INITIAL STUDY/ MITIGATED NEGATIVE DECLARATION FOR THE PROPOSED MILLS HIGH SCHOOL ATHLETICS COMPLEX PROJECT

Prepared for:

San Mateo Union High School
District
650 N. Delaware Street,
San Mateo, CA 94401

Prepared by:

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May 7, 2020

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ACRONYMS AND ABBREVIATIONS

Acronym/Abbreviation	Definition
ADWF	average dry weather flow
APE	Area of Potential Effect
BAAQMD	Bay Area Air Quality Management District
BMP	Best Management Practice
CARB	California Air Resources Board
DPR	California Department of Parks and Recreation
FEMA	Federal Emergency Management Agency
HPD	Historic Property Directory
CO	carbon monoxide
CO2E	carbon dioxide equivalent
GHG	greenhouse gas
gpd	gallons of wastewater per day
LOS	level of service
mgd	million gallons per day
MLD	Most Likely Descendant
NAHC	Native American Heritage Commission
NO_x	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NWIC	Northwest Information Center
OHP	State Office of Historic Preservation
O_3	ozone
PM_{10}	particulate matter less than 10 microns
$PM_{2.5}$	particulate matter less than 2.5 microns
RWQCB	Regional Water Quality Control Board
SCH	State Clearinghouse
SFBAAB	San Francisco Bay Area Air Basin
SFBRWQCB	San Francisco Bay Regional Water Quality Control Board
SLF	Sacred Lands File
SO_x	sulfur dioxide
SWPPP	Stormwater Pollution Prevention Plan
TAC	toxic air contaminant
TMDL	Total Maximum Daily Load
UCMP	University of California Museum of Paleontology
VOC	volatile organic compound
WWTP	Wastewater Treatment Plant

ENVIRONMENTAL DETERMINATION

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

DETERMINATION: On the basis of this initial evaluation:

I find that the proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.	
I find that although the proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the Project have been made by or agreed to by the Project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.	**X**
I find that the proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.	
I find that the proposed Project MAY have a "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.	

Elizabeth McManus, Deputy Superintendent, SMUHSD **Date**

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I. INTRODUCTION

This Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared by the San Mateo Union High School District (SMUHSD or District), 650 North Delaware St. San Mateo, CA 94401, pursuant to the California Environmental Quality Act (Public Resources Code Sections 21000 et seq.), CEQA Guidelines (Title 14, Section 15000 et seq. of the California Code of Regulations). It provides documentation to support the conclusion that the proposed Mills High School Athletics Complex Project ("the project"), with mitigation identified herein, would not cause a potentially significant impact to the physical environment. The proposed site is located on the Mills High School campus, in the City of Millbrae, in San Mateo County.

This IS/MND describes the location of the project site, the project sponsor's objectives, and the details of the proposed project. The Environmental Checklist Form included as Appendix G of the CEQA Guidelines serves as the basis for the environmental evaluation contained in the IS/MND. The Checklist Form examines the specific potential project-level physical environmental impacts that may result from the construction and operation of the proposed new and expanded facilities onsite. Mitigation measures have been identified to reduce any potentially significant impacts that would otherwise occur with development and operation of the new facilities to a less-than-significant level.

The District will serve as the "lead agency" (the public agency that has the principal responsibility for carrying out and/or approving a project) for the proposed project. The governing board of the District is responsible for ensuring that the environmental review and documentation meet the requirements of CEQA. The Draft IS/MND is subject to review and comment by responsible agencies and the public during a statutory public review period (30 days). Any necessary revisions will be incorporated in the Final IS/MND.

Should the District approve the project, it will be required to file a "Notice of Determination" for posting by the County Clerk and the State Clearinghouse. The filing ofthe notice and its posting starts a 30- day statute of limitations on court challenges to the CEQA review of the Project.

Document Organization

This document is organized into the following sections:

SECTION I – INTRODUCTION: Provides background information about the project.

SECTION II – PROJECT DESCRIPTION: Includes project background and detailed description of the project.

SECTION III – INITIAL STUDY CHECKLIST AND DISCUSSION: Reviews the proposed project and states whether the project would have potentially significant environmental effects.

SECTION IV – MANDATORY FINDINGS OF SIGNIFICANCE: States whether environmental

effects associated with development of the proposed project are significant, and what, if any, added environmental documentation may be required.

SECTION V – REFERENCES: Identifies source materials that have been consulted in the preparation of the IS.

SECTION IV – REPORT PREPARERS: Identifies the firms and individuals who prepared the IS.

APPENDICES - Includes technical reports and Mitigation Monitoring and Reporting Program (in Final IS/MND)

II. PROJECT DESCRIPTION

Project Name:	Mills High School Athletics Complex Project
Project Location:	400 Murchison Drive, Millbrae CA 94030
Project Applicant and Lead Agency Contact:	Elizabeth McManus, Deputy Superintendent - Chief Business Officer San Mateo Union High School District 650 N. Delaware Street, San Mateo, CA 94401 (650) 558-2299 emcmanus@smuhsd.org
General Plan Designation:	City of Millbrae, Community Facilities
Zoning:	City of Millbrae, Community Facilities
Project Approvals:	SMUHSD approval. Review of facilities by Division of the State Architect for structural safety, fire and life safety, and ADA accessibility. Possible City of Millbrae approval of Grading Permit. SWPPP from RWQCB
Date Initial Study Completed:	May 7, 2020

PROJECT DESCRIPTION

Project Location

Mills High School is located at 400 Murchison Drive in the southeastern area of the City of Millbrae adjacent to the City of Burlingame, in San Mateo County. (See Figure 1.) Regionally, the campus is accessed via from US Highway 101, via Millbrae Avenue and the Millbrae BART Station which is located approximately a quarter of a mile northeast of the campus.

The Mills High School campus is located north of Sequoia Avenue, southeast of Millbrae Avenue, southwest of South Magnolia Avenue, and northwest of Murchison Avenue (see Figure 1). The project site, which encompasses the baseball field, multi-use field, tennis courts, and swimming pool, is at the northeastern and northwestern edges of the campus.

Mills High School occupies 36.4 acres and was built in 1958. Existing athletic facilities include eight tennis courts, eight basketball courts, baseball and softball diamonds, and a newly upgraded artificial turf football field and all-weather track

Surrounding Land Uses

The project site is bounded on the northeast by multi-family residential uses located between the campus and South Magnolia Avenue; on the northwest by the Millbrae Spur trail and the Millbrae Skate Park which are located between the school and Millbrae Avenue; on the southeast by multi-family residential uses between the campus and Murchison Drive, and on the southwest by the remainder of the Mills campus.

Existing Site Conditions and Facilities

The existing athletic facilities and site conditions are described below and shown in Figure 2.

Practice Field. The practice field is located at the northeastern edge of campus, adjacent to multi-family housing on the northeast and southeast (along Magnolia and Murchison Drive), the on-campus tennis courts to the northwest, and landscaped areas and parking to the southwest. (See Figure 2.) The practice field has a grass surface covering approximately 120,000 square feet and soil covering the remaining 20,000 square feet of the field. This field has several deficiencies, including the following:

- The field is not level
- A substantial gopher problem has resulted in numerous holes throughout the field
- The irrigation system has failed
- The storm drains and drainage systems have failed
- There is no lighting or public address (PA) system

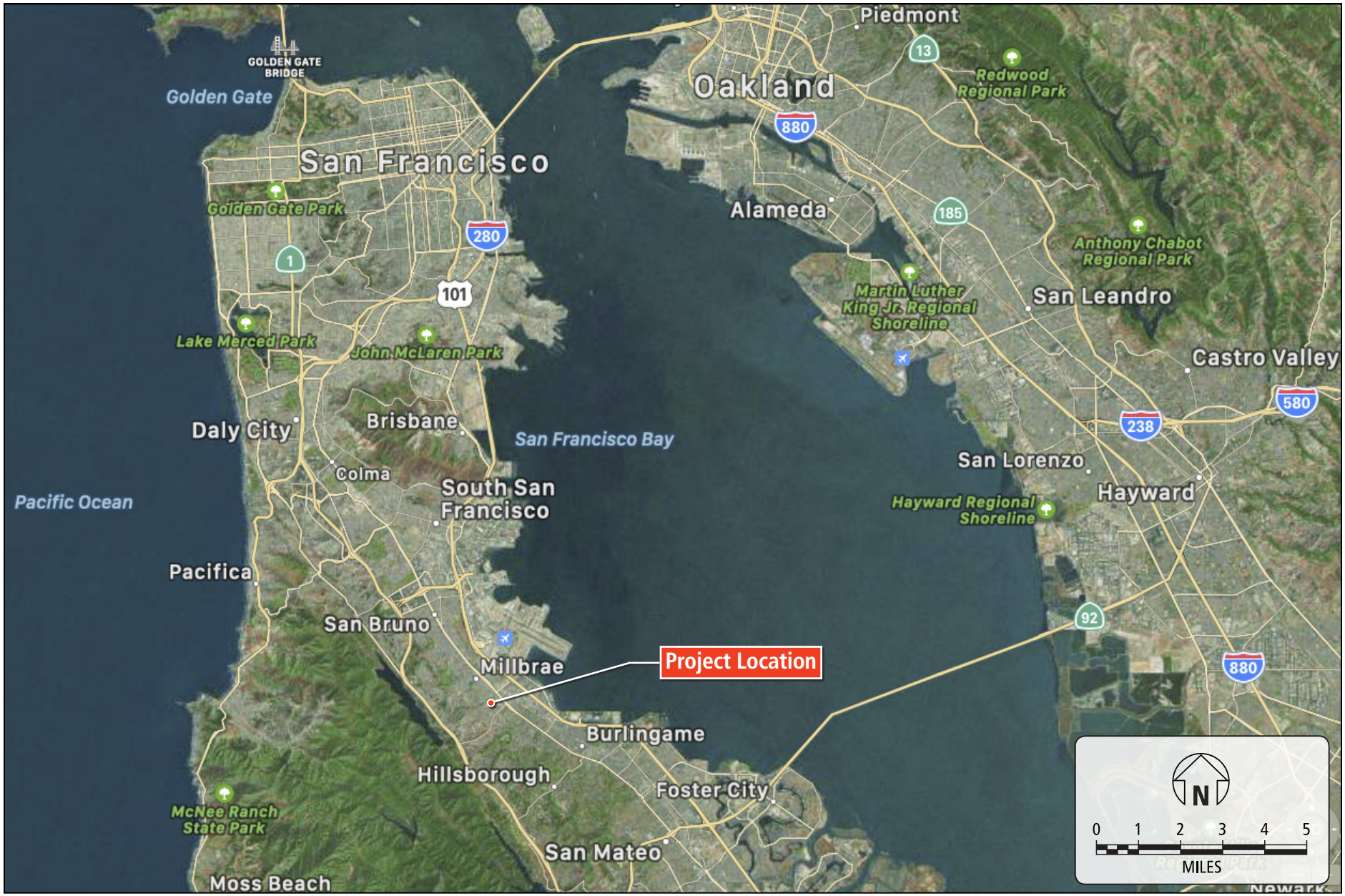


Figure 1
Project Location

Source: TomTom Maps



Figure 2
Aerial Photograph of Project Site

Source: TomTom Maps and Grassetti Environmental

Multi-Use Field. As shown in Figure 2, the multi-use field that is used for football, soccer, and lacrosse. The grass on this field will be replaced with synthetic turf as part of a separate project in the summer or fall of 2020. (Mills High School Stadium Field Turf Replacement Project Notice of Exemption, October 29, 2019, https://ceqanet.opr.ca.gov/2019110178/2/Attachment/88vuiw .

Tennis Courts. There are eight tennis courts located at the northern corner of the campus. (See Figure 2.) These courts cover approximately 60,000 square feet, have never been renovated, and have no lights.

Swimming Pool. The existing swimming pool is located in the central area of campus next to the multi-use field. (See Figures 2 and 3.) The only existing lighting for the swimming pool is egress lighting.

Athletic Facilities Hours of Operation. School hours are generally between 8:00 AM and 3:15 PM weekdays, with variations in the bell schedule depending upon the day of the week. Student athletic practices and games take place after school hours Monday through Friday. Currently, baseball, softball, and tennis games start at 4:00 PM; baseball games end at 7:00, softball games end at 6:00 PM, and tennis games end at 5:30 PM. Soccer, baseball, softball, and tennis practices currently take place from 3:30 PM to 5:30 PM. Swimming practices take place between 3:30 and 7:00 PM and meets run from 3:30 to7:30 PM. Water polo practice takes place between 3:30 and 7:00 PM as well, and games run from 3:30 to 7:00 PM.

District Lighting and PA Policies. The San Mateo Union High School District Board Policy 7325 was adopted in 2016 and updated in March 2018 to limit the impacts of stadium lights and public address systems. The policy limits the number of athletic games and contests, practices and other uses of facilities, and public address system limits. This policy is included as Appendix A to this document.

Proposed Athletic Complex Upgrades

The proposed athletics complex upgrades are described below and shown on Figures 3 and 4.

Replacement of Practice Field with a Baseball Field. The baseball field, currently located at the southwest corner of the campus just north of Sequoia Avenue, (See Figure 2) would be relocated to the current practice field site. The baseball field has several deficient conditions including the following:

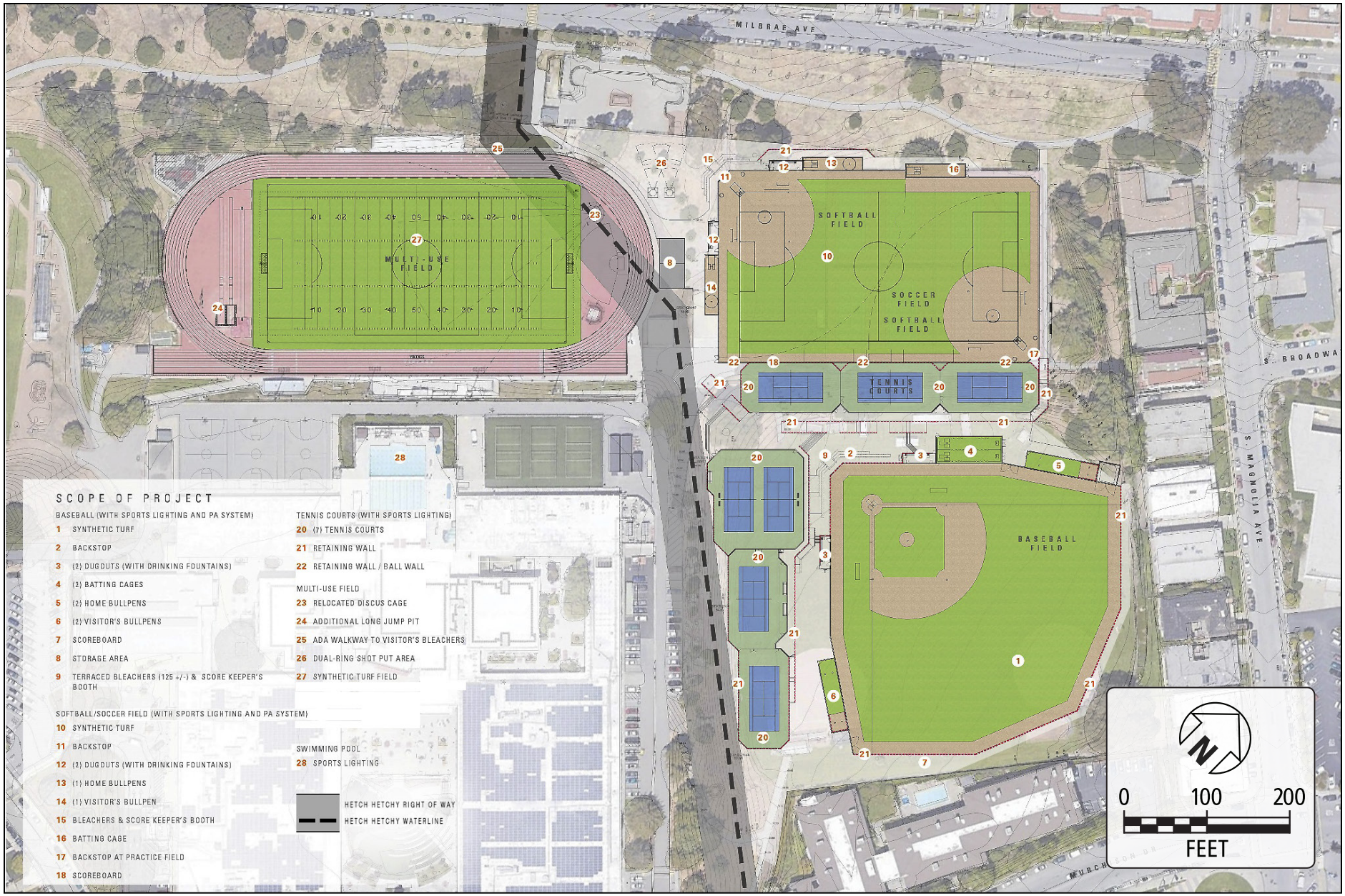


Figure 3
Proposed Fields Complex Upgrades

Source: Carducci Associates



Figure 4
Proposed Project Rendering

Source: Carducci Associates

- The field is not level
- There is a substantial gopher problem which has resulted in numerous holes throughout the field
- The irrigation system has failed
- The storm drain and drainage systems have failed
- There is no lighting or public address (PA) system

The existing natural grass surface of the practice field would be replaced with synthetic turf. The turf would include four components: fiber, infill, backing, and underlayment. The fiber would consist of polyethylene slit film, would be grass-like in appearance. The infill, which would be used to provide stability, would be made of sand, cryogenic rubber and natural cork. The backing would be comprised of polyethylene and its function would be to bind the slit film. The underlayment would consist of polyethylene mat. The turf, would be expected to last approximately eight to 12 years, and could then be recycled and replaced with a new surface.

Lighting and a public address (PA) system would be included as part of the project. The project would use an off the shelf commercial system intended to provide focused coverage of the terraced bleachers. This would require loudspeakers behind home plate (near the score keeper's booth). Six LED light poles would be installed. Table 1 shows that the light poles would range from 70 to 90 feet high, and the average, minimum, and maximum illumination proposed expressed in "maintained horizontal footcandles." Lighting would also be provided for the bullpens and bleachers. Please see Section III.I for discussion of the light and glare impacts and Appendix B for additional lighting details.

Table 1. Proposed Lighting

Facility	Number of Light Poles	Pole Heights	Average Illumination[1]	Maximum Illumination
Baseball Field	6	70'-90'	30-50	41-61
Soccer Field	6	60'-70'	30	46
Softball Field	5	60'-70'	30-50	47-65
Swimming Pool	4	50'	30	38
Swimming Pool Deck	4	50'	22.81	39
Tennis Courts	13	24'	30.26	37.6

[1] Illumination is described in "maintained horizontal footcandles". A footcandle is defined as the illuminance on a one square foot surface from a uniform source of light. When a range is provided, the lower figure is for the outfield and higher for the infield.

Accessory facilities would include batting cages, a backstop, bullpens, a 15-foot-high illuminated scoreboard, a 870 square-foot storage area, terraced concrete steps that would be approximately four feet high with seating for approximately 125 spectators, dugouts with a drinking fountains, and a 100-square-foot score-keepers booth that would be approximately 25 feet high. There would also be over 5,000 linear feet of fencing up to 12 feet in height.

Softball and Soccer Field. The proposed softball and soccer field would replace the current tennis courts at the northern corner of the campus (See Figures 2, 3 and 4). The 60,000 square feet of tennis court hardscape would be replaced with 91,315 square feet of synthetic turf. The components and lifespan of the turf would be the same as described above for the baseball field.

Lighting and a PA system would be included for the softball field. Five LED light poles ranging from 60 to 70 feet in height would be installed on each of the two softball field diamonds. Lighting would be provided for the bleachers. Table 1 shows the average, minimum, and maximum footcandles. The PA system would be an off-the-shelf commercial system. The system is intended to provide focused coverage of the bleachers. This would require loudspeakers behind home plate (near the score keeper's booth).

Accessory facilities for the softball field would include a batting cage, a backstop at the practice field, bullpens, a 15-foot-high illuminated scoreboard, terraced four-foot-high bleachers with seating for approximately 125, dugouts with a drinking fountains, and a 100-square-foot score-keepers booth that would be approximately 25 feet high.

Multi-Use Field. The existing 102,000 square feet of grass on the multi-use field would be replaced with synthetic turf as part of a separate project. The proposed project includes the following additional improvements and changes to the multi-use field:

- Relocate the discus cage
- Add another long-jump pit
- Install an ADA walkway to the visitor's bleachers
- Add a dual-ring shot put area

Tennis Courts. The eight existing tennis courts at the northern corner of the campus would be redeveloped with the softball and soccer field. Four new tennis courts would be developed adjacent to the baseball field and three adjacent to the softball and soccer field. (See Figures 2, 3, and 4.) A retaining wall of varying heights up to 14 feet would be installed between the tennis courts and the baseball field and a 12-foot-high retaining wall that would also be used as a ball wall would be located between the softball and soccer field and the tennis courts. Lighting would be installed for the two of the tennis courts. No PA system would be provided

for the tennis courts.

Swimming Pool. Lighting would be added to the existing swimming pool facility as part of the project. The addition of these systems would not change the existing hours or number events annually. Eight LED 50-foot-high light poles would be installed, four for the pool and four for the pool deck. Table 1 shows the average, minimum, and maximum footcandles (fc).

Days and Hours of Operation. Games and practices for all of the sports using the project facilities currently take place and would continue to do so Monday through Friday. The hours for practices and games would not change but the lighting may prevent games from being called early for lack of daylight and proper lighting would increase player safety. Also, please note that while soccer games would continue to be played at the multi-use field, which is not part of this project, soccer practices would be relocated from the stadium and lower field to the proposed soccer field with practice hours remaining the same (3:30 to 5:30 PM weekdays).

Combined Changes

Total Building Area Added. The project would result in less than 800 square feet of increase in building area (storage shed, score-keepers booths, etc.).

Capacity Increases. There would be no student enrollment change or increase in staff due to the proposed project. And, as specified above, the upgrades would not result in any changes to the number of games or overall hours of operations. Spectator attendance is not expected to increase as a result of the upgrades.

Tree Protection, Planting and Removal. Figure 5 illustrates the proposed tree protection, removal, transplant, and replacement plan. An arborist's report[2] was prepared for the project which determined the following:

- There are 96 trees located in and around the project area, none of which are street trees – they are all located on the Mills campus. The Project would protect 76 trees, transplant 18 trees, replace 32 trees, and remove 20 trees, four of which are dead. The 16 living trees expected to be removed include three coast live oaks, three pittosporum, three blue gum eucalyptus, two holly oaks, two coast redwoods, one red maple, one chinquapin oak, and one Monterey cypress.
- As shown in Figure 5, two of the 20 trees to be removed are located at the northeastern corner of the site near the proposed baseball outfield eight are located on or near the location of the proposed tennis courts between the new baseball field

[2] "Tree Protection for Proposed Sports Field Reconstruction at Mills High School", Aesculus Arboricultural Consulting, February 14, 2020. A copy is on file at the District offices.

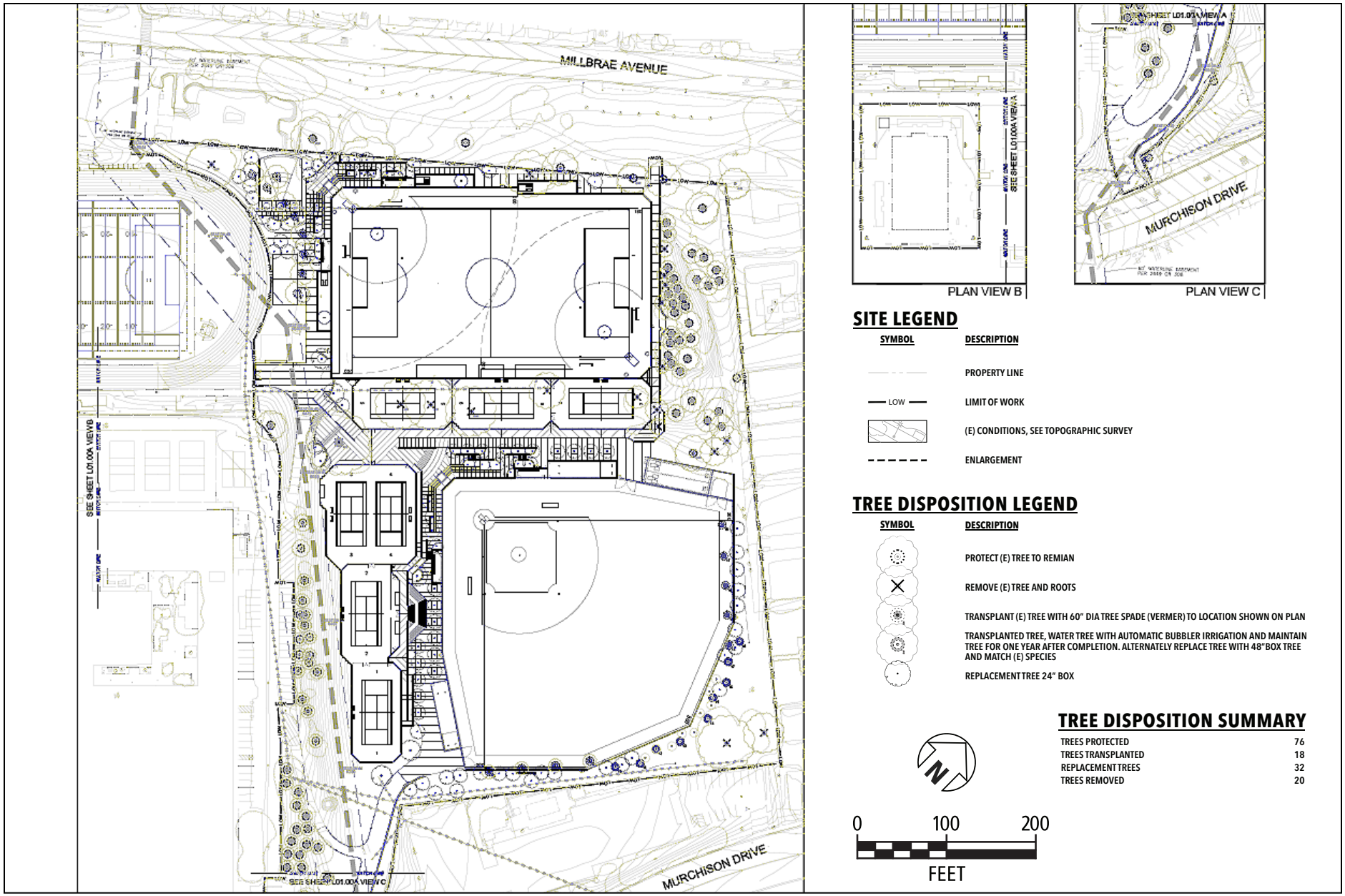


Figure 5
Tree Removal and Replacement Plan

Source: Carducci Associates

- and the soccer and softball field, and the remaining ten are located at the periphery of the soccer and softball field. Removal of the four dead trees and 16 living trees is required to accommodate three of the new tennis courts and soccer field and associated improvements.
- Thirty-two new trees would be planted and 20 removed as part of the project, resulting in a net increase of 12 trees. Or, not counting the removal of the four dead trees, a net increase of 16 trees

Grading and Earthwork. The preliminary project grading scheme would result in 8,015 cubic yards of cut and 22,687 cubic yards of fill. Moderate topographic changes would occur as a result of the project's cut and fill.

Drainage and Water Quality. The project area includes 469,984 square feet of surface area, 358,368 of which are pervious and 111,616 of which are impervious. With the project there would be a net increase in impervious surface area of 26,2188 square feet: 296,063 would be pervious and 137,834 would be impervious. New storm drains would be installed to connect field subdrains to the existing stormwater collection system. Peak flows would not be expected to exceed existing site peak runoff conditions because any increase would be detained by the stormwater system. The quality of the runoff would improve because pesticide and fertilizer would no longer be needed for the natural grass that would be replaced with synthetic turf.

Construction Schedule

Project construction would start in May of 2021 and be completed in April of 2022.

Construction Equipment, Workers, and Hours

Equipment Use. Equipment used during construction would vary by phase, but would include excavators, backhoes, dump trucks, graders, compactors, water trucks, and similar equipment.

Construction Workers. Up to 24 construction workers would be onsite on an average day.

Construction Hours. Typical construction hours would be 7:00 am to 4:30 PM, weekdays Some work may also be done on Saturdays between 9:00 am and 4:30 PM.

Construction Staging Areas. Construction staging areas would most likely be located in the staff parking area adjacent to the track.

Land Use Entitlements and other Agency Approvals

SMUHD Approvals. The School District is a local agency with independent discretionary authority over site improvements. The District would take approval actions for the project at a noticed SMUHSD Board of Trustees Meeting.

Other Agency Approvals. The project would require the following approvals from other agencies:

- Regional Water Quality Control Board, San Francisco Bay Region, Construction Stormwater Pollution Prevention Plan and Permit; and
- Division of the State Architect review of construction plans.
- Consultation with California Native American tribes has been initiated pursuant to Public Resources Code section 21080.3.1.

III. INITIAL STUDY CHECKLIST

The initial study checklist recommended by the CEQA Guidelines is used to describe the potential impacts of the proposed Project on the physical environment.

I. Aesthetics

Would the Project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?				**X**
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				**X**
c) In nonurbanized 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?			**X**	
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?		**X**		

Discussion

a, b) There are no rock outcroppings, historic buildings, or scenic highways on or immediately adjacent to the project site. There are also no designated scenic

highways with views of the site. The project site is approximately a half of a mile away from U.S. Highway 101 and about 1.25 miles from I-280. The project improvements would not be visible from these highways due to the distance from them and the intervening topography and buildings. El Camino Real is located two blocks east of the site, however, this section of El Camino Real is not designated as a Scenic Road in the San Mateo County General Plan. El Camino Real between Crystal Springs Road in San Mateo and Easton Drive in Burlingame is the only section that is considered a Scenic Road[3]. Therefore, the project would have **no impact** on scenic vistas or scenic resources.

c) The project includes replacement of the existing practice field with a baseball field; replacement of the eight existing tennis courts with a softball and soccer field and seven new adjacent tennis courts; the addition of new facilities for the multi-use field, and upgrades to the swimming pool. As shown in Figures 6 through 8, the existing practice field, which would be replaced with a new baseball field, would not be visible from the adjacent streets (Murchison Drive and South Magnolia Avenue) due to the presence of existing buildings and trees between those streets and sidewalks and the field. As shown in Figure 9, the existing tennis courts which would be replaced with the soccer and softball field would be visible from the Millbrae Spur Trail and Skate Park and Millbrae Avenue. As shown in Figure 10, the multi-use field is visible from Millbrae Avenue and the Millbrae Spur Trail and Skate Park. Because the pool is located towards the center of campus (See Figure 3), it is not visible from offsite locations.

As detailed in the Project Description section of this document and illustrated in Figures 3 and 4, the project would introduce new accessory equipment and small structures, including batting cages bullpens, dugouts, and bleachers; a 100-square-foot elevated press box and a score-keeper's booth (both approximately 25 feet from the ground to the rooftop); two 15-foot-high illuminated scoreboards (one or the baseball field and one for the soccer and softball field); a small (300-square-foot) storage shed, and lighting with a total of 25 light poles ranging from 50 to 90 feet in height. There would also be 13 24-foot-high light poles for two of the tennis courts. Improvements to the multi-use field would include a new long-jump pit, new shotput area, relocation of the discuss cage, and installation of a new ADA walkway to the visitor's bleachers.

The project would also result in the removal of 20 of the 96 trees in and adjacent to the project area. Most of the trees to be removed are located between the baseball field and the existing tennis courts/proposed soccer and baseball field to accommodate three of the new tennis courts and soccer field

[3] https://planning.smcgov.org/sites/planning.smcgov.org/files/SMC-GP%201986.pdf.

and associated improvements. In addition, 18 of the trees that are not being removed would be transplanted. The project also includes the planting of 32 new trees in the project area, resulting in a net increase of 12 trees.

The project would result in a change in the views from public vantage points including Millbrae Avenue and the Millbrae Spur Trail and Skate Park due to the conversion of the existing tennis courts to the soccer and softball field and the addition of seven new tennis courts and associated improvements. While the multi-use field is visible from these areas, the proposed improvements would not represent a major change in the visual quality of the site since the proposed use is consistent in character with the existing recreational uses and would, if anything, be an improvement due to the introduction of new open green space. As indicated above, the project would not generally be visible from public vantagepoints along South Magnolia Avenue and Murchison Drive. The project would not substantially degrade the existing visual character or quality of public views of the site from the adjacent streets, because the project features would (1) either not be visible from these public vantage points due to vegetative screening, other buildings on campus, or changes in grade; or (2) would introduce minor features, such as light poles and new bleachers that, while visible, would not significantly detract from the existing visual quality of the high school campus. Moreover, the planting of 32 new trees (12 net when counting for the removal of 20) and transplanting of 16 trees would further limit any adverse visual impacts. Views from the 300 Murchison Drive apartments, while not public, would be impacted by the new baseball field. However, because of the substantial number of trees that would be planted between the baseball field and the rear of the apartments, impacts on these private views would be softened and would not be considered significant. Because the project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings the impacts on visual quality would be **less than significant**.



Figure 6. View of project site from the intersection of Ogden Drive and Murchison Drive looking northwest towards the baseball field. The Mills campus and apartments in the foreground.

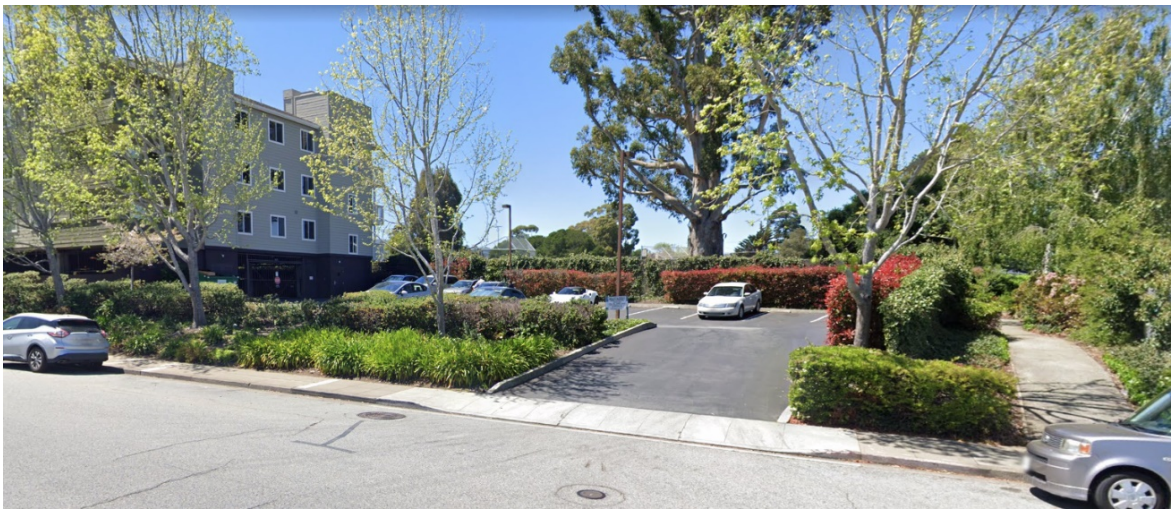


Figure 7. View of project site from Murchison Drive near S. Magnolia looking northwest towards the baseball field. Apartments, parking lot, and pedestrian path in the foreground.



Figure 8. View of project site from S. Magnolia Avenue looking southwest towards the proposed baseball field with residential units in the foreground.



Figure 9. View of the project site from Millbrae Avenue near Willow Avenue looking northeast towards the tennis courts. The Millbrae Avenue Spur Trail is in the foreground.



Figure 10. View of the project site from Millbrae Avenue near Poplar Avenue looking southeast towards the multi-use field. The Millbrae Avenue Spur Trail and Skate Park are in the foreground. The pool is further east beyond the multi-use field.

d) The proposed project lighting for the athletic facilities would create a new source of nighttime light and glare. Currently, baseball, softball, and tennis games start at 4:00 PM; baseball games end at 7:00 PM, softball games end at 6:00 PM, and tennis games end at 5:30 PM. Soccer, baseball, softball, and tennis practices currently take place from 3:30 PM to 5:30 PM. Swimming practices take place between 3:30 and 7:00 PM and meets run from 3:30 to 7:30 PM. Water polo practice and games run from 3:30 to 7:00 PM. These hours would not change with the proposed project, but lighting would prevent games from being called early due to lack of adequate natural light.

Residents along Murchison Drive adjacent to the Baseball field would experience limited periods of new nighttime light as a result of six new 70- to 90-foot-high light poles for the baseball field. Residents along Magnolia Avenue who are located adjacent to the soccer field would also experience limited new nighttime light due to five new 60- to 70-foot-high light poles for the soccer/softball field. Two of the tennis courts would have lighting which would be provided by 13 24-foot-high poles but would be located 300 feet or more from away from the nearby residents. (The locations of these courts are show in in Appendix B). New lighting would be provided for the swimming pool as well (four 70-foot-high poles), but the swimming pool is located towards the center of campus away from nearby residences.

The proposed sports lighting for the softball and baseball fields is designed to control light to maximize illumination on the field and minimize off-site light and glare. The proposed lighting would be less impactful and more focused than older systems. A light study (Musco Sports Lighting, 2019) (See Figure 11 below and Appendix B.) assessed light spillover at 73 points at the front property lines of homes across the street from the fields along Magnolia Avenue and Murchison Drive. The study determined that the maximum illuminance in footcandles (fc) from proposed lights at the residential property lines would range from 0.0 to 1.46 fc, with an average of 0.1611 fc. This average would be less than is typical of roadway lighting which ranges from 0.3 to 1.6 fc.

The glare impacts on adjacent residents would be limited to the areas shown in Figure 12, below. The figure indicates the maximum *calenda*, or amount of glare an observer would see when facing the brightest light source from any direction. *High glare* is considered to be 150,000 or more candelas. *Significant glare* is defined as 25,000 to 75,000 candelas, which is equivalent to the high beam headlights on a car. *Minimal to no glare* is 500 or fewer candelas, or equivalent to a 100-watt incandescent light bulb. Figure 12 shows that the glare from the lighting that some of the residents adjacent to the baseball field would experience would be up to 100,000 candelas. Additional lighting diagrams are provided in Appendix B. Because the residents located adjacent to the baseball field would be exposed

to glare exceeding 25,000 candelas, the lighting would result in ***significant glare impacts***. However, implementation of Mitigation Measure AES-1, below, would reduce these impacts to a ***less than significant*** level.

Currently, baseball, softball, and tennis games start at 4:00 PM; baseball games end at 7:00 and softball and tennis games end at 5:30 PM. Soccer, baseball, softball, and tennis practices currently take place from 3:30 PM to 5:30 PM. Swimming practices take place between 3:30 and 7:00 PM and meets run from 3:30 to 7:30 PM. Water polo practice and games run from 3:30 to 7:00 PM. With the project, there would be no change in hours. Therefore, it is anticipated that the lights would be turned on for a short period of time – at the start of the baseball, softball, and swimming seasons prior to daylight savings time – and turned off well before average bedtimes. Likewise, lighting for water polo (a fall sport) would be used for a short period after daylight savings ends.

The project also would comply with San Mateo Union High School District Board Policy 7325 to limit the impacts of lighting on neighbors. Appendix A includes the detailed lighting policy, but applicable highlights that would govern the baseball and softball lighting are as follows:

> Other [non-football] SMUHSD High School Athletic Contests After Daylight Hours
>
> - Other nighttime athletic contests are those that start at 7:00 p.m. or later.
> - These events can be scheduled throughout the school year, Monday through Friday.
> - The goal is to end other SMUHSD athletic contests by 8:30 p.m., Monday through Thursday. There will be sports, such as lacrosse, that may end at 9:15 p.m. Every effort will be made to complete games as efficiently as possible.
> - On Friday nights, competition level lighting will be turned off within 10 minutes of the completion of the game (typically before 9:30 p.m.).
> - The Public Address (PA) system for these contests shall be limited to key game facts and shall not include running game commentary.
> - The same lighting guidelines used for evening football games, and related to crowd disbursement and litter abatement/field restoration will apply.

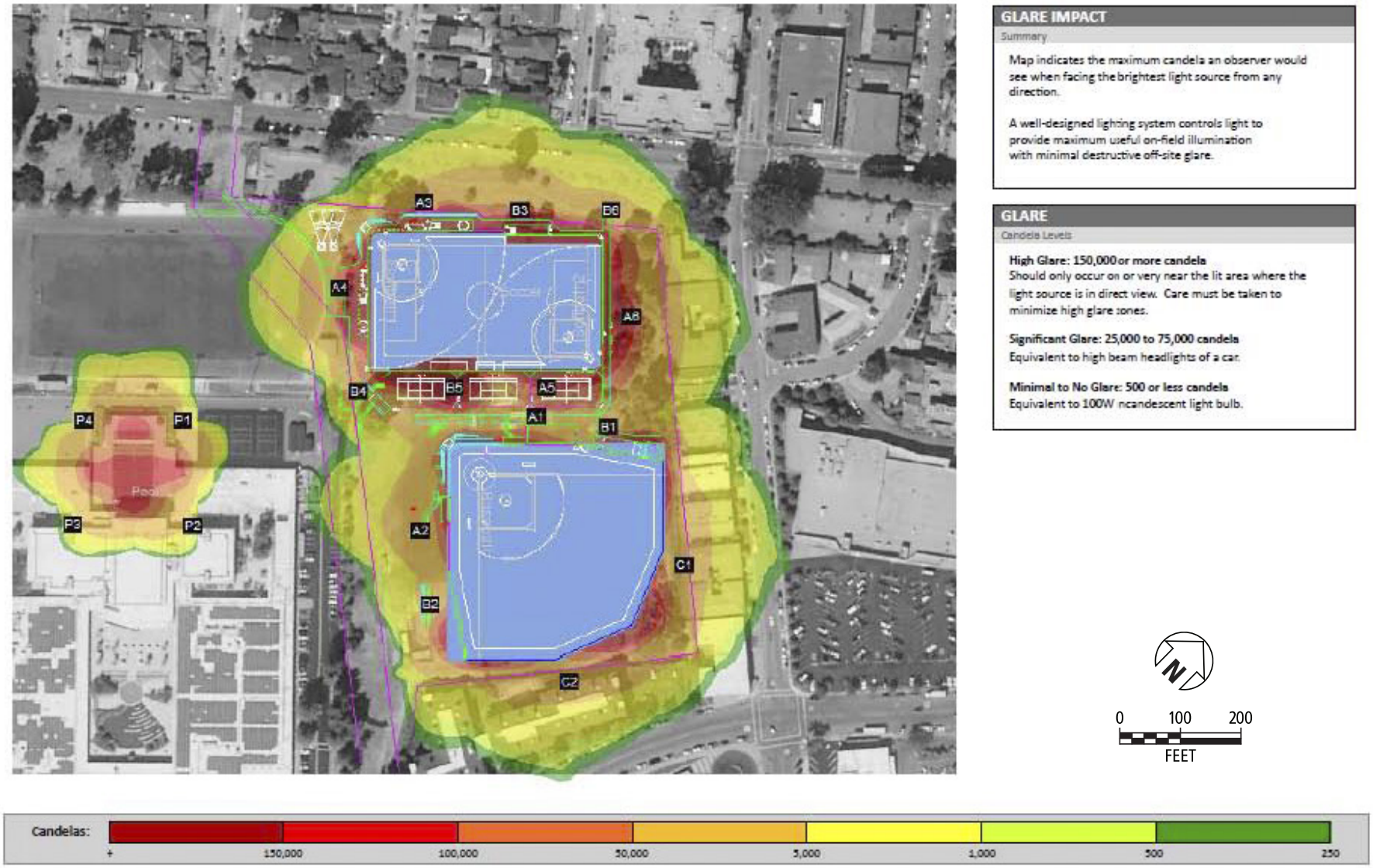
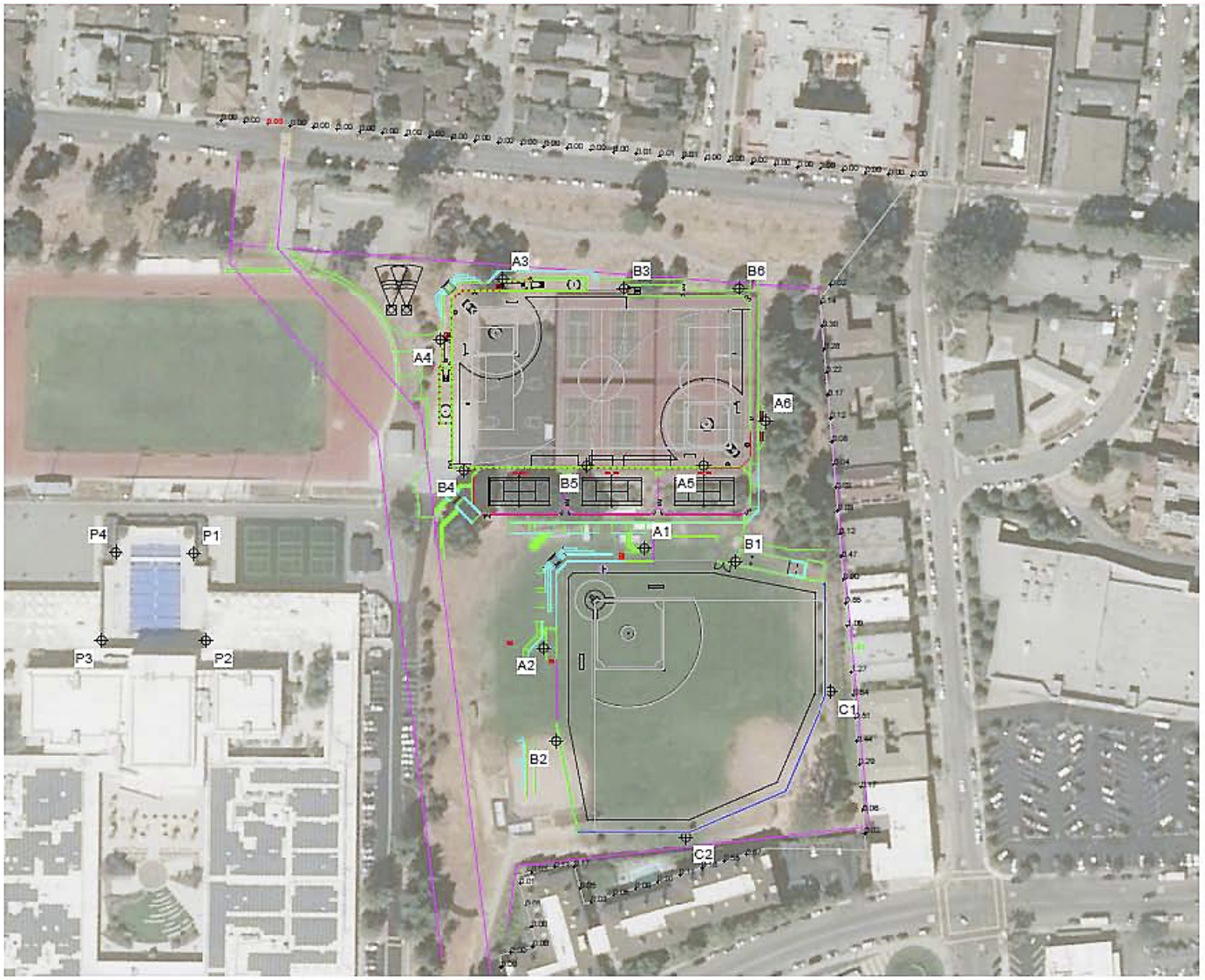


Figure 11
Environmental Glare Impact

Source: Musco Lighting



GRID SUMMARY

Name:	Spill/ Glare - Residence
Spacing:	30.0'
Height:	3.0' above grade

ILLUMINATION SUMMARY

HORIZONTAL FOOTCANDLES

	Entire Grid
Scan Average:	0.1611
Maximum:	1.46
Minimum:	0.00
No. of Points:	74

LUMINAIRE INFORMATION

Color / CRI:	5700K - 75 CRI
Luminaire Output:	136,000 / 160,000 / 46,500 / 89,600 / 52,000
No. of Luminaires:	101
Total Load:	96.74 kW

Lumen Maintenance

Luminaire Type	L90 hrs	L80 hrs	L70 hrs
TLC-LED-1200	>81,000	>81,000	>81,000
TLC-LED-1500	>81,000	>81,000	>81,000
TLC-LED-400	>81,000	>81,000	>81,000
TLC-LED-900	>81,000	>81,000	>81,000
TLC-BT-575	>81,000	>81,000	>81,000
TLC-LED-600	>81,000	>81,000	>81,000

Reported per TM-21-11. See luminaire datasheet for details.

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ⊗

Figure 12
Illumination Summary

Source: Musco Lighting

The project's **potentially significant** light and glare impacts would be reduced to a **less-than-significant** level with implementation of Mitigation Measure AES-1 below, combined with the fact that (1) the hours that the lights would be on at night would be limited to non-bedtime hours and (2) the project would comply with SMUSD policies to limit the hours that lighting can be used**.**

Mitigation Measures

Measure AES-1: Reduce Glare Impacts. To reduce significant glare impacts on the adjacent residents at their rear property lines to levels below 25,000 candelas, which is the threshold of significance, **one** of the following measures shall be implemented: (1) redesign the lighting proposed for the outfield so that glare would not exceed 25,000 candelas at the rear property lines. ***or*** (2), adjust the site plan to reduce the glare at the rear of the residential units along South Magnolia and Murchison to less than 25,000 candelas. One possible approach to this would be to relocated the seven new proposed tennis courts to an alternate location (perhaps adjacent to the rear of the residential units) to allow the baseball field to move to the southwest enough to reduce glare to acceptable levels.

II. Agricultural and Forestry Resources

Would the Project:

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

Discussion

a-e) The project site is covered by existing athletic fields, tennis courts, and a swim complex on an existing high school campus in a highly urbanized area. There are no agricultural or forested lands on or in the vicinity of the high school campus. Therefore, the project would not result in the conversion of farmland or forestland to non-agricultural uses would have **no impact** on agricultural and forestry resources.

III. Air Quality

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?			**X**	
b) Result in a cumulatively considerable net increase of any criteria for which the Project region is non-attainment under an applicable federal or state ambient air quality standard?			**X**	
c) Expose sensitive receptors to substantial pollutant concentrations?			**X**	
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			**X**	

Background

The project site (i.e., the Mills High School campus) is located in the Bay Area's "Peninsula" climatic sub-region, which includes all of San Mateo County. In the summer and fall, episodes of high temperatures and low wind speeds in the County increase the potential for local ozone formation and build up. During the winter, surface-based temperature inversions (i.e., colder air near the ground, capped by warmer air aloft, which limits the vertical dispersion of air pollutants) concentrate pollutants such as carbon monoxide and particulate matter generated by motor vehicles, fireplaces/ woodstoves, etc. Many other chemical compounds, generally termed toxic air contaminants (TACs), pose a present or potential hazard to human health through airborne exposure from a wide variety of TAC sources, both stationary (e.g., dry cleaning facilities, gasoline stations, and emergency diesel-powered generators) and mobile (e.g., motor vehicles, construction equipment).

Ozone and suspended particulate matter (i.e., two types of the latter - particulate matter less than ten microns in diameter [PM_{10}] and particulate matter less than 2.5 microns in diameter [$PM_{2.5}$]) are of particular concern in the Bay Area, which is currently designated "nonattainment" for state and national ozone ambient air quality standards, for the state PM_{10}

standards, and for state and national $PM_{2.5}$ standards; it is "attainment" or "unclassified" with respect to all the other major air pollutants. The BAAQMD maintains a number of air quality monitoring stations, which continually measure the ambient concentrations of major air pollutants throughout the Bay Area. The closest station to the Project site is at 897 Barron Avenue in Redwood City, about 12 miles southeast of the Project site. The data collected show violations of the ozone and $PM_{2.5}$ particulate standards on a few days per year over the last three years (see Table AQ-1).

Table AQ-1. Local Ambient Air Quality Monitoring Summary

Pollutant	Air Quality Standard	Maximum Concentrations and Number of Days Standards Exceeded		
		2016	2017	2018
Ozone				
Maximum 8-hour concentration (ppb)		60	86	49
# Days 8-hour national/California standard exceeded	70 ppb	0	2	0
Nitrogen Dioxide (NO_2)				
Maximum 1-hour concentration (ppb)		46	67	77
# Days national 1-hour standard exceeded	100 ppb	0	0	0
Suspended Fine Particulates ($PM_{2.5}$)				
Maximum 24-hour concentration ($\mu g/m^3$)		19.5	60.8	120.9
# Days national 24-hour standard exceeded	35 $\mu g/m^3$	0	6	13*

Notes:
The pollutants are monitored at the BAAQMD station at 897 Barron Avenue in Redwood City (about 15 miles southeast of the Project site).
$\mu g/m^3$ = micrograms per cubic meter
ppb = parts per billion.
* The number of days exceeding the $PM_{2.5}$ standard in 2018 was unusually high due to the influence of the Camp Fire on Bay Area air quality.
Source: BAAQMD Air Quality Summary Reports http://www.baaqmd.gov/about-air-quality/air-quality-summaries

San Francisco International Airport (SFO) and the Highway 101 corridor in San Mateo County contain a dense concentration of stationary industrial/commercial air pollution sources. The County is crossed by several major freeways and State highways, but stationary sources of emissions become relatively sparse in the residential areas west of El Camino Real and in mountainous open-space areas beyond. But there are a few notable stationary TAC sources near the Project site, all emergency diesel-powered generators or gas stations. El Camino Real (State Route 82), a major source of airborne toxics from motor vehicles, passes about 600 feet east of

the project site.[4]

Analysis Methodology and Significance Criteria

The air quality analysis addressing this Initial Study checklist items was performed using the methodologies and significance thresholds recommended in *CEQA Air Quality Guidelines* (*Guidelines*; BAAQMD, May 2017, Table 2-1). The air pollutant impacts evaluated in the Items "a" and "b" discussions below are from precursors to ozone formation (i.e., reactive organic compounds [ROG] and nitrogen oxides [NO_x]), and from small-diameter particulate matter (i.e., PM_{10} and $PM_{2.5}$).

According to the *Guidelines*, any Project would have a significant potential for obstructing air quality plan implementation or making a cumulatively considerable contribution to a regional air quality problem if its pollutant emissions would exceed any of the thresholds presented in Table AQ-2 during construction or operation.

TABLE AQ-2. CEQA Air Quality Significance Thresholds for Air Pollutant Emissions

Pollutant	Construction Average Daily (lbs./day)	Operational	
		Average Daily (lbs./day)	Maximum Annual (tons/year)
Reactive Organic Gases (ROG)	54	54	10
Oxides of Nitrogen (NO_x)	54	54	10
Inhalable Particulate Matter (PM_{10})	82 (exhaust)	82	15
Fine Inhalable Particulate Matter ($PM_{2.5}$)	54 (exhaust)	54	10
PM_{10}/$PM_{2.5}$ (Fugitive Dust)	BMPs[a]	N/A	N/A

Notes: BMPs = Best Management Practices N/A = Not Applicable

[a] If BAAQMD Best Management Practices (BMPs) for fugitive dust control are implemented during construction, the impacts of such residual emissions are considered to be less than significant.
Source: Bay Area Air Quality Management District, May *2017, CEQA Air Quality Guidelines*.

In addition to the major air pollutants (as identified above), many other chemical compounds,

[4] The BAAQMD Stationary Source Screening Analysis Tool and Highway Screening Analysis Tool allow all major Bay Area stationary and freeway/highway TAC sources to be located on Google Earth maps and their health risks displayed. https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/ceqa-tools

generally termed toxic air contaminants (TACs), pose a present or potential hazard to human health through airborne exposure. A wide variety of sources, stationary (e.g., dry cleaning facilities, gasoline stations, and emergency diesel-powered generators, etc.) and mobile (e.g., motor vehicles, construction equipment, etc.), emit TACs. The health effects associated with TACs are quite diverse. TACs can cause adverse health effects from long-term exposure (e.g., cancer, birth defects, neurological damage, asthma, bronchitis, or genetic damage) and/or from short-term exposure (e.g. eye watering, respiratory irritation, running nose, throat pain, and headaches). Most of the estimated carcinogenic/chronic health risk in California can be attributed to relatively few airborne compounds, the most important being particulate matter from diesel-fueled engines (DPM). The California Air Resources Board (CARB) has identified DPM as being responsible for about 70 percent of the cumulative cancer risk from all airborne TAC exposures in California.

The *Guidelines* establish a relevant zone of influence for an assessment of project-level and cumulative health risk from TAC exposure to an area within 1,000 feet of a project site. Project construction-related or Project operational TAC impacts to sensitive receptors within the zone that exceed any of the following thresholds are considered significant:

- An excess cancer risk level of more than 10 in one million
- A non-cancer hazard index greater than 1.0.
- An incremental increase of greater than 0.3 micrograms per cubic meter ($\mu g/m^3$) for annual average $PM_{2.5}$ concentrations.

Cumulative impacts from TACs emitted from freeways, state highways or high-volume roadways (i.e., the latter defined as having traffic volumes of 10,000 vehicles or more per day or 1,000 trucks per day), and from all BAAQMD-permitted stationary sources within the zone to sensitive receptors within the zone that exceed any of the following thresholds are considered cumulatively significant:

- A combined excess-cancer-risk levels of more than 100 in one million.
- A combined non-cancer hazard index greater than 10.0.
- A combined incremental increase in annual average $PM_{2.5}$ concentrations greater than 0.8 $\mu g/m^3$.

Project and cumulative TAC impacts are evaluated in the Item “c” discussion below.

Discussion

a) The BAAQMD’s current *Clean Air Plan: Spare the Air, Cool the Climate* (2017 Plan), focuses on two closely-related goals: protecting public health from air pollutant exposures and reducing Bay Area emissions of heat-trapping gases (termed greenhouse gases [GHG]) that promote global climate change (Project GHG impacts will be addressed in Section VIII below).

Key elements in the 2017 Plan control strategies having particular applicability to

the Project, are:

Controls on Transportation Sources:

- Direct new development to areas that are well-served by transit, and conducive to bicycling and walking.

Controls on Buildings and Energy Sources:

- Promote energy and water efficiency in both new and existing buildings.

The project site is served by the San Mateo County Transit District (SamTrans) bus line "ECR" that connects it to other Peninsula communities and to the greater Bay Area via the Millbrae BART and Caltrain stations about a quarter mile to the northeast. The project would renovate the high school's athletic fields and facilities on a site that has contained similar outdoor sports facilities serving the San Bruno School District since the 1950s. But the School's student population, faculty and staff levels would remain unchanged. Thus, the project would not have the potential to substantially affect regional housing, employment, and/or population levels in San Mateo County or the Bay Area, which are the bases of the 2017 Plan regional emission inventories and control strategies.

Project construction would include the installation of outdoor lighting and public address systems that would comply with California's CALGreen (Title 24) energy code. Also, the renovated athletic fields would be converted from natural to artificial turf, thus, conserving water that is now used to irrigate the existing fields. Both are control strategies promoted by the 2017 Plan

Compliance with BAAQMD-approved CEQA thresholds of significance is another condition for determining project consistency with 2017 Plan control measures (as addressed in the Items b discussion below). Thus, the Project would have **less-than-significant** air quality plan compliance impacts because it meets all BAAQMD CEQA emission thresholds.

b) The BAAQMD *Guidelines* recommend quantification of project construction and operational emissions and their comparison to the CEQA significance thresholds. For the construction estimates, the California Emissions Estimator Model (CalEEMod, Version 2016.3.2) was used. The project would renovate the School's existing baseball, softball, soccer, practice fields and tennis facilities. Construction activities are expected to commence in 2020 and be completed within a year. The model was initialized with project-specific equipment types, numbers and durations appropriate to each sub-phase of project construction, as provided by the project engineers.

Table AQ-3 shows the estimated exhaust air-pollutant emissions for all project sub-phases from construction equipment, haul/delivery trucks and worker commute vehicles, including comparisons with the BAAQMD CEQA significance thresholds. Provided that there is no overlap of the sub-phases (especially during clear & grub,

rough grade, lime treatment, fine grade and rock placement), no CEQA thresholds would be exceeded and construction air pollution impacts would be **less than significant**.

Table AQ-3. Project Construction Pollutant Emissions (Maximum Pounds per Day)

Construction Phase	ROG	NOx	PM_{10} (Exhaust)	$PM_{2.5}$ (Exhaust)
Demolition	0.4	4.2	0.2	0.2
Clear & Grub	1.3	13.9	0.6	0.5
Rough Grade	3.5	35.4	1.6	1.5
Lime Treatment	2.0	19.6	0.9	0.8
Fine Grade	1.8	17.1	0.8	0.7
Rock Placement	2.0	20.2	0.9	0.8
Paving	0.9	9.9	0.5	0.4
Turf Placement	1.0	8.3	0.3	0.3
Fencing	0.5	2.8	0.2	0.1
Landscaping	0.5	4.8	0.2	0.2
Concrete Placement	0.4	5.3	0.2	0.2
Significance Thresholds	**54**	**54**	**82**	**54**
Significant Impact?	**No**	**No**	**No**	**No**

Since the project would renovate existing outdoor athletic facilities that would serve the same high school student, faculty and staff levels, the number of motor vehicle trips and on-site air pollutant sources, and the operational air pollutant emissions from them, would be about the same after Project completion as before. Thus, the project's operational air pollutant emissions and their effects on local ambient levels would be **less than significant**.

c) The project site borders low-density residential areas to the north and west of the campus, with predominantly commercial uses to the east. The local maximally exposed sensitive receptors [MESR] to project construction emissions and to existing emissions from cumulative local TAC sources would be the residential uses north of Millbrae Avenue and west of Magnolia Avenue.

A screening health risk assessment (HRA) for TAC and particulate exposures to nearby sensitive receptors from project construction activities was conducted following guidelines established by the California Office of Environmental Health Hazard Assessment (OEHHA 2015) and the BAAQMD (2012).

Cancer risk is the probability of developing cancer from a lifetime exposure (i.e., 70 years) to carcinogenic substances. The likelihood of other adverse chronic health impacts unrelated to cancer are measured using a hazard index (HI) defined as the ratio of a project's incremental annual TAC concentration to a published reference exposure level (REL) as determined by OEHHA (which for DPM is 5 µg/m3). Project

incremental cancer risks and HI were estimated by applying established DPM toxicity factors to the construction equipment exhaust DPM concentrations estimated by the SCREEN3 model (Lakes Environmental).

As shown in Table AQ-4, the cancer risk from project construction DPM at the existing adjacent residential uses most exposed to TACs from project construction would be 1.31 additional cancer cases per million people exposed, which is below the project-level CEQA threshold for cancer risk. The HI from project construction DPM would be 0.001, which is well below the BAAQMD threshold for chronic hazard. The modeled annual $PM_{2.5}$ concentration from project construction would be 0.17 µg/m3, which is below the Project-level CEQA threshold (0.3 $\mu g/m^3$).

As also shown in Table AQ-4, the cumulative TAC exposure at the MESR would be considerably below the BAAQMD cumulative thresholds for cancer risk, chronic hazard and annual $PM_{2.5}$ concentration. After it is operational, the project would not include substantial stationary TAC emission sources nor add substantial mobile TAC emission sources (i.e., by BAAQMD definition, daily incremental traffic volumes of 10,000 or more).

Table AQ-4. Project and Cumulative TAC Impacts on Maximally Exposed Sensitive Receptor (MESR) in the Project Site Vicinity

BAAQMD Source #	Facility	Address	Cancer Risk	Chronic Hazard Index	$PM_{2.5}$ Concentration
From Local Permitted Stationary TAC Sources*					
13489	Pacific Bell (Generator)	10 Magnolia Avenue, Millbrae	14.1056	0.0192	0.0192
18931	Verizon Wireless (Generator)	1801 Murchison Drive, Burlingame	0.0900	0.0000	0.0000
111854	76 Products (Gas Station)	5 El Camino Real, Millbrae	0.6820	0.0031	0.0000
18315	Lucky (Generator)	45 Murchison Drive, Millbrae	0.0012	0.0000	0.0000
111992	Burlingame 76 (Gas Station)	1876 El Camino Real, Burlingame	0.3344	0.0015	0.0000
From Major Local Roadways**					
El Camino Real			0.93	0.001	0.01
From Project Sources***					
Project Construction TAC Impacts			1.31	0.03	0.17
Project-Level Significance Thresholds			10	1.0	0.3

BAAQMD Source #	Facility	Address	Cancer Risk	Chronic Hazard Index	$PM_{2.5}$ Concentration
Significant Project Construction Impact?			No	No	No
From Cumulative Sources (after Project Mitigation)					
Cumulative Sources TAC Impact			17.45	0.06	0.20
Cumulative Significance Thresholds			100	10	0.8
Significant Cumulative Impact?			No	No	No

*The BAAQMD's Stationary Source Screening Analysis Tool and Distance Multiplier Tool were used to estimate the maximum cancer risk, hazard index, and $PM_{2.5}$ concentration at the existing residences most exposed to Project construction TAC emissions.
**The BAAQMD's Roadway Screening Calculator was used to estimate maximum cancer risks, hazard indexes, and $PM_{2.5}$ concentrations at the closest existing residences about 600 feet west of El Camino Real.
***Project construction cancer risk, chronic hazard and $PM_{2.5}$ increments were estimated by the SCREEN3 dispersion model using Project construction equipment TAC emission estimates from the CalEEMod model. Project construction cancer risk, chronic hazard and PM2.5 could be reduced by an additional 40% by requiring that Project construction equipment have EPA-rated Tier 3 diesel engines, and by an additional 90% by requiring that Project construction equipment have Tier 4 diesel engines.

To reduce the exposure of local sensitive receptors to PM_{10} and $PM_{2.5}$ in the fugitive dust released during project construction, the BAAQMD *Guidelines* also require that all Bay Area construction projects implement Best Management Practices (BMPs) to control fugitive dust emissions. Thus, the following basic control measures must be implemented by the project construction contractor:

BAAQMD Required Dust Control Measures: The construction contractor shall reduce construction-related air pollutant emissions by implementing BAAQMD's basic fugitive dust control measures, including:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved surfaces shall be limited to 15 miles per hour.
- 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.

- A publicly visible sign shall be posted with the telephone number and person to contact at the School District regarding dust complaints. This person shall respond and take corrective action with 48 hours. The BAAQMD's phone number shall also be included to ensure compliance with applicable regulations.

As described above, potential TAC emissions would be **less than significant**.

d) Project operation would not introduce substantial sources of odor emissions to the area. However, the project's diesel-powered construction equipment would emit odorous exhaust that could impact existing local residents. Because the project construction activities would be short-term (i.e., less than a year) and most local odor-sensitive receptors (i.e., the existing low-density residential neighborhoods) are at distances greater than a few hundred feet from the site center, construction odor emissions would not affect a substantial number of people for a substantial time, nor be substantially objectionable to any particular receptor while construction is underway. Therefore, this impact would be **less than significant**.

IV. Biological Resources

Would the Project:

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

Background

The project site is currently comprised of athletic fields, tennis courts, and a swim complex on an existing high school campus in a highly developed urban area.

Based on habitat requirements and regional distribution, no State or federally Threatened or Endangered species are expected to occur on the project site. No sensitive habitats or plant communities for these occur on the project site. However, there are several mature trees surrounding the fields, which may provide nesting habitat for special status songbirds and raptors. An arborist report was prepared to address impacts to trees (Aescules Arboicultural Consulting, February 14, 2020). No potential jurisdictional wetlands or Waters of the United States occur on the project site[5]. Trees surrounding the school fields may provide nesting and/or roosting habitat for a number of special-status bird species.

Discussion

a) The project has the potential to affect migratory and nesting protected bird species by tree removal and noise impacts on active nests. Roosting or nesting special-status bat species also may be affected. Twenty trees would be removed (four of which are already dead) and 32 replacement trees would be planted. This potentially significant impact would be reduced to a ***less-than-significant*** level by implementation of Mitigation Measures BIO- 1 and BIO-2, below.

b) The project would not affect any riparian habitat or sensitive natural communities, as none of those are present on the site. ***No impact*** would occur.

c) The project would not affect any wetlands habitats, as none of those are present on the site. ***No impact*** would occur.

d) The project has no potential to impede any migration corridors. The proposed project is not expected to "interfere substantially with the movement of any native resident or migratory fish or wildlife species" because there is minimal habitat on the site and the proposed project would not substantially change the uses of the project site and area. With respect to native wildlife nursery sites, see Migratory and Nesting Bird Species discussion, above. ***No impact*** would occur.

e) The project would remove four dead trees and removal of 16 additional trees including three coast live oaks, three pittosporum, three blue gum eucalyptus, two holly oaks, two coast redwoods, one, red maple, one chinquapin oak, and one Monterey cypress. The City of Millbrae requires a permit for removal of street trees and replacement of any tree removed. However, the City does not have jurisdiction over the trees on the Mills

[5] https://www.fws.gov/wetlands/data/mapper.html

campus since it is under the jurisdiction of the SMUHSD. Therefore, the District would not be required to obtain a tree removal permit from the City of Millbrae for their removal. **No impact** would occur.

f) The project site is not covered by any federal, state, or local conservation plan. Therefore, the project would have **no impact** with respect to habitat conservation plan compliance.

Mitigation Measures

Measure BIO-1: Prevent Loss of Active Bird Nests. A pre-construction survey for nesting birds shall be conducted by a qualified biologist within two weeks of construction activities, if activities are to occur within nesting/breeding season of native bird species (February- August). If active nests are identified within 300 feet of construction and would be exposed to prolonged construction-related noise above normal levels, a buffer shall be implemented around nests during the breeding season, or until a biologist determines the young have fledged. The size of the buffer and the type of construction activity will depend on multiple factors including relative change in noise and disturbance during construction activity, amount of vegetative screening between activity and nest, and sensitivity of species.

Measure BIO-2: Prevent Loss of Roosting Habitat for Bat Species. The potential of the large trees to provide suitable roosting habitat shall be assessed by a qualified bat biologist, and if necessary, a roosting bat protection plan shall be implemented. If bats are determined to be using the site, minimization measures shall include prohibiting night work activities (between 10pm and sunrise) and minimizing work activities to outside of the most sensitive breeding (non-volant) period of April to August.

V. Cultural Resources

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?				X
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?		X		
c) Disturb any human remains, including those interred outside of dedicated cemeteries?		X		

Background

A Cultural Resources Study was conducted for the project site and vicinity by Solano Archaeological Services (SAS, April 22, 2020). That study included a literature review, consultation with Native American tribal representatives, and a field survey and shovel auguring at six locations on the site.

The NWIC records search yielded a single cultural resource in the project area, P-41-00079, an oyster shell concentration located in the middle of the existing multi-use field (and proposed for the new baseball field. The documentation of the site was scant and consisted of a one-page record written in 1952. No artifacts or archaeological features were mentioned in the record. The NWIC warned that the documented location of the site should be considered approximate. Additionally, the NAHC SLF results were positive for pre-contact resources in the vicinity. Although little information on the Sacred Land resource was gained,

Mr. Galvan from the Ohlone Indian Tribe recommended that a Native American monitor be present during all ground disturbing construction activities. Ms. Irenne Zwierlein from the Amah Mutsun Tribal Band of Mission San Juan Bautista further recommend that sensitivity and inadvertent discovery training be provided to all field personnel. During the pedestrian survey no cultural materials were discovered, but most of the ground surface consisted of existing field turf or was landscaped, creating a 0% ground surface visibility situation. In order to inspect limited subsurface soils for cultural resources and any signs of P-41-00079, a total of six hand-auger units were excavated around the approximate location of P-41-00079. All the auger units had negative findings.

Discussion

a) The project site is an existing graded, benched, and developed high school field, tennis courts, and swim center on an existing high school campus. Consequently, the project site contains no historical resources as defined in CEQA Guidelines Section 15064.5. Minimal additional grading would occur for construction of the proposed field upgrades. The project would not have any potential to affect off-site historic resources. Therefore, the project would have **no impact** on historical resources.

b) Although the fieldwork resulted in the identification of no cultural resources, the records search and NAHC SLF findings conclude that past indigenous peoples inhabited the immediate area, and that the project area is considered archaeologically sensitive for pre-contact sites. The NWIC records search also indicated that there are multiple previously recorded historic-era sites within a half mile of the project area, showing early development in the City of Millbrae. As a precaution, SAS recommends construction crew training and construction monitoring by a qualified professional archaeologist during all ground disturbing activities. Although the likelihood of project's grading, trenching, and digging for utility lines and lighting fixture foundations to encounter and disturb archaeological resources is low, it is possible that prehistoric materials and sites could be encountered. Mitigation Measures CULT-1 and CULT-2 would reduce this **potentially significant impact** to a **less-than-significant level**.

c) Although no prehistoric or historic-era human remains are known to exist on the project site, it is possible that presently undocumented human interments may be uncovered during grading. This **potentially significant** impact would be a potentially significant. Implementation of Mitigation Measures CULT-2 and CULT-2 would reduce this impact to a **less-than-significant** level.

Mitigation Measures

Mitigation Measure CULT-1: Archaeological Deposits. If archaeological remains are encountered during project activities, project ground disturbances at the find and immediate vicinity shall be halted immediately until a qualified archaeologist can evaluate the finds (§15064.5 [f]). The archaeologist shall examine the finds and recommend mitigation measures which may include documentation in place, avoidance, testing, and/or data recovery. Project personnel should not collect cultural resources. Native American resources include chert or obsidian flakes, projectile points, mortars, and pestles; and dark friable soil containing shell and bone dietary debris, heat-affected rock, or human burials. Historic-period resources include stone or adobe foundations or walls; structures and remains with square nails; and refuse deposits or bottle dumps, often located in old wells or privies.

In addition, as a precaution, the project shall include cultural resource sensitivity training for crews involved in grading activities, as well as construction monitoring by a qualified professional archaeologist during all ground disturbing activities.

Mitigation Measure CULT-2: Human Remains*.* California law recognizes the need to protect interred human remains, particularly Native American burials and associated items of patrimony, from vandalism and inadvertent destruction. The procedures for the treatment of discovered human remains are contained in California Health and Safety Code Section 7050.5 and Section 7052 and California Public Resources Code Section 5097.

In accordance with the California Health and Safety Code, if human remains are uncovered during ground disturbing activities all such activities in the vicinity of the find shall be halted immediately and the District or the District's designated representative shall be notified. The District shall immediately notify the county coroner and a qualified professional archaeologist. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (Health and Safety Code Section 7050.5[b]). If the coroner determines that the remains are those of a Native American, he or she must contact the Native American Heritage Commission (NAHC) by phone within 24 hours of making that determination (Health and Safety Code Section 7050[c]). The responsibilities of the District for acting upon notification of a discovery of Native American human remains are identified in detail in the California Public Resources Code Section 5097.9. The District or their appointed representative and the professional archaeologist will consult with a Most Likely Descendent determined by the NAHC regarding the removal or preservation and avoidance of the remains and determine if additional burials could be present in the vicinity.

VI. Energy

Would the Project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X	

Discussion

a) The project would not result in wasteful, inefficient, or unnecessary consumption of energy, given project installation of outdoor lighting and public systems compliant with State of California energy conservation regulations, and its reduction of water use associated with the replacement of natural turf athletic fields by artificial turf. Therefore, this impact would be **less than significant.**

b) The California State Building Standards Commission adopted updates to the California Green Building Standards Code (CALGreen), which went into effect in January 2011. CALGreen contains requirements for construction site selection, storm water control during construction, construction waste reduction, indoor water use reduction, material selection, natural resource conservation, and site irrigation conservation. CALGreen is intended to (1) reduce GHG emissions; (2) promote environmentally responsible, cost-effective, healthier places to live and work; and (3) reduce energy and water consumption. The project would be built on accord with CALGreen standards and reduce water use by the installation of artificial turf athletic fields. Therefore, this impact would be **less than significant**.

VII. Geology and Soils

Would the Project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				X
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?		X		
iv) Landslides?				X
b) Result in substantial soil erosion or the loss of topsoil?		X		
c) Be located on a geologic unit or soil that is unstable, 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?		X		
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial director indirect risks to life or property?			X	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of wastewater?				X
f) Directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature?			X	

Background

Cleary Consulting, Inc. prepared a Geotechnical Hazards Investigation for the project (Cleary 2020). That study included a literature review and thirteen exploratory soil borings. Relevant portions of that investigation report are summarized below.

Geologic Conditions

Regional geologic mapping (Knudsen et al, 1997) indicates the campus is underlain by early or middle-Pleistocene alluvial deposits. This formation consists of interbedded layers of unconsolidated gravel, sand, silt, and clay. The nearest trace of the San Andreas Fault is mapped approximately 1.6-miles southwest of the project site. Soil studies at the school's football field, adjacent to the site, identified sandy soils extending up to 20 feet below the surface. Although groundwater was not encountered in the borings, it is anticipated to be seasonally high.

Site soil borings indicated that the site is underlain by 1.75 to 3.5 feet of fill, mostly loose mixtures of gravel, sand, and clay. The fill was underlain by layers of sandy clay, clayey sand, sandy gravel, and sandy silt to depths ranging from 3.0 to 12 feet. These soils are underlain by sandstone and claystone of the of the Colma Formation to the maximum depth explored, 51.5 feet. (Cleary 2020)

Groundwater was encountered at depths ranging from 12 to 30 feet below the ground surface. Site soils were identified as having "moderate" expansion potential. (Cleary 2020)

Seismic Conditions

The project site is located within a seismically active region that includes the Central and Northern Coast Mountain Ranges. Several active faults are present in the area including Maacama, Healdsburg, Rodgers Creek, San Andreas, and Hayward Faults, among others. An "active" fault is defined as one that shows displacement within the last 11,000 years and, therefore, is considered more likely to generate a future earthquake than a fault that shows no evidence of recent rupture. The California Geologic Survey has mapped various active and inactive faults in the region (CDMG, 1972 and 2000). The San Andreas Fault is the nearest known active fault and is located approximately 1.2-miles southwest of the site; other nearby faults include the San Gregorio, Hayward, and Calaveras Faults, located 7.5 miles southwest of the site, and 17, and 25.6 miles northeast of the site (Cleary 2020).

The site will likely experience moderate to strong ground shaking from future earthquakes originating on any of several active faults in the San Francisco Bay region. The historical records do not directly indicate either the maximum credible earthquake or the probability of such a future event. To evaluate earthquake probabilities in California, the USGS has

assembled a group of researchers into the "Working Group on California Earthquake Probabilities" (USGS 2003, 2008; Field, et al 2015) to estimate the probabilities of earthquakes on active faults.

Conclusions from the most recent studies indicate there is a 72% chance of an M>6.7 earthquake in the San Francisco Bay Region between 2014 and 2043. The highest probability of an M>6.7 earthquake on any of the active faults in the San Francisco Bay region by 2043 is assigned to the Hayward/Rodgers Creek Fault system the site at 33% followed by the San Andreas Fault at 22%.

There are no faults mapped as crossing the site, and the site is not in a fault rupture hazard zone as identified by the California Geological Survey. (Cleary 2020)

Discussion

a) i. Based on available published geologic information, the project site is not located within a Fault Rupture Hazard Zone. The potential for fault rupture on the site is therefore considered to be low and **no impact** would occur.

ii. The site would be subject to strong ground shaking in the event of a major earthquake on any of the regional fault zones. Due to its close proximity, the San Andreas Fault presents the highest potential for strong ground shaking. The small buildings proposed for the site, as well as light poles and retaining walls may be damaged by this shaking. The buildings are intended for storage use only and would be constructed to current seismic codes so would not pose a safety risk in an earthquake. The poles and retaining walls would be deigned to resist this seismic shaking. This impact would be **less than significant**.

iii. The site soils were evaluated liquefaction and/or lateral spreading and differential settlement potential in a major earthquake. They were determined not to be susceptible to liquefaction, and have seismic shaking induced settlement of up to 4.5 inches, with about 2.8 inches of differential settlement. Most areas of the site would have about 2/3 of an inch of settlement, which would not present a significant impact to project facilities. Lateral spreading hazards were considered "very low". The impact associated with liquefaction and differential settlement hazards would be reduced to a **less-than-significant** level by implementation of Mitigation Measure GEO- 1, below.

b) Existing slopes on the site are shallow and have up to 22 feet in elevation change. Cleary concluded that any lateral movement on the site slopes would consist of localized sloughing. With the proposed retaining walls, landslide hazards were determined to be low. (Cleary 2020)

Sandy soils on moderate slopes are susceptible to erosion when exposed to concentrated water runoff. Sandy soils were observed near or at the ground surface during the subsurface exploration. Development of the proposed project would require a substantial amount of grading, as described in the Project Description. If grading were to occur during the rainy season, substantial erosion could result. Mitigation Measure HYDRO-1, in the Hydrology and Water Quality section, and Mitigation Measure GEO-2, below, would reduce this potential impact to **less than significant**.

c) Please see response to item a) iii, above. This impact would be reduced to a **less-than-significant** level by implementation of Mitigation Measure GEO-1, below.

d) Expansive soils shrink and swell with changes in moisture content and are capable of exerting significant expansion pressures on building foundations, interior floor slabs, and exterior flatwork. Site soils were identified as having "moderate" expansion potential. (Cleary 2020) Therefore, the risk of expansive soil affecting the proposed improvements is low. The impact would be **less than significant**.

e) The proposed project would be served by the City's sewer system and would not include any septic systems. Therefore, **no impact** would occur with respect to adequacy of site soils for septic systems.

f) The project excavation work would occur primarily within areas of sandy soils, therefore potential impacts to paleontological resources are unlikely and would be considered **less than significant**.

Mitigation Measures

Mitigation Measure GEO-1. The project's site clearing, site preparation, subgrade preparation and stabilization, fill, drainage, and any foundation systems shall be designed and constructed per the specifications set forth on the project geotechnical report.

Mitigation Measure GEO-2. The project shall include a site drainage system to collect surface water and discharging it into an established storm drainage system. The project Civil Engineer or Architect shall be responsible for designing the site drainage system and, an erosion control plan could be developed prior to construction per the current guidelines of the California Stormwater Quality Association's Best Management Practice Handbook.

VIII. Greenhouse Gas Emissions

Would the Project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

Background

Greenhouse gases (GHGs) are atmospheric gases that capture and retain a portion of the heat radiated from the earth after it has been heated by the sun. The primary GHGs are carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O), ozone, and water vapor. While GHGs are natural components of the atmosphere, CO_2, CH_4, and N_2O, are also emitted in substantial quantities from human activities and their accumulation in the atmosphere over the past 200 years has substantially increased their concentrations. This accumulation of GHGs has been implicated as the driving force behind global climate change.

Human emissions of CO_2 are largely by-products of fossil fuel combustion, whereas CH_4 results from off-gassing associated with organic decay processes in agriculture, landfills, etc. Other GHGs, including hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride, are generated by certain industrial processes. The global warming potential of GHGs are typically reported in comparison to that of CO_2, the most common and influential GHG, in units of "carbon dioxide- equivalents" (CO_2e).

There is international scientific consensus that human-caused increases in GHGs have and will continue to contribute to global warming. Potential global warming impacts in California may include, but are not limited to, loss in snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years. Secondary effects are likely to include a global rise in sea level, impacts to agriculture, changes in disease vectors, and changes in habitat and biodiversity.

The Bay Area Air Quality Management District (BAAQMD) is the primary agency responsible for air quality regulation in the nine-county San Francisco Bay Area Air Basin. As part of that role, the BAAQMD has prepared *CEQA Air Quality Guidelines* that provide CEQA thresholds of significance for operational GHG emissions from land use project. (i.e., 1,100 metric tons of CO_2e per year, which is also considered the definition of a cumulatively considerable

contribution to the global GHG burden and, therefore, of a significant cumulative impact), but has not defined thresholds for project construction GHG emissions. The *Guidelines* methodology and thresholds of significance have been used in this Initial Study's analysis of potential GHG impacts associated with the project.

The CalEEMod model was used to quantify GHG emissions associated with project construction activities. The Project would renovate the School's existing baseball, softball, soccer, practice fields and tennis facilities. Construction activities are expected to commence in 2020 and be completed within a year. The model was initialized with project-specific equipment types, numbers and durations appropriate to each sub-phase of project construction, as provided by the project engineers.

After renovation of the outdoor athletic facilities, the School that would accommodate the same high school student, faculty and staff levels. Thus, operational GHG emissions from motor vehicle trips and on-site stationary would be about the same after project completion as before. Project construction would also include the installation of outdoor lighting and public address systems that would comply with California's CALGreen (Title 24) energy code. Also, the renovated athletic fields would be converted from natural to artificial turf, conserving water that is now used to irrigate the existing fields. Both are GHG reduction strategies promoted by the BAAQMD's 2017 Clean Air Plan.

Discussion

a) Assembly Bill 32 (AB32), the California Global Warming Solutions Act, requires the CARB to lower State GHG emissions to 1990 levels by 2020—a 25% reduction statewide with mandatory caps for significant GHG emission sources. AB32 directed CARB to develop discrete early actions to reduce GHG while preparing the Climate Change Scoping Plan in order to identify how best to reach the 2020 goal. Statewide strategies to reduce GHG emissions to attain the 2020 goal include the Low Carbon Fuel Standard (LCFS), the California Appliance Energy Efficiency regulations, the California Renewable Energy Portfolio standard, changes in the motor vehicle corporate average fuel economy (CAFE) standards, and other early action measures that would ensure the state is on target to achieve the GHG emissions reduction goals of AB 32.

b) The estimated project construction GHG emissions would be about 175 metric tons of CO2e (for which there is no BAAQMD CEQA significance threshold). The project's estimated operational GHG emissions would be slightly less than they are now because of the reduction in water use by the renovated sports fields. Therefore, this impact would be less than significant.

c) The project site is accessible by mass transit and would be required to obtain building permits for construction, which would ensure compliance with CALGreen (Title 24).

Thus, the Project would not conflict with the goals and policies of AB32 and the Bay Area's 2017 Clean Air Plan. The project would have a **less-than-significant** impact related to this issue.

IX. Hazards and Hazardous Materials

Would the Project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			**X**	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			**X**	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			**X**	
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?			**X**	
e) For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard or excessive noise for people residing or working in the Project area?				**X**
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				**X**

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				**X**

Discussion

a) Project construction activities may involve the use and transport of hazardous materials. These materials may include fuels, oils, mechanical fluids, and other chemicals used during construction. Transportation, storage, use, and disposal of hazardous materials during construction activities would be required to comply with applicable federal, state, and local statutes and regulations. Compliance would ensure that human health and the environment are not exposed to hazardous materials. In addition, the construction contractor would be required to implement a Stormwater Pollution Prevention Plan during construction activities to prevent contaminated runoff from leaving the project site. Therefore, no significant impacts would occur during construction activities.

In addition, the proposed project would not be a large-quantity user of hazardous materials. Small quantities of hazardous materials would likely routinely be used on site, primarily fertilizers, herbicides, and pesticides, although the use of these substances would decrease with the project due to natural grass being replaced by synthetic turf. These substances would be stored in secure areas and would comply with all applicable storage, handling, usage, and disposal requirements. The potential risks posed by the use and storage of these hazardous materials are limited primarily to the immediate vicinity of the materials. Any transport of these materials would be required to comply with various federal and state laws regarding hazardous materials transportation.

In summary, the proposed project would not create a significant hazard to the public or the environment from routine transport, use, or disposal of hazardous materials and impacts would be **less than significant**.

b, d) The site is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962 (Cortese List)[6] because a “School Evaluation” was conducted at the site in 2001. That investigation found no contamination and no action was required by DTSC or the RWQCB. The investigation found no contamination and no action was required by DTSC or the RWQCB. Prior to school construction in 1958, the site was undeveloped. From the time the school was built to the present, land use in the area has remained very similar with residential housing developing to the northwest and west and southwest, and commercial areas to the

[6] https://www.envirostor.dtsc.ca.gov/public/map/?global_id=43990007

northeast and east.

Cleary Consultants, Inc. conducted a soils study of the project site consisting of screening eight soil samples for various hazardous substances (Cleary Consultants, April 17, 2020). The results of their environmental soil screening indicate the presence of heptachlor epoxide, arsenic, and vanadium above the SF Bay Regional Water Quality Control Board's environmental screening levels (ESLs) for shallow soils and residential land use, July 2019 – Revision 2 ESLs. All other constituents tested were non-detectable.

Heptachlore epoxide levels in one of the soil samples are above the ESL but below the EPA's Total Threshold Limit Concentration (TTLC).

Arsenic levels in all eight samples, are above the ESL, although, arsenic is below the proposed upper background limit of 11 mg/kg for the San Francisco Bay Area.

Vanadium levels in all eight samples, are equal to or above the ESL. However, vanadium is below the mean value for Vanadium (46 mg/kg) in the soil at LBL (a reference site), the California Human Health Screening Levels (CHHSLs), which are concentrations of chemicals in soil below thresholds of concern for risks to human health, and the state TTLC criteria.

This screening was intended for preliminary analysis; additional sampling and discrete soil screening analysis may be required by landfills or trucking companies based on quantity of soil or site area prior to offhaul or disposal of excess materials. All materials proposed for off-hauling would be screened prior to disposal in an appropriate landfill. Therefore, potential impacts from site contamination would be **less than significant**.

c) As described under response to questions IX a, above, the project would reduce the amount of pesticides and other hazardous materials used on campus, and storage and use would comply with applicable regulations. Therefore, the project would have a **less-than-significant** potential to significantly affect children or adults at the school.

e) The project site approximately two miles from San Francisco International Airport. While it is within the boundary of the airport safety zone[7] of the Airport Land Use Plan area and the FAA 14 CFR Part 77 Conical Surface (which applies limits to heights of structures within that zone), the project would not change the land use or increase

[7] City/County Governments of San Mateo County, California, July 2012. *Comprehensive Airport Land Use Plan, San Francisco International Airport.* Exhibit IV-4- Airport Influence Area B – Southeast Side -- Land Use Policy Action/Project Referral Area

the height of any buildings. Therefore, it would not present a hazard to air safety, and **no impact** would occur.

f) Construction and operation of the project are not expected to interfere with the City of Millbrae's emergency response. Construction would be limited to the existing high school athletic facilities, and traffic would not be substantially affected by the project. Therefore, it would not adversely affect emergency response or access. **No impact** would occur.

g) The project is in a highly developed urban area. It is surrounded by urban uses and the nearest wildfire-hazard areas are several miles west of the site. Therefore, the project would have **no impact** with respect to wildfire hazards.

X. Hydrology and Water Quality

Would the Project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?		**X**		
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				**X**
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river 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 off-site; 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?		**X**		
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?			**X**	
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				**X**

Discussion

a, c, e) Under Section 402 of the Clean Water Act, the U.S. EPA has established regulations through the National Pollution Discharge Elimination System (NPDES) stormwater program to control stormwater discharges, including those associated with construction activities. The NPDES stormwater permitting program regulates stormwater quality from construction sites. The State Construction General Permit (CGP) requires the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP) and the use of appropriate best management practices (BMPs) for erosion control and spill prevention during construction. Dischargers whose projects disturb one or more acres of soil or whose projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the CGP for Discharges of Stormwater Associated with Construction Activity (CGP Order 2009-0009-DWQ).

The City of Millbrae is under the jurisdiction of the San Mateo County Flood Control District (SMFCD), which manages stormwater and flooding problems in San Mateo County and is responsible for administering the San Mateo Countywide Water Pollution Prevention Program (SMCWPPP) and FEMA Flood Insurance Program.

The project site is relatively flat and mostly covered with existing athletic fields. Development of the proposed project would require disturbance and substantial grading, as described in the Project Description. Substantial topographic changes would be required to construct the new fields.

During construction activities, there would be a potential for surface water to carry sediment from on-site erosion and small quantities of pollutants into the City's stormwater system and, ultimately, San Francisco Bay. Soil erosion may occur along project boundaries during construction in areas where temporary soil storage may be required. Small quantities of pollutants may enter the storm drainage system, potentially degrading water quality.

Construction of the proposed project also would require the use of gasoline and diesel-powered heavy equipment. Chemicals such as gasoline, diesel fuel, lubricating oil, hydraulic oil, lubricating grease, automatic transmission fluid, paints, solvents, glues, and other substances would be used during construction. An accidental release of any of these substances could degrade the water quality of the surface water runoff and add additional sources of pollution into the drainage system.

The proposed project would be required to comply with the State CGP. The District would be required to develop and implement a SWPPP that identifies appropriate construction BMPs in order to minimize potential sedimentation or contamination of storm water runoff generated from the project site. The SWPPP would identify the risk level for erosion and

sedimentation and how much monitoring of potential pollutants is required. Implementation of a SWPPP as required would ensure that the construction of the proposed project would not violate any water quality standards or waste discharge requirements and reduce potential impacts to a less-than-significant level, as described in Mitigation Measure HYD-1.

As required under State Water Resources Control Board Order No. R2 2009-0074, the City of Millbrae requires regulated projects, such as this one, to prepare a Stormwater Control Plan (SWCP). The SWCP must include post-construction stormwater treatment measures such as bio-retention facilities and source controlled BMPs. The SWCP must also address ongoing maintenance of those facilities.

Prior to the issuance of grading permits or building permits (whichever occurs first), the Project would be required to obtain coverage under the State CGP (NPDES General Permit for Stormwater Discharges Association with Construction Activity (Order 2009-0009 DWQ) by preparing a Stormwater Pollution Prevention Plan (SWPPP) and submitting it along with a notice of intent, to the San Francisco Bay RWQCB. The SWPPP must identify a practical sequence for BMP implementation and maintenance, site restoration, contingency measures, responsible parties, and agency contacts. The SWPPP would include but not be limited to the following elements:

- Temporary erosion control measures would be employed for disturbed areas.

- No disturbed surfaces would be left without erosion control measures in place during the winter and spring months. Cover disturbed areas with soil stabilizers, mulch, fiber rolls, or temporary vegetation.

- Sediment would be retained on site by a system of sediment basins, traps, or other appropriate measures. Drop inlets shall be lined with filter fabric/geotextile.

- The construction contractor would prepare Standard Operating Procedures for the handling of hazardous materials on the construction site to eliminate or reduce discharge of materials to storm drains. This may include locating construction-related equipment and processes that contain or generate pollutants in a secure area, away from storm drains and gutters, and wetlands; parking, fueling, and cleaning all vehicles and equipment in the secure area; designating concrete washout areas; and preventing or containing potential leakage or spilling from sanitary facilities.

- BMP performance and effectiveness would be determined either by visual means where applicable (e.g., observation of above-normal sediment release), or by actual water sampling in cases where verification of contaminant reduction or elimination (such as inadvertent petroleum release) is required by the

RWQCB to determine adequacy of the measure.

- In the event of significant construction delays or delays in final landscape installation, native grasses or other appropriate vegetative cover would be established on the construction site as soon as possible after disturbance, as an interim erosion-control measure throughout the wet season.

There are 469,984 square feet of total surface area within the project site. Currently, 358,368 square feet of surface area is pervious and 111,616 square feet is impervious. The project would result in a net increase of 26,218 square feet of impervious area (post-project net 332,368 square feet of pervious area and 137,834 square feet of impervious area on the site). New storm drains would be installed to connect field subdrains to the existing stormwater collection system. Peak flows would not be expected to exceed existing site conditions because any increase in peak runoff would be detained by the stormwater system. The District would coordinate any new connections with the City of Millbrae Public Works Department. Therefore, impacts to runoff would be **less than significant**.

The quality of the runoff would improve since pesticide and fertilizer use would decrease since such substances would no longer be needed for the natural grass that would be replaced with synthetic turf. Implementation of the Construction General Permit requirements described above, as well as Mitigation Measures HYD-1 and HYD-2, below, would reduce the other water quality impacts described above to a **less-than-significan**t level.

b) The City of Millbrae Public Works Department is responsible for the efficient and effective operation and maintenance of the City's water supply and distribution systems. The City of Millbrae receives its water through the Bay Area Water Supply and Conservation Agency, which purchases water from the San Francisco Public Utilities Commission (SFPUC) Hetch Hetchy system. No groundwater is used for the City's supply. The Public Works Department maintains the City's water and sewer systems.

The project would re-arrange and improve existing athletic fields and associated facilities, and replace large areas of natural turf, which require irrigation, to synthetic turf. Because the natural grass-covered softball fields would be replaced with synthetic turf (a net decrease of about 30,000 sq. ft. of irrigated field), water currently used for irrigation would no longer be needed. Therefore, the proposed project would not contribute to depletion of water supplies and **no impact** would occur to surface or groundwater.

Because of the reduced overall demand from the project, and because it would incorporate water conservation equipment, landscaping, and practices, it would not conflict with any groundwater management plan.

d) The Federal Emergency Management Agency (FEMA) is recently updated its maps for Millbrae. Most of the site is mapped as an "Area of Minimal Flood Hazards". However, a portion of the multi-use field and a portion of the proposed baseball field site is mapped as Zone X, which has a 0.2% annual chance of flood hazard, and 1% annual chance of a flooding of less than one foot[8]. This would not pose a significant hazard for field users, as the fields would not be in use during heavy rains or when flooded. Therefore, this impact would be **less than significant**.

The project site is not within a dam failure area[9]. Therefore, the project would not be subject to flood hazards from that source. **No impact** would occur.

Seiches and tsunamis are seismically induced large waves of water. Because of the distance of the site from any large water body, the absence of steep slopes above the site, and the elevation of the site well above sea level, there is no potential for a tsunami seiche, or mudflow to affect this part of Millbrae. Therefore, the proposed project would have no impact to future occupants of the project from these hazards, and **no impact** would occur.

Mitigation Measures

Mitigation Measure HYD-1: Prior to the issuance of grading permits for the proposed Project, the project engineers shall prepare a Stormwater Control Plan. The Stormwater Control Plan shall identify pollution prevention measures and practices to prevent polluted runoff from leaving the project site.

Mitigation Measure HYD-2: The District shall maintain in perpetuity the post-construction BMPs listed in the Stormwater Control Plan. The District shall make changes or modifications to the BMPs to ensure peak performance. The District shall be responsible for costs incurred in operating, maintaining, repairing, and replacing the BMPs. The owner shall conduct inspection and maintenance activities and complete annual reports.

[8] Federal Emergency Management Agency (FEMA) FIRM Flood Hazard Maps, Effective April 5, 2019, 06081C0132F
[9] https://planning.smcgov.org/sites/planning.smcgov.org/files/documents/files/Dam_Failure_Inundation.pdf

X. Land Use and Planning

Would the Project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Physically divide an established community?				**X**
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				**X**
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				**X**

Discussion

a) The athletic facility improvements are proposed for existing facilities on an existing high school campus. Because the project would not change the existing land use but would instead upgrade the existing athletic facilities onsite, the project would not create conflicts between uses or divide an established community, there would be **no impact.**

b) The project would not change the existing land use on site and would therefore have **no impact** on plan conformance.

c) The project site is not located within the boundaries of a habitat conservation plan or a natural community conservation plan; therefore, the project would not conflict with any habitat plans and there would be **no impact**.

XI. Mineral Resources

Would the Project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				**X**
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				**X**

Discussion

a, b) The project site a developed school campus in an urban area, and is not identified in the City of Millbrae's General Plan as a site containing mineral resources that would be of local, regional, or statewide importance. Therefore, the project is not considered to have any impacts on mineral resources. The project site is also outside of any areas designated by the State Mining and Geology Board as containing regionally significant construction-grade aggregate resources (used in concrete). The project site does not contain any known mineral deposits or active mineral extraction operations. Therefore, there would be **no impact** to mineral resources.

XIII. Noise

Would the Project result in:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		X		
b) Generation of excessive groundborne vibration or groundborne noise levels?			X	
c) For a Project 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?			X	

Background

A detailed noise analysis was conducted for the project by RGD Acoustical Consulting (April 2020). The discussion below is summarized from that analysis. The full RGD study is available at the SMUHSD offices.

Noise Descriptors

Noise can be defined as unwanted sound. It is commonly measured with an instrument called a sound level meter. The sound level meter captures the sound with a microphone and converts it into a number called a sound level. Sound levels are expressed in units of decibels.

To correlate the microphone signal to a level that corresponds to the way humans perceive noise, the A-weighting filter is used. A-weighting de-emphasizes low-frequency and very high-frequency sound in a manner similar to human hearing. The use of A-weighting is required by most local General Plans as well as federal and state noise regulations (e.g. Caltrans, EPA, OSHA and HUD). The abbreviation dBA is sometimes used when the A-weighted sound level is reported.

Because of the time-varying nature of environmental sound, there are many descriptors that are used to quantify the sound level. Although one individual descriptor alone does not fully describe a particular noise environment, taken together, they can more accurately represent the noise environment. The maximum instantaneous noise level (L_{max}) is often used to identify the loudness of a single event such as a car pass-by or airplane flyover.

To express the average noise level the L_{eq} (equivalent noise level) is used. The L_{eq} can be measured over any length of time but is typically reported for periods of 15 minutes to 1 hour. The background noise level (or residual noise level) is the sound level during the quietest moments. It is usually generated by steady sources such as distant freeway traffic. It can be quantified with a descriptor called the L_{90} which is the sound level exceeded 90 percent of the time.

There are other statistical descriptors that are used, often times as part of a local noise ordinance. These descriptors are used since local ordinances will have limits based on the number of minutes per hour that an intrusive sound may exceed a specified limit. For example, if a specified noise level cannot be exceeded more than 30 minutes in an hour that is referred to as the L_{50}. The L_{50} is used in this is also referred to as the median noise level.

To quantify the noise level over a 24-hour period, the Day/Night Average Sound Level (DNL or L_{dn}) or Community Noise Equivalent Level (CNEL) is used. These descriptors are averages like the L_{eq} except they include a 10 dB penalty during nighttime hours (and a 5 dB penalty during evening hours in the CNEL) to account for peoples increased sensitivity during these hours. The CNEL and DNL are typically within one decibel of each other.

In environmental noise, a change in noise level of 3 dB is considered a just noticeable difference. A 5 dB change is clearly noticeable, but not dramatic. A 10 dB change is perceived as a halving or doubling in loudness.

Vibration is an oscillatory motion which can be described in terms of the displacement, velocity, or acceleration. For a vibrating floor, the displacement is simply the distance that a point on the floor moves away from its static position. The velocity represents the instantaneous speed of the floor movement.

The peak particle velocity (PPV) is the descriptor used in monitoring of construction vibration since it is related to the stresses that are experienced by buildings. Although PPV is appropriate for evaluating the potential of building damage, it is not always suitable for evaluating human response. It takes some time for the human body to respond to vibration signals and a time averaged vibration descriptor correlates better with human response. For this reason, criteria for transit vibration is presented in terms of the root-mean-square (rms) vibration velocity and is typically shown in units of decibels referenced to 1 micro-inch per second (with the abbreviation “VdB" to reduce the potential for confusion with

sound decibels).

Regulatory Setting

General Plan Noise Element

The Noise Element of the City of Millbrae General Plan (adopted 1998) has goals and policies to assure the compatibility of a new development with the noise environment of the City. The applicable goals, policies and actions are below:

GOAL NS1: Protect Millbrae's neighborhoods by providing an acceptable noise level throughout the community, identifying and alleviating or minimizing existing noise problems where possible.

- POLICY NS1.2: Protect the noise environment in existing residential areas, requiring the evaluation of mitigation measures for projects under the following circumstances:
    a. The project would cause the L_{dn} to increase 3 dBA or more.
    b. Any increase would result in an L_{dn} greater than 60 dBA.
    c. The L_{dn} already exceed 60 dBA.
    d. The project has the potential to generate significant adverse community response.

- POLICY NS1.4: Regulate construction activity to reduce noise between 7:00 pm and 7:00 am.

City of Millbrae Municipal Code

Chapter 6.25.050 "Unlawful Property Nuisances" states that a nuisance exists if there is "emanation of noise or vibrations on a continuous and regular basis of such a loud, unusual, unnecessary, penetrating, lengthy or untimely nature as to unreasonably disturb, annoy, injure or interfere with or endanger the comfort, repose, health, peace safety or welfare of users of neighboring property." The City does not have any quantitative noise level limits.

For construction or repair work, the municipal states that a nuisance exists if construction/repair work occurs at any time other than the following:

- Monday through Friday 7:30 a.m. to 7:00 p.m., or
- Saturday 8:00 a.m. to 6:00 p.m., or
- Sundays and holidays 9:00 a.m. to 6:00 p.m.,
- Unless otherwise authorized by the City

Section 8 of Chapter 6.25.050 "Construction Equipment and Materials" provides

construction-related requirements. However, the City does not have any quantitative noise level limits.

a) Construction equipment or machinery of any type of description parked or stored on property when it is readily visible from a public street, alley or adjoining property, except while excavation, construction or demolition operations covered by an active building permit are in progress on the subject property or where the property is zoned for the storage of construction equipment and/or machinery.

b) The keeping, storing, depositing or accumulating on property of dirt, sand, gravel, concrete or other similar materials when they are readily visible from a public street, alley or adjoining property, except while excavation, construction or demolition operations covered by an active building permit are in progress on the subject property or where the property is zoned for the storage of such materials,

c) Unfenced excavations or excavations not property covered.

Existing Noise Environment

Noise levels around the school site emanates from school activities as well as other ambient noise sources. Activities at the school consist of sporting events (e.g. baseball games, softball games, swim meet, water polo games) as well as practices for various sports teams. The practices generate lower noise levels than games but tend to occur more frequently. Other ambient noise sources are vehicular traffic on local roads as well as nearby and regional aircraft.

To quantify ambient noise levels, two continuous, long-term (5-day) noise measurement and five short-term (15 minute) noise measurements were made in the surrounding neighborhoods. The long-term monitors began on Friday, November 15, 2019 and ended on Tuesday, November 19, 2019. The noise measurement locations are shown in Figure 13.

The long-term measurement at location LT-1 was made on the property line fence along the existing softball field. The microphone was positioned above the fence at approximately 10 feet above ground. The long-term measurement at location LT-2 was made on a utility pole on Sequoia Avenue at approximately 12 feet above ground.

Two short-term measurements were made at the existing softball field at ST-1 and ST-2. During the first 10 minute of the short-term measurement at ST-1, there was a PE class on the softball field with approximately 25 students. The voices of the students generally ranged from 52 to 60 dBA.

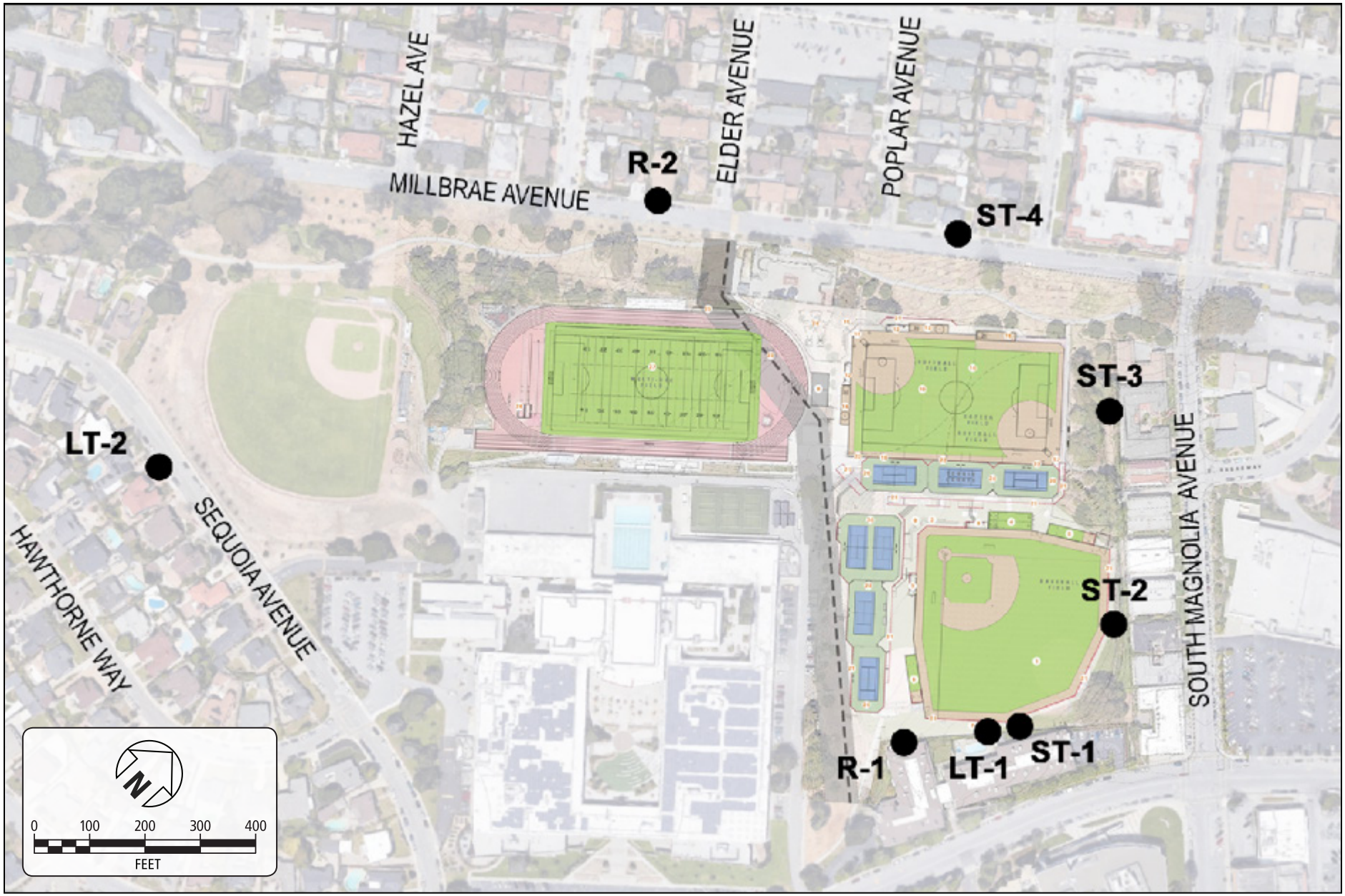


Figure 13
Noise Measurement and Assessment Locations

Source: RGD Acoustical Consultants

Two short-term measurements were made at the residences near the existing tennis courts at ST-3 and ST-4. The short-term measurement at ST-3 was made near the school's property line fence at a height of 5 feet above ground. The short-term measurement at ST-4 was at the residences across Millbrae Avenue.

The short-term measurement at ST-5 was made during soccer practice. The soccer practice occurred at the stadium and lower fields and had approximately 50 students. The microphone was positioned at the front of the bleacher area. Voices of students generated typical maximum instantaneous noise levels of L_{max} 56 to 63 dBA. The voices of students in the lower field were not audible.

Tables Noise-1 and Noise-2 show a graph of the long-term measurement results at LT-1 and LT-2, respectively. A summary of the short-term measurements is provided in Table Noise-3.

Table Noise-1: Long-Term Noise Measurement Results (CNEL), Location LT-1

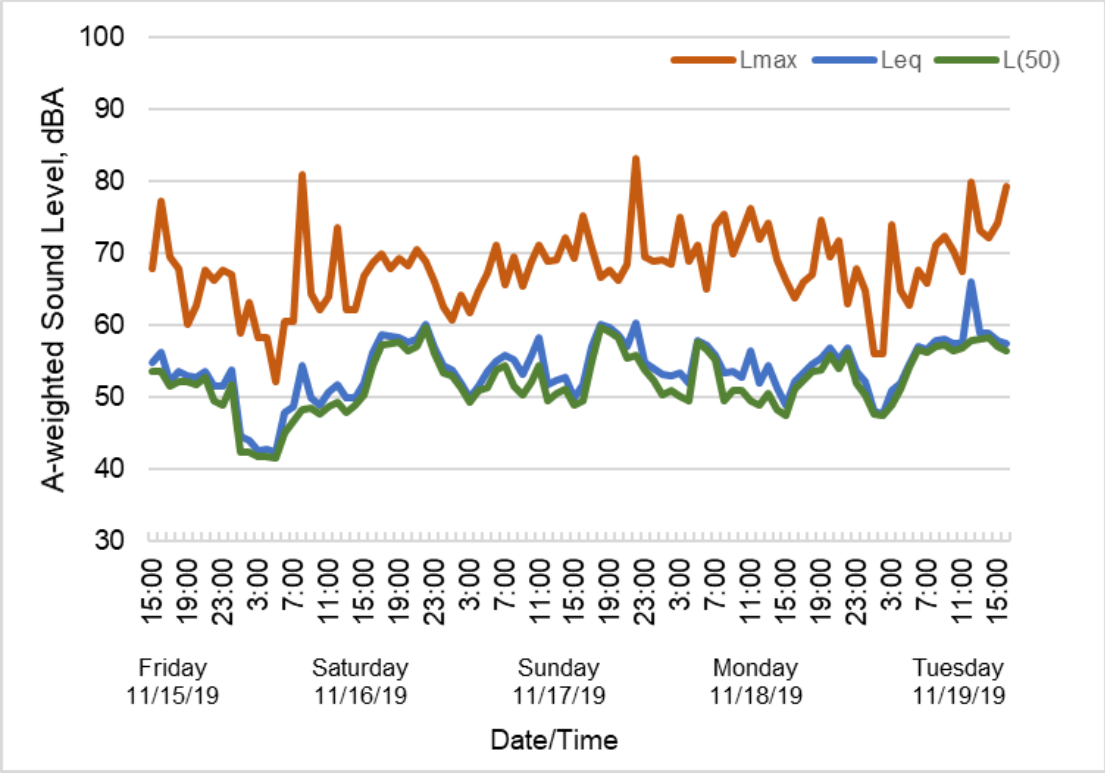


Table Noise-2: Long-Term Noise Measurement Results (CNEL), Location LT-2

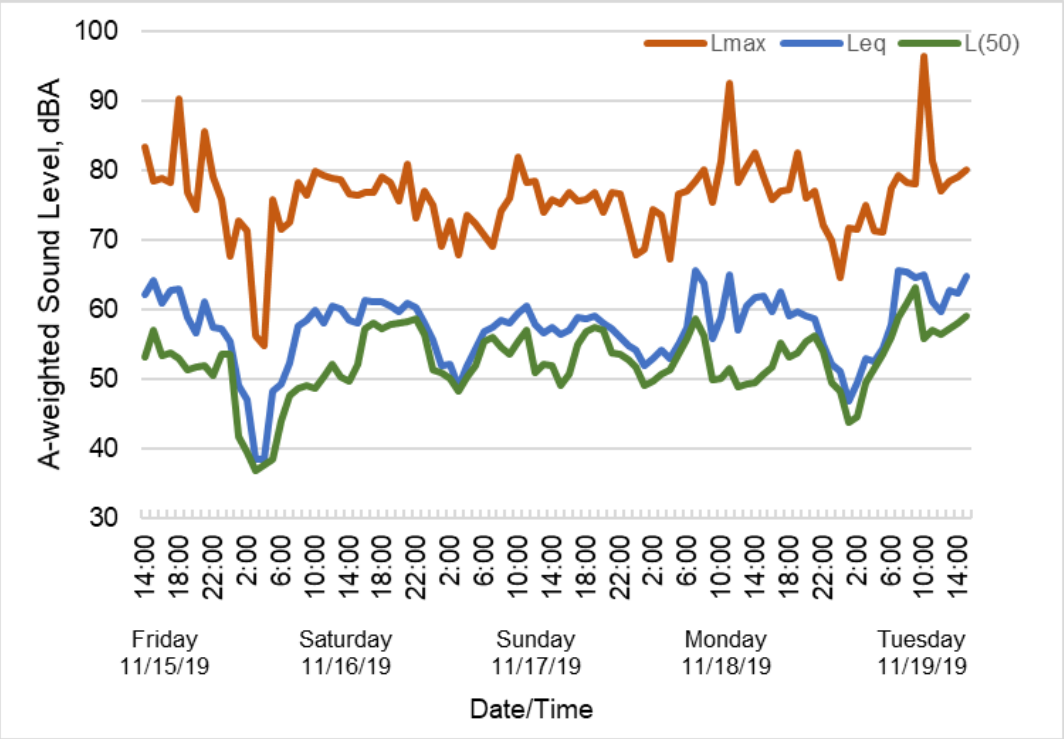


Table Noise-3: School Short-Term Noise Measurement Results

Location		Date/Time	A-weighted Sound Level, dBA					
			L_{eq}	L_8	L_{33}	L_{50}	CNEL*	L_{max}
ST-1	Existing softball field / future baseball field	15 Nov 2019 3:07 – 3:22 P.M.	55	56	54	53	61	Students during PE class: Voices: 52, 55 – 56, 60, 70 (yell) Jet: 55, 63 - 66
ST-2	Existing softball field / future baseball field	15 Nov 2019 3:26 – 3:41 P.M.	52	54	51	50	58	Voices of students near school building: < 48 Traffic: 48 – 50 Students playing on field: < 49, excited yell: 57 Bird: 50
ST-3	Along school property line near existing tennis courts / future soccer field	15 Nov 2019 3:45 – 4:00 P.M.	50	52	50	49	58	Traffic: ~48

ST-4	Residences along Millbrae Avenue across from existing tennis courts	19 Nov 2019 4:08 – 4:23 P.M.	64	68	64	61	68	Cars: 65 – 68, 70 – 72, 78 General Aviation: 52 Crows: 56
ST-5	At stadium bleachers	19 Nov 2019 4:29 – 4:44 P.M.	56	59	55	54	62	Soccer practice voices: 56-63 typical, 61, 70 Soccer ball hitting bleachers: 72 General Aviation: 62

*CNEL is based on comparison with simultaneous measurement at the long-term location.

CEQA Thresholds of Significance

CEQA does not provide quantitative noise level limits to use as thresholds of significance for a project. Instead, it points to use of local ordinances, adopted standards of agencies as well as the potential for a project to significantly increase existing noise levels above those that were present without the project. Within this framework, the following thresholds are adopted for this project.

Threshold 1: A significant noise impact would occur if the noise from the new PA system would exceed 65 dBA at the nearest property line.

Discussion: The Board of Directors for the District, in recognition of the importance of minimizing noise impact to neighbors from PA use, has adopted a policy for amplified sound. The policy requires that the sound of the PA system be limited to 65 dBA at the closest property line to the school or compliance with the local ordinance, whichever is less. The City of Millbrae municipal code does not have quantitative noise limits. Therefore, the District policy is adopted as a threshold of significance.

Threshold 2: A significant noise impact would occur if the combined noise from all field sources exceeds an hourly L_{50} of 60 dBA at the adjacent uses.

Discussion: The City of Millbrae does not specify quantitative noise level limits for assessing noise from the field activities. For the purposes of assessing impact from the combined noise of all sources associated with activities at the field on a short term, hourly basis (e.g. crowd, PA, players and coaches), an hourly L50 of 60 dBA is used as a threshold of significance. This threshold was used for a prior study of noise impacts associated with the field lighting of the Mills High School football stadium. The L50 is often referred to as the median noise level.

Threshold 3: A significant impact would occur if the daily CNEL increases by 3 dBA or more when a baseball game, softball game, swim meet, or water polo game is played at night (as compared to a day when a game is played during the daytime).

Discussion: The Millbrae General Plan requires consideration of mitigation

measures for projects that increase the L_{dn} by 3 dBA or more. The L_{dn} has an adjustment to account for peoples increased sensitivity to noise at night (between 10 pm and 7 am) but does not include an adjustment to account for the increased sensitivity of people to noise during evening hours when the games would occur. There is another metric called CNEL which is similar to the L_{dn} but includes a 5 dBA "penalty" which is added to noise during evening hours (7 pm – 10 pm) to account for peoples' sensitivity to evening noise.

In order to evaluate the potential impact that would occur as a result of peoples' sensitivity to evening noise, this report considers the increase in the daily CNEL. A baseball game day, softball game day, tennis game day, and soccer practice day are used since these sports were relocated as part of the project.

Threshold 4: A significant impact would occur if the annual average CNEL increases by 3 dBA or more as a result of the project.

Discussion: While the CNEL increase on a game day is helpful to understand potential impact on a daily basis, it does not necessarily provide a measure of the impact over time since there will be events happening on the field throughout the year. In order to evaluate the potential impact of noise from all field related activities during the course of a year, this report considers the increase in the annual average CNEL that would result from all games and practices on the fields.

Threshold 5: A significant impact would occur if the project results in the generation of construction noise outside of the following times as per the City Municipal Code.

Discussion: The City of Millbrae municipal code Chapter 6.25.050 limits construction activities to Monday through Friday between 7:30 a.m. to 7:00 p.m., Saturday 8:00 a.m. to 6:00 p.m., and Sundays and holidays 9:00 a.m. to 6:00 p.m., unless otherwise authorized by the City.

Threshold 6: A significant impact would occur if the project results in the generation of excessive groundborne vibration or groundborne noise.

Discussion: The operation of the project (i.e. activities on the field) is not expected to include groundborne vibration sources. However, construction activities will generate groundborne vibration.

Neither CEQA, City, nor the State specifies acceptable vibration levels from construction activities. For the purposes of this assessment, the methodology described by the Federal Transit Administration (FTA) for assessing potential damage to structures is used[10]. These construction vibration damage criteria for typical buildings range from a Peak Particle Velocity (PPV) of 0.5 inches/second

[10] Transit Noise and Vibration Impact Assessment, Federal Transit Administration, September 2018

for new residential structures to 0.3 inches/second for older residential structures.

Threshold 7: A significant impact would occur if the project would expose people residing or working in the project area to excessive aircraft noise levels.

Discussion: According to the 2012 Comprehensive Airport Land Use Compatibility Plan for the Environs of San Francisco International Airport's Noise/Land Use Compatibility Criteria (Table IV-1), public and private schools exposed to an aircraft CNEL of below 65 dBA is considered compatible without restrictions. Schools exposed to an aircraft CNEL of 65 to 70 dBA are considered "conditionally compatible" and schools exposed to an aircraft CNEL above 70 dBA are considered incompatible.

Discussion

a) *Construction Noise Impacts*

Construction of the project would include the renovation of existing fields, grading/foundation work, and the addition of light poles and other structures. Equipment used during construction would vary by phase, but would include excavators, backhoes, dump trucks, graders, compactors, water trucks and similar equipment. According to the Project Description, construction hours would be 7:00 AM to 4:30 PM on weekdays only. Some work may be done on Saturdays between 9:00 AM to 4:30 PM. Project construction would start in May 2021 and be completed in April 2022.

Residences along South Magnolia Avenue and Murchison Drive share a common property line with the school. The project's proposed field upgrades are located between 27 feet (baseball field edge) to 525 feet from the nearest homes along South Magnolia Avenue. The proposed field upgrades are between 28 feet (baseball field edge) to 750 feet from the nearest homes along Murchison Drive. The project's proposed field upgrades are located between 175 feet to 880 feet from the nearest homes across Millbrae Avenue.

Based on a typical noise construction source level of 84 dBA at 50 feet, the construction noise levels are calculated to be approximately 89 dBA when construction equipment is located at the near distance of 27 to 28 feet from the nearest homes along South Magnolia Avenue and Murchison Drive. Construction equipment noise level for the nearest homes across Millbrae Avenue would be approximately 73 dBA.

Construction noise would be clearly noticeable at times and may temporarily interfere with normal outdoor activities such as speech communications. When construction activities occur farther from the homes, construction noise levels would be reduced

due to the greater distance. For example, when construction activities occur at the center of the new softball/soccer field, the typical noise source would be attenuated to 69 dBA at the nearest home along South Magnolia Avenue, 62 dBA at the nearest home along Murchison Drive, and 68 dBA at the nearest home across Millbrae Avenue.

The City's municipal code limits construction activities to Monday through Friday between 7:30 a.m. to 7:00 p.m., Saturday 8:00 a.m. to 6:00 p.m., and Sundays and holidays 9:00 a.m. to 6:00 p.m., unless otherwise authorized by the city. In order to reduce the potential for annoyance due to construction noise, the project's construction hours should follow the City's hours of construction unless otherwise authorized by the City.

Noise from construction activities would be reduced to a less than significant impact with Mitigation Measure NOISE-1, below.

Operational Noise Impacts

The RGD noise analysis considered long-term noise at the nearest sensitive receptors from the various changes in fields and facility use that would result from the project. Proposed changes in field/facility usage are shown in Table Noise-4, below.

Noise from PA Sound Systems. Table Noise-5 shows the calculated noise level from the PA sound system from the baseball and softball fields. The table shows that the PA sound level would be less than the threshold of 65 dBA at the nearest receivers. This is considered less than significant.

Noise from Activities on the Fields. Although there are no new sports occurring on the fields, some of the athletic fields would be relocated due to the project. The baseball and softball fields would also include a new PA sound system. Table Noise-5 shows the hourly L_{50} noise levels from the activities relocated due to the project.

Table Noise-4: Existing and Project Field Usage

Activities	Existing				with Project				
	Location	# of players and spectators	Time of Day	# of events per year	Location	# of players and spectators	Time of Day	# of events per year	Events with PA use
Baseball game	Existing baseball field	65	4:00 - 7:00	30	Future baseball field	65	4:00 - 7:00	30	30
Baseball practice	Existing baseball field	35	3:30 - 5:30	100	Future baseball field	35	3:30 - 5:30	100	--
Softball game	Existing softball field	50	4:00 - 6:00	30	Future softball field	50	4:00 - 6:00	30	30
Softball practice	Existing softball field	20	3:30 - 5:30	100	Future softball field	20	3:30 - 5:30	100	--
Soccer game	Stadium	110	4:30 - 7:30	20	Stadium	110	4:30 - 7:30	40	2
Soccer practice	Stadium	70	3:30 - 5:30	100	Future soccer field	70	3:30 - 5:30	100	--
Tennis game	Existing tennis courts	45	4:00 - 5:30	30	Future tennis courts	45	4:00 - 5:30	30	--
Tennis practice	Existing tennis courts	40	3:30 - 5:30	100	Future tennis courts	40	3:30 - 5:30	100	--
Swim meet	Pool	100	3:30 - 7:30	5	Pool	100	3:30 - 7:30	5	5
Swim practice	Pool	75	3:30 - 5:30	25	Pool	75	3:30 - 5:30	25	--
Water polo game	Pool	80	3:30 - 7:00	15	Pool	80	3:30 - 7:00	15	2
Water polo practice	Pool	50	3:30 - 5:30	25	Pool	50	3:30 - 5:30	25	--

Source: email from Greystone West Company to RGD Acoustics, 1 April 2020

Table Noise-5: Calculated PA System Sound Levels

Receiver	Noise Source	Hourly L_{max}, dBA
LT-1	Baseball field PA System	63.1
	Softball field PA System	55.2
LT-2	Baseball field PA System	35.5
	Softball field PA System	40.5
R-1	Baseball field PA System	61.6
	Softball field PA System	55.9
R-2	Baseball field PA System	40.9
	Softball field PA System	49.5
ST-1	Baseball field PA System	62.8
	Softball field PA System	57.3
ST-2	Baseball field PA System	62.5
	Softball field PA System	56.8
ST-3	Baseball field PA System	58.2
	Softball field PA System	60.5
ST-4	Baseball field PA System	48.5
	Softball field PA System	60.1

Table Noise-5: L_{50} Due to Future Field Activities

Receiver	Activity	Hourly L_{50}, dBA
LT-1	Baseball game	**60.6**
	Softball game	50.4
	Soccer practice	42.3
	Tennis game	47.2
LT-2	Baseball game	38.3
	Softball game	43.7
	Soccer practice	35.0
	Tennis game	31.7
R-1	Baseball game	59.6
	Softball game	51.1
	Soccer practice	42.0
	Tennis game	49.6
R-2	Baseball game	45.6
	Softball game	49.9
	Soccer practice	38.7
	Tennis game	38.7
ST-1	Baseball game	**60.7**
	Softball game	51.6
	Soccer practice	42.1
	Tennis game	47.0
ST-2	Baseball game	59.8
	Softball game	51.2
	Soccer practice	42.6
	Tennis game	46.1
ST-3	Baseball game	54.7
	Softball game	56.7

	Soccer practice	52.1
	Tennis game	46.4
ST-4	Baseball game	50.8
	Softball game	58.6
	Soccer practice	48.7
	Tennis game	44.9

Table Noise-5 shows that hourly L_{50} noise levels would be less than the hourly noise level threshold of a L_{50} of 60 dBA for all activities at the neighboring homes except for noise from a baseball game at the homes near locations LT-1 and ST-1. The baseball noise level exceedance is partly due to the PA sound system which was modeled with four loudspeakers to achieve a design PA sound level of 78 to 85 dBA at the baseball bleachers. This preliminary PA system design generates a maximum instantaneous noise level of L_{max} 63 dBA at LT-1 and ST-1.

Reducing the PA sound levels at the homes near LT-1 and ST-1 by 5 dBA to a L_{max} of 58 dBA at LT-1 and ST-1 would reduce the overall baseball game noise level by approximately 1 dBA, or an L_{50} of 60 dBA or less at those homes. This can be achieved by reducing the PA sound level at the bleachers to 73 to 80 dBA. Alternatively, a specially designed baseball PA sound system that is optimized for the new baseball field may also achieve the same reduction in noise emanating to the neighboring homes while maintaining a PA sound level of 78 to 85 dBA at the bleachers.

This **potentially significant** impact would be reduced to a **less than significant** level with Mitigation Measure Noise-2

Table Noise-6 shows the change in the annual average CNEL as a result of the project. The table shows that the annual average CNEL would increase by less than 3 dBA at all receiver locations and this is considered **less than significant**. and no mitigation would be required.

Table Noise-6. Increase in Annual Average CNEL from all Field Activities

Receiver		A-weighted Annual CNEL, dBA		
		Existing	Future w/ Project	Increase
LT-1				
	Ambient	61.2	61.2	
	Baseball field	19.6	44.1	
	Softball/Practice field	42.9	33.5	
	Tennis courts	27.6	31.4	
	Pool	20.8	20.8	
	Total	61.3	61.3	< 0.1
LT-2				
	Ambient	63.7	63.7	
	Baseball field	38.0	21.7	
	Softball/Practice field	24.9	26.6	
	Tennis courts	19.1	15.0	
	Pool	28.5	28.5	
	Total	63.7	63.7	< 0.1
R-1				
	Ambient	61.2	61.2	
	Baseball field	14.6	43.0	
	Softball/Practice field	49.5	34.0	
	Tennis courts	27.1	34.3	
	Pool	19.7	19.7	
	Total	61.5	61.3	-0.2
R-2				
	Ambient	67.7	67.7	
	Baseball field	31.2	29.0	
	Softball/Practice field	30.9	32.3	
	Tennis courts	21.9	21.7	
	Pool	30.3	30.3	
	Total	67.7	67.7	< 0.1

b) The nearest neighboring residential homes are located about 27 feet or more from the nearest edge of the proposed field upgrades. There is also an outdoor pool area at the residences along Murchison Drive. Table Noise-7shows the calculated vibration levels. The calculations were based on the nearest distances from the proposed field upgrades (baseball field) to predict the vibration levels when equipment is operating near the homes.

Caltrans categorizes a PPV of 0.04 inches/sec to be “distinctly perceptible”, a PPV of

0.10 inches/sec to be "strongly perceptible", and a PPV of 0.4 inches/sec to be "severe". The calculated construction vibration levels for the vibratory roller when it is near the homes near the edge of the proposed field upgrade would be greater than Caltrans' "strongly perceptible" level of PPV 0.1 inches/sec but less than the "severe" level of PPV 0.4 inches/sec. Vibration from other equipment would be "distinctly perceptible" but less than the levels for "strongly perceptible" and "severe". Although vibration from the vibratory roller may be, at times, "strongly perceptible", all construction activities would be temporary and only occur during daytime hours. Additionally, most construction activities would occur at distances greater than 100 feet and construction vibration would be less noticeable.

Table Noise-7 shows that construction vibration levels are expected to be less than the potential building damage thresholds of a PPV of 0.3 inches/sec for older residential structures and a PPV of 0.5 inches/sec for new residential structures. Since vibration from construction would not exceed the threshold for potential building damage, this is considered **less than significant.**

Table Noise-7: Calculated Project Construction Vibration Levels

	PPV (inches/sec)	
	Nearest Homes along South Magnolia Avenue	**Nearest Homes along Murchison Drive**
Equipment	**27 feet from Equipment**	**29 feet from Equipment**
Vibratory Roller	0.19	0.17
Hoe Ram	0.08	0.07
Large Bulldozer	0.08	0.07
Caisson Drilling	0.08	0.07
Loaded Trucks	0.07	0.06
Jackhammer	0.03	0.03
Small Bulldozer	< 0.01	< 0.01

c) According to the 2012 Comprehensive Airport Land Use Compatibility Plan for the Environs of San Francisco International Airport Exhibit IV-5 which shows the airport CNEL noise contours, the project site is outside the aircraft CNEL 65 dBA noise contour. Based on the document's Table IV-1, school uses outside the aircraft CNEL 65 dBA noise contour is considered compatible with the noise environment. This is considered less than significant.

Mitigation Measures

Mitigation Measure NOISE-1: In order to minimize disruption and potential annoyance during construction, the following shall be implemented during construction:

- Construction activities for the project should be limited to the City's construction hours of Monday through Friday between 7:30 a.m. to 7:00 p.m., Saturday 8:00 a.m. to 6:00 p.m., and Sundays and holidays 9:00 a.m. to 6:00 p.m., unless otherwise authorized by the city.
- All construction equipment shall be equipped with mufflers and sound control devices (e.g., intake silencers and noise shrouds) that are in good condition and appropriate for the equipment.
- Maintain all construction equipment to minimize noise emissions.
- Stationary equipment shall be located on the site so as to maintain the greatest possible distance to the sensitive receptors.
- Unnecessary idling of internal combustion engines should be strictly prohibited.
- Neighbors located adjacent to the construction site shall be notified of the construction schedule in writing.
- The construction contractor shall provide the name and telephone number an on-site construction liaison. In the event that construction noise is intrusive to the community, the construction liaison shall investigate the source of the noise and require that reasonable measures be implemented to correct the problem.

Mitigation Measure NOISE-2: The project shall new baseball PA system shall be designed and operated to not exceed a L_{max} of 58 dBA at locations LT-1 and ST-1. This will require distributing highly directional and carefully aimed loudspeakers around the bleachers and field. The distance between the loudspeakers and the coverage area shall be minimized to reduce spill to the community. In addition, the PA system output volume shall be regulated by an audio processor with the ability to limit the audio output levels (e.g. compressor/limiter).

XIII. Population and Housing

Would the Project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				**X**
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				**X**

Discussion

a) The proposed athletics field upgrade project would not directly or indirectly increase population growth because no new housing or permanent jobs are proposed as part of the project. The project site and surrounding areas are developed with urban land uses and no extensions of roads or other infrastructure would be required that would indirectly induce growth. Therefore, the project would not induce new development on nearby lands, and **no impact** would occur.

b) The Project site contains existing high school athletic fields facility with no housing. The proposed project would not displace existing housing or people, so there would be **no impact**.

XIV. Public Services

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:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Fire protection?			X	
b) Police protection?			X	
c) Schools?				X
d) Parks?				X
e) Other public facilities?				X

Discussion

a) The Central County Fire Department (CCFD) provides fire protection and emergency medical services for the project site. CCFD has six strategically located and professionally staffed fire stations, in addition to an administrative headquarters and training facility. Daily staffing consists of six engine companies, one ladder truck and one Battalion Chief, 24 hours a day, every day. Two of the six CCFD fire stations are located within the Millbrae City limits. The Main Fire Station (#37) at 511 Magnolia Avenue is closest to the project site, approximately 1.1 miles away. Implementation of the project would not materially alter uses of the site, and therefore would not result in an increased demand for fire protection services. The project would not require the provision of or need for new or physically altered facilities to continue to serve the project site. As a result, the project would not increase the need for fire services nor would it substantially affect response times for those services. The project's impact related to the provision of fire services would be **less than significant.**

b) The City of Millbrae Police Bureau (MPB) and the San Mateo County Sheriff's Office provides police protection services for the project site. The MPB and Sheriff's Office currently provides police protection to the existing school fields and would continue to provide service if the project were implemented. The project plans would be reviewed for safety provisions. Full emergency access to the site would be provided. Because there would be no new demand for police protection services, the impact would be **less than significant**.

c) The proposed facilities would not increase the population or otherwise increase demands

for school services. It would not aklter the capacity of students at Mills High School. Therefore, the project would have **no impact** on schools.

d) As described above, the proposed project would not result in an increase in residents and therefore, would not increase demand for any parks facilities. For this reason, the project would be expected to have **no impact** on recreational facilities

e) No other public facilities would be required by the proposed project. Therefore, there would be **no impact** on other facilities.

XV. Recreation

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that physical deterioration of the facility would occur or be accelerated?				**X**
b) Does the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				**X**

Discussion

a) As described in response to question d) under Public Services, above, the project would have **no impact** on parks and other recreational facilities because the project would not cause physical deterioration of any recreational facility to occur or be accelerated.

b) The project includes upgrades to the school athletic facilities, which are evaluated by topic in this document. The change in the use of the existing practice field to a baseball field would not substantially adversely affect recreational use of the field. The project would not require the construction or expansion of other recreational facilities. Because the project does not include features that would result in additional adverse impacts to recreational facilities beyond that addressed herein, **no impacts** would occur that are not already addressed.

XVII. Transportation/Traffic

Would the Project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?			**X**	
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?			**X**	
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				**X**
d) Substantially increase hazards due to design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			**X**	
e) Result in inadequate emergency access?			**X**	

f)	Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?				**X**

Discussion

a, b, d) The project would not alter site access, parking, or circulation. There would be no change in after-school traffic associated with the project because no changes to the practice or game schedules would occur as a result of the facility improvements and no increase in participants or spectators is proposed. Soccer practices would be relocated from the stadium and lower field to the proposed soccer field, but that would have no impact on traffic. Therefore, the project would not impact any roadways and there would be no impact on any congestion management plans or increases in safety risks.

Because proposed project would not introduce new design features or other changes that are incompatible with the existing transportation infrastructure, it would not create any traffic hazards. Therefore, project traffic and safety impacts would be **less than significant**.

c) San Francisco International Airport is located approximately two miles northeast of the Project site. However, the proposed athletic facilities improvements would be low-lying and not extend into the protected air space. Therefore they would not create aviation safety hazards for persons residing or working in the vicinity. The project would upgrade and replace existing athletic facilities on the site, and the lighting fixtures would not be at heights that could create air traffic hazards. Therefore, it would have **no impact** on air traffic patterns.

e) The project would not alter or otherwise affect emergency access to the fields. The Central County Fire Department would review the project plans for adequacy of emergency access. Therefore, the project would not affect emergency access to the site and surrounding area. Impacts would be **less thansignificant**.

f) The project would be limited to existing high school athletic facilities and therefore have **no impact** on existing bus, bicycle and pedestrian access. As show in Figure 2, the project area is located adjacent to the Millbrae Spur Trail but would not impact access to, or the pedestrian experience on, that trail. It would not conflict with any adopted plans, policies, or programs that address alternative transportation, and would have **no impact** on those plans.

XVIII. Tribal Cultural Resources

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Would the project cause a significant adverse change in the significance of a tribal cultural resource defined in Public Resource 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			**X**	
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 criteria set forth in subdivision (c) of Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.		**X**		

Background

As described in the Cultural Resources section, above, there is the potential for prehistoric resources to occur on the site. The Public Resources Code Sections 21080.1, 21080.3.1, and 21080.3.2 (AB 52) requires public agencies to consult with the appropriate California Native American tribes identified by the NAHC for the purpose of mitigating impacts to cultural resources.

Solano Archaeological Services (SAS) is conducting Native American community outreach, for the project on behalf of the San Mateo Union High School District. On April 2, 2020, SAS emailed a letter and a map depicting the project area and surrounding vicinity to the Native American Heritage Commission (NAHC). On behalf of the District, the letter requested a Sacred Lands File (SLF) search of the project area, facilitation of AB 52 consultation, and a list of Native American consultants who should be contacted about the proposed Project (see Attachment B of the Cultural Resources Study (SAS April 22, 2020) for Native American consultation documentation). On April 3, 2020, Ms. Sarah Fonseca, Cultural Resources Analyst for the NAHC, replied in an emailed letter that the SLF search was completed with positive results. Ms. Fonseca instructed SAS to contact the Amah Mutsun Tribal Band of Mission San Juan Bautista and the Ohlone Indian Tribe for more information regarding the resource, and also supplied a list of local Native Americans to inform about the Project, request information on unrecorded cultural resources, and gather official Project recommendations. On April 7, 2020, SAS mailed letters to the following Native Americans identified by the NAHC:

- Irenne Zwierlein, Chair – Amah Mutsun Tribal Band of Mission San Juan Bautista
- Ann Marie Sayers, Chair – Indian Canyon Mutsun Band of Costanoan
- Andrew Galvan – The Ohlone Indian Tribe
- Tony Cerda, Chair – Costanoan Rumsen Carmel Tribe
- Monica Arellano – Muwekma Ohlone Tribe of the San Francisco Bay Area
- Charlene Nijmeh, Chair – Muwekma Ohlone Indian Tribe of the San Francisco Bay Area

On April 16 and April 22, 2020, SAS attempted to contact the above tribal groups via email and telephone calls to gather their input about the Project. Mr. Galvan responded to SAS and recommended that a Native American monitor be present during subsurface construction activities. On April 20, 2020 SAS telephoned Ms. Zwierlein regarding the project. Ms. Zwierlein recommended that the construction crew members receive cultural sensitivity and inadvertent discovery training prior to the start of project work.

Native American consultation should be considered still in progress, and future correspondence and project recommendations and inquiries will be summarized in the Final Initial Study.

Discussion

a) i., ii. As described above, SAS contacted the above tribal contacts via letters and emails to gather their input about the project and they have noted that the site may be sensitive, and have requested mitigation be added to address this sensitivity. Mitigation Measures CULT-1 and CULT -2, in the Cultural Resources section would address impacts on any unknown cultural resources and would assure that any potential tribal cultural resource impacts would be reduced to **less than significant.**

XVII. Utilities and Service Systems

Would the Project:

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

Background

The City of Millbrae provides wastewater collection, treatment, and disposal services for the project area. The Millbrae Public Works Department is responsible for the wastewater collection system. Wastewater treatment is handled at the Millbrae Public Works Water

Pollution Control Plant. Treated wastewater is discharged two miles out into San Francisco Bay via a join outfall pipe shared by the cities of San Bruno, South San Francisco, Millbrae, Burlingame, Colma, and the San Francisco Airport.

The City of Millbrae Public Works Department is responsible for the efficient and effective operation and maintenance of the water supply and distribution systems. The City relies on imported water purchased from the San Francisco Public Utilities Commission (SFPUC)

The City of Millbrae contracts with South San Francisco Scavenger Company for the collection of compost, recycling, and landfill collection and disposal services to residential and commercial customers. South San Francisco Scavenger operates a solid waste transfer station at 500 East Jasmine Court in South San Francisco.

Discussion

a, b, c) The project wastewater generation from the upgraded fields use would be approximately the same as from the existing fields use, so there would be no substantive net increased wastewater treatment demand. As a result, the project would have a **less-than-significant** impact related to wastewater treatment facilities.

As described in Hydrology and Water Quality, project water use would be reduced compared to the existing school demand, resulting in **no impact** in water demand.

The project area is fully developed, and no substantial expansions or extensions of utility services would be required.

d, e) South San Francisco Scavenger would continue to provide recycling, compost, and garbage collection services to the school. Because the Project would replace the existing fields on the site, there would be no net increase in solid waste generation as a result of project operation, and there would **no impact** on solid waste generation or disposal.

XX. Wildfire Hazards

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				**X**
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?				**X**
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				**X**
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				**X**

Discussion

a, b, c) The project site is adjacent to developed urban uses and the nearest wildfire-hazard areas are several miles west of the site, in the Santa Cruz Mountains, and several miles to the north, on San Bruno Mountain. Therefore, the project would have **no impact** with respect to wildfire hazards, associated hazards, and equipment /infrastructure needs.

IV. MANDATORY FINDINGS OF SIGNIFICANCE

Environmental Issue	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact
a) Does the Project have the potential to 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 an endangered, rare or threatened species or eliminate important examples of the major periods of California history or prehistory?		**X**		
b) Does the Project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a Project are considerable when viewed in connection with the effects of past Projects, the effects of other current Projects, and the effects of probable future Projects)?			**X**	
c) Does the Project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			**X**	

a) As described in the Aesthetics section of this IS, potentially significant light and glare impacts would be mitigated to a **less-than-significant level** by measures included in that section. As described in the Biological Resources section of this IS, potentially significant impacts to biological resource impacts (nesting birds and bats) would be mitigated to a **less-than-significant** level by measures included in that section. Compliance with the mitigation measures for the unearthing of any unknown cultural resources would ensure all potential impacts associated with cultural resources would

be reduced to a **less-than-significant** level.

b) As noted in the impact analyses, the District is proposing to re-turf the football field, adjacent to this project site, with artificial turf. It is possible that some of that work may overlap work on this project, resulting in overlapping construction noise and air quality effects. However, with the recommended mitigation measures, the two projects impacts would not be cumulatively considerable.

In addition, three major development projects currently are proposed 0.5 miles or closer to the project site, including a 120-unit residential project proposed in the City of Burlingame approximately 0.1 miles from the site at 1868 Ogden Drive, a 50-unit senior housing facility at 97 Broadway, and a 63-unit residential project at 400 El Camino Real, both proposed approximately 0.5 miles from the school in the City of Millbrae.[11] Because the project would upgrade and replace the existing school athletic facilities, it would not contribute in a cumulatively considerable manner to any impacts of any other local projects. All project construction impacts would be limited to the project site and immediately surrounding streets. Long-term impacts would not extend beyond this area as well. Therefore, the proposed project would not contribute in a cumulatively considerable manner to these off-campus projects

For all of the above reasons, the project's contribution to cumulative impacts would be **less than significant**.

c) The proposed project would not increase long-term air pollutant emissions and greenhouse gasses because it would not add any net new workers. Mitigation measures for emissions from construction emissions would reduce any such emissions to less than significant levels. The project's noise impacts also would be less than significant. The project's hazards to human health and safety would be less than significant, as described in Section VIII of this Initial Study. The impact would be reduced to a **less-than-significant** level with mitigation.

[11] Please see the list of current proposed projects in the City of Millbrae as of March 2020: https://www.ci.millbrae.ca.us/home/showdocument?id=22082 and approved and proposed projects in the City of Burlingame as of March 2020: https://www.burlingame.org/departments/planning/majorprojects_new.php

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APPENDIX A
SAN MATEO UNION HIGH SCHOOL DISTRICT
BOARD POLICY DISTRICT STADIUM LIGHTS AND PUBLIC ADDRESS SYSTEMS BP 7325

Board Policy
District Stadium Lights and Public Address Systems BP 7325

Facilities
Updated March 2018 (Last Update March 2017)

The San Mateo Union High School District (SMUHSD) Board of Trustees recognizes the need for our schools to be good neighbors in the use of permanent stadium lights on our school grounds. While the Board believes stadium lights enable schools to enhance opportunities for students, the use of stadium lights and public address systems has an impact on the surrounding neighborhoods of our comprehensive high schools. The Board directs staff to create administrative regulations that guide the use of stadium lights and the accompanying public address systems.

Football Games After Daylight Hours

The District's football games often draw a large number of families and friends to participate in the athletic experience of their students. While there is a significant school and community value to evening sports events, the District recognizes that night football games have the greatest impact on the surrounding neighborhood. Therefore, the following outlines the use of stadium lights at football games:

B. Night Time Football Games

- There shall be typically no more than five nighttime regular season homes games (with a maximum of six) with potentially two playoff games.
- These games will generally take place on Friday nights with varsity games starting no later than 7:30pm. Games will typically end no later than 10pm barring unforeseen issues such as injuries and overtime contests.
-

C. Use of Lights

- Competition level lighting will be turned off within 20 minutes of the completion of the games (typically by 10 p.m.).
- The school has no more than 40 minutes after the end of game to have lower level lights on for safe crowd disbursement.
- The school can keep lights on the lowest level of lighting to ensure that the area is restored to pre-game condition.

Football Games During the Day

- Daytime football games can be played any day except Sunday, but will generally take place Thursday, Friday, or Saturday.

Other SMUHSD High School Athletic Contests After Daylight Hours

- Other nighttime athletic contests are those that start at 7:00 p.m. or later.
- These events can be scheduled throughout the school year, Monday through Friday.
- The goal is to end other SMUHSD athletic contests by 8:30 p.m., Monday through Thursday. There will be sports, such as lacrosse, that may end at 9:15 p.m. Every effort will be made to complete games as efficiently as possible.
- On Friday nights, competition level lighting will be turned off within 10 minutes of the

completion of the game (typically before 9:30 p.m.).
- The Public Address (PA) system for these contests shall be limited to key game facts and shall not include running game commentary.
- The same lighting guidelines used for evening football games, and related to crowd disbursement and litter abatement/field restoration will apply.

ADDITIONAL USES AFTER DAYLIGHT HOURS

A. Other School-Related Activities After Daylight Hours

- There will be no more than six school activities (e.g., graduation) each school year during the night that make use of the PA system.
- These events will typically take place during the school year, Monday-Friday.
- On limited occasion, school special events and fundraisers that benefit community causes may occur on a Saturday night and will end by 9:30 p.m. .
- The highest level of lighting (competition level lighting) must be off no later than 9:30pm. The graduation ceremony will be announced/published well in advance of the event.

B. School Athletic Team Practices After Daylight Hours

- The District recognizes the need for our athletic teams to have lighting for safe practices. With this in
- mind, the following applies:
- School teams can use the field lights for such practices during the school year Monday-Friday, weekdays only. School practices that take place Monday through Thursday should end before 8:30 p.m. on the fields.
- Lighting can be used up until 8:30 p.m. Lower level lighting can be used up to 30 minutes after the end of practice.
- To comply with CIF Regulations on length of time between practices, during the month of August and before school starts, practices will be allowed to run until 9 p.m.
- The PA system may not be used for school athletic team practices.
- The lights will not be activated for any summer practices or any other school field activities during the months of June and July. The high school graduation event is the only exception.

C. Other Use of SMUHSD Fields by Organized Sports After Daylight Hours

The District recognizes the shortage of well-maintained fields in the communities it serves. With this in mind, the following applies:
External sports teams can use the field lights, Monday through Saturday (no Sunday use).

- External sports teams can use field lights throughout the year, with the exception of June and
- July.
- These teams may utilize lighting until 8:30 p.m.
- The PA system may not be used for non-school, organized sports leagues.
- Organizations that rent out the District's stadium fields will be informed that the organization must instruct users to park and drop-off participants in school parking areas.
- Outside organizations must restore the facility to pre-use condition.
- School uses and activities will be prioritized over use by external organized sports teams.

Morning Use of Stadium Lights

- The Board values the track being available to the community and this includes the early morning hours. Staff

will devise appropriate regulations to govern early morning use of lights.
- Lower level lighting will be used for early morning use.
- School activities are allowed to start at 8 a.m., Monday through Saturday, but typically, school events will occur during school days. School events will commence no earlier than 8 a.m.

Public Address (PA) System: Limits on Use
- Schools can use the PA system during the day for all school events every day, except Sunday and typically not before 9:00 a.m.
- The PA system shall only be used to make essential announcements.
- The PA system cannot exceed 65dBA (or decibel limit according to city ordinance) at closest property line to school.
- The school will do one annual testing of the proper functioning of their PA system, if requested.
- PA sound limits will apply at all times for stadium fields.
- No noisemakers will be allowed at games, per Central Coast Section Sportsmanship Policy.

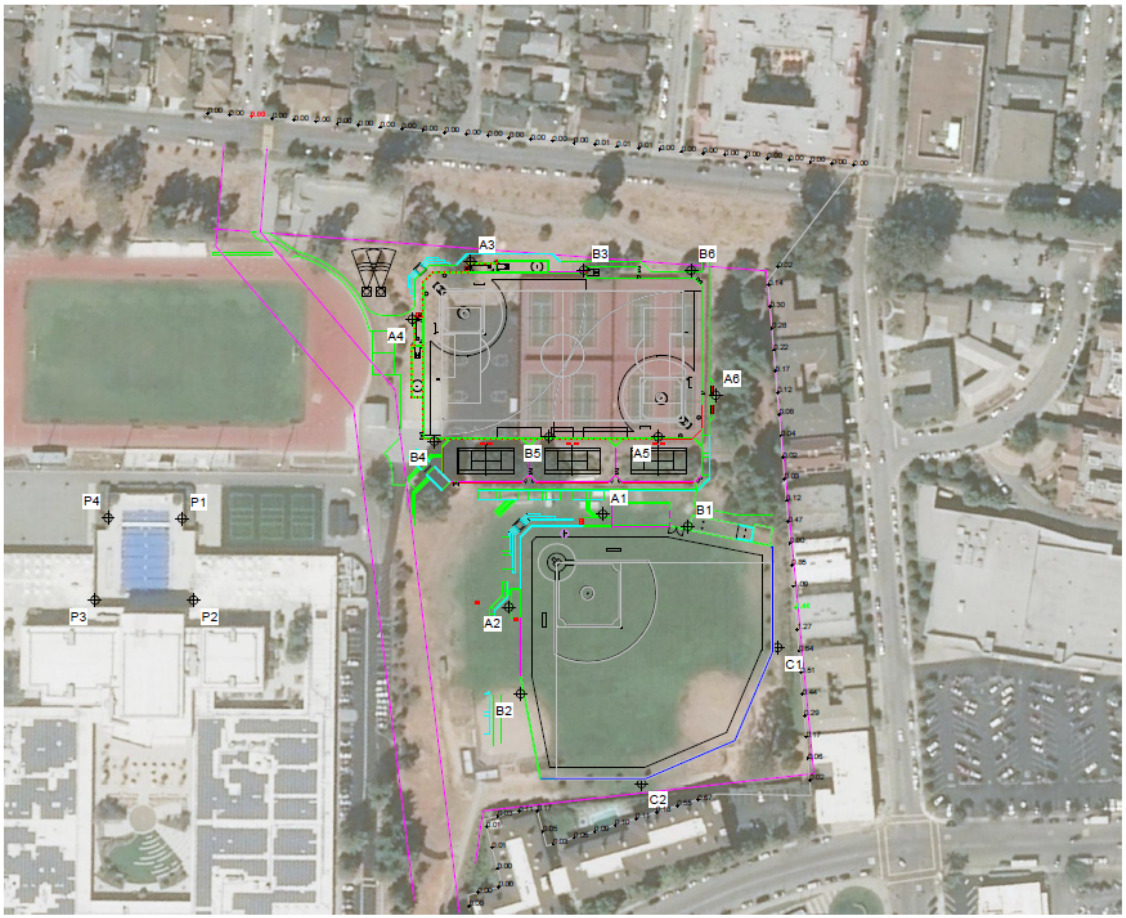
Traffic & Parking
- The District will work with each City's Police Department to develop a traffic, parking and security plan for football games.
- Upon individual request, schools will provide on-site phone numbers of staff who can address issues should they arise.
- School is not bound by limitations in the case of an emergency.

Litter
- The school is responsible for checking the school grounds and fronting properties for litter. All litter will be immediately removed.
- The school will clear trash bags resulting from games or events from school property and properly dispose immediately or no later than the following morning.
- The school should provide trash receptacles inside and outside the field area.

Activities After Daylight Hours that Precede this Administrative Regulation
- Prior to this AR, Burlingame High School (BHS) lights have been on for hours beyond those set forth in these regulations. These hours will be neither extended nor reduced without Board approval.
- There are several activities (e.g., Relay for Life) that have been approved at specific school sites.
- New requests beyond these pre-existing activities will be specifically approved by the Board. No use of the PA system will be allowed at these events.

General
- The District will review and improve, as needed, signage informing visitors of the location of District parking lots.
- During the first two years of implementation, District staff will review administrative regulations and report to the Board annually. After two years, the District staff will provide future updates and reviews as needed.

APPENDIX B
ADDITIONAL LIGHTING EXHIBITS



Mills High School Baseball Softball Pool
Millbrae,CA

GRID SUMMARY

Name:	Spill/ Glare - Residence
Spacing:	30.0'
Height:	3.0' above grade

ILLUMINATION SUMMARY

HORIZONTAL FOOTCANDLES

	Entire Grid
Scan Average:	0.1611
Maximum:	1.46
Minimum:	0.00
No. of Points:	74

LUMINAIRE INFORMATION

Color / CRI:	5700K - 75 CRI
Luminaire Output:	136,000 / 160,000 / 46,500 / 89,600 / 52,000 /
No. of Luminaires:	101
Total Load:	96.74 kW

Lumen Maintenance

Luminaire Type	L90 hrs	L80 hrs	L70 hrs
TLC-LED-1200	>81,000	>81,000	>81,000
TLC-LED-1500	>81,000	>81,000	>81,000
TLC-LED-400	>81,000	>81,000	>81,000
TLC-LED-900	>81,000	>81,000	>81,000
TLC-BT-575	>81,000	>81,000	>81,000
TLC-LED-800	>81,000	>81,000	>81,000

Reported per TM-21-11. See luminaire datasheet for details.

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

SCALE IN FEET 1 : 150

0' 150' 300'

Pole location(s) ✚ dimensions are relative to 0,0 reference point(s) ⊗

ENGINEERED DESIGN By: K. Reynolds • File #201284A • 13-Sep-19

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Mills High School Baseball Softball Pool

Millbrae,CA

Circuit Summary

Circuit	Description	Load	Fixture Qty
A	Baseball	42.18 kW	38
B	SB 1 Infield/Outfield	9.95 kW	10
C	SB Infield/Outfield	15.19 kW	14
D	SB 2 Infield/Outfield	8.78 kW	9
E	SB 2 Infield	3.53 kW	4
F	SB 1 Infield	3.53 kW	4
G	SB 1 Bullpen	3.25 kW	4
H	SB 2 Bullpen	1.47 kW	2
I	BB Bullpen	1.47 kW	2
J	Pool	5.8 kW	10
K	Pool Egress	1.6 kW	4

Fixture Type Summary

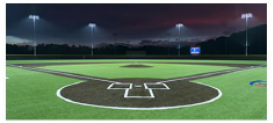
Type	Source	Wattage	Lumens	L90	L80	L70	Quantity
TLC-LED-1200	LED 5700K - 75 CRI	1170W	136,000	>81,000	>81,000	>81,000	33
TLC-LED-1500	LED 5700K - 75 CRI	1430W	160,000	>81,000	>81,000	>81,000	16
TLC-LED-400	LED 5700K - 75 CRI	400W	46,500	>81,000	>81,000	>81,000	4
TLC-LED-900	LED 5700K - 75 CRI	890W	89,600	>81,000	>81,000	>81,000	19
TLC-BT-575	LED 5700K - 75 CRI	575W	52,000	>81,000	>81,000	>81,000	16
TLC-LED-600	LED 5700K - 75 CRI	580W	65,600	>81,000	>81,000	>81,000	13

Light Level Summary

Calculation Grid Summary

Grid Name	Calculation Metric	Illumination					Circuits	Fixture Qty
		Ave	Min	Max	Max/Min	Ave/Min		
BB Bullpen	Horizontal Illuminance	33.7	22	51	2.33	1.53	I	2
Baseball (Infield)	Horizontal Illuminance	50.7	43	61	1.42	1.18	A	38
Baseball (Outfield)	Horizontal Illuminance	30.2	21	41	1.93	1.44	A	38
Bleacher 1	Horizontal Illuminance	14.9	12	20	1.73	1.24	K	4
Bleacher 2	Horizontal Illuminance	9.92	9	11	1.21	1.10	K	4
Pool Deck	Horizontal Illuminance	22.8	2	39	17.65	11.41	J	10
Pool	Horizontal Illuminance	30.5	24	38	1.56	1.27	J	10
SB 1 Bullpen 1	Horizontal Illuminance	32.8	27	42	1.57	1.22	G	4
SB 1 Bullpen 2	Horizontal Illuminance	31.8	28	37	1.34	1.14	G	4
SB 2 Bullpen	Horizontal Illuminance	32.5	23	43	1.88	1.41	H	2
Soccer	Horizontal Illuminance	34.4	20	46	2.35	1.72	B,C,D	33
Softball 1 (Infield)	Horizontal Illuminance	50.3	36	65	1.79	1.40	B,C,F	28
Softball 1 (Outfield)	Horizontal Illuminance	33.8	26	47	1.82	1.30	B,C,F	28
Softball 2 (Infield)	Horizontal Illuminance	52.5	37	61	1.66	1.42	C,E,D	27
Softball 2 (Outfield)	Horizontal Illuminance	35.3	29	48	1.63	1.22	C,E,D	27
Spill/ Glare - Residence	Horizontal Illuminance	0.16	0	1.46	39109100.00		A,B,C,D,E, F,G,H,I,J, K	101
Spill/ Glare - Residence	Max Candela Metric	5180	0.04	19041	496343.40	129494.10	A,B,C,D,E, F,G,H,I,J, K	101
Spill/ Glare - Residence	Max Vertical Illuminance Metric	0.27	0	1.58	6540370.00		A,B,C,D,E, F,G,H,I,J, K	101

From Hometown to Professional









We Make It Happen.

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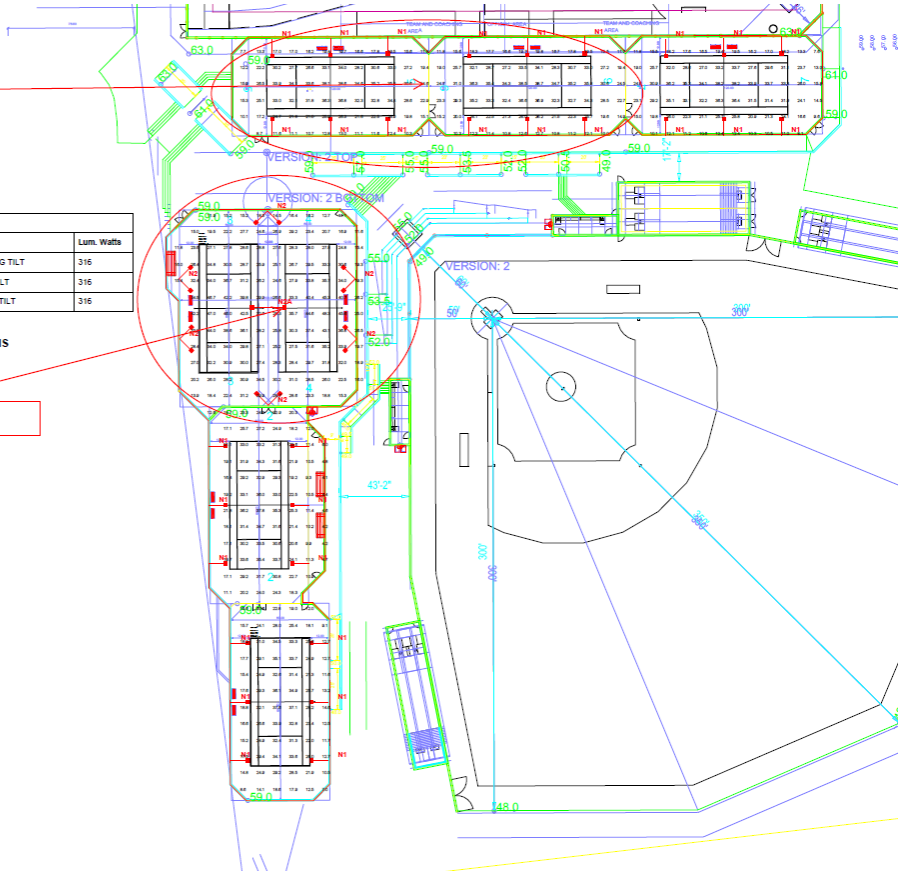
Second option to light these 2 courts

Luminaire Schedule						
Symbol	Qty	Label	Arrangement	LLF	Description	Lum. Watts
	30	N1	SINGLE	1.000	VUE-2-TT-96L-1-5DK-SINGLE @ 24' MTG.HT W/5' ARMS W/5 DEG TILT	316
	6	N2	2 @ 90 DEGRE	1.000	VUE-2-TT-96L-1-5DK-D90 @ 24' MTG.HT W/5' ARMS W/5 DEG TILT	316
	1	N2A	BACK-BACK	1.000	VUE-2-TT-96L-1-5DK-TWIN @ 24' MTG.HT W/5' ARMS W/5 DEG TILT	316

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
CalcPts_1	Illuminance	Fc	24.44	48.3	4.1	5.96	11.78
TENNIS COURT	Illuminance	Fc	30.28	37.6	21.3	1.42	1.77
TWIN COURT	Illuminance	Fc	33.73	47.0	25.9	1.30	1.81

MILLS HS TENNIS
NLS LIGHTING
REV 1
9/17/19

Light these 2 courts



APPENDIX C: MITIGATION MONITORING AND REPORTING PROGRAM (TO BE ADDED IN FINAL INITIAL STUDY)