## FINAL INITIAL STUDY/

## MITIGATED NEGATIVE DECLARATION FOR THE

# **REDWOOD HIGH SCHOOL MUSIC, ARTS, AND DINING BUILDINGS**

# PROJECT

## Prepared for:

Tamalpais Union High School District 395 Doherty Drive, Larkspur, CA 94939

### Prepared by:

Grassetti Environmental Consulting 7008 Bristol Drive Berkeley, CA 94705

## April 2024

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# ACRONYMS AND ABBREVIATIONS

| Acronym/Abbreviation | Definition   |
|----------------------|--|
| BMP                  | Best Management Practice                                 |
| CARB                 | California Air Resources Board                           |
| FEMA                 | Federal Emergency Management Agency                      |
| 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                                  |
| MCSTOPPP             | Marin Countywide Stormwater Pollution Prevention Program |
| MLD                  | Most Likely Descendant                                   |
| NAHC                 | Native American Heritage Commission                      |
| NOx                  | nitrogen oxides  |
| NPDES                | National Pollutant Discharge Elimination System          |
| OHP                  | State Office of Historic Preservation                    |
| O3                   | ozone  |
| PM10                 | particulate matter less than 10 microns                  |
| PM2.5                | particulate matter less than 2.5 microns                 |
| RWQCB                | Regional Water Quality Control Board                     |
| SCH                  | State Clearinghouse                                      |
| SOx                  | sulfur dioxide   |
| SWPPP                | Stormwater Pollution Prevention Plan                     |
| TAC                  | toxic air contaminant                                    |
| TMDL                 | Total Maximum Daily Load                                 |
| VOC                  | volatile organic compound                                |
| ZWM                  | Zero Waste Marin   |

## 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 | х | Hazards and Hazardous<br>Materials |   | Recreation                            |
| х | Air Quality                         |   | Hydrology/Water Quality            |   | Transportation/ Traffic               |
| х | Biological Resources                |   | Land Use/Planning                  |   | Tribal Cultural Resources             |
| х | Cultural Resources                  |   | Mineral Resources                  |   | Utilities/Service Systems             |
|   | Energy                              |   | Noise                              |   | Wildfire Hazards                      |
|   | Geology/Soils                       |   | Population/Housing                 | х | Mandatory Findings of<br>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.

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.

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2024

Michael Woolard, Senior Director of Facilities Planning, TUHSD

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## I. INTRODUCTION

This Initial Study and Mitigated Negative Declaration (IS/MND) has been prepared by the Tamalpais Union High School District (TUHSD or District), 395 Doherty Drive, Larkspur, CA, pursuant to the California Environmental Quality Act (CEQA) statutes<sup>1</sup> and Guidelines<sup>2</sup>. It provides documentation to support the conclusion that the proposed Redwood High School Music, Arts, and Dining Buildings Project ("the Project"), with mitigation identified herein, would not cause a potentially significant impact to the physical environment. The proposed site is located at Redwood High School, 395 Doherty Drive, in the City of Larkspur.

This IS/MND describes the location of the Project site, the Project objectives, and the details of the 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 modernized facilities on-site. 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 District's Board of Trustees is responsible for ensuring that the environmental review and documentation meet the requirements of CEQA. The Draft IS/Notice of Intent to adopt an MND was circulated for a 30-day public review period from February 16 through March 18, 2024. Comments received and responses to those comments are included in Appendix B.

Should the District approve the project, it would be required to file a "Notice of Determination" for posting by the County Clerk and the State Clearinghouse. The filing of the 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.

<sup>&</sup>lt;sup>1</sup> Public Resources Code Sections 21000 et seq.

<sup>&</sup>lt;sup>2</sup> Title 14, Section 15000 et seq. of the California Code of Regulations

**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 VI – REPORT PREPARERS: Identifies the firms and individuals who prepared the IS.

**APPENDICES:** Includes technical reports, comments and responses on the Draft IS, and Mitigation Monitoring and Reporting Program.

# II. PROJECT DESCRIPTION

| Project Name:                     | Redwood High School Building Replacement Project   |
|-----------------------------------|--|
| Project Location:                 | 395 Doherty Drive<br>Larkspur, CA 94939  |
| Project Applicant and Lead Agency | Tamalpais Union High School District<br>395 Doherty Drive<br>Larkspur, CA 94939<br>415-945-1020  |
| General Plan Designation:         | Public/Schools and Public Facilities   |
| Zoning:                           | R-1 (Single Family Residential)  |
| Project Approvals:                | TUHSD approval. Review of facilities by Division of<br>the State Architect for structural, fire and life safety,<br>and ADA accessibility. |
| Date Initial Study Completed:     | April 12, 2024   |

## PROJECT DESCRIPTION

### **Project Purpose/Objectives**

The Project is intended to provide expanded and improved music, arts, and dining facilities to replace existing outdated and substandard facilities. The Project's overarching aim is to modernize the school's infrastructure and create functional spaces by constructing a new cafeteria, music building, and art/ceramics building, along with the repurposing of the existing kitchen/cafeteria building into a student commons space. These enhancements ensure compliance with current safety codes and standards. Updating the landscaping for increased water efficiency and reduced environmental impact is an integral Project component. The Project also is intended to improve the overall connectivity of the campus, creating an eastside campus entry for students and staff while simultaneously creating a threshold to deter community entry of the campus core during school hours.

### **Project Location**

Redwood High School is located at 395 Doherty Dr. in the City of Larkspur (see Figure 1). The site is located within a residential area in eastern Larkspur, on the south side of Doherty Drive. The campus is bounded by Doherty Dr. along the northern and eastern property line and Lucky Drive along the western property line. The Project site comprises approximately 2.5 acres of the overall 63.9-acre campus (see Figure 2).

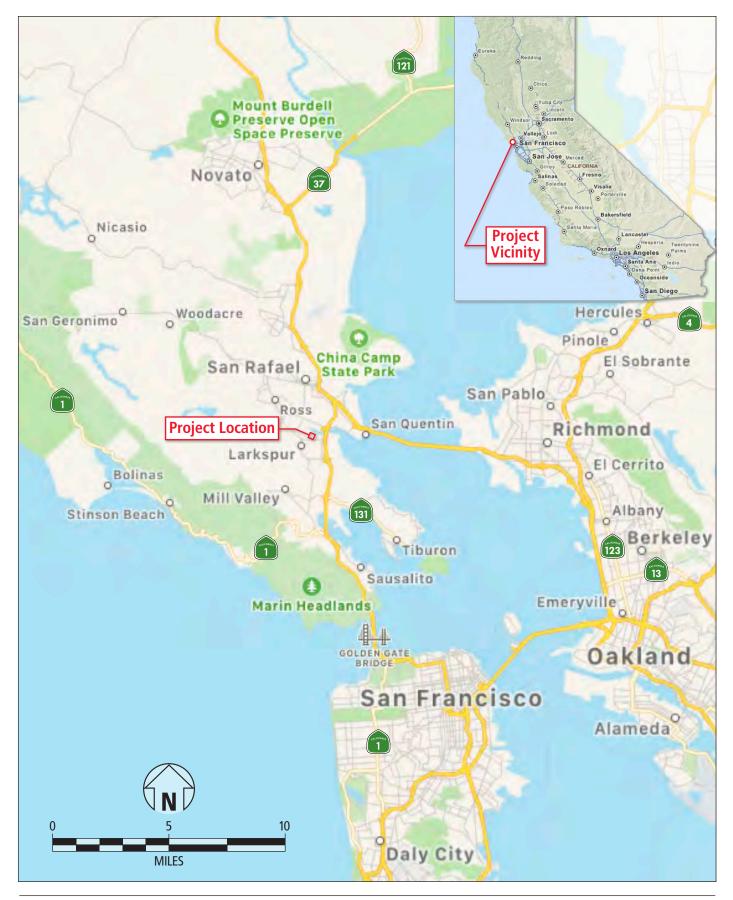
Redwood High School has an enrollment of approximately 1,930 students and was originally built in 1957. The campus is currently developed with a variety of one-and two-story classrooms, modular classrooms, and administrative structures; concrete and asphalt pedestrian areas; open lawns; and asphalt parking lots.

## **Surrounding Land Uses**

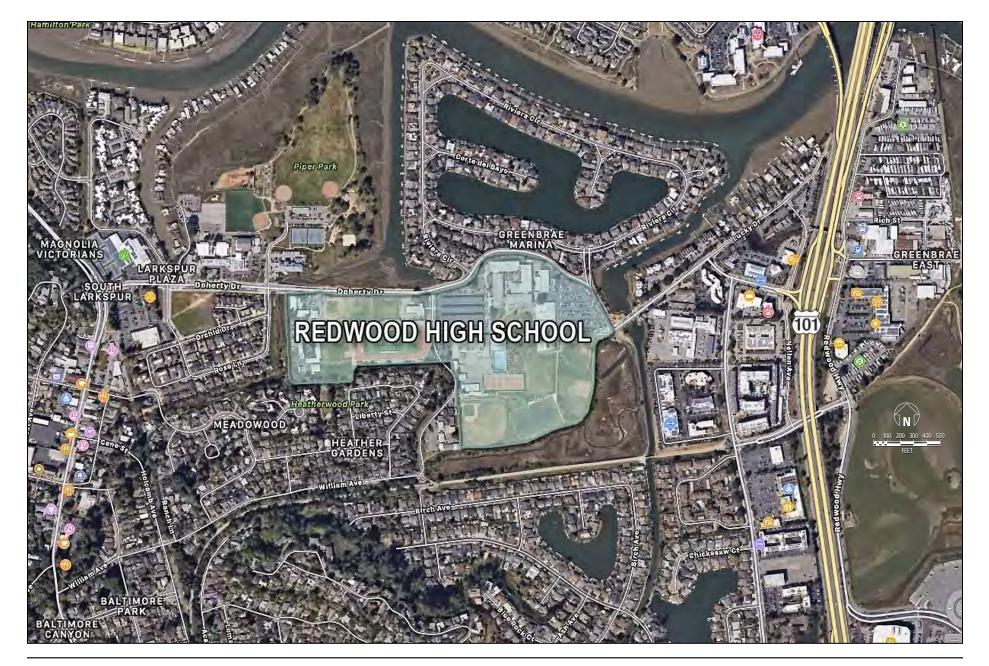
A shoreline/marsh wetlands conservation area borders Redwood High School to the south and east, which varies in width from 150 feet to 450 feet with the widest expanse at the southeastern corner of the high school grounds. The area north of the Project site consists of single-family residences lining the horseshoe-shaped Corte Madera Creek. To the west of the Project site are recreation fields, Tamalpais Adult School, and Tamiscal High School, along with single-family residences along Lucky Drive. To the south, San Andreas High School, recreation fields, and an undeveloped shoreline/marsh wetlands area characterize the surroundings, accompanied by additional single-family residences further south. To the east, a tributary channel to Corte Madera Creek runs north to south, bordered by professional office buildings.

## **Existing Site Conditions and Facilities**

The Project encompasses approximately 2.5 acres, spanning two distinct areas. The first, situated in the northeast of the school, is bordered by the corresponding northeast parking lot. Existing structures at this location include the kitchen and cafeteria and art building. These buildings date



Source: TomTom Maps and Grasetti Environmental



Source: TomTom Maps and Grasetti Environmental

to the 1940s -1950s. Immediately to the south of this cluster lie the ceramics, band, and music buildings, with a line of trees separating the buildings. A shared courtyard with a paved walkway, trees, and grass connects these buildings to the rest of the campus. The topography is generally flat and is characterized by grass and hardscape, encompassing non-vegetative elements such as asphalt areas and walkways.

The area adjacent to the pool and gymnasium, would be the site for the temporary modular classrooms. This section is adjacent to the western parking lot and is currently developed with paved basketball courts.

### **Proposed School Building Replacement**

The Project would demolish approximately 7,900 square-feet of buildings (about 2500 sq. ft. ceramics building and 4400 sq. ft. music building) and approximately 24,500 square-feet of hardscape (See Figure 3). The core of the Project involves constructing 32,107 square-feet of new buildings and modernizing/repurposing the existing kitchen/cafeteria building (Building C). The new permanent buildings would be built in the northeast area of the school adjacent to the northeast parking lot. Proposed new buildings include an 11,094-square-foot two-story cafeteria and kitchen building, a 9,744-square-foot two-story music building, and a 6,648-square-foot two-story art and ceramics building (see Figure 4, Project Site Plan). The design of the new buildings would be modern, with tall ceilings and open interiors, characterized by adherence to contemporary architectural principles.

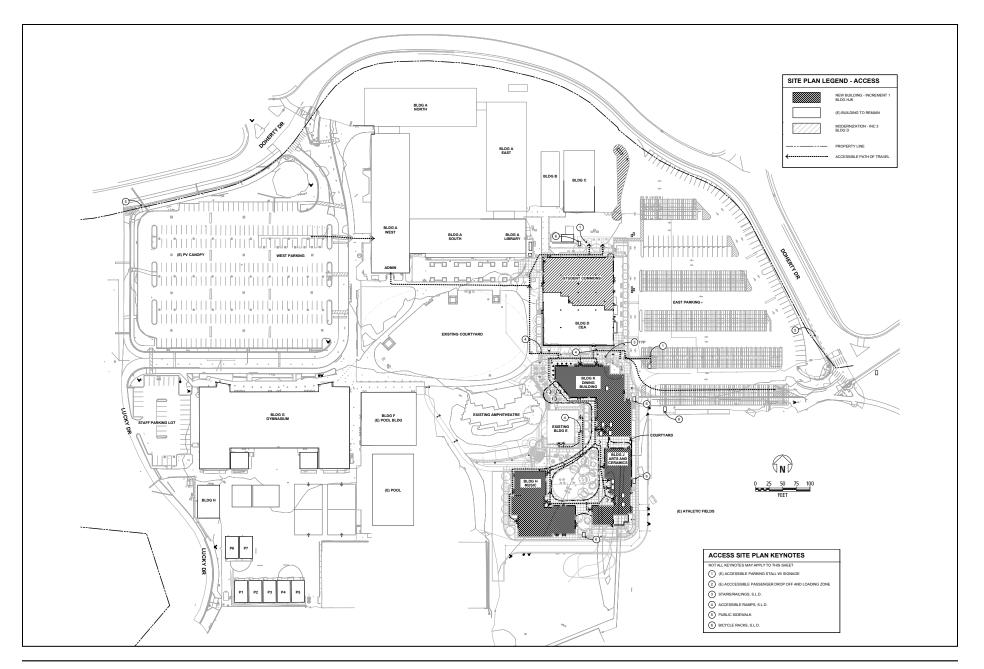
The music building would contain seven practice spaces, two ensemble spaces, a recording room, a music library room, and custodial/maintenance facilities. The art and ceramics building would contain a ceramics studio, art studio, kiln room, ceramics storage room, art storage room, restrooms and custodial/maintenance facilities. The existing kitchen/cafeteria building adjacent to the northeast parking lot would be remodeled into a 9,970 square-foot student commons space for activities and collaboration. Three temporary modular classrooms totaling 4,800 square-feet would be constructed in the western area of the school on the existing basketball courts for use during Project construction. The new art and music buildings would be constructed on a grassy area south of the existing ceramics and music buildings, and would include a new concrete perimeter pathway. The new kitchen and cafeteria building would generally be constructed within the footprint of the existing buildings proposed for demolition.

The Project improvements would require demolishing existing classroom space including the ceramics portable building and music portable building adjacent to the northeast parking lot. These portable buildings are outdated and are not eligible for upgrade or repair. The loss of classroom space would be supplemented by the three temporary modular classrooms for use during construction.

#### Days and Hours of Operation

The Project would not change or expand any hours or days of use of the school compared to existing use operating hours.





### **School Uses and Capacity**

The Project would not change or expand any uses of the school compared to existing use types and levels. There would be no change in student enrollment or staffing from the Project.

#### Tree Protection, Planting and Removal

Thirteen existing trees would be removed, and 65 new trees would be planted, as well as shrubs and ground cover. The Project would not remove any mature, heritage-sized trees.

#### **Drainage and Runoff**

Runoff from the site currently drains into the campus drainage system, which connects into the City of Larkspur storm drainage system, and would continue to do so with the proposed Project. The new art and music buildings would be constructed on a currently grassy area and would include a new concrete perimeter pathway. The new kitchen and cafeteria building would generally be constructed within the footprint of the existing buildings proposed for demolition. Increased runoff from the increase in impervious surfaces would be offset by the landscape area improvements, including a new biofiltration planting area and a detention basin. This is discussed further in the Hydrology section of this IS.

### Grading

Approximately 3,600 cubic yards of fill for new construction would be required. Excavated material would be re-used on-site and no off-haul would occur.

### **Construction Activities**

*Construction Schedule*. The Project would consist of 5 phases beginning in June 2024 and running through December of 2026. The phases are:

*Phase 1 – Temporary Classrooms (2.5 months for construction of temporary classrooms)* Two 36'x40' and one 48'x40' modular classrooms (totaling approximately 4,800 squarefeet) would be built on the western part of the campus on the basketball courts immediately south of the existing gymnasium. These structures would provide temporary replacement classrooms during the existing building demolition and new building construction phases.

#### Phase 2 – Demolition and Site Work (3.5 months)

This phase encompasses the removal of the existing buildings and hardscape. Concurrently, site preparation would occur for upcoming construction phases. In-ground infrastructure connections including electricity, sewer, and water would be installed for connection to existing utility lines on the campus.

Phase 3 – Building Construction and Modernization (19 months)

This phase includes modernizing existing Building C and constructing new buildings. This phase would construct the 6,468 square-foot art and ceramics building, two-story 9,744 square-foot music center, and 11,094-square-foot two-story cafeteria and kitchen building. Modernization would include upgrades and maintenance to HVAC systems, electrical components, lighting and finishes to convert the existing kitchen to a new student commons area

Phase 4 – Remove Temporary Classrooms (2.5 months)

This phase would entail dismantling the temporary modular classrooms and removing them from the campus, followed by the restoration of the basketball courts on which they were situated.

Phase 5 – Student Commons Conversion (8 months)

This phase involves renovating and modernizing the existing kitchen/cafeteria. The existing 9,970 square-foot kitchen/cafeteria would be converted into a teachers/students commons space. The renovation of the kitchen/cafeteria includes updating the HVAC system, electrical system and perimeter landscaping.

**Construction Equipment and Staging**. Equipment used during construction would vary by phase, but would include excavators, backhoes, skid steers, dump trucks, grading machines, compaction equipment, water trucks, concrete trucks, concrete pumps, cranes and various boom lifts and power equipment for building construction.

Construction staging would be located on an existing paved area on the Project site near the work sites.

*Construction Workers*. Up to 25 construction workers would be on-site on an average day.

**Construction Hours**. Typical construction hours would be 7:00 a.m. to 6:00 p.m. on weekdays with heavy equipment use restricted to the hours of 8:00 a.m. to 5:00 p.m., and on Saturdays between the hours of 9:00 a.m. and 5:00 p.m., consistent with the City of Larkspur Noise Ordinance.

## 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<br>Significant<br>Impact | Less Than<br>Significant<br>with<br>Mitigation | Less Than<br>Significant<br>Impact | No<br>Impact |
|----|---|--------------------------------------|--|------------------------------------|--------------|
| a) | Have a substantial adverse effect on a scenic vista?  |                                      |  | x                                  |              |
| b) | Substantially damage scenic resources,<br>including, but not limited to, trees, rock<br>outcroppings, and historic buildings within<br>a state scenic highway?  |                                      |  | x                                  |              |
| c) | In nonurbanized areas, substantially<br>degrade the existing visual character or<br>quality of public views of the site and its<br>surroundings? (Public views are those that<br>are experienced from publicly accessible<br>vantage point). If the project is in an<br>urbanized area, would the project conflict<br>with applicable zoning and other<br>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?   |                                      |  | х                                  |              |

## Discussion

- a, c) The Project would have buildings of similar sizes and scale as the existing school buildings. The new two-story cafeteria and kitchen, and new two-story music center would be one story taller than the existing buildings, but would not block or impede any views, or substantially change the character of this part of the school campus. As shown in Figures 5, views from adjacent houses on Doherty Dr. and Lucky Dr. would not be substantially altered from existing views of the school and recreation fields. The Project would remove thirteen trees from the site but would replace them with a larger number of new trees and additional landscaping. Therefore, the Project would have a less-than-significant impact on scenic vistas or scenic resources.
- b) There are no rock outcroppings, historic buildings, or scenic highways on the Project site. The section of US Highway 101 nearest to the Project area is not designated as a scenic

highway<sup>3</sup>. Furthermore, the Project would not be visible from the highway due to intervening buildings and vegetation. Therefore, the Project's impact would be **less than significant**.

d) The proposed exterior safety lighting for the reconstructed school buildings would be similar to existing exterior lighting in this area of the school. Exterior lighting would be shielded and directed to minimize light and glare spillage. Therefore, the Project's light and glare impact would be **less than significant**.

<sup>&</sup>lt;sup>3</sup> <u>https://www.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa</u>



Intersection of Doherty Drive and Riviera Circle Looking South Towards Band Room and Athletic Fields



Lucky Drive Looking East Towards Basketball Courts

## II. Agricultural and Forestry Resources

Would the Project:

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

### Discussion

a-e) The Project site is developed with existing school facilities, including existing buildings and athletic fields. There are no existing or designated agricultural or forested lands on or in the vicinity of the school campus. The site is not under Williamson Act contract. Therefore, the Project would not result in the conversion of farmland or forestland to non-agricultural uses and would have **no impact** on agricultural or forest 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<br>Significant<br>Impact | Less Than<br>Significant<br>with<br>Mitigation | Less Than<br>Significant<br>Impact | No<br>Impact |
|----|--|--------------------------------------|--|------------------------------------|--------------|
| a) | Conflict with or obstruct implementation of the applicable air quality plan?   |                                      |  | х                                  |              |
| b) | Result in a cumulatively considerable net<br>increase of any criteria for which the<br>Project region is non-attainment under an<br>applicable federal or state ambient air<br>quality standard? |                                      | х  |                                    |              |
| c) | Expose sensitive receptors to substantial pollutant concentrations?  |                                      |  | х                                  |              |
| d) | Result in other emissions (such as those<br>leading to odors) adversely affecting a<br>substantial number of people?   |                                      |  | х                                  |              |

## Background

This section describes construction and operational air quality impacts associated with the project and is consistent with the methods described in the Bay Area Air Quality Management District (BAAQMD) *CEQA Air Quality Guidelines* (April 2023).

The air quality analysis includes a review of criteria pollutant emissions such as carbon monoxide (CO), nitrogen oxides (NO<sub>x</sub>), volatile organic compounds (VOC) as reactive organic gases (ROG), particulate matter less than 10 micrometers (coarse or  $PM_{10}$ ), and particulate matter less than 2.5 micrometers (fine or  $PM_{2.5}$ ).

The United States Environmental Protection Agency (USEPA) has established National Ambient Air Quality Standards (NAAQS) under the Clean Air Act (CAA) for the criteria pollutants and California Air Resources Board (CARB) has established California Ambient Air Quality Standards (CAAQS). Air basins where NAAQS and/or CAAQS are exceeded is designated as a "nonattainment" area. If standards are met, the area is designated as an "attainment" area.

The Project site is located within the San Francisco Bay Area Air Basin (Air Basin) under the jurisdiction of the BAAQMD. The BAAQMD is the local agency responsible for the administration and enforcement of air quality regulations for the area. The Bay Area is currently designated "nonattainment" for state and national (1-hour and 8-hour) ozone standards, for the state PM<sub>10</sub> standards, and for state and national (annual average and 24-hour) PM<sub>2.5</sub> standards. The Bay Area is designated "attainment" or "unclassifiable" with respect to the other ambient air quality standards.

### Discussion

a) The BAAQMD 2017 Clean Air Plan/Regional Climate Protection Strategy (CAP/RCPS), which provides a roadmap for BAAQMD's efforts over the next few years to reduce air pollution and protect public health and the global climate. The 2017 CAP/RCPS identifies potential rules, control measures, and strategies that BAAQMD can pursue to reduce GHG in the Bay Area. Determination of whether a project supports the goals in the 2017 CAP/RPCS is achieved by a comparison of project-estimated emissions with BAAQMD thresholds of significance. If project emissions would not exceed the thresholds of significance after the application of all feasible mitigation measures, the project is considered consistent with the goals of the 2017 CAP/RPCS. As presented in the subsequent impact discussions, the project would not exceed the BAAQMD significance thresholds; therefore, it would support the primary goals of the 2017 CAP/RCPS and would not hinder implementation of any of the control measures. Therefore, this impact would be **less than significant**.

#### b) Construction Impacts

Project construction would generate short-term emissions of air pollutants, including fugitive dust and equipment exhaust emissions. The BAAQMD *CEQA Air Quality Guidelines* recommend quantification of construction-related exhaust emissions and comparison of those emissions to significance thresholds. CalEEMod (California Emissions Estimator Model Version 2022.1.1.20) was used to quantify construction-related pollutant emissions (CAPCOA, 2022).

Table AQ-1 provides the estimated average daily construction emissions for the Project. The average daily construction period emissions (i.e., total construction period emissions divided by the number of construction days) were compared to the BAAQMD significance thresholds. Construction-related emissions would be below the BAAQMD significance thresholds. See Appendix A for air quality calculations.

| Condition                | ROG  | NOx  | <b>PM</b> 10 | PM <sub>2.5</sub> | CO   |
|--------------------------|------|------|--------------|-------------------|------|
| Construction (2024)      | 1.56 | 13.2 | 0.71         | 0.65              | 11.8 |
| Construction (2025)      | 0.93 | 7.81 | 0.29         | 0.27              | 9.01 |
| Construction (2026)      | 2.12 | 9.54 | 0.43         | 0.39              | 9.18 |
| Significance Threshold   | 54   | 54   | 82           | 54                |      |
| Significant (Yes or No)? | No   | No   | No           | No                | No   |

Table AQ-1: Estimated Average Daily Construction Emissions (pounds)

Notes:  $PM_{10}$  and  $PM_{2.5}$  are exhaust emissions only. SOURCE: CAPCOA, 2022.

Uncontrolled construction activities could result in substantial emissions of fugitive dust. According to BAAQMD's *CEQA Air Quality Guidelines,* for a project to assure a less-thansignificant impact related to construction-related fugitive dust emissions, it must implement all of BAAQMD's basic BMPs for construction-related fugitive dust emissions. Mitigation Measure AQ-1 would require the implementation of BAAQMD's basic BMPs for construction-related fugitive dust emissions during the Project. Therefore, Project construction impacts would be **less than significant with mitigation incorporated.** 

#### **Operational Impacts**

The Project would not result in an increase in enrollment or staffing and would not increase vehicle trips. Furthermore, the new buildings would be subject to more stringent energy standards than the existing buildings. Therefore, the Project would not increase operational emissions and this impact would be **less than significant**.

#### **Cumulative Impacts**

The BAAQMD *CEQA Air Quality Guidelines* state that the BAAQMD project-level mass daily and annual criteria pollutant thresholds may also be used to address cumulative impacts. These thresholds were developed to identify a cumulatively considerable contribution to a significant regional air quality impact. As shown in Table AQ-1, the Project-related construction emissions would be below the significance thresholds. In addition, BAAQMD's basic BMPs for construction-related fugitive dust emissions would be implemented through Mitigation Measure AQ-1. The Project would not increase operational emissions. Therefore, the Project would not be cumulatively considerable and cumulative impacts would be **less than significant with mitigation**.

#### Conclusion

As shown, Project construction emissions would be **less than the BAAQMD significance thresholds** and BAAQMD's basic BMPs for construction-related fugitive dust emissions would be implemented through Mitigation Measure AQ-1 per BAAQMD's *CEQA Air Quality Guidelines*. The Project would not increase operational emissions. Therefore, criteria pollutant impacts would be **less than significant with mitigation**.

- c) Project construction equipment (on-road haul truck and off-road equipment) would generate diesel particulate matter (DPM) emissions from. DPM is a human carcinogen and that chronic (long-term) inhalation exposure to DPM poses a chronic health risk, particularly to sensitive receptors. Sensitive receptors include residences, hospitals, schools, day care facilities, and nursing homes. Construction activities would occur approximately 230 feet away from the nearest residence on Lucky Drive and approximately 300 feet away from the nearest school building at San Andreas High School. Furthermore, the Project site is situated within an operational school that would continue its regular activities during construction, with students present. However, the Project is a short-term construction activity and exhaust PM10 and PM2.5 emissions (see Table AQ-1) would each be less than one percent of BAAQMD's significance thresholds. Off-road construction equipment would be regulated per the State's In-Use Off-Road Diesel Vehicle Regulation and on-road haul trucks would be regulated per the State's Truck and Bus Regulation. Therefore, health impacts would be less than significant.
- d) Generally, the BAAQMD considers any project with the potential to frequently expose members of the public to objectionable odors to cause a significant impact. With respect to

the Project, diesel-fueled construction equipment exhaust would generate some odors. However, these emissions typically dissipate quickly and would be unlikely to affect a substantial number of people. The Project would not involve operational activities that generate substantial off-site odors. Therefore, odor impacts would be **less than significant**.

#### **Mitigation Measures**

*Mitigation Measure AQ-1*: The construction contractor shall implement the following during Project construction activities:

- 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 excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.
- All trucks and equipment, including their tires, shall be washed off prior to leaving the site.
- Unpaved roads providing access to sites located 100 feet or further from a paved road shall be treated with a 6- to 12-inch layer of compacted wood chips, mulch, or gravel.
- All vehicle speeds on unpaved roads shall be limited to 15 miles per hour.
- A publicly visible sign shall be posted with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.

## IV. Biological Resources

Would the Project:

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

## Background

The Project site is developed with school buildings and facilities. Landscape trees also are present on various areas of the site; these may provide potential nesting habitat for special-status songbirds and raptors. No potential jurisdictional wetlands or Waters of the United States occur on the project site<sup>4</sup>.

### Discussion

a) Planned tree removal (13 trees and several areas of shrubs that may provide nesting habitat) and construction activities would have the potential to affect migratory and nesting protected bird species, either directly from tree removal, and/or from construction noise impacts on active nests in remaining trees on or near the site. This **potentially significant** impact would be reduced to a **less-than-significant** level by the proposed planting of 65 new trees and implementation of Mitigation Measure BIO-1, below.

The Project is within the range of pallid bat (*Antrozous pallidus*), western red bat (*Lasiurus blossevillii*), and Townsend's big-eared bat (*Corynorhinus townsendii*).<sup>2</sup> There are four occurrences of Townsend's big-eared bat mapped in the California Natural Diversity Database (CNDDB) within 5 miles of the Project site. These bat species are California Species of Special Concern (SSC). All three of these bat species are known to roost in tree bark, hollows, or foliage; pallid bat and Townsend's big-eared bat are also known to roost in structures including buildings (Johnston 2004). Buildings that would be removed as part of this Project may be occupied by bats. Trees that would be removed as part of this Project may also be occupied by bats. This **potentially significant** impact can be reduced to a **less-than-significant** level with implementation of mitigation measure 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 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 tree discussion, above. **No impact** would occur.
- e) According to the Project demolition plan, about 13 trees would be removed as a result of the project. The Tamalpais Union High School District is not subject to the City of Larkspur's tree protection ordinance and none of the trees to be removed would qualify as a "Heritage Tree" under the City of Larkspur's tree protection ordinance (Section 12.16 of the City's Municipal Code) so no tree removal permits would be required. However, the Project landscaping plan includes planting of approximately 65 new trees, which would more than offset trees removed by the project. Therefore the Project's impacts to trees would be **less than significant**.

<sup>&</sup>lt;sup>4</sup> <u>https://www.fws.gov/wetlands/data/mapper.html</u>

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 or Substantial Disturbance of Active Bird Nests.* A pre-construction survey for nesting birds shall be conducted in trees to be removed and trees within 200 feet of construction activities by a qualified biologist within two weeks of construction activities, if construction activities are to occur within nesting/breeding season of native bird species (February- August). If active nests are identified within 300 feet of 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 shall be determined by the Project biologist, and would 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: Bat Surveys and Protection.** Roosting Bat Habitat Assessment and Surveys: Prior to Project activities that would remove trees or modify buildings, a qualified biologist shall conduct a habitat assessment for bats. A qualified biologist shall have: 1) at least two years of experience conducting bat surveys that resulted in detections for relevant species, such as pallid bat, with verified project names, dates, and references, and 2) experience with relevant equipment used to conduct bat surveys. The habitat assessment shall be conducted a minimum of 30 to 90 days prior to the beginning of Project activities.

For tree removal, the habitat assessment shall include a visual inspection of potential roosting features (e.g., cavities, crevices in wood and bark, exfoliating bark for colonial species, suitable canopy for foliage roosting species, and anthropogenic structures such as buildings, bridges, and culverts). If suitable habitat is found, it shall be flagged or otherwise clearly marked. Trees shall be removed only if: a) presence of bats is presumed, or documented during the surveys described below, in trees with suitable habitat, and removal using the two-step removal process detailed below occurs only during seasonal periods of bat activity, from approximately March 1 through April 15 and September 1 through October 15, or b) after a qualified biologist conducts night emergence surveys or completes visual examination of roost features that establish absence of roosting bats. Two-step tree removal shall be conducted over two consecutive days, as follows: 1) the first day (in the afternoon), under the direct supervision and instruction by a qualified biologist with experience conducting two-step tree removal, limbs and branches shall be removed by a tree cutter using chainsaws only. Limbs with cavities, crevices, or deep bark fissures shall be avoided, and 2) the second day the entire tree shall be removed.

For modification of buildings, if the qualified biologist determines that the buildings are suitable bat habitat, the qualified biologist shall conduct a survey for roosting bats. If roosting bats are detected, a bat avoidance, exclusion, and habitat mitigation plan shall be prepared and implemented, and the Project shall obtain CDFW's written approval of the plan prior to implementation. The plan shall recognize that both maternity and winter roosting seasons are vulnerable times for bats and require exclusion outside of these times, generally between March 1 and April 15 or September 1 and October 15 when temperatures are sufficiently warm. The plan shall include habitat mitigation such as planting suitable roost trees in an appropriate location or installing and maintaining in perpetuity bat boxes if they are determined to be suitable for the bat species impacted. Work operations shall cease if bats are found roosting within the Project area and CDFW shall be consulted.

# V. Cultural Resources

Would the project:

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

## Background

A Cultural Resources Evaluation was conducted for the site by Solano Archaeological Services (SAS 2024). On December 15, 2023, SAS archaeologist Karena Skinner conducted an intensive pedestrian survey of the Project area. The Project area consists largely of asphalt (parking lots), standing in-use buildings, and areas exhibiting landscaping (e.g., grass). Ground surface visibility was only available in small, landscaped areas or minor undeveloped patches in between buildings, some of which exhibited minor erosional areas. No prehistoric or historic-era cultural sites, features, or artifacts or potentially sensitive soil types (i.e., prehistoric midden) were encountered.

Archival research and an intensive field survey did not identify any prehistoric or historic-period cultural resources within the Project area. Map and aerial photography reviews show that the land on which the project area is situated is largely comprised of fill brought in sometime prior to the construction of the original late-1950s campus buildings. However, while most of the campus was placed on fill, the earliest buildings also appear to have been built at least in part on a landform that may be highly sensitive for containing potentially significant prehistoric remains. Consequently,

Concerning historic period resources, historic mapping, and aerial photography demonstrate that the Redwood High School campus was built almost entirely on a filled wetland and no historicperiod developments appear to have been established in the project area. Consequently, there is very little chance that any intact and potentially significant buried historic-era resources could be present within the project area. Although several of the buildings on the campus subject to demolition or modernization date to the early- to mid-20th century, local historic buildings inventories do not show any of the school buildings proposed for demolition as potentially significant historic structures<sup>5</sup>.

#### Discussion

- a) As discussed above, local inventories of historic buildings do not include any or the buildings proposed for demolition as historic. Consequently, the project site contains no historical resources as defined in CEQA Guidelines Section 15064.5. The project would not have the potential to affect any off-site historic resources due to its location internal to the school campus. Therefore, the project would have **no impact** on historical resources.
  - b) The project would involve grading for foundations and infrastructure. Even though the site has been previously developed with school facilities, the Project area retains a high level of sensitivity for retaining early and important Native American prehistoric materials (SAS 2024) and has the potential to have a **potentially significant impact** on these resources. Mitigation Measures CUL-1 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. Implementation of Mitigation Measure CULT-2 would reduce this potentially significant impact to a less-than-significant level.

#### **Mitigation Measures**

*Mitigation Measure CULT-1:* Due to the highly sensitive nature of the project area to retain significant (per CEQA criteria) prehistoric resources, the Project shall include monitoring of initial stages of Project-related ground disturbances by a qualified archaeologist. 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.

*Mitigation Measure CULT-2:* 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.

<sup>&</sup>lt;sup>5</sup> <u>https://www.ci.larkspur.ca.us/169/Inventory-of-Historic-Resources</u> <u>https://www.ci.larkspur.ca.us/DocumentCenter/View/411/Historic-Resources-Inventory?bidId=</u>

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 would 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<br>Significant<br>Impact | Less Than<br>Significant<br>with<br>Mitigation | Less Than<br>Significant<br>Impact | No<br>Impact |
|----|--|--------------------------------------|--|------------------------------------|--------------|
| a) | Result in potentially significant<br>environmental impact due to wasteful,<br>inefficient, or unnecessary consumption of<br>energy resources, during project<br>construction or operation? |                                      |  |                                    | x            |
| b) | Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?   |                                      |  |                                    | x            |

### Setting

### California Building Energy Efficiency Standards (Title 24, Part 6)

The energy consumption of new residential and nonresidential buildings in California is regulated by the state's Title 24, Part 6, Building Energy Efficiency Standards (California Energy Code). The California Energy Code was established by CEC in 1978 in response to a legislative mandate to create uniform building codes to reduce California's energy consumption and provide energy efficiency standards for residential and nonresidential buildings. CEC updates the California Energy Code every 3 years with more stringent design requirements for reduced energy consumption, which results in the generation of fewer GHG emissions.

The California Energy Commission (CEC) updates the Energy Code every three years. On August 11, 2021, the CEC adopted the 2022 Energy Code. In December, it was approved by the California Building Standards Commission for inclusion into the California Building Standards Code. The 2022 Energy Code encourages efficient electric heat pumps, contains prescriptive requirements for high-efficiency lighting, strengthens ventilation standards, and more. Buildings whose permit applications are applied for on or after January 1, 2023, must comply with the 2022 Energy Code.

### California Green Building Standards Code (Title 24, Part 11)

The California Green Building Standards Code—Part 11, Title 24, California Code of Regulations — known as CALGreen, is the first-in-the-nation mandatory green building standards code developed to meet the state's GHG reduction goals. CALGreen includes regulations for energy efficiency, water efficiency and conservation, material conservation and resource efficiency, environmental quality, and more, and also includes mandatory provisions for commercial, residential, and public-school buildings. CalGreen includes a waste diversion mandate, which requires that at least 65 percent of construction materials generated during new construction or demolition projects are diverted from landfills.

### Discussion

a) The Project would require short-term energy consumption of petroleum fuels (primarily gasoline and diesel fuel) by construction workers traveling to and from the Project site, transportation of site and building materials, and equipment for on-site construction activities. Gasoline and diesel fuel would be the primary sources of energy for these activities except where electricity is available and feasible, thus electricity use during construction is considered to be minor.

Based on the CalEEMod modeling described in the air quality and GHG emissions sections of this Initial Study and standard fuel conversion factors, Project construction activities would require approximately 91,031 gallons of diesel fuel and approximately 5,970 gallons of gasoline<sup>6</sup>. This increase in gasoline and diesel fuel consumption would be temporary, of relatively short duration, and would cease once Project construction is completed. The Project would replace existing school buildings, which are outdated, have inadequate safety, and are substandard facilities. The Project would also modernize existing buildings and landscaping, incorporating modern design principles and technologies. Therefore, Project construction would not result in wasteful, inefficient, or unnecessary consumption of energy.

The Project would not result in wasteful, inefficient, or unnecessary consumption of energy during operation, given that the school facilities would be constructed to more stringent energy standards, in compliance with current State of California building energy efficiency standards and green building standards. Furthermore, the Project would not increase vehicle trips since there would be no change in student enrollment or staffing with the Project. Therefore, **no impact** would occur.

b) The Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. The Project would comply with the current State of California Building Energy Efficiency Standards and the California Green Buildings Standards Code. Therefore, **no impact** would occur.

<sup>&</sup>lt;sup>6</sup> Fuel usage is estimated using the CalEEMod output for CO<sub>2</sub>, and a kgCO<sub>2</sub>/gallon conversion factor, as cited in the *U.S. Energy Information Administration Carbon Dioxide Emissions Coefficients*, https://www.eia.gov/environment/emissions/co2 vol mass.php

# VII. Geology and Soils

Would the Project:

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

### Background

Miller Pacific Engineering Group (MPEG) prepared a Geotechnical Investigation for the Project (MPEG 2023).<sup>7</sup> The study included a literature review and exploratory soil borings. Relevant portions of the Geotechnical Investigation report are summarized below.

### Soil and Geologic Conditions

The geotechnical exploration found that the Project site is underlain by artificial fill placed over marsh deposits known as Bay Mud. Artificial fill generally consists of highly variable deposits of rock, soil, and debris. Bay Mud is described as a soft, highly compressible silt and clay marine marsh deposit. Underneath the Bay Mud and artificial fill, at depths of 10 feet below ground surface or greater, Franciscan sandstone and shale are present on the northern end of the campus as well as to the west and southwest (MPEG 2023).

Groundwater was measured at depths between 5 and 11-feet below the ground surface in the geologic study borings. Groundwater levels were also measured at depths between 6.5 and 7-feet below the ground surface. Typically, groundwater levels fluctuate seasonally with higher levels expected during the wet winter months. MPEG anticipates, based on their subsurface exploration, a historic high groundwater level of approximately 5-feet below the ground surface (MPEG 2023).

### Seismic Conditions

Numerous earthquakes have occurred in the region within historic times. Conclusions from the most recent Uniform California Earthquake Rupture Forecast indicate the highest probability (33%) of an earthquake of 6.7 Richter Magnitude or greater on any of the active faults in the region by 2045 would be from the Hayward/Rodgers Creek Fault, located approximately 9.6 miles northeast of the site. The San Andreas Fault, located approximately 7.9 miles southwest of the Project site, has a probability of 22% for a similar earthquake by 2045 (MPEG 2023).

### Discussion

a) i. Under the Alquist-Priolo Earthquake Fault Zoning Act, the California Geological Survey produced 1:24,000 scale maps showing all known active faults and defining zones within which special fault studies are required. The Project site is not located within an Alquist-Priolo Earthquake Fault Zone. Additionally, MPEG did not observe evidence during site reconnaissance indicative of active or historic faulting. MPEG concluded that the potential for fault surface rupture on the campus is very low (MPEG 2023).

ii. As discussed in the Background, above, Larkspur is subject to ground shaking caused by a number of regional faults, most prominently the San Andreas Fault. Because ground rupture is unlikely on the site, ground shaking would be the cause of most damage during an earthquake. According to the Association of Bay Area Government's Seismic Hazard

<sup>&</sup>lt;sup>7</sup> Miller Pacific Engineering Group, Geotechnical Investigation, TUHSD – Redwood High School – 395 Doherty Drive, Larkspur, California, September 18, 2023.

maps, the Project area is subject to severe seismic shaking in the event of a major earthquake on the faults in the region<sup>8</sup>.

The proposed school buildings would be designed to current seismic safety codes, and the design would be reviewed for structural safety by the State Architect. Given updates to the Building Code, the new buildings would likely be safer seismically than the existing buildings. Large earthquakes could generate strong to violent ground shaking at the Project site and could cause damage to buildings and infrastructure and threaten public safety. This is a **potentially significant** impact that would be reduced to a **less-than-significant** level with implementation of the recommendations contained in the MPEG geotechnical report, per Mitigation Measure GEO-1, below.

iii. Seismic ground shaking can induce settlement of unsaturated, loose, granular soils. Settlement occurs as the loose soil particles rearrange into a denser configuration when subjected to seismic ground shaking. MPEG did not observe loose granular deposits above the highest historic groundwater level. MPEG concluded that the risk of seismically induced ground settlement occurring under the proposed structures is low. Therefore, this impact would be **less than significant**.

MPEG evaluated the potential for liquefaction based on testing of site soils and concluded that the potential for substantive liquefaction on-site is medium to high. Therefore, this impact is **potentially significant** but would be reduced to **less than significant** with implementation of Mitigation Measure GEO-1 below (MPEG 2023).

Lurching and associated ground cracking can occur during strong ground shaking. The ground cracking generally occurs along the tops of slopes where stiff soils are underlain by soft deposits, or along steep slopes or channel banks. These conditions generally do not exist at the site, so MPEG concluded that the risk of lurching or ground cracking impacting the structures is very low (MPEG 2023). Therefore, this impact would be **less than significant**.

iv. Slope instability generally occurs on relatively steep slopes and/or on slopes underlain by weak materials. The Project site consists of relatively flat topography and traditional (hillside) slope instability is not considered a hazard. Therefore, this impact would be **less than significant**.

b) Sandy soils on moderate slopes or clayey soils on steep slopes are susceptible to erosion when exposed to concentrated water runoff. The Redwood High School campus is relatively flat and covered in hardscaped surfaces, existing structures, and vegetation. Therefore, the risk of erosion due to surface water runoff is low. However, the risk of erosion would increase during construction when the surficial soils are exposed. The Project would require a Construction General Permit (CGP) issued by the State Water

<sup>&</sup>lt;sup>8</sup> https://mtc.maps.arcgis.com/apps/webappviewer/index.html?id=4a6f3f1259df42eab29b35dfcd086fc8

Resources Control Board. A Stormwater Pollution Prevention Plan (SWPPP) would be required to be prepared prior to issuance of the permit.

Furthermore, California Government Code Section 53097 stipulates that the District must comply with a city or county ordinance (1) regulating drainage improvements and conditions, (2) regulating road improvements and conditions, or (3) requiring the review and approval of grading plans. The City of Larkspur Urban Runoff Pollution Prevention Ordinance includes both construction and operational Best Management Practices (BMPs) to reduce stormwater runoff contaminants in drainage and thus the Project is required to comply.

The ordinance requires each construction project to have an erosion and sediment control plan (ESCP) which addresses erosion and sediment control and pollution prevention during the construction phase as well as final stabilization control measures. The Project also would be required to develop and implement an Erosion and Sediment Control Plan (ESCP) or have the SWPPP meet the requirements of the ESCP. The ESCP and the specific control measures to be utilized are subject to the review and approval of the City of Larkspur. Modifications of an approved ESCP are required if, during the course of construction at a site, unanticipated conditions occur, or if the plans prove inadequate for the intended purpose. The SWPPP and compliance with ESCP requirements would reduce the potential impact of erosion to **less than significant**.

c) For discussion of liquefaction, lateral spreading, collapse, and landslides see items a(iii) and a(iv) above.

The site in question has underlying soft and compressible Bay Mud, with up to 50 feet of thickness in lower elevations. MPEG conducted subsurface exploration and consolidation tests to estimate the Bay Mud deposit thicknesses and understand its consolidation properties. Settlement analyses indicate that the Bay Mud has generally fully consolidated due to 1950s fill placement in proposed improvement areas. However, areas with over 40 feet of Bay Mud may experience additional consolidation.

The northeastern parking lot, near the site of the proposed two-story kitchen and cafeteria building, has thicker Bay Mud deposits, and about 1.5 to 2.0 inches of additional consolidation may be expected due to the original fill placement. The proposed site improvements, including new structural and fill loads, could lead to further consolidation of the underlying Bay Mud, causing additional surface settlement. The impact of differential settlement is **potentially significant** but would be reduced to a **less-than-significant** level with implementation of Mitigation Measure GEO-1.

d) Expansive soils will shrink and swell with fluctuations in moisture content and are capable of exerting significant expansion pressures on building foundations, interior floor slabs, and exterior flatwork. Distress from expansive soil movement can include cracking of brittle wall coverings (stucco, plaster, drywall, etc.), cracked door and/or window frames,

and uneven floors and cracked slabs. Flatwork, pavements, and concrete slabs-on-grade are particularly vulnerable to distress. Based on subsurface exploration and laboratory testing, MPEG concluded that the risk of expansive soil affecting the Project is low (MPEG 2023). Therefore, this impact would be **less than significant**.

- e) The Project would be served by the public 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 would involve limited grading to a previously developed site. Therefore, potential impacts to paleontological resources would be considered **less than significant**.

#### **Mitigation Measures**

*Mitigation Measure GEO-1*: The Project shall implement all site preparation, structural, drainage, and foundation design recommendations included in the MPEG Geotechnical Investigation (MPEG 2023). With respect to potential seismically induced slope failures, a professional engineer shall create a finalized grading plan and assess the potential for bearing failure based on planned fill and structural loads. Limitations on the thickness of new fills may be required to maintain adequate factors of safety against instability.

# VIII. Greenhouse Gas

Would the Project:

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

## Background

This section describes greenhouse gas (GHG) emissions impacts associated with the Project and is consistent with the methods described in the BAAQMD *CEQA Air Quality Guidelines* (April 2023). The BAAQMD adopted GHG significance thresholds in April 2022, however, they do not apply to construction activities (BAAQMD, 2022).

"Global warming" and "global climate change" are the terms used to describe the increase in the average temperature of the earth's near-surface air and oceans since the mid-20th century and its projected continuation. Warming of the climate system is now considered to be unequivocal, with global surface temperature increasing approximately 1.33 degrees Fahrenheit (°F) over the last 100 years. Continued warming is projected to increase global average temperature between 2 and 11°F over the next 100 years.

Gases that trap heat in the atmosphere are referred to as GHG because they capture heat radiated from the sun as it is reflected back into the atmosphere, much like a greenhouse does. The accumulation of GHG has been implicated as the driving force for global climate change. The primary GHG are carbon dioxide ( $CO_2$ ), methane ( $CH_4$ ), and nitrous oxide ( $N_2O$ ), ozone, and water vapor.

While the presence of the primary GHG in the atmosphere are naturally occurring,  $CO_2$ ,  $CH_4$ , and  $N_2O$  are also emitted from human activities, accelerating the rate at which these compounds occur within earth's atmosphere. Emissions of  $CO_2$  are largely by-products of fossil fuel combustion, whereas methane results from off-gassing associated with agricultural practices, coal mines, and landfills. Other GHG include hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride, and are generated in certain industrial processes.

CO<sub>2</sub> is the reference gas for climate change because it is the predominant GHG emitted. The effect that each of the aforementioned gases can have on global warming is a combination of the mass of their emissions and their global warming potential (GWP). GWP indicates, on a pound-for-pound basis, how much a gas is predicted to contribute to global warming relative to how much

warming would be predicted to be caused by the same mass of  $CO_2$ .  $CH_4$  and  $N_2O$  are substantially more potent GHG than  $CO_2$ , with GWP of 28 and 265 times that of  $CO_2$ , respectively.

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

### Discussion

a) CalEEMod was used to quantify GHG emissions associated with Project construction activities. The Project's estimated 30-year amortized annual construction related GHG emissions would be approximately 32.6 metric tons of CO<sub>2</sub>e. There is no BAAQMD CEQA significance threshold for construction related GHG emissions. BAAQMD states that GHG emissions from construction represent a very small portion of a project's lifetime GHG emissions. GHG emissions from construction are a one-time release and would not pose a significant impact to the environment (BAAQMD 2022).

Project operational GHG emissions were not quantified because the Project would not increase GHG emissions. The Project would not result in an increase in enrollment or staffing and would not result in an increase in vehicle trips. Furthermore, the new buildings would be subject to more stringent energy standards than the existing buildings. Therefore, this impact would be **less than significant**.

b) The principal State plans and policies adopted for the purpose of reducing GHG emissions are Senate Bill 32 (SB 32) and the 2022 CARB Scoping Plan (Scoping Plan). The Scoping Plan lays out a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels no later than 2045, as directed by Assembly Bill 1279. SB 32 was preceded by Assembly Bill 32 (AB 32). AB 32 required that statewide GHG emissions be reduced to 1990 levels by 2020. SB 32 requires that by 2030 statewide emissions be reduced by 40 percent beyond the 2020 reduction target set by AB 32. The State has taken these measures because no project individually could have a major impact (either positively or negatively) on the global concentration of GHG. Therefore, the Project would result in a significant impact if it would be in conflict with state regulations for reducing GHG emissions such as SB 32 or the Scoping Plan.

Increasing building energy efficiency is a measure identified under the Scoping Plan to reduce statewide GHG emissions. As outlined in the Scoping Plan, energy efficiency moderates the need for electricity consumption and contributes to overall environmental sustainability. By replacing older buildings with buildings built to modern, more stringent energy standards, the Project aligns with the Scoping Plan's overarching goal of achieving substantial and meaningful reductions in GHG emissions statewide. Thus, the Project would be consistent with State GHG plans and policies and this impact would be **less than significant**.

The City of Larkspur adopted a Climate Action Plan (CAP) in 2021. Strategy SA-C1 applies to the Project. Strategy SA-C1 supports improving air quality through the planting of trees and the creation of green space. The Project would remove twenty-three existing trees and 76 new trees would be planted. Therefore, the Project would be consistent with the City of Larkspur CAP and the impact would be **less than significant**.

#### Conclusion

The Project would be consistent with the GHG emissions reduction measures in the City of Larkspur CAP. The Project would be consistent with the climate change policies and measures in CARB's scoping plans and would not conflict with State GHG reduction goals. Therefore, Project impacts would be **less than significant**.

# IX. Hazards and Hazardous Materials

Would the Project:

|    | Environmental Issue  | Potentially<br>Significant<br>Impact | Less Than<br>Significant<br>with<br>Mitigation | Less Than<br>Significant<br>Impact | No<br>Impact |
|----|--|--------------------------------------|--|------------------------------------|--------------|
| a) | Create a significant hazard to the public or<br>the environment through the routine<br>transport, use, or disposal of hazardous<br>materials?  |                                      |  | x                                  |              |
| b) | Create a significant hazard to the public or<br>the environment through reasonably<br>foreseeable upset and accident conditions<br>involving the release of hazardous<br>materials into the environment?   |                                      |  | x                                  |              |
| c) | Emit hazardous emissions or handle<br>hazardous or acutely hazardous materials,<br>substances, or waste within one-quarter<br>mile of an existing or proposed school?  |                                      | х  |                                    |              |
| d) | Be located on a site which is included on a<br>list of hazardous materials sites compiled<br>pursuant to Government Code Section<br>65962.5 and, as a result, would it create a<br>significant hazard to the public or the<br>environment?   |                                      |  |                                    | x            |
| e) | For a project located within an airport land<br>use plan or, where such a plan has not<br>been adopted, within two miles of a public<br>airport or public use airport, would the<br>Project result in a safety hazard or<br>excessive noise for people residing or<br>working in the Project area? |                                      |  |                                    | x            |
| f) | Impair implementation of or physically<br>interfere with an adopted emergency<br>response plan or emergency evacuation<br>plan?  |                                      |  |                                    | x            |
| g) | Expose people or structures, either directly<br>or indirectly, to a significant risk of loss,<br>injury or death involving wildland fires?   |                                      |  | х                                  |              |

## Discussion

 a, b) 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, the impacts would be **less than significant**.

Project operations (school uses) would not involve the routine transport, use, or disposal of hazardous materials. Therefore, the Project would not create a significant hazard to the public or the environment from such activities and the impact would be **less than significant**.

c) As discussed in a) above, Project operations would not involve the use of hazardous materials on campus, and construction use of such materials would be carefully implemented in compliance with all applicable regulations. The construction and demolition sites would be fenced and no student access would be permitted. Therefore, this impact would be **less than significant**.

NorBay Consulting conducted an evaluation of asbestos and lead-based paints that may be associated with the existing buildings to be demolished on the campus (NorBay 2023). A total of 48 samples of suspected asbestos containing building materials were collected during the inspection. Upon analysis, the only material at the school identified to contain asbestos minerals or known to contain asbestos is drywall/taping mud found in room 513 of the ceramics wing.

NorBay collected a total of 154 readings of interior/exterior painted/coated surfaces during the inspection. In addition, six calibration readings were also collected. Lead based paint/glazing was located on the following components:

- Exterior multi-colored ceramic benches in the courtyard between the music and ceramics wings.
- Exterior multi-colored statues and decorative pieces in the courtyard between the music and ceramics wings.

Demolition could disturb and disperse lead found within the lead-based paint/glazing and create a hazard to the public. This is a **potentially significant** impact that would be reduced to a **less than significant** level with implementation of Mitigation Measure HAZ-1, below.

- d) A review of the Envirostor database (Cortese List) indicated that there are no known hazardous waste sites within 1000 feet of the school<sup>9</sup>. Therefore, the Project would not present a hazard to the public or the environment and **no impact** would occur.
- e) The Project site is not within two miles of an airport or within an airport land use plan area. Therefore, it would not present a hazard to air safety, and **no impact** would occur.

<sup>&</sup>lt;sup>9</sup>https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=Redwood+High+School

- f) Construction and operation of the Project are not expected to interfere with City of Larkspur's emergency response because it is the replacement of existing school buildings on an existing school campus. Construction, including staging, would be limited to the existing high school, and traffic would not be substantially affected by the Project. In addition, the Office of State Architect would review all plans for emergency response accessibility and safety. No impact would occur.
- g) The Project site is situated in a developed urban area, surrounded by other urban uses. It is not designated as a fire hazard severity zone of moderate or higher<sup>10</sup>. Additionally, the new and reconstructed school buildings would include fire protection infrastructure (alarms, sprinklers, etc.) as required by current codes. Therefore, the Project would have a **less than significant** impact with respect to wildfire hazards.

#### Mitigation Measures

*Mitigation Measure HAZ-1*: As part of the project, all items potentially containing asbestos materials or lead-based paints shall be removed intact to prevent the generation of any asbestos or lead-based paint hazard to the public.

<sup>&</sup>lt;sup>10</sup>https://gisopendata.marincounty.org/datasets/MarinCounty::fire-hazard-severity-zone-1/explore?location=37.864395%2C-122.502329%2C16.00

# X. Hydrology and Water Quality

Would the Project:

|    | Environmental Issue   | Potentially<br>Significant<br>Impact | Less Than<br>Significant<br>with<br>Mitigation | Less Than<br>Significant<br>Impact | No<br>Impact |
|----|---|--------------------------------------|--|------------------------------------|--------------|
| a) | Violate any water quality standards or<br>waste discharge requirements or<br>otherwise substantially degrade surface or<br>groundwater quality?   |                                      |  | x                                  |              |
| b) | Substantially decrease groundwater<br>supplies or interfere substantially with<br>groundwater recharge such that the<br>project may impede sustainable<br>groundwater management of the basin?  |                                      |  |                                    | x            |
| c) | Substantially alter the existing drainage<br>pattern of the site or area, including<br>through the alteration of the course of a<br>stream or river or through the addition of<br>impervious surfaces, in a manner which<br>would:                          |                                      |  |                                    |              |
|    | <ul> <li>i) result in substantial erosion or siltation<br/>on- or off-site;</li> <li>ii) substantially increase the rate or<br/>amount of surface runoff in a manner<br/>which would result in flooding on-or<br/>off-site;</li> </ul>                      |                                      |  | x                                  |              |
|    | <ul> <li>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</li> <li>iv) impede or redirect flood flows?</li> </ul> |                                      |  |                                    |              |
| d) | In flood hazard, tsunami, or seiche zones,<br>risk release of pollutants due to project<br>inundation?  |                                      |  | x                                  |              |
| e) | Conflict with or obstruct implementation of<br>a water quality control plan or sustainable<br>groundwater management plan?  |                                      |  |                                    | x            |

## Discussion

a, c) During construction activities, there would be a potential for surface water to carry sediment from bared soils and small quantities of other pollutants into the City's stormwater system, which ultimately discharges to San Francisco Bay, potentially contributing to degrading water quality in the drainages and Bay In addition, potential pollutants such as gasoline, diesel fuel, lubricating oil, hydraulic oil, lubricating grease, automatic transmission fluid, paints, solvents,

glues, and other substances may be used/released by construction equipment. 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 City of Larkspur's stormwater runoff is controlled by the Marin Countywide Stormwater Pollution Prevention Program (MCSTOPPP), which was established in 1993 to reduce the pollution carried by stormwater into local creeks, the San Francisco Bay, and the Pacific Ocean. The City of Larkspur is a member agency of MCSTOPPP, obligating it to implement a local stormwater pollution prevention program and fund the countywide MCSTOPPP.

The Federal Clean Water Act and the California Porter-Cologne Water Quality Control Act require a National Pollutant Discharge Elimination System (NPDES) permit to prevent harmful pollutants from being dumped or washed by stormwater runoff, into the stormwater system, then discharged into local waterbodies. Smaller (less than 100,000 population) municipalities and unincorporated counties are required to obtain coverage under a statewide NPDES Municipal General Stormwater Permit (Phase II Permit) issued by the State Water Resources Control Board. In Marin, the County and all Marin's municipalities are subject to the conditions of the regulations described in the Phase II Small Municipal Separate Storm Sewer System (MS4) NPDES Permit, Water Quality Order No. 2013-0001-DWQ, General Permit No. CAS000004.

The City of Larkspur administers its Urban Runoff Pollution Prevention Ordinance, the purpose of which is to manage and control stormwater and nonstormwater discharges to ensure the future health, safety, and general welfare of City of Larkspur citizens and to protect and enhance watercourses, fish and wildlife habitat in a manner pursuant to and consistent with the Phase II Permit.

California Government Code Section 53097 stipulates that the District must comply with a city or county ordinance (1) regulating drainage improvements and conditions, (2) regulating road improvements and conditions, or (3) requiring the review and approval of grading plans. The City of Larkspur Urban Runoff Pollution Prevention Ordinance includes both construction and operational Best Management Practices (BMPs) to reduce stormwater runoff contaminants in drainage and thus the Project is required to comply.

The ordinance requires each construction project to have an erosion and sediment control plan (ESCP) which addresses erosion and sediment control and pollution prevention during the construction phase as well as final stabilization control measures. The ESCP and the specific control measures to be utilized are subject to the review and approval of the City of Larkspur.

The Project would disturb more than one acre and therefore would require a Construction General Permit (CGP) from the State Water Resources Control Board. A Stormwater Pollution Prevention Plan (SWPPP) would be required to be prepared prior to issuance of the permit. Under the City of Larkspur Urban Runoff Pollution Prevention Ordinance a SWPPP may be submitted in lieu of the ESCP provided it meets the requirements of the ESCP. The ESCP/SWPPP is required to identify a practical sequence for BMP implementation and maintenance, site restoration, contingency measures, responsible parties, and agency contacts.

The SWPPP must 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.

Implementation of the ESCP (or SWPPP) would ensure that the construction of the Project would not violate any water quality standards or waste discharge requirements and therefore potential impacts would be **less than significant**.

b) The City of Larkspur purchases all of its water from the Marin Municipal Water District (MMWD). About 75% of the MMWD's water supply originates from rainfall on the Mt. Tamalpais watershed and in the hills of west Marin, flowing into the MMWD's seven reservoirs. The MMWD also supplements its supply with water from the Sonoma County Water Agency (SCWA), which comes from the Russian River system in Sonoma County. The Russian River water supply originates from rainfall runoff to the River and then is captured in Lake Sonoma and Lake Mendocino. MMWD does not rely substantially on groundwater. As such, it would not conflict with any groundwater management plan, and **no impact** would result. c) The Project site is already developed with school facilities and landscaped areas. However, the Project would increase impervious surfaces with new asphalt and concrete paved surfaces. The site currently has about 65,400 sq. ft. of impervious surfaces and 75,000 sq. ft. of pervious surfaces. The Project would increase impervious surfaces to about 112,000 sq. ft, and reduce pervious surfaces to about 28,000 sq. ft. The increased peak runoff from the increased impervious surfaces would be offset by the proposed landscape area improvements, infiltration areas, and a detention basin sized to assure that post-project peak runoff would not exceed existing peak runoff levels. Therefore, impacts to peak runoff would be **less than significant**.

The Project would create or replace more than 5,000 square feet of impervious area and would therefore be required to prepare and maintain Low-Impact Development Plans with post-construction BMPs for the Project. The District would be responsible for costs incurred in operating, maintaining, repairing, and replacing any stormwater quality improvements and features. The District is required to conduct inspection and maintenance activities and complete annual reports. Implementation of the requirements described above would reduce water quality impacts associated with increased runoff to a **less than significant** level.

d) The campus is mapped as within a FEMA 100-year and 500-year flood zone (ABAG, 2023, in MPEG 2023<sup>11</sup>). Therefore, widespread flooding may be considered a significant geologic hazard at the Project site. The existing buildings on the site are currently subject to flood hazard. To remain in compliance with the 2022 California Building Code, Project floor elevations have been designed to remain one foot above the FEMA base flood elevation in accordance with accepted hydrologic and hydraulic engineering techniques. Therefore, this impact would be less than significant.

The Project site is not mapped within a zone at risk of flooding due to the failure of local dams (Department of Water Resources, 2023, in MPEG 2023). Therefore, the risk of inundation of the site from dam failure would be low. **No impact** would occur.

Seiche and tsunamis are short duration, earthquake-generated water waves in large, enclosed bodies of water and the open ocean, respectively. The extent and severity of a seiche or tsunami would be dependent upon ground motions and fault offset from nearby active faults. The Project site is adjacent to the San Francisco Bay and is located within a mapped Tsunami Inundation Zone (ABAG, 2023, in MPEG 2023). There have been eight credible local seiche events observed in San Francisco Bay between 1854 and 1906, six of which are attributed to earthquake activity and two to landslides.

No confirmed seiche has been recorded in San Francisco Bay since 1906. Considering the recorded history of seiche in San Francisco Bay, MPEG concluded that the risk of seiche or tsunami in excess of the height observed in the 1964 tsunami (approximately

<sup>&</sup>lt;sup>11</sup> Miller Pacific Engineering Group, Geotechnical Investigation, TUHSD – Redwood High School – 395 Doherty Drive, Larkspur, California, September 18, 2023.

3.5-feet) is low. Furthermore, as discussed above the Project floor elevations are designed to remain one foot above the FEMA base flood elevation. Therefore, the Project impact to future occupants of the Project from these hazards would be **less than significant**. Mudflows and other slope instability impacts are addressed in the Geology section of this document.

e) Please see Item b), above. The project would not affect groundwater resources, and **no impact** would occur.

## XI. Land Use and Planning

Would the Project:

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

- a) The replacement school buildings are proposed on an existing school campus containing similar existing facilities. Because the Project would not change the existing land use but would instead upgrade the existing school facilities on-site, the Project would not create conflicts between uses or divide an established community, and there would be **no impact**.
- b) The Project parcel's general plan land use designation is currently Public/Schools and Public Facilities, and the zoning is R-1 (Single Family Residential), where a school is an allowed use. 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**.

## XII. Mineral Resources

Would the Project:

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

## Discussion

a, b) The Project site is a developed school campus in an urban area and is not identified in the City of Larkspur's 2020 Administrative Draft General Plan nor the City of Larkspur's 1990 General Plan as a site containing mineral resources that would be of local, regional, or statewide importance. The Project site does not contain any known mineral deposits or active mineral extraction operations. Therefore, the Project would have **no impact** on mineral resources.

## XIII. Noise

Would the Project result in:

|    | Environmental Issue  | Potentially<br>Significant<br>Impact | Less Than<br>Significant<br>with<br>Mitigation | Less Than<br>Significant<br>Impact | No<br>Impact |
|----|--|--------------------------------------|--|------------------------------------|--------------|
| a) | Generation of a substantial temporary or<br>permanent increase in ambient noise<br>levels in vicinity of the project in excess of<br>standards established in the local general<br>plan or noise ordinance, or applicable<br>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<br>airstrip or an airport land use plan or,<br>where such a plan has not been adopted,<br>within two miles of a public airport or<br>public use airport, would the Project<br>expose people residing or working in the<br>project area to excessive noise levels? |                                      |  |                                    | x            |

## Background

RCH Group, Inc. (RCH) performed noise monitoring at the project site on November 30, 2023. The following analysis details the results of the noise monitoring and potential noise impacts from the Project.

#### **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 decibel. 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 how humans hear sound. The abbreviation dBA is sometimes used when the A-weighted sound level is reported.

Different time-averaged scales are used to represent noise environments and consequences of human activities. The most commonly used noise descriptors are: the A–weighted sound level over a given time period (Leq)<sup>12</sup>; average day–night 24-hour average sound level (Ldn)<sup>13</sup> with a nighttime increase of 10 dB to account for sensitivity to noise during the nighttime; and community

<sup>&</sup>lt;sup>12</sup>The Equivalent Sound Level (Leq) is a single value of a constant sound level for the same measurement period duration, which has sound energy equal to the time–varying sound energy in the measurement period.

<sup>&</sup>lt;sup>13</sup>Ldn is the day–night average sound level that is equal to the 24-hour A-weighted equivalent sound level with a 10-decibel penalty applied to night between 10:00 p.m. and 7:00 a.m.

noise equivalent level (CNEL)<sup>14</sup>, , which also is a 24-hour average that includes both an evening and a nighttime sensitivity weighting.

Table NOISE-1 identifies decibel levels for common sounds heard in the environment. With regard to increases in A-weighted noise level, the following relationships occur (Caltrans, 1998a):

- Under controlled conditions in an acoustics laboratory, the trained healthy human ear is able to discern changes in sound levels of 1 dB;
- Outside of such controlled conditions, the trained ear can detect changes of 2 dB in normal environmental noise;
- It is widely accepted that the average healthy ear, however, can barely perceive noise levels changes of 3 dB;
- A change in level of 5 dB is a readily perceptible increase in noise level; and
- A 10-dB change is recognized as twice as loud as the original source, although different people may perceive sound increases of from 6-10 dB as twice as loud.

| Noise Level (dB) | Outdoor Activity                  | Indoor Activity                     |
|------------------|-----------------------------------|-------------------------------------|
| 90+              | Gas lawn mower at 3 feet, jet     | Rock Band                           |
|                  | flyover at 1,000 feet             |                                     |
| 80-90            | Diesel truck at 50 feet           | Loud television at 3 feet           |
| 70-80            | Gas lawn mower at 100 feet,       | Garbage disposal at 3 feet,         |
| 70-00            | noisy urban area                  | vacuum cleaner at 10 feet           |
| 60-70            | Commercial area                   |                                     |
| 40-60            | Quiet urban daytime, traffic at   | Large business office, dishwasher   |
| 40-00            | 300 feet                          | next room                           |
| 20-40            | Quiet rural, suburban nighttime   | Concert hall (background), library, |
| 20-40            |                                   | bedroom at night                    |
| 10-20            |                                   | Broadcast / recording studio        |
| 0                | Lowest threshold of human         | Lowest threshold of human           |
| U                | hearing                           | hearing                             |
| SOURCE: Modified | from Caltrans Technical Noise Sup | oplement, 1998                      |

### Table NOISE-1. Typical Noise Levels

#### Noise Attenuation

Stationary point sources of noise, including construction equipment, attenuate (lessen) at a rate of 6 to 7.5 dB per doubling of distance from the source, depending on ground absorption. Soft sites, such as soft dirt, grass, or unpaved sites with scattered bushes and trees, attenuate at 7.5 dB per doubling. Hard sites have reflective surfaces (e.g., parking lots or smooth bodies of water) and therefore have less attenuation (6.0 dB per doubling). A street or roadway with moving vehicles (known as a "line" source), would typically attenuate at a lower rate, approximately 3 to 4.5 dB each time the distance doubles from the source (Caltrans, 1998b). Physical barriers

<sup>&</sup>lt;sup>14</sup>CNEL is the average A-weighted noise level during a 24-hour day, obtained by addition of 5 decibels in the evening from 7:00 to 10:00 p.m., and an addition of a 10–decibel penalty in the night between 10:00 p.m. and 7:00 a.m.

located between a noise source and the noise receptor, such as buildings, berms, or sound walls, would increase the attenuation. Noise from large construction sites would have characteristics of both "point" and "line" sources, so attenuation would likely range between 4.5 and 7.5 dB per doubling of distance.

#### City of Larkspur General Plan

Chapter 7 of the 2040 Larkspur General Plan addresses protection from man-made hazards such as noise. The following are relevant to the project:

Goal SAF-13: No significant escalation of noise levels in areas where noise-sensitive uses exist.

Policy SAF-13.1: Analyze in detail the potential noise impacts of any actions the City may take that could significantly alter noise levels in the community.

#### City of Larkspur Municipal Code

Chapter 9.54 (Noise Control Regulations) of the City of Larkspur Municipal Code prohibits unnecessary, excessive, and annoying noises from all sources of noise in the City. The following are relevant to the project:

Per §9.54.060(H), noise sources exceeding the prescribed standards that are associated with construction, repair, remodeling, demolition, or paving of any real property, including those from vehicles and equipment associated with these activities are exempt if they occur during the following time periods:

| Monday – Friday (excluding holidays) | Seven a.m. to six p.m.                 |
|--------------------------------------|--|
| Saturdays (excluding holidays)       | Nine a.m. to five p.m.                 |
| Sundays/holidays                     | No exemption from prescribed standards |

#### Vibration

Vibration is an oscillatory motion which can be described in terms of the displacement, velocity, or acceleration. The peak particle velocity (PPV) is the descriptor used in monitoring of construction vibration.

#### Sensitive Receptors

Noise-sensitive receptors in the City of Larkspur General Plan and Municipal Code are identified as residences, schools, hospitals, and convalescent homes. The area north of the Project site consists of single-family residences lining the horseshoe-shaped Corte Madera Creek. To the west of the Project site are recreation fields, Tamalpais Adult School, and Tamiscal High School, along with single-family residences along Lucky Drive. To the south, San Andreas High School, recreation fields, and an undeveloped shoreline/marsh wetlands area characterize the surroundings, accompanied by additional single-family residences further south. To the east, a tributary channel to Corte Madera Creek runs north to south, bordered by professional office buildings.

## Existing Noise Environment

To quantify existing ambient noise levels, this noise monitoring consisted of four short-term (10minute) noise measurements in and around the Project site. Table NOISE-2 summarizes the locations and results of the noise measurements. Figure NOISE-1 shows the locations of the noise measurements on a map. Based on observations during the short-term measurements, the main sources of noise in and around the project site include traffic noise on Doherty Drive, Lucky Drive and the Redwood High School East Parking Lot. Other noise sources include stationary equipment noise from school buildings, students, parking lot noise, and wind.

| Thursday November 30,<br>2023<br>12:57 p.m. to 1:09 p.m.<br>Thursday November 30,<br>2023 | 5-minute Leq's:<br>53, 52<br>5-minute Leq's:<br>53, 50          | Traffic noise from the<br>intersection of Doherty<br>Drive and Lucky Drive 56-<br>77 dB. Car doors<br>slamming in parking lot<br>55-59 dB.<br>Distant noise from          |
|---|---|---|
| 2023  | •   |   |
| 1:11 p.m. to 1:21 p.m.  |   | students 48-50 dB. Wind 44-48 dB.   |
| Thursday November 30,<br>2023<br>1:23 p.m. to 1:33 p.m.                                   | 5-minute Leq's:<br>50, 52                                       | Traffic noise from Lucky<br>Drive was 55-64 dB.<br>HVAC noise from nearby<br>building at Redwood High<br>School was a constant 49<br>dB.                                  |
| Thursday November 30,<br>2023<br>1:36 p.m. to 1:46 p.m.                                   | 5-minute Leq's:<br>64, 65                                       | Traffic noise from Doherty<br>Drive was 64-74 dB.   |
|   | 2023<br>1:23 p.m. to 1:33 p.m.<br>Thursday November 30,<br>2023 | 2023       50, 52         1:23 p.m. to 1:33 p.m.       50, 52         Thursday November 30, 2023       5-minute Leq's: 64, 65         1:36 p.m. to 1:46 p.m.       64, 65 |

#### Table NOISE-2. Existing Noise Levels



Figure NOI-1 Noise Measurement Locations

Source: RCH Group and Google Earth, 2023.

#### Discussion

#### a) **Construction Noise Impacts.**

Project construction is anticipated to begin in June 2024 and run through December of 2026. Construction would result in a temporary increase in ambient noise levels in the vicinity of the project. Noise levels generated by construction equipment would vary greatly depending upon factors such as the type and specific model of the equipment, the operation being performed, the condition of the equipment and the prevailing wind direction.

Construction activities would occur approximately 230 feet away from the nearest residence on Lucky Drive and approximately 300 feet away from the nearest school building at San Andreas High School. The maximum noise levels at 50 feet, 230 feet and 300 feet for various types of construction equipment that could be used during construction are provided in Table NOISE-3.

| Construction<br>Equipment | Noise Level (dB,<br>Lmax at 50 feet) | Noise Level (dB,<br>Lmax at 230 feet) | Noise Level (dB, Lmax<br>at 300 feet) |
|---------------------------|--------------------------------------|---------------------------------------|---------------------------------------|
| Dump Truck                | 76                                   | 59                                    | 57                                    |
| Air Compressor            | 78                                   | 61                                    | 59                                    |
| Backhoe                   | 78                                   | 61                                    | 59                                    |
| Dozer                     | 82                                   | 65                                    | 63                                    |
| Excavator                 | 81                                   | 64                                    | 62                                    |
| Flat Bed Truck            | 74                                   | 57                                    | 55                                    |
| Grader                    | 85                                   | 68                                    | 66                                    |
| Generator                 | 81                                   | 64                                    | 62                                    |
| Roller                    | 80                                   | 63                                    | 61                                    |
| Vibratory Concrete Mixer  | 80                                   | 63                                    | 61                                    |
| Concrete Mixer Truck      | 79                                   | 62                                    | 60                                    |
| Front End Loader          | 79                                   | 62                                    | 60                                    |

#### Table NOISE-3. Typical Noise Levels from Construction Equipment (Lmax)

Notes:

1. An attenuation rate of 7.5 per doubling of distance was used to convert the FHWA construction equipment noise levels at 50 feet to the noise levels at 230 feet and 300 feet.

L<sub>max</sub> = maximum sound level

SOURCE: Federal Highway Administration (FHWA) Roadway Construction Noise Model User's Guide, 2006.

Construction equipment would not all operate at the same time or location. As shown in Table NOISE-3, construction noise levels at the nearest residence on Lucky Drive could reach up to 68 dB, Lmax.

The standards for construction noise in the City of Larkspur Municipal Code are consistency with the allowable hours for construction activities and not the decibel noise level. Construction would only occur within the allowable hours of the City of Larkspur Municipal Code Per § 9.54.060(H), described above. Therefore, construction noise impacts on off-site sensitive receptors would be a **less than significant impact**.

Due to the proximity of nearby school buildings on-site, construction activities have the potential to disrupt school activities or cause annoyance to on-site students, teachers, and staff. The District shall implement Mitigation Measure NOISE-1 to reduce impacts to on-site school activities. With implementation of Mitigation Measure NOISE-1, construction noise impacts to on-site school activities would be a **less than significant impact**.

#### **Operational Noise Impacts**

Implementation of the project would not result in a significant escalation of noise levels in areas where noise-sensitive uses exist. The project would not change or expand any uses of the school and there would be no change in student enrollment or staffing. Once operational, the project noise would not generate noise that would exceed what is currently generated by the existing school (See Table NOISE-2). As shown in Table NOISE-2, the

main source of noise at nearby noise-sensitive areas is traffic noise from Doherty Drive and Lucky Drive and not noise from current school operations. Therefore, operational noise would be a **less than significant impact**.

- b) Construction activities have the potential to result in varying degrees of temporary ground vibration, depending on the specific construction equipment used and operations involved. In most cases, vibration induced by typical construction equipment does not result in adverse effects on people or structures (Caltrans, 2013). Vibrational effects from typical construction activities are only a concern within 25 feet of existing structures (Caltrans, 2002). There are no off-site structures within 25 feet of the proposed construction site. Therefore, vibration would be a less than significant impact.
- c) The Project site is not within the vicinity of a private airstrip or an airport land use plan, or within 2 miles of a public use airport. The nearest airport is San Rafael Airport (the nearest runway of which is approximately 5 miles north of the Project site). Therefore, the Project would have **no impact** from airport noise.

#### **Mitigation Measures**

*Mitigation Measure NOISE-1.* The District Construction Contractor shall coordinate with the school principal or site administrator to limit high-noise-producing activities (i.e., site grading, demolition, truck deliveries, etc.) to only occur at times that minimize disruption to school activities. Coordination shall continue on an as-needed basis throughout the construction phase of the Project to reduce school disruptions from construction activities.

# XIV. Population and Housing

Would the Project:

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

- a) The Project would not directly or indirectly increase population growth because no new housing, enrollment 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 an existing school campus and facilities, with no housing. The Project would not displace existing housing or people, so there would be **no impact**.

## XV. 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<br>Significant<br>Impact | Less Than<br>Significant<br>with<br>Mitigation | Less Than<br>Significant<br>Impact | No<br>Impact |
|----|--------------------------|--------------------------------------|--|------------------------------------|--------------|
| a) | Fire protection?         |                                      |  |                                    | Х            |
| b) | Police protection?       |                                      |  |                                    | Х            |
| c) | Schools?                 |                                      |  |                                    | Х            |
| d) | Parks?                   |                                      |  |                                    | Х            |
| e) | Other public facilities? |                                      |  |                                    | X            |

- a) The Central Marin Fire Department (CMFD) provides fire protection and emergency medical services for the school. The fire station nearest the Project site is Station #15, located at 400 Magnolia Ave, Larkspur, approximately 0.8 miles southwest of the Project site. Replacement of existing school buildings would not materially alter uses of the site, and therefore would not result in a substantive increase in 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 the new school buildings would include fire protection components as required under current codes, and would replace existing similar buildings. In addition, the Project would be subject to fire safety review by the Office of the State Architect. Therefore, the Project would have **no impact** to fire protection services.
- b) The school is served by the Central Marin Police Authority, located at 250 Doherty Drive, Larkspur, about 0.3 miles west of the school. As discussed for fire, above, the Project would be the demolition and replacement of existing school buildings and therefore would not increase the need for police services. No new police facilities would be required. Therefore, **no impact** would occur to police services.
- c) The Project would encompass the demolition and reconstruction of existing school buildings. It would not increase the population or otherwise increase demand for school services. It would not alter the enrollment of students at the school. Therefore, the Project would have **no impact** on schools.

- d) As described above, the 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 have **no impact** on recreational facilities.
- e) No other public facilities would be required by the Project. Therefore, there would be **no impact** on other public facilities.

## **XVI.** Recreation

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

- As described in response to item d) under Public Services, the Project would have no adverse effects on parks and other recreational facilities. Therefore, the Project would not cause physical deterioration of any recreational facility to occur or be accelerated, and **no** impact would occur.
- b) The Project would not increase employment or enrollment at the school. The Project would not require the construction or expansion of recreational facilities and **no impact** would occur.

## XVII. Transportation/Traffic

Would the Project:

|    | Environmental Issue   | Potentially<br>Significant<br>Impact | Less Than<br>Significant<br>with<br>Mitigation | Less Than<br>Significant<br>Impact | No<br>Impact |
|----|---|--------------------------------------|--|------------------------------------|--------------|
| a) | Conflict with a program, plan, ordinance or<br>policy addressing the circulation system,<br>including transit roadways, pedestrian and<br>bicycle facilities? |                                      |  |                                    | x            |
| b) | Conflict or be inconsistent with CEQA<br>Guidelines Section 15064.3, subdivision<br>(b) (vehicle Miles traveled)?   |                                      |  | х                                  |              |
| c) | Substantially increase hazards due to<br>design features (e.g., sharp curves or<br>dangerous intersections) or incompatible<br>uses (e.g., farm equipment)?   |                                      |  |                                    | x            |
| d) | Result in inadequate emergency access?  |                                      |  |                                    | Х            |

### Discussion

- a) The Project would not alter uses or any traffic routes compared to existing conditions at the school. Minor construction traffic would not conflict with program, plan, ordinance, or policy addressing the circulation system, including transit roadways, pedestrian, and bicycle facilities. Therefore, the Project would have **no impact** with respect to any such plan or policy, or underlying circulation systems.
- b) With the passage of Senate Bill SB 743 in 2013 and full implementation on July 1, 2020, Vehicle Miles Traveled (VMT) became the main metric to evaluate transportation impacts of proposed development projects. Traffic LOS and parking deficiencies are no longer considered significant impacts in CEQA analysis. With SB 743, most development projects need to provide a VMT analysis to determine traffic impacts. However, there are several exceptions. These include small projects that generate fewer than 110 daily trips; locally serving retail and similar land uses; and locally serving public facilities such as public schools and parks.

As discussed above, the Project is a reconstruction of existing school buildings, and would not result in additional enrollment or employment that would change the current traffic circulation patterns and operations in the area. The Project will not add new driveways or parking. The Project is a public school that serves the students from the nearby community and, as such, would be exempt from VMT analysis. In addition, Project construction traffic is exempt from VMT analysis. According to the Governor's Office of Planning and Research (Technical Advisory on Evaluating Transportation Impacts in CEQA, April 2018), similar to small projects, locally serving retail and land uses, and local-serving public facilities, including

schools, are presumed to have a less than significant impact on VMT. As indicated above, the Project is not a new project but the replacement of existing buildings and would be mainly used by the school. As such, the VMT impact of the Project would be **less than significant**.

c, d) The Project would not introduce new design features or other changes that are incompatible with the existing transportation infrastructure or otherwise adversely affect emergency access, and it would not create any traffic hazards. Therefore, **no impact** would occur.

# XVIII. Tribal Cultural Resources

Would the project:

|    | Environmental Issue   | Potentially<br>Significant<br>Impact | Less Than<br>Significant<br>with<br>Mitigation | Less Than<br>Significant<br>Impact | No<br>Impact |
|----|---|--------------------------------------|--|------------------------------------|--------------|
| a) | Would the project cause a significant<br>adverse change in the significance of a<br>tribal cultural resource defined in Public<br>Resource Code Section 21074 as either a<br>site, feature, place cultural landscape that<br>is geographically defined in terms of the<br>size and scope of the landscape, sacred<br>place, or object with cultural value to a<br>California Native American tribe, and that<br>is:   |                                      |  |                                    |              |
|    | <ul> <li>Listed or eligible for listing in the<br/>California Register of Historical<br/>Resources, or in a local register of<br/>historical resources as defined in<br/>Public Resources Code section<br/>5020.1(k), or</li> </ul>   |                                      |  | x                                  |              |
|    | <ul> <li>A resource determined by the lead<br/>agency, in its discretion and supported<br/>by substantial evidence, to be<br/>significant pursuant to criteria set forth<br/>in subdivision (c) of Public Resources<br/>Code section 5024.1. In applying<br/>criteria set forth in subdivision (c) of<br/>Public Resources Code section<br/>5024.1, the lead agency shall consider<br/>the significance of the resource to a<br/>California Native American tribe.</li> </ul> |                                      | X  |                                    |              |

## Background

The PRC Sections 21080.1, 21080.3.1, and 21080.3.2 require public agencies to consult with the appropriate California Native American tribes identified by the Native American Heritage Commission (NAHC) for the purpose of mitigating impacts to cultural resources. To meet PRC requirements, on November 22, 2023, SAS emailed a letter and a map depicting the project area and surrounding vicinity to the NAHC requesting a Sacred Lands File (SLF) search, and a list of Native American community representatives who might have an interest in, or concerns with the proposed Project (Attachment B). On December 4th, 2023, the NAHC responded to SAS stating that the SLF did not contain any information on sensitive Native American cultural properties within or near the project area. The NAHC also provided contact information for the following individuals:

- Mr. Greg Sarris, Chair Federated Indians of Graton Rancheria
- Ms. Bunny Tarin, Tribal Administrator Guidiville Rancheria of California
- Mr. Michael Derry, Historian Guidiville Rancheria of California
- Mr. Kenneth Woodrow, Chair Wuksachi Indian Tribe / Eshom Valley Band

SAS contacted each of the individuals listed above by letter on December 6, 2023, inquiring if they had any knowledge of culturally sensitive properties or archaeological sites within or near the Project area. On January 4, 2024, Ms. Buffy McQuillen, Tribal Historic Preservation Officer for the Federated Indians of Graton Rancheria (Graton Rancheria) contacted SAS and requested the "...results of research efforts and recommendation.". The TUHSD has provided Graton Rancheria with the SAS report and is in consultation with the tribal representative. Results of the consultation will be incorporated into the Final Initial Study, as required under AB 52.

### Discussion

a) i., ii. As described in the Cultural Resources section, due to the high sensitivity of the Project site, impacts to culturally sensitive sites may be **potentially significant**. Mitigation Measures CULT-1 and CULT-2 in the Cultural Resources section would reduce impacts to these resources to a **less-than-significant** level. The TUHSD has provided Graton Rancheria with the SAS report and is in consultation with the tribal representative. Results of the consultation will be incorporated into the Final Initial Study, as required under AB 52. Consultation with Graton and incorporation of applicable tribal requests would assure that potential tribal cultural resource impacts would be reduced to **less than significant**.

# XIX. Utilities and Service Systems

Would the Project:

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

## Background

Wastewater collection in Larkspur is provided by the City of Larkspur Department of Public Works. Wastewater treatment and conveyance services in Larkspur are provided by the Ross Valley Sanitary District (RVSD). The RVSD conveys sewage to a sanitation plant operated by the Central Marin Sanitation Agency (CMSA) through a 54-inch transmission force main in Sir Francis Drake Boulevard. The CMSA wastewater treatment plant serves the communities of Larkspur, San Rafael, Ross Valley, and Corte Madera and treats an average of approximately 11 million gallons of wastewater per day (mgd). CMSA treatment capacity is 125 mgd and their hydraulic capacity is over 155 mgd.

The City of Larkspur purchases its water from the Marin Municipal Water District (MMWD). About 75% of the MMWD water supply originates from rainfall on the Mt. Tamalpais watershed and in the grassy hills of west Marin, flowing into the MMWD's seven reservoirs. The MMWD also supplements its supply with water from the Sonoma County Water Agency (SCWA), which comes from the Russian

River system in Sonoma County. The Russian River water supply originates from rainfall that flows into Lake Sonoma and Lake Mendocino. The MMWD does not rely substantially on groundwater.

Zero Waste Marin (ZWM) is the informal name for the Marin Hazardous and Solid Waste Joint Powers Authority (JPA), which is comprised of representatives from all over Marin County. ZWM is comprised of the city and town managers of Belvedere, Corte Madera, Fairfax, Larkspur, Mill Valley, Novato, Ross, San Anselmo, San Rafael, Sausalito and Tiburon and the County of Marin. Zero Waste Marin ensures Marin's compliance with the California Integrated Waste Management Act and its waste reduction mandates. ZWM's mission is to help residents and businesses meet the county's Zero Waste goal by 2025 by reducing and recycling their solid waste and safely disposing of hazardous materials. ZWM provides information on household hazardous waste collection, recycling, composting, and waste disposal. The Marin County Department of Public Works/Waste Management administers Zero Waste Marin.The City of Larkspur's solid waste collection and disposal is provided by Marin Sanitary Service.

- a, b, c) The Project would demolish, replace, and modernize existing school buildings and therefore would not substantively alter water demand. Therefore, impacts to water supplies and associated facilities would be minimal and **less than significant**. Similarly, the quantity of sewage generated is not expected to change substantially from that generated by the existing school facilities. These facilities would continue to discharge to the City of Larkspur's sewer system. Therefore, this impact would be **less than significant**. The Project would increase impervious surfaces on the site with the addition of asphalt and concrete paving. However, peak runoff from the site would not be increased, as described in the Hydrology section of this IS. This impact would be **less than significant**.
- d, e) Because the Project would replace existing school buildings, there would be no substantial increase in solid waste generation as a result of Project operation. Solid waste would be generated during demolition of the existing buildings and construction of the new buildings. As much of this material would be reused and composted of as feasible. Therefore, the Project would have a less than significant 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<br>Significant<br>Impact | Less Than<br>Significant<br>with<br>Mitigation | Less Than<br>Significant<br>Impact | No<br>Impact |
|----|---|--------------------------------------|--|------------------------------------|--------------|
| a) | Substantially impair an adopted<br>emergency response plan or emergency<br>evacuation plan?   |                                      |  |                                    | x            |
| b) | Due to slope, prevailing winds, and other<br>factors, exacerbate wildfire risks, and<br>thereby expose project occupants to<br>pollutant concentrations from a wildfire or<br>the uncontrolled spread of a wildfire?  |                                      |  |                                    | x            |
| c) | Require the installation or maintenance of<br>associated infrastructure (such as roads,<br>fuel breaks, emergency water sources,<br>power lines or other utilities) that may<br>exacerbate fire risk or that may result in<br>temporary or ongoing impacts to the<br>environment? |                                      |  |                                    | x            |
| d) | Expose people or structures to significant<br>risks, including downslope or downstream<br>flooding or landslides, as a result of runoff,<br>post-fire slope instability, or drainage<br>changes?  |                                      |  |                                    | x            |

- a, b) The Project site is situated in a developed urban area, surrounded by other urban uses. It is not designated as a fire hazard severity zone of moderate or higher<sup>15</sup>. Additionally, the reconstructed school buildings would include fire protection infrastructure (alarms, sprinklers, etc.) as required by current codes. Therefore, the Project would have **no impact** with respect to wildfire hazards.
- c, d) The Project is in an urbanized area, and would not require any additional fire protection infrastructure or fuel breaks. Because of the developed state of the Project site and area, it would not expose people or structures to post-fire land instability or runoff issues. Therefore, the Project would have **no impact** with respect to these wildfire hazards.

<sup>&</sup>lt;sup>15</sup>https://gisopendata.marincounty.org/datasets/MarinCounty::fire-hazard-severity-zone-1/explore?location=37.864395%2C-122.502329%2C16.00

## IV. MANDATORY FINDINGS OF SIGNIFICANCE

|    | Environmental Issue  | Potentially<br>Significant | Less Than<br>Significant<br>with<br>Mitigation | Less Than<br>Significant | No<br>Impact |
|----|--|----------------------------|--|--------------------------|--------------|
| a) | Does the Project have the potential to<br>degrade the quality of the environment,<br>substantially reduce the habitat of a fish or<br>wildlife species, cause a fish or wildlife<br>population to drop below self-sustaining<br>levels, threaten to eliminate a plant or animal<br>community, substantially reduce the number<br>or restrict the range of an endangered, rare<br>or threatened species or eliminate important<br>examples of the major periods of California<br>history or prehistory? |                            | X  |                          |              |
| b) | Does the Project have impacts that are<br>individually limited, but cumulatively<br>considerable? ("Cumulatively considerable"<br>means that the incremental effects of a<br>Project are considerable when viewed in<br>connection with the effects of past Projects,<br>the effects of other current Projects, and the<br>effects of probable future Projects)?   |                            |  |                          | x            |
| c) | Does the Project have environmental effects<br>which will cause substantial adverse effects<br>on human beings, either directly or indirectly?   |                            |  | x                        |              |

- a) 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. Similarly, impacts to special-status birds and bats habitat would be mitigated to **less than significant** with measures included in this document.
- b) Two other projects are proposed at the school that would overlap with the Project: A solar project in the parking lots (June to December 2024) and a pool deck replacement and replastering project (June to October 2024). The proposed Project would not have any possible cumulatively considerable impacts that, in addition to these projects, would result in a potentially significant impact.

Based on a review of the City of Larkspur current projects lists<sup>16</sup>, there are currently no proposed development projects in the Project area. Therefore, the Project would not contribute to any potentially significant cumulative impacts associated with development in the Project area. **No impact** would result.

<sup>&</sup>lt;sup>16</sup> <u>https://www.ci.larkspur.ca.us/658/Larkspurs-CIP-Projects</u>, accessed November 28, 2023.

c) The Project would not increase long-term air pollutant emissions and greenhouse gas emissions because it would not add any net new workers or residents. The Project's noise impacts would also be **less than significant** with mitigation. The Project's hazards to human health and safety would **be less than significant**, as described in Section VIII of this Initial Study.

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- Miller Pacific Engineering Group, Geotechnical Investigation, TUHSD Redwood High School, 395 Doherty Drive, Larkspur, September 18, 2023.
- NorBay Consulting, Pre-Demolition Hazardous Materials Inspection Portable Restrooms, Music and Ceramics Wings Redwood High School, Larkspur, California. January 3, 2023.
- Office of Environmental Health Hazard Assessment (OEHHA). *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*, February 2015.
- United States Environmental Protection Agency (USEPA). 1973. *Legal Compilation: Statutes and Legislative History, Executive Orders, Regulations, Guidelines and Reports.*

# VI. REPORT PREPARERS

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# APPENDIX A: MITIGATION MONITORING AND REPORTING PROGRAM

#### MITIGATION MONITORING AND REPORTING PROGRAM – REDWOOD HIGH SCHOOL MUSIC, ARTS, AND DINING BUILDING PROJECT

When adopting a Mitigated Negative Declaration, the CEQA Guidelines [Section 15074(d)] require that Lead Agencies adopt a program for reporting on or monitoring the changes that it has required in the project or made a condition of approval to mitigate or avoid significant environmental effects.

This monitoring program for mitigation measures identified by the Mitigated Negative Declaration includes:

- 1. A list of mitigation measures with a space for the completion date,
- 2. The full text of the mitigation measures, and
- 3. Monitoring details, including: 1) agency responsible for implementation, 2) timing of implementation and monitoring, and 3) monitoring verification.

|                   |                            |                          | MONITORING                            |                     | VERIFICAT | ION  |
|-------------------|----------------------------|--------------------------|---------------------------------------|---------------------|-----------|------|
| Identified Impact | Related Mitigation Measure | Implementation<br>Entity | Monitoring and<br>Verification Entity | Timing Requirements | Signature | Date |

| AIR QUALITY  |   |  |                                     |                                |  |
|--------------|---|--|-------------------------------------|--------------------------------|--|
| Dust Control | <ul> <li>Mitigation Measure AQ-1: The construction contractor shall implement the following during Project construction activities:</li> <li>All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.</li> <li>All haul trucks transporting soil, sand, or other loose material off site shall be covered.</li> <li>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.</li> <li>All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.</li> <li>All trucks and equipment, including their tires, shall be washed off prior to leaving the site.</li> <li>Unpaved roads providing access to sites located 100 feet or further from a paved road shall be treated with a 6- to 12-inch layer of compacted wood chips, mulch, or gravel.</li> <li>All vehicle speeds on unpaved roads shall be limited to 15 miles per hour.</li> </ul> | Project<br>grading/const<br>ruction<br>contractors | District<br>construction<br>manager | During project<br>construction |  |

|                   |                            |                          | MONITORING                            |                     | VERIFICAT | ION  |
|-------------------|----------------------------|--------------------------|---------------------------------------|---------------------|-----------|------|
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| BIOLOGICAL RESOURCES | <ul> <li>A publicly visible sign shall be<br/>posted with the telephone number<br/>and person to contact at the Lead<br/>Agency regarding dust complaints.<br/>This person shall respond and take<br/>corrective action within 48 hours.<br/>The BAAQMD's phone number shall<br/>also be visible to ensure compliance<br/>with applicable regulations.</li> </ul>  |                                      |                                     |  |  |
|----------------------|--|--------------------------------------|-------------------------------------|--|--|
| Special-Status Birds | <i>Mitigation Measure BIO-1:</i> A pre-<br>construction survey for nesting birds<br>shall be conducted in trees to be<br>removed and trees within 200 feet of<br>construction activities by a qualified<br>biologist within two weeks of<br>construction activities, if construction<br>activities are to occur within<br>nesting/breeding season of native bird<br>species (February- August). If active<br>nests are identified within 300 feet of<br>construction and would be exposed to<br>either. Proposed tree removal or<br>prolonged construction-related noise<br>above normal levels, a buffer shall be<br>implemented around nests during the<br>breeding season, or until a biologist<br>determines the young have fledged. The<br>size of the buffer shall be determined by<br>the Project biologist, and would depend<br>on multiple factors including relative<br>change in noise and disturbance during<br>construction activity, amount of | Qualified<br>consulting<br>biologist | District<br>construction<br>manager | Within 2 weeks<br>prior to start of<br>construction. |  |

|                   |                            |                          | MONITORING                            |                     | VERIFICATI | ON   |
|-------------------|----------------------------|--------------------------|---------------------------------------|---------------------|------------|------|
| Identified Impact | Related Mitigation Measure | Implementation<br>Entity | Monitoring and<br>Verification Entity | Timing Requirements | Signature  | Date |

|                     | vegetative screening between activity and nest, and sensitivity of species.  |                                      |                                     |   |  |
|---------------------|--|--------------------------------------|-------------------------------------|---|--|
| Special-Status Bats | Mitigation Measure BIO-2: Prior to<br>Project activities that would remove trees<br>or modify buildings, a qualified biologist<br>shall conduct a habitat assessment for<br>bats. A qualified biologist shall have: 1)<br>at least two years of experience<br>conducting bat surveys that resulted in<br>detections for relevant species, such as<br>pallid bat, with verified project names,<br>dates, and references, and 2)<br>experience with relevant equipment<br>used to conduct bat surveys. The habitat<br>assessment shall be conducted a<br>minimum of 30 to 90 days prior to the<br>beginning of Project activities.For tree removal, the habitat<br>assessment shall include a visual<br>inspection of potential roosting features<br>(e.g., cavities, crevices in wood and<br>bark, exfoliating bark for colonial<br>species, suitable canopy for foliage<br>roosting species, and anthropogenic<br>structures such as buildings, bridges,<br>and culverts). If suitable habitat is found,<br>it shall be flagged or otherwise clearly<br>marked. Trees shall be removed only if:<br>a) presence of bats is presumed, or<br>documented during the surveys<br>described below, in trees with suitable<br>habitat, and removal using the two-step<br>removal process detailed below occurs | Qualified<br>consulting<br>biologist | District<br>construction<br>manager | Within 2 weeks<br>prior to any<br>building<br>demolition or<br>modification<br>activities |  |

|                   |                            |                          | MONITORING                            |                     | VERIFICAT | ON   |
|-------------------|----------------------------|--------------------------|---------------------------------------|---------------------|-----------|------|
| Identified Impact | Related Mitigation Measure | Implementation<br>Entity | Monitoring and<br>Verification Entity | Timing Requirements | Signature | Date |

| only during seasonal periods of bat         |  |
|---|--|
| activity, from approximately March 1        |  |
| through April 15 and September 1            |  |
| through October 15, or b) after a           |  |
| qualified biologist conducts night          |  |
|   |  |
| emergence surveys or completes visual       |  |
| examination of roost features that          |  |
| establish absence of roosting bats. Two-    |  |
| step tree removal shall be conducted        |  |
| over two consecutive days, as follows: 1)   |  |
| the first day (in the afternoon), under the |  |
| direct supervision and instruction by a     |  |
| qualified biologist with experience         |  |
| conducting two-step tree removal, limbs     |  |
| and branches shall be removed by a tree     |  |
| cutter using chainsaws only. Limbs with     |  |
| cavities, crevices, or deep bark fissures   |  |
| shall be avoided, and 2) the second day     |  |
| the entire tree shall be removed.           |  |
|   |  |
| For modification of buildings, if the       |  |
| For modification of buildings, if the       |  |
| qualified biologist determines that the     |  |
| buildings are suitable bat habitat, the     |  |
| qualified biologist shall conduct a survey  |  |
| for roosting bats. If roosting bats are     |  |
| detected, a bat avoidance, exclusion,       |  |
| and habitat mitigation plan shall be        |  |
| prepared and implemented, and the           |  |
| Project shall obtain CDFW's written         |  |
| approval of the plan prior to               |  |
| implementation. The plan shall              |  |
| recognize that both maternity and winter    |  |
| roosting seasons are vulnerable times       |  |
|   |  |
| for bats and require exclusion outside of   |  |
| these times, generally between March 1      |  |

|                   |                            |                          | MONITORING                            |                     | VERIFICAT | ION  |
|-------------------|----------------------------|--------------------------|---------------------------------------|---------------------|-----------|------|
| Identified Impact | Related Mitigation Measure | Implementation<br>Entity | Monitoring and<br>Verification Entity | Timing Requirements | Signature | Date |

|   | and April 15 or September 1 and<br>October 15 when temperatures are<br>sufficiently warm. The plan shall include<br>habitat mitigation such as planting<br>suitable roost trees in an appropriate<br>location or installing and maintaining in<br>perpetuity bat boxes if they are<br>determined to be suitable for the bat<br>species impacted. Work operations shall<br>cease if bats are found roosting within<br>the Project area and CDFW shall be<br>consulted.   |   |                                     |                                    |  |
|---|---|---|-------------------------------------|------------------------------------|--|
| CULTURAL RESOURCES Prehistoric Cultural Resources | <b>Mitigation Measure CULT-1:</b> Due to<br>the highly sensitive nature of the project<br>area to retain significant (per CEQA<br>criteria) prehistoric resources, the Project<br>shall include monitoring of initial stages<br>of Project-related ground disturbances<br>by a qualified archaeologist. If<br>archaeological remains are encountered<br>during project activities, project ground<br>disturbances at the find and immediate<br>vicinity shall be halted immediately until<br>a qualified archaeologist can evaluate<br>the finds (§15064.5 [f]). The<br>archaeologist shall examine the finds<br>and recommend mitigation measures<br>which may include documentation in<br>place, avoidance, testing, and/or data<br>recovery. | Construction<br>Project<br>Manager/Con<br>struction<br>Contractor/<br>Qualified<br>Archaeologist<br>(if finds<br>occur) | District<br>Construction<br>Manager | During earth-<br>moving activities |  |

|                   |                            |                          | MONITORING                            |                     | VERIFICAT | ION  |
|-------------------|----------------------------|--------------------------|---------------------------------------|---------------------|-----------|------|
| Identified Impact | Related Mitigation Measure | Implementation<br>Entity | Monitoring and<br>Verification Entity | Timing Requirements | Signature | Date |
|                   |                            |                          |                                       |                     |           |      |

| Human Burials | Mitigation Measure CULT-2: California  | Project       | District     | During earth-     |  |
|---------------|--|---------------|--------------|-------------------|--|
|               | law recognizes the need to protect   | Manager/Con   | Construction | moving activities |  |
|               | interred human remains, particularly   | struction     | Manager      |                   |  |
|               | Native American burials and associated   | Contractor/   |              |                   |  |
|               | items of patrimony, from vandalism and   | Qualified     |              |                   |  |
|               | inadvertent destruction. The procedures  | Archaeologist |              |                   |  |
|               | for the treatment of discovered human  | (if finds     |              |                   |  |
|               | remains are contained in California  | occur)        |              |                   |  |
|               | 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<br>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   |               |              |                   |  |

|                   |                            | MONITORING               |                                       |                     | VERIFICATION |      |
|-------------------|----------------------------|--------------------------|---------------------------------------|---------------------|--------------|------|
| Identified Impact | Related Mitigation Measure | Implementation<br>Entity | Monitoring and<br>Verification Entity | Timing Requirements | Signature    | Date |

|  | discovery of Native American human<br>remains are identified in detail in the<br>California Public Resources Code<br>Section 5097.9. The District or their<br>appointed representative and the<br>professional archaeologist would consult<br>with a Most Likely Descendent<br>determined by the NAHC regarding the<br>removal or preservation and avoidance<br>of the remains and determine if<br>additional burials could be present in the<br>vicinity.   |   |                             |                        |  |
|--|--|---|-----------------------------|------------------------|--|
| GEOLOGY AND SOILS Geotechnical Hazards | <i>Mitigation Measure GEO-1:</i> The<br>Project shall implement all site<br>preparation, structural, drainage, and<br>foundation design recommendations<br>included in the MPEG Geotechnical<br>Investigation (MPEG 2023). With respect<br>to potential seismically induced slope<br>failures, a professional engineer shall<br>create a finalized grading plan and<br>assess the potential for bearing failure<br>based on planned fill and structural<br>loads. Limitations on the thickness of<br>new fills may be required to maintain<br>adequate factors of safety against<br>instability. | District<br>Construction<br>Contractors | District Project<br>Manager | During<br>construction |  |
| HAZARDS AND HAZARDOUS<br>MATERIALS     |  |   |                             |                        |  |

|                   |                            | MONITORING               |                                       |                     | VERIFICATION |      |
|-------------------|----------------------------|--------------------------|---------------------------------------|---------------------|--------------|------|
| Identified Impact | Related Mitigation Measure | Implementation<br>Entity | Monitoring and<br>Verification Entity | Timing Requirements | Signature    | Date |

| Hazardous Materials        | <i>Mitigation Measure HAZ-1:</i> As part of<br>the project, and based on evaluation<br>surveys conducted by NorBay at the<br>project site, the removal, demolition<br>and disposal of all hazardous items<br>(lead-based paints/products, mercury,<br>asbestos containing materials, and<br>polychlorinated biphenyl caulk) shall be<br>conducted in compliance with<br>applicable California environmental<br>regulations and policies to prevent the<br>generation of any demolition materials<br>hazards to the public. | District<br>Construction<br>Contractor | District Project<br>Manager | Prior to and<br>during<br>demolition/remod<br>eling of existing<br>buildings |  |
|----------------------------|--|--|-----------------------------|--|--|
| Construction Noise Impacts | <i>Mitigation Measure NOISE-1.</i> The<br>District Construction Contractor shall<br>coordinate with the school principal or<br>site administrator to limit high-noise-<br>producing activities (i.e., site grading,<br>demolition, truck deliveries, etc.) to only<br>occur at times that minimize disruption to<br>school activities. Coordination shall<br>continue on an as-needed basis<br>throughout the construction phase of the<br>Project to reduce school disruptions from<br>construction activities.           | District<br>Construction<br>Contractor | District Project<br>Manager | Prior to start of<br>construction<br>activities                              |  |

# APPENDIX B: COMMENTS AND RESPONSES ON THE DRAFT IS/MND

# **COMMENTS AND RESPONSES ADDENDUM**

# MITIGATED NEGATIVE DECLARATION

Proposed Redwood High School Music, Arts, and Dining Buildings Project

### **Prepared for:**

Tamalpais Union High School District 1327 Sir Francis Drake Blvd, San Anselmo, CA 94960 Attn: Michael Woolard, Senior Director of Facilities Planning <u>mwoolard@tamdistrict.org</u> (415) 945-1056

# Prepared by:

Grassetti Environmental Consulting 7008 Bristol Drive Berkeley, CA 94705

April 2024

Comments and Responses Addendum

Mitigated Negative Declaration for the Proposed Redwood High School Music, Arts and Dining Building Project

#### Introduction

The Proposed Mitigated Negative Declaration (MND) for the Redwood High School Fine Arts Building Replacement Project was circulated for public and agency review from February 14, 2024 through March 15, 2024. The Final MND has been revised to address these comments. A number of comments were received on the document. This Addendum to the Final MND includes the comments received and a discussion of how the environmental issues raised in the comments have been addressed in the Final MND.

Comments were received from the following organization:

• California Department of Toxic Substances Control, Letter, March 13, 2024

This letter is included at the end of this addendum.

#### Responses to California Department of Toxic Substances Control (DTSC) Comments

The following responses are keyed to the numbered items on the attached DTSC letter.

**Comment 1.** California Education Code Site Investigation Requirements.

The District is planning to apply for California Department of Education (CDE) State funds for this project, so the District will comply with all CDE Code site evaluation and cleanup requirements as applicable to this project.

**Comments 2 and 3.** Lead-based paints or products, mercury, asbestos containing materials, and polychlorinated biphenyl caulk.

The requested evaluation was conducted by NorBay Consulting and summarized on p. 38 of the Draft Initial Study. Lead-based paints were found in some areas of buildings to be demolished, and a mitigation measure (Measure HAZ-1) has been included in the IS to address this potential impact. In order to fully address the constituents identified in the DTSC letter, Mitigation Measure HAZ-1 has been modified as shown below:

"As part of the project, and based on evaluation surveys conducted by NorBay at the project site, all items potentially containing asbestos materials or lead based paints shall be removed intact the removal, demolition and disposal of all hazardous items (lead-based paints/products, mercury, asbestos containing materials, and polychlorinated biphenyl caulk) shall be conducted in compliance with applicable California environmental regulations and policies to prevent the generation of any asbestos or lead-based paint demolition materials hazards to the public."

Comments and Responses Addendum Mitigated Negative Declaration for the Proposed Redwood High School Music, Arts and Dining Building Project

### **Comment 4.** *Testing of Imported Soils.*

The standard District contract documents require the contract to follow a submittal process for all imported materials brought onto the site which would include source of material, test reports, etc. Therefore, the requested testing would be included as part of the project and no additional mitigation would be required.

Comments and Responses Addendum Mitigated Negative Declaration for the Proposed Redwood High School Music, Arts and Dining Building Project

### ATTACHMENT A: DTSC COMMENT LETTER

artment of Toxic Substances C

Department of Toxic Substances Control

Meredith Williams, Ph.D., Director 8800 Cal Center Drive Sacramento, California 95826-3200

# SENT VIA ELECTRONIC MAIL

March 13, 2024

Yana Garcia

Secretary for

Environmental Protection

Mike Woolard Senior Director of Facilities Planning Tamalpais Union High School District 395 Doherty Drive Larkspur, CA 94939 <u>mwoolard@tamdistrict.org</u>

RE: MITIGATED NEGATIVE DECLARATION (MND) FOR THE REDWOOD HIGH SCHOOL MUSIC, ARTS, AND DINING BUILDING, DATED FEBRUARY 16, 2024 STATE CLEARINGHOUSE # <u>2024020648</u>

Dear Mike Woolard,

The Department of Toxic Substances Control (DTSC) received a MND for the Redwood High School Music, Arts, and Dining Building (Project). The Project would demolish approximately 7,900 square-feet of buildings (ceramics building and music building) and approximately 24,500 square-feet of hardscape. The core of the Project involves constructing 32,107 square-feet of new buildings and modernizing/re-purposing the existing kitchen/cafeteria building (Building C). The new permanent buildings would be built in the northeast area of the school adjacent to the northeast parking lot. Proposed new buildings include an 11,094 square-foot two-story cafeteria and kitchen building, a 9,744-square-foot two-story music building, and a 6,648-square-foot two-story art and





Gavin Newsom Governor Mike Woolard March 13, 2024 Page 2

ceramics building. Based on our review, DTSC requests consideration of the following comments.

 If the district plans to use California Department of Education (CDE) State funds for the project, then the district shall comply with the requirements of Education Code (EDC), <u>§17210</u>, <u>§17213.1</u>, and <u>§17213.2</u>, unless otherwise specifically exempted under section <u>§17268</u>. If the district is not using CDE State funds for the project, or is otherwise specifically exempt under section <u>§17268</u>, DTSC recommends the district continue to investigate, clean up the Site under the oversight of Marin County and in concurrence with all applicable DTSC guidance documents, if necessary. For more information on the CDE State funding, please visit the <u>Office of Public-School Consultation</u> webpage.

A local education agency may also voluntarily request the CDE site/plan approval for locally funded site acquisitions and new construction projects. In these cases, CDE will require DTSC to review and approve prior to its final approval, except when exempt under section 17268.

2. The Initial Study/Mitigated Negative Declaration states, "The Project would demolish approximately 7,900 square-feet of buildings (about 2,500 sq. ft. ceramics building and 4,400 sq. ft. music building) and approximately 24,500 square-feet of hardscape" ... If planned activities include building modifications/demolitions, surveys should be conducted for the presence of lead-based paints or products, mercury, asbestos containing materials, and polychlorinated biphenyl caulk. Removal, demolition, and disposal of any of the above-mentioned chemicals should be conducted in compliance with California environmental regulations and policies. In addition, evaluate whether polychlorinated biphenyls (PCBs) containing materials is present in onsite buildings and address as necessary to protect human health

and the environment and sampling near current and/or former buildings should be conducted in accordance with <u>DTSC's Update to</u> <u>June 2006 Phase I Addendum Guidance</u>.

- If there are any recognized environmental conditions in the project area, then proper investigation, sampling and remedial actions overseen by the appropriate regulatory agencies should be conducted prior to the new development or any construction.
- 4. DTSC recommends that all imported soil and fill material should be tested to ensure any contaminants of concern are within approved screening levels for the intended land use. To minimize the possibility of introducing contaminated soil and fill material there should be documentation of the origins of the soil or fill material and, if applicable, sampling be conducted to ensure that the imported soil and fill material meets screening levels for the intended land use. The soil sampling should include analysis based on the source of the fill and knowledge of the prior land use. If during construction/demolition of the project, soil and/or groundwater contamination is suspected, construction/demolition in the area should cease and appropriate health and safety procedures should be implemented. If it is determined that contaminated soil and/or groundwater exist, future environmental documents should identify how any required investigation and/or remediation will be conducted, and the appropriate government agency to provide regulatory oversight.

DTSC appreciates the opportunity to comment on the MND for the Redwood High School Music, Arts, and Dining Building project. If you would like to proceed with DTSC's school environmental review process, please visit <u>DTSC's Evaluating & Clean-up School 3-Step Process</u> to begin a Phase I Environmental Site Assessment.

Thank you for your assistance in protecting California's people and environment from the harmful effects of toxic substances. If you have any questions or would like any Mike Woolard March 13, 2024 Page 4

clarification on DTSC's comments, please respond to this letter or via <u>email</u> for additional guidance.

Sincerely,

Tamara Purvis

Tamara Purvis Associate Environmental Planner HWMP – Permitting Division - CEQA Unit Department of Toxic Substances Control <u>Tamara.Purvis@dtsc.ca.gov</u>

cc: (via email)

Governor's Office of Planning and Research State Clearinghouse State.Clearinghouse@opr.ca.gov

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Department of Toxic Substances Control

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