

# **INITIAL STUDY and MITIGATED NEGATIVE DECLARATION**

FOR

## **JACOBY CREEK SCHOOL IMPROVEMENT PROJECT**

*Adopted December 10, 2018*

**Lead Agency:**

**Jacoby Creek School District**



1617 Old Arcata Road  
Bayside, California 95524  
(707) 822-4896

**Prepared by:**

**PLANWEST**  
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## 1.0 PROJECT SUMMARY

**Date:** December 10, 2018

**Project Title:** Jacoby Creek School Improvement Project

**Lead Agency:** Jacoby Creek School District

**Contact:** Tim Parisi  
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**Location:** The subject property is located at 1617 Old Arcata Road within the City limits of Arcata in Humboldt County, CA (Figure 1).

**Coastal Zone:** Yes

**Affected Parcel(s):** Assessor's Parcel Number (APN): 501-042-004

**City of Arcata General Plan Land Use Designation:** Public Facility (PF)

**City of Arcata Zoning Designation:** Public Facility (PF)

### PROJECT DESCRIPTION

Jacoby Creek Elementary School was originally constructed in 1956 with subsequent additions since that time. The classroom additions and modifications are proposed to replace aging portables and provide new classroom and program space to alleviate current crowding conditions. Current enrollment is approximately 470 students. No increase in the student population is proposed with this project. All construction will be located on the existing school property and adjacent to existing buildings on campus, all on previously disturbed ground.

#### Project Objectives are to:

- Improve the Jacoby Creek School campus to better serve the student population
- Greater building efficiency to reduce energy consumption
- Replace deteriorating modular classrooms with permanent structures
- Invest voter approved School District Bond funds (Measure K) and bring \$6.45 million of State Proposition 51 bond funds to the school community

### Building Improvements

The proposed project involves the construction of new classroom facilities and a library as including the replacement of existing aging modular classrooms with permanent structures. The proposed project is planned to be completed in two phases. Phase One consists of construction of a new library building and new bus shelter. These buildings are not replacing existing structures and will require associated mechanical, plumbing, and electrical improvements. The project site for the Library is currently used as a play area and is covered in cement.

Phase Two consists of improvements in five building areas and associated updates to water and electrical services. Of these five building areas, three classrooms will replace existing modular

structures, one classroom will be wholly new and will not replace an existing structure, and the final building area will be a newly-constructed addition to an existing classroom. Additional walkways will be modified to provide accessible routes of travel on the campus to the new buildings. The building areas and their respective replacement status are noted below and shown on Figures 2 and 3:

<b>Phase</b>	<b>Building Area #</b>	<b>Description</b>	<b>Floor Area (SF)</b>	<b>Replace Existing</b>
Phase 1	1	new library building	3,296	No
Phase 2	2	classrooms	2,176	Yes
Phase 2	3	classroom	1,216	No
Phase 2	4	classrooms	120	No
Phase 2	5	classrooms	1,920	Yes
Phase 2	6	classroom	960	Yes
Phase 1	7	bus shelter	<u>392</u>	No
<b>Total:</b>			<b>10,080 SF</b>	

### **Additional Site Improvements**

Walkways will be modified to provide accessible routes of travel on the campus between buildings and will stop at minimum three feet from the public right-of-way. Traffic routing will be modified with restriping of the existing pavement. Accessible Bus and Pedestrian loading zones will be added to the vehicle traffic plan. These modifications will stop at least three feet short of the public street right-of-way and do not have a point of contact with the right-of-way.

Also proposed is the installation of a new fire hydrant, fire water service, fire access road and fire alarm system to meet the current fire code requirements. A new extension to the existing sanitary sewer service is proposed to serve three new bathrooms. New 3" and 8" water service lines are proposed to run from the existing City of Arcata water hookup at Jacoby Creek Road to the proposed fire hydrant located south of the Library structure. The project will also include a new extension to the existing storm drain line leading from the library site, as well as three new drop inlets (DIs) at the southwest, northwest, and northeast corners of the library/classroom complex. These DIs will feed into the new extension to the existing storm drain line. Trenching for the storm drain extension and DIs is anticipated to be at the same depth as the foundation (a maximum of 36 inches).

### **PROJECT SETTING AND LOCATION**

The site is located within the City limits of Arcata in Bayside. The project site is within the Coastal Zone Boundary and is directly adjacent to the Jacoby Creek-Gannon Slough Wildlife Area to the west and Old Arcata Road to the east. Jacoby Creek School was originally located in the County and was later annexed to the City of Arcata. The existing school has no use permit issued by the City but is considered a legal pre-existing, non-conforming use with the current City zoning regulations. The site is currently developed with classrooms, a gym, and outdoor play areas.

The site is directly east of the northern end of Humboldt Bay on the first upland landward of the coastal plain adjacent to the bay margin. Elevation at the school campus in the area of the proposed improvements is between about 32 and 38 feet above sea level. The site is not located close to fault zones. The majority of the school site, including all school facilities, fall within Flood Zone X (minimal flood hazard). The unbuilt areas of the site are primarily vegetated with trees and freshwater emergent wetland. A wetland survey provided by the City of Arcata delineates areas of wetlands and a 100'

required buffer zone. All current and proposed development remains outside of the 100' buffer (Figure 5).

North and west of the campus are pasture lands, marshes, and estuarine areas; Highway 101 traverses the bay margin west of the site. Surrounding uses include low-density residential (RVL) neighborhoods to the east and south (across Old Arcata Road) and agriculture exclusive land to the north, west, and south. Four parcels of mixed commercial (CM) are located directly east of Jacoby Creek School across Old Arcata Road. The Coastal Zone boundary follows the eastern property boundary, along the west side of Old Arcata Road.

### **Best Management Practices**

The following actions and practices are included as part of the Project to reduce or avoid adverse effects that could result from construction or operation of the improvements. Additional resource specific mitigation measures are presented in the analysis sections (Section 3.0).

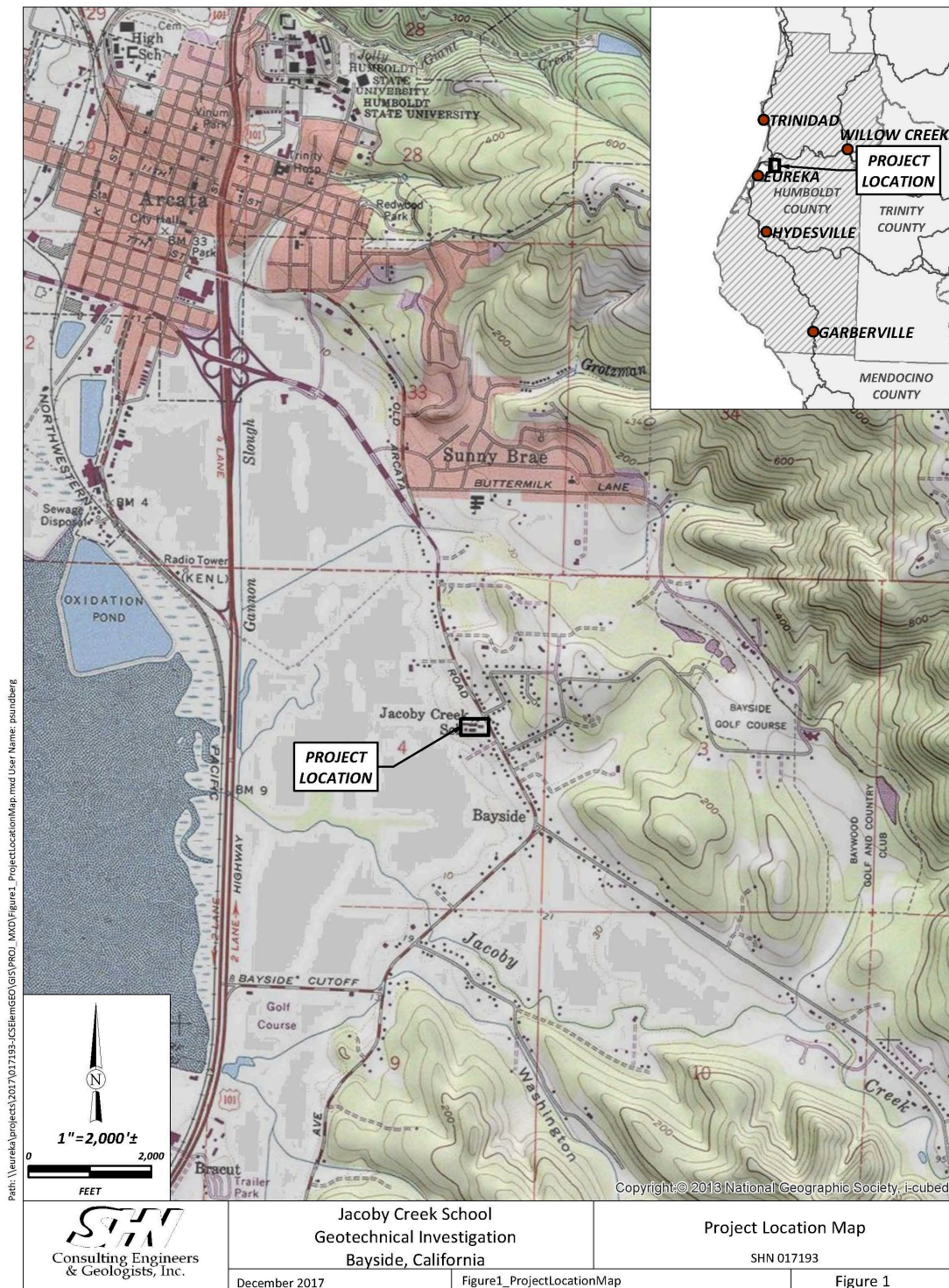
*Erosion Control* – Erosion control measures will be implemented during construction to address how the contractor will manage erosion and sediment control actions, general site and materials management, and inspection and maintenance. Below are examples of actions to prevent soil erosion and sedimentation during construction and protect water quality.

1. Erosion and sediment control actions will be in effect and maintained by the contractor on a year-round basis until all disturbed areas are stabilized.
2. Fiber rolls or similar products will be utilized to reduce sediment runoff from disturbed soils.
3. A stabilized construction entrance will be maintained to minimize tracking of mud and dirt from construction vehicles onto public roads.
4. Storm drain inlets receiving stormwater runoff will be equipped with inlet protection.
5. A concrete washout area will be designated to clean concrete trucks and tools, if necessary.

### **Anticipated Permits and Approvals**

- Small Municipal Separate Storm Sewer System (MS4) Permit, CA State Water Board
- Approval from State Architect's Board

Figure 1 Project Location



Source: Jacoby Creek School Geotechnical Report, SHN, 2018

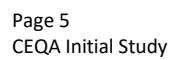
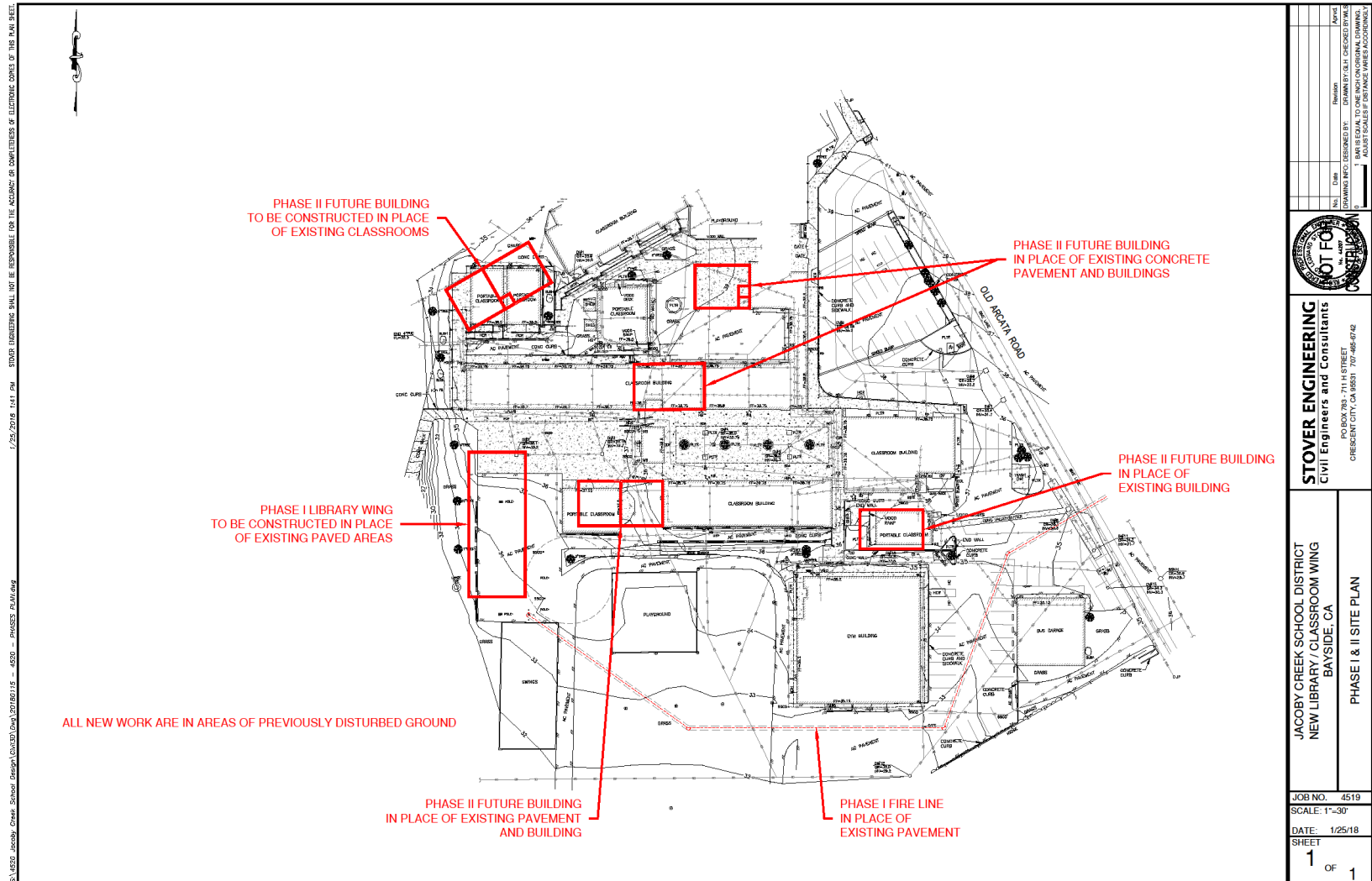
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CEQA Initial Study



Figure 3 Project Phases





## 2.0 Statement of Findings and 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.

- |  |  |   |
|--|--|---|
| <input type="checkbox"/> Aesthetics  | <input type="checkbox"/> Greenhouse Gas Emissions      | <input type="checkbox"/> Population/Housing                 |
| <input type="checkbox"/> Agricultural & Forestry Resources                           | <input type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Public Services                    |
| <input type="checkbox"/> Air Quality   | <input type="checkbox"/> Hydrology/Water Quality       | <input type="checkbox"/> Recreation                         |
| <input type="checkbox"/> Biological Resources  | <input type="checkbox"/> Land Use/Planning             | <input type="checkbox"/> Transportation/Traffic             |
| <input checked="" type="checkbox"/> Cultural Resources/<br>Tribal Cultural Resources | <input type="checkbox"/> Mineral Resources             | <input type="checkbox"/> Utilities/Service Systems          |
| <input type="checkbox"/> Geology/Soils   | <input type="checkbox"/> Noise                         | <input type="checkbox"/> Mandatory Findings of Significance |

### DETERMINATION

On the basis of this initial evaluation:

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

Signature

Title

Date

### 3.0 Environmental Impacts Evaluation and Checklists

- 1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
  - a) Earlier Analysis Used. Identify and state where they are available for review.
  - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
  - c) Mitigation Measures. For effects that are "Less Than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9) The analysis of each issue should identify:
  - a) the significance criteria or threshold used to evaluate each question; and
  - b) the mitigation measure identified, if any, to reduce the impact to less than significance.

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

## SETTING

The project site is located within the rural/residential setting of the City of Arcata along Old Arcata Road. The existing visual character of the area is rural residential surrounded by open farmland and riparian areas with views of the bay and agricultural land. The Jacoby Creek School site is directly adjacent to the Jacoby Creek-Gannon Slough Wildlife Area. The majority of the project area is not directly visible from the street and perimeter vegetation screens the school from surrounding parcels. There are no views of the surrounding area that will be blocked by the construction of a new library and classrooms in their currently proposed configuration.

## DISCUSSION

**a-c)** The project site is a previously developed area. All construction associated with the proposed project is infill, and will occur within the school boundaries on previously disturbed ground already associated with the school site. There are no designated scenic vistas at or near the site and the site is not considered a unique scenic vista or scenic resource. The project site is not located adjacent to a state-designated scenic highway. Therefore, the proposed project would have **no impact** on scenic vistas, scenic resources within a state scenic highway, or the existing site character/surroundings.

**d)** Future development of the site would be required to utilize downward facing exterior lighting and to minimize reflective surfaces, thereby reducing the potential for new sources of significant light or glare at the site. Project lighting will be limited to areas that are already lit during nighttime hours. A **less than significant** impact would occur.

Issues and Supporting Information	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No Impact
<b>AGRICULTURE AND FOREST RESOURCES:</b> Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on				x

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

## SETTING

There are no Williamson Act contracts in the project area. The Farmland Mapping and Monitoring Program has not mapped Humboldt County. The City of Arcata General Plan 2020 defines "Prime Agricultural Land" as "land which qualifies for rating 60 – 100 with the Storie Index Rating." The project site falls within the Hookton-Table Bluff Soils Complex, which is not considered prime farmland (USDA Natural Resources Conservation Service Soils Survey, no date).

## DISCUSSION

**a-e)** The project site is a previously developed area and is zoned Public Facility (PF). All construction associated with the proposed project is considered infill, and will occur within the school boundaries on previously disturbed ground. The project site does not contain farmland, forest land, or timberland, and is not zoned for agricultural or timberland production. Therefore, the proposed project would not convert agricultural land, forest land, or timberland to another use or conflict with any associated zoning. The site is not zoned or used for agricultural purposes and does not contain forest land or timberland. The proposed project would develop the site for continuing educational uses and would not result in any other significant changes to the existing environment which would result in the conversion of agricultural lands or timber lands to non-agricultural or non-timber uses. Therefore **No impact** would occur.

Issues and Supporting Information	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No Impact
<b>AIR QUALITY:</b> Would the project:				
a) Conflict with or obstruct Implementation of the applicable air quality plan?			x	
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			x	
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			x	
d) Expose sensitive receptors to substantial pollutant concentrations?			x	
e) Create objectionable odors affecting a substantial number of people?			x	

## SETTING

The project site is located within the North Coast Air Basin (NCAB) which is under in the jurisdiction of the North Coast Unified Air Quality Management District (NCUAQMD) in Humboldt, Trinity, and Del Norte counties. The NCUAQMD's primary responsibility is the control of air pollution from stationary sources. The California Air Regulatory Board (CARB) regulates construction equipment emissions. Humboldt County generally has good air quality and is in attainment for all federal air quality standards and all state standards except for particulate matter less than 10 microns in size (PM<sub>10</sub>). To address this, the NCUAQMD adopted a Particulate Matter Attainment Plan in 1995. This plan presents available information about the nature and causes of PM<sub>10</sub> standard exceedance, and identifies cost-effective control measures to reduce PM<sub>10</sub> emissions, to levels necessary to meet California Ambient Air Quality Standards.

Particulate matter (both PM<sub>10</sub> and PM<sub>2.5</sub>) can be inhaled and cause adverse health effects. Particulate matter in the atmosphere results from many kinds of dust- and fume-producing industrial, agricultural and logging operations, combustion, driving on unpaved roads, and atmospheric photochemical reactions. In rural areas, agricultural activities (tilling, disking and field burning) and logging (tree cutting, burning of slash) are the major sources of particulate matter. In urban areas, vehicle and equipment use, demolition activities, and construction activities are the major sources. In both areas, wood-burning stoves and fireplaces are also a major source of particulates and can cause exposure in residential areas, especially during winter when their use is high and meteorological conditions to prevent the dispersion of associated particulates.

Project related air quality emissions would primarily be from short-term construction activities related to grading and other earth moving activities, operation of construction equipment, and travel to and

from the project site by workers and equipment. Sensitive receptors in the project area and vicinity include students at the school itself and nearby residents.

## DISCUSSION

**a-c)** As mentioned above the NCAB is in non-attainment for California's 24-hour PM<sub>10</sub> standard, but it does not violate other federal, state or local air quality standards. To address this the NCUAQMD adopted a Particulate Matter Attainment Plan in 1995. In the NCAB, most particulate matter is caused by vehicle emissions, wind generated dust, construction dust, wildfire and human caused wood smoke, and sea salts. NCUAQMD's Particulate Matter Attainment Plan adopts a number of control strategies for achieving particulate matter reductions, including transportation control measures (intended to reduce vehicular pollutant generation from all modes), land use measures, regulation of open burning, and residential burning controls.

The proposed project would generate construction emissions associated with mechanical clearing, grading, base laying, surface application, and construction activities. While the NCAB is in non-attainment for PM<sub>10</sub>, the temporary nature of construction activities combined with implementation of standard NCUAQMD dust and CO<sub>2</sub> emission reduction measures during construction (e.g., watering of construction site, covering haul trucks, street sweeping haul routes, landscaping/covering freshly graded areas immediately after grading, etc.) would avoid significant impacts. In addition, the proposed project involves infill development on an existing school campus and would not increase school population; therefore is not expected to increase vehicle trips to and from the site after construction. Air quality modeling was not conducted for the project due to its small scale. The proposed project would not conflict with or obstruct implementation of the NCUAQMD particulate matter attainment plan, or contribute substantially to an existing or projected air quality violation.

Some of the project's construction activities would likely temporarily increase PM<sub>10</sub> levels (e.g., exposing and moving soil can increase airborne particulate matter). To reduce potential impacts to air quality, standard construction BMPs, including several measures that would reduce dust and other air pollutants during the construction period have been incorporated into the project as specified in the project description. Construction activities and equipment (i.e. ready mix truck, excavator, grader, etc.) would also be required to comply with all rules and regulations of the NCUAQMD and the Air Resources Board.

The project will be constructed and operated in compliance with Rule 104, Subsection D (Fugitive Dust Emissions) of the NCUAQMD's *Rules and Regulations* to reduce the amount of fugitive dust generated by construction and operation of the project. To minimize potential air quality impacts associated with the project the project contractor and operator will:

- Spray exposed soils with water during grading on a daily basis.
- Suspend earthmoving and trenching activities when winds exceed 20 mph.
- Cover haul-truck loads.
- Remove tracked dirt from the paved roads adjacent to the construction zone and provide a tire wash station at the site's entrances to reduce the amount of tracked dirt leaving the site.
- Immediately after grading, plant ground cover/grass in disturbed areas or otherwise cover exposed disturbed areas in a manner preventing windblown dust from leaving the project site.

The project will implement BMPs during construction that will minimize the project's PM<sub>10</sub> and PM<sub>2.5</sub> emissions. NCUAQMD has advised that generally an activity that individually complies with the state and

local standards for air quality emissions would not result in a cumulatively considerable net increase in the countywide PM<sub>10</sub> air quality violation. The project would not include any source of visible emissions, including intentional fire/burning or manufacturing. With incorporation of standard BMPs during project construction and compliance with NCUAQMD standards and regulations fugitive dust and maintaining all equipment in good working condition such that potential fugitive dust is controlled and exhaust emissions are minimized, the proposed project and anticipated future development of the site would not result in substantial adverse air quality impacts or result in a cumulatively considerable net increase in the PM<sub>10</sub> non-attainment levels in Humboldt County, and a **less than significant impact** would occur.

**d)** Sensitive receptors, as defined by NCUAQMD (2014), include, but are not limited to, preschools and daycare centers, K-12 schools, nursing homes, hospitals, and other locations where there are concentrations of sensitive populations. Sensitive receptors in the project area include students at the school itself and nearby residents.

Project related air quality emissions include short-term construction activities related to grading and other earth moving activities, operation of construction equipment, and travel to and from the project site by workers and equipment (e.g. dust, vehicle exhaust). There are no anticipated long-term operational emissions as a result of the project, as the addition of a library and extra classrooms to an existing school site will not increase vehicle trips. During construction, temporary air pollutant emissions would be associated with construction equipment, grading, and excavation on the site; however, the project would comply with NCUAQMD policies regarding the control of fugitive dust during these activities and all construction equipment would be maintained in good working condition.

As these emissions are temporary in nature, health risks from project construction are not anticipated. Because construction activities would be of limited duration and project operational emissions would be consistent with existing uses, the proposed project would not expose sensitive receptors to significant pollutant concentrations. Therefore, this impact is considered **less than significant**.

**e)** The use of diesel equipment during project construction could generate minor odors near the equipment; however, these odors would subside once project construction is concluded. Hence, potential odor impacts would be both short-term and localized. The project would not involve any activities or sources that would be a source of objectionable odors that would affect a substantial number of people. Therefore, a **less than significant** impact would occur.

Issues and Supporting Information	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No Impact
<b>BIOLOGICAL RESOURCES:</b> Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Depart. of Fish and			x	



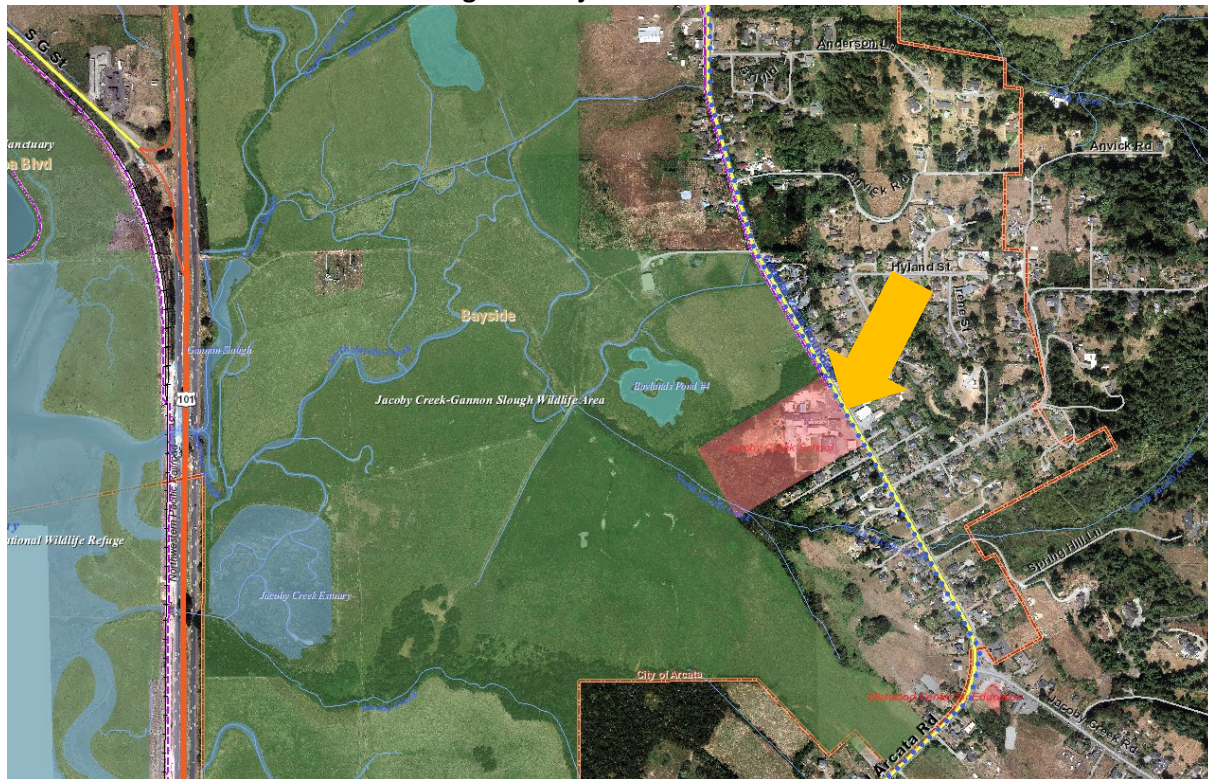
Issues and Supporting Information	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No Impact
Wildlife or U.S. Fish and Wildlife Service?				
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional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

## SETTING

The Jacoby Creek School site's northern and western parcel boundaries border the Jacoby Creek-Gannon Slough wildlife area (Figure 4). Much of the land is owned by the City of Arcata and includes pasture lands, riparian, wetland, and pond areas. The eastern portion of the project parcel is primarily developed with school facilities, buildings, play areas, and parking areas. This developed campus area is located at a slightly higher elevation than a largely undeveloped "lower field" in the western portion of the parcel. There are riparian and wetland areas in the southwest portion of the property. Per the U.S. Fish and Wildlife Service's (USFWS) National Wetlands Inventory, the surrounding Wildlife area and the rear undeveloped portion of the project site is mapped as part of freshwater forested and freshwater emergent wetland. North Jacoby Creek flows northwest towards Humboldt Bay adjacent to the

southwestern property boundary. The onsite wetland area and 100 foot wetland setback are shown on Figure 5.

### Figure 4 Adjacent Wildlife Area



Source: City of Arcata WebGIS Viewer

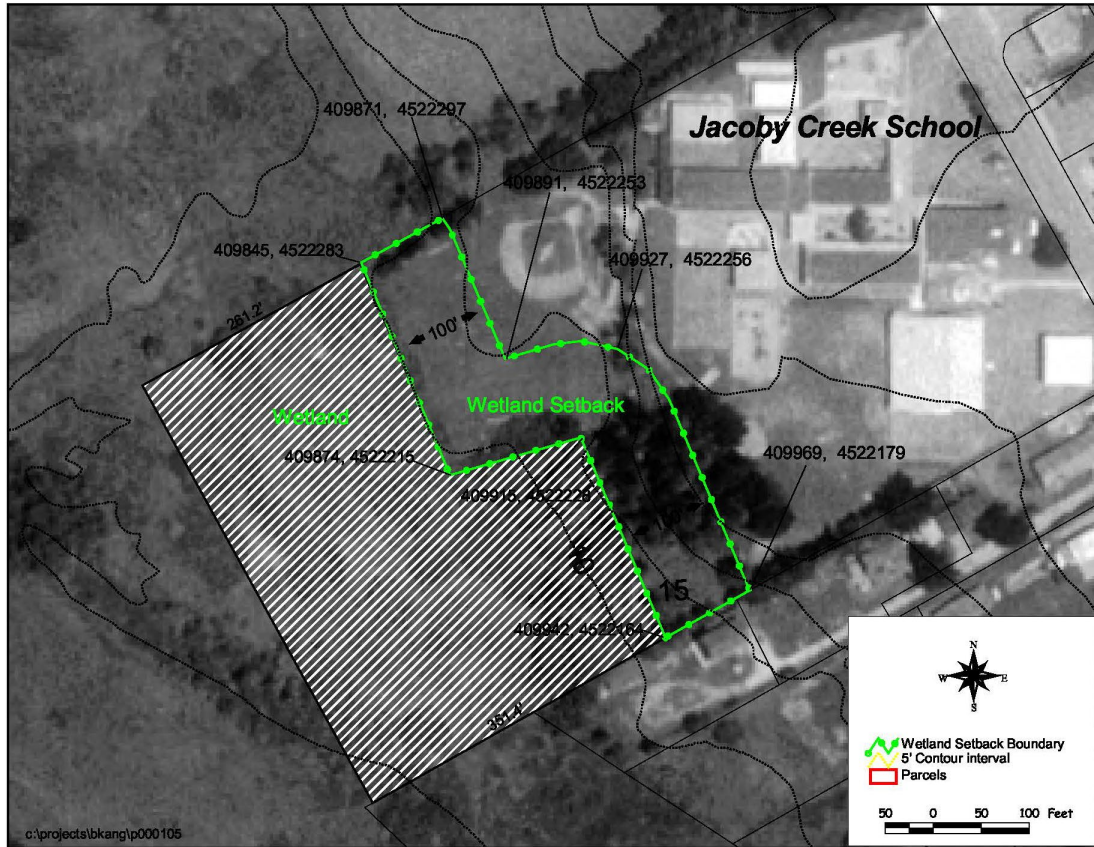
## DISCUSSION

**a-d)** Proposed project activities will take place within existing developed areas on the project site. The project is designed to adhere to established wetland setbacks and will not remove any riparian vegetation. There are no known special status species on the project site based on a search of the California Natural Diversity Database (Appendix A). Many of the special-status species identified in the CNDDB records search are fish and avian species that are unlikely to be present in the proposed development areas on the project site, as it is currently developed and lacks suitable habitat. Hence, due to the existing developed nature of the project site, the project design, and the fact that there is currently significant use of these areas by students and school activities, presence of special status species within proposed development areas is unlikely.

Adjacent to the project site there are known: 1) species identified as a candidate, sensitive, or special status species, and 2) riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. Although the project will not directly impact wetland areas, the project's proximity to wetlands and the Jacoby Creek -Gannon Slough Wildlife Area could affect nearby sensitive habitat areas through the noise, dust, and general activity associated with construction. To minimize potential construction impacts the project contractor will: implement standard BMPs such as straw bales, coir rolls, and/or silt fencing structures to minimize erosion resulting from construction and to avoid runoff

into sensitive habitat areas; limit ground disturbance to the minimum necessary; and will stabilize disturbed soil areas as soon as feasible after construction is completed.

**Figure 5 Jacoby Creek School Wetland**



Source: City of Arcata Planning Department, 2018

As all construction will be occurring within the bounds of the existing school site on disturbed ground, appropriate BMPs will be implemented during construction to avoid erosion and runoff into sensitive areas, and a 100' wetland buffer will be retained, the proposed project would not have a substantial adverse effect either directly or through habitat modifications on any species identified as a candidate, sensitive, or special status species or riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. Additionally, the project will not have a substantial adverse effect on federally protected wetlands through direct removal, filling, hydrological interruption, or other means.

With implementation of standard BMPs during site development activities, potential impacts to sensitive species, habitats, and wetlands will be minimized and a **less than significant impact** would occur.

**d)** The site is not bisected by watercourses, and thus is not used as a movement corridor by resident or migratory fish species. The southern portion of the site contains a riparian area that could provide habitat for nesting birds. This riparian area would not be directly impacted by the proposed project. No known fish or wildlife corridors pass through the project site. Therefore, the proposed project would not

interfere substantially with the movement of native resident or migratory fish or wildlife species. A **less than significant impact** would occur.

**e- f)** The proposed project would not conflict with local policies protecting biological resources. There are no adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other local, regional, or state habitat conservation plans that cover the project site. Therefore, **no impact** would occur.

Issues and Supporting Information	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No Impact
<b>CULTURAL RESOURCES (Including TRIBAL CULTURAL RESOURCES):</b> Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?		x		
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?		x		
c) Disturb any human remains, including those interred outside of dedicated cemeteries?			x	
d) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC section 21074 as either:  1) a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, that is listed or eligible for listing on the California Register of Historical Resources, or on a local register of historical resources as defined in PRC section 5020.1(k); or  2) a resource determined by a lead agency, in its discretion and supported by substantial evidence, to be significant according to the historical register criteria in PRC section		x		



Issues and Supporting Information	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No Impact
5024.1(c), and considering the significance of the resource to a California Native American tribe.				

This section including the setting, findings, evaluation of site significance, impact statements, and mitigation measures were prepared in coordination with William Rich and Associates (WRA) with input from the Wiyot Tribe, Bear River Band of the Rohnerville Rancheria, and the Blue Lake Rancheria Tribal Historic Preservation Officers (THPOs).

### SETTING

The JCS property lies on a relatively level terrace, adjacent to but uplifted from the wetlands of the Humboldt Bay margin. This location is known for canoe navigable sloughs, fresh water sources, and overland trails that headed north/ south and to the east. The school property appears to have been an open undeveloped grassy field in 1957, when the first school buildings were constructed. Since that time, the school has gone through several expansions, including construction in 2009 of three module kit buildings on engineered foundations. While school development would have caused impacts to the ground surface for slab foundations, roads, etc., it appears that some areas were simply filled, preserving the intact archaeological soil strata below. The existence of an archaeological site at the school campus was not investigated or confirmed until initial project planning in 2018.

This location is within the traditional homelands of the Wiyot peoples, represented today by the Wiyot Tribe at Table Bluff, Bear River Band of the Rohnerville Rancheria, and the Blue Lake Rancheria. At the time of Euro-American contact, the Wiyot were divided into three principal groups, speaking a mutually intelligible language, which differed markedly from the Athapaskan languages to the east and south, and the Yurok language to the north. Although Yurok and Wiyot are both considered by linguists to be Algic languages, they are not closely related. The three subdivisions of the Wiyot were (1) the Patawat, who lived in the villages on the lower Mad River, (2) the Wiki on Humboldt Bay, and (3) the Wiyot along the lower Eel River (Elsasser 1978). With a population numbering somewhere between a low estimate of 1,000 by Kroeber (1925) and a high estimate of 3,300 by Cook (1956), the Wiyot lived almost exclusively in villages along the protected shores of Humboldt Bay and along the lower reaches of the Eel and Mad Rivers.

The Wiyot were afforded an ample resource base to sustain their lives within their territory, which generally stretched to Little River on the north, Bear River Ridge on the south, and the divide between the Mad River and Redwood Creek on the east. Along the bay and coast, mollusks, fishes, sea lions and stranded whales were among the marine resources utilized by the Wiyot, while deer, elk, acorns, berries and other plants constituted more important inland resources (Loud 1918). Perhaps the most important protein sources for the Wiyot were shellfish and coastal smelt harvests, and eel and anadromous fish migrations on the Eel and Mad Rivers (Elsasser 1978).

Stone technology of the Wiyot included flaked stone knives, projectile points, and other tools made from locally available chert, imported obsidian and other silicates. Groundstone tools included mortars with a shallow grinding basins and basket hoppers, and cylindrical pestles used for grinding acorns. Steatite was used for making ornaments, toys and bowls. Beads manufactured from bone, shell, and steatite were used for ornamentation. Wood and bone were used for a variety of tools and weapons, bows, arrow shafts and points, hide preparation tools, fishhooks, pipes, musical instruments, food serving utensils, gaming pieces, hairpins, awls and punches. Dugout canoes and paddles were routinely made with redwood. Baskets were made of plant fiber were used for a variety of tasks. Beginning with baby-carrying-baskets and continuing with the acorn-hopper-basket as well as other types of baskets used for storage, cooking, serving and processing foods, carrying burdens, traps, and personal adornment including hats (Eidsness 1993).

### Prior Archaeological Studies

Several hundred Wiyot archaeological sites and places of importance were documented in the early 1900s by University of California at Berkeley, Department of Anthropology researcher Llewellyn L. Loud (1918) working closely with Wiyot consultant. Several villages and trails are cited by Loud in the Bayside community along the tideland margin on the northeast side of the bay. Importantly for the Jacoby Creek School is a site mapped in the vicinity of the school property (CA-HUM-45/P-12-000103). Other Native American habitation remains (P-12-002558 and P-12-002560) have been recorded in the Bayside community along Old Arcata Road and it seems likely that there was much more use of the Bayside area than what was initially reported by early researchers.

The Northwest Indians Cemetery Protective Association, Inc. (NICPA 1974) indicated the importance of CA-HUM-45 in a letter concerning the Old Arcata Road expansion project. Larson and Stillinger re-recorded archaeological site #45 in 1976 and indicate that that it was on the edge of the original Humboldt Bay shoreline. Two more recent archaeological studies have been completed at the recorded site of CA-HUM-45. These include a 2007 investigation for the school garden project by Coats and Burns that involved an intensive pedestrian survey that located approximately 300 surface artifacts, plus excavation of 20 auger holes (negative results), enlarging the site boundary. In 2009 for a proposed wetland restoration project by the City of Arcata, Rich and Grantham dug a 13, 50x50-cm shovel test units in the area where excavated pond spoils were to be stockpiled, to determine whether an archaeological deposit was present. Three units yielded one artifact each. Rich and Grantham (2009) also recorded and mapped a surface projectile point and cobble spall tool. These observations infer the site extends west and north of the area mapped by Coats and Burns (2007), however, the site boundaries were not revised in 2009. Despite the limited subsurface investigations at CA-HUM-45, no subsurface deposit was identified.

### Archaeological Investigation Methods for the Proposed Project

Pre-field methods included a review of previous investigation reports and files for known resources at the Northwest Information Center (NWIC) of the California Historical Resources Information System (CHRIS), and other published literature pertinent to the project area. Correspondence was conducted with the Native American Heritage Commission (NAHC), Wiyot area tribes, and local knowledgeable individuals. Tribal Historic Preservation Officers (THPOs) for the Wiyot Tribe, Bear River Band of the Rohnerville Rancheria, and the Blue Lake Rancheria, participated in developing the archaeological

research design, a tribal monitor from the Wiyot Tribe and Blue Lake THPO Janet Eidsness participated in fieldwork. The THPOs assessed the significance of the study findings in consultation with the archaeological Principal Investigator, William (Bill) Rich of the Humboldt State University (HSU) Cultural Resources Facility (CRF).

During the spring and summer of 2018, William Rich and Associates (WRA) conducted an archaeological survey with subsurface testing at Jacoby Creek Elementary School (JCS) in Bayside, California in response to the proposed project. The survey effort was designed to determine if historical soil strata remain present beneath the fill, asphalt and paving, and if archaeological materials remain in those strata. Recent geotechnical boring logs from SHN Consulting Engineers (2018) were reviewed and guided the investigation.

The archaeological field survey was performed over the entire JCS property with limited subsurface auger testing at selected locations followed by excavation of 9.78 cubic meters spread between eight test units within or adjacent to the proposed footprints of the new buildings. Approximately 5.15 cubic meters of excavated soil appear to be from historically, and now in-situ, buried top soil horizons from seven of the eight excavation units. WRA is preparing a detailed excavation report that will be provided to the Tribes and JCS to review.

The Institute for Canine Forensics (ICF) conducted a survey of the school property on August 16<sup>th</sup>, 2018 with seven dogs trained to detect historical human remains below ground. Five handlers independently led the dogs over the school property and concluded that one of the seven provided six alerts in the upper ball field proposed for utility trenching. Two of the alerts corresponded directly to the backdirt of the previous auger excavation holes. The handlers interpreted these alerts as a weak scent, perhaps from “graves that were disturbed” when the school was constructed (Pense 2018:8).

### Findings

A significant Native American archaeological deposit was identified at the school site and is suspected to be an extension of CA-HUM-45 (P-12-000103) (Coats and Burns 2012, Rich and Grantham 2009).

Native American archaeological constituents were found in all but one of the excavation samples. After examining the excavated contents from eight controlled archaeological excavation samples measuring 1x2 meters, and 1x1 meters, plus 10-cm diameter auger probes, it is clear that relatively dense concentrations of archaeological materials are present within the intact historical soils that lie beneath the fill and concrete/asphalt surfaces that cover the school property. All materials were collected and are being analyzed for their attributes that provide information related to stone tool technology, exchange, chronological control, subsistence, settlement patterns, and other research questions. Because much of the survey area is effectively capped with cement, asphalt, and dense grass, the horizontal extent of the deposit on the school property has not been determined, however.

### Regulatory Setting

The California Office of Historic Preservation recognizes a range of cultural resource types as important to history and prehistory, including buildings, objects, structures, sites and districts. Districts may include all of these first four resource types as well as significant landscape features. A resource that meets standards for inclusion on the California Register (see Applicable Plans, Policies, Codes and



Regulations below) is regarded as potentially eligible for the Register. CEQA treats resources that are eligible for the Register but not listed on the Register in exactly the same way as designated historic resources.

Generally, a resource shall be considered by the CEQA lead agency to be “historically significant” if the resource meets the criteria for listing on the California Register of Historical Resources (PRC 5024.1, Title 14 CCR, Section 4852) including resources: associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage (Criterion 1); associated with the lives of persons important in our past (Criterion 2); that embody the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values (Criterion 3); or has yielded, or may be likely to yield, information important in prehistory or history (Criterion 4).

In 2014, the California legislature added new requirements regarding tribal cultural resources to the CEQA Guidelines in Assembly Bill 52 (Gatto 2014). By including *tribal cultural resources* in the CEQA process, the legislature intended to ensure that local and Tribal governments, public agencies, and project proponents would have information available, early in the project planning process, to identify and address potential adverse impacts to tribal cultural resources. By taking this proactive approach, the legislature also intended to reduce the potential for delay and conflicts in the environmental review process.

The Public Resources Code establishes that “[a] project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment.” (Public Resources Code §21084.2.) These rules apply to projects that have a notice of preparation for an environmental impact report or negative declaration or mitigated negative declaration filed on or after July 1, 2015.

Public Resources Code §21074 defines “tribal cultural resources.” In brief, in order to be considered a “tribal cultural resource,” a resource must be either: (1) listed, or determined to be eligible for listing, on the national, state, or local register of historic resources, or (2) a resource that the lead agency chooses, in its discretion, to treat as a tribal cultural resource. Public Resources Code §21074 defines “tribal cultural resources” as follows:

(a) “Tribal cultural resources” are either of the following:

(1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

- Included or determined to be eligible for inclusion in the California Register of Historical Resources.
- Included in a local register of historical resources as defined in §5020.1 subdivision (k).

(2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in §5024.1 subdivision (c). In applying the criteria set forth in §5024.1 subdivision (c) for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

(b) A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of landscape size and scope.

(c) A historical resource described in §21084.1, a unique archaeological resource as defined in §21083.2 subdivision (g), or a “nonunique archaeological resource” as defined in §21083.2 subdivision (h) may also be a tribal cultural resource if it conforms with subdivision (a) criteria.

Public agencies shall, when feasible, avoid damaging effects to any Tribal cultural resource. (Pub. Resources Code, §21084.3 (a).) If the lead agency determines that a project may cause a substantial adverse change to a tribal cultural resource, and measures are not otherwise identified in the consultation process, new provisions in the Public Resources Code describe mitigation measures that, if determined by the lead agency to be feasible, may avoid or minimize the significant adverse impacts. (Pub. Resources Code, § 21084.3 (b).)

Examples include:

- (1) Avoidance and preservation of the resources in place, including, but not limited to, planning and construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
- (2) Treating the resource with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following: (A) Protecting the cultural character and integrity of the resource (B) Protecting the traditional use of the resource (C) Protecting the confidentiality of the resource
- (3) Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for purposes of preserving or utilizing the resources or places
- (4) Protecting the resource (Ibid.)

## DISCUSSION

**a, b, d)** The project site contains resources important to the Wiyot Tribe, the Blue Lake Rancheria and the Bear River Band of the Rohnerville Based on the investigations undertaken to date, the project area contains substantial artifact-bearing soils and it has been determined by the Tribes that the archaeological site is considered eligible for the California Register of Historical Resource under Criterion 4: that the site “Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California or the nation.” The site appears significant for the information potential yielded from collected materials. In addition, the Wiyot area Tribes consider the site part of a larger Wiyot cultural landscape that contains distinct elements associated with the wetland ecosystems of Humboldt Bay and its associated environments (Erika Cooper, Bear River Rancheria Tribal Historic Preservation Officer, via written correspondence August 24, 2018). As such, the JCS site qualifies as an historical resource, as defined in CEQA Guidelines Title 14. California Code of Regulations (CCR) Section 15064.5(a) and may also be considered a tribal cultural resource by the Wiyot area tribes.

The archaeological site is situated at varying depths beneath the paved and built surfaces of the school property. The proposed construction of new buildings with utility improvements will expose, unearth, and otherwise disturb intact soil strata known to contain significant archaeological deposits. Although

testing of the site at the proposed project locations has characterized the deposit, there is the possibility of encountering features, such as discrete artifacts concentrations, anthrosol, shell deposits, or human remains. Unconditioned disturbances and displacement of these soils will cause significance impacts to the resource.

The horizontal boundaries of the archaeological site on the school property are unknown. The 11 square meters of surface that was subject to excavation represents a very small fraction of the whole terrace. The landform appears to have dipped to the south with a rise near the front center of the school property. Although areas were cut and filled, much of the historical topsoil horizons are preserved. It is expected that archaeological deposits extend throughout the areas proposed for new foundation and utility trenching construction work.

The THPOs are working with the project applicant to develop a *Mitigation Monitoring and Reporting Program* (MMRP) that ensures potentially significant resources on the project site are carefully considered and monitored during construction and will remain undisturbed in the future. Field record keeping will include daily monitor records, feature and artifact sketches, selective recovery of artifacts, mapping of datum, and photography with logs. To ensure safety, appropriate clothing and boots will be worn at the project site at all times. OSHA standards for safe access and egress to all excavations will be enforced; barriers and buffers will be instated to the satisfaction of the project archeologist and tribal monitor. The project archeologist and/or tribal cultural monitor shall also function as an on-site docent to discuss work with visitors. All mitigation work shall be accompanied by a statement of non-disclosure of confidential issues or concerns identified by the Tribes and restricted by law from public disclosure. For full list of mitigation measures, see Mitigation Measure CULT-1 through CULT-7 below. With incorporation of the mitigation measures described herein, the project's potential to cause a substantial adverse change in the significance of a historical resource is **less than significant with mitigation**.

The proposed work is at an Elementary School site that does not contain historic resources listed in the Arcata Designated Historical Sites List. Therefore no impact to a registered historic resource will occur.

c) The site may contain human remains, as verified by ICF trained canines, who conducted a survey of the property in August of 2018. Due to the potential of discovering human remains during construction, a standard mitigation measure/condition of approval includes a trained construction monitor to observe all ground disturbing work and to stop work in the event human remains are found. With incorporation of Mitigation Measure CULT-6, the project's potential to disturb human remains is **less than significant with mitigation**.

## MITIGATION MEASURES

**CULT-1 MONITORING REQUIREMENTS.** A locally experienced professional archaeologist that meets the qualification standards of Principal Investigator (PI) - Prehistory<sup>1</sup>, and a Tribal Monitor<sup>2</sup> will be retained by the Jacoby Creek School District (District) to observe project construction excavations. The following conditions are included:

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<sup>1</sup> Professional Qualifications, Archaeologist Principal Investigator (PI) - <https://scahome.org/professional-qualifications-standards-2/professional-qualifications-principal-investigator-archaeology/>

<sup>2</sup> Tribal Monitor to be selected by the culturally and geographically affiliated Wiyot area Tribes.

- 1) Pre-construction guided exploratory archaeological excavations will be scheduled and monitored for each building site and activity involving ground disturbances (buried utilities) where the archaeological resource is known or suspected to occur, to include preferred equipment, segregation of soils, and an agreed-upon methodology and location for re-depositing soils on the school property<sup>3</sup>.
- 2) The PI-Archaeologist and Tribal Monitor shall be paired to observe heavy equipment excavations in the known or suspected areas of the buried archaeological resource (each piece of excavation equipment must have an archaeological monitor); additional archaeologists may be brought on-site, under supervision of the PI, to monitor multiple simultaneous excavation operations.
- 3) The Archaeologist(s) and Tribal Monitor will have the authority to temporarily halt ground disturbing construction activities to allow for rapid assessment of potentially significant archaeological constituents (e.g., features such as fire hearths, tool caches, housepit floors, human remains or burials, and time-sensitive artifacts including projectile points, obsidian, ornaments, shell and faunal remains, etc.).
- 4) The District's lead Construction Contractor Foreman and the Archaeologist-PI shall maintain records of work suspensions, noting date, times, and nature of work stoppages. Construction at a discovery location may not be resumed until the Foreman has received a written notice from the District. Construction excavation can continue outside the discovery area as long as each piece of heavy equipment is monitored by an Archaeologist and Tribal Monitor.
- 5) The THPOs and District will be immediately notified by the Archaeologist-PI when a potentially significant discovery is made, whereupon, when feasible, they will convene on-site within 72-hours to come to agreement about the appropriate treatment (e.g., recovery of significant archaeological data), where avoidance is not feasible.
- 6) Where archaeological data recovery is agreed upon for a significant discovery, additional qualified field archaeologists<sup>4</sup> will be retained by the District to work under direction of the PI, with goal of rapid-recovery of significant data so that construction may be resumed in a timely manner.
- 7) The THPOs will regularly monitor the effectiveness of this archaeological monitoring program, by means of periodic field visits and review of weekly progress reports from the Archaeologist-PI and the Tribal Monitor's daily fieldnotes; the THPOs shall confer and may make recommendations for modifying, as appropriate, the MMRP.

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<sup>3</sup> The THPOs expressed priorities for depositing artifact bearing spoils from excavations on the school property as follows (10/26/18 consultation meeting): first preference, placed under buildings as engineered fill; second, lay down geotextile fabric and then pile at south edge of play field and cover with landscaping to discourage artifact collecting; and third, create a landscaped berm planted in grass. The final disposition of these spoils will be mapped and recorded as a "Redeposit" on appropriate DPR 523 record forms by the Archaeologist PI.

<sup>4</sup> Professional Qualifications, Archaeologist Crew Member - <https://scahome.org/professional-qualifications-standards-2/professional-qualifications-principal-investigator-archaeology/professional-qualifications-crew-member-archaeology/>

8) As deemed prudent for safety and security, a buffer zone will be established around significant archaeological resources discovered during project construction (e.g., fencing, tarp covers, security night watch).

9) Construction personnel will be informed at tailgate safety briefings that only the Archaeologist(s) and Tribal Monitor have the authority to collect artifacts or other archaeological material; violation may lead to prosecution to the full extent of the law.

**CULT-2 PUBLIC BENEFIT ON-SITE INTERPRETATION.** The Archaeologist PI and Tribal Monitor shall also function as an on-site docent to discuss work with visitors, or the District shall designate and coordinate with a volunteer docent.

**CULT-3 RECORD KEEPING AND REPORTING.** Daily field record keeping and project reporting requirements for the Archaeologist PI and Tribal Monitor, and Field Archaeologists if engaged, shall include:

- 1) Archaeologists and Tribal Monitor, Daily monitor logs;
- 2) PI and Field Archaeologists, Feature and artifact records, stratigraphic profiles, collection logs, photography logs;
- 3) Archaeologist PI, Weekly progress reports during periods of construction monitoring;
- 4) Archaeological Data Recovery Reports following each construction phase as necessary, per California Office of Historic Preservation ARMR guidelines<sup>5</sup>, with copies filed with the Blue Lake, Bear River and Wiyot THPOs, the JCSD, and the Northwest Information Center (NWIC) of the California Historical Information System (CHRIS)<sup>6</sup>;
- 5) At completion of each project phase, updated historical resource forms (Primary, Archaeological, etc.) using the DPR 523 forms<sup>7</sup> will be appended to Data Recovery Reports.

**CULT-4 SAFETY PLAN.** To ensure safety, appropriate clothing and boots will be worn at the project site at all times. OSHA standards for safe access and egress to all excavations will be enforced, including ladders, steps, ramps, or other safe means of exit for employees working in trench excavations 4 feet (1.22 meters) or deeper. These devices must be located within 25 feet (7.6 meters) of all workers. Barriers and buffers will be instated to the satisfaction of the project archeologist and tribal monitor. A written Safety Plan for the archaeological monitoring will be shared with field personnel at weekly tailgate Safety Briefings.

**CULT-5 SPECIAL STUDIES.** Archaeological constituents recovered during construction monitoring will be tabulated in a catalog and then, in consultation with the THPOs and District representative, the Archaeologist PI shall oversee appropriate special analyses such as radiocarbon dating, obsidian sourcing and hydration analyses, blood residue analysis, lithic reduction technology characterization,

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<sup>5</sup> ARMR (Technical Reporting) Guidelines, <http://www.ohp.parks.ca.gov/pages/1054/files/armr.pdf>

<sup>6</sup> About NWIC of CHRIS, [http://www.ohp.parks.ca.gov/?page\\_id=28730](http://www.ohp.parks.ca.gov/?page_id=28730)

<sup>7</sup> DPR 523 forms, [http://www.ohp.parks.ca.gov/?page\\_id=28351](http://www.ohp.parks.ca.gov/?page_id=28351)

flotation, fauna and floral species identification (dietary remains), etc., with results presented in phased Data Recovery Reports.

**CULT-6 DISCOVERY, TREATMENT AND DISPOSITION OF HUMAN REMAINS.** If human remains are discovered during project construction, work within the discovery location plus nearby areas reasonably suspected to overlie human remains, will cease (Public Resources Code, Section 7050.5). The Humboldt County Coroner will be contacted by the Project Archaeologist to determine if the cause of death must be investigated. If the Coroner determines that the remains are of Native American origin, it is necessary to comply with state laws regarding the disposition of Native American burials, which fall within the jurisdiction of the California Native American Heritage Commission (NAHC) (Public Resources Code, Section 5097). In this case, the Coroner will contact NAHC. The descendants or most likely descendants (MLD) of the deceased will be contacted, and work will not resume until they have made a recommendation to the landowner or person responsible for excavation work with direction regarding appropriate means of treatment and disposition, with appropriate dignity, of the human remains and any associated grave goods, as provided in Public Resources Code, Section 5097.98.

**CULT-7 CONFIDENTIALITY.** All project personnel will be bound by a non-disclosure rule that prohibits the sharing of sensitive information about the archaeological site with persons other than those with a “need to know,” and the Jacoby Creek School District representatives shall consult with the THPOs before disclosing any information with the public or press.

**CULT-8 CURATION.** During the course of fieldwork and post-field analyses and report preparation, collected archaeological constituents will be housed locally in a secure facility acceptable to the THPOs and the JCSD. At project completion, the Blue Lake Rancheria, Bear River Band of the Rohnerville Rancheria and Wiyot Tribe THPOs will jointly make a recommendation to District about the final disposition of the collection.

Issues and Supporting Information	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No Impact
<b>GEOLOGY AND SOILS:</b> Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			x	
ii) Strong seismic ground shaking?			x	

<b>Issues and Supporting Information</b>	<b>Potentially Significant</b>	<b>Less Than Significant With Mitigation</b>	<b>Less Than Significant</b>	<b>No Impact</b>
iii) Seismic-related ground failure, including liquefaction?			x	
iv) Landslides?			x	
b) Result in substantial soil erosion or the loss of topsoil?			x	
c) Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?			x	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			x	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				x
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				x

## **SETTING**

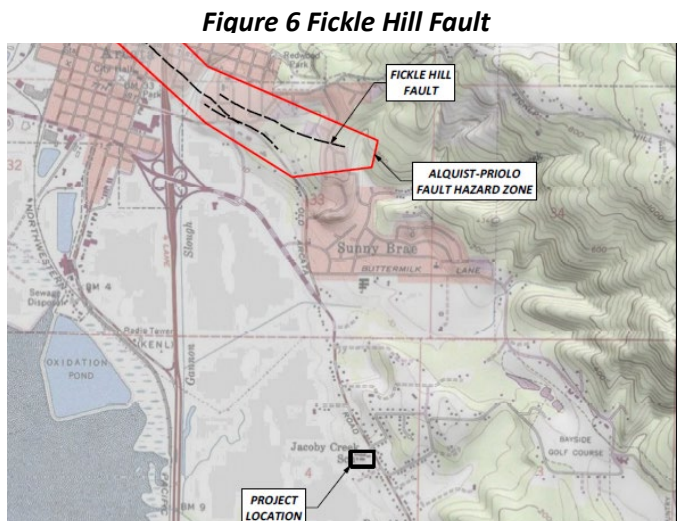
Northwestern California is located in a complex tectonic region dominated by northeast-southwest oriented compression associated with collision of the Gorda and North American tectonic plates. This plate convergence has resulted in a broad fold-and-thrust belt along the western edge of the accretionary margin of the North American plate. In the Humboldt Bay region, this fold-and-thrust belt is manifested as a series of northwest-trending, northeast dipping thrust faults, including the Little Salmon fault and faults that comprise the Mad River fault zone (MRfz). These faults are active and are capable of generating large-magnitude earthquakes.



The project site is located at the southwestern edge of the MRfz.

This zone consists of several major northwest-trending thrust faults and numerous minor, secondary synthetic and antithetic faults. Major faults within the MRfz include from north to south, the Trinidad, McKinleyville, Mad River, and Fickle Hill faults. The project site is located at the southwestern edge of the Fickle Hill fault (Figure 6, SHN, 2018).

Topographically, the site occupies a broad rounded bench or terrace remnant bordered on the west by gentle slopes that descend toward the back edge of the low gradient bay margin slope. Slopes to the east of the site climb gradually toward Fickle Hill across a series of mapped traces of the Fickle Hill fault zone. For the most part, the school campus has been associated with modest amounts of historical grading, and it generally follows natural grade. Cuts and fills across most of the campus are less than 3 feet in height. The exception is a largely undeveloped “lower field” cut into the toe of the west side of the campus decades ago. That grading resulted in a west-facing cut slope about 15 feet high and a field just above the water table; it is bordered on the west side by marsh. There is a perennial spring that daylights in the riparian area adjacent to the north side of campus that flows west-southwest toward Humboldt Bay (Geologic Report, SHN 2018).



Source: Jacoby Creek School Geotechnical Report, SHN, 2018.

The site itself is classified as part of the Hookton-Table bluff complex with 2-9% slope and moderately well-drained clay/loamy soil (USDA Web Soil Survey, 2018). All construction will take place in areas of previously disturbed ground. *Soils of Western Humboldt County, November 1965* classifies agricultural soils in the surrounding area as Bayside Silty Clay Loam 2 (poorly drained) and Bayside Silty Clay Loam 3 (imperfectly drained). These are soils typical of reclaimed tidal marsh and have Soil Rating Index Numbers of 36 (Ba2) and 49 (Ba3). Grade 3 soils (Storie Index 40-60) are generally not subject to erosional problems. Historic maps of the area indicate that most of the surrounding slough land currently used for grazing is former tidelands (City of Arcata Arcata Baylands Enhancement/Restoration Project, 2006).

## DISCUSSION

The information and data included in this section is based on the Geotechnical Investigation and Geologic Hazards Evaluation prepared for the project site by SHN Consulting Engineers and Geologists in January 2018 (Appendix B). The scope of SHN's investigation included reviewing geologic references and aerial imagery, performing a reconnaissance of the site and surrounding vicinity, overseeing the drilling of four geotechnical borings, performing laboratory testing on select soil samples recovered from the borings, conducting engineering analyses, and preparing a report with geotechnical recommendations to aid in project planning, design, and construction. The Geotechnical Report concluded the site can be developed as planned for the proposed construction, provided the recommendations presented in the report are followed. The recommendations of the report have been incorporated in to the final site plan

by the project architect, and include guidance on: site preparation and grading; engineered fill; utility trenches; seismic design criteria; foundations; slabs on grade; and surface drainage.

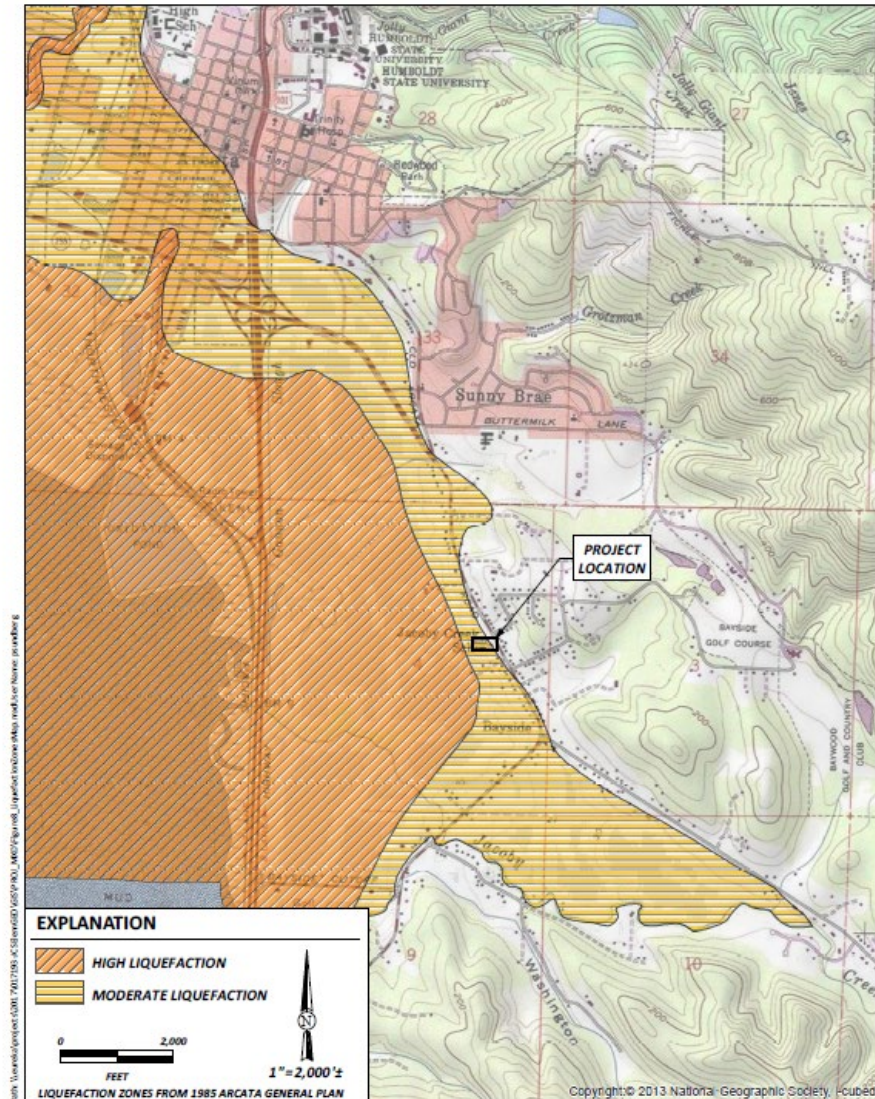
### **Discussion**

**a.i-aiii, c)** As noted above, Northwestern California is located in a complex tectonic region and the project site is located at the southwestern edge of the Mad River Fault Zone (MRfz). Only one moderate historic earthquake may have been generated within the MRfz, but all the faults within the zone are considered active based on deformation of Holocene-age soils overlying the faults. The project is not within an Alquist-Priolo (A-P) Earthquake Fault Zone and no active faults have been mapped on the project site. The nearest A-P zone is approximately one mile north of the project site.

The 2018 Geologic Report concluded that there is a low potential for surface fault rupture on the Jacoby Creek campus. While the proposed project could potentially be subject to ground shaking from these or other Northern California faults, it would be comparable to all other development in this seismically active region. Compliance with standard state and local building codes would provide foundation and structural strengthening applicable to this zone. A site specific Geotechnical Report prepared for the proposed project contains foundation, earthwork, drainage, and grading recommendations; the project has been designed to comply with the recommendations of this report.

The school campus is located within a “Moderate” liquefaction zone (Figure 7). On this generalized map, the liquefaction hazard area encompasses nearby low-lying alluvial deposits (which do have probable liquefaction susceptibility), as well as the subject campus site, despite available geologic mapping showing the site as underlain by sediments that do not have the potential to liquefy. Liquefaction is the transformation of a saturated granular material from a solid to a liquefied state as a result of increased pore pressure and decreased effective stress. This sudden loss of soil shear strength is caused by cyclic loading from a seismic event.

**Figure 7 Liquefaction Zones Map**



*Source: Jacoby Creek School Geotechnical Report, SHN, 2018.*

The adverse effects of liquefaction include localized ground settlement, ground cracking and expulsion of water and sand (sand boils), the partial or complete loss of bearing and confining forces used to support loads, and lateral spreading. Geologic age of sedimentary deposits is an important criterion in estimating liquefaction susceptibility. It has long been recognized that increased geologic age results in decreased liquefaction potential as sediments become more consolidated, weathered, and cemented as they age. Repeated earthquake shaking results in seismic consolidation of sediments. Results of California post-earthquake studies indicate that liquefaction typically occurs in manmade fills and in unconsolidated, geologically youthful materials in close proximity to active river and stream channels. Given the geologic age of the soils at the site, liquefaction risk is considered to be low on the project site (SHN, 2018).

Based on the results in the Geotechnical Report (SHN, 2018) the site can be developed as proposed, provided the recommendations presented in the report are followed. The main geotechnical considerations affecting the design and construction of the project are the variability of the surficial soils across the site and the need to provide uniform foundation support under each of the proposed structures. The proposed project has been designed to follow these recommendations in order to minimize risk to health and safety from seismic ground shaking and seismic ground-related failure and would not expose people or structures to potential substantial adverse effects involving the rupture of a known earthquake fault as delineated on the most recent Alquist-Priolo Fault Zoning Map. Therefore a **less than significant impact** would occur.

**a iv)** The site is classified as part of the Hookton-Table bluff complex with 2-9% slope and moderately well-drained clay/loamy soil (USDA Web Soil Survey, 2018). All construction will take place in areas of previously disturbed ground. The site does not have the potential to substantially expose people to risk due to landslides; therefore, a **less than significant impact** will occur.

**b)** Development of the site will require excavation and groundbreaking activities. However, proposed development at the site will implement standard BMPs such as straw bales, coir rolls, and/or silt fencing structures to assure the minimization of erosion resulting from construction and to avoid runoff, limit ground disturbance to the minimum necessary, and stabilize disturbed soil areas as soon as feasible after construction is completed. With BMPs incorporated, the proposed project and anticipated future development would not result in substantial soil erosion or the loss of topsoil and a **less than significant impact** would occur.

**d)** Certain types of clay soils expand when they are saturated and shrink when dried. These are called expansive soils, and can pose a threat to the integrity of improvements that are built on them without proper engineering. The expansion and contraction of the soil varies with the soil moisture content (wet or dry), and can be aggravated by the way a property is maintained or irrigated. These soil movements and the damage they cause generally occur very slowly and the damage is spread over a wide area. At the project site, the Geologic Report has determined that the subsurface sediments predominantly consist of gravelly, clayey soils. The clayey soils encountered are not typically associated with shrink/swell potential. The lean nature of the clay indicates it is unlikely to have expansive properties. The hazard posed to the proposed structures associated with potential soil swelling or shrinkage is therefore negligible. **No impact** will occur.

**e)** The project does not involve septic tanks or alternative wastewater disposal systems. The project site and surrounding area is served by city water and sanitary sewer systems, provided by City of Arcata. Therefore **no impact** will occur.

**f)** As mentioned above, site specific Geotechnical and Cultural Resources Investigations have been conducted on the site. Neither of these studies suggest that the site may have unique paleontological or geologic features that would be significantly impacted by the proposed project. Therefore, the proposed project is not expected to directly or indirectly destroy such features. **No impact** will occur.

Issues and Supporting Information	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No Impact
<b>GREENHOUSE GAS EMISSIONS:</b> Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			x	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			x	

## SETTING

Global temperatures are affected by naturally occurring and anthropogenic-generated (generated by humankind) atmospheric gases, such as water vapor, carbon dioxide, methane, and nitrous oxide. Gases that trap heat in the atmosphere are called greenhouse gases (GHGs). Emissions of GHGs from human activities, such as electricity production, motor vehicle use, and agriculture, are elevating the concentration of GHGs in the atmosphere and are reported to have led to a trend of unnatural warming of the earth's climate, known as global warming or global climate change. Other than water vapor, the primary GHGs contributing to global climate change include the following gases:

- Carbon dioxide (CO<sub>2</sub>), primarily a byproduct of fuel combustion;
- Nitrous oxide (N<sub>2</sub>O), a byproduct of fuel combustion and also associated with agricultural operations such as the fertilization of crops;
- Methane (CH<sub>4</sub>), commonly created by off-gassing from agricultural practices (e.g., livestock), wastewater treatment, and landfill operations;
- Chlorofluorocarbons (CFCs), which were used as refrigerants, propellants, and cleaning solvents, although their production has been mostly prohibited by international treaty;
- Hydrofluorocarbons (HFCs), which are now widely used as a substitute for chlorofluorocarbons in refrigeration and cooling; and Perfluorocarbons (PFCs) and sulfur hexafluoride (SF<sub>6</sub>) emissions, which are commonly created by industries such as aluminum production and semiconductor manufacturing.

According to Humboldt County General Plan Update Draft Environmental Impact Report (DEIR), Chapter 3 (Environmental Setting and Impacts) (revised April 20, 2017), the County has seen a significant decline in GHG emissions since 1990. This is likely attributable to a steady and significant decline in the local lumber industry and closure of major industrial facilities related to timber processing, including lumber and pulp mills. The data included in the DEIR reveals that overall GHG emissions in the County in 2006 (approximately 1.31 MMTCO<sub>2</sub>e) were approximately a half-million metric tons less than in 1990 (approximately 1.82 MMTCO<sub>2</sub>e). Because of the reduction in GHG production since the peak of the logging era, and Humboldt County's sparse and largely rural population, the DEIR concludes that a single development, such as the proposed project, would not have an individually-discernible effect on GHG emissions.

## DISCUSSION

a) The proposed project includes construction of a new library and classroom/site improvements that do not increase student enrollment. GHG emissions associated with development of the proposed project would occur over the short term from construction activities, consisting primarily of emissions from equipment exhaust and worker and vendor trips. There would also be minimal long-term operational emissions associated with site uses including vehicular traffic, energy and water usage, and solid waste disposal. Air quality modeling, which includes estimates of GHG emissions, was not conducted for the project due to its small scale. As such, the discussion below contains a qualitative analysis of GHG impacts.

Generally small development projects would not generate substantial GHG emissions. Construction GHG emissions include emissions produced as a result of material processing, emissions produced by onsite construction equipment, and emissions arising from traffic delays due to construction. Utility impacts will result from the use of natural gas for heating and electricity used in daily educational activity. The project will be subject to new California Energy Code regulations, which require energy efficient features. Therefore, due to its relatively small size and other project features, the project would not be expected to generate GHG emissions, either directly or indirectly, that would have a significant impact on the environment; this impact is considered **less than significant**.

b) In 2006, the California Global Warming Solutions Act (Assembly Bill 32) definitively established the state's climate change policy and set GHG reduction targets (Health & Safety Code §38500 et seq.), including setting a target of reducing GHG emissions to 1990 levels by 2020. AB 32 requires local governments to take an active role in addressing climate change and reducing greenhouse gas (GHG) emissions. While methodologies to inventory and quantify local GHG emissions are still being developed, recommendations to reduce residential GHG emissions include promoting energy efficiency in new development and improved coordination of land use and transportation planning on the city, county and subregional level, and other measures to reduce automobile use.

Locally, the City of Arcata adopted a Community Greenhouse Gas Reduction Plan in 2006 to reduce locally generated greenhouse gas emissions with an emphasis on municipal operations and structures. The City of Arcata committed to decrease locally generated greenhouse gas emissions by 20% below year 2000 levels by the year 2010. To meet this goal, the plan focuses on six action areas: energy efficiency, renewable energy, sustainable transportation, waste and consumption reduction, carbon sequestration and other methods, and cross-cutting approaches including collaborative educational campaigns and programs.

Consistent with AB 32 and the City's Community Greenhouse Gas Reduction Plan, the project involves infill development and promotes efficient land use development patterns, and will not increase vehicle trips to and from the site. The proposed library and classrooms would emit limited greenhouse gases, and the project would be subject to all applicable permit and planning requirements in place or adopted by the State of California. Therefore, the project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases; **no impact** would occur.

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



## SETTING

A material is considered hazardous if it appears on a list of hazardous materials prepared by a federal, state, or local agency, or has characteristics defined as hazardous by a federal, state, or local agency. Chemical and physical properties such as toxicity, ignitability, corrosiveness, and reactivity cause a substance to be considered hazardous. These properties are defined in the California Code of Regulations (CCR), Title 22, §66261.20-66261.24. A “hazardous waste” includes any hazardous material that is discarded, abandoned, or will be recycled. Therefore, the criteria that render a material hazardous also cause a waste to be classified as hazardous (California Health and Safety Code, §25117).

The proposed project consists of the development of seven classrooms and associated utilities at an existing school site and no operations will occur that would require or emit hazardous materials. Other than the temporary use of oil, diesel, asphalt, paints, and other materials typical of construction activities, the project would not transport, use, dispose of, emit or release hazardous materials. The site is not included on the Cal EPA Cortese List (Government Code Section 65962.5) administered by the Department of Toxic Substances Control nor is it on the State Water Resources Control Board’s GeoTracker system.

## DISCUSSION

**a-d)** The project is limited to improvements to an existing elementary school site, and no aspect of school operations requires or permits the use of hazardous materials in the vicinity of such sensitive receptors. Site development may require routine transport and use of hazardous materials during the grading and construction process, such as gasoline, diesel fuel, hydraulic fluids, oils, and lubricants, in addition to cleaning solvents and household cleaning supplies. However, the types and quantities of hazardous materials to be used are not expected to pose a significant risk to the public and/or environment and would be managed in accordance with federal, state, and local regulations. Since the transport, use, and storage of any limited hazardous materials at the site would be required to be conducted in accordance with all federal, state, and local regulations, a less than significant impact would occur. A records search was conducted using the State Water Resources Control Board’s (SWRCB) GeoTracker database and the State of California Department of Toxic Substance Control’s (DTSC) EnviroStor database. No hazardous waste or materials sites have been identified on the site. Therefore a **less than significant** impact would occur at the site due to hazardous substances.

**e-f)** The proposed development is not located within an airport land use plan, within two miles of a public airport or public use airport, or within the vicinity of a private airstrip. In addition, the project would not include new structures which could potentially represent a hazard to aviation. Thus, the project would not have the potential to result in airport-related safety hazards for people residing or working in the project area. **No impact** would occur.

**g)** The project is limited to improvements to an existing site with no expansion of users. Therefore the project does not affect the implementation of an adopted emergency response or evacuation plans for the project site. **No impact** would occur.

**h)** According to the Humboldt County Web GIS, the project site is located within an area categorized with a “low” fire rating. The project site is located in an urban setting and is in a Local Response Area (LRA) within three miles or less of the AFD’s Downtown Arcata Fire Station. The site is not within a State Responsibility Area (SRA) for fire protection, does not occur within an area of steep slopes or forest, and would not result in the intermixing of residences with wildlands. Therefore the project would

not expose people or structures to significant risk of loss, injury or death involving wildland fire. For these reasons, the project will have a **Less Than Significant Impact** on wildland fire hazards.

Issues and Supporting Information	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No Impact
<b>HYDROLOGY AND WATER QUALITY:</b> Would the project:				
a) Violate any water quality standards or waste discharge requirements?			x	
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			x	
c) Substantially alter the existing drainage pattern of the site or area, including through stream or river course alteration, in a manner which would result in substantial erosion or siltation onsite or offsite?			x	
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding onsite or offsite?			x	
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?			x	
f) Otherwise substantially degrade water quality?			x	
g) Place housing within a 100-year flood hazard Area 1 as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				x
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?			x	

Issues and Supporting Information	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No Impact
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?			x	
j) Inundation by seiche, tsunami, or mudflow?			x	

## SETTING

The Jacoby Creek School site's northern and western parcel boundaries border the Jacoby Creek-Gannon Slough wildlife area. Much of the land is owned by the City of Arcata and includes pasture lands, riparian, wetland, and pond areas. The eastern portion of the project parcel is primarily developed with school facilities, buildings, play areas, and parking areas. This developed campus area is located at a slightly higher elevation than a largely undeveloped "lower field" in the western portion of the parcel. There are riparian and wetland areas in the southwest portion of the property. North Jacoby Creek flows northwest towards Humboldt Bay adjacent to the southwestern property boundary.

Jacoby Creek School's existing drainage pattern directs stormwater runoff to existing drainage inlets at the center of the campus, the parking lot, and out to Jacoby Creek Road. The proposed project would connect to the existing stormwater drainage system. The property is not within a 100-year flood hazard area and is outside the Matthews Dam inundation Area.

## DISCUSSION

a) The methods used to detain and convey stormwater at new developments are regulated at the State and local levels. The State Water Resources Control Board and North Coast Regional Water Quality Control Boards (NCRWQCB) regulate water quality of surface water and groundwater bodies in the region.

Construction activities associated with the proposed project would cause disturbance of soil during excavation work, which could adversely affect water quality. Contaminants from construction vehicles and equipment and sediment from soil erosion could increase the pollutant load in runoff being transported to receiving waters during development.

The proposed project requires a MS4 permit from the NCRWQCB, which legally enforce the reduction of pollutant discharge to the maximum extent practicable, protect water quality, and satisfy the appropriate water quality requirements of the Clean Water Act. MS4 permittees develop Stormwater Management Plans in order to implement the permit requirements. Each permit details the applicable stormwater management requirements to meet State and Federal Requirements and contain standard Best Management Practices (BMPs). Additionally, to protect water quality, appropriate measures and feasible BMPs have been incorporated into the project. BMPs include provisions to minimize potential sediment and pollutants entering the waterways. Because the proposed project would adhere to these requirements, and because the project would not generate or discharge wastewater or industrial flows to wetlands, creeks, waters of the U.S., or Humboldt Bay, the project would not violate any water quality standards or waste discharge requirements, or otherwise substantially degrade water quality.

Site development would be served by City water and sewer service, and operated in compliance with all water quality standards and waste discharge requirements. With incorporation of BMPs and compliance with MS4 requirements, the proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. A **less than significant** impact would occur.

**b)** The project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge. The site is currently served by City water and sewer service, and adequate capacity remains available to serve the development anticipated at the site, which includes a new domestic water line and fire hydrant. No new users are anticipated as a result of this project. The construction of the library and classrooms will not substantially increase or decrease impervious surfaces, as all development at the site will take place on existing impervious surface. Therefore the project would not significantly impact groundwater recharge. A **less than significant** impact would occur.

**c-f)** The proposed project would not alter the course of a stream or river and would generally maintain the existing site drainage features and the direction of site runoff. Jacoby Creek School's existing drainage pattern directs runoff to existing drainage inlets at the center of the campus, the parking lot, and out to Jacoby Creek Road. Stormwater will continue to be routed to the existing drainage system. Development will not significantly increase the amount of impervious surface at the project site. The proposed project would not be anticipated to 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. A substantial amount of additional runoff and pollution is not anticipated under the project, as future development anticipated at the site would be within previously developed areas. Additionally, appropriate BMPs would be incorporated as required to prevent erosion of and to prevent storm water runoff from carrying pollutants from the site to nearby wetlands, streams, and sensitive habitats.

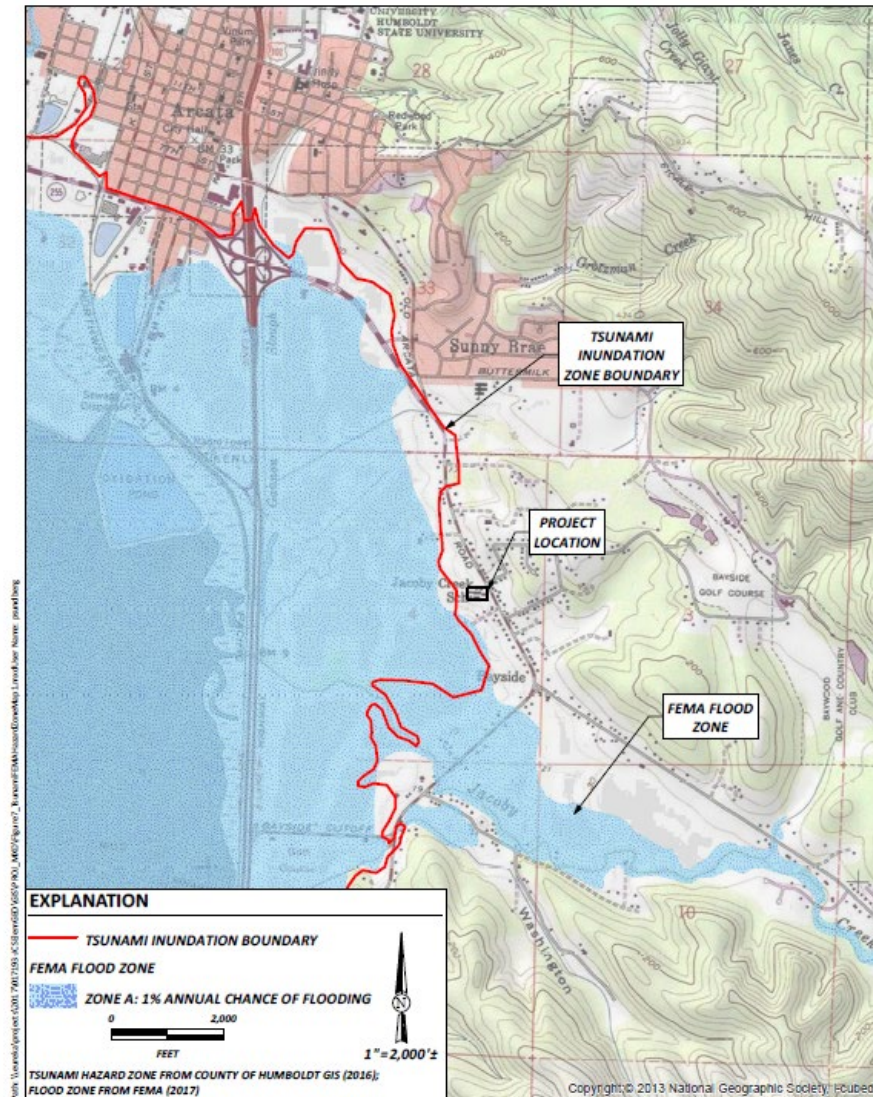
Compliance with construction and operation stormwater requirements would ensure that development of the project would not result in substantial erosion or siltation on- or off-site and the proposed project would not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. Therefore a **less than significant** impact would occur.

**g)** The Jacoby Creek School Improvements project does not include housing. The project site is not within the 100-year floodplain. Therefore **no impact** would occur.

**h-j)** The project site is located at an elevation of 37 feet above mean sea level. The school campus is located outside the 100 year FEMA floodplain (Figure 8). The Jacoby Creek School site is primarily classified as an "Area of Minimal Flood Hazard" (Zone X), including all classrooms and the entirety of the project site. The rear portion of the parcel containing the wetland is included in the edge of the 500-year flood plain (Zone A). The floodplain mapping appears to reflect a Jacoby Creek flood event. The mapped floodplain extends to the southwestern edge of campus; that is, the edge of the lower field surface described above. This flood elevation is at least 17 feet below the elevation of the main campus. Available tsunami models indicate the site is above anticipated inundation levels. While available maps vary somewhat in terms of the degree of inundation across the Arcata Bottoms and around the bay

margin, all models show the Jacoby Creek campus site as above potential inundation levels. Therefore, the proposed project would not expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam nor from inundation by seiche, tsunami, or mudflow. A **less than significant** impact would occur.

**Figure 8: Tsunami Inundation Zone and FEMA Flood Zone Map**



Source: Jacoby Creek School Geotechnical Report, SHN, 2018

Issues and Supporting Information	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No Impact
<b>LAND USE AND PLANNING:</b> Would the project:				
a) Physically divide an established community?				x
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?			x	
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?			x	

## SETTING

The land use designation of the site is Public Facility (PF) and the General Plan Designation is Public Facility (PF). The School site was developed before the parcel was located within Arcata City limits and is considered a “grandfathered” use. The site is within the Coastal Zone Boundary; in a Categorical Exclusion area. No changes to the parcel’s current land use or zoning designations are proposed under the project.

North and west of the campus are pasture lands, marshes, and estuarine areas. Highway 101 traverses the bay margin west of the site. Surrounding uses include low-density residential (RVL) neighborhoods to the east and south (across Old Arcata Road) and agriculture exclusive land to the north, west, and south. Four parcels of mixed commercial (CM) are located directly east of Jacoby Creek School across Old Arcata Road. The Coastal Zone boundary ends on the eastern property boundary.

## DISCUSSION

**a)** The proposed project would not physically divide an established community, as the school site is pre-existing, and the proposed project is limited to infill within the existing bounds of the school. The Jacoby Creek school site is primarily surrounded by undeveloped land and single family residences. Therefore **no impact** would occur.

**b-c)** The proposed project does not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding/mitigating general environmental effects and does not conflict with plans to conserve habitat. No changes to the site’s current land use and zoning designations are proposed under the project and the project site’s zoning (PF) allows the use of public-serving facilities such as schools. The current use at the site will not change and will not expand beyond the existing site footprint. All future anticipated development at the site would therefore be developed in accordance with the site’s current land use and zoning designations. Therefore a **less than significant** impact would occur.

Issues and Supporting Information	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No Impact
<b>MINERAL RESOURCES:</b> Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				x
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				x

## SETTING

According to the soils testing and analysis performed by SHN Engineers and Geologists as part of the Geotechnical Investigation prepared for the site in 2018, basement rock in the region is composed of late Jurassic to late Cretaceous mélange of the Franciscan Complex. This mélange typically consists of blocks of conglomerate, graywacke sandstone, radiolarian chert, blueschist facies metamorphic rock, greenstone, and ophiolitic plutonic rock in an intensely sheared argillite matrix. These materials are not exposed in the site vicinity, but they are presumably present at depth beneath the site. In the Arcata area, Franciscan basement rock is unconformably overlain by early to middle Pleistocene age marine and continental deposits. These sediments are described as fluvial and shallow water marine sediments including pebble to cobble sized conglomerate, sandstone, and silt (SHN Geotechnical Report, 2018).

The project area is not located in an area of known rock, aggregate, sand, or other mineral resource deposits of local, regional, or State residents. There are no known mineral resources of significance on the site that would be made unavailable by the proposed project. Furthermore, the parcel is not utilized for Surface Mining and Reclamation Act (SMARA) activities. There are no mineral lands mapped in the project vicinity (California Geological Survey Mapping, 2018).

## DISCUSSION

**a-b)** The project area does not contain mineral resources that are of value locally to the region or its residents. The project area is not identified as a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan, or by the State of California. Therefore, the proposed project would not interfere with materials extraction or otherwise cause a short-term or long-term decrease in the availability of mineral resources. **No impact** would occur.

Issues and Supporting Information	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No Impact
<b>NOISE:</b> Would the project:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			x	
b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?			x	
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			x	
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			x	
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				x
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				x

## SETTING

Noise-sensitive land uses (or receptors) can be defined as those areas that benefit from a lowered sound level, consistent with areas of primary human activities, such as sleeping or learning. Examples of noise-sensitive land uses include but are not limited to residences, schools, daycare facilities, hospitals, places of worship, parks, and libraries. Noise-sensitive land uses in the immediate project site vicinity are the attendees of the school and residential uses.

The predominant noise source in the project vicinity is currently traffic noise on Highway 101 and on Old Arcata Road. Traffic noise volume depends primarily on traffic speed, volume and vehicle type. The main motor vehicle noise source is tire noise, which increases with speed. As mapped in the City of Arcata General Plan Noise Element (2008), the eastern boundary of the project site is located in the 55-60 decibel (dbA) contour for traffic noise from Old Arcata Road. Other existing noise sources in the project vicinity include Jacoby Creek School and the commercial uses across Old Arcata Road.



The Arcata General Plan identifies quantified noise levels for new projects and retrofits, outlined below.

*N-2d Acceptable noise levels.* New construction and retrofits at existing buildings shall include appropriate insulation, glazing, and other sound attenuation measures so that they comply with standards contained in Table N-1[Table 4]. These standards are intended to set levels for external noise sources that could potentially impact a new dwelling or other noise-sensitive use.

**Noise Standards for New Projects and Retrofits**

LAND USE	EXTERIOR			INTERIOR		
Noise Level Descriptor	7am-7pm	7-10 pm	10pm-7am	7am-7pm	7pm-10pm	10 pm-7am
Residences, Transient Lodging, Hospitals, Nursing Homes						
Hourly $L_{eq}$	55 dB	50 dB	45 dB	45 dB	40 dB	35 dB
Maximum	75 dB	75 dB	70 dB	65 dB	65 dB	60 dB
Auditoriums, Theaters, Libraries, Schools, Churches						
Hourly $L_{eq}$	55 dB	55 dB	n/a	40 dB	40 dB	n/a
Maximum	75 dB	75 dB	n/a	60 dB	60 dB	n/a

Source: City of Arcata General Plan Noise Element, 2008.

1. The City can impose noise level standards which are up to 5 dB less than those specified above based upon determination of existing low ambient noise levels in the vicinity of the project site.
2. These noise level standards do not apply to residential units established in conjunction with industrial or commercial uses (e.g., caretaker dwellings).
3. The standards will be applied at the outdoor activity areas of the receiving land use, and at the building facade for upper floor receivers which do not have an outdoor activity area facing the noise source. Where no outdoor activity area is identified, the City has the option to apply only the interior noise level performance standards.

*N-5d Construction site tool or equipment noise.* The following shall apply to construction noise from tools and equipment:

1. The operation of tools or equipment used in construction, drilling, repair, alteration or demolition shall be limited to between the hours of 8 A.M. and 7 P.M. Monday through Friday, and between 9 a.m. and 7 p.m. on Saturdays.
2. No heavy equipment related construction activities shall be allowed on Sundays or holidays.

This shall apply to construction noise from tools and equipment which are subject to the review of the City, and which may affect receptor uses. This policy shall not apply to emergency work of public service utilities or by variance under a noise ordinance.

*N-5e Stationary and construction equipment noise.* All stationary and construction equipment shall be maintained in good working order, and fitted with factory approved muffler systems.

## DISCUSSION

**a, d)** The proposed project would result in short-term increased noise levels from construction activities. Various types of equipment would be used for construction of the proposed project. Noise impacts

resulting from construction activities would depend on the noise generated by various pieces of construction equipment, the timing and duration of noise-generating activities, and the distance between construction noise sources and noise-sensitive receptors. Construction noise impacts primarily result when construction activities occur during noise-sensitive times of the day (early morning, evening, or nighttime hours), when the construction occurs in areas immediately adjoining noise-sensitive land uses, or when construction lasts over extended periods of time. The loudest expected phase of construction is grading and earthwork, which would likely include the use of dozers, backhoes, and graders.

The adjacent single-family residences and on-site school activities could be temporarily affected by construction noise. During each stage of construction, there would be a different mix of equipment operating. Construction noise levels would vary by stage and vary within stages based on the amount of equipment in operation and the location where the equipment is operating. These activities would be temporary, during the initial stage of construction. Construction activities would temporarily increase ambient noise levels, mainly from heavy equipment and construction-related truck traffic, hydraulic or pneumatic-powered equipment. The temporary use of heavy equipment for earth moving, grading and compaction, paving, and hauling can be expected. The construction phase would increase localized truck trips to transport materials and equipment to and from the site. Therefore, construction-related noise will occur, but will be temporary and intermittent in nature.

The proposed project would comply with all applicable City policies to abate construction-related noise impacts. Arcata General Plan Policy N-5d which requires limiting construction activity to the hours of 8 a.m. and 7 p.m. Monday through Friday, and between 9 a.m. and 7 p.m. on Saturdays, and Policy N-5e which requires that all construction equipment be maintained in good working order and fitted with factory approved mufflers. These proposed measures would reduce noise generated by the construction of the project to the extent feasible for the project's size. Given its temporary nature, construction activities would result in a less than significant short-term noise impact and would not result in the exposure of persons to or generation of significant noise levels. These sources and normal day-to-day on-site activities are not expected to exceed accepted noise standards or result in substantial increases in ambient noise levels in the project vicinity, and impacts are considered **less than significant**.

**b, c)** There are no proposed uses on-site that would result in excessive ground borne vibration or ground borne noise levels, or any permanent increase in noise. The site is already used as an educational facility, and the majority of the new structures will be replacing existing structures. No new enrollment of students or hiring of staff is anticipated as a result of this project. Primary sources of operational noise associated with the proposed project include noises associated with children playing and vehicles traveling to and leaving school. These noise sources are not anticipated to increase or decrease as a result of this project. The proposed project will not include heavy industrial activities, blasting, or other activities that could create a permanent source of excessive groundborne noise levels or vibration. Therefore a **less than significant impact** will occur.

**e,f)** The project site is not located within two miles of a public airport or in the vicinity of a private airstrip, and thus would not expose people working or residing in the area due to excessive noise levels. **No impact** would occur.

Issues and Supporting Information	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact
<b>POPULATION AND HOUSING:</b> Would the project:				
a) Induce substantial population growth in the area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				x
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				x
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				x

## SETTING

Jacoby Creek School currently serves the Bayside/Southern Arcata area. Surrounding land uses do not permit high density development, as zoning is primarily limited to single-family residential and agricultural uses. The proposed classroom additions and modifications will replace aging portables and provide new classroom and program space to alleviate current crowding conditions. Current enrollment is approximately 470 students. No increase in the student population is proposed with this project. All construction will be located on the existing school property and adjacent to existing buildings on campus.

## DISCUSSION

**a-c)** As mentioned above, it is not anticipated that this project will result in population growth in the area, either directly or indirectly. The School is pre-existing and has served the surrounding area for decades. No new enrollment is anticipated as a result of these classroom updates. The project does not contain housing or displace housing, as the project is limited to the existing site boundary and is a public use. Therefore **no impact** would occur.

Issues and Supporting Information	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No Impact
<b>PUBLIC SERVICES:</b> Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a) Fire protection?			x	
b) Police protection?			x	
c) Schools?			x	
d) Parks?			x	
e) Other public facilities?			x	

## SETTING

Emergency response and evacuation in the project area is the responsibility of the Arcata Police Department (APD) located at 736 F Street and the Arcata Volunteer Fire Department (AVFD) located at 631 9th Street and 3235 Janes Road. These provide critical emergency response services and serve as the community's primary response agencies under the City's Emergency Response Plan. Both the APD and AVFD are part of the multiagency Standardized Emergency Management System emergency response network. In addition, a California Highway Patrol (CHP) office is located at 255 East Samoa Boulevard and regularly provides back-up services to APD within city limits and serves as the primary emergency responders along the Highway 101 corridor. The Humboldt County Sheriff's Office also serves the Highway 101 Corridor and HSU Police offer partner law enforcement services as well.

## DISCUSSION

**a, b)** No population increase would result from the proposed project. Therefore, the project will not result in the need for new or physically altered governmental facilities in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection and police services. A **less than significant** impact would occur.

**c)** The proposed project involves improvements to an existing school. The intention of this project is to better serve existing students at Jacoby Creek School. There are currently roughly 470 students enrolled and this number is not anticipated to change as a result of this project. This project will allow the District to better accommodate existing students with a new library and improved classrooms. The potential impacts from the proposed school improvements are evaluated throughout this document. A **less than significant impact** would occur.

**d, e)** The project site is a school with recreational facilities for students on site. No additional students are expected to enroll as a result of the project. Recreational facilities used by students will be retained on site and there will be no further need for parks because of this project. There are no elements of the proposed project that would significantly impact other public facilities, such as regional hospitals or libraries. Additionally, there are no components of the proposed project or anticipated future development at the site that would increase population to the extent that new or physically-altered public facilities would be required. A **less than significant** impact would occur.

Issues and Supporting Information	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No Impact
<b>RECREATION:</b> Would the project:				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				x
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				x

## SETTING

The project site is a school with recreational facilities for students on site. No additional students are expected to enroll as a result of the project. Recreational facilities used by students will be retained on site. The City of Arcata has a total of 23 parks, and manages several open space areas including Aldergrove Marsh, Arcata Marsh and Wildlife Sanctuary and Shay Park, for a total of approximately 88 acres of parks and recreational facilities and 3,744 acres of total public open space (City of Arcata Parks and Recreation Parks Master Plan, 2010). The State of California guidelines establish a ratio of at least five (5) acres of parkland for each 1,000 residents of the State. The proposed project area is in the vicinity of two community parks and an open space area, including:

- Bayside Park, located approximately 0.5 miles north of the site;
- Sunnybrae Park, located approximately 0.8 miles north of the site.
- Sunnybrae Community Forest, approximately 0.9 miles north of the site.

## DISCUSSION

**a-b)** The project site is a school that provides existing recreational facilities for students. No additional students are expected to enroll as a result of the project. The project will not increase the number of users or require greater use of City-maintained recreational facilities. The proposed project would not significantly increase the use of existing neighborhood parks or recreational facilities such that substantial physical deterioration or adverse physical effects would occur and does not include the construction or expansion of recreational facilities. Recreational facilities used by students will be retained on site. **No impact** to recreational facilities would occur.

Issues and Supporting Information	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No Impact
<b>TRANSPORTATION/TRAFFIC:</b> Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation systems, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.			x	
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county			x	

Issues and Supporting Information	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No Impact
congestion management agency for designated roads or highways?				
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				x
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			x	
e) Result in inadequate emergency access?			x	
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?				x

## SETTING

The project site is located off of Old Arcata Road, a regionally significant rural arterial route for southern Arcata and the Bayside community. It is part of an alternate north/south corridor to Highway 101, and provides access to unincorporated areas. Old Arcata Road also provides access to important facilities such as Sunny Brae Middle School, Jacoby Creek Elementary School, the Bayside Grange, and the Bayside Post Office. Old Arcata Road is an important truck route and serves as an oversized load route.

The City of Arcata's Pedestrian and Bicycle Master Plan states "South/southeast of central downtown Arcata leads to Sunnybrae and then to Bayside neighborhood. These primarily residential areas also support shopping centers hosting local businesses, schools, churches, and park and open space areas. Bayside Road and Old Arcata Road access these neighborhoods and are key thoroughways that should maximize multi-modal facilities to support bicycling and walking. Old Arcata Road might even be considered "main street" in the central Bayside."

The segment of road between Buttermilk Lane and Jacoby Creek School has a separated path along the western side of the road. This path ends at Jacoby Creek School and does not continue southward. This path is approximately four feet wide and is separated from the roadway by a strip of vegetation that varies in width between 2-8 feet. The segment of road between Jacoby Creek School and the intersection with Jacoby Creek Road has a few isolated segments of sidewalks on the eastern side of the road, but these segments are very minimal and do not provide a continuous path for pedestrian access. There is a speed bump and hatched crosswalk north end of the project site to ensure safe student crossing.

The posted speed limit along the project corridor is 25 miles per hour. There are no stop signs along this stretch of road, but there are multiple speed humps and a crosswalk in the vicinity of Jacoby Creek

School. Old Arcata Road experiences congestion during arrival and dismissal and special events at Jacoby Creek School. Parking is sometimes limited, and cars frequently can be seen parked in, and blocking, the bike lanes. In fall 2016, The City made numerous pothole repairs to the roadway, and then re-striped the roadway. During the re-striping effort, the travel lane widths were reduced from 11-12 feet down to 10 feet, which resulted in wider bike lanes.

The closest key intersection to the project site discussed in the City of Arcata's transportation element is the intersection of Old Arcata Road and Buttermilk Lane, roughly 0.75 miles north of the project site. The Buttermilk intersection is the southernmost key intersection outlined in the Plan. General Plan Buildout projections for the Buttermilk intersection estimate an average daily projection of 10,600 vehicles. Buildout projects directly south of the project site estimate 8,000 average daily vehicle trips. There has not been a Level of Service (LOS) designation or projection at the project site or in its immediate vicinity. The closest signalized intersection is at Sunset Boulevard and G Street adjacent to the Highway 101 on/off ramps, approximately 1.7 miles to the north along Old Arcata Road (City of Arcata Transportation Element, 2008).

## DISCUSSION

a) The proposed project involves construction of permanent classrooms to replace modular classrooms already on site and a new library. On-site walkways will be modified to provide accessible routes of travel on the campus between buildings. On-site traffic routing will be modified with restriping of the existing pavement to improve on-site traffic flow. Accessible bus and pedestrian loading zones will be added to the vehicle traffic plan. No modifications within the public right-of-way are proposed. The project will not affect the street or existing circulation systems, or increase risk to students or residents due to unsafe conditions. The project does not have the potential to conflict with the City of Arcata's transportation plan or affect the performance of the City's circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation systems, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit. Therefore a **less than significant** impact would occur.

b) Similar to many school sites, Jacoby Creek School is known to have a high level of traffic in the mornings and afternoons during school drop-off and pickup times. However, the proposed project does not involve increasing the number of students or staff, and therefore will not increase congestion at the project site. Additionally, the District recently reviewed the traffic flow in and out of campus and as a result of that review, the District plans to begin work to redesign the school buses ingress, egress and loading; redesign the drop off and pick up lanes; and restripe the parking and drop off and pick up lanes. The District also coordinates with the Arcata Community Center to create a bus stop there and encourages parents to drop children off at the Center to reduce traffic congestion at the School.

Minor temporary changes in traffic volumes or patterns would result from construction of the Project. Project construction would require deliveries of equipment and materials to the site, as well as daily commute trips by construction employees. Potential transportation system impacts during the construction phase of the proposed project include the potential to disrupt traffic flows on area roadways through the addition of construction vehicles turning in and out of the project site and sharing the roadway with normal vehicle traffic, creating potential conflicts. These impacts would be temporary. Given the temporary nature and availability of on-site staging and construction related parking areas, construction related traffic impacts are considered less than significant. Once constructed, the proposed project would not change overall traffic to and from the site. Therefore, the project will not conflict with

applicable congestion management programs or level of service standards. A **less than significant impact** would occur.

c) The proposed project is not located near an airport, would have no impact on air traffic patterns, would not substantially increase air traffic levels, and would not result in substantial safety risks. **No impact** would occur.

d) As the proposed project involves construction of new path of travel improvements, including replacement of existing walkways, a new bus loading zone, parking improvements, new ramps and sidewalks, and site drainage improvements. None of these are in the public right-of-way, and are intended to increase vehicular and pedestrian safety. The School must comply with all design standards set by the Division of the State Architect (DSA), including, but not limited to, site access, roadway width, and turning radii. No incompatible uses are proposed that would interfere with traffic safety. Therefore, the proposed project would not substantially increase hazards due to design features or incompatible uses; a **less than impact** would occur.

e) The project site is located adjacent to Jacoby Creek Road, and is already served by an existing street system. Emergency access to the project site already exists from these streets, and would continue to exist under the proposed project. Creating more direct fire access is included in Phase One of the proposed project, including the installation of a new fire hydrant, fire water service, and fire access road to meet the current fire code requirements. A **less than significant impact** would occur.

f) The City of Arcata's Pedestrian and Bicycle Master Plan notes Old Arcata Road as a key thoroughway that should maximize multi-modal facilities to support bicycling and walking. Old Arcata Road has existing Class II bike lanes and multi-use trails in the vicinity of the project site and the School site provides bike racks and actively encourages biking and walking to and from the school site. Therefore, the project adheres to the intentions of the Arcata Pedestrian and Bicycle Master Plan and does not conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the safety of such facilities. **No impact** would occur.

Issues and Supporting Information	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No Impact
<b>UTILITIES AND SERVICE SYSTEMS:</b> Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			x	
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			x	
c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the			x	



Issues and Supporting Information	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No Impact
construction of which could cause significant environmental effects?				
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?			x	
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			x	
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			x	
g) Comply with federal, state, and local statutes and regulations related to solid waste?			x	

## SETTING

The proposed project is planned to be completed in two phases. Phase One consists of construction of a new library building and new bus shelter. These buildings are not replacing existing structure and will require associated mechanical, plumbing, and electrical improvements. Also proposed is the installation of a new fire hydrant, fire water service, fire access road and fire alarm system to meet current fire code requirements. A new domestic water line from the street will be installed. An existing storm drain will be relocated to avoid the footprint of a proposed building.

Walkways will be modified to provide accessible routes of travel on the campus between buildings and will stop at minimum three feet from the public right-of-way. Traffic routing will be modified with restriping of the existing pavement. Accessible Bus and Pedestrian loading zones will be added to the vehicle traffic plan.

Phase Two consists of constructing five new buildings with water and electrical services. Of these five new building areas, three classrooms will replace existing modular structures, one classroom will be wholly new and will not replace an existing structure, and the final building area will be a newly-constructed addition to an existing classroom. Additional walkways will be modified to provide accessible routes of travel on the campus to the new buildings.

## DISCUSSION

**a, b, d, e)** The Jacoby Creek School site is served by City of Arcata water and sewer service. The project site receives water service from the Jacoby Creek County Water District (CWD). Jacoby Creek CWD receives its water from the City of Arcata under contract. The City of Arcata performs the treatment, operation, and maintenance of the water system. The City of Arcata receives most of its water from the

Humboldt Bay Municipal Water District (HBMWD). New 3" and 8" water service lines are proposed to run from the existing City of Arcata water hookup at Jacoby Creek Road to the proposed fire hydrant located south of the Library structure. All extensions are relatively minor and will only continue to serve the existing school population. No new users of the system are anticipated as a result of this project and the project is consistent with the existing overall site uses; any incremental increase in demand would not be significant. Therefore, the City would have sufficient water supplies to serve the project from existing entitlements and resources. Existing water supplies and existing water treatment, storage, and distribution facilities are expected to be adequate to serve the proposed project, and no construction or expansion of off-site facilities is expected to be necessary to serve the project. The project would not require or result in the construction of new water supply or off-site distribution facilities or expansion of existing facilities. Environmental effects of on-site construction of proposed water line connections are evaluated throughout this document.

The City of Arcata provides sewage collection, treatment, and disposal service within the City, including the project site. A new extension to the existing on-site sanitary sewer service line is proposed to serve three new bathrooms. Since the proposed project does not result in an increase to overall school population, the proposed project is expected to have negligible effects to existing discharges and therefore would not significantly impact the City's treatment capacity.

The proposed project is not expected to increase water usage or exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board, require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, deplete water supplies, or result in a determination that the wastewater treatment provider does not have adequate capacity to serve the project's projected demand. A **less than significant impact** would occur.

**c)** The project will include a new extension to the existing storm drain line leading from the library site, as well as three new drop inlets (DIs) at the southwest, northwest, and northeast corners of the library/classroom complex. These DIs will feed into the new extension to the existing storm drain line. All water catchment is proposed to be installed and tied into the existing storm drain line and stormwater will continue to be routed to the existing drainage system. Trenching for the storm drain extension and DIs is anticipated to be at the same depth as the foundation, a maximum of 36 inches, any environmental effects of which will be mitigated for (see CULT 1-7). Development will not significantly increase the amount of impervious surface at the project site, as the library and classrooms will be placed over existing pervious surface. The proposed project would therefore not be anticipated to require or result in the construction of new stormwater drainage facilities, or expansion of existing facilities, the construction of which could cause significant environmental effects. A **less than significant impact** would occur.

**f, g)** The School District contracts with Recology Arcata (previously Arcata Garbage Company) to pick up a three-yard dumpster twice per week. The dumpster often retains additional capacity and is not always full at the time of pickup. The District estimates it generates roughly nine hundred pounds of waste per week. The District used to have three scheduled pickups per week, but has been able to reduce waste to such an extent that they were able to renegotiate their contract down to two per week.

As the District is not planning to increase enrollment a significant increase in ongoing solid waste is not anticipated under the project, and all solid waste generated as a result of building construction will be disposed of in accordance to all federal, state, and local statutes and regulations. Recology Arcata works

closely with city and state government to ensure that shared sustainability goals are made possible and ensures compliance with Federal, State, and local statutes and regulations related to solid waste. Therefore this project will not negatively impact existing solid waste services or impair the attainment of solid waste reduction goals. A **less than significant** impact would occur.

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

## DISCUSSION

Certain mandatory findings of significance must be made to comply with CEQA Guidelines §15065. The proposed project has been analyzed, and it has been determined that it would not:

- Substantially degrade environmental quality;
- Substantially reduce fish or wildlife habitat;
- Cause a fish or wildlife population to fall below self-sustaining levels;
- Threaten to eliminate a plant or animal community;
- Reduce the numbers or range of a rare, threatened, or endangered species;
- Eliminate important examples of the major periods of California history or pre-history;

- Achieve short term goals to the disadvantage of long term goals;
  - Have environmental effects that will directly or indirectly cause substantial adverse effects on human beings; or
  - Have possible environmental effects that are individually limited but cumulatively considerable when viewed in connection with past, current, and reasonably anticipated future projects.
- a) With the mitigation measures described in this document, the project would not degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal. See Biological Resources Section for a specific discussion of biological resources supporting this finding. With all proposed mitigations, the project will not eliminate important examples of the major periods of California history or prehistory. See Biological Resources and Cultural Resources Sections for specific discussions supporting this finding. As such, potential impacts would be **less than significant with mitigation**.
- b) The project's individual impacts would not add appreciably to any existing or foreseeable future significant cumulative impact, such as visual quality, biological resources, stormwater runoff, flooding, traffic impacts, or air quality degradation. Incremental impacts, if any, would be small and undetectable. There are no known current project applications in the project vicinity. No cumulative impacts have been identified for the project, and the project's implementation of the recommended mitigation measures would reduce the project's contribution to cumulative impacts. As such, potential impacts would be **less than significant**.
- c) The proposed project has been designed to be consistent with required standards for school facility design including the project's Geotechnical and Hazards Study; measures to reduce project related impacts to the environment have been incorporated into the project design wherever possible. The proposed project's potential to result in environmental effects that could adversely affect human beings, either directly or indirectly, has been discussed throughout this document. Based on the project as described in this Initial Study and a review of applicable regulations, there is no evidence that the proposed project will cause substantial adverse effects on human beings, either directly or indirectly. As such, potential impacts would be **less than significant**.

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# APPENDIX A

## CNDDDB Search- Arcata South Quad September 2018

FID	SNAME	CNAME	SENSITIVE	FEDLIST	CALLIST
0	Lilium occidentale	western lily	Y	Endangered	Endangered
8	Lilium occidentale	western lily	Y	Endangered	Endangered
10	Thaleichthys pacificus	eulachon	N	Threatened	None
22	Oncorhynchus clarkii clarkii	coast cutthroat trout	N	None	None
23	Oncorhynchus mykiss irideus pop. 16	steelhead - northern California DPS	N	Threatened	None
24	Entosphenus tridentatus	Pacific lamprey	N	None	None
25	Oncorhynchus kisutch pop. 2	coho salmon - southern Oregon / northern California ESU	N	Threatened	Threatened
28	Rana boylei	foothill yellow-legged frog	N	None	Candidate Threatened
33	Charadrius montanus	mountain plover	N	None	None
34	Ascapus truei	Pacific tailed frog	N	None	None
35	Apodonta rufa humboldtiana	Humboldt mountain beaver	N	None	None
38	Coturnicops noveboracensis	yellow rail	N	None	None
43	Bombus occidentalis	western bumble bee	N	None	None
44	Bombus caliginosus	obscure bumble bee	N	None	None
46	Cardamine angulata	seaside bittercress	N	None	None
49	Viola palustris	alpine marsh violet	N	None	None
89	Carex praticola	northern meadow sedge	N	None	None
101	Oncorhynchus mykiss irideus pop. 16	steelhead - northern California DPS	N	Threatened	None
102	Oncorhynchus clarkii clarkii	coast cutthroat trout	N	None	None
103	Oncorhynchus kisutch pop. 2	coho salmon - southern Oregon / northern California ESU	N	Threatened	Threatened
109	Rana aurora	northern red-legged frog	N	None	None
121	Fissidens pauperculus	minute pocket moss	N	None	None
125	Eucyclogobius newberryi	tidewater goby	N	Endangered	None
137	Arborimus pomo	Sonoma tree vole	N	None	None
182	Pandion haliaetus	osprey	N	None	None
195	Entosphenus tridentatus	Pacific lamprey	N	None	None
196	Arborimus pomo	Sonoma tree vole	N	None	None
204	Northern Coastal Salt Marsh	Northern Coastal Salt Marsh	N	None	None
208	Oncorhynchus clarkii clarkii	coast cutthroat trout	N	None	None
209	Castilleja ambigua var. humboldtensis	Humboldt Bay owl's-clover	N	None	None
210	Oncorhynchus clarkii clarkii	coast cutthroat trout	N	None	None
211	Fissidens pauperculus	minute pocket moss	N	None	None
217	Rana aurora	northern red-legged frog	N	None	None
221	Chloropyron maritimum ssp. palustre	Point Reyes salty bird's-beak	N	None	None
222	Arborimus pomo	Sonoma tree vole	N	None	None
231	Eucyclogobius newberryi	tidewater goby	N	Endangered	None
243	Apodonta rufa humboldtiana	Humboldt mountain beaver	N	None	None
244	Rana aurora	northern red-legged frog	N	None	None
248	Sidalcea malachroides	maple-leaved checkerbloom	N	None	None
266	Rana aurora	northern red-legged frog	N	None	None
271	Rana aurora	northern red-legged frog	N	None	None
274	Erethizon dorsatum	North American porcupine	N	None	None
278	Eucyclogobius newberryi	tidewater goby	N	Endangered	None
280	Pandion haliaetus	osprey	N	None	None
281	Pandion haliaetus	osprey	N	None	None
282	Pandion haliaetus	osprey	N	None	None
299	Corynorhinus townsendii	Townsend's big-eared bat	N	None	None
302	Myotis evotis	long-eared myotis	N	None	None
326	Phalacrocorax auritus	double-crested cormorant	N	None	None
334	Sidalcea malachroides	maple-leaved checkerbloom	N	None	None
341	Rana aurora	northern red-legged frog	N	None	None
347	Carex lyngbyei	Lyngbye's sedge	N	None	None
348	Castilleja ambigua var. humboldtensis	Humboldt Bay owl's-clover	N	None	None
355	Carex lyngbyei	Lyngbye's sedge	N	None	None
357	Rhyacotriton variegatus	southern torrent salamander	N	None	None
367	Sidalcea malachroides	maple-leaved checkerbloom	N	None	None
368	Ascapus truei	Pacific tailed frog	N	None	None
374	Oncorhynchus clarkii clarkii	coast cutthroat trout	N	None	None
375	Montia howellii	Howell's montia	N	None	None
388	Apodonta rufa humboldtiana	Humboldt mountain beaver	N	None	None
394	Rana aurora	northern red-legged frog	N	None	None
399	Lycopodium clavatum	running-pine	N	None	None
411	Rana aurora	northern red-legged frog	N	None	None
413	Pandion haliaetus	osprey	N	None	None
435	Lycopodium clavatum	running-pine	N	None	None
436	Carex lyngbyei	Lyngbye's sedge	N	None	None
439	Rana aurora	northern red-legged frog	N	None	None
440	Eucyclogobius newberryi	tidewater goby	N	Endangered	None
441	Castilleja ambigua var. humboldtensis	Humboldt Bay owl's-clover	N	None	None
457	Rana aurora	northern red-legged frog	N	None	None
475	Rana aurora	northern red-legged frog	N	None	None
489	Rana aurora	northern red-legged frog	N	None	None

496	<i>Sidalcea malachroides</i>	maple-leaved checkerbloom	N	None	None
511	<i>Rana aurora</i>	northern red-legged frog	N	None	None
512	<i>Rana aurora</i>	northern red-legged frog	N	None	None
532	<i>Rana aurora</i>	northern red-legged frog	N	None	None
543	<i>Rana aurora</i>	northern red-legged frog	N	None	None
553	<i>Ascaphus truei</i>	Pacific tailed frog	N	None	None
558	<i>Rhyacotriton variegatus</i>	southern torrent salamander	N	None	None
567	<i>Rana aurora</i>	northern red-legged frog	N	None	None
578	<i>Erethizon dorsatum</i>	North American porcupine	N	None	None
589	<i>Rhyacotriton variegatus</i>	southern torrent salamander	N	None	None
597	<i>Pandion haliaetus</i>	osprey	N	None	None
600	<i>Pandion haliaetus</i>	osprey	N	None	None
601	<i>Pandion haliaetus</i>	osprey	N	None	None
605	<i>Lycopodium clavatum</i>	running-pine	N	None	None
606	<i>Lycopodium clavatum</i>	running-pine	N	None	None
607	<i>Pandion haliaetus</i>	osprey	N	None	None
608	<i>Pandion haliaetus</i>	osprey	N	None	None
609	<i>Nycticorax nycticorax</i>	black-crowned night heron	N	None	None
615	<i>Pandion haliaetus</i>	osprey	N	None	None
645	<i>Carex lyngbyei</i>	Lyngbye's sedge	N	None	None
646	<i>Pandion haliaetus</i>	osprey	N	None	None
648	<i>Rhyacotriton variegatus</i>	southern torrent salamander	N	None	None
649	<i>Mitellastrum caulescens</i>	leafy-stemmed mitrewort	N	None	None
657	<i>Rana boylei</i>	foothill yellow-legged frog	N	None	Candidate Threatened
660	<i>Pandion haliaetus</i>	osprey	N	None	None
665	<i>Ardea herodias</i>	great blue heron	N	None	None
666	<i>Ardea herodias</i>	great blue heron	N	None	None
668	<i>Lycopodium clavatum</i>	running-pine	N	None	None
691	<i>Pandion haliaetus</i>	osprey	N	None	None
697	<i>Emys marmorata</i>	western pond turtle	N	None	None
698	<i>Carex lyngbyei</i>	Lyngbye's sedge	N	None	None
700	<i>Lycopodium clavatum</i>	running-pine	N	None	None
713	<i>Castilleja ambigua</i> var. <i>humboldtensis</i>	Humboldt Bay owl's-clover	N	None	None
714	<i>Spergularia canadensis</i> var. <i>occidentalis</i>	western sand-spurrey	N	None	None
715	<i>Carex lyngbyei</i>	Lyngbye's sedge	N	None	None
727	<i>Chloropyron maritimum</i> ssp. <i>palustre</i>	Point Reyes salty bird's-beak	N	None	None
728	<i>Pandion haliaetus</i>	osprey	N	None	None
731	<i>Pandion haliaetus</i>	osprey	N	None	None
732	<i>Pandion haliaetus</i>	osprey	N	None	None
734	<i>Pandion haliaetus</i>	osprey	N	None	None
735	<i>Pandion haliaetus</i>	osprey	N	None	None
759	<i>Carex lyngbyei</i>	Lyngbye's sedge	N	None	None
771	<i>Sidalcea malachroides</i>	maple-leaved checkerbloom	N	None	None
778	<i>Sidalcea malachroides</i>	maple-leaved checkerbloom	N	None	None
791	<i>Lycopodium clavatum</i>	running-pine	N	None	None
796	<i>Lycopodium clavatum</i>	running-pine	N	None	None
801	<i>Carex lyngbyei</i>	Lyngbye's sedge	N	None	None
804	<i>Sidalcea malachroides</i>	maple-leaved checkerbloom	N	None	None
809	<i>Montia howellii</i>	Howell's montia	N	None	None
828	<i>Usnea longissima</i>	Methuselah's beard lichen	N	None	None
829	<i>Sidalcea malachroides</i>	maple-leaved checkerbloom	N	None	None
856	<i>Sidalcea malachroides</i>	maple-leaved checkerbloom	N	None	None