SUPPLEMENT TO NOTICE OF EXEMPTION
East Union High School Improvement Project

Manteca Unified School District

The Manteca Unified School District (District) is proposing to upgrade the East Union High School by replacing the existing classroom and school-supporting facilities with new structures and improvements on the existing campus. The proposed improvements would not increase the existing student capacity. This Supplement to Notice of Exemption (Supplement) provides justification for the Categorical Exemption pursuant to the California Environmental Quality Act (CEQA) Guidelines under California Code of Regulations, Title 14 §§ 15300.2, 15301, 15302, 15303, 15311, and 15314.

1. EXISTING CONDITIONS

PROJECT LOCATION

East Union High School is at 1700 Union Road in the City of Manteca, San Joaquin County (Assessor's Parcel Number [APN] 216-12-001). APN 216-12-001 totals 58.38 acres and is developed with the East Union High School on its western 40.38 acres and Neil Hafley Elementary School on the eastern 18 acres. The city of Manteca abuts the city of Lathrop to the west and unincorporated San Joaquin County to the east, south, and north (see Figure 1, *Regional Location*). Figure 1 also shows regional access to the high school via State Route (SR) 99, which is 0.7 miles to the east, SR-120 2.4 miles to the south, and Interstate (I)-5 2.8 miles to the west. The high school has two street frontages, Union Road to the west and Northgate Drive to the south (see Figure 2, *Local Vicinity*). The school is accessed from two parking lots via Union Road, the main student parking lot to the north and faculty parking to the south (see Figure 3, *Aerial Photograph*). No vehicle access is provided from Northgate Drive. The northern main student parking lot access is provided from the "T" intersection at Union Road and Lancer Way/Spragus Street, which is a signalized intersection, and a secondary driveway for the parking lot is approximately 150 feet to the south. The southern faculty parking lot is accessed via two driveways on Union Road, one for enter-only and one for exit-only.

EXISTING CONDITIONS

East Union High School is currently developed with classroom buildings, portable classrooms, admin, library, cafeteria, labs, one big and one small gymnasiums, ball fields, a football stadium, tennis courts, a swimming pool, and two parking lots.

SURROUNDING LAND USES

The existing high school is in a residential neighborhood surrounded by residential uses to the north and south, a church and residential uses to the west, and Neil Hafley Elementary School to the east.

2. PROJECT DESCRIPTION

The District proposes to improve the existing East Union High School by constructing a two-story, 28-classroom building with a media center totaling approximately 30,000 square feet (sf) on the western grass area, and a new auxiliary gym (approximately 15,100 sf) and a weight room building (approximately 3,000 sf) on the hardcourts north of the existing big gym, for a total of 48,100 sf of new building area. The proposed site plan is shown on Figure 4, *Proposed Site Plan*. No demolition of existing structures would be necessary except for a small, approximately 400-square-foot utility building north of the existing big gym. The proposed project also includes regrading, repaving, and restriping the existing north parking lot. Once the new buildings are constructed, the 28 portable classrooms throughout the campus would be removed. Therefore, the proposed project would not increase the current student capacity at the high school campus. The District is tentatively scheduled to begin construction in the summer of 2023.

3. REASONS WHY THE PROJECT IS EXEMPT

The proposed project is exempt from further environmental documentation under the California Environmental Quality Act (Public Resources Code §§ 21000 et seq.), categorical exemptions Class 1, Class 2, Class 3, and Class 14.

> Class 1, Existing Facilities (CEQA Guidelines § 15301), consists of the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment or topographical features, involving negligible or no expansion of existing or former use.

The proposed project includes grading, repaving, and restriping of the existing north parking lot. The proposed parking lot improvement would occur within the existing boundaries of the parking lot and would not expand the existing use or capacity. Therefore, the proposed project meets the criteria for an exemption under CEQA Guidelines Section 15301. A review of the possible exceptions to the exemption, as outlined under CEQA Guidelines § 15300.2 and discussed in Section 4, *Exceptions to an Exemption*, determined that no characteristics or circumstances would invalidate findings that the project is exempt from further analysis under CEQA.

> Class 2, Replacement or Reconstruction (CEQA Guidelines § 15302), consists of replacement or reconstruction of existing structures and facilities where the new structure will be located on the same site as the structure replaced and will have substantially the same purpose and capacity as the structure replaced.

The proposed project includes grading, repaving, and restriping of the existing north parking lot. The proposed parking lot improvement would occur within the existing parking lot boundaries, would be a reconstruction of existing parking facilities on the same site, and would have the same purpose and substantially the same capacity as the facility replaced. Therefore, the proposed project meets the criteria for an exemption under CEQA Guidelines § 15302. A review of the possible exceptions to the exemption, as outlined under CEQA Guidelines § 15300.2 and discussed in Section 4, *Exceptions to an Exemption*, determined that no characteristics or circumstances would invalidate findings that the project is exempt from further analysis under CEQA.

> Class 3, New Construction or Conversion of Small Structures (CEQA Guidelines § 15303), consists of construction and location of limited numbers of new, small facilities or structures; installation of small new equipment and facilities in small structures; and the conversion of existing small structures from one use to another where only minor modifications are made in the exterior of the structure. Examples of this exemption include. (d) Water main, sewage, electrical, gas, and other utility extensions, including street improvements, of reasonable length to serve such construction.

The proposed project would construct a total of 48,100 sf of new building area that would require installation of water, sewer, electrical, gas, and other utility connections and extensions in the campus. The project site is already being served by wet and dry utilities, and new buildings would be constructed with water-conserving and energy-efficient systems in compliance with the 2022 Building Energy Efficiency Standards and the Green Building Standards Code. The proposed project would serve the existing high school without increasing the existing student capacity. Therefore, the proposed project meets the criteria for an exemption under CEQA Guidelines § 15303. A review of the possible exceptions to the exemption, outlined under CEQA Guidelines § 15300.2 and discussed in Section 4 of this document, determined that no characteristics or circumstances would invalidate findings that the project is exempt from further analysis under CEQA.

> Class 4, Minor Alterations to Land (CEQA Guidelines § 15304), consists of minor public or private alterations in the condition of land, water, and/or vegetation which do not involve removal of healthy, mature, scenic trees except for forestry or agricultural purposes.

The proposed project would require minor alterations to land due to removal of landscaping and trees to construct a two-story classroom and media center building. The proposed project would also require grading and minor trenching and backfilling to install utility systems, then the surface would be restored. The proposed changes to the condition of land and vegetation would not involve removal of healthy, mature, scenic trees, and the area to be disturbed is generally level with a slope of less than 10 percent. Therefore, the proposed project meets the criteria for an exemption under CEQA Guidelines § 15304. A review of the possible exceptions to the exemption, outlined under CEQA Guidelines § 15300.2 and discussed in Section 4 of this document, determined that no characteristics or circumstances would invalidate findings that the project is exempt from further analysis under CEQA.

> Class 14, Minor Additions to Schools (CEQA Guidelines § 15314), consists of minor additions to existing schools within existing school grounds where the addition does not increase original student capacity by more than 25% or ten classrooms, whichever is less. The addition of portable classrooms is included in this exemption.

The proposed project would construct a 28-classroom building with a media center, a new auxiliary gym, and a weight room building. Once the buildings are constructed, 28 portable classrooms would be removed from the campus. Therefore, there would be no increase in the original student capacity of the high school. The new auxiliary gym and weight room building would serve the existing school program and would not impact the existing school capacity. Therefore, the proposed project would meet the criteria for an exemption under CEQA Guidelines § 15314. A review of the possible exceptions to the exemption, as outlined under CEQA Guidelines § 15300.2 and discussed in Section 4 of this document, determined that no characteristics or circumstances would invalidate findings that the project is exempt from further analysis under CEQA.

4. REVIEW OF EXCEPTIONS TO THE CATEGORICAL EXEMPTION

The proposed project has been reviewed under CEQA Guidelines § 15300.2, Exceptions, for any characteristics or circumstances that might invalidate findings that the project is exempt from further CEQA analysis. Each exception is reproduced and followed by an assessment of whether that exception applies to the proposed project.

> (a) Location. Classes 3, 4, 5, 6, and 11 are qualified by consideration of where the project is to be located—a project that is ordinarily insignificant in its impact on the environment may in a particularly sensitive environment be significant. Therefore, these classes are considered to apply all instances, except where the project may impact on an environmental resource of hazardous or critical concern where designated, precisely mapped, and officially adopted pursuant to law by federal, state, or local agencies.

The project site is on the existing Manteca High School campus in a community surrounded by various urban uses in the city of Manteca. The project site is already developed and operates as a comprehensive high school. The campus does not have any sensitive biological species because it is developed as a school campus with actively maintained turf field and landscape, frequent human disturbances, and absence of habitat. The project site does not support native wildlife species, and it does not have any streams or water bodies or native habitat for wildlife species to thrive. Also, the project site is not designated or precisely mapped as a hazardous materials site, as discussed in item (e).

> (b) Cumulative Impact. All exemptions for these classes are inapplicable when the cumulative impact of successive projects of the same type in the same place, over time is significant.

A cumulative impact could occur if the project would result in an incrementally considerable contribution to a significant cumulative impact in consideration of past, present, and reasonably foreseeable future projects. Because

the proposed project would not increase the student capacity and would accommodate existing school programs without changing or expanding its uses within the boundaries of the existing high school campus, the impacts would be limited to short-term construction and would not be cumulatively considerable. The District plans to implement similar classroom improvement project on Manteca High School without increasing the student capacity. Manteca High School is at 450 E. Yosemite Avenue, approximately 2 miles south of the project site. Considering the distance from the project site and scale, construction impacts would be limited to the immediate vicinity and would not result in cumulative impacts. No other successive projects of the same type in the same place that could result in cumulative impacts are anticipated. This exception does not apply to the proposed project.

(c) **Significant Effects.** A categorical exemption shall not be used for an activity where there is a reasonable possibility that the activity will have a significant effect on the environment due to unusual circumstances.

Aesthetics

The project site is in an urban area already developed as a high school and is not part of a scenic vista or within a state scenic highway. The proposed project is consistent with the existing use of the site as a high school and would not conflict with any zoning regulations governing scenic quality. The existing high school is surrounded by residential uses to the north and south, a church and residential uses to the west, and Neil Hafley Elementary School in a residential neighborhood to the east. There are no unique or protected views on or near the project site. The proposed project would not use any highly reflective building materials to cause adverse daytime light or glare impact in the area. There are no unusual circumstances that could result in significant aesthetics impacts, and this exception would not apply to the proposed project.

Air Quality

As substantiated in Attachment A, *Air Quality Technical Memorandum*, to this Supplement, the proposed project would not result in any significant impact related to air quality during construction and operation of the proposed project. This exception does not apply to the proposed project.

Biological Resources

The project site is already developed as a comprehensive high school and does not contain any sensitive natural community or riparian habitats. The project site is identified as "urban" by Figure 3.4-1, Land Cover Types, in the City of Manteca General Plan EIR. The two-story classroom building would be constructed on the western portion of the campus with grass and ornamental trees as shown on Figure 3, *Aerial Photograph*, and the small gym and the weight room would be placed on the paved surface area without any biological resources. According to the California Natural Diversity Database (CNDB), the project site is within the Manteca Quad, where six special status species are identified: three birds (Swainson's hawk, great egret, and tricolored blackbird), two insects (western bumble bee and moestan blister beetle), and one mammal (riparian brush rabbit) (CDFW 2023). As described below, the project site does not contain the described habitat to sustain the listed special status species.

Species	Habitat Description
Swainson's hawk	Nests in oaks or cottonwoods in or near riparian habitats. Forages in grasslands, irrigated pastures, and grain fields.
Great egret	Usually forages in rather open situations, as along edges of lakes, large marshes, shallow coastal lagoons and estuaries; also along rivers in wooded country. Usually nests in trees

Species	Habitat Description
	or shrubs near water, sometimes in thickets some distance from water, sometimes low in marsh.
Tricolored blackbird	Nests in dense colonies in emergent marsh vegetation, such as tules and cattails, or upland sites with blackberries, nettles, thistles, and grainfields. Habitat must be large enough to support 50 pairs. Probably requires water at or near the nesting colony.
Western bumble bee	Open coniferous, deciduous and mixed-wood forests, wet and dry meadows, montane meadows and prairie grasslands, meadows bordering riparian zones, and along roadsides in taiga adjacent to wooded areas, urban parks, gardens and agricultural areas, subalpine habitats and more isolated natural areas.
Moestan blister beetle	Annual grasslands, foothill woodlands, or saltbush scrub.
Riparian brush rabbit	Native valley riparian habitats with large clumps of dense shrubs, low-growing vines, and some tall shrubs and trees.

Because the project site is heavily disturbed by human activities and there are no native or sensitive habitats on or near the project site, the proposed project is not anticipated to adversely impact these special status species. The project site contains trees and grasslands expected to provide nesting habitat for raptors and migratory birds protected under the California Fish and Game Code (CFGC). CFGC § 3503 protects nesting habitat for common and sensitive bird and raptors and requires compliance. Therefore, if any phase of construction is proposed between February 1 and August 31, a qualified biologist must conduct a preconstruction nesting bird survey(s) no more than three days prior to initiation of grading to document the presence or absence of nesting birds or raptors within or directly adjacent (within 100 feet) to the impact area. Construction outside the nesting season (between September 1 and January 31) does not require preconstruction nesting bird surveys. The District is required to comply with the existing regulatory requirement concerning migratory birds and no unusual circumstances are anticipated. Furthermore, the city of Manteca is a participant in the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP), but because the project site does not contain any native or sensitive habitat or covered species, no impact to the SJMSCP is anticipated. There is no reasonable possibility that the proposed project will have a significant effect on the environment due to unusual circumstances related to biological resources.

Cultural Resources

The proposed project would not demolish existing school buildings other than a small utility building (approximately 400 square feet). A cultural resources review for the East Union High School was conducted at the Central California Information Center (CCIC), California State University, Stanislaus, to determine whether the study area had been previously surveyed for cultural resources and/or whether any such resources were known to exist on the project site: that is, (i) if prehistoric or historical archaeological sites had previously been recorded within the study area; (ii) if the project area had been systematically surveyed by archaeologists prior to the initiation of this field study; and/or (iii) whether the region of the field project was known to contain archaeological sites and to thereby be archaeologically sensitive. Records examined included archaeological site files and maps, the National Register of Historic Places, Historic Property Data File, California Inventory of Historic Resources, and the California Points of Historic Interest. The records review indicated that one previously recorded historical resource is known to exist within the East Union High School boundary. However, because the proposed project would not demolish any existing school buildings, no impact to historical resources would occur. The project site is already developed as a high school and has been previously disturbed. No records pertaining to significant archaeological resources were identified. Therefore, there

are no unusual circumstances related to historical and archaeological resources to result in a significant environmental impact. The Cultural Resources Review is included as Attachment B to this Supplement.

Geology and Soils

The project site is not within an Alquist-Priolo Earthquake Fault Zone, and there are no known active faults crossing the project site (CGS 2023). The nearest Alquist-Priolo Zone, the Greenville Fault Zone, is approximately 25 miles southwest of the city's boundary. There are also no known geological hazards, such as liquefaction, landslide, lateral spreading, or subsidence, on the project site (Manteca 2022). The proposed project would be required to comply with the seismic design parameters of the California Building Code (CBC), California Code of Regulations, Title 24, which regulates all building and construction projects and implements a minimum standard for building design and construction that includes specific requirements for foundations and seismic safety. All school facilities would require review and approval by the Division of the State Architect (DSA). There are no unusual circumstances pertaining to geology and soils that would apply to the proposed project. This exception does not apply to the proposed project.

Hazards and Hazardous Materials

Project construction would require the use of hazardous materials, including fuels, greases and other lubricants, and coatings such as paint. And since the proposed project would not require building demolition other than a small utility building, no substantial release of hazardous materials into the environment is anticipated. The handling, use, transport, and disposal of hazardous materials during the construction phase of the project are required to comply with the existing regulations of several agencies, such as the EPA, Occupational Safety and Health Administration, California Division of Occupational Safety and Health, and the US Department of Transportation. After construction, building maintenance may require the use of cleaners, solvents, paints, and other custodial products that are potentially hazardous. These materials would be used in relatively small quantities, clearly labeled, and stored in compliance with state and federal requirements. With the exercise of normal safety practices by the school maintenance staff, the proposed project would not create substantial hazards to the public or the environment.

Furthermore, the project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 based on the review of the GeoTracker, EnviroStor, EJScreen, EnviroMapper, or SWIS. Therefore, the proposed project would have less than significant impacts related to hazards and hazardous materials. There is no reasonable possibility that the proposed project would have a significant effect on the environment due to unusual circumstances related to hazards and hazardous materials. This exception does not apply to the proposed project.

Hydrology and Water Quality

Urban runoff from storms or nuisance flows (runoff during dry periods) from development projects can carry pollutants to receiving waters. The construction and operational phases of the proposed project could have the potential to impact water quality. Construction activities may impact water quality due to sheet erosion of exposed soils. Clearing, grading, excavation, and construction activities associated with the proposed project may impact water quality through soil erosion, increasing the amount of silt and debris carried in runoff. Additionally, the use of construction materials such as fuels, solvents, and paints may present a risk to surface water quality. Finally, refueling and parking construction vehicles and other equipment on-site during construction may result in oil, grease, or related pollutant leaks and spills that may discharge into the storm drain system. To minimize these potential impacts, the proposed project would be required to comply with the National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP) as well as prepare a Storm Water Pollution Prevention Plan that requires the incorporation of best management practices (BMPs) to control sedimentation, erosion, and hazardous materials

contamination of runoff during construction. The State Water Resources Control Board mandates that projects that disturb one or more acres of land must obtain coverage under the statewide CGP. The two-story classroom building would be built on the pervious grass area, and the small gym and the weight room would be built on the impervious area. All construction activities are required to comply with the NPDES CGP to reduce water quality and hydrology impacts to a less than significant level by the Central Valley Regional Water Quality Control Board. The project would occur within the existing high school with various school facilities. and no unusual circumstances that would cause significant environmental impacts.

Once the proposed project is completed, impervious surfaces within the boundary of the campus would increase, thus increasing the volume and speed of urban runoff generated. However, prior to ground disturbance, the District is required to prepare a Water Quality Management Plan and implement appropriate BMPs to ensure that impervious areas are minimized and that post-development conditions would have approximately the same drainage pattern and time of concentrations. There are no unusual circumstances related to hydrology and water quality impacts that would result in a significant impacts on the environmental due to project implementation. This exception does not apply to the proposed project.

Noise

As substantiated in Attachment C, *Noise Technical Memorandum*, to this Supplement, the proposed project would not result in any significant impact related to noise during construction and operation of the proposed project. This exception does not apply to the proposed project.

Public Services

The Manteca Fire Department provides fire protection services to the city of Manteca, including the project site. The nearest fire station to East Union High School is Manteca Fire Station 4 at 1465 W. Lathrop Road, approximately 0.34 mile northwest of the project site. The proposed project would replace portable classrooms with a permanent classroom building on the existing campus and support the existing school program by constructing a small gymnasium and a weight room; therefore, it would not increase the student capacity to increase the service population within the Manteca Fire Department's service boundary. Furthermore, the new building would be constructed to adhere to the applicable fire code and emergency access standards to ensure fire safety. Therefore, the proposed project would not increase the demand for fire services or have a substantial impact on response times.

The Manteca Police Department provides police protection services to the city of Manteca, including the streets that surround the East Union High School campus. Additionally, the campus security system includes a School Resources Officer, surveillance system, and fire and alarm systems. The proposed project would not increase the student capacity at the high school; therefore, it would not increase the police protection demands within the Manteca Police Department's service area that could lead to significant environmental impacts. There is no unusual circumstance surrounding the public services such as fire and police services that could result in a significant impact to the environment. This exception does not apply to the proposed project.

Transportation

For the purposes of CEQA, transportation impacts are analyzed in terms of vehicle miles traveled (VMT). OPR's "Technical Advisory on Evaluating Transportation Impacts in CEQA" (December 2018) includes specifications for VMT methodology and recommendations for significance thresholds, screening projects that may be presumed to have less than significant impacts, and mitigation. Screening criteria include small projects, which the Technical Advisory concluded that, absent any information to the contrary, projects that generate 110 trips per day or less may be

assumed to cause a less than significant transportation impact. The proposed project would not increase the existing student capacity by increasing the number of classrooms or creating a new use that could generate additional traffic. Therefore, the proposed project meets OPR's Technical Advisory screening criteria. There are no unusual circumstances that would cause a significant transportation impact. This exception does not apply to the proposed project.

Utilities and Service Systems

The newly constructed buildings would require water, wastewater, natural gas, and electricity services. The existing campus is already served by these wet and dry utility systems, and no new services would be required. The new buildings would be designed using green building practices, including those of the most current Building Energy Efficiency Standards (Title 24, California Code of Regulations, Part 6) and CALGreen (Title 24, California Code of Regulations, Part 11). Both standards contain energy efficiency requirements for newly constructed buildings. Therefore, the new buildings would consume less water, natural gas, and electricity and generate less wastewater compared to the portable buildings to be removed. As stated in the Project Description, the proposed project would not increase the student capacity, and the utilities and service systems demands would not be increased. There is no reasonable possibility that the proposed project would have a significant effect on the environment due to unusual circumstances related to utilities and service systems. Therefore, this exception does not apply to the proposed project.

Wildfire

The project site is in a highly urbanized area and no wildfire hazards are anticipated. There is no reasonable possibility that the proposed project would have a significant effect on the environment due to unusual circumstances related to wildfire. Therefore, this exception does not apply to the proposed project.

(d) **Scenic Highways.** A categorical exemption shall not be used for a project which may result in damage to scenic resources, including but not limited to, trees, historic buildings, rock outcroppings, or similar resources, within a highway officially designated as a state scenic highway.

There are no officially designated state scenic highways near Manteca. The closest officially designated state scenic highway is I-580—from I-5 to the Alameda County line—approximately 15 miles to the southwest (Caltrans 2022). The closest eligible state scenic highway is a segment of I-580 in Alameda County, approximately 20 miles to the west (Caltrans 2022). Due to the distance between the project site and scenic highways, the proposed project would not have any effect on the scenic value of officially designated or eligible scenic highways. There are no scenic resources on campus or in the surrounding community. This exception does not apply to the proposed project.

(e) **Hazardous Waste Sites.** A categorical exemption shall not be used for a project located on a site which is included on any list compiled pursuant to Section 65962.5 of the Government Code.

California Government Code Section 65962.5 requires the compiling of lists of the following types of hazardous materials sites: hazardous waste facilities; hazardous waste discharges for which the State Water Quality Control Board has issued certain types of orders; public drinking water wells containing detectable levels of organic contaminants; underground storage tanks with reported unauthorized releases; and solid waste disposal facilities from which hazardous waste has migrated.

Five environmental lists were searched for hazardous materials sites on the school campus and within a 500-foot radius:

» GeoTracker: State Water Resources Control Board (SWRCB 2023)

» EnviroStor: Department of Toxic Substances Control (DTSC 2023)

» EJScreen: US Environmental Protection Agency (EPA 2023a)

» EnviroMapper: US Environmental Protection Agency (EPA 2023b)

» Solid Waste Information System (SWIS): California Department of Resources Recovery and Recycling (CalRecycle 2023)

The project site is not listed on GeoTracker, EnviroStor, EJScreen, EnviroMapper, or SWIS as a hazardous materials site. EnviroStor. Therefore, the project would not create a hazard to the public because of a hazardous materials site pursuant to Government Code § 65962.5. This exception does not apply to the proposed project.

(f) Historical Resources. A categorical exemption shall not be used for a project which may cause a substantial adverse change in the significance of historical resources.

Under Public Resources Code § 21084.1, a historical resource is a resource listed in or determined to be eligible for listing in the California Register of Historical Resources. Additionally, historical resources in a local register of historical resources are presumed to be historically or culturally significant, and a lead agency can determine whether the resource may be a historical resource.

A records search was conducted for the project site, and the result is included in Appendix B to this Supplement. According to the records search, the project site includes one recorded historical building resource within the project site. However, no specific identification of the resource was shown, and the resource is not listed in the California Register of Historical Resources or a local register of historical resources. The proposed project would not demolish any buildings or other structures that could qualify as a historical resource pursuant to Public Resources Code § 21084.1. The project would not cause significant impacts on historical resources This exception does not apply to the proposed project.

Conclusion

As substantiated in this document, the proposed project would not meet the conditions specified in § 15300.2, Exceptions, of the CEQA Guidelines, and the project is categorically exempt under Class 1, Class 3, Class 4, and Class 11.

5. REFERENCES

ASM Affiliates. 2023, February 28. Re: Cultural Resources Review, East Union High School Improvement Project, Manteca, San Joaquin County, California.

California Department of Resources Recycling and Recovery (CalRecycle). 2023, January 5 (accessed). SWIS Facility/Site Search. https://www2.calrecycle.ca.gov/SWFacilities/Directory/.

California Department of Transportation (Caltrans). 2023, January 5 (accessed). California State Scenic Highway System Map. https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa.

Department of Toxic Substances Control (DTSC). 2023, January 5 (accessed). EnviroStor. http://www.envirostor.dtsc.ca.gov/public/.

Department of Conservation, California Geological Survey (CGS). CGS Seismic Hazards Program, Alquist-Priolo Earthquake Fault Zones, Alquist-Priolo Site Investigation Reports. https://maps.conservation.ca.gov/cgs/informationwarehouse/apreports/.

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Department of Fish and Wildlife (CDFW). 2023, February 12 (accessed). Manteca Quad. CNDDB QuickView Tool in BIOS 6.

Manteca, City of. 2023, February 12 (accessed). City of Manteca Geographic Information System. https://data-manteca.opendata.arcgis.com/datasets/acc9d3bebd83446a995487287976cfdb_21/explore?location=37.763717%2C-121.228423%2C12.39.

State Water Resources Control Board (SWRCB). 2023, January 12 (accessed). GeoTracker. http://geotracker.waterboards.ca.gov/.

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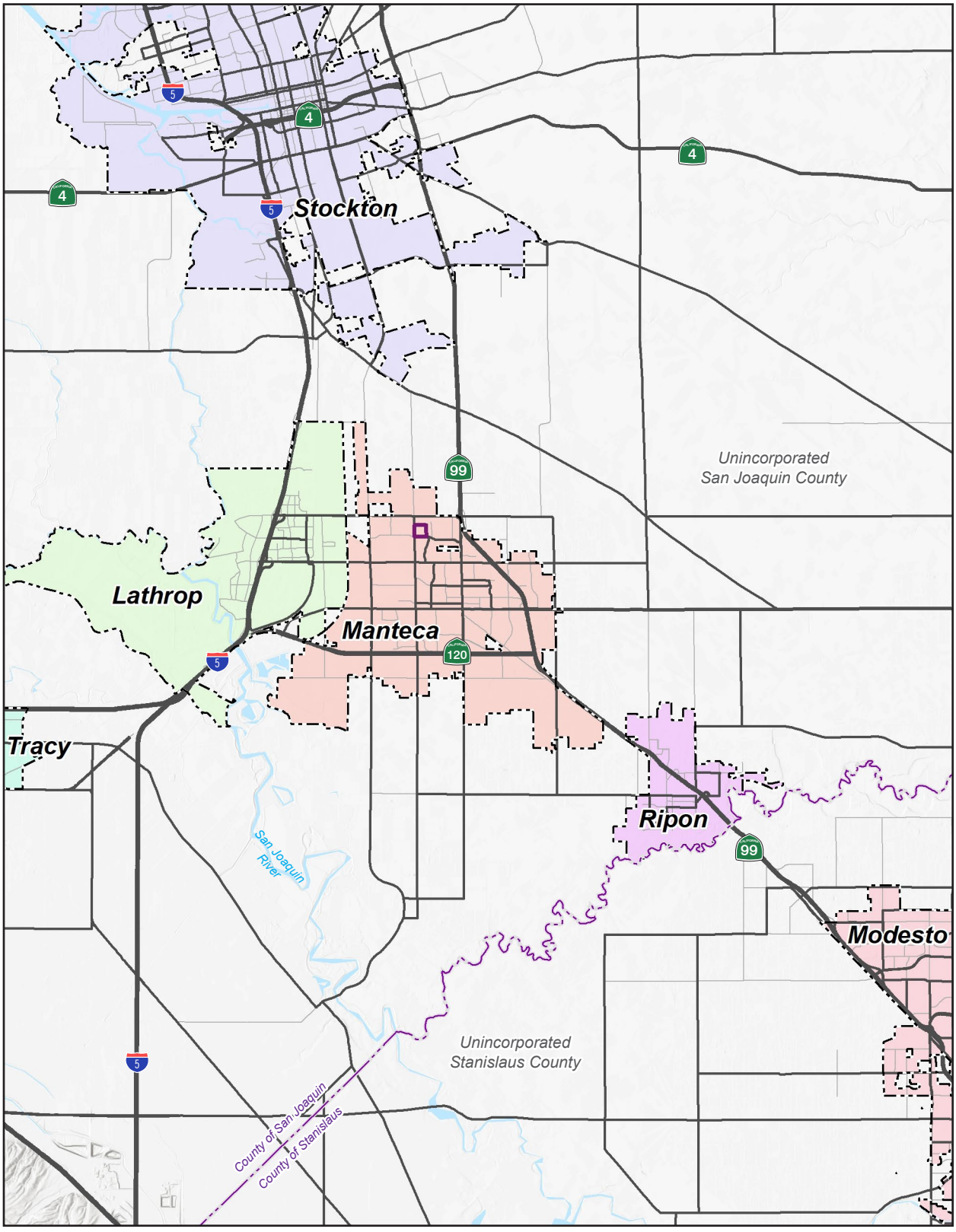
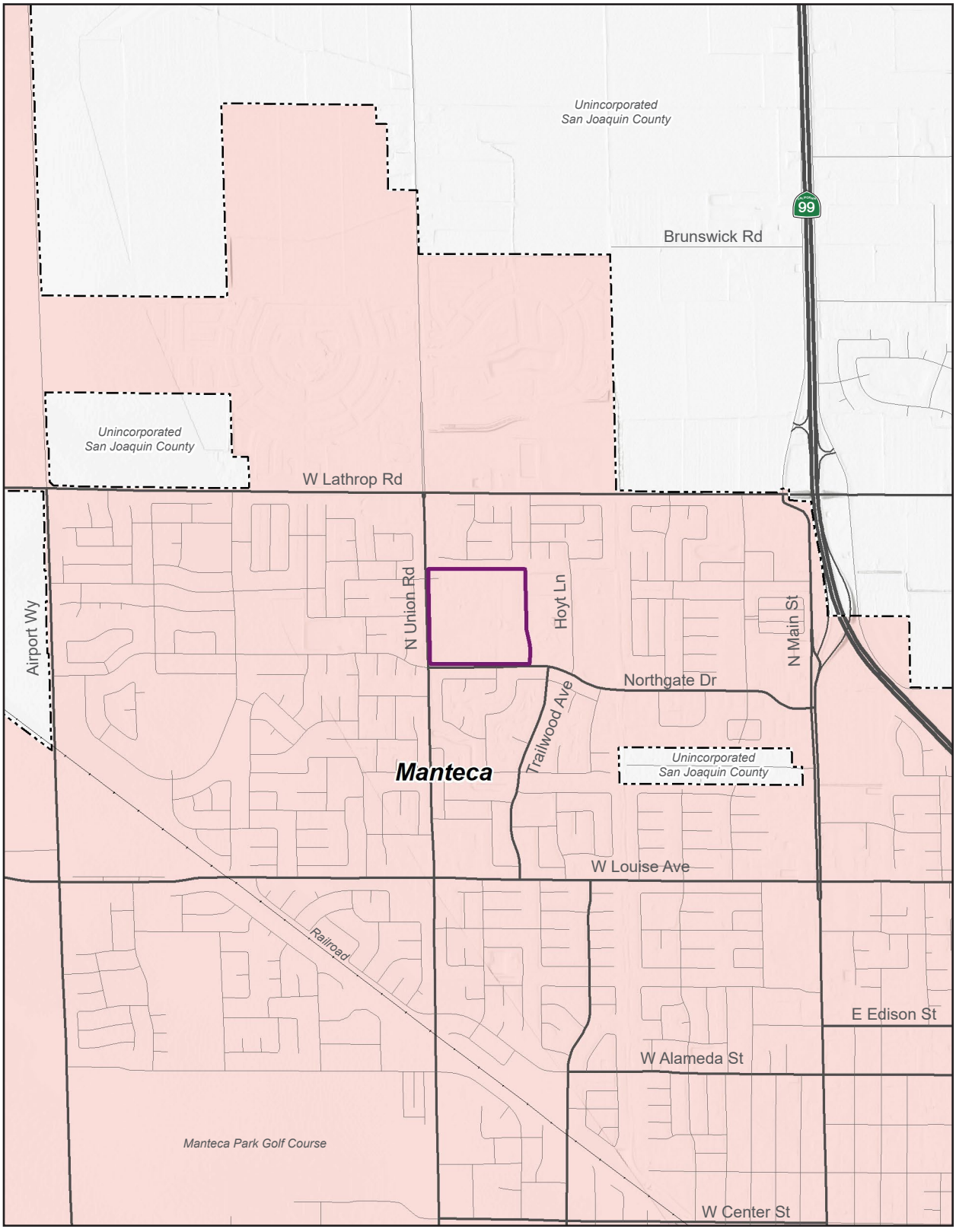
US Fish and Wildlife Service (USFWS). 2023, January 12 (accessed). National Wetlands Inventory, Wetland Mapper. https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/.

Figure 1 - Regional Location



Source: Generated using ArcMap, Inc., 2023.

Figure 2 - Local Vicinity

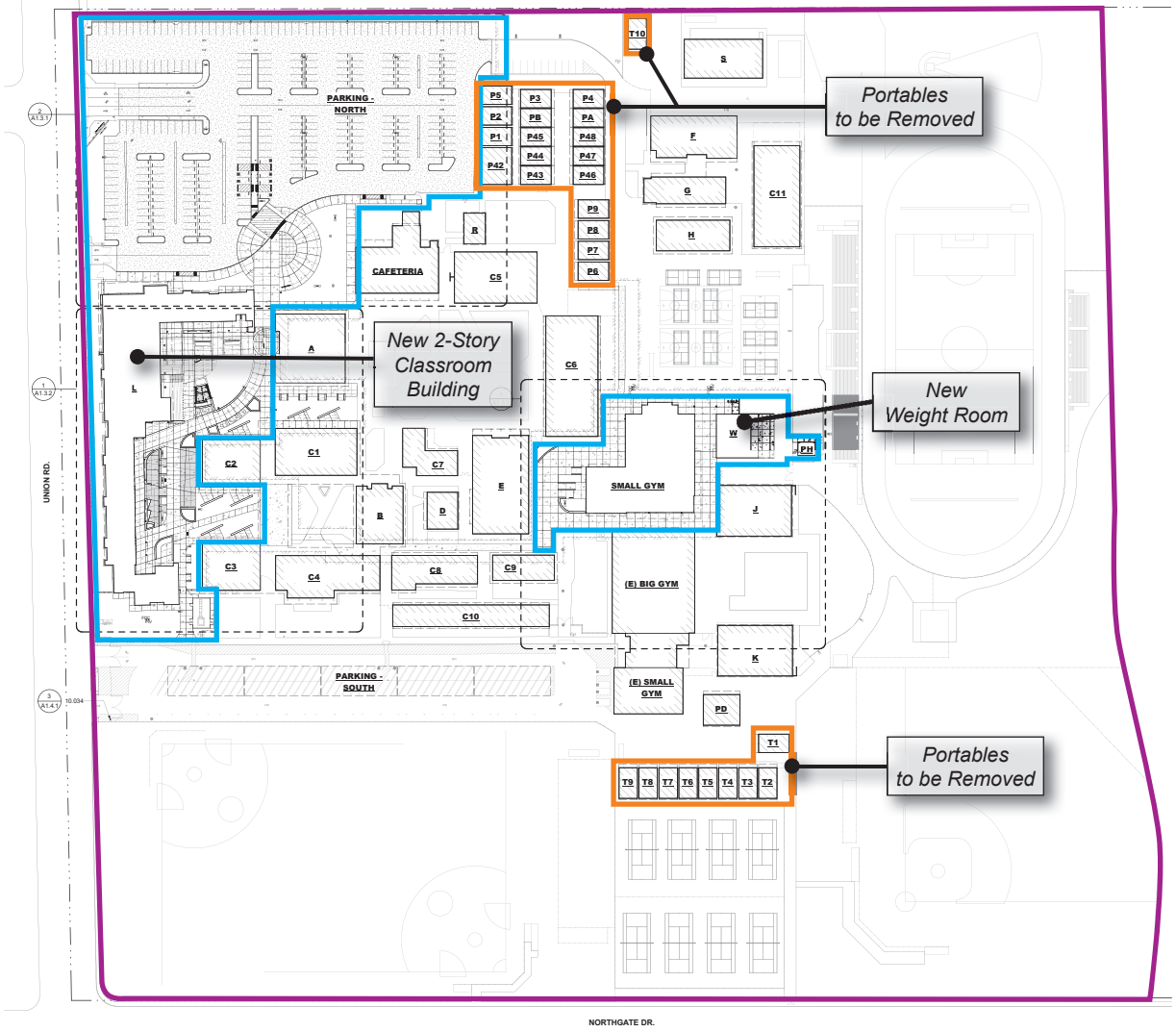


Source: Generated using ArcMap, Inc., 2023.

Figure 3 - Aerial Photograph

Source: Nearmap, Inc., 2023.

Figure 4 - Proposed Site Plan



Source: RGA, 2022.

Attachment A Air Quality Technical Memorandum

AIR QUALITY TECHNICAL MEMORANDUM

DATE	March 2023
FROM	Lexie Zimny, Associate Planner Lance Park, Senior Associate
SUBJECT	Air Quality Technical Memorandum for East Union High School Improvement Project
PROJECT NUMBER	MANT-05.0

PlaceWorks technical staff has prepared an air quality emissions memorandum to support the Notice of Exemption under a Class 32 Categorical Exemption (CEQA Guidelines § 15332) for the East Union High School Improvement Project (proposed project) at 1700 Union Road, Manteca, California.

Project Description

The project site is within the San Joaquin Valley Air Basin (SJVAB). The Manteca Unified School District (District) proposes to construct a two-story classroom building, a new auxiliary gym, and a weight room building. Once the classroom building is constructed, the District will remove 28 portable classrooms from the campus. The proposed project also includes regrading, repaving, and restriping of the existing north parking lot. No demolition of existing structures would necessary except for a small utility building north of the existing gym. The proposed project would not increase the current student capacity at the high school campus.

Methodology

Criteria air pollutant emissions were analyzed qualitatively due to the size of the project qualifying under San Joaquin Valley Air Pollution Control District's (SJVAPCD's) Small Project Analysis Level (SPAL) (SJVAPCD 2020). To develop the SPAL analysis, the District pre-quantified emissions using the project type, size, and number of vehicle trips, and determined values below which it is reasonable to conclude that a project would not exceed applicable thresholds of significance for criteria pollutants. Therefore, this analysis compares the project-related construction and operational activities against the SJVAPCD's applicable SPAL criteria to determine the potential emissions impact significance resulting from implementation of the proposed project. Should the proposed project exceed the applicable SPAL criteria, a detailed, quantified emissions analysis is recommended by the SJVAPCD.

Thresholds of Significance

SJVAPCD has developed the Guide for Assessing and Mitigating Air Quality Impacts (GAMAQI) and recently adopted the latest version on March 19, 2015 (SJVAPCD 2015). The current GAMAQI represents the latest guidance for addressing air quality impacts in the SJVAB. Changes to the GAMAQI are primarily administrative in nature to update air basin information, attainment status, and general guidance to reflect updated conditions. The following thresholds of significance from the SJVAPCD's GAMAQI are used to determine whether a proposed project would result in a significant air quality impact.

REGIONAL SIGNIFICANCE THRESHOLDS

According to the GAMAQI, the SJVAPCD establishes regional significance thresholds to determine whether a project would significantly contribute to a nonattainment designation based on the mass emissions generated. Table 1, *SJVAPCD Regional Criteria Air Pollutants Significance Thresholds*, lists SJVAPCD's regional significance thresholds. Nonetheless, per SJVACPD's SPAL methodology, a high school project that would result in less than 153,600 square feet of new building space or 1,160 new students, as well as less than 1,000 average daily one-way trips, would not generate emissions that exceed SJVAPD's regional significance thresholds.

Table 1 SJVAPCD Regional Criteria Air Pollutants Significance Thresholds

Air Pollutant	Construction and Operation Phase
Reactive Organic Gases (ROG)	10 tons/year
Carbon Monoxide (CO)	100 tons/year
Nitrogen Oxides (NO_X)	10 tons/year
Sulfur Oxides (SO_X)	27 tons/year
Coarse Particulates (PM_{10})	15 tons/year
Fine Particulates ($PM_{2.5}$)	15 tons/year

Source: SJVAPCD 2015

AMBIENT AIR QUALITY ANALYSIS

Determination of whether a project would violate a federal and/or state ambient air quality standard (AAQS) is largely a function of air dispersion modeling. If project emissions would not exceed the AAQS at the project boundaries, a project would not be considered to violate an air quality standard or contribute substantially to an existing or projected air quality violation. Nonetheless, per the GAMAQI, the SPAL screening criteria have been established by the SJVAPCD to streamline the process of assessing the significance of impact of criteria pollutant emissions from projects. Projects which fall below these screening criteria would not be considered to have the potential to violate the AAQS and a quantified ambient air quality analysis (AAQA) would not be required. Since NO_X is the predominant combustion exhaust pollutant and would be the first pollutant to exceed the 100 lb/day trigger for conducting an AAQA, SPAL levels are based on NO_X emissions.

CONSISTENCY WITH THE APPLICABLE AIR QUALITY PLAN

SJVAPCD has prepared plans to attain federal and State AAQS. The significance thresholds in Table 1 are based on SJVAPCD's New Source Review (NSR) offset requirements for stationary sources. Emission reductions achieved through implementation of SJVAPCD's offset requirements are a major component of SJVAPCD's air quality plans. Thus, projects with emissions below the thresholds of significance for criteria pollutants (see Table 1) would be determined to "not conflict or obstruct implementation of the [SJVAPCD's] air quality plan." Projects with emissions that exceed these values are considered to have the potential to exceed the AAQS, resulting in a potentially significant impact.

ODOR

Odor impacts associated with a proposed project would be considered significant if the project has the potential to frequently expose members of the public to objectionable odors. There are two general scenarios where a project could expose people to substantial odors:

- Odor Generator. Projects that would potentially generate odorous emissions proposed to locate near existing sensitive receptors or other land uses where people may congregate.

- Odor Receiver. Residential or other sensitive receptor projects or other projects built for the intent of attracting people locating near existing odor sources.

Due to the subjective nature of odor impacts, the number of variables that can influence the potential for an odor impact, and the variety of odor sources, there are no quantitative or formulaic methodologies to determine if potential odors would have a significant impact. Rather, projects must be assessed on a case-by-case basis. As shown in Table 2, *SJVAPCD Screening Levels for Potential Odor Sources*, the SJVAPCD has identified buffer distances for common types of facilities that have been known to produce odors in the SJVAB. The degree of odors could be significant and may be based on a review of SJVAPCD's complaint records.

Table 2 SJVAPCD Screening Levels for Potential Odor Sources

Land Use/Type of Operation	Screening Distance
Wastewater Treatment Plant	2 miles
Sanitary Landfill	1 mile
Transfer Station	1 mile
Composting Facility	1 mile
Petroleum Refinery	2 miles
Asphalt Batch Plant	1 mile
Chemical Manufacturing	1 mile
Fiberglass Manufacturing	1 mile
Painting/Coating Operations	1 mile
Food Processing Facility	1 mile
Feed Lot/ Dairy	1 mile
Rendering Plant	1 mile

Source: SJVAPCD 2015

For a project locating near an existing source of odors, in Californ*ia Building Industry Association v. Bay Area Air Quality Management District* (CBIA), the California Supreme Court ruled that CEQA generally does not require an evaluation of impacts of the environment on a project unless a project will exacerbate an existing environmental hazard.

HEALTH RISK THRESHOLDS

School projects that use state funds are subject to Public Resources Code Section 21151.8 and Education Code Section 17213 pursuant to Title 5 requirements. These code sections require the preparation of a health risk assessment for state-funded school projects if freeways or other busy traffic corridors have been identified within 500 feet of a proposed school site. A busy traffic corridor is defined as having 50,000 or more average daily vehicle trips in a rural area or 100,000 or more average daily trips in an urban area. Additionally, these code sections also require school districts to identify facilities, including but not limited to freeways and other busy traffic corridors, large agricultural operations, and rail yards within one quarter-mile of a proposed school site that might reasonably be expected to emit hazardous air emissions.

As shown in Figure 3.14-3, Existing Conditions Average Daily Traffic and Level of Service, of the City of Manteca General Plan EIR, no roadways within 500 feet of the project site exceed 50,000 average daily vehicle trips (Manteca 2022). Additionally, the project site is not located with a quarter-mile of any freeways, large agricultural operations, rail yards or other operations that would be expected to emit

hazardous air emissions. Furthermore, the proposed project would not result in an increase in school enrollment, and therefore would not result in the addition of new receptors that could be exposed to nearby hazardous air emission sources. As such, no health risk assessment is required for the proposed project.

Whenever a project would require use of chemical compounds that have been identified in SJVAPCD's Rule 2201, placed on CARB's air toxics list pursuant to Assembly Bill 1807 (AB 1807), Toxic Air Contaminant Identification and Control Act (1983), or placed on the US EPA's National Emissions Standards for Hazardous Air Pollutants, a health risk assessment is warranted. In addition, if a project would place sensitive land uses proximate to major sources of TACs (roadways with over 50,000 vehicles per day or major stationary sources), a health risk assessment may also be warranted. As previously discussed, the project site is not located in proximity to any major sources of TAC's. Table 3, *SJVAPCD Toxic Air Contaminants Incremental Risk Thresholds*, lists the SJVAPCD's TAC incremental risk thresholds for operation of a project or placement of sensitive land uses proximate to major sources of air pollution. As stated, under the CBIA ruling, while CEQA is generally not required to analyze impacts of the environment on a project, where a project will exacerbate an existing environmental hazard, CEQA requires an analysis of the worsened condition on future project residents and the public at large. However, projects that do not generate emissions that exceed the values in Table 3 would not substantially contribute to cumulative air quality hazards or exacerbate an existing environmental hazard.

Table 3 SJVAPCD Toxic Air Contaminants Incremental Risk Thresholds

Risk Type	Threshold
Cancer Risk[1]	≥ 10 in 1 million
Hazard Index[2]	≥ 1.0

Source: SJVAPCD 2015
[1] For the Maximum Exposed Individuals (MEI).
[2] Ground-level concentrations of noncarcinogenic TACs for the MEI.

CUMULATIVE IMPACTS

By its very nature, air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development. Future attainment of federal and State AAQS is a function of successful implementation of the SJVAPCD's attainment plans. Consequently, SJVAPCD's application of thresholds of significance for criteria pollutants is relevant to the determination of whether a project's individual emissions would have a cumulatively significant impact on air quality. Pursuant to the SJVAPCD's guidance, if project-specific emissions would be less than the thresholds of significance for criteria pollutants, the project would not be expected to result in a cumulatively considerable net increase of any criteria pollutant for which the SJVAPCD is in nonattainment under applicable federal or State AAQS.

Environmental Impacts

This analysis addresses the impacts of the proposed project on ambient air quality and the exposure of people, especially sensitive individuals, to unhealthful pollutant concentrations.

The primary air pollutants of concern for which the AAQS have been established are ozone (O_3), carbon monoxide (CO), coarse inhalable particulate matter (PM_{10}), fine inhalable particulate matter ($PM_{2.5}$), sulfur dioxide (SO_2), nitrogen dioxide (NO_2), and lead (Pb). Areas are classified under the federal and California Clean Air Act as either in attainment or nonattainment for each criteria pollutant based on whether the AAQS have been achieved. The San Joaquin Valley Air basin (SJVAB) has been identified as a nonattainment

area for ozone (O_3) and particulate matter (PM_{10} and $PM_{2.5}$) under the California and/or National AAQS (CARB 2023).

The following describes project-related regional, localized, and odor impacts from operational activities from implementation of the project. Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less Than Significant Impact. CEQA requires that General Plans be evaluated for consistency with applicable air quality management plans (AQMPs). A consistency determination plays an important role in local agency project review by linking local planning and individual projects to the AQMPs. It fulfills the CEQA goal of informing decisionmakers of the environmental impacts of the project under consideration early enough to ensure that air quality concerns are fully addressed. It also provides the local agency with ongoing information as to whether they are contributing to clean air goals in the AQMPs. Only new or amended general plan elements, specific plans, and major projects need to undergo a consistency review. This is because the AQMP strategies are based on projections from local general plans. Projects that are consistent with the local general plan are considered consistent with the air quality-related regional plan. The project site currently operates as a school and the proposed additions to the campus would construct new school-serving buildings, consistent with the intended use of the site under the City's Public/Quasi-Public land use designation. The proposed project would allow the school to further accommodate the demand for current student education within the San Joaquin County area. In addition, SJVAPCD is tasked with implementing programs and regulations required by the Clean Air Act and the California Clean Air Act.

SJVAPCD has prepared several plans to attain the National AAQS and California AAQS. Emission reductions achieved through implementation of SJVAPCD's New Source Review offset requirements are a major component of SJVAPCD's air quality plans. The established thresholds of significance for criteria pollutant emissions are based on SJVAPCD offset requirements for stationary sources. Thus, projects with emissions below the thresholds of significance for criteria pollutants would be determined to not conflict or obstruct implementation of the SJVAPCD's air quality plan. Development of the proposed additions to East Union High School would not exceed the SJVAPCD significance thresholds (Table 1) due to the project size of 48,100 square feet, which is under the SJVAPCD SPAL screening criterion of 153,600 square feet for high school projects. The proposed project would also result in no increase to the student population, resulting in no additional vehicle trips under the proposed project. Therefore, this impact would be less than significant.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Less Than Significant Impact. Based on the size of the project, it qualifies under SJVAPCD's SPAL methodology for construction and operational criteria air pollutant emissions; and therefore, a quantified analysis of the project's construction and operational emissions is not warranted. Per SJVACPD's methodology, a qualitative analysis of the project's construction and operational impacts based on SJVACPD's screening level sizes is provided.

Regional Short-Term Construction Impacts

Construction activities produce combustion emission from various sources, such as on-site heavy-duty construction vehicles, vehicles hauling materials to and from the site, and motor vehicles transporting the crew. Site preparation activities produce fugitive dust emissions (PM_{10} and $PM_{2.5}$) from demolition and soil-disturbing activities, such as grading and excavation. Air pollutant emissions from construction activities on

site would vary daily as construction activity levels change. Construction activities associated with the project would result in emissions of VOC, NO_X, CO, PM_{10}, and $PM_{2.5}$.

Construction onsite would include the construction of a two-story classroom building totaling approximately 30,000 square feet, a new auxiliary gym totaling approximately 15,100 square feet, and new weight room building totaling approximately 3,000 square feet, resulting in approximately 48,100 square feet of new building space. The proposed project would also regrade and repave the existing north parking lot. Construction activities associated with development of the proposed project would include pavement demolition, site preparation, grading, building construction, paving, and painting. Due to the project size of approximately 48,100 square feet of new building space, the proposed project would be below the SJVAPCD SPAL screening criterion of 153,600 square feet. Therefore, per SJVAPCD methodology, project-related construction activities are not anticipated to exceed the SJVAPCD's regional significant thresholds (Table 1). Therefore, this impact would be less than significant.

Regional Long-Term Operational Impacts

The proposed project would construct additional buildings to serve the existing East Union High School campus. Long-term air pollutant emissions generated by the project would be generated by area sources (e.g., landscape fuel use, aerosols, and architectural coatings), mobile sources from vehicle trips, and energy use (natural gas) associated with the proposed school buildings. In general, the primary source of long-term criteria air pollutant emissions generated by land use development projects, such as the proposed project, are usually from mobile sources. As the proposed project would result in no increase in student enrollment or subsequent vehicle trip generation, the proposed project's greatest emission sources are anticipated to be area and energy source emissions from operation of the new buildings. The proposed buildings would be constructed to meet the latest California Building and Energy Efficiency Standards. Because the proposed project would result in the construction of approximately 48,100 square feet and result in no additional students or vehicle trips, it would be below the SJVAPCD SPAL screening criterion of 153,600 square feet, 1,160 students, and 1,000 average one-way trips, and is therefore considered to generate criteria air pollutant emissions that would be less than SJVAPCD's significance thresholds. Therefore, this impact would be less than significant.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. Land uses that have the potential to be substantial stationary sources that would require a permit from SJVAPCD to operate include industrial land uses, such as chemical processing, and warehousing operations where substantial truck idling could occur onsite. Operation of the proposed new school buildings would include occasional use of landscaping equipment and natural gas consumption for heating and would not result in the operation of land uses expected to generate substantial amounts of toxic air contaminants (TAC).

Localized Short-Term Construction Impacts

Health risk assessments are based on risk accumulated over a 70-year lifetime. Given the relatively short-term schedule for construction activities (approximately 3 years total compared to a 70-year lifetime), the proposed project would not result in a long-term substantial source of TAC emissions. In addition, the proposed project was previously identified as falling below the applicable SPAL screening criteria, indicating it would not exceed SJVAPCD significance thresholds for criteria pollutants or AAQS during construction or operation. While the SJVAPCD significance thresholds and AAQS are not directly associated with potential health risks, health risk impacts are the product of the quantity of emissions generated and the duration of those emissions' exposure to off-site sensitive receptors. Considering construction of the proposed project would be short-term and the proposed project's size would be well below the applicable SPAL screening

criteria, implying it would not generate substantial emissions during construction or operation, project-related diesel particulate matter impacts during construction are not anticipated to be significant.

Localized Long-Term Operational Impacts

CO HOTSPOTS

Areas of vehicle congestion have the potential to create pockets of CO called hotspots. These pockets have the potential to exceed the state one-hour standard of 20 ppm or the eight-hour standard of 9.0 ppm. The SJVAPCD Guidance for Assessing and Mitigation Air Quality Impacts guidance document previously required CO hotspot monitoring. However, emissions from motor vehicles, the largest source of CO emissions, have been declining since 1985 despite increases in vehicle miles traveled (VMT) due to the introduction of new automotive emission controls and fleet turnover. Furthermore, under existing and future vehicle emission rates, a project would have to increase traffic volumes at a single intersection to more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal air does not mix—or result in a conflict with the local congestion management plan in order to have the potential to generate a CO hotspot (BAAQMD 2017). Operation of the proposed project would generate no additional vehicle trips and would therefore not produce the volume of traffic or present a conflict with the local congestion management plan that could result in generating a CO hotspot. Therefore, impacts from CO hotspots are considered less than significant.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less Than Significant Impact. The proposed project would not result in objectionable odors. The threshold for odor is if a project creates an odor nuisance pursuant to SJVAPCD Rule 4102, Nuisance, which states:

> A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. The provisions of this rule shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

The type of facilities that are considered to have objectionable odors include wastewater treatments plants, compost facilities, landfills, solid waste transfer stations, fiberglass manufacturing facilities, paint/coating operations (e.g., auto body shops), dairy farms, petroleum refineries, asphalt batch plants, chemical manufacturing, and food manufacturing facilities. The uses proposed by the project do not fall within the aforementioned land uses. Emissions from construction equipment, such as diesel exhaust and volatile organic compounds from architectural coatings and paving activities, may generate odors. However, these odors would be low in concentration, temporary, and are not expected to affect a substantial number of people. Therefore, odor impacts would be less than significant.

References

Bay Area Air Quality Management District (BAAQMD). 2017, May. California Environmental Quality Act Air Quality Guidelines. http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en

———. 2023, Area Designations Maps/State and National. Accessed February 8, 2023. https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations.

Manteca, City of. 2022, November. Environmental Impact Report for the Manteca General Plan Update (SCH: 2020019010). https://static1.squarespace.com/static/582f3c2a59cc689c8da65127/t/637c5c775a5126143571888e/1669094565820/Manteca+GPU+RDEIR_Nov+2022+Vol+2_reduced.pdf

San Joaquin Valley Air Pollution Control District (SJVAPCD). 2020, November. Small Project Analysis Levels (SPAL). https://www.valleyair.org/transportation/CEQA%20Rules/GAMAQI-SPAL.PDF

———. 2015, March 19. Guidance for Assessing and Mitigating Air Quality Impacts. https://www.valleyair.org/transportation/GAMAQI.pdf

Attachment B Cultural Resources Review

ASM affiliates
Archaeology • History • Ethnography • Architectural History

ASM Project Number: 42050.01

28 February 2023

Mr. Dwayne Mears, AICP
Placeworks, Inc.
3 MacArthur Place, Suite 1100
Santa Ana, CA 92707

RE: Cultural Resources Review, East Union High School Improvement Project, Manteca, San Joaquin County, California

Dear Mr. Mears:

This letter documents completion of a cultural resources review for the proposed East Union High School Improvement Project (Project), located in the City of Manteca, San Joaquin County, California. Specifically, the proposed Project is within the Manteca USGS 7.5' Quadrangle in Section 29, Township 1 South (T1S), Range 7 East (R7E), Mount Diablo Base and Meridian (MDBM). This study was conducted to assist in compliance with the California Environmental Quality Act (CEQA). Peter A. Carey, M.A., RPA, served as Principal Investigator.

In summary, one previous survey had been conducted within the Project area, and one cultural resource – historic buildings associated with Mandeville/King Island Schools and Manteca High School (P-39-005005) – is known to exist within it.

Method of Study

An archival records search was conducted at the Central California Information Center (CCIC), California State University, Stanislaus for the East Union High School Improvements Project (T1S/R7E; Manteca) San Joaquin County, California. This records search was completed in order to determine whether the study area had been previously surveyed for cultural resources, and/or whether any such resources were known to exist on it. The records search was completed to determine: (i) if prehistoric or historical archaeological sites had previously been recorded within the study area; (ii) if the project area had been systematically surveyed by archaeologists prior to the initiation of this field study; and/or (iii) whether the region of the field project was known to contain archaeological sites and to thereby be archaeologically sensitive. Records examined included archaeological site files and maps, the National Register of Historic Places, Historic Property Data File, California Inventory of Historic Resources, and the California Points of Historic Interest.

According to the IC records, one previous survey had been conducted within the East Union High School Project area (Table1; Figure 2). With one previously recorded cultural resource known to exist within (Table 2, Figure 3). In addition, thirteen studies had been conducted within 0.5-mi of the Project area (Table 3, see Figure 2) and eleven cultural resources are known to exist within that outer radius (Table 4, see Figure 3). The results of the records search are available in Appendix A.

Table 1. Survey Reports within the Project Area

Report No.	Year	Author (s)/Affiliation	Title
SJ-04786	2002	Windmiller, Ric and Donald Napoli/ Ric Windmiller, Consulting Archaeologist (and) Donald Napoli, of Historic Preservation Planning; for Wade Associates, Sacramento, CA	City of Manteca--General Plan Update, Background Reports: Archaeological Resources, Historical Resources, Records Search Results.

Table 2. Resources within the Project Area

Resource	Type	Description
P-39-005005	Building	Mandeville/King Island Schools and Manteca High School. Historic Buildings

Table 3. Survey Reports within 0.5-mi of the Project Area

Report No.	Year	Author (s)/Affiliation	Title
SJ-00729	1981	Chavez, D./ David Chavez, Consulting Archaeologist; for James M. Montgomery Consulting Engineers, Inc.	Cultural Resource Evaluation for the Manteca Wastewater Project, San Joaquin County, California.
SJ-00755	1977	Napton, L. K./ Institute for Archeological Research, CSC Stanislaus; for City of Manteca	Archaeological Survey Report CSCS/IAR 77-14, Northgate Industrial Park, Manteca, California.
SJ-00768	1982	Napton, L. K./ Institute for Archaeological Research, California State College, Stanislaus (prepared for San Joaquin Co. Dept. of Public Works)	Cultural Resource Reconnaissance of the Lathrop Road (Airport Way to Highway 99) Expansion, San Joaquin County, California.
SJ-02262	1994	Napton, L. K./ Calif. State Univ., Stanislaus, Institute for Arch. Research; for WPM Planning Team, Modesto, CA	Cultural Resources Investigation of the Proposed Tidewater Bikeway Project, City of Manteca, San Joaquin County, California.
SJ-03362	1994	City of Manteca/ City of Manteca / Caltrans District 10 / Federal Highway Administration	Historic Property Survey Report – Proposed Tidewater Bikeway Project in the City of Manteca, California
SJ-05309	2004	Baloian, M., R. Baloian, and W. Nettles/ Applied Earthworks, Inc.; prepared for Russell Associates, Palo Alto, CA	Cultural Resources Investigations for the South San Joaquin Irrigation District in San Joaquin County, California.
SJ-05582	2004	Deis, R. W./ EDAW	Cultural Resources Inventory and Assessment for the Union Ranch Specific Plan EIR, San Joaquin County, California.
SJ-05885	2005	Billat, L./ EarthTouch Inc.	New Tower Submission Packet, FCC Form 620, Calvary Community Church, TM-SC-13118, San Joaquin County.
SJ-07047	2009	Billat, L./ Earth Touch, Inc.	New Tower ("NT") Submission Packet FCC Form 620 Project Name: North Manteca Project #:SAC-452D
SJ-07145	2009	EDAW, Inc./ EDAW, Inc.	Draft: Cultural Resources Assessment for the Manteca Arsenic Reduction Project San Joaquin County, California
SJ-07238	2008	Billat, L./ Earth Touch, Inc.	New Tower ("NT") Submission Packet FCC Form 620 Project Nmae: North Manteca, Project Number: SAC-452C

Report No.	Year	Author (s)/Affiliation	Title
SJ-07761	2012	Martorana, D./ URS Corporation	Letter Report: Verizon Cellular Communications Tower Site, Lathrop Union, 815 W. Lathrop Road (APN:197-020-11), Manteca, San Joaquin, County, California 95336
SJ-09092	2019	ESA, Inc./ ESA, Inc., for City of Manteca Public Works Dept.	Cultural Resources and Tribal Cultural Resources City of Manteca TCP Mitigation Project.

Table 4. Resources within 0.5-mi of the Project Area

Resource	Type	Description
P-39-000015	Structure	Historic; Tidewater Southern Railway
P-39-004495	Building	Historic Orchard Farm
P-39-004496	Building	Historic Residence
P-39-004497	Building	Historic Residence
P-39-004498	Building	Historic Residence/ Garage
P-39-004499	Building	Historic Public Utility Building
P-39-004500	Building	Historic Residence/ Ancillary Building
P-39-004501	Building	Historic Residence/ Garage
P-39-004502	Building	Historic Residence/ Ancillary Building
P-39-004913	Building	Historic Residence
P-39-005339	Building	Historic Residence

Please feel free to contact me if you have any questions.

Sincerely,

Peter A. Carey, M.A., RPA
Director

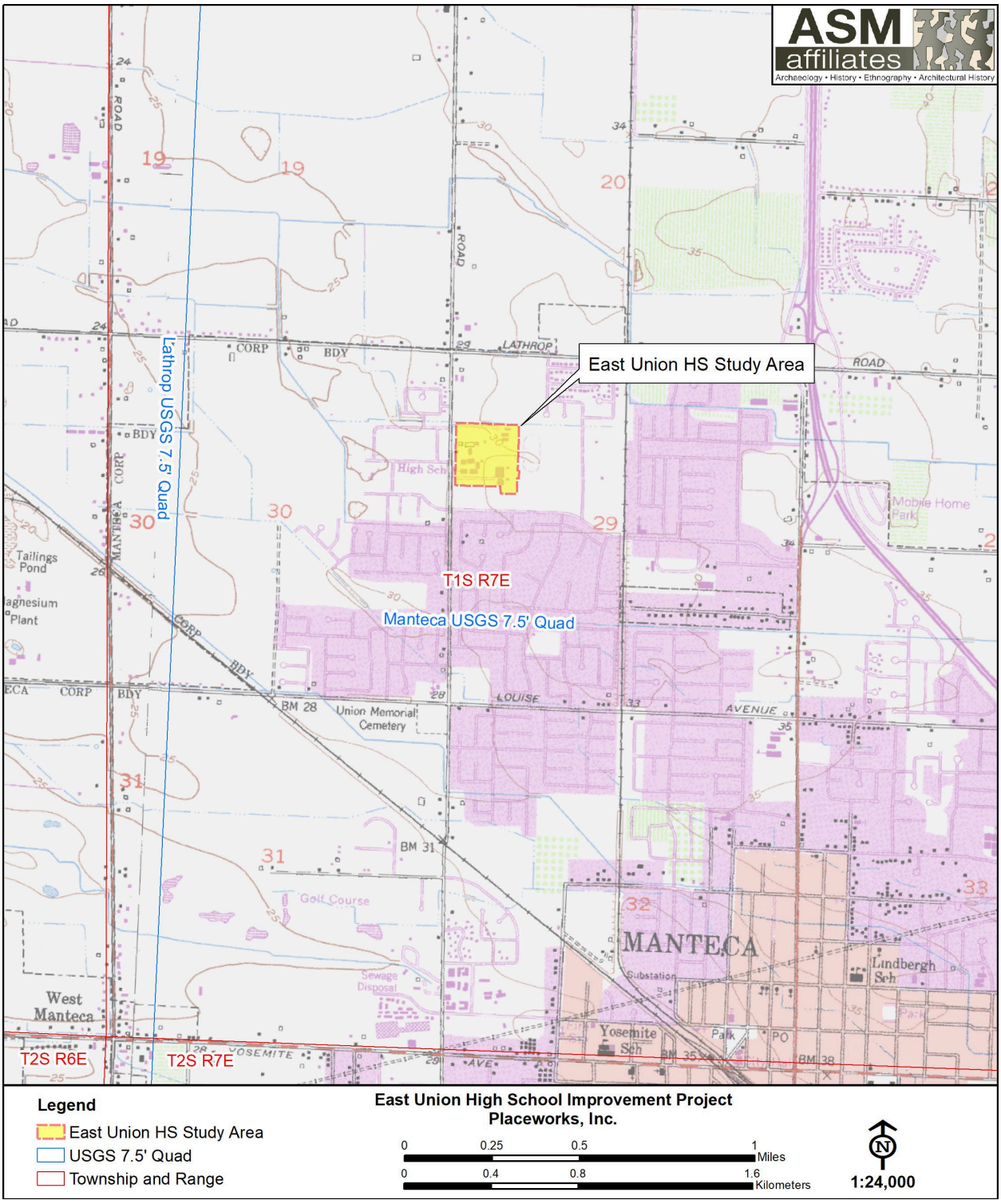


Figure 1. Location of East Union High School Project Area (T1S/R7E, Manteca), San Joaquin County, California.

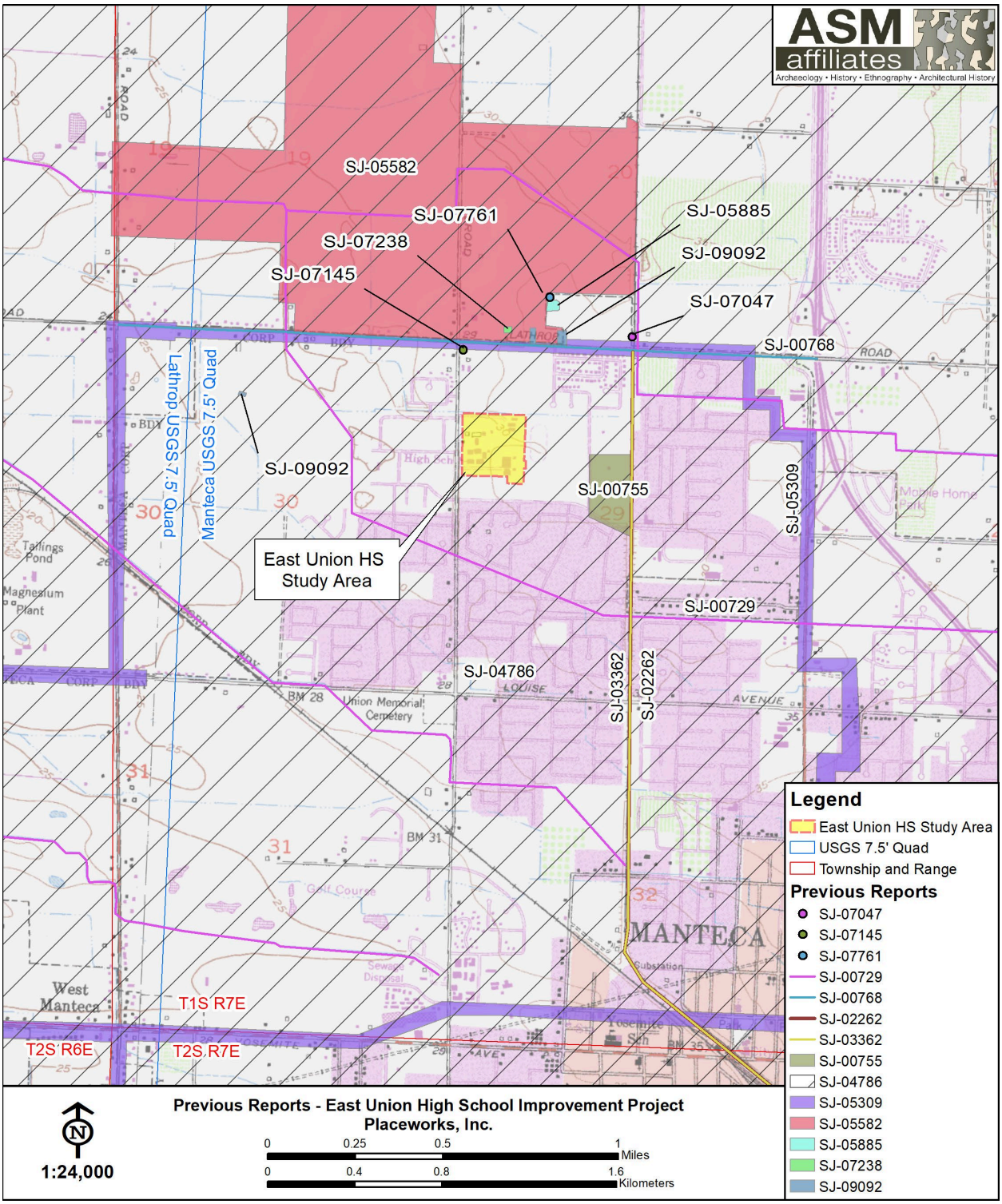


Figure 2. Location previous surveys within the East Union High School Project Area (T1S/R7E, Manteca) San Joaquin County, California.

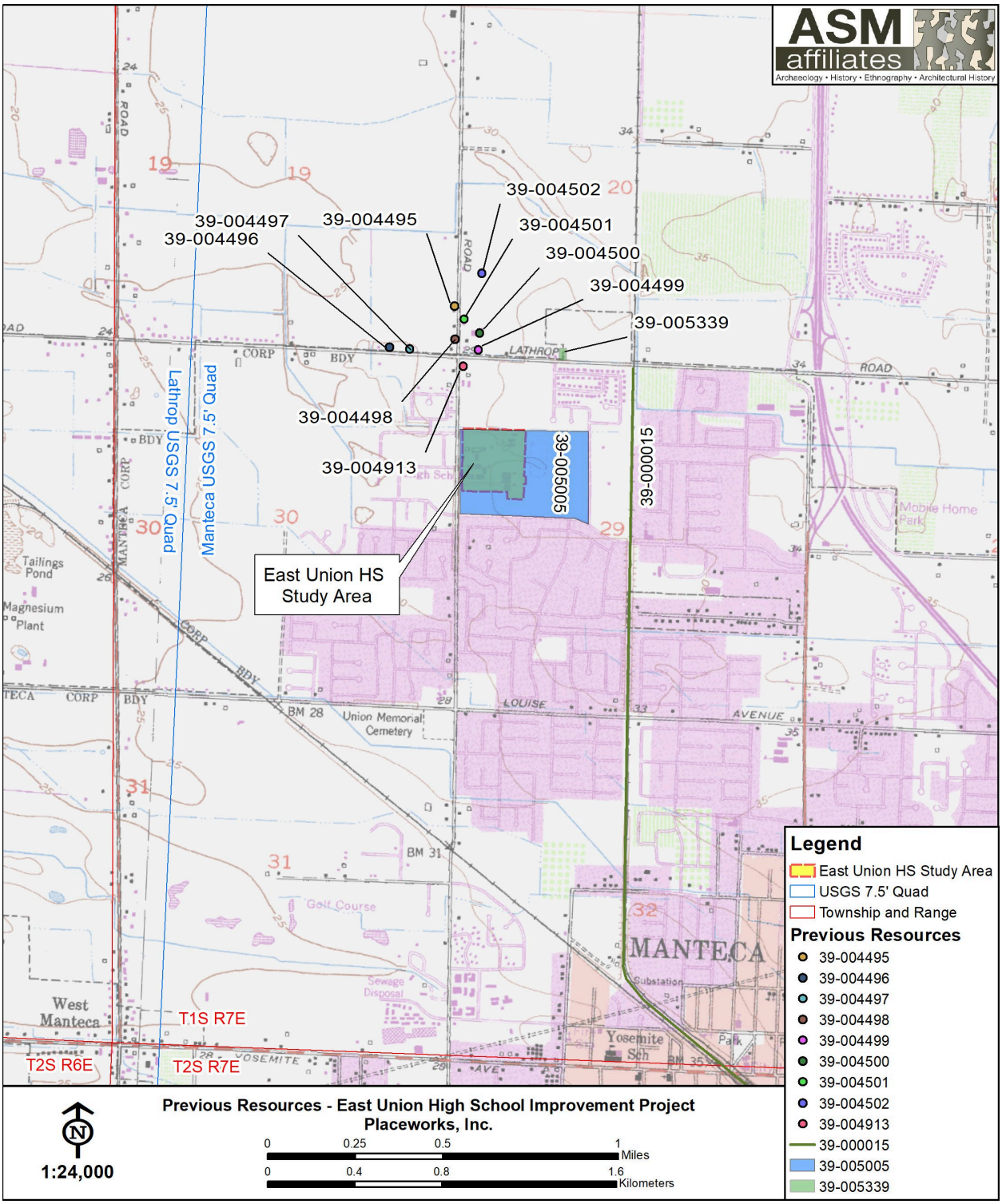


Figure 3. Location previous resources within the East Union High School Project Area (T1SS/R7E, Manteca) San Joaquin County, California.

Appendix A:
Records Search Results

CENTRAL CALIFORNIA INFORMATION CENTER

California Historical Resources Information System
Department of Anthropology – California State University, Stanislaus
One University Circle, Turlock, California 95382
(209) 667-3307

Alpine, Calaveras, Mariposa, Merced, San Joaquin, Stanislaus & Tuolumne Counties

Date: 2/14/2023

Records Search File No.: 12440L
Project: East Union High School Improvements

Peter Carey
ASM Affiliates
20424 West Valley, Suite A
Tehachapi, CA 93561
661-823-7690 pcarey@asmaffiliates.com

Invoice address: 2034 Corte del Nogal
Carlsbad, CA 92011

Dear Mr. Carey:

The Central California Information Center received your record search request for the project area referenced above, located on the Manteca 7.5' quadrangle in San Joaquin County. The following reflects the results of the records search for the project study area and radius:

As per data currently available at the CCaIC, the locations of resources/reports are provided in the following format: ☐ custom GIS maps ☒ GIS Data/shape files

Summary Data:

Resources within the project area:	1: P-39-005005
Resources within the 1/2-mile radius:	11: P-39-000015*, 4495, 4496, 4497, 4498, 4499, 4500, 4501, 4502, 4913, 5339 *see CCaIC 12439L for PDF, no charge for duplicate shape provided for this search
Reports within the project area:	1: SJ-04786* *see CCaIC 12439L, no charge for duplicate shape provided for this search
Reports within the 1/2-mile radius:	13: SJ-00729, 755, 768, 2262*, 3362*, 5309*, 5582, 5885, 7047, 7145, 7238, 7761, 9092* *see CCaIC 12439L, no charge for duplicate shape provided for this search

Resource Database Printout (list):	☒ enclosed	☐ not requested	☐ nothing listed
Resource Database Printout (details):	☒ enclosed	☐ not requested	☐ nothing listed
Resource Digital Database Records:	☐ enclosed	☒ not requested	☐ nothing listed
Report Database Printout (list):	☒ enclosed	☐ not requested	☐ nothing listed
Report Database Printout (details):	☒ enclosed	☐ not requested	☐ nothing listed
Report Digital Database Records:	☐ enclosed	☒ not requested	☐ nothing listed
Resource Record Copies:	☒ enclosed	☐ not requested	☐ nothing listed
Report Copies:	☐ enclosed	☒ not requested	☐ nothing listed

OHP Historic Properties Directory: New Excel File: Built Environment Resource Directory (BERD) Dated 9/23/2022

Not all resources listed in the BERD are mapped in GIS, nor do we have records on file for; if you identify additional resources in the BERD that you need copies of, contact the IC.

	☒ enclosed	☐ not requested	☒ nothing listed
Archaeological Determinations of Eligibility:	☐ enclosed	☐ not requested	☒ nothing listed
CA Inventory of Historic Resources (1976):	☐ enclosed	☐ not requested	☒ nothing listed
Caltrans Bridge Survey:	☐ enclosed	☒ not requested	☐ nothing listed
Ethnographic Information:	☐ enclosed	☒ not requested	☐ nothing listed
Historical Literature:	☐ enclosed	☒ not requested	☐ nothing listed
Historical Maps:	☐ enclosed	☒ not requested	☐ nothing listed
Local Inventories:	☐ enclosed	☒ not requested	☐ nothing listed
GLO and/or Rancho Plat Maps:	☐ enclosed	☒ not requested	☐ nothing listed

Shipwreck Inventory: ☒ not available at CCIC; please go to http://shipwrecks.slc.ca.gov/ShipwrecksDatabase/Shipwrecks_Database.asp

Soil Survey Maps: ☒ not available at CCIC; please go to http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at the phone number listed above.

The provision of CHRIS Data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation, or the State Historical Resources Commission.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the CHRIS

Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

Should you require any additional information for the above referenced project, reference the record search number listed above when making inquiries. Requests made after initial invoicing will result in the preparation of a separate invoice.

Thank you for using the California Historical Resources Information System (CHRIS).

Note: Billing will be transmitted separately via email by our Financial Services office * ($476.40), payable within 60 days of receipt of the invoice.

If you wish to include payment by Credit Card, you must wait to receive the official invoice from Financial Services so that you can reference the CMP # (Invoice Number), and then contact the link below:

https://commerce.cashnet.com/ANTHROPOLOGY

Sincerely,

E. A. Greathouse

E. A. Greathouse, Coordinator
Central California Information Center
California Historical Resources Information System

* Invoice Request sent to: ARBilling@csustan.edu, CSU Stanislaus Financial Services

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
SJ-00729	NADB-R - 1361539	1981	Chavez, D.	Cultural Resource Evaluation for the Manteca Wastewater Project, San Joaquin County, California.	David Chavez, Consulting Archaeologist; for James M. Montgomery Consulting Engineers, Inc.	
SJ-00755	NADB-R - 1361576	1977	Napton, L. K.	Archaeological Survey Report CSCS/IAR 77-14, Northgate Industrial Park, Manteca, California.	Institute for Archeological Research, CSC Stanislaus; for City of Manteca	
SJ-00768	NADB-R - 1361575	1982	Napton, L. K.	Cultural Resource Reconnaissance of the Lathrop Road (Airport Way to Highway 99) Expansion, San Joaquin County, California.	Institute for Archaeological Research, California State College, Stanislaus (prepared for San Joaquin Co. Dept. of Public Works)	
SJ-02262	NADB-R - 1361134	1994	Napton, L. K.	Cultural Resources Investigation of the Proposed Tidewater Bikeway Project, City of Manteca, San Joaquin County, California.	Calif. State Univ., Stanislaus, Institute for Arch. Research; for WPM Planning Team, Modesto, CA	39-000015
SJ-03362	NADB-R - 1363291	1994	City of Manteca	Historic Property Survey Report - Proposed Tidewater Bikeway Project in the City of Manteca, California	City of Manteca / Caltrans District 10 / Federal Highway Administration	39-000015
SJ-04786	NADB-R - 1364725	2002	Windmiller, Ric and Donald Napoli	City of Manteca--General Plan Update, Background Reports: Archaeological Resources, Historical Resources, Records Search Results.	Ric Windmiller, Consulting Archaeologist (and) Donald Napoli, of Historic Preservation Planning; for Wade Associates, Sacramento, CA	39-000002, 39-000015, 39-000098, 39-000099, 39-000102, 39-000103, 39-000111, 39-000282, 39-000354, 39-000681, 39-000682, 39-000683, 39-000684, 39-004148, 39-004188, 39-004189, 39-004190, 39-004191, 39-004192
SJ-05309	NADB-R - 1365195	2004	Baloian, M., R. Baloian, and W. Nettles	Cultural Resources Investigations for the South San Joaquin Irrigation District in San Joaquin County, California.	Applied Earthworks, Inc.; prepared for Russell Associates, Palo Alto, CA	39-000002, 39-000015, 39-000098, 39-000099, 39-000103, 39-000354, 39-004400, 39-004401, 39-004402, 39-004403, 39-004404, 39-004405, 39-004406, 39-004407, 39-004408, 39-004409, 39-004410, 39-004411, 39-004412, 39-004413, 39-004414, 39-004415, 39-004416, 39-004417
SJ-05582	NADB-R - 1365466	2004	Deis, R. W.	Cultural Resources Inventory and Assessment for the Union Ranch Specific Plan EIR, San Joaquin County, California.	EDAW	39-004494, 39-004495, 39-004496, 39-004497, 39-004498, 39-004499, 39-004500, 39-004501, 39-004502, 39-004503

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
SJ-05885	NADB-R - 1365765	2005	Billat, L.	New Tower Submission Packet, FCC Form 620, Calvary Community Church, TM-SC-13118, San Joaquin County.	EarthTouch Inc.	
SJ-07047	NADB-R - 1367344; Other - North Manteca; SAC-452D	2009	Billat, L.	New Tower ("NT")Submission Packet FCC Form 620 Project Name: North Manteca Project #:SAC-452D	Earth Touch, Inc.	
SJ-07145	NADB-R - 1367468	2009	EDAW, Inc.	Draft: Cultural Resources Assessment for the Manteca Arsenic Reduction Project San Joaquin County, California	EDAW, Inc.	39-004913
SJ-07238	NADB-R - 1367568; Other - North Manteca; SAC-452C	2008	Billat, L.	New Tower ("NT") Submission Packet FCC Form 620 Project Nmae: North Manteca, Project Number: SAC-452C	Earth Touch, Inc.	
SJ-07761	NADB-R - 1368137	2012	Martorana, D.	Letter Report: Verizon Cellular Communications Tower Site, Lathrop Union, 815 W. Lathrop Road (APN:197-020-11), Manteca, San Joaquin, County, California 95336	URS Corporation	
SJ-09092		2019	ESA, Inc.	Cultural Resources and Tribal Cultural Resources City of Manteca TCP Mitigation Project.	ESA, Inc., for City of Manteca Public Works Dept.	39-005339

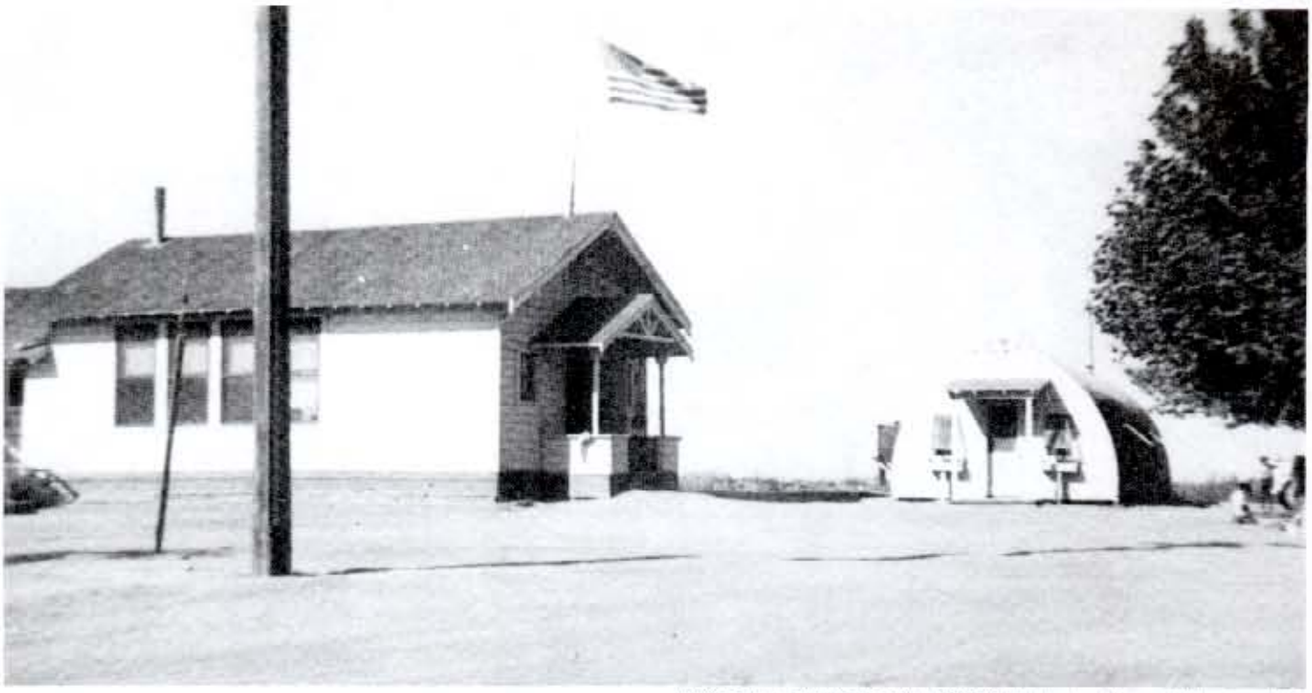
Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-39-000015	CA-SJO-000256H	Resource Name - Tidewater Southern Railway; Union Pacific	Structure	Historic	AH07	1994 (Napton, L.K., California State University Stanislaus, Institute for Archaeological Research); 1994 (JRP Historical Consulting, for Woodward-Clyde); 1996 (Corbett et al., Corbett & Minor); 2000 (Fisher, Caltrans); 2000 (Lindquist, Office of Historic Preservation); 2000 (Jensen and Jensen, Jensen & Associates); 2002 (David S. Byrd, Jones & Stokes)	SJ-02262, SJ-02759, SJ-03358, SJ-03362, SJ-04029, SJ-04203, SJ-04204, SJ-04786, SJ-05309, SJ-05746, SJ-06994, SJ-07171, SJ-07310, SJ-08542, ST-07171
P-39-004495		Resource Name - 14745 S. Union Road	Building	Historic	HP33	2004 (Angel Tomes, EDAW, Inc)	SJ-05582
P-39-004496		Resource Name - 3833 Lathrop Road	Building	Historic	HP02	2004 (Angel Tomes, EDAW, Inc.)	SJ-05582
P-39-004497		Resource Name - 3807 Lathrop Road	Building	Historic	HP02	2004 (Angel Tomes, EDAW)	SJ-05582
P-39-004498		Resource Name - 14875 S. Union Road	Building	Historic	HP02; HP04	2004 (Angel Tomes, EDAW, Inc.)	SJ-05582
P-39-004499		Resource Name - 4513 Lathrop Road	Building	Historic	HP09	2004 (Angel Tomes, EDAW, Inc.)	SJ-05582
P-39-004500		Resource Name - 14842 S. Union Road	Building	Historic	HP02; HP04	2004 (Angel Tomes, EDAW, Inc.)	SJ-05582
P-39-004501		Resource Name - 14808 S. Union Road	Building	Historic	HP02; HP04	2004 (Angel Tomes, EDAW, Inc.)	SJ-05582
P-39-004502		Resource Name - 14596 S. Union Road	Building	Historic	HP02; HP04	2004 (Angel Tomes, EDAW, Inc.)	SJ-05582
P-39-004913		Resource Name - 2064 N. Union Road	Building	Historic	HP02	2009 (Angel Tomes, EDAW, Inc.)	SJ-07145
P-39-005005		Resource Name - Mandeville/King Island Schools and Manteca High School	Building	Historic	HP15	1991 (San Joaquin County Superintendent of Schools, Public Schools of San Joaquin County 1852-1990 (1991))	
P-39-005339		Resource Name - 883 W. Lathrop Road, Manteca	Building	Historic	HP02	2019 (A. Cunningham, ESA, Inc., for City of Manteca Public Works Dept.)	SJ-09092

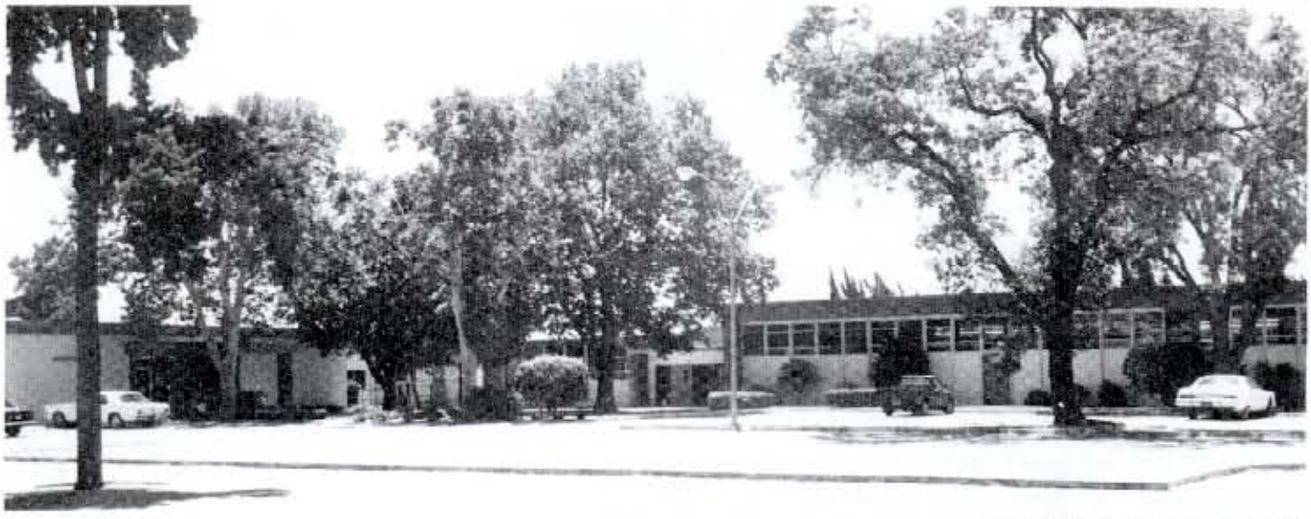
P-39-003603 Manteca, CA

MANDEVILLE/KING ISLAND SCHOOLS, cont.

12-10



MANDEVILLE/KING ISLAND SCHOOLS (Venice-Mandeville), circa 1950

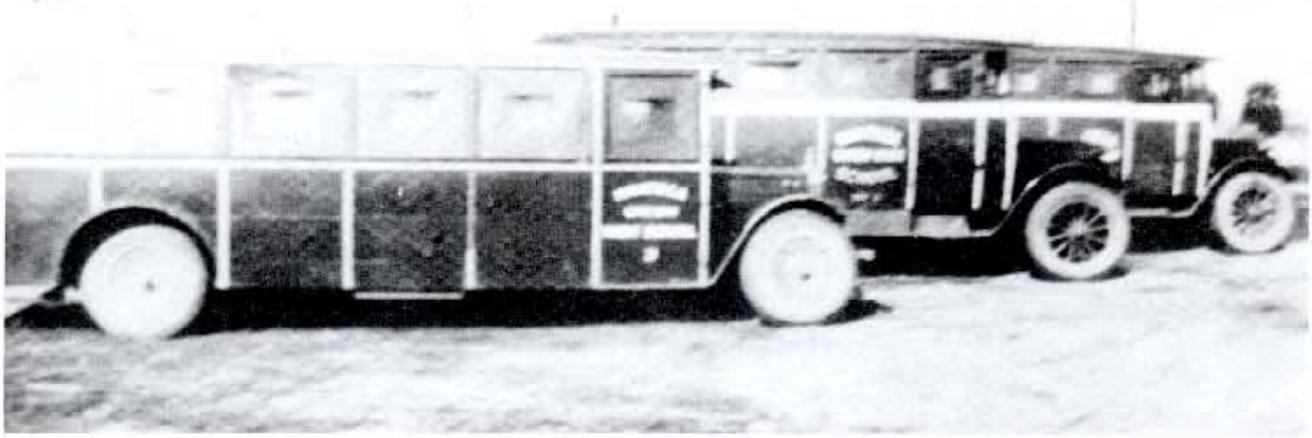


MANTECA HIGH SCHOOL circa 1956

MANTECA HIGH SCHOOL

Up until the year 1920, Manteca and the surrounding vicinity were without secondary education of any kind. Therefore, children living in the area had to travel to Stockton if they wished to receive higher education. In October of 1920 the first high school to be located within Manteca's city limits opened its doors. This group of unimpressive wooden structures, officially known as Manteca Union High School but known to all as

Continued next page



MANTECA HIGH SCHOOL, High School Buses

MANTECA HIGH SCHOOL, cont.

"the shacks," remained in use for slightly over two years.

The passage of a $200,000 bond issue on December 23, 1921, made possible the construction of a modern, California-Mission style high school which was dedicated on January 27, 1923. The new school, which was designed by the Davis, Heller and Pierce Company of Stockton, came complete with an auditorium and a gym. Ten students graduated in 1923; the school's first graduating class.

The original facilities remained adequate up until the post-World War II era. Early in 1950 a new agricultural building was added, and by 1954 Manteca's increased population necessitated the construction of additional classrooms; therefore a $500,000 bond was passed in April of that year. Manteca High's new half-million dollar addition, which included 13 classrooms and a library, opened in January of 1956. Additional bond issues, passed in March of 1958 and April of 1961, raised $360,000 and $790,000 respectively. Portions of this money were used to build a new swimming pool and gym.

On April 12, 1965, voters in the district agreed to form another high school, to be called East Union. As a result, on July 1, 1966, Manteca Union High School's name was shortened to simply Manteca High School, and East Union came into existence. The high schools became part of the Manteca Unified School District in 1966.

In 1968 a fire seriously damaged a large portion of the original high school structure, hastening its demise which was made inevitable by the Field Act standards. One year later, on October 3, 1969, the old school tower was toppled; it was followed shortly by the remainder of the old buildings. Shortly thereafter new Administration and Speech Arts buildings were added to the campus. The present Manteca High complex is a sleek post-World War II facility located at 450 E. Yosemite Avenue. For a brief period during the early 1980's two continuation high schools were located on the high school campus. These two schools, called "North" and "South" housed students from East Union High and Manteca High respectively.

■

MANTECA HIGH SCHOOL, 2nd School, circa 1921

P-39-005005

PUBLIC SCHOOLS OF SAN JOAQUIN COUNTY

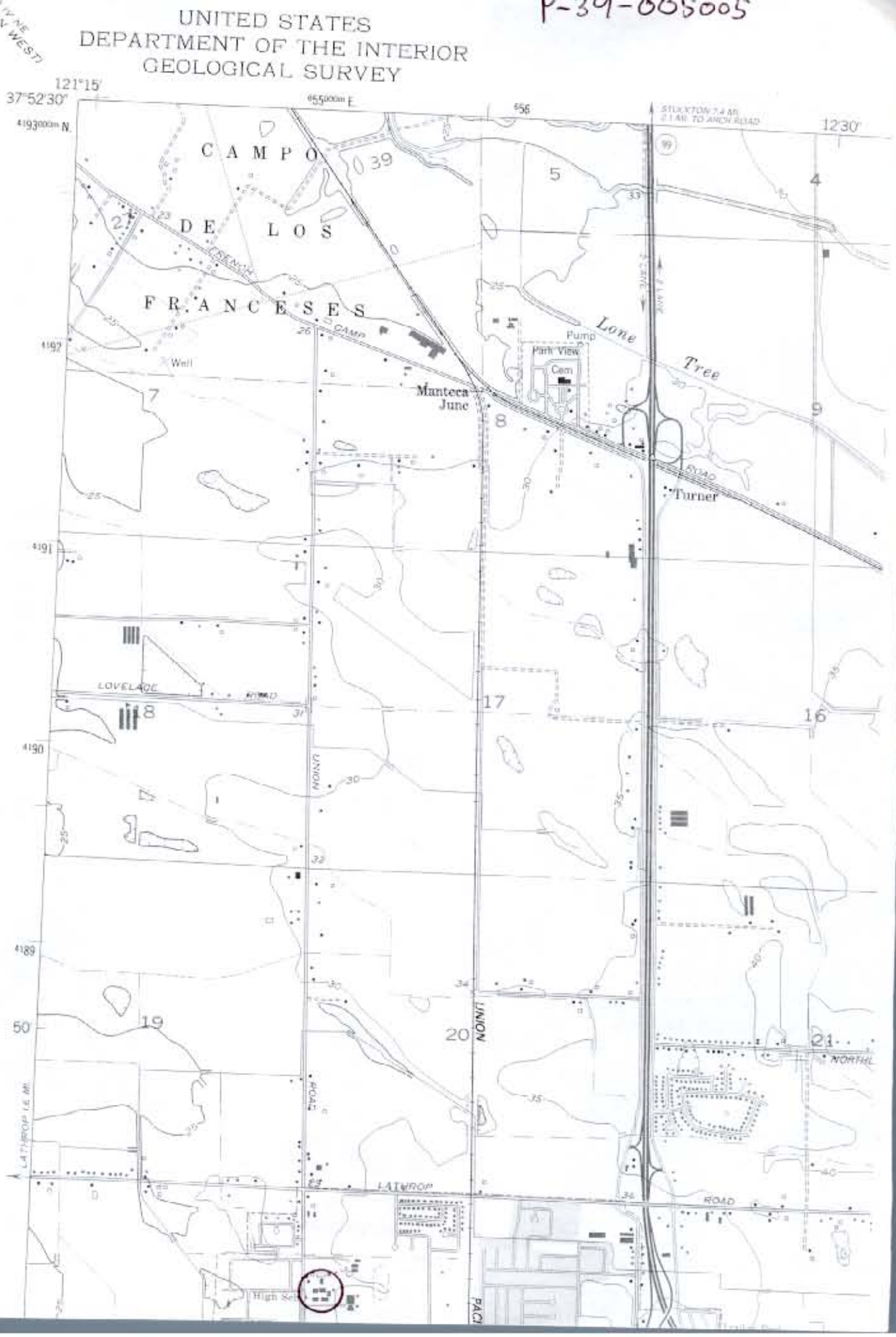
1852 - 1990

Published by the
SAN JOAQUIN COUNTY SUPERINTENDENT OF SCHOOLS

Stockton, California

January 1991

P-39-005005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LATHROP
ROAD
PACIFIC
NORTHE
LATHROP 1.6 MI.
STOCKTON 7.4 MI.
2.1 MI. TO ARCH ROAD

Attachment C Noise Technical Memorandum

NOISE TECHNICAL MEMORANDUM

DATE	March 2023
FROM	Alejandro Garcia, INCE-USA, Senior Associate, Noise and Vibration Abdul Khan, Project Planner
SUBJECT	Noise Technical Memorandum for the East Union High School Improvement Project
PROJECT NUMBER	MANT-05

This noise technical memorandum provides a community noise assessment of the proposed improvements at the East Union High School project at 1700 Union Road in Manteca (proposed project). The analysis evaluates construction and operational noise and vibration with implementation of the proposed project for compliance with the City of Manteca Municipal Code noise level standards. Noise fundamentals and common definitions are included in Appendix A.

Project Location and Description

The Manteca Unified School District (District) is proposing the improvements of East Union High School at 1700 Union Road in Manteca, California. The project area is a predominantly residential neighborhood, with residences to the north, south, and west of the project site. Other sensitive receptors within the vicinity of the project site include the Church of Jesus Christ of Latter-day Saints (LDS) to the southwest across Union Road and Neil Hafley Elementary School east of the project site.

The Manteca Unified School District (District) proposes to construct a two-story classroom building, a new auxiliary gym, and a weight room building. Once the classroom building is constructed, the District will remove 28 portable classrooms from the campus. The proposed project also includes regrading, repaving, and restriping of the existing north parking lot. No demolition of existing structures would be necessary except for a small utility building north of the existing gym. The proposed project would not increase the current student capacity at the high school campus.

Applicable Standards

CITY OF MANTECA NOISE STANDARDS

Municipal Code

Section 17.58.050(e), Prohibited Activities, sets restrictions on when construction is allowed:

» Operating or causing the operation of tools or equipment on private property used in alteration construction, demolition, drilling, or repair work, do not take place between the hours of 7:00 pm and 7:00 am.

Section 17.58.070, Vibration, sets rules for any activity that may cause vibrational noise at nearby sensitive receptors:

» Uses, activities, and processes shall not generate vibrations that cause discomfort or annoyance to reasonable persons of normal sensitivity, or which endanger the comfort, repose, health, or peace of residents whose property abuts the property line of the parcel.

» Vibrations from temporary construction/demolition and vehicles that leave the subject parcel (e.g., trucks, trains, and aircraft) are exempt from the provisions of this section. (Ord. 1501 sec. 1, 2011)

General Plan

The City of Manteca General Plan provides standards for noise from stationary noise sources at off-site sensitive receptors, as shown in Table 1.

Table 1 City of Manteca Stationary Noise Standards

Noise Level Descriptor	Daytime 7:00 am to 10:00 pm	Nighttime 10:00 pm to 7:00 am
Hourly L_{eq}, dBA	55	45

Source: City of Manteca General Plan Safety Element, 2022.

FEDERAL TRANSIT ADMINISTRATION

The City of Manteca does not have a quantified threshold for temporary construction noise and vibration. Therefore, to determine impact significance, the following FTA criteria are adopted.

A vibration or construction noise impact would occur if:

» Vibration levels would exceed 0.20 inches/second (in/sec) peak particle velocity (PPV) at the façade of a nonengineered structure (e.g., wood-frame residential) at the nearby sensitive receptors.

» Project construction activities would generate noise levels greater than 80 dBA L_{eq} at the sensitive receptor property line.

Sensitive Receptors

The closest residential sensitive receptors to the project site are the single-family residences adjacent to the northern campus boundary. Other sensitive receptors within 500 feet of the project site include the LDS building to the southwest and Neil Hafley Elementary School to the southeast. Further receptors include Norgate Park and McFall Preschool. However, because noise attenuates at least 6 dB per doubling of distance, receptors beyond 500 feet typically would not experience excessive noise from project-related construction or operational activities.

Existing Noise Conditions

The project site is primarily characterized by vehicular traffic from State Route 99 (SR-99), approximately 0.75 mile to the east, and local roadways. Noise sources from nearby residential uses (e.g., property maintenance) and Neil Hafley Elementary School to the east (e.g., outdoor student activities, student pick-up and drop-off, maintenance) also contribute to the overall ambient noise environment in the project vicinity. Based on the General Plan's Recirculated Draft Environmental Impact Report, the project site is well outside SR-99's 60 dBA CNEL noise contour.

Environmental Impacts

a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

PROJECT CONSTRUCTION NOISE

Two types of short-term noise impacts could occur during construction: (1) mobile-source noise from transport of workers, material deliveries, and debris and soil haul and (2) stationary-source noise from use of construction equipment. Existing uses surrounding the project site would be exposed to construction noise.

Construction Vehicles

The transport of workers and materials to and from the construction site would incrementally increase noise levels along access roadways in the project vicinity. Individual construction vehicle pass-bys and haul trucks may create momentary noise levels of up to 85 dBA (L_{max}) at 50 feet from the vehicle, but these occurrences would be temporary and generally short lived as trucks pass by. The highest worker and vendor trips would approach 42 trips during overlapping construction activity. Existing average daily trips in the project vicinity are unknown, but student enrollment for the year 2021-2022 is 1,614 students (CDE 2023). Comparing the temporary construction trips to trips generated from existing student enrollment alone, the addition of 42 temporary worker and vendor daily trips would result in a negligible noise increase. Therefore, impacts would be less than significant.

Construction Equipment

Noise generated during construction is based on the type of equipment used, the location of the equipment relative to sensitive receptors, and the timing and duration of the noise-generating activities. Each activity phase of construction involves the use of different construction equipment, and therefore each activity phase has its own distinct noise characteristics. Noise levels from construction activities are

dominated by the loudest piece of construction equipment. The dominant noise source is typically the engine, although work piece noise (such as dropping of materials) can also be noticeable.

The noise generated at each activity phase is determined by combining the L_{eq} contributions from each piece of equipment used at a given time. Construction activities associated with the proposed project would not require blasting or pile driving. Demolition and grading typically generate the highest noise levels because they require the largest equipment. Construction noise quite often exhibits a high degree of variability because factors such as noise attenuation due to distance, the number and type of equipment, and the load and power requirements to accomplish tasks at each construction activity phase result in different noise levels at a given sensitive receptor. The project's loudest activity phases would involve grading and paving, which would produce short-duration noise levels of 85 dBA L_{eq} at 50 feet. Since noise from construction equipment is intermittent and diminishes at a rate of 6 dBA per doubling distance,[1] the average noise levels at noise-sensitive receptors would be lower, because mobile construction equipment would move around the site with different loads and power requirements. The City of Manteca does not have an established criterion for construction noise. The FTA provides criteria for acceptable construction noise levels and recommends a daytime noise threshold of 80 dBA L_{eq} for residential uses. For the purposes of this analysis, the FTA criterion is applied to nearby residences to determine impact significance.

The top 3 loudest pieces of construction equipment for each construction phase were modeled using the Roadway Construction Noise Model (RCNM) and equipment mix based on CalEEMod defaults. The closest residences from the Project's proposed onsite improvements are single-family homes approximately 90 feet to the west on Union Road as measured from the façade of the new classroom building. Building construction is estimated to generate noise levels of up to 78dBA L_{eq} at 90 feet, which is below the FTA criterion of 80 dBA L_{eq}. Given that this would be the closest distance construction would occur to nearby sensitive receptors, all other construction activity phases would be below the threshold the further away they would be from sensitive receptors. These calculated distances for the other activity phases can be found in Appendix A. Project construction noise impacts would be less than significant.

PROJECT STATIONARY OPERATIONAL NOISE

The proposed school would include new mechanical equipment for heating, ventilation, and cooling equipment (HVAC). The nearest sensitive receptor to the new building that would have HVAC equipment (L Building) is approximately 90 feet to the west. Typical HVAC equipment generates noise levels ranging up to 72 dBA at a distance of 3 feet. At 90 feet, HVAC-related noise would attenuate to 43 dBA or less. This would be below the daytime and nighttime Manteca noise standards of 55 and 45 dBA L_{eq}, respectively. This would be a less-than-significant impact.

PROJECT TRAFFIC NOISE

With the planned school remodel, the proposed project would not result in an increase in students. Additionally, there are no planned roadway upgrades associated with the proposed project. Therefore, the project would not result in a significant change in long-term traffic volumes. Therefore, traffic noise increases from the proposed project on nearby roadway segments would be less than significant.

b. Generation of excessive groundborne vibration or groundborne noise levels?

As stated above, the City of Manteca has not established specific limits for vibration. However, the FTA criterion of 0.2 in/sec PPV is used in this analysis to evaluate potential construction-related vibration

[1] The sound attenuation rate of 6 dBA is generally conservative and does not consider additional attenuation provided by existing buildings, structures, and natural landscapes around the project site.

impacts. Typical construction equipment can generate vibration levels up to 0.21 in/sec PPV at 25 feet (FTA 2018). Vibration levels at a distance greater than 25 feet would attenuate to less than 0.2 in/sec PPV. The nearest structure to proposed construction activities are the residences approximately 90 feet west of the project site boundary. At 90 feet, construction vibration would attenuate below the 0.2 in/sec PPV criterion at nearby homes. Therefore, impacts would be less than significant.

c. **For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?**

The nearest airport to the project site is Stockton Metropolitan Airport, approximately 4.25 miles to the north (Airnav 2023). Therefore, since no public or private airstrip is within 2 miles of the proposed project, the project would not expose people residing or working in the project area to excessive noise levels.

References

AirNav.com. 2023. Airports. https://www.airnav.com/airports/.

California Department of Education (CDE). 2021-2022 East Union Student Enrollment. https://dq.cde.ca.gov/dataquest/dqcensus/enrgrdlevels.aspx?agglevel=School&year=2021-22&cds=39685933932001.

Federal Highway Administration (FHWA). 2006, January. *FHWA Roadway Construction Noise Model (RCNM) User's Guide*.

———. 2006, August. *Construction Noise Handbook*.

Federal Transit Administration (FTA). 2018, September. Transit Noise and Vibration Impact Assessment.

Manteca, City of. 2022a, November. Manteca, California General Plan Safety Element. https://static1.squarespace.com/static/582f3c2a59cc689c8da65127/t/637c6067071d1d00331389e6/1669095531562/MantecaGP_9-Safety.pdf

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———. 2023, February 13 (accessed). Manteca, California Noise Ordinance. https://library.qcode.us/lib/manteca_ca/pub/municipal_code/item/title_17-article_iii-chapter_17_58-17_58_050.

Appendix A Noise Fundamentals and Common Noise Definitions

Fundamentals of Noise

NOISE

Noise is most often defined as unwanted sound; whether it is loud, unpleasant, unexpected, or otherwise undesirable. Although sound can be easily measured, the perception of noise and the physical response to sound complicate the analysis of its impact on people. People judge the relative magnitude of sound sensation in subjective terms such as "noisiness" or "loudness."

Noise Descriptors

The following are brief definitions of terminology used in this chapter:

- **Sound.** A disturbance created by a vibrating object, which, when transmitted by pressure waves through a medium such as air, is capable of being detected by a receiving mechanism, such as the human ear or a microphone.

- **Noise.** Sound that is loud, unpleasant, unexpected, or otherwise undesirable.

- **Decibel (dB).** A unitless measure of sound, expressed on a logarithmic scale and with respect to a defined reference sound pressure. The standard reference pressure is 20 micropascals (20 μPa).

- **A-Weighted Decibel (dBA).** An overall frequency-weighted sound level in decibels that approximates the frequency response of the human ear.

- **Equivalent Continuous Noise Level (L_{eq}); also called the Energy-Equivalent Noise Level.** The value of an equivalent, steady sound level which, in a stated time period (often over an hour) and at a stated location, has the same A-weighted sound energy as the time-varying sound. Thus, the L_{eq} metric is a single numerical value that represents the equivalent amount of variable sound energy received by a receptor over the specified duration.

- **Statistical Sound Level (L_n).** The sound level that is exceeded "n" percent of time during a given sample period. For example, the L_{50} level is the statistical indicator of the time-varying noise signal that is exceeded 50 percent of the time (during each sampling period); that is, half of the sampling time, the changing noise levels are above this value and half of the time they are below it. This is called the "median sound level." The L_{10} level, likewise, is the value that is exceeded 10 percent of the time (i.e., near the maximum) and this is often known as the "intrusive sound level." The L_{90} is the sound level exceeded 90 percent of the time and is often considered the "effective background level" or "residual noise level."

- **Maximum Sound Level (L_{max})**. The highest RMS sound level measured during the measurement period.
- **Root Mean Square Sound Level (RMS).** The square root of the average of the square of the sound pressure over the measurement period.

- **Day-Night Sound Level (L_{dn} or DNL).** The energy-average of the A-weighted sound levels occurring during a 24-hour period, with 10 dB added to the sound levels occurring during the period from 10:00 PM to 7:00 AM.

- **Community Noise Equivalent Level (CNEL).** The energy average of the A-weighted sound levels occurring during a 24-hour period, with 5 dB added from 7:00 PM to 10:00 PM and 10 dB from 10:00 PM to 7:00 AM. NOTE: For general community/environmental noise, CNEL and L_{dn} values rarely differ by more than 1 dB (with the CNEL being only slightly more restrictive – that is, higher than the L_{dn} value). As a matter of practice, L_{dn} and CNEL values are interchangeable and are treated as equivalent in this assessment.

- **Peak Particle Velocity (PPV).** The peak rate of speed at which soil particles move (e.g., inches per second) due to ground vibration.

- **Sensitive Receptor.** Noise- and vibration-sensitive receptors include land uses where quiet environments are necessary for enjoyment and public health and safety. Residences, schools, motels and hotels, libraries, religious institutions, hospitals, and nursing homes are examples.

Characteristics of Sound

When an object vibrates, it radiates part of its energy in the form of a pressure wave. Sound is that pressure wave transmitted through the air. Technically, airborne sound is a rapid fluctuation or oscillation of air pressure above and below atmospheric pressure that creates sound waves.

Sound can be described in terms of amplitude (loudness), frequency (pitch), or duration (time). Loudness or amplitude is measured in dB, frequency or pitch is measured in Hertz [Hz] or cycles per second, and duration or time variations is measured in seconds or minutes.

Amplitude

Unlike linear units such as inches or pounds, decibels are measured on a logarithmic scale. Because of the physical characteristics of noise transmission and perception, the relative loudness of sound does not closely match the actual amounts of sound energy. Table 1 presents the subjective effect of changes in sound pressure levels. Ambient sounds generally range from 30 dBA (very quiet) to 100 dBA (very loud). Changes of 1 to 3 dB are detectable under quiet, controlled conditions, and changes of less than 1 dB are usually not discernible (even under ideal conditions). A 3 dB change in noise levels is considered the minimum change that is detectable with human hearing in outside environments. A change of 5 dB is readily discernible to most people in an exterior environment, and a 10 dB change is perceived as a doubling (or halving) of the sound.

Table 1 Noise Perceptibility

Change in dB	Noise Level
± 3 dB	Barely perceptible increase
± 5 dB	Readily perceptible increase
± 10 dB	Twice or half as loud
± 20 dB	Four times or one-quarter as loud

Source: California Department of Transportation (Caltrans). 2013, September. Technical Noise Supplement ("TeNS").

Frequency

The human ear is not equally sensitive to all frequencies. Sound waves below 16 Hz are not heard at all, but are "felt" more as a vibration. Similarly, though people with extremely sensitive hearing can hear sounds as high as 20,000 Hz, most people cannot hear above 15,000 Hz. In all cases, hearing acuity falls off rapidly above about 10,000 Hz and below about 200 Hz.

When describing sound and its effect on a human population, A-weighted (dBA) sound levels are typically used to approximate the response of the human ear. The A-weighted noise level has been found to correlate well with people's judgments of the "noisiness" of different sounds and has been used for many years as a measure of community and industrial noise. Although the A-weighted scale and the energy-equivalent metric are commonly used to quantify the range of human response to individual events or general community sound levels, the degree of annoyance or other response also depends on several other perceptibility factors, including:

- Ambient (background) sound level
- General nature of the existing conditions (e.g., quiet rural or busy urban)
- Difference between the magnitude of the sound event level and the ambient condition
- Duration of the sound event
- Number of event occurrences and their repetitiveness
- Time of day that the event occurs

Duration

Time variation in noise exposure is typically expressed in terms of a steady-state energy level equal to the energy content of the time varying period (called L_{eq}), or alternately, as a statistical description of the sound level that is exceeded over some fraction of a given observation period. For example, the L_{50} noise level represents the noise level that is exceeded 50 percent of the time; half the time the noise level exceeds this level and half the time the noise level is less than this level. This level is also representative of the level that is exceeded 30 minutes in an hour. Similarly, the L_2, L_8 and L_{25} values represent the noise levels that are exceeded 2, 8, and 25 percent of the time or 1, 5, and 15 minutes per hour, respectively. These "n" values are typically used to demonstrate compliance for stationary noise sources with many cities' noise ordinances. Other values typically noted during a noise survey are the L_{min} and L_{max}. These values represent the minimum and maximum root-mean-square noise levels obtained over the measurement period, respectively.

Because community receptors are more sensitive to unwanted noise intrusion during the evening and at night, state law and many local jurisdictions use an adjusted 24-hour noise descriptor called the Community Noise Equivalent Level (CNEL) or Day-Night Noise Level (L_{dn}). The CNEL descriptor requires that an artificial increment (or "penalty") of 5 dBA be added to the actual noise level for the hours from 7:00 PM to 10:00 PM and 10 dBA for the hours from 10:00 PM to 7:00 AM. The L_{dn} descriptor uses the same methodology except that there is no artificial increment added to the hours between 7:00 PM and 10:00 PM. Both descriptors give roughly the same 24-hour level, with the CNEL being only slightly more restrictive (i.e., higher). The CNEL or L_{dn} metrics are commonly applied to the assessment of roadway and airport-related noise sources.

Sound Propagation

Sound dissipates exponentially with distance from the noise source. This phenomenon is known as "spreading loss." For a single-point source, sound levels decrease by approximately 6 dB for each doubling of distance from the source (conservatively neglecting ground attenuation effects, air absorption factors, and barrier shielding). For example, if a backhoe at 50 feet generates 84 dBA, at 100 feet the noise level would be 79 dBA, and at 200 feet it would be 73 dBA. This drop-off rate is appropriate for noise generated by on-site operations from stationary equipment or activity at a project site. If noise is produced by a line source, such as highway traffic, the sound decreases by 3 dB for each doubling of distance over a reflective ("hard site") surface such as concrete or asphalt. Line source noise in a relatively flat environment with ground-level absorptive vegetation decreases by an additional 1.5 dB for each doubling of distance.

Psychological and Physiological Effects of Noise

Physical damage to human hearing begins at prolonged exposure to noise levels higher than 85 dBA. Exposure to high noise levels affects the entire system, with prolonged noise exposure in excess of 75 dBA increasing body tensions, thereby affecting blood pressure and functions of the heart and the nervous system. Extended periods of noise exposure above 90 dBA results in permanent cell damage, which is the main driver for employee hearing protection regulations in the workplace. For community environments, the ambient or background noise problem is widespread, through generally worse in urban areas than in outlying, less-developed areas. Elevated ambient noise levels can result in noise interference (e.g., speech interruption/masking, sleep disturbance, disturbance of concentration) and cause annoyance. Since most people do not routinely work with decibels or A-weighted sound levels, it is often difficult to appreciate what a given sound pressure level number means. To help relate noise level values to common experience, Table 2 shows typical noise levels from familiar sources.

Table 2 Typical Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
Onset of physical discomfort	120+	
	110	Rock Band (near amplification system)
Jet Flyover at 1,000 feet		
	100	
Gas Lawn Mower at three feet		
	90	
Diesel Truck at 50 feet, at 50 mph		Food Blender at 3 feet
	80	Garbage Disposal at 3 feet
Noisy Urban Area, Daytime		
	70	Vacuum Cleaner at 10 feet
Commercial Area		Normal speech at 3 feet
Heavy Traffic at 300 feet	60	
		Large Business Office
Quiet Urban Daytime	50	Dishwasher Next Room
Quiet Urban Nighttime	40	Theater, Large Conference Room (background)
Quiet Suburban Nighttime		
	30	Library
Quiet Rural Nighttime		Bedroom at Night, Concert Hall (background)
	20	
		Broadcast/Recording Studio
	10	
Lowest Threshold of Human Hearing	0	Lowest Threshold of Human Hearing

Source: California Department of Transportation (Caltrans). 2013, September. Technical Noise Supplement ("TeNS").

Vibration Fundamentals

Vibration is an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. Vibration is normally associated with activities stemming from operations of railroads or vibration-intensive stationary sources, but can also be associated with construction equipment such as jackhammers, pile drivers, and hydraulic hammers. As with noise, vibration can be described by both its amplitude and frequency. Vibration displacement is the distance that a point on a surface moves away from its original static position; velocity is the instantaneous speed that a point on a surface moves; and acceleration is the rate of change of the speed. Each of these descriptors can be used to correlate vibration to human response, building damage, and acceptable equipment vibration levels. During construction, the operation of construction equipment can cause groundborne vibration. During the operational phase of a project, receptors may be subject to levels of vibration that can cause annoyance due to noise generated from vibration of a structure or items within a structure.

Vibration amplitudes are usually described in terms of either the peak particle velocity (PPV) or the root mean square (RMS) velocity. PPV is the maximum instantaneous peak of the vibration signal and RMS is the

square root of the average of the squared amplitude of the signal. PPV is more appropriate for evaluating potential building damage and RMS is typically more suitable for evaluating human response.

As with airborne sound, annoyance with vibrational energy is a subjective measure, depending on the level of activity and the sensitivity of the individual. To sensitive individuals, vibrations approaching the threshold of perception can be annoying. Persons accustomed to elevated ambient vibration levels, such as in an urban environment, may tolerate higher vibration levels. Table 3 displays the human response and the effects on buildings resulting from continuous vibration (in terms of various levels of PPV).

Table 3 Human Reaction to Typical Vibration Levels

Vibration Level, PPV (in/sec)	Human Reaction	Effect on Buildings
0.006–0.019	Threshold of perception, possibility of intrusion	Vibrations unlikely to cause damage of any type
0.08	Vibrations readily perceptible	Recommended upper level of vibration to which ruins and ancient monuments should be subjected
0.10	Level at which continuous vibration begins to annoy people	Virtually no risk of "architectural" (i.e. not structural) damage to normal buildings
0.20	Vibrations annoying to people in buildings	Threshold at which there is a risk to "architectural" damage to normal dwelling – houses with plastered walls and ceilings
0.4–0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic, but would cause "architectural" damage and possibly minor structural damage

Source: California Department of Transportation (Caltrans). 2020, April. *Transportation and Construction Vibration Guidance Manual*. Prepared by ICF International.

LOCAL REGULATIONS AND STANDARDS

Noise

Goal S-~~5~~6

Protect the quality of life by protecting the community from harmful and excessive noise.

Policies

S-~~5~~6.1 Incorporate noise considerations into land use, transportation, and infrastructure planning decisions, and guide the location and design of noise-producing uses to minimize the effects of noise on adjacent noise-sensitive land uses, including residential uses and schools.

S-~~5~~6.2 Ensure that Downtown noise levels remain acceptable and compatible with a pedestrian-oriented environment and higher density residential land uses.

S-~~5~~6.3 Areas within Manteca exposed to existing or projected exterior noise levels from mobile noise sources exceeding the performance standards in Table S-1 shall be designated as noise-impacted areas. Figure S-3 identifies noise contours anticipated at General Plan buildout.

S-~~5~~6.4 Require residential and other noise-sensitive development projects to satisfy the noise level criteria in Tables S-1 and S-2.

S-~~5~~6.5 Require new stationary noise sources proposed adjacent to noise sensitive uses to incorporate noise-attenuating measures~~be mitigated~~ so as to not exceed the noise level performance standards in Table S-2, or a substantial increase in noise levels established through a detailed ambient noise survey.

S-~~5~~6.6 Regulate construction-related noise to reduce impacts on adjacent uses to the criteria identified in Table S-2 or, if the criteria in Table S-2 cannot be met, to the maximum level feasible using best management practices and complying with the MMC Chapter 9.52.

S-~~5~~6.7 Where the development of residential or other noise-sensitive land use is proposed for a noise-impacted area or where the development of a stationary noise source is proposed in the vicinity of noise-sensitive uses, an acoustical analysis is required as part of the ~~environmental~~ development review process so that noise mitigation may be considered in the project design. The acoustical analysis shall:

- Be the responsibility of the applicant.
- Be prepared by a qualified acoustical consultant experienced in the fields of environmental noise assessment and architectural acoustics.
- Include representative noise level measurements with sufficient sampling periods and locations to adequately describe local conditions and the predominant noise sources.

Measuring Noise

Sound is a pressure wave that travels through the air. It is described in terms of loudness, frequency or pitch, and duration. The standard measurement unit for loudness is the decibel (dB). Changes of 1 to 3 dB are detectable under quiet, controlled conditions, and changes of less than 1 dB are usually indiscernible. A change of 5 dB is readily discernable to most people in an exterior environment. The human ear is not equally sensitive to all frequencies. In the context of environmental noise, the A-weighted decibel, or dBA, is used to adjust sound levels to reflect the way humans hear. Because people are more sensitive to noise during the evening and at night, state law requires additions to the measured noise levels during these times for planning purposes. The Community Noise Equivalent Level (CNEL) averages sound over 24 hours, with 5 dB added from 7 pm to 10 pm and 10 dB added from 10 pm to 7 am.

- Estimate existing and projected (20 years) noise levels in terms of the standards of Table S-1 or Table S-2, and compare those levels to the adopted policies of the Noise Element.
- Recommend appropriate mitigation measures to achieve compliance with the adopted policies and standards of the Noise Element.
- Estimate noise exposure after the prescribed mitigation measures have been implemented.
- If necessary, describe a post-project assessment program to monitor the effectiveness of the proposed mitigation measures.

Noise-sensitive land uses include residential neighborhoods, places of worship, schools, and hospitals.

S-~~5~~6.8 Apply noise level criteria applied to land uses other than residential or other noise-sensitive uses consistent with noise performance levels of Table S-1 and Table S-2.

S-~~5~~6.9 Enforce the Sound Transmission Control Standards of the California Building Code concerning the construction of new multiple occupancy dwellings such as hotels, apartments, and condominiums.

S-~~5~~6.10 Ensure that new equipment and vehicles purchased by the City comply with noise level performance standards consistent with the best available noise reduction technology.

S-~~5~~6.11 Require the Manteca Police Department to actively enforce requirements of the California Vehicle Code relating to vehicle mufflers and modified exhaust systems.

S-~~5~~6.12 For new residential development backing on to a freeway or railroad right-of-way, the developer shall be required to ~~provide~~ incorporate appropriate ~~mitigation~~ noise-attenuation measures to satisfy the performance standards in Table S-1.

S-~~5~~6.13 It is recognized that the City and surrounding areas are considered to be urban in nature and rely upon both the industrial and agricultural economy of the area. Therefore, it is recognized that noise sources of existing uses may exceed generally accepted standards.

S-~~5~~6.14 Carefully review and give potentially affected residents an opportunity to fully review any proposals for the establishment of helipads or heliports.

S-~~5~~6.15 Recognizing that existing noise-sensitive uses may be exposed to increase noise levels due to circulation improvement projects associated with development under the General Plan and that it may not be feasible to reduce increased traffic noise levels to the criteria identified in Table S-1, the following criteria may be used to determine the significance of noise impacts associated with circulation improvement projects:

- Where existing traffic noise levels are less than 60 dB Ldn at the

outdoor activity areas of noise-sensitive uses, a +5 dB Ldn increase in noise levels due to roadway improvement projects will be considered significant; and

- Where existing traffic noise levels range between 60 and 65 dB Ldn at the outdoor activity areas of noise-sensitive uses, a +3 dB Ldn increase in noise levels due to roadway improvement projects will be considered significant; and
- Where existing traffic noise levels are greater than 65 dB Ldn at the outdoor activity areas of noise-sensitive uses, a + 1.5 dB Ldn increase in noise levels due to roadway improvement projects will be considered significant.

S-~~5~~6.16 Work with the Federal Railroad Administration and passenger and freight rail operators to reduce exposure to rail and train noise, including establishing train horn "quiet zones" and/or wayside horns consistent with the federal regulations.

Implementation

S-6~~5~~a Require an acoustical analysis that complies with the requirements of S-5.7 where:

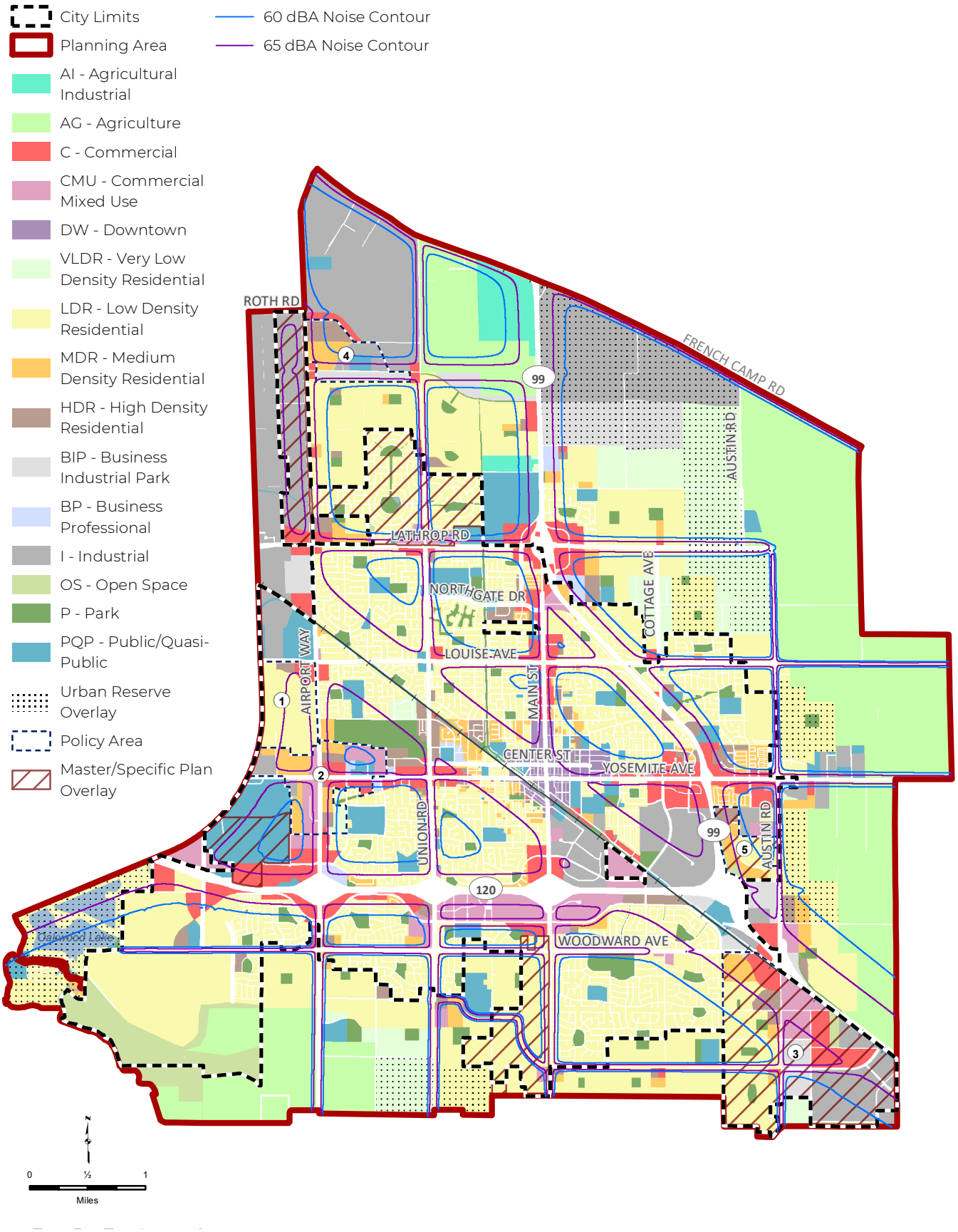
- *Noise sensitive land uses are proposed in areas exposed to existing or projected noise levels exceeding the levels specified in Table S-1 or S-2.*
- *Proposed transportation projects are likely to produce noise levels exceeding the levels specified in Table S-1 or S-2 at existing or planned noise sensitive uses.*

S-6~~5~~b Assist in enforcing compliance with noise emissions standards for all types of vehicles, established by the California Vehicle Code and by federal regulations, through coordination with the Manteca Police Department and the California Highway Patrol.

S-6~~5~~c Update the City's Noise Ordinance (Chapter 9.52) to reflect the noise standards established in this ~~Noise~~ Safety Element and proactively enforce the City's Noise Ordinance, including requiring the following measures for construction:

- *Restrict construction activities to the hours of 7:00 a.m. to 7:00 p.m. on Monday through Friday, and 8:00 a.m. to 6:00 p.m. on Saturdays. No construction shall be permitted outside of these hours or on Sundays or federal holidays, without a specific exemption issued by the City. No exemption shall be issued for construction within 200 feet of residential uses.*
- *A Construction Noise Management Plan shall be submitted by the applicant for construction projects that exceed ambient noise levels by more than 12dBA or produce perceptible vibrations at any off-site structures~~, when determined necessary by the City~~. The Construction Noise Management Plan shall include proper posting*

Figure S-3: Future Noise Contours



of construction schedules, appointment of a noise disturbance coordinator, ~~and~~ methods for assisting in noise reduction measures, and shall establish allowed truck routes to access the site that minimize exposure of residential areas to heavy truck traffic.

- *Noise reduction measures ~~may~~ shall include, but are not limited to, the following:*

  a. *Equipment and trucks used for project construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically attenuating shields or shrouds) wherever feasible.*

  b. *Except as provided herein, impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electrically powered to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used. This muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used, if such jackets are commercially available. ~~this~~ This ~~could~~ would achieve a reduction of up to 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever such procedures are available and consistent with construction procedures.*

  c. *Temporary power poles or zero-emission power sources shall be used instead of generators where feasible.*

  d. *Stationary noise sources shall be located as far from adjacent properties as possible, and they shall be muffled and enclosed within temporary sheds, incorporate insulation barriers, or use other measures as determined by the City ~~of~~ to provide equivalent noise reduction.*

  e. *The noisiest phases of construction shall be limited to less than 10 days at a time. Exceptions may be allowed if the City determines an extension is necessary and all available noise reduction controls are implemented.*

  f. *Delivery of materials shall observe the hours of operation described above.*

  g. *Truck traffic ~~should~~ shall avoid residential areas to the greatest extent ~~possible~~feasible.*

S-6~~5~~d *In making a determination of impact under the California Environmental Quality Act (CEQA), a substantial increase will occur if ambient noise levels are have a substantial increase. Generally, a 3 dB*

increase in noise levels is barely perceptible, and a 5 dB increase in noise levels is clearly perceptible. Therefore, increases in noise levels shall be considered to be substantial when the following occurs:

Transportation Noise

- *When existing noise levels are less than 60 dB, a 5 dB increase in noise will be considered substantial;*
- *When existing noise levels are between 60 dB and 65 dB, a 3 dB increase in noise will be considered substantial;*
- *When existing noise levels exceed 65 dB, a 1.5 dB increase in noise will be considered substantial.*

Non-Transportation Noise

- *An 5dB increase in noise will be considered substantial.*

Construction Noise

- *An increase in 12dBA in noise will be considered substantial.*

~~*Additional or alternative criteria can be used for determining a substantial increase in noise levels. For instance, if the overall increase in noise levels occurs where no noise-sensitive uses are located, then the City may use their discretion in determining if there is any impact at all. In such a case, the following alternative factors may be used for determining a substantial increase in noise levels:*~~

- ~~*the resulting noise levels;*~~
- ~~*the duration and frequency of the noise;*~~
- ~~*the number of people affected;*~~
- ~~*conforming or non-conforming land uses;*~~
- ~~*the land use designation of the affected receptor sites;*~~
- ~~*public reactions or controversy as demonstrated at workshops or hearings, or by correspondence; and*~~
- ~~*prior CEQA determinations by other agencies specific to the project.*~~

S-6~~5~~e *Control noise at the source through use of insulation, berms, building design and orientation, buffer space, staggered operating hours, and similar techniques. Where such techniques would not meet acceptable levels, use noise barriers to attenuate noise associated with new noise sources to acceptable levels.*

S-6~~5~~f *Require that all noise-attenuating features, including soundwalls and quieter pavements, are designed to be attractive and to minimize maintenance.*

S-6~~5~~g *Evaluate new transportation projects, such as truck routes, rail or public transit routes, and transit stations, using the standards contained in Table S-1. However, noise from these projects may be allowed to exceed*

the standards contained in Table S-1, if the City Council finds through the CEQA process that there are special overriding considerations circumstances.

S-65h *Work with the Federal Rail Authority and passenger and freight rail service providers to establish a Quiet Zone and/or Wayside Horns at at-grade crossings in the City. Where new development would be affected by the train and rail noise, require project applicants to fund a fair-share of: a) studies associated with the application for a Quiet Zone and/or Wayside Horns, and b) alternative safety measures associated with the Quiet Zone (including, but not limited to signage, gates, lights, etc.).*

S-65i *Work in cooperation with Caltrans, the Union Pacific Railroad, San Joaquin Regional Rail Commission, and other agencies where appropriate to maintain noise level standards for both new and existing projects in compliance with Table S-1.*

S-65j *The City shall require new residential projects located adjacent to major freeways, truck routes, hard rail lines, or light rail lines to follow the FTA screening distance criteria to ensure that groundborne vibrations to do not exceed acceptable levels.*

Table S-1: Maximum Allowable Noise Exposure from Mobile Noise Sources

Land Use[1]	Outdoor Activity Areas[2,3]	Interior Spaces	
		Ldn/ CNEL, dBA	Leq, dBA[4]
Residential	60	45	-
Motels/Hotels	65	45	-
Mixed-Use	65	45	
Hospitals, Nursing Homes	60	45	-
Theaters, Auditoriums	-	-	35
Churches	60	-	40
Office Buildings	65	-	45
Schools, Libraries, Museums	70	-	45
Playgrounds, Neighborhood Parks	70	-	-
Industrial	75	-	45
Golf Courses, Water Recreation	70	-	-

[1]Where a proposed use is not specifically listed, the use shall comply with the standards for the most similar use as determined by the City.

[2]Outdoor activity areas for residential development are considered to be the back yard patios or decks of single family units and the common areas where people generally congregate for multi-family developments. Where common outdoor activity areas for multi-family developments comply with the outdoor noise level standard, the standard will not be applied at patios or decks of individual units provided noise-reducing measures are incorporated

(e.g., orientation of patio/deck, screening of patio with masonry or other noise-attenuating material). Outdoor activity areas for non-residential developments are the common areas where people generally congregate, including pedestrian plazas, seating areas, and outside lunch facilities; not all residential developments include outdoor activity areas.

[3]In areas where it is not possible to reduce exterior noise levels to achieve the outdoor activity area standard w using a practical application of the best noise-reduction technology, an increase of up to 5 Ldn over the standard will be allowed provided that available exterior noise reduction measures have been implemented and interior noise levels are in compliance with this table

[4]Determined for a typical worst-case hour during periods of use.

Table S-2: Performance Standards for Stationary Noise Sources, Including Affected Projects[1,2,3,4]

Noise Level Descriptor	Daytime 7 am to 10 pm	Nighttime 10 pm to 7 am
Hourly Leq, dBA	55	45

[1]Each of the noise levels specified above should be lowered by 5 dB for simple noise tones, noises consisting primarily of speech or music, or recurring impulsive noises. Such noises are generally considered to be particularly annoying and are a primary source of noise complaints.

[2]No standards have been included for interior noise levels. Standard construction practices should, with the exterior noise levels identified, result in acceptable interior noise levels.

[3]Stationary noise sources which are typically of concern include, but are not limited to, the following:

HVAC Systems	*Cooling Towers/Evaporative Condensers*
Pump Stations	*Lift Stations*
Emergency Generators	*Boilers*
Steam Valves	*Steam Turbines*
Generators	*Fans*
Air Compressors	*Heavy Equipment*
Conveyor Systems	*Transformers*
Pile Drivers	*Grinders*
Drill Rigs	*Gas or Diesel Motors*
Welders	*Cutting Equipment*
Outdoor Speakers	*Blowers*

[4]The types of uses which may typically produce the noise sources described above include but are not limited to: industrial facilities, pump stations, trucking operations, tire shops, auto maintenance shops, metal fabricating shops, shopping centers, drive-up windows, car washes, loading docks, public works projects, batch plants, bottling and canning plants, recycling centers, electric generating stations, race tracks, landfills, sand and gravel operations, and athletic fields.

CONSTRUCTION NOISE MODELING

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 02/06/2023
Case Description: MANT-05

**** Receptor #1 ****

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Demolition	Residential	60.0	55.0	50.0

Equipment

Description	Impact Device	Spec Usage (%)	Actual Lmax (dBA)	Receptor Lmax (dBA)	Estimated Distance (feet)	Shielding (dBA)
Concrete Saw	No	20	89.6	50.0		0.0
Excavator	No	40	80.7	50.0		0.0
Dozer	No	40	81.7	50.0		0.0

Results

Equipment	Calculated (dBA) Lmax	Calculated (dBA) Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq
Concrete Saw	89.6	82.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	80.7	76.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	81.7	77.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	89.6	84.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 02/06/2023
Case Description: MANT-05

**** Receptor #1 ****

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Site Preparation	Residential	60.0	55.0	50.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	50.0	0.0
Tractor	No	40	84.0		50.0	0.0
Front End Loader	No	40		79.1	50.0	0.0

Results

	Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Dozer	81.7	77.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	84.0	80.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Front End Loader	79.1	75.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	84.0	82.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 02/06/2023
Case Description: MANT-05

**** Receptor #1 ****

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Rough Grading	Residential	60.0	55.0	50.0

Equipment

Description	Impact Device	Spec Usage (%)	Actual Lmax (dBA)	Receptor Lmax (dBA)	Estimated Distance (feet)	Shielding (dBA)
Dozer	No	40	81.7	50.0		0.0
Tractor	No	40	84.0	50.0		0.0
Grader	No	40	85.0	50.0		0.0

Results

Equipment	Calculated (dBA) Lmax	Calculated (dBA) Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq
Dozer	81.7	77.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	84.0	80.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader	85.0	81.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	85.0	84.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 02/06/2023
Case Description: MANT-05

**** Receptor #1 ****

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Building Construction	Residential	60.0	55.0	50.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	50.0	0.0
Generator	No	50		80.6	50.0	0.0
Tractor	No	40	84.0		50.0	0.0

Results

	Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Crane	80.6	72.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	80.6	77.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	84.0	80.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	84.0	82.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 02/14/2023
Case Description: MANT-05.0

**** Receptor #1 ****

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Asphalt Paving	Residential	60.0	55.0	50.0

Equipment

Description	Impact Device	Spec Usage (%)	Actual Lmax (dBA)	Receptor Lmax (dBA)	Estimated Distance (feet)	Shielding (dBA)
Tractor	No	40	84.0		50.0	0.0
Paver	No	50		77.2	50.0	0.0
Pavement Scarafier	No	20		89.5	50.0	0.0

Results

	Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Tractor	84.0	80.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	77.2	74.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pavement Scarafier	89.5	82.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	89.5	84.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 02/14/2023
Case Description: MANT-05.0

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Architectural Coating	Residential	60.0	55.0	50.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	50.0	0.0

Results

Equipment	Calculated (dBA) Lmax	Leq	Noise Limits (dBA) Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq	Noise Limit Exceedance (dBA) Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq
Compressor (air)	77.7	73.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	77.7	73.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

MANT-05 - Construction Noise Modeling Attenuation Calculations

Levels in dBA Leq

Phase	RCNM Reference Noise Level	Receptor to North	Receptor to East	Receptor to South	Receptor to West
Distance in feet	*50*	*470*	*460*	*770*	*130*
Site Prep	83.0	63.5	63.7	59.2	74.7
Grading	85.0	65.5	65.7	61.2	76.7
Distance in feet	*50*	*370*	*430*	*720*	*90*
Building Construction	83.0	65.6	64.3	59.8	77.9
Architectural Coating	74.0	56.6	55.3	50.8	68.9
Distance in feet	*50*	*310*	*720*	*760*	*230*
Paving	85.0	69.2	61.8	61.4	71.7

Attenuation calculated through Inverse Square Law: Lp(R2) = Lp(R1) - 20Log(R2/R1)

MANT-05 - Vibration Damage Attenuation Calculations

Levels, PPV (in/sec)

Distance in feet	**Vibration Reference Level at *25 feet***	**Receptor to North** *120*	**Receptor to East** *475*	**Receptor to South** *560*	**Receptor to West** *90*
Vibratory Roller	0.21	0.020	0.003	0.002	0.031
Large Bulldozer	0.089	0.008	0.001	0.001	0.013
Loaded Trucks	0.076	0.007	0.001	0.001	0.011
Jackhammer	0.035	0.003	0.000	0.000	0.005
Small Bulldozer	0.003	0.000	0.000	0.000	0.000

STATIONARY NOISE MODELING

MANT-05 - Stationary Noise Modeling Attenuation Calculations

Levels in dBA Leq

Distance in feet	*3*	*90*
HVAC	72.0	42.5