August 2018 | Mitigated Negative Declaration

CHINO HIGH SCHOOL RECONSTRUCTION

Chino Valley Unified School District

Prepared for:

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CHINO VALLEY
UNIFIED SCHOOL DISTRICT

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Student Achievement • Safe Schools • Positive School Climate • Humility • Civility • Service

BOARD OF EDUCATION: Andrew Cruz • Pamela Feix • Irene Hernandez-Blair • James Na • Sylvia Orozco • SUPERINTENDENT: Norm Enfield, Ed.D.

MITIGATED NEGATIVE DECLARATION

Pursuant to the California Environmental Quality Act (CEQA) (California Public Resources Code (PRC) Sections 2100 et seq.) and the State CEQA Guidelines (California Code of Regulations (CCR) Sections 15000 et seq.), the Chino Valley Unified School District has completed this Mitigated Negative Declaration (MND) for the project described below based on the assessment presented in the attached Initial Study.

LEAD AGENCY & PROJECT PROPONENT: Chino Valley Unified School District

PROJECT TITLE: Chino High School Reconstruction Project

PROJECT LOCATION: The project site is on the Chino High School campus. The approximately 51-acre campus is at 5472 Park Place (Assessor Parcel Number [APN] 1015-591-02, 1015-401-01, 1015-581-01, and 1015-591-01) in the northern area of the City of Chino in San Bernardino County, California.

PROJECT DESCRIPTION: Chino Valley Unified School District is proposing to reconstruct the academic core of the Chino High School campus. A new academic core would be constructed in the northwest quadrant of the campus, while the students continue to use the existing buildings in the southwest. Once the new buildings are completed, the students would attend classes in the new buildings and the existing buildings will be demolished.

The District would demolish approximately 147,891 square feet (sf) of permanent buildings and 149,502 sf of sports facilities, along with removal of 7 portable buildings (18,244 sf). The project would construct approximately 285,473 sf of permanent buildings and 209,936 sf sports facilities. The east end of the campus would remain, including the football stadium, varsity baseball field, tennis courts, student parking lot, and gymnasium (20,665 sf). At project buildout in 2024, student capacity would be 2,500; an increase of 69 seats over the existing 2,431 capacity. A total of approximately 774 parking spaces would be provided on campus—an increase of 241 spaces.

EXISTING CONDITIONS: Chino High School has a 2017-18 enrollment of 2,229 students in grades 9 through 12, and has a maximum total capacity of 2,431. The school has 79 full time teachers. There are 24 permanent buildings with a total of approximately 168,556 sf and 7 portable buildings with 18,244 sf. The campus also has sports fields, a football stadium, tennis courts, hardcourts and two parking lots.

DOCUMENT AVAILABILITY: The MND and supporting Initial Study for the Chino High School Reconstruction are available for review at the following locations:

- Chino Valley Unified School District, Main Office, 5130 Riverside Drive, Chino, CA 91710
- Chino High School, 54722 Park Place, Chino, CA 91710
- Chino Branch Library, 13180 Central Avenue., Chino, CA 91710
- District Facilities, Planning and Operations Division website: https://www.chino.k12.ca.us/domain/48

SUMMARY OF IMPACTS: The attached Initial Study was prepared to identify the potential effects on the environment from the proposed project and to evaluate the significance of those effects. Based on the environmental analysis, the proposed project would have no impacts or less-than-significant environmental impacts related to the following issues:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Population and Housing
- Public Services
- Recreation
- Tribal Cultural Resources
- Utilities and Service Systems

The environmental assessment in the Initial Study also identified environmental impacts to three topics that would be potentially significant unless mitigation measures are incorporated into the project.

- Biological Resources
- Noise
- Transportation and Traffic

The mitigation measures below have been incorporated into the project to effectively minimize the potentially significant environmental impacts. Project-related impacts would be less than significant with mitigation incorporated.

Biological Resources

BIO-1 Vegetation clearing shall take place outside the general avian breeding season (February 1 through August 31 and as early as January 1 for some raptors).

If it is infeasible to conduct vegetation clearing outside the avian breeding season, then a pre-construction avian nesting survey shall be conducted by a qualified biologist within 7 calendar days prior to the start of construction activities.

- If a bird nest is not found:
  - Building demolition and vegetation clearing may proceed.
  - A survey report by a qualified biologist verifying that no active nests are present shall be submitted to the CVUSD project manager prior to initiation of building demolition and vegetation clearing.

- If a bird nest is found:
    - Work may proceed provided that construction activity is at least: 1) 500 feet from a raptor nest; 2) 300 feet from a listed bird species' nest; and 3) 100 feet from a nonlisted bird species' nest.
        - The qualified biologist shall mark the buffer with flagging, stakes, and/or construction fencing to demarcate the inside boundary so that building demolition and vegetation clearing does not encroach into the buffer until the nest is no longer active (i.e., the nestlings fledge, the nest fails, or the nest is abandoned, as determined by the biologist). Project personnel, including all contractors working on site, shall be instructed about the sensitivity of the area.
        - During all grubbing and clearing of vegetation and building demolition, the biological monitor shall be present on site to ensure that these activities remain outside the demarcated buffer (nest setback zone) and that the flagging, stakes, and/or construction fencing are maintained, and to minimize the likelihood that active nests are abandoned or fail due to project activities.
        - During the grubbing and clearing of vegetation and building demolition, the biological monitor shall send weekly monitoring reports to the CVUSD project manager. The CVUSD project manager shall be immediately notified if project activities affect avian nests.
        - Prior to initiation of construction activities in the nest setback zone, the biological monitor shall send a final monitoring report to CVUSD project manager verifying that the young have fledged and no further monitoring is required.

Construction Noise

N-1 To reduce temporary construction noise disruption in classrooms prior to commencement of construction activities, the following measures shall be implemented.

- CVUS Facilities Division or its construction contractor shall consult and coordinate with the school principal or site administrator and occupants of other nearby noise sensitive land uses prior to construction to schedule high noise producing activities to minimize disruption. Coordination between the school, nearby land uses, and the construction contractor shall continue on an as-needed basis throughout the construction phase of the project to reduce disruptions to school and other noise-sensitive land uses.
- Construction contractor shall ensure specific noise reduction measures include, but are not limited to:
    - Source Controls
        - Time Constraints – prohibiting work during sensitive nighttime hours
        - Scheduling – performing noisy work during less sensitive time periods (on operating campus: delay the loudest noise generation until class instruction at the nearest classrooms has ended; residential: only between 7:00 AM and 7:00 PM)
        - Equipment Restrictions – restricting the type of equipment used
        - Noise Restrictions – specifying stringent noise limits
        - Substitute Methods – using quieter methods and/or equipment. Implement alternative methods identified in the preconstruction meeting during demolition, excavation, and construction for work done near active classrooms.
        - Exhaust Mufflers – ensuring equipment have quality mufflers installed and ensure equipment is properly tuned and maintained in accordance with manufacturer's

specifications, to ensure excessive noise is not generated by unmaintained equipment.

- Lubrication & Maintenance – well maintained equipment is quieter
- Reduced Power Operation – use only necessary size and power
- Limit Equipment On-Site – only have necessary equipment on-site
- Noise Compliance Monitoring – technician on site to ensure compliance
- Quieter Backup Alarms – manually-adjustable or ambient sensitive types

- Path Controls
  - Noise Barriers – semi-permanent or portable wooden or concrete barriers
  - Noise Curtains – flexible intervening curtain systems hung from supports
  - Enclosures – encasing localized and stationary noise sources
  - Increased Distance – perform noisy activities farther away from receptors, including operation of portable equipment, storage and maintenance of equipment
- Receptor Controls
  - Window Treatments – reinforcing the building's noise reduction ability
  - Temporary Relocation – in extreme, otherwise immitigable cases. Temporarily move students to facilities away from the construction activity.

Traffic

T-1 **Install Stop Signs and Crosswalks.** To reduce vehicle/pedestrian conflicts at the 10th Street/Jefferson Avenue intersection, prior to the first day of classes in the new classroom buildings, the District shall ensure that stop signs and yellow crosswalks are installed, subject to City of Chino review and approval.

Stop signs shall be installed on Jefferson Avenue north- and southbound at 10th Street. Yellow school crosswalks shall be painted on Jefferson Avenue north- and southbound at 10th Street and on 10th Street eastbound at Jefferson Avenue, subject to City of Chino review and approval.

T-2 **Remove Midblock Crosswalk.** To reduce vehicle/pedestrian conflict at the 10th Street midblock crosswalk (at Mt. Vernon Avenue) and new school driveway, prior to the first day of classes in the new classroom buildings, the District shall ensure that the 10th Street midblock crosswalk is removed. Crosswalk removal is subject to City of Chino review and approval.

T-3 **Convert Angled Street Parking.** To reduce visibility constraints along Jefferson Avenue and new school driveways, prior to the first day of classes in the new classroom buildings, the District shall ensure that the angled parking spaces on the south side of Jefferson Avenue between 10th Street and Benson Avenue are converted to conventional parallel parking spaces by removing the angled striping; new pavement markings are not required for conventional parallel parking. The District shall also paint a red curb on the south side of Jefferson Avenue for a length of 50 feet on each side of the two new driveways. All measures are subject to review and approval by the City of Chino.

August 2018 | Initial Study

CHINO HIGH SCHOOL RECONSTRUCTION

Chino Valley Unified School District

PLACEWORKS

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Abbreviations and Acronyms

AAQS	ambient air quality standards
AB	Assembly Bill
ACM	asbestos-containing material
AQMD	Air Quality Management District
AQMP	air quality management plan
BMP	best management practice
CALGreen	California Green Building Standards Code
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CBC	California Building Code
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CHPS	Collaborative for High Performance Schools
CMP	congestion management program
CNEL	community noise equivalent level
CO	carbon monoxide
CO_2e	carbon dioxide equivalent
CVUSD	Chino Valley Unified School District
cy	cubic yard
dB	decibel
dBA	A-weighted decibel
DSA	California Division of the State Architect
EIR	environmental impact report
EOP	emergency operations plan
GHG	greenhouse gas
HCM	Highway Capacity Manual
HVAC	heating, ventilation, and air conditioning
IPCC	Intergovernmental Panel on Climate Change
L_{dn}	day-night noise level
L_{eq}	equivalent continuous noise level
LID	low-impact development
LOS	level of service
LST	localized significance thresholds

Abbreviations and Acronyms

MBTA	Migratory Bird Treaty Act
MND	mitigated negative declaration
MT	metric ton
ND	negative declaration
NO_X	nitrogen oxides
NPDES	National Pollution Discharge Elimination System
O_3	ozone
PM	particulate matter
ppm	parts per million
PPV	peak particle velocity
PRC	Public Resources Code
Q1	first quarter
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCS	Sustainable Communities Strategy
SoCAB	South Coast Air Basin
SO_X	sulfur oxides
SWPPP	Storm Water Pollution Prevention Plan
sf	square foot
VOC	volatile organic compound

1. Introduction

1.1 OVERVIEW

Chino Valley Unified School District (CVUSD or District) is proposing to reconstruct the academic core of the Chino High School campus (proposed project). The proposed project is required to undergo an environmental review pursuant to the California Environmental Quality Act. This initial study provides the evaluation of the potential environmental consequences associated with this project.

1.2 CALIFORNIA ENVIRONMENTAL QUALITY ACT

The environmental compliance process is governed by the California Environmental Quality Act (CEQA)[1] and the State CEQA Guidelines.[2] CEQA was enacted in 1970 by the California Legislature to disclose to decision makers and the public the significant environmental effects of projects and to identify ways to avoid or reduce the environmental effects through feasible alternatives or mitigation measures. Compliance with CEQA applies to California government agencies at all levels: local, regional, and state agencies, boards, commissions, and special districts (such as school districts and water districts).

The Chino Valley Unified School District is the lead agency for this project and is therefore required to conduct an environmental review to analyze the potential environmental effects associated with the project.

California Public Resources Code Section 21080(a) states that analysis of a project's environmental impact is required for any "discretionary projects proposed to be carried out or approved by public agencies.…" In this case, CVUSD has determined that an initial study is required to determine whether there is substantial evidence that construction and operation of the project would result in environmental impacts. An initial study is a preliminary environmental analysis to determine whether an environmental impact report (EIR), a mitigated negative declaration (MND), or a negative declaration (ND) is required for a project.[3]

When an initial study identifies the potential for significant environmental impacts, the lead agency must prepare an EIR;[4] however, if all impacts are found to be less than significant or can be mitigated to a less-than-significant level, the lead agency can prepare an ND or MND that incorporates mitigation measures into the project.[5]

1 California Public Resources Code (PRC), Sections 21000 et seq.
2 California Code of Regulations (CCR), Title 14, Sections 15000 et seq.
3 14 CCR Section 15063.
4 14 CCR Section 15064.
5 14 CCR Section 15070.

1.3 MITIGATED NEGATIVE DECLARATION AND SUPPORTING INITIAL STUDY

This initial study was prepared to determine if the project would have a significant impact on the environment. The purpose of the initial study is to 1) provide the lead agency with information to use as the basis for deciding the proper type of CEQA document to prepare; 2) enable the lead agency to modify a project, mitigating adverse impacts before an EIR is prepared, thereby enabling the project to qualify for a negative declaration; 3) assist in the preparation of an EIR, if one is required; 4) facilitate environmental assessment early in the design of a project; (5) provide documentation of the factual basis for the findings in an MND or ND; (6) eliminate unnecessary EIRs; and (7) determine if the project is covered under a previously prepared EIR.[6]

Based on the findings in this initial study, the District has determined that an MND is the appropriate level of environmental documentation for the proposed Chino High School Reconstruction Project.

1.4 IMPACT TERMINOLOGY

The following terminology is used to describe the level of significance of impacts.

- A finding of **no impact** is appropriate if the analysis concludes that the project would not affect the particular topic area in any way.

- An impact is considered **less than significant** if the analysis concludes that it would cause no substantial adverse change to the environment.

- An impact is considered **less than significant with mitigation incorporated** if the analysis concludes that it would cause no substantial adverse change to the environment with the inclusion of environmental commitments or other enforceable mitigation measures.

- An impact is considered **potentially significant** if the analysis concludes that it would cause a substantial adverse effect on the environment, and there are no feasible mitigation measures, or mitigation measures would reduce impacts but not to less than significant levels. The remaining impacts are considered significant and unavoidable.

1.5 ORGANIZATION OF THE INITIAL STUDY

The content and format of this report are designed to meet the requirements of CEQA and the State CEQA Guidelines. The conclusions in this initial study are that the project would have no significant impacts with the incorporation of mitigation. This report contains the following sections:

[6] 14 CCR Section 15063.

- **Chapter 1, Introduction,** identifies the purpose and scope of the MND and supporting Initial Study and the terminology used.

- **Chapter 2, Environmental Setting,** describes the existing conditions, surrounding land uses, general plan designations, and existing zoning at the school and surrounding area.

- **Chapter 3, Project Description,** identifies the location and background and describes the project in detail.

- **Chapter 4, Environmental Checklist,** has the CEQA checklist and the significance finding for each resource topic.

- **Chapter 5, Environmental Analysis,** provides an evaluation of the impact categories and a response to questions contained in the CEQA checklist and identifies mitigation measures, if applicable. Bibliographical references and individuals cited for information sources and technical data are footnoted throughout this CEQA Initial Study; therefore, a bibliography is not required.

- **Chapter 6, List of Preparers,** identifies the individuals who prepared the MND and supporting Initial Study and technical studies.

- **Appendices** have data supporting the analysis or contents of this CEQA Initial Study.

  A. Air Quality and Greenhouse Gas Emissions Background and Modeling Data

  B. Paleontological and Cultural Resources Assessment Report

  C. Engineering Geology Investigation

  D. Hazards Report

  E. Noise and Vibration Background and Modeling Data

  F. Traffic Study

1. Introduction

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2. Environmental Setting

2.1 PROJECT LOCATION

The project site is on the 51-acre Chino High School campus at 5472 Park Place, City of Chino, San Bernardino County, California (Assessor's Parcel Numbers [APNs] 1015-591-02, 1015-401-01, 1015-581-01, and 1015-591-01). Regional access to the school is from the Pomona Freeway (SR-60) to Central Avenue south to Walnut Avenue east (see Figure 1, *Regional Location*, and Figure 2, *Local Vicinity*). SR-60 is approximately 3,200 feet north of the school.

2.2 SURROUNDING LAND USE

The school campus is completely surrounded by suburban development. As shown on Figure 3, *Surrounding Land Use,* the campus is bordered by the following land uses.

- **North:** Jefferson Avenue, Chino Valley Medical Center, Immanuel Lutheran Church, and single-family residential.
- **East:** Benson Avenue and single-family residential.
- **South:** Park Place, Park Christian Fellowship, multifamily residential, and commercial.
- **West:** 10th Street, Chino Medical Group, single-family residential, and commercial.

2.3 CAMPUS HISTORY

Historically, Chino High School is one of the oldest schools in Southern California. Its history goes back to 1897 when Chino School District and Chino High School were founded. The first class graduated in 1900 from a building demolished long ago. That school once stood on the site of the current Community Building at 5443 B Street. A new 52-acre high school was constructed on Riverside Drive west of Central Avenue (near the existing District offices).

The current 51-acre Chino High School campus dates from 1950 when it had football and baseball fields and auditorium and gymnasium buildings. The boys and girls locker and shower buildings were under construction in 1950. Other campus structures included several 1950s Quonset huts. Later additions included the music building, library, classroom building, and agricultural shop building. The period of significance or date of construction ranges from 1950 to 1992, with major periods of expansion in 1959, 1964, 1966, and 1972. Many modular classrooms or portable buildings were added in the 1990s.

2.4 EXISTING CONDITIONS

Chino High School has a 2017-2018 enrollment of 2,229 students in grades 9 through 12 and has a maximum total capacity of 2,431. The school has 79 full-time teachers.

2.4.1 Existing Facilities

Table 1 shows the existing buildings and facilities on the Chino High School campus, as well as building square footages (see Figure 4, *Campus Map*).

Table 1 Existing School Facilities

Building No.	Facility	Existing Buildings (sf)
Permanent Buildings		
A1	Administration and Library	10,747
A2	Counseling / Health / Records Building	4,743
B1	Classroom Building	10,983
B	Classroom Building	10,982
B3	Classroom Building	10,982
C	Classroom Building	5,415
C3	Classroom Building	8,159
D1	Classroom Building	8,200
D	Classroom Building	7,300
E1	Classroom Building	6,640
E2	Classroom Building	4,833
E3	Classroom Building	960
E4	Industrial Arts / Wood	7,080
G	Gymnasium	20,665
G2	Girls Showers & Lockers	5,924
G	Boys Showers & Lockers	7,860
H	Homemaking	4,118
J	Student Store / restrooms	1,440
K	Auditorium/Multipurpose/Cafeteria	9,459
L2	Music	5,266
M	Classroom Building	1,440
M1	Classroom Building	6,720
M2	Classroom Building	6,720
M4	Classroom Building	1,920
	Total permanent building space	**168,556**
Portable Buildings		
C2	Portable Classroom	2,880
E5	Portable Classroom	1,440
E6	Portable Classroom	1,440
F1	Portable Classroom	1,440
F2	Portable Classroom	5,764

Table 1 Existing School Facilities

Building No.	Facility	Existing Buildings (sf)
F3	Portable Classroom	3,840
L1	Portable Classroom	1,440
	Total portable building space	**18,244**
Other Facilities		
	Lunch Shelter	2,400
	Covered Walkways	14,131
	Pool	25 yards x 25 meters (~12,884 sf)
	Softball Field	59,535
	JV Baseball Field	60,552
	Varsity Baseball Field	153,408
	Football Stadium	238,788
	Tennis Courts	39,154
	Total other facilities	**564,321**

Note: sf = square feet

The topography of the school campus is relatively level. All four sides of the campus are bordered by public streets. All of the campus buildings are one story, and, with the exception of several portable buildings, most are constructed of wood framed, brick-veneered with low pitched roofs. The classrooms are arranged in a traditional 'finger plan' configuration with access from exterior doors. Covered walkways connect the classroom wings to the administration and library building (see Figure 5, *Photograph Location Key*, Figures 6a through 6d, *Site Photographs*). The campus also has athletic facilities: baseball, softball, tennis, basketball and a football stadium.

2.4.2 Access, Circulation, and Parking

The campus currently has 533 parking spaces. A 383-space student parking lot, with solar panels, is on the south side of the campus along Park Place, near the football stadium. A 120-space staff parking lot is in the southwest corner of the campus, west of the administration building. A small gated 30-space lot is just east of the administration building. Parallel curb parking is available on streets adjacent to the campus: Park Place, Benson Avenue, Jefferson Avenue and 10th Street. Diagonal head-in parking is available along the south side of Jefferson Avenue.

The main entrances to the campus are adjacent to the administration building and adjacent to the gymnasium and multipurpose building, so most of the student drop-off and pick-up takes place along Park Place and in the student parking lot.

2.4.3 Landscape

Campus landscaping consists of standard ornamental trees, such as Mexican fan palm, podacarpus, pine, and eucalyptus. The trees are various ages, with some healthy and others that appear to be drought stressed. One

large coast live oak tree (*Quercus agrifolia*) is in the northeast part of the campus between the two baseball fields. Turf areas and shrubs are throughout the campus.

2.4.4 Operation

School Operations. Chino HS is a two-semester, single-track school that serves 9th through 12th grades. The school operates on a traditional calendar from August through May.[7] Typical school hours are from 6:28 AM (0 Period) to 2:17 PM.[8] Most students arrive between 7:15 AM and 7:30 AM.

School-Related Events. The school has after-school programs for the students, such as special-interest clubs and extracurricular activities that begin and end later than 2:17 PM. There are also occasional nighttime and weekend events during the school year. Some of these events are campus wide, such as school plays and open houses, while others are grade specific, such as commencement.

Community Use. In compliance with the Civic Center Act (CA Education Code Sections 38130–38139), the campus is available for community use at selected times when not in use by CVUSD.[9]

2.5 GENERAL PLAN AND EXISTING ZONING

The existing zoning designation of the school property is PS (Public School).[10] The City General Plan land use designation for the school is Public Schools (PS).[11]

[7] 2017-2018 School Attendance Calendar. https://www.chino.k12.ca.us/cms/lib/CA01902308/Centricity/Domain/4/FINAL%202017-2018%20student%20attendance%20calendar%20180%20days.pdf

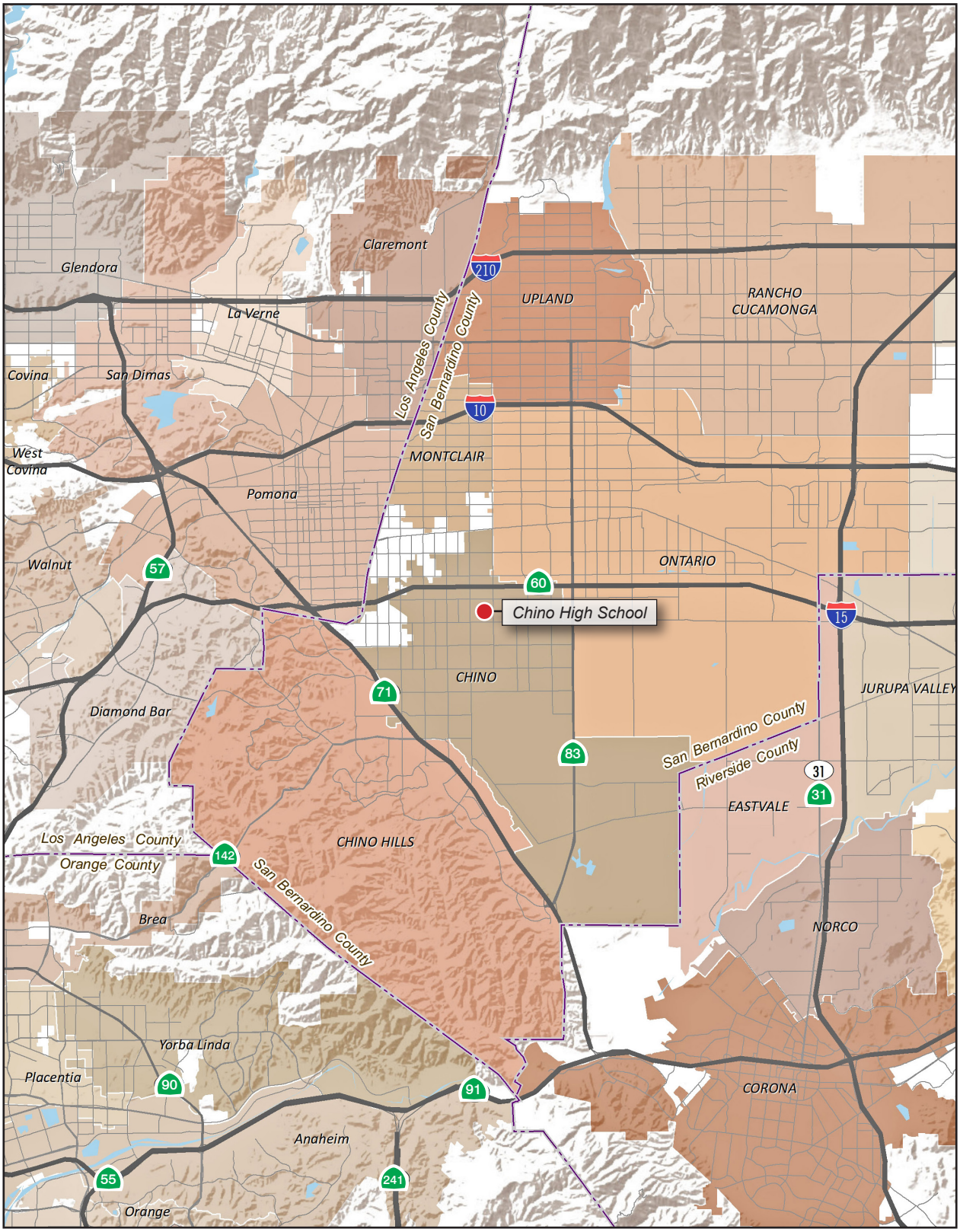
[8] Chino High School Bell Schedules. https://www.chino.k12.ca.us/cms/lib/CA01902308/Centricity/Domain/37/Bell%20Schedule%2017-18.pdf

[9] California Education Code Sections 38130–38139.

[10] City of Chino Zoning Map. Adopted on July 6, 2010. http://www.cityofchino.org/home/showdocument?id=14147.

[11] City of Chino General Plan Map. Adopted on July 6, 2010. Map Revised September 18, 2017. http://www.cityofchino.org/home/showdocument?id=14796.

Figure 1 - Regional Location
2. Environmental Setting



Note: Unincorporated county areas are shown in white.

0 3
Scale (Miles)

Source: ESRI, 2018

2. Environmental Setting

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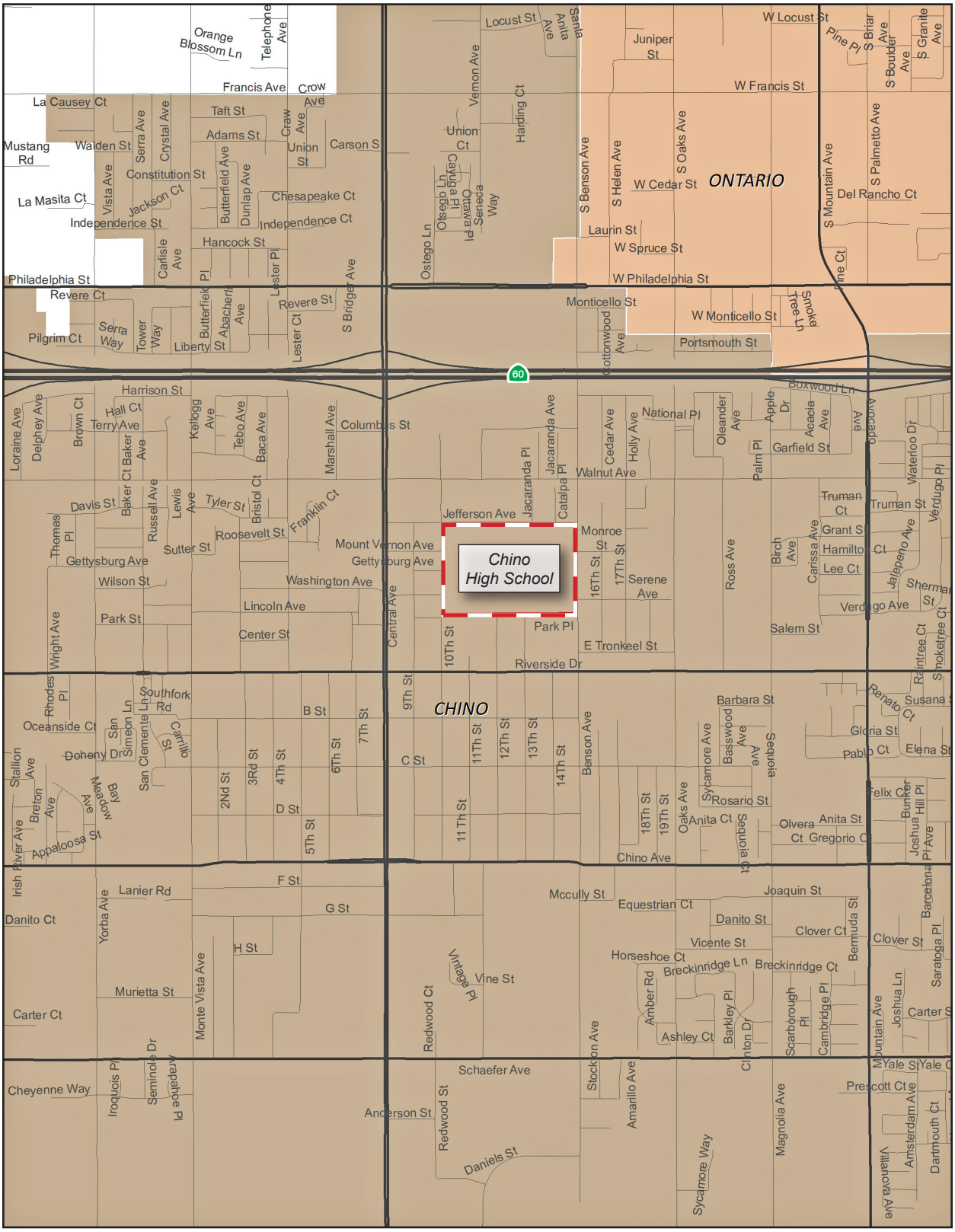
Figure 2 - Local Vicinity
2. Environmental Setting



Note: Unincorporated county areas are shown in white.

0 2,000
Scale (Feet)

Source: ESRI, 2018

2. Environmental Setting

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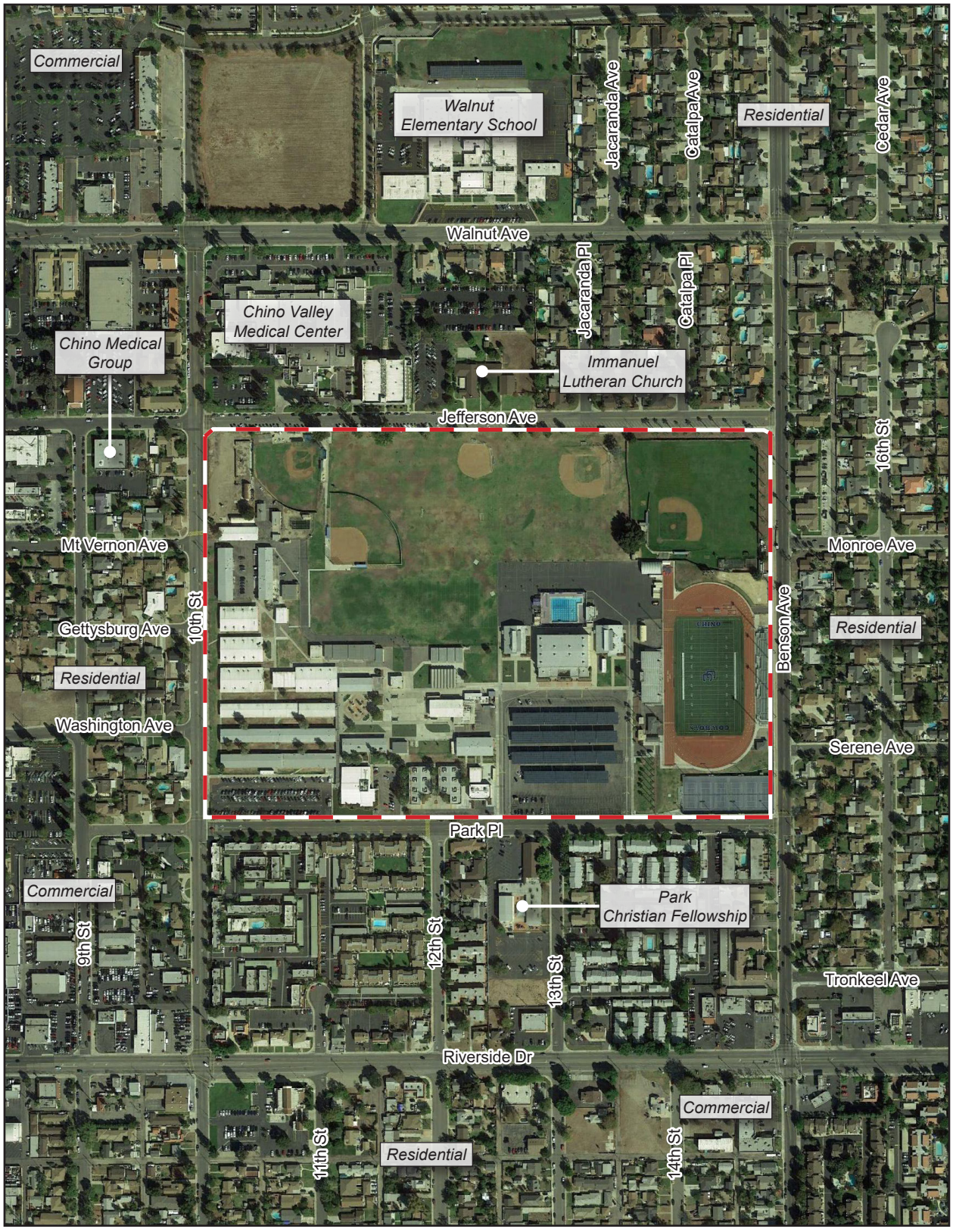
Figure 3 - Surrounding Land Use
2. Environmental Setting



Chino High School Boundary

0 450
Scale (Feet)

Source: Google Earth Pro, 2018

2. Environmental Setting

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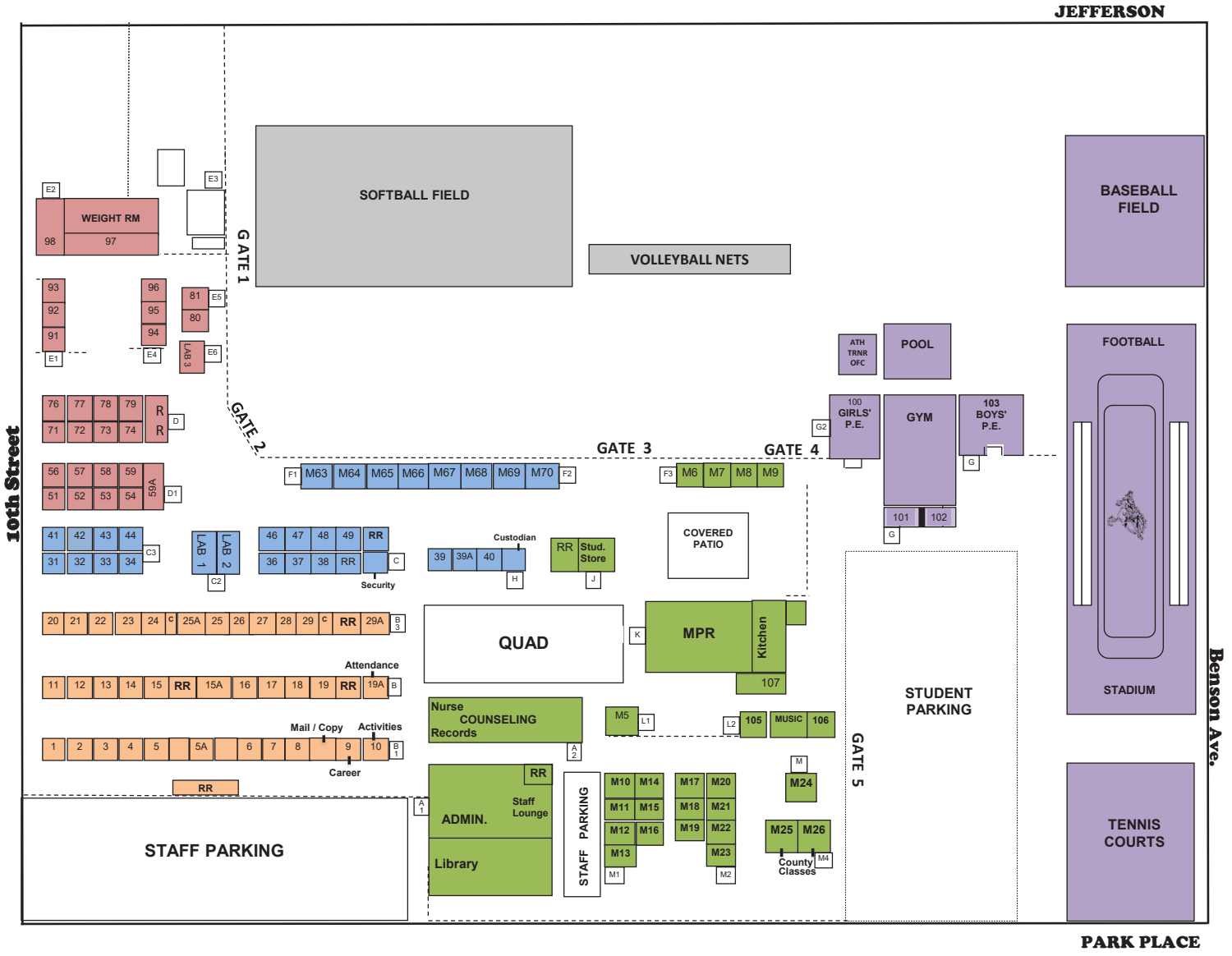
Figure 4 - Campus Map
2. Environmental Setting



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2. Environmental Setting

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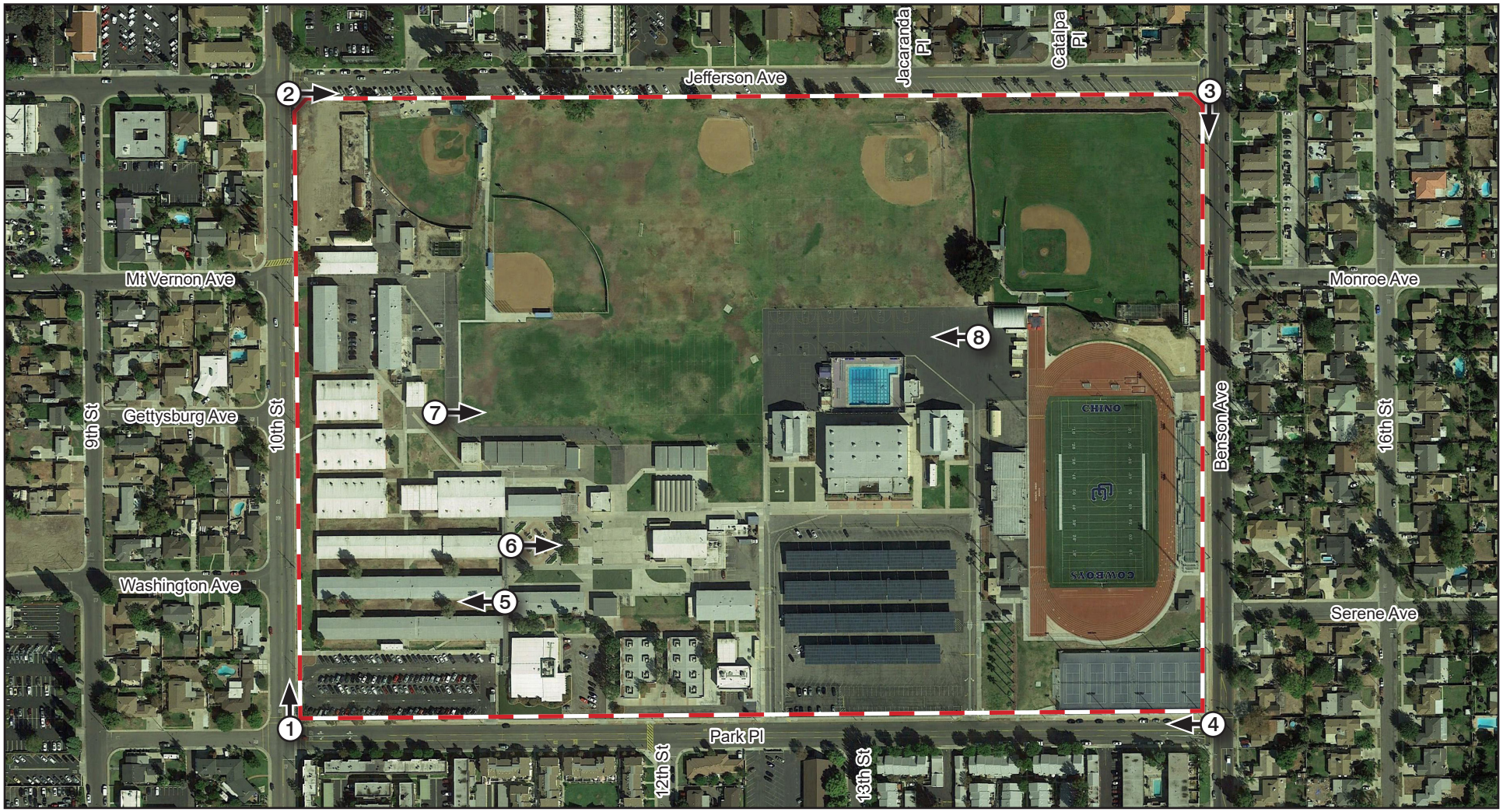
Figure 5 - Photograph Location Key

2. Environmental Setting



Source: Google Earth Pro, 2018

2. Environmental Setting

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Figure 6a - Site Photographs
2. Environmental Setting

Photo 1. View from the corner of Park Place and 10th Street looking north along 10th Street. The staff parking lot is shown on the right, along with Units B1, B, and B3 in the background. Residential uses are shown on the left.

Photo 2. View from the corner of 10th Street and Jefferson Avenue looking east along Jefferson Avenue. The campus is shown on the right and the medical center is on the left.

2. Environmental Setting

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Figure 6b - Site Photographs
2. Environmental Setting

Photo 3. View from the corner of Jefferson Avenue and Benson Avenue looking south along Benson Avenue. The varsity baseball field is on the right, and the football stadium is in the background. Residential uses are shown on the left.

Photo 4. View from the corner of Benson Avenue and Park Place looking west along Park Place. The tennis court fence is shown on the right. Residential uses are shown on the left.

2. Environmental Setting

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Figure 6c - Site Photographs
2. Environmental Setting

Photo 5. View from outside Unit A2 looking west between Unit B1 on the left and B2 on the right.

Photo 6. View from outside Unit B3 looking east across the central quad. Units H and J are shown on the left, and Unit K can be seen in the background.

2. Environmental Setting

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Figure 6d - Site Photographs
2. Environmental Setting

Photo 7. View from outside Unit E6 looking east toward the gymnasium. Units F1, F2, and F3 are shown on the right. The volleyball nets, gymnasium, and football stadium are in the background.

Photo 8. View from west of the football stadium looking west. The JV baseball field and softball field are on the right. The pool and gymnasium are on the left. Units E5 and E6 are in the background.

2. Environmental Setting

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3. Project Description

3.1 PROPOSED PROJECT

The project consists of the reconstruction the academic core of the Chino High School campus. Approximately 39 acres of the 51-acre school are proposed to be demolished, reconfigured, and rebuilt.

3.1.1 Campus Reconstruction

Chino Valley Unified School District is proposing to reconstruct the academic core of the Chino High School campus. A new academic core would be constructed in the northwest quadrant of the campus while the students continue to use the existing buildings in the southwest. Once the new buildings are completed, the students would attend classes in the new buildings and the existing buildings will be demolished. The District would demolish approximately 147,891 square feet (sf) of permanent buildings and 149,502 sf of sports facilities and remove 7 portable buildings (18,244 sf). The project would construct approximately 285,473 sf of permanent buildings and 209,936 sf sports facilities. The east end of the campus would remain, including the football stadium, varsity baseball field, tennis courts, student parking lot, and gymnasium (20,665 sf). The new main campus entry and drop-off lane would be on the north side of the campus along Jefferson Avenue (see Figure 7, *Conceptual Site Plan,* and Figures 8 and 9, *Conceptual Illustrations*).

At project buildout in 2024, student capacity would be 2,500, an increase of 69 seats over the existing 2,431 capacity. Starting in the 2023-24 school year, the school could accommodate a maximum enrollment of 2,500 (although this number is not anticipated), an increase of 271 students over the current 2017-18 school year student enrollment of 2,229.[12]

The overall design of the school would flip the layout of the western half of the campus, with buildings moving north and sports fields moving south. The east end of the campus would remain virtually the same, including the football stadium, varsity baseball field, tennis courts, and student parking lot.

Table 2 shows the buildings and facilities to be demolished and new buildings to be constructed.

[12] Although the reconstructed school would have 2,500 seats, student enrollment varies from year to year and is not anticipated to be 2,500. The analysis in this document uses the maximum seats for future enrollment as a worst-case scenario for environmental impacts.

3. Project Description

Table 2 Campus Reconstruction

Bldg. No	Building/Facility Name	Existing (sf)	Demolition/ Removal (sf)	New Construction (sf)	Existing to Remain (sf)	Campus Total (sf)
EXISTING PERMANENT BUILDINGS (1-story)						
A1	Administration and Library	10,747	10,747	0	0	0
A2	Counseling / Health / Records Building	4,743	4,743	0	0	0
B1	Classroom Building	10,983	10,983	0	0	0
B	Classroom Building	10,982	10,982	0	0	0
B3	Classroom Building	10,982	10,982	0	0	0
C	Classroom Building	5,415	5,415	0	0	0
C3	Classroom Building	8,159	8,159	0	0	0
D1	Classroom Building	8,200	8,200	0	0	0
D	Classroom Building	7,300	7,300	0	0	0
E1	Classroom Building	6,640	6,640	0	0	0
E2	Classroom Building	4,833	4,833	0	0	0
E3	Classroom Building	960	960	0	0	0
E4	Industrial Arts / Wood	7,080	7,080	0	0	0
G	Gymnasium	20,665		0	20,665	0
G2	Girls Showers & Lockers	5,924	5,924	0	0	0
G	Boys Showers & Lockers	7,860	7,860	0	0	0
H	Homemaking	4,118	4,118	0	0	0
J	Student Store / restrooms	1,440	1440	0	0	0
K	Auditorium/Multipurpose/Cafeteria	9,459	9,459	0	0	0
L2	Music	5,266	5,266	0	0	0
M	Classroom Building	1,440	1440	0	0	0
M1	Classroom Building	6,720	6720	0	0	0
M2	Classroom Building	6,720	6720	0	0	0
M4	Classroom Building	1,920	1920	0	0	0
Subtotal permanent building space (existing)		**168,556**	**147,891**	**0**	**20,665**	**20,665**
NEW PERMANENT BUILDINGS (2-story)						
A	Administration & Math	–	–	39,601	–	39,601
B	Foreign Language	–	–	39,804	–	39,804
C	Ceramics / Arts & Social Studies	–	–	43,129	–	43,129
D	Science Labs & Library	–	–	38,139	–	38,139
E	Technology Shops	–	–	10,071	–	10,071
F	Pool Building (aquatic center)	–	–	7,850	–	7,850
G	Gymnasium & Lockers	–	–	52,576	–	52,576
H	Auditorium, MPR, & Kitchen	–	–	54,303	–	54,303
Subtotal permanent building space (new)		–	–	**285,473**	–	**285,473**
Total Permanent Building Space		**168,556**	**147,891**	**285,473**[a]	**20,665**	**306,138**
EXISTING PORTABLE BUILDINGS						
C2	Portable Classroom	2,880	2,880	0	0	0
E	Portable Classroom	1,440	1,440	0	0	0
E6	Portable Classroom	1,440	1,440	0	0	0

Table 2 Campus Reconstruction

Bldg. No	Building/Facility Name	Existing (sf)	Demolition/ Removal (sf)	New Construction (sf)	Existing to Remain (sf)	Campus Total (sf)
F1	Portable Classroom	1,440	1,440	0	0	0
F2	Portable Classroom	5,764	5,764	0	0	0
F3	Portable Classroom	3,840	3,840	0	0	0
L1	Portable Classroom	1,440	1,440	0	0	0
	Total portable building space	**18,244**	**18,244**	**0**	**0**	**0**
Total Permanent and Portable Building Space (Increase of 98,673 Sf)		**186,800**	**186,800**	**285,473**	**20,665**	**306,138**
OTHER FACILITIES						
–	Lunch Shelter	2,400	2,400	–	–	0
–	Covered Walkways	14,131	14,131	–	–	0
–	Pool	12,884	12,884	12,884	--	12,884
–	Softball Field*	59,535	59,535	–	–	0
–	Soccer Field*	–	–	184,000	–	184,000
–	JV Baseball Field*	60,552	60,552	–	–	0
–	Varsity Baseball Field*	153,408	–	–	153,408	153,408
–	Football Stadium*	238,788	–	–	238,788	238,788
–	Tennis Courts*	39,154	–	13,052[b]	39,154	52,206
	Subtotal athletic facilities only*	**580,852**	**149,502**	**209,936**	**431,350**	**641,286**

Notes: sf = square feet (all numbers are approximate and subject to change as design is refined)

[a] The discrepancy in square footage between total existing permanent building and total new permanent building construction is due to the addition of the new gymnasium and theater as well as the inclusion of interior corridors and additional support services.

[b] New tennis court square footage calculated using the square footage of the six courts and dividing by three for the two new courts.

3.1.2 Access, Circulation, and Parking

The main campus entry would be along Jefferson Avenue across from the Chino Valley Medical Center, between Building A (Administration & Math) and Building B (Foreign Language).

The campus currently has 533 parking spaces. A total of approximately 774 parking spaces would be provided on campus—an increase of 241 spaces. The existing student parking lot (south lot) would remain and continue to have 383 student parking spaces. Multiple new staff parking lots would have a total 300 spaces: 168 spaces in the north lot along Jefferson Avenue, 132 spaces in the west lot along 10th Street. Following completion of the reconstructed high school, a new, approximately 91-space staff parking lot would be next to the future aquatic center with pool building.

The north lot would have two driveways, and the west lot would have three driveways (all directly across from existing streets: Washington Avenue, Gettysburg Avenue and Mt. Vernon Avenue).

3.1.3 Landscape

There are approximately 80 trees of various sizes and species on the school campus. As part of the project approximately half of the trees would be removed. Trees on the eastern portion of the campus would be unaffected, including the coast live oak tree between the two baseball fields.

New turf athletic fields would be constructed in the southwest portion of the campus. Other landscape would include turf, drought-tolerant plantings and trees.

3.1.4 Project Plans and Building Design

The project is subject to California Department of Education criteria and the school architectural designs are subject to review and approval by the California Division of the State Architect (DSA). The project would also comply with specific design standards and sustainable building practices. These standards assist in reducing environmental impacts, such as the California Green Building Code (CALGreen)[13] and the Collaborative for High Performance Schools (CHPS) criteria.[14]

Collaborative for High Performance Schools. CHPS is leading a national movement to improve student performance and the entire educational experience by building the best possible schools.[15] The project would include CHPS criteria points under seven categories: Integration, Indoor Environmental Quality, Energy, Water, Site, Materials and Waste Management, and Operations and Metrics. Under the current 2014 CA-CHPS criteria, the project would earn at least 250 points—110 prerequisite criteria points and 140 criteria credit points. Optional credit points would be determined during later site and architectural design phases, but all prerequisites are required.

3.2 CONSTRUCTION

Preconstruction and design activities began in the first quarter of 2017 (Q1-2017) and are anticipated to be completed in Q1-2019. Construction activities are anticipated to begin in Q1-2019 and be completed in Q1-2024. Demolition, construction, and modernization activities are expected to take approximately 60 months. New campus buildings would be supported by conventional, shallow, isolated, and continuous footings.

Existing campus topography suggests that significant cut or fill slopes would not be required for reconstruction of the school. Total demolition and debris haul would include about 168,556 sf of permanent buildings along with removal of 7 portable buildings (18,244 sf), and 149,502 sf of soil export from the athletic fields, along with minor soil import. Maximum excavation depths would be around 10- to 12-feet deep for some utility lines; however, most of the building excavations would be no more than 8 feet below current grades.

[13] CALGreen. California Green Building Standards Code, Title 24, Part 11, of the California Code of Regulations.

[14] The Board of Education's October 2003 Resolution on Sustainability and Design of High Performance Schools, directs staff to continue its efforts to ensure that every new school and modernization project in the District, from the beginning of the design process, incorporate CHPS (Collaborative for High Performance Schools) criteria to the extent possible.

[15] Collaborative for High Performance Schools. http://www.chps.net/dev/Drupal/node.

3.2.1 Construction Phasing

For the purpose of this analysis, construction activities have been broken down into two major phases based on construction date and type of equipment. Figure 10, *Phasing Plan*, shows the location of each of the six project phases and the two construction phases. Table 3 shows the two major construction phases. While the new academic core is being constructed in the northwest quadrant of the campus, the students will continue to use the existing buildings in the southwest. Once the classroom buildings are constructed, the students would start attending classes there (end of Project Phase 3 and Construction Phase I). Then the existing buildings would be demolished and removed to accommodate the softball, soccer, and basketball facilities.

Table 3 Construction Schedule

Construction Phase	Duration (days)	Start Date	End Date
Phase I (Q1-2019 through Q3- 2021)			
Construction	810	March 3, 2019	May 21, 2021
Finishing	45	May 21, 2021	July 45, 2021
Occupancy	30	July 5, 2021	August 4, 2021
Phase II (Q3-2021 through Q1-2024)			
Construction	810	August 4, 2021	October 23, 2023
Finishing	45	October 23, 2023	December 7, 2023
Occupancy	30	December 7, 2023	January 6, 2024

Notes: See Figure 10 for phasing location. The 6 project phases are combined into 2 construction phases based on construction schedule and type of construction equipment.
The construction schedule was based on best available data from preliminary designs and is subject to change during final design and as dictated by field conditions.

3.2.2 Project Phasing

To accommodate the students on campus during construction, the project will be completed in six Project Phases. Table 4 explains the project phase and schedule.

Table 4 Project Phasing

Phase	Construction Activity	Start Date	End Date
1	Convert junior varsity baseball field to varsity softball field; add 2 new tennis courts adjacent to existing courts.	Q3-2021	Q2-2023
2	Demolition of buildings E, D, and F. Construction of north half of the new buildings, including three 2-story classroom buildings, and the library/science building and CTE (shops) building. New drop-off lane and staff parking lot along Jefferson.	Q1-2019	Q2-2022
3	South half of the new buildings, including the gym and auditorium/MPR/kitchen building.	Q3-2020	Q2-2023
4	Demolition of remaining buildings	Q2-2023	Q3-2023
5	New softball and soccer fields, basketball courts, and western parking lot.	Q3-2023	Q4-2023
6	New aquatic center and adjacent parking lot.	After 2023	9 months after start of construction

3.3 LEAD AGENCY

The CVUSD is the lead agency under CEQA and has approval authority over the project. The project-related MND must be adopted by the Board of Trustees, confirming its adequacy in complying with the requirements of CEQA. The Board will consider the information in the MND when deciding whether to approve or deny the project. The analysis in this Initial Study is intended to provide environmental review for the whole of the project, including the planning of the project; clearance, excavation, and grading of the site; construction of buildings; installation of the proposed facilities; and ongoing operation.

3.4 ANTICIPATED AGENCY ACTIONS

It is the intent of this CEQA document to enable the District and responsible agencies to evaluate the environmental impacts of the project, thereby enabling them to make informed decisions with respect to the requested entitlements, permits, or approvals. Agency actions are identified in Table 5.

Table 5 Anticipated Agency Actions

Lead Agency	Discretionary Action
Chino Valley Unified School District (CVUSD)	Adoption of the MND
	Adoption of the Mitigation Monitoring and Reporting Program
	Approval of the Reconstruction Project
Reviewing Agency[16,17]	**Action**
Chino Valley Independent Fire District	Approval of plans for emergency access and emergency evacuation. DSA approval of the fire/life safety portion of a project requires local fire authority review of: elevator/stair access for emergency rescue and patient transport; access roads, fire lane markings, pavers, and gate entrances; fire hydrant location and distribution; and fire flow (location of post indicator valve, fire department connection, and detector check valve assembly).
Chino Public Works Department	Permit for curb, gutter, stop signs, crosswalks, and other offsite improvements. Approval of haul route and construction worksite traffic control plan.
California Department of General Services, Division of State Architect (DSA)	Plan review and construction oversight, including structural safety, fire and life safety, and access compliance.
California Department of Transportation (Caltrans).	Transportation permit for oversized vehicles on state highways.
State Water Resources Control Board (SWRCB)	Review of Notice of Intent to obtain permit coverage; issuance of general permit for discharges of stormwater associated with construction activity; review of Storm Water Pollution Prevention Plan.
Santa Ana Regional Water Quality Control Board (SARWQCB)	Issue National Pollution Discharge Elimination System permit; Clean Water Act Section 401 Water Quality Certification.
South Coast Air Quality Management District (SCAQMD)	Review and file submittals for Rule 403, Fugitive Dust; Rule 1403, Asbestos Emissions from Demolition/Reconstruction Activities; Rule 201, Permit to Construct; Rule 1166, Volatile Organic Compound Emissions from

[16] 14 CCR Section 15381. "Responsible Agency" means a public agency which proposes to carry out or approve a project, for which a Lead Agency is preparing or has prepared an EIR or Negative Declaration. For the purposes of CEQA, the term "Responsible Agency" includes all public agencies other than the Lead Agency which have discretionary approval power over the project.

[17] Reviewing Agencies include those agencies that do not have discretionary powers over the proposed project, but that may 1) review the EIR or Negative Declaration for adequacy and accuracy; and 2) issue ministerial approvals or permits.

Table 5 Anticipated Agency Actions

	Decontamination of Soil, and site-specific soil mitigation plan; and site monitoring.
City of Chino	
Fire Department	Fire/Life Safety review of: 1. elevator/stair access for emergency rescue and patient transport; 2. access roads, fire lane markings, pavers, and entrances; 3. fire hydrant location and distribution; 4. fire flow (location of post indicator valve, fire department connection, and detector check valve assembly)
Traffic Engineering Department	Truck haul permit; haul route approval
Public Works	Off-campus improvements review and approval
Police Department	Site plan review for fire, life, safety hazards, access, and visibility.

3. Project Description

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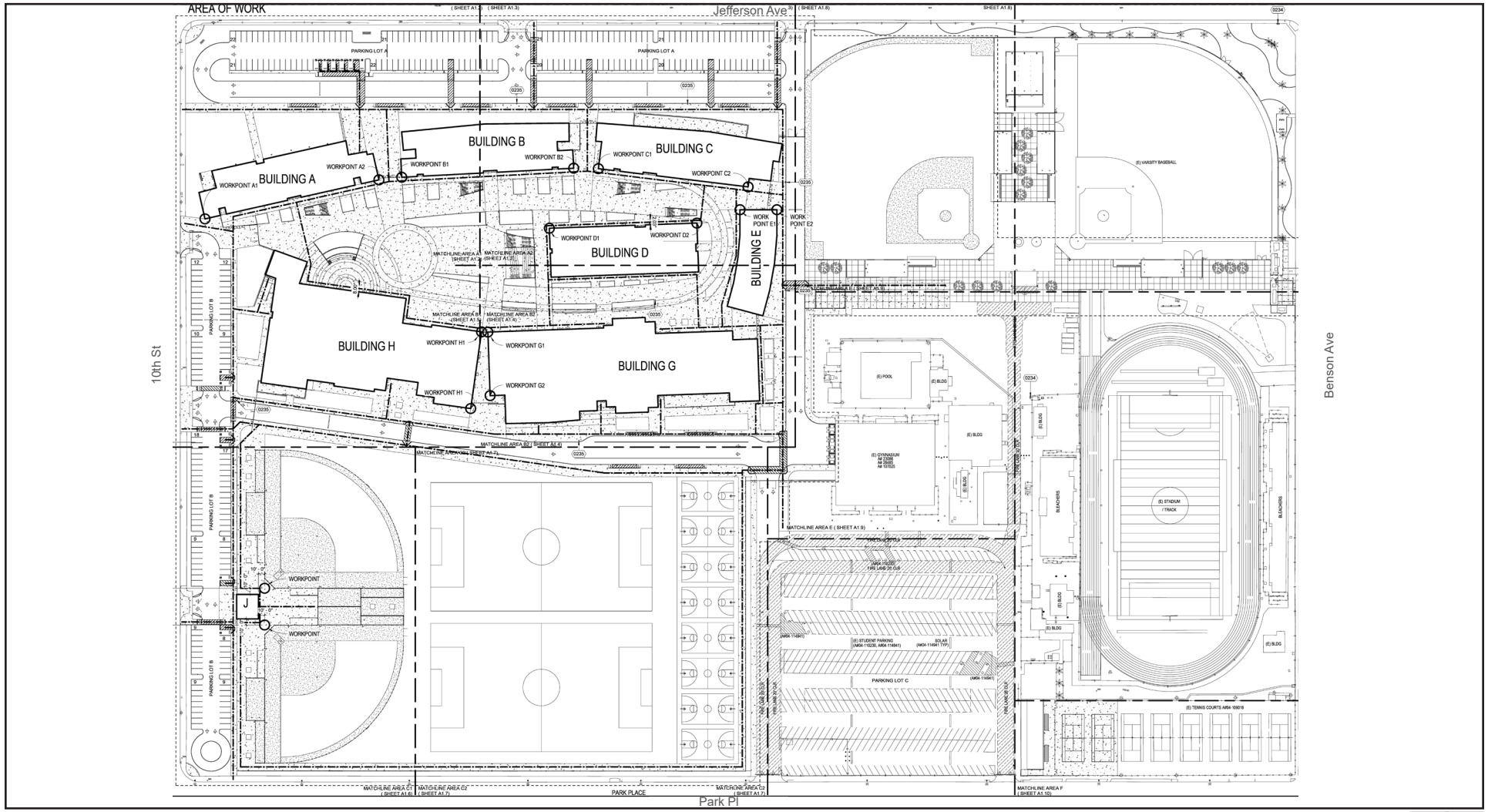
Figure 7 - Conceptual Site Plan

3. Project Description



0 250
Scale (Feet)

Source: WLC Architects, 2018

3. Project Description

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Figure 8 - Conceptual Illustrations
3. Project Description

South View

Source: WLC Architects, 2017

3. Project Description

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Figure 9 - Conceptual Illustrations
3. Project Description

North View

Source: WLC Architects, 2017

3. Project Description

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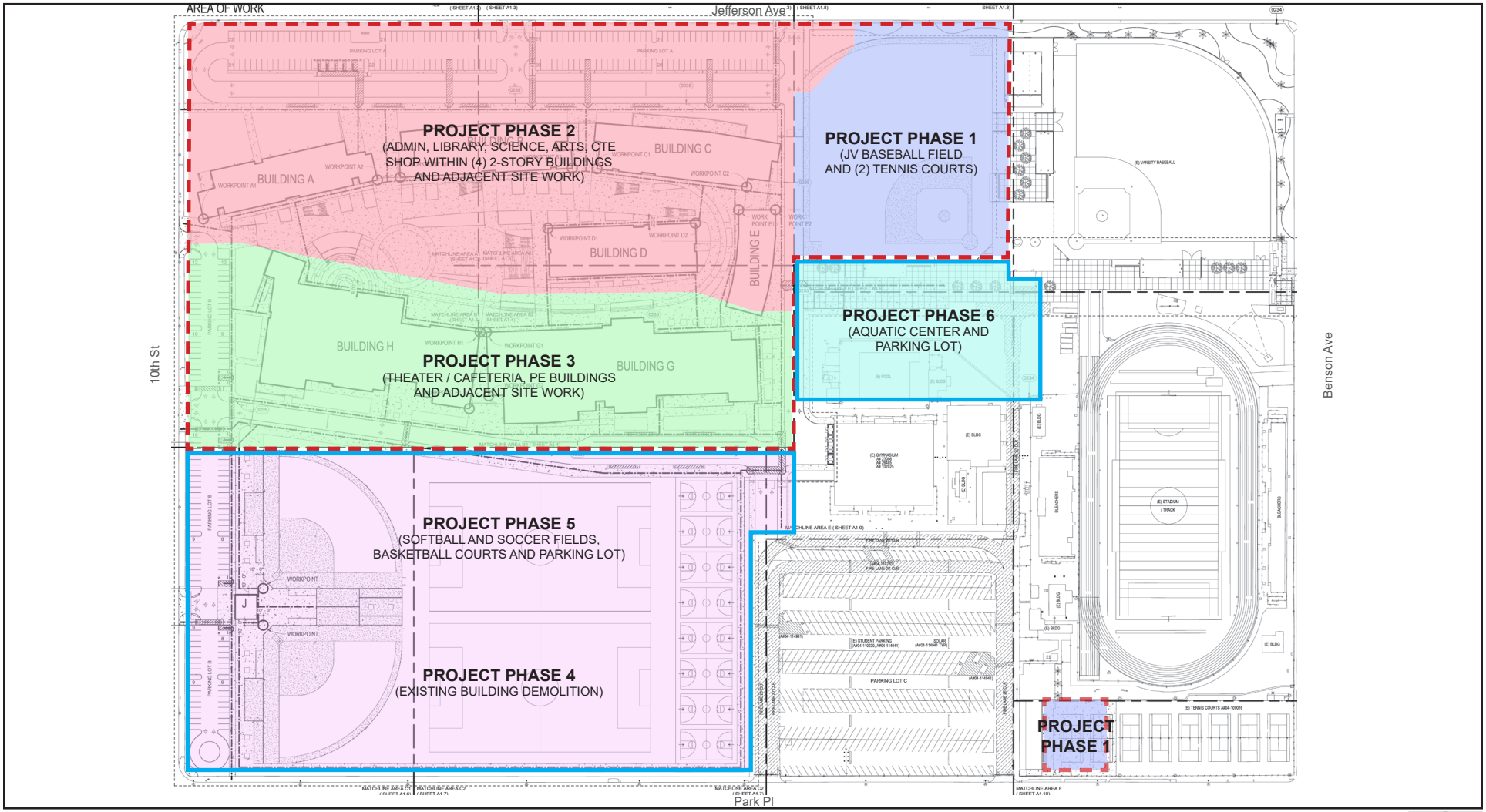
Figure 10 - Phasing Plan
3. Project Description



Source: WLC Architects, 2018

3. Project Description

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4. Environmental Checklist

4.1 BACKGROUND

1. **Project Title:** Chino High School Reconstruction

2. **Lead Agency Name and Address:**
   Chino Valley Unified School District
   5130 Riverside Drive
   Chino, CA 91710

3. **Contact Person and Phone Number:**
   Greg Stachura, Assistant Superintendent

   (909) 628-1201

4. **Project Location:**
   The project is located on a portion of the Chino High School campus at 5472 Park Place, City of Chino, San Bernardino County, California (APNs 1015-591-02, 1015-401-01, 1015-581-01, and 1015-591-01).

5. **Project Sponsor's Name and Address:**
   Chino Valley Unified School District
   5130 Riverside Drive
   Chino, CA 91710

6. **General Plan Designation:** Public Schools (PS)

7. **Zoning:** PS (Public School)

8. **Description of Project:**
   Chino Valley Unified School District is proposing the reconstruction of the academic core of the Chino High School campus. Approximately 39 acres of the 51-acre school are proposed to be demolished and rebuilt. The proposed project would consist of the demolition 130,213 sf of permanent buildings and 120,087 sf sports facilities, removal of 9,072 sf of portable buildings, and construction 285,473 sf of new permanent buildings and 314,521 sf of sports facilities.

9. **Surrounding Land Uses and Setting:**
   The high school is surrounded by suburban development, including residential, medical, church, and commercial.

10. **Other Public Agencies Whose Approval Is Required:** None.

4. Environmental Checklist

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun?

Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21083.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.94 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

Yes. Gabrieleno Band of Mission Indians – Kizh Nation requested consultation, but not pursuant to Public Resources Code section 21080.3.1. The District initiated consultation on January 23, 2018.

4.2 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

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

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

4.3 DETERMINATION

On the basis of this initial evaluation:

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

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

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

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

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

Signature	August 16, 2018 *Date*
Gregory Stachura *Printed Name*	Chino Valley Unified School District *For*

4.4 EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors, as well as general standards (e.g., the project would not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level.

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

   a) **Earlier Analyses Used.** Identify and state where they are available for review.

   b) I**mpacts Adequately Addressed.** Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

   c) **Mitigation Measures.** For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated. A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9. The explanation of each issue should identify:

   a) the significance criteria or threshold, if any, used to evaluate each question; and

   b) the mitigation measure identified, if any, to reduce the impact to less than significant.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS. Would the project:				
a) Have a substantial adverse effect on a scenic vista?				X
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
c) Substantially degrade the existing visual character or quality of the site and its surroundings?			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	
II. AGRICULTURE AND FORESTRY RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X

4. Environmental Checklist

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
III. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?			X	
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			X	
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			X	
d) Expose sensitive receptors to substantial pollutant concentrations?			X	
e) Create objectionable odors affecting a substantial number of people?			X	
IV. BIOLOGICAL RESOURCES. Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?				X
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?				X
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?		X		
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X
V. CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?			X	
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?			X	
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			X	

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Disturb any human remains, including those interred outside of dedicated cemeteries?			X	
e) Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074?			X	
VI. GEOLOGY and SOILS. Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			X	
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?			X	
iv) Landslides?				X
b) Result in substantial soil erosion or the loss of topsoil?			X	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			X	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			X	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				X
VII. GREENHOUSE GAS EMISSIONS. Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	
VIII. HAZARDS and HAZARDOUS MATERIALS. Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	

4. Environmental Checklist

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment?			X	
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				X
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				X
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				X
IX. HYDROLOGY and WATER QUALITY. Would the project:				
a) Violate any water quality standards or waste discharge requirements?			X	
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			X	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in a substantial erosion or siltation on- or off-site			X	
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?			X	
e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?			X	
f) Otherwise substantially degrade water quality?			X	
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				X

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				X
j) Inundation by seiche, tsunami, or mudflow?				X
X. LAND USE and PLANNING. Would the project:				
a) Physically divide an established community?				X
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				X
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				X
XI. MINERAL RESOURCES. Would the project:				
a) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?				X
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X
XII. NOISE. Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				X
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			X	
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				X
XIII. POPULATION and HOUSING. Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X

4. Environmental Checklist

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X
XIV. PUBLIC SERVICES. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a) Fire protection?			X	
b) Police protection?			X	
c) Schools?				X
d) Parks?				X
e) Other public facilities?				X
XV. RECREATION.				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X
XVI. TRANSPORTATION and TRAFFIC. Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?			X	
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?			X	
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				X
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?		X		
e) Result in inadequate emergency access?				X
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?				X

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. TRIBAL CULTURAL RESOURCES. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or				X
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.			X	
XVIII. UTILITIES and SERVICE SYSTEMS. Would the project:				
a) Exceed waste water treatment requirements of the applicable Regional Water Quality Control Board?			X	
b) Require or result in the construction of new water or waste water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X
d) Have sufficient water supplies available to serve the project from existing entitlements and resources or are new or expanded entitlements needed?				X
e) Result in a determination by the waste water treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				X
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			X	
g) Comply with federal, state, and local statutes and regulations related to solid waste?			X	
XIX. MANDATORY FINDINGS OF SIGNIFICANCE.				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?			X	

4. Environmental Checklist

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)			X	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

5. Environmental Analysis

Section 4.4 provided a checklist of environmental impacts. This section evaluates the impact categories and questions in the checklist and identifies mitigation measures, if applicable.

5.1 AESTHETICS

a) Have a substantial adverse effect on a scenic vista?

No Impact. Vistas provide visual access or panoramic views to a large geographic area. The field of view from a vista location can be wide and extend into the distance. Panoramic views are usually associated with vantage points looking out over a section of urban or natural areas that provide a geographic orientation not commonly available. Examples of panoramic views include an urban skyline, valley, mountain range, the ocean, or other water bodies.[18]

The school campus and surrounding area are flat and developed with residential, medical, church, and commercial uses. The school campus has a gymnasium and lighted football stadium on-site as well as numerous buildings, surface parking, play fields, hardcourts, student gathering areas, and ornamental trees and landscaping. Although the project would remove the existing one-story buildings (with the exception of the gym) and construct two-story buildings, there are no protected or designated scenic vistas or views, and project development would not obscure any views. Therefore, no impact to scenic vistas would occur.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. The nearest officially designated state scenic highway is the Angeles Crest Highway (SR-2) in Los Angeles County, located about 24 miles north of the school.[19] The proposed structures associated with the project would not be visible from any designated scenic highway. Project development would not result in impacts to scenic resources within a designated state scenic highway. No impact would occur.

c) Substantially degrade the existing visual character or quality of the site and its surroundings?

Less Than Significant Impact. The school campus is in a suburban area and surrounded by residential, church, medical, and commercial uses. The gymnasium building, the tallest building on campus, will remain. The existing lighted football stadium will remain, and no lighting will be added to other fields. The new buildings would be built on the northwest quadrant of the campus, and the character of the site as a high

[18] City of Los Angeles, LA CEQA Thresholds Guide, Chapter A, 2006. http://www.environmentla.org/programs/Thresholds/Complete%20Threshold%20Guide%202006.pdf.

[19] California Department of Transportation (Caltrans). Updated September 7, 2011. California Scenic Highway Mapping System. http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm.

school would not change. The school would be visually compatible with nearby medical and commercial development. Therefore, the proposed project would not substantially degrade the existing visual character or the quality of the site or its surroundings. Impacts to the visual character and quality of the school campus and surrounding uses would be less than significant.

d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?

Less Than Significant Impact. The two major causes of light pollution are glare and spill light. Spill light is caused by misdirected light that illuminates areas outside the area intended to be lit. Glare occurs when a bright object is against a dark background, such as oncoming vehicle headlights or an unshielded light bulb.

The school campus is in a surburban setting and is fully developed. The existing school generates nighttime light from field lights, security and parking lot lights, and building lights (interior and exterior). Surrounding land uses also generate significant light from street lights, vehicle lights, parking lot lights, and building lights.

The project would not significantly increase nighttime lighting on the campus. The project would not include any high-intensity lighting such as is used for athletic fields. Any new security and/or path lights would be directional and would not spill light outside the school campus.

Lighting for the project would not introduce lights at substantially greater intensities than existing lights on and near the school, and the project would not affect nighttime views. Light and glare impacts would be less than significant.

5.2 AGRICULTURE AND FORESTRY RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

Would the project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact. The project would not convert farmland to nonagricultural uses. There is no agricultural or farm use on or in the vicinity of the school campus; therefore, no project-related farmland conversion impact

would occur. The school campus is fully developed and is not mapped as important farmland on the California Important Farmland Finder.[20,21] No impact would occur.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. The project would not conflict with agricultural zoning or a Williamson Act contract. The existing zoning for the campus is PS (Public School).[22] The property is not zoned for agricultural use, and project development would not conflict with such zoning. Williamson Act contracts restrict the use of privately owned land to agriculture and compatible open-space uses under contract with local governments; in exchange, the land is taxed based on actual use rather than potential market value. There is no Williamson Act contract in effect on the campus. No impact would occur.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

No Impact. Project development would not conflict with existing zoning for forest land, timberland, or timberland production. Forest land is defined as "land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits."[23] Timberland is defined as "land….which is available for, and capable of, growing a crop of trees of any commercial species used to produce lumber and other forest products, including Christmas trees."[24] The school campus is zoned for school use as public and semi-public and is not zoned for forest land or timberland use.[25] No impact would occur.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. Construction activities of the project would not result in the loss or conversion of forest land. No vegetation onsite is cultivated for forest resources. Vegetation is limited to ornamental trees, shrubs, and turf. No forest land would be affected by the project, and no impacts would occur.

[20] Division of Land Resource Protection (DLRP). 2017, October 10. California Important Farmland Finder. https://maps.conservation.ca.gov/dlrp/ciff/.
[21] Most of urbanized San Bernardino County, including the Chino High School campus, is not mapped on the California Important Farmland Finder.
[22] City of Chino Zoning Map. Adopted on July 6, 2010. http://www.cityofchino.org/home/showdocument?id=14147.
[23] California PRC Section 12220(g).
[24] California PRC Section 4526.
[25] City of Chino Zoning Map. Adopted on July 6, 2010. http://www.cityofchino.org/home/showdocument?id=14147.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

No Impact. There is no mapped important farmland or forest land on or near the school campus, and project development would not indirectly cause conversion of such land to nonagricultural or nonforest use. No impact would occur.

5.3 AIR QUALITY

A background discussion on the air quality regulatory setting, meteorological conditions, existing ambient air quality in the vicinity of the school, and air quality modeling is attached as Appendix A of this Initial Study.

The primary air pollutants of concern for which ambient air quality standards (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 South Coast Air Basin (SoCAB), which is managed by the South Coast Air Quality Management District (SCAQMD), is designated nonattainment for O_3, and $PM_{2.5}$ under the California and National AAQS, nonattainment for PM_{10} under the California AAQS, and nonattainment for lead (Pb) (Los Angeles County only) under the National AAQS.[26]

Would the project:

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

Less Than Significant Impact. The most recently adopted comprehensive plan is the Final 2016 Air Quality Management Plan, adopted on March 3, 2017 (see Appendix A of this Initial Study for a description of the 2016 AQMP).

Regional growth projections are used by SCAQMD to forecast future emission levels in the SoCAB. For southern California, these regional growth projections are provided by the Southern California Association of Governments (SCAG) and are partially based on land use designations in city and county general plans.[27] Typically, only large, regionally significant projects have the potential to affect the regional growth projections.

The proposed project involves the reconstruction of a portion of the Chino High School campus, which would replace most school buildings and provide improvements to athletic facilities, parking, and circulation. The proposed project is not a project of statewide, regional, or areawide significance that would require intergovernmental review under Section 15206 of the CEQA Guidelines. Therefore, the project would not

[26] California Air Resources Board. October, 2017. Area Designations Maps: State and National. http://www.arb.ca.gov/desig/adm/adm.htm.

[27] Southern California Association of Governments. 2016, April. The 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS): A Plan for Mobility, Accessibility, Sustainability, and a High Quality of Life. http://scagrtpscs.net/Documents/2016/final/f2016RTPSCS.pdf.

have the potential to substantially affect SCAG's demographic projections. Additionally, the regional emissions generated from operation of the project would be less than the SCAQMD regional emissions thresholds, and SCAQMD would not consider the project a substantial source of air pollutant emissions that would have the potential to affect the attainment designations in the SoCAB. Therefore, the project would not affect the regional emissions inventory or conflict with strategies in the AQMP, and impacts are less than significant.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Less Than Significant Impact. The following describes project-related impacts from short-term construction activities and long-term operation of the proposed project.

Short-Term Construction-Related Air Quality

Construction activities would result in the generation of air pollutants, primarily 1) exhaust emissions from off-road diesel-powered construction equipment; 2) dust generated by construction activities; 3) exhaust emissions from on-road vehicles; and 4) off-gas emissions of volatile organic compounds (VOCs) from paint.

Construction activities are anticipated over approximately 39 acres of the 51-acre campus. Construction would occur in two general phases, and each phase would involve building, hardscape, landscape demolition, site preparation, grading, building and/or landscape construction, paving, and painting. Phase 1 construction activities are anticipated to start in 2019 and continue through 2021. Phase 2 construction would begin immediately after Phase 1 in 2021 and would end in 2023. Construction emissions were estimated using the California Emissions Estimator Model (CalEEMod), version 2016.3.2, and are based on a preliminary construction schedule and phasing provided by the District's architect and an equipment list generated by CalEEMod. Table 6 shows the results of the construction emission modeling for maximum daily emissions. Criteria air pollutant emissions from construction activities would not exceed the SCAQMD regional significance thresholds. Therefore, air quality impacts from project-related construction activities would be less than significant.

Table 6 Maximum Daily Construction Emissions

Source	Maximum Daily Emissions (lbs/day)[a]					
	VOC	NO_x	CO	SO_2	PM_{10}[b]	$PM_{2.5}$[b]
PHASE 1						
Year 2019						
Building Demolition	4	39	23	<1	3	2
Site Preparation	4	46	23	<1	10	7
Grading	5	55	34	<1	6	4
Building Construction	4	29	27	<1	3	2
Year 2020						
Building Construction	3	27	26	<1	3	2
Year 2021						
Building Construction	3	24	25	<1	3	2
Building Construction + Paving + Painting	71	39	43	<1	4	2
Maximum Daily Emissions	71	55	43	<1	10	7
SCAQMD Regional Threshold	**75**	**100**	**550**	**150**	**150**	**55**
Exceeds Threshold	No	No	No	No	No	No
PHASE 2						
Year 2021						
Building Demolition	3	40	24	<1	6	2
Site Prep	4	41	22	<1	10	6
Grading	4	47	32	<1	6	3
Building Construction	2	19	18	<1	1	1
Year 2022						
Building Construction	2	17	18	<1	1	1
Year 2023						
Building Construction	2	15	18	<1	1	1
Building Construction + Paving + Painting	8	27	35	<1	2	1
Maximum Daily Emissions	8	47	35	<1	10	6
SCAQMD Regional Threshold	**75**	**100**	**550**	**150**	**150**	**55**
Exceeds Threshold	No	No	No	No	No	No

Source: CalEEMod Version 2016.3.2.
Notes: lbs/day = pounds per day
[a] Where specific information regarding project-related construction activities or processes was not available, construction assumptions were based on CalEEMod defaults, which are based on construction surveys conducted by the SCAQMD.
[b] Includes implementation of fugitive dust control measures required by SCAQMD under Rule 403, including watering disturbed areas a minimum of two times per day, reducing speed limit to 15 miles per hour on unpaved surfaces, replacing ground cover quickly, and street sweeping with Rule 1186–compliant sweepers.

Long-Term Operation-Related Air Quality

Typical long-term air pollutant emissions are generated by area sources (e.g., landscape fuel use, aerosols, and architectural coatings), energy use (natural gas), and mobile sources (i.e., on-road vehicles associated with a project). The project has the potential to increase the number of students on campus by about 271. Based on the traffic study (see Section 5.16, *Transportation and Traffic*) the increase in students would result in an

additional 550 average daily vehicle trips. All new buildings would meet the current Building Energy Efficiency Standards and the California Green Building Standards Code (CALGreen) and would therefore be more energy efficient than the existing buildings constructed or installed between 1951 and 1992. The net change in operation-phase criteria air pollutant emissions is shown in Table 7. The net change in emissions associated with the project would be nominal and would not exceed the SCAQMD regional operation-phase significance thresholds. Therefore, impacts to the regional air quality associated with operation of the project would be less than significant.

Table 7 Maximum Daily Operation-Phase Emissions

Source	Maximum Daily Emissions (lbs/day)					
	VOC	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
Area	3	<1	<1	0	0	0
Energy	<1	<1	<1	<1	<1	<1
Mobile	<1	2	15	<1	5	1
Maximum Daily Emissions	4	2	15	<1	5	1
SCAQMD Regional Threshold	**55**	**55**	**550**	**150**	**150**	**55**
Exceeds Threshold	No	No	No	No	No	No

Source: CalEEMod Version 2016.3.2.
Notes: lbs/day = pounds per day

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Less Than Significant Impact. The SoCAB is designated nonattainment for O_3 and $PM_{2.5}$ under the California and National AAQS, nonattainment for PM_{10} under the California AAQS, and nonattainment for lead (Pb) under the National AAQS.[28] According to SCAQMD methodology, any project that does not exceed or can be mitigated to less than the daily threshold values would not add significantly to a cumulative impact.[29] Construction and operational activities would not result in emissions in excess of SCAQMD's significance thresholds. Therefore, the project would not result in a cumulatively considerable net increase in criteria pollutants, and impacts would be less than significant.

d) Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. The project could expose sensitive receptors to elevated pollutant concentrations if it causes or significantly contributes to elevated pollutant concentration levels. Unlike regional emissions, localized emissions are typically evaluated in terms of air concentration rather than mass so they can be more readily correlated to potential health effects.

[28] California Air Resources Board. 2017, October. Area Designations Maps: State and National. http://www.arb.ca.gov/desig/adm/adm.htm.
[29] South Coast Air Quality Management District. 1993. California Environmental Quality Act Air Quality Handbook.

5. Environmental Analysis

Construction LSTs

Localized significance thresholds (LSTs) are based on the California AAQS, which are the most stringent standards established to provide a margin of safety in the protection of public health and welfare. They are designed to protect sensitive receptors that are most susceptible to further respiratory distress, such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and people engaged in strenuous work or exercise. Construction LSTs are based on the size of the construction site, distance to the nearest sensitive receptor, and Source Receptor Area. The nearest offsite sensitive receptors to the construction site are the adjacent single-family residences on the west side of the campus.

Construction activities are anticipated to cause temporary increases in air pollutant concentrations. Table 8 shows the maximum daily construction emissions (pounds per day) generated during onsite construction activities. The maximum daily NO_X, CO, PM_{10}, and $PM_{2.5}$ construction emissions would be less than their respective SCAQMD screening-level thresholds. Therefore, project-related construction activities would not have the potential to expose sensitive receptors to substantial pollutant concentrations, and localized air quality impacts would be less than significant.

Table 8 Localized Construction Emissions

	Pollutants(lbs/day)[a]			
Source	NO_X	CO	PM_{10}	$PM_{2.5}$
Phase 1 Building Demolition --2019	36	22	2.59	1.79
Phase 2 Building Demolition – 2021	31	22	4.80	1.93
SCAQMD <1.00-acre LST	**118**	**863**	**5.00**	**4.00**
Exceeds LST?	**No**	**No**	**No**	**No**
Phase 1 Building Construction -- 2019	21	17	1.29	1.21
Phase 1 Building Construction -- 2020	19	17	1.12	1.05
Phase 1 Building Construction --2021	17	17	0.96	0.90
Phase 1 Building Construction + Paving + Painting -- 2021	32	33	1.73	1.62
Phase 2 Building Construction – 2021	17	17	0.96	0.90
Phase 2 Building Construction – 2022	16	16	0.81	0.76
Phase 2 Building Construction –2023	14	16	0.70	0.66
Phase 2 Building Construction + Paving + Painting – 2023	26	33	1.28	1.20
SCAQMD 1.31-acre LST	**134**	**978**	**5.31**	**4.31**
Exceeds LST?	**No**	**No**	**No**	**No**
Phase 1 Site Preparation -- 2019	46	22	10.11	6.44
Phase 2 Site Preparation – 2021	41	21	9.77	6.13
SCAQMD 3.5-Acre LSTs	**220**	**1712**	**10.99**	**7.00**
Exceeds LST?	**No**	**No**	**No**	**No**

Table 8 Localized Construction Emissions

Source	Pollutants(lbs/day)[a]			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Phase 1 Grading -- 2019	55	33	6.09	3.73
Phase 2 Grading – 2021	46	31	5.69	3.36
SCAQMD 4-Acre LSTs	**237**	**1872**	**12.66**	**7.67**
Exceeds LST?	**No**	**No**	**No**	**No**

Source: CalEEMod Version 2016.3.2; SCAQMD, July 2008, Final Localized Significance Threshold Methodology; SCAQMD,. 2011, Fact Sheet for Applying CalEEMod to Localized Significance Thresholds.
Note: In accordance with SCAQMD methodology, only onsite stationary sources and mobile equipment are included in the analysis. LSTs are based on receptors within 82 feet (25 meters) of the construction site in Source Receptor Area 33.
[a] Where specific information regarding project-related construction activities or processes was not available, construction assumptions were based on CalEEMod defaults, which are based on construction surveys conducted by the SCAQMD.

Operation LSTs

Operation of the project would not generate substantial quantities of emissions from stationary sources. Land uses that have the potential to generate substantial stationary sources of emissions that would require a permit from SCAQMD include industrial land uses, such as chemical processing and warehousing operations where substantial truck idling could occur onsite. The project does not fall within these categories of uses. While operation of the new school facilities would result in the use of standard mechanical equipment such as heating, ventilation, and air conditioning (HVAC) systems, air pollutant emissions generated would be nominal. Therefore, localized air quality impacts related to operation-related emissions would be less than significant.

Carbon Monoxide 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 parts per million (ppm) or the eight-hour standard of 9.0 ppm. Because CO is produced in greatest quantities from vehicle combustion and does not readily disperse into the atmosphere, adherence to ambient air quality standards is typically demonstrated through an analysis of localized CO concentrations. Hotspots are typically produced at intersections, where traffic congestion is highest because vehicles idle for longer periods and are subject to reduced speeds.

Under existing and future vehicle emission rates, a project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour—or 24,000 vehicles per hour where there is little air movement—in order to generate a significant CO impact.[30] The SoCAB has been designated attainment under both the National and California AAQS for CO. The project would result in an increase of approximately 141 AM peak hour trips and approximately 550 average daily trips, which is substantially below the number of trips required to form a hotspot. Localized air quality impacts related to mobile-source emissions would be less than significant.

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

e) Create objectionable odors affecting a substantial number of people?

Less Than Significant Impact. The project would not result in objectionable odors. The threshold for odor is if a project creates an odor nuisance pursuant to SCAQMD Rule 402, 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 reconstructed high school does not fall within these land uses. Emissions from construction equipment, such as diesel exhaust, and VOCs 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.

5.4 BIOLOGICAL RESOURCES

Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

No Impact. Development has the potential to impact sensitive plants and wildlife species when it results in the removal of suitable habitat for these species. Special status species include: those listed as endangered or threatened under the federal Endangered Species Act or California Endangered Species Act; species otherwise given certain designations by the California Department of Fish and Wildlife; and plant species listed as rare by the California Native Plant Society. The school campus is fully developed, with most of the site consisting of buildings and hardscape (asphalt and concrete). Vegetation onsite is limited to ornamental trees, shrubs, and turf sports playfields. There is no native undisturbed suitable habitat for sensitive plant or animal species. No impact would occur.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

No Impact. Sensitive natural communities are natural communities that are considered rare in the region by regulatory agencies; known to provide habitat for sensitive animal or plant species; or known to be important wildlife corridors. Riparian habitats are those occurring along the banks of rivers and streams. The nearest riparian habitats are approximately five miles south and are associated with Prado Dam. There is no sensitive natural community or riparian habitat on or adjacent to the school campus. No impact would occur.

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No Impact. Wetlands are defined under the federal Clean Water Act as land that is flooded or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that normally does support, a prevalence of vegetation adapted to life in saturated soils. Wetlands include areas such as swamps, marshes, and bogs. The school campus is fully developed and has no protected wetlands. The nearest wetlands are approximately five miles south and are associated with Prado Dam.[31] The school is surrounded by residential development and there are no nearby wetlands. No impact would occur.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less than Significant Impact with Mitigation Incorporated. Wildlife movement corridors facilitate movement of species between large patches of natural habitat that are separated by rugged terrain, changes in vegetation, or human disturbance. Corridors accommodate animal movement to enhance genetic interchange and re-colonization of the species, and provide buffers for species populations to use in response to environmental changes and natural disasters.

The school campus does not function as a wildlife movement corridor for overland wildlife movement or migration, because it is in an urbanized area, the school is surrounded by a fence, and there is no adjacent wildlife habitat. The school does not support native resident or migratory fish or wildlife species; it does not have any watercourses or water bodies, greenbelts, or native habitat for fish or wildlife.

However, birds use trees, shrubs, and buildings as nesting or nursery sites. During a campus survey conducted December 4, 2017, several unoccupied nests were observed in the building overhang braces for the covered walkways. Chicken wire and hardware cloth were installed to prevent bird nesting; however, birds found nesting sites where the mesh was dislodged or bent. Construction activities would result in the removal and/or replacement of about half of the trees on campus and the demolition of the entire campus core.

[31] United States Fish and Wildlife Service (USFWS). 2016, December 8. National Wetlands Mapper. http://www.fws.gov/wetlands/data/mapper.HTML.

5. Environmental Analysis

Migratory birds are protected by the Migratory Bird Treaty Act (MBTA), enacted in 1918.[32] Over 1,000 species are currently on the list, including common species such as the American crow (*Corvus brachyrhynchos)*, northern mockingbird *(Mimus polyglottos)*, and mourning dove *(Zenaida macroura),* found throughout the urban areas in Chino. Under the MBTA, the District cannot knowingly wound, kill, trap, capture, or collect birds, their nests, or eggs without a permit. Also, the California Fish and Game Code prohibits direct impacts to hawks, eagles, owls, and to the nest or eggs of any bird species.[33] Therefore, if construction activities occur during the nesting season (February 1 through August 31 and as early as January 1 for some raptors), nests or nursery sites may be disturbed. To avoid impacts to nesting birds, Mitigation Measure BIO-1 shall be implemented.

Mitigation Measures

BIO-1 Vegetation clearing shall take place outside the general avian breeding season (February 1 through August 31 and as early as January 1 for some raptors).

If it is infeasible to conduct vegetation clearing outside the avian breeding season, then a pre-construction avian nesting survey shall be conducted by a qualified biologist within 7 calendar days prior to the start of construction activities.

- If a bird nest is not found:
  - Building demolition and vegetation clearing may proceed.
  - A survey report by a qualified biologist verifying that no active nests are present shall be submitted to the CVUSD project manager prior to initiation of building demolition and vegetation clearing.
- If a bird nest is found:
  - Work may proceed provided that construction activity is at least: 1) 500 feet from a raptor nest; 2) 300 feet from a listed bird species' nest; and 3) 100 feet from a nonlisted bird species' nest.
  - The qualified biologist shall mark the buffer with flagging, stakes, and/or construction fencing to demarcate the inside boundary so that building demolition and vegetation clearing does not encroach into the buffer until the nest is no longer active (i.e., the nestlings fledge, the nest fails, or the nest is abandoned, as determined by the biologist). Project personnel, including all contractors working on site, shall be instructed about the sensitivity of the area.

[32] United States Code Annotated. Title 16. Conservation. Chapter 7. (US Code, Title 16, §§ 703–712). Protection of Migratory Game and Insectivorous Birds. Subchapter II. Migratory Bird Treaty. § 703. Taking, killing, or possessing migratory birds unlawful. http://uscode.house.gov/view.xhtml?path=/prelim@title16/chapter7&edition=prelim

[33] California Fish and Game Code, §§ 3503 et seq. http://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=3503.5.&lawCode=FGC

- During all grubbing and clearing of vegetation and building demolition, the biological monitor shall be present on site to ensure that these activities remain outside the demarcated buffer (nest setback zone) and that the flagging, stakes, and/or construction fencing are maintained, and to minimize the likelihood that active nests are abandoned or fail due to project activities.
- During the grubbing and clearing of vegetation and building demolition, the biological monitor shall send weekly monitoring reports to the CVUSD project manager. The CVUSD project manager shall be immediately notified if project activities affect avian nests.
- Prior to initiation of construction activities in the nest setback zone, the biological monitor shall send a final monitoring report to CVUSD project manager verifying that the young have fledged and no further monitoring is required.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact. The City of Chino has regulations for City-owned street trees in its Municipal Code.[34] No trees on City property would be affected by the proposed project. The trees that would be removed are on the school campus, which is District property. There are no protected biological resources on campus. Therefore, the proposed project would not conflict with any policies or ordinances protecting biological resources, including trees. No impact would occur.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact. The school is not within an adopted habitat conservation plan, natural community conservation plan, or similar plan.[35] The proposed project would not conflict with any local policies or ordinances protecting biological resources. No impact would occur.

5.5 CULTURAL RESOURCES

The analysis in this section is based in part on the following technical study:

- Cogstone. March 2018. Paleontological and Cultural Resources Assessment Report for the Chino High School Reconstruction Project, City of Chino, San Bernardino County, California (see Appendix B of this Initial Study).

[34] Chino Municipal Code. Title 12, Chapter 12.16 - STREET TREES. https://library.municode.com/ca/chino/codes/code_of_ordinances?nodeId=TIT12STSIOTPUPL_CH12.16STTR

[35] California Department of Fish and Wildlife. October 2017. California Regional Conservation Plans. https://nrm.dfg.ca.gov/ ; Chino General Plan. July 2010. Opens Space and Conservation Element. http://www.cityofchino.org/home/showdocument?id=12898

5. Environmental Analysis

Would the project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?

Less Than Significant Impact. CEQA Guidelines, Section 15064.5 defines historic resources as a resource listed in or determined to be eligible for listing in the California Register of Historical Resource by the State Historical Resources Commission; included in a local register of historical resources; or as determined by a lead agency. Generally, a resource is considered 'historically significant' if the resource meets the criteria for listing on the California Register of Historical Resources:

i) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

ii) Is associated with the lives of persons important in our past;

iii) Embodies the distinctive characteristics of a type, period, region or method of construction, or represents the work of an important creative individual, or possesses high artistic values;

iv) Has yielded, or may be likely to yield, information important in prehistory or history.

Historically, Chino High School is one of the oldest schools in all of Southern California. Its history goes back to 1897 when Chino School District and Chino High School were founded. The first class graduated in 1900 from a building long ago demolished. That school once stood on the site of the current Community Building at 5443 B Street. A new 52-acre high school was constructed on Riverside Drive west of Central Avenue (near the existing District offices).

The current 51-acre Chino High School campus dates from 1950 when it had football and baseball fields and auditorium and gymnasium buildings. The boys and girls locker and shower buildings were under construction in 1950. Other campus structures included several 1950s Quonset huts. Later additions included the music building, library, classroom building, and agricultural shop building. The period of significance or date of construction ranges from 1950 to 1992, with major periods of expansion in 1959, 1964, 1966, and 1972. Several modular classrooms or portable buildings were added in the 1990s. A cultural resource study was prepared to evaluate campus buildings.

Thirteen buildings were determined to be less than 45 years old and are not historic.

- E3 Classroom Building
- E5 Classroom Building
- E6 Classroom Building
- C2 Classroom Building
- F1 Classroom Building
- F2 Classroom Building

- F3 Classroom Building
- J Student Store/Restroom Building
- L1 Classroom Building
- M1 Classroom Building
- M2 Classroom Building
- M Classroom Building
- M4 Classroom Building

Twenty buildings were determined to be over 45 years old.

Building No.	Facility	Construction Date
A1	Administration and Library Building	1964
A2	Counseling / Health / Records Building	1959
B1	Classroom Building (East Wing)	1964
B1	Classroom Building (West Wing)	1959
B2	Classroom Building	1959
B3	Classroom Building (East Wing)	1964
B3	Classroom Building (West Wing)	1959
C1	Classroom Building	1959
C3	Classroom Building	1966
D1	Classroom Building	1966
D	Classroom Building	1966
E1	Classroom Building	1959
E2	Classroom Building	1966
E4	Industrial Arts / Wood	1964
G	Gymnasium	1964
G2	Girls Showers & Lockers	1959
G	Boys Showers & Lockers	1959
H	Homemaking	1959
K	Auditorium/Multipurpose/Cafeteria	1964
L2	Music	1959

None of the campus buildings over 45 years old meet the criteria for a significant historic resource, individually or collectively, on a statewide or national level, and do not appear eligible for listing in the National Register of Historic Places or the California Register of Historical Resources.[36] Therefore, reconstruction of the campus would not cause a substantial adverse change in the significance of a historical resource. Impacts would be less than significant.

[36] Cogstone. March 2018. Paleontological and Cultural Resources Assessment Report for the Chino High School Renovation Project, City of Chino, San Bernardino County, California

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?

Less Than Significant Impact. Archaeological resources are cultural resources of prehistoric or historic origin that reflect human activity. Archaeological resources include both structural ruins and buried resources. The term "unique archaeological resources" is defined in PRC Section 21083.2(g):

> … "unique archaeological resources" means an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:
>
> (1) Contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information.
>
> (2) Has a special and particular quality such as being the oldest of its type or the best available example of its type.
>
> (3) Is directly associated with a scientifically recognized important prehistoric or historic event or person.

A Sacred Lands File search was conducted at the Native American Heritage Commission and resulted in a negative determination for resources within the campus.[37] Additionally, all undeveloped ground surfaces were visually inspected by a professional archaeologist. No resources were found.

Soil on campus was previously disturbed by construction of the existing school. Neither the school nor the surrounding area has been designated as sensitive for archeological resources. Site preparation for the project would include import and export of soils to create building pads and level the play fields; however deep excavations would not be required. Maximum excavation depths would be around 10- to 12-feet deep for some utility lines; however, most of the building excavations would be no more than 8 feet below current grades, similar to existing buildings. Because the campus is flat and has been developed previously, any surficial archaeological resources that may have been present at one time have likely been disturbed. Therefore, earth movement on the campus is not anticipated to uncover archaeological resources. Impacts related to archaeological resources would be less than significant.

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less Than Significant Impact. A paleontological resource is a natural resource characterized as faunal or floral fossilized remains, but may also include specimens of nonfossil material dating to any period preceding human occupation. All undeveloped ground surfaces were visually inspected by a professional paleontologist. No resources were found.

[37] Cogstone. March 2018. Paleontological and Cultural Resources Assessment Report for the Chino High School Renovation Project, City of Chino, San Bernardino County, California

Surface soils in the entire area consist of younger Quaternary alluvium, deposited from San Gabriel Mountains to the north, mostly likely from San Antonino Creek drainage area (now a concrete channel) to the west of the school. This type of soil typically does not contain significant vertebrate fossils in the uppermost layers, but can be underlain by older Quaternary alluvium that may contain fossils. The closest fossil found was in older Quaternary alluvium (Pleistocene age) southwest of the SR-60 / SR-71 interchange where deep excavations uncovered a fossil specimen of bison.[38] Fossils have been found mostly in sedimentary rock that has been uplifted, eroded, or otherwise exposed. Pleistocene age[39] and older alluvium has yielded locally abundant and scientifically significant fossils and has moderate to high paleontological sensitivity. However, Holocene-age alluvium deposits are too young to contain fossils and have low paleontological sensitivity.[40,41]

Exploratory soil test borings on campus in November 2017 encountered alluvial materials to a maximum depth of 71.5 feet. These materials were mostly silty sands with occasional clay sands and sandy clay. Previous reports showed the thickness of alluvial materials in the vicinity of the site to be approximately 850 feet. The geomorphology of the site suggests that surficial materials on the site are probably Holocene in age.[42]

Maximum excavation depths would be around 10- to 12-feet deep for some utility lines; however, most of the building excavations would be no more than 8 feet below current grades. Because of the flat topography, limited excavation depth, and soil age, fossils are not anticipated to be uncovered. Impacts would be less than significant.

d) Disturb any human remains, including those interred outside of dedicated cemeteries?

Less Than Significant Impact. There are no known human remains on or near the project site. Additionally, the school is in a developed area and has undergone previous ground-disturbing activities. The likelihood that human remains are discovered during construction activities is negligible.

California Health and Safety Code Section 7050.5, CEQA Section 15064.5, and Public Resources Code Section 5097.98 mandate the process to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery. Specifically, California Health and Safety Code Section 7050.5 requires that in the event human remains are discovered within the school campus, disturbance of the

[38] Cogstone. March 2018. Paleontological and Cultural Resources Assessment Report for the Chino High School Renovation Project, City of Chino, San Bernardino County, California

[39] The Pleistocene age is typically defined as the time period that began about 2.6 million years ago and lasted until about 11,700 years ago. The most recent Ice Age occurred then, as glaciers covered huge parts of the planet Earth.
The Holocene age began 12,000 to 11,500 years ago and continues through today. As Earth entered a warming trend, the glaciers of the late Paleolithic retreated.
The Quaternary period is divided into two epochs: the Pleistocene (2.6 million years ago to 11,700 years ago) and the Holocene (11,700 years ago to today).

[40] Paleontological Assessment and Technical Report, Water Replenishment District, Groundwater, Reliability Improvement Program, County of Los Angeles, California http://www.wrd.org/AppendixG_PaleoAssessmt.pdf.

[41] City of Los Angeles Citywide General Plan Framework Final Environmental Impact Report. Certified August 8, 2001. Appendix C - Vertebrate Paleontological Resources http://cityplanning.lacity.org/HousingInitiatives/HousingElement/FrameworkEIR/GPF_DraftEIR/GPF_FEIR_DEIR_AppC.pdf.

[42] Gary S. Rasmussen & Associates, Inc. January 5, 2018. Engineering Geology Investigation, Chino High School Reconstruction, 5472 Park Place, Chino, California. Page 4.

site shall remain halted until the coroner has conducted an investigation into the circumstances, manner, and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made in the manner provided in Section 5097.98 of the Public Resources Code. If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes or has reason to believe the human remains to be those of a Native American, the coroner shall contact, by telephone within 24 hours, the Native American Heritage Commission. Compliance with existing law, if required, would ensure that significant impacts to human remains would not occur.

5.6 GEOLOGY AND SOILS

The analysis in this section is based in part on the following technical study:

- Gary S. Rasmussen & Associates, Inc. January 5, 2018. Engineering Geology Investigation, Chino High School Reconstruction, 5472 Park Place, Chino, California (see Appendix C-1 of this Initial Study).

- John R. Byerly, Inc. March 9, 2018. Geotechnical Investigation. Chino High School Reconstruction Project, 5472 Park Place, Chino, California (see Appendix C-2 of this Initial Study).

Would the project:

Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

a) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

Less than Significant Impact. The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to prevent construction of buildings used for human occupancy on the surface of active faults. An active fault is one that has had surface displacement within the last 11,000 years. Fault rupture generally occurs within 50 feet of an active fault line and is limited to the immediate area of the fault. The school is not within or next to an Alquist-Priolo Earthquake Fault Zone. The distance to the nearest Alquist-Priolo Earthquake Fault Zone is approximately three miles southwest of the school, associated with the Chino fault.[43]

The risk of surface rupture of a known active fault in or next to the school is considered low due to the lack of Alquist-Priolo Earthquake Fault Zones and the absence of any identified faults in the immediate vicinity of the campus. Therefore, impacts from a fault rupture would be less than significant.

[43] Gary S. Rasmussen & Associates, Inc. January 5, 2018. Engineering Geology Investigation, Chino High School Reconstruction, 5472 Park Place, Chino, California.

b) Strong seismic ground shaking?

Less Than Significant Impact. The project would not increase exposure of people or structures to earthquake impacts. Similar to the rest of southern California, the school campus is subject to ground shaking and potential damage in the event of seismic activity (Seismic Zone 4, encompassing most of southern California). Impacts from ground shaking could occur many miles from an earthquake epicenter. The potential severity of ground shaking depends on many factors, including the distance from the originating fault, the earthquake magnitude, and the nature of the earth materials beneath a given site.

The northwest-trending Chino fault is approximately three miles southwest of the school and is considered potentially active. The Chino fault is part of the Elsinore fault system. Other faults include:

- San Jose fault, a northeast trending fault approximately 5 miles northwest.
- Cucamonga fault, an east trending fault approximately 7 miles north.
- Sierra Madre fault, a west to northwest trending fault approximately 7 miles northwest.
- Whittier fault, a northwest trending fault approximately 9 miles southwest.
- Glen Ivy fault, a branch of the Elsinore fault zone approximately 10 miles southwest.

Because of the proximity to known faults, and because the entire southern California region is considered seismically active, there is a potential for people and structures to experience strong ground shaking in the future.

The state building standard is established in the California Building Code (CBC) (Title 24, Part 2, California Code of Regulations), with local, more restrictive amendments based on local geographic, topographic, or climatic conditions. These codes provide minimum standards to protect property and the public welfare by regulating the design and construction of excavations, foundations, building frames, retaining walls, and other building elements to mitigate the effects of seismic shaking and adverse soil conditions. New school buildings would be designed in accordance with the California Building Code, the California Geological Survey's "Guidelines for Evaluating and Mitigating Seismic Hazards in California,"[44] and "Checklist for the Review of Geologic/Seismic Reports for California Schools, Hospitals, and Essential Services Buildings."[45]

The Engineering Geology Investigation includes seismic design parameters calculated based on CBC requirements. The project would also be reviewed by the DSA for compliance with design and construction and accessibility standards and codes, including seismic requirements. CVUSD, with oversight from DSA, would comply with these requirements in the design and construction of the new school buildings. Seismic ground shaking impacts would be less than significant.

[44] California Geological Survey "Guidelines for Evaluating and Mitigating Seismic Hazards in California," published in 1997 by the California Department of Mines and Geology as Special Publication 117 (SP117), and revised and readopted September 11, 2008, and published by the California Department of Conservation, California Geological Survey (formerly known as DMG).

[45] California Geological Survey. October 2013. http://www.conservation.ca.gov/cgs/information/publications/cgs_notes/note_48/Documents/Note_48.pdf

c) Seismic-related ground failure, including liquefaction?

Less Than Significant Impact. Liquefaction refers to loose, saturated sand or gravel deposits that lose their load supporting capability when subjected to intense shaking. The parameters for increased liquefaction susceptibility are: 1) high ground water (less than 33 feet below the surface); 2) sandy sedimentary deposits (cohesionless, granular soils with relatively low densities); 3) recent age of material (usually of Holocene age); and 4) close proximity to an active fault (moderate to high seismic ground shaking).

The school campus is not within a zone of required investigation for liquefaction.[46] Based on local exploration, groundwater in the area is deeper than 50 feet below ground surface.[47] Data from two groundwater wells within approximately 0.5 mile of the school indicate that the depth to groundwater ranged between 187 feet and 102 feet between 1998 and 2007. Data from a well approximately 1.0 mile away indicates that the depth to groundwater ranged between 216 feet in 1993 and 133 feet in 2007.[48] Exploratory soil test borings to a maximum depth of 71.5 feet, conducted in November, 2017, did not encounter groundwater. The sediments encountered fall into only three of the geologic parameters. Based on groundwater data, shallow groundwater does not occur at the school: therefore, the sediments are not considered to have a significant potential for liquefaction. No impact related to liquefaction would occur.

d) Landslides?

No Impact. Landsliding is a type of erosion in which masses of earth and rock move down slope as a single unit. Susceptibility of slopes to landslides and other forms of slope failure depend on several factors, which are usually present in combination and include steep slopes, condition of rock and soil materials, the presence of water, formational contacts, geologic shear zones, and seismic activity.

The relatively flat-lying topography at the school and surrounding area precludes both stability problems and the potential for lurching (earth movement at right angles to a cliff or steep slope during ground shaking). No landslides have been mapped on or adjacent to the campus, and the school and surrounding area exhibit gentle terrain.[49] No evidence for landsliding was observed on or in the immediate vicinity of the school, during field surveys, or on aerial photographs. Due to the lack of significant topography, landslides are not expected.[50] Therefore, no landslide impacts would occur.

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46 California Geological Survey. November 2000. State of California Seismic Hazard Zones. Earthquake Zones of Required Investigation, Ontario Quadrangle, scale 1:24,000. http://gmw.conservation.ca.gov/SHP/EZRIM/Maps/ONTARIO_EZRIM.pdf.

47 Geo-Cal, Inc., 2012. Confirmation Soil Sampling and Request for Case Closure, Doshi's ARCO, 5715 Riverside Drive, Chino, California, dated March 26, 2012.

48 Gary S. Rasmussen & Associates, Inc. January 5, 2018. Engineering Geology Investigation, Chino High School Reconstruction, 5472 Park Place, Chino, California.

49 Morton, D. M., and F. K. Miller, 2003. Preliminary Geologic Map of the San Bernardino 30' X 60' Quadrangle, California, Version 1.0, U.S. Geological Survey Open-File Report 03-293, scale 1:100,000. https://pubs.usgs.gov/of/2003/of03-293/

50 Gary S. Rasmussen & Associates, Inc. January 5, 2018. Engineering Geology Investigation, Chino High School Reconstruction, 5472 Park Place, Chino, California.

e) Result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact. Erosion is a normal and inevitable geologic process whereby earthen materials are loosened, worn away, decomposed or dissolved, and moved from one place to another. Precipitation, running water, waves, and wind are all agents of erosion. Ordinarily, erosion proceeds imperceptibly, but when the natural equilibrium of the environment is changed, the rate of erosion can be greatly accelerated. Significant erosion typically occurs on steep slopes where stormwater and high winds can carry soil down hillsides. Accelerated erosion in an urban area can cause damage by undermining structures; blocking storm drains; and depositing silt, sand, or mud in roads and tunnels. Eroded materials can eventually be deposited in local waters, where the carried silt remains suspended in the water for some time, constituting a pollutant and altering the normal balance of plant and animal life.

Construction Phase

Project-related construction activities would expose soil through excavation, grading, and trenching, and thus could cause erosion during heavy winds or storms.

Reduction of the erosion can be accomplished by following standard best management practices, such as temporary catchment basins and/or sandbagging to control runoff and contain sediment transport within the project area. Project construction is required to comply with standard regulations, including SCAQMD Rules 402 (Nuisance) and 403 (Fugitive Dust), which would reduce construction erosion impacts. Rule 402 requires dust suppression techniques to be implemented to prevent dust and soil erosion from creating a nuisance offsite. Rule 403 has control measures to reduce erosion during grading and construction activities that include stabilizing backfilling materials when not actively handling, stabilizing soils during clearing and grubbing activities, and stabilizing soils during and after cut-and-fill activities. The District would comply with these and other SCAQMD regulations.

Construction projects of one acre or more are regulated under the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2012-0006-DWQ) issued by the State Water Resources Control Board.[51,52]

The San Bernardino County Development Code Section 85.11.030 requires standard erosion control practices to be implemented for all construction. Additionally, construction sites are required to prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) in accordance with the requirements of the statewide Construction General Permit and are subject to the oversight of the Santa Ana Regional Water Quality Control Board (RWQCB). The SWPPP must include best management practices (BMP) to reduce or eliminate erosion and sedimentation from soil-disturbing activities, as well as proper materials and waste management. Implementation of these state and local requirements would effectively protect projects from

[51] California Environmental Protection Agency, State Water Resources Control Board. 2012 Water Quality Orders. https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/wqo12.shtml

[52] County of San Bernardino Areawide Stormwater Program NPDES No. CAS618036, ORDER No. R8-2010-0036. Technical Guidance Document for Water Quality Management Plans. Effective Date: September 19, 2013. http://cms.sbcounty.gov/Portals/50/Land/SantaAnaRiver-WQMP-Final-June2013.pdf?ver=2016-01-20-122443-980

violating any water quality standards or waste discharge requirements from construction activities, and impacts would be less than significant.

Campus soils have already been highly disturbed by development. The native topsoil was removed and/or compacted during development of the school campus; therefore, redevelopment of the school campus would not result in the loss of topsoil.[53] Construction-related soil erosion and loss of topsoil would be less than significant.

Operational Phase

After completion of the project, ground surfaces at the school campus would be either hardscape or maintained landscaping, and no large areas of exposed soil would be left to erode off the campus.

Statewide Small MS4 Permit

San Bernardino County is a permittee on the statewide Small MS4 Permit, Order No. 2013-0001-DWQ, issued by the State Water Resources Control Board in 2013. Regulated projects under the Small MS4 Permit are generally redevelopment projects that add or replace 5,000 or more square feet of impervious surfaces, and new development projects that create 10,000 or more square feet of impervious surfaces. Regulated projects must implement BMPs from the following categories.

Source Control BMPs

Source Control BMPs reduce the potential for pollutants to enter runoff; such BMPs include design of various types of areas, including outdoor storage areas for equipment, materials, trash, and recyclable materials, to prevent stormwater from running on to those areas and to prevent materials from those areas from entering stormwater. Source control BMPs also include activity restrictions such as for vehicle and equipment cleaning, pesticide use, parking area maintenance, and outdoor cooking, to minimize stormwater contamination from those activities.

Low-Impact Development BMPs

The District would comply with the County of San Bernardino Areawide Stormwater Program.[54] LID employs principles such as preserving and recreating natural landscape features, and minimizing effective imperviousness to create functional and appealing site drainage that treat stormwater as a resource rather than a waste product. There are many practices that have been used to adhere to these principles, such as bioretention facilities, rain gardens, vegetated rooftops, rain barrels, and permeable pavements.[55]

[53] Topsoil is the thin, rich layer of soil where most nutrients for plants are found and where most land-based biological activity takes place. The loss of topsoil through erosion is a major agricultural problem.

[54] County of San Bernardino Areawide Stormwater Program NPDES No. CAS618036, ORDER No. R8-2010-0036. Technical Guidance Document for Water Quality Management Plans. Effective Date: September 19, 2013. http://cms.sbcounty.gov/Portals/50/Land/SantaAnaRiver-WQMP-Final-June2013.pdf?ver=2016-01-20-122443-980.

[55] US Environmental Protection Agency. 2016, December 14. Urban Runoff: Low Impact Development. https://www.epa.gov/nps/urban-runoff-low-impact-development.

Site Design BMPs

Site Design BMPs reduce or eliminate postproject runoff; examples include routing rooftop drainage pipes into rain barrels, cisterns, or permeable areas rather than storm drains; setting back development from streams; porous pavements; and vegetated swales. Site design BMPs are intended to infiltrate, evapotranspire, harvest, or reuse runoff from an 85th-percentile, 24-hour storm.

Additionally, San Bernardino County Development Code Chapter 83.15 provides requirements to ensure compliance with projects subject to water quality management plans. Soil erosion or the loss of topsoil impacts would be less than significant.

f) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

Less Than Significant Impact. Liquefaction is discussed in Section 5.6(a)(iii) and would be less than significant.

The soils underlying the planned reconstruction site were explored by means of 41 test borings drilled to depths of up to 71.5 feet below the existing ground surface. Also, seven shallow borings were drilled to a depth of 6 feet in the vicinity of the new parking lots, driveways, hardcourt, and ball field areas.

Test borings identified 2.5 to 5 inches of asphalt concrete pavement followed by 3 to 6 inches of aggregate base. Relatively shallow fill consisting of loose to medium dense silty sands was encountered at all boring locations. The underlying natural soils consisted of loose silty sands and medium stiff sandy silts to depths of up to 10.5 feet. The deeper natural soils consisted of medium dense to very dense silty sands, silty sands with gravel, and sands, and stiff to hard sandy silts and sandy clays. Dense alluvial soil is considered to extend to a depth of at least 100 feet beneath the site. Neither bedrock nor free ground water was encountered at boring locations.

Structure Areas – The upper natural soils encountered in explorations are loose and medium stiff and are not considered competent. These loose and medium stiff upper soils extend to depths of up to 10.5 feet below the presently existing ground surface. Where the existing improvements will allow, the upper natural soils will be overexcavated to a depth of at least 10 feet. The overexcavation would extend beyond the new structure areas a horizontal distance of at least 10 feet.

Pavement and Hardscape Areas – Overexcavation and recompaction of the existing soil in pavement and hardscape areas would extend to a depth of 3 feet.[56]

Lateral spreading is a phenomenon where large blocks of intact, nonliquefied soil move downslope on a large liquefied substratum. The mass moves toward an unconfined area, such as a descending slope or stream-cut bluff, and has been known to move on slope gradients as little as one degree. A liquefaction-induced

[56] John R. Byerly, Inc. March 9, 2018. Geotechnical Investigation. Chino High School Reconstruction Project, 5472 Park Place, Chino, California.

lateral spread landslide is unlikely because of the lack of liquefaction susceptibility and the lack of a open cut slope adjacent to the campus. No impact related to lateral spreading would occur.

Settlement. Strong ground shaking can cause settlement of alluvial soils underlying the campus by allowing sediment particles to become more tightly packed. Alluvial deposits are especially susceptible to this phenomenon. Artificial fills, if not adequately compacted, may also experience seismically induced settlement. Seismic settlement on the campus is not expected because no unusual geologic conditions or structures are known to exist at shallow depth beneath the site.[57] Grading and compaction that would occur as part of the project would reduce any potential for seismically induced settlement.

Ground lurching. Seismically induced ground lurching occurs when soil or rock masses move at right angles to a cliff or steep slope in response to seismic waves. Structures built on these masses can experience significant lateral and vertical deformations if ground lurching occurs. Based on the flat terrain of the campus and surrounding area, the potential for ground lurching is considered low. Therefore, no significant adverse impact related to ground lurching is anticipated.

Subsidence of basins attributed to overdraft of groundwater aquifers or overpumping of petroleum reserves has been reported in various parts of southern California. The school is outside of the managed area of significant subsidence.[58] In addition, it is outside of the Mahala oil field, which is about 5.6 miles to the south.[59] Based on the distance from the oil field and the adjudicated operation of the Chino Basin under a subsidence management plan, petroleum-related subsidence effects on the campus are unlikely.

The primary cause of nontectonic subsidence has been the removal of large quantities of ground water from the groundwater basins. Subsidence of the ground surface has occurred in the Chino Basin and in the San Bernardino, San Jacinto, Antelope, and Murrieta valleys. The school is in the Chino Basin. Static groundwater levels in the vicinity of the campus have risen approximately 85 feet between 1993 and 2005. Subsidence is not considered a potential hazard to the campus unless static groundwater levels are allowed to decline significantly (greater than approximately 100 feet) in the future.[60]

Collapsible soils shrink when wetted and/or topped by a heavy load. The upper one to two feet of soil encountered in test borings are loose and compressible. Recompaction of campus soils in accordance with the geotechnical investigation report would occur. The deeper natural soils have at elevated moisture content, but are not considered subject to hydroconsolidation. Impacts would be less than significant.

[57] Gary S. Rasmussen & Associates, Inc. January 5, 2018. Engineering Geology Investigation, Chino High School Reconstruction, 5472 Park Place, Chino, California.
[58] Chino Basin Watermaster, 2015. Chino Basin Subsidence Management Plan, dated July 23, 2015.
[59] California Division of Oil, Gas and Geothermal Resources, 2004. Regional Wildcat Map W1-4, ftp://ftp.consrv.ca.gov/pub/oil/maps/dist1/w1-4/Mapw1-4.pdf.
[60] Gary S. Rasmussen & Associates, Inc. January 5, 2018. Engineering Geology Investigation, Chino High School Reconstruction, 5472 Park Place, Chino, California.

g) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

Less Than Significant Impact. Highly expansive soils swell when they absorb water and shrink as they dry and can cause structural damage to building foundations and roads. Thus, they are less suitable for development than nonexpansive soils. The campus is underlain by alluvial soils, which may contain expansive soil.[61] Standard grading technologies and compliance with current grading requirements in accordance with the seismic requirements of the CBC would reduce impacts from expansive soils. Impacts related to expansive soils would be less than significant.

h) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

No Impact. The project would not require the installation of a septic tank or alternative wastewater disposal system. The school is already using the local sewer system and would continue this after reconstruction of the campus core. Therefore, no impacts would result from soil conditions in relation to septic tanks or other onsite wastewater disposal systems.

5.7 GREENHOUSE GAS EMISSIONS

Scientists have concluded that human activities are contributing to global climate change by adding large amounts of heat-trapping gases, known as greenhouse gases (GHGs), into the atmosphere. The primary source of these GHG is fossil fuel use. The Intergovernmental Panel on Climate Change (IPCC) has identified four major GHGs—water vapor, carbon dioxide (CO_2), methane (CH_4), and ozone (O_3)—that are the likely cause of an increase in global average temperatures observed within the 20th and 21st centuries. Other GHGs identified by the IPCC that contribute to global warming to a lesser extent include nitrous oxide (N_2O), sulfur hexafluoride (SF_6), hydro fluorocarbons, per fluorocarbons, and chlorofluorocarbons.[62]

Information on manufacture of cement, steel, and other "life cycle" emissions resulting from the project are not applicable and are not included in the analysis.[63] Black carbon emissions are not included in the GHG analysis because the California Air Resources Board (CARB) does not include this pollutant in the state's Assembly Bill 32 (AB 32) inventory and treats this short-lived climate pollutant separately.[64] A background discussion on the GHG regulatory setting and GHG modeling can be found in Appendix A to this Initial Study.

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61 Morton, D. M., and F. K. Miller, 2003. Preliminary Geologic Map of the San Bernardino 30' X 60' Quadrangle, California, Version 1.0, U.S. Geological Survey Open-File Report 03-293, scale 1:100,000. https://pubs.usgs.gov/of/2003/of03-293/

62 Water vapor (H_2O) is the strongest GHG and the most variable in its phases (vapor, cloud droplets, ice crystals). However, water vapor is not considered a pollutant, but part of the feedback loop rather than a primary cause of change.

63 Please see Appendix A for further details regarding "life cycle" emissions.

64 Particulate matter emissions, which include black carbon, are analyzed in Section 5.3, *Air Quality*. Black carbon emissions have sharply declined due to efforts to reduce on-road and off-road vehicle emissions, especially diesel particulate matter. The state's existing air quality policies will virtually eliminate black carbon emissions from on-road diesel engines within 10 years (https://www.arb.ca.gov/cc/shortlived/shortlived.htm).

5. Environmental Analysis

Would the project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant Impact. Global climate change is not confined to a particular project area and is generally accepted as the consequence of global industrialization over the last 200 years. A typical project, even a very large one, does not generate enough greenhouse gas emissions on its own to influence global climate change significantly; hence, the issue of global climate change is, by definition, a cumulative environmental impact.

The school reconstruction project would generate GHG emissions from construction activities, energy use (directly through fuel consumed for building heating), mobile sources (emissions from vehicles), and area sources (e.g., consumer products, architectural coatings). Table 9 shows the net change in GHG emissions associated with the construction and operation of the proposed project. Annual construction emissions are based on total construction emissions amortized over 30 years, per SCAQMD methodology.[65] As shown in the table, the net change in GHG emissions of 1,031 metric tons of carbon dioxide equivalent ($MTCO_2e$) per year as a result of project implementation would not exceed SCAQMD's bright-line threshold of 3,000 $MTCO_2e$/year.[66] Therefore, the project-related cumulative contribution to GHG emissions is less than significant.

Table 9 Project-Related GHG Emissions

Source	Annual GHG ($MTCO_2e$/Year)
Area	<1
Energy	364
Mobile	484
Waste Generation	85
Water and Wastewater	16
Amortized Construction Emissions[a]	83
Total	**1,031**
Proposed SCAQMD Bright-Line Threshold	3,000 $MTCO_2e$/Yr
Exceeds Bright-Line Threshold	No

Source: CalEEMod, Version 2016.3.2. Totals may not equal to the sum of the values as shown due to rounding.
Notes: $MTCO_2e$ = metric ton of carbon dioxide equivalent
[a] Total construction emissions are amortized over 30 years, per SCAQMD methodology.

[65] South Coast Air Quality Management District, 2008. Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold, http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-6/ghg-meeting-6-guidance-document-discussion.pdf.

[66] This threshold is based on a combined threshold of 3,000 $MTCO_2e$ for all land use types, proposed by SCAQMD's Working Group based on a survey of the GHG emissions inventory of CEQA projects. Approximately 90 percent of CEQA projects' GHG emissions inventories exceed 3,000 $MTCO_2e$, which is based on a potential threshold approach cited in the California Air Pollution Control Officers Association's white paper, "CEQA and Climate Change."

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less Than Significant Impact. Applicable plans adopted for the purpose of reducing GHG emissions include CARB's Scoping Plan and SCAG's Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS).

CARB Scoping Plan

In accordance with AB 32, CARB developed the 2008 Scoping Plan to outline the state's strategy established by AB 32, which is to return the State's GHG emissions inventory to 1990 levels by year 2020. In September 2016, Senate Bill 32 (SB 32) was signed into law, requiring the state's GHG emissions to return to 40 percent below 1990 levels by 2030. Executive Order B-30-15 and SB 32 require CARB to prepare another update to the Scoping Plan to address the 2030 target for the state. On December 14, 2017, CARB adopted the 2017 Climate Change Scoping Plan Update to address the new interim GHG emissions target under Senate Bill 32. The CARB Scoping Plan is applicable to state agencies and is not directly applicable to cities/counties and individual projects. Nonetheless, the Scoping Plan has been the primary tool that is used to develop performance-based and efficiency-based CEQA criteria and GHG reduction targets for climate action planning efforts.[67]

Statewide strategies to reduce GHG emissions in the latest 2017 Climate Change Scoping Plan include implementing Senate Bill 350, which expands the Renewables Portfolio Standard to 50 percent by 2030 and doubles energy efficiency savings; expanding the Low Carbon Fuel Standard to 18 percent by 2030; implementing the Mobile Source Strategy to deploy zero-electric vehicle buses and trucks; implementation of the Sustainable Freight Action Plan; implementation of the Short-Lived Climate Pollutant Reduction Strategy, which reduces methane and hydrofluorocarbons 40 percent below 2013 levels by 2030 and black carbon emissions 50 percent below 2013 levels by 2030; continuing to implement SB 375; creation of a post-2020 Cap-and-Trade Program; and development of an Integrated Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.[68] Statewide GHG emissions reduction measures that are being implemented as a result of the Scoping Plan would reduce the proposed project's GHG emissions. The proposed project would be constructed to achieve the standards in effect at the time of development and would not conflict with statewide programs adopted for the purpose of reducing GHG emissions. While measures in the Scoping Plan apply to state agencies and not the proposed project, the project's GHG emissions would be reduced from compliance with statewide measures that have been adopted since AB 32 and SB 32 were adopted. Therefore impact would be less than significant.

[67] California Air Resources Board. 2017, November. California's 2017 Climate Change Scoping Plan Update. https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf

[68] California Air Resources Board. 2017, November. California's 2017 Climate Change Scoping Plan Update. https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf

SCAG's Regional Transportation Plan/Sustainable Communities Strategy

In addition to AB 32, the California legislature passed SB 375 to connect regional transportation planning to land use decisions made at a local level. SB 375 requires the metropolitan planning organizations to prepare a Sustainable Communities Strategy (SCS) in their regional transportation plans to achieve the per capita GHG reduction targets. For the SCAG region, the SCS was adopted in April 2016.[69] The SCS does not require that local general plans, specific plans, or zoning be consistent with the SCS, but provides incentives for consistency to governments and developers. The project would increase student capacity by about 271 students and would further enable Chino High School to accommodate the educational needs of the local community. Therefore, the project would not interfere with SCAG's ability to implement the regional strategies outlined in the RTP/SCS, and the impact is less than significant.

5.8 HAZARDS AND HAZARDOUS MATERIALS

The analysis in this section is based in part on the following technical study:

- Hazards Report. 2017, October 17. EDR Site Report. Chino USD 5472 Park Pl, Chino, CA 91710 (see Appendix D of this Initial Study).

Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?

Less Than Significant Impact. The project involves the demolition of existing buildings and the construction of new buildings on the high school campus. Project-related construction activities would require the use of hazardous materials such as fuels, lubricants, and greases in construction equipment and coatings. Onsite construction equipment might require routine or emergency maintenance that could result in the release of oil, diesel fuel, transmission fluid, or other materials. However, the materials used would not be in such quantities or stored in such a manner as to pose a significant safety hazard or environmental threat. These activities would also be short term or one-time in nature. Significant amounts of hazardous materials would not be transported, used, or disposed of in conjunction with the operation of the project. Maintenance of the new facility would likely require the use of cleaners, solvents, paints, and other janitorial products that are potentially hazardous. However, these materials would be utilized in relatively small quantities and would be stored in compliance with established state and federal requirements. With the exercise of normal operational safety practices currently employed at the school, impacts would be less than significant.

[69] Southern California Association of Governments. 2016, April. The 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS): A Plan for Mobility, Accessibility, Sustainability, and a High Quality of Life. http://scagrtpscs.net/Documents/2016/final/f2016RTPSCS.pdf.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less Than Significant Impact. The high school does not use significant quantities of hazardous materials in its operation. Also, construction activities would not involve a significant amount of hazardous materials, and their use would be temporary. Project construction and operational workers would be trained on the proper use, storage, and disposal of hazardous materials. Construction projects typically maintain supplies onsite for containing and cleaning small spills of hazardous materials. Impacts would be less than significant.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less Than Significant Impact. Operation of a high school campus would not emit hazardous emissions, and no significant amounts of hazardous materials, substances, or wastes would be transported, used, or disposed of in conjunction with the facility's operation. The onsite use of hazardous materials would be restricted to typical cleaning solvents and paints used by the school's janitorial and/or maintenance staff. These materials would be utilized in small quantities and stored in compliance with established state and federal requirements.

Asbestos

Asbestos is the name of a group of silicate minerals that are heat resistant and thus were commonly used as insulation and fire retardant. Inhaling asbestos fibers has been shown to cause lung disease (asbestosis) and lung cancer (mesothelioma). Beginning in the early 1970s, a series of bans on the use of certain asbestos-containing materials (ACMs) in construction were established by the EPA and the Consumer Product Safety Commission. Most US manufacturers voluntarily discontinued the use of asbestos in certain building products during the 1980s.

During demolition of permanent buildings and removal of portable buildings, asbestos would be removed, contained, and disposed. Requirements for limiting asbestos emissions from building demolition activities are specified in SCAQMD Rule 1403 (Asbestos Emissions from Demolition/Reconstruction Activities). California Government Code Sections 1529 and 1532.1 provide for exposure limits, exposure monitoring, respiratory protection, and good working practice by workers exposed to lead and ACMs. The project would not subject people to substantial hazards from ACM, and impacts would be less than significant.

Lead-Based Paint

Lead was used as an ingredient in paint before 1978 and as a gasoline additive; both of these uses have been banned. Lead is listed as a reproductive toxin and a cancer-causing substance; it also impairs the development of the nervous system and blood cells in children. Lead-based paint is defined in the Code of Federal Regulations Title 40 Part 745 as paint or other surface coatings that contain lead equal to or in excess of 1.0 milligram per square centimeter or 0.5 percent by weight. Those demolishing pre-1978 structures may presume the buildings contain lead-based paint without having an inspection.

5. Environmental Analysis

Due to the age of some of the buildings, all coated surfaces (paint, varnish, or glazed) are assumed to contain lead; therefore, they must be tested prior to demolition. All lead-containing material abatement/removal work must comply with the EPA, US Occupational Safety and Health Administration, and SCAQMD regulations. Lead must be contained during demolition activities (California Health & Safety Code Sections 17920.10 and 105255). The Code of Federal Regulations Title 29 Part 1926 establishes standards for occupational health and environmental controls for lead exposure. The standard also includes requirements addressing exposure assessment, methods of compliance, respiratory protection, protective clothing and equipment, hygiene facilities and practices, medical surveillance, medical removal protection, employee information and training, signs, recordkeeping, and observation or monitoring. The project would not subject people to substantial hazards from lead-based paint, and impacts would be less than significant.

No significant hazards would result from project implementation.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Less Than Significant Impact. California Government Code Section 65962.5 requires that lists of hazardous materials sites be compiled and available to the public. These lists include:

- Hazardous waste facilities subject to corrective action
- Hazardous waste discharges for which the State Water Resources 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
- Solid waste disposal facilities from which hazardous waste has migrated

A regulatory agency environmental database search was conducted by Environmental Data Resources, Inc., on October 16, 2017.[70] The school was identified on the HAZNET database 90 times for manifesting hazardous waste that was shipped offsite. The waste was generated from asbestos-containing waste, photochemicals, laboratory waste chemicals, organic waste, inorganic waste, polychlorinated biphenyls–containing waste, biological waste, organic liquids, solvents and aqueous solutions. The campus was listed on the CHMIRS database for a spill of 75 gallons of diphenylmethane diisocyanate by vandals on April 30, 2006, and spills of mercury in rooms 27, 28, 29, and the storage room for room 28, reported on May 10, 2004. The campus is permitted by San Bernardino County as a conditionally exempt small quantity generator. The campus is not listed as a hazardous materials site by the databases searched. Impacts would be less than significant.

[70] Hazards Report. 2017, October 17. EDR Site Report. Chino USD 5472 Park Pl, Chino, CA 91710

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles or a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

No Impact. The nearest airport is Chino Airport, which is approximately 3.5 miles southeast of the campus, and the LA/Ontario International Airport is approximately 4 miles northeast of the campus.[71] Neither of these airports nor any other airports in the area would be affected by the project. The school campus is not within the airport influence area or the airport land use planning area of the Chino Airport.[72] Project development would not result in a new use that would interfere with air traffic patterns, increase traffic levels, or change traffic locations such that it would result in a safety risk. No impact would occur.

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

No Impact. There are no private airstrips or heliports within two miles of the school campus.[73] The nearest private airstrip to the project site would be the Pomona Police Department Heliport located over 6 miles to the northwest of the proposed project site.[74] The new buildings would not create a safety hazard. No impact would occur.

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Impact. The emergency response plan in effect in Chino is the City of Chino Emergency Operations Plan (EOP) approved by the city council in 2014. The EOP identifies city agencies and other agencies that would be involved in emergency responses; threat summaries and assessments; and procedures for responding agencies as well as city agencies that would be involved in coordinating and managing responses. The EOP is focused on emergencies beyond the scope of the daily functions of public safety agencies, such as emergencies requiring multiagency and/or multi-jurisdictional responses. The project would not interfere with any other existing emergency response plans or emergency evacuation plans. No emergency response impact would occur.

h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

No Impact. The school campus is in a built-out urban area, and there is no wildland susceptible to wildfire on or near the campus. Project development would not place people or structures at risk from wildfire; no impact would occur.

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71 Caltrans. 2016, March. 2016 California Public Use Airports and Federal Airfields. http://dot.ca.gov/hq/planning/aeronaut/documents/maps/PublicUseAirports_MilitaryAirfieldsMap.pdf.
72 San Bernardino County Airport Land Use Commission. 1991, November. Comprehensive Land Use Plan, Chino Airport.
73 Airnav.com. Airport Information. http://www.airnav.com/airports/.
74 Airnav.com. Airport Information. http://www.airnav.com/airports/.

5.9 HYDROLOGY AND WATER QUALITY

Would the project:

a) Violate any water quality standards or waste discharge requirements?

Less Than Significant Impact. A significant impact would occur if the project discharges water that does not meet the quality standards of agencies that regulate surface water quality and water discharge into stormwater drainage systems.

New construction projects can result in two types of water quality impacts: (1) short-term impacts from discharge of soil through erosion, sediments, and other pollutants during construction and (2) long-term impacts from impervious surfaces (buildings, roads, parking lots, and walkways) that prevent water from being absorbed/soaking into the ground, thereby increasing the pollutants in stormwater runoff. Impervious surfaces can increase the concentration of pollutants, such as oil, fertilizers, pesticides, trash, soil, and animal waste, in stormwater runoff. Runoff from short-term construction and long-term operation can flow directly into lakes, local streams, channels, and storm drains and eventually be released untreated into the ocean.

Construction Phase

Construction projects of one acre or more are regulated under the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2012-0006-DWQ) issued by the State Water Resources Control Board.[75,76]

Construction sites are required to prepare and implement a SWPPP in accordance with the requirements of the statewide Construction General Permit and are subject to the oversight of the Santa Ana RWQCB. The SWPPP must include BMPs to reduce or eliminate polluted water runoff, as well as proper materials and waste management. Implementation of these state and local requirements would effectively protect projects from violating any water quality standards or waste discharge requirements from construction activities. See Section 5.6, *Geology and Soils,* of this Initial Study. Impacts would be less than significant.

Operational Phase

San Bernardino County is a permittee on the Statewide Small MS4 Permit, Order No. 2013-0001-DWQ, issued by the State Water Resources Control Board in 2013. Regulated projects under the Small MS4 Permit are generally redevelopment projects that add or replace 5,000 or more square feet of impervious surfaces and new development projects that create 10,000 or more square feet of impervious surfaces.

[75] California Environmental Protection Agency, State Water Resources Control Board. 2012 Water Quality Orders. https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/wqo12.shtml

[76] County of San Bernardino Areawide Stormwater Program NPDES No. CAS618036, ORDER No. R8-2010-0036. Technical Guidance Document for Water Quality Management Plans. Effective Date: September 19, 2013. http://cms.sbcounty.gov/Portals/50/Land/SantaAnaRiver-WQMP-Final-June2013.pdf?ver=2016-01-20-122443-980

The LID Standards Manual was developed as part of the municipal stormwater program to address stormwater pollution from new developments and redevelopment projects. LID stormwater management would be incorporated into the project design. LID principles are described further in Section 5.6, *Geology and Soils,* of this Initial Study. CVUSD would comply with existing regulations. Operational phase impacts would be less than significant.

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

Less Than Significant Impact. The school is above the Chino Basin portion of the Upper Santa Ana Valley Groundwater Basin, which provides water for the City of Chino.[77] Recharge of the Chino Basin is accomplished through direct infiltration of precipitation on the basin floor, by infiltration of surface flow, and underflow from adjacent basins. The school campus does not provide groundwater recharge. No groundwater would be used for the project, and project implementation would not require excavation activities that would extend into the groundwater table. The project would not deplete groundwater supplies or interfere substantially with groundwater recharge. Impacts would be less than significant.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in a substantial erosion or siltation on- or off-site?

Less Than Significant Impact. Implementation of the project would not alter the course of a stream or river and would not result in alterations to the existing off-campus drainage pattern. The nearest stream or body of water is the Sultana Storm Drain, which is one mile east-southeast of the project. Stormwater runoff from the project would flow into the athletic fields and existing storm drains, similar to the existing conditions. The District would comply with water quality regulations, including NPDES discharge permitting requirements, which are monitored and enforced by the Santa Ana RWQCB and represent the primary means of controlling the potential adverse erosion impacts of grading and excavation activities. The District would comply with the existing regulations, and impacts of the project would be less than significant.

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

Less Than Significant Impact. Drainage pattern would be similar to existing conditions, as described above in item (c). Pursuant to LID standards, the proposed onsite drainage system would discharge a net decrease in runoff to municipal storm drains. Thus, project development would not result in substantial flooding on- or off-site, and no impacts would occur.

[77] California Department of Water Resources, 2003. California's Groundwater, Bulletin 118, Upper Santa Ana Valley Groundwater Basin, Chino Sub basin, located at http://www.water.ca.gov/groundwater/bulletin118/basindescriptions/8-2.01.pdf, updated January 2006.

e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?

Less Than Significant Impact. Project development would not result in runoff exceeding the capacity of the municipal storm drain system, as discussed under item (c). Development of the proposed project would not cause substantial water pollution, as substantiated above in items (a) and (c). Runoff water impacts would be less than significant.

f) Otherwise substantially degrade water quality?

Less Than Significant Impact. The proposed project would be required to comply with applicable federal, state, and local regulations and to obtain necessary permits from the RWQCB. The project would not otherwise degrade water quality; impacts would be less than significant.

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

No Impact. The proposed project would not develop housing. No impact would occur.

h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

No Impact. The campus is outside of 100-year flood zones mapped by FEMA, and therefore the project buildings would not impede or redirect flood flows.[78] No impact would occur.

i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

No Impact. Flooding impacts may occur when an area is unable to remove water during rainfall inundation, or flooding can result from failure of a levee or dam. The campus is outside of 100-year flood zones mapped by FEMA.[79] Thirteen dams in the greater Los Angeles area moved or cracked during the 1994 Northridge earthquake, although none were severely damaged, due in part to completion of the retrofitting of dams and reservoirs pursuant to the 1972 State Dam Safety Act. According to the California Office of Emergency Services, the school does not lie within a zone of potential dam inundation.[80] However, based on maps by the US Army Corps of Engineers, the campus is within the inundation zone for the San Antonio Dam.[81] However, these reservoirs, as well as others in California, are continually monitored by various governmental agencies (such as the State of California Division of Safety of Dams and the US Army Corps of Engineers) to guard against the threat of dam failure. Current design; construction practices; and ongoing programs of

[78] Federal Emergency Management Agency, 2008. Flood Insurance Rate Map, San Bernardino County, California, Map Number 06071C8620H, Effective Date August 28, 2008, scale 1:12,000.

[79] Federal Emergency Management Agency, 2008. Flood Insurance Rate Map, San Bernardino County, California, Map Number 06071C8620H, Effective Date August 28, 2008, scale 1:12,000.

[80] California Office of Emergency Services, 2015. Dam Inundation, Registered Images and Boundary Files in ESRI Shapefile Format, Version FY2014, CD-ROM.

[81] U.S. Army Corps of Engineers, 1986. San Antonio Dam Emergency Plan Inundation Map, Plate No. 2, February 1986, scale 1:24,000.

review, modification, or total reconstruction of existing dams are intended to ensure that all dams are capable of withstanding the maximum considered earthquake. Although the campus is within the inundation zone, the proposed project would not exacerbate the existing hazard. No impact would occur.

j) Inundation by seiche, tsunami, or mudflow?

No Impact.

Seiche. A seiche is a surface wave created when a body of water is shaken, usually by earthquake activity. Seiches are of concern relative to water storage facilities because inundation from a seiche can occur if the wave overflows a containment wall, such as the wall of a reservoir, water storage tank, dam, or other artificial body of water. There are no water tanks or large bodies of water in the area. The closest water storage facilities are water tanks about 1.5 mile north-northwest of the campus that are owned and operated by the City of Chino. Due to the distance and intervening structures between the reservoirs and campus, no seiche risks would occur.

Tsunami. Tsunamis are a type of earthquake-induced flooding produced by large-scale sudden disturbances of the sea floor. Tsunami waves interact with the shallow sea floor when approaching a landmass, resulting in an increase in wave height and a destructive wave surge into low-lying coastal areas. The campus is about 31 miles inland from the Pacific Ocean and lies at about 775 feet above sea level. The campus is not at risk for tsunami impacts.

Mudflow. A mudflow is a landslide in which the debris, land mass, and soils are saturated during their displacement. The campus is on a land mass that is relatively flat, with no slopes that are capable of generating a mudflow. No impact would occur.

5.10 LAND USE AND PLANNING

Would the project:

a) Physically divide an established community?

No Impact. The school campus and surrounding land is fully developed with urban land uses, including residential, medical, church, and commercial. The project would take place within the school campus boundaries and would not divide an established community. No impact would occur.

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact. The campus is zoned as Public School (PS).[82] The General Plan land use designation for the campus is Public Schools (PS).[83] Construction on the school campus would not conflict with existing plans, policies, or regulations adopted for the purpose of avoiding or mitigating environmental effects. No impact would occur.

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

No Impact. The school campus is completely developed and located in a suburban area; it is not in a habitat conservation plan or natural community conservation plan. No impact would occur.

5.11 MINERAL RESOURCES

Would the project:

a) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?

No Impact. The school campus is mapped Mineral Resource Zone 3 (MRZ-3) by the California Geological Survey, indicating an area where the significance of mineral deposits cannot be evaluated from available data.[84] No active mines are mapped near the campus.[85] There are no oil fields near the school campus. The closest active gas and oil production well is approximately 6.4 miles south of the school campus and operated by Optima Conservation Resources Exploration, LLC.[86] The school campus is fully developed and is not available for mining. Therefore, the project would not cause a loss of availability of a known mineral resource valuable to the region and the state, and no impact would occur.

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No Impact. No mining sites are identified in the City of Chino General Plan 2025.[87] Therefore, development of the project would not cause a loss of availability of a mining site, and no impact would occur.

82 City of Chino Zoning Map. Adopted on July 6, 2010. http://www.cityofchino.org/home/showdocument?id=14147.
83 City of Chino General Plan Map. Adopted on July 6, 2010. Map Revised September 18, 2017. http://www.cityofchino.org/home/showdocument?id=14796.
84 California Geological Survey (CGS). 2007. Updated Mineral Land Classification Map for Portland Cement Concrete-Grade Aggregate in the Claremont-Upland Production-Consumption (P-C) Region, Los Angeles and San Bernardino Counties, California. Special Report 202, Plate 1. Scale: 1:100,000.
85 Office of Mine Reclamation (OMR). 2017, October 10. Mines Online. http://maps.conservation.ca.gov/mol/Index.html.
86 Division of Oil, Gas, and Geothermal Resources (DOGGR). 2017, October 10. DOGGR Well Finder. http://www.conservation.ca.gov/dog/Pages/WellFinder.aspx.
87 City of Chino, 2010. City of Chino General Plan 2025, July 2010.

5.12 NOISE

Noise and vibration background and modeling data are included as Appendix E of this Initial Study.

Noise is defined as unwanted sound and is known to have several adverse effects on people, including hearing loss, speech and sleep interference; physiological responses; and annoyance. Based on these known adverse effects of noise, the federal government, state, city, and CVUSD have established criteria to protect public health and safety and to prevent the disruption of certain human activities, such as classroom instruction.

The school is in a medium density suburban area. The existing ambient noise environment is primarily controlled by roadway noise. Roadways in the vicinity of the school that are expected to contribute to the total noise environment include Benson Avenue, a major roadway directly to the east of the school; Walnut Avenue and Riverside Drive, major roadways to the north and south that are set back further from the school; Pomona Freeway (SR-60), a busy freeway approximately 0.4 mile north; and adjacent minor residential arterials such as Park Place, Jefferson Avenue, and 10th Street. Typical student, intercom/bell, and vehicle noise is also generated at the school.

Would the project:

a) Result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less Than Significant. Project-related increases can be broken down into three categories. "Audible" increases refer to increases in noise levels that are perceptible to humans. Audible increases in general community noise levels generally refer to a change of 3 dB or more since this level has been found to be the threshold of perceptibility in exterior environments. "Potentially audible" increases refer to a change in noise level between 1 and 3 dB. The last category includes changes in noise level of less than 1 dB that are typically "inaudible" to the human ear except under quiet conditions in controlled environments.

Mobile-Source Noise

The project would accommodate an increase of 271 students compared to existing enrollment. Additionally, the campus would be reconfigured, and additional parking locations would redirect existing traffic from Park Place to 10th Street and Jefferson Avenue. The existing traffic counts and future traffic conditions were used to estimate project-related roadway noise changes (see Table 10). Traffic noise levels after school reconstruction is complete would be reduced at one location and increased in other locations.

5. Environmental Analysis

Table 10 Noise Level Increases Due to Increased Traffic at Intersections

Intersection	Intersection Leg	Existing Volumes	Year 2024 with Project	Percent Increase	Noise Level Increase (dB)
Benson Avenue at Walnut Avenue	N	850	902	6%	0.26
	S	920	999	9%	0.36
	E	1000	1149	15%	0.60
	W	1030	1138	10%	0.43
Benson Avenue at Jefferson Avenue	N	920	978	6%	0.27
	S	950	960	1%	0.05
	W	90	284	216%	4.99
Benson Avenue at Park Place	N	890	900	1%	0.05
	S	1010	1027	2%	0.07
	W	640	507	-21%	-1.01
Benson Avenue at Riverside Drive	N	990	1072	8%	0.35
	S	660	706	7%	0.29
	E	1910	2254	18%	0.72
	W	1600	1866	17%	0.67
Jefferson Avenue at 10th Street	N	600	678	13%	0.53
	S	630	848	35%	1.29
	E	120	371	209%	4.90
	W	130	147	13%	0.53
Park Place at 10th Street	N	680	858	26%	1.01
	S	580	720	24%	0.94
	E	250	257	3%	0.12
	W	70	81	16%	0.63
Riverside Drive at 10th Street	N	580	733	26%	1.02
	S	460	533	16%	0.64
	E	1530	1904	24%	0.95
	W	1370	1650	20%	0.81
Central Avenue at Riverside Drive	N	2220	2619	18%	0.72
	S	1950	2423	24%	0.94
	E	1330	2083	57%	1.95
	W	1360	1935	42%	1.53

Note: Daily traffic volumes based on AM peak hour (7:00 AM – 9:00 AM).
Traffic volumes from traffic study; see Section 5.16 (Garland & Associates 2018)
Noise level increase based on basic decibel definition: [10 * LOG (future traffic volume / existing traffic volume) = noise increase in decibels (dB)]

Only two intersection legs would experience a roadway noise increase of over 3 dB. Short periods of audible noise increases for people standing outside would occur along Jefferson Avenue adjacent to the school campus (4.90 dB on the east leg of Jefferson Avenue at 10th Street, and 4.99 dB on the west leg of Jefferson Avenue at Benson Avenue).

Roadway noise increases along Jefferson Avenue would only occur for a short period of time (15 to 20 minutes) before school start and after school dismissal. According to the Chino Municipal Code, exterior noise standards, the 15-minute noise level (L_{25}) limit in a residential area is 60 dBA L_{eq}. Because the existing noise levels along Jefferson Avenue are anticipated to be about 53 dBA L_{eq}, future 15-minute noise levels

along the segment of Jefferson Avenue adjacent to the school would not expose any receptors to levels in excess of the 60 dBA L_{eq} standard.[88] All other roadway segments would experience inaudible roadway noise increases or decrease. Exposure of persons to noise levels in excess of established thresholds from project-related vehicle noise would be less than significant.

Stationary-Source Noise

Stationary noise sources would include school buzzers or bells, landscaping equipment, outdoor activities, and HVAC systems. Additional students around the Chino High School campus could potentially result in increased operational noise levels; however, it would be indistinguishable from the change in overall high school noise at the reconstructed campus.

Mechanical Equipment Noise

HVAC equipment on top of the new buildings is expected to be placed within appropriate sound enclosures or parapets, similar to the mechanical systems now employed at the existing buildings. Additionally, HVAC noise would be considerably lower than ambient noise levels, which are dominated by traffic. It is expected that the operations at the reconstructed high school would not noticeably affect the existing conditions and would not exceed the City's exterior noise standards at offsite receptors.

Relocated Athletic Fields

The existing fields along the east side of the campus would remain the same. The western half of the campus would be flipped, with buildings moving north and fields moving south. Thus, receptors that would be most affected by the student activity noise would be the residences to the south and east of the campus. These homes are currently exposed to the existing staff parking lot and the main entrance to the school. Noise from the relocated fields may increase daytime noise at these homes, but it is not anticipated that school noise would be significant. Additionally, Chino Municipal Code Section 9.40.060, *Special Provisions*, exempts the schools from the provisions of the noise ordinance. The noise exemption applies to "Activities conducted on public parks, public playgrounds and public or private school grounds including school athletic and school entertainment events that are conducted under the sanction of the school or which a license or permit has been duly issued pursuant to any provision of the city code." Therefore, noise impacts from the new fields in the southwest corner of the campus would be less than significant.

b) Result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact.

[88] The Chino General Plan Noise Element shows L_{dn} noise contour map for this segment of Jefferson Avenue is about 55 dB L_{dn}. Caltrans guidelines (California Department of Transportation. May 2011. Traffic Noise Analysis Protocol) states that L_{eq} noise levels can be estimated from L_{dn} noise levels by subtracting approximately 2 dB; therefore, existing noise along Jefferson Avenue is 53 dB L_{eq}

Operational Vibration

Typically, land uses that result in vibration impacts are (a) industrial businesses that use heavy machinery or (b) railroads where passing trains generate perceptible levels of vibration. The project is reconstructed of a portion of an existing school, and operation of the school would not change after project completion. No long-term operational vibration impacts would occur.

Construction Vibration

During demolition and construction, use of vibration-inducing construction equipment would include equipment such as vibratory rollers, excavators, bulldozers, graders, and backhoe loaders. Following the excavation and grading phase, the building phase would primarily employ equipment that would not generate substantial levels of vibration, such as forklifts, cranes, and haul trucks. Construction activities are anticipated to begin in Q1-2019 and be completed in Q1-2024. Demolition, construction, and modernization activities are expected to take approximately 60 months. However, the project would be phased, and excavation and grading would occur in small sections over time.

Construction activities can generate ground vibration that varies depending on the construction procedures, equipment used, and proximity to vibration-sensitive uses. Construction equipment generates vibrations that spread through the ground and diminish in amplitude with distance. Such vibrations may have two types of potential impacts: (a) architectural damage to nearby buildings and (b) annoyance to vibration-sensitive receptors.

Table 11 lists vibration levels for different types of commonly used construction equipment in terms of RMS[89] velocity (for vibration perception) and peak particle velocity (PPV) (in terms of structural damage).

Table 11 Typical Construction Equipment Vibration Levels

Equipment	RMS Velocity (in/sec) at 25 feet	Peak Particle Velocity (in/sec) at 25 feet
Vibratory Roller	0.053	0.210
Small Bulldozer	0.001	0.003
Jackhammer	0.009	0.035
Loaded Trucks	0.019	0.076
Large Bulldozer	0.022	0.089

Source: Federal Transit Administration (FTA), Transit Noise and Vibration Impact Assessment, 2006.

Construction vibration effects are typically assessed in terms of either architectural damage or annoyance to people nearby. Construction equipment such as pile drivers, jackhammers, high-power or vibratory tools, and heavy rolling stock equipment (tracked vehicles, compactors, etc.) could generate vibration in the immediate vicinity of their use.

[89] Root-mean-squared (the square root of an average of squared terms)

Construction Vibration-Induced Annoyance

Ground vibrations from construction activities rarely reach levels that can damage structures, but can achieve levels in buildings close to a construction site that are perceptible.[90]

Typical construction equipment rarely exceeds vibration levels that are perceptible at 25 feet away from the source of the vibration.[91] Groundborne vibration is rarely annoying to people who are outdoors, so it is usually evaluated in terms of indoor receivers. For annoyance, vibration is typically noticed nearby when objects in a building generate noise from rattling windows or picture frames, and impacts are based on the distance to the nearest building. Human annoyance occurs when vibration rises significantly above the threshold of human perception for extended periods of time. A threshold commonly used to assess when construction vibration becomes annoying is a peak particle velocity of 0.05 inch/second for residential uses.[92]

The municipal code vibration limit would be exceeded for any instantaneous vibration event. Thus, distances are measured from the receptor façade to the nearest location of construction activities. Table 12 shows the vibration levels from typical earthmoving construction equipment at off-campus sensitive receptors. As shown, vibration from construction activities is not anticipated to be perceptible at the nearest off-site receptors.

Table 12 Maximum Vibration Levels at Nearest Structures

Equipment	Peak Particle Velocity in inches per second[a]			
	Existing School Buildings (25 feet)	Residences to South (110 feet)	Residences to West (110 feet)	Medical Facilities to North (100 feet)
Hoe Ram	0.022	0.002	0.002	0.003
Large Bulldozer	0.022	0.002	0.002	0.003
Loaded Trucks	0.019	0.002	0.002	0.002
Jackhammer	0.009	0.001	0.001	0.001
Small Bulldozer	0.001	<0.000	<0.000	<0.000

Source: Federal Transit Administration. 2006, May. Transit Noise and Vibration Impact Assessment.

[a] Distances measured from boundary of construction site to the nearest façade of the receptor building.

[b] The FTA equations used to calculate vibration levels become less accurate as the input values for distances decrease toward zero feet. The reliability of the calculations for distances of less than 15 feet is increasingly uncertain; therefore, for receptors located at distances of less than 15 feet vibration levels are assumed to be greater than values calculated using a distance of 15 feet.

Construction-generated vibration levels at the nearest receptors would be less than perceptible (i.e., less than 0.05 inch/second RMS), per Chino Municipal Code. Impacts related to construction vibration annoyance would not be significant, and mitigation is not necessary.

[90] Federal Transit Administration (FTA). 2006, May. Transit Noise and Vibration Impact Assessment. U.S. Department of Transportation (DoT). FTA-VA-90-1003-06.

[91] As measured at a distance of 25 feet from an individual piece of equipment perceptible vibration would be 0.1 peak particle velocity (PPV) in inches per second. Architectural damage at typical building structures may occur at 0.2 to 0.5 PPV in inches per second.

[92] Federal Transit Administration (FTA). 2006, May. Transit Noise and Vibration Impact Assessment. United States Department of Transportation. FTA-VA-90-1003-06.

Structural Damage

Beyond annoyance effects, higher levels of vibration can result in architectural damage at receptor buildings. The term 'architectural damage' is defined as minor surface cracks (in plaster, drywall, tile, or stucco) or the sticking of doors and windows. This is below the severity of 'structural damage,' which entails the compromising of structural soundness or the threatening the basic integrity of the building shell. Building damage is typically not a concern for most projects, with the occasional exception of blasting and pile driving during construction.[93] No blasting, pile driving, or hard rock ripping/crushing activities will be required during project construction. Since vibration-induced architectural damage could result from an instantaneous vibration event, distances are measured from the receptor façade to the nearest location of potential construction activities. Table 13 shows the vibration levels from typical earthmoving construction equipment at the nearest receptors.

Table 13 Structural Damage Vibration Levels from Construction Equipment

	Peak Particle Velocity (inches per second)			
Equipment	Existing School Buildings (25 feet)	Residences to South (110 feet)	Residences to West (110 feet)	Medical Facilities to North (100 feet)
Hoe Ram	0.089	0.010	0.010	0.011
Large Bulldozer	0.089	0.010	0.010	0.011
Loaded Trucks	0.076	0.008	0.008	0.010
Jackhammer	0.035	0.004	0.004	0.004
Small Bulldozer	0.003	<0.000	<0.000	<0.000

Source: Federal Transit Administration. 2006, May. Transit Noise and Vibration Impact Assessment.
Note: Distances are from the nearest portion of potential construction activity to the nearest receptor building within each land use type.

Construction-generated vibration levels at the nearest receptors would be less than the vibration damage criteria for "non-engineered timber and masonry buildings," per FTA guidelines.[94] Impacts related to architectural damage would be less than significant.

c) Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Less Than Significant Impact. Project-generated operational noise from traffic, stationary noise sources (i.e., mechanical systems), and operational activities would not result in a substantial permanent increase in ambient noise levels. Therefore, these ongoing activities would have a less-than-significant noise impact.

[93] Federal Transit Administration (FTA). 2006, May. Transit Noise and Vibration Impact Assessment. U.S. Department of Transportation (DoT). FTA-VA-90-1003-06. Available at: https://www.transit.dot.gov/regulations-and-guidance/environmental-programs/fta-noise-and-vibration-impact-assessment

[94] Federal Transit Administration (FTA). 2006, May. Transit Noise and Vibration Impact Assessment. U.S. Department of Transportation (DoT). FTA-VA-90-1003-06. Available at: https://www.transit.dot.gov/regulations-and-guidance/environmental-programs/fta-noise-and-vibration-impact-assessment

d) Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Less than Significant with Mitigation Incorporated. The project consists of the reconstruction the academic core of the Chino High School campus. Approximately 39 acres of the 51-acre school is proposed to be demolished, reconfigured, and rebuilt. Total project construction comprises two major phases (six subphases) and includes demolition, site preparation, grading, building construction, paving, and architectural coating and is expected to last approximately five years (see Figure 10 for phasing). Noise generated during construction is based on the type of equipment used, the location of the equipment relative to sensitive receptors, amount of equipment operating at the same time, and the timing and duration of the noise-generating activities. Sensitivity to noise is based on the location of the equipment relative to sensitive receptors, time of day, and the duration of the noise-generating activities. Two types of short-term noise could occur during construction: (1) mobile-source noise from the transport of workers, material deliveries, and debris/soil hauling and (2) on-site noise from use of construction equipment. Existing uses surrounding the project site would be exposed to construction noise.

Construction Vehicles Noise

The transport of workers and equipment to the construction site would incrementally increase noise levels along school access roadways. The worst-case flow of construction-related trips would occur during the Phase 2 building demolition debris haul phase. There would be a total of 28 daily truckload trips over a 20-day soil haul period. This minimal number of construction-related vehicle trips is not expected to result in any audible noise increase compared to the existing daily traffic flows. Only "audible" changes in noise levels at sensitive receptor locations (i.e., 3 dB or more) are considered potentially significant. Note that a doubling of traffic flows (i.e., 1,000 vehicles per day to 2,000 per day) would be needed to create a 3 dB increase in traffic-generated noise levels.

Thus, the number of construction-related trips would not significantly increase traffic noise when compared to the level of noise currently generated on the roadways. While individual construction vehicle pass-bys may create momentary noise levels of up to approximately 85 dBA (L_{max}) at 50 feet from the vehicle, these occurrences would be infrequent and primarily during nonpeak traffic periods. Therefore, noise impacts from construction-related traffic would be less than significant.

Construction Noise

Each stage of construction involves the use of different kinds of construction equipment/processes depending on the work to be accomplished, and therefore has its own distinct noise characteristics.

For this project, the building demolition, grading, and paving phases are expected to generate the highest noise levels because they require the largest, most powerful equipment. Other noisy phases are site preparation (vegetation clearing), building construction, and architectural coating (i.e., air compressor).

Construction activities would increase noise levels above existing levels. Projected noise levels from construction activities were calculated from the simultaneous use of all construction equipment at spatially

averaged distances during each construction phase (i.e., from the center of each construction phase area) to the property line of the nearest receptors. Also, noise levels are typically reduced from this value due to usage factors as well as the barrier effects provided by physical structures once erected.

On Campus

During Phase 1 construction, the closest sensitive on-site receptors would be occupied classrooms in Buildings C3, C2, and C. During Phase 2, students would be relocated to the newly constructed buildings (which were constructed during Phase 1) and may be affected by demolition and construction activities (see Figure 10 for construction phasing). The new buildings closest to Phase 2 construction consist of the auditorium, multipurpose room, kitchen, and gym and would generally shield the new classroom buildings' construction noise. Because these buildings are not considered sensitive receptors, and classrooms are not anticipated to be disrupted by noise during Phase 2 construction, on-campus receptors are not included in the Phase 2 construction noise analysis.

Based on the project phasing plan and modeling inputs used for air quality assessment, the expected construction equipment mix was estimated and categorized by construction activity.

The existing classrooms would be between 25 and 200 feet from Phase 1 construction activities. The closest receptors would be the existing classrooms to the south. At this distance, demolition of buildings D1 and F1 would generate up to 87 dBA L_{eq}. Noise levels from other construction activities would result in lower noise levels due to attenuation with increasing distances from the sources. The proposed construction would occur while classroom activities are in session. Thus, construction noise would potentially impact classroom instruction.

Classrooms located within 25 feet of construction activities and direct sightline may experience exterior noise levels in excess of 87 dBA L_{eq}. With a typical 24 dB exterior-to-interior noise reduction, interior noise levels may exceed 45 dBA Leq.[95] Using this reduction factor, during the Phase 1 demolition period, occupied classrooms could experience an interior noise environment of up to 63 dBA L_{eq}. Classrooms that are within 100 feet of construction could experience interior noise levels as high as 58 dBA L_{eq} (exterior noise level of 83 dBA L_{eq}). The Department of Education's interior noise threshold is 45 dBA L_{eq}; therefore, interior levels above 45 dBA L_{eq} could be disruptive to the learning environment. However, low-intensity construction phases would generate lower noise levels and would be less likely to result in disruptions. Additionally, for some construction activities, noise would be attenuated (reduced) by buildings between the construction zone and classrooms.

To assess a worst-case scenario, this analysis included all construction equipment operating at the same time, where in reality, these equipment items would occur in different combinations and would operate intermittently throughout the phase. Demolition of the closest buildings would occur over a short period of time, approximately one week. Considering these factors, construction noise may disrupt classroom instruction.

[95] U.S. Environmental Protection Agency (EPA). 1978, November. Protective Noise Levels. EPA 550/9-79-100. (Condensed version of 1971 and 1974 documents). Available at: http://nonoise.org/library/levels/levels.htm

Implementation of Mitigation Measure N-1 provides requirements for: construction equipment that is properly tuned and maintained to ensure excessive noise is not generated; discussions between construction contractor and school administrators prior to and throughout construction to schedule high noise producing activities at times that minimize disruption to classes; alternative methods of demolition and construction for activities near classrooms; and source controls (time constraints, equipment location and type restrictions, etc.), path controls (noise barriers), and/or receptor controls (notification and noise complaint process) to reduce noise impacts. Compliance with Mitigation Measure N-1 would reduce noise levels to active classrooms. On-campus construction noise impacts would be less than significant.

Mitigation Measures

N-1 To reduce temporary construction noise disruption in classrooms prior to commencement of construction activities, the following measures shall be implemented.

- CVUS Facilities Division or its construction contractor shall consult and coordinate with the school principal or site administrator and occupants of other nearby noise sensitive land uses prior to construction to schedule high noise producing activities to minimize disruption. Coordination between the school, nearby land uses, and the construction contractor shall continue on an as-needed basis throughout the construction phase of the project to reduce disruptions to school and other noise-sensitive land uses.

- Construction contractor shall ensure specific noise reduction measures include, but are not limited to:

  - Source Controls

    - Time Constraints – prohibiting work during sensitive nighttime hours.
    - Scheduling – performing noisy work during less sensitive time periods (on operating campus: delay the loudest noise generation until class instruction at the nearest classrooms has ended; residential: only between 7:00 AM and 8:00 PM Mon.-Sat.).
    - Equipment Restrictions – restricting the type of equipment used.
    - Noise Restrictions – specifying stringent noise limits.
    - Substitute Methods – using quieter methods and/or equipment. Implement alternative methods identified in the preconstruction meeting during demolition, excavation, and construction for work done near active classrooms.
    - Exhaust Mufflers – ensuring equipment has quality mufflers installed and that equipment is properly tuned and maintained in accordance with manufacturer's specifications, to ensure excessive noise is not generated by unmaintained equipment.
    - Lubrication & Maintenance – well-maintained equipment is quieter.
    - Reduced Power Operation – use only necessary size and power.
    - Limit Equipment On-Site – only have necessary equipment on-site.
    - Noise Compliance Monitoring – technician on-site to ensure compliance.
    - Quieter Backup Alarms – manually adjustable or ambient sensitive types.

- Path Controls
    - Noise Barriers – semipermanent or portable wooden or concrete barriers.
    - Noise Curtains – flexible intervening curtain systems hung from supports.
    - Enclosures – encasing localized and stationary noise sources.
    - Increased Distance – perform noisy activities farther from receptors, including operation of portable equipment, storage and maintenance of equipment.
- Receptor Controls
    - Window Treatments – reinforcing the building's noise reduction ability.
    - Temporary Relocation – in extreme, otherwise immitigable cases, temporarily move students to facilities away from the construction activity.

Off-Campus

During Construction Phase I the residential units to the west would be between 80 and 200 feet, the church to the north between 120 and 750 feet, and the medical facilities to the north between 150 and 300 feet. The residential units to the south are approximately 200 feet from the Phase 2 construction; residential units to the west are approximately 300 feet. Aggregate sound levels for both construction phases are summarized in Table 14.

Table 14 Construction Noise Levels

Construction Activity	Sound Level from Construction Activities, dBA L_{eq}		
	Residences to West (80 ft.)	Church to North (120 ft.)	Medical Facilities to North (150 ft.)
PHASE 1			
Demolition	78	63	71
Site Preparation	74	72	72
Grading	77	74	75
Building Construction	70	66	67
Paving	82	79	77
Architectural Coating	60	56	57
PHASE 2	**Residences to South (200 ft.)**	**Residences to West (300 ft.)**	
Demolition	71	71	
Site Preparation	69	69	
Grading	72	72	
Construction	67	67	
Paving	71	71	

Notes: Calculations performed with the FHWA's RCNM software and are included in Appendix E.
Distances are from the center of each respective construction phase area to the nearest receptor buildings.

In terms of the surrounding residential receptors, construction activities would occur during the least sensitive periods of the day when people are typically out of their homes. Although construction would

increase ambient noise in the surrounding community, construction noise is exempt from the city's ordinance. Section 9.40.060 of the municipal code exempts certain noise-generating activities from the provisions of the noise ordinance. Noise and vibration impacts associated with the construction, repair, remodeling, or grading of any real property are exempt from the provisions of the municipal code, provided activities do not take place between the hours of 8:00 PM and 7:00 AM Monday through Saturday, or at any time on Sunday or federal holidays. Cconstruction would be conducted during the City's allowable time-of-day periods. Impacts would be less than significant.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public-use airport, would the project expose people residing or working in the area to excessive noise levels?

No Impact. The nearest airport is Chino Airport, which is approximately 3.5 miles southeast of the campus, and the LA/Ontario International Airport is approximately 4 miles northeast of the campus.[96] Neither of these airports nor any other airports in the area would be affected by the project. The school campus is not within the airport influence area or the airport land use planning area of the Chino Airport.[97] Therefore, the proposed project would not expose people to excessive aircraft-related noise levels. No airport noise impacts would occur.

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The nearest private airstrip to the project site would be the Pomona Police Department Heliport, located over six miles to the northwest of the school.[98] Development of the project would not expose people to excessive noise levels from aircraft approaching or departing the heliport facilities, and no impact would occur.

5.13 POPULATION AND HOUSING

Would the project:

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

No Impact. The project would make physical changes to an existing school campus; it would not induce population growth. New roads, expanded utility lines, and housing that could induce population growth would not be constructed as part of the school project. No impacts related to population growth would occur.

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96 Caltrans. 2016, March. 2016 California Public Use Airports and Federal Airfields. http://dot.ca.gov/hq/planning/aeronaut/documents/maps/PublicUseAirports_MilitaryAirfieldsMap.pdf.

97 San Bernardino County Airport Land Use Commission. 1991, November. Comprehensive Land Use Plan, Chino Airport.

98 Airnav.com. Airport Information. http://www.airnav.com/airports/.

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

No Impact. Project development would not displace housing units and would not require construction of replacement housing. There is no existing housing on the high school campus, and demolition and reconstruction of the high school would not displace housing. No housing impacts would occur.

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

No Impact. Development of the project would not displace people and would not require construction of replacement housing elsewhere. No impact would occur.

5.14 PUBLIC SERVICES

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

a) Fire protection?

Less Than Significant Impact. The Chino Valley Independent Fire District provides fire protection and emergency medical services to the cities of Chino Hills and Chino. The administrative offices are at 14011 City Center Drive in Chino Hills. The nearest stations are Station 67, about 0.4 mile southeast at 5980 Riverside Drive in Chino, and Station 61, about 1.2 mile southwest at 5078 Schaefer Avenue in Chino. The project would not make any programmatic changes at the campus and would not increase the use of the school; therefore, it would not increase the need for fire protection services. The CVUSD is required to provide a full site plan for fire and police review, including both existing and proposed buildings, along with fences, drive gates, retaining walls, and other construction affecting emergency vehicle access, and to provide unobstructed fire lanes. The District would coordinate with fire and police to review all construction and project site plans prior to the State Fire Marshall's final approval. Reconstruction of the school would not require construction of new or expanded fire stations; impacts would be less than significant.

b) Police protection?

Less Than Significant Impact. The Chino Police Department provides police protection service to the City of Chino. The police station is at 5450 Guardian Way in Chino, about 0.2 mile north of the school. The project is not anticipated to result in an increase in demands for police services. During construction, the staging area would be fenced, and the school campus is currently fenced and would remain secured during nonschool hours. Any increase in police demands would be temporary and would not require construction of new or expanded police facilities. General campus activities are under the supervision of the teachers and staff at the school. The new buildings and other upgrades would not introduce new adverse impacts on existing police service. Impacts would be less than significant.

c) Schools?

No Impact. The project would not have an adverse physical impact on any existing schools. The project would make physical changes to the existing campus. The project would not induce growth in the community or otherwise increase demand for school services. Reconstruction of the school would have a favorable impact on school facilities. No impacts to schools would occur.

d) Parks?

No Impact. The project would not have an adverse physical impact on any parks or necessitate the construction of new parks. Demand for parks in a region is generally dependent on the region's population. The project would not cause substantial population growth. While the project would expand the school's capacity, the expansion would accommodate existing students and planned growth in the region, and would not induce population growth. No impacts to parks would occur.

e) Other public facilities?

No Impact. The project would not result in impacts associated with the provision of other new or physically altered public facilities (e.g., libraries, hospitals, childcare, teen or senior centers). Physical impacts to public services are usually associated with population in-migration and growth, which increase the demand for public services and facilities. The project would not result in an increase in population. Therefore, no impacts to other public facilities would occur.

5.15 RECREATION

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility would occur or be accelerated?

No Impact. The project would not increase the use of existing neighborhood and regional parks or other recreational facilities and would not cause physical deterioration of these facilities. The project would not increase population in the surrounding community. No impacts to neighborhood and regional parks or other recreational facilities would occur.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

No Impact. The project includes improvements to the campus athletic facilities. The environmental effects of the construction and operation of these proposed changes to recreational facilities are considered as part of the project throughout the environmental analysis. The project would not require the construction or expansion of additional recreational facilities that would have an adverse effect on the environment. No impacts related to recreational facilities would occur.

5.16 TRANSPORTATION AND TRAFFIC

The majority of the analysis in this section is based on the following technical study:

- Garland Associates. June 2018. Traffic Impact Analysis for the Proposed Chino High School Redevelopment (see Appendix F of this Initial Study).

All traffic figures are included at the end of this section.

Would the project:

a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

Less Than Significant Impact.

Methodology

Definition of Level of Service

Roadway capacity on city streets is generally limited by the ability to move vehicles through intersections. Level of service (LOS) is a standard performance measurement to describe the operating characteristics of a street system in terms of the level of congestion or delay experienced by motorists. Service levels range from A through F, corresponding to traffic conditions from best (uncongested, free-flowing conditions) to worst (total breakdown with stop-and-go operation). LOS for this school project is calculated for weekday traffic peak hours. The peak hours selected for analysis are typically the highest volumes that occur in four consecutive 15-minute periods from 7:00 AM to 9:00 AM and/or from 4:00 PM to 6:00 PM on weekdays.

Intersection LOS

According to the City of Chino's methodology for evaluating traffic impacts, the study area intersection analysis used the Highway Capacity Manual (HCM) model.[99] The 2010 HCM calculates LOS in terms of control delay (in seconds per vehicle).[100] The intersection LOS analysis is based on the traffic volumes observed during the peak hour conditions. Per the HCM, the overall average intersection delay at was calculated for the signalized and all-way stop intersections was calculated, and the worst-case approach delay was calculated for the cross-street stop intersections. Table 15 describes the operating conditions under each LOS for signalized and unsignalized intersections. The LOS corresponds to the calculated delay values.

[99] City of Chino. 2010. City of Chino General Plan Transportation Element. http://www.cityofchino.org/government-services/community-development/general-plan

[100] Transportation Research Board. 2010. Highway Capacity Manual. http://hcm.trb.org/

Table 15 Intersection Level of Service Descriptions

LOS	Description	Average Delay Per Vehicle (seconds)	
		Signalized	Unsignalized
A	Level of Service A occurs when progression is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.	0 to 10.00	0 to 10.00
B	Level of Service B generally occurs with good progression and/or short cycle lengths. More vehicles stop than for Level of Service A, causing higher levels of average total delay.	>10.00 to 20.00	>10.00 to 15.00
C	Level of Service C generally results when there is fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear in this level. The number of vehicles stopping is significant at this level, although many still pass through the intersection without stopping.	>20.00 to 35.00	>15.00 to 25.00
D	Level of Service D generally results in noticeable congestion. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high volume to capacity ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.	>35.00 to 55.00	>25.00 to 35.00
E	Level of Service E is considered to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high volume to capacity ratios. Individual cycle failures are frequent occurrences.	>55.00 to 80.00	>35.00 to 50.00
F	Level of Service F is considered to be unacceptable to most drivers. This condition often occurs with oversaturation, i.e., when arrival flow rates exceed the capacity of the intersection. It may also occur at high volume to capacity ratios below 1.00 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing causes to such delay levels.	>80.00	>50.00

Source: Transportation Research Board. 2010. Highway Capacity Manual. http://hcm.trb.org/
Note: If the volume to capacity (V/C) ratio is greater than 1.0 for the operation of a signalized or unsignalized intersection, the LOS is F regardless of the delay value.

The Highway Capacity Software was used to determine the LOS at the study area intersections. According to the criteria in the City of Chino General Plan Transportation Element, deficient intersections are those that operate at LOS E or F.

Existing and Future Baseline Conditions

Roadways

Regional access to the school is provided by SR-60, Central Avenue, and Riverside Drive. Roadways that are used for local access to the school include Walnut Avenue, 10th Street, Benson Avenue, Jefferson Avenue, Park Place, Mt. Vernon Avenue, Gettysburg Avenue, Washington Avenue, 12th Street, 13th Street, Serene Avenue, Monroe Street, Catalpa Place, and Jacaranda Place. Figure 11, *Study Area Street Network,* shows streets, the type of traffic control at each intersection, the lane configuration at each intersection, the speed limit on each street segment, and the number of lanes on each street segment.

- **State Route 60** (SR-60, Pomona Freeway) is the main east-west regional corridor in Chino. It is a ten-lane freeway approximately 0.25 mile north of the school campus.

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- **Central Avenue** is a north-south roadway classified a major arterial in the city's transportation element. It is two blocks west of the school and has six lanes north of Riverside Drive and four lanes south of Riverside Drive. No street parking is permitted on Central Avenue, and the speed limit is 35 mph.

- **Riverside Drive** is an east-west roadway one block south of the school. It is classified a major arterial and has four lanes. The speed limit is 35 mph, and curbside parking is not permitted.

- **Walnut Avenue** is an east-west secondary arterial one block north of the school. It has four lanes west of Benson Avenue and two lanes east of Benson Avenue. The speed limit is 35 mph, and no street parking is permitted.

- **10th Street** is a north-south local street that borders the west side of the school. Curbside parking is permitted on the west side of the street with a permit on Monday through Friday from 9:00 AM to 6:00 PM. Parking is restricted on the east side on Monday through Friday from 9:00 AM to 2:00 PM. The speed limit is 35 mph north of Riverside Drive and 25 mph south of Riverside Drive.

- **Benson Avenue** is a two-lane secondary arterial that borders the east side of the school. Street parking is allowed on both sides of the street, and the speed limit is 35 mph south of Walnut Avenue and 40 mph north of Walnut Avenue.

- **Jefferson Avenue** is a two-lane east-west local street that borders the north side of the school. The south side of the street currently contains 138 angled parking spaces that used for school and hospital parking (a hospital is located on the north side of Jefferson Avenue). The north side of the street allows 2-hour parking Monday through Friday from 9:00 AM to 2:00 PM. The speed limit on Jefferson Avenue is 30 mph between 10th Street and Benson Avenue and 25 mph west of 10th Street.

- **Park Place** is a two-lane east-west local street that borders the south side of the school. Curbside parking is not permitted on either side of the street from 9:00 AM to 2:00 PM Monday through Friday. The speed limit on Park Place is 30 mph between 10th Street and Benson Avenue and 25 mph west of 10th Street.

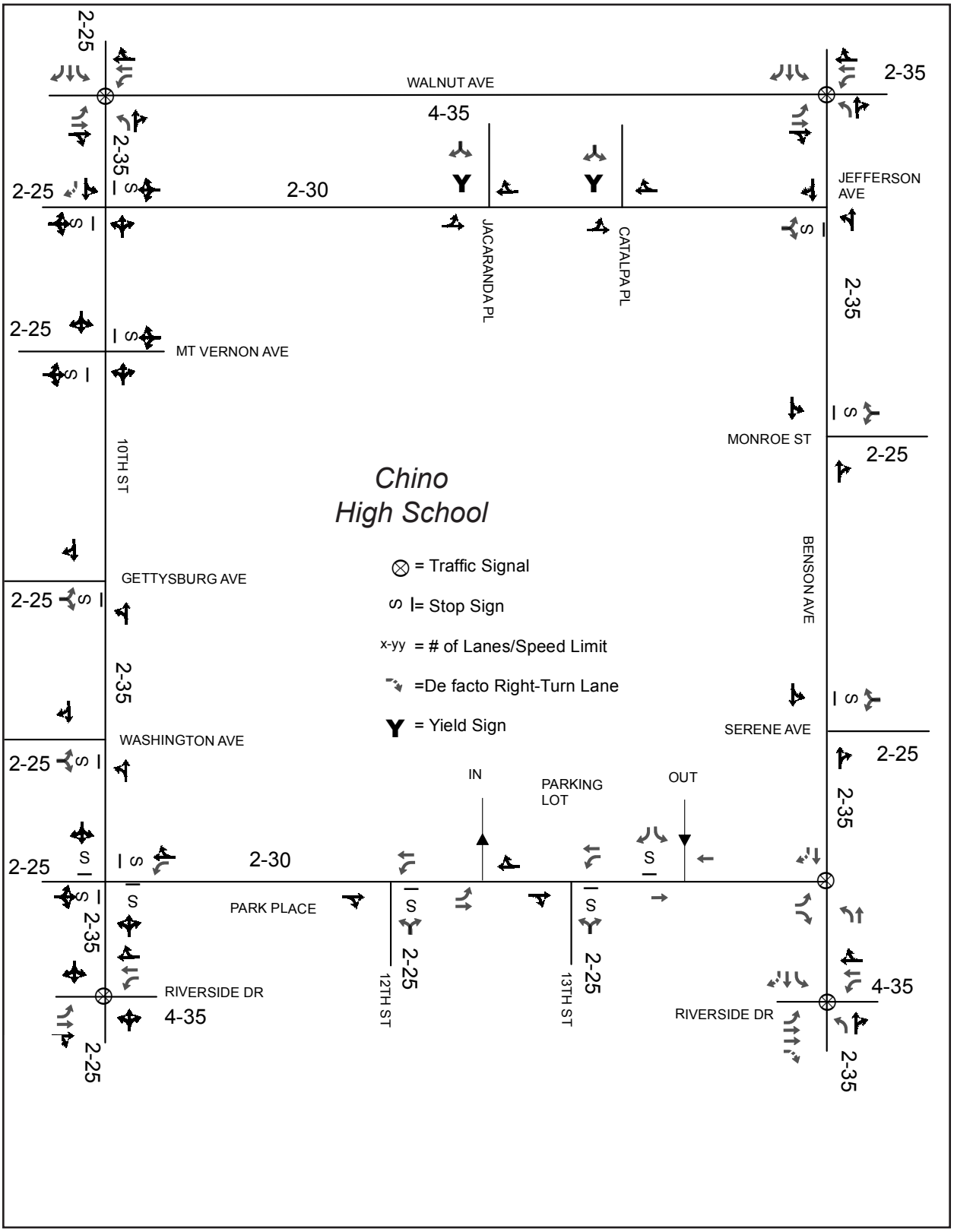
- **Mt. Vernon Avenue**, **Gettysburg Avenue**, and **Washington Avenue** are two lane local streets that intersect with 10th Street and extend into the residential neighborhood to the west of the school. The speed limit on these streets is 25 mph.

- **12th Street** and **13th Street** are two lane local streets that intersect with Park Place and extend into the neighborhood to the south of the school. The speed limit on these streets is 25 mph.

- **Serene Avenue** and **Monroe Street** are two lane local streets that intersect with Benson Avenue and extend into the residential neighborhood to the east of the school. The speed limit on these streets is 25 mph.

Figure 11 - Study Area Street Network

5. Environmental Analysis



NOT TO SCALE

Source: Garland Associates, 2018

5. Environmental Analysis

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Intersections

The traffic analysis analyzed 19 existing intersections in the study area and two future intersections; i.e., the entrance and exit to the north parking lot on the north side of the campus along Jefferson Avenue. Table 16 lists the intersections and shows the type of traffic control at each intersection. All of the intersections are under the jurisdiction of the City of Chino.

Table 16 Study Area Intersections

Intersection	Traffic Controls	Pedestrian Controls
Benson Avenue at Walnut Avenue	Traffic Signal	
Benson Avenue at Jefferson Avenue	Stop Sign on Jefferson Avenue	3-leg intersection with stop sign and yellow crosswalk west leg of Jefferson Avenue
Benson Avenue at Monroe Street	Stop Sign on Monroe Street	None
Benson Avenue at Serene Avenue	Stop Sign on Serene Avenue	None
Benson Avenue at Park Place	Traffic Signal	Signalized 3-leg intersection with yellow crosswalks on the north and west legs
Benson Avenue at Riverside Drive	Traffic Signal	Signalized with white crosswalks
Walnut Avenue at 10th Street	Traffic Signal	Signalized with white crosswalks
Jefferson Avenue at 10th Street	Stop Signs on Jefferson Avenue	2-way stop (stop signs on the east and west legs of Jefferson Avenue) with yellow crosswalk on the east leg
Mt. Vernon Avenue at 10th Street	Stop Sign on Mt. Vernon Avenue	Yellow crosswalks on north leg of the intersection
Gettysburg Avenue at 10th Street	Stop Sign on Gettysburg Avenue	None
Washington Avenue at 10th Street	Stop Sign on Washington Avenue	None
Park Place at 10th Street	4-Way Stop Signs	All-way stop signs with yellow crosswalks on the west, north, and east legs
Riverside Drive at 10th Street	Traffic Signal	Signalized with white crosswalks
Park Place at 12th Street	Stop Sign on 12th Street	Yellow crosswalks on west leg of the intersection
Park Place at Parking Lot Entrance	None – Inbound Only	None
Park Place at 13th Street	Stop Sign on 13th Street	None
Park Place at Parking Lot Exit	Stop Sign at Parking Lot Exit	None
Jefferson Avenue at Jacaranda Place	Yield Sign on Jacaranda Place	None
Jefferson Avenue at Catalpa Place	Yield Sign on Catalpa Place	None
Jefferson Avenue at Parking Lot Entrance (future intersection)	None – Inbound Only (future)	None
Jefferson Avenue at Parking Lot Exit (future intersection)	Stop Sign at Parking Lot Exit – Outbound Only (future)	None

Sidewalks and Bicycle Facilities

There are sidewalks along both sides of all roadways in the study area. On-street bicycle routes are available on Walnut Avenue and Benson Avenue. The intersections that are signalized have pedestrian signals and pedestrian push buttons.

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Public Transit

Omnitrans Route 85 runs along Central Avenue every 30 minutes on weekdays. The closest stop is two blocks west of the school on Central Avenue. Route 81 runs along Riverside Drive approximately every hour with a stop one block south of the school.

Student Drop-off, Pick-up, and Parking

Site surveys were conducted in November 2017, January 2018, and May 2018 during the student drop-off period. There is a one-way driveway through the staff parking lot near the intersection of Park Place and 12th Street (approximately half way between 10th Street and Benson Avenue) that is used for school buses during student drop-off and pick-up. The school campus includes three main parking lots. The parking lot at the corner of 10th Street and Park Place is a staff lot and is also used for drop-off and pick-up operations. This lot has an ingress driveway on Park Place and an egress driveway on 10th Street (left turns are prohibited onto 10th street, but the sign is routinely ignored by drivers). A smaller staff parking lot is west of 12th Street. The student parking lot is near the intersection of Park Place and 13th Street. This lot is also used for drop-off and pick-up operations, with an ingress driveway on the western side of the lot between 12th and 13th Streets and an egress driveway with two lanes on the eastern side of the lot between 13th Street and Benson Avenue. In addition, a service driveway is west of the lot that provides access to the school kitchen and other facilities on the south portion of the campus. During the drop-off operations, all lineup queues were contained within the parking lots; no vehicles were observed lined up along Park Place.

Curbside parking is available on both sides of Park Place, but parking is not allowed during the hours of 9:00 AM to 2:00 PM on school days. Curbside parking is limited to two hours on Park Place within 200 feet of Benson Avenue. Unrestricted curbside parking is allowed on the east side of Benson Avenue, except for several areas that are marked with red curbs. Parking is allowed on the west side of Benson Avenue. Angled parking is available on the south side of Jefferson Avenue with no parking restrictions (students were not observed parking on Jefferson Avenue during normal school hours). Curbside parking is allowed on the north side of Jefferson Avenue, but is not allowed during the hours of 9:00 AM to 2:00 PM on school days. West of Jacaranda Place, curbside parking is limited to two hours. Curbside parking is available on both sides of 10th Street, but is not allowed from 9:00 AM to 2:00 PM on the east side of the street on school days. A permit is required to park on the west side of 10th Street.

Although most drop-off and pick-up operations occur within the two main parking lots, it was noted that some vehicles also stop along Park Place. Traffic congestion was noted along several segments of Park Place, 12th Street, and 13th Street during the drop-off period between 7:15 AM and 7:30 AM. It was observed that most of the congestion along these roadways was due to vehicles parking along Park Place or stopping in the middle of the road to drop off students.

Existing Peak Hour Traffic Volumes

Manual traffic counts were taken at seven of the study area intersections on Wednesday and Thursday, January 24 and 25, 2018, and at the remainder of the intersections on Wednesday and Thursday, May 23 and 24, 2018, during the morning peak period from 6:45 AM to 8:45 AM. The one-hour interval of peak traffic

flow within the two-hour monitoring period was identified for each intersection (See Figure 12, *Existing Traffic Volumes – AM Peak Hour*).

Only the AM peak hour is analyzed because the high school generates minor traffic volumes during the late PM commuter peak period. The afternoon peak period for the school would occur around 3:00 PM to 3:30 PM when traffic volumes are relatively light, while the afternoon commuter peak period generally occurs around 5:00 PM to 6:00 PM. During the morning peak period, the traffic generated by the school coincides with the morning commuter peak period traffic. This is the standard methodology for school traffic impact analyses.

Existing Intersection Levels of Service

The average levels of vehicle delay and the resulting LOS values at the signalized and stop-controlled intersections were determined using the Highway Capacity Software.

To quantify the existing baseline traffic conditions, the 19 existing study area intersections were analyzed to determine their operating conditions during the morning peak hour. Based on the peak hour traffic volumes, the turning movement counts, and the existing number of lanes at each intersection, the delay values and LOS were determined at each intersection, as summarized in Table 17.

Table 17 Existing Intersection Levels of Service

Intersection	Delay Value and Level of Service
Signalized Intersections	
Benson Avenue at Walnut Avenue	13.0 – B
Benson Avenue at Park Place	21.4 – C
Benson Avenue at Riverside Drive	15.0 – B
Riverside Drive at 10th Street	18.1 – B
Walnut Avenue at 10th Street	26.7 – C
Unsignalized Intersections	
Benson Avenue at Jefferson Avenue	15.0 – B
Benson Avenue at Monroe Street	13.8 – B
Benson Avenue at Serene Avenue	13.4 – B
Jefferson Avenue at 10th Street	15.6 – C
Mt. Vernon Avenue at 10th Street	11.4 – B
Gettysburg Avenue at 10th Street	11.9 – B
Washington Avenue at 10th Street	11.6 – B
Park Place at 10th Street	11.4 – B
Park Place at 12th Street	10.4 – B
Park Place at Parking Lot Entrance	8.6 – A
Park Place at 13th Street	12.6 – B
Park Place at Parking Lot Exit	13.3 – B
Jefferson Avenue at Jacaranda Place	8.9 – A
Jefferson Avenue at Catalpa Place	8.7 – A

5. Environmental Analysis

The delay and LOS values for the signalized intersections and the intersection with four-way stop signs represent the average level of vehicle delay for the entire intersection. The delay and LOS values for the intersections with one or two stop signs (i.e., the Benson/Jefferson and Jefferson/10th Street intersections) represent the values at the stop sign with the highest level of delay. Three of the 19 study area intersections currently operate at LOS A, 13 of the intersections operate at LOS B, and three intersections operate at LOS C during the morning peak hour.

Future Baseline Traffic Conditions

The future traffic volumes without the proposed school project were determined to establish the baseline traffic conditions for the target year of the completed school modernization project, which is the year 2024. The first step in forecasting the baseline traffic conditions for the year 2024 was to expand the existing (2018) traffic volumes by an ambient growth factor. The growth factors for each study area street were determined by using the results of the traffic model that was conducted for the City of Chino General Plan Transportation Element. The output from that traffic model had peak hour traffic volume projections for the year 2025. Although the model did not include results for all of the study area intersections, the traffic volumes for the excluded intersections were estimated by interpolation using the traffic volume projections for the nearby intersections that were included in the model.

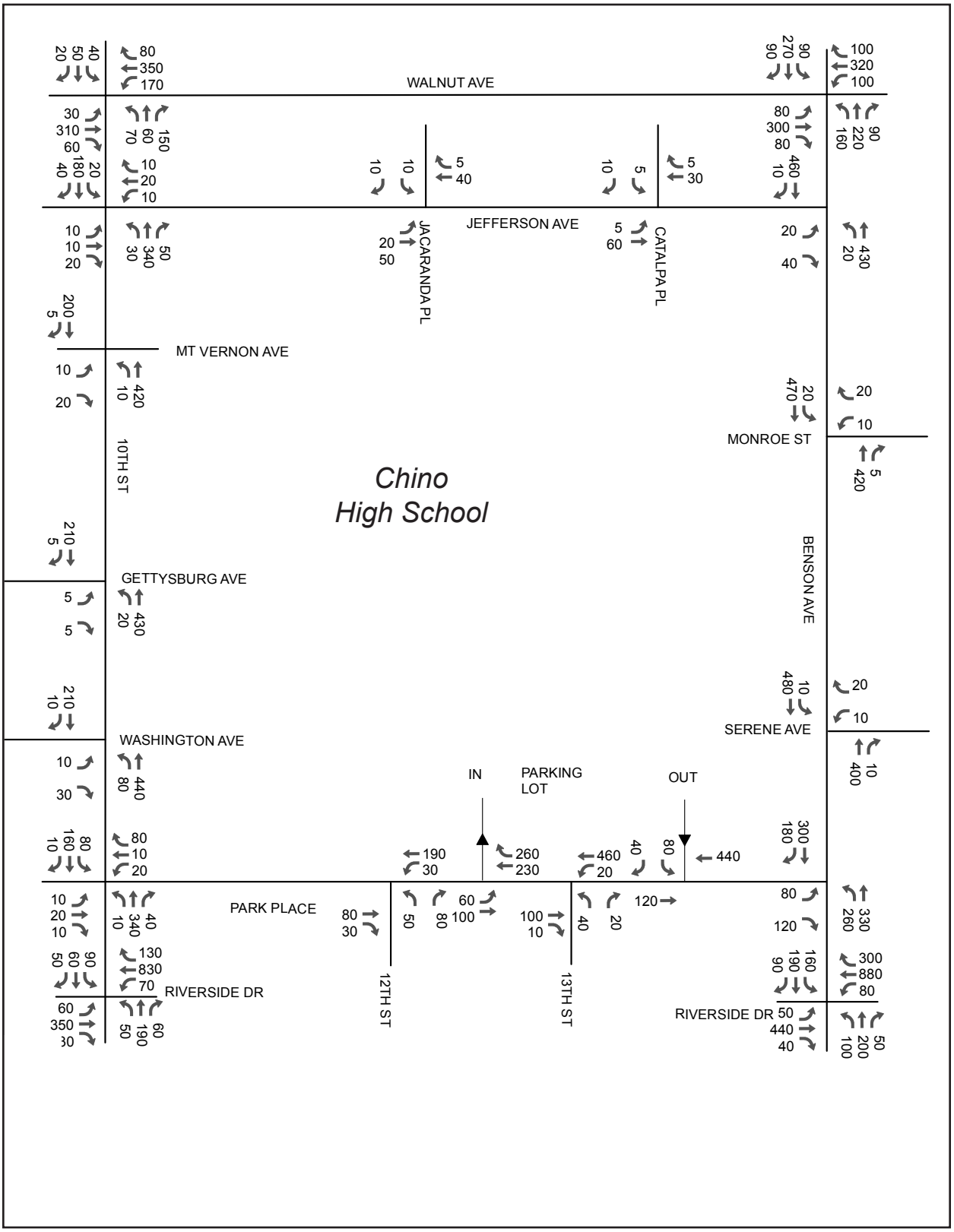
The second step in forecasting the baseline traffic volumes for the year 2024 was to quantify the cumulative levels of traffic that would be generated by other development projects in the area and add this traffic to the 2024 baseline levels that were calculated by applying the ambient growth rates. The related projects that were included in the cumulative traffic analysis are shown in Table 18. This list of projects was provided by the City of Chino (June 5, 2018). It represents development projects that are within 1.5 miles of the school and south of the Pomona Freeway.

Table 18 Cumulative Projects

Project Location	Project Description
1 – East of Pipeline Avenue, north of Chino Avenue, west of Norton Avenue, & south of Hacienda Lane	38 single family homes
2 – 4416 Riverside Drive	Andy's Burgers drive-through restaurant - 4,925 square feet
3 – 14085 Magnolia Avenue	Convert residence to office & pave 4.5-acre lot for a trucking facility
4 – 13186 3rd Street	Montessori school & child day care for 14 children
5 – 5353 G Street	Expansion of Canyon Ridge Hospital – 21,245 square feet
6 – 4076 Chino Avenue	Commercial center – 24,633 square feet

The cumulative volumes of traffic that would be generated by these proposed development projects are shown in Table 19. The trip generation rates are from the Institute of Transportation Engineers *Trip Generation Manual* (10th Edition).

Figure 12 - Existing Traffic Volumes - AM Peak Hour



NOT TO SCALE

Source: Garland Associates, 2018

5. Environmental Analysis

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Table 19 Traffic Generation Estimates for Related Projects

Project No. – Land Use – Quantity	Trip Generation Rates			Generated Traffic		
	Total	In	Out	Total	In	Out
1 – Single family residential (per unit) - 38 units	0.74/unit	25%	75%	28	7	21
2 – Fast-food restaurant w/ drive-through – 4,925 sq. ft. / With 49% passby reduction	40.19/ksf	51%	49%	198 101	101 52	97 49
3 – Truck terminal – 4.5 acres	4.62/acre	47%	53%	21	10	11
4 – Day care center – 14 students	0.78/student	53%	47%	11	6	5
5 – Hospital – 21,245 sq. ft.	0.89/ksf	68%	32%	19	13	6
6 – Commercial retail – 24,633 sq. ft.	0.94/ksf	62%	38%	23	14	9
TOTAL				**203**	**102**	**101**

Notes: ksf = thousand square feet

The future baseline 2024 traffic volumes were forecasted by adding the traffic that would be generated by the other development projects to the expanded traffic volumes that were calculated by using the ambient growth factor. The 2024 cumulative baseline traffic volumes without the school project are shown on Figure 13.

Based on the peak hour traffic volume projections, the turning movement counts, and the existing lane configuration, the future (year 2024) baseline delay values and levels of service were calculated for each study area intersection, as summarized in Table 20. Three of the eight study area intersections are projected to operate at LOS B, four intersections would operate at LOS C, and one intersection would operate at LOS E during the morning peak hour.

Table 20 Year 2024 Intersection Levels of Service without Project

Intersection	Delay Value and Level of Service
Signalized Intersections	
Benson Avenue at Walnut Avenue	13.2 – B
Benson Avenue at Park Place	21.6 – C
Benson Avenue at Riverside Drive	20.8 – C
Riverside Drive at 10th Street	20.1 – C
Walnut Avenue at 10th Street	28.8 – C
Unsignalized Intersections	
Benson Avenue at Jefferson Avenue	15.5 – C
Benson Avenue at Monroe Street	14.2 – B
Benson Avenue at Serene Avenue	13.8 – B
Jefferson Avenue at 10th Street	17.4 – C
Mt. Vernon Avenue at 10th Street	11.9 – B
Gettysburg Avenue at 10th Street	12.5 – B
Washington Avenue at 10th Street	12.1 – B
Park Place at 10th Street	12.9 – B
Park Place at 12th Street	10.5 – B
Park Place at Parking Lot Entrance	8.6 – A
Park Place at 13th Street	12.8 – B

Table 20 Year 2024 Intersection Levels of Service without Project

Intersection	Delay Value and Level of Service
Park Place at Parking Lot Exit	13.5 – B
Jefferson Avenue at Jacaranda Place	9.0 – A
Jefferson Avenue at Catalpa Place	8.7 – A

Acceptable LOS and Thresholds of Significance

The City of Chino has established LOS D as the minimum acceptable level of service for its street intersections. Hence, any intersection operating at LOS E or F is considered deficient.

According to the City of Chino's significance criteria, an intersection would be significantly impacted if a project would result in either of the following:

- The project would change the level of service from an acceptable LOS A through D to an unacceptable LOS E or F.
- The project would contribute 50 or more vehicle trips to an intersection that is operating at LOS E or F for the "without project" scenario.

Traffic Impact Analysis

Project Trip Generation

Compared to the existing enrollment at the high school, the final buildout would result in a potential increase of 271 students (2017/18 school year student enrollment of 2,229 and a potential 2024 enrollment of 2,500 based on school capacity). The trip generation rates for a high school were obtained from the Institute of Transportation Engineers' *Trip Generation Manual* (10th edition, 2017). The manual provides peak hour and daily trip generation rates under land use code 530, High School. Table 21 shows the trip generation rates and the levels of additional traffic that may be generated by the reconstructed school.

Table 21 Project-Generated Traffic

		AM Peak Hour			PM Peak Hour			PM Peak Hour of School		
Land Use	Daily	In	Out	Total	In	Out	Total	In	Out	Total
Trip Generation Rates										
High School	2.03	0.35	0.17	0.52	0.07	0.07	0.14	0.11	0.22	0.33
Generated Traffic Volumes										
271 Students	550	95	46	141	19	19	38	30	60	90

The project would generate an estimated additional 550 vehicle trips per day, 141 trips during the AM peak hour (95 inbound and 46 outbound), 38 trips during the PM commuter peak hour (19 inbound and 19

outbound), and 90 trips (30 inbound and 60 outbound) during the student dismissal time in the early afternoon (i.e., the school's PM peak hour).

Project Trip Distribution

The additional traffic was geographically distributed onto the study area street network to quantify the project's traffic contribution at each study area intersection. The directional distribution of the school traffic is based on the geographical area served by Chino High School and observations of existing traffic patterns at the school (see Figure 14, *Project-Generated Traffic*).

The project would result in a localized redistribution of the existing travel patterns at the school because of the new locations of parking lots adjacent to Jefferson Avenue and 10th Street and the drop-off/pick-up zone on the north side of the campus in the Jefferson Avenue parking lot. Much of the traffic that currently accesses the school along Park Place would be shifted to Jefferson Avenue and 10th Street. Figure 15, *Redistribution of Existing School Traffic,* shows the estimated changes in traffic volumes that would occur at each intersection because of the anticipated redistribution of traffic.

Traffic Volumes with the Proposed Project

This traffic analysis considers two scenarios: the project's impacts on existing conditions and the project's impacts on the projected year-2024 conditions. The project's impacts on existing conditions are provided for information purposes only because this is not a realistic scenario as the project would not be operational until 2024. To quantify the impacts on existing conditions, the project-generated traffic volumes (Figure 14) and the redistributed traffic volumes (Figure 15) were added to (or subtracted from) the existing traffic volumes. The resulting "existing plus project" traffic volumes are shown on Figure 16, *Existing Plus Project Traffic Volumes*.

The total volumes of traffic projected for the year 2024 scenario were determined by adding the project-generated traffic and adding or subtracting the redistributed traffic to the future year 2024 baseline traffic volumes. The "2024 with project" traffic volumes are shown on Figure 17, *Year 2024 Traffic Volumes with Project*.

Intersection Impact Analysis

An analysis of traffic impacts was conducted by quantifying the before-and-after traffic volumes, then determining the average delay values and levels of service at the study area intersections for the "without project" and "with project" scenarios. Two baseline conditions are addressed in the analysis: existing and the projected year 2024.

Existing Conditions as Baseline

For the existing conditions baseline, the before-and-after delay values and levels of service at each of the study area intersections are summarized in Table 22 for the morning peak hour. The table shows the existing traffic conditions, existing traffic conditions with the proposed project, and the increase or decrease in delay values associated with the project. The final column in the table indicates if the intersection would be significantly impacted by the project according to the significance criteria outlined above.

5. Environmental Analysis

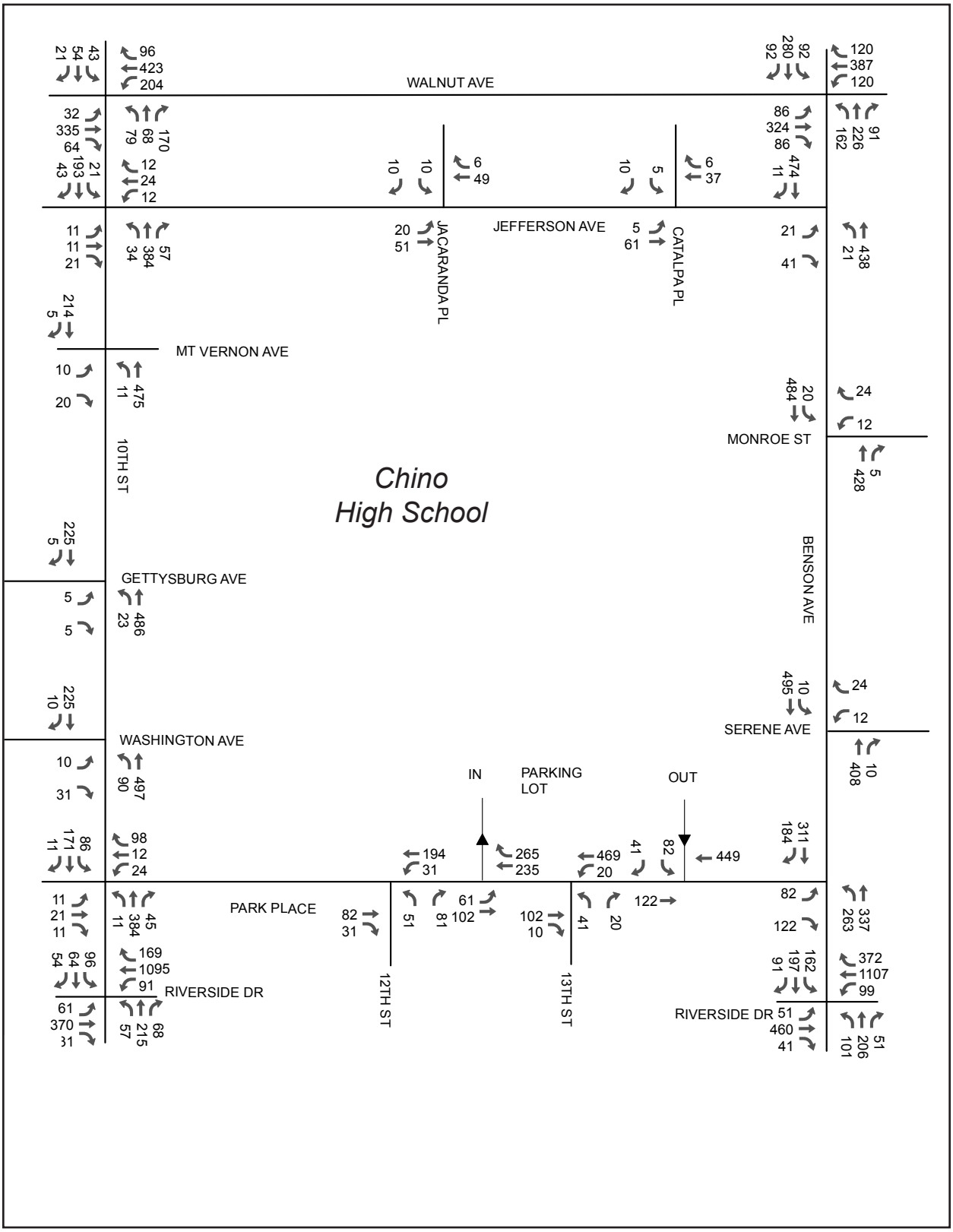
Table 22 Project Impact on Intersection Levels of Service – Existing Conditions as Baseline

Intersection	Delay Value and Level of Service		Change in Delay Value (seconds)	Significant Impact
	Existing Conditions	Existing Plus Project		
Signalized Intersections				
Benson Avenue at Walnut Avenue	13.0 – B	13.1 – B	0.1	No
Benson Avenue at Park Place	21.4 – C	21.4 – C	0.0	No
Benson Avenue at Riverside Drive	15.0 – B	15.6 – B	0.6	No
Riverside Drive at 10th Street	18.1 – B	18.9 – B	0.8	No
Walnut Avenue at 10th Street	26.7 – C	27.1 – C	0.4	No
Unsignalized Intersections				
Benson Avenue at Jefferson Avenue	15.0 – B	22.4 – C	7.4	No
Benson Avenue at Monroe Street	13.8 – B	14.4 – B	0.6	No
Benson Avenue at Serene Avenue	13.4 – B	14.0 – B	0.6	No
Jefferson Avenue at 10th Street	15.6 – C	23.6 – C	8.0	No
Mt. Vernon Avenue at 10th Street	11.4 – B	12.5 – B	1.1	No
Gettysburg Avenue at 10th Street	11.9 – B	14.0 – B	2.1	No
Washington Avenue at 10th Street	11.6 – B	14.7 – B	3.1	No
Park Place at 10th Street	11.4 – B	13.9 – B	2.5	No
Park Place at 12th Street	10.4 – B	9.6 – A	(-0.8)	No
Park Place at Parking Lot Entrance	8.6 – A	8.1 – A	(-0.5)	No
Park Place at 13th Street	12.6 – B	10.8 – B	(-1.8)	No
Park Place at Parking Lot Exit	13.3 – B	11.1 – B	(-2.2)	No
Jefferson Avenue at Jacaranda Place	8.9 – A	10.5 – B	1.6	No
Jefferson Avenue at Catalpa Place	8.7 – A	10.0 – A	1.3	No
Jefferson Avenue at Parking Lot Entrance	N/A	8.0 – A	8.0	No
Jefferson Avenue at Parking Lot Exit	N/A	9.7 – A	9.7	No

All 21 intersections (19 existing intersections and two new intersections at the parking lot entrance and exit on Jefferson Avenue) would operate at acceptable levels of service (LOS A through D) for the scenario with the school project and none of the intersections would be significantly impacted.

Figure 13 - Year 2024 Traffic Volumes without Project

5. Environmental Analysis



NOT TO SCALE

Source: Garland Associates, 2018

5. Environmental Analysis

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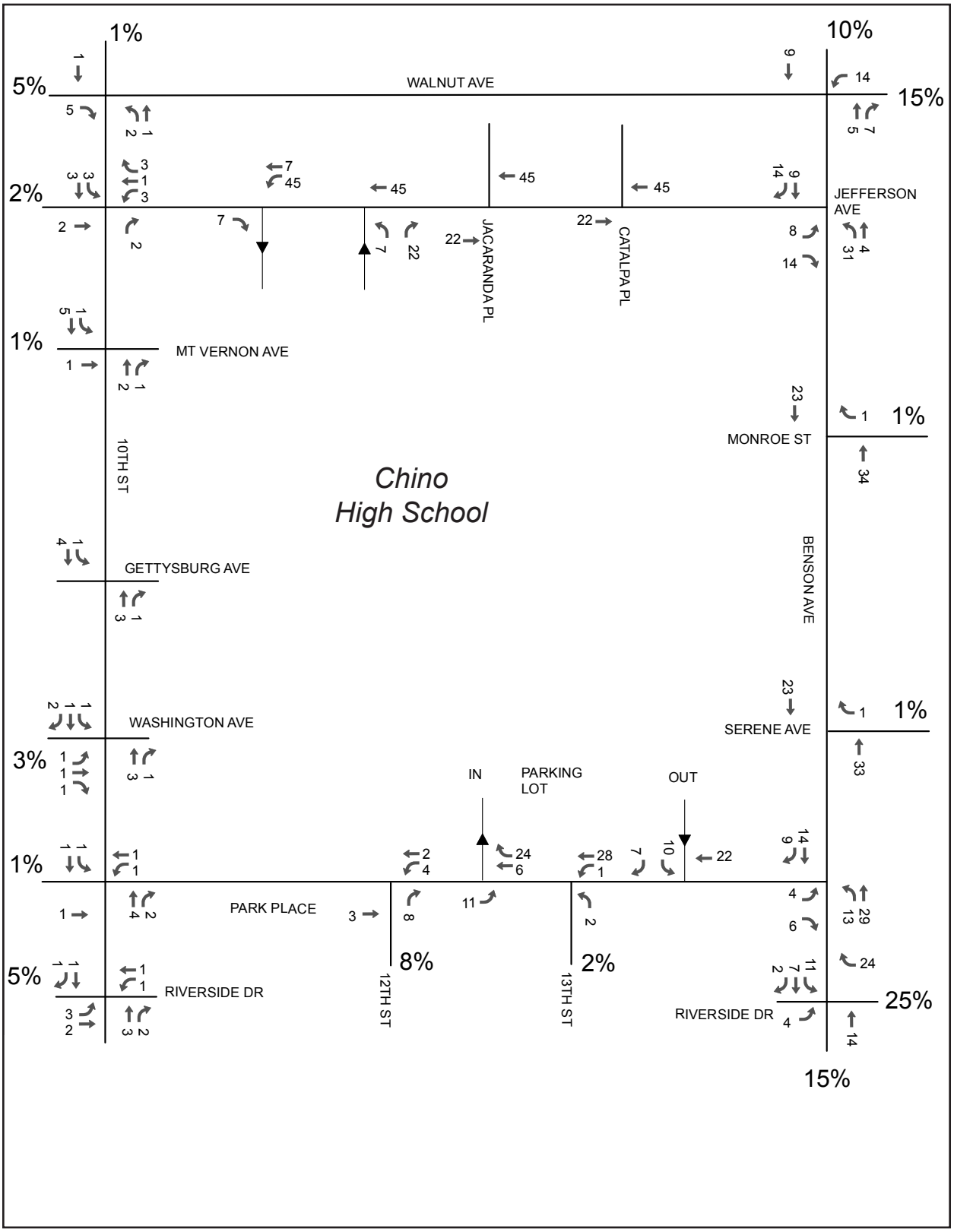
Figure 14 - Project-Generated Traffic

5. Environmental Analysis



NOT TO SCALE

Source: Garland Associates, 2018

5. Environmental Analysis

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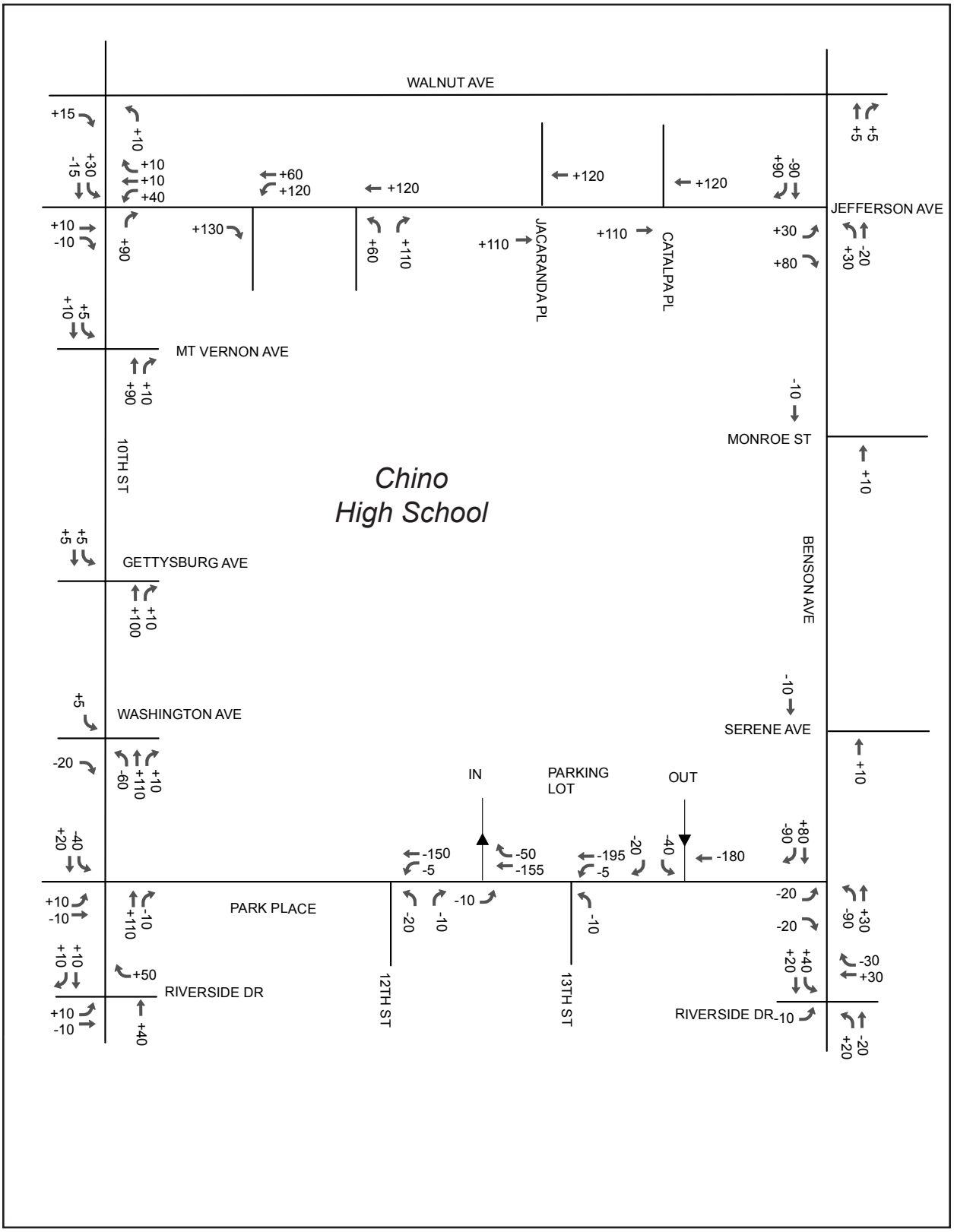
Figure 15 - Redistribution of Existing School Traffic

5. Environmental Analysis



NOT TO SCALE

Source: Garland Associates, 2018

5. Environmental Analysis

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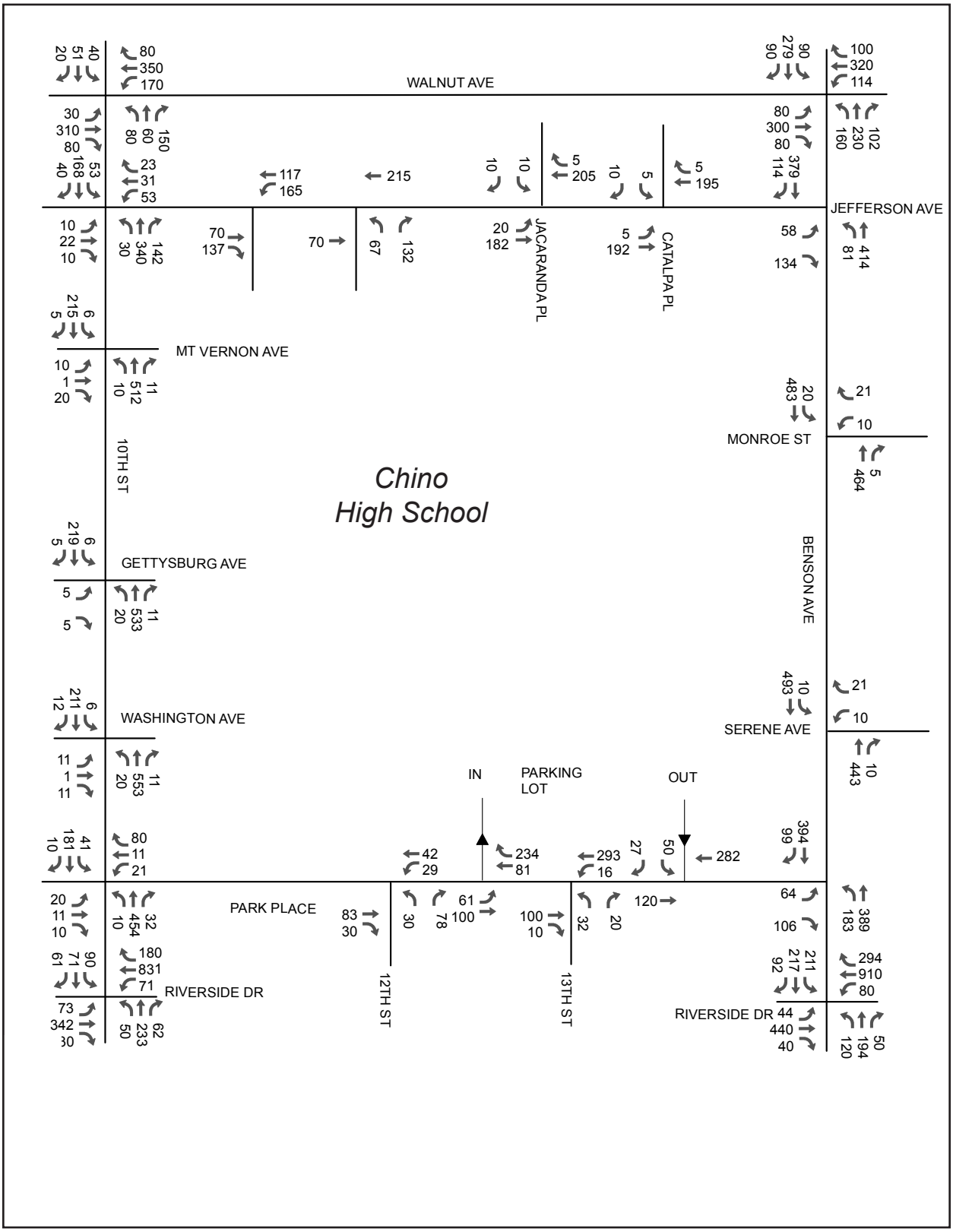
Figure 16 - Existing Plus Project Traffic Volumes

5. Environmental Analysis



NOT TO SCALE

Source: Garland Associates, 2018

5. Environmental Analysis

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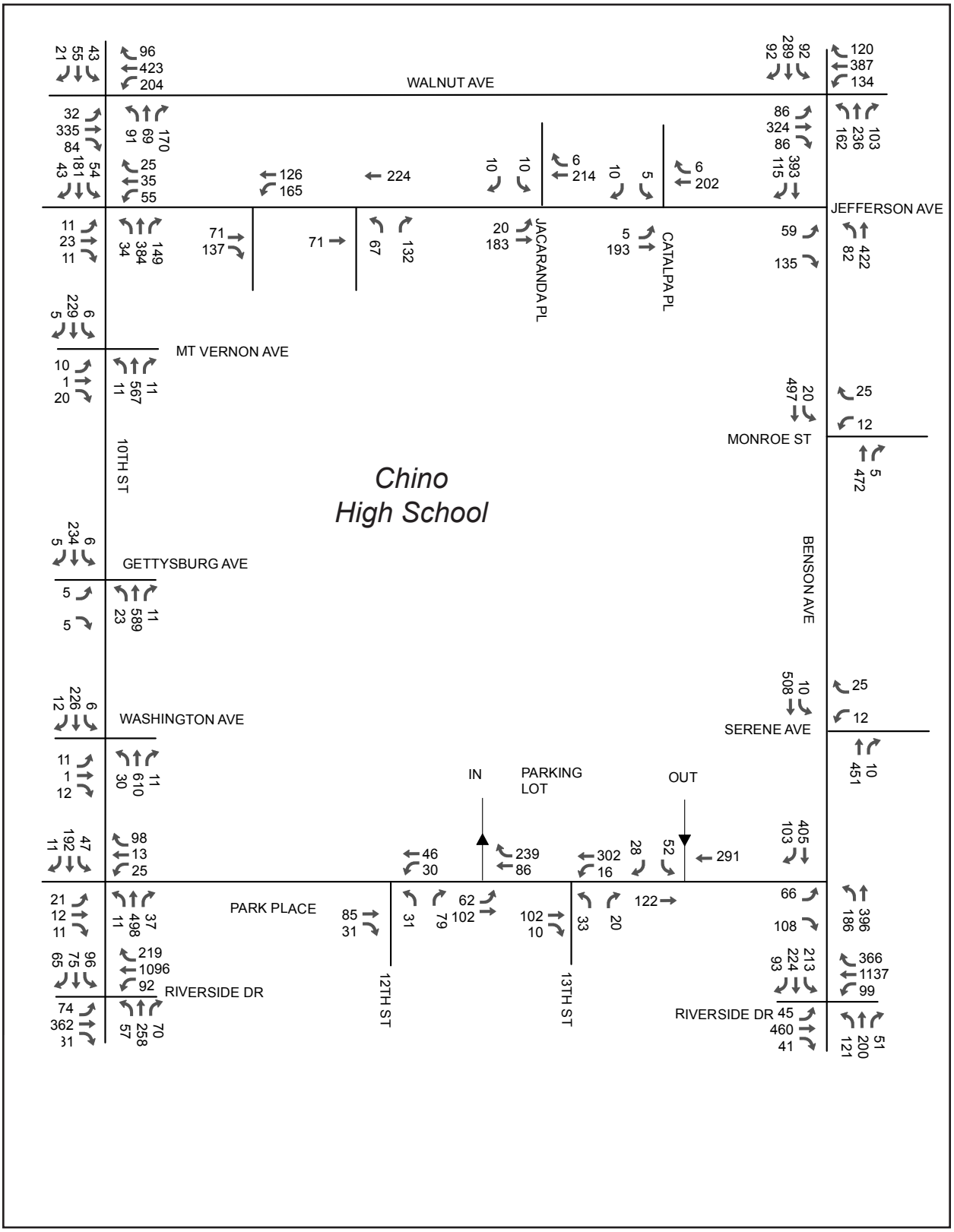
Figure 17 - Year 2024 Traffic Volumes with Project

5. Environmental Analysis



NOT TO SCALE

Source: Garland Associates, 2018

5. Environmental Analysis

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Year 2024 as Baseline

For the year 2024 baseline, the before-and-after delay values and levels of service at each of the study area intersections are summarized in Table 23 for the morning peak hour. As shown, none of the study area intersections would be significantly impacted by the project.

Table 23 Project Impact on Intersection Levels of Service – Year 2024 as Baseline

Intersection	Delay Value and Level of Service		Change in Delay Value (seconds)	Significant Impact
	2024 Without Project	2024 With Project		
Signalized Intersections				
Benson Avenue at Walnut Avenue	13.2 – B	13.3 – B	0.1	No
Benson Avenue at Park Place	21.6 – C	21.6 – C	0.0	No
Benson Avenue at Riverside Drive	20.8 – C	27.7 – C	6.9	No
Riverside Drive at 10th Street	20.1 – C	23.7 – C	3.6	No
Walnut Avenue at 10th Street	28.8 – C	29.4 – C	0.6	No
Unsignalized Intersections				
Benson Avenue at Jefferson Avenue	15.5 – C	23.7 – C	8.2	No
Benson Avenue at Monroe Street	14.2 – B	14.9 – B	0.7	No
Benson Avenue at Serene Avenue	13.8 – B	14.4 – B	0.6	No
Jefferson Avenue at 10th Street	17.4 – C	28.6 – D	11.2	No
Mt. Vernon Avenue at 10th Street	11.9 – B	13.1 – B	1.2	No
Gettysburg Avenue at 10th Street	12.5 – B	15.0 – B	2.5	No
Washington Avenue at 10th Street	12.1 – B	15.8 – C	3.7	No
Park Place at 10th Street	12.9 – B	17.1 – C	4.2	No
Park Place at 12th Street	10.5 – B	9.6 – A	(-0.9)	No
Park Place at Parking Lot Entrance	8.6 – A	8.1 – A	(-0.5)	No
Park Place at 13th Street	12.8 – B	10.9 – B	(-1.9)	No
Park Place at Parking Lot Exit	13.5 – B	11.2 – B	(-2.3)	No
Jefferson Avenue at Jacaranda Place	9.0 – A	10.6 – B	1.6	No
Jefferson Avenue at Catalpa Place	8.7 – A	10.0 – B	1.3	No
Jefferson Avenue at Parking Lot Entrance	N/A	8.0	8.0	No
Jefferson Avenue at Parking Lot Exit	N/A	9.8	9.8	No

It should be noted that the level of service analysis is based on peak hour traffic volumes, which is the standard methodology for a traffic impact analysis. Because schools generally experience short periods of high traffic volume (approximately 15 to 20 minutes within the peak one-hour study interval), there would be periods of time at the start and end of each school day when the levels of service would be worse than the values shown in the tables, similar to existing conditions. This is typical of a school operation and is not

considered a significant impact if the peak one-hour period of traffic flow is at an acceptable level of service. Year 2024 traffic impacts would be less than significant.

Nonmotorized Transportation and Transit

Similar to existing conditions, some students and staff/faculty would walk or bike to and from the school. The streets in the school vicinity have sidewalks along both sides, and the signalized intersections are equipped with painted crosswalks, pedestrian push buttons, and signals. The unsignalized intersections have painted crosswalks across the critical roadway approaches.

For public transit, OmniTrans operates Route 85 along Central Avenue west of the school and Route 81 runs along Riverside Drive south of the school. The proposed school modernization project would not adversely affect the performance of transit or nonmotorized transportation facilities and would not conflict with any plans or policies relative to these transportation modes.

Considering all modes of ground transportation, the proposed project would not result in a significant impact to the performance of the circulation system. The project would not conflict with an applicable plan, ordinance or policy with established measures of effectiveness for the circulation system. Impacts would be less than significant.

b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Less Than Significant Impact. The county congestion management agency is the San Bernardino County Transportation Authority. This agency is responsible for administering the San Bernardino County Congestion Management Program (CMP), which designates a network of freeways, other state highways, and arterial routes that make up the CMP roadway system. According to the CMP Traffic Impact Analysis Report Guidelines in the 2016 update of the San Bernardino County CMP, a traffic study is required if a proposed development project would generate 250 or more two-way vehicle trips per hour or if the project would generate 100 to 250 peak hour trips and would be expected to result in one or more of the following impacts:[101]

- The proposed project would add 100 or more peak hour vehicle trips to a freeway link, or
- The proposed project would add 50 or more peak hour vehicle trips to any designated CMP roadway or a non-freeway state highway.

The project is estimated to generate a total of 141 vehicle trips during the AM peak hour, 38 vehicle trips during the PM commuter peak hour, and 90 trips during the school's early afternoon peak hour at dismissal time. The AM peak hour is subject to further CMP review because the generated traffic volume falls between

[101] San Bernardino Associated Governments (SANBAG). 2016. San Bernardino County Congestion Management Program - 2016 Update. http://www.gosbcta.com/plans-projects/CMP/CMP16-Complete-061416.pdf

100 and 250 vehicle trips per hour. As the volume of project-generated traffic during the PM peak hour is below the threshold of 100 trips, the PM peak hour does not require a CMP traffic analysis.

The CMP arterial routes closest to the school are Riverside Drive and Central Avenue. Based on the project-generated traffic volumes, approximately 25 percent of the project traffic would use Riverside Drive, which equates to 35 peak hour trips, and 10 percent would use Central Avenue, which equates to 14 peak hour trips. Because these traffic volumes are below the CMP threshold of 50 trips per hour, a detailed CMP traffic impact analysis is not required, and the project would not have a significant CMP impact.

The nearest freeway to the school is the Pomona Freeway (SR-60). It is assumed that approximately 15 percent of the project-generated traffic would use any particular freeway segment as an access route, which equates to 21 trips during the morning peak hour. As this volume is well below the CMP threshold of 100 trips for freeways, a detailed CMP freeway analysis is not required, and the proposed project would not have a significant impact on the freeway network. The project would not exceed a LOS standard established by the congestion management agency or conflict with the CMP. Impacts would be less than significant.

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

No Impact. The nearest airport is Chino Airport, which is approximately 3.5 miles southeast of the campus, and the LA/Ontario International Airport is approximately 4 miles northeast of the campus. The school campus is not within the airport influence area or the airport land use planning area of either airport. Neither of these airports nor any other airports in the area would be affected by the project. The property is already operating as a high school, and reconstructed of the campus would not result in a change in air traffic patterns, an increase air traffic levels, or a change in location that would result in a safety risk.

d) Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?

Less Than Significant Impact with Mitigation.

Temporary Construction

During construction, construction equipment, trucks, and workers would drive to and from the construction areas shown in Figure 10. Construction workers normally arrive before 7:00 AM and depart at approximately 4:00 PM, prior to student drop-off times (most students arrive between 7:15 AM and 7:30 AM) and after student dismissal (at 2:17 PM). Therefore, the majority of construction trips would not overlap with student drop-off and pick-up. The truck trips would be spread out throughout the workday during nonpeak traffic periods.

Construction staging (i.e., storage of equipment and materials) would be contained on the campus. Construction trucks would enter and exit the school campus by an exclusive construction driveway and would not affect the existing school driveways or parking lots. Parking for workers is anticipated to be provided onsite and in the staging areas (as available) during all phases of construction. Construction workers would be required to avoid parking on local streets to the extent feasible.

5. Environmental Analysis

In compliance with the City of Chino Public Works Department, CVUSD's construction contractor would prepare a Work Area Traffic Control plan prior to commencement of construction.[102] This plan would establish methods to avoid conflicts between the construction traffic and the existing street, pedestrian, and bicycle traffic. The plan would be prepared by a traffic engineer or qualified civil engineer licensed in the State of California and would identify vehicular and pedestrian traffic controls; maintenance of vehicular and pedestrian access, detours, and street closures; location of any haul routes; hours of operation; protective devices; warning signs; and access to abutting properties. Additionally, construction fencing would be used on campus to separate construction zones from students and to ensure safety. Implementation and compliance with the construction worksite traffic control plan would address potential hazardous conditions. Project construction would not create new hazards or conflicts, and impacts related to vehicle, pedestrian, and bike safety would be less than significant.

Operational Impacts

The project is a compatible use because the school is an existing land use and the project would not change this use. However, the redistribution of some traffic and pedestrian activity to the west and north side of the school; increased traffic, pedestrians, and bicycles along Jefferson Avenue and reduction along Park Place; and the increased number of vehicle turning movements at the new school entrances and nearby intersections may increase the number of traffic conflicts and the possibility of accidents.

Missing Stop Signs and Crosswalks. Jefferson Avenue/10th Street intersection would have an increase in activity, because of the location of the relocated campus driveways. A yellow crosswalk is currently in place on the east leg of the intersection; however, the remaining three legs of the intersection have no pedestrian/bike safety features. Pedestrians and bicyclists crossing this intersection may be exposed to increased hazard. The District shall implement Mitigation Measure T-1 (Install Stop Signs and Crosswalks) prior to operation of the new classroom building (end of Project Phase 3 and Construction Phase I). With mitigation the Jefferson Avenue/10th Street intersection safety impact would be less than significant.

Dangerous Midblock Crossing. Additionally, because of the close proximity of the new driveway to the existing 10th Street midblock crosswalk (at Mt. Vernon Avenue), a vehicle/pedestrian conflict may occur. People crossing at this location would need to avoid vehicles entering and exiting the 10th Street parking lot as well as through-traffic and would be exposed to increased hazard. The District shall implement Mitigation Measure T-2 (Remove Midblock Crosswalk) prior to operation of the new classroom building (end of Project Phase 3 and Construction Phase I). With mitigation, the 10th Street midblock crossing safety impact would be less than significant.

Visibility Constraints. The south side of Jefferson Avenue along the project frontage currently has angled parking spaces. The project includes two new driveways on Jefferson Avenue for access to the parking lot and drop-off/pick-up area on the north side of the redeveloped school. With cars parked in the angled spaces there may be a safety issue associated with visibility constraints. Vehicles exiting the school would be required

[102] City of Chino. December 2017. Standard Specifications and Standard Drawings. Standard & Specifications. http://www.cityofchino.org/government-services/public-works/standards-specifications

to pull onto Jefferson Avenue to see around the parked vehicles. Additionally, vehicles entering may not see pedestrians on the sidewalk because of the distance from the travel lane to the sidewalk. The District shall implement Mitigation Measure T-3 (Convert Angled Street Parking) prior to operation of the new classroom building (end of Project Phase 3 and Construction Phase I). With mitigation, the sight distance safety impact would be less than significant.

The elimination of angled parking along Jefferson Avenue would not significantly reduce parking available to the adjacent hospital because school staff and visitors would no longer use these spaces for parking. The redeveloped school would provide an additional 241 on-campus staff and visitor parking spaces.

Existing Regulations. California law requires a city or county to implement traffic control devices requested by a school district if they are meant to mitigate safety risks for students traveling to and from school, as described below.

- **California Vehicle Code, Division 11, Chapter 2, Article 1, Section 21372, Guidelines for Traffic Control Devices near Schools.** The Department of Transportation and local authorities shall, with respect to highways under their respective jurisdictions, establish and promulgate warrants to be used as guidelines for the placement of traffic control devices near schools for the purpose of protecting students going to and from school. Such devices may include flashing signals. Such warrants shall be based upon, but need not be limited to, the following items: pedestrian volumes, vehicle volumes, width of the roadway, physical terrain, speed of vehicle traffic, horizontal and vertical alignment of the roadway, the distance to existing traffic control devices, proximity to the school, and the degree of urban or rural environment of the area.[103]

- **California Vehicle Code, Division 11, Chapter 2, Article 1, Section 21373, School Board Request for Traffic Control Devices.** The governing board of any school district may request the appropriate city, county, city and county, or state agency to install traffic control devices in accordance with the warrants established pursuant to Section 21372. Within 90 days thereafter, the city, county, city and county, or state agency involved shall undertake an engineering and traffic survey to determine whether the requested crossing protection meets the warrants established pursuant to Section 21372. The city, county, city and county, or state agency involved may require the requesting school district to pay an amount not to exceed 50 percent of the cost of the survey. If it is determined that such requested protection is warranted, it shall be installed by the city, county, city and county, or state agency involved.[104]

- **California Vehicle Code, Division 11, Chapter 2, Article 1, Section 21368, Crosswalks near Schools.** Whenever a marked pedestrian crosswalk has been established in a roadway contiguous to a school building or the grounds, it shall be painted or marked in yellow. Other established marked pedestrian crosswalks may be painted or marked in yellow if either (a) the nearest point of the crosswalk is not more than 600 feet from a school building or the grounds thereof, or (b) the nearest point of the

[103] CA Veh Code § 21372 (2017). Amended Ch. 545, Stats. 1974. Effective January 1, 1975.
[104] CA Veh Code § 21373 (2017). Amended Ch. 1061, Stats. 1969. Effective November 10, 1969.

crosswalk is not more than 2,800 feet from a school building or the grounds thereof, there are no intervening crosswalks other than those contiguous to the school grounds, and it appears that the facts and circumstances require special painting or marking of the crosswalks for the protection and safety of persons attending the school. There shall be painted or marked in yellow on each side of the street in the lane or lanes leading to all yellow marked crosswalks the following words, "SLOW-SCHOOL XING," except that such words shall not be painted or marked in any lane leading to a crosswalk at an intersection controlled by stop signs, traffic signals, or yield right-of-way signs. A crosswalk shall not be painted or marked yellow at any location other than as required or permitted in this section.[105]

Driveways, sidewalks, parking lots, and other features at the school would comply with existing requirements from the Division of the State Architect (for on-campus facilities) and the City of Chino (for off-campus facilities within the public right-of-way).

Mitigation Measures

T-1 **Install Stop Signs and Crosswalks.** To reduce vehicle/pedestrian conflicts at the 10th Street/Jefferson Avenue intersection, prior to the first day of classes in the new classroom buildings, the District shall ensure that stop signs and yellow crosswalks are installed.

Stop signs shall be installed on Jefferson Avenue north- and southbound at 10th Street. Yellow school crosswalks shall be painted on Jefferson Avenue north- and southbound at 10th Street and on 10th Street eastbound at Jefferson Avenue, subject to City of Chino review and approval.

T-2 **Remove Midblock Crosswalk.** To reduce vehicle/pedestrian conflict at the 10th Street midblock crosswalk (at Mt. Vernon Avenue) and new school driveway, prior to the first day of classes in the new classroom buildings, the District shall ensure that the 10th Street midblock crosswalk is removed. Crosswalk removal is subject to City of Chino review and approval.

T-3 **Convert Angled Street Parking.** To reduce visibility constraints along Jefferson Avenue and new school driveways, prior to the first day of classes in the new classroom buildings, the District shall ensure that the angled parking spaces on the south side of Jefferson Avenue between 10th Street and Benson Avenue are converted to conventional parallel parking spaces by removing the angled striping; new pavement markings are not required for conventional parallel parking. The District shall also paint a red curb on the south side of Jefferson Avenue for a length of 50 feet on each side of the two new driveways. All measures are subject to review and approval by the City of Chino.

e) Result in inadequate emergency access?

No Impact. The existing and proposed access and circulation features at the school would accommodate emergency ingress and egress by fire trucks, police units, and ambulance/paramedic vehicles. School access would be provided via driveways on Park Place, 10th Street, and Jefferson Avenue. These driveways provide

[105] CA Veh Code § 21368 (2017). Amended by Stats. 1976, Ch. 232.

emergency access to the school's parking lots and to the school's buildings, recreation areas, and other internal areas of the campus. All access features are subject to and must satisfy the City of Chino Public Works Department, Chino Valley Independent Fire District, Chino Police Department, and the Division of the State Architect design requirements. The project would not, therefore, result in inadequate emergency access. No impact would occur.

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

No Impact. The school would be consistent with policies supporting public transit, bicycle, and pedestrian facilities because bike racks would continue to be available on campus, sidewalks would continue to be provided along the streets around the school, pedestrian crosswalks and signals would continue to be available in the school vicinity, and public transit is provided on Central Avenue (Omnitrans Route 85) and Riverside Drive (Omnitrans Route 81) near the school. While the proposed relocation of school buildings would shift the primary pedestrian access to the north side of the school (i.e., a shift from Park Place on the south side to Jefferson Avenue on the north side), the project would not adversely affect nonmotorized or transit facilities or operations. No bus stops, sidewalks, crosswalks, or bike lanes would be affected. A School Route Plan will be prepared prior to the opening of the re-designed school to guide students as to the recommended pedestrian routes to the school. The project would not conflict with policies, plans, or programs regarding transit, bicycle, or pedestrian facilities or otherwise decrease the performance or safety of such facilities. No impact would occur.

5.17 TRIBAL CULTURAL RESOURCES

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

No Impact. Assembly Bill 52 (AB 52) requires meaningful consultation with California Native American tribes on potential impacts to tribal cultural resources, as defined in PRC Section 21074. Tribal cultural resources are sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either eligible for or listed in the California Register of Historical Resources or local register of historical resources.[106]

As part of the AB 52 process, Native American tribes must submit a written request to CVUSD (lead agency) to be notified of projects within their traditionally and culturally affiliated area. CVUSD must provide written, formal notification to those tribes within 14 days of deciding to undertake a project. A tribe must respond to

[106] California Natural Resources Agency. AB 52 Regulatory Update. http://resources.ca.gov/ceqa/.

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CVUSD within 30 days of receiving this notification if it wants to engage in consultation on the project, and CVUSD must begin the consultation process within 30 days of receiving the tribe's request. Consultation concludes when either 1): the parties agree to mitigation measures to avoid a significant effect on a tribal cultural resource, or 2) a party, acting in good faith and after reasonable effort, concludes mutual agreement cannot be reached.

The school is not listed or eligible for listing in the California Register of Historical Resources or a local register of historical resources. There is no evidence of any tribal cultural resources that are either eligible for or listed in the California Register of Historical Resources or local register of historical resources. No impacts would occur.

b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Less than Significant Impact. Although the District received correspondence from one Tribe, to date the District has not received any official AB 52 tribal requests to be notified about projects. Although not required under AB 52, The District sent notification letters to six tribes. Contact information was provided by the Native American Heritage Commission (see Appendix B of this Initial Study). The tribes were notified on January 12, 2018.

- Gabrieleno Band of Mission Indians – Kizh Nation
- Gabrieleno/Tongva San Gabriel Band of Mission Indians
- Gabrielino/Tongva Nation
- Gabrielino Tongva Indians of California Tribal Council
- Gabrielino/Tongva Tribe
- Pauma Band of Luiseno Indians

Mr. Andrew Salas, Chairman of Gabrieleno Band of Mission Indians – Kizh Nation, responded on January 17, 2018. As of the date on this document no other tribes have responded. The District initiated consultation on January 23, 2018 by contacting the Tribe to arrange a meeting. No response was forthcoming. There is no substantial evidence that tribal cultural resources are present on the existing school campus. The District has complied with the requirements of AB 52. Therefore, the project would not result in a significant impact to tribal cultural resources.

5.18 UTILITIES AND SERVICE SYSTEMS

Would the project:

a) Exceed waste water treatment requirements of the applicable Regional Water Quality Control Board?

Less Than Significant Impact. The project would not exceed wastewater treatment requirements of the Santa Ana RWQCB. The Santa Ana RWQCB sets requirements for waste discharges to municipal storm drains, which would apply to the operation phase of the project. Construction impacts to stormwater are regulated by the State Water Resources Control Board and are discussed in Section 5.9, *Hydrology and Water Quality*. Impacts related to RWQCB requirements would be less than significant.

b) Require or result in the construction of new water or waste water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

No Impact. Water treatment facilities filter and/or disinfect water before it is delivered to customers. The City of Chino Public Works Department supplies water to the school campus and would continue to supply water to the school. The project would serve existing and future students living in the region and would not increase the student population or water treatment demands in the city. Development of the project would not require construction of new or expanded wastewater treatment facilities, and no impact would occur.

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

No Impact. Project development would include storm drainage improvements onsite that would discharge to the existing storm drainage infrastructure in the surrounding street. Low impact development stormwater management would be incorporated into the project design pursuant to requirements of the Technical Guidance Document for Water Quality Management Plans.[107] Low impact development performance standards would improve the water quality of stormwater leaving the campus and reduce the runoff volume through retention on campus. Therefore, the campus drainage system would discharge a net decrease in runoff to municipal storm drains. Construction of the onsite stormwater management measures would not cause a significant impact on the environment. The project would not require the construction of expanded off-campus storm drains. No impact would occur.

[107] County of San Bernardino Areawide Stormwater Program NPDES No. CAS618036, ORDER No. R8-2010-0036. Technical Guidance Document for Water Quality Management Plans. Effective Date: September 19, 2013. http://cms.sbcounty.gov/Portals/50/Land/SantaAnaRiver-WQMP-Final-June2013.pdf?ver=2016-01-20-122443-980

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

No Impact. The school currently serves students living in the region, and the reconstructed school would not increase long-term water demands in the water district. Water would be used on-campus during construction for dust suppression and similar activities. The small amount of water that would be used for project construction would not result in the need for new or expanded water entitlements. No impact would occur.

e) Result in a determination by the waste water treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

No Impact. Project development would not impact wastewater treatment capacity, as substantiated in (a) and (b), above.

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Less Than Significant Impact. The project would not increase solid waste generation in the region. Future students that would attend Chino High School are currently generating trash that is hauled to local landfills. Demolition and construction waste would be generated and disposed of at local landfills. Section 5.408 (Construction Waste Reduction, Disposal, and Recycling) of the CALGreen Building Standards Code (24 CCR, Part 11, Section 5.408.1.1) requires that at least 65 percent of the nonhazardous construction and demolition waste from nonresidential construction operations be recycled and/or salvaged for reuse. Construction of the project would adhere to these established standards. Therefore, demolition of existing onsite improvements would not adversely impact landfills. Impacts would be less than significant.

g) Comply with federal, state, and local statutes and regulations related to solid waste?

Less than Significant Impact. The school administrators and the District currently comply with federal, state, and local statutes and regulations related to solid waste and would continue this practice. The reconstructed school would include storage areas for recyclable materials per AB 341, including areas for storing organic matter per AB 1826. At least 65 percent of construction and demolition debris would be recycled and/or salvaged for reuse per CALGreen Section 5.408.1. The District would comply with regulations governing solid waste disposal and diversion, and impacts would be less than significant.

5.19 MANDATORY FINDINGS OF SIGNIFICANCE

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less than Significant Impact with Mitigation Incorporated. As discussed in Sections 5.1, *Aesthetics*, and 5.4, *Biological Resources,* the project would neither degrade the quality of the environment nor substantially impact any endangered fauna or flora. The project would demolish and construct new buildings at an existing school campus and would not change the aesthetics in surrounding neighborhoods. Because the school is fully developed and the surrounding area is highly urbanized, the project would not impact the habitat or population level of a fish, plant, or animal community or the range of a rare or endangered plant or animal. Mandatory compliance with MBTA, Fish and Game Code, and Mitigation Measure BIO-1 would avoid or limit potential impacts to nesting birds.

As discussed under Section 5.5, *Cultural Resources,* impacts related to archaeological and paleontological resources and human remains would be less than significant.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

Less than Significant Impact with Mitigation Incorporated. Based on the preceding discussion, with implementation of Mitigation Measures BIO-1, N-1, T-1, T-2, and T-3 as well as compliance with existing regulations, the project is not anticipated to result in significant adverse operational impacts that could contribute to a cumulatively considerable impact.

c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?

Less Than Significant Impact. As discussed in the preceding analyses the project would not result in significant direct or indirect adverse impacts or result in substantial adverse effect on human beings.

5. Environmental Analysis

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6. List of Preparers

6.1 LEAD AGENCY

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6. List of Preparers

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