

PUBLIC REVIEW DRAFT

**INITIAL STUDY/
MITIGATED NEGATIVE DECLARATION**

VILLA/MINNEWAWA AVENUE WIDENING PROJECT

CIP 17-12

CLOVIS, CALIFORNIA



LSA

April 2020

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CIP 17-12

CLOVIS, CALIFORNIA

Submitted to:

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Project No. CIT1901



April 2020

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LIST OF ABBREVIATIONS AND ACRONYMS

AAQS	Ambient Air Quality Standards
AB 52	Assembly Bill 52
AB 939	California Integrated Waste Management Act of 1989
ADT	average daily traffic
APE	area of potential effect
APN	assessor's parcel number
ASR	Archeological Survey Report
BAU	Business-as-Usual
BMPs	best management practices
BPS	Best Performance Standards
CARB	California Air Resource Board
CBC	California Building Code
CCAP	Climate Change Action Plan
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CDFW	California Department of Fish and Wildlife
CGP	Construction General Permit
CGS	California Geological Survey
CH ₄	methane
CHRIS	California Historic Resources Information System
City	City of Clovis
CNDDB	California Natural Diversity Database
CNEL	community noise equivalent level
CO	carbon monoxide
CO ₂	carbon dioxide
COC	constituents of concern
CVRWQCB	Central Valley Regional Water Quality Control Board
dB	decibel
dBA	A-weighted sound level

EIR	Environmental Impact Report
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
GHGs	greenhouse gas emissions
GWP	Global Warming Potential
HASP	health and safety plan
HFCs	hydrofluorocarbons
HPDF	Historic Property Data File
HPSR	Historical Property Survey Report
in/sec	inches per second
iPaC	Information for Planning and Consultation
ISA	Initial Site Assessment
L _{dn}	day-night average level
L _{eq}	equivalent continuous sound level
MBTA	Migratory Bird Treaty Act
MLD	Most Likely Descendant
MMI	Modified Mercalli Intensity
MS4	Fresno-Clovis Urbanized Area Municipal Separate Storm Sewer Systems
N ₂ O	nitrous oxide
NAAQS	National Air Quality Standards
NAHC	Native American Heritage Commission
NO ₂	nitrogen dioxide
NO _x	nitrogen oxides
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
NSR	Noise Study Report
O ₃	ozone
OHP	Office of Historic Preservation
Pb	lead
PFCs	perfluorocarbons

PM	particulate matter
PM _{2.5}	particulate matter less than 2.5 microns in diameter
PM ₁₀	particulate matter less than 10 microns in diameter
ppb	parts per billion
PPV	peak particle velocity
project	Villa/Minnewawa Avenue Widening Project
PRC	Public Resources Code
PSI	preliminary site investigation
REC	Recognized Environmental Conditions
RMS	root-mean-square
RoadMod	Sacramento Metropolitan Air Quality Management District's Road Construction Emissions Model, Version 9.0.0
ROG	reactive organic gases
SF ₆	sulfur hexafluoride
SJVAB	San Joaquin Valley Air Basin
SJVAPCD	San Joaquin Valley Air Pollution Control District
SJVR	San Joaquin Valley Railroad
SMARA	Surface Mining and Reclamation Act
SO ₂	sulfur dioxide
SP	Southern Pacific Railroad
SSJVIC	Southern San Joaquin Valley Information Center
State	State of California
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TMP	Traffic Management Plan
TNM 2.5	Traffic Noise Model Version 2.5
USA	Underground Service Alert
USEPA	U.S. Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

VdB	vibration velocity decibels
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	vehicle miles traveled
WDRs	Waste Discharge Requirements
WPCP	Water Pollution Control Program

1.0 PROJECT INFORMATION

This chapter describes the proposed Villa/Minnewawa Avenue Widening Project (project) that is evaluated in this Initial Study/Mitigated Negative Declaration (IS/MND). Copies of all materials referenced in this IS/MND are available for review in the project file during regular business hours at the City of Clovis Engineering Division.

1. Project Title:

Villa/Minnewawa Avenue Widening Project

2. Lead Agency Name and Address:

City of Clovis
Engineering Division
1033 Fifth Street
Clovis, CA 93612

3. Contact Person and Phone Number:

Claudia Cazares | (559) 324-2350

4. Project Location:

The proposed project includes an approximately 0.5-mile segment of Villa/Minnewawa Avenue from Herndon Avenue to Alluvial Avenue. The project site is defined as the proposed project right-of-way, including parcels or segments of land that would be acquired for the purpose of widening Villa/Minnewawa Avenue beyond the existing right-of-way. Figure 1 shows the site's regional and local context. Figure 2 depicts an aerial photograph of the project site and surrounding land uses.

5. Project Sponsor's Name and Address:

City of Clovis
Engineering Division
1033 Fifth Street
Clovis, CA 93612

6. General Plan Designation:

None (public street)

7. Zoning:

None (public street)

8. Description of Project:

The proposed project would widen and rehabilitate an approximately 0.5-mile segment of Villa/Minnewawa Avenue from Herndon Avenue to Alluvial Avenue in the City of Clovis (City). The existing 0.5-mile project segment has multiple lane configurations and the project would widen the roadway to provide two travel lanes consistently in each direction along the segment.

Southbound Minnewawa Avenue consists of two travel lanes north of the project site and transitions to one lane at the intersection of Minnewawa Avenue and Alluvial Avenue. Within the project segment, the southbound travel lane on Villa/Minnewawa Avenue widens to two lanes at Fir Avenue, approximately 350 feet north of Herndon Avenue, and remains two travel lanes south of Herndon Avenue. The project would widen the southbound lanes between Alluvial and Fir from one to two lanes, eliminating the delay and congestion that occurs from the transition to one lane at the intersection of Minnewawa Avenue and Alluvial Avenue.

North of Herndon Avenue, northbound Villa Avenue is one lane until the Minnewawa “T” intersection where Villa Avenue becomes Minnewawa Avenue along the project segment. At the intersection of Villa/Minnewawa Avenue, Minnewawa Avenue widens to two lanes for approximately 1,350 feet, and remains two travel lanes north of Alluvial Avenue. The proposed project would widen northbound Villa Avenue to two travel lanes in between Herndon Avenue and Alluvial Avenue, up to the Old Town Trail Crossing.

The project includes a Class II bike lane in each direction with sidewalks and a 16-foot landscaped median. The proposed project would also install curbs, gutters, curb return ramps, adjustment of existing utilities, landscaping, irrigation, traffic striping, marking and signage, and street lights along the project segment.

Implementation of the proposed project is expected to improve traffic level of service and service capacity during peak hours, reduce delays and traffic congestion, and increase safety and security. A Class II bicycle lane and pedestrian sidewalk provide for continuous bicycle and pedestrian facilities in this segment and would connect to existing improvements that serve to encourage non-motorized transportation. The project would also include the installation of 15 street lights in the areas where the road widening will take place. The widening of Villa/Minnewawa Avenue is consistent with the City’s General Plan Circulation Element and it would address the current and projected traffic demand (20,500 average daily traffic [ADT] by 2035) and would serve to improve the conveyance of traffic.

As shown in Figure 2, additional street right-of-way would be needed to accommodate the outside travel lanes and street sidewalks. The proposed project would require a 0.44-acre acquisition of right-of-way across assessor’s parcel number (APN) 561-142-38, a 0.26-acre acquisition of right-of-way across APN 561-185-04, and a 0.22-acre acquisition of right-of-way across APN 561-186-03.

Construction of the project is anticipated to begin in 2021 and is expected to occur for approximately 50 to 60 working days. Villa/Minnewawa Avenue would remain open during the construction period with lanes shifted to one side of the roadway while the other side is under construction. Construction would include earthwork, grading, compaction, relocating existing utilities and modifications of existing drainage facilities, installation of a new drainage inlet, relocation of a Fresno Irrigation District pipeline, relocation of a Comcast vault, placing aggregate base, asphalt concrete paving, street illumination, application of new traffic striping and markings, and landscaping and irrigation of the median island. In addition, construction of the proposed project would require retaining walls adjacent to the Clovis rail trail on both sides of the roadway. The project would require the import of approximately 1,200 cubic yards of soil.

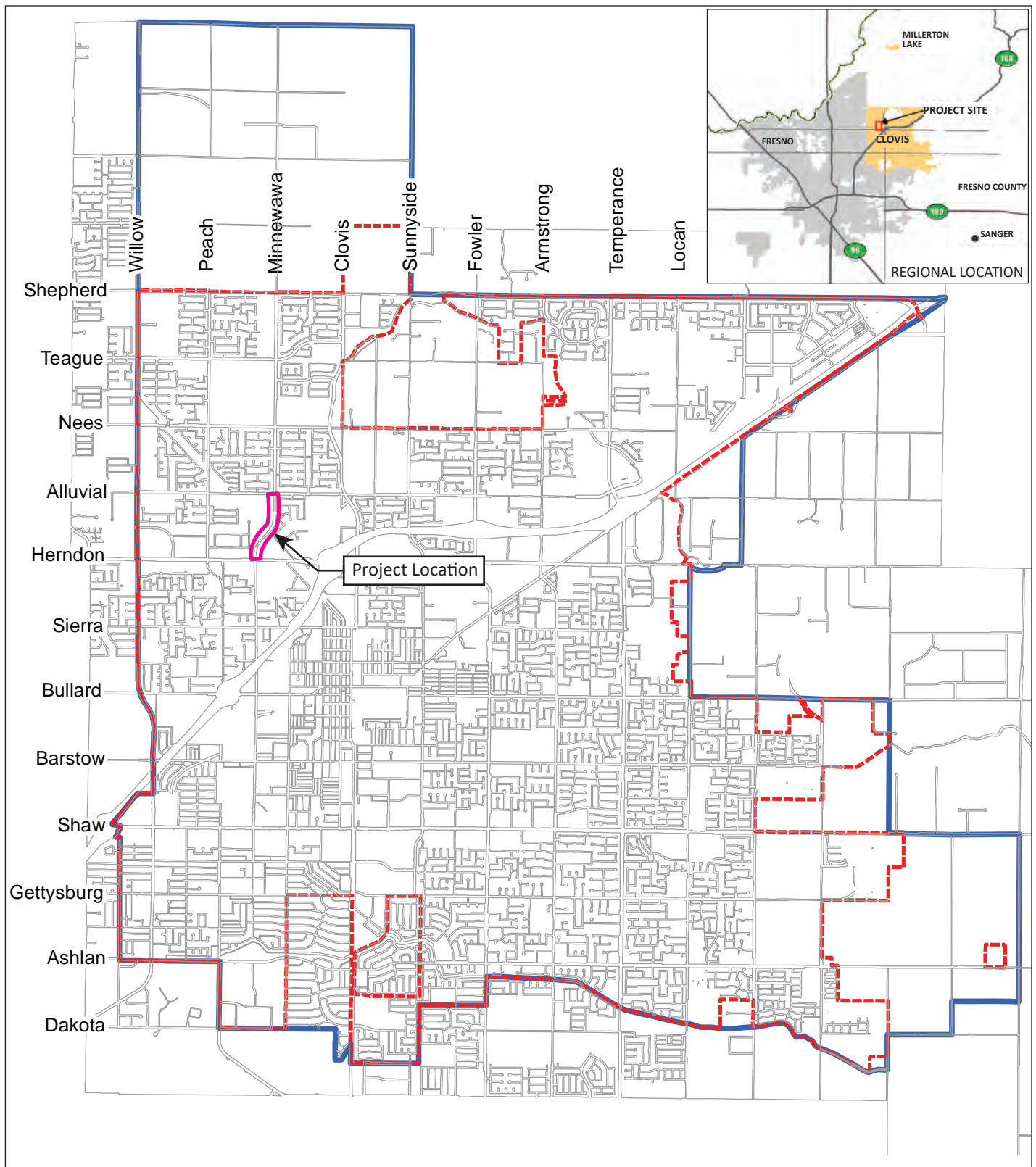


FIGURE 1

LSA



NOT TO SCALE

- Project Location
- City Limits
- Sphere of Influence

SOURCE: CITY OF CLOVIS, CALIFORNIA, AUGUST 2018.

Villa/Minnewawa Avenue Widening Project
Vicinity Map

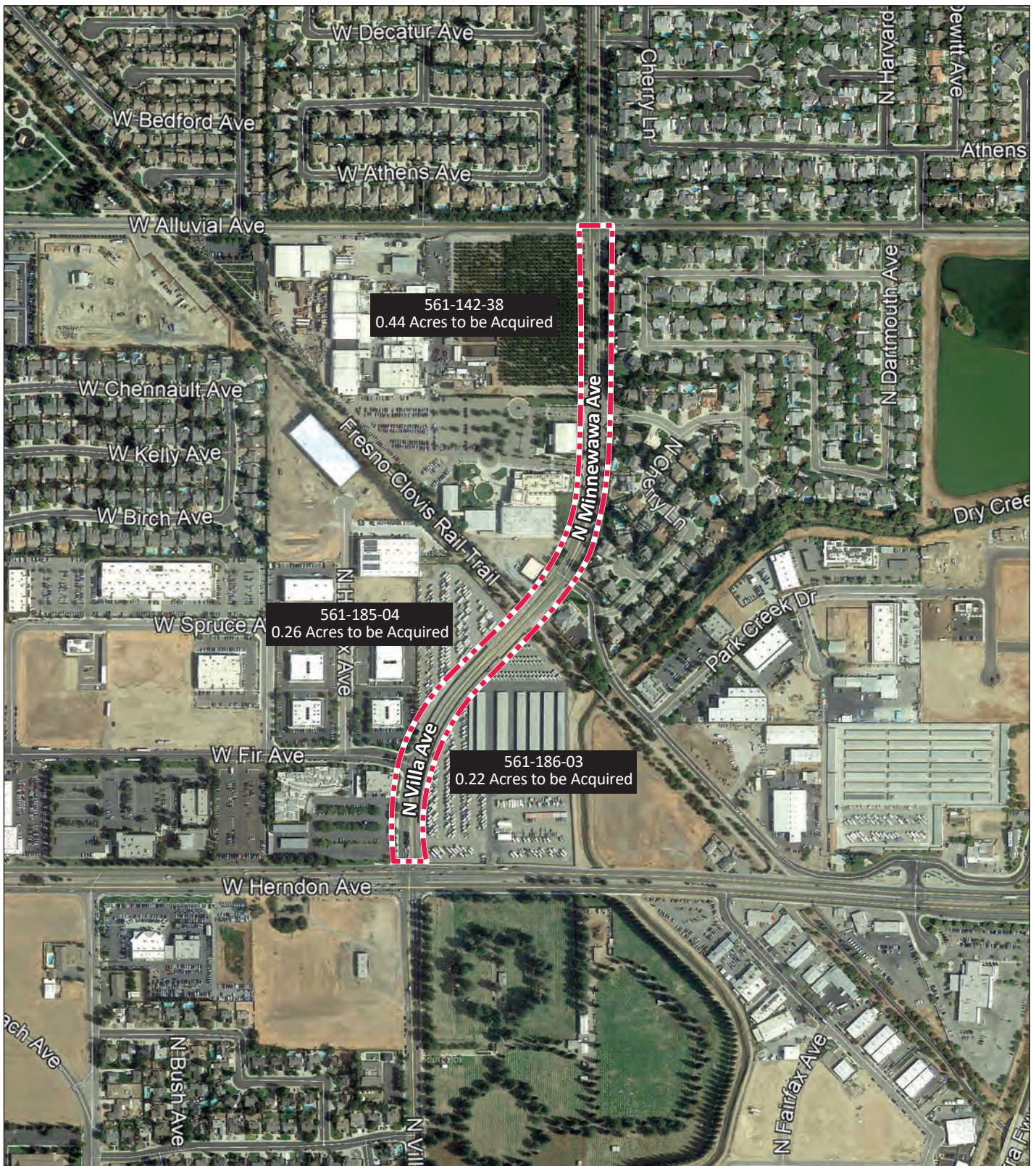
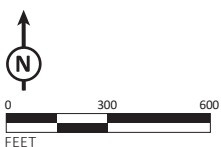


FIGURE 2

LSA



 Project Location

Villa/Minnewawa Avenue Widening Project
Project Location

SOURCES: GOOGLE EARTH; 8/23/18; CITY OF CLOVIS, CALIFORNIA, SEPTEMBER 2018; LSA, 2019.

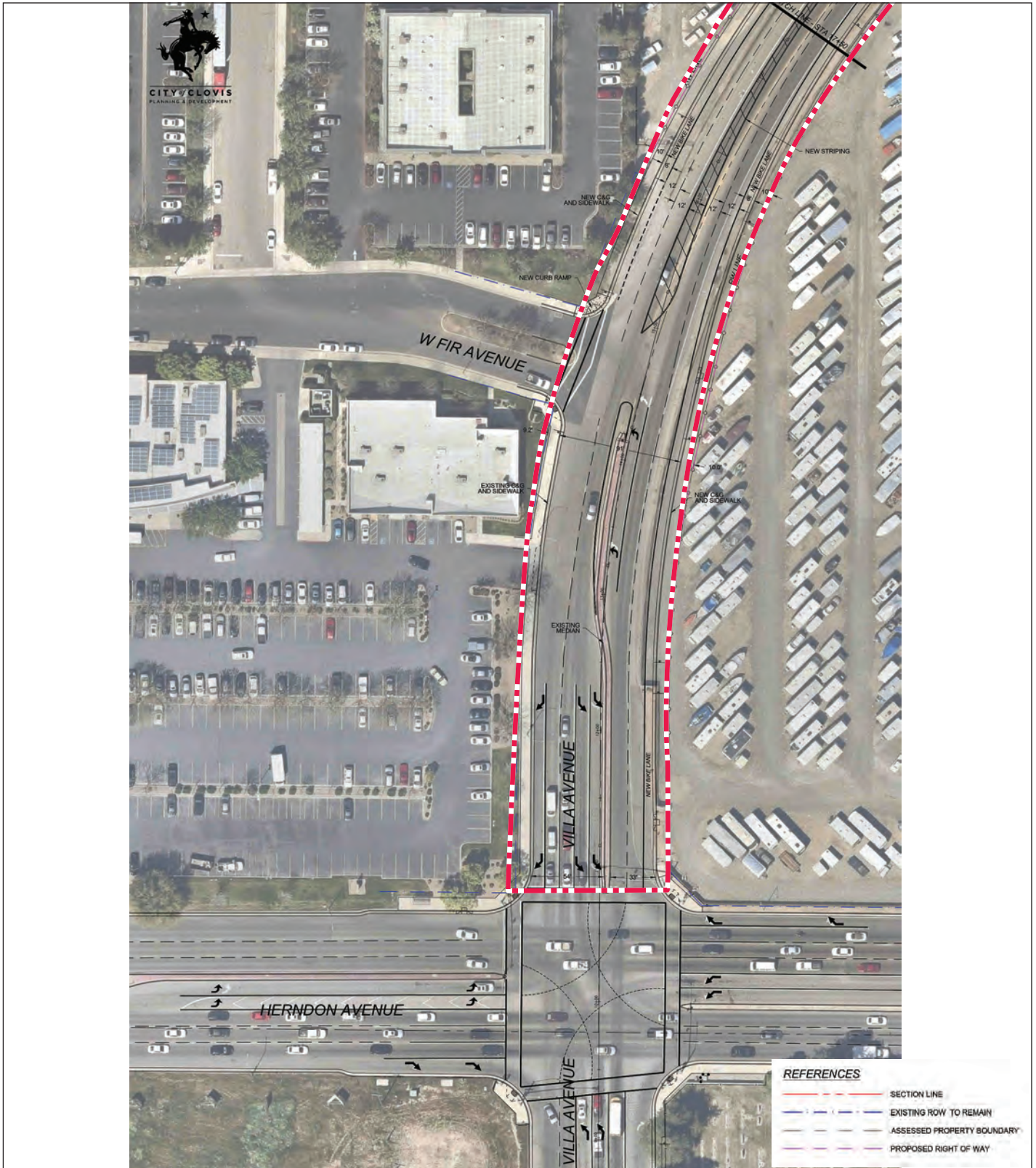


FIGURE 3a

LSA

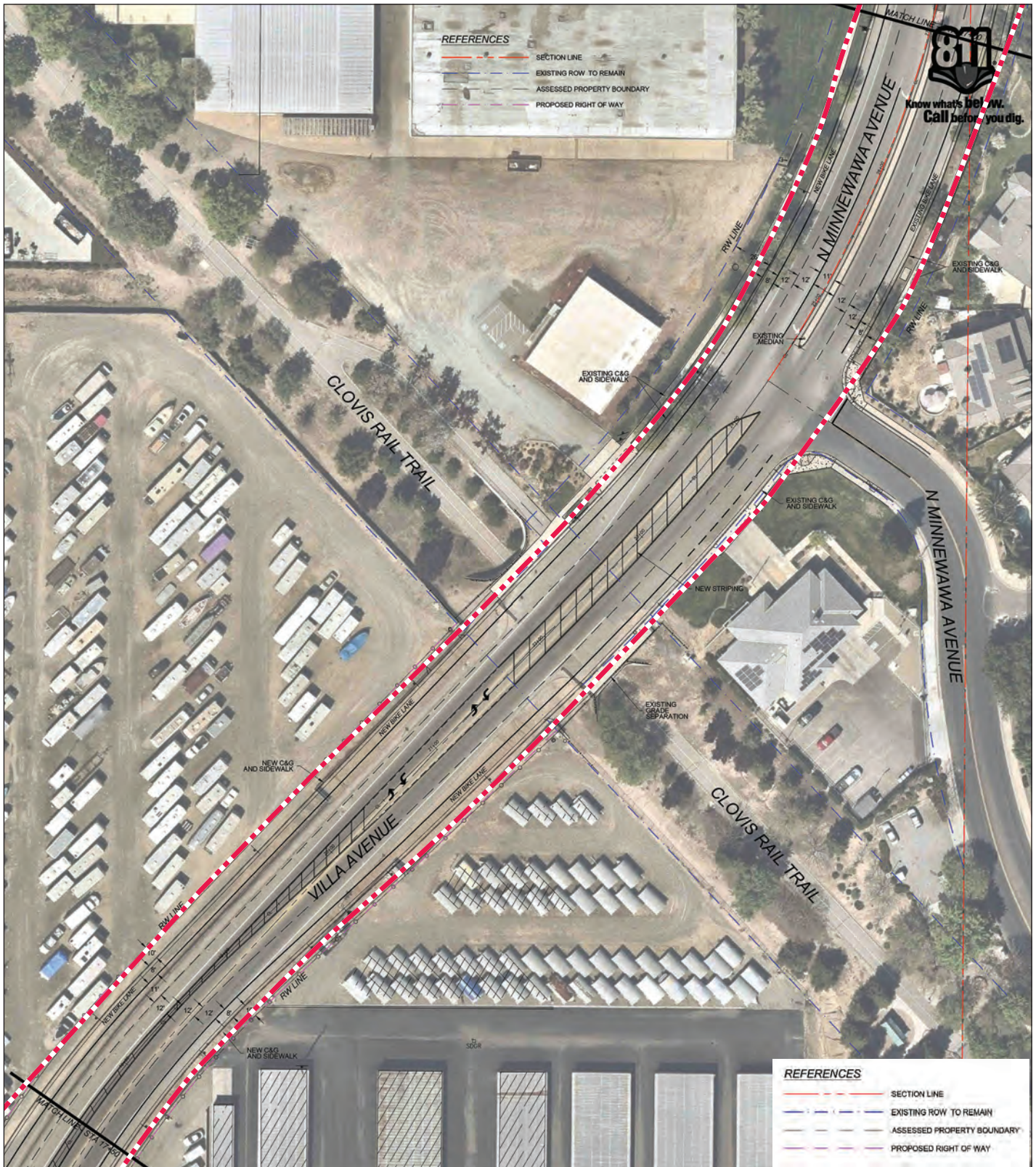


NOT TO SCALE

 Project Boundary

SOURCE: CITY OF CLOVIS, CALIFORNIA, SEPTEMBER 2018.

Villa/Minnewawa Avenue Widening Project
Street Improvement Plans



LSA

FIGURE 3b



 Project Boundary

NOT TO SCALE

SOURCE: CITY OF CLOVIS, CALIFORNIA, SEPTEMBER 2018.

Villa/Minnewawa Avenue Widening Project
Street Improvement Plans

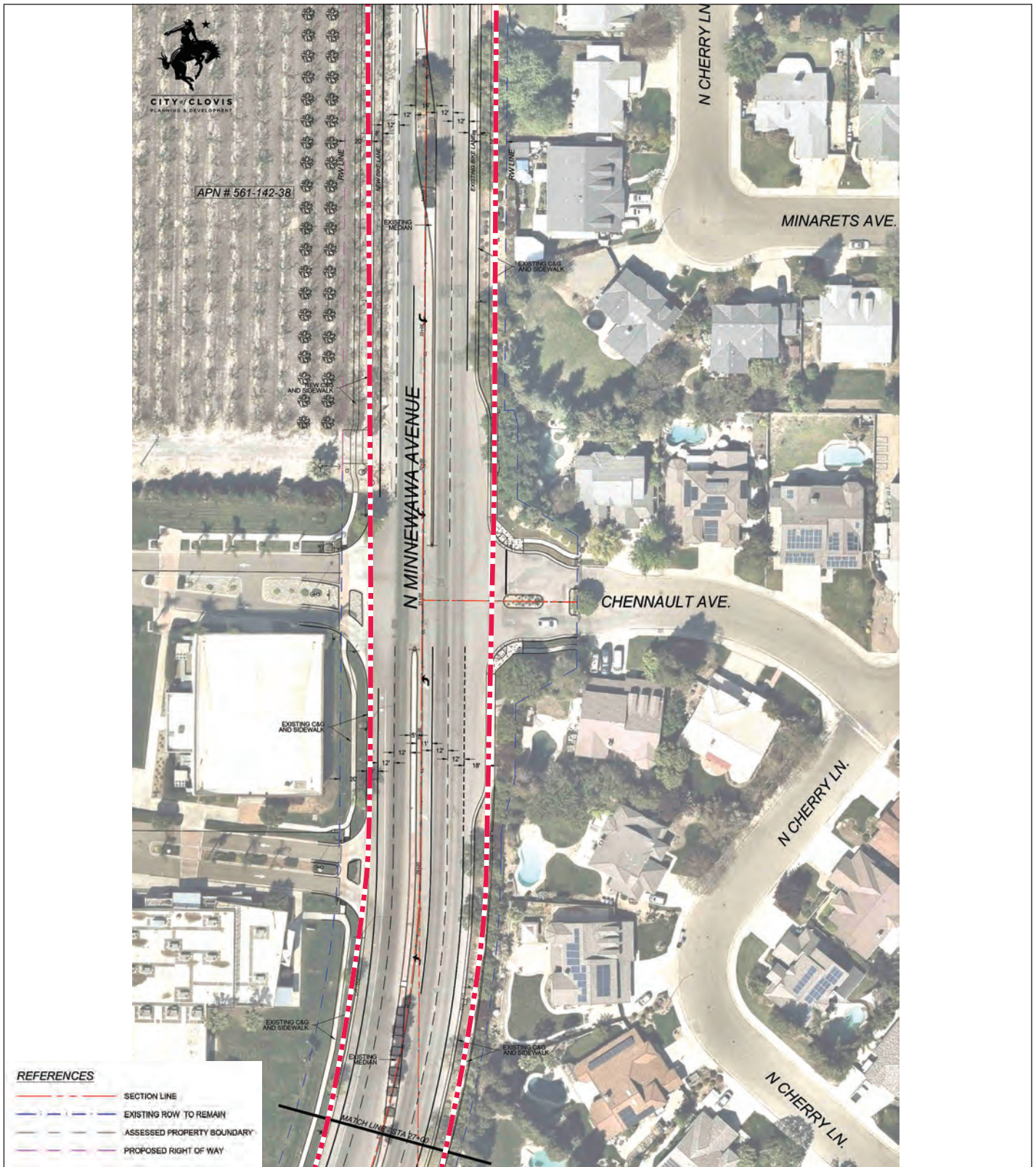


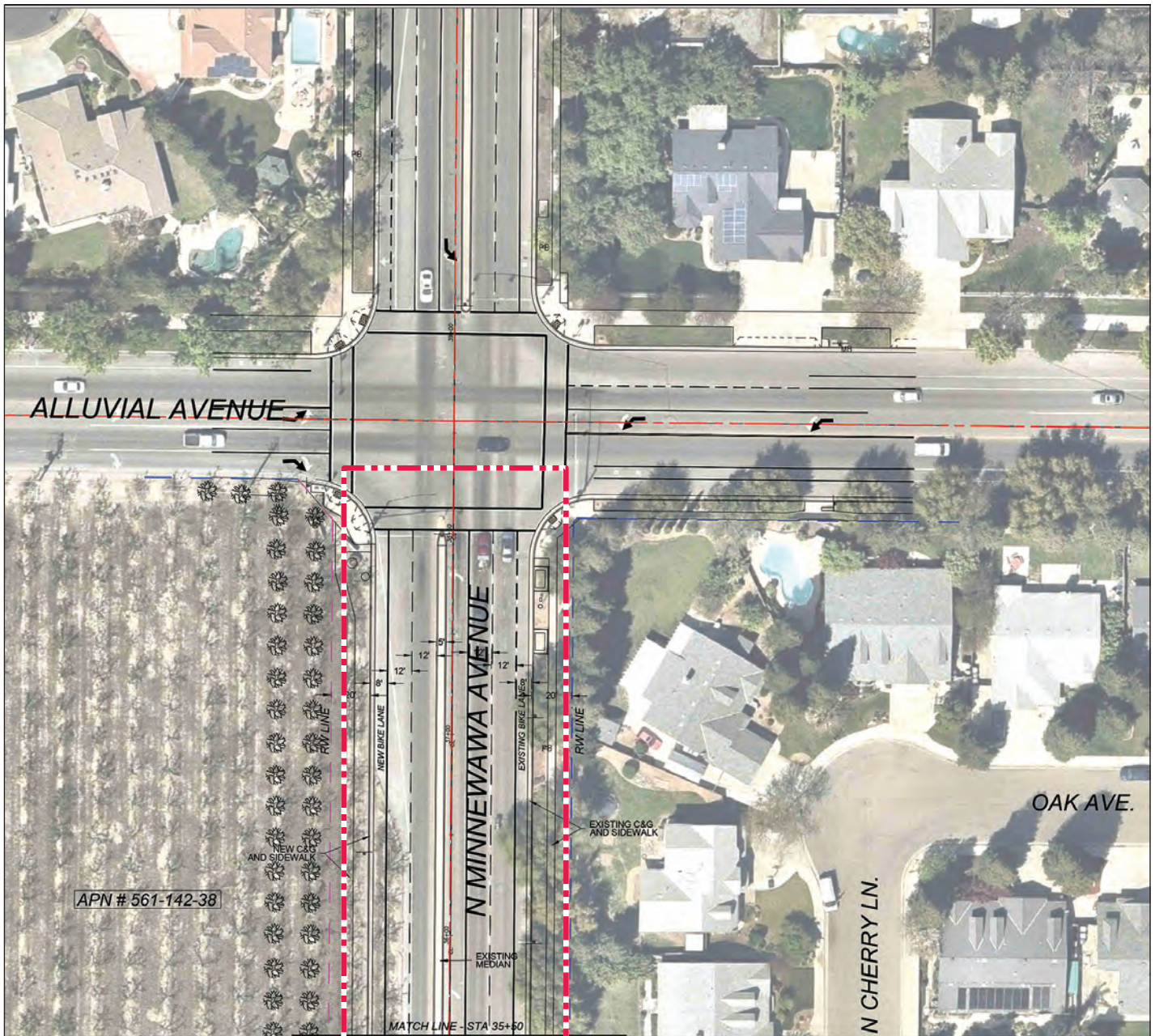
FIGURE 3c

LSA



Project Boundary

Villa/Minnewawa Avenue Widening Project
Street Improvement Plans



REFERENCES

- SECTION LINE
- EXISTING ROW TO REMAIN
- ASSESSED PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY

LSA

FIGURE 3d



--- Project Boundary

NOT TO SCALE

SOURCE: CITY OF CLOVIS, CALIFORNIA, SEPTEMBER 2018.

Villa/Minnewawa Avenue Widening Project
Street Improvement Plans

9. Surrounding Land Uses and Setting:

The project site is located in an area with a mix of land uses, including single-family residential, commercial, public, industrial, open space, and agricultural uses. The project segment is bound to the north by Alluvial Avenue, to the east by single-family residential, industrial, and open space uses and a fire station, to the south by Herndon Avenue, and to the west by industrial, commercial, open space, and agricultural uses. The Clovis Old Town Trail crosses underneath Villa Avenue. The Clovis Old Town Trail is designated a Class I Trail and is one of the City's main alternative transportation routes for pedestrians traversing through Clovis and connecting to the City of Fresno. Neither the trail nor the underground crossing would be affected by the project.

10. Other Public Agencies Whose Approval is Required (e.g., permits, financial approval, or participation agreements):

- San Joaquin Valley Air Pollution Control Board
- Central Valley Regional Water Quality Control Board
- Fresno Irrigation District
- Fresno Metropolitan Flood Control District

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resource Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

California Native American tribes traditionally and culturally affiliated with the project site and area were notified of the proposed project on August 22, 2019. In response, Robert Pennell, Tribal Cultural Resources Director, Table Mountain Rancheria identified interest in the project and requested copies of the cultural resource report. No tribes have requested consultation and the City has fulfilled its obligations pursuant to Assembly Bill 52 (AB 52).

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2.0 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 in Chapter 3.0.

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

2.1 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 ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Claudia Caza

Claudia Cázares, Management Analyst

April 29, 2020

Date

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3.0 CEQA ENVIRONMENTAL CHECKLIST

3.1 AESTHETICS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.1.1 Impact Analysis

a. *Would the project have a substantial effect on a scenic vista?*

Scenic vistas can generally be defined as natural landscapes that form views of unique flora, geologic, or other natural features that are generally free from urban intrusions. Typical scenic vistas include views of mountains and hills, large, uninterrupted open spaces, and waterbodies.

The proposed project includes an approximately 0.5-mile segment of Villa/Minnewawa Avenue from Herndon Avenue to Alluvial Avenue. The project site is located in an area with a mix of land uses, including single-family residential, commercial, public, industrial, open space, and agricultural uses. Although construction and operation of the proposed project would result in a change in the visual environment, this change would be minimal because the proposed improvements would connect with the existing circulation system and would be similar to existing conditions. In addition, the roadway improvements would be at-grade and are not expected to impair surrounding views. Therefore, the proposed project would have no impact to scenic vistas, and no mitigation is required.

b. *Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

No officially designated State scenic highways are located in the City of Clovis. The nearest eligible State scenic highway to the City is State Route 168, which is located in Fresno County northeast of the City of Clovis. The project site would not be visible from this scenic roadway. Therefore,

implementation of the proposed project would not affect scenic resources within view of a State or local scenic highway, and there would be no impact.

- c. In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?*

The visual character immediately surrounding the project area is representative of a built-out urban area containing a mix of single-family residential, commercial, public, industrial, open space, and agricultural uses. Implementation of the proposed project would result in a minimal change in the existing visual environment because the proposed improvements would connect with the existing circulation system and would be similar to existing conditions. Although construction and operation of the proposed project would result in a change in the visual environment, this change would be minimal because the proposed improvements would connect with the existing circulation system and would be similar to existing conditions. The proposed materials and design of the proposed project improvements would be consistent with the existing visual environment. In addition, the proposed project is consistent with current zoning and applicable development standards, and with the General Plan Land Use designation and applicable General Plan policies. No impacts would occur and no mitigation is required.

- d. Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?*

Villa/Minnewawa Avenue currently includes street lighting; however, as part of the proposed project, 15 street lights would be installed where the road would be widened. These fixtures would be similar in type to other street lights throughout the City and would be typical of pole-mounted street lights used for roadways in the City, with lighting directed onto the roadway. The proposed project would not include any reflective components that would increase glare. Therefore, implementation of the proposed project would not include lighting or features that could contribute to a significant new source of glare. Therefore, the proposed project would not create substantial light or glare that would adversely affect day or nighttime views. This impact would be less than significant and no mitigation is required.

3.2 AGRICULTURE AND FORESTRY RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.2.1 Impact Analysis

- a. Would the project 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?*

The project area is classified as Urban and Built-Up Land, according to the Farmland Mapping and Monitoring Program of the State Department of Conservation.¹ The project area is not located on land that is designated as Prime Farmland or Farmland of State Importance. Therefore, implementation of the proposed project would not result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the Fresno County Important Farmland Map, to a non-agricultural use. Therefore, there would be no impact and no mitigation is required.

- b. Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?*

As shown in Figure 2, additional street right-of-way would be needed to accommodate the outside travel lanes and street sidewalks. The proposed project would require a 0.44-acre acquisition of right-of-way across APN 561-142-38, a 0.26-acre acquisition of right-of-way across APN 561-185-04, and a 0.22-acre acquisition of right-of-way across APN 561-186-03. APN 561-142-38 consists of agricultural uses; however, this site is designated industrial in the City's General Plan Land Use

¹ California Department of Conservation, 2016. *Fresno County Important Farmland 2014*. Available online at <ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2016/> (accessed November 2019).

Element.² In addition, no portion of the project site is subject to a Williamson Act contract, and, therefore, implementation of the proposed project would not conflict with existing zoning for agricultural use or a Williamson Act contract and no impact would occur.

- c. Would the project 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))?*

The project site is not zoned for, nor would it require the rezoning of, any existing parcels or land use designations, including forest land or timberland uses. In addition, there is no forest land or timberland subject to the Public Resources Code within the vicinity of the project site. Therefore, the proposed project would have no impact to forest land or timberland and no mitigation would be required.

- d. Would the project result in the loss of forest land or conversion of forestland to non-forest use?*

See Response 3.2.1(c). The proposed project would not convert forest land to non-forest use and would not result in the loss or conversion of forest land to a non-forest use and no impact would occur.

- e. Would the project 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?*

As discussed above, the proposed project would require a 0.44-acre acquisition of right-of-way across APN 561-142-38, which consists of agricultural uses. However, this site is designated industrial.³ In addition, no portion of the project site is subject to a Williamson Act contract, and, therefore, implementation of the proposed project would not conflict with existing zoning for agricultural use or a Williamson Act contract. Furthermore, the proposed project would not convert forest land to non-forest use and would not result in the loss or conversion of forest land to a non-forest use and no mitigation would be required. Therefore, this impact would be less than significant.

² Clovis, City of, 2014a. *General Plan City of Clovis*. August.

³ Ibid.

3.3 AIR QUALITY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.3.1 Impact Analysis

a. Would the project conflict with or obstruct implementation of the applicable air quality plan?

The City of Clovis is part of the San Joaquin Valley Air Basin (SJVAB), which is within the jurisdiction of the San Joaquin Valley Air Pollution Control District (SJVAPCD). The SJVAPCD is responsible for air quality regulation within the eight-county San Joaquin Valley region.

Both the State of California (State) and the federal government have established health-based Ambient Air Quality Standards (AAQS) for six criteria air pollutants: carbon monoxide (CO), ozone (O₃), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), lead (Pb), and suspended particulate matter (PM_{2.5} and PM₁₀). The SJVAB is designated as non-attainment for O₃ and PM_{2.5} for federal standards and non-attainment for O₃, PM₁₀, and PM_{2.5} for State standards.

Air quality monitoring stations are located throughout the nation and maintained by the local air districts and State air quality regulating agencies. Data collected at permanent monitoring stations are used by the U.S. Environmental Protection Agency (USEPA) to identify regions as “attainment” or “nonattainment” depending on whether the regions meet the requirements stated in the applicable National Air Quality Standards (NAAQS). Nonattainment areas are imposed with additional restrictions as required by the USEPA. In addition, different classifications of attainment, such as marginal, moderate, serious, severe, and extreme, are used to classify each air basin in the State on a pollutant-by-pollutant basis. The classifications are used as a foundation to create air quality management strategies to improve air quality and comply with the NAAQS. The SJVAB attainment statuses for each of the criteria pollutants are listed in Table 3.A.

Table 3.A: SJVAB Air Quality Attainment Status

Pollutant	State	Federal
Ozone (1-hour)	Severe/Nonattainment	Standard Revoked
Ozone (8-hour)	Nonattainment	Extreme Nonattainment
PM ₁₀	Nonattainment	Attainment (Maintenance)
PM _{2.5}	Nonattainment	Nonattainment
Carbon Monoxide	Attainment	Attainment (Maintenance)
Nitrogen Dioxide	Attainment	Unclassified/Attainment
Lead	Attainment	Unclassified/Attainment
Sulfur Dioxide	Attainment	Unclassified
Sulfates	Attainment	No Federal Regulation
Hydrogen Sulfide	Unclassified	No Federal Regulation

Source: San Joaquin Valley Air Pollution Control District (2016).

An air quality plan describes air pollution control strategies to be implemented by a city, county, or region classified as a non-attainment area. The main purpose of the air quality plan is to bring the area into compliance with the requirements of the federal and State air quality standards. To bring the San Joaquin Valley into attainment, the SJVAPCD adopted the 2016 Plan for the 2008 8-Hour Ozone Standard in June 2016 to satisfy Clean Air Act requirements and ensure attainment of the 75 parts per billion (ppb) 8-hour ozone standard.⁴

To assure the SJVAB's continued attainment of the USEPA PM₁₀ standard, the SJVAPCD adopted the 2007 PM₁₀ Maintenance Plan in September 2007.⁵ The SJVAPCD adopted the 2018 Plan for the 1997, 2006, and 2012 PM_{2.5} Standards in November 2018 to address the USEPA 1997 annual PM_{2.5} standard of 15 µg/m³ and 24-hour PM_{2.5} standard of 65 µg/m³, the 2006 24-hour PM_{2.5} standard of 35 µg/m³, and the 2012 annual PM_{2.5} standard of 12 µg/m³.⁶

The California Environmental Quality Act (CEQA) requires that certain proposed projects be analyzed for consistency with the applicable air quality plan. For a project to be consistent with SJVAPCD air quality plans, the pollutants emitted from a project should not exceed the SJVAPCD emission thresholds or cause a significant impact on air quality. In addition, emission reductions achieved through implementation of offset requirements are a major component of the SJVAPCD air quality plans.

As discussed below, implementation of the proposed project would not result in the generation of criteria air pollutants that would exceed SJVAPCD thresholds of significance. Therefore, the

⁴ San Joaquin Valley Air Pollution Control District, 2016. *2016 Plan for the 2008 8-Hour Ozone Standard*. June 16. Website: www.valleyair.org/Air_Quality_Plans/Ozone-Plan-2016.htm (accessed November 2019).

⁵ San Joaquin Valley Air Pollution Control District, 2007. *2007 PM₁₀ Maintenance Plan and Request for Redesignation*. Available online at: www.valleyair.org/Air_Quality_Plans/docs/Maintenance%20Plan10-25-07.pdf (accessed November 2019).

⁶ San Joaquin Valley Air Pollution Control District, 2018. *2018 Plan for the 1997, 2006, and 2012 PM_{2.5} Standards*. November 15. Available online at: valleyair.org/pmplans/documents/2018/pm-plan-adopted/2018-Plan-for-the-1997-2006-and-2012-PM2.5-Standards.pdf (accessed November 2019).

proposed project would not conflict with or obstruct implementation of SJVAPCD air quality plans and impacts would be less than significant.

b. Would the project 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?

The SJVAB is designated as non-attainment for O₃ and PM_{2.5} for federal standards and non-attainment for O₃, PM₁₀, and PM_{2.5} for State standards. The SJVAPCD's nonattainment status is attributed to the region's development history. Past, present, and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant.

In developing thresholds of significance for air pollutants, the SJVAPCD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. The following analysis assesses the potential project-level construction- and operation-related air quality impacts.

Short-Term Construction Emissions. During construction, short-term degradation of air quality may occur due to the release of particulate matter emissions (i.e., fugitive dust) generated by grading, hauling, and other activities. Emissions from construction equipment are also anticipated and would include CO, nitrogen oxides (NO_x), reactive organic gases (ROG), directly-emitted particulate matter (PM_{2.5} and PM₁₀), and toxic air contaminants (TACs) such as diesel exhaust particulate matter.

Site preparation and project construction would involve grading, paving, and other activities. Construction-related effects on air quality from the proposed project would be greatest during the site preparation phase due to the disturbance of soils. If not properly controlled, these activities would temporarily generate particulate emissions. Sources of fugitive dust would include disturbed soils at the construction site. Unless properly controlled, vehicles leaving the site would deposit dirt and mud on local streets, which could be an additional source of airborne dust after it dries. PM₁₀ emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM₁₀ emissions would depend on soil moisture, silt content of soil, wind speed, and the amount of operating equipment. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site.

Water or other soil stabilizers can be used to control dust, resulting in emission reductions of 50 percent or more. SJVAPCD Regulation VIII (Fugitive PM₁₀ Prohibitions) is designed to reduce PM₁₀ emissions generated by human activity. The SJVAPCD has established Regulation VIII measures for

reducing fugitive dust emissions (PM₁₀). With the implementation of Regulation VIII measures, fugitive dust emissions from construction activities would not result in adverse air quality impacts.

In addition to dust-related PM₁₀ emissions, heavy trucks and construction equipment powered by gasoline and diesel engines would generate CO, SO₂, NO_x, ROG and some soot particulate (PM_{2.5} and PM₁₀) in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase slightly while those vehicles are delayed. These emissions would be temporary and limited to the immediate area surrounding the construction site.

Construction of the project is anticipated to begin in 2021 and is expected to occur for approximately 50 to 60 working days. Villa/Minnewawa Avenue would remain open during the construction period with lanes shifted to one side of the roadway while the other side is under construction. Construction of the proposed project would include earthwork, grading, compaction, relocating existing utilities and modifications of existing drainage facilities, installation of a new drainage inlet, relocation of a Fresno Irrigation District pipeline, relocation of a Comcast vault, placing aggregate base, asphalt concrete paving, street illumination, application of new traffic striping and markings, and landscaping and irrigation of the median island. In addition, construction of the proposed project would require retaining walls adjacent to the Clovis rail trail on both sides of the roadway. The project would require the import of approximately 1,200 cubic yards of soil. Construction emissions were estimated for the project using the (RoadMod) as recommended by the SJVAPCD for roadway projects. Construction-related emissions are presented in Table 3.B. Detailed calculations are provided in Appendix A.

Table 3.B: Project Construction Emissions in Tons Per Year

Project Construction	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Construction Emissions	0.2	2.0	1.6	0.0	2.1	0.5
SJVAPCD Thresholds	10.0	10.0	100.0	27.0	15.0	15.0
Exceed Threshold?	No	No	No	No	No	No

Source: LSA (December 2019).

As shown in Table 3.B, construction emissions associated with the project would not exceed the SJVAPCD's thresholds for ROG, NO_x, CO, SO_x, PM₁₀, and PM_{2.5} emissions. In addition to the construction period thresholds of significance, the SJVAPCD has implemented Regulation VIII measures for dust control during construction. These control measures are intended to reduce the amount of PM₁₀ emissions during the construction period. Implementation of Mitigation Measure AIR-1 would ensure that the proposed project complies with Regulation VIII and further reduces the short-term construction period air quality impacts.

Mitigation Measure AIR-1

Consistent with SJVAPCD Regulation VIII (Fugitive PM₁₀ Prohibitions), the following controls are required to be included as specifications for the proposed project and implemented at the construction site:

- All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, covered with a tarp or other suitable cover or vegetative ground cover.
- All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant.
- All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking.
- When materials are transported off-site, all material shall be covered, or effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained.
- All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. Use of blower devices is expressly forbidden.
- Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emission utilizing sufficient water or chemical stabilizer/suppressant.

As shown in Table 3.B, construction emissions associated with the project would be less than significant with implementation of Mitigation Measure AIR-1. Therefore, construction of the proposed project would not result in a cumulatively considerable net increase of PM₁₀ or any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standards and impacts would be less than significant with mitigation incorporated.

Long-Term (Operational) Emissions. Long-term air emission impacts are associated with stationary sources and mobile sources. Stationary source emissions result from the consumption of natural gas and electricity. Mobile source emissions result from vehicle trips and result in air pollutant emissions affecting the entire air basin. The proposed project would widen and rehabilitate an approximately 0.5-mile segment of Villa/Minnewawa Avenue from Herndon Avenue to Alluvial Avenue to provide two travel lanes consistently in each direction along the segment. The project would not generate additional vehicle trips through the project area and, therefore, would not increase mobile source

emissions. The proposed project includes pedestrian and bicycle safety improvements to promote the use of alternative modes of transportation, which potential to reduce vehicle trips and vehicle miles traveled and would increase the use of alternate means of transportation. The project would result in low levels of off-site emissions due to energy generation associated with lighting along the project segment. However, these emissions would be minimal and would not exceed the pollutant thresholds established by the SJVAPCD. Therefore, operation of the proposed project would not result in a cumulatively considerable net increase of PM₁₀ or any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standards and impacts would be less than significant.

c. Would the project expose sensitive receptors to substantial pollutant concentrations?

Sensitive receptors are defined as people that have an increased sensitivity to air pollution or environmental contaminants. Sensitive receptor locations include schools, parks and playgrounds, day care centers, nursing homes, hospitals, and residential dwelling units. The closest sensitive receptors include single-family residential uses located adjacent to the eastern boundary of the site.

Construction activities associated with the proposed project may expose surrounding sensitive receptors to airborne particulates, as well as a small quantity of construction equipment pollutants (i.e., usually diesel-fueled vehicles and equipment). However, construction contractors would be required to implement measures to reduce or eliminate emissions by following the Regulation VIII, Fugitive PM₁₀ Prohibitions, as required by Mitigation Measure AIR-1 above. Project construction emissions would be below the SJVAPCD's significance thresholds. In addition, once the proposed project is constructed, the project would not be a significant source of long-term operational emissions. Therefore, the proposed project would not expose sensitive receptors to substantial pollutant concentrations, and potential impacts would be considered less than significant with mitigation incorporated.

d. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

During construction, the various diesel powered vehicles and equipment in use on-site would create localized odors. These odors would be temporary and are not likely to be noticeable for extended periods of time beyond the project site. The potential for diesel odor impacts is therefore considered less than significant. In addition, once the project is operational, it would not be a source of odors. Therefore, the proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people, and potential impacts would be considered less than significant.

3.4 BIOLOGICAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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 Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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 Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.4.1 Impact Analysis

The following discussion is based on the findings of the Section 7 No Effect Memorandum⁷ prepared for the proposed project.

- a. *Would the project 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 Game or U.S. Fish and Wildlife Service?*

Habitat within the project area includes disturbed/developed habitat, landscape habitat, and agricultural habitat as the project is located along and within the existing paved roadway. Project location is adjacent to a peach orchard, single-family residential, commercial, public, industrial, and open space uses. Each of the habitat types, and their commonly associated wildlife species, found in the biological study area, are described below.

⁷ California Department of Transportation, 2019a. *Section 7 No Effect Memorandum*. August 26.

Disturbed/Developed Habitat. Disturbed areas are lands that have been altered by human actions such that the natural communities no longer exist. Disturbed areas generally consist of ruderal species or are unvegetated. Developed areas consist of all artificial structures within the project area including the paved roadway and shoulders.

Landscape Habitat. In the biological study area, landscape habitat is associated with ornamental trees and grass, with are routinely maintained by weeding and herbicide application. Landscape habitat occurs along the roadway sidewalk and within the median.

Agricultural Habitat. In the biological study area, agricultural land consists of a peach orchard on the west side of Villa/Minnewawa Avenue. Migratory birds may nest in the peach trees if left undisturbed during the nesting season.

Study Methods. The California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) was queried using the Clovis 7.5-minute United States Geological Survey (USGS) quadrangle map, and the United States Fish and Wildlife Service (USFWS) official species list was acquired using the USFWS's Information for Planning and Consultation (IPaC) database.

Findings. As discussed above, the project area and vicinity consists of disturbed/developed habitat, landscape habitat, and agricultural habitat. The existing roadway system, development, and agricultural lands within the project area have altered the natural landscape by introducing non-native plant species and removing potentially suitable habitat for candidate, sensitive, or special-status plant or animal species within the project area. The vegetation found along the existing paved roadway consists of non-native ornamental and agricultural species that provide little or no biological importance or value.

Therefore, due to the nature of the project, the lack of suitable habitat within the project limits, and the high level of disturbance within and adjacent to the project area, the project site would only support common species that are tolerant of human disturbance. In addition, no candidate, sensitive, or special-status species are known or expected to inhabit the project area.

However, the proposed project would require a 0.44-acre acquisition of right-of-way across APN 561-142-38, which consists of agricultural uses and would result in the removal of 62 peach trees. Even though the proposed project would be constructed within an already disturbed corridor, removal of the peach trees has the potential to disrupt nesting of birds protected under the Migratory Bird Treaty Act (MBTA). These species may nest in the peach trees, as well as in grass and landscaping and on suitable structures, including buildings and poles on and adjacent to the project area. Mitigation Measures BIO-1 and BIO-2 would reduce these potential impacts to a less-than-significant level.

Mitigation Measure BIO-1

If feasible, initiation of construction activities should occur outside of nesting season, which is typically defined as February 1 through September 30. During nesting season (February 1-September 30) pre-activity surveys for active bird nests shall be conducted no more than 10 days prior to the commencement of disturbance.

Mitigation Measure BIO-2

If nesting birds are identified, a qualified avian biologist should establish an avoidance buffer that is maintained through the end of nesting season or until the nest is deemed fledged or inactive by a qualified avian biologist.

- b. Would the project 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 Game or U.S. Fish and Wildlife Service?*

No riparian habitat or other sensitive natural communities are present at the project site. Therefore, implementation of the proposed project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community. As a result, no impact would occur.

- c. Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

The project site does not contain federally protected wetlands, as defined by Section 404 of the Clean Water Act. The project site contains no evidence of wetlands as the project limits are located along and within the existing paved roadway. The project site is located in an area with a mix of land uses, including single-family residential, commercial, public, industrial, open space, and agricultural uses. The project would include the relocation of a Fresno Irrigation District pipeline; however the proposed pipe/culvert relocation would not be considered federally protected wetlands, as defined by Section 404 of the Clean Water Act. Therefore, implementation of the proposed project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community. As a result, no impact would occur.

- d. Would the project 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?*

Wildlife movement corridors are linear habitats that function to connect two or more areas of significant wildlife habitat. These corridors may function on a local level as links between small habitat patches (e.g., streams in urban settings) or may provide critical connections between regionally significant habitats (e.g., deer movement corridors). Wildlife corridors typically include vegetation and topography that facilitate the movements of wild animals from one area of suitable habitat to another, in order to fulfill foraging, breeding, and territorial needs. These corridors often provide cover and protection from predators that may be lacking in surrounding habitats. Wildlife corridors generally include riparian zones and similar linear expanses of contiguous habitat.

As discussed above, removal of the peach trees has the potential to disrupt nesting of birds protected under the MBTA. These species may nest in the peach trees, as well as in grass and landscaping and on suitable structures, including buildings and poles on and adjacent to the project area. Mitigation Measures BIO-1 and BIO-2 would reduce these potential impacts to a less-than-significant level.

e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Chapter 9.30, Tree Protection Standards, of the City's Municipal Code establishes regulations and standards to protect and manage trees on private property which would also apply to development that would occur with the proposed project, to ensure that development is compatible with and enhances the City's quality and character. Chapter 9.30 also identifies the requirements for replacement trees, which states that, when a permit has been issued, the minimum number and size of replacement trees shall be based on the necessity, number, size, and species of trees requested to be removed.

As discussed above, the proposed project would require the removal of 62 peach trees; however this analysis assumes the peach trees would not be considered protected trees. In addition, since the planned improvements would be subject to City regulations, any removal of protected trees would comply with City requirements and would comply with any applicable tree removal permits. Therefore, any removed protected trees would be replaced if required by the City and no impact related to conflicts with local ordinances would occur.

f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The project site is not within the boundaries of a habitat conservation plan or natural community conservation plan. This condition precludes the possibility that implementation of the proposed project would conflict with the provisions of such a plan, and no impact would occur.

3.5 CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3.5.1 Impact Analysis

The discussion of cultural resources on, and in, the vicinity of the project area and the analyses of the potential effects of the proposed project on cultural resources provided in this section are based on the Historical Property Survey Report⁸ (HPSR) and its attached Archeological Survey Report [ASR] for the project.

The area of potential effects (APE) for this project totals 7.7 acres. The APE includes areas where physical impacts as well as indirect effects from the project would occur. The vertical APE within the areas of direct effects will extend to a maximum depth of 4 feet.

a. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

A cultural resources records search was completed for Natural Investigations Company on June 24, 2019, by the Southern San Joaquin Valley Information Center (SSJVIC) at California State University, Bakersfield (SSJVIC File No. 19-240). The SSJVIC acts as a branch of the California Historic Resources Information System (CHRIS), which was established by the Office of Historic Preservation (OHP) and maintains information concerning cultural resources and associated studies recorded in their respective counties. The SSJVIC maintains the records for Fresno County. The records search covered a 0.5-mile radius around the APE boundaries. The search at the SSJVIC included a review of site records, prior reports, and the following sources of information: National Register of Historic Places; California Register of Historical Resources; California Inventory of Historic Resources (1976); California State Historical Landmarks (1996 and updates); California Points of Historical Interest (1992 and updates); and OHP Directory of Properties in Historic Property Data File (HPDF) (2012).

The records search indicated nine cultural resources studies were previously conducted within a 0.5-mile radius of the APE, none of which included the current APE. The records search also listed nine previously recorded cultural resources within a 0.5-mile radius of the APE (eight built-environment resources and one archaeological), of which one (P-10-003930, CA-FRE-3109H) is located within the APE. No archaeological resources have been previously recorded within the APE.

⁸ Natural Investigations Company, Inc. *Historic Property Survey Report*. August.

P-10-003930 (CA-FRE-3109H), the Southern Pacific Railroad (SP), includes the abandoned railroad segment within the APE, which was initially part of the 26-mile San Joaquin Valley Railroad (SJVR) later acquired by SP. The SP/SJVR line has not been formally evaluated for listing in the National Register of Historic Places (NRHP). There are no components of the railroad within the APE. The trackbed within the APE and through the City has been converted into the Class I Clovis Old Town Trail, with a tunnel overcrossing at Villa Avenue within the APE.

An intensive-level pedestrian survey of the APE was completed on June 25, 2019. Within the APE outside the hardscape (paved streets, sidewalks, multi-use trail), ground visibility in dirt shoulders, orchard rows, and landscaped areas varied from poor to excellent. No previously unknown archaeological resources were identified within or immediately adjacent to the APE during the survey.

The archaeological sensitivity assessment suggests the APE has a very low sensitivity for buried archaeological deposits, materials, or features. As such, the likelihood of encountering intact archaeological resources is very low. However, if previously unidentified cultural materials are unearthed during construction, work should be halted in that portion of the project area until a qualified archaeologist can assess the significance of the find. As a precautionary measure to avoid any impacts to potential archaeological resources, Mitigation Measure CULT-1 requires a professional archaeologist to evaluate any cultural material encountered during construction. With implementation of Mitigation Measure CULT-1, the proposed project would not cause a substantial adverse change in the significance of an archaeological resource.

Mitigation Measure CULT-1: If archaeological cultural resources are encountered during construction, the Construction Contractor shall ensure that work within 50 meters (165 feet) of the area of the discovery is stopped and the City of Clovis Planning and Development Services Director or designee shall be notified. A professional archaeologist (i.e., an archaeologist registered with the Register of Professional Archaeologists) shall be contacted and shall visit the site to assess the nature and significance of the find. The archaeologist shall then develop proper mitigation measures for the discovery. Work may continue on other parts of the project while cultural resources mitigation takes place.

Implementation of Mitigation Measure CULT-1 would reduce potential impacts related to the substantial adverse change in the significance of historical or archaeological resources to a less-than-significant level.

b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Mitigation Measure CULT-1, as presented in Response 3.5.1(a) above, would ensure that potential impacts to archaeological resources would be reduced to a less-than-significant level. Therefore, the project would not cause a substantial adverse change in the significance of an archeological resource.

c. Would the project disturb any humans remains, including those interred outside of formal cemeteries?

Although no such remains have been identified within the project area, there is a possibility of encountering such remains, either in isolation or with prehistoric archaeological deposits. Such remains could be uncovered during project ground-disturbing activities. Based on the significance criteria identified above, the project would have a significant effect on the environment if it would disturb human remains, including those interred outside of formal cemeteries.

Implementation of Mitigation Measure CULT-2 would reduce potential impacts to human remains to a less-than-significant level.

Mitigation Measure CULT-2

Any human remains encountered during project-related ground-disturbing activities shall be treated in accordance with California Health and Safety Code Section 7050.5. The City of Clovis shall inform all contractor(s) performing excavation of the sensitivity of the project site for human remains and include the following directive in the appropriate contract documents:

In the event that human remains are encountered in the project area during construction activities, work within 50 feet of the discovery shall be redirected and the County Coroner notified immediately consistent with the requirements of CCR Section 15064.5(e). If the remains are determined to be Native American, the County Coroner shall notify the Native American Heritage Commission (NAHC), which shall determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. The MLD recommendations may include scientific removal and nondestructive analysis of human remains and items associated with Native American burials, preservation of Native American human remains and associated items in place, relinquishment of Native American human remains and associated items to the descendants for treatment, or any other culturally appropriate treatment.

3.6 ENERGY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.6.1 Impact Analysis

- a. *Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?*

This analysis evaluates energy consumption for both construction and operation of the proposed project, including diesel fuel use for construction off-road equipment.

Construction. Construction of the proposed project would require the use of energy to fuel grading vehicles, trucks, and other construction vehicles. All or most of this energy would be derived from non-renewable resources. However, construction activities are not anticipated to result in an inefficient use of energy as gasoline and diesel fuel would be supplied by construction contractors who would conserve the use of their supplies to minimize their costs on the project. Energy usage on the project site during construction would be temporary in nature and would be relatively small in comparison to the State's available energy sources. Therefore, construction energy impacts would be less than significant, and no mitigation would be required.

Operation. Typically, energy consumption is associated with fuel used for vehicle trips and electricity and natural gas use. However, the proposed project is a roadway project that would widen and rehabilitate an approximately 0.5-mile segment of Villa/Minnewawa Avenue from Herndon Avenue to Alluvial Avenue to provide two travel lanes consistently in each direction along the segment. The project would not generate additional vehicle trips through the project area; and, therefore, would not increase fuel usage. The proposed project includes pedestrian and bicycle safety improvements to promote the use of alternative modes of transportation, which allow for a decreased dependence on nonrenewable energy resources and a reduction in energy use. Operation of the proposed project would not require the consumption of natural gas. Energy use consumed by the proposed project would only be limited to electricity consumption associated with additional street lighting along the project segment, which would be minimal. Electricity use would be provided through existing connections in the project vicinity. Therefore, implementation of the proposed project would not result in a long-term demand for electricity and natural gas nor would the project require new service connections or construction of new off-site service lines or substations to serve the project. The nature of proposed improvements would not require substantial amounts of energy for either construction or maintenance purposes. Therefore, the

proposed project would not use non-renewable resources in a wasteful or inefficient manner. Therefore, operational energy impacts would be less than significant.

b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

In 2002, the Legislature passed Senate Bill 1389, which required the California Energy Commission (CEC) to develop an integrated energy plan every two years for electricity, natural gas, and transportation fuels, for the California Energy Policy Report. The plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators in implementing incentive programs for zero emission vehicles and their infrastructure needs, and encouragement of urban designs that reduce vehicle miles traveled (VMT) and accommodate pedestrian and bicycle access.

The CEC is in the process of adopting the 2019 Integrated Energy Policy Report.⁹ The 2019 Integrated Energy Policy Report provides the results of the CEC's assessments of a variety of energy issues facing California. Many of these issues will require action if the State is to meet its climate, energy, air quality, and other environmental goals while maintaining energy reliability and controlling costs. The 2019 Integrated Energy Policy Report covers a broad range of topics, including implementation of Senate Bill 350, integrated resource planning, distributed energy resources, transportation electrification, solutions to increase resiliency in the electricity sector, energy efficiency, transportation electrification, barriers faced by disadvantaged communities, demand response, transmission and landscape-scale planning, the California Energy Demand Preliminary Forecast, the preliminary transportation energy demand forecast, renewable gas (in response to Senate Bill 1383), updates on electricity reliability, natural gas outlook, and climate adaptation and resiliency.

As indicated above, energy usage in the project area during construction would be relatively small in comparison to the State's available energy sources and energy impacts would be negligible at the regional level. Because California's energy conservation planning actions are conducted at a regional level, and because the project's total impact to regional energy supplies would be minor, the proposed project would not conflict with California's energy conservation plans as described in the CEC's 2019 Integrated Energy Policy Report. Further, the proposed project includes pedestrian and bicycle safety improvements to promote the use of alternative modes of transportation, which allow for a decreased dependence on nonrenewable energy resources and a reduction in energy use. Thus, as demonstrated above, the project would avoid or reduce the inefficient, wasteful, and unnecessary consumption of energy and not result in any irreversible or irretrievable commitments of energy. Impacts would be less than significant.

⁹ California Energy Commission, 2019. *2019 Integrated Energy Policy Report*. California Energy Commission. Docket # 19-IEPR-01.

3.7 GEOLOGY AND SOILS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3.7.1 Impact Analysis

a. *Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:*

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

Surface fault rupture occurs when the ground surface is broken due to fault movement during an earthquake. Fault rupture is generally expected to occur along active fault traces. Areas susceptible to fault rupture are delineated by the California Geological Survey (CGS) Alquist-Priolo Earthquake Fault Zones and require specific geological investigations prior to certain kinds of development to reduce the threat to public health and safety and to minimize the loss of life and property posed by earthquake-induced ground failure.

The project site is not located within an Alquist-Priolo Earthquake Zone and is not located on any active faults or any inactive fault lines.¹⁰ In addition, the proposed project includes roadway improvements and would not include the construction or rehabilitation of structures for human occupancy. Therefore, potential for the exposure of people or structures to potential substantial adverse effects related to fault rupture as delineated on the Alquist-Priolo Earthquake Fault Zoning Map is less than significant. No mitigation is required.

ii. Strong seismic ground shaking?

Seismic ground shaking generally refers to all aspects of motion of the earth's surface resulting from an earthquake, and is normally the major cause of damage in seismic events. The extent of ground shaking is controlled by the magnitude and intensity of the earthquake, distance from the epicenter, and local geologic conditions. The magnitude of a seismic event is a measure of the energy released by an earthquake; it is assessed by seismographs that measure the amplitude of seismic waves. The intensity of an earthquake is a subjective measure of the perceptible effects of a seismic event at a given point. The Modified Mercalli Intensity (MMI) scale is the most commonly used scale to measure the subjective effects of earthquake intensity. It uses values ranging from I to XII.¹¹

The closest fault to the City of Clovis, the Clovis Fault, extends northwest-southeast from just north of the City, across the northeastern corner, to just east of the southeast City boundary. The Clovis Fault is not mapped as active, and is mapped as showing no recognized displacement in the Quaternary Period, that is, within the last 1.6 million years. No other faults are located within 50 miles of the City.¹²

Due to the distance of the project area to the known faults, hazards due to ground shaking would be minimal. Therefore, impacts related to strong seismic ground shaking would be less than significant.

iii. Seismic-related ground failure, including liquefaction?

Liquefaction is the transformation of saturated, loose, fine-grained sediment to a fluid-like state because of earthquake shaking or other rapid loading. Soils most susceptible to liquefaction are loose to medium dense, saturated sands, silty sands, sandy silts, non-plastic silts and gravels with poor drainage, or those capped by or containing seams of impermeable sediment. Areas of the San Joaquin Valley in Fresno County are not considered conducive to liquefaction due to soil types—either too coarse or too high in clay content.¹³

¹⁰ California Geological Survey, 2018. California Earthquake Hazards Zone Application. Website: www.conservation.ca.gov/cgs/geohazards/eq-zapp (accessed November 2019).

¹¹ United States Geological Survey, 2018. The Modified Mercalli Intensity Scale. Website: earthquake.usgs.gov/learn/topics/mercalli.php (accessed November 2019).

¹² Clovis, City of, 2014b. *General Plan and Development Code Update Draft Program Environmental Impact Report*. June.

¹³ Ibid.

The project area is relatively flat and includes roadway improvements, which would not exacerbate lateral spreading. Therefore, implementation of the proposed project would result in a less-than-significant impact related to seismic-related ground failure, including liquefaction and lateral spreading.

iv. Landslides?

A landslide generally occurs on relatively steep slopes and/or on slopes underlain by weak materials. The City of Clovis is not susceptible to earthquake-induced landslides due to very slight grades.

No habitable structures would be constructed at the project site nor would construction of the project's roadway improvements increase the potential for landslide hazards as no slopes are present in proximity to the project area. Therefore, implementation of the proposed project would not expose people or structures to potential substantial adverse effects from landslides, and no impact would occur.

b. Would the project result in substantial soil erosion or the loss of topsoil?

The project area is an existing roadway, and the majority of the area is paved. Because the project area is developed, existing topsoil has already been removed or otherwise disturbed. However, during construction, earthwork and grading activities would disturb and expose soils along the shoulder of Villa/Minnewawa Avenue. Construction activities would be subject to the California Building Code (CBC) and would be required to comply with the Construction General Permit (CGP) issued by the State Water Resources Control Board (SWRCB).

The National Pollutant Discharge Elimination System (NPDES) program regulates storm water and non-storm water discharges associated with construction or demolition activities including, but not limited to, clearing, grading, grubbing, or excavation, or any other activity that results in a land disturbance equal to or greater than 1 acre. The NPDES program requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP), which will prescribe best management practices (BMPs) that the discharger will use to protect stormwater runoff and provide erosion control. Implementation of a SWPPP and the BMPs would minimize the impacts related to soil erosion to less than significant levels. With compliance with the CGP, potential impacts of the proposed project that are related to soil erosion or loss of topsoil are considered less than significant.

c. Would the project 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?

The project area is an existing roadway, and the majority of the area is paved. As such, on-site geologic and soils issues, such as on-site soil stability including landslides, lateral spreading, subsidence, liquefaction, and collapse are not significant due to the nature of the project. Therefore, implementation of the proposed project would not result in impacts associated with unstable

geologic conditions. Therefore impacts related to geologic unit stability that could result in lateral spreading, subsidence, liquefaction, or collapse are less than significant.

d. Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Expansive soils generally have a substantial amount of clay particles, which can give up water (shrink) or absorb water (swell) in response to dry and moist conditions and can result in cracking and structural failure of pavement and foundations. The type and amount of silt and clay in a soil will determine the expansion potential. Soils comprised of sand and gravel are not expansive soils. The soils within the project area consist of sands and silty sands with lesser silts, minor clays, and gravel. Therefore, the project would not create substantial risks to life or property due to expansive soils. Impacts would be less than significant and no mitigation is required.

e. Would the project 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?

The proposed project is an improvement to the existing roadway and does not include the construction of, or connections to, a septic or alternative wastewater disposal system. Therefore, the proposed project would not result in impacts related to the soil's capability to adequately support the use of septic tanks or alternative wastewater disposal systems, and no impacts would occur.

f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Paleontological resources are the mineralized (fossilized) remains of prehistoric plant and animal life exclusive of human remains or artifacts. Fossil remains such as bones, teeth, shells, and leaves are found in geologic deposits (rock formations) where they were originally buried. Fossil remains are considered to be important as they provide indicators of the earth's chronology and history. These resources are afforded protection under CEQA and are considered to be limited and nonrenewable, and they provide invaluable scientific and educational data. Due to the sensitive nature of these paleontological resources, they are not mapped.

Implementation of the proposed project would require ground disturbing construction activities that may inadvertently encounter and damage paleontological resources. Should this occur, project construction may result in the destruction of a unique paleontological site, resulting in a potentially significant impact. Mitigation Measure GEO-1 would reduce this impact to less than significant.

Mitigation Measure GEO-1: The City shall inform its contractor(s) of the sensitivity of the project area for paleontological resources. Should paleontological resources be encountered during project subsurface construction activities, all ground-disturbing activities within 25 feet shall be redirected and a qualified paleontologist contacted to assess the situation, consult with agencies as appropriate, and make recommendations for the

treatment of the discovery. If found to be significant, and project activities cannot avoid the paleontological resources, adverse effects to paleontological resources shall be mitigated. Mitigation may include monitoring, recording the fossil locality, data recovery and analysis, a final report, and accessioning the fossil material and technical report to a paleontological repository. Public educational outreach may also be appropriate. Upon completion of the assessment, a report documenting methods, findings, and recommendations shall be prepared and submitted to the City of Clovis for review, and (if paleontological materials are recovered) a paleontological repository, such as the University of California Museum of Paleontology.

The City shall verify that the above directive has been included in the appropriate contract documents.

3.8 GREENHOUSE GAS EMISSIONS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.8.1 Impact Analysis

- a. *Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*

Greenhouse gas emissions (GHGs) are present in the atmosphere naturally, and are released by natural sources, or are formed from secondary reactions taking place in the atmosphere. However, over the last 200 years, human activities have caused substantial quantities of GHGs to be released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere, and enhancing the natural greenhouse effect, which is believed to be causing global climate change. The gases that are widely seen as the principal contributors to human-induced global climate change are:

- Carbon dioxide (CO₂)
- Methane (CH₄)
- Nitrous oxide (N₂O)
- Hydrofluorocarbons (HFCs)
- Perfluorocarbons (PFCs)
- Sulfur Hexafluoride (SF₆)

Certain gases, such as water vapor, are short-lived in the atmosphere. Others remain in the atmosphere for significant periods of time, contributing to climate change in the long term. Water vapor is excluded from the list of GHGs above because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

These gases vary considerably in terms of Global Warming Potential (GWP), which is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. GWP is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and the length of time that the gas remains in the atmosphere ("atmospheric lifetime").

The GWP of each gas is measured relative to CO₂, the most abundant GHG; the definition of GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to the ratio of heat trapped by one unit mass of CO₂ over a specified time period. GHG emissions are typically measured in terms of pounds or tons of “CO₂ equivalents” (CO₂e).

The SJVAPCD’s *Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA*¹⁴ suggests project GHG emissions would be considered less than significant if a project meets any of the following conditions: is exempt from CEQA requirements; complies with an approved GHG emission reduction plan or GHG mitigation program; or implements Best Performance Standards (BPS). Additionally, projects that demonstrate that GHG emissions would be reduced or mitigated by at least 29 percent compared to Business-as-Usual (BAU), including GHG emission reductions achieved since the 2002-2004 baseline period, would be considered less than significant.

Construction Greenhouse Gas Emissions. Construction activities, such as site preparation, site grading, on-site heavy-duty construction vehicles, equipment hauling materials to and from the site, and motor vehicles transporting the construction crew would produce combustion emissions from various sources. During construction of the proposed project, GHGs would be emitted through the operation of construction equipment and from worker and builder supply vendor vehicles, each of which typically uses fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as CO₂, CH₄, and N₂O. Furthermore, CH₄ is emitted during the fueling of heavy equipment. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change. According to the results of the RoadMod analysis, the project would generate 296.1 metric tons CO₂e construction emissions. Implementation of Mitigation Measure AIR-1 would further reduce construction GHG emissions by limiting construction idling emissions. Therefore, construction emissions would be considered less than significant.

Operational Greenhouse Gas Emissions. Long-term GHG emissions are typically generated from mobile and area sources as well as indirect emissions from sources associated with energy consumption. Mobile-source GHG emissions include project-generated vehicle trips to and from a project. Area-source emissions would be associated with activities such as landscaping and maintenance on the project site. Energy source emissions are typically generated at off-site utility providers as a result of increased electricity demand generated by a project. Waste source emissions generated by the proposed project include energy generated by land filling and other methods of disposal related to transporting and managing project generated waste. In addition, water source emissions associated with the proposed project are generated by water supply and conveyance, water treatment, water distribution, and wastewater treatment.

The proposed project would widen and rehabilitate an approximately 0.5-mile segment of Villa/Minnewawa Avenue from Herndon Avenue to Alluvial Avenue to provide two travel lanes consistently in each direction along the segment. The project would not generate additional vehicle

¹⁴ San Joaquin Valley Air Pollution Control District, 2009a. *Guidance for Valley Land-Use Agencies in Addressing GHG Emission Impacts for New Projects Under CEQA*. December 17. Available online at: www.valleyair.org/Programs/CCAP/12-17-09/3%20CCAP%20-%20FINAL%20LU%20Guidance%20-%20Dec%2017%202009.pdf (accessed June 2019).

trips through the project area and, therefore, would not increase mobile source emissions. The proposed project includes pedestrian and bicycle safety improvements to promote the use of alternative modes of transportation, which potential to reduce vehicle trips and vehicle miles traveled and would increase the use of alternate means of transportation. The project would result in low levels of off-site emissions due to energy generation associated with lighting along the project segment. However, these emissions would be minimal and would not exceed thresholds established by the SJVAPCD. Therefore, the proposed project would not generate any GHG emissions or result in any new vehicle trips that would contribute to an increase in GHG emissions. GHG emissions generated by the proposed project would be less than significant. No mitigation is required.

b. Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

In August 2008, the SJVAPCD adopted the Climate Change Action Plan (CCAP).¹⁵ The CCAP directed the SJVAPCD to develop guidance to assist lead agencies, project proponents, permit applicants, and interested parties in assessing and reducing the impacts of project specific GHG emissions on global climate change.

In December 2009, the SJVAPCD adopted the guidance: Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA¹⁶ and the policy: District Policy – Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency.¹⁷ The guidance and policy rely on the use of performance-based standards, otherwise known as Best Performance Standards (BPS),¹⁸ to assess significance of project-specific GHG emissions on global climate change during the environmental review process, as required by CEQA. Projects implementing BPS in accordance with SJVAPCD's guidance would be determined to have a less than significant individual and cumulative impact on GHG emissions and would not require project specific quantification of GHG emissions.

The BPS include standards related to Bicycle/Pedestrian/Transit Measures, Parking Measures, Site Design Measures, Mixed-use Measures, Building Component Measures, and Transportation Demand Management Measures and are not specifically applicable to this roadway improvement project. However, the project would support BPS as the project would facilitate bicycle and pedestrian travel. The BPS do not include measures related to construction.

¹⁵ San Joaquin Valley Air Pollution Control District, 2008. *Climate Change Action Plan*. November.

¹⁶ San Joaquin Valley Air Pollution Control District, 2009a. op. cit.

¹⁷ San Joaquin Valley Air Pollution Control District, 2009b. *Addressing GHG Emission Impacts for Stationary Source Projects under CEQA When Serving as the Lead Agency*. Available online at: www.valleyair.org/Programs/CCAP/12-17-09/2%20CCAP%20-%20FINAL%20District%20Policy%20CEQA%20GHG%20-%20Dec%2017%202009.pdf (accessed November 2019). December 17.

¹⁸ San Joaquin Valley Air Pollution Control District, 2009c. *Final Staff Report Appendix J: GHG Emission Reduction Measures – Development Projects*. Available online at: www.valleyair.org/Programs/CCAP/bps/Appendix%20J%20-%20Dec%2017%202009.pdf (accessed November 2019). December 17.

Projects not implementing BPS would require quantification of project specific GHG emissions. To be determined to have a less-than-significant individual and cumulative impact on GHG emissions, such projects must be determined to have reduced or mitigated GHG emissions by 29 percent, consistent with GHG reduction targets established in California Air Resources Board's (CARB) Assembly Bill 32 Scoping Plan. Construction emissions, as discussed above, would be minimal and would cease once the project is completed. Additionally, as discussed above, the proposed project would not generate long-term GHG emissions. Therefore, the proposed project would not generate substantial GHG emissions that would have a significant effect on the environment and would be consistent with the SJVAPCD's CCAP. Therefore, the proposed project would not conflict with plans, policies, or regulations adopted for the purpose of reducing GHG emissions. This impact would be less than significant.

3.9 HAZARDS AND HAZARDOUS MATERIALS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.9.1 Impact Analysis

A Hazardous Waste Initial Site Assessment (ISA)¹⁹ was prepared for the proposed project to determine whether construction of the proposed project could be affected by any recorded, visible or potential hazardous waste issues and to recommend any additional work that may be warranted. The ISA also identifies Recognized Environmental Conditions (RECs). An REC is defined as the presence or likely presence of any hazardous substances or petroleum hydrocarbons on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum hydrocarbons into structures or into the ground, groundwater, or surface water of the subject property. Several of the following responses are based on the results of the ISA.

¹⁹ Krazan & Associates, Inc. 2019. *Hazardous Waste Initial Site Assessment Villa/Minnewawa Avenue Improvements Project CIP-17-12 N. Villa & N. Minnewawa Avenues Herndon Avenue To Alluvial Avenue FTIP STPL-5108(161) Clovis, California 93611*. October 21.

a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

A significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials during the construction of the proposed project could result from the improper handling or use of hazardous substances or an inadvertent release resulting from an unforeseen event (e.g., fire, flood, or earthquake). The severity of any such exposure is dependent upon the type, amount, and characteristic of the hazardous material involved; the timing, location, and nature of the event; and the sensitivity of the individual or environment affected.

Construction of the proposed project would require the use of limited quantities of hazardous materials, such as fuels, oils, lubricants, and solvents. The small quantities of hazardous materials that would be transported, used, or disposed of would be well below reportable quantities. The improper use, storage handling, transport, or disposal of hazardous materials during construction could result in accidental release exposing construction workers, the public, and the environment, including soil and/or ground or surface water, to adverse effects. Construction activities would follow standard construction practices and applicable California Division of Occupational Safety and Health Administration, California Health and Safety Code, and other safety regulations to minimize the risk to the public. Compliance with federal, State, and local hazardous-materials laws and regulations would minimize the risk to the public and environment presented by these materials during construction of the proposed project.

The ISA indicated the location of contamination in soils and/or on paved roadways which are focused around historical and/or currently observed features where constituents of concern (COCs) may be present, including of the following RECs:

- Surface staining located within and/or immediately adjacent to the subject site;
- Potential presence of environmentally persistent pesticides/herbicides;
- Potential lead-based paint in roadway striping; and
- Potential aerially deposited lead from historical adjacent roadway emissions.

As such, these RECs would have the potential to create a significant hazard to the public or the environment. Mitigation Measure HAZ-1 includes procedures to manage anticipated and unknown hazardous materials.

Mitigation Measure HAZ-1

During project design and construction, the Design Engineer and the Construction Contractor shall adhere to the requirements listed below:

- The surface stained/discolored soils observed within the Derrel's Mini Storage facility portion of the subject site located on the east side of N. Villa Avenue noted in the central portion of this Derrel's Mini Storage facility adjacent to the west of the

storage buildings shall be characterized by sampling and analysis, removed, placed in drums, and properly disposed offsite. If a higher level of due diligence is desired relative to possible impacts associated with potential petroleum hydrocarbon releases in this area, a Limited Soil Assessment shall be conducted to assess the extent of subsurface impacts by COCs and/or to confirm the absence of impacts following removal.

- The soils within the northwestern portion of the subject site which is currently occupied by a portion of a fruit orchard which extends onto the western adjoining property shall be assessed for the presence or absence of significant concentrations of agricultural chemicals by sampling and laboratory analysis.
- If the removal of traffic striping (thermoplastic paint) observed on the subject site roadways and intersections associated with pavement replacement would occur within the scope of work of the proposed project, sampling, analysis, and disposal of these materials shall be conducted in accordance with applicable laws, regulations and standard of care.
- Excavation of soil generated from the proposed project along the subject site roadways which may have been impacted by aerially-deposited lead (ADL) which may represent a health threat to construction workers, future users of the proposed thoroughfare or for off-site disposal purposes and/or if relinquishment to the contractor is necessary, a preliminary site investigation (PSI) shall be conducted to determine potential ADL levels for potential preparation of a site-specific health and safety plan (HASP) and for proper handling and disposal requirements, if warranted.
- At the time of excavation, Underground Service Alert (USA) shall be contacted at least two working days prior to subsurface disturbance to ensure that service owners mark the locations of their underground utilities.
- Because any project where excavation is proposed includes the potential for the discovery of unknown subsurface features of concern or potential hazardous materials/waste contamination, in the event previously unreported or unknown subsurface features and/or hazardous contamination are encountered during project construction, the procedures outlined in the Caltrans Unknown Hazards Procedures guidance shall be followed.

With implementation of Mitigation Measure HAZ-1, impacts associated with the transport or disposal of existing known or unknown hazardous materials in the project area would be less than significant. Once operational, the proposed project would not routinely generate, use, or dispose of hazardous materials. Impacts would be less than significant with mitigation incorporated.

b. Would the project 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?

The potential for releasing hazardous materials into the environment would primarily involve vehicles on the roadway, but could involve future subsurface contamination from nearby locations and off-site contaminated groundwater. This potential exists today and would not be substantially greater with roadway widening. Vehicles and trucks may transport hazardous substances that could spill and impact the roadway, adjacent properties, or resources. However, transport of hazardous materials is subject to strict regulations established by local police and fire departments trained in emergency response procedures for safely responding to accidental spills of hazardous substances on public roads, which further reduces impacts. Therefore, project impacts associated with hazards from reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment would be similar to existing conditions and are considered less than significant, and no mitigation is required.

c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Clovis Community College: Herndon Campus is located approximately 0.14 mile west of the project area. As discussed in Section 3.3, Air Quality, the project would not substantially increase the concentrations of hazardous materials in the area. As discussed in Response 3.9.1(a), above, construction of the proposed project would require the use of limited quantities of fuels, oils, lubricants, and solvents. In addition, the RECs identified above would have the potential to generate hazardous emissions. Mitigation Measure HAZ-1 includes procedures to manage anticipated and unknown hazardous materials. The project would comply with local, State, and federal regulations with respect to the transport, use, and disposal of hazardous waste during construction activities and would comply with specific hazardous-materials procedures specified in Mitigation Measure HAZ-1. Once operational, the proposed project would not generate hazardous emissions. Impacts would be less than significant with mitigation incorporated.

d. Would the project 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?

According to the Department of Toxic Substances Control EnviroStor database,²⁰ the project site is not located on a federal Superfund site, State response site, voluntary-cleanup site, school cleanup site, evaluation site, school investigation site, military evaluation site, tiered permit site, or

²⁰ California Department of Toxic Substances Control. 2019. *EnviroStor*. Website: www.envirostor.dtsc.ca.gov/public (accessed December 2019).

corrective-action site. In addition, the project site is not included on the list of hazardous-materials sites compiled pursuant to Government Code Section 65962.5.²¹ As a result, no impacts related to hazardous-materials sites would occur. No mitigation is required.

- e. Would the project be located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?*

The Fresno Yosemite International Airport is the closest airport and is located approximately 3.8 miles south of the project site. The project site is not located within the Airport Land Use Plan. The proposed project's operation would be similar to the existing conditions. Because the project area is not located within an Airport Land Use Plan, the proposed project would not involve the introduction of residential or employment uses in the project area, the proposed project would not significantly change the roadway from existing conditions, and the proposed project would result in no impacts related to aviation-related safety hazards or excessive noise for construction workers or travelers using the roadway. No mitigation is required.

- f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

Villa/Minnewawa Avenue would remain open during the construction period with lanes shifted to one side of the roadway while the other side is under construction. Access to properties would be maintained; however, construction activities may temporarily restrict local vehicular traffic, which could affect emergency response or evacuation. The City of Clovis Fire Station 3 is located along the project segment of Villa/Minnewawa Avenue. Construction of the proposed project would require temporary closure of one travel lane at a time, which would temporarily delay local vehicular traffic and could temporarily affect emergency responders. However, there are no local adopted emergency responses or emergency evaluation plans applicable to the project area. A Traffic Management Plan (TMP) is needed to ensure that adequate emergency response and evacuation will be maintained. Mitigation Measure TR-1, provided in Section 3.17, Transportation, requires that a TMP be developed during final design to address impacts to local circulation during construction, including emergency access. The TMP would require that emergency service providers be notified prior to project construction regarding any temporary limitations to emergency access. Therefore, with implementation of Mitigation Measure TR-1, potential impacts to emergency response and evacuation plans during construction would be reduced to less than significant. In addition, once operational, the proposed project is expected to improve traffic level of service and service capacity during peak hours, reduce delays and traffic congestion, and increase safety and security. Therefore, potential impacts to emergency response and evacuation plans would be less than significant with mitigation incorporated.

²¹ California Environmental Protection Agency. 2019. *Government Code Section 65962.5(a)*. Website: <https://calepa.ca.gov/sitecleanup/corteselist/section-65962-5a/> (accessed August 2019).

g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

According to the California Department of Forestry and Fire Protection, the project site is not within a designated Very High Fire Hazard Severity Zone (Non-VHFHSZ).²² Construction of the proposed Project would be required to adhere to construction provisions in the City's Municipal Code. In addition, the proposed project is anticipated to improve traffic along Villa/Minnewawa Avenue once the improvements are operational. Therefore, since the project area is not located in or near a VHFHSZ, there would be no impact associated with the exposure of people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires, and no mitigation is required.

²² California Department of Forestry and Fire Protection. 2011. *Wildland Hazard and Building Codes*. November. Website: <https://osfm.fire.ca.gov/divisions/wildfire-prevention-planning-engineering/wildland-hazards-building-codes/> (accessed December 2019).

3.10 HYDROLOGY AND WATER QUALITY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. Result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv. Impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.10.1 Impact Analysis

This section is based on the Water Quality Assessment Report²³ for the proposed project.

a. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Pollutants of concern during construction include eroded sediments, trash, petroleum products, concrete waste (dry and wet), sanitary waste, and other construction-related chemicals. Each of these pollutants on its own or in combination with other pollutants can have a detrimental effect on water quality. During construction activities, excavated soil would be exposed, and there would be an increased potential for soil erosion and sedimentation compared to existing conditions. In addition, there is a potential for chemicals, petroleum products, other liquids (such as paints and solvents), and concrete-related waste to be spilled or leaked and transported via storm runoff into a stormwater drainage basin.

²³ California Department of Transportation, 2019b. *Water Quality Assessment Report. Villa/Minnewawa Avenue Improvements Project Federal Project No. 5208(161), City of Clovis, Fresno County, Caltrans, District 06.* December.

Projects that disturb more than 1 acre of soil are subject to the requirements of the NPDES CGP. However, projects that disturb between 1 and 5 acre are potentially eligible for a Small Construction Rainfall Erosivity Waiver, which would exempt the project from coverage under the CGP. To obtain a waiver, a project would need to demonstrate that there would be no adverse water quality impacts, because construction activities would only take place when there is a low erosivity potential (i.e., the rainfall erosivity value in the Revised Universal Soil Loss Equation [R factor] for a project is less than 5). However, a Water Pollution Control Program (WPCP) would be required to meet the Caltrans storm water program requirements promulgated by SWRCB Order No. 2012-0011-DWQ, NPDES No. CAS000003.

To prevent significant water quality impacts during ground-disturbance activities, the project would need to prepare and implement a SWPPP that includes construction BMPs that comply with Caltrans requirements to reduce pollutants of concern in the storm water runoff consistent with the CGP. These requirements are included in Mitigation Measures HYDRO-1 through HYDRO-5. Construction BMPs would include, but not be limited to, erosion control and sediment control BMPs designed to minimize erosion and retain sediment on site and good housekeeping BMPs to prevent spills, leaks, and discharge of construction debris and waste into receiving waters. In addition, to protect water quality during the Fresno Irrigation District pipeline relocation, BMPs will be identified in the site-specific SWPPP or WPCP. At a minimum, BMPs shall include temporary shut-off of the pipeline and a temporary diversion, as needed. If a temporary diversion is installed, it should be implemented in a manner such that connection points are free of leaks and the pipeline is resistant to breakage from construction activities and potential tampering. Additional Construction BMPs would be determined during preparation of the SWPPP.

When construction BMPs are properly designed, implemented, and maintained to address pollutants of concern, as required in Mitigation Measures HYDRO-1 through HYDRO-5, pollutants of concern would be retained on site so that they would not reach receiving waters; therefore, the project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality with mitigation. Impacts would be less than significant with mitigation incorporated.

Mitigation Measure HYDRO-1 Depending on final disturbance areas, a site-specific Storm Water Pollution Prevention Plan (SWPPP) or Water Pollution Control Program (WPCP) shall be prepared in accordance with Caltrans' Statewide Stormwater Management Program to address all construction-related activities, equipment, and materials that have the potential to impact water quality.

Mitigation Measure HYDRO-2 The project shall comply with the provisions of the Caltrans National Pollutant Discharge Elimination System (NPDES) Permit, Statewide Storm Water Permit, Waste Discharge Requirements (WDRs) for the State of California, Department of Transportation Order No. 2012-0011-DWQ, NPDES No. CAS000003 or any subsequent permit.

Mitigation Measure HYDRO-3 The project shall comply with the provisions of the Fresno-Clovis Urbanized Area Municipal Separate Storm Sewer Systems (MS4)

Phase I Permit, Central Valley Regional Water Quality Control Board (CVRWQCB) Order No. R5-2013-0080-01 NPDES No. CA0083500.

Mitigation Measure HYDRO-4 Caltrans-approved design pollution prevention best management practices (BMPs) will be implemented during construction to the maximum extent practicable consistent with the requirements of the Caltrans Permit and Project Planning and Design Guide.

Mitigation Measure HYDRO-5 To protect water quality during the Fresno Irrigation District pipeline relocation, BMPs will be identified in the site-specific SWPPP or WPCP. At a minimum, BMPs shall include temporary shut-off of the pipeline and a temporary diversion, as needed. If a temporary diversion is installed, it should be implemented in a manner such that connection points are free of leaks and the pipeline is resistant to breakage from construction activities and potential tampering.

With implementation of Mitigation Measures HYDRO-1 through HYDRO-5, construction of the proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. Therefore, impacts would be less than significant with mitigation incorporated.

During operation of the proposed project, expected pollutants of concern include suspended solids/sediment, nutrients, heavy metals, pathogens (bacteria/viruses), pesticides, oil and grease, toxic organic compounds, and trash and debris. The pollutants of concern for the project are metals and oil and grease. The proposed project would increase impervious surface area, which would increase the volume of runoff during a storm and more effectively transport pollutants to receiving waters. In addition, an increase in impervious surface area would increase the total amount of pollutants in the storm water runoff, which would increase the amount of pollutants discharged to downstream receiving waters. In order to avoid impacts to water quality during project operation, the proposed project would need to prepare and implement Caltrans-approved treatment control BMPs to be incorporated into project design to reduce the discharge of pollutants of concern to the maximum extent practicable. Treatment control BMPs are structural BMPs designed to treat and reduce pollutants in storm water runoff prior to release to receiving waters.

Mitigation Measure HYDRO-6 Caltrans-approved treatment BMPs will be implemented as post-construction measures to the maximum extent practicable consistent with the requirements of the Caltrans Permit and Project Planning and Design Guide.

With implementation of Mitigation Measure HYDRO-6, the project would provide long-term water quality benefits by preventing erosion and stabilizing areas along the project through the implementation of post-construction BMPs. As such, operation of the proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. Therefore, impacts would be less than significant with mitigation incorporated.

In addition, infiltration of storm water could have the potential to affect groundwater quality in areas of shallow groundwater. Pollutants in storm water are generally removed by soil through absorption as water infiltrates. Therefore, in areas of deep groundwater, there is more absorption potential and, as a result, less potential for pollutants to reach groundwater. Groundwater depth immediately east of the project near Red Bank Creek and Ashlan Avenue is less than 30 feet below grade.²⁴ It is not expected that any storm water that may infiltrate during construction or operation would affect groundwater quality because there is not a direct path for pollutants to reach groundwater. Therefore, project construction and operation would not violate any water quality standards or waste discharge requirements or substantially degrade groundwater quality. In addition, implementation of the proposed treatment BMPs would avoid any potential impacts to water quality before storm water would percolate into the groundwater basin. As such, when operational BMPs are implemented in accordance with Mitigation Measure HYDRO-6, the project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. Impacts would be less than significant with mitigation incorporated.

b. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

The proposed project would increase impervious surface areas on site, which can decrease infiltration. However, due to the large amount of impervious surface area in the vicinity of the project area, minimal infiltration would be expected to occur in the existing conditions. Additionally, the increase in impervious surface area is minimal compared to the size of the watershed and the amount of existing impervious surface area in the vicinity of the project area. Therefore, the increase in impervious area would not substantially interfere with groundwater recharge. In addition, construction and operation of the proposed project would not require groundwater extraction. Therefore, the proposed project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin, and impacts would be less than significant.

c. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i. Result in substantial erosion or siltation on- or off-site;

During construction activities, soil would be exposed and disturbed, drainage patterns would be temporarily altered during grading and other construction activities, and there would be an increased potential for soil erosion and siltation compared to existing conditions. Additionally, during a storm event, soil erosion and siltation could occur at an accelerated rate. As discussed above in Response 3.10.1(a), Mitigation Measures HYDRO-1 through HYDRO-5 require compliance with applicable permits and preparation of a SWPPP to identify construction BMPs to be implemented as part of the proposed project to reduce impacts to water quality during

²⁴ California Department of Transportation, 2019b. op. cit.

construction, including those impacts associated with soil erosion and siltation. Compliance with applicable permit requirements and implementation of the construction BMPs would ensure that construction impacts related to on- or off-site erosion or siltation would be reduced to less than significant with mitigation incorporated.

The proposed project would increase impervious surface area on the project, which can potentially increase storm water runoff generated from a project and increase erosion and sedimentation in receiving waters. However, as discussed previously, the proposed project would only slightly increase the impervious surface area on the project site compared to existing conditions, which would slightly increase the volume of storm water runoff generated from the project site. The proposed project would include the installation of a new drainage inlet and with implementation of Mitigation Measure HYDRO-6, the project would provide long-term water quality benefits by preventing erosion and stabilizing areas along the project through the implementation of post-construction BMPs. As such, operational impacts related to on-site or off-site erosion or siltation would be less than significant.

ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;

During construction activities, soil would be exposed and disturbed, drainage patterns would be temporarily altered during grading and other construction activities, and there would be an increased potential for flooding compared to existing conditions. Additionally, during a storm event, flooding could occur at an accelerated rate. As discussed above in Response 3.10.1(a), Mitigation Measures HYDRO-1 through HYDRO-5 require compliance with applicable permits and preparation of a SWPPP to identify construction BMPs to be implemented as part of the proposed project to manage and convey storm water during construction. Proper management of storm water during construction would reduce impacts associated with flooding. Therefore, impacts related to on- or off-site flooding would be less than significant with mitigation incorporated.

Once operational, the proposed project would increase impervious surface area on the site, and could potentially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite. However, as discussed previously, the proposed project would only slightly increase the impervious surface area on the project site compared to existing conditions, which would slightly increase the volume of storm water runoff. Additionally, the project would include the installation of a new drainage inlet. Therefore, the proposed project would not substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site. As such, operational impacts related to on-site or off-site flooding would be less than significant.

iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

As discussed above in Response 3.10.1(a), there is a potential for chemicals, petroleum products, other liquids (such as paints and solvents), and concrete-related waste to be spilled or leaked and transported via storm runoff into stormwater basins. Each of these pollutants on its

own or in combination with other pollutants can have a detrimental effect on water quality. Drainage patterns would be temporarily altered during grading and other construction activities, and construction-related pollutants could be spilled, leaked, or transported via storm runoff into adjacent drainages and stormwater basins. However, when construction BMPs are properly designed, implemented, and maintained to address pollutants of concern, as required in Mitigation Measures HYDRO-1 through HYDRO-5, pollutants of concern would be retained on site so that they would not reach stormwater basins. Therefore, construction of the proposed project would not create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff. Impacts would be less than significant with mitigation incorporated.

In addition, as discussed above in Response 3.10.1(a), expected pollutants of concern during operation of the proposed project include suspended solids/sediment, nutrients, heavy metals, pathogens (bacteria/viruses), pesticides, oil and grease, toxic organic compounds, and trash and debris. The pollutants of concern for the project are metals and oil and grease. The proposed project would increase impervious area, which would increase the volume of runoff during a storm and more effectively transport pollutants to receiving waters. In addition, an increase in impervious surface would increase the total amount of pollutants in the storm water runoff, which would increase the amount of pollutants discharged to downstream receiving waters.

The proposed project would include the installation of a new drainage inlet. With implementation of Mitigation Measure HYDRO-6, the project would provide long-term water quality benefits by preventing erosion and stabilizing areas along the project through the implementation of post-construction BMPs. With implementation of post-construction BMPs, no substantial additional sources of polluted runoff would be discharged to the storm drain system. As such, when post-construction BMPs are implemented in accordance with Mitigation Measure HYDRO-6, operation of the proposed project would not create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff. Impacts would be less than significant with mitigation incorporated.

iv. Impede or redirect flood flows?

Refer to Response 3.10.1(a)(ii) above. Implementation of the proposed project would not impede or redirect flood flows. This impact would be less than significant. No mitigation is required.

d. In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?

The project site is located within an urbanized area and no enclosed bodies of water are in close enough proximity that would create a potential risk for seiche or a tsunami at the project site. Although small quantities of commercially available hazardous materials could be used during project construction activities and on-going maintenance operations, these materials would not be used in sufficient quantities to pose a threat to human or environmental health. Therefore,

implementation of the proposed project would have a less-than-significant impact related to the release of pollutants due to project inundation.

e. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Implementation of the proposed project would result in a slight increase in impervious surfaces at the project area. As a result, stormwater would continue to percolate into the groundwater table to allow for natural recharge. In addition, operation of the proposed project is not expected to result in any substantial changes to on-site water quality, with the exception of the potential impacts associated with stormwater runoff. As such, the proposed project would not conflict with or obstruct implementation of the City's Urban Water Management Plan.²⁵ A less-than-significant impact would occur.

²⁵ Clovis, City of, 2016. *2015 Urban Water Management Plan*. July.

3.11 LAND USE AND PLANNING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.11.1 Impact Analysis

a. Would the project physically divide an established community?

The physical division of an established community typically refers to the construction of a feature, such as interstate highway, or the removal of a means of access, such as a local road, that would impair mobility within an existing community or between a community and outlying areas. For example, the construction of an interstate highway through an existing community may constrain travel from one side of the community to another; similarly, such construction may also impair travel to areas outside of the community. Development of the proposed project would not create a physical barrier to travel within the project area, as it would widen an existing roadway and improve accessibility and safety in the area for drivers, pedestrians, and bicyclists. As such, the proposed project would not physically divide an established community and no impacts would occur. No mitigation is required.

b. Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The City's General Plan Circulation Element²⁶ states the City's focus is to maintain and improve the road network to safely and efficiently move people and goods in cars and trucks. However, according to the Circulation Element, it is also important to reduce vehicle miles traveled through coordinated land use planning and facilitating non-automotive travel (i.e., transit, bikes, and walking). The proposed project would widen and rehabilitate Villa/Minnewawa to provide two travel lanes consistently in each direction along the segment. Implementation of the proposed project is expected to improve traffic level of service and service capacity during peak hours, reduce delays and traffic congestion, and increase safety and security. A Class II bicycle lane and pedestrian sidewalk provide for continuous bicycle and pedestrian facilities in this segment and would connect to existing improvements that serve to encourage non-motorized transportation. The widening of Villa/Minnewawa Avenue is consistent with the City's General Plan Circulation Element and it would address the current and projected traffic demand (20,500 ADT by 2035) and would serve to improve the conveyance of traffic.

²⁶ Clovis, City of, 2014a. op. cit.

Therefore, the proposed project is consistent with the goals and policies in the Circulation Element and does not conflict with any plans applicable to the project area. Therefore, the project is consistent with applicable land use plans, policies, and regulations adopted for the purpose of avoiding or mitigating an environmental effect, and no impacts would occur. No mitigation is required.

3.12 MINERAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.12.1 Impact Analysis

- a. *Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*

The Surface Mining and Reclamation Act (SMARA) regulates surface mining in California. SMARA was adopted in 1975 to protect the State's need for a continuing supply of mineral resources and to protect the public and environmental health. SMARA requires that all cities incorporate mapped mineral resource designations approved by the State Mining and Geology Board into their General Plans.

State and local governments classify mineral resources based on geologic factors. The State Geologist is required to classify the mineral resources throughout the State as one of the following:

- **MRZ-1:** Adequate information indicates that no significant mineral deposits are present or likely to be present.
- **MRZ-2:** Adequate information indicates that significant mineral deposits are present, or a likelihood of their presence, and development should be controlled.
- **MRZ-3:** The significance of mineral deposits cannot be determined from the available data.
- **MRZ-4:** There is insufficient data to assign any other MRZ designation.
- **SZ Areas:** Contains unique or rare occurrences of rocks, minerals, or fossils that are of outstanding scientific significance.
- **IRA Areas:** Areas identified by the County or State Division of Mines and Geology, where adequate production and information indicates that significant minerals are present.

The entire City of Clovis is mapped as MRZ-3 by the California Geological Survey, which means the significance of mineral deposits cannot be determined from available data.²⁷

The proposed project would widen and rehabilitate an approximately 0.5-mile segment of Villa/Minnewawa Avenue from Herndon Avenue to Alluvial Avenue. The project would result in disturbance to a relatively small area, and based on available data, a mineral resource loss associated with project implementation is not anticipated. Therefore, implementation of the proposed project would not result in the loss of known mineral resources or recovery sites. Therefore, no impact would occur.

b. Would the project 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?

Refer to Response 3.12.1(a). Implementation of the proposed project would not result in the loss of availability of a locally-important mineral resource recovery site. Therefore, no impact would occur.

²⁷ Clovis, City of, 2014a, op. cit.

3.13 NOISE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.13.1 Impact Analysis

This section is based on the Noise Study Report²⁸ (NSR) prepared for the project.

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

Noise is usually defined as unwanted sound. Noise consists of any sound that may produce physiological or psychological damage and/or interfere with communication, work, rest, recreation, or sleep. Several noise measurement scales exist that are used to describe noise in a particular location. A decibel (dB) is a unit of measurement that indicates the relative intensity of a sound. Sound levels in dB are calculated on a logarithmic basis. An increase of 10 dB represents a 10-fold increase in acoustic energy, while 20 dB is 100 times more intense and 30 dB is 1,000 times more intense. Each 10 dB increase in sound level is perceived as approximately a doubling of loudness; and similarly, each 10 dB decrease in sound level is perceived as half as loud. Sound intensity is normally measured through the A-weighted sound level (dBA). This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. The A-weighted sound level is the basis for 24-hour sound measurements that better represent human sensitivity to sound at night.

As noise spreads from a source, it loses energy so that the farther away the noise receiver is from the noise source, the lower the perceived noise level would be. Geometric spreading causes the sound level to attenuate or be reduced, resulting in a 6 dB reduction in the noise level for each doubling of distance from a single point source of noise to the noise sensitive receptor of concern.

There are many ways to rate noise for various time periods, but an appropriate rating of ambient noise affecting humans also accounts for the annoying effects of sound. Equivalent continuous

²⁸ WJV Acoustics, Inc., 2019. *Noise Study Report Villa/Minnewawa Avenues Improvements Project CIP 17-12 Clovis, California FTIP STPL-5208 (161)*. August.

sound level (L_{eq}) is the total sound energy of time varying noise over a sample period. However, the predominant rating scales for human communities in the State of California are the L_{eq} , the community noise equivalent level (CNEL), and the day-night average level (L_{dn}) based on dBA. CNEL is the time varying noise over a 24-hour period, with a 5 dBA weighting factor applied to the hourly L_{eq} for noises occurring from 7:00 p.m. to 10:00 p.m. (defined as relaxation hours) and 10 dBA weighting factor applied to noise occurring from 10:00 p.m. to 7:00 a.m. (defined as sleeping hours). L_{dn} is similar to the CNEL scale, but without the adjustment for events occurring during the evening relaxation hours. CNEL and L_{dn} are within one dBA of each other and are normally exchangeable. The noise adjustments are added to the noise events occurring during the more sensitive hours.

A project would have a significant noise effect if it would substantially increase the ambient noise levels for adjoining areas or conflict with adopted environmental plans and goals of applicable regulatory agencies, including, as appropriate, the City of Clovis.

The City of Clovis addresses noise in the Environmental Safety Element of the General Plan²⁹ and in the Municipal Code.³⁰ The Environmental Safety Element provides goals and policies that work to provide an environment in which minimized noise contributes to the public's health, safety, and welfare. Applicable Environmental Safety Element policies include the following:

- **Policy 3.2: Land use and traffic patterns.** Discourage land use and traffic patterns that would expose sensitive land uses or noise-sensitive areas to unacceptable noise levels.
- **Policy 3.4: Acoustical study.** Require an acoustical study for proposed projects that have the potential to exceed acceptable noise thresholds or are exposed to existing or future noise levels in excess of the thresholds in the City's noise ordinance.
- **Policy 3.5: Site and building design.** Minimize noise impacts by requiring appropriate site, circulation, equipment, and building design, and sound walls, landscaping, and other buffers.
- **Policy 3.6: Noise impacts.** Minimize or eliminate persistent, periodic, or impulsive noise impacts of business operations.
- **Policy 3.9: Caltrans facilities.** Coordinate with Caltrans to ensure the inclusion of noise mitigation measures in the design of new highway projects or improvements to existing facilities.
- **Policy 3.12: Truck traffic.** Plan and maintain truck routes that avoid noise-sensitive land uses and areas. Encourage business delivery areas to be located away from residential properties and to mitigate associated noise impacts.
- **Policy 3.14: Control sound at the source.** Prioritize using noise mitigation measures to control sound at the source before buffers, soundwalls, and other perimeter measures.

²⁹ Clovis, City of, 2014a. op. cit.

³⁰ Clovis, City of, 2019. *Clovis Municipal Code*. September 3.

The City also addresses noise in Municipal Code Chapter 5.27 Nuisances. Section 5.27.604 addresses construction activity noise and states that construction activities are only permitted between the hours of 7:00 a.m. and 7:00 p.m. Monday through Friday and between 9:00 a.m. and 5:00 p.m. on Saturday and Sunday. From June 1st through September 15th, permitted construction activity may commence after 6:00 a.m. Monday through Friday. Extended construction work hours must at all times be in strict compliance with the permit.

Certain land uses are considered more sensitive to noise than others. Examples of these sensitive land uses include residential areas, educational facilities, hospitals, childcare facilities, and senior housing. Noise-sensitive land uses located within the project area include single-family residences located adjacent to the roadway. Other non-noise-sensitive land uses located within the project area include commercial, public, industrial, open space, and agricultural uses.

Noise monitoring was conducted in the project area, which determined that ambient noise levels in the project area range from 56.0 dBA to 64.8 dBA L_{eq} . In addition, traffic noise levels were predicted using the Federal Highway Administration's (FHWA) Traffic Noise Model Version 2.5 (TNM 2.5).³¹ Key inputs to TNM 2.5 were the locations of roadways, traffic mix, vehicle speeds, shielding features (e.g., topography and buildings), noise barriers, ground type, and receptors. Results of the TNM 2.5 modeling predicted that noise levels in the project area range from 57.1 dBA to 63.1 dBA L_{eq} .

Construction. Project construction would result in short-term noise impacts on the nearby sensitive receptors. Maximum construction noise would be short-term, generally intermittent depending on the construction phase, and variable depending on receiver distance from the active construction zone. The duration of noise impacts generally would be from one day to several days depending on the phase of construction. The level and types of noise impacts that would occur during construction are described below.

Short-term noise impacts would occur during grading and site preparation activities. Table 3.C lists typical construction equipment noise levels (L_{max}) recommended for noise impact assessments, based on a distance of 50 feet between the equipment and a noise receptor, obtained from the FHWA Roadway Construction Noise Model. Construction-related short-term noise levels would be higher than existing ambient noise levels currently in the project area but would no longer occur once construction of the project is completed.

Two types of short-term noise impacts could occur during construction of the proposed project. The first type involves construction crew commutes and the transport of construction equipment and materials to the site, which would incrementally increase noise levels on roads leading to the site. As shown in Table 3.C, there would be a relatively high single-event noise exposure potential at a maximum level of 84 dBA L_{max} with trucks passing at 50 feet.

The second type of short-term noise impact is related to noise generated during grading and construction on the project site. Construction is performed in discrete steps, or phases, each with its own mix of equipment and, consequently, its own noise characteristics. These various sequential phases would change the character of the noise generated on site. Therefore, the noise levels vary

³¹ Federal Highway Administration, 2004. Traffic Noise Model (TNM) Version 2.5. April.

as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase.

Table 3.C lists maximum noise levels recommended for noise impact assessments for typical construction equipment, based on a distance of 50 feet between the equipment and a noise receptor.

Typical maximum noise levels range up to 87 dBA L_{max} at 50 feet during the noisiest construction phases. The site preparation phase, including excavation and grading of the site, tends to generate the highest noise levels because earthmoving machinery is the noisiest construction equipment. Earthmoving equipment includes excavating machinery such as backfillers, bulldozers, draglines, and front loaders. Earthmoving and compacting equipment includes compactors, scrapers, and graders. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full-power operation followed by 3 or 4 minutes at lower power settings.

Table 3.C: Typical Construction Equipment Noise Levels

Equipment Description	Acoustical Usage Factor (%)	Maximum Noise Level (L_{max}) at 50 Feet ¹
Backhoes	40	80
Compactor (ground)	20	80
Compressor	40	80
Cranes	16	85
Dozers	40	85
Dump Trucks	40	84
Excavators	40	85
Flat Bed Trucks	40	84
Forklift	20	85
Front-end Loaders	40	80
Graders	40	85
Impact Pile Drivers	20	95
Jackhammers	20	85
Pick-up Truck	40	55
Pneumatic Tools	50	85
Pumps	50	77
Rock Drills	20	85
Rollers	20	85
Scrapers	40	85
Tractors	40	84
Welder	40	73

Source: Roadway Construction Noise Model (FHWA 2006).

Note: Noise levels reported in this table are rounded to the nearest whole number.

¹ Maximum noise levels were developed based on Spec 721.560 from the Central Artery/Tunnel (CA/T) program to be consistent with the City of Boston's Noise Code for the "Big Dig" project.

L_{max} = maximum instantaneous sound level

As discussed in the Project Description, construction of the project is anticipated to begin in 2021 and is expected to occur for approximately 50 to 60 working days and would include earthwork,

grading, compaction, relocating existing utilities and modifications of existing drainage facilities, installation of a new drainage inlet, relocation of a Fresno Irrigation District pipeline, relocation of a Comcast vault, placing aggregate base, asphalt concrete paving, street illumination, application of new traffic striping and markings, and landscaping and irrigation of the median island. In addition, construction of the proposed project would require retaining walls adjacent to the Clovis rail trail on both sides of the roadway. The project would require the import of approximately 1,200 cubic yards of soil. Other construction details (e.g., construction of future phases and construction fleet activities) are not yet known; therefore, this analysis assumes that a scraper, bulldozer, heavy truck, backhoe, pneumatic tools, and concrete pump would be operating simultaneously during construction of the proposed project. Based on the typical construction equipment noise levels shown in Table 3.C, noise levels associated with these pieces of construction equipment operating simultaneously would be approximately 90 dBA L_{max} at 50 feet.

The closest sensitive receptors to the proposed project include the single-family residences located immediately adjacent to the project site. The distance from the closest outdoor activity areas of the single-family residences in the project area to the project site is 80 feet or greater. At 80 feet, there would be a decrease of approximately 4 dBA from the increased distance compared to the noise level measured at 50 feet from the active construction area. In addition, all surrounding sensitive receptors have a solid concrete masonry unit (CMU) wall, which would reduce construction noise by a minimum of 5 dBA. Therefore, the closest sensitive receptor may be subject to short-term maximum construction noise reaching 81 dBA L_{max} during construction. In addition, construction equipment would operate at various locations within the 0.5-mile project segment and would only generate this maximum noise level when operations occur closest to the receptor.

Construction of the proposed project would occur during daylight hours, from approximately 8:00 a.m. to 5:00 p.m. daily. Construction noise is permitted by the City of Fairfield when activities occur between the hours of 7:00 a.m. and 7:00 p.m. Monday through Friday and between 9:00 a.m. and 5:00 p.m. on Saturday and Sunday. In addition, Mitigation Measure NOI-1 would be required to limit construction activities to daytime hours and would reduce potential construction period noise impacts for the indicated sensitive receptors to less-than-significant levels.

- Mitigation Measure NOI-1:** The project contractor shall implement the following measures during construction of the proposed project:
- Equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards.
 - Place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the active project site.
 - Locate equipment staging in areas that would create the greatest possible distance between construction-related noise

sources and noise-sensitive receptors nearest the active project site during all construction activities.

- Ensure that all general construction related activities are in compliance with the hours set forth in the City of Clovis Municipal Code section 5.27.604.

Implementation of Mitigation Measure NOI-1 would limit construction hours and require the construction contractor to implement noise-reducing measures during construction, which would reduce short-term construction noise impacts to a less-than-significant level.

Operational Noise Impacts. Motor vehicles with their distinctive noise characteristics are the dominant noise source in the project vicinity. The amount of noise varies according to many factors, such as volume of traffic, vehicle mix (percentage of cars and trucks), average traffic speed, and distance from the observer. Implementation of the proposed project would result in new daily trips on local roadways in the project site vicinity. A characteristic of sound is that a doubling of a noise source is required in order to result in a perceptible (3 dBA or greater) increase in the resulting noise level.

Future traffic noise levels were predicted using the FHWA's TNM 2.5 at eight receptor locations were determined using either the future worst hour conditions. This analysis evaluates potential noise level increases between the future without project and future with project noise levels. Impacts would be considered significant if the noise level were to increase 3 dBA or more at receiving land uses and if the future with project traffic noise level exceeds the City's noise and land use compatibility standards. Table 3.D below provides the predicted future traffic noise levels.

Table 3.D: Predicted Future Noise

Receptor ID	Land Use	Address	Existing Noise Level Leq dBA	Design Year Noise Level No Project Leq dBA	Design Year Noise Level With Project Leq dBA	Change in Noise Level
R-1	Residential	770 N. Cherry Lane	57	58	58	0
R-2	Residential	42 Chennault Avenue	57	58	58	0
R-3	Church	698 N. Minnewawa Avenue	66	66	67	1
R-4	Public Institution	555 N. Villa Avenue	64	65	65	0
R-5	Residential	51 Birch Avenue	57	58	58	0
R-6	Office	221 W. Fir Avenue	57	60	61	1
R-7	Agricultural	Minnewawa Avenue	64	66	67	1
R-8	Church	698 N. Minnewawa Avenue	51	52	52	0

Source: WJV Acoustics, Inc., 2019.

As shown in Table 3.D, the project-related traffic noise increase (from Design Year Noise Level No Project to Design Year Noise Level with Project) at all eight modeled receptor locations would reach up to 1 dBA. This noise level increase is less than 3 dBA and would not be perceptible to the human ear in an outdoor environment. Therefore, implementation of the roadway widening would not

result in a perceptible noise increase to receptors in the project vicinity and impacts would be less than significant.

b. Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Vibration refers to groundborne noise and perceptible motion. Groundborne vibration is almost exclusively a concern inside buildings and is rarely perceived as a problem outdoors. Vibration energy propagates from a source, through intervening soil and rock layers, to the foundations of nearby buildings. The vibration then propagates from the foundation throughout the remainder of the structure. Building vibration may be perceived by the occupants as the motion of building surfaces, rattling of items on shelves or hanging on walls, or as a low-frequency rumbling noise. The rumbling noise is caused by the vibrating walls, floors, and ceilings radiating sound waves. Annoyance from vibration often occurs when the vibration exceeds the threshold of perception by 10 dB or less. This is an order of magnitude below the damage threshold for normal buildings.

Typical sources of groundborne vibration are construction activities (e.g., pavement breaking and operating heavy-duty earthmoving equipment), and occasional traffic on rough roads. In general, groundborne vibration from standard construction practices is only a potential issue when within 25 feet of sensitive uses. Groundborne vibration levels from construction activities very rarely reach levels that can damage structures; however, these levels are perceptible near the active construction site. With the exception of old buildings built prior to the 1950s or buildings of historic significance, potential structural damage from heavy construction activities rarely occurs. When roadways are smooth, vibration from traffic (even heavy trucks) is rarely perceptible.

The streets surrounding the project area are paved, smooth, and unlikely to cause significant groundborne vibration. In addition, the rubber tires and suspension systems of fire engines and other on-road vehicles make it unusual for on-road vehicles to cause groundborne noise or vibration problems. It is, therefore, assumed that no such vehicular vibration impacts would occur and, therefore, no vibration impact analysis of on-road vehicles is necessary. Additionally, once constructed, the proposed project would not contain uses that would generate groundborne vibration.

Construction Vibration. Construction of the proposed project could result in the generation of groundborne vibration. This construction vibration impact analysis discusses the level of human annoyance using vibration levels in vibration velocity decibels (VdB) and will assess the potential for building damages using vibration levels in peak particle velocity (PPV inches per second [(in/sec)]) because vibration levels calculated in root-mean-square (RMS) are best for characterizing human response to building vibration, while vibration level in PPV is best used to characterize potential for damage. The Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment guidelines indicate that a vibration level up to 102 VdB (an equivalent to 0.5 in/sec in PPV) is considered safe for buildings consisting of reinforced concrete, steel, or timber (no plaster), and would not result in any construction vibration damage. For a non-engineered timber and masonry building, the construction vibration damage criterion is 94 VdB (0.2 in/sec in PPV).

Table 3.E shows the PPV and VdB values at 25 feet from a construction vibration source. As shown in Table 3.E, bulldozers and other heavy-tracked construction equipment (except for pile drivers and vibratory rollers) generate approximately 87 VdB of groundborne vibration when measured at 25 feet, based on the Transit Noise and Vibration Impact Assessment. At this level, groundborne vibration would result in potential annoyance to residents and workers, but would not cause any damage to the buildings.

Construction vibration, similar to vibration from other sources, would not have any significant effects on outdoor activities (e.g., those outside of residences and commercial/office buildings in the project vicinity). Outdoor site preparation for the proposed project is expected to include the use of bulldozers and loaded trucks. The greatest levels of vibration are anticipated to occur during the site preparation phase. All other phases are expected to result in lower vibration levels. The distance to the nearest buildings for vibration impact analysis is measured between the nearest off-site buildings and the project boundary (assuming the construction equipment would be used at or near the project boundary) because vibration impacts occur normally within the buildings. The formula for vibration transmission is provided below.

$$L_{v\text{dB}}(D) = L_{v\text{dB}}(25 \text{ ft}) - 30 \log(D/25)$$

$$\text{PPV}_{\text{equip}} = \text{PPV}_{\text{ref}} \times (25/D)^{1.5}$$

Table 3.E: Vibration Source Amplitudes for Construction Equipment

Equipment	Reference PPV/L _v at 25 feet	
	PPV (in/sec)	L _v (VdB) ^a
Pile Driver (Impact), Typical	0.644	104
Pile Driver (Sonic), Typical	0.170	93
Vibratory Roller	0.210	94
Hoe Ram	0.089	87
Large Bulldozer	0.089	87
Caisson Drilling	0.089	87
Loaded Trucks	0.076	86
Jackhammer	0.035	79
Small Bulldozer	0.003	58

Sources: *Transit Noise and Vibration Impact Assessment* (FTA 2018).

^a RMS vibration velocity in decibels (VdB) is 1 μin/sec.

μin/sec = micro-inches per second

FTA = Federal Transit Administration

in/sec = inches per second

L_v = velocity in decibels

PPV = peak particle velocity

RMS = root-mean-square

VdB = vibration velocity decibels

For typical construction activity, the equipment with the highest vibration generation potential is the large bulldozer, which would generate 87 VdB at 25 feet. The closest residences are located approximately 110 feet from the project construction areas. Due to distance attenuation, the closest residences would experience vibration levels of up to 68 VdB (0.010 PPV [in/sec]), which is below the FTA threshold of 94 VdB (0.2 in/sec PPV) for building damage. Although construction vibration levels at the adjacent land uses would have the potential to result in annoyance, these vibration levels would no longer occur once construction of the project is completed. Therefore, ground-

borne vibration and noise impacts generated by construction equipment would be less than significant.

- c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?*

The proposed project is not located within 2 miles of a public or public use airport. The Fresno Yosemite International Airport is the closest airport and is located approximately 3.8 miles south of the project site. Aircraft noise is occasionally audible at the project site; however, no portion of the project site lies within the 60 dBA CNEL noise contours of any public airport nor does any portion of the project site lie within 2 miles of any private airfield or heliport. Therefore, the proposed project would not result in the exposure of people residing or working in the project area to excessive noise levels. There would be no impact.

3.14 POPULATION AND HOUSING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Induce substantial unplanned 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.14.1 Impact Analysis

- a. *Would the project induce substantial unplanned 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)?*

The proposed project would widen and rehabilitate Villa/Minnewawa Avenue. The proposed project would not result in direct population growth as the use proposed is not residential and would not contribute to permanent residency on site. Implementation of the proposed project is expected to improve traffic level of service and service capacity during peak hours, reduce delays and traffic congestion, and increase safety and security. In addition, the proposed project is consistent with the City's General Plan Circulation Element and it would address the current and projected traffic demand (20,500 ADT by 2035) and would serve to improve the conveyance of traffic and would not generate growth beyond that anticipated in the General Plan. Therefore, the proposed project would not directly or indirectly induce population growth and there would be no impact.

- b. *Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

The proposed project would widen and rehabilitate Villa/Minnewawa Avenue and would not displace housing or people. Therefore, there would be no impact.

3.15 PUBLIC SERVICES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. 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:				
i. Fire protection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii. Police protection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii. Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv. Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
v. Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.15.1 Impact Analysis

a. *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:*

- i. *Fire protection?*
- ii. *Police protection?*
- iii. *Schools?*
- iv. *Parks?*
- v. *Other public facilities?*

The project site is located in an area that is already served by public service systems. Police protection services are provided to the City by the Clovis Police Department. Fire protection and emergency response services for the project site are provided by the City of Clovis Fire Department. The Clovis Unified School District serves the City. In addition, the City provides several types of parks and other public facilities.

The proposed project would widen and rehabilitate Villa/Minnewawa Avenue. The proposed project would not result in direct population growth as the use proposed is not residential and would not contribute to permanent residency on site. However, construction of the proposed project would require temporary closure of one travel lane at a time, which would temporarily delay local vehicular traffic and could temporarily affect emergency responders. The City of Clovis Fire Station 3 is located along the project segment of Villa/Minnewawa Avenue. Therefore, coordination with emergency responders with respect to reducing delays and identifying detour routes would be

required to avoid significant impacts with regards to emergency access. This requirement is included as part of the TMP specified in Mitigation Measure TR-1.

Once operational, the proposed project is expected to improve traffic level of service and service capacity during peak hours, reduce delays and traffic congestion, and increase safety and security. In addition, the proposed project is consistent with the City's General Plan Circulation Element and it would address the current and projected traffic demand (20,500 ADT by 2035) and would serve to improve the conveyance of traffic and would not generate growth beyond that anticipated in the General Plan. Therefore, the proposed project would not result in an increase in population or facilities that would require the provision of new or additional fire or police services, schools, parks, or other public facilities, or result in the need for physically altered facilities. Therefore, with implementation of Mitigation Measure TR-1, the project would have a less-than-significant impact associated with public services.

3.16 RECREATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.16.1 Impact Analysis

- 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?*

The proposed project would not induce population or employment growth that would generate an increased demand for recreational facilities. Therefore, the proposed project would not 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. There would be no impact.

- 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?*

The project does not include recreational facilities or require the construction or expansion of recreational facilities. No impacts would occur.

3.17 TRANSPORTATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Conflict or be inconsistent with CEQA Guidelines §15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in inadequate emergency access?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3.17.1 Impact Analysis

- a. *Would the project conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

The proposed project would widen and rehabilitate an approximately 0.5-mile segment of Villa/Minnewawa Avenue from Herndon Avenue to Alluvial Avenue. The existing 0.5-mile project segment has multiple lane configurations and the project would widen the roadway to provide two travel lanes consistently in each direction along the segment. The project would widen the southbound lane from one to two lanes. Southbound Minnewawa Avenue consists of two travel lanes north of the project site; therefore, the project would eliminate the delay and congestion that occurs from the transition to one lane at the intersection of Minnewawa Avenue and Alluvial Avenue. Within the project segment, the southbound travel lane on Villa/Minnewawa Avenue widens to two lanes at Fir Avenue, approximately 350 feet north of Herndon Avenue, and remains two travel lanes south of Herndon Avenue.

North of Herndon Avenue, northbound Villa Avenue is one lane until the Minnewawa "T" intersection where Villa Avenue becomes Minnewawa Avenue along the project segment. At the intersection of Villa/Minnewawa Avenue, Minnewawa Avenue widens to two lanes for approximately 1,350 feet, and remains two travel lanes north of Alluvial Avenue. The proposed project would widen northbound Villa Avenue to two travel lanes in between Herndon Avenue and Alluvial Avenue, up to the Old Town Trail Crossing.

The project includes a Class II bike lane in each direction with sidewalks and a 16-foot landscaped median. The proposed project would also install curbs, gutters, curb return ramps, adjustment of existing utilities, landscaping, irrigation, traffic striping, marking and signage, and street lights along the project segment.

Construction of the project is anticipated to begin in 2021 and is expected to occur for approximately 50 to 60 working days. Villa/Minnewawa Avenue would remain open during the construction period with lanes shifted to one side of the roadway while the other side is under

construction. Construction of the proposed project would temporarily delay local vehicular traffic and could affect travelers on Villa/Minnewawa Avenue. Potential impacts to travelers on Villa/Minnewawa Avenue in the project area during construction would be avoided or minimized with development and implementation of a TMP that identifies how the safe movement of vehicular, pedestrian, and bike traffic would be safely handled during construction. Mitigation Measure TR-1 requires that a TMP be prepared during final design and implemented during construction.

Mitigation Measure TR-1

Prior to construction, the City shall develop a construction traffic management plan that specifies measures that would reduce impacts to motor vehicle, bicycle, pedestrian, and transit circulation. The construction traffic management plan shall include the following:

- Disclosure of all planned construction activity (such as provisions for staging, grading, and trash removal) and duration.
- Location of construction staging areas for materials, equipment, and vehicles.
- Anticipated number of truck trips, truck routes, employees, and employee parking locations.
- Identification of haul routes for movement of construction trucks and vehicles that would minimize impacts on vehicular and pedestrian traffic, circulation and safety, and provision for monitoring surface streets used for haul routes so that any damage and debris attributable to the haul trucks can be identified and corrected by the City or construction contractor.
- Notification procedures for adjacent property owners and public safety personnel regarding when major project-related deliveries, detours, and lane closures would occur.
- Procedures for coordination with emergency service providers to minimize temporary delays in emergency response times. Such coordination could include the identification of alternative routes for emergency vehicles and routes across the construction area.
- The measures outlined in the construction plans shall be devised to reduce circulation impacts during the construction period to the maximum extent possible.

With implementation of Mitigation Measure TR-1, construction activities would not conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

Once operational, the proposed project is expected to improve traffic level of service and service capacity during peak hours, reduce delays and traffic congestion, and increase safety and security. A Class II bicycle lane and pedestrian sidewalk provide for continuous bicycle and pedestrian facilities in this segment and would connect to existing improvements that serve to encourage non-motorized transportation. The widening of Villa/Minnewawa Avenue is consistent with the City's General Plan Circulation Element and it would address the current and projected traffic demand (20,500 ADT by 2035) and would serve to improve the conveyance of traffic. Project operation would not conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Impacts would be less than significant with mitigation incorporated.

b. Would the project conflict or be inconsistent with CEQA Guidelines §15064.3, subdivision (b)?

CEQA Guidelines section 15064.3 was certified and adopted in December 2018. Section 15064.3 provides that VMT is the most appropriate metric to assess transportation impacts. Other relevant considerations may include a project's effects on transit and nonmotorized travel. Section 15064.3, subdivision (b) further provides that transportation projects that reduce VMT should be presumed to cause a less-than-significant impact. For roadway capacity projects, a lead agency has "discretion to determine the appropriate measure of transportation impact consistent with CEQA and other applicable requirements."

As discussed above, the existing project segment has multiple lane configurations and the project would widen the roadway to provide two travel lanes consistently in each direction along the segment. Implementation of the proposed project is expected to improve traffic level of service and service capacity during peak hours, reduce delays and traffic congestion, and increase safety and security. A Class II bicycle lane and pedestrian sidewalk provide for continuous bicycle and pedestrian facilities in this segment and would connect to existing improvements that serve to encourage non-motorized transportation. The widening of Villa/Minnewawa Avenue is consistent with the City's General Plan Circulation Element and it would address the current and projected traffic demand and would serve to improve the conveyance of traffic.

Because the project would add lane capacity to Villa/Minnewawa Avenue, some traffic currently using other routes would use a widened Villa/Minnewawa Avenue, which could increase VMT in the area. However, the improved roadway may attract additional pedestrians and bicyclists due to added sidewalks and bikeways. As such, the proposed project would support nonmotorized travel. Therefore, the proposed project would not conflict or be inconsistent with State CEQA Guidelines section §15064.3, subdivision (b). Impacts would be less than significant, and no mitigation is required.

c. Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The project segment of Villa/Minnewawa Avenue does not currently include hazardous design features and does not include any incompatible uses. The proposed roadway improvements would be designed and constructed consistent with applicable CBC and Caltrans seismic design standards and would not include hazardous design features or incompatible uses. The construction of the proposed improvements would be completed with materials consistent with standard City requirements. Therefore, construction and operation of the proposed project would not increase hazards due to a design feature or incompatible uses. This impact would be less than significant, and no mitigation is required.

d. Would the project result in inadequate emergency access?

The City of Clovis Fire Station 3 is located along the project segment of Villa/Minnewawa Avenue. Construction of the proposed project would require temporary closure of one travel lane at a time, which would temporarily delay local vehicular traffic and could temporarily affect emergency responders. Coordination with emergency responders with respect to reducing delays and identifying detour routes would avoid significant impacts with regards to emergency access. This requirement is included as part of the TMP specified in Mitigation Measure TR-1. Once operational, the proposed project would to improve traffic level of service and service capacity during peak hours, reduce delays and traffic congestion, and increase safety and security. Therefore, with implementation of Mitigation Measure TR-1, the proposed project would not result in inadequate emergency access.

3.18 TRIBAL CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. 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:				
i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)? Or	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying 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.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3.18.1 Impact Analysis

- a. *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:*
- i. *Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)? Or*
 - ii. *A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying 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.*

AB 52, which became law on January 1, 2015, provides for consultation with California Native American tribes during the CEQA environmental review process, and equates significant impacts to “tribal cultural resources” with significant environmental impacts.

Public Resources Code (PRC) Section 21074 states that “tribal cultural resources” are:

Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe and are one of the following:

- Included or determined to be eligible for inclusion in the California Register of Historical Resources;
- Included in a local register of historical resources as defined in subdivision (k) of PRC Section 5020.1; or
- 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 PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

A “historical resource” (PRC Section 21084.1), a “unique archaeological resource” (PRC Section 21083.2(g)), or a “nonunique archaeological resource” (PRC Section 21083.2 (h)) may also be a tribal cultural resource if it is included or determined to be eligible for inclusion in the California Register. The consultation provisions of the law require that a public agency consult with local Native American tribes that have requested placement on that agency’s notification list for CEQA projects. Within 14 days of determining that a project application is complete, or a decision by a public agency to undertake a project, the lead agency must notify tribes of the opportunity to consult on the project, should a tribe have previously requested to be on the agency’s notification list. California Native American tribes must be recognized by the NAHC as traditionally and culturally affiliated with the project site, and must have previously requested that the lead agency notify them of projects. Tribes have 30 days following notification of a project to request consultation with the lead agency.

The purpose of consultation is to inform the lead agency in its identification and determination of the significance of tribal cultural resources. If a project is determined to result in a significant impact on an identified tribal cultural resource, the consultation process must occur and conclude prior to adoption of a Negative Declaration or Mitigated Negative Declaration, or certification of an Environmental Impact Report (PRC Sections 21080.3.1, 21080.3.2, 21082.3).

On August 22, 2019, the City provided formal notification to interested Native American tribes that may be culturally or traditionally affiliated with the project area and vicinity to conduct consultation. In response, Robert Pennell, Tribal Cultural Resources Director, Table Mountain Rancheria identified interest in the project and requested copies of the cultural resource report. No requests for consultation were received within the 30-day period, and as a result, AB 52 requirements have been fulfilled.

The proposed excavation of the project sites could potentially result in adverse effects of unanticipated tribal cultural resources. Mitigation Measures CULT-1 and CULT-2 would address unknown archaeological materials and unknown human remains. Therefore, the proposed project would not have a significant impact on tribal cultural resources.

3.19 UTILITIES AND SERVICE SYSTEMS

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

3.19.1 Impact Analysis

- a. *Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?*

Potential impacts related to the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects are discussed below.

Water and Wastewater. Construction of the proposed project would include earthwork, grading, compaction, relocating existing utilities and modifications of existing drainage facilities, installation of a new drainage inlet, relocation of a Fresno Irrigation District pipeline, relocation of a Comcast vault, placing aggregate base, asphalt concrete paving, street illumination, application of new traffic striping and markings, and landscaping and irrigation of the median island. To protect water quality during the new drainage inlet installation and Fresno Irrigation District pipeline relocation, Mitigation Measure HYDRO-5 would be required, which would require BMPs to be identified in the site-specific SWPPP or WPCP. At a minimum, BMPs shall include temporary shut-off of the pipeline and a temporary diversion, as needed. If a temporary diversion is installed, it should be implemented in a manner such that connection points are free of leaks and the pipeline is resistant to breakage from construction activities and potential tampering. With implementation of

Mitigation Measure HYDRO-5, installation of the new drainage inlet and relocation of the Fresno Irrigation District pipeline would not result in an impact to water and wastewater facilities.

The proposed project would not result in any new land uses that would consume water or generate wastewater. Water would be used during construction to reduce fugitive dust in compliance with SJVAPCD Regulation VIII and during operation for landscape irrigation, which would not demand a substantial increase in water used for irrigation in comparison to existing conditions in the project area. The amount of water used during construction and operation would be minimal, and water use during construction would cease when construction is completed. Therefore, the proposed project would not require or result in the relocation or construction of new or expanded water or wastewater facilities. As such, the project would not result in a significant environmental effect.

Stormwater Drainage. As discussed earlier in Response 3.10.1(a)(ii) in the Hydrology and Water Quality section, during construction activities, soil would be exposed and disturbed, drainage patterns would be temporarily altered during grading and other construction activities, and there would be an increased potential for soil erosion and siltation compared to existing conditions. Additionally, during a storm event, soil erosion and siltation could occur at an accelerated rate. As discussed above in Response 3.10.1(a), Mitigation Measures HYDRO-1 through HYDRO-5 require compliance with applicable permits and preparation of a SWPPP to identify construction BMPs to be implemented as part of the proposed project to manage and convey stormwater during construction. Proper management of storm water during construction would reduce impacts associated with flooding.

As identified above, the proposed project would include the installation of a new drainage inlet. The proposed project would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite. Therefore, the proposed project would not require or result in the relocation or construction of new or expanded stormwater drainage facilities, the construction of which could cause significant environmental effects.

Electric Power and Natural Gas. In addition, as discussed in Response 3.6.1(a), energy usage on the project site during construction would be temporary in nature and would be relatively small in comparison to available energy sources. Once operational, the proposed project would not include lighting or features that could contribute to a significant new source of electricity and natural gas usage. As such, implementation of the proposed project would not result in a long-term substantial demand for electric power and natural gas. Therefore, the proposed project would not require or result in the relocation or construction of new or expanded electric power or natural gas facilities, the construction of which could cause significant environmental effects.

Telecommunication Facilities. The proposed project would include the relocation of a Comcast vault. To avoid any significant impacts to telecommunication facilities during the construction phase, coordination with utility providers would be necessary. Any modifications to utility facilities are required to be coordinated with the applicable utility provider to minimize the risk of disruption of services and damage to the facilities, to ensure advance notification of any temporary service disruptions to the public, and to protect the safety of the construction workers and the general public. These requirements are specified in Mitigation Measure UTL-1. Therefore, with

implementation of Mitigation Measure UTL-1, the relocation or construction of new or expanded telecommunications facilities would not cause significant environmental effects.

Mitigation Measure UTL-1 During the construction phase, the Construction Contractor will coordinate with utility service providers in the area to minimize the risk of disruption of services and damage to any utility facilities present within the disturbance limits, to ensure advance notification of any temporary service disruptions to the public, and to protect the safety of the construction workers and the general public.

Summary. The proposed project would not require or result in the relocation or construction of new or expanded facilities for water, wastewater treatment, storm drainage, electric power, natural gas, or telecommunications, the construction of which could cause significant environmental effects. Therefore, impacts would be less than significant with mitigation incorporated.

b. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Refer to Response 3.19.1(b), above. As discussed in that response, water use during construction and operation would be minimal, and water supplies for construction activities would be temporary in nature, ceasing upon construction completion. In addition, the minor increase in water use during operation for irrigation would not require additional entitlements or resources. Therefore, construction and operation of the proposed project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years, and no impact would occur.

c. Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

No wastewater would be generated as a result of construction or operation of the proposed project. Therefore, the project would not result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments, and no impact would occur.

d. Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

The proposed project would generate construction waste that would require disposal in local landfills. According to the City's General Plan Environmental Impact Report (EIR), the Clovis Landfill has adequate capacity to receive solid waste through the year 2053.³² Therefore, this landfill would provide adequate waste disposal services in accepting construction waste generated by the proposed project. Construction waste would be recycled as appropriate. Waste collected during

³² Clovis, City of, 2014b, op. cit.

road maintenance associated with operation of the proposed project would be limited and would be similar to the amount of waste collected during maintenance of the existing roadway. The proposed project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals during construction or operation. Therefore, a less than significant impact would occur.

e. Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Waste generated during construction of the proposed project would be limited to construction debris (e.g., concrete, rebar, and vegetation associated with clearing and grading) and would not generate an excessive amount of solid waste that would exceed the capacity of the Clovis Landfill. Construction waste would be disposed of in accordance with federal, State, and local regulations related to recycling, including the California Integrated Waste Management Act of 1989 (AB 939). Operation of the completed project would generate very limited waste material. Specifically, waste collected during maintenance would be collected and disposed of consistent with City policies. Therefore, the proposed project would comply with all federal, State, and local statutes and regulations related to solid waste, and no impact would occur.

3.20 WILDFIRE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.20.1 Impact Analysis

a. Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

The proposed project is anticipated to improve traffic along Villa/Minnewawa Avenue once the improvements are operational. Therefore, the completed project should have a beneficial impact on emergency response and evacuation in the project area and vicinity. Moreover, since the project area is not located in or near a VHFHSZ nor is it located in or near a State Responsibility Area, potential impacts associated with emergency response or evacuation would not pertain to wildfire and would more likely be associated with an urban fire or other emergency situations. Therefore, operation of the proposed project would not substantially impair an adopted emergency response plan or emergency evacuation plan. There would be no impact.

b. Would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

As stated previously, the project area is not located in or near a VHFHSZ nor is it located in or near a State Responsibility Area. Therefore, the proposed project would not exacerbate wildfire risks due to slope and prevailing winds, thereby exposing project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. There would be no impact.

- c. Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*

The proposed roadway improvements would not exacerbate fire risk due to the location of the project in an urban area outside of a designated fire hazard zone. Therefore, the proposed project would not require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that would exacerbate fire risk or result in temporary or ongoing impacts to the environment. There would be no impact.

- d. Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

Landslides and other forms of mass wasting, including mud flows, debris flows, and soil slips, occur as soil moves downslope under the influence of gravity. Landslides are frequently triggered by intense rainfall or seismic shaking but can also occur as a result of erosion and downslope runoff caused by rain following a fire. As previously discussed in Response 3.7.1(a)(iv), the proposed project would not introduce any new topographical features or elements that would increase the risk of landslide within the project vicinity. Further, as stated previously, the project is not located in or near a VHFHSZ nor is it located in or near a State Responsibility Area. Therefore, the proposed project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. There would be no impact.

3.21 MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3.21.1 Impact Analysis

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

Implementation of the mitigation measures recommended in this Initial Study would ensure that construction and operation of the proposed project would not substantially degrade the quality of the environment; reduce the habitat, population, or range of a plant or animal species; or eliminate important examples of California history or prehistory.

- 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)?*

The potential impacts of the project are individually limited and are not cumulatively considerable. Implementation of mitigation measures recommended in this report would reduce potentially significant impacts that could become cumulatively considerable.

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

The proposed project would be constructed and operated in accordance with all applicable regulations governing hazardous materials, noise, and geotechnical considerations. Because all potentially significant impacts of the proposed project are expected to be mitigated to less-than-significant levels, it is unlikely that implementation of the proposed project would cause substantial adverse effects on human beings. Therefore, implementation of the proposed project would not result in significant human health risks.

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APPENDIX A

ROADMOD OUTPUT

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Road Construction Emissions Model, Version 9.0.0

Daily Emission Estimates for -> Villa/Minnewawa Avenue Widening Project														
Project Phases (Pounds)	ROG (lbs/day)	CO (lbs/day)	NOx (lbs/day)	PM10 (lbs/day)	Exhaust (lbs/day)	Fugitive Dust (lbs/day)	Total (lbs/day)	Exhaust (lbs/day)	Fugitive Dust (lbs/day)	SOx (lbs/day)	CO2 (lbs/day)	CH4 (lbs/day)	N2O (lbs/day)	CO2e (lbs/day)
Grubbing/Land Clearing	1.93	16.11	22.72	77.95	0.95	77.00	16.84	0.83	16.02	0.04	4,332.80	0.99	0.19	4,415.62
Grading/Excavation	9.04	70.08	101.54	81.28	4.28	77.00	19.88	3.86	16.02	0.16	15,157.96	4.52	0.20	15,330.83
Drainage/Utilities/Sub-Grade	6.13	54.27	62.30	79.86	2.86	77.00	18.67	2.66	16.02	0.11	10,335.05	2.18	0.13	10,427.06
Paving	2.36	27.57	23.25	1.33	1.33	0.00	1.19	1.19	0.00	0.04	4,325.41	1.20	0.07	4,376.63
Maximum (pounds/day)	9.04	70.08	101.54	81.28	4.28	77.00	19.88	3.86	16.02	0.16	15,157.96	4.52	0.20	15,330.83
Total (tons/construction project)	0.19	1.58	2.05	2.05	0.09	1.96	0.49	0.08	0.41	0.00	322.88	0.09	0.00	326.40
Notes:	Project Start Year -> 2021													
	Project Length (months) -> 3													
	Total Project Area (acres) -> 8													
	Maximum Area Disturbed/Day (acres) -> 8													
	Water Truck Used? -> Yes													
	Total Material Imported/Exported Volume (yd³/day)		Daily VMT (miles/day)											
Phase	Soil	Asphalt	Soil Hauling	Asphalt Hauling	Worker Commute	Water Truck								
Grubbing/Land Clearing	120	0	180	0	320	80								
Grading/Excavation	0	0	0	0	1,200	80								
Drainage/Utilities/Sub-Grade	0	0	0	0	960	40								
Paving	0	0	0	0	600	40								
PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.														
Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.														
CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1, 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.														
Total Emission Estimates by Phase for -> Villa/Minnewawa Avenue Widening Project														
Project Phases	ROG (tons/phase)	CO (tons/phase)	NOx (tons/phase)	PM10 (tons/phase)	Exhaust (tons/phase)	PM10 (tons/phase)	PM2.5 (tons/phase)	Exhaust (tons/phase)	PM2.5 (tons/phase)	SOx (tons/phase)	CO2 (tons/phase)	CH4 (tons/phase)	N2O (tons/phase)	CO2e (MT/phase)
(Tons for all except CO2e. Metric tonnes for CO2e)														
Grubbing/Land Clearing	0.01	0.05	0.07	0.23	0.00	0.23	0.05	0.00	0.05	0.00	13.00	0.00	0.00	12.02
Grading/Excavation	0.11	0.84	1.22	0.98	0.05	0.92	0.24	0.05	0.19	0.00	181.90	0.05	0.00	166.90
Drainage/Utilities/Sub-Grade	0.06	0.57	0.65	0.84	0.03	0.81	0.20	0.03	0.17	0.00	108.52	0.02	0.00	99.32
Paving	0.01	0.12	0.10	0.01	0.01	0.00	0.01	0.01	0.00	0.00	19.46	0.01	0.00	17.87
Maximum (tons/phase)	0.11	0.84	1.22	0.98	0.05	0.92	0.24	0.05	0.19	0.00	181.90	0.05	0.00	166.90
Total (tons/construction project)	0.19	1.58	2.05	2.05	0.09	1.96	0.49	0.08	0.41	0.00	322.88	0.09	0.00	296.10
PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.														
Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.														
CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1, 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.														
The CO2e emissions are reported as metric tons per phase.														