

P-18 Sewer Trunkline Project

Final Initial Study / Proposed Mitigated Negative Declaration

CAPITAL PROJECT NO. 50424



Lead Agency:

City of Chico, Public Works Department
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May 2024

Prepared By:

City of Chico Public Works – Engineering Department
Consultant: ICF

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<https://chico.ca.us/Departments/Engineering/Capital-Projects/P-18-Sewer-Trunkline/index.html>.

Appendix A: Air Quality and Greenhouse Gas Analysis

Appendix B: Biological Resource Memorandum

Appendix C: Aquatic Resources Delineation Report

Appendix D: Section 106 Report Cultural Resources Inventory Report for the P-18 and P-17B Trunkline Project (Capital Project No. 50424), City of Chico, Butte County, California

Appendix E: Noise and Vibration Technical Report

List of Acronyms

AQAP	Air Quality Attainment Plan
BCAQMD	Butte County Air Quality Management District
BMPs	Best Management Practices
BSA	Biological Survey Area
CAAQS	California Ambient Air Quality
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CARB	California Air Resources Board
CBC	California Building Code
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFD	Chico Fire Department
CFGF	California Fish and Game Commission
CH ₄	Methane
City	City of Chico
CO ₂	Carbon dioxide
CPD	Chico Police Department
CUSD	Chico Unified School District
dB	decibel
dBA	A-weighted decibel
Diversion Channel	Butte Creek Diversion Channel
DPM	diesel particulate matter
DTSC	Department of Toxic Substances Control
EIR	Environmental Impact Report
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
GHG	Greenhouse gas
GWP	Global warming potential
IPCC	Intergovernmental Panel on Climate Change
ISA	International Society of Arboriculture
Leq	Level equivalent
LRA	Local Responsibility Area
MBTA	Migratory Bird Treaty Act
MT CO _{2e}	metric tons of carbon dioxide equivalent
N ₂ O	Nitrous oxide
NAHC	Native American Heritage Commission
NMFS	National Marine Fisheries Service
NO _x	Nitrous oxides
NPDES	National Pollution Discharge Elimination Permit
NSVAB	Northern Sacramento Valley Air Basin

P-17A	Project 17A
P-17B	Project 17B
P-18	Project 18
PM ₁₀	Respirable Particulate Matter
PM _{2.5}	Fine Particulate Matter
RCEM	Roadway Construction Emissions Model
ROG	Reactive Organic Gases
SR 99	State Route 99
SSMPU	Sanitary Sewer Master Plan Update
SVAB	Sacramento Valley Air Basin
SWMP	Storm Water Management Program
SWPPP	Stormwater Pollution Prevention Plan
UPRR	Union Pacific Railroad
USACE	United States Army Corps of Engineers
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
VELB	Valley elderberry longhorn beetle
VMT	Vehicle-miles-traveled
WPCP	Water Pollution Control Plant

**Draft Initial Study / Proposed Mitigated Negative Declaration
City of Chico
Environmental Coordination and Review**

I. PROJECT DESCRIPTION

- A. Project Title:** P-18 Sewer Trunkline Project (Capital Project No. 50424)
- B. Project Sponsor/Lead Agency:** City of Chico – Public Works Engineering
PO Box 3420
Chico, CA 95927
- C. Property Owners:** City of Chico
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Chico, CA 95927

Butte County
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Oroville, CA 95965

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Chico, CA 95927

040-400-096:
24829 Palomares Rd
Castro Valley, CA 94559

040-400-097:
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Dallas TX 75240
- D. City Contact:** Tracy R. Bettencourt – MPA, AICP
Senior Planner
City of Chico – Public Works Engineering
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(530) 879-6903
- E. Project Location:** Southern Chico area along Midway, Entler Avenue, Cramer Lane, Morrow Lane, and Skyway in the City of Chico, California (City). (**Figure 1, Project Location Map**).
- F. Assessor's Parcel Number (APN):** The Project will be located within the existing public right-of-way and narrow portions of APNs: 040-400-092, 040-400-096, and 040-400-097.
- G. Parcel Size:** The Project is approximately 2.85 miles in length.
- H. General Plan Designation:** Primary Open Space, Secondary Open Space, Manufacturing and Warehousing, Very-Low and Low Density Residential, and Commercial Services, and Public Facilities and Services

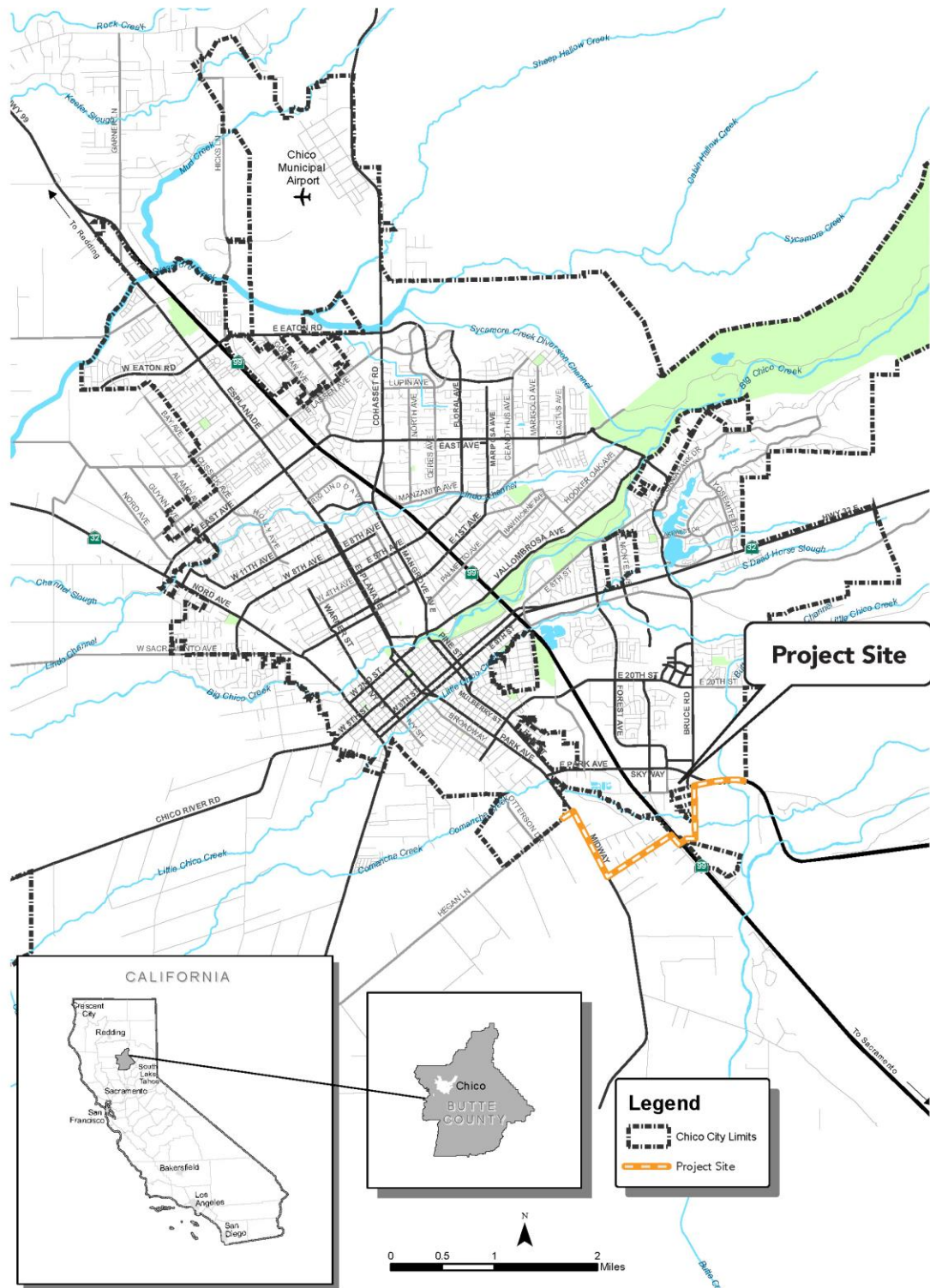


Figure 1 – Project Location Map

I. Zoning: OS1 (Primary Open Space), OS2 (Secondary Open Space), ML (Light Manufacturing), R-S (Suburban Residential, R-1 (Low Density Residential), CS (Services Commercial), PQ (Public/Quasi Public Facilities)

J. Environmental Setting: The Project site, located in south Chico, is relatively flat with an elevation of approximately 200 feet above sea level near Hegan Lane, increasing to 245 feet near its eastern terminus near Potter Road. Spanning nearly 2.85 miles, the Project site is bound by several different types of development and land uses. From east to west the Project site is surrounded by the following land uses and developments (**Figure 2, Proposed Project**):

- The Doe Mill / Honey Run Special Planning Area (SPA-5);
- Butte Creek Diversion Channel (Diversion Channel) and Crough Ditch;
- Butte County Sheriff Search and Rescue Office;
- Commercial services and manufacturing/warehousing uses along Morrow Lane;
- United States Forest Service (USFS) Mendocino National Forest Genetic Resource and Conservation Center south of Morrow Lane and east of Cramer Lane and Comanche Creek;
- An abandoned Union Pacific Railroad (UPRR) alignment south of the unpaved Cramer Lane;
- Core Butte High School, Core Butte Charter School, California Highway Patrol and other quasi-public facilities between State Route 99 (SR 99) and Cramer Lane/USFS;
- Manufacturing and warehousing uses followed by the South Enter Special Planning Area (SP-3) south of SR 99 and Entler Road;
- Very-low and low density residential uses along Entler Road; as well as agricultural, manufacturing and warehousing uses, along with the Glen Oaks Memorial Park along Midway.

K. Project Description:

Background

The 2013 Sanitary Sewer Master Plan Update (SSMPU) updated the 2003 iteration to identify capacity deficiencies in the City's sanitary sewer system, develop feasible alternatives to correct those deficiencies, and plan the infrastructure that will serve future development projected by the Chico 2030 General Plan. Project 18 (P-18) and Project 17-B (P-17B) are two of the build-out projects identified in the 2013 SSMPU. Construction of SSMPU Project 17A (P-17A) was completed in 2019. This Project involves the construction of both P-18 and P-17B.

Project Need

The purpose of the Project is to serve the City's sanitary sewer future needs; the Project will provide sanitary sewer service to the Honey Run/Doe Mill Special Planning Area, South Entler Special Planning Area, and other future land uses in the Project area.

The Project is needed to meet the goals described in the Chico 2030 General Plan.

- Goal PPFS-4: Maintain a sanitary sewer system that meets the City's existing and future needs, complies with all applicable regulations, and protects the underlying aquifer.
- Goal PPFS-4.1: Improve and expand the sanitary sewer system as necessary to accommodate the needs of existing and future development.

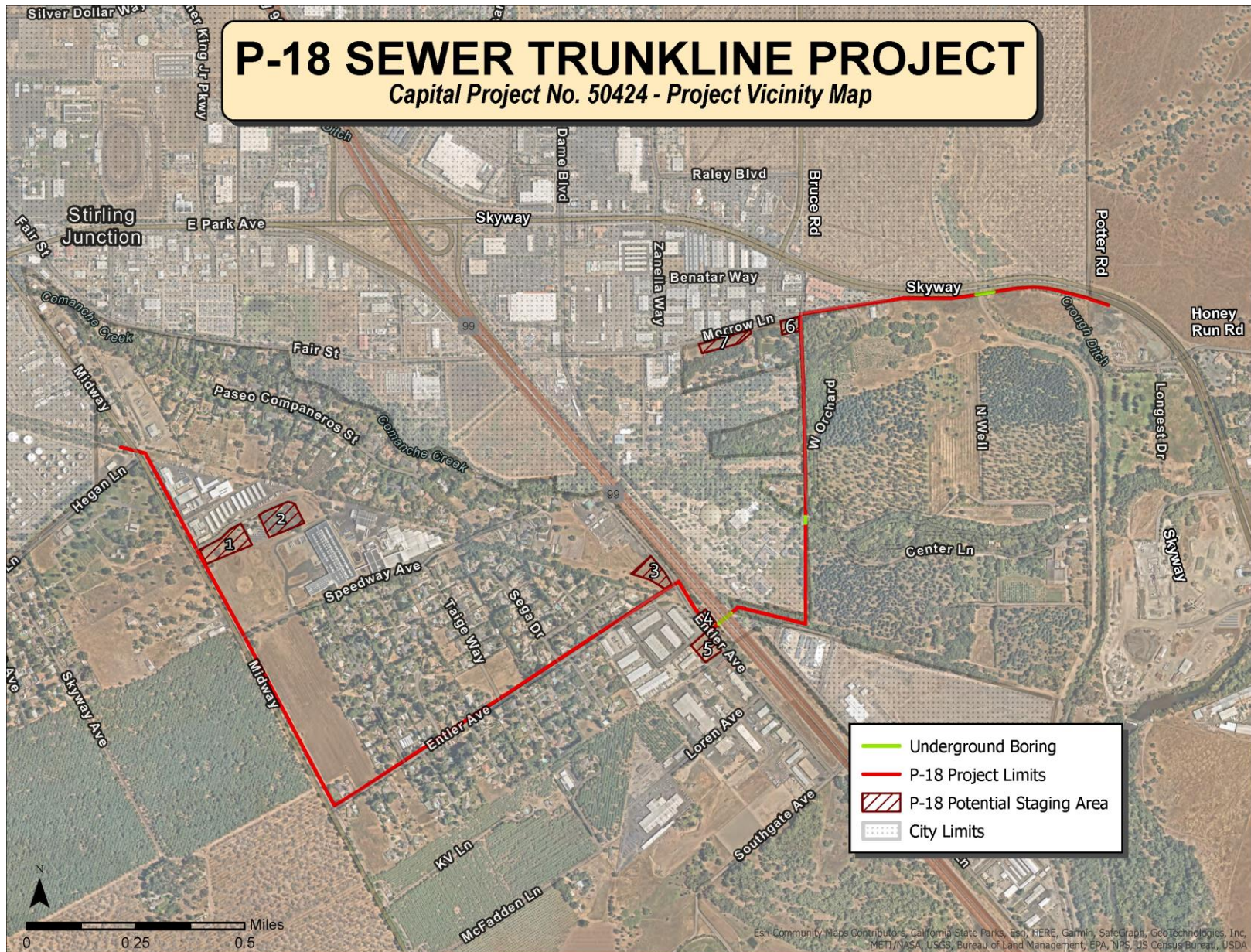


Figure 2 – Proposed Project

Project Location

The combined P-17B and P-18 segments extend generally from southwest to northeast as follows: within the Hegan Lane right-of-way to Midway; along Midway, under the existing bike path east of the roadway, between Hegan Lane and Entler Avenue; under Entler Avenue between Midway and SR 99; turning and continuing under Entler Avenue parallel to SR 99; boring under SR 99; along a section of the abandoned UPRR alignment and an unpaved alignment between the railroad grade and the paved Cramer Lane; boring under Comanche Creek; continuing along under the paved Cramer Lane between unpaved area north to Morrow Lane; within Morrow Lane between Cramer Lane and Butte Creek Diversion Channel (Diversion Channel); boring under Diversion Channel; and terminating on the south side of Skyway approximately 191 feet east of the last manhole.

Project Features

The Project would install a sewer trunkline mainly in the unincorporated region outside the southern City limits. The trunkline would service the majority of the Honey Run/Doe Mill Special Planning Area, South Entler Special Planning Area, and commercial and industrial uses in the area. The proposed trunkline pipe diameter would range from 1.25–2.25 feet (18–27 inches), the trench width would be 6 feet wide with total easements 40 feet wide.

The trunkline would extend approximately 2.85 miles easterly starting from the existing P-17A sewer trunkline located near the intersection of Hegan Lane and the Comanche Creek Greenway bike path (see **Figure 2**). From the connection point, the trunkline would cross Hegan Lane and travel under the Class I bike lane located immediately east of the northbound lane of Midway to Entler Avenue. The trunkline may be located in the northbound lane of Midway for approximately 300 feet of this distance to avoid conflict with an existing gas line under the bike path. The trunkline would continue along Entler Avenue going east, then continue along Entler Avenue going south for approximately 530 linear feet before crossing underneath SR 99 and extending along the UPRR right-of-way for approximately 630 linear feet. The trunkline then shifts north along a City easement, continues through Cramer Lane and heads east at Morrow Lane. At the eastern terminus of Morrow Lane, an existing 36-inch culvert originating on the north side of the Skyway conveys water southerly into an existing open ditch. The City proposes to install a manhole at the south end of the 36-inch culvert and connect a 40-foot-long pipe in the existing drainage ditch to provide vehicular construction access to the P-18 Sewer Trunkline Project, and to facilitate future maintenance access to the easterly manholes located on the south side of Skyway. The Project would continue along the southside of Skyway just past the Potter Road intersection and terminate 191 feet east of a manhole on the south side of Skyway.

Construction

Areas of Disturbance and Excavation: The proposed trunkline areas of disturbance for construction, for construction equipment staging, and for vegetation grubbing and clearing is described below and shown on Figure 1. The pipeline laydown and construction work-area width would be restricted to a 40-foot-wide easement, except where it would be limited to the right-of-way, as noted below:

- Hegan Lane to Midway, trenched under existing pavement to the north of the intersection. Staging and construction within the right-of-way.
- Midway between Hegan Lane and Entler Avenue, trenched under the existing bike path east of roadway. The trunkline may be located in the northbound lane of Midway for approximately

300 feet of this distance to avoid conflict with an existing gas line under the bike path. Staging and construction would be limited to the eastern right-of-way line to the easterly edge of pavement of Midway, which includes removal and replacement of the bike path and sidewalk.

- Entler Avenue between Midway and SR 99, trenched within the north side/westbound lane of pavement. Equipment would work from paved eastbound lane.
- Entler Avenue parallel to SR 99, trenched in centerline of paved roadway. Staging and construction would be limited to the southbound lane.
- SR 99 undercrossing with jack and boring that would require a 20-foot by 50-foot pit southwest of the southbound lane and a 10-foot-square receiving pit plus a 40-foot clearing and grubbing area on the northeast side of the northbound lane.
- Unpaved alignment between the railroad grade and paved Cramer Lane, trenched in the approximate centerline. Construction impacts would occur off pavement and include tree and vegetation removal within the 40-foot-wide disturbance area.
- Paved Cramer Lane between the unpaved area to the south (UPRR alignment) and Morrow Lane to the north, trenched in the centerline of pavement. This section would also require jack and boring to construct a casing pipe under Comanche Creek. Because the pavement area is narrower than the 40-foot construction area, construction impacts may occur off pavement, including tree removal. The jack-and-bore pit, clearing and grubbing area would not extend into creek or wetland habitat, but it would require the removal and replacement of 22 feet of storm drain.
- Morrow Lane between Cramer Lane to where the road becomes Skyway, and then to the Diversion Channel; trenched within the south side/eastbound lane pavement. Equipment would work from the paved westbound lane.
- Jack-and-bore pit located east of the Diversion Channel, with the receiving pit to its west.
- Eastern terminus of Morrow Lane includes the installation of a manhole at the south end of an existing 36-inch culvert and connection to a 40-foot-long pipe in the existing drainage ditch to provide vehicular construction access to the P-18 Sewer Trunkline Project, and to facilitate future maintenance access to the easterly manholes located on the south side of Skyway. Skyway west of Potter Road, trenched off-pavement to south at the toe of roadway fill slope. Equipment would be staged and used from the paved eastbound lane.
- Skyway east of Potter Road to just past Potter Road intersection terminating 191 feet east of a manhole. Equipment would be staged and used from paved eastbound lane.

Underground boring, as noted above, would occur at three locations to avoid impacts to surface features; these are at SR 99, Comanche Creek, and Butte Creek Diversion Channel. Each boring location would require a rectangular 20-foot by 50-foot jack-and-bore pit for pipeline insertion, and a square 10-foot receiving pit. The maximum grading and excavation depth needed for most Project trenching, manhole access, and jack and boring is primarily 10 feet, with depths up to 15 feet required in some locations to avoid underground utilities.

Project construction would also require temporary staging areas for construction-related items such as vehicles, equipment, office trailers, portable toilets, pipe, manholes, and other construction materials; the stockpiling of fill and backfill; and for construction vehicle refueling and

maintenance. The use of these areas would be temporary, and the timeframe would not exceed the duration of Project construction. All staging areas would be restored to pre-Project conditions at the completion of the Project. Replanting of areas along the construction alignment would include similar and native species, where appropriate, and replanting within areas regulated by state and federal government agencies would be done in conformance with all associated permitting requirements.

Timing: The Project is proposed to be constructed in three phases within up to three seasonal construction windows, between April and October. Project construction would begin as early as spring of 2026 and be completed no later than fall 2030. The conceptual phasing plan includes three phases: Phase 1, from Hegan Lane to SR 99; Phase 2, from SR 99 to Morrow Lane; and Phase 3, from Morrow Lane to the Potter Road terminus.

Lane Closure Management: Project construction would require temporary lane closures. The Class I bike path along the Midway would be closed during pipeline construction at this location. There also may be intermittent lane closures with one-way traffic controls, but no complete closures. There also would be short-term (less than 15 minutes) interrupted vehicle access to adjacent properties; apart from these minimal delays, access to properties would be ensured at all times. While the Comanche Creek Trail would remain accessible during construction, some off-site parking along the southern end of Cramer Lane could experience temporary closures as construction activities occur in the public right-of-way along the frontage of the Mendocino National Forest Genetic Resource and Conservation Center.

Construction Equipment: Typical construction equipment would include pneumatic jack hammers, excavators, grading equipment, paving equipment, concrete equipment, striping equipment, generators, auger boring machine, and/or other similar devices.

Compliance Features: All construction noise would be temporary and subject to the noise limits in the Chico Municipal Code, Chapter 9.38 Noise Ordinance, which regulates noise generation within the City of Chico. Construction activity noise is restricted to the hours of 7:00 a.m. to 9:00 p.m. on weekdays (10:00 a.m. to 6:00 p.m. on weekends and holidays), unless otherwise approved by the City Engineer. No night or weekend work is anticipated for the proposed Project.

Silt Management: At both Comanche Creek and Butte Creek Diversion Channel, the Project would install temporary silt fences in accordance with the California Department of Transportation (Caltrans) Standard Plan T51 at the top of each bank, extending 25 feet in each direction of the pipeline. The jack-and-bore pits would require dewatering during construction.

Public Agency Approvals and Permits Required:

Agency	Type of Permit or Approval	Regulated Activity
U.S. Army Corps of Engineers Sacramento District, Regulatory Division	Department of the Army permit (Clean Water Act Section 404)	Discharge of dredged or fill material into waters of the United States (including wetlands)
U.S. Army Corps of Engineers Sacramento District, Civil Works Division	33 USC Section 408 Permission	Any proposed project that may affect any existing USACE (and/or State Plan of Flood Control levee in the Central Valley and Delta)
State Office of Historic Preservation	Section 106 of the National Historic Preservation Act Determination: Concurrence or MOA	Federal undertaking (HUD) and as part of consideration of a Section 404 permit and 408 Permission by USACE
U.S. Fish and Wildlife Service	Section 7 of the Endangered Species Act Determination: Biological Opinion	Federal undertaking (HUD) and as part of consideration of a Section 404 permit and Section 408 Permission by USACE
Central Valley Flood Protection Board	Title 23 Encroachment Permit	Encroachment onto/through regulated streams, and designated floodways Non-federal sponsor agency for 33 USC 408 coordination with USACE Civil Works Division.
Department of Water Resources Sutter Maintenance Area 5	Endorsement of Title 23 Encroachment Permit	Encroachment onto/through regulated streams, and designated floodways within maintenance area.
Central Valley Regional Water Quality Control Board	Section 401 Water Quality Certification	Any applicant for a federal license or permit which may result in a discharge into waters of the United States
California Department of Fish and Wildlife	Lake and Streambed Alteration Agreement	Any substantial diversion or obstruction of the natural flow of, or substantial change or use of any material from the bed, channel, or bank of, any river stream or lake. Crossing of streams, rivers, or lakes (also for reservoirs, which interrupt streams)
State Water Resources Control Board and Regional Water Quality Control Boards	National Pollutant Discharge Elimination System General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities	All construction and land disturbance discharges when clearing, grading, and excavation result in a land disturbance of 1 or more acres
State Water Resources Control Board and Regional Water Quality Control Boards*	Waste Discharge Requirements	Discharge of reclaimed water on land and to groundwater
California Department of Transportation (Caltrans)	Encroachment permits	Use of California rights-of-way for installation of pipelines along State freeways and roads (related to boring under SR 99)

Agency	Type of Permit or Approval	Regulated Activity
Butte County Public Works Departments	Encroachment permit	Use of local jurisdictions right-of-way to install pipeline across roadways
Butte County Public Works Departments	Grading permit	Construction activities within the County
Butte County	Memorandum of Understanding	For construction Project elements located within the County's jurisdiction

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

☐ Yes ☒ No

On March 8, 2024, the City of Chico submitted a formal invitation to the Mechoopda comment on the proposed Project per the requirements of AB 52. The Tribal Historic Preservation Officer for the Mechoopda Indian Tribe of Chico Rancheria confirmed via email on March 18, 2024 that the areas near Entler and Hegan are extremely sensitive, as well as Butte and Comanche Creeks and requested a tribal monitor during all earth-moving and grading activities.

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II. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below could be potentially affected by this Project, but, due to the inclusion of specific mitigation measures, will result in impacts that are a "Less Than Significant with Mitigation Incorporated," as indicated by the environmental checklist on the following pages.

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

III. COMMUNITY DEVELOPMENT DIRECTOR 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 have a potentially significant impact unless mitigated, but at least one effect has been adequately analyzed in an earlier document pursuant to applicable legal standards, and has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT (EIR) 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, there WILL NOT be a significant effect in this case because all potentially significant effects have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards and have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION including revisions or mitigation measures that are imposed upon the proposed Project. No further study is required.


Signature

5/31/24
Date

Tracy R. Bettencourt – MPA, AICP, Senior Planner

(for Brendan Vieg, Community Development Director)

IV. EVALUATION OF ENVIRONMENTAL IMPACTS

- Responses to the following questions and related discussion indicate if the proposed project will have or potentially have a significant adverse impact on the environment.
- A brief explanation is required for all answers except “No Impact” answers that are adequately supported by referenced information sources. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors or general standards.
- All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- Once it has been determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there is at least one “Potentially Significant Impact” entry when the determination is made an EIR is required.
- Negative Declaration: “Less than Significant with Mitigation Incorporated” applies when the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less than Significant Impact.” The initial study will describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section 4, “Earlier Analysis,” may be cross-referenced).
- Earlier analyses may be used where, pursuant to tiering, a program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration [Section 15063(c)(3)(D)].
- Initial studies may incorporate references to information sources for potential impacts (e.g., the general plan or zoning ordinances, etc.). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated. A source list attached, and other sources used or individuals contacted are cited in the discussion.
- The explanation of each issue should identify:
 - a. The significance criteria or threshold, if any, used to evaluate each question; and
 - b. The mitigation measure identified, if any, to reduce the impact to less than significant.

A. Aesthetics

Except as provide in Public Resources Code Section 21099, would the project or its related activities:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
1. Have a substantial adverse effect on a scenic vista?				X
2. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
3. 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 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?			X	
4. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				X

AFFECTED ENVIRONMENT: The Project site, located in south Chico, is relatively flat with an elevation of approximately 200 feet above sea level near Hegan Lane, increasing to 245 feet near its eastern terminus near Potter Road. The City of Chico is known for its flat agricultural landscape. Spanning nearly 3 miles, the Project site is surrounded by public service facilities, commercial buildings, schools, abandoned rail facilities, a public trail access for Comanche Creek Trail, and residential areas. The site is located near the USFS Mendocino National Forest Genetic Resource and Conservation Center and Comanche Creek. Construction would involve tree and vegetation removal within the 40-foot-wide disturbance area.

DISCUSSION: A.1. No Impact. While the City of Chico is characterized by scenic views including flat topography with agricultural areas, foothills, bluffs, ravines, and creeks, the Project site and surrounding area are relatively flat, and the site is only visible from the immediate area (City of Chico 2010). There are no valued visual resources on the Project site and no areas that are categorized as a scenic vista, as the Project is not near the Sierra Nevada Foothills to the east or the Central Valley to the west. Therefore, implementation of the Project would result in **no impact** on a scenic vista.

A.2. No Impact. The only highway near, and within, the Project site alignment is SR 99 which is not a designated scenic highway, nor eligible for that distinction (DOT 2023). Therefore, implementation of the Project would result in **no impact** on scenic resources along a scenic highway.

A.3. Less Than Significant. The Project site is only partially located within the incorporated City of Chico limits and crosses non-urban land (California Department of Conservation 2023). Therefore, this analysis considers the visual character of the Project site and surroundings. While the Project trunkline generally decreases in elevation from its eastern to western terminus, this slope occurs over 2.85 miles, such that the surrounding area appears relatively flat. The Project site is not located near any publicly accessible viewpoints. The Project is located near the Comanche Creek Trail parking lot and trailhead,

but the densely vegetated nature of the creek at this location reduces the viewshed to the immediate vicinity. Sidewalks and bike lanes are present along much of the Project alignment.

Construction of the Project would require tree removal and vegetation grubbing within some locations of the 40-foot-wide disturbance area. This is particularly the case along Cramer Lane, which is narrower than 40 feet in some locations, and because jack and boring would be required to construct a casing pipe under Comanche Creek. While tree removal and clearing and grubbing for the jack-and-bore pit would not extend into creek or wetland habitat, the removal would alter the densely vegetated nature along Cramer Lane including at the Comanche Creek Trail. Tree removal and vegetation grubbing would be conducted following local tree preservation regulations and guidelines and implementing Mitigation Measures D-1, D-4, and D-5 to protect nesting birds (City of Chico 2023). Replanting of areas along the construction alignment would include similar and native species, where appropriate, and replanting within areas regulated by state and federal government agencies would be done in conformance with all associated permitting requirements. A bike lane along Midway would be closed during pipeline construction; portions of the bike lane would be removed and replaced. Because implementation of the Project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings, these impacts would be **less than significant**.

A.4. No Impact. Because implementation of the Project would not create a new source of light or glare adversely impacting day or nighttime views, nor would the Project involve nighttime or weekend construction requiring the use of lighting at the Project site, there would be **no impact**.

MITIGATION: None required.

REFERENCES CITED:

California Department of Conservation. 2023. California Important Farmland Finder. Available: <https://maps.conservation.ca.gov/DLRP/CIFF/>. Accessed April 27, 2023.

California Department of Transportation (DOT). 2023. Scenic Highways. Available: <https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways>. Accessed: February 24, 2023.

City of Chico. 2010. General Plan: Section 4.13 Visual Resources and Aesthetics. Available: <https://chico.ca.us/documents/Departments/Community-Development/Planning-Division/General-Plan--Other-Planning-Documents/Draft-EIR-Chico-2030-General-Plan/4.13visualresourcesandaesthetics.pdf>. Accessed: February 28, 2023.

City of Chico. 2023. Municipal Code Chapter 16.66 Tree Preservation Regulations. Available: https://codelibrary.amlegal.com/codes/chico/latest/chico_ca/0-0-0-12939. Accessed: March 1, 2023.

B. Agriculture and Forest Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
1. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
2. Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
3. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code Section 4526, or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				X
4. Result in the loss of forest land or conversion of forest land to non-forest use?				X
5. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X

AFFECTED ENVIRONMENT: The Project is in Chico, a city in Butte County known for its flat agricultural landscape and agricultural economy. Butte County participates in the Williamson Act Program, in addition to land designated by the California Department of Conservation Farmland Mapping and Monitoring Program as agricultural land (City of Chico 2010). Spanning 2.85 miles, the Project site is bound to several different types of development and land uses and primarily runs through lands identified as "Urban and Built-Up" and "Other," as well as small areas of Prime and Unique Farmland (California Department of Conservation 2023). The Project site is surrounded by public service facilities, commercial buildings, schools, former rail facilities, and residential areas.

DISCUSSION: B.1. No Impact. The Project would not convert Prime or Unique Farmland or Farmland of Statewide Importance to a non-agricultural use. The California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program's *Butte County Important Farmland 2016* map identifies the Project site as predominantly "Urban and Built-up Land" and "Other Land" (California Department of Conservation 2023). Urban and built-up land along the Project

alignment is land occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. Other Land refers to lands not otherwise placed in a Farmland Mapping and Monitoring Program category. For the Project site, this includes natural vegetation, rural residential, wetlands, and vacant lands (City of Chico 2010). While the Project site does extend through “Prime Farmland” along Midway, “Unique Farmland” near Morrow Lane, the Project is located within the existing road rights-of-way at these locations and would not impact the continued use of farmland. Overall, while the Project would be located within portions of Prime Farmland, because it would not alter future use of the farmland, it would have a **less-than-significant** impact on this resource.

B.2. No Impact. The Project site does not include land under a Williamson Act Contract and therefore, would result in **no impact** to Williamson Act lands (Butte County 2016).

B.3–B.5. No Impact. Because the portion of the Project site that crosses agricultural land is within existing roadways rights-of-way and because there are no designated forest lands (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)) within or adjacent to the Project site, the Project would not conflict with existing zoning for agricultural land, nor result in the loss of agricultural land, or conversion of farmland, or involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland or forest land to non-agricultural uses. The Project would result in **no impact** on agricultural land and forest land.

MITIGATION: None required.

REFERENCES CITED:

California Department of Conservation. 2023. Important Farmland Categories. Available: <https://www.conservation.ca.gov/dlrp/fmmp/Pages/Important-Farmland-Categories.aspx>. Accessed: February 28, 2023.

City of Chico. 2010. General Plan: Section 4.2 Agricultural Resources. Available: <https://chico.ca.us/documents/Departments/Community-Development/Planning-Division/General-Plan--Other-Planning-Documents/Draft-EIR-Chico-2030-General-Plan/4.2agriculturalresources.pdf>. Accessed: February 28, 2023.

Butte County. 2016. The Land Conservation (Williamson) Act. Available: https://www.buttecounty.net/Portals/10/Planning/SFS/CLCA_Map_2015.pdf. Accessed: February 28, 2023.

C. Air Quality

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
1. Conflict with or obstruct implementation of the applicable air quality plans (e.g., Northern Sacramento Valley Planning Area 2012 Triennial Air Quality Attainment Plan, Chico Urban Area CO Attainment Plan, and Butte County AQMD Indirect Source Review Guidelines)?			X	
2. 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?			X	
3. Expose sensitive receptors to substantial pollutant concentrations?			X	
4. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

AFFECTED ENVIRONMENT: Butte County is located within the Sacramento Valley Air Basin (SVAB), comprising the northern half of California's 400-mile-long Great Central Valley. The SVAB encompasses approximately 14,994 square miles with a largely flat valley floor (excepting the Sutter Buttes) about 200 miles long and up to 150 miles wide, bordered on its east, north, and west by the Sierra Nevada, Cascade, and Coast mountain ranges, respectively.

The SVAB, containing 11 counties and approximately 2 million people, is divided into two air quality planning areas based on the amount of pollutant transport from one area to the other and the level of emissions within each. Butte County is within the Northern Sacramento Valley Air Basin (NSVAB), which is composed of Butte, Colusa, Glenn, Shasta, Sutter, Tehama, and Yuba Counties.

Emissions from the urbanized portion of the basin (Sacramento, Yolo, Solano, and Placer Counties) dominate the emission inventory for the SVAB, and on-road motor vehicles are the primary source of emissions in the Sacramento metropolitan area. While pollutant concentrations have generally declined over the years, additional emission reductions will be needed to attain the state and national ambient air quality standards in the SVAB. Seasonal weather patterns have a significant effect upon regional and local air quality. The Sacramento Valley and Butte County have a Mediterranean climate, characterized by hot, dry summers and cool, wet winters. Winter weather is governed by cyclonic storms from the North Pacific, while summer weather is typically subject to a high-pressure cell that deflects storms from the region.

In Butte County, winters are generally mild with daytime average temperatures in the low 50s°F and nighttime temperatures in the upper 30s°F. Temperatures range from an average January low of approximately 36°F to an average July high of approximately 96°F, although periodic lower and higher temperatures are common. Rainfall between October and May averages about 26 inches but varies considerably year to year. Heavy snowfall often occurs in the northeastern mountainous portion of the

County. Periodic rainstorms contrast with occasional stagnant weather and thick ground or "tule" fog in the moister, flatter parts of the valley. Winter winds generally come from the south, although north winds also occur. Diminished air quality within Butte County largely results from local air pollution sources, transport of pollutants into the area from the south, the NSVAB topography, prevailing wind patterns, and certain inversion conditions that differ with the season. During the summer, sinking air forms a "lid" over the region, confining pollution within a shallow layer near the ground that leads to photochemical smog and visibility problems. During winter nights, air near the ground cools while the air above remains relatively warm, resulting in little air movement and localized pollution "hot spots" near emission sources. Carbon monoxide, nitrogen oxides (NO_x), particulate matters and lead particulate concentrations tend to elevate during winter inversion conditions when little air movement may persist for weeks.

As a result, high levels of particulate matter (primarily fine particulates or PM_{2.5}) and ground-level ozone are the pollutants of most concern to the NSVAB Districts. Ground-level ozone, the principal component of smog, forms when reactive organic gases (ROG) and NO_x—together known as ozone precursor pollutants—react in strong sunlight. Ozone levels tend to be highest in Butte County during late spring through early fall, when sunlight is strong and constant, and emissions of the precursor pollutants are highest.

The SVAB is subject to federal, state, and local regulations. The Butte County Air Quality Management District (BCAQMD) is responsible for attainment of the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) in Butte County. The BCAQMD released the *CEQA Air Quality Handbook: Guidelines for Assessing Air Quality and Greenhouse Gas Impacts for Projects Subject to CEQA Review* (CEQA Handbook), which was approved March 28, 2024 (BCAQMD 2024). BCAQMD's CEQA Handbook provides the County's current attainment status, air quality trends, and rules and regulations that may be applicable to projects under consideration by lead agencies. Table C-1 summarizes the attainment status for Butte County with regard to NAAQS and CAAQS.

Table C-1. Butte County Ambient Air Quality Attainment Status

Pollutant	State	Federal
Ozone (1-hour)	<i>Nonattainment-Transitional</i>	--
Ozone (8-hour)	<i>Nonattainment-Transitional</i>	<i>Nonattainment</i>
Carbon Monoxide	Attainment	Attainment
Nitrogen Dioxide	Attainment	Attainment
Sulfur Dioxide	Attainment	Attainment
PM ₁₀ ^a (24-hour)	<i>Nonattainment</i>	Attainment
PM _{2.5} ^b (24-hour)	No Standard	<i>Attainment/Maintenance</i>
PM ₁₀ ^a (Annual)	Attainment	No Standard
PM _{2.5} ^b (Annual)	Attainment	Attainment

Source: BCAQMD 2024; CARB 2020; USEPA 2023a-e.

^a PM₁₀ = Respirable particulate matter less than 10 microns in size

^b PM_{2.5} = Fine particulate matter less than 2.5 microns in size

^c Chico Urbanized Area only.

Table C-2 provides BCAQMD's criteria pollutant emissions thresholds, which were adopted to support regional attainment of the NAAQS and CAAQS.

Table C-2. Butte County Air Quality Management District Criteria Pollutant Thresholds

Source	ROG	NO _x	PM ₁₀
Construction (pounds per day)	137	137	80
Construction (tons per year)	4.5	4.5	--
Operation (pounds per day)	25	25	80

Source: BCAQMD 2024.
 -- = No threshold

If a project is below (meets) the applicable screening criteria, it may be assumed to have a less-than-significant impact upon the environment under CEQA. None of the BCAQMD thresholds are expected to be exceeded.

DISCUSSION: To support the air quality analysis for the Project, ICF completed detailed air quality modeling calculations, included in Appendix A to this Draft IS/MND.

C.1. Less Than Significant. The applicable air quality plan for the Project site is the 2021 Northern Sacramento Valley Planning Area Air Quality Attainment Plan (AQAP), prepared by the BCAQMD and other air pollution control districts or air quality management districts located in the northern portion of the Sacramento Valley. Many of BCAQMD's rules are intended to meet the attainment goals of the AQAP. These AQAP control measure commitments are based, in part, on the regional population, housing, and employment projections (and related transportation-source emissions) prepared by the region's cities and counties. As such, projects that propose development consistent with the population, employment, and vehicle-miles-traveled (VMT) growth (and resultant emissions projections) anticipated in the relevant land use plans that were used in the formulation of the AQAP are therefore considered to be consistent with the AQAP.

The proposed Project is consistent with the population, employment, and VMT growth (and resultant emissions) projections in the Chico 2030 General Plan. Specifically, the proposed Project is needed to meet the goals described in the Chico 2030 General Plan Goal PPFS-4: Maintain a sanitary sewer system that meets the City's existing and future needs, complies with all applicable regulations, and protects the underlying aquifer; and Goal PPFS-4.1: Improve and expand the sanitary sewer system as necessary to accommodate the needs of existing and future development (City of Chico 2011). The Project was also identified in the 2013 SSMPU, which updated the previous iteration to identify capacity deficiencies in the City's sanitary sewer system, develop feasible alternatives to correct those deficiencies, and plan the infrastructure that will serve future development projected by the Chico 2030 General Plan (City of Chico 2013). Overall, the Project would not induce any population or job growth resulting in the generation of greenhouse gas (GHG) emissions, but rather support planned growth consistent with the Chico 2030 General Plan goals, policies, and land use plan. Impacts resulting from development regulated and guided by General Plan policies and actions have already been evaluated in the EIR prepared for the Chico 2030 General Plan (City of Chico 2010).

Because the Project is consistent with the population, employment, and VMT growth (and resultant emissions) projections in the Chico 2030 General Plan, it would be considered consistent with the region's AQAP, including with applicable rules that would limit ROG and PM emissions (e.g., Rules 205, 230, 231) during construction. Therefore, the Project would not conflict with or obstruct implementation of the applicable air quality plans. This impact would be **less than significant**.

C.2. Less Than Significant. Once construction is completed, the Project would not result in changes in traffic patterns in the Project area and would not generate additional vehicle trips, except for occasional maintenance-related trips. Therefore, the Project would result in negligible operational criteria pollutant and toxic air contaminant emissions, relative to the existing no Project conditions.

Air quality impacts associated with construction of the proposed Project were assessed and quantified (where applicable) using the SMAQMD Roadway Construction Emissions Model (RCEM), Version 9.0.1. Construction activities include the construction of a new sewer trunkline in a 40-foot trench (with total easements), extending approximately 2.85 miles easterly starting from the existing P-17A sewer trunkline located near the intersection of Hegan Lane and the Comanche Creek Greenway bike path. Construction of the Project would generate emissions of ROG, NO_x, CO, sulfur oxides, PM₁₀, and PM_{2.5} that could result in short-term air quality effects.

Emissions would originate from off-road equipment exhaust, on-road vehicle exhaust, site grading and earth movement, and paving. These emissions would be temporary (i.e., limited to the construction period) and would cease when construction activities are completed. The Project is proposed to be constructed over a duration of approximately 18 months, within up to three seasonal six-month construction windows between April and October (from between 2026 and 2030). The proposed construction would be conducted within the hours specified in the individual noise ordinances for the City of Chico.

Construction emissions were estimated using the RCEM based on Project-specific construction data (e.g., duration, area disturbed, hauling quantities) provided by the City. Table C-3 provides the Project's estimated construction emissions. A full list of the assumptions and methods used to quantify construction emissions in RCEM are presented in Appendix A.

Table C-3. Daily and Annual Criteria Pollutant Emissions from Project Construction

Construction Activity	ROG	NO _x	PM ₁₀
Daily Emissions (Pounds per Day)			
Grubbing/Land Clearing	0.94	7.71	1.75
Grading/Excavation	3.83	42.43	3.15
Drainage/Utilities/Sub-Grade	3.27	29.33	2.61
Paving	1.43	13.92	0.68
Maximum	3.83	42.43	3.15
Significance Threshold	137	137	80
Exceeds Threshold?	No	No	No
Annual Emissions (Tons per Year)			
Grubbing/Land Clearing	0.02	0.15	0.03
Grading/Excavation	0.34	3.78	0.28
Drainage/Utilities/Sub-Grade	0.19	1.74	0.15
Paving	0.04	0.41	0.02
Total (tons per year)	0.40	4.06	0.33
Significance Threshold	4.5	4.5	--
Exceeds Threshold after mitigation?	No	No	N/A
Source: Appendix A			

As shown in Table C-3, the Project's estimated construction emissions would not exceed the applicable BCAQMD thresholds, which were developed by BCAQMD taking into consideration the existing

emissions concentrations and regional attainment designations under the ambient air quality standards (NAAQS and CAAQS). As a result, this impact would be **less than significant**.

C.3. Less Than Significant. Typical sensitive receptors are residences, hospitals, schools, and parks. Low and very-low density residential uses are located adjacent to the Project alignment along Entler Avenue, and two schools, Core Butte High School, and Core Butte Charter School, are located along the Project alignment between SR 99 and Cramer Lane. Sensitive receptors within 1,000 feet of the Project may be exposed to criteria pollutants and toxic air contaminants temporarily during construction.

All criteria pollutants are associated with some form of health risk (e.g., asthma, lower respiratory problems) at certain concentrations. For example, particulate matter has been linked to premature death in people with preexisting heart or lung disease and nonfatal heart attacks (USEPA 2022). Exposure to ozone at certain concentrations can make breathing more difficult, cause shortness of breath and coughing, inflame and damage the airways, aggregate lung diseases, increase the frequency of asthma attacks, and cause chronic obstructive pulmonary disease (USEPA 2018). Exposure to CO at high concentrations can cause fatigue, headaches, confusion, dizziness, and chest pain (CARB 2023). While construction of the Project would generate criteria pollutants, as shown in Table C-3, emissions are well below BCAQMD thresholds and would only occur during three six-month construction phase increments.

BCAQMD's thresholds were adopted to support regional attainment of the NAAQS and CAAQS. The NAAQS and CAAQS are informed by a wide range of scientific evidence that demonstrates there are known safe concentrations of criteria pollutants. While recognizing that air quality is a cumulative problem, BCAQMD considers projects that generate criteria pollutant and ozone precursor emissions below these thresholds to be minor in nature and to not adversely affect air quality such that the NAAQS or CAAQS would be exceeded. Consequently, construction-generated criteria pollutants would be less than significant and would not result in exposure of sensitive receptors to substantial pollutant concentrations.

The primary toxic air contaminants of concern associated with Project construction are asbestos and diesel particulate matter (DPM). The inhalation of asbestos fibers into the lungs can result in inflammation of the lungs, respiratory ailments (e.g., asbestosis), and cancer (e.g., lung cancer and mesothelioma). DPM is generated by diesel-fueled equipment and vehicles and may cause acute irritation (e.g., eye, throat, and bronchial), neurophysiological symptoms (e.g., lightheadedness and nausea), respiratory symptoms (e.g., cough and phlegm), and cancer. The Project site does not have any reported historic asbestos mines, historic asbestos prospects, asbestos-bearing talc deposits, fibrous amphiboles, or ultramafic rock outcrops and the Project does not involve the demolition or modification of structures or buildings that would release asbestos during construction (U.S. Geological Survey and California Geological Survey 2011; BCAQMD 2018). DPM generated during construction would be temporary and cease once construction (approximately six months) is complete. Construction activities are anticipated to progress along the alignment at a rate of approximately 38 feet per day.¹ As such, the exposure of an individual sensitive receptor, where the receptor is within 1,000 feet of construction activities, would be well below six months and often less than one month. These timeframes are substantially lower than the 30-year exposure period typically associated with chronic cancer health

¹ This assumption is calculated based on the project length of 2.85 miles (15,048 feet), divided by the number of days of construction, 396 (possibly three 6month construction windows, assuming 22 work days per month).

risks (OEHHA 2015). Consequently, construction-generated toxic air contaminants emissions would be **less than significant** and would not expose sensitive receptors to substantial pollutant concentrations.

C.4. Less Than Significant. Potential sources of odors during construction include diesel exhaust and asphalt paving. Any odors from these activities would be temporary, minor, and are not likely to dominate ambient odors generated by the surrounding environment, which includes adjacent residential and commercial land uses. This impact would be **less than significant**.

MITIGATION: None required.

REFERENCES CITED:

- Butte County Air Quality Management District (BCAQMD). 2018. Naturally Occurring Asbestos Areas. Available: http://bcaqmd.org/wp-content/uploads/Naturally_Occuring_Asbestos_Map_Butte_8.5x11.pdf. Accessed: April 14, 2023.
- . 2024. CEQA Air Quality Handbook. March 28. Available: <https://bcaqmd.org/wp-content/uploads/CEQA-Handbook-2024-Updates-Clean-1.pdf>. Accessed: May 10, 2024.
- California Air Resources Board. 2020. State Area Designations Regulations. Appendix C: Maps and Tables of Area Designations for State and National Ambient Air Quality Standards. October. Available: <https://ww3.arb.ca.gov/regact/2021/sad20/appc.pdf>. Accessed: April 21, 2023.
- . 2023. Carbon Monoxide and Health. Available: <https://ww2.arb.ca.gov/resources/carbon-monoxide-and-health>. Accessed: April 14, 2023.
- City of Chico. 2010. Chico 2030 General Plan Update Draft Environmental Impact Report. September. <https://chico.ca.us/documents/Departments/Community-Development/Planning-Division/General-Plan--Other-Planning-Documents/Draft-EIR-Chico-2030-General-Plan/4.6airquality.pdf>. Accessed: April 24, 2023.
- . 2011. Chico 2030 General Plan: *Parks, Public Facilities, and Services*. Available: https://chico.ca.us/documents/Departments/Community-Development/Planning-Division/General-Plan--Other-Planning-Documents/Chico-2030-General-Plan/9_parks_public_facility_srvcs_element.pdf. Accessed: April 24, 2023.
- . 2013. Final Sanitary Sewer Master Plan Update. June. Available: https://chico.ca.us/documents/Departments/Public-Works/SewerStorm-Drain-Engineering/2013-Sanitary-Sewer-Master-Plan-Update/_ssmpu_final.pdf. Accessed: April 24, 2023.
- Office of Environmental Health Hazard Assessment (OEHHA). 2015. Air Toxics Hot Spots Program Risk Assessment Guidelines. February. Available: <https://oehha.ca.gov/media/downloads/crn/2015guidancemanual.pdf>. Accessed: April 14, 2023.
- U.S. Environmental Protection Agency (USEPA). 2022. Health and Environmental Effects of Particulate Matter (PM). Last updated August 30, 2022. Available: <https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm>. Accessed: April 14, 2023.
- . 2023a. California Nonattainment/Maintenance Status for Each County by Year for All Criteria Pollutants. Available: https://www3.epa.gov/airquality/greenbook/anayo_ca.html. Accessed: April 21, 2023.
- . 2023b. Carbon Monoxide (1971) Designated Areas by State/County/Area. Available: <https://www3.epa.gov/airquality/greenbook/cbcty.html>. Accessed: April 21, 2023.

———. 2023c. Carbon Monoxide (1971) Designated Area Partial County Descriptions. Available: <https://www3.epa.gov/airquality/greenbook/cbp.html#CO.1990.Chico>. Accessed: April 21, 2023.

———. 2023d. PM-2.5 (2006) Designated Areas by State/County/Area. Available: <https://www3.epa.gov/airquality/greenbook/rbcty.html>. Accessed: April 21, 2023.

———. 2023e. PM-2.5 (2006) Designated Area Partial County Descriptions. Available: <https://www3.epa.gov/airquality/greenbook/rbp.html#PM-2.5.2006.Chico>. Accessed: April 21, 2023.

U.S. Geological Survey and California Geological Survey. 2011. Reported Historic Asbestos Mines, Historic Asbestos Prospects, and Other Natural Occurrences of Asbestos in California – Map. Available: <http://pubs.usgs.gov/of/2011/1188/pdf/Plate.pdf>. Accessed: April 14, 2023.

D. Biological Resources

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
1. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species as listed and mapped in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		X		
2. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		X		
3. 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?		X		
4. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				X
5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
6. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X

AFFECTED ENVIRONMENT: A Biological Resource Memorandum was prepared for the Project in October 2023 by ICF (**Appendix B**). The purpose of the memo is to document the current endangered, threatened, sensitive, and rare species and their critical habitats that occur in the survey area of the Project. The survey area is defined as the Project footprint plus a 250-foot buffer. Primary references consulted include species lists and information gathered using the United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation tool, the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database, the California Native Plant Society inventory of rare and endangered plants, and literature review. An Aquatic Resources Delineation Report was also prepared for the Project in October 2023 by ICF (**Appendix C**). The surveys involved an examination of botanical resources, soils, hydrological features, and determination of wetland characteristics based on the United States Army Corps of Engineers (USACE) Wetlands Delineation Manual and other current regulations, manuals, and interpretations of jurisdiction currently in effect. (Environmental Laboratory 1987).

The Project study area contains the habitat types of agriculture, annual grassland, developed, upland ditch, valley oak woodland, aquatic ditch, culvert, emergent marsh, ephemeral, intermittent, and perennial streams, seasonal swale, seasonal wetland, valley oak riparian forest, vernal pool grassland complex, and vernal swale. Of these, valley oak woodland, valley oak riparian forest, and vernal pool grassland complex conform to sensitive natural communities within the study area. The potential for occurrence of special-status species was determined based on presence of suitable habitat, presence or absence of species during protocol surveys, and previously disturbed landcover. The following discussion considers Project impacts on the species with moderate to high potential to occur within the survey area.

DISCUSSION: D.1. Less Than Significant with Mitigation Incorporated. The special-status species with moderate to high potential to occur within the Project area are valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*; VELB), northwestern pond turtle (*Emys marmorata*), and various other bird and raptor species protected under the Migratory Bird Treaty Act (MBTA).

Valley Elderberry Longhorn Beetle

VELB is listed as threatened under the federal Endangered Species Act (ESA). The VELB is a small (0.5–0.8 inch long) beetle that is endemic to the Central Valley of California (USFWS 2017). The beetle is found only in association with its host plant, elderberry. Adults feed on the foliage and flowers of elderberry shrubs and are present from March through early June. During this period, the beetles mate and females lay eggs on living elderberry plants. The first instar larvae bore to the center of elderberry stems where they feed on the pith of the plant for 1 to 2 years as they develop. Prior to forming their pupae, the elderberry wood boring larvae chew through the bark and then plug the holes with wood shavings. In the pupal chamber, the larvae metamorphose into their pupae and then into adults whereupon they emerge between mid-March through June (Barr 1991). The only identifiable exterior evidence of elderberry use by VELB is the exit hole created by the larvae (USFWS 2017). Current threats to VELB consist primarily of riparian habitat destruction causing extirpation, fragmentation, and isolation of beetle populations (Barr 1991).

VELB was considered to have moderate potential to occur within the survey area. There are 19 blue elderberry shrubs mapped in the survey area, 5 of which occur in the Project footprint and may be directly affected, 3 are located less than 20 feet from the Project footprint, 5 are located between 20 and 165 feet of the Project footprint, and 6 are located greater than 165 feet from the Project footprint. Elderberry shrubs within the Project footprint occur north of Comanche Creek along Cramer Lane and

south of Comanche Creek north of Southgate Avenue. The largest stem of shrubs ranged from 1 to 5 inches in diameter. However, no VELB exit holes were observed. With the implementation of **Mitigation Measure D.1, Conduct Worker Environmental Awareness Training and Implement General Requirements**, and **Mitigation Measure D.2, Valley Elderberry Longhorn Beetle Avoidance and Minimization Measures** and through the **Section 7 Consultation process**, potential impacts would be reduced to **less than significant**.

Northwestern Pond Turtle

The northwestern pond turtle is proposed for listing as threatened under the ESA and is a Species of Special Concern in California. Northwestern pond turtles are drab, darkish colored turtles with a yellowish to cream colored head. They range from the Washington Puget Sound to the California Sacramento Valley. Suitable aquatic habitats include slow-moving to stagnant water, such as backwaters and ponded areas of rivers and creeks, semi-permanent to permanent ponds and irrigation ditches. Preferred habitats include features such as hydrophytic vegetation, for foraging and cover, and basking areas to regulate body temperature. In early spring through early summer, female turtles begin to move over land in search of nesting sites. Eggs are laid on the banks of slow-moving streams. The female digs a hole approximately 4 inches deep and lays up to eleven eggs. Afterwards the eggs are covered with sediment and are left to incubate under the warm soil. Eggs are typically laid between March and August (Zeiner et al. 1990). Current threats facing the northwestern pond turtle include loss of suitable aquatic habitats due to rapid changes in water regimes and removal of hydrophytic vegetation.

The northwestern pond turtle was considered to have moderate potential to occur within the survey area. Suitable aquatic habitat for this species occurs within Comanche Creek. Uplands surrounding Comanche Creek provide only marginal habitat due to their densely forested nature. The Project would primarily trench through existing roadways, which are not habitat for northwestern pond turtle. However, smaller portions of the Project would trench through and directly affect habitat for northwestern pond turtle, which consists of suitable annual grassland, valley oak riparian forest, valley oak woodland, and grassland dominated portions of developed habitats within 500 meters of suitable aquatic habitat (Thomson et al. 2016). With the implementation of **Mitigation Measure D.1, Conduct Worker Environmental Awareness Training and Implement General Requirements**, and **Mitigation Measure D.3, Northwestern Pond Turtle Avoidance and Minimization Measures**, and through the **Section 7 Consultation process**, impacts would be **less than significant**.

Migratory Birds and Raptors

Migratory birds and raptors are protected under the Migratory Bird Treaty Act (16 USC 703) and the CFGC (§3503). The MBTA (16 USC §703) prohibits the killing of migratory birds or the destruction of their occupied nests and eggs except in accordance with regulations prescribed by the USFWS. The bird species covered by the MBTA include nearly all of those that breed in North America, excluding introduced (i.e., exotic) species (50 Code of Federal Regulations §10.13). Activities that involve the removal of vegetation including trees, shrubs, grasses, and forbs or ground disturbance have the potential to affect bird species protected by the MBTA.

The CFGC (§3503.5) states that it is “unlawful to take, possess, or destroy any birds in the order Falconiformes (hawks, eagles, and falcons) or Strigiformes (owls) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.” Take includes the disturbance of an active nest resulting in the abandonment or loss of young. The CFGC (§3503) also states that “it is unlawful to take, possess, or needlessly destroy the nest or eggs

of any bird, except as otherwise provided by this code or any regulation made pursuant thereto.” There is suitable nesting habitat for a variety of ground, shrub, and tree nesting avian species within the study area. The Project would primarily trench through existing roadways, which are not habitat for migratory birds and raptors. However, smaller portions of the Project could trench through and directly affect habitat for migratory birds and raptors. Migratory birds and raptors have potential to roost within valley oak woodland, valley oak riparian forest, isolated trees and buildings, grassland, and developed habitats within the survey area. With the implementation of **Mitigation Measure D.1, Conduct Worker Environmental Awareness Training and Implement General Requirements**, and **Mitigation Measure D.4, Nesting Migratory Birds and Raptors Avoidance and Minimization Measures**, potential impacts would be reduced to **less than significant**.

D.2. Less Than Significant with Mitigation Incorporated. While no USFWS Critical Habitats have been mapped within the survey area, two sensitive natural communities overlap with the Project footprint: valley oak woodland and valley oak riparian forest. The proposed Project would permanently remove up to 0.84-acre of valley oak woodland habitat and up to 0.17-acre of valley oak riparian forest. Impacts on these sensitive natural communities would be considered significant. With the implementation of **Mitigation Measure D.1, Conduct Worker Environmental Awareness Training and Implement General Requirements**, **Mitigation Measure D.5, Protect Valley Oak Trees during Construction**, and **Mitigation Measure D.6, Minimize Impacts on Riparian Vegetation and Compensate for Loss of Riparian Habitat**, the impacts would be reduced to **less than significant**.

D.3. Less Than Significant with Mitigation Incorporated. An Aquatic Resources Delineation Report (**Appendix C**) was prepared for the Project in October 2023 by ICF. The study area contains 0.32-acre of Waters of the United States and Waters of the State and 0.42-acre and 0.97-acre of CDFW streambed and riparian habitat, respectively. The Project has the potential to impact 0.01 acre of impact to jurisdictional waters. This is a significant impact. With the implementation of Mitigation Measure D.7, Aquatic Resources Avoidance and Minimization and Compensation, the impact would be reduced to **less than significant**.

D.4. No Impact. The proposed Project consists of installation of a sewer trunkline approximately 2.85 miles in length. The trunkline will be trenched below the ground surface. The Project would not interfere substantially with the movement of any native fish or wildlife species, nor cause fragmentation of an existing wildlife habitat, therefore there would be **no impact**.

D.5. No Impact. Through compliance with state and federal regulations protecting sensitive biological resources, including waters of the United States and special-status species, the proposed Project would not conflict with any of the City of Chico General Plan Policies or the Butte County General Plan policies. There would be no impact. Project construction activities are anticipated to occur primarily within existing roadway rights-of-way and, therefore, the local tree ordinance does not apply to the Project (CMC Section 16.66.040 Exemptions). If the Project design changes result in impacts to trees outside of rights-of-way, trees should be assessed for potential protection under the local tree ordinances. There would be **no impact**.

D.6. No Impact. There are no adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plans for the Project area. With the implementation of Mitigation Measures D-1, D-4, and D-5 there would be **no impact**.

MITIGATION: Mitigation Measure D.1. Conduct Worker Environmental Awareness Training and Implement General Requirements:

The applicant will retain a qualified biologist to develop and conduct a mandatory worker environmental awareness training about special-status species and other sensitive resources that could be encountered during proposed Project work (e.g., sensitive natural communities, northwestern pond turtle, nesting birds). In addition, construction employees will be educated about the importance of controlling and preventing the spread of invasive plant infestations.

The biologist will prepare a handout that contains information (including photographs) about how to identify pertinent species, their habitat requirements, and the avoidance and minimization measures to be implemented. All personnel will receive worker environmental awareness training before conducting Project work and new personnel will receive the training as they are brought onto the Project. Proof of personnel environmental training attendance will be kept on file by the biologist and made available to the applicant upon request. At least one copy of the handout will remain on-site throughout the duration of the Project with the construction foreman.

General restrictions and guidelines that will be in the training and followed by Project personnel are listed below. The Project foreman will be responsible for ensuring that crew members adhere to these guidelines and restrictions:

- A. Before construction begins, the construction contractor will work with the Project engineer and a biologist to identify sensitive locations to be protected with orange construction fencing or other high visibility materials (e.g., stanchions or pilons and flagging) and will place stakes to indicate these locations. Fencing will be installed with a 1-foot gap between the ground and the bottom of the fence so that small animals do not become trapped in the fence. The fencing or other high visibility materials shall be installed before construction activities are initiated, maintained throughout the construction period, and removed when construction is completed. The protected areas shall be designated as environmentally sensitive areas and clearly identified on the construction plans or resource protection exhibit, which will be prepared after the site review with the contractor and prior to construction;
- B. Work crews will be restricted to designated and clearly defined work areas and access routes. Staging of equipment and material sites will be restricted to designated areas;
- C. A biological monitor will make periodic visits to the Project area to ensure that environmentally sensitive areas are being protected, provide environmental awareness training to new crew members, and determine if general restrictions and guidelines are being followed;
- D. Prior to mobilization to the Project site, all equipment shall be pressure washed clean to ensure noxious weeds are not imported into or out of the Project area. Equipment shall be considered clean when there is no visible soil or plant parts.
- E. At the end of each workday, either a secure cover such as trench plating shall be placed over any open excavation, or an escape ramp shall be placed at each end of any open excavation to allow wildlife that may become trapped to climb out overnight. The ramp may be constructed of either dirt fill or wood planking or other suitable material that is placed at an angle no greater than 30 degrees. The biological monitor or designated construction personnel will check excavations, open pipes, and other areas prior to filling, moving, or disturbing to ensure that animals are not trapped or harmed by construction activities;
- F. Vehicles will not exceed a speed of 10 miles per hour when traveling off paved roads;

- G. Vehicle access across streams and wetlands shall be limited to existing roads and designated crossings;
- H. Laydown and staging areas will be located in previously developed or disturbed areas;
- I. Any erosion control materials required for the Project will be rice straw or come from certified weed-free sources, as practicable (i.e., certified weed-free straw wattles, mulch, etc.);
- J. Maintain gravel and soil spoil piles free of invasive weeds;
- K. All trash shall be disposed of and removed from the work area daily. Workers will not feed or otherwise attract fish or wildlife to the work area;
- L. No pets or firearms will be allowed in the Project area;
- M. Workers shall look underneath vehicles and other heavy equipment for wildlife before moving vehicles or equipment to ensure that no animals are crushed;
- N. No wildlife species will be handled and/or removed from the site by anyone except qualified biologists.
- O. Any worker who inadvertently injures or kills an animal or finds one dead, injured, or entrapped will immediately report the incident to the Project foreman, who will immediately report the incident to the biologist.

Mitigation Measure D.2. Valley Elderberry Longhorn Beetle Avoidance and Minimization Measures and Section 7 Consultation:

The applicant will implement the following avoidance and minimization measures consistent with USFWS's (2017) *Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle*.

- A. If direct impacts to elderberry bushes can be avoided, the following measures will be implemented to avoid and minimize impacts on VELB:
 - Fencing. All areas to be avoided during construction activities will be fenced and/or flagged as close to construction limits as feasible.
 - Avoidance area. Activities that may damage or kill an elderberry shrub (e.g., trenching, paving, etc.) may need an avoidance area of at least 6 meters (20 feet) from the dripline, depending on the type of activity.
 - Worker education. A qualified biologist will provide training for all contractors, work crews, and any on-site personnel on the status of the VELB, its host plant and habitat, the need to avoid damaging the elderberry shrubs, and the possible penalties for noncompliance.
 - Construction monitoring. A qualified biologist will be present on site and will monitor the work area during all work directly impacting elderberry bushes. Once direct impacts are complete, the qualified biologist will conduct site visits on a weekly basis to assure and document that all avoidance and minimization measures are implemented.
 - Timing. As much as feasible, all activities that could occur within 50 meters (165 feet) of an elderberry shrub, will be conducted outside of the flight season of the VELB (March–July).

- Trimming. Trimming may remove or destroy VELB eggs and/or larvae and may reduce the health and vigor of the elderberry shrub. In order to avoid and minimize adverse effects to VELB when trimming, trimming will occur between November and February and will avoid the removal of any branches or stems that are ≥ 1 inch in diameter.
 - Mowing. Mechanical weed removal within the dripline of the shrub will be limited to the season when adults are not active (August–February) and will avoid damaging the elderberry.
- B. Because impacts on five of the elderberry shrubs are unavoidable, formal consultation with USFWS and mitigation for impacts on valley elderberry longhorn beetle will be required. The final amounts of impacts and mitigation will be determined through the federal ESA Section 7 consultation process. The applicant shall purchase credits at an approved mitigation bank as defined by the USFWS Biological Opinion.
- C. Public Works staff shall document the final purchase of required mitigation credits, or other methods of mitigation documenting relief thereof, prior to commencement of construction activities. Public Works staff and contractor shall ensure avoidance and minimization measures are implemented through ongoing site inspections and monitoring.

MITIGATION D.3. Northwestern Pond Turtle Avoidance and Minimization Measures and Section 7 Consultation:

To avoid and minimize potential impacts on northwestern pond turtle, the applicant will implement the following avoidance and minimization measures.

- A. A qualified biologist will provide training for all contractors, work crews, and any on-site personnel on the status of the western pond turtle, its life stages and habitats where nests, hatchlings, and adults may be found at different times of year, and the responsibilities of any personnel who observe a turtle within work areas.
- B. Where feasible, the applicant's contractors will initiate construction and conduct initial ground disturbance in suitable upland habitat within 300 feet of suitable aquatic habitat prior to the start of nesting season (August 1–February 28) and avoid northwestern pond turtle upland habitat during periods of nesting and nestling emergence (between March 1–July 31).
- C. At least 30 days prior to any ground-disturbing activities the applicant will prepare and submit a relocation plan for USFWS's written approval. The relocation plan will contain the name(s) of the biologist(s) to relocate northwestern pond turtles or their nests, the method of relocation, a map, and a description of the proposed release site(s) a minimum of 300 feet outside of the work area or at a distance otherwise agreed to by USFWS and written permission from the landowner to use their land as a relocation site. Any capture and handling of turtles will be done by a USFWS- and CDFW-approved biologist wearing clean, new disposable surgical style (nitrile, etc.) gloves.
- D. Within 48 hours prior to the initiation of any vegetation clearing, ground-disturbing activities, the USFWS- and CDFW-approved biologist will conduct a preconstruction survey within suitable aquatic and upland habitat in the entire work site for the presence of northwestern pond turtles or nests. These surveys will consist of walking the worksite limits. The biologist will investigate all potential areas that could be used by northwestern pond turtle for feeding, basking, nesting, or other essential behaviors including beneath vehicles before the vehicles are moved. If there is a lapse in construction of 7 days or more preconstruction surveys will be repeated before activities resume.

- E. The USFWS- and CDFW-approved biological monitor will help guide access and construction work around sensitive habitats capable of supporting northwestern pond turtle to minimize habitat disturbance and risk of injuring or killing northwestern pond turtles.
- F. The USFWS- and CDFW-approved biologist will conduct clearance surveys prior to the start of construction each day and regularly throughout the workday when construction activities are occurring that may result in injury or mortality of northwestern pond turtle. Surveys will be conducted in the same manner as the preconstruction surveys.
- G. If a northwestern pond turtle is encountered in a construction or restoration area, all personnel on-site will be notified and activities within a minimum of 25 feet of the individual will cease immediately, the construction manager and USFWS- and CDFW-approved biologist will be notified, and the biologist will observe and follow within 10 feet of the individual to ensure it has safely left the area. Depending on site-specific conditions, such as the use of heavy equipment or other activities that may cause harm to the individual, as determined by the biologist, a larger protective buffer may be established. The turtle will be allowed to leave the area of its own volition out of harm's way. If the turtle does not move out of the area on its own, and it is determined by the biologist, in coordination with the construction manager that relocating the turtle is necessary to prevent harm, the turtle may be captured and relocated to suitable habitat a minimum of 300 feet outside the work area in accordance with the relocation plan, prior to resumption of construction activity.
- H. Equipment will be stored in designated staging area areas at least 300 feet away from northwestern pond turtle aquatic habitat to the extent practicable.
- I. If a work site is to be temporarily dewatered by pumping during the northwestern pond turtle active season, intakes will be completely screened with wire mesh not larger than 5 millimeters to prevent juvenile pond turtle and other aquatic species from entering the pump system. Any turtles found in the dewatered area will be relocated according to the USFWS- and CDFW-approved relocation plan.

For construction that will occur within suitable northwestern pond turtle aquatic habitat during the northwestern pond turtle inactive season (October 1 through February 28), the applicant will implement the following additional avoidance and minimization measures.

- A. All aquatic northwestern pond turtle habitat will be dewatered prior to the start of the inactive season (October 1) to the extent that the area is no longer suitable northwestern pond turtle habitat, as defined by the biologist. Dewatering is necessary because aquatic habitat provides overwintering habitat for northwestern pond turtle; dewatering serves to remove the attractant and increase the likelihood that northwestern pond turtle will move to other available habitat. Pump intakes will be completely screened with wire mesh not larger than 5 millimeters to prevent juvenile pond turtle and other aquatic species from entering the pump system. Dewatering will be limited to the immediate construction area. The USFWS- and CDFW-approved biologist will be on-site during dewatering activities to salvage and relocate any turtles that cannot escape on their own according to the USFWS- and CDFW-approved relocation plan. Any deviation from this measure will be done in coordination with and with approval of USFWS and CDFW.
- B. Following dewatering of aquatic habitat, all potential impact areas that provide suitable aquatic or upland northwestern pond turtle habitat will be surveyed for northwestern pond turtle by the biologist. If northwestern pond turtles are observed, they will be allowed to move of its own accord or relocated in accordance with the approved relocation plan.

Because western pond turtle is proposed for listing as threatened under the ESA, and Project trenching would occur through potential habitat for western pond turtle, informal or formal consultation with USFWS and additional mitigation measures may be required.

MITIGATION D.4. Nesting Migratory Birds and Raptors Avoidance and Minimization Measures:

If vegetation removal or initial ground disturbances occur during the avian breeding season (February 1–August 31) the applicant will hire a qualified biologist to conduct a nesting migratory bird and raptor survey to identify any active nests within 50 feet of the Project footprint. The qualified biologist will:

- A. Conduct a preconstruction survey for nesting migratory birds and raptors within 7 days prior to the initiation of Project activities, including a survey of the Skyway bridge that passes over the Butte Creek Diversion Channel which supports a nesting cliff swallow colony. If active nests are encountered, the qualified biologist will develop no-disturbance buffers around active nests based on the species tolerance of disturbance, species type, nest location, and activities that will be conducted near the nest.
- B. Construction activities will be prohibited within the buffer zones until the end of the breeding season (August 31) or until after a qualified wildlife biologist determines that the young have fledged and moved out of the Project area (this date varies by species).
- C. If construction activities stop for more than 15 days, then another migratory bird and raptor survey will be conducted within seven (7) days prior to the continuation of construction activities.
- D. Active nests will be monitored once per week, or as frequently as deemed necessary by the qualified biologist, and monitoring logs will be available to the City of Chico Public Works Department upon request.

MITIGATION D.5. Protect Valley Oak Trees during Construction:

This measure applies to all valley oaks that have a diameter at breast height of at least 6 inches, or if it has multiple trunks of less than 6 inches each, a combined diameter at breast height of at least 10 inches.

- A. Removal and trimming of vegetation will be the minimum amount necessary to support the work.
- B. All vegetation work will be done with hand tools only, which includes chainsaws. No mastication machines will be utilized.
- C. No refueling of chainsaws will be permitted in off-road areas without secondary containment.
- D. If any active nests (nests with birds or eggs in them) are detected during tree-removal or tree-trimming, the contractor will safely stop work and contact the Project biologist immediately.
- E. The applicant will ensure that all valley oak trees that can be retained, but may be affected by Project construction, will be preserved and protected to the extent feasible as follows:
 - A circle with a radius measurement from the trunk of the tree to the tip of its longest limb will constitute the dripline protection area of the tree. Limbs must not be cut back in order to change the dripline. The area beneath the dripline is a critical portion of the root zone and defines the minimum protected area of the tree. Removing limbs that make up the dripline does not change the protected area.

- Construction exclusion fencing or a similar protective barrier will be installed 1 foot outside the driplines of oak trees prior to initiating Project construction in order to avoid damage to the trees and their root system.
- No signs, ropes, cables (except cables that may be installed by a certified arborist to provide limb support), or other items will be attached to oak trees.
- No vehicles, construction equipment, or materials, will be driven, parked, stockpiled, or located within the driplines of oak trees.
- Any soil disturbance (scraping, grading, trenching, and excavating) is to be avoided within the driplines of oak trees. Where these activities are necessary, an International Society of Arboriculture (ISA) Certified Arborist will provide specifications for this work, including methods for root pruning, backfill specifications, and irrigation management guidelines.
- Trenching within protected tree driplines will be avoided wherever feasible. If trenching must encroach upon the dripline, the trenching should be tunneled or bored under the tree under the supervision of an ISA Certified Arborist.
- If temporary access roads must pass within the driplines of oak trees, a roadbed of 6 inches of mulch or gravel will be created to protect the root zone. The roadbed will be installed from outside the dripline and while the soil is in a dry condition, if possible. The roadbed material will be replenished as necessary to maintain a 6-inch depth.
- Drainage patterns on the site will not be modified so that water collects or stands within, or is diverted across, the dripline of oak trees.
- Tree pruning that may be required for clearance during construction will be performed by an ISA Certified Arborist or Tree Worker and in accordance with the American National Standards Institute A300 pruning standards and the ISA *Best Management Practices – Pruning, 3rd edition* (Lilly et al. 2019).

MITIGATION D.6. Minimize Impacts on Riparian Vegetation and Compensate for Loss of Riparian Habitat:

- A. The applicant will minimize the loss of riparian vegetation during construction by limiting the movement of construction equipment to only the area necessary.
- B. Prior to any construction activities, the boundaries of necessary equipment access areas will be marked with construction exclusion fencing. All vegetation work will be done with hand tools only, which includes chainsaws. No mastication machines will be utilized.
- C. No refueling of chainsaws will be permitted in off-road areas without secondary containment.
- D. If any active nests (nests with birds or eggs in them) are detected during tree-removal or tree-trimming, the contractor will safely stop work and contact the Project biologist immediately.
- E. The applicant will compensate for the loss of riparian vegetation through either on-site restoration or through the purchase of mitigation credits at a CDFW-approved mitigation bank. The ratio and method(s) of compensation will be determined through consultation with CDFW.

MITIGATION D.7. Aquatic Resources Avoidance and Minimization and Compensation:

- A. The applicant will implement the following measures to avoid and minimize impacts on aquatic resources:
- If possible, work will be conducted during the dry season (generally May 15–October 15). If it is not possible to conduct work in the dry season, rainy season work will be conducted during dry spells between rain events.
 - Aquatic resources will be flagged in the field prior to the start of construction.
 - Vehicle and equipment crossing of waterways will be limited to existing roads and crossings.
 - A biologist will be on-site to monitor boring beneath Comanche Creek and the Butte Creek Diversion Channel.
- B. The applicant will compensate for the permanent loss of approximately 0.01 acres of jurisdictional waters at a minimum ratio of 1:1 (one acre of habitat credit for every one acre of impact). The actual mitigation ratio and associated credit acreage may be modified based on CWA Section 404 and 401 permitting, which will dictate the ultimate compensation for permanent impacts on jurisdictional Waters of the United States and Waters of the State.

REFERENCES CITED:

- Barr, C. B., 1991. The distribution, habitat, and status of the Valley Elderberry Longhorn Beetle *Desmocerus californicus dimorphus* Fisher (Coleoptera: Cerambycidae). U.S. Fish and Wildlife Service. Sacramento, CA.
- City of Chico. 2010. Chico 2030 General Plan, Open Space and Environment Element. Available: https://chico.ca.us/documents/Departments/Community-Development/Planning-Division/General-Plan--Other-Planning-Documents/Chico-2030-General-Plan/10_open_space_and_environment_element.pdf. Accessed: March 15, 2024.
- Environmental Laboratory. 1987. *Corps of Engineers Wetland Delineation Manual*. Technical Report Y-87-1. Vicksburg, MS: U.S. Army Waterways Experiment Station.
- Lilly, S.J. Gilman E.F, and Smiley T. 2019. Best Management Practices – Pruning, 3rd Edition. International Society of Arboriculture. Atlanta, GA.
- Thomson, R.C., A.N. Wright and H.B. Shaffer. 2016. California Amphibian and Reptile Species of Special Concern. California Department of Fish and Wildlife. University of California Press. Oakland, CA.
- U.S. Fish and Wildlife Service. 2017. Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimorphus*). U.S. Fish and Wildlife Service; Sacramento, California. 28 pp.
- Zeiner, D.C., W.F. Laudenslayer, and K.E. Mayer, 1988-1990. California's Wildlife. Vols I, II, and III. California Statewide Wildlife Habitat Relationships System. California Department of Fish and Game. Sacramento, California.

E. Cultural Resources

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
1. Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?				X
2. Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?		X		
3. Disturb any human remains, including those interred outside of dedicated cemeteries?		X		

AFFECTED ENVIRONMENT: Ethnographically, the Konkow Maidu occupied the areas surrounding Chico and Oroville, along the Sacramento and Feather Rivers as well as a portion of the Sacramento Valley (Riddell 1978). From the Sacramento Valley, the Konkow territory extended northeast into the Feather River Canyon along areas surrounding the North Fork of the Feather River (Shipley 1978). In addition to the major rivers, the Konkow also occupied lands along the creeks in the valley such as Comanche Creek which runs through the Project. Archaeological evidence of Native American habitation along Comanche Creek, Big Chico Creek, and Little Chico Creek in the vicinity of Chico has been documented over the past 100 years. In historic times, the Project was within the Rancho Arroyo Chico, granted to William Dickey in 1844. The land grant was sold to George W. McKinstry in 1849 who then sold the land to John Bidwell and Justus McKinstry between 1849 and 1850. In 1851, Justus McKinstry sold his interest to Bidwell, who then became the sole owner of Rancho Arroyo Chico (Beckham 2006:5–6; Hunt 1942:247–249). Founded in 1860 by John Bidwell and incorporated as a city in 1872, the City of Chico came to prominence as an important economic hub for settlers seeking gold after its regional discovery by Bidwell and his business partners along the Feather River in 1848.

DISCUSSION: **E.1. No Impact; E.2–E.3. Less Than Significant with Mitigation Incorporated.** Overall and based upon map review and the results of current and previous archaeological surveys in the vicinity, the Project area appeared to contain lands high in archaeological sensitivity for both prehistoric sites and features.

ICF conducted a cultural resources investigation for the proposed Project, refer to **Appendix D**. In support of the study ICF cultural staff conducted an archival record search, assisted in consultations, and an archaeological field survey in order to identify the cultural resources occurring, or potentially occurring, in the Project area. The record search included a review of the data housed at the Northeast Information Center at CSU, Chico and a Sacred Lands search with the Native American Heritage Commission (NAHC). The consultation involved potentially interested local Native American groups, as identified by the NAHC. As part of the study efforts, the record search, consultations, and field survey produced the following results.

Prior to conducting the pedestrian field survey, a records search at the Northeast Information Center (I.C. File # NE-108, dated March 2, 2023) was performed which reviewed the records of previous cultural resource studies and recorded cultural resources within the Project and a 0.25-mile buffer surrounding the Project. The records search indicated that 39 studies were conducted within the record search radius and 14 of those intersected the Project. Additionally, four built environment resources were previously recorded within the 0.25-mile record search radius. None of those resources were

located within the Project. Due to the fragmentary nature of the previous studies, a new and comprehensive archaeological pedestrian survey of the Project was warranted.

Additional research was conducted to address sensitivity of the Project for buried archaeological sites. Soil survey data and soil classification types were identified across the Project and cross-referenced with the age of the landforms associated with the identified soils (Meyer and Rosenthal 2008). According to Meyer and Rosenthal's analysis, the surface soils in the Project contain mostly Latest Holocene (2,000 to 150 years old) with areas of Latest Pleistocene (22,000 to 11,000 years old). The Project is adjacent to Comanche Creek and directly west of Chico Creek, both of which are prone to alluvial sediments. Additionally, Burnett and Jennings 1962 geologic map shows the entire Project as Quaternary fan deposits. Because these soils are prone to sediment accumulation, they could contain buried archaeological materials that were previously exposed on the surface. In addition, due to the overall landform age being in the Holocene, which is consistent with human occupation in the area, the majority of the Project is identified as having a high sensitivity for buried archaeological sites due to the proximity of major creeks and waterways.

Consultation efforts for the Project included a Sacred Lands File search through NAHC and outreach to five local historical parks, associations, and museums for information regarding built environment resources. The NAHC identified no sacred lands within the Project (Letter dated February 23, 2023) and no responses were received with any information on historical resources in the area. Tribal Consultation under Assembly Bill 52 was conducted by the City of Chico and the results of those consultation efforts are provided in the Tribal Cultural Resources section.

On April 10 and May 3, 2023, ICF Archaeologist Breidy Quispe Vilcahuaman and Marlene Saucedo conducted an intensive pedestrian survey of the entire Project. The survey was conducted by walking 10-meter-wide, east-west- and north-south-oriented transects in order to ensure optimal coverage of the Project alignment as well as any potential staging areas for equipment and materials associated with the Project. The surveyed area varied, consisting largely of asphalt highway, gravel paths, large residential and commercial plots, and densely vegetated land adjacent to Comanche Creek. The Project included segments of Morrow Lane, Cramer Lane, Comanche Court, Entler Avenue, Midway Road, and gated private property. Ground visibility varied from excellent (90–100%) along graded sections of public roads, residential driveways, and private driveways, to poor (10–20%) in the densely vegetated pastures adjacent to Comanche Creek. As a result of the intensive field survey, no new evidence of prehistoric (i.e., Native American) and/or historic resources were encountered in the Project.

The overall finding for this study is that no historical or archaeological resources recognized under CEQA were identified within the Project; therefore, no historical resources would be affected by the proposed Project. However, there is always a possibility of unearthing an archaeological site during ground-disturbing activities.

Therefore, in accordance with the intent of the Memorandum of Understanding Regarding Principles for the City of Chico Consultation with the Mechoopda Indian Tribe of Chico Rancheria dated August 8, 2008, and in the event that resources are inadvertently discovered, implementation of **Mitigation Measures E.1, Cultural Resources, Mitigation Measure E.2, Tribal Monitor and R.1 Tribal Cultural Resources** (see Section IV.R, *Tribal Cultural Resources*) would reduce impacts to **less than significant**.

MITIGATION: Mitigation Measure E.1. Cultural Resources: If any bones, pottery fragments or other potential cultural resources are encountered during construction, all work shall cease within the area of the find equivalent to a 25-foot radius around the materials (100 feet for human remains) pending an examination of the site and materials by a professional archaeologist. If during ground-disturbing

activities, any bones, pottery fragments or other potential cultural resources are encountered, the developer or their supervising contractor shall cease all work within 25 feet of the materials and notify City of Chico Public Works staff at (530) 879-6900. A professional archaeologist who meets the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeology and who is familiar with the archaeological record of Butte County, shall be retained by the City of Chico to evaluate the significance of the find. Further, City Public Works staff shall notify the local tribe(s) on the consultation list maintained by the State of California NAHC to provide local tribes the opportunity to monitor evaluation of the site. Site work shall not resume until the archaeologist conducts sufficient research, testing and analysis of the archaeological evidence to make a determination that the resource is either not cultural in origin or not potentially significant. If a potentially significant resource is encountered, the archaeologist shall prepare a mitigation plan for review and approval by the City of Chico Public Works Department, including recommendations for total data recovery, Tribal monitoring, disposition protocol, or avoidance, if applicable. All measures determined by the City of Chico to be appropriate shall be implemented pursuant to the terms of the archaeologist's report. The preceding requirement shall be incorporated into construction contracts and plans to ensure contractor knowledge and responsibility for proper implementation.

Mitigation Measure E.2. Tribal Monitor: The City's contractor shall facilitate the presence of a Mechoopda Indian Tribal Monitor during all earth moving and ground-disturbing activities. This includes, providing the contractor's contact information for the purpose of providing direct information to the Tribal Monitor regarding Project scheduling and safety protocol, as well as Project scope, location of construction areas, and nature of work to be performed. The determination to be present for any, some, or all construction activities shall be at the discretion of the Tribal Monitor.

REFERENCES CITED:

- City of Chico. 2010. Chico 2030 General Plan, Sustainability Element. Available: https://chico.ca.us/documents/Departments/Community-Development/Planning-Division/General-Plan--Other-Planning-Documents/Chico-2030-General-Plan/2._sustainability_element.pdf. Accessed: April 28, 2023.
- Beckham, Stephen Dow. 2006. *Mechoopda Indian Tribe of the Chico Rancheria*. Portland, Oregon.
- Hunt, Rockwell D. 1942. *John Bidwell, Prince of California Pioneers*. The Claxton Printers, Ltd. Caldwell, Idaho.
- Meyer, J., and J. S. Rosenthal. 2008. *A Geoarchaeological Overview and Assessment of Caltrans District 3, Cultural Resources Inventory of Caltrans District 3 Rural Conventional Highways*. Prepared by Far Western Anthropological Research Group.
- Riddell, F.A. 1978. Maidu and Konkow. Pages 370–386 in Robert F. Heizer (ed.), *Handbook of North American Indians, California*. Volume 8. Washington, DC: Smithsonian Institution.
- Shipley, William F. 1978. Native Languages of California. In *California*, edited by Robert F. Heizer, pp. 80–90. *Handbook of North American Indians*, Vol. 8, William C. Sturtevant, general editor, Smithsonian Institution, Washington, D.C.

F. Energy

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
1. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	
2. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X	

AFFECTED ENVIRONMENT: The Project would install 2.85 miles of sewer trunkline mainly in the unincorporated region outside the south section of the City of Chico. The trunkline would service the majority of the Honey Run/Doe Mill Special Planning Area, South Entler Special Planning Area, and commercial and industrial uses in the area. Electric service within the City of Chico is provided by Pacific Gas and Electric. Electricity purchased from Pacific Gas and Electric by local customers in Butte County, including Chico, is generated and transmitted to the area by a statewide network of power plants and transmission lines. Various transmission and distribution lines traverse Butte County, serving to carry electrical power from power plants within and outside the county to electrical substations where power is converted to voltages suitable for distribution to end users. A comprehensive list of goals and policies related to Energy is provided in the Sustainability Element of the City's General Plan (City of Chico 2010).

DISCUSSION: F.1–F.2. Less Than Significant. The Project includes the construction/installation and operation of a sewer trunkline. All construction equipment would be regulated per the California Air Resources Board (CARB) In-Use Off-Road Diesel Vehicle Regulation. CARB standards for construction equipment include measures to reduce emissions from vehicles by subjecting fleet owners to retrofit or accelerated replacement/repower requirements and imposing idling limitations on owners, operators, renters, or lessees of off-road diesel vehicles, thereby minimizing wasteful energy consumption during construction activities (Impact H.1 and H.2). Project construction would also be required to comply with all applicable BCAQMD rules and regulations.

The Project would be required to comply with all applicable standards and regulations regarding energy conservation and fuel efficiency, which would ensure that the future activities would be energy efficient to the maximum extent practicable. Operation of the sewer trunkline would be gravity run and therefore would not contribute to an increase or change in the energy demand or consumption beyond the existing amount. The Project would not be considered to result in a wasteful, inefficient, or unnecessary use of energy; the impacts would be **less than significant**.

MITIGATION: None required.

REFERENCES CITED:

City of Chico. 2010. *Chico 2030 General Plan, Sustainability Element*. Available: https://chico.ca.us/documents/Departments/Community-Development/Planning-Division/General-Plan--Other-Planning-Documents/Chico-2030-General-Plan/2._sustainability_element.pdf. Accessed: April 28, 2023.

G. Geology/Soils

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
1. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:			X	
a. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			X	
b. Strong seismic ground shaking?			X	
c. Seismic-related ground failure, including liquefaction?			X	
d. Landslides?			X	
2. Result in substantial soil erosion or the loss of topsoil?			X	
3. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			X	
4. 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?			X	
5. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater, or is otherwise not consistent with the Chico Nitrate Action Plan or policies for sewer service control?				X
6. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		X		

AFFECTED ENVIRONMENT: The Project site, located in south Chico, is relatively flat with an elevation of approximately 200 feet above sea level near Hegan Lane, increasing to 245 feet at the site's eastern terminus near Potter Road. Spanning 2.85 miles, the Project site comprises several soil types, primarily including: Redsluff gravelly loam, 0 to 2% slopes; Redtough-Redswale, 0 to 2% slopes; Vina fine sandy loam, sandy substratum, 0 to 2% slopes; MLRA 17, Chico loam, 0 to 1% slopes; and Charger fine sandy loam, 0 to 1% slopes (Table 1, Appendix C). Excavation for pipe laydown and jack-and-bore pits would typically require a depth of 10-15 feet with dewatering required for the pits at the Diversion Channel and Comanche Creek.

DISCUSSION: G.1a–G.1d. Less Than Significant. The City of Chico is in one of the least active seismic regions in California. No Alquist-Priolo Earthquake Fault Zones exist within Butte County. Butte County only includes one active fault, the Cleveland Hills fault. The Cleveland Hills fault is located approximately 17 miles southeast of the Chico City limits. The Cleveland Hills fault is within an Earthquake Fault Zone as mapped by the Alquist-Priolo Earthquake Fault Zoning Act. Thus, the potential for ground rupture within the Chico area is considered very low (City of Chico 2010).

As there are no known faults in the Project area, the rupture of a known fault could, at most, result in a seismic ground-shaking or related seismic-related ground failure event on the Project site. Project design features would incorporate all appropriate development standards and adherence to all necessary permits and certifications. The City of Chico Municipal Code, the California Building Code (CBC), and other related construction standards apply seismic requirements and address certain grading activities. The CBC includes common engineering practices requiring special design and construction methods that reduce or eliminate potential expansive soil-related impacts. Compliance with CBC regulations would ensure the adequate design and construction of the trunkline and jack and boring sites to resist soil movement (City of Chico 2010).

While Butte County has a history of landslides in the mountainous central area, which includes steep slopes and experiences heavy rainfall, the Project site is not near this region and is categorized by its flat terrain (City of Chico 2010). Any areas of slopes on the Project site are categorized as engineered slopes and do not pose landslide risk. Overall, the Project would result in a **less-than-significant** impact related to the risk of loss, injury, or death due to rupture, ground shaking, ground failure and landslide. **G.2–G.4. Less Than Significant.** The Project is not located on an unstable geologic unit or on expansive soil. Project construction would include installation of silt fences in accordance with Caltrans Standard Plan T51 at top of each bank, extending 25 feet in each direction of the pipeline laydown, at both Comanche Creek and Butte Creek Diversion Channel, as a method of erosion control. Therefore, the Project is not expected to cause substantial soil erosion, loss of topsoil, or result in impacts related to suitable or expansive soils.

Additionally, development of the Project would be subject to the City's Design Criteria and Improvement Standards (CMC §18R). The Project would be required to incorporate site-specific measures, as identified in the grading standards defined in the CBC, which describe appropriate measures used to reduce potential impacts resulting from unstable soils and soil shrink-swell. Because the Project disturbance area is greater than one acre, it must comply with and obtain coverage under the applicable National Pollution Discharge Elimination Permit (NPDES) from the California Regional Water Quality Control Board per §402 of the Clean Water Act (Order No 2009-0009-DWQ; City of Chico 2010). The City, as Project sponsor, would be required to prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) pursuant to the Central Valley Regional Water Quality Control Board requirements. The SWPPP would require site-specific, detailed measures to be incorporated into grading plans to control erosion and sedimentation. Furthermore, the City and the BCAQMD require implementation of all applicable fugitive dust control measures, which further reduces the potential for construction-generated erosion. Therefore, prior to grading, the City would ensure that the Project has incorporated appropriate, site-specific construction and design standards per CMC §18R Design Criteria and Improvement Standards. As a result, impacts relating to erosion, soil stability, and expansive soils would be **less than significant**.

G.5. No Impact. The Project would install a sewer trunkline mainly in the unincorporated region outside the south section of City limits. The trunkline would service the majority of the Honey Run/Doe Mill Special Planning Area, South Entler Special Planning Area, and commercial and industrial uses in the

area, connecting these uses to the City's existing wastewater treatment system and the Water Pollution Control Plant, located southwest of the City limits. No septic tanks, sewer, or alternative wastewater disposal systems are proposed as part of the Project. Therefore, the Project would result in **no impact** related to consistency with the Chico Nitrate Action Plan or policies for sewer service control.

G.6. Less Than Significant with Mitigation Incorporated. The Project is not anticipated to cause a substantial adverse change in the significance, directly or indirectly destroy a unique paleontological resource or site, geological feature, or unique geological feature. The maximum grading and excavation depth needed for most Project trenching, manhole access, and jack and boring is primarily 10 feet, with depths up to 15 feet required in some locations. Due to the developed character of the site, the potential to encounter surface-level paleontological resources is considered low. If resources are inadvertently discovered, implementation of **MITIGATION E.1. Cultural Resources**, would reduce impacts to a less-than-significant level. See Section IV.E, *Cultural Resources*, of this Initial Study for mitigation measure specifics. Therefore, Project impacts related to the significance of a unique paleontological resource or site, geological feature, or unique geological feature would be considered **less than significant**.

MITIGATION: Mitigation E.1. Cultural Resources

REFERENCES CITED:

City of Chico. 2010. Draft EIR Chico 2030 General Plan. Section 4.8 *Geology and Soils*. Available: <https://chico.ca.us/documents/Departments/Community-Development/Planning-Division/General-Plan--Other-Planning-Documents/Draft-EIR-Chico-2030-General-Plan/4.8geologyandsoils.pdf>. Accessed: March 5, 2023.

H. Greenhouse Gas Emissions

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
1. Generate greenhouse gas (GHG) emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
2. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

AFFECTED ENVIRONMENT: This section describes the environmental setting related to GHG emissions and climate change. No single emitter of GHGs is large enough to trigger global climate change on its own. Rather, climate change is the result of the individual contributions of countless past, present, and future sources. Thus, GHG impacts are inherently cumulative, and the study area for impacts on GHGs includes the entire state and global atmosphere.

Climate Change

The process known as the *greenhouse effect* keeps the atmosphere near the earth's surface warm enough for the successful habitation of humans and other life. Present in the earth's lower atmosphere, GHGs play a critical role in maintaining the earth's temperature. Sunlight including infrared, visible, and ultraviolet radiation passes through the atmosphere. Some of the sunlight striking the earth is absorbed and converted to heat, which warms the surface. The surface emits infrared radiation to the atmosphere, where some of it is absorbed by GHGs and re-emitted toward the surface; some of the heat is not

trapped by GHGs and escapes into space. Human activities that emit additional GHGs to the atmosphere increase the amount of infrared radiation that gets absorbed before escaping into space, thus enhancing the greenhouse effect and amplifying the warming of the earth (Center for Climate and Energy Solutions 2019).

Increases in fossil fuel combustion and deforestation have intensified concentrations of GHGs in the atmosphere since the Industrial Revolution. Rising atmospheric concentrations of GHGs in excess of natural levels enhance the greenhouse effect, which contributes to global warming of the earth's lower atmosphere. This warming induces large-scale changes in earth surface temperatures, ocean circulation patterns, precipitation patterns, global ice cover, biological distributions, and other changes to the earth system that are collectively referred to as *climate change*.

Principal Greenhouse Gases

GHGs include the following gases: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), perfluorinated carbons, sulfur hexafluoride, and hydrofluorocarbons. Water vapor, the most abundant GHG, is not included in this list because its natural concentrations and fluctuations far outweigh its anthropogenic (human-made) sources. The state CEQA Guidelines (§ 15364.5) also identify these six gases as GHGs. The primary GHGs of concern associated with the Project are CO₂, CH₄, and N₂O, discussed below:

- **CO₂** enters the atmosphere through the burning of fossil fuels (oil, natural gas, and coal), solid waste, trees and wood products, and respiration, as well other chemical reactions (e.g., manufacture of cement). CO₂ is also removed from the atmosphere (or *sequestered*) when it is absorbed by plants as part of the biological carbon cycle.
- **CH₄** is emitted during the production and transport of coal, natural gas, and oil. CH₄ emissions also result from livestock and other agricultural practices and the decay of organic waste in municipal solid waste landfills.
- **N₂O** is emitted during agricultural and industrial activities as well as during the combustion of fossil fuels and solid waste.

Methods have been set forth to describe emissions of GHGs in terms of a single gas to simplify reporting and analysis. The most commonly accepted method to compare GHG emissions is the global warming potential (GWP) methodology defined in the Intergovernmental Panel on Climate Change (IPCC) reference documents. The IPCC defines the GWP of various GHG emissions on a normalized scale that recasts all GHG emissions in terms of CO₂e, which compares the gas in question to that of the same mass of CO₂ (CO₂ has a GWP of 1 by definition). Table H-1 lists the GWP of CO₂, CH₄, and N₂O and their atmospheric lifetimes.

Table H-1. Greenhouse Gases' Global Warming Potential

Greenhouse Gases	Global Warming Potential (100 years)	Lifetime (years)
CO ₂	1	100
CH ₄	25	12
N ₂ O	298	114

Sources: Center for Climate and Energy Solutions 2020.

CH₄ = methane; CO₂ = carbon dioxide; N₂O = nitrous oxide; ppb = parts per billion; ppm = parts per million

Greenhouse Gas Emission Inventories

A GHG inventory is a quantification of all GHG emissions and sinks (processes, activities, or mechanisms that remove GHGs from the atmosphere) within a selected physical and/or economic boundary. GHG inventories can be performed on a large scale (e.g., for global and national entities) or on a small scale (e.g., for a particular building or person). Although many processes are difficult to evaluate, several agencies have developed tools to quantify emissions from certain sources. Table H-2 outlines the most recent global, national, statewide, and local GHG inventories to help contextualize the magnitude of potential Project-related emissions.

Table H-2. Global, National, State, and Local Greenhouse Gas Emissions Inventories

Emissions Inventory	CO ₂ e (metric tons per year)
2017 IPCC Global	53,500,000,000
2020 USEPA National	5,981,400,000
2020 CARB State	369,200,000
2019 County of Butte (Unincorporated)	996,210
2017 City of Chico	466,366

Sources: IPCC 2018; USEPA 2022; CARB 2022; Butte County 2021; City of Chico 2021.
CO₂e = carbon dioxide equivalent; IPCC = Intergovernmental Panel on Climate Change; USEPA = U.S. Environmental Protection Agency; CARB = California Air Resources Board.

In 2012, the Chico City Council adopted a Climate Action Plan (CAP) which sets forth objectives and actions that will be undertaken to meet the City's GHG emission reduction targets. In 2021 the Chico City Council adopted a Climate Action Plan Update which sets emission reduction targets of 40% below 1990 levels by the year 2030. This target is consistent with Senate Bill 32 (2016).

Development and implementation of the CAP are directed by a number of goals, policies and actions in the City's General Plan (SUS-6, SUS-6.1, SUS-6.2, SUS-6.2.1, SUS-6.2.2, SUS-6.2.3, S-1.2 and OS-4.3). Growth and development assumptions used for the CAP are consistent with the level of development anticipated in the General Plan EIR. The actions in the CAP, in most cases, mirror adopted General Plan policies calling for energy efficiency, water conservation, waste minimization and diversion, reduction of vehicle miles traveled, and preservation of open space and sensitive habitat.

BCAQMD currently has no drafted, adopted, or recommended thresholds relevant to the analysis of GHG emissions from sewer trunkline projects.

DISCUSSION: H.1–H.2. Less Than Significant. Once construction is completed, the Project would not result in changes in traffic patterns in the Project area and would not generate additional vehicle trips, except for occasional maintenance-related trips. Therefore, the Project would result in negligible operational emissions relative to existing conditions, and there would be no long-term GHG impact. Accordingly, the following analysis focuses on short-term construction-related emissions.

Equipment and vehicles required during construction would result in the short-term generation of GHG emissions, including CO₂, CH₄, and N₂O. The methodology used to calculate GHG emissions generated during construction is the same as described above for air quality (see Section IV.C, *Air Quality*). Based on RCEM modeling, these sources would emit approximately 1,066 metric tons of carbon dioxide equivalent (MT CO₂e) per year during Project construction.

As previously stated, BCAQMD does not have an adopted GHG threshold. Emissions are nonetheless below numeric construction thresholds adopted by other regional air quality districts (e.g., SMAQMD's

1,100 MT CO₂e/year threshold and Placer County Air Pollution Control District's threshold of 10,000 MT CO₂e/year). Moreover, construction activities associated with the sewer trunkline installation would temporarily generate a small amount of additional GHG emissions, predominantly in the form of CO₂ resulting from the operation of construction equipment. While GHG emissions generated by these construction activities may be considered new, they are temporary and episodic in nature and would thus not be considered substantial. To further minimize GHG emissions generated by Project construction and avoid GHG impacts, **Improvement Measure H.1** requires the Project sponsor to implement applicable and feasible BCAQMD-recommended construction best management practices.

Further, the construction activities, including the use of heavy-duty vehicles will not exceed those already anticipated, analyzed, and mitigated in the Chico 2030 General Plan EIR. As discussed in Section IV.C, *Air Quality*, the Project is needed to meet the goals described in the Chico 2030 General Plan and is identified in the 2013 SSMPU, which plans the infrastructure needed to serve future development projected by the Chico 2030 General Plan. The Project is thus consistent with the level of development anticipated in the Chico 2030 General Plan EIR, which is used to develop growth and development assumptions for the City's CAP. Therefore, development of this Project would not impact the City's ability to meet the GHG emission reduction targets outlined in the CAP.

Based on the analysis above, development of this Project would result in neither a significant impact on the environment, nor conflict with the City's GHG plans, policies, or regulations. Implementation of BCAQMD-recommended best management practices, as required by **Improvement Measure H.1**, and compliance with City of Chico policies/requirements and BCAQMD rules would further reduce short-term construction GHG emissions. This impact would be **less than significant**.

MITIGATION MEASURE: None required.

IMPROVEMENT MEASURE: H.1. BCAQMD Best Management Practices

To minimize GHG emissions resulting from Project construction, the Project proponent shall implement BCAQMD-recommended best management practices, including, but not limited to:

- Improve fuel efficiency from construction equipment:
 - Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to no more than three minutes (a five-minute limit is required by the State Airborne Toxics Control Measure [Title 13, sections 2449(d)(3) and 2485 of the California Code of Regulations]) and provide clear signage posting this requirement for workers at the entrances to the site;
 - Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determined to be running in proper condition before it is operated;
 - Train equipment operators in proper use of equipment;
 - Use the proper size of equipment for the job; and
 - Use equipment with new technologies (repowered engines, electric drive trains).
- Perform on-site material hauling with trucks equipped with on-road engines (if determined to be less emissive than the off-road engines).

- Use alternative fuels for generators at construction sites such as propane or solar or use electrical power.
- Use an Air Resources Board approved low carbon fuel for construction equipment.
- Encourage and provide carpools, shuttle vans, transit passes and/or secure bicycle parking for construction worker commutes.
- Reduce electricity use in the construction office by using compact fluorescent bulbs, powering off computers every day, and replacing heating and cooling units with more efficient ones.
- Recycle or salvage non-hazardous construction and demolition debris (goal of at least 75% by weight).
- Use locally sourced or recycled materials for construction materials (goal of at least 20% based on volume for roadway, parking lot, sidewalk, and curb materials).
- Minimize the amount of concrete for paved surfaces or utilize a low carbon concrete option.
- Produce concrete on-site if determined to be less emissive than transporting ready mix.
- Use SmartWay certified trucks for deliveries and equipment transport (USEPA 2023).
- Develop a plan to efficiently use water for adequate dust control.

REFERENCES CITED:

Center for Climate and Energy Solutions. 2019. Climate Essentials – Science and Impacts. Available: <https://www.c2es.org/site/assets/uploads/2019/09/science-and-impacts.pdf>. Accessed: April 14, 2023.

Center for Climate and Energy Solutions 2020

City of Chico. 2021. Climate Action Plan Update. Available: https://chico.ca.us/sites/main/files/file-attachments/chico-cap-update_final-draft-complete.pdf?1655413766. Accessed: April 14, 2023.

Butte County. 2021. Butte County 2021 Climate Action Plan. December. Available: <https://www.buttecounty.net/DocumentCenter/View/2255/2021-Butte-County-Climate-Action-Plan-CAP-PDF?bidId=>. Accessed: April 14, 2023.

California Air Resources Board. 2022. Current California GHG Emission Inventory Data. Available: <https://ww2.arb.ca.gov/ghg-inventory-data>. Accessed: April 14, 2023.

Intergovernmental Panel on Climate Change (IPCC). 2018. Emissions Gap Report 2018. Available: https://wedocs.unep.org/bitstream/handle/20.500.11822/26895/EGR2018_FullReport_EN.pdf?sequence=1&isAllowed=y. Accessed: April 14, 2023.

U.S. Environmental Protection Agency (USEPA). 2022. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2020. Available: <https://www.epa.gov/system/files/documents/2022-04/us-ghg-inventory-2022-main-text.pdf>. Accessed: April 14, 2023.

———. 2023. SmartWay. Available: <https://www.epa.gov/smartway>. Accessed: April 14, 2023.

I. Hazards and Hazardous Materials

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

AFFECTED ENVIRONMENT: The State Water Resources Control Board GeoTracker database did not identify any active sites within the Project area of disturbance or trench line (SWRCB 2024). Similarly, a review of the California Department of Toxic Substances Control's EnviroStor mapping database did not identify any known sites or facilities being tracked for cleanup, permitting, enforcement, or investigation efforts within or adjacent to the Project site.

DISCUSSION: I.1 and I.2. Less Than Significant: While hazardous materials would be used during construction activities (e.g., equipment maintenance, fuel, solvents, roadway resurfacing and re-stripping materials), all hazardous material use would be required to comply with all applicable local, state, and federal standards associated with the release, handling, and storage of hazardous materials. The Hazardous Materials Regulations, which implement the federal hazmat law, govern the transportation of hazardous materials by highway, rail, vessel, and air. These regulations address hazardous materials classification, packaging, hazard communication, emergency response information, and training. Hazardous materials transported through Butte County, including the Project site, would be carried by truck on the state highway system or via the rail line. Registered hazardous waste haulers may use all

county roadways to transport hazardous materials. To date, regulators have not placed restrictions on roadways available for the transportation of hazardous waste. Refer to Section 4.4 of the City's Draft EIR General Plan 2030 for more information on transportation of hazardous materials in Butte County and additional detail regarding hazardous material regulations (City of Chico 2010). Because Project use, handling, routine transport use, or disposal of hazardous materials during construction would be in accordance with federal, state, and local laws, impacts related to the accidental release of hazardous materials would be **less than significant**.

I.3. Less Than Significant. Two schools are located within 0.25 mile of the Project site: Core Butte High School and Core Butte Charter School. These schools, adjacent to one another, are approximately 130 feet northwest of the SR 99 to UPRR alignment of the Project trunkline. Accidental release of hazardous materials during construction near a school would be a significant impact. However, as disclosed under *Discussion I.1 and I.2*, there is a low potential for Project construction or operation to cause a significant hazard through transport, use, or disposal of hazardous materials because these activities would be required to comply with the regulations, standards, requirements, and guidelines established by federal and state law and overseen by the regulatory agencies. Accordingly, the potential for hazardous materials releases near an existing or proposed school are low. Therefore, the potential for impacts on school facilities would be **less than significant**.

I.4. No Impact. The Project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (Cortese List); therefore, there would be **no impact**.

I.5. No Impact. The Chico Regional Airport is more than 5.5 miles north of the Project site and a private air strip, Ranchaero Airport, is approximately 3.25 miles northwest of the Hegan/Midway intersection; therefore, the Project site is outside of the runway protection zones and all other defined safety zones, airspace protection zones, and Airport Influence Areas of the airport's Comprehensive Land Use Compatibility Plan. Therefore, the Project would not expose persons to additional airport-related hazards. There would be **no impact** related to airport hazards.

I.6. No Impact. The Project would not interfere with an adopted emergency response plan or emergency evacuation plan. As presented under *Transportation Q.1–Q.4*, the Project area would remain open to traffic, but Project construction would require temporary lane closures. The bike lane along the Midway would be closed during pipeline construction at this location. There may also be intermittent lane closures with one-way controlled traffic, but with no complete closures. Construction activities would ensure vehicle access is available at all times. There also would be short-term interrupted vehicle access to adjacent properties, but access to properties would be ensured at all times. Ultimately, a traffic management plan would be developed, and emergency access would be maintained. Therefore, the Project would have **no impact** with regard to conflict with an adopted emergency response plan or emergency evacuation plan.

I.7. No Impact. The Project site is not located in an area of high sensitivity to wildland fire risks per the California Fire Hazard Severity Zone Viewer (CalFire 2024). No buildings or dwelling units are proposed as part of the Project, and the Project site is not in a wildland area. The Project site is identified as an area outside of CalFire's 'Very High Fire Hazard Severity Zone' (i.e., it is a non-VHFHSZ) as identified by CalFire. The Project site is in a Local Responsibility Area (LRA) pursuant to the Fire Hazard Severity Zone. It is surrounded by urban uses and the area is within the service area of the City of Chico Fire Department. The Project does not include any design elements that would expose people or structures to significant risk of loss, injury, or death involving wildland fire. There would be **no impact** associated with wildland fires.

MITIGATION: None required.

REFERENCES CITED:

City of Chico. 2010. Chico 2030 General Plan Update Draft Environmental Impact Report. Section 4.4 *Human Health Risk & Upset*. Available: <https://chico.ca.us/Departments/Community-Development/Planning-Division/General-Plan--Other-Planning-Documents/Draft-EIR-Chico-2030-General-Plan/index.html>. Accessed March 8, 2023.

California Department of Toxic Substances Control (DTSC). 2024. EnviroStor. Hazardous Waste and Substances Sites List. <https://dtsc.ca.gov/your-envirostor/>. Accessed March 14, 2024.

CalFire. 2024. SRA Fire Hazard Severity Zone Map. Effective April 1. Available: <https://osfm.fire.ca.gov/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones>. Accessed March 20, 2024.

California State Water Control Board. 2024. GeoTracker Data Management Tool. Available at: <https://geotracker.waterboards.ca.gov/>. Accessed March 14, 2024.

J. Hydrology/ Water Quality

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
1. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?		X		
2. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin?				X
3. 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:			X	
a. result in substantial erosion or siltation on- or off-site;			X	
b. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;			X	
c. 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			X	
d. impede or redirect flood flows?			X	

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
4. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to Project inundation?			X	
5. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			X	

AFFECTED ENVIRONMENT: The City of Chico, in the Sacramento Valley, is in the north-central portion of the Sacramento River Hydrologic Region, which covers approximately 17.4 million acres (27,200 square miles). The City is located approximately 10 miles east of the Sacramento River (City of Chico 2010).

The Project site, in south Chico, is relatively flat and includes two primary hydrologic crossings: Comanche Creek and Butte Creek Diversion Channel, which overlaps with Crough Ditch. According to the Aquatic Resource Delineation Report (**Appendix C**), the Project also would cross three other ephemeral features near Cramer Lane. In addition, the Project site overlays portions of Federal Emergency Management Agency (FEMA) 100-year floodplain areas (1% annual chance of flooding) and FEMA 100-Year Floodplain River or Stream flood hazard areas (a 1% or greater chance of shallow flooding each year, with an average depth ranging from 1 to 3 feet) (FEMA 2011). Both the Butte Creek Diversion Channel and Comanche Creek are within the FEMA-designated 100-year floodplain (City of Chico 2010).

The proposed trunkline pipe diameter would range from 1.25–2.25 feet (18–27 inches) within a six-foot-wide trench, with a total easement of 40 feet wide. The maximum grading and excavation depth needed for most Project trenching, manhole access, and jack and boring is primarily 10 feet, with depths up to 15 feet required in some locations. At both Comanche Creek and the Butte Creek Diversion Channel, the Project would require jack-and-bore pits to tunnel under the water features and avoid any disturbance to the related systems. At each location it would also install temporary silt fences in accordance with Caltrans Standard Plan T51 at the top of each bank, extending 25 feet in each direction of the pipeline, to prevent construction-related surface runoff and water quality degradation. West of Diversion Channel the Project would also provide connections to south end of an existing 36-inch culvert and connection to a 40-foot-long pipe in the existing drainage ditch.

DISCUSSION: J.1. Less Than Significant. Water quality for all Sacramento Valley surface and ground waters is regulated under the jurisdiction of the California Regional Water Quality Control Board's Central Valley Region. Per Phase II of the NPDES Program, the City has a Storm Water Management Program (SWMP); the Project would be constructed in full compliance with applicable standards of the SWMP, which includes both construction activity and post-construction storm water discharge Best Management Practices (BMPs). Further, because the Project would disturb more than one acre, it must comply with and obtain coverage under the NPDES Construction General Permit (Water Quality Order 2009-0009-DWQ) to minimize water quality impacts, including the development of an erosion control plan incorporating BMPs. The Chico Water Pollution Control Plant (WPCP) would continue to comply with all discharge requirements as the plant has adequate capacity to serve all existing and proposed sewer connections, including the Project. Therefore, the Project would not violate any waste discharge requirements. Compliance with the SWMP and existing regulation would minimize potential impacts

relating to water quality and waste discharge requirements. Therefore, impacts related to surface or groundwater quality would be **less than significant**.

J.2. No Impact. Construction related to the installation of the two jack-and-bore pits would involve temporary dewatering. Apart from this temporary disturbance, there would be no new long-term sources of groundwater extraction. The Project would not interfere substantially with groundwater recharge nor impede sustainable groundwater management of the basin. Therefore, the Project would have **no impact** on groundwater supply or recharge.

J.3a–J.3d. Less Than Significant. The construction work-area width would be restricted to a 40-foot-wide easement, except where it would be limited to the right-of-way, such as at the paved Cramer Lane between an unpaved area to the south (UPRR alignment) and Morrow Lane to the north, trenched within the pavement centerline. At Cramer Lane near Comanche Creek, construction would require jack and boring to construct a casing pipe under Comanche Creek. The jack-and-bore pit, vegetation clearing and grubbing area would not extend into creek or wetland habitat. Construction along Morrow Lane between Cramer Lane to where the road becomes Skyway, and then to the Diversion Channel would require trenching in the south side/eastbound lane pavement. Equipment would work from the paved westbound lane. At this location, west of Diversion Channel, the Project would also provide connections to the south end of an existing 36-inch culvert and connection to a 40-foot-long pipe in the existing drainage ditch. To avoid impacts to Diversion Channel and its associated levy another jack-and-bore pit required, it would be located east of the Diversion Channel, with the receiving pit to its west. The construction of the trunkline at this location would also require the removal and replacement of 22 feet of storm drain. Both jack-and-bore pit locations would require dewatering during construction.

As described above, underground boring would occur at Comanche Creek and the Butte Creek Diversion Channel. At both locations the Project would install temporary silt fences in accordance with Caltrans Standard Plan T51 at the top of each bank, extending 25 feet in each direction of the pipeline, as an erosion control measure. The Project would not alter the existing drainage patterns at the site, result in substantial erosion or siltation on- or off-site, or create excessive runoff because prior to construction the Project would have to demonstrate compliance with City and State post-construction storm water management requirements including the General Construction Permit requirements of the NPDES, as well as the preparation of a SWPPP incorporating water quality control BMPs. With the application of the existing regulations outlined above, the Project would not substantially degrade water quality drainage systems or provide substantial additional sources of polluted runoff. Under existing City and State requirements for the Project to implement BMPs and incorporate low impact development design standards, stormwater impacts from anticipated future construction and operation of the Project would be **less than significant**.

J.4. Less Than Significant. The Project site includes portions of FEMA 100-year floodplain areas (1% annual chance of flooding) and FEMA 100-Year Floodplain River or Stream flood hazard areas (a 1% or greater chance of shallow flooding each year, with an average depth ranging from 1 to 3 feet) (FEMA 2011). Because the Project is proposed to be constructed within two seasonal construction windows, between April to October, Project activities would occur during the dry season when it is extremely unlikely that flooding will occur. The Project would not introduce any population to the floodplain, nor is the Project site located in an area that is prone to seiche or tsunami. Therefore, risks associated with inundation and the release of pollutants by seiche or tsunami, would not occur beyond existing conditions. According to the FEMA Flood Insurance Rate Map No. 06007C0506E, the Project site is located in Zone AE, a Special Flood Hazard Area subject to inundation with a 1% annual chance of flooding. Project construction activities would occur during the dry season, and it is extremely unlikely

that flooding will occur. Although the Project would be located within a Special Flood Hazard Area, flooding would not cause the release of pollutants from the enclosed trunkline. This impact would be **less than significant**.

J.5. No Impact. The Project is not expected to substantially degrade water quality with the implementation of the SWPPP and BMPs. The Project would not conflict or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Therefore, the Project would have **no impact**.

MITIGATION: MITIGATION J.1. (Hydrology): Prior to grading and ground- disturbance, the applicant shall consult with the Central Valley Flood Protection Board to confirm the need to obtain an Encroachment Permit for the proposed Project. Public Works staff shall ensure the acquisition of the permit and compliance with any design and measures to minimize environmental impacts as a result of the Project.

REFERENCES CITED:

City of Chico. 2010. Draft EIR Chico 2030 General Plan. Section 4.9 Hydrology and Water Quality. Available: <https://chico.ca.us/documents/Departments/Community-Development/Planning-Division/General-Plan--Other-Planning-Documents/Draft-EIR-Chico-2030-General-Plan/4.9hydrologyandwaterquality.pdf>. Accessed: March 5, 2023.

Federal Emergency Management Agency (FEMA). 2011. Flood Insurance Rate Map, Butte County, California, Panel 510 of 1200. Map Number 06007C0510E. Revised January 6.

K. Land Use and Planning

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
1. Physically divide an established community?				X
2. 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?				X

AFFECTED ENVIRONMENT: The Project would comprise a 2.85-mile segment of the City's overall sewer system in southeast Chico. Both Project Segments P-18 and P-17B were identified in the 2013 Sanitary Sewer Master Plan Update to service future development in the southern area of the City of Chico and is consistent with both the City of Chico Water Pollution Control Plant Expansion Project and the City of Chico 2030 General Plan.

DISCUSSION: K.1. No Impact. The Project would be located below grade, with only manholes serving as operational points of access, and as such, would not physically divide an established community. All construction activity would be temporary and vehicular and pedestrian access to the area would be ensured. Future operation of the Project would support established growth in southern Chico as anticipated and considered by the 2030 General Plan. Therefore, the Project is anticipated to have **no impact**.

K.2. No Impact. Given that the Project is a planned segment of the 2013 Sanitary Sewer Master Plan Update and is consistent with both the City of Chico Water Pollution Control Plant Expansion Project and the City of Chico 2030 General Plan, the Project would not result in any new impacts beyond those

already anticipated, analyzed, and mitigated in association with these plans. There would therefore be no conflicts with land use plans, policies or regulations adopted for the purpose of avoiding or mitigating an environmental effect; and there would be **no impact** on land use.

MITIGATION: None required.

REFERENCES CITED:

City of Chico. 2010. Draft EIR Chico 2030 General Plan. Section 4.1 *Land Use*. Available: <https://chico.ca.us/documents/Departments/Community-Development/Planning-Division/General-Plan--Other-Planning-Documents/Draft-EIR-Chico-2030-General-Plan/4.1landuse.pdf>. March 21, 2024.

L. Mineral Resources

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
1. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
2. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X

AFFECTED ENVIRONMENT: The Project would install a sewer trunkline mainly in the unincorporated region outside the south section of the City limits. There are no active mines and no known areas of mineral resource deposits within the City of Chico, although historically several areas along Butte Creek were mined for gold, sand, and gravel. Most of the closest mining operations are located to the southeast, outside of the City (City of Chico 2010). Refer to page 9, section 4.8, Geology and Soils of the Draft EIR Chico 2030 General Plan for complete information regarding mineral resources in the City of Chico.

DISCUSSION: L.1–L.2. No Impact. Mineral resources are not present in the City of Chico to an appreciable extent nor are they associated with the Project site. Therefore, the Project would have **no impact** on mineral resources.

MITIGATION: None required.

REFERENCES CITED:

City of Chico. 2010. Draft EIR Chico 2030 General Plan. Section 4.8, *Geology and Soils*. Available: <https://chico.ca.us/documents/Departments/Community-Development/Planning-Division/General-Plan--Other-Planning-Documents/Draft-EIR-Chico-2030-General-Plan/4.8geologyandsoils.pdf> Accessed: March 21, 2024.

M. Noise

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
1. 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?		X		
2. Generation of excessive groundborne vibration or groundborne noise levels?			X	
3. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X

AFFECTED ENVIRONMENT: Existing noise levels in Chico are described in the City of Chico 2030 General Plan Update Draft Environmental Impact Report (General Plan EIR), which describes monitored noise levels and existing noise sources in the City, primarily for the purpose of determining potential land use compatibility conflicts (City of Chico 2010). For the General Plan EIR, noise was measured at 18 locations in the City, mostly near roadways, and the City's calculated community noise equivalent level (CNEL), a time-weighted 24-hour average noise level, based on monitored noise levels, ranged from 56 to 77 dBA L_{dn} . Roadways are identified as the predominant noise source in the City, with other sources that include stationary sources (e.g., industrial and commercial land uses), recreational and sporting events (e.g., events at the speedway and music events), aircraft (e.g., municipal airports and medical center heliports), and railroads (City of Chico 2010).

In unincorporated Butte County, where portions of the Project are located, noise is also dominated by traffic. The County's 2030 General Plan presents modeled noise levels for roadways throughout the County. Modeled noise was determined for several roadways coterminous with or near the Project alignment, including Midway Avenue (59–61 dBA L_{dn}); SR 99 between Skyway and Durham-Pentz Road (69 dBA L_{dn}); and Skyway from Bruce Road to Honey Run Road (67 dBA L_{dn}). All noise levels represent a distance of 100 feet between the road and the receiver experiencing the noise (Butte County 2010).

DISCUSSION: To support the Project's noise analysis, ICF prepared a technical report assessing noise impacts at existing sensitive land uses, included in Appendix E to this Draft IS/MND. For this Project, the potentially affected noise-sensitive uses, including those with defined outdoor activity areas, consist of single-family residences located primarily along Entler Avenue, and several schools: Core Butte High School, Core Butte Charter School, and Chico Christian Preschool.

The Project site is surrounded by developed and built-up suburban land uses. The ambient noise in the Project area is generated primarily by vehicles traveling on multiple roadways, including Midway, Entler Avenue, SR 99, Cramer Lane, Morrow Lane, and Skyway. The Project site is also adjacent to agricultural land parcels, where noise from occasional use of farm equipment is present, and open space.

The magnitude of sound, whether wanted or unwanted, is usually described by sound pressure (a dynamic variation in atmospheric pressure). The human auditory system is sensitive to fluctuations in air pressure above and below the barometric static pressure. These fluctuations are defined as sound when the human ear is able to detect pressure changes within the audible frequency range.

To better accommodate and assess the varying noise levels typically associated with traffic patterns, a time-averaged, single-number descriptor known as the Level equivalent (Leq) is frequently employed. The Leq, expressed in decibels (dB), represents the average energy content of sounds over a specified time. The A weighting filter (dBA) is commonly used to create a scale more compatible with human perceptions of sound. It includes both steady background sounds, transient, and short-term sounds. It represents the level of a steady sound which, when averaged over the sampling period, is equivalent in energy to the time-varying (fluctuating) sound level over the same period.

Table M-1 shows typical equipment noise levels for various construction equipment and activities, including measured sound levels at a distance of 50 and 100 feet from the source. Noise sources associated with Project construction would include excavation, construction truck traffic, and other noises typically associated with a construction site.

Table M-1. Construction Equipment Noise Levels

Equipment	Typical Noise Level (dBA) 25 Feet from Source^a	Typical Noise Level (dBA) 50 Feet from Source
Crawler Tractors	<u>86</u>	80
Excavators	<u>83</u>	77
Signal Boards ^b	74	68
Graders	<u>87</u>	81
Rollers	79	73
Rubber-Tired Loaders	<u>81</u>	75
Scrapers	<u>86</u>	80
Tractors/Loaders/Backhoes	<u>86</u>	80
Air Compressors	80	74
Generator Sets	<u>84</u>	78
Plate Compactors	<u>82</u>	76
Pumps	<u>84</u>	78
Rough Terrain Forklifts	<u>86</u>	80
Pavers	80	74
Paving Equipment	<u>89</u>	83

Source: Federal Highway Administration 2006.

^a Values that exceed the limit of 83 dBA at 25 feet, per City of Chico Municipal Code Section 9.38.060, are bolded and underlined.

^b Signal boards are not included in the list of equipment with reference noise levels from the Federal Highway Administration's guidance. Conservatively, signal boards are represented here by the reference noise level from aerial lifts.

M.1. Less Than Significant with Mitigation Incorporated. During the construction phases of the Project, noise from construction activities would intermittently dominate the noise environment in the immediate area of active construction. Construction noise is subject to municipal regulations, including the City of Chico and Butte County municipal codes. Because all construction activities must comply with

applicable regulations pertaining to the generation of noise, adherence to existing noise attenuation standards would minimize construction-generated noise impacts.

Temporary or periodic noise levels would increase during construction along the Project alignment. Because the Project is linear in nature, construction activity and equipment would progress along the alignment and thus not affect any single area for an extended period. Construction activities are anticipated to occur for up to 18 months, and thus the rate of construction is estimated to be approximately 38 feet per day.² Additionally, construction activities would be required to adhere to all applicable noise standards, such as proper equipment maintenance and limiting the hours of noise-generating activities to normal working hours.

Project construction would generate noise that could affect sensitive receptors within the Project vicinity. The FHWA defines a noise-sensitive receptor as a property where frequent outside human use occurs and where a lowered noise level would be beneficial. Given the Project's 2.85-mile extent, several noise-sensitive receptors, including residences and schools, could be affected by construction activities.

The City of Chico's Noise Ordinance in Chapter 9.38 of the City's Municipal Code states, "...no person shall produce, suffer or allow to be produced on public property by human voice, machine, animal, or device, or any combination of same, a noise level that exceeds sixty (60) dBA at a distance of 25 feet or more from the source" (City of Chico 2024). Per Section 9.38.060, construction-related source noise is exempt from the provisions set forth in the noise ordinance except "(i) individual pieces of equipment shall not exceed 83 dBA at a distance of 25 feet; (ii) the construction-related noise must not exceed 86 dBA at any point outside of the property plane of the Project; and (iii) construction noise-generating activities are restricted to the hours of 7:00 a.m. to 9:00 p.m., Monday through Saturday and 10:00 a.m. to 6:00 p.m. on Sunday and holidays" (City of Chico 2024).

Portions of the Project site are also located in unincorporated Butte County, where noise from public works projects is exempt from the County's noise standards if construction occurs during the daytime hours on weekdays and before 6 p.m. on Fridays (Butte County 2024).

Construction equipment could operate within 25 feet of existing noise-sensitive land uses in the Project area. During construction, the two loudest pieces of equipment that may operate at one time would vary by phase. At a distance of 25 feet, construction equipment used during construction would produce a maximum noise level of up to 91 dBA, and an average noise level of approximately 82 to 85 dBA, depending on the phase of construction. The maximum and average noise levels and the list of two loudest pieces of equipment for each phase are shown in Table M-2.

² This assumption is calculated based on the project length of 2.85 miles (15,048 feet), divided by the number of days of construction 396 (possibly three 6-month construction windows, assuming 22 work days per month).

Table M-2. Construction Phase Noise Levels

Construction Phase	Combined Noise Level (dBA) 25 Feet from Source	Two Loudest Pieces of Equipment
Grubbing/Land Clearing	L _{max} : 86 L _{eq} : 82	Crawler Tractor Excavator
Grading/Excavation	L _{max} : <u>88</u> L _{eq} : 84	Grader Crawler Tractor
Drainage/Utilities/Sub-grade	L _{max} : <u>88</u> L _{eq} : 84	Grader Rough Terrain Forklift
Paving	L _{max} : <u>91</u> L _{eq} : 85	Paving Equipment Tractor/Loader/Backhoe

Source: Federal Highway Administration 2006.

^a Values that exceed the limit of 86 dBA at the property line, per City of Chico Municipal Code Section 9.38.060, are bolded and underlined.

^b Signal boards are not included in the list of equipment with reference noise levels from the Federal Highway Administration's guidance. Conservatively, signal boards are represented here by the reference noise level from aerial lifts.

As shown in Table M-2, individual pieces of construction equipment would exceed the limit of 83 dBA at 25 feet specified in Section 9.38.060 of the City's municipal code. Noise levels during construction are also expected to exceed the municipal code limit of 86 dBA, as shown in Table M-2. These exceedances would occur along the Project alignment and would be most impactful at the noise-sensitive land uses described above. Because most of these land uses are located farther than 25 feet from the Project alignment, they would experience less noise than the levels shown in Table M-2; however, some portion of these land uses could be within 25 feet of the alignment or otherwise experience short-term noise in excess of the ambient noise levels.

Construction noise at the Project site would be short-term at any single land use because construction would proceed along the alignment at a rate of approximately 38 feet per day. Consequently, it is likely that most noise-sensitive land uses would experience the worst-case, 25-foot construction noise for short periods of time. At the staging areas, noise could occur on multiple days, as construction equipment and materials are prepared for mobilization and demobilization, but noise from these sources would occur for a short period of the workday.

Heavy-duty equipment noise from Project construction would be temporary, affecting individual land uses for a duration much shorter relative to other types of projects. As noted above, construction activities for public works projects are not subject to the noise limits in the Butte County Code of Ordinances. The noise limits in the City of Chico, as noted above, could be exceeded during construction. As such, Mitigation Measure M.1. is provided to implement minimization and avoidance measures with respect to potential construction-related noise impacts. Implementation of this measure for construction occurring in Butte County, although the noise would be exempt, would nevertheless reduce temporary increases in noise that would occur. With the implementation of **Mitigation Measure M.1, Noise**, construction-related noise impacts in excess of established standards would be **less than significant**.

After construction is completed, the operational phase of the Project would begin, which would be limited to underground operation of the sewer line. Project operations would not result in noticeable changes to the ambient noise environment, because there would be no above-ground noise sources.

M.2. Less Than Significant. Construction of the Project would not require installation of piles or equipment that is more vibration intensive than typical equipment. Vibration impacts during construction were evaluated using the construction vibration modeling methods recommended by the U.S. Department of Transportation. Reasonable worst-case construction vibration levels are provided and compared to the Caltrans Vibration Guidelines for Damage and Annoyance, which are shown in Tables M-3 and M-4, respectively.

Table M-3. Caltrans Vibration Guidelines for Potential Damage to Structures

Structure Type and Condition	Maximum Peak Particle Velocity (PPV, in/sec)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Extremely fragile historic buildings	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5

Source: California Department of Transportation 2020.

Note: Transient sources create a single, isolated vibration event (e.g., blasting or the use of drop balls).

Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

PPV = peak particle velocity.

Table M-4. Caltrans Guidelines for Vibration Annoyance Potential

Human Response	Maximum PPV (in/sec)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Barely perceptible	0.04	0.01
Distinctly perceptible	0.25	0.04
Strongly perceptible	0.9	0.10
Severe	2.0	0.4

Source: California Department of Transportation 2020.

Note: Transient sources create a single, isolated vibration event (e.g., blasting or drop balls). Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

PPV = peak particle velocity.

Table M-5 summarizes typical vibration levels generated by construction equipment at a reference distance of 25 feet and at intervals up to 100 feet. Table M-5 focuses on the types of equipment included in the Federal Transit Administration's guidance that are anticipated to be included in the Project's equipment fleet. However, additional equipment may be represented by the equipment in this table. For example, an excavator, which would be used for Project construction, would result in similar vibration levels as those indicated for a large bulldozer.

Table M-5. Vibration Source Levels for Construction Equipment

Equipment	PPV at 25 Feet	PPV at 50 Feet	PPV at 75 Feet	PPV at 100 Feet
Large bulldozer	0.089	0.032	0.017	0.011
Loaded trucks	0.076	0.027	0.015	0.010

Source: Federal Transit Administration 2018.

PPV = peak particle velocity.

A large bulldozer would produce the highest vibration level of about 0.089 in/sec PPV at a distance of 25 feet. Loaded trucks, which would be used during construction, would generate a vibration level of about 0.076 in/sec PPV. Rubber-tired vehicles are not typically associated with substantial groundborne vibration. As noted above, the shortest anticipated distance between the Project work areas and existing noise-sensitive land uses is 25 feet. This level of vibration would be below the damage threshold of 0.1 in/sec PPV for fragile buildings.

In general, groundborne vibration is only noticeable inside buildings within a highly localized area around the source of vibration. Outdoor use areas are not considered to be sensitive to vibration. Operation of heavy construction equipment could result in intermittently perceptible levels of groundborne vibration in the immediate vicinity of sensitive land uses if the equipment is staged or operated in areas near those uses. Overall, construction is not expected to exceed the Caltrans criterion of 0.04 in/sec PPV for annoyance from distinctly perceptible vibration for a sustained period. Although vibration from a bulldozer could occasionally exceed the distinctly perceptible threshold but not the strongly perceptible threshold, such vibration would only occur in limited circumstances. The vibration level of 0.089 in/sec PPV at a distance of 25 feet would occur infrequently. Additionally, because construction would progress linearly at a rate of approximately 38 feet per day, perceptible vibration would be brief at any given location.

Use of heavy equipment during construction of the Project would be temporary and would cease once construction is complete. Because the types of equipment scheduled for use in the Project site work areas would not produce vibration levels in excess of the Caltrans guidelines for damage or strongly perceptible vibration, and operation of the Project would not generate excessive levels of vibration, this impact would be **less than significant**.

M.3. No Impact. The western extent of the Project site is approximately 3.2 miles southeast of Ranchoero Airport, a private airport. Additionally, the Project site is approximately 5.8 miles south of the Chico Regional Airport. Because the Project would not be within 2 miles of a public or private airport, and people within the Project site would not be exposed to excessive noise levels generated by airports or airstrips, beyond what they already experience, there would be **no impact**.

MITIGATION: **MITIGATION M.1. Noise:** To avoid substantial construction-period noise impacts to nearby sensitive receptors, the best practices listed below will be implemented during Project construction.

1. Use of heavy equipment shall be limited to hours allowed by the City: 7:00 a.m. to 9:00 p.m. Monday to Saturday, and 10:00 a.m. to 6:00 p.m. on Sunday.
2. Stationary equipment (e.g., generators, compressors, cement mixers, idling trucks) shall be located as far as possible from noise-sensitive land uses.

3. Construction equipment powered by gasoline or diesel engines shall be required to have sound control devices that are at least as effective as those originally provided by the manufacturer; all equipment shall be operated and maintained to minimize noise generation.
4. Excessive noise shall be prevented by shutting down idle vehicles or equipment.
5. Noise-reducing enclosures shall be used around noise-generating equipment.
6. Adjacent residents shall be notified in advance of construction work.

REFERENCES CITED:

- Butte County. 2010. Butte County General Plan Draft EIR. Available:
<https://www.buttecounty.net/DocumentCenter/View/1883/General-Plan-2030-EIR-Public-Review-Draft-PDF?bidId=>. Accessed: April 14, 2023.
- Butte County. 2024. Butte County, California - Code of Ordinances Chapter 41A - Noise Control, Article II. – Noise Regulations, 41A-9 - Exemptions. Available:
https://library.municode.com/ca/butte_county/codes/code_of_ordinances?nodeId=CH41ANOCO_ARTIINORE_41A-9EX. Accessed: March 26, 2024.
- California Department of Transportation. 2020. *Transportation and Construction Guidance Manual*. Available: <https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf>. Accessed: April 14, 2023.
- City of Chico. 2010. Draft EIR Chico 2030 General Plan – 4.7 Noise. Available:
<https://chico.ca.us/documents/Departments/Community-Development/Planning-Division/General-Plan--Other-Planning-Documents/Draft-EIR-Chico-2030-General-Plan/4.7noise.pdf>. Accessed: April 14, 2023.
- City of Chico. 2024. Chico, California Code of Ordinances. Division VI. Offenses Against Property, Chapter 9.38, Noise. Available: https://codelibrary.amlegal.com/codes/chico/latest/chico_ca/0-0-0-7601#JD_Chapter9.38. Accessed: March 26, 2024.
- Federal Highway Administration. 2006. Roadway Construction Noise Model User’s Guide. January. Available: https://www.fhwa.dot.gov/environment/noise/construction_noise/rcnm/rcnm.pdf. Accessed: April 14, 2023.
- Federal Highway Administration. 2018. Transit Noise and Vibration Impact Assessment Manual. September. Available: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf. Accessed: May 10, 2024.

N. Population and Housing

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
1. 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)?			X	
2. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

AFFECTED ENVIRONMENT: The Project would install the P-17B and P-18 trunkline extension to serve the City's sanitary sewer future needs as identified in the 2013 Sewer System Master Plan and 2030 General Plan. Specifically, the Project would provide sanitary sewer service to the Honey Run/Doe Mill Special Planning Area, South Entler Special Planning Area, and other planned land uses in the area.

DISCUSSION: N.1. Less Than Significant. The purpose of the Project is to maintain a sanitary sewer system to serve the existing and planned needs of the City of Chico. Construction and operation of the Project would not result in unplanned population growth. Construction activities would pull from an existing labor pool and employees associated with Project construction would commute from their residences in and around Chico rather than permanently relocate to the City, as is typical for employees in the construction trades. Once construction is complete, construction workers would seek employment at other job sites in the region that require their specific skills. Therefore, construction of the Project would not generate an unplanned population increase in the City.

Project operations would not induce direct population or housing growth on the Project site because the primary function of the Project is to maintain a sanitary sewer system that meets the City's existing and planned needs as outlined in the City's 2030 General Plan. Refer to Section 4.3 of the Draft EIR Chico 2030 General Plan for detailed information regarding the City's plan and policies regarding population and housing (City of Chico 2010). Because construction and operation of the Project would not directly or indirectly induce population growth beyond that which is already projected in the City's 2030 General Plan, the impact on population growth would be **less than significant**.

N.2. No Impact. The Project would not displace any residents or housing units as there are no housing units directly on the Project site. Project construction would require temporary lane closures and limited closures (less than 15 minutes) that could affect driveways and residential roads, but these would be temporary closures, with access ensured at all times apart from this. Therefore, the Project would have no direct impact related to the displacement of housing units or people, nor would the Project necessitate construction of replacement housing elsewhere that could result in physical environmental effects. There would be **no impact** on housing.

MITIGATION: None required.

REFERENCES CITED:

City of Chico. 2010. Chico 2030 General Plan Update Draft Environmental Impact Report, Section 4.3 *Population and Housing*. Available: <https://chico.ca.us/documents/Departments/Community-Development/Planning-Division/General-Plan--Other-Planning-Documents/Draft-EIR-Chico-2030-General-Plan/4.3pophousingemployment.pdf>. Accessed: March 31, 2024.

O. Public Services

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a. Fire protection?				X
b. Police protection?				X
c. Schools?				X
d. Parks?				X
e. Other public facilities?				X

AFFECTED ENVIRONMENT:**Fire Protection**

The Chico Fire Department (CFD) provides fire protection and emergency medical services to a 31-square-mile service area that includes the City of Chico. CFD services include fire suppression, emergency medical service, rescue service, hazardous material emergencies service, public assists fire prevention and life safety, and emergency preparedness including operation of the Emergency Operations Center at the Fire Training Center. The CFD has mutual aid agreements with the California Department of Forestry and Fire Protection and the Butte County Fire Department. In areas not covered by the Chico Urban Area Fire and Rescue Agreement, Butte County and the Chico Fire Department can still call each other for backup “mutual aid” in addition to their first due response engine. Refer to Section 4.12, Page 5,6, and 10 of the City’s Draft EIR 2030 General Plan which provides a complete list of relevant policies and strategic plans related to Fire Protection Services in the City of Chico.

Police Protection

The Chico Police Department (CPD) provides law enforcement services to the City of Chico. If requested by the Butte County Sheriff’s Office or the California Highway Patrol, the CPD may provide assistance in the surrounding unincorporated territory on a case-by-case basis. While the CPD service area comprises the Chico City limits, the department also provides law enforcement services to the unincorporated parts of the Chico urban area daily. Refer to Section 4.12, Pages 16 through 20 of the City’s Draft EIR 2030 General Plan which provides a complete list of relevant policies and strategic plans related to Protection Services in the City of Chico.

Schools

The Chico Unified School District (CUSD) was formed in 1965 and now serves a 322 square mile area that includes the entire City of Chico as well as the surrounding unincorporated areas of Butte County. The CUSD oversees 23 schools with a total enrollment of over 12,000 students (CUSD 2024).

DISCUSSION: 0.1–0.5. No Impact.

Fire Protection

The CFD currently operates six fire stations. The closest fire stations to the Project site are the Chico Fire Station #4 located at 2405 Notre Dame Boulevard, (approximately 2.5 miles), and the fire station located at 182 East 5th Avenue (approximately 5 miles). Because the Project is an underground sewer trunkline, it would not physically alter any fire protection facilities or create a need for new facilities, nor would it alter any emergency routes or evacuation plans that could impact service ratios, response times, or other performance objectives.

Police Protection

The Chico Police Department located at 1460 Humboldt Road is approximately 2.85 miles north of the Project site at Midway and Entler Avenue. The Project site is in an area that is already served by police protection services. As discussed in Section IV.Q, *Transportation*, of this Initial Study, the Project would cause temporary road closures, but with implementation of a traffic management plan, emergency services and routes would be maintained.

Schools

Two schools are located within 0.25 mile of the Project site: Core Butte High School and Core Butte Charter School. The Project would not add to the area's population or increase demand for school services.

Parks

The impacts on parks and recreational facilities are addressed in Section IV.P, *Recreation*, of this Initial Study.

Overall, the Project would not result in a direct increase in population, changes in land use, or increased traffic capacity or volumes that would affect or require alteration to fire, police, schools, parks and recreation facilities. Once the Project is completed, roadways, bicycle paths and pedestrian walkways along the Project alignment would be restored to their existing conditions. Therefore, the Project would have **no impact** on public services.

MITIGATION: None required.

REFERENCES CITED:

Chico Unified School District. 2024. Our District. Available: <https://www.chicousd.org/Our-District/>. Accessed: May 6, 2024.

City of Chico. 2010. Chico 2030 General Plan Update Draft Environmental Impact Report. Section 4.12. Available: <https://chico.ca.us/documents/Departments/Community-Development/Planning-Division/General-Plan--Other-Planning-Documents/Draft-EIR-Chico-2030-General-Plan/4.12publicservicesandutilities.pdf>. Accessed: February 28, 2023.

P. Recreation

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
1. Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			X	
2. Does the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			X	

AFFECTED ENVIRONMENT: Park, recreation, and open space resources, facilities, and services are provided by both the City of Chico Park Division and the Chico Area Recreation and Park District. The City of Chico currently includes a total of 4,317 acres of park, recreation, and open space areas. Refer to Section 4.12 of the City's Draft EIR 2030 General Plan for detailed information about parks and recreation. There are two recreation resources along the Project alignment: Comanche Creek Trail (parking lot and trailhead) at the end of Cramer Lane and a bike lane along Midway.

DISCUSSION: P.1 and P.2. No Impact. The Project does not involve activity that would lead to a direct increase in population, nor does the Project include the development of recreational facilities or other structures that would necessitate the development or modification of any recreational facilities. Construction of the Project would include underground boring at Comanche Creek Trail, but this would not result in a closure to the trailhead. The Project would however, temporarily close the bike lane along Midway, but only during the seasonal construction of the trunkline. The Project is proposed to be constructed within up to three seasonal construction windows, between April and October. Work along Midway falls under Phase 1, proposed for as early as spring of 2026. Therefore, recreational use interruption would be restricted to one six-month window. Overall, the Project would not generate demands on other parks and recreational facilities such that it would cause substantial physical deterioration of the facility to occur or be accelerated. Overall, the Project would have a **less-than-significant** impact on recreation.

MITIGATION: None required.

REFERENCES CITED:

City of Chico. 2010. Chico 2030 General Plan Update Draft Environmental Impact Report, Section 4.12.8. *Parks and Recreation*. Available: <https://chico.ca.us/documents/Departments/Community-Development/Planning-Division/General-Plan--Other-Planning-Documents/Draft-EIR-Chico-2030-General-Plan/4.12publicservicesandutilities.pdf>. Accessed: February 28, 2023.

Q. Transportation

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
1. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?			X	
2. Would the Project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?			X	
3. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
4. Result in inadequate emergency access?			X	

AFFECTED ENVIRONMENT: Project activities consist of vegetation clearing and grubbing along with replanting, open cut trenching, jack-and-bore pit excavation to support directional boring, installation of sewer pipe, backfilling, and pave-back of existing paved sidewalk, bikes paths and portions of roadway along the Project alignment. Project construction activity would occur along several portions of roadways that provide access to the community, namely Hegan Lane to Midway, Midway between Hegan Lane and Entler Avenue, Entler Avenue between Midway and SR 99, Cramer Lane between an unpaved area to the south (UPRR alignment) and Morrow Lane, Morrow Lane between Cramer Lane to where the road becomes Skyway, and then Skyway to just west of Potter Road.

DISCUSSION: Q.1–Q.4. Less Than Significant. Project construction would require temporary lane closures. The Class I bike path along Midway would be closed during pipeline construction at this location. There also may be intermittent lane closures with one-way traffic controls, but with no complete closures. There would be short-term (less than 15 minutes) interrupted vehicle access to adjacent properties during construction; apart from these minimal delays, access to properties would be ensured at all times. As such, construction activities would have minimal impacts on traffic patterns, and use of traffic controls would ensure adequate emergency access to all areas. All impacts on ground transportation would be temporary and exist only during construction.

The proposed Project is not considered a generator of additional traffic as it would not construct facilities, residential, commercial, or otherwise. The Project would not conflict with an applicable plan, ordinance, or policy regarding the circulation system, nor would it conflict with a congestion management program, result in changes in air traffic levels, or affect air traffic patterns. There would be no permanent modification or design changes of the existing roads, nor would there be any above-ground structures associated with the Project. Relative to these traffic and transportation factors, the proposed Project would result in **less-than-significant** impacts on transportation.

MITIGATION: None required.

REFERENCES CITED:

City of Chico. 2010.Chico 2030 General Plan Update Draft Environmental Impact Report, Section 4.5. *Traffic*. Available: <https://chico.ca.us/documents/Departments/Community-Development/Planning-Division/General-Plan--Other-Planning-Documents/Draft-EIR-Chico-2030-General-Plan/4.5traffic.pdf>

R. Tribal Cultural Resources

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

AFFECTED ENVIRONMENT: The Project site is classified as an area of High Sensitivity on the Archaeological Sensitivity Areas Map in the Chico General Plan. The Project site is located within the traditional boundaries of the Konkow, or Valley Maidu tribe. Historically, the Konkow inhabited a large geographic area that encompassed the Sacramento River and east to the Sierra/Cascade canyons and foothills east of Chico. Local to the Chico area are the people of Mechoopda. The ancestral village of the Mikćapdo was located on Little Butte Creek, less than 4 miles south of downtown Chico. The people of Mechoopda survived based on strategies, technologies and knowledge associated with a "hunting and gathering" economy. Today, the Mechoopda Indian Tribe is a federally recognized tribe comprised of 560 Tribal Members and governed by a Tribal Council elected by the General Membership (Mechoopda Indian Tribe 2024).

DISCUSSION: R.1a–R.1b. Less Than Significant with Mitigation Incorporated. A Tribal Cultural Resource is a site feature, place, cultural landscape, sacred place or object, which is of cultural value to a Tribe. According to Butte County constraints mapping, the Project site is not located in an area considered to have a high archaeological sensitivity. Often, cultural resources are found in foothill areas, areas with high bluffs, rock outcroppings, areas overlooking deer migratory corridors, or near bodies of water. The Project site is located in the Sacramento Valley and has been extensively disturbed by residential and transportation infrastructure development.

No prehistoric or historic-era sites have been recorded or otherwise identified within the Project site boundary on records maintained at the Northeast Information Center. Additionally, no prehistoric sites,

traditional use areas or other cultural issues of concern have been identified by the Native American groups and individuals contacted. The NAHC has no record of Sacred Land listings within, adjacent or close to the Project area. The data file and determinations of effect for the Office of Historic Preservation also failed to document resources in the Project. Lastly, the California Inventory and Historic and General Land Office maps failed to identify potential historic resources within the Area of Potential Effect.

Consultation with Interested Parties: The NAHC identified no sacred lands within the Project area (response date February 23, 2023). The NAHC provided contact information for local Native American parties that may have an interest in the Project site for additional consultation. Follow-up telephone calls were made to all of the parties and in all cases voicemails were reached and detailed messages concerning the Project description and findings were provided. The representative of the Enterprise Rancheria indicated that the Project is not located within the Tribe's aboriginal territory and there is no comment. On March 8, 2024, the City of Chico solicited input from the Mechoopda Tribe. The Tribal Historic Preservation Officer for the Mechoopda Indian Tribe of Chico Rancheria confirmed via email on March 18, 2024 that the areas near Entler and Hegan are extremely sensitive, as well as Butte and Comanche Creeks and requested a tribal monitor during all earth-moving and grading activities. No other responses were received.

The Project is not anticipated to cause a substantial adverse change in the significance of a tribal cultural resource. In the event that resources are inadvertently discovered, implementation of **Mitigation Measure R.1, Tribal Cultural Resources** would reduce impacts to a **less-than-significant** level.

MITIGATION: Mitigation Measure R.1. Tribal Cultural Resources: If during ground-disturbing activities, any potentially paleontological, prehistoric, protohistoric, and/or historic cultural resources or tribal cultural resources are encountered, the supervising contractor shall cease all work within 25 feet of the find (100 feet for human remains) and notify the City. A professional archaeologist meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeology and being familiar with the archaeological record of Butte County, shall be retained to evaluate the significance of the find. City staff shall notify all local tribes on the consultation list maintained by the State of California NHAC, to provide local tribes the opportunity to monitor evaluation of the site. If human remains are uncovered, the Project team shall notify the Butte County Coroner pursuant to Section 7050.5 of California's Health and Safety Code. Site work shall not resume until the archaeologist conducts sufficient research, testing and analysis of the archaeological evidence to make a determination that the resource is either not cultural in origin or not potentially significant. If a potentially significant resource is encountered, the archaeologist shall prepare a mitigation plan for review and approval by the City, including recommendations for total data recovery, Tribal monitoring, disposition protocol, or avoidance, if applicable. All measures determined by the City to be appropriate shall be implemented pursuant to the terms of the archaeologist's report. The preceding requirement shall be incorporated into construction contracts and documents to ensure contractor knowledge and responsibility for the proper implementation.

REFERENCES CITED:

Mechoopda Indian Tribe. 2024.Mechoopda Indian Tribe of Chico Rancheria website. Available: Mechoopda (mechoopda-nsn.gov). Accessed: May 10, 2024.

S. Utilities and Service Systems

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
1. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			X	
2. Have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years?				X
3. Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?			x	
4. 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?			X	
5. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			X	

AFFECTED ENVIRONMENT: The City's collection system consists of sewer mains, trunk sewers, lift stations, and flow diversions that collect and convey wastewater to the City's WPCP, which is located west of the City on Chico River Road. The City's existing sanitary sewer collection system is comprised of roughly 283 miles of gravity collection system pipes up to 39-inches in diameter.

The Project would install a sewer trunkline that would service the majority of the Honey Run/Doe Mill Special Planning Area, South Entler Special Planning Area, and commercial and industrial uses in the area. This Project involves the construction of both P-18 and P-17B segments identified in the 2013 Sanitary Sewer Master Plan Update. The purpose of the Project is to serve the City's sanitary sewer future needs and provide sanitary sewer service to the above areas.

The trunkline would extend approximately 2.85 miles easterly starting from the existing P-17A sewer trunkline located near the intersection of Hegan Lane and the Comanche Creek Greenway bike path. The maximum grading and excavation depth needed for most Project trenching, manhole access, and jack and boring is primarily 10 feet, with depths up to 15 feet required in some locations.

The majority of solid waste generated in the City of Chico is disposed of at the Neal Road Recycling and Waste Facility, which is owned by Butte County and operated by the Butte County Public Works Department. The landfill is located at 1023 Neal Road in unincorporated Butte County, approximately 7 miles southeast of Chico. The facility is located on 190 acres, 140 of which are used for solid waste disposal. The Neal Road Recycling and Waste Facility is permitted to accept municipal solid waste, inert industrial waste, demolition materials, and special wastes such as tires, heavily wrapped non-friable

asbestos shingles and siding, and uncontaminated dirt and other construction wastes (Butte County 2024).

DISCUSSION: S.1. Less Than Significant. The Project is the construction of new wastewater infrastructure and would not require or result in the relocation or construction of new or expanded water, stormwater drainage, electric power, natural gas, or telecommunications facilities. Underground boring for the Project would occur at three locations to avoid impacts on surface features; these would be at SR 99, Comanche Creek, and the Butte Creek Diversion Channel. During construction, the jack-and-bore pit, clearing and grubbing area would require the removal and replacement of 22 feet of storm drain. Once completed the Project would serve to support the provision of adequate wastewater conveyance for the planned growth in the southern areas of Chico; it would not alter wastewater requirements or result in an increase in wastewater generation.

No utility updates are required in association with the Project, nor would the Project require or result in the construction of other facilities, or expansion of existing facilities, beyond those included and analyzed in this document. The impact would be **less than significant**.

S.2. No Impact. The Project would not increase population or require water supplies, nor would it generate impacts relative to water supply; there would be **no impact**.

S.3. Less Than Significant. The Project is intended to provide wastewater conveyance to the existing WPCP to accommodate existing and planned development in Chico. The WPCP has adequate capacity to serve all existing and proposed sewer connections, including the Project. As such, the Project would not include any uses that would require increased wastewater treatment. This would be a **less-than-significant** impact.

S.4–S.5. Less Than Significant. The 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, a limited amount of construction waste would be generated. Waste would only be sent to permitted landfill facilities with adequate capacity to accept construction waste. The Project would not create a long-term source of solid waste needing disposal. Disposal and recycling of materials generated by the construction of the trunkline would be handled and disposed of in accordance with Federal, State, and local requirements. The Project would not create a long-term source of solid waste needing disposal. This impact would be **less than significant**.

MITIGATION: None required.

REFERENCES CITED:

Butte County. 2024. Dumping Guidelines. Available: <https://www.buttecounty.net/917/Dumping-Guidelines>. Accessed: May 8, 2024.

City of Chico. 2010. Chico 2030 General Plan Update Draft Environmental Impact Report. Section 4.12, *Public Services and Utilities*. Available: <https://chico.ca.us/documents/Departments/Community-Development/Planning-Division/General-Plan--Other-Planning-Documents/Draft-EIR-Chico-2030-General-Plan/4.12publicservicesandutilities.pdf> Accessed: March 7, 2023.

T. Wildfire

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
1. Substantially impair an adopted emergency response plan or emergency evacuation plan?				X
2. 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?				X
3. 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?				X
4. 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?				X

AFFECTED ENVIRONMENT: The Project site is identified as an area outside of CalFire’s ‘Very High Fire Hazard Severity Zone’ (i.e., it is a non-VHFHSZ) (CalFire 2020). The Project site is not located in or near any state responsibility areas but is located within a LRA (CalFire 2020).

DISCUSSION: T.1–T.4. No Impact. The Project would consist of an underground trunkline. Although construction would entail temporary and progressing partial road closures (see Section I.K, *Project Description*, of this Initial Study), the Project would not impair an adopted emergency response or evacuation plan. Because the Project site is relatively flat and the Project would be underground with no occupants, the Project would not exacerbate wildfire risks or expose anyone to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. In addition, the Project would not require the installation or maintenance of above-ground infrastructure and would therefore not exacerbate fire risks or cause temporary or ongoing impacts to the environment. The Project site is in a LRA pursuant to the Fire Hazard Severity Zone and is served by the City of Chico Fire Department as shown in the State Responsibility Area map. The construction of the proposed Project would take place in accordance with the policies and procedures laid out in the City of Chico General Plan Draft EIR. Refer to Section 4.4 of the Draft EIR Chico 2030 General Plan for a complete list of general plan policies related to preventing wildfire risks and hazards. Therefore, the 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** on wildfire.

MITIGATION: None required.

REFERENCES CITED:

California Department of Forestry and Fire Protection (CalFire). 2020. Fire Hazard Severity Zones Viewer. Available: <https://egis.fire.ca.gov/FHSZ>. Accessed: 03/07/2023.

City of Chico. 2010. Chico 2030 General Plan Update Draft Environmental Impact Report. Section 4.4, Human Health Risk of Upset. Available: <https://chico.ca.us/documents/Departments/Community-Development/Planning-Division/General-Plan--Other-Planning-Documents/Draft-EIR-Chico-2030-General-Plan/4.4humanhealthriskofupset.pdf>. Accessed: March 7, 2023.

U. Mandatory Findings of Significance

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

DISCUSSION: U.1–U.3. Less-Than-Significant. As addressed under Section I.K. *Project Description*, the proposed Project is needed to meet the goals described in the Chico 2030 General Plan Goal PPFS-4: Maintain a sanitary sewer system that meets the City's existing and future needs, complies with all applicable regulations, and protects the underlying aquifer; and Goal PPFS-4.1: Improve and expand the sanitary sewer system as necessary to accommodate the needs of existing and future development (City of Chico 2011). The Project was also identified in the 2013 SSMPU, which updated the previous iteration to identify capacity deficiencies in the City's sanitary sewer system, develop feasible alternatives to correct those deficiencies, and plan the infrastructure that will serve future development projected by the Chico 2030 General Plan (City of Chico 2013).

Based on the preceding analyses, the Project does not have the potential to significantly degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory (see sections D. *Biological Resources*, and E. *Cultural Resources*). Furthermore, the application of existing regulations and incorporation of identified mitigation measures would ensure that all potentially significant environmental impacts associated with the Project, including those related to air quality, biological

resources, cultural resources, geology/soils, hydrology/water quality, noise, and tribal cultural resources would be minimized or avoided, and the Project would not result in direct or indirect adverse effects on human beings or the environment, such that it would not result in significant cumulative impacts. Therefore, given the inclusion of the Project in the City's 2030 General Plan and 2013 SSMPU and with the incorporation of the mitigation measures identified in previous sections of this IS/MND, the Project would result in **less-than-significant cumulative impacts**.