Guynn Bridge Replacement Project

Draft Initial Study / Proposed Mitigated Negative Declaration

CAPITAL PROJECT NO. 50232

Lead Agency:

City of Chico, Public Works Department

411 Main Street

Chico, CA 95928

March 2025

Prepared By:

City of Chico Department of Public Works – Engineering

Lead Consultant: Mark Thomas

Supporting Consultant: Gallaway Enterprises

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Each of the appendices listed below is available for review, along with the Draft IS/Proposed MND on the City of Chico's website at https://chico.ca.us/Departments/Engineering/Capital-Projects/Guynn-Avenue-Bridge-Replacement-Project/index.html (Public Review Documents – Guynn Avenue over Lindo Channel Bridge Replacement Project).

Appendix A: Visual Impact Assessment
Appendix B: Natural Environment Study
Appendix C: Draft Delineation of Waters of the U.S.
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List of Acronyms

AASHTO	American Association of State Highway Transportation Officials
APE	Area of Potential Effect
AQAP	Air Quality Attainment Plan
ASR	Archaeological Survey Report
BCAG	Butte County Association of Governments
BCAQMD or Air District	Butte County Air Quality Management District
BMPs	Best Management Practices
BSA	Biological Survey Area
CAP	Climate Action Plan
Caltrans	California Department of Transportation
Cal Water	California Water Service Company
CARB	California Air Resources Board
CBC	California Building Code
CCV	California Central Valley
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFGC	California Fish and Game Commission
CFR	Code of Federal Regulations
CIDH	Cast-In-Drilled-Hole
City	City of Chico
CNDDB	California Natural Diversity Database
CRWQCB	California Regional Water Quality Control Board
CV	Central Valley
CVFPB	Central Valley Flood Protection Board
CWHR	California Wildlife Habitat Relationships
dBA	decibel
DBH	Diameter at breast height
DPS	Distinct Population Segment
DTSC	Department of Toxic Substances Control
EFH	Essential Fish Habitat
EIR	Environmental Impact Report
ESA	Endangered Species Act
ESU	Evolutionarily Significant Unit
FEMA	Federal Emergency Management Agency
ft	Feet
GHG	Greenhouse gas
HPSR	Historic Properties Survey Report
LID	Low Impact Development
LRA	Local Responsibility Area
LSA	Limited Soils Assessment
MBTA	Migratory Bird Treaty Act
MND	Mitigated Negative Declaration
MMRP	Mitigation Monitoring and Reporting Program
NAHC	Native American Heritage Commission
NEIC	Northeast Information Center
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollution Discharge Elimination Permit
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NOx	Oxides of Nitrogen
$PM_{2.5}$	Fine Particulate Matter
PM_{10}	Respirable Particulate Matter

ROG	Reactive Organic Gases
SNC	Sensitive Natural Community
SPP	Spill Prevention Plan
sq ft	Square feet
SRA	State Responsibility Area
SSC	Species of Special Concern
SVAB	Sacramento Valley Air Basin
SWPPP	Stormwater Pollution Prevention Plan
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
VELB	Valley elderberry longhorn beetle
VMT	Vehicle-miles-traveled

Draft Initial Study / Proposed Mitigated Negative Declaration

City of Chico
Environmental Coordination and Review

I. PROJECT DESCRIPTION

A. Project Title: Guynn Avenue Over Lindo Channel Bridge Replacement Project (Capital Project No. 50232)

B. Project Sponsor/Lead Agency:
City of Chico – Public Works Engineering
PO Box 3420
Chico, CA 95927

C. Property Owners:
City of Chico – Public Works Engineering
PO Box 3420
Chico, CA 95927

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Carlson, Cynthia K & Ernest E
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Thorlaksson, Freda E Revocable Inter Vivos Trust
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Chico, CA 95926

Curtis Family Trust
2409 Guynn Ave
Chico, CA 95926

D. City Contact: Tracy R. Bettencourt – MPA, AICP
Senior Planner
City of Chico – Public Works Engineering
tracy.bettencourt@chicoca.gov
(530) 879-6903

E. Project Location: The Project is located on Guynn Avenue at Lindo Channel in the City of Chico, California, latitude 39.743599, longitude -121.875913 (**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 043-630-014, 043-630-074, 043-630-076, 042-600-012. Permanent acquisitions will be needed from 042-600-012; temporary construction easements will be needed from 043-630-074, 043-630-076, and 043-630-014.

G. Parcel Size: The Project is approximately 1.83 acres in size.

H. General Plan Designation: Public Right of Way (ROW), LDR (Low Density Residential), POS (Primary Open Space)

I. Zoning: Public ROW, R-3 (Medium-High Density Residential), R-1 (Low Density Residential) and OS1 (Primary Open Space).

J. Environmental Setting:

The Project site is located on Guynn Avenue in the City of Chico, Butte County, California, within the United States Geological Survey (USGS) "Ord Ferry" quadrangle, Section 21, Township 22N, Range 01E. The Project is located in the north Sacramento Valley at the base of the Sierra Nevada foothills. The Project site consists of the bridge that spans Lindo Channel, an intermittent drainage, and adjacent land consists of residential development. The overall topography of the Project site is relatively flat but varied due to the steep banks of the channelized creek. The survey area is elevated approximately 180 feet above sea level and is sloped between 0-2 percent.

K. Project Description:

BRIDGE CONSTRUCTION

The existing bridge (Bridge No. 12C0066) has been given a Caltrans sufficiency rating of 30.0 and has a status of structurally deficient. The structure has a substantially reduced load carrying capacity and is posted for load and speed restrictions. Transverse and longitudinal cracks are found throughout the AC overlay. There is significant paint loss and rust throughout the steel stringers, floor beams, and on the main truss. A full-height vertical crack is present at the interface between the left wingwall and northern abutment and the wingwall has begun to fail.

The Project will construct a new bridge to replace the existing bridge. Removal of the existing bridge will be done from the roadway without the need to access the channel. The new structure will accommodate two 11-foot travel lanes, five-foot shoulders, and a six-foot sidewalk on the east side. The new bridge is anticipated to be a single-span structure, approximately 90 feet long. The structure type is expected to be a precast prestressed concrete box beam.

Construction of the bridge will involve excavation for and construction of concrete abutments, founded on deep foundation. Temporary work within Lindo Channel includes installation of scour countermeasures at the support locations. Lindo Channel is typically dry during the construction season. However, in the event that flowing water may be present, the use of a diversion system to ensure completion of all in-channel activities within the established work window may be necessary. Construction of the roadway approaches will involve the removal of existing pavement and placement of aggregate base and hot mix asphalt pavement. New curb, gutter, and sidewalk will be constructed on the approach roadways.

During construction, Guynn Avenue will be closed to traffic and a detour route made available. Vehicular traffic will be able to cross Lindo Channel at one of two nearby locations. The first is by using Nord Avenue, just west (downstream) of the Project site. This results in a detour length of less than one mile. The second is by using Holly Avenue, northeast (upstream) of the Project site. This detour length is 1.8 miles long, but is a more viable option when train traffic restricts access to Nord Avenue from West Lindo Avenue and East Avenue.

VEGETATION REMOVAL

Tree removal and removal of other vegetation along the creek will be necessary for the Project. Elderberry shrubs occur on the south and north-west corners of the bridge and removal of some shrubs will be necessary to facilitate construction. Elderberry shrubs are the sole host plant for the federally listed valley elderberry longhorn beetle (VELB), thus impacts to a federally listed species are anticipated. Lindo Channel can also provide a habitat for federally listed salmonids but only when flows allow passage of fish. Since construction is not expected to occur during sustaining flows, or will use a water diversion system, there will be no impacts to fish.

SCHEDULE
Construction is anticipated to begin in Spring 2028 and will have a duration of approximately eight months.

RIGHT OF WAY AND UTILITY RELOCATION
The right of way width along Guynn Avenue and West Lindo Avenue (including the creek) varies. A permanent acquisition will be needed from the northwest parcel (2409 Guynn Avenue) to accommodate access for maintenance to the retaining wall. Temporary construction easements will be needed from the southern parcels (1395 and 1349 West Lindo Avenue and 2386 Moyer Way) to construct the south approach improvements. There are several utilities crossing Lindo Channel near Guynn Avenue. A two-inch PG&E gas distribution line is attached to the east side of the existing structure. An eight-inch California Water line crosses under the channel on the east side of the existing bridge. The gas and water lines are anticipated to be relocated. An overhead joint electrical and communication line crosses the channel on the east side of the bridge, however no conflicts with the overhead facility are anticipated at this time.

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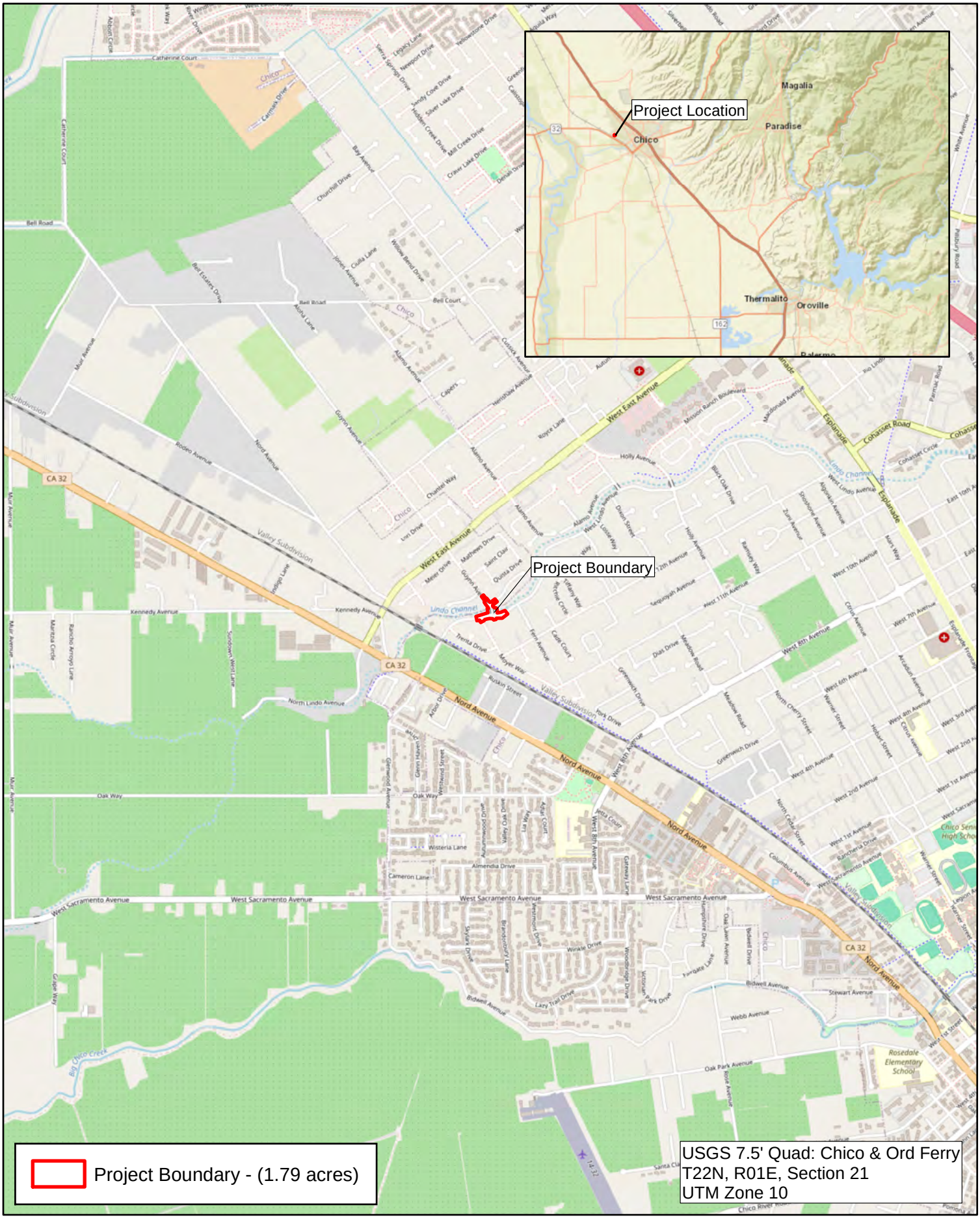

1:24,000

0 0.25 0.5 Miles

NORTH

Data Sources: ESRI, OpenStreetMap, Mark Thomas

Guynn Ave Bridge Replacement Project
Project Vicinity
Figure 1

gallaway ENTERPRISES

GE: #15-034b Map Date: 04/05/2024

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L. Public Agency Approvals:

1. California Regional Water Quality Control Board – NPDES and §401 Water Quality Certification
2. California Department of Fish and Wildlife – Streambed Alternation Agreement §1602
3. Central Valley Flood Protection Board Encroachment Permit
4. U.S. Army Corps of Engineers – Clean Water Act §404 Permit
5. U.S. Fish and Wildlife §7 Endangered Species Act Consultation
6. National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NMFS) §7 Endangered Species Act Consultation

M. 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, has consultation begun?

☐ **Yes** ☒ **No**

N. Prepared By:

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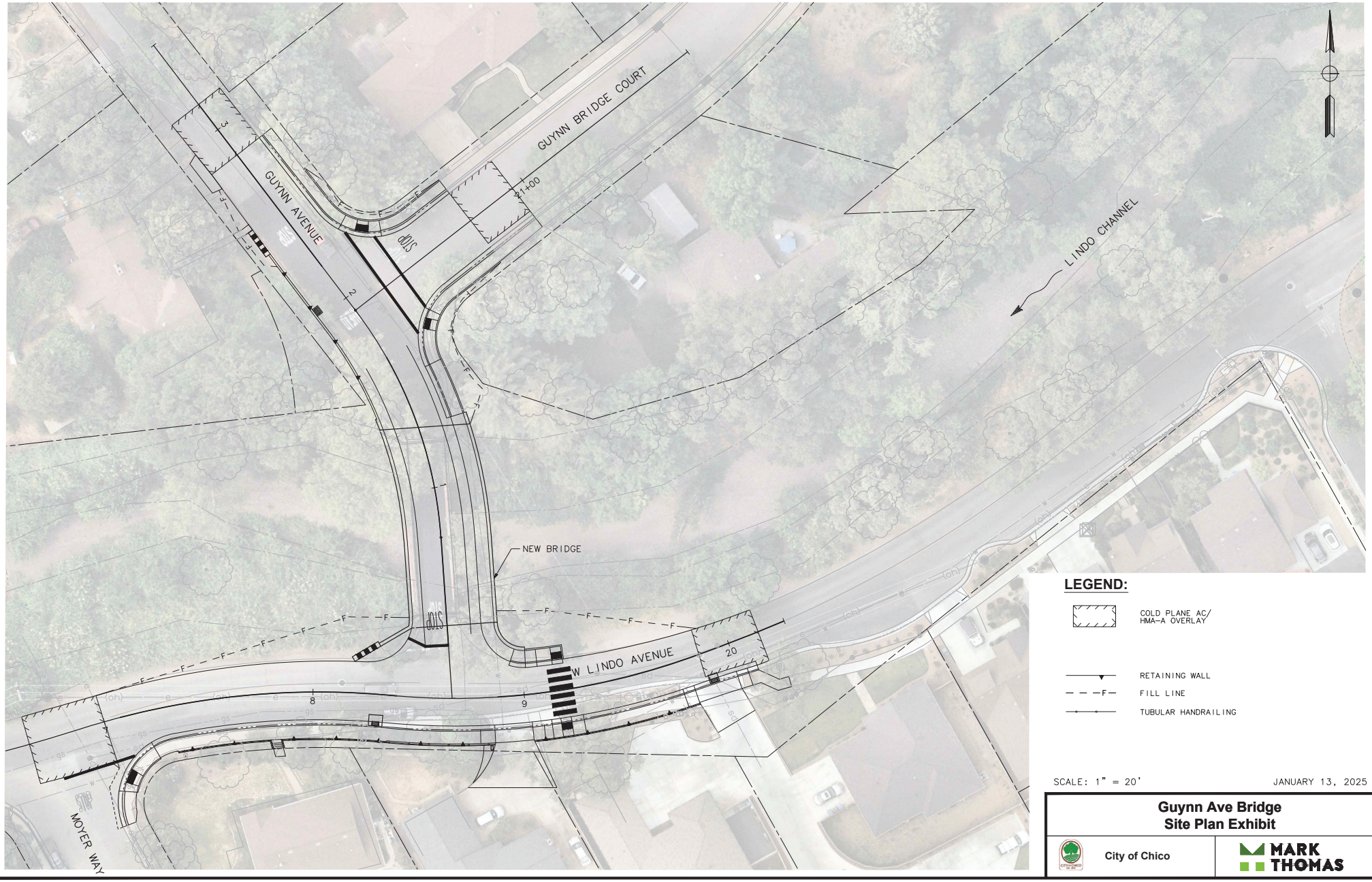
GUYNN BRIDGE COURT
GUYNN AVENUE
LINDO CHANNEL
NEW BRIDGE
W LINDO AVENUE
MOYER WAY
STOP
STOP
91+00
20
LEGEND:
COLD PLANE AC/
HMA-A OVERLAY
RETAINING WALL
FILL LINE
TUBULAR HANDRAILING
SCALE: 1" = 20'
JANUARY 13, 2025
Guynn Ave Bridge
Site Plan Exhibit
City of Chico
MARK THOMAS

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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.

☐ Aesthetics	☐ Greenhouse Gas Emissions	☐ Public Services
☐ Agriculture and Forestry Resources	☒ Hazards/Hazardous Materials	☐ Recreation
☐ Air Quality	☒ Hydrology/Water Quality	☐ Transportation
☒ Biological Resources	☐ Land Use and Planning	☒ Tribal Cultural Resources
☒ Cultural Resources	☐ Mineral Resources	☒ Utilities and Service Systems
☐ Energy	☒ Noise	☐ Wildfire
☒ Geology/Soils	☐ Population/Housing	☐ 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.

Tracy R Bettencourt — 3/17/2025

Signature — Date

Tracy R. Bettencourt – MPA, AICP, Senior Planner

Printed Name (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

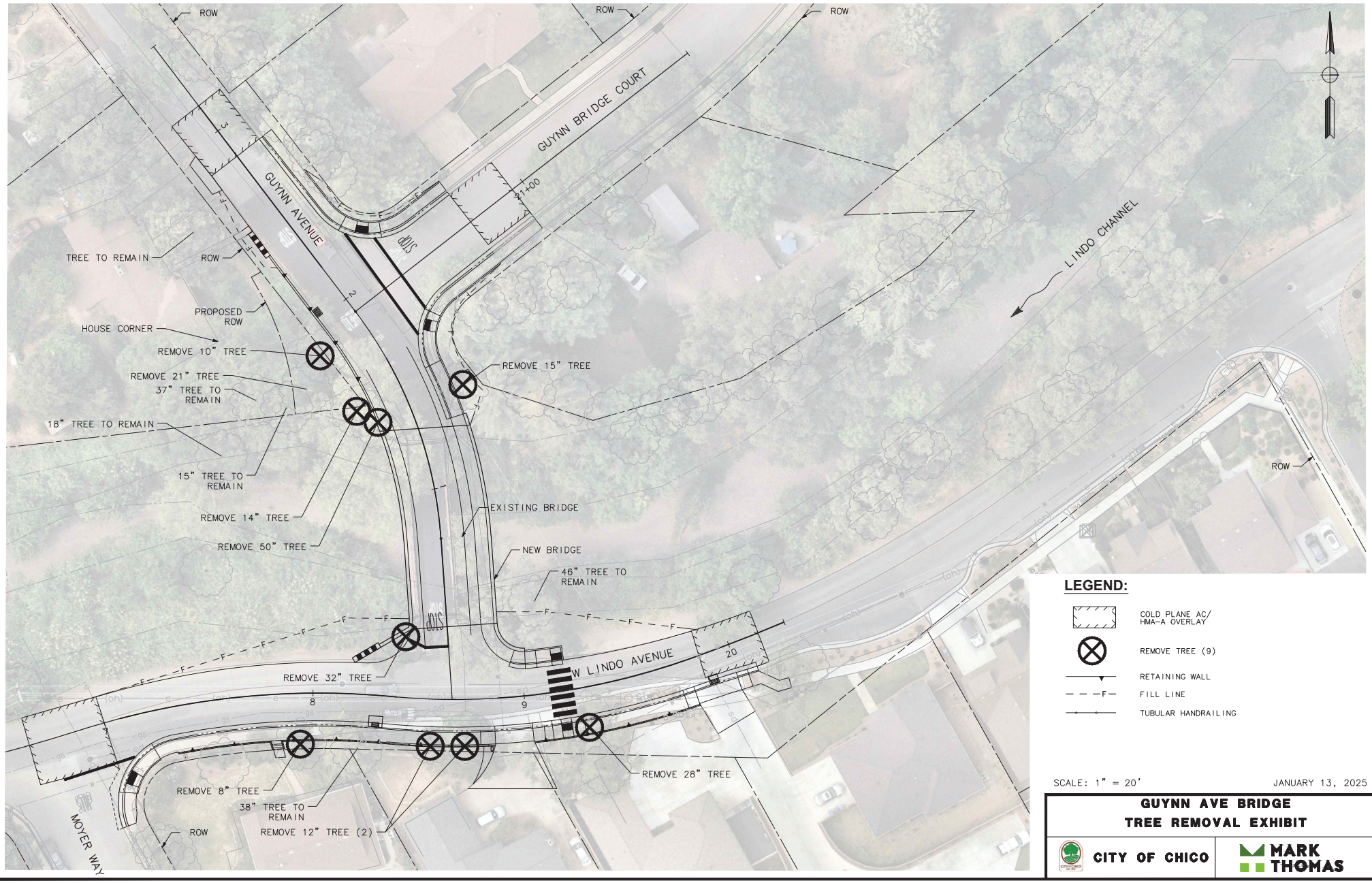
DISCUSSION:
The Project is located in northwest Chico on the valley floor. The surrounding area is developed for residential use. A Visual Impact Assessment (VIA) was prepared for the proposed Project utilizing Caltrans Questionnaire to determine Visual Impact Assessment Level form (VIA Form) **(Appendix A)**.

A.1-A.4. Less Than Significant Impact. The proposed development will not have a substantial adverse effect on a scenic vista. Guynn Avenue is not designated as a state scenic highway nor are there any identified scenic resources including trees, rock outcroppings, and historic buildings, in the Project area. There are no significant scenic vistas on which the proposed Project could have an impact. The improvements for this Project do not include the installation of lighting or reflective surfaces that could contribute to substantial sources of light or glare.

Review of the Project site and preliminary Project plans by means of the VIA form indicate that the proposed Project will result in less than significant visual impacts to the environment. Some vegetation removal will occur, including the removal of twelve (12) elderberry bushes, and nine (9) trees with a DBH of 4 inches or greater. The following tree species and quantities are proposed for removal: grey pine (1), glossy privet (1), sycamore (2), black locust (1), redwood (3), valley oak (1). See Figure 3 for tree removal locations. Lindo Channel contains many occurrences of sycamore trees and elderberry bushes, so the removal of vegetation as a result of the Project would not remove unique resources on a landscape scale. A permanent right of way acquisition will be needed from the northwest parcel (2409 Guynn Avenue) to accommodate the roadway shift. Temporary construction easements are needed to construct the southern approach improvements (1395 and 1349 West Lindo Avenue, and 2386 Moyer Way). The Project will construct a new bridge to replace the existing bridge such that the visual character of the area will not significantly change.

The characteristics of the proposed Project resulted in a VIA score of 26. Consistent with Caltrans Visual Assessment Guidelines, a score of 19 to 28 recommends the preparation of a brief visual assessment in memo format. The removal of the existing bridge will result in changes to the visual character of the site due to slight alterations in the contemporary bridge design. However, the proposed bridge will be built on the same alignment and will not significantly change the current visual character of existing road or surrounding areas. The general natural setting of Lindo Channel will remain largely intact. Because the Project would not significantly change the existing visual setting and would not introduce visual elements that are uncommon in the area, no substantial long-term visual impact is anticipated. The Project will have **a less than significant impact** relative to these resources.

MITIGATION: None required.


ROW
ROW
ROW
GUYNN BRIDGE COURT
GUYNN AVENUE
STOP
00+14
LINDO CHANNEL
TREE TO REMAIN
ROW
PROPOSED ROW
HOUSE CORNER
REMOVE 10" TREE
REMOVE 21" TREE
37" TREE TO REMAIN
18" TREE TO REMAIN
15" TREE TO REMAIN
REMOVE 14" TREE
REMOVE 50" TREE
REMOVE 15" TREE
EXISTING BRIDGE
NEW BRIDGE
46" TREE TO REMAIN
REMOVE 32" TREE
W LINDO AVENUE
REMOVE 28" TREE
REMOVE 8" TREE
38" TREE TO REMAIN
REMOVE 12" TREE (2)
ROW
MOYER WAY
ROW
LEGEND:
COLD PLANE AC/ HMA-A OVERLAY
REMOVE TREE (9)
RETAINING WALL
FILL LINE
TUBULAR HANDRAILING
SCALE: 1" = 20'
JANUARY 13, 2025
GUYNN AVE BRIDGE
TREE REMOVAL EXHIBIT
CITY OF CHICO
MARK THOMAS

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B. Agriculture and Forest Resources: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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

DISCUSSION:

B.1–B.5. No Impact. The Project will 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 "Urban and Built-Up Land." Urban and built-up land is occupied by structures with a building density of at least 1 unit to 1.5 acres. The Project will not conflict with existing zoning for agricultural use or forest land and is not under a Williamson Act Contract. The Project will not result in the loss of forest land, conversion of forest land, or involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland or forest land. The site consists of an existing road with no agriculture or timber resources. The Project will result in **No Impact** to agriculture and forest resources.

MITIGATION: None required.

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 2018 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	

DISCUSSION:

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 Coastal mountain ranges, respectively.

The SVAB, containing 11 counties and some two 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 Sacramento Valley Air Basin, 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, 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 PM2.5) 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 nitrogen oxides (NOx) - 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 and California Air Quality Standards in Butte County. The BCAQMD released the CEQA Air Quality Handbook: Guidelines for Assessing Air Quality Impacts for projects subject to CEQA Review (CEQA Handbook), which was approved October 23, 2014, and updated in 2024. The District web site (www.bcaqmd.org) 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 1 provides Butte County's attainment status as of August 2024:

Table 1. Butte County Ambient Air Quality Attainment Status

Pollutant	State	Federal
1-hour Ozone	**Nonattainment**	**-**
8-hour Ozone	**Nonattainment**	**Nonattainment**
Carbon Monoxide	Attainment	Attainment
Nitrogen Dioxide	Attainment	Attainment
Sulfur Dioxide	Attainment	Attainment
24-hour PM10*	**Nonattainment**	Attainment
24-hour PM2.5*	No Standard	Attainment
Annual PM10*	Attainment	No Standard
Annual PM2.5*	Attainment	Attainment

* PM10 – Respirable particulate matter less than 10 microns in size Source: BCAQMD 2024

* PM 2.5 – Fine particulate matter less than 2.5 microns in size

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

Source	ROG	NOX	PM10
Construction (pounds per day)	137	137	80
Construction (tons per year)	4.5	4.5	--
Operation (pounds per day)	25	25	80

Source: BCAQMD 2014.
-- = no threshold

Table 3. Road Construction Emissions Model Estimates

Source	ROG	NOX	PM10
Construction (pounds per day)	5	56	5
Construction (tons per year)	0.4	4.4	0.4
Operation (pounds per day)	n/a	n/a	n/a

Source: Road Construction Emissions Model V 9.0.0

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 Butte County Air Quality Management District Criteria Pollutant Thresholds are expected to be exceeded.

The proposed Project is not a "Project of Air Quality Concern" as determined by the U.S. Environmental Protection Agency.

C.1. Less Than Significant Impact. The Project will not conflict with or obstruct implementation of the applicable air quality plans.

The applicable air quality plan for the Project area is the 2021 AQAP, prepared by BCAQMD. The 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 and adopted by BCAG (BCAQMD 2024). As such, projects that propose development that is consistent with the population, employment, and VMT growth (and therefore the 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 was included in the regional emissions analysis conducted by BCAG for the conforming 2024 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (BCAG 2024). The Guynn Avenue Bridge Replacement Project was identified as a Non-Exempt Regionally Significant Project in the 2024 RTP/SCS and was part of the Emissions Analysis conducted in the 2024 RTP/SCS. In the 2024 RTP/SCS EIR the proposed Project is listed as complete and part of the existing environmental setting. As such, the proposed Project is considered consistent with the region's AQAP. Furthermore, many of BCAQMD's rules are intended to meet the attainment goals of the AQAP. The Project would be consistent with applicable rules that would limit ROG and PM emissions (e.g., Rules 205, 230, 231) during construction. Accordingly, the proposed Project would not exacerbate nonattainment conditions within Butte County or conflict with air quality plans adopted to attain and maintain the CAAQS and NAAQS. This impact is considered **less than significant**.

C.2. Less Than Significant Impact. The Project will not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment. The EPA has classified Butte County as nonattainment for the federal 8-hour O_3 standard and a partial maintenance area for the federal $PM_{2.5}$ standard. The California Air Resources Board (CARB) has classified the area as nonattainment for the state 8-hour O_3, 24-hour PM_{10}, and annual $PM_{2.5}$ standards. The BCAQMD has promulgated separate construction- and operation-period significance thresholds to help the Basin attain federal and state air quality standards and protect public health. This impact is considered **less than significant**.

C.3-C.4. Less Than Significant Impact. Construction of the proposed Project would result in the short-term generation of criteria pollutant emissions. Pollutant emissions would vary daily, depending on the level of activity, specific operations, and prevailing weather. As described in Table 2 and Table 3, the Project will not exceed criteria pollutant thresholds. The Project will not expose sensitive receptors to substantial pollutant concentrations. Due to the small scope of the Project, the pollutant concentrations and other emissions will not be substantial and will not adversely affect a substantial number of people. This impact is considered **less than significant**.

MITIGATION: None required.

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

DISCUSSION:

A Natural Environment Study (NES) was prepared for the Project in June 2020 (Updated November 2024) by Gallaway Enterprises **(Appendix B)**. The purpose of the NES is to document the current endangered, threatened, sensitive, and rare species and their critical habitats that occur in the biological study area (BSA) of the Project. The BSA extends to the limits of the Project boundary. Primary references consulted include species lists and information gathered using the United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) tool, NOAA-NMFS species list, California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB), the California Native Plant Society (CNPS) inventory of rare and endangered plants, and literature review. A Draft Delineation of Jurisdictional Waters of the United States was also prepared for the Project in March 2020 (Updated April 2024) by Gallaway Enterprises **(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 (Environmental Laboratory 1987) and other current regulations, manuals, and interpretations of jurisdiction currently in effect.

The Project site contains the habitat types of valley foothill-riparian, riverine, barren, and urban. Valley foothill riparian habitat within the Project site is associated with the riverine habitat of Lindo Channel,

which traverses the Project site. Barren habitats are comprised of the existing roadway and sidewalks. Urban habitat is present in the form of the surrounding residential development. Lindo Channel is designated as critical habitat for California Central Valley steelhead (CCV steelhead) and Central Valley (CV) spring-run Chinook salmon.

The Project proposes to replace the bridge on Guynn Avenue over Lindo Channel with a new bridge along the same alignment. The following discussions will address potential environmental impacts.

D.1. Less Than Significant with Mitigation Incorporated. The special-status species with potential to occur within the Project area are Central Valley (CV) spring-run Chinook salmon (*Oncorhynchus tshawytscha*), Sacramento River winter-run (SRWR) Chinook salmon Evolutionary Significant Unit (ESU) (*Oncorhynchus tshawytscha*), California Central Valley (CCV) steelhead (*Oncorhynchus mykiss*), valley elderberry longhorn beetle (VELB, *Desmocerus californicus dimorphus)*, northwestern pond turtle (*Actinemys marmorata*), pallid bat (*Antrozous pallidus)*, western red bat (*Lasiurus blossevillii*), and various bird and raptor species protected under the Migratory Bird Treaty Act (MBTA). The potential for occurrence for the aforementioned species is considered to be moderate to high due to suitable habitat and favorable conditions, with the exception of CV spring-run Chinook salmon, whose habitat within the BSA is considered marginal and, therefore, the potential for occurrence is low. Elderberry shrubs (*Sambucus cerulea*) occur within the Project site and the presence of VELB is assumed.

Central Valley Spring-run Chinook Salmon

Chinook salmon are an anadromous species which originate in freshwater environments, such as major rivers and tributaries, before migrating to oceanic environments to grow and mature, then returning to their natal freshwater environments to spawn and eventually die. Chinook salmon are the largest of the salmon species. They range in appearance throughout their developmental stages and aquatic environments.

The Central Valley spring-run Chinook salmon ESU is listed as threatened under the Endangered Species Act (ESA) and California Endangered Species Act (CESA). Spring-run Chinook salmon are differentiated from the other ESUs or other "runs" of Chinook salmon due to their distinct life history strategy in which natural populations migrate from the Pacific Ocean to their natal spawning habitat in Central Valley tributaries starting in the spring; as early as February for some populations. Unlike other runs of Chinook salmon, spring-run migrate upstream early in the year and then disperse throughout the upper reaches of a river and hold there over the summer months before spawning, instead of spawning quickly upon arrival. Juveniles will then emigrate during late fall and winter with increased flows to make their way to the Pacific Ocean. Key habitat for CV spring-run Chinook salmon includes moderately deep pools utilized for holding habitat over summer, small cobble or gravel substrate for spawning, and slow, off-channel water with debris or vegetation that juveniles utilize for rearing habitat and refuge. Shade and wood cover have been indicated as important for juvenile Chinook salmon holding habitat (Zajanc et al. 2012). Chinook salmon adults utilize deep pools for holding that usually have a large bubble curtain at the head, underwater rocky ledges, and shade cover throughout the day, or hold in smaller "pocket" water behind large rocks in fast water (Moyle 1995).

The stretch of Lindo Channel within the BSA has been designated by the NMFS as critical habitat for CV spring-run Chinook salmon. Lindo Channel continues offsite where it forks and flows into Channel Slough and Big Chico Creek, both of which are tributaries of Mud Creek. Mud Creek is a direct tributary of the Sacramento River, which would facilitate migration of non-natal juvenile fishes into Lindo Channel. Many of the primary constituent elements (PCEs) of critical habitat for Chinook salmon are lacking within the BSA. The stretch of Lindo Channel within the BSA lacks suitable rearing site elements such as submerged and overhanging large wood, log jams and beaver dams, aquatic vegetation, large rocks and boulders, side channels, and undercut banks (NMFS 2014); however, Lindo Channel is a known migration and rearing corridor for Chinook salmon (Bettelheim 2001). It is unlikely that CV spring-run Chinook salmon spawn in Lindo Channel. Central Valley spring-run Chinook spawning normally occurs between mid-August and early October, peaking in September (Moyle 2002 cited in NMFS 2014) when Lindo Channel is typically dry.

The BSA does offer suitable rearing and emigration habitat for non-natal Chinook salmon juveniles during the late fall through late spring months (i.e., October 16 – May 30) when water levels are high and temperatures are cool. Central Valley spring-run Chinook salmon use Lindo Channel as a migration corridor from the Sacramento River to the upper reaches of Big Chico Creek where suitable spawning habitat is present. During the summer months (i.e., June 1 - October 15), Lindo Channel is typically

void of water. During this time period the intermittent hydrology and warm temperatures within the BSA make Lindo Channel unsuitable habitat for any life stage of anadromous fishes and they can become stranded and perish (Phipps 1988, Bettelheim 2001). If Lindo Channel contains water between May 1 and June 30, then there is a potential for non-natal juvenile anadromous fishes to be present.

Sacramento River Winter-run Chinook Salmon

Chinook salmon are an anadromous species which originate in freshwater environments, such as major rivers and tributaries, before migrating to oceanic environments to grow and mature, then returning to their natal freshwater environments to spawn and eventually die. Chinook salmon are the largest of the salmon species. They range in appearance throughout their developmental stages and aquatic environments.

The Sacramento River winter-run (SRWR) Chinook salmon Evolutionarily Significant Unit (ESU) is listed as endangered under the ESA and the CESA. The SRWR Chinook salmon ESU contains all naturally spawning populations of SRWR Chinook salmon within the Sacramento River and its tributaries within California. Two artificial populations are also included in this ESU from the Livingston Stone National Fish Hatchery (NFH) and the University of California Bodega Marine Laboratory. The SRWR Chinook salmon are currently distributed throughout the Sacramento River and lower reaches of its tributaries below the Keswick Dam (RM 302), which is located northwest of Redding, California. They enter the Sacramento River from the San Francisco Bay to spawn from November through June (Van Woert 1958, Hallock et al. 1957 cited in NMFS 1997), peaking in March.

The majority of the SRWR Chinook pass the Red Bluff Diversion Dam between January and May. SRWR Chinook generally spawn in the Sacramento River from the Keswick Dam to Tehama (Jennings and Hendrix 2020). Spawning occurs during late April through mid–August, peaking in May and June (Table 1). Fry emerge and disperse to downstream habitats where they hide within gravel substrates. When fry become larger, they move into other areas of the stream that offer larger refugia such as woody debris, calm channels, undercut banks, and fallen trees. Juveniles migrate to delta, bay, and estuary environments at all sizes. Some juveniles migrate immediately while others take time to grow in freshwater systems before migrating into brackish and saltwater environments. Current threats facing the SRWR Chinook are loss of spawning habitat, dams and diversions, degraded stream habitat, reduction in Sacramento River flow, pollution, and drought (Jennings and Hendrix 2020).

The stretch of Lindo Channel within the BSA has been designated by the NMFS as critical habitat for SRWR Chinook salmon. Lindo Channel continues offsite where it forks and flows into Channel Slough and Big Chico Creek, both of which are tributaries of Mud Creek. Mud Creek is a direct tributary of the Sacramento River, which would facilitate migration of non-natal juvenile fishes into Lindo Channel. Many of the primary constituent elements (PCEs) of critical habitat for Chinook salmon are lacking within the BSA. The stretch of Lindo Channel within the BSA lacks suitable rearing site elements such as submerged and overhanging large wood, log jams and beaver dams, aquatic vegetation, large rocks and boulders, side channels, and undercut banks (NMFS 2014); however, there is evidence of SRWR Chinook utilizing Lindo Channel as non-natal rearing habitat during the winter months (Maslin cited in Bettelheim 2001). It is unlikely that SRWR Chinook salmon spawn in Lindo Channel. SRWR Chinook Salmon spawn in the upper mainstem Sacramento River from mid-April through August, peaking in June and July (CDFW 2018). Since spawning occurs during the warmest time of the year, adult spawners require stream reaches with plentiful cold, clean water that will protect embryos and juveniles from the warm ambient summer conditions (NMFS 2014).

The BSA does offer suitable rearing habitat for non-natal Chinook salmon juveniles during the winter months. During the summer months (i.e., June 1 - October 15) Lindo Channel is typically void of water. During this time period the intermittent hydrology and warm temperatures within the BSA make Lindo Channel unsuitable habitat for any life stage of anadromous fishes and they can become stranded and perish (Phipps 1988, Bettelheim 2001). If Lindo Channel contains water between May 1 and June 30, then there is a potential for non-natal juvenile anadromous fishes to be present.

California Central Valley Steelhead Distinct Population Segment

The CCV steelhead Distinct Population Segment (DPS) is listed as threatened by NMFS. Steelhead are small-bodied in general compared to their coastal counterparts and rarely exceed 60 centimeters in fork length, which may be an adaptation to the distance inland these fish migrate to reach their spawning areas in some cases (Moyle 2002). Steelhead will spend one 1 to 3 years growing in a marine environment before migrating into the Sacramento and San Joaquin River systems, as well as far upstream into the tributaries of these river systems, to spawn. Steelhead generally move quickly

through the main stem of the Sacramento River to their respective spawning grounds, where they then seek out suitable spawning habitat. The steelhead population is entirely a "winter-run" fish that enter the river system in November through April as fully reproductively mature adults to spawn before emigrating back to marine habitat (Moyle et al. 2008). Adult steelhead require cold, clear, relatively fast-moving water that is usually provided by snowmelt-driven stream systems at the time they are spawning. Depths required for spawning are typically 10 to 150 cm (Moyle 2002 cited in NMFS 2014b), and optimum depth for spawning is 14 inches (Bovee 1978 cited in McEwan 2001). Juvenile steelhead may spend from just months up to 7 years rearing in freshwater, with most emigrating to the ocean after 1 to 2 years (NMFS 2016). For the first year or two of life, juvenile steelhead are found in cool, fast-flowing permanent streams and rivers where riffles predominate over pools and there is ample cover from riparian vegetation or undercut banks (Moyle 2002 cited in NMFS 2014b).

The stretch of Lindo Channel within the BSA has been designated by the USFWS as critical habitat for CCV steelhead (70 FR 52488 [September 02, 2005]). Lindo Channel continues offsite where it forks and flows into Channel Slough and Big Chico Creek, both of which are tributaries of Mud Creek. Mud Creek is a direct tributary of the Sacramento River, which would facilitate migration of non-natal juvenile fishes into Lindo Channel. Many of the primary constituent elements (PCEs) of critical habitat for steelhead are lacking within the BSA. The stretch of Lindo Channel within the BSA lacks suitable rearing site elements such as submerged and overhanging large wood, log jams and beaver dams, aquatic vegetation, large rocks and boulders, side channels, and undercut banks (NMFS 2014); however, Lindo Channel is a known migration and rearing corridor for steelhead (Bettelheim 2001).

It is unlikely that CCV steelhead spawn in Lindo Channel. California Central Valley steelhead typically spawn from December through April, with peaks from January through March in small streams and tributaries where cool, well-oxygenated water is available year-round (Hallock et al. 1961; McEwan 2001 cited in NMFS 2014) and would not be expected to spawn in Lindo Channel due to highly variable flows and seasonality (D. Nielsen, personal communication, April 8, 2020) as Lindo Channel is used as a diversion for floodwaters from Big Chico Creek during the CCV steelhead spawning period (GEM 2001). There is marginal potential for CCV steelhead to spawn in Lindo Channel. The BSA does offer suitable rearing and emigration habitat for non-natal and steelhead juveniles during the late fall through late spring months (i.e., October 16 – May 30) when water levels are high and temperatures are cool. Both species use Lindo Channel as a migration corridor from the Sacramento River to the upper reaches of Big Chico Creek where suitable spawning habitat is present. During the summer months (i.e., June 1 - October 15) Lindo Channel is typically void of water. During this time period the intermittent hydrology and warm temperatures within the BSA make Lindo Channel unsuitable habitat for any life stage of anadromous fishes and they can become stranded and perish (Phipps 1988, Bettelheim 2001). If Lindo Channel contains water between May 1 and June 30, then there is a potential for non-natal juvenile anadromous fishes to be present. The proposed Project will require work within the channel of Lindo Channel, but the in-channel work will be conducted when the creek is typically dry. However, in the event that water may be present, the use of a diversion system to ensure completion of all in-channel activities within the established work window may be necessary. Further, any temporarily disturbed vegetation within the creek and along the creek banks will be re-planted and restored once the construction activities are complete. The Project proposes to place approximately 328 cubic yards of rock slope protection (RSP) within Lindo Channel to protect the banks and abutments, which will result in permanent impacts to 0.05 acres of CCV steelhead critical habitat. If the temporary diversion is needed, it will result in 0.19 acres of temporary impact to CCV steelhead critical habitat.

With the implementation of mitigation measures D.1 and D.6, which will include compensatory mitigation for impacts to critical habitat, restoration of all temporarily disturbed areas, and the implementation of best management practices and avoidance measures, these impacts are considered **less than significant with mitigation incorporated.**

Valley Elderberry Longhorn Beetle

The VELB is listed as threatened under the federal 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 where upon 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).

There are twenty-seven (27) clusters of elderberry shrubs within the Project boundary with stems with a diameter at ground level of 1 inch or greater, twelve (12) of which overlap the area of permanent impact where the new bridge structure will be placed.

Accessible elderberry shrubs were found to have exit holes consistent with those created by VELB. The shrubs are located in riparian vegetation on steep slopes. See Figure 4 for elderberry bush locations and impacts. The following elderberry shrubs will be directly impacts; EB05, EB06, EB07, EB09, EB11, EB12. EB14 is located outside of the Action Area and the limits of construction. EB04, EB14, EB15, EB16, EB17, EB19, and EB20 are not anticipated to be directly impacted and construction will occur beyond 25 feet of the dripline of these shrubs. There are two (2) CNDDB occurrences of VELB within the riparian zone of Lindo Channel (occurrences #291, 228), approximately 1.5 miles (#291) and 2 miles (#228) upstream from the Action Area. There are four (4) other CNDDB occurrences of VELB within 5 miles of the Action Area: #212 & 136 associated within the Sacramento River to the southwest and #107 & 108 associated with Big Chico Creek to the east.

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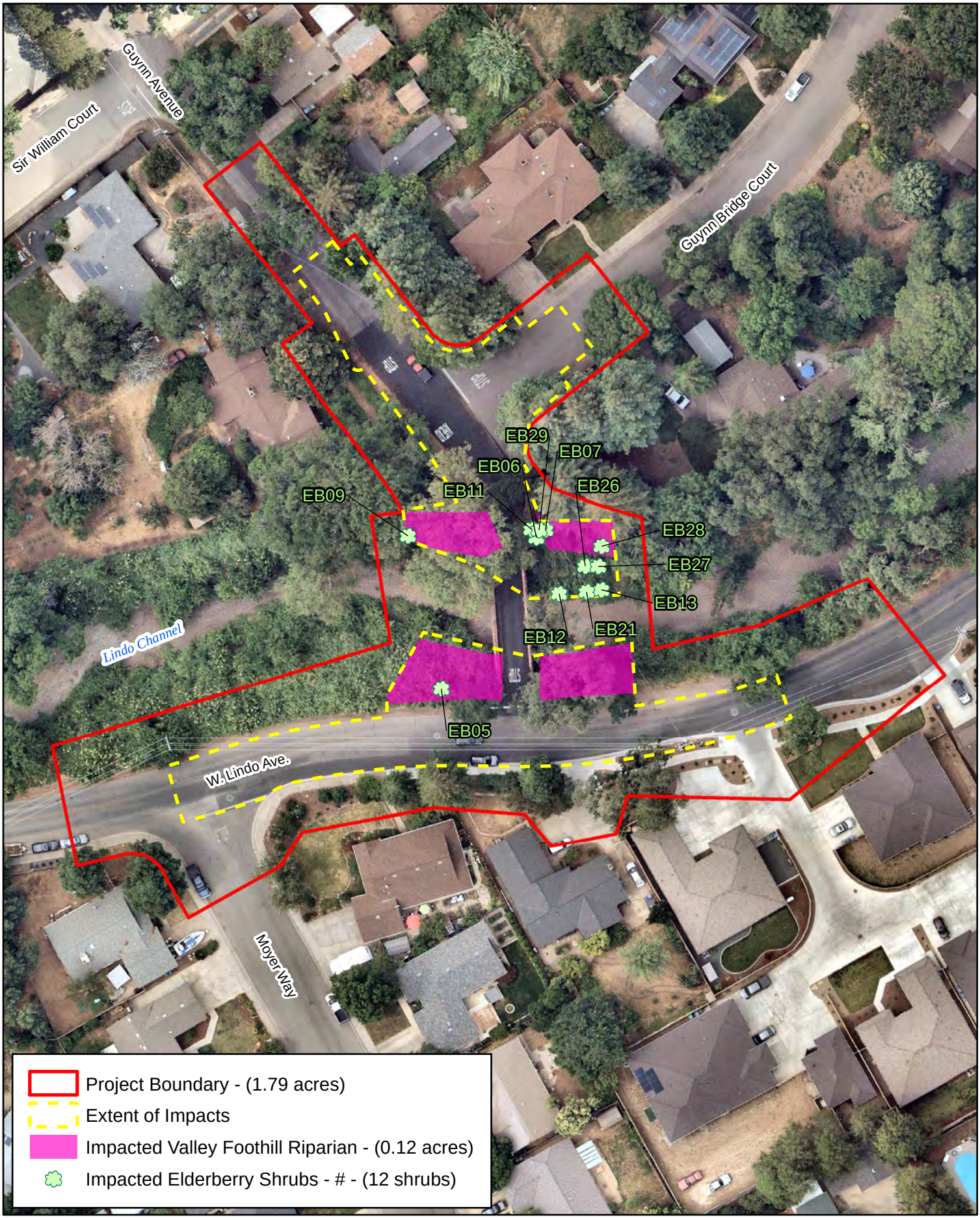

NORTH

1:850

0 50 100 Feet

Guynn Ave Bridge Replacement Project
Elderberry Shrub Location and Impacts

gallaway ENTERPRISES

Data Sources: ESRI, City of Chico, Mark Thomas

GE: #15-034b Map Date: 04/12/2024

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With the implementation Mitigation Measures D.2 and D.6, which will include compensatory mitigation for direct impacts to VELB habitat, restoration of all temporarily disturbed areas, and the implementation of best management practices and avoidance measures, these impacts are considered **less than significant with mitigation incorporated.**

Northwestern Pond Turtle

The northwestern pond turtle is a Species of Special Concern (SSC) in California and is currently proposed to be listed as threatened under the ESA. 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 back waters 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 for 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 soils. 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 stretch of Lindo Channel that occurs in the BSA contains suitable aquatic habitat for northwestern pond turtles when water is present. Lindo Channel within the BSA generally lacks emergent rocks and logs on which northwestern pond turtles bask for thermoregulation; however, there is vegetation for foraging and cover. Due to the intermittent nature of Lindo Channel and the lack of basking sites within the BSA, there is low potential for northwestern pond turtle to occur within the BSA.

Direct and indirect impacts to northwestern pond turtles will be avoided by conducting a survey immediately prior to in-stream work, relocating turtles as needed, and creating non-disturbance buffers if turtle nests are discovered. With the implementation of Mitigation Measures D.3 and D.6 these impacts are considered **less than significant with mitigation incorporated.**

Pallid Bat

The pallid bat is designated as a CDFW SSC. Pallid bats roost alone, in small groups (2 to 20 bats), or gregariously (hundreds of individuals). Day and night roosts include crevices in rocky outcrops and cliffs, caves, mines, trees (e.g., basal hollows of coast redwoods and giant sequoias, bole cavities of oaks, exfoliating Ponderosa pine and valley oak bark, deciduous trees in riparian areas, and fruit trees in orchards), and various human structures such as bridges (especially wooden and concrete girder designs), barns, porches, bat boxes, and human-occupied as well as vacant buildings. Roosts generally have unobstructed entrances/exits, and are high above the ground, warm, and inaccessible to terrestrial predators. However, this species has also been found roosting on or near the ground under burlap sacks, stone piles, rags, and baseboards. Lewis 1996 found that pallid bats have low roost fidelity and both pregnant and lactating pallid bats changed roosts an average of once every 1.4 days throughout the summer. Overwintering roosts have relatively cool, stable temperatures and are located in protected structures beneath the forest canopy or on the ground, out of direct sunlight. In other parts of the species' range, males and females have been found hibernating alone or in small groups, wedged deeply into narrow fissures in mines, caves, and buildings. At low latitudes, outdoor winter activity has been reported at temperatures between –5 and 10 °C.

Mature trees within the Project boundary that have suitable habitat elements (e.g., cavities, peeling bark) may provide suitable day-roosting habitat. Removal of mature trees within the BSA would have a potentially significant impact on pallid bats in the Project area. Mitigation Measures D.4 and D.6 would reduce the potential impact to a **less than significant with mitigation incorporated** level.

Western Red Bat

The western red bat is designated as a CDFW SSC. Western red bats are typically solitary, roosting primarily in the foliage of trees or shrubs. Day roosts are commonly in edge habitats adjacent to streams or open fields, in orchards, and sometimes in urban areas. There may be an association with intact riparian habitat (particularly willows, cottonwoods, and sycamores). Roost sites are generally hidden from view from all directions except below; lack obstruction beneath, allowing the bat to drop downward for flight; lack lower perches that would allow visibility by predators; have dark ground cover to minimize solar reflection; have nearby vegetation to reduce wind and dust; and are generally located on the south or southwest side of a tree. Red bats generally begin to forage one to two hours after sunset. Although

some may forage all night, most typically have an initial foraging period corresponding to the early period of nocturnal insect activity, and a minor secondary activity period corresponding to insects that become active several hours before sunrise. Red bats mate in late summer or early fall. Females become pregnant in spring and have a pregnancy of 80-90 days. Females may have litters of up to five pups per year. This species is highly migratory. Although generally solitary, red bats appear to migrate in groups and forage in close association with one another in summer. The timing of migration and the summer ranges of males and females seem to be different. Winter behavior of this species is poorly understood (Pierson and Rainey 1998).

Mature trees within the Project boundary that have suitable habitat elements (e.g., cavities, peeling bark) may provide suitable day-roosting habitat. Removal of mature trees within the BSA would have a potentially significant impact on western red bats in the Project area. Mitigation Measures D.4 and D.6 would reduce the potential impact to a **less than significant with mitigation incorporated** level.

Migratory Birds and Raptors

Migratory birds and raptors are protected in varying degrees under California Fish and Game Code (CFGC) Section 3503.5, the Migratory Bird Treaty Act (MBTA), and CEQA. The Project site currently provides suitable nesting and/or foraging habitat for several species protected by the MBTA.

To avoid impacts to bird and raptor species protected under the MBTA and the CFGC, Mitigation Measures D.5 and D.6 have been included. With the implementation of Mitigation Measures D.5 and D.6, the potential impacts are considered **less than significant with mitigation incorporated.**

D.2. Less Than Significant with Mitigation Incorporated. No Sensitive Natural Communities (SNC) identified by the CDFW have been mapped within the BSA. Critical habitat designation is a tool used by the USFWS and NMFS that supports the continued conservation of imperiled species by guiding cooperation within the federal government and only affects federal agency actions. Lindo Channel has been designated by NMFS as critical habitat for CCV steelhead.

The Magnuson-Stevens Fishery Conservation and Management Act (MSA), as amended by the Sustainable Fisheries Act of 1996, established procedures designed to identify, conserve, and enhance Essential Fish Habitat (EFH) for those species regulated under a federal fisheries management plan. The MSA requires Federal agencies to consult with the NMFS on all actions, or proposed actions, authorized, funded, or undertaken by the agency, that may adversely affect EFH. EFH is defined in the MSA as those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity. Adverse effect means any impact which reduces quality and/or quantity of EFH, and may include direct (e.g., contamination or physical disruption), indirect (e.g., loss of prey or reduction in species fecundity), site-specific or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions. Lindo Channel has been designated by NMFS as EFH for Chinook salmon.

The proposed Project would result in 0.05 acres of direct impacts to Lindo Channel. If the temporary stream diversion is implemented, it will result in 0.19 acres of temporary impacts to Lindo Channel. Additionally, the proposed Project would result in 0.12 acres of direct impacts to riparian habitat (associated VELB habitat). Impacts to these habitats would be considered a potentially significant impact. With the implementation of Mitigation Measures D.1, D.2 and D.6 the potential impacts are considered **less than significant with mitigation incorporated.**

D.3. Less Than Significant with Mitigation Incorporated. A Draft Delineation of Waters of the United States **(Appendix C)** was prepared for the Project site in March of 2020, updated April 2024, by Gallaway Enterprises. The BSA contains 0.19 acres of Waters of the U.S. (WOTUS). The Project will result in 0.05 acres of permanent impacts to other waters due to the permanent placement of RSP below the ordinary high water mark of Lindo Channel. This is considered a potentially significant impact. With the implementation of Mitigation Measure D.6, the potential impacts are considered **less than significant with mitigation incorporated.**

D.4. No Impact. The proposed Project consists of the replacement of an existing bridge. The extent and scope of the bridge replacement will not be significantly different than what currently exists. The Project will not interfere substantially with the movement of any native fish or wildlife species, nor cause fragmentation of an existing wildlife habitat, therefore there will be **no impact.**

D.5. Less Than Significant with Mitigation Incorporated. Nine (9) trees with a DBH of 4 inches or greater proposed for removal include: grey pine (1), glossy privet (1), sycamore (2), black locust (1), redwood (3), valley oak (1). Tree species present within the riparian area of Lindo Channel include California sycamore (Platanus racemosa), Oregon ash (Fraxinus latifolia), valley oak (Quercus lobata), black locust (Robinia pseudoacacia), and black walnut (Juglans hindsii). Tree removal is localized and constitutes a minor temporary impact. Trees with a DBH of 4 inches or greater removed from the banks of Lindo Channel will be mitigated for onsite and in-kind at a 2:1 ratio per Mitigation D.7, which will reduce these impacts to **less than significant with mitigation incorporated**.

D.6. No Impact. The Project will not conflict with any local policies or ordinances protecting biological resources.

MITIGATION:

MITIGATION D.1. (CV Spring-run Chinook Salmon, SR winter-run Chinook Salmon, CCV Steelhead, CVSR Chinook Salmon Critical Habitat, SRWR Chinook Salmon Critical Habitat, CCV Steelhead Critical Habitat, and Chinook Salmon EFH):
The following measures, when implemented, will avoid and minimize impacts to anadromous fishes, their critical habitat, and EFH:

- Construction activities within Lindo Channel shall be limited to a work window of June 1 to October 15, or during a period when there is typically no flow within the BSA.
- However, in the event that flowing water may be present, the use of a diversion system to ensure completion of all in-channel activities within the established work window may be necessary.
- Disturbance to the channel and banks of Lindo Channel and/or removal of vegetation will be kept to the minimum necessary to complete Project activities.
- Portions of the bank of Lindo Channel disturbed by construction activities will be restored to a pre-construction condition.
- An erosion control plan that incorporates erosion control BMPs shall be created and implemented prior to the wet season (November 1 – April 1) in order to avoid sediment from entering into WOTUS.
- All fueling and/or equipment maintenance shall occur 50 feet from all water bodies and riparian areas. Any chemical spill within the active channel of the Lindo Channel will be reported to NMFS, CDFW, and other appropriate resource agencies within 48 hours.
- A spill prevention plan (SPP) and storm water pollution prevention plan (SWPPP) shall be developed and implemented by the contractor. Spill prevention measures will include stockpiling absorbent booms, staging hazardous materials at least 50 feet away from WOTUS, and maintaining and checking construction equipment to prevent fuel and lubrication leaks. SWPPP measures will utilize applicable BMPs such as use of silt fences, straw bales, and other methods necessary to minimize storm water discharge associated with construction activities.
- The contractor should have absorbent booms available within 50 feet of the live channel during all in channel work to be further prepared for quick containment of any spills within or adjacent to Lindo Channel.

Additionally, prior to any vegetation- or ground-disturbing activities associated with the replacement of the bridge over Lindo Channel, the applicant shall compensate for impacts to CCV steelhead critical habitat and Chinook salmon EFH as determined through consultation with NMFS. The applicant shall purchase salmonid habitat preservation and creation credits at an approved mitigation bank, or other methods of providing mitigation as defined by the NMFS Biological Opinion.

MITIGATION MONITORING D.1.: Public Works staff shall document the final purchase of required mitigation credits, or other method of compensatory 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.2. (Valley Elderberry Longhorn Beetle):
The following measures, when implemented, will avoid and minimize impacts to 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 drip-line, depending on the type of activity.
- Worker education. A qualified biologist will provide training for all contractors, work crews, and any onsite 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 monitor the work area at Project-appropriate intervals to assure that all avoidance and minimization measures are implemented. The amount and duration of monitoring will depend on the Project specifics and should be discussed with the USFWS.
- 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 drip-line of the shrub will be limited to the season when adults are not active (August - February) and will avoid damaging the elderberry.

Additionally, prior to any ground-disturbing activities, the applicant shall compensate for direct impacts to 0.12 acres of riparian habitat that may support VELB. The final amounts of impacts and mitigation will be determined through the federal Endangered Species Act section 7 consultation process. The applicant shall purchase credits at an approved mitigation bank as defined by the USFWS Biological Opinion.

MITIGATION MONITORING D.2: Public Works staff shall document the final purchase of required mitigation credits, or other methods of compensatory 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):
Immediately prior to initial ground disturbance within 200 feet of suitable aquatic habitat, a clearance survey will be conducted by a qualified biologist within the Project limits for northwestern pond turtle. If a turtle is observed in the Project limits during construction, the biologist will:

1. relocate the turtle(s) outside of the work area; or
2. create a species protection buffer (determined by the biologist) until the turtle(s) have left the work area.

The biologist will report observations and relocations to the City in a clearance survey report.

MITIGATION MONITORING D.3.: Public Works staff will require final copies of the clearance survey reports for northwestern pond turtle.

MITIGATION D.4. (Pallid Bat and Western Red Bat):
To minimize impacts to pallid bats and western red bats, mature trees identified for removal shall be removed between September 16 and March 15, outside of the bat maternity season. Trees shall be removed at dusk to minimize impacts to roosting bats that may be utilizing the mature trees.

MITIGATION MONITORING D.4: Public Works staff will ensure that tree removal is conducted during the appropriate time of year and after dusk.

MITIGATION D.5. (Nesting Migratory Birds and Raptors):
If vegetation removal or initial ground disturbances occur during the avian breeding season (February 1 – August 31) the applicant shall hire a qualified biologist to conduct a nesting migratory bird and raptor survey to identify any active nests within 50 feet of the BSA. A qualified biologist shall:

- Conduct a pre-construction survey for nesting migratory birds and raptors within 7 days prior to the initiation of Project activities, and map all active nests located within 50 feet of proposed construction areas.
- Develop buffer zones around active nests as recommended by a qualified biologist. Construction activity shall be prohibited within the buffer zones until the young have fledged or the nest fails.

- All inactive nests should be removed from the existing bridge during the avian non-nesting season, so as to deter avian species from nesting on the bridge. Inactive nests removed during the nesting season (February 1 – August 31) must be surveyed prior to removal and removed by a qualified biologist.
- If construction activities stop for more than 15 days, then another migratory bird and raptor survey shall be conducted within seven (7) days prior to the continuation of construction activities.

MITIGATION MONITORING D.5.: If Project activities are proposed to be conducted during the avian breeding season, Public Works staff will require final copies of the required surveys documenting relief thereof, prior to disturbances to the site. If active nests are encountered, the qualified biologist shall determine appropriate species protections buffers around active nests based on the species tolerance of disturbance, species type, nest location, and activities that will be conducted near the nest. Construction activities shall be prohibited within the buffer zones until the young have fledged or the nest fails. Active nests shall be monitored once per week, or as necessary, and a report submitted to the City of Chico Public Works Department weekly or as necessary.

MITIGATION D.6. (Aquatic and Biological Resources):
Prior to commencing construction, the City shall have available the final copies of the permits and authorizations required by the USACE, USFWS, NMFS, California Regional Water Quality Control Board, CDFW, and the Central Valley Flood Protection Board or copies of relevant correspondence documenting that no permit is required, as applicable.

Approximately 0.05 acres of permanent impacts and 0.19 acres of temporary impacts to other waters are anticipated. Impacts to jurisdictional Waters of the U.S. and the State will be compensated through the CWA §404 and §401 permitting process and mitigation requirements.

MITIGATION MONITORING D.6.: Public Works staff will require final copies of the required permits or letters documenting relief thereof, prior to the commencement of construction.

MITIGATION D.7. (Trees):
Trees with a DBH of 4 inches or greater removed from the banks of Lindo Channel will be mitigated for onsite and in-kind at a 2:1 ratio.

MITIGATION MONITORING D.7: Public Works staff will ensure appropriate saplings are planted following the completion of construction activities.

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		

DISCUSSION:

E.1.–E.3. Less Than Significant with Mitigation Incorporated. In prehistoric times, Lindo Channel, which flows east to west through the present APE, was a significant surface water source that made possible relatively intensive occupation during all prehistoric phases as well as the early historic time period. A number of ecotones and microenvironments are represented along this Creek (Klaseen and Ellison 1974), which prior to modern development created a complex mosaic of vegetation and dependent fauna. An oak/grassland community once dominated the area, with native flora at one time including gray pine (*Pinus sabiniana*), buckeye (*Aesculus californica*), valley oak (*Quercus lobata*), interior live oak (*Quercus wislizenii*), blue oak (*Quercus douglasii*), buckbrush (*Ceanothus* sp.) and manzanita (*Arctostaphylos* sp.), redbud (*Cercis occidentalis*), poison oak (*Toxicodendron diversiloba*), toyon (*Heteromeles arbutifolia*), yerba santa (*Eriodictyon* sp.), sycamore (*Platanus racemosa*), willow (*Salix* sp.), and a variety of annual grasses and forbs dominating the wetter areas along Lindo Channel and its overflow channels. One such overflow channel of Big Chico Creek is Lindo Channel, which generally trends northeast-southwest through the present APE.

Based on previous cultural resources studies undertaken within the general vicinity of the APE, coupled with the absence of prehistoric cultural materials being documented within these previous investigation areas, the APE appeared to be situated within lands of moderate archaeological sensitivity with respect to prehistoric sites. The APE appeared to represent moderate sensitivity with respect to historic-period sites. While historic-period sites had been identified in the general area, the postulate of moderate sensitivity was based on the considerable disturbance to both the surface and subsurface setting, resulting from decades of historic agricultural, contemporary road construction, adjacent residential construction, contemporary placement of buried and overhead utilities.

Genesis Society prepared an Archaeological Survey Report (ASR) and Historic Properties Survey Report (HPSR) in February 2021 (Updated August 2024) for the proposed Project **(Appendix D)**. In support of the ASR, Genesis Society staff conducted an archival record search, 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 (NEIC) 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 identified in the ASR, the record search, consultations and field survey produced the following results:

Record Search: Prior to conducting the pedestrian field survey, the official Butte County archaeological records maintained by the Northeast Information Center were examined for any existing recorded prehistoric or historic sites (N.I.C. File # NE24-243, dated 05/12/2024). The records search area was established at 1/4-mile radius of the project site. According to the records maintained by the NEIC, three (3) investigations have been documented within the Project boundary. Twelve (12) additional investigations have been documented within the 1/4-mile radius search area.

No prehistoric sites have been recorded or otherwise identified within the Project site boundary on records maintained at the NEIC. 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

Native American Heritage Commission (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. The California Inventory and Historic and General Land Office (GLO) maps failed to identify potential historic resources within the APE. One historic-era resource (P-04-4126), the Guynn Avenue Bridge, has been recorded within the APE. This resource has been designated Category 5 by Caltrans, and thus warrants no additional consideration.

Consultation with Interested Parties: The NAHC identified no sacred lands within the Project area (response dated 06/25/2020). 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, detailed messages concerning the Project description and findings was provided, along with contact information for both Caltrans and Genesis Society. The representative of the Mechoopda Tribe responded via email, indicating that "We have obvious concerns [sic] due to the proximity of the waterway and we have village locations in the vicinity of this Project." An additional email was sent to Mr. McHenry as an effort to obtain specific information concerning the purported villages. The Mechoopda Tribe representative responded with an email and annotated ethnographic site list. The site list included three ethnographic villages situated along Big Chico Creek, while the email narrative discussed the Tribe's concerns for projects in close proximity to water sources. No additional information was received from the Mechoopda Tribe representative. In an effort to communicate the results of the pedestrian survey efforts to potentially interested Native American groups, tribes and individuals, telephone calls were made to the above-listed parties on July 26, 2020. In all cases, detailed voicemails were left with the parties, requesting any information, questions, or concerns that they may have regarding the Project. To date, no responses have been received. No other responses were received. Although no other responses were received, consultation will continue for the life of the Project.

Field Survey: The field survey conducted May 23, 2024, per CEQA and NHPA standards, identified no potentially significant cultural resources (prehistoric or historic) within the Project site. No archaeological resources were identified within or immediately adjacent to the Project site.

Given the heavily disturbed landscape of the Project Area, the lack of known prehistoric archaeological sites within the Project Area, and the depositional environment of the landscape, there is an overall moderate potential for subsurface archaeological deposits in most of the Project Area. Vertical soil disturbance for the Project will occur at several depths depending on the location. Since the roadway profile will match or be higher than the existing profile, excavation for the approach roadway will be limited to the depth necessary to construct the roadway structural section. The roadway section will consist of compacted asphalt and aggregate base approximately 2 feet thick. Deeper excavations will be necessary near the bridge abutments in order to construct the bridge footings. Bridge abutment excavation is expected to extend approximately 20 feet in depth, while the cast-in-drilled hole concrete piles, too, are expected to penetrate approximately 40 feet of soils below the footings. The pile tips represent the maximum depth of disturbance (i.e., the vertical APE) within the Project limits.

Geo-archaeological research indicated the presence of Late Holocene soils along Lindo Channel. While the APE is situated within/upon Late Holocene alluvial deposits, road construction and maintenance, which have been ongoing for nearly a century, have not identified archaeological resources within or near the APE. Consequently, the likelihood of encountering intact, buried, prehistoric deposits at this locale appears to be unlikely. Given the type of proposed Project activities for the bridge at Lindo Channel (construction of CIDH piles), the potential to encounter previously unrecorded prehistoric and historic-period resources is considered low. The overall finding for this study is that no historic properties recognized under Section 106 and no historical resources recognized under CEQA were identified within the Project Area; therefore, no historic properties/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 '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. and R.1. (see Section R. Tribal Cultural Resources) will mitigate potential impacts to a level considered **less than significant with mitigation incorporated.**

A Historic Resources Evaluation Report (HRER) was developed by ICF in March 2021, updated August 2024 (ICF, 2024b) **(Appendix E)**. The purpose of the HRER was to evaluate the proposed Project's potential to affect buildings and structures listed in or eligible for listing in the National Register of Historic Places (NRHP), or any buildings and structures considered historical resources for the purposes

of CEQA. ICF conducted field investigations for this study on September 25, 2020. Three historic-era, architectural built-environment resources were addressed in the HRER. None of the resources addressed in the HRER appears to meet criteria for listing in the NRHP, either individually or as part of a district. Similarly, the properties are not historical resources for the purposes of CEQA. Finally, the Guynn Avenue Bridge over Lindo Channel (No. 12C0066) was assigned a Category 5—not eligible for the NRHP—through the "Structure Maintenance & Investigations, Historical Significance – Local Agency Bridges" inventory, and thus did not require formal evaluation in the HRER.

Record Search: One California Historical Resources Information System (CHRIS) repository covers the portion of California in which the APE is located. The Northeast Information Center (NEIC) at the California State University at Chico contains records for the area including the APE. This repository maintains the official records of the CHRIS of previous cultural resource studies and recorded cultural resources for the Project location.

Consultation: On September 25, 2020 and June 07, 2024, ICF sent letters describing the Project and requesting any information on potential cultural resources in the APE to the Association for Northern California Records and Research, the Bidwell Mansion State Historic Park, the Butte County Historical Society, Chico Heritage Association, Chico History Museum, Valene L. Smith Museum of Anthropology at California State University, Chico, and the Museum of Northern California Art. ICF sent follow up messages on October 27, 2020 and June 03, 2024. None of the organizations had any other resources to add to those identified as part of this study. In addition, no specific concerns arose about potential adverse effects on cultural resources in the APE that could result from Project implementation. As of the date of this document, ICF received no further comments.

Field Survey: ICF surveyed and recorded historic-era, architectural built-environment resources in the APE on September 25, 2020. The survey was conducted according to guidelines established in Caltrans' Standard Environmental Reference, Volume 2—Cultural Resources, Chapter 6, Built Environment Resources Evaluation and Treatment, revised July 5, 2020. Architectural Historian Josh Severn conducted the survey with guidance provided by David Lemon. Mr. Lemon meets the qualifications of an Architectural Historian per Attachment 1 of the Programmatic Agreement PA. The survey effort included formal recordation of historic-era, architectural built-environment resources in the APE with digital photographs and handwritten notes.

The results of the HRER document concluded a total of three historic-era, architectural built-environment resources were identified in the APE and formally evaluated in this study per the terms of the PA Stipulation VIII.C.2. These three resources also were evaluated in accordance with CEQA Guidelines Section 15064.5(a)(2–3), using the criteria outlined in Pub. Resources Code Section 5024.1. The Guynn Avenue Bridge over Lindo Channel (No. 12C0066) was assigned a Category 5—not eligible for the NRHP—through the "Structure Maintenance & Investigations, Historical Significance – Local Agency Bridges" inventory. The HRER concludes that the three evaluated resources in the APE do not appear to meet the criteria for listing in the NRHP, either individually or as contributing elements to a historic district and are not considered to be historical resources for the purposes of CEQA.

MITIGATION:

MITIGATION E.1. (Cultural Resources): If during ground disturbing activities, any potentially prehistoric 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) 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 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 Native American Heritage Commission 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 MONITORING E.1: Public Works staff will verify that the above wording is included in the construction specifications. Should cultural resources be encountered, the supervising contractor shall be responsible for reporting any such findings to Public Works staff, and contacting a professional archaeologist, in consultation with Public Works staff, to evaluate the find.

MITIGATION E.2. (Cultural Resources): The City's contractor shall communicate with the Mechoopda Indian Tribal Monitor during 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.

MITIGATION MONITORING E.2: Public Works staff will verify that the contractor's contact information has been provided to the Tribe.

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

DISCUSSION:

F.1.–F.2. No Impact. The proposed Project will be built to the current California Building Energy Efficiency Standards and will therefore be consistent with State and local requirements for efficiency use of energy resources. There will be **no impact** with regard to energy resources.

MITIGATION: None required.

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		

DISCUSSION:

G.1. Less Than Significant Impact. The City of Chico is located in one of the least active seismic regions in California. Currently, there are no designated Alquist-Priolo Special Studies Zones within the Chico Planning Area, nor are there any known or inferred active faults. Thus, the potential for ground rupture within the Chico area is considered very low. The Project would result in no impact as there are no known earthquake faults within the Chico Planning Area.

As there are no known faults in the Project area, the rupture of a known fault would, at most, result in a seismic ground-shaking event on the Project site. The bridge will be built to current American Association of State Highway Transportation Officials (AASHTO), Caltrans Seismic Design Criteria (SDC) and current releases to the Caltrans Bridge Memo to Designers (MTD) criteria.

Under existing regulations, all future structures will incorporate AASHTO, SDC, and MTD standards into the engineering plans. Plans are designed to minimize potential impacts associated with strong ground-shaking during an earthquake. Therefore, the Project would result in a **less than significant impact**.

The Project site is not located in an area of sloping topography that would result in a landslide risk. Potential soil instability in and around the channel of Lindo Channel would not result in potentially significant impacts through the incorporation of appropriate development standards and adherence to all necessary permits and certifications. Therefore, the Project would result in a **less than significant impact**.

G.2.-G.4. Less Than Significant Impact. Development of the site will be subject to the City's Design Criteria and Improvement Standards (CMC §18R). The proposed Project would be required to incorporate site-specific and City-wide measures, as identified in the grading standards defined in the CMC, which describe appropriate measures used to reduce potential impacts resulting from unstable soils and soil shrink-swell. All projects disturbing greater than one acre must comply with and obtain coverage under the applicable National Pollution Discharge Elimination Permit (NPDES) from the California Regional Water Quality Control Board (CRWQCB) per §402 of the Clean Water Act. The proponent will be required to prepare and implement Storm Water Pollution Prevention Plan (SWPPP) pursuant to Regional Water Quality Control Board (RWQCB) 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 Butte County Air Quality Management District 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 proposed Project has incorporated appropriate, site-specific construction and design standards per CMC §18R Design Criteria and Improvement Standards. As a result, potential future impacts relating to geology and soils are considered to be **less than significant.**

G.5. No Impact. No septic tanks, sewer, or alternative wastewater disposal systems are proposed for the subject property. The Project will result in **no impact** relative to policies governing 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. Due to the developed character of the site, the potential to encounter surface-level paleontological resources is considered low. However, there is the potential for accidental discovery of paleontological resources. In the event that resources are inadvertently discovered, implementation of Mitigation E.1. would reduce impacts to a less-than-significant level. See Impact E.1. Cultural Resources for mitigation measure specifics. Therefore, impacts would be considered **less than significant with mitigation incorporated.**

MITIGATION: Mitigation E.1. (Cultural Resources)

H. Greenhouse Gas Emissions Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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	

DISCUSSION:

H.1-H.2. Less Than Significant Impact. An Air Quality Report was developed for the Guynn Avenue Bridge Replacement Project by ICF in 2024 (ICF, 2024a) **(Appendix I)**. This report was prepared to provide an impact analysis of criteria pollutant, toxic air contaminant (TAC), and greenhouse gas (GHG) emissions resulting from the proposed Project. The report evaluated potential air quality and GHG emissions generated by construction and operation of the Project. The Air Quality and Greenhouse Gas Analysis report determined that short-term construction activities would result in GHG emissions from fuel combustion by off- and on-road construction equipment and vehicles. These sources would emit approximately 146 metric tons of CO2e over the 8-month construction period. Operation of the proposed Project would result in the long-term generation of GHG emissions from an increase in vehicles traveling within the project area. The analysis of the report concluded that GHG emissions would not exceed existing conditions.

The proposed Project would not increase VMT, is identified in the RTP/SCS, and includes pedestrian and bicycle infrastructure to reduce VMT. The Project is consistent with state climate goals and supporting transportation policies enacted to reduce VMT and promote active transportation. Therefore, the Project would be consistent with SB 32 and AB 32 (ICF, 2021a), and impacts would be less than significant.

Construction of the Project would generate short-term GHGs, but these emissions would be minor. As previously discussed, the proposed Project reduced VMT and emissions. The Project is identified in the RTP/SCS and includes pedestrian and bicycle infrastructure further decreasing VMT. The Project would not conflict with the state's climate goals and supporting transportation policies enacted to reduce VMT and promote active transportation. Furthermore, the "complete streets" improvements to pedestrian, bicycle, and traffic conditions are also consistent with the City's 2021 CAP (Actions 1.10.2, 1.11, 1.12, 1.13, and 1.14). These city and regional plans have been adopted to support state and local GHG reduction goals (e.g., AB 32 and SB 32).

In 2012, The Chico City Council adopted the Climate Action Plan (CAP) which sets forth objectives and actions that will be undertaken to meet the City's greenhouse gas (GHG) emission reduction target of 25 percent below 2005 levels by the year 2020. The CAP was updated in 2021 with a goal of achieving the City's target of carbon neutrality by 2045, amongst other goals. This target is consistent with the State Global Warming Solutions Act of 2006 (AB 32, Health & Safety Code, Section 38501[a]).

Development and implementation of the CAP is 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.

The Guynn Avenue Bridge Replacement Project was identified as a Non-Exempt Regionally Significant Project in the 2024 RTP/SCS and was part of the Emissions Analysis conducted in the 2024 RTP/SCS. BCAG's 2024 RTP/SCS estimates a 7 percent reduction in per-capita GHG emissions will be achieved by 2035 (BCAG 2024). GHG emissions associated with the RTP/SCS, including those projects identified in the RTP/SCS, would therefore be less than significant.

As discussed, the proposed Project is listed in the 2024 RTP/SCS as complete. The design concept and scope of the proposed Project is consistent with the Project description in both documents. Since the proposed Project is identified and consistent with BCAG's 2016, 2020, and 2024 RTP/SCS, which was found to have a less-than-significant GHG impact, project-level GHG emissions would be consistent with SB 375.

Chico's CAP, in conjunction with the General Plan, meets the State criteria for tiering and streamlining the analysis of GHG emissions in subsequent CEQA project evaluation. Therefore, to the extent that a development project is consistent with CAP requirements, potential impacts with regard to GHG emissions for that project are considered to be **less than significant**.

MITIGATION: None required.

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

DISCUSSION:

An Initial Site Assessment (ISA) was developed for the proposed Project site by Crawford & Associates (CA Inc.) on September 20, 2020 (updated May/June 2024) **(Appendix F)**. The purpose of the ISA is to identify recognized soil or groundwater contamination and hazardous material issues that may affect the planned project improvements. Based on the records reviewed and the site reconnaissance, CA Inc. made the following observations:

- The database records, aerial photographs, and historical topographic maps search did not identify any RECs that have potentially impacted the Project site.
- In 1994 a private citizen reported paint solvent in two containers in the vicinity of the bridge; some product spilled on ground during abatement. No records were identified documenting investigation or cleanup following the emergency repose. This incident appears to have been minor (*de minimis*) and is unlikely to have impacted the Project site (HRECs).

- Reconnaissance did not identify any uses of adjacent properties or properties in the site vicinity (within 500 feet) that appear likely to have impacted the project site.

I.1. Less Than Significant Impact. The Project will not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Hazardous materials will be used during construction activities (e.g., equipment maintenance, fuel, solvents, roadway resurfacing and re-striping materials). However, all hazardous material use would be required to comply with all applicable local, state, and federal standards associated with the handling and storage of hazardous materials. Use of hazardous materials in accordance with applicable standards ensures that any exposure of the public to hazard materials would result in a **less than significant impact**.

I.2. Less Than Significant Impact with Mitigation Incorporated. Construction activities associated with the Project would include refueling and minor onsite maintenance of construction equipment, which could lead to minor fuel and oil spills. The release of hazardous materials into the environment is regulated through existing federal, state, and county laws. These regulations require emergency response from local agencies to contain hazardous materials. The Butte County Interagency Hazardous Materials Team responds to hazardous materials emergencies in the Project area. The use and handling of hazardous materials during construction activities would occur in accordance with applicable federal, state, and local laws including California Occupational Health and Safety Administration (CalOSHA) requirements.

The ISA identified the potential for several common hazardous materials associated with bridges to be present: asbestos containing construction materials (ACCM), aerially deposited lead (ADL), lead-based paint, chemically treated wood, thermoplastic traffic striping, and transformers. Based on the potential for these hazardous materials to be present during the demolition and construction process, CA Inc. recommends a series of evaluations and screening. This is considered a potentially significant impact that with the implementation of mitigation I.1 will be reduced to a **less than significant impact with mitigation**.

I.3. No Impact. The nearest schools, Emma Wilson Elementary School and Little Discoveries Preschool are located approximately 0.65 miles from the Project site to the south and east respectively. Since the proposed Project involves the replacement of an existing bridge, the activities are not expected to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste that would affect the school population.

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 will be **no impact**.

I.5. No Impact. The Project site is located 1.5 miles north of Ranchaero Airport, a private airport and approximately 3.25 miles from the Chico Municipal Airport, a public airport. The Project site is not located within 2 miles of a public airport or public use airport and will not result in a safety hazard or excessive noise; therefore, there will be **no impact**.

I.6. No Impact. Development of the proposed Project would neither hinder the implementation, nor physically interfere with, emergency response or evacuation plans. Street designs and improvements will be adequate for ingress and egress of emergency response vehicles. The proposed Project is considered to have **no impact.**

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. No buildings or dwelling units are proposed as part of the proposed Project, therefore there is **no impact**.

MITIGATION:

MITIGATION I.1 (Hazards): Prior to any ground-disturbing or demolition activities, the following evaluations, screenings, and material handling protocols shall occur:

- Prior to demolition, the bridge structure shall be evaluated by a Certified Asbestos Consultant for the presence of asbestos.
- Prior to demolition, the bridge structure shall be evaluated by a Certified Lead Inspector/Assessor for the presence of lead-based paint.

- Wood guard rail supports will be handled as treated wood waste (TWW).
- Soil adjacent to the corners of the bridge should be screened for the presence of aerially deposited lead prior to initiation of demolition and construction activities.
- If roadway striping material will be removed by grinding or planing, the paint should be tested for hazardous concentrations of heavy metals.

Should any of the constituents of concern be found in excess concentrations, the applicant shall prepare a Soil Management Plan (SMP), Asbestos Abatement Plan (AAP), or equivalent report addressing specific hazardous materials shall be implemented and distributed to construction personnel. The plans shall establish protocols for handling, sampling, storage, and disposal of any suspected hazardous materials generated during construction activities.

MITIGATION MONITORING I.1: Public works staff will require final copies of the required assessment or the plan documenting relief thereof prior to commencing construction at the site.

J. Hydrology/ Water Quality Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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	
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	

DISCUSSION:

The Project site is within the Butte Creek Watershed. The Project site is situated in the floodplain of Lindo Channel. Lindo Channel, in the area of the Project site, is listed as a regulated stream per the CCR Title 23 §112.

The bridge portion of the Project site traverses an area that is designated as AE (part of the Special Flood Hazard Area) and the approaches to the bridge are located in an area designated as X on FEMA's FIRM # 06007C0485E. A Design Hydraulic Study and Location Hydraulic Study were developed by Avila and Associates Consulting Engineers, Inc. for the proposed Project, September 9, 2024 (**Appendix G**). The Design Hydraulic Study used hydraulic modeling based on a HEC-RAS model to estimate the water surface elevation (WSE) for the existing and proposed bridge.

Results indicate that after construction of the new bridge, the water surface elevation will be virtually unchanged from the existing condition. With a proposed minimum soffit elevation of 177.86 feet, 3.35 feet of freeboard will be provided above the 100-year water surface elevation of 174.51 ft. The CVFPB

requires 2 feet of freeboard above their design discharge for minor streams. The proposed bridge achieves the CVFPB freeboard requirement therefore will have no adverse impacts to the hydraulics.

J.1. Less Than Significant Impact with Mitigation Incorporated. The new bridge over Lindo Channel will include the installation of cast-in-drilled-hole (CIDH) piles within the creek channel and placement of RSP below the ordinary high water mark of the creek. Under existing State regulations, the Project proponent is required to obtain a water quality certification or waiver from the Central Valley RWQCB. Through the RWQCB permitting process (refer to Mitigation D.6), the Project will be required to avoid, minimize, and/or compensate for potential discharges into regulated waterways based on a detailed review of the bridge construction techniques.

Existing State permitting requirements by the RWQCB will ensure that the Project will not result in the violation of any water quality standards or waste discharge requirements. Due to the scope and nature of the proposed Project it is not expected that the Project would degrade ground water quality. With these standard permitting and water quality requirements in place, potential impacts to water quality from the Project are considered to be **less than significant with mitigation**.

J.2. No Impact. There would be no new sources of groundwater extraction. The Project will not interfere substantially with groundwater recharge nor impede sustainable groundwater management of the basin.

J.3 (a)–(d) Less Than Significant Impact. The Project would not alter the existing drainage patterns at the site, result in substantial erosion or siltation on- or off-site, nor create excessive runoff because prior to construction the Project would have to demonstrate compliance with City/State post-construction storm water management requirements including the General Construction Permit requirements of the NPDES, as well as, the preparation of a SWPPP that incorporates water quality control BMPs.

With the application of the existing regulations outlined above, the Project will not substantially degrade water quality drainage systems or provide substantial additional sources of polluted runoff. Under existing City/State requirements for the Project to implement BMPs and incorporate LID design standards, storm water impacts from anticipated future construction and operation of the Project would be **less than significant**.

J.4. Less Than Significant Impact. According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map No. 06007C0485E, the Project site is located in Zone AE (part of the Special Flood Hazard Area) and the approaches to the bridge are located in an area designated as X (other flood areas with 0.2% chance of flooding Project activities will occur during the dry season when Lindo Channel is not flowing and it is extremely unlikely that flooding will occur. The Project site is not located in an area that is prone to seiche or tsunami. Risks associated with inundation and the release of pollutants by seiche or tsunami, would not occur beyond existing conditions. This is considered a **less than significant impact.**

J.5. Less than Significant Impact. The Project is not expected to substantially degrade water quality with the implementation of the SWPPP and BMPs. The Project will not conflict or obstruct implementation of a water quality control plan or sustainable groundwater management plan. The impact to water quality will be **less than significant.**

MITIGATION:

MITIGATION D.6 (Biological Resources)

MITIGATION J.1. (Hydrology): Prior to grading and ground-disturbance, the applicant shall consult with Central Valley Flood Protection Board to determine if an Encroachment Permit is necessary for the proposed Project. If an Encroachment Permit is required, 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.

MITIGATION MONITORING J.1: Public Works staff will require final copies of the required permits or letters documenting relief thereof, prior to issuance of any grading or other permits that will result in disturbances to the site.

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

DISCUSSION:

K.1. No Impact. The Project will not physically divide an established community. Therefore, the Project is anticipated to have **no impact**.

K.2. No Impact. The Project implements General Plan goals and policies which strive to enhance community connectivity and improve public safety and access. The Project is also identified in the Butte County Regional Transportation Plan. There will be no conflicts with land use plans, policies or regulations adopted for the purpose of avoiding or mitigating an environmental effect. This is considered **no impact.**

MITIGATION: None required.

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

DISCUSSION:

L.1-L.2. No Impact. There are no active mines and no known areas with mineral resource deposits within the Chico Planning Area, although historically several areas along Butte Creek were mined for gold, sand, and gravel. The majority of the closest mining operations are located to the southeast, outside of the Chico Planning Area (City of Chico 2011b). The Project would not result in the loss of availability of a known mineral resource or mineral resource recovery site. Mineral resources are not associated with the Project or located on the Project site. Therefore, the Project would have **no impact** on mineral resources.

MITIGATION: None required.

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

DISCUSSION:

The Project is surrounded by developed and built-up urban land. The ambient noise in the Project area is generated primarily by vehicles traveling on Guynn Avenue and the State Route 32, and East Avenue.

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 and transient, 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.

Mark Thomas produced a Construction Noise Technical Memorandum for the Guynn Avenue Bridge Replacement Project dated May 15, 2024 (**Appendix H**).

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

Table 4. Construction Equipment Noise Levels

Construction Equipment	Maximum Noise Level dBA at 50 feet
Backhoe	78
Chain Saw	84
Compactor (ground)	83
Compressor (air)	78
Concrete Saw	90
Concrete Mix Truck	79
Concrete Pump Truck	81
Crane	81
Dozer	82
Drill Rig Truck	79
Dump Truck	76
Excavator	81
Front End Loader	79
Generator	81
Paver	77
Pneumatic Tools	85
Pumps	81
Roller	80
Scraper	84
Welder / Torch	74

Source: FHWA Roadway Construction Noise Model User's Guide, 2006

The project site is not within any airport land use plans. The Chico Airport is located approximately 3.3 miles northeast of the project site and the private Ranchaero Airport is located 1.5 miles to the south.

M.1-M.2. Less Than Significant Impact With Mitigation Incorporated. During the construction phases of the Project, noise from construction activities will intermittently dominate the noise environment in the immediate area. Construction noise is regulated by state and county regulations, which include California Building Code (CBC) standards for construction-generated noise attenuation and Caltrans Standard Specifications Section 14-8.02, "Noise Control". Noise levels generated during construction must comply with applicable local, state, and federal regulations. Adherence to existing noise attenuation standards would ensure construction-generated noise impacts that are less than significant.

The proposed Project would not result in new land uses or significant infrastructure extensions. The proposed Project would replace the existing bridge and roadway surface; therefore, substantial permanent increases in ambient noise levels in the Project vicinity are not expected.

Temporary or periodic noise levels may be increased in the area during Project construction. 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.

There are several sensitive receptors bordering the project area. These include five residential properties located at 8 Guynn Bridge Court, 2409 Guynn Avenue, 2386 Moyer Way, 1395 W Lindo Avenue, and 1348 W Lindo Avenue. These residences are located approximately 100 feet northeast, 80 feet northwest, 70 feet southwest, 40 feet south, and 60 feet south of the bridge respectively.

The City of Chico's Noise Ordinance contained 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." Per Section 9.38.060, construction-related source noise is exempt from the provisions set forth in the noise ordinance except (i) the construction-related noise must not exceed 86 dBA at any point outside of the property plane of the Project; and (ii) 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.

Relative to these noise-related factors, the proposed Project would result in **less than significant impact with mitigation incorporated.**

M.3. No Impact. The Project site is located 1.5 miles east of Ranchaero Airport, a private airport. The Project site is not located within 2 miles of a public airport or public use 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. The proposed Project would result in **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 included during Project construction. With implementation of these standard construction-period specifications, the Project will not result in excessive construction-period noise effects.

1. Project-related noise-generating activities at, or adjacent to, the construction site shall comply with the Chico Municipal Code Section 9.38.060.B. and shall be restricted to the hours of 7:00 a.m. to 9:00 p.m., Monday through Saturday. Should it become necessary to work on Sundays or holidays, construction hours shall be limited to 10:00 a.m. to 6:00 p.m. Should it become necessary to work after 9:00 p.m. and before 7:00 a.m., businesses will be notified, and the generated noise levels will be subject to a special provision that would prohibit noise from exceeding 83 dBA at a distance of 25 feet from the source.
2. All internal combustion engine driven equipment shall be equipped with the appropriate intake and exhaust mufflers, which are in good condition.
3. "Unnecessary" idling of internal combustion engines shall be strictly prohibited.
4. Avoid staging construction equipment within 200 feet of residences and locate all stationary noise-generating construction equipment as far as practical from existing noise receptors. Construct temporary barriers to screen noise generating equipment when located in areas adjoining noise-sensitive land uses.
5. "Quiet" air compressors and other stationary noise sources shall be used when applicable.
6. All construction traffic shall be routed to and from the Project site via designated truck routes. Construction-related heavy truck traffic shall be prohibited in residential areas where feasible. Construction truck traffic shall be prohibited in the Project vicinity during non-allowed hours.
7. The businesses, residents and schools in the Project area shall be notified in writing by the City of the construction schedule.
8. The City shall designate a "noise disturbance coordinator" who will be responsible for responding to any local complaints about construction noise. The disturbance coordinator will determine the cause of the noise complaint and implement reasonable measures to correct the problem. The contractor shall visibly post the telephone number for the disturbance coordinator at the construction site. The City shall include the telephone number in the notice sent to residents regarding the construction schedule.

MITIGATION MONITORING M.1: The supervising contractor shall be responsible for ensuring that Project-related noise-generating activities at, or adjacent to, the construction site shall comply with the Chico Municipal Code and all guidelines set forth in Mitigation M.1. Public Works staff shall ensure a Noise Disturbance Coordinator is responsible for responding to noise complaints and implementing reasonable measures.

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

DISCUSSION:

N.1-N.2. No Impact. The Project proposes to replace an existing bridge and associated roadway surface to meet current safety standards. It is not expected to directly or indirectly trigger new home construction that has not already been identified in the City's General Plan. The Project implements General Plan goals and policies which strive to enhance community connectivity and improve public safety and access. The Project is also identified in the Butte County Regional Transportation Plan. The Project will not displace any people or housing. There will be no conflicts with land use plans, policies or regulations adopted for the purpose of avoiding or mitigating an environmental effect. Project impacts regarding population/housing are therefore considered to have **no impact.**

MITIGATION: None required.

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

DISCUSSION:

O.1-O.5. Less Than Significant Impact. The proposed Project would not construct dwelling units, buildings, businesses, or other similar facilities that would result in an increased human population in the Project area. There would be no long-term demands on fire or police protection services generated by the proposed Project. Similarly, there would be no increased demands on school services or parks.

The proposed Project would not cause any permanent closures to the roadway, nor block access to private property.

Temporary average delays are not anticipated to exceed 3-6 minutes. The construction is expected to take approximately 8 months over one (1) construction season, weather and conditions permitting. Temporary road delays and closures during construction may affect traffic patterns near the construction site and potentially affect fire and police response times for multiple apparatus events; however, any such impacts would be minor and not significantly affect long-term service ratios, response times, or other performance objectives for public services.

During construction, a detour route will be made available. Vehicular traffic will be able to cross Lindo Channel at one of two nearby locations. The first is by using Nord Avenue, just west (downstream) of the project site. This results in a detour length of less than one mile. The second is by using Holly Avenue, northeast (upstream) of the project site. This detour length is 1.8 miles long but is a more viable option when train traffic restricts access to Nord Avenue from West Lindo Avenue and East Avenue.

Project proponents would notify local emergency service providers of construction activities and would ensure coordination with local providers to establish alternative routes and appropriate signage. No changes in fire protection or police protection services are proposed as part of this Project. The proposed Project would not add to the area's population or increase demands on police or fire services. The effects of the temporary road closure would not cause significant environmental impacts as it relates to police and fire service. Therefore, relative to the provision of police and fire service, the proposed Project would generate a **less than significant impact**.

MITIGATION: None required.

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

DISCUSSION:
P.1-P.2. No Impact. The Project does not propose dwelling units, businesses, or other structures that might increase the area's human population. The Project site does not include existing recreational facilities. Similarly, the proposed Project would not construct recreational facilities.

The proposed Project would not generate additional demands on parks and recreational facilities. The proposed Project does not include the development of recreational facilities or other structures that would necessitate the development or modification of any recreational facilities. Relative to recreation, the proposed Project would result in **no impact.**

MITIGATION: None required.

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	

DISCUSSION:
This Project is identified in BCAG's 2024 RTP/SCS. The Project will replace an existing, structurally deficient bridge, along the same alignment. A report titled "Final Traffic Analysis & Technical Study – Guynn Avenue Bridge Replacement" was developed by Headway Transportation in September of 2020 to assess traffic conditions associated with the proposed Project (Appendix J).

The key findings of the traffic analysis are:

- The Guynn Avenue / Lindo Avenue intersection and the Guynn Avenue roadway segment just north of Lindo Avenue currently operate at acceptable levels of service under Existing Condition volumes with or without construction of the new bridge.
- The Guynn Avenue / Lindo Avenue intersection and the Guynn Avenue roadway segment just north of Lindo Avenue will operate at acceptable levels of service under Opening Day Condition volumes with or without construction of the new bridge.
- The Guynn Avenue / Lindo Avenue intersection and the Guynn Avenue roadway segment just north of Lindo Avenue will operate at acceptable levels of service under 2040 Condition volumes with or without construction of the new bridge.
- VMT will be unaffected by construction of a wider bridge structure. The estimated daily VMT for each Project scenario is:
    - Existing Conditions- 23.7 miles per day
    - Opening Day Conditions- 23.9 miles per day
    - 2040 Conditions- 24.9 miles per day
- Since the Project will not induce new VMT, the Project would have a less-than-significant impact on transportation facilities related to the amount of travel.
- The Project improves local bicycle and pedestrian access and does not include any elements that would be counter to long-term multimodal plans or regional goals and policies. It would therefore have no impact on multimodal transportation facilities.

Q.1-Q.4. Less Than Significant Impact The proposed Project would not generate additional traffic as it would not construct facilities – residential, commercial or otherwise – that would generate additional vehicular traffic. The Project is not expected to result in the generation of additional vehicular trips, impacts to the area's levels of service, an increase in VMT or affect trip distributions within the Project area. Roadway safety conditions are expected to improve upon Project completion as opposed to existing conditions.

Emergency vehicles could experience minor delays in the Project area during the construction phase. However, emergency vehicle access to, and passage around, the Project site would be ensured through adherence to applicable standards. As described in Section O. of this document (Public Services), the Project will be required to adhere to pertinent construction site standards, including those of the City Code, Caltrans, and the CBC. The proposed improvements, which would bring the existing facilities in the Project site up to current design standards, would provide safer passage for emergency vehicles following the completion of the Project. Relative to these traffic and transportation factors, the proposed Project would generate **less than significant** impacts.

MITIGATION: None required.

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		

DISCUSSION:

The Project is not anticipated to cause a substantial adverse change in the significance of a tribal cultural resource. 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 was located within the traditional boundaries of the Konkow, or Valley Maidu tribe. The Konkow inhabited a large geographic area that encompassed the Sacramento River and east to the Sierra/Cascade canyons and foothills east of Chico.

R.1.a – R.1.b. 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 archeological 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 NEIC. 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 Native American Heritage Commission (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 area. Lastly, the California Inventory and Historic and General Land Office (GLO) maps failed to identify potential historic resources within the APE.

Consultation with Interested Parties: The NAHC identified no sacred lands within the Project area (response date June 27, 2020, and May 7, 2024). 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. Detailed messages concerning the Project description and findings were provided, along with contact information for both Caltrans and Genesis Society. The representative of the Mechoopda Tribe responded via email, indicating that "We have obvious concurs [sic] due to the proximity of the waterway and we have village

locations in the vicinity of this project." An additional email was sent to Mr. McHenry as an effort to obtain specific information concerning the purported villages. The Mechoopda Tribe representative responded with an email and annotated ethnographic site list. The site list included three ethnographic villages situated along Big Chico Creek, while the email narrative discussed the Tribe's concerns for projects in close proximity to water sources. No additional information was received from the Mechoopda Tribe representative. In an effort to communicate the results of the pedestrian survey efforts to potentially interested Native American groups, tribes and individuals, telephone calls were made to the above-listed parties on July 26,2020, and May 17, 2024. In all cases, detailed voicemails were left with the parties, requesting any information, questions, or concerns that they may have regarding the Project. To date, no responses have been received. No other responses were received. Although no other responses were received, consultation will continue for the life of the Project. Excavation depths for roadway reconstruction and associated utilities are anticipated to be up to 20-feet. For the bridge structure, a maximum excavation depth of 40-feet will be required to install abutment supports, which are anticipated to be Cast-In-Drilled-Hole (CIDH) piles. Geo-archaeological research indicated the presence of Late Holocene soils along Lindo Channel. With the presence of Holocene soils and the ethnographic villages in the region of the channel, this area is identified as sensitive for buried archaeological material. Despite this, given the type of proposed Project activities for the bridge at Lindo Channel (construction of Cast-In-Drilled-Hole piles), the potential to encounter intact cultural resources is considered low. In the event that resources are inadvertently discovered, implementation of Mitigation R.1 would reduce impacts to a level considered **less than significant with mitigation incorporated.**

MITIGATION:

MITIGATION 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 Native American Heritage Commission, 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.

MITIGATION MONITORING R.1.: Public Works staff will verify that the above wording is included in the construction specifications. Should paleontological, prehistoric, protohistoric, and/or historic cultural resources or tribal cultural resources be encountered, the supervising contractor shall be responsible for reporting any such findings to Public Works staff, and contacting a professional archaeologist or paleontologist in consultation with Public Works staff, to evaluate the find.

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	

DISCUSSION:

S.1. Less Than Significant Impact. There are several utilities crossing Lindo Channel near Guynn Avenue. A two-inch PG&E gas distribution line is attached to the east side of the existing structure. An eight-inch California Water line crosses under the channel on the east side of the existing bridge. The gas and water lines are proposed for relocation due to the demolition of the existing bridge. An overhead joint electrical and communication line crosses the channel on the east side of the bridge, however no conflicts with the overhead facility is anticipated at this time.

The right of way width along Guynn Avenue and West Lindo Avenue (including the creek) varies. A permanent acquisition will be needed from the northwest parcel (2409 Guynn Avenue) to accommodate the roadway shift. Temporary construction easements will be needed from the southern parcels (1395 and 1369 West Lindo Avenue and 2386 Moyer Way) to construct the south approach improvements.

The Project would not alter wastewater requirements or result in an increase in the generation of wastewater aside from groundwater generated during any potential dewatering operations that may occur as a result of trenching and excavation. Similarly, the Project would not result in an increased demand for water and no expanded water treatment facilities are required.

Stormwater drainage and utilities would be reconfigured, updated and placed underground within the Project site. The proposed utility relocation and updating would take place primarily within the existing roadway corridor, which is highly disturbed, and would not cause a significant environmental effect. Therefore, the Project would not require or result in the construction of other facilities or expansion of existing facilities outside of those included and analyzed in this document. This is considered a **less than significant impact with mitigation** incorporated.

S.2-S.3. No Impact. The proposed Project would not include any uses that would require increased wastewater treatment or solid waste disposal. The proposed Project would not generate impacts relative

to landfill capacity, wastewater treatment, or solid waste generation. Therefore, there would be **no impact.**

S.4-S.5. Less Than Significant Impact. The Project will 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 new road and bridge will be handled and disposed of in accordance with Federal, State, and local requirements. This impact would be **less than significant**.

MITIGATION: None required.

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

DISCUSSION:

T.1-T.4. No Impact. The Project is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones; therefore, it will not substantially impair an adopted emergency response plan or emergency evacuation plan, exacerbate wildfire risks, require the installation or maintenance of associated infrastructure, or expose people or structures to significant risks. The Guynn Avenue over Lindo Channel Bridge Replacement Project site is identified as an area outside of Cal Fire's is 'Very High Fire Hazard Severity Zone' (i.e., it is a non-VHFHSZ) as identified by Cal Fire (see the following: https://egis.fire.ca.gov/FHSZ). The Project site is located in a Local Responsibility Area (LRA) pursuant to the Fire Hazard Severity Zone and is served by the City of Chico Fire Department as shown in the SRA map last modified by Cal Fire on 07/09/2020. The proposed Project would have **no impact** on wildfire.

MITIGATION: None required.

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 Impact. 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. Based on the preceding environmental analysis, the application of existing regulations and incorporation of identified mitigation measures will ensure that all potentially significant environmental impacts associated with the Project, including those related to aesthetics, air quality, biological resources, geology/soils, hazards and hazardous materials, cultural resources, tribal cultural resources and hydrology would be minimized or avoided, and the Project will not result in direct or indirect adverse effects on human beings or the environment, nor result in significant cumulative impacts. Therefore, with the incorporation of the mitigation measures identified in previous sections, the Project will result in a **less than significant impact**.

MITIGATION: None required.

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Appendix A:
Visual Impact Assessment

Appendix B:
Natural Environment Study

Appendix C:
Draft Delineation of Waters of the U.S.

Appendix D:
Historical Property Survey Report/Archaeological Survey Report

Appendix E:
Historic Resources Evaluation Report

Appendix F:
Initial Site Assessment

Appendix G:
Bridge Design Hydraulic Study and Location Hydraulic Study

Appendix H:
Construction Noise Technical Memorandum

Appendix I:
Air Quality and Greenhouse Gas Analysis

Appendix J:
Final Traffic Analysis & technical Study