PROPOSED MITIGATED NEGATIVE DECLARATION
and
INITIAL STUDY

Sewer Replacement Project
Weed, California

Prepared for:

City of Weed

August 2016

32-24

ENPLAN

PROPOSED MITIGATED NEGATIVE DECLARATION

LEAD AGENCY: City of Weed
550 Main Street
Weed, CA 96094

PROJECT: The proposed project entails replacement of approximately 7,900 feet of old vitrified clay sewer main piping, as well as installation of new manholes and cleanouts. The purpose of the project is to eliminate sewer back-ups and provide improved access to sewers for operation and maintenance activities.

LOCATION: Project elements would be constructed at two locations. The North Weed site includes an area on Roseburg Forest Products' property, just north of Roseburg Parkway and south to Park Way; on and near White Avenue, Park Way, and Alamo Avenue; as well as an open area along East Lincoln Avenue for staging purposes. The Central Weed site includes portions of Walnut Street, Oregon Street, Siskiyou Way, South Weed Boulevard, and a corridor between residences on South Weed Boulevard and Interstate 5. The City Yard on Shastina Drive would be utilized for staging purposes. These locations are in and adjacent to the City of Weed, California. See Figure 1 of the Initial Study.

PROJECT PROPONENT: City of Weed

PROJECT NAME: Sewer Replacement Project

FINDINGS

As documented in the Initial Study, project implementation could result in possible effects on special-status plant species, disturbance of nesting migratory birds, disturbance of subsurface cultural resources (if present), increased soil erosion and water quality degradation, increased air emissions, temporarily increased noise levels, and possible exposure of the public or environment to hazardous materials. Design features incorporated into the project would avoid or reduce certain potential environmental impacts, as would compliance with existing regulations and permit conditions. Remaining impacts can be reduced to levels that are less than significant through implementation of the mitigation measures presented in the Initial Study. Because the City of Weed will adopt mitigation measures as conditions of project approval and will be responsible for ensuring their implementation, it has been determined that the project will not have a significant adverse impact on the environment.

Signature _____ Date _____

Name _____ Title _____

INITIAL STUDY

CITY OF WEED
SEWER REPLACEMENT PROJECT
WEED, CALIFORNIA

August 2016

Prepared for:
City of Weed
550 Main Street
Weed, CA 96094

Prepared by:
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(530) 221-0440

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Appendix A.

I. THE PROJECT

A. Introduction

The City of Weed (City) is proposing to replace approximately 7,900 feet of old vitrified clay sewer main piping, as well as install new manholes and cleanouts. Project elements would be constructed at two general locations. The North Weed site includes an area on Roseburg Forest Products' (Roseburg) property, just north of Roseburg Parkway and south to Park Way; on and near White Avenue, Park Way, and Alamo Avenue; as well as an open area along East Lincoln Avenue for staging purposes. The Central Weed site includes portions of Walnut Street, Oregon Street, Siskiyou Way, South Weed Boulevard, and a corridor between residences on South Weed Boulevard and Interstate 5. The City Yard on Shastina Drive would be utilized for staging purposes. The entirety of the Central Weed site is located within City limits; while approximately 60 percent of the North Weed site, which is located on Roseburg property, is within unincorporated Siskiyou County (Figure 1).

In October 2015, the City authorized PACE Engineering, Inc. to prepare a Preliminary Engineering Report (PER) to evaluate alternatives for correcting existing sewer system deficiencies. In order to evaluate the condition of existing sewers, a television inspection contractor was hired to inspect the inaccessible portions of the existing gravity sewers (approximately 3,500 feet of sewer main).

B. Project Need

Replacement of the existing old vitrified clay sewer main piping, and installation of new manholes and cleanouts, is needed to: (1) eliminate sewer back-ups, (2) replace aged infrastructure, and (3) provide improved access to sewers for operation and maintenance activities. These needs are discussed in detail below.

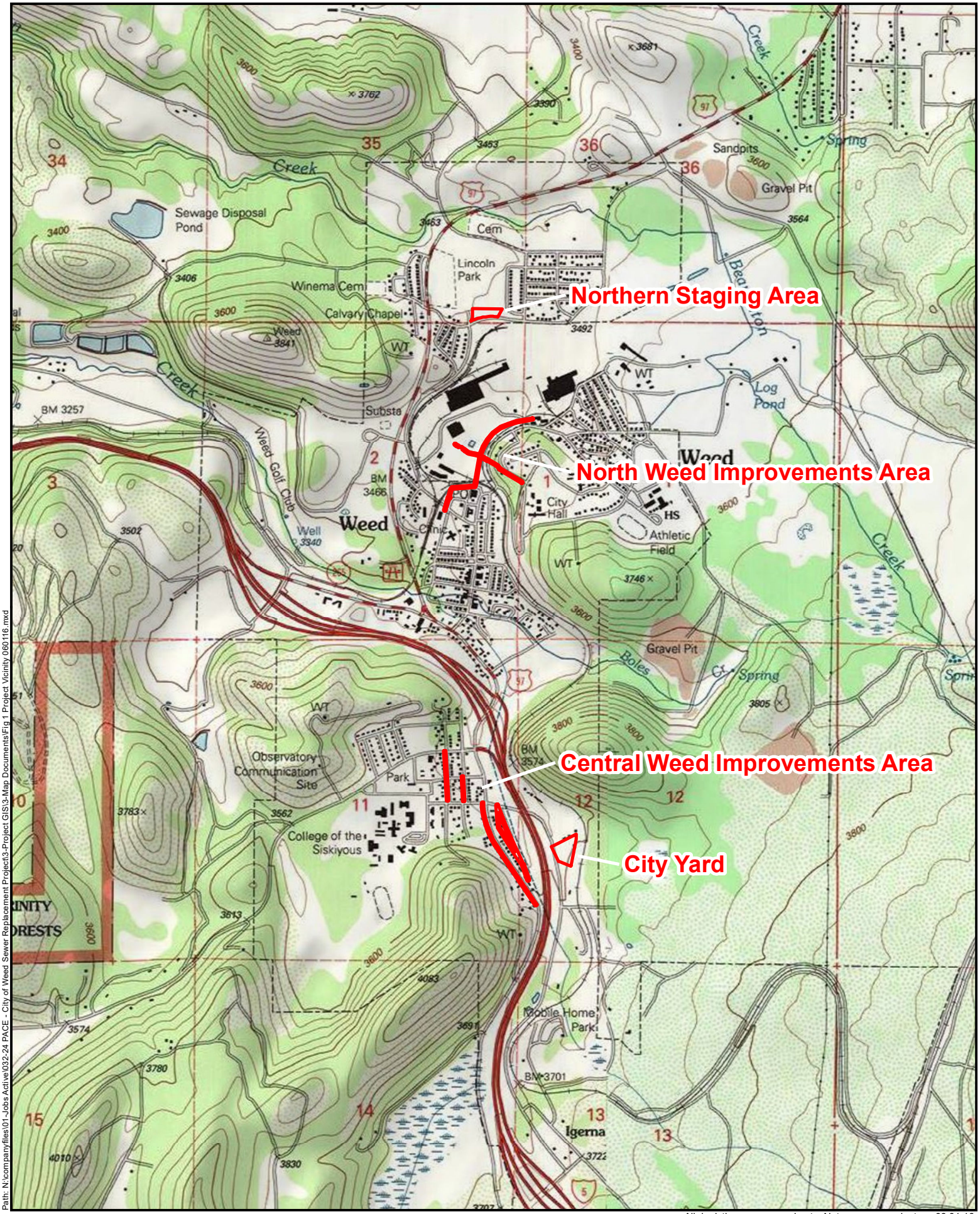
1. Eliminate Sewer Back-ups

Several of the existing sewers have a history of back-ups and overflows caused by root intrusion, structural defects, and/or inadequate grade. Results of the television inspection of the sewer revealed a number of significant structural defects, including cracked pipe sections, partial collapses, and deformed cross-sections. In addition, there were numerous joints with root intrusion, including partial blockages caused by grease build-up around the roots.

Root intrusion typically occurs in pipelines in which the joints have failed or where there are structural defects, such as cracks or broken sections, allowing roots to easily grow inside the pipe. All of the old clay sewers inspected had two-foot pipe joints allowing additional opportunities for leaks and root intrusion compared to modern pipes with 20-foot or longer spans between joints[1]. The sewers in Central Weed, on South Weed Boulevard, Oregon Street, and Walnut Street, have documented root intrusion issues that require periodic root-cutting, treatment, and flushing by City staff. These sewers were not television inspected, except for a 50-foot section on Oregon Street near Phelps Avenue which ceased to function due to a collapse in the polyvinyl-chloride (PVC) main.

The 10-inch sewer located along Park Way, north and west of City Hall, has significant structural defects and root intrusion. Despite cleaning efforts, portions of the existing pipelines

[1] Roots are attracted to water vapor that escapes from sewer mains via cracks or loose joints in the pipe. Upon reaching the opening in the pipe, roots will penetrate the pipe resulting in further structural damages and potential blockages in the pipe. Thus, the more joints in a section of pipe, the more opportunities there are for root intrusion.



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All depictions are approximate. Not a survey product. 06.01.16

Figure 1

Project Vicinity

0 2,000 Feet

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could not be inspected due to heavy debris buildup consisting of roots, grease, and gravel.

2. Replace Aged Infrastructure
The sewers identified for replacement along Park Way were constructed around the early 1900's[2], and thus, have exceeded the expected service life of 50 to 60 years. The sewers in the Central Weed site were installed subsequent to the North Weed sewers, but likely installed prior to 1950 given the two-foot pipe joints; thus, these sewers have also exceeded the expected service life.

3. Improved Access for Operations and Maintenance
The sewers in the North Weed site have an inadequate number of manholes. In a well-designed collection system, manholes are typically spaced no more than 400 feet apart. The spacing limitation is necessary to allow manhole-to-manhole access by the City's cleaning/rodding/flushing equipment. The existing sewer in North Weed has one sewer reach with 600 feet and another with 1,150 feet between manholes.

The manhole spacing in the Central Weed site is adequate; however, the southern portion of the sewer adjacent to the Interstate-5 right-of-way is difficult to access due to its proximity to a steep slope with riparian vegetation and backyard infrastructure along the alignment. In addition, the existing manhole locations require City staff to enter the Caltrans right-of-way for access. By placing manholes at more accessible locations and replacing the existing pipeline at adequate slope, the access for operations and maintenance of these facilities would be improved.

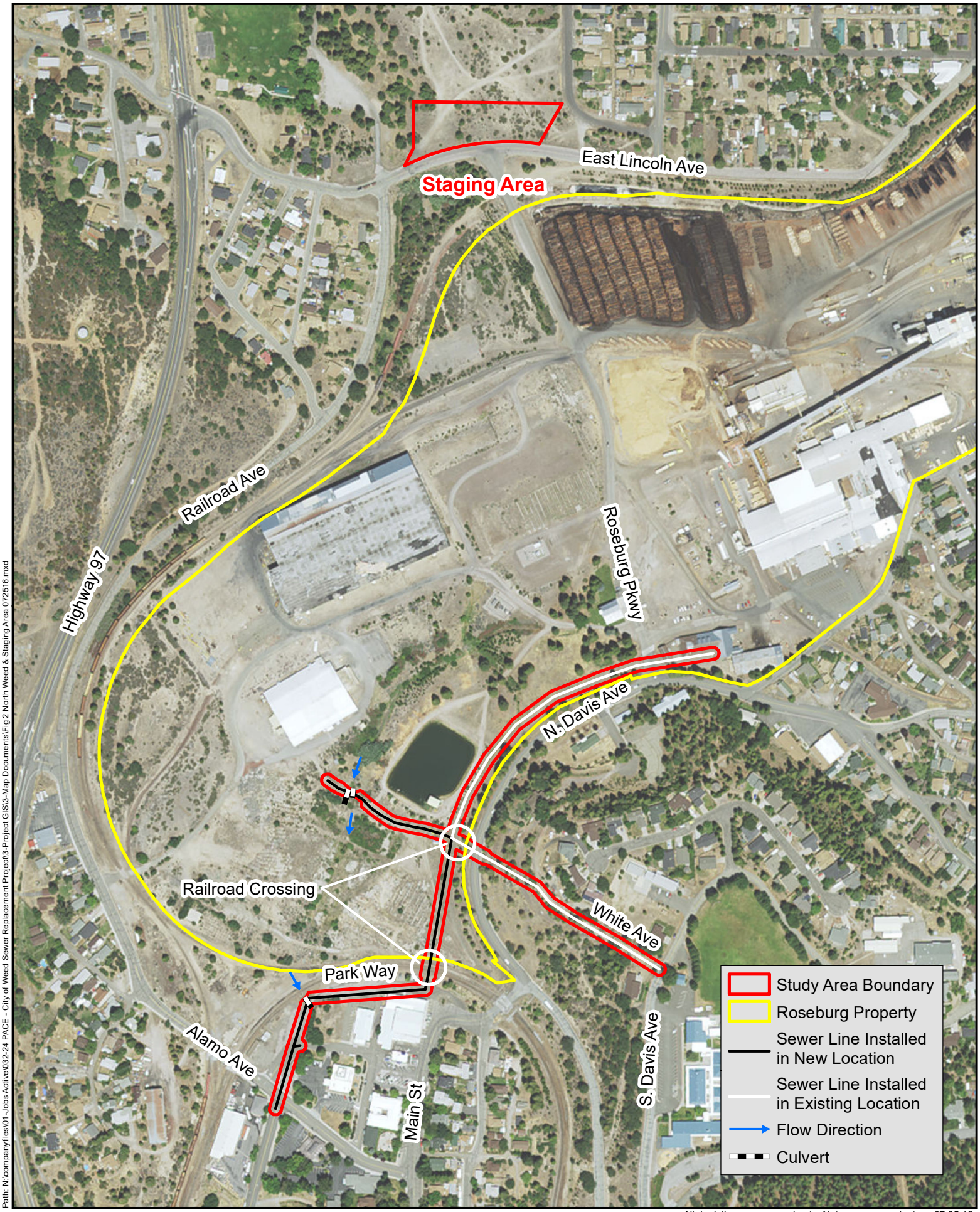
C. Project Description

The City is proposing to replace sewer mains and install manholes and cleanouts in the North and Central Weed sites in order to meet the project needs described above. Generally, these improvements would occur along the same alignments as existing sewers (see Figures 2 and 3 for an aerial photograph of the project elements). In some instances, the existing sewer mains would be replaced with a larger diameter pipe, where the mains are at or over design capacity. Existing lateral piping would be reconnected to the new sewer main using in-line tees. Approximately 95 sewer cleanouts would be installed at the property line of individual service connections within the project site.

North Weed Site
Replacement sewer main would consist of approximately 3,700 feet of 6-, 8-, and 10-inch pipe. As shown in Figure 2, the sewer would be installed along two general alignments: 1) the alignment running north to south, from near the intersection of Roseburg Parkway and North Davis Avenue, to Alamo Avenue, and 2) the alignment running east to west, from South Davis Avenue to just southwest of the constructed pond on the Roseburg property. The sewer mains would be constructed within existing access corridors and paved roads, with the exception of a portion of the alignment running east to west, which features a hillslope between White Avenue and North Davis Avenue.

Where feasible, the sewer mains would be installed via open-cut trenching. Trenches would be approximately three feet wide at the top, and vary from 4- to 8-feet in depth to match existing

[2] According to PACE Engineering, Inc., the predicted age of the sewer is supported by the two-foot pipe joints which were among the earliest clay sewers installed in the United States. During the 1950's and 1960's, four-foot clay joints were used. The subject sewers were not replaced as part of the 1999 Sewer Improvements Project, which replaced a large portion of the collection system in North Weed, north of Division Street.



Path: N:\companyfiles\01-Jobs Active\032-24 PACE - City of Weed Sewer Replacement Project\3-Project GIS\3-Map Documents\Fig 2 North Weed & Staging Area 072516.mxd

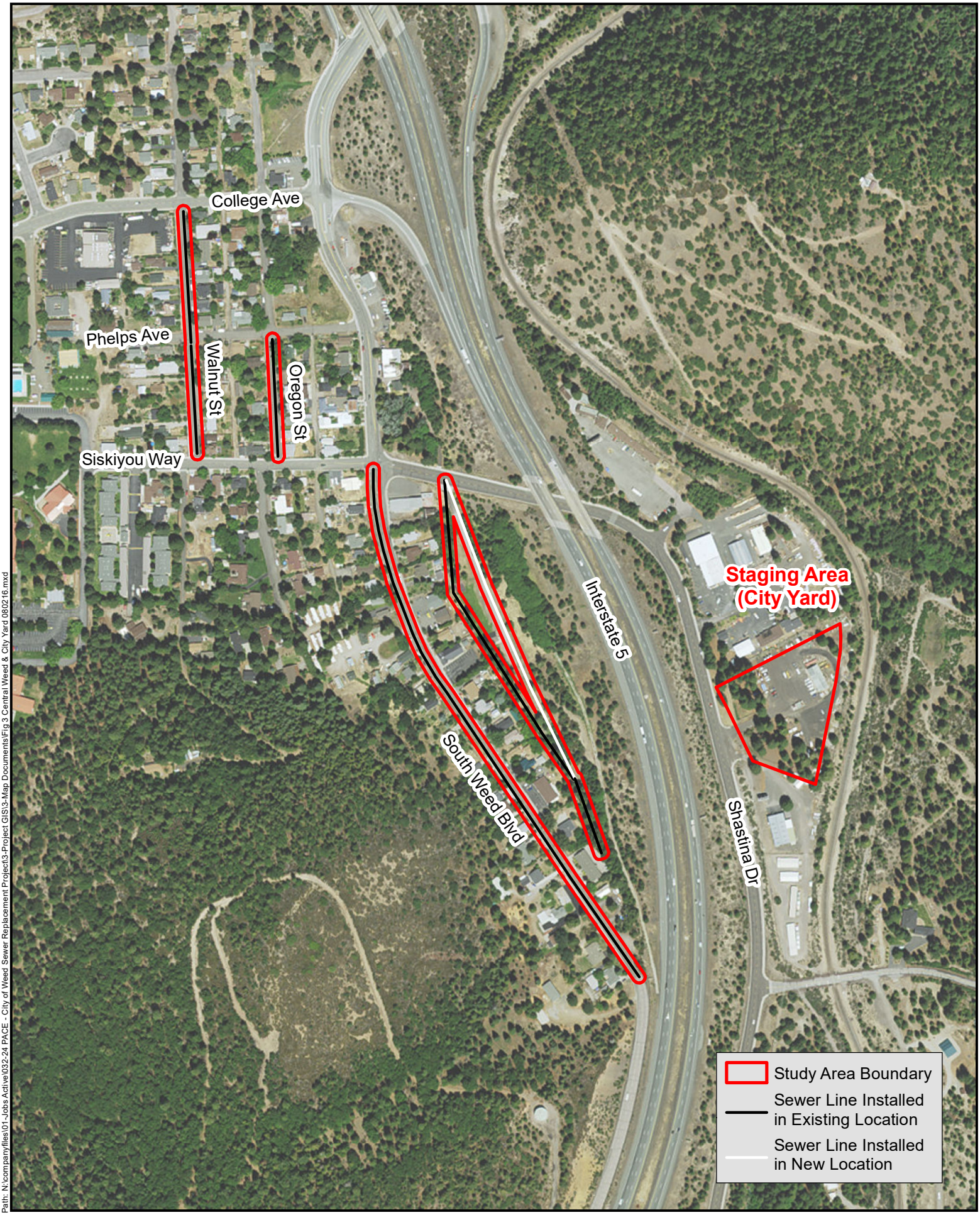
All depictions are approximate. Not a survey product. 07.05.16

0 400 Feet

Figure 2

North Weed Improvements and Staging Area

ENPLAN



Path: N:\companyfiles\01-Jobs Active\032-24 PACE - City of Weed Sewer Replacement Project\3-Project GIS\3-Map Documents\Fig 3 Central Weed & City Yard 080216.mxd

All depictions are approximate. Not a survey product. 08.02.16

0 400 Feet

Figure 3

Central Weed Improvements and Staging Area

ENPLAN

grades. At locations where open-cut trenching is not feasible, the new pipe would be installed using a trenchless technique such as horizontal directional drilling (HDD) or bore and jack. These locations include two railroad crossings, North Davis Avenue, and the culverted stream just south of the southern railroad tracks crossing. In addition, a stream on the Roseburg property would be avoided either via trenchless methods or by open-cut trenching, depending on soil depth between the top of the culvert and road surface.

New manholes would be provided at spacing not to exceed 400 feet. Manholes would consist of precast concrete bases, wall sections, cones, and grade rings. Manhole covers and lids would be cast iron. Anticipated manhole locations for the North Weed site are shown in Figure 4.

Staging for the North Weed site would likely occur within an approximately 1.5-acre open area on the north side of East Lincoln Avenue, between Railroad Avenue and Oak Street.

Central Weed Site

As shown in Figure 5, approximately 4,200 feet of 6-, 8-, and 10-inch replacement sewer main would be installed in the Central Weed site. If an easement for construction activities on the Berean Church property (Assessor's Parcel Number [APN] 060-512-310) is obtained, the sewer main would be installed east of the existing main along a graveled access road. Alternatively, if the easement is not obtained, the existing sewer main would be replaced in place. If that is the case, the portion of the main that is located under an old barn (on APN 060-512-280), would require a cast-in-place liner or pipe-bursting instead of open trenching. Under either scenario, the ±300-foot-section through residential lots at the southernmost end of the alignment would also require a cast-in-place liner or pipe-bursting instead of open trenching. The manhole materials would be the same as previously described, and would be placed at the same locations as existing manholes, except near the southern end of the sewer along the Interstate 5 right-of-way.

Staging for the Central Weed site would likely occur at the City Yard, located on Shastina Drive.

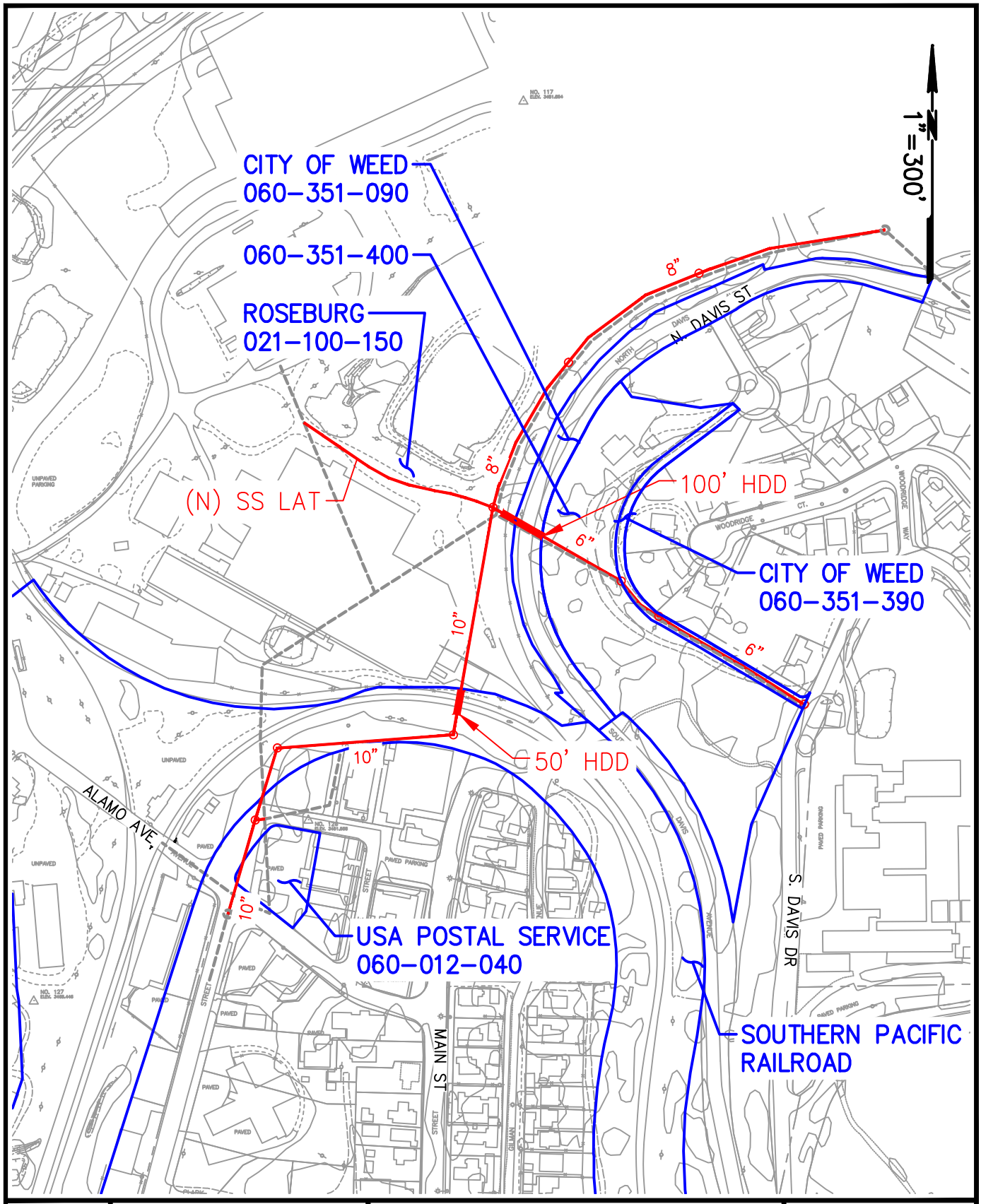
Construction Considerations

Demolition and Abandonment

The existing sewer main would be abandoned in place by installing grout plugs at yet-to-be-determined intervals. The existing pipeline would be excavated at the abandonment locations, a short section of pipe removed, and the open pipe ends filled with a non-shrink grout. Existing manholes would be abandoned by filling the holes with a layer of concrete and a layer of gravel. In streets or drive areas, the ring and cover would be removed, and the disturbed area resurfaced.

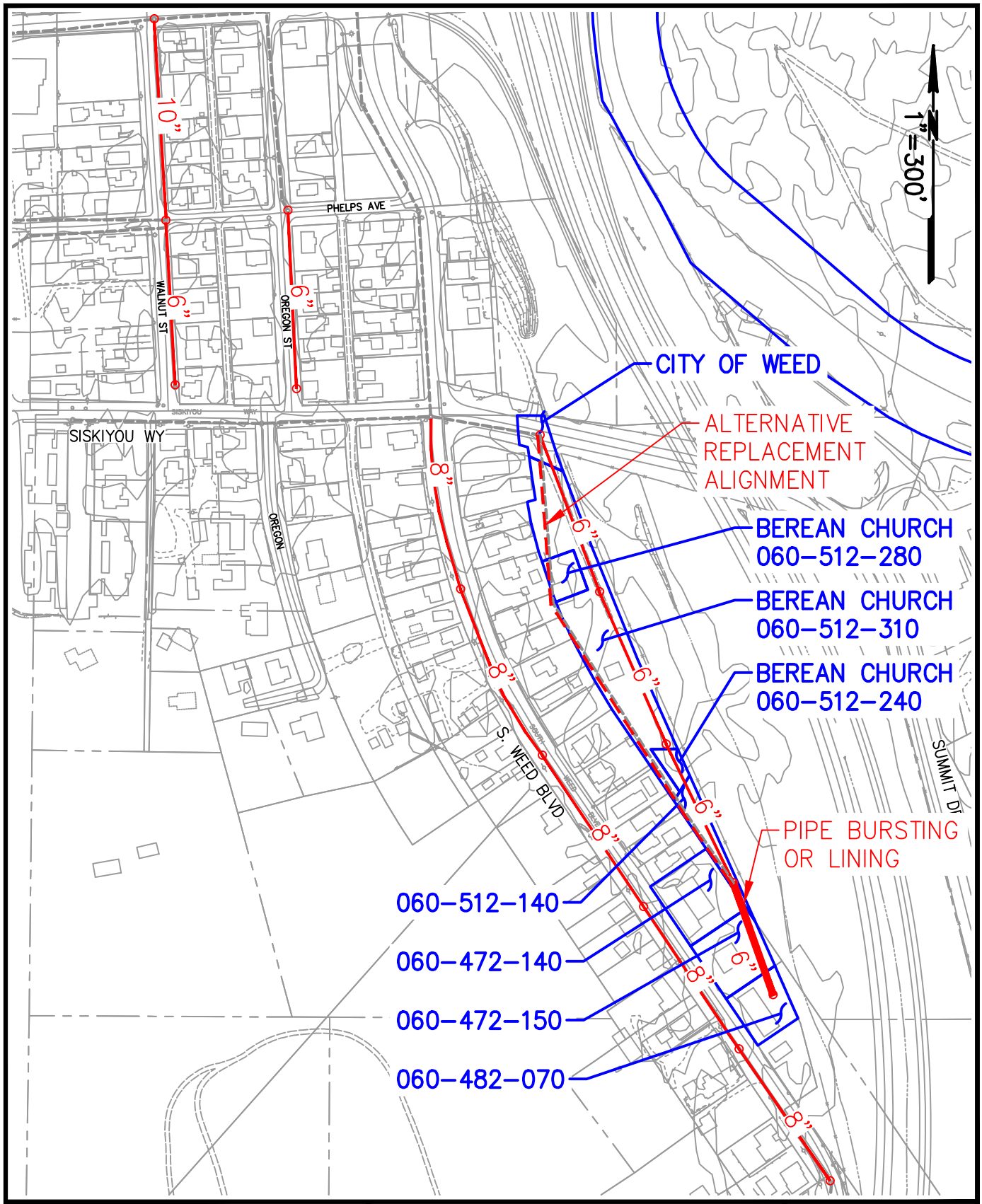
Spoils

Native soil removed from trenches would be used as backfill, where practical. However, since the new pipeline would be bedded with imported sand or gravel, and areas in roads or travelled ways would be backfilled with imported gravel, it is expected there will be excess material to move off-site. For the North Weed site, approximately, 600 cubic yards of material would be hauled off-site. For the Central Weed site, it is estimated that approximately 1,200 cubic yards of soil would need to be disposed off-site. A possible disposal site for the excess soil is the old landfill located northeast of the Roseburg property; however, the contractor may decide to dispose of the soil elsewhere.



DATE			
7/16	PACE ENGINEERING REDDING, CALIFORNIA	CITY OF WEED SEWER REPLACEMENT PROJECT NORTH WEED	FIGURE 4 JOB # 161.95

Plot Date: July 06, 2016 - 7:32 am Login Name: CPaget
File Name: M:\Land Projects\0161.95 Sewer Replacement Project\DWG\Sewer Improvement Project.dwg, Layout: FIG 3 (8.5x11)



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7/16	PACE ENGINEERING, REDDING, CALIFORNIA	CITY OF WEED SEWER REPLACEMENT PROJECT CENTRAL WEED	FIGURE 5 / JOB # 161.95

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File Name: M:\Land Projects\0161.95 Sewer Replacement Project\DWG\Sewer Improvement Project.dwg, Layout: FIG 4 (8.5x11)

Construction Schedule and Activities
The existing gravity sewers would remain in service throughout the construction effort until the new sewer is tested, accepted, and approved for service. However, those sewers requiring in-place replacement would be put into service as soon as the work is completed and accepted.

Construction of the proposed project would likely require approximately five months to complete, with construction projected to start in May 2017. In order to allow ample time for submittal review and some schedule float, it is recommended the total construction contract be approximately six months. It would be ideal to issue a construction Notice to Proceed in early May of the year so that construction can be fully wrapped-up before the end of that year.

D. Permits and Approvals

The following permits and approvals would likely be needed prior to implementation of the proposed project. In addition, National Environmental Policy Act (NEPA) approvals may also be necessary for funding of the project.

- City of Weed – Adoption of a Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program for the proposed project.
- State Water Resources Control Board – Construction General Permit and preparation of a Storm Water Pollution Prevention Plan (SWPPP).
- Caltrans – Issuance of an encroachment permit.
- Union Pacific Railroad – Issuance of an encroachment permit.
- U.S. Department of Agriculture, Rural Development – NEPA approval for funding.
- State Historic Preservation Officer – NEPA approval through consultation with the federal lead agency, for the purposes of protecting cultural resources.

II. ENVIRONMENTAL SETTING

General Plan Designation: The North Weed site includes lands within both Siskiyou County and the City of Weed; however, the entire project site is located with the City's Sphere of Influence. The portion of the North Weed site located within the City limits is designated under the City of Weed General Plan as Residential Low (RL), Open Space (OS), Light Industrial (LI), General Industrial (I), and Retail Commercial (CR), or is un-mapped (areas of City right-of-way). The remaining portion of the site which is on Roseburg property and outside of City limits is designated under the Siskiyou County General Plan as being located within the following mapped areas: Geologic Hazards – None; Soils: Erosion Hazard – None; Building Foundation Limitation – Severe Pressure Limitations Soils; Soils: Severe Septic Tank Limitations – Moderate; Slope – None; Water Quality – Acceptable for Human Use; Flood Hazard – None; Surface Hydrology – None; Critical Deer Wintering Area – None; Wildfire Hazard – None; Woodland Productivity – None; and prime agricultural soils – None. The entire Central Weed site is located with the City limits and is designated under the City of Weed General Plan as CR, RL, LI, Residential High (RH), and Residential Mixed Use – High Density (RMU).

Zoning: The portion of the North Weed site within the City limits is zoned by the City as C-1 Retail Commercial, Open Space, R3 – High Density Residential, and R1 – Single Family Residential. The remaining portion is zoned by Siskiyou County as Heavy Industrial District (M-H). The Central Weed site is zoned by the City as R1 – Single Family Residential, R3 – High Density Residential, R4 – Residential Mixed-Use, and CM – Limited Industrial.

Surrounding Land Uses: Surrounding lands are primarily developed with residential and commercial uses. Commercial uses, industrial uses (including Roseburg's mill), residential uses, and Weed Union Elementary School are located in the immediate vicinity of the proposed sewer alignment in the North Weed site. Interstate 5, residences, and the Weed Berean Church/Siskiyou Christian School are located adjacent to the Central Weed site.

Topography: The elevation of the project site ranges from approximately 3,498 to 3,620 feet above sea level. Several hills with moderate slopes ranging up to approximately 4,051 feet above sea level are located in close proximity to the project site.

Soils: According to the Natural Resources Conservation Service, soils within the North Weed site are mapped as Deetz gravelly loamy sand, 0 to 5 percent slopes; and Neer-Ponto stony sandy loams, 15 to 50 percent slopes complex. Soils within the Central Weed site are mapped as Deetz gravelly loamy sand, 0 to 5 percent slopes; Deetz gravelly loamy sand, 5 to 15 percent slopes; Odas sandy loam, 0 to 2 percent slopes; and Ponto sandy loam, 5 to 15 percent slopes.

Vegetation: Although mostly disturbed, the project site contains small areas of vegetated landscape. Representative herbaceous species throughout the project site include downy brome, bulbous bluegrass, and English plantain. The City Yard (southern staging area) is not described because it is entirely paved. Shrubs and trees within the project site are described in more detail below.

> North Weed Site (including the northern staging area): The North Weed site is primarily disturbed with paved and graveled roadways; however, some areas, such as the staging area and the hillslope between White Avenue and North Davis Avenue support natural vegetation, include ponderosa pine, incense-cedar, green-leaved manzanita, goldenbush, and antelope bitterbrush.

Central Weed Site:
Although the Central Weed work area consists primarily of paved roadways, the segment between South Weed Boulevard and Interstate 5 contains incense-cedar and ponderosa pine, with understory vegetation that includes cleavers and miner's lettuce. A riparian community is present at the southern terminus of this line segment; the community is represented by sedge, blackberry, cottonwood, and willow.

Water Features: Two intermittent streams are located within the North Weed site. One intermittent stream is located southwest of a constructed pond on the Roseburg property. The stream is culverted under an existing gravelled road. In addition to the culvert, a second pipe is installed immediately west of the culvert (slightly higher in the road prism), presumably to manage high flows and prevent water from overtopping the dirt road. A second intermittent stream crosses the project alignment on the south side of the southern railroad crossing, on Park Way. This stream briefly daylights from under the railroad tracks before entering another pipe and continuing southeast under a paved road.

Within the Central Weed site, a single intermittent stream or irrigation ditch occasionally daylights along the eastern side of some of the residences along South Weed Boulevard near the project site. Within the project site, some of the water from this feature drains across the proposed sewer alignment to a concrete-lined drainage that parallels Interstate 5.

III. ENVIRONMENTAL CHECKLIST FORM

A. Environmental Factors Potentially Affected

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

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

B. Determination (To be completed by the Lead Agency)

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.

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

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

Signature	Date
Ron Stock	City Administrator
Name	Title

C. Evaluation of Environmental Impacts

This section analyzes the potential environmental impacts associated with the proposed project. The issue areas evaluated in this Initial Study include:

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

The environmental analysis in this section is patterned after the Initial Study Checklist recommended in the State CEQA Guidelines. For the preliminary environmental assessment undertaken as part of this Initial Study, a determination that there is a potential for significant effects indicates the need to more fully analyze the project's impacts and to identify mitigation.

For the evaluation of potential impacts, the questions in the Initial Study Checklist are stated and an answer is provided according to the analysis undertaken as part of the Initial Study. The analysis considers the long-term, direct, indirect, and cumulative impacts of the project. To each question, there are four possible responses:

- **No Impact.** The development will not have any measurable environmental impact on the environment.

- **Less-Than-Significant Impact.** The project will have the potential for impacting the environment, although this impact will be below established thresholds that are considered to be significant.

- **Potentially Significant Impact Unless Mitigation Incorporated.** The project will have the potential to generate impacts which may be considered as a significant effect on the environment, although mitigation measures or changes to the project's physical or operational characteristics can reduce these impacts to levels that are less than significant.

- **Potentially Significant Impact**. The project will have impacts which are considered significant, and additional analysis is required to identify mitigation measures that could reduce these impacts to less than significant levels.

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
1. AESTHETICS. Would the project:				
a. Have a substantial adverse effect on a scenic vista?	❑	❑	X	❑
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	❑	❑	❑	X
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	❑	❑	X	❑
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	❑	❑	❑	X

Discussion

a, c.

The proposed project entails replacement of sewer mains, as well as installation of new manholes and cleanouts. Once constructed, the new sewer facilities would be located at grade or below ground and would not adversely affect views or scenic vistas. Some vegetation may be removed to accommodate project construction, but no tree removal is expected. Visual impacts due to vegetation removal are less than significant due to the relatively small amount of vegetation that would be removed. Further, the City of Weed General Plan does not identify any scenic viewsheds within its planning area. As such, the proposed project would not have a substantial adverse effect on a scenic vista, nor degrade the visual character or quality of the site and surroundings.

b.

There are no officially designated State Scenic Highways in Siskiyou County; thus, project implementation would not damage scenic resources within a designated State Scenic Highway. State Route 265/U.S. Route 97 leading northeast from the City of Weed and Interstate 5 from Weed to State Route 89 in the City of Mt. Shasta are designated as Eligible State Scenic Highways by Caltrans. The Siskiyou County General Plan also designates these stretches of highway as scenic routes. Although the project site is located within viewing distance of these designated stretches of highway, once constructed, new facilities would be located at or below ground level, and thus, would not affect scenic resources.

d.

Implementation of the proposed project would not introduce a new source of light or glare. No impact on day or nighttime views in the area would occur.

Mitigation

None necessary

Documentation

ENPLAN. Field survey. May 3, 2016.
Caltrans. 2015. California State Scenic Highway Mapping System. Siskiyou County. http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm. Accessed October 2015.
Siskiyou County. 1974. General Plan for Siskiyou County, California. Scenic Highways Element. http://www.co.siskiyou.ca.us/sites/default/files/docs/GP_ScenicHighwaysElement.pdf. Accessed October 2015.

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact

2. AGRICULTURAL AND FORESTRY RESOURCES.

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

a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	❑	❑	❑	X
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	❑	❑	❑	X
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	❑	❑	X	❑
d. Result in the loss of forest land or conversion of forest land to non-forest use?	❑	❑	X	❑
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?	❑	❑	❑	X

Discussion

a.

According to data maintained by the Farmland Mapping and Monitoring Program, neither Prime Farmland nor Farmland of Statewide Importance occur within or adjacent to the project site. The nearest mapped farmland, Farmland of Statewide Importance, is located approximately 1.2 miles northwest of the North Weed site, west of U.S. Route 97, along the north side of Beaughton Creek.

b, e.

No lands in or adjacent to the project site are used for commercial agricultural production or subject to a Williamson Act contract. Project implementation would not change the on-site land use or result in the conversion of off-site lands from farmland to non-agricultural use.

c, d.
Although the project site is not zoned as forestland or timberland by the City or County, portions of the North Weed and Central Weed sites qualify as forest land as defined in Public Resources Code section 12220(g) (i.e., they are capable of supporting 10 percent cover by native tree species). Additionally, those portions of the project site support commercial timber species such as incense-cedar and ponderosa pine, and thus, may be classified as "timberland" by the California Department of Forestry and Fire Protection (CAL FIRE). Although some vegetation may be removed to facilitate construction of the proposed project, no tree removal is expected. Impacts would be less than significant.

Mitigation
None necessary

Documentation
City of Weed. 2014. General Plan Map. http://weedca.govoffice3.com/index.asp?SEC=EC3DD86C-B74C-4E4C-80EE-2149126F86DE&DE=E51D9C5D-9ECB-402A-81D3-640367C5F1C0&Type=B_BASIC. Accessed March 2016.
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Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
3. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	❑	❑	❑	X
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	❑	❑	X	❑
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	❑	❑	X	❑
d. Expose sensitive receptors to substantial pollutant concentrations?	❑	❑	X	❑
e. Create objectionable odors affecting a substantial number of people?	❑	❑	X	❑

Discussion
a-d.
Both the Federal and State governments have developed standards for air pollutants of principal concern. Pollutants for which national ambient air quality standards have been developed are nitrogen dioxide (NO_2), ozone (O_3), sub 2.5-micron particulate matter ($PM_{2.5}$), sub 10-micron particulate matter (PM_{10}), sulfur dioxide (SO_2), carbon monoxide (CO), and lead (Pb). The State has adopted similar or more stringent criteria for these pollutants and has also adopted standards for hydrogen sulfide (H_2S), vinyl chloride, and visibility reducing particles. These ambient air quality standards are intended to address regional air quality conditions, not project-specific emissions.

Siskiyou County is in compliance with both Federal and State standards for all of the above air pollutants (i.e., is considered “attainment” or “unclassified” for these pollutants). To ensure continuing compliance, the Siskiyou County Air Pollution Control District (SCAPCD) evaluates new projects for air pollutant emissions. The CalEEMod air emissions modeling program is the accepted tool for estimating project emissions. The software provides results for NO_X, $PM_{2.5}$, PM_{10}, SO_2, CO, reactive organic gases (ROG)/volatile organic compounds (VOC), and carbon dioxide (CO_2). Siskiyou County has defined 250 lbs/day as the threshold of significance for NO_X, $PM_{2.5}$, PM_{10}, and SO_2 emissions, and 2,500 lbs/day as the threshold of significance for CO emissions. The remaining pollutants, consisting of lead, ozone, hydrogen sulfide, vinyl chloride, and visibility reducing pollutants, are evaluated on an individual basis. Although not directly addressed as pollutants of concern, ROG and VOC are of interest because they are precursors of ozone. Likewise, CO_2 is not addressed as a pollutant of concern, but is of interest because it is a common greenhouse gas (see Section III.C.3, “Greenhouse Gas Emissions”).

Project implementation would result in temporarily increased air emissions during construction due to equipment emissions and earthwork. Project construction emissions were estimated using the CalEEMod program (CalEEMod 2013.2.2). Consistent with the thresholds of significance established by SCAPCD, the values reported in Table 1 are the highest daily levels regardless of construction phase. As shown in Table 1, construction emissions would not exceed the numerical significance thresholds established by the SCAPCD.

Table 1
Projected Construction Emissions (lbs/day)

NO_X	$PM_{2.5}$	PM_{10}	SO_2	CO	ROG/VOC	CO_2
37.8	2.8	5.0	0.1	39.5	4.6	8,199.7

Likewise, the proposed project would not result in significant impacts associated with lead, ozone, hydrogen sulfide, vinyl chloride, or visibility reducing pollutants, as discussed below.

- According to the U.S. Environmental Protection Agency (EPA), the majority of lead emissions produced nationally are associated with combustion of leaded aviation gasoline by piston-driven aircraft. Elevated levels of airborne lead at the local level are usually found near industrial operations that process materials containing lead, such as smelters. As these conditions are not applicable to the proposed project, the potential for lead emissions is less than significant.
- Ozone is formed primarily from photochemical reactions between two major classes of air pollutants: ROGs and nitrogen dioxide. ROGs are emitted from a variety of sources, including motor vehicles, chemical manufacturing facilities, refineries, factories, consumer and commercial products, and natural (biogenic) sources (mainly trees). Nitrogen dioxide emissions are primarily emitted from motor vehicles, power plants, and off-road equipment. Because project construction would generate relatively low amounts of both ROG and NO_x, the potential for ozone production/emissions is less than significant.
- Hydrogen sulfide is formed during the decomposition of organic material in anaerobic environments. Sewer pipes could provide the right set of conditions for hydrogen sulfide production. However, according to the project engineer, the proposed sewer line would have adequate slope to support sufficient flow-through velocities. This should minimize the potential for stagnation and the production of hydrogen sulfide. Further, the project design does not include dedicated vents or pump houses that would allow sewer gases to vent to the outside air. Because the proposed sewer lines would support sufficient flow-through velocities, and would not vent to the outside air, the potential for hydrogen sulfide emissions is less than significant.
- Vinyl chloride is used to manufacture polyvinyl chloride (PVC) plastic and other vinyl products, which accounts for approximately 98 percent of the vinyl chloride produced in the United States. Additionally, vinyl chloride is produced during the microbial breakdown of chlorinated solvents (e.g., engine cleaner, degreasing agent, adhesive solvents, paint removers, etc.). The potential for vinyl chloride exposure is primarily limited to areas in close proximity to PVC production facilities. Such facilities are absent from the Mt. Shasta area, and project implementation would not result in an increase of chlorinated solvents. Therefore, the potential vinyl chloride emissions associated with the proposed project would be less than significant.
- Visibility reducing pollutants generally consist of sulfates, nitrates, organics, soot, fine soil dust, and coarse particulates. These pollutants contribute to the regional haze that impairs visibility, in addition to affecting public health. According to the California Regional Haze Management Plan, natural wildfires and biogenic emissions are the primary contributors to visibility reducing pollutants for these sites. For the proposed project, visibility reducing pollutants (e.g., $PM_{2.5}$ and PM_{10}), would be generated only during construction activities. Because only relatively low amounts of particulates would be generated, potential impacts with respect to visibility reducing pollutants are less than significant.

The proposed project would not exceed numerical significance thresholds established by the SCAPCD or otherwise result in significant air pollutant emissions. Therefore, implementation of Best Available Control Technology, as defined by the SCAPCD, would provide appropriate air quality control during project construction. A basic requirement for projects occurring in the SCAPCD is dust control. Dust control measures that would be implemented as part of the proposed project may include: covering, watering, and treating excavated, graded, or stockpiled areas; establishing speed limits for construction vehicles; restricting construction activities when winds exceed 20 mph; covering inactive areas; managing dust during material transport; street sweeping; and re-establishing groundcover. Further, in accordance with CARB regulations, additional measures to minimize impacts to air quality may include: maintaining all construction equipment in proper tune according to manufacturer's specifications, using diesel construction equipment meeting the CARB's 1996 or newer certification standard for off-road heavy-duty diesel engines, registering in the CARB Diesel Off-road On-line Reporting System program, and registering certain portable equipment in the Portable Equipment Registration Program or directly with the SCAPCD. With implementation of

required dust control measures, and compliance with CARB regulations, impacts to air quality would be less than significant.

e.
During project construction, the proposed project may result in the release of diesel fumes or other potentially objectionable odors. Although residents and three schools are located in close proximity to the project site, construction activities would be minor, and temporary in nature, and therefore, would not result in a significant release of potentially objectionable odors. No odors would be expected as a result of project operation. Given the limited exposure time and the nature of the work activities within the project site, potentially objectionable odors resulting from construction of the proposed project (e.g., diesel exhaust) would not be significant.

Mitigation
Because the proposed project would be constructed and operated in accordance with existing requirements of the SCAPCD and CARB, no mitigation would be necessary.

Documentation
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Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
4. BIOLOGICAL RESOURCES. Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	❑	X	❑	❑
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	❑	❑	X	❑
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	❑	❑	❑	X
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	❑	X	❑	❑
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	❑	❑	❑	X
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	❑	❑	❑	X

Discussion

a.

The following evaluation of potential impacts on special-status species is based on the findings of a review of California Natural Diversity Data Base (CNDDB) and U.S. Fish and Wildlife Service (USFWS) records, as well as botanical and wildlife surveys completed by ENPLAN on May 10, May 12, and June 23, 2016. In addition, a field review of portions of the project site was conducted with California Department of Fish and Wildlife (CDFW) staff on May 3, 2016. Evaluation of potential effects on federally listed, proposed, and Candidate species entailed review of plant and animal species under jurisdiction of the USFWS, and anadromous fish species under the jurisdiction of the National Marine Fisheries Service (NMFS). An IPaC Trust Resource Report was generated for species of concern to the USFWS. NMFS was not consulted because anadromous fish have no potential to occur in or adjacent to the project site due to absence of suitable stream habitat.

Special-Status Plant Species

Review of the USFWS IPaC Trust Resource Report for the project site (Appendix A) identified four federally listed plant species as potentially being affected by the proposed project: Gentner's fritillary, Hoover's spurge, slender Orcutt grass, and whitebark pine. The project site does not contain designated critical habitat for federally listed plant species. Review of CNDDB records showed that one special-status plant species, subalpine aster, has been previously reported in the project vicinity and the occurrence has been broadly mapped to include a portion of the project site. Nine other special-status plant species have been reported within a five-mile radius of the project site:

alkali hymenoxys, coast fawn lily, Oregon fireweed, pallid bird's-beak, Peck's lomatium, Pickering's ivesia, Shasta chaenactis, snow fleabane daisy, and woolly balsamroot.

To determine the presence/absence of special-status plant species, ENPLAN conducted a botanical survey of the project site on May 12 and June 23, 2016. A list of vascular plant species observed is included in Appendix A. Most of the special-status plant species potentially occurring on the project site would have been evident at the time the fieldwork was conducted. The potential presence of species not identifiable during the field study was readily determined on the basis of observed habitat characteristics. The potential for special-status plant species to occur on the project site is evaluated in Appendix A. As shown in Appendix A, the project site has potentially suitable habitat for pallid bird's beak, Shasta chaenactis, and woolly balsamroot. However, neither Shasta chaenactis nor woolly balsamroot were observed or are expected to occur on the site, and no other special-status plant species were observed. Mitigation Measure 4.1. requires a follow-up survey for pallid bird's beak during its late-season blooming period.

Special-Status Wildlife Species
Review of the USFWS IPaC Trust Resource Report for the project site (Appendix A) identified ten federally listed or Candidate animal species as potentially being affected by the proposed project: Oregon spotted frog, conservancy fairy shrimp, vernal pool fairy shrimp, vernal pool tadpole shrimp, northern spotted owl, western yellow-billed cuckoo, Lost River sucker, shortnose sucker, fisher, and gray wolf. The project site does not contain designated critical habitat for federally listed animal species.

Review of CNDDB records showed that six special-status wildlife species have been reported within a five-mile radius of the project site: bald eagle, Cascades frog, fisher (West Coast distinct population segment), Sierra Nevada red fox, western pond turtle, and western yellow-billed cuckoo.

To determine the presence/absence of special-status animal species, ENPLAN conducted wildlife surveys of the project site on May 3 and May 12, 2016. Special-status animal species potentially occurring on the project site would have been evident at the time the fieldwork was conducted. The potential presence of species not identifiable during the field study was readily determined on the basis of observed habitat characteristics. The potential for special-status animal species to utilize the project site is evaluated in Appendix A. The project site does not contain potentially suitable habitat for special-status species. No special-status wildlife species were observed during the wildlife survey, and none are expected to occur. Thus, implementation of the proposed project would not result in substantial impacts to special-status animals.

b, c.
As described previously in Section II, "Environmental Setting," a small amount of riparian habitat is present in the Central Weed site between South Weed Boulevard and Interstate 5. Both the North Weed and Central Weed sites contain intermittent streams. Two intermittent streams are located within the North Weed site, and one intermittent stream is located in the Central Weed site. Although the proposed sewer alignment crosses these stream features as well as riparian habitat (Central Weed site only), these features would be avoided by installing the new sewer via a trenchless technique, or by open trenching above existing culverts. Thus, implementation of the proposed project would not affect the riparian or stream communities.

d.
Project implementation would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, nor would it impede the use of native wildlife nursery sites. Numerous native resident and migratory fish and wildlife species inhabit Siskiyou County. Most notable among the migratory species are anadromous salmonids, black-tailed deer, and various species of migratory birds. As described above, no anadromous salmonids would be directly or indirectly affected because no perennial water feature is located in close proximity to the project site. The black-tailed deer is not designated as a special-status species, but is of concern to CDFW. Review of the Siskiyou County General Plan found that the project site is not located within a critical deer wintering area; thus, project implementation would have no significant impact on critical deer wintering areas.

The project site is located within the Pacific Flyway, and it is possible that migratory birds could nest on the site. Swallows—a migratory bird—were observed nesting approximately 60 feet north and west of the project site, under

the eaves of a mill building at the southeastern corner of the constructed pond. The federal Migratory Bird Treaty Act (MBTA) and related international treaties and domestic laws provide protection for migratory birds. The MBTA established that all migratory birds and their parts (including eggs, nests, and feathers) are fully protected. The MBTA is the domestic law that affirms, or implements, the United States' commitment to four international conventions (with Canada, Japan, Mexico, and Russia) for the protection of a shared migratory bird resource. Each of the conventions protects selected species of birds that are common to each country (i.e., they occur in each country at some point during their annual life cycle). The USFWS is the federal agency primarily responsible for protection of migratory birds.

Vegetation removal for the replacement sewer mains, and installation of manholes and cleanouts, could impact nesting birds. As called for in Mitigation Measure 4.2, to comply with the requirements of the MBTA, vegetation removal and construction activities should occur outside of the nesting season, if possible. In the local area, most birds nest between February 1 and August 31. Accordingly, the potential for adversely affecting nesting birds can be greatly minimized by removing vegetation and conducting construction activities either before February 1 or after August 31. If this is not possible, a nesting survey would be conducted within one week prior to removal of vegetation and/or the start of construction. If active nests are found on the project site, work would need to be postponed in the vicinity of the nests until after the young have fledged. Further, to prevent nest abandonment and mortality of chicks and eggs, vegetation removal and construction activities would not occur within 500 feet of an active nest, if actively being used) unless a smaller buffer zone is authorized by CDFW and USFWS. If required by the agencies, a qualified biologist could monitor active nest(s) during construction for signs of disturbance to the nesting birds.

Compliance with the requirements of the MBTA will ensure that nesting migratory birds are not adversely affected by the proposed project.

e.
Review of the City of Weed General Plan confirmed that the proposed project is consistent with local policies and ordinances protecting biological resources.

f.
No adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state habitat conservation plans are applicable to the project site.

Mitigation
MM 4.1. A follow-up botanical field survey shall be conducted in the late summer (July/August), when pallid bird's beak would be identifiable. In the event that pallid bird's beak or other special-status plant species are present, the sewer main route shall be relocated to avoid the plant population(s) and a suitable buffer zone(s) shall be established to the extent practicable; alternatively, trenchless construction methods shall be employed to ensure that sensitive plant population(s) are avoided. If avoidance is not feasible, loss of the special-status plants shall be offset through creation of suitable habitat at a minimum 3:1 ratio. A detailed mitigation plan shall be submitted to the City of Weed and California Department of Fish and Wildlife for review and approval. The plan shall identify the mitigation site, methods to be employed to create offsetting special-status plant habitat, success criteria, monitoring requirements, remedial measures, and/or other pertinent data to ensure successful replacement of the affected plant populations. Mitigation shall be undertaken concurrently with or in advance of the start of project construction.

MM 4.2. To ensure that active nests of migratory birds are not disturbed, vegetation removal and construction activities shall occur between August 31 and February 1, if feasible. If vegetation removal or construction must occur during the nesting season, a nesting survey shall be conducted by a qualified biologist to identify active nests in and adjacent to the work area. The survey shall be conducted no more than one week prior to the initiation of vegetation removal or construction. If nesting birds are found, the nest sites shall not be disturbed until after the young have fledged. Further, to prevent nest abandonment and mortality of chicks and eggs, no vegetation removal or construction activities shall occur within 500 feet of an active nest, unless a smaller buffer zone is authorized by the California Department of Fish and Wildlife and the U.S. Fish and Wildlife Service (the size of the construction buffer zone may vary depending on the species of nesting birds present).

Documentation
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California Department of Fish and Wildlife. 2015. California Regional Conservation Plans. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=68626&inline. Accessed October 2015.
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Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
5. CULTURAL RESOURCES. Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5?	❑	X	❑	❑
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5?	❑	X	❑	❑
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	❑	❑	X	❑
d. Disturb any human remains, including those interred outside of formal cemeteries?	❑	X	❑	❑

Discussion

a, b, d.

A cultural resources study, including a records search, Native American consultation, and field survey, was completed for the project by ENPLAN.

Consultation with the Native American Heritage Commission and local Native American community did not reveal any known sacred sites or cultural resources in the project area. The records search included review of the data filed with the California Historical Resources Information System, Northeast Information Center, at California State University, Chico, as well as other sources. The records search indicated that five historic isolates have been previously recorded within one-half-mile of the project site. The historic isolates consist of refuse and trash dumps. Records indicate that 14 cultural resource surveys have been previously conducted within a half-mile of the project site, with one survey encompassing a portion of the project site.

ENPLAN conducted a pedestrian survey of the project site on March 3, April 4, and May 22, 2016. The survey resulted in the identification of one multicomponent historic site. This historic site entails five leveled-earth pads, a rock wall, and the remains of infrastructural elements associated with early mill housing. This site is not unique, does not offer research value, nor is it eligible for listing on the National Register of Historic Places or California Register of Historical Resources.

Given the above findings, project implementation would not cause a substantial adverse change in the significance of a historical resource or archaeological resource. However, the project area is considered moderately sensitive for the presence of historic and prehistoric features, and it is possible that undocumented cultural remains could be encountered during subsurface excavations. Implementation of Mitigation Measures 5.1 and 5.2 below would ensure that potential impacts associated with the proposed project would be less than significant.

c.

According to the California Geological Survey, the project site is comprised of Tertiary volcanic rock. This formation is old enough to contain paleontological resources. However, the majority of the excavation involved with the proposed project would be located in previously disturbed areas. Further, no unique geologic features, or paleontological sites are known to exist in the vicinity of the project site. Impacts to paleontological resources are not expected.

Mitigation

MM 5.1. If any human remains are encountered during any phase of construction, all earth-disturbing work shall stop within 50 feet of the find. The county coroner shall be contacted to determine whether investigation of the cause of death is required as well as to determine whether the remains may be Native American in origin. Should Native American remains be discovered, the county coroner must contact the Native American Heritage

Commission (NAHC). The NAHC will then determine those persons it believes to be most likely descended from the deceased Native American(s). Together with representatives of the people of most likely descent, a qualified archaeologist shall make an assessment of the discovery and recommend/implement mitigation measures as necessary.

MM 5.2. If any previously unevaluated cultural resources (i.e., burnt animal bone, midden soils, projectile points or other humanly-modified lithics, historic artifacts, etc.) are encountered, all earth-disturbing work shall stop within 50 feet of the find until a qualified archaeologist can make an assessment of the discovery and recommend/implement mitigation measures as necessary.

Documentation

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Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
6. GEOLOGY AND SOILS. Would the project:				
a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
1) 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	❑
2) Strong seismic ground-shaking?	❑	❑	X	❑
3) Seismic-related ground failure, including liquefaction?	❑	❑	X	❑
4) Landslides?	❑	❑	X	❑
b. Result in substantial soil erosion or the loss of topsoil?	❑	❑	X	❑
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	❑	❑	X	❑
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	❑	❑	X	❑
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	❑	❑	❑	X

Discussion

a.

The project would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

1) Rupture of a known earthquake fault:

According to the Alquist-Priolo Earthquake Fault Zoning Map for Siskiyou County, there are no Alquist-Priolo Special Study Zones in the project vicinity. The nearest Alquist-Priolo Special Study Zones, which identify fault areas considered to be of greatest risk in the state, occur primarily in the northeastern corner of Siskiyou County. Review of the U.S. Geological Survey's earthquake fault map shows that the nearest earthquake fault is an east-west trending fault running through the top of Mount Shasta, approximately five miles southeast of the project site.

2), 3) Strong seismic ground shaking or seismic-related ground failure, including liquefaction:

According to the City of Weed General Plan, the City of Weed is located in an area of "moderate" earthquake severity and northeastern California has a history of fault displacement. However, studies that were conducted in preparation of the General Plan indicate that the potential for earthquakes in Siskiyou County is not great when compared to the rest of California and other natural hazards. As described in Chapter 16.04, "Construction Codes," in the City of Weed's Code of Ordinances, the City has adopted the Uniform Building Code (UBC), 1994 Edition. The UBC establishes standardized building requirements for all new structures and is intended to

promote public safety. Compliance with UBC standards ensures that potential impacts associated with new construction, such as those related to seismic ground shaking or seismic-related ground failure, are less than significant.

Liquefaction results from an applied stress on the soil, such as earthquake shaking or other sudden change in stress condition, and is primarily associated with saturated, cohesionless soil layers located close to the ground surface. During liquefaction, soils lose strength and ground failure may occur. This phenomenon is most likely to occur in alluvial (geologically recent, unconsolidated sediments) and stream channel deposits, especially when the groundwater table is high. Soils of the project site may be underlain with Tertiary volcanic rock, which is not considered geologically recent, and do not include alluvium or stream channel deposits. Further, the project site is not located near any known active seismic sources; thus, the potential for liquefaction is low.

Based on the information provided above, the potential for adverse effects resulting from seismic ground shaking, or seismic-related ground failure, including liquefaction, is less than significant.

4) Landslides:

According to the City of Weed General Plan, areas of potential landslides are associated with steep hillslopes in the area. However, the California Geological Survey has determined that the local area is located in an area of generally low susceptibility to landslides. Although construction of the proposed project would include excavation in previously undisturbed areas, the project site is relatively flat (with the exception of the short hillslope between North Davis Avenue and White Avenue), and does not include steep hillslopes that would be subject to landslides. Potential effects from landslides on the project site or in the project vicinity are expected to be less than significant.

b.

Soils within the North Weed site are mapped as Deetz gravelly loamy sand, 0 to 5 percent slopes; and Neer-Ponto stony sandy loams, 15 to 50 percent slopes complex. Soils within the Central Weed site are mapped as Deetz gravelly loamy sand, 0 to 5 percent slopes; Deetz gravelly loamy sand, 5 to 15 percent slopes; Odas sandy loam, 0 to 2 percent slopes; and Ponto sandy loam, 5 to 15 percent slopes. Project soil types are summarized in Table 2.

Table 2
Soil Type and Characteristics

Soil Name	Soil Type	Slope (%)	Erosion Potential	Permeability	Drainage	Runoff Rate
Deetz	Gravelly loamy sand	0-5	Slight to moderate	Rapid	Well drained	Slow to very slow
Deetz	Gravelly loamy sand	5-15	Slight to moderate	Rapid	Well drained	Slow to very slow
Neer-Ponto	Stony sandy loam	15-50	High	Moderate	Well drained	Slow to rapid
Ponto	Sandy loam	5-15	High	Moderate	Well drained	Slow to rapid
Odas	Sandy loam	0-2	Slight	Moderate to rapid	Poorly drained	Very slow

Sources: U.S. Department of Agriculture, Natural Resources Conservation Service, 2015; U.S. Department of Agriculture, Soil Conservation Service et al., 1983.

Best Management Practices (BMPs) for erosion and sediment control would be implemented during project construction, as required by the Construction General Permit Order issued by the State Water Resources Control Board (SWRCB); the order requires the preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP) for all projects that disturb one or more acres of soil. Measures that may be implemented to minimize erosion include limiting construction to the dry season; use of straw wattles, silt fences, and/or gravel berms to prevent sediments from discharging off-site; and revegetating temporarily disturbed sites upon completion of construction. Because BMPs for erosion and sediment control would be implemented in accordance with existing requirements, the potential for soil erosion and loss of top soil would be less than significant.

c.
The potential hazards associated with liquefaction and landslides are addressed in impacts (a)3 and (a)4 above. In regard to the potential for lateral spreading, subsidence, or collapse, according to the Natural Resources Conservation Service (NRCS), soils on the project site have the potential to be unstable, and are likely limited in regards to shallow excavations and construction of small commercial buildings. Some excavation would be involved as part of the construction of the proposed project. However, the UBC provides minimum standards for design and construction. In addition, the California Department of Industrial Relations, Division of Occupational Safety and Health (Cal-OSHA), has developed and enforces numerous workplace safety regulations and requirements within California. Because both the design and construction of project-related facilities in unstable soils is required by law to comply with Cal-OSHA and UBC regulations, which were developed to reduce risks to life and property to the maximum extent practical, this impact would be less than significant.

d.
Expansive soils contain high levels of clay and present hazards for development since they expand and shrink depending on water content. NRCS data shows that soils in the project site have some potential for soil expansion/contraction, but that any such limitations can be overcome or minimized through proper planning, design, and/or construction. Compliance with UBC regulations would ensure that the project is constructed in a suitable location and specific safety standards are met. No substantial risks to life or property are anticipated.

e.
The proposed project is limited to installation of replacement sewer mains, manholes, and cleanouts. As such, the project would not require the use of septic tanks or alternative wastewater disposal systems.

Mitigation
None necessary

Documentation
City of Weed. n.d. City of Weed General Plan Safety Element. http://weedca.govoffice3.com/vertical/sites/%7BC0495501-9512-4786-A427-BAB3AEBDEA56%7D/uploads/gp-safety.pdf. Accessed October 2015.
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U.S. Geological Survey. 2015. Interactive Fault Map. http://earthquake.usgs.gov/hazards/qfaults/map/. Accessed October 2015.

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
7. GREENHOUSE GAS EMISSIONS. Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	❑	❑	X	❑
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	❑	❑	❑	X

Discussion

a.

Project implementation would result in short-term construction emissions, including greenhouse gas emissions. The principal greenhouse gases of concern for a project of this nature are carbon dioxide (CO_2), nitrogen oxides (NO_X), and methane (CH_4). All greenhouse gases are assigned a global warming potential (GWP). This value is used to compare the abilities of different greenhouse gases to trap heat in the atmosphere. GWPs are based on the heat-absorbing ability of each gas relative to that of carbon dioxide (assigned a value of 1), as well as the decay rate of each gas (the amount removed from the atmosphere over a given number of years). GWPs can also be used to define the impact greenhouse gases will have on global climate change over different time periods. Assigning a GWP allows policy makers to compare impacts of emissions and reductions of different gases on an equal basis, termed "CO_2 equivalents" (CO_2e). NO_X and CH_4 are 298 and 25 times, respectively, more potent than CO_2 in terms of GWP.

To identify the threshold of significance for greenhouse gases resulting from project construction, ENPLAN contacted Siskiyou County Air Pollution Control District staff (SCAPCD). SCAPCD reviewed the thresholds adopted by other Districts (i.e., Sacramento Metropolitan and South Coast Air Quality Management Districts) and determined that the 1,100 metric tons/per year CO_2e threshold adopted by these Districts is appropriate for the proposed project (Sumner, SCAPCD, pers. comm.).

According to the results of the CalEEMod analysis, the project would generate 0.70 metric tons of NO_X, 0.02 metric tons of CH_4, and 98 metric tons of CO_2 during the estimated construction period. As such, the resulting CO_2e emissions would be approximately 308 metric tons [(0.70 x 298) + (0.02 x 25) + 98]. Based on the 1,100 metric tons per year threshold approved by SCAPCD, construction emissions would be less than significant. Project operation would not result in an increase in greenhouse gas emissions as compared to current conditions.

b.

The project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Mitigation

None necessary

Documentation

Intergovernmental Panel on Climate Change (IPCC). 2007. IPCC Fourth Assessment Report: Climate Change 2007. ipcc.ch/publications_and_data/ar4/wg1/en/ch2s2-10-2.html. Accessed January 2016.

Kim Sumner, Air Pollution Specialist, Siskiyou County Air Pollution Control District, personal communication.

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
8. HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	❑	❑	X	❑
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	❑	X	❑	❑
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	❑	❑	X	❑
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	❑	X	❑	❑
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	❑	❑	❑	X
f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	❑	❑	❑	X
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	❑	❑	X	❑
h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	❑	❑	X	❑

Discussion

a, b.

Project operation would not result in an increased use of hazardous materials. As discussed under d) below, due to the project site's proximity to an existing hazardous materials cleanup site, project construction could increase the potential for a release of hazardous materials to the environment. However, Mitigation Measure 8.1 would require sampling for contaminated soil and groundwater prior to construction, as well as proper handling and disposal of contaminated material, if encountered. In addition, project construction would involve use of relatively small quantities of materials such as diesel, gasoline, oils, and other engine fluids. However, the project would comply with existing State standards that govern the transport, use, and disposal of hazardous materials. Because work would be conducted in accordance with existing State requirements, and Mitigation Measure 8.1 would be implemented, the project would not result in a significant hazard to the public or the environment. Potential impacts would be less than significant.

c.
During construction, the proposed project would emit potentially hazardous emissions or handle hazardous materials, substances, or waste within one-quarter mile of two existing schools. Weed Union Elementary School is located directly adjacent to the North Weed site. Siskiyou Christian School is located adjacent to the Central Weed site. However, as described under a) above, project construction would involve use of relatively small quantities of materials such as diesel, gasoline, oils, and other engine fluids. Existing State standards govern the transport, use, and disposal of hazardous materials; because work would be conducted in accordance with these existing requirements, potential impacts would be less than significant and no mitigation measures are warranted. Long-term operation of the proposed project would not subject the schools to emissions of potentially hazardous emissions or handle hazardous materials, substances, or waste.

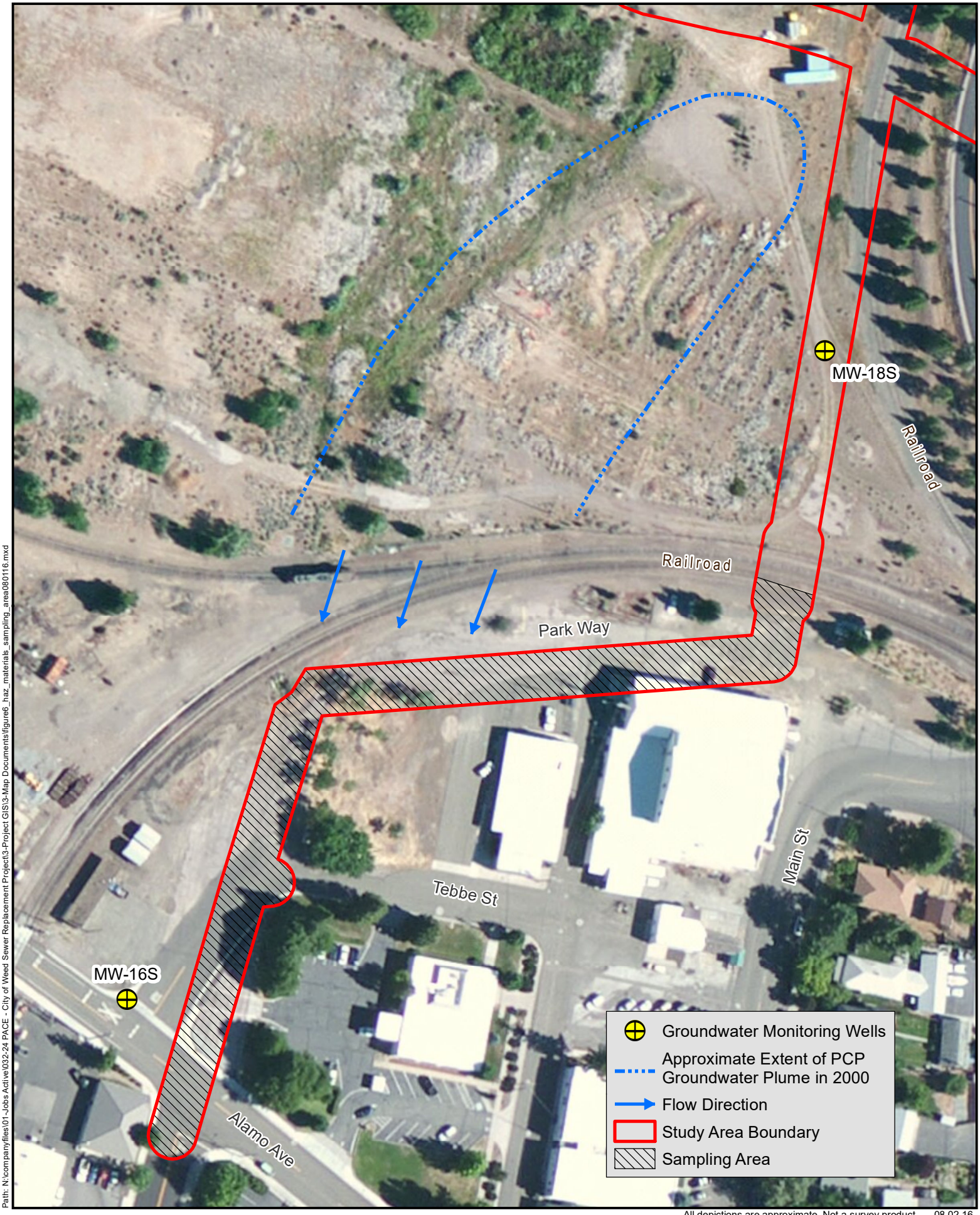
d.
Review of the State's EnviroStor and GeoTracker databases showed that the North Weed site is located on or in the vicinity of three cleanup sites that are included on a list of hazardous materials sites. Of the three sites, two are leaking underground storage tank (LUST) cleanup sites—Weed Elementary School (T0609300091) and Patton Distribution Co. (T0609300020)—that are located adjacent to the North Weed site. However, the cases for these sites were closed as of 1996 and 1997, respectively; thus, it is not expected that the proximity of the hazardous materials sites would affect project implementation or that earthwork associated with the project would result in hazardous conditions near these locations.

The third cleanup site, Morgan Products Company (T0609393189), is located on Roseburg property, northwest of the intersection of North Davis Avenue and Main Street. This cleanup site encompasses a portion of the North Weed sewer alignment. The case for the site has been open since 2001 for groundwater and soil contamination. Contaminants of concern have included insecticides, pesticides, fumigants, and herbicides, due to past wood processing and treatment operations since the early 1900s, which included a spray booth, dip tank, and several ancillary storage tanks that contained pentachlorophenol (PCP) used to preserve wood products. On-going soil and groundwater monitoring and treatment has occurred to aid in site clean-up.

According to North Coast Regional Water Quality Control Board (RWQCB) staff, project construction activities such as trenching and boring along the proposed alignment from the southern railroad crossing, south to Alamo Avenue, could encounter contaminated soil and groundwater. Thus, soil and possibly groundwater sampling prior to construction is recommended. In regards to contaminated groundwater, during groundwater monitoring activities conducted on February 16, 2016, contaminated groundwater was encountered at a depth of 4.6 feet in monitoring well MW-16S (located near the intersection of Park Way and Alamo Avenue). Although construction activities associated with the proposed project would likely take place during the summer months, when depth to groundwater would be deeper, there is a potential that groundwater may be encountered, and could be contaminated. Project activities along the proposed alignment north of the southern railroad crossing are not expected to encounter contaminated materials because this area is outside of the contaminant plume, or because the depth to contaminated soil/groundwater far exceeds planned excavation depths associated with construction activities.

Figure 6 is based on data contained in the *First Quarter 2016 Groundwater and Surface Water Monitoring Report* and *In-Situ Chemical Oxidation Pilot Test Report* prepared for the cleanup site. This figure shows the sampling area recommended by RWQCB staff, as well as groundwater monitoring wells located near the project site, the approximate extent of known PCP contamination, and the approximate extent of known contaminated groundwater. To minimize potential impacts associated with hazardous materials in the area south of the southern railroad crossing, Mitigation Measure 8.1 requires soil and groundwater sampling to confirm presence/absence of contaminated materials prior to construction. If encountered, hazardous materials would be handled and disposed of in accordance with existing regulations, and therefore, would not result in a significant hazard to the public or the environment. Potential impacts would be less than significant.

e, f.
There are no airports, public or private, located in the project vicinity. Weed Airport, the closest airport, is located approximately 4.5 miles to the northwest of the project site. Implementation of the proposed project would not result in an aviation-related safety hazard for people residing or working in the project area.



Path: N:\companyfiles\01-Jobs Active\032-24 PACE - City of Weed Sewer Replacement Project\3-Project GIS\3-Map Documents\figure6_haz_materials_sampling_area080116.mxd

All depictions are approximate. Not a survey product. 08.02.16

0 100 Feet

Figure 6

Hazardous Materials Sampling Area

ENPLAN

g.
Operation of the proposed project would not involve a use or activity that could interfere with emergency-response or emergency-evacuation plans for the area. Although an increase in traffic volume could interfere with emergency-response times, construction-related traffic associated with the proposed project would be minor due to the overall scale of the construction activities. Further, construction-related traffic would be spread over the duration of the construction schedule and would be minimal on a daily basis. Impacts are expected to be less than significant.

h.
The proposed project would be located in the relatively small, urban area of Weed. According to CAL FIRE, the proposed project is located in a "Local Responsibility Area (LRA) - Incorporated" fire hazard area. As described under a) above, during construction, the project would involve the use of flammable or combustible matierals such as diesel, gasoline and other engine fluids. However, the project would comply with existing State standards that govern the transport, use, and disposal of hazardous materials. Construction equipment can also emit sparks that could ignite fires. However, construction workers are required to comply with the California Code of Regulations, Subchapter 4. Construction Safety Orders, Article 36. Fire Protection and Prevention, Section 1920, which requires that firefighting equipment be available on-site to address equipment-related fires. Further, in the event of a fire requiring emergency response at the project site, existing access roads could be used to accommodate firefighting crews and equipment. In the long-term operation of the proposed project, the project would not expose people or structures to an increased risk of fire. Impacts would be less than significant.

Mitigation
MM 8.1. Prior to construction, soil sampling shall be conducted up to the maximum planned excavation depth along the project alignment from the southern railroad crossing to Alamo Avenue in order to confirm presence/absence of contaminated materials. If groundwater is encountered during sampling, groundwater sampling shall also occur. All sampling shall be conducted by a qualified professional at intervals and depths deemed appropriate by North Coast Regional Water Quality Control Board staff. If the soils and/or groundwater contain elevated levels of contaminants, they shall be removed from the site for disposal at a facility licensed to accept such materials; all of the contaminated material to be removed shall be profiled and manifested as potentially hazardous waste.

Documentation

California Code of Regulations. 2016. Subchapter 4. Construction Safety Orders. Article 36. Fire Protection and Prevention. http://www.dir.ca.gov/title8/1920.html. Accessed July 2016

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Cody Walker, North Coast Regional Water Quality Control Board. Personal Communications with ENPLAN. February – July 2016.

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State Water Resources Control Board. 2016. GeoTracker. http://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=weed+ca. Accessed February 2016.

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
9. HYDROLOGY AND WATER QUALITY. Would the project:				
a. Violate any water quality standards or waste-discharge requirements?	❑	❑	X	❑
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of preexisting nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	❑	❑	❑	X
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	❑	❑	X	❑
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	❑	❑	X	❑
e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	❑	❑	X	❑
f. Otherwise substantially degrade water quality?	❑	❑	X	❑
g. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	❑	❑	❑	X
h. Place within a 100-year flood-hazard area structures which would impede or redirect flood flows?	❑	❑	X	❑
i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	❑	❑	❑	X
j. Inundation by seiche, tsunami, or mudflow?	❑	❑	X	❑

Discussion

a.

The proposed project has the potential to temporarily degrade water quality due to increased erosion during project construction. However, as previously described in Section III.C.6, “Geology and Soils,” BMPs would be implemented to provide soil stabilization, sediment control, and spill prevention throughout the duration of the project to minimize impacts to water quality. Therefore, impacts of project construction and operation with respect to water quality standards and waste-discharge requirements are expected to be less than significant.

b.
The proposed project would not require new groundwater supplies for construction or operation of the project. Although the project would result in minor overcovering of ground surfaces, this would not substantially interfere with groundwater recharge. Impacts on groundwater supplies would be less than significant.

c.
Project implementation would not alter existing drainage patterns, alter the course of a stream or river, or result in substantial erosion or siltation on- or off-site. As previously described, BMPs for erosion and sediment control would be implemented through the SWPPP to be prepared for the project. Therefore, no significant impacts with respect to erosion or siltation are expected as a result of project construction or operation.

d.
The proposed project entails construction of replacement sewer mains, new manholes and cleanouts that would be installed at grade or below ground. Once construction is complete, the topography of the site would be restored to preexisting contours, and thus, project implementation would not alter existing drainage patterns, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site. The potential for flooding would be less than significant.

e.
The proposed project would result in a negligible increase in the amount of impervious surfacing, and thus, the volume of storm water generated as a result of project implementation would also be negligible and would not exceed the capacity of existing stormwater drainage systems. No significant impacts on storm drain systems or water quality are anticipated at the project site.

f.
Project implementation could potentially degrade water quality through increased erosion and sedimentation or through the release of petroleum products or other potentially hazardous materials used during construction. Implementation of BMPs, combined with compliance with existing requirements governing the transport, use, and disposal of fuels and other potentially hazardous materials that may be used during construction, would reduce the potential for water quality degradation to a less than significant level.

g.
Although a small portion of the Central Weed site would be located within a 100-year floodplain, the proposed project would not involve the construction of any housing.

h.
Although a small portion of the Central Weed site is located within a 100-year floodplain, the proposed project would consist only of construction of underground or at-grade facilities that would not impede or redirect flood flows.

i.
Although a small portion of the Central Weed site may be subject to 100-year flooding, the project entails construction of underground sewer mains and cleanouts, and at-grade manholes; thus, the project would not expose people or structures to a significant risk of loss, injury or death involving flooding.

j.
The project site is located within the interior of California where there is no threat of a tsunami. No large bodies of water are in the vicinity that could experience seiches as a result of very strong ground-shaking; therefore, there is no risk of inundation of the project site from seiches. According to the City of Weed General Plan, the City is susceptible to mudflows originating from Mount Shasta as a result of volcanic eruption. However, the local area, while located in a volcanic eruption danger zone, is not in the “highest” volcanic hazard area. Additionally, Mount Shasta has erupted an average of once every 800 years during the last 10,000 years and about once every 600 years during the last 4,500 years; with the last known eruption occurring over 200 years ago. Due to the unlikelihood of an eruption in the next century, the project site is not located in an area where inundation by seiche, tsunami, or mudflow is a significant risk to the project.

Mitigation
None necessary

Documentation
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Siskiyou County. 1975. General Plan for Siskiyou County, California. Seismic Safety and Safety Element. http://www.co.siskiyou.ca.us/content/planning-division-siskiyou-county-general-plan. Accessed October 2015.

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
10. LAND USE AND PLANNING. Would the project:				
a. Physically divide an established community?	❑	❑	X	❑
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	❑	❑	❑	X
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	❑	❑	❑	X

Discussion

a.

The proposed project entails replacement of sewer mains, and installation of manholes and cleanouts, within the City of Weed. Although construction activities may cause some minor, temporary delays, no established access routes would be eliminated or impeded in the long term. Therefore, project implementation would not physically divide an established community.

b.

As described previously in Section II, "Environmental Setting," the replacement sewer mains would be located in the City of Weed and unincorporated Siskiyou County, and the proposed project is compatible with applicable City and County land use designations and zoning. The proposed project would not conflict with any applicable land use plan, policy, or regulation of any agency with jurisdiction over the project.

c.

There are no habitat conservation plans or natural community conservation plans that are applicable to the project site.

Mitigation

None necessary

Documentation

California Department of Fish and Wildlife. 2014. California Regional Conservation Plans Map. http://www.dfg.ca.gov/habcon/nccp/. Accessed February 2016.

City of Weed. 2014. General Plan Map. http://weedca.govoffice3.com/index.asp?SEC=EC3DD86C-B74C-4E4C-80EE-2149126F86DE&DE=E51D9C5D-9ECB-402A-81D3-640367C5F1C0&Type=B_BASIC. Accessed October 2015.

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Siskiyou County. 2015. Siskiyou County, California - Code of Ordinances. Updated July 28. https://www.municode.com/library/ca/siskiyou_county/codes/code_of_ordinances. Accessed February 2016.

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
11. MINERAL RESOURCES. Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	❑	❑	❑	X
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	❑	❑	❑	X

Discussion

a, b.

A mineral resource is land on which known deposits of commercially viable mineral or aggregate deposits exist. The designation is applied to sites determined by the California Geological Survey as being a resource of regional significance, and is intended to help maintain any mining operations and protect them from encroachment of incompatible uses. The project site has not been classified by the California Geological Survey as containing significant mineral resources.

The City of Weed General Plan's Open Space and Conservation Elements do not address mineral resources. The Siskiyou County General Plan notes that Siskiyou County features minerally productive lands with established mines that could be reopened and placed into production. Gravel and mining tailings were cited as possible mineral resources. Likewise, the County website states indicates that there are many mining operations in Siskiyou County from gravel processing to hard rock to placer mining. However, mining of these resources on or in the vicinity of the project site would be infeasible due to the nature and location of the proposed project and the proximity to existing development. Project implementation would not result in a change in land use patterns and would therefore have no effect on the on-site or off-site availability of mineral resources.

Mitigation

None necessary

Documentation

City of Weed. n.d. City of Weed General Plan, Open Space and Conservation Elements. http://weedca.govoffice3.com/vertical/sites/%7BC0495501-9512-4786-A427-BAB3AEBDEA56%7D/uploads/gp-openspace.pdf. Accessed October 2015.

Department of Conservation, California Geological Survey. 2007. SMARA Mineral Land Classification Maps. http://www.quake.ca.gov/gmaps/WH/smaramaps.htm. Accessed October 2015.

Siskiyou County. 2015. Natural Resources – Mining. http://www.co.siskiyou.ca.us/content/natural-resources-mining. Accessed October 2015.

Siskiyou County. 1973. The Conservation Element of the General Plan, Siskiyou County, California. https://www.co.siskiyou.ca.us/sites/default/files/docs/GP_ConservationElement.pdf. Accessed October 2015.

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
12. NOISE. Would the project result in:				
a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	❑	❑	X	❑
b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	❑	❑	X	❑
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	❑	❑	❑	X
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	❑	X	❑	❑
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	❑	❑	❑	X
f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	❑	❑	❑	X

Discussion

a, c, d.

Project implementation has the potential to increase noise levels in the short term during project construction. No increase in noise levels would be expected in the long-term operation of the project. With respect to short-term noise level increases, construction equipment anticipated to be used for project construction typically generates maximum noise levels ranging from 80 to 89 decibels (dBA) at a distance of 50 feet. Noise from construction activities generally attenuates at a rate of 6 dBA per doubling of distance, assuming the site is mostly unvegetated and features a smooth surface. Typical sound levels and relative loudness for various types of noise environments are described in Table 3. At an attenuation rate of 6 dBA, 80-89 dBA noise levels would drop to 74-83 dBA at a distance of 100 feet. Construction noise levels at and near the project site would fluctuate, depending on the number and type of construction equipment operating at any given time.

The nearest noise sensitive land uses to the North Weed site are several residences located approximately 60 feet to the north. The maximum noise level at this location would be approximately 86 dBA. Due to the damage caused by the 2014 Boles Fire that burned through this area, these residences are currently undergoing construction and therefore, may be unoccupied and are currently exposed to construction noise. If residential construction were completed prior to construction of the proposed project, the residents would experience nearly unobstructed noise levels.

Weed Elementary Union School is located to the east of the project site, where classrooms are located approximately 160 feet away. The maximum noise level at this location would be approximately 79 dBA. The nearest noise sensitive uses to the Central Weed site are numerous residences and Siskiyou Christian School, which are located directly adjacent to the proposed project. These locations would experience untempered noise levels from construction activities.

Construction activities would be completed within approximately five months, with work in any single segment of the proposed alignment being completed on a substantially shorter time frame. According to the Noise Element in the City of Weed General Plan, City noise levels are influenced by overlapping noise produced from the nearby railroad, Interstate 5, and U.S. Route 97. Noise contours produced for the General Plan indicate that the majority of the proposed project would be located within zones that are exposed to noise levels between 65 and 70 dbA, without the proposed project. The City's General Plan does not identify noise standards for temporary construction activities. In order to minimize noise effects on nearby sensitive uses, Mitigation Measure 12.1 requires that work associated with the proposed project would occur during weekdays between the hours of 7:00 a.m. and 5:00 p.m. to the extent feasible; possible exceptions to this condition would be time-sensitive operations such as an extended, continuous concrete pour or nighttime hook-ups. With construction activities confined to daytime hours, temporary construction noise level increases would be less than significant.

Project operation would not result in a perceptible increase in noise levels. Operational noise levels would be less than significant.

Table 3
Examples of Construction Equipment
Noise Emission Levels

Equipment	Typical Noise Level (dBA) 50 ft from Source
Air Compressor	81
Backhoe	80
Compactor	82
Concrete Mixer	85
Concrete Pump	82
Concrete Vibrator	76
Crane, Derrick	88
Crane, Mobile	83
Dozer	85
Generator	81
Grader	85
Loader	85
Paver	89
Pile-Driver (Impact)	101
Pile-Driver (Sonic)	96
Pump	76
Saw	76
Truck	88

Source: Federal Transit Administration 2006:12-6, adapted by ENPLAN 2016

b.
The proposed project would not expose people to or generate excessive groundborne vibration or groundborne noise levels. Project construction would consist primarily of excavation, trenching, and pipe bursting (likely using an expander head, pulling rods, a pulling machine, a retaining device, and a hydraulic power pack) and concrete-pouring activities for installation of manholes and cleanouts. Work would not involve the use of explosives, pile driving, or other intensive construction techniques that could generate significant groundborne noise or vibration. With regard to project operation, no groundborne vibration or groundborne noise would occur. Thus, the proposed project would not expose people to or generate excessive groundborne vibration or groundborne noise levels.

e, f.
The airport nearest the project site is the Weed Airport, which is located approximately 4.5 miles to the northwest. Due to the airport's relatively small traffic volume and its distance from the project location, people working within the project area would not be exposed to excessive aircraft-generated noise levels.

Mitigation
MM 12.1. Construction work associated with the proposed project shall be limited to weekdays between the hours of 7:00 a.m. and 5:00 p.m. to the extent feasible; possible exceptions to this condition would be time-sensitive operations such as an extended, continuous concrete pours or nighttime hook-ups. Exceptions are subject to approval by the City Administrator or his/her designee.

Documentation
City of Weed. 2015. Weed, California – Code of Ordinances. https://www.municode.com/library/ca/weed/codes/code_of_ordinances. Accessed February 2016.
City of Weed. 2015. City of Weed General Plan, Noise Element. http://weedca.govoffice3.com/vertical/sites/%7BC0495501-9512-4786-A427-BAB3AEBDEA56%7D/uploads/gp-noise.pdf. Accessed April 2016.
Federal Transit Administration. 2006. *Transit Noise and Vibration Impact Assessment*. FTA-VA-90-1003-06. Washington, DC: Office of Planning and Environment. http://www.fta.dot.gov/documents/FTA_Noise_and_Vibration_Manual.pdf. Accessed October 2015.

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
13. POPULATION AND HOUSING. Would the project:				
a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	❑	❑	X	❑
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	❑	❑	❑	X
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	❑	❑	❑	X

Discussion

a.

Installation of replacement sewer mains, and new manholes and cleanouts, would not directly or indirectly induce substantial population growth in the area. The purpose of the new sewer mains is to replace old, decrepit pipe, and in some instances, replace with larger diameter pipe, where the mains are at or over design capacity. Although the capacity of some of the sewer mains would be increased, the new pipe and associated facilities, would serve existing hookups, and thus, would not induce population growth. Although construction related jobs may be temporarily created, most are expected to be filled by existing Weed or Siskiyou County residents. Due to the short-term nature of the jobs, project construction is not likely to attract new residents to the area. The existing housing stock in the Weed area is more than adequate to serve new residents that may be attracted to the area. The potential for population growth would be less than significant.

b.

Project implementation would consist of installation of replacement sewer mains, manholes, and cleanouts. Implementing the proposed project would not displace existing housing or necessitate the construction of replacement housing elsewhere.

c.

For the reason described in response to item (b) above, implementation of the proposed project would not displace any people, or necessitate the construction of replacement housing elsewhere.

Mitigation

None necessary

Documentation

PACE Engineering, Inc. Personal Communication with ENPLAN. January – June 2016.

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact

14. PUBLIC SERVICES.

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

i. Fire protection?	❑	❑	❑	X
ii. Police protection?	❑	❑	❑	X
iii. Schools?	❑	❑	❑	X
iv. Parks?	❑	❑	❑	X
v. Other public facilities?	❑	❑	❑	X

Discussion

a-i, ii.

The proposed project consists of installation of replacement sewer mains, and new manholes and cleanouts, and is not intended for human occupancy, and therefore, would not affect fire or police protection services.

a-iii.

The proposed project does not include the construction of any new housing units and would not result in any increase in the City's population or increased numbers of students served by local schools.

a-iv.

The proposed project does not include the provision of any new park facilities nor would it adversely affect any existing park facilities.

a-v.

The proposed project is not intended for human occupancy, and would not result in a substantial increase of construction-related or operational traffic on local roadways. Therefore, the project is not expected to result in a significant impact on other public facilities.

Mitigation

None necessary

Documentation

PACE Engineering, Inc. Personal Communication with ENPLAN. January – June 2016.

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
15. RECREATION. Would the project:				
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	❑	❑	❑	X
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	❑	❑	❑	X

Discussion

a.

The proposed project does not include the construction of houses or businesses that would increase the number of residents in the area. As a result, implementing the proposed project would not result in an increased demand for recreational facilities.

b.

The proposed project does not include the construction or expansion of new recreational facilities.

Mitigation

None necessary

Documentation

PACE Engineering, Inc. Personal Communication with ENPLAN. January – June 2016.

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
16. TRANSPORTATION AND CIRCULATION. Would the project:				
a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	❑	❑	X	❑
b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	❑	❑	X	❑
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	❑	❑	❑	X
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	❑	❑	❑	X
e. Result in inadequate emergency access?	❑	❑	X	❑
f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	❑	❑	❑	X

Discussion

a, b.

Access to the North Weed site is provided by East Lincoln Avenue, Roseburg Parkway, Alamo Avenue, Park Way, North Davis Boulevard, and White Avenue. Access to the Central Weed site is provided by Oregon Street, Walnut Street, Siskiyou Way, and South Weed Boulevard. Short-term increases in traffic volume would occur on these and nearby roads during construction activities. This traffic would consist of construction workers traveling to and from the site, truck trips to haul materials and supplies to the project site, as well as truck trips to haul debris off-site for disposal. However, because of the small scale and temporary nature of the construction activities, the proposed project would not cause a substantial increase in the number of vehicle trips on local roadways, highways, or freeways.

Implementation of the proposed project would result in replacement sewer mains, and new manholes and cleanouts. No long-term increase in traffic volume would occur as a result of the project. The proposed project would not conflict with an applicable program, plan, ordinance, or policy related to traffic.

c.

The nearest airport, Weed Airport, is located approximately 4.5 miles to the northwest of the project site. The proposed project does not involve any aviation-related uses, would not result in a change in air traffic patterns, and would not result in substantial aviation-related safety risks.

d.
The proposed project would not permanently alter public access routes or increase hazards due to transportation design features or incompatible uses. No impact would occur.

e.
Project construction is not expected to interfere with emergency access. Construction-related activities would be short term and temporary in nature, with approximately half of the work occurring outside of the existing road network—on Roseburg property and along the corridor between residences on South Weed Boulevard and Interstate 5. Although there would be some construction-related activities on the roadways mentioned under a) above, these roads feature relatively low traffic volumes and construction activities would be small in scale and temporary in nature. Impacts would be less than significant.

f.
The proposed project consists of installation of replacement sewer mains and cleanouts below ground, and manholes that would be installed at grade. Project implementation would not conflict with local plans, policies, or programs regarding public transit, bicycle, or pedestrian facilities.

Mitigation
None necessary

Documentation
PACE Engineering, Inc. Personal Communication with ENPLAN. January – June 2016.

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
17. UTILITIES AND SERVICE SYSTEMS. Would the project:				
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	❑	❑	❑	X
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	❑	❑	❑	X
c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	❑	❑	❑	X
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	❑	❑	X	❑
e. Result in a determination by the 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
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	❑	❑	X	❑
g. Comply with federal, state, and local statutes and regulations related to solid waste?	❑	❑	❑	X

Discussion

a.

The proposed project would not exceed wastewater treatment requirements of the North Coast RWQCB. Minor quantities of wastewater may be generated during project construction, but no additional wastewater would be generated during project operation. No impact would occur.

b.

Construction of the proposed project would not require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities.

c.

Project implementation would not require the construction or expansion of stormwater drainage facilities.

d.

The proposed project would not require additional water supplies, or new or expanded entitlements. Relatively small amounts of water would be consumed during project construction, and no increase in water consumption would occur as a result of project implementation.

e.
Minor quantities of wastewater may be generated during project construction (e.g., through use of port-a-potties), but no wastewater would be generated during project operation. The proposed project would not require new wastewater treatment capacity.

f.
Construction of the proposed project would result in a minimal amount of debris that would be disposed of at Black Butte Transfer Station in Mt. Shasta, where it would be consolidated and ultimately trucked to Rogue Disposal & Recycling landfill in southern Oregon. This one-time impact is not expected to significantly affect the capacity of the landfill.

g.
The proposed project would comply with all federal, state, and local statutes and regulations as they relate to solid waste.

Mitigation
None necessary

Documentation
Mike Reusze, Solid Waste & Flood Control Supervisor – Siskiyou County, General Services, Sanitation Division, personal communication, May 2015.
PACE Engineering, Inc. Personal Communication with ENPLAN. January – June 2016.
Rouge Disposal Company. 2015. Who We Are. http://roguedisposal.com/who-we-are/. Accessed October 2015.

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact

18. MANDATORY FINDINGS OF SIGNIFICANCE.

a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	❑	X	❑	❑
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	❑	❑	X	❑
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	❑	❑	X	❑

Discussion

a.

As documented in the Initial Study, project implementation could result in possible effects on special-status plant species, disturbance of nesting migratory birds, disturbance of subsurface cultural resources (if present), increased soil erosion and water quality degradation, increased air emissions, temporarily increased noise levels, and possible exposure of the public or environment to hazardous materials. Design features incorporated into the project would avoid or reduce certain potential environmental impacts, as would compliance with existing regulations and permit conditions. Remaining impacts can be reduced to levels that are less than significant through implementation of the mitigation measures presented in the Initial Study. Because the City of Weed will adopt mitigation measures as conditions of project approval and will be responsible for ensuring their implementation, it has been determined that the project will not have a significant adverse impact on the environment.

b.

Based on the discussion and findings of this Initial Study and in consideration of recently approved projects in the general area, there is no evidence to suggest that the project would have impacts that are cumulatively considerable.

c.

As described herein, the project does not have characteristics that could cause substantial adverse effects on human beings either directly or indirectly.

IV. LIST OF PREPARERS

ENPLAN

Donald Burk ..... Environmental Services Manager
Lindsay Kantor ..... Environmental Planner
John Luper ..... Environmental Scientist
Darrin Doyle ..... Environmental Scientist
Sam Huscher ..... Environmental Scientist
Heidi Shaw ..... Archaeologist
Jessica McCoy ..... Archaeologist
Hazen Kazaks ..... Production Coordinator

PACE Engineering, Inc.

Paul Reuter ..... Managing Engineer
Curtis Paget ..... Staff Engineer

City of Weed

Ron Stock ..... City Administrator

APPENDIX A.

- California Natural Diversity Database RareFind Query Summary
- U.S. Fish and Wildlife Service IPaC Trust Resource Report
- Potential for Federally Listed, Proposed, and Candidate Species, and Special-Status Species Identified by the CNDDB to Occur on the Project Site
- List of Vascular Plant Species Observed

RareFind (CNDDB) Report Summary (February 2016 Data)

Sewer Replacement Project

Listed Element	Quadrangle[1]						
	LS	JF	WE	HO	ME	MS	Status[2]
Wildlife							
Bald eagle	●		●				FD, SE, SFP
California gull	●	●	●				None
Cascades frog			●		●		SSSC
Fisher - West Coast DPS					●	●	FP, SC, SSSC
Gray-headed pika				●			None
Obscure bumble bee				●		●	None
Sierra Nevada red fox				●		●	ST
Silver-haired bat				●		●	None
Siskiyou hesperian			●	●			None
Western pond turtle			●				SSSC
Western yellow-billed cuckoo			●				FT, SE
Plants							
Alkali hymenoxys			●				2B.2
Coast fawn lily			●				2B.2
Oregon fireweed					●	●	1B.2
Pallid bird's-beak			●	●		●	1B.2
Peck's lomatium			●				2B.2
Pickering's ivesia			●				1B.2
Shasta chaenactis			●				1B.3
Snow fleabane daisy				●			2B.3
Subalpine aster			●	●	●	●	2B.3
Woolly balsamroot			●		●		1B.2

Shading indicates the quadrangle in which the project site is located. The 5-mile search radius contains portions of the following quadrangles: Lake Shastina, Juniper Flat, Weed, Hotlum, Mount Eddy, and City of Mount Shasta.

[1]Quadrangle Code

LS = Lake Shastina
JF = Juniper Flat
HO = Hotlum
WE = Weed
ME = Mount Eddy
MS = City of Mount Shasta

[2]Status Codes

Federal
FE = Federally Listed - Endangered
FT = Federally Listed - Threatened
FC = Federal Candidate Species
FP = Federal Proposed Species
FD = Federally Delisted
FSC = Federal Species of Concern

State
SE = State Listed - Endangered
SR = State Rare
SE = State Listed - Endangered
ST = State Listed - Threatened
SC = State Candidate
SD = State Delisted
SSSC = State Species of Special Concern
SFP = State Fully Protected

Other
None = Non special-status species

California Rare Plant Rank
List 1A = Presumed extirpated in California and either rare or extinct elsewhere
List 1B = Rare or Endangered in California and elsewhere
List 2A = Presumed extirpated in California, but more common elsewhere
List 2B = Rare or Endangered in California, but more common elsewhere
List 3 = Plants for which we need more information - Review list (generally not considered special-status, unless unusual circumstances warrant)
List 4 = Plants of limited distribution - Watch list (generally not considered special-status, unless unusual circumstances warrant)

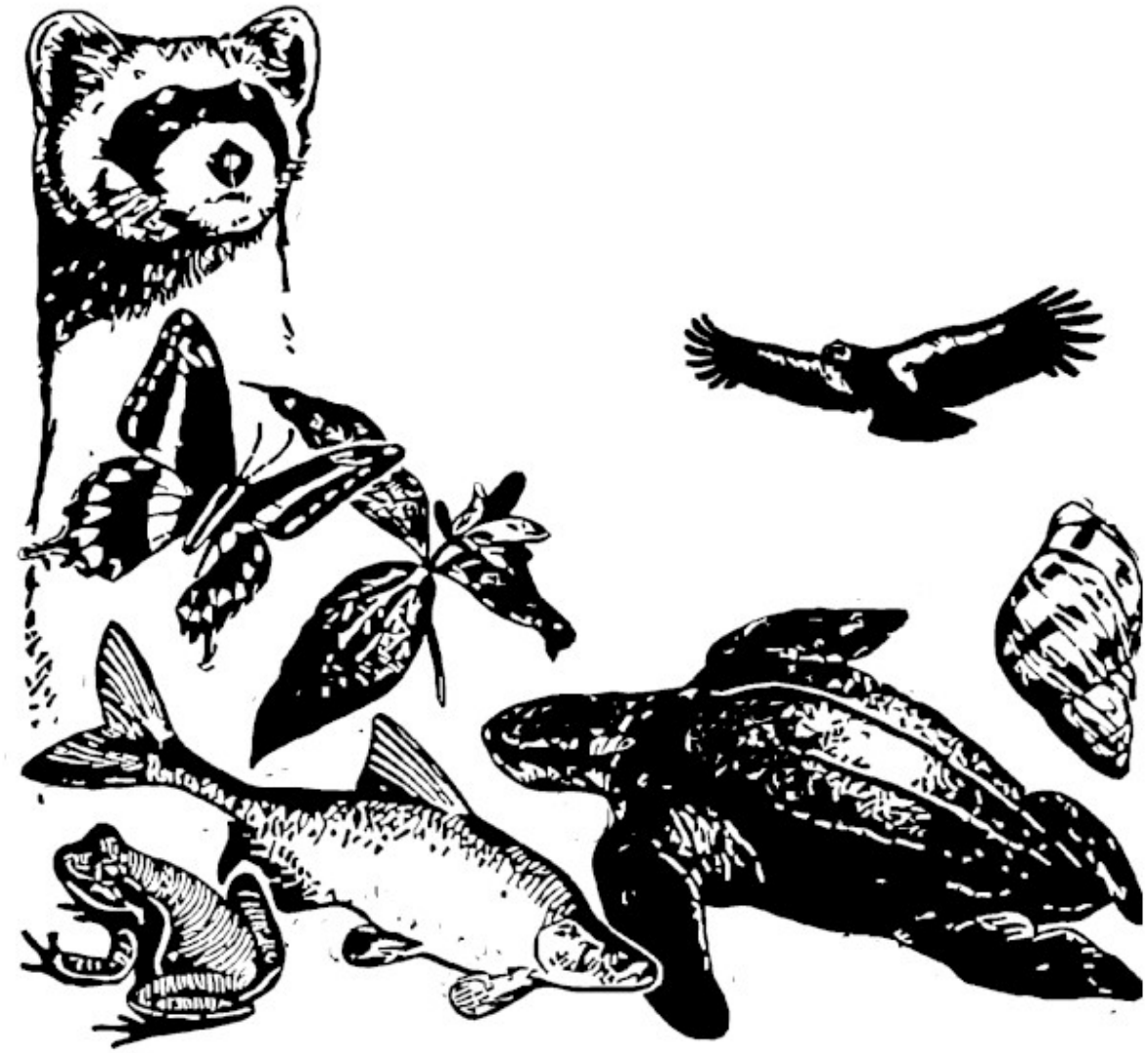
Threat Ranks
0.1 = Seriously Threatened in California
0.2 = Fairly Threatened in California
0.3 = Not Very Threatened in California

U.S. Fish & Wildlife Service

IPaC Trust Resource Report

Generated February 19, 2016 12:54 PM MST, IPaC v2.3.2

This report is for informational purposes only and should not be used for planning or analyzing project level impacts. For project reviews that require U.S. Fish & Wildlife Service review or concurrence, please return to the IPaC website and request an official species list from the Regulatory Documents page.



IPaC - Information for Planning and Conservation (https://ecos.fws.gov/ipac/): A project planning tool to help streamline the U.S. Fish & Wildlife Service environmental review process.

US Fish & Wildlife Service

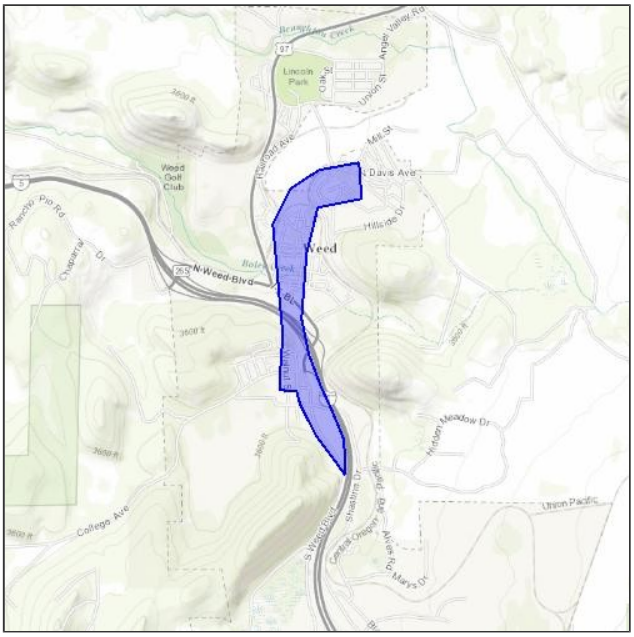
IPaC Trust Resource Report

LOCATION

Siskiyou County, California

IPAC LINK

https://ecos.fws.gov/ipac/project/V5B7B-WYJQN-FR7NM-ZW64I-DH5TKA



U.S. Fish & Wildlife Contact Information

Trust resources in this location are managed by:

Yreka Fish And Wildlife Office
1829 South Oregon Street
Yreka, CA 96097-3446
(530) 842-5763

Endangered Species

Proposed, candidate, threatened, and endangered species are managed by the Endangered Species Program of the U.S. Fish & Wildlife Service.

This USFWS trust resource report is for informational purposes only and should not be used for planning or analyzing project level impacts.

For project evaluations that require FWS concurrence/review, please return to the IPaC website and request an official species list from the Regulatory Documents section.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency.

A letter from the local office and a species list which fulfills this requirement can only be obtained by requesting an official species list from the Regulatory Documents section in IPaC.

The list of species below are those that may occur or could potentially be affected by activities in this location:

Amphibians

Oregon Spotted Frog Rana pretiosa — Threatened

CRITICAL HABITAT
There is **proposed** critical habitat designated for this species.

https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=D02A

Birds

Northern Spotted Owl Strix occidentalis caurina — Threatened

CRITICAL HABITAT
There is **final** critical habitat designated for this species.

https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B08B

Yellow-billed Cuckoo Coccyzus americanus — Threatened

CRITICAL HABITAT
There is **proposed** critical habitat designated for this species.

https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B06R

Crustaceans

Conservancy Fairy Shrimp Branchinecta conservatio — Endangered

CRITICAL HABITAT
There is **final** critical habitat designated for this species.

https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=K03D

Vernal Pool Fairy Shrimp Branchinecta lynchi — Threatened

CRITICAL HABITAT
There is **final** critical habitat designated for this species.

https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=K03G

Vernal Pool Tadpole Shrimp Lepidurus packardi — Endangered

CRITICAL HABITAT
There is **final** critical habitat designated for this species.

https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=K048

Fishes

Lost River Sucker Deltistes luxatus — Endangered

CRITICAL HABITAT
There is **final** critical habitat designated for this species.

https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=E052

Shortnose Sucker Chasmistes brevirostris — Endangered

CRITICAL HABITAT
There is **final** critical habitat designated for this species.

https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=E055

Flowering Plants

Gentner's Fritillary Fritillaria gentneri — Endangered

CRITICAL HABITAT
No critical habitat has been designated for this species.

https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=Q0V6

Hoover's Spurge Chamaesyce hooveri — Threatened

CRITICAL HABITAT
There is **final** critical habitat designated for this species.

https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=Q0E9

Slender Orcutt Grass Orcuttia tenuis — Threatened

CRITICAL HABITAT
There is **final** critical habitat designated for this species.

https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=Q1AZ

Mammals

Fisher Martes pennanti — Proposed Threatened

CRITICAL HABITAT
No critical habitat has been designated for this species.

https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=A0HS

Gray Wolf Canis lupus — Endangered

CRITICAL HABITAT
No critical habitat has been designated for this species.

https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=A00D

Critical Habitats

There are no critical habitats in this location

Migratory Birds

Birds are protected by the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act.

Any activity which results in the take of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service (1). There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

Any person or organization who plans or conducts activities that may result in the take of migratory birds is responsible for complying with the appropriate regulations and implementing appropriate conservation measures.

Additional information can be found using the following links:

- Birds of Conservation Concern
  http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Conservation measures for birds
  http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Year-round bird occurrence data
  http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/akn-histogram-tools.php

The following species of migratory birds could potentially be affected by activities in this location:

Bald Eagle Haliaeetus leucocephalus — Bird of conservation concern
Year-round
https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B008

Black Swift Cypseloides niger — Bird of conservation concern
Season: Breeding
https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0FW

Brewer's Sparrow Spizella breweri — Bird of conservation concern
Season: Breeding
https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0HA

Calliope Hummingbird Stellula calliope — Bird of conservation concern
Season: Breeding
https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0K3

Flammulated Owl Otus flammeolus — Bird of conservation concern
Season: Breeding
https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0DK

Fox Sparrow Passerella iliaca — Bird of conservation concern
Season: Breeding

Green-tailed Towhee Pipilo chlorurus — Bird of conservation concern
Season: Breeding
https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0IO

Lewis's Woodpecker Melanerpes lewis — Bird of conservation concern
Year-round
https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0HQ

Loggerhead Shrike Lanius ludovicianus — Bird of conservation concern
Year-round
https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0FY

Oak Titmouse Baeolophus inornatus — Bird of conservation concern
Year-round
https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0MJ

Olive-sided Flycatcher Contopus cooperi — Bird of conservation concern
Season: Breeding
https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0AN

Peregrine Falcon Falco peregrinus — Bird of conservation concern
Year-round
https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0FU

Purple Finch Carpodacus purpureus — Bird of conservation concern
Year-round

Sage Thrasher Oreoscoptes montanus — Bird of conservation concern
Season: Breeding
https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0ID

Short-eared Owl Asio flammeus — Bird of conservation concern
Year-round
https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0HD

Snowy Plover Charadrius alexandrinus — Bird of conservation concern
Season: Breeding

Swainson's Hawk Buteo swainsoni — Bird of conservation concern
Season: Breeding
https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B070

Western Grebe aechmophorus occidentalis — Bird of conservation concern
Season: Breeding
https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0EA

White Headed Woodpecker Picoides albolarvatus — Bird of conservation concern
Year-round
https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0HU

Williamson's Sapsucker Sphyrapicus thyroideus — Bird of conservation concern
Year-round
https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0FX

Willow Flycatcher Empidonax traillii — Bird of conservation concern
Season: Breeding
https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0F6

Refuges

Any activity proposed on National Wildlife Refuge lands must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuges in this location

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal Statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

DATA LIMITATIONS

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

DATA EXCLUSIONS

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

DATA PRECAUTIONS

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

There are no wetlands in this location

Potential for Federally Listed, Proposed, and Candidate Species Identified by the IPaC Trust Resource Report, and Special-Status Species Identified by the CNDDB to Occur on the Project Site

COMMON NAME	SCIENTIFIC NAME	STATUS	GENERAL HABITAT DESCRIPTION	HABITAT PRESENT (Y/N)	CRITICAL HABITAT PRESENT (Y/N)	SPECIES PRESENT (Y/N/POT.)	RATIONALE/COMMENTS
Plants							
Alkali hymenoxys	*Hymenoxys lemmonii*	2B.2	Alkali hymenoxys is a perennial herb that occurs in Great Basin scrub, lower montane coniferous forest, and subalkaline soils in meadows and seeps. The species is reported between 800 and 3,300 feet in elevation. The flowering period is June through September.	No	No	No	No potentially suitable habitats for alkali hymenoxys are present in the project site. The species was not observed during the botanical survey and is not expected to be present.
Coast fawn lily	*Erythronium revolutum*	2B.2	Coast fawn lily, a perennial herb, occurs along streambanks, bogs, and fens in broadleafed upland forests and North Coast coniferous forests. The species is reported between sea level and 5,300 feet in elevation. The flowering period is from March through August.	No	No	No	No potentially suitable habitats for coast fawn lily are present in the project site. The species was not observed during the botanical survey and is not expected to be present.
Gentner's fritillary	*Fritillaria gentneri*	FE, 1B.1	Gentner's fritillary is a perennial bulbiferous herb that occurs in chaparral and cismontane woodland habitats, sometimes in serpentine soils. The species is found between 3,200 and 3,700 feet in elevation. The flowering period is April through May.	No	No	No	Chaparral and cismontane woodland habitats are not present on the project site, Gentner's fritillary is not known or expected to occur in the project site. The species is known from only two locations in California, both near the Oregon border; the nearest population is approximately 35 miles away. The species was not observed during the field survey.
Hoover's spurge	*Chamaesyce hooveri*	FT, 1B.2	Hoover's spurge is an annual herb that occurs in vernal pools. The species is found between sea level and 900 feet in elevation. The flowering period is July through October.	No	No	No	No vernal pools are present in the project site. Further, the project site is well above the known elevational range of Hoover's spurge. Hoover's spurge was not observed during the botanical survey and is not expected to be present.

Potential for Federally Listed, Proposed, and Candidate Species Identified by the IPaC Trust Resource Report, and Special-Status Species Identified by the CNDDB to Occur on the Project Site

COMMON NAME	SCIENTIFIC NAME	STATUS	GENERAL HABITAT DESCRIPTION	HABITAT PRESENT (Y/N)	CRITICAL HABITAT PRESENT (Y/N)	SPECIES PRESENT (Y/N/POT.)	RATIONALE/COMMENTS
Oregon fireweed	*Epilobium oreganum*	1B.2	Oregon fireweed is associated with springs, bogs, fens, and meadows in montane coniferous forest. The species sometimes occurs on serpentine soils. The species is reported between 1,600 and 7,400 feet in elevation. The flowering period is June through September.	No	No	No	No potentially suitable habitats for Oregon fireweed is present in the project site. The species was not observed during the botanical survey and is not expected to be present.
Pallid bird's beak	*Cordylanthus tenuis* spp. *pallescens*	1B.2	Pallid bird's-beak occurs on open volcanic alluvium within lower montane coniferous forest. The species is reported between 2,200 and 5,400 feet in elevation. The flowering period is July through September.	Yes	No	Pot.	A known population of pallid bird's beak is located approximately 740 feet south of the project site. Marginally suitable habitat for the species is present on the project site. The species may be present.
Peck's lomatium	*Lomatium peckianum*	2B.2	Peck's lomatium is a perennial herb that occurs on volcanic soils within cismontane woodland, chaparral, or juniper woodland. The species is reported between 2,300 and 5,900 feet in elevation. The flowering period is April through June.	No	No	No	No potentially suitable habitats for Peck's lomatium is present in the project site. The species was not observed during the botanical survey and is not expected to be present.
Pickering's ivesia	*Ivesia pickeringii*	1B.2	Pickering's ivesia is a perennial herb that occurs in mesic, clay, often serpentine soils, in lower montane coniferous forest or meadows and seeps. The species is known to occur between 2,500 and 4,500 feet above sea level in Siskiyou and Trinity counties. The flowering period is June through October.	No	No	No	No potentially suitable habitat for Pickering's ivesia is present on the project site. The species was not observed during the botanical survey and is not expected to be present.

Potential for Federally Listed, Proposed, and Candidate Species Identified by the IPaC Trust Resource Report, and Special-Status Species Identified by the CNDDB to Occur on the Project Site

COMMON NAME	SCIENTIFIC NAME	STATUS	GENERAL HABITAT DESCRIPTION	HABITAT PRESENT (Y/N)	CRITICAL HABITAT PRESENT (Y/N)	SPECIES PRESENT (Y/N/POT.)	RATIONALE/COMMENTS
Shasta chaenactis	*Chaenactis suffrutescens*	1B.3	Shasta chaenactis occurs on rocky open slopes, cobbly river terraces, and along roadcuts. The species is found between 2,400 and 8,800 feet in elevation. The flowering period is May through September.	Yes	No	No	Review of CNDDB records found that one occurrence of Shasta chaenactis was reported approximately 2.5 miles northwest of the project site in the vicinity of Old Eaglewood Road in 1889. Marginally suitable habitat for Shasta chaenactis is present in the project area. However, the species was not observed during the botanical survey and is not expected to be present.
Slender Orcutt grass	*Orcuttia tenuis*	FT, 1B.1	Slender Orcutt grass is an annual herb that occurs in vernal pools and similar habitats, occasionally on reservoir edges or stream floodplains, on clay soils with seasonal inundation in valley grassland to coniferous forest or sagebrush scrub. The species is found between 100 and 5,800 feet in elevation. The flowering period is May through September.	No	No	No	No vernal pools or other potentially suitable habitats for slender Orcutt grass are present in the project site. Slender Orcutt grass was not observed during the botanical survey and is not expected to be present.
Snow fleabane daisy	*Erigeron nivalis*	2B.3	Snow fleabane daisy, a perennial herb, occurs in alpine boulder and rock fields, on rocky volcanic substrates, and in association with meadows and seeps. The species is reported between 5,600 and 9,600 feet in elevation. The flowering period is July and August.	No	No	No	No suitable habitat for snow fleabane daisy is present on the project site. Further, the project site is outside of the known elevation range of the species. The species was not observed during the botanical survey and is not expected to be present.
Subalpine aster	*Eurybia merita*	2B.3	Subalpine aster, a perennial herb, occurs on moist soils in upper montane coniferous forest. The species is reported between 4,000 and 6,300 feet in elevation. The flowering period is July through August.	No	No	No	No potentially suitable habitat for subalpine aster is present on the project site. The species was not observed during the botanical survey and is not expected to be present.

Potential for Federally Listed, Proposed, and Candidate Species Identified by the IPaC Trust Resource Report, and Special-Status Species Identified by the CNDDB to Occur on the Project Site

COMMON NAME	SCIENTIFIC NAME	STATUS	GENERAL HABITAT DESCRIPTION	HABITAT PRESENT (Y/N)	CRITICAL HABITAT PRESENT (Y/N)	SPECIES PRESENT (Y/N/POT.)	RATIONALE/COMMENTS
Whitebark pine	*Pinus albicaulis*	FC	In California, whitebark pine typically occurs in cold, windy, high elevation sites in the Coast and Cascade ranges and the Sierra Nevada. The species is found at elevations ranging from 6,500 to 12,200 feet.	No	No	No	The project site is well below the elevational range of whitebark pine. Whitebark pine was not observed during the botanical survey and is not expected to be present.
Woolly balsamroot	*Balsamorhiza lanata*	1B.2	Woolly balsamroot, a perennial herb, occurs in open areas and grassy slopes in cismontane woodland in Siskiyou County. The species is reported between 2,600 and 6,300 feet. The flowering period is April through June.	Yes	No	No	Marginally suitable habitat for woolly balsamroot is present on the project site. However, the species was not observed during the botanical survey and is not expected to be present.
Invertebrates							
Conservancy fairy shrimp	*Branchinecta conservatio*	FE	Conservancy fairy shrimp inhabit large, cool-water vernal pools with moderately turbid water.	No	No	No	No vernal pools or other potentially suitable habitats for Conservancy fairy shrimp are present in the project site. Conservancy fairy shrimp would thus not be present.
Vernal pool fairy shrimp	*Branchinecta lynchi*	FT	Vernal pool fairy shrimp inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump or basalt-flow depression pools.	No	No	No	No vernal pools or other potentially suitable habitats for vernal pool fairy shrimp are present in the project site. Vernal pool fairy shrimp would thus not be present.
Vernal pool tadpole shrimp	*Lepidurus packardi*	FE	Vernal pool tadpole shrimp occur in vernal pools in California's Central Valley and in the surrounding foothills.	No	No	No	No vernal pools or other potentially suitable habitats for vernal pool tadpole shrimp are present in the project site. Vernal pool tadpole shrimp would thus not be present.

Potential for Federally Listed, Proposed, and Candidate Species Identified by the IPaC Trust Resource Report, and Special-Status Species Identified by the CNDDB to Occur on the Project Site

COMMON NAME	SCIENTIFIC NAME	STATUS	GENERAL HABITAT DESCRIPTION	HABITAT PRESENT (Y/N)	CRITICAL HABITAT PRESENT (Y/N)	SPECIES PRESENT (Y/N/POT.)	RATIONALE/COMMENTS
Birds							
Bald eagle	*Haliaeetus leucocephalus*	FD, SE, SFP	Bald eagles nest in large, old-growth trees or snags in mixed stands near open bodies of water. Adults tend to use the same breeding areas year after year and often use the same nest, though a breeding area may include one or more alternate nests. Bald eagles usually do not begin nesting if human disturbance is evident. In California, the bald eagle nesting season is from February through July.	No	No	No	No suitable nesting habitat for the bald eagle is present on the project site or vicinity. Thus, the bald eagle is not expected to nest on the project site.
Northern spotted owl	*Strix occidentalis caurina*	FT, SC, SSSC	Northern spotted owls inhabit dense, old-growth, multi-layered mixed conifer, redwood, and Douglas-fir forests from sea level to approximately 7,600 feet in elevation. Northern spotted owls typically nest in tree cavities, the broken tops of trees, or in snags.	No	No	No	No old-growth forest or potentially suitable nesting trees/snags are present on the project site or vicinity. Thus, the spotted owl is not expected to nest on the project site.
Western yellow-billed cuckoo	*Coccyzus americanus occidentalis*	FT, SE	Western yellow-billed cuckoos inhabit and nest in extensive deciduous riparian thickets or forests with dense, low-level or understory foliage, and which abut slow-moving watercourses, backwaters, or seeps. Willows are almost always a dominant component of the vegetation.	No	No	No	No suitable nesting habitat occurs on the project site for the western yellow-billed cuckoo. Thus, yellow-billed cuckoos are not expected to nest on the project site.
Amphibians							
Cascades frog	*Rana cascadae*	SSSC	In the Klamath Mountains and southern Cascades of Northern California, the Cascades frog is typically found above 5,000 feet in elevation. Cascades frogs inhabit alpine lakes, inlet and outlet streams to mountain lakes, ponds, and meadows.	No	No	No	No suitable habitat occurs on the project site for Cascades frog. The Cascades frog would thus not be present.

Potential for Federally Listed, Proposed, and Candidate Species Identified by the IPaC Trust Resource Report, and Special-Status Species Identified by the CNDDB to Occur on the Project Site

COMMON NAME	SCIENTIFIC NAME	STATUS	GENERAL HABITAT DESCRIPTION	HABITAT PRESENT (Y/N)	CRITICAL HABITAT PRESENT (Y/N)	SPECIES PRESENT (Y/N/POT.)	RATIONALE/COMMENTS
Oregon spotted frog	*Rana pretiosa*	FT, SSSC	Oregon spotted frog is typically found in or near a perennial body of water that includes zones of shallow water and abundant emergent or floating aquatic plants, which the frogs use as basking sites and for escape cover. The frog prefers large, warm marshes (approximate minimum size of 9 acres), and is thought to be extirpated from California.	No	No	No	No suitable habitat occurs on the project site for Oregon spotted frog. The Oregon spotted frog would thus not be present.
Western pond turtle	*Emys marmorata*	SSSC	The western pond turtle associates with permanent or nearly permanent water in a variety of habitats. This turtle is typically found in quiet water environments. Pond turtles require basking sites such as partially submerged logs, rocks, or open mud banks, and suitable (sandy banks or grassy open fields) upland habitat for egg-laying. Nesting and courtship occur during spring. Nests are generally constructed within 500 feet of a waterbody, but some nests have been found up to 1,200 feet away. Pond turtles leave aquatic sites in the fall and overwinter in uplands nearby. Pond turtles return to aquatic sites in spring.	No	No	No	No suitable habitat occurs on the project site for western pond turtle. The western pond turtle would thus not be present.
Fish							
Lost River sucker	*Deltistes luxatus*	FE, SE, SFP	The Lost River sucker is native to the Lost River and Upper Klamath River, and is adapted to lakes within these watersheds. In lakes and reservoirs, adult suckers prefer shallow water with vegetation. Lake populations spawn in tributary streams, or around springs near the shoreline. River populations spawn in riffles or runs with gravel or cobble substrate, moderate flow, and at depths less than four feet. Spawning occurs from late February to early May.	No	No	No	No suitable habitat occurs on the project site for Lost River sucker. The Lost River sucker would thus not be present.

Potential for Federally Listed, Proposed, and Candidate Species Identified by the IPaC Trust Resource Report, and Special-Status Species Identified by the CNDDB to Occur on the Project Site

COMMON NAME	SCIENTIFIC NAME	STATUS	GENERAL HABITAT DESCRIPTION	HABITAT PRESENT (Y/N)	CRITICAL HABITAT PRESENT (Y/N)	SPECIES PRESENT (Y/N/POT.)	RATIONALE/COMMENTS
Shortnose sucker	*Chasmistes brevirostris*	FE, SE, SFP	The shortnose sucker is known to inhabit Upper Klamath Lake and its tributaries, the Lost River, Clear Lake, Gerber Reservoir, the Tule Lake sump, and the Klamath River upstream of Keno. Lake populations spawn in tributary streams, or around springs near the shoreline. River populations spawn in riffles or runs with gravel or cobble substrate, moderate flow, and at depths less than four feet. Spawning occurs from early April to early May.	No	No	No	No suitable habitat occurs on the project site for shortnose sucker. The shortnose sucker would thus not be present.
Mammals							
Fisher - West Coast DPS	*Martes pennanti*	FP, SC, SSSC	Fishers inhabit mixed conifer forests dominated by Douglas-fir, although they also are encountered frequently in higher elevation fir and pine forests, and mixed evergreen/broadleaf forests. Suitable habitat for fishers consists of large areas of mature, dense forest stands with snags and greater than 50 percent canopy closure. Fishers den in cavities in large trees, snags, logs, rocky areas, or shelters provided by slash or brush piles. Fishers are very sensitive to human activities. Den sites are most often found in areas with no human disturbance.	No	No	No	No suitable habitat for fishers occurs in the project site. Further, the fisher is not expected to den on the site due to the level of human activity nearby.

Potential for Federally Listed, Proposed, and Candidate Species Identified by the IPaC Trust Resource Report, and Special-Status Species Identified by the CNDDB to Occur on the Project Site

COMMON NAME	SCIENTIFIC NAME	STATUS	GENERAL HABITAT DESCRIPTION	HABITAT PRESENT (Y/N)	CRITICAL HABITAT PRESENT (Y/N)	SPECIES PRESENT (Y/N/POT.)	RATIONALE/COMMENTS
Gray wolf	*Canis lupus*	FE, SE	Gray wolves are habitat generalists and populations can be found in any type of habitat in the Northern Hemisphere from about 20° latitude to the polar ice pack. Key components of preferred wolf habitat include a year-round abundance of natural prey, secluded denning and rendezvous sites, and sufficient space with minimal human disturbance. Dens may be a hollow log or a tunnel excavated in loose soil. A den may have two or more entrances, which are usually indicated by a large pile of dirt. Den sites are often near water, and are usually elevated to detect approaching enemies. Wolf packs establish and defend territories that may range from 20 to 400 square miles. Wolves travel over large areas to hunt, and may cover as much as 30 miles in a day. Young wolves may disperse several hundred miles to seek out a mate or to establish their own pack.	No	No	No	A gray wolf pack, known as the "Shasta Pack" became established in southeastern Siskiyou County in the spring of 2015. Continued dispersal of wolves into California is expected. Although gray wolves can travel approximately 30 miles each day, and could potentially stray near the project site, gray wolves would not be expected to stray onto or den in the project site given the extent of human activity and urbanization in and adjacent to the project site.
Sierra Nevada red fox	*Vulpes vulpes necator*	ST	The Sierra Nevada red fox inhabits remote mountainous areas where encounters with humans are rare. Preferred habitat appears to be red fir and lodgepole pine forests in the subalpine and alpine zones of the Sierra Nevada. This species may hunt in forest openings, meadows, and barren rocky areas associated with its high elevation habitats.	No	No	No	No suitable habitat for Sierra Nevada red fox occurs in the project site. Further, the Sierra Nevada red fox is not expected to den on the site due to the level of human activity nearby.

Federal Status
FE = Federally Listed – Endangered
FT = Federally Listed – Threatened
FC = Federal Candidate Species
FP = Federal Proposed Species
FD = Federally Delisted
FSC = Federal Species of Concern

State Status
SFP = State Fully Protected
SR = State Rare
SE = State Listed – Endangered
ST = State Listed – Threatened
SC = State Candidate
SD = State Delisted
SSSC = State Species of Special Concern

California Rare Plant Rank
List 1A = Presumed extirpated in California and either rare or extinct elsewhere
List 1B = Rare or Endangered in California and elsewhere
List 2A = Presumed extirpated in California, but more common elsewhere
List 2B = Rare or Endangered in California, but more common elsewhere
List 3 = Plants for which we need more information - Review list (generally not considered special-status, unless unusual circumstances warrant)
List 4 = Plants of limited distribution - Watch list (generally not considered special-status, unless unusual circumstances warrant)

Threat Ranks
0.1 = Seriously Threatened in California
0.2 = Fairly Threatened in California
0.3 = Not Very Threatened in California

CHECKLIST OF VASCULAR PLANT SPECIES OBSERVED

City of Weed Sewer Replacement Project

May 12 and June 23, 2016

Adoxaceae	**Muskroot Family**
Sambucus nigra subsp. *caerulea*	Blue elderberry
Amaryllidaceae	**Amaryllis Family**
Narcissus pseudonarcissus	Daffodil
Apiaceae	**Carrot Family**
Anthriscus caucalis	Bur-chervil
Cymopterus terebinthinus var. *californicus*	California cymopterus
Apocynaceae	**Dogbane Family**
Vinca major	Greater periwinkle
Asteraceae	**Sunflower Family**
Achillea millefolium	Common yarrow
Agoseris grandiflora	Bigflower agoseris
Ambrosia sp.	Ragweed
Bidens sp.	Sticktight
Centaurea cyanus	Bachelor's button
Centaurea solstitialis	Yellow star thistle
Cichorium intybus	Chicory
Ericameria sp.	Goldenbush
Eriophyllum lanatum	Woolly sunflower
Gaillardia aristata	Blanketflower
Helianthella californica var. *nevadensis*	Nevada helianthella
Lactuca serriola	Prickly lettuce
Lagophylla ramosissima	Lagophylla ramosissima
Madia sp.	Tarweed
Madia exigua	Little tarweed
Matricaria discoidea	Pineapple weed
Silybum marianum	Milk thistle
Taraxacum officinale	Dandelion
Tragopogon dubius	Goat’s beard
Boraginaceae	**Borage Family**
Amsinckia menziesii	Menzies' fiddleneck
Phacelia heterophylla	Varileaf phacelia
Brassicaceae	**Mustard Family**
Alyssum sp.	Alyssum
Draba verna	Whitlow grass
Isatis tinctoria	Dyer's woad
Lepidium virginicum	Virginia pepperweed
Lepidium perfoliatum	Round-leaved peppergrass
Sisymbrium altissimum	Tall tumblemustard
Caprifoliaceae	**Honeysuckle Family**
Symphoricarpos sp.	Snowberry

CHECKLIST OF VASCULAR PLANT SPECIES OBSERVED

City of Weed Sewer Replacement Project

Caryophyllaceae	**Pink Family**
Cerastium fontanum ssp. *vulgare*	Big chickweed
Holosteum umbellatum subsp. *umbellatum*	Jagged chickweed
Scleranthus annuus subsp. *annuus*	German knotgrass
Stellaria media	Common chickweed
Cupressaceae	**Cypress Family**
Calocedrus decurrens	Incense cedar
Cyperaceae	**Sedge Family**
Carex sp.	Sedge
Dennstaedtiaceae	**Bracken Family**
Pteridium aquilinum var. *pubescens*	Bracken fern
Equisetaceae	**Horsetail Family**
Equisetum sp.	Horsetail
Ericaceae	**Heath Family**
Arctostaphylos patula	Green-leaved manzanita
Euphorbiaceae	**Spurge Family**
Chamaesyce serpyllifolia subsp. *serpyllifolia*	Thymeleaf sandmat
Fabaceae	**Legume Family**
Acmispon americanus	Spanish lotus
Acmispon sp.	Lotus
Cytisus scoparius	Scotch broom
Lathyrus latifolius	Perennial sweet pea
Lupinus lepidus var. *sellus*	Dwarf tidy lupine
Medicago lupulina	Black medick
Medicago sativa	Alfalfa
Melilotus alba	White sweetclover
Robinia pseudoacacia	Black locust
Trifolium arvense	Rabbitfoot clover
Trifolium dubium	Shamrock clover
Trifolium pratense	Red clover
Trifolium repens	White clover
Vicia americana subsp. *americana*	American vetch
Vicia villosa	Winter vetch
Fagaceae	**Oak Family**
Quercus kelloggii	California black oak
Geraniaceae	**Geranium Family**
Erodium cicutarium	Red-stemmed filaree
Hypericaceae	**St. John's-wort Family**
Hypericum perforatum	Klamath weed
Iridaceae	**Iris Family**
Iris sp.	Iris (horticultural)

CHECKLIST OF VASCULAR PLANT SPECIES OBSERVED

City of Weed Sewer Replacement Project

Juncaceae	**Rush Family**
Juncus balticus subsp. *ater*	Baltic rush
Lamiaceae	**Mint Family**
Marrubium vulgare	Horehound
Loasaceae	**Loasa Family**
Mentzelia dispersa	Bushy blazingstar
Malvaceae	**Mallow Family**
Malva sp.	Mallow
Sidalcea asprella	Harsh checker mallow
Montiaceae	**Miner's Lettuce Family**
Calyptridium monospermum	One-seeded pussypaws
Claytonia parviflora	Littleleaf miner's lettuce
Claytonia rubra	Miner's lettuce
Oleaceae	**Olive Family**
Syringa sp.	Lilac
Onagraceae	**Evening-Primrose Family**
Gayophytum sp.	Groundsmoke
Oenothera elata subsp. *hookeri*	Hooker's evening-primrose
Papaveraceae	**Poppy Family**
Eschscholzia californica	California poppy
Pinaceae	**Pine Family**
Pinus ponderosa	Ponderosa pine
Plantaginaceae	**Plantain Family**
Collinsia sp.	Collinsia
Penstemon speciosus	Royal penstemon
Plantago lanceolata	English plantain
Veronica arvensis	Corn speedwall
Poaceae	**Grass Family**
Apera interrupta	Dense silky bent
Bromus carinatus	California brome
Bromus hordeaceus	Soft brome
Bromus sterilis	Poverty brome
Bromus tectorum	Downy brome
Elymus hispidus	Intermediate wheatgrass
Elymus multisetus	Big squirreltail grass
Festuca arundinacea	Alta fescue
Festuca microstachys	Reflexed fescue
Festuca myuros	Foxtail fescue
Poa bulbosa	Bulbous bluegrass
Poa compressa	Canada bluegrass
Poa pratensis	Kentucky bluegrass

CHECKLIST OF VASCULAR PLANT SPECIES OBSERVED

City of Weed Sewer Replacement Project

Secale cereale	Rye
Stipa occidentalis	Western needlegrass
Polemoniaceae	**Phlox Family**
Collomia grandiflora	Large flowered collomia
Collomia heterophylla	Variable-leaved collomia
Polygonaceae	**Buckwheat Family**
Eriogonum nudum	Naked buckwheat
Polygonum aviculare subsp. *depressum*	Common knotweed
Rumex sp.	Dock
Rumex acetosella	Sheep sorrel
Rhamnaceae	**Buckthorn Family**
Ceanothus prostratus	Squaw carpet
Rosaceae	**Rose Family**
Horkelia tridentata	Three-toothed horkelia
Prunus sp.	Prunus
Purshia tridentata	Antelope bush
Rubus armeniacus	Himalayan blackberry
Rubus laciniatus	Cut-leaf blackberry
Rubiaceae	**Madder Family**
Galium aparine	Cleavers
Salicaceae	**Willow Family**
Populus balsamifera subsp. *trichocarpa*	Black cottonwood
Salix exigua	Sandbar willow
Salix sp. *(ligulifolia ?)*	Strapleaf willow?
Sapindaceae	**Soapberry Family**
Acer negundo	Box elder
Scrophulariaceae	**Snapdragon Family**
Verbascum thapsus	Woolly mullein
Themidaceae	**Brodiaea Family**
Dichelostemma multiflorum	Round-toothed ookow
Vitaceae	**Grape Family**
Parthenocissus sp.	Virginia creeper