CITY OF YREKA
SOUSA READY MIX, LLC.
CONCRETE BATCH PLANT PROJECT
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Prepared for:

CITY OF YREKA
701 FOURTH STREET
YREKA, CA 96097

Prepared by:

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MARCH 2016

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1.0 Introduction

1.1 INTRODUCTION AND REGULATORY GUIDANCE

This document is an Initial Study, with supporting environmental studies, which concludes that a Mitigated Negative Declaration is the appropriate California Environmental Quality Act (CEQA) document for the Sousa Ready Mix Concrete Batch Plant Project (project; proposed project). This Mitigated Negative Declaration has been prepared in accordance with the California Environmental Quality Act, Public Resources Code Section 21000 et seq., and the State CEQA Guidelines, California Code of Regulations Section 15000 et seq.

An initial study is conducted by a lead agency to determine whether a project may have a significant effect on the environment. In accordance with CEQA Guidelines Section 15063, an environmental impact report (EIR) must be prepared if an initial study indicates that the proposed project under review may have a potentially significant impact on the environment which cannot be initially avoided or mitigated to a level that is less than significant. A negative declaration may be prepared if the lead agency also prepares a written statement describing the reasons why the proposed project would not have a significant effect on the environment and therefore why it does not require the preparation of an EIR (CEQA Guidelines Section 15371). According to CEQA Guidelines Section 15070, a negative declaration is to be prepared for a project subject to CEQA when:

a) The initial study shows there is no substantial evidence, in light of the whole record before the agency, that the proposed project may have a significant effect on the environment, or

b) The initial study identifies potentially significant effects, but:

(1) Revisions in the project plans or proposals made by or agreed to by the applicant before the proposed negative declaration is released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur; and

(2) There is no substantial evidence, in light of the whole record before the agency, that the proposed project as revised may have a significant effect on the environment.

If revisions are adopted in the proposed project in accordance with CEQA Guidelines Section 15070(b), including the adoption of mitigation measures included in this document, a mitigated negative declaration is prepared.

1.2 LEAD AGENCY

The lead agency is the public agency with primary responsibility over a proposed project. Where two or more public agencies will be involved with a project, CEQA Guidelines Section 15051 provides criteria for identifying the lead agency. In accordance with CEQA Guidelines Section 15051(b)(1), "the lead agency will normally be the agency with general governmental powers, such as a city or county, rather than an agency with a single or limited purpose." Based on the criteria above, the City of Yreka (City) is the lead agency for the proposed Sousa Ready Mix Concrete Batch Plant Project.

1.3 PURPOSE AND DOCUMENT ORGANIZATION

The purpose of this Initial Study is to evaluate the potential environmental impacts of the proposed project. This document is divided into the following sections:

1.0 Introduction – This section provides an introduction and describes the purpose and organization of the document.

2.0 Project Information – This section provides general information regarding the project, including the project title, lead agency and address, contact person, brief description of the project location, General Plan land use designation, and zoning district, identification of surrounding land uses, and identification of other public agencies whose review, approval, and/or permits may be required. Also included in this section is a checklist of the environmental factors that are potentially affected by the project.

3.0 Project Description – This section provides a detailed description of the proposed project.

4.0 Environmental Checklist – This section describes the environmental setting and overview for each of the environmental subject areas, evaluates a range of impacts classified as "no impact," "less than significant impact," "less than significant impact with mitigation incorporated," and "potentially significant impact" in response to the environmental checklist.

5.0 References – This section identifies documents, websites, people, and other sources consulted during the preparation of this Initial Study.

1.4 EVALUATION OF ENVIRONMENTAL IMPACTS

Section 4.0, Environmental Checklist, is the analysis portion of this Initial Study. The section provides an evaluation of the potential environmental impacts of the project. Section 4.0 includes 18 environmental issue subsections, including CEQA Mandatory Findings of Significance. The environmental issue subsections, numbered 1 through 18, consist of the following:

1. Aesthetics
2. Agriculture Resources
3. Air Quality
4. Biological Resources
5. Cultural Resources
6. Geology and Soils
7. Greenhouse Gases
8. Hazards and Hazardous Materials
9. Hydrology and Water Quality
10. Land Use and Planning
11. Mineral Resources
12. Noise
13. Population and Housing
14. Public Services
15. Recreation
16. Transportation/Traffic
17. Utilities and Service Systems
18. Mandatory Findings of Significance

Each environmental issue subsection is organized in the following manner:

The **Setting** summarizes the existing conditions at the regional, subregional, and local level, as appropriate, and identifies applicable plans and technical information for the particular issue area.

The **Discussion of Impacts** includes a detailed discussion of each of the environmental issue checklist questions. The level of significance for each topic is determined by considering the predicted magnitude of the impact. Four levels of impact significance are evaluated in this Initial Study:

No Impact: No project-related impact to the environment would occur with project development.

Less Than Significant Impact: The impact would not result in a substantial adverse change in the environment. This impact level does not require mitigation measures.

Less Than Significant Impact With Mitigation Incorporated: An impact that may have a "substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project" (CEQA Guidelines Section 15382). However, the incorporation of mitigation measures that are specified after analysis would reduce the project-related impact to a less than significant level.

Potentially Significant Impact: An impact that is "potentially significant" but for which mitigation measures cannot be immediately suggested or the effectiveness of potential mitigation measures cannot be determined with certainty, because more in-depth analysis of the issue and potential impact is needed. In such cases, an EIR is required.

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2.0 Project Information

1. Project title:	Sousa Ready Mix Concrete Batch Plant Project
2. Lead agency name and address:	City of Yreka 701 Fourth Street Yreka, CA 96097
3. Contact person and phone number:	Liz Casson, City Clerk (530) 841-2324
4. Project location:	The proposed project is located in Yreka in Siskiyou County, California. The project area, which totals approximately 4.26 acres, is situated on APN 053-681-240 in Section 24 of Township 45 North, Range 7 West of the Mount Diablo Meridian (Latitude 41°43'58.5"N, Longitude 122°35'38.9"W). The project address is 319 South Phillipe Lane. (See **Figure 3.0-1** for project location.)
5. Project sponsor's name and address:	Sousa Ready Mix, LLC P.O. Box 157 Mt. Shasta, CA 96064
6. General Plan designation:	Industrial (I)
7. Zoning:	Heavy Industrial (M-2)
8. Description of project:	Sousa Ready Mix has requested the approval of a Conditional Use Permit to allow the construction of a concrete batch plant, complete with a small portable office trailer, aggregate storage area, truck and auto parking, precast concrete area, and concrete truck washout basin. The office would be portable and inclusive of restroom facilities, a break room, and a batch plant control room. Future development plans for the site include the construction of a shop building and truck scales. The primary use at the site would be the production of ready-mix concrete; wholesale aggregate sales and the fabrication of precast concrete products are proposed as secondary uses dependent on the sales generated from ready-mix concrete. The proposed use requires the flexibility to operate 24 hours a day, 7 days a week, as nighttime deliveries are expected approximately once a month. The proposed project site is vacant industrial land that has been previously used to store lumber and recycled concrete. As such, the land has been heavily disturbed.

9. Surrounding land uses and setting:

The project site is located in an industrial area near the eastern edge of the Yreka city limits. The site is bordered on the south by the Yreka Western Railroad tracks; the railroad is currently not in operation. The site is surrounded by industrial uses, including the Belcampo Meat Co. processing plant to the north, Siskiyou Distributing to the west, and Shasta Forest Products to the east. The Fruit Growers lumber mill is currently under construction and located south of project site, on the south side of the railroad tracks. The nearest residential properties are two single-family homes located approximately one-half mile west of the project site.

10. Other public agencies whose approval may be required (e.g., permits, financing approval, or participation agreement):

- California Department of Fish and Wildlife (CDFW)
- North Coast Regional Water Quality Control Board (RWQCB)
- Siskiyou County Air Pollution Control District (APCD)
- Siskiyou County Environmental Health Division

11. Environmental factors potentially affected:

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

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

12. 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.

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

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

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

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

Signature	Date
Steve Baker Printed Name	City of Yreka Lead Agency
City Manager Title	

3.0 Project Description

3.1 PROJECT LOCATION

The proposed project site is located in Yreka in Siskiyou County, California. Yreka is located approximately 21 miles south of the California-Oregon border. Interstate 5, State Route (SR) 3, and SR 263 pass through and provide regional access to the city. The project area, which totals approximately 4.26 acres, is located at 319 South Phillipe Lane adjacent to the eastern boundary of the city limits. The project site is accessed via South Phillipe Lane, which connects with SR 3 approximately 0.2 miles north of the project site. Specifically, the project is situated on APN 053-681-240, in Section 24 of Township 45 North, Range 7 West of the Mount Diablo Meridian (Latitude 41°43'58.5"N, Longitude 122°35'38.9"W). (See **Figure 3.0-1** for project location.)

3.2 PROJECT SETTING

The proposed project site is a vacant, previously disturbed lot that has been graded and used for storage of recycled concrete. The site, located in an industrial area, is bordered on the south by the Yreka Western Railroad tracks; the railroad is not currently in operation. The site is surrounded by industrial uses, including the Belcampo Meat Co. processing plant to the north, Siskiyou Distributing to the west, and Shasta Forest Products to the east. The Fruit Growers lumber mill is currently under construction and located south of project site, on the south side of the railroad tracks. The nearest residential properties are two single-family homes located approximately one-half mile west of the project site.

The project site is owned by Sousa Ready Mix, LLC. Under the City's jurisdiction, Assessor's Parcel Number 053-681-240 is designated Industrial in the City General Plan and is zoned Heavy Industrial (M-2). As defined by the General Plan, the Industrial designation is intended to accommodate "lumber mills, asphalt plants, manufacturers of product designed predominantly for sale off site" (Yreka 2003).

PROJECT HISTORY

The project site is devoid of vegetation, with the exception of eight small trees. Also on-site are an approximately 330-square-foot shed, an abandoned "scale shack," and the remnants of a concrete slab foundation. As previously described, the project site is heavily disturbed and is located in an area that has historically been used for industrial purposes.

At one time, the site was used to store excess lumber for the Hi-Ridge Lumber Company. Most recently, the site was used to store concrete materials generated from a California Department of Transportation (Caltrans) emergency road improvement project in early 2015. The Caltrans project required the replacement of 5 miles of Interstate 5 near the Randolph Collier Rest Area, approximately 8 miles north of Yreka. The concrete was later used to develop the Fruit Growers Mill, located just south of the proposed project site.

FIGURE 3.0-1 PROJECT LOCATION

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3.3 PROJECT OVERVIEW

The project requires the approval of a Conditional Use Permit, pursuant to City Municipal Code Section 16.42.070, to allow the construction of a concrete batch plant complete with a small portable office trailer, aggregate storage area, truck and auto parking, precast concrete area, and concrete truck washout basin. Future development plans for the site include the construction of a shop building and truck scales. The office would be portable and inclusive of restroom facilities, a break room, and a batch plant control room. The primary use at the site would be the production of ready-mix concrete; wholesale aggregate sales and the fabrication of precast concrete products are proposed as secondary uses dependent on the sales generated from ready-mix concrete.

Specifically, the project is proposing to demolish an existing shed and construct a new 400-square-foot office building, 450-square-foot plant, and 2,400-square-foot shop building for a total of 3,250 square feet of new structures/building additions. The total building coverage (office and shop building) at the site would be 2,800 square feet, with 3,659 square feet of landscaped area and 22,533 square feet of paved surface area, for a total project site coverage of 28,992 square feet (15.5 percent of the total lot area). The project proposes five on-site parking spaces to accommodate for three to five employees and two daily visitors.

PROJECT SITE IMPROVEMENTS

As previously described, the project site is a heavily disturbed, vacant lot that has been used over the years for the storage of lumber and concrete. The project proposes the construction of a ready-mix concrete batch plant facility to produce and deliver ready-mix concrete to construction project sites in the region.

Direct access to the site is currently provided from South Phillipe Lane via a 60-foot-wide easement between adjacent parcels at the southeastern edge of the project site. Ready-mix concrete would be transported to and from the site primarily via SR 3/Montague Road. The applicant anticipates that project operations would result in an average of 14 truck deliveries per summer day, with a peak summer season maximum of 50 daily truck deliveries. During the winter season, truck deliveries would be reduced in number or stopped, depending on weather and customer demand for concrete supplies. Truck deliveries would continue as needed all year. Once they leave the project site, the trucks would drive north on South Phillipe Lane to access SR 3, then drive west to Interstate 5 before heading either north or south. The project site road frontage at South Phillipe Lane is fully improved, with the exception of sidewalks. Two paved travel lanes, a left turn center lane, curb, gutter, sewer, water, underground storm drain, and storm drain inlets are present. Public improvements of a commercial driveway and sidewalk per specifications will be required. Streetlights are already in place.

PROJECT CONSTRUCTION

It is anticipated that construction will begin during the 2016 construction year. A variety of equipment and vehicles will be used during construction, potentially including backhoes, compacters, and air compressors. On-site or on-street parking is available or will be provided for all construction-related vehicles and traffic. Construction work will generally occur during normal daylight construction hours, Monday through Friday, in compliance with City of Yreka noise ordinance requirements for construction.

PROJECT OPERATION

Once construction is completed, the concrete batch plant facility will need the flexibility to operate 24 hours a day, 7 days a week in order to adequately service clients and supply concrete for nighttime construction projects. Although these will not be the typical daily operating hours, nighttime operations and deliveries will be required about once a month on average. Sousa Ready Mix LLC anticipates that construction of the Siskiyou County Courthouse may require nighttime concrete pours to prevent congestion downtown. Additionally, the construction of the new Yreka High School gymnasium may require nighttime concrete operations to meet the school district's construction schedule.

Once in operation, the plant will produce ready-mix concrete through a series of processes mixing aggregates, sand, and cement. First, aggregates and sand are loaded into the batch plant bins. These holding bins release aggregates and sand into the weighing hopper. All aggregates and sand are weighed for each batch of concrete. Simultaneously, cement is released from the storage silo through a material valve into the cement weigh hopper. About 75 percent of the concrete mixing water is metered into the ready-mix truck prior to loading of the aggregates, sand, and cement. Next, the aggregates and sand are released from the weigh hopper and delivered to the ready-mix truck via a belt conveyor. As the aggregates are being loaded into the truck, cement is released from the cement weigh hopper and into the ready-mix truck. After all the aggregates and sand are loaded, the truck mixes the concrete, then moves to a wash station for cleaning of the inside of the drum and cleaning of any latent solid material that may be on a fender or outside of the truck.

There will be approximately three to five employees at the facility. It is anticipated that employees may be shared between the Mt. Shasta and Yreka Sousa Ready Mix locations. As previously described, the applicant anticipates that project operations would result in 1,000 to 1,330 deliveries a year, or an average of 5 to 7 truck deliveries per day. The average delivery of concrete is 6 cubic yards; however, the ready-mix trucks can haul up to 10 cubic yards per delivery. The average number of summertime deliveries will be higher than the number of wintertime deliveries, ranging from 14 deliveries a day during the months of September and October to as low as zero to 1 or 2 deliveries on a winter day. However, peak delivery days could require as many as 50 truck trips in a single day if 1,000 cubic yards of concrete were ordered for that day.

Lighting

There are currently two streetlights along South Phillipe Lane, but they do not provide adequate light to the project site. For site security and safety, the project applicant proposes to add lighting at the office door, employee parking area, and bay doors of the shop, as well as in the truck parking area. The proposed lighting for the structures will be attached to the building(s), and pole lighting will be used in the parking areas. All lighting fixtures would be shielded, oriented downward, and mounted a maximum of 30 feet high.

Fire Suppression

The site plan submitted for the project (**Figure 3.0-2**) depicts a fire hydrant located directly across from the project site, along South Phillipe Lane. Additionally, fire protection services will be provided by the Yreka Fire Department.

Water Supply

The water system currently consists of a 10-inch fire water main located on the east side of South Phillipe Lane that provides water to the existing fire hydrant. An additional 2-inch potable water line would be installed to the office building and shop building for domestic use in restrooms and for drinking water. This line would also be used for batching concrete, wetting aggregate piles, and truck washout. A backflow device will be required.

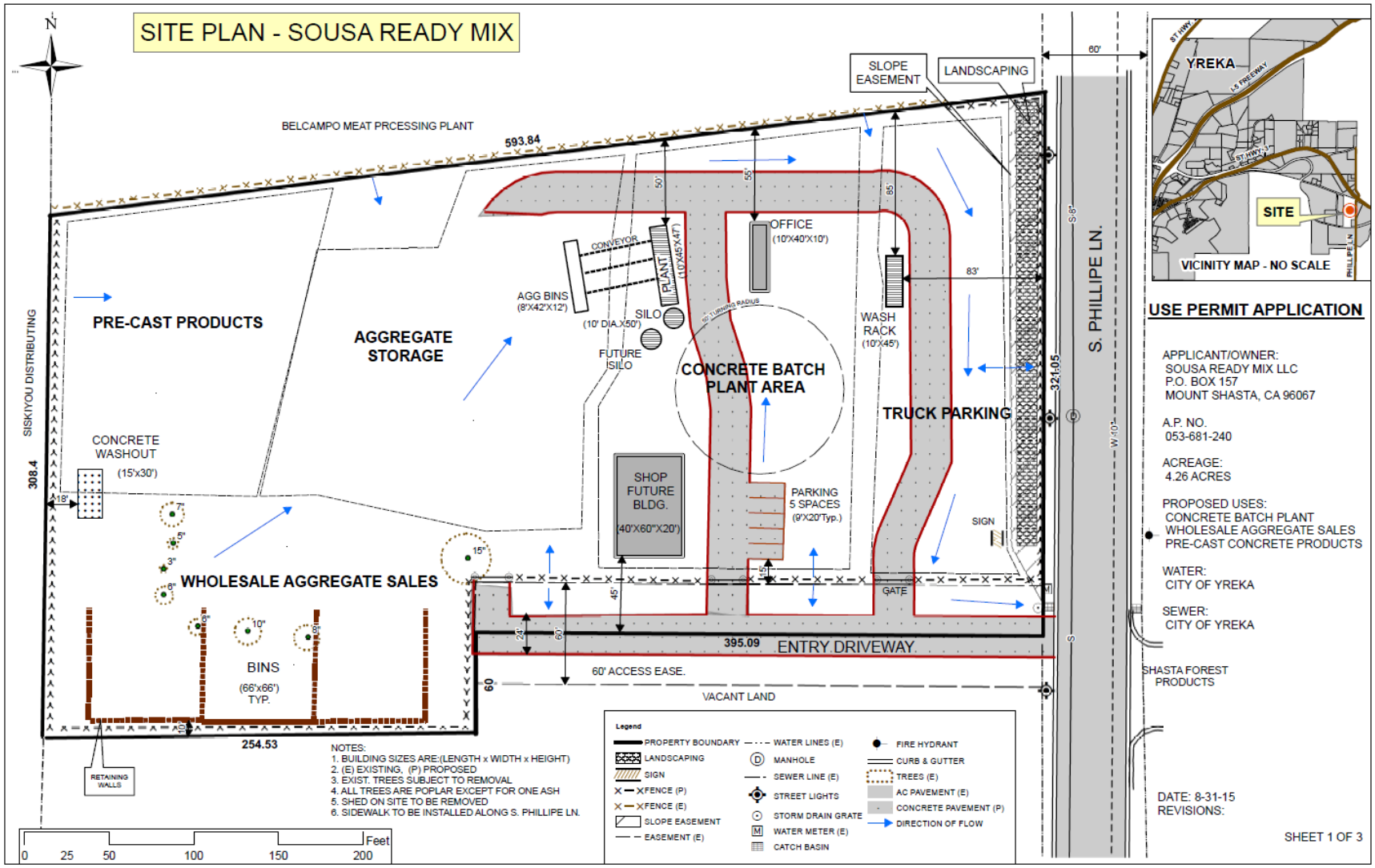
Wastewater

The project would have a total of two restrooms in the portable office building, which will require a 4-inch sewer line to be installed to the manhole in South Phillipe Lane.

Electricity

A proposed three-phase electrical power supply would be connected at the northeast and southeast corners of the project site. The power supply line will be buried from the supply poles once the line crosses the street.

FIGURE 3.0-2 PROJECT SITE PLAN



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3.4 PROJECT APPROVALS

The City of Yreka is the lead agency for this project. In addition, permits and/or approvals would be required from the following agencies:

NORTH COAST REGIONAL WATER QUALITY CONTROL BOARD (RWQCB)

The RWQCB typically requires that a Construction General Permit be obtained for projects that disturb more than 1 acre of soil. Typical conditions issued with such a permit include the submittal of and adherence to a stormwater pollution prevention plan (SWPPP), as well as prohibitions on the release of oils, grease, or other hazardous materials.

SISKIYOU COUNTY AIR POLLUTION CONTROL DISTRICT (SCAPCD)

The proposed project is located in an area under the jurisdiction of the Siskiyou County Air Pollution Control District. The project applicant will be required to obtain approval of a dust control plan from the district prior to any soil-disturbing activities on the site.

SISKIYOU COUNTY ENVIRONMENTAL HEALTH DIVISION (SCEHD)

Businesses located in cities and unincorporated areas of Siskiyou County are required to disclose all hazardous material and waste that are used, handled or stored at their facility. The purpose of the business plan program is to prevent damage to the health and safety of workers, the public, and the environment from the release or threatened release of hazardous materials.

The proposed project involves the use of propane fuel storage tanks that are regulated by the Siskiyou County Environmental Health Department. Therefore, the project applicant will be required to submit a Hazardous Materials Business Plan (HMBP) to the Department.

3.5 RELATIONSHIP OF PROJECT TO OTHER PLANS

CITY OF YREKA GENERAL PLAN

The proposed project would be located in Yreka. The City of Yreka General Plan was updated in 2002–2003 and adopted by the City Council on December 18, 2003. The General Plan is the fundamental document governing land use development in the incorporated areas of the city. It includes numerous goals and policies pertaining to land use, circulation, housing, conservation, open space, parks and recreation, noise, public health and safety, and public facilities. The proposed project will be required to abide by all applicable goals and policies included in the adopted General Plan.

CITY OF YREKA FLOOD DAMAGE PREVENTION ORDINANCE

The project will not be subject to the City's Flood Damage Prevention Ordinance (Municipal Code Chapter 11.34), which regulates improvements in flood zones. Chapter 11.34 applies to special flood hazard areas, which are defined as areas having special flood or flood-related erosion hazards and shown on a Flood Hazard Boundary Map (FHBM) or Flood Insurance Rate Map (FIRM) as Zone A, AO, A1-30, AE, A99, or AH. The project site is shown on FEMA FIRM Map 06093C1600D. The proposed project site is located in Flood Zone X, meaning that no portion of the site is located within the 100-year floodplain (FEMA 2011). Therefore, the project is not subject to the requirements of Chapter 11.34.

4.0 Environmental Checklist

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

SETTING

Yreka is in an area considered to have high scenic value, located in a valley surrounded by mountains in the Klamath National Forest on the north and west, Shasta Valley to the east, and the Kilgore Hills to the southeast. Nearby mountains rise 300 to 4,000 feet above the city and provide an attractive backdrop. Some areas of the city have longer views to the Siskiyou and Cascade ranges to the north and east, with Mount Shasta as the prominent feature to the southeast. Mount Shasta is a dormant volcano 14,179 feet in elevation. The near mountain ranges are covered with pine forests and oak trees. Winter brings snows to the higher elevations, while spring brings green hills and the fresh foliage of deciduous trees. Fall color in the oaks brings a bright gold, which contrasts with the green of pines. These views are readily seen from most residential areas and are visible from major highways traversing the city (i.e., Interstate 5, State Route (SR) 3, and SR 263).

There are no locally designated or state scenic highways adjacent to or in the vicinity of the project site.

The proposed project site is a 4.26-acre vacant lot in an industrial area. There is an approximately 330-square-foot shed existing on-site, as well as the remnants of a concrete slab foundation and abandoned scale shack. With the exception of eight trees, the project site is devoid of any vegetation. In addition, the site has been previously used for the storage of lumber and recycled concrete. Thus, the land has been heavily disturbed and does not contain any feature or element that could be considered scenic or that is designated as scenic by the City or the State.

Interstate 5 is located 2 miles west of the project and SR 3 is approximately 0.2 miles (1,000 feet) north of the project site. As such, the proposed project will not obstruct or otherwise interfere with any views from off-site roadway vantage points.

DISCUSSION OF IMPACTS

a) *No Impact*. The project site, located in an industrial area at the eastern edge of the Yreka city limits, is bordered to the south by the Yreka Western Railroad tracks; the railroad is not currently in operation. The site is surrounded by industrial uses, including the Belcampo Meat Co. processing plant to the north, Siskiyou Distributing to the west, and Shasta Forest Products to

the east. The Fruit Growers lumber mill is currently under construction and located south of project site, on the south side of the railroad tracks. The nearest residential properties are two single-family homes located approximately one-half mile west of the project site.

As previously stated, the proposed project site consists of vacant, heavily disturbed land. The project area is designated Industrial in the City General Plan and is zoned Heavy Industrial (M-2). The project would be an appropriate use and consistent with the permitted activities in industrial zones.

The project proposes to develop the land as a concrete batch plant to produce and sell ready-mix concrete. The project would alter the existing conditions of the site, requiring some additional grading and the construction of several structures. The existing shed and abandoned scale shack on-site will be removed. The existing trees on the site are subject to removal and consist of seven poplar trees and one ash tree. However, the project site does not contain unique visual features that distinguish it from surrounding areas. Thus, the project would not have a significant impact on the visual character of the existing site or its surroundings. The project site is not located within a designated scenic vista. In addition, there are no distinct or distinguishing rock features on the project site. The project proposes a single-story shop building with a height of 20 feet. The proposed batch plant structure would be 47 feet tall. Although this structure's height is significant, there are no scenic resources designated on or surrounding the project site that would be adversely impacted. Residential views of the distant surrounding mountains would not be obstructed, as the closest residential property is located over 2,300 feet from the project site. Therefore, the proposed project is not considered an impediment to any existing viewsheds, and the project would have no impact on scenic vistas.

b) *No Impact*. Due to the lack of scenic resources on the project site, the proposed project would have no impact on scenic resources. Furthermore, none of the development associated with the project would be visible from a state scenic highway.

c) *Less Than Significant Impact*. The project site is located in the eastern portion of the city and is bounded by a combination of industrial land uses, lands designated for industrial land uses, and vacant lands. The project site is a vacant lot and contains no significant scenic resources. The site is designated and zoned for industrial land uses. The proposed project would be required to comply with development review guidelines mandated under City Municipal Code Chapters 15.32 and 16.40, which would ensure that the proposed project would not substantially degrade the existing visual character or quality of the site and its surroundings. The proposed project would have a less than significant impact to the existing visual character and quality of the site and its surroundings.

d) *Less Than Significant Impact With Mitigation Incorporated*. No new light or glare sources visible beyond the project site would be introduced during construction of the proposed project. All construction work will be performed during normal daylight construction hours, thereby eliminating any need for temporary light sources necessary for nighttime work.

The proposed project may result in a moderate increase of artificial light and glare into the existing environment. Potential sources of light and glare include external building lighting, parking lot lighting, security lighting, building windows, and reflective building materials. The introduction of new sources of light and glare may contribute to nighttime light pollution and result in impacts to nighttime views in the area. The project proposes to install lighting at the office door, employee parking area, and bay doors of the shop, as well as in the truck parking

area. The proposed lighting for the structures will be attached to the building(s), and pole lighting will be used in the parking areas. These lights would be for security and safety and would be mounted a maximum of 30 feet high. Implementation of mitigation measure **MM 4.1.1** would reduce potential impacts to a level that is considered less than significant.

Mitigation Measures

MM 4.1.1 All lighting shall be shielded and directed inward onto the project site. Lighting shall not create glare on neighboring properties. Tall fixtures that illuminate large areas shall be directed downward to prevent light spillover onto neighboring properties and streets. Lighting shall be directed away from adjacent roadways and shall not interfere with traffic or create a safety hazard. All outdoor lighting on the project site shall be shielded.

Timing/Implementation: *Prior to operation of the new facilities*

Enforcement/Monitoring: *City of Yreka Public Works Department*

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.2 AGRICULTURE 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. 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 nonagricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to nonagricultural use?	☐	☐	☐	☒
d) Conflict with existing zoning for, or cause rezoning of, forestland (as defined in Public Resources Code Section 1222(g), timberland (as defined in Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined in Public Resources Code Section 51104(g))?	☐	☐	☐	☒
e) Result in the loss of forestland or conversion of forestland to non-forest use?	☐	☐	☐	☒

SETTING

The California Department of Conservation manages a Farmland Mapping and Monitoring Program (FMMP), which identifies and maps significant farmland. The classification of farmland as Important Farmland (i.e., Prime Farmland, Unique Farmland, and Farmland of Statewide Importance) is based on the suitability of soils for agricultural production, as determined by a soil survey conducted by the Natural Resources Conservation Service (NRCS). An FMMP map has been prepared for Siskiyou County that includes the project area.

The project site is zoned for industrial land uses and is highly disturbed due to previous grading and use of the property for lumber and concrete storage. The Siskiyou FMMP map classifies these areas of the project site as Urban and Built-Up Land (DOC 2010).

There are no Williamson Act or Timber Preserve contracted lands within or adjacent to the project site.

DISCUSSION OF IMPACTS

a) *No Impact*. As identified on the 2010 Siskiyou County Important Farmland Map published by the California Department of Conservation's Farmland Mapping and Monitoring Program, none of the land in the project area is considered Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. The project site is designated Industrial (I) on the General Plan Land Use Map and is zoned Heavy Industrial (M-2). Therefore, the proposed project would

not result in the loss of Important Farmland as defined by the California Department of Conservation.

b) *No Impact*. The project site is not under a Williamson Act contract, nor are any lands near the project site subject to a Williamson Act contract. As such, the proposed project would not conflict with any existing Williamson Act contract lands.

c) *No Impact*. The project site does not contain any forest resources, nor is it zoned for forest use.

d) *No Impact*. See Response 4.2(c) above. The project site does not contain any forest resources, nor is it zoned for forest use.

e) *No Impact*. The project site is not used for agricultural or timber production purposes.

Mitigation Measures

None required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.3 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?	☐	☐	☐	☒
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☒	☐	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	☐	☐	☐	☒
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

SETTING

Yreka and the project site are located in a region identified as the Northeast Plateau Air Basin (NPAB), which principally includes Siskiyou, Modoc, and Lassen counties. This larger air basin is divided into local air districts, which are charged with the responsibility of implementing air quality programs. The local air quality agency affecting Yreka is the Siskiyou County Air Pollution Control District (SCAPCD). Within the SCAPCD, the primary sources of air pollution are wood-burning stoves, wildfires, farming operations, unpaved road dust, managed burning and disposal, and motor vehicles. The project site is currently vacant.

The SCAPCD adopts and enforces controls on stationary sources of air pollutants through its permit and inspection programs and regulates agricultural and nonagricultural burning. Other district responsibilities include monitoring air quality, preparing air quality plans, and responding to citizen air quality complaints.

Ambient Air Quality Standards

Air quality standards are set at both the federal and state levels of government. The federal Clean Air Act requires the US Environmental Protection Agency (EPA) to establish ambient air quality standards for six criteria air pollutants: ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), lead, coarse particulate matter (PM_{10}), and fine particulate matter ($PM_{2.5}$). The California Clean Air Act also sets ambient air quality standards. The state standards are more stringent than the federal standards, and they include other pollutants in addition to those regulated by the federal standards. When the concentrations of pollutants are below the maximum allowed standards in an area, that area is considered to be in attainment of the

standards. Yreka has been designated as an attainment area for all six criteria air pollutants, as the air quality meets all state and federal standards.

DISCUSSION OF IMPACTS

a) *No Impact*. The project site lies within the boundaries of the NPAB. While the other counties in the air basin are identified as currently being in nonattainment for exceeding state criteria pollutant levels for particulate matter, Siskiyou County and Yreka are identified as being in attainment or unclassified for all federal and state air quality standards (CARB 2013). As such, Siskiyou County is not subject to an air quality plan.

b) *Less Than Significant Impact With Mitigation Incorporated*. As noted above, Siskiyou County and Yreka are in attainment or unclassified for federal and state air quality standards. However, the proposed project could result in air quality impacts during construction and operation.

Construction Emissions

The proposed project would result in short-term emissions from construction activities. Construction-generated emissions are short term and of temporary duration, lasting only as long as construction activities occur. Emissions commonly associated with construction activities include fugitive dust from soil disturbance. During construction, fugitive dust, the dominant source of particulate matter emissions, is generated when wheels or blades disturb surface materials. Uncontrolled dust from construction can become a nuisance and potential health hazard to those living and working nearby. Emissions of airborne particulate matter are largely dependent on the amount of ground disturbance associated with site preparation activities.

While some particulate matter (i.e., dust) may be generated as a result of construction activities, implementation of mitigation measure **MM 4.3.1** addressing construction-related dust control measures would reduce this impact to a level that is considered less than significant.

Operational Emissions

Operational air quality impacts would include emissions from project-generated vehicle traffic and facility operations, including material haul trucks, the operation of the concrete batch plant, and landscape maintenance equipment. Thresholds of significance illustrate the extent of an impact and are a basis from which to apply mitigation measures. Because the SCAPCD has no established thresholds under CEQA for the assessment of air quality impacts, the North Coast Unified Air Quality Management District's (NCUAQMD) thresholds of significance will be used for the evaluation of operational air quality impacts for the purpose of this analysis. These thresholds are consistent with the New Source Review Rule 110 adopted by the Air Quality Management District as required by the California Clean Air Act. The thresholds of significance are summarized in **Table 4.3-1**.

TABLE 4.3-1
NCUAQMD THRESHOLDS OF SIGNIFICANCE (PROXY THRESHOLDS FOR ANALYSIS PURPOSES)

Threshold	Emissions (lbs/day)				
	ROG	NO_x	CO	PM_{10}	$PM_{2.5}$
Significance Thresholds	50	50	500	80	50

Source: North Coast Unified Air Quality Management District 2010
Note: The SCAPCD does not have adopted thresholds of significance. Proxy thresholds from the North Coast Unified AQMD were used to facilitate the analysis for this section as described above.

The predicted maximum daily emissions associated with project operations are summarized in **Table 4.3-2**. The projected criteria pollutant emissions were estimated by Michael Baker International using the California Emissions Estimator Model (CalEEMod), emissions factors from the EPA's (2011a) AP 42, Compilation of Air Pollutant Emission Factors, and supplementary documentation provided by the EPA (2011b). Results of the modeling conducted by Michael Baker International are included in **Appendix A**.

TABLE 4.3-2
CRITERIA AIR POLLUTANTS – MAXIMUM POUNDS PER DAY

Threshold	Emissions (lbs/day)				
	ROG	NO_x	CO	PM_{10}	$PM_{2.5}$
Project Maximum Daily Emissions					
Area Source[1,3]	0.38	3.03	2.38	14.52	0.20
Energy Source[1,2]	0.86	7.84	6.59	0.59	0.59
Mobile Source[1]	1.00	7.21	8.78	1.07	0.42
Total	**2.24**	**18.08**	**17.75**	**16.18**	**1.21**
Significance Thresholds	50	50	500	80	50
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**

*Sources: [1]CalEEMod version 2013.2.2; [2]EPA 2011a; [3]EPA 2011b. Refer to **Appendix A** for model data outputs.*
Notes: Area source emissions include specific processes of the ready-mix concrete batch plant (i.e., aggregate transfer, sand transfer, concrete unloading, weigh hopper loading, mixer loading, truck loading, and operation of the front loader.
Energy source emissions account for the estimate of 64,800 kBtu energy consumption annually, which is based on the production of 8,000 cubic yards of concrete per year.
Mobile source emissions account for the daily commute trips of five employees and 50 daily product delivery trips.

As shown, all criteria pollutant emissions would remain below their respective thresholds during project operations.

c) *No Impact*. Siskiyou County is in attainment or is identified as unclassified for all monitored air quality standards. In addition, as demonstrated under Response 4.3(b) above, significance thresholds would not be surpassed. Therefore, no cumulative considerable net increase of criteria pollutants will result from the project.

d) *Less Than Significant Impact*. Sensitive receptors are generally defined as facilities that house or attract groups of children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air pollutants. Schools, hospitals, residential areas, and convalescent facilities are examples of sensitive receptors. The project site is not located in close proximity

to any schools, hospitals, residential areas, senior housing, or residential care facilities. The majority of the site is designated Industrial by the City of Yreka General Plan and is zoned Heavy Industrial, which explicitly classifies the site as accommodating concrete batch plants. The nearest residence is located approximately 2,300 feet to the west of the project site. As shown in **Table 4.3-2**, project emissions would not surpass any significance thresholds, which were are derived from a New Source Review Rule intended to protect human health. In addition, in 2005, CARB published an informational guide entitled *Air Quality and Land Use Handbook: A Community Health Perspective*. The purpose of this guide is to provide information to aid local jurisdictions in addressing issues and concerns related to the placement of air pollution sources to nearby sensitive land uses. The handbook includes recommended separation distances for various land uses, the longest of which is 1,000 feet. For these reasons, impacts are less than significant.

e) *Less Than Significant Impact*. Offensive odors rarely cause any physical harm; however, they still can be very unpleasant, leading to considerable distress among the public and often generating citizen complaints to local governments and regulatory agencies. Odor impacts on residential areas and other sensitive receptors, such as daycare centers and schools, are of particular concern. Major sources of odor-related complaints by the general public commonly include wastewater treatment facilities, landfill disposal facilities, food processing facilities, agricultural activities, and various industrial activities such as petroleum refineries, chemical and fiberglass manufacturing, painting/coating operations, feedlots/dairies, composting facilities, landfills, and transfer stations. The project does not include any of these land uses or similar land uses. The project may result in temporary and localized odors associated with diesel-powered equipment. However, any such odors would be temporary and would not be in sufficiently high concentrations to affect nearby land uses.

Mitigation Measures

MM 4.3.1 The following dust control measures shall be incorporated into the project to reduce short-term emissions resulting from construction. Depending on weather and site conditions, measures shall include, but are not limited to, the following:

1. Use regular watering to control dust generation as described below.

2. When transporting soil and other dust-generating materials by truck during construction activities, cover materials and/or maintain 2 feet of freeboard.

3. Wash or wet-sweep paved streets adjacent to construction sites as necessary to remove accumulated dust.

4. During earth-moving operations, conduct watering as necessary to prevent visible emissions from extending beyond active areas.

5. Water all unpaved roads used for any vehicular traffic at least once per every two hours of active operations and restrict vehicle speed on unpaved roads to 15 miles per hour (mph), or as appropriate to reduce dust.

6. Pave, maintain a wet surface, or apply dust suppressants on all unpaved access roads, parking areas, and staging areas.

7. Suspend land clearing, grading, earth-moving, or excavation activities when winds exceed 20 miles per hour.

8. Cover inactive storage piles of topsoil or landscape materials.

9. Post a publicly visible sign with the number and person to contact regarding dust complaints. This person shall have the authority and responsibility to respond and take corrective action within 24 hours.

10. No temporary asphalt or concrete batch plants will be allowed to operate on-site.

11. Construction staging areas should be located at a distance that would reduce odors and dust emissions from existing schools and residential areas.

Timing/Implementation: *Prior to and during construction*

Enforcement/Monitoring: *Siskiyou County Air Pollution Control District; City of Yreka Public Works Department*

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.4 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 US Fish and Wildlife Service?	☐	☐	☒	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	☐	☐	☐	☒
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 wetlands, etc.), through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
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?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
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?	☐	☐	☐	☒

SETTING

Eight small trees exist at the southeast corner of the site, ranging from 3 feet to 15 feet tall. Implementation of the project may result in the loss of these trees, as they are identified as "subject to removal" on the project's site plan. However, the project site is located in an industrial portion of Yreka and has been heavily disturbed, making it unlikely that the trees provide significant wildlife habitat or nesting grounds for migratory birds. While the project site itself is essentially devoid of any natural habitat, forage, or shelter features of biological resources, Yreka is surrounded by habitat supporting a robust local deer herd. The deer herd inhabits much of western Yreka, having reasonably adapted to the urban environment, finding shelter on vacant lots and food on residential lots not protected with adequate fencing. (It is not uncommon to see deer casually walking in downtown Yreka.) Easy access to the mountains to the west gives the herd a range of habitat options. According to the California Department of Fish and Wildlife (CDFW) (2015) California Natural Diversity Database, special-status wildlife species potentially occurring in the Yreka vicinity include Yreka phlox, vernal pool fairy shrimp, Coho salmon, western yellow-billed cuckoo, northern spotted owl, and fisher.

The US Fish and Wildlife Service (USFWS), the CDFW, and the California Native Plant Society (CNPS) document species that may be rare, threatened, or endangered. Federally listed species are fully protected under the mandates of the federal Endangered Species Act (ESA). "Take" of listed species incidental to otherwise lawful activity may be authorized by either the USFWS or the National Marine Fisheries Service (NMFS), depending on the species.

Under the California Endangered Species Act (CESA), the CDFW has the responsibility for maintaining a list of threatened and endangered species. The CDFW also maintains lists of "candidate species" and "species of special concern," which serve as "watch lists." State-listed species are fully protected under the mandates of the CESA. Take of protected species incidental to otherwise lawful management activities may be authorized under Section 2081 of the California Fish and Game Code.

Under California Fish and Game Code Section 3503.5, it is unlawful to take, possess, or destroy any birds in the orders of Falconiformes or Strigiformes (raptors) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.

The Native Plant Protection Act (California Fish and Game Code Sections 1900–1913) prohibits the taking, possessing, or sale within the state of any rare, threatened, or endangered plants as defined by the CDFW. Project impacts on these species would not be considered significant unless the species are known to have a high potential to occur within the area of disturbance associated with the project.

DISCUSSION OF IMPACTS

a) *Less Than Significant Impact*. The project site is vacant, highly disturbed, and located in an area historically used for industrial purposes. As described in Section 3.0, Project Description, the proposed project site has been previously used for the storage of lumber and concrete. As such, it does not contain habitat suitable for special-status species. For the reasons stated, impacts to special-status species as a result of the proposed project would be less than significant.

b) *No Impact*. The project area consists of vacant, industrial land. The entirety of the site has been heavily disturbed and does not contain sensitive natural communities or provide riparian habitat.

c) *No Impact*. See Response 4.4(b) above. There are no wetlands within or immediately adjacent to the project area.

d) *Less Than Significant Impact*. The project site is devoid of vegetation, with the exception of seven poplar trees and one ash tree, ranging from 3 feet to 15 feet tall. Migratory birds are known to occur in the Yreka vicinity and are likely to pass through the project area. However, the project area is situated in an industrial setting just south of an operating meat-processing plant, east of Siskiyou Distributing, and west of Shasta Forest Products. These existing industrial land uses currently generate a fairly consistent amount of heavy-duty truck traffic most hours of the day. As such, there are no functional wildlife corridors in or immediately adjacent to the project area. The proposed project will not interfere with the movement of these migratory birds, any fish species, amphibians, or reptiles.

e) *No Impact*. There are currently no adopted or proposed local policies or ordinances that affect the proposed project. Therefore, no conflict with occur.

f) *No Impact*. There are currently no adopted or proposed habitat conservation plans, natural community conservation plans, or other approved local, regional, or state habitat conservation plans that affect the proposed project. Therefore, no conflict with occur.

Mitigation Measures

None required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.5 CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	☐	☒	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☒	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	☐	☒	☐	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

SETTING

The archaeological record of the native population is limited. It is known that at the time of European "discovery," the area now home to Yreka was settled by the Shasta Indians and used for winter hunting. Typical of increased European settlement, the native population declined during the Gold Rush era.

At the time of initial contact with white populations (circa 1850), the Shasta Indian tribe occupied the Shasta Valley south to the area around what is now the city of Mt. Shasta. Accounts of early travelers, native informants, and early ethnographies also document the existence of the Okwanuchu tribe. However, little is known about this tribe, except that it was linguistically related to the Shasta tribe.

As noted elsewhere in this document, the project site is a previously disturbed site in an industrialized area of Yreka. As such, the natural integrity of the site has been compromised over time due to past use of the project site. As a result, the potential for encountering cultural resources during project-related activities is considered low.

DISCUSSION OF IMPACTS

a) *Less Than Significant Impact With Mitigation Incorporated*. No historical resources have been identified in or adjacent to the project area. However, ground disturbance associated with development of the site has the potential to impact previously unknown, subsurface historic resources should any be present. Therefore, mitigation measure **MM 4.5.1** is provided below to reduce potential impacts to a level that is considered less than significant.

b) *Less Than Significant Impact With Mitigation Incorporated*. While no evidence of archaeological resources has been identified in the project area and the potential for encountering cultural resources during project-related activities is low due to the history of past disturbance, construction activities have the potential to impact subsurface archaeological resources should any be present. Therefore, mitigation measure **MM 4.5.1** is provided below to address the potential for the discovery of any unrecorded or previously unknown resources.

c) *Less Than Significant Impact With Mitigation Incorporated*. Although no evidence of paleontological resources has been identified in the project area, unanticipated and accidental discoveries of paleontological resources are possible during project implementation and have the potential to impact paleontological resources. Therefore, mitigation measure **MM 4.5.2** is provided below to address the potential for the discovery of any unrecorded or previously unknown resources.

d) *Less Than Significant Impact With Mitigation Incorporated*. Previous cultural resource investigations conducted for projects in the vicinity of the project area indicate that there is little likelihood for Native American archaeological sites, or burial sites, to be present in the area (Jensen and Associates 1996; North State Resources 2005). Regardless, there is a possibility of the unanticipated and accidental discovery of human remains during ground-disturbing project-related activities. Therefore, mitigation measure **MM 4.5.3** is provided below to reduce potential impacts to a level that is considered less than significant.

Mitigation Measures

MM 4.5.1 If, during the course of project construction and/or operations, cultural resources (i.e., prehistoric sites, historic features, isolated artifacts, and features such as concentrations of shell or glass) are discovered, work shall be halted immediately within 50 feet of the discovery, the City of Yreka Public Works Department shall be immediately notified, and a professional archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology shall be retained to determine the significance of the discovery. The City shall consider mitigation recommendations presented by a professional archaeologist and implement a measure or measures that the City deems feasible and appropriate. Such measures may include avoidance, preservation in place, excavation, documentation, curation, data recovery, or other appropriate measures.

Timing/Implementation: *During construction activities and during operations*

Enforcement/Monitoring: *City of Yreka Public Works Department*

MM 4.5.2 If, during the course of project implementation and/or operations, paleontological resources (e.g., fossils) are discovered, work shall be halted immediately within 50 feet of the discovery, the City of Yreka Public Works Department shall be immediately notified, and a qualified paleontologist shall be retained to determine the significance of the discovery. The City shall consider the mitigation recommendations presented by a professional paleontologist and implement a measure or measures that the City deems feasible and appropriate. Such measures may include avoidance, preservation in place, excavation, documentation, curation, data recovery, or other appropriate measures.

Timing/Implementation: *During construction activities and during operations*

Enforcement/Monitoring: *City of Yreka Public Works Department*

MM 4.5.3 If, during the course of project construction and/or operations, human remains are discovered, all work shall be halted immediately within 50 feet of the discovery, the City of Yreka Public Works Department shall be immediately notified, and the

county coroner must be notified, according to Section 5097.98 of the California Public Resources Code and Section 7050.5 of the California Health and Safety Code. If the remains are determined to be Native American, the coroner will notify the Native American Heritage Commission, and the procedures outlined in California Code of Regulations Section 15064.5(d) and (e) shall be followed.

Timing/Implementation: *During construction activities and during operations*

Enforcement/Monitoring: *City of Yreka Public Works Department*

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.6 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:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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?	☐	☐	☐	☒

SETTING

Several earthquake faults exist in the Yreka area as indicated on the 2010 Fault Activity Map of California (CGS 2010). Some notable faults include the Greenhorn Fault north of the city and the Soap Creek Ridge Fault to the southwest. One small fault has been identified in the northern portion of the city near the Interstate 5/SR 3 junction. None of these faults have shown evidence of any activity within the last 1.6 million years. The nearest recently active fault identified by the State of California Alquist-Priolo Mapping Program is the Cedar Mountain Fault Zone 35 miles to the east in the Hebron-Macdoel area and a fault located approximately 99 miles to the east in the Klamath Falls area (CGS 2010).

The Seismic Safety and Safety Element of the Siskiyou County General Plan (1975) states that over a 120-year period, nine or ten earthquakes capable of "considerable damage" occurred in the region. No deaths were reported from these quakes, and building damage was considered minor or unreported. No known damage has resulted from an earthquake in the Yreka area.

Landslides are not prominent in the area, since the mountains in the region consist of stable bedrock material with little likelihood of sliding. While Yreka is in an area having undulating and

varying topography, standard construction practices limit the amount of potential erosion, and the California Building Code addresses necessary construction techniques to accommodate soils in the area with expansive characteristics.

According to the City of Yreka General Plan, the project site is on alluvial soils and consists of gravelly, clay, and sandy loams. Typically these soils have moderate shrink-swell characteristics, have slight to moderate erosion hazard potential, and contain slopes ranging from 0 to 9 percent. Only the Salisbury gravelly clay loam and Pit clay soils in the southern area of the city are considered to have severe shrink-swell characteristics that could affect construction practices.

DISCUSSION OF IMPACTS

a)

i) *Less Than Significant Impact*. There are no known active or potentially active faults in or adjacent to the city. The closest mapped fault to the project area is approximately 35 miles to the east. The California Geological Survey does not identify Yreka as a city affected by this fault or any other Alquist-Priolo Earthquake Fault Zone.

ii) *Less Than Significant Impact*. See Response 4.6(a)(i). The city, along with all of Siskiyou County, is located in a region with moderate to high probability of earthquakes that may cause structural damage. Buildings constructed in California are subject to more stringent seismic safety standards than those constructed elsewhere in the United States. Earthquakes centered about 20 miles east of Mount Shasta were recorded in 1978 with Richter magnitudes of 4.0 to 4.6. However, an earthquake history compiled for the Seismic Safety and Safety Element of the Siskiyou County General Plan indicated that over a 120-year period, no deaths related to earthquakes were recorded, and reported building damage was never more than "minor." Given the past history of seismic activity in Siskiyou County, the California Building Code standards would ensure that improvements in the project area are able to withstand ground shaking with no significant damage. The State of California provides minimum standards for building design through the California Building Code (California Code of Regulations, Title 24). The California Building Code is based on the Uniform Building Code, which is used widely throughout the United States (generally adopted on a state-by-state or district-by-district basis) and has been modified for conditions in California. State regulations and engineering standards related to geology, soils, and seismic activity are reflected in the California Building Code requirements. The code contains specific requirements for seismic safety, excavation, foundations, retaining walls, and site demolition. It also regulates grading activities, including drainage and erosion control.

iii) *Less Than Significant Impact*. Liquefaction occurs when loose sand and silt that is saturated with water behaves like a liquid when shaken by an earthquake. Liquefaction can result in the following types of seismic-related ground failure:

- Loss of bearing strength – soils liquefy and lose the ability to support structures
- Lateral spreading – soils slide down gentle slopes or toward stream banks
- Flow failures – soils move down steep slopes with large displacement

- Ground oscillation – surface soils, riding on a buried liquefied layer, are thrown back and forth by shaking
- Flotation – floating of light buried structures to the surface
- Settlement – settling of ground surface as soils reconsolidate
- Subsidence – compaction of soil and sediment

Three factors are required for liquefaction to occur: (1) loose, granular sediment; (2) saturation of the sediment by groundwater; and (3) strong shaking. Impacts associated with liquefaction are unlikely given the low incidence of strong earthquakes in the region. The region is not within an Alquist-Priolo earthquake hazard zone, and the closest active fault system is 35 miles east of the project site. In addition, according to the City General Plan, the Yreka vicinity is an area that is not conducive to liquefaction. These characteristics indicate a less than significant risk of liquefaction on the project site.

iv) *No Impact*. The project site has flat topography, indicating no potential for landslides.

b) *Less Than Significant Impact*. Construction activities during project site development, such as grading, excavation, and soil hauling, would disturb soils and potentially expose them to wind and water erosion. Similarly, proposed project operations would involve the use of heavy equipment and movement of materials and therefore also disturb on-site soils. However, with the application of standard construction practices and regulatory requirements, soil erosion and loss of topsoil is not a concern. Erosion from stormwater runoff is controlled by the National Pollutant Discharge Elimination System (NPDES), which requires sedimentation and erosion controls to be implemented. Wind erosion during construction is controlled by SCAPCD Rule 403, which requires fugitive dust to be reduced with the application of best available control technologies. Impacts would be less than significant.

c) *Less Than Significant Impact*. The potential for landslides on the project site was addressed under Response 4.6(a)(iv) and was determined to have no impact. The potential for lateral spreading, liquefaction, subsidence, and other types of ground failure or collapse was addressed under Response 4.6(a)(iii) and was determined to be less than significant.

d) *Less Than Significant Impact*. Expansive or shrink-swell soils are soils that swell when subjected to moisture and shrink when dry. Expansive soils typically contain clay minerals that attract and absorb water, greatly increasing the volume of the soil. This increase in volume can cause damage to foundations, structures, and roadways. While the clay content of project site soils in the vicinity of proposed improvements is currently unknown, standard procedures used in the construction of concrete footings as required by the California Building Code will reduce this potential impact to a level that is considered less than significant.

e) *No Impact*. No septic tanks or alternative wastewater disposal systems are associated with the project.

Mitigation Measures

None required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.7 GREENHOUSE GASES. Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

SETTING

Since the early 1990s, scientific consensus holds that the world's population is releasing greenhouse gases (GHG) faster than the earth's natural systems can absorb them. These gases are released as byproducts of fossil fuel combustion, waste disposal, energy use, land-use changes, and other human activities. This release of gases, such as carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O), creates a blanket around the earth that allows light to pass through but traps heat at the surface, preventing its escape into space. While this is a naturally occurring process known as the greenhouse effect, human activities have accelerated the generation of GHGs beyond natural levels. The overabundance of GHGs in the atmosphere has led to an unexpected warming of the earth and has the potential to severely impact the earth's climate system.

Each GHG differs in its ability to absorb heat in the atmosphere based on the lifetime, or persistence, of the gas molecule in the atmosphere. CH_4 traps over 25 times more heat per molecule than CO_2, and N_2O absorbs 298 times more heat per molecule than CO_2. Often, estimates of GHG emissions are presented in carbon dioxide equivalents (CO_2e), which weight each gas by its GWP. Expressing GHG emissions in carbon dioxide equivalents takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO_2 were being emitted.

DISCUSSION OF IMPACTS

a) *Less Than Significant Impact*. GHG emissions contribute, on a cumulative basis, to the significant adverse environmental impacts of global climate change. No single project could generate enough GHG emissions to noticeably change the global average temperature. The combination of GHG emissions from past, present, and future projects contributes substantially to the phenomenon of global climate change and its associated environmental impacts and as such is addressed only as a cumulative impact.

   Thresholds of significance illustrate the extent of an impact and are a basis from which to apply mitigation measures. Significance thresholds for GHG emissions resulting from land use development projects have not been established in Siskiyou County. In the absence of any GHG emission significance thresholds, the projected emissions are compared to the South Coast Air Quality Management District's recommended threshold of 3,000 metric tons of CO_2e annually. While significance thresholds used in Southern California are not binding in Siskiyou County or Yreka, they are instructive for comparison purposes. The project would be

considered to have a significant impact if the projected emissions would surpass 3,000 metric tons of CO_2e annually. There would also be long-term regional emissions associated with project-related new indirect source emissions.

TABLE 4.7-1
OPERATIONAL GHG EMISSIONS – METRIC TONS PER YEAR

Source	CO_2e
Area Source	38
Energy Source	1,592
Mobile Source	341
Solid Waste Source	1
Water Source	10
Total	**1,982**
Significance Threshold	**3,000**
Exceed Threshold?	**No**

*Sources: CalEEMod version 2013.2.2; EPA 2011b. Refer to **Appendix B** for model data outputs.*
Notes: Area source emissions include the operation of the front loader.
Energy source emissions account for the estimate of 64,800 kBtu energy consumption annually, which is based on the production of 8,000 cubic yards of concrete per year.
Mobile source emissions account for the daily commute trips of five employees and 50 daily product deliver trips.

As shown in **Table 4.7-1**, estimated GHG emissions resulting from both construction and operations of the proposed would total 1,982 metric tons of CO_2e per year, which is less than the GHG threshold of 3,000 metric tons of CO_2e per year and therefore a less than significant impact.

b) *No Impact*. The project would not conflict with any adopted plans, policies, or regulations adopted for the purpose of reducing GHG emissions. While the proposed project is subject to compliance with the Global Warming Solutions Act (Assembly Bill [AB] 32), as identified under Response 4.7(a), proposed project-generated GHG emissions would not surpass GHG significance thresholds, which were prepared with the purpose of complying with the requirements of AB 32. Therefore, the proposed project would not conflict with AB 32.

Mitigation Measures

None required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.8 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?	☐	☐	☒	☐
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?	☐	☒	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
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?	☐	☐	☒	☐
e) For a project located within an airport land use plan area or, where such a plan has not been adopted, within 2 miles of a public airport or a public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
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?	☐	☐	☐	☒
g) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
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?	☐	☐	☒	☐

SETTING

A material is considered hazardous if it appears on a list of hazardous materials prepared by a federal, state, or local agency, or if it has characteristics defined as hazardous by such an agency. A hazardous material is defined in Title 22 of the California Code of Regulations, Title 22, Section 662601.10, as follows:

> *A substance or combination of substances which, because of its quantity, concentration, or physical, chemical or infectious characteristics, may either (1) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed of or otherwise managed.*

Most hazardous material regulation and enforcement in Siskiyou County is managed by the Siskiyou County Public Health Department, which refers large cases of hazardous materials contamination or violations to the North Coast Regional Water Quality Control Board (RWQCB) and the California Department of Toxic Substances Control (DTSC). When issues of hazardous materials arise, it is not at all uncommon for other agencies to become involved, such as the applicable air pollution control district and both the federal and state Occupational Safety and Health Administrations (OSHA).

Under Government Code Section 65962.5, both the DTSC and the State Water Resources Control Board (SWRCB) are required to maintain lists of sites known to have hazardous substances present in the environment. Both agencies maintain up-to-date lists on their websites. A search of the DTSC and SWRCB databases results in a total of one site within a 1-mile radius of the project site listed in the EnviroStor and GeoTracker databases (DTSC 2015; SWRCB 2015). This site, belonging to the Hi-Ridge Lumber Company, is located just north of the project site at 229 S. Phillipe Lane and is listed as in need of evaluation for potential lead contamination. The agency responsible for overseeing the cleanup is listed as the RWQCB. Consultation with the North Coast RWQCB will ensure that remediation efforts are carried out and that the cleanup of the site will be completed.

DISCUSSION OF IMPACTS

a) *Less Than Significant Impact*. Businesses that store hazardous materials are subject to the Hazardous Material Business Plan program, which is regulated by the Environmental Health Division of the Siskiyou County Public Health Department as part of the Certified Unified Program. The program requires the preparation of a document that includes an inventory of hazardous materials on-site, emergency plans and procedures in the event of an accidental release, and training for employees on safety procedures for handling hazardous materials and in the event of a release or threatened release. These plans are routine documents that are intended to disclose the presence of hazardous materials and provide information on what to do if materials are inadvertently released.

   While the proposed project would store some hazardous materials on-site (e.g., up to 1,200 gallons of propane fuel), all of the concrete chemical admixtures used to produce ready-mix concrete are nonhazardous. Adherence to the reporting requirements for hazardous materials, preparation of a hazardous material business plan, and compliance with all required regulations and laws would ensure that hazardous materials are stored and handled properly and that the proposed operation minimizes the potential for accidental upset. Therefore, with compliance with the law, this impact is considered to be less than significant.

b) *Less Than Significant Impact With Mitigation Incorporated*. Regarding construction, although unlikely, a potential release of hazardous materials could occur during construction work on the project. Any such releases would most likely be spillages of motor vehicle fuels and oils. However, with the application of standard construction practices and regulatory requirements, the effects of such spills would be minimized.

   In terms of the potential release of hazardous materials during proposed project operations, all chemical admixtures used in the production of ready-mix concrete are nonhazardous. During the winter months, a water heater will be fired by propane fuel and used to heat batch water. Approximately 1,200 gallons of propane fuel would be stored in propane tanks at the project site. As discussed in Response 4.8(a) above, the applicant is required to comply with county and state requirements regarding the transport, storage, and handling of hazardous materials. These requirements include the Siskiyou County Environmental Health Division's

review and approval of a hazardous materials business/hazardous waste release response plan. Mitigation measure **MM 4.8.1** is provided below to address the accidental release of hazardous materials.

c) *No Impact*. The project is not located within one-quarter mile of any school. The nearest schools to the project site are all located on the west side of Interstate 5, approximately 2 miles distant. In addition, compliance with existing regulations and standard safety procedures related to the handling of hazardous materials and waste would further reduce potential impacts to a level of insignificance, resulting in a determination of no impact.

d) *Less Than Significant Impact*. As previously stated, a search of the DTSC and SWRCB databases identified only one open case of hazardous waste violations within a 1-mile radius of the proposed improvements and none on the project site. Consultation with the RWQCB would ensure remediation of the contaminated site and further reduce potential impacts to a less than significant level.

e) *No Impact*. The closest public airport to the project site is Montague-Yreka Rohrer Field Airport, located just over 2 miles to the east. Therefore, the project site is more than 2 miles from a public or private airport. No impact would occur.

f) *No Impact*. The project site is not located in the vicinity of a private airstrip.

g) *Less Than Significant Impact*. Yreka is located in the Operational Area of the Siskiyou County Office of Emergency Services. A standardized emergency management system (SEMS) program is in place between the City and the Office of Emergency Services. A local emergency plan guides local response to emergencies and local emergency management and is conducted under the direction of the City of Yreka Police Department. The proposed project would not obstruct evacuation routes or access to critical emergency facilities. This impact is less than significant.

h) *Less Than Significant Impact*. Although there is the potential for wildland fires in the region given the relatively dry summer climate, with hot days and wind, the project site is located in an urban industrial environment in an area that is not likely to be affected by wildland fires. Impacts would be less than significant.

Mitigation Measures

MM 4.8.1 The project applicant shall prepare and submit a hazardous materials business/hazardous waste release response plan for the site, including information on hazardous materials and hazardous waste handling and storage. The plan shall be submitted to the Siskiyou County Environmental Health Division for review and approval.

Timing/Implementation: *Prior to approval of project plans*

Enforcement/Monitoring: *City of Yreka Planning Department; Siskiyou County Environmental Health Division*

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.9 HYDROLOGY AND WATER QUALITY. Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
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 that would result in flooding on- or off-site?	☐	☐	☒	☐
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?	☐	☐	☒	☐
f) Otherwise substantially degrade water quality?	☐	☐	☒	☐
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?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	☐	☐	☐	☒
i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of a failure of a levee or dam?	☐	☐	☐	☒
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

SETTING

One of the most significant hydrology-related issues in Yreka is occasional flooding from storm events. The city is traversed by a number of natural and man-made drainages that experience dramatic seasonal fluctuations in flow and occasional short-term "pulse flow" conditions resulting in flooding. Occasional flooding due to storm events occurs along these drainages and at a few intersections throughout the city. As noted above, several creeks and/or intermittent drainages flow through the city: Yreka Creek, Humbug Creek, Juniper Creek, and Greenhorn Creek. Yreka Creek, an ephemeral waterway, does not maintain a year-round surface flow in many of its reaches.

The project site is located along the west side of South Phillipe Lane, which is equipped with curb, gutter, and storm drainage features. Surface water flows would be collected by an on-site ditch or swale, where stormwater would then be directed to the storm drain inlet and catch basins at the southeast corner of the project site. As mapped by the FEMA (2011) Flood Insurance Rate Mapping program, no portion of the proposed project is located in the 100-year floodplain.

DISCUSSION OF IMPACTS

a) *Less Than Significant Impact*. There is potential for the proposed project to result in degradation of water quality during both the construction and operational phases. Polluted runoff from the project site during construction and operation could include sediment from soil disturbances and oil and grease from heavy-duty equipment. The greatest potential source of water contaminants from the proposed project would be from erosion related to both construction and post-construction operations.

   As previously stated, stormwater runoff from the site would be collected into catch basins and the storm drain inlet at the southeast corner of the property near the driveway off South Phillipe Lane. The proposed project would be connected to the City's municipal stormwater drainage facilities, which are required to comply with water quality standards and current permits. Therefore, the proposed project would result in a less than significant impact to water quality standards or waste discharge requirements.

b) *Less Than Significant Impact*. The proposed project would receive water from the City's municipal water supply, which is sourced from surface water, and would not involve drilling a new well to serve the site. The project would result in an increase in impervious surfaces, specifically 2,800 square feet of new buildings (office and shop building), 3,659 square feet of landscaped area, and 22,533 square feet of paved surface area, for a total lot coverage of 28,992 square feet. Despite this increase in impervious surfaces, the total lot coverage would equate to 15.5 percent of the parcel's total area of 185,565 square feet. Therefore, the addition of these surfaces would not significantly interfere with groundwater recharge, as there are sufficient pervious surfaces adjacent to these improvements.

c) *Less Than Significant Impact*. See Response 4.6(b). Construction activities during project site development, such as grading, excavation, and soil hauling, would disturb soils and potentially expose them to wind and water erosion. Similarly, proposed project operations would involve the use of heavy equipment and movement of materials and therefore could also disturb on-site soils. However, with the application of standard construction practices and compliance with regulatory requirements, soil erosion and loss of topsoil is not a concern for the site. In addition, the project site does not contain any surface water features.

d) *Less Than Significant Impact*. See Responses 4.6(b) and 4.9(c). The proposed project would alter the existing drainage patterns on the site by adding impermeable surfaces to portions of the site. Impervious surfaces will allow stormwater to move more quickly through the site, increasing the rate of runoff, and thus have more erosive potential. However, on-site stormwater would be collected in a ditch or swale and directed to the catch basins and storm drain inlet at the southeast corner of the project site. For these reasons, the proposed project would have a less than significant impact regarding flooding on- or off-site.

e) *Less Than Significant Impact*. See Responses 4.6(a) and 4.9(c). The proposed project would alter the existing drainage patterns on the site by resulting in changes to the amount of impervious surface. Polluted runoff from the project site during construction and operation

could include sediment from soil disturbances; oil and grease from construction equipment, roadways, and parking lots; pesticides and fertilizers from landscaped areas; metals from paints; and gross pollutants such as trash and debris. Compliance with existing regulations developed to minimize the release of polluted runoff from construction sites would reduce this impact to a less than significant level.

f) *Less Than Significant Impact*. See Responses 4.9(a) through 4.9(e).

g) *No Impact*. As mapped by the FEMA (2011) Flood Insurance Rate Mapping program, no portion of the proposed project is located in the 100-year floodplain.

h) *No Impact*. See Response 4.9(g).

i) *No Impact*. See Response 4.9(h). The project site is located within 3 miles of the Greenhorn Dam in Yreka to the east. According to the City General Plan (2003), Greenhorn Dam Reservoir poses no real threat to Yreka. Even though it is a Class C earthfill dam, a breakage by any means would result in seepage rather than a complete collapse. There is a limited quantity of water impounded and Yreka Creek could accommodate the flow. Additionally, the project site is located within 20 miles of several dams on the Klamath River. According to the City General Plan, these dams do not pose a threat to any part of Yreka due to their distance from the city and the intervening topography. Furthermore, these dams are regulated by the California Division of Safety of Dams (DSD). The DSD performs annual maintenance inspections of these and other dams under state jurisdiction, including monitoring for compliance with seismic stability standards. Regular inspection by the DSD ensures that dams are kept in safe operating condition. As such, failure of these dams is considered to have an extremely low probability of occurring and is not considered to be a reasonably foreseeable event. For these reasons, the project would not expose people or structures to a significant risk of loss, injury, or death as a result of the failure of a dam. No impact would occur.

j) *No Impact*. The project site is not located near an ocean or large body of water with potential for seiche or tsunami. The project area is not at risk for mudflows.

Mitigation Measures

None required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.10 LAND USE AND PLANNING. Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
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?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

SETTING

The basis for land use planning in Yreka is the City's General Plan (2003). The Land Use Element provides the primary guidance on issues related to land use and land use intensity. The Land Use Element provides designations for land in the city and outlines goals and policies concerning development and use of that land. In concert with the General Plan, the Yreka Zoning Ordinance establishes zoning districts in the city and specifies allowable uses and development standards for each district. Under state law, each jurisdiction's zoning ordinance must be consistent with its general plan.

The project site contains one parcel located within the Yreka city limits; that parcel is owned by Sousa Ready Mix, LLC. The project site is designated Industrial in the City General Plan and is zoned Heavy Industrial (M-2). As defined by the General Plan, the Industrial designation is intended to accommodate "lumber mills, asphalt plants, manufacturers of product designed predominantly for sale off site" (Yreka 2003).

DISCUSSION OF IMPACTS

a) *No Impact*. The project will not result in the division of an existing community. The project site is located in an area of Yreka with existing industrial development. While there are undeveloped lands in the project vicinity, these lands are designated and zoned for industrial development. Therefore, the proposed project will not divide an established community.

b) *No Impact*. The project is required to secure a Conditional Use Permit, pursuant to City Municipal Code Section 16.42.070, to allow the construction of a concrete batch plant, small portable office trailer, aggregate storage area, truck and auto parking, precast concrete area, and concrete truck washout basin. The primary use at the site would be the production of ready-mix concrete. The project is consistent with the City's General Plan and Zoning Ordinance.

c) *No Impact*. See subsection 4, Biological Resources. No habitat conservation or natural community conservation plans are applicable to the project area.

Mitigation Measures

None required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.11 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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

SETTING

Historically, gold mining was responsible for the establishment of Yreka. With thousands of gold miners hoping to strike it rich, dredge mining occurred along Yreka Creek between the 1850s and 1930s. Although some mining still takes place on the Shasta and Klamath rivers, the resource is essentially depleted and no longer plays a significant role in Yreka's economy. Nevertheless, gold continues to provide a tourist draw to the region for many amateur gold-seekers.

The State Mining and Geology Board has the responsibility to inventory and classify mineral resources and could designate such mineral resources as having a statewide or regional significance. If this designation occurs, the local agency must adopt a management plan for such identified resources. At this time, there are no plans to assess local mineral resources for the project area or Siskiyou County.

The project site is located in an area that has been heavily disturbed. The site was previously used for the storage of lumber and recycled concrete.

DISCUSSION OF IMPACTS

a) *No Impact*. The project would not result in the loss of an available known mineral resource that would be of value to the region or residents of the state.

b) *No Impact*. See Response 4.11(a). There are no locally important mineral resource recovery sites in the project area delineated in the City's General Plan.

Mitigation Measures

None required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.12 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 of applicable standards of other agencies?	☐	☐	☒	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
e) For a project located within an airport land use plan area or, where such a plan has not been adopted, within 2 miles of a public airport or a public use airport, exposure of people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, exposure of people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

SETTING

Noise sources in Yreka include local and through traffic, commercial and industrial uses, races at the fairgrounds, and occasional railroad operations of the Yreka Western Railroad when it is operating. The most consistent noise sources in Yreka are local and through traffic. Interstate 5, which traverses the full length of the community from north to south, is likely the most significant noise source.

Noise Fundamentals

Noise is generally defined as sound that is loud, disagreeable, or unexpected. The selection of a proper noise descriptor for a specific source is dependent on the spatial and temporal distribution, duration, and fluctuation of the noise. The noise descriptors most often encountered when dealing with traffic, community, and environmental noise include an overall frequency-weighted sound level in decibels that approximates the frequency response of the human ear (in dBA).

Noise can be generated by a number of sources, including mobile sources, such as automobiles, trucks, and airplanes, and stationary sources, such as construction sites, machinery, and industrial operations. The rate depends on the ground surface and the number or type of objects between the noise source and the receiver. Mobile transportation sources, such as highways, and hard and flat surfaces, such as concrete or asphalt, have an attenuation rate of 3.0 dBA per doubling of distance. Soft surfaces, such as uneven or vegetated terrain, have an attenuation rate of about 4.5 dBA per doubling of distance from the source. Noise generated by stationary sources typically

attenuates at a rate of approximately 6.0 to 7.5 dBA per doubling of distance from the source (EPA 1971).

Sound levels can be reduced by placing barriers between the noise source and the receiver. In general, barriers contribute to decreasing noise levels only when the structure breaks the "line of sight" between the source and the receiver. Buildings, concrete walls, and berms can all act as effective noise barriers. Wooden fences or broad areas of dense foliage can also reduce noise, but are less effective than solid barriers.

DISCUSSION OF IMPACTS

a) *Less Than Significant Impact*.

Short Term. Short-term noise levels related to construction of the proposed project would temporarily increase noise levels in the vicinity of the project site. Typical construction noise levels vary up to a maximum of 95 dBA at 50 feet from the construction site during the noisiest construction phases. Site preparation activities, which include excavation and grading, tend to generate the highest noise levels because the noisiest construction equipment is earth-moving equipment. Earth-moving equipment includes excavating machinery such as backhoes, bulldozers, draglines, front loaders, and earth-moving and compacting equipment, which includes compactors, scrapers, and graders. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full power operation followed by 3 to 4 minutes at lower power settings. **Table 4.12-1** summarizes noise levels produced by construction equipment that is commonly used during construction projects.

TABLE 4.12-1
TYPICAL CONSTRUCTION NOISE LEVELS

Equipment	Noise Levels at 50 Feet
Front-End Loader	85 dBA
Bulldozer	85 dBA
Backhoe	80 dBA
Water Truck (or other heavy truck)	88 dBA
Generator	81 dBA
Concrete Mixer	85 dBA
Tamper/Roller	75 dBA
Crane, Mobile	83 dBA
Paver	87 dBA
Jackhammer	85 dBA
Grader/Excavator/ Scraper	85 dBA
Paver	85 dBA

Sources: FTA 2006; FHWA 2006; EPA 1971

As depicted in **Table 4.12-1**, noise levels generated by individual pieces of construction equipment typically range from approximately 74 dBA to 88 dBA L_{max} at 50 feet (FTA 2006).

Average-hourly noise levels associated with construction projects can vary, depending on the activities performed, reaching levels of up to approximately 83 dBA at 50 feet. Short-term increases in vehicle traffic, including worker commute trips and haul truck trips, may also result in temporary increases in ambient noise levels at nearby receptors. During project construction, exterior noise levels could affect the nearest existing sensitive receivers in the vicinity. The nearest noise-sensitive receptors include residences to the west, which are approximately 2,300 feet from the project site.

The City's General Plan Noise Element establishes policies and regulations concerning the generation and control of noise that could adversely affect its citizens and noise-sensitive land uses. For instance, the maximum allowable noise level for residential land uses under the City's General Plan Noise Element is 50 dBA. As depicted in **Table 4.12-1**, noise generated by individual equipment can reach levels of up to approximately 88 dBA at 50 feet for brief periods. Based on the above noise levels and assuming an average noise attenuation rate of 6 dB per doubling of distance from the source center, predicted exterior average-hourly noise levels would be approximately 56.5 dBA at the nearest residential land uses, which is above the City standard. However, City General Plan Noise Element Policy 9 exempts construction activities from City noise standards because such activity is temporary. In addition, City General Plan Noise Element Policy 10 limits construction activities to the hours between 7 a.m. and 5 p.m. For these reasons, short-term noise levels related to construction of the proposed project would be less than significant.

Long Term. The operation of the concrete batch plant would generate noise. Noise would also be generated primarily from the ready-mix trucks and the loading of the aggregate bins. While noise levels resulting from the project are not expected to be high, they will inevitably be higher than under existing conditions (i.e., a vacant parcel). However, an increase in noise is expected from industrial activities and the project would not have a significant adverse effect on the surrounding environment.

The nearest noise-sensitive land use are two single-family homes located approximately 2,300 feet to the west of the proposed concrete batch plant. As previously stated, the maximum allowable noise level for residential land uses under the City's General Plan Noise Element is 50 dBA. Based on the traffic model analysis generated for this project, predicted exterior average-hourly noise levels would be approximately 42.7 dBA at the nearest residential land uses, which is less than the maximum allowable noise level under the City standard (see **Appendix C** for traffic model data).

Furthermore, the project site is located in an area of Yreka with existing industrial development (immediately north of the project site is a meat-processing plant, with Siskiyou Distributing to the west and Shasta Forest Products to the east). Therefore, the anticipated increase in noise levels over existing conditions as a result of the project would be considered appropriate due to its location. Potential long-term noise impacts would be less than significant.

b) *Less Than Significant Impact*. Increases in groundborne vibration levels attributable to the proposed project would be associated with both short-term construction-related activities and long-term operational activities. Both construction and operational activities associated with the proposed improvements would likely require the use of various types of equipment, such as tractors and haul trucks. Groundborne vibration levels associated with representative construction equipment are summarized in **Table 4.12-2**.

TABLE 4.12-2
REPRESENTATIVE VIBRATION SOURCE LEVELS FOR CONSTRUCTION EQUIPMENT

Equipment	Peak Particle Velocity at 25 Feet (in/sec)
Loaded Trucks	0.076
Jackhammer	0.035
Small Bulldozers/Tractors	0.003

Source: FTA 2006; Caltrans 2004

Commonly recommended criteria for structural damage and human annoyance are 0.2 and 0.1 inches per second peak particle velocity (ppv), respectively (Caltrans 2002, 2004). Based on the vibration levels presented in **Table 4.12-2**, ground vibration generated by heavy-duty equipment would not be anticipated to exceed approximately 0.08 inches per second peak particle velocity at 25 feet. Predicted vibration levels at the nearest on- and off-site structures would not exceed recommended criteria. As a result, this impact would be considered less than significant.

c) *Less Than Significant Impact*. See Response 4.12(a).

d) *Less Than Significant Impact*. See Response 4.12(a).

e) *No Impact*. The project is not located within 2 miles of an airport.

f) *No Impact*. The project is not located in the vicinity of a private airstrip.

Mitigation Measures

None required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.13 POPULATION AND HOUSING. Would the project:				
a) Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

SETTING

According to the California Department of Finance (2015), the population of Yreka was approximately 7,849 as of January 2015, with 3,391 occupied dwelling units and an average of 2.28 persons per household. No housing exists on the project site.

DISCUSSION OF IMPACTS

a) *No Impact*. The proposed project does not include the construction of any new homes and will not require the extension of roads or infrastructure. As such, the proposed project will have no impact with regarding to population growth.

b) *No Impact*. Because the project site is a vacant lot, the project would not displace any housing.

c) *No Impact*. Because the project site is a vacant lot, the project would not displace any people.

Mitigation Measures

None required.

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

SETTING

Fire Protection

Fire protection services in Yreka are provided by the Yreka Fire Department, which is staffed by volunteers. The fire station is located at 401 West Miner Street. The department also provides Basic Life Support services. Although the personnel are volunteers, equipment needs are funded through the City of Yreka's property assessment for fire services.

The service boundaries of the department are the city limits, although the department has a mutual aid agreement with Cal Fire to provide fire protection services to outlying areas (Yreka 2003, p. 6-4). One fire hydrant is currently located on the project site.

Police Protection

Police protection services in the city are provided by the Yreka Police Department, which operates from the main police station located at 412 West Miner Street. The department anticipates that the current police force will be adequate to provide police protection needs to Yreka residents at the same level of service through 2022, barring a large increase in population due to a major change such as a large employer locating in Yreka (Yreka 2003, p. 6-6).

Schools

The Yreka Union Elementary School District serves school-aged children in kindergarten through eighth grade (K–8). Three public schools serve elementary school–aged children: Evergreen School, Jackson Street School, and Matole Valley Charter School. The Yreka Union High School District serves high school–aged children in grades 9 through 12 at Yreka High School (Yreka 2003, p. 7-2).

Parks and Recreation

Recreational opportunities for both youth and adults are varied in Yreka. A well-rounded variety of programs and activities is available to residents at City, school, and private recreational facilities

in and around the community. The City operates and maintains nine parks, one pool, two ball fields, and the Yreka Creek Greenway, all funded by the City's General Fund.

Other Public Facilities

Other local public facilities found in Yreka include Siskiyou County Administration, Courts, Public Health, and Library; College of the Siskiyous; Yreka City Administration; California Highway Patrol; National Forest Service; California Department of Forestry; County Fairgrounds; and a variety of other state and federal offices.

DISCUSSION OF IMPACTS

a) *Less Than Significant Impact*. Development of the project site would result in a need for fire protection services to respond to any potential incidents that may occur at the site. However, the project site is located in a developed part of the city that currently receives fire service. While a new industrial facility would require services, it would not result in the need for new fire personnel or facilities, as services can adequately be provided by existing personnel out of existing facilities. Therefore, this impact is less than significant.

b) *Less Than Significant Impact*. Development of the project site would result in a need for police protection services to respond to any potential incidents that may occur at the site. However, the project site is located in a developed part of the city that currently receives police service. While a new industrial land use would require services, it would not result in the need for new police personnel or facilities, as services can adequately be provided by existing personnel out of existing facilities. Therefore, this impact is less than significant.

c) *No Impact*. The proposed project does not propose any housing and would not include any other components that would result in an increased demand for schools. As such, there would be no need for additional facilities to maintain acceptable service ratios for schools. No impact would occur.

d) *No Impact*. The proposed project does not propose any housing and would not include any other components that would result in an increased demand for parks. As such, there would be no need for additional facilities to maintain acceptable service ratios for parks. No impact would occur.

e) *No Impact*. The proposed project does not propose any housing and would not include any other components that would result in an increased demand other public services, such as libraries. As such, there would be no need for additional facilities to maintain acceptable service ratios. No impact would occur.

Mitigation Measures

None required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.15 RECREATION.				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
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?	☐	☐	☐	☒

SETTING

Recreational opportunities for both youth and adults are varied in Yreka. A well-rounded variety of programs and activities is available to Yreka's residents at City, school, and private recreational facilities. The City's Department of Public Works operates and maintains nine parks, one pool, two ball fields, the Yreka Creek Greenway, a senior center and community theater, all funded by the City's General Fund. Private recreational facilities include a community theater, the YMCA, fitness centers, and a bowling alley.

DISCUSSION OF IMPACTS

a) *No Impact*. The proposed project will not result in the construction of any new residential units; therefore, the use of existing parks and other recreational facilities will not be increased and no new or expanded facilities will be required. As such, the proposed project would have no impact to recreation.

b) *No Impact*. See Response 4.15(a).

Mitigation Measures

None required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.16 TRANSPORTATION/TRAFFIC. Would the project:				
a) Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)?	☐	☐	☒	☐
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
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?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☐	☐	☒
f) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	☒

SETTING

The city is located in northern Siskiyou County and is served by Interstate 5, SR 3, and SR 263. In Yreka, a number of significant roadways, including Main Street, Oregon Street, Miner Street, and Oberlin Road, provide internal circulation and connectivity to the Siskiyou County roadway system.

The County of Siskiyou provides a public bus system, the Siskiyou Transit and General Express (STAGE), that makes several stops in Yreka, while providing transportation to the communities in Siskiyou County generally along Interstate 5. Another STAGE route travels SR 3 from Etna into Yreka and returns along the same route. A senior bus service is also provided in Yreka by the Yreka Senior Center. This service works in conjunction with STAGE to provide a greater service area for STAGE.

The terrain and layout of Yreka is favorable for bicycle and pedestrian circulation. Sidewalks exist on most streets. Most streets have sufficient width and low traffic volumes, permitting their safe use by bicyclists. Streets in the city have designated areas between the vehicle travelway and the edge of pavement of sufficient width to accommodate bicyclists. These include SR 3 throughout the city, Oregon Street, and SR 263 from SR 3 north. The Yreka Creek Greenway is identified as a future Class I bike path facility, which is identified as a completely separate right-of-way for the exclusive use of bicycles and pedestrians (Yreka 2006).

The site is bounded on the south by the Yreka Western Railroad tracks; the railroad is not currently in operation. South Phillipe Lane abuts the project site to the east and Oberlin Road is located approximately 1.5 miles south of the project site. South Phillipe Lane has existing curb and gutter improvements. Direct access to the site is currently provided from South Phillipe Lane via a 60-foot-

wide easement between adjacent parcels at the southeastern edge of the project site. In addition, the project proposes three entrance gates. The west gate will be primarily for aggregate delivery. The central gate will be used as the primary entry for employees and returning ready-mix trucks. The east gate will be for trucks and employees exiting the property. The travel ways around the concrete batch plant will be paved, as well as the west entrance; however, the aggregate storage area will not be paved.

DISCUSSION OF IMPACTS

a) *Less Than Significant Impact*. The proposed project site is located adjacent to South Phillipe Lane within 1,000 feet of SR 3/Montague Road. With the proposed project, cement trucks would be used to mix and deliver concrete to construction sites as needed. Primary access to the project site would be provided from South Phillipe Lane via a 60-foot-wide easement between adjacent parcels at the southeastern edge of the project site. Ready-mix concrete and pre-cast concrete products would be shipped to and from the site primarily via SR 3/Montague Road. The applicant anticipates that project operations would result in an average of 5 to 7 truck deliveries per day; however, during the peak summer season, deliveries could be as frequent as 50 truckloads a day. Overall, the average number of summertime deliveries will be higher than the number of wintertime deliveries, ranging from 14 deliveries a day in September and October to as low as zero or 1 to 2 deliveries on a winter day. Outgoing trucks would operate all year. Once they leave the project site, the trucks would drive north on South Phillipe Lane to access SR 3/Montague Road, then drive west to Interstate 5 before heading either north or south.

As described, South Phillipe Lane and SR 3/Montague Road would act as the primary traffic facilities serving the project site. South Phillipe Lane is defined as a collector roadway by the City General Plan, while SR 3/Montague Road is defined as an arterial roadway facility (Yreka 2003). According to General Plan Circulation Element Program CI.4.F, traffic impacts are considered significant if they result in traffic that exceeds the "environmental capacity" of average daily trips (ADT); this capacity is defined as greater than 2,500 ADT on collector facilities like South Phillipe Lane and greater than 5,000 ADT on arterial facilities like SR 3/Montague Road.

The proposed project would result in a maximum of 50 daily truck deliveries in the summer season. Additionally, the project anticipates three to five employees accessing the site each day, as well as two visitors. Assuming that every employee travels to the site via automobile as the sole passenger and that each employee would leave the site for a lunch break before returning, each project employee would represent four trips and each visitor would represent two trips. Therefore, project employee and visitor trips would result in an average of 24 trips daily year-round, while delivery truck trips during peak season (summertime) would equate to an average of 100 trips daily (five employees and two visitors coming and going and 50 ready-mix concrete trucks coming and going [(5 x 4) + (2 x 2) + (50 x 2)]).

The most recent traffic data for South Phillipe Lane shows that 701 traffic trips are accommodated daily (Yreka 2014). The addition of a maximum 100 truck daily trips (during peak season) and 24 employee/visitor daily trips for a total of 124 maximum daily trips to the existing daily traffic on South Phillipe Lane would not surpass the City General Plan threshold of 2,500 ADT for a collector roadway [701 existing daily trips + 124 project daily trips = 825].

According to the California Department of Transportation's (2013) inventory of traffic volumes on the California highway system, the segment of SR 3/Montague Road between South

Phillipe Lane and Interstate 5 currently accommodates an average of 2,200 traffic trips per day. The addition of a total of 124 maximum daily trips to the existing daily traffic on SR 3/Montague Road would not surpass the City General Plan threshold of 5,000 ADT for an arterial roadway [2,200 existing daily trips + 124 project daily trips = 2,324].

The proposed project's impact to the roadway system is less than significant since the project's contribution to local traffic would not surpass City General Plan thresholds.

b) *Less Than Significant Impact*. See Response 4.16(a). According to General Plan Circulation Element Program CI.4.F, traffic impacts are considered significant if they result in traffic that exceeds the environmental capacity of ADT, which is defined as greater than 2,500 ADT on collector facilities like South Phillipe Lane and greater than 5,000 ADT on arterial facilities like SR 3/Montague Road. The proposed project's contribution to local traffic would not surpass these City General Plan thresholds.

c) *No Impact*. The closest public airport to Yreka is Montague-Yreka Rohrer Field Airport, located just over 2 miles to the east. However, there are no project components that would affect air traffic patterns.

d) *No Impact*. No design features associated with the proposed project would increase hazards. Primary access to the project site would be provided from South Phillipe Lane via a 60-foot-wide easement between adjacent parcels at the southeastern edge of the project site. South Phillipe Lane has existing curb, gutter, and sidewalk improvements, and according to the City General Plan Circulation Element (2003), South Phillipe Lane is classified as a roadway that is designed to carry significant industrial traffic.

e) *No Impact*. Emergency vehicles would access the site from South Phillipe Lane via SR 3/Montague Road. A secondary emergency access route would also be available from South Phillipe Lane via Oberlin Road to the south of the project site. There is no impact from the proposed project.

f) *No Impact*. The proposed project will not conflict with adopted plans for alternative transportation and will not have an impact on alternative transportation.

Mitigation Measures

None required.

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

SETTING

Water Supply

Water supply for Yreka originates from the Fall Creek Pumping Station and is piped to the city for distribution. Water is chlorinated at the source and again at the treatment plant and then is filtered before entering the city. The water system is largely gravity fed, with eight storage tanks located around the city to provide and maintain system pressure and storage. Yreka has a current winter usage of 1.0 million gallons per day (mgd), while summer usage can increase up to 6.0 mgd during peak demands. Most of the system is looped, and adequate pressure is available throughout most of the city (Yreka 2003). Existing water lines are located in South Phillipe Lane adjacent to the site. The project proposes to tap into the City's water lines located in South Phillipe Lane.

Wastewater

The wastewater treatment facility for Yreka is located between State Route 263 (N. Main Street) and Yreka Creek, approximately 600 feet north of the intersection of Montague Road and SR 263. The wastewater treatment plant has a design capacity of 1.0 million gallons per day of average dry weather flow. Average dry weather flow (ADWF) is 0.7 mgd. Average wet weather flow (AWWF) is 0.9 mgd (Yreka 2003). Existing wastewater lines are located in South Phillipe Lane

adjacent to the site. The project proposes to tap into the City's existing wastewater collection line located in South Phillipe Lane.

Storm Drainage

The city is traversed by a number of natural and man-made drainages that all eventually lead to Yreka Creek, which flows north to the Shasta River, a tributary to the Klamath River. Overall drainage in the city is adequate, with only localized flooding during storm events. Floodwater and drainage have had a negative effect on the wastewater collection and treatment systems. The City prepared and adopted the comprehensive City of Yreka Master Plan of Drainage in 2005.

As discussed in subsection 4.9, Hydrology and Water Quality, the proposed project would be connected to the City's municipal stormwater drainage facilities. The site plan submitted for the project site indicates the direction of surface level stormwater flows on-site. Most on-site stormwater is sheet flow that may enter an on-site ditch or swale, which will convey it to the storm drain inlet near the southeast corner of the property.

Solid Waste

The County of Siskiyou owns and operates a transfer site southeast of Yreka off Oberlin Road. By agreement between the City of Yreka and the County of Siskiyou, the City has access to the facility for 25 years, commencing in 2007. Solid waste from Yreka is subsequently transported and disposed of at the Anderson Solid Waste Landfill in Shasta County. Under existing state permits, the landfill may accept 1,850 tons of solid waste per day until the year 2055 and had an estimated remaining capacity of 16,840,000 cubic yards in 2008 (CalRecycle 2012a).

DISCUSSION OF IMPACTS

a) *Less Than Significant Impact*. Wastewater disposal is regulated under the federal Clean Water Act and the state Porter-Cologne Water Quality Control Act. The North Coast RWQCB implements these acts by administering the National Pollutant Discharge Elimination System (NPDES), issuing water discharge permits, and establishing best management practices (BMPs). The proposed project would result in increased wastewater flows that would be collected and treated at the Yreka wastewater treatment plant. As previously stated, the plant has a design capacity of 1.0 million gallons per day of average dry weather flow, and the current dry weather flow averages 0.7 mgd. The City of Yreka is currently able to dispose of all of its effluent and will continue to do so with implementation of the proposed project. In addition, the City recently approved a project to repair or replace portions of the City's existing municipal wastewater collection system at 13 locations and to modify the waste treatment and sludge drying infrastructure at the City's existing wastewater treatment plant. Once the infrastructure project is complete, Yreka's wastewater disposal needs will be accommodated for the life of the General Plan. The proposed project is consistent with the land use assumptions contained in the General Plan. Therefore, no aspect of the proposed project would exceed wastewater treatment requirements.

b) *Less Than Significant Impact*. The proposed project would not increase demand for water supply and/or wastewater disposal beyond the capacity of the water delivery and wastewater collection systems, as these systems were constructed to accommodate growth, including development of the proposed project for industrial uses.

In terms of water supply facilities, an existing water line traverses the east end of the project site along South Phillipe Lane. The City's water service line is capable of meeting the project's needs. The project will have a less than significant impact on water supply facilities.

In terms of wastewater disposal facilities, the City recently approved a project to repair or replace portions of the City's existing municipal wastewater collection system at 13 locations and to modify waste treatment and sludge drying infrastructure at the City's existing wastewater treatment plant. Once the infrastructure project is complete, Yreka's wastewater disposal needs will be accommodated for the life of the General Plan. The proposed project is consistent with the land use assumptions contained in the General Plan and would not increase demand for wastewater disposal beyond the capacity of the improved wastewater disposal system.

c) *Less Than Significant Impact*. The proposed project would increase the amount of impervious surfaces on the project site, resulting in greater stormwater runoff potential. However, the addition of these surfaces would not significantly impact stormwater systems, as there are sufficient pervious surfaces adjacent to the project site. As discussed previously, the project would develop stormwater retention on-site through the use of drainage ditches or swales that carry stormwater flows to catch basins and the storm drain inlet at the southeast corner of the property. As such, existing stormwater retention and conveyance systems would be unaffected.

d) *Less Than Significant Impact*. As previously stated, the City has a current winter water usage of 1.0 mgd, while summer usage can increase up to 6.0 mgd during peak demands. Water use data for the proposed business was obtained from Appendices E and F of the Pacific Institute's (2003) Waste Not, Want Not report, which reports total gallons of water used per day per employee (152 gallons per employee each day). The total daily water use was converted to annual water use based on 365 days, which is conservative as it does not exclude weekends or holidays. According to the project applicant, three to five employees would work on the proposed project site during operations. Use of 152 gallons per five employees each day equals 760 gallons used daily and 277,400 gallons of water used annually. In addition, the applicant estimates the use of an additional 1,820 to 3,636 gallons daily for plant-specific activities such as batching concrete, wetting aggregate stockpiles, and washing out the ready-mix truck basins. The addition of this water use equates to between 2,580 and 4,396 gallons used daily, or between 941,700 and 1,604,540 gallons of water used annually.

The City had an annual water demand of 646.1 million gallons in 2012, or an average of 1.8 million gallons per day (Yreka 2013, p. 11). According to the City's (2010) Urban Water Management Plan, the city's total available water supply is 12,134 acre-feet per year (approximately 3,953,881,215 gallons annually or 10,832,551 gallons per day). The project's water usage of 1,604,540 gallons annually or 4,396 gallons daily would equate to 0.0004 percent of the city's water supply. While the proposed use will increase the demand for water in the city, the use is consistent with the land use assumptions contained in the General Plan and would not increase demand for water beyond the available supplies.

e) *Less Than Significant Impact.* See Response 4.17(a).

f) *Less Than Significant Impact*. Solid waste from the project site will be transported to the transfer station south of the city off Oberlin Road and subsequently disposed of at the Anderson Solid Waste Landfill in Shasta County consistent with the solid waste disposal process for the whole

of the city. Under existing state permits, the landfill may accept 1,850 tons of solid waste per day until the year 2055.

Using waste generation rates published by the California Department of Resources Recycling and Recovery (CalRecycle), the proposed project is estimated to generate approximately 6 tons of solid waste during construction (2,800 square feet of nonresidential building space x 4.34 = 12,152 pounds/6.076 tons). The California Building Code requires that a minimum of 50 percent of construction waste be diverted from the landfill.

In terms of project operations, approximately 8.15 tons of solid waste would be generated annually (assuming all five employees work every day). This estimate was obtained using ratios obtained from CalRecycle's (2012b) estimated solid waste generation rates for industrial land use, which projects the generation of approximately 8.93 pounds of solid waste per employee each day (5 x 8.93 = 44.65 pounds daily; 44.65 pounds x 365 = 16,297.25 pounds/8.15 tons annually).

The proposed project would generate a total of 6.076 tons of solid waste over the duration of construction activities, 50 percent of which must be diverted from the landfill, and a total of 8.15 tons annually during project operations. Under existing state permits, the landfill may accept 1,850 tons of solid waste per day until the year 2055. Therefore, the project's daily contribution to the landfill relative to the landfill's capacity is considered less than significant.

g) *Less Than Significant Impact*. The proposed project will comply with all state and federal statutes regarding solid waste.

Mitigation Measures

None required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.18 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 rare or endangered plants or animals, or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? "Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.	☐	☒	☐	☐
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

DISCUSSION OF IMPACTS

a) *Less Than Significant Impact With Mitigation Incorporated*. Several IS/MND subsections have identified the potential for significant environmental impacts: 4.1, Aesthetics; 4.3, Air Quality; 4.5, Cultural Resources; and 4.8, Hazards and Hazardous Materials. However, with the implementation of mitigation measures included in the relevant subsections of this document, these potential impacts would be reduced to a level that is considered less than significant.

b) *Less Than Significant Impact With Mitigation Incorporated*. The proposed project, in conjunction with other approved or pending projects in the region, has the potential to result in potentially cumulatively impacts to the physical environment for analysis areas which include noise and air quality. However, with the implementation of mitigation measures included in the relevant subsections of this IS/MND, the proposed project's potential impacts would be reduced to a level that is considered less than significant.

c) *Less Than Significant Impact With Mitigation Incorporated*. With the implementation of mitigation measures included in this IS/MND, the project will not result in adverse impacts on human beings.

5.0 References

5.1 DOCUMENTS REFERENCED IN INITIAL STUDY AND/OR INCORPORATED BY REFERENCE

The following documents were used or to determine the potential for impact from the proposed project. Compliance with federal, state, and local laws is assumed in all projects.

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Appendices

Appendix A: Air Quality

Sousa Ready Mix Concrete Batch Plant

Siskiyou County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Heavy Industry	0.45	1000sqft	0.01	450.00	0
General Office Building	2.40	1000sqft	0.06	2,400.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	85
Climate Zone	14			**Operational Year**	2017
Utility Company	PacifiCorp				
CO2 Intensity (lb/MWhr)	1656.39	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Energy Use - Concrete batch plant energy consumption - EPA

Vehicle Trips - Trip generation based on the maximum assumed 5 employees and the maximum assumed 50 haul trips daily

Operational Off-Road Equipment - Operations includes 1 front loader

Vechicle Emission Factors - 91 percent of project traffic = haul trucks

Table Name	Column Name	Default Value	New Value
tblEnergyUse	T24NG	3.37	64,800.00
tblOperationalOffRoadEquipment	OperLoadFactor	0.37	0.37
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblProjectCharacteristics	OperationalYear	2014	2017
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleEF	HHD	0.21	0.00
tblVehicleEF	HHD	0.21	0.00
tblVehicleEF	HHD	0.21	0.00
tblVehicleEF	LDA	0.28	0.01
tblVehicleEF	LDA	0.28	0.01
tblVehicleEF	LDA	0.28	0.01
tblVehicleEF	LDT1	0.10	0.01
tblVehicleEF	LDT1	0.10	0.01
tblVehicleEF	LDT1	0.10	0.01
tblVehicleEF	LDT2	0.15	0.02
tblVehicleEF	LDT2	0.15	0.02
tblVehicleEF	LDT2	0.15	0.02
tblVehicleEF	LHD1	0.10	0.01
tblVehicleEF	LHD1	0.10	0.01
tblVehicleEF	LHD1	0.10	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	MCY	6.1050e-003	0.00
tblVehicleEF	MCY	6.1050e-003	0.00
tblVehicleEF	MCY	6.1050e-003	0.00
tblVehicleEF	MDV	0.14	0.03
tblVehicleEF	MDV	0.14	0.03
tblVehicleEF	MDV	0.14	0.03

tblVehicleEF	MH	4.1720e-003	0.00
tblVehicleEF	MH	4.1720e-003	0.00
tblVehicleEF	MH	4.1720e-003	0.00
tblVehicleEF	MHD	0.01	0.91
tblVehicleEF	MHD	0.01	0.91
tblVehicleEF	MHD	0.01	0.91
tblVehicleEF	OBUS	2.4320e-003	0.00
tblVehicleEF	OBUS	2.4320e-003	0.00
tblVehicleEF	OBUS	2.4320e-003	0.00
tblVehicleEF	SBUS	1.7610e-003	0.00
tblVehicleEF	SBUS	1.7610e-003	0.00
tblVehicleEF	SBUS	1.7610e-003	0.00
tblVehicleEF	UBUS	1.1870e-003	0.00
tblVehicleEF	UBUS	1.1870e-003	0.00
tblVehicleEF	UBUS	1.1870e-003	0.00
tblVehicleTrips	CC_TL	6.60	20.00
tblVehicleTrips	CC_TTP	28.00	100.00
tblVehicleTrips	CNW_TL	6.60	0.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TL	14.70	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.50	111.11
tblVehicleTrips	ST_TR	2.37	2.08
tblVehicleTrips	SU_TR	1.50	111.11
tblVehicleTrips	SU_TR	0.98	2.08
tblVehicleTrips	WD_TR	1.50	111.11
tblVehicleTrips	WD_TR	11.01	2.08

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0791	0.0000	3.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.2000e-004	6.2000e-004	0.0000		6.6000e-004
Energy	0.8630	7.8457	6.5904	0.0471		0.5963	0.5963		0.5963	0.5963		9,414.8214	9,414.8214	0.1805	0.1726	9,472.1185
Mobile	1.0058	7.2106	8.7812	0.0214	0.8991	0.1788	1.0779	0.2556	0.1644	0.4200		2,072.2537	2,072.2537	0.0225		2,072.7267
Offroad	0.3155	3.0315	2.3841	3.1000e-003		0.2280	0.2280		0.2098	0.2098		316.9747	316.9747	0.0971		319.0142
Total	**2.2635**	**18.0878**	**17.7560**	**0.0716**	**0.8991**	**1.0031**	**1.9021**	**0.2556**	**0.9704**	**1.2260**		**11,804.0504**	**11,804.0504**	**0.3001**	**0.1726**	**11,863.8601**

3.0 Operational Detail - Mobile

3.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	1.0058	7.2106	8.7812	0.0214	0.8991	0.1788	1.0779	0.2556	0.1644	0.4200		2,072.2537	2,072.2537	0.0225		2,072.7267

3.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Heavy Industry	50.00	50.00	50.00	363,996	363,996
General Office Building	4.99	4.99	4.99	13,782	13,782
Total	54.99	54.99	54.99	377,778	377,778

3.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Heavy Industry	0.00	20.00	0.00	0.00	100.00	0.00	100	0	0
General Office Building	14.70	6.60	6.60	33.00	48.00	19.00	77	19	4

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.010000	0.010000	0.020000	0.030000	0.010000	0.010000	0.910000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

4.0 Energy Detail

Historical Energy Use: N

4.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Unmitigated	0.8630	7.8457	6.5904	0.0471		0.5963	0.5963		0.5963	0.5963		9,414.8214	9,414.8214	0.1805	0.1726	9,472.1185

4.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Heavy Industry	79890.8	0.8616	7.8324	6.5792	0.0470		0.5953	0.5953		0.5953	0.5953		9,398.9168	9,398.9168	0.1802	0.1723	9,456.1171
General Office Building	135.189	1.4600e-003	0.0133	0.0111	8.0000e-005		1.0100e-003	1.0100e-003		1.0100e-003	1.0100e-003		15.9046	15.9046	3.0000e-004	2.9000e-004	16.0014
Total		**0.8630**	**7.8457**	**6.5904**	**0.0471**		**0.5963**	**0.5963**		**0.5963**	**0.5963**		**9,414.8214**	**9,414.8214**	**0.1805**	**0.1726**	**9,472.1185**

5.0 Area Detail

5.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.0791	0.0000	3.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.2000e-004	6.2000e-004	0.0000		6.6000e-004

5.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0181					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0610					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0000e-005	0.0000	3.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.2000e-004	6.2000e-004	0.0000		6.6000e-004
Total	**0.0791**	**0.0000**	**3.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**6.2000e-004**	**6.2000e-004**	**0.0000**		**6.6000e-004**

6.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Tractors/Loaders/Backhoes	1	8.00	260	97	0.37	Diesel

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Tractors/Loaders/Backhoes	0.3155	3.0315	2.3841	3.1000e-003		0.2280	0.2280		0.2098	0.2098		316.9747	316.9747	0.0971		319.0142
Total	**0.3155**	**3.0315**	**2.3841**	**3.1000e-003**		**0.2280**	**0.2280**		**0.2098**	**0.2098**		**316.9747**	**316.9747**	**0.0971**		**319.0142**

Concrete Batch Plant
Particulate Matter Generation

Project Action	Based on the production of 8,000 cubic yards of concrete annually [21.9 cubic yards daily]	
	Tonnage Equivalent	Particulate Matter (lbs per day)
Aggregate Transfer	**29.57**	0.10
Sand Transfer	**32.85**	0.03
Cement Unloading to Elevated Silo	**43.80**	0.23
Weigh Hopper Loading	**43.80**	0.12
Mixer Loading	**43.80**	0.24
Truck Loading	**43.80**	13.58
Daily Total		**14.30**

Source:
Environmental Protection Agency. 2011. AP42 Compilation of Air Pollutant Emission Factors Section 11.12 Concrete Batching. February 2011.

Appendix B: Greenhouse Gases

Sousa Ready Mix Concrete Batch Plant

Siskiyou County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Heavy Industry	0.45	1000sqft	0.01	450.00	0
General Office Building	2.40	1000sqft	0.06	2,400.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	85
Climate Zone	14			**Operational Year**	2017
Utility Company	PacifiCorp				
CO2 Intensity (lb/MWhr)	1656.39	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Energy Use - Concrete batch plant energy consumption - EPA

Vehicle Trips - Trip generation based on the maximum assumed 5 employees and the maximum assumed 50 haul trips daily

Operational Off-Road Equipment - Operations includes 1 front loader

Vechicle Emission Factors - 91 percent of project traffic = haul trucks

Water And Wastewater - Water consumption

Table Name	Column Name	Default Value	New Value
tblEnergyUse	T24NG	3.37	64,800.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblProjectCharacteristics	OperationalYear	2014	2017
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleEF	HHD	0.21	0.00
tblVehicleEF	HHD	0.21	0.00
tblVehicleEF	HHD	0.21	0.00
tblVehicleEF	LDA	0.28	0.01
tblVehicleEF	LDA	0.28	0.01
tblVehicleEF	LDA	0.28	0.01
tblVehicleEF	LDT1	0.10	0.01
tblVehicleEF	LDT1	0.10	0.01
tblVehicleEF	LDT1	0.10	0.01
tblVehicleEF	LDT2	0.15	0.02
tblVehicleEF	LDT2	0.15	0.02
tblVehicleEF	LDT2	0.15	0.02
tblVehicleEF	LHD1	0.10	0.01
tblVehicleEF	LHD1	0.10	0.01
tblVehicleEF	LHD1	0.10	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	MCY	6.1050e-003	0.00
tblVehicleEF	MCY	6.1050e-003	0.00
tblVehicleEF	MCY	6.1050e-003	0.00
tblVehicleEF	MDV	0.14	0.03
tblVehicleEF	MDV	0.14	0.03
tblVehicleEF	MDV	0.14	0.03
tblVehicleEF	MH	4.1720e-003	0.00
tblVehicleEF	MH	4.1720e-003	0.00

tblVehicleEF	MH	4.1720e-003	0.00
tblVehicleEF	MHD	0.01	0.91
tblVehicleEF	MHD	0.01	0.91
tblVehicleEF	MHD	0.01	0.91
tblVehicleEF	OBUS	2.4320e-003	0.00
tblVehicleEF	OBUS	2.4320e-003	0.00
tblVehicleEF	OBUS	2.4320e-003	0.00
tblVehicleEF	SBUS	1.7610e-003	0.00
tblVehicleEF	SBUS	1.7610e-003	0.00
tblVehicleEF	SBUS	1.7610e-003	0.00
tblVehicleEF	UBUS	1.1870e-003	0.00
tblVehicleEF	UBUS	1.1870e-003	0.00
tblVehicleEF	UBUS	1.1870e-003	0.00
tblVehicleTrips	CC_TL	6.60	20.00
tblVehicleTrips	CC_TTP	28.00	100.00
tblVehicleTrips	CNW_TL	6.60	0.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TL	14.70	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.50	111.11
tblVehicleTrips	ST_TR	2.37	2.08
tblVehicleTrips	SU_TR	1.50	111.11
tblVehicleTrips	SU_TR	0.98	2.08
tblVehicleTrips	WD_TR	1.50	111.11
tblVehicleTrips	WD_TR	11.01	2.08
tblWater	IndoorWaterUseRate	104,062.50	1,327,000.00

2.0 Emissions Summary

2.1 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0144	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.0000e-005	5.0000e-005	0.0000	0.0000	5.0000e-005
Energy	0.1575	1.4318	1.2027	8.5900e-003		0.1088	0.1088		0.1088	0.1088	0.0000	1,582.5978	1,582.5978	0.0303	0.0287	1,592.1195
Mobile	0.2119	1.3650	2.0874	3.8800e-003	0.1564	0.0328	0.1892	0.0447	0.0302	0.0749	0.0000	340.6582	340.6582	3.7300e-003	0.0000	340.7366
Offroad	0.0410	0.3941	0.3099	4.0000e-004		0.0296	0.0296		0.0273	0.0273	0.0000	37.3821	37.3821	0.0115	0.0000	37.6226
Waste						0.0000	0.0000		0.0000	0.0000	0.5663	0.0000	0.5663	0.0335	0.0000	1.2692
Water						0.0000	0.0000		0.0000	0.0000	0.5563	7.8165	8.3728	0.0573	1.3800e-003	10.0026
Total	**0.4249**	**3.1910**	**3.6001**	**0.0129**	**0.1564**	**0.1713**	**0.3276**	**0.0447**	**0.1663**	**0.2110**	**1.1227**	**1,968.4545**	**1,969.5772**	**0.1362**	**0.0300**	**1,981.7506**

3.0 Operational Detail - Mobile

3.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Unmitigated	0.2119	1.3650	2.0874	3.8800e-003	0.1564	0.0328	0.1892	0.0447	0.0302	0.0749	0.0000	340.6582	340.6582	3.7300e-003	0.0000	340.7366

3.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Heavy Industry	50.00	50.00	50.00	363,996	363,996
General Office Building	4.99	4.99	4.99	13,782	13,782
Total	54.99	54.99	54.99	377,778	377,778

3.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Heavy Industry	0.00	20.00	0.00	0.00	100.00	0.00	100	0	0
General Office Building	14.70	6.60	6.60	33.00	48.00	19.00	77	19	4

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.010000	0.010000	0.020000	0.030000	0.010000	0.010000	0.910000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

4.0 Energy Detail

Historical Energy Use: N

4.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	23.8685	23.8685	4.2000e-004	9.0000e-005	23.9041
NaturalGas Unmitigated	0.1575	1.4318	1.2027	8.5900e-003		0.1088	0.1088		0.1088	0.1088	0.0000	1,558.7293	1,558.7293	0.0299	0.0286	1,568.2154

4.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Heavy Industry	2.91601e+007	0.1572	1.4294	1.2007	8.5800e-003		0.1086	0.1086		0.1086	0.1086	0.0000	1,556.0961	1,556.0961	0.0298	0.0285	1,565.5662
General Office Building	49344	2.7000e-004	2.4200e-003	2.0300e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	2.6332	2.6332	5.0000e-005	5.0000e-005	2.6492
Total		**0.1575**	**1.4318**	**1.2027**	**8.5900e-003**		**0.1088**	**0.1088**		**0.1088**	**0.1088**	**0.0000**	**1,558.7293**	**1,558.7293**	**0.0299**	**0.0286**	**1,568.2154**

4.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Heavy Industry	2128.5	1.5992	3.0000e-005	1.0000e-005	1.6016
General Office Building	29640	22.2693	3.9000e-004	8.0000e-005	22.3025
Total		**23.8685**	**4.2000e-004**	**9.0000e-005**	**23.9041**

5.0 Area Detail

5.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Unmitigated	0.0144	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.0000e-005	5.0000e-005	0.0000	0.0000	5.0000e-005

5.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	3.3000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0111					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.0000e-005	5.0000e-005	0.0000	0.0000	5.0000e-005
Total	**0.0144**	**0.0000**	**3.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**5.0000e-005**	**5.0000e-005**	**0.0000**	**0.0000**	**5.0000e-005**

6.0 Water Detail

6.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Unmitigated	8.3728	0.0573	1.3800e-003	10.0026

6.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Heavy Industry	1.327 / 0	5.8158	0.0433	1.0400e-003	7.0484
General Office Building	0.426561 / 0.261441	2.5570	0.0139	3.4000e-004	2.9542
Total		**8.3728**	**0.0573**	**1.3800e-003**	**10.0026**

7.0 Waste Detail

7.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Unmitigated	0.5663	0.0335	0.0000	1.2692

7.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Heavy Industry	0.56	0.1137	6.7200e-003	0.0000	0.2548
General Office Building	2.23	0.4527	0.0268	0.0000	1.0145
Total		**0.5663**	**0.0335**	**0.0000**	**1.2692**

8.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Tractors/Loaders/Backhoes	1	8.00	260	97	0.37	Diesel

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Tractors/Loaders/Backhoes	0.0410	0.3941	0.3099	4.0000e-004		0.0296	0.0296		0.0273	0.0273	0.0000	37.3821	37.3821	0.0115	0.0000	37.6226
Total	**0.0410**	**0.3941**	**0.3099**	**4.0000e-004**		**0.0296**	**0.0296**		**0.0273**	**0.0273**	**0.0000**	**37.3821**	**37.3821**	**0.0115**	**0.0000**	**37.6226**

APPENDIX C: TRAFFIC ANALYSIS

TRAFFIC NOISE LEVELS

Project Name: Yreka - Sousa Concrete Batch Plant

Background Information

Model Description: FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.
Analysis Scenario(s): **On-Site Operations**
Source of Traffic Volumes: Applcant
Community Noise Descriptor: L_{dn}: x CNEL: _____

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

Traffic Noise Levels

Analysis Condition Project Site	Land Use	Lanes	Median Width	Peak Hour Volume	ADT Volume	Design Speed (mph)	Dist. from Center to Receptor[1]	Alpha Factor	Barrier Attn. dB(A)	Vehicle Mix Medium Trucks	Vehicle Mix Heavy Trucks	Peak Hou dB(A) L_{eq}	24-Hour dB(A) Ldn
Project Site													
Heavy Duty Truck Operations	Industrial	2	0	63	63	5	2400	0	0	5.0%	80.0%	42.7	31.7

Existing Condition Fleet Mix derived from the CalEEMod modeling software.