El Dorado County Historical Railroad Park Project

Initial Study / Draft Mitigation Negative Declaration

Prepared for:

County of El Dorado Chief Administrative Office Parks Division 330 Fair Lane Placerville, CA 95667

February 11, 2016

Prepared by:



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NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION

for the

El Dorado County Historical Railroad Park Project

Public Notice is hereby given that a Mitigated Negative Declaration (Environmental Report) is available for public review for the Historical Railroad Park Project.

Project Location: The Proposed Site is located within the Sacramento – Placerville Transportation Corridor (SPTC) right-of-way, adjacent to the Town of El Dorado in unincorporated El Dorado County, California, within the northwest ¼ of Section 35, Township 10 North, Range 10 East, of the *Placerville*, California USGS 7.5-minute topographic quadrangles, 38° 41' 3.206" North, 120° 51' 0.938" West.

Project Description: Implementation of the Proposed Project would result in several improvements to the existing Historical Railroad Park. Improvements would include development of several new facilities, improvements to existing facilities, and trail construction. The proposed new facilities would house El Dorado County Museum's collection of railroad and logging artifacts. New facilities include construction of a depot, display yard, display building, engine house shop, children's play area, parking, picnic area, and a two-stall prefabricated public restroom. A paved and unpaved multi-use trail would be developed for pedestrian, bicycle, and equestrian users and would connect to the existing and proposed future trails within the SPTC.

Document Review and Availability: The public review and comment period will extend for 30 calendar days in accordance with CEQA Guidelines Section 15105 starting **February 11, 2016** and ending **March 14, 2016**. The Initial Study/Mitigated Negative Declaration (IS/MND) is available for public review at the following location:

County of El Dorado Parks and Trails Division 330 Fair Lane, Suite 1 Placerville, CA 95667

The IS/MND can also be viewed and/or downloaded at the County of El Dorado website via the following: http://www.edcgov.us/Parks/.

Comments/Questions: Comments and/or questions regarding the IS/MND may be directed to: Vickie Sanders, Parks Manager, County of El Dorado, Chief Administrative Office, Parks Division, 330 Fair Lane, Placerville, California, 95667, Phone: (530) 621-7538, Email: vickie.sanders@edcgov.us.

Public Meetings: The IS/MND is tentatively scheduled for consideration and possible adoption by the County of El Dorado on **April 5**, **2015**. Board meetings are on Tuesdays and start at 8:00 A.M. in the County Supervisors Board Meeting Room, 330 Fair Lane, Building A, Placerville, California, 95667. Interested parties should call Vickie Sanders, Parks Manager with the County of El Dorado at (530) 621-7538 to confirm meeting agendas, times, and dates.

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1.0 MITIGATION NEGATIVE DECLARATION INFORMATION SHEET

PROJECT TITLE: Historical Railroad Park Project

PROJECT LOCATION: El Dorado, El Dorado County, California

DATE: February 11, 2016

PROJECT APPLICANT: County of El Dorado

LEAD AGENCY: County of El Dorado

CONTACT PERSON: Vickie Sanders, Parks Manager

PROJECT DESCRIPTION: Implementation of the Proposed Project would result in additional space

for the El Dorado County Historical Museum to display large railroad and logging artifacts. The Proposed Project would develop a new depot building, display building, display yard, engine house shop, children's play area, a two-stall prefabricated restroom, trails, a picnic area, and parking within the existing Historical Railroad Park. The proposed improvements would provide additional recreation and educational opportunities while accommodating museum enthusiasts, pedestrians, bicyclists, and equestrian users. See **Section 3.0** for additional Project

Description information.

DECLARATION

The County of El Dorado has determined that implementation of the Proposed Project will not result in significant effects on the environment and therefore this project does not require evaluation through the preparation of an Environmental Impact Report (EIR) pursuant to the California Environmental Quality Act (CEQA). This determination is based on the attached Initial Study in support of the following findings:

- The project will not degrade environmental quality, substantially reduce habitat, cause a
 wildlife population to drop below self-sustaining levels, reduce the number or restrict the
 range of special-status species, or eliminate important examples of California history or
 prehistory;
- The project does not have the potential to achieve short-term, to the disadvantage of longterm, environmental goals;
- The project will not have impacts that are individually limited, but cumulatively considerable;
- The project will not have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly; and
- No substantial evidence exists that the project will have a negative or adverse effect on the environment.

The project incorporates all applicable mitigation measures identified in the attached Initial Study.

This Mitigated Negative Declaration (MND) reflects the independent judgment of the Lead Agency.

Written comments shall be submitted no later than 30 days from the posting date. The County of El Dorado's determination on the draft MND shall be final.

Submit comments in writing to:

Vickie Sanders Parks Manager County of El Dorado Chief Administrative Office Parks Division 330 Fair Lane Placerville, CA 95667 Phone: (530) 621-7538

Fax: (530) 626-5730

Email: vickie.sanders@edcgov.us

2.0 INTRODUCTION

2.1 Introduction and Regulatory Guidance

This document is an Initial Study (IS) supporting a Mitigated Negative Declaration (MND) determination to clear the development of several proposed improvements to the El Dorado County Historical Railroad Park (Proposed Project). This MND evaluates the potential impacts resulting from implementation of the Proposed Project. This MND has been prepared in accordance with CEQA, Public Resources Code Section 21000 *et seq.*, and the State CEQA Guidelines, 14 California Code of Regulations (CCR) Section 15000 *et seq.*

An Initial Study is prepared by a Lead Agency to determine if a project has the potential to result in significant impacts on the environment (CEQA Guidelines Section 15063). An EIR must be prepared if an IS indicates that the proposed project under review may result in significant impacts to the environment. A Negative Declaration (ND) may be prepared instead, if the Lead Agency prepares a written statement describing the reasons why a proposed project would not have a significant effect on the environment, and therefore does not require the preparation of an EIR. According to CEQA Guidelines Section 15070, a Negative Declaration or Mitigated Negative Declaration shall be prepared for a project subject to CEQA when either:

- A. The Initial Study documents that there is no substantial evidence, in light of the whole record before the agency, that the proposed project may result in any 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 potentially significant impacts or mitigate potential impacts to less than significant levels, and
 - 2. There is no substantial evidence, in light of the whole record before the agency that the proposed project as revised, may result in significant impacts to the environment.

2.2 LEAD AGENCY

The Lead Agency is the public agency that has the principal responsibility for carrying out or approving a proposed project. CEQA Guidelines Section 15051 states that if a project will be carried out by a public agency that agency shall be the Lead Agency, even if the project would be located within the jurisdiction of another public agency. The County of El Dorado will oversee and implement the project, therefore the County of El Dorado is the designated Lead Agency for the purposes of CEQA.

2.3 Purpose and Document Organization

The purpose of this Initial Study is to document if implementation of the Proposed Project may result in potentially significant impacts on the environment.

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This document is divided into the following sections:

Section 1.0 Mitigation Negative Declaration Information Sheet

Pursuant to CEQA Guidelines 15071, Section 1 includes a brief description of the project, the project location, and the County of El Dorado proposed findings, and references the attached Initial Study, including proposed mitigating measures included within individual resource issue areas as applicable to development of the proposed Historical Railroad Park Project.

Section 2.0 Introduction

This section provides an introduction and describes the purpose and organization of this document.

Section 3.0 Project Description

This section provides a detailed description of the Proposed Project including the location of the project.

Section 4.0 Initial Study Checklist

This section describes the environmental setting for each of the environmental subject areas, the regulatory setting, where relevant, and evaluates a range of impacts in response to the environmental checklist. Impacts are classified as "no impact", "less than significant impact," "less than significant with mitigation incorporated," or "potentially significant impact." Where appropriate, mitigation measures are provided that mitigate potentially significant impacts to a less than significant level.

Section 5.0 CEQA Determination

This section provides the environmental determination for the project.

Section 6.0 Report Preparation

This section identifies a list of staff and consultants responsible for preparation of this document, and persons and agencies consulted.

Section 7.0 References

This section identifies the references used in preparation of the MND.

Appendix A Mitigation Monitoring and Reporting Program

This appendix identifies mitigation measures included in the Initial Study and the responsible entity for implementation of the mitigation measures, as required by Section 15097 of the CEQA Guidelines.

Appendix B California Emissions Estimator Model (CalEEMod), Version 2013.2.2

Appendix C Biological Resources Assessment [for the] ±7.7-Acre Railroad Park Project, El Dorado County, California, dated January 11, 2016

2.4 Thresholds of Significance

A significant effect on the environment is generally defined as a substantial or potentially substantial adverse change in the physical environment (CEQA Guidelines Section 15358). Environment as used in this definition includes the land, air, water, minerals, flora, fauna, ambient noise, and objects which are historical or aesthetic in nature. The guidelines in the following Initial Study focus on these elements and are used as tools to determine the potential of whether or not an activity is considered significant (CEQA Guidelines Section 15065). Effects are also recognized as to whether they would occur either directly or indirectly as a result of the project.

2.5 TERMINOLOGY USED IN THIS DOCUMENT

This Environmental Checklist in this document utilizes the following terminology to describe the levels of significance associated with project-related impacts:

Potentially Significant Impact: 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); the existence of a potentially significant impact requires the preparation of an EIR with respect to such an impact.

Less Than Significant with Mitigation Incorporated: A potentially significant impact that could be mitigated to a level of less than significant through the incorporation of mitigation measures.

Less Than Significant Impact: An impact which is less than significant and does not require the implementation of mitigation measures.

No Impact: Utilized for checklist items where development of the project would not have any impact and does not require the implementation of mitigation measures.

2.6 REQUIRED APPROVALS

Development of the Proposed Project is anticipated to require permits and authorizations as summarized in **Table 2.6-1** below.

Table 2.6-1 — Potential Resource Agency Permitting Requirements

Approving Agency	Permit/Approval
Federal Agencies	
U.S. Army Corps of Engineers (USACE)	Compliance with Section 404 of the Federal Clean Water Act, 33 USC 1341)
Federal Railroad Administration	Operational Safety – Comply with all railroad operating practices (Electronic Code of Federal Regulations: Chapter II, Subtitle B, Title 49, Part 218)
State Agencies	
State Water Resources Control Board, Regional Water Quality Control Board (SWRCB, RWQCB)	Coverage under the General Construction Activity Storm Water Permit (§402 of the Clean Water Act, 40 CFR Part 122)
State Water Resources Control Board, Regional Water Quality Control Board (SWRCB, RWQCB)	Water Quality Certification (§401 of the Clean Water Act)
California Department of Fish and Wildlife (CDFW)	Streambed Alteration Agreement (§1602 of the Fish and Game Code)
California Public Utilities Commission (CPUC)	Review/Approval of General Order (GO) – Railroad Clearances (GO 26-D), Establishment of Spurs (GO 36-E), and Walkways (GO 118-A)
Local Agencies	
County of El Dorado, Building and Safety Services	Grading Permit (El Dorado County Grading, Erosion, and Sediment Control Ordinance, Chapter 15.4)

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3.0 PROJECT DESCRIPTION

The proposed project location, components, and characteristic are described in the following subsections.

3.1 PROJECT LOCATION

The El Dorado County Historical Railroad Park is located just north of Pleasant Valley Road within the Sacramento – Placerville Transportation Corridor (SPTC), adjacent to the Town of El Dorado in unincorporated El Dorado County, California, Latitude 38° 41' 3.206" North, Longitude 120° 51' 0.938" West, NAD 83, and can be located on the *Placerville* USGS 7.5-Minute Topographic Quadrangle (Project Site), as shown on **Figure 3.2-1**.

3.2 Environmental Setting

3.2.1 General Plan Land Use Designation and Zoning Designation

The Project Site is designated in the *El Dorado County General Plan, Land Use Element* as Commercial and Medium Density Residential within a delineated El Dorado County Community Region (County of El Dorado 2004). Land uses to the north and south of the Project Site are designated as Medium Density Residential, High Density Residential, and Commercial. The land uses to the east and west of the Project Site is designated as High Density Residential, Commercial, and Medium Density Residential by the *El Dorado County General Plan, Land Use Element* (County of El Dorado 2004) (**Figure 3.2-2**). The Project Site is zoned as Single Family Residential (**Figure 3.2-3**). The zoning designations surrounding the Project Site include Commercial and Single Family Residential (County of El Dorado 2004) (**Figure 3.2-3**).

3.2.2 Surrounding Land Uses

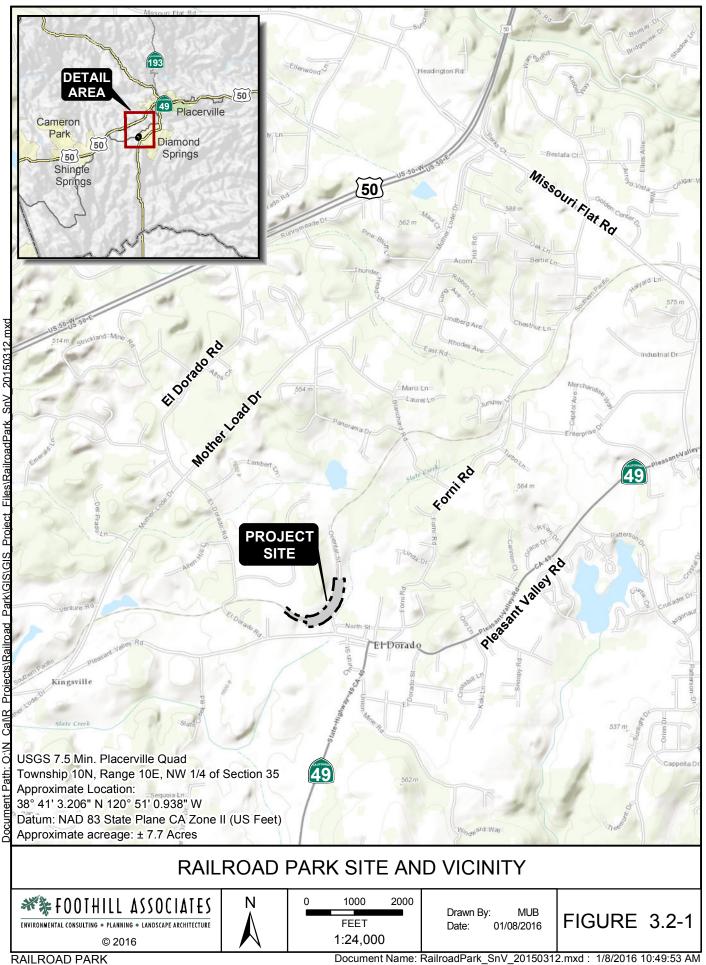
The Project Site has been historically characterized as Southern Pacific Railroad property. The unincorporated community of El Dorado is adjacent and southeast of the Project Site and a Community Center is located near the southwest border. The Project Site is surrounded by commercial development to the south, oak woodland to the west, non-native annual grassland and residential development to the east.

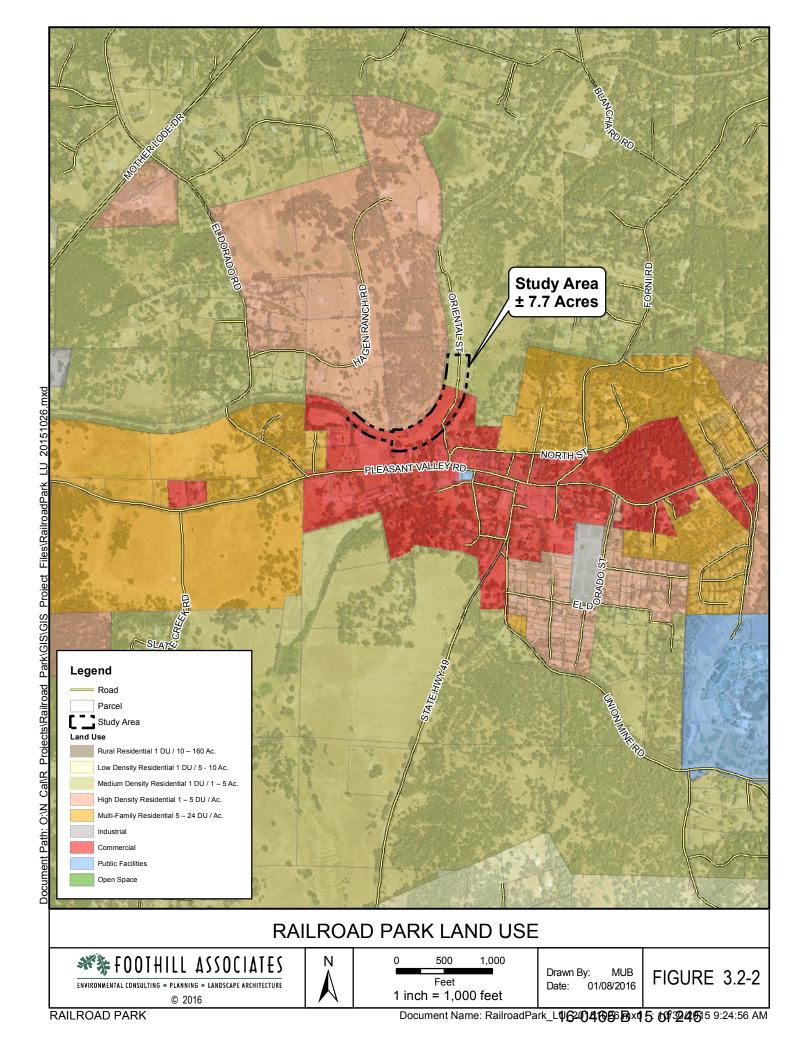
3.2.3 Biological Communities

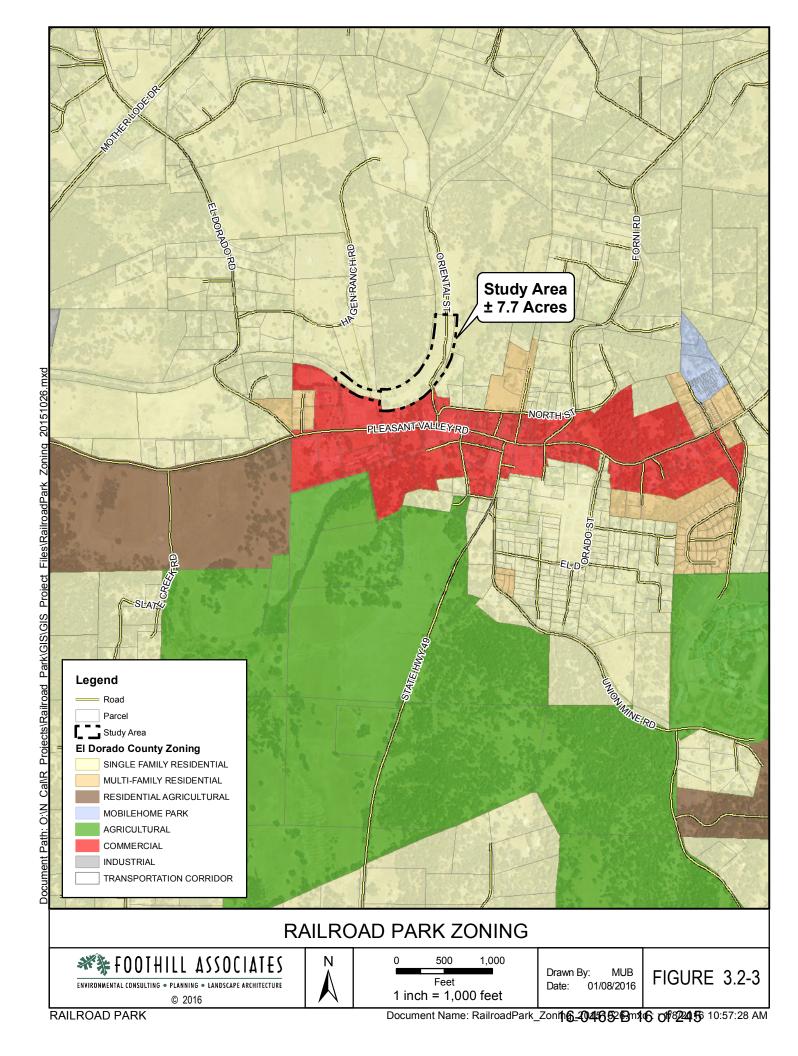
The Project Site is primarily characterized by disturbed/developed areas and non-native annual grassland. The extent of individual biological communities mapped within the Project Site is summarized below in **Table 3.2-1**.

Table 3.2-1 — Biological Communities by Acreages

Biological Community	Total Acreage
Disturbed/Developed	3.82
Non-Native Annual Grassland	3.63
Riparian	0.17
Intermittent Drainage	0.05
Depressional Seasonal Wetland	0.02
Ephemeral Drainage	0.01
Total	7.70







3.2.4 Aquatic Features

An unnamed intermittent drainage and an ephemeral drainage bisect the Project Site. The intermittent drainage flows westward through the southern boundary of the Project Site and drains into Slate Creek, a tributary to Dry Creek, that eventually flows to the American River. Depressional seasonal wetlands are located within the western portion of the Project Site.

3.2.5 Topography

The general topography of the Project Site has been largely influenced by the construction of the railroad. The topography slopes downward from the northwest and northeast of the railroad tracks to the southwest and southeast of the railroad tracks, and then levels out towards the eastern boundary. Elevations ranges from 1,650 feet above mean sea level (MSL) in the northwestern portion of the Project Site to 1,610 feet above MSL in the southern portion of the Project Site.

3.3 BACKGROUND

3.3.1 El Dorado County Historical Museum

The El Dorado County Historical Museum (Museum) opened to the public in 1974 in Placerville, California to exhibit and interpret the heritage of El Dorado County (County) and to collect, document, and preserve artifacts and records that are significant to the County's history. The Museum displays logging and railroad artifacts related to the County's history. Logging was an integral part of the County's economic history and the Sacramento Valley Railroad, which was the first railroad west of the Mississippi River, was located in the County and operated a freight and passenger service. One of the five goals of the Museum is to develop a satellite museum to display and operate these railroad and logging artifacts.

3.3.2 Sacramento - Placerville Transportation Corridor

Railroad Park is located within the Sacramento – Placerville Transportation Corridor. The SPTC is a 53-mile segment of the Southern Pacific Railway Corporation's Placerville Branch railroad right-of-way (Rail Corridor) from Sacramento to Placerville, California. The SPTC Joint Powers Authority (SPTC - JPA) is a public entity formed in 1991 for the purpose of purchasing the SPTC and consists of four member agencies: the County of El Dorado, the City of Folsom, the County of Sacramento, and the Sacramento Regional Transit District, and one Member-at-Large that serves on the SPTC – JPA Board of Directors.

The SPTC – JPA purchased the 53-mile Rail Corridor segment in 1996 and continues to own it for the purpose of preserving it for transportation uses, and coordinating usage and maintenance by the member agencies. Upon acquiring the Rail Corridor, the SPTC – JPA and its member agencies entered into a Reciprocal Use and Funding Agreement (RUFA) to establish the joint rights and responsibilities for the member agencies with respect to the ownership and use of the Rail Corridor. The RUFA allocates segments of the Rail Corridor among the SPTC – JPA member agencies; each member agency has primary usage rights and maintenance responsibility for its allocation of the Rail Corridor which has been granted through an easement to each member by the SPTC – JPA. The SPTC – JPA has railbanked¹ this portion of the Rail Corridor under the Rails to Trails Act and it remains subject to the jurisdiction of the federal Surface Transportation Board.

¹ Railbanking, as defined by the National Trails System Act, 16 USC 1247 (d), is a voluntary agreement between a railroad company and a trail agency to use an out-of-service rail corridor as a trail until a railroad might need the corridor again for rail service. Because a railbanked corridor is not considered abandoned, it can be sold, leased or donated to a trail manager without reverting to adjacent landowners (Rails to Trails Conservancy, accessed online May 24, 2015 - http://www.railstotrails.org/build-trails/trail-building-toolbox/railbanking/).

3.3.3 Planning and California Environmental Quality Act Evaluation

The Sacramento - Placerville Transportation Corridor Master Plan (SPTC Master Plan) and associated programmatic Environmental Impact Report were prepared over a period of five years from 1998 to 2003 under direction from the El Dorado County Board of Supervisors in order to identify alternative uses of the portion of the SPTC in El Dorado County. These documents address 28 miles of the corridor from the Sacramento County/ El Dorado County mine (milepost 19.4) to the community of Apex (milepost 147.6) west of the City of Placerville. Utilizing the SPTC for the development of the El Dorado County Historical Museum satellite museum, is in agreement with the planned uses in the SPTC Master Plan by providing an active rail service and trails for public enjoyment, while educating people on the rich history of the County.

In 2009, the El Dorado County Board of Supervisors approved a concept plan for the Railroad Park to be located within the SPTC corridor along 2.2 miles of multi-use trail at Oriental Street as a satellite facility of the El Dorado County Museum (Foothill Associates 2012).

3.4 EL DORADO HISTORIC RAILROAD PARK

Railroad Park is open to the public on the first and third Sunday of every month to provide public access to its public passenger rail excursion program. Rides are provided at the park on historic Gang Cars which were used by railroad inspectors and officials to travel along the tracks (El Dorado County Historical Museum 2015). The historic El Dorado Station is still within the park just north of its original location. The Sunday operations are maintained by Museum volunteers that operate the Gang Cars and perform maintenance on the track. The unpaved trail in the park is used by pedestrians and equestrian users to transverse along the railway within the Rail Corridor.

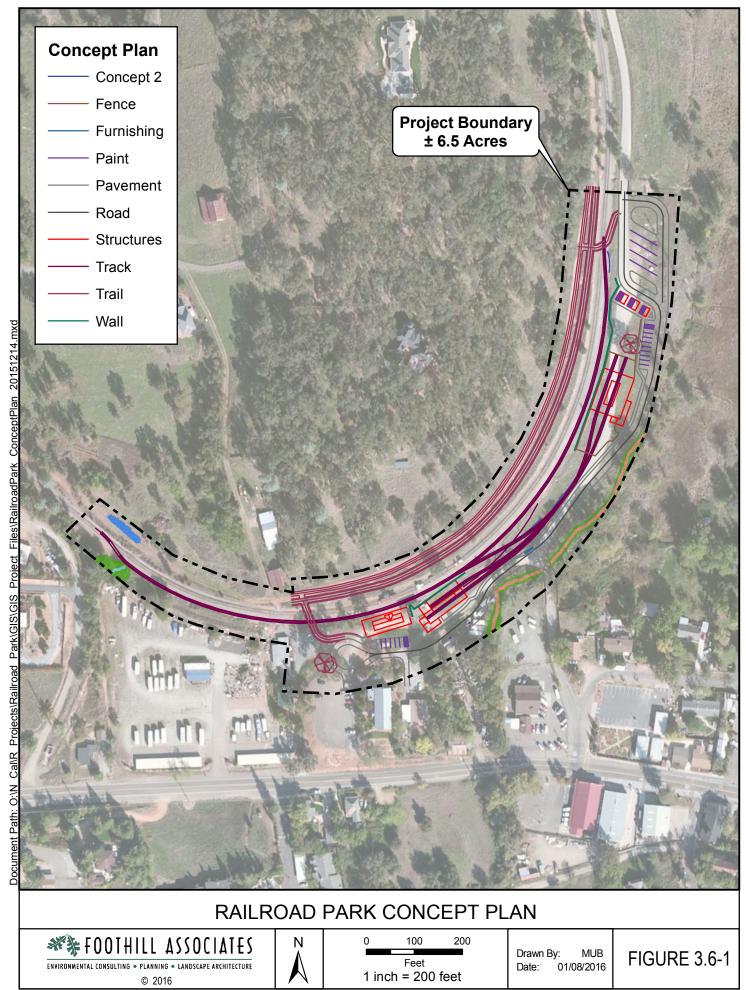
3.5 **PROJECT PURPOSE & OBJECTIVES**

The El Dorado County Historical Museum has limited space at its current location in Placerville, California for its large railroad and logging artifacts, as well as for many donated artifacts. There is a high level of interest in railroading history, as the museum has many visitors from around the country. The limited space set aside for the locomotive restoration and rail cars at the Museum does not provide adequate space to properly interpret and demonstrate the artifacts for railroad enthusiasts.

The El Dorado County Historic Railroad Park (Railroad Park) would operate as part of El Dorado County Historical Museum under the direction of the Museum Administrator, with trained volunteers as staff and the Museum Commission providing oversight. Facilities at Railroad Park would provide restoration, display, demonstration, and interpretation of elements of El Dorado County's railroading and logging past. Railroad Park would provide unique opportunities for public programming, collaborating with schools, special events, and changing exhibits. By relocating and expanding upon the railroad and logging displays, the vacated space at the Museum's main building would be used for better artifact preservation. historical interpretation, and educational programming.

3.6 PROJECT COMPONENTS

Improvements analyzed for the Proposed Project include construction of new facilities, improvements to existing facilities, and trail construction (Figure 3.6-1). Construction of the Proposed Project would begin with Phase 1 in the summer of 2016 with construction of the two-stall prefabricated restroom. Phase 2 would follow several years later and the two-stall prefabricated restroom would be moved near the picnic area, as shown on Figure 3.6-1. Construction for Phase 2 would occur incrementally, with the parking lot and trails first, followed in the next few years by museum improvements. Individually proposed improvements are summarized below in **Section 3.6.1** and shown on **Figure 3.6-1**.



3.6.1 Recommended New Facility Construction

Display Building

Placed adjacent to the depot, the display building would provide a large area to exhibit historical artifacts, provide space for displays on the history of railroads in El Dorado County, and for use as an interpretation center for school groups. The building is planned to be approximately 4,500 square feet with a display track of both narrow and standard gauge. The building would consist of a metal building on concrete slab with board and bat siding constructed onsite with some exterior lighting for nighttime safety. The building would contain a two-stall restroom with access outside of the display building. The restroom would connect to the existing water and sewer utility lines underneath Oriental Street.

Prefabricated Restroom

Phase 1 of the Proposed Project would involve installation of a two-stall prefabricated restroom to the east of the existing depot building. The restroom would connect to the existing sewer main underneath the road in Railroad Park for sewer and water supply. The restroom and restroom installation would comply with all current El Dorado Irrigation District (EID) design and construction standards at the time of the project. In Phase 2 of the Proposed Project the two-stall prefabricated restroom would be moved near the picnic area for use by Railroad Park visitors, and would comply with all current EID design and construction standards at the time of Phase 2 construction. The restroom would be connected to the existing sewer main, which would be moved under the newly proposed road alignment as part of the project improvements.

Outdoor Display Yard

The sidings and other stretches of track of the Main Line would be used for moving rolling stock to and from other Railroad History Center facilities, to hold cars and engines awaiting maintenance or restoration work, and to display historical rail cars and engines relating to the history of railroads in El Dorado County. Historical features such as the water column, used to fill stream locomotive water tanks, would add to the standard gauge rail for narrow gauge (36 inch) rolling stock. The track would be designed to connect the Engine House Shop and Exhibit Building with a runaround track for moving locomotives and rail cars in order to arrange the train.

Engine House Shop

The engine house shop would provide an area for ongoing work to research and restore the Center's historical rolling stock. This facility would be designed so that the public can view the restoration work and preservation. Viewing and restoration information would be provided in the outdoor interpretive area section of the engine house shop. The building would consist of an approximately 4,500 square foot metal building on a concrete slab with board and bat siding. The building would have security fencing and some exterior lighting for nighttime safety.

Children's Play Area

The children's play area would be located adjacent to the picnic and parking areas. The children's play area would have wrought iron safety fencing between the play area and parking to provide safety for children using the play structures. The play area would include play equipment such as slides, swing set, a climbing apparatus, etc.

Shade Shelter/Picnic Area

Two shade shelters and twelve picnic tables underneath the shade shelters would be added to the northeastern section of the park. The shade shelter/picnic area would be located adjacent to the parallel parking area and the children's play area.

Park Amenities

Additional benches, trashcans, recycling bins, and drinking fountains would be installed at various locations throughout the park to better accommodate the needs to park users. Water connections to drinking fountains would be extended from the water line down Oriental Road.

Plaza

A plaza would be located adjacent to the depot building and the static display building. The plaza would be a paved area with permeable pavers providing easy access between the two buildings.

Parking

Parking within Railroad Park would be provided for cars, bicycles, and equestrian users. An equestrian lot with five spaces would be located at the northwest end of the park. Adjacent to the paved equestrian parking area would be a hitching area for equestrian users. Parking for bicycles would be adjacent to the picnic area and the depot. Seven paved parking spaces would be established for vehicles to the south of the depot and ten more paved spaces for head-in parking would be developed adjacent to the picnic area. A bus parking area that would accommodate three buses with a drop-off lane would also be developed adjacent to the depot and display buildings to provide a parking area for school and tour buses.

Retaining Walls

Retaining walls would be built between the proposed structures, and the railroad tracks to provide additional safety measures for park users.

Park Sign

A new sign would be added to the entrance of Railroad Park at the north end of Oriental Street as the street dead ends into the park. This sign would welcome park users and direct them to the park.

3.6.2 Recommended Improvements to Existing Facilities

Depot Building

The El Dorado Depot would be reconstructed to reproduce the original Southern Pacific Railroad Depot. The depot would be the focal point of Railroad Park where tickets are sold. It would contain a gift shop and office space for railroad staff and volunteers, exhibits of historical photographs, smaller artifacts, and a Research Library concentrating on the history of railroads in El Dorado County.

The depot would be the same size as the original depot, 20 feet by 67 feet with a platform, approximately 10 feet on three sides, and a 26 foot by 35-foot freight platform on the west end. There would be minimal exterior lighting on the building to provide nighttime safety.

Oriental Street and Oriental Street Bridge

The park entrance from Oriental Street would be widened to accommodate horse trailers that would access the equestrian parking and hitching area. Oriental Street and the bridge would be widened to approximately 24 feet.

El Dorado Western Railroad

Several changes would be made to the railroad tracks to accommodate the new buildings and excursion rails. A switch would be added to the southeastern portion of the tracks. A second switch would be added to the northeastern section of track. The corresponding spur would follow the existing rail line to the south of the track and would connect the two switches at either end of the park. The spur would run adjacent to the depot, display building, outdoor display yard and engine house shop for access to these structures by the trains. A 1940's eighteen-ton diesel Plymouth Locomotive would pass through Railroad Park with a flat car carrying passengers and a restored caboose. On average, the Plymouth Locomotive

would pass through the Park once a month and spend about a half hour at the park, averaging approximately six operational hours annually within the Project Site.

Oriental Street Extension

The existing County road within Railroad Park is an unpaved extension of Oriental Street. The road alignment would be moved south along the park border to provide additional space adjacent to the track for new park facilities. The new road alignment would be paved and provide access to the parking and picnic areas within Railroad Park.

Sewer Main Relocation

The existing County road within Railroad Park contains a sewer main beneath the surface. As the road alignment would be moved south along the park border, the sewer main would also be relocated beneath the newly proposed road alignment within Railroad Park.

3.6.3 Trail Improvements and New Trail Construction

Existing Unpaved Trail

There is currently an unpaved trail within Railroad Park that would be improved to better accommodate park users. Trail improvements would consist of establishing a more consistent width (approximately six feet) and cross slope, with stabilized decomposed granite on the trail. The trail connects the two ends of the park on the north side of the track. The trail would accommodate walkers, bikers, and equestrian users connecting them to the hitching area and depot building in Railroad Park. The unpaved trail would provide trails users on the north and south ends of the park access to the rest of the SPTC trail corridor.

Paved Trail

A paved trail would be developed to the south of the unpaved trail and would run parallel to the unpaved trail alignment. The paved trail would diverge from the unpaved trail at either end of Railroad Park and cross the tracks to connect to the depot in the southwest portion of the park and to the hitching area in the northeast section of the park. The trail would be approximately 10 feet wide with two-foot decomposed granite shoulders to accommodate pedestrians and bicyclists. The paved trail would provide trail users access to the SPTC trail corridor with connections at the north and south of the Project Site.

3.7 OTHER PROJECT APPROVALS

Development of the Proposed Project is anticipated to require permits and authorizations as summarized in **Table 3.7-1** below.

Table 3.7-1 — Potential Resource Agency Permitting Requirements

Approving Agency	Permit/Approval
Federal Agencies	
U.S. Army Corps of Engineers (USACE)	Compliance with Section 404 of the Federal Clean Water Act, 33 USC 1341)
Federal Railroad Administration	Operational safety - comply with all railroad operating practices (Electronic Code of Federal Regulations: Chapter II, Subtitle B, Title 49, Part 218)
State Agencies	
State Water Resources Control Board, Regional Water Quality Control Board (SWRCB, RWQCB)	Coverage under the General Construction Activity Storm Water Permit (§ 402 of the Clean Water Act, 40 CFR Part 122)
State Water Resources Control Board, Regional Water Quality Control Board (SWRCB, RWQCB)	Water Quality Certification (§ 401 of the Clean Water Act)
California Department of Fish and Wildlife (CDFW)	Streambed Alteration Agreement (§1602 of the Fish and Game Code)
California Public Utilities Commission (CPUC)	Review/Approval of General Order (GO) – railroad clearances (GO 26-D), establishment of spurs (GO 36-E), and walkways (GO 118-A)
Local Agencies	
County of El Dorado, Building and Safely Services	Grading permit (El Dorado County Grading, Erosion, and Sediment Control Ordinance, Chapter 15.4)

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4.0 INITIAL STUDY CHECKLIST

4.1 **AESTHETICS**

	Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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 along a 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 which would adversely affect daytime or nighttime views in the area?				

Impact Analysis

a. Have a substantial adverse effect on a scenic vista?

No Impact. Development of the Proposed Project would involve construction of new facilities, improvements to existing facilities, and trail construction. There are no designated scenic routes, vistas, or resources listed in the *El Dorado County General Plan* (County of El Dorado 2004). The natural topography immediately adjacent to and within the Project Site has historically been altered by the development of the railroad. Surrounding topography in the vicinity of the Project Site slopes downward from the northwest of the railroad tracks to the southwest and southeast of the railroad tracks, and then levels out towards the northwestern portion of the Project Site. There are no scenic vistas that overlook the Project Site. Therefore, **no impact** would result from implementation of the Proposed Project.

b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings along a scenic highway?

No Impact. The only designated state scenic highway in El Dorado County is U.S 50 from west of Placerville to Tahoe. The Proposed Project is not within the viewshed of that designated portion of U.S. 50. Development of the Proposed Project would therefore have **no impact** on a scenic highway.

c. Substantially degrade the existing visual character or quality of the site and its surroundings?

Less Than Significant Impact. Development of the Proposed Project would result in several improvements to Railroad Park that would provide a museum area and authentic railroad experience. Proposed improvements to exhibit the logging and railroad history of El Dorado County would involve the construction of new facilities. The following improvements would alter the existing visual character and/or quality of the Project Site, but would not cause any visual degradation.

El Dorado Depot

The El Dorado Depot would be constructed in the southwestern portion of the Project Site. The depot would be reconstructed to reproduce the original 1888 Southern Pacific Railroad Depot as closely as

possible. This depot would be a focal point for Railroad Park and would maintain the integrity of the park and provide authenticity to the museum area.

<u>Display Building</u>

The display building would provide important exhibit space for restored wooden railroad cars, logging artifacts, and other public displays. The display building would be 4,500 square feet with a display track of both narrow and standard gauge, and would consist of a metal building with board and bat façade to simulate a lumber company building. This façade would maintain the authentic atmosphere in Railroad Park and maintain the visual character of the site.

Outdoor Display Yard

The outdoor display yard would hold cars and engines awaiting maintenance or restoration work, and display historical rail cars and engines relating to the history of El Dorado County. Additionally, the display yard would have historical features, such as a historic water column to add to the interest and authenticity of the park. The display yard would function as an additional historic element within the park. The design and purpose of the display yard would maintain the theme of Railroad Park and would not degrade the visual character or quality of the Project Site.

Engine House Shop

The engine house shop would be the location for ongoing work to research and restore the historical rolling stock. The facility would be designed for public viewing and appreciation of ongoing restoration and preservation work. The shop would be a 4,500 square foot building with two tracks of both narrow and standard gauge, a pit and overhead crane. The building would consist of a metal building with board and bat façade maintaining the authentic atmosphere of Railroad Park.

Implementation of proposed improvements would not substantially degrade the existing visual character or quality of the Project Site and its surroundings, and impacts resulting from implementation of the Proposed Project are therefore considered **less than significant**.

d. Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area?

Less Than Significant Impact with Mitigation Incorporated. The land to the south of Railroad Park is within the Town of El Dorado which currently generates some light from an urbanized setting. The land to the north, east, and west of Railroad Park is residential, and contains a few rural home sites.

Under El Dorado County Municipal Code Section 9.46.050, parks are intended for day use and hours of operation are from 6:00 A.M. until one hour after sunset. Therefore, the park would not require lighting for operation. However, the proposed buildings would include exterior lighting for safety purposes. The exterior lighting would have the potential to affect nighttime views in the area. Implementation of **Mitigation Measure AES — 1** would minimize impacts due to new sources of light or glare through the required implementation of directional shielding and new technology. Therefore, impacts associated with project development are considered **less than significant with mitigation incorporated**.

Mitigation Measures

Mitigation Measure AES — 1: All outdoor light fixtures which have the potential to impact surrounding land uses shall be designed to minimize impacts through the use of directional shielding as well as new lighting technology. Backlight, Uplight and Glare (BUG) ratings for light fixtures shall be considered during the selection process.

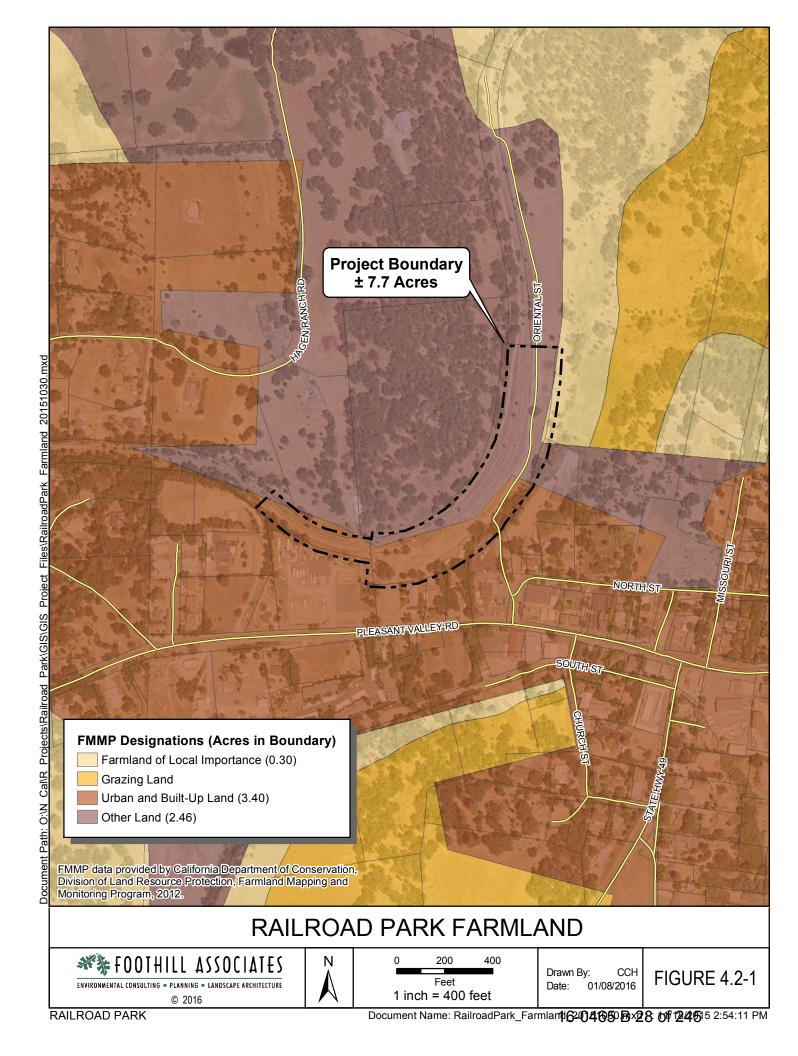
4.2 AGRICULTURE AND FOREST RESOURCES

	Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				
b.	Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract?				
C.	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				
d.	Result in the loss of forest land or conversion of forest land to non-forest use?				
e.	Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to non-agricultural use?				

Impact Analysis

a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

Less Than Significant Impact. The Division of Land Resource Protection of the California Department of Conservation has developed the Farmland Mapping and Monitoring Program (FMMP) which monitors the conversion of the State's farmland to and from agricultural use. Data is collected at the county level to produce a series of maps identifying eight land use classifications using a minimum mapping unit of 10 acres. According to the 2010 FMMP data, the boundaries of Railroad Park include land categorized as Farmland of Local Importance (0.30 acre), Urban and Built-Up Land (3.40 acres), and Other Land (2.46 acres) (Figure 4.2-1). The 0.30 acre of designated Farmland of Local Importance in Railroad Park is a small sliver in the northeast portion of the park. The designated Farmland of Local Importance is within a segment of the STPC, which was purchased by the SPTC – JPA in 1996. The SPTC – JPA has railbanked this portion of the Rail Corridor under the Rails to Trails Act.



Development of the Proposed Project would not impact the designated FMMP Farmland of Local Importance adjacent to the Project Site because the farmland is not operated as a farm, nor would it impair the adjacent farmland for future farming activity. Farmland of Local Importance mapped within the Project Site would not ever be used as farmland because it is located within the existing Rail Corridor. The northeastern section of the Project Site, adjacent to the Farmland of Local Importance, would be developed into the road leading to the horse hitching area and parking would not further affect the potential of Farmland of Local Importance or adjacent farmlands. Therefore, impacts are considered **less than significant** related to conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland).

b. Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract?

No Impact. Land within the Project Site is mapped as Farmland of Local Importance, Urban and Built-Up Land, and Other Land by the Farmland Mapping and Monitoring Program (**Figure 4.2-1**). The Project Site is zoned as Single Family Residential by the El Dorado County Zoning Ordinance (**Figure 3.2-3**). There is no agricultural zoning designation within the Project Site. Development of the Proposed Project would not impact agricultural zoned land or land currently under Williamson Act contracts and **no impact** would result from project development.

c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No Impact. No forest lands exist within the project vicinity. Therefore, **no impact** related to existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g)) would result from development of the Proposed Project.

d. Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. No forested areas are located within the vicinity of the Proposed Project. Therefore, development of the Proposed Project would not result in the loss of any forest land or conversion of forest land to non-forest use, and **no impact** would result from development of the Proposed Project.

e. Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to non-agricultural use?

Less Than Significant Impact. The only designated farmland within the Project Site is 0.30 acre of Farmland of Local Importance (**Figure 4.2-1**). This small section of farmland is within the SPTC and would not be considered for operational agricultural practices due to its location within the existing Rail Corridor. See *subsection a* for further discussion of Farmland of Local Importance. The farmland that occurs within the project vicinity is under the jurisdiction of the SPTC – JPA within a Rail Corridor and development of the Proposed Project would not contribute to the conversion or reduction of the existing Farmland of Local Importance adjacent to the Project Site. Therefore, impacts from the Proposed Project are considered **less than significant**.

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Mitigation Measures

No mitigation is warranted.

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4.3 AIR QUALITY

	Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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 a nonattainment area for 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?				

Impact Analysis

a. Conflict with or obstruct implementation of the applicable air quality plan?

No Impact. Implementation of the Proposed Project would not conflict with or obstruct implementation of any applicable air quality plan. Proposed improvements include consistency with the goals and policies identified by El Dorado County's General Plan pertaining to sustainability and overall strategy for air quality.

El Dorado County General Plan, Health and Safety Element identifies the following goals and policies applicable to Air Quality and relevant to the Proposed Project:

Goal 6.7:

A. Strive to achieve and maintain ambient air quality standards established by the U.S. Environmental Protection Agency and California Air Resources Board.

B. Minimize public exposure to toxic or hazardous air pollutants and air pollutants that create unpleasant odors.

Objective 6.7.6: Air Pollution-Sensitive Land Uses

Policy 6.7.6.1 Ensure that new facilities in which sensitive receptors are located (e.g., schools, child care centers, playgrounds, retirement homes, and hospitals) are sited away from significant sources of air pollution.

Policy 6.7.6.2 New facilities in which sensitive receptors are located (e.g. residential subdivisions, schools, childcare centers, playgrounds, retirement homes, and hospitals) shall be sited away from significant sources of air pollution.

Objective 6.7.7: Construction Related, Short-Term Emissions

Policy 6.7.7.1 The County shall consider air quality when planning the land uses and transportation systems to accommodate expected growth, and shall use the recommendations in the most recent version of the EI Dorado County Air Quality Management (AQMD) *Guide to Air Quality Assessment: Determining Significance of Air Quality Impacts Under the California Environmental Quality Act*, to analyze potential air quality impacts (e.g., short-term construction, long-term operations, toxic and odor-related emissions) and to require feasible mitigation requirements for such impacts. The County shall also consider any new information or technology that becomes available prior to periodic updates of the Guide. The County shall encourage actions (e.g., use of light-colored roofs and retention of trees) to help mitigate heat island effects on air quality.

Construction and operation of the proposed improvements would be implemented consistent with applicable regulatory standards and requirements, including consistency with all El Dorado County Air Quality Management District (EDCAQMD) rules and thresholds. Therefore, **no impact** is anticipated and no mitigation is required.

b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Less Than Significant with Mitigation Incorporated. The Proposed Project is located within the Mountain Counties Air Basin (MCAB). The MCAB includes the western slope of El Dorado County, from Lake Tahoe on the east to the Sacramento County boundary on the west. The prevailing wind is southwesterly and air pollution generally moves west to east through the air basin.

Air quality in the County is regulated by the EI Dorado County Air Quality Management District (EDCAQMD). The EDCAQMD regulates air quality through the federal and state Clean Air Acts, district rules, and its permit authority. Air quality concerns in western EI Dorado County include the most common pollutants including ozone, particulate matter from dust and diesel exhaust, and state defined Toxic Air Contaminants (TACs). One TAC of concern in the County is naturally occurring asbestos. Naturally occurring asbestos (NOA) is a concern in EI Dorado County because it is present in certain soils and can be a health risk if released into the air. The EDCAQMD has adopted an EI Dorado County Naturally Occurring Asbestos Review Area Map identifying areas most likely to contain NOA. The Project Site is located in an area identified by the map within a quarter mile buffer for an area more likely to contain NOA or fault line (EI Dorado County 2005). According to the *Department of Conservation Mines and Geology Open-File Report 2000-002* the Project Site is near an inactive fault line. Areas associated with fault lines are more likely to contain NOA because of the serpentine soils and tremolite/actinolite asbestos as carbonates (Churchill and Higgins 2000).

El Dorado County is in "nonattainment" for both federal and state ozone standards and for the state PM_{10} standard. The County is in "attainment" or unclassified status for all other pollutants (California Air Resources Board 2013). The EDCAQMD developed a *Guide to Air Quality Assessment* in 2002 identifying specific daily emissions thresholds based on the national and state standards. These thresholds were established to guide CEQA evaluation and are the national and state ambient air quality standards. The project would have the potential to result in significant effects to air quality if project emissions exceed the pollutant thresholds in **Table 4.3-1** for applicable national or State ambient air quality standard(s). The thresholds are used for all pollutants other than reactive organic gasses (ROG) and oxides of nitrogen (NO_x). The significance criteria of ozone are: 82 pounds for day for both ROG and NO_x.

Table 4.3-1 — Ambient Air Quality Standards for ECAQMD

Pollutant	Unit of Measure	California	National
Ozone	1-Hour	0.09 ppm	0.12 ppm
	8- Hour	N/A	0.08 ppm
Carbon Monoxide	1-Hour	20.0 ppm	35.0 ppm
	8- Hour	9.0 ppm	9.0 ppm
Nitrogen Dioxide	1-Hour	0.25 ppm	N/A
	Annual	N/A	0.53 ppm
Sulfur Dioxide	1-Hour	0.25 ppm	N/A
	24-Hour	0.04 ppm	0.14 ppm
	Annual	N/A	0.03 ppm
Respirable Particulates	24-Hour	50 μg/m³	150 μg/m³
(PM ₁₀)	Annual Average ²	30 μg/m ³	50 μg/m³
Fine Particulate Matter	24-Hour	N/A	65 μg/m³
(PM _{2.5})	Annual Average ²	N/A	15 μg/m³
Sulfates	24-Hour	25 μg/m³	N/A
Lead	30-Day Average	1.5 μg/m ³	N/A
	Calendar Quarter	N/A	1.5 μg/m³
Hydrogen Sulfide	1-Hour	0.03 ppm	N/A
Vinyl Chloride	24-Hour	0.010 ppm	N/A
Visibility Reducing Particles	1-Observation	Visibility > 10 Miles with relative humidity <70%	N/A

The County has a list of rules for air quality attainment and the EDCAQMD *Guide to Air Quality Assessment* to regulate air quality, but it is also included in the California Air Resources Board Sacramento Region Attainment Plans because the Sacramento Metropolitan Air Quality Management District (SMAQMD) includes the MCAB. The SMAQMD prepared the 1991 *Air Quality Attainment Plan* (AQAP) as required by the California Clean Air Act of 1988. The AQAP has adopted regulations and programs to minimize pollutant emissions.

The County of El Dorado, as Lead Agency, utilizes the EDCAQMD's recommended project-level criteria air pollutant thresholds of significance for CEQA evaluation purposes. Thus, if the Proposed Project's emissions exceed the pollutant thresholds presented in **Table 4.3-1**, the project would have the potential to result in significant effects to air quality, and affect the attainment status of federal and state Ambient Air Quality Standards.

² The State PM₁₀ annual standard is for geometric mean of all measurements. The national PM₁₀ and PM_{2.5} annual average standards are based upon the arithmetic mean of all measurements; ppm=parts per million. μ g/m³ = micrograms per cubic meter. The NAAQS shown serve as both primary (health-related) and secondary (welfare-related) standards, except that for SO₂ the standards shown are the primary NAAQS; there is also a separate secondary NAAQS for SO₂ of 0.5 ppm. Implementation of the 8-hour NAAQS for ozone and the NAAQA for fine particulate has delayed by litigation and is pending further implementation guidance from the federal court and EPA. SOURCE: California Air Resources Board and ECAQMD CEQA Guidelines.

Construction Emissions

Project construction is planned to commence during summer 2016 with Phase 1, the construction of the two-stall prefabricated restroom near the existing depot building. Construction would continue at a later date with Phase 2, moving the two-stall prefabricated restroom near the picnic area, and constructing the parking lots and trails. Further construction would occur several years later developing the museum improvements, such as the proposed display building.

Construction exhaust emissions would be generated from construction equipment, earth moving activities, construction worker commutes, and construction material hauling during the construction work window. The aforementioned activities would involve the use of diesel- and gasoline-powered equipment that would generate emissions of criteria pollutants. Project construction activities also represent sources of fugitive dust, which includes PM emissions. Construction-related activities remain of potential concern due to the fact that El Dorado County is currently designated as "non-attainment" for ozone and PM standards.

Short-term, construction-related emissions resulting from Phase 1 of project construction, constructing the two-stall prefabricated restroom, were estimated for ROG, NOx, and PM in 2016 using the California Emissions Estimator Model (CalEEMod) Version 2013.2.2 (**Appendix B**). Construction of the two-stall prefabricated restroom would involve three distinct phases including: site preparation, grading, and building construction. Construction exhaust would be generated from construction equipment, earth moving activities, construction worker commutes, and construction generated hauling. In addition, construction activities would also result in fugitive dust, which includes PM emissions. **Table 4.3-2** below presents the estimated construction-related emission of ROG, NOx, and PM₁₀ which may result from project construction of the two-stall prefabricated restroom.

Table 4.3-2 — Estimated Maximum Unmitigated Project Construction Emissions

Pollutant	Project Emissions (lbs./day)	EDCAQMD Significance Threshold (lbs./day)
ROG	2.5	82
NO _x	25.8	82
PM ₁₀	6.8	80
PM _{2.5}	4.2	82

Source: CalEEMod, Version 2013.2.2 (Appendix B).

As shown in **Table 4.3-2** above, estimated maximum unmitigated project construction emissions related to the proposed two-stall prefabricated restroom would remain well below EDCAQMD thresholds for ROG, NOx, PM₁₀, and PM_{2.5}. Similarly, construction of all other components of the Proposed Project is not anticipated to exceed the current applicable thresholds of significance for air pollutant emissions operation. However, due to an undefined construction timeframe and the fact that the proposed improvements would be constructed over several years, it is impossible to anticipate future regulatory standards and thresholds, and analyze potential construction-related impacts for individual projects proposed within an undetermined timeframe. Therefore, development of the two-stall restroom proposed by Phase 1 would result in less than significant impacts to air quality. However, impacts associated with implementation of additional future components of the Proposed Project would result in less than significant with mitigation incorporated construction-related impacts related to air quality. Implementation of **Mitigation Measure AQ — 1** would reduce potential impacts to less than significant levels by requiring air quality studies for future improvements prior to the onset of construction and compliance with regulatory requirements at the time of construction.

Operational Emissions

Operational emissions of ROG, NO_x, PM_{2.5}, and PM₁₀ are generated by mobile and stationary sources, including day-to-day activities such as vehicle trips to and from a given site, heavy equipment operation, natural gas combustion from heating mechanisms, landscape maintenance equipment exhaust, and consumer products (e.g., deodorants, cleaning products, spray paint, etc.). Development of the proposed two-stall prefabricated restroom would not modify the existing land use or operations within the Project Site in a way that would increase operational emissions to levels above existing thresholds (**Table 4.3-3**). Therefore, the Proposed Project is anticipated to result in a less than significant impact associated with operational emissions of the two-stall prefabricated restroom.

Table 4.3-3 — Estimated Operational Project Emissions

Season	ROG (lbs./day)	NO _X (lbs./day)	PM ₁₀ (lbs./day)	PM _{2.5} (lbs./day)
Summer	1.00	0.02	0.001	0.001
Winter	1.00	0.02	0.06	0.02

Source: CalEEMod Version 2013.2.2 (Appendix B).

Although the construction timeframe for proposed future improvements remains uncertain, the nature of uses within the existing park will not change and substantial increases in visitation are not anticipated. All trails within the Proposed Project would comply with El Dorado County transportation policies outlined in the County's General Plan. The Proposed Project aligns with Goal TC-4 of the *El Dorado County General Plan, Circulation Element* to promote alternative modes of transportation that are safe, continuous, and easily accessible for non-motorized transportation by developing the trails within the park that would connect to other trails within the existing Rail Corridor (County of El Dorado 2004). Railroad Park improvements would also include establishing several bike parking areas and an equestrian hitching and parking area to further promote non-motorized transportation.

Operation of the Plymouth Locomotive would result in minor emissions within the Project Site from the diesel powered engine. Excursion train operation of diesel-fueled locomotives was assessed under the *Sacramento-Placerville Transportation Corridor Master Plan Environmental Impact Report* (SPTC EIR) and it was determined that air quality emissions would not cause a significant impact within the Rail Corridor as a result of the limited operations of the rail cars. The SPTC EIR analyzed a standard diesel powered locomotive within the Rail Corridor completing a total twenty-two-mile trip length through the Rail Corridor for a total run time of about 3.2 hours (Jones & Stokes, Inc. 1998). The Plymouth Locomotive would only run within the Project Site for thirty minutes over less than half a mile of track. The estimated emissions from the twenty-two-mile train excursion and train excursion within the Project Site are summarized below on **Table 4.3-4**.

Table 4.3-4 – Estimated Train Excursion Emissions

Excursion	NO _x (lbs./day)	CO (lbs./day)	PM ₁₀ (lbs./day)
22-Mile Excursion	14.7	2.0	0.3

Source: Jones & Stokes, Inc. 1998

As shown above in **Table 4.3-4** the estimated emissions resulting from operation of the twenty-two-mile train excursion would remain well below the current air quality thresholds presented in **Table 4.3-1**. The Plymouth Locomotive would only operate a fraction of the time/distance analyzed by the SPTC EIR on average six hours a year within the Project Site and cover under a half mile of railroad track. Therefore, it is not anticipated that air quality thresholds would be exceeded within the yearly six hours of train excursion operation proposed in Railroad Park.

Therefore, operational emissions associated with development of the Proposed Project are not anticipated to result in a substantial increase in operational emissions exceeding air quality thresholds and impacts are considered less than significant.

Conclusion

Construction and operation of the proposed Phase 1 two-stall prefabricated restroom would not exceed current applicable thresholds of significance for air pollutant emissions. Similarly, development of proposed future improvements is not anticipated to exceed the applicable thresholds of significance for air pollutant emissions operation. However, due to the fact that proposed improvements would be constructed over an undetermined future timeframe, it is impossible to anticipate future regulatory thresholds and analyze potential construction-related impacts for proposed future improvements. Therefore, implementation of anticipated future improvements associated with development of the Proposed Project would result in **less than significant with mitigation incorporated** construction-related impacts related to air quality. Implementation of **Mitigation Measure AQ — 1** would reduce potential construction-related impacts to less than significant levels by requiring air quality studies prior to construction of proposed future improvements and approval by the EDCAQMD.

c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a non- attainment area for an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?

Less Than Significant Impact. El Dorado County is currently designated as "non-attainment" for ozone and PM₁₀. Projected growth and combined population, vehicle usage, and business activity within the County, in combination with other past, present, and reasonably foreseeable projects within the County and surrounding areas, could either delay attainment of established standards or require the adoption of additional controls on existing and future air pollution sources to offset emission increases.

Implementation of the Proposed Project would involve minimal emissions during construction, as proposed improvements would not require frequent maintenance and would not result in a substantial increase in long-term operational emissions. Construction emissions would be short-term in duration, and would be implemented intermittently starting in the summer of 2016 and carried out over the next several years. Accordingly, the incremental contribution of the Proposed Project's construction-related emissions would not be considered cumulatively considerable. Therefore, impacts from the Proposed Project are considered less than significant, cumulatively.

d. Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant with Mitigation Incorporated. Development of the Proposed Project would involve on-site recreational use and rail transportation; however, no additional rail transportation is anticipated from project development. Emissions of diesel particulate matter (DPM) resulting from construction-related equipment and vehicles would be temporary and intermittent. Sensitive receptors would not be exposed to substantial long-term concentrations of DPM emissions associated with construction of the Proposed Project.

Project development would not introduce sensitive receptors to the area, and, thus, would not expose new sources of sensitive receptors to any existing sources of substantial pollutant concentrations. However, the California Air Resource Board promulgated the Airborne Toxic Control Measure (ATCM) for Construction, Grading, Quarrying and Surface Mining Operations (17 CCR 93105). This ATCM regulates asbestos associated with construction projects. The ATCM is a statewide regulation triggered prior to the ground-disturbing activities in certain areas of California, and applies to any size construction project, although there are more stringent mitigation requirements for projects that exceed one acre.

El Dorado County Naturally Occurring Asbestos Review Area Map identifies areas with potential to contain naturally occurring asbestos (NOA) in El Dorado County. As identified by the map the Project Site is located in a quarter mile buffer zone for an area more likely to contain NOA, because the Project

Site is near an inactive fault line increasing the likelihood of surface deposits NOA (El Dorado County 2005). The Project Site has the potential to result in the risk of exposure from NOA. Therefore, impacts related to exposing sensitive receptors to substantial pollutant concentrations are considered a less than significant impact with mitigation incorporated.

Compliance with Mitigation Measure AQ — 2 would require that the County of El Dorado to implement on-site inspections by a qualified geotechnical specialist to determine if naturally occurring asbestos is present, and would implement all minimization measures, in accordance with County Ordinances and EDCAQMD rules and regulations, at a minimum, required to reduce the potential risk from exposure to NOA. Implementation of Mitigation Measure AQ — 2 would therefore reduce potential impacts to less than significant levels.

e. Create objectionable odors affecting a substantial number of people?

Less Than Significant Impact. While offensive odors rarely cause any physical harm, they can be unpleasant, leading to considerable distress among members of the public and often result in generating citizen complaints to local governments and air districts. The Proposed Project is not anticipated to result in a substantial increase in the amount of rail transportation within the Project Site, and would therefore result in a minimal increase in operational odors from the trains. Odors from train operation would be limited to when trains are in operation within the Project Site. Other project-related odor emissions would be limited to times when equipment would be utilized for construction and emissions from equipment may be evident in the immediate surrounding area. Potential impacts would be limited as there are few residential and commercial developments near the project vicinity. Construction activities would be shortterm and would not result in the creation of long-term objectionable odors. Therefore, due to the shortterm nature of proposed construction activities, combined with the limited exposure to sensitive receptors from train operations, impacts associated with development of the Proposed Project are considered less than significant.

Mitigation Measures

Mitigation Measure AQ — 1:

Prior to implementation of any proposed future improvements that require a grading permit (except the two-stall restroom proposed by Phase 1), the County shall consult with the El Dorado County AQMD. These consultations shall determine if a project-specific air quality analysis or GHG analysis for project construction would be required. If a project-specific air quality analysis and/or GHG analysis is required, the County shall conduct the analysis using the applicable standards in place at the time. These air quality assessments will provide recommended methodology for air pollution and GHGs. The methodology may include, but not be limited to; project screening identified by the El Dorado County AQMD, the California Emissions Estimator Model (CalEEMod), Urban Emissions Model (URBEMIS) for air quality, or other methodology identified by El Dorado County AQMD. Should the project-specific analysis estimate that emissions, (including GHG emissions) could exceed the applicable thresholds, the project shall incorporate the appropriate level of mitigation measures, which may include additional fugitive dust/particulate matter control as well as the applicable standard construction mitigation measures, or other measures identified to reduce GHG emissions in accordance with the current standards applicable at the time of development.

Mitigation Measure AQ — 2:

Prior to commencement of ground-disturbing activities, the County will implement on-site inspections by a qualified geotechnical specialist to determine if naturally occurring asbestos is present within the proposed construction footprint required for development of the Proposed Project. If the presence of naturally occurring asbestos (NOA) is likely, the County will assume responsibility for obtaining all required EDCAQMD

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authorizations relevant to NOA in accordance with EDCAQMD rules and regulations, and will require contractors to implement all feasible mitigating measures identified to reduce the health risks related to potential exposure to NOA. Additionally, if NOA is present on the Project Site an *Asbestos Hazard Dust Mitigation Plan* shall be prepared in accordance with El Dorado County Ordinance Section 8.44.030 (B).

4.4 BIOLOGICAL RESOURCES

	Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?				
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 U.S. 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, marshes, vernal pools, 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?				

Impact Analysis

a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Less Than Significant Impact with Mitigation Incorporated. Based on a records search of the California Natural Diversity Database (CNDDB), the U.S. Fish and Wildlife Service (USFWS) and California Native Plant Society (CNPS) lists as well as field observations, several special-status species are found to have the potential to occur onsite or in the vicinity of the Project Site. The CNDDB special-status species occurrences in the project vicinity are shown on **Figure 4.4-1** and enclosed within the *Biological Resources Assessment* [for the] ±7.7-Acre Railroad Park Project, El Dorado County, California which was prepared by Foothill Associates January 11, 2016 (**Appendix C**). The following set of criteria has been used to determine each species' potential for occurrence within the Project Site.

Present: Species known to occur within the Project Site based on CNDDB records and/or

observed within the Project Site during the biological surveys.

High: Species known to occur on or near the Project Site (based on CNDDB records within 5

miles and/or based on professional expertise specific to the Project Site or species) and

there is suitable habitat within the Project Site.

Low: Species known to occur in the vicinity of the Project Site and there is marginal habitat

within the Project Site -OR- Species is not known to occur in the vicinity of the Project

Site, however, there is suitable habitat on the site.

None: Species is not known to occur on or in the vicinity of the Project Site and there is no

suitable habitat within the Project Site -OR- Species was surveyed for during the appropriate season with negative results -OR- Species is not known in the Project Site.

Only those species that are known to be present or that have a high or low potential for occurrence will be discussed in further detail.

Special-Status Plants

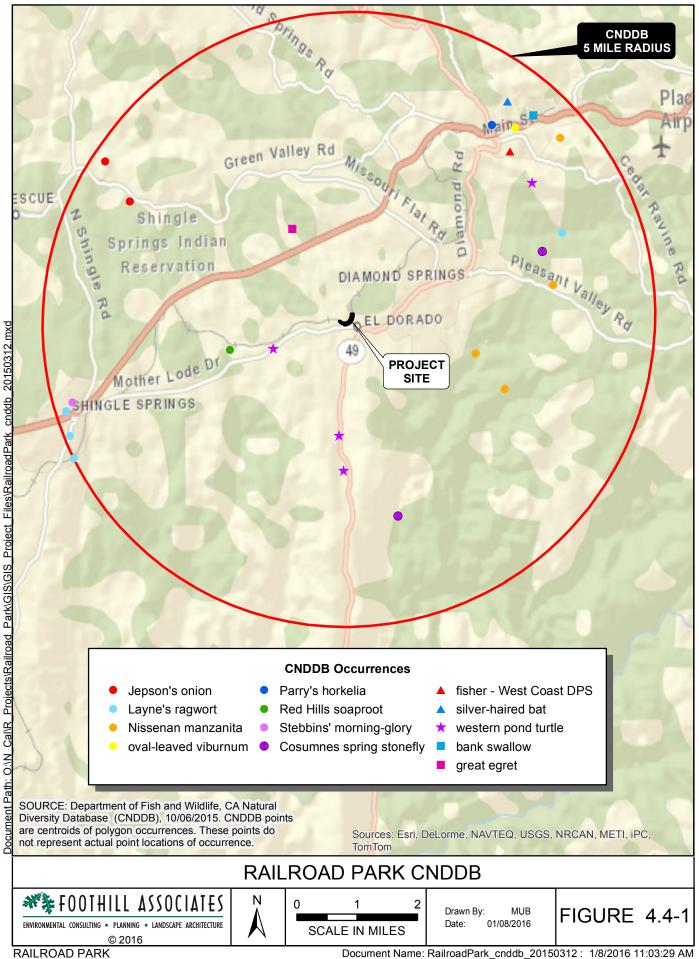
There are no special-status plants that occur or have the potential to occur within the Project Site.

Listed and Special-Status Wildlife

The following special-status wildlife species have a high potential to occur or were observed within the Project Site: western pond turtle (*Emys marmorata*), a Species of Special Concern, and migratory birds and other birds of prey. No other special-status species have the potential to occur within the Project Site.

Western Pond Turtle

Western pond turtles are found in ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches within suitable basking sites (Californiaherps 2015). Suitable aquatic habitat typically has a muddy or rock bottom and has emergent aquatic vegetation for cover (Stebbins 2003). There are four CNDDB records for this species within five miles of the Project Site (**Figure 4.4-1**). The intermittent drainage and riparian habitat surrounding the drainage provide habitat for the species. No western pond turtles were observed within the Project Site during the biological survey, however, this species has a high potential to occur within the Project Site.



Migratory Birds and Other Birds of Prey

Migratory birds and other birds of prey, protected under 50 CFR 10 of the MBTA and/or Section 3503 of the California Fish and Game Code, have the potential to nest in the non-native annual grassland, in culverts and burrows along the railroad tracks, within the disturbed/developed areas, and in trees and shrubs within the non-native annual grassland, riparian habitat, and disturbed/developed areas. Migratory birds and other birds of prey have a high potential to nest within the Project Site during the nesting season. The generally accepted nesting season is from February 15 through August 31.

Conclusion

Several special-status wildlife species have the potential to occur within the Project Site. Implementation of **Mitigation Measure BIO** — 1 and **Mitigation Measure BIO** — 2 would require pre-construction surveys prior to implementation of construction activities ensuring no adverse effects to special-status species. These measures would reduce potential impacts to special-status species to a less than significant level. Therefore, impacts to special-status species are considered **less than significant with mitigation incorporated**.

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 U.S. Fish and Wildlife Service?

Less Than Significant Impact with Mitigation Incorporated. Sensitive habitats include those that are of special concern to resource agencies or those that are protected under CEQA, Section 1600 of the California Fish and Game Code, or Section 404 of the Clean Water Act. Sensitive habitats within the Project Site include the following biological communities and resources: riparian habitat and waters of the U.S. (including ephemeral drainage, depressional seasonal wetland, and intermittent drainage).

Riparian

Riparian habitat occurs along the banks of the intermittent drainage and the ephemeral drainage within the Project Site (**Figure 4.4-2**). Dominant vegetation along the intermittent drainage includes: willow (*Salix* sp.), Himalayan blackberry (*Rubus armeniacus*), curly dock (*Rumex crispus*), English plantain (*Plantago lanceolata*), Fremont cottonwood (*Populus fremontii*), gray pine (*Pinus sabiniana*), valley oak (*Quercus lobata*), live oak (*Quercus wislizeni*), interior live oak, teasel (*Dispasacus* sp.), mugwort (*Artemisia douglasiana*), and greater periwinkle (*Vinca major*). Dominant vegetation along the ephemeral drainage includes: Himalayan blackberry and a single crab apple (*Malus* sp.) tree.

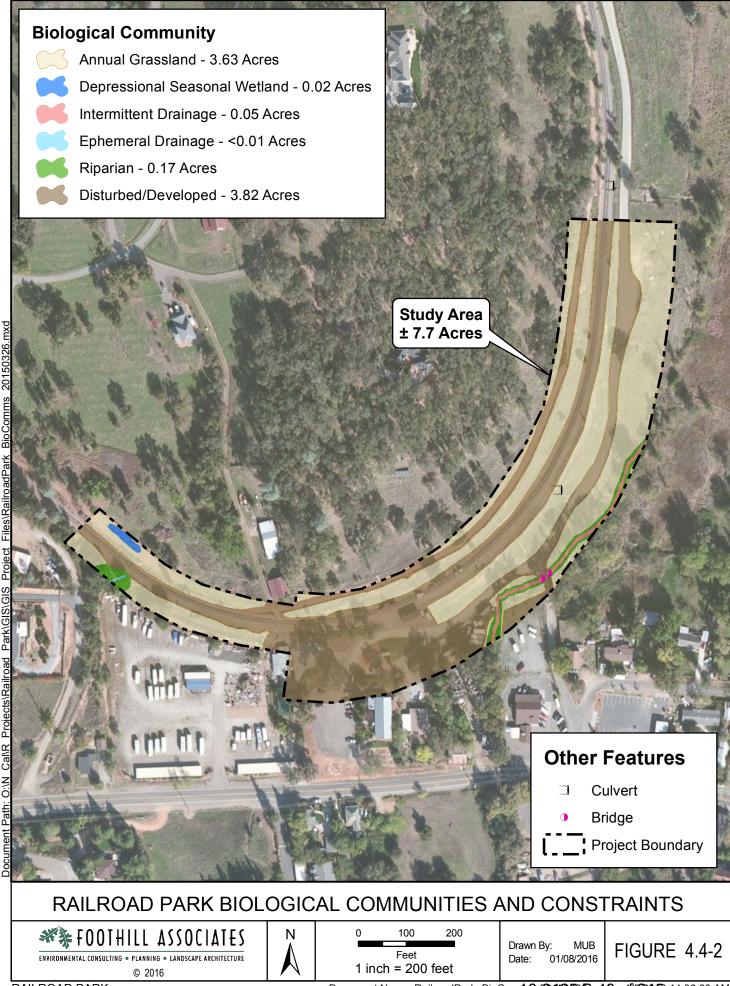
Waters of the U.S.

Intermittent Drainage

A total of 0.05 acre of intermittent drainage has been delineated within the Project Site (**Figure 4.4-2**). Intermittent drainages are defined as well-defined channels that contain water for only part of the year, typically during the winter and spring when the aquatic bed is below the water table. The unnamed intermittent drainage occurs within the southern portion of the Project Site. Dominant vegetation includes: spikerush (*Eleocharis macrostachya*), yellow cress (*Rorippa curvisiliqua*), and duckweed (*Lemna* sp.).

Ephemeral Drainage

A total of 0.01 acre of ephemeral drainage occurs within the western portion of the Project Site (**Figure 4.4-2**). Ephemeral drainages are primarily fed by stormwater runoff. These features convey flows during and immediately after storm events but may stop flowing or begin to dry if the interval between storm events is long enough. Typically, these features exhibit a defined bed and bank and often show signs of scouring as a result of rapid flow events. Dominant vegetation includes Himalayan blackberry.



Depressional Seasonal Wetland

A total of 0.02 acre of depressional seasonal wetland has been delineated within the western portion of the Project Site (**Figure 4.4-2**). The hydrologic regime is generally saturated rather than inundated. Dominant vegetation includes: ryegrass (*Festuca perennis*), spreading rush (*Juncus patens*), and pennyroyal (*Mentha pulegium*).

Conclusion

Development of the Proposed Project would have the potential to result in impacts to riparian habitat or other sensitive natural communities identified in local or regional plans, policies, or regulations, or by the CDFW or the USFWS. The southwest spur and Oriental Street Bridge widening would impact jurisdictional aquatic features. Implementation of **Mitigation Measure BIO — 3** and **Mitigation Measure BIO — 4** would require the appropriate permits be obtained from the U.S. Army Corps of Engineers (USACOE), Regional Water Quality Control Board (RWQCB), and the California Department of Fish and Wildlife. Therefore, impacts to sensitive natural communities within the Project Site are considered **less than significant with mitigation incorporated**.

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, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling hydrological interruption, or other means?

Less Than Significant Impact with Mitigation Incorporated. The Project Site contains a total of 0.08 acre of potential jurisdictional aquatic features, including depressional seasonal wetland (0.02 acre), intermittent drainage (0.05 acre), and ephemeral drainage (0.01 acre). See *subsection b* above for a more detailed characterization of individual feature classifications. Project development would impact the ephemeral drainage and intermittent drainage on the Project Site through development of the southwest railroad spur and the Oriental Street Bridge and road widening. Implementation of Mitigation Measure BIO — 4 would require Section 404 authorization for the fill of any federally jurisdictional waters and would require that a Section 401 Water Quality Certification be obtained from the RWQCB. In addition, a Section 1600 Agreement will be required for impacts to the streamzone. Compliance with these measures would ensure that impacts to federally jurisdictional waters, including wetlands, as well as other aquatic resources are implemented in a manner consistent with current regulatory standards and that impacts are offset through applicable regulatory standards, ensuring nonet-loss of aquatic functions and values. Therefore, impacts to aquatic features are considered less than significant with mitigation incorporated.

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?

No Impact. According to the *Biological Resources Assessment* (**Appendix C**) there are no fish species with the potential to occur within the Project Site. The Project Site is not part of a major or local wildlife corridor/travel route because it does not connect two significant habitats. The center of the Project Site consists of developed areas comprised of an existing railroad track. A graded road occurs parallel and south-southeast of the railroad track. The unnamed intermittent drainage that borders the southern portion of the Project Site does not act as a wildlife corridor since it initiates approximately one-mile north of the Project Site and flows through residential and commercial development to the south of the Project Site. Therefore, no wildlife corridors occur within the Project Site and **no impact** would result from development of the Proposed Project.

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

Less Than Significant with Mitigation Incorporated. Isolated oak trees occur in the existing disturbed/developed area and riparian habitat within the Project Site (**Figure 4.4-2**). Although these trees are not considered oak woodland habitat due to their proximity to one another, the oak canopy is greater

than one percent of the Project Site. The *El Dorado County General Plan*, *Conservation and Open Space Element* regulates impacts to tree canopy under General Plan Policy 7.4.4.4. This policy sets forth percentages of on-site canopy retention requirements for development projects until the County developed a County-wide strategy. In 2008, the County adopted the *El Dorado County Oak Woodland Management Plan* (OWMP) to implement these General Plan oak woodland protection policies. The County's adoption of the OWMP was challenged in court. In 2012, the Appellate Court upheld the CEQA challenge to the OWMP and directed the County to prepare an Environmental Impact Report for the OWMP. Currently, a General Plan amendment is being prepared to clarify and refine the County's oak tree protection policies.

As a result, only Option "A" of Policy 7.4.4.4 is applicable to oak woodland mitigation. Impacts to oak woodland canopy are currently assessed under the *Interim Interpretive Guidelines* amended October 12, 2007.

Policy 7.4.4.4 For all new development projects (not including agricultural cultivation and actions pursuant to an approved Fire Safe Plan necessary to protect existing structures, both of which are exempt from this policy) that would result in soil disturbance on parcels that (1) are over an acre and have at least 1 percent total canopy cover or (2) are less than an acre and have at least 10 percent total canopy cover by woodlands habitats as described in this General Plan and determined from base line aerial photography or by site survey performed by a qualified biologist or licensed arborist, the County shall require one of two mitigation options: (1) the project applicant shall adhere to the tree canopy retention and replacement standards described below; or (2) the project applicant shall contribute to the County's Integrated Natural Resources Management Plan (INRMP) conservation fund described in Policy 7.4.2.8.

Option A

The County shall apply the following tree canopy retention standards:

Percent Existing Canopy Cover	Canopy Cover to be Retained
80-100	60% of existing canopy
60-79	70% of existing canopy
40-59	80% of existing canopy
20-39	85% of existing canopy
10-19	90% of existing canopy
1-9 for parcels > 1 acre	90% of existing canopy

Under Option A, the project applicant shall also replace woodland and habitat removed at 1:1 ratio. Impacts on woodland habitat and mitigation requirements shall be addressed in a Biological Resources Study and Important Habitat Mitigation Plan as described in Policy 7.4.2.8. Woodland replacement shall be based on a formula, developed by the County, that accounts for the number of trees and acreage affected.

The *El Dorado County General Plan*, *Conservation and Open Space Element* also protects wetlands under Objective 7.3.3. Policy 7.3.3.4 outlines specific buffers and special setbacks for the protection of wetlands and riparian areas. Exceptions to the riparian and wetland buffers and setbacks outlined in the General Plan can be permitted if the County exempts a project and Best Management Practices are incorporated into the project.

However, there is the possibility of oak tree removal for the construction of new facilities. Mitigation Measure BIO — 5 would ensure that the proper standards are adhered to for the Proposed Project to follow any local policies or ordinances protecting biological resources. Therefore, impacts are considered less than significant with mitigation incorporated.

Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?

No Impact. There are no habitat conservation plans, natural community conservation plans, or local, regional, or state habitat conservation plans in El Dorado County, therefore no impact would result from development of the Proposed Project.

Mitigation Measures

Mitigation Measure BIO — 1 through BIO — 5 are identified by the analyses within this IS/MND to reduce potential impacts related to biological resources to less than significant levels.

Mitigation Measure BIO — 1: The intermittent drainage and riparian habitat provide habitat for the western pond turtle. A qualified biologist shall conduct a pre-construction survey for western pond turtle within 14 days prior to the start of ground disturbance. If no western pond turtles are observed, a letter report documenting the results of the survey shall be submitted to the County, and no additional measures are recommended. If construction does not commence within 14 days of the pre-construction survey or halts for more than 14 days, a new survey shall be conducted.

> If western pond turtles are found, additional avoidance measures shall be implemented, following consultation with CDFW. Avoidance measures shall include, but not be limited to, a qualified biologist conducting a pre-construction survey within 24 hours prior to commencement of construction activities and having a qualified biologist onsite during all initial ground disturbance including vegetation clearing and grading. If a western pond turtle is found within the construction footprint, the qualified biologist shall relocate the individual to a portion of the intermittent drainage or riparian habitat within the intermittent drainage upstream of the construction zone.

Mitigation Measure BIO — 2: Migratory birds and other birds of prey, protected under 50 CFR 10 of the MBTA and/or Section 3503 of the California Fish and Game Code have the potential to nest in the non-native annual grassland, in the culverts and burrows along the railroad tracks within the disturbed/developed areas, and within the trees and shrubs within the non-native annual grassland, riparian habitat, and disturbed/developed area. Vegetation clearing operations, including pruning or removal of trees and shrubs. shall be completed between September 1 and February 14, if feasible. If vegetation removal begins during the nesting season (February 15 to August 31), a qualified biologist shall conduct a pre-construction survey for active nests. The pre-construction survey shall be conducted within 14 days prior to commencement of ground-disturbing activities. If the pre-construction survey shows that there is no evidence of active nests, then a letter report shall be submitted to the County for their records and no additional measures are required. If construction does not commence within 14 days of the pre-construction survey, or halts for more than 14 days, and additional pre-construction survey must be conducted.

> If any active nests are located within the Project Site, an appropriate buffer zone shall be established around the nests as determined by the

biologist. The biologist shall mark the buffer zone with construction tape or pin flags and maintain the buffer zone until the end of breeding season or until the young have successfully fledged. Buffer zones are typically 100 feet for migratory bird nests and 250 feet for raptor nests. If active nests are found onsite, a qualified biologist shall monitor nests weekly during construction to evaluate potential nesting disturbance by construction activities. If establishing the typical buffer zone is impractical, the qualified biologist may reduce the buffer depending on the species and daily monitoring is required to ensure that the nest is not disturbed and no forced fledging occurs. Daily monitoring shall occur until the qualified biologist determines that the nest is no longer occupied.

Mitigation Measure BIO — 3: Placement of permanent or temporary fill in waters of the U.S. is regulated by the U.S. Army Corps of Engineers (USACOE) under Section 404 of the federal Clean Water Act. The County shall coordinate with the USACOE in order to obtain the applicable permits for any activities resulting in temporary and/or permanent impacts to waters of the U.S. The project shall comply with the USACOE "no-net-loss" of aquatic functions and values policy and all applicable conditions of the Section 404 authorization.

> Any discharge into waters of the U.S. is also subject to regulation by the Central Valley Regional Water Quality Control Board (RWQCB) pursuant to Section 401 of the federal Clean Water Act. As required under Section 404, the County shall also coordinate with the RWQCB in order to obtain 401 Water Quality Certification.

Mitigation Measure BIO — 4: Pursuant to Fish and Game Code §1602, the County shall notify the California Department of Fish and Wildlife (CDFW) prior to any activity which may result in impacts to the streamzone. The County shall coordinate with CDFW and enter into a 1600 Streambed Alteration Agreement, if applicable, for impacts to the bed, bank or channel of onsite drainages and/or any riparian areas.

Mitigation Measure BIO — 5: Option A under General Plan Policy 7.4.4.4 requires projects that involve more than one acre of soil disturbance with at least one percent of canopy cover by woodlands to adhere to the tree canopy retention and replacement standards. If oak tree removal is required for development of proposed improvements, an Oak Woodland Canopy Assessment shall be prepared for the Project Site.

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4.5 CULTURAL RESOURCES

	Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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 geologic feature?				
d.	Disturb any human remains, including those interred outside of formal cemeteries?				

Impact Analysis

a. Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?

Less Than Significant with Mitigation Incorporated. Registered Professional Archaeologist Ric Windmiller, M.A., prepared the July 2015 *El Dorado County Historic Railroad Park Cultural Resources Assessment, El Dorado, El Dorado County, California* (Cultural Assessment Report). The Cultural Assessment Report was prepared to identify and evaluate cultural resources within the El Dorado County Historical Railroad Park (Railroad Park) Project Site, and consisted of a records search by the North Central Information Center, California Historical Resources Information System; a sacred lands file search and report by the Native American Heritage Commission; contact with Native Americans listed by the commission; archival research/literature review; on-site interview with El Dorado Western Railroad staff and; a field inspection by a qualified archaeologist.

As summarized below in Table 4.5-1, the field team documented three features within the Railroad Park.

Table 4.5-1 — Cultural Resources Identified within Railroad Park and California Register Eligibility

Reference Number	Reference Number Description	
P-9-1242	Sacramento – Placerville Railroad Segments	Potentially (under Criterion 4)
P-9-1829	Chinese Habitation and Cemetery Site	Potentially (under Criterion 4)
	Oriental Street at China Creek Culvert	No

Source: Windmiller 2015

Of the three features documented by the archaeological field team, resources P-9-1242 and P-9-1829 have been determined to be potentially eligible for the California Register of Historical Resources and are likely eligible under CEQA as unique archaeological resources (Windmiller 2015), as further discussed by individual resource below.

P-9-1242: Sacramento – Placerville Railroad Segment

The railroad segment was first recorded by Parsons Harland Bartholomew & Associates archaeologists in 1999 and 2000. The recorded railroad segment is located opposite (north) of the fork in Oriental Street at the existing road culvert. A set of records written by historian Melinda Peak and others in 2007 describe the Shingle Springs to Placerville portion of the railroad as being 10.5 miles long and built in 1887. Peak determined that the railroad was not eligible for the National Register of Historic Places under any criterion of eligibility because this segment was part of an extension of an existing railroad, not part of the original race between the Sacramento-Placerville Railroad and the Central Pacific to construct a trans-Sierra railroad. Under the same argument, the railroad line would not be eligible under California Register of Historical Resources criteria, with the exception of El Dorado Station Locus A. Locus A includes the site of the original station and privy pits associated with the station. The El Dorado Station Locus A is not eligible under California Register of Historical Resources Criterion 1, 2, or 3, but is potentially eligible under Criterion 4. The El Dorado Station Locus A is potentially eligible for listing under Criterion 4 for the information it may yield though archaeological excavation. Footings of the original station house may result in information on construction details not available in written historical literature that may be historically important (Windmiller 2015).

P-9-1829: Chinese Habitation and Cemetery Site

The 20-acre historic archaeological site was documented in 1992 by historian Dana Supernowicz. This historic archaeological site is located on the hill immediately northwest of the Project Site and includes cabin sites and a cemetery. Southeast of the railroad is a non-contiguous area of the same Chinese site. Lacking information on specific association of the Chinese site with a particular period, events or people, the site cannot be assessed as eligible for the California Register of Historical Resources under Criterion 1 or 2. Under Criterion 3, the site would need to be significant for its physical design or construction, but there is not enough information known about the site to determine eligibility under Criterion 3. The site is likely eligible for the California Register of Historical Resources under Criterion 4, because archaeological excavation could yield important information on the structure and activities of a historic Chinese community not available in written historical documents (Windmiller 2015).

Oriental Street at China Creek Culvert

The historic "bridge" is a concrete box culvert with raised concrete sides in the form of molded panels. According to the records search results the culvert has not been evaluated in the Caltrans bridge inventory. In California, the most common bridge type is constructed of concrete and such reinforced concrete structures are numerous in the California. The culvert does not demonstrate an association with a clearly important event or theme outlined in historic context; have an association with individual(s) whose specific contributions to history can be identified and documented; have properties significant for their physical design or construction; or demonstrate or have the potential to yield information important in history. Therefore, the culvert is not eligible for the California Register of Historical Resources or a unique archaeological resource under the CEQA Guidelines. The current conceptual plan (**Figure 3.6-1**) identifies improvements proposed within the boundaries of P-9-1242 and P-9-1829. The proposed switch, spur and trail connections would involve construction within the boundaries of P-9-1242. In addition, the proposed construction of the equestrian parking, shade shelters, pre-fabricated restroom, children's play area, parking lot, engine house shop, and secured shop yard would involve construction within the boundaries of the portion of P-9-1829. Construction of the proposed paved and un-paved trail would also occur within a portion of P-9-1829.

Under CEQA, any activity that would demolish, materially alter, or adversely affect the physical characteristics that convey the historical significance of a resource, and that justifies its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources would be considered potentially significant. Construction of the proposed Railroad Park could adversely affect historic resources; therefore, impacts are considered **less than significant with mitigation incorporated**.

Compliance with **Mitigation Measure CR** — 1 through **Mitigation Measure CR** — 3 would require a data recovery plan and chemically-compatible soil cover or archaeological test excavation to ensure potential effects to historic resources are avoided and would ensure project development is implemented in such a manner to ensure potential impacts remain less than significant.

b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Less Than Significant with Mitigation Incorporated. No prehistoric resources were identified by the Cultural Assessment Report (Windmiller 2015).

Per Assembly Bill 52 (AB 52), as of July 1, 2015 Public Resources Code Sections 21080.3.1 and 21080.3 require public agencies to consult with the Native American Heritage Commission (NAHC) and Native American tribes for the purpose of mitigating impacts to tribal cultural resources. The process is described in part below.

Within 14 days of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section (Public Resources Code Section 21080.1 (d)).

As of writing this document no request has yet been received for notification from any designated contact of, or tribal representative of a traditionally and culturally affiliated California Native American Tribe. Consistent with Public Resources Code Section 21080.3.1 (c) and per AB 52 the NAHC was contacted for a sacred lands file search and list of Native American contacts. The NAHC responded to the request for the sacred lands file search and list of Native American contacts on April 1, 2015. On April 2, 2015 each of the 7 Native American contacts were sent written correspondence requesting input on the Proposed Project including a project description and map, however there were no responses to the mailing. Each contact was then called by telephone on July 22, 2015 and most were unavailable. One respondent Mr. Hermo Olanio, Vice Chairperson of the Shingle Springs Band, indicated that he did not know of any Native American cultural resources within the Project Site. The remaining contacts were not available. Therefore, no Native American archaeological resources or traditional cultural properties were identified by the Cultural Assessment Report (Windmiller 2015).

The current conceptual plan (**Figure 3.6-1**) identifies improvements proposed within the boundaries of P-9-1829, a 20-acre historic archaeological site, as well as within the boundaries of P-9-1242, a segment of the Sacramento-Placerville Railroad. If ground-disturbing activities within these areas cannot be avoided, impacts would be considered **less than significant with mitigation incorporated**. In addition, grading and excavation activities associated with construction of the Proposed Project would have the potential to unearth or otherwise expose previously unidentified archaeological resources. Therefore, impacts are considered **less than significant with mitigation incorporated**.

Compliance with **Mitigation Measure CR** — 1 through **Mitigation Measure CR** — 3 would require a data recovery plan and chemically-compatible soil cover or archaeological test excavation to ensure potential effects to archaeological resources are avoided and would ensure project development is implemented in such a manner to ensure potential impacts remain less than significant. Compliance with **Mitigation Measure CR** — 4 would require construction activities to cease in the event of inadvertent discovery of archaeological resources and would require that the County be contacted for inadvertent discovery of resources associated with project construction. In the event of inadvertent discovery of archaeological resources, **Mitigation Measure CR** — 4 would require coordination with local agency planning resources and the project archaeologist to assist with the proper treatment of discovered resources.

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

Less Than Significant with Mitigation Incorporated. No paleontological localities are identified by the University of California, Museum of Paleontology's database within the USGS *Placerville* 7.5' quadrangle (Windmiller 2015). No unique geologic features are known within the Project Site. However, grading and excavation activities associated with construction of the Proposed Project would have the potential to unearth or otherwise expose previously unidentified paleontological resources or unique geologic features. Therefore, impacts are considered less than significant with mitigation incorporated.

Compliance with **Mitigation Measure CR** — 5 would require construction activities to cease in the event of inadvertent discovery of paleontological or unique geologic resources and would require that the County be contacted for inadvertent discovery of resources associated with project construction. In the event of inadvertent discovery of paleontological resources, **Mitigation Measure CR** — 5 would require coordination with local agency planning resources and the project archaeologist to assist with the proper treatment of discovered resources.

d. Disturb any human remains, including those interred outside of formal cemeteries?

Less Than Significant with Mitigation Incorporated. The Chinese habitation and cemetery site (P-9-1829) consists of remnants of a Chinese cemetery or shrine located near the top of the hill west and north of the Project Site, with a small portion of the habitation area also present. No known grave sites for the Chinese habitation and cemetery site have been identified within the Project Site. However, grading and excavation activities associated with construction of the Proposed Project would have the potential to unearth or otherwise expose previously unidentified human remains or burial grounds. Therefore, impacts are considered less than significant with mitigation incorporated.

Compliance with **Mitigation Measure CR — 3** and **Mitigation Measure CR — 6** would require archaeological test excavations within the Chinese habitation site and coordination with the El Dorado County Coroner in compliance with CEQA (Section 1064.5) and the California Health and Safety Code (Section 7050.5), as well as Native American Heritage Commission who will notify and appoint a Most Likely Descendent (MLD), thereby reducing potential impacts to less than significant levels.

Mitigation Measures

Mitigation Measure CR — 1:

If ground-disturbing activities within El Dorado Station Locus A (Site P-9-1242) cannot be avoided, a data recovery plan to recover the significant information on the original station feature including any station house footings and the privy pit deposits, shall be implemented using standard archaeological procedures and reporting standards. The data recovery plan shall be reviewed and approved by the El Dorado County Planning Department prior to implementation of any field investigative work. All field work at El Dorado Station Locus A must be completed and review by the County of El Dorado prior to any construction near El Dorado Station Locus A.

Mitigation Measure CR — 2:

For all improvements proposed within the boundaries of P-9-1829 that can avoid ground disturbance, construction shall include covering the site with layer(s) of chemically compatible soil prior to construction of any physical structures or other improvements. A qualified archaeologist shall be onsite continuously to monitor all soil capping activities. The qualified archaeologist shall have the authority to stop work if necessary to protect the integrity of the site.

Mitigation Measure CR — 3:

If ground-disturbing activities within the boundaries of P-9-1829 cannot be avoided, archaeological test excavation shall be conducted. Archaeological test excavations at locations within the Project Site at any location where ground-disturbing activities are planned shall be

conducted prior to implementation of ground disturbance. The excavations shall be guided by an explicit research design prepared by a qualified professional archaeologist to determine the significance of the proposed area of disturbance, followed by further mitigation, if required.

Mitigation Measure CR — 4:

Should buried archaeological deposits, prehistoric or historic artifacts be inadvertently exposed during the course of any construction activity, work shall cease in the immediate area and the El Dorado County Planning Department shall be immediately contacted for inadvertent discovery of resources associated with project construction. A qualified archaeologist shall be retained to document the find, assess its significance, and recommend further treatment. Work on the Project Site shall not resume until the archaeologist has had a reasonable time to conduct an examination and implement mitigation measures deemed appropriate and necessary by the agency with local jurisdiction in consultation with the qualified archaeologist to reduce impacts to a less than significant level.

Mitigation Measure CR — 5:

If evidence of a paleontological site is uncovered during grading or other construction activities, work shall be halted within 100 feet of the find and the El Dorado County Planning Department shall be contacted for inadvertent discovery of resources associated with project construction. A qualified paleontologist shall be retained to conduct an on-site evaluation and provide recommendations for removal and/or preservation. Work on the Project Site shall not resume until the paleontologist has had a reasonable time to conduct an examination and implement mitigation measures deemed appropriate and necessary by the agency with local jurisdiction in consultation with the qualified paleontologist to reduce impacts to a less than significant level.

Mitigation Measure CR — 6:

In the event that any human remains or any associated funerary objects are encountered during construction, all work will cease within the vicinity of the discovery and the El Dorado County Planning Department shall be immediately contacted regarding the inadvertent discovery of resources associated with project construction. In accordance with CEQA (Section 1064.5) and the California Health and Safety Code (Section 7050.5), the El Dorado County coroner should be contacted immediately. If the human remains are determined to be Native American, the coroner will notify the Native American Heritage Commission, who will notify and appoint a Most Likely Descendent (MLD). The MLD will work with a qualified archaeologist to decide the proper treatment of the human remains and any associated funerary objects. Construction activities in the immediate vicinity will not resume until a notice-to-proceed is issued.

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4.6 GEOLOGY AND SOILS

	Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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 groundshaking?			\boxtimes	
	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 Section 1803.5.3 of the 2010 CBC, creating substantial risks to life or property?				
e.	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				

Impact Analysis

- a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
- a.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.

No Impact. Geological literature indicates that no major active faults delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map transect El Dorado County (Bryant and Hart 2007). Therefore, there would be **no impact** from strong seismic groundshaking.

a.ii. Strong seismic groundshaking?

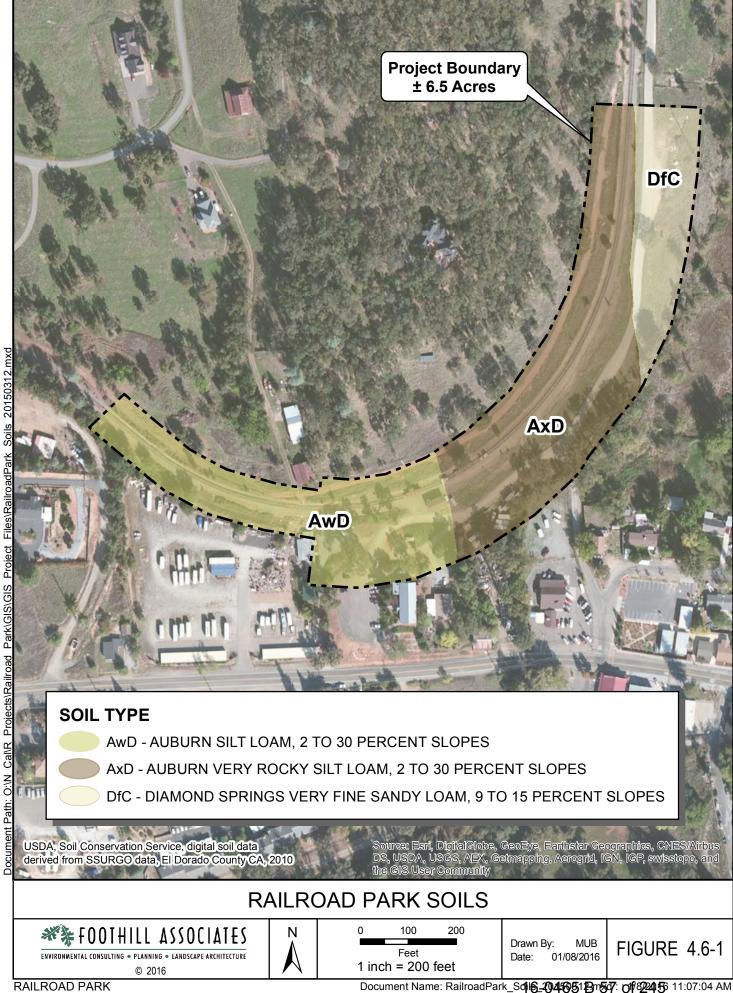
Less Than Significant Impact. According to mapping prepared by the California Division of Mines and Geology, the potential for seismic ground shaking hazards within the vicinity of the Project Site is low, and the Project Site is not located within the vicinity of an Alquist-Priolo Earthquake Fault Zone. The closest Alquist-Priolo Earthquake Fault Zone is the Genoa fault, located in Alpine County over 50 miles to the east of the Project Site (Bryant and Hart 2007). There are several fault systems mapped within El Dorado County such as the El Dorado Fault and East Bear Mountain Fault, but none of these faults are active. Therefore, the Proposed Project is not expected to experience strong groundshaking, and impacts are considered less than significant.

a.iii. Seismic-related ground failure, including liquefaction?

Less Than Significant Impact. Liquefaction is a loss of soil strength related to seismic groundshaking and is most commonly associated with soil deposits characterized by water-saturated, well sorted, fine gran sands and silts. The Project Site contains Auburn Silt Loam, 2 to 30 Percent Slopes, Auburn Very Rocky Silt Loam, 2 to 30 Percent Slopes, and Diamond Springs Very Fine Sandy Loam, 9 to 15 Percent Slopes (Figure 4.6-1). Each of these soil types have a depth to the water table that is over 80 inches (USDA, NRCS 2015b). The probability of liquefaction is highest in areas subject to groundshaking and groundwater close to the surface, with highly saturated soil (USDA, NRCS 2004). The potential for seismic related ground failure due to liquefaction is low because the groundwater levels are low and the Project Site is not within the vicinity of a fault zone. Therefore, impacts are considered less than significant and no mitigation is required.

a.iv. Landslides?

Less Than Significant Impact. The topography of the Project Site has been largely influenced by the construction of the railroad. The existing topography slopes downward from the northwest and northeast of the railroad tracks to the southwest and southeast of the railroad tracks, and then levels out toward the eastern boundary. Elevations range from 1,650 feet above mean sea level (MSL) in the northwest portion of the Project Site to 1,610 feet above MSL in the southern portion of the Project Site. Proposed trail segments would be located in the area with the steepest slope in the northwest and northeast of the Project Site, below the bank on the edge of the site. The park trails would maintain the natural topography, paralleling the railroad tracks, from the northern to southern end of the Project Site, and avoid the steep bank to the north of the railroad tracks. Therefore, impacts associated with landslides are considered less than significant and no mitigation is required.



b. Result in substantial soil erosion or the loss of topsoil?

Less Than Significant with Mitigation Incorporated. As shown on **Figure 4.6-1**, the Proposed Project is characterized by three soil map units including: Auburn Silt Loam, 2 to 30 Percent Slopes; Auburn Very Rocky Silt Loam, 2 to 30 Percent Slopes, and Diamond Springs Very Fine Sandy Loam, 9 to 15 Percent Slopes.

Auburn Silt Loam, 2 to 30 Percent Slopes occurs on undulating to very steep foothills from 500 to 1,800 feet above MSL. Bedrock outcropping occur on the surface of this soil type at frequency of less than 5 percent. The Auburn series consists of well drained soils underlain by hard metamorphic rocks at a depth of 12 to 26 inches. Permeability is moderate and surface runoff is slow to medium. The hydric soils list for El Dorado County does not identify this soil type as hydric (USDA, NRCS 2014).

Auburn Very Rocky Silt Loam, 2 to 30 Percent Slopes, occurs on more prominent steep to very steep foothills and slopes descending into creek channels and drainageways, typically located between 500 and 1,800 feet above MSL. Bedrock outcroppings occur on the surface of this soil type at a frequency of 5 to 25 percent. The Auburn series consists of well drained soils underlain by hard metamorphic rocks at a depth of 12 to 26 inches. Permeability is moderate and surface runoff is low to medium. The hydric soils list for El Dorado County does not identify this soil type as hydric (USDA, NRCS 2014).

Diamond Springs Very Fine Sandy Loam, 9 to 15 Percent Slopes occurs on mountainous uplands from 1,200 to 2,000 feet above MSL. This soil type has a slow permeability, medium runoff, and slight to moderate erosion hazard. The available water holding capacity is 4 to 9 inches. The hydric soils list for El Dorado County does not identify this soil type as hydric (USDA, NRCS 2014).

The Proposed Project would consist of improvements to existing facilities, construction of new facilities, and trail construction. Construction of the depot, display building, engine house shop, picnic tables, trails, road widening, children's play area, and parking areas have the potential to result in erosion and loss of topsoil.

State regulations pertaining to the management of erosion and sedimentation target the protection of surface water resources from the effects of land development (such as turbidity caused by sedimentation), measures included in such regulations and standards also reduce the potential for erosion and soil loss. Such regulations include, but are not limited to, the National Pollutant Discharge Elimination System (NPDES) program for management of construction and municipal stormwater runoff, which is part of the federal Clean Water Act and the State Porter-Cologne Water Quality Act and is implemented at the state and local level through issuance of permits and preparation of site-specific Storm Water Pollution Prevention Plans (SWPPP).

Project development would be required to comply with the standards established by El Dorado County's Storm Water Management Plan (SWMP). Project-related grading activities would also be subject to the requirements of the California Regional Water Quality Control Board for filing a Notice of Intent (NOI) to comply with the Construction General Permit for projects over an acre or for projects that are part of a larger common plan of development that is over one acre. Notice of Intent applicants are required to develop a SWPPP specifying individual Best Management Practices (BMPs) as well as scheduling for regular monitoring and maintenance of said BMPs for effectiveness.

Site disturbance related to clearing, grading, and excavation activities associated with implementation of the improvements proposed by Railroad Park would have the potential to result in increased erosion within the project area.

Construction-related soil disturbance within the Project Site would exceed one acre and would have the potential to result in impacts to water quality resulting from pollutant discharge, including soil sediments. Therefore, preparation of a SWPPP would be required to comply with the NPDES Construction General Permit administered by the State Water Resources Control Board. The SWPPP will identify structural

and non-structural BMPs to control and prevent erosion and topsoil loss. Impacts are therefore considered **less than significant with mitigation incorporated**.

Compliance with **Mitigation Measure GEO** — 1 would require that the County comply with applicable NPDES requirements in effect at the time of construction. Compliance with **Mitigation Measure GEO** — 2 would ensure that the park is monitored for erosion resulting from long-term trail usage.

It is anticipated that compliance with **Mitigation Measure GEO** — 1 and **Mitigation Measure GEO** — 2 would reduce potential impacts associated with erosion to less than significant levels.

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?

Less Than Significant Impact. Lateral spreading, a phenomenon associated with liquefaction, subsidence, or other geologic or soils conditions that could create unstable subsurface conditions that could affect project features, is not a significant hazard for the Project Site. Impacts related to unstable soils including lateral spreading or collapse resulting from seismic-induced groundshaking are considered less than significant due to the distance from an active fault, the low potential for groundshaking hazards, and soil conditions in the area. Subsidence is generally characterized by the gradual settling of the earth's surface with little or no horizontal motion, and typically occurs in formations overlaying an aquifer subject to a gradual and consistently decreasing withdraw of groundwater. The project is not located on a geologic unit or soil that is unstable. Impacts are therefore considered less than significant and no mitigation is required.

d. Be located on expansive soil, as defined in Section 1803.5.3 of the 2010 CBC, creating substantial risks to life or property?

No Impact. The Project Site is not located in an area of expansive soils and would not expose people to risk related to potential geologic impacts. Therefore, **no impact** would result from project development and no mitigation is required.

e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

No Impact. Project development would not involve septic tank installation or the use of alternative waste water disposal systems. An EID sewer main runs under the road within the Project Site. Development of Phase 1 of the Proposed Project would include construction of the two-stall prefabricated restroom near the existing depot building. The restroom would connect to the EID sewer main and would not require the use of septic tanks or alternative waste water disposal systems. During development of Phase 2 of the Proposed Project, the two-stall prefabricated restroom would be moved near the picnic and play area. The two-stall prefabricated restroom in its new location would connect to a re-aligned EID sewer main segment. The two-stall prefabricated restroom would not require the use of septic tanks or alterative waste water disposal systems. Therefore, **no impact** on soils related to the use of septic tanks would occur. No mitigation is required.

Mitigation Measures

Mitigation Measure GEO — 1: The County shall apply for and comply with all construction-related storm water permitting, monitoring and reporting requirements required by the RWQCB under NPDES, as applicable to project development at the time of construction of proposed improvements/facilities.

For any impacted aquatic features determined not to be subject to federal jurisdiction, and proposed to be impacted by development of the Proposed Project, the County will Notify the Regional Water Quality Control Board through the preparation of a Notice of Intent to fill waters

of the State and will comply with all required Waste Discharge Requirements.

Mitigation Measure GEO — 2: Biannually, prior to October 15 (the onset of the rainy season), the County shall inspect and repair cut slopes and off-trail use areas within the park. Repairs shall prioritize eliminating any areas subject to erosion, as well as improper drainage and areas likely to form gullies during the rainy season.

Compliance with **Mitigation Measure GEO — 1** and **Mitigation Measure GEO — 2** would ensure that water quality BMPs are implemented in a pro-active and effective manner compliant with regulatory standards in effect at the time of construction, as well as throughout the long-term usage of the trail.

4.7 GREENHOUSE GAS EMISSIONS

	Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?				

Impact Analysis

a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant with Mitigation Incorporated. Greenhouse gas (GHG) emissions negatively affect the environment through contributing, on a cumulative basis, to global climate change. Atmospheric concentration of GHGs determines the intensity of climate change, with current levels already leading to increases in global temperatures, sea level rise, severe weather, and other environmental impacts. From a CEQA perspective, GHG impacts to global climate change are inherently cumulative (SMAQMD 2015). Due to the inherently cumulative nature of impacts associated with global climate change, a project's GHG emissions contribution is typically quantified and analyzed on an annual operational basis.

Construction Emissions

El Dorado County has no adopted policies or goals for reducing GHG emissions that would be directly applicable to the Proposed Project. However, State regulations have been adopted for GHG emissions that apply to project development. California Assembly Bill 32 (AB 32), adopted in 2006, established the Global Warming Solutions Act of 2006. AB 32 requires the State to reduce GHGs to 1990 levels by the year 2020. Senate Bill 97, adopted in 2007, requires the Governor's Office of Planning and Research (OPR) to develop CEQA Guidelines to incorporate analysis and mitigation for GHG emissions for projects subject to CEQA. Finally, Executive Order S-3-05, established in 2006, develops statewide emission reduction targets through the year 2050.

El Dorado County Air Quality Management District (EDCAQMD) is part of the committee of air districts in the Sacramento Region called the Thresholds Committee. The committee of air districts along with the Sacramento Metropolitan Air Quality Management District (SMAQMD) has developed recommended GHG thresholds of significance in order to comply with AB 32 and meet requirements of the CEQA Guidelines section 15183.5 (b). Data from the EDCAQMD was used to help determine the air quality GHG thresholds developed by the Threshold Committee. The SMAQMD Board of Directors adopted GHG thresholds on October 23, 2014, via resolution AQMD2014-028. The adopted annual threshold of 1,100 MTCO₂e is applicable to the construction phase, as well as the operational phase for land development and construction projects in the jurisdiction of the SMAQMD. EDCAQMD has not yet formally adopted the annual threshold of 1,100 MTCO₂e, but will add it to their CEQA Guide to Air Quality Assessment in the near future. The EDCAQMD is recommending CEQA analysis to adopt the SMAQMD thresholds of 1,100 MTCO₂e and use their guidance for GHG emissions (EDCAQMD 2015).

Construction-related GHG emissions are a one-time release that occurs over a short period of time. The estimated construction-related GHG emissions attributable to the Proposed Project would be primarily associated with increases of CO₂ and other GHG pollutants, such as methane (CH4) and nitrous oxide (N2O), from mobile sources and construction equipment operation. The Proposed Project's short-term construction-related emissions were estimated using the California Emissions Estimator Model (CalEEMod) Version 2013.2.2 (**Appendix B**), developed to estimate emissions associated with construction and operational use of land development projects in California. The model quantifies direct GHG emissions from construction, which are expressed in tons per project of CO₂ equivalent units of measure (MTCO₂e), based on the global warming potential of the individual pollutants. This number is then converted from English tons to metric tons by a conversion factor of 0.91. The estimated annual increase in GHG emissions associated with construction of the proposed two-stall restroom during Phase 1 construction is summarized below in **Table 4.7-1**.

Table 4.7-1 — Project Estimated Construction-Related GHG Emissions

	CO₂ emissions (MTCO₂e)
Short-term Construction GHG Emissions	28.6

Source: CalEEMod Version 2013.2.2 (Appendix B)

As presented in **Table 4.7-1**, total construction-related GHG emissions associated with development of the proposed two-stall prefabricated restroom near the existing depot building would be 28.6 MTCO₂e. The SMAQMD adopted annual threshold of 1,100 MTCO₂e is applicable to the construction phase, as well as the operational phase for land development and construction projects in El Dorado County.

As construction of proposed park improvements would generate GHG emissions intermittently until all construction has been completed, it is not anticipated that implementation of the Proposed Project would result in emissions exceeding established GHG thresholds of 1,100 MTCO₂e. Short-term construction-related emissions associated with construction of the two-stall restroom near the existing depot building were modeled and estimated to be 28.6 MTCO₂e, well below the threshold. However, construction-related activities for the remaining project components remain of potential concern due to the fact that construction of Phase 2 and all other proposed components of the project are anticipated over several years, it is impossible to anticipate future regulatory thresholds and analyze potential construction-related impacts for future individual projects. Impacts to GHG from construction activities are therefore considered less than significant with mitigation incorporated.

Operational Emissions

Operational emissions related to GHG are generated by mobile and stationary sources, including day-to-day activities such as vehicle trips to and from a given site, heavy equipment operation, natural gas combustion from heating mechanisms, landscape maintenance equipment exhaust, and consumer products (e.g., deodorants, cleaning products, spray paint, etc.). The Plymouth Locomotive would conduct monthly excursions through Railroad Park. The diesel powered engine would produce some air pollutants that contribute to GHGs, however the infrequency of excursions and minimal operational time within the Project Site (estimated at thirty minutes per month), would not produce emissions exceeding the 1,100 MTCO₂e GHG significance threshold. Proposed improvements within Railroad Park, including operation of the Plymouth Locomotive, are not anticipated to significantly modify the existing land use or operations within the park.

All trails within the Proposed Project would comply with El Dorado County transportation policies outlined in the County's General Plan. The Proposed Project aligns with Goal TC-4 of the *El Dorado County General Plan, Circulation Element* to promote alternative modes of transportation that are safe, continuous, and easily accessible for non-motorized transportation by developing the trails within the park that would connect to other trails within the existing Rail Corridor (County of El Dorado 2004). Railroad

Park improvements would also include establishing several bike parking areas and an equestrian hitching and parking area to further promote non-motorized transportation.

The GHG emissions associated with operation of the two-stall prefabricated restroom were modeled at 1.6 MTCO₂e using CalEEMod 2013 Version 2.2. Therefore, impacts associated with operation emissions resulting from Phase 1 of the Proposed Project would be considered less than significant. Similarly, as proposed future improvements would not result in a change in land use and are not anticipated to substantially modify operations within the park, in combination with the fact that development of the Proposed Project includes components encouraging non-motorized travel, operational emissions resulting from development of proposed future improvements are considered less than significant.

Conclusion

Operational and construction GHG emissions associated with the Proposed Project would generate GHG emissions that would contribute to the overall GHG levels in the atmosphere. However, operational emissions resulting from development of the Proposed Project would remain less than significant due to the fact that the overall land use would not change and it is not anticipated that development of proposed improvements would generate a substantial increase in park use. Due to the fact that proposed improvements would be constructed over several years, it is impossible to anticipate future regulatory thresholds and analyze potential construction-related impacts for individual projects. Therefore, impacts are considered **less than significant with mitigation incorporated** for construction-related impacts. Implementation of **Mitigation Measure AQ — 1** would reduce potential impacts to less than significant levels.

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

No Impact. Implementation of the Proposed Project would not conflict with or obstruct implementation of any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. All trails within the Proposed Project would comply with El Dorado County transportation policies outlined in the County's General Plan. The Proposed Project aligns with Goal TC-4 of the *El Dorado County General Plan, Circulation Element* to promote alternative modes of transportation that are safe, continuous, and easily accessible for non-motorized transportation by developing the trails within the park that would connect to other trails within the existing Rail Corridor (County of El Dorado 2004). Railroad Park improvements would also include establishing several bike parking areas and an equestrian hitching and parking area to further promote non-motorized transportation.

Proposed improvements include consistency with the goals and policies identified by the *El Dorado County General Plan* pertaining to sustainability and an overall strategy for reduction of emissions. Construction and operation of proposed improvements would be implemented consistent with applicable regulatory standards and requirements, including consistency with all applicable El Dorado County AQMD and SMAQMD rules and thresholds. Therefore, **no impact** is anticipated and no mitigation is required.

Mitigation Measures

Compliance with **Mitigation Measure AQ — 1** would reduce impacts from GHG associated with the Proposed Project to less than significant levels.

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4.8 HAZARDS AND HAZARDOUS MATERIALS

	Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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 involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				
d.	Be located on a site that 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.	Be located within an airport land use plan area or, where such a plan has not been adopted, be within two miles of a public airport or public use airport, and result in a safety hazard for people residing or working in the project vicinity?				
f.	Be located within the vicinity of a private airstrip and result in a safety hazard for people residing or working in the project vicinity?				
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?				
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Impact Analysis

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

Less Than Significant Impact. Development of the Proposed Project would involve potential exposure to some hazardous materials during construction, maintenance, and engine house shop operation.

Construction

The construction of improvements in Railroad Park would involve the use of heavy equipment, which would contain fuels, oils, lubricants, solvents, and various other possible contaminants. Temporary storage tanks necessary to store fuel and/or other flammable or combustible liquids required on the Project Site during construction would be regulated through the applicable federal, State, and local regulations. Routine maintenance activities occurring within recreational facilities may also involve the occasional use of hazardous materials. Potentially toxic or hazardous compounds associated with maintenance activities typically consist of readily available solvents, cleaning compounds and paint. These compounds are regulated by stringent federal and State laws mandating the proper transport, use, and storage of hazardous materials in accordance with product labeling. The transport, storage, and disposal of any hazardous materials used would be subject to federal, State, and local regulations as overseen by agencies such as the California Department of Health Services and the County of El Dorado Environmental Health Department.

Operations

Park operations would include the engine house shop, which would provide a facility for train restoration and research. The restoration would only occur within the engine house shop by the qualified Museum staff. The restoration of rolling stock on site may include the use of toxic or hazardous compounds including cleaning compounds, paint, oils, lubricants, and solvents. All of these compounds are regulated by stringent federal and State laws mandating the proper transport, storage and disposal of hazardous materials in accordance with product labeling. The transport, storage, and disposal of any hazardous materials used would be subject to federal, State, and local regulations as overseen by agencies such as the State Department of Health Services and the El Dorado County Environmental Health Department.

The County of El Dorado Department of Environmental Management, Hazardous Waste Division, is approved by Cal-EPA as the Certified Unified Program Agency (CUPA) for El Dorado County. As the CUPA the County of El Dorado Department of Environmental Management, Hazardous Waste Division regulates the use, storage, and disposal of hazardous materials and is available to respond to hazardous materials complaints or emergencies, if any, during construction, routine maintenance, and engine house shop operation.

The County of El Dorado Department of Environmental Management, Hazardous Waste Division administers the Hazardous Materials Business Plan (HMBP) for any facility handling a hazardous material or mixture containing a hazardous material to protect public health and the environment. Businesses that handle/store at least 55 gallons of hazardous liquids, 500 pound of hazardous solids, and 200 cubic feet (at standard temperature and pressure) of compressed gases must complete a HMBP for the safe storage and use of chemicals.

The handling, use, and storage of hazardous materials during construction, maintenance, and operations would be required to be compliant with the County of El Dorado Department of Environmental Management, Hazardous Waste Division standards. Therefore, impacts related to the creation of a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials are considered **less than significant** and no mitigation is required.

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?

Less Than Significant Impact. During construction and maintenance of Railroad Park, and operation of the engine house shop there is the possibility of upset or accident conditions involving the release of hazardous materials into the environment involving contaminants from construction machinery and rolling stock restoration. However, if an accident should occur the County of El Dorado Department of Environmental Management, Hazardous Waste Division is available to respond to an emergency relating to hazardous materials. The handling, use, and storage of hazardous materials during construction, maintenance, and engine house shop operation would be required to be compliant with standards set forth by the County of El Dorado Department of Environmental Management, Hazardous Waste Division. Therefore, impacts are considered less than significant and no mitigation is required.

c. Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No Impact. The Project Site is within the Mother Lode Union School District, and all district schools are located over two miles from the Project Site. There are no public or private schools located within ¼ mile of the Project Site nor are there any schools planned to be developed within ¼ mile of the Project Site because the El Dorado area is not listed by the *El Dorado County General Plan, Services and Utilities Element* as an area with high average student yield (El Dorado County 2004). Construction would not generate hazardous air emissions or handle acutely hazardous substances within ¼ mile of a school. Therefore, **no impact** would result from development of the Proposed Project.

d. Be located on a site that 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?

No Impact. The Project Site is not included on the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. According to the California Department of Toxic Substances Control (CDTSC) *Envirostor Database*, there are no known hazardous sites within the immediate vicinity of the Proposed Project (CDTSC 2014). Therefore, the Proposed Project would not create a significant hazard to the public or environment and **no impact** would result from project implementation. No mitigation is required.

e. Be located within an airport land use plan area or, where such a plan has not been adopted, be within two miles of a public airport or public use airport, and result in a safety hazard for people residing or working in the project vicinity?

No Impact. The west slope of El Dorado County operates three public airports: Cameron Airport, Georgetown Airport, and Placerville Airport. The Proposed Project is not located within an airport land use plan area for any of these airports (El Dorado County Transportation Commission 2015). The Project Site is not within two miles of any airport and would not result in a safety hazard for people residing or working in the project vicinity. Therefore, **no impact** would result from development of the Proposed Project and no mitigation is required.

f. Be located within the vicinity of a private airstrip and result in a safety hazard for people residing or working in the project vicinity?

No Impact. The Project Site is not located within the vicinity of a private airstrip and would not result in a safety hazard for people residing or working in the project vicinity. Therefore, **no impact** would result from development of the Proposed Project and no mitigation is required.

g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Impact. The Proposed Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, **no impact** would result from development of the Proposed Project and no mitigation is required.

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?

Less Than Significant Impact. Wildland fires are those fires that pose a threat to the more rural areas of the County. Wildland fires result from intentional and unintentional human activities as well as natural processes. Railroad Park is within a moderate fire hazard severity zone, as defined by Cal Fire and is located within the El Dorado County Fire Protection District (ECF) (Cal Fire 2007). Fire suppression responsibilities are shared between ECF, CAL Fire, and the U.S. Forest Service (USFS). Railroad Park is serviced by Station 28 in Shingle Springs which is staffed 24 hours a day, seven days a week. Additionally, there are a number of other local fire stations within a 10-mile radius of Railroad Park and CAL Fire operates a station at Mount Danaher northeast of Railroad Park in Camino.

The El Dorado County Fire Safe Council is currently developing a Community Wildfire Protection Plan (CWPP) for the western slope of El Dorado County. The CWPP would include Railroad Park and will develop a cohesive plan for the western slope of the County incorporating existing CWPPs, CAL Fire Unit Plan, and existing and proposed fuel treatments. The objectives of the plan are to manage fuel and develop and implement projects to protect the western slope of the County from wildland fires. The plan is in its second phase updating existing CWPPs in accordance with community interfaces. The expected completion date for the El Dorado County Western Slope Wildfire Protection Plan is January 2017 (El Dorado County Fire Safe Council 2015).

Proposed improvements to the park would not increase exposure of people or structures to a significant fire risk. Railroad Park is within a 10-mile radius of several fire stations and the El Dorado Fire Safe Council is currently developing further wildfire protection that would include the park. These fire safe measures along with the moderate fire severity zone designation minimize the risk of wildland fire in Railroad Park. Proposed improvements would not increase park operations to a level where risk would be elevated and emergency services for fire protection and evacuation could not be provided by the existing fire stations. Therefore, impacts are considered **less than significant** and no mitigation is required.

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Mitigation Measures

No mitigation is warranted.

4.9 HYDROLOGY AND WATER QUALITY

	Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	Violate any water quality standards or waste discharge requirements?				
b.	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, resulting in a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of preexisting nearby wells would drop to a level that 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 that would result in substantial erosion or siltation onsite or offsite?				
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 onsite or offsite?				
e.	Create or contribute runoff water that 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 structures within a 100-year flood hazard area 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 the failure of a levee or dam?		
j.	Contribute to inundation by seiche, tsunami, or mudflow?		

Impact Analysis

a. Violate any water quality standards or waste discharge requirements?

Less Than Significant Impact with Mitigation Incorporated. Development of the Proposed Project would involve construction of new facilities, alterations to existing faculties, and trail construction within Railroad Park. The Proposed Project would require the widening of the Oriental Street Bridge over an intermittent drainage, which runs along the eastern edge of the Project Site.

Construction-Related Impacts

Any discharge of pollutants to waters of the U.S. is unlawful unless the discharge is in compliance with the National Pollutant Discharge Elimination System (NPDES) permit. The Statewide General Construction Permit and the NDPES General Construction Activity Stormwater Permit (General Permit) are applicable to requiring the preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP) that specifies erosion and sediment control construction and post-construction Best Management Practices (BMPs) to reduce or eliminate construction-related and operation impacts on receiving water quality. The SWPPP identifies structural and non-structural BMPs to uphold water quality and waste discharge requirements.

Chapter 15.14 of the El Dorado County Code establishes the Grading, Erosion, and Sediment Control Ordinance. A Grading Permit is required for all grading projects in El Dorado County unless exempt under Section 15.14.140. The grading must also be consistent with Section B of the Grading, Erosion, and Sediment Control chapter of the Grading Design Manual adopted by the El Dorado County Board of Supervisors, which relates to water quality. The Grading, Erosion, and Sediment Control Ordinance was established to "safeguard life, health, property, and public welfare; to avoid pollution of watercourses; and to ensure that the intended grading site is consistent with the El Dorado County General Plan, any Specific Plans, the adopted Storm Water Management Plan, California Fire Safe Standards, and the California Building Code" (County of El Dorado 2010).

The County of El Dorado has adopted a Storm Water Management Plan (SWMP) to reduce the discharge of pollutants associated with storm water drainage systems and identify how the County will comply with the provisions of the NPDES permits (SWMP 2004). The SWMP outlines program management for permit monitoring, and reporting. Additionally, the SWMP addresses how the County will manage planning, design, and construction projects.

Implementation, monitoring, and maintenance of BMPs required to comply with existing enforceable County Ordinances, combined with compliance with State and federal regulations relevant to maintaining water quality objectives, would ensure that project development would not result in substantial erosion or siltation violating water quality standards and discharge requirements. In addition, the discharge of fill into aquatic features that are not subject to federal jurisdiction would require compliance with the State Porter-Cologne Water Quality Control Act through the issuance of waste discharge requirements (WDRs). Compliance with **Mitigation Measure GEO — 1** would require that the County comply with all applicable

local, State, and federal standards applicable to proposed improvement at the time of construction, ensuring compliance with the current NPDES and State and federal water quality objectives.

For all aquatic features within the Project Site are determined to be subject to federal jurisdiction any fill proposed with aquatic features delineated within the project alignment would be subject to 401 Water Quality Certification. Compliance with **Mitigation Measure BIO** — 3 would require that the County obtain Water Quality Certification prior to implementation of any fill of aquatic features within the Project Site. Therefore, impacts related to violation of waste discharge requirements are considered less than significant with mitigation incorporated with implementation of **Mitigation Measure BIO** — 3 and **Mitigation Measure GEO** — 1.

Operational Impacts

Ongoing use of the Proposed Project would have the potential, through time, to result in areas prone to erosion within the designated unpaved trail alignment and the equestrian hitching area. Ongoing use by trail users would have the potential to result in areas within the trail alignment that may exhibit erosion and sediment loss. Therefore, potential impacts associated with trail operation are considered less than significant with mitigation incorporated.

Implementation of **Mitigation Measure GEO — 2** would require the County to conduct annual inspections of the trail alignment and other park areas for erosion and would require the implementation of BMPs to stabilize all areas exhibiting erosion.

Overall

Compliance with Mitigation Measure GEO — 1, Mitigation Measure GEO — 2, and Mitigation Measure BIO — 3 would require the County to obtain all applicable permits and implement effective erosion control BMPs during construction, as well as throughout the operational life of Railroad Park, thereby reducing potential erosion-related impacts to less than significant with mitigation incorporated.

b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, resulting in 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 that would not support existing land uses or planned uses for which permits have been granted)?

Less Than Significant Impact. Project development would not result in an increased demand for or use of groundwater. Water for the park toilets, display yard water column, and drinking fountains would be provided from existing utility lines under Oriental Street. The water supply in these utility lines is provided by El Dorado Irrigation District (EID). The majority of the park surface area would remain unpaved and would not interfere with groundwater recharge. Therefore, the Proposed Project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a less lowing of the local groundwater table level, and impacts from project development are considered less than significant.

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 that would result in substantial erosion or siltation onsite or offsite?

Less Than Significant Impact with Mitigation Incorporated. Implementation of the Proposed Project would involve the development of several improvements to the existing park. The only improvement that would have the potential to alter drainage patterns resulting in erosion or siltation is the widening of the bridge across Oriental Street. The bridge would be widened to 24 feet to accommodate horse trailers that would access the equestrian parking area in Railroad Park. The construction phase of the project would not alter the existing drainage pattern of the intermittent drainage, but would have the potential to result in erosion or siltation adjacent to or within the intermittent drainage associated with the bridge crossing.

Implementation of **Mitigation Measure GEO — 1** would ensure compliance with the current NPDES and State and federal water quality objectives, preventing erosion and siltation. Therefore, impacts are considered **less than significant with mitigation incorporated**.

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 onsite or offsite?

Less Than Significant Impact. Within the Project Site, one intermittent drainage and one small ephemeral drainage have been mapped. The Oriental Street Bridge and adjacent road would be widened to 24 feet, potentially temporarily affecting the drainage pattern of the intermittent drainage during construction. The ephemeral drainage is just west of the proposed rail spur and may be impacted by project construction. However, neither of these existing drainages would be altered in a way that would substantially increase the amount of surface runoff and result in flooding because both drainages convey a minimal volume of water, and are dry during the summer months when construction is most likely to occur. Development of the Proposed Project would not involve a substantial increase in impermeable surfaces resulting in an increase in the rate or volume of surface water runoff. Therefore, impacts are considered less than significant.

e. Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Less Than Significant Impact. Construction and operations within Railroad Park would not substantially contribute to runoff water that would exceed existing stormwater drainage patterns. The paved parking areas, paved trail, paved road, and new buildings would not introduce substantial areas of impervious surfaces that would contribute to excessive amounts of runoff. The majority of the park would remain unpaved and characterized by existing topography, and would continue to accommodate normal surface water flow and infiltration. Therefore, development of the Proposed Project would not result in a considerable increase in the amount of runoff. Railroad Park would be used by pedestrians, bicyclists, and equestrian users and railroad enthusiasts and is not anticipated to result in additional sources of pollutant runoff. Therefore, impacts are considered less than significant.

f. Otherwise substantially degrade water quality?

Less Than Significant with Mitigation Incorporated. Construction of the Proposed Project would be implemented through mechanical work. Construction activities would disturb the existing topography and would therefore have the potential to result in erosion and sediment loss. Long-term park use would partially occur on earthen surfaces throughout the Project Site, with further potential for contributing to erosion and sediment loss that could impact water quality.

Implementation, monitoring and maintenance of BMPs required to comply with existing enforceable El Dorado County Ordinances (Section 15.14.140), combined with compliance with State and federal regulations relevant to maintaining water quality objectives, would ensure that project development would not result in substantial erosion or siltation violating water quality standards and discharge requirements.

Compliance with **Mitigation Measure GEO — 1** and **Mitigation Measure GEO — 2** would require the County to obtain all applicable permits and implement effective erosion control BMPs during construction, as well as throughout the operational life of Railroad Park, thereby reducing potential erosion-related impacts to less than significant levels.

Compliance with **Mitigation Measure BIO — 3 and/or Mitigation Measure GEO — 1** would require that the County obtain Water Quality Certification and/or WDRs prior to implementation of any placement of fill within aquatic features within the project alignment, thereby reducing potential impacts related to water quality standards to less than significant levels.

Therefore, impacts are considered less than significant with mitigation incorporated.

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?

No Impact. As shown in **Figure 4.9-1** the Proposed Project is not located within a FEMA-designated 100-year flood hazard area. Additionally, the Proposed Project would not involve residential development and would not place housing in special flood hazard areas. Therefore, **no impact** would result from project development and no mitigation is required.

h. Place structures within a 100-year flood hazard area that would impede or redirect flood flows?

No Impact. As shown on **Figure 4.9-1**, the Project Site is not located within a FEMA-designated 100-year flood hazard area. Therefore, no structures would be placed within a FEMA-designated 100-year flood hazard area that would impede or redirect flood flows and project development would result in **no impact** to impeding or redirecting flood flows.

i. Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?

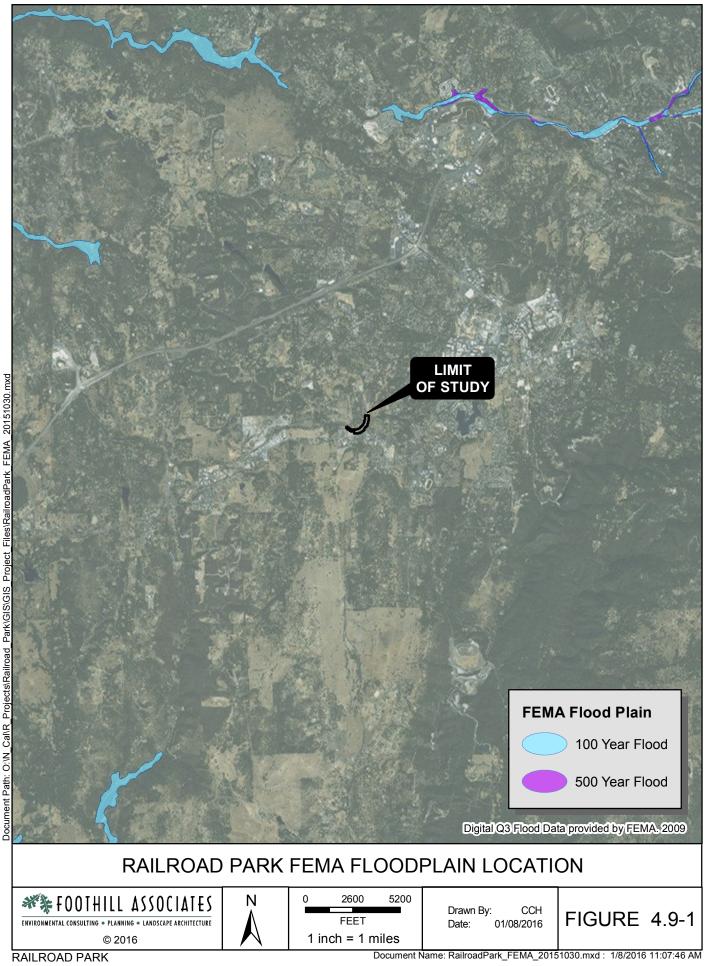
No Impact. The Project Site is not located within a FEMA-designated 100-year flood hazard area or within the vicinity of a dam or levee (**Figure 4.9-1**). Therefore, project development would not expose people or structures to a significant risk of loss, injury, or death, involving flooding and **no impact** would result from the development of the Proposed Project and no mitigation is required.

j. Contribute to inundation by seiche, tsunami, or mudflow?

No Impact. The Project Site is not located near an ocean coast or enclosed body of water that could produce a seiche or tsunami, nor is the site located near areas having steep slopes that would create mudflows. Therefore, **no impact** would result from project development and no mitigation is required.

Mitigation Measures

Compliance with Mitigation Measure GEO — 1, Mitigation Measure GEO — 2, and Mitigation Measure BIO — 3 would reduce potential impact to a less than significant level.



4.10 LAND USE AND PLANNING

	Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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, a 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?				

Impact Analysis

a. Physically divide an established community?

No Impact. The entire Project Site is within the SPTC. Development of the proposed improvements to Railroad Park would provide new facilities, improvements to existing facilities, and trail improvements within the park boundary. The proposed improvements would not divide an established community, and would therefore result in **no impact** related to division of 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, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact. Railroad Park is under the jurisdiction of El Dorado County. There are several policies within the *El Dorado County General Plan* that relate to parks and recreation. The underlying goal of the County's General Plan, *Parks and Recreation Element* is to provide residents with additional recreation land and facilities on a regional scale increasing trails, water recreation, tourism recreation-based business, and acquiring adequate funding. Policy 9.1.1.1 through Policy 9.3.6.2 is outlined in the General Plan to guide the County in accomplishing their park and recreation goals (County of El Dorado 2004). The Proposed Project aligns with the goals and policies of the *El Dorado County General Plan* by proposing the improvements to Railroad Park that would spotlight the rich logging and train history of the area, while continuing their public passenger rail excursion program. The improvements to the existing unpaved trail and the development of a paved trail would provide more recreational opportunities in the park.

Railroad Park is also located within the SPTC. The SPTC consists of a 53-mile segment of the Southern Pacific Railway Corporation's Placerville Branch railroad right-of-way from Sacramento to Placerville, California. The SPTC –JPA is a public entity formed in 1991 for the purpose of purchasing the SPTC and consists of four member agencies: the County of El Dorado, the City of Folsom, the County of Sacramento, and the Sacramento Regional Transit District, and one Member-at-Large that serves on the SPTC – JPA Board of Directors. The SPTC – JPA purchased the 53-mile Rail Corridor Segment in 1996 and continues to own it for the purpose of preserving it for transportation uses, and coordinating usage

and maintenance by the member agencies. Each member agency has primary usage rights and maintenance responsibility for its allocation of the Rail Corridor which has been granted through an easement to each member by the SPTC – JPA. The SPTC – JPA has the authority under the Rails to Trails Act to use this portion of the out-of-service rail corridor as a museum area with a trail until a railroad might need the corridor again for rail service. The Rail Corridor therefore remains in the jurisdiction of the federal Surface Transportation Board. The Proposed Project is an appropriate usage for the out-of-service railway and there is no conflict with the federal Surface Transportation Board. The Proposed Project was also approved by the El Dorado County Board of Supervisors in 2009.

The Railroad Park Parcel (APN: 3310100410 and 3310100310) is currently zoned as single-family residential. However, daytime public parks, and hiking and equestrian trails are permitted uses by the County in a parcel zoned as single-family residential (County of El Dorado 2014). The Proposed Project remains consistent with all applicable land use plans, policies, or regulation or agencies with jurisdiction over the project and development of the Proposed Project would therefore have **no impact**.

c. Conflict with any applicable habitat conservation plan or natural community conservation plan?

No Impact. The Project Site does not contain any applicable Habitat Conservation Plans or Natural Community Conservation Plans. Therefore, **no impact** would result from development of the Proposed Project.

Mitigation Measures

No mitigation is warranted.

4.11 MINERAL RESOURCES

	Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?				

Impact Analysis

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?

No Impact. Approximately eleven permitted commercial mines operate within El Dorado County (Busch 2001). According to the *Conservation and Open Space Element* of the County General Plan, the Project Site is located within an MRZ 2a and 2b mineral resource area (County of El Dorado 2004) for gold (Busch 2001). MRZ 2a areas are classified as areas underlain by mineral deposits where geologic data indicate that significant measured or indicated resources are present. MRZ 2b areas are classified as areas underlain by mineral deposits where geologic information indicates that significant inferred resources are present (Busch 2001). However, the Project Site is currently an existing community park facility, as well as SPTC land and mineral extraction would not be permitted under current use. Development of the Proposed Project would therefore not result in the loss of availability of a known mineral resource that would be of value to the region. Therefore, **no impact** to mineral resources of the regional or statewide importance would result from the Proposed Project and no mitigation is required.

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?

No Impact. As stated in the *El Dorado County General Plan, Conservation and Open Space Element*, Goal 7.2 provides for the protection of the County's mineral deposits. Objective 7.2.2 protects important mineral resources from incompatible development and outlines different General Plan designations that may be compatible with surface mining (County of El Dorado 2004). The Project Site is designated as Commercial and Medium Density Residential. Additionally, the Project Site does not have a mineral resource overlay on the County's General Plan land use map meaning that the adjacent land uses are not compatible with surface mining and mining cannot take place on the Project Site (County of El Dorado 2004). The Project Site would therefore not result in the loss of availability of a locally important mineral resource recovery site. Therefore, there would be **no impact** to mineral resources as a result of development of the Proposed Project and no mitigation is required.

Mitigation Measures

No mitigation is warranted.

4.12 Noise

	Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				
b.	Expose persons to or generate excessive groundborne vibration or groundborne noise levels?				
C.	Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				
d.	Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?				
e.	Be located within an airport land use plan area, or, where such a plan has not been adopted, within two miles of a public airport or public use airport and expose people residing or working in the project vicinity to excessive noise levels?				
f.	Be located in the vicinity of a private airstrip and expose people residing or working in the project vicinity to excessive noise levels?				

Impact Analysis

a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less Than Significant with Mitigation Incorporated. Development of the Proposed Project would involve new facility construction, improvements to existing facilities, and trail construction. The Proposed Project is within the jurisdictional limits of El Dorado County and therefore must meet the noise level standards for this jurisdictional area.

The *El Dorado County General Plan, Public Health, Safety, and Noise Element* has established Goals and Policies relating to evaluating noise impacts due to construction projects (County of El Dorado 2004). The underlying theme in the *Public Health, Safety, and Noise Element* is to protect County residents from any noise beyond those levels considered acceptable. The *Public Health, Safely, and Noise Element* establishes noise standards and maximum allowable noise exposure.

Construction Impacts

Policy 6.5.1.11 of the *El Dorado County General Plan* states specific requirements for construction activities. All construction activities must occur between 7:00 A.M. and 7:00 P.M. Monday through Friday and between 8:00 A.M. to 5:00 P.M. Saturday through Sunday and on all federally recognized holidays. Construction also must follow specific noise levels in public facilities shown below in **Table 4.12-1** (El Dorado County 2004). Construction of all buildings, children's play area, parking, and the paved trail as well as bridge expansion would have the potential to exceed noise level thresholds established by the County. Implementation of **Mitigation Measure Noise** — 1 and **Mitigation Measure Noise** — 2 requiring the specified General Plan construction hours and noise muffling devices would reduce the potential impacts related to construction noise to less than significant levels.

Construction Time Period	Noise Level (dB)		
	$oldsymbol{\mathcal{L}_{eq}}$	L _{max}	
7:00 A.M. to 7:00 P.M.	65	75	
7:00 P.M. to 7:00 A.M.	60	70	

Table 4.12-1 — Construction Noise Levels

Operational Impacts

It is not anticipated that the operation of any of the proposed improvements would produce noise in excess of standards and/or the existing ambient noise within the Project Site. The proposed improvements are not anticipated to increase the ambient noise level permitted by El Dorado County. Recreation and Public Facilities have a maximum allowable noise exposure of 65 dBL_{eq} to 75 dBL_{max} from 7:00 A.M. to 7:00 P.M. and 60 dBL_{eq} to 70 dBL_{max} from 7:00 P.M. to 7:00 A.M. (County of El Dorado 2004). It is not anticipated that the operation of new passive-recreational use facilities and continued gang car train operation would produce noise in excess of standards and/or the existing ambient noise within Railroad Park and the surrounding area.

The Plymouth Locomotive would pass through the Project Site approximately twelve times a year for a half an hour, totaling six hours within the Project Site annually. The SPTC EIR analyzed noise-related impacts due to train operations within the SPTC. Based on the SPTC EIR analysis, two excursion train operations per day during daylight hours are expected to result in a noise level of 69 dBLdn at a distance of 50 feet with use of warning horns, and 53 dBLdn without the use of warning horns (Johns & Stokes 1998). The use of the warning horns is required by Sections 7604 and 7605 of the California Public Utilities Commission Administrative Code at road crossings, and is the loudest component of an excursion train. The Project Site does not have any road crossings, and therefore the warning horn is not required. At locations where the warning horn is not required no exceedance of the 60 dBL_{eq} criteria is expected at noise-sensitive uses, even at locations as close as 50 feet from the tracks (Jones & Stokes, Inc. 1998). The operations for the park are therefore not anticipated to exceed the noise exposure standards stated above once the proposed improvements have been completed, therefore operational impacts are considered less than significant.

<u>Overall</u>

Compliance with **Mitigation Measure Noise** — 1 and **Mitigation Measure Noise** — 2 would reduce potential impacts related to construction-related noise to less than significant levels. The Proposed Project therefore would not generate any noise levels in excess of the standards established by the local general plans and noise ordinances, and impacts associated with project development are considered **less than significant with mitigation incorporated**.

b. Expose persons to or generate excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact with Mitigation Incorporated. Operation of the proposed new facilities, including a paved trail, children's play area, bike parking, car parking, equestrian user parking, picnic tables with shade shelters, an engine house shop, a static display building, an outdoor display yard, and both phases of the two-stall prefabricated restroom, is not anticipated to generate groundborne vibration and/or groundborne noise. Nor is it anticipated that the proposed improvements to the unpaved trail, depot, bridge, and railway would result in groundborne vibration and groundborne noise. However, operation of the Plymouth Locomotive would generate some groundborne vibration. Vibration effects are dependent on several factors including train weight and speed, condition of wheels and track, type of track support structure, and distance to vibration-sensitive land uses (Johns & Stokes 1998). The Plymouth Locomotive was recently restored and with train wheels in good condition, reducing the vibration from train excursions. The Federal Transit Administration (FTA) identifies acceptable infrequent groundborne vibration near residences as any vibration of 80 VdB or under (FTA 2006). The SPTC EIR determined that a locomotive powered passenger train traveling 20 miles per hour would generate a vibration level of 80 VdB at a distance up to 170 feet from the center of the track, and that vibration would be considered significant if project-related vibration levels would exceed 80 VdB at a residence or other sensitive land use (Johns & Stokes 1998). The closest residence to the Project Site is over 200 feet from the center of the track and would therefore be anticipated to experience less than 80 VdB of vibration as analyzed within the SPTC EIR. Additionally, the Plymouth Locomotive would be equipped with only one passenger car and a caboose, not several heavy cars, and would infrequently pass through the Project Site. The lighter weight of the Plymouth Locomotive, restored wheels, distance to the nearest residence, and infrequency of operation would therefore not result in levels of groundborne vibration that are considered significant.

However, construction activities may result in vibration and groundborne noise. Construction groundborne vibration and noise levels are of concern because they have the potential to affect the community center near the Proposed Project. The main sources of groundborne noise are anticipated to result from the construction of new facilities. Project construction equipment includes but is not limited to: tractor, excavator, forklift, crane, grader, roller, and paver. Therefore, development of the Proposed Project would have the potential to result in impacts related to groundborne vibration and/or noise. Compliance with **Mitigation Measure Noise** — **2** would reduce potential impacts to a level which is **less than significant with mitigation incorporated** through the use of construction muffling devices and the strategic placement of construction equipment.

c. Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Less Than Significant Impact. Long-term operational use of Railroad Park would include use by bicyclists, pedestrians, equestrian users and railroad enthusiasts. The museum and rail yard would also be open for the public to view artifacts from El Dorado County's logging and railroad history. Additionally, the Plymouth Locomotive would run excursions through the park once a month (without utilizing the warning signal). These uses are consistent with the SPTC Master Plan, within the park including a formal trail, museum, and the rail service operation. Little additional noise would result from development of the Proposed Project. Therefore, impacts to permanent ambient noise levels are considered less than significant.

d. Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Less Than Significant with Mitigation Incorporated. The primary source of temporary increased noise levels due to development of the Proposed Project would be construction noise. As discussed in *subsection a*, construction noise would be temporary and intermittent. Compliance with Mitigation Measure Noise — 1 and Mitigation Measure Noise — 2 would require construction activities to adhere to specified hours of operation and construction standards that would reduce impacts from construction noise to a less than significant level. Additionally, the Plymouth Locomotive would come through Railroad Park once a month for half an hour. When the train is within the park it would not use its warning signal,

which is only required at road crossings, and would therefore not result in a substantial periodic increase in ambient noise levels. Therefore, impacts are considered **less than significant with mitigation incorporated**.

e. Be located within an airport land use plan area, or, where such a plan has not been adopted, within two miles of a public airport or public use airport and expose people residing or working in the project vicinity to excessive noise levels?

No Impact. The Proposed Project is not located within an airport land use plan area or within two miles of a public airport or public use airport. Therefore, people working on the project and residing in the project vicinity will not be exposed to excessive noise levels. **No impact** would result from development of the Proposed Project.

f. Be located in the vicinity of a private airstrip and expose people residing or working in the project vicinity to excessive noise levels?

No Impact. There are no private airstrips within the vicinity of the Project Site. Therefore, people working in the Project Site would not be exposed to any excessive noise levels. **No impact** would result from the development of the Proposed Project.

Mitigation Measures

Mitigation Measure Noise — 1 and Mitigation Measure Noise — 2 are proposed to reduce potential noise-related impacts to less than significant levels:

- Mitigation Measure Noise 1: Construction activities shall be limited to: Monday through Friday 7:00 A.M. to 7:00 P.M. and 8:00 A.M. to 5:00 P.M. on Saturday, Sunday, and all federally recognized holidays. Any exceptions to these hours shall be evaluated on a case-by-case basis and require approval by the County of El Dorado.
- Mitigation Measure Noise 2: All construction equipment shall be fitted with factory installed muffling devices and all construction equipment shall be maintained in good working order. All stationary construction noise sources (e.g. generators, compressors) shall be located as far away from noise sensitive land uses as feasible. All stationary construction noise sources (e.g. generators, compressors) shall be located as far away from noise sensitive land uses as is feasible. All equipment staging areas (e.g. equipment storage, warm-up areas) shall be located as far away from noise sensitive land uses as feasible.

4.13 POPULATION AND HOUSING

	Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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 a substantial number of existing housing units, necessitating the construction of replacement housing elsewhere?				
C.	Displace a substantial number of people, necessitating the construction of replacement housing elsewhere?				

Impact Analysis

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)?

No Impact. Implementation of the Proposed Project would involve the development of several improvements to Railroad Park such as new facility construction, improvements to existing facilities, and trail improvements. The Proposed Project would not directly induce population growth because it proposes no employment-generating land uses. Project development would not indirectly induce population growth because it would not extend roads or infrastructure into previously undeveloped areas. Development of park improvements therefore, would result in **no impact** and no mitigation is required.

b. Displace a substantial number of existing housing units, necessitating the construction of replacement housing elsewhere?

No Impact. The Proposed Project is located within the existing Rail Corridor at Railroad Park and would not displace any existing housing units. **No impact** would result from development of the Proposed Project and no mitigation is required.

c. Displace a substantial number of people, necessitating the construction of replacement housing elsewhere?

No Impact. As discussed above *in subsection b*, the Proposed Project is located entirely within the Rail Corridor at Railroad Park. **No impac**t would result from development of the Proposed Project and no mitigation is required.

Mitigation Measures

No mitigation is warranted.

4.14 Public Services

	Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
gov whi	Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or a 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?			\boxtimes	
b.	Police protection?			\boxtimes	
C.	Schools?				
d.	Parks?				
e.	Other public facilities?				

Impact Analysis

Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or a 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?

Less Than Significant Impact. The Project Site is located within a moderate fire hazard severity zone, as defined by Cal Fire (Cal Fire 2007). The Proposed Project is served by the El Dorado County Fire District (ECF) and there are currently 15 stations operated by ECF throughout the County. Railroad Park is serviced by Station 28 in Shingle Springs which is staffed 24 hours a day, seven days a week.

The *El Dorado County General Plan, Health and Safety Element* contains objectives relating to fire protection (County of El Dorado 2004). Goal 6.2 i pertains to minimizing fire hazards and risks in urban and wildland areas. Objective 6.2.3 pertains to adequate fire protection and Objective 6.2.4 pertains to an area-wide fuel management program to reduce fire hazards. The Project Site is not in a high or very high fire hazard severity zone and objectives of the General Plan further reduce fire risk.

Development of the Proposed Project would not result in increased population and residential structures, and a subsequent need for additional fire protection facilities. The construction of new facilities, improvements to existing facilities, and trail construction would not result in a significant number of additional calls related to fire services or decreased response times for fire protective services. It is therefore anticipated that existing fire protection facilities in the EI Dorado County would be able to provide fire protection services for the Proposed Project, and maintain acceptable service ratios, response times and performance objectives. Therefore, impacts to fire protection services are considered less than significant.

b. Police protection?

Less Than Significant Impact. Police protection services within the vicinity of the Proposed Project are provided by the El Dorado County Sheriff's Department. In addition, the *El Dorado County General Plan, Services and Utilities Element* contains policies relating to police protection (County of El Dorado 2004).

Under Policy 5.7.3.1 all new development shall be reviewed by the Sheriff's Department to determine the ability of the department to provide protection services. If adequate protection services are not available for new development then additional equipment, facilities, and adequate access may be incorporated as conditions for project approval.

The Proposed Project would not involve residential development and would not result in an increased population. Project improvements of construction of new facilities, improvements to existing facilities, and trail construction would not result in a significant number of additional calls or decreased response times for police protective services. Under El Dorado County Municipal Code Section 9.46.050 parks are intended for day use and hours of operation are from 6:00 A.M. until one hour after sunset. Railroad Park staff members would be onsite during the parks operational hours to ensure that the park is safe and that all park functions are managed correctly. Therefore, impacts related to the provision of police protection services are considered **less than significant**.

c. Schools?

No Impact. The Proposed Project would involve improvements to Railroad Park to construct new facilities, improve existing facilities, and trail construction. The Project Site is located in El Dorado, California and is served by the Mother Lode Union School District. The Mother Lode Union School District serves kindergarten through 8th grade students (EDCOE 2015). The Proposed Project would not involve residential development and would not result in increased population. Therefore, **no impact** related to existing school facilities would result from project development.

d. Parks?

No Impact. Implementation of the Proposed Project would involve new facility construction, improvements to existing facilities, and trail construction for Railroad Park. The park improvements would provide additional recreation in El Dorado to meet the needs to the local community and railroad enthusiasts. The Proposed Project would not result in residential development or an increase in population. Therefore, **no impact** related to park facilities would result from implementation of the Proposed Project.

e. Other public facilities?

No Impact. The Proposed Project would not involve residential development and would not result in increased population; therefore, **no impact** related to other public facilities such as hospitals or libraries would result from project development.

Mitigation Measures

No mitigation is warranted.

4.15 RECREATION

	Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	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.	Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?				

Impact Analysis

a. 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?

No impact. Development of the Proposed Project would result in the construction of recreational facilities for public access/use and would not increase the use of other recreational facilities or parks. Therefore, **no impact** would result from development of the Proposed Project.

b. Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

Less Than Significant with Mitigation Incorporated. As discussed throughout this document, construction of the Proposed Project would have the potential to result in adverse physical effects on the environment related to Aesthetics, Air Quality, Biological Resources, Cultural Resources, Geology and Soils, and Noise. However, mitigation measures are proposed to reduce potentially significant effects resulting from implementation of the Proposed Project to less than significant levels; therefore, impacts are considered less than significant with mitigation incorporated.

Mitigation Measures

Mitigating measures are proposed within this document relevant to **Aesthetics**, **Air Quality**, **Biological Resources**, **Cultural Resources**, **Geology and Soils**, and **Noise**. Individual mitigation measures can be found within individual resource-related sections within this document.

4.16 TRANSPORTATION/TRAFFIC

	Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?				
b.	Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?				
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 because of a design feature (e.g., sharp curves or dangerous intersections or incompatible uses (e.g., farm equipment)?				
e.	Result in inadequate emergency access?			\boxtimes	
f.	Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?				

Impact Analysis

a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

Less Than Significant Impact. According to the *El Dorado County General Plan, Circulation Element* almost 90 percent of all trips within the County are made by automobile. The County is comprised of a

rural roadway network with U.S. 50 as the primary transportation corridor running east to west, resulting in elevated automobile use (County of El Dorado 2004). The Proposed Project would involve construction of several new facilities and would improve existing facilities within Railroad Park. All trails within the Proposed Project would comply with El Dorado County transportation policies outlined in the County's General Plan. The Proposed Project aligns with Goal TC-4 of the *El Dorado County General Plan, Circulation Element* to promote alternative modes of transportation that are safe, continuous, and easily accessible for non-motorized transportation by developing the trails within the park that would connect to other trails within the existing Rail Corridor (County of El Dorado, 2004). Railroad Park improvements would also include establishing several bike parking areas and an equestrian hitching and parking area to further promote non-motorized transportation.

Policy TC-1w of the El Dorado County General Plan. Circulation Element requires parking consideration for improvements to existing roads necessitated by new development. The Proposed Project would include parking for three buses, five cars with equestrian trailers, and seventeen parking spaces for cars. These parking spaces are adequate parking for the utilization of Railroad Park facilities (KDA 2015). However, the park would host several special events once all park facilities are completed. These special events would include as many as 125 people at the park over the course of an afternoon, arriving by automobile. The parking onsite would not be adequate to accommodate special events. Therefore, whenever special events occur at Railroad Park overflow parking would be located, if possible, at the Community Center. Another option would be to develop a shuttle system from an established parking lot near the Project Site. The Town of El Dorado has held special events where they utilized parking in various areas, and parking management would consist of partnering with local merchants and the Community Center during these special events that require additional parking. Development of the Proposed Project would not conflict with any other components of the circulation system such as existing intersections, streets, highways, freeways, of mass transit. Therefore, project development would not conflict with any existing adopted plans, ordinances, or policies establishing performance standards for transportation-related improvements and impacts are considered less than significant.

b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Less Than Significant Impact. The December 2015 *Traffic Assessment for Historic Railroad Park Project, El Dorado County, California* prepared by KD Anderson & Associates assessed and evaluated the possible traffic impacts resulting from development of the Proposed Project. Visitors to the museum and park would vary depending on the day of the week. On weekdays the museum is expected to attract 35 visitors each day. On weekends when train rides are available more visitors are expected. The park facilities provided at Railroad Park would attract additional visitors, an estimated 15 groups per day. Railroad Park would hold special events as fundraisers and education programming during limited evening hours once all facilities are fully built and staffed. One possible special event would be overnight "camps" for kids with special themed programming.

Table 4.16-1 below summarizes the estimated trip generation rates for Railroad Park (KDA, 2015).

Table 4.16-1 — Trip Generation Estimate

Day of the Week	Activities	Employees /Volunteers	Visitors	Daily Trip Generation	Peak Hour Trip Generation
Monday	Closed	N/A	N/A	N/A	N/A
Tuesday	Railroad Center Volunteer Work Day	20	N/A	50	10*
Wednesday – Friday	Museum Center Open	5	35	50	0**
Saturday – Sunday	Railroad Rides and Museum Center Open	20	200	250	25***
Monday – Sunday	Visitors for Park Facilities	N/A		30	5****

^{*}Based on ½ of volunteers existing the Project Site in the evening peak hour

There are several roads that provide access to the Project Site. Pleasant Valley Road is a Major Highway that extends east on Mother Lode Drive just west of the Project Site to Diamond Springs. Within the project vicinity Pleasant Valley Road is a two-lane rural road with paved shoulders of varying width. The most recent 24-hour traffic counts published by the County of El Dorado indicate that this segment of Pleasant Valley Road carried 8,960 vehicles per day in 2014. Oriental Street is the main access point to Railroad Park, extending from Pleasant Valley Road. Oriental Street is a two-lane street with a sidewalk on the east side of the street south of the North Street junction. Oriental Street and North Street fork roughly 100 feet north of Pleasant Valley Road, and Oriental Street continues to the Project Site while North Street continues to Forni Road. The portion of Oriental Street beyond the North Street junction is relatively narrow and contains a one lane bridge which limits access for larger vehicles (KDA, 2015). This bridge would be widened to 24 feet to accommodate the vehicles with horse trailers accessing the horse hitching area.

Existing Traffic Scenario

The February 2014 *Diamond Springs & El Dorado Area Mobility and Livable Community Plan Draft Technical Report* by Fehr & Peers reported that Pleasant Valley Road carries 800 vehicles per hour (vph) in the project vicinity, from El Dorado Road to Stat Route 49, during peak hours. The highway operates at a Level of Service (LOS) D, which satisfies the El Dorado County minimum standard of LOS E in community areas (KDA 2015).

The Proposed Project would add a small amount of traffic to Pleasant Valley Road on weekdays and the current peak hour volume of 880 vph may increase by ±10 vph for traffic heads in both directions on Pleasant Valley Road. Project traffic could increase background peak hour traffic by roughly 1.1 percent. However, the operating LOS on Pleasant Valley Road would remain at LOS D. The criteria for analysis under El Dorado County traffic study guidelines are 10 peak hour trips at a particular location. Assuming that trips related to the Proposed Project are dispersed in each direction, both east and west, on Pleasant Valley Road, no location beyond the Oriental Street intersection is likely to increase above the 10 weekday trip threshold. Therefore, the impact from weekday traffic is considered less than significant.

Railroad Park weekend visits would be higher than on weekdays and would therefore add more traffic to the project vicinity. However, because the background traffic volume on Pleasant Valley Road is likely to

^{**} Based on 2.0 volunteers per automobile, with 1/7 visitors exiting the site in the evening peak hour and $\frac{1}{2}$ of volunteers exiting in the evening peak hour

^{***}Based on 2.0 visitors per automobile, with 1/7 visitors exiting the site in the evening peak hour and ½ of volunteer exiting the site in the evening peak hour

^{****}Based on 15 vehicles per day and 1/7 in the peak hour

be lower on the weekends than on weekdays, project impacts to weekend traffic are considered to be less than significant.

Future Traffic Scenario

The *Diamond Springs & El Dorado Area Mobility and Livable Community Plan Draft Technical Report* provides information regarding future traffic conditions in the project area with and without future roadway connections. Potential roadway connections include: El Dorado Road extension, Union Mine Road connection, and Diamond Springs Parkway extension (KDA 2015). Pleasant Valley Road has a predicted 900 vph volume in the Year 2035, and would remain at LOS D with or without implementation of the potential roadway connections. As mentioned above, LOS D satisfies the El Dorado County minimum standard for Pleasant Valley Road (KDA 2015). The small amount of traffic added to Pleasant Valley Road resulting from the Proposed Project would therefore not change the LOS forecast for the Year 2035.

Overall

Traffic resulting from the Proposed Project would remain at a LOS D for Pleasant Valley Road under both existing and projected Year 2035 conditions. The higher weekend traffic volume for Railroad Park would not affect the LOS standard for Pleasant Valley Road because of the lower background traffic volume on Pleasant Valley Road during the weekend. Therefore, traffic impacts related to congestion management are considered **less than significant**.

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?

No Impact. Development of the Proposed Project would not result in a change in air traffic patterns. Therefore, **no impact** would result from development of the Proposed Project and no mitigation is required.

d. Substantially increase hazards because of a design feature (e.g., sharp curves or dangerous intersections or incompatible uses (e.g., farm equipment)?

Less Than Significant Impact. The December 2015 *Traffic Assessment for Historic Railroad Park Project, El Dorado County, California* prepared by KD Anderson & Associates assessed the adequacy of access to the Project Site based on review of the Pleasant Valley/Oriental Street intersection and the conditions of the roads along the access to the Project Site. At the Pleasant Valley Road/Oriental Street intersection the view of the southbound motorists can be interrupted by vehicles parked in the roadway right-of-way near the existing auto sales shop. However, normally the view looking west around these vehicles, satisfies minimum sight distance requirements of 25 mph speed limit.

The Proposed Project would likely result in additional pedestrians walking from the Project Site to other locations in El Dorado. Visitors would share the improved 24 foot Oriental Street Bridge with other automobiles. Under normal conditions the number of vehicles and pedestrians in this area are not anticipated to create conflicts that would result in the necessity of separated pedestrian facilities (KDA 2015). Widening the Oriental Street Bridge to 24 feet would allow additional room for pedestrians to cross over to the Project Site when automobiles are simultaneously using the bridge. Therefore, the Proposed Project would not substantially increase hazards and impacts are considered **less than significant**.

e. Result in inadequate emergency access?

Less Than Significant Impact. Emergency access to Railroad Park would not be affected by development of the Proposed Project. Park operations as a result of the Proposed Project are not anticipated to increase to a level where emergency access would be inhibited. The Oriental Street Bridge would be widened providing easier access to the Project Site for larger emergency vehicles. Construction

associated with the Proposed Project would take place within Railroad Park and would not inhibit emergency access. Therefore, impacts to emergency access are considered **less than significant**.

f. Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

No Impact. There are no existing bicycle facilities within the project vicinity. However, there are sidewalks on the north side of Pleasant Valley Road near the Project Site. Marked crosswalks are on Pleasant Valley Road on the east side of the Oriental Street intersection and midway between Oriental Street and State Route 49 (KDA 2015). The Rail Corridor within the Project Site would be used as an alternative transportation corridor promoting multiple alternative modes of transportation. The STPC Master Plan identifies multiple uses for the Rail Corridor including bicycle, pedestrian, and equestrian trails. Development of the Proposed Project is therefore consistent with the SPTC Master Plan and El Dorado County, General Plan, Circulation Element (County of El Dorado 2004). Specifically, the Proposed Project is consistent with Goal TC-4 of the General Plan that promotes alternative transportation modes that are safe, continuous, and easily accessible. Railroad Park improvements would include adequate parking for bicycles, promoting people to visit the park with an alternative mode of transportation. A parking area would also be provided for horse trailers, allowing equestrian users to access the trails within and beyond the park. All trails within Railroad Park would comply with El Dorado County transportation policies outlined in the County's General Plan. Therefore, the Proposed Project would not conflict with El Dorado County's overall transportation service goal. Therefore, no impact would result from development of the Proposed Project and no mitigation is required.

Mitigation Measures

No mitigation is warranted.

4.17 UTILITIES AND SERVICE SYSTEMS

	Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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 would new or expanded entitlements be 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?				

Impact Analysis

a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

Less Than Significant Impact. Development of the Proposed Project would not result in an increase in residential population or number of dwelling units. However, project development would include two phases of installation for a two-stall prefabricated restroom. In Phase 1 the two-stall prefabricated restroom would be located adjacent to the depot building in its existing location and connect to the sewer main underneath the road within Railroad Park. Phase 2 would involve moving the two-stall prefabricated restroom near the picnic area and relocating the sewer main beneath the proposed road alignment. Therefore, in Phase 2 the restroom would also connect to the sewer main. The two-stall prefabricated restroom and restroom installation would follow all EI Dorado Irrigation District (EID) design and

construction standards at the time of restroom installation. Construction of a second restroom adjoining the new display building would also connect to the relocated sewer main. No other proposed improvements are anticipated to impact wastewater treatment requirements.

Wastewater treatment for the Project Site is provided by EID. EID provides local wastewater collection, treatment, and conveyance services and has five wastewater treatment plants, three which have been recently updated to ensure consistent compliance (EID 2015). EID maintains the sewer line underneath the road through Railroad Park, which connects to the adjacent residences. All restroom facilities would be connected to this sewer main to provided connection for wastewater. The capacity of existing EID facilities is sufficient to accommodate wastewater from the two-stall prefabricated restroom and restroom adjoining the display building. Therefore, the Proposed Project would not result in the exceedance of any wastewater treatment requirements of the Central Valley Regional Water Quality Control Board, and impacts are considered **less than significant**.

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?

Less Than Significant Impact. The EID manages wastewater within the County. EID manages five wastewater treatment plants, the two largest being Deer Creek and EI Dorado Hills Wastewater Treatment Plants (EID 2015). The Deer Creek Wastewater Treatment Plant operates at an average flow of 2.86 million gallons per day (MGD). The capacity of the wastewater treatment plant however, is designed to accommodate an average dry weather flow (ADWF) of 3.6 MGD (CRWQCB 2002). The EI Dorado Hills Wastewater Treatment Plant is constructed to accommodate a treatment capacity of 26 MGD (EID 2011). The existing wastewater treatment plants have sufficient capacity to serve the Proposed Project, which would produce a relatively small amount of waste from the two proposed restrooms, see *subsection a*. Therefore, development of the Proposed Project would not result in the need for new or expanded wastewater facilities and would not have an adverse effect on wastewater treatment requirements. Impacts to wastewater facilities are considered less than significant and no mitigation is required.

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?

No Impact. The Proposed Project would integrate construction stormwater management principles into proposed design as part of the County Ordinance for the Reduction of Pollutants in Stormwater: Best Management Practices (Section 8.79.150). The construction of new stormwater facilities or the expansion of existing facilities would not be required. There would be **no impact** from development of the Proposed Project and no mitigation is required.

d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or would new or expanded entitlements be needed?

Less Than Significant Impact. Development of the Proposed Project would involve construction of new facilities, improvements to existing facilities, and trail construction. Included in the proposed list of new facilities are: a two-stall prefabricated restroom; a water column; restroom adjoining the display building; and a drinking fountain on the Project Site. The water for the park is currently provided by EID through the existing utilities lines under Oriental Street. EID has sufficient water supply in several reservoirs to meet the needs to the new facilities that require water. Therefore, impacts from development of the Proposed Project are considered less than significant.

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?

Less Than Significant Impact. As discussed above in *subsection b*, the wastewater treatment plants that serve El Dorado County have sufficient capacity to accommodate the additional wastewater from the two proposed restrooms. Development of the Proposed Project would not result in the need for new or expanded wastewater facilities and would not have an adverse effect on wastewater treatment

requirements. Therefore, impacts from development of the Proposed Project are considered **less than significant**.

f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Less Than Significant Impact. The Material Recovery Facility in El Dorado County is managed by Waste Connections, El Dorado Disposal and provides commercial waste collection and drop off for demolition and construction for the County (El Dorado Disposal 2015). The closest Material Recovery Facility to the Project Site is located at 4100 Throwita Way in Placerville. Project construction and park operations for all proposed improvements would be collected and disposed of by El Dorado Disposal. The Material Recovery Facility is large enough to accommodate the waste accumulated by the Proposed Project. Therefore, impacts associated with the development of the Proposed Project are considered less than significant.

g. Comply with federal, state, and local statutes and regulations related to solid waste?

Less Than Significant Impact. El Dorado County is served by two permitted Material Recovery Facilities. As discussed in *subsection f* the closer of the two Material Recover Facilities to the Project Site is in Placerville and is managed by Waste Connections Disposal. Waste connections would haul all construction waste associated with the Proposed Project to the permitted Material Recovery Facility. All construction debris would be disposed of according to the relative federal, State, and local regulations related to solid waste. All solid waste generated by the Proposed Project would be hauled by County permitted private carriers to a permitted solid waste disposal/recycling site. Therefore, impacts are considered **less than significant**.

Mitigation Measures

No mitigation is warranted.

4.18 MANDATORY FINDINGS OF SIGNIFICANCE

	Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?				
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?				

Impact Analysis

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

Less Than Significant with Mitigation Incorporated. Implementation of the Proposed Project would have the potential to degrade the quality of the existing environment. Potential impacts have been identified related to Aesthetics, Air Quality, Biological Resources, Cultural Resources, Geology and Soils, Greenhouse Gas Emissions, Hydrology and Water Quality, and Noise. Mitigation measures have been identified related to individual potential resource-specific impacts. Proposed mitigation measures would reduce the level of all project-related impacts to less than significant levels. Therefore, impacts are considered less than significant with mitigation incorporated.

- 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.)
 - Less Than Significant with Mitigation Incorporated. Implementation of the Proposed Project would facilitate the development of several new facilities and improvements to existing facilities within Railroad Park. Where applicable, this Initial Study identifies Mitigation Measures by individual resource area as relevant to potential environmental impacts resulting from development of the Proposed Project. Mitigation measures are proposed to reduce all project-related environmental impacts to less than significant levels; therefore, impacts are considered less than significant with mitigation incorporated.
- c. Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?
 - Less Than Significant with Mitigation Incorporated. Implementation of Mitigation Measure AES — 1 would reduce potential impacts related to Aesthetics to less than significant levels. Implementation of Mitigation Measures AQ — 1 through AQ — 2 would reduce potential impacts related to Air Quality to less than significant levels. Implementation of Mitigation Measures BIO — 1 through **BIO** — 5 would reduce impacts related to Biological Resources to less than significant levels. Implementation of Mitigation Measures CR — 1 through CR — 6 would reduce potential impacts related to Cultural and Paleontological Resources to less than significant levels. Implementation of Mitigation Measures GEO — 1 through GEO — 2 would reduce potential impacts related to Geology and Soils to less than significant levels. Implementation of Mitigation Measure AQ — 1 would reduce potential impacts related to Greenhouse Gas Emissions to less than significant levels. Implementation of Mitigation Measures GEO — 1 through GEO — 2, in combination with Mitigation Measure BIO — 3 would reduce potential impacts related to Hazards and Hazardous Materials to less than significant levels. Implementation of Mitigation Measure Noise — 1 through Noise — 2 would reduce potential impacts related to Noise to less than significant levels. Therefore, impacts resulting in substantial adverse environmental effects to human beings from implementation of the Proposed Project are considered less than significant with mitigation incorporated.

5.0 CEQA DETERMINATION

Pursuant to Section 15063, CEQA Guidelines, the County of El Dorado has utilized an Environmental Checklist to evaluate the potential environmental effects of the Proposed Project. The checklist provides a determination of these potential impacts and includes the substantiation developed in support of the conclusions checked on this form.

On the	basis of this initial evaluation:	
	I find that the proposed project COULD NOT NEGATIVE DECLARATION will be prepared	have a significant effect on the environment, and a
	I find that although the proposed project coul will not be a significant effect in this case becattached sheets have been added to the proj NEGATIVE DECLARATION will be prepared	d have a significant effect on the environment, there cause the mitigation measures described on the ect (see previous pages). A MITIGATED
	I find that the proposed project MAY have a s ENVIRONMENTAL IMPACT REPORT is req	significant effect on the environment, and an uired.
	effect 1) has been adequately analyzed in an standards, and 2) has been addressed by mi described on attached sheets, if the effect is	significant effect on the environment, but at least one a earlier document pursuant to applicable legal tigation measures based upon the earlier analysis as a "potentially significant impact" or "potentially MENTAL IMPACT REPORT is required, but it must dressed.
	will NOT be a significant effect in this case be been analyzed adequately in an earlier EIR of standards and (b) have been avoided or mitig	Id have a significant effect on the environment, there ecause all potentially significant effects (a) have or NEGATIVE DECLARATION pursuant to applicable gated pursuant to that earlier EIR or NEGATIVE ation measures that are imposed upon the proposed
100	The M. Sandus	2/8/16
Signa	llie Sanders	Date
Printe	ed Name:	For:
	e Sanders	County of El Dorado, Chief Administrative
Parks Manager		Office, Parks Division

6.0 REPORT PREPARATION

6.1 LEAD AGENCY

6.1.1 County of El Dorado

Vickie Sanders, Parks Manager

6.2 CONSULTANT STAFF

6.2.1 Foothill Associates

Kyrsten Shields, Project Manager, Senior Regulatory Specialist Kari Zajac, Environmental Planner Candice Guider, Regulatory Specialist Michael Brewer, GIS Specialist Ann Marie Perozzi, Graphics Design & Mapping

6.2.2 Ric Windmiller Consulting

Ric Windmiller, Registered Professional Archaeologist

6.2.3 KD Anderson & Associates

Ken Anderson, P.E.

7.0 REFERENCES

7.1 LITERATURE REFERENCES

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7.2 Personal Communication

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Appendix A — Mitigation Monitoring and Reporting Program

Historical Railroad Park Project Mitigation Monitoring and Reporting Program

	Mitigation Measure (MM)	Implementing Responsibility	Monitoring Responsibility	Timing*	Verification of Compliance (Initials/Date)
Aesthetic	es es				
AES — 1:	All outdoor light fixtures which have the potential to impact surrounding land uses shall be designed to minimize impacts through the use of directional shielding as well as new lighting technology. Backlight, Uplight and Glare (BUG) ratings for light fixtures shall be considered during the selection process.	El Dorado County Parks and Trails Department	El Dorado County Parks and Trails Department	Following Construction of Buildings with Outdoor Lighting	
Air Qualit	ty				
AQ — 1:	Prior to implementation of any proposed future improvements that require a grading permit (except the two-stall restroom proposed by Phase 1), the County shall consult with the El Dorado County AQMD. These consultations shall determine if a project-specific air quality analysis or GHG analysis for project construction would be required. If a project-specific air quality analysis and/or GHG analysis is required, the County shall conduct the analysis using the applicable standards in place at the time. These air quality assessments will provide recommended methodology for air pollution and GHGs. The methodology may include, but not be limited to; project screening identified by the El Dorado County AQMD, the California Emissions Estimator Model (CalEEMod), Urban Emissions Model (URBEMIS) for air quality, or other methodology identified by El Dorado County AQMD. Should the project-specific analysis estimate that emissions, (including GHG emissions) could exceed the applicable thresholds, the project shall incorporate the appropriate level of mitigation measures, which may include additional fugitive dust/particulate matter control as well as the applicable standard construction mitigation measures, or other	El Dorado County Parks and Trails Department and El Dorado County Air Quality Management District	El Dorado County Parks and Trails Department	Prior to Construction of Proposed Improvements Requiring a Grading Permit	

	Mitigation Measure (MM)	Implementing Responsibility	Monitoring Responsibility	Timing*	Verification of Compliance (Initials/Date)
	measures identified to reduce GHG emissions in accordance with the current standards applicable at the time of development.				
AQ — 2:	AQ — 2: Prior to commencement of ground-disturbing activities, the County will implement on-site inspections by a qualified geotechnical specialist to determine if naturally occurring asbestos is present within the proposed construction footprint required for development of the Proposed Project. If the presence of naturally occurring asbestos (NOA) is likely, the County will assume responsibility for obtaining all required EDCAQMD authorizations relevant to NOA in accordance with EDCAQMD rules and regulations, and will require contractors to implement all feasible mitigating measures identified to reduce the health risks related to potential exposure to NOA. Additionally, if NOA is present on the Project Site an Asbestos Hazard Dust Mitigation Plan shall be prepared in accordance with El Dorado County Ordinance Section 8.44.030 (B).		El Dorado Parks and Trails Department and El Dorado County Air Quality Management District (if applicable)	Prior to Ground Disturbing Activities	
Biologica	l Resources				
BIO — 1:	The intermittent drainage and riparian habitat provide habitat for the western pond turtle. A qualified biologist shall conduct a pre-construction survey for western pond turtle within 14 days prior to the start of ground disturbance. If no western pond turtles are observed, a letter report documenting the results of the survey shall be submitted to the County, and no additional measures are recommended. If construction does not commence within 14 days of the preconstruction survey or halts for more than 14 days, a new survey shall be conducted.	El Dorado County Department of Parks and Trails	El Dorado County Department of Parks and Trails and CDFW if Applicable	14days Prior to Ground Disturbing Construction	
	If western pond turtles are found, additional avoidance measures shall be implemented, following consultation with				

	Mitigation Measure (MM)	Implementing Responsibility	Monitoring Responsibility	Timing*	Verification of Compliance (Initials/Date)
	CDFW. Avoidance measures shall include, but not be limited to, a qualified biologist conducting a pre-construction survey within 24 hours prior to commencement of construction activities and having a qualified biologist onsite during all initial ground disturbance including vegetation clearing and grading. If a western pond turtle is found within the construction footprint, the qualified biologist shall relocate the individual to a portion of the intermittent drainage or riparian habitat within the intermittent drainage upstream of the construction zone.				
BIO — 2:	Migratory birds and other birds of prey, protected under 50 CFR 10 of the MBTA and/or Section 3503 of the California Fish and Game Code have the potential to nest in the nonnative annual grassland, in the culverts and burrows along the railroad tracks within the disturbed/developed areas, and within the trees and shrubs within the non-native annual grassland, riparian habitat, and disturbed/developed area. Vegetation clearing operations, including pruning or removal of trees and shrubs, shall be completed between September 1 and February 14, if feasible. If vegetation removal begins during the nesting season (February 15 to August 31), a qualified biologist shall conduct a pre-construction survey for active nests. The pre-construction survey shall be conducted within 14 days prior to commencement of ground-disturbing activities. If the pre-construction survey shows that there is no evidence of active nests, then a letter report shall be submitted to the County for their records and no additional measures are required. If construction does not commence within 14 days of the pre-construction survey, or halts for more than 14 days, and additional pre-construction survey must be conducted. If any active nests are located within the Project Site, an appropriate buffer zone shall be established around the	El Dorado County Department of Parks and Trails	El Dorado County Department of Parks and Trails	Vegetation Clearing (September 1 through February 14) and 14 Days Prior to Construction (February 15 through August 31) and During Construction (if applicable)	

	Mitigation Measure (MM)	Implementing Responsibility	Monitoring Responsibility	Timing*	Verification of Compliance (Initials/Date)
	nests as determined by the biologist. The biologist shall mark the buffer zone with construction tape or pin flags and maintain the buffer zone until the end of breeding season or until the young have successfully fledged. Buffer zones are typically 100 feet for migratory bird nests and 250 feet for raptor nests. If active nests are found onsite, a qualified biologist shall monitor nests weekly during construction to evaluate potential nesting disturbance by construction activities. If establishing the typical buffer zone is impractical, the qualified biologist may reduce the buffer depending on the species and daily monitoring is required to ensure that the nest is not disturbed and no forced fledging occurs. Daily monitoring shall occur until the qualified biologist determines that the nest is no longer occupied.				
BIO — 3:	Placement of permanent or temporary fill in waters of the U.S. is regulated by the U.S. Army Corps of Engineers (USACOE) under Section 404 of the federal Clean Water Act. The County shall coordinate with the USACOE in order to obtain the applicable permits for any activities resulting in temporary and/or permanent impacts to waters of the U.S. The project shall comply with the USACOE "no-net-loss" of aquatic functions and values policy and all applicable conditions of the Section 404 authorization. Any discharge into waters of the U.S. is also subject to regulation by the Central Valley Regional Water Quality Control Board (RWQCB) pursuant to Section 401 of the federal Clean Water Act. As required under Section 404, the County shall also coordinate with the RWQCB in order to obtain 401 Water Quality Certification.	El Dorado County Department of Parks and Trails	El Dorado County Parks and Trails Department and Corps	Prior to Construction	

	Mitigation Measure (MM)	Implementing Responsibility	Monitoring Responsibility	Timing*	Verification of Compliance (Initials/Date)
BIO — 4:	Pursuant to Fish and Game Code §1602, the County shall notify the California Department of Fish and Wildlife (CDFW) prior to any activity which may result in impacts to the streamzone. The County shall coordinate with CDFW and enter into a 1600 Streambed Alteration Agreement, if applicable, for impacts to the bed, bank or channel of onsite drainages and/or any riparian areas.	El Dorado County Department of Parks and Trails	El Dorado County Department of Parks and Trails and CDFW	Prior to Construction	
BIO — 5:	Option A under General Plan Policy 7.4.4.4 requires projects that involve more than one acre of soil disturbance with at least one percent of canopy cover by woodlands to adhere to the tree canopy retention and replacement standards. If oak tree removal is required for development of proposed improvements, an <i>Oak Woodland Canopy Assessment</i> shall be prepared for the Project Site.	El Dorado County Department of Parks and Trails	El Dorado County Department of Parks and Trails	Prior to Construction	
Cultural I	Resources				
CR — 1: If ground-disturbing activities within El Dorado Station Locus A (Site P-9-1242) cannot be avoided, a data recovery plan to recover the significant information on the original station feature including any station house footings and the privy pit deposits, shall be implemented using standard archaeological procedures and reporting standards. The data recovery plan shall be reviewed and approved by the El Dorado County Planning Department prior to implementation of any field investigative work. All field work at El Dorado Station Locus A must be completed and review by the County of El Dorado prior to any construction near El Dorado Station Locus A.		El Dorado County Parks and Trails Department	El Dorado County Parks and Trails Department	Prior to Construction	

	Mitigation Measure (MM)	Implementing Responsibility	Monitoring Responsibility	Timing*	Verification of Compliance (Initials/Date)
CR — 2:	For all improvements proposed within the boundaries of P-9-1829 that can avoid ground disturbance, construction shall include covering the site with layer(s) of chemically compatible soil prior to construction of any physical structures or other improvements. A qualified archaeologist shall be onsite continuously to monitor all soil capping activities. The qualified archaeologist shall have the authority to stop work if necessary to protect the integrity of the site.	El Dorado County Parks and Trails Department	El Dorado County Parks and Trails Department	Prior to Construction	
CR — 3:	If ground-disturbing activities within the boundaries of P-9-1829 cannot be avoided, archaeological test excavation shall be conducted. Archaeological test excavations at locations within the Project Site at any location where ground-disturbing activities are planned shall be conducted prior to implementation of ground disturbance. The excavations shall be guided by an explicit research design prepared by a qualified professional archaeologist to determine the significance of the proposed area of disturbance, followed by further mitigation, if required.	El Dorado County Parks and Trails Department	El Dorado County Parks and Trails Department	Prior to Construction	
CR — 4:	Should buried archaeological deposits, prehistoric or historic artifacts be inadvertently exposed during the course of any construction activity, work shall cease in the immediate area and the El Dorado County Planning Department shall be immediately contacted for inadvertent discovery of resources associated with project construction. A qualified archaeologist shall be retained to document the find, assess its significance, and recommend further treatment. Work on the Project Site shall not resume until the archaeologist has had a reasonable time to conduct an examination and implement mitigation measures deemed appropriate and necessary by the agency with local jurisdiction in consultation with the qualified archaeologist to reduce	El Dorado County Parks and Trails Department and Contractor	El Dorado County Parks and Trails Department/El Dorado County Planning Department	During Construction	

	Mitigation Measure (MM)	Implementing Responsibility	Monitoring Responsibility	Timing*	Verification of Compliance (Initials/Date)
	impacts to a less than significant level.				
CR — 5:	If evidence of a paleontological site is uncovered during grading or other construction activities, work shall be halted within 100 feet of the find and the El Dorado County Planning Department shall be contacted for inadvertent discovery of resources associated with project construction. A qualified paleontologist shall be retained to conduct an onsite evaluation and provide recommendations for removal and/or preservation. Work on the Project Site shall not resume until the paleontologist has had a reasonable time to conduct an examination and implement mitigation measures deemed appropriate and necessary by the agency with local jurisdiction in consultation with the qualified paleontologist to reduce impacts to a less than significant level.	El Dorado County Parks and Trails Department and Contractor	El Dorado County Parks and Trails Department/El Dorado County Planning Department	During Construction	
CR — 6:	In the event that any human remains or any associated funerary objects are encountered during construction, all work will cease within the vicinity of the discovery and the El Dorado County Planning Department shall be immediately contacted regarding the inadvertent discovery of resources associated with project construction. In accordance with CEQA (Section 1064.5) and the California Health and Safety Code (Section 7050.5), the El Dorado County coroner should be contacted immediately. If the human remains are determined to be Native American, the coroner will notify the Native American Heritage Commission, who will notify and appoint a Most Likely Descendent (MLD). The MLD will work with a qualified archaeologist to decide the proper treatment of the human remains and any associated funerary objects. Construction activities in the immediate vicinity will not resume until a notice-to-proceed is issued.	El Dorado County Parks and Trails Department and Contractor	El Dorado County Parks and Trails Department/El Dorado County Planning Department and El Dorado County Coroner (if applicable)	During Construction	

	Mitigation Measure (MM)		Monitoring Responsibility	Timing*	Verification of Compliance (Initials/Date)
Geology a	and Soils				
GEO – 1: The County shall apply for and comply with all construction- related storm water permitting, monitoring and reporting requirements required by the RWQCB under NPDES, as applicable to project development at the time of construction of proposed improvements/facilities. For any impacted aquatic features determined not to be subject to federal jurisdiction, and proposed to be impacted by development of the Proposed Project, the County will Notify the Regional Water Quality Control Board through the preparation of a Notice of Intent to fill waters of the State and will comply with all required Waste Discharge Requirements.		El Dorado County Parks and Trails Department	El Dorado County Parks and Trails Department and RWQCB	Prior to Construction	
GEO - 2:	Biannually, prior to October 15 (the onset of the rainy season), the County shall inspect and repair cut slopes and off-trail use areas within the park. Repairs shall prioritize eliminating any areas subject to erosion, as well as improper drainage and areas likely to form gullies during the rainy season.	El Dorado County Parks and Trails Department	El Dorado County Parks and Trails Department	Biennially After Construction (Prior to October 15)	
Noise					
Noise —	I: Construction activities shall be limited to: Monday through Friday 7:00 A.M. to 7:00 P.M. and 8:00 A.M. to 5:00 P.M. on Saturday, Sunday, and all federally recognized holidays. Any exceptions to these hours shall be evaluated on a case-by-case basis and require approval by the County of El Dorado.	El Dorado County Parks and Trails Department and Contractor	El Dorado County	During Construction	

Mitigation Measure (MM)	Implementing Responsibility	Monitoring Responsibility	Timing*	Verification of Compliance (Initials/Date)
Noise — 2: All construction equipment shall be fitted with factory installed muffling devices and all construction equipment shall be maintained in good working order. All stationary construction noise sources (e.g. generators, compressors) shall be located as far away from noise sensitive land uses as feasible. All stationary construction noise sources (e.g. generators, compressors) shall be located as far away from noise sensitive land uses as is feasible. All equipment staging areas (e.g. equipment storage, warm-up areas) shall be located as far away from noise sensitive land uses as feasible.	El Dorado County Parks and Trails Department and Contractor	El Dorado County Parks and Trails Department	Prior to and During Construction	

Appendix B — California Emissions Estimator Model, Version 2013.2.2

Railroad Park - Restroom Installation

Mountain Counties Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	1.00	Acre	1.00	43,560.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	8
Climate Zone	1			Operational Year	2016
Utility Company					
CO2 Intensity (lb/MWhr)	0	CH4 Intensity (lb/MWhr)	0	N2O Intensity (lb/MWhr)	0

1.3 User Entered Comments & Non-Default Data

CalEEMod Version: CalEEMod.2013.2.2 Page 2 of 17 Date: 12/9/2015 7:33 AM

Project Characteristics -

Land Use -

Construction Phase - No deomolition, no paving, no architectural coating

Off-road Equipment - No architectural coating

Off-road Equipment - No crane, forklift, or welders

Off-road Equipment - No rubber tired dozers

Off-road Equipment - No rubber tired dozers

On-road Fugitive Dust - No demolition, paving, or architectural coating

Architectural Coating - No architectural coating

Area Coating - No architectural coating

Grading - Site prep would be for less than .5 acre

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Interior	65340	0
tblConstructionPhase	NumDays	100.00	15.00
tblConstructionPhase	NumDays	2.00	10.00
tblConstructionPhase	NumDays	1.00	10.00
tblGrading	AcresOfGrading	3.75	0.75
tblGrading	AcresOfGrading	5.00	0.50
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblProjectCharacteristics	OperationalYear	2014	2016

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	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
Year					lb/	day							lb/d	day		
2016	2.4891	25.8164			5.3881	1.3991	6.7871	2.9196	1.2871	4.2068						1,961.3725
Total	2.4891	25.8164			5.3881	1.3991	6.7871	2.9196	1.2871	4.2068						1,961.3725

Mitigated Construction

	ROG	NOx	СО	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
Year					lb/	day							lb/d	day		
2016	2.4891	25.8164			5.3881	1.3991	6.7871	2.9196	1.2871	4.2068						1,961.3725
Total	2.4891	25.8164			5.3881	1.3991	6.7871	2.9196	1.2871	4.2068						1,961.3725

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	СО	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/d	day							lb/d	day		
Area	1.0013	0.0000				0.0000	0.0000		0.0000	0.0000						2.3000e- 004
Energy	0.0000	0.0000				0.0000	0.0000		0.0000	0.0000						0.0000
Mobile	9.6300e- 003	0.0187			7.2200e- 003	2.4000e- 004	7.4600e- 003	1.9300e- 003	2.2000e- 004	2.1500e- 003						10.1659
Total	1.0110	0.0187			7.2200e- 003	2.4000e- 004	7.4600e- 003	1.9300e- 003	2.2000e- 004	2.1500e- 003						10.1661

Mitigated 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/d	day		
Area	1.0013	0.0000				0.0000	0.0000		0.0000	0.0000						2.3000e- 004
Energy	0.0000	0.0000				0.0000	0.0000		0.0000	0.0000						0.0000
Mobile	9.6300e- 003	0.0187			7.2200e- 003	2.4000e- 004	7.4600e- 003	1.9300e- 003	2.2000e- 004	2.1500e- 003						10.1659
Total	1.0110	0.0187			7.2200e- 003	2.4000e- 004	7.4600e- 003	1.9300e- 003	2.2000e- 004	2.1500e- 003						10.1661

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	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	5/30/2016	6/10/2016	5	10	
2	Grading	Grading	6/11/2016	6/24/2016	5	10	
3	Building Construction	Building Construction	6/25/2016	7/15/2016	5	15	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0.75

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	174	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	174	0.41
Grading	Rubber Tired Dozers	1	6.00	255	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	226	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	18.00	7.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2016

Unmitigated Construction On-Site

	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/d	day							lb/d	day		
Fugitive Dust					5.3224	0.0000	5.3224	2.9022	0.0000	2.9022						0.0000
Off-Road	2.4428	25.7718				1.3985	1.3985		1.2866	1.2866						1,792.3693
Total	2.4428	25.7718			5.3224	1.3985	6.7208	2.9022	1.2866	4.1888						1,792.3693

Unmitigated Construction Off-Site

	ROG	NOx	СО	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/d	day		
Hauling	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0463	0.0446			0.0657	6.0000e- 004	0.0663	0.0174	5.5000e- 004	0.0180						67.4104
Total	0.0463	0.0446			0.0657	6.0000e- 004	0.0663	0.0174	5.5000e- 004	0.0180						67.4104

3.2 Site Preparation - 2016

Mitigated Construction On-Site

	ROG	NOx	СО	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/d	day		
Fugitive Dust					5.3224	0.0000	5.3224	2.9022	0.0000	2.9022						0.0000
Off-Road	2.4428	25.7718				1.3985	1.3985		1.2866	1.2866						1,792.3693
Total	2.4428	25.7718	-	-	5.3224	1.3985	6.7208	2.9022	1.2866	4.1888						1,792.3693

Mitigated Construction Off-Site

	ROG	NOx	СО	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/d	day		
Hauling	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0463	0.0446			0.0657	6.0000e- 004	0.0663	0.0174	5.5000e- 004	0.0180						67.4104
Total	0.0463	0.0446			0.0657	6.0000e- 004	0.0663	0.0174	5.5000e- 004	0.0180						67.4104

3.3 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	СО	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/d	day		
Fugitive Dust					4.5961	0.0000	4.5961	2.4913	0.0000	2.4913						0.0000
Off-Road	1.9908	21.0361				1.1407	1.1407		1.0494	1.0494						1,472.1130
Total	1.9908	21.0361			4.5961	1.1407	5.7368	2.4913	1.0494	3.5407						1,472.1130

Unmitigated Construction Off-Site

	ROG	NOx	СО	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/d	day		
Hauling	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0463	0.0446			0.0657	6.0000e- 004	0.0663	0.0174	5.5000e- 004	0.0180						67.4104
Total	0.0463	0.0446			0.0657	6.0000e- 004	0.0663	0.0174	5.5000e- 004	0.0180						67.4104

3.3 Grading - 2016

Mitigated Construction On-Site

	ROG	NOx	СО	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/d	day		
Fugitive Dust					4.5961	0.0000	4.5961	2.4913	0.0000	2.4913						0.0000
Off-Road	1.9908	21.0361				1.1407	1.1407		1.0494	1.0494						1,472.1130
Total	1.9908	21.0361			4.5961	1.1407	5.7368	2.4913	1.0494	3.5407						1,472.1130

Mitigated Construction Off-Site

	ROG	NOx	СО	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/d	day		
Hauling	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0463	0.0446			0.0657	6.0000e- 004	0.0663	0.0174	5.5000e- 004	0.0180						67.4104
Total	0.0463	0.0446			0.0657	6.0000e- 004	0.0663	0.0174	5.5000e- 004	0.0180						67.4104

3.4 Building Construction - 2016

Unmitigated Construction On-Site

	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/d	day		
Off-Road	2.1670	16.9417				1.0816	1.0816		1.0335	1.0335						1,639.3198
Total	2.1670	16.9417				1.0816	1.0816		1.0335	1.0335						1,639.3198

Unmitigated Construction Off-Site

	ROG	NOx	СО	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/d	day		
Hauling	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.1050	0.6739			0.0464	0.0119	0.0583	0.0132	0.0109	0.0241						166.5671
Worker	0.1043	0.1004			0.1479	1.3500e- 003	0.1492	0.0392	1.2300e- 003	0.0405						151.6734
Total	0.2093	0.7743			0.1943	0.0132	0.2075	0.0525	0.0121	0.0646						318.2405

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3.4 Building Construction - 2016 Mitigated Construction On-Site

	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/d	day		
Off-Road	2.1670	16.9417				1.0816	1.0816		1.0335	1.0335						1,639.3198
Total	2.1670	16.9417				1.0816	1.0816		1.0335	1.0335						1,639.3198

Mitigated Construction Off-Site

	ROG	NOx	СО	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/d	lay		
Hauling	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.1050	0.6739			0.0464	0.0119	0.0583	0.0132	0.0109	0.0241						166.5671
Worker	0.1043	0.1004			0.1479	1.3500e- 003	0.1492	0.0392	1.2300e- 003	0.0405						151.6734
Total	0.2093	0.7743			0.1943	0.0132	0.2075	0.0525	0.0121	0.0646						318.2405

4.0 Operational Detail - Mobile

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4.1 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/d	day		
Mitigated	9.6300e- 003	0.0187			7.2200e- 003	2.4000e- 004	7.4600e- 003	1.9300e- 003	2.2000e- 004	2.1500e- 003						10.1659
Unmitigated	9.6300e- 003	0.0187			7.2200e- 003	2.4000e- 004	7.4600e- 003	1.9300e- 003	2.2000e- 004	2.1500e- 003						10.1659

4.2 Trip Summary Information

	Ave	rage Daily Trip Ra	te	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	1.59	1.59	1.59	3,394	3,394
Total	1.59	1.59	1.59	3,394	3,394

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
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
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.382433	0.085852	0.200178	0.164634	0.086163	0.010726	0.014842	0.036987	0.001544	0.000672	0.009399	0.000879	0.005691

5.0 Energy Detail

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Historical Energy Use: N

5.1 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/c	lay		
NaturalGas Mitigated	0.0000	0.0000				0.0000	0.0000		0.0000	0.0000						0.0000
NaturalGas Unmitigated	0.0000	0.0000				0.0000	0.0000		0.0000	0.0000						0.0000

5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	СО	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/d	day							lb/d	day		
City Park	0	0.0000	0.0000				0.0000	0.0000		0.0000	0.0000						0.0000
Total		0.0000	0.0000				0.0000	0.0000		0.0000	0.0000						0.0000

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGa s Use	ROG	NOx	СО	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/d	day		
City Park	0	0.0000	0.0000				0.0000	0.0000		0.0000	0.0000						0.0000
Total		0.0000	0.0000				0.0000	0.0000		0.0000	0.0000						0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	СО	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/d	lay		
Mitigated	1.0013	0.0000				0.0000	0.0000		0.0000	0.0000						2.3000e- 004
Unmitigated	1.0013	0.0000				0.0000	0.0000		0.0000	0.0000						2.3000e- 004

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6.2 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/d	day							lb/d	day		
Architectural Coating	0.0691					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	0.9322					0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	1.0000e- 005	0.0000				0.0000	0.0000		0.0000	0.0000						2.3000e- 004
Total	1.0013	0.0000				0.0000	0.0000		0.0000	0.0000						2.3000e- 004

Mitigated

	ROG	NOx	СО	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/d	day							lb/d	day		
Architectural Coating	0.0691					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	0.9322					0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	1.0000e- 005	0.0000				0.0000	0.0000		0.0000	0.0000						2.3000e- 004
Total	1.0013	0.0000				0.0000	0.0000		0.0000	0.0000						2.3000e- 004

7.0 Water Detail

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7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Railroad Park - Restroom Installation

Mountain Counties Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	1.00	Acre	1.00	43,560.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	8
Climate Zone	1			Operational Year	2016
Utility Company					
CO2 Intensity (lb/MWhr)	0	CH4 Intensity (lb/MWhr)	0	N2O Intensity (lb/MWhr)	0

1.3 User Entered Comments & Non-Default Data

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Project Characteristics -

Land Use -

Construction Phase - No deomolition, no paving, no architectural coating

Off-road Equipment - No architectural coating

Off-road Equipment - No crane, forklift, or welders

Off-road Equipment - No rubber tired dozers

Off-road Equipment - No rubber tired dozers

On-road Fugitive Dust - No demolition, paving, or architectural coating

Architectural Coating - No architectural coating

Area Coating - No architectural coating

Grading - Site prep would be for less than .5 acre

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Interior	65340	0
tblConstructionPhase	NumDays	100.00	15.00
tblConstructionPhase	NumDays	2.00	10.00
tblConstructionPhase	NumDays	1.00	10.00
tblGrading	AcresOfGrading	3.75	0.75
tblGrading	AcresOfGrading	5.00	0.50
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblProjectCharacteristics	OperationalYear	2014	2016

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	СО	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
Year	lb/day										lb/day					
2016	2.4877	25.8287			5.3881	1.3991	6.7871	2.9196	1.2871	4.2068						1,945.5662
Total	2.4877	25.8287			5.3881	1.3991	6.7871	2.9196	1.2871	4.2068						1,945.5662

Mitigated Construction

	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
Year	lb/day										lb/day					
2016	2.4877	25.8287			5.3881	1.3991	6.7871	2.9196	1.2871	4.2068						1,945.5662
Total	2.4877	25.8287			5.3881	1.3991	6.7871	2.9196	1.2871	4.2068						1,945.5662

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational <u>Unmitigated Operational</u>

	ROG	NOx	СО	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	y lb/day										lb/day						
Area	1.0013	0.0000				0.0000	0.0000		0.0000	0.0000						2.3000e- 004	
Energy	0.0000	0.0000				0.0000	0.0000		0.0000	0.0000						0.0000	
Mobile	0.0101	0.0211			7.2200e- 003	2.4000e- 004	7.4600e- 003	1.9300e- 003	2.2000e- 004	2.1500e- 003						9.5029	
Total	1.0115	0.0211			7.2200e- 003	2.4000e- 004	7.4600e- 003	1.9300e- 003	2.2000e- 004	2.1500e- 003						9.5031	

Mitigated Operational

	ROG	NOx	СО	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	1.0013	0.0000				0.0000	0.0000		0.0000	0.0000						2.3000e- 004
Energy	0.0000	0.0000				0.0000	0.0000		0.0000	0.0000						0.0000
Mobile	0.0101	0.0211			7.2200e- 003	2.4000e- 004	7.4600e- 003	1.9300e- 003	2.2000e- 004	2.1500e- 003						9.5029
Total	1.0115	0.0211			7.2200e- 003	2.4000e- 004	7.4600e- 003	1.9300e- 003	2.2000e- 004	2.1500e- 003						9.5031

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	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	5/30/2016	6/10/2016	5	10	
2	Grading	Grading	6/11/2016	6/24/2016	5	10	
3	Building Construction	Building Construction	6/25/2016	7/15/2016	5	15	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0.75

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	174	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	174	0.41
Grading	Rubber Tired Dozers	1	6.00	255	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	226	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	18.00	7.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2016

Unmitigated Construction On-Site

	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/d	day							lb/d	day		
Fugitive Dust					5.3224	0.0000	5.3224	2.9022	0.0000	2.9022						0.0000
Off-Road	2.4428	25.7718				1.3985	1.3985		1.2866	1.2866						1,792.3693
Total	2.4428	25.7718			5.3224	1.3985	6.7208	2.9022	1.2866	4.1888						1,792.3693

Unmitigated Construction Off-Site

	ROG	NOx	СО	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/d	day		
Hauling	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0449	0.0569			0.0657	6.0000e- 004	0.0663	0.0174	5.5000e- 004	0.0180						60.9498
Total	0.0449	0.0569			0.0657	6.0000e- 004	0.0663	0.0174	5.5000e- 004	0.0180						60.9498

3.2 Site Preparation - 2016

Mitigated Construction On-Site

	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/d	day		
Fugitive Dust					5.3224	0.0000	5.3224	2.9022	0.0000	2.9022						0.0000
Off-Road	2.4428	25.7718				1.3985	1.3985		1.2866	1.2866						1,792.3693
Total	2.4428	25.7718			5.3224	1.3985	6.7208	2.9022	1.2866	4.1888						1,792.3693

Mitigated Construction Off-Site

	ROG	NOx	СО	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/d	day		
Hauling	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0449	0.0569			0.0657	6.0000e- 004	0.0663	0.0174	5.5000e- 004	0.0180						60.9498
Total	0.0449	0.0569			0.0657	6.0000e- 004	0.0663	0.0174	5.5000e- 004	0.0180						60.9498

3.3 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	СО	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/d	day		
Fugitive Dust					4.5961	0.0000	4.5961	2.4913	0.0000	2.4913						0.0000
Off-Road	1.9908	21.0361				1.1407	1.1407		1.0494	1.0494						1,472.1130
Total	1.9908	21.0361			4.5961	1.1407	5.7368	2.4913	1.0494	3.5407						1,472.1130

Unmitigated Construction Off-Site

	ROG	NOx	СО	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/d	day		
Hauling	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0449	0.0569			0.0657	6.0000e- 004	0.0663	0.0174	5.5000e- 004	0.0180						60.9498
Total	0.0449	0.0569			0.0657	6.0000e- 004	0.0663	0.0174	5.5000e- 004	0.0180						60.9498

3.3 Grading - 2016

Mitigated Construction On-Site

	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/d	day							lb/d	day		
Fugitive Dust					4.5961	0.0000	4.5961	2.4913	0.0000	2.4913						0.0000
Off-Road	1.9908	21.0361				1.1407	1.1407		1.0494	1.0494						1,472.1130
Total	1.9908	21.0361			4.5961	1.1407	5.7368	2.4913	1.0494	3.5407						1,472.1130

Mitigated Construction Off-Site

	ROG	NOx	СО	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/d	day		
Hauling	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0449	0.0569			0.0657	6.0000e- 004	0.0663	0.0174	5.5000e- 004	0.0180						60.9498
Total	0.0449	0.0569			0.0657	6.0000e- 004	0.0663	0.0174	5.5000e- 004	0.0180						60.9498

3.4 Building Construction - 2016

Unmitigated Construction On-Site

	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/d	day		
Off-Road	2.1670	16.9417				1.0816	1.0816		1.0335	1.0335						1,639.3198
Total	2.1670	16.9417				1.0816	1.0816		1.0335	1.0335						1,639.3198

Unmitigated Construction Off-Site

	ROG	NOx	СО	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/d	day		
Hauling	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.1485	0.7125			0.0464	0.0120	0.0584	0.0132	0.0111	0.0243						165.2981
Worker	0.1010	0.1280			0.1479	1.3500e- 003	0.1492	0.0392	1.2300e- 003	0.0405						137.1369
Total	0.2495	0.8405			0.1943	0.0134	0.2077	0.0525	0.0123	0.0648						302.4350

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3.4 Building Construction - 2016 Mitigated Construction On-Site

	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/d	day		
Off-Road	2.1670	16.9417				1.0816	1.0816		1.0335	1.0335						1,639.3198
Total	2.1670	16.9417				1.0816	1.0816		1.0335	1.0335				-		1,639.3198

Mitigated Construction Off-Site

	ROG	NOx	СО	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/d	day		
Hauling	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.1485	0.7125			0.0464	0.0120	0.0584	0.0132	0.0111	0.0243						165.2981
Worker	0.1010	0.1280			0.1479	1.3500e- 003	0.1492	0.0392	1.2300e- 003	0.0405						137.1369
Total	0.2495	0.8405			0.1943	0.0134	0.2077	0.0525	0.0123	0.0648						302.4350

4.0 Operational Detail - Mobile

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4.1 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/d	lay		
Mitigated	0.0101	0.0211			7.2200e- 003	2.4000e- 004	7.4600e- 003	1.9300e- 003	2.2000e- 004	2.1500e- 003						9.5029
Unmitigated	0.0101	0.0211			7.2200e- 003	2.4000e- 004	7.4600e- 003	1.9300e- 003	2.2000e- 004	2.1500e- 003						9.5029

4.2 Trip Summary Information

	Ave	rage Daily Trip Ra	te	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	1.59	1.59	1.59	3,394	3,394
Total	1.59	1.59	1.59	3,394	3,394

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
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
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.382433	0.085852	0.200178	0.164634	0.086163	0.010726	0.014842	0.036987	0.001544	0.000672	0.009399	0.000879	0.005691

5.0 Energy Detail

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Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	СО	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/d	lay		
NaturalGas Mitigated	0.0000	0.0000				0.0000	0.0000		0.0000	0.0000						0.0000
NaturalGas Unmitigated	0.0000	0.0000				0.0000	0.0000		0.0000	0.0000						0.0000

5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	СО	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/d	day							lb/d	day		
City Park	0	0.0000	0.0000				0.0000	0.0000		0.0000	0.0000						0.0000
Total		0.0000	0.0000				0.0000	0.0000		0.0000	0.0000						0.0000

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGa s 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/d	day		
City Park	0	0.0000	0.0000				0.0000	0.0000		0.0000	0.0000						0.0000
Total		0.0000	0.0000				0.0000	0.0000		0.0000	0.0000						0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	СО	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/d	lay		
Mitigated	1.0013	0.0000				0.0000	0.0000		0.0000	0.0000						2.3000e- 004
Unmitigated	1.0013	0.0000				0.0000	0.0000		0.0000	0.0000						2.3000e- 004

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6.2 Area by SubCategory

Unmitigated

	ROG	NOx	СО	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/d	day							lb/d	day		
Architectural Coating	0.0691					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	0.9322					0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	1.0000e- 005	0.0000				0.0000	0.0000		0.0000	0.0000						2.3000e- 004
Total	1.0013	0.0000				0.0000	0.0000		0.0000	0.0000						2.3000e- 004

Mitigated

	ROG	NOx	СО	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/d	day							lb/d	day		
Architectural Coating	0.0691					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	0.9322					0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	1.0000e- 005	0.0000				0.0000	0.0000		0.0000	0.0000						2.3000e- 004
Total	1.0013	0.0000				0.0000	0.0000		0.0000	0.0000						2.3000e- 004

7.0 Water Detail

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7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Railroad Park - Restroom Installation

Mountain Counties Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	1.00	Acre	1.00	43,560.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	8
Climate Zone	1			Operational Year	2016
Utility Company					
CO2 Intensity (lb/MWhr)	0	CH4 Intensity (lb/MWhr)	0	N2O Intensity (lb/MWhr)	0

1.3 User Entered Comments & Non-Default Data

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Project Characteristics -

Land Use -

Construction Phase - No deomolition, no paving, no architectural coating

Off-road Equipment - No architectural coating

Off-road Equipment - No crane, forklift, or welders

Off-road Equipment - No rubber tired dozers

Off-road Equipment - No rubber tired dozers

On-road Fugitive Dust - No demolition, paving, or architectural coating

Architectural Coating - No architectural coating

Area Coating - No architectural coating

Grading - Site prep would be for less than .5 acre

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Interior	65340	0
tblConstructionPhase	NumDays	100.00	15.00
tblConstructionPhase	NumDays	2.00	10.00
tblConstructionPhase	NumDays	1.00	10.00
tblGrading	AcresOfGrading	3.75	0.75
tblGrading	AcresOfGrading	5.00	0.50
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblProjectCharacteristics	OperationalYear	2014	2016

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	СО	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
Year					ton	s/yr							MT	/yr		
2016	0.0405	0.3678			0.0517	0.0209	0.0726	0.0275	0.0195	0.0471						28.6077
Total	0.0405	0.3678			0.0517	0.0209	0.0726	0.0275	0.0195	0.0471						28.6077

Mitigated Construction

	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
Year					ton	s/yr							MT	/yr		
2016	0.0405	0.3678			0.0517	0.0209	0.0726	0.0275	0.0195	0.0471						28.6076
Total	0.0405	0.3678			0.0517	0.0209	0.0726	0.0275	0.0195	0.0471						28.6076

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational Unmitigated Operational

0.1844

Total

3.7000e-

003

	ROG	NOx	СО	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					ton	s/yr							MT	·/yr		
Area	0.1827	0.0000				0.0000	0.0000		0.0000	0.0000						2.0000e- 005
Energy	0.0000	0.0000				0.0000	0.0000		0.0000	0.0000						0.0000
Mobile	1.7000e- 003	3.7000e- 003			1.3100e- 003	4.0000e- 005	1.3500e- 003	3.5000e- 004	4.0000e- 005	3.9000e- 004						1.5895
Waste	7 7 7 7 7 7					0.0000	0.0000		0.0000	0.0000						0.0409
Water	9. 9.				•	0.0000	0.0000	• • • • • • • • • • • • • • • • • • •	0.0000	0.0000						0.0000

3.5000e-

004

4.0000e-

005

3.9000e-

004

1.3100e-003 4.0000e-

005

1.3500e-

003

1.6304

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Area	0.1827	0.0000				0.0000	0.0000		0.0000	0.0000						2.0000e- 005
Energy	0.0000	0.0000				0.0000	0.0000		0.0000	0.0000						0.0000
Mobile	1.7000e- 003	3.7000e- 003			1.3100e- 003	4.0000e- 005	1.3500e- 003	3.5000e- 004	4.0000e- 005	3.9000e- 004						1.5895
Waste						0.0000	0.0000		0.0000	0.0000						0.0409
Water						0.0000	0.0000		0.0000	0.0000						0.0000
Total	0.1844	3.7000e- 003			1.3100e- 003	4.0000e- 005	1.3500e- 003	3.5000e- 004	4.0000e- 005	3.9000e- 004						1.6304

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	:		5/30/2016	6/10/2016	5	10	
2	Grading		6/11/2016	6/24/2016	5	10	
3	•	Building Construction	6/25/2016	7/15/2016	5	15	

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Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0.75

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	174	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	174	0.41
Grading	Rubber Tired Dozers	1	6.00	255	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	226	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	18.00	7.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.2 Site Preparation - 2016 <u>Unmitigated Construction On-Site</u>

	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					ton	s/yr							MT	/yr		
Fugitive Dust					0.0266	0.0000	0.0266	0.0145	0.0000	0.0145						0.0000
Off-Road	0.0122	0.1289				6.9900e- 003	6.9900e- 003		6.4300e- 003	6.4300e- 003						8.1301
Total	0.0122	0.1289			0.0266	6.9900e- 003	0.0336	0.0145	6.4300e- 003	0.0209			_			8.1301

Unmitigated Construction Off-Site

	ROG	NOx	СО	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					ton	s/yr							МТ	-/yr		
Hauling	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	2.1000e- 004	2.6000e- 004			3.3000e- 004	0.0000	3.3000e- 004	9.0000e- 005	0.0000	9.0000e- 005						0.2822
Total	2.1000e- 004	2.6000e- 004			3.3000e- 004	0.0000	3.3000e- 004	9.0000e- 005	0.0000	9.0000e- 005						0.2822

3.2 Site Preparation - 2016

Mitigated Construction On-Site

	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					ton	s/yr							MT	/yr		
Fugitive Dust					0.0266	0.0000	0.0266	0.0145	0.0000	0.0145						0.0000
Off-Road	0.0122	0.1289				6.9900e- 003	6.9900e- 003		6.4300e- 003	6.4300e- 003						8.1300
Total	0.0122	0.1289			0.0266	6.9900e- 003	0.0336	0.0145	6.4300e- 003	0.0209						8.1300

Mitigated Construction Off-Site

	ROG	NOx	СО	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					ton	s/yr							MT	-/yr		
Hauling	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	2.1000e- 004	2.6000e- 004			3.3000e- 004	0.0000	3.3000e- 004	9.0000e- 005	0.0000	9.0000e- 005						0.2822
Total	2.1000e- 004	2.6000e- 004			3.3000e- 004	0.0000	3.3000e- 004	9.0000e- 005	0.0000	9.0000e- 005						0.2822

3.3 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Fugitive Dust					0.0230	0.0000	0.0230	0.0125	0.0000	0.0125						0.0000
Off-Road	9.9500e- 003	0.1052				5.7000e- 003	5.7000e- 003		5.2500e- 003	5.2500e- 003						6.6774
Total	9.9500e- 003	0.1052		-	0.0230	5.7000e- 003	0.0287	0.0125	5.2500e- 003	0.0177						6.6774

Unmitigated Construction Off-Site

	ROG	NOx	СО	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					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	2.1000e- 004	2.6000e- 004			3.3000e- 004	0.0000	3.3000e- 004	9.0000e- 005	0.0000	9.0000e- 005						0.2822
Total	2.1000e- 004	2.6000e- 004			3.3000e- 004	0.0000	3.3000e- 004	9.0000e- 005	0.0000	9.0000e- 005						0.2822

3.3 Grading - 2016

Mitigated Construction On-Site

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Fugitive Dust					0.0230	0.0000	0.0230	0.0125	0.0000	0.0125						0.0000
Off-Road	9.9500e- 003	0.1052				5.7000e- 003	5.7000e- 003		5.2500e- 003	5.2500e- 003						6.6774
Total	9.9500e- 003	0.1052			0.0230	5.7000e- 003	0.0287	0.0125	5.2500e- 003	0.0177						6.6774

Mitigated Construction Off-Site

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	2.1000e- 004	2.6000e- 004			3.3000e- 004	0.0000	3.3000e- 004	9.0000e- 005	0.0000	9.0000e- 005						0.2822
Total	2.1000e- 004	2.6000e- 004			3.3000e- 004	0.0000	3.3000e- 004	9.0000e- 005	0.0000	9.0000e- 005						0.2822

3.4 Building Construction - 2016

Unmitigated Construction On-Site

	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					ton	s/yr							MT	/yr		
Off-Road	0.0163	0.1271				8.1100e- 003	8.1100e- 003		7.7500e- 003	7.7500e- 003						11.1537
Total	0.0163	0.1271				8.1100e- 003	8.1100e- 003		7.7500e- 003	7.7500e- 003						11.1537

Unmitigated Construction Off-Site

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	9.6000e- 004	5.2900e- 003			3.5000e- 004	9.0000e- 005	4.4000e- 004	1.0000e- 004	8.0000e- 005	1.8000e- 004						1.1297
Worker	7.1000e- 004	8.8000e- 004			1.1000e- 003	1.0000e- 005	1.1100e- 003	2.9000e- 004	1.0000e- 005	3.0000e- 004						0.9524
Total	1.6700e- 003	6.1700e- 003			1.4500e- 003	1.0000e- 004	1.5500e- 003	3.9000e- 004	9.0000e- 005	4.8000e- 004						2.0821

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3.4 Building Construction - 2016 Mitigated Construction On-Site

	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					ton	s/yr							MT	/yr		
Off-Road	0.0163	0.1271				8.1100e- 003	8.1100e- 003		7.7500e- 003	7.7500e- 003						11.1537
Total	0.0163	0.1271				8.1100e- 003	8.1100e- 003		7.7500e- 003	7.7500e- 003						11.1537

Mitigated Construction Off-Site

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	9.6000e- 004	5.2900e- 003			3.5000e- 004	9.0000e- 005	4.4000e- 004	1.0000e- 004	8.0000e- 005	1.8000e- 004						1.1297
Worker	7.1000e- 004	8.8000e- 004			1.1000e- 003	1.0000e- 005	1.1100e- 003	2.9000e- 004	1.0000e- 005	3.0000e- 004						0.9524
Total	1.6700e- 003	6.1700e- 003			1.4500e- 003	1.0000e- 004	1.5500e- 003	3.9000e- 004	9.0000e- 005	4.8000e- 004						2.0821

4.0 Operational Detail - Mobile

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4.1 Mitigation Measures Mobile

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Mitigated	1.7000e- 003	3.7000e- 003			1.3100e- 003	4.0000e- 005	1.3500e- 003	3.5000e- 004	4.0000e- 005	3.9000e- 004						1.5895
Unmitigated	1.7000e- 003	3.7000e- 003			1.3100e- 003	4.0000e- 005	1.3500e- 003	3.5000e- 004	4.0000e- 005	3.9000e- 004						1.5895

4.2 Trip Summary Information

	Ave	rage Daily Trip Ra	te	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	1.59	1.59	1.59	3,394	3,394
Total	1.59	1.59	1.59	3,394	3,394

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
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
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.382433	0.085852	0.200178	0.164634	0.086163	0.010726	0.014842	0.036987	0.001544	0.000672	0.009399	0.000879	0.005691

5.0 Energy Detail

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Historical Energy Use: N

5.1 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					ton	s/yr							MT	/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000						0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000						0.0000
NaturalGas Mitigated	0.0000	0.0000				0.0000	0.0000		0.0000	0.0000						0.0000
NaturalGas Unmitigated	0.0000	0.0000				0.0000	0.0000		0.0000	0.0000						0.0000

5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	СО	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					ton	s/yr							MT	Г/уг		
City Park	0	0.0000	0.0000				0.0000	0.0000		0.0000	0.0000						0.0000
Total		0.0000	0.0000				0.0000	0.0000		0.0000	0.0000						0.0000

5.2 Energy by Land Use - NaturalGas Mitigated

	NaturalGa s Use	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
City Park	0	0.0000	0.0000				0.0000	0.0000		0.0000	0.0000						0.0000
Total		0.0000	0.0000				0.0000	0.0000		0.0000	0.0000						0.0000

5.3 Energy by Land Use - Electricity <u>Unmitigated</u>

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		МТ	Γ/yr	
City Park	0				0.0000
Total					0.0000

5.3 Energy by Land Use - Electricity Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		МТ	-/yr	
City Park	0				0.0000
Total					0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Mitigated	0.1827	0.0000				0.0000	0.0000		0.0000	0.0000						2.0000e- 005
Unmitigated	0.1827	0.0000				0.0000	0.0000		0.0000	0.0000						2.0000e- 005

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6.2 Area by SubCategory

Unmitigated

	ROG	NOx	СО	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					ton	s/yr							МТ	/yr		
Architectural Coating	0.0126					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	0.1701					0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	0.0000	0.0000				0.0000	0.0000		0.0000	0.0000						2.0000e- 005
Total	0.1827	0.0000				0.0000	0.0000		0.0000	0.0000						2.0000e- 005

Mitigated

	ROG	NOx	СО	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	0.0126					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	0.1701					0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	0.0000	0.0000				0.0000	0.0000		0.0000	0.0000						2.0000e- 005
Total	0.1827	0.0000				0.0000	0.0000		0.0000	0.0000						2.0000e- 005

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category		MT	-/yr	
Mitigated				0.0000
Unmitigated				0.0000

7.2 Water by Land Use <u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		МТ	[⊺] /yr	
City Park	0 / 1.19148				0.0000
Total					0.0000

7.2 Water by Land Use

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		MT	-/yr	
City Park	0 / 1.19148				0.0000
Total					0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e		
	MT/yr					
				0.0409		
Unmitigated				0.0409		

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8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		МТ	√yr	
City Park	0.09				0.0409
Total					0.0409

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		МТ	√yr	
City Park	0.09				0.0409
Total					0.0409

9.0 Operational Offroad

Equipment Type	Number	Hours/Dav	Days/Year	Horse Power	Load Factor	Fuel Type
= 4			= 5.9 5, 1 5 5.1			,,,, .

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10.0 Vegetation

Appendix C — Biological Resources Assessment [for the] ±7.7-Acre Railroad Park Project, El Dorado County, California

Biological Resources Assessment

±7.7-Acre Railroad Park Project El Dorado County, California

> **Prepared for**: El Dorado County Parks and Trail Division

> > **Date**: January 11, 2016



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1.0 EXECUTIVE SUMMARY

Foothill Associates' biologists prepared this Biological Resources Assessment (BRA) for the ± 7.7 -acre Railroad Park Project (Study Area), located in El Dorado County, California. The purpose of this BRA is to summarize the general biological resources within the Study Area, to assess the suitability of the Study Area to support special-status species and sensitive habitat types, to provide recommendations for regulatory permitting or further analysis that may be required, and to recommend mitigation measures to avoid or minimize potential impacts to special-status species and sensitive habitat types.

Biological constraints within the Study Area include known or potential habitat for:

- Western pond turtle (*Emys marmorata*);
- Migratory birds and raptors; and
- Sensitive habitats (potentially jurisdictional waters of the U.S., riparian habitat, and oak woodland canopy).

1

2.0 INTRODUCTION

This BRA summarizes the general biological resources within the Study Area, assesses the suitability of the Study Area to support special-status species and sensitive habitat types, provides recommendations for regulatory permitting or further analysis that may be required, and recommends mitigation measures to avoid or minimize potential impacts to special-status species and sensitive habitat types.

3.0 REGULATORY FRAMEWORK

Federal, State, and local environmental laws, regulations, and policies relevant to the California Environmental Quality Act (CEQA) review process are summarized below. The CEQA significance criteria are also included in this section.

3.1 Federal Jurisdiction

3.1.1 Federal Endangered Species Act

The U.S. Congress passed the Federal Endangered Species Act (FESA) in 1973 to protect those species that are endangered or threatened with extinction. FESA is intended to operate in conjunction with the National Environmental Policy Act (NEPA) to help protect the ecosystems upon which endangered and threatened species depend.

FESA prohibits the "take" of endangered or threatened wildlife species. "Take" is defined to include harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species or any attempt to engage in such conduct (FESA Section 3 [(3)(19)]). Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns (50 CFR §17.3). Harass is defined as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns (50 CFR §17.3). Actions that result in take can result in civil or criminal penalties.

FESA and Clean Water Act (CWA) Section 404 guidelines prohibit the issuance of wetland permits for projects that jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species. The U.S. Army Corps of Engineers (Corps) must consult with the U.S. Fish and Wildlife Service (USFWS) and/or the National Marine Fisheries Service (NMFS) when threatened or endangered species under their jurisdiction may be affected by a proposed project. In the context of the proposed project, FESA would be initiated if development resulted in take of a threatened or endangered species or if issuance of a Section 404 permit or other federal agency action could result in take of an endangered species or adversely modify critical habitat of such a species.

3.1.2 Migratory Bird Treaty Act

Raptors (birds of prey), migratory birds, and other avian species are protected by a number of State and federal laws. The federal Migratory Bird Treaty Act (MBTA) prohibits the killing, possessing, or trading of migratory birds except in accordance with regulations prescribed by the Secretary of Interior.

3.1.3 The Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (Eagle Act) prohibits the taking or possession of and commerce in bald and golden eagles with limited exceptions. Under the Eagle Act, it is a violation to "take, possess, sell, purchase, barter, offer to sell, transport, export or import, at any time or in any manner, any bald eagle commonly known as the American eagle, or golden eagle, alive or dead, or any part, nest, or egg, thereof." Take is defined to include pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, destroy, molest, and disturb. Disturb is further defined in 50 CFR Part 22.3 as "to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior."

3.2 State Jurisdiction

3.2.1 California Endangered Species Act

The State of California enacted the California Endangered Species Act (CESA) in 1984. CESA is similar to the FESA but pertains to State-listed endangered and threatened species. CESA requires state agencies to consult with the California Department of Fish and Wildlife (CDFW), formally California Department of Fish and Game, when preparing California Environmental Quality Act (CEQA) documents. The purpose is to ensure that the state lead agency actions do not jeopardize the continued existence of a listed species or result in the destruction, or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available (Fish and Game Code §2080). CESA directs agencies to consult with CDFW on projects or actions that could affect listed species, directs CDFW to determine whether jeopardy would occur and allows CDFW to identify "reasonable and prudent alternatives" to the project consistent with conserving the species. CESA allows CDFW to authorize exceptions to the State's prohibition against take of a listed species if the "take" of a listed species is incidental to carrying out an otherwise lawful project that has been approved under CEQA (Fish & Game Code § 2081).

3.2.2 California Department of Fish and Game Codes

Fully protected fish species are protected under Section 5515; fully protected amphibian and reptile species are protected under Section 5050; fully protected bird species are protected under Section 3511; and fully protected mammal species are protected under Section 4700. The California Fish and Game Code defines take as "hunt, pursue, catch, capture, or kill," Except for take related to scientific research, all take of fully protected species is prohibited.

Section 3503 of the California Fish and Game Code prohibits the killing of birds or the destruction of bird nests. Section 3503.5 prohibits the killing of raptor species and the

destruction of raptor nests. Sections 2062 and 2067 define endangered and threatened species.

3.2.3 California Department of Fish and Wildlife Species of Concern

In addition to formal listing under FESA and CESA, species receive additional consideration by CDFW and local lead agencies during the CEQA process. Species that may be considered for review are included on a list of "Species of Special Concern," developed by the CDFW. It tracks species in California whose numbers, reproductive success, or habitat may be threatened.

3.3 Jurisdictional Waters

3.3.1 Federal Jurisdiction

The Corps regulates discharge of dredge or fill material into waters of the U.S. under Section 404 of the CWA. "Discharges of fill material" is defined as the addition of fill material into waters of the U.S., including, but not limited to the following: placement of fill that is necessary for the construction of any structure, or impoundment requiring rock, sand, dirt, or other material for its construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; fill for intake and outfall pipes and subaqueous utility lines [33 C.F.R. §328.2(f)]. In addition, Section 401 of the CWA (33 U.S.C. 1341) requires any applicant for a Federal license or permit to conduct any activity that may result in a discharge of a pollutant into waters of the U.S. to obtain a certification that the discharge will comply with the applicable effluent limitations and water quality standards.

Waters of the U.S. include a range of wet environments such as lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, and wet meadows. Boundaries between jurisdictional waters and uplands are determined in a variety of ways depending on which type of waters is present. Methods for delineating wetlands and non-tidal waters are described below.

- Wetlands are defined as "those areas that are inundated or saturated by surface or
 groundwater at a frequency and duration sufficient to support and under normal
 circumstances do support, a prevalence of vegetation typically adapted for life in
 saturated soil conditions" [33 C.F.R. §328.3(b)]. Presently, to be a wetland, a site
 must exhibit three wetland criteria: hydrophytic vegetation, hydric soils, and
 wetland hydrology existing under the "normal circumstances" for the site.
- The lateral extent of non-tidal waters is determined by delineating the ordinary high water mark (OHWM) [33 C.F.R. §328.4(c)(1)]. The OHWM is defined by the Corps as "that line on shore established by the fluctuations of water and indicated by physical character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas" [33 C.F.R. §328.3(e)].

3.3.2 State Jurisdiction

CDFW is a trustee agency that has jurisdiction under Section 1600 *et seq.* of the California Fish and Game Code. Under Sections 1602 and 1603, a private party must notify CDFW if a proposed project will "substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by the department, or use any material from the streambeds...except when the department has been notified pursuant to Section 1601." Additionally, CDFW may assert jurisdiction over native riparian habitat adjacent to aquatic features, including native trees over 4 inches in diameter at breast height (DBH). If an existing fish or wildlife resource may be substantially adversely affected by the activity, CDFW may propose reasonable measures that will allow protection of those resources. If these measures are agreeable to the parties involved, they may enter into an agreement with CDFW identifying the approved activities and associated mitigation measures.

Section 13260(a) of the Porter-Cologne Water Quality Control Act (contained in the California Water Code) requires any person discharging waste or proposing to discharge waste, other than to a community sewer system, within any region that could affect the quality of the waters of the State (all surface and subsurface waters) to file a report of waste discharge. The discharge of dredged or fill material may constitute a discharge of waste that could affect the quality of waters of the State. All of the wetlands and waterways in the Study Area are waters of the State, which are protected under this act.

Historically, California relied on its authority under Section 401 of the CWA to regulate discharges of dredged or fill material to California waters. That section requires an applicant to obtain "water quality certification" from the State Water Resources Control Board (SWRCB) through its Regional Water Quality Control Boards (RWQCB) to ensure compliance with state water quality standards before certain federal licenses or permits may be issued. The permits subject to Section 401 include permits for the discharge of dredged or fill materials (CWA Section 404 permits) issued by the USACE. Waste discharge requirements under the Porter-Cologne Water Quality Control Act were typically waived for projects that required certification. With the recent changes that limited the jurisdiction of wetlands under the CWA, the SWRCB has needed to rely on the report of waste discharge process.

3.4 CEQA Significance Criteria

Section 15064.7 of the CEQA Guidelines encourages local agencies to develop and publish the thresholds that the agency uses in determining the significance of environmental effects caused by projects under its review. However, agencies may also rely upon the guidance provided by the expanded Initial Study checklist contained in Appendix G of the CEQA Guidelines. Appendix G provides examples of impacts that would normally be considered significant. Based on these examples, impacts to biological resources would normally be considered significant if the project would:

 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 CDFW or USFWS;

- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS;
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- 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;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and
- Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional or state habitat conservation plan.

An evaluation of whether or not an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that would diminish, or result in the loss of, an important biological resource, or those that would obviously conflict with local, State, or federal resource conservation plans, goals, or regulations. Impacts are sometimes locally important but not significant according to CEQA. The reason for this is that although the impacts would result in an adverse alteration of existing conditions, they would not substantially diminish, or result in the permanent loss of, an important resource on a population-wide or region-wide basis.

3.4.1 California Native Plant Society

The California Native Plant Society (CNPS) maintains a rank of plant species native to California that has low population numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Vascular Plants of California. Potential impacts to populations of CNPS-ranked plants receive consideration under CEQA review. The following identifies the definitions of the CNPS ranks:

- Rank 1A: Plants presumed Extinct in California
- Rank 1B: Plants Rare, Threatened, or Endangered in California and elsewhere
- Rank 2: Plants Rare, Threatened, or Endangered in California, but more numerous elsewhere
- Rank 3: Plants about which we need more information A Review List
- Rank 4: Plants of limited distribution A Watch List

All plants appearing on CNPS List 1 or 2 are considered to meet CEQA Guidelines Section 15380 criteria. While only some of the plants ranked 3 and 4 meet the definitions of threatened or endangered species, the CNPS recommends that all Rank 3 and Rank 4 plants be evaluated for consideration under CEQA.

3.5 El Dorado County General Plan

In addition to federal and State regulations, *The El Dorado County General Plan* (General Plan) includes goals, objectives, and policies regarding biological resources. Sections relevant to this project are summarized below.

CONSERVATION AND PROTECTION OF WATER RESOURCES

GOAL 7.3: WATER QUALITY AND QUANTITY

Conserve, enhance, and manage water resources and protect their quality from degradation.

OBJECTIVE 7.3.1: WATER RESOURCE PROTECTION

Preserve and protect the supply and quality of the County's water resources including the protection of critical watersheds, riparian zones, and aquifers.

- Policy 7.3.1.1 Encourage the use of Best Management Practices, as identified by the Soil Conservation Service, in watershed lands as a means to prevent erosion, siltation, and flooding.
- Policy 7.3.1.2 Establish water conservation programs that include both drought tolerant landscaping and efficient building design requirements as well as incentives for the conservation and wise use of water.
- Policy 7.3.1.3 The County shall develop the criteria and draft an ordinance to allow and encourage the use of domestic gray water for landscape irrigation purposes. (See Title 22 of the State Water Code and the Graywater Regulations of the Uniform Plumbing Code).

OBJECTIVE 7.3.2: WATER OUALITY

Maintenance of and, where possible, improvement of the quality of underground and surface water.

- Policy 7.3.2.1 Stream and lake embankments shall be protected from erosion, and streams and lakes shall be protected from excessive turbidity.
- Policy 7.3.2.2 Projects requiring a grading permit shall have an erosion control program approved, where necessary.
- Policy 7.3.2.3 Where practical and when warranted by the size of the project, parking lot storm drainage shall include facilities to separate oils and salts from storm water in accordance with the recommendations of the Storm Water

Quality Task Force's California Storm Water Best Management Practices Handbooks (1993).

- Policy 7.3.2.4 The County should evaluate feasible alternatives to the use of salt for ice control on County roads.
- Policy 7.3.2.5 As a means to improve the water quality affecting the County's recreational waters, enhanced and increased detailed analytical water quality studies and monitoring should be implemented to identify and reduce point and non-point pollutants and contaminants. Where such studies or monitoring reports have identified sources of pollution, the County shall propose means to prevent, control, or treat identified pollutants and contaminants.

OBJECTIVE 7.3.3: WETLANDS

Protection of natural and man-made wetlands, vernal pools, wet meadows, and riparian areas from impacts related to development for their importance to wildlife habitat, water purification, scenic values, and unique and sensitive plant life.

- Policy 7.3.3.1 For projects that would result in the discharge of material to or that may affect the function and value of river, stream, lake, pond, or wetland features, the application shall include a delineation of all such features. For wetlands, the delineation shall be conducted using the U.S. Army Corps of Engineers (USACE) Wetland Delineation Manual
- Policy 7.3.3.2 Intentionally blank
- Policy 7.3.3.3 The County shall develop a database of important surface water features, including lake, river, stream, pond, and wetland resources.
- Policy 7.3.3.4 The Zoning Ordinance shall be amended to provide buffers and special setbacks for the protection of riparian areas and wetlands. The County shall encourage the incorporation of protected areas into conservation easements or natural resource protection areas.

Exceptions to riparian and wetland buffer and setback requirements shall be provided to permit necessary road and bridge repair and construction, trail construction, and other recreational access structures such as docks and piers, or where such buffers deny reasonable use of the property, but only when appropriate mitigation measures and Best Management Practices are incorporated into the project. Exceptions shall also be provided for horticultural and grazing activities on agriculturally zoned lands that utilize "best management practices (BMPs)" as recommended by the County Agricultural Commission and adopted by the Board of Supervisors.

Until standards for buffers and special setbacks are established in the Zoning Ordinance, the County shall apply a minimum setback of 100 feet from all perennial streams, rivers, lakes, and 50 feet from intermittent streams and wetlands. These interim standards may be modified in a particular instance if more detailed information relating to slope, soil stability, vegetation, habitat, or other site- or project-specific conditions supplied as part of the review for a specific project demonstrates that a different setback is necessary or would be sufficient to protect the particular riparian area at issue.

For projects where the County allows an exception to wetland and riparian buffers, development in or immediately adjacent to such features shall be planned so that impacts on the resources are minimized. If avoidance and minimization are not feasible, the County shall make findings, based on documentation provided by the project proponent, that avoidance and minimization are infeasible.

Policy 7.3.3.5 Rivers, streams, lakes and ponds, and wetlands shall be integrated into new development in such a way that they enhance the aesthetic and natural character of the site while disturbance to the resource is avoided or minimized and fragmentation is limited.

OBJECTIVE 7.3.4: DRAINAGE Protection and utilization of natural drainage patterns.

- Policy 7.3.4.1 Natural watercourses shall be integrated into new development in such a way that they enhance the aesthetic and natural character of the site without disturbance.
- Policy 7.3.4.2 Modification of natural stream beds and flow shall be regulated to ensure that adequate mitigation measures are utilized.

OBJECTIVE 7.3.5: WATER CONSERVATION

Conservation of water resources, encouragement of water conservation, and construction of wastewater disposal systems designed to reclaim and re-use treated wastewater on agricultural crops and for other irrigation and wildlife enhancement projects.

- Policy 7.3.5.1 Drought-tolerant plant species, where feasible, shall be used for landscaping of commercial development. Where the use of drought-tolerant native plant species is feasible, they should be used instead of non-native plant species.
- Policy 7.3.5.2 A list of appropriate local indigenous drought tolerant plant materials shall be maintained by the County Planning Department and made available to the public.

- Policy 7.3.5.3 The County Parks and Recreation Division shall use drought tolerant landscaping for all new parks and park improvement projects.
- Policy 7.3.5.4 Require efficient water conveyance systems in new construction.

 Establish a program of ongoing conversion of open ditch systems shall be considered for conversion to closed conduits, reclaimed water supplies, or both, as circumstances permit.
- Policy 7.3.5.5 Encourage water reuse programs to conserve raw or potable water supplies consistent with State Law.

CONSERVATION OF BIOLOGICAL RESOURCES

GOAL 7.4: WILDLIFE AND VEGETATION RESOURCES

Identify, conserve, and manage wildlife, wildlife habitat, fisheries, and vegetation resources of significant biological, ecological, and recreational value.

- OBJECTIVE 7.4.1: RARE, THREATENED, AND ENDANGERED SPECIES
 The County shall protect State and federally recognized rare,
 threatened, or endangered species and their habitats consistent
 with Federal and State laws.
- Policy 7.4.1.1 The County shall continue to provide for the permanent protection of the eight sensitive plant species known as the Pine Hill endemics and their habitat through the establishment and management of ecological preserves consistent with County Code Chapter 17.71 and the USFWS's Gabbro Soil Plants for the Central Sierra Nevada Foothills Recovery Plan (USFWS 2002).
- Policy 7.4.1.2 Private land for preserve sites will be purchased only from willing sellers.
- Policy 7.4.1.3 Limit land uses within established preserve areas to activities deemed compatible. Such uses may include passive recreation, research and scientific study, and education. In conjunction with use as passive recreational areas, develop a rare plant educational and interpretive program.
- Policy 7.4.1.4 Proposed rare, threatened, or endangered species preserves, as approved by the County Board of Supervisors, shall be designated Ecological Preserve (-EP) overlay on the General Plan land use map.
- Policy 7.4.1.5 Species, habitat, and natural community preservation/conservation strategies shall be prepared to protect special-status plant and animal species and natural communities and habitats when discretionary development is proposed on lands with such resources unless it is

determined that those resources exist, and either are or can be protected, on public lands or private Natural Resource lands.

Policy 7.4.1.6 All development projects involving discretionary review shall be designed to avoid disturbance or fragmentation of important habitats to the extent reasonably feasible. Where avoidance is not possible, the development shall be required to fully mitigate the effects of important habitat loss and fragmentation. Mitigation shall be defined in the Integrated Natural Resources Management Plan (INRMP) (see Policy 7.4.2.8 and Implementation Measure CO-M).

The County Agricultural Commission, Plant and Wildlife Technical Advisory Committee, representatives of the agricultural community, academia, and other stakeholders shall be involved and consulted in defining the important habitats of the County and in the creation and implementation of the INRMP.

Policy 7.4.1.7 The County shall continue to support the Noxious Weed Management Group in its efforts to reduce and eliminate noxious weed infestations to protect native habitats and to reduce fire hazards.

OBJECTIVE 7.4.2: IDENTIFY AND PROTECT RESOURCES

Identification and protection, where feasible, of critical fish and wildlife habitat including deer winter, summer, and fawning ranges; deer migration routes; stream and river riparian habitat; lake shore habitat; fish spawning areas; wetlands; wildlife corridors; and diverse wildlife habitat.

- Policy 7.4.2.1 To the extent feasible in light of other General Plan policies and to the extent permitted by State law, the County of El Dorado will protect identified critical fish and wildlife habitat, as identified on the Important Biological Resources Map maintained at the Planning Department, through any of the following techniques: utilization of open space, Natural Resource land use designation, clustering, large lot design, setbacks, etc.
- Policy 7.4.2.2 Where critical wildlife areas and migration corridors are identified during review of projects, the County shall protect the resources from degradation by requiring all portions of the Study Area that contain or influence said areas to be retained as non-disturbed natural areas through mandatory clustered development on suitable portions of the Study Area or other means such as density transfers if clustering cannot be achieved. The setback distance for designated or protected migration corridors shall be determined as part of the project's environmental analysis. The intent and emphasis of the Open Space land use designation and of the non-disturbance policy is to ensure continued viability of contiguous or interdependent habitat areas and the

preservation of all movement corridors between related habitats. The intent of mandatory clustering is to provide a mechanism for natural resource protection while allowing appropriate development of private property. Horticultural and grazing projects on agriculturally designated lands are exempt from the restrictions placed on disturbance of natural areas when utilizing "Best Management Practices" (BMPs) recommended by the County Agricultural Commission and adopted by the Board of Supervisors when not subject to Policy 7.1.2.7.

- Policy 7.4.2.3 Consistent with Policy 9.1.3.1 of the Parks and Recreation Element, low impact uses such as trails and linear parks may be provided within river and stream buffers if all applicable mitigation measures are incorporated into the design.
- Policy 7.4.2.4 Establish and manage wildlife habitat corridors within public parks and natural resource protection areas to allow for wildlife use. Recreational uses within these areas shall be limited to those activities that do not require grading or vegetation removal.
- Policy 7.4.2.5 Setbacks from all rivers, streams, and lakes shall be included in the Zoning Ordinance for all ministerial and discretionary development projects.
- Policy 7.4.2.6 El Dorado County Biological Community Conservation Plans shall be required to protect, to the extent feasible, rare, threatened, and endangered plant species only when existing federal or State plans for non-jurisdictional areas do not provide adequate protection.
- Policy 7.4.2.7 The County shall form a Plant and Wildlife Technical Advisory
 Committee to advise the Planning Commission and Board of Supervisors
 on plant and wildlife issues, and the committee should be formed of local
 experts, including agricultural, fire protection, and forestry
 representatives, who will consult with other experts with special
 expertise on various plant and wildlife issues, including representatives
 of regulatory agencies. The Committee shall formulate objectives which
 will be reviewed by the Planning Commission and Board of Supervisors.
- Policy 7.4.2.8 Develop within five years and implement an Integrated Natural Resources Management Plan (INRMP) that identifies important habitat in the County and establishes a program for effective habitat preservation and management. The INRMP shall include the following components:
 - A. Habitat Inventory. This part of the INRMP shall inventory and map the following important habitats in El Dorado County:
 - 1. Habitats that support special-status species;

- 2. Aquatic environments including streams, rivers, and lakes;
- 3. Wetland and riparian habitat;
- 4. Important habitat for migratory deer herds; and
- 5. Large expanses of native vegetation.

The County should update the inventory every three years to identify the amount of important habitat protected, by habitat type, through County programs and the amount of important habitat removed because of new development during that period. The inventory and mapping effort shall be developed with the assistance of the Plant and Wildlife Technical Advisory Committee, CDFW, and USFWS. The inventory shall be maintained and updated by the County Planning Department and shall be publicly accessible.

- B. Habitat Protection Strategy. This component shall describe a strategy for protecting important habitats based on coordinated land acquisitions (see item D below) and management of acquired land. The goal of the strategy shall be to conserve and restore contiguous blocks of important habitat to offset the effects of increased habitat loss and fragmentation elsewhere in the county. The Habitat Protection Strategy should be updated at least once every five years based on the results of the habitat monitoring program (item F below). Consideration of wildlife movement will be given by the County on all future 4- and 6-lane roadway construction projects. When feasible, natural undercrossings along proposed roadway alignments that could be utilized by terrestrial wildlife for movement will be preserved and enhanced.
- C. Mitigation Assistance. This part of the INRMP shall establish a program to facilitate mitigation of impacts to biological resources resulting from projects approved by the County that are unable to avoid impacts on important habitats. The program may include development of mitigation banks, maintenance of lists of potential mitigation options, and incentives for developers and landowner participation in the habitat acquisition and management components of the INRMP.
- D. Habitat Acquisition. Based on the Habitat Protection Strategy and in coordination with the Mitigation Assistance program, the INRMP shall include a program for identifying habitat acquisition opportunities involving willing sellers. Acquisition may be by state or federal land management agencies, private land trusts or mitigation banks, the County, or other public or private organizations. Lands may be acquired in fee or protected through acquisition of a conservation easement designed to protect the core

habitat values of the land while allowing other uses by the fee owner. The program should identify opportunities for partnerships between the County and other organizations for habitat acquisition and management. In evaluating proposed acquisitions, consideration will be given to site specific features (e.g., condition and threats to habitat, presence of special-status species), transaction related features (e.g., level of protection gained, time frame for purchase completion, relative costs), and regional considerations (e.g., connectivity with adjacent protected lands and important habitat, achieves multiple agency and community benefits). Parcels that include important habitat and are located generally to the west of the El Dorado National Forest should be given priority for acquisition. Priority will also be given to parcels that would preserve natural wildlife movement corridors such as crossing under major roadways (e.g., U.S. Highway 50 and across canyons). All land acquired shall be added to the Ecological Preserve overlay area.

- E. Habitat Management. Each property or easement acquired through the INRMP should be evaluated to determine whether the biological resources would benefit from restoration or management actions. Examples of the many types of restoration or management actions that could be undertaken to improve current habitat conditions include: removal of non native plant species, planting native species, repair and rehabilitation of severely grazed riparian and upland habitats, removal of culverts and other structures that impede movement by native fishes, construction of roadway under and overcrossing that would facilitate movement by terrestrial wildlife, and installation of erosion control measures on land adjacent to sensitive wetland and riparian habitat.
- F. Monitoring. The INRMP shall include a habitat monitoring program that covers all areas under the Ecological Preserve overlay together with all lands acquired as part of the INRMP. Monitoring results shall be incorporated into future County planning efforts so as to more effectively conserve and restore important habitats. The results of all special-status species monitoring shall be reported to the CNDDB. Monitoring results shall be compiled into an annual report to be presented to the Board of Supervisors.
- G. Public Participation. The INRMP shall be developed with and include provisions for public participation and informal consultation with local, state, and federal agencies having jurisdiction over natural resources within the County.
- H. Funding. The County shall develop a conservation fund to ensure adequate funding of the INRMP, including habitat maintenance and restoration. Funding may be provided from grants, mitigation fees,

and the County general fund. The INRMP annual report described under item F above shall include information on current funding levels and shall project anticipated funding needs and anticipated and potential funding sources for the following five years.

- Policy 7.4.2.9 The Important Biological Corridor (-IBC) overlay shall apply to lands identified as having high wildlife habitat values because of extent, habitat function, connectivity, and other factors. Lands located within the overlay district shall be subject to the following provisions except that where the overlay is applied to lands that are also subject to the Agricultural District (-A) overlay or that are within the Agricultural Lands (AL) designation, the land use restrictions associated with the -IBC policies will not apply to the extent that the agricultural practices do not interfere with the purposes of the -IBC overlay.
 - Increased minimum parcel size;
 - Higher canopy-retention standards and/or different mitigation standards/thresholds for oak woodlands;
 - Lower thresholds for grading permits;
 - Higher wetlands/riparian retention standards and/or more stringent mitigation requirements for wetland/riparian habitat loss;
 - Increased riparian corridor and wetland setbacks;
 - Greater protection for rare plants (e.g., no disturbance at all or disturbance only as recommended by U.S. Fish and Wildlife Service/California Department of Fish and Wildlife);
 - Standards for retention of contiguous areas/large expanses of other (non-oak or non-sensitive) plant communities;
 - Building permits discretionary or some other type of "site review" to ensure that canopy is retained;
 - More stringent standards for lot coverage, floor area ratio (FAR), and building height; and
 - No hindrances to wildlife movement (e.g., no fences that would restrict wildlife movement).

The standards listed above shall be included in the Zoning Ordinance.

Wildland Fire Safe measures are exempt from this policy, except that Fire Safe measures will be designed insofar as possible to be consistent with the objectives of the Important Biological Corridor.

OBJECTIVE 7.4.3: COORDINATION WITH APPROPRIATE AGENCIES Coordination of wildlife and vegetation protection programs with appropriate federal and State agencies.

PRESERVATION OF OPEN SPACE

GOAL 7.6: OPEN SPACE CONSERVATION

Conserve open space land for the continuation of the County's rural character, commercial agriculture, forestry and other productive uses, the enjoyment of scenic beauty and recreation, the protection of natural resources, for protection from natural hazards, and for wildlife habitat.

OBJECTIVE 7.6.1: IMPORTANCE OF OPEN SPACE

Consideration of open space as an important factor in the County's quality of life.

- Policy 7.6.1.1 The General Plan land use map shall include an Open Space land use designation. The purpose of this designation is to implement the goals and objectives of the Land Use and the Conservation and Open Space Elements by serving one or more of the purposes stated below. In addition, the designations on the land use map for Rural Residential and Natural Resource areas are also intended to implement said goals and objectives. Primary purposes of open space include:
 - A. Conserving natural resource areas required for the conservation of plant and animal life including habitat for fish and wildlife species; areas required for ecologic and other scientific study purposes; rivers, streams, banks of rivers and streams and watershed lands;
 - B. Conserving natural resource lands for the managed production of resources including forest products, rangeland, agricultural lands important to the production of food and fiber; and areas containing important mineral deposits;
 - C. Maintaining areas of importance for outdoor recreation including areas of outstanding scenic, historic and cultural value; areas particularly suited for park and recreation purposes including those providing access to lake shores, beaches and rivers and streams; and areas which serve as links between major recreation and open space reservations including utility easements, banks of rivers and streams, trails and scenic highway corridors;
 - D. Delineating open space for public health and safety including, but not limited to, areas which require special management or regulation because of hazardous or special conditions such as earthquake fault zones, unstable soil areas, flood plains, watersheds, areas presenting high fire risks, areas required for the protection of water quality and water reservoirs, and areas required for the protection and enhancement of air quality; and

- E. Providing for open spaces to create buffers which may be landscaped to minimize the adverse impact of one land use on another.
- *Policy 7.6.1.2 The County will provide for Open Space lands through:*
 - A. The designation of land as Open Space;
 - B. The designation of land for low-intensity land uses as provided in the Rural Residential and Natural Resource land use designations;
 - C. Local implementation of the Federal Emergency Management Agency's National Flood Insurance Program;
 - D. Local implementation of the State Land Conservation Act Program; and
 - E. Open space land set aside through Planned Developments (PDs).
- Policy 7.6.1.3 The County shall implement Policy 7.6.1.1 through zoning regulations and the administration thereof. It is intended that certain districts and certain requirements in zoning regulations carry out the purposes set forth in Policy 7.6.1.1 as follows:
 - A. The Open Space (OS) Zoning District is consistent with and shall implement the Open Space designation of the General Plan land use map and all other land use designations.
 - B. The Agricultural (A), Exclusive Agricultural (AE), Planned Agricultural (PA), Select Agricultural (SA-10), and Timberland Production Zone (TPZ) zoning districts are consistent with Policy 7.6.1.1 and serve one or more of the purposes set forth therein.
 - C. Zoning regulations shall provide for setbacks from all flood plains, streams, lakes, rivers and canals to maintain Purposes A, B, C, and D set forth in Policy 7.6.1.1.
 - D. Zoning regulations shall provide for maintenance of permanent open space in residential, commercial, industrial, agricultural, and residential agricultural zone districts based on standards established in those provisions of the County Code. The regulations shall minimize impacts on wetlands, flood plains, streams, lakes, rivers, canals, and slopes in excess of 30 percent and shall maintain Purposes A, B, C, and D in Policy 7.6.1.1.
 - E. Landscaping requirements in zoning regulations shall provide for vegetative buffers between incompatible land uses in order to maintain Purpose E in Policy 7.6.1.1.

- F. Zoning regulations shall provide for Mineral Resource Combining Zone Districts and/or other appropriate mineral zoning categories which shall be applied to lands found to contain important mineral deposits if development of the resource can occur in compliance with all other policies of the General Plan. Those regulations shall maintain Purposes A, B, C, D, and E of Policy 7.6.1.1.
- Policy 7.6.1.4 The creation of new open space areas, including Ecological Preserves, common areas of new subdivisions, and recreational areas, shall include wildfire safety planning.

3.5.1 El Dorado County General Plan Section 7.4.4.4

The El Dorado County General Plan, adopted in 2004, regulates impacts to tree canopy under General Plan Policy 7.4.4.4. This policy set forth percentages of on-site canopy retention requirements for development projects until the County developed a County-wide strategy. In 2008, the County adopted the *El Dorado County Oak Woodland Management Plan* (OWMP) to implement these General Plan oak woodland protection policies. The County's adoption of the OWMP was challenged in court. In 2012, the Appellate Court upheld the CEQA challenge to the OWMP and directed the County to prepare an Environmental Impact Report for the OWMP. Currently, a General Plan amendment is being prepared to clarify and refine the County's oak tree protection policies.

As a result, only Option "A" of Policy 7.4.4.4 is applicable to oak woodland mitigation. Impacts to oak woodland canopy are currently assessed under the *Interim Interpretive Guidelines* amended October 12, 2007.

Policy 7.4.4.4 For all new development projects (not including agricultural cultivation and actions pursuant to an approved Fire Safe Plan necessary to protect existing structures, both of which are exempt from this policy) that would result in soil disturbance on parcels that (1) are over an acre and have at least 1 percent total canopy cover or (2) are less than an acre and have at least 10 percent total canopy cover by woodlands habitats as defined in this General Plan and determined from base line aerial photography or by site survey performed by a qualified biologist or licensed arborist, the County shall require one of two mitigation options: (1) the project applicant shall adhere to the tree canopy retention and replacement standards described below; or (2) the project applicant shall contribute to the County's Integrated Natural Resources Management Plan (INRMP) conservation fund described in Policy 7.4.2.8.

Option A

The County shall apply the following tree canopy retention standards:

Percent Existing Canopy Cover	Canopy Cover to be Retained
80–100	60% of existing canopy
60–79	70% of existing canopy
40–59	80% of existing canopy
20–39	85% of existing canopy
10-19	90% of existing canopy
1-9 for parcels > 1 acre	90% of existing canopy

Under Option A, the project applicant shall also replace woodland habitat removed at 1:1 ratio. Impacts on woodland habitat and mitigation requirements shall be addressed in a Biological Resources Study and Important Habitat Mitigation Plan as described in Policy 7.4.2.8. Woodland replacement shall be based on a formula, developed by the County, that accounts for the number of trees and acreage affected.

Available information pertaining to the natural resources of the region was reviewed. All references reviewed for this assessment are listed in the **References** section. The following site-specific information was reviewed:

- California Department of Fish and Wildlife (CDFW). 2015. California Natural Diversity Data Base (CNDDB: Coloma, Garden Valley, Slate Mountain, Shingle Springs, Placerville, Camino, Latrobe, Fiddletown, and Aukum U.S. Geological Survey (USGS) 7.5-minute series quadrangles), Sacramento, CA. [Last updated 10/02/2015] (Appendix A);
- California Native Plant Society (CNPS). 2015. Inventory of Rare and Endangered Plants (online edition, v8-01a) (CNPS: *Coloma, Garden Valley, Slate Mountain, Shingle Springs, Placerville, Camino, Latrobe, Fiddletown, and Aukum* quadrangles). [Last updated 10/05/2015] (**Appendix A**);
- U.S. Fish and Wildlife Service (USFWS). 2015. *Information for Planning and Conservation (IPaC) Trust Resource Report: My Project, El Dorado County*. [Last updated 10/02/2015] (**Appendix A**); and
- U.S. Department of Agriculture (USDA), Natural Resource Conservation Service (NRCS). 1974. Soil Survey of El Dorado Area, California. U.S. Department of Agriculture.

A Foothill Associates' biologist conducted biological surveys on March 23, 2015 and August 26, 2015. The biological surveys consisted of conducting a botanical inventory, evaluating biological communities, mapping wetlands and waterways, and documenting habitat for special-status species with the potential to occur within the Study Area. The botanical inventory followed CDFW's (2009) protocol plant surveys. Plants and wildlife observed within the Study Area are identified in **Appendix B**.

5.1 Site Location and Description

The ±7.7-acre Study Area is located within the Sacramento-Placerville Transportation Corridor (SPTC) near the intersection of Oriental Street and Pleasant Valley Road in the unicorporated community of El Dorado, El Dorado County, California. The Study Area is located within Township 10 North, Range 10 East, Section 35 of the *Placerville* quadrangle. The approximate location of the Study Area is 38° 41' 3.509" North, 120° 50' 59.621" West (**Figure 1**).

The Study Area is surrounded by commercial development to the south, oak woodland to the west, non-native annual grassland and disturbed areas to the north, and non-native annual grassland and low density residential development to the east.

5.2 Physical Features

5.2.1 Topography and Drainage

The general topography of the Study Area has been largely influenced by the construction of the railroad. The topography slopes downward from the northwest and northeast of the railroad tracks to the southwest and southeast of the railroad tracks, and then levels out towards the eastern boundary. Elevations range from 1,650 feet above mean sea level (MSL) in the northwestern portion of the Study Area to 1,610 feet above MSL in the southern portion of the Study Area.

The Study Area includes an unnamed intermittent drainage that flows westward through the southern boundary of the Study Area. The unnamed intermittent drainage drains to Slate Creek. Slate Creek is tributary to Dry Creek. Dry Creek is tributary to Weber Creek. Weber Creek is tributary to the American River.

5.2.2 *Soils*

The Natural Resources Conservation Service (NRCS) has mapped three soil units within the Study Area (**Figure 2**). General characteristics associated with these soil types are described below (USDA, NRCS 1974 and 2015).

• (AwD) Auburn Silt Loam, 2 to 30 Percent Slopes: This soil unit occurs on undulating to very steep foothills, typically located between 500 to 1,800 feet above MSL. Bedrock outcroppings occur on the surface of this soil type at a frequency of less than 5 percent. The Auburn series consists of well drained soils underlain by hard metamorphic rocks at a depth of 12 to 26 inches. Permeability is moderate and surface runoff is slow to medium. The hydric soils list for El Dorado County does not identify this soil type as hydric (USDA, NRCS 2014).

- (AxD) Auburn Very Rocky Silt Loam, 2 to 30 Percent Slopes: This soil unit occurs on the more prominent steep to very steep foothills and slopes descending into creek channels and drainageways, typically located between 500 to 1,800 feet above MSL. Bedrock outcroppings occur on the surface of this soil type at a frequency of 5 to 25 percent. The Auburn series consists of well drained soils underlain by hard metamorphic rocks at a depth of 12 to 26 inches. Permeability is moderate and surface runoff is slow to medium. The hydric soils list for El Dorado County does not identify this soil type as hydric (USDA, NRCS 2014).
- (DfC) Diamond Springs Very Fine Sandy Loam, 9 to 15 Percent Slopes: This soil unit is found on mountainous uplands from 1,200 to 2,000 feet. This soil type has a slow permeability, medium runoff, and slight to moderate erosion hazard. The available water holding capacity is four to nine inches. The hydric soils list for El Dorado County does not identify this soil type as hydric (USDA, NRCS 2014).

5.3 Wildlife Corridors

Wildlife corridors link together areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. The fragmentation of open space areas by urbanization creates isolated "islands" of wildlife habitat. Fragmentation can also occur when a portion of one or more habitats is converted into another habitat, such as when woodland or scrub habitat is altered or converted into grasslands after a disturbance such as fire, mudslide, or grading activities. Wildlife corridors mitigate the effects of this fragmentation by: (1) allowing animals to move between remaining habitats, thereby permitting depleted populations to be replenished and promoting genetic exchange; (2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk of catastrophic events (such as fire or disease) on population or local species extinction; and (3) serving as travel routes for individual animals as they move within their home ranges in search of food, water, mates, and other needs.

The Study Area is not part of a major or local wildlife corridor/travel route because it does not connect two significant habitats. The center of the Study Area consists of developed areas comprised of an existing railroad track. A graded road occurs parallel and south-southeast of the railroad track. The unnamed intermittent drainage that borders the southern portion of the Study Area does not act as a wildlife corridor since it initiates approximately one-mile north of the Study Area and flows through residential and commercial development to the south of the Study Area. Therefore, no wildlife corridors occur within the Study Area.

5.4 Biological Communities

The following biological communities occur within the Study Area: non-native annual grassland, disturbed/developed, intermittent drainage, and riparian wetland. **Table 1** summarizes the biological communities by acreages. Dominant vegetation observed within each biological community is discussed in detail below. A comprehensive list of

plants observed within the Study Area is provided in **Appendix B**. The biological communities are depicted in **Figure 3**.

Table 1 — Railroad Park Biological Communities by Acreages

Biological Community	Total Acreage ¹
Non-Native Annual Grassland	3.63
Disturbed/Developed	3.82
Riparian	0.17
Intermittent Drainage	0.05
Ephemeral Drainage	0.01
Depressional Seasonal Wetland	0.02
Total	7.70

¹GIS calculations may not reflect exact acreage of Study Area due to rounding.

5.4.1 Non-Native Annual Grassland

Non-native annual grassland occurs throughout the Study Area. Non-native annual grassland is characterized primarily by an assemblage of non-native grasses and herbaceous species. Dominant vegetation includes: soft chess (*Bromus hordeaceus*), ripgut brome (*Bromus diandrus*), Medusahead (*Elymus caput-medusae*), slender oat (*Avena barbata*), field popcornflower (*Plagiobothrys fulvus* var. *campestris*), wild hyacinth (*Dichelostemma multiflorum*), filaree (*Erodium botrys*), geranium (*Geranium dissectum*), and vetch (*Vicia sativa*). Isolated live oak and blue oak trees occur within the non-native annual grassland.

5.4.2 Disturbed/Developed

Disturbed/developed occurs throughout the Study Area and is comprised of the railroad track and the associated gravel surrounding the railroad track, a graded road, buildings, and paved parking lots. The majority of the disturbed/developed areas lack vegetation aside from a few isolated live oak (*Quercus wislizeni*) and blue oak (*Quercus douglasii*) trees.

5.4.3 Riparian

Riparian habitat occurs along the banks of the intermittent drainage and the ephemeral drainage within the Study Area. Dominant vegetation along the intermittent drainage includes: willow (*Salix* sp.), Himalayan blackberry (*Rubus armeniacus*), curly dock (*Rumex crispus*), English plantain (*Plantago lanceolata*), Fremont cottonwood (*Populus fremontii*), gray pine (*Pinus sabiniana*), valley oak (*Quercus lobata*), live oak, interior live oak, teasel (*Dipsacus* sp.), mugwort (*Artemisia douglasiana*), and greater periwinkle (*Vinca major*). Dominant vegetation along the ephemeral drainage includes: Himalayan blackberry and a single crab apple (*Malus* sp.) tree.

5.4.4 Intermittent Drainage

An unnamed intermittent drainage occurs within the southern portion of the Study Area. Dominant vegetation includes: spikerush (*Eleocharis macrostachya*), yellow cress (*Rorippa curvisiliqua*), and duckweed (*Lemna* sp.).

5.4.5 Ephemeral Drainage

An ephemeral drainage occurs within the western portion of the Study Area. Dominant vegetation includes: Himalayan blackberry.

5.4.6 Depressional Seasonal Wetland

A seasonal wetland occurs within the western portion of the Study Area. Dominant vegetation includes ryegrass (*Festuca perennis*), spreading rush (*Juncus patens*), and pennyroyal (*Mentha pulegium*).

5.5 Wildlife Observed

Commonly occurring wildlife observed within the Study Area includes: western scrub jay (*Aphelocoma californica*), red-tailed hawk (*Buteo jamaicensis*), northern mockingbird (*Mimus polyglottos*), and American bushtit (*Pseudacris regilla*). A comprehensive list of wildlife observed is provided in **Appendix B**.

5.6 Special-Status Species

Special-status species are plant and animal species that have been afforded special recognition by federal, State, or local resource agencies or organizations. Listed and special-status species are of relatively limited distribution and may require specialized habitat conditions. Special-status species are defined as meeting one or more of the following criteria:

- Listed or proposed for listing under the CESA or the FESA;
- Protected under other regulations (e.g. Migratory Bird Treaty Act);
- CDFW Species of Special Concern;
- Plant species ranked by the CNPS; or
- Receive consideration during environmental review under CEQA.

Special-status species considered for this analysis are based on the CNDDB, CNPS, and USFWS lists. CNDDB occurrences of special-status species documented within five miles of the Study Area are illustrated within **Figure 4**. **Appendix C** includes the common and scientific names for each species, regulatory status (federal, State, local, CNPS), habitat descriptions, and potential for occurrence on the Study Area. The following set of criteria has been used to determine each species potential for occurrence within the Study Area:

- **Present**: Species known to occur within the Study Area based on CNDDB records and/or observed within the Study Area during the biological surveys.
- **High**: Species known to occur on or near the Study Area (based on CNDDB records within 5 miles and/or based on professional expertise specific to the Study Area or species) and there is suitable habitat within the Study Area.
- Low: Species known to occur in the vicinity of the Study Area and there is marginal habitat within the Study Area -OR- Species is not known to occur in the vicinity of the site, however, there is suitable habitat on the site.
- None: Species is not known to occur on or in the vicinity of the Study Area and there is no suitable habitat within the Study Area -OR- Species was surveyed for during the appropriate season with negative results -OR- Species is not known in El Dorado County.

Only those species that are known to be present or that have a high or low potential for occurrence will be discussed further in the following paragraphs.

5.6.1 Listed and Special-Status Plants

No special-status plants have the potential to occur within the Study Area.

5.6.2 Listed and Special-Status Wildlife

The following special-status wildlife species have a *high* potential to occur or were observed within the Study Area: western pond turtle, a species of special concern, and migratory birds and other birds of prey. No other special-status species have the potential to occur within the Study Area.

Western Pond Turtle

Western pond turtles are found in ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches with suitable basking sites (Californiaherps 2015). Suitable aquatic habitat typically has a muddy or rocky bottom and has emergent aquatic vegetation for cover (Stebbins 2003). There are four CNDDB records for this species within five miles of the Study Area (**Figure 4**). The intermittent drainage and riparian habitat surrounding the drainage provide habitat for the species. No western pond turtles were observed within the Study Area during the biological survey. This species has a *high* potential to occur within the Study Area.

Migratory Birds and Other Birds of Prey

Migratory birds and other birds of prey, protected under 50 CFR 10 of the MBTA and/or Section 3503 of the California Fish and Game Code, have the potential to nest in the non-native annual grassland, in culverts and burrows along the railroad tracks within the disturbed/developed areas, and within the trees and shrubs within the non-native annual

grassland, riparian habitat, and disturbed/developed areas. Migratory birds and other birds of prey have a *high* potential to nest within the Study Area during the nesting season. The generally accepted nesting season is from February 15 through August 31.

5.7 Sensitive Habitats

Sensitive habitats include those that are of special concern to resource agencies or those that are protected under CEQA, Section 1600 of the California Fish and Game Code, or Section 404 of the Clean Water Act. Additionally, sensitive habitats are protected under the specific policies outlined in the *El Dorado County General Plan*. Sensitive habitats within the Study Area include riparian habitat, potential waters of the U.S., including an intermittent drainage, and oak woodland canopy.

5.7.1 Potential Jurisdictional Waters of the U.S.

Potential jurisdictional waters of the U.S. within the Study Area total approximately 0.08 acres associated with the intermittent drainage (**Figure 3**).

5.7.2 Riparian

Riparian habitat is considered a sensitive habitat. The CDFW asserts jurisdiction over riparian habitat. There are 0.17 acres of riparian habitat (**Figure 3**).

5.7.3 Oak Woodland

Oak woodland habitat is regulated under Section 7.4.4.4 of the *El Dorado County General Plan*. The Study Area contains isolated oak trees within the riparian habitat, disturbed/developed areas, and non-native annual grassland. Although these trees are not considered oak woodland habitat due to their proximity to one another, the oak canopy is greater than one percent of the Study Area.

6.0 DISCUSSION AND RECOMMENDATIONS

Biological constraints within the Study Area include known or potential habitat for:

- Western pond turtle (*Emys marmorata*);
- Migratory birds and raptors; and
- Sensitive habitats (potentially jurisdictional waters of the U.S., riparian habitat, and oak woodland canopy).

6.1 Western Pond Turtle

The intermittent drainage and riparian habitat provide habitat for western pond turtle. A qualified biologist should conduct a pre-construction survey for western pond turtle within 14 days prior to the start of ground disturbance. If no western pond turtle are observed, a letter report documenting the results of the survey should be submitted to the project proponent, and no additional measures are recommended. If construction does not commence within 14 days of the pre-construction survey or halts for more than 14 days, a new survey is recommended.

If western pond turtles are found, additional avoidance measures should be implemented including, but not limited to, the biologist conducting a pre-construction survey within 24 hours prior to commencement of construction activities and having a qualified biologist onsite during all initial ground disturbance including vegetation clearing and grading. If a western pond turtle is found within the construction footprint, the qualified biologist should relocate the individual to a portion of the intermittent drainage or riparian habitat within the intermittent drainage upstream of the construction zone.

6.2 Migratory Birds and Other Birds of Prey

Migratory birds and other birds of prey, protected under 50 CFR 10 of the MBTA and/or Section 3503 of the California Fish and Game Code have the potential to nest in the non-native annual grassland, in the culverts and burrows along the railroad tracks within the disturbed/developed areas, and within the trees and shrubs within the non-native annual grassland, riparian habitat, and disturbed/developed areas. Vegetation clearing operations, including pruning or removal of trees and shrubs, should be completed between September 1 and February 14, if feasible. If vegetation removal begins during the nesting season (February 15 to August 31), a qualified biologist should conduct a preconstruction survey for active nests. The pre-construction survey should be conducted within 14 days prior to commencement of ground-disturbing activities. If the preconstruction survey shows that there is no evidence of active nests, then a letter report would be submitted to the project proponent for their records and no additional measures are recommended. If construction does not commence within 14 days of the preconstruction survey, or halts for more than 14 days, an additional pre-construction survey is recommended.

If any active nests are located within the Study Area, an appropriate buffer zone should be established around the nests, as determined by the biologist. The biologist should mark the buffer zone with construction tape or pin flags and maintain the buffer zone until the end of breeding season or until the young have successfully fledged. Buffer zones are typically 100 feet for migratory bird nests and 250 feet for raptor nests. If active nests are found onsite, a qualified biologist should monitor nests weekly during construction to evaluate potential nesting disturbance by construction activities. If establishing the typical buffer zone is impractical, the qualified biologist may reduce the buffer depending on the species and daily monitoring is recommended to ensure that the nest is not disturbed and no forced fledging occurs. Daily monitoring should occur until the qualified biologist determines that the nest is no longer occupied.

6.3 Sensitive Habitats

Potential jurisdictional waters of the U.S. within the Study Area total approximately 0.08 acres. These areas are potentially regulated by Sections 404 and 401 of the Clean Water Act. Additionally, these areas are protected under the *El Dorado County General Plan*. Should the Proposed Project result in impacts to any waters of the U.S. and waters of the State, then a Section 404 Permit should be obtained by the U.S. Army Corps of Engineers (Corps) and a Section 401 Water Quality Certification should be obtained by the Regional Water Quality Control Board (RWQCB) prior to the issuance of a grading permit. Any waters of the U.S. or jurisdictional wetlands that would be lost or disturbed should be replaced or rehabilitated on a "no-net-loss" basis in accordance with the Corps mitigation guidelines. Habitat restoration, rehabilitation, and/or replacement should be at a location and by methods agreeable to the Corps and RWQCB.

In addition, if the Proposed Project results in impacts to the bed and bank of the intermittent drainage or results in the removal of riparian vegetation, a Section 1600 Streambed Alteration Agreement may be required prior to the issuance of a grading permit. In addition, a minimum setback of 50 feet from the intermittent drainage and the seasonal wetland is recommended, in accordance with Policy 7.3.3.4 of the *El Dorado County General Plan*. Exceptions to riparian and wetland buffer and setback requirements may be permitted so long as appropriate mitigation measures and Best Management Practices (BMPs) are incorporated into the project design and are approved by El Dorado County.

If any oak trees are slated for removal, an Oak Woodland Canopy Assessment should be prepared for the Study Area. Option A under General Plan Policy 7.4.4.4 requires projects that involve more than one acre of soil disturbance with at least one percent of canopy cover by woodlands to adhere to the tree canopy retention and replacement standards.

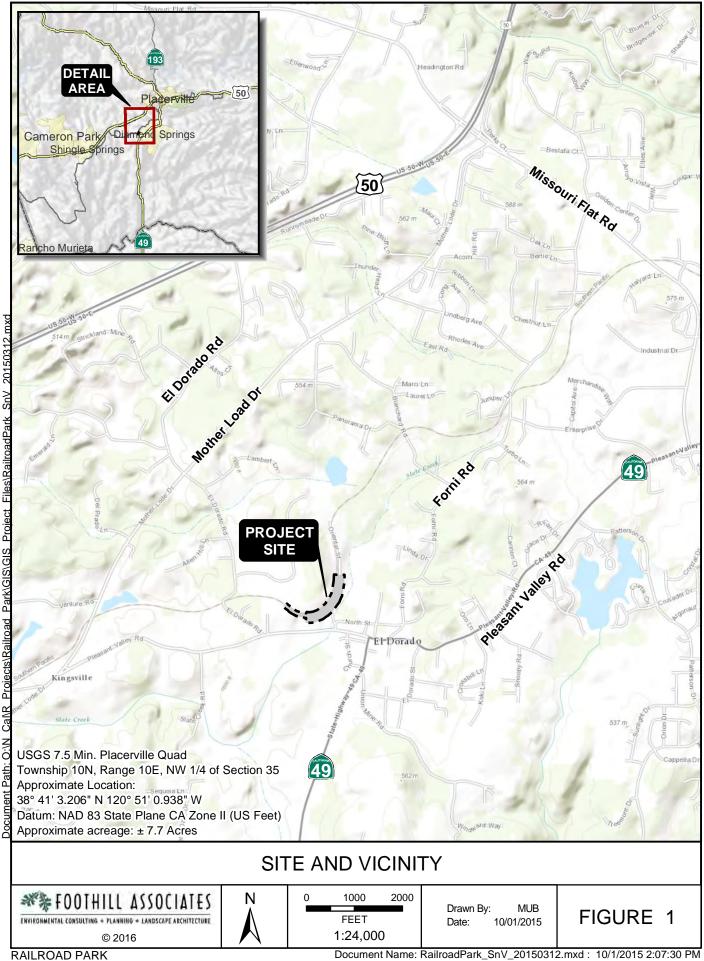
6.4 Summary of Avoidance and Minimization Measures

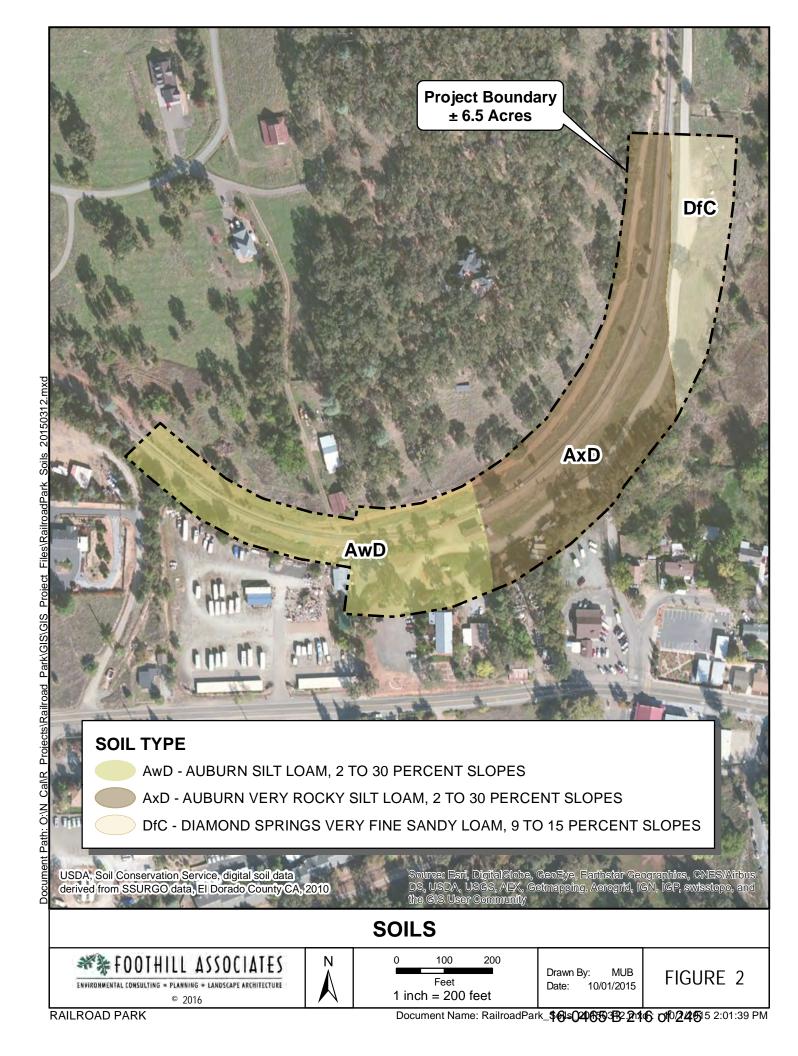
• Conduct clearing and tree and shrub removal operations between September 1 and February 14 to minimize potential impacts to nesting birds;

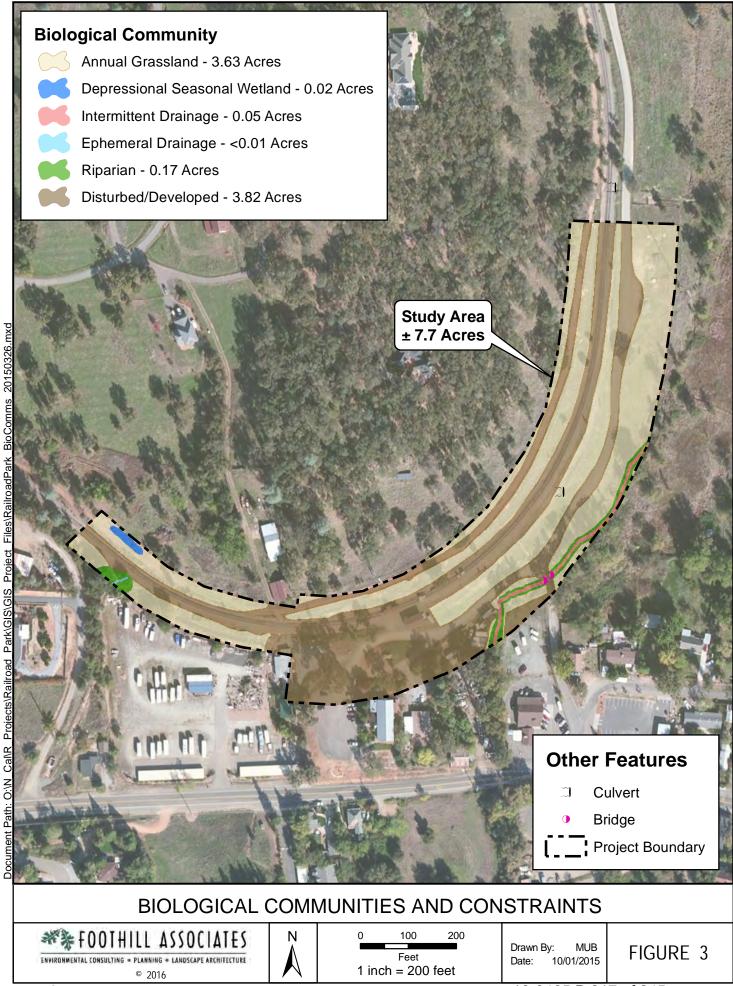
- If construction begins or trees are anticipated for removal during the nesting season (February 15 August 31), conduct a pre-construction survey for active bird nests within the Study Area within 14 days prior to initiation of construction activities;
- Within 14 days prior to the initiation of construction activities, conduct a preconstruction survey for western pond turtle; and
- Prepare an Oak Woodland Canopy Assessment for oak woodland habitat within El Dorado County, in accordance with Option A under *El Dorado County General Plan Policy 7.4.4.4*, if disturbance thresholds are met.

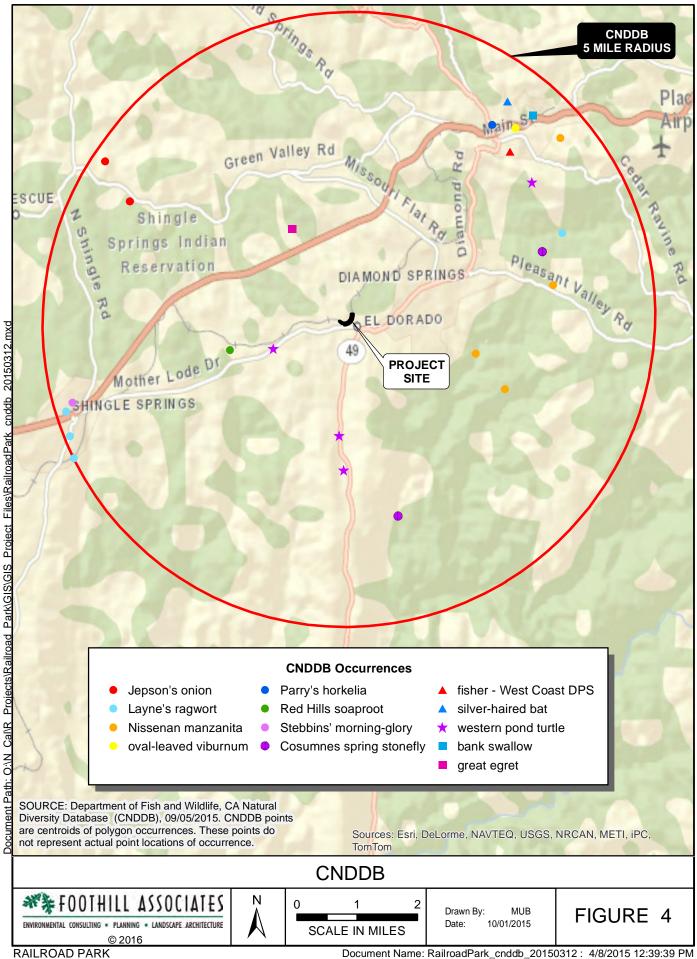
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CDFW CNDDB: Placerville, Garden Valley, Coloma, Shingle Springs, Latrobe, Fiddletown, Slate Mountain, Camino, and Aukum Quadrangles

10/2/2015 Print View

CALIFORNIA DEPARTMENT OF

FISH and WILDLIFE RareFind

Query Summary:
Quad IS (Aukum (3812056) OR Camino (3812066) OR Coloma (3812078) OR Fiddletown (3812057) OR Garden Valley (3812077) OR Latrobe (3812058) OR Placerville (3812067) OR Shingle Springs (3812068) OR Slate Mtn. (3812076))

Print

Close

CNDDB Element Query Results

Scientific Name	Common Name	Taxonomic Group	Element Code	Total	Returned Occs	Federal Status	State Status	Global Rank			Other Status	Habitats
Accipiter gentilis	northem goshawk	Birds	ABNKC12060	427	1	None	None	G5	S3	null	BLM_S- Sensitive CDF_S- Sensitive CDFW_SSC- Species of Special Concern IUCN_LC-Least Concern USFS_S- Sensitive	North coast coniferous forest Subalpine coniferous forest Upper montane coniferous forest
Agelaius tricolor	tricolored blackbird	Birds	ABPBXB0020	560	1	None	None	G2G3	\$1\$2	null	BLM_S- Sensitive CDFW_SSC- Species of Special Concem IUCN_EN- Endangered NABCI_RWL- Red Watch List USFWS_BCC- Birds of Conservation Concem	Freshwater marsh Marsh & swamp Swamp Wetland
Allium jepsonii	Jepson's onion	Monocots	PMLIL022V0	27	2	None	None	G1	S1	1B.2	BLM_S- Sensitive USFS_S- Sensitive	Cismontane woodland Lower montane coniferous forest Ultramafic
Arctostaphylos nissenana	Nissenan manzanita	Dicots	PDERI040V0	13	10	None	None	G1	S1	1B.2	BLM_S- Sensitive USFS_S- Sensitive	Chaparral Closed-cone coniferous forest
Ardea alba	great egret	Birds	ABNGA04040	35	1	None	None	G5	S4	null	CDF_S- Sensitive IUCN_LC-Least Concern	Brackish marsh Estuary Freshwater marsh Marsh & swamp Riparian forest Wetland
											CDF_S- Sensitive16-04	Brackish marsh Estuary 655899297113612443rsh &

2/2/2015 Print View												
Ardea herodias	great blue heron	Birds	ABNGA04010	134	1	None	None	G5	S4	null	IUCN_LC-Least Concern	swamp Riparian forest Wetland
Calochortus clavatus var. avius	Pleasant Valley mariposa-lily	Monocots	PMLIL0D095	107	2	None	None	G4T2	S2	1B.2	BLM_S- Sensitive USFS_S- Sensitive	Lower montane coniferous forest
Calystegia stebbinsii	Stebbins' morning- glory	Dicots	PDCON040H0	13	8	Endangered	Endangered	G1	S1	1B.1	SB_RSABG- Rancho Santa Ana Botanic Garden	Chaparral Cismontane woodland Ultramafic
Calystegia vanzuukiae	Van Zuuk's morning- glory	Dicots	PDCON040Q0	9	1	None	None	G2Q	S2	1B.3	null	Chaparral Cismontane woodland Ultramafic
Ceanothus roderickii	Pine Hill ceanothus	Dicots	PDRHA04190	8	5	Endangered	Rare	G1	S1	1B.2	SB_RSABG- Rancho Santa Ana Botanic Garden	Chaparral Cismontane woodland Ultramafic
Central Valley Drainage Hardhead/Squawfish Stream	Central Valley Drainage Hardhead/Squawfish Stream	Inland Waters	CARA2443CA	11	1	None	None	GNR	SNR	null	null	null
Central Valley Drainage Resident Rainbow Trout Stream	Central Valley Drainage Resident Rainbow Trout Stream	Inland Waters	CARA2421CA	5	1	None	None	GNR	SNR	null	null	null
Chlorogalum grandiflorum	Red Hills soaproot	Monocots	PMLIL0G020	82	15	None	None	G2	S2	1B.2	BLM_S- Sensitive	Chaparral Cismontane woodland Lower montane coniferous forest Ultramafic
Clarkia biloba ssp. brandegeeae	Brandegee's clarkia	Dicots	PDONA05053	89	10	None	None	G4G5T4	S4	4.2	BLM_S- Sensitive	Chaparral Cismontane woodland Lower montane coniferous forest
Cosumnoperla hypocrena	Cosumnes stripetail	Insects	IIPLE23020	12	6	None	None	G2	S2	null	null	Aquatic
Crocanthemum suffrutescens	Bisbee Peak rush- rose	Dicots	PDCIS020F0	31	8	None	None	G2Q	S2	3.2	null	Chaparral Ione formation Ultramafic
Emys marmorata	western pond turtle	Reptiles	ARAAD02030	1146	7	None	None	G3G4	S3	null	BLM_S- Sensitive CDFW_SSC- Species of Special Concern IUCN_VU- Vulnerable USFS_S- Sensitive	Aquatic Artificial flowing waters Klamath/North coast flowing waters Klamath/North coast standing waters Marsh & swamp Sacramento/San Joaquin flowing waters Sacramento/San Joaquin standing waters South coast flowing waters South coast standing waters Wetland
Fremontodendron decumbens	Pine Hill flannelbush	Dicots	PDSTE03030	10	5	Endangered	Rare	G1	S1	1B.2	SB_RSABG- Rancho Santa Ana Botanic Garden SB_UCBBG-UC Berkeley Botanical Garden	Chaparral Cismontane woodland Ultramafic
Galium californicum ssp. sierrae	El Dorado bedstraw	Dicots	PDRUB0N0E7	16	12	Endangered	Rare	G5T1	S1	1B.2	SB_RSABG- Rancho Santa Ana Botanic 16-04	Chaparral Cismontane woodland Lower montane conference forest LUltramafic 65 B 222 Of 245

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Horkelia parryi	Parry's horkelia	Dicots	PDROS0W0C0	36	8	None	None	G2	S2	1B.2	Garden BLM_S- Sensitive USFS_S- Sensitive	Chaparral Cismontane woodland Ione formation
Lasionycteris noctivagans	silver-haired bat	Mammals	AMACC02010	138	3	None	None	G5	S3S4	null	IUCN_LC-Least Concern WBWG_M- Medium Priority	Lower montane coniferous forest Oldgrowth Riparian forest
Myotis yumanensis	Yuma myotis	Mammals	AMACC01020	260	2	None	None	G5	S4	null	BLM_S- Sensitive IUCN_LC-Least Concem WBWG_LM- Low-Medium Priority	Lower montane coniferous forest Riparian forest Riparian woodland Upper montane coniferous forest
Packera layneae	Layne's ragwort	Dicots	PDAST8H1V0	48	24	Threatened	Rare	G2	S2	1B.2	SB_RSABG- Rancho Santa Ana Botanic Garden	Chaparral Cismontane woodland Ultramafic
Pekania pennanti	fisher - West Coast DPS	Mammals	AMAJF01021	680	1	Proposed Threatened	Candidate Threatened	G5T2T3Q	S2S3	null	BLM_S- Sensitive CDFW_SSC- Species of Special Concem USFS_S- Sensitive	North coast coniferous forest Oldgrowth Riparian forest
Phrynosoma blainvillii	coast horned lizard	Reptiles	ARACF12100	728	4	None	None	G3G4	S3S4	null	BLM_S- Sensitive CDFW_SSC- Species of Special Concern IUCN_LC-Least Concern	Chaparral Cismontane woodland Coastal bluff scrut Coastal scrub Desert wash Pinon & juniper woodlands Riparian scrub Riparian woodland Valley & foothill grassland
Rana boylii	foothill yellow-legged frog	Amphibians	AAABH01050	810	3	None	None	G3	S3	null	BLM_S- Sensitive CDFW_SSC- Species of Special Concern IUCN_NT-Near Threatened USFS_S- Sensitive	Aquatic Chaparral Cismontane woodland Coastal scrub Klamath/North coast flowing waters Lower montane coniferous forest Meadow & seep Riparian forest Riparian woodland Sacramento/San Joaquin flowing waters
Rana draytonii	California red-legged frog	Amphibians	AAABH01022	1374	1	Threatened	None	G2G3	S2S3	null		Aquatic Artificial flowing waters Artificial standing waters Freshwater marsh Marsh & swamp Riparian forest Riparian scrub Riparian woodland Sacramento/San Joaquin flowing waters Sacramento/San Joaquin standing waters South coast flowing waters South coast standing waters Wetland 65 B 223 of 245

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Riparia riparia	bank swallow	Birds	ABPAU08010	296	1	None	Threatened	G5	S2	null		Riparian scrub Riparian woodland
Sacramento-San Joaquin Foothill/Valley Ephemeral Stream	Sacramento-San Joaquin Foothill/Valley Ephemeral Stream	Inland Waters	CARA2130CA	1	1	None	None	GNR	SNR	null	null	null
Strix nebulosa	great gray owl	Birds	ABNSB12040	75	3	None	Endangered	G5	S1	null	Concern	Lower montane coniferous forest Oldgrowth Subalpine coniferous forest Upper montane coniferous forest
Vibumum ellipticum	oval-leaved vibumum	Dicots	PDCPR07080	38	1	None	None	G4G5	S3?	2B.3	null	Chaparral Cismontane woodland Lower montane coniferous forest
Wyethia reticulata	El Dorado County mule ears	Dicots	PDAST9X0D0	25	15	None	None	G2	S2	1B.2	SB_RSABG-	Chaparral Cismontane woodland Lower montane coniferous forest Ultramafic

CNPS Inventory of Rare and Endangered: Placerville, Garden Valley, Coloma, Shingle Springs, Latrobe, Fiddletown, Slate Mountain, Camino, and Aukum Quadrangles



Rare and Endangered Plant Inventory

Plant List

26 matches found. Click on scientific name for details

Search Criteria

Found in 9 Quads around 38120F7

Scientific Name	Common Name	Family	Lifeform	Rare Plant Rank	State Rank	Global Rank
Allium jepsonii	Jepson's onion	Alliaceae	perennial bulbiferous herb	1B.2	S1	G1
Allium sanbornii var. congdonii	Congdon's onion	Alliaceae	perennial bulbiferous herb	4.3	S3	G3T3
Arctostaphylos mewukka ssp. truei	True's manzanita	Ericaceae	perennial evergreen shrub	4.2	S3	G4?T3
<u>Arctostaphylos nissenana</u>	Nissenan manzanita	Ericaceae	perennial evergreen shrub	1B.2	S1	G1
Bolandra californica	Sierra bolandra	Saxifragaceae	perennial herb	4.3	S4	G4
Calochortus clavatus var. avius	Pleasant Valley mariposa lily	Liliaceae	perennial bulbiferous herb	1B.2	S2	G4T2
Calystegia stebbinsii	Stebbins' morning-glory	Convolvulaceae	perennial rhizomatous herb	1B.1	S1	G1
Calystegia vanzuukiae	Van Zuuk's morning-glory	Convolvulaceae	perennial rhizomatous herb	1B.3	S2	G2Q
Ceanothus fresnensis	Fresno ceanothus	Rhamnaceae	perennial evergreen shrub	4.3	S4	G4
Ceanothus roderickii	Pine Hill ceanothus	Rhamnaceae	perennial evergreen shrub	1B.1	S1	G1
Chlorogalum grandiflorum	Red Hills soaproot	Agavaceae	perennial bulbiferous herb	1B.2	S2	G2
Clarkia biloba ssp. brandegeeae	Brandegee's clarkia	Onagraceae	annual herb	4.2	S4	G4G5T4
Clarkia virgata	Sierra clarkia	Onagraceae	annual herb	4.3	S3	G3
Claytonia parviflora ssp. grandiflora	streambank spring beauty	Montiaceae	annual herb	4.2	S3	G5T3
Crocanthemum suffrutescens	Bisbee Peak rush-rose	Cistaceae	perennial evergreen shrub	3.2	S2	G2Q
Delphinium hansenii ssp. ewanianum	Ewan's larkspur	Ranunculaceae	perennial herb	4.2	S3	G4T3
Erigeron miser	starved daisy	Asteraceae	perennial herb	1B.3	S2	G2
Fremontodendron decumbens	Pine Hill flannelbush	Malvaceae	perennial evergreen shrub	1B.2	S1	G1
Galium californicum ssp. sierrae	El Dorado bedstraw	Rubiaceae	perennial herb	1B.2	S1	G5T1
Horkelia parryi	Parry's horkelia	Rosaceae	perennial herb	1B.2 16-04	S2 165 B 226	G2 of 245

Lilium humboldtii ssp. humboldtii	Humboldt lily	Liliaceae	perennial bulbiferous herb	4.2	S3	G4T3
Navarretia prolifera ssp. lutea	yellow bur navarretia	Polemoniaceae	annual herb	4.3	S3	G4T3
Packera layneae	Layne's ragwort	Asteraceae	perennial herb	1B.2	S2	G2
Trichostema rubisepalum	Hernandez bluecurls	Lamiaceae	annual herb	4.3	S4	G4
Viburnum ellipticum	oval-leaved viburnum	Adoxaceae	perennial deciduous shrub	2B.3	S3?	G4G5
Wyethia reticulata	El Dorado County mule ears	Asteraceae	perennial herb	1B.2	S2	G2

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<u>The California Database</u>
<u>The California Lichen Society</u>

Contributors

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USFWS List for Federal Endangered and Threatened Species that may be affected by Projects in the Placervillee 7.5-minute series Quad and El Dorado County Species List

U.S. Fish & Wildlife Service

My project El Dorado County, California

This project potentially impacts **27 resources** managed or regulated by the U.S. Fish & Wildlife Service

Endangered species

Proposed, candidate, threatened, and endangered species that are managed by the <u>Endangered Species</u> <u>Program</u> and should be considered as part of an effect analysis for this project.

Amphibians

California Red-legged Frog Rana draytonii

Threatened (A species likely to become endangered within the foreseeable future throughout all or a significant portion of its range)

Fishes

Threatened (A species likely to become endangered within the foreseeable future throughout all or a significant portion of its range)

Steelhead Oncorhynchus (=Salmo) mykiss

Threatened (A species likely to become endangered within the foreseeable future throughout all or a significant portion of its range)

Flowering Plants

Layne's Butterweed Senecio layneae

Threatened (A species likely to become endangered within the foreseeable future throughout all or a significant portion of its range)

Critical habitats

Potential effects to critical habitat(s) within the project area must be analyzed along with the endangered species themselves.

THERE IS NO CRITICAL HABITAT WITHIN THIS PROJECT AREA

Migratory birds

Birds are protected by the <u>Migratory Bird Treaty Act</u> and the Bald and Golden Eagle Protection Act.

Any activity which results in the take (to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct) of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service (1). There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

You are responsible for complying with the appropriate regulations for the protection of birds as part of this project. This involves analyzing potential impacts and implementing appropriate conservation measures for all project activities.

Bald Eagle Haliaeetus leucocephalus

Year-round

Black Rail Laterallus jamaicensis

Season: Breeding

Black Swift Cypseloides niger

Season: Breeding

Black-chinned Sparrow Spizella atrogularis

Season: Breeding

Brewer's Sparrow Spizella breweri

Season: Breeding

Burrowing Owl Athene cunicularia

Year-round

California Spotted Owl Strix occidentalis occidentalis

Year-round

Calliope Hummingbird Stellula calliope

Season: Breeding

Costa's Hummingbird Calypte costae

Season: Breeding

Flammulated Owl Otus flammeolus

Season: Breeding

Fox Sparrow Passerella iliaca

Year-round

Green-tailed Towhee Pipilo chlorurus

Season: Breeding

Lewis's Woodpecker Melanerpes lewis

Season: Wintering

Loggerhead Shrike Lanius ludovicianus

Year-round

Nuttall's Woodpecker Picoides nuttallii

Year-round

Oak Titmouse Baeolophus inornatus

Year-round

Olive-sided Flycatcher Contopus cooperi

Season: Breeding

Peregrine Falcon Falco peregrinus

Season: Wintering

Short-eared Owl Asio flammeus

Season: Wintering

Snowy Plover Charadrius alexandrinus

Season: Breeding

White Headed Woodpecker Picoides albolarvatus

Year-round

Williamson's Sapsucker Sphyrapicus thyroideus

Year-round

Yellow-billed Magpie Pica nuttalli

Year-round

Wildlife refuges

Any activity proposed on <u>National Wildlife Refuge</u> lands must undergo a 'Compatibility Determination' conducted by the Refuge. If your project overlaps or otherwise impacts a Refuge, please contact that Refuge to discuss the authorization process.

THERE ARE NO REFUGES WITHIN THIS PROJECT AREA

Wetlands in the National Wetlands Inventory

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

Project proponents should discuss the relationship of these requirements to their project with the Regulatory Program of the appropriate <u>U.S. Army Corps of Engineers District</u>.

THERE ARE NO WETLANDS IDENTIFIED IN THIS PROJECT AREA

Appendix B — Plants and Wildlife Observed within the Railroad Park Study Area

Family	Scientific Name	Common Name	*
Apiaceae	Daucus carota	Carrot, Queen Anne's lace	Invasive
Apocynaceae	Vinca major	Greater periwinkle	Invasive
Araceae	Lemna sp.	Duckweed	Native
Asteraceae	Artemisia douglasiana	Mugwort	Native
Asteraceae	Centaurea solstitialis	Yellow star-thistle	Invasive
Asteraceae	Cichorium intybus	Chicory	Invasive
Asteraceae	Erigeron bonariensis	Flax-leaved horseweed	Invasive
Asteraceae	Gnaphalium palustre	Cudweed	Native
Asteraceae	Helminthotheca echioides	Bristly ox-tongue	Invasive
Asteraceae	Lactuca serriola	Prickly lettuce	Invasive
Asteraceae	Matricaria discoidea	Pineapple weed, rayless chamomile	Invasive
Boraginaceae	Amsinckia menziesii	Common fiddleneck	Native
Boraginaceae	Nemophila maculata	Fivespot	Native
Boraginaceae	Plagiobothrys fulvus var. campestris	Field popcornflower	Native
Brassicaceae	Rorippa curvisiliqua	Yellow cress	Native
Caryophyllaceae	Stellaria media	Common chickweed	Invasive
Convolvulaceae	Convolvulus arvensis	Bindweed, orchard morning-glory	Invasive
Cyperaceae	Eleocharis macrostachya	Spikerush	Native
Dipsacaceae	Dipsacus sp.	Teasel	Invasive
Fabaceae	Lathyrus sp.	Wild pea	
Fabaceae	Lupinus bicolor	Miniature lupine	Native
Fabaceae Fabaceae	Medicago polymorpha Vicia sativa	California burclover Vetch	Invasive Invasive
Fagaceae	Quercus douglasii	Blue oak	Native
_		Valley oak, roble	Native
Fagaceae	Quercus lobata		
Fagaceae	Quercus wislizeni	Interior live oak	Native
Geraniaceae	Erodium botrys	Storksbill, filaree	Invasive
Geraniaceae	Erodium cicutarium	Redstem filaree	Invasive
Geraniaceae	Geranium dissectum	Cranesbill, geranium	Invasive
Juncaceae	Juncus patens	Spreading rush	Native
Lamiaceae	Lamium amplexicaule	Henbit	Invasive
Lamiaceae	Mentha pulegium	Pennyroyal	Invasive
Montiaceae	Calandrinia ciliata	Red maids	Native
Papaveraceae	Eschscholzia californica	California poppy	Native
Papaveraceae	Eschscholzia lobbii	Frying pans	Native
Pinaceae	Pinus sabiniana	Gray, ghost, or foothill pine	Native
Plantaginaceae	Plantago lanceolata	English plantain	Invasive
Poaceae	Aira caryophyllea	Silver hair grass	Invasive
Poaceae	Avena barbata	Slender wild oat	Invasive
Poaceae	Bromus diandrus	Ripgut grass	Invasive
Poaceae	Bromus hordeaceus	Soft chess	Invasive
Poaceae	Cynosurus echinatus	Bristly dogtail grass	Invasive
Poaceae	Elymus caput-medusae	Medusahead	Invasive
Poaceae	Festuca myuros	Rattail sixweeks grass	Invasive
Polygonaceae	Rumex acetosella	Sheep sorrel	Invasive
Polygonaceae	Rumex crispus	Curly dock	Invasive
Rosaceae	Rubus armeniacus	Himalayan blackberry	Invasive
Salicaceae	Salix sp.	Willow	
Scrophulariaceae	Verbascum blattaria	Moth mullein	Invasive
Simaroubaceae	Ailanthus altissima	Tree of heaven	Invasive
Themidaceae	Dichelostemma multiflorum	Wild hyacinth	Native
Verbenaceae	Verbena sp.	Vervain	
Viscaceae	Phoradendron sp.	Mistletoe	Native

Appendix B

Wildlife Observed within the Railroad Park Study Area

Scientific Name	Common Name
Mammals	
Spermophilus beecheyi	California ground squirrel
Birds	
Aphelocoma californica	Western scrub jay
Branta canadensis	Canada goose
Buteo jamaicensis	Red-tailed hawk
Cathartes aura	Turkey vulture
Corvus brachyrhyncos	American crow
Melanerpes formicivorus	Acorn woodpecker
Mimus polyglottos	Northern mockingbird
Psaltriparus minimus	American bushtit
Amphbians	
Pseudacris regilla	Northern Pacific treefrog

Appendix C — Regionally Occurring Listed and Special-Status Species

Special-Status Species	Regulatory Status (Federal; State; Local; CNPS)	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
Plants				
Congdon's onion Allium sanbornii var. congdonii	;; 4.3	Perennial bulbiferous herb found in serpentinite or volcanic substrate in chaparral or cismontane woodland from 300 to 990 meters.	Blooming period: April – July	None ; The Study Area does not provide habitat or soils for this species.
True's manzanita Arctostaphylos mewukka ssp. truei	;; 4.2	Perennial evergreen shrub found in chaparral and lower montane coniferous forests, sometimes roadside from 425 to 1,390 meters.	Blooming period: February – July	None ; The Study Area does not provide habitat for this species.
Ewan's larkspur Delphinium hansenii ssp. ewanianum	;; 4.2	Perennial herb found in rocky soils in cismontane woodland and valley and foothill grassland from 60 to 600 meters.	Blooming period: March – May	None; Although the non-native annual grassland within the Study Area provides habitat, this species was not observed during the March 23, 2015 biological survey that was conducted during the evident and identifiable blooming period.
Humboldt lily <i>Lilium humboldtii</i> ssp. <i>humboldtii</i>	;; 4.2	Perennial bulbiferous herb found in openings in chaparral, cismontane woodland, and lower montane coniferous forest from 90 to 1,280 meters.	Blooming period: May – July	None ; The Study Area does not provide habitat for this species.
Yellow bur navarretia Navarretia prolifera ssp. lutea	;; 4.3	Annual herb found in chaparral and cismontane woodland from 853 to 1,402 meters.	Blooming period: May – July	None ; The Study Area occurs outside of the known elevation range and does not provide habitat for this species.
Oval-leaved viburnum Viburnum ellipticum	;; 2.3	Perennial deciduous shrub found in chaparral, cismontane woodland, and lower montane coniferous forest from 215 to 1,400 meters. One CNDDB occurrence is documented within 5 miles of the Study Area (CDFW 2015).	Blooming period: May – June	None; The Study Area does not provide habitat for this species.
Nissenan manzanita Arctostaphylos nissenana	;; 1B.2	Perennial evergreen shrub found on rocky substrate in closed cone coniferous forest and chaparral from 450 to 1,100 meters.	Blooming period: February – March	None; The Study Area does not provide habitat for this species.
Sierra bolandra Bolandra californica	;; 4.3	Perennial herb found in mesic or rocky soils in lower and upper montane coniferous forest from 975 to 2,450 meters.	Blooming period: June – July	None ; The Study Area occurs outside of the known elevation range and does not provide habitat for this species.
Pleasant Valley mariposa lily Calochortus clavatus var. avius	;; 1B.2	Perennial bulbiferous herb found in Josephine silt loam or volcanic soils in lower montane coniferous forest from 305 to 1,800 meters.	Blooming period: May – July	None; The Study Area does not provide habitat for this species.

Special-Status Species	Regulatory Status (Federal; State; Local; CNPS)	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
Van Zuuk's morning-glory Calystegia vanzuukiae	;; 1B.3	Perennial rhizomatous herb found in gabbroic or serpentinite soils in chaparral and cismontane woodland from 500 to 1,180 meters.	Blooming period: May – August	None ; The Study Area does not provide habitat for this species.
Sierra clarkia Clarkia virgata	;; 4.3	Annual herb found in cismontane woodland and lower montane coniferous forest from 400 to 1,615 meters.	Blooming period: May – August	None ; The Study Area does not provide habitat for this species.
Streambank spring beauty Claytonia parviflora ssp. grandiflora	;; 4.2	Annual herb found in rocky soils in cismontane woodland from 250 to 1,200 meters.	Blooming period: February – May	None; The Study Area does not provide habitat for this species.
Bisbee Peak rush-rose Crocanthemum suffrutescens	;; 3	Perennial evergreen shrub found often on gabbroic or ione soils, often in burned or disturbed areas and chaparral from 75 to 670 meters.	Blooming period: April – August.	None; The Study Area does not provide habitat for this species.
Brandegee's clarkia Clarkia biloba ssp. biloba	;; 4	Annual herb found often in roadcuts within chaparral, cismontane woodland, and lower montane coniferous forest from 75 to 915 meters.	Blooming period: May – July.	None; The Study Area does not provide habitat for this species.
El Dorado bedstraw Galium californicum ssp. sierrae	FE; CR;; 1B	Perennial herb found on gabbroic soils within chaparral, cismontane woodland, and lower coniferous forest from 100 to 585 meters.	Blooming period: May – June.	None; The Study Area does not provide habitat for this species.
El Dorado mule ears Wyethia reticulata	; ;; 1B	Perennial herb found on clay or gabbroic soils in chaparral, cismontane woodland, and lower montane coniferous forest from 185 to 630 meters.	Blooming period: April – August.	None; The Study Area does not provide habitat for this species.
Fresno ceanothus Ceanothus fresnensis	;; 4	Perennial evergreen shrub found in openings of cismontane woodland and lower montane coniferous forest from 900 to 2,103 meters.	Blooming period: May – July.	None ; The Study Area occurs outside of the known elevation range and does not provide habitat for this species.
Hernandez bluecurls Trichostema rubisepalum	;;; 4	Annual herb found on volcanic or serpentinite, gravelly substrate within broad-leafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, and vernal pools from 300 to 1,435 meters.	Blooming period: June – August.	None ; The Study Area does not provide habitat for this species.
Jepson's onion Allium jepsonii	;; 1B	Perennial bulbiferous herb found on serpentine or volcanic soils in chaparral, lower montane coniferous forest, and cismontane woodland from 300 to 1,320 meters. Two CNDDB occurrences are documented within 5 miles of the Study Area (CDFW 2015).	Blooming period: April – August.	None; The Study Area does not provide habitat for this species.

2

Special-Status Species	Regulatory Status (Federal; State; Local; CNPS)	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
Layne's butterweed (=ragwort) Packera layneae	rocky soils in cismontane wood from 200 to 1,085 meters. Four CNDDB occurrences are of		Blooming period: April – August.	None; The Study Area does not provide habitat for this species.
	1.0	miles of the Study Area (CDFW 2015).	DI :	
Parry's horkelia Horkelia parryi	;; 1B	Perennial herb found on Ione formation in chaparral and cismontane woodland from 80 to 1,070 meters. One CNDDB occurrence is documented within 5 miles of the Study Area (CDFW 2015).	Blooming period: April – September.	None ; The Study Area does not provide habitat or soils for this species.
Pine Hill ceanothus Ceanothus roderickii	FE; CR;; 1B	Perennial evergreen shrub found in chaparral or cismontane woodland on serpentine or gabbro soils from 245 to 630 meters.	Blooming period: April – June.	None; The Study Area does not provide habitat or soils for this species.
Pine Hill flannelbush Fremontodendron decumbens	FE; CR;; 1B	Perennial evergreen shrub found in chaparral and cismontane woodland on rocky, gabbroic, or serpentinite soils from 425 to 760 meters.	Blooming period: April – July.	None; The Study Area does not provide habitat or soils for this species.
Red Hills soaproot Chlorogalum grandiflorum	;; 1B	Perennial bulbiferous herb found on gabbro, serpentine, or other soils in chaparral, cismontane woodland, and lower montane coniferous forest from 245 to 1,240 meters. One CNDDB occurrence is documented within 5 miles of the Study Area (CDFW 2015).	Blooming period: May – June.	None; The Study Area does not provide habitat or soils for this species.
Starved daisy Erigeron miser	;; 1B	Perennial herb usually found on rocky substrate in upper montane coniferous forest from 1,840 to 2,620 meters.	Blooming period: June – October.	None; The Study Area occurs outside of the known elevation range and does not provide habitat for this species
Stebbins' morning glory Calystegia stebbinsii	FE; CE;; 1B	Perennial rhizomatous herb found in openings of chaparral and cismontane woodland on gabbro or serpentinite soils from 185 to 1,090 meters.	Blooming period: April – July.	None; The Study Area does not provide habitat or soils for this species.
		One CNDDB occurrence is documented within 5 miles of the Study Area (CDFW 2015).		

Special-Status Species	Regulatory Status (Federal; State; Local; CNPS)	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
Wildlife				
Invertebrates				
Valley elderberry longhorn beetle Desmocerus californicus dimorphus	FT;;;	Blue elderberry shrubs usually associated with riparian areas.	Adults emerge in spring until June. Exit holes visible year-round.	None; The Study Area does not provide habitat required for this species since no elderberry shrubs occur within the Study Area.
Amphibians/Reptiles				
California red-legged frog Rana draytonii	FT; CSC;;	Inhabit ponds, slow-moving creeks, and streams with deep pools that are lined with dense emergent marsh or shrubby riparian vegetation. Submerged root masses and undercut banks are important habitat features for this species. Believed extirpated from the Central Valley floor since 1970s. The nearest CNDDB occurrences (occurrence numbers 1284 and 1317) are approximately 13 miles north of the Study Area. These occurrences state that CRLF was observed in a series of small pools/wet areas in a drainage stream channel. These locations are separated from the Study Area by a number of impassible barriers including major roadways and urban development.	breeding sites between January and September. Optimally after April 15.	None; The Study Area does not provide habitat and does not occur within the known geographic range for this species. The intermittent drainage within the Study Area ranges in width from 5 to 10 feet, lacked backwater pools and undercut banks, and only contained approximately six inches of water during the March 23, 2015 biological survey.
Foothill yellow-legged frog Rana boylii	; CSC;;	Found in shallow flowing streams with some cobble in a variety of habitats including woodlands, riparian forest, coastal scrub, chaparral, and wet meadows from 0 to 1,830 meters. Rarely encountered far from permanent water sources.	March – June	None; The Study Area does not provide habitat required for this species. The intermittent drainage dries out for several months of the year. This species needs a permanent water source.
Coast (California) horned lizard Phrynosoma blainvillii	; CSC;;	Grasslands, coniferous forests, woodlands, and chaparral, with open areas and patches of loose sandy soil. Often found in lowlands along sandy washes with scattered shrubs and along dirt roads, and frequently found near ant hills.	Year-round	None ; The Study Area does not contain sandy soils.

Special-Status Species	Regulatory Status (Federal; State; Local; CNPS)	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
Western pond turtle Emys marmorata	; CSC;;	Agricultural wetlands and other wetlands such as irrigation and drainage canals, low gradient streams, marshes, ponds, sloughs, small lakes, and their associated uplands.	Year-round	High ; The intermittent drainage within the Study Area provides habitat for this species.
		Four CNDDB occurrences occur within 5 miles of the Study Area (CDFW 2015).		
Fish				
Central Valley spring-run Chinook salmon Oncorhynchus tshawytscha	FT; CT;;	Spawn in Mill, Deer, and Butte Creeks and in Yuba River and Feather River watersheds. Juveniles may journey up to 5 miles upstream in Sacramento River tributaries.	Migrate from late March – September. Spawn in mid- August – early October.	None; The Study Area does not provide habitat required for this species.
Central Valley winter-run Chinook salmon Oncorhynchus tshawytscha	FE; CE;;	Spawn in northern Sacramento River (Redding to Red Bluff) and its tributaries. Juveniles may journey up to 5 miles upstream in other tributaries.	Migrate from late December - August. Spawn April - August	None; The Study Area does not provide habitat required for this species.
Central Valley steelhead Oncorhynchus mykiss	FT;;;	Rivers and streams tributary to the Sacramento-San Joaquin Rivers and Delta ecosystems.	Spawn in winter and spring.	None; The Study Area does not provide habitat required for this species.
Delta smelt Hypomesus transpacificus	FT; CE;;	Shallow fresh or brackish water tributary to the Delta ecosystem; spawns in freshwater sloughs and channel edgewaters. Known almost exclusively in the Fresno-San Joaquin estuary.	Spawn December – July. Present year-round in delta.	None; The Study Area does not occur within the known geographic range for this species.
Birds				
Bank swallow <i>Riparia riparia</i>	; CT;;	Nests in riverbanks and forages over riparian areas and adjacent uplands.	Spring – Fall	None; The Study Area does not provide nesting habitat for this species.
		One CNDDB occurrence is documented within 5 miles of the Study Area (CDFW 2015).		
Great gray owl Strix nebulosa	; CE;;	In California, prefers pine and fir forests adjacent to montane meadows between 750 and 2,250 meters in California.	Year-round	None; The Study Area does not provide nesting habitat for this species.

Special-Status Species	Regulatory Status (Federal; State; Local; CNPS)	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
Western yellow-billed cuckoo Coccyzus americanus occidentalis	FT; CE;;	Frequents valley foothill and desert riparian habitats. Inhabits open woodlands with clearings, and riparian habitats with dense understory foliage along slowmoving drainages, backwaters, or seeps. Prefers dense willows for roosting, but will use adjacent orchard in the Sacramento Valley.	June – August	None ; The riparian vegetation within the Study Area does not contain dense vegetation required for this species.
Northern goshawk Accipiter gentilis	; CSC;;	Found in high-elevation forested areas with cleared openings for foraging.	Year-round	None ; The Study Area does not provide habitat for this species.
Tricolored blackbird Agelaius tricolor	; CSC;; (nesting colony)	Nests in dense blackberry, cattail, tules, willow, or wild rose within emergent wetlands throughout the Central Valley and foothills surrounding the valley. Nesting locations typically must be large enough to support a minimum colony of approximately 50 pairs.	Year-round	None; The riparian vegetation within the Study Area is not large enough to support a minimum nesting colony of 50 pairs.
Other Raptors (Hawks, Owls and Vultures) and Migratory Birds	Department of Fish	Nests in a variety of communities including cismontane woodland, mixed coniferous forest, chaparral, montane meadow, riparian, annual grassland, and urban communities.	February 15 – August 31	High ; The non-native annual grassland and riparian corridor provide nesting habitat for birds.
Mammals				
Fisher Martes pennanti	FC; CCT;;	Occurs in intermediate to large-tree stages of coniferous and deciduous forests. One CNDDB occurrence is documented within 5 miles of the Study Area (CDFW 2015).	Most active at dusk and night, year- round; camera and tracking surveys.	None; The Study Area does not provide habitat for this species.
Federally-Listed Species: FE = federal endangered FT = federal threatened FC = candidate PT = proposed threatened FPD = proposed for delisting FD = delisted			 2 = plants rare, threatened, o 3 = plants about which we not 4 = plants of limited distribut Other Special-Status Listing 	or endangered in California and elsewhere r endangered in California, but common elsewhere eed more information tion