

Traffic and Transportation Management Plan



FERC Docket No. CP09-____-000

January 2009

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List of Abbreviations and Acronyms

BLM	Bureau of Land Management
DOT	Department of Transportation
FERC	Federal Energy Regulatory Commission
Project	Ruby Pipeline Project
ROW	Right-of-Way
Ruby	Ruby Pipeline, LLC
Traffic Plan	Traffic and Transportation Management Plan
USFS	United States Forest Service

1.0 Introduction

The Ruby Pipeline Project (Project), proposed by Ruby Pipeline, LLC (Ruby), is comprised of approximately 675.2 miles of 42-inch diameter natural gas pipeline, along with associated compression and measurement facilities, located between Opal, Wyoming and Malin, Oregon. An approximate 2.6-mile lateral would also be constructed south from the Malin Hub in Klamath County, Oregon. The pipeline right-of-way (ROW) would cross four states: Wyoming, Utah, Nevada, and Oregon. Four new compressor stations would also be installed as part of the Project.

The purpose of this Traffic and Transportation Management Plan (Traffic Plan) is to describe how Ruby will comply with federal policy and standards relative to planning, location, improvement, maintenance, and operation of roads for the Project. The Plan also describes how Ruby would implement equipment access to and from the ROW, drainage improvement procedures, dust control and maintenance measures, and reclamation and abandonment of roads.

1.1 Traffic Impacts

The addition of 4,300 construction employees and truck traffic to and from the Project ROW construction could cause temporary impacts to traffic levels on local roads, particularly in the more rural areas of the Project. Areas of particular concern are mining areas near Elko and Winnemucca, Nevada, where road access is limited, but a significant amount of traffic is created by mining operations. Construction employees for the Ruby project would be dispersed over 675.2 miles, seven pipeline construction spreads, and four compressor station construction crews. Construction workers would likely be located well within a 50-mile radius of the Project route and commute to and from the central contractor yard location for each spread. Commuting patterns could create potential temporary traffic congestion if peak travel hours for the mining operations and Ruby construction coincide.

Vehicle movements would generally occur during the daylight hours, with primary movements occurring during the early morning (6:30-7:30am) and evening hours (6:30-9:00pm) when crews would be driving to and from the work site. Due to the long workday, it is projected that the commute for construction crews would not interfere with local evening commutes. However, the potential exists for localized traffic increases that could affect local morning traffic. Typically, the work week is six days, sometimes extending to seven days as required by the workload and construction schedule. During directional drilling and hydrostatic testing, work would be conducted on a 24-hour basis until the drilling and testing is complete.

It is expected that during construction the phase, there would be approximately 200 vehicles mobilized to support the installation. These vehicles would be used to transport 100 equipment operators, 30 Welders, 15 Foremen, 25 miscellaneous and 30 inspectors for each spread. These vehicles would report to the contractor staging yard before proceeding to the ROW. In addition, there would be six to eight buses for transporting the other workers to the ROW. These workers would drive to the contractor yard(s) and park their vehicles before embarking via bus to the ROW. For stringing, there will be a sufficient number of stringing trucks to make approximately 50 trips per day. This equates to an average progress rate of 8,000 feet per day. These trucks would haul pipe from yards located in proximity to the pipeline ROW.

The access roads are shown in the Federal Energy Regulatory Commission (FERC) route maps included as an appendix to Resource Report No. 1 of Ruby's application to FERC.

2.0 General Requirements

2.1 Temporary Access Roads

Ruby intends to use existing access roads on a temporary basis during construction of the Project to transport personnel, equipment, vehicles (high clearance vehicles and heavy trucks) and materials to work areas. The Project will utilize federal and state highways, and numerous county, BLM, USFS, and private roads. Table 2.1-1 summarizes the total mileage of access roads by state and county being proposed for use by Ruby, as well as the total mileage that may require improvement. A complete listing of the proposed access roads is shown on Table A-1 in Appendix A of this plan. Table A-1 includes information about the class (i.e. dirt, gravel, pavement, etc.), land ownership, and additional information about each of the access roads that Ruby and its contractors would utilize during the Project.

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Table 2.1-1 Summary of Access Road Length

	Total (Miles)	Total Improved (Miles)
Wyoming		
Lincoln	53.5	53.5
Uinta	78.9	58.8
Utah		
Rich	41.0	38.8
Cache	46.7	46.6
Box Elder	242.0	216.5
Nevada		
Elko	538.8	339.0
Humboldt	234.7	108.0
Washoe	98.5	65.5
Oregon		
Lake	101.3	83.1
Klamath	81.7	62.1
TOTAL	1,517.1	1,071.9

The access roads are generally classified into roads that would not require improvement prior to, and during use and access roads that may or will require improvement prior to, during, or after use for the Project.

Existing access roads may be modified to facilitate Project construction. Modifications to existing access roads would consist primarily of increasing the width of the road up to 30 feet by grading, where authorized. The improvements would be done to provide a safe and level transportation surface for construction vehicles.

The use of dirt roads by construction vehicles may result in road deterioration, even without rain events, due to the size and weight of these vehicles. Ruby proposes maintenance on these roads to ensure they maintain their existing condition.

Roads that require new improvements, such as widening, would only be allowed after Ruby completes the required biological and cultural resource surveys and secures approval for these improvements from agencies or private landowners. Following construction, and at the discretion of the landowner, these roads would be returned to their preconstruction condition.

Landowners (county, federal, private) and county road departments would be consulted to determine the preferred protocols for road maintenance and improvement activities. Additionally, borrow material needed to improve access roads on federal land would be obtained only from approved sources. On roads that may become rutted due to use by construction equipment, Ruby will grade the road or fill the ruts to restore the road as close as practicable to its original condition or improved condition. Ruby will employ erosion control, revegetation, and restoration measures included in Ruby's Reclamation plan.

2.2 Permanent Access Roads

Ruby intends to use all existing access roads for occasional maintenance purposes during the operation of the Project facilities. Any new permanent access roads or any new road infrastructure that will be necessary to access its Project facilities will be identified on its alignment sheets or topographic maps that will be provided in Ruby's certificate application.

2.3 Public Road Use

In many cases, existing public highways could be used to transport construction equipment to the approved access roads. Ruby would obtain approvals from the appropriate state DOT, BLM, USFS, or county road and bridge departments prior to construction. Ruby estimates that road use by construction crews will occur between the hours of 5 am and 9 pm.

In an effort to address potential traffic impacts to local towns and communities, Ruby will consult with respective county and highway officials to address traffic congestion issues. Ruby will require its construction contractors to prepare traffic management plans to reduce traffic congestion that may be created by construction personnel. The contractors' traffic management plans will be developed for each construction spread.

2.4 Road Crossings

Ruby will require its construction contractors to clear accumulated mud and debris where the Project ROW intersects paved roads or in accordance with site specific crossing plans that

are filed with each state highway or county road department. Where necessary, Ruby will prepare specific traffic control plans to address construction activities, detours, and lane closures.

2.5.2 Rangeland

In construction areas that cross rangelands, Ruby proposes to inspect cattle guards and gates prior to construction and will maintain access through those facilities during construction. Ruby is committed to maintaining, repairing, or replacing any cattle guards or gates that may be damaged by construction to their Project pre-construction condition.

2.5.3 Residential Areas

The Project route will be located in the vicinity of various residential areas. At these locations, Ruby is committed to maintaining traffic flow and emergency vehicle access on roadways with traffic control personnel or detour signs where necessary. Ruby will also inspect road surfaces near residences and, if necessary, clean street surfaces and wet exposed soil to prevent generation of dust. Furthermore, Ruby will collaborate with local officials and any homeowner groups to repair any damage to roads caused by Project construction activities.

2.5.4 Dust Control

Ruby will develop a Project-wide fugitive dust control plan that will be implemented to meet state by state requirements for dust control. This fugitive dust control plan will be included in the Plan of Development being submitted as an appendix to Resource Report No. 1 of Ruby's application.

2.5.5 Reclamation and Abandonment

For any temporary access road authorized for the Project, Ruby will reclaim or abandon any such road in accordance with the requirements of the appropriate landowner or land managing agency.

2.5 Removal of Obstructions

Upon securing appropriate authorization from the appropriate landowner or land managing agency, Ruby will trim or remove obstructions, such as limbs, rocks and/or fences, to facilitate construction equipment ingress or egress.

A Access Roads

Table A-1 Access Roads Used by the Project

Access Road No.	Public or Private	Road Name	Existing Width (feet)	Existing Surface	Length (miles)	Existing Condition	Proposed Improvement	FERC Route Map Page
LINCOLN COUNTY, WYOMING								
LW-1	Private	King Compressor Road	24'	Gravel	0.3	Gravel	Graded	1
LW-1A	Private	Unnamed	8'	Dirt	2.4	2-Track	Graded	1, 1A
LW-1B	Private	Unnamed	12'	Dirt	0.1	2-Track	Graded, Widen	1
LW-3	Private	Unnamed	10'	Dirt	0.5	2-Track	Graded, Widen	2
LW-4	Private	Unnamed	8'	Dirt	2.4	2-Track	Graded, Widen	1, 2
LW-5	Private	Unnamed	8'	Dirt	0.1	2-Track	Graded, Widen	2
LW-6	Private	Unnamed	8'	Dirt	15.7	2-Track	Graded, Widen	1A, 2, 3, 4
LW-7	Private	Unnamed	8' to 24'	Gravel and Dirt	0.2	Good and Mostly 2-Track	Graded, Widen	2
LW-8	Private	Unnamed	8'	Dirt	2.3	2-Track	Graded, Widen	2
LW-9	Private	Unnamed	8'	Dirt	0.1	2-Track	Graded, Widen	2
LW-10	Private	Unnamed	8'	Dirt	0.1	2-Track	Graded, Widen	2
LW-11	Private	Unnamed	8'	Dirt	1.6	2-Track	Graded, Widen	2, 3
LW-12	Private	Unnamed	10'	Dirt	1.7	2-Track	Graded, Widen	3
LW-13	Private	Unnamed	8'	Dirt	1.6	2-Track	Graded, Widen	3
LW-14	Private	Unnamed	8'	Dirt	4.4	2-Track	Graded, Widen	3
LW-15	Private	Unnamed	8'	Dirt	1.0	2-Track	Graded, Widen	3
LW-16	Private	Unnamed	8'	Dirt	0.9	2-Track	Graded, Widen	3
LW-17	Private	Unnamed	8'	Dirt	2.8	2-Track	Graded, Widen	3
LW-18	Private	Unnamed	8'	Dirt	0.2	2-Track	Graded, Widen	3
LW-19	Private	Unnamed	8'	Dirt	0.8	2-Track	Graded, Widen	3

Table A-1 Access Roads Used by the Project

Access Road No.	Public or Private	Road Name	Existing Width (feet)	Existing Surface	Length (miles)	Existing Condition	Proposed Improvement	FERC Route Map Page
LW-20	Private	Unnamed	8'	Dirt	2.9	2-Track	Graded, Widen	4, 5
LW-21	Private	Unnamed	8'	Dirt	6.4	2-Track	Graded, Widen	4, 5
LW-22	Private	Unnamed	20'	Gravel	0.9	Good	Graded	5
LW-23	Private	Unnamed	8'	Dirt	2.8	2-Track	Graded, Widen	5
LW-24	Private	Unnamed	8'	Dirt	0.3	2-Track	Graded, Widen	5
LW-26	Private	Unnamed	8'	Dirt	0.2	2-Track	Graded, Widen	5
LW-28	Private	Unnamed	8'	Dirt	0.3	2-Track	Graded, Widen	5
LW-29	Private	Unnamed	8'	Dirt	0.4	2-Track	Graded, Widen	5
LW-30	Private	Unnamed	8'	Dirt	0.1	2-Track	Graded, Widen	5
UINTA COUNTY, WYOMING								
U-1	Private	Unnamed	24'	Paved	4.8	Paved	None	5, 6
U-2	Private	Unnamed	8'	Dirt	0.1	2-Track	Graded, Widen	5
U-3	Private	Unnamed	8'	Dirt	0.8	2-Track	Graded, Widen	5
U-4	Private	Unnamed	8'	Dirt	0.7	2-Track	Graded, Widen	5, 6
U-5	Private	Unnamed	8'	Dirt	0.1	2-Track	Graded, Widen	5
U-5A	Private	Unnamed	8'	Dirt	0.1	2-Track	Graded, Widen	6
U-5B	Private	Unnamed	8'	Dirt	0.8	2-Track	Graded, Widen	6
U-6	Private	Unnamed	16'	Gravel and Dirt	12.7	Good and Mostly 2-Track	Graded, Widen	6
U-7	Private	Unnamed	8'	Dirt	0.3	2-Track	Graded, Widen	6
U-8	Private	Unnamed	8'	Dirt	0.5	2-Track	Graded, Widen	6
U-10	Private	Unnamed	8'	Dirt	2.5	2-Track	Graded, Widen	7
U-11	Private	Unnamed	8'	Dirt	0.6	2-Track	Graded, Widen	7

Table A-1 Access Roads Used by the Project

Access Road No.	Public or Private	Road Name	Existing Width (feet)	Existing Surface	Length (miles)	Existing Condition	Proposed Improvement	FERC Route Map Page
U-12	Private	Unnamed	8'	Dirt	0.3	2-Track	Graded, Widen	7
U-13	Private	Unnamed	8'	Dirt	0.5	2-Track	Graded, Widen	7
U-14	Private	Unnamed	8'	Dirt	1.0	2-Track	Graded, Widen	7
U-15	Private	Unnamed	8'	Dirt	1.6	2-Track	Graded, Widen	7, 8
U-16	Private	Unnamed	8'	Dirt	0.8	2-Track	Graded, Widen	7, 8
U-16A	Private	Unnamed	8'	Dirt	0.9	2-Track	Graded, Widen	8
U-18	Private	Unnamed	8'	Dirt	16.6	2-Track	Graded, Widen	7, 7A, 8
U-18A	Private	Unnamed	24'	Gravel	8.8	Good	None	8, 8A
U-19	Private	Unnamed	24'	Gravel	6.5	Good	None	8, 9
U-20	Private	Unnamed	16'	Gravel and Dirt	1.6	Good and Partly 2-Track	Graded, Widen	8
U-21	Private	Unnamed	8'	Dirt	1.5	2-Track	Graded, Widen	8
U-23	Private	Unnamed	20'	Gravel	0.1	Good	Graded	8
U-24	Private	Unnamed	10'	Dirt	6.9	2-Track	Graded, Widen	8
U-25	Private	Unnamed	8'	Dirt	1.8	2-Track	Graded, Widen	8
U-26	Private	Unnamed	10'	Dirt	1.1	2-Track	Graded, Widen	8
U-27	Private	Unnamed	8'	Dirt	0.5	2-Track	Graded, Widen	8
U-28	Private	Unnamed	8'	Dirt	0.6	2-Track	Graded, Widen	8
U-30	Private	Unnamed	8'	Dirt	0.4	2-Track	Graded, Widen	8
U-31	Private	Unnamed	8'	Dirt	3.4	2-Track	Graded, Widen	8, 9
RICH COUNTY, UTAH								
R-1	Private	Unnamed	16'	Gravel	0.8	Good	Graded	9
R-1A	Private	Unnamed	8'	Dirt	0.7	2-Track	Graded, Widen	9

Table A-1 Access Roads Used by the Project

Access Road No.	Public or Private	Road Name	Existing Width (feet)	Existing Surface	Length (miles)	Existing Condition	Proposed Improvement	FERC Route Map Page
R-2	Private	Unnamed	16'	Gravel and Dirt	2.7	Good and Partly 2-Track	Graded, Widen	9, 10
R-3	Private	Unnamed	8'	Dirt	0.2	2-Track	Graded, Widen	9
R-5A	Private	Unnamed	8'	Gravel	1.5	2-Track	Graded, Widen	9, 10
R-7A	Public	Unnamed	20'	Gravel	0.6	Good	None	10
R-7B	Public	Schulthess Lane	20'	Gravel	1.6	Good	None	10, 11
R-8	Private	Unnamed	8'	Dirt	7.3	2-Track	Graded, Widen	10, 11, 12
R-8A	Private	Unnamed	8'	Dirt	1.1	2-Track	Graded, Widen	10, 11
R-8B	Private	Unnamed	16'	Gravel	1.9	Good	Graded, Widen	12
R-9	Private	Unnamed	8'	Dirt	0.1	2-Track	Graded, Widen	10
R-10	Private	Unnamed	8'	Dirt	0.3	2-Track	Graded, Widen	11
R-11	Private	Unnamed	8'	Dirt	1.5	2-Track	Graded, Widen	11
R-12	Private	Unnamed	8'	Dirt	0.3	2-Track	Graded, Widen	11
R-12A	Private	Unnamed	8'	Dirt	0.4	2-Track	Graded, Widen	11
R-12B	Private	Unnamed	8'	Dirt	0.2	2-Track	Graded, Widen	11
R-12C	Private	Unnamed	8'	Dirt	0.1	2-Track	Graded, Widen	11
R-13	Private	Unnamed	8'	Dirt	1.3	2-Track	Graded, Widen	11
R-13A	Private	Unnamed	8'	Dirt	0.1	2-Track	Graded, Widen	11
R-14	Private	Unnamed	8'	Dirt	0.1	2-Track	Graded, Widen	11
R-15	Private	Unnamed	8'	Dirt	0.4	2-Track	Graded, Widen	11
R-16	Private	Unnamed	8'	Dirt	1.6	2-Track	Graded, Widen	11, 12
R-17	Private	Unnamed	8'	Dirt	0.5	2-Track	Graded, Widen	12
R-18	Private	Unnamed	8'	Dirt	0.1	2-Track	Graded, Widen	12

Table A-1 Access Roads Used by the Project

Access Road No.	Public or Private	Road Name	Existing Width (feet)	Existing Surface	Length (miles)	Existing Condition	Proposed Improvement	FERC Route Map Page
R-19	Private	Unnamed	16'	Gravel	2.3	Good	Graded	12
R-19A	Private	Unnamed	10'	Dirt	3.6	2-Track	Graded, Widen	12
R-20	Private	Unnamed	8'	Dirt	0.8	2-Track	Graded, Widen	12
R-21	Private	Unnamed	8'	Dirt	4.9	2-Track	Graded, Widen	12, 13
R-22	Private	Unnamed	8'	Dirt	0.1	2-Track	Graded, Widen	12
R-23	Private	Unnamed	8'	Dirt	0.1	2-Track	Graded, Widen	12
R-24	Private	Unnamed	8'	Dirt	0.9	2-Track	Graded, Widen	12
R-25	Private	Unnamed	8'	Dirt	0.5	2-Track	Graded, Widen	12
R-26	Private	Unnamed	8'	Dirt	2.3	2-Track	Graded, Widen	12
R-27	Private	Unnamed	8'	Dirt	0.1	2-Track	Graded, Widen	12
CACHE COUNTY, UTAH								
C-1	Private	Unnamed	8'	Dirt	7.3	2-Track	Graded, Widen	14
C-1A	Private	Unnamed	12'	Gravel	0.1	2-Track	Graded, Widen	13
C-1B	Private	Unnamed	12'	Gravel	0.1	Good	None	13
C-2	Private	Unnamed	8'	Dirt	0.1	2-Track	Graded, Widen	14
C-3	Private	Unnamed	8'	Dirt	0.3	2-Track	Graded, Widen	14
C-5	Private	Unnamed	16'	Dirt	8.9	2-Track	Graded, Widen	14, 15, 16
C-6	Private	Unnamed	8'	Dirt	0.6	2-Track	Graded, Widen	14
C-7	Private	Unnamed	8'	Dirt	1.0	2-Track	Graded, Widen	14
C-8	Private	Unnamed	16'	Dirt	0.3	2-Track	Graded, Widen	16
C-9	Private	Unnamed	8'	Dirt	0.5	2-Track	Graded, Widen	16
C-9A	Private	Unnamed	8'	Dirt	0.1	2-Track	Graded, Widen	16
C-10	Private	Unnamed	8'	Dirt	0.1	2-Track	Graded, Widen	16

Table A-1 Access Roads Used by the Project

Access Road No.	Public or Private	Road Name	Existing Width (feet)	Existing Surface	Length (miles)	Existing Condition	Proposed Improvement	FERC Route Map Page
C-11	Private	Unnamed	8'	Dirt	1.2	2-Track	Graded, Widen	16
C-12	Private	Unnamed	8'	Gravel and Dirt	4.7	Good and Mostly 2-Track	Graded, Widen	16, 17
C-12A	Private	Unnamed	8'	Dirt	0.4	2-Track	Graded, Widen	16
C-13	Private	Unnamed	8'	Dirt	1.4	2-Track	Graded, Widen	16, 17
C-14	Private	Unnamed	8'	Dirt	1.5	2-Track	Graded, Widen	16, 17
C-14A	Private	Unnamed	8'	Dirt	0.2	2-Track	Graded, Widen	17
C-14B	Public	LaPlata County Road	24'	Paved and Gravel	3.0	Good	Graded	16, 17
C-14C	Private	Unnamed	8'	Dirt	0.1	2-Track	Graded, Widen	17
C-15	Private	Unnamed	8'	Dirt	0.6	2-Track	Graded, Widen	17
C-15A	Public	South 1800 East	20'	Gravel	0.6	Good	Graded	17
C-16	Private	Unnamed	8'	Dirt	0.8	2-Track	Graded, Widen	17
C-17	Private	Unnamed	8'	Dirt	1.3	2-Track	Graded, Widen	17
C-18	Private	Unnamed	8'	Dirt	7.4	2-Track	Graded, Widen	17, 18
C-18A	Private	Unnamed	8'	Dirt	4.1	2-Track	Graded, Widen	18
BOX ELDER COUNTY, UTAH								
B-1	Private	Unnamed	8'	Dirt	2.2	2-Track	Graded, Widen	18
B-1A	Private	Unnamed	8'	Dirt	2.2	2-Track	Graded, Widen	18
B-1B	Private	Unnamed	8'	Dirt	0.6	2-Track	Graded, Widen	18
B-1B1	Private	Unnamed	8'	Dirt	0.4	2-Track	Graded, Widen	18
B-2	Private	Unnamed	8'	Dirt	1.8	2-Track	Graded, Widen	18
B-2A	Private	Unnamed	8'	Dirt	1.4	2-Track	Graded, Widen	18, 19
B-3	Private	Unnamed	8'	Dirt	0.1	2-Track	Graded, Widen	18

Table A-1 Access Roads Used by the Project

Access Road No.	Public or Private	Road Name	Existing Width (feet)	Existing Surface	Length (miles)	Existing Condition	Proposed Improvement	FERC Route Map Page
B-3A	Private	Unnamed	8'	Dirt	1.1	2-Track	Graded, Widen	19
B-4	Public	Hatch County Road N 2800 W	20'	Gravel	4.4	Good	Graded	19
B-4A	Private	Unnamed	8'	Dirt	0.2	2-Track	Graded, Widen	19
B-4B	Public	N 3300 W County Road	16'	Gravel	1.0	Good	Graded, Widen	19
B-4C	Public	N 4000 W County Road	16'	Gravel	1.2	Good	Graded, Widen	19
B-4D	Private	Unnamed	8'	Dirt	0.7	2-Track	Graded, Widen	19
B-4F	Public	N 4800 W County Road	16'	Gravel	0.8	Good	Graded	19
B-4F1	Public	N 4400 W County Road	10'	Gravel	0.7	Good	Graded, Widen	19
B-4G	Public	W 4300 N County Road	20'	Gravel	0.3	Good	Graded	19, 20
B-4H	Public	W 4000 N County Road	20'	Gravel	2.5	Good	Graded	20
B-4I	Public	W 4000 N County Road	20'	Gravel	0.5	Good	Graded	19
B-6A	Public	N 6000 W County Road	20'	Gravel	1.2	Good	Graded	20
B-6B	Private	Unnamed	8'	Dirt	0.2	2-Track	Graded, Widen	20
B-7	Public	N 7600 W County Road	20'	Gravel	0.7	Good	Graded	20
B-8	Private	Unnamed	16'	Gravel	1.7	Good	Graded, Widen	20
B-9	Private	Unnamed	16'	Gravel	1.3	Good	Graded, Widen	20, 21

Table A-1 Access Roads Used by the Project

Access Road No.	Public or Private	Road Name	Existing Width (feet)	Existing Surface	Length (miles)	Existing Condition	Proposed Improvement	FERC Route Map Page
B-10	Public	W Evans N County Road	20'	Gravel	3.6	Good	Graded	20, 21
B-11	Public	Dump County Road	16'	Dirt	0.4	Good	Graded, Widen	21
B-11A	Private	Unnamed	8'	Dirt	0.2	2-Track	Graded, Widen	22
B-12	Private	Unnamed	8'	Dirt	0.4	2-Track	Graded, Widen	22
B-12A	Private	Unnamed	8'	Dirt	0.4	2-Track	Graded, Widen	22
B-12B	Private	Unnamed	8'	Dirt	0.3	2-Track	Graded, Widen	22
B-12C	Private	Unnamed	8'	Dirt	0.1	2-Track	Graded, Widen	22
B-12D	Private	Unnamed	8'	Dirt	0.1	2-Track	Graded, Widen	22
B-13	Private	Unnamed	20'	Gravel	0.4	Good	Graded	22
B-14	Private	Unnamed	20'	Gravel	1.6	Good	Graded	22
B-14A	Public	N 11600 W County Road	20'	Gravel	1.0	Good	Graded	22
B-15	Public	W 8040 N County Road	20'	Gravel	0.6	Good	Graded	22
B-15A	Private	Unnamed	16'	Gravel	1.1	Good	Graded, Widen	22
B-15B	Private	Unnamed	8'	Dirt	0.8	2-Track	Graded, Widen	22
B-16A	Private	Unnamed	8'	Dirt	1.8	2-Track	Graded, Widen	22
B-16B	Private	Unnamed	8'	Dirt	0.1	2-Track	Graded, Widen	22
B-17	Private	Unnamed	8'	Dirt	5.5	2-Track	Graded, Widen	22
B-18	Public	W Faust Valley Road N	24'	Paved	10.5	Paved	None	22, 23
B-18A	Private	Unnamed	8'	Dirt	0.5	2-Track	Graded, Widen	23
B-19	Public	N 18000 W County Road	20'	Gravel	1.1	Good	Graded	23

Table A-1 Access Roads Used by the Project

Access Road No.	Public or Private	Road Name	Existing Width (feet)	Existing Surface	Length (miles)	Existing Condition	Proposed Improvement	FERC Route Map Page
B-20	Public	N 18800 W County Road	8'	Dirt	0.7	2-Track	Graded, Widen	23
B-21	Private	Unnamed	8'	Dirt	5.5	2-Track	Graded, Widen	23, 24
B-22	Private	Unnamed	8'	Dirt	0.1	2-Track	Graded, Widen	24
B-23	Public	Sunset Pass County Road	20'	Gravel	16.5	Good	Graded	24, 25
B-23A	Public	Salt Wells Flat Road	20'	Gravel	15.0	Good	None	24, 26A, 27A
B-24	Private	Unnamed	8'	Dirt	1.5	2-Track	Graded, Widen	24
B-24A	Private	Unnamed	8'	Dirt	0.6	2-Track	Graded, Widen	24
B-25	Private	Unnamed	8'	Dirt	4.2	2-Track	Graded, Widen	26
B-26	Public	Hansel Valley County Road	20'	Gravel	30.3	Good	Graded	25, 25A, 26, 26A, 27A, 28, 28A
B-26A	Private	Unnamed	8'	Dirt	0.1	2-Track	Graded, Widen	26
B-26B	Private	Unnamed	8'	Dirt	0.1	2-Track	Graded, Widen	26
B-27	Public	Old Railroad Grade County Road	20'	Gravel	10.5	Good	Graded	28, 28A, 29, 29A
B-27A	Public	Unnamed	8'	Dirt	0.2	2-Track	Graded, Widen	28
B-27B	Public	Unnamed	20'	Gravel	0.1	Good	Graded	29A
B-27C	Private	Unnamed	8'	Dirt	1.0	2-Track	Graded, Widen	29
B-28	Public	W 13600 N County Road	16'	Gravel	2.3	2-Track	Graded, Widen	26A, 27, 27A
B-28B	Private	Unnamed	8'	Dirt	0.6	2-Track	Graded, Widen	27

Table A-1 Access Roads Used by the Project

Access Road No.	Public or Private	Road Name	Existing Width (feet)	Existing Surface	Length (miles)	Existing Condition	Proposed Improvement	FERC Route Map Page
B-29	Public	N 31600 W	16'	Dirt	1.0	2-Track	Graded, Widen	27, 27A
B-29A	Private	Unnamed	8'	Dirt	3.6	2-Track	Graded, Widen	27
B-29B	Private	Unnamed	8'	Dirt	0.4	2-Track	Graded, Widen	27
B-31	Public	N Locomotive Springs County Road W	20'	Gravel	2.9	Good	Graded, Widen	28, 28A
B-32	Public	Deep Creek Road	8'	Dirt	1.6	2-Track	Graded, Widen	28, 28A
B-33	Private	Unnamed	8'	Dirt	0.3	2-Track	Graded, Widen	28
B-34	Private	Unnamed	8'	Dirt	1.1	2-Track	Graded, Widen	28, 29
B-35	Public	Wildcat County Road	12'	Dirt	4.3	2-Track	Graded, Widen	28, 29
B-36	Private	Unnamed	8'	Dirt	6.1	2-Track	Graded, Widen	29, 29A
B-36A	Private	Unnamed	8'	Dirt	0.1	2-Track	Graded, Widen	29
B-37	Private	Unnamed	8'	Dirt	0.7	2-Track	Graded, Widen	29
B-38	Public	Kelton County Road	20'	Gravel	6.5	Good	Graded	29, 29A, 30
B-38A	Public	Baker Mountain Loop County Road	10'	Dirt	1.0	2-Track	Graded, Widen	29, 29A, 30
B-39	Public	Emigrant Trail County Road	16'	Gravel	27.3	Good	Graded, Widen	29A, 31, 32, 33, 33A, 34, 35
B-39A	Private	Unnamed	8'	Dirt	0.1	2-Track	Graded, Widen	31
B-39B	Private	Unnamed	8'	Dirt	0.1	2-Track	Graded, Widen	31

Table A-1 Access Roads Used by the Project

Access Road No.	Public or Private	Road Name	Existing Width (feet)	Existing Surface	Length (miles)	Existing Condition	Proposed Improvement	FERC Route Map Page
B-40	Private	Unnamed	8'	Dirt	0.8	2-Track	Graded, Widen	31
B-41	Private	Unnamed	8'	Dirt	0.1	2-Track	Graded, Widen	31
B-42	Public	Board Ranch County Road #13	20'	Gravel	11.8	Good	Graded	30A, 32
B-43	Public	N Red Dome County Road	16'	Dirt	0.8	2-Track	Graded, Widen	33, 34
B-43A	Public	S Airplane Hill County Road	10'	Dirt	3.1	2-Track	Graded, Widen	33, 34
B-45	Public	Red Dome Road	16'	Dirt	4.5	2-Track	Graded, Widen	34, 35
B-46	Public	Water Cress County Road	16'	Dirt	0.1	2-Track	Graded, Widen	36
B-47	Private	Unnamed	8'	Dirt	0.1	2-Track	Graded, Widen	36
B-48	Private	Unnamed	8'	Dirt	0.1	2-Track	Graded, Widen	37
B-49	Private	Unnamed	8'	Dirt	0.1	2-Track	Graded, Widen	37
B-49A	Private	Unnamed	8'	Dirt	0.1	2-Track	Graded, Widen	37
B-50	Private	Unnamed	8'	Dirt	0.1	2-Track	Graded, Widen	37
B-51	Public	Emigrant Pass County Road	16'	Gravel	0.1	Good	Graded	38
B-52	Public	Mud Basin Springs County Road #73	16'	Dirt	0.1	2-Track	Graded, Widen	38
B-53	Private	Unnamed	8'	Dirt	0.2	2-Track	Graded, Widen	38

Table A-1 Access Roads Used by the Project

Access Road No.	Public or Private	Road Name	Existing Width (feet)	Existing Surface	Length (miles)	Existing Condition	Proposed Improvement	FERC Route Map Page
B-54	Private	Unnamed	8'	Dirt	0.3	2-Track	Graded, Widen	38
B-55	Public	Grouse Creek County Road	24'	Gravel	0.2	Good	Graded	39
B-56	Private	Unnamed	8'	Dirt	0.6	2-Track	Graded, Widen	39
B-57	Private	Unnamed	8'	Dirt	0.1	2-Track	Graded, Widen	39
B-58	Private	Unnamed	8'	Dirt	1.0	2-Track	Graded, Widen	39
B-59	Private	Unnamed	8'	Dirt	1.9	2-Track	Graded, Widen	39
B-60	Public	S Winter Cabin County Road	8'	Gravel and Dirt	4.9	Good and some 2-Track	Graded, Widen	39
B-60A	Public	SW Winter Cabin County Road	8'	Dirt	0.7	2-Track	Graded, Widen	39
B-61	Private	Unnamed	8'	Dirt	3.6	2-Track	Graded, Widen	39, 40
B-62	Public	Kilgore Basin County Road	8'	Dirt	2.0	2-Track	Graded, Widen	40
B-63	Private	Unnamed	8'	Dirt	0.5	2-Track	Graded, Widen	40
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E-1	Private	Unnamed	10' to 12'	Gravel	7.0	Rough - Not Maintained	Graded	40, 40A
E-2	Private	Unnamed	8' to 10'	Gravel	8.5	Rough - Not Maintained 2-Track	Graded	40, 41
E-3	Public	Wilkins-Montello Road (#765)	24' to 30'	Gravel	53.3	Improved-Maintained	None	41, 41A, 42, 42A, 43B, 44, 44B, 45

Table A-1 Access Roads Used by the Project

Access Road No.	Public or Private	Road Name	Existing Width (feet)	Existing Surface	Length (miles)	Existing Condition	Proposed Improvement	FERC Route Map Page
E-4	Private	Unnamed	8' to 10'	Gravel	26.7	Rough - Not Maintained 2-Track	Graded	41, 42, 43, 44, 45
E-5	Private	Unnamed	12' to 14'	Dirt-Gravel	21.7	Improved- Not Maintained	Graded	42, 43, 43A, 44A
E-6	Private	Unnamed	12' to 14'	Dirt-Gravel	11.1	Improved- Not Maintained	Graded	43, 44, 45
E-7	Private	Unnamed	12' to 14'	Dirt-Gravel	4.4	Improved- Not Maintained	Graded	43, 43A, 44
E-7A	Private	Unnamed	12' to 14'	Dirt-Gravel	0.5	Improved- Not Maintained	Graded	43A
E-8	Private	Unnamed	12' to 14'	Dirt-Gravel	4.6	Improved- Not Maintained	Graded	44, 44A
E-9	Private	Winecup Ranch Road	24' to 30'	Gravel	8.6	Improved- Maintained	None	44A, 45, 45A
E-9A	Private	Unnamed	8'	Gravel	6.1	Rough - Not Maintained 2-Track	Graded	45, 46, 46A
E-9B	Private	Unnamed	8'	Gravel	10.0	Rough - Not Maintained 2-Track	Graded	45, 45A, 46A
E-10	Private	Unnamed	16' to 20'	Gravel	23.5	Improved- Maintained	Graded	45, 46, 46A, 48
E-11	Private	Unnamed	8' to 10'	Gravel	10.0	Rough - Not Maintained 2-Track	Graded	46, 47
E-12	Private	Unnamed	12' to 14'	Gravel	10.1	Improved- Maintained	Graded	47, 48
E-13	Private	Unnamed	12' to 14'	Gravel	6.4	Improved- Not Maintained	Graded	47, 48
E-14	Private	Unnamed	8' to 10'	Gravel	14.8	Rough - Not Maintained 2-Track	Graded	47, 48, 49

Table A-1 Access Roads Used by the Project

Access Road No.	Public or Private	Road Name	Existing Width (feet)	Existing Surface	Length (miles)	Existing Condition	Proposed Improvement	FERC Route Map Page
E-14A	Private	Unnamed	8' to 10'	Gravel	0.1	Unimproved 2-Track	Graded	49
E-14B	Private	Unnamed	8' to 10'	Gravel	0.5	Unimproved 2-Track	Graded	49
E-15	Private	Unnamed	8' to 10'	Gravel	3.0	Rough - Not Maintained 2-Track	Graded	49, 50
E-16	Public	Upper Metropolis Road (#754)	24' to 30'	Gravel	21.6	Improved-Maintained	None	48A, 48B, 49, 49A, 50
E-17	Public	Oneil Deeth Road (#753)	24' to 30'	Gravel	22.2	Improved-Maintained	None	50, 50A, 50B, 52A
E-17A	Private	Unnamed	8' to 16'	Dirt-Gravel	5.0	Rough - Not Maintained 2-Track	Graded	50
E-17B	Private	Unnamed	8'	Dirt	0.4	Rough - Not Maintained 2-Track	Graded	50
E-17C	Private	Unnamed	8'	Dirt	0.9	Rough - Not Maintained 2-Track	Graded	50
E-18	Public	Mary's River Ranch Road	18' to 24'	Gravel	7.7	Improved-Maintained	None	51, 52
E-18A	Private	Unnamed	18' to 24'	Gravel	0.7	Improved-Maintained 2-Track	Graded	52
E-19	Private	Unnamed	8' to 10'	Gravel	0.3	Rough - Not Maintained 2-Track	Graded	51
E-20	Private	Unnamed	8' to 10'	Gravel	0.5	Rough - Not Maintained 2-Track	Graded	51
E-21	Private	Unnamed	8' to 10'	Gravel	0.8	Rough - Not Maintained 2-Track	Graded	51, 52
E-22	Private	Unnamed	8' to 10'	Gravel	1.6	Rough - Not Maintained 2-Track	Graded	51, 52

Table A-1 Access Roads Used by the Project

Access Road No.	Public or Private	Road Name	Existing Width (feet)	Existing Surface	Length (miles)	Existing Condition	Proposed Improvement	FERC Route Map Page
E-23	Private	Unnamed	8' to 10'	Gravel	3.3	Rough - Not Maintained 2-Track	Graded	52
E-24	Public	Charleston Deeth Road (#747)	24' to 30'	Gravel	16.9	Improved-Maintained	None	52, 52A, 53, 54
E-25	Private	Unnamed	8' to 10'	Gravel	6.5	Rough - Not Maintained 2-Track	Graded	53, 54
E-26	Private	Unnamed	16' to 20'	Gravel	9.4	Improved-Maintained	Graded	53, 54
E-27	Private	Unnamed	12' to 20'	Gravel	27.2	Improved-Not Maintained	Graded	53, 54, 55, 55A, 55B, 55C
E-28	Private	Unnamed	8' to 10'	Gravel	1.1	Rough - Not Maintained	Graded	55
E-28A	Private	Unnamed	8' to 10'	Gravel	2.2	Unimproved 2-Track	Graded	55
E-29	Private	Tule Ranch Road	16' to 20'	Gravel	12.5	Improved-Maintained	Graded	53, 55, 55A, 57
E-29A	Private	Unnamed	8' to 10'	Gravel	2.2	Unimproved 2-Track	Graded	56
E-30	Public	Rynden Road	18' to 24'	Gravel	13.6	Improved-Maintained	None	55B, 55C
E-31	Private	Unnamed	8' to 10'	Gravel	11.9	Improved-Not Maintained	Graded	56, 57, 58A
E-32	Public	Coal Mine Canyon Road	32' to 40'	Asphalt-Gravel	23.1	Improved-Maintained	None	55B, 57, 57A, 58, 58A
E-33	Private	Tule Ranch Road	14' to 18'	Gravel	3.9	Improved-Maintained	None	56, 57
E-34	Private	Unnamed	10' to 12'	Dirt-Gravel	0.4	Improved-Not Maintained	Graded	58, 58A
E-35	Private	Unnamed	8' to 10'	Gravel	0.5	Unimproved 2-Track	Graded	57

Table A-1 Access Roads Used by the Project

Access Road No.	Public or Private	Road Name	Existing Width (feet)	Existing Surface	Length (miles)	Existing Condition	Proposed Improvement	FERC Route Map Page
E-36	Private	Unnamed	8' to 10'	Gravel	3.6	Unimproved 2-Track	Graded	58, 58A
E-37	Private	Unnamed	8' to 10'	Gravel	1.3	Unimproved 2-Track	Graded	58
E-38	Private	Unnamed	8' to 10'	Gravel	0.4	Unimproved 2-Track	Graded	58
E-39	Private	Unnamed	8' to 10'	Gravel	0.6	Unimproved 2-Track	Graded	58
E-40	Private	Unnamed	8' to 10'	Gravel	8.3	Unimproved 2-Track	Graded	58, 59
E-41	Private	Unnamed	8' to 10'	Gravel	0.2	Unimproved 2-Track	Graded	59
E-42	Private	Unnamed	8' to 10'	Gravel	0.9	Unimproved 2-Track	Graded	59
E-42A	Private	Unnamed	8' to 10'	Gravel	0.2	Unimproved 2-Track	Graded	59
E-43	Private	Unnamed	8' to 10'	Gravel	0.3	Unimproved 2-Track	Graded	60
E-44	Private	Unnamed	8' to 10'	Dirt-Gravel	0.7	Unimproved 2-Track	Graded	60
E-45	Public	Maggie Creek Road	24' to 40'	Asphalt-Gravel	43.0	Improved-Maintained	none	60, 60A, 60B, 60C, 60D, 60E, 60F
E-45A	Private	Unnamed	8' to 10'	Gravel	1.4	2-Track	Graded	60
E-45B	Private	Unnamed	8' to 10'	Gravel	0.9	Unimproved 2-Track	Graded	60
E-45C	Private	Unnamed	8' to 10'	Gravel	0.1	2-Track	Graded	60
E-46	Private	Unnamed	8' to 10'	Gravel	0.3	Unimproved 2-Track	Graded	60
E-48	Private	Unnamed	10' to 12'	Dirt-Gravel	1.9	Improved-Not Maintained	Graded	62
E-48A	Private	Unnamed	10' to 12'	Dirt-Gravel	4.7	Improved-Not Maintained 2-Track	Graded	61, 62
E-48B	Private	Unnamed	10' to 12'	Dirt-Gravel	0.3	Improved-Not Maintained 2-Track	Graded	61

Table A-1 Access Roads Used by the Project

Access Road No.	Public or Private	Road Name	Existing Width (feet)	Existing Surface	Length (miles)	Existing Condition	Proposed Improvement	FERC Route Map Page
E-48C	Private	Unnamed	8' to 10'	Dirt-Gravel	5.2	Unimproved 2-Track	Graded	60, 61
E-48D	Private	Unnamed	8' to 10'	Dirt-Gravel	0.3	Unimproved 2-Track	Graded	61
E-48E	Private	Unnamed	8' to 10'	Dirt-Gravel	0.3	Unimproved 2-Track	Graded	61
E-49	Private	Unnamed	8' to 10'	Gravel	1.1	Unimproved 2-Track	Graded	62
E-50	Private	Soldier Creek Road	10' to 12'	Gravel	0.4	Improved-Not Maintained	Graded	63
E-51	Private	China Creek Road	10' to 12'	Dirt-Gravel	0.4	Improved-Not Maintained	Graded	63
E-52	Private	Unnamed	8' to 10'	Gravel	5.0	Unimproved 2-Track	Graded	64
E-53	Private	Unnamed	8' to 10'	Gravel	3.1	Rough - Unimproved 2-Track	Graded	64
E-54	Private	Rock Creek Road	24' to 28'	Gravel	2.8	Improved-Maintained	None	64, 65
E-55	Private	Rock Creek Ranch Road	10' to 12'	Gravel	1.3	Improved-Maintained	Graded	64
E-56	Private	Unnamed	8' to 10'	Gravel	3.9	Unimproved 2-Track	Graded	64, 65
E-57	Private	Unnamed	10' to 12'	Gravel	0.7	Improved-Not Maintained 2-Track	Graded	66
E-58	Private	Izenhood Road	10' to 12'	Gravel	1.7	Improved-Not Maintained	Graded	66, 67
E-59	Private	Unnamed	8' to 10'	Gravel	6.5	Unimproved 2-Track	Graded	66
E-60	Private	Unnamed	18' to 20'	Gravel	9.6	Improved-Maintained	Graded	67, 67A
E-61	Private	Unnamed	10' to 12'	Gravel	0.3	Unimproved 2-Track	Graded	67
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Table A-1 Access Roads Used by the Project

Access Road No.	Public or Private	Road Name	Existing Width (feet)	Existing Surface	Length (miles)	Existing Condition	Proposed Improvement	FERC Route Map Page
H-2	Private	Lower Clover Ranch Road	18' to 22'	Gravel	6.6	Improved-Maintained	None	68
H-3	Private	Unnamed	8' to 10'	Gravel and Dirt	1.0	Unimproved 2-Track	Graded	68
H-4	Public	Hot Springs Road	8' to 10'	Gravel and Dirt	0.6	Unimproved 2-Track	None	70
H-5	Private	Hippy Ranch Road	8' to 10'	Gravel and Dirt	0.6	Unimproved 2-Track	Graded	70
H-6	Public	5 Mile Road aka Red House Road	18' to 22'	Gravel	0.2	Improved-Maintained	None	71
H-8	Private	Pettit Ranch Road-aka Christesen Ranch Road	18' to 20'	Gravel	0.7	Improved-Maintained	Graded	71
H-9	Public	Unnamed	20' to 24'	Gravel	2.4	Improved-Maintained	None	71
H-10	Private	Soldiers Pass Road	10' to 12'	Gravel and Dirt	8.8	Unimproved	Graded	71, 72
H-11	Public	Eden Valley Road	28' to 32'	Gravel	11.8	Improved-Maintained	None	72
H-12	Public	Dutch Flat Road	28' to 32'	Gravel	15.0	Improved-Maintained	None	72, 73, 74, 75
H-13	Private	Unnamed Road	16' to 20'	Gravel and Dirt	0.3	Improved-Not Maintained	Graded	72
H-14	Private	Unnamed	13' to 24'	Gravel and Dirt	0.3	Unimproved 2-Track	Graded	72
H-15	Private	Unnamed	16' to 20'	Gravel	0.1	Improved-Not Maintained	Graded	73
H-16	Private	New Farm Road	18' to 20'	Gravel	0.2	Improved-Maintained	None	73

Table A-1 Access Roads Used by the Project

Access Road No.	Public or Private	Road Name	Existing Width (feet)	Existing Surface	Length (miles)	Existing Condition	Proposed Improvement	FERC Route Map Page
H-16A	Private	Unnamed	10' to 12'	Gravel and Dirt	0.6	Unimproved 2-Track	Graded	74
H-17	Public	Unnamed	10' to 12'	Gravel and Dirt	3.8	Unimproved 2-Track	Graded	74, 75
H-18	Public	Mauser Rd	12' to 16'	Gravel and Dirt	1.0	Unimproved	Graded	74, 74A
H-19	Public	Paradise Ranchos Drive	24' to 28'	Asphalt/Gravel	3.5	Improved-Maintained	None	74A, 76
H-20	Public	Weatherby Road	12' to 14'	Gravel and Dirt	1.0	Improved-partially Maintained	Graded	75, 76
H-21	Public	Western Horizon Road	18' to 24'	Gravel	1.0	Improved-Maintained	Graded	75, 76
H-22	Private	Unnamed	12' to 14'	Asphalt/Gravel	1.7	Improved-Not Maintained	Graded	75, 76
H-22A	Private	Unnamed	10' to 12'	Gravel and Dirt	0.1	Unimproved 2-Track	Graded	75
H-23	Private	Unnamed	12' to 14'	Gravel and Dirt	0.1	Improved-Not Maintained	Graded	75
H-24	Private	Unnamed	10' to 12'	Gravel and Dirt	0.2	Improved-Not Maintained 2-Track	Graded	76
H-24A	Private	Unnamed	8' to 12'	Gravel and Dirt	0.3	Unimproved 2-Track	Graded	76
H-25	Private	Unnamed	8' to 10'	Gravel	0.7	Unimproved 2-Track	Graded	76
H-26	Private	Unnamed	8' to 10'	Gravel	0.6	Unimproved 2-Track	Graded	76, 77
H-26A	Private	Unnamed	8' to 10'	Gravel	1.0	Unimproved 2-Track	Graded	77
H-26B	Private	Unnamed	8' to 10'	Gravel and Dirt	0.9	Unimproved 2-Track	Graded	78
H-27	Public	Mount View Rd aka Cane Springs Road	16' to 20'	Gravel	2.1	Improved-Maintained	None	78
H-28	Public	Valley County Road	24' to 30'	Gravel	0.6	Improved-Maintained	None	78

Table A-1 Access Roads Used by the Project

Access Road No.	Public or Private	Road Name	Existing Width (feet)	Existing Surface	Length (miles)	Existing Condition	Proposed Improvement	FERC Route Map Page
H-29	Private	Unnamed	8' to 10'	Gravel	0.4	Unimproved 2-Track	Graded	79
H-29A	Public	Sod House Road	26' to 30'	Gravel	0.3	Improved	None	80
H-30	Private	Unnamed	14' to 18'	Gravel	0.3	Improved/Unimproved 2-Track	Graded	80
H-30A	Private	Unnamed	10' to 12'	Gravel	0.6	Improved 2-Track	Graded	80
H-31	Private	Unnamed	8' to 10'	Gravel	0.4	Unimproved 2-Track	Graded	80
H-32	Private	Unnamed	8' to 10'	Gravel and Dirt	0.8	Unimproved 2-Track	Graded	81
H-33	Public	Bottle Creek Road	20' to 24'	Gravel	0.9	Improved-Maintained	None	82
H-34	Public	Happy Creek Ranch Road aka Old Winnemucca-Denio Road	22' to 26'	Gravel	14.3	Improved-Maintained	None	82, 83, 84
H-34A	Private	Unnamed	8' to 10'	Dirt	1.2	Unimproved 2-Track	Graded	84
H-34B	Private	Unnamed	8' to 10'	Dirt	1.7	Unimproved 2-Track	Graded	84
H-35	Private	Unnamed	10' to 12'	Gravel and Dirt	0.1	Unimproved 2-Track	Graded	82
H-36	Private	Unnamed	10' to 12'	Gravel and Dirt	0.8	Unimproved 2-Track	Graded	82
H-37	Public	Leonard Creek Ranch Road	20' to 26'	Gravel	25.4	Improved-Maintained	None	83, 84, 85, 86, 86A, 87, 88
H-37A	Private	Unnamed	8' to 10'	Gravel and Dirt	0.2	Unimproved 2-Track	Graded	86
H-38	Private	Unnamed	8' to 10'	Gravel and Dirt	5.5	Unimproved 2-Track	Graded	86, 86A

Table A-1 Access Roads Used by the Project

Access Road No.	Public or Private	Road Name	Existing Width (feet)	Existing Surface	Length (miles)	Existing Condition	Proposed Improvement	FERC Route Map Page
H-38A	Private	Unnamed	8' to 10'	Gravel	2.2	Unimproved 2-Track	Graded	86
H-39	Private	Unnamed	14' to 16'	Gravel and Dirt	1.3	Improved	Graded	86, 86A
H-40	Public	Pearl Camp Road	16' to 20'	Gravel	33.4	Improved-Maintained	None	87, 88, 88A, 88B, 89, 89A
H-41	Private	Unnamed	8' to 10'	Gravel and Dirt	0.3	Unimproved 2-Track	Graded	88
H-42	Private	Unnamed	8' to 10'	Gravel and Dirt	0.2	Unimproved 2-Track	Graded	88
H-43	Private	Unnamed	8' to 12'	Gravel and Dirt	2.2	Unimproved 2-Track	Graded	88
H-45	Private	Unnamed	8' to 10'	Gravel	4.4	Unimproved 2-Track	Graded	89
H-45A	Private	Unnamed	8' to 10'	Gravel	0.2	Unimproved 2-Track	Graded	89
H-46	Public	Summit Lake Road	18' to 24'	Gravel	13.2	Improved-Maintained	None	89, 89A, 90
H-46A	Private	Unnamed	10' to 12'	Gravel	3.0	Unimproved - Rough 2-Track	Graded	91
H-46B	Public	Summit Lake Road	18' to 24'	Gravel	21.8	Improved-Maintained	None	90, 91, 91A, 92A
H-47	Private	Unnamed	10' to 12'	Gravel and Dirt	1.8	Unimproved 2-Track	Graded	89
H-48	Private	Unnamed	8' to 10'	Gravel and Dirt	1.3	Unimproved 2-Track	Graded	89
H-49	Private	Unnamed	8' to 10'	Gravel	1.0	Unimproved 2-Track	Graded	90
H-50	Private	Unnamed	10' to 12'	Gravel	16.4	Unimproved 2-Track	Graded	90, 91, 92
H-50A	Private	Unnamed	10' to 12'	Gravel and Dirt	0.3	Unimproved 2-Track	Graded	91
H-51	Private	Unnamed	8' to 10'	Gravel	0.1	Unimproved 2-Track	Graded	91
H-52	Private	Unnamed	8' to 10'	Gravel	3.4	Unimproved 2-Track	Graded	91, 92

Table A-1 Access Roads Used by the Project

Access Road No.	Public or Private	Road Name	Existing Width (feet)	Existing Surface	Length (miles)	Existing Condition	Proposed Improvement	FERC Route Map Page
H-53	Private	Unnamed	8' to 10'	Gravel	2.6	Unimproved 2-Track	Graded	92
H-54	Private	Unnamed	8' to 10'	Gravel	5.8	Unimproved 2-Track	Graded	92, 92A
WASHOE COUNTY, NEVADA								
W-1	Private	Unnamed	8' to 10'	Gravel	13.2	Unimproved 2-Track	Graded	92, 93, 93A
W-2	Private	Unnamed	8' to 10'	Gravel	5.8	Unimproved 2-Track	Graded	93, 93A
W-2A	Private	Unnamed	8' to 10'	Gravel	0.1	Unimproved 2-Track	Graded	93
W-3	Private	Unnamed	8' to 10'	Gravel	5.5	Unimproved 2-Track	Graded	93, 94, 94A
W-3A	Private	Unnamed	8' to 10'	Gravel	0.1	Unimproved 2-Track	Graded	93
W-4	Private	Unnamed	8' to 10'	Gravel	0.9	Unimproved 2-Track	Graded	94
W-4A	Private	Unnamed	8' to 10'	Gravel	1.1	Unimproved 2-Track	Graded	94
W-5	Private	Unnamed	8' to 10'	Gravel	0.7	Unimproved 2-Track	Graded	94
W-7	Private	Unnamed	8' to 10'	Dirt	1.1	Unimproved 2-Track	Graded	95
W-8	Private	Unnamed	8' to 10'	Dirt	0.5	Unimproved 2-Track	Graded	95
W-9	Private	Powerline Road	8' to 10'	Dirt	13.9	Improved-Not Maintained 2-Track	Graded	96, 97, 98
W-10	Private	Unnamed	8' to 10'	Dirt	1.0	Improved-Not Maintained 2-Track	Graded	97
W-10A	Private	Unnamed	8' to 10'	Dirt	1.2	Improved-Not Maintained 2-Track	Graded	97
W-12	Public	Dugway Road	16' to 20'	Gravel	2.4	Improved	None	96, 96A
W-13	Public	Ft. Bidwell Road	24' to 30'	Gravel	16.4	Improved-Maintained	None	97, 98
W-13A	Private	Unnamed	8' to 10'	Dirt	0.9	2-Track	Graded	98

Table A-1 Access Roads Used by the Project

Access Road No.	Public or Private	Road Name	Existing Width (feet)	Existing Surface	Length (miles)	Existing Condition	Proposed Improvement	FERC Route Map Page
W-14	Private	Cow Camp Road	12' to 14'	Gravel	3.8	Improved-Not Maintained	Graded	98
W-14A	Private	Unnamed	8' to 10'	Dirt	2.4	2-Track	Graded	98
W-15	Private	Unnamed	8' to 10'	Gravel	13.2	Unimproved 2-Track	Graded	98, 99, 100
W-15A	Private	Unnamed	8' to 10'	Dirt	0.2	Unimproved 2-Track	Graded	100
W-16	Public	Barrel Springs Road	16' to 20'	Gravel	14.3	Improved-Maintained	None	98, 98A, 100
LAKE COUNTY, OREGON								
L-1A	Private	Unnamed	8' to 10'	Gravel	1.1	Unimproved 2-Track	Graded	101
L-1B	Private	Unnamed	8' to 10'	Gravel	2.4	Unimproved 2-Track	Graded	101, 102
L-1D	Private	Unnamed	8' to 10'	Dirt	0.9	Unimproved 2-Track	Graded	101
L-1E	Private	Unnamed	8' to 10'	Gravel and Dirt	0.1	Unimproved 2-Track	Graded	101
L-1F	Private	Unnamed	8' to 10'	Gravel and Dirt	1.3	Unimproved 2-Track	Graded	101, 102
L-1A	Private	Unnamed	8' to 10'	Gravel	0.4	Unimproved 2-Track	Graded	100
L-3A	Private	Robinson Ranch Rd	12' to 14'	Gravel	2.2	Improved 2-Track	Graded	102, 103, 104
L-3C	Private	Unnamed	12' to 14'	Gravel	17.2	Improved 2-Track	Graded	102
L-3D	Private	Unnamed	8' to 10'	Gravel	3.0	Unimproved 2-Track	Graded	102, 103
L-4	Private	NFR 019	20' to 22'	Gravel	0.2	Improved-Maintained	None	102
L-5	Private	NFR 3915	14' to 18'	Gravel	1.0	Improved-Maintained	None	102, 103, 104
L-6	Private	NFR 39-22	10' to 12'	Gravel	0.1	Unimproved	None	104
L-6A	Private	NFR 016	8' to 10'	Gravel	4.8	Unimproved 2-Track	Graded	104
L-6B	Private	Unnamed	10' to 14'	Gravel	0.7	Improved 2-Track	Graded	104
L-6C	Private	Unnamed	8' to 10'	Gravel	1.6	Unimproved 2-Track	Graded	104

Table A-1 Access Roads Used by the Project

Access Road No.	Public or Private	Road Name	Existing Width (feet)	Existing Surface	Length (miles)	Existing Condition	Proposed Improvement	FERC Route Map Page
L-7	Private	NFR 3910	20' to 24'	Asphalt	0.1	Improved-Maintained	None	104, 105
L-8	Private	NFR 3915	20' to 24'	Asphalt	6.5	Improved-Maintained	None	104
L-9	Private	NFR 3913	14' to 16'	Gravel	0.2	Improved	None	104, 105
L-9A	Private	NFR 037	10' to 12'	Gravel	0.2	Unimproved	Graded	104
L-10	Private	NFR 3922	14' to 16'	Gravel	2.7	Improved-not Maintained	None	104, 105
L-11	Private	NFR 146	8' to 10'	Gravel	3.4	Unimproved	Graded	105
L-11A	Private	Unnamed	8' to 10'	Gravel	0.2	Unimproved 2-Track	Graded	105
L-12	Private	NFR 3913	12' to 14'	Gravel	0.8	Improved	None	105
L-12A	Private	Unnamed	8' to 10'	Gravel and Dirt	0.9	Unimproved 2-Track	Graded	105
L-12B	Private	Unnamed	8' to 10'	Gravel and Dirt	2.1	Unimproved 2-Track	Graded	105
L-12C	Private	Unnamed	8' to 10'	Gravel and Dirt	4.3	Unimproved 2-Track	Graded	105
L-12D	Private	Unnamed	8' to 10'	Gravel and Dirt	10.6	Unimproved 2-Track	Graded	105
L-13	Public	Bullard Canyon Road	14' to 18'	Gravel	0.1	Improved-Maintained	None	105
L-14	Private/Public	Old Wells Road	24' to 28' / 10' to 12'	Gravel	0.8	Public is Maintained	Graded	106, 107
L-15	Private	NFR 412	10' to 12'	Gravel	0.4	Improved-not Maintained	Graded	108, 109
L-15A	Private	Unnamed	8' to 10'	Gravel	6.1	Unimproved 2-Track	Graded	108
L-15B	Private	Unnamed	10' to 12'	Gravel and Dirt	0.4	Improved 2-Track	Graded	109
L-15C	Private	Unnamed	10' to 12'	Gravel and Dirt	0.1	Unimproved	Graded	109
L-15D	Private	Unnamed	12' to 14'	Gravel	4.1	Partially Improved	Graded	109, 109A, 110
L-15E	Private	Unnamed	10' to 12'	Gravel and Dirt	1.0	Unimproved 2-Track	Graded	108

Table A-1 Access Roads Used by the Project

Access Road No.	Public or Private	Road Name	Existing Width (feet)	Existing Surface	Length (miles)	Existing Condition	Proposed Improvement	FERC Route Map Page
L-15F	Private	Unnamed	10' to 12'	Gravel and Dirt	1.2	Unimproved 2-Track	Graded	108
L-16	Private	NFR 4020	12' to 14'	Gravel	6.7	Improved-not Maintained	Graded	109, 110
L-17	Public	Dog Lake Lane	12' to 16'	Gravel	2.3	Improved-Maintained	None	110
L-18	Private	NFR 419	12' to 16'	Gravel	2.7	Improved-Maintained	None	110
L-19	Private	NFR 4017	16' to 22'	Gravel	1.6	Improved-Maintained	None	110, 111
L-20	Private	NFR 407	12' to 14'	Dirt	3.6	Improved-not Maintained	Graded	110
L-21	Private	NFR 3940	12' to 14'	Gravel	0.4	Improved-not Maintained	Graded	110, 111
L-22	Private	NFR 016	16' to 20'	Gravel	0.8	Improved-Maintained	Graded	110, 111
KLAMATH COUNTY, OREGON								
K-1	Private	NFR 4017	20' to 24'	Gravel	3.5	Improved-Maintained	None	111, 111A
K-2	Private	NFR 4017-224	14' to 16'	Gravel	3.9	Improved	Graded	111
K-3	Private	Willow Valley Road (#K 6188)	20' to 24'	Gravel	16.1	Improved-Maintained	none	111, 11A, 112, 112A, 113
K-4	Private	Unnamed	8' to 10'	Gravel	2.3	Improved 2-Track	Graded	111
K-5	Private	6118 Road	14' to 18'	Gravel	3.5	Improved-Maintained	Graded	111
K-6	Private	6118-B Road	8' to 10'	Gravel and Dirt	2.5	Unimproved 2-Track	Graded	111
K-7	Private	6148 Road	8' to 10'	Gravel and Dirt	2.0	Unimproved 2-Track	Graded	111
K-7A	Private	6118-D Road	8' to 10'	Gravel	8.5	Unimproved 2-Track	Graded	111, 112
K-7B	Private	Unnamed	8' to 10'	Gravel	0.4	Unimproved 2-Track	Graded	112
K-8	Private	Unnamed	20' to 24'	Gravel	4.4	Improved	Graded	112, 112A
K-9	Private	Unnamed	8' to 10'	Gravel	0.2	Unimproved 2-Track	Graded	112

Table A-1 Access Roads Used by the Project

Access Road No.	Public or Private	Road Name	Existing Width (feet)	Existing Surface	Length (miles)	Existing Condition	Proposed Improvement	FERC Route Map Page
K-9A	Private	Unnamed	8' to 10'	Gravel and Dirt	0.1	Unimproved 2-Track	Graded	112
K-10	Private	Unnamed	8' to 10'	Gravel	1.4	Unimproved 2-Track	Graded	113
K-10A	Private	Unnamed	8' to 10'	Gravel and Dirt	1.5	Unimproved 2-Track	Graded	113
K-10B	Private	Unnamed	8' to 10'	Gravel and Dirt	5.7	Unimproved 2-Track	Graded	113, 114
K-10C	Private	Unnamed	8' to 10'	Gravel and Dirt	2.5	Unimproved 2-Track	Graded	113, 114
K-10D	Private	Unnamed	8' to 10'	Gravel and Dirt	4.2	Unimproved 2-Track	Graded	114
K-11	Private	Unnamed	8' to 10'	Gravel	7.4	Unimproved 2-Track	Graded	114, 115
K-12	Private	Unnamed	8' to 10'	Gravel	0.2	Unimproved 2-Track	Graded	114
K-13	Private	Unnamed	10' to 16'	Gravel	6.1	Unimproved 2-Track	Graded	114, 115
K-13A	Private	Unnamed	8' to 10'	Gravel and Dirt	0.5	Unimproved 2-Track	Graded	114
K-16	Private	Unnamed	10' to 12'	Gravel	3.7	Improved 2-Track	Graded	114
K-17	Private	Unnamed	10' to 12'	Gravel and Dirt	1.5	Unimproved 2-Track	Graded	114