PLAN OF DEVELOPMENT

CONSTRUCTION, OPERATION, AND MAINTENANCE

UINTA BASIN RAILWAY

Submitted to:
USDA Forest Service
Ashley National Forest

Submitted by:
Seven County Infrastructure Coalition &
Uinta Basin Railway, LLC

Uinta Basin Railway

DRAFT
July 2021

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Acronyms and Abbreviations

Applicant	Seven County Infrastructure Coalition and Uinta Basin Railway, LLC
AREMA	American Railway Engineering and Maintenance-of-Way Association
Basin	Uinta Basin
BIA	Bureau of Indian Affairs
BLM	Bureau of Land Management
BMP	Best Management Practices
BNSF	BNSF Railway Company
Board	Surface Transportation Board
CFR	Code of Federal Regulations
Coalition	Seven County Infrastructure Coalition
EIS	Environmental Impact Statement
EMS	Emergency Management Services
Forest Plan	Ashley National Forest Land and Resource Management Plan
Forest Service	US Department of Agriculture, Forest Service
FRA	Federal Railroad Administration
MOW	maintenance-of-way
MRE	[AREMA] Manual for Railway Engineering
NEPA	National Environmental Policy Act
NWS	National Weather Service
OEA	[Surface Transportation Board] Office of Environmental Analysis
OSHA	Occupational Safety and Health Administration
PHMSA	Pipeline and Hazardous Materials Safety Administration
POD	Plan of Development
ROW	right-of-way
RRP	Risk Reduction Program
STB	Surface Transportation Board
TBD	to be determined
the project	Uinta Basin Railway Project
UBRY	Uinta Basin Railway, LLC
UDAF	Utah Department of Agriculture and Food
UDOT	Utah Department of Transportation
UP	Union Pacific Railway
USACE	US Army Corps of Engineers
USDA	US Department of Agriculture
USFS	US Department of Agriculture, Forest Service
USGS	US Geological Survey
Ute Indian Tribe	Ute Indian Tribe of the Uintah and Ouray Reservation

Plan of Development
Construction, Operation, and Maintenance
Uinta Basin Railway Project

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I. INTRODUCTION

The Seven County Infrastructure Coalition (Coalition)[1], a local government body known as an interlocal entity in the State of Utah, is planning to construct and operate approximately 88 miles of new rail line in Carbon, Duchesne, Uintah, and Utah Counties, Utah. This area is also known as the Uinta Basin (Basin). The Coalition has entered into a Development Agreement with Drexel Hamilton Infrastructure Partners, LP Uinta Basin Railway, LLC (UBRY), and the Ute Indian Tribe of the Uintah and Ouray Reservation (Ute Indian Tribe). The Coalition and UBRY are together the Applicant for the Special Use Permit (the Applicant).

The new rail line will provide a common-carrier rail connection between the Uinta Basin in northeastern Utah and the existing Union Pacific Railway (UP) interstate common-carrier rail network. The BNSF Railway Company (BNSF) has also been granted trackage rights on the connecting UP line for competitive shipping operations. Trains received from UP or BNSF will be operated intact on the UBRY to customer facilities, and trains originating on the UBRY at customer facilities will be handed off intact in return. This is done so that the UBRY can accept and deliver trains from and to UP and BNSF without need for aggregation or disaggregation of trains at or near the interchange, which would add considerable operating expense and would require construction of yard and siding infrastructure.

Portions of the Uinta Basin Railway Project (the project) will cross approximately 13 miles of National Forest System lands managed by the US Department of Agriculture (USDA) Forest Service (USFS or Forest Service) Ashley National Forest. The project will also cross 8.1 miles of Tribal trust lands in the Uintah and Ouray Reservation as well as lands managed by the State of Utah and private land. See figure 1 for an overview of the total project area, including all administrative jurisdictions crossed by this project.

An Environmental Impact Statement (EIS) has been prepared for the project. The Surface Transportation Board (STB or Board), through its Office of Environmental Analysis (OEA) was the lead federal agency on this effort, with the US Army Corps of Engineers (USACE), State of Utah Public Lands Policy Coordinating Office, the USFS, Bureau of Land Management (BLM), and Bureau of Indian Affairs (BIA) serving as cooperating agencies. The EIS satisfies the requirements of the National Environmental Policy Act (NEPA) for each federal agency. Separate decisions will be issued by the STB, USFS, USACE, and BIA. USFS's action would be the granting of a special use permit allowing the Coalition to cross the Ashley National Forest.

[1] The term "Coalition" is intended to encompass any future third party to which the Coalition transfers its authority to construct and operate the Project in accordance with the Surface Transportation Board regulations.

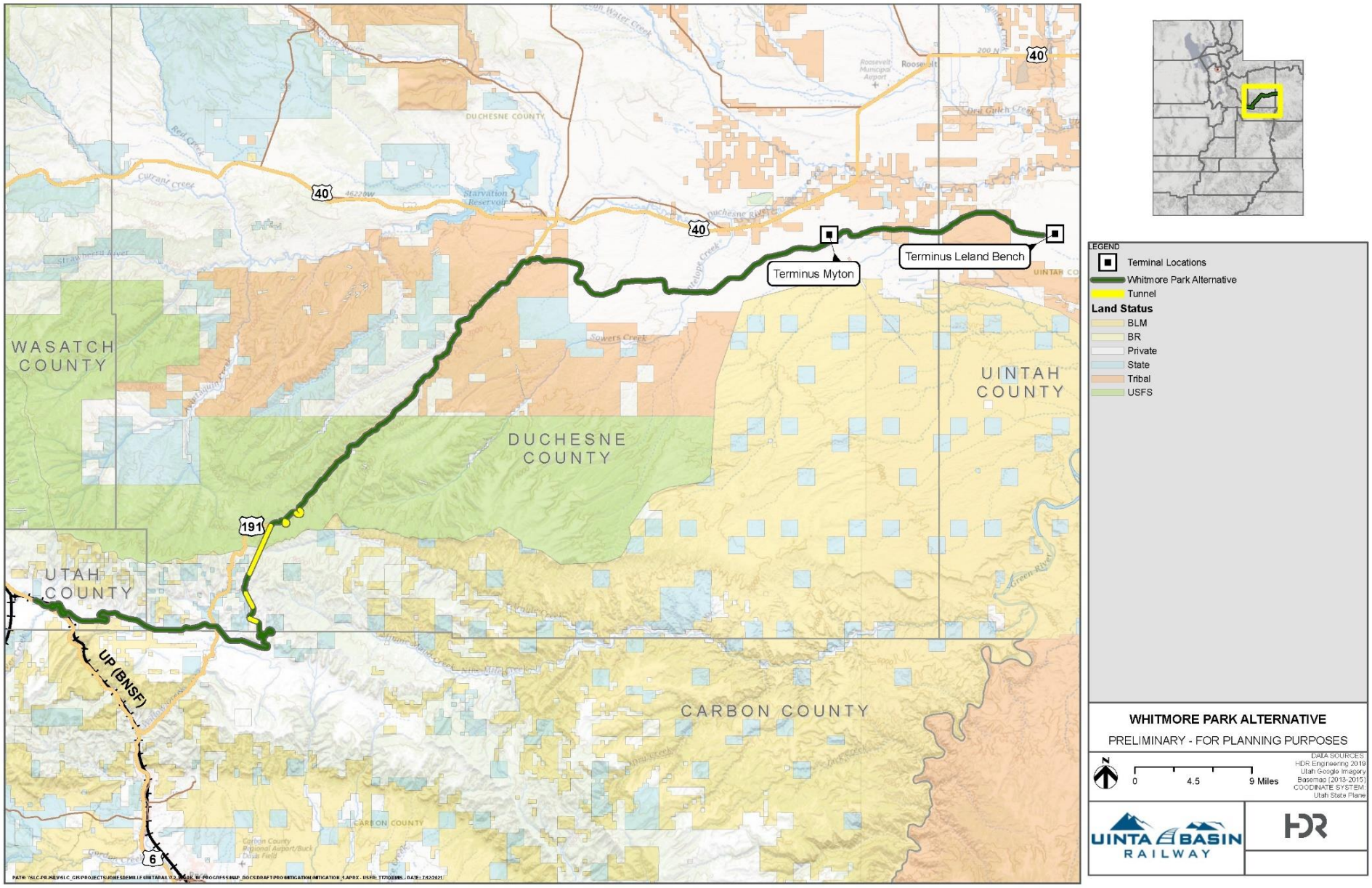

Figure 1. Project Overview Map

The purpose of the project is to provide common carrier rail service connecting the Basin to the interstate common carrier rail network using a route that would provide shippers with a viable alternative to trucking. The Basin is an isolated geographical region, approximately 12,000 square miles in area, extending from northeastern Utah into northwestern Colorado. Because it is surrounded by high mountains and plateaus with elevations up to 13,500 feet above sea level, the Basin has limited access to all transportation modes.

Currently, all freight moving into and out of the Basin is transported by trucks on the area's limited road network, which includes one north-south running two-lane highway (US Highway 191) and one east-west running two-lane highway (US Highway 40).

The rail line will:

- provide customers in the Basin with multi-modal options for the movement of freight to and from the Basin;
- promote a safe and efficient system of freight transportation in and out of the Basin;
- further the development of a sound rail transportation system; and
- foster sound economic conditions in transportation and effective competition and coordination between differing modes of transportation.

Development of this project includes rail line and track construction; temporary construction staging areas; bridges, culverts, and stream channel modifications; construction of tunnels; grade crossings; road relocations; and the construction of associated facilities.

This **Plan of Development** (POD) is written to meet the requirements for the USFS prior to issuance of the final right-of- way (ROW) authorizations for this project. Unless otherwise noted, all activities described in this document are specific to Forest Service lands. Permitting the rail ROW could include amending the *Ashley National Forest Land and Resource Management Plan* (Forest Plan) with a project-specific amendment in the areas of visual quality and scenery management, pursuant to the requirements of the 2012 Planning Rule. The Applicant will also obtain a consent resolution from the Ute Indian Tribe for use of reservation lands and a grant of easement for ROW or leases, if necessary, from the Ute Indian Tribe and BIA before beginning construction.

This POD has been prepared to provide information needed for acquiring a Special Use Permit ROW authorization. More detailed, site-specific plans for certain areas may be prepared following receipt of the ROW authorization in order to meet the project schedule and obtain limited or segmented Notice to Proceeds for construction in these areas.

While full construction is anticipated to begin in January 2023, construction activities on Forest Service land could begin as early as January 2022. Construction activities will take approximately two years to complete, though this duration may range from 20 to 28 months depending on weather conditions. The construction season will be different for the different components of the rail line. Construction of the following features will occur year-round:

- Tunnels
- Bridges
- Track

- Signal and communications systems

Construction of the following components will be limited to an eight-month construction season each year, beginning in mid-April and ending in mid-November:

- Embankments (cut and fills)
- Culverts
- Retaining walls
- Roadway crossings
- Fencing

To address the potential environmental impacts of constructing and operating the rail line, the Applicant has proposed a number of voluntary mitigation measures, which include regulatory-related requirements and other conditions that are typical, like stormwater management and associated best management practices (BMPs). OEA has also recommended to the STB additional preliminary mitigation measures (see Section VII: "Environmental Requirements" below). Included within the voluntary and recommended mitigation measures pertaining to USFS are those related to grade crossing safety, recreation, land use, and visual resources [to be updated for subsequent drafts].

A. Project Description

The Applicant will construct and operate an approximately 88-mile, single-track rail line with sidings connecting the Basin to the existing interstate rail network. The proposed rail line would extend from two terminus points in the Basin near Myton, Utah and Leland Bench, Utah to a proposed connection with the existing UP Provo Subdivision near Kyune, Utah. Starting at Leland Bench, approximately 9.5 miles south of Fort Duchesne, Utah, the railroad route will proceed westward, past the South Myton Bench area. Approximately 23 miles west of the terminus point near Leland Bench, the route will head south to avoid the residential Mini Ranches area near Duchesne, Utah. It will then continue west to Indian Canyon and turn southwest to follow Indian Canyon Creek upstream toward its headwaters below Indian Creek Pass, paralleling US Highway 191 for approximately 21 miles. The route will use three tunnels, including a summit tunnel to pass through the West Tavaputs Plateau near Indian Creek Pass on US Highway 191. After emerging from the tunnel, the route will head south and southeast on its descent from the Roan Cliffs to reach Emma Park, an open grassy area at the base of the Roan Cliffs. Two additional tunnels will be used along this segment of the route. After reaching Emma Park, it will follow Whitmore Park Road westward, cross US Highway 191, and continue west along Quarry Road and Emma Park Road where it will split into a westbound and eastbound wye configuration that will connect to the UP Provo Subdivision near the railroad timetable station at Kyune.

The project will cross approximately 13 miles of Forest Service land within Ashley National Forest, entering just before railroad Mile Marker 38 to the northeast and exiting between Mile Marker 25 and Mile Marker 26 to the southwest. Within the limits of the Ashley National Forest, the alignment location was prioritized to be adjacent to US Highway 191, except in locations where significant impacts to Indian Creek and the highway would occur. The route was also designed to minimize construction impacts to the existing environment and preserve the view shed of US Highway 191 to the extent possible. The Applicant is seeking Forest Service approval for permitting the rail line right-of-way, which could include amending the Ashley

National Forest Plan with a project-specific amendment in the areas of visual quality and scenery management, pursuant to the requirements of the 2012 Planning Rule. The project-specific amendment, if necessary, would include the following language:

The plan amendment adds the following to the Forest Plan Standard and Guideline for Objective 9 for Recreation under IV. Forest Management Direction, C. Goals, Objectives, Standards and Guidelines by Management Area (Forest Plan, page IV-19): This standard and guideline does not apply to the Uinta Basin Railway Project.

Because the project will cross through Inventoried Roadless Areas in the Ashley National Forest, review and approval by the Regional Forester will be completed to ensure consistency with the 2001 Roadless Area Conservation Rule.

It is anticipated that shippers could use the proposed rail line to transport various heavy and bulk commodities, such as crude oil, frac sand, soda ash, phosphate, natural gas, oil shale, gilsonite, natural asphalt, limestone, bentonite, heavy clay, aggregate materials, bauxite, low-sulfur coal, and agricultural products.

II. COORDINATION AND COOPERATION

A. Principal Representatives

Clear, efficient, and timely communication and coordination between the Forest Service and the Applicant is necessary for the implementation and monitoring of this POD on National Forest System lands. To ensure effective coordination, each entity will designate a principal and alternate representative assigned to all project activities. The Applicant is committed to timely communication and suggests a goal of responding (via e-mail or phone) to one another within 48 hours of initial contact. The Applicant will also develop an internal Emergency Response Plan which will include a roster of agencies and people to be contacted for specific types of emergencies. Additional information is provided below in Section V, Part A: "Safety." Contact information of all representatives is provided below.

USFS Contact Information
Name, Title, Phone Number, E-mail
[to be added for subsequent drafts]

Rio Grande Pacific Corporation
Name, Title, Phone Number, E-mail
[to be added for subsequent drafts]

Uinta Basin Railway, LLC
Name, Title, Phone Number, E-mail
[to be added for subsequent drafts]

Seven County Infrastructure Coalition
Michael McKee, Executive Director

435-823-5010
mmckee@7county.utah.gov

Construction Contractor Contact Information
Name, Title, Phone Number, E-mail
[to be added for subsequent drafts]

Notify the first available person in order listed above. Should contact information change, each entity is responsible for providing timely notification to the other.

B. Reports

During the project construction period, the Applicant will communicate weekly with the Forest Service with construction updates. This responsibility has been assigned to [to be added for subsequent drafts].

C. Noncompliance

The Forest Service will immediately notify the Applicant's principal representative if it believes the Applicant has not complied with the terms of this POD. If the matter has not been resolved after informal discussions, the Forest Service may follow its regulatory procedures for suspension, termination, or revocation.

D. Plan Amendments and Changes

If modifications and/or changes to this POD are needed, they may be initiated at the request of the Applicant or the Forest Service. Modifications and/or changes will be negotiated between the Applicant and the Forest Service, and joint approval will be required by the Forest Service and the Applicant's Project Manager.

III. DESIGN CRITERIA

A. Railbed and Tracks

For the proposed activity, the width of the railbed would extend approximately 10 to 20 feet from the centerline to the edge of the subballast. This distance would vary in cut-and-fill locations where ditches could be required. The track would be constructed on top of 8-12 inches of subballast material and 8 inches of ballast. Timber ties would support the continuously welded steel rail. The track would be designed to accommodate railroad loading requirements and to support a gross weight of 315,000 pounds per rail car and 432,000 pounds per locomotive.[2]

Railroad track components will conform to the latest version of the American Railway Engineering and Maintenance-of-Way Association's (AREMA) Portfolio of Standard Track Work Plans or similar standards, as approved by UBRY. Track design will, at a minimum, meet

[2] The estimated maximum weight of locomotives used by the proposed rail line would range from approximately 380,000 to 432,000 pounds. The typical weight of loaded crude oil rail cars operating over the proposed rail line is expected to be 143 tons, or 286,000 pounds, per car.

or exceed Federal Railroad Administration (FRA) Class 3 track safety standards per the Code of Federal Regulations (CFR) Part 213. Communications and signal design will take into account the best practices in the AREMA Communications and Signals Manual (or similar standards) and will comply with CFR Parts 234 and 236.

Railroad track will consist of wood crossties, rails, ballast, and other track materials, such as spikes and tie plates. These materials will follow industry standard practices for design, construction, and maintenance.

Main track alignments will be designed to accommodate a maximum speed of 40 miles per hour. The horizontal alignment will consist of tangent sections connected by circular curves with spiral transition curves. The number of curves and their sharpness will be reduced as much as practical, since more of sharper curves may increase the amount of maintenance activity. The maximum grade for the Unita Basin railway will be 2.5 percent.

New turnouts and crossovers will be constructed of new 136-RE CWR and wood ties. If a different rail size is chosen for the main track, turnout rail size will match the different rail size.

Clearances outside of tunnels should allow for AAR Plate H. Vertical clearances over the track, measured in the plane of the top of the rails, should exceed 25 feet, wherever possible. Horizontal clearance should exceed 15 feet, with 25 feet being preferred. Clearances at tunnels and bridges may be reduced per AREMA recommendations (or similar standards).

B. Bridges and Culverts

The rail line will require bridges and culverts to cross streams, rivers, and ephemeral drainages. On Forest Service land, the project will require 5 rail bridges and 8 culverts on jurisdictional waters of the US along the rail line. Placement of permanent culverts in waters of the US has been minimized to the greatest extent practicable. Culverts have been sized to span the ordinary high-water mark of waters of the US as well as to meet railroad design criteria. Culverts permanently installed will likely either be single or multi-barrel corrugated steel pipes or reinforced concrete box culverts.

Hydraulic design of storm water conveyances including bridges and culverts will include the following criteria, and include associated hydraulic design criteria:

- Federal Emergency Management Agency and irrigation district criteria will be followed where applicable.
- The 50-year water surface elevation will be at or below the bridge lowest low chord elevation or culvert crown.
- The 100-year water surface elevation will be at or below the top of subgrade at the shoulder (nominally 2 feet and 3 inches below base of rail for a single track).
- The 100-year water surface elevation will be not be more than 1 foot above the bridge low chord or 1 foot above the culvert crown.

Railroad bridge design will be in accordance with AREMA's Manual for Railway Engineering (MRE) or similar standards, as approved by UBRY, and may consist of concrete or steel elements,

or a combination of both. The date of construction and bridge number will be displayed on a sign in a visible location. Specific components and layouts for bridges are detailed below.

Skew

Railroad bridge crossings will be located at 90 degrees relative to centerline of track, where feasible. A concrete approach slab or corbel may be required to square up the approach embankment where skewed abutments are used.

Substructure and Concrete

The substructure elements will be designed in accordance with the AREMA MRE or similar standard, as approved by UBRY, and may consist of concrete or steel elements, or a combination of both.

Bearings

For prestressed concrete spans, bearing material will consist of elastomer in accordance with the AREMA MRE (or similar standard). Urethane pads are the preferred bearings. Steel span bearings may consist of various material types and configurations, consistent with the AREMA MRE (or similar standard) requirements. Flat steel plate or radial bearings are preferred per the AREMA manual.

Superstructure

Superstructure elements will be designed in accordance with the AREMA MRE (or similar standard). The depth of ballast under the low rail will be 8 inches minimum for timber ties. Timber tie depth will be assumed to be 7 inches. Initial design depth of ballast and ties will be 15 inches, and a final design depth will be 30 inches to account for future ballast raises. Concrete ties may not be used on bridges unless approved by UBRY and additional ballast below the tie or ballast mat on the bridge deck may be required.

Deck Waterproofing

Deck waterproofing systems will meet the current AREMA guidelines for waterproofing (or similar standard). Where possible, superstructure will be sloped to drain water off ends of bridges and be collected behind the back walls. Intermediate drainage from spans if required, will be at piers or bents, and will direct water away from the substructure concrete.

Steel Type and Painting

For steel structures, unpainted weathering steel is the standard. If painting is required by the Forest Service or in an environment that is not conducive to establishing a stable weathering finish on the steel, painting will conform to the current requirement of the Forest Service and the Steel Structures Painting Council recommendations of 3-coat zinc rich systems for bridge use in the project's environmental conditions and must also be approved by UBRY.

C. Stream Channel Modifications

Construction of the proposed rail line will require modifications of stream segments in seven locations to accommodate permanent project features, including portions of the rail bed and areas of cut and fill. The project will require about 1.4 miles of stream channel modifications on Forest

Service land. The stream modifications and cross-section geometries are based on existing stream bottom width and hydrology and hydraulics. The proposed stream modifications would not be straightened stream with the bed and banks locked-in-place with riprap or concrete linings. The proposed modifications are intended to mimic the natural stream environment in the area and restore stable stream conditions. Where head-cuts are currently occurring, the proposed stream length is longer than the existing stream length to establish a stable stream slope. See appendix A.1 (originally appended to the UBRY Compensatory Mitigation and Monitoring Plan in accordance with Section 404 of the Clean Water Act) for additional detail on stream modification mitigation sites and design. Fencing may be installed in association with stream channel modifications on grazing allotments to restrict cattle grazing to allow for the reestablishment of vegetation in these areas. In total, there is the potential for 19.74 acres of fence area on Forest Service land. Fences will be maintained as necessary where perimeter fences are established. The Applicant will make regular inspections and repair perimeter fences if needed to maintain access control. For additional detail, see appendix A.2 for the full mitigation fencing plan.

Additional information on the design of the proposed stream modifications is provided below.

Hydrology

Stream gage records are not available along the proposed rail line, so the existing condition design event hydrology was developed using US Geological Survey (USGS) regression equations established in *Methods for estimating magnitude and frequency of peak flows for natural streams in Utah, USGS Report 2007-5158*.

The proposed rail line is not expected to increase runoff or streamflow because unlike paved roads, which increase the impervious surfaces and reduce rainfall infiltration, a railroad allows continued rainfall infiltration. No change to proposed design flows is recommended because the runoff coefficient for the rail embankment is in the same range or slightly less than the existing condition (pasture with shallow soil) and no substantial amount of new impervious areas or runoff will be added by the proposed activity.

Hydraulics

The preliminary stream modifications were analyzed using a Sedimentation and River Hydraulics Two-Dimensional hydraulic model developed by the US Bureau of Reclamation. The existing and proposed 2- and 10-year flow depths and velocities were summarized and compared for the stream relocation reaches. The hydraulic objective of the stream relocation layout was to match or lower the proposed condition flow depths and velocities. This objective was achieved at most locations, except for some locations where the velocity increased slightly at the upstream tie-in to the existing stream. The area of velocity increase was due to creation of the floodplain bench. This allowed the flow to spread out above the low flow stream and across the floodplain thus lowering water levels, which created a localized steepened energy grade line, and increased velocities. Bank protection and stone vanes were proposed in these isolated increased velocity areas to limit erosion, but a pool is also likely to form in these locations. The marginal velocity increases predicted as a result of some of the stream modifications is anticipated to be mitigated by the use of bioengineering or in-stream habitat features (described below). A total of 10,206 cubic yards of fill material is anticipated to be needed for the proposed stream modifications.

Stream Planform and Geometry

The preliminary proposed stream length matches the existing stream length with a 1:1 replacement length resulting in no change to the bed slope, except in cases where an existing head-cut or over-steepened reach occurs. In this case, the proposed relocated stream was lengthened to maintain a consistent and stable stream slope. The stream radius of curvature matches the existing radius of curvature occurring within the existing stream reach. The proposed stream planform is more sinuous to match the existing stream length in a slightly shorter valley length. The stream bottom width was determined by matching, to the extent possible, the existing bottom width. The proposed stream side slopes are 2:1 (horizontal:vertical) which are flatter than most of the existing side slopes resulting in a slightly wider stream top width as well as banks that are stabilized by native vegetation.

In-Stream Habitat Features

The relocated streams will include the following in-stream, bio-engineered features, where practicable: stone cross vanes, J-hooks, cross stream log weir, anchored in-stream large woody debris, multi-log structures, and root wads. Pools will form at the outside of the stream bends, at the downstream side of the stone cross vanes, and upstream of the cross-stream features due to backwater. Root wads, anchored in-stream large woody debris, and multi-log structures will provide immediate shading and habitat cover. The large woody debris next to the pools will create habitat cover next to low velocity deep water areas. The mid-stream anchored woody debris will promote mid-stream gravel bar formation. The combination of these features will create habitat complexity throughout the stream modification reaches and promote more pools than currently occur, with an estimated increase from less than 5% to over 15% pooled habitat per re-established segment.

Adjacent Floodplain Habitat

In areas where the existing stream is entrenched, a floodplain bench will be graded to allow high flows to spread out, which lowers shear stress thereby reducing sediment transport capacity and the ability of the stream to erode the bed and banks. The floodplain bench will provide locations of gravel deposition, regular overland flooding, and shallow groundwater recharge which are intended to promote riparian vegetation growth. Riparian vegetation next to the stream will provide tree/shrub canopy to shade the stream and introduce organic matter.

Revegetation and Stream Biota

The top 6 inches of existing adjacent floodplain wetland substrate from areas impacted by the proposed activity will be salvaged and transported to the proposed adjacent wet meadow and riparian overbank wetland areas to take advantage of the existing seed bank and quickly re-establish vegetation in wetland areas. Root mats will also be salvaged and placed along the stream bank where possible. In addition, gravels will be salvaged from the existing stream bed to incorporate the existing biota into the proposed stream. The salvaged gravel will be distributed by stream flows recreating bars, pools, riffles, and narrower stream width throughout the stream modification reach resulting in gravel bars and sorting based on stream velocities.

Final Stream Relocation Design

The final stream relocation designs will incorporate field-identified reference stream reaches. Reference stream reaches are anticipated to be located immediately upstream or downstream of the areas being realigned and will have the same sediment, flow, and ecological regimes as the stream reach to be realigned. A field visit with Forest Service personal will be scheduled to discuss the proposed design reaches, incorporate local knowledge and insight, and identify site-specific considerations.

On-site data will be collected and used to develop the site-specific stream metrics. The desired minimum and maximum stream characteristics will be measured for the reference reaches and will be used in the final design of the reconstructed stream reaches. Stream metrics include: bankfull width, floodplain width, entrenchment, bankfull width/depth ratio, sinuosity, pool spacing, step/pool spacing, riffle length/spacing, stream slope, valley slope, substrate gradation (via Wolman pebble count), and others. The established range of stream parameters will be used to finalize the typical plan, profile, and cross sections which will be superimposed onto the stream reach to be reconstructed. The adjusted layout will be updated in the hydraulic model to compare the proposed stream dimensions with typical bankfull flow rates (approximately the 2-year return interval from USGS Regression Equations) and to verify that the sediment transport capacity (stream power) is consistent between reaches to prevent aggradation (deposition due to a lower stream power than upstream reaches) or degradation (down cutting during extreme events due to undersized or poorly graded substrate). Additional design adjustments will be made as necessary to verify stability of the final stream dimensions.

Stream relocation drawings will then be developed based on Forest Service Aquatic Organism Passage principles such as the use of geomorphic, ecologic, and stream stability, bank and floodplain ecology, and habitat. The reference conditions selected will include key habitat features such as woody material, cut banks, pools, rock outcrops or clusters, riffles, chutes, and others. These habitat features will be part of the overall engineering drawings.

Stream Relocation Revegetation Plan

In conjunction with development of the stream relocation drawings, a Revegetation Plan will be prepared with the overarching goal of quickly establishing native riparian vegetation in the restored areas. The design team will seek Forest Service input on this plan to take advantage of the local knowledge of the plant species and successful plantings in the area. The agreed upon Revegetation Plan will establish goals, objectives, success criteria, monitoring, minimize establishment of invasive plants, and adaptive management (should adjustments be required for items such as poor transplant survival, wildlife damage, or ongoing invasive species infestation).

The Revegetation Plan will specify plant species, plant harvest areas, harvesting, transportation, storage, planting approach, and invasive species control methods. The selection and siting of plant species will be primarily based on species suitability for the hydrologic regimes and soil conditions anticipated in the restored stream channels and floodplains. Additionally, it will take into account native plant species in existing riparian vegetation communities at each site suitable for salvaging or harvesting.

D. Tunnels and Ventilation

The rail line will require three tunnels on Forest Service land, totaling 2.6 miles, to traverse the mountainous terrain surrounding the Basin. The longest tunnel of the three will be partially on Forest Service land and partially on private lands. The other two tunnels will exist entirely on Forest Service land. Mining methods (i.e., "mine" construction methods) will be used to construct each tunnel. Tunnels over one mile long will require ventilation features and may require rock stabilization. Shorter tunnels may not require such features, depending on the specific geological features at the tunnel locations.

Tunnel portal cuts will likely be designed following USACE Engineering Manual 1110-1-2908 and USACE Engineer Research and Development Center Information Technology Laboratory Technical Report 01-1 and as approved by UBRY. Global stability and excavation support requirements will be evaluated using limit equilibrium methods for both two-dimensional and three-dimensional (rock wedge) approaches. Tunnel support will be designed considering empirical approaches related to the rock mass classifications, semi-empirical methods that consider the anticipated rock loads, and kinematic approaches utilizing discontinuity orientations with respect to the tunnel size and orientation. In addition, numerical methods will be used to determine the effects of excavation sequencing and compatible support system designs.

Initial support will be required to temporarily support the tunnel excavation until the final liner is installed. This includes support of all temporary load conditions and maintains stability during construction. Initial support will be designed to be compatible with the method and sequence of excavation as well as the final liner. This design will generally follow USACE standards unless superseded by AREMA or similar standards, as approved by UBRY. Tunnel final liner alternatives will be developed following the completion of the geotechnical investigation [to be updated for subsequent drafts]. The design will evaluate various dead and live loads as well as earth pressures and seismic loads. The liner will be compatible with the initial support as well as anticipated ground conditions, in situ stresses and drill-and-blast excavation. If excavation methods other than drill-and-blast are used, the final lining design will take that into account.

The three tunnels will also follow AREMA standards or similar, as approved by UBRY, for ventilation. The two shorter tunnels will likely not require ventilation systems because the piston action of the trains will self-ventilate them. Only the longest tunnel will require ventilation since its length precludes self-ventilation. The purpose of the ventilation system is to control the air temperature and the levels of pollutants in the tunnel, emitted from the diesel locomotives. The proposed ventilation system for the longest tunnel uses a fan/s to provide longitudinal ventilation along the tunnel to purge the tunnel of pollutants. During normal operations, air will be forced through the tunnel and over the trains to provide cooling to the locomotives as they traverse the tunnel. The ventilation system will also be used to purge the tunnel of pollutants before the next train passes through.

E. Grade Crossings

The rail line will cross existing National Forest System Roads 302, 303, and 304 as well as Trail 153. At-grade crossings would be provided and equipped with passive warning devices (stop signs and crossbucks). Grade-crossing warning devices will be designed to comply with the

Federal Highway Administration's *Manual on Uniform Traffic Control Devices*, and applicable safety regulations.

F. Road Relocations

Construction of the project would result in adjustments to Roads 302, 303, 304, and Trail 153. These adjustments would not increase the overall length of the existing roads or trail. See figure 2 below for an overview of roads in the project area.

G. Associated Facilities

Support Facilities

The Applicant does not anticipate constructing or operating support facilities along the rail line on USFS land. The rail line through the USFS land does not connect to a common carrier railroad and is not in a location to receive bulk commodities. The Applicant expects that UP and BNSF would conduct run-through operations on the proposed rail line and does not intend to construct locomotive repair shops, rail car repair shops, marshalling yards, or storage yards as part of the proposed rail line. Shippers could conduct mechanical inspections and repairs at potential shipper-owned facilities.

Siding Tracks and Set-Out Tracks

Within Forest Service land, the rail line will consist of a single main track with approximately 3.7 miles of sidings, to enable trains to meet and/or pass. The siding track will be approximately 15 to 20 feet from and adjacent to the main track. Set-out tracks are used on an as-needed basis when railcars may need to be "set-out" from a train in order to address mechanical issues or used to temporarily stage maintenance-of-way (MOW) equipment during maintenance activities. The Applicant will determine the exact location of siding and set-out tracks during final design [to be updated for subsequent drafts]

Distribution Lines and Power

Power distribution lines will be needed for some signals, communications, and safety equipment. The exact locations of power distribution lines will be determined during detailed design. It is anticipated that any needed power distribution lines will be constructed within the rail line footprint and will connect to existing lines where there are connections adjacent to the rail line footprint.

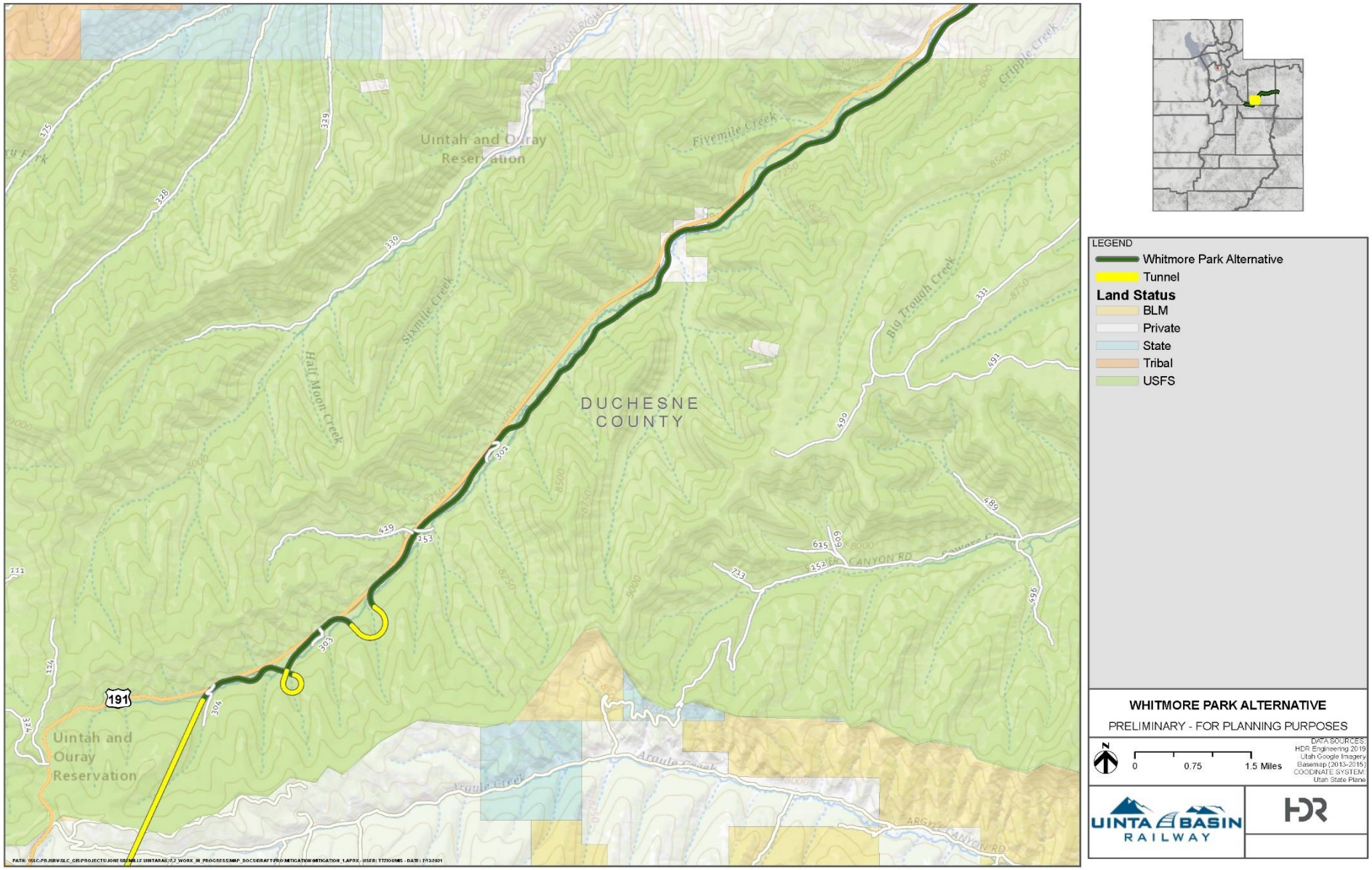

Figure 2. Roads on Ashley National Forest Land

IV. PROJECT CONSTRUCTION

Construction of the rail line would involve several phases of work, including rail line and track construction; temporary construction staging areas; construction of staffing and worker housing; bridges, culverts, and stream channel modifications; construction of tunnels; grade crossings; road relocations; and the construction of associated facilities. Each of these phases is described in more detail below.

A. Construction Schedule

While full construction is anticipated to begin in January 2023, construction activities on Forest Service land could begin as early as January 2022. Construction activities will take approximately two years to complete, though this duration may range from 20 to 28 months depending on weather conditions. The construction season will be different for the different components of the rail line. Construction of the following features will occur year-round:

- Tunnels
- Bridges
- Signal and communications systems

Construction of the following components will be limited to an eight-month construction season each year, beginning in mid-April and ending in mid-November:

- Embankments (cut and fills)
- Culverts
- Retaining walls
- Roadway crossings
- Track
- Fencing

See appendix B for a detailed list of construction tasks, duration of each task, and projected start and finish dates. Once the Applicant selects a contractor, this schedule may need to be modified. [to be added for subsequent drafts]

B. Construction Personnel and Equipment

The following lists the general construction personnel and equipment requirements that will likely be needed for construction on the Ashley National Forest:

- 2 earth-moving crews
- 2-3 tunneling crews
- 1 bridge construction crew
- 10 haul trucks
- 15 scrapers
- 4 excavators
- 1 crane
- 3 front-end loaders
- tunneling machinery
- 20 pickup trucks

- 1 water truck
- 1 fuel truck
- mobile restrooms
- 1 or more fire suppression vehicles

[to be confirmed/updated in subsequent drafts]

C. Survey

Appendix G contains the proposed ROW survey that was prepared for the Forest Service.

D. Rail Line, Temporary, and Project Footprints

Rail Line Footprint

The rail line footprint includes the area of the railbed, as well as the full width of the area cleared and cut or filled. The rail line length crossing Forest Service land would be approximately 13 miles, with a footprint of just over 167.1 acres. The rail line footprint would also include other physical structures installed as part of the proposed rail line, such as fence lines, siding tracks, relocated roads, and power distribution lines. All work is anticipated to be constructed within the rail line footprint, and the rail line footprint is the area where rail line operations and maintenance would occur. The area would be permanently disturbed.

Temporary Footprint

The temporary footprint is the area that would be temporarily disturbed during construction, including areas for temporary material laydown, staging, and logistics. This area on Forest Service land would comprise nearly 233.8 acres and would be reclaimed and revegetated following construction.

Project Footprint

The project footprint is the combined area of the rail line footprint and temporary footprint, both of which would be disturbed during construction. This includes where construction and operations of the proposed rail line would occur and comprises approximately 400.9 acres.

The width of the rail line footprint will vary depending on site-specific conditions, such as topography, soil slope stability, and other geotechnical conditions.

Only the rail line footprint will be permanently cleared of vegetation for construction and operation of the proposed rail line. The Applicant may not need to use the entire project footprint after construction. The Applicant has voluntarily committed to mitigation that would require it to limit ground disturbance to only the areas necessary for project-related construction and to reclaim disturbed areas when construction is completed. Because the Forest Service land is an Inventoried Roadless Area, the Applicant will not construct any roads.

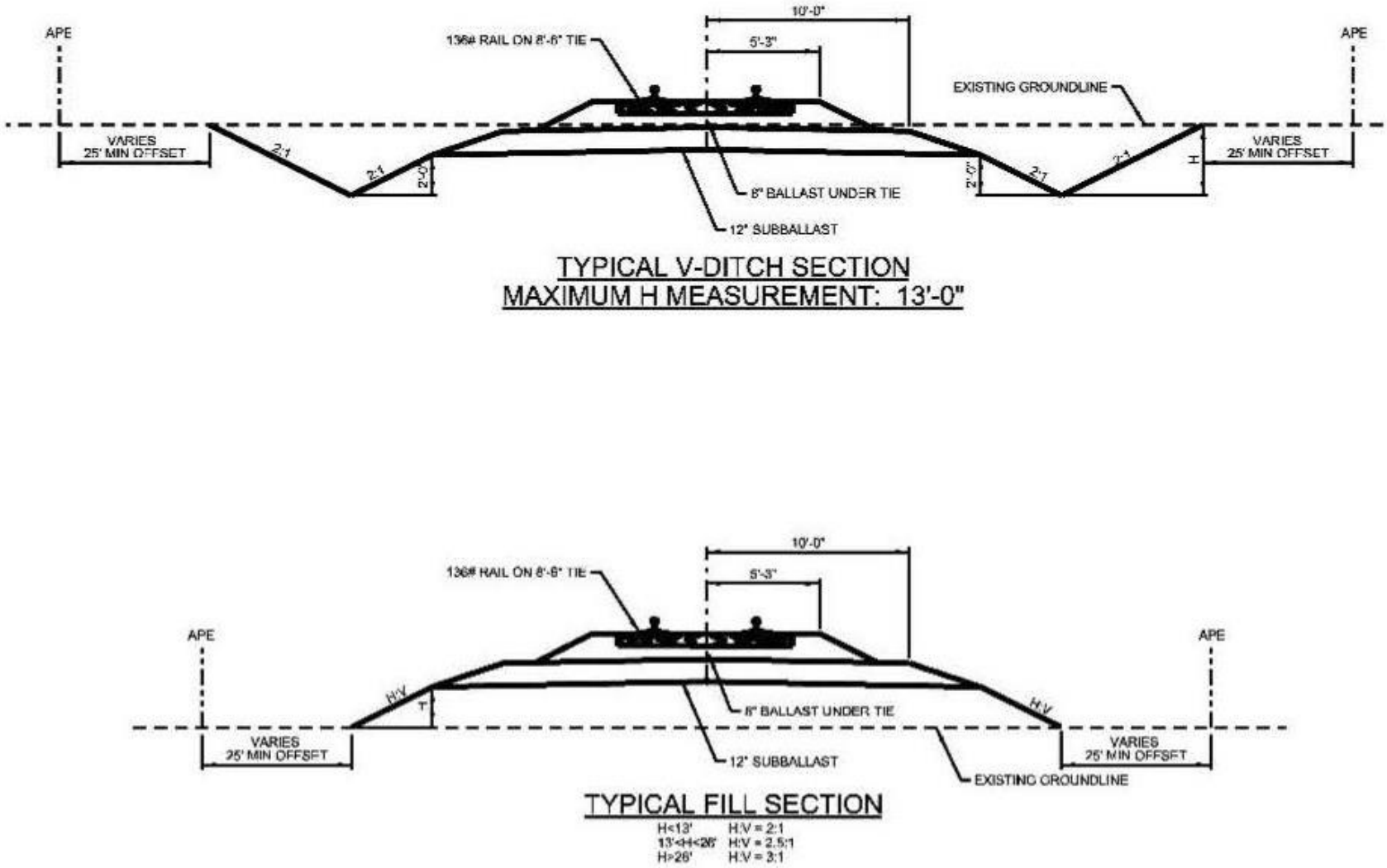

Figure 3. Typical Cross Sections of the Proposed Rail Line Footprint (as presented in the Uinta Basin Railway DEIS, Figure 2-4)

E. Bridge Construction

Construction at bridge locations would begin with a temporary access embankment or temporary bridge [to be confirmed/revised for subsequent drafts] that parallels a proposed permanent bridge and includes a temporary staging area on either side of the bridge for storage of materials and equipment away from the stream. Clean rock fill for the construction of temporary staging areas will be separated from native ground using geotextile fabric. If a temporary access embankment is used parallel to a proposed bridge [to be confirmed/revised for subsequent drafts], corrugated metal pipe culverts would be adequately sized and placed to allow for sufficient water passage during construction activities. If the topography dictates the need for a temporary construction bridge [to be confirmed/revised for subsequent drafts], steel H-pile construction techniques would be used. Construction of temporary steel H-pile bridges typically involves driving H-piles using equipment, staged outside wetlands or other Waters of the US, to build a temporary platform above ground that would later be disassembled and removed.

A temporary bridge will be used to span perennial streams when flows are too large for culverts [to be confirmed/revised for subsequent drafts] to minimize impacts on wetlands or other Waters of the US while providing safe access from one side of the stream to the other for movement of materials and equipment. These temporary bridges typically consist of second-hand rolled steel beam spans with timber decks, supported on driven H-piles and steel caps. Temporary bridges would be sized to accommodate normal flows at the proposed locations.

The five bridges proposed on Forest Service land will be shorter span permanent bridges that will consist of standardized prefabricated components such as prestressed/precast concrete beam spans, precast concrete bent caps[3], and driven steel H-pile foundations. A crane with pile driving equipment and leads will drive each steel H-pile until adequate capacity is reached for the pile at each bent location. The piles are then cut off to a specific elevation and a precast concrete cap with an embedded steel plate is welded to the tops of the piles at each bent, with steel cross and sash bracing installed as designed. Finally, the prefabricated beam spans will be erected, and track installed over the bridge. Screening-level geotechnical assessments have indicated that the following hazards may exist in the project area: landslides, debris flow, rockfall, liquefaction, fault rupture, expansive soil/rock, and collapsible soil. Please note that the substructure is dependent on the rock depth, which will be determined by future geotechnical investigations; as a result, other foundation types/methods may be employed as needed and will be formalized as design advances [to be confirmed/revised for subsequent drafts].

The construction time required for the bridges is dictated by the size and type of bridge, staging, and access. Once access is provided and materials and equipment are staged, a short single-span standard bridge could take just over a month to construct. Activities such as fueling, storage of materials, and staging of equipment will meet Utah Best Management Practices including separation distances from waterways, use of silt fence and other measures as appropriate for the site.

The bridges will be designed to maintain native substrate in stream channels and adjacent wetlands as well as pass the 50-year flood event to minimize scour, increases in velocity, and

[3] Bridge supports

potential increases in water surface elevations. Installation of a temporary sheet pile cofferdam and subsequent dewatering is anticipated to be required for the construction of one bridge pier [to be confirmed/revised for subsequent drafts]. Water from inside the cofferdam will be pumped into a location for the solids to separate. Only clean water will flow back into the channel downstream of the construction area. Accumulated silts and sediments will be disposed of in accordance with the terms and conditions of the project permits.

F. Culverts

Culverts permanently installed will either be single or multi-barrel corrugated steel pipes or reinforced concrete box culverts. Locations for culvert placement will be excavated with the top 6 inches of native substrate stockpiled for use in post-construction restoration of temporarily impacted areas. After excavation, granular bedding material will be installed and then each culvert will be placed and backfilled according to project specifications. If needed, existing surface water will be pumped around, placed in temporary piping, or diverted to a temporary plastic lined channel to bypass the construction area and maintain downstream flows throughout construction, while reducing sedimentation and siltation until after the culvert is installed. Bypassed surface water and groundwater dewatering, if needed for a culvert installation, will be pumped into a location for the solids to separate. Only clean water will flow back into the channel downstream of the construction area. Accumulated silts and sediments will be disposed of in accordance with the terms and conditions of the project construction general permits (Utah Pollutant Discharge Elimination System and National Pollutant Discharge Elimination System). Precast concrete headwalls may be placed at culvert inlets and outlets to reduce overall culvert length. Up to one foot of stockpiled native substrate materials will be placed in the culvert bottom invert to mimic more natural substrate conditions. Lastly, an estimated total of 150 cubic yards of riprap will be placed at culvert outlets to minimize erosion.

Construction time can vary greatly depending on the size and type of culvert, along with staging and access. Once access is provided and materials and equipment are staged, a small, short, single-barrel culvert could take as little as a few days to construct; whereas a large, long, reinforced concrete box culverts could take a few months to construct.

G. Cut and Fill

Cut-and-fill material will be balanced as much as possible so that offsite fill and spoil sites should not be required. During construction, subballast would be transported via truck, and ballast would be delivered either by truck or by rail directly to the project. Staging for subballast and ballast material would occur at the quarries from which those materials were obtained as well as on project as needed. Water for compaction, dust control, and concrete work would likely be obtained from existing water right holders for the construction of the proposed rail line. Specific existing water rights would be identified for construction during the final design phase based on discussions with current water right holders, timing of construction activities and seasonal availability, location of the water right point of diversion, and the type of water right diversion (e.g., well, surface water). The sources for water used during construction may include groundwater, surface water, potable water, or reclaimed and treated wastewater.

H. Rail Line Construction Equipment, Methods, and Materials

Constructing the rail line will involve a variety of construction methods and equipment. Bull dozers, scrapers, front-end loaders, and dump trucks will be used to create the appropriate corridor and grade. Cranes may be needed to construct bridges over roads and surface waters. Mining will be used to construct tunnels. Rail will be laid and welded by track welding machine or crews where necessary.

Existing, permanent quarries located in Carbon, Duchesne, Uintah, and Utah Counties will be used to obtain and stockpile aggregate and rock materials. Trucks will deliver the materials to the rail line using existing roadways. The Applicant anticipates obtaining concrete aggregate and subballast material from existing Utah Department of Transportation (UDOT)-certified quarries and ballast material from an existing rail-served quarry near Milford, Utah. If that source of ballast material were unavailable, the Applicant would obtain ballast material from existing rail-served quarries near Granite Canyon, Wyoming, and Carr, Colorado or similar. The Applicant does not anticipate needing or developing new quarry sources. If the Applicant identifies the need for additional sources during the final design phase of the proposed rail line, the Applicant will develop those sources in conformance with applicable local and state land use and permitting regulations and applicable UDOT specifications.

I. Construction Staging Areas

During construction, the Applicant intends to locate all temporary staging areas within the project footprint or in existing permanent industrial sites permitted for construction uses. To receive construction materials by rail, the Applicant will use existing permanent rail-to-truck transload facilities located in Salt Lake City, Ogden, Provo, Helper, Price, and other locations in Utah, and will transfer the materials to trucks for final delivery to the project footprint. The Applicant will establish temporary material laydown, staging, and logistics areas within the project footprint at bridge locations, tunnel portals, roadway crossings, and other locations.

J. Other Temporary Construction Spaces

Additional temporary workspaces will be required at the tunnel portals (inlets/outlets) and along the limits of cut and fill across the entire alignment. Tunnel portals used for a tunnel's excavation will require approximately 2-5 acres of relatively level laydown area outside the portal. These staging areas will contain features such as a staging area containing compressors, generators, temporary ventilation fan system; a workshop and storage area for tunnel support measures; a worker's change house; and a rail/track system for tunnel muck removal.

In addition to the tunnel portal staging areas, a temporary construction zone to allow for access and staging along the cut and fill limits of the proposed rail line will be established. This area will be used primarily for construction equipment to move along the proposed rail alignment permanent cut and fill construction limits and for temporary equipment and materials staging. No fill is anticipated in areas where the temporary construction zone affects waters of the US; however, minor grading and other earthwork may be required to facilitate access.

K. Staffing and Worker Housing

The average annual workforce during construction will include approximately 1,000 individuals, with peak employment of approximately 1,500 individuals. Peak employment will occur between May 1 and October 30 during each year of construction. It is anticipated that most construction personnel will reside in their own personal residences or in existing commercial hotels and motels.

L. Hazardous Materials Handling and Spills

Prior to initiating any project-related construction activities, the Applicant will develop a spill prevention, control, and countermeasures plan in consultation with federal, tribal, state, and local governments. The plan will specify measures to prevent the release of petroleum products or other hazardous materials during construction activities and contain such discharges if they occur. In the event of a spill over the applicable reportable quantity, the Applicant will comply with its spill prevention, control, and countermeasures plan and applicable federal, state, local and tribal regulations pertaining to spill containment, appropriate clean-up, and notifications.

The Applicant will require its construction contractor(s) to implement measures to protect workers' health and safety and the environment in the event that undocumented hazardous materials are encountered during construction. The Applicant will document activities associated with hazardous material spill sites and hazardous waste sites and will notify the appropriate state, local, and tribal agencies according to applicable regulations. The goal of the measures is to ensure the proper handling and disposal of contaminated materials including contaminated soil, groundwater, and stormwater, if such materials are encountered. The Applicant will use disposal methods that comply with applicable solid and hazardous waste regulations.

The Applicant will ensure that gasoline, diesel fuel, oil, lubricants, and other petroleum products are handled and stored to reduce the risk of spills contaminating soils or surface waters. If a petroleum spill occurs in the project area as a result of rail construction, operation, or maintenance and exceeds specific quantities or enters a water body, the Applicant (or its agents) will be responsible for promptly cleaning up the spill and notifying responsible agencies in accordance with federal, state, and tribal regulations.

M. Cleanup and Restoration of Construction Areas

As sections of the rail line are constructed, the disturbed areas will be monitored as part of routine line inspection activities, and the effectiveness of erosion control measures will be verified. Any active erosion discovered during monitoring will be repaired according to the road maintenance requirements of the land manager. When the project is under construction, dispersed camping may continue, though the presence of construction equipment may make areas near US Highway 191 less attractive for camping. If camping exists where earthwork needs to be moved, UBRY will work with the Forest Service to address this.

Once construction is complete, temporary staging, access, and dewatering structures would be removed, and the site would be restored to pre-project conditions outside of the limits of the new railway. UBRY may improve the site conditions outside of the railway limits, with a focus on the Indian Canyon area. Improvements may include establishing new stream channels and relocating

streams. There may also be fencing along certain stream restoration relocations that will restrict cattle grazing to allow for the reestablishment of vegetation. Allotment holders will be compensated for this and USFS will be involved in consultation. Once the rail is in service, there will be an offset from the railroad (approximately 100 feet from the rail centerline) to prevent dispersed camping groups from setting up too close to the rail. As part of construction activities, some merchantable timber may be removed from Forest Service land. These will be accounted and compensated for as part of the cost recovery process at the end of the project. The disturbed area outside of the new rail footprint will be seeded with locally appropriate native seed mixes. Stockpiled native topsoil and/or substrate materials may also be used in site restoration post-construction. The goal of revegetation and reclamation will be the rapid and permanent re-establishment of native groundcover on disturbed areas to prevent soil erosion, where feasible. If weather or seasonal conditions prevent vegetation from being quickly re-established, UBRY will use measures such as mulching, erosion-control blankets, or dust-control palliatives to prevent erosion until vegetative cover is established. UBRY will monitor reclaimed areas for 3 years. For areas where efforts to establish vegetative cover have been unsuccessful after 1 year, the UBRY will reseed annually for up to 3 years as needed.

V. OPERATIONS AND MAINTENANCE

Typical activities associated with operating and maintaining the rail line will occur once the new line is constructed. Following construction, UBRY would operate the proposed rail line. As a common carrier railroad, it will be subject to FRA safety regulations, and its maintenance must comply with all applicable FRA regulations.

UBRY will maintain its rail lines to ensure that its maintenance crews have safe and all-weather access to rail line structures in order to maintain the reliable operation of the rail line. The major components driving the railroad's operating and maintenance program consist of workforce labor for inspection and maintenance, locomotive rental, locomotive fuel, MOW equipment and vehicles, and maintenance of railroad assets. Maintenance activities on the tracks would include rail surfacing, ballast cleaning and tamping, and rail grinding. Other maintenance activities would include maintaining rail sensors; lubricating rails; replacing rail, ties, and ballast; and inspecting track. In addition, any tunnels would need regular inspections and maintenance.

A. Safety

A Risk Reduction Program Plan (RRP Plan) is under development that provides for a high standard of safety and security for its railroad employees and the public within the railroad's areas of operation [to be updated for subsequent drafts]. The purpose of an RRP Plan is to give guidance and direction with respect to the implementation of the principles of system safety in a form that ensures continuity during changes in staffing, infrastructure, equipment, operations, and conditions. The RRP Plan also aids in the prevention, identification, and management of hazards in an effort to minimize safety risks to operating railroad employees, contractors' employees, and the public at large within the limits of the project. The RRP Plan can help define specific, implementable methods for eliminating and mitigating for any hazards identified during the development of the document. The plan also defines the responsibilities and authority for

organizations that have a role in addressing hazards and establishing safety and security protocols within the project corridor.

The RRP Plan will be based on the FRA Regulations 49 CFR Part 271 – Risk Reduction Program. Below are the potential critical components to be included in the RRP Plan:

- Policy, Purpose and Scope, and Goals
- Railroad System Description
- Description of Consultation Process with Affected Employees
- Description of Consultation with Employees on Future Amendments to the RRP
- Risk-Based Hazard Management Program
- Safety Performance Evaluation Process
- Safety Outreach Process
- Technology Analysis and Implementation Process
- Implementation and Support Training Plan
- Involvement of Railroad Employees Process
- Internal Assessment Process
- RRP Implementation Plan

In addition to the above critical components, the following additional prescriptive components are also included:

- Workplace Safety
- Emergency Management
- Maintenance, Repair, and Inspection Program
- Contract Procurement Requirements
- Public Safety Outreach Program
- Accident/Incident Reporting and Investigation
- Safety Data Acquisition and Analysis
- Safety Culture

These items are a starting point for developing the RRP Plan. Other items and regulations may need to be considered, especially with respect to the risk-based hazard management program and analysis. For example, hazardous material transport would be an item to be considered on the basis of 49 CFR Part 172 that is likely applicable to the rail line and its common carrier operations. [to be updated for subsequent drafts]

To minimize the likelihood and consequences of accidents during rail operations, the Applicant is volunteering mitigation to ensure that train operators using the rail line would comply with the requirements of the Hazardous Materials Transportation Act, as implemented by the US Department of Transportation, and with FRA safety requirements, including any applicable speed limits and train-lighting requirements.

To ensure that the consequences of a potential accident would be minimized, the Applicant is committing to developing an internal Emergency Response Plan for operations on the proposed rail line. The plan would include a roster of agencies and people to be contacted for specific types of emergencies during rail operations and maintenance activities, procedures to be

followed by particular rail employees in the event of a collision or derailment, emergency routes for vehicles, and the location of emergency equipment. In addition, the Applicant would immediately notify state and local authorities in the event of a release of crude oil and to immediately commence cleanup actions in compliance with federal, state, and local requirements.

The following mitigation measures related to safety will be implemented during operations and maintenance of the rail line:

- The Applicant will follow all applicable federal Occupational Safety and Health Administration (OSHA), FRA, tribal, and state construction and operational safety regulations to minimize the potential for accidents and incidents during operation of the rail line.
- The Applicant will follow standard safety designs for each at-grade crossing for proposed warning devices and signs. These designs will follow the Federal Highway Administration Manual on Uniform Traffic Control Devices for Streets and Highways as implemented by UDOT and the American Railway Engineering and Maintenance-of-Way Association standards for railroad warning devices. They will also comply with applicable UDOT, tribal, city, and county requirements.
- The Applicant will prepare a hazardous materials emergency response plan to address potential derailments or spills. This plan will address the requirements of the Pipeline and Hazardous Materials Safety Administration (PHMSA) and FRA requirements for comprehensive oil spill response plans. The Applicant will distribute the plan to federal, state, local, and tribal emergency response agencies. This plan will include a roster of agencies and people to be contacted for specific types of emergencies during rail operation and maintenance activities, procedures to be followed by particular rail employees, emergency routes for vehicles, and the location of emergency equipment.
- The Applicant will work with the affected communities to facilitate the development of cooperative agreements with other emergency service providers to share service areas and emergency call response.
- Prior to beginning operations of the rail line, the Applicant will implement a desktop simulation of its emergency response drill procedures with the voluntary participation of local emergency response organizations. If necessary, the Applicant will update the hazardous materials emergency response plan based on the findings and observations of the simulated emergency response.
- In the event of a reportable hazardous materials release, the Applicant will notify appropriate federal, state, and tribal environmental agencies as required under federal, state, and tribal law.
- The Applicant will comply with FRA, PHMSA, Transportation Security Administration regulations and tribal ordinances or plans applicable to the safe and secure transportation of hazardous materials.
- The Applicant will design and construct any road realignments to comply with the reasonable requirements of the UDOT Roadway Design Manual (UDOT 2020), other applicable road construction guidance (e.g., county road right-of-way encroachment standards), and land management agency or landowner requirements regarding the establishment of safe roadway conditions.
- For each of the public at-grade crossings on the proposed rail line, the Applicant will provide and maintain permanent signs prominently displaying both a toll-free telephone

number and a unique grade-crossing identification number in compliance with Federal Highway Administration regulations (23 C.F.R. Part 655). The toll-free number would enable drivers to report promptly any accidents, malfunctioning warning devices, stalled vehicles, or other dangerous conditions.

- The Applicant will make educational programs such as Operation Lifesaver available to communities, schools, and other organizations located along the proposed the rail line. Operation Lifesaver is a nationwide, nonprofit organization that provides public education programs to help prevent collisions, injuries, and fatalities at highway/rail grade crossings.

B. General Operation

The proposed common-carrier railroad will be a freight-only railroad and will not consider passenger rail operations. In general, the rail line is intended to forward trains received from the UP Provo Subdivision connection at Kyune, Utah, from either UP or BNSF, to the customer facilities of shippers along the Uinta Basin Railway. At the customer facilities, trains will be classified and cars switched to the appropriate tracks within the facilities for each commodity (or storage tracks provided). The Uinta Basin Railway will gather cars released from shippers and receivers and forward them to UP or BNSF. After interchange to either railroad, trains may operate intact to their destination or to yards on the respective railroad's system, where they will be reclassified for furtherance to their respective final destinations.

The intent is for trains to be interchanged intact to UP or BNSF. No additional classification or assembly of trains will be required for interchange, nor will individual cars or blocks of cars be interchanged with UP or BNSF at respective railroad interchanges.

Operating Practices

The operating practices of the Uinta Basin Railway will be consistent with practices on other US railroads. The railway will adopt the General Code of Operating Rules, which is used by nearly all railroads in the Midwestern and Western United States, as its governing system of operating rules. Exceptions and supplements, if any, will be noted in the Employee Timetable, System Special Instructions, Air Brake and Train Handling Rules, Hazardous Materials Instructions, and General Orders. Safety rules, compatible with Class I railroad safety rules and adapted as needed to suit the characteristics of the new railroad, may also be developed.

Method of Operation

The railroad will operate with a signal system that incorporates a passive failsafe wayside block signal system as well as specified key locations that respond to remote dispatcher input via a secure communications system. These key locations are known as control points, and may encompass a junction, an end-of-siding location, a crossover, or may simply be a holding point. Turnouts located within control points may be power-operated and remotely controlled by the dispatcher, which generally eliminates the need for trains to stop at these locations to allow an employee to operate the point mechanism by hand.

A wayside block signal system detects the occupancy of tracks using electronic circuits which run through the rails. A train occupying a track will "shunt" the circuit by completing a circuit

between the two rails. The circuits also verify the continuity and integrity of the block and will detect if a rail has fractured and is no longer conducting a current, as well as if a main track turnout within the block is lined for other-than-main-track movement.

C. Rail Traffic

The Applicant anticipates that shippers would primarily use the proposed rail line to transport crude oil using trains composed of 110 tank cars each, on average. The Applicant also expects that shippers could transport frac sand on the proposed rail line using frac sand trains composed of between 0 and 110 loaded franc sand cars. It is also possible that shippers would transport other commodities in rail cars that could be added to the oil trains or the frac sand trains. Trains will be hauled by diesel-electric locomotives, as is current standard North American railroad practice.

D. Maintenance Activities

Mechanical (Locomotives and Cars)

Potentially, a fleet of locomotives and rail cars are needed for the planned operation of the rail line. This would consist of several road units (and spares) as power for the main line, as well as a corresponding number of rail cars respective to the volume of commodities moved. These locomotives and rail cars could be owned or leased by UBRY, and either operated captive to this rail line or pooled with other railroads or lessors. It is likely, however, that UBRY would not own or lease railcars, and that the rail line's customers would make other arrangements for the provision of railcars to accommodate their shipments. The same could be considered for locomotives, as UBRY is likely to use locomotives from connecting Class I carriers to haul freight on its railroad. Thus, lube oil, sand, water, consumable parts such as brake shoes, minor repair and replacement parts, maintenance, and inspections will be part of the UBRY maintenance program.

Maintenance-of-Way Equipment and Vehicles

The purchase or lease and maintenance of track maintenance equipment will be required for the railroad. The principal track maintenance activity will be track surfacing, tamping, and alignment. Other track maintenance will be required as the railroad ages, including tie replacement and rail replacement, which will require the purchase, lease, or contracting for equipment to perform this service. Other miscellaneous activities such as brush cutting and vegetation control, ditching and ditch cleaning, and maintenance of stream armoring and bridges, can be done as incidental labor with the railroad's own forces, or through contract forces.

Track Maintenance

Track maintenance activities will consist of track inspection, track maintenance, turnout maintenance, track surfacing, track undercutting, routine rail replacement, routine tie replacement, maintenance of grade crossings, and maintenance of active and passive grade crossing warning systems. General overviews of these activities are listed below:

- Track inspection at regular intervals, to ensure that the railroad meets the standards of care prescribed by the FRA when operating on railroad tracks.
- Track surfacing and ballasting to maintain the surface and line of the ballasted track, with spot maintenance of problematic areas.

- Undercutting and ballast cleaning removes mud-fouled ballast from the track structure and promotes positive drainage from the roadbed. Common areas for undercutting are located at roadway crossings, weak subgrade areas, and tracks that accumulate blown materials, such as silt and sand.
- Ultrasonic rail inspection to detect internal flaws in the rail itself.
- Cross tie imaging and grading to assess tie condition.
- Geometry, track gauge strength, and rail wear/cant inspections to provide a comprehensive assessment of track condition and insights for continued maintenance and capital investment.
- Rail grinding to extend the life of the rail and rail replacement due to ordinary wear, curve wear, internal rail defects, rail pull-aparts, and other conditions.
- Regular tie replacement is needed to support the heavy loads traversing the railroad, and will help to maintain track surface and alignment, as well as supporting turnouts and other wayside asset devices on the track.
- Grade crossing maintenance including asphalt approaches; crossing panels; signage and marking; and active warning devices (bells, flashing lights, and gates).
- Other annual track maintenance costs are assumed, including maintenance for turnouts, switch machines and controls, rail lubricators, and wayside asset devices (i.e., dragging equipment detectors and hot box detectors, etc.).

Structures Maintenance

Structures maintenance activities will be required as necessary, but generally will at first be minor and focused on maintaining adequate stream flows under and through rail line drainage structures, removal of brush or obstructions from bridges and culverts, and inspection. Facilities will be inspected semi-annually for debris accumulation. Eventually this activity will include ordinary culvert maintenance, ditch drainage maintenance, ordinary tunnel maintenance, and ordinary bridge maintenance.

Signal and Communications Maintenance

A preventative maintenance program will be implemented to effectively maintain the rail line's signal and communications system. Periodic testing and equipment adjustments will need to be performed to keep the signal and communications equipment functional. Signaling equipment will be maintained so that moveable parts operate freely without lost motion. Wayside equipment, such as mechanically-locked switch machines and electromechanical relays, will be kept clean and lubricated to prevent excessive wear. Signaling equipment will be properly adjusted and calibrated. Electrical contacts will be tested for continuity and visually inspected for deterioration of connections. The following components will likely require regular scheduled maintenance:

- Wayside Instrument Houses and equipment
- Wayside Instrument Cases and equipment
- Track Connections
- Junction Boxes
- Signals
- Track Circuits
- Point Mechanisms at Power Operated Turnouts

- Grade Crossings
- Storage Batteries
- Train Wayside Communications
- Communications, such as radio

The initial testing/inspection program will be based on FRA requirements; however, shorter testing intervals may be implemented based on signal equipment manufacturer's requirements and/or site-conditions at specific locations.

E. Maintenance Schedule

[to be added for subsequent drafts]

F. Staffing

A skilled workforce is required to operate the rail line and will require management staff to supervise the workforce and execute the administrative and business aspects of the railroad. Below is a qualitative description of that workforce. Staff anticipated to regularly be on Forest Service land would be limited to train, engine, and MOW staff. Operations and maintenance staffing requirements would depend on the train traffic volume. On USFS lands, most staff would be on-board the trains themselves. Occasional maintenance and inspection staff or contractors would work along the right-of-way performing regular inspections, right-of-way maintenance, and maintenance activities on the track, signal, and communication systems.

VI. FIRE PLAN

The Fire Protection Plan details measures that will be implemented to 1) reduce the risk of starting a fire (prevention) and 2) suppress a fire in the event one does occur in the project area during construction of the railway. The precautions and procedures identified in this Plan are also applicable for future railroad operating and maintenance activities. The Plan is summarized below. Specific mitigation measures for fire protection are available in the full draft Fire Protection Plan (appendix C) [to be updated for subsequent drafts].

A. Responsibilities

Federal Agency

The USFS's Fire Management Officers or Unit Duty Officers will oversee all fire control activities on the Ashley National Forest. An appropriate USFS representative will discuss fire protection stipulations at the notice-to-proceed meeting, which will be attended by the construction contractor(s), and UBRY representatives. In the event a non-project–related fire threatens access to or egress from the project area for construction personnel, the USFS's Authorized Officer or their designated representative will be responsible for immediately notifying the nearest Dispatch Center (Uintah Basin Interagency Fire Center in Vernal, Utah) first, then informing the construction contractor(s), and the Uinta Basin Railway, LLC.

Uinta Basin Railway, LLC

The UBRY will be responsible for compliance with this Plan and its implementation during operation and maintenance activities.

Construction Contractor

During initial construction of the railway, in the event of a fire caused by construction activities in the construction area, the construction contractor(s) will notify the nearest Fire Center (Uintah Basin Interagency Fire Center). In the event of a fire, the construction contractor(s) will initiate fire suppression, will endeavor to preserve the point of origin for the fire for further investigation, and will take action to prevent and suppress fires on and adjacent to the project area resulting from contractor activities. The construction contractor(s) will use workers and equipment on the project for preventing the spread of fires started by contractor activities unless the fire exceeds immediate control, at which time all the construction contractor(s)' employees will exit the area to predetermined muster points, or locations safe from the spread of the fire, and the construction contractor(s) will immediately contact emergency management services (EMS), e.g., 911, and the appropriate jurisdictional agency(s).

B. Notification

The construction contractor(s)' Fire Marshal will immediately notify the USFS Authorized Officer(s), the nearest Fire Center and UBRY of any fire started in the project area during construction, either by construction activities or naturally. The construction contractor(s) and UBRY will have notification numbers readily available for all employees in case of fire and will update the following emergency contact numbers (Table 1 below) for any changes prior to construction or maintenance in the project area.

TABLE 1. FIRE NOTIFICATION NUMBERS (IN CASE OF FIRE, CALL 911 FIRST)

Contact Name	Phone Number
Ashley National Forest (USFS) Authorized Officer or designated representative	To be determined (TBD)
Lance Kovel, USFS Authorized Officer Designated Representative	Office: (801) 999-2131 Cell: (801) 413-8784
UBRY	TBD
Ute Indian Tribe Authorized Officer or designated representative	TBD
Construction Contractor(s)' Fire Marshal	TBD
Construction Contractor(s)' Fire Marshal (alternate)	TBD
Uintah Basin Interagency Fire Center – for fires in the BLM Vernal Field Office jurisdiction, in the Ashley National Forest, or Uintah or Duchesne Counties, Utah	(435) 789-7021 (or 911)

During operation and maintenance activities, UBRY's maintenance or contract crews will be required to immediately notify the nearest Fire Center (Uintah Basin Interagency Fire Center, Richfield Interagency Fire Center, Color Country Interagency Fire Center, or Northern Utah Interagency Fire Center) and UBRY, if applicable, of any fire that starts or that they observe in the project area.

C. Mitigation Measures for Fire Protection

Applied project-wide, design features for environmental protection have been developed in accordance with federal land management standards and will address many of the concerns associated with fire protection in Utah. Descriptions of design features address construction and operation of project facilities that will affect fire protection are as follows:

- The UBRY will develop and implement a wildfire management plan consistent with freight railroad industry standards and in consultation with appropriate tribal, state and local agencies, including local fire departments and emergency management/first responder personnel. The plan will incorporate specific information about operation, equipment, and personnel on the proposed rail line that might be of use in case a fire occurs and will evaluate and include as appropriate site-specific techniques for fire prevention and suppression.
- The UBRY will design any crossings or relocations of pipelines or electrical transmission lines in accordance with applicable Utah Division of Public Utilities' regulations and guidelines. The UBRY will consult with appropriate utility providers to develop a plan to ensure that construction activities that could affect existing electrical transmission lines or energy pipelines avoid any interruption of utility service to customers to the extent possible.
- The UBRY will follow all applicable federal OSHA, FRA, PHMSA, tribal, and state construction and operational safety regulations to minimize the potential for accidents and incidents during construction and operation of the rail line.

D. Minimum Fire Prevention and Suppression Equipment Required

The Contractor's motorized vehicles and equipment in each active construction area will carry the following set of fire suppression tools during "moderate" or higher fire conditions:

- One shovel and/or one axe or Pulaski fire tool
- One 5-pound ABC Dry Chemical Fire Extinguisher
- Hardhat, work gloves, and eye protection
- In the event that vehicles or construction equipment do not have sufficient cargo area for a set of fire suppression tools (such as the confined cab of construction machinery), equipment operators will have access to such equipment in a staging area located nearby. The staging area will also include at least one 5-gallon water-backpack (or other approved container) or pressurized sprayer full of water or other extinguishing solution.

In addition to the fire suppression equipment required in motorized vehicles, construction work sites will comply with the following:

- Power saws, if required for construction, will be equipped with an approved spark arrestor and accompanied by one 10-pound ABC dry chemical fire extinguisher and a round point shovel when used away from a vehicle.
- Fuel service trucks will contain one 20-pound capacity fire extinguisher charged with the necessary chemicals to control electrical and fuel fires.
- Wood cutting, brush cutting, welding, or other construction work sites that have a higher risk of starting fires will have at least two shovels and two 20-pound ABC dry chemical fire extinguishers available onsite.

- Every construction work site will have at least one radio and/or cellular/satellite telephone capable of contacting fire suppression agencies or the project management. These communication devices will be tested weekly to ensure that emergency communication is possible at each construction work site.
- Every at-risk work site will include water-backpacks or pressurized tanks filled with water (e.g., welding sites).

During periods of heightened fire danger, the following equipment will be available in the construction area or stationed near high-risk construction work sites to aid in response to a fire situation:

- One fire suppression vehicle equipped with a water tank with a minimum 500-gallon capacity, 100 feet of hose, and a pump with a discharge capacity of at least 20 gallons per minute.
- The fire suppression vehicle will be outfitted with one tool cache for fire use only, containing at a minimum two shovels, two axes or Pulaski fire tools, as well as at least one 20-pound ABC fire extinguisher.

E. Initial Response and Emergency Contacts

If a fire does start in the project area and if the fire is manageable, then construction personnel will safely attempt to control it with a fire extinguisher or other available equipment. As part of the environmental compliance training program, the construction contractor(s) will receive training addressing initial fire suppression techniques, reporting requirements, how to determine if a fire is manageable, what control measures should be implemented by on-site field crews, and fire evacuation procedures. The training also will address how to respond to wildfires in the area and maintain knowledge of, and plans for, evacuation routes.

If the fire is unmanageable, field crews will evacuate and first call EMS/911 followed by the district dispatch for the area (refer to emergency contacts in Table 1 above). The construction contractor(s) must also report all fires immediately to the federal land management agencies' Authorized Officer(s) or their designated representative(s), the nearest Fire Center (Uintah Basin Interagency Fire Center), and the jurisdictional fire agency regardless of size and actions taken.

F. Post-Fire Rehabilitation Strategies

If the cause of a fire is determined to be the result of the project, the construction contractor(s) will implement rehabilitation measures, as required by the USFS as well as the following post-fire rehabilitation measures:

- After a fire has been extinguished, the burned areas will be reclaimed in accordance with USFS requirements using standard Emergency Stabilization and Rehabilitation protocols. Small burn areas will be revegetated to the native vegetation using appropriate seed mixtures. Larger burn areas may require specific reclamation plans. Coordination with the federal land management agency will be necessary to determine requirements for each particular area, depending on the size and location of a fire, and the location of environmental resources.

- To prevent the spread of noxious weeds and invasive species during post-fire rehabilitation, the measures outlined in the Weed Management Plan, will be implemented by the construction contractor(s).

G. Fire Conditions

The factors of humidity, wind speed, and temperature are the key weather components, both recent and current, that are considered, along with the fuel types and fuel moisture, for determining the potential danger for wildfire to occur (Fire Danger Ratings, or Classes) and whether that fire potential is imminent. Different levels of fire danger warnings (e.g., Fire Weather Watches and Red Flag Warnings) are issued by the National Weather Service (NWS) depending on whether the danger is imminent. Fire Danger Ratings, or Classes, are used in combination with the level of fire danger warnings issued to determine the appropriate level of fire precautions to be implemented.

Fire Danger Ratings

Fire Danger Ratings will be used to direct daily activities and in-field crew safety briefings and will be included in the Fire Risk Assessment activity. Fire Danger Ratings take into account current and antecedent weather, fuel types, and both live and dead fuel moisture and will be used by the land management agency to determine mitigation or curtailment of operations. Fire Danger Ratings and their descriptions are available on the Wildland Fire Assessment System website: http://www.wfas.net/index.php/fire-danger-rating-fire-potential--danger-32.

Red Flag Warnings

The NWS issues Red Flag Warnings for extreme fire danger during periods of low humidity, high winds, dry lightning, and high temperatures. Red Flag Warnings will also be used by the land management agency to determine mitigation for fire prevention or curtailment of specific activities or all operations. Red Flag Warnings are posted on the NWS website: https://www.weather.gov/wrh/

Fire Weather Watches

The NWS issues Fire Weather Watches to alert land managers and the public that upcoming weather conditions could result in extensive wildland fire occurrence or extreme fire behavior. A Fire Weather Watch means critical fire weather conditions are possible but not imminent or occurring.

Fire Precaution Levels

The construction contractor(s)' Fire Marshal will check the forecasted and current weather, Fire Stage Restrictions, Fire Danger Ratings, and if there are Red Flag Warnings or fire restrictions issued for the project area at the start of each day of operation. If there are questions as to the level of fire danger and the effect on operations, the construction contractor(s)' Fire Marshal will contact the Uintah Basin Interagency Fire Center first, then the federal land management agencies' Authorized Officer(s) or their designated representative(s) and the Fire Management Officers prior to conducting work for any additional required mitigation for fire prevention or orders to curtail specific activities or all operations. Regardless of the fire danger or warnings, and if the USFS has not required additional mitigation for fire prevention or curtailment of

specific activities or all operations, the construction contractor(s)' Fire Marshal will determine when additional fire prevention measures will be taken due to periods of extreme dryness and wind. Fire precaution levels associated with the Fire Danger Ratings from low to extreme along with suggested fire suppression equipment are shown in Table 2 below.

TABLE 2. FIRE PRECAUTION LEVELS

Low	Normal fire precautions
Moderate	Normal fire precautions
High	One fire suppression vehicle present for blasting.
Very High	One fire suppression vehicle present for blasting, welding, cutting, and grinding activities occurring in vegetated areas
Extreme	Two fire suppression vehicles present for blasting, welding, cutting, and grinding in vegetated areas.

VII. ENVIRONMENTAL REQUIREMENTS

Environmental mitigation requirements, including mitigation measures identified in the EIS, will be followed. The mitigation measures are discussed in Chapter 4 of the EIS. The Applicant developed voluntary mitigation measures to reduce public and worker safety hazards and limit potential impacts to the environment associated with construction activities. OEA also has developed additional recommended mitigation measures for the Board to consider. The final mitigation measures adopted by the STB will be followed at all times, including construction and O&M activities and throughout the project area. The Applicant will conduct an annual training class on these procedures for all maintenance crews. All contractors will be responsible for understanding the requirements, schedule limitations, and notification procedures associated with each mitigation measure.

The Applicant will obtain a permit from the USACE under Section 404 of the Clean Water Act before initiating project-related construction activities in wetlands and other jurisdictional waters of the United States. The Applicant will comply with all conditions of the Section 404 permit. The Applicant will obtain a Section 401 Water Quality Certification from the State of Utah and US Environmental Protection Agency. The Applicant will monitor the project for compliance with any conditions of the 404 permit and 401 certifications.

The Applicant will comply with the terms and conditions of the USFWS Biological Opinion (see appendix D) for the protection of federally listed threatened and endangered plants and animals that could be affected by the proposed rail line, and to ensure compliance with Section 7 of the Endangered Species Act.

The Applicant will comply with the stipulations of the *Programmatic Agreement Among the Surface Transportation Board, Utah State Historic Preservation Officer, Ute Indian Tribe Of The Uintah and Ouray Reservation, Bureau of Indian Affairs, Bureau of Land Management, Seven County Infrastructure Coalition, State of Utah School and Institutional Trust Land Administration, US Army Corps of Engineers, US Forest Service Ashley National Forest, and Utah Public Lands Policy Coordinating Office Regarding Seven County Infrastructure Coalition*

Construction and Operation of the Proposed Uinta Basin Railway Project in Carbon, Duchesne, Uintah, and Utah Counties, Utah, developed in compliance with Section 106 of the National Historic Preservation Act (see appendix E). The Programmatic Agreement contains a stipulation to prepare a Tribal Participation Plan. The Applicant will comply with the requirements of that plan.

A. Seasonal Limitations

[if final BO received before final POD, review to see if any of these limitations changed]

For migratory birds:

If activities must be scheduled to start during the migratory bird breeding season, the Applicant will take steps to prevent migratory birds from establishing nests in the potential impact area. Birds can be hazed (i.e., deterred) to prevent them from nesting until egg(s) are present in the nest. The Applicant or its agents will not haze or exclude nest access for migratory birds and other sensitive avian species.

If activities must be scheduled during the migratory bird breeding season, a qualified biologist will perform a site-specific survey for nesting birds starting no more than 7 days prior to ground-disturbing activities or vegetation treatments. Birds with eggs or young will not be hazed, and nests with eggs or young will not be moved until the young are no longer dependent on the nest. A qualified biologist will confirm that all young have fledged.

For bald eagles:

The project area contains areas of potentially suitable habitat for bald and golden eagles. During the field surveys, both eagle species were recorded in the project area, as well as within a 2-mile radius of the project area. Construction of the rail line might occur in habitats suitable for nesting and winter roosting. The removal of this habitat could have a long-term impact. To mitigate these direct effects, the project would comply with site-specific timing limitations and conservation measures for surface disturbance as identified during project specific consultation with the USFWS.

For the Ute Ladies'-Tresses:

The project area contains areas of potentially suitable habitat for Ute Ladies'-Tresses. Construction of the rail line might occur in potentially suitable habitats. The removal of this habitat could have a long-term impact. To mitigate these direct effects, the project would comply with site-specific timing limitations and conservation measures for surface disturbance as identified during project specific consultation with the USFWS.

VIII. WEED MANAGEMENT PLAN

The weed management plan provides the principles and procedures for preventing the introduction and spread of state-listed noxious weeds and other invasive species of concern associated with the construction, operation, and maintenance of the Uinta Basin Railway on USFS land in the Ashley National Forest. The full plan is available in appendix F [to be added for subsequent drafts].

Invasive and noxious weeds are typically found in areas where the ground or soil has been disturbed and are commonly found along transportation corridors, such as rail lines. For railroads, weeds and other uncontrolled vegetation are safety hazards and can affect operations by reducing visibility, limiting inspections, creating fire hazards, and so on. The FRA regulates vegetation on railroad property through CFR Title 49, Section 213.37.

A. Introduction

The purpose of controlling uncontrolled or unwanted vegetation is to maintain safe train operations and to protect the public, employees, and the environment from potential hazards that are associated with railway operations. Effective vegetation management also focuses on protecting environmental assets and the human environment. The goals of noxious weed and invasive plant management are to:

- Maintain a vegetation-free construction site
- Maintain a vegetation-free track ballast section after construction
- Selectively control vegetation within the ROW to remove brush and trees that could affect:
    - Visibility at highway-rail grade and pathway crossings
    - Visibility along horizontal curves
    - Visibility of railroad signals and signage
    - Integrity of railway communication, electrical distribution lines, wayside assets, and other utilities
    - Physical inspection of the railroad property
    - Railroad employees working along the ROW
    - Fire hazard potential
- Manage vegetation in railway yards, including around facilities and signal infrastructure
- Manage noxious weeds and invasive plants in accordance with government objectives.

Existing populations of state-listed noxious weeds and other invasive plant species of concern within the ROW and temporary construction areas will be treated during construction as well as during operation and maintenance.

The management of state-listed noxious weeds and other invasive plant species of concern will be considered throughout all stages of the project, and will include the following:

- Educating all construction personnel regarding identified problem areas, the importance of preventive measures, and treatment methods.
- Implementing specific preventive measures to counteract the spread of state-listed noxious weeds and other invasive plant species of concern during construction, operation, and maintenance activities.
- Implementing postconstruction treatment methods to be applied to areas where state-listed noxious weeds and other invasive plant species of concern are present.

B. Preconstruction Flagging

Prior to construction, areas with populations of state-listed noxious weeds and other invasive plant species of concern will be flagged by the construction contractor(s). This flagging will alert construction personnel to the presence of state-listed noxious weeds and other invasive plant

species of concern and will prevent access to these areas until noxious weed and invasive plant control measures have been implemented.

C. Education and Personnel Requirements

Before beginning construction activities, the construction contractor(s) will provide construction personnel with training and information regarding the importance of controlling and managing noxious weeds and invasive plants. This training and information will emphasize the importance of preventing the spread of noxious weeds and invasive plants in areas not infested and controlling the proliferation of weeds and invasive plants already present. Project personnel will also be informed of areas that have been flagged for avoidance or treatment, and they will be trained on construction equipment washing procedures.

Contractors or personnel conducting weed and invasive plant management actions will have training and experience in identifying and managing weed and invasive plant before beginning work in that role on the project. Additionally, all personnel who apply herbicides will have a current commercial applicator's license for herbicides from the Utah Department of Agriculture and Food (UDAF) before applying herbicides for the project.

D. Mitigation Measures and Best Management Practices

The mitigation measures and BMPs described in this section are applicable to project construction, operation, and maintenance.

Best Management Practices

Applied project BMPs for environmental protection have been developed in accordance with federal land management agency standards and will address concerns associated with noxious weed and invasive plant management. The BMPs that address construction, operation, and maintenance of project facilities regarding noxious weed and invasive plant management are listed below.

- The Applicant will limit ground disturbance to only the areas necessary for project-related construction activities.
- The Applicant will revegetate disturbed areas, where practical, and in consultation with the Ute Tribe, as applicable, when construction is completed. The goal of reclamation will be to permanently re-establish native groundcover on disturbed areas to prevent soil erosion, where feasible. If weather or seasonal conditions prevent vegetation from being quickly re-established, the Applicant will use measures such as mulching, erosion-control blankets, or dust-control palliatives to prevent erosion until vegetative cover is established. The Applicant will monitor reclaimed areas for 3 years. For areas where efforts to establish vegetative cover have been unsuccessful after 1 year, the Applicant will reseed annually for up to 3 years as needed.
- Areas disturbed as a part of the construction and/or maintenance of the project will be seeded with a seed mixture appropriate for those areas. USFS will approve a seed mixture that fits each range type. Seeding methods typically will include drill seeding, where practicable; however, USFS might recommend broadcast seeding as an alternative method in some cases.

- During project-related construction, the Applicant will minimize, to the extent practicable, soil compaction and related effects (for example, increased runoff and erosion), provide surface treatments to minimize soil compaction (for example, by breaking up compacted soils during reclamation to promote infiltration), and take actions to promote non-invasive temporary cover and/or native vegetation regrowth after the facilities (for example, temporary staging areas) are no longer needed to support construction.
- In construction areas where recontouring is not required, vegetation will be left in place wherever possible, and the original contour will be maintained to avoid excessive root damage and allow resprouting.
- During construction, the Applicant will remove cleared vegetation and green debris from construction areas, including trees from woodland and timber clearing (if not used during stream restoration activities) and from surface waters and wetlands.
- The spatial limits of construction activities, including vehicle movement, will be predetermined, and activity will be restricted to and confined within those limits.
- Inspections of the erosion-prevention and permanent erosion- and sediment-control BMPs will continue for three years. The post-construction inspection period will begin after construction stabilization criteria are met (70% of existing vegetative cover or other non-vegetative stability measures are in place) and a notice of termination is filed to end permit coverage under the Construction General Permits.
- The Applicant will retrofit the project components with additional drainage features, erosion controls, and post-construction BMPs in locations where inspections identify the potential for future erosion problems.
- During construction, the Applicant will use temporary barricades around sensitive habitats.

Other Specific Measures and Practices

Noxious Weed and Invasive Plant Preventive Measures

The construction contractor(s) and the Applicant will implement the following noxious weed and invasive plant preventive measures, as applicable, to prevent the spread of state-listed noxious weeds and other invasive plant species of concern during construction, operation, and maintenance of the project.

Prior to ground-disturbing activities, the construction contractor(s) will implement the following noxious weed and invasive plant species of concern preventive measures:

- Where feasible, construction will begin in weed-free areas before operating in weed-infested areas.
- All construction sites will be clearly marked or flagged at the outer limits before any surface-disturbing activity. All personnel will be informed that their activities will be confined within the marked or flagged areas.
- Construction personnel will inspect, remove, and appropriately dispose of weed seed and plant parts found on their clothing and equipment.
- Vehicles and equipment will be cleaned of soil and debris prior to accessing the project so as to avoid transporting noxious weed seeds, roots, or rhizomes to the project.
- Whenever possible, temporary disturbance will be avoided in areas with known noxious weed populations to reduce the risk of spread.

- During reclamation, the construction contractor(s) will return topsoil and vegetative material containing noxious weeds to their original locations. The construction contractor(s) will remove seeds, roots, and rhizomes from the equipment with pressurized water before transport off site.
- The construction contractor(s) will ensure that straw or hay bales used for sediment barrier installations or mulch distribution are obtained from sources that are certified free of noxious weeds.
- Immediately following construction, the construction contractor(s) will implement the reclamation of disturbed land. Continuing revegetation efforts will ensure adequate vegetative cover, reducing the potential for the invasion of noxious weeds.

Equipment and Vehicles

Upon arrival to the project site, all vehicles will be inspected by the vehicle operator. Soil and debris capable of transporting weed seeds, roots, or rhizomes will be removed from vehicles before the vehicles are allowed to use project access roads. Vehicle operators will be briefed by the construction contractor(s) regarding requirements for cleaning vehicle exteriors and interiors and personnel clothing.

Vehicle washing will concentrate on tracks, tires, and the undercarriage including axles, frame, cross members, motor mounts, on and underneath steps, running boards, front bumper, and brush guard assemblies. If sediment from washing accumulates, it will be shoveled out and placed in sealed containers for disposal in a landfill.

Winter Preventive Measures

During winter construction, the construction contractor(s) would implement as necessary the following BMPs to support noxious weed and invasive plant preventive measures during freezing conditions.

- Equipment, vehicles, and materials will arrive on site clean and free of weedy materials.
- When using mats to cross through weedy areas, the "dirty" mats will be segregated from the clean mats to minimize mat cleaning and cross contamination. Contaminated mats will be cleaned before reuse.
- Equipment that has traversed a weedy area will be cleaned prior to entering a weed-free area. This could potentially be accomplished by one of the following methods in an identified weed infested area: (1) washing or (2) dry brushing or scraping weed material and dirt clumps from equipment, tires, and the undercarriage by hand.

Vegetation Management Measures

Below are vegetation management measures that might be performed before, during, and/or after construction.

- Provide selective tree removal with the ROW to prevent impacts to railroad operations (visibility), prevent debris flows, and eliminate seeds and leaf litter (potential to foul ballast).
- Track maintenance will include keeping the roadbed ballast section free of organic matter. Doing so eliminates fine particles and organic matter from residing in the ballast section and helps to limit vegetation growth over the life of the asset.

- Ballast resurfacing can be used to temporarily disrupt new, unwanted vegetation growth within the ballasted areas of the track. However, this is not an effective technique for permanently controlling vegetation.
- Ballast cleaning or renewal can help remove fine particles or organics that are embedded in the ballast section.
- Seeding disturbed areas before, during, and after construction with native grasses or non-invasive low-growing vegetation is an effective method of preventing the establishment of noxious weeds, invasive plants, and woody vegetation. Revegetation strategies that are compatible with railroad safety requirements and goals for the local, state, tribal, and federal regulations and programs will be implemented.

E. Control Measures

Control measures implemented by the construction contractor(s) or the Applicant, as applicable, will be based on species-specific and site-specific conditions, such as the proximity to water or riparian areas, special-status species, agricultural areas, and seasonality. If existing weed populations are currently under treatment by USFS or other entities, the Applicant and/or the construction contractor(s) will coordinate efforts with the federal land management agency and/or other government entities, as applicable, to treat the state-listed noxious weeds and other invasive plant species of concern associated within the project area. If new populations of state-listed noxious weed or other invasive plant species of concern are identified in the project area in the future, the control measures in this plan will be followed.

In areas that include sensitive species habitat or habitat for threatened and endangered species, the Applicant and construction contractor(s) are required to follow additional conservation measures. Control measures will include one or more of the methods in the subsections below prior to implementation of reclamation actions.

Mechanical

Mechanical methods rely on cutting roots with a shovel or other hand tools or using equipment to mow or disc weed or invasive plant populations. This type of method is useful for smaller, isolated populations in areas of sensitive habitats or if larger populations occur on agricultural land where tillage can be implemented. Some rhizomatous weeds or invasive plants can spread by discing or tillage; therefore, implementation will be species-specific. If such a method is used in areas to be reclaimed, the area will subsequently be seeded to re-establish a desirable vegetative cover that will stabilize the soils and slow the potential reinvasion of noxious weeds and invasive plants. Discing or other mechanical treatments that will disturb the soil surface in native habitats will be avoided in favor of applying herbicides, which is an effective means of reducing the size of noxious weed populations as well as preventing new colonies from becoming established.

Cultural

Cultural control methods rely on educating the public, as well as construction, operation, and maintenance personnel, about how to prevent the spread of weeds and invasive plants. Cultural control of noxious weeds and invasive plants also can include minimizing vehicle travel through

areas of known populations. The following measures will be followed by the construction contractor(s) or the Applicant, as applicable:

- Implement preventive measures to reduce and contain existing populations in Utah. Flagging the perimeter of the infested area by the construction contractor(s) or the Applicant, as applicable, will alert personnel about areas where noxious weeds are present.
- Reclamation treatments applied by the construction contractor(s) or the Applicant, as applicable, such as seeding, will be based on site-specific conditions and the appropriate seed mix approved by the applicable federal land management agency for those conditions. Seeding will help reduce the spread of noxious weeds by revegetating exposed soils. If areas are not seeded until the following spring because of weather or scheduling constraints, all undesirable vegetation will be treated by the construction contractor(s) or the Applicant, as applicable, before seeding.

Biological

Biological control involves using living organisms (for example, insects, diseases, or livestock) to control noxious weeds and invasive plants to achieve management objectives. Many noxious weed and invasive plant species have been introduced recently into North America and have few natural competitors to control their population. The biological control agent is typically adapted to a specific species and is selected for its ability to attack critical areas of the plant that contribute to its persistence. The use of biological control methods is not expected to be required for the project in Utah.

Chemical

Chemical control can effectively remove noxious weeds and invasive plants through the proper use of selective herbicides. Herbicide treatment can be temporarily effective for large populations of noxious weeds and invasive plants where other means of control are not feasible (Table 2 in Appendix F). Herbicide application, handling, spills, and cleanup will be controlled by the construction contractor(s) or the Applicant, as applicable, to minimize the impacts on the surrounding vegetation and will follow applicable regulations

Herbicide Application and Handling

The list of herbicides to be used will be reviewed and approved by USFS, and herbicide application will be conducted by the construction contractor(s) or the Applicant, as applicable based on information gathered from USFS. Before application, all required permits from local authorities will be obtained by the construction contractor(s) or the Applicant, as applicable. Permits might contain additional terms and conditions that go beyond the scope of this weed management plan. The herbicides approved for use on the project will be reviewed and approved by USFS prior to beginning construction, and herbicide application will include only herbicides and adjuvants approved for use on USFS-administered land. Use of chemical control for vegetation on USFS-administered land will be consistent with the guidelines in Forest Service Manual 2150, *Pesticide-Use Management and Coordination*. Once herbicide use is approved by USFS, the construction contractor(s) or the Applicant, as applicable, will maintain herbicide application records and herbicide use reports. The construction contractor(s) or the Applicant, as applicable, will submit these records and reports monthly to USFS as appropriate.

F. Monitoring

The Applicant will monitor areas of project disturbance for three years following completion of the project using current USFS weed treatment inventory and monitoring standards. Post construction monitoring will be conducted annually in the late summer when noxious weeds and invasive plants are still identifiable and might take into consideration the treatment windows for target weed and invasive plant species. Growing seasons will vary from year to year, so the timing of seasonal monitoring will vary as well.

Monitoring of previously identified affected and/or disturbed areas and noxious weed and invasive plant treatment areas will begin during the first summer following construction. During postconstruction monitoring of the project area, the Applicant will consult with USFS if issues arise pertaining to noxious weeds and invasive plants. USFS might also contact the Applicant to report on the presence of noxious weeds and invasive plants in the project area.

During operation, ROW, main tracks, and sidings will be visually inspected at least twice per week as part of regular track inspections in order to comply with FRA regulations. During these inspections, vegetation management issues will be noted through either formal or informal processes and will be communicated to the Applicant. Ongoing monitoring will include but is not limited to the following:

- An assessment of track conditions and extent of vegetation growth
- Sightlines at road and pedestrian crossings
- Location of vegetation hazards that could affect employee safety or railroad operations

IX. TERMINATION AND REHABILITATION

In the event of abandonment or discontinuance f the rail line, the Applicant would adhere to STB regulations under 49 CFR Part 1152—Abandonment and Discontinuance of Rail Lines and Rail Transportation. Title 49 U.S.C. 10903 et seq. governs abandonment of rail lines and discontinuance of rail service by common carriers. Section 10903(d) provides that no line of railroad may be abandoned and no rail service discontinued unless the Board finds that the present or future public convenience and necessity require or permit the abandonment or discontinuance.

UINTA BASIN RAILWAY PROJECT

PLAN OF DEVELOPMENT

CONSTRUCTION, OPERATION, AND MAINTENANCE

APPROVAL/CONCURRENCE

Seven Counties Infrastructure Coalition & Uinta Basin Railway LLC	USDA FOREST SERVICE Ashley National Forest
Approved by:	Approved by:
_____	_____
xxxxxxxxxxxxxxx Date	Forest Supervisor Date

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Appendix A: Work Plan Exhibits for Indian Canyon Stream Relocation Mitigation Sites

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Appendix A.1: Mitigation Design Plans in Indian Canyon on Ashley National Forest Land

(from Appendix E1 of the Draft Compensatory Mitigation Plan)

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Appendix A.2: Proposed Mitigation Fencing in Indian Canyon on Ashley National Forest Land Grazing Allotments

(from Appendix E2 of the Draft Compensatory Mitigation Plan)

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Appendix B: Construction Schedule

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Appendix C: Draft Fire Protection Plan

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Appendix D: USFWS Biological Opinion

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Appendix E: Programmatic Agreement Regarding Seven County Infrastructure Coalition Construction and Operation of the Proposed Uinta Basin Railway Project

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Appendix F: Draft Weed Management Plan

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Appendix G: Requested Right-of-Way

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