

PLAN OF DEVELOPMENT CABIN CREEK LATERAL PIPELINE

Prepared for

**Denbury Green Pipeline-Montana,
LLC**

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1 PROJECT DESCRIPTION

1.1 Project Overview

Denbury Green Pipeline - Montana, LLC (Denbury), proposes to construct a 25.8-mile long, 12-inch-diameter carbon dioxide (CO₂) pipeline and ancillary facilities that will originate from the existing terminus at the Cedar Creek Anticline (CCA) Enhanced Oil Recovery (EOR) Development in Fallon County, Montana, extending west, then north through Fallon County, Montana, and terminate at the Cabin Creek EOR Development (the Project). The proposed Project will transmit liquid (dense phase) CO₂ from the CCA EOR Development to the Cabin Creek EOR Development, where it will be used in EOR techniques to stimulate oil production. Figure 1-1 provides a general location of the proposed Project.

The CO₂ pipeline will total 25.8 miles in length, of which, 0.07 miles (369.6 ft) crosses BLM administered lands at the following location:

Principal Meridian, Montana, Fallon County
T. 6 N., R. 60 E., Sec. 10, NW1/4NW/14

The pipeline route will generally consist of a 75-foot-wide construction area. The 75-foot-wide construction area will consist of a 50-foot-wide permanent right-of-way (ROW) and a 25-foot-wide temporary workspace. Some areas of the ROW would include an additional 25 feet for temporary workspace (ATWS). The temporary and ATWS workspaces on BLM would be a total of 634 feet long and 25 feet wide containing 0.4 acres, more or less. The temporary and ATWS workspaces cross public lands at the same location as the requested CO₂ pipeline ROW. See above legal land description and hereafter referred to as milepost 0.52.

Two temporary access roads will also be required for the project during the construction phase and will require a short-term right-of-way (ROW). The two access roads that cross BLM managed lands are AR-6 and AR-11 as shown on Figure 1-1. The temporary access roads located on BLM lands are existing roads and may be improved and maintained (e.g., blading, re-graveling, etc.) and reclaimed to their original state. The temporary access roads are located at the following locations:

AR-6
Principal Meridian, Montana, Fallon County
T. 9 N., R. 58 E., sec. 26, NE1/4SE/14, S1/2SW1/4

AR-11
Principal Meridian, Montana, Fallon County
T. 6 N., R. 60 E., Sec. 4, NW1/4SE/14.

No permanent access roads will be constructed on BLM managed lands; however, a permanent ROW will be required for portions of the existing Anticline County Road and portions of the existing Coral Creek County Road that cross BLM. The permanent access roads are located in the following locations:

Anticline County Road:
Principal Meridian, Montana, Fallon County
T. 9 N., R. 58 E.,
sec. 22, NE1/4NE/14;
sec. 26, W1/2NE1/4, N1/2SE1/4, SE1/4SE1/4.
T. 8 N., R. 59 E.,
sec. 15, NE1/4NW1/4, W1/2NE1/4, N1/2SE1/4, SE1/4SE1/4;

sec. 23, W1/2NW1/4, W1/2SW1/4.

Coral Creek County Road:
Principal Meridian, Montana, Fallon County
T. 6 N., R. 60 E.,
sec. 4, S1/2SE1/4.
T. 7 N., R. 60 E.,
sec. 32, N1/2NE1/4, SE1/4NE1/4.

Table 1-1 and Table 1-2 summarize the approximate land ownerships for the Project ROW and access roads.

Table 1-1. Approximate Land Ownership Miles for Right-of-Way and Access Roads

Land Status	Private	Bureau of Land Management	Montana State Lands	Total
Pipe length (approx. miles)	22.57	0.07	3.13	25.77
Temporary access roads (approx. miles)	6.53	0.82	0.39	7.74
Permanent ROW access roads		3.78		
Total (approx. miles)	29.1	4.67 *	3.52	33.51

*Total mileage on BLM lands includes existing Anticline and Coral Creek County Roads

Table 1-2. Approximate Land Ownership Acres for Right-of-Way and Access Roads

Land Status	Private	Bureau of Land Management	Montana State Lands	Total
Permanent pipeline ROW (approx. acres)	136.6	0.43	19.0	156.03
Temporary pipeline workspace (approx. acres)	68.3	0.2	9.7	78.2
Additional temporary workspace (approx. acres)	13.0	0.16	2.2	15.36
Permanent structure [meter station and mainline valves] (approx. acres)	0.3	0	0	0.3
Temporary access roads (approx. acres)	11.1	2.49	0	13.59
Permanent access road ROW		27.47		27.47
Total (approx. acres)	229.3	30.75	30.9	290.95

Plan of Development
Cabin Creek Lateral Pipeline

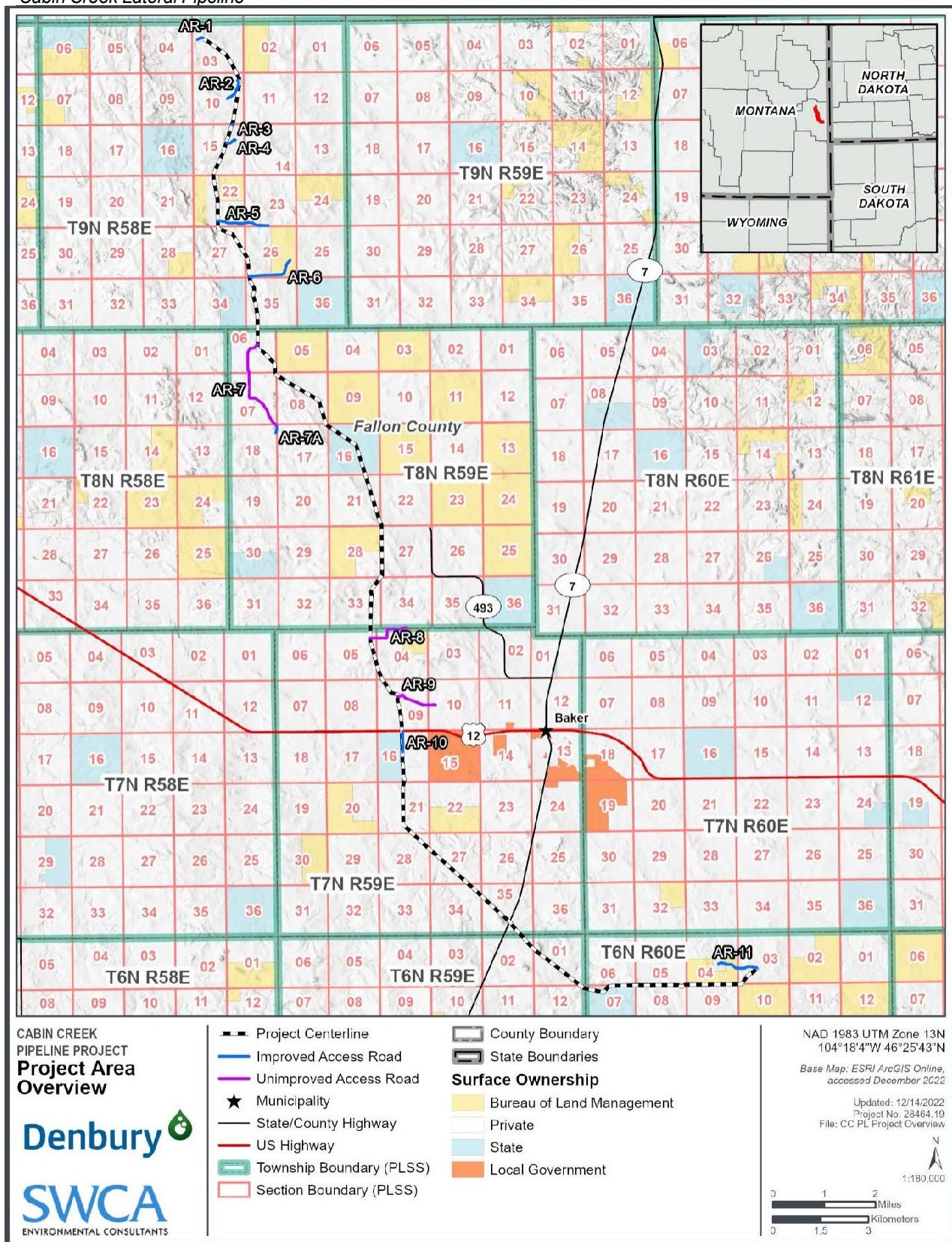


Figure 1-1. Project location map.

1.2 Permits and Approvals Required

The proposed Project crosses federal, state, and private land and is subject to federal, state, and local permit requirements. Denbury will obtain all federal, state, and local permits and approvals necessary prior to construction of the proposed Project. The list of permits and/or approvals that are required prior to construction is included in Table 1-3.

Circumstances may require Denbury to modify what is proposed in this plan of development (POD). Denbury will document any such variances through a formal change management process and will coordinate with the appropriate agencies for permitting purposes, to ensure proper reviews and requirements are met.

Table 1-3. Permits and Approvals Required

Issuing Agency/Program/ Permit Name	Permits/Approvals/ Authorizing Actions	Application Project Component
FEDERAL PERMITS, APPROVALS, AND AUTHORIZING ACTIONS		
Bureau of Land Management (BLM)		
National Environmental Policy Act/ Environmental assessment	Environmental assessment development, review, and approval; issuance of Record of Decision	All Project components on BLM-managed land and connected actions
Comply with Federal cultural resources legislation	Current cultural resource use permit, valid fieldwork authorization, BLM acceptance of archaeological report, BLM determines eligibility of cultural resources for listing in the NRHP and potential to affect historic properties, SHPO concurrence with BLM determinations	Entirety of proposed Project area
Comply with Federal paleontological legislation	Current paleontological use permit, valid fieldwork authorization, BLM accepts paleontological report	BLM-administered surface lands
Endangered Species Act	Informal or formal consultation with U.S. Fish and Wildlife Service for threatened and endangered species	All Project components
ROW grant, temporary use permits	ROW grant consists of permanent pipeline and roads; temporary use permit consists of temporary workspace, additional temporary workspace, temporary roads	Permanent access roads and pipeline, temporary workspace, additional temporary workspace, and temporary roads that are located on BLM-managed land
Notice to Proceed	Following issuance of a ROW grant and approval of the Project's POD, the Authorized Officer will issue a notice to proceed with the Project development and mitigation activities for BLM lands	Project component on BLM-managed land
U.S. Department of Transportation		
Pipeline and Hazardous Materials Safety Administration	Type F notification 60 days prior to commencing construction	Pipeline construction and safety
U.S. Army Corps of Engineers		
Permit for dredged or fill material (404 permit)	Placement of fill or dredged material in waters of the U.S. (WUS) or adjacent wetlands	All surface-disturbing activities affecting WUS or wetlands

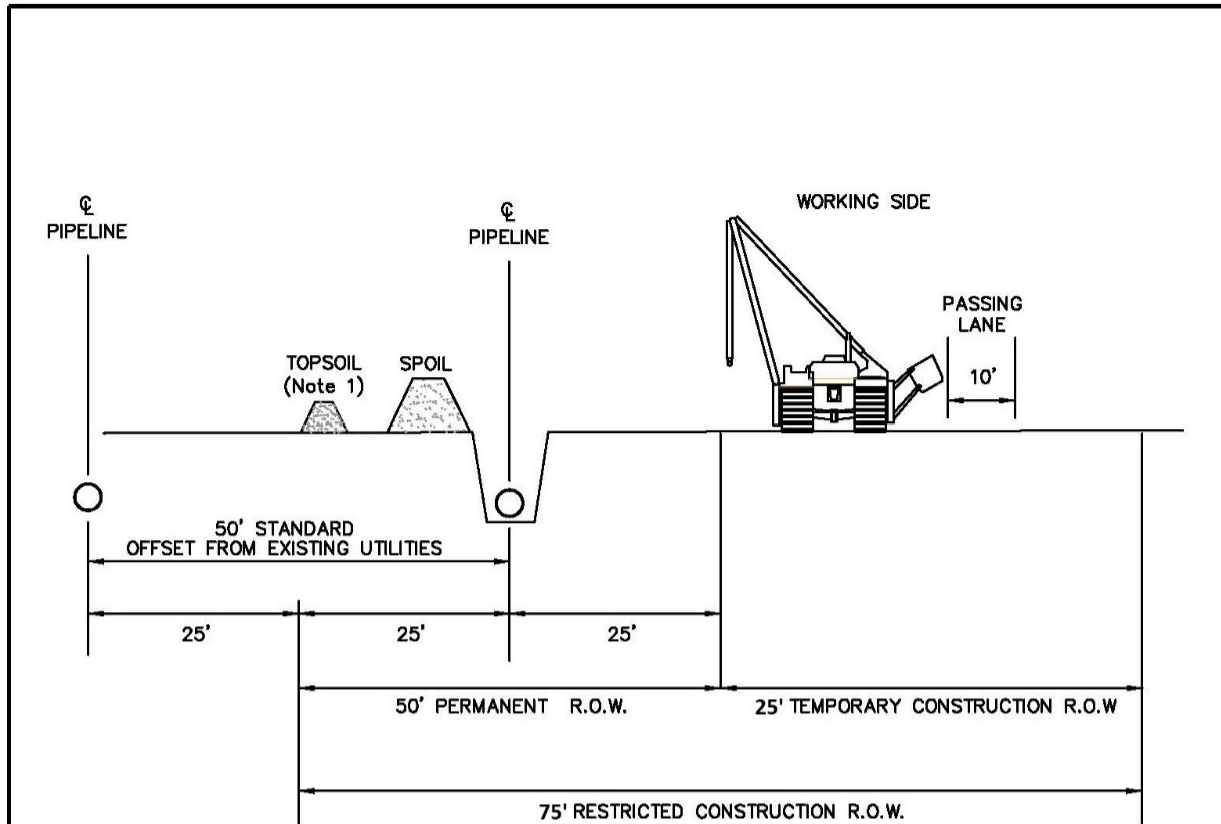
Issuing Agency/Program/ Permit Name	Permits/Approvals/ Authorizing Actions	Application Project Component
U.S. Environmental Protection Agency		
Clean Water Act	Spill prevention, control, and countermeasure plans	Transfer and storage of fuels and oils
STATE PERMITS, APPROVALS, AND AUTHORIZING ACTIONS		
Montana Department of Environmental Quality		
Section 401 Water Quality Certification for Stream Crossings	State approvals for 404 permits for stream crossings	All surface-disturbing activities affecting WUS
Short-Term Water Quality Standard for Turbidity – 318 Authorization	Construction activities that will cause short-term or temporary violations of state water quality standard for turbidity	Stream crossings, near-stream activities that will discharge stormwater to stream
Montana Natural Streambed and Land Preservation Act – 310 Permit	Construction activities that alter the bed or banks of a perennially flowing stream	Perennial stream crossings
Individual Montana Pollutant Discharge Elimination System Discharge Permit	Discharges of hydrostatic test water	Pipeline testing
General permit for construction dewatering	Discharges for construction dewatering	Construction sites
Montana Department of Transportation		
Transport permits	Permit for oversize, over length, and overweight loads	Transportation of equipment and materials on state highways
Montana Board of Land Commissioners		
Authorization of activities on state land	Approval of oil and gas leases, ROWs, temporary use permits, and developments on state land	Facilities on state land
Montana Department of Natural Resources		
Water agreement for temporary use of water	Temporary water use for hydrostatic testing and dust abatement	Pipeline and facility construction
Montana Sage Grouse Habitat Conservation Program Review	Consultation with the Program to develop the Greater Sage-grouse Mitigation Planning Approach	Greater Sage-grouse Mitigation Planning Approach
LOCAL PERMITS, APPROVALS, AND AUTHORIZING ACTIONS		
Fallon County		
Road use authorization	Overweight and over length loads on county roads	Transportation of equipment and materials on county roads
Conditional use and special use permits, zoning	New structures	Associated facilities
County road departments	Crossing permits	Project access roads
PRIVATE LANDOWNERS AND COMPANIES		
Private Landowners	Land easements/agreements	All land-disturbing activities
Burlington Northern Santa Fe	Crossing permits	Railroad crossings

1.3 Carbon Dioxide Pipeline Location in Relation to Existing Disturbance

Denbury has located the proposed ROW parallel to previously disturbed areas or along utility or road corridors where possible to minimize disturbance and avoid sensitive surface resources. Approximately 10.34 miles (40%) are parallel to existing pipeline ROWs; 1.2 miles (1%) are parallel to road ROWs; and approximately 13.1 miles (12%) will not be parallel to any existing linear features. Table 1-4 summarizes locations along the ROW that are parallel to existing ROWs and Figure 1-2 provides a typical ROW construction profile for parallel utilities.

Table 1-4. Locations along Right-of-Way Parallel to Existing Rights-of-Way

Location	Milepost		Length (miles)	Land Ownership
	Begin	Exit		
Cedar Creek Anticline Pipeline	0.0	0.47	0.47	Private
Unknown ROW (decommissioned pipeline?)	3.24	8.38	5.14	Private/state
ONEOK NGL Pipeline (Elk Creek and Bakken System)	19.00	20.70	1.7	Private
Kinder Morgan Double H 12" Crude Oil Pipeline	21.69	24.72	3.03	Private



NOTES:

1. THIS IS THE PREFERRED LOCATION FOR TOPSOIL STORAGE. DEPENDING UPON THE CONDITIONS ENCOUNTERED IN THE FIELD DURING CONSTRUCTION, THE TOPSOIL MAY BE MOVED TO THE OPPOSITE SIDE OF THE R.O.W..

Some elements of this figure are not depicted to scale. The measurements shown are true and accurate.


REVISIONS						DRAWN BY:	 TYPICAL CONSTRUCTION R.O.W. PROFILE: SHARED CORRIDOR					
						CHECKED BY:						
						REVIEWED BY:						
						APPROVED BY:						
						PROJECT MANAGER:						
0	ISSUE FOR USE	5-18-2012				SCALE: NONE	PROJECT NUMBER	DRAWING NUMBER	REV.			
NO.	DESCRIPTION	DATE	BY	CHK.	APPR.			TYP-032C	0			

Figure 1-2. Typical construction right-of-way profile for shared corridor.

1.4 Additional Features Associated with the Right-of-Way

In addition to the 75-foot-wide ROW (50-foot permanent and 25-foot temporary), additional features will be required for the installation, production, and maintenance of the CO₂ pipeline. These additional features include pipeline transportation and storage; staging areas; additional temporary workspace (ATWS); permanent and temporary access roads; mainline valves and pigging facilities; and permanent pipeline markers. Of these additional features, only 2 temporary access roads, 2 permanent access roads, and one ATWS would be located on BLM lands.

1.4.1 Pipe Transportation and Storage

An existing pipe storage yard located on private land in Baker, Montana (approximately 2.4 miles east of the pipeline), will be used to store the pipe. Pipe will be delivered to the yard via rail and/or truck from the manufacturer to be determined at a later date. The trip length, transportation method, pipe segments per vehicle, total vehicle trips, and total vehicle miles have yet to be determined.

1.4.2 Additional Temporary Workspace

Some ATWS would be 25 feet in width and would be needed in areas where the terrain or other features require more room to work outside of the nominal 75-foot-wide pipeline Short-Term Right-of-Way area. One ATWS area would be located on BLM lands at mileposts 0.52. Justification for ATWS includes spoil storage area for side slopes/terrain, creek crossings, road crossings, foreign pipeline crossings, and railroad crossings. ATWS will be stripped of vegetation and topsoil to create level and safe construction conditions; ATWS used to store topsoil will not be stripped of existing topsoil and vegetation. A complete list of proposed ATWS locations, sorted by milepost and including land ownership and justification per ATWS, is provided in Appendix A.

1.4.3 Staging Areas

Two staging areas are planned along the ROW on private lands. Staging areas are ATWS that will be used specifically for temporary storage of equipment, vehicles, and pipe sections at strategic locations along the ROW. They will be located on previously disturbed areas to the maximum extent practical. Staging areas are proposed immediately adjacent to the ROW and/or at locations that are easily accessible to access roads. A complete list of proposed staging area locations, sorted by milepost and including land ownership, is provided in Appendix A.

1.4.4 Temporary Access Roads

The Project will require temporary access roads that connect to existing state or county roads for the construction, operation, and maintenance of the pipeline. Two access roads would cross through BLM lands. Some access roads are already improved roads and will only require maintenance actions (e.g., blading, re-graveling, etc.) while other access roads are primitive two-tracks that will require modification (e.g., blading) in order to use them effectively for construction equipment. A two-track road consists of two tracks where tires have been previously driven over the landscape, with vegetation growing in the middle and along the edges of the tire tracks. It is common practice to blade the two-track roads by stripping topsoil (if present prior to construction) and flat blading/leveling during construction; topsoil will be replaced; and the road will be reseeded after construction is complete.

Temporary access roads may be improved to no more than 25 feet wide (see Appendix B for additional information). Survey stakes will be used to delineate the edges of the 25-foot-wide boundary for access roads that require improvements. Temporary access roads on private lands that require improvements/widening will be returned to preconstruction conditions, including original contour, according to landowner requirements. Proposed access roads that cross intermittent or perennial streams will be designed to cross at right angles to minimize impacts to the riparian habitat. The temporary access roads on BLM are AR-6 and AR-11. They are improved roads that will only require maintenance actions. No temporary access roads located on BLM lands would require improvements. The portion of Access Road AR-6 on BLM land is 2,868 feet long and 25 feet wide consisting of 1.7 acres. Access Road AR-11 is 1,466 feet long and 25 feet wide consisting of 0.9 acres. Road maintenance may require the application of gravel. If necessary, Denbury and/or its Contractors will coordinate the source of gravel with the BLM/state agencies prior to purchase to ensure there are no concerns related to erionite. All material used will be from privately owned surface and minerals and/or permitted by the appropriate entity.

Access to the project area would also utilize existing Anticline County Road and Coral Creek County Road. No improvements would be required; however, some maintenance may be necessary in the event of rutting. The portion of Anticline County Road used for access on BLM land would be 15,692 feet long and 60 feet wide consisting of 21.61 acres. The portion of Coral Creek County Road used for access would be 4,251 feet long and 60 feet wide consisting of 6.0 acres.

Maps that illustrate the locations of access roads are provided in Figure 1-1. A comprehensive list of all proposed access roads is provided in Appendix B, including any environmental concerns associated with each road (e.g., wetlands or waterbodies crossed by the road).

1.4.5 Mainline Valves and Pipeline Inspection Gauge Facilities

Proposed mainline valves and pipeline inspection gauge facilities (e.g., scraper traps, block valves, and takeoff valves) will be installed according to applicable requirements of 49 Code of Federal Regulations (CFR) 195, Transportation of Hazardous Liquids. No mainline valves would be located on BLM lands. A pipeline inspection gauge is commonly referred to as a “pig” and is used for inspecting or cleaning the pipeline. A launcher will be located at each delivery point and a receiver at each receipt point to allow for pigging operations. The area will be approximately 100 × 120 feet. Valve sites will be graveled and consist of a 6-foot-high chain link fence with 1-foot-high barbed wire on top. Photographs of typical mainline valves and launcher/receiver sites are provided in Appendix C.

1.4.6 Permanent Pipeline Markers

The pipeline centerline will be identified by 3-foot-tall pipeline markers placed at each public road crossing, railroad crossing, and line-of-sight; the markers will be inter-visible in accordance with 49 CFR 195.410. A 6-foot-tall aerial marker will be placed at 1-mile intervals along the ROW and will be larger

so that milepost numbers can be seen from the air. Variances for placement of both types of markers will be allowed in waterbodies or where restricted by special habitats or other resource considerations. Typical markers are depicted in Figures 1-3 and 1-4.

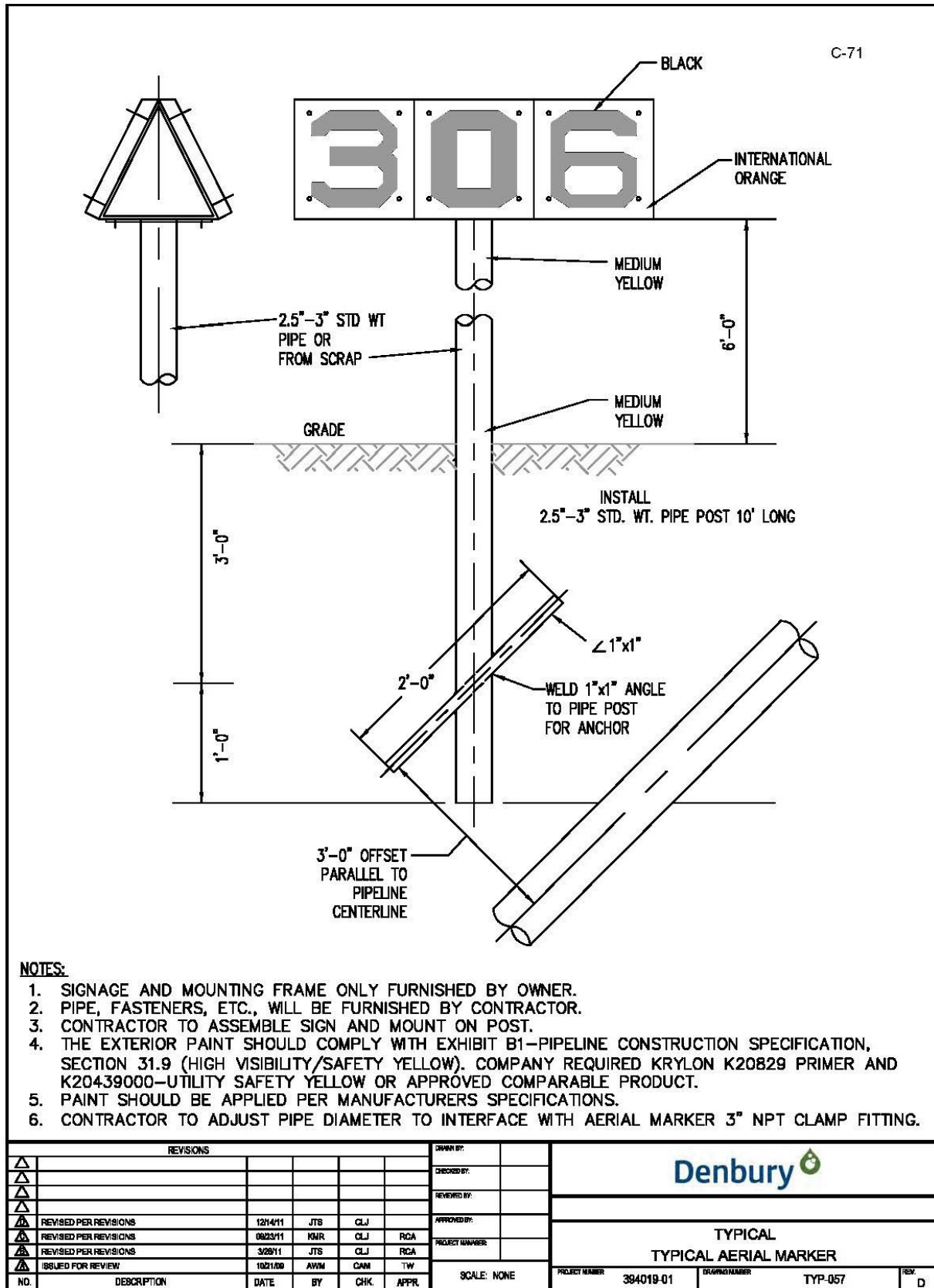
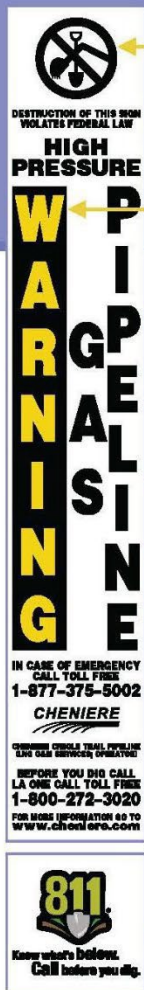


Figure 1-3. Typical aerial marker.



Vulcan Drivable Marker

Vulcan's Drivable Marker (DRV) is the top flexible fiberglass product professionals prefer when strength, reliability and visibility are demanded.



"No Dig" Symbol- easily recognized by all excavators

Warning of Federal Law

Contrasting WARNING message for maximum visibility

Large black letters meet Federal Requirements

Top-quality, premium cast vinyl film with aggressive adhesive

Match Component System Inks used for maximum longevity

3" wide by 12", 16" or 18" length

Decals with protective overlay applied to marker before shipping

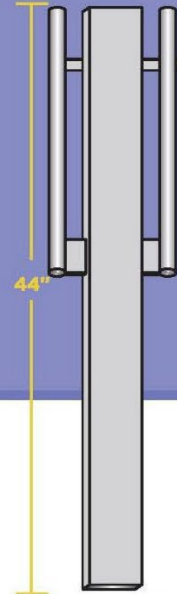
Company name and emergency phone number

One-Call Phone Number

811 Logo



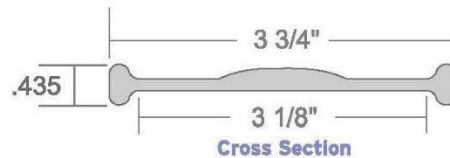
Orange Drivable Marker with Decal



Driving Tool

Unique Design

Recessed design on both sides protect the vinyl sheeting from damage during installation or vehicle impacts.



Cross Section

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www.vulcanutilitysigns.com

Figure 1-4. Typical drivable marker.

2 CONSTRUCTION SEQUENCE, SCHEDULE, AND EQUIPMENT

Pipeline construction is generally sequenced as a moving assembly line as shown in Figure 2-1. This Project will be constructed in a similar manner with the exception of some preconstruction activities that are identified below that will occur prior to clearing of the ROW.

Construction of the Project will not begin until the BLM issues a Decision Record, grants the ROW and TUP, and issues a notice to proceed. All applicable federal, state, and local permits and approvals, including private landowner agreements, will also be needed prior to commencement of construction.

The Project will be constructed via a single spread. Denbury's Contractor(s) will begin preconstruction activities described in Section 2.2 in March, more than 3 weeks prior to mainline construction activities described in Section 2.3. Pre-construction and construction activities and associated crews are detailed in Table 2-1.

Denbury's Contractor(s) will begin mainline construction activities, as described in Section 2.3, in mid-July. Mainline construction and reclamation activities will be completed by late October.

The workforce required for construction activities would range from five, at the initial start of construction, to a peak of 215 personnel, primarily for pipeline construction activities. The construction work will be sent for bid and the workforce will be filled in accordance with the construction contractors labor force. It is assumed that a portion of the workforce will be filled with local workers. Housing for the workforce would likely be provided by local hotels and RVs in nearby campgrounds.

In the event of a medical emergency, services in the vicinity of the Project area include the Fallon County Ambulance/EMS and Fallon Medical Complex in Baker MT. Other emergency response services include Montana Disaster and Emergency Services, Fallon County Sheriff's Office, Baker Police Department, and Baker Fire Department.

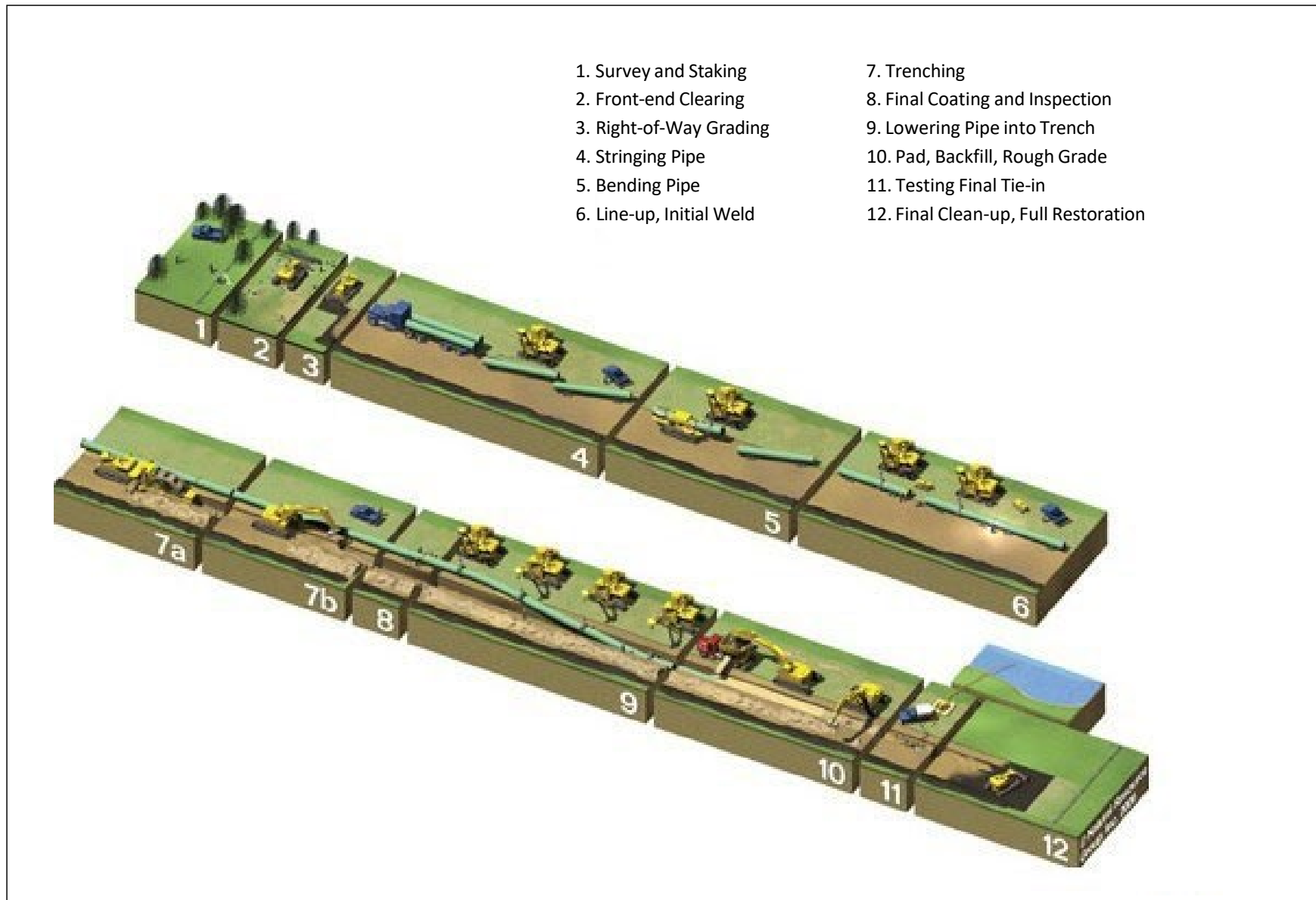


Figure 2-1. Typical pipeline construction sequence.

Table 2-1. Project Personnel Requirements

Construction Crew	Month – Crew Size	Month – Crew Size	Month – Crew Size	Month – Crew Size
Preconstruction survey	March – 6	April – 6	-	-
Preconstruction geotechnical	March – 2	-	-	-
Logistics/Pipe receiving	April – 4	May – 4	-	-
Mainline construction	June – 25	July – 50	Aug – 225	Sept – 100
Nondestructive testing	July – 4	Aug – 4	-	-
Civil survey	July – 6	Aug – 6	Sept – 2	-
Environmental inspection	June – 2	July – 2	Aug – 2	Sept – 2
Construction inspection	June – 10	July – 25	Aug – 25	Sept – 15
Postconstruction electrical	Sept – 6	Oct – 6	-	-

2.1 Construction Equipment

Standard pipeline construction techniques will be implemented along the pipeline route and typically involve the following sequential operations: clearing and grading, ditching, stringing and bending, welding, joint coating, lowering and backfilling, hydrostatic testing, and cleanup and restoration.

Typical equipment for pipeline construction includes pickup trucks, loaders, various sized dozers, shovels and backhoes, side booms, generators, and bending machines. Equipment typically used for ROW reclamation includes dozers, blades, and track hoes. An estimate of the type and number of each piece of equipment required for construction is included in Table 2-2.

Table 2-2. Construction Equipment Requirements

Equipment	Number	Use/Purpose
4×4 UTV	15	Pre-construction survey
4×4 pick-up truck	25	Pre-construction survey
330 track excavator (with vacuum units)	2	Logistics/pipe receiving contractor
Stringing truck	6	Logistics/pipe receiving contractor
Pick-up truck	25	Logistics/pipe receiving contractor
Mechanic truck (with welding equipment)	3	Mainline construction contractor
D7 bulldozer	5	Mainline construction contractor
Motorgrader	1	Mainline construction contractor
330 track excavator	5	Mainline construction contractor
Sideboom tractor	3	Mainline construction contractor
D6 crawler tractor (with welding equipment, air compressor and generator)	2	Mainline construction contractor
Generator-powered coating rig	3	Mainline construction contractor
Air compressor powered sandblast coating rig	3	Mainline construction contractor
Lowboy	2	Mainline construction contractor
Haul truck	2	Mainline construction contractor

Equipment	Number	Use/Purpose
Water truck	4	Mainline construction contractor
Mechanics rig (with welding equipment, generator and air compressor)	2	Mainline construction contractor
Welding rig (with welding machine)	15	Mainline construction contractor
Crew truck	25	Mainline construction contractor
Pick-up truck	25	Mainline construction contractor
Telescoping fork lift	1	Mainline construction contractor
Crew truck (with trailer)	3	Non-destructive testing contractor
X-ray truck	2	Non-destructive testing contractor
Mini-excavators	1	Post-construction electrical contractor

2.2 Preconstruction Activities

2.2.1 Amendment of Alignment Sheets

Once all required environmental permits have been acquired and conditions of approval, avoidance areas, and seasonal restrictions have been determined, these items will be incorporated into the Issued for Construction (IFC) alignment sheets. Compliance with permit conditions will be aided by distributing the IFC alignment sheets prior to construction and discussing the contents with Environmental Inspectors, construction managers, and Denbury representatives.

2.2.2 Survey Monuments

All survey monuments found within the ROW/TUP will be protected. Survey monuments include, but are not limited to, General Land Office and BLM Cadastral Survey Corners, reference corners, witness points, U.S. Coastal and Geodetic benchmarks and triangulation stations, military control monuments, and recognizable civil (both public and private) survey monuments. If any survey monuments found within the ROW are disturbed or obliterated during the course of Project development, the Contractor will immediately report it to Denbury; Denbury will report the incident in writing to the BLM Authorized Officer (AO) and the respective installing authority, if known.

2.2.3 Surveying and Staking

Civil engineering surveys will be conducted to identify the proposed centerline of the pipeline and the boundaries of both sides of the approved working limits before construction. Survey and staking crews will access the ROW via approved, existing access roads using pickup trucks and UTVs. Denbury's construction inspectors will be responsible for verifying that the limits of authorized construction work areas are staked prior to construction. Flagged and/or painted lath will be set at 200-foot intervals (maximum), or as required to maintain line of sight, along the proposed centerline. The edges of the work limits will be marked with flagged or painted lath at 200-foot intervals (maximum), or as required to maintain a line of sight. All Short-Term ROW areas will be marked in a similar fashion and all four corners of each temporary use area will be flagged or marked with painted laths. This staking will clearly demark the boundary of the area that can be used or accessed by construction personnel. Equipment will not be parked or driven beyond these stakes. The edges of work limits will also be marked along access roads that require improvements (maximum 25-foot disturbance). This staking effort will commence 3 weeks prior to any ground-disturbing activities, as coordinated with the BLM AO and/or private landowners.

2.2.4 Right-of-Way Signage and Fence Modifications

Signage will be installed by the Construction Contractor along the ROW and roads to indicate wetland boundaries, refueling setbacks, waterbody boundaries, approved/unapproved construction access roads, or any other sensitive areas or features deemed appropriate by Denbury or BLM (see Figure 2-2 for typical signage). The Environmental Inspectors will ensure that signage is installed by the Contractor in the proper locations, considering visibility, feature boundaries, etc.



Figure 2-2. Typical right-of-way signage.

Fences crossing the ROW will be braced, cut, and temporarily fitted with gates to permit construction traffic passage. Typical fence installation drawings are included in Section 2.8.5 of the Reclamation, Mitigation, and Monitoring Plan (Appendix D). Signage installation and fencing efforts will commence 3 weeks prior to any ground-disturbing activities, as coordinated with the BLM AO and/or private landowners. Signage and fencing crews will access the ROW via approved, existing access roads using pickup trucks and UTVs.

2.3 Construction Process

The following construction process sections are presented in the order that they will occur on the ground, and they generally follow the sequence diagram in Figure 2-1. However, depending on the type of Contractor that is selected for the Project (union versus non-union), certain activities may precede others (e.g., trenching and stringing sections).

Best management practices (BMPs) will be installed to limit sediment transport and erosion. The Reclamation, Mitigation, and Monitoring Plan (Appendix D) should be referred to throughout the

proposed Project to ensure proper sediment- and erosion-control, mitigation, and reporting procedures are followed.

2.3.1 Clearing

Once the ROW has been clearly staked, equipment will be brought in to clear the existing vegetation. All vegetation, including trees, will be removed from the entire ROW. The only areas where vegetation will not be removed are wetland and waterbody areas. Stumps will be left in place except over the trench line or removed as necessary to create a safe and level workspace. The Environmental Inspector will coordinate with the appropriate agency or landowner to locate areas for stump disposal when necessary. Trees will be felled only within the approved ROW boundaries. Clearing and all subsequent earth-moving activities will commence as outlined in Figure 2-1 and Section 2.

As discussed in the Resource Report for Aquatics, Vegetation, and Wildlife (Appendix E), specific wooded or forested areas within the proposed disturbance will be cleared prior to construction to avoid disturbance to species-specific habitat.

2.3.2 Topsoil Stripping

The objective of topsoil handling is to maintain topsoil capability by conserving topsoil for future replacement and reclamation and to minimize the degradation of topsoil from compaction, rutting, loss of organic matter, or soil mixing so that successful reclamation of the ROW can occur. Topsoil will be stripped and stockpiled in a windrow along the edges of the ROW and any other work areas. Topsoil stripping will occur along the entire ROW prior to grading operations. Available topsoil depths vary across the proposed Project but will be stockpiled separately from subsoil and will not be used to pad the trench or construct trench breakers. Topsoil will be used as the final layer of soil during reclamation.

In order to avoid mixing of topsoil and subsoil, rutting greater than 4 inches deep will not be allowed in areas where topsoil is intact. The 4-inch rutting rule will not be enforced in areas that have already been stripped of topsoil (i.e., where equipment is working on subsoil). This rule includes access roads; if the topsoil has not been stripped, ruts cannot exceed 4 inches.

In wetlands, only the topsoil on the trench line will be removed and segregated before digging and removing the subsoil (double-ditching method). The Environmental Inspector will determine the depth of available topsoil per site conditions. Dry ephemeral drainages (arroyos and swales) crossed by the ROW will not be blocked with topsoil piles. Topsoil will be placed on the banks of drainages so natural flows are not impeded and topsoil is not washed away.

2.3.3 Front End Grading

In locations where side sloping terrain exists, grading will occur to create a flat, level work area for construction equipment. The grading crew will install timber mats in wetlands and overflowing waterbodies, or where soil conditions cannot support construction equipment. These areas will be restored to the existing natural contours after the trench is backfilled (during the rough grade phase of construction).

2.3.4 Re-staking Centerline of the Trench

Following clearing, topsoil stripping, and grading of the ROW/TUP, civil engineering survey crews will re-stake the centerline of the pipeline trench. Flagged and/or painted lath will be set at 200-foot intervals (maximum), or as required to maintain line of sight.

2.3.5 Trenching

Trenches will be excavated using a wheel trencher or backhoe; the method selected will be based on soils, rock, terrain, and/or other related factors. Special excavation equipment or techniques may be used if large quantities of solid rock are encountered.

Trenches will be excavated to a depth sufficient to provide the minimum 48 inches of cover required by federal, state, and local municipalities as well as landowner requirements. The minimum cover depth (and therefore the total depth of the trench) will vary depending on soil type and existing conditions/land use; the different depth of cover requirements is listed in Table 2-3. Trenches will be excavated to approximately 36 to 48 inches wide at the bottom with the sides sloped according to Occupational Safety and Health Administration specifications (up to approximately 96 inches wide).

Table 2-3. Minimum Depth of Pipeline Cover Requirements

Crossing Type	No Rock (minimum inches)	Rock Trench (minimum inches)
Standard trench	48	48
Agricultural land*	48	48
Water crossings	48	48
Drainage or ephemeral waterways	48	48
Road crossings	48	48
Drainage ditch at public road crossing	60	48
Wetlands	48	48

* Note: Double-ditching required for agricultural areas.

2.3.6 Stringing

The Contractor will string the pipe along the ROW as shown in Figure 2-1. Stringing trucks will collect and deliver the pipe to the ROW from staging areas and/or the pipe yard. Each individual joint of pipe will be unloaded with a side-boom or track-hoe and placed (strung) parallel to the trench in a continuous line. Pipe for road, waterbody, and/or wetland crossings will be stockpiled at temporary use areas near the crossings. Stringing operations will be coordinated with trenching and installation activities in order to properly manage the construction time on a particular tract of land. Gaps will be left at access points across the trench to allow for ROW crossing, as discussed in the Reclamation, Mitigation, and Monitoring Plan (Appendix D).

2.3.7 Bending

After joints of pipe are strung along the trench, but before the joints are welded or pressed together, individual joints of pipe will be bent to accommodate horizontal and vertical changes in direction. Field bends will be made using a hydraulically operated bending machine. The bending machine uses a series of clamps and hydraulic pressure to make a smooth, controlled bend in the pipe. All bending is performed in strict accordance with federal standards to ensure integrity of the bend. Pipe will be bent at the mill when necessary for sharp bends. All pipe will be pre-coated at the mill with a fusion-bonded epoxy external coating (or other coating technique) to provide corrosion protection.

2.3.8 Welding

After pipe joints are bent, the joints will be lined up end-to-end into one continuous length and clamped into positions. Each welder will be required to pass an approved qualification test to work on the pipeline. The qualification tests will be conducted using Project-specific weld procedures that are developed in accordance with federally adopted welding standards. The pipeline joints will be welded together in conformance with 49 CFR 195(D) (Construction).

2.3.9 Weld Inspection

Welds will be visually inspected by a certified inspector who is part of the construction management staff. Nondestructive radiographic inspection methods will be conducted to ensure structural integrity and compliance with the applicable U.S. Department of Transportation (USDOT) regulations. The percentage of welds radiographically inspected will be in accordance with 49 CFR 195.234 (Welds: Nondestructive Testing). Any defect will be repaired or cut out as required under the specified regulations and standards. Documents that verify the integrity of the pipeline will be kept on file by Denbury for inspection by the Office of Pipeline Safety, USDOT.

2.3.10 Coating of Field Welds

To prevent corrosion, the pipeline will be externally coated with fusion bonded epoxy coating prior to delivery. After welding, field joints will be coated with a tape wrap, brush grade urethane epoxy, or field-applied fusion bond epoxy.

2.3.11 Cathodic Protection

Cathodic protection test sites will be installed at accessible locations to measure the pipe to soil potential for the establishment and maintenance of an effective cathodic protection system.

2.3.12 Inspection and Repair of Coating

Before the pipe is lowered into the trench, the pipeline coating will be visually inspected and tested with an electronic detector, and any faults or scratches will be repaired.

2.3.13 Padding and Lowering in Trench

Specialized padding machines may be used to sift the excavated subsoils to provide rock-free pipeline padding and bedding. In rocky areas, sandbags may be used to pad the bottom of the trench instead of, or in combination with, using soil fines for padding. Rock shields also may be used to protect the pipe from rocks. No topsoil will be used to pad the pipe.

Before a pipe section is lowered into the trench, inspection will be conducted to ensure the trench bottom is free of rocks and other debris that could damage the external pipe coating. A series of side-boom tractors will simultaneously lift welded sections of the pipe and carefully lower the sections into the trench. Non-metallic slings will protect the pipe and its coating as it is raised and moved into position. A second inspection will be done to verify that the pipe is properly fitted and installed in the trench and that minimum cover is provided.

2.3.14 Backfilling and Rough Grade

Backfilling will begin after a section of pipe has been successfully placed in the trench. Trench breakers will be installed, as needed. Prior to backfilling the trench, the equipment operator will check the trench for wildlife and/or livestock; any wildlife or livestock found in the trench will be removed before backfilling begins. The backfilling process will use a bulldozer, rotary auger backfiller, padding machine, or other suitable equipment. Backfill material will be subsoil previously excavated from the trench, except in rocky areas where imported select fill material may be needed (sand pits for barrow material may need to be identified and used).

Backfill will be graded and compacted by tamping or walking with a wheeled or tracked vehicle to ensure ground stability. Compaction will be done to the extent that there are no voids in the trench. In irrigated agricultural areas, the backfill will be replaced at the same compaction density as the adjacent undisturbed soil. Backfilling at road crossing will be in accordance with the crossing permit. Any excavated materials or materials unfit for backfill will be used elsewhere or properly disposed in conformance with applicable laws or regulations.

2.3.15 Hydrostatic Testing

The entire length of the pipeline will be hydrostatically tested in compliance with USDOT regulations (49 CFR 195.300) before being placed into service. Test water will be obtained from a permitted source and/or as negotiated with water rights owners or commercial wells and will be required to meet water quality standards prior to use. A detailed description of hydrostatic pressure testing procedures is included in the Hydrostatic Test Plan (Appendix F).

2.3.16 Final Cleanup and Reclamation

The final step in the construction process is restoring the ROW/TUP as closely as possible to its original condition. All construction debris and miscellaneous items will be removed from the construction site and disposed properly by the Contractor. No trash will be buried. Fences and roads will be replaced/rebuilt as negotiated with the landowner.

Disturbed portions of the construction workspace (including the ROW, Short-Term ROW, and travel lane) will be returned to preconstruction grades and contours as close as possible as described in the Reclamation, Mitigation, and Monitoring Plan (Appendix D). Requirements related to seeding, mulching, slope and trench breaker installation, relieving compaction, restoration of stream banks and slopes, etc., are also included in the Reclamation, Mitigation, and Monitoring Plan (Appendix D).

2.4 Blasting

No blasting will be required for the construction of the proposed project.

3 ADDITIONAL DESIGN FEATURES

3.1 Road and Railroad Crossings

A single railroad will be crossed by the ROW and will be designed in accordance with American Society of Mechanical Engineers standard B31.4 and American Petroleum Institute standard RP 1102.

Depending on local regulations, traffic, construction availability, and costs, road crossings will be bored or achieved through open cut techniques.

Crossings of two-track roads and gravel roads will use open cut techniques; paved county roads and state highways will be crossed via directional bores (Table 3-1 and Figure 3-1 and Figure 3-2, respectively). Denbury will work with the specific landowner and local agencies to coordinate detours and emergency access. Traffic control is included in Section 4.5 of this POD, which includes information regarding road closures and signage, etc.

The pipeline will be buried at a minimum depth of 4 feet or depth specified in applicable permit below the bottom of existing road ditches. Barrow ditches on county roads will be provided a means for mechanical protection. Road crossings will not be cased. The Frac-Out Contingency Plan (Appendix G) addresses concerns related to the potential for drilling fluid release during boring operations.

Table 3-1. Road and Railroad Crossings

Milepost	Road/Rail Name	Road Surface	Ownership	Proposed Crossing Method
0.02	Unnamed Rd	Dirt	Private	Open cut
0.16	Unnamed Rd	Dirt	Private	Open cut
0.65	Coral Creek Rd	Gravel	Public/city	Open cut
1.63	Brackett Butte Rd	Gravel	Public/city	HDD
3.06	Airport Rd	Gravel	Public/city	Open cut
5.59	Highway 7	Paved	Public/state	HDD
7.69	Yellowbrick Rd	Gravel	Public/city	HDD
8.16	Sandstone Rd	Gravel	Public/city	HDD
10.23	Highway 12	Paved	Public/state	HDD
10.90	Burlington Northern Santa Fe Railroad	N/A	BNSF	HDD
10.92	Sunset Trl	Dirt/grass	Public/city	HDD
14.52	Pennel Rd	Gravel	Public/city	HDD
20.48	Unnamed Rd	Gravel	Private	HDD
21.85	Unnamed Rd	Gravel	Private	Open Cut
23.43	Unnamed Rd	Dirt	Private	Open Cut
23.80	Unnamed Rd	Gravel	Private	Open Cut
23.83	Anticline Rd	Gravel	Public/City	HDD
25.78	Unnamed Rd	Gravel/Dirt	Private	Open Cut

Note: HDD = horizontal directional drilling.

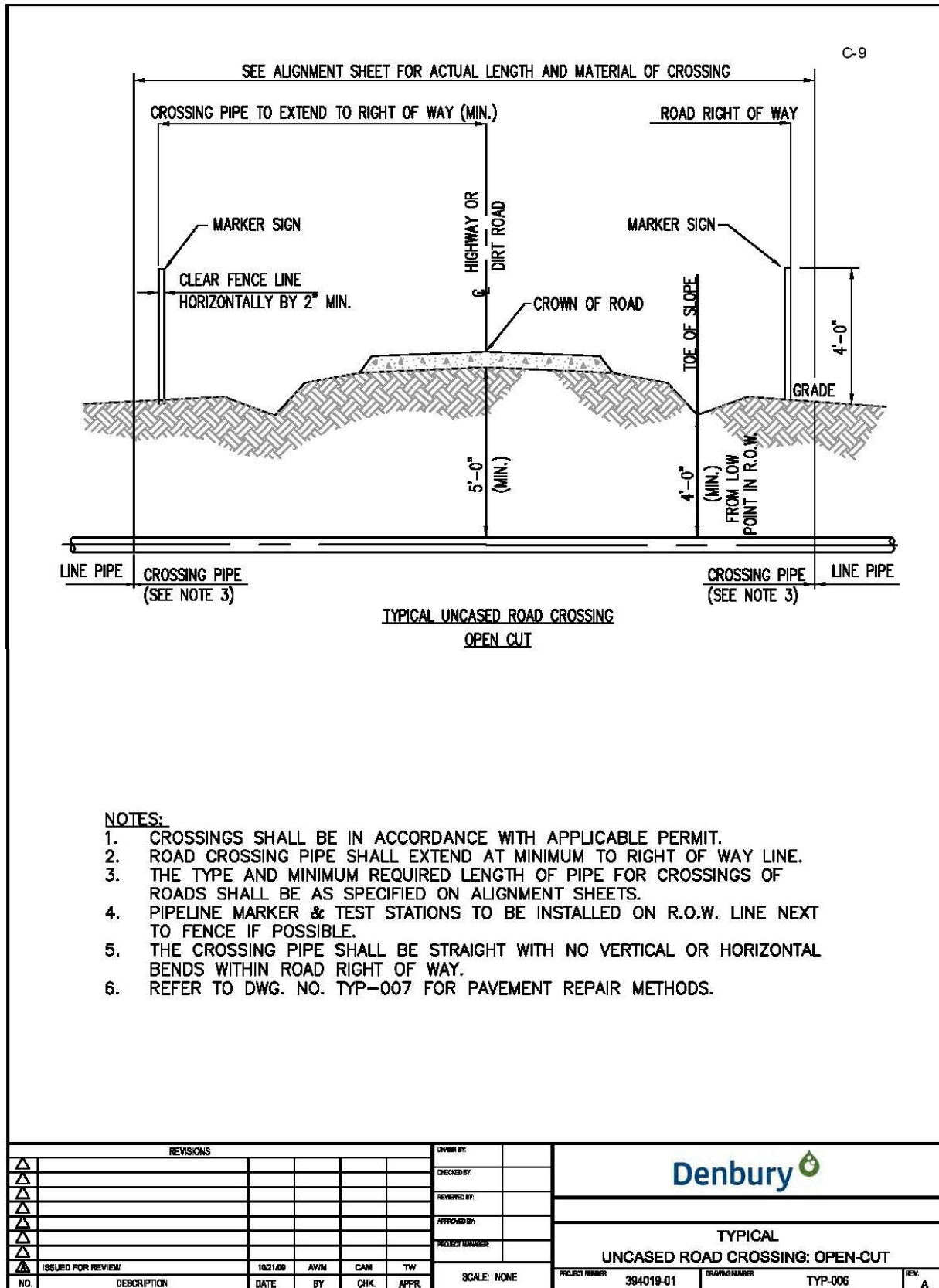


Figure 3-1. Typical open-cut road crossing.

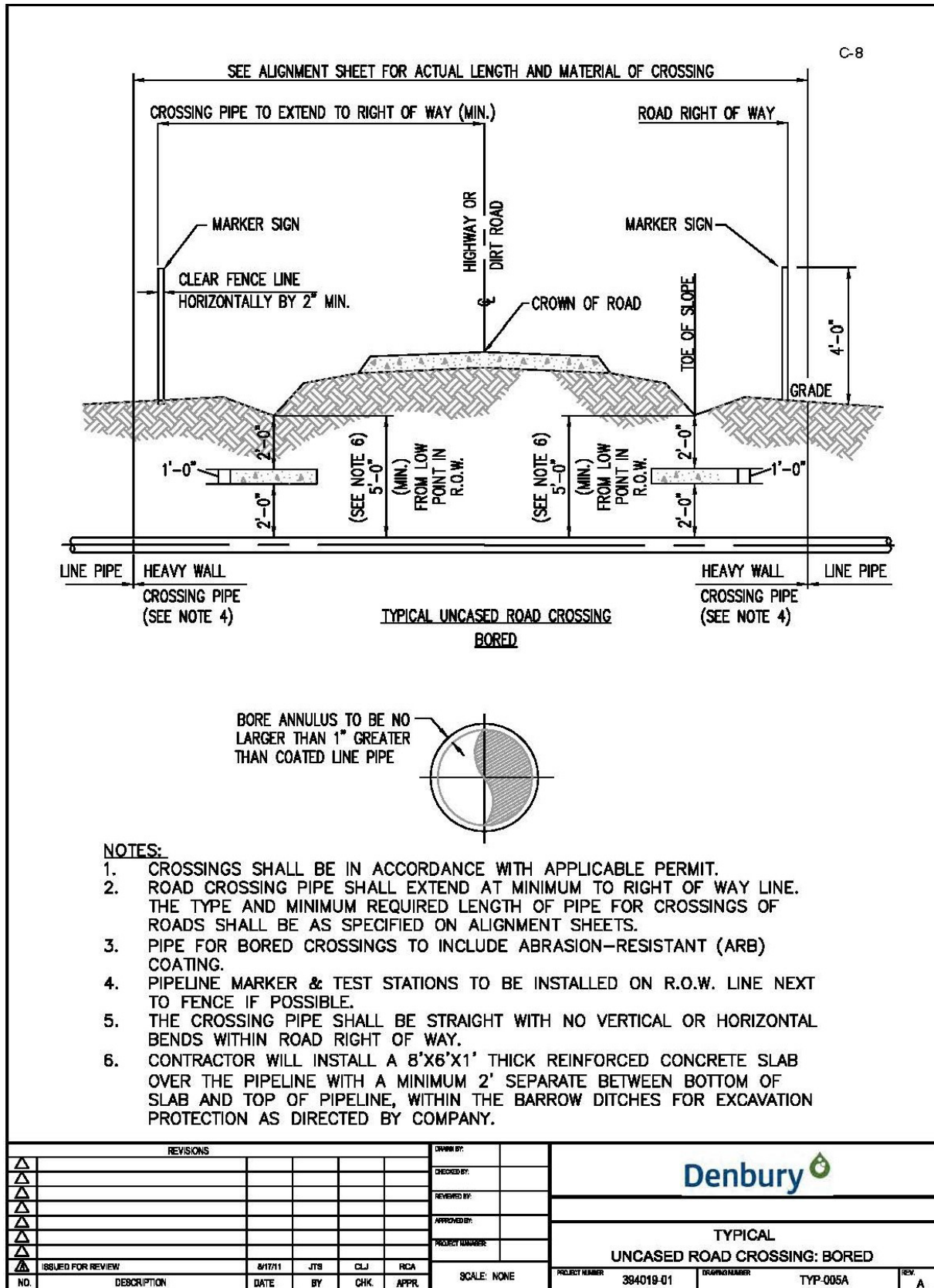


Figure 3-2. Typical bored road crossing.

3.2 Wetlands

A full description of wetlands that have been delineated within the Project area, including crossing techniques, typical construction drawings, erosion- and sediment-control measures, and other mitigative measures, is provided in Section 3 of the Reclamation, Mitigation, and Monitoring Plan (Appendix D).

3.3 Waterbody Crossings

A waterbody includes any natural or artificial stream, river, canal, or drainage with perceptible flow at the time of crossing, as well as other permanent waterbodies such as ponds or lakes. A full description of the waterbodies that have been delineated within the Project area, including crossing techniques, bridge/mat installation, typical construction drawings, erosion- and sediment-control measures, bank stabilization, and other mitigative measures, is provided in Section 4 of the Reclamation, Mitigation, and Monitoring Plan (Appendix D). Crossing methods will include open cut (dry dam and pump and dry flume) methods and horizontal directional drilling.

3.3.1 Horizontal Directional Drill

Horizontal directional drilling would be used for crossing Pennel and Sandstone creeks and would occur only on private lands. This method is further described in Appendix G, Frac-Out Contingency Plan.

3.4 Fugitive Dust Control

Construction activities and the use of unpaved roads can result in varying degrees of fugitive dust emissions. BMPs that will be used to control fugitive dust during construction, when necessary or during periods of dry conditions, include the following:

- Water and/or non-toxic chemical dust suppressant, alone or in combination with mulches, will be applied to areas of disturbance to minimize fugitive dust emissions. Note: Chemical dust suppressant will not be used on BLM-managed lands.
- Use of wind fences, berms, or covering material such as gravel or textiles in areas of disturbance will minimize fugitive dust emissions.
- Unpaved roads in the construction area that pass within 0.25 mile of inhabited dwellings will be watered or treated with non-toxic chemical dust suppressant.

Water for fugitive dust control purposes will be obtained prior to construction, through permits or purchase contracts with owners of valid existing water rights as necessary. Specific water sources will be identified prior to construction per coordination between Denbury and the construction contractor.

Federal, state, and local air quality standards will be met during construction. Site revegetation will be conducted in accordance with Denbury's reclamation procedures, which will also reduce dust emissions.

Portions of Fallon County are known to contain geologic formations containing erionite, a carcinogen on the Toxic Substance Control Act list. Denbury will verify that fill and surfacing material source locations are properly permitted and have been tested for erionite. Denbury will complete testing, if not already completed and properly documented, to ensure that all fill and surfacing materials used during construction are free of erionite. All material used for the project would be privately owned surface and minerals or permitted by the appropriate entity. Keep windows and doors to equipment closed while operating and driving down dirt roads.

- Maintain equipment air filters regularly as recommended by the equipment manufacturer.
- Ensure an effective hazard communication program to educate employees on the health effects and hazards of crystalline silica and the potential health effects of erionite.

- Wet the soil or aggregate before disturbing to reduce dust generation.
- Wash protective clothing and other equipment regularly to remove dust, dirt, and other contaminants.

3.5 Health and Safety

The pipeline will be designed in accordance with the USDOT Pipeline Safety Regulations, 49 CFR 195. The pipe will be steel line pipe conforming to API 5L and made from Grade X-70, high-strength steel. Special design consideration will be given to road crossings, river crossings, and any areas with potential for class location change that would require heavier wall pipe; in these locations, a Grade X 65 steel is anticipated to be used. The pipeline will initially have a uniform design maximum allowable operating pressure of 2,200 pounds per square inch gauge (psig) throughout.

As part of the construction mobilization activities, Denbury will provide Contractor prevention, response, and safety training to improve awareness of safety requirements, pollution control laws and procedures, and proper operation and maintenance of equipment. Preconstruction safety coordination meetings will be held at each spread or Project work location. The safety meeting will address specific Denbury or Contractor concerns and expectations; discuss safety initiatives; and review the safety compliance program, incident reporting, and established protocols for determining, correcting, and documenting safety non-compliance incidents. A detailed discussion of the health and safety measures to be followed is included in the Emergency Response Plan (Appendix H).

3.6 Waste Disposal

Denbury Construction Inspectors will ensure that the Contractor implements the following waste disposal measures:

- No littering will be allowed on the ROW/TUP. Construction and operations sites will be maintained in a sanitary condition at all times and waste materials at these sites will be disposed promptly at an appropriate waste disposal site. Waste is defined as all discarded matter including, but not limited to, human waste, discarded food, trash, garbage, refuse, oil drums, petroleum products, and equipment.
- The Contractor will dispose excess or unsuitable materials at commercial disposal sites, commercial recycling centers, and disposal sites approved by Denbury and the State of Montana.
- The Contractor will comply with all hazardous waste disposal requirements.
- Human wastes, temporarily located within self-contained facilities (portable toilets), will be removed from the ROW/TUP and disposed in accordance with applicable laws and regulations; these facilities will not be placed within 100 feet of a drainage, wetland, or waterbody.

3.7 Livestock Grazing and Associated Structures

Grazing allotments and associated permit infrastructure (fences, gates, cattle guards, water pipelines, etc.) are present within the proposed Project on private, state, and BLM-administered lands. The acres of BLM grazing allotments disturbed by construction of the pipeline are listed in Table 3-2.

Denbury will implement BMPs to maintain current permit operations for grazing permittees during construction and to re-establish permit operations and disturbed infrastructure following construction. Fences crossing the ROW/TUP will be braced, cut, and temporarily fitted with gates to permit

construction traffic passage. During construction, the opening will be controlled to prevent the escape of livestock. If necessary, gates would be installed with chained locks to allow access to the ROW after construction, as negotiated with landowners. Locked gates will not restrict public access to areas with legal public access. Care will be taken to not obstruct or damage existing gates or cattle guards. All livestock facilities (gates, cattle guards, corrals, fences, water sources, etc.) damaged or made inoperable will be repaired to BLM and private landowner satisfaction (per BLM specifications on public land).

Table 3-2. Acres of Grazing Allotments Disturbed by Pipeline Construction

Allotment Name	Land Ownership Acres			Total Acres
	BLM	Private	State	
Pinnow (MT01316)	0.82	11.22	0.00	12.04
Engesser Unit (MT01042)	0.00	24.00	0.02	24.02
Kirschten (MT01071)	0.00	5.37	0.00	5.37
Middle Fork (MT00857)	0.00	29.84	0.00	29.84
Munsell Unit (MT01162)	0.00	4.62	0.00	4.62
Schell (MT01126)	0.00	16.81	0.00	16.81

4 AREAS OF SPECIAL CONDITIONS

The pipeline has been routed and will be installed to avoid impacts to special environmental resources and sensitive cultural resource locations, as much as possible. Special environmental resources could include wetlands, waterbodies, sensitive wildlife habitats, and wildlife migration corridors. In cases where routing cannot avoid all impacts to areas of special environmental conditions and cultural resource locations, the construction ROW will be reduced to minimize impacts. Additionally, timing restrictions and construction stipulations will be implemented to help protect these resources.

4.1 Federally Listed, Proposed Threatened or Endangered, and Candidate Species

The U.S. Fish and Wildlife Service (USFWS) identifies two listed threatened species (northern long-eared bat [*Myotis septentrionalis*] and piping plover [*Charadrius melodus*]) and one candidate species (monarch butterfly [*Danaus plexippus*]) with potential to occur in Fallon County, Montana. The BLM Miles City Field Office may require a biological assessment for this Project. Additional information on these species can be found in Section 4 of the Resource Report for Aquatics, Vegetation, and Wildlife (Appendix E of this POD).

4.2 Bureau of Land Management Sensitive Species

BLM sensitive wildlife that could potentially occur within the proposed Project area are listed in Section 4.2 of the Resource Report for Aquatics, Vegetation, and Wildlife (Appendix E). There are no designated sensitive plant species that could potentially occur within the proposed Project area. The proposed Project area was evaluated for the potential occurrence of sensitive species based on range, known distribution, and the presence of suitable habitat in the proposed Project area.

Field surveys were conducted for black-tailed prairie dog (*Cynomys ludovicianus*) colonies, greater sage-grouse leks (*Centrocercus urophasianus*), sharp-tailed grouse (*Tympanuchus phasianellus*) leks, mountain plover (*Charadrius montanus*) habitat, raptor nests, potential wading bird rookery habitat, and potential eagle winter roost habitat as discussed in the Resource Report for Aquatics, Vegetation, and Wildlife (Appendix E).

Migratory bird presence in the Project area is discussed in the Resource Report for Aquatics, Vegetation, and Wildlife (Appendix E). Additional discussion on migratory bird presence and conservation measures for mitigation of Project impacts to migratory birds is provided in the Migratory Bird Conservation Plan (Appendix I).

Greater sage-grouse lek surveys and presence in the Project area are discussed in the Resource Report for Aquatics, Vegetation, and Wildlife (Appendix E). The approach that will be used by Denbury to produce a science-based mitigation plan that will compensate for effects to greater sage-grouse habitat is described in the Greater Sage-grouse Mitigation Planning Approach (Appendix J).

As presented in the Resource Report for Aquatics, Vegetation, and Wildlife (Appendix E), conifer woodland and/or wooded riparian areas within the proposed disturbance will be cleared prior to construction between September 30 and June 1 to avoid disturbance to northern long-eared bat summer maternity habitat.

4.3 Aquatic Resources

Wetlands, waterbodies, and other aquatic features are described in Appendices E and F of this POD. Denbury will coordinate with the U.S. Army Corps of Engineers as necessary before these resources are disturbed and if required complete the necessary permitting process.

4.4 General Wildlife

The BLM, Montana Fish, Wildlife and Parks, and USFWS cooperatively manage wildlife resources over the Project area with the goal of avoiding or minimizing impacts from Project development. In addition, these agencies also work with other state and federal agencies, Denbury, and landowners to implement protective measures within the Project area.

Denbury acquired wildlife baseline information for the Project area in 2021 and 2022 (Appendix E). That information will be used to facilitate the BLM's ability to identify concerns, provide guidance for the design of Project plans that encourage conservation, monitor the effectiveness of decisions, and make recommendations to adjust management to address specific situations. Specific biological resources that have been identified as potentially occurring within the Project area are discussed in the Resource Report for Aquatics, Vegetation, and Wildlife in Appendix E of this POD.

Protection and conservation measures will be implemented for the proposed Project as outlined in Appendix I, Appendix J, and Appendix K. Additional measures may be included in the Conditions of Approval, BMPs, and recommendations from consultation with the BLM, USFWS, and Montana Fish, Wildlife and Parks.

4.5 Recreation Areas

Areas of public recreation and outfitter use exist along the pipeline route and could be temporarily impacted by construction of the Project. BLM lands with legal public access that could be used for

dispersed recreation (e.g., hunting, birding, fishing, hiking, etc.) are located within the proposed Project area. Hunting is the predominant recreational use most affected on BLM land. Construction and reclamation work during hunting season will temporarily exclude hunters and outfitters from comparatively small areas on BLM land. Denbury will contact the BLM via regular status update reports throughout construction, which will enable the BLM to notify the public of anticipated road closures or delays to regular traffic patterns to these areas.

4.5.1 Traffic Control Plan

Safety of the public is the primary concern associated with active construction within or near recreation or other public use areas. Signage will be used along public roads, Project access roads, and the construction ROW to indicate where the public and/or construction Contractor are allowed access. Construction warning signs will also be used along public roads to warn the public when they are approaching a construction work area (Figure 4-1).

Public access to open excavations will be limited by either installation of BLM-approved locked gates at public access points, installation of barbed wire fences or temporary gates (Section 2.8.5 of Appendix D) or use of other approved means of limiting public access. Flag persons will be used to control traffic (as needed) for ingress and egress from the ROW/TUP.

Designated hard-surfaced roads used during Project construction activities will be maintained in an operable condition to allow access for the public and/or landowners during construction. However, construction activities may in some cases require temporary lane or road closure. Partial closure or closure and detouring of existing roads will be performed only following authorization by the appropriate agency (counties, Montana Department of Transportation, etc.). An alternate route will be provided to residents, Contractors, and the emergency response organizations for their approval prior to any road closures. Proper signage will be provided, and signage locations will be approved prior to any change in traffic flow. Notification of road closure with detour routes and reopening of roads will be communicated to the appropriate agencies, emergency response personnel, operators, and Contractors working on-site prior to closures. Proper signage such as detour and road closure signs will be placed before the roads are taken out of service.

One BLM-designated sport-fish reservoir, Frigid Reservoir, is adjacent to the proposed access road AR-16. Denbury will allow public access to facilitate continued use by the public during construction via use of clear signage and/or traffic-control devices including a flag person.

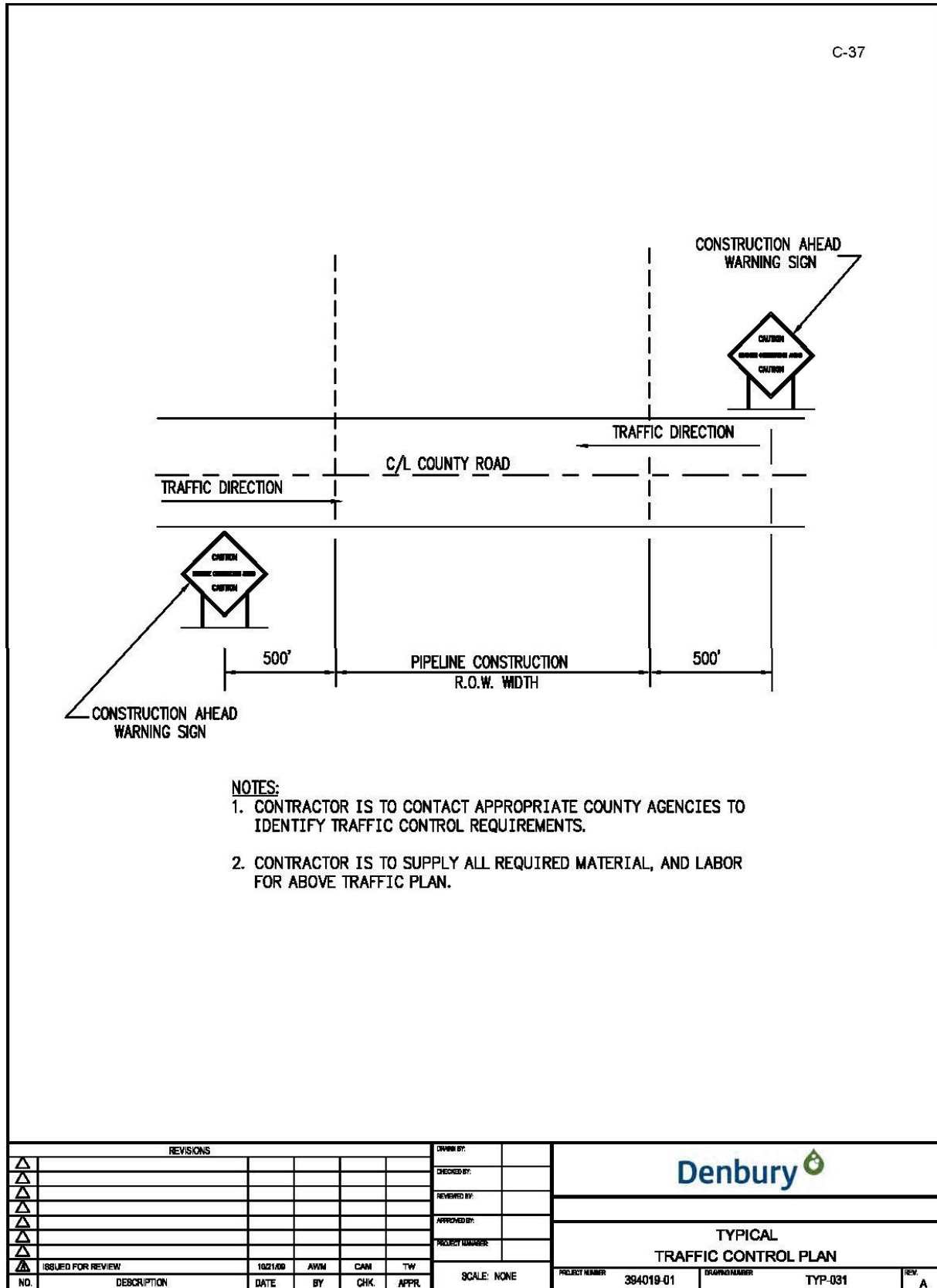


Figure 4-1. Typical traffic-control plan.

4.5.2 Visual Resource Management

Visual Resource Management (VRM) classes along with the corresponding VRM objectives have been established for BLM lands within the Project area. These VRM objectives provide standards for evaluating and analyzing proposed projects as well as identifying mitigating measures that serve to minimize visual impacts.

The VRM class established for this Project area falls within a Class IV, the objectives of which are described as follows:

Class IV Objectives. The objective of this class is to provide for management activities which require major modification of the existing character of the landscape. The level of change to the characteristic landscape can be high. These management activities may dominate the view and be the major focus of viewer attention. However, every attempt should be made to minimize the impact of these activities through careful location, minimal disturbance, and repeating the basic elements.

4.6 Special or Sensitive Soil Locations

A variety of unique or special soils exist within the Project area. Sensitive areas include landscape features, soil attributes, and vegetation community characteristics that may limit the success of reclamation. Denbury will implement reclamation techniques that ensure subsurface integrity and re-establish slope and surface stability while maintaining the biological, chemical, and physical integrity of the soil resource. A more detailed discussion of the specific techniques used during and after construction are included in the Reclamation, Mitigation, and Monitoring Plan (Appendix D). The locations of sensitive soils crossed by the proposed Project are summarized in Table 4-1.

No areas of Prime Farmland are located within the proposed Project area.

Table 4-1. Locations of Sensitive Soils Crossed by Pipeline

Milepost		Length (miles)	Land Ownership
Begin	Exit		
2.95	2.98	0.03	State
3.11	3.14	0.03	State
3.52	3.61	0.09	State
3.67	4.07	0.40	Private
4.11	4.15	0.05	Private
4.32	4.66	0.34	Private
4.96	5.02	0.06	Private
5.30	5.42	0.12	Private
5.48	5.53	0.05	Private
7.81	8.00	0.19	Private
8.03	8.16	0.13	Private
8.67	8.69	0.02	Private
11.62	11.89	0.27	Private

Milepost		Length (miles)	Land Ownership
Begin	Exit		
11.94	12.52	0.58	Private
16.12	16.60	0.48	State
17.35	17.47	0.12	Private
21.97	22.35	0.38	Private
22.52	22.57	0.06	Private

4.7 Environmental Inspections

Denbury will be responsible for providing environmental inspection for the proposed Project during construction. An Environmental Compliance Plan (ECP) will be prepared that includes this POD as well as Conditions of Approval, permit stipulations, and other approvals from various agencies that are applicable to environmental compliance. The ECP will describe roles, responsibilities, and reporting procedures for the Environmental Inspectors to use during the construction and postconstruction phases of the Project. Inspection personnel will have the qualifications and experience necessary to conduct environmental inspections, as well as stormwater inspections and compliance reporting for pipelines. Environmental Inspectors will be responsible for conducting water quality sampling at discharge locations per the Hydrostatic Test Plan (see Appendix F).

4.8 Noxious Weed Management

Denbury will be responsible for noxious weed control within the limits of the ROW and other disturbance areas. Noxious weeds will be monitored and mitigated in accordance with the Noxious Weed Management Plan (Appendix K).

4.9 Areas of Cultural Significance

SWCA Environmental Consultants has completed Class III inventories on the proposed pipeline route. Unanticipated discovery of cultural remains during construction of the Project may occur by any Project-related personnel. The procedures detailed in the Unanticipated Discovery Plan for Cultural Resources (Appendix L) identify standard best-practice measures that will be implemented in the event of an unanticipated discovery of cultural resources. The plan must be approved by BLM and State Historic Preservation Office (SHPO) prior to construction.

5 EMERGENCY PROCEDURES

The Emergency Response Plan is included in Appendix H and includes a Fire Prevention and Suppression Plan and a Hydrogen Sulfide Safety Plan. The Emergency Response Plan will be reviewed by all Contractors and updated as needed to meet changing conditions and applicability with federal regulations. The Emergency Response Plan will also outline the reliability, safety standards, CO₂ pipeline accident data, and damage control program requirements.

6 FIRE PREVENTION AND SUPPRESSION

Contractors will comply with Denbury's Fire Prevention and Suppression Plan, which is included in Emergency Response Plan (Appendix H). This plan details fire control procedures including responsibilities and coordination, notification procedures, emergency fire patrols, fire prevention methods, and fire prevention requirements for construction equipment.

7 SPILL PREVENTION AND CONTAINMENT

Spill prevention and containment applies to the use and management of hazardous materials on the construction ROW and all ancillary areas during construction. This includes the refueling or servicing of all equipment with diesel fuel, gasoline, lubricating oils, grease, and hydraulic and other fluids during normal upland applications and special applications on federal lands that are within 500 feet of perennial streams or wetlands.

Denbury or its Contractors will prepare a Project-specific Spill Prevention Containment and Countermeasure (SPCC) Plan prior to construction. The Contractor will provide additional information to complete the SPCC plan for each construction spread (if applicable) and will provide site-specific data that meet the requirements of 40 CFR 112 for every location used for staging fuel or oil storage tanks and for every location used for bulk fuel or oil transfer. Each SPCC plan will be prepared prior to introducing the subject fuel, oil, or hazardous material to the subject location.

7.1 Spill Prevention

7.1.1 Staging Areas

Staging areas (including Contractor yards and pipe stockpile sites) will be used as described in Section 1.4.3. Bulk fuel and storage tanks used during construction will be placed only at Contractor yards. Hazardous materials at staging areas will be stored in compliance with federal and state laws. The following spill prevention measures will be implemented by the Contractor to reduce the potential of a spill to impact federal lands:

- Contractor fuel trucks will be loaded at existing bulk fuel dealerships or from bulk tanks set up for that purpose at the staging area. In the former case, the bulk dealer is responsible for preventing and controlling spills.
- The Environmental Inspector will inspect the tank site for compliance with the 500-foot setback requirement and approve the tank site prior to installing bulk fuel or storage tanks on the construction yard.
- Fuels and lubricants will be stored only at designated staging areas. Storage of fuel and lubricants in the staging area will be at least 500 feet away from the water's edge. Refueling and lubrication of equipment will be restricted to upland areas at least 500 feet away from perennial streams and wetlands.
- Contractors will be required to perform all routine equipment maintenance at the staging area and recover and dispose of wastes in an appropriate manner.
- Fixed fuel dispensing locations will be provided with secondary containment to capture fuel from leaks, drips, and overfills.

- Temporary liners, berms, or dikes (secondary containment) will be constructed around the aboveground bulk tanks, providing 110% containment volume of the largest storage tank or trailer within the containment structure, so that containment structures may consist of temporary earthen berms with a chemical resistant liner, or a portable containment system constructed of steel, PVC, or other suitable material. The secondary containment structure will be capable of containing 110% of the volume of material stored in these areas.

Denbury may allow modification of the above specifications as necessary to accommodate specific situations or procedures. Any modifications must comply with all applicable regulations and permits.

7.1.2 Construction Right-of-Way

The Contractor will ensure that all equipment is free of leaks prior to use on the Project and prior to entering or working in or near waterbodies or wetlands. Throughout construction, the Contractor will conduct regular maintenance and inspections of the equipment to reduce the potential for spills or leaks.

Rubber-tired vehicles will refuel at the construction staging areas or commercial gas stations. Tracked machinery (backhoes, bulldozers) may be refueled and lubricated on the construction ROW. Equipment maintenance may be conducted in staging areas when practical. When impractical, repairs to equipment can be made on the construction short-term ROW when approved by Denbury's representative.

Each fuel truck that transports and dispenses fuel to construction equipment or Project vehicles along the construction ROW or within equipment staging and material areas will carry an oil spill response kit and spill response equipment onboard at all times. In the event that response materials are depleted through use or their condition is deteriorated through age, the materials will be replenished prior to placing the fueling vehicle back into service.

The following preventive measures apply to refueling and lubricating activities on the construction ROW.

- Construction activities will be conducted to allow for prompt and effective cleanup of spills of fuel and other hazardous materials. Each construction crew, including cleanup crews, will have on hand sufficient tools and material to stop leaks and supplies of absorbent and barrier materials to allow rapid containment and recovery of spilled materials. Crew members must know and follow the procedure for reporting spills.
- Refueling and lubricating of construction equipment will be restricted to upland areas at least 500 feet away from waterbodies, perennial streams, drainages, and wetlands located on federal lands. Where this is not possible (e.g., trench dewatering pumps), the equipment will be approved in advance by the BLM AO and fueled by designated personnel with special training in refueling, spill containment, and cleanup. The Environmental Inspector will ensure that signs are installed identifying restricted areas. Spent oils, lubricants, filters, etc. will be collected and disposed of at an approved location in accordance with state and federal regulations.
- Equipment will not be washed within 500 feet of waterbodies, streams, drainages, or wetlands.
- Stationary equipment will be placed within a secondary containment if it will be operated or require refueling within 500 feet of a wetland or waterbody boundary.

Denbury may allow modification of the above specifications as necessary to accommodate specific situations or procedures. Any modifications on federal lands must comply with all applicable regulations and permits and be approved by BLM AO.

If a spill occurs on navigable waters of the U.S., Denbury will notify the National Response Center at 1-800-424-8802. For spills that occur on federal lands, which includes surface waters or into sensitive areas, the BLM AO also will be notified.

7.2 Spill Containment and Countermeasures

In the event of a spill of hazardous material, Contractor personnel will complete the following steps:

- Notify the appointed Denbury representative.
- Identify the product hazards related to the spilled material and implement appropriate safety procedures, based on the nature of the hazard.
- Control danger to the public and personnel at the site.
- Implement spill contingency plans and mobilize appropriate resources and manpower.
- Isolate or shutdown the source of the spill.
- Block culverts to limit spill travel.
- Initiate containment procedures to limit the spill to as small an area as possible to prevent damage to property or areas of environment concern (e.g., watercourses).
- Commence recovery of the spill and cleanup operations.

When notified of a spill, the Denbury representative will immediately ensure the following procedures are completed:

- Action is taken to control danger to the public and personnel at the site.
- Spill contingency plans are implemented and necessary equipment and manpower are mobilized.
- Measures are taken to isolate or shutdown the source of the spill.
- All resources necessary to contain, recover, and clean up the spill are available.
- Any resources requested by the Contractor from Denbury are provided.
- The appropriate agencies are notified. For spills that occur on federal lands, which includes surface waters or into sensitive areas, the BLM AO will also be notified and involved in the incident.

For a land spill, berms will be constructed with available equipment to physically contain the spill. Personnel entry and travel on contaminated soils will be minimized. Sorbent materials will be applied or, if necessary, heavily contaminated soils will be removed to an approved facility. Contaminated sorbent materials and vegetation will also be disposed of at an approved facility.

For a spill threatening a waterbody, berms or trenches will be constructed to contain the spill prior to entry into the waterbody. Deployment of booms, skimmers, and sorbent materials will be necessary if the spill reaches the water. The spilled product will be recovered, and the contaminated area will be cleaned up in consultation with spill response specialists and appropriate government agencies.

8 OPERATIONS AND MAINTENANCE ACTIVITIES

Denbury will be responsible for monitoring pipeline operations after construction is completed. This will include environmental inspections, and equipment and facility inspections. Inspection personnel will have the qualifications necessary to conduct stormwater inspections and reporting for pipelines. It is estimated that 3 personnel will be required for operation and maintenance activities including access, ROW, stormwater, equipment, and facility inspections, and monitoring the SCADA system and responding to alerts.

Denbury Control Center (DCC) will continuously monitor pipeline pressure and flow conditions. DCC, which is manned 24/7, will utilize a SCADA system to monitor the entire system for pressures, flows, receipts, deliveries, and operating conditions of the pipeline. The control system will be programmed to alarm any time there is a deviation in pressure or flow indicating abnormal condition in the pipeline system.

The proposed CO₂ pipeline will be operated and maintained in accordance with industry standard procedures to ensure safe operation and to maintain the integrity of the pipeline system. Denbury's operating and maintenance procedures are developed in accordance with the safety standards outlined in 49 CFR 195 and other applicable regulations. These procedures will continue to be implemented during the operation and maintenance of the pipeline facilities.

8.1 Surveillance

Communication and detection systems for the proposed Project will be developed. The frequency of pipeline ground inspections will be in compliance with USDOT Office of Pipeline Safety requirements. The ROW will be periodically inspected by aerial patrol.

Operations and maintenance stipulations to protect cultural resource sites during operation and maintenance of the pipeline will be specified in the Section 106 of the National Historic Preservation Act. Ground-disturbing operations and maintenance activities within or near known significant cultural or paleontological resources will not occur without prior coordination with BLM and may require monitoring by qualified archaeologists or paleontologists.

8.2 Right-of-Way Access

Surface travel along the ROW and Short-Term ROW will be limited to periodic valve inspections, leak surveys, erosion control (stormwater inspections), and any pipeline repairs that may be needed. In addition, it also will be necessary to access the ROW/Short-Term ROW for the corrosion control inspections and noxious weed surveys; this will be conducted with a field service truck or all-terrain vehicle. Denbury will use the identified access roads (as negotiated via signed agreements with each individual landowner) to gain access to the ROW/Short-Term ROW following construction.

8.3 Pipeline and Site Maintenance and Repair

Specialists and technicians will be on-call to service the pipeline. Surface traffic will be limited to workers performing pipeline and valve maintenance, periodic monitoring and inspection, and emergency repairs to the pipeline or associated equipment.

Repairs from minor corrosion and slight external mechanical damage to pipe and coating material can be made without interruption or with a minimum interruption of service. These types of repairs are usually made under a reduced pipeline pressure and require a minimum amount of excavation and heavy equipment. Other minor repairs may include BMP maintenance, pipeline marker replacement, and

debris removal. Some settling of the backfilled trench will occur, particularly after the first winter following construction. Subsidence and potholes will be filled if necessary and the surface restored to normal grade and reseeded. Subsidence discovered in subsequent years will be filled, surface restored to normal grade, and reseeded (per BLM's approved seed mixture on public land).

9 TERMINATION AND ABANDONMENT OF RIGHT-OF-WAY AND FACILITIES

Prior to termination of the BLM ROW Grant and Short-Term ROW, or any portion thereof, Denbury will contact the BLM AO to arrange for a pretermination meeting and joint inspection of the ROW. This meeting and inspection will take place a minimum of 30 days prior to termination. The meeting and inspection will be held so that an agreement on an acceptable termination and reclamation plan is reached. This plan will include, but not be limited to, abandonment and/or removal of facilities, drainage structure and/or surface material, recontouring, replacement of topsoil, seeding, and monitoring (including the monitoring of noxious weeds). The AO must approve the plan in writing. Denbury will relinquish all, or those specified portions, of the ROW/Short-Term ROW in accordance with the termination plan.

10 UNANTICIPATED DISCOVERY PLAN

Denbury prepared separate unanticipated discovery plans for cultural resources (Appendix L) and paleontological resources (Appendix M) that detail the procedures to be followed by Environmental Inspectors, and construction personnel in the event of cultural or paleontological resource discoveries during construction. The Unanticipated Discovery Plan for Cultural Resources has been submitted to the BLM, as the lead federal agency, for SHPO and other consulting party review and concurrence. Procedures outlined in the plan will be reviewed during construction Contractor training.

11 GLOSSARY

AO	Authorized Officer
ATWS	additional temporary workspace
BLM	Bureau of Land Management
BMP	best management practice
CFR	Code of Federal Regulations
CO ₂	carbon dioxide
ECP	environmental compliance plan
Denbury	Denbury Onshore, LLC
HDD	horizontal directional drilling
IFC	Issued for Construction
MLV	mainline valve
psig	pounds per square inch gauge
ROW	right-of-way
SCADA	Supervisory Control and Data Acquisition
SHPO	State Historic Preservation Office
SPCC	spill prevention containment and countermeasure
USDOT	U.S. Department of Transportation
USFWS	U.S. Fish and Wildlife Service
VRM	visual resource management

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