ROVER PIPELINE
An ENERGY TRANSFER Company

ROVER PIPELINE LLC

Rover Pipeline Project

PROJECT SPECIFIC

WETLAND AND WATERBODY CONSTRUCTION AND MITIGATION PROCEDURES

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NOTE: Text boxes have been inserted into this document to identify specific areas where Rover Pipeline LLC (Rover) is proposing modifications to the Federal Energy Regulatory Commission (FERC) Wetland and Waterbody Construction and Mitigation Procedures, May 2013 (Procedures) due to site-specific conditions in the Rover Pipeline Project area.

I. APPLICABILITY

A. The intent of these Procedures is to assist project sponsors by identifying baseline mitigation measures for minimizing the extent and duration of project-related disturbance on wetlands and waterbodies. Project sponsors shall specify in their applications for a new FERC authorization, and in prior notice and advance notice filings, any individual measures in these Procedures they consider unnecessary, technically infeasible, or unsuitable due to local conditions and fully describe any alternative measures they would use. Project sponsors shall also explain how those alternative measures would achieve a comparable level of mitigation.

Once a project is authorized, project sponsors can request further changes as variances to the measures in these Procedures (or the applicant's approved procedures). The Director of the Office of Energy Projects (Director) will consider approval of variances upon the project sponsor's written request, if the Director agrees that a variance:

1. provides equal or better environmental protection;

2. is necessary because a portion of these Procedures is infeasible or unworkable based on project-specific conditions; or

3. is specifically required in writing by another federal, state, or Native American land management agency for the portion of the project on its land or under its jurisdiction.

Sponsors of projects planned for construction under the automatic authorization provisions in the FERC's regulations must receive written approval for any variances in advance of construction.

Project-related impacts on non-wetland areas are addressed in the staff's Upland Erosion Control, Revegetation, and Maintenance Plan (Plan).

B. DEFINITIONS

1. "Waterbody" includes any natural or artificial stream, river, or drainage with perceptible flow at the time of crossing, and other permanent waterbodies such as ponds and lakes:

   a. "minor waterbody" includes all waterbodies less than or equal to 10 feet wide at the water's edge at the time of crossing;

   b. "intermediate waterbody" includes all waterbodies greater than 10 feet wide but less than or equal to 100 feet wide at the water's edge at the time of crossing; and

   c. "major waterbody" includes all waterbodies greater than 100 feet wide at the water's edge at the time of crossing.

   d. "ditches" are primarily man-made drainage features that include agricultural ditches and canals in fields and pastures and roadside drainage ditches. Ditches are not considered part of stream systems mapped in the USGS hydrographic database and are not intermittent or perennial stream systems or channelized portions of these stream systems. As such, they typically do not fall under the jurisdiction of the U.S. Army Corps of Engineers (COE). Ditches are temporary in nature and are used to facilitate agriculture practices.

2. "Wetland" includes any area that is not in actively cultivated or rotated cropland and that satisfies the requirements of the current federal methodology for identifying and delineating wetlands.

II. PRECONSTRUCTION FILING

A. The following information must be filed with the Secretary of the FERC (Secretary) prior to the beginning of construction, for the review and written approval by the Director:

1. site-specific justifications for extra work areas that would be closer than 50 feet from a waterbody or wetland; and

2. site-specific justifications for the use of a construction right-of-way greater than 75-feet-wide in wetlands.

B. The following information must be filed with the Secretary prior to the beginning of construction. These filing requirements do not apply to projects constructed under the automatic authorization provisions in the FERC's regulations:

1. Spill Prevention and Response Procedures specified in section IV.A;

2. a schedule identifying when trenching or blasting will occur within each waterbody greater than 10 feet wide, within any designated coldwater fishery, and within any waterbody identified as habitat for federally-listed threatened or endangered species. The project sponsor will revise the schedule as necessary to provide FERC staff at least 14 days advance notice. Changes within this last 14-day period must provide for at least 48 hours advance notice;

3. plans for horizontal directional drills (HDD) under wetlands or waterbodies, specified in section V.B.6.d;

4. site-specific plans for major waterbody crossings, described in section V.B.9;

5. a wetland delineation report as described in section VI.A.1, if applicable; and

6. the hydrostatic testing information specified in section VII.B.3.

III. ENVIRONMENTAL INSPECTORS

A. At least one Environmental Inspector having knowledge of the wetland and waterbody conditions in the project area is required for each construction spread. The number and experience of Environmental Inspectors assigned to each construction spread shall be appropriate for the length of the construction spread and the number/significance of resources affected.

B. The Environmental Inspector's responsibilities are outlined in the Upland Erosion Control, Revegetation, and Maintenance Plan (Plan).

IV. PRECONSTRUCTION PLANNING

A. The project sponsor shall develop project-specific Spill Prevention and Response Procedures that meet applicable requirements of state and federal agencies. A copy must be filed with the Secretary prior to construction and made available in the field on each construction spread. This filing requirement does not apply to projects constructed under the automatic authorization provisions in the FERC's regulations.

1. It shall be the responsibility of the project sponsor and its contractors to structure their operations in a manner that reduces the risk of spills or the accidental exposure of fuels or hazardous materials to waterbodies or wetlands. The project sponsor and its contractors must, at a minimum, ensure that:

   a. all employees handling fuels and other hazardous materials are properly trained;

   b. all equipment is in good operating order and inspected on a regular basis;

   c. fuel trucks transporting fuel to on-site equipment travel only on approved access roads;

   d. all equipment is parked overnight and/or fueled at least 100 feet from a waterbody or in an upland area at least 100 feet from a wetland boundary. These activities can occur closer only if the Environmental Inspector determines that there is no reasonable alternative, and the project sponsor and its contractors have taken appropriate steps (including secondary containment structures) to prevent spills and provide for prompt cleanup in the event of a spill;

   e. hazardous materials, including chemicals, fuels, and lubricating oils, are not stored within 100 feet of a wetland, waterbody, or designated municipal watershed area, unless the location is designated for such use by an appropriate governmental authority. This applies to storage of these materials and does not apply to normal operation or use of equipment in these areas;

f. concrete coating activities are not performed within 100 feet of a wetland or waterbody boundary, unless the location is an existing industrial site designated for such use. These activities can occur closer only if the Environmental Inspector determines that there is no reasonable alternative, and the project sponsor and its contractors have taken appropriate steps (including secondary containment structures) to prevent spills and provide for prompt cleanup in the event of a spill;

g. pumps operating within 100 feet of a waterbody or wetland boundary utilize appropriate secondary containment systems to prevent spills; and

h. bulk storage of hazardous materials, including chemicals, fuels, and lubricating oils have appropriate secondary containment systems to prevent spills.

2. The project sponsor and its contractors must structure their operations in a manner that provides for the prompt and effective cleanup of spills of fuel and other hazardous materials. At a minimum, the project sponsor and its contractors must:

a. ensure that each construction crew (including cleanup crews) has on hand sufficient supplies of absorbent and barrier materials to allow the rapid containment and recovery of spilled materials and knows the procedure for reporting spills and unanticipated discoveries of contamination;

b. ensure that each construction crew has on hand sufficient tools and material to stop leaks;

c. know the contact names and telephone numbers for all local, state, and federal agencies (including, if necessary, the U. S. Coast Guard and the National Response Center) that must be notified of a spill; and

d. follow the requirements of those agencies in cleaning up the spill, in excavating and disposing of soils or other materials contaminated by a spill, and in collecting and disposing of waste generated during spill cleanup.

B. AGENCY COORDINATION

The project sponsor must coordinate with the appropriate local, state, and federal agencies as outlined in these Procedures and in the FERC's Orders.

V. WATERBODY CROSSINGS

A. NOTIFICATION PROCEDURES AND PERMITS

1. Apply to the U.S. Army Corps of Engineers (COE), or its delegated agency, for the appropriate wetland and waterbody crossing permits.

2. Provide written notification to authorities responsible for potable surface water supply intakes located within 3 miles downstream of the crossing at least 1 week before beginning work in the waterbody, or as otherwise specified by that authority.

3. Apply for state-issued waterbody crossing permits and obtain individual or generic section 401 water quality certification or waiver.

4. Notify appropriate federal and state authorities at least 48 hours before beginning trenching or blasting within the waterbody, or as specified in applicable permits.

B. INSTALLATION

1. Time Window for Construction

Unless expressly permitted or further restricted by the appropriate federal or state agency in writing on a site-specific basis, instream work, except that required to install or remove equipment bridges, must occur during the following time windows:

a. coldwater fisheries - June 1 through September 30; and

b. coolwater and warmwater fisheries - June 1 through November 30.

2. Extra Work Areas

a. Locate all extra work areas (such as staging areas and additional spoil storage areas) at least 50 feet away from water's edge, except where the adjacent upland consists of cultivated or rotated cropland or other disturbed land.

b. The project sponsor shall file with the Secretary for review and written approval by the Director, site-specific justification for each extra work area with a less than 50-foot setback from the water's edge, except where the adjacent upland consists of cultivated or rotated cropland or other disturbed land. The justification must specify the conditions that will not permit a 50-foot setback and measures to ensure the waterbody is adequately protected.

Table 1 identifies locations where site-specific conditions at certain waterbody crossings require that extra work areas (referred to as additional temporary work space or ATWS) be located less than 50 feet from the water's edge. Rover will implement all applicable protection measures, such as installation of silt fencing and hay bales along ATWS limits to prevent off-site sedimentation, and any other measures appropriate for stabilizing the ATWS during and after construction.

c. Limit the size of extra work areas to the minimum needed to construct the waterbody crossing.

3. General Crossing Procedures

a. Comply with the COE, or its delegated agency, permit terms and conditions.

b. Construct crossings as close to perpendicular to the axis of the waterbody channel as engineering and routing conditions permit.

c. Where pipelines parallel a waterbody, maintain at least 15 feet of undisturbed vegetation between the waterbody (and any adjacent wetland) and the construction right-of-way, except where maintaining this offset will result in greater environmental impact.

d. Where waterbodies meander or have multiple channels, route the pipeline to minimize the number of waterbody crossings.

e. Maintain adequate waterbody flow rates to protect aquatic life, and prevent the interruption of existing downstream uses.

f. Waterbody buffers (e.g., extra work area setbacks, refueling restrictions) must be clearly marked in the field with signs and/or highly visible flagging until construction-related ground disturbing activities are complete.

g. Crossing of waterbodies when they are dry or frozen and not flowing may proceed using standard upland construction techniques in accordance with the Plan, provided that the Environmental Inspector verifies that water is unlikely to flow between initial disturbance and final stabilization of the feature. In the event of perceptible flow, the project sponsor must comply with all applicable Procedure requirements for "waterbodies" as defined in section I.B.1.

4. Spoil Pile Placement and Control

a. All spoil from minor and intermediate waterbody crossings, and upland spoil from major waterbody crossings, must be placed in the construction right-of-way at least 10 feet from the water's edge or in additional extra work areas as described in section V.B.2.

b. Use sediment barriers to prevent the flow of spoil or silt-laden water into any waterbody.

5. Equipment Bridges

a. Only clearing equipment and equipment necessary for installation of equipment bridges may cross waterbodies prior to bridge installation. Limit the number of such crossings of each waterbody to one per piece of clearing equipment.

b. Construct and maintain equipment bridges to allow unrestricted flow and to prevent soil from entering the waterbody. Examples of such bridges include:

(1) equipment pads and culvert(s);
(2) equipment pads or railroad car bridges without culverts;
(3) clean rock fill and culvert(s); and
(4) flexi-float or portable bridges.

Additional options for equipment bridges may be utilized that achieve the performance objectives noted above. Do not use soil to construct or stabilize equipment bridges.

c. Design and maintain each equipment bridge to withstand and pass the highest flow expected to occur while the bridge is in place. Align culverts to prevent bank erosion or streambed scour. If necessary, install energy dissipating devices downstream of the culverts.

d. Design and maintain equipment bridges to prevent soil from entering the waterbody.

e. Remove temporary equipment bridges as soon as practicable after permanent seeding.

f. If there will be more than 1 month between final cleanup and the beginning of permanent seeding and reasonable alternative access to the right-of-way is available, remove temporary equipment bridges as soon as practicable after final cleanup.

g. Obtain any necessary approval from the COE, or the appropriate state agency for permanent bridges.

6. Dry-Ditch Crossing Methods

a. Unless approved otherwise by the appropriate federal or state agency, install the pipeline using one of the dry-ditch methods outlined below for crossings of waterbodies up to 30 feet wide (at the water's edge at the time of construction) that are state-designated as either coldwater or significant coolwater or warmwater fisheries, or federally-designated as critical habitat.

b. Dam and Pump

(1) The dam-and-pump method may be used without prior approval for crossings of waterbodies where pumps can adequately transfer streamflow volumes around the work area, and there are no concerns about sensitive species passage.

(2) Implementation of the dam-and-pump crossing method must meet the following performance criteria:

(i) use sufficient pumps, including on-site backup pumps, to maintain downstream flows;
(ii) construct dams with materials that prevent sediment and other pollutants from entering the waterbody (e.g., sandbags or clean gravel with plastic liner);
(iii) screen pump intakes to minimize entrainment of fish;
(iv) prevent streambed scour at pump discharge; and
(v) continuously monitor the dam and pumps to ensure proper operation throughout the waterbody crossing.

c. Flume Crossing

The flume crossing method requires implementation of the following steps:

(1) install flume pipe after blasting (if necessary), but before any trenching;

(2) use sand bag or sand bag and plastic sheeting diversion structure or equivalent to develop an effective seal and to divert stream flow through the flume pipe (some modifications to the stream bottom may be required to achieve an effective seal);

(3) properly align flume pipe(s) to prevent bank erosion and streambed scour;

(4) do not remove flume pipe during trenching, pipelaying, or backfilling activities, or initial streambed restoration efforts; and

(5) remove all flume pipes and dams that are not also part of the equipment bridge as soon as final cleanup of the stream bed and bank is complete.

d. Horizontal Directional Drill

For each waterbody or wetland that would be crossed using the HDD method, file with the Secretary for the review and written approval by the Director, a plan that includes:

(1) site-specific construction diagrams that show the location of mud pits, pipe assembly areas, and all areas to be disturbed or cleared for construction;

(2) justification that disturbed areas are limited to the minimum needed to construct the crossing;

(3) identificationn of any aboveground disturbance or clearing between the HDD entry and exit workspaces during construction;

(4) a description of how an inadvertent release of drilling mud would be contained and cleaned up; and

(5) a contingency plan for crossing the waterbody or wetland in the event the HDD is unsuccessful and how the abandoned drill hole would be sealed, if necessary.

The requirement to file HDD plans does not apply to projects constructed under the automatic authorization provisions in the FERC's regulations.

7. Crossings of Minor Waterbodies

Where a dry-ditch crossing is not required, minor waterbodies may be crossed using the open-cut crossing method, with the following restrictions:

a. except for blasting and other rock breaking measures, complete instream construction activities (including trenching, pipe installation, backfill, and restoration of the streambed contours) within 24 hours. Streambanks and unconsolidated streambeds may require additional restoration after this period;

b. limit use of equipment operating in the waterbody to that needed to construct the crossing; and

c. equipment bridges are not required at minor waterbodies that do not have a state-designated fishery classification or protected status (e.g., agricultural or intermittent drainage ditches). However, if an equipment bridge is used it must be constructed as described in section V.B.5.

8. Crossings of Intermediate Waterbodies

Where a dry-ditch crossing is not required, intermediate waterbodies may be crossed using the open-cut crossing method, with the following restrictions:

a. complete instream construction activities (not including blasting and other rock breaking measures) within 48 hours, unless site-specific conditions make completion within 48 hours infeasible;

b. limit use of equipment operating in the waterbody to that needed to construct the crossing; and

c. all other construction equipment must cross on an equipment bridge as specified in section V.B.5.

9. Crossings of Major Waterbodies

Before construction, the project sponsor shall file with the Secretary for the review and written approval by the Director a detailed, site-specific construction plan and scaled drawings identifying all areas to be disturbed by construction for each major waterbody crossing (the scaled drawings are not required for any offshore portions of pipeline projects). This plan must be developed in consultation with the appropriate state and federal agencies and shall include extra work areas, spoil storage areas, sediment control structures, etc., as well as mitigation for navigational issues. The requirement to file major waterbody crossing plans does not apply to projects constructed under the automatic authorization provisions of the FERC's regulations.

The Environmental Inspector may adjust the final placement of the erosion and sediment control structures in the field to maximize effectiveness.

10. Temporary Erosion and Sediment Control

Install sediment barriers (as defined in section IV.F.3.a of the Plan) immediately after initial disturbance of the waterbody or adjacent upland. Sediment barriers must be properly maintained throughout construction and reinstalled as necessary (such as after backfilling of the trench) until replaced by permanent erosion controls or restoration of adjacent upland areas is complete. Temporary erosion and sediment control measures are addressed in more detail in the Plan; however, the following specific measures must be implemented at stream crossings:

a. install sediment barriers across the entire construction right-of-way at all waterbody crossings, where necessary to prevent the flow of sediments into the waterbody. Removable sediment barriers (or driveable berms) must be installed across the travel lane. These removable sediment barriers can be removed during the construction day, but must be re-installed after construction has stopped for the day and/or when heavy precipitation is imminent;

b. where waterbodies are adjacent to the construction right-of-way and the right-of-way slopes toward the waterbody, install sediment barriers along the edge of the construction right-of-way as necessary to contain spoil within the construction right-of-way and prevent sediment flow into the waterbody; and

c. use temporary trench plugs at all waterbody crossings, as necessary, to prevent diversion of water into upland portions of the pipeline trench and to keep any accumulated trench water out of the waterbody.

11. Trench Dewatering

    Dewater the trench (either on or off the construction right-of-way) in a manner that does not cause erosion and does not result in silt-laden water flowing into any waterbody. Remove the dewatering structures as soon as practicable after the completion of dewatering activities.

C. RESTORATION

1. Use clean gravel or native cobbles for the upper 1 foot of trench backfill in all waterbodies that contain coldwater fisheries.

2. For open-cut crossings, stabilize waterbody banks and install temporary sediment barriers within 24 hours of completing instream construction activities. For dry-ditch crossings, complete streambed and bank stabilization before returning flow to the waterbody channel.

3. Return all waterbody banks to preconstruction contours or to a stable angle of repose as approved by the Environmental Inspector.

4. Install erosion control fabric or a functional equivalent on waterbody banks at the time of final bank recontouring. Do not use synthetic monofilament mesh/netted erosion control materials in areas designated as sensitive wildlife habitat unless the product is specifically designed to minimize harm to wildlife. Anchor erosion control fabric with staples or other appropriate devices.

5. Application of riprap for bank stabilization must comply with COE, or its delegated agency, permit terms and conditions.

6. Unless otherwise specified by state permit, limit the use of riprap to areas where flow conditions preclude effective vegetative stabilization techniques such as seeding and erosion control fabric.

7. Revegetate disturbed riparian areas with native species of conservation grasses, legumes, and woody species, similar in density to adjacent undisturbed lands.

8. Install a permanent slope breaker across the construction right-of-way at the base of slopes greater than 5 percent that are less than 50 feet from the waterbody, or as needed to prevent sediment transport into the waterbody. In addition, install sediment barriers as outlined in the Plan.

   In some areas, with the approval of the Environmental Inspector, an earthen berm may be suitable as a sediment barrier adjacent to the waterbody.

9. Sections V.C.3 through V.C.7 above also apply to those perennial or intermittent streams not flowing at the time of construction.

D. POST-CONSTRUCTION MAINTENANCE

1. Limit routine vegetation mowing or clearing adjacent to waterbodies to allow a riparian strip at least 25 feet wide, as measured from the waterbody's mean high water mark, to permanently revegetate with native plant species across the entire construction right-of-way. However, to facilitate periodic corrosion/leak surveys, a corridor centered on the pipeline and up to 10 feet wide may be cleared at a frequency necessary to maintain the 10-foot corridor in an herbaceous state. In addition, trees that are located within 15 feet of the pipeline that have roots that could compromise the integrity of the pipeline coating may be cut and removed from the permanent right-of-way. Do not conduct any routine vegetation mowing or clearing in riparian areas that are between HDD entry and exit points.

In areas where dual pipelines will be installed, Rover will maintain the 20 feet between the pipeline centerlines plus an additional 5 feet on the outside portion of the centerlines for a total of 30 feet.

2. Do not use herbicides or pesticides in or within 100 feet of a waterbody except as allowed by the appropriate land management or state agency.

3. Time of year restrictions specified in section VII.A.5 of the Plan (April 15 – August 1 of any year) apply to routine mowing and clearing of riparian areas.

VI. WETLAND CROSSINGS

A. GENERAL

1. The project sponsor shall conduct a wetland delineation using the current federal methodology and file a wetland delineation report with the Secretary before construction. The requirement to file a wetland delineation report does not apply to projects constructed under the automatic authorization provisions in the FERC's regulations.

This report shall identify:

a. by milepost all wetlands that would be affected;

b. the National Wetlands Inventory (NWI) classification for each wetland;

c. the crossing length of each wetland in feet; and

d. the area of permanent and temporary disturbance that would occur in each wetland by NWI classification type.

The requirements outlined in this section do not apply to wetlands in actively cultivated or rotated cropland. Standard upland protective measures, including workspace and topsoiling requirements, apply to these agricultural wetlands.

2. Route the pipeline to avoid wetland areas to the maximum extent possible. If a wetland cannot be avoided or crossed by following an existing right-of-way, route the new pipeline in a manner that minimizes disturbance to wetlands. Where looping an existing pipeline, overlap the existing pipeline right-of-way with the new construction right-of-way. In addition, locate the loop line no more than 25 feet away from the existing pipeline unless site-specific constraints would adversely affect the stability of the existing pipeline.

3. Limit the width of the construction right-of-way to 75 feet or less. Prior written approval of the Director is required where topographic conditions or soil limitations require that the construction right-of-way width within the boundaries of a federally delineated wetland be expanded beyond 75 feet. Early in the planning process the project sponsor is encouraged to identify site-specific areas where excessively wide trenches could occur and/or where spoil piles could be difficult to maintain because existing soils lack adequate unconfined compressive strength.

Table 2 identifies locations where Rover is requesting approval for a construction right-of-way of greater than 75 feet in wetlands. Installation of large-diameter pipelines requires a construction right-of-way of more than 75 feet due to workspace requirements associated with installing large diameter pipelines, the associated larger equipment size, and soil conditions found in the Project area which tend to slump resulting in wider trenches to achieve adequate depth of cover and difficulty in containing spoil piles. A reduced construction right-of-way would require the pipe and equipment to be located closer to the ditch line posing a safety concern for construction personnel.

4. Wetland boundaries and buffers must be clearly marked in the field with signs and/or highly visible flagging until construction-related ground disturbing activities are complete.

5. Implement the measures of sections V and VI in the event a waterbody crossing is located within or adjacent to a wetland crossing. If all measures of sections V and VI cannot be met, the project sponsor must file with the Secretary a site-specific crossing plan for review and written approval by the Director before construction. This crossing plan shall address at a minimum:

a. spoil control;

b. equipment bridges;

c. restoration of waterbody banks and wetland hydrology;

d. timing of the waterbody crossing;

e. method of crossing; and

f. size and location of all extra work areas.

6. Do not locate aboveground facilities in any wetland, except where the location of such facilities outside of wetlands would prohibit compliance with U.S. Department of Transportation regulations.

B. INSTALLATION

1. Extra Work Areas and Access Roads

a. Locate all extra work areas (such as staging areas and additional spoil storage areas) at least 50 feet away from wetland boundaries, except where the adjacent upland consists of cultivated or rotated cropland or other disturbed land.

Table 1 identifies locations where site-specific conditions at certain wetlands require that extra work areas (referred to as additional temporary work space or ATWS) be located less than 50 feet from the wetland edge or within the wetland. Rover will implement all applicable protection measures, such as installation of silt fencing and hay bales along ATWS limits to prevent off-site sedimentation, and any other measures appropriate for stabilizing the ATWS during and after construction.

b. The project sponsor shall file with the Secretary for review and written approval by the Director, site-specific justification for each extra work area with a less than 50-foot setback from wetland boundaries, except where adjacent upland consists of cultivated or rotated cropland or other disturbed land. The justification must specify the site-specific conditions that will not permit a 50-foot setback and measures to ensure the wetland is adequately protected.

c. The construction right-of-way may be used for access when the wetland soil is firm enough to avoid rutting or the construction right-of-way has been appropriately stabilized to avoid rutting (e.g., with timber riprap, prefabricated equipment mats, or terra mats).

In wetlands that cannot be appropriately stabilized, all construction equipment other than that needed to install the wetland crossing shall

use access roads located in upland areas. Where access roads in upland areas do not provide reasonable access, limit all other construction equipment to one pass through the wetland using the construction right-of-way.

d. The only access roads, other than the construction right-of-way, that can be used in wetlands are those existing roads that can be used with no modifications or improvements, other than routine repair, and no impact on the wetland.

2. Crossing Procedures

a. Comply with COE, or its delegated agency, permit terms and conditions.

b. Assemble the pipeline in an upland area unless the wetland is dry enough to adequately support skids and pipe.

c. Use "push-pull" or "float" techniques to place the pipe in the trench where water and other site conditions allow.

d. Minimize the length of time that topsoil is segregated and the trench is open. Do not trench the wetland until the pipeline is assembled and ready for lowering in.

If conditions allow, such as low flow or unsaturated soils, the trench will be excavated through the wetland before pipe assembly. This will allow for proper topsoil segregation and adequate workspace to safely excavate the trench.

e. Limit construction equipment operating in wetland areas to that needed to clear the construction right-of-way, dig the trench, fabricate and install the pipeline, backfill the trench, and restore the construction right-of-way.

f. Cut vegetation just above ground level, leaving existing root systems in place, and remove it from the wetland for disposal.

The project sponsor can burn woody debris in wetlands, if approved by the COE and in accordance with state and local regulations, ensuring that all remaining woody debris is removed for disposal.

g. Limit pulling of tree stumps and grading activities to directly over the trenchline. Do not grade or remove stumps or root systems from the rest of the construction right-of-way in wetlands unless the Chief Inspector and Environmental Inspector determine that safety-related

construction constraints require grading or the removal of tree stumps from under the working side of the construction right-of-way.

h. Segregate the top 1 foot of topsoil from the area disturbed by trenching, except in areas where standing water is present or soils are saturated. Immediately after backfilling is complete, restore the segregated topsoil to its original location.

i. Do not use rock, soil imported from outside the wetland, tree stumps, or brush riprap to support equipment on the construction right-of-way.

j. If standing water or saturated soils are present, or if construction equipment causes ruts or mixing of the topsoil and subsoil in wetlands, use low-ground-weight construction equipment, or operate normal equipment on timber riprap, prefabricated equipment mats, or terra mats.

k. Remove all project-related material used to support equipment on the construction right-of-way upon completion of construction.

3. Temporary Sediment Control

Install sediment barriers (as defined in section IV.F.3.a of the Plan) immediately after initial disturbance of the wetland or adjacent upland. Sediment barriers must be properly maintained throughout construction and reinstalled as necessary (such as after backfilling of the trench). Except as noted below in section VI.B.3.c, maintain sediment barriers until replaced by permanent erosion controls or restoration of adjacent upland areas is complete. Temporary erosion and sediment control measures are addressed in more detail in the Plan.

a. Install sediment barriers across the entire construction right-of-way immediately upslope of the wetland boundary at all wetland crossings where necessary to prevent sediment flow into the wetland.

b. Where wetlands are adjacent to the construction right-of-way and the right-of-way slopes toward the wetland, install sediment barriers along the edge of the construction right-of-way as necessary to contain spoil within the construction right-of-way and prevent sediment flow into the wetland.

c. Install sediment barriers along the edge of the construction right-of-way as necessary to contain spoil and sediment within the construction right-of-way through wetlands. Remove these sediment barriers during right-of-way cleanup.

4. Trench Dewatering

   Dewater the trench (either on or off the construction right-of-way) in a manner that does not cause erosion and does not result in silt-laden water flowing into any wetland. Remove the dewatering structures as soon as practicable after the completion of dewatering activities.

C. RESTORATION

1. Where the pipeline trench may drain a wetland, construct trench breakers at the wetland boundaries and/or seal the trench bottom as necessary to maintain the original wetland hydrology.

2. Restore pre-construction wetland contours to maintain the original wetland hydrology.

3. For each wetland crossed, install a trench breaker at the base of slopes near the boundary between the wetland and adjacent upland areas. Install a permanent slope breaker across the construction right-of-way at the base of slopes greater than 5 percent where the base of the slope is less than 50 feet from the wetland, or as needed to prevent sediment transport into the wetland. In addition, install sediment barriers as outlined in the Plan. In some areas, with the approval of the Environmental Inspector, an earthen berm may be suitable as a sediment barrier adjacent to the wetland.

4. Do not use fertilizer, lime, or mulch unless required in writing by the appropriate federal or state agency.

5. Consult with the appropriate federal or state agencies to develop a project-specific wetland restoration plan. The restoration plan shall include measures for re-establishing herbaceous and/or woody species, controlling the invasion and spread of invasive species and noxious weeds (e.g., purple loosestrife and phragmites), and monitoring the success of the revegetation and weed control efforts. Provide this plan to the FERC staff upon request.

6. Until a project-specific wetland restoration plan is developed and/or implemented, temporarily revegetate the construction right-of-way with annual ryegrass at a rate of 40 pounds/acre (unless standing water is present).

7. Ensure that all disturbed areas successfully revegetate with wetland herbaceous and/or woody plant species.

8. Remove temporary sediment barriers located at the boundary between wetland and adjacent upland areas after revegetation and stabilization of

adjacent upland areas are judged to be successful as specified in section VII.A.4 of the Plan.

D. POST-CONSTRUCTION MAINTENANCE AND REPORTING

1. Do not conduct routine vegetation mowing or clearing over the full width of the permanent right-of-way in wetlands. However, to facilitate periodic corrosion/leak surveys, a corridor centered on the pipeline and up to 10 feet wide may be cleared at a frequency necessary to maintain the 10-foot corridor in an herbaceous state. In addition, trees within 15 feet of the pipeline with roots that could compromise the integrity of pipeline coating may be selectively cut and removed from the permanent right-of-way. Do not conduct any routine vegetation mowing or clearing in wetlands that are between HDD entry and exit points.

2. Do not use herbicides or pesticides in or within 100 feet of a wetland, except as allowed by the appropriate federal or state agency.

3. Time of year restrictions specified in section VII.A.5 of the Plan (April 15 – August 1 of any year) apply to routine mowing and clearing of wetland areas.

4. Monitor and record the success of wetland revegetation annually until wetland revegetation is successful.

5. Wetland revegetation shall be considered successful if all of the following criteria are satisfied:

   a. the affected wetland satisfies the current federal definition for a wetland (i.e., soils, hydrology, and vegetation);

   b. vegetation is at least 80 percent of either the cover documented for the wetland prior to construction, or at least 80 percent of the cover in adjacent wetland areas that were not disturbed by construction;

   c. if natural rather than active revegetation was used, the plant species composition is consistent with early successional wetland plant communities in the affected ecoregion; and

   d. invasive species and noxious weeds are absent, unless they are abundant in adjacent areas that were not disturbed by construction.

6. Within 3 years after construction, file a report with the Secretary identifying the status of the wetland revegetation efforts and documenting success as defined in section VI.D.5, above. The requirement to file wetland restoration reports with the Secretary does not apply to projects constructed under the

automatic authorization, prior notice, or advance notice provisions in the FERC's regulations.

For any wetland where revegetation is not successful at the end of 3 years after construction, develop and implement (in consultation with a professional wetland ecologist) a remedial revegetation plan to actively revegetate wetlands. Continue revegetation efforts and file a report annually documenting progress in these wetlands until wetland revegetation is successful.

VII. HYDROSTATIC TESTING

A. NOTIFICATION PROCEDURES AND PERMITS

1. Apply for state-issued water withdrawal permits, as required.

2. Apply for National Pollutant Discharge Elimination System (NPDES) or state-issued discharge permits, as required.

3. Notify appropriate state agencies of intent to use specific sources at least 48 hours before testing activities unless they waive this requirement in writing.

B. GENERAL

1. Perform 100 percent radiographic inspection of all pipeline section welds or hydrotest the pipeline sections, before installation under waterbodies or wetlands.

2. If pumps used for hydrostatic testing are within 100 feet of any waterbody or wetland, address secondary containment and refueling of these pumps in the project's Spill Prevention and Response Procedures.

3. The project sponsor shall file with the Secretary before construction a list identifying the location of all waterbodies proposed for use as a hydrostatic test water source or discharge location. This filing requirement does not apply to projects constructed under the automatic authorization provisions of the FERC's regulations.

C. INTAKE SOURCE AND RATE

1. Screen the intake hose to minimize the potential for entrainment of fish.

2. Do not use state-designated exceptional value waters, waterbodies which provide habitat for federally listed threatened or endangered species, or

waterbodies designated as public water supplies, unless appropriate federal, state, and/or local permitting agencies grant written permission.

3. Maintain adequate flow rates to protect aquatic life, provide for all waterbody uses, and provide for downstream withdrawals of water by existing users.

4. Locate hydrostatic test manifolds outside wetlands and riparian areas to the maximum extent practicable.

D. DISCHARGE LOCATION, METHOD, AND RATE

1. Regulate discharge rate, use energy dissipation device(s), and install sediment barriers, as necessary, to prevent erosion, streambed scour, suspension of sediments, or excessive streamflow.

2. Do not discharge into state-designated exceptional value waters, waterbodies which provide habitat for federally listed threatened or endangered species, or waterbodies designated as public water supplies, unless appropriate federal, state, and local permitting agencies grant written permission.

TABLE 1. Justification for Additional Temporary Workspace (ATWS) that is located within 50 feet of a Waterbody or Wetland

Approx MP	Approximate Dimensions		Acres	Reason for ATWS	Waterbody/Wetland ID	Flow/Wetland Type[2]	Location of ATWS[3]	Justification
	Width	Length						
Supply Laterals								
Sherwood Lateral								
.30	15	140	0.05	MORGANS RUN CROSSING	S3ES-DO-213	Ephemeral	SW-P3-1001A	ATWS required to facilitate crossing of Morgans Run Crossing.
0.63	10	85	0.02	WETLAND CROSSING	W1ES-DO-218	PEM	SW-P3-1001	Only upland locsation available to facilitate waterbody and wetland crossings in an area of steep slopes.
0.64	15	250	0.09	CONSOLE PIPELINE CROSSING	S1ES-DO-219	Ephemeral	SW-P3-1001	ATWS required to facilitate crossing of Console Pipeline.
2.29	15	230	0.08	EQUITABLE PRODUCTION CO. PIPELINE CROSSING	S4H-DO-249	Intermittent	SW-P3-1003	ATWS required to facilitate crossing of Equitable Production Co. Pipeline Crossing.
2.44	10	795	0.18	CR 30/3 (JOCKEY CAMP RD) / STREAM / UNKNOWN FOREIGN PIPELINES CROSSING	S1ES-DO-126	Ephemeral	SW-P3-1003	ATWS required to facilitate waterbody crossings in an area of steep side slopes.
2.73	15	300	0.1	STREAM CROSSING	S1ES-DO-127 & S1ES-DO-128	Intermittent/Perennial	SW-P3-1003	ATWS required to facilitate waterbody crossings in an area of steep side slopes.
2.81	10	300	0.07	STREAM CROSSING	S1ES-DO-128	Perennial	SW-P3-1003	ATWS required to facilitate waterbody crossings in an area of steep side slopes.
3.48	15	140	0.05	STREAM CROSSING	S2ES-DO-122	Ephemeral	SW-P3-1004	ATWS required to facilitate waterbody crossings in an area of steep side slopes.
3.52	15	65	0.02	STREAM CROSSING	S2ES-DO-122	Ephemeral	SW-P3-1004	ATWS required to facilitate waterbody crossings in an area of steep side slopes.
4.11	10	100	0.02	NATURAL DRAINAGE CROSSING	S2ES-DO-124	Ephemeral	SW-P3-1005	ATWS required for optimal crossing of a series of waterbodies.
4.53	15	320	0.11	STREAM / UNKNOWN FOREIGN PIPELINE CROSSING	S4ES-DO-103	Ephemeral	SW-P3-1005	ATWS required to facilitate waterbody crossing in an area of steep side slopes.
4.76	15	595	0.2	CR 34 (PIGGIN RUN RD) / STREAMS CROSSING	S2ES-DO-109	Intermittent	SW-P3-1005	ATWS required for optimal crossing of a series of waterbodies.
4.77	10	660	0.15	CR 34 (PIGGIN RUN RD) / STREAMS CROSSING	S1ES-DO-108	Intermittent	SW-P3-1005	ATWS required for optimal crossing of a series of waterbodies.
5.78	10	385	0.09	STREAM / WETLAND CROSSING	W4H-DO-252	PEM	SW-P3-1006	Only upland location available between waterbody and wetland crossings.

TABLE 1. Justification for Additional Temporary Workspace (ATWS) that is located within 50 feet of a Waterbody or Wetland

Approx MP	Approximate Dimensions		Acres	Reason for ATWS	Waterbody/Wetland ID	Flow/Wetland Type[2]	Location of ATWS[3]	Justification
Sherwood Lateral								
6.62	15	295	0.1	STREAM CROSSING	S2ES-DO-136	Perennial	SW-P3-1008	ATWS required for optimal crossing of large waterbody in an area of steep side slopes.
6.62	10	295	0.07	STREAM CROSSING	S2ES-DO-137 & S2ES-DO-136	Ephemeral/Perennial	SW-P3-1008	ATWS required for optimal crossing of large waterbody in an area of steep side slopes.
6.71	15	390	0.13	STREAM / EQUITRANS PIPELINE CROSSING	S2ES-DO-136	Perennial	SW-P3-1008	ATWS required for optimal crossing of large waterbody in an area of steep side slopes.
6.71	10	385	0.09	STREAM / EQUITRANS PIPELINE CROSSING	S2ES-DO-135 & S2ES-DO-136	Ephemeral/Perennial	SW-P3-1008	ATWS required for optimal crossing of large waterbody in an area of steep side slopes.
7.01	10	240	0.06	CR 22 (WOLFPEN RUN RD) / STREAM CROSSING	S2ES-DO-130	Intermittent	SW-P3-1008	ATWS required for optimal crossing of a series of waterbodies.
7.02	15	190	0.07	CR 22 (WOLFPEN RUN RD) / STREAM CROSSING	S2ES-DO-131	Ephemeral	SW-P3-1008	ATWS required for optimal crossing of a series of waterbodies.
8.05	15	290	0.1	STREAM / CR 24 (CAMP MISTAKE RD) CROSSING	S1ES-DO-121	Perennial	SW-P3-1009	ATWS required for optimal crossing of large waterbody in an area of steep side slopes.
8.05	10	295	0.07	STREAM / CR 24 (CAMP MISTAKE RD) CROSSING	S1ES-DO-121	Perennial	SW-P3-1009	ATWS required for optimal crossing of large waterbody in an area of steep side slopes.
8.13	10	300	0.07	STREAM / CR 24 (CAMP MISTAKE RD) CROSSING	S1ES-DO-121	Perennial	SW-P3-1009	ATWS required for optimal crossing of large waterbody in an area of steep side slopes.
8.13	15	300	0.1	STREAM / CR 24 (CAMP MISTAKE RD) CROSSING	S1ES-DO-121	Perennial	SW-P3-1009	ATWS required for optimal crossing of large waterbody in an area of steep side slopes.
8.59	10	55	0.01	STREAM / UNKNOWN FOREIGN PIPELINE CROSSING	S3ES-DO-103	Ephemeral	SW-P3-1010	Only upland location available to facilitate the crossing of several waterbodies and a pipeline in an area of steep side slopes.
9.75	10	515	0.12	CR 60/2 (SANDY CREEK RD) / EQT PIPELINE / STREAM CROSSING	S3ES-TY-115	Ephemeral	SW-P3-1011	ATWS required for optimal crossing of a series of waterbodies in an area of steep side slopes.
9.98	15	235	0.08	STREAMS / EQT PIPELINE CROSSING	S3ES-TY-121	Ephemeral	SW-P3-1011	Only upland location available between waterbody crossings.
10.07	25	440	0.25	STREAM CROSSING / SIDE SLOPE	S3ES-TY-123	Ephemeral	SW-P3-1011	Only upland location available between waterbody crossings.
12.97	50	300	0.34	PRIVATE ROAD & MIDDLE ISLAND CREEK HDD	S4ES-TY-244	Ephemeral	SW-P3-1014	ATWS required for HDD crossing.
12.97	50	300	0.34	PRIVATE ROAD & MIDDLE ISLAND CREEK HDD	S4ES-TY-244	Ephemeral	SW-P3-1014	ATWS required for HDD crossing.

TABLE 1. Justification for Additional Temporary Workspace (ATWS) that is located within 50 feet of a Waterbody or Wetland

Approx MP	Approximate Dimensions		Acres	Reason for ATWS	Waterbody/Wetland ID	Flow/Wetland Type[2]	Location of ATWS[3]	Justification
Sherwood Lateral								
14.07	10	100	0.02	CR 18/8 (PURGATORY RUN RD) / STREAM CROSSING	S4ES-TY-114	Ephemeral	SW-P3-1015	AWTS required for optimal crossing of a waterbody.
16.57	15	75	0.03	CR 30/1 (LAUGH RUN RD) CROSSING	S7H-TY-265	Ephemeral	SW-P3-1018	Only available location without interferring with residential property.
18.67	25	1040	0.6	SIDE SLOPE	S4H-TY-284	Ephemeral	SW-P3-1020	AWTS required for optimal crossing of a waterbody.
22.27	25	300	0.17	STREAM / CR 10/1 (MARTIN HILL RD) CROSSING	S2ES-TY-115	Intermittent	SW-P3-1024	ATWS required to facilitate waterbody and road crossing.
23.72	25	285	0.16	MIDDLE ISLAND CREEK HDD	S4H-TY-288	Intermittent	SW-P3-1026	ATWS required for HDD crossing.
23.73	50	310	0.36	MIDDLE ISLAND CREEK HDD	S4H-TY-288	Intermittent	SW-P3-1026	ATWS required for HDD crossing.
24.30	50	300	0.34	MIDDLE ISLAND CREEK HDD	S7H-TY-270	Intermittent	SW-P3-1026	ATWS required for HDD crossing.
24.31	25	300	0.17	MIDDLE ISLAND CREEK HDD	S7H-TY-270	Intermittent	SW-P3-1026	ATWS required for HDD crossing.
26.73	25	2300	1.32	SIDE SLOPE	S5ES-TY-127	Ephemeral	SW-P3-1029	ATWS required for pipeline construction in an area of steep side slopes.
30.89	10	250	0.06	STREAMS / UNKNOWN FOREIGN PIPELINE CROSSING	S7H-TY-322	Ephemeral	SW-P3-1033	ATWS required to facilitate the crossing of a waterbody and a pipeline in an area of relatively steep side slopes.
37.43	15	180	0.06	WETLAND / TWP 490 (BREY HOLLOW ROAD) CROSSING	W4H-MO-276	PFO	SW-P3-1040	ATWS required to facilitate the crossing of a wetland complex in an area of steep side slopes.
37.43	10	180	0.04	WETLAND / TWP 490 (BREY HOLLOW ROAD) CROSSING	W4H-MO-276	PFO	SW-P3-1040	ATWS required to facilitate the crossing of a wetland complex in an area of steep side slopes.
47.49	25	75	0.04	CR 6 (ALTITUDE MILLER HILL RD) CROSSING	W4H-MO-271 & S4H-MO-270	PEM/Perennial	SW-P3-1051	ATWS required to facilitate the crossing of a waterbody and wetland.
51.95	25	665	0.38	SIDE SLOPE	S9H-MO-136	Ephemeral	SW-P3-1056	ATWS required to facilitate the crossing of two waterbodies.
CGT Lateral								
3.33	25	3280	1.88	SIDE SLOPE	S9H-DO-104	Perennial	CGT-PS-1004	ATWS needed to support pipeline construction in steep area.

TABLE 1. Justification for Additional Temporary Workspace (ATWS) that is located within 50 feet of a Waterbody or Wetland

Approx MP	Approximate Dimensions		Acres	Reason for ATWS	Waterbody/Wetland ID	Flow/Wetland Type[2]	Location of ATWS[3]	Justification
Seneca Lateral								
0.68	25	290	0.17	TEXAS EASTERN TRANSMISSION PIPELINE / ST HWY 513 (BATESVILLE RD) CROSSING	W7H-NO-424	PEM	SN-P3-1002	Only upland available location between waterbody crossings.
3.23	25	105	0.06	STREAM CROSSING	S2TB-MO-108	Intermittent	SN-P3-1005	Only upland location available between waterbody and wetland crossings. ATWS required for optimal crossing of wetland.
3.63	25	125	0.07	STATE HWY 78 CROSSING	S1TB-MO-130	Perennial	SN-P3-1005	Only upland location available to facilitate road and stream crossings.
3.69	25	100	0.06	STATE HWY 78 CROSSING	S1TB-MO-130	Perennial	SN-P3-1005	ATWS required for optimal crossing of waterbody.
5.43	25	290	0.17	SIDE SLOPE	S1H-MO-160	Ephemeral	SN-P3-1007	Only upland location available to facilitate road, wetland, and stream crossings in an area with steep side slopes.
5.52	25	660	0.38	SIDE SLOPE	S1H-MO-160	Ephemeral	SN-P3-1007	Only upland location available to facilitate road, wetland, and stream crossings in an area with steep side slopes.
5.84	25	1305	0.75	SIDE SLOPE / STREAM / TWP 68 CROSSING	S4H-MO-203	Ephemeral	SN-P3-1008	ATWS required for stream and road crossing. ATWS is located within uplands consisting of primarily cropland, minimzing impacts to forested areas.
6.72	25	315	0.18	TWP RD 55 CROSSING	S3ES-MO-265	Ephemeral	SN-P3-1009	AWTS located for optimal crossing of waterbodies in a relatively steep area.
9.07	25	585	0.34	STREAM / WETLAND CROSSING	W2TB-MO-120	PEM	SN-P3-1011	Only upland location available between waterbody and wetland crossings.
10.79	25	205	0.12	STREAMS CROSSING	S4H-MO-205	Intermittent	SN-P3-1013	Only upland location available between a series of waterbody crossings.
10.89	25	355	0.2	STREAMS CROSSING	S4H-MO-208	Intermittent	SN-P3-1013	ATWS required for optimal waterbody crossing.
12.76	25	90	0.05	STREAM CROSSING	S3TB-MO-105	Intermittent	SN-P3-1015	AWTS required for optimal crossing of a waterbody in an area with steep side slopes.
13.92	25	1040	0.6	STREAM CROSSING / SIDE SLOPE	S2TB-MO-125	Intermittent	SN-P3-1016	AWTS required for optimal crossing of a waterbody in an area with steep side slopes.

TABLE 1. Justification for Additional Temporary Workspace (ATWS) that is located within 50 feet of a Waterbody or Wetland

Approx MP	Approximate Dimensions		Acres	Reason for ATWS	Waterbody/Wetland ID	Flow/Wetland Type[2]	Location of ATWS[3]	Justification
Seneca Lateral								
14.20	25	225	0.13	STREAM CROSSING	S2TB-MO-124	Ephemeral	SN-P3-1016	AWTS required for optimal crossing of a waterbody in an area with steep side slopes.
15.58	25	665	0.38	SIDE SLOPE	S1TB-MO-147	Ephemeral	SN-P3-1018	AWTS required for optimal crossing of a waterbody in an area with steep side slopes.
16.42	25	350	0.2	STREAMS / WETLAND CROSSING	S2TB-MO-132	Ephemeral	SN-P3-1018	Only upland location available between waterbody crossings.
17.02	25	990	0.57	SIDE SLOPE / STREAM CROSSING	S1TB-MO-164	Ephemeral	SN-P3-1019	AWTS required for optimal crossing of a waterbody in an area with steep side slopes.
17.19	25	230	0.13	SIDE SLOPE / STREAM CROSSING	S1TB-MO-163	Intermittent	SN-P3-1019	AWTS required for optimal crossing of a waterbody in an area with steep side slopes.
18.78	25	650	0.37	CR 31 (MELLOTT RIDGE RD) / STREAM CROSSING / SIDE SLOPE	S1TB-MO-170	Intermittent	SN-P3-1021	ATWS required to facilitate pipeline construction in an area of steep side slopes.
20.56	25	1485	0.85	SIDE SLOPE / STREAM CROSSING	S2TB-MO-142	Intermittent	SN-P3-1023	ATWS required to facilitate waterbody crossings in an area of steep side slopes.
22.10	25	190	0.11	STREAM CROSSING	S7H-MO-446	Ephemeral	SN-P3-1025	AWTS required for optimal crossing of a waterbody.
Berne Lateral								
1.29	25	255	0.15	ST HWY 78 CROSSING	S9H-MO-119	Ephemeral	BE-P3-1002	No other upland locations available to facilitate road and stream crossings.
1.39	25	370	0.21	ST HWY 78 / STREAM CROSSING	S3ES-MO-238	Ephemeral	BE-P3-1002	Only upland location available to facilitate road and stream crossing. ATWS located in uplands primarily consisting of croplands.
1.73	25	395	0.23	BLUE RACER MIDSTREAM PIPELINE CROSSING / SIDE SLOPE	S3ES-MO-230	Ephemeral	BE-P3-1002	Only upland location available between stream crossings.
1.92	25	285	0.16	STREAM CROSSING	S3ES-MO-224	Ephemeral	BE-P3-1002	No other upland locations available to facilitate road and stream crossings. East side of construction ROW is too steep.
1.99	25	105	0.06	STREAM CROSSING	S3ES-MO-223	Ephemeral	BE-P3-1002	No other upland locations available to facilitate road and stream crossings. West side of construction ROW is too steep.
2.05	25	685	0.39	TWP 203 (CEMETERY RD) / BISHOP RUN WATERBODY CROSSING / SIDE SLOPE	S7H-NO-434	Intermittent	BE-P3-1003	Only upland location available between stream crossings.

TABLE 1. Justification for Additional Temporary Workspace (ATWS) that is located within 50 feet of a Waterbody or Wetland

Approx MP	Approximate Dimensions		Acres	Reason for ATWS	Waterbody/Wetland ID	Flow/Wetland Type[2]	Location of ATWS[3]	Justification
Berne Lateral								
3.01*	25	300	0.17	TEXAS EASTERN PIPELINES CROSSING	W7H-NO-424	PEM	BE-P3-1004	Only upland location available between road and wetland crossings.
Clarington Lateral								
3.51	10	100	0.02	STREAM CROSSING	S4ES-BE-204	Ephemeral	CL-P3-1004	ATWS needed to support pipeline crossing of a waterbody in steep area.
3.84	25	330	0.19	WETLAND CROSSING / SIDE SLOPE	S9H-BE-142	Ephemeral	CL-P3-1005	Only available upland location between stream crossings.
3.93	25	440	0.25	STREAM CROSSING	S9H-BE-142	Ephemeral	CL-P3-1005	Only available uplands between stream crossings.
4.11	15	350	0.12	PEA VINE CREEK / CR 106 CROSSING	S4ES-BE-201	Perennial	CL-P3-1005	ATWS needed to support pipeline crossing of Pea Vine Creek and county road
4.36	25	2760	1.58	SIDE SLOPE	S4ES-BE-201	Perennial	CL-P3-1005	ATWS needed to support pipeline construction in steep area.
4.80	10	130	0.03	STREAM CROSSING	S1ES-BE-215	Intermittent	CL-P3-1006	ATWS needed to support pipeline construction in steep area.
7.06	25	2410	1.38	SIDE SLOPE	S4H-BE-356	Perennial	CL-P3-1008	ATWS needed to support pipeline construction in steep area.
7.60	25	140	0.08	STREAM CROSSING / SIDE SLOPE	S3ES-BE-179 & S3ES-BE-176	Ephemeral	CL-P3-1009	ATWS needed to support pipeline crossing of a waterbody in steep area.
8.24	25	180	0.1	STREAM CROSSING	S2ES-BE-205	Ephemeral	CL-P3-1009	ATWS needed to support pipeline crossing of a waterbody in steep area.
9.76	15	300	0.1	STREAM CROSSING	S4H-BE-361	Intermittent	CL-P3-1011	ATWS needed to support pipeline crossing of a waterbody in steep area.
15.60	25	185	0.11	CREEK CROSSING	S3ES-BE-171	Ephemeral	CL-P3-1017	ATWS needed to support pipeline crossing of a waterbody in steep area.
15.87	25	395	0.23	US HWY 149 CROSSING	S3ES-BE-166	Perennial	CL-P3-1017	Only upland location available to facilitate road crossing.
19.24	25	280	0.16	STREAM / WETLAND CROSSING	S7H-BE-395	Ephemeral	CL-P3-1021	AWTS located for optimal crossing of waterbody and wetland.
32.02	15	190	0.07	WETLAND / STREAM CROSSING	W1ES-HA-198	PEM	CL-P3-1035	AWTS located for optimal crossing of wetland.

TABLE 1. Justification for Additional Temporary Workspace (ATWS) that is located within 50 feet of a Waterbody or Wetland

Approx MP	Approximate Dimensions		Acres	Reason for ATWS	Waterbody/Wetland ID	Flow/Wetland Type[2]	Location of ATWS[3]	Justification
Majorsville Lateral								
1.69	25	185	0.11	STREAM CROSSING / SIDE SLOPE	S3ES-MA-144	PEM	MJ-P3-1002	ATWS needed to support pipeline crossing of a waterbody in steep area.
1.92	25	2300	1.32	STREAM CROSSING / SIDE SLOPE	S3ES-MA-147	Ephemeral	MJ-P3-1002	ATWS needed to support pipeline crossing of a waterbody in steep area.
3.24	10	100	0.02	STREAM CROSSING	S1ES-MA-179 & S1ES-MA-177	Ephemeral	MJ-P3-1004	AWTS located for optimal crossing of waterbody.
3.25	15	110	0.04	STREAM CROSSING	S1ES-MA-179	Ephemeral	MJ-P3-1004	AWTS located for optimal crossing of waterbodies in a relatively steep area.
3.53	15	400	0.14	CR 46 (IRISH RIDGE ROAD) CROSSING	S4H-MA-339	Intermittent	MJ-P3-1004	AWTS located for optimal crossing of waterbodies in a relatively steep area.
3.98	25	125	0.07	CR 7/3 (LOWER STULL ROAD) / STULL RUN CROSSING	S4H-MA-338 & S4H-MA-336	Intermittent	MJ-P3-1005	AWTS located for optimal crossing of waterbodies in a relatively steep area.
4.44	10	65	0.01	STREAM CROSSING	S4H-MA-331	Ephemeral	MJ-P3-1005	AWTS located for optimal crossing of waterbodies in a relatively steep area.
9.26	10	685	0.16	STREAM CROSSING / SIDE SLOPE	S7H-MA-379	Ephemeral	MJ-P3-1010	AWTS located for optimal crossing of waterbodies in a relatively steep area.
15.20	15	1630	0.56	SIDE SLOPE / CR 46 (NEW CUT RD) CROSSING	S4H-BE-297	Perennial	MJ-P3-1017	ATWS required to facilitate road and stream crossings. Space limited overall due to steep side slopes.
15.44	25	270	0.15	SIDE SLOPE	S4H-BE-295	Intermittent	MJ-P3-1017	AWTS located for optimal crossing of waterbodies in an area with steep side slopes.
15.47	15	100	0.03	STREAM CROSSING	S4H-BE-295	Intermittent	MJ-P3-1017	AWTS located for optimal crossing of waterbodies in an area with steep side slopes.
17.27	10	100	0.02	WETLAND / STREAM CROSSING	S5ES-BE-143 & W5ES-BE-145	Perennial - PEM	MJ –P3-1019	ATWS required for stream and wetland crossing. ATWS located in upland area.

TABLE 1. Justification for Additional Temporary Workspace (ATWS) that is located within 50 feet of a Waterbody or Wetland

Approx MP	Approximate Dimensions		Acres	Reason for ATWS	Waterbody/Wetland ID	Flow/Wetland Type[2]	Location of ATWS[3]	Justification
Majorsville Lateral								
17.59	10	110	0.03	STREAM CROSSING	S5ES-BE-146	Ephemeral	MJ-P3-1019	ATWS required for stream crossing. ATWS is located within upland areas consisting of primarily within cropland, minimizing impacts to forested uplands.
18.81	25	390	0.22	STREAM / WETLAND / PRIVATE ROAD CROSSING	W4H-BE-312	PEM	MJ-P3-1021	ATWS required for optimal crossing of wetland.
Burgettstown Lateral								
14.42	25	205	0.12	SHADY GLEN RD CROSSING	S2ES-HA-212	Intermittent	BG-P3-1016	ATWS required for optimal road crossing.
15.00	25	600	0.34	GOLF COURSE / OHIO RIVER HDD	WB4ES-HA-186	Pond - Manmade	BG-P3-1016	ATWS required for HDD crossing.
15.00	50	600	0.69	GOLF COURSE / OHIO RIVER HDD	W4ES-HA-187	PEM	BG-P3-1016	ATWS required for HDD crossing.
16.09	50	300	0.34	OHIO RIVER HDD	S1ES-JE-197	Perennial	BG-P3-1018	ATWS required for HDD crossing.
16.26	25	280	0.16	US HWY 47 CROSSING	S1ES-JE-191 & W1ES-JE-192	Intermittent	BG-P3-1018	ATWS required to facilitate crossing of pipeline underneath US HWY 47 bridge. Space limited overall.
17.77	10	50	0.01	STREAM CROSSING	S4ES-JE-183	Perennial	BG-P3-1020	AWTS located for optimal crossing of waterbody.
17.78	15	85	0.03	STREAM CROSSING	S4ES-JE-183	Perennial	BG-P3-1020	ATWS located for optimal crossing of waterbody.
18.23	25	100	0.06	STREAM CROSSING	S4ES-JE-178	Intermittent	BG-P3-1020	ATWS located for optimal crossing of waterbody.
19.40	15	95	0.03	STREAM CROSSING	S2ES-JE-201	Ephemeral	BG-P3-1022	AWTS located for optimal crossing of waterbody.
20.65	10	65	0.01	STREAM CROSSING	S2ES-JE-208	Ephemeral	BG-P3-1023	AWTS located for optimal crossing of waterbody.
20.73	15	115	0.04	STREAM CROSSING	S2ES-JE-206	Intermittent	BG-P3-1023	AWTS located for optimal crossing of waterbody.
22.69	10	60	0.01	WAGGONER ROAD / STREAM CROSSING	ST2B-JE-296	Ephemeral	BG-P3-1025	ATWS needed to support Waggonner road crossing and waterbody.
23.22	25	100	0.06	WETLAND / STREAM CROSSING	S4ES-JE-170	Intermittent	BG-P3-1025	Only available upland location to facilitate crossing of a waterbody and large wetland.

TABLE 1. Justification for Additional Temporary Workspace (ATWS) that is located within 50 feet of a Waterbody or Wetland

Approx MP	Approximate Dimensions		Acres	Reason for ATWS	Waterbody/Wetland ID	Flow/Wetland Type[2]	Location of ATWS[3]	Justification
Burgettstown Lateral								
27.08	25	100	0.06	STREAM CROSSING	S2TB-JE-290	Ephemeral	BG-P3-1050	ATWS located for optimal crossing of waterbody.
27.24	10	100	0.02	STREAM CROSSING	S2ST-JE-108	Intermittent	BG-P3-1029	Only available upland location to facilitate road and stream crossing.
27.25	15	100	0.03	STREAM CROSSING	S2ST-JE-108	Intermittent	BG-P3-1029	Only available upland location to facilitate road and stream crossing.
28.94	15	95	0.03	SIDE SLOPE	S2ST-JE-106	Perennial	BG-P3-1031	ATWS needed to support pipeline construction in steep area.
28.96	10	100	0.02	SIDE SLOPE	S2ST-JE-106	Perennial	BG-P3-1031	ATWS needed to support pipeline construction in steep area.
29.16	15	100	0.03	WETLAND / STREAM CROSSING	W2ST-JE-105	PEM	BG-P3-1032	ATWS located for optimal crossing of wetland.
36.05	15	100	0.03	WETLAND / STREAM CROSSING	S2TB-CA-273	Perennial	BG-P3-1039	AWTS located for optimal crossing of waterbody.
36.73	25	100	0.06	WETLAND / STREAM CROSSING	W2TB-CA-231	PEM	BG-P3-1040	AWTS located for optimal crossing of waterbody and wetland.
37.30	25	100	0.06	STREAM CROSSING	ST2B-CA-229	Perennial	BG-P3-1040	ATWS located for optimal crossing of waterbody.
37.35	25	100	0.06	STREAM CROSSING	S2TB-CA-229	Perennial	BG-P3-1041	ATWS located for optimal crossing of waterbody.
38.33	25	100	0.06	WETLAND / STREAM CROSSING	W2ES-CA-154	PSS	BG-P3-1042	ATWS located for optimal crossing of two waterbodies.
38.70	25	100	0.06	STREAM CROSSING	W4ES-CA-127	PEM	BG-P3-1042	ATWS located for optimal crossing of waterbody.
38.79	25	100	0.06	WETLAND CROSSING	W4ES-CA-120	PSS	BG-P3-1042	AWTS located for optimal crossing of wetland.
39.63	25	100	0.06	WETLAND / STREAM CROSSING	S4ES-CA-116	Ephemeral	BG-P3-1043	ATWS located for optimal crossing of two waterbodies.
40.43	10	100	0.02	STREAM CROSSING	S2TB-CA-238	Perennial	BG-P3-1044	AWTS located for optimal crossing of two waterbodies.
45.87	25	100	0.06	WETLAND / STREAM CROSSING	S2ES-CA-172	Intermittent	BG-P3-1050	AWTS located for optimal crossing of two waterbodies.
46.94	10	75	0.02	WETLANDS / STREAM CROSSING	W4ES-CA-151	PEM	BG-P3-1051	AWTS located for optimal crossing of waterbody and wetland.
47.44	25	425	0.24	STREAM / ACCESS MIDSTREAM PIPELINE CROSSING	S2ES-CA-219	Ephemeral	BG-P3-1051	AWTS located for optimal crossing of a series of waterbodies.

TABLE 1. Justification for Additional Temporary Workspace (ATWS) that is located within 50 feet of a Waterbody or Wetland

Approx MP	Approximate Dimensions		Acres	Reason for ATWS	Waterbody/Wetland ID	Flow/Wetland Type[2]	Location of ATWS[3]	Justification
Burgettstown Lateral								
47.68	25	25	0.01	STREAM / WETLAND CROSSING	S4ES-CA-133 & W4ES-CA-134	Intermittent/PEM	BG-P3-1051	AWTS located for optimal crossing of waterbody and wetland.
48.00	25	100	0.06	STREAM CROSSING	WB4ES-CA-137 & S4ES-CA-135	Pond - Manmade/Intermittent	BG-P3-1052	AWTS located for optimal crossing of waterbodies.
Supply Connector Lines A and B								
7.47	15	310	0.11	CR 22 (LOWER CLEARFORK ROAD) CROSSING	W4ES-HR-223	PEM	ML-P3-1009	ATWS required for road crossing. No other upland location available. ATWS is located in uplands consistis primarily of croplands and road.
18.40	15	140	0.05	PRIVATE RD / EAST OHIO GAS COMPANY PIPELINE / STREAM / WETLAND CROSSING	W2ST-CA-150	PEM	ML-P3-1020	Only available upland location to facilitate crossing of a large wetland complex. Large waterbody is located on the opposite side of the construction ROW, further limiting the amount of available space.
Mainlines								
Mainlines A and B								
21.61	15	70	0.02	WATERBODY / WETLAND CROSSING	W2ST-CA-141	PEM	ML-P3-2003	Only available upland location for optimal crossing of wetland and waterbody.
22.57	15	170	0.06	STREAM CROSSING	S4ES-CA-205	Perennial	ML-P3-2004	ATWS required for optimal crossing of waterbody.
24.22	50	970	1.11	FALSE ROW – INDIAN FORK HDD	S1ES-TU-105	Perennial	ML-P3-2006	ATWS required for HDD backstring.
24.83	50	300	0.34	INDIAN FORK HDD	W7H-TU-255	PFO	ML-P3-2007	ATWS required for HDD crossing.
32.85	15	195	0.07	STREAM CROSSING	S4H-TU-381	Intermittent	ML-P3-2015	ATWS required for optimal crossing of multiple streams.
51.87	15	545	0.19	CR 105 / DOMINION PIPELINE / STREAM CROSSING	S2H-WA-125	Ephemeral	ML-P3-2013	Only available upland location between waterbodies, residences, and cropland.
53.53	145	300	1	STREAM AT HIGHWAY 241 HDD	W7H-WA-176	PEM	ML-P3-2014	ATWS required for HDD crossing.
67.92	50	300	0.34	PRAIRIE LANE HDD / CR 176 / PRIVATE ROAD / WATERBODY / WETLAND / LEVEE CROSSING	S1M-WA-144 & W1M-WA-143	Intermittent/PEM	ML-P3-3029	ATWS required for HDD crossing.
68.32	50	100	0.11	PRAIRIE LANE HDD	S1M-WA-147	Perennial	ML-P3-3029	ATWS required for HDD crossing.
68.34	200	140	0.64	PRAIRIE LANE HDD	S1M-WA-153	Perennial	ML-P3-3029	ATWS required for HDD crossing.

TABLE 1. Justification for Additional Temporary Workspace (ATWS) that is located within 50 feet of a Waterbody or Wetland

Approx MP	Approximate Dimensions		Acres	Reason for ATWS	Waterbody/Wetland ID	Flow/Wetland Type[2]	Location of ATWS[3]	Justification
Mainlines A and B								
68.90	25	300	0.17	NORFOLK SOUTHERN RAILROAD HDD	S1M-WA-147	Perennial	ML-P3-3030	ATWS required for HDD crossing.
76.97	145	235	0.78	US HIGHWAY 30 HDD	S1TB-WA-116	Perennial	ML-P3-3038	ATWS required for HDD crossing.
83.40	50	300	0.34	COUNTY ROAD 1675 HDD	S1H-AS-115	Perennial	ML-P3-4007	ATWS required for HDD crossing.
84.87	15	150	0.05	CR 1575 CROSSING	W7H-AS-105	PEM	ML-P3-4008	ATWS required for road crossing.
86.43	15	390	0.13	PRIVATE RD CROSSING (2)	S4H-AS-391	Perennial	ML-P3-4010	Only available upland location between waterbodies, roads, residences, and cropland.
93.39	15	715	0.25	STREAM CROSSING	S1H-AS-131	Perennial	ML-P3-4017	Only available upland location to facilitate stream crossing without interferring with croplands.
94.74	75	190	0.33	US HIGHWAY 42 HDD	W4H-AS-120	PEM	ML-P3-4018	ATWS required for HDD crossing.
94.90	75	1530	2.63	FALSE ROW - US HIGHWAY 42 HDD	W4H-AS-121	PEM	ML-P3-4018	ATWS required for HDD crossing.
95.73	135	300	0.93	BLACK FORK MOCHICAN RIVER HDD	W4H-RI-130/131	PEM/PFO	ML-P3-4019	ATWS required for HDD crossing.
135.29	80	230	0.42	COUNTY ROAD 12 HDD	W7H-SE-219	PEM	ML-P3-5008	ATWS required for HDD crossing.
135.31	50	150	0.17	COUNTY ROAD 12 HDD	W7H-SE-219	PEM	ML-P3-5008	ATWS required for HDD crossing.
Market Segment								
2.92	25	505	0.29	CR 166 CROSSING	W4H-DF-229	PFO	MK-P3-7003	Only available location to facilitate crossover without interferring with croplands.
60.58	60	150	0.21	CROSSOVER / WETLAND CROSSING	W2K-WA-167	PEM	MK-P3-8005	ATWS required for wetland crossing. ATWS is located within cropland, minimzing impacts to forested areas.
73.70	60	500	0.69	CROSSOVER	S5K-WA-182 & W5K-WA-183	Perennial/PEM	MK-P3-8019	Only available location to facilitate road crossing without interferring with croplands.
81.49	25	150	0.09	QUIGLEY RD CROSSING	S1M-WA-211	Intermittent	MK-P3-8027	ATWS required for optimal crossing of a large wetland complex.
82.76	20	190	0.09	CROSSOVER	W5K-WA-265	PEM	MK-P3-8028	Only available location to facilitate crossover without directly impacting wetlands.
86.51	25	300	0.17	DELAPP LN HDD	W5K-LI-249	PEM	MK-P3-8032	ATWS required for HDD crossing.

TABLE 1. Justification for Additional Temporary Workspace (ATWS) that is located within 50 feet of a Waterbody or Wetland

Approx MP	Approximate Dimensions		Acres	Reason for ATWS	Waterbody/Wetland ID	Flow/Wetland Type[2]	Location of ATWS[3]	Justification
Market Segment								
87.14	45	345	0.36	CROSSOVER	W2K-LI-238	PSS	MK-P3-8033	Only available upland location to facilitate crossover and optimal crossing of large wetland complex and perennial stream.
93.36	25	150	0.09	W SCHAFER RD CROSSING	W5K-LI-250	PFO	MK-P3-8040	ATWS required for road crossing.
94.76	50	300	0.34	LAKE AT VINES RD HDD	W2K-LI-248/W5K-LI-258	PEM/PFO	MK-P3-8042	ATWS required for HDD crossing.
94.76	25	300	0.17	LAKE AT VINES RD HDD	W2K-LI-248/258 & S2K-LI-249	PEM/PFO/Intermittent	MK-P3-8042	ATWS required for HDD crossing.
95.12	75	250	0.43	LAKE AT VINES RD HDD	W2K-LI-251	PEM	MK-P3-8042	ATWS required for HDD crossing.
98.03	25	150	0.09	WEST LANGE RD CROSSING	W2K-LI-253	PEM	MK-P3-8045	Only available upland location to facilitate road crossing.
98.06	25	150	0.09	WEST LANGE RD CROSSING	W2K-LI-254	PEM	MK-P3-8045	Only available upland location to facilitate road crossing.

[1] Wetland classification according to Cowardin et al. 1979: PEM = Palustrine Emergent Wetland; PSS = Palustrine Scrub-Shrub Wetland; PFO = Palustrine Forested Wetland.
[2] Identifies the drawing number associated with the alignment sheet where the ATWS is located.

An asterisk (*) notes a portion of the wetland is crossed via HDD.

TABLE 2. Justification for Construction Right-of-Way Width in Wetlands

Approx. Enter MP	Crossing Length (feet)	Wetland ID	Wetland Type[1]	Construction Right-of-Way Width (feet)	Justification
Supply Laterals					
Burgettstown Lateral					
4.48	41.18	W2ES-WA-224	PEM	100	OSHA Type C soil conditions affect slope stability of pipeline trench and saturated soil conditions make it difficult to contain spoil for large diameter pipe. Wider construction right-of-way will ensure excavated material does not run into adjacent wetland. Erosion controls will be installed and maintained throughout construction in accordance with Rover's Procedures and all areas will be restored in compliance with requirements.
4.80	38.54	W2ES-WA-226	PEM	100	
4.94	76.03	W2ES-WA-229	PEM	100	
16.27	63.89	W1ES-JE-192	PEM	100	
20.22	103.49	W2ST-JE-113	PEM	100	
22.72	23.76	W2TB-JE-298	PSS	100	
23.25	83.42	W4ES-JE-167	PEM	100	
23.61	24.29	W4ES-JE-172	PEM	100	
25.16	40.66	W2TB-JE-281	PEM	100	
26.18	59.66	W2TB-JE-289	PEM	100	
29.16	51.74	W2ST-JE-105	PEM	100	
30.85	149.42	W2ES-JE-190	PSS	100	
31.53	162.10	W2TB-JE-286	PEM	100	
33.00	21.12	W2ST-JE-103	PEM	100	
33.83	500.02	W4ES-JE-160	PSS	100	
33.92	49.63	W4ES-JE-153	PEM	100	
33.94	31.15	W4ES-JE-153	PEM	100	
34.27	72.86	W2ES-JE-184	PEM	100	
36.75	51.22	W2TB-CA-231	PEM	100	
38.35	46.99	W2ES-CA-154	PSS	100	
38.81	173.71	W4ES-CA-120	PSS	100	
44.80	38.02	W2ES-CA-162	PEM	100	
45.18	22.18	W2ES-CA-177	PEM	100	
45.21	23.76	W2ES-CA-177	PEM	100	
45.46	88.70	W2ES-CA-179	PEM	100	
45.82	45.94	W2ES-CA-171	PEM	100	
46.23	24.82	W2ES-CA-166	PEM	100	

TABLE 2. Justification for Construction Right-of-Way Width in Wetlands

Approx. Enter MP	Crossing Length (feet)	Wetland ID	Wetland Type[1]	Construction Right-of-Way Width (feet)	Justification
Burgettstown Lateral					
46.92	23.76	W4ES-CA-151	PEM	100	OSHA Type C soil conditions affect slope stability of pipeline trench and saturated soil conditions make it difficult to contain spoil for large diameter pipe. Wider construction right-of-way will ensure excavated material does not run into adjacent wetland. Erosion controls will be installed and maintained throughout construction in accordance with Rover's Procedures and all areas will be restored in compliance with requirements.
47.66	24.82	W4ES-CA-134	PEM	100	
49.33	939.31	W2ES-CA-165	PSS	100	
50.26	21.12	W2ES-CA-188	PEM	100	
50.57	60.19	W2TB-CA-256	PSS	100	
50.59	231.79	W2TB-CA-256	PSS	100	
50.82	816.82	W2TB-CA-254	PSS	100	
Clarington Lateral					
0.99	299.38	W7H-MO-406	PEM	100	OSHA Type C soil conditions affect slope stability of pipeline trench and saturated soil conditions make it difficult to contain spoil for large diameter pipe. Wider construction right-of-way will ensure excavated material does not run into adjacent wetland. Erosion controls will be installed and maintained throughout construction in accordance with Rover's Procedures and all areas will be restored in compliance with requirements.
3.77	8.98	W9H-BE-141	PEM	100	
3.78	37.49	W9H-BE-141	PEM	100	
18.12	23.23	W1ES-BE-208	PEM	100	
18.16	40.13	W1ES-BE-209	PEM	100	
18.17	115.10	W1ES-BE-209	PEM	100	
19.40	44.88	W7H-BE-401	PEM	100	
25.60	159.46	W1ES-BE-201	PEM	100	
26.34	21.48	W7H-HA-391	PEM	100	
26.62	62.93	W7H-HA-390	PEM	100	
28.89	98.74	W4H-HA-344	PSS	100	
29.88	36.96	W2ST-HA-118	PSS	100	
29.90	162.62	W2ST-HA-117	PEM	100	
32.08	5.81	W1ES-HA-198	PEM	100	
32.28	51.22	W1ES-HA-200	PEM	100	
Seneca Lateral					
0.02	13.73	W7H-NO-453	PEM	100	OSHA Type C soil conditions affect slope stability of pipeline trench and saturated soil conditions make it difficult to contain spoil for large diameter pipe. Wider construction right-of-way will ensure excavated material does not run into adjacent wetland. Erosion controls will be installed and maintained throughout construction in accordance with Rover's Procedures and all areas will be restored in compliance with requirements.
0.70	185.86	W7H-NO-424	PEM	100	
5.07	6.34	W1H-MO-162	PSS	100	
5.67	15.84	W4H-MO-201	PEM	100	

TABLE 2. Justification for Construction Right-of-Way Width in Wetlands

Approx. Enter MP	Crossing Length (feet)	Wetland ID	Wetland Type[1]	Construction Right-of-Way Width (feet)	Justification
6.87	289.34	W3ES-MO-261	PEM	100	
Seneca Lateral					
6.98	43.82	W3ES-MO-261	PEM	100	OSHA Type C soil conditions affect slope stability of pipeline trench and saturated soil conditions make it difficult to contain spoil for large diameter pipe. Wider construction right-of-way will ensure excavated material does not run into adjacent wetland. Erosion controls will be installed and maintained throughout construction in accordance with Rover's Procedures and all areas will be restored in compliance with requirements.
9.12	96.10	W2TB-MO-120	PEM	100	
11.57	60.72	W4H-MO-210	PEM	100	
15.03	132.53	W1TB-MO-151	PEM	100	
17.81	31.15	W2TB-MO-175	PEM	100	
17.88	8.45	W2TB-MO-173	PEM	100	
24.49	46.46	W2TB-MO-155	PEM	100	
Sherwood Lateral					
0.54	59.67	W5ES-DO-166	PEM	100	OSHA Type C soil conditions affect slope stability of pipeline trench and saturated soil conditions make it difficult to contain spoil for large diameter pipe. Wider construction right-of-way will ensure excavated material does not run into adjacent wetland. Erosion controls will be installed and maintained throughout construction in accordance with Rover's Procedures and all areas will be restored in compliance with requirements.
0.83	23.23	W1ES-DO-218	PEM	100	
5.83	1.58	W4H-DO-252	PEM	100	
10.40	60.19	W5ES-TY-105	PEM	100	
13.65	6.86	W4ES-TY-109	PEM	100	
21.97	26.40	W1ES-TY-114	PEM	100	
24.48	213.31	W7H-TY-267	PEM	100	
26.95	22.18	W5ES-TY-131	PEM	100	
30.00	26.93	W4H-TY-262	PEM	100	
44.61	113.52	W7H-MO-289	PEM	100	
46.54	80.78	W2TB-MO-216	PEM	100	
47.41	98.21	W2TB-MO-205	PSS	100	
48.12	6.34	W4H-MO-271	PEM	100	
50.21	21.12	W2TB-MO-196	PEM	100	
50.31	20.06	W2TB-MO-198	PEM	100	
Supply Connector Lines A and B					
0.96	21.12	W2ST-HR-158	PEM	120	OSHA Type C soil conditions affect slope stability of pipeline trench and saturated soil conditions make it difficult to contain spoil for large diameter pipe. Wider construction right-of-way will ensure excavated material does not run into adjacent wetland. Erosion controls will be installed and maintained throughout
1.57	235.49	W2ES-HR-251	PEM	120	
3.38	45.41	W2ST-HR-162	PEM	120	

TABLE 2. Justification for Construction Right-of-Way Width in Wetlands

Approx. Enter MP	Crossing Length (feet)	Wetland ID	Wetland Type[1]	Construction Right-of-Way Width (feet)	Justification
7.14	187.97	W4ES-HR-221	PEM	120	construction in accordance with Rover's Procedures and all areas will be restored in compliance with requirements.
7.28	38.02	W4ES-HR-223	PEM	120	
Supply Connector Lines A and B					
7.31	699.60	W4ES-HR-223	PEM	120	OSHA Type C soil conditions affect slope stability of pipeline trench and saturated soil conditions make it difficult to contain spoil for large diameter pipe. Wider construction right-of-way will ensure excavated material does not run into adjacent wetland. Erosion controls will be installed and maintained throughout construction in accordance with Rover's Procedures and all areas will be restored in compliance with requirements.
8.61	99.42	W2ST-HR-165	PEM	120	
9.07	22.70	W4H-HR-366	PEM	120	
10.25	57.55	W4ES-HR-225	PEM	120	
10.37	65.47	W4ES-HR-229	PEM	120	
14.11	237.60	W2ES-HR-249	PEM	120	
15.35	8.98	W3ES-HR-257	PEM	120	
16.16	21.65	W2ES-HR-268	PSS	120	
16.68	255.02	W2ES-HR-260*	PEM	120	
18.34	158.93	W2TB-CA-250	PSS	120	
18.39	23.23	W2ST-CA-150	PEM	120	
Mainlines					
Mainlines A and B					
21.09	33.79	W2ST-CA-137	PEM	120	OSHA Type C soil conditions affect slope stability of pipeline trench and saturated soil conditions make it difficult to contain spoil for large diameter pipe. Wider construction right-of-way will ensure excavated material does not run into adjacent wetland. Erosion controls will be installed and maintained throughout construction in accordance with Rover's Procedures and all areas will be restored in compliance with requirements.
21.54	178.33	W2ST-CA-141	PEM	120	
22.04	35.38	W7H-CA-234	PEM	120	
22.07	31.15	W7H-CA-234	PEM	120	
22.17	56.50	W7H-CA-233	PEM	120	
22.79	111.94	W2ES-TU-105	PEM	120	
23.55	103.49	W4ES-TU-215	PEM	120	
24.04	53.33	W4ES-TU-217	PEM	120	
24.19	334.75	W1ES-TU-104	PSS	120	
24.52	58.08	W1ES-TU-106	PEM	120	
24.58	57.55	W1ES-TU-106	PEM	120	
24.77	27.46	W7H-TU-256	PEM	120	
26.64	29.57	W4ES-TU-230	PFO	95	
26.71	68.74	W4ES-TU-232	PEM	120	

TABLE 2. Justification for Construction Right-of-Way Width in Wetlands

Approx. Enter MP	Crossing Length (feet)	Wetland ID	Wetland Type[1]	Construction Right-of-Way Width (feet)	Justification
27.40	11.09	W1ES-TU-100	PEM	120	
27.40	12.14	W1ES-TU-100	PEM	120	
Mainlines A and B					
27.42	4.75	W1ES-TU-101	PEM	120	OSHA Type C soil conditions affect slope stability of pipeline trench and saturated soil conditions make it difficult to contain spoil for large diameter pipe. Wider construction right-of-way will ensure excavated material does not run into adjacent wetland. Erosion controls will be installed and maintained throughout construction in accordance with Rover's Procedures and all areas will be restored in compliance with requirements.
27.69	53.86	W1ES-TU-102	PEM	120	
27.76	431.38	W1ES-TU-102	PEM	120	
27.90	246.05	W1ES-TU-102	PEM	120	
28.47	120.67	W2H-TU-163	PEM	120	
29.03	92.93	W2H-TU-156	PEM	120	
29.05	53.86	W2H-TU-155	PFO	95	
29.12	156.29	W2H-TU-154	PFO	95	
29.30	28.51	W4ES-TU-220	PFO	95	
29.37	232.32	W2ES-TU-259	PEM	120	
29.47	574.46	W2ES-TU-259	PEM	120	
29.58	238.13	W2ES-TU-259	PEM	120	
29.67	20.59	W2ES-TU-259	PEM	120	
29.71	21.65	W2ES-TU-259	PEM	120	
29.75	63.36	W2ES-TU-259	PEM	120	
29.97	393.89	W4H-TU-385	PEM	120	
31.04	40.66	W4ES-TU-234	PEM	120	
33.85	406.03	W1M-TU-198	PEM	120	
33.94	295.15	W1M-TU-203	PFO	95	
34.50	42.77	W4H-TU-379	PFO	95	
35.77	36.96	W1M-TU-194*	PEM	120	
36.03	95.04	W1M-TU-192	PEM	120	
37.45	167.90	W1M-ST-189	PEM	120	
37.99	508.46	W1M-ST-186	PFO	95	
38.09	917.66	W1M-ST-186	PFO	95	
39.07	184.80	W4H-ST-370	PEM	120	

TABLE 2. Justification for Construction Right-of-Way Width in Wetlands

Approx. Enter MP	Crossing Length (feet)	Wetland ID	Wetland Type[1]	Construction Right-of-Way Width (feet)	Justification
39.44	16.90	W4H-ST-367	PFO	95	
39.46	62.83	W4H-ST-367	PFO	95	
39.47	21.65	W4H-ST-367	PFO	95	
Mainlines A and B					
39.49	28.51	W4H-ST-367	PFO	95	OSHA Type C soil conditions affect slope stability of pipeline trench and saturated soil conditions make it difficult to contain spoil for large diameter pipe. Wider construction right-of-way will ensure excavated material does not run into adjacent wetland. Erosion controls will be installed and maintained throughout construction in accordance with Rover's Procedures and all areas will be restored in compliance with requirements.
42.19	699.60	W1M-ST-180*	PEM	120	
42.32	73.92	W1M-ST-179*	PEM	120	
42.93	295.15	W3H-ST-170	PEM	120	
44.43	284.06	W4H-ST-373	PEM	120	
46.78	34.85	W1M-ST-164	PEM	120	
47.38	12.67	W1H-ST-144	PSS	120	
47.67	78.67	W3H-ST-171	PFO	95	
48.07	287.76	W4H-ST-187	PEM	120	
48.41	72.86	W4H-ST-186	PEM	120	
48.54	148.90	W4H-ST-185	PEM	120	
48.60	425.57	W7H-ST-184	PEM	120	
48.81	129.89	W1H-ST-157	PEM	120	
48.84	407.09	W1H-ST-158	PFO	95	
49.00	111.41	W1M-ST-159	PFO	95	
50.71	1.58	W3H-ST-166	PEM	120	
50.71	32.21	W3H-ST-165	PSS	120	
50.72	21.65	W3H-ST-166	PEM	120	
50.73	98.74	W4H-ST-402	PFO	95	
51.48	11.62	W2H-AS-130	PEM	120	
52.42	8.98	W2H-WA-133	PEM	120	
53.53	33.79	W7H-WA-176	PEM	120	
53.92	33.26	W7H-WA-174	PEM	120	
53.97	7.92	W7H-WA-172	PEM	120	
54.07	123.55	W7H-WA-166	PEM	120	
54.15	44.35	W7H-WA-168	PEM	120	

TABLE 2. Justification for Construction Right-of-Way Width in Wetlands

Approx. Enter MP	Crossing Length (feet)	Wetland ID	Wetland Type[1]	Construction Right-of-Way Width (feet)	Justification
54.17	37.02	W7H-WA-169	PEM	120	
54.67	68.64	W4H-WA-170	PFO	95	
54.70	103.49	W4H-WA-170	PFO	95	
Mainlines A and B					
55.33	16.37	W1H-WA-137	PEM	120	OSHA Type C soil conditions affect slope stability of pipeline trench and saturated soil conditions make it difficult to contain spoil for large diameter pipe. Wider construction right-of-way will ensure excavated material does not run into adjacent wetland. Erosion controls will be installed and maintained throughout construction in accordance with Rover's Procedures and all areas will be restored in compliance with requirements.
55.53	30.73	W1H-WA-140	PEM	120	
56.71	46.46	W3H-WA-141	PEM	120	
56.72	2.11	W3H-WA-142	PFO	95	
57.66	114.58	W1TB-WA-102	PEM	120	
57.72	482.06	W1TB-WA-104	PFO	95	
59.97	100.85	W1TB-WA-108	PEM	120	
60.47	347.95	W1TB-WA-113	PFO	95	
62.60	23.23	W2H-WA-139	PEM	120	
63.27	329.47	W4H-WA-175	PFO	95	
63.34	34.85	W4H-WA-176	PEM	120	
63.34	73.92	W4H-WA-175	PFO	95	
63.36	52.80	W4H-WA-176	PEM	120	
63.37	44.35	W4H-WA-175	PFO	95	
64.49	6.86	W4H-WA-183	PEM	120	
67.92	1570.27	W1M-WA-143*	PEM	120	
68.52	831.07	W1M-WA-150	PEM	120	
69.33	69.70	W3H-WA-143	PEM	120	
69.47	21.12	W3H-WA-147	PEM	120	
70.13	70.75	W7H-WA-179	PFO	95	
70.15	300.96	W7H-WA-181	PEM	120	
71.71	3.70	W3H-WA-151*	PEM	120	
78.05	23.23	W3H-WA-153	PEM	120	
80.92	102.43	W4H-AS-233	PEM	120	
81.01	331.58	W4H-AS-235	PFO	95	
81.21	40.66	W4H-AS-237	PFO	95	

TABLE 2. Justification for Construction Right-of-Way Width in Wetlands

Approx. Enter MP	Crossing Length (feet)	Wetland ID	Wetland Type[1]	Construction Right-of-Way Width (feet)	Justification
81.29	117.22	W2H-AS-121	PFO	95	
83.26	109.82	W1H-AS-116*	PEM	120	
83.57	31.68	W1H-AS-114	PEM	120	
Mainlines A and B					
83.67	25.34	W1H-AS-112	PEM	120	OSHA Type C soil conditions affect slope stability of pipeline trench and saturated soil conditions make it difficult to contain spoil for large diameter pipe. Wider construction right-of-way will ensure excavated material does not run into adjacent wetland. Erosion controls will be installed and maintained throughout construction in accordance with Rover's Procedures and all areas will be restored in compliance with requirements.
84.06	268.22	W2H-AS-107	PFO	95	
84.12	41.71	W2H-AS-107	PFO	95	
84.19	295.15	W2H-AS-108	PEM	120	
84.47	326.83	W2H-AS-104	PEM	120	
84.65	101.38	W4H-AS-386	PEM	120	
86.30	269.81	W4H-AS-392	PEM	120	
87.00	51.22	W4H-AS-394	PEM	120	
87.02	30.62	W4H-AS-394	PEM	120	
87.32	28.51	W4H-AS-395	PEM	120	
87.43	22.18	W4H-AS-396	PEM	120	
89.04	17.42	W4H-AS-398	PEM	120	
89.05	10.56	W4H-AS-399	PEM	120	
91.32	38.54	W1H-AS-133	PEM	120	
94.83	38.02	W4H-AS-121	PEM	120	
96.64	30.63	W4H-RI-135	PEM	120	
98.35	35.90	W4H-RI-145	PFO	95	
98.94	6.34	W4H-RI-241	PFO	95	
98.95	51.22	W4H-RI-241	PFO	95	
99.12	105.07	W4H-RI-141	PFO	95	
99.14	236.02	W4H-RI-140	PEM	120	
99.57	10.56	W4H-RI-137	PEM	120	
102.49	74.98	W7H-RI-139	PEM	120	
102.50	104.54	W7H-RI-140	PFO	95	
102.52	78.67	W7H-RI-139	PEM	120	
104.29	54.38	W4H-RI-152	PFO	95	

TABLE 2. Justification for Construction Right-of-Way Width in Wetlands

Approx. Enter MP	Crossing Length (feet)	Wetland ID	Wetland Type[1]	Construction Right-of-Way Width (feet)	Justification
104.40	70.22	W4H-RI-148	PFO	95	
104.41	60.72	W4H-RI-147	PSS	120	
104.42	34.85	W4H-RI-148	PFO	95	
Mainlines A and B					
104.54	2.11	W4H-RI-149	PFO	95	OSHA Type C soil conditions affect slope stability of pipeline trench and saturated soil conditions make it difficult to contain spoil for large diameter pipe. Wider construction right-of-way will ensure excavated material does not run into adjacent wetland. Erosion controls will be installed and maintained throughout construction in accordance with Rover's Procedures and all areas will be restored in compliance with requirements.
104.64	68.74	W6H-RI-103	PSS	120	
105.14	124.61	W3H-RI-161	PFO	95	
105.75	24.82	W6H-RI-104	PFO	95	
107.45	132.00	W7H-RI-148	PFO	95	
108.15	65.47	W7H-RI-151	PEM	120	
110.82	8.45	W6H-RI-107	PEM	120	
111.48	7.39	W6H-RI-109	PEM	120	
115.59	90.82	W4H-CR-159	PEM	120	
115.62	91.87	W4H-CR-159	PEM	120	
118.62	194.83	W4H-CR-245	PFO	95	
121.50	34.85	W7H-CR-160	PEM	120	
121.55	15.84	W7H-CR-160	PEM	120	
122.00	6.86	W6H-CR-114	PEM	120	
124.00	25.87	W4H-CR-243	PEM	120	
125.53	10.03	W4H-CR-165	PEM	120	
127.64	10.56	W3H-CR-107	PEM	120	
131.65	200.11	W8H-SE-156	PFO	95	
131.67	171.50	W8H-SE-158	PEM	120	
133.31	119.86	W3H-SE-108	PSS	120	
135.10	17.42	W7H-SE-219	PEM	120	
138.44	97.15	W7H-SE-224	PEM	120	
139.37	31.15	W7H-SE-225	PFO	95	
140.20	41.60	W3H-SE-112	PEM	120	
146.59	23.23	W1M-SE-127	PFO	95	
146.77	168.43	W1M-SE-119	PFO	95	

TABLE 2. Justification for Construction Right-of-Way Width in Wetlands

Approx. Enter MP	Crossing Length (feet)	Wetland ID	Wetland Type[1]	Construction Right-of-Way Width (feet)	Justification
148.09	58.61	W1M-SE-115	PFO	95	
151.08	58.08	W8H-SE-172	PFO	95	
158.86	10.03	W3H-HA-118	PEM	120	
Mainlines A and B					
158.98	5.28	W3H-HA-117	PEM	120	OSHA Type C soil conditions affect slope stability of pipeline trench and saturated soil conditions make it difficult to contain spoil for large diameter pipe. Wider construction right-of-way will ensure excavated material does not run into adjacent wetland. Erosion controls will be installed and maintained throughout construction in accordance with Rover's Procedures and all areas will be restored in compliance with requirements.
191.20	215.42	W8H-HE-143	PFO	95	
201.31	584.50	W8H-DE-110	PFO	95	
Market Segment					
2.28	11.62	W1H-DF-117	PEM	100	OSHA Type C soil conditions affect slope stability of pipeline trench and saturated soil conditions make it difficult to contain spoil for large diameter pipe. Wider construction right-of-way will ensure excavated material does not run into adjacent wetland. Erosion controls will be installed and maintained throughout construction in accordance with Rover's Procedures and all areas will be restored in compliance with requirements.
3.52	10.03	W3H-DF-103	PEM	100	
3.85	146.78	W1H-DF-122	PEM	100	
4.14	8.98	W1H-DF-120	PEM	100	
10.23	5.81	W1H-HE-123	PEM	100	
17.02	12.14	W4H-FU-221	PEM	100	
18.15	13.20	W2H-FU-112	PEM	100	
20.67	9.50	W4H-FU-216	PEM	100	
36.54	22.18	W1K-LE-105	PEM	100	
36.54	107.71	W2K-LE-136	PSS	100	
37.88	159.98	W1K-LE-146	PEM	100	
37.89	161.84	W1K-LE-146	PEM	100	
38.54	63.89	W2TB-LE-412	PEM	100	
41.77	291.57	W5K-LE-181	PEM	100	
41.99	27.98	W5K-LE-106	PEM	100	
45.80	124.61	W2K-LE-178	PEM	100	
45.83	127.25	W2K-LE-233	PEM	100	
49.04	119.33	W1K-LE-123	PEM	100	
49.05	121.47	W1K-LE-123	PEM	100	

TABLE 2. Justification for Construction Right-of-Way Width in Wetlands

Approx. Enter MP	Crossing Length (feet)	Wetland ID	Wetland Type[1]	Construction Right-of-Way Width (feet)	Justification
49.30	213.31	W1K-LE-128	PEM	100	
49.39	29.04	W1K-LE-129	PEM	100	
49.47	149.95	W1K-LE-131	PSS	100	
51.70	37.49	W1K-LE-132	PSS	100	
Market Segment					
52.91	45.45	W1K-LE-237	PEM	100	OSHA Type C soil conditions affect slope stability of pipeline trench and saturated soil conditions make it difficult to contain spoil for large diameter pipe. Wider construction right-of-way will ensure excavated material does not run into adjacent wetland. Erosion controls will be installed and maintained throughout construction in accordance with Rover's Procedures and all areas will be restored in compliance with requirements.
54.03	25.34	W1K-LE-137	PEM	100	
54.89	34.32	W2K-LE-137	PEM	100	
56.26	60.72	W1K-LE-242	PEM	100	
56.73	111.94	W2K-WA-165	PEM	100	
57.00	220.18	W1K-WA-292*	PSS	100	
57.04	223.87	W1K-WA-291*	PEM	100	
58.24	123.43	W1K-WA-173	PEM	100	
58.48	91.34	W2K-WA-103	PEM	100	
60.60	114.05	W2K-WA-167	PEM	100	
60.70	34.85	W2K-WA-168	PEM	100	
60.96	27.98	W1K-WA-257	PEM	100	
61.04	92.78	W1K-WA-259	PEM	100	
62.30	247.10	W1K-WA-277*	PSS	100	
63.26	119.33	W1K-WA-281	PSS	100	
63.92	62.30	W2K-WA-102	PEM	100	
66.75	253.97	W1K-WA-278	PEM	100	
66.99	37.49	W2K-WA-199	PEM	100	
67.13	45.94	W5K-WA-264	PEM	100	
67.18	118.80	W2K-WA-198	PSS	100	
68.92	60.72	W1K-WA-151	PEM	100	
69.11	113.52	W1K-WA-147	PEM	100	
69.32	27.98	W1K-WA-150	PEM	100	
70.36	393.36	W2K-WA-194	PEM	100	

TABLE 2. Justification for Construction Right-of-Way Width in Wetlands

Approx. Enter MP	Crossing Length (feet)	Wetland ID	Wetland Type[1]	Construction Right-of-Way Width (feet)	Justification
70.61	230.21	W2K-WA-196	PSS	100	
70.68	194.30	W2K-WA-196	PSS	100	
71.06	424.51	W1K-WA-163	PEM	100	
71.18	46.46	W1K-WA-162	PSS	100	
71.19	52.80	W1K-WA-161	PEM	100	
Market Segment					
71.21	25.87	W1K-WA-160	PSS	100	OSHA Type C soil conditions affect slope stability of pipeline trench and saturated soil conditions make it difficult to contain spoil for large diameter pipe. Wider construction right-of-way will ensure excavated material does not run into adjacent wetland. Erosion controls will be installed and maintained throughout construction in accordance with Rover's Procedures and all areas will be restored in compliance with requirements.
71.22	38.02	W1K-WA-167	PSS	100	
71.60	399.70	W2K-WA-120	PEM	100	
71.89	193.25	W2K-WA-192	PEM	100	
71.96	220.18	W2K-WA-193	PEM	100	
72.03	46.46	W2K-WA-193	PEM	100	
73.15	157.87	W1M-WA-233	PEM	100	
73.71	116.16	W5K-WA-183	PEM	100	
74.91	986.83	W5K-WA-220	PEM	100	
75.09	189.55	W1M-WA-224	PEM	100	
77.03	314.69	W1M-WA-220	PEM	100	
78.54	356.40	W1M-WA-215	PEM	100	
80.77	196.94	W2K-WA-191	PEM	100	
80.81	574.46	W2K-WA-191	PEM	100	
81.92	96.10	W1M-WA-214	PEM	100	
82.73	42.68	W5K-WA-265	PEM	100	
85.46	213.84	W2K-LI-219	PEM	100	
85.50	73.92	W5K-LI-112	PSS	100	
85.51	265.58	W5K-LI-111	PEM	100	
86.46	16.37	W5K-LI-249*	PEM	100	
88.99	82.37	W5K-LI-261	PSS	100	
89.01	133.06	W5K-LI-263	PSS	100	
90.77	115.63	W2K-LI-243	PEM	100	
91.29	220.70	W2K-LI-244	PEM	100	

TABLE 2. Justification for Construction Right-of-Way Width in Wetlands

Approx. Enter MP	Crossing Length (feet)	Wetland ID	Wetland Type[1]	Construction Right-of-Way Width (feet)	Justification
91.56	924.00	W2K-LI-245	PEM	100	
91.73	391.78	W5K-LI-125	PSS	100	
91.81	128.30	W5K-LI-127	PEM	100	
91.89	271.39	W5K-LI-127	PEM	100	
92.33	129.89	W5K-LI-129	PEM	100	
Market Segment					
92.51	417.65	W5K-LI-130	PSS	100	OSHA Type C soil conditions affect slope stability of pipeline trench and saturated soil conditions make it difficult to contain spoil for large diameter pipe. Wider construction right-of-way will ensure excavated material does not run into adjacent wetland. Erosion controls will be installed and maintained throughout construction in accordance with Rover's Procedures and all areas will be restored in compliance with requirements.
92.65	255.02	W1K-LI-288	PEM	100	
92.80	608.26	W1K-LI-285	PEM	100	
92.93	308.35	W1K-LI-283	PSS	100	
93.89	929.28	W5K-LI-178	PEM	100	
94.07	23.81	W5K-LI-178a	PEM	100	
94.33	102.43	W5K-LI-100	PEM	100	
94.56	151.54	W5K-LI-186	PEM	100	
94.59	30.62	W2K-LI-247	PEM	100	
94.77	45.94	W2K-LI-248	PEM	100	
94.79	242.88	W2K-LI-250*	PEM	100	
95.01	497.90	W2K-LI-251	PEM	100	
96.15	50.69	W5K-LI-155	PEM	100	
96.19	7.39	W5K-LI-155	PEM	100	
96.23	46.46	W5K-LI-155	PEM	100	
97.83	182.69	W2K-LI-253	PEM	100	
97.93	599.81	W2K-LI-253	PEM	100	
98.06	413.95	W2K-LI-254	PEM	100	
100.26	328.94	W2K-LI-267	PEM	100	
101.12	83.44	W5K-LI-135	PEM	100	
101.16	87.65	W5K-LI-135	PEM	100	
101.26	291.46	W5K-LI-137	PEM	100	
101.81	559.15	W5K-LI-142	PSS	100	
101.88	182.70	W5K-LI-143	PEM	100	

TABLE 2. Justification for Construction Right-of-Way Width in Wetlands

Approx. Enter MP	Crossing Length (feet)	Wetland ID	Wetland Type[1]	Construction Right-of-Way Width (feet)	Justification
102.27	236.54	W5K-LI-147	PEM	100	
102.32	66.00	W5K-LI-148	PSS	100	
102.34	116.16	W5K-LI-150	PSS	100	
102.36	608.26	W5K-LI-151*	PEM	100	
102.68	504.24	W2K-LI-268*	PEM	100	
Market Segment					
102.77	353.23	W2K-LI-269*	PSS	100	OSHA Type C soil conditions affect slope stability of pipeline trench and saturated soil conditions make it difficult to contain spoil for large diameter pipe. Wider construction right-of-way will ensure excavated material does not run into adjacent wetland. Erosion controls will be installed and maintained throughout construction in accordance with Rover's Procedures and all areas will be restored in compliance with requirements.
102.87	850.61	W5K-LI-255	PSS	100	
103.03	530.64	W5K-LI-255	PSS	100	
105.27	79.73	WST1-LI-103	PSS	100	
105.29	111.94	WST1-LI-103	PSS	100	
106.78	1430.35	W1ST-LI-107	PSS	100	
108.13	143.09	W5K-LI-163*	PEM	100	
108.19	1302.58	W5K-LI-164*	PEM	100	
108.44	140.45	W6K-LI-109*	PSS	100	
108.62	49.10	W6K-LI-113*	PEM	100	
108.64	208.56	W6K-LI-113*	PEM	100	
113.84	242.88	W6K-SH-119	PSS	100	
114.14	58.61	W6K-SH-118	PEM	100	
114.23	5.81	W6K-SH-118	PEM	100	
114.32	1454.64	W6K-SH-117	PEM	100	
114.59	832.13	W6K-SH-117	PEM	100	
114.75	422.40	W5K-SH-188	PEM	100	
115.02	81.31	W5K-SH-165	PEM	100	
115.20	295.68	W5K-SH-166	PEM	100	
115.27	210.67	W5K-SH-166	PEM	100	
115.64	301.49	W5K-SH-168	PEM	100	
116.42	260.30	W1ST-SH-109	PEM	100	
116.50	24.82	W1ST-SH-110	PEM	100	
117.40	69.70	W2K-SH-306	PEM	100	

TABLE 2. Justification for Construction Right-of-Way Width in Wetlands

Approx. Enter MP	Crossing Length (feet)	Wetland ID	Wetland Type[1]	Construction Right-of-Way Width (feet)	Justification
119.23	176.35	W6K-SH-123	PSS	100	
123.02	34.32	W5K-GE-243	PSS	100	
123.05	78.67	W5K-GE-244	PEM	100	
123.18	429.79	W5K-GE-245	PEM	100	
124.93	794.11	W6K-GE-126	PEM	100	
Market Segment					
125.86	282.48	W5K-GE-225	PSS	100	OSHA Type C soil conditions affect slope stability of pipeline trench and saturated soil conditions make it difficult to contain spoil for large diameter pipe. Wider construction right-of-way will ensure excavated material does not run into adjacent wetland. Erosion controls will be installed and maintained throughout construction in accordance with Rover's Procedures and all areas will be restored in compliance with requirements.
126.07	78.14	W2K-GE-300	PEM	100	
126.12	512.16	W6K-GE-132	PEM	100	
127.38	171.60	W2K-GE-277	PSS	100	
127.43	141.50	W2K-GE-279	PSS	100	
127.48	134.64	W2K-GE-279	PSS	100	
127.52	62.30	W2K-GE-279	PSS	100	
127.59	60.19	W2K-GE-280	PSS	100	
127.78	33.79	W2K-GE-283	PSS	100	
128.29	1269.31	W2K-GE-275	PSS	100	
128.59	161.57	W6K-GE-138	PSS	100	
128.62	368.54	W6K-GE-137	PEM	100	
132.99	207.50	W5K-GE-237	PEM	100	
133.65	52.27	W2K-GE-382	PEM	100	
135.19	283.01	W5K-GE-198	PEM	100	
135.73	50.69	W5K-OA-190	PEM	100	
139.02	272.45	W5K-OA-192	PEM	100	
139.07	220.18	W5K-OA-191	PSS	100	
139.33	57.55	W5K-OA-194	PEM	100	
140.43	76.03	W2K-OA-364	PEM	100	
141.30	38.24	W5K-OA-218	PEM	100	
141.55	602.45	W2K-OA-289	PEM	100	
142.23	772.16	W2K-GE-297	PEM	100	
145.91	144.14	W2K-GE-374	PSS	100	

TABLE 2. Justification for Construction Right-of-Way Width in Wetlands

Approx. Enter MP	Crossing Length (feet)	Wetland ID	Wetland Type[1]	Construction Right-of-Way Width (feet)	Justification
150.05	77.09	W2TB-LA-314	PEM	100	
150.12	118.27	W2TB-LA-314	PEM	100	
151.29	41.18	W2TB-LA-317	PSS	100	
153.16	60.19	W5K-LA-205	PSS	100	
153.17	19.01	W2TB-LA-365	PEM	100	
Market Segment					
153.24	234.21	W2TB-LA-366	PEM	100	OSHA Type C soil conditions affect slope stability of pipeline trench and saturated soil conditions make it difficult to contain spoil for large diameter pipe. Wider construction right-of-way will ensure excavated material does not run into adjacent wetland. Erosion controls will be installed and maintained throughout construction in accordance with Rover's Procedures and all areas will be restored in compliance with requirements.
153.38	33.79	W2TB-LA-367	PSS	100	
154.51	153.65	W5K-LA-230	PSS	100	
154.55	28.51	W2TB-LA-321	PEM	100	
154.88	58.61	W2K-LA-371	PEM	100	
155.71	34.32	W5K-LA-209	PSS	100	
157.25	17.42	W2TB-LA-324	PEM	100	
159.09	84.48	W2TB-LA-330	PEM	100	
167.66	42.24	W2TB-LA-338	PEM	100	
167.98	18.48	W2TB-LA-336	PEM	100	
167.99	19.01	W2TB-LA-335A	PEM	100	
168.01	303.07	W2TB-LA-335	PEM	100	
168.07	268.75	W2TB-LA-332	PSS	100	
171.01	204.34	W2TB-LA-347	PEM	100	
171.08	74.98	W2K-LA-368	PEM	100	
171.92	33.26	W2K-LA-319	PEM	100	
172.06	95.57	W2K-LA-320	PEM	100	
172.51	62.83	W2K-LA-329	PSS	100	
173.12	13.20	W1ST-LA-147	PEM	100	
175.83	63.66	W2K-LA-325	PEM	100	
177.42	98.21	W2K-SC-339	PSS	100	
177.58	53.33	W2K-SC-352	PEM	100	
178.44	42.24	W1ST-SC-136	PEM	100	
180.05	161.75	W2K-SC-358	PSS	100	

TABLE 2. Justification for Construction Right-of-Way Width in Wetlands

Approx. Enter MP	Crossing Length (feet)	Wetland ID	Wetland Type[1]	Construction Right-of-Way Width (feet)	Justification
180.80	113.52	W1ST-SC-141	PSS	100	
181.43	15.84	W2TB-SC-388	PEM	100	
184.33	1103.52	W2TB-SC-343	PEM	100	
184.54	616.70	W2TB-SC-344	PSS	100	
186.88	18.48	W2TB-SC-356	PEM	100	
Market Segment					
189.31	43.82	W2TB-MA-349	PEM	100	
192.02	100.85	W2TB-MA-383	PEM	100	
192.19	37.39	W2TB-MA-384	PEM	100	
194.11	725.47	W2TB-SC-406	PEM	100	
195.20	757.15	W2TB-SC-396	PEM	100	
197.89	59.66	W2K-SC-344	PEM	100	
198.17	22.18	W2TB-SC-361	PEM	100	
198.19	256.61	W2TB-SC-360	PEM	100	
198.24	26.93	W2TB-SC-360	PEM	100	
198.42	22.70	W2TB-SC-357	PEM	100	
200.20	237.07	W2K-SC-139	PEM	100	
200.25	17.95	W1K-SC-219	PSS	100	
201.26	1038.53	W2K-SC-156	PEM	100	
201.59	391.78	W1K-SC-222	PEM	100	
201.89	20.59	W1K-SC-199	PEM	100	
203.16	28.51	W1K-SC-184	PEM	100	
203.18	99.26	W1K-SC-184	PEM	100	
203.26	45.94	W1K-SC-184	PEM	100	
203.74	32.74	W1K-SC-179	PEM	100	
204.84	35.38	W1K-SC-207	PSS	100	
205.17	22.70	W1K-SC-194	PSS	100	

OSHA Type C soil conditions affect slope stability of pipeline trench and saturated soil conditions make it difficult to contain spoil for large diameter pipe. Wider construction right-of-way will ensure excavated material does not run into adjacent wetland. Erosion controls will be installed and maintained throughout construction in accordance with Rover's Procedures and all areas will be restored in compliance with requirements.

1 PFO = Palustrine Forested; PSS = Palustrine Scrub-shrub; PEM = Palustrine emergent