Appendix F

ELBA EXPRESS PIPELINE PROJECT
WETLAND AND WATERBODY CONSTRUCTION
AND MITIGATION PROCEDURES

ELBA EXPRESS COMPANY'S
WETLAND AND WATERBODY CONSTRUCTION AND MITIGATION PROCEDURES

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ELBA EXPRESS COMPANY'S WETLAND AND WATERBODY CONSTRUCTION AND MITIGATION PROCEDURES

I. APPLICABILITY

A. Elba Express Company, LLC (EEC)'s Wetland and Waterbody Construction and Mitigation Procedures (Procedures) for the Elba Express Pipeline Project are based upon the Federal Energy Regulatory Commission's (FERC's) Wetland and Waterbody Construction and Mitigation Procedures published in January 2003 (FERC Procedures). The FERC Procedures state that project sponsors should specify in their applications for a FERC Certificate (Certificate) any individual measures in the FERC Procedures they consider unnecessary, technically infeasible, or unsuitable due to local conditions and to fully describe any alternative measures they would use. Applicants also should explain how those alternative measures would achieve a comparable level of mitigation. As such, EEC has identified project-specific exceptions for the Elba Express Pipeline Project in bold text throughout this document.

If the Elba Express Pipeline Project is certificated, further changes to EEC's Procedures may be approved by the Director of the Office of Energy Projects (Director), upon EEC's written request, if the Director agrees that an alternative measure:

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.

Project-related impacts on non-wetland areas are addressed in EEC'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 <u>at the time of crossing</u>, 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 <u>at the time of construction</u>;

   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 <u>at the time of construction</u>; and

   c. "major waterbody" includes all waterbodies greater than 100 feet wide at the water's edge <u>at the time of construction</u>.

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 will be filed with the Secretary prior to the beginning of construction:

1. the hydrostatic testing information specified in Section VII.B.3. and a wetland delineation report as described in Section VI.A.1., if applicable; and

2. a schedule identifying when trenching or blasting would occur within each waterbody greater than 10 feet wide, or within any designated coldwater fishery. EEC shall 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.

B. The following site-specific construction plans required by these Procedures will be filed with the Secretary for the review and written approval by the Director:

1. plans for extra work areas that would be closer than 50 feet from a waterbody or wetland;

2. plans for major waterbody crossings;

3. plans for the use of a construction right-of-way greater than 75 feet wide in wetlands; and

4. plans for horizontal directional drill (HDD) "crossings" of wetlands or waterbodies.

III. ENVIRONMENTAL INSPECTORS

A. EEC will provide at least one Environmental Inspector (EI) having knowledge of the wetland and waterbody conditions in the project area for each construction spread. The number and experience of Environmental Inspectors assigned to each construction spread will 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. A copy of EEC's Spill Plan will be available in the field on each construction spread. The Spill Plan shall contain Spill Prevention and Response Procedures that meet the requirements of state and Federal agencies.

1. EEC and its contractors will 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. EEC and its contractors will 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. fueling equipment is located in an upland additional temporary workspace area at the furthest distance away from a waterbody or wetland boundary as is practical. If fueling equipment must be located within 100 feet of a wetland or waterbody, Elba Express Company, LLC (EEC) proposes to follow provisions in its Spill Plan;

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; and

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.

2. EEC and its contractors will 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, EEC and its contractors will:

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;

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

EEC will coordinate with the appropriate local, state, and Federal agencies as outlined in these Procedures and in the Certificate.

V. WATERBODY CROSSINGS

A. NOTIFICATION PROCEDURES AND PERMITS

1. EEC has applied to the U.S. Army Corps of Engineers (COE) for the appropriate wetland and waterbody crossing permits.

2. EEC will 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. EEC will apply for state-issued waterbody crossing permits and obtain individual or generic Section 401 water quality certification or waiver.

4. EEC will notify appropriate state authorities at least 48 hours before beginning trenching or blasting within the waterbody, or as specified in state permits.

B. INSTALLATION

1. Time Window for Construction

Unless expressly permitted or further restricted by the appropriate 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 - EEC will conduct all in-stream work in consultation with federal and state regulatory agencies. Unless specific issues are identified for a particular stream crossing, EEC will use its discretion to utilize the most appropriate crossing method for that location during a time period within its construction schedule. In all events, EEC will attempt to minimize in-stream impacts by expediting the crossing time and adhering to best management practices for waterbody crossings.

FERC Staff Comment – This approach is acceptable only if the GDNR, SCDNR, FWS, and COE are amenable to this construction schedule.

2. Extra Work Areas

a. EEC will 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 actively cultivated or rotated cropland or other disturbed land. EEC has identified areas where it will be necessary to utilize extra work spaces within 50 feet of wetland and waterbodies and within wetlands. These extra workspaces are necessary for certain construction techniques for HDD and conventional bore pits at road crossings and the crossings of sensitive environmental features. The Extra Work Space areas within 50 feet of wetlands and waterbodies are detailed in Attachment A.

FERC Staff Comment – We have determined that EEC's extra work spaces (presented as Attachment A to these Procedures) are reasonable and adequately justified. EEC would need to be consistent with its permits from the other jurisdictional agencies (e.g., the COE, the GDNR, and the SCDNR).

b. EEC shall file with the Secretary for review and written approval by the Director, a site-specific construction plan for each extra work area with a less than 50-foot setback from the water's edge, (except where the adjacent upland consists of actively cultivated or rotated cropland or other disturbed land) and a site-specific explanation of the conditions that will not permit a 50-foot setback.

c. EEC will limit clearing of vegetation between extra work areas and the edge of the waterbody to the certificated construction right-of-way.

d. EEC will limit the size of extra work areas to the minimum needed to construct the waterbody crossing.

3. General Crossing Procedures

a. EEC will comply with the COE, or its delegated agency, permit terms and conditions.

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

c. If the pipeline parallels a waterbody, EEC will attempt to maintain at least 15 feet of undisturbed vegetation between the waterbody (and any adjacent wetland) and the construction right-of-way.

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

e. EEC will maintain adequate flow rates to protect aquatic life, and prevent the interruption of existing downstream uses.

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

f. The Chief Inspector (CI), EI, Environmental Contractor (EC), appropriate agency(s), and other EEC inspectors will identify or approve the appropriate waterbody crossing method from Section V.B.6-9 or Section VI.B of the Procedures for each location, based on site-specific conditions at the time of construction. In all instances, the crossing method utilized will be in accordance with all federal, state and local permit requirements including specific measures listed within this plan for the selected method.

FERC Staff Comment – Implementation of this method of the EI determining crossing methods at the stream location in consultation with appropriate agencies would offer the same level of protection or greater than identifying crossing methods prior to construction.

4. Spoil Pile Placement and Control

a. All spoil from minor and intermediate waterbody crossings, and upland spoil from major waterbody crossings, will 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. EEC will use sediment barriers to prevent the flow of spoil or heavily 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. The number of such crossings of each waterbody will be limited to one per piece of clearing equipment.

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

(1) equipment pads and culvert(s) (see figure Proc-1);

(2) equipment pads or railroad car bridges without culverts (see figure Proc-2);

(3) clean rock fill and culvert(s) (see figure Proc-3); and

(4) flexi-float or portable bridges (see figure Proc-4).

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. EEC will 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. EEC will design and maintain equipment bridges to prevent soil from entering the waterbody.

e. EEC will remove equipment bridges as soon as possible after permanent seeding unless the COE, or its delegated agency, authorizes it as a permanent bridge.

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, EEC will remove equipment bridges as soon as possible after final cleanup.

6. Dry-Ditch Crossing Methods

a. Unless approved otherwise by the appropriate state agency, EEC will 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.

b. Dam and Pump (see figure Proc-5)

(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;

(iv) prevent streambed scour at pump discharge; and

(v) monitor the dam and pumps to ensure proper operation throughout the waterbody crossing.

c. Flume Crossing (see figure Proc-6)

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 in 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 (HDD) (see figure Proc-7)

To the extent they were not provided as part of the pre-certification process, for each waterbody or wetland that would be crossed using the HDD method, EEC will provide 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) a description of how an inadvertent release of drilling mud would be contained and cleaned up; and

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

7. Crossings of Minor Waterbodies (see figure Proc-8)

Where a dry-ditch crossing is not required, minor waterbodies will 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 (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 will 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, EEC 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 will be developed in consultation with the appropriate state and Federal agencies and will include extra work areas, spoil storage areas, sediment control structures, etc., as well as mitigation for navigational issues.

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

EEC will install sediment barriers (as defined in Section IV.F.2.a. of the Plan) immediately after initial disturbance of the waterbody or adjacent upland. Sediment barriers will 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, 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; and

c. use 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

EEC will 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 heavily silt-laden water flowing into any waterbody. Removal of the dewatering structures will take place as soon as possible after the completion of dewatering activities.

C. RESTORATION

1. EEC will 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, EEC will 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. EEC will return all waterbody banks to preconstruction contours or to a stable angle of repose as approved by the Environmental Inspector.

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

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

6. EEC will revegetate disturbed riparian areas with conservation grasses and legumes or native plant species, preferably woody species.

7. EEC will 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, EEC will 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.

8. Sections V.C.3. through V.C.6. above also apply to those perennial or intermittent streams not flowing at the time of construction.

D. POST-CONSTRUCTION MAINTENANCE

1. EEC will limit vegetation maintenance 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 pipeline corrosion/leak surveys, a corridor centered on the pipeline and up to 10 feet wide may be maintained in a herbaceous state. In addition, trees that are located within 15 feet of the pipeline that are greater than 15 feet in height may be cut and removed from the permanent right-of-way.

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

VI. WETLAND CROSSINGS

A. GENERAL

1. EEC shall conduct a wetland delineation using the current Federal methodology and file a wetland delineation report with the Secretary before construction. 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. EEC will 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, EEC will route the new pipeline in a manner that minimizes disturbance to wetlands. Where looping an existing pipeline, EEC will overlap the existing pipeline right-of-way with the new construction right-of-way. In addition, EEC will 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. EEC will 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 expand beyond 75 feet. Early in the planning process EEC identified site-specific areas where existing soils lack adequate unconfined compressive strength that would result in excessively wide ditches and/or difficult to contain spoil piles.

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

5. EEC will implement the measures of Sections V. <u>and</u> 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, EEC will 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. EEC will 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. EEC will 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 actively cultivated or rotated cropland or other disturbed land. Areas where it will be necessary to utilize extra work spaces within 50 feet of wetlands and waterbodies are identified in Attachment A.

b. EEC shall file with the Secretary for review and written approval by the Director, a site-specific construction plan for each extra work area with a less than 50-foot setback from wetland boundaries (except where adjacent upland consists of actively cultivated or rotated cropland or other disturbed land) and a site-specific explanation of the conditions that will not permit a 50-foot setback.

c. EEC will limit clearing of vegetation between extra work areas and the edge of the wetland to the certificated construction right-of-way.

d. 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.

e. The only access roads, other than the construction right-of-way, which will be used in wetlands without Director approval, are those existing roads that can be used with no modification and no impact on the wetland.

2. Crossing Procedures

a. EEC will comply with COE, or its delegated agency, permit terms and conditions (see figures Proc-9 and Proc-10).

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

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

d. EEC will minimize the length of time that topsoil is segregated and the trench is open.

e. EEC will 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. EEC will cut vegetation just aboveground level, leaving existing root systems in place, and remove it from the wetland for disposal.

g. EEC will 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. EEC will 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 or frozen. Immediately after backfilling is complete, restore the segregated topsoil to its original location.

i. EEC will 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, EEC will use low-ground-weight construction equipment, or operate normal equipment on timber riprap, prefabricated equipment mats, or terra mats.

k. EEC will not cut trees outside of the approved construction work area to obtain timber for riprap or equipment mats.

l. EEC will attempt to use no more than two layers of timber riprap to support equipment on the construction right-of-way.

m. EEC will remove all project-related material used to support equipment on the construction right-of-way upon completion of construction.

3. Temporary Sediment Control

EEC will install sediment barriers (as defined in Section IV.F.2.a. of the Plan) immediately after initial disturbance of the wetland or adjacent upland. Sediment barriers will 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, sediment barriers will be maintained 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. EEC will 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, EEC will install sediment barriers along the edge of the construction right-of-way as necessary to prevent sediment flow into the wetland.

c. EEC will 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. EEC will remove these sediment barriers during right-of-way cleanup.

4. Trench Dewatering

EEC will 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 heavily silt-laden water flowing into any wetland. EEC will remove the dewatering structures as soon as possible after the completion of dewatering activities.

C. RESTORATION

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

2. For each wetland crossed, EEC will install a trench breaker at the base of slopes near the boundary between the wetland and adjacent upland areas. EEC will install a permanent slope breaker across the construction right-of-way at the base of a slope(s) 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, EEC will 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.

3. EEC will not use fertilizer, lime, or mulch unless required in writing by the appropriate land management or state agency.

EEC does not intend to revegetate wetlands by planting native species. Studies have shown that natural revegetation of wetlands in the southeast have a higher success rate than planted wetlands due to inherent, regenerative capacities of seedbank and vegetative reproduction. Natural species selection will occur across the environmental gradient and microsites where they are best adapted versus seeded or installed plantings.

FERC Staff Comment – This approach is acceptable only if the COE agrees. Complete analysis of this approach can be found in section 4.4.

4. EEC has outlined its wetland restoration methods in its Wetland Mitigation Plan. A Draft Wetland Mitigation Plan has been submitted to the USACE with EEC's application to the USACE to construct the pipeline within waters of the U.S. (in compliance with Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899). EEC's wetland restoration measures as approved by the USACE will become part of the USACE's permit authorizing construction of the proposed project within waters of the U.S. EEC will comply with federal and state permit conditions regarding wetland restoration and mitigation.

5. EEC will ensure that all disturbed areas successfully revegetate with wetland herbaceous and/or woody plant species.

6. EEC will remove temporary sediment barriers located at the boundary between wetland and adjacent upland areas after upland revegetation and stabilization of adjacent upland areas are judged to be successful as specified in Section VII.A.5. of the Plan.

D. POST-CONSTRUCTION MAINTENANCE

1. EEC will not conduct vegetation maintenance over the full width of the permanent right-of-way in wetlands. However, to facilitate periodic pipeline corrosion/leak surveys, a corridor centered on the pipeline and up to 10 feet wide may be maintained in a herbaceous state. In addition, trees within 15 feet of the pipeline greater than 15 feet in height may be selectively cut and removed from the permanent right-of-way.

2. EEC will not use herbicides or pesticides in or within 100 feet of a wetland, except as allowed by the appropriate land management agency or state agency.

3. EEC will continue revegetation efforts until wetland revegetation is successful. Upon EEC's determination that revegetation is successful, it will terminate monitoring. An annual report will be filed with the Secretary identifying the status of the wetland revegetation efforts. The percent cover achieved and problem areas (weed invasion issues, poor revegetation, etc.) will be included in the report. EEC will file a report annually until wetland revegetation is successful.

4. Wetland revegetation shall be considered successful if the cover of herbaceous and/or woody species is at least 80 percent of the type, density, and distribution of the vegetation in adjacent wetland areas that were not disturbed by construction. If revegetation is not successful at the end of 3 years, EEC will develop and implement (in consultation with a professional wetland ecologist) a remedial revegetation plan to actively revegetate the wetland. EEC will continue revegetation efforts until wetland revegetation is successful.

VII. HYDROSTATIC TESTING

A. NOTIFICATION PROCEDURES AND PERMITS

1. EEC will apply for state-issued water withdrawal permits, as required.

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

3. EEC will 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. EEC will 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, EEC will address the operation and refueling of these pumps in the project's Spill Prevention and Response Procedures.

3. EEC 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.

C. INTAKE SOURCE AND RATE

1. EEC will screen the intake hose to prevent entrainment of fish.

2. EEC will 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. EEC will maintain adequate flow rates to protect aquatic life, provide for all waterbody uses, and provide for downstream withdrawals of water by existing users.

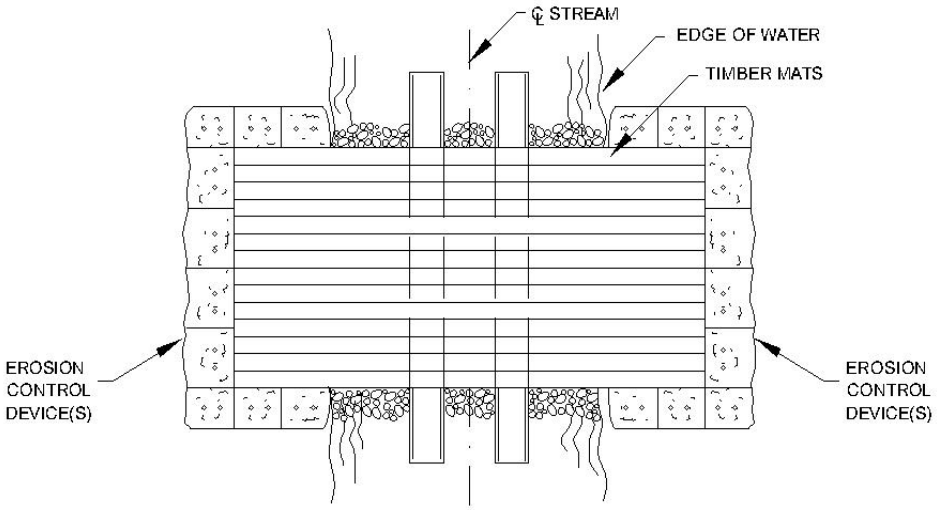
4. EEC will locate hydrostatic test manifolds outside wetlands and riparian areas to the maximum extent practicable.

D. DISCHARGE LOCATION, METHOD, AND RATE

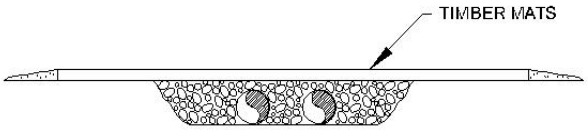
1. EEC will regulate discharge rate, use energy dissipation device(s), and install sediment barriers, as necessary, to prevent erosion, streambed scour, suspension of sediments, or excessive streamflow (see figure Proc-11).

2. EEC will 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.

TIMBER MAT WITH CULVERT BRIDGE



PLAN



ELEVATION

NOTES

1. THIS TYPE OF BRIDGE IS GENERALLY USED FOR MEDIUM-SIZED STREAM CROSSINGS.
2. THE NUMBER AND SIZE OF THE FLUME PIPES WILL BE DESIGNED TO HANDLE MAXIMUM EXPECTED FLOW OF STREAM AT TIME OF CONSTRUCTION.
3. CLEAN, SILT-FREE ROCK TO BE USED ONLY. INSTALL 1 FT. MIN. OF FILL OVER CULVERT.
4. BRIDGE TO REMAIN IN PLACE UNTIL THE COMPLETION OF FINAL RESTORATION.
5. SILT FENCE, WEED-FREE STRAW BALES OR SANDBAGS MAY BE USED INTERCHANGEABLY.
6. STRAW BALES OR EQUIVALENT SEDIMENT BARRIERS WILL BE PLACED AT THE EDGE OF EQUIPMENT BRIDGE AT THE END OF THE WORK DAY TO PREVENT EROSION BUT WILL BE REMOVED DURING CONSTRUCTION ACTIVITY.

ENG. RECORD		DATE
DRAWN BY:		
DRAWING APPROVAL		
PROJECT APPROVAL		
SURVEY DATE:		
SCALE:		
PROJECT ID:		
FILE NAME: 03687738		

ep

TYPICAL
ROCK/CULVERT BRIDGE
EQUIPMENT CROSSING

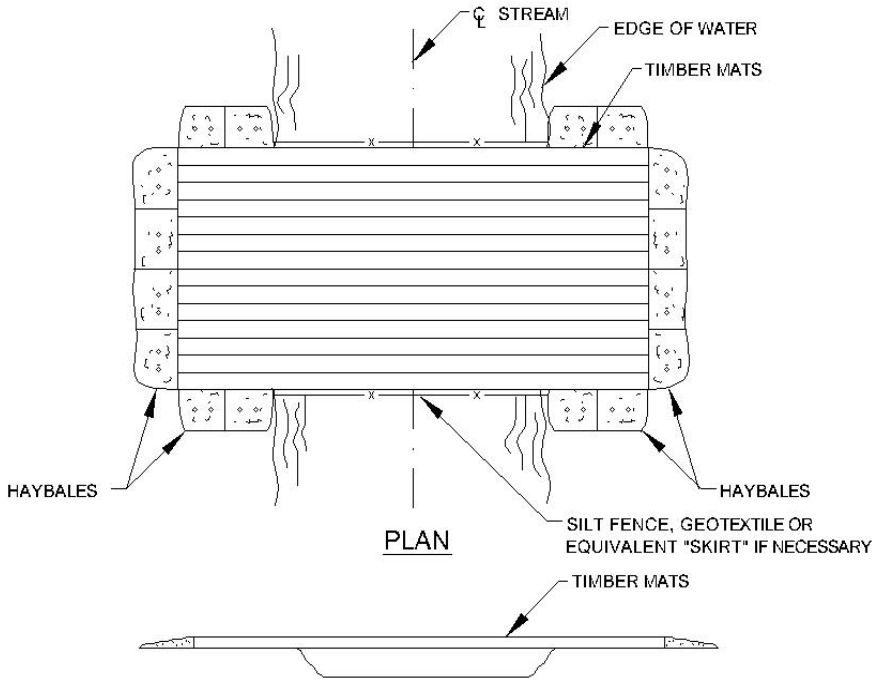
DWG. NO. PROC – 1

NO	DATE	BY	DESCRIPTION	PROJ. ID	APPR.

REVISIONS

TGPLETTERPORTRAIT (Rev. 2/01)

TIMBER MAT BRIDGE WITHOUT CULVERTS



NOTES

1. THIS TYPE OF BRIDGE IS GENERALLY USED FOR SMALL STREAM CROSSINGS LESS THAN 20 FEET IN WIDTH IN COMBINATION WITH A PROPER STREAM BANK CONFIGURATION.
2. BRIDGE WILL BE TEMPORARILY REMOVED IF HIGH WATER RENDERS IT UNSAFE FOR CROSSING.
3. BRIDGE TO REMAIN IN PLACE UNTIL THE COMPLETION OF FINAL RESTORATION.
4. SILT FENCE, HAYBALES OR SANDBAGS MAY BE USED INTERCHANGEABLY.
5. A "SKIRT" FORMED OF SILT FENCE, GEOTEXTILE FABRIC OR EQUVALENT SHALL BE PLACED ON THE SIDES AND BOTTOM OF THE BRIDGE TO TRAP SEDIMENT AS NECESSARY.
6. INDIVIDUAL MATS SHALL BE ANCHORED AND BUTTED TIGHTLY TO MINIMIZE THE INTRODUCTION OF SEDIMENT TO THE WATERBODY.
7. STRAW BALES OR APPROPRIATE BARRIERS WILL BE PLACED AT THE EDGE OF EQUIPMENT BRIDGE AT THE END OF THE WORK DAY TO PREVENT EROSION BUT WILL BE REMOVED DURING CONSTRUCTION ACTIVITY.

ENG. RECORD		DATE
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DRAWING APPROVAL		
PROJECT APPROVAL		
SURVEY DATE:		
SCALE:		
PROJECT ID:		
FILE NAME: 03687736		

TYPICAL MAT BRIDGE WITHOUT CULVERTS EQUIPMENT CROSSING

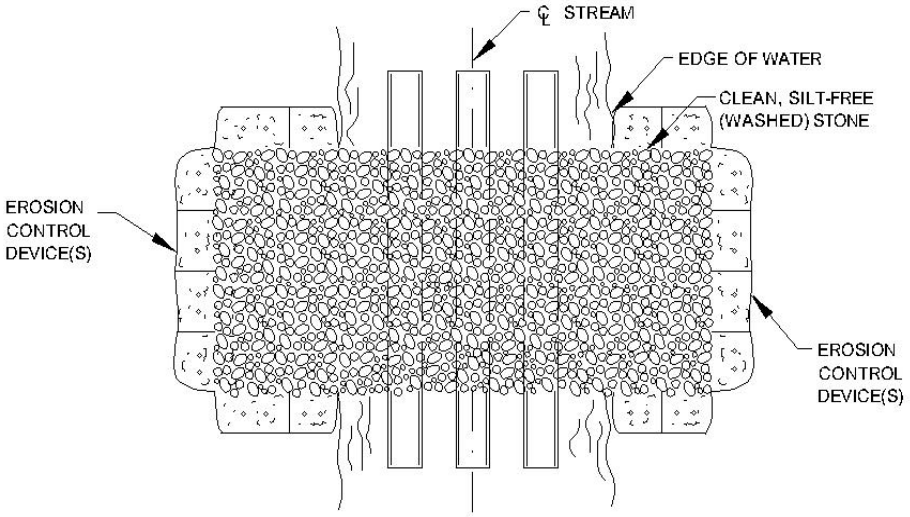
DWG. NO. PROC - 2

NO	DATE	BY	DESCRIPTION	PROJ. ID	APPR.

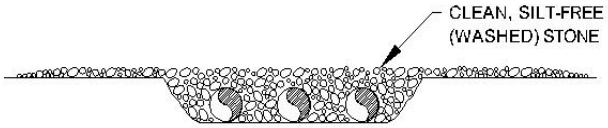
REVISIONS

TGPLETTERPORTRAIT (Rev. 2/01)

ROCK/CULVERT BRIDGE



PLAN



ELEVATION

NOTES

1. THIS TYPE OF BRIDGE IS USED ON MEDIUM TO LARGE STREAMS WITH POTENTIAL FOR SIGNIFICANT FLOW.
2. THE NUMBER AND SIZE OF FLUME PIPES WILL BE DESIGNED TO HANDLE THE MAXIMUM EXPECTED FLOW OF THE STREAM AT TIME OF CONSTRUCTION.
3. CLEAN, SILT-FREE ROCK TO BE USED ONLY. INSTALL 1 FT. MIN. OF FILL OVER CULVERT.
4. BRIDGE TO REMAIN IN PLACE UNTIL THE COMPLETION OF FINAL RESTORATION.
5. SILT FENCE, WEED-FREE STRAW BALES OR SANDBAGS MAY BE USED INTERCHANGEABLY.
6. STRAW BALES OR EQUIVALENT SEDIMENT BARRIERS WILL BE PLACED AT THE EDGE OF EQUIPMENT BRIDGE AT THE END OF THE WORK DAY TO PREVENT EROSION BUT WILL BE REMOVED DURING CONSTRUCTION ACTIVITY.

ENG. RECORD		DATE
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DRAWING APPROVAL		
PROJECT APPROVAL		
SURVEY DATE:		
SCALE:		
PROJECT ID:		
FILE NAME: 03687737		

TYPICAL ROCK & FLUME EQUIPMENT CROSSING

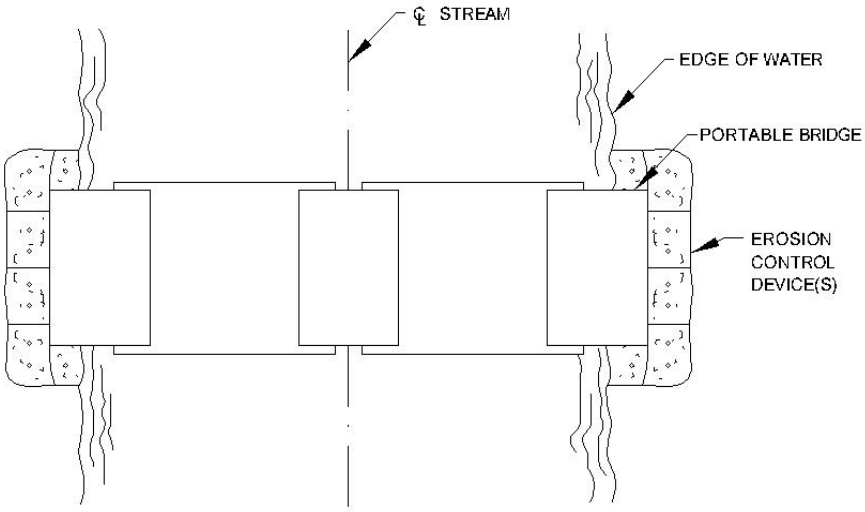
DWG. NO. PROC – 3

NO	DATE	BY	DESCRIPTION	PROJ. ID	APPR.

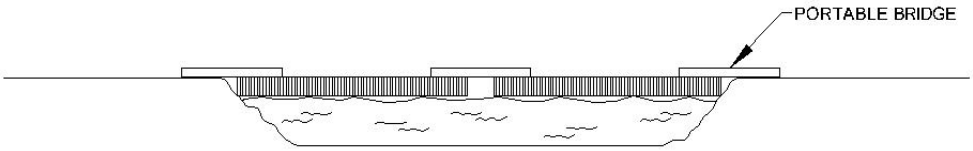
REVISIONS

TCPLETTERPORTRAIT (Rev. 8/01)

PORTABLE BRIDGE



PLAN



ELEVATION

NOTES

1. THIS TYPE OF BRIDGE IS GENERALLY USED ON WIDE, DEEP CROSSINGS.
2. BRIDGE IS ANCHORED AND/OR TIED OFF TO ANCHOR BLOCKS FOR STABILITY.
3. BRIDGE TO REMAIN IN PLACE UNTIL THE COMPLETION OF FINAL RESTORATION.
4. SILT FENCE, WEED-FREE STRAW BALES OR SANDBAGS MAY BE USED INTERCHANGEABLY.
5. STRAW BALES OR EQUIVALENT SEDIMENT BARRIERS WILL BE PLACED AT THE EDGE OF EQUIPMENT BRIDGE AT THE END OF THE WORK DAY TO PREVENT EROSION BUT WILL BE REMOVED DURING CONSTRUCTION ACTIVITY.

ENG. RECORD		DATE
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PROJECT APPROVAL		
SURVEY DATE:		
SCALE:		
PROJECT ID:		
FILE NAME: 03687739		

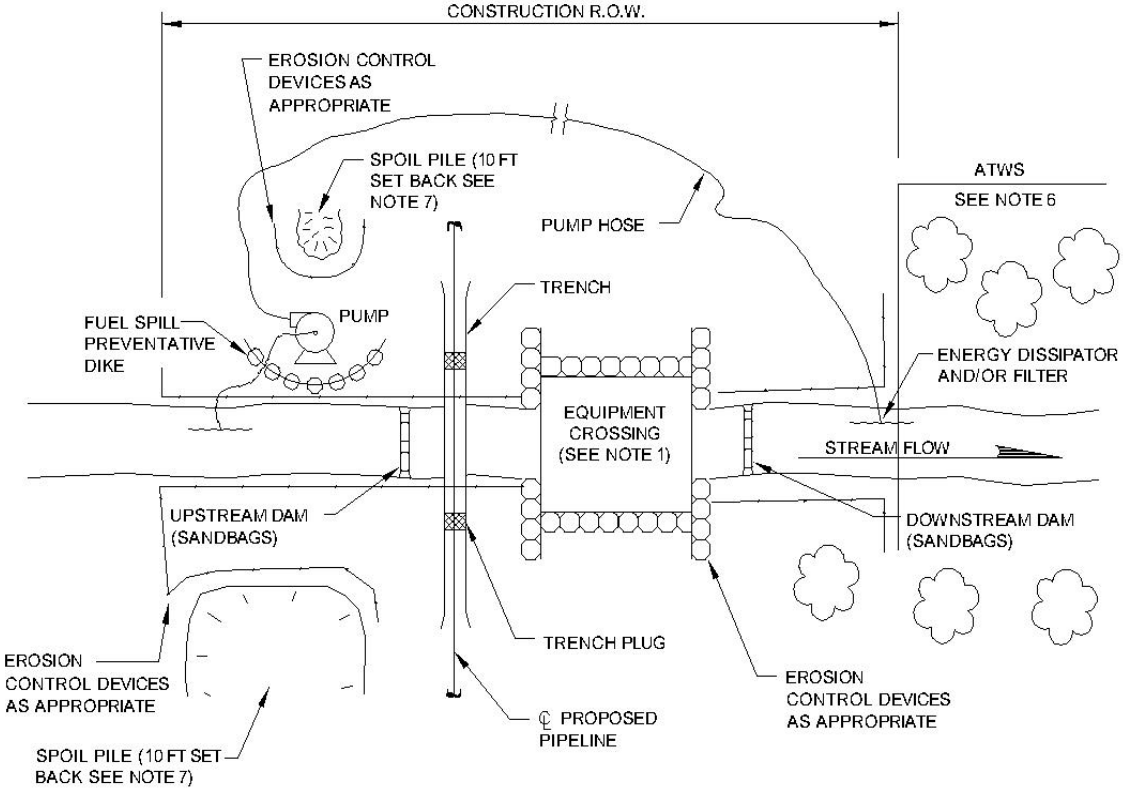
TYPICAL PORTABLE BRIDGE EQUIPMENT CROSSING

DWG. NO. PROC – 4

NO	DATE	BY	DESCRIPTION	PROJ. ID	APPR.

REVISIONS

TGPLETTERPORTRAIT (Rev. 2/01)



PLAN
NOT TO SCALE

NOTES:

1. EQUIPMENT CROSSINGS WILL BE SELECTED BASED UPON SITE SPECIFIC CONDITIONS (REFER TO PROC - 1 TO PROC - 4).
2. SET UP PUMP AND HOSE AS SHOWN, OR USE OTHER PRACTICAL ALTERNATIVES. PUMP SHOULD HAVE TWICE THE PUMPING CAPACITY OF ANTICIPATED FLOW.
3. CONTRACTOR TO ENSURE A SUFFICIENT NUMBER OF ACTIVE AND BACKUP PUMPS TO MAINTAIN THE CAPACITY OF THE STREAM FLOW AT ALL TIMES DURING INSTALLATION.
4. ALL INTAKE HOSES WILL BE SCREENED.
5. DISMANTLE DOWNSTREAM DAM, THEN UPSTREAM DAM. KEEP PUMP RUNNING TO MAINTAIN STREAM FLOW.
6. THE REQUIRED SET BACK FOR ATWS IS 50 FEET FROM TOP OF BANK UNLESS APPROVED OTHERWISE BY THE APPROPRIATE AGENCIES.
7. THE MINIMUM REQUIRED SETBACK FOR SPOIL PILE IS 10 FEET FROM THE TOP OF BANK.
8. STRAW BALES OR EQUIVALENT SEDIMENT BARRIERS WILL BE PLACED AT THE EDGE OF EQUIPMENT BRIDGE AT THE END OF THE WORK DAY TO PREVENT EROSION BUT WILL BE REMOVED DURING CONSTRUCTION ACTIVITY.

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PROJECT APPROVAL		
SURVEY DATE:		
SCALE:		
PROJECT ID:		
FILE NAME: 03687731		

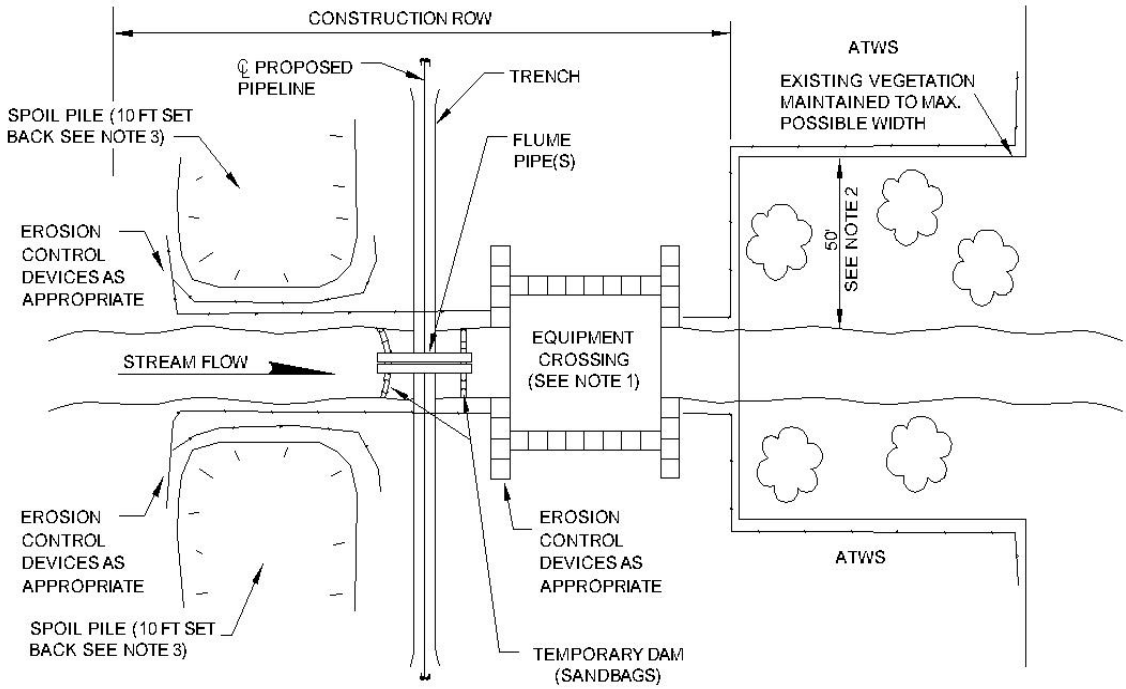
NO	DATE	BY	DESCRIPTION	PROJ. ID	APPR.

REVISIONS

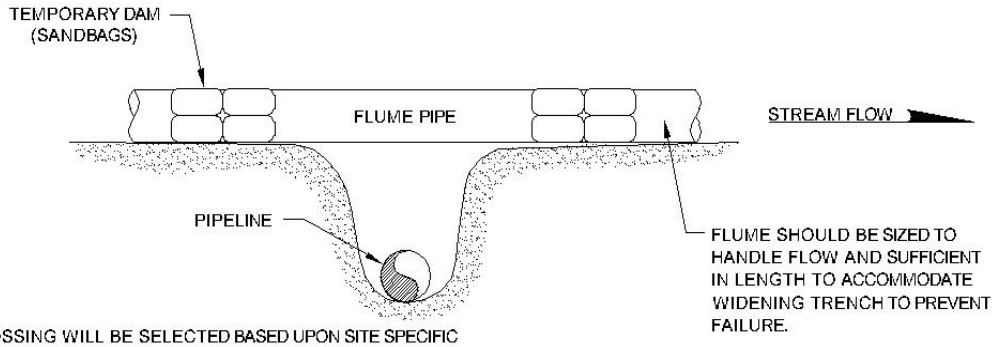
TYPICAL
DRY WATERBODY CROSSING
(METHOD 2B, PUMP-AROUND)

DWG. NO. PROC - 5

TGPLETTERPORTRAIT (Rev. 2/01)



CROSS SECTION FOR TRENCH FLUMING



NOTE:

1. EQUIPMENT CROSSING WILL BE SELECTED BASED UPON SITE SPECIFIC CONDITIONS (REFER TO PROC - 1 TO PROC - 4).
2. THE REQUIRED SET BACK FOR ATWS IS 50 FEET FROM TOP OF BANK UNLESS APPROVED OTHERWISE BY THE APPROPRIATE AGENCIES.
3. THE MINIMUM REQUIRED SETBACK FOR SPOIL PILE IS 10 FEET FROM THE TOP OF BANK.
4. EQUIPMENT BRIDGE SHALL REMAIN IN PLACE UNTIL THE COMPLETION OF FINAL RESTORATION.
5. STRAW BALES OR EQUIVALENT SEDIMENT BARRIERS WILL BE PLACED AT THE EDGE OF EQUIPMENT BRIDGE AT THE END OF THE WORKDAY DAY TO PREVENT EROSION BUT WILL BE REMOVED DURING CONSTRUCTION ACTIVITY.

ENG. RECORD		DATE
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DRAWING APPROVAL		
PROJECT APPROVAL		
SURVEY DATE:		
SCALE:		
PROJECT ID:		
FILE NAME: 03687730		

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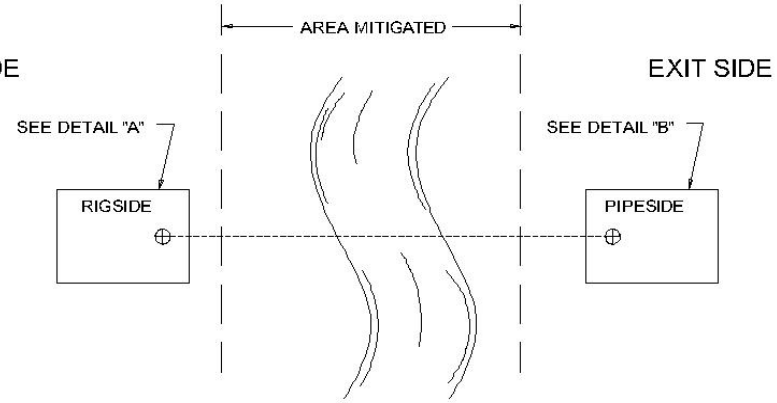
TYPICAL
DRY WATERBODY CROSSING
(METHOD 2A – FLUMED)

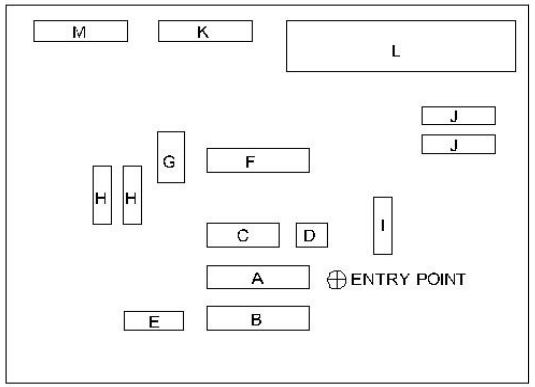
DWG. NO. PROC – 6

NO	DATE	BY	DESCRIPTION	PROJ. ID	APPR.

REVISIONS

TGPLETTERPORTRAIT (Rev. 2/01)

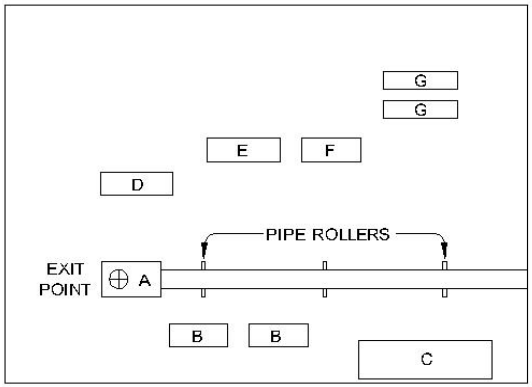




A = DRILL RIG
B = DRILLER'S CONSOLE, GENERATOR
C = DRILL PIPE
D = CRANE
E = PARTS VAN
F = MUD CLEANING UNIT
G = MUD MIXING TANK
H = MUD PUMPS
I = MUD PIT
J = FRAC TANKS
K = DRILLING MUD (PALLETS)
L = PARKING
M = OFFICE TRAILER

DETAIL "A"

N.T.S.



A = EXIT PIT
B = LIFT EQUIPMENT
C = WELDING AREA
D = PIT
E = MUD CLEANING
F = GENERATOR
G = FRAC TANKS

DETAIL "B"

N.T.S.

ENG. RECORD		DATE
DRAWN BY:		
DRAWING APPROVAL		
PROJECT APPROVAL		
SURVEY DATE:		
SCALE:		
PROJECT ID:		
FILE NAME: 03687733		

TYPICAL WORKSPACE LAYOUT DIRECTIONAL DRILL METHOD

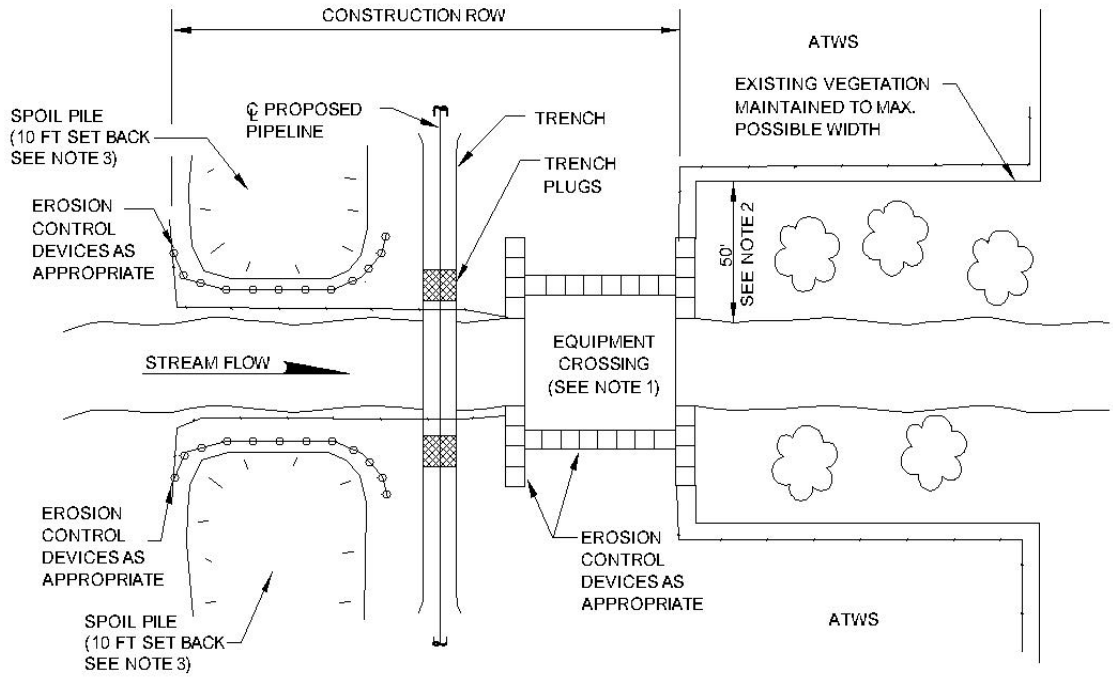
DWG. NO. PROC – 7

RE

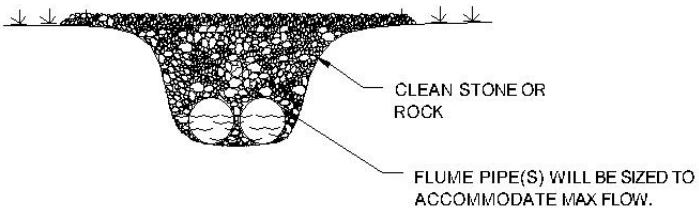
DATE	BY	DESCRIPTION	PROJ. ID	APPR.

REVISIONS

.ETTERLANDSCAPE (Rev. 2/01)



CROSS SECTION FOR EQUIPMENT CROSSING



NOTE:

1. EQUIPMENT CROSSINGS WILL BE SELECTED BASED UPON SITE SPECIFIC CONDITIONS (REFER TO PROC - 1 TO PROC - 4).
2. THE REQUIRED SET BACK FOR ATWS IS 50 FEET FROM TOP OF BANK UNLESS APPROVED OTHERWISE BY THE APPROPRIATE AGENCIES.
3. THE MINIMUM REQUIRED SETBACK FOR SPOIL PILE IS 10 FEET FROM THE TOP OF BANK.
4. EQUIPMENT BRIDGE TO REMAIN IN PLACE UNTIL THE COMPLETION OF FINAL RESORATION.
5. STRAW BALES OR EQUIVALENT SEDIMENT BARRIERS WILL BE PLACED AT THE EDGE OF EQUIPMENT BRIDGE AT THE END OF THE WORK DAY TO PREVENT EROSION BUT WILL BE REMOVED DURING CONSTRUCTION ACTIVITY.

ENG. RECORD		DATE
DRAWN BY:		
DRAWING APPROVAL		
PROJECT APPROVAL		
SURVEY DATE:		
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PROJECT ID:		
FILE NAME: 03687740		

ep

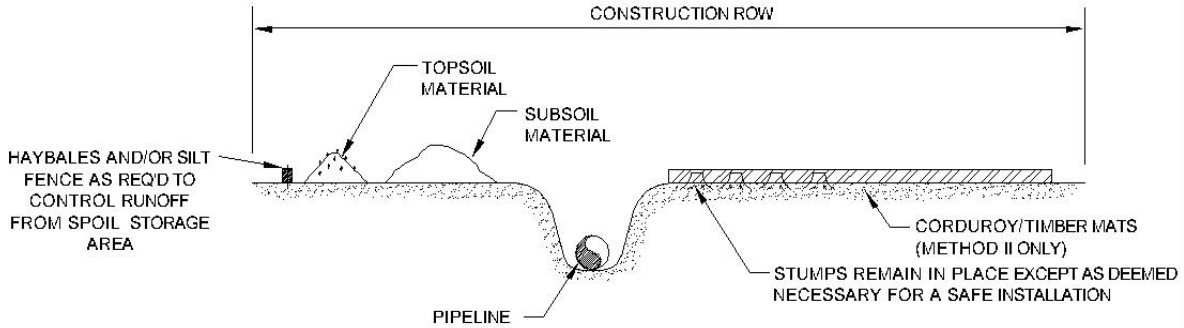
TYPICAL WET WATERBODY CROSSING (METHOD I)

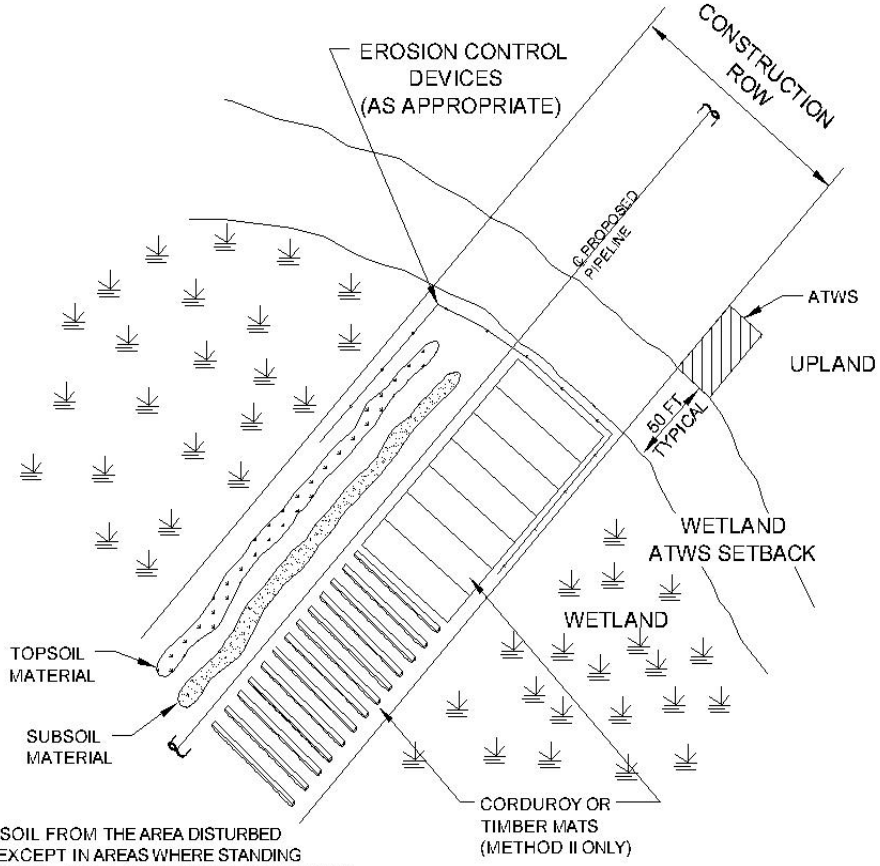
DWG. NO. PROC – 8

NO	DATE	BY	DESCRIPTION	PROJ. ID	APPR.

REVISIONS

TGPLETTERPORTRAIT (Rev. 2/01)





NOTES:

1. SEGREGATE TOPSOIL FROM THE AREA DISTURBED BY TRENCHING, EXCEPT IN AREAS WHERE STANDING WATER IS PRESENT OR SOILS ARE SATURATED OR FROZEN.
2. RE-SEED W/ANNUAL RYEGRASS @ 40 LBS/ACRE IN ALL AREAS W/O STANDING WATER UNLESS ALTERNATIVES HAVE BEEN APPROVED BY MANAGING AGENCY.
3. NO FERTILIZER OR LIME SHALL BE USED.
4. INSTALL TRENCH PLUGS & WATERBAR ON BOTH SIDES OF WETLAND IF THE HYDROLOGICAL CONDITIONS WOULD DRAIN THE WETLAND.
5. DO NOT USE LIQUID MULCH BINDERS WITHIN 100 FEET OF WETLANDS OR WATERBODIES.

ENG. RECORD		DATE
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DRAWING APPROVAL		
PROJECT APPROVAL		
SURVEY DATE:		
SCALE:		
PROJECT ID:		
FILE NAME: 03687734		

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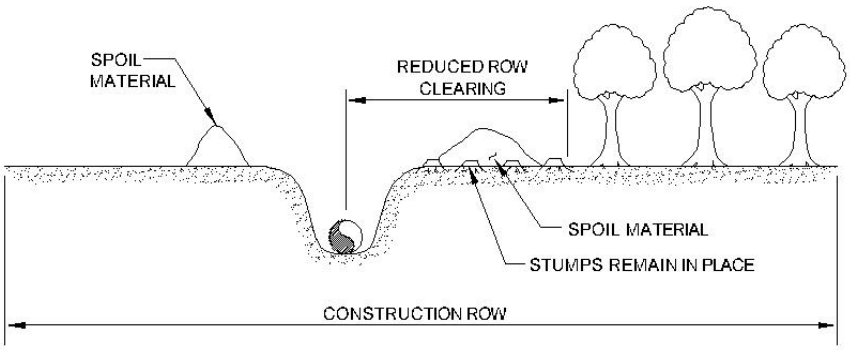
TYPICAL
STANDARD AND CONVENTIONAL
WETLAND CONSTRUCTION
(METHOD I & II)

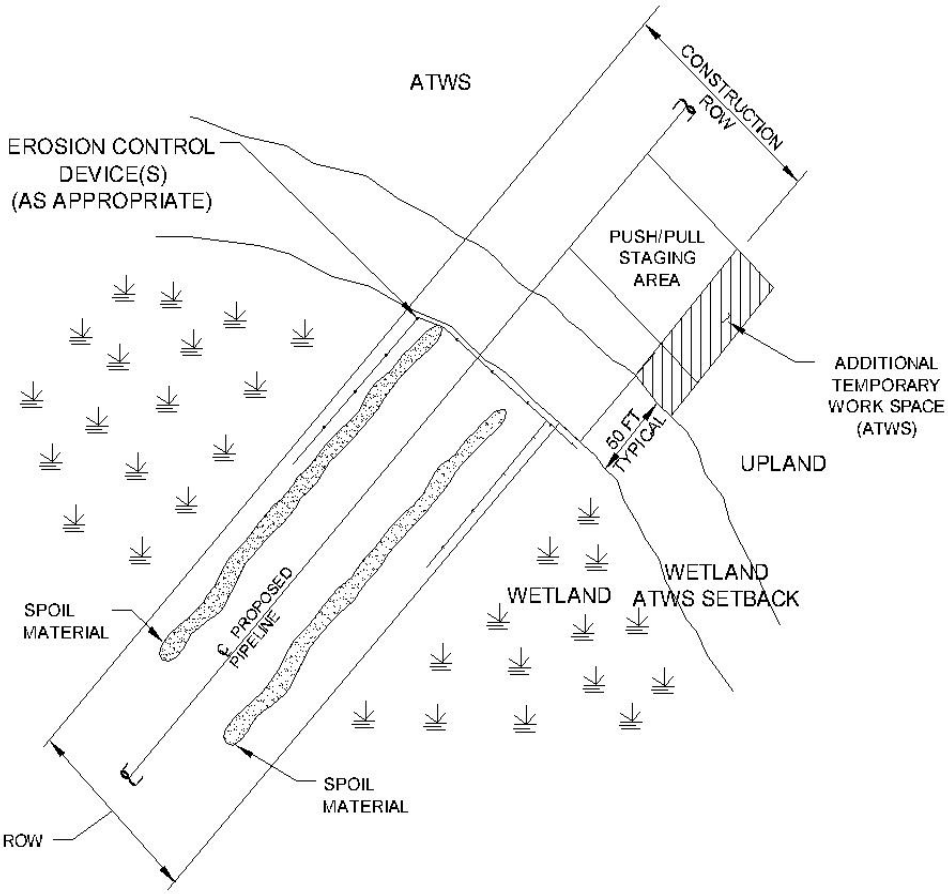
DWG. NO. PROC - 9

NO	DATE	BY	DESCRIPTION	PROJ. ID	APPR.

REVISIONS

TGPLETTERPORTRAIT (Rev. 2/01)





NOTES:

1. SEGREGATE TOPSOIL FROM THE AREA DISTURBED BY TRENCHING, EXCEPT IN AREAS WHERE STANDING WATER IS PRESENT OR SOILS ARE SATURATED OR FROZEN.
2. INSTALL TRENCH BREAKERS & WATERBARS ON BOTH SIDES OF THE WETLAND IF HYDROLOGIC CONDITIONS WOULD DRAIN THE WETLAND.
3. DO NOT SEED WETLAND AREAS W/SATURATED SOIL.
4. NO FERTILIZER OR LIME IS PERMITTED.
5. DO NOT USE LIQUID MULCH BINDERS WITHIN 100 FEET OF WETLANDS OR WATERBODIES.

NO	DATE	BY	DESCRIPTION	PROJ. ID	APPR.

REVISIONS

ENG. RECORD		DATE
DRAWN BY:		
DRAWING APPROVAL		
PROJECT APPROVAL		
SURVEY DATE:		
SCALE:		
PROJECT ID:		
FILE NAME: 03687735		

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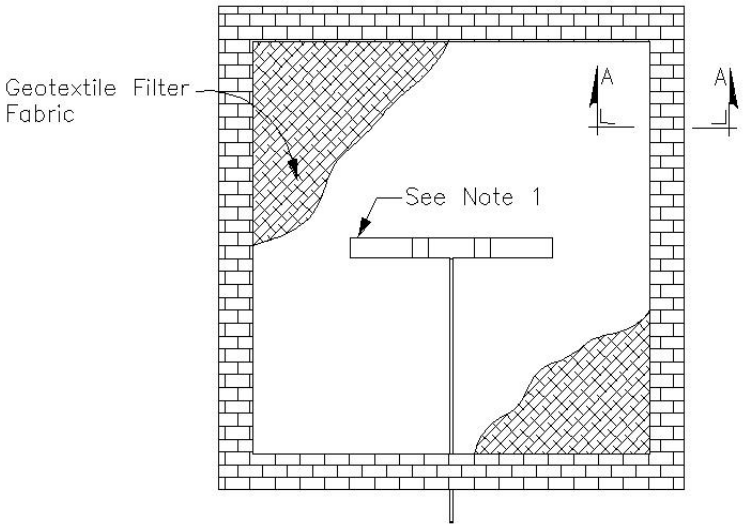
TYPICAL
PUSH/PULL WETLAND
CONSTRUCTION (METHOD III)

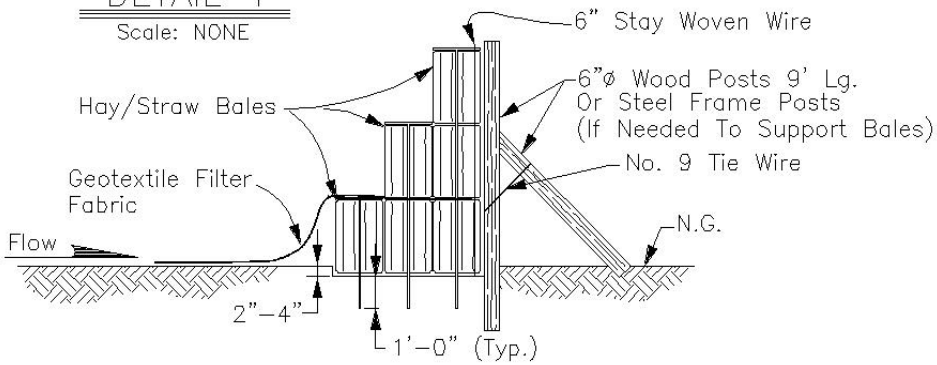
DWG. NO. PROC - 10

TGPLETTERPORTRAIT (Rev. 2/01)



DETAIL 1

Scale: NONE



SECTION "A–A"

Scale: NONE

NOTES:

1. Energy Dissipator (Baffle Device, Splash Plate, Filter Bag) To Be Anchored By Contractor.
2. Typical Energy Dissipator Must Be Used In Conjunction w/ Filter (As Appropriate).
3. Attempt to Locate In An Upland Area.
4. Sediment Must Be Removed When Accumulations Reach 1/2 The Height Of The Filters.
5. Discharge Structure To Be Underlain With Geotextile Fabric.
6. Do Not Discharge Into State–designated Exceptional Value Waters, Waterbodies Which Provide Habitat For Federally Listed T&E Species, Or Waterbodies Designated As Public Water Supplies, Unless Appropriate Federal, State, And Local Permitting Agencies Grant Written Permission.

ENG. RECORD		DATE
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DRAWING APPROVAL		
PROJECT APPROVAL		
SURVEY DATE:		
SCALE:		
PROJECT ID:		
FILE NAME: 03687726		

TYPICAL ENERGY DISSIPATOR

DWG. NO. PROC – 11

NO	DATE	BY	DESCRIPTION	PROJ. ID	APPR.

REVISIONS

TGPLETTERPORTRAIT (Rev. 2/01)

Attachment A

AREAS ALONG THE ELBA EXPRESS PIPELINE PROJECT WHERE EEC PROPOSES EXTRA WORK SPACES AND FACILITIES WITHIN 50 FEET OF WETLANDS AND WATERBODIES

AREAS WHERE EEC PROPOSES EXTRA WORK SPACES/ATWS AND FACILITIES WITHIN 50 FEET OF WETLANDS AND WATERBODIES

MP	Work Space ID	County/ State	Approximate Dimension	Wetland/ Waterbody ID	Drawing Reference	Description	Landuse Acreage				Total Acreage[a]	Exception Requested Reasoning
							PFO	PSS	PEM	OTHER		
Extra Work Spaces/ATWS and Facilities within 50 feet of a WETLAND												
Southern Segment												
16.4	EF-20	Effingham/GA	100x150	W1BEF017	SN-GA-ELBA-1-007	State Highway 119	0.17	--	--	0.17	0.34	Conventional Bore for Major Highway Crossing
19.4	EF-32	Effingham/GA	50x245 + 45x50 (Triangle)	W1BEF029	SN-GA-ELBA-1-008	Boaen Road	0.15	--	--	0.16	0.31	Conventional Bore for Road Crossing
19.4	N/A (TWS)	Effingham/GA	50X257 + 48X50 (Triangle)	WiBEF029	SN-GA-ELBA-1-008	Boaen Road	0.25	--	--	0.05	0.30	Conventional Bore for Road Crossing
19.4	EF-33	Effingham/GA	50x135 + 35x50 (Triangle)	W1BEF030	SN-GA-ELBA-1-008	Boaen Road	0.17	--	--	0.00	0.17	Conventional Bore for Road Crossing
19.4	N/A (TWS)	Effingham/GA	50x242 + 43x50 (Triangle)	W1BEF030	SN-GA-ELBA-1-008	Boaen Road	0.11	--	--	0.22	0.33	Conventional Bore for Road Crossing
20.6	EF-37	Effingham/GA	50x270 + 45x50 (Triangle)	W1BEF033	SN-GA-ELBA-1-009	MT. Hope Road	--	--	--	0.34	0.34	Conventional Bore for Road Crossing
27.3	EF-56	Effingham/GA	50x410 + 15x50 (Triangle)	W1BEF038	SN-GA-ELBA-1-011	Egypt Ardmore Road	0.35	--	--	0.13	0.48	Conventional Bore for Road Crossing
27.3	EF-57	Effingham/GA	105x330 + 25x105 (Triangle)	W1BEF038	SN-GA-ELBA-1-011	Egypt Ardmore Road	--	--	--	0.83	0.83	Conventional Bore for Road Crossing
30.1	EF-70	Effingham/GA	100x290 + 90x100(Triangle)	W1BEF064	SN-GA-ELBA-1-012	Norfolk Southern Railroad	0.54	--	--	0.23	0.77	Conventional Bore for Railroad Crossing

AREAS WHERE EEC PROPOSES EXTRA WORK SPACES/ATWS AND FACILITIES WITHIN 50 FEET OF WETLANDS AND WATERBODIES

MP	Work Space ID	County/ State	Approximate Dimension	Wetland/ Waterbody ID	Drawing Reference	Description	Landuse Acreage				Total Acreage[a]	Exception Requested Reasoning
							PFO	PSS	PEM	OTHER		
Northern Segment												
161.0	EL-01a	Elbert/GA	15x140	W2AEL001	SN-GA-ELBA-1-064	Wetland/ Stream	--	--	--	0.05	0.05	To facilitate wetland and stream crossings
Aboveground Facilities												
No ATWS/Aboveground facilities located within 50ft. of wetlands. Extra Work Spaces/ATWS and Facilities within 50 feet of a WATERBODY.												
Southern Segment												
28.5	EF-60	Effingham/GA	50x90 + 55x50 (Triangle)	S1BEF031	SN-GA-ELBA-1-011	Stream	--	--	--	0.13	0.13	ATWS added for access road
Northern Segment												
No ATWS/Aboveground facilities located within 50ft. of waterbodies.												
Aboveground Facilities												
No ATWS/Aboveground facilities located within 50ft. of waterbodies. Extra Work Spaces/ATWS and Facilities within 50 feet of WETLANDS and WATERBODIES.												
Southern Segment												
No ATWS/Aboveground facilities located within 50ft. of wetland and waterbodies.												
Northern Segment												
No ATWS/Aboveground facilities located within 50ft. of wetlands and waterbodies.												
Aboveground Facilities												
9.7	EF-113	Effingham/GA	No change	SF2CEF001-001	SN-GA-ELBA-1-004	McIntosh Meter Station	No change	No change	No change	No change	No change	Man-made ephemeral drainage ditch to be moved.

NOTE: ITEMS IN BOLD REPRESENT CHANGES TO ATTACHMENT A OF EEC'S PROCEDURES SUBMITTED WITH THE SEPTEMBER ER.