

SECTION 02230

STREAM CROSSING

PART 1: GENERAL

1.01 SCOPE

Furnish all labor, materials, and equipment necessary to install the stream crossings as shown on the plans and described in the construction documents.

Install the stream crossings in such a manner as to protect the mains from erosion and to restore, as much as practicable, the stream banks and bottom to their original condition and in compliance with requirements of the regulating agency.

Protect the main from erosion by concrete encasement around the pipe or by a sufficient depth of compacted backfill as shown.

1.02 PROFILES AND TOPOGRAPHY

Contours, topography and profiles of the ground shown on the Drawings are believed to be reasonable approximations and are not guaranteed.

The Contractor accepts the construction site with the conditions that existed at the time of bidding.

1.03 RELATED WORK

Excavation, backfilling and compaction procedures shall conform to Specification Section 2210.

Concrete placement shall conform to Specification Section 3300.

PART 2: PRODUCTS

2.01 MATERIALS

Excavation, fill and concrete materials shall be as specified in Specification Sections 2210 and 3300.

PART 3: EXECUTION

3.01 CONSTRUCTION PROCEDURE

Comply with construction procedures if provided as a condition of the regulators stream opening permit. If methodology is not provided through permitting process, provide and submit the same to the Engineer and all Federal, State and local authorities having jurisdiction over the stream crossing for their review and approval.

3.02 STREAM BANK RESTORATION

Restore the stream banks by backfilling the main trench with mechanically compacted backfill of earth or rip rap, approved by the Engineer and in compliance with regulatory requirements, to the original ground surface (unless new contours are shown on the drawings). The limits of compaction shall extend from the top of bank to top of bank on each side of the crossing as determined by the Engineer or as shown on the detail drawings provided.

Immediately following the completion of a stream crossing, and while stream banks are disturbed, place straw bales or silt-fence along the trench excavation on each stream bank from within two (2) feet of the edge of water to beyond the limits of the excavated trench width per detail on straw bale and fabric fence. Straw bales or silt-fence shall remain in place until after the stream banks have been fine graded, fertilized and seeded, and the seeding has grown sufficiently to protect the stream banks from erosion.

3.03 STREAM BOTTOM RESTORATION

If the plans call for open cut across the stream bottom, backfill the trench within the stream bottom (high water to high water) mechanically compacted earth or riprap that has been approved by the Engineer and meeting regulatory requirements. Rip rap placement must be flush with stream bottoms from upstream to downstream.

END OF SECTION