SECTION 02/241

LANDSCAPE ROCKS

PART 1 GENERAL

1.1 DESCRIPTION

A. This work consists of furnishing and placing landscape rocks at designated areas on the project drawings or as directed by the Engineer.

PART 2 PRODUCTS – NOT USED

PART 3 EXECUTION

3.1 GENERAL

A. Furnish hard, durable, angular barrier rock that is resistant to weathering and water action and free of organic or other unsuitable material. Do not use shale, rock with shale seams, or other fissured rock that may break into smaller pieces in the process of handling and placing.

B. Furnish landscape rocks that approximately measure 8 cubic feet (2.5 – 3.5 feet in nominal diameter as measured on the long axis). Backfill around embedded landscape rocks by tamping with hand tools and/or mechanical equipment. Space landscape rocks at 5 feet clearance as measured from edge to edge.

C. Install landscape rocks according to the project drawings or as directed by the Engineer.

PART 4 MEASUREMENT AND PAYMENT

4.1 PAYMENT

A. Landscape rock placement will be measured and paid for by the each (EACH).

END OF SECTION 02/241

SECTION 02/835

WOOD RAIL FENCE

PART I DESCRIPTION

1. GENERAL

   A. This item covers the requirements for furnishing materials and constructing new pressure treated wood rail fence as shown on the Drawings or established by the Engineer.

2. SUBMITTALS

   A. The following submittals are required:
      1. Material and product specifications including dimensions for fence posts and rail, and associated hardware.

PART 2 MATERIALS

1. GENERAL

   A. The fence shall be the product of a manufacturer who has demonstrated by actual installations of a similar nature that its product is of the type required. The Contractor shall include all supplementary parts necessary or required for a complete and satisfactory installation within the true meaning and intent of the drawings. All runs of the fence shall present the same general appearance and the product of one manufacturer only will be accepted, except for items which do not influence the appearance of the completed fence. No used materials will be accepted.

2. FENCE POSTS AND RAILS

   A. Posts and rails shall be constructed of pressure treated pine milled and cut to the appropriate sizes. Rails shall have a single flat face.

PART 3 CONSTRUCTION METHODS

1. GENERAL

   A. The fence shall be constructed in accordance with the details on the Drawings and as specified herein using new materials, and all work shall be performed in a workmanlike manner satisfactory to the Engineer.

2. CLEARING FENCE LINE

   A. The site of the fence shall be sufficiently cleared of obstructions and surface irregularities shall be graded by blading or other means suitable to the Engineer so that the fence will conform to the general contour of the ground. The fence line shall be cleared to a minimum width of 2-feet on each side of the center line

of the fence. This clearing shall consist of the removal of all stumps, brush, rocks, tree, or other obstructions which will interfere with proper construction of the same fence. Stumps within the cleared area of the fence line shall be grubbed or excavated. The bottom of the fence shall be placed a uniform distance above the ground, as specified on the Drawings. When shown on the Drawings, the existing fences which coincide with, or are in a position to interfere with the new fence location shall be removed by the Contractor as a part of the construction work, unless such removal is listed as a separate item in the bid schedule. All holes remaining after post and stump removal shall be refilled with suitable soil, gravel or other material acceptable to the Engineer and shall be compacted properly with tampers.

B. The work shall include the handling and disposal of all material cleared, excavated, or removed, regardless of the type, character, composition or condition or such material encountered.

3. INSTALLING POSTS

A. All posts shall be spaced not more than 10-feet apart as shown on the Drawings. All post settings shall be done carefully so that all posts shall be vertical and in true alignment and rigidly secured in position. Soil shall be compacted around posts by tamping.

B. Where solid rock is encountered without an overburden of soil, posts shall be set a minimum depth of 15-inches and set in concrete. The hole shall have a minimum width of 1-inch greater than the largest dimension of the post section to be set.

4. INSTALLING RAILS

A. Rail dowels shall be attached to the post with Timberlock screws or approved equal, one screw per rail end.

5. CLEAN-UP

A. The Contractor shall remove from the vicinity of the completed work all tools, buildings, equipment, etc. used during construction.

END OF SECTION 02/835

SECTION 03/410

PRE-CAST CONCRETE VAULT LATRINE

PART 1 GENERAL

1.1 DESCRIPTION

A. This work consists of site preparation (excavation and leveling), backfilling and compaction, and landscaping for Fishing Access Site (FAS) pre-cast concrete vault latrines at designated areas on the project drawings or as directed by the Engineer.

PART 2 PRODUCTS

2.1 MATERIALS

A. Pre-Cast Concrete Vault Latrine.

1. Montana Department of Fish, Wildlife and Parks will supply the latrine through Missoula Concrete Products. The Contractor shall coordinate the delivery with Missoula Concrete Products. The Contractor is advised to contact **Missoula Concrete Products at (406) 549-9682,** as soon as a schedule is established to insure delivery in a timely manner.

B. Gravel Bedding for Latrine.

1. Gravel bedding shall be ¾-inch minus crushed base course per the MPW Standard Specifications.

PART 3 EXECUTION

3.1 GENERAL

Each latrine location shall be staked in the field by the Engineer. Refer to the project drawings for pre-cast concrete vault toilet installation locations, details, and dimensions.

3.2 EXCAVATION

Excavate for the installation of the toilet vault to a depth that will allow the structure site to be free draining after installation is completed. Salvage conserved topsoil.

3.3 FINISH FLOOR ELEVATION

Finish floor elevation shall be a minimum of 4 to 6 inches above natural grade measured at the front entrance.

3.4 COMPACTION OF EARTH UNDER TOILET VAULTS

Prior to installation of the toilet building, compact the natural ground underlying the vault with a minimum of three passes with a whacker-type mechanical tamper or equivalent approved by the Engineer.

3.5 INSTALLATION OF GRAVEL BEDDING UNDER TOILET VAULTS

Install 12-inches of compacted gravel bedding material for leveling course. Compact leveling course with one pass with a whacker-type mechanical tamper or equivalent approved by the Engineer. Grade level course so there will be no high spots in middle of vault bottom. Finished leveling course shall not vary more than 0.01-foot for the four corners of the vault.

3.6 BACKFILL AND DISPOSAL OF DEBRIS

Backfill around structures, including under exterior slab. Use excavated material for backfill except that rocks larger than six inches in maximum dimension shall not be placed within six inches of exterior of vault walls. Stumps, roots, brush, and other vegetation shall be removed from the site and disposed of in a legal manner by the contractor.

3.7 FILL AROUND LATRINES AND SLAB

Spread excess excavated material from vault around structure. Final backfill surface shall be flush with the top of the front slab. Allowance shall be made for the depth of the topsoil. Grade backfill away from structure at maximum slope of five percent unless otherwise noted in the plans or specs or approved by the Engineer.

3.8 LANDSCAPING

Spread conserved topsoil as final 2-inch layer after rough grading is completed. Areas disturbed by excavation, backfilling, and stockpiling of excavated materials shall be hand raked to removed exposed rocks over one-inch in maximum dimension. Oversize rocks removed from the surface shall be disposed of off-site or with the approval of the Landscape Architect used as fill in other items in the contract.

3.9 HIDDEN GROUND CONDITION

If the contractor uncovers bedrock, boulders too big to remove, ground water or other unexpected conditions, he shall immediately contact the Engineer for instructions.

3.10 TEMPORARY FENCING

A. All excavations left open overnight shall be fenced with polyethylene plastic safety fence, orange color, 48-inch high, and 4-inch maximum mesh openings. Fencing shall be secured to steel posts on the side away from the excavation unless otherwise approved in advance by the Engineer.

1. The bottom of the fence shall generally follow the contour of the ground.

2. Maximum spacing of the steel posts shall be ten feet.

B. No excavations will be left open more than seven days unless otherwise approved by the Engineer.

3.11 PATHWAYS

A. Construct a pathway between each latrine installation and the adjacent roadway or parking area. Requirements of each pathway are as follows:

1. Utilize compacted gravel for all pathway surfaces as specified on the project drawings.

2. Construct pathways that follow existing ground contours as much as possible. Limit excessive excavation and embankment.

3. Cross slopes on the pathway shall be 2%.

4. The running slope of the pathway shall not exceed 5%.

5. Slopes will be checked using a 3-foot level.

6. Ridges or other sudden changes in slope shall not exceed of ½-inch. The top surface of the path shall match the top surface of the Vault Latrine Slab within ½-inch.

END OF SECTION 03/410