

GENERAL NOTES

SEEDING:

Quantities for the seeding are calculated for the soil area within the work limits, as shown on the cross sections.

ROUNDING OF CORNERS ON CROSS SECTIONS:

The rounded corners shown on the typical section apply to all cross sections, even though otherwise shown on these plans.

EMBANKMENT, USING N#8 AGGREGATE:

A cut-off drain, using granular material shall be provided at locations specified on these plans. Material furnished for this item shall be as defined in 203.02 except that size N#8 aggregate shall be used. The granular material shall be placed and compacted as directed by the Engineer.

CROSS SECTIONS TO BE RERUN:

The cross sections shall be rerun by State Forces prior to construction to be used in the final determination of earthwork.

FIELD OFFICE:

The Contractor shall provide a suitable field office having a minimum of 150 Sq. Ft. of floor space.

ITEM G25 LIGHT POLE ERECTION:

This item shall include all labor, equipment, and materials necessary to erect the G T 15 B 30 light pole luminaire supplied by the state.

The contractor shall supply the AT-X transformer base for mounting the pole under a separate pay item. Payment shall be per each Item G25 Light Pole Erection.

ITEM 606 BRIDGE TERMINAL ASSEMBLY REBUILT, TYPE C:

This item shall include the following:

- (1) Removing the back two concrete encased posts & the rail element.
- (2) Supplying and erecting two new posts in concrete.
- (3) Attaching the existing rail to the new posts.

The new posts shall be erected after the proposed berm and embankment are in place. The Contractor shall furnish concrete, new posts, spacer blocks and such additional bolts, clips or incidental hardware as may be necessary to complete the assembly. The existing steel box, the front post and the curb shall remain in place. Payment shall be per each Item 606 Bridge Terminal Assembly Rebuilt, Type C.

SCHEDULE OF EXCAVATION:

The initial cut should be made down to approximately elevation 844 for a distance of at least 1/4th foot (50) along the centerline, before any excavation for the rock or granular material shear key is made. This operation should be coordinated so that as little excavation as practical is left open over a weekend. Excavation should be made only as fast as the backfill is available at the site to fill it.

The paved berm shall not be removed until the fill slope is restored. This also includes any pavement replacement if subsequent slope deterioration makes that necessary.

ITEM SPECIAL FILTER FABRIC:

The fabric shall be made of strong, rot-proof polymeric fibers formed into a woven or nonwoven fabric. Both types shall not have any treatment that would significantly alter its physical properties. The fabric shall be processed so that the fibers maintain their relative positions with respect to each other.

Prior to use, the fabric shall be wrapped to protect it from sunlight, dust, dirt, etc.

The vendor shall furnish certified test results showing that the fabric meets requirements of this specification.

Woven Fabric (Cloth)

The woven filter fabric shall meet the following requirements.

Tensile Strength, ASTM D-1682,
Grab Test Method, Constant
rate of travel of 12" per
minute.

150 lbs minimum, 90%
maximum elongation.

Bursting Strength, ASTM D-751,
Diaphragm Test Method.

400 psi minimum.

Equivalent Opening Size, Corps
of Engineers Method.
Minimum Weight

60-140 U.S. Standard
Sieve number:
4oz./5.4.

Nonwoven Fabric

The nonwoven filter fabric shall meet the following requirements:

Tensile strength, as above.

80 lbs minimum 50%
minimum elongation

Equivalent opening size as above.

60-140 U.S. Standard
Sieve Number:
4oz./5.4.

Twelve inch overlaps shall be provided, secured in any manner suitable to the Engineer, at adjoining strips of the fabric. Payment shall be per square yard of Item Special Filter Fabric.

ITEM 614 MAINTAINING TRAFFIC:

Traffic shall be maintained as per the detail sheets and specifications and as outlined in the Construction and Maintenance Operations sections of the Ohio Manual of Uniform Traffic Control Devices for Streets and Highways.

The Contractor shall close the south lane of the interstate as per sheet 9 of these plans.

The entrance ramp from the rest area shall remain open at all times.

PIPE CONNECTIONS TO CORRUGATED STEEL STRUCTURES:

Connections of proposed longitudinal drainage to corrugated steel structures shall be by means of a shop fabricated or field welded stub on the structure.

The stub shall meet the requirements of 707 and have a minimum length of two feet and a minimum thickness of 0.064 inches.

Location and elevation of the stub are to be considered approximate and may be adjusted by the Engineer to avoid cutting through joints in the structure.

The field welded joint, if used, shall be painted on the inside and outside with two coats of red lead paint, 708.06 and two coats of graphite paint, 708.13. Welding shall meet the requirements of 513.17.

A concrete collar, as per Standard Drawing MC-4, will be required to connect the longitudinal drainage to the stub, when pipe other than corrugated steel is provided for the longitudinal drainage.

Payment for cutting into the structure and providing the connection described, shall be included in the unit price bid for Item 603 or 522.

ITEM 606 GUARDRAIL, REBUILT, TYPE 5:

All posts shall be augered to prevent damage to the Item 301 paved shoulder. Any damage to the shoulder, resulting from the installation of the guardrail, shall be repaired at no additional cost.

FHWA REGION	STATE	PROJECT	
5	OHIO		3

MUS-70- 15.96

CALCULATIONS

ITEM 203 Embankment using N#8 Aggregate:
 $(25.25' \text{ Avg. Height})(2') (130') \div 27 = 243 \text{ C.Y.}$
 $(26.67' \text{ Avg. Height})(2') (79') \div 27 = 156 \text{ C.Y.}$
 399 C.Y.

ITEM 659 Commercial Fertilizer:
 $(3450 \text{ Seeding & Mulching})(.00009) = 0.31 \text{ Ton}$

ITEM 659 Agricultural Liming:
 $(3450 \text{ S.Y.}) (.00045) = 1.55 \text{ Tons}$

ITEM SPECIAL Filter Fabric:
 $(130 + 79)(4') \div 9 = 93 \text{ Sq.Yd.}$

ITEM 301 Bituminous Aggregate Base:
 $[(.25)(5)(342) + (.25)(8)(.190)] \div 27 = 30 \text{ C.Y.}$

ITEM 304 Aggregate Base:
 $(.375)(8)(.190) \div 27 = 21 \text{ C.Y.}$

ITEM 310 Subbase, Type II
 $(.5)(8)(.190) \div 27 = 28 \text{ C.Y.}$

Item 203 Embankment Using Rock Fill

STATION	E. A.	SUM	DIST.	C.Y.
0+17	138			
		267	17	84
0+34	129			
		536	12	119
160+20	407			
		830	30	461
0+50	423			
		903	50	836
161+00	480			
		896	50	830
0+50	416			
		568	25	263
0+75	152			
Total				2593

REMOVAL OF EXISTING PIPE:

The removal of all existing pipe drains, which would normally be removed in various excavation items, shall be included for payment in the unit prices bid for the respective excavation items, unless otherwise itemized in the plans.

CONNECTION TO EXISTING PIPE :

Where the plans provide for proposed conduit to be connected to, or to cross either over or under an existing sewer, it shall be the responsibility of the Contractor to locate the existing pipe both as to line and grade before he starts to lay the proposed conduit.

Payment for all operations described above shall be included in the unit price bid for the pertinent 603 conduit items.