

NORTH ABUTMENT Minimum section Modulus of Sheet Piling = 5.0 in3/ft

TEMPORARY SHEET PILING

Notes:

Backfill with Porous Granular Embankment (Special) by Bridge Contractor after Superstructure Const. joint is in place 30' Approach Şlab 48" plate girder (composite) Excavation for placing Porous Granular Embankment (Special) is wall drain included in the cost for 2" P.J.F. Structure Excavation Geotechnical Fabric for French Drains Drainage Aggregate \*Included in the cost of Pipe Underdrains for Structures. \*4'' Ø Perforated 11 pipe drain 2'-0" II H-Piles i All drainage system components shall extend to the toe of slope. The pipes shall drain into concrete headwalls.

SECTION THRU INTEGRAL ABUTMENT

Integral Abutment

SECTION THRU CONCRETE SLOPEWALL

(Horiz. dim. @ Rt. L's)

**—** Face of

6′′

TEMPORARY SOIL RETENTION SYSTEM

SOUTH ABUTMENT

\*\* A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.

\*\*\* If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.

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Boring Logs

Concrete Parapet Slipforming Option

## GENERAL NOTES

Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts. Bolts  $^{7}_{8}$  in.  $\phi$ , holes  $^{15}_{16}$  in.  $\phi$ , unless otherwise noted.

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.

Calculated weight of Structural Steel = 891,054 lbs., Grade 50, 75,980 lbs., Grade 36 No field welding is permitted except as specified in the contract documents. Reinforcement bars designated (E) shall be epoxy coated.

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of  $l_8$  inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.

If the Contractor elects to use cantilever forming brackets on the exterior beams or girders, the brackets shall be placed at the same locations as required for the hardwood blocks in Article 503.06(b) of the Standard Specifications. If additional cantilever forming brackets are required, hardwood blocking shall be wedged between the exterior and first interior beam at each of these additional bracket locations.

The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

The Inorganic Zinc Rich Primer / Acrylic / Acrylic Paint System shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the final finish coat for all interior steel surfaces shall be gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be gray, Munsell No. 5B 7/1. See Special Provision for "Cleaning and Painting New Metal Structures".

The contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at substructures specified or approved by the Engineer before ordering the remainder of the piles.

Slope wall shall be reinforced with welded wire fabric, 6 in. x 6 in.-W4.0 x W4.0, weighing 58 lbs. per 100 sq. ft..

## TOTAL BILL OF MATERIAL

| ITEM                                     | UNIT    | SUPER                                   | SUB    | TOTAL   |
|--|---------|---|--------|---------|
|  |         | JOI LIN                                 | 300    |         |
| Removal of Existing Structures           | Each    | *************************************** |        | 1       |
| Structure Excavation                     | Cu. Yd. |   |        | 711     |
| Porous Granular Embankment (Special)     | Cu. Yd. |   | 10.1.0 | 446     |
| Concrete Structures                      | Cu. Yd. |   | 424.8  | 424.8   |
| Concrete Superstructure                  | Cu. Yd. | 1382.5                                  |        | 1382.5  |
| Protective Coat                          | Sq. Yd. | 4339                                    |        | 4339    |
| Bridge Deck Grooving                     | Sq. Yd. |   |        | 4059    |
| Reinforcement Bars, Epoxy Coated         | Lb.     | 309,950                                 |        | 390,410 |
| Bar Splicers                             | Each    | 2328                                    | 280    | 2608    |
| Furnishing Steel Piles HP 12x63          | Ft.     |   | 1275   | 1275    |
| Furnishing Steel Piles HP 14x73          | Ft.     |   | 3551   | 3551    |
| Driving Piles                            | Ft.     |   | 4826   | 4826    |
| Test Piles Steel, HP 12x63               | Each    |   | 2      | 2       |
| Test Piles Steel, HP 14x73               | Each    |   | 1      | 1       |
| Name Plates                              | Each    | 1                                       |        | 1       |
| Furnishing and Erecting Structural Steel | L. Sum  |   |        | 1       |
| Stud Shear Connectors                    | Each    | 11,712                                  |        | 11,712  |
| Pipe Underdrains for Structures, 4"      | Ft.     |   |        | 824     |
| Drainage Scuppers, DS-11                 | Each    | 4                                       |        | 4       |
| Slopewall 4"                             | Sq. Yd. |   |        | 1300    |
| Temporary Sheet Piling                   | Sq. Ft. |   |        | 292     |
| Protective Shield                        | Sq. Yd. |   |        | 3709    |
| Concrete Encasement                      | Cu. Yd. |   | 40.7   | 40.7    |
| Geocomposite Wall Drain                  | Sq. Yd. |   |        | 228     |
| Anchor Bolts, 1"                         | Each    |   |        | 64      |
| Anchor Bolts, 1 <sup>1</sup> 4"          | Each    |   |        | 32      |
| Temporary Soil Retention System          | Sq. Ft. |   | 118    | 118     |
| Mechanical Splicers                      | Each    |   | 180    | 180     |
| Temporary Support System                 | L. Sum  |   | 1      | 1       |

GENERAL NOTES AND TOTAL BILL OF MATERIAL STRUCTURE NO. 058-0136

COUNTY

MACON

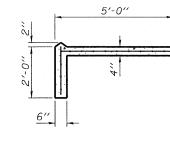
TOTAL SHEET

61

SHEETS

149

CONTRACT NO. 74387



Edge of deck --

(See Article 601.05 of the Standard Specifications and Highway

Standard 601101)

1:6

coombe-Bloxdorf P.C. -CIVIL ENGINEERS SECTION A-A -STRUCTURAL ENGINEERS-

32-36

1/18/10 DESIGN BY -LAND SURVEYORS-TFG Design Firm License No. 184-002703

SHEET NO. 2 36 SHEETS

SECTION (58-64HB-1)B-1 322 FED. ROAD DIST. NO. 7 | ILLINOIS | FED. AID PROJECT