

**GENERAL NOTES**

Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts. Bolts 3/8 in.  $\phi$ , holes 1/2 in.  $\phi$ , unless otherwise noted.

Calculated weight of Structural Steel = 177,580 lbs. (Grade 50)  
15,290 lbs. (Grade 36)

No field welding is permitted except as specified in the contract documents.

Reinforcement bars designated (E) shall be epoxy coated.

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.

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8 inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.

Concrete Sealer shall be applied to the exposed surfaces of both piers.

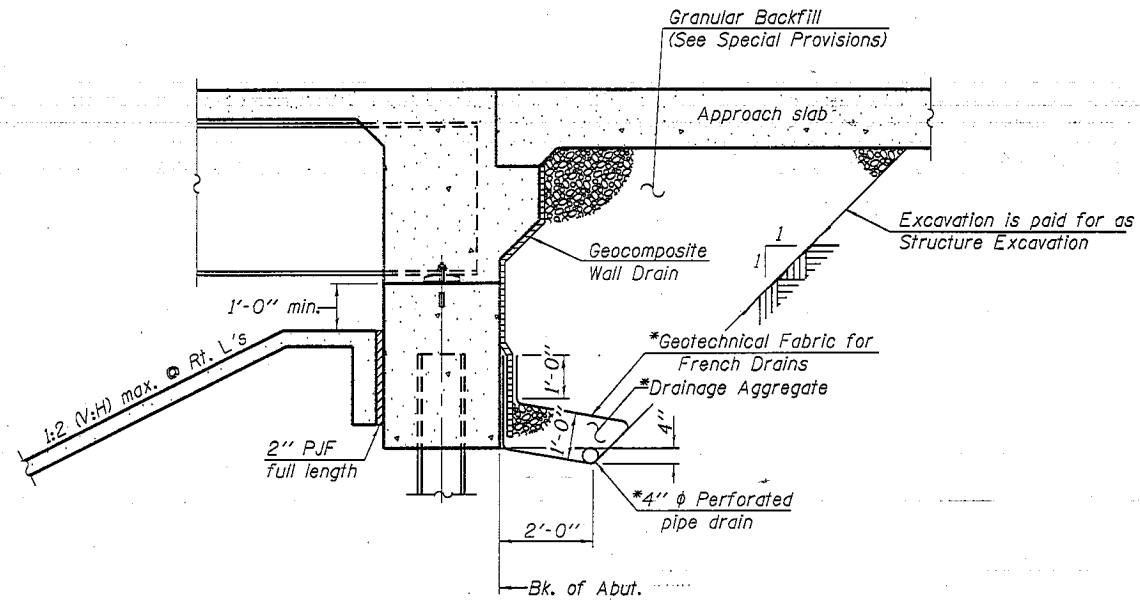
The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

The Organic Zinc Rich Primer / Epoxy / Urethane Paint System shall be used for painting of new structural steel except where otherwise noted. The entire system shall be shop applied, with the exception that the exterior surfaces and bottom of the bottom flange of the fascia beams, masked off connection surfaces, and field installed fasteners, all of which shall be touched up and finish coated in the field. 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 Reddish Brown, Munsell No. 2.5YR 3/4.

The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.

Slipforming of the parapets is not allowed.

The removal of existing concrete slope wall shall be paid for as Slope Wall Removal. The quantity shown extends midway between the adjacent structures. The Engineer may adjust the limits of removal in the field as needed to accommodate excavation of the proposed embankment between the bridges.



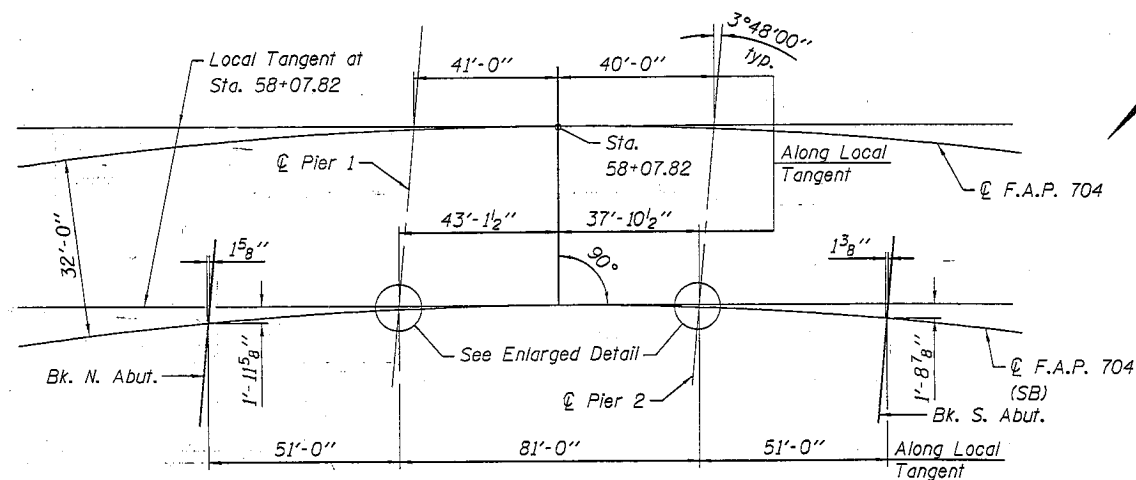
**SECTION THRU INTEGRAL ABUTMENT**  
(Horiz. dim. @ Rt. L's)

\*Included in the cost of Pipe Underdrains for Structures 4".

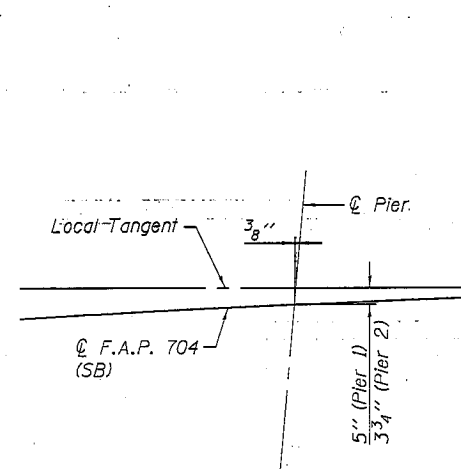
Note:  
All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).

**TOTAL BILL OF MATERIAL**

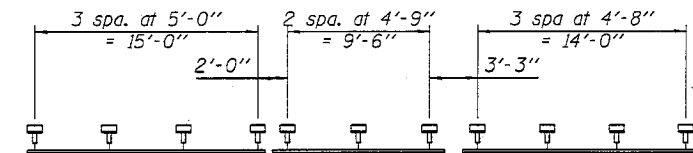
ITEM	UNIT	SUPER	SUB	TOTAL
Removal of Existing Structures No. 2	Each			1
Slope Wall Removal	Sq. Yd.		649	649
Protective Shield	Sq. Yd.	327		327
Structure Excavation	Cu. Yd.		632	632
Concrete Structures	Cu. Yd.		308.6	308.6
Concrete Superstructure	Cu. Yd.	476.7		476.7
Bridge Deck Grooving	Sq. Yd.	1303		1303
Protective Coat	Sq. Yd.	1521		1521
Stud Shear Connectors	Each	5985		5985
Reinforcement Bars, Epoxy Coated	Pound	117970	51150	169120
Bar Splicers	Each	910		1172
Slope Wall 4 Inch	Sq. Yd.		840	840
Furnishing Metal Shell Piles 14"x0.312"	Foot		1422	1422
Driving Piles	Foot		1422	1422
Test Pile Metal Shells	Each		4	4
Pile Shoes	Each		46	46
Name Plates	Each			1
Elastomeric Bearing Assembly, Type I	Each	14		14
Anchor Bolts, 1"	Each		28	28
Anchor Bolts, 1/4"	Each		28	28
Concrete Sealer	Sq. Ft.		3223	3223
Geocomposite Wall Drain	Sq. Yd.		88	88
Granular Backfill for Structures	Cu. Yd.		142	142
Furnishing and Erecting Structural Steel	L. Sum	0.20		0.20
Diamond Grinding (Bridge Section)	Sq. Yd.	1249		1249
Pipe Underdrains for Structures 4"	Foot		171	171
Temporary Soil Retention System	Sq. Ft.		330	330



**OFFSET SKETCH**



**ENLARGED DETAIL**



**SIGN STRUCTURE BRACKET SPACING**

Note:  
See sign structure sheets for location of the signs relative to the abutments.