

**GENERAL NOTES**

Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts.  
Bolts  $\frac{7}{8}$  in.  $\phi$ , holes  $\frac{15}{16}$  in.  $\phi$ , unless otherwise noted.

Calculated weight of Structural Steel = 227,190 lbs. (Grade 50)  
14,760 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  $\frac{1}{8}$  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.

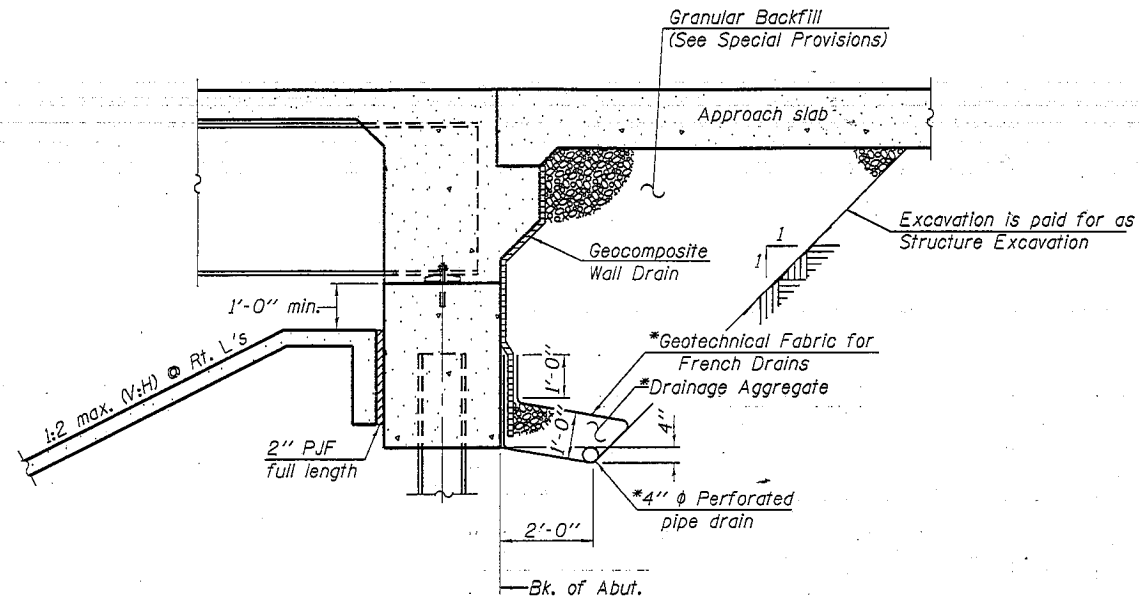
The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

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.



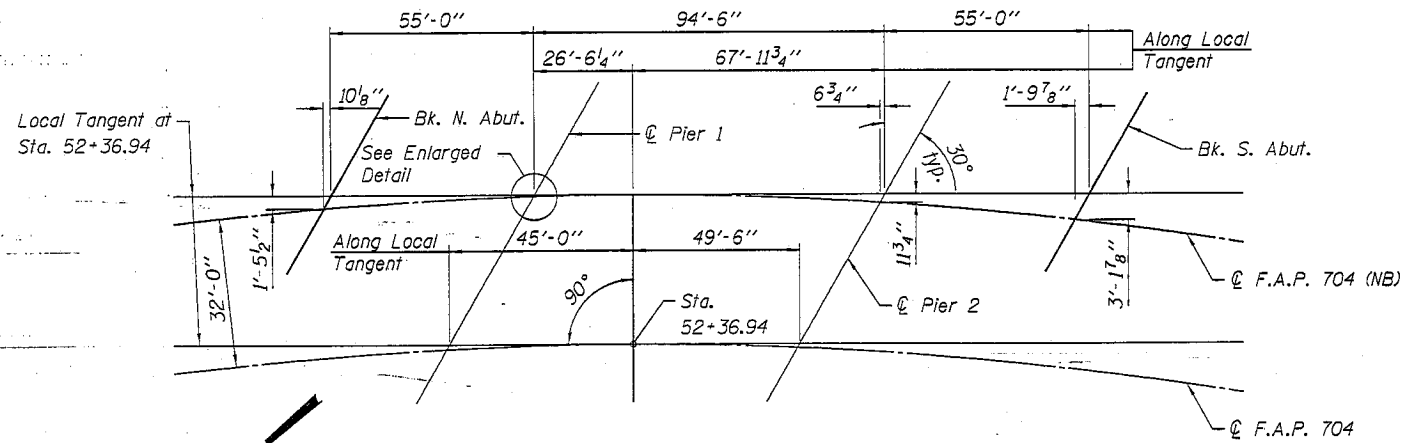
**SECTION THRU INTEGRAL ABUTMENT**  
(Horiz. dim. @ Rt. L's)

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

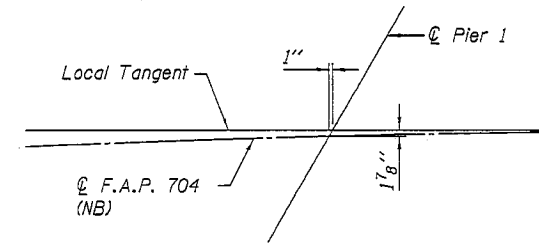
Note:  
All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 60110).

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
Removal of Existing Structures No. 3	Each			1
Slope Wall Removal	Sq. Yd.		646	646
Protective Shield	Sq. Yd.	258		258
Structure Excavation	Cu. Yd.		872	872
Concrete Structures	Cu. Yd.		333.5	333.5
Concrete Superstructure	Cu. Yd.	504.6		504.6
Bridge Deck Grooving	Sq. Yd.	1351		1351
Concrete Encasement	Cu. Yd.		6.2	6.2
Protective Coat	Sq. Yd.	1591		1591
Stud Shear Connectors	Each	6972		6972
Reinforcement Bars, Epoxy Coated	Pound	122420	46350	168770
Bar Splicers	Each	967	226	1193
Slope Wall 4 Inch	Sq. Yd.		678	678
Furnishing Metal Shell Piles 14"x0.250"	Foot		1080	1080
Furnishing Steel Piles HP12x53	Foot		680	680
Driving Piles	Foot		1760	1760
Test Pile Metal Shells	Each		2	2
Test Pile Steel HP12x53	Each		2	2
Pile Shoes	Each		38	38
Name Plates	Each			1
Elastomeric Bearing Assembly, Type I	Each	14		14
Anchor Bolts, 1"	Each		28	28
Anchor Bolts, 1 1/4"	Each		28	28
Concrete Sealer	Sq. Ft.		3525	3525
Geocomposite Wall Drain	Sq. Yd.		100	100
Granular Backfill for Structures	Cu. Yd.		163	163
Furnishing and Erecting Structural Steel	L. Sum	0.26		0.26
Diamond Grinding (Bridge Section)	Sq. Yd.	1293		1293
Pipe Underdrains for Structures 4"	Foot		187	187
Temporary Soil Retention System	Sq. Ft.		1008	1008



**OFFSET SKETCH**



**ENLARGED DETAIL**