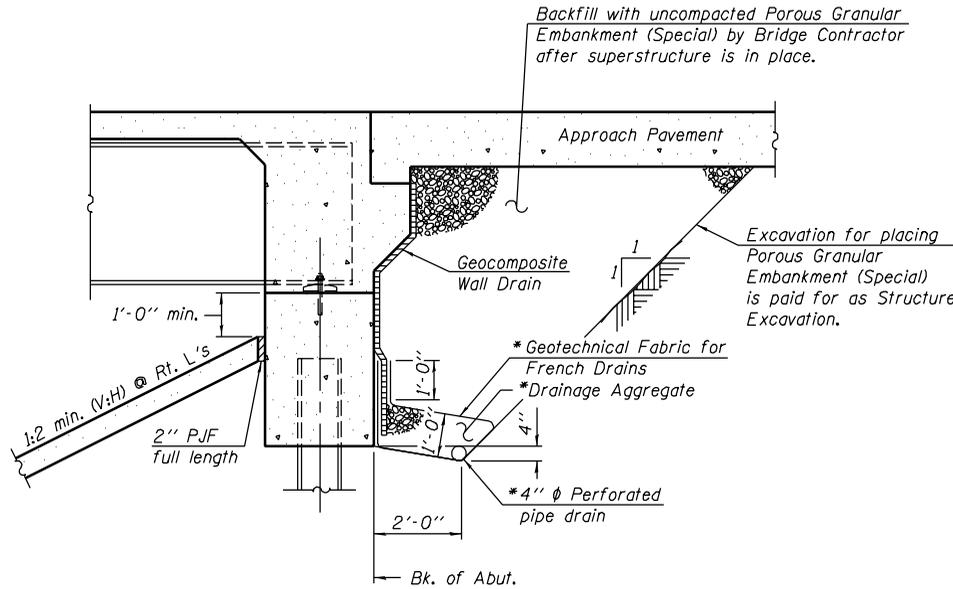


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.S. 1671	‡	DOUGLAS	181	109
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 25  
46 SHEETS

Contract #70258  
‡ 22VBR-1 and 144SBR-2



**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).

**INDEX OF SHEETS**  
(for 021-0060)

25	General Details
26 - 31	Top of Slab Elevations
32	Superstructure
33	Superstructure Details
34	Diaphragm Details
35	Structural Steel
36	Structural Steel Details
37	Bearing Details
38	Anchor Bolt Details
39	South Abutment
40	North Abutment
41	Pier 1
42	Pier 2
43	Bar Splicer Assembly Details

STATION 1154+99.02  
BUILT 200 BY  
STATE OF ILLINOIS  
F.A.S. RT. 1671 SEC. 22VBR-1  
LOADING HS20-44  
STR. NO. 021-0060

**NAME PLATE**  
See Std. 515001

**CONSTRUCTION SEQUENCE**

1. Remove the superstructures on both sides of the existing Pier 9.
2. Drive temporary sheet piling at the location shown and excavate to the limits shown on the plan and elevation view.
3. Remove the existing substructure per plans and Section 501 of the Standard Specifications.
4. Fill and compact excavation with embankment material per Section 205 of the Standard Specifications.
5. Remove temporary sheeting.

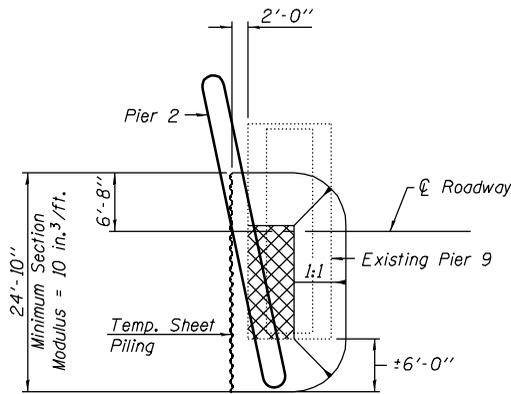
- Hatched area indicates Removal of Existing Structures.
- Cross-hatched area indicates concrete to be removed as required to install piles for proposed pier. Cost included with Removal of Existing Structures.

**GENERAL NOTES**

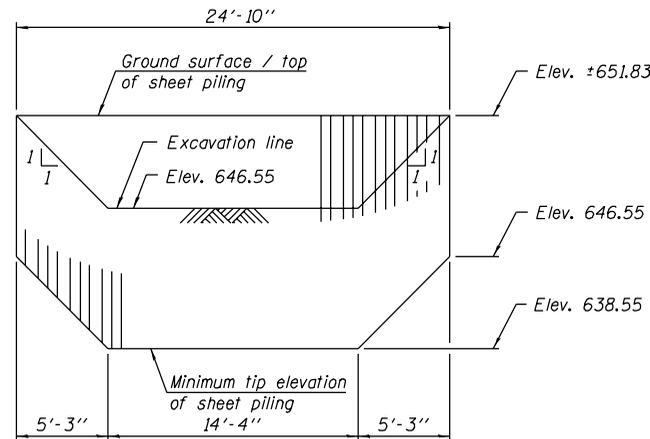
Fasteners shall be high strength bolts (AASHTO M 164, Type 3). Bolts 7/8"  $\phi$ , open holes 1 1/16"  $\phi$ , unless otherwise noted. Calculated weight of Structural Steel = 159,190 Lbs. All structural steel shall be AASHTO M 270 Grade 50W. Field welding of construction accessories will not be permitted to beams. Anchor bolts shall be set before bolting diaphragms over supports. The main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These components are the wide flange beams and all splice plate material. Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8 inch. Adjustment shall be made either by grinding the surface or by shimming the bearing. Two 1/8" adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims. The Contractor shall drive two (2) HP 12x53 test piles in a permanent location, one at each abutment, and two (2) HP 12x74 test piles in a permanent location, one at each pier, as directed by the Engineer before ordering the remainder of the piles. AASHTO M 270 Grade 50W structural steel shall only be painted, at the ends of the beams, for a distance equal to the depth of embedment into the concrete cap plus 3 inches. Those areas shall be primed in the shop with an inorganic zinc rich primer per AASHTO M 300, Type 1. No field painting shall be required. All structural steel shall be cleaned as specified in the special provision for "Surface Preparation and Painting Requirements for Weathering Steel".

**STRUCTURE NO. 021-0060**  
**BILL OF MATERIAL**

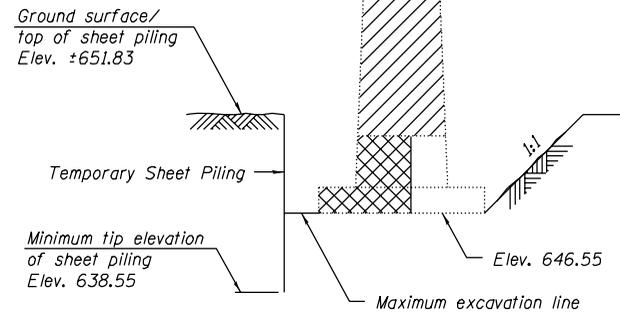
ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment (Special)	Cu. Yd.		110	110
Removal of Existing Structures No. 2	Each			0.5
Structure Excavation	Cu. Yd.		236	236
Driving Steel Piles	Foot		1340	1340
Concrete Structures	Cu. Yd.		231.6	231.6
Concrete Superstructure	Cu. Yd.	232.3		232.3
Bridge Deck Grooving	Sq. Yd.	640		640
Protective Coat	Sq. Yd.	843		843
Furnishing and Erecting Structural Steel	L. Sum	1		1
Stud Shear Connectors	Each	3330		3330
Reinforcement Bars, Epoxy Coated	Pound	49600	15750	65350
Slopedwall 4"	Sq. Yd.		27	27
Bituminous Coated Aggregate Slopedwall 6"	Sq. Yd.		489	489
Furnishing Steel Piles HP 12x53	Foot		645	645
Furnishing Steel Piles HP 12x74	Foot		695	695
Test Pile Steel HP 12x53	Each		2	2
Test Pile Steel HP 12x74	Each		2	2
Temporary Sheet Piling	Sq. Ft.		330	330
Name Plates	Each	1		1
Geocomposite Wall Drain	Sq. Yd.		62	62
Pipe Underdrains for Structures, 4"	Foot		132	132
Diamond Grinding (Bridge Section)	Sq. Yd.	821		821
Bar Splicers	Each	64		64



**PLAN**  
(at Pier 2)



**ELEVATION**



**SECTION THRU EXISTING PIER 9**

Note:  
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.

**TEMPORARY SHEET PILING**

DESIGNED	Curt M. Evoy
CHECKED	Rebecca L. Tharp
DRAWN	Michael B. Mossman
CHECKED	C.M.E. / R.L.T.

August 4, 2006  
EXAMINED *Thomas J. Donagale*  
PASSED *Ralph E. Anderson*  
ENGINEER OF BRIDGE DESIGN  
ENGINEER OF BRIDGES AND STRUCTURES

**GENERAL DETAILS**  
F.A.S. RT. 1671 - SEC. 22VBR-1  
DOUGLAS COUNTY  
STATION 1154+99.02  
STRUCTURE NO. 021-0060