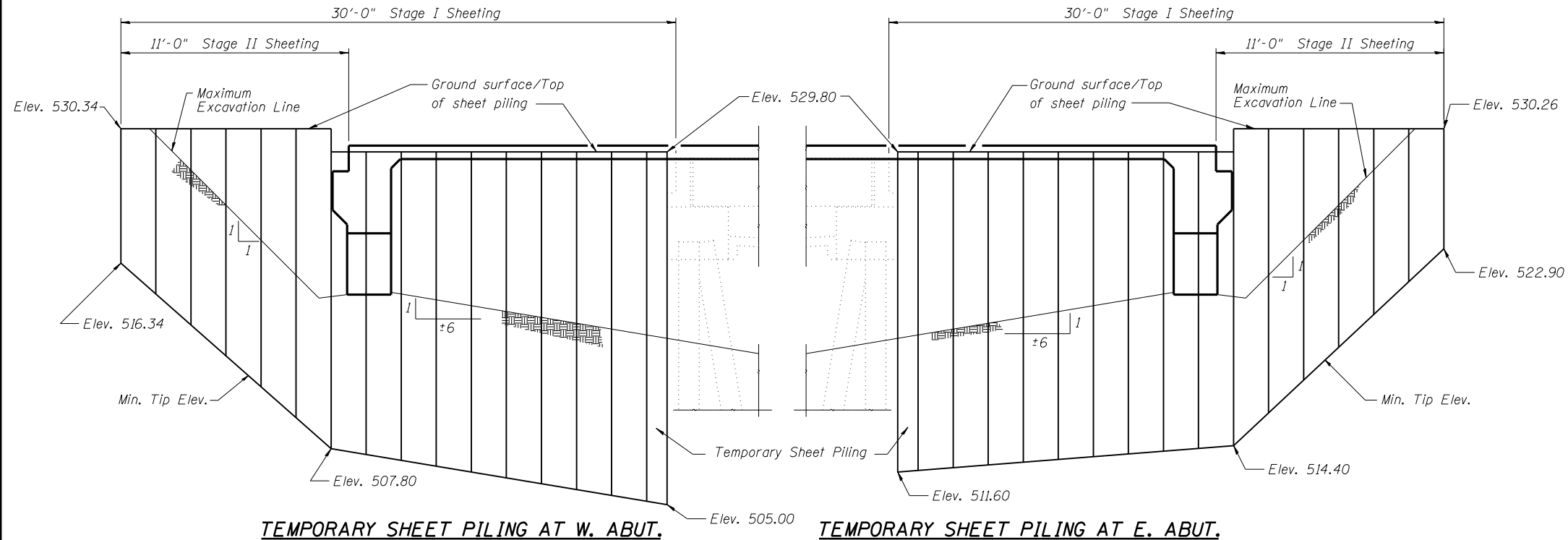


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 2 23 SHEETS
F.A.P. 717	101B-1	LOGAN	49	18	
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT		

Contract #72A04



TEMPORARY SHEET PILING AT W. ABUT.

TEMPORARY SHEET PILING AT E. ABUT.

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 a review and acceptance by the Engineer.

Minimum Required Section Modulus = 19 in³/ft.

GENERAL NOTES

Fasteners shall be AASHTO M 164, Type 1, mechanically galvanized bolts in painted areas and M 164 Type 3 in unpainted areas. Bolts 7/8" φ, holes 15/16" φ, unless otherwise noted.

Calculated weight of Structural Steel = 275,110 Lbs.
All structural steel shall be AASHTO M270 Grade 50W.
No field welding is permitted except as specified in the contract documents.
Reinforcement bars shall conform to the requirements of ASTM A 706 Grade 60 (IL Modified). See Special Provisions.

Reinforcement bars designated (E) shall be epoxy coated.
Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.

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 bearing.

Structural steel shall only be painted 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 a Department approved zinc rich primer. 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".

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

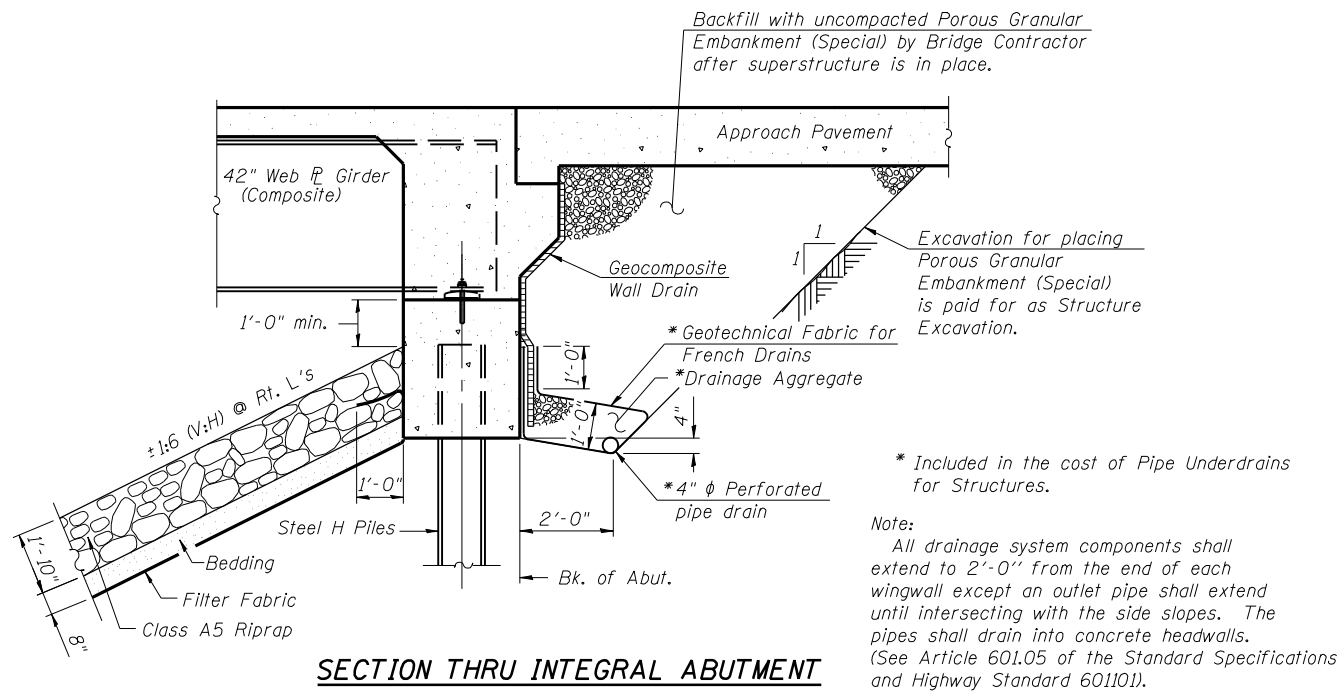
In lieu of hammer selection criteria and use of the FHWA Modified Gates formula specified in Section 512 of the Standard Specifications, the Contractor shall conduct a wave equation analysis to establish the driving criteria at all pile foundations which specify a nominal required bearing above 600 kips. The analysis and calculations shall be submitted to the Engineer for approval.

Two 1/8 inch adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

The Contractor is advised that the existing PPC Deck Beams are in deteriorated condition with reduced load carrying capacity. It is the contractor's responsibility to account for the condition of the beams when developing construction procedures for removal and replacement of the superstructure.

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub.	Total
Porous Granular Embankment (Special)	Cu. Yd.		120	120
Stone Riprap, Class A5	Sq. Yd.		1,513	1,513
Filter Fabric	Sq. Yd.		1,513	1,513
Removal of Existing Structures	Each			1
Structure Excavation	Cu. Yd.		288	288
Floor Drains	Each	14		14
Concrete Structures	Cu. Yd.		118.2	118.2
Concrete Superstructure	Cu. Yd.	325.9		325.9
Bridge Deck Grooving	Sq. Yd.	865		865
Concrete Encasement	Cu. Yd.		3.2	3.2
Protective Coat	Sq. Yd.	1,142		1,142
Furnishing and Erecting Structural Steel	L. Sum	1		1
Stud Shear Connectors	Each	3,132		3,132
Reinforcement Bars, Epoxy Coated	Lb.	65,620	9,900	75,520
Furnishing Steel Piles HP10x42	Foot		790	790
Furnishing Steel Piles HP14x89	Foot		1,255	1,255
Driving Piles	Foot		2,045	2,045
Test Piles Steel HP10x42	Each		2	2
Test Piles Steel HP14x89	Each		2	2
Temporary Sheet Piling	Sq. Ft.		1,093	1,093
Name Plates	Each	1		1
Anchor Bolts, 1"	Each		24	24
Anchor Bolts, 1 1/4"	Each		24	24
Geocomposite Wall Drain	Sq. Yd.		67	67
Pipe Underdrains for Structures 4"	Foot		133	133
Underwater Structure Excavation Protection - Location 1	Each		1	1
Underwater Structure Excavation Protection - Location 2	Each		1	1
Asbestos Bearing Pad Removal	Each	66		66
Bar Splicers	Each	674	88	762



SECTION THRU INTEGRAL ABUTMENT

DESIGNED	D.J.T. & S.D.S.
CHECKED	J.J.P. & S.D.S.
DRAWN	L.M.G. & D.L.H.
CHECKED	D.J.T. & S.D.S.

WHKS & CO.
ENGINEERS PLANNERS LAND SURVEYORS
MASON CITY, IOWA DUBUQUE, IOWA AMES, IOWA
E. DUBUQUE, ILLINOIS SPRINGFIELD, ILLINOIS ROCHESTER, MINNESOTA

GENERAL INFORMATION
IL ROUTE 10 OVER PRAIRIE CREEK
F.A.P. ROUTE 717 - SECTION 101B-1
LOGAN COUNTY
STATION 254+75.91
STRUCTURE NO. 054-0507