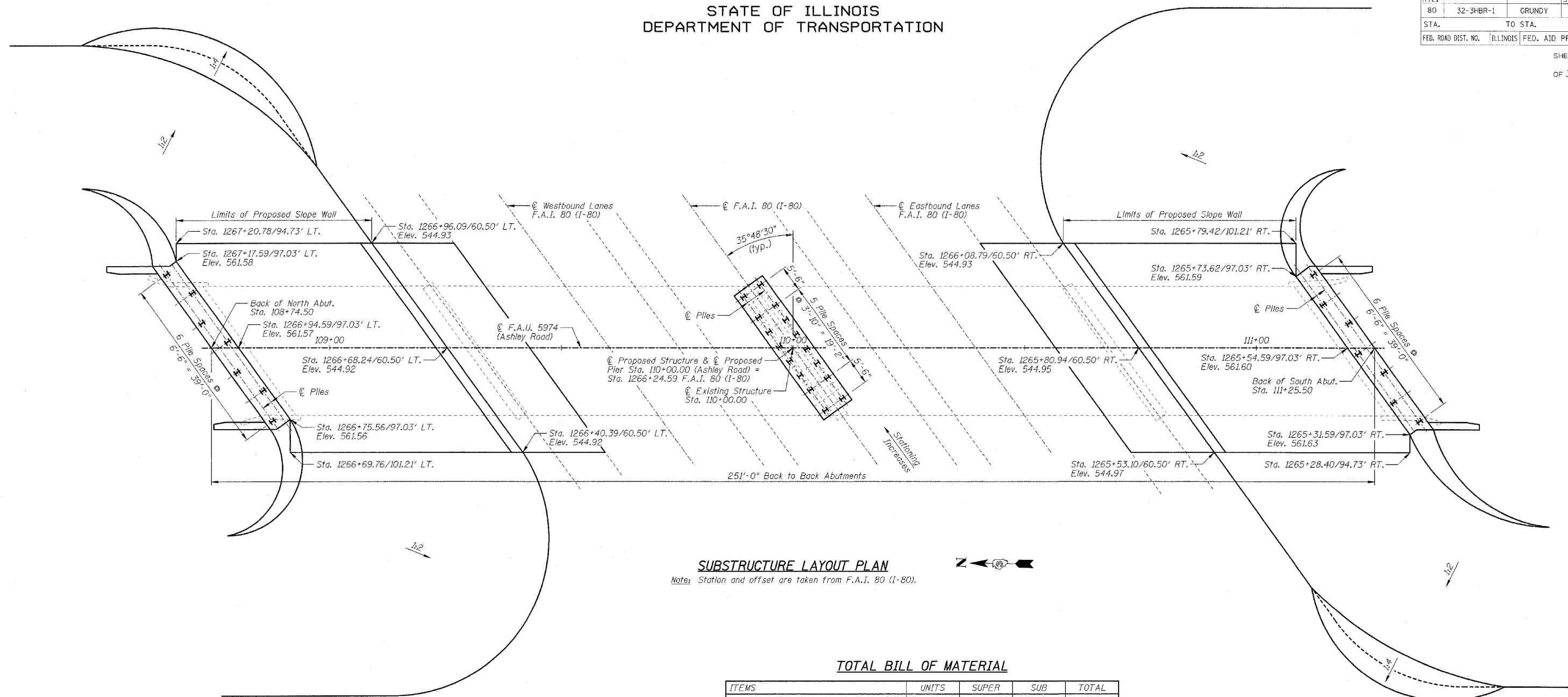


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	32-3HBR-1	GRUNDY	88	29
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

SHEET NO. B2  
OF 35 SHEETS



**SUBSTRUCTURE LAYOUT PLAN**

Note: Station and offset are taken from F.A.I. 80 (I-80).

**TOTAL BILL OF MATERIAL**

ITEMS	UNITS	SUPER	SUB	TOTAL
Porous Granular Embankment (Special)	Cu Yd		160	160
Removal of Existing Structures No. 1	Each	1		1
Slope Wall Removal	Sq Yd		388	388
Structure Excavation	Cu Yd		957	957
Neoprene Expansion Joint 2"	Foot	82		82
Concrete Structures	Cu Yd		176.9	176.9
Concrete Superstructure	Cu Yd	280.1		280.1
Bridge Deck Grooving	Sq Yd		816	816
Protective Coat	Sq Yd		1080	1080
Elastomeric Bearing Assembly, Type 1	Each		12	12
Furnishing And Erecting Structural Steel	L Sum	1		1
Stud Shear Connectors	Each	2424		2424
Reinforcement Bars, Epoxy Coated	Pound	61650	21680	83330
Slope Wall 4 Inch	Sq Yd		507	507
Furnishing Steel Piles HP12x63	Foot		1714	1714
Driving Steel Piles	Foot		1714	1714
Test Pile Steel HP12x63	Each		3	3
Name Plates	Each		1	1
Bridge Seat Sealer	Sq Ft		232	232
Drainage Scuppers, DS-II	Each	4		4
Bar Splicers	Each		64	64

**GENERAL NOTES:**

- Fasteners shall be high strength bolts. Bolts  $\frac{9}{16}$ "  $\phi$ , open holes  $\frac{11}{16}$ "  $\phi$ , unless otherwise noted.
- Calculated weight of Structural Steel AASHTO M270 Gr50 = 309,320 lb. and AASHTO M270 Gr36 = 19,060 lb.
- Field welding of construction accessories will not be permitted to beams or girders.
- Anchor bolts shall be set before bolting diaphragms over supports.
- The structural steel bearing plates of the Elastomeric Bearing Assembly shall conform to the requirements of AASHTO M270 Grade 50.
- 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 tension flanges, webs and all splice plate material except fill plates.
- Reinforcement Bars shall conform to the requirements of AASHTO M31 or M322 Grade 60.
- Slope walls shall be reinforced with welded wire fabric, 6" x 6" - W4.0 x W4.0, weighing 58 lbs. per 100 sq. ft.
- Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of  $\frac{1}{8}$  inch. Adjustment shall be made either by grinding the surface or by shimming the bearing. Two  $\frac{1}{8}$ " adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims. For Type 1 Elastomeric Bearings, two  $\frac{1}{8}$ " adjusting shims shall be provided and placed as detailed.
- The Contractor shall drive three (3) HP 12x63 test piles in permanent locations, one at each abutment and one at the pier, as directed by the Engineer before ordering the remainder of piles.
- Bridge Seat Sealer shall be applied to the seat area of the abutments.
- All construction joints shall be bonded.
- 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 Reddish Brown, Munsell No. 2.5YR 3/4. See special provision for "Cleaning and Painting New Metal Structures".
- The existing plans are provided for informational use only.

REVISIONS	
NAME	DATE
DJM	11/21/05

ILLINOIS DEPARTMENT OF TRANSPORTATION  
GENERAL NOTES, BILL OF MATERIAL  
AND SUBSTRUCTURE LAYOUT PLAN  
F.A.I. 80 (I-80)  
F.A.U. 5974 (ASHLEY ROAD) OVER I-80  
SECTION 32-3HBR-1  
GRUNDY COUNTY  
STATION 110+00.00 STRUCTURE NO. 032-0113  
DESIGNED BY: JML  
DRAWN BY: DJM  
DATE: 09/09/05  
CHECKED BY: MSW