

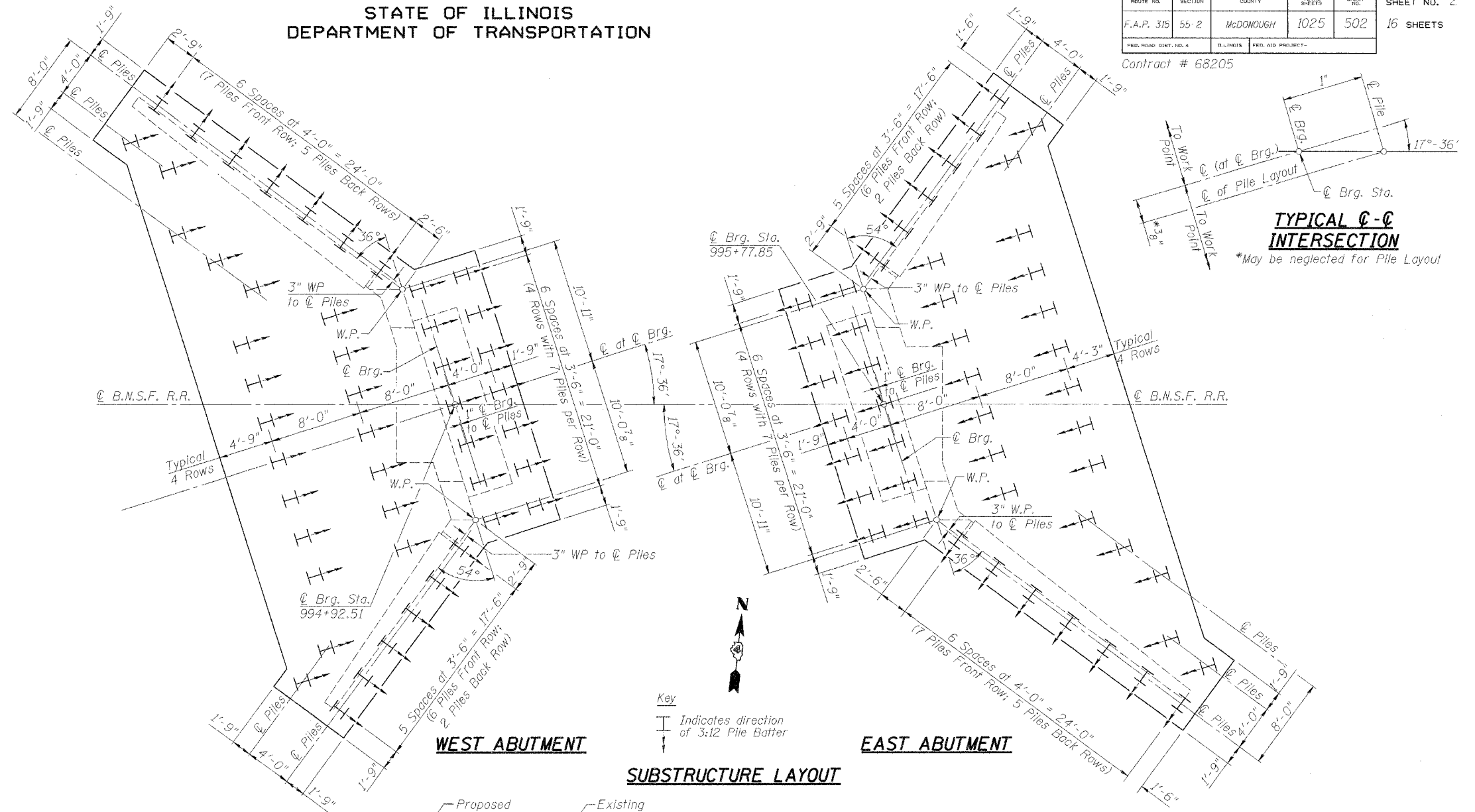
**GENERAL NOTES**

- Fasteners shall be high strength bolts. Bolts  $\frac{7}{8}$ "  $\phi$ , open holes  $\frac{15}{16}$ "  $\phi$ , unless otherwise noted.
- Calculated weight of Structural Steel = Grade 36: 58,289 lbs.; Grade 50 & Bolts: 230,742 lbs.
- 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 and fixed bearings shall conform to the requirements of AASHTO M 270 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 girder tension flanges and webs noted "N.T.R." on Sht. 5 and 6 of 16.
- Reinforcement bars shall conform to the requirements of AASHTO M 31 or M 32.2 Grade 60.
- Slope wall 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  $\frac{1}{8}$ ". Adjustment shall be made either by grinding the surface or by shimming the bearing. Two  $\frac{1}{8}$ " adjusting shims, of the dimensions shown on Sht. 7 of 16, shall be provided for each bearing in addition to all other plates or shims. Adjusting shims shall be placed as detailed on Sht. 7 of 16.
- The Contractor shall drive two HP 14 x 73 test piles in permanent locations, one test pile at each abutment, as directed by the Engineer before ordering the remainder of piles.
- Bridge Seat Sealer shall be applied to the seat area of both abutments.
- All Construction joints shall be bonded.
- Painting new steel as part of F & E structural steel:  
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 steel surfaces shall be Light Gray, Munsell No. 10Y 7/1. See special provision for "Cleaning and Painting New Metal Structures."
- The contractor is to ensure stability of plate girders during transport and during erection.

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 2
F.A.P. 315	55-2	MCDONOUGH	1025	502	16 SHEETS
FED. ROAD DIST. NO. 4		ILLINOIS	FED. AID PROJECT-		

Contract # 68205



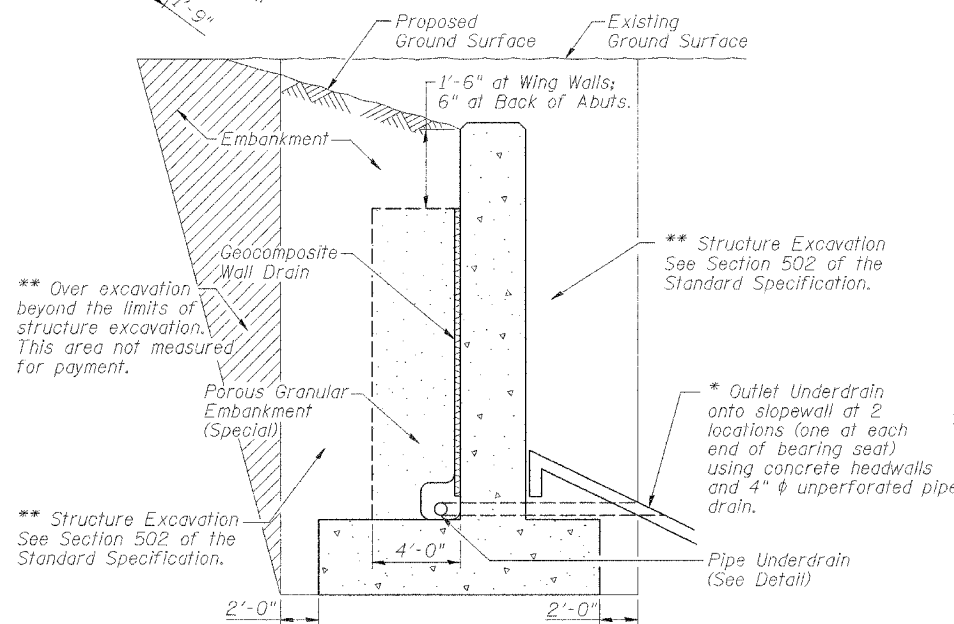
**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
Structure Excavation	Cu. Yd.		2,419	2,419
Ballast Drains	Foot	250		250
Concrete Structures	Cu. Yd.		462.8	462.8
Membrane Waterproofing (Special)	Sq. Ft.	1,581		1,581
Furnishing and Erecting Structural Steel	L. Sum	0.21		0.21
Reinforcement Bars, Epoxy Coated	Pound		73,080	73,080
Test Pile Steel HP 14 x 73	Each		2	2
Furnishing Steel Piles HP 14 x 73	Foot		5,217	5,217
Driving Steel Piles	Foot		5,217	5,217
Elastomeric Bearing Assembly Type I (Special)	Each	5		5
Name Plates	Each		1	1
Slopedwall 4 Inch	Sq. Yd.		162.6	162.6
Porous Granular Embankment (Special)	Cu. Yd.		320	320
Pipe Handrail, Special	Foot		185	185
Bridge Seat Sealer	Sq. Ft.		128	128
Metal Shoes	Each		94	94
Geocomposite Wall Drain	Sq. Yd.		256	256
Pipe Underdrains for Structures, 4"	Foot		182	182

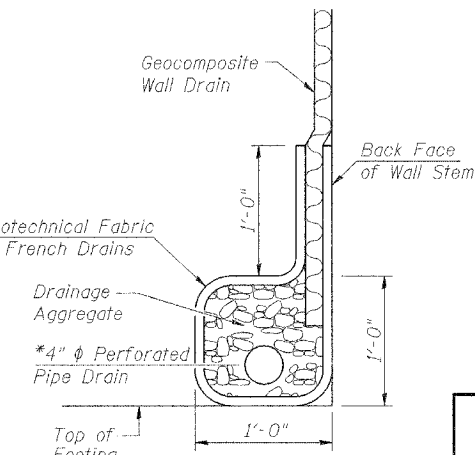
DESIGNED	P.J.L.
CHECKED	W.D.L.
DRAWN	M.G.M.
CHECKED	P.J.L.

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

\*\* Backfill remainder of structure excavation and over excavation with same material specified for roadway embankment in accordance with Section 205 of the Standard Specifications.



**TYPICAL SECTION THRU ABUTMENT AND WING WALLS WITH PIPE UNDERDRAIN OUTLET**



**PIPE UNDERDRAIN DETAIL**

**TOTAL BILL OF MATERIAL, GENERAL NOTES, & SUBSTRUCTURE LAYOUT BURLINGTON NORTHERN SANTA FE RAILROAD OVER RAMP I**  
 F.A.P. ROUTE 315 SECT. 55-2  
 MCDONOUGH COUNTY  
 STATION 21+61.48  
 STRUCTURE NO. 055-9902  
 B.N.S.F. LINE SEGMENT 0011  
 B.N.S.F. BRIDGE NO. 206.13

**STS CONSULTANTS**  
 111 NE Jefferson Ave.  
 Peoria, Illinois 61602  
 PH (309) 676-8464  
 FAX (309) 676-5445  
 IL Design Firm Reg. No. 224-001522