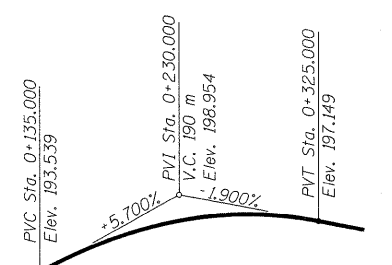
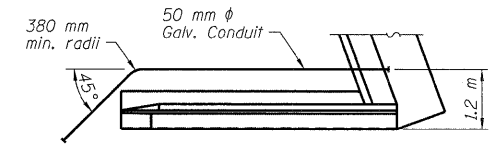
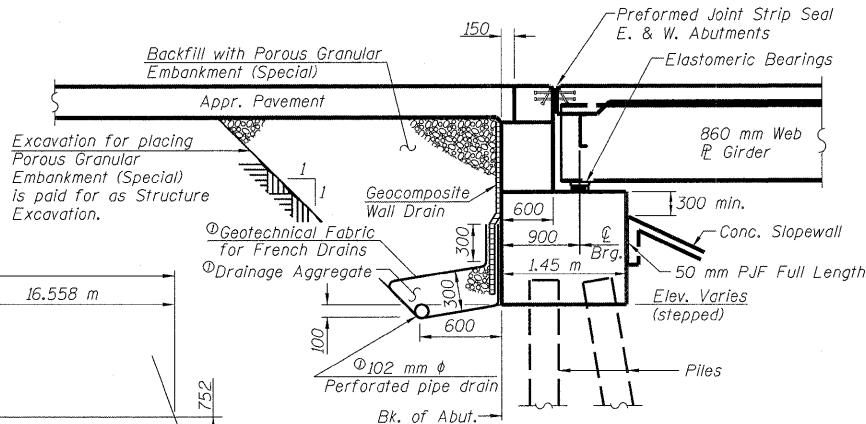
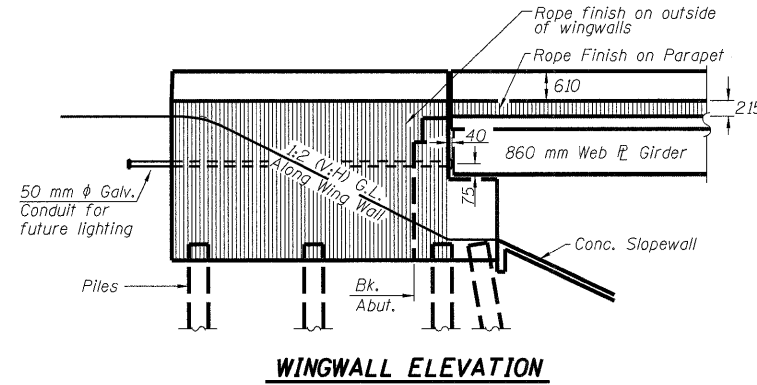
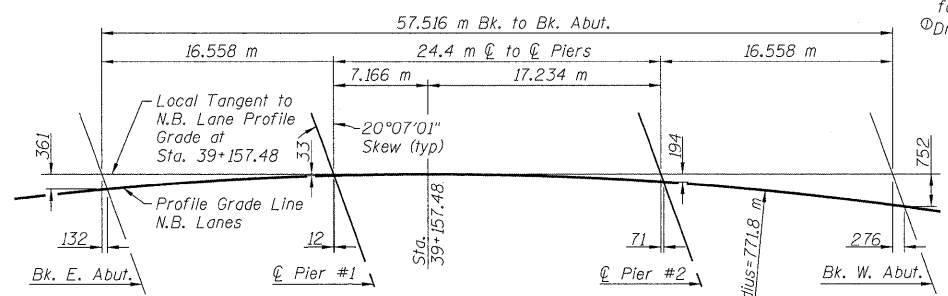
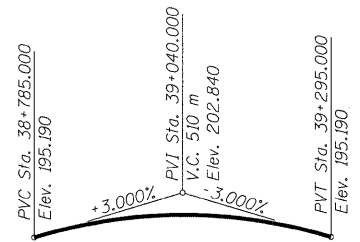


ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
S. E. R.	*	MADISON	149	33	36 SHEETS
F. A. R. 310					
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

Contract #76634 \* 60-15VB-1 & 2



From Sta. 0+322.818 to Sta. 0+508.671  
(Mainline Sta. 39+178.890 to Sta. 39+370.000)  
Ramp C profile is controlled by mainline outside edge of pavement modified entrance ramp terminal



**GENERAL NOTES**

Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts. Bolts M22, open holes 24 mm  $\phi$ , unless otherwise noted.  
 Calculated mass of Structural Steel = 124,010 kg (M270M Grade 345)  
 15,630 kg (M270M Grade 250)  
 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 surfaces shall be gray, Munsell No. 5B 7/1. The color of the finish for the exterior and bottom flange of the fascia girders shall be Reddish Brown, Munsell No. 2.5 YR 3/4. See Special Provisions for "Cleaning and Painting New Metal Structures".  
 The structural steel bearing plates of the Elastomeric Bearing Assemblies shall conform to the requirements of AASHTO M 270M Grade 345.  
 Slope wall shall be reinforced with welded wire fabric, 152 x 152-MW25.8 x MW25.8 with a mass of 2.91 kg/m<sup>2</sup>.  
 The embankment configuration shown shall be the minimum embankment that must be constructed prior to construction of the abutments. Pile driving at the abutments will NOT be allowed until two (2) months after the completions of the embankment cones.  
 The contractor shall drive one (1) metal shell test pile in a permanent location at the East Abutment and at Pier #2 as directed by the Engineer before ordering the remainder of piles.  
 Concrete Sealer shall be applied to designated seat areas of the abutments.  
 The elevations of the existing top-of-rail profiles shall be verified prior to beginning construction.  
 All dimensions are in millimeters (mm) except as noted.  
 All structural steel shall be AASHTO M 270M Grade 345 unless noted otherwise.  
 No field welding is permitted except as specified in the contract documents.  
 Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 400. See Special Provisions.  
 Reinforcement bars designated (E) shall be epoxy coated.  
 Bearing seat surfaces shall be constructed or adjusted to their designated elevations within a tolerance of 3 mm. Adjustment shall be made either by grinding the surface or by shimming the bearings.  
 The Contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at substructures specified or approved by the Engineer before ordering the remainder of piles.  
 All diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual diaphragms at supports may be temporarily disconnected to install bearing anchor rods.  
 Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.  
 Two 3 mm adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.  
 Piles shall be driven through 380 mm diameter precored holes extending to elevation 185.5 at East Abutment & Elevation 184.5 at West Abutment according to Article 512.09(c) of the Standard Specifications. Cost included in driving piles.  
 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.  
 Slip forming of parapets will not be allowed.

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
Furnishing and Erecting Structural Steel	Lump Sum	0.5		0.5
Stud Shear Connectors	Each	6,183		6,183
Test Pile Metal Shells	Each		2	2
Name Plates	Each	1		1
*** Pipe Underdrains for structures, 100 mm	Meter		71.1	71.1
Geocomposite Wall Drain	m <sup>2</sup>		98	98
Concrete Encasement	m <sup>3</sup>		13.6	13.6
Anchor Bolts, M24	Each		36	36
Anchor Bolts, M36	Each		36	36
Porous Granular Embankment (Special)	m <sup>3</sup>		181	181
*** Stone Riprap, Class A3	m <sup>2</sup>		92	92
*** Filter Fabric	m <sup>2</sup>		92	92
** Protective Coat	m <sup>2</sup>	1,339		1,339
Structure Excavation	m <sup>3</sup>		981	981
Elastomeric Bearing Assembly, Type 1	Each	27		27
Concrete Structures	m <sup>3</sup>		626.8	626.8
Concrete Superstructure	m <sup>3</sup>	307.2		307.2
Bridge Deck Grooving	m <sup>2</sup>	1,181		1,181
Reinforcement Bars, Epoxy Coated	kg	52,310	34,260	86,570
Bar Splicers	Each		150	150
Furnishing Metal Shell Piles 356mmX6.35mm	Meter		1,801.0	1,801.0
Driving Piles	Meter		1,801.0	1,801.0
Concrete Sealer	m <sup>2</sup>	149		149
*** Slopewall 100 mm	m <sup>2</sup>		1,081	1,081
Form Liner Textured Surface	m <sup>2</sup>	24	62	86
*** Temporary Sheet Piling	m <sup>2</sup>		767	767
Preformed Joint Strip Seal	Meter	46.0		46.0

\*\* Quantity is for inside & top surface of parapet & deck.  
 \*\*\* For Quantity North of Local Tangent to  $\phi$  FAP 310 at Sta. 39+157.48.

STATION 39+160.297  
 BUILT 200.. BY  
 STATE OF ILLINOIS  
 F.A.P. RT. 310 SEC. 60-15VB-1&2  
 LOADING MS18  
 STR. NO. 060-0310

**NAME PLATE**  
 See Std. 515001  
 (1 Required)

**TOTAL BILL OF MATERIALS,  
 GENERAL NOTES AND DETAILS  
 FAP RTE 310 (IL RTE 255) NB & RAMP C OVER  
 UNION PACIFIC & KANSAS CITY SOUTHERN R.R.  
 SECTION 60-15VB-1 & 2  
 MADISON COUNTY  
 STATION 39+160.297  
 STRUCTURE NUMBER 060-0310**

DESIGNED	ADL
CHECKED	WLW
DRAWN	DGM/ADL
CHECKED	WLW