Contract # 64C74

INDEX OF SHEETS

- 1. Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts. Bolts ${}^{3}_{4}$ " ϕ , holes ${}^{9}_{16}$ " ϕ , unless otherwise noted.
- 2. Calculated weight of Structural Steel is

GENERAL NOTES

- For Cover Plate Retrofit, M 270 Grade 50 = 9,910 lbs.
- For Bearing Extensions & Side Retainers, M 270 Grade 36 = 7,460 lbs.
- 3. No field welding is permitted except as specified in the contract documents.
- 4. The Contractor shall test the existing welds by non-destructive methods within 2 ft. of the end of the existing cover plates for cracks after removal of the existing concrete deck. Dye penetrant (PT), magnetic particle (MT), or other approved testing method shall be performed by qualified personnel approved by the Engineer. If cracks are found, report them to the Bureau of Bridges and Structures for disposition. The cost of testing is included in Removal of Existing Concrete Deck. The cost of crack repair, if necessary, will be paid for according to Article 109.04 of the Standard Specifications.
- 5. Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). See Special Provisions
- 6. Reinforcement bars designated (E) shall be epoxy coated.
- 7. Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.
- As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by an individual acceptable to the Engineer. Any cracks that cannot be removed by grinding 4 inch deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.
- 8. If the Contractor elects to use cantilever forming brackets on the exterior beams or girders, the brackets shall be placed at the same locations as required for the hardwood blocks in Article 503.06(b) of the Standard Specifications. If additional cantilever forming brackets are required, hardwood blocking shall be wedged between the exterior and first interior beam at each of these additional bracket locations.
- 9. Plan dimensions and details relative to existing plans are subject to routine variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished based upon the unit price bid for the work.
- 10. Cleaning and field painting of structural steel shall be done under a separate painting contract.
- 11. Surface preparation and painting of existing steel areas that will be in contact with new steel for cover plate retrofit and bearing extentions shall be done as specified in the special provision "Cleaning and Painting Contact Surface Areas of Existing Steel Structures".
- 12. The lateral limits of the protective shield system required for deck removal and reconstruction shall extent to the edge of the existing deck.
- 13. The existing structural steel coating contains lead. The contractor shall take appropriate precautions to deal with the presence of lead on this project.
- 14. The Organic Zinc Rich Primer/ Epoxy / Urethane Paint System shall be used for painting of new structural steel except where otherwise noted. The entire system shall be shop applied, with the exception that masked off connection surfaces, field installed fasteners and damaged areas shall be touched up in the field. 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 beam surfaces shall be Interstate Green, Munsell No. 7.56 4/8. See Special Provision for "Cleaning and Painting New Metal Structures".
- 15. Clean and relocate existing name plates adjacent to new plates. Cost included with "Name Plates".

General Plan and Flevation

- 52
- General Notes, Index of Sheets, Total Bill of Materials

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

Approach Pavement

10" Back of Exist. Abut.

- Exist. backwall

to be removed

_Const. Joint

- 5.3 Construction Staging
- Removal Details
- Top of Slab Elevations I (WB Bridge) *S*5
- Top of Slab Elevations II (WB Bridge)
- 57 Top of Slab Flevations III (FR Bridge)
- S8 Top of Slab Elevations IV (EB Bridge)
- Top of Approach Slab Elevations (WB Bridge) 59 Top of Approach Slab Elevations (EB Bridge) 510
- S11 Deck Plan and Section
- S12 Superstructure Details I - Abutment Diaphragm
- Superstructure Details II Parapet Elevation 513
- Superstructure Details III Parapet Details 514
- S15 Concrete Parapet Slipforming Option
- Framing Plan and Moment & Reaction Tables
- 517 Shear Connector Details
- Cover Plate Retrofit Details S18
- S19 Temporary Concrete Barrier for Stage Construction

Bridge Omission

2'-0"

- Bar Splicer Assembly Details
- Bearing Details I (Beams 1 to 6) 521
- S22 Bearing Details II (Beams 7 to 9)
- S23 Abutments A & D
- S24 Abutments B & C

Exist. W30 or W33 Beam

S25 Bridge Approach Pavement (Special)

2" Preformed Joint Filler

(See Abutment Note 2)

Exist. Conduit to be relocated (See Abutment Note 4)

New Elastomeric Bearings with Extension

(See Sheets S21 and S22 of S25)

STATION 217+81.50 REBUILT 2008 BY STATE OF ILLINOIS FAI 80 SECTION 81-1HBY-D LOADING HS20 STRUCTURE NO.081-0012

NAME PLATE See Std. 515001

STATION 217+81.50 REBUILT 2008 BY STATE OF ILLINOIS FAI 80 SECTION 81-1HBY-L LOADING HS20 STRUCTURE NO.081-0013

NAME PLATE See Std. 515001

Backfill with uncompacted Porous Granular Embankment (Special) by Bridge Contractor after superstructure is in place. Structure Excavation for placing Porous Granular Embankment (Special) Fabric Reinforced Elastomeric Mat (See Abutment Note 1) Geocomposite Wall Drain Geotechnical Fabric for French Drains Drainage Aggregate * 4'' ¢ Perforated Pipe Drain * Included in the cost of "Pipe Underdrains for Structures". ** Paid for as "Structure Excavation". ABUTMENT SECTION

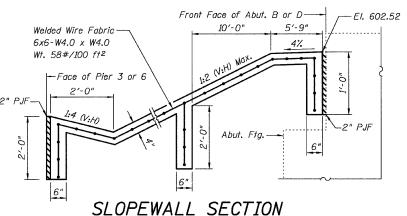
ABUTMENT NOTES

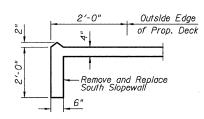
€ Brg.

- 1. Fabric Reinforced Elastomeric Mat shall be in accordance with Section 1028 of the Standard Specifications. Fabric mat shall be 24" wide and attached full width and vertically at edges to the abutment cap with $a \stackrel{3}{}_{8}$ " x 5" steel plate and $\stackrel{1}{}_{2}$ " ϕ studs with nuts and washers at 12" cts. The mat shall cover the full length of the 2" open joints at edges of abutment wingwalls. The cost of this work, including all material, labor and equipment necessary to complete the work, shall be included with "Concrete Superstructures".
- 2. 2" Preformed Joint Filler shall be per Article 1051.08 and shall be bonded full width to the abutment cap with suitable adhesive as recommended by supplier.
- 3. 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 pipe shall drain into concrete headwalls. See Article 601.05 of the Standard Specifications and Highway Standard 601101.
- 4. Existing utility conduit shall be removed and relocated. For details and method of payment, see roadway plans.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment (Special)	Cu. Yd.		233	233
Bridge Approach Pavement (Special)	Sq. Yd.		740	740
Concrete Removal	Cu. Yd.		62	62
Slope Wall Removal	Sq. Yd.		676	676
Removal of Existing Concrete Deck	Each	2		2
Protective Shield	Sq. Yd.	1455		1,455
Structure Excavation	Cu. Yd.		233	233
Concrete Structures	Cu. Yd.		2.6	2.6
Concrete Superstructure	Cu. Yd.	726.9		726.9
Bridge Deck Grooving	Sq. Yd.	2,208		2,208
Protective Coat	Sq. Yd.	2,659		2,659
Furnishing and Erecting Structural Steel	Pound	9,910	7,460	17,370
Stud Shear Connectors	Each	11,808		11,808
Jack and Remove Existing Bearings	Each		36	36
Reinforcement Bars, Epoxy Coated	Pound	174,070	220	174,290
Bar Splicers	Each	1,560		1,560
Slope Wall, 4 inch	Sq. Yd.		654	654
Temporary Sheet Piling	Sg. Ft.		392	392
Name Plates	Each	2		2
Elastomeric Bearing Assembly, Type I	Each		36	36
Anchor Bolts, 1"	Each		72	72
Geocomposite Wall Drain	Sq. Yd.		129	129
Pipe Underdrains for Structures, 4"	Foot		238	238
Type C Inlet Box, Standard 609006	Each		4	4





SECTION A-A

ILLINOIS DEPARTMENT OF TRANSPORTATION GENERAL NOTES. INDEX OF SHEETS. AND TOTAL BILL OF MATERIAL INTERSTATE 80 OVER INTERSTATE 88 F.A.I. ROUTE 80 - SECTION 81-1HBY-D ROCK ISLAND COUNTY STATION 217+81.50 EB S.N. 081-0012 & WB 081-0013 DRAWN BY: A. Yargicoglu CHECKED BY: A. Durbak DATE: FEBRUARY 27, 2008

PATRICK ENGINEERING INC. LISLE, ILLINOIS