GENERAL NOTES

Calculated weight of Structural Steel: AASHTO M270 Grade 36 = E.B. 39,690 lbs - W.B. 40,040 lbs. Expansion joint plates and attached bars shall be shop painted with the inorganic zinc rich primer.

Field welding of construction accessories will not be permitted to beams or airders.

Anchor bolts shall be set before bolting diaphragms over supports.

otherwise noted.

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 wide flange beams and all splice plate material except fill plates.

Reinforcement bars shall conform to the requirements of AASHTO M 31 or M 322 Grade 60

Slope wall shall be reinforced with welded wire fabric, 6"x6"-W4.0xW4.0, weighing 58 lbs. per 100 Sq. Ft.

Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field 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 the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price for the work.

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of $^{l}_{8}$ inch. Adjustment shall be made either by grinding the surface or by shimming the bearing. Two $^{\prime}8^{\prime\prime}$ adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims.

The contractor shall drive one HP10x42 test pile at the Abutments and Pier #2 for the E.B. & W.B. structures in a permanent location as directed by the Engineer before ordering the remainder of piles.

Prior to pouring the new concrete deck, all loose rust, loose mill scale, and other loose potentially detrimental foreign material shall be removed from the surfaces of the beams or girders in contact with concrete. The cost of this work will be included in the pay item covering removal of the existing concrete. All heavy rust and other tightly adhered potentially detrimental foreign matter shall also be removed from the surfaces of the beams or girders in contact with concrete. Tightly adhered paint may remain unless otherwise noted. This removal shall be accomplished by methods that will not damage the steel. The cost of this work will be paid for according to Article 109.04.

All existing construction accessories welded to the top flange over the pier between the quarter points of the beams or girders shall be removed. The remaining weld shall be ground smooth and inspected for cracks using magnetic particle testing. Any cracks that cannot be removed by grinding approximately ¹₄ inch deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of this work will be paid for according to Article 109,04.

Concrete Sealer shall be applied to the seat area of the abutment extensions. The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

The existing structural steel shall be painted, cleaned, and lead coatings removed under a separate contract.

All Construction joints shall be bonded.

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 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.

No deck drains will be permitted in the span over tracks or within 10' of crossarms

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 Interstate Green Munsell No. 7.5G 4/8. See Special Provisions for "Cleaning and Painting New Metal Structures".

Drains shall be located clear of all diaphragms.

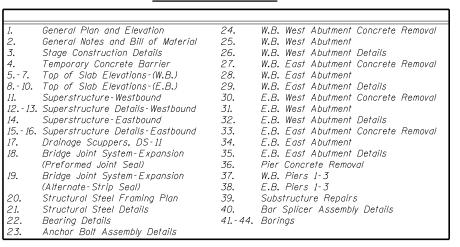
If the Contractor chooses to after the temporary cantilevered sheet piling design requirements shown on the plans a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.

Top of slab elevations were set using the proposed profile grade shown on this sheet to account for a future mill of ${}^{l}_{4}{}^{\prime\prime}$ and an overlay of $3{}^{3}_{4}{}^{\prime\prime}$

The Steel H-piles shall be according to AASHTO M270 Grade 50.

The test piles shall be driven to 110 percent of the Nominal Required Regring indicated in the pile data information.

INDEX OF SHEETS



Existing Slope Wall to be removed

and replaced with 6" Bituminous

Coated Aggregate Slopewall

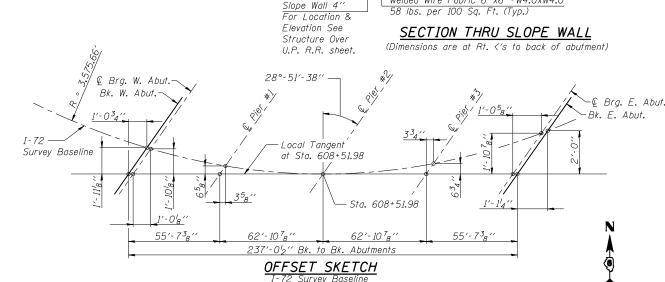
(V.4) (V:

Slope as required

at ends of piers

PROPOSED IMPROVEMENTS

Existing dual structures to be widened. Existing concrete deck to be removed and widened using staged construction. Superstructure will be widened by adding one new beam line, utilizing the same type of beam and bearings as the existing structure. All diaphragms at the abutments to be replaced. Existing Structural Steel shall be cleaned and painted under a seperate contract. Existing wingwalls and backwalls to be removed, abutments to be widened. Pier cap cantilevers removed, piers to be widened and repaired at locations of cracks and spalled areas. East and West slopewall to be removed and replaced. Existing approach pavements to be removed and replaced with 30' bridge approach pavements. Traffic to be maintained utilizing stage construction.



VPI Sta. 609+00.00 Elevation 650.58 Elevation 650.52 2.90% 2,400.00 2.400.00 59 EL. —Limits of Structure -Limits of Structure

<u>I-72 W.B. PROPOSED PROFILE GRADE</u> I-72 E.B. PROPOSED PROFILE GRADE

(I-72 WB & EB Proposed Profile Grades shown above are a best fit vertical curve that was based on a survey of the existing deck, and were adjusted to account for a future mill of $^{l}_{4}$ " and an overlay of 3^{3}_{4} ")

SHEET NO. SHEET NO. 02 TOTAL 44 SHEETS FAI 72 559 255 SANGAMON

Contract No 7254.

to be removed and replaced with 30' Bridge Approach Pavement (Std. 420401) Existing Backwall to be removed and replaced Backfill with uncompacted Porous Granular Geocomposite Embankment (Special) by Bridge Contractor. Wall Drain

Existing Bridge Approach Pavement

Pipe Drain

2′-0"

Bk. of

Abut.

4'-4"

SECTION THRU ABUTMENT

Structure Excavation. *Geotechnical Fabric for French Drains

Excavation is paid for as

—*Drainage Aggregate *Included in the cost of

— Approach Pavement

Porous Granular Embankment (Special)

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 pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).

Pipe Underdrains for Structures 4".

4" \$\phi\$ Perforeated Pipe Drain shall be capped at the pipes high end, adjacent to wingwall. Cost included with Pipe Underdrains for Structures 4".

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	Cu. Yd.	-	117.6	117.6
Slope Wall Removal	Sq. Yd.	-	2100	2100
Removal of Existing Concrete Deck	Each	2	-	2
Porous Granular Embankment, Special	Cu. Yd.	-	132	132
Structure Excavation	Cu. Yd.	-	697	697
Floor Drains	Each	12	-	12
Concrete Structures	Cu. Yd.	-	340.0	340.0
Concrete Superstructure	Cu. Yd.	657.3	-	657.3
Bridge Deck Grooving	Sq. Yd.	1966	-	1966
Protective Coat	Sq. Yd.	2502	-	2502
Structural Repair of Conc. (Depth eq. to or less than 5'')	Sq. Ft.	-	33	33
Furnishing and Erecting Structural Steel Bridge No. 1	L. Sum	1	-	1
Furnishing and Erecting Structural Steel Bridge No. 2	L. Sum	1	-	1
Stud Shear Connectors	Each	10710	-	10710
Structural Steel Removal	Pound	2920	-	2920
Reinforcement Bars, Epoxy Coated	Pound	148700	39400	188100
Slope Wall 4''	Sq. Yd.	-	152	152
Bituminous Coated Aggregate Slopewall 6''	Sq. Yd.	-	1982	1982
Furnishing Steel Piles HP10x42	Foot	-	1425	1425
Driving Piles	Foot	-	1425	1425
Test Pile Steel HP10x42	Each	-	6	6
Temporary Sheet Piling	Sq. Ft.	-	1105	1105
Name Plates	Each	2	-	2
Concrete Sealer	Sq. Ft.	-	98	98
Drainage Scuppers, DS-11	Each	4	-	4
Bridge Joint System (Expansion) 1 ⁵ 8"	Foot	187	-	187
Temporary Shoring and Cribbing	L. Sum	1	-	1
Bar Splicers	Each	1374	231	1605
Protective Shield	Sq. Yd.	1007	-	1007
Pipe Underdrains for Structures 4"	Foot	-	208	208
Geocomposite Wall Drain	Sq. Yd.	-	75	75

West	West Rail East Rail		Rail
Station	Elevation	Station	Elevation
0+00.00	605.31	0+00.03	605.33
0+67.95	605.32	0+67.76	605.35
1+83.47	605.26	1+83.48	605.25
2+80.82	605.24	2+80.71	605.24
3+81.80	605.12	3+81.74	605,13
4+81.65	605.26	4+81.69	605.24
5+78.38	605.39	5+78.51	605.36

2'-0" or 5'-0"

See sheet O1 of 44.

— Edge of Deck

Bituminous Coated

Aggregate Slopewall 6'

2′-5⁵8" at Rt. <′s

€ Brg.-

4" Preformed

Joint Seal

SECTION A-A

Steel Rocker

Low Bearing

Bearinas

·1'-0" min.

2" P.J.F. al.

around pier

Welded Wire Fabric 6"x6"-W4.0xW4.0

All discrepencies shall be brought to the attention of the Field Engineer.

EXISTING TOP OF RAIL ELEVATIONS UP R.R.

Corporate License Number 184-001-084

GENERAL NOTES & BILL OF MATERIAL F.A.I. 72 OVER UNION PACIFIC RAILROAD SECTION (84-9-4)A,HBK,BY,BY-1 SANGAMON COUNTY STATION 608+51.98 STR NO. 084-0074 EB - 084-0075 WB



96S2002E 01/12/06