

GENERAL NOTES

- Fasteners shall be high strength bolts (AASHTO M 164, Type 1 or 2). Bolts $\frac{7}{8}$ " ϕ , open holes $\frac{15}{16}$ " ϕ , unless otherwise noted.
- Calculated weight of Structural Steel = 519,246 lbs (AASHTO M270 Grade 50)
Calculated weight of Structural Steel = 51,213 lbs (AASHTO M270 Grade 36)
- 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 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 wide flange beams, webs and all splice plate material except fill plates.
- Reinforcement bars shall conform to the requirements of AASHTO M 31, M 42 or M 53 Grade 60.
- 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.
- The embankment configuration shown shall be the minimum embankment that must be constructed prior to construction of the abutments.
- 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 I Elastomeric Bearings, two $\frac{1}{8}$ " adjusting shims shall be provided for each bearing and placed as detailed).
- The contractor shall drive 1 steel HP 12x53 test pile in a permanent location at each abutment and each pier as directed by the Engineer before ordering the remainder of piles. 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 Bearing indicated in the pile data information.
- The concrete for bridge floors finished according to Article 503.16 of the Standard Specifications, shall be placed and compacted parallel to the skew in uniform increments along centerline of bridge. The finishing machine, when required, shall be set parallel to the skew for striking off and screeding the concrete.
- Concrete Sealer shall be applied to the seat area of the abutments.
- Protective coat shall be applied to the entire top surface of the bridge deck, top surface of the bridge approach, the top surface of the multi-use path, the top and inside face of the concrete parapet near the roadway median and the top and both faces of the concrete parapet along the north side of the bridge.
- When the deck pour is stopped for the day at one or more of the Transverse Bonded Construction Joints in the deck Pouring Sequence as shown, the next pour shall not be made until both of the following requirements are met:
 - At least 72 hours shall have elapsed from the end of the previous pour.
 - The concrete strength shall have attained a minimum flexural strength of 650 psi or a minimum compressive strength of 3500 psi.
- 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 steel surfaces shall be gray, Munsell No. 5B 7/1. See Special Provision for Cleaning and Painting New Metal Structures.
- Floor drains shall be located clear of all diaphragms. If adjustments to the drain locations are required, the drain shall be adjusted away from the nearest pier/abutment.
- The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
- 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.
- Demolition, falsework and shoring shall meet the Union Pacific (UP) and Chicago Central & Pacific (CC&P) railroad requirements and shall be reviewed and approved by the UPRR & CC&RR.
- The proposed bridge structure will not change the quantity and/or characteristic of flow in the railway's ditches.

INDEX OF SHEETS

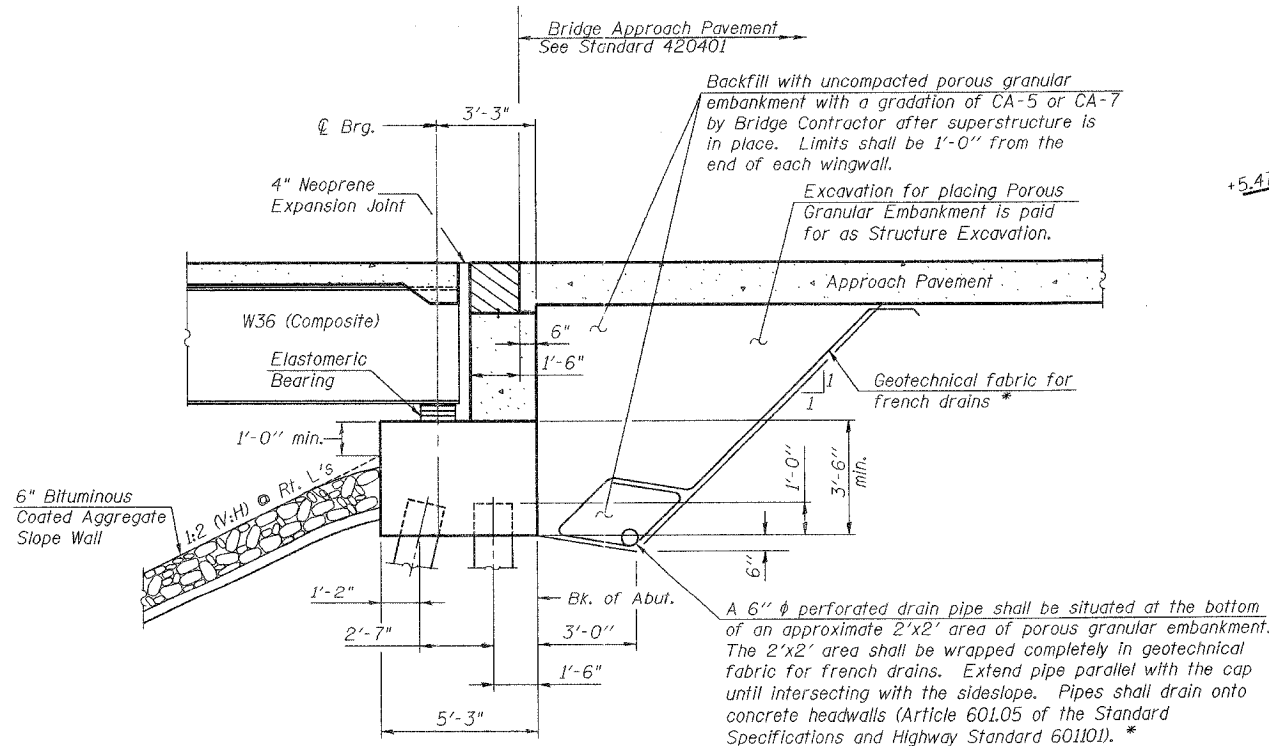
TITLE	SHEET #
General Plan & Elevation	1
General Notes & Details	2
Pier Excavation Protection Plan	3-4
Protective Shield	5
Top of Slab Elevations	6-9
Superstructure	10-11
Superstructure Details	12-16
Neoprene Expansion Joint	17
Parapet Steel Railing	18
Pedestrian Railing	19
Bridge Fence Railing (Sidewalk)	20
Drainage System Details	21
Structural Steel Framing Plan	22
Beam Elevation	23
Structural Steel Details	24-25
Bearing Details	26-28
Anchor Bolt Details	29
West Abutment	30-32
East Abutment	33-35
Pier 1	36-37
Pier 2	38-39
Pier 3	40-41
Pier 4	42-43
Bar Splicer Assembly Details	44
West Slopewall	45
East Slopewall	46
Grading Between Piers 2 & 3	47
Boring Logs	48-50

West Rail		East Rail	
Station	Elevation	Station	Elevation
26+19.76	777.08	26+19.85	776.95
27+21.36	776.59	27+21.57	776.45
28+25.84	776.14	28+25.36	776.05
29+24.38	775.70	29+23.68	775.63
29+88.23	775.38	29+88.24	775.29
30+82.51	774.83	30+82.58	774.74
31+03.43	774.32	31+86.06	774.22
32+89.05	773.80	32+87.89	773.67
33+86.26	773.35	33+85.69	773.25

EXISTING TOP OF RAIL ELEVATIONS CC&P R.R.

West Rail		East Rail	
Station	Elevation	Station	Elevation
56+42.51	781.93	56+42.81	781.86
57+35.39	781.55	57+35.41	781.49
58+40.71	781.25	58+40.95	781.18
59+38.16	781.10	59+37.71	780.97
60+10.65	780.91	60+10.57	780.78
60+80.42	780.74	60+79.92	780.83
61+70.81	780.51	61+70.65	780.43
62+60.36	780.15	62+60.18	780.04
63+59.19	779.41	63+58.67	779.34

EXISTING TOP OF RAIL ELEVATIONS UP R.R.



* Included in the cost of Porous Granular Embankment.

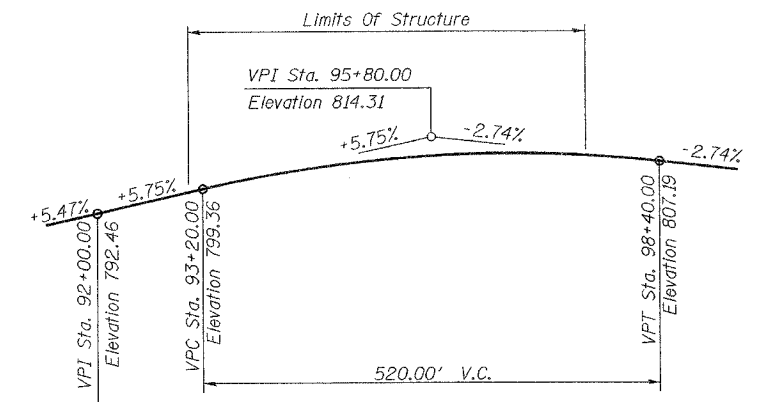
SECTION THRU ABUTMENT

(Horiz. dim. @ Rt. L's)

ROUTE NO.	SECTION	COUNTY	DATE	SHEET	SHEET NO.
FAP 0525	0	WINNEBAGO	157	59	2
FED. ROAD DIST. NO. 7					50 SHEETS
STATE PROJECT NO. 02-00518-00-BR					

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment	Cu. Yd.	-	238	238
Removal of Existing Structures - No. 2	Each	-	-	1
Slope Wall Removal	Sq. Yd.	-	305	305
Structure Excavation	Cu. Yd.	-	2,020	2,020
Floor Drains	Each	3	-	3
Neoprene Expansion Joint 4"	Foot	128	-	128
Concrete Structures	Cu. Yd.	-	971.3	971.3
Concrete Superstructure	Cu. Yd.	584.1	-	584.1
Bridge Deck Grooving	Sq. Yd.	1205	-	1205
Concrete Encasement	Cu. Yd.	-	8.5	8.5
Protective Coat	Sq. Yd.	2760	-	2760
Elastomeric Bearing Assembly, Type I	Each	6	-	6
Elastomeric Bearing Assembly, Type II	Each	18	-	18
Furnishing and Erecting Structural Steel - Bridge No. 2	L. Sum	1	-	1
Stud Shear Connectors	Each	5712	-	5712
Reinforcement Bars, Epoxy Coated	Pound	143,020	131,680	274,700
Furnishing Steel Piles, HP 12x53	Foot	-	2,793	2,793
Driving Piles	Foot	-	2,793	2,793
Test Pile Steel HP 12x53	Each	-	6	6
Pile Shoes	Each	-	110	110
Name Plates	Each	1	-	1
Concrete Sealer	Sq. Ft.	-	425	425
HLMR Bearings, Guided Exp. 300k	Each	6	-	6
Bar Splicers	Each	1138	-	1138
Parapet Railing	Foot	475	-	475
Bridge Fence Railing (Sidewalk)	Foot	442	-	442
Pedestrian Railing	Foot	439	-	439
Bituminous Coated Aggregate Slopewall, 6"	Sq. Yd.	-	878	878
Protective Shield	Sq. Yd.	1115	-	1115
Drainage System	L. Sum	0.5	-	0.5
Structure Excavation Protection for Pile Bents, No. 4	Each	-	1	1
Structure Excavation Protection for Pile Bents, No. 5	Each	-	1	1
Structure Excavation Protection for Pile Bents, No. 6	Each	-	1	1
Anchor Bolts, 1"	Each	48	-	48
Anchor Bolts, 1 1/2"	Each	24	-	24
Anchor Bolts, 1 1/2"	Each	24	-	24
Permanent Survey Marker, Type I	Each	1	-	1



PROFILE GRADE

Corporate License Number 184-001-084

GENERAL NOTES & DETAILS

**EASTBOUND HARRISON AVENUE
OVER UP & CC&P RAILROAD
F.A.P. ROUTE 0525
SECTION 02-00518-00-BR
ROCKFORD, ILLINOIS
STATION 95+72.00
STRUCTURE NO. 101-6111**

© Copyright Hanson Professional Services Inc. 2006



03R1751

DATE 12/14/06

12/28/06 PM 12:13:00.06.028 PM
 DRAWN: MCM/RR 12/11/06
 REVIEWED: FLN 12/11/06
 LAYOUT: FLN 11/14/05
 12/13/06