

GENERAL NOTES

- Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts (in painted areas and M164 Type 3 in unpainted areas). Bolts $\frac{7}{8}$ in. ϕ , holes $\frac{15}{16}$ in. ϕ , unless otherwise noted.
- Calculated weight of Structural Steel = 386,730 lbs.
- All structural steel shall be AASHTO M 270 Grade 50.
- No field welding is permitted except as specified in the contract documents.
- Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). See Special Provisions
- Reinforcement bars designated (E) shall be epoxy coated.
- 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.
- Bearing seat surfaces shall be constructed or adjusted to their designated elevations within a tolerance of $\frac{1}{8}$ inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.
- 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 Gray, Munsell No. 5B 7/1. See Special Provision for "Cleaning and Painting New Metal Structures".
- Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
- 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 cross frames or diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual cross frames or 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.
- The Contractor shall make allowance for the deflection of forms, shrinkage and settlement of falsework, in addition to allowance for dead load deflection. Forms for deck slab shall be removed prior to placement of bridge approach pavement.
- 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 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 structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M 270 Grade 50.
- Two $\frac{1}{8}$ in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.
- All embedded and separate bearing plates, side retainers, anchor bolts, nuts, washers and pintles shall be galvanized according to AASHTO M111 or M232 (as applicable).
- Backfill shall be placed behind the abutment after the superstructure has been poured and falsework removed. See Article 502.10 of the Standard Specifications.

DESIGNED	200
CHECKED	EXAMINED
DRAWN	PASSED
CHECKED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLATE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. S-2 SHEETS 33
		KANE	72	21	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

Project No. BROS-000(641)
Contract No. 63080

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
*Porous Granular Embankment, Special	Cu. Yd.		131	131
*Porous Granular Embankment, Subgrade	Cu. Yd.		239	239
*Removal of Existing Structures	L. Sum	1		1
Structure Excavation	Cu. Yd.		1,645	1,645
Concrete Structures	Cu. Yd.		358.7	358.7
Concrete Superstructure	Cu. Yd.	475.7		475.7
Bridge Deck Grooving	Sq. Yd.	770		770
Concrete Encasement	Cu. Yd.		4.2	4.2
Protective Coat	Sq. Yd.	1,424		1,424
Furnishing and Erecting Structural Steel	L. Sum	1		1
Stud Shear Connectors	Each	3,852		3,852
Reinforcement Bars, Epoxy Coated	Pound	89,400	54,690	144,090
Bar Splicers	Each	78		78
Bridge Fence Railing	Foot	558		558
*Bituminous Aggregate Coated Slopewall, 6	Sq. Yd.		555	555
Furnishing Steel Piles HPI2X53	Foot		2,495	2,495
Driving Piles	Foot		2,495	2,495
Test Pile Steel HPI2X53	Each		4	4
Pile Shoes	Each		60	60
Name Plate	Each	1		1
Anchor Bolts, 1 1/4"	Each		24	24
Anchor Bolts, 1 1/4"	Each		12	12
Anchor Bolts, 1 1/2"	Each		12	12
Geocomposite Wall Drain	Sq. Yd.		64	64
*Pipe Underdrains for Structures, 4"	Foot		89	89
*Permanent Steel Sheet Piling	Sq. Ft.		1,512	1,512
*Stone Columns, 2'-6" dia.	Ft.		1,796	1,796
*Mechanically Stabilized Earth Retaining Wall	Sq. Ft.		3,258	3,258

* Denotes Special Provision Item

WATERWAY INFORMATION

Drainage Area = 14.30 Sq. Mi. Proposed Low Grade Elev. 696.40 @ Sta. 16+50.00

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	10	1,096	6,390	6,760	664.59	0.25'	0.25'	664.84	664.84
Base	30	2,378	6,390	6,760	666.05	0.27'	0.27'	666.32	666.32
Overtop Existing	100	3,063	6,390	6,760	668.59	0.36'	0.36'	668.95	668.95
Overtop Proposed	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Max. Calc.	500	4,511	6,390	6,760	669.79	1.89'	1.87'	671.68	671.66

10 Year Velocity Through Existing Bridge = 10ft/s
10 Year Velocity Through Proposed Bridge = 10ft/s

Notes:

- Waterway Information Table from Phase I.
- The data is based on the effective Flood Insurance Rte Mp (FIRM) No. 170320 0025E dated December 13, 2007.
- The elevations have been converted to NAVD 88 datum. (NAVD 88 = NGVD 29 - 0.243)
- A preliminary Flood Insurance Study is available by IDNR-OWR. See table for elevations.

REVISIONS	
NAME	DATE

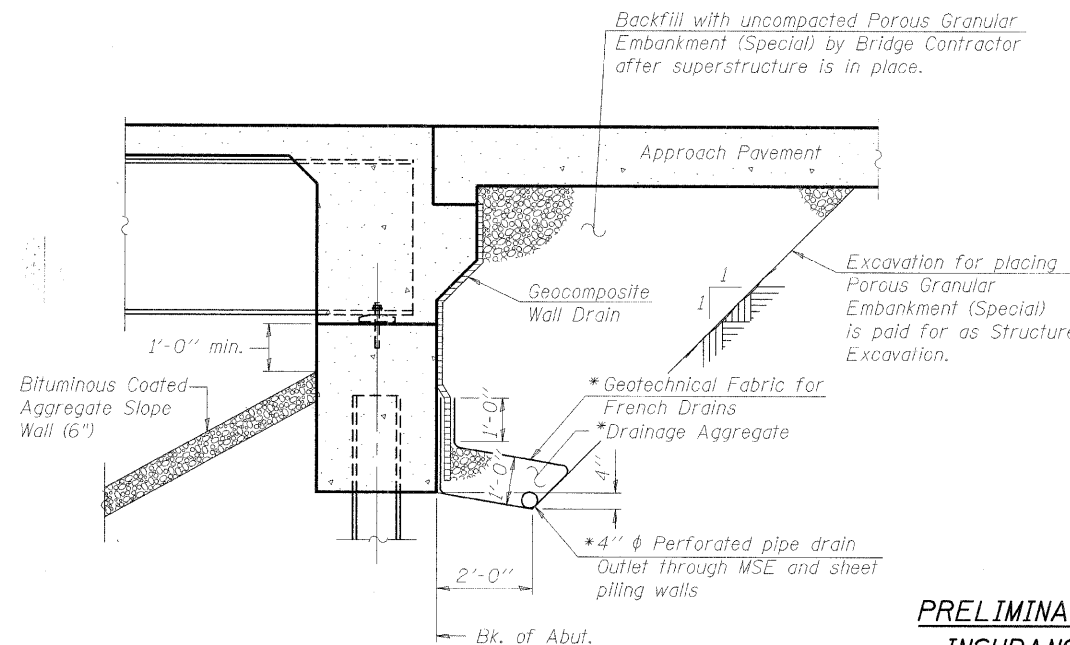
ILLINOIS DEPARTMENT OF TRANSPORTATION
INDEX, NOTES & BILL OF MATERIAL
WOOD ST. BRIDGE OVER B.N.S.F. R.R.
AND INDIAN CREEK
SECTION 03-00251-00-BR STATION 15+24.92
KANE COUNTY STRUCTURE NO. 045-6022

SCALE: DATE: SEPTEMBER 2008 DRAWN BY: MCC CHECKED BY: ATI

- Slopewall shall be 6" bituminous coated aggregate
- If the Contractor chooses to alter the permanent 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.

INDEX OF BRIDGE SHEETS

S-1 General Plan and Elevation	S-12 Parapet Elevation	S-23 Pier 2 Details
S-2 Notes and Bill of Material	S-13 Backwall Details	S-24 Pile Details
S-3 Foundation Layout	S-14 Bridge Railing Detail	S-25 MSE Wall Details
S-4 Deck Elevations - I	S-15 Bar Splicer Assembly Details	S-26 Sheet Wall Details-I
S-5 Deck Elevations - II	S-16 Framing Plan and Elevation	S-27 Sheet Wall Details-II
S-6 Deck Elevations - III	S-17 Camber Diagram	S-28 Cantilever Forming Brackets
S-7 Deck Elevations - IV	S-18 Splice Details-I	S-29 Soil Borings-I
S-8 South Approach Slab Elevations	S-19 Splice Details-II	S-30 Soil Borings II
S-9 North Approach Slab Elevations	S-20 Framing & Bearing Details	S-31 Soil Borings-III
S-10 Superstructure-I	S-21 Abutment Details	S-32 Soil Borings-IV
S-11 Superstructure-II	S-22 Pier 1 Details	S-33 Soil Borings-V



SECTION THRU INTEGRAL ABUTMENT
(Horiz. dim. @ Rt. L's)

* Included in the cost of Pipe Underdrains for Structures, 4".

Note:

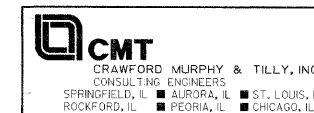
All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).

PRELIMINARY FLOOD INSURANCE STUDY
DATED: OCTOBER 22, 2007

Drainage Area = 14.3 Sq. Mi.

Freq. YR	Elev. FT
10	665.0
50	667.9
100	669.0
500	670.0

Datum: NAVD88



WOOD STREET

SEC