### GENERAL NOTES

Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts. Bolts  $^{7}_{8}$  in.  $\phi$ , holes  $^{15}_{16}$  in.  $\phi$ , unless otherwise noted.

Calculated weight of Structural Steel = 111,540 pounds

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. See Special Provisions.

Reinforcement bars designated (E) shall be epoxy coated.

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.

Bearing seat surfaces shall be constructed or adjusted to their designated elevations within a tolerance of  $l_8$  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 Reddish Brown, Munsell No. 2.5YR 3/4. 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.

The Contractor shall obtain a construction permit from the Illinois Department of Natural Resources (IDNR), Office of Water Resources for any temporary construction activity placed in the water except cofferdams. This shall include the placement of material for run-arounds, causeways, etc. Any permit application by the Contractor shall refer to the IDOT Floodway permit and ACOE Section 404 permit numbers as shown in the contract documents.

The old bridge abutment shall be removed to 1'-0" below proposed grade. This work is included in the cost of Removal of Existing Structures.

The existing abutment caps, pier caps and piles shall be removed as necessary to construct the new abutments and / or rip rap. Cost included under Removal of Existing Structures.

NOTES:

DESIGNED

CHECKED

DRAWN

CHECKED

KMA

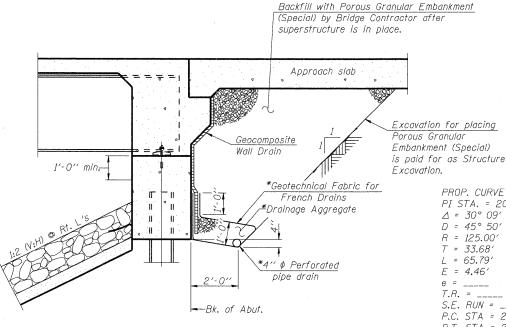
WJH

RGD

4'-0"

**ELEVATION** 

Work this sheet with sheet S-12.



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

\*Included in the cost of Pipe Underdrains for Structures.

SECTION A-A

END TREATMENT DETAIL

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 or retaining walls as shown. The pipes on the east side shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).



PROP. CURVE THOM 01-1

PI STA. = 203+78.38

△ = 30° 09′ 26" (RT)

P.C. STA = 203+44.70

P.T. STA = 204+10.49

D = 45° 50′ 12"

R = 125.00'

 $T = 33.68^{\circ}$ 

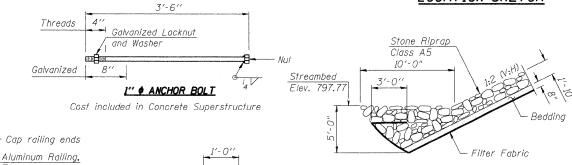
L = 65.79'

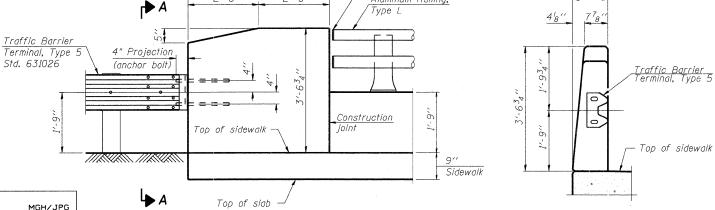
E = 4.46'

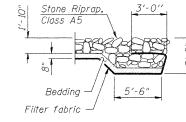
T.R. = \_\_\_

S.E. RUN = \_\_

# LOCATION SKETCH







SECTION A-A

(See S-1)

SECTION B-B (See S-1)

## INDEX OF SHEETS

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Bridge General Plan and Elevation Bill of Materials and General Notes South Retaining Wall Details North Retaining Wall Details Substructure Layout Plan Bridge Approach Slab Details Bridge Approach Slab Details Approach Pavement Elevations Top of Slab Elevations Top of Slab Elevations

Deck Plan and Cross Section Superstructure Details Diaphraam Details

Aluminum Railing Type L Steel Framing Plan Beam Elevation and Details Bearing Details South Abutment Details

North Abutment Details S-20 Pier 1 Details Pier 2 Details Bar Splicer Assembly Details S-22 Metal Shell Pile Details S-23

5-24 Soil Boring Logs Soil Boring Logs

## CURVE DATA

P.C. STA = 204+80.51

P.T. STA = 205 + 34.17

Limits of

Structure

PROFILE GRADE

(along € roadway)

PROP. CURVE THOM\_01-2

PI STA. = 205+07.37

 $\Delta = 6^{\circ} 49' 55'' (LT)$ 

D = 12° 43′ 57"

R = 450.00'

T = 26.86

 $L = 53.66^{\circ}$ 

 $E = 0.80^{\circ}$ 

e = \_\_\_\_ T.R. = \_\_\_\_

S.E. RUN = \_

### TOTAL BILL OF MATERIAL

PROP. CURVE THOM\_01-3

PI STA. = 207+91.70

Δ = 23° 39′ 20" (LT)

P.C. STA = 207+05.84

P.T. STA = 208+75.12

D = 13° 58' 28"

R = 410.00'

 $T = 85.86^{\circ}$ 

L = 169.28

E = 8.89'

e = \_\_\_\_

T.R. = \_\_\_\_

S.E. RUN = \_\_\_

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment (Special)	Cu. Yds.		82	82
Stone Riprap, Class A5	Sq. Yds.		788	788
Filter Fabric	Sq. Yds.		891	891
Removal of Existing Structures	Each	1		1
Structure Excavation	Cu. Yds.		185	<i>1</i> 85
Concrete Structures	Cu. Yds.		203.4	203.4
Concrete Superstructures	Cu. Yds.	327.5		327.5
Bridge Deck Grooving	Sq. Yds	413		413
Concrete Encasement	Cu. Yds.		12	12
Protective Coat	Sq. Yds.	168		168
Furnishing and Erecting Structural Steel	L. Sum	. 1		1
Stud Shear Connectors	Each	2,412		2,412
Reinforcement Bars, Epoxy Coated	Pounds	67,570	18,890	86,460
Bar Splicers	Each	58		58
Aluminum Railing, Type L	Foot	281		281
Furnishing Metal Shell Piles 14x0.25	Foot		2,375	2,375
Furnishing Steel Piles HP 14x73	Foot		450	450
Driving Piles	Foot		2,825	2,825
Test Pile, Metal Shells	Each		3	3
Name Plates	Each	1		1
Anchor Bolts, 1"	Each	48		48
Geocomposite Wall Drain	Sq. Yds.		77	77
Pipe Underdrains for Structures, 4"	Foot		116	116
Underwater Structure Excavation Protection, Special - Location 1	Each		1	1
Underwater Structure Excavation Protection, Special - Location 2	Each		1	1

## BILL OF MATERIALS AND GENERAL NOTES

THOMPSON ROAD OVER NIPPERSINK CREEK SECTION NO. 06-00005-00-BR MCHENRY COUNTY STATION 206+30.48 STRUCTURE NO. 056-6006

SEC GROUP, INC.

		DAT				DATE: 11	/18/09
SHEET NO. <b>5-2</b>	F.A.U RTE.	SECTION		COUNTY JOTAL SHEETS		SHEET NO.	
110.52		06-00005-00-BR			McHENRY /	45	13
SHEETS				CONTRACT	NO. 6	3409	
FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT							
		NO. <b>5-2</b> RTE. 4081	NO. <b>5-2</b> RTE. SEC 4081 06-00009	NO. <b>5-2</b> RTE. SECTION  4081 06-00005-00-BR  SHEETS	NO. <b>S-2</b> RTE. SECTION 4081 06-00005-00-BR SHEETS	NO. <b>S-2</b>   F.A.U   SECTION   COUNTY	NO. 5-2 RTE. SECTION COUNTY SHEETS  4081 06-00005-00-BR McHENRY 45  CONTRACT NO. 6