### GENERAL NOTES

Fasteners shall be AASHTO MI64 Type 1, mechanically galvanized bolts (in painted areas and M164 Type 3 in unpainted areas). Bolts  $^{7}_{8}$  in.  $\phi$ , holes  $^{15}_{16}$  in.  $\phi$ , unless otherwise noted.

Calculated weight of Structural Steel Gr.50 = 4,024,470 Lbs Calculated weight of Structural Steel Gr.70 = 411,330 Lbs

All structural steel shall be AASHTO M 270 Grade 50W except top and bottom flanges over Piers in Segment 2 which shall be AASHTO M 270 HPS70W.

No field welding is permitted except as specified in the contract documents.

The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

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.

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.

Concrete Sealer shall be applied to the designated areas of the piers and abutments.

Structural steel shall only be painted for a distance of 10 ft. each way from all piers & abutments. All structural steel shall be cleaned as specified in the Special Provision for "Surface Preparation and Painting Requirements for Weathering Steel".

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 IDNR permit number as shown in the contract plans.

All exposed structural steel of the bearings shall be cleaned and shop painted as specified in the Special Provision for "Surface Preparation and Painting Requirements for Weathering Steel".

The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.

Slopewall shall be reinforced with welded wire fabric, 6" x 6" - W4.0 x W4.0, weighing 58 lbs. per 100 sq. ft.

The Contractor is alerted that the camber and dead load deflection values shown within the drawings were developed based on the deck pouring sequence shown on Sheet 23. Any deviation from this poring sequence may require changes to the camber, dimensions and elevations derived from the dead load deflections. If the Contractor elects to vary from the pouring sequence shown on the Plans, an evaluation of the structure shall be performed by an Illinois Licensed Structural Engineer retained by the Contractor. Calculations and any revised details shall be submitted to the Engineer for review and approval.

The erection of the structural steel shall be accomplished by a steel erection contractor or sub-contractor certified as an Advanced Certified Steel Erector (ASCE) by AISC. See special provision for "Erection of Complex Steel Structures."

Slipforming of the east parapet in not allowed because of embedded conduit & ) light pole blisters. A protective shield system shall be provided in span 10.

#### STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

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*	Prepared	bу	Lin	Engineering,	Ltd.	
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SHEST VVVVVVV	
34A. CONCRETE PARAPET SLI	PFORMING OPTION (3/1)
10'-0"	5'-0" Edge of Deck  Welded Wire Fabric
<b>○</b>	SECTION D-D
NI O	/ <b>-b</b> 2'-0"
6" 0	tearing 1:4
4	6"

# TYPICAL SECTION THRU SLOPE WALL

(North Abutment shown, South is similar)

## WATERWAY INFORMATION TABLE

Drainage Area: 8,259 sq. miles Existing Low Grade Elev. = 5 Proposed Low Grade Elev. =											
	Frequency	Discharge	Waterway (	Opening (Sq.Ft.)	Natural	H.W.E.	Created	l Head	Headwater	Elev. (ft)	
Flood	(Yr)	(cfs)	Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	
	10	73000	12318	12636	491.54	491.58	0.04	0.03	491.58	491.61	
DESIGN	50	98000	14218	14435	494.10	494.13	0.06	0.05	494.16	494.18	
BASE	100	106000	14874	15501	494.82	494.85	0.07	0.06	494.89	494.91	
<i>VERTOPPING</i>											
MAX CALC	500	130000	16846	18116	496,78	496.84	0.10	0.09	496.88	496.93	

STATION 79+04.42 BUILT BY STATE OF ILLINOIS IL. 170 F.A.P. 786 LOADING HS20 STRUCTURE NO. 050-0246

NAME PLATE

AREVISED 2/27/08

A.P. ROUTE NO. SECTION TOTAL SHEET SHEET NO. 2 786 109 BR 351 202 FED. ROAD DIST. NO. 7 ILLINDIS FED. AID PROJECT

89 SHEETS

Contract # 66607

## BRIDGE TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	228
BRIDGE APPROACH PAVEMENT (SPECIAL)	SQ YD	284
REMOVAL OF EXISTING STRUCTURES	L SUM	1
PROTECTIVE SHIELD	SQ YD	482
STRUCTURE EXCAVATION	CU YD	1,206
COFFERDAM EXCAVATION	CU YD	1,195
COFFERDAM PIER 3	EACH	1
COFFERDAM PIER 4	EACH	000010
CONCRETE STRUCTURES	CU YD	( 9852
CONCRETE SUPERSTRUCTURE	CU YD	2254.3
BRIDGE DECK GROOVING	SQ YD	5761
CONCRETE ENCASEMENT	CU YD	(183)
PROTECTIVE COAT	SQ YD	7539
FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1
STUD SHEAR CONNECTORS	EACH	16,731
REINFORCEMENT BAR	POUND	5258Q
REINFORCEMENT BARS, EPOXY COATED	POUND	(940300)
BAR SPLICERS FOR #5 BAR	EACH	770300
MECHANICAL SPLICE	EACH	532
BICYCLE RAILING	FOOT	
PARAPET RAILING	FOOT	1,732
SLOPE WALL 4 INCH	SQ YD	1762
FURNISHING STEEL PILES HP12X74	FOOT	475
DRIVING PILES		5108
TEST PILE STEEL HP12X74	FOOT	5108 ( <b>9</b> 3
PILE SHOES	EACH	$-\frac{C_{1}^{2}}{C_{1}^{2}}$
NAME PLATES	EACH	150
DRILLED SHAFT IN ROCK	EACH	0.70
PREFORMED JOINT STRIP SEAL	CU YD	230
	FOOT	139
FINGER PLATE EXPANSION JOINT, 4"	FOOT	37.5
FINGER PLATE EXPANSION JOINT, 5"	FOOT	37.5
FABRIC REINFORCED ELASTOMERIC TROUGH	FOOT	80
ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	42
ELASTOMERIC BEARING ASSEMBLY, TYPE II	EACH	12
ELASTOMERIC BEARING ASSEMBLY, TYPE III	EACH	6
ANCHOR BOLTS, 1 IN	EACH	98
ANCHOR BOLTS, 1-1/4 IN	EACH	14
ANCHOR BOLTS, 1-1/2 IN	EACH	50
CONCRETE SEALER	SQ FT	<b>2,</b> 796
GEOCOMPOSITE WALL DRAIN	SQ YD	151
PIPE UNDERDRAIN FOR STRUCTURES, 4 IN	FOOT	250
DRAINAGE SCUPPERS, DS-12	EACH	10
DRAINAGE SCUPPERS, DS-11	EACH	10
HIGH LOAD MULTI-ROTATION BEARING. FIXED 800K	EACH	6
HIGH LOAD MULTI-ROTATION BEARING, GUIDED EXPANSION, 800K	EACH	6

GENERAL NOTES AND BILL OF MATERIAL IL. 170 F.A.P. 786 OVER ILLINOIS RIVER AT SENECA PUBLIC WATERS LA SALLE COUNTY, SECTION 109 BR STATION 79+04.42 STRUCTURE NO. 050-0246

DESIGNED - CLS CHECKED - RJC DRAWN - JHR

CHECKED - RJC