## GENERAL NOTES:

- 1. Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts. Bolts  $\frac{3}{4}$  in. dia., open holes <sup>15</sup>16 in. dia., unless otherwise noted.
- 2. Calculated weight of Structural Steel: M 270 Grade 36 = 48,500 pounds M 270 Grade 50 = 490,570 pounds
- 3. No field welding is permitted except as specified in the contract documents.
- 4. Reinforcement bars designated (E) shall be epoxy coated.
- 5. Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of  $l_{B}$  in. (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.
- 6. Concrete Sealer shall be applied to the exposed faces of the piers.
- 7. The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on the project.
- 8. 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 Blue, Munsell No. 10B 3/6.
- 9. The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.
- 10. Slipforming of parapets is not allowed.
- 11. Remove existing piers, abutments and wingwalls to 5' below proposed ground within outside edges of proposed I-74 and Ramp G shoulders, and to 2' below proposed ground elsewhere.
- 12. Settlement platforms shall be utilized at the embankments for the proposed abutments to monitor rate of settlement. See Roadway plans and Special Provisions for more information.
- 13. Proposed underdeck lighting shall be attached to the pier and underside of deck for each structure. Contractor shall coordinate the required concrete inserts with the electrical sub-contractor. The location of these inserts shall be submitted to the Engineer prior to installation for approval. See Lighting Plans for more information.

## SEQUENCE OF CONSTRUCTION:

- 1. Per MOT plans, embankment for the I-155 over I-74 bridge approaches shall be placed in Stage 5 at the start of the 2014 construction season. A free draining sand blanket is required across the base of the approach embankment to facilitate consolidation. Wick drains shall also be installed to minimize time required to achieve 90 percent consolidation. Settlement platforms shall be utilized to monitor rate of consolidation. See Roadway Plans for more information.
- 2. Removal of the existing I-74 EB over I-155 structure (SN 090-0013) may begin in Stage 6 when I-74 EB traffic is transferred to the temporary runaround. Removal of the existing I-74 WB over I-155 structure (SN 090-0012) may begin in Stage 7 when I-74 WB traffic is transferred to the temporary runaround.
- 3. Construction of the proposed piers may begin in Stage 7 when all I-74 traffic has been transferred to the temporary runaround.
- 4. Construction of the proposed abutments may begin once 90 percent consolidation has occurred in the proposed embankments as well as the existing soil beneath the proposed embankments.
- 5. Girder erection must be completed for both structures prior to the start of Stage 10 when the WB I-74 traffic is returned to mainline I-74.
- 6. Protective shield shall be required in each deck span that is installed over live traffic. The limits of protective shield shall be out to out bridge width in the transverse direction and the entire length of the span with live traffic in the longitudinal direction.
- 7. Construction of the south approach slabs may not begin until Stage 11 when all I-74 traffic has been returned to the mainline and the temporary runaround is no longer in use.

8. Both proposed structures shall be completed at the end of Stage 12 when I-155 traffic returns to mainline I-155 prior to winter shutdown.

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	engineers - scientists - planners	312-565-0450 Job No. 1005

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ITEM	UNIT	SUPER	SUB	TOTAL
Removal of Existing Structures No. 1	Each			1
Removal of Existing Structures No. 2	Each			1
Structure Excavation	Cu. Yd.		350	350
Concrete Structures	Cu. Yd.		332.8	332.8
Concrete Superstructure	Cu. Yd.	810.9		810.9
Bridge Deck Grooving	Sq. Yd.	<i>1,8</i> 65		1,865
Protective Coat	Sq. Yd.	2,515		2,515
Furnishing and Erecting Structural Steel	L Sum	0.20		0.20
Stud Shear Connectors	Each	8,550		8,550
Reinforcement Bars, Epoxy Coated	Pound	197,700	66,420	264,120
Mechanical Splicers	Each		212	212
Slope Wall 4 Inch	Sq. Yd.		872	872
Furnishing Steel Piles HP12X53	Foot		2,159	2,159
Furnishing Steel Piles HP14X89	Foot		4,015	4,015
Driving Piles	Foot		6,174	6,174
Test Pile Steel HP12X53	Each		2	2
Test Pile Steel HP14X89	Each		1	1
Name Plates	Each	2		2
Anchor Bolts, 1"	Each	40		40
Anchor Bolts, <sup>1</sup> 4"	Each	20		20
Concrete Sealer	Sq. Ft.		2,273	2,273
Geocomposite Wall Drain	Sq. Yd.		169	169
Pipe Underdrains for Structures 4"	Foot		246	246
Granular Backfill for Structures	Cu. Yd.		317	317





PRC	)FIL	Ε	GI	RADE	
(₿	I-74	EΒ	&	WB)	

<u>CURVE DATA © I-74</u>	<u>CURV</u>
∆ = 38° 41′ 45″ (LT)	$\bigtriangleup$
$D = 1^{\circ} 30' 00''$	D =
T = 1,341.24′	T =
L = 2,579.73′	L =
E = 228.64′	E
R = 3,819.72′	R =
S.E. = 4.6%	S.E
P.C. = Sta. 523+04.86	P.C
P.T. = Sta. 548+84.59	P.T
P.I. = Sta. 536+46.10	P.I.

FILE NAME =	USER NAME = mbecker	DESIGNED - MFB/DTS	REVISED -		GENERAL DATA 1 OF 2	F.A.I. SECTION	COUNTY TOTA	AL SHEET
	CHECKED - MRB/AAY	REVISED -	STATE OF ILLINOIS		74 90-[14R;(14HB-4,14,14HVB)BR	J TAZEWELL 243	33 1866	
0900165_68620_02_gndt1.dgn	PLOT SCALE =	DRAWN - PRT	REVISED -	DEPARTMENT OF TRANSPORTATION			CONTRACT NO.	. 68620
	PLOT DATE = 8/20/2012	CHECKED - MRB	REVISED -		SHEET NO. SA2 OF SA47 SHEETS	ILLINOIS FED. A	ID PROJECT	

## TOTAL BILL OF MATERIAL



TLE	GRADE

(₿ I-155 NB & SB)

## ′E DATA € I-155

= 10° 55′ 46″ (LT) = 0° 42′ 58' = 765.35' = 1.526.05' = 36.53' = 8,000.00' E. = NC C. = Sta. 0+00.00 T. = Sta. 15+26.05 = Sta. 7+65.35

P.V.I. Sta. 10+25.00 Elev. 728.66	P.V.I. Sta. 10+50.00	P.V.I. Sta. 11+00.00	99 P.V.I. Sta. 11+50.00 Elev. 727.73
F	PROFILE (@ Ra	E GRADL imp G)	=
<u>CUF</u>	RVE DA	TA RAM	<u>P                                    </u>
L L H S H H H H	Δ = 12° 23 ) = 1° 31' T = 410.12 . = 817.01' E = 22.31' R = 3,759. S.E. = 4.6' P.C. = Sta. P.T. = Sta. P.I. = Sta.	7′ 09" (RT) 27" 	

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