

MSET PROJECT NO.: 12316		LOG OF BORING NO. B-3		Page 1 of 1					
PROJECT: Indian Trail Road over the Fox River			SITE LOCATION: Aurora, Illinois						
BORING LOCATION: P4-L(North)			CLIENT: HR Green, Inc.						
DEPTH (feet)	SOIL TYPE	Material Description	Elevation	SAMPLE		TESTS		REMARKS	
				TYPE/INTERVAL	NO.	N-VALUE Blows per ft.	Wc%		Dry Unit Weight, pcf
0		Dark Brown Silty CLAY Topsoil	634.6	AU			14		
		Brown, Grey, & Black Sandy Clay LOAM, A- 6, FILL	633.6	SS	1	16	14		
4		Light Brown and Grey Weathered Dolomitic Limestone	631.6	SS	2	55/6"	14		
8		RQD=0% from 5' to 10'		RC					
12		RQD=7% from 10' to 15'		RC					
16		RQD=43% from 15' to 20'		RC					
20		End of Boring at 20.0 Feet	614.6						

WATER LEVEL OBSERVATIONS, ft.
DURING DRILLING:
IMMEDIATELY AFTER DRILLING:
DELAYED READING AFTER



BORING STARTED: 7/23/12
BORING COMPLETED: 7/23/12
LOGGED BY: MHP
BORING METHOD: HSA

Midland Standard Engineering & Testing, Inc. 558 Plate Drive Unit 6, East Dundee, IL 60118 (847) 844-1895 f(847) 844-3875

MSET PROJECT NO.: 12316		LOG OF BORING NO. B-4		Page 1 of 1					
PROJECT: Indian Trail Road over the Fox River			SITE LOCATION: Aurora, Illinois						
BORING LOCATION: P5-R (South)			CLIENT: HR Green, Inc.						
DEPTH (feet)	SOIL TYPE	Material Description	Elevation	SAMPLE		TESTS		REMARKS	
				TYPE/INTERVAL	NO.	N-VALUE Blows per ft.	Wc%		Dry Unit Weight, pcf
0		Dark Grey Sandy LOAM, A-4 with Gravel and Cobbles	629.5						
		Grey Weathered Dolomitic Limestone	628.1	SS	1	50/5"	12		
4		RQD=25% from 2' to 7'		RC					
8		RQD=32% from 7' to 12'		RC					
12		RQD=35% from 12' to 17'		RC					
16		End of Boring at 17.0 Feet	612.5						

WATER LEVEL OBSERVATIONS, ft.
DURING DRILLING:
IMMEDIATELY AFTER DRILLING:
DELAYED READING AFTER



BORING STARTED: 7/24/12
BORING COMPLETED: 7/24/12
LOGGED BY: MHP
BORING METHOD: HSA

Midland Standard Engineering & Testing, Inc. 558 Plate Drive Unit 6, East Dundee, IL 60118 (847) 844-1895 f(847) 844-3875

COMPANY NAME: Kevin M. Arff
PROJECT CONTACT: Kevin M. Arff
CLIENT: HR Green, Inc.
DRAWN: R. LOTTEN
FILE NAME: 861018R-SW-SB-Boring_Logs.dgn
PLOT DRIVER: pdfJET-TIFF.ctb
PEN TABLE: standard-trans.tbl



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PLOT SCALE: -	CHECKED: RGD	REVISED: -
PLOT DATE: 8/22/2013	DRAWN: WJH	REVISED: -
	CHECKED: 8/22/13	REVISED: -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS
STRUCTURE NO. 045-3088

SHEET NO. SW-60 OF SW-62 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	101
CONTRACT NO. 63863				
ILLINOIS FED. AID PROJECT #FEDPROJ06				

MSET PROJECT NO.: 12316		LOG OF BORING NO. B-5		Page 1 of 1				
PROJECT: Indian Trail Road over the Fox River			SITE LOCATION: Aurora, Illinois					
BORING LOCATION: P6-L (North)			CLIENT: HR Green, Inc.					
DEPTH (feet)	SOIL TYPE	Material Description	Elevation	SAMPLE		TESTS		REMARKS
				TYPE/INTERVAL	NO.	N-VALUE Blows per ft.	Wc%	
0		Dark Grey Sandy LOAM, with Gravel, A-2 4	631.3	AU				
				SS	1	9	20	
		Grey Weathered Dolomitic Limestone	629.3					
4				SS	2	40	4	
8		RQD=12% from 5.5' to 10.5'		RC				
12		RQD=21% from 10.5' to 15.5'		RC				
16		RQD=17% from 15.5' to 20.5'		RC				
20		End of Boring at 20.5 Feet	610.8					

WATER LEVEL OBSERVATIONS, ft.
 DURING DRILLING:
 IMMEDIATELY AFTER DRILLING:
 DELAYED READING AFTER



BORING STARTED: 7/24/12
 BORING COMPLETED: 7/24/12
 LOGGED BY: MHP
 BORING METHOD: CFA

Midland Standard Engineering & Testing, Inc. 558 Plate Drive Unit 6, East Dundee, IL 60118 (847) 844-1895 f(847) 844-3875

MSET PROJECT NO.: 12316		LOG OF BORING NO. B-6		Page 1 of 2					
PROJECT: Indian Trail Road over the Fox River			SITE LOCATION: Aurora, Illinois						
BORING LOCATION: Abutment 2 (South)			CLIENT: HR Green, Inc.						
DEPTH (feet)	SOIL TYPE	Material Description	Elevation	SAMPLE		TESTS		REMARKS	
				TYPE/INTERVAL	NO.	N-VALUE Blows per ft.	Wc%		Dry Unit Weight, pcf
0		Pavement Materials, 2" Bit. Concrete over 14" reinforced PCC	654.9						
		Brown SAND & GRAVEL, A-1-a FILL	653.5	SS	1	21	4		
4				SS	2	26	5		
8				SS	3	22	5		
12				SS	4	18	12		
16		Brown and Grey Silty CLAY, A-6 Hard to Stiff	641.4	SS	6	17	20	107	4.19
20				SS	7	10	23	100	1.86
24		Grey SAND and GRAVEL, A-1-a dense to slightly dense	630.9	SS	10	33	9		3.0 Qp
28				SS	11	13	10		3.10
				SS	12	9	12		

WATER LEVEL OBSERVATIONS, ft.
 DURING DRILLING:
 IMMEDIATELY AFTER DRILLING:
 DELAYED READING AFTER



BORING STARTED: 7/27/12
 BORING COMPLETED: 7/27/12
 LOGGED BY: MHP
 BORING METHOD: HSA

Midland Standard Engineering & Testing, Inc. 558 Plate Drive Unit 6, East Dundee, IL 60118 (847) 844-1895 f(847) 844-3875

COMPANY NAME: Kevin M. Arfki
 PROJECT CONTACT: Kevin M. Arfki
 CLIENT: City of Aurora
 DATE PLOTTED: 8/22/2013 10:04 PM
 FILE NAME: 8610318-SW-Soil Boring Log.dwg
 PLOT DRIVER: pdfLDT-Tiff.plt
 PEN TABLE: standard-trans.tbl



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PLOT SCALE =	CHECKED - RGD	REVISED -
PLOT DATE = 8/22/2013	DRAWN - WJH	REVISED -
	CHECKED - 8/22/13	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS
 STRUCTURE NO. 045-3088

SHEET NO. SW-61 OF SW-62 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	102
CONTRACT NO. 63863				
[ILLINOIS] FED. AID PROJECT #FEDPROJNO#				

MSET PROJECT NO.: 12316		LOG OF BORING NO. B-6		Page 2 of 2				
PROJECT: <u>Indian Trail Road over the Fox River</u>			SITE LOCATION: <u>Aurora, Illinois</u>					
BORING LOCATION: <u>Abutment 2 (South)</u>			CLIENT: <u>HR Green, Inc.</u>					
DEPTH (feet)	SOIL TYPE	Material Description	Elevation	SAMPLE		TESTS		REMARKS
				TYPE/ INTERVAL	NO.	N-VALUE Blows per ft.	Wc%	
32		Grey Dolomitic Limestone Bedrock, Weathered	623.4					
36		RQD=22% from 32' to 37'		RC				
40		RQD=0% from 37' to 42'		RC				
44		RQD=37% from 42' to 47'		RC				
		End of Boring at 47.0 Feet	607.9					

WATER LEVEL OBSERVATIONS, ft.
DURING DRILLING:
IMMEDIATELY AFTER DRILLING:
DELAYED READING AFTER



BORING STARTED: 7/27/12
BORING COMPLETED: 7/27/12
LOGGED BY: MHP
BORING METHOD: HSA

Midland Standard Engineering & Testing, Inc. 558 Plate Drive Unit 6, East Dundee, IL 60118 (847) 844-1895 f(847) 844-3875

COMPANY NAME: Kevin M. Arff
PROJECT CONTACT: City of Aurora
CLIENT: 8/22/2013 12:03:50 PM
DATE PLOTTED: 8/22/2013 12:03:50 PM
PLOT DRIVER: Standard-Trans.tbl
PEN TABLE: Standard-Trans.tbl



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PLOT SCALE =	DRAWN - <u>WJH</u>	REVISED -
PLOT DATE = <u>8/22/2013</u>	CHECKED - <u>8/22/13</u>	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS
STRUCTURE NO. 045-3088
SHEET NO. SW-62 OF SW-62 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	103
CONTRACT NO. 63863			ILLINOIS FED. AID PROJECT #FEDPROJNO#	

GENERAL NOTES

- Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts. Bolts 7/8" φ, holes 15/16" φ, unless otherwise noted.
- Calculated weight of new Structural Steel = 104,780 pounds
- No field welding is permitted except as specified in the contract documents.
- The Contractor shall test the existing welds by non-destructive methods within 2 ft. of the end of the existing cover plates for cracks after removal of the existing concrete deck. Dye penetrant (PT), magnetic particle (MT), or other approved testing method shall be performed by qualified personnel approved by the Engineer. If cracks are found, report them to the Bureau of Bridges and Structures for disposition. The cost of testing is included in Removal of Existing Concrete Deck. The cost of crack repair, if necessary, will be paid for according to Article 109.04 of the Standard Specifications.
- Reinforcement bars designated (E) shall be epoxy coated.
- Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.

As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer. Any cracks that cannot be removed by grinding 1/4 inch deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.
- 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.
- Plan dimensions and details relative to existing plans are subject to nominal construction 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 at the unit price bid for the work.
- Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8 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 abutments.
- The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
- 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 of the exterior surface and the bottom of the bottom flange of fascia beams, 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 interior steel surfaces and new bearings 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 and exterior bearings shall be Reddish Brown, Munsell No. 2.5 YR 3/4. See Steel Framing Plan for painting existing structural steel.
- Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
- The embankment shown for widening each abutment shall be the minimum that must be placed and compacted prior to construction of the abutment widening.
- See Cofferdam Plans for notes and details concerning in-water work.

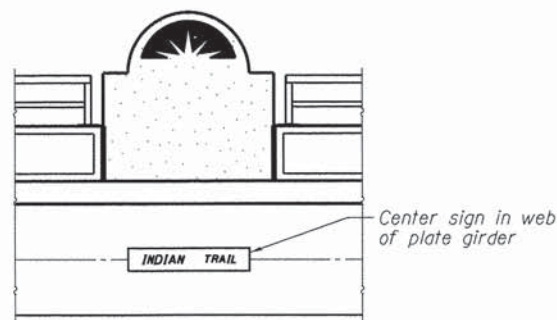
- Contractor shall maintain emergency vehicular access to the island from either east or west for utilities and City emergency service providers. Emergency access shall mean 18'-0" of clear deck width without barriers.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Stone Riprap, Class A4	Sq. Yd.	-	681	681
Filter Fabric	Sq. Yd.	-	661	661
Concrete Removal	Cu. Yd.	-	56.0	56.0
Removal of Existing Concrete Deck No. 2	Each	1	-	1
Structure Excavation	Cu. Yd.	-	118.0	118.0
Cofferdam Excavation	Cu. Yd.	-	124.4	124.4
Rock Excavation for Structures	Cu. Yd.	-	71.5	71.5
Cofferdam (Type 2) (Location - 3)	Each	-	1	1
Cofferdam (Type 2) (Location - 4)	Each	-	1	1
Concrete Structures	Cu. Yd.	-	258.9	258.9
Concrete Superstructure	Cu. Yd.	711.8	-	711.8
Bridge Deck Grooving	Sq. Yd.	1,595	-	1,595
Seal Coat Concrete	Cu. Yd.	-	56.8	56.8
Protective Coat	Sq. Yd.	2,263	-	2,263
Furnishing and Erecting Structural Steel	L. Sum	0.3	-	0.3
Stud Shear Connectors	Each	9,123	-	9,123
Reinforcement Bars, Epoxy Coated	Pound	162,730	35,320	198,050
Bar Splicers	Each	-	120	120
Furnishing Steel Piles HP12X63	Foot	-	558	558
Driving Piles	Foot	-	558	558
Test Pile Steel HP12X63	Each	-	3	3
Pile Shoes	Each	-	36	36
Name Plates	Each	1	-	1
Preformed Joint Strip Seal	Foot	153	-	153
Elastomeric Bearing Assembly, Type II	Each	27	-	27
Anchor Bolts, 1"	Each	72	-	72
Concrete Sealer	Sq. Ft.	-	1,022	1,022
Epoxy Crack Injection	Foot	-	185	185
Geocomposite Wall Drain	Sq. Yd.	-	74	74
Controlled Low Strength Material	Cu. Yd.	-	21.6	21.6
Conduit Attached to Structure, 4" Dia. Galvanized Steel	Foot	1,195	-	1,195
Conduit Embedded in Structure	Foot	486	-	486
Concrete Bridge Railing	Foot	531	-	531
Parapet Railing (Special)	Foot	435	-	435
Name Plates (Special)	Each	2	-	2
Granular Backfill for Structures	Cu. Yd.	-	134.2	134.2
Jack and Remove Existing Bearings	Each	28	-	28
Hot-Mix Asphalt Surface Removal (Deck)	Sq. Yd.	1,258	-	1,258
Containment and Disposal of Lead Paint Cleaning Residues No. 2	L. Sum	1	-	1
Cleaning and Painting Steel Bridge No. 2	L. Sum	1	-	1
Structural Repair of Concrete (Depth Less than or Equal to 5")	Sq. Ft.	-	34	34
Drainage Scuppers, DS-33	Each	17	-	17

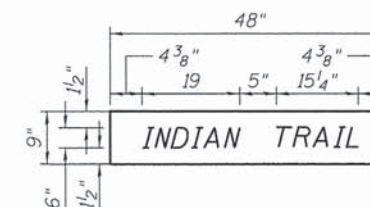
INDEX OF SHEETS

SE-01	Genral Plan and Elevation
SE-02	General Notes and Total Bill of Materials
SE-03	General Details
SE-04	Temporary Concrete Barrier for Stage Construction
SE-05	Cofferdam Plan
SE-06	Cofferdam Plan
SE-07	Top of Slab Elevations
SE-08	Top of Slab Elevations
SE-09	Top of Slab Elevations
SE-10	Top of Slab Elevations
SE-11	Top of Approach Slab Elevations
SE-12	Deck Details
SE-13	Deck Details
SE-14	DS-33 Scupper
SE-15	Bridge Approach Slab Details
SE-16	Bridge Approach Slab Details
SE-17	North Railing Elevation
SE-18	Bridge Railing Details
SE-19	Bridge Railing Details
SE-20	Bridge Railing Details
SE-21	Bridge Railing Details
SE-22	Preformed Joint Strip Seal
SE-23	Steel Beam Framing Plan
SE-24	Steel Beam Framing Plan
SE-25	Steel Beam Elevation & Details
SE-26	Steel Diaphragm Details
SE-27	Elastomeric Bearing Details
SE-28	Fixed Bearing Details
SE-29	Removal Details
SE-30	Removal Details
SE-31	West Abutment
SE-32	West Abutment
SE-33	West Abutment Details
SE-34	East Abutment
SE-35	East Abutment
SE-36	East Abutment Details
SE-37	Pier 1
SE-38	Pier 2
SE-39	Pier Details
SE-40	Bar Splicer assembly and Mechanical Splicer Details
SE-41	HP Pile Details
SE-42	Soil Boring Logs



WATERWAY SIGN

Sign shall be provided according to applicable portions of Section 720 of the Standard Specifications. Connection to be approved by the Engineer. Cost included in Furnishing and Erecting Structural Steel.



WATERWAY SIGN DETAIL

Sign color shall be brown with white lettering.

COMPANY NAME: Kevin M. Artt
 PROJECT CONTACT: City of Aurora
 CLIENT: 9/4/2013 7:51:03 AM
 DATE PLOTTED: 8610218-SE-Bgnpl.dgn
 FILE NAME: pdf.def-TIF.plt
 PLOT DRIVER: standard-true.tst
 PEN TABLE:



USER NAME = whood	DESIGNED - KMA	REVISED -
	CHECKED - RDG	REVISED -
PLOT SCALE =	DRAWN - WJH	REVISED -
PLOT DATE = 9/4/2013	CHECKED - 9/4/13	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

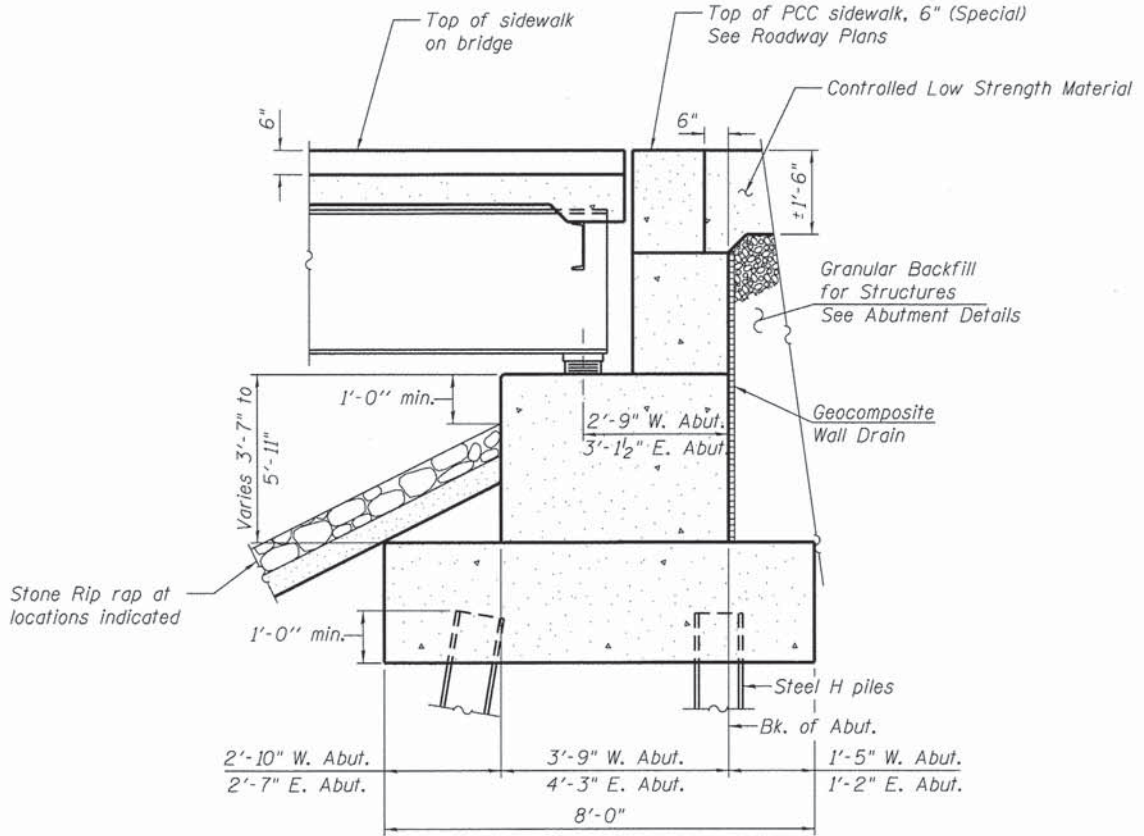
**GENERAL NOTES AND TOTAL BILL OF MATERIALS
STRUCTURE NO. 045-3089**

SHEET NO. SE-02 OF SE-43 SHEETS

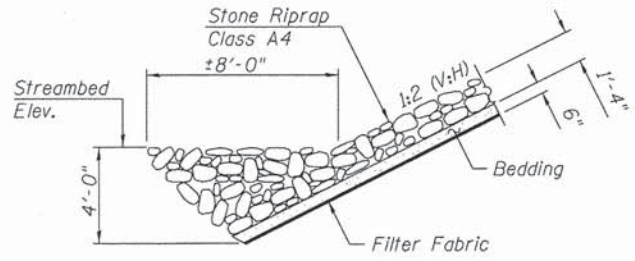
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	105
CONTRACT NO. 63863				
ILLINOIS FED. AID PROJECT			*FEDPROJNO*	

FOX RIVER
 RE-BUILT 20__ BY CITY OF AURORA
 KANE COUNTY
 SEC. 09-00286-00-BR
 F.A. RT. 1503 STA. 101+87.61
 STR. NO. 045-3089 LOADING HS20

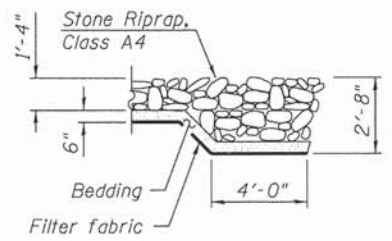
NAME PLATE
 See Std. 515001
 See Bridge Railing Details



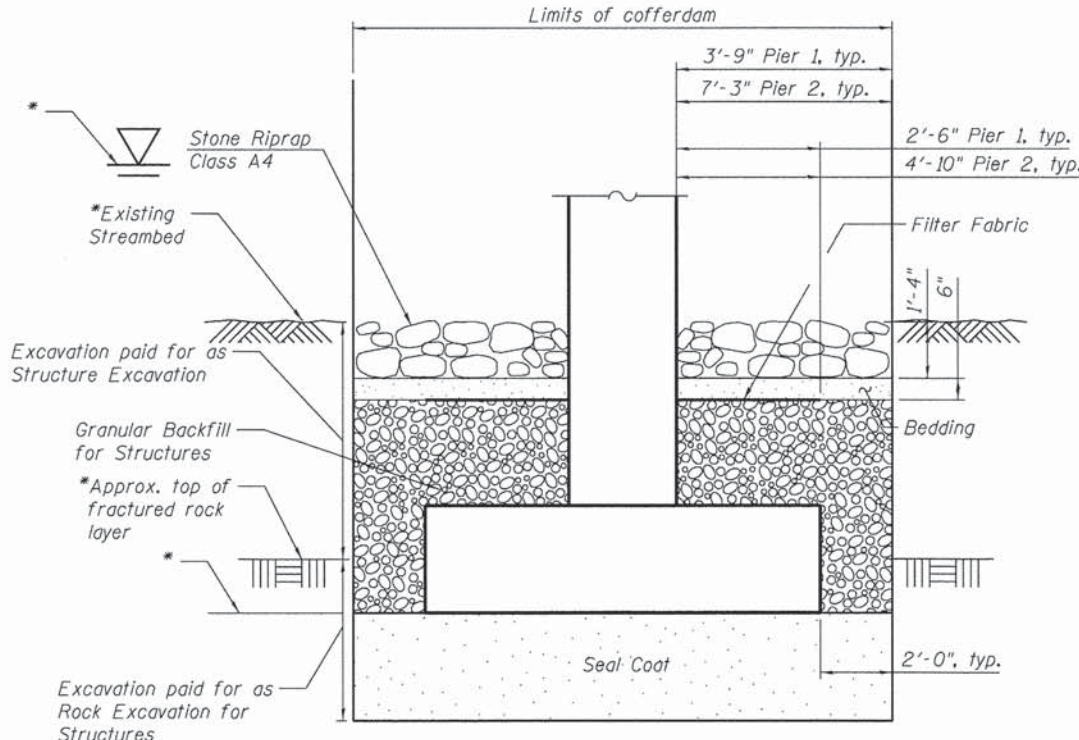
SECTION THRU PILE SUPPORTED ABUTMENT
 At Widening
 (Horiz. dim. @ Rt. L's)



SECTION A-A

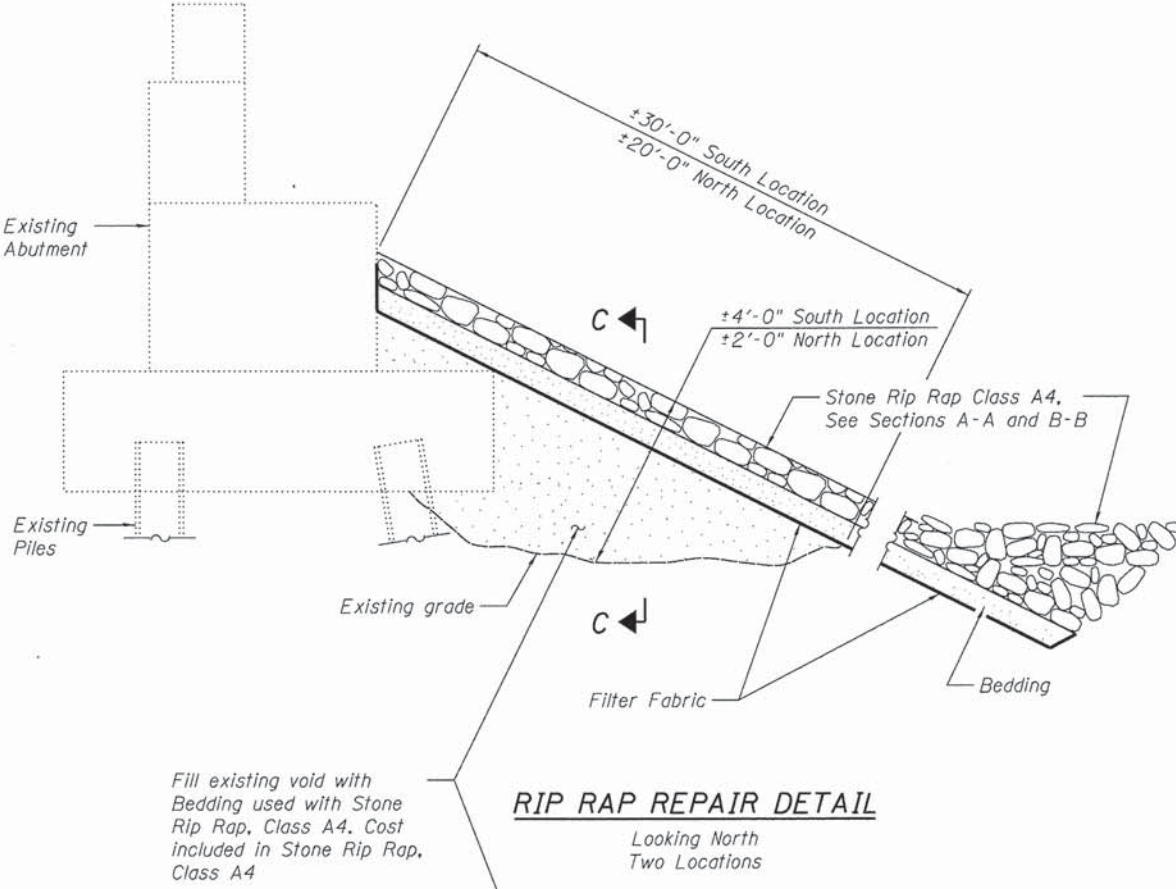


SECTION B-B



PIER BACKFILL DETAIL

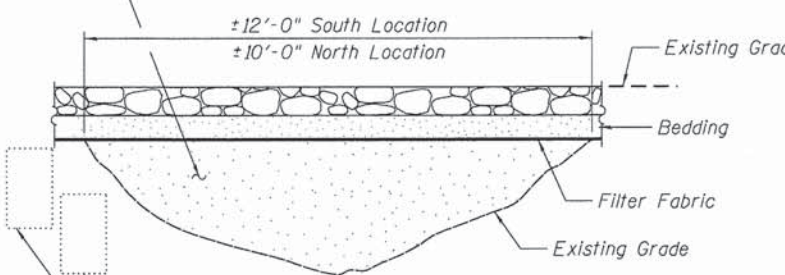
Applies to Piers 1 and 2 (at widening)
 * See General Plan and Elevation and Cofferdam Plan for additional dimensions and elevations



RIP RAP REPAIR DETAIL

Fill existing void with Bedding used with Stone Rip Rap, Class A4. Cost included in Stone Rip Rap, Class A4

Looking North
 Two Locations



SECTION C-C

Remove and dispose of existing large concrete debris. Cost included in Stone Rip Rap, Class A4

COMPANY NAME: HRGreen
 PROJECT CONTACT: Kevin M. Arfki
 CLIENT: City of Aurora
 DATE PLOTTED: 8/22/2013 12:56:14 PM
 FILE NAME: 8610318-SE-090003.dwg
 PLOT DRIVER: pdfLDEF-T11F.plt
 PEN TABLE: standard-trans.tbl



USER NAME = whood	DESIGNED - KMA	REVISED -
	CHECKED - RDG	REVISED -
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PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -

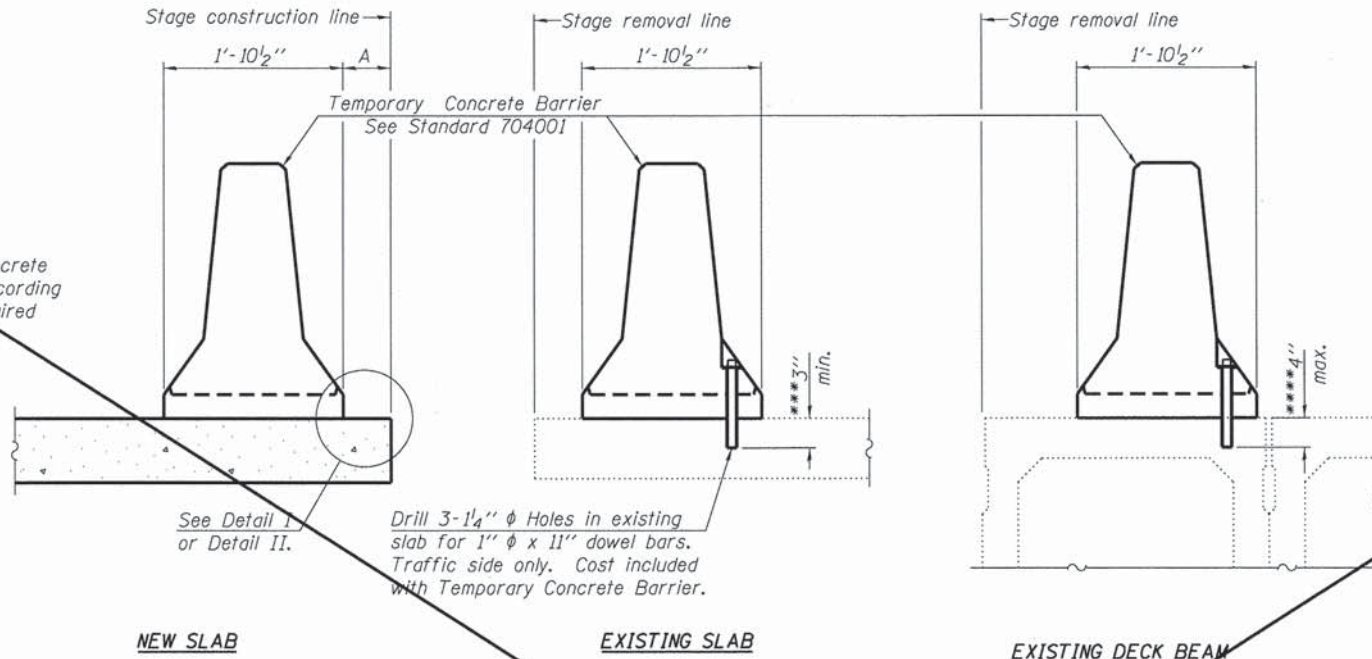
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

GENERAL DETAILS
 STRUCTURE NO. 045-3089

SHEET NO. SE-03 OF SE-43 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	106
CONTRACT NO. 63863				
ILLINOIS FED. AID PROJECT #FEDPROJNO#				

When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".



SECTIONS THRU SLAB OR DECK BEAM

NOTES

Detail I - With Bar Splicer or Couplers:
Connect one (1) 1" x 7" x "W" steel \bar{P} to the top layer of couplers with 2- $\frac{5}{8}$ " ϕ bolts screwed to coupler at approximate \bar{C} of each barrier panel.

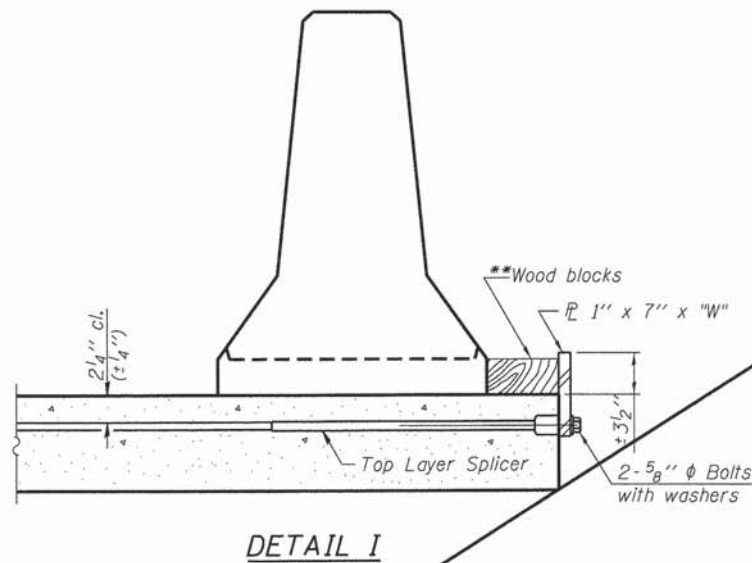
Detail II - With Extended Reinforcement Bars:
Connect one (1) 1" x 7" x "W" steel \bar{P} to the concrete slab or concrete wearing surface with 2- $\frac{5}{8}$ " ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate \bar{C} of each barrier panel.

Cost of anchorage is included with Temporary Concrete Barrier. The 1" x 7" x "W" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

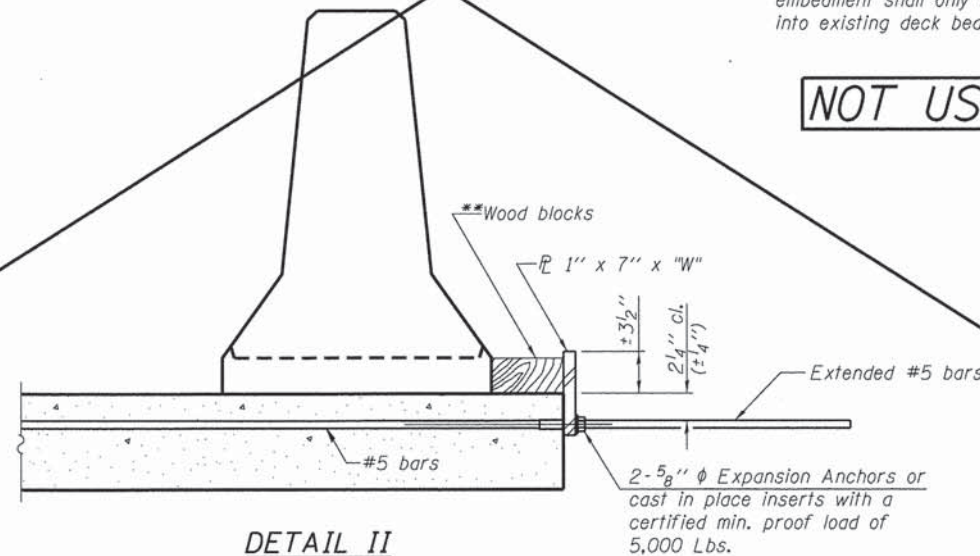
*** Dimension shown is minimum required embedment into concrete. If hot-mix asphalt wearing surface is present, minimum embedment shall be in addition to wearing surface depth.

**** If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.

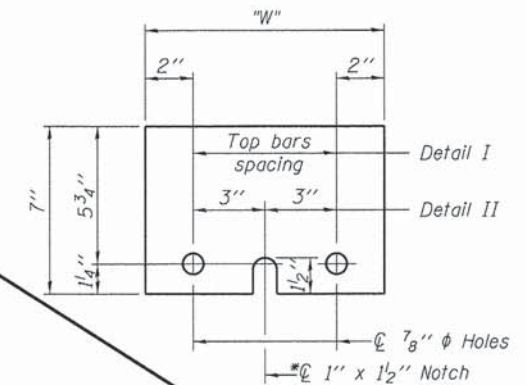
NOT USED



DETAIL I



DETAIL II



STEEL RETAINER \bar{P} 1" x 7" x "W"

* Required only with Detail II

** Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.

"W" = Top bars spacing + 4"

COMPANY NAME: Kevin M. Arff
PROJECT CONTACT: City of Aurora
CLIENT: City of Aurora
DATE PLOTTED: 8/22/2013
PLOT SCALE: 1/8" = 1'-0"
PLOT DRIVER: gregory.schmitt
PEN TABLE: standard-trans.tbl

R-27

7-1-10



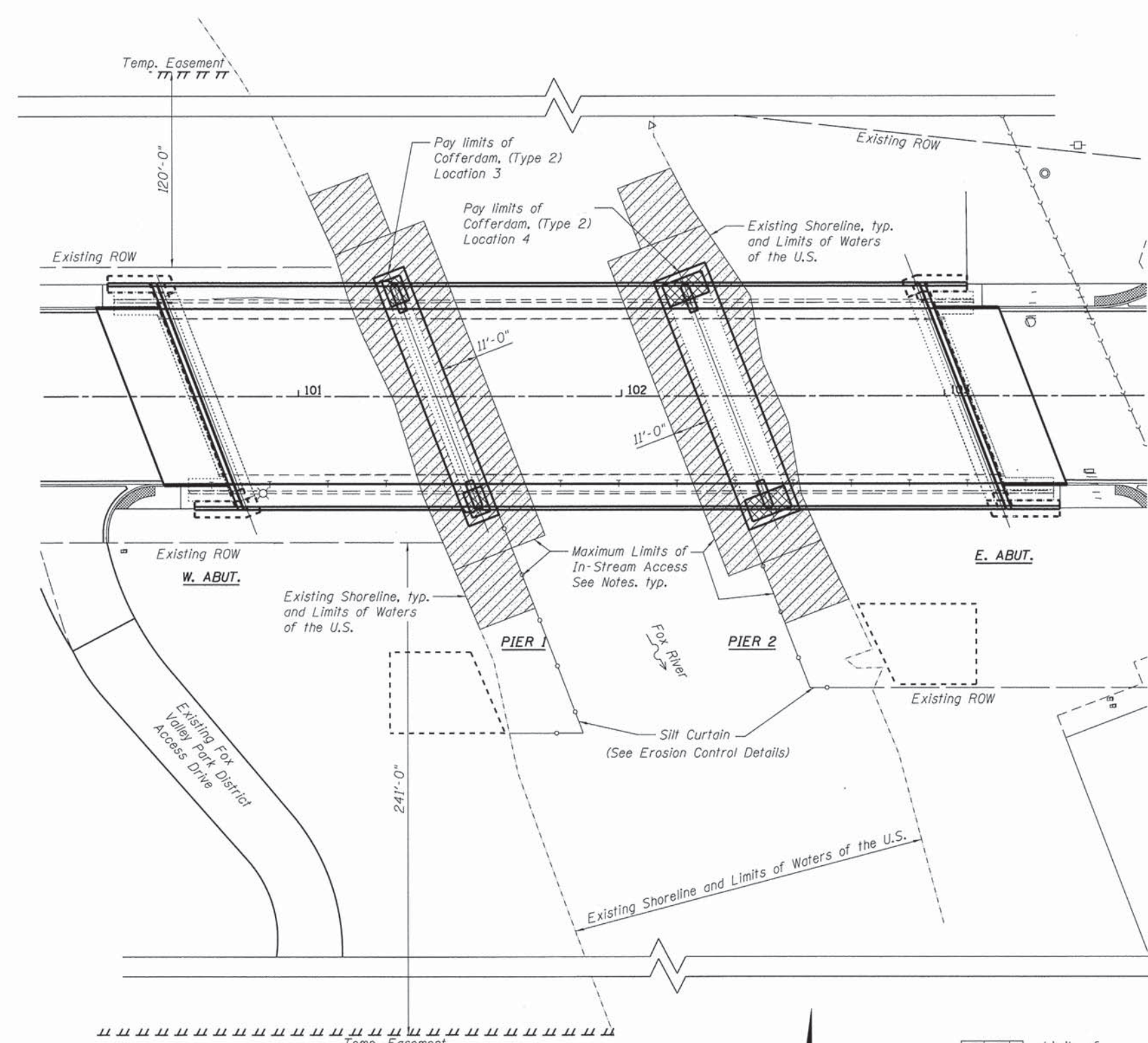
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PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
STRUCTURE NO. 045-3089

SHEET NO. SE-04 OF SE-43 SHEETS







F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	107
CONTRACT NO. 63863				
ILLINOIS FED. AID PROJECT #FEDPROJNO#				



COFFERDAM KEY PLAN

- Note:
1. In-stream access, if utilized, must be constructed completely of non-erodible materials; under no circumstances may earthen materials or fill be used.
 2. See notes next sheet.

LEGEND

-  Limits of Protective Shield
-  Areas designated for dewatering
-  Limits of Temporary Impacts to Waters of the U.S.
-  Maximum allowable limits of in-stream access, if required
See Notes next sheet.
-  Limits of Permanent Impacts to Waters of the U.S.
-  Silt Curtain

COMPANY NAME: **HRGreen**
 PROJECT CONTACT: **Kevin M. Pratt**
 DATE PLOTTED: **8/22/2013 2:56:55 PM**
 FILE NAME: **8610218-SE-Topo.dgn**
 PLOT DRIVER: **pdf.DET-Tiff.plt**
 PEN TABLE: **standard-trans.tbl**



USER NAME	whood	DESIGNED	KMA	REVISED	-
CHECKED	RGD	REVISIONS			
DRAWN	WJH	REVISIONS			
PLOT DATE	8/22/2013	CHECKED	8/22/13	REVISED	-


**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

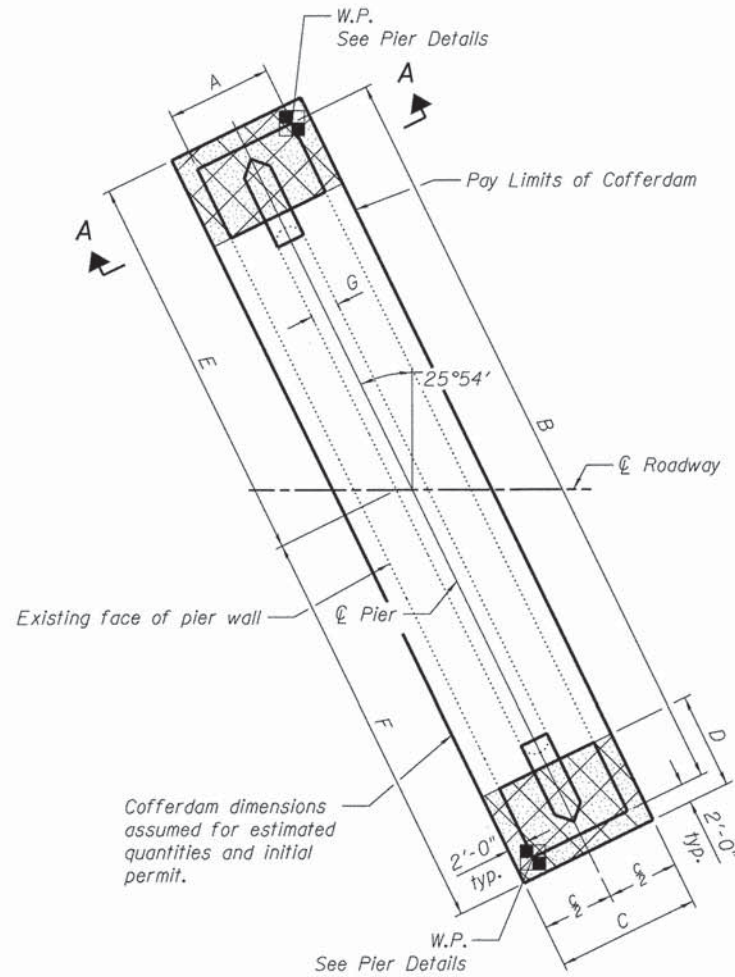
**COFFERDAM PLAN
 STRUCTURE NO. 045-3089**

SHEET NO. SE-05 OF SE-43 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	108
				CONTRACT NO. 63863
				ILLINOIS FED. AID PROJECT #FEDPROJNO#

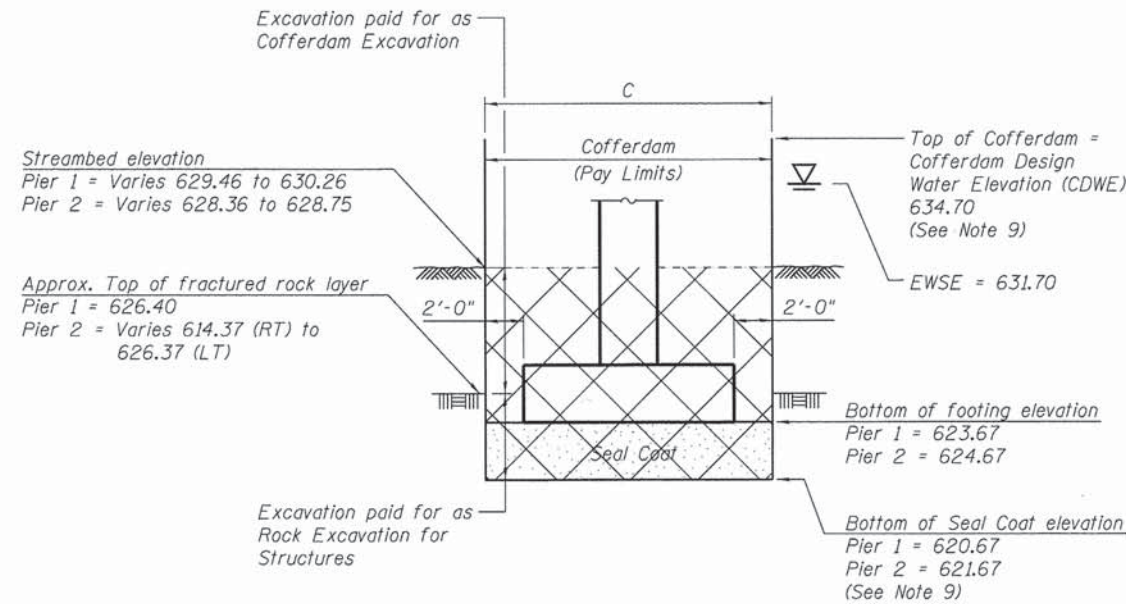
LEGEND

-  Pay Limits of Cofferdam Excavation/Rock Excavation for Structures
-  Pay Limits of seal coat



TYPICAL COFFERDAM PLAN

See Pier Details for W.P. locations



SECTION A-A

Notes:

1. All In-Stream work, including placement and removal of In-Stream Access to piers, Cofferdam construction and removal, and stream restoration, must be completed outside of spawning season (April 1 through June 15). No work in flowing water will be permitted during this time.
2. The Contractor shall be responsible for a survey of the work zone upon project completion to demonstrate that the river has been restored to the condition prior to commencement of construction. Cost to survey and restore included in cofferdam items.
3. 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 3704 Floodway Construction permit number allowing permanent construction as shown in the contract plans. The maximum limits of in-stream access (shown on previous sheet) are not included in the IDNR permit nor do they imply that an IDNR permit can be obtained for a causeway or other in-stream work.
4. Work shall conform to all provisions of the Erosion Control Plan.
5. Methods of in-stream access (i.e. Haul Roads, In-Stream Work Pads and Causeways), if needed, shall be constructed in accordance with the Recurring Special Provision Check Sheet #8 and requirements of the ACOE and IDNR Office of Water Resources. The permit for this work shall be obtained by the Contractor (See Note 5 above).
6. Contractor shall review and adhere to the ACOE permit stipulations (copy in Special Provision). Note especially restrictions on the disposal of water pumped from the coffer dams.
7. If the Contractor elects to use a seal coat, the seal coat thickness design shown on these plans is based on the Cofferdam Design Water Elevation (CDWE). Cofferdam design details and proposed changes in seal coat thickness shall be submitted to the Engineer for approval with the cofferdam design. The quantity of Cofferdam Excavation and Rock Excavation for Structures is based on the seal coat thickness and the allowable limits of the Cofferdam.
8. The Contractor should anticipate difficult driving conditions (See Boring Logs). The Typical Cofferdam Plan and Details at left are intended to show the Contractor how cofferdam and associated work will be measured for payment. They do not imply that a conventional steel sheetpile cofferdam is a cost effective or feasible method to isolate the work from water and enable construction under dry conditions as outlined in Guide Bridge Special Provision 73.
9. The maximum area of temporary impacts to Waters of the U.S. at any time for both bridges combined is limited to 0.25 acres in conformance with the ACOE permit issued for the project (See Special Provisions). The Contractor should be aware this will limit his in-stream work to one branch of the river at a time. See note 1, ACOE permit and Special Provisions for additional restrictions.

DIMENSIONS (ft)	Pier 1	Pier 2
A	6'-0"	13'-0"
B	78'-0"	78'-0"
C	10'-0"	17'-0"
D	10'-3"	9'-0"
E	40'-0"	40'-0"
F	42'-0"	42'-0"
G	2'-6"	2'-6"

TEMPORARY IMPACTS TO WATERS OF THE U.S.

Pier 1: 2,652 sf = 0.06 AC
 Pier 2: 2,471 sf = 0.06 AC
 In-Stream Access (if required):
 1,538 sf = 0.04 AC
 Total: 6,661 sf = 0.16 AC

PERMANENT IMPACTS TO WATERS OF THE U.S.

Pier 1: 108 sf = 0.002 AC
 Pier 2: 198 sf = 0.004 AC
 Total: 306 sf = 0.006 AC

BILL OF MATERIALS

ITEM	UNIT	TOTAL
Cofferdam Excavation	Cu. Yd.	124.4
Rock Excavation for Structures	Cu. Yd.	71.5
Cofferdam (Type 2) (Location 3)	Each	1
Cofferdam (Type 2) (Location 4)	Each	1
Seal Coat Concrete	Cu. Yd.	56.8

COMPANY NAME: Kevin M. Arff
 PROJECT CONTACT: City of Aurora
 CLIENT: 8/22/2013 10:10:10 AM
 DATE PLOTTED: 8/22/2013 10:10:10 AM
 PLOT DRIVER: plot_driver.tbl
 PEN TABLE: standard-trans.tbl



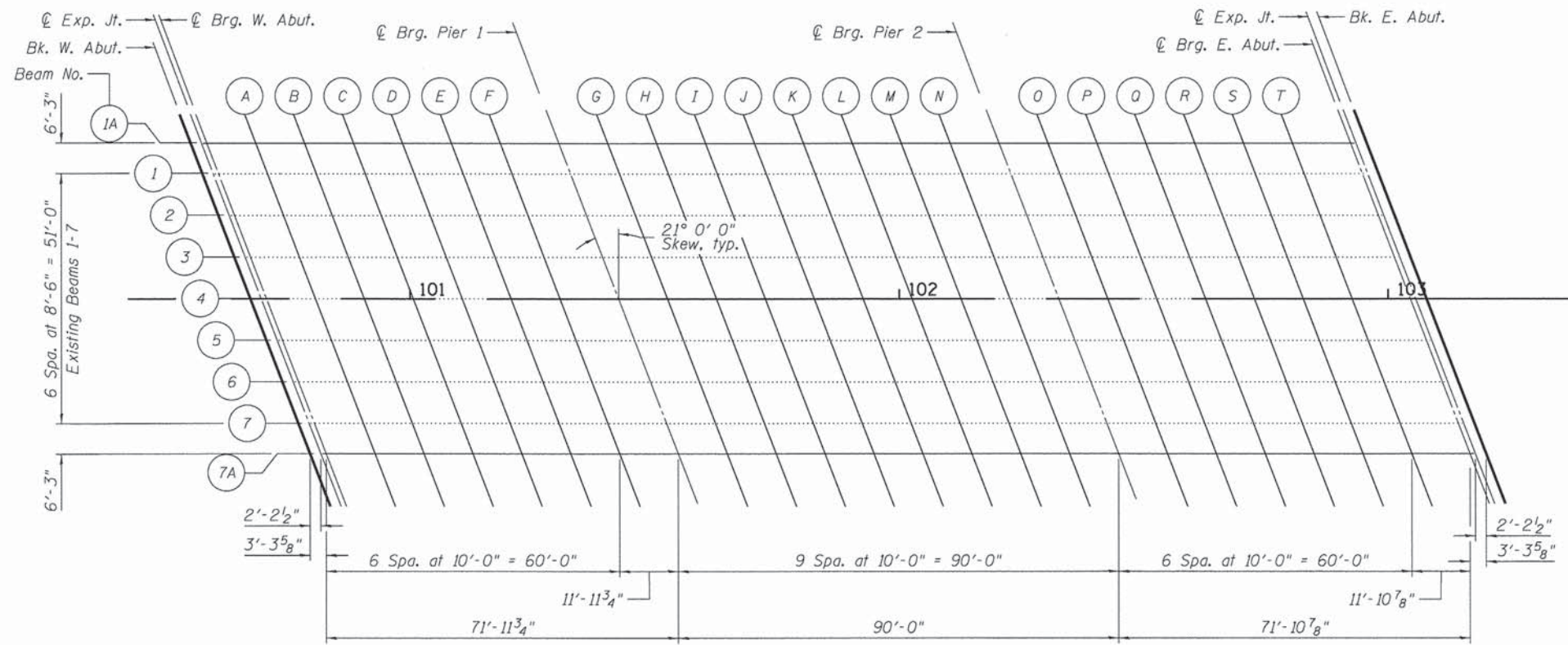
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	CHECKED - RGD	REVISED -
PLOT SCALE =	DRAWN - WJH	REVISED -
PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

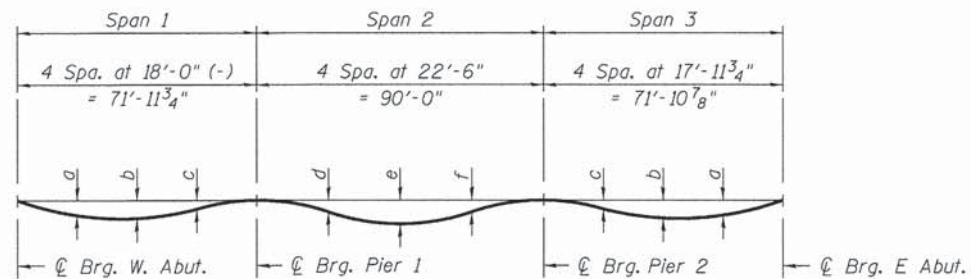
**COFFERDAM PLAN
STRUCTURE NO. 045-3089**

SHEET NO. SE-06 OF SE-43 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	109
CONTRACT NO. 63863			[ILLINOIS] FED. AID PROJECT #FEDPROJNG#	



PLAN



DEAD LOAD DEFLECTION DIAGRAM

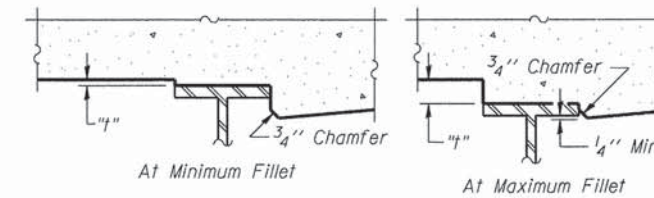
(Includes weight of concrete only.)

Note:

The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on following sheets.

DEAD LOAD DEFLECTION DIAGRAM TABLE

Beam	a	b	c	d	e	f
1A & 7A	5/8"	5/8"	1/4"	3/8"	5/8"	3/8"
1 & 7	1/4"	3/8"	1/8"	1/8"	3/8"	1/8"
2-6	1/2"	1/2"	1/4"	1/4"	1/2"	1/4"



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown below, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS

COMPANY NAME: HRGreen
 PROJECT CONTACT: Kevin M. Arff
 DATE PLOTTED: 8/22/2013 10:04:46 AM
 FILE NAME: 8610286-SE-7051.dgn
 PLOT DRIVER: pdfLDT-Tiff.plt
 PEN TABLE: standard-trans.tbl



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PLOT SCALE: -	CHECKED: RGD	REVISED: -
PLOT DATE: 8/22/2013	DRAWN: WJH	REVISED: -
	CHECKED: 8/22/13	REVISED: -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS
 STRUCTURE NO. 045-3089

SHEET NO. SE-07 OF SE-43 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	110
CONTRACT NO. 63863				
ILLINOIS FED. AID PROJECT #FEDPROJNO#				

BEAM 1A

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back of W. Abut.	100+55.18	-31.75	653.46	653.46
CL Brg. W. Abut.	100+58.48	-31.75	653.44	653.44
A	100+68.48	-31.75	653.40	653.43
B	100+78.48	-31.75	653.37	653.42
C	100+88.48	-31.75	653.35	653.41
D	100+98.48	-31.75	653.35	653.39
E	101+08.48	-31.75	653.35	653.39
F	101+18.48	-31.75	653.38	653.39
CL Brg. Pier 1	101+30.46	-31.75	653.42	653.42
G	101+40.46	-31.75	653.47	653.48
H	101+50.46	-31.75	653.53	653.56
I	101+60.46	-31.75	653.61	653.65
J	101+70.46	-31.75	653.70	653.75
K	101+80.46	-31.75	653.80	653.86
L	101+90.46	-31.75	653.92	653.96
M	102+00.46	-31.75	654.05	654.07
N	102+10.46	-31.75	654.19	654.20
CL Brg. Pier 2	102+20.46	-31.75	654.34	654.34
O	102+30.46	-31.75	654.49	654.50
P	102+40.46	-31.75	654.64	654.66
Q	102+50.46	-31.75	654.79	654.83
R	102+60.46	-31.75	654.93	654.99
S	102+70.46	-31.75	655.08	655.13
T	102+80.46	-31.75	655.23	655.27
CL Brg. E. Abut.	102+92.36	-31.75	655.41	655.41
Back of E. Abut.	102+95.66	-31.75	655.46	655.46

BEAM 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back of W. Abut.	100+57.58	-25.50	653.55	653.55
CL Brg. W. Abut.	100+60.88	-25.50	653.53	653.53
A	100+70.88	-25.50	653.49	653.50
B	100+80.88	-25.50	653.46	653.49
C	100+90.88	-25.50	653.45	653.47
D	101+00.88	-25.50	653.44	653.47
E	101+10.88	-25.50	653.46	653.47
F	101+20.88	-25.50	653.48	653.49
CL Brg. Pier 1	101+32.86	-25.50	653.53	653.53
G	101+42.86	-25.50	653.58	653.58
H	101+52.86	-25.50	653.65	653.66
I	101+62.86	-25.50	653.73	653.75
J	101+72.86	-25.50	653.82	653.85
K	101+82.86	-25.50	653.93	653.95
L	101+92.86	-25.50	654.05	654.07
M	102+02.86	-25.50	654.18	654.19
N	102+12.86	-25.50	654.32	654.33
CL Brg. Pier 2	102+22.86	-25.50	654.47	654.47
O	102+32.86	-25.50	654.62	654.62
P	102+42.86	-25.50	654.77	654.78
Q	102+52.86	-25.50	654.92	654.94
R	102+62.86	-25.50	655.07	655.09
S	102+72.86	-25.50	655.22	655.24
T	102+82.86	-25.50	655.37	655.38
CL Brg. E. Abut.	102+94.76	-25.50	655.54	655.54
Back of E. Abut.	102+98.06	-25.50	655.59	655.59

BEAM 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back of W. Abut.	100+60.84	-17.00	653.66	653.66
CL Brg. W. Abut.	100+64.14	-17.00	653.65	653.65
A	100+74.14	-17.00	653.61	653.63
B	100+84.14	-17.00	653.59	653.62
C	100+94.14	-17.00	653.58	653.62
D	101+04.14	-17.00	653.58	653.62
E	101+14.14	-17.00	653.60	653.62
F	101+24.14	-17.00	653.62	653.63
CL Brg. Pier 1	101+36.12	-17.00	653.68	653.68
G	101+46.12	-17.00	653.73	653.74
H	101+56.12	-17.00	653.80	653.82
I	101+66.12	-17.00	653.89	653.92
J	101+76.12	-17.00	653.99	654.03
K	101+86.12	-17.00	654.10	654.14
L	101+96.12	-17.00	654.22	654.25
M	102+06.12	-17.00	654.36	654.38
N	102+16.12	-17.00	654.50	654.51
CL Brg. Pier 2	102+26.12	-17.00	654.65	654.65
O	102+36.12	-17.00	654.80	654.81
P	102+46.12	-17.00	654.95	654.97
Q	102+56.12	-17.00	655.10	655.13
R	102+66.12	-17.00	655.25	655.29
S	102+76.12	-17.00	655.40	655.44
T	102+86.12	-17.00	655.55	655.57
CL Brg. E. Abut.	102+98.02	-17.00	655.72	655.72
Back of E. Abut.	103+01.32	-17.00	655.77	655.77

COMPANY NAME: Kevin M. Arft
 PROJECT CONTACT: Kevin M. Arft
 DATE PLOTTED: 8/22/2013 12:00:01 PM
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TOP OF SLAB ELEVATIONS
STRUCTURE NO. 045-3089**

SHEET NO. SE-08 OF SE-43 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	111
CONTRACT NO. 63863				
(ILLINOIS) FED. AID PROJECT #FEDPROJNO#				

BEAM 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back of W. Abut.	100+64.11	-8.50	653.78	653.78
CL Brg. W. Abut.	100+67.41	-8.50	653.77	653.77
A	100+77.41	-8.50	653.74	653.76
B	100+87.41	-8.50	653.72	653.75
C	100+97.41	-8.50	653.71	653.75
D	101+07.41	-8.50	653.72	653.75
E	101+17.41	-8.50	653.74	653.76
F	101+27.41	-8.50	653.77	653.78
CL Brg. Pier 1	101+39.39	-8.50	653.83	653.83
G	101+49.39	-8.50	653.89	653.89
H	101+59.39	-8.50	653.96	653.98
I	101+69.39	-8.50	654.05	654.09
J	101+79.39	-8.50	654.15	654.20
K	101+89.39	-8.50	654.27	654.31
L	101+99.39	-8.50	654.40	654.43
M	102+09.39	-8.50	654.54	654.56
N	102+19.39	-8.50	654.69	654.69
CL Brg. Pier 2	102+29.39	-8.50	654.83	654.83
O	102+39.39	-8.50	654.98	654.99
P	102+49.39	-8.50	655.13	655.15
Q	102+59.39	-8.50	655.28	655.31
R	102+69.39	-8.50	655.43	655.47
S	102+79.39	-8.50	655.58	655.62
T	102+89.39	-8.50	655.73	655.75
CL Brg. E. Abut.	103+01.29	-8.50	655.91	655.91
Back of E. Abut.	103+04.59	-8.50	655.95	655.95

PROFILE GRADE & BEAM 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back of W. Abut.	100+67.37	0.00	653.90	653.90
CL Brg. W. Abut.	100+70.67	0.00	653.89	653.89
A	100+80.67	0.00	653.86	653.88
B	100+90.67	0.00	653.85	653.88
C	101+00.67	0.00	653.84	653.88
D	101+10.67	0.00	653.85	653.89
E	101+20.67	0.00	653.88	653.90
F	101+30.67	0.00	653.92	653.92
CL Brg. Pier 1	101+42.65	0.00	653.98	653.98
G	101+52.65	0.00	654.04	654.05
H	101+62.65	0.00	654.12	654.14
I	101+72.65	0.00	654.22	654.25
J	101+82.65	0.00	654.32	654.36
K	101+92.65	0.00	654.44	654.48
L	102+02.65	0.00	654.57	654.61
M	102+12.65	0.00	654.72	654.74
N	102+22.65	0.00	654.87	654.87
CL Brg. Pier 2	102+32.65	0.00	655.02	655.02
O	102+42.65	0.00	655.16	655.17
P	102+52.65	0.00	655.31	655.33
Q	102+62.65	0.00	655.46	655.50
R	102+72.65	0.00	655.61	655.65
S	102+82.65	0.00	655.76	655.80
T	102+92.65	0.00	655.91	655.93
CL Brg. E. Abut.	103+04.55	0.00	656.09	656.09
Back of E. Abut.	103+07.85	0.00	656.14	656.14

BEAM 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back of W. Abut.	100+70.63	8.50	653.76	653.76
CL Brg. W. Abut.	100+73.93	8.50	653.75	653.75
A	100+83.93	8.50	653.72	653.74
B	100+93.93	8.50	653.71	653.75
C	101+03.93	8.50	653.71	653.75
D	101+13.93	8.50	653.73	653.76
E	101+23.93	8.50	653.76	653.78
F	101+33.93	8.50	653.80	653.81
CL Brg. Pier 1	101+45.91	8.50	653.87	653.87
G	101+55.91	8.50	653.94	653.94
H	101+65.91	8.50	654.02	654.04
I	101+75.91	8.50	654.12	654.15
J	101+85.91	8.50	654.23	654.27
K	101+95.91	8.50	654.35	654.39
L	102+05.91	8.50	654.49	654.52
M	102+15.91	8.50	654.63	654.65
N	102+25.91	8.50	654.78	654.79
CL Brg. Pier 2	102+35.91	8.50	654.93	654.93
O	102+45.91	8.50	655.08	655.09
P	102+55.91	8.50	655.23	655.25
Q	102+65.91	8.50	655.38	655.41
R	102+75.91	8.50	655.53	655.57
S	102+85.91	8.50	655.68	655.71
T	102+95.91	8.50	655.83	655.85
CL Brg. E. Abut.	103+07.81	8.50	656.00	656.00
Back of E. Abut.	103+11.11	8.50	656.05	656.05

COMPANY NAME: Kevin M. Arff
 PROJECT CONTACT: 6777
 CLIENT: 08/22/2013 10:03:53 PM
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	CHECKED - RGD	REVISED -
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PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**TOP OF SLAB ELEVATIONS
 STRUCTURE NO. 045-3089**

SHEET NO. SE-09 OF SE-43 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	112
CONTRACT NO. 63863				
ILLINOIS FED. AID PROJECT #FEDPROJNO*				

BEAM 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back of W. Abut.	100+73.90	17.00	653.61	653.61
CL Brg. W. Abut.	100+77.20	17.00	653.60	653.60
A	100+87.20	17.00	653.58	653.60
B	100+97.20	17.00	653.58	653.61
C	101+07.20	17.00	653.58	653.62
D	101+17.20	17.00	653.60	653.64
E	101+27.20	17.00	653.64	653.66
F	101+37.20	17.00	653.68	653.69
CL Brg. Pier 1	101+49.18	17.00	653.75	653.75
G	101+59.18	17.00	653.83	653.83
H	101+69.18	17.00	653.92	653.94
I	101+79.18	17.00	654.02	654.05
J	101+89.18	17.00	654.13	654.17
K	101+99.18	17.00	654.26	654.30
L	102+09.18	17.00	654.40	654.44
M	102+19.18	17.00	654.55	654.57
N	102+29.18	17.00	654.70	654.70
CL Brg. Pier 2	102+39.18	17.00	654.85	654.85
O	102+49.18	17.00	655.00	655.00
P	102+59.18	17.00	655.15	655.17
Q	102+69.18	17.00	655.29	655.33
R	102+79.18	17.00	655.44	655.48
S	102+89.18	17.00	655.59	655.63
T	102+99.18	17.00	655.74	655.77
CL Brg. E. Abut.	103+11.08	17.00	655.92	655.92
Back of E. Abut.	103+14.38	17.00	655.97	655.97

BEAM 7

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back of W. Abut.	100+77.16	25.50	653.47	653.47
CL Brg. W. Abut.	100+80.46	25.50	653.46	653.46
A	100+90.46	25.50	653.45	653.46
B	101+00.46	25.50	653.44	653.47
C	101+10.46	25.50	653.46	653.48
D	101+20.46	25.50	653.48	653.50
E	101+30.46	25.50	653.52	653.53
F	101+40.46	25.50	653.57	653.57
CL Brg. Pier 1	101+52.44	25.50	653.64	653.64
G	101+62.44	25.50	653.72	653.73
H	101+72.44	25.50	653.82	653.83
I	101+82.44	25.50	653.92	653.94
J	101+92.44	25.50	654.04	654.07
K	102+02.44	25.50	654.17	654.20
L	102+12.44	25.50	654.32	654.34
M	102+22.44	25.50	654.47	654.48
N	102+32.44	25.50	654.61	654.62
CL Brg. Pier 2	102+42.44	25.50	654.76	654.76
O	102+52.44	25.50	654.91	654.92
P	102+62.44	25.50	655.06	655.07
Q	102+72.44	25.50	655.21	655.23
R	102+82.44	25.50	655.36	655.39
S	102+92.44	25.50	655.51	655.53
T	103+02.44	25.50	655.66	655.67
CL Brg. E. Abut.	103+14.34	25.50	655.83	655.83
Back of E. Abut.	103+17.64	25.50	655.88	655.88

BEAM 7A

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back of W. Abut.	100+79.56	31.75	653.37	653.37
CL Brg. W. Abut.	100+82.86	31.75	653.36	653.36
A	100+92.86	31.75	653.35	653.38
B	101+02.86	31.75	653.35	653.40
C	101+12.86	31.75	653.36	653.42
D	101+22.86	31.75	653.39	653.44
E	101+32.86	31.75	653.43	653.46
F	101+42.86	31.75	653.48	653.50
CL Brg. Pier 1	101+54.84	31.75	653.56	653.56
G	101+64.84	31.75	653.65	653.65
H	101+74.84	31.75	653.74	653.77
I	101+84.84	31.75	653.85	653.89
J	101+94.84	31.75	653.97	654.03
K	102+04.84	31.75	654.11	654.16
L	102+14.84	31.75	654.25	654.30
M	102+24.84	31.75	654.40	654.43
N	102+34.84	31.75	654.55	654.56
CL Brg. Pier 2	102+44.84	31.75	654.70	654.70
O	102+54.84	31.75	654.85	654.86
P	102+64.84	31.75	655.00	655.03
Q	102+74.84	31.75	655.15	655.19
R	102+84.84	31.75	655.30	655.35
S	102+94.84	31.75	655.45	655.50
T	103+04.84	31.75	655.60	655.63
CL Brg. E. Abut.	103+16.74	31.75	655.77	655.77
Back of E. Abut.	103+20.04	31.75	655.82	655.82

COMPANY NAME: HRGreen
 PROJECT CONTACT: Kevin M. Arff
 DATE PLOTTED: 8/22/2013 7:30:17 PM
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 PEN TABLE: standard-trans.tbl



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PLOT SCALE =	DRAWN - WJH	REVISED -
PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**TOP OF SLAB ELEVATIONS
 STRUCTURE NO. 045-3089**

SHEET NO. SE-10 OF SE-43 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	113
CONTRACT NO. 63863				
[ILLINOIS] FED. AID PROJECT #FEDPROJNO#				

CL ROADWAY, PROFILE GRADE & CROWN

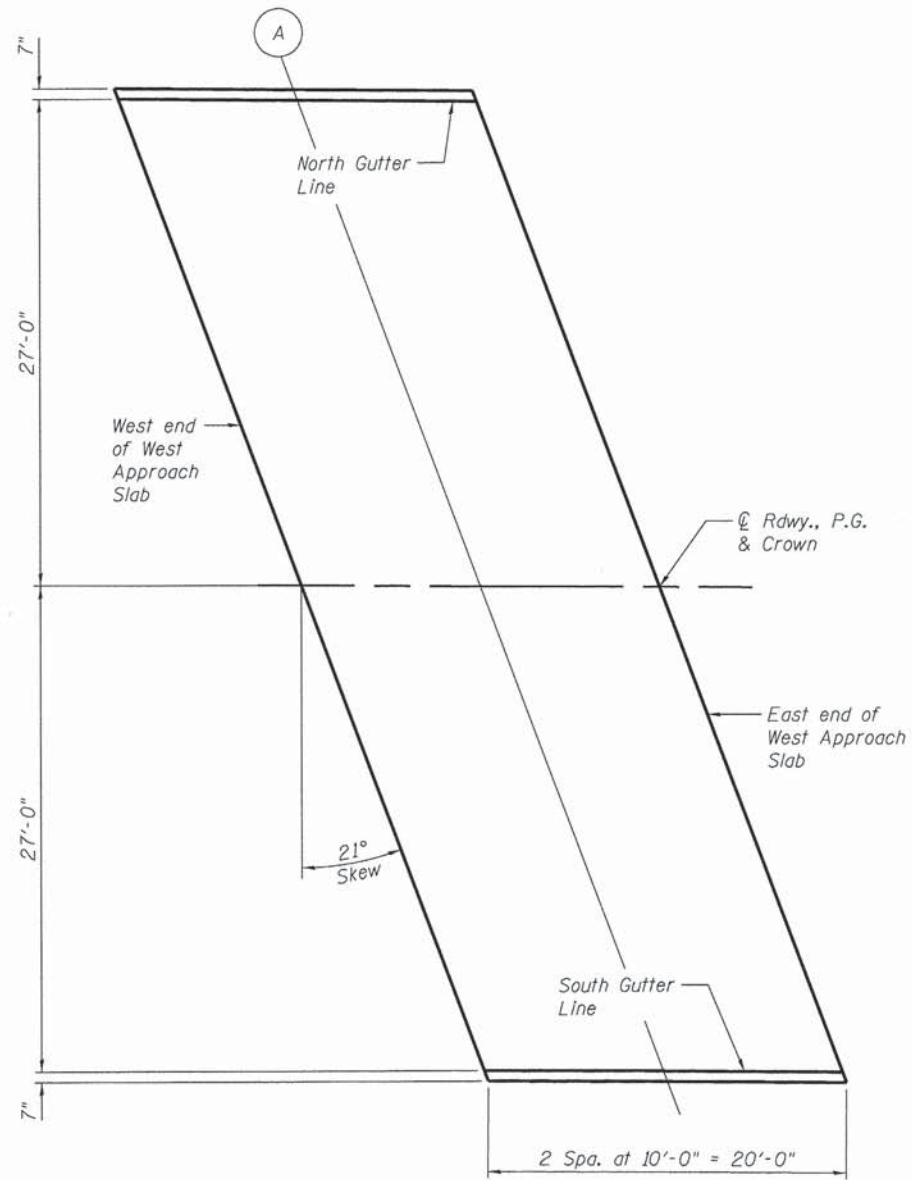
Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Appr.	100+47.90	0.00	654.00
A	100+57.90	0.00	653.94
E. End of W. Appr.	100+67.90	0.00	653.90
W. End of E. Appr.	103+07.32	0.00	656.13
B	103+17.32	0.00	656.28
E. End of E. Appr.	103+27.32	0.00	656.43

NORTH GUTTER LINE

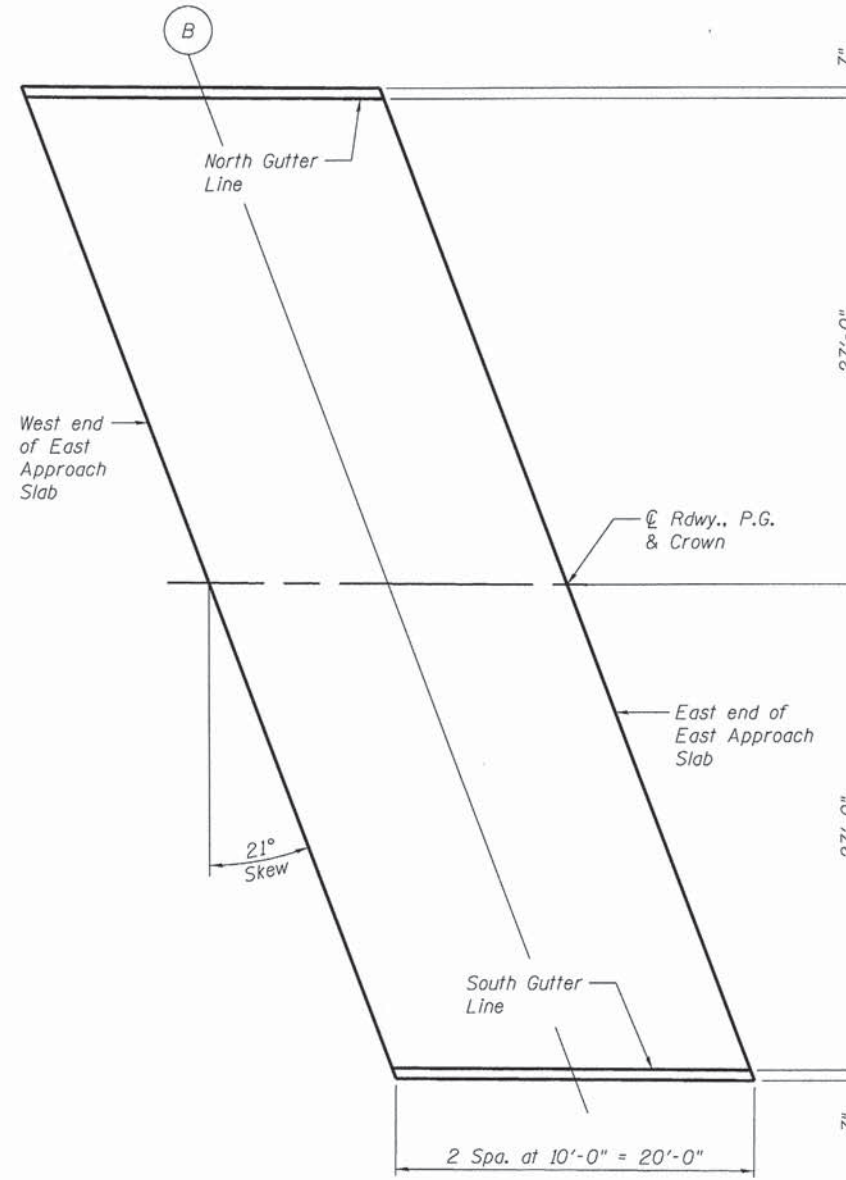
Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Appr.	100+37.54	-27.00	653.65
A	100+47.54	-27.00	653.58
E. End of W. Appr.	100+57.54	-27.00	653.52
W. End of E. Appr.	102+96.95	-27.00	655.55
B	103+06.95	-27.00	655.70
E. End of E. Appr.	103+16.95	-27.00	655.85

SOUTH GUTTER LINE

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Appr.	100+58.27	27.00	653.52
A	100+68.27	27.00	653.48
E. End of W. Appr.	100+78.27	27.00	653.44
W. End of E. Appr.	103+17.68	27.00	655.86
B	103+27.68	27.00	656.01
E. End of E. Appr.	103+37.68	27.00	656.16



WEST APPROACH



EAST APPROACH



COMPANY NAME: Kevin M. Arff
 PROJECT CONTACT: City of Aurora
 CLIENT: 8/22/2013 1:55:51 PM
 DATE PLOTTED: 8/22/2013 1:55:51 PM
 PLOT ORIGIN: 0,0
 PEN TABLE: standard-truss.tbl



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	CHECKED - RGD	REVISED -
PLOT SCALE =	DRAWN - WJH	REVISED -
PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TOP OF APPROACH SLAB ELEVATIONS
 STRUCTURE NO. 045-3089

SHEET NO. SE-11 OF SE-43 SHEETS

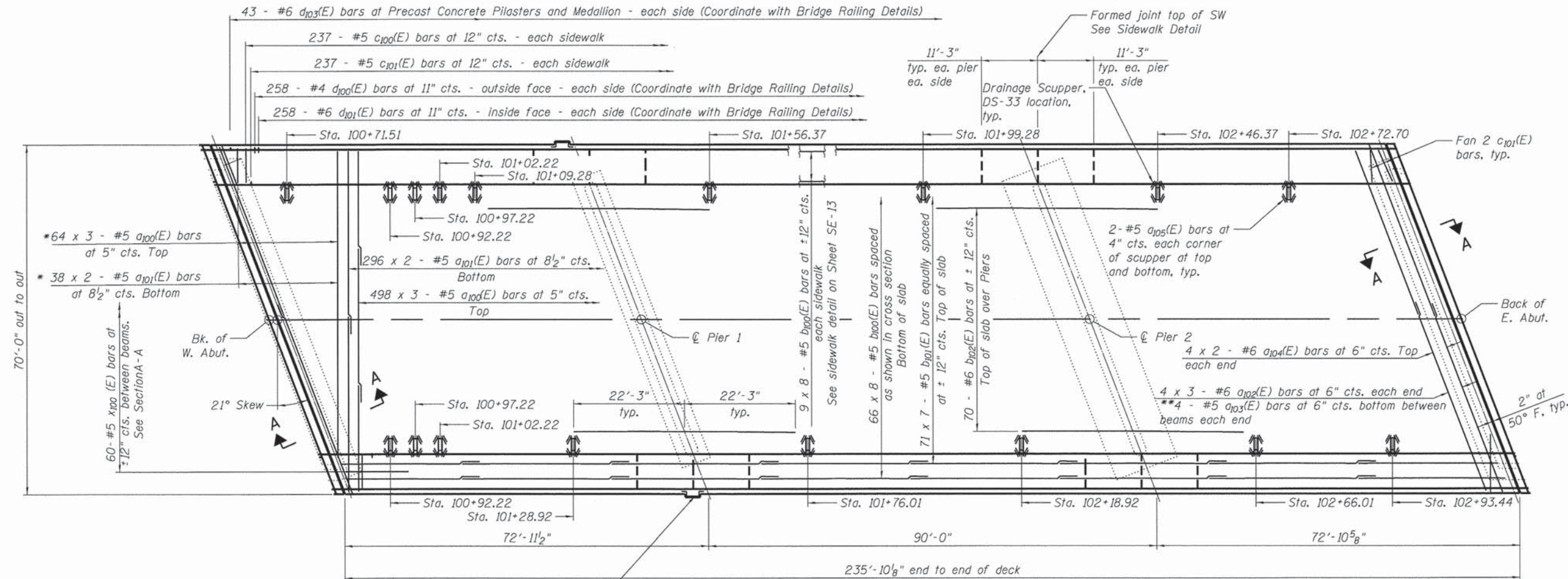
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	114
CONTRACT NO. 63863				
[ILLINOIS] FED. AID PROJECT #FEDPROJNO#				

* Order $a_{100}(E)$ and $a_{101}(E)$ bars full length.
Cut to fit skew and use remainder of bars in opposite end.

**Trim to fit.

MIN. BAR LAP

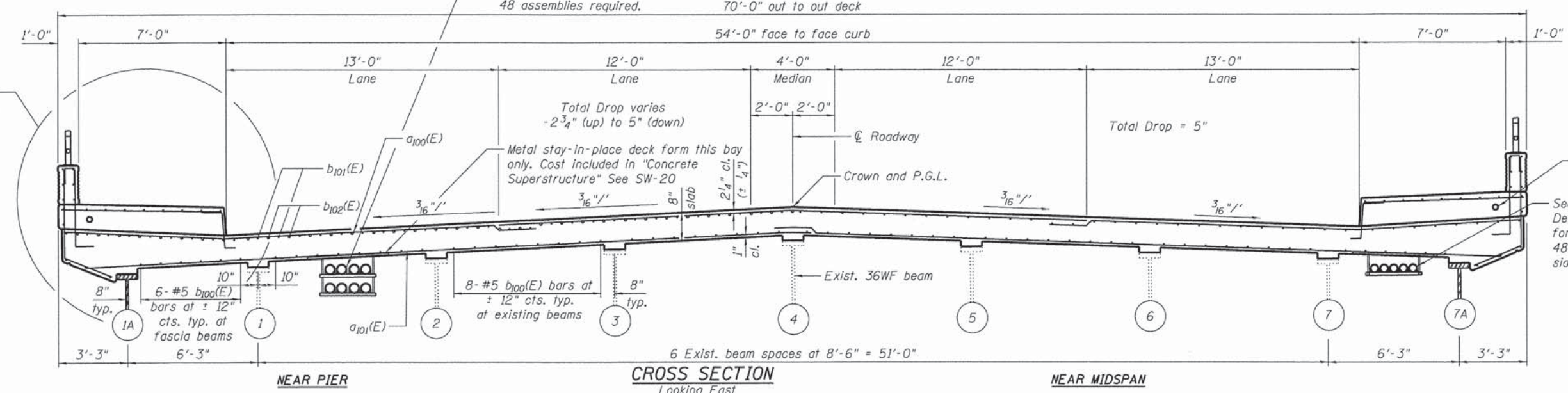
#4 bar = 2'-7"
#5 bar = 3'-3"
#6 bar = 3'-10"



2- #6 $d_{104}(E)$ bars in deck at each light pole pilaster - See Bridge Railing Details

See Roadway Typical Sections for ComEd relocation coordination. See SW-20 for hanger details. 48 assemblies required.

DECK PLAN



CROSS SECTION
Looking East

COMPANY NAME: Kevith M. Arff
PROJECT CONTACT: City of Aurora
CLIENT: City of Aurora
DATE: 8/22/2013
PLOT SCALE: 1/8" = 1'-0"
PLOT DATE: 8/22/2013

HRGreen
Illinois Professional Design Firm
184-001322

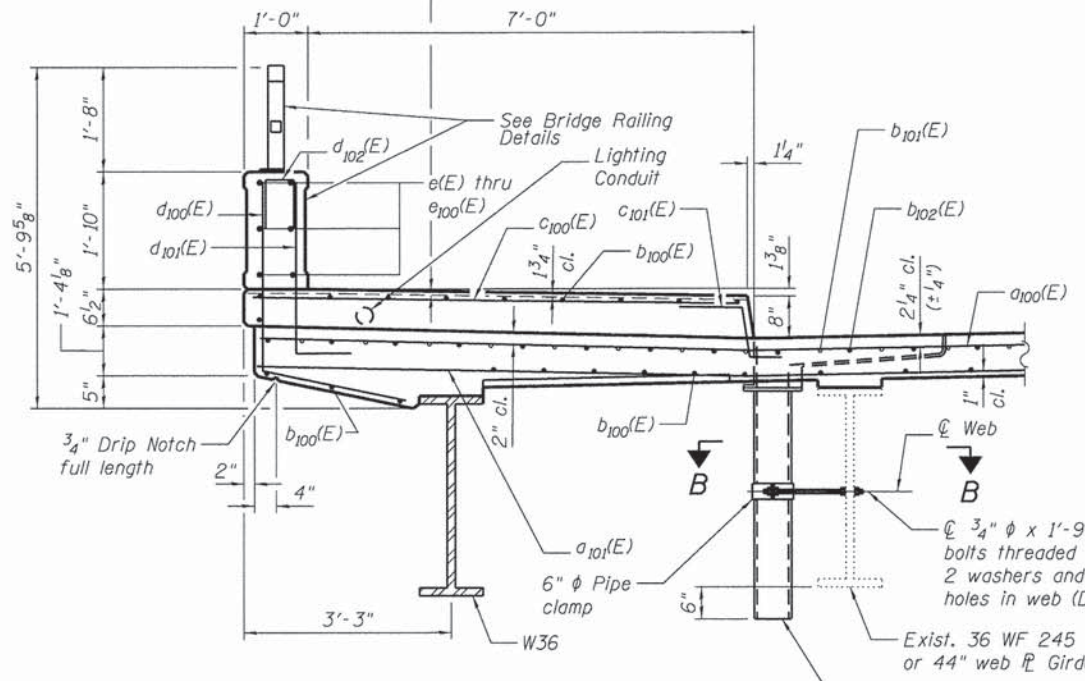
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PLOT DATE: 8/22/2013	DRAWN: WJH	REVISED: -
	CHECKED: 8/22/13	REVISED: -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DECK DETAILS
STRUCTURE NO. 045-3089
SHEET NO. SE-12 OF SE-43 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	115
CONTRACT NO. 63863				
ILLINOIS FED. AID PROJECT #FEDPROJNO#				

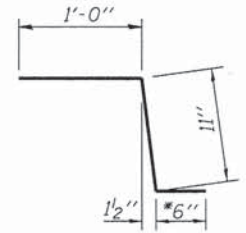
1/4" x 3/4" Formed Joint with Bridge Relief Joint Sealer (See Spec. Prov.) (full width sw-backer rod not required) at piers and either side. (See Deck Plans) Cost included in Concrete Superstructure.



SIDEWALK DETAIL

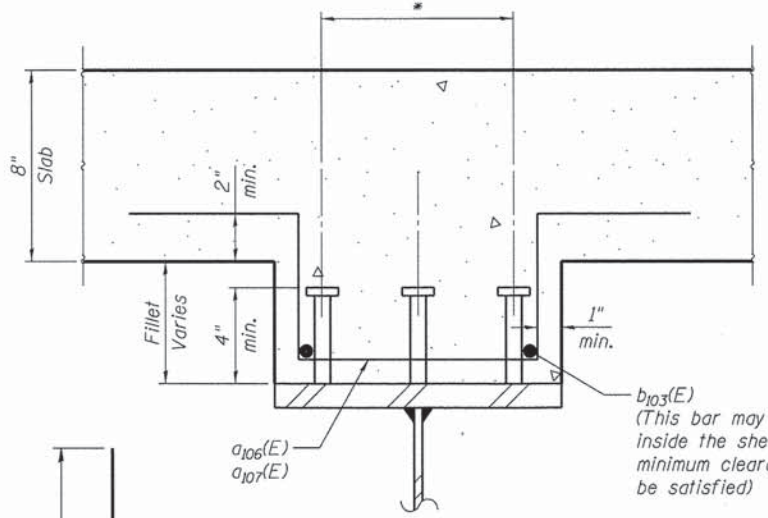
* Four - 5" dia. galv. steel conduits See Lighting Plans and SW-20 for additional information and hanger details

Orientation can be either side of beam/girder. Maintain positive slope in trough towards downspout



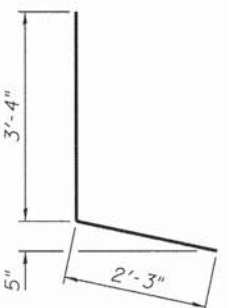
BAR c₁₀₁(E)

* In lieu of bottom leg, c(E) bars may be cored and set according to Article 509.06 of the Standard Specifications. Cored holes shall be roughened or scored per manufacturer's recommendations. Maximum depth of cored hole shall not exceed 6".



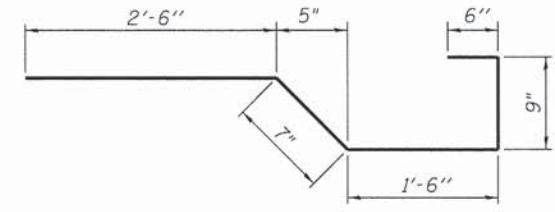
DEEP FILLET SECTION

* See Structural Steel Details

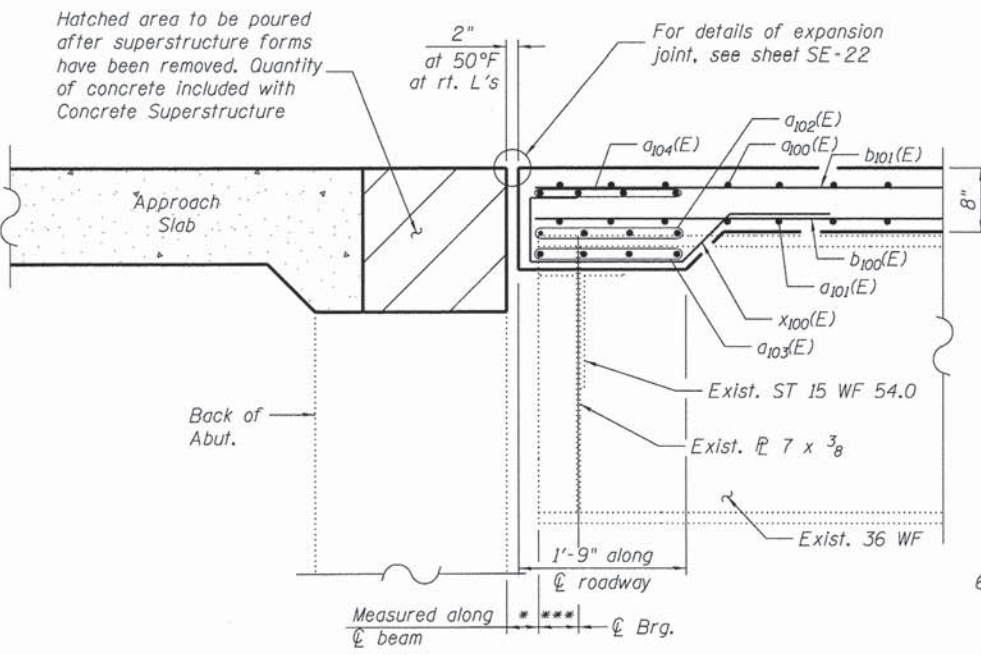


BAR d₁₀₀(E)

BAR d₁₀₃(E)



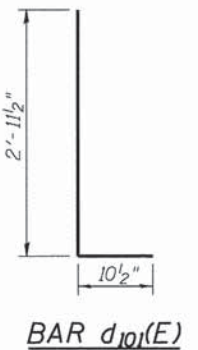
BAR x₁₀₀(E)



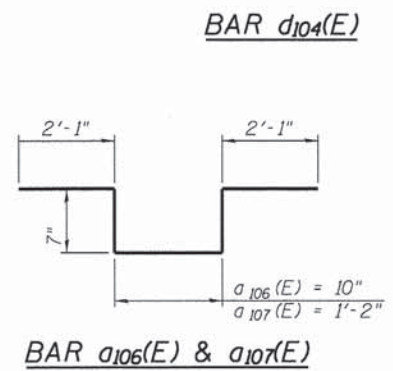
SECTION A-A

* 6 7/8" at Beams 1A & 7A
4 7/8" at Beams 1-7

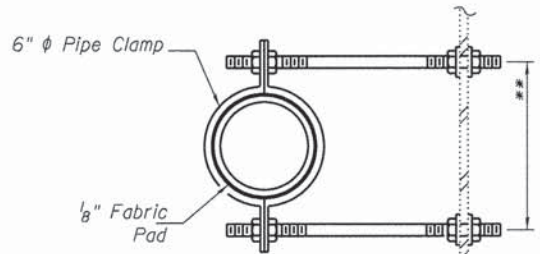
*** 7" at Beams 1A & 7A
9" at Beams 1-7



BAR d₁₀₁(E)

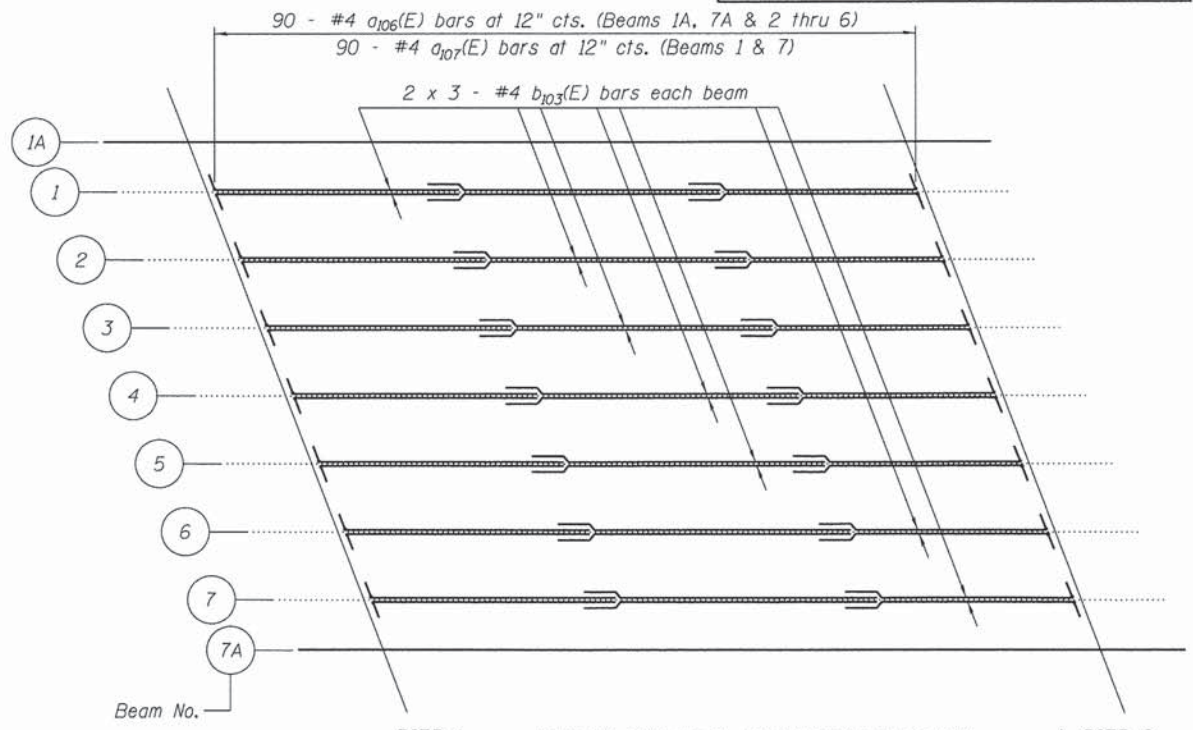


BAR a₁₀₆(E) & a₁₀₇(E)



SECTION B-B

** Dimension as required by Pipe Clamp



DECK FILLET REINFORCEMENT

(Based on theoretical fillet heights)

The actual quantities of the deck fillet reinforcement will be determined based on the field measurements of the fillet heights. Proposed fillets measured 6" taller for a length greater than 10'-0" shall be reinforced according to these details.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a ₁₀₀ (E)	1,686	#5	25'- 7"	—
a ₁₀₁ (E)	668	#5	36'- 6"	—
a ₁₀₂ (E)	24	#6	27'- 3"	—
a ₁₀₃ (E)	64	#5	8'- 9"	—
a ₁₀₄ (E)	16	#6	39'- 0"	—
a ₁₀₅ (E)	272	#5	2'- 0"	—
a ₁₀₆ (E)	630	#4	6'- 2"	—
a ₁₀₇ (E)	180	#4	6'- 6"	—
b ₁₀₀ (E)	672	#5	32'- 8"	—
b ₁₀₁ (E)	497	#5	36'- 9"	—
b ₁₀₂ (E)	140	#6	44'- 6"	—
b ₁₀₃ (E)	54	#4	31'- 9"	—
c ₁₀₀ (E)	482	#5	7'- 8"	—
c ₁₀₁ (E)	482	#5	2'- 5"	—
d ₁₀₀ (E)	516	#4	5'- 7"	L
d ₁₀₁ (E)	516	#6	3'- 10"	L
d ₁₀₂ (E)	86	#6	5'- 7"	L
d ₁₀₃ (E)	4	#6	9'- 9"	L
x ₁₀₀ (E)	120	#5	5'- 10"	L
Concrete Superstructure		Cu. Yd.	582.7	
Reinforcement Bars, Epoxy Coated		Pound	140,790	
Bridge Deck Grooving		Sq. Yd.	1,363	
Protective Coat		Sq. Yd.	2,012	

COMPANY NAME: Kevin M. Arfki
 PROJECT CONTACT: City of Aurora
 CLIENT: City of Aurora
 DATE PLOTTED: 8/22/2013 7:40:39 PM
 FILE NAME: 8610318-SE-Deck_Details02.dgn
 PLOT DRIVER: pdfplot111f.plt
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HRGreen.com
 Illinois Professional Design Firm
 #184-001322

USER NAME = whood	DESIGNED - KMA	REVISED -
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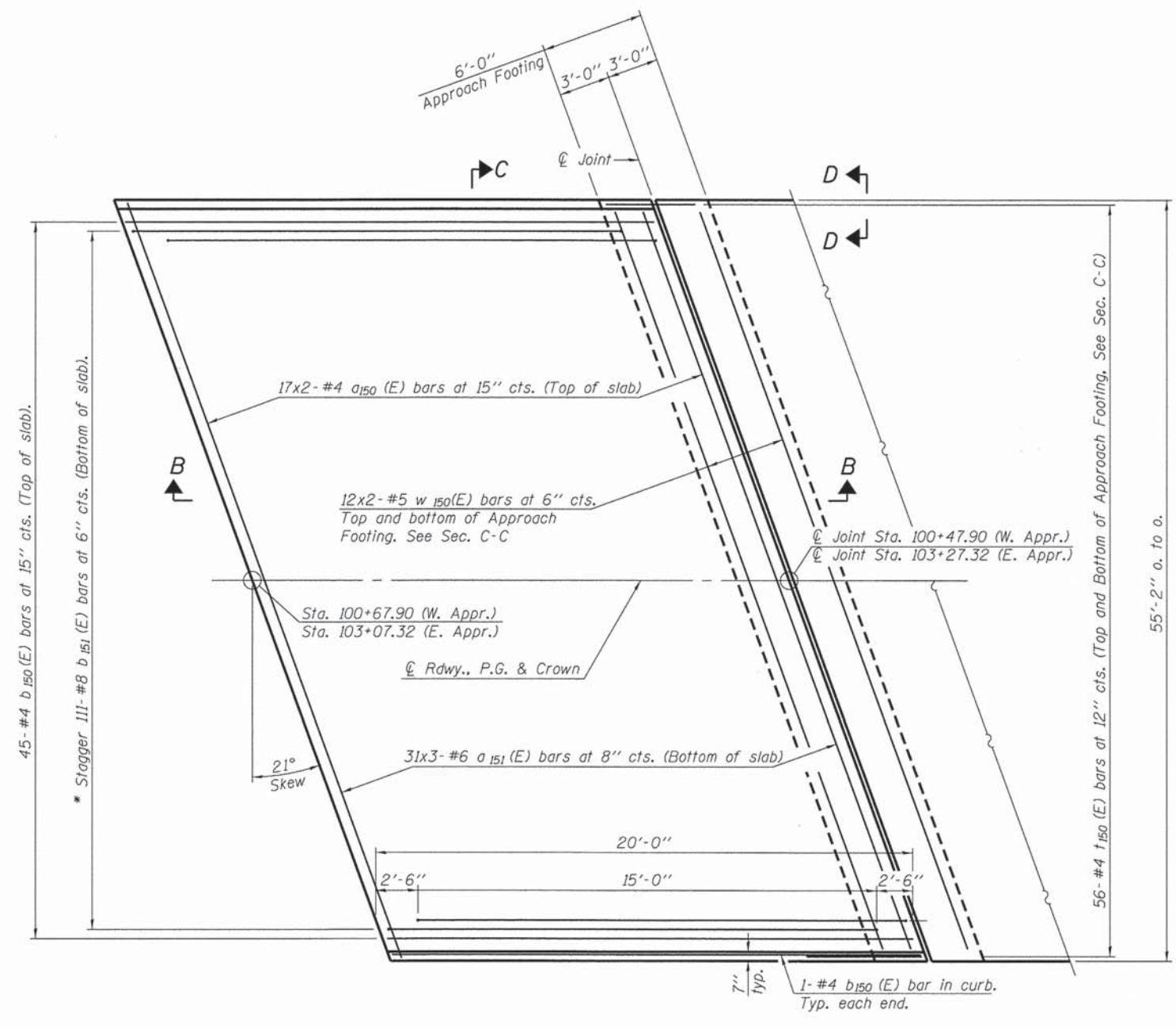
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DECK DETAILS
STRUCTURE NO. 045-3089

SHEET NO. SE-13 OF SE-43 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	116
CONTRACT NO. 63863			ILLINOIS FED. AID PROJECT #FEDPROJN08	

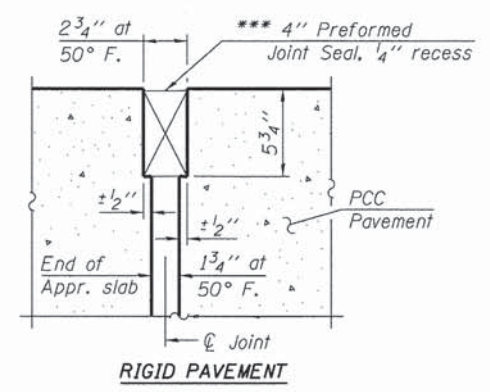
Notes:
See sheet SE-16 of for Sections B-B & C-C
a₁₅₀(E) and a₁₅₁(E) bar spacings measured along \perp Rdwy.



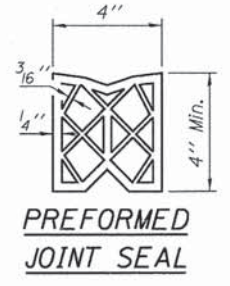
PLAN

* Tilt #8 b₁₅₁(E) bars as required to maintain clearance.

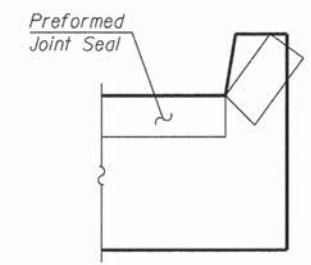
*** Cost included with Concrete Superstructure.



DETAIL A



PREFORMED JOINT SEAL



VIEW D-D

Angle Preformed Joint Seal at 45° at curbs when req'd for drainage.

COMPANY NAME: Kevin M. Arft
PROJECT CONTACT: City of Aurora
CLIENT: City of Aurora
DATE PLOTTED: 8/22/2013 14:23 PM
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PLOT DRIVER: pdf.plt
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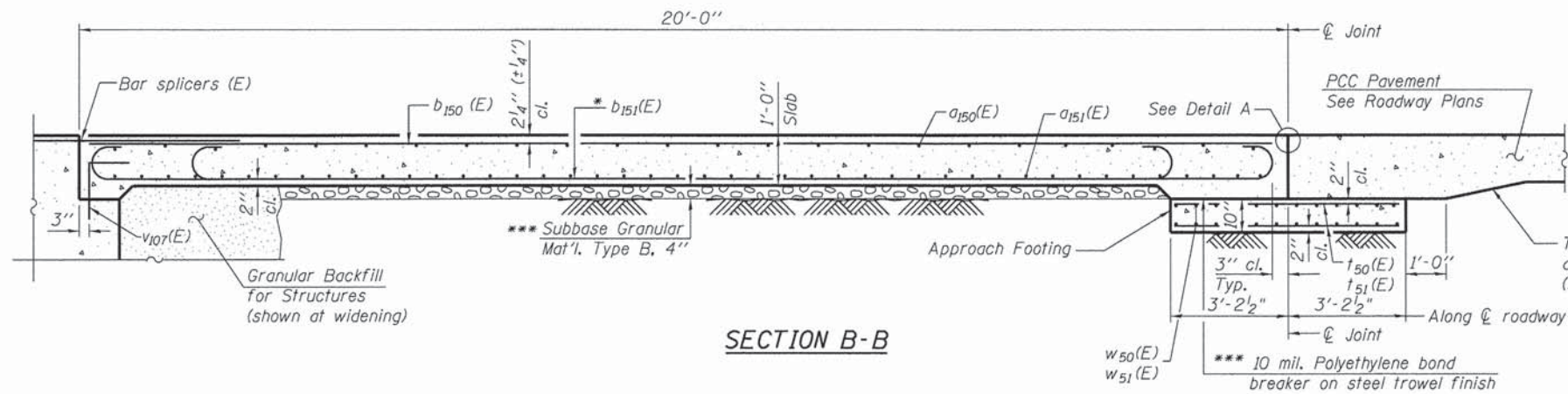
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PLOT DATE = 8/22/2013	DRAWN - WJH	REVISED -
	CHECKED - 8/22/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 045-3089

SHEET NO. SE-15 OF SE-43 SHEETS

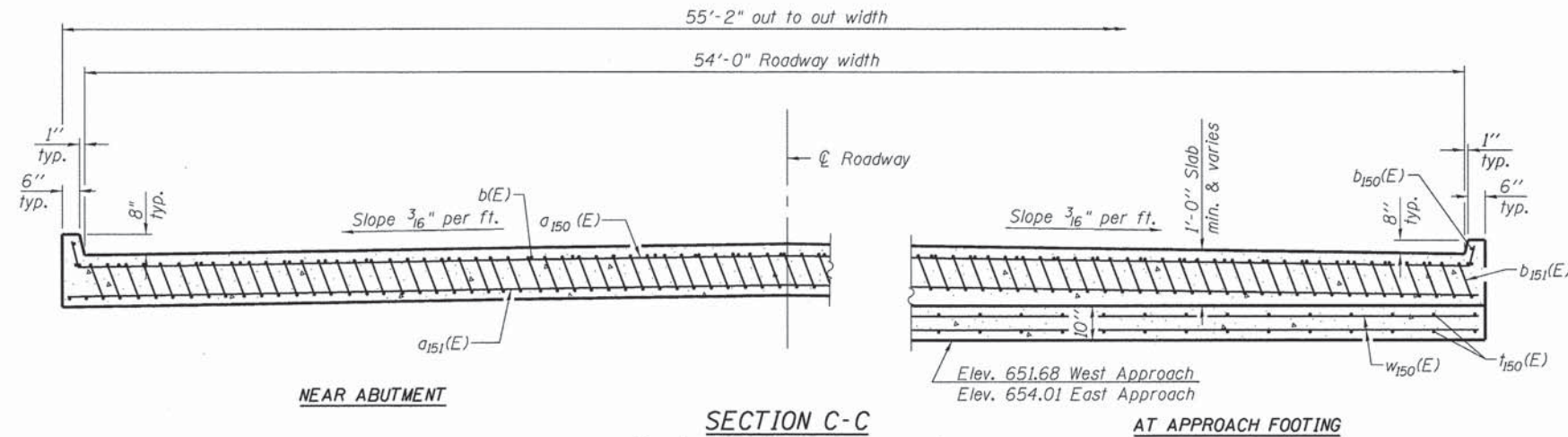
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	118
CONTRACT NO. 63863				
ILLINOIS FED. AID PROJECT			FEDPROJNO	



Notes:
 See sheet SE-15 for Detail A.
 Approach slab concrete shall be paid for as Concrete Superstructure.
 Approach footing concrete shall be paid for as Concrete Structures.
 Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
 For v₁₀₇(E) bar details, see Abutment Details.
 The approach footing maximum applied service bearing pressure (Q_{max}) = 2.0 ksf.
 For bar splicer details, see sheet SE-40.
 Cost of excavation for approach footing included with Concrete Structures.
 For Granular Backfill for Structures and drainage treatment details, see Abutment Details.

The cost to increase thickness of PCC Pavement, as shown is included in the pavement item. (See Roadway Plans)

SECTION B-B



NEAR ABUTMENT

SECTION C-C

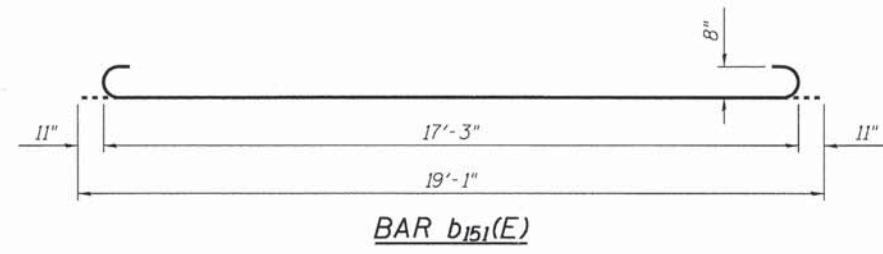
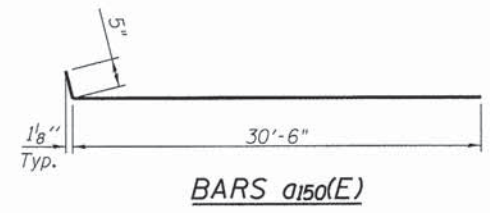
(See Plan for dimensions not shown)

AT APPROACH FOOTING

TWO APPROACHES
 BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a ₁₅₀ (E)	68	#4	30'- 11"	—
a ₁₅₁ (E)	186	#6	21'- 8"	—
b ₁₅₀ (E)	90	#4	19'- 8"	—
b ₁₅₁ (E)	222	#8	19'- 1"	—
t ₁₅₀ (E)	112	#4	6'- 1"	—
w ₁₅₀ (E)	48	#5	30'- 8"	—
Concrete Superstructure			Cu. Yd.	106.4
Concrete Structures			Cu. Yd.	21.8
Reinforcement Bars, Epoxy Coated			Pound	21,940
Protective Coat			Sq. Yd.	251
Bridge Deck Grooving			Sq. Yd.	232

* Tilt #8 b₁₅₁(E) bars as required to maintain clearance.
 *** Cost included with Concrete Superstructure.



COMPANY NAME: Kevin M. Arfki
 PROJECT CONTACT: Kevin M. Arfki
 CLIENT: City of Aurora
 DATE PLOTTED: 8/22/2013 14:53:39 PM
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HRGreen
 HRGreen.com
 Illinois Professional Design Firm
 # 184-001322

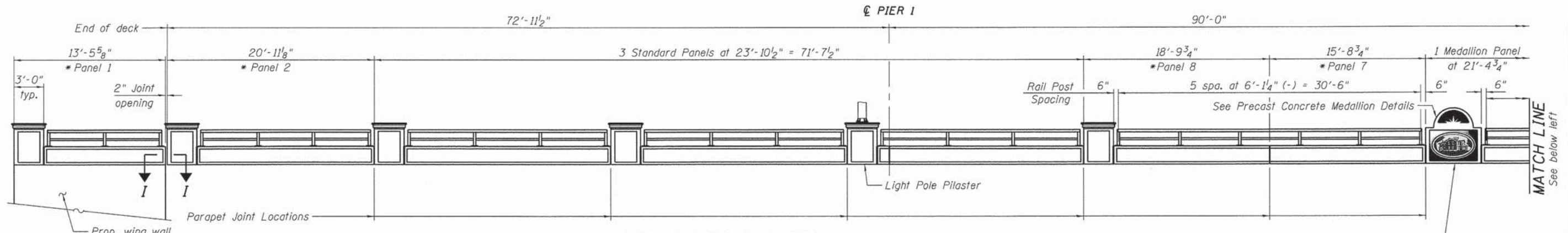
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	CHECKED - RGD	REVISED -
PLOT SCALE *	DRAWN - WJH	REVISED -
PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**BRIDGE APPROACH SLAB DETAILS
 STRUCTURE NO. 045-3089**

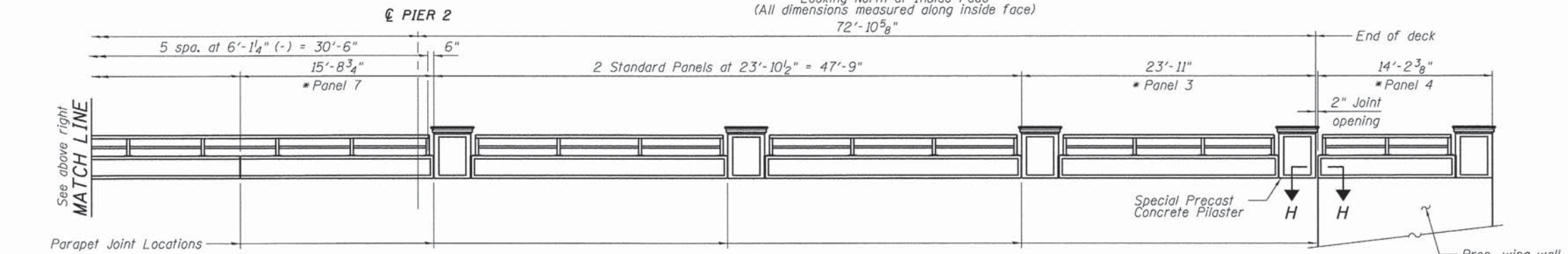
SHEET NO. SE-16 OF SE-43 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 63863				
[ILLINOIS] FED. AID PROJECT #FEDPROJNO#				



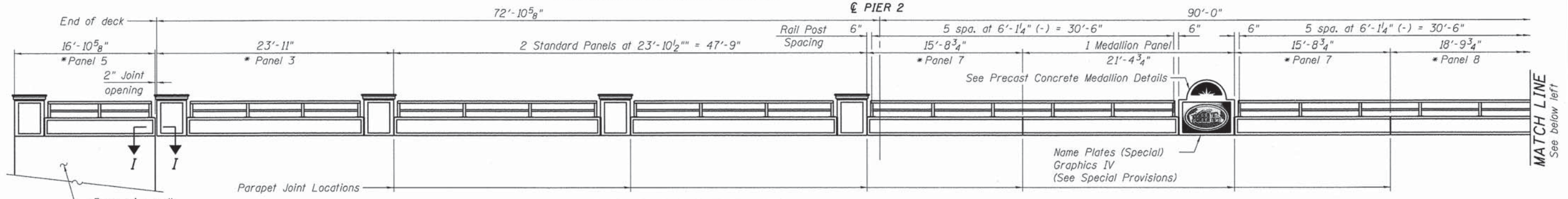
NORTH RAILING ELEVATION

Looking North at Inside Face
(All dimensions measured along inside face)



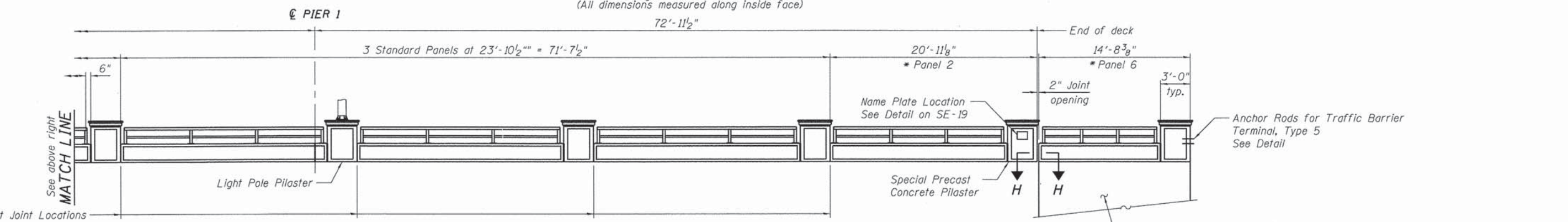
NORTH RAILING ELEVATION

Looking North at Inside Face
(All dimensions measured along inside face)



SOUTH RAILING ELEVATION

Looking South at Inside Face
(All dimensions measured along inside face)



SOUTH RAILING ELEVATION

Looking South at Inside Face
(All dimensions measured along inside face)

* See Special Panel Details
See Sheet SE-20 for Sections H-H and I-I

COMPANY NAME: HRGreen
PROJECT CONTACT: Kevin M. Arfki
DATE PLOTTED: 8/22/2013 7:43:28 PM
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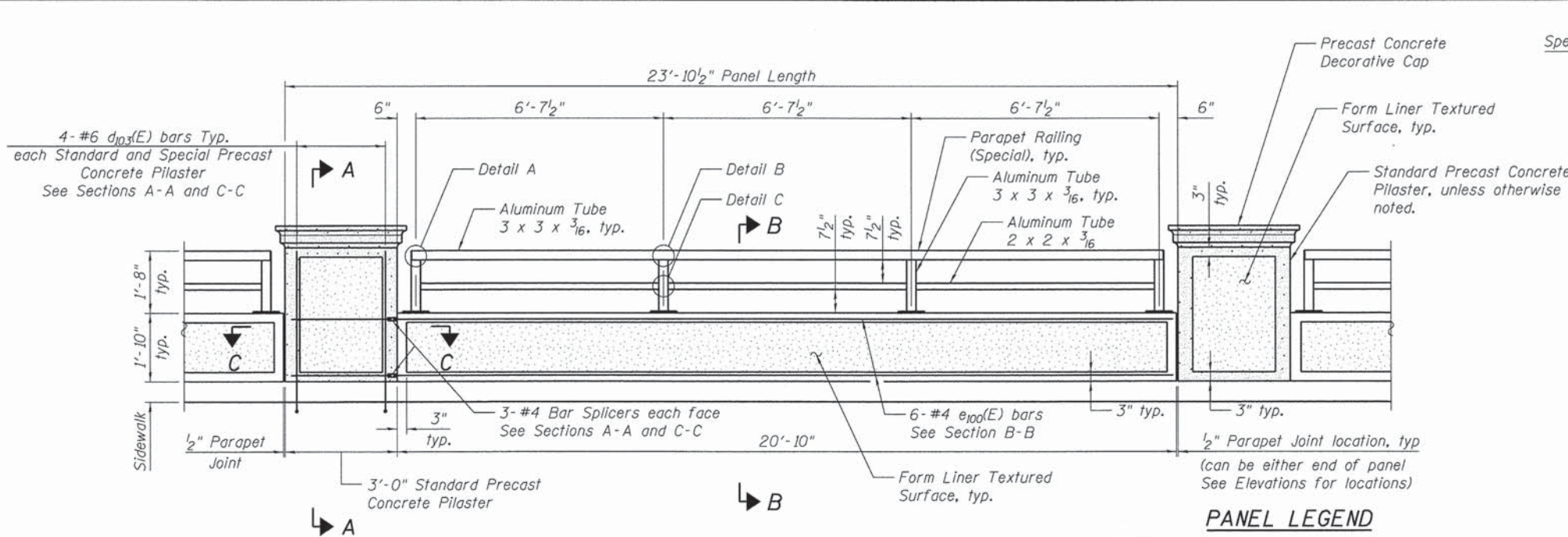
HRGreen
Illinois Professional Design Firm
#184-001322

USER NAME = w hood	DESIGNED - KMA	REVISED -
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PLOT SCALE =	DRAWN - WJH	REVISED -
PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NORTH RAILING ELEVATION
STRUCTURE NO. 045-3089
SHEET NO. SE-17 OF SE-43 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 63863				
ILLINOIS FED. AID PROJECT #FEDPROJNO#				

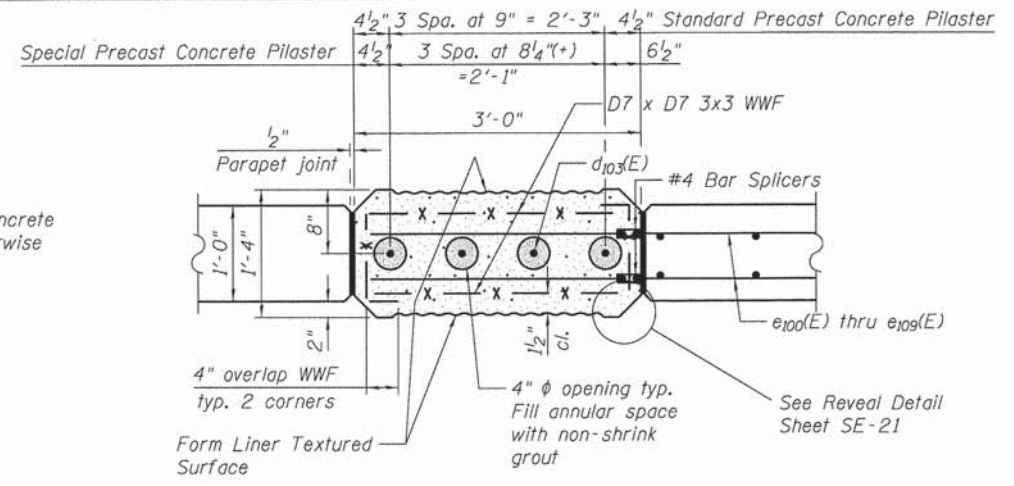


STANDARD PANEL ELEVATION

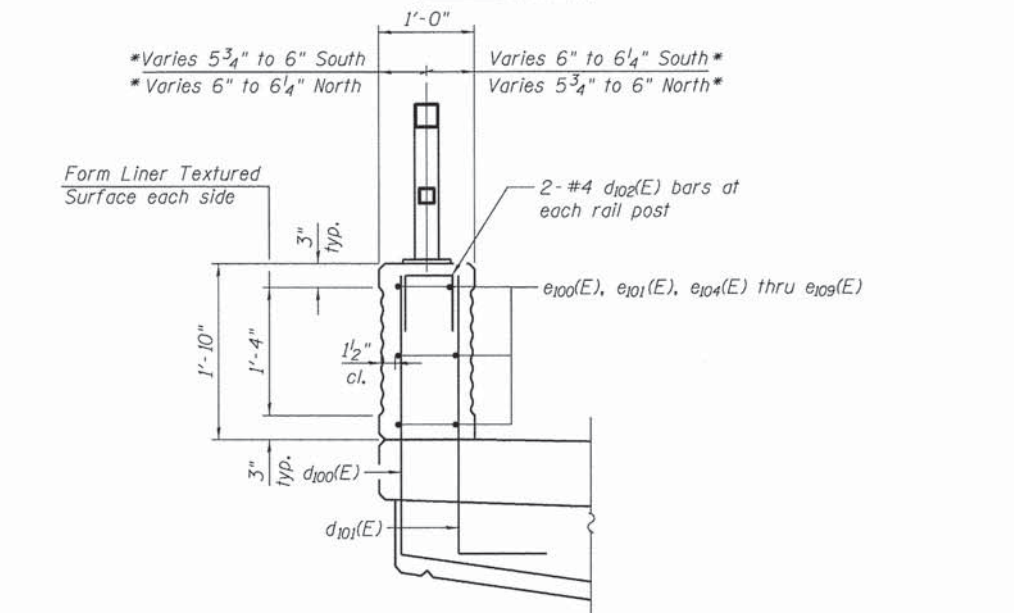
Can be Opposite Hand See Elevations

PANEL LEGEND

- Precast Concrete (Install first)
 - Cast-in-place Concrete (Install after Precast)
 - Indicates Form Liner Textured Surface
- All paid for under Concrete Bridge Railing

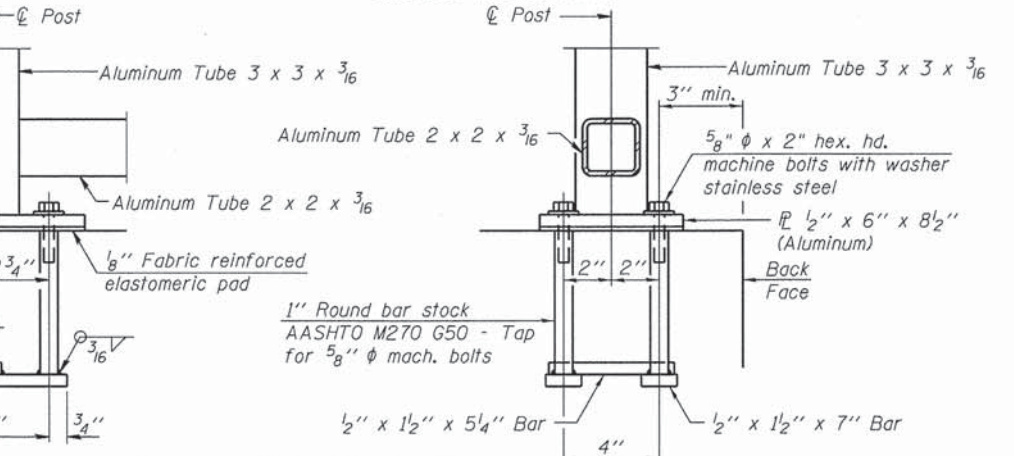


SECTION C-C



SECTION B-B

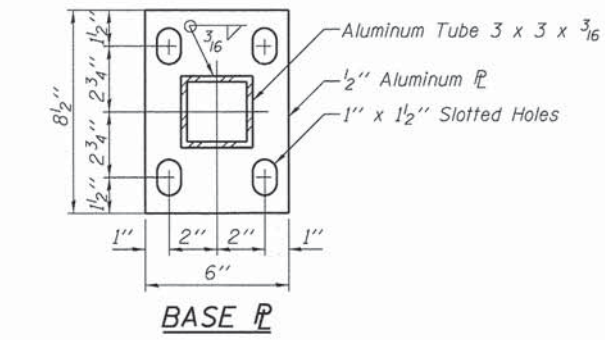
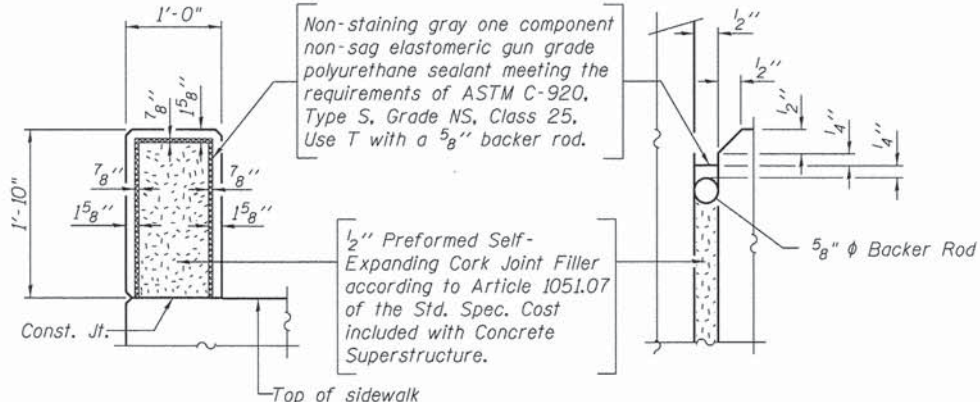
* Applies to Unit 1 Dimension is 6" at Unit 2



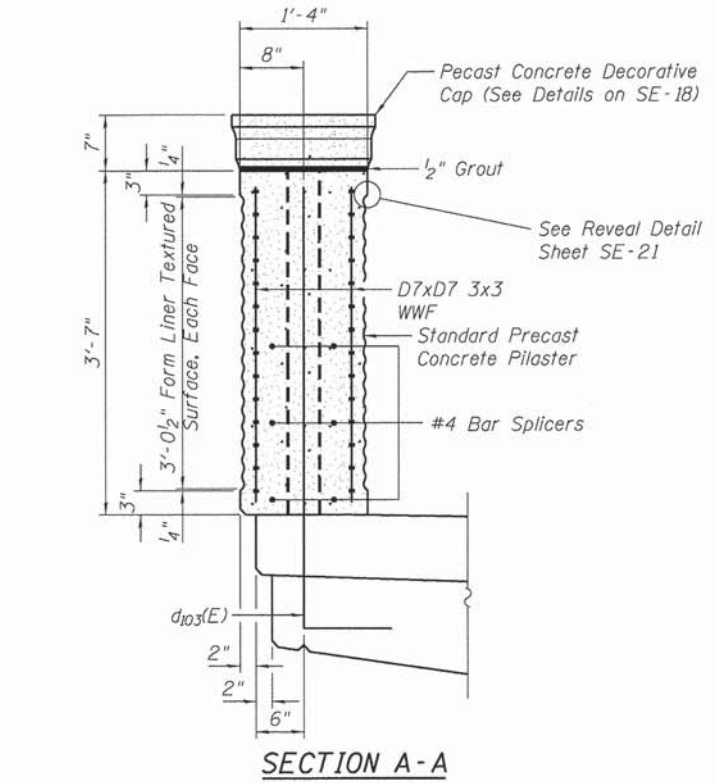
ANCHOR BOLT DETAILS

Drilling and setting anchor rods is not allowed.

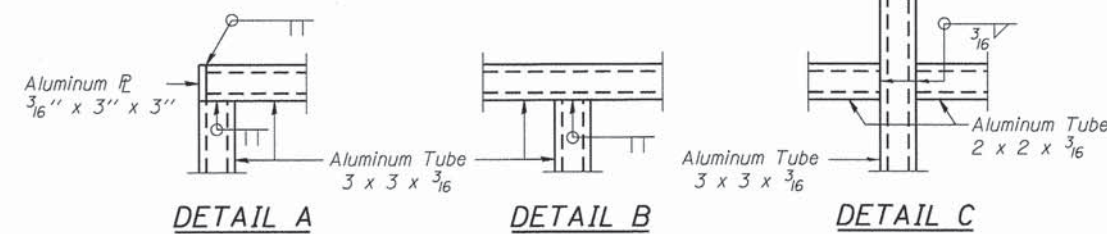
PARAPET JOINT DETAILS



BASE PL



SECTION A-A



DETAIL A

DETAIL B

DETAIL C

See Special Provisions for finish and color of Parapet Railings, Special.

BILL OF MATERIAL

Item	Unit	Quantity
Parapet Railing (Special)	Foot	435
Concrete Bridge Railing	Foot	531

COMPANY NAME: Kevin M. Arft
 PROJECT CONTACT: City of Aurora
 CLIENT: 8/22/2013 1:46:03 PM
 DATE PLOTTED: 8/22/2013 1:46:03 PM
 FILE NAME: 8610518-SE-99-100 Rolling Details.dgn
 PLOT DRIVER: pdfJET-TIF164
 PEN TABLE: standard-trans.tbl

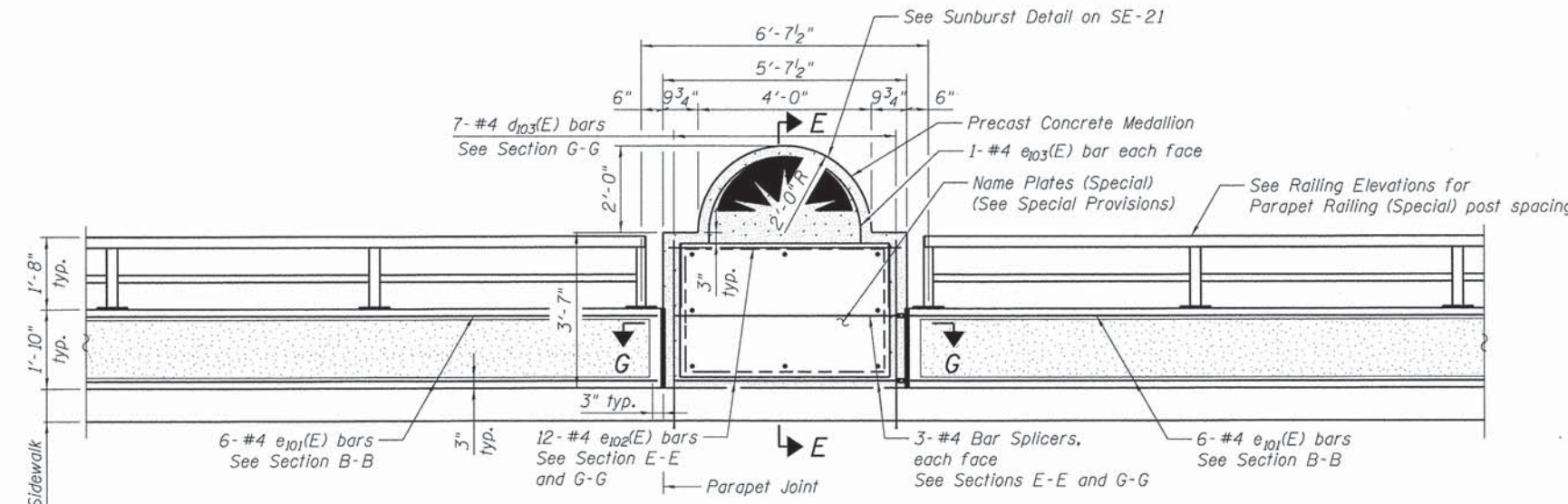
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#184-001322

USER NAME = w hood	DESIGNED - KMA	REVISED -
PLOT SCALE =	CHECKED - RDG	REVISED -
PLOT DATE = 8/22/2013	DRAWN - WJH	REVISED -
	CHECKED - 8/22/13	REVISED -

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DEPARTMENT OF TRANSPORTATION**

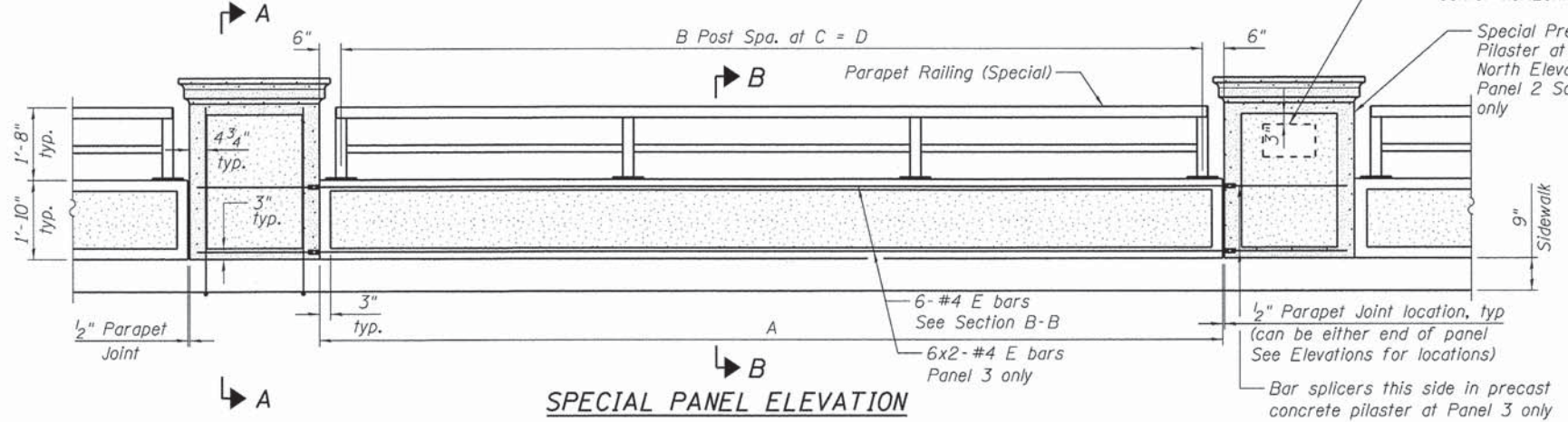
**BRIDGE RAILING DETAILS
STRUCTURE NO. 045-3089**
SHEET NO. SE-18 OF SE-43 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	121
CONTRACT NO. 63863			[ILLINOIS] FED. AID PROJECT #FEDPROJNO#	



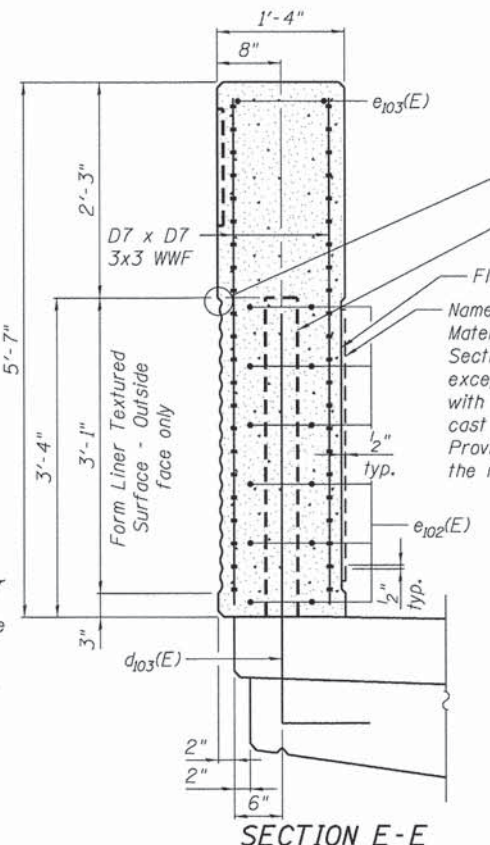
MEDALLION PANEL ELEVATION

Shown at South Railing
North Railing similar but opposite hand

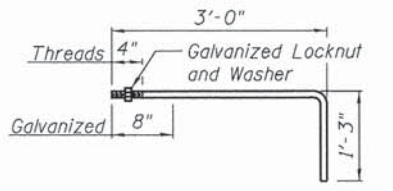


SPECIAL PANEL ELEVATION

Can be Opposite Hand if only one pilaster is included
See Elevations

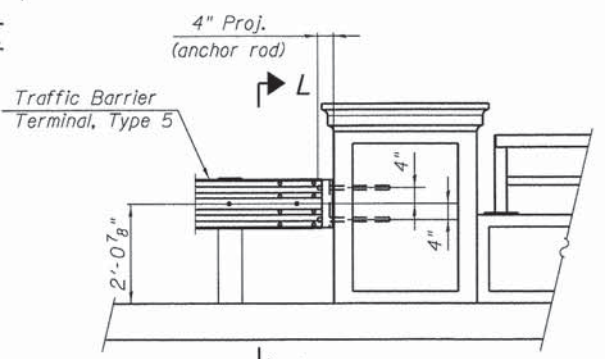


SECTION E-E



1" Ø ANCHOR ROD

For TBT Type 5
Cost included in Concrete Bridge Railing

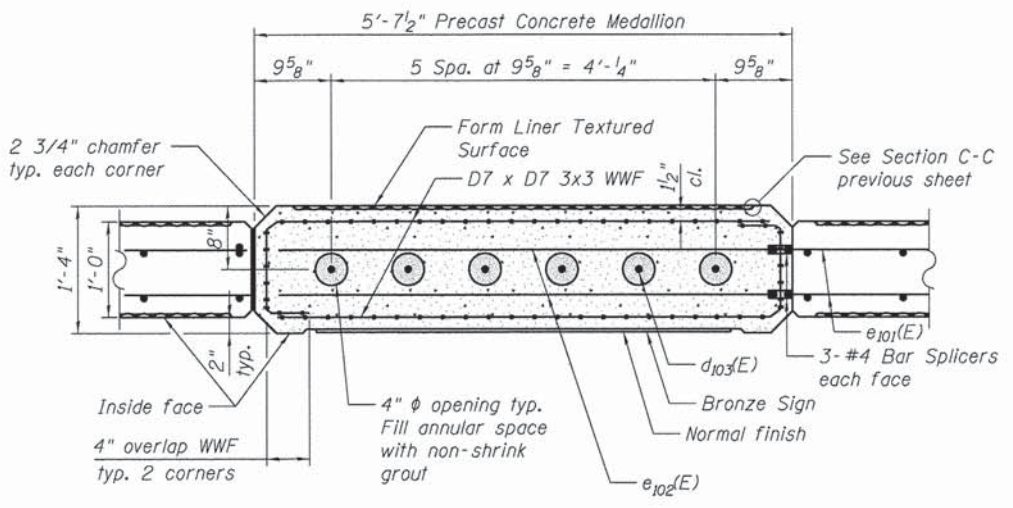


TRAFFIC BARRIER TERMINAL DETAIL

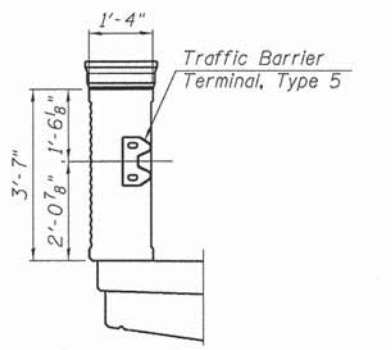
SPECIAL PARAPET / RAILING PANEL DIMENSION TABLE

Special Panel	A	B	C	D	E	No. of Panels
1	10'-5 ⁵ / ₈ "	2	4'-8 ³ / ₄ "	9'-5 ⁵ / ₈ "	e 104 (E)	1
2	17'-10 ⁵ / ₈ "	3	5'-7 ¹ / ₂ "	16'-10 ¹ / ₂ "	e 105 (E)	2
3	17'-11"	3	5'-7 ¹ / ₂ "	16'-10 ¹ / ₂ "	e 106 (E)	2
4	11'-2 ³ / ₈ "	2	5'-2 ¹ / ₄ "	10'-4 ³ / ₈ "	e 107 (E)	1
5	13'-10 ⁵ / ₈ "	2	6'-5 ¹ / ₄ "	12'-10 ⁵ / ₈ "	e 108 (E)	1
6	11'-8 ³ / ₈ "	2	5'-4 ¹ / ₄ "	10'-8 ³ / ₈ "	e 109 (E)	1
7	15'-8 ¹ / ₄ "	***	***	***	e 101 (E)	4
8	15'-9 ³ / ₄ "	***	***	***	e 101 (E)	2

* See Standard Precast Concrete Pilaster Details
** See Standard Panel Details for Metal Railing Layout
*** See Railing Elevations for Parapet Railing (Special) post spacing



SECTION G-G



SECTION L-L

PANEL LEGEND

Precast Concrete (Install first)

Cast-in-place Concrete (Install after precast)

Indicates Form Liner Textured Surface

All paid for under Concrete Bridge Railing

COMPANY NAME: Kevin M. Arff
 PROJECT CONTACT: Kevin M. Arff
 DATE PLOTTED: 8/22/2013 7:46:51 PM
 FILE NAME: 8610388-SE-19.dwg
 PLOT DRIVER: pdfLDT-11f.ctb
 PEN TABLE: standard-trans.tbl



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USER NAME	* hood
DESIGNED	- KMA
REVISIONS	
CHECKED	- RDG
REVISIONS	
DRAWN	- WJH
REVISIONS	
PLOT DATE	= 8/22/2013
CHECKED	- 8/22/13
REVISIONS	

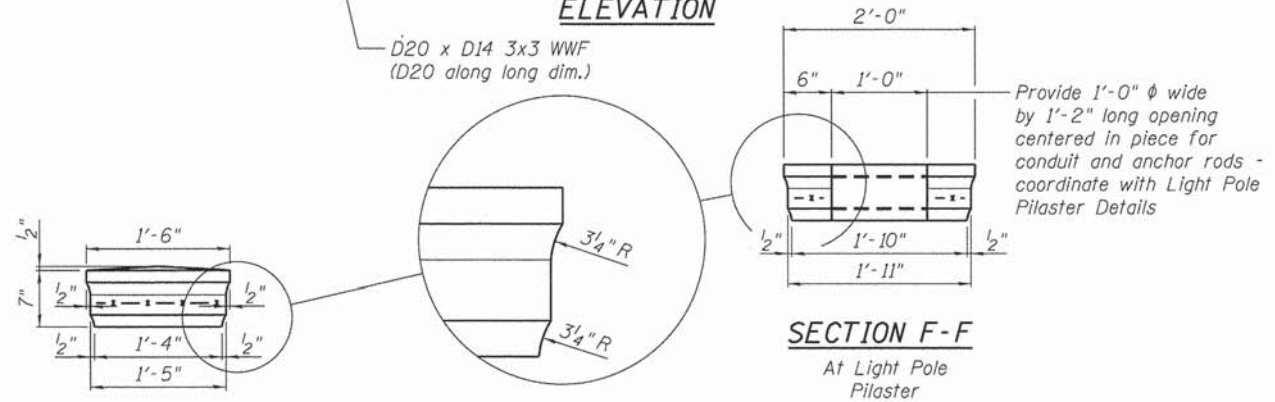
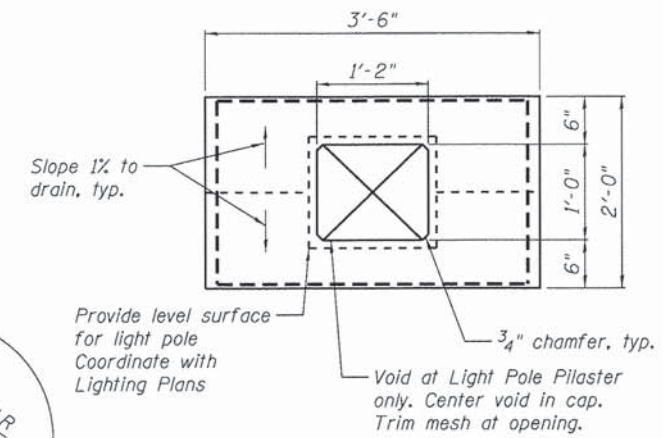
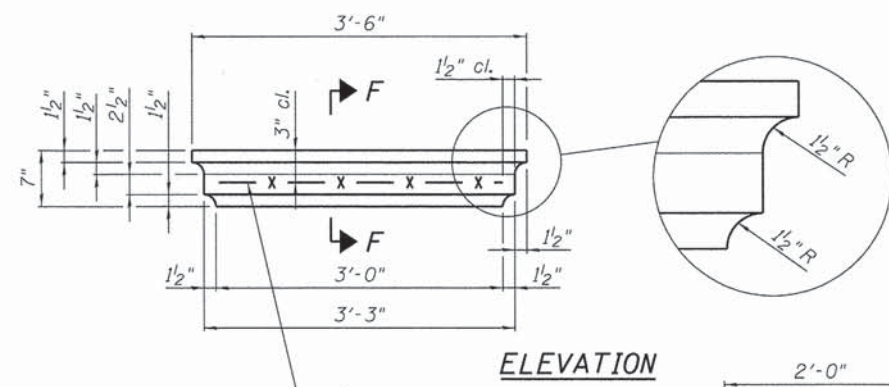
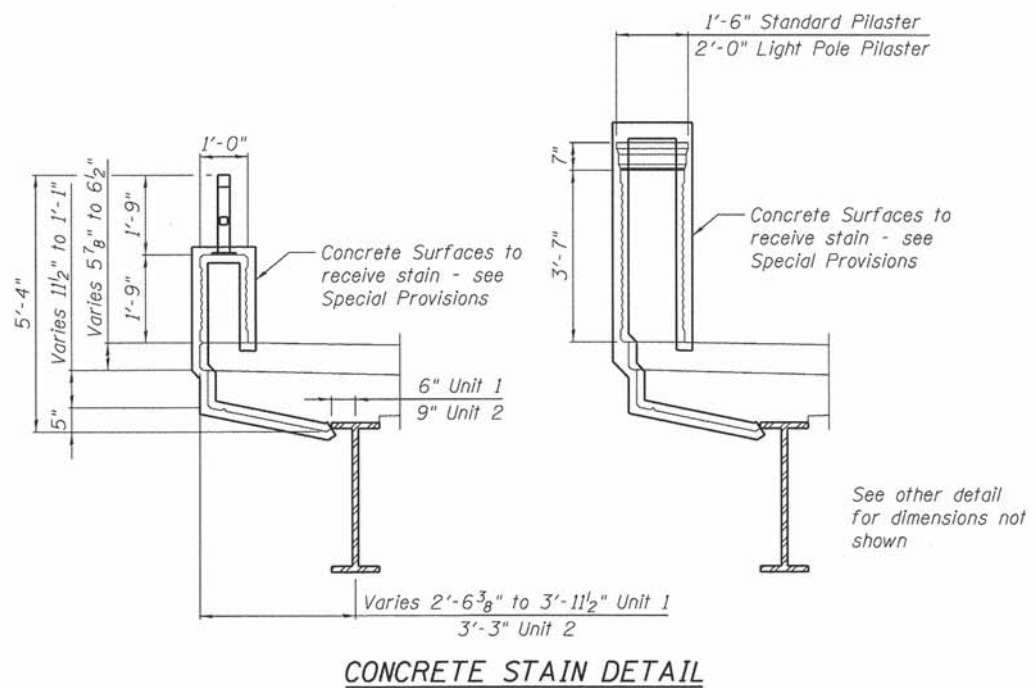
DESIGNED	- KMA	REVISIONS	
CHECKED	- RDG	REVISIONS	
DRAWN	- WJH	REVISIONS	
CHECKED	- 8/22/13	REVISIONS	

**STATE OF ILLINOIS
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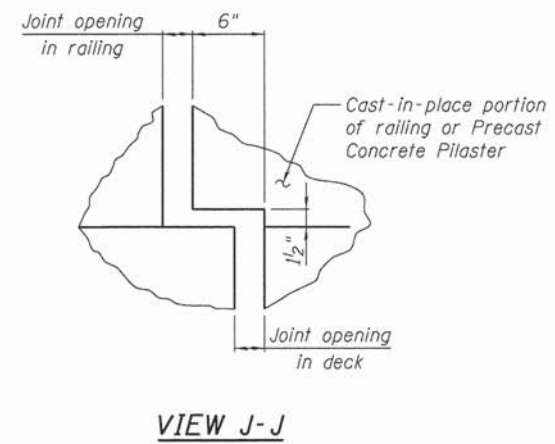
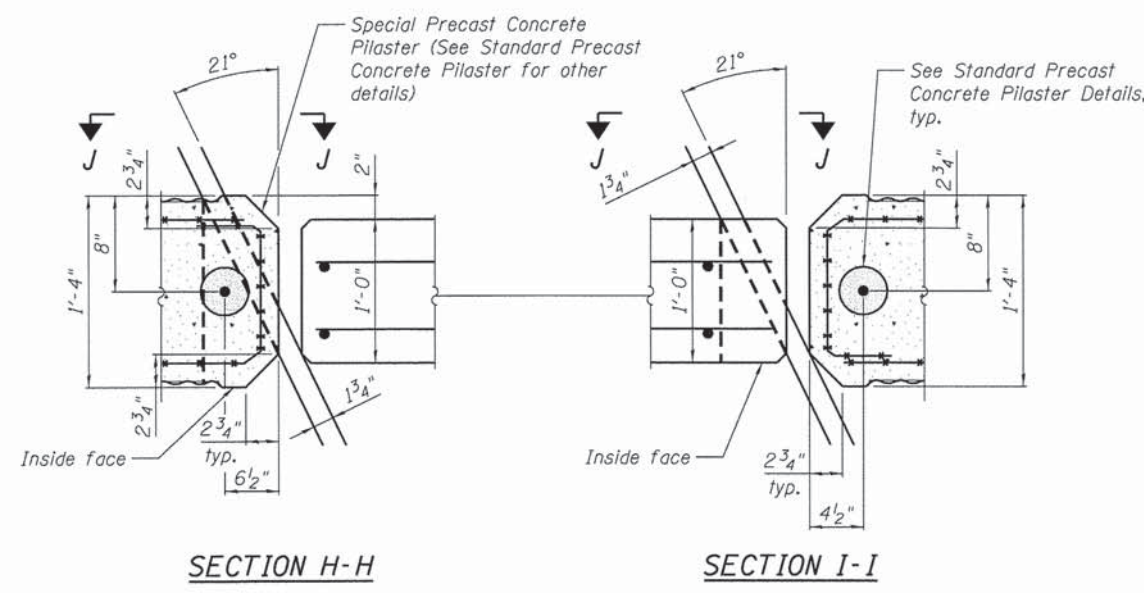
**BRIDGE RAILING DETAILS
STRUCTURE NO. 045-3089**

SHEET NO. SE-19 OF SE-43 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	122
CONTRACT NO. 63863				
ILLINOIS FED. AID PROJECT #FEDPROJ#				



PRECAST CONCRETE DECORATIVE CAP DETAILS



MIN. BAR LAP

#4 bar	= 2'-7"
#5 bar	= 3'-3"
#6 bar	= 3'-10"

COMPANY NAME: HRGreen.com
 PROJECT CONTACT: Kevin M. Arft
 DATE PLOTTED: 8/22/2013 2:46:54 PM
 FILE NAME: 8610218-SE-bridge Rolling Details.dgn
 PLOT DRIVER: pdf.plt
 PEN TABLE: standard-trans.tbl

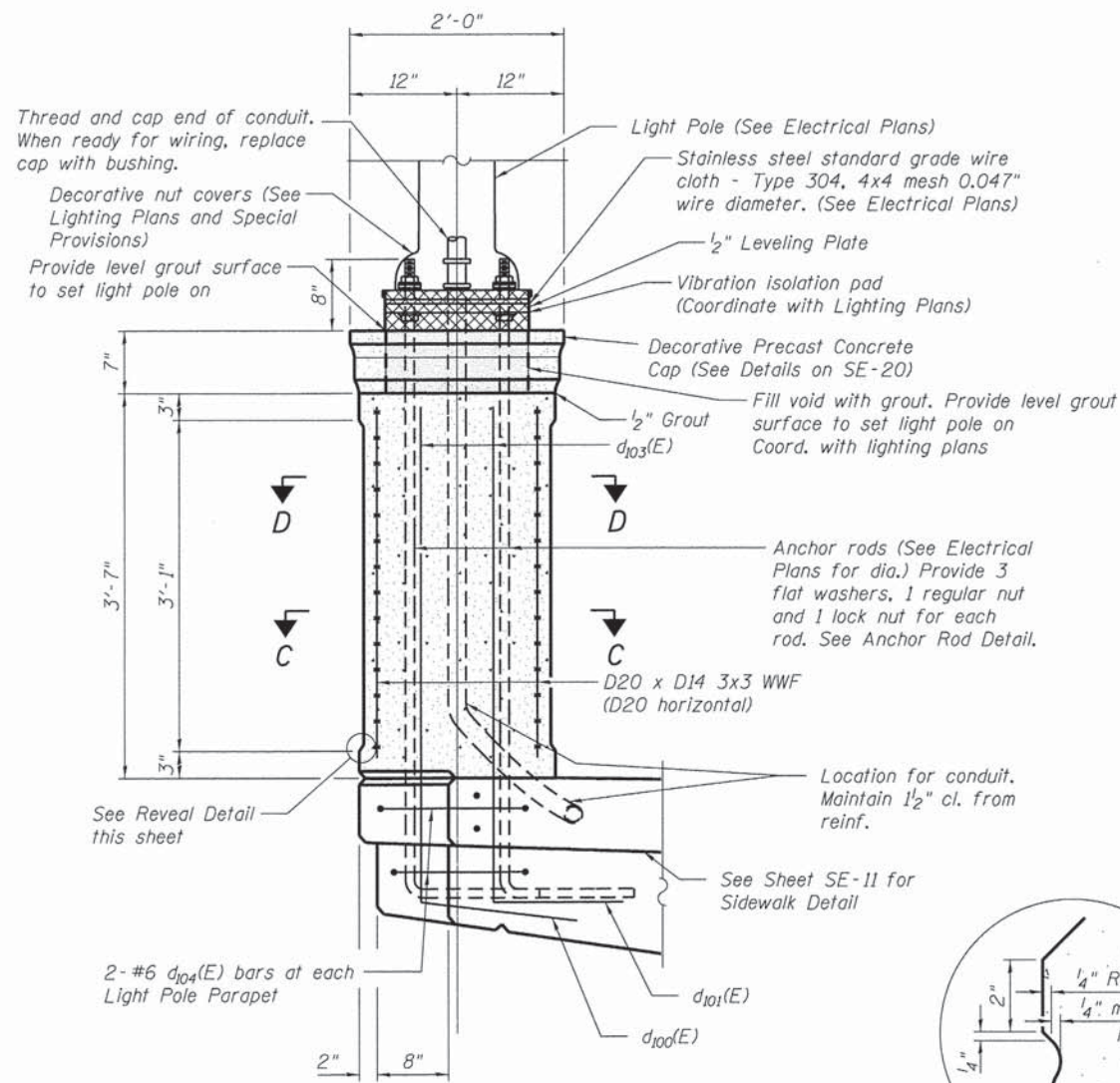
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USER NAME = whood	DESIGNED - KMA	REVISED -
PLOT SCALE =	CHECKED - RDG	REVISED -
PLOT DATE = 8/22/2013	DRAWN - WJH	REVISED -
	CHECKED - 8/22/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE RAILING DETAILS
STRUCTURE NO. 045-3089
 SHEET NO. SE-20 OF SE-43 SHEETS

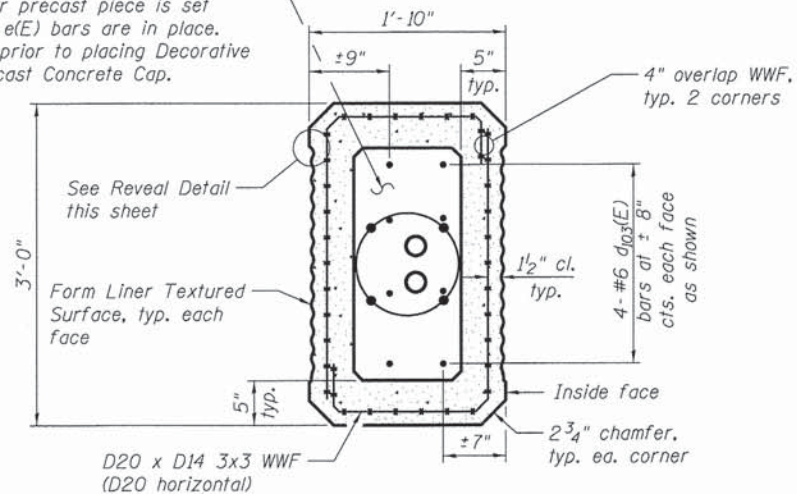
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	123
				CONTRACT NO. 63863
				ILLINOIS FED. AID PROJECT #FEDPROJNO#



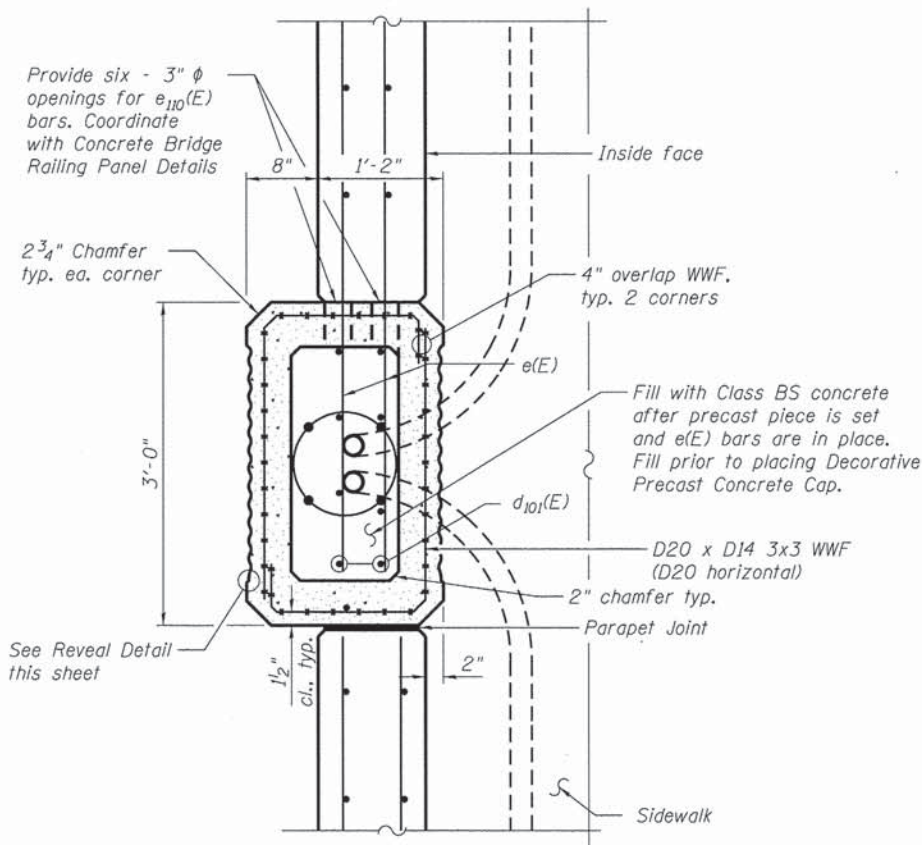
SECTION THRU LIGHT POLE PARAPET

Cost of Anchor Rods in bridge is included with Concrete Superstructure

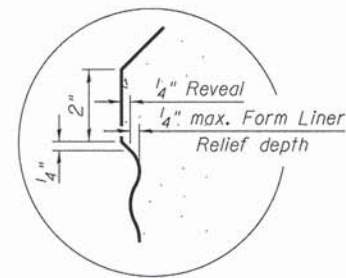
Fill with Class BS concrete after precast piece is set and e(E) bars are in place. Fill prior to placing Decorative Precast Concrete Cap.



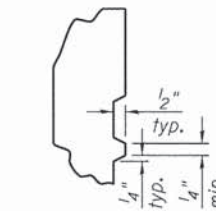
SECTION D-D



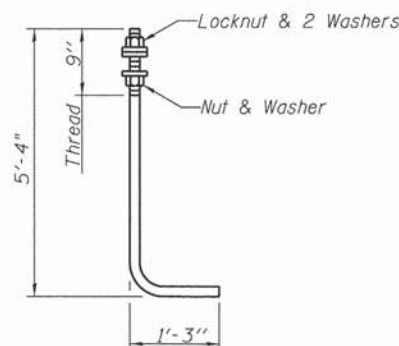
SECTION C-C
Could be opposite hand



REVEAL DETAIL

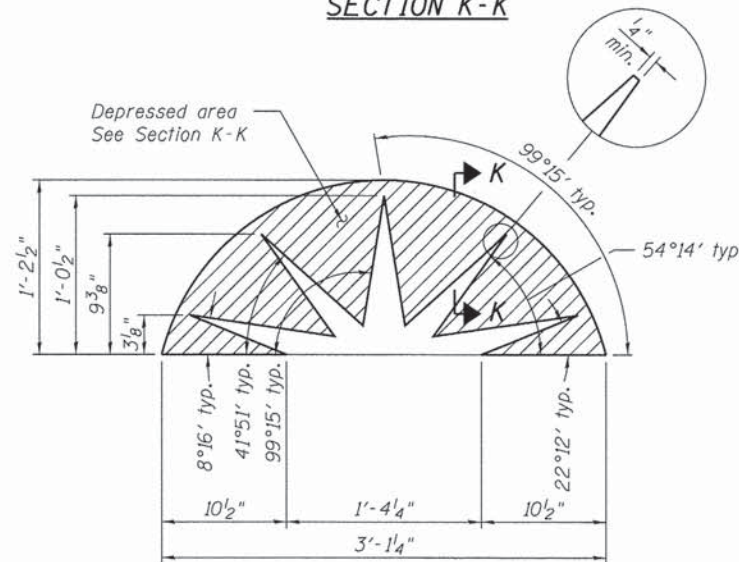


SECTION K-K

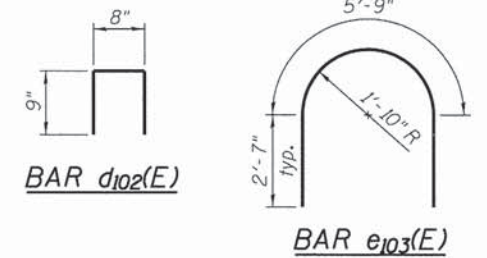


ANCHOR ROD

Diameter as specified for light poles. (ASTM F 1554 Grade 105) Full length hot dipped galvanized



SUNBURST DETAIL



CONCRETE BRIDGE RAILING REINFORCEMENT

Bar	No.	Size	Length	Shape
d102(E)	186	#4	2'-2"	□
e100(E)	48	#4	20'-8"	—
e101(E)	48	#4	15'-7"	—
e102(E)	24	#4	5'-4"	U
e103(E)	4	#4	10'-11"	—
e104(E)	6	#4	10'-3"	—
e105(E)	12	#4	17'-8"	—
e106(E)	24	#4	11'-6"	—
e107(E)	6	#4	11'-0"	—
e108(E)	6	#4	13'-8"	—
e109(E)	6	#4	11'-6"	—
e110(E)	12	#4	23'-2"	—
Reinforcement Bars, Epoxy Coated			Pound	1,970
Bar Splicers			Each	144

Quantities above provided for bidder's information only. Cost of reinforcement bars, epoxy coated and bar splicers are included in the price of Concrete Bridge Railing.

COMPANY NAME: Equip M. Arfa
PROJECT CONTACT: Equip M. Arfa
CLIENT: City of Aurora
DATE PLOTTED: 9/4/2013 10:06 AM
FILE NAME: 8610318-SE-9-Railing Details.dgn
PLOT DRIVER: pdf.plt
PEN TABLE: standard-trans.tbl



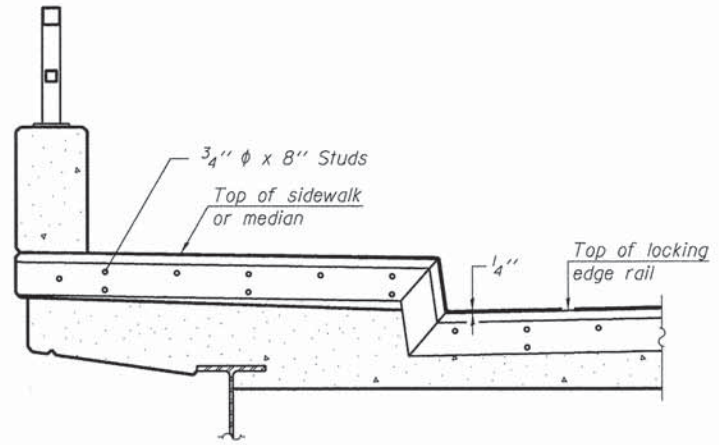
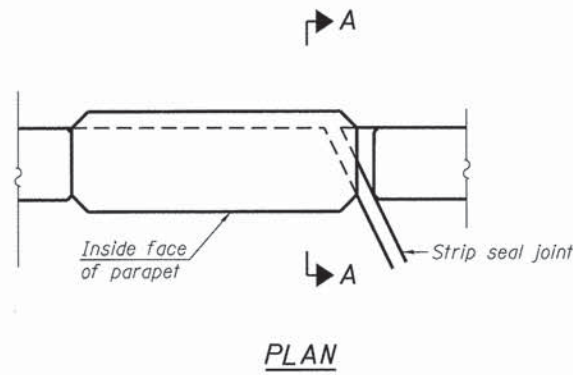
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PLOT SCALE =	CHECKED - RDG	REVISED -
PLOT DATE = 9/4/2013	DRAWN - WJH	REVISED -
	CHECKED - 9/4/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

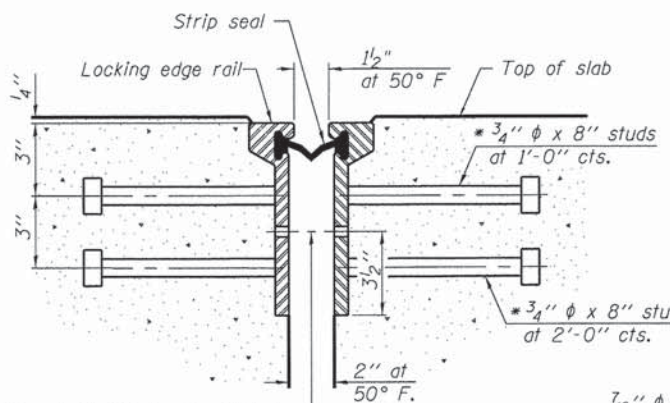
BRIDGE RAILING DETAILS
STRUCTURE NO. 045-3088

SHEET NO. SE-21 OF SE-43 SHEETS

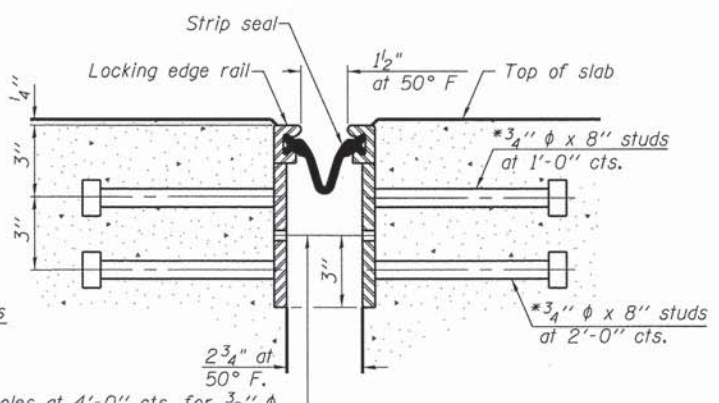
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	124
CONTRACT NO. 63863				
ILLINOIS FED. AID PROJECT #FEDPROJNO#				



Shorter plates with a single row of studs at 12" cts. may be necessary on medians which are shallower than 9". See manufacturer's recommendation.

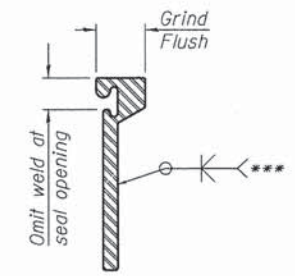
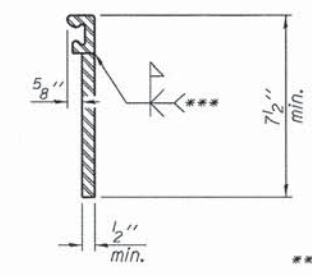
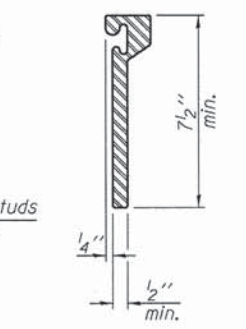


7/16" φ holes at 4'-0" cts. for 3/8" φ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.



7/16" φ holes at 4'-0" cts. for 3/8" φ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.



*** Back gouge not required if complete joint penetration is verified by mock-up.

The inside of the locking edge rail groove shall be free of weld residue. Rolled rail shown, welded rail similar.

Notes:
The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

The Locking Edge Rails depicted are conceptual only, except for the minimum dimensions shown. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities.

The manufacturer's recommended installation methods shall be followed.

The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the Contract.

All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

Maximum space between rail segments shall be 3/16", sealed with a suitable sealant. Joints in rails within 10 ft. of curbs shall be welded.

Parapet plates and anchorage studs for skews > 30° included in the cost of Preformed Joint Strip Seal.

LOCKING EDGE RAILS

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	153

COMPANY NAME: HRGreen
PROJECT CONTACTS: Kevin M. Artf...
DATE PLOTTED: 8/22/2013 7:45:40 PM
FILE NAME: 8610388-SE-Expansion Joint On rails.dgn
PLOT DRIVER: pdfLJET-T11.fax
PEN TABLE: standard-trans.tbl

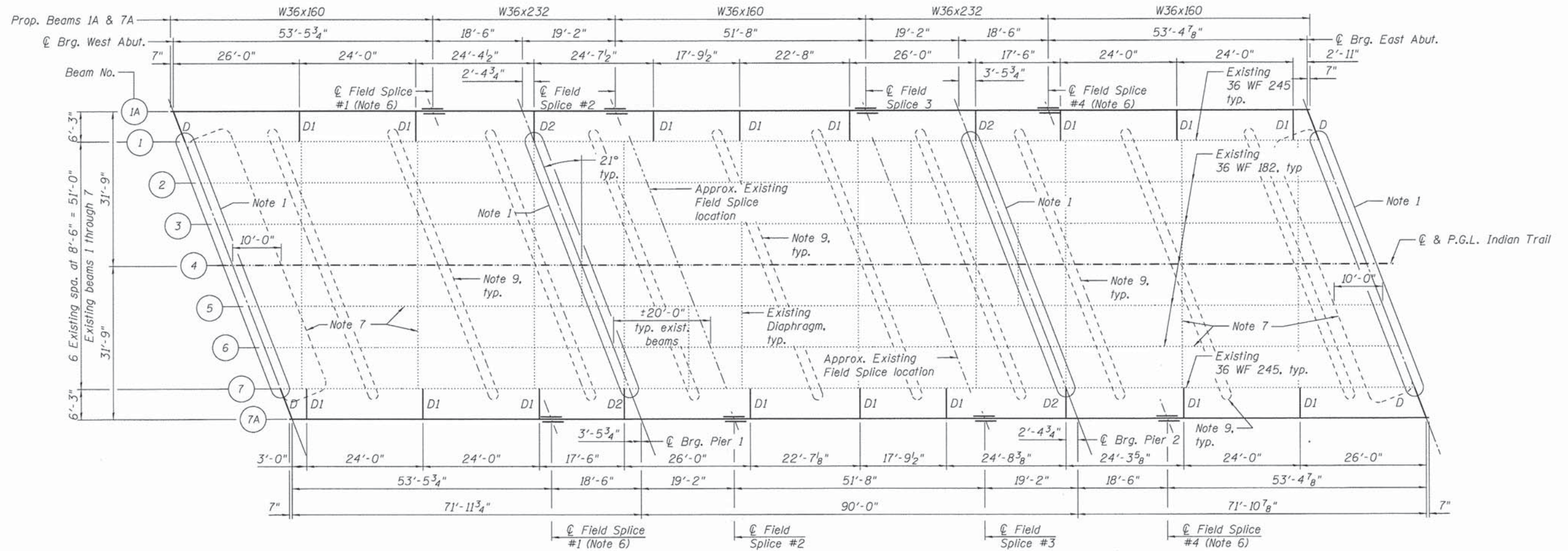
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USER NAME = whood	DESIGNED - KMA	REVISED -
	CHECKED - RGD	REVISED -
PLOT SCALE =	DRAWN - WJH	REVISED -
PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL
STRUCTURE NO. 045-3089
SHEET NO. SE-22 OF SE-43 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	125
CONTRACT NO. 63863				
[ILLINOIS] FED. AID PROJECT #FEDPROJ06				



FRAMING PLAN

All proposed beams are AASHTO M270 Grade 50 (NTR)

TOP OF BEAM ELEVATIONS (FOR FABRICATION USE ONLY)

Beam #	West Abut.	(Note 8) Field Splice #1	Pier 1	(Note 8) Field Splice #2	(Note 8) Field Splice #3	Pier 2	(Note 8) Field Splice #4	East Abut.
Beam 1A	652.53	652.46	652.42	652.38	652.98	653.34	653.68	654.62
Beam 7A	652.44	652.54	652.56	652.58	653.35	653.70	654.04	654.98

Notes:

- Jack and Remove Existing Bearings (See Special Provisions)
- All materials shall be AASHTO M270 Grade 50.
- "NTR" denotes members to which Notch Toughness Requirements are applicable.
- See Sheet SE-23 for beam elevation details.
- All diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual diaphragms at supports may be temporarily disconnected to install bearing anchor rods.
- Field Splices #1 and #4 may be substituted with a complete joint penetration weld shop splice. If a shop splice is used, the Contractor shall submit details of the shop splice to the Engineer for approval.
- The existing portions of the steel superstructure within 10 feet of each deck joint shall receive near white metal blast cleaning SSPC-SP10 and repainted with System 1 according to the IDOT Guide Bridge Special Provision for "Cleaning and Painting Existing Steel Structures."
The remainder of the existing steel superstructure shall receive Power Tool Cleaning Modified SSPC-SP3 and repainted with System 2 according to the IDOT Guide Bridge Special Provision for "Cleaning and Painting Existing Steel Structures." Color of the final finish coat for all existing structural steel to be painted shall be gray, Munsell No. 5B 7/1.
- Top of Beam provided at larger section
- Approximate existing cover plate termination locations - 140 total locations Unit 1 (70 Top and Bottom). See General Notes on SE-02.

COMPANY NAME: HRGreen.com
 PROJECT CONTACT: Kevin M. Jaffe
 DATE PLOTTED: 8/22/2013 14:45:09 PM
 FILE NAME: 8610318-SE-51a.dgn
 PLOT DRIVER: pdf.plt
 PEN TABLE: standard-trans.tbl

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PLOT DATE = 8/22/2013	DRAWN - WJH	REVISED -
	CHECKED - 8/22/13	REVISED -

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STEEL BEAM FRAMING PLAN
STRUCTURE NO. 045-3089

SHEET NO. SE-23 OF SE-43 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	126
ILLINOIS FED. AID PROJECT			CONTRACT NO. 63863	
			#FEDPROJNO#	

PROPOSED BEAMS 1A AND 7A MOMENT TABLE				
		0.4 SP. 1 or 0.6 Sp 3	Pier	0.5 SP. 2
I_s	(in ⁴)	9,750	15,000	9,750
$I_c(n)$	(in ⁴)	24,337	17,988	24,337
$I_c(3n)$	(in ⁴)	17,644	17,988	17,644
S_s	(in ³)	541.5	808.0	541.5
$S_c(n)$	(in ³)	777.2	879.4	777.2
$S_c(3n)$	(in ³)	698.0	879.4	698.0
Z	(in ³)	624.0	936.0	624.0
DL	(k/')	1.00	1.08	1.00
M_{DL}	('k)	344.1	775.5	295.1
S_{DL}	(k/')	0.58	0.58	0.58
$M_{s DL}$	('k)	205.7	387.8	199.5
M_{LL+PED}	('k)	673.6	535.3	720.5
M_{IM}	('k)	181.9	144.5	194.5
*** $5/4 [M_{LL+PED} + I]$	('k)	1,069.3	849.8	1,143.8
M_o	('k)	2,104.8	2,617.1	2,130.0
* M_u	('k)	3,744.3	4,406.3	3,744.3
f_s DL non-comp	(ksi)	7.63	11.52	6.54
f_s DL (comp)	(ksi)	3.54	5.29	3.43
*** f_s 5/4[M _{LL} +M _i]	(ksi)	16.51	11.60	17.66
f_s (Overload)	(ksi)	27.67	28.41	27.63
** f_s (Total)	(ksi)	35.97	36.90	35.92
VR	(k)	49.05	114.50	52.30

Note:
Information regarding existing beams 1 thru 7 can be found in the original design drawings prepared by Vogt, Ivers & Associates, dated December 1, 1961.

I_s, S_s : Non-composite moment of inertia and section modulus of the steel section used for computing f_s (Total and Overload) due to non-composite dead loads (in⁴ and in³).

$I_c(n), S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s (Total and Overload) due to short-term composite live loads (in⁴ and in³).

$I_c(3n), S_c(3n)$: Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing f_s (Total and Overload) due to long-term composite (superimposed) dead loads (in⁴ and in³).

Z: Plastic Section Modulus of the steel section in non-composite areas (in³).

q : Un-factored non-composite dead load (kips/ft.).

M_{DL} : Un-factored moment due to non-composite dead load (kip-ft.).

s_{DL} : Un-factored long-term composite (superimposed) dead load (kips/ft.).

M_{sDL} : Un-factored moment due to long-term composite (superimposed) dead load (kip-ft.).

M_L : Un-factored live load moment (kip-ft.).

M_I : Un-factored moment due to impact (kip-ft.).

M_o : Factored design moment (kip-ft.).
 $1.3 [M_{DL} + M_{sDL} + \frac{5}{4} (M_L + M_I)]$

M_u : Compact composite moment capacity according to AASHTO LFD 10.50.1.1 or compact non-composite moment capacity according to AASHTO LFD 10.4B.1 (kip-ft.).

f_s (Overload): Sum of stresses as computed from the moments below (ksi).
 $M_{DL} + M_{sDL} + \frac{5}{4} (M_L + M_I)$

f_s (Total): Sum of stresses as computed from the moments below on non-compact section (ksi).
 $1.3 [M_{DL} + M_{sDL} + \frac{5}{4} (M_L + M_I)]$

VR: Maximum $\frac{1}{4}$ + impact shear range within the composite portion of the span for stud shear connector design (kips).

PROPOSED BEAM 1A & 7A REACTION TABLE			
		Abut.	Pier
R_{θ}	(k)	42.5	150.4
R_L	(k)	57.0	46.3
R_I	(k)	13.0	12.5
R_{Total}	(k)	137.5	209.2

* Compact section
** Braced non-compact and partially braced section
*** 1.25 x 1.3 (Truck + Pedestrian) governs

COMPANY NAME: Kevin M. Arff
PROJECT CONTACT: Kevin M. Arff
CLIENT: City of Aurora
DATE PLOTTED: 8/22/2013 10:00 AM
FILE NAME: 09-00286-00-01.dgn
PLOT DRIVER: pdfWRITE-11f.pdf
PEN TABLE: standard-trans.tbl



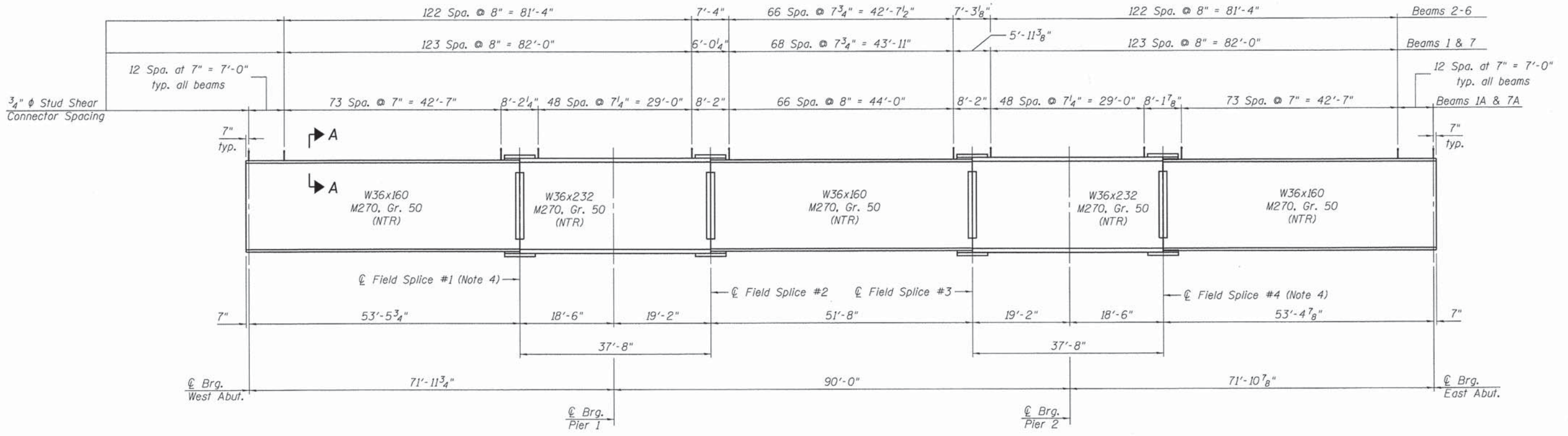
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	CHECKED - RGD	REVISED -
PLOT SCALE =	DRAWN - WJH	REVISED -
PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STEEL BEAM FRAMING PLAN
STRUCTURE NO. 045-3089

SHEET NO. SE-24 OF SE-43 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	127
CONTRACT NO. 63863				
ILLINOIS FED. AID PROJECT #FEDPROJNO#				

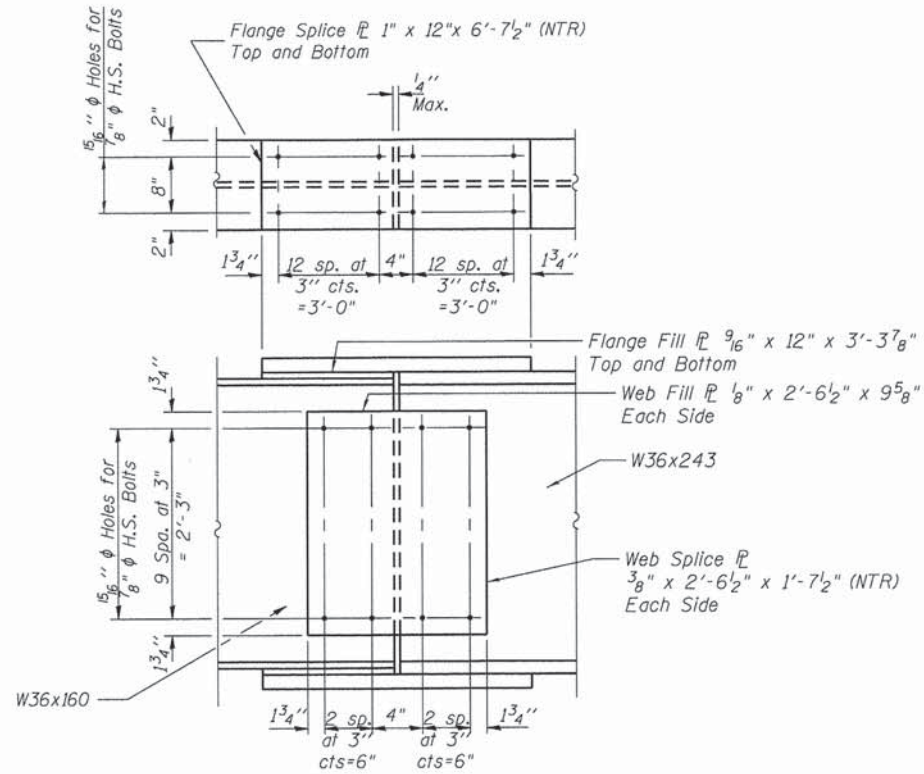


PROPOSED BEAM 1A AND 7A ELEVATION

"NTR" denotes beams to which Notch Toughness requirements are applicable Stud Shear Connector layout

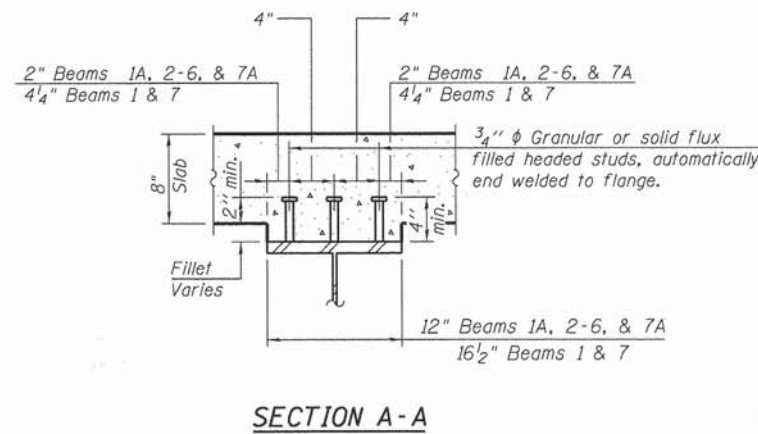
STUD SHEAR CONNECTOR LAYOUT

For proposed and existing beams



FIELD SPLICE DETAIL

Applies to Field Splices #1, #2, #3, and #4
All splice material shall be M270 Grade 50 (NTR)
(8 Required - See Note 4.)



SECTION A-A

BILL OF MATERIAL - UNIT 2

Item	Unit	Quantity
Furnishing & Erecting Structural Steel	L. Sum	0.3
Stud Shear Connectors	Each	9,123
Jack and Remove Exist. Bearings	Each	28

Notes:

1. Work this Sheet with Sheets SE-23, SE-24, and SE-26
2. All splice material shall be M270 Grade 50.
3. Load carrying components designatd "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.
4. Field Splices #1 and #4 may be substituted with a complete joint penetration weld shop splice. If a shop splice is used, the Contractor shall submit details of the shop splice to the Engineer for approval.

COMPANY NAME: Kevin M. Arff
PROJECT CONTACT: City of Aurora
CLIENT: 8200 Grandview Road
DATE PLOTTED: 8/22/2013 10:53 AM
PLOT BRWGR: 8/22/2013 10:53 AM
PEN TABLE: 8/22/2013 10:53 AM



HRGreen.com
Illinois Professional Design Firm
#184-001302
USER NAME = whood
DESIGNED - KMA
CHECKED - RGD
DRAWN - WJH
CHECKED - 8/22/13

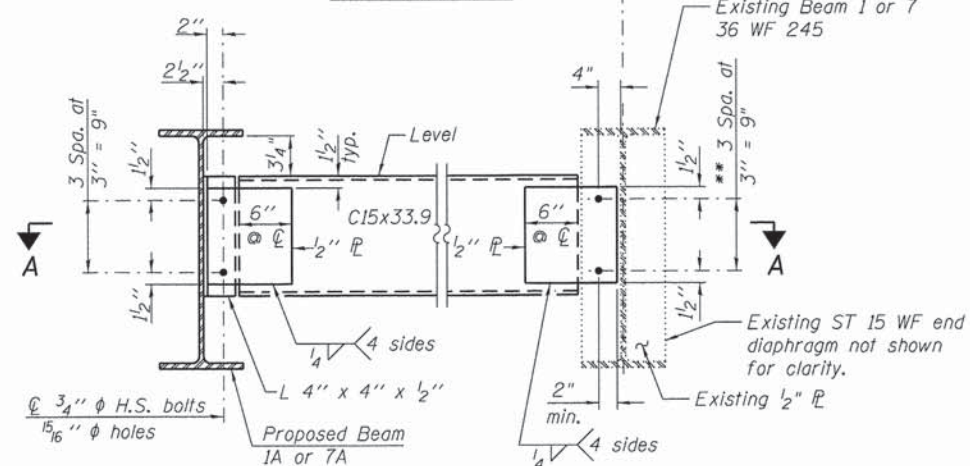
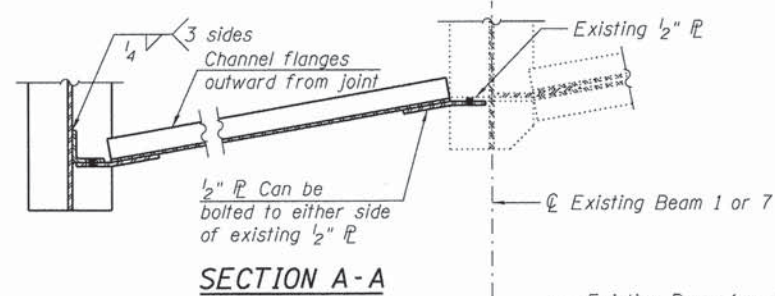
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

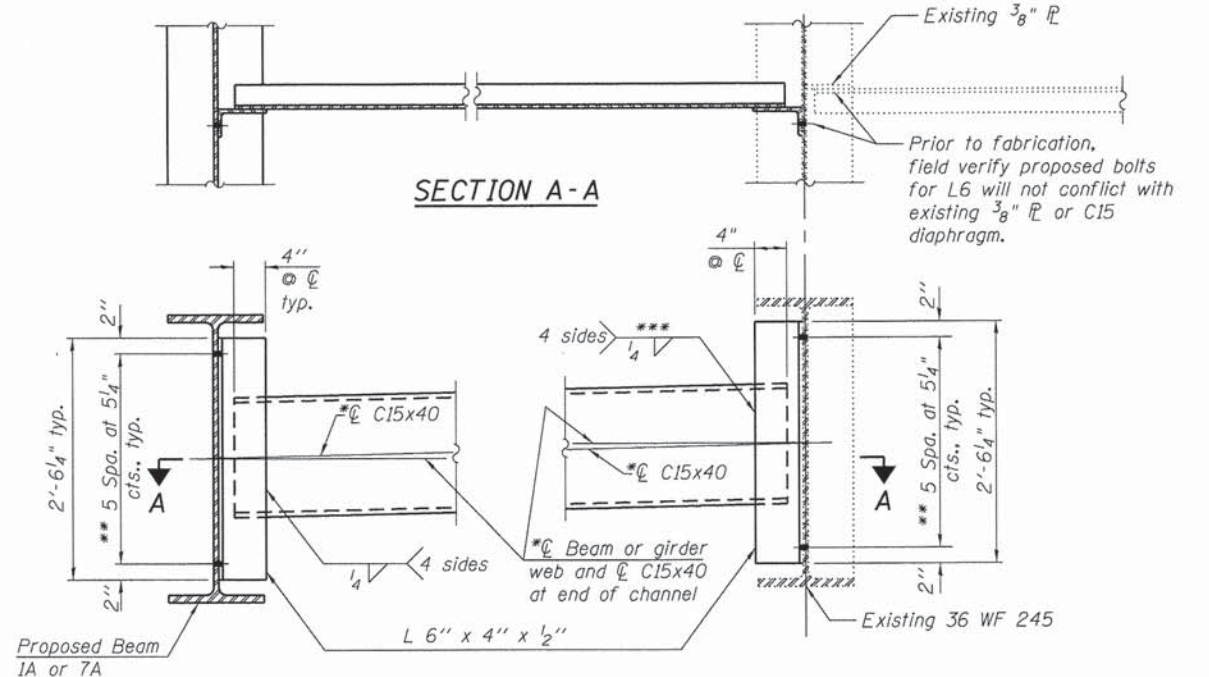
STEEL BEAM ELEVATION & DETAILS
STRUCTURE NO. 045-3089

SHEET NO. SE-25 OF SE-43 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 63863			ILLINOIS FED. AID PROJECT #FEDPROJ008	

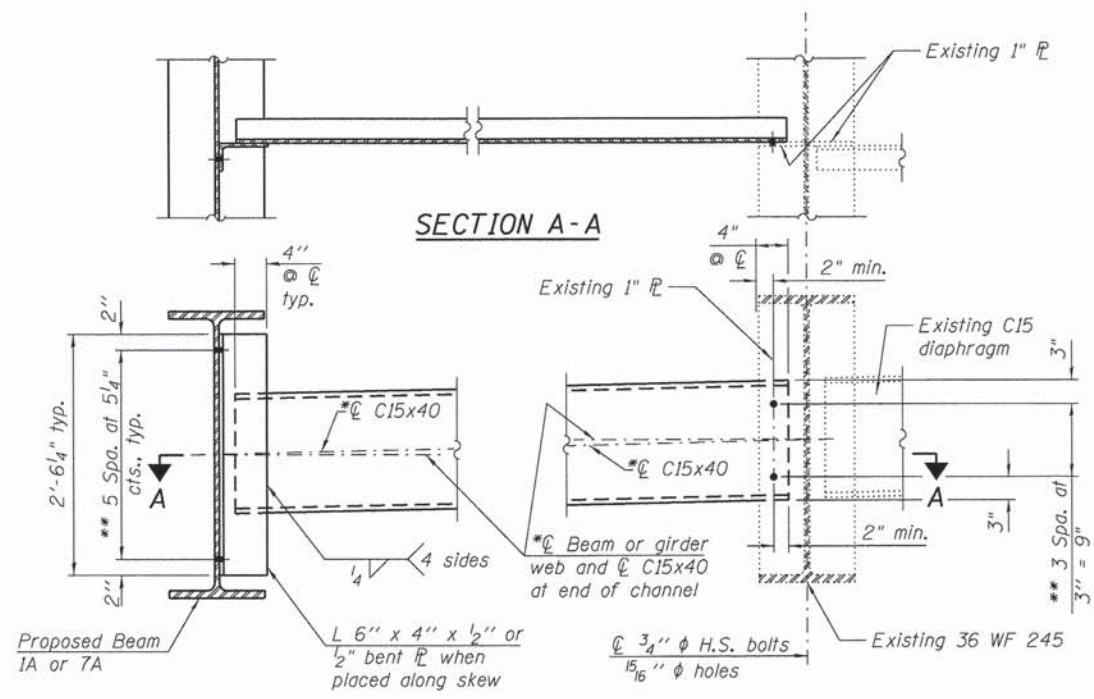


Notes:
Two hardened washers required for each set of oversized holes.
** 3/4" φ HS bolts, 15/16" φ holes
Field drill at existing 36 WF 245



INTERIOR DIAPHRAGM D1

Notes:
Two hardened washers required for each set of oversized holes.
* Alternate C15x50 channels are permitted to facilitate material acquisition. Calculated weight of structural steel is based on the lighter section. The alternate, if utilized, shall be provided at no additional cost to the Contract.
** 3/4" φ HS bolts, 15/16" φ holes
Field drill at existing 36 WF 245
*** The Contractor may field weld channel to L6 at no additional cost to the contract. If field welding, the fillet weld will only be required at the 3 accessible sides.



INTERIOR DIAPHRAGM D2

Notes:
Two hardened washers required for each set of oversized holes.
* Alternate C15x50 channels are permitted to facilitate material acquisition. Calculated weight of structural steel is based on the lighter section. The alternate, if utilized, shall be provided at no additional cost to the Contract.
** 3/4" φ HS bolts, 15/16" φ holes
Field drill at existing 36 WF 245

COMPANY NAME: Kevin M. Arft
PROJECT CONTACT: City of Aurora
CLIENT: 8/22/2013 14:51 PM
DATE PLOTTED: 8/22/2013 14:51 PM
FILE NAME: 86102018-SE-3-6003.dgn
PLOT NUMBER: 09-00286-00-BR
PLOT DATE: 8/22/2013

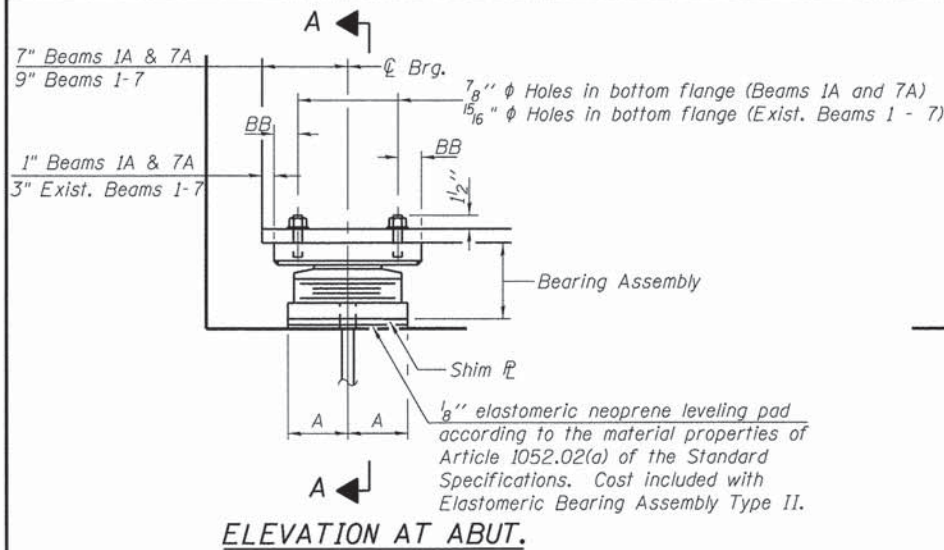


USER NAME = whood	DESIGNED - KMA	REVISED -
PLOT SCALE =	CHECKED - RGD	REVISED -
PLOT DATE = 8/22/2013	DRAWN - WJH	REVISED -
	CHECKED - 8/22/13	REVISED -

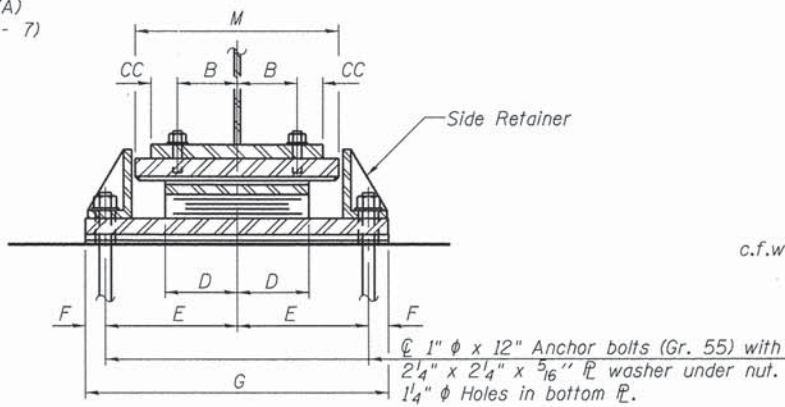
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STEEL DIAPHRAGM DETAILS
STRUCTURE NO. 045-3089
SHEET NO. SE-26 OF SE-43 SHEETS

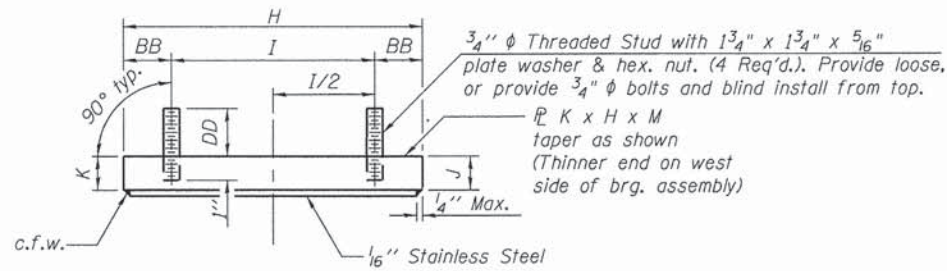
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	129
ILLINOIS FED. AID PROJECT			#FEDPROJNO#	



ELEVATION AT ABUT.

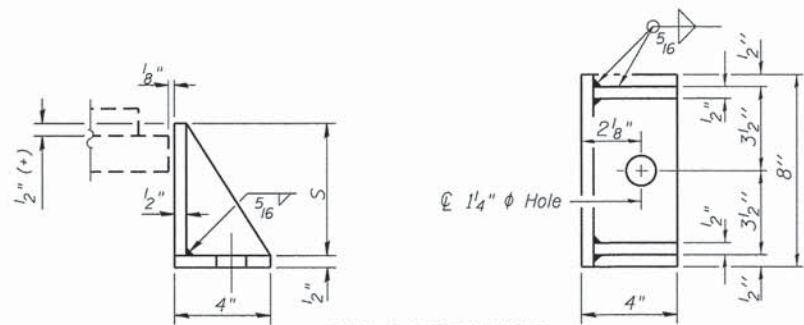


SECTION A-A



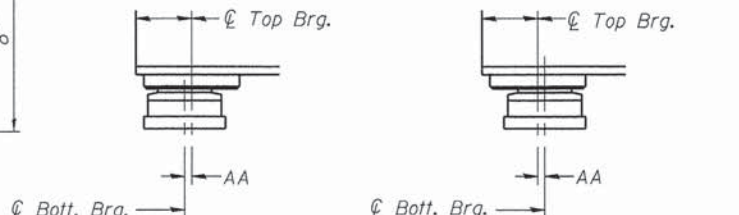
TOP BEARING ASSEMBLY

TYPE II ELASTOMERIC EXP. BRG.



SIDE RETAINER

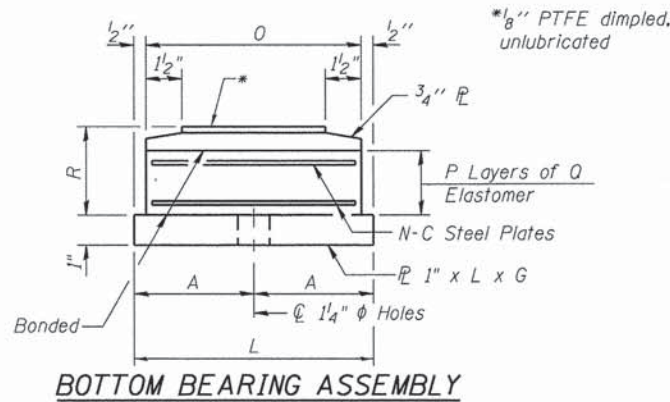
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



BELOW 50°F. (Move bott. brg. away from fixed brg.) ABOVE 50°F. (Move bott. brg. toward fixed brg.)

SETTING ANCHOR BOLTS AT EXP. BRG.

AA = 1/8\"/>



BOTTOM BEARING ASSEMBLY

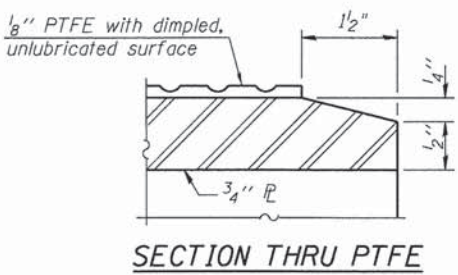
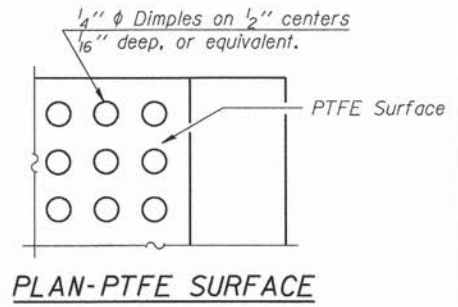
BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type II	Each	27
Anchor Bolts, 1"	Each	54

Notes:
 Two 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.
 Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
 Anchor bolts for Type II bearings shall be placed in holes drilled in the concrete through holes in the bottom bearing plate after members are in place. Side retainers shall be placed after bolts are installed.
 Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
 Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type II.
 The 1/8\"/>

ELASTOMERIC BEARING DIMENSIONS

Location	Size	Beam	Dimensions																				
			A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	BB	CC
Abutments	10" x 14"	Beams 1 & 7	5 1/2"	3 1/4"	1/8"	7"	10 1/2"	1 7/8"	2'-0 3/4"	1'-0"	4 1/2"	1 3/4"	2	11"	1'-4 1/2"	4	10"	5	7/16"	3 9/16"	5 3/8"	3 3/4"	5"
		Beams 1A & 7A	5 1/2"	4"	1/8"	7"	10 1/2"	1 7/8"	2'-0 3/4"	1'-0"	8"	1 3/4"	2	11"	1'-4 1/2"	4	10"	5	7/16"	3 9/16"	5 3/8"	2"	2"
		Beams 2-6	5 1/2"	3 1/4"	1/8"	7"	10 1/2"	1 7/8"	2'-0 3/4"	1'-0"	4 1/2"	1 3/4"	2	11"	1'-4 1/2"	4	10"	5	7/16"	3 9/16"	5 3/8"	3 3/4"	2 3/4"
Pier 1	15" x 24"	Beams 1 & 7	8"	3 1/4"	3/16"	1'-0"	1-3 1/4"	1 7/8"	2'-10 1/4"	1'-5"	4 1/2"	3	3	1'-4"	2'-2"	6	1'-3"	7	3/4"	7 1/4"	9 7/8"	6 1/4"	5"
		Beams 1A, 2-6 & 7A	8"	4"	3/16"	1'-0"	1-3 1/4"	1 7/8"	2'-10 1/4"	1'-5"	1'-1"	3	3	1'-4"	2'-2"	6	1'-3"	7	3/4"	7 1/4"	9 7/8"	2"	2"
		Beams 2-6	8"	3 1/4"	3/16"	1'-0"	1-3 1/4"	1 7/8"	2'-10 1/4"	1'-5"	4 1/2"	3	3	1'-4"	2'-2"	6	1'-3"	7	3/4"	7 1/4"	9 7/8"	6 1/4"	2 3/4"



COMPANY NAME: HRGreen.com
 PROJECT CONTACT: Kevin M. Arft
 CLIENT: City of Aurora
 DATE PLOTTED: 8/22/2013 14:02:41 PM
 FILE NAME: 8610318-SE-Bearing_Details01.dgn
 PLOT DRIVER: pdf_driver.tiff
 PEN TABLE: standard-trans.tbl



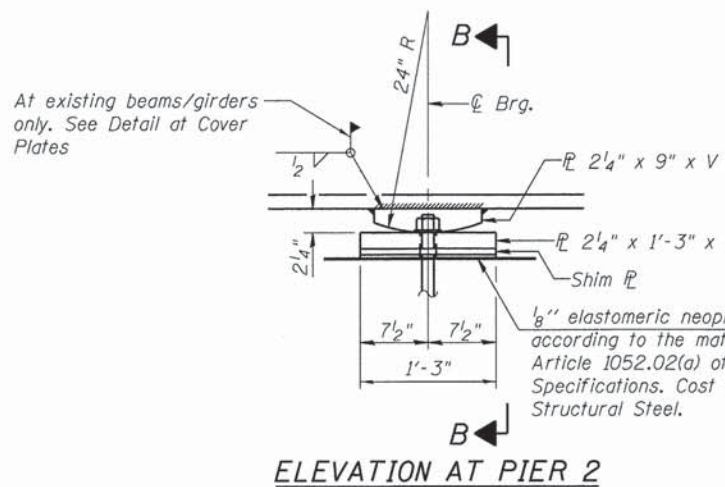
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PLOT DATE = 8/22/2013	DRAWN - WJH	REVISED -
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

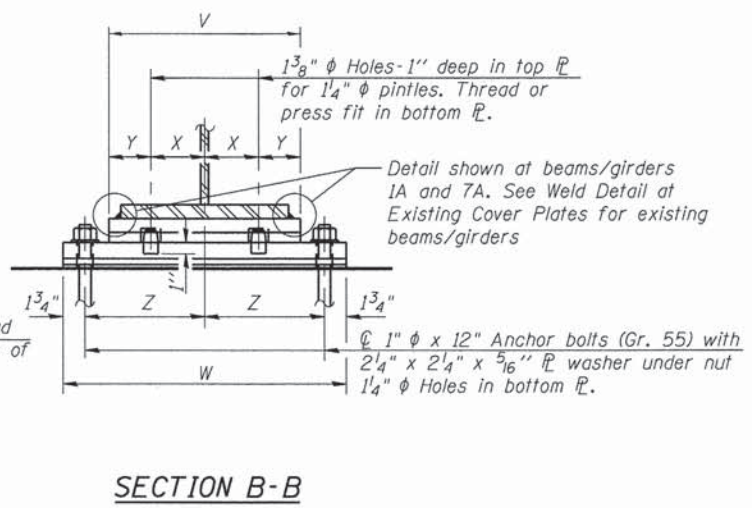
ELASTOMERIC BEARING DETAILS
 STRUCTURE NO. 045-3089
 SHEET NO. SE-27 OF SE-43 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	130

CONTRACT NO. 63863
 ILLINOIS FED. AID PROJECT #FEDPROJNO#

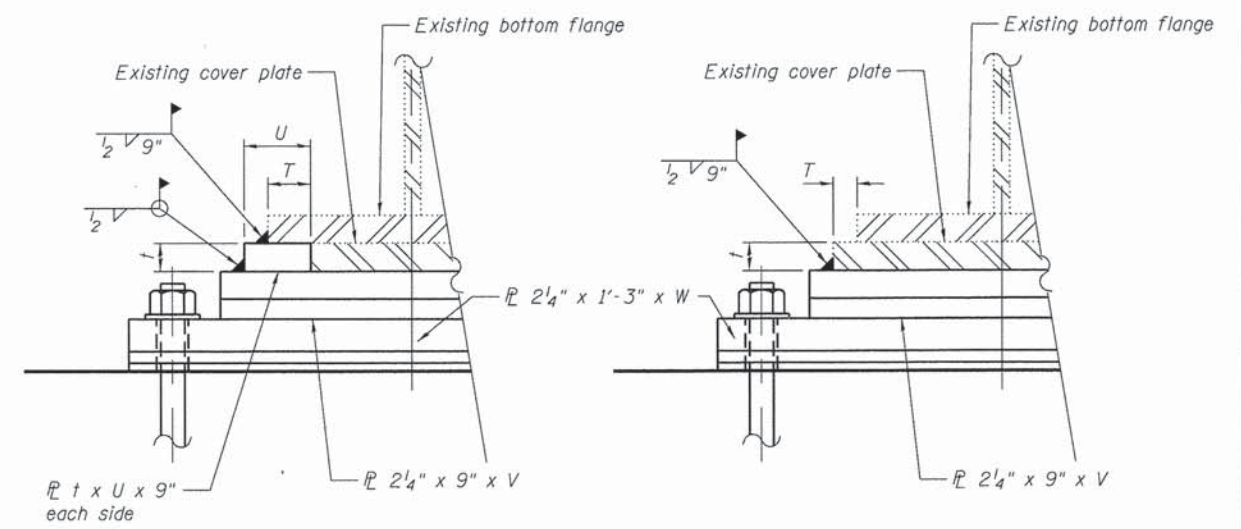


ELEVATION AT PIER 2



SECTION B-B

FIXED BEARING AT PIER 2



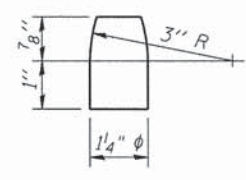
BEAMS 2-6

BEAMS 1 & 7

FIXED BEARING AT COVER PLATE DIMENSIONS

Location	Beam	Dimensions		
		*t	*T	U
Pier 2	Beams 1 & 7	1 3/8"	1/2"	-
	Beams 2-6	1 1/4"	1/2"	1 1/8"

* Verify in field prior to ordering material



PINTLE

FIXED BEARING DIMENSIONS

Beam	Dimensions				
	V	W	X	Y	Z
Beams 1 & 7	1'-7"	2'-2"	4 1/8"	5 3/8"	11 1/4"
Beams 1A, 2-6 & 7A	1'-2 1/2"	1'-9 1/2"	3"	4 1/4"	9"

BILL OF MATERIAL

Item	Unit	Total
Anchor Bolts, 1"	Each	18

Notes:
 Two 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.
 Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
 Anchor bolts at fixed bearings for Beams/Girders 1A & 7A may be either cast in place or installed in holes drilled after the supported member is in place.
 Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

COMPANY NAME: Kevin M. Krft
 PROJECT CONTACT: City of Aurora
 CLIENT: 8/22/2013 14:48:42 PM
 DATE PLOTTED: 8610316-SE-Bearing Details.dgn
 FILE NAME: pdf.DET-TIFF.plt
 PLOT DRIVER: standard-trans.tbl
 PEN TABLE:



USER NAME = whood	DESIGNED - KMA	REVISED -
PLOT SCALE =	CHECKED - RGD	REVISED -
PLOT DATE = 8/22/2013	DRAWN - WJH	REVISED -
	CHECKED - 8/22/13	REVISED -




STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

FIXED BEARING DETAILS
 STRUCTURE NO. 045-3089
 SHEET NO. SE-28 OF SE-43 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	131
CONTRACT NO. 63863				
ILLINOIS FED. AID PROJECT #FEDPROJNO#				

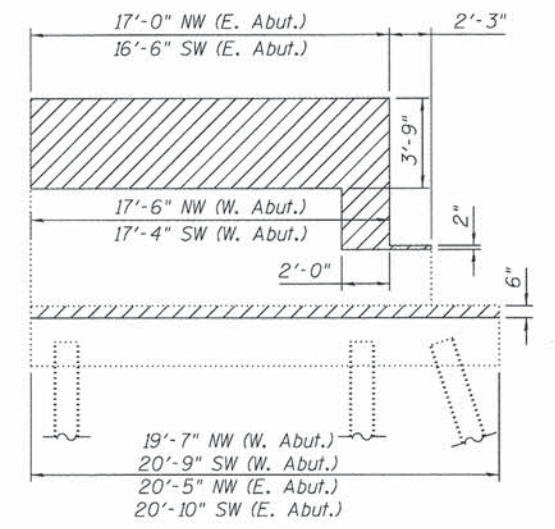
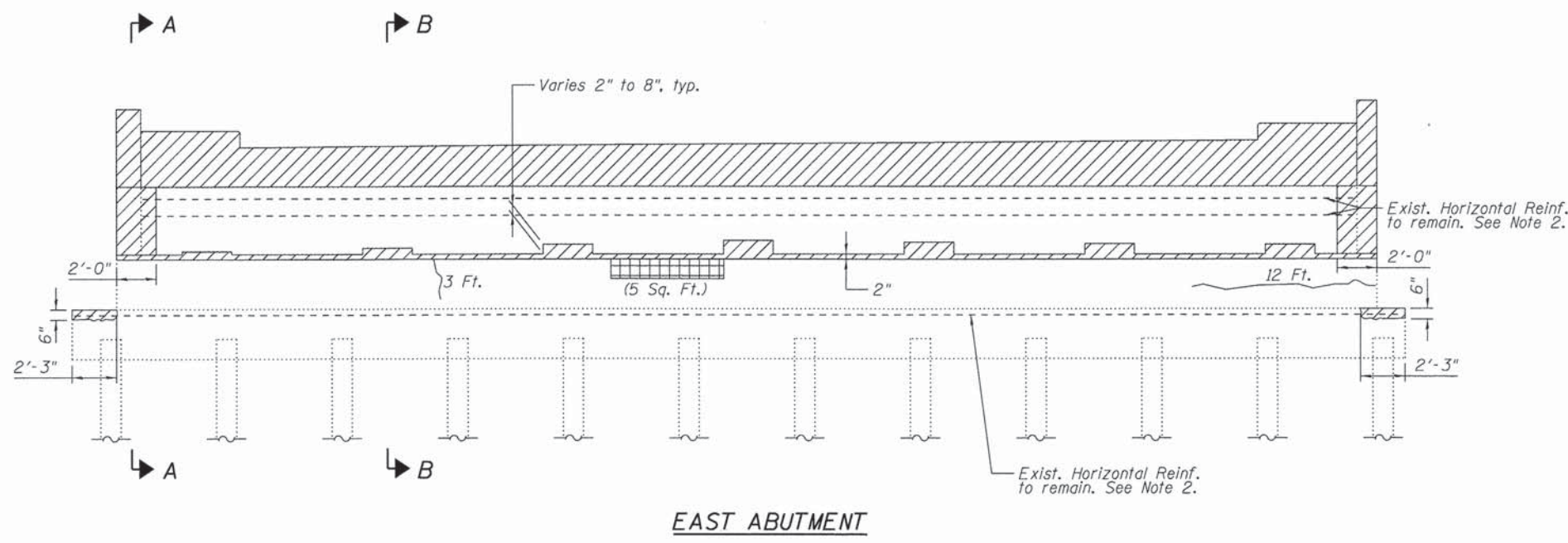
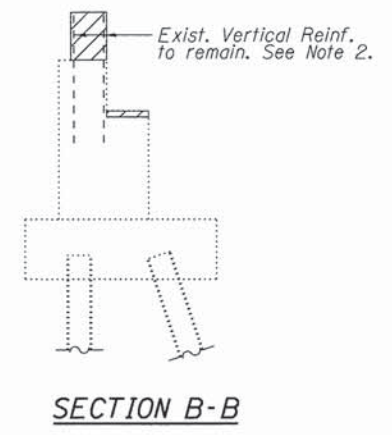
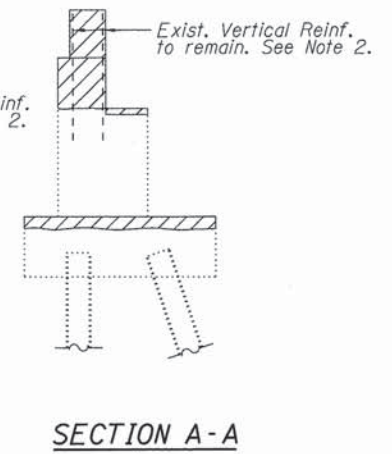
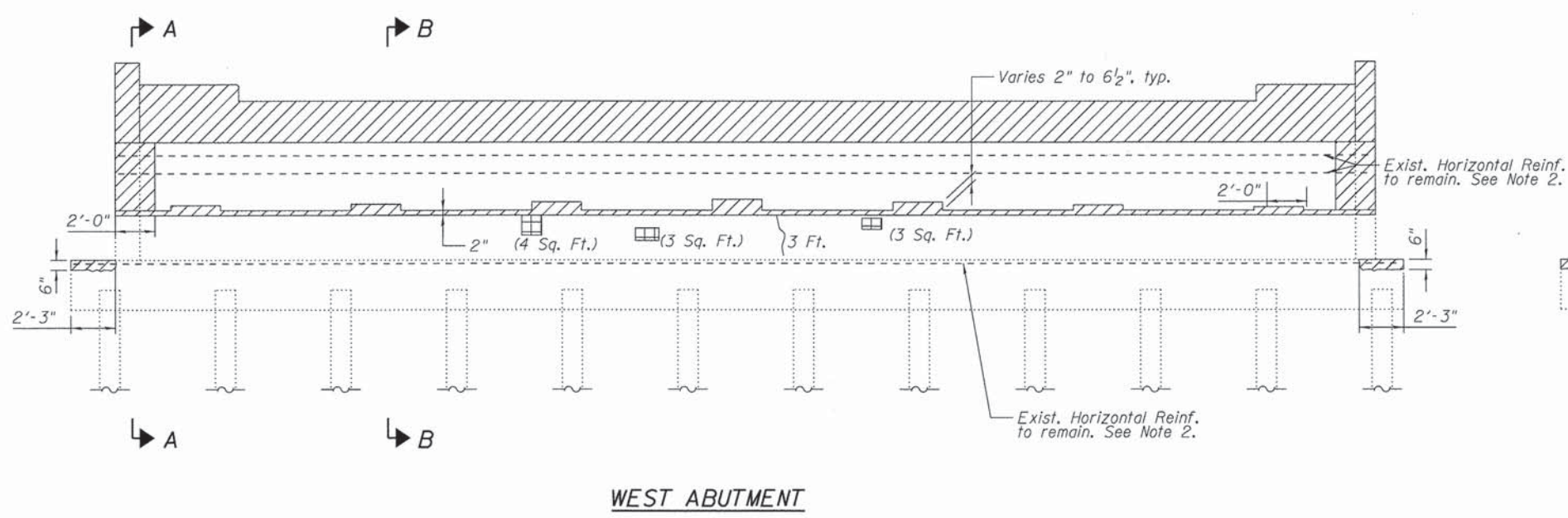
- Notes:
1. Removal of concrete deck, 6-4" AT&T ducts in south sidewalk, railings, and light poles shall be included in the unit price for "Removal of Existing Concrete Deck." Removal of HMA Wearing Surface paid for as "Hot-Mix Asphalt Surface Removal (Deck)." Removal of 4-5" COMED ducts in north sidewalk paid for as "Removal of Asbestos Cement Conduit." See Roadway Typical Sections.
 2. Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.
 3. The cost for all saw cuts shown shall be included in the cost of "Concrete Removal."
 4. See existing bridge plans in the Special Provisions for additional information.

LEGEND

-  Concrete Removal
-  Structural Repair of Concrete (Depth Equal to or Less than 5 in.)
-  Epoxy Crack Injection

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Concrete Removal	Cu. Yd.	38.5
Epoxy Crack Injection	Foot	18
Structural Repair of Concrete (Depth Equal to or Less than 5 in.)	Sq. Ft.	15



WING WALL ELEVATION

COMPANY NAME: HRGreen
 PROJECT CONTACT: Kevin M. Arfki
 DATE PLOTTED: 8/22/2013 14:50:00 PM
 FILE NAME: 8610318-SE-Remo.dgn
 PLOT DRIVER: pdf_driver
 PEN TABLE: standard-trans.tbl

HRGreen
 Illinois Professional Design Firm
 # 184-001322

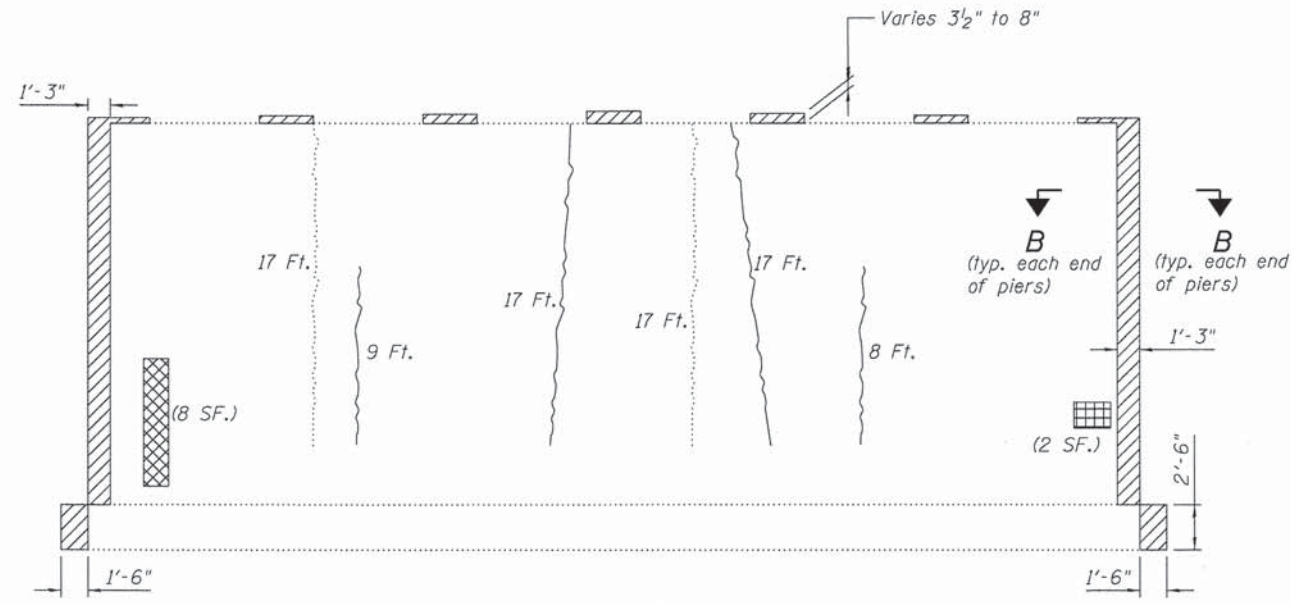
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PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

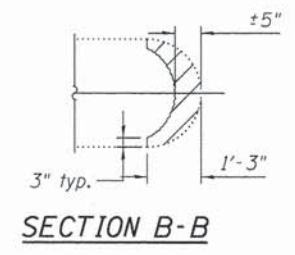
**REMOVAL DETAILS
 STRUCTURE NO. 045-3089**

SHEET NO. SE-29 OF SE-43 SHEETS

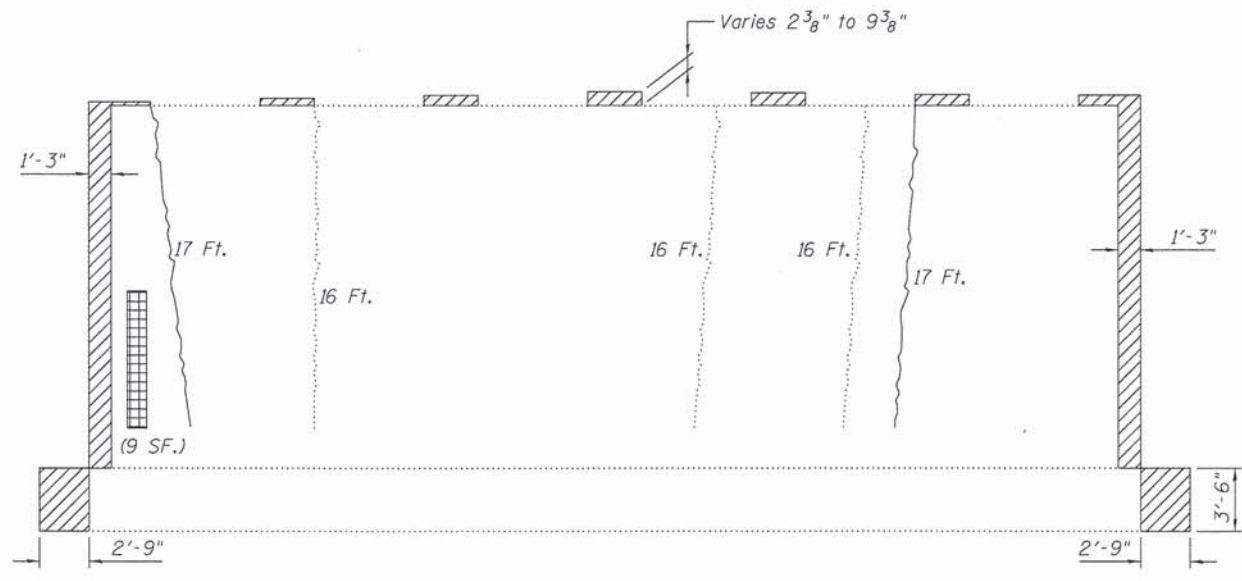
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	132
CONTRACT NO. 63863				
ILLINOIS FED. AID PROJECT #FEDPROJNO#				



PIER 1
West Face



SECTION B-B



PIER 2
West Face

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Concrete Removal	Cu. Yd.	17.5
Epoxy Crack Injection	Foot	167
Structural Repair of Concrete (Depth Equal to or Less than 5 in.)	Sq. Ft.	19

LEGEND

- Concrete Removal
- Structural Repair of Concrete
(Depth Equal to or Less than 5 in.)
- Structural Repair of Concrete
(Depth Equal to or Less than 5 in.)
East Face
- Epoxy Crack Injection
- Epoxy Crack Injection
East Face

- Notes:
- Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.
 - The cost for all saw cuts shown shall be included in the cost of "Concrete Removal."
 - See existing bridge plans in the Special Provisions for additional information.

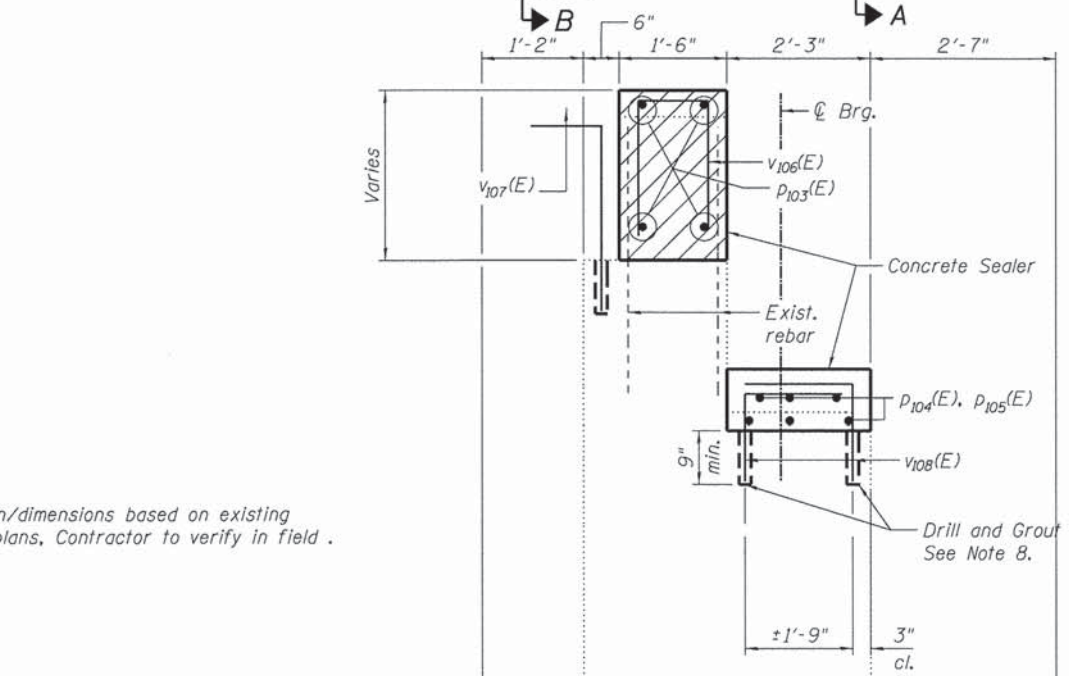
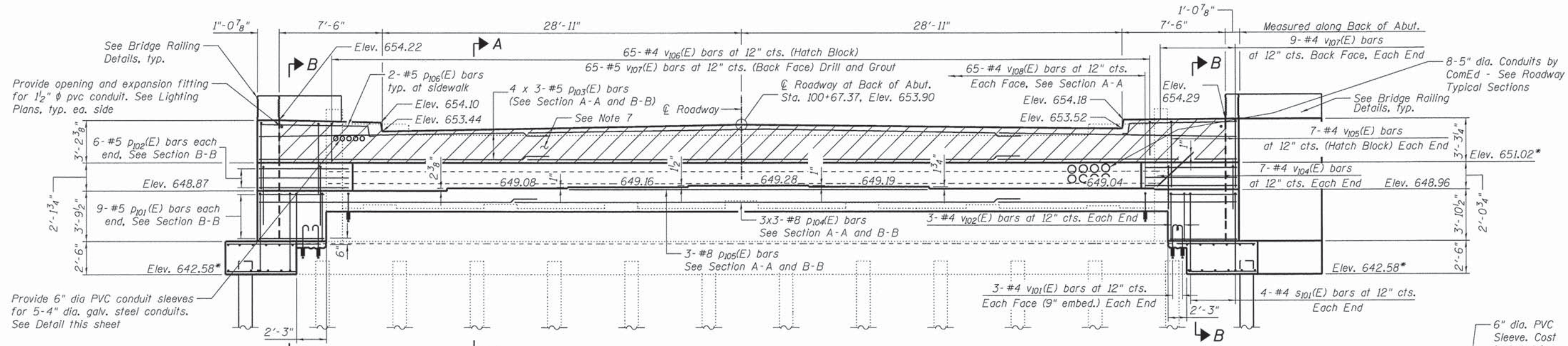
COMPANY NAME: HRGreen
 PROJECT CONTACT: Kevin M. Arfitt
 CLIENT: City of Aurora
 DATE PLOTTED: 8/22/2013 7:49:32 PM
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 PEN TABLE: standard-trans.tbl

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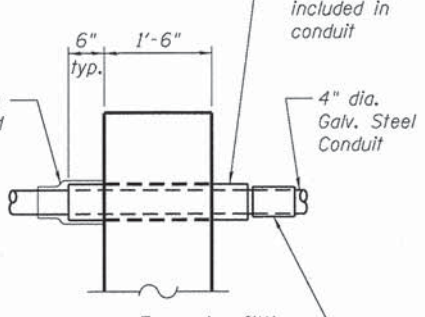
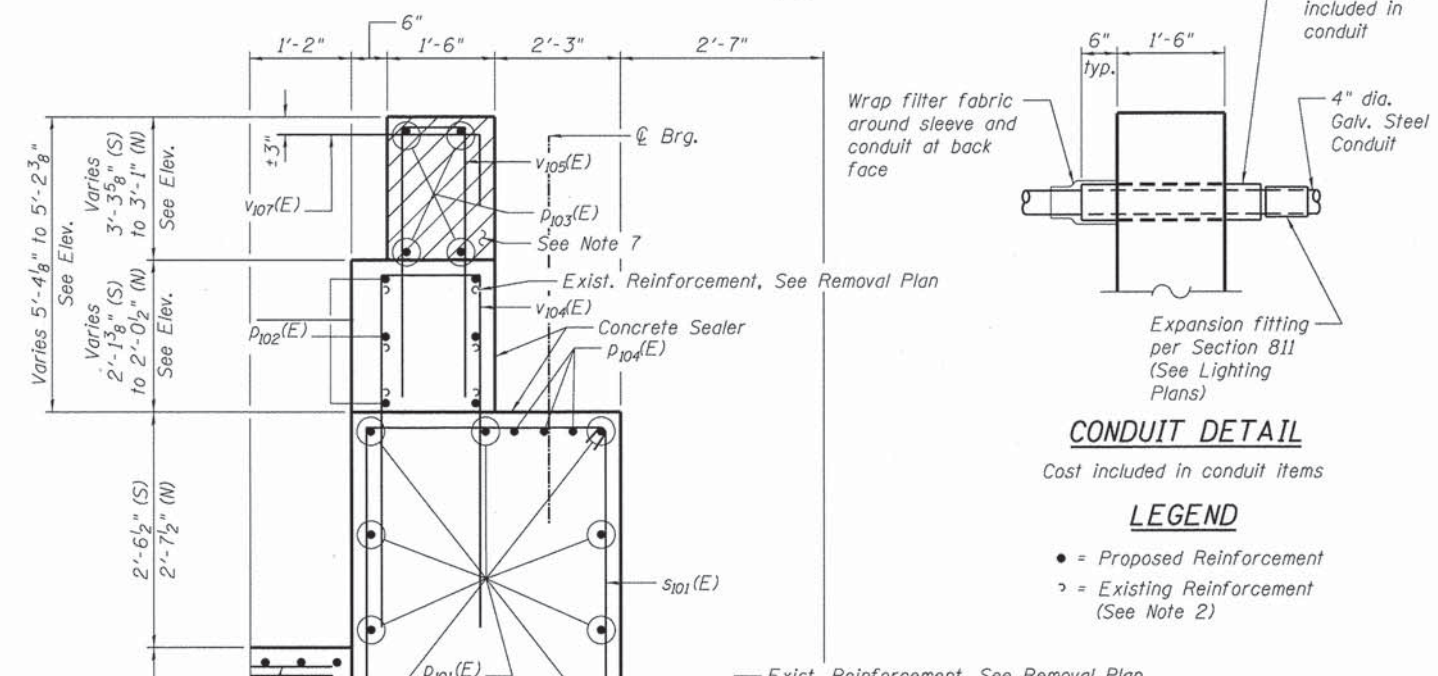
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REMOVAL DETAILS
STRUCTURE NO. 045-3089
 SHEET NO. SE-30 OF SE-43 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	133
CONTRACT NO. 63863				
ILLINOIS FED. AID PROJECT #FEDPROJNO#				



ELEVATION
(Looking West)



* Elevation/dimensions based on existing design plans, Contractor to verify in field.

- Notes:
1. Pour steps monolithically with cap.
 2. Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal. See Removal Plan.
 3. All concrete edges shall have standard 3/4" chamfer.
 4. Space reinforcement in cap to miss Anchor Bolts.
 5. Drilling and Epoxy Grouting of bars as shown in plans shall be included in the cost of Reinforcement Bars, Epoxy Coated.
 6. See Sheet SE-29 for Concrete Removal Details.
 7. Hatched area to be poured after Superstructure False work has been removed. Quantity of concrete included with Concrete Superstructure.
 8. Trim or drill and grout deeper to maintain clear cover.

COMPANY NAME: Kevin M. Arff
 PROJECT CONTACT: Kevin M. Arff
 DATE PLOTTED: 8/22/2013 7:49:54 PM
 FILE NAME: 8610318-SE-Abut-01.dwg
 PLOT DRIVER: pdfLDT-1111.dwt
 PEN TABLE: standard-trans.tbl

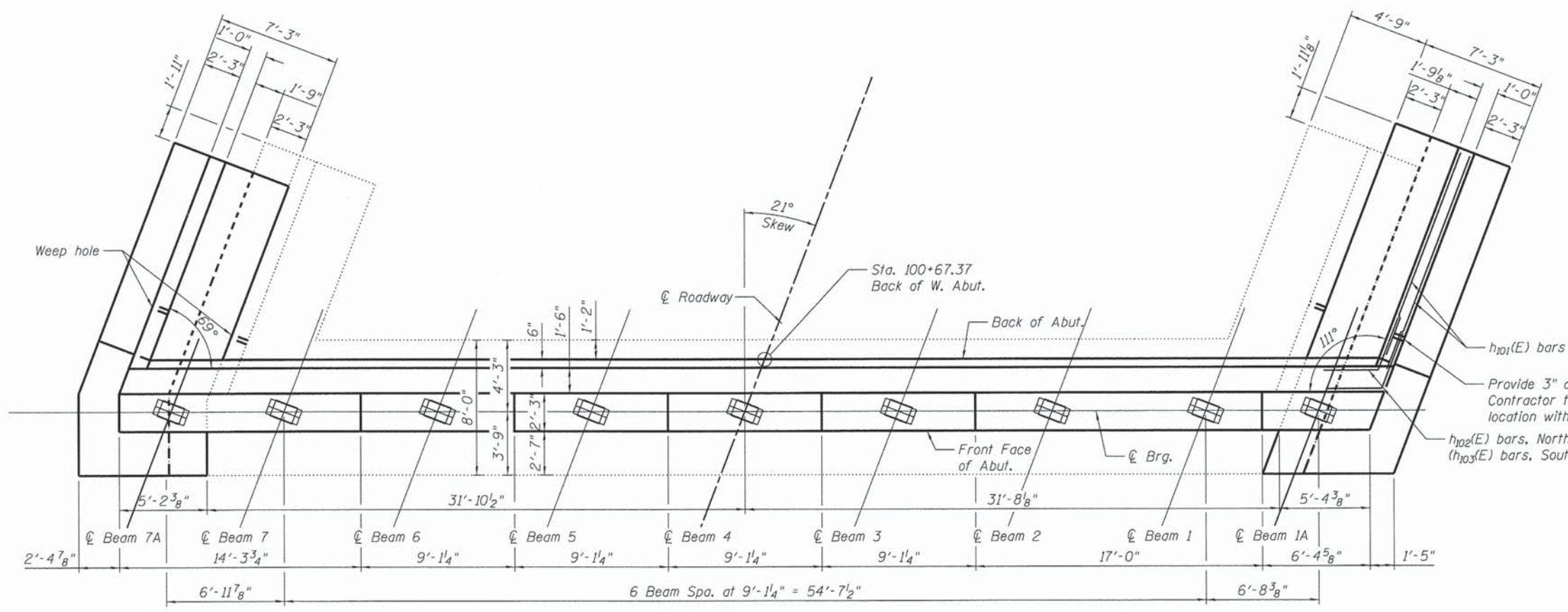


USER NAME = whood	DESIGNED - KMA	REVISED -
	CHECKED - RGD	REVISED -
PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

WEST ABUTMENT
 STRUCTURE NO. 045-3089
 SHEET NO. SE-31 OF SE-43 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	134
CONTRACT NO. 63863				
ILLINOIS FED. AID PROJECT #FEDPROJNO#				

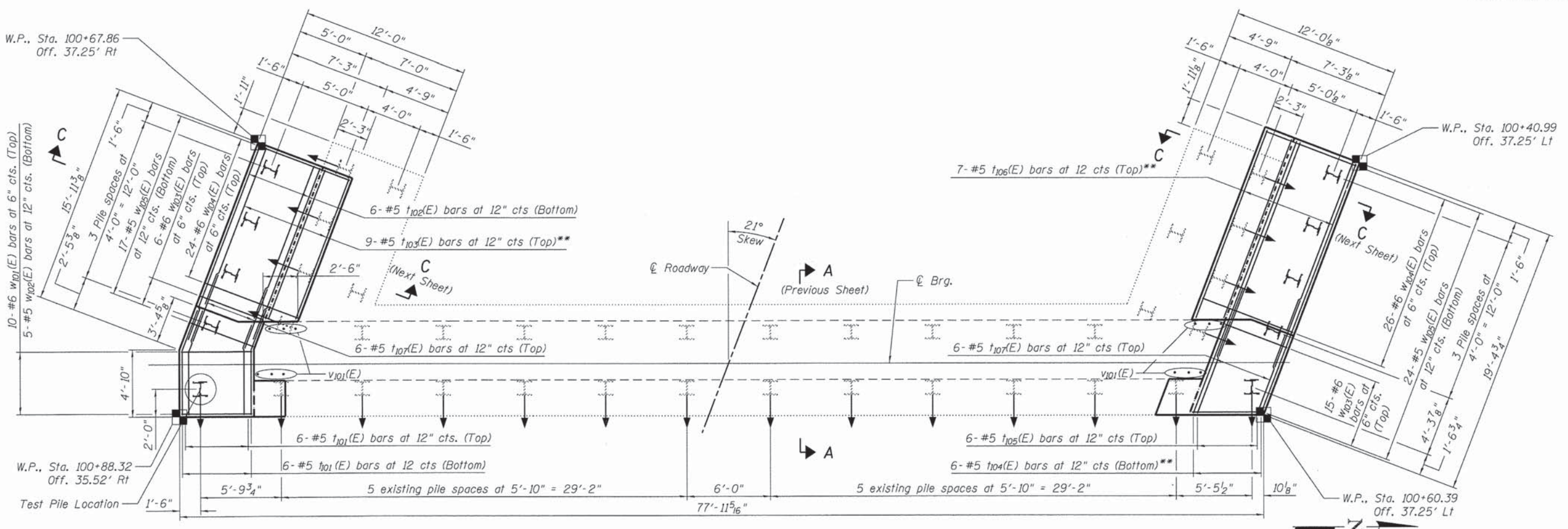


ANCHOR BOLT LOCATION

Verify with existing beams

** Trim to fit

- Notes:
 1. Dimensions of existing abutment elements are based on existing design plans and field survey. Contractor to verify in field.



PLAN-PILE CAP

COMPANY NAME: Kevin M. Arff
 PROJECT CONTACT: City of Aurora
 CLIENT: 6700 S. 130th St.
 FILE NAME: 09-00286-00-00.dgn
 PLOT DATE: 8/22/2013
 PLOT DRIVER: perfplot-trifont
 PEN TABLE: standard-traces.tbl

HRGreen
 HRGreen.com
 Illinois Professional Design Firm
 #184-001322

USER NAME = whood	DESIGNED - KMA	REVISED -
	CHECKED - RGD	REVISED -
PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

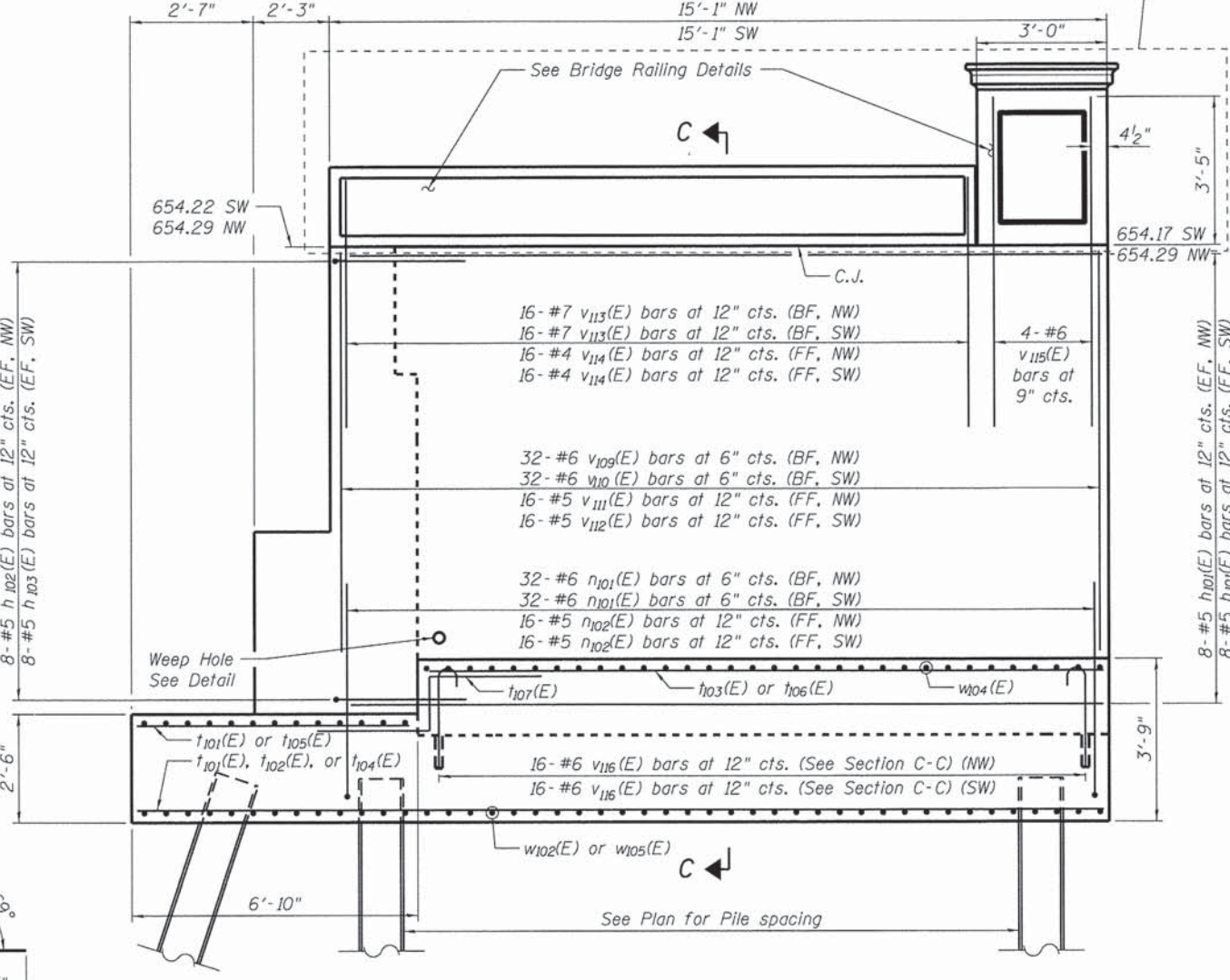
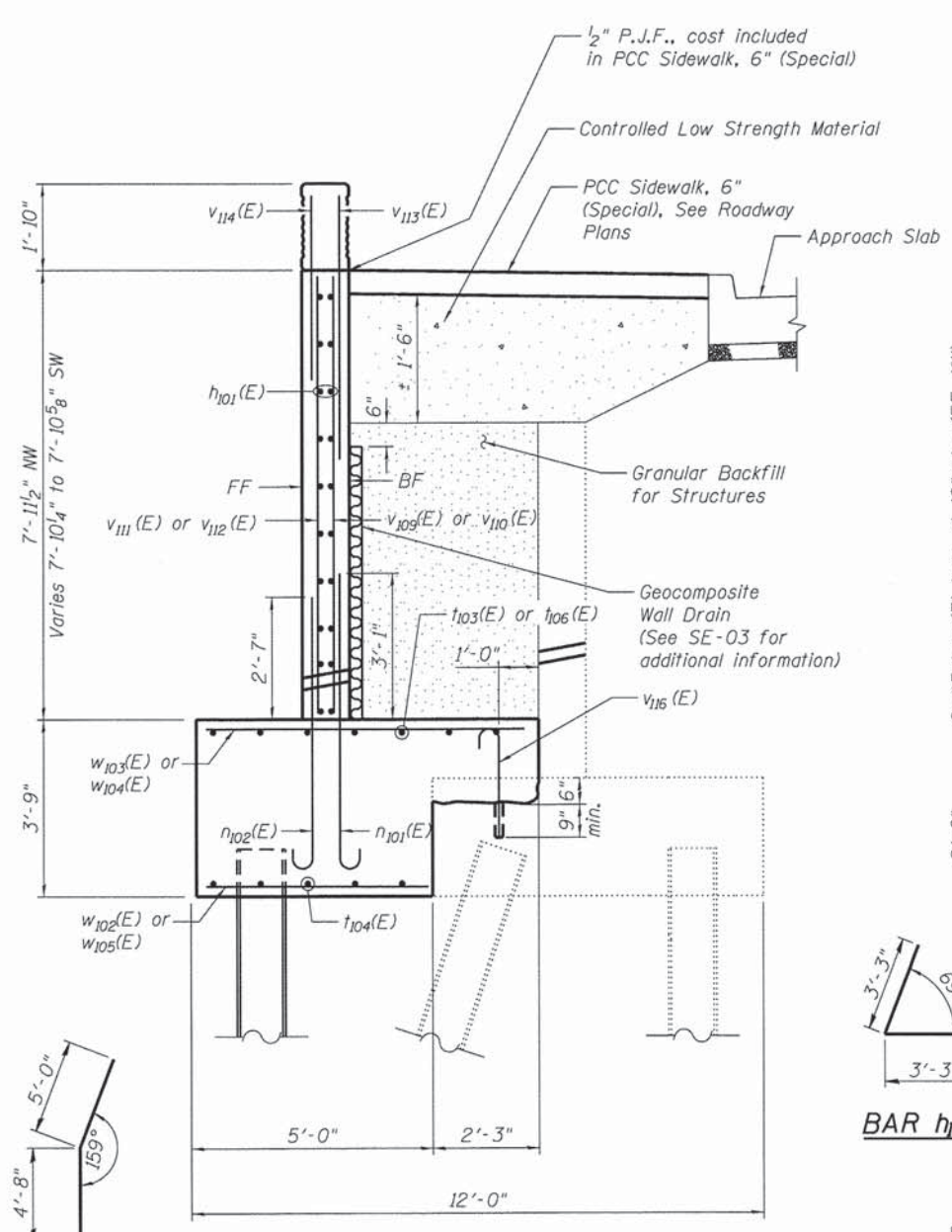
WEST ABUTMENT
STRUCTURE NO. 045-3089
 SHEET NO. SE-32 OF SE-43 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS NO.	SHEET NO.
1503	09-00286-00-BR	KANE	181	135
CONTRACT NO. 63863				
ILLINOIS FED. AID PROJECT #FEDPROJNO#				

**ABUTMENT
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h101(E)	32	#5	14'-9"	—
h102(E)	16	#5	6'-6"	J
h103(E)	16	#5	6'-6"	L
h101(E)	64	#6	7'-3"	—
h102(E)	32	#5	6'-8"	—
D101(E)	18	#5	4'-11"	—
D102(E)	12	#5	6'-11"	—
D103(E)	12	#5	26'-8"	—
D104(E)	9	#8	28'-5"	—
D105(E)	3	#8	26'-11"	—
D106(E)	4	#5	9'-7"	—
S101(E)	8	#4	20'-5"	□
t101(E)	12	#5	9'-8"	—
t102(E)	6	#5	13'-10"	—
t103(E)	9	#5	12'-3"	—
t104(E)	6	#5	20'-11"	—
t105(E)	6	#5	7'-2"	—
t106(E)	9	#5	14'-6"	—
t107(E)	12	#5	6'-5"	—
v101(E)	12	#4	7'-10"	—
v102(E)	6	#4	10'-11"	—
v104(E)	14	#4	10'-4"	—
v105(E)	14	#4	10'-8"	—
v106(E)	65	#4	5'-2"	—
v107(E)	83	#5	4'-9"	—
v108(E)	130	#4	3'-7"	—
v109(E)	32	#6	7'-8"	—
v110(E)	32	#6	7'-7"	—
v111(E)	16	#5	7'-8"	—
v112(E)	16	#5	7'-7"	—
v113(E)	32	#7	5'-11"	—
v114(E)	32	#4	3'-10"	—
v115(E)	8	#6	7'-7"	—
v116(E)	32	#6	3'-0"	—
W101(E)	10	#6	5'-0"	—
W102(E)	5	#5	5'-0"	—
W103(E)	21	#6	4'-8"	—
W104(E)	50	#6	6'-11"	—
W105(E)	41	#5	4'-8"	—
Structure Excavation		Cu. Yd.	59	
Concrete Structures		Cu. Yd.	55.4	
Concrete Superstructure		Cu. Yd.	11.6	
Reinforcement Bars, Epoxy Coated		Pound	7,810	
Furnishing Steel Piles HP12x63		Foot	180	
Test Pile Steel HP12x63		Each	1	
Driving Piles		Foot	180	
Pile Shoes		Each	10	
Concrete Sealer		Sq. Ft.	518	

Paid for as "Concrete Bridge Railing (Special)"

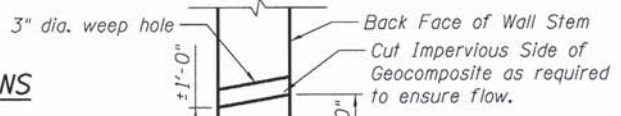


BAR t101(E)

SECTION C-C

ABBREVIATIONS

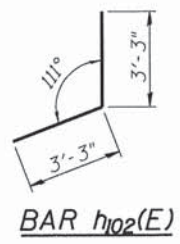
- FF = Front Face
- BF = Back Face
- EF = Each Face
- NW = North Wall
- SW = South Wall



WEEP HOLE DRAIN DETAIL

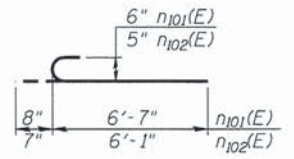
MIN BAR LAP

- #4 2'-1"
- #5 2'-7"
- #6 3'-1"
- #7 4'-2"
- #8 5'-5"



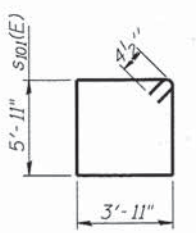
BAR h102(E)

BAR h103(E)



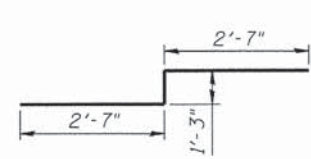
BARS n101(E) & n102(E)

BAR p106(E)

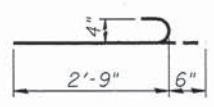


BARS s101(E)

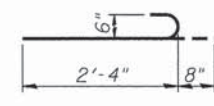
BAR t107(E)



BAR v101(E)

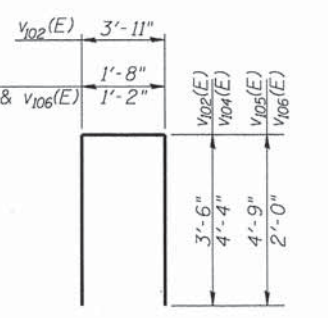


BAR v116(E)



PILE DATA

Type: HP12x63
 Nominal Required Bearing: 497 Kips
 Factored Resistance Available: 273 Kips
 Est. Length: 20'-0"
 No. Production Piles: 9
 No. Test Piles: 1



BARS v102(E), v104(E), v105(E), & v106(E)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WEST ABUTMENT DETAILS
STRUCTURE NO. 045-3089

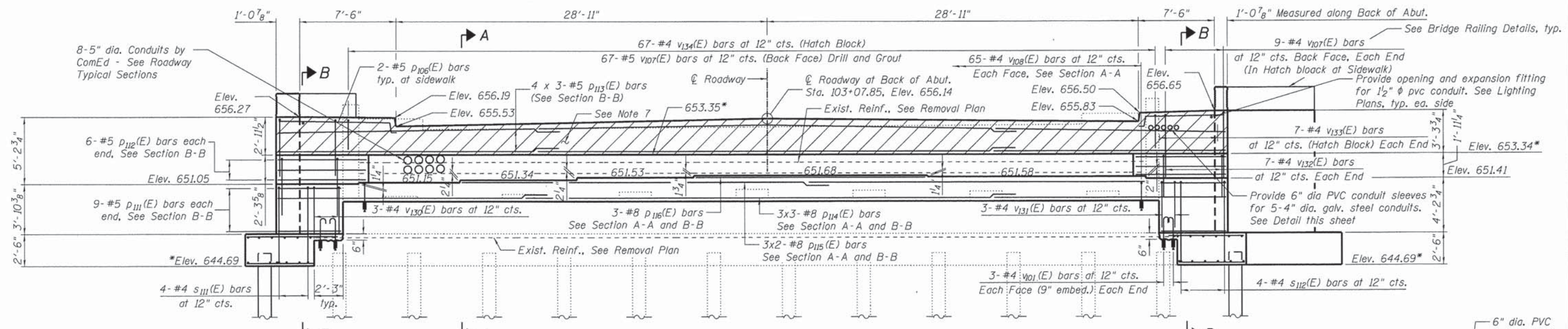
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	136
				CONTRACT NO. 63863
				ILLINOIS FED. AID PROJECT #FEDPROJNO#

COMPANY NAME: Kevin M. Ar-Fr
 PROJECT CONTACT: City of Aurora, IL
 CLIENT: City of Aurora, IL
 FILE NAME: 881018-SE-Abut1-03.dgn
 PLOT DRIVER: pdf.plt
 PEN TABLE: standard-trans.tbl

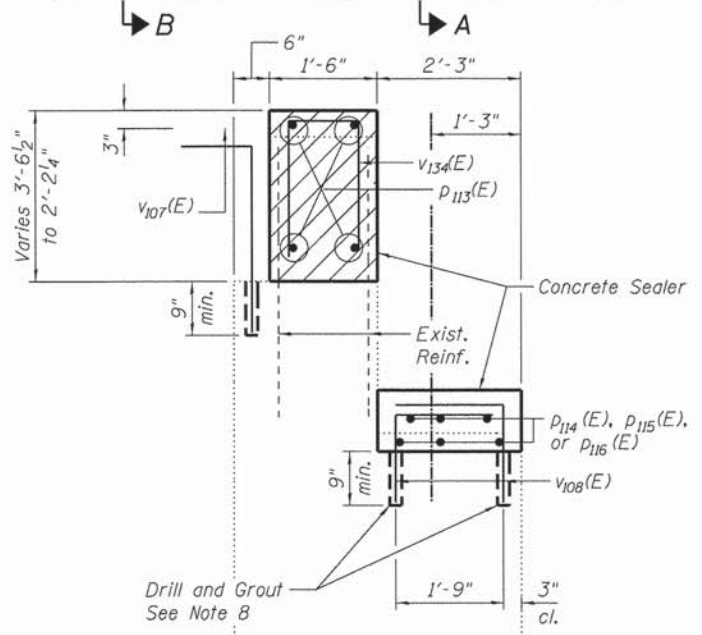
HRGreen.com
 Illinois Professional Design Firm
 #184-001322

USER NAME = w hood	DESIGNED - KMA	REVISED -
	CHECKED - RGD	REVISED -
PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -

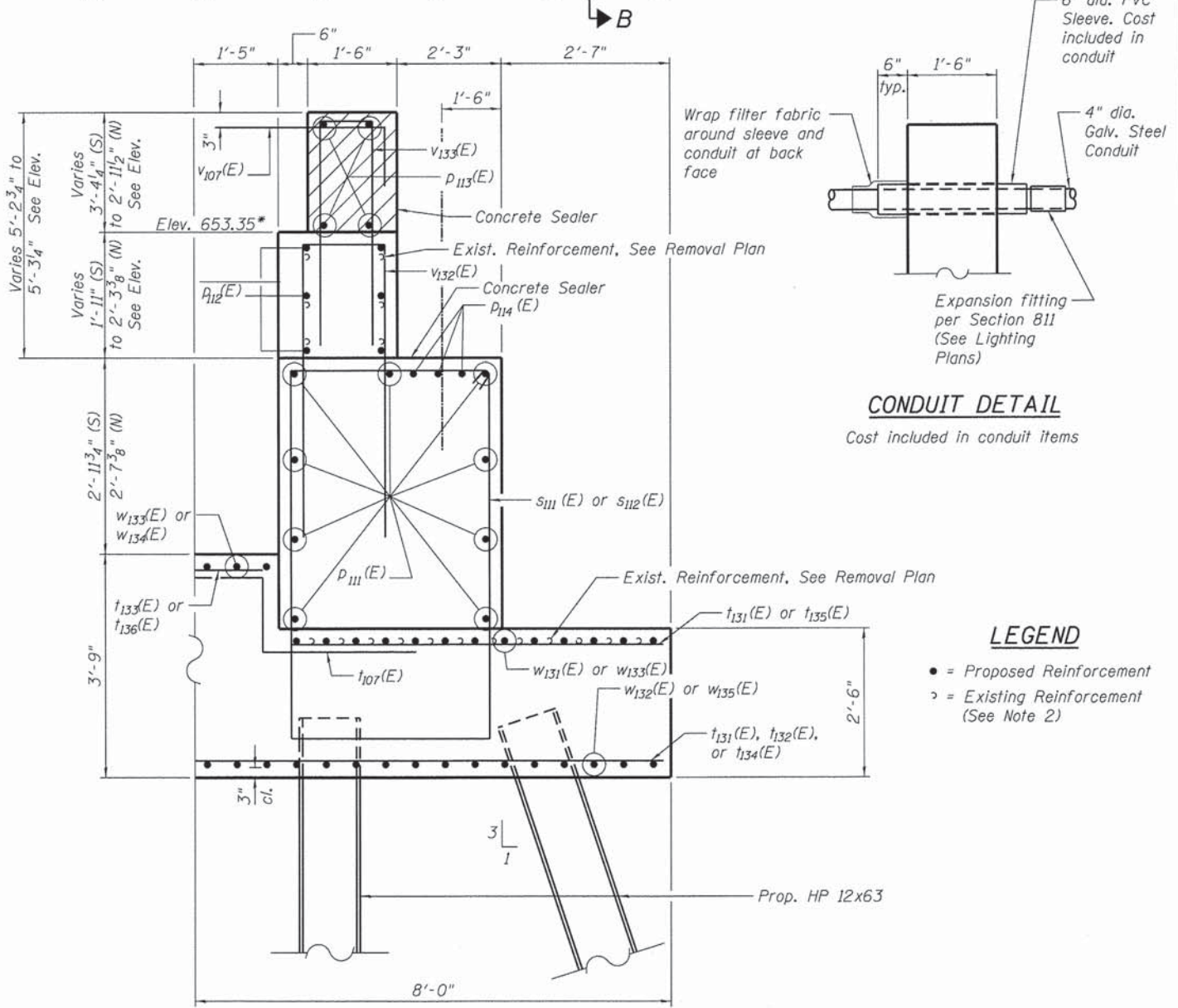
SHEET NO. SE-33 OF SE-43 SHEETS



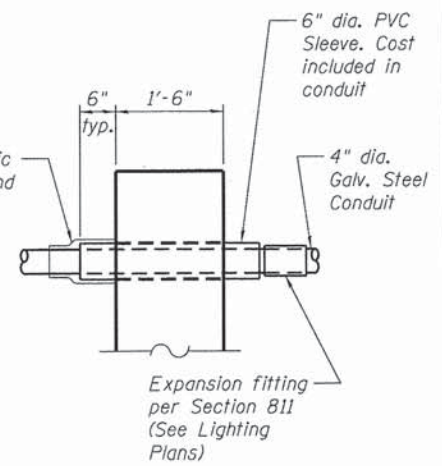
ELEVATION
(Looking East)



SECTION A-A



SECTION B-B



CONDUIT DETAIL
Cost included in conduit items

* Elevation/dimensions based on existing design plans, Contractor to verify in field.

- Notes:**
1. Pour steps monolithically with cap.
 2. Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal. See Removal Plan.
 3. All concrete edges shall have standard 3/4\"/>

- LEGEND**
- = Proposed Reinforcement
 - ◊ = Existing Reinforcement (See Note 2)

COMPANY NAME: HRGreen
 PROJECT CONTACT: Kevin M. Artt
 CLIENT: Illinois Department of Transportation
 FILE NAME: 09-00286-00-BR-181-137.dgn
 PLOT DRIVER: pdfplotter
 PEN TABLE: standard-trans.tbl



USER NAME = whoad	DESIGNED - KMA	REVISED -
PLOT SCALE =	CHECKED - RGD	REVISED -
PLOT DATE = 8/22/2013	DRAWN -	REVISED -
	CHECKED - 8/22/13	REVISED -

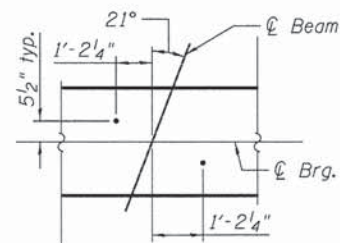
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST ABUTMENT
STRUCTURE NO. 045-3089
SHEET NO. SE-34 OF SE-43 SHEETS

F.A. R.T.E. 1503	SECTION 09-00286-00-BR	COUNTY KANE	TOTAL SHEETS 181	SHEET NO. 137
CONTRACT NO. 63863				ILLINOIS FED. AID PROJECT #FEDPROJING#

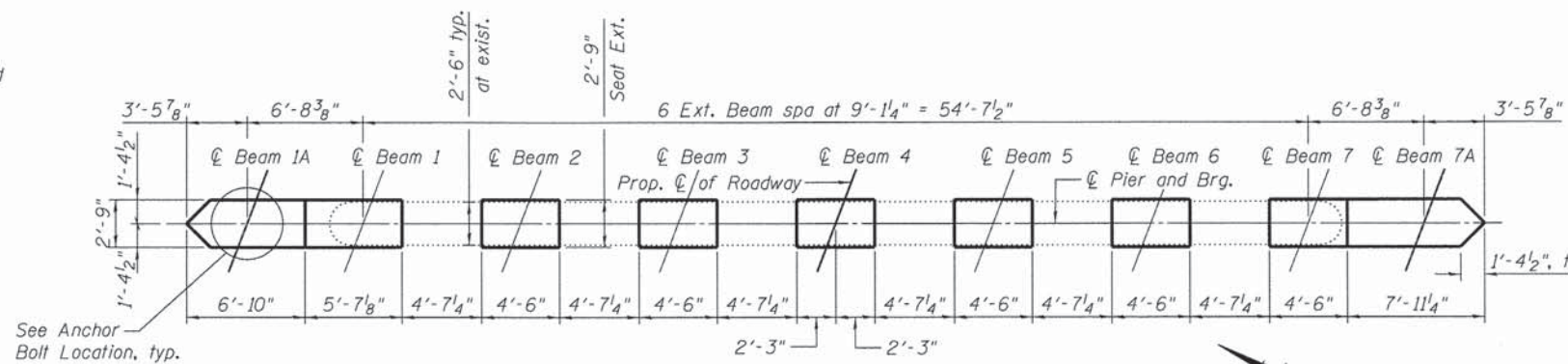
Notes:
 Space reinforcement in cap to miss anchor bolts.
 Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.

See sheet SE-29 for Concrete Removal details.

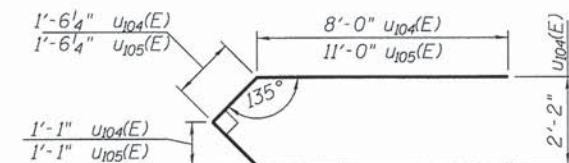


ANCHOR BOLT LOCATION

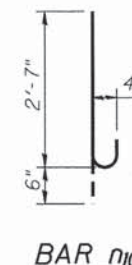
Verify with existing beams



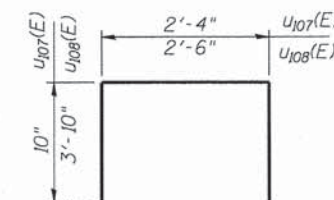
TOP PLAN



BARS U104(E) & U105(E)



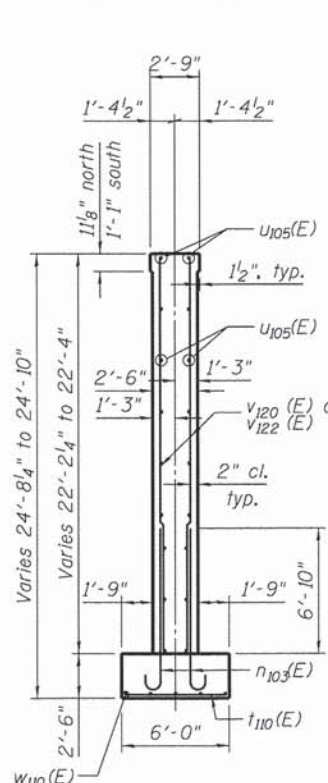
BAR n104(E)



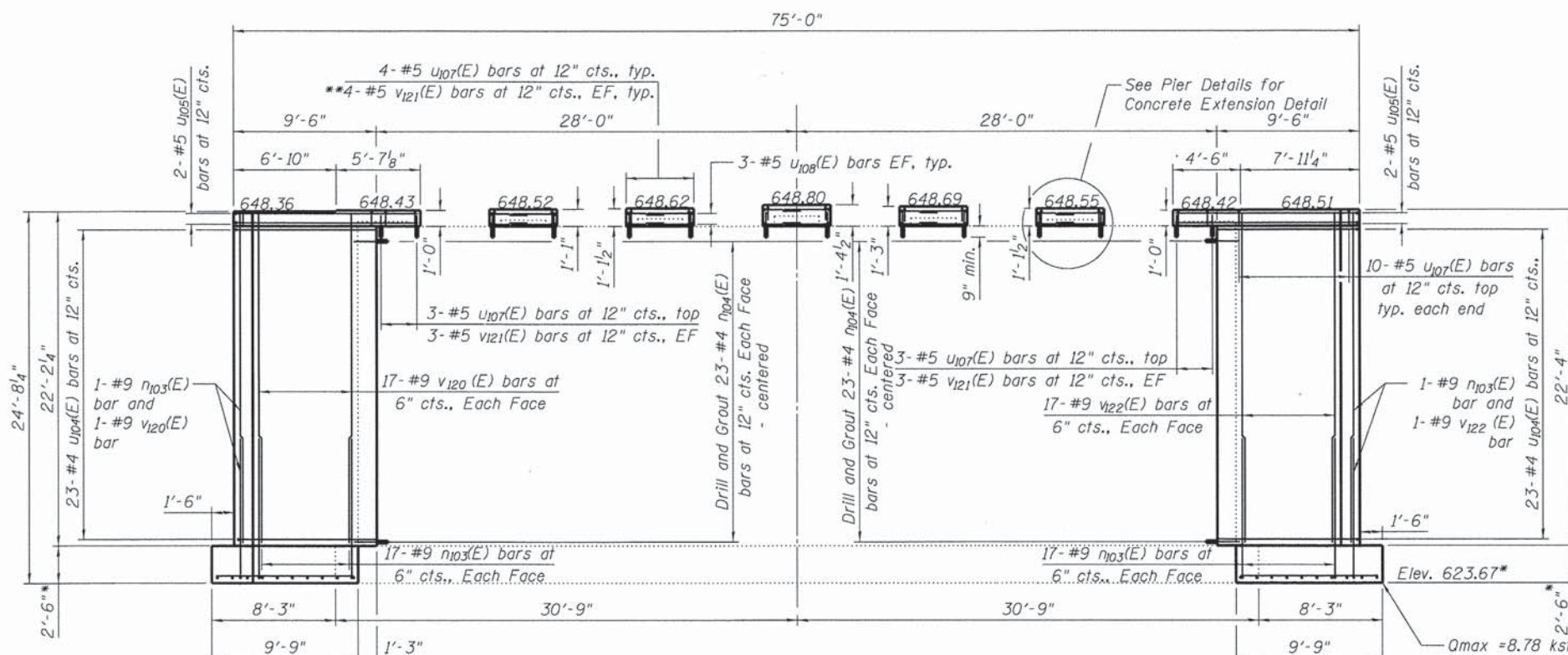
BAR U107(E) & U108(E)



BAR n103(E)

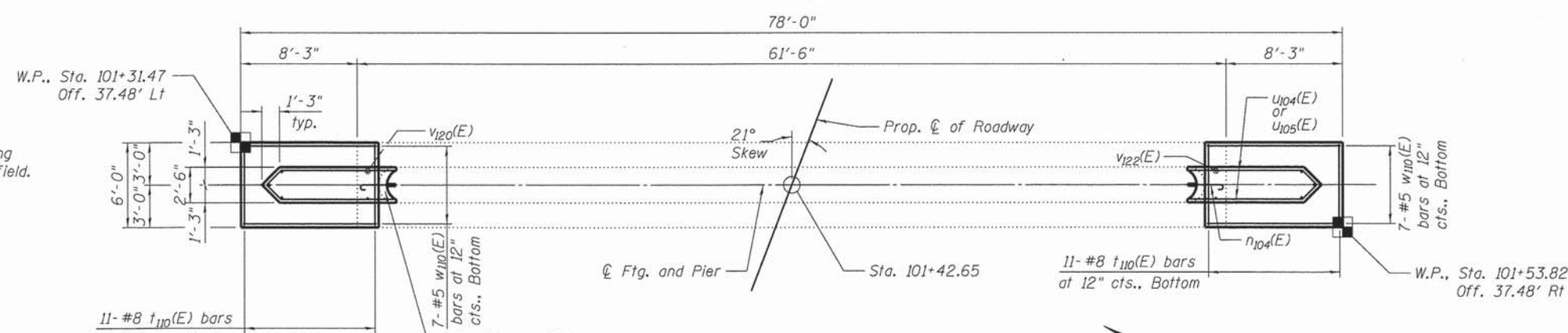


END VIEW



ELEVATION

(Looking East)



FOOTING PLAN

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
n103 (E)	70	#9	10'-10"	C
n104 (E)	46	#4	3'-1"	C
t110 (E)	22	#8	5'-8"	—
U104 (E)	46	#4	19'-0"	U
U105 (E)	4	#4	25'-0"	U
U107 (E)	46	#5	4'-0"	U
U108 (E)	36	#5	10'-2"	U
V120 (E)	35	#9	21'-11"	—
V121 (E)	52	#5	3'-0"	—
V122 (E)	35	#9	22'-0"	—
W110 (E)	14	#5	9'-5"	—
Concrete Structures		Cu. Yd.	50.9	
Reinforcement Bars, Epoxy Coated		Pound	9,760	

See Cofferdam Plans for Excavation quantities

* Elevations/dimensions based on Existing Design Plans. Contractor to verify in field.
 ** Fan and/ or Trim to fit.

ABBREVIATIONS

EF = Each Face

MIN BAR LAP

#5 Bar = 2'-7"
 #9 Bar = 6'-10"

COMPANY NAME: HRGreen
 PROJECT CONTACT: Kevin M. Arfki
 DATE PLOTTED: 8/22/2013 7:52:22 PM
 FILE NAME: 8610318-SE-PIER-1.dgn
 PLOT DRIVER: pdfplot11t.dwt
 PEN TABLE: standard-trans.tbl



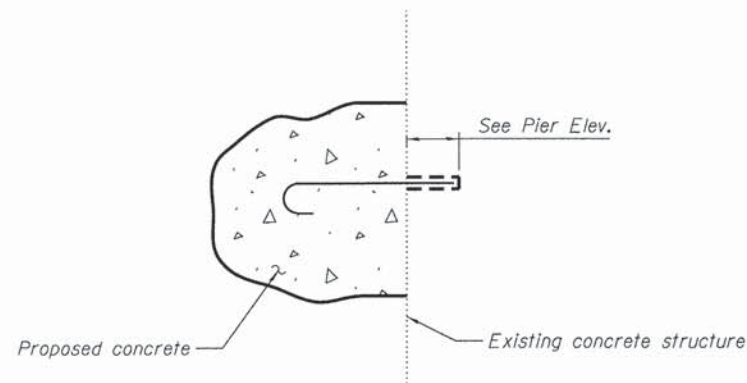
USER NAME = whoad	DESIGNED - KMA	REVISED -
	CHECKED - RGD	REVISED -
PLOT SCALE =	DRAWN - WJH	REVISED -
PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PIER 1
 STRUCTURE NO. 045-3089

SHEET NO. SE-37 OF SE-43 SHEETS

F.A. RTE. 1503	SECTION 09-00286-00-BR	COUNTY KANE	TOTAL SHEETS 181	SHEET NO. 140
				CONTRACT NO. 63863
				ILLINOIS FED. AID PROJECT #FEDPROJNO#



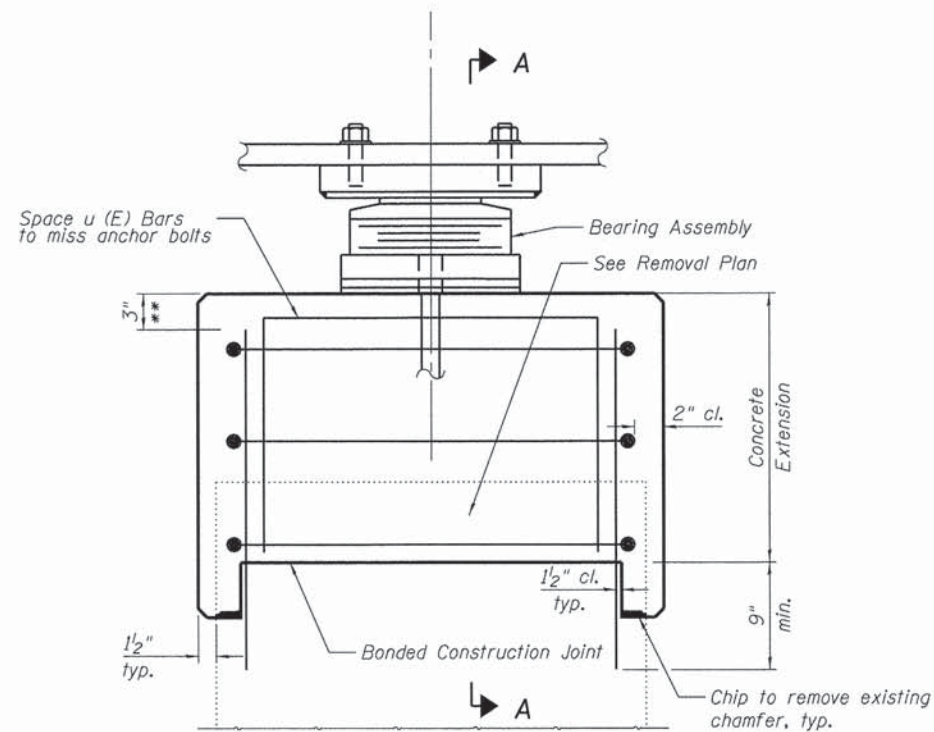
DRILL & GROUT DETAIL

Notes:

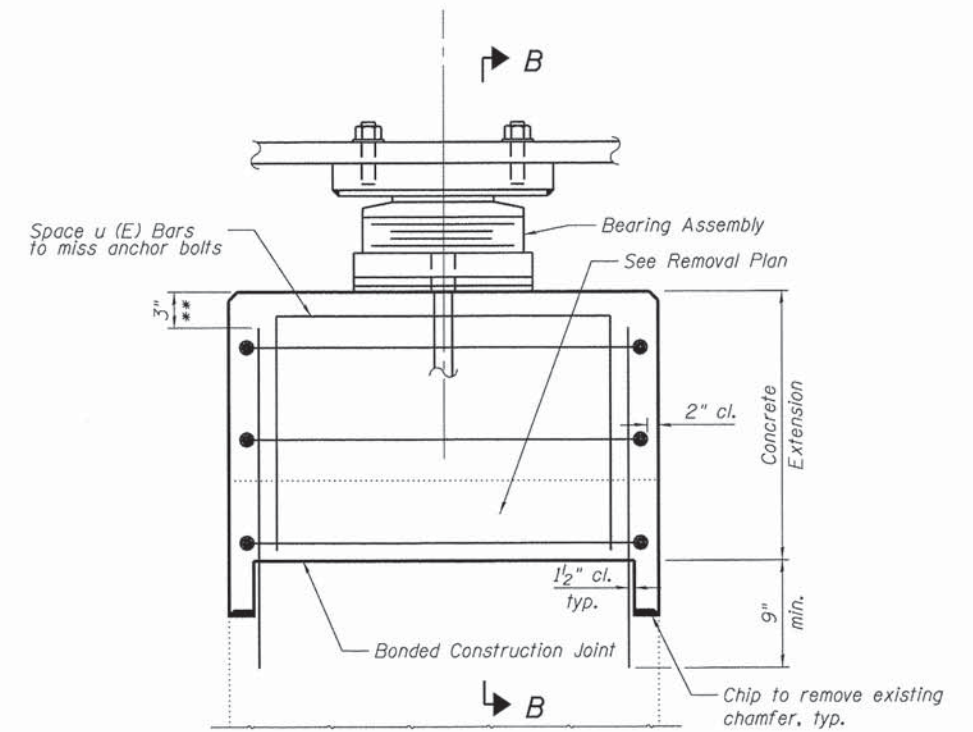
Drill and grout into existing concrete in conformance with Article 509.06 and furnish adhesive in conformance with Article 1027.01. The cost of drilling, cleaning and furnishing the adhesive shall be included under the contract unit price for "Reinforcement Bars" and will not be paid for separately. Follow the manufacturer's instructions except that the minimum embedment shall not be less than what is shown in the plan details.

** Trim dowel to 3" below top of concrete

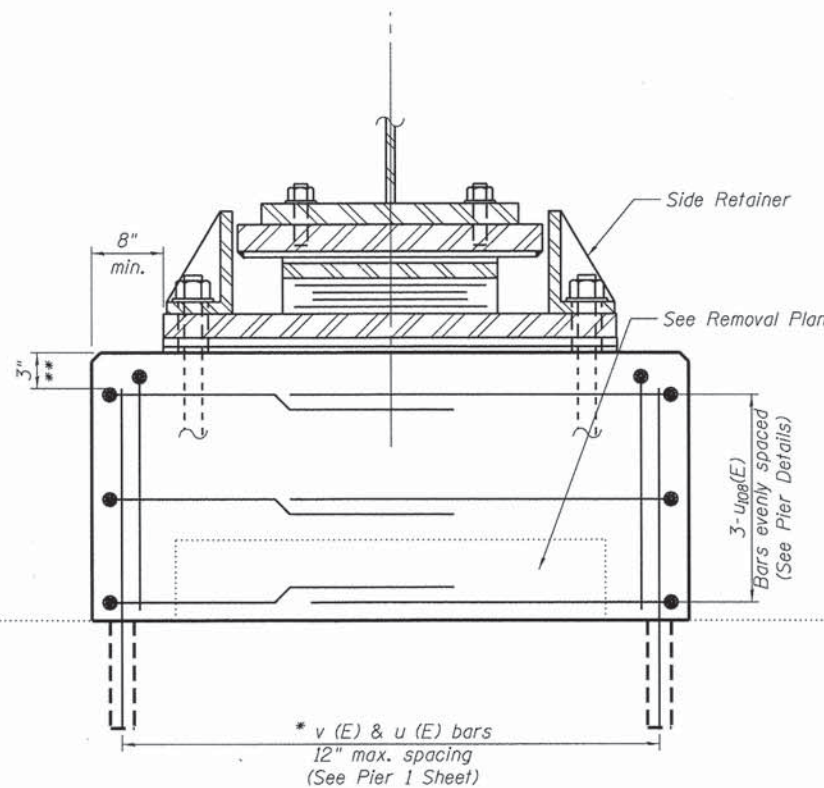
Notes:
See plan details for bar quantities.



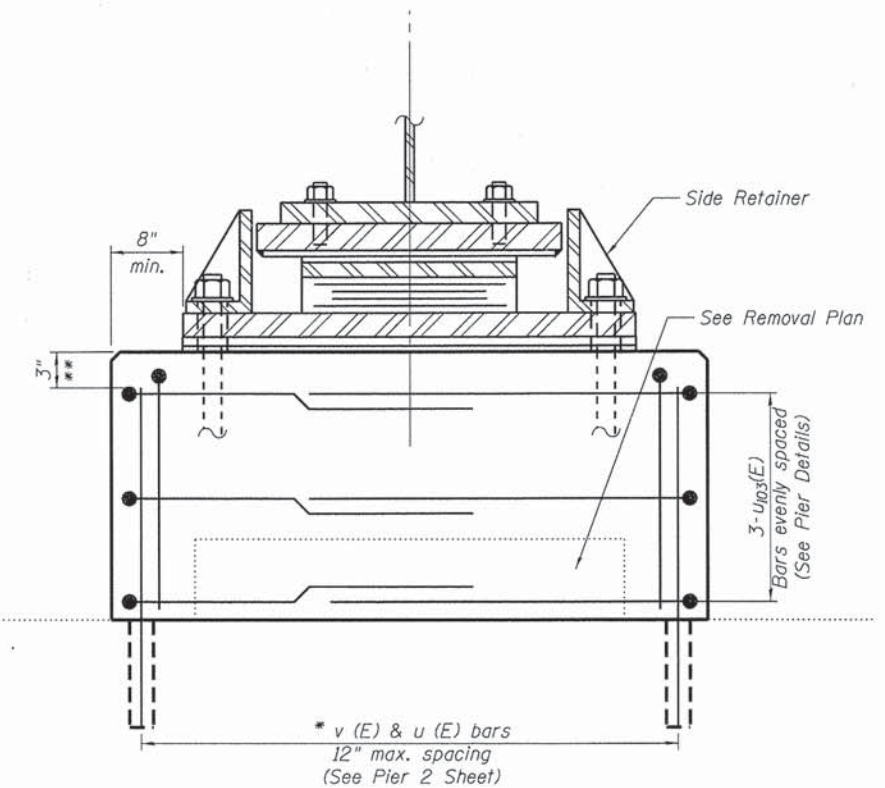
PIER 1 CONCRETE BRIDGE SEAT EXTENSION ELEVATION



PIER 2 CONCRETE BRIDGE SEAT EXTENSION ELEVATION



SECTION A-A



SECTION B-B

* Increase embedment or trim to fit

COMPANY NAME: Kevin M. Artt
PROJECT CONTACT: City of Aurora
DATE PLOTTED: 8/22/2013 10:50:00 PM
FILE NAME: 8610309-SE-Pier_Details.dgn
PLOT DATE: 8/22/2013
PEN TABLE:



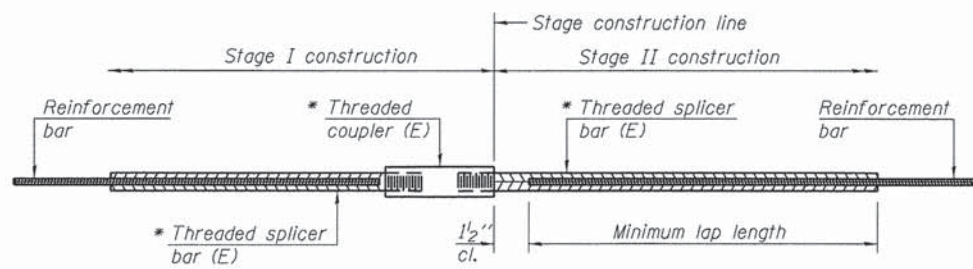
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	CHECKED - RGD	REVISED -
PLOT SCALE =	DRAWN - WJH	REVISED -
PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PIER DETAILS
STRUCTURE NO. 045-3089**

SHEET NO. SE-39 OF SE-43 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	142
CONTRACT NO. 63863				
ILLINOIS FED. AID PROJECT			*FEDPROJNO*	



STANDARD BAR SPLICER ASSEMBLY

Minimum Lap Lengths						
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5	Table 6
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-7"	2'-11"
5	1'-9"	2'-5"	2'-7"	2'-11"	3'-3"	3'-8"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-10"	4'-5"
7	2'-9"	3'-10"	4'-2"	4'-8"	5'-2"	5'-10"
8	3'-8"	5'-1"	5'-5"	6'-2"	6'-9"	7'-8"
9	4'-7"	6'-5"	6'-10"	7'-9"	8'-7"	9'-8"

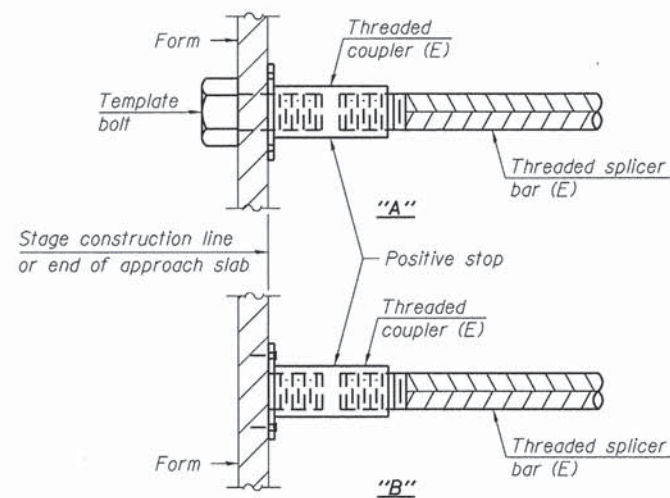
- Table 1: Black bar, 0.8 Class C
- Table 2: Black bar, Top bar lap, 0.8 Class C
- Table 3: Epoxy bar, 0.8 Class C
- Table 4: Epoxy bar, Top bar lap, 0.8 Class C
- Table 5: Epoxy bar, Class C
- Table 6: Epoxy bar, Top bar top, Class C

Threaded splicer bar length = min. lap length + 1/2" + thread length

* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

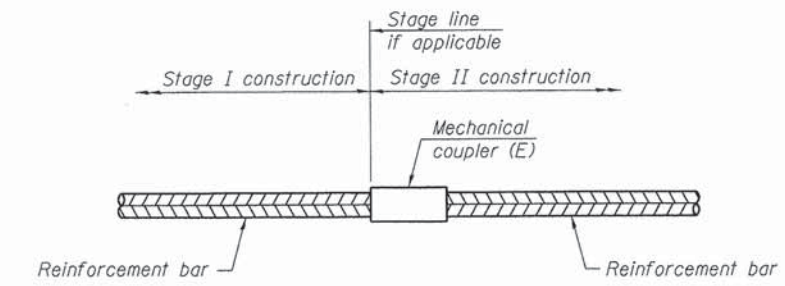
Location	Bar size	No. assemblies required	Table for minimum lap length
** Concrete Bridge Railing	#4	144	5

** Included for information only.
Cost included in Concrete Bridge Railing



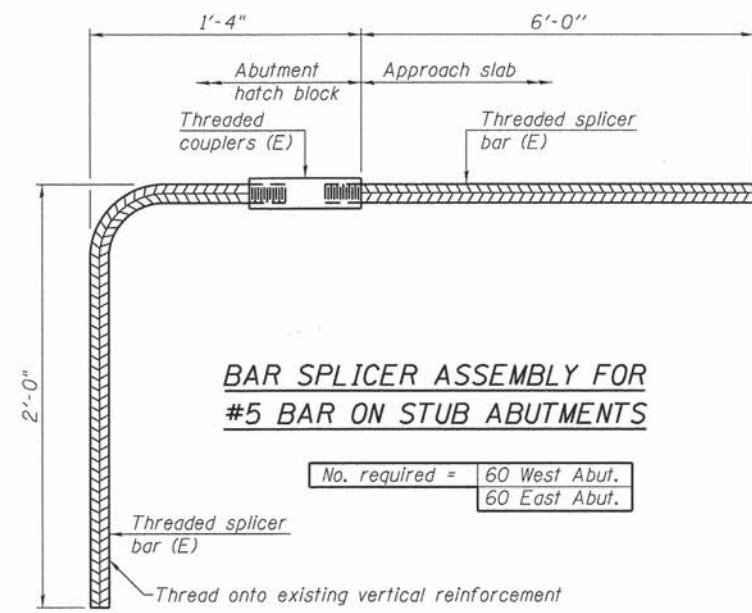
INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
 "B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
 (E) : Indicates epoxy coating.



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required = 60 West Abut.
60 East Abut.

NOTES

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.
 All reinforcement shall be lapped and tied to the splicer bars.
 Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.
 See approved list of bar splicer assemblies and mechanical splicers for alternatives.

COMPANY NAME: Kuhn, M. Arft
 PROJECT CONTACT: City of Aurora
 CLIENT: 8/22/2013 10:53:31 PM
 DATE PLOTTED: 8610218-SE-Bar-Splicer.dgn
 FILE NAME: pdf.DET-Tiff.pdf
 PLOT DRIVER: standard-trans.tbl
 PEN TABLE:



USER NAME = whood	DESIGNED - KMA	REVISED -
PLOT SCALE =	CHECKED - RGD	REVISED -
PLOT DATE = 8/22/2013	DRAWN - WJH	REVISED -
	CHECKED - 8/22/13	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 045-3089**

F.A. RTE. 1503	SECTION 09-00286-00-BR	COUNTY KANE	TOTAL SHEETS 181	SHEET NO. 143
CONTRACT NO. 63863				
ILLINOIS FED. AID PROJECT #FEDPROJNO#				

MSET PROJECT NO.: 12316		LOG OF BORING NO. B-7		Page 1 of 2				
PROJECT: Indian Trail Road over the Fox River			SITE LOCATION: Aurora, Illinois					
BORING LOCATION: AB-1L (North)			CLIENT: HR Green, Inc.					
DEPTH (feet)	SOIL TYPE	Material Description	Elevation	SAMPLE		TESTS		REMARKS
				TYPE/ INTERVAL	NO.	N-VALUE Blows per ft.	Wc%	
0		Dark Brown to Black Silty CLAY, A-6 Topsoil	653.0	AU				
		Brown and Black Silty Clay LOAM, A-6 FILL stiff	651.5	SS	1	5	18	
4				SS	2	4	11	1.0 Qp
		Light Brown and Grey Fractured Limestone, A-1-a mixed with brown Sandy LOAM, A-2-4 Probable FILL	646.5	SS	3	11	6	
8				SS	4	22	11	
		Brown Silty Clay LOAM, A-6 FILL stiff	642.5	SS	5	9	18	105 0.97
12				SS	6	14	5	
		Light Brown and Grey Fractured Limestone, A-1-a possible FILL	640.0	SS	7	10	7	
16				SS	8	17	16	111 1.73
20		Grey and Brown CLAY, A-6 stiff to very stiff	635.0	SS	9	12	23	100 2.52
24		Grey SAND and GRAVEL, A-1-a some weathered limestone fragments, medium dense	630.0	SS	10	19	17	
28		Grey Dolomitic Limestone Bedrock, Weathered	627.0	SS	11	80/2"	10	
		RQD=24% from 27' to 32' continued		RC				

WATER LEVEL OBSERVATIONS, ft.
 DURING DRILLING:
 IMMEDIATELY AFTER DRILLING:
 DELAYED READING AFTER



BORING STARTED: 7/25/12
 BORING COMPLETED: 7/25/12
 LOGGED BY: MHP
 BORING METHOD: CFA

Midland Standard Engineering & Testing, Inc. 558 Plate Drive Unit 6, East Dundee, IL 60118 (847) 844-1895 f(847) 844-3875

MSET PROJECT NO.: 12316		LOG OF BORING NO. B-7		Page 2 of 2				
PROJECT: Indian Trail Road over the Fox River			SITE LOCATION: Aurora, Illinois					
BORING LOCATION: AB-1L (North)			CLIENT: HR Green, Inc.					
DEPTH (feet)	SOIL TYPE	Material Description	Elevation	SAMPLE		TESTS		REMARKS
				TYPE/ INTERVAL	NO.	N-VALUE Blows per ft.	Wc%	
32		Grey Dolomitic Limestone Bedrock, Weathered						
		RQD=44% from 32' to 37'						
36				RC				
40		RQD=73% from 37' to 42'						
				RC				
		End of Boring at 42.0 Feet	611.0					

WATER LEVEL OBSERVATIONS, ft.
 DURING DRILLING:
 IMMEDIATELY AFTER DRILLING:
 DELAYED READING AFTER



BORING STARTED: 7/25/12
 BORING COMPLETED: 7/25/12
 LOGGED BY: MHP
 BORING METHOD: CFA

Midland Standard Engineering & Testing, Inc. 558 Plate Drive Unit 6, East Dundee, IL 60118 (847) 844-1895 f(847) 844-3875

COMPANY NAME: Kevin M. Arrf
 PROJECT CONTACT: Kevin M. Arrf
 DATE PLOTTED: 8/22/2013 10:46:28 AM
 FILE NAME: 8610318-SE-Soil Boring Log.dgn
 PLOT DRIVER: pdf.plt
 PEN TABLE: standard-trans.tbl



USER NAME = w hood	DESIGNED - KMA	REVISED -
	CHECKED - RGD	REVISED -
PLOT SCALE =	DRAWN - WJH	REVISED -
PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -




STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS
 STRUCTURE NO. 045-3089

SHEET NO. SE-42 OF SE-43 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	145
CONTRACT NO. 63863			ILLINOIS FED. AID PROJECT #FEDPROJNO#	

MSET PROJECT NO.: 12316		LOG OF BORING NO. B-8		Page 1 of 2				
PROJECT: Indian Trail Road over the Fox River			SITE LOCATION: Aurora, Illinois					
BORING LOCATION: P7-R (South)			CLIENT: HR Green, Inc.					
DEPTH (feet)	SOIL TYPE	Material Description	Elevation	SAMPLE		TESTS		REMARKS
				TYPE/INTERVAL	NO.	N-VALUE Blows per ft.	Wc% Dry Unit Weight, pcf	
0		Bridge Deck, Bit. Concrete over Reinforced Concrete	653.9					
		Air Space	652.9					
4								
8								
12								
16								
20								
24		Brown Sandy LOAM, A-2-4 with Limestone Fragments, slughtly dense	631.9	SS	1	6	7	
		Dark Grey Sandy LOAM, A-2-4 with Gravel, medium dense	628.4	SS	2	22	11	
28		Grey Dolomitic Limestone Bedrock, Weathered	626.4		3	80/1"	6	
		continued						




WATER LEVEL OBSERVATIONS, ft.
DURING DRILLING: 
IMMEDIATELY AFTER DRILLING: 
DELAYED READING AFTER 



BORING STARTED: 7/26/12
BORING COMPLETED: 7/26/12
LOGGED BY: MHP
BORING METHOD: HSA

Midland Standard Engineering & Testing, Inc. 558 Plate Drive Unit 6, East Dundee, IL 60118 (847) 844-1895 f(847) 844-3875

MSET PROJECT NO.: 12316		LOG OF BORING NO. B-8		Page 2 of 2				
PROJECT: Indian Trail Road over the Fox River			SITE LOCATION: Aurora, Illinois					
BORING LOCATION: P7-R (South)			CLIENT: HR Green, Inc.					
DEPTH (feet)	SOIL TYPE	Material Description	Elevation	SAMPLE		TESTS		REMARKS
				TYPE/INTERVAL	NO.	N-VALUE Blows per ft.	Wc% Dry Unit Weight, pcf	
32		Grey Dolomitic Limestone Bedrock, Weathered RQD=10% from 28.5' to 33'		RC				
36		RQD=25% from 33' to 38'		RC				
40		RQD=88% from 38' to 43'		RC				
		End of Boring at 43.0 Feet	610.9					

WATER LEVEL OBSERVATIONS, ft.
DURING DRILLING: 
IMMEDIATELY AFTER DRILLING: 
DELAYED READING AFTER 



BORING STARTED: 7/26/12
BORING COMPLETED: 7/26/12
LOGGED BY: MHP
BORING METHOD: HSA

Midland Standard Engineering & Testing, Inc. 558 Plate Drive Unit 6, East Dundee, IL 60118 (847) 844-1895 f(847) 844-3875

COMPANY NAME: Kevin M. Arty
PROJECT CONTACT: Kevin M. Arty
DATE PLOTTED: 8/22/2013 7:55:53 PM
FILE NAME: 8610318-SE-Soil Boring Log.dwg
PLOT DRIVER: pdfLBR-T11Left
PEN TABLE: standard-trans.tbl

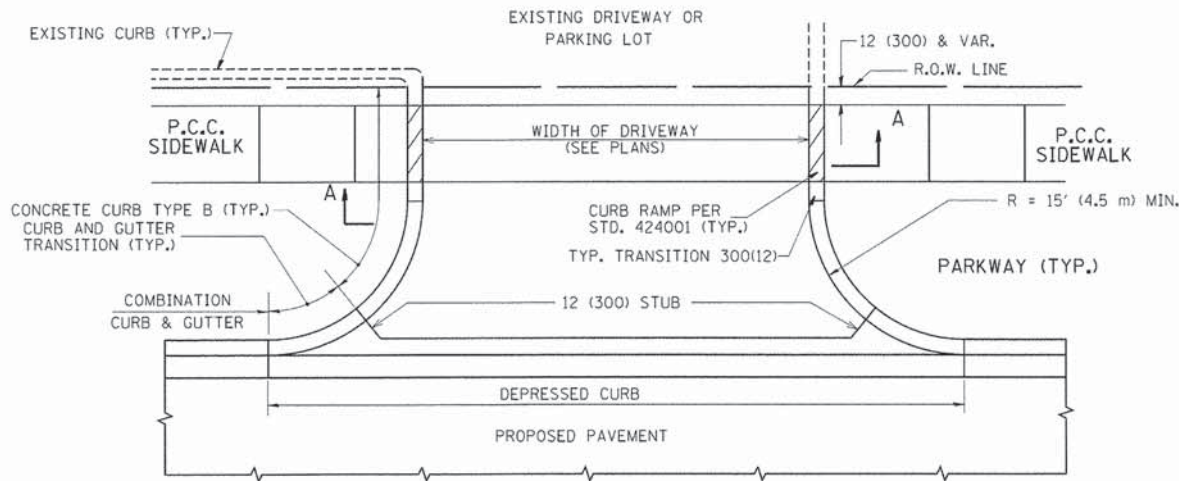
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

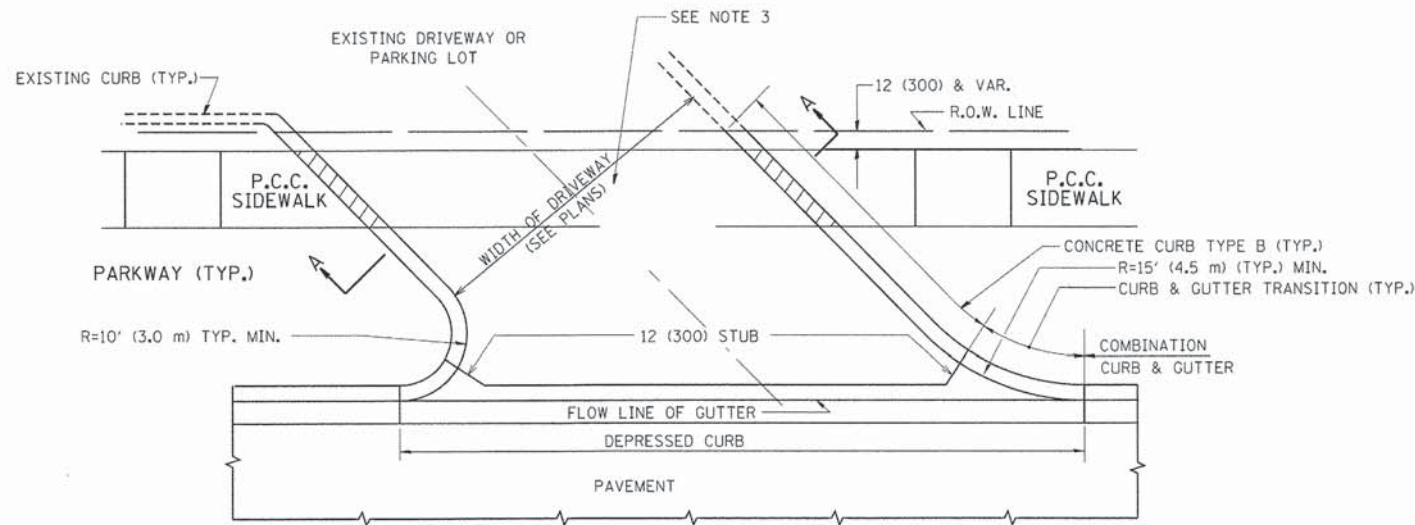
SOIL BORING LOGS
STRUCTURE NO. 045-3089

SHEET NO. SE-43 OF SE-43 SHEETS

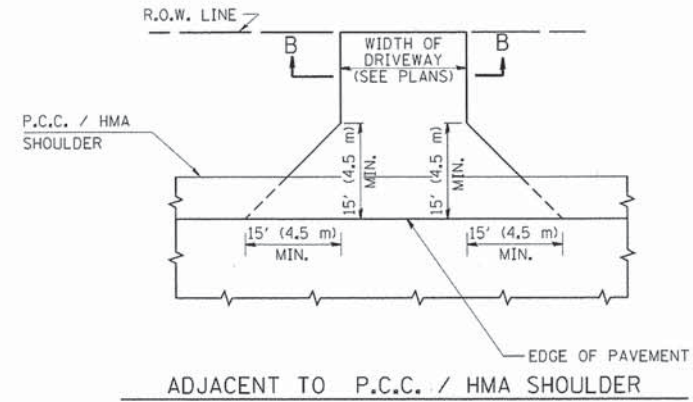
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	146
CONTRACT NO. 63863			ILLINOIS FED. AID PROJECT #FEDPROJNO#	



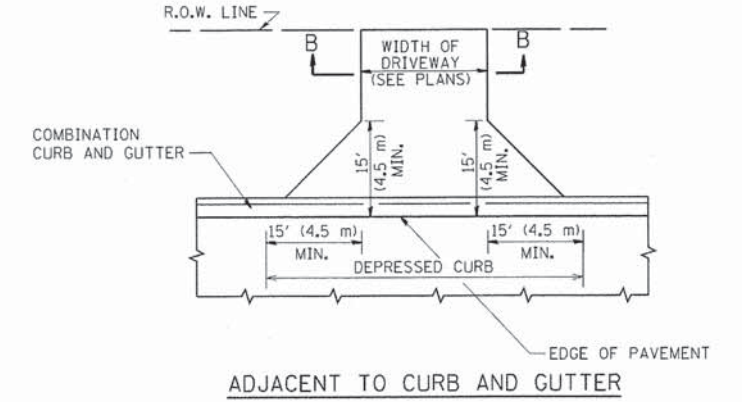
WITH CONCRETE CURB, TYPE B



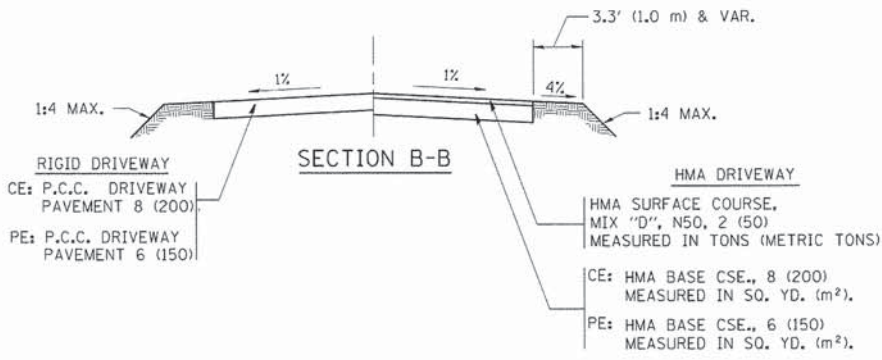
WITH CONCRETE CURB, TYPE B



ADJACENT TO P.C.C. / HMA SHOULDER



ADJACENT TO CURB AND GUTTER



RURAL FIELD ENTRANCE (FE)
HMA SURFACE COURSE, MIX "D", N50, 2 (50) MEASURED IN TONS (METRIC TONS)
AGGREGATE BASE CSE., TYPE B, 8 (200) MEASURED IN SQ. YD. (m²).

GENERAL NOTES:

DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATIONS IN THE PERMIT HANDBOOK. DRIVEWAYS SHALL BE REPLACED IN KIND, UNLESS OTHERWISE NOTED ON THE PLANS.

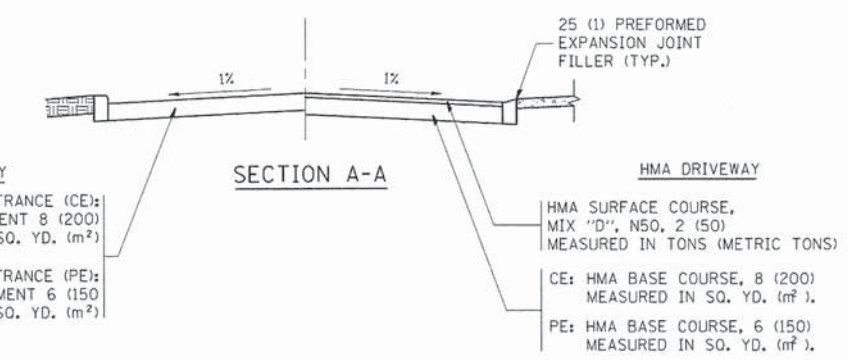
COMMERCIAL DRIVEWAYS SHALL BE CONSTRUCTED WITH CONCRETE CURB, TYPE B RETURNS EXCEPT WHEN THE SIDEWALK EDGE IS 4 FEET (1.2 METERS) OR LESS FROM THE BACK OF CURB, CONSTRUCT A FLARE DRIVEWAY WITHOUT CURB.

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC PERMIT OFFICE AT 847/ 705-4131 FOR ANY QUESTIONS ON DRIVEWAYS SHOWN IN THE PLANS; SPECIFICALLY IN REFERENCE TO ADDITIONAL AND/OR RELOCATION/REMOVAL OF A DRIVEWAY.

COMBINATION CONCRETE CURB & GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CURB & GUTTER TRANSITION.

1 (25) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK.

WHEN THE P.C.C. SIDEWALK EXTENDS THROUGH THE DRIVEWAY, THE THICKNESS OF THE SIDEWALK IN THE DRIVEWAY AREA SHALL BE THE SAME AS THE DRIVEWAY THICKNESS. SIDEWALK WILL BE PAID FOR AS P.C.C. SIDEWALK OF THE THICKNESS SPECIFIED. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.



RIGID DRIVEWAY
COMMERCIAL ENTRANCE (CE): P.C.C. DRIVEWAY PAVEMENT 8 (200) MEASURED IN SQ. YD. (m²)
NON-COMMERCIAL ENTRANCE (PE): P.C.C. DRIVEWAY PAVEMENT 6 (150) MEASURED IN SQ. YD. (m²)

HMA DRIVEWAY
HMA SURFACE COURSE, MIX "D", N50, 2 (50) MEASURED IN TONS (METRIC TONS)
CE: HMA BASE COURSE, 8 (200) MEASURED IN SQ. YD. (m²)
PE: HMA BASE COURSE, 6 (150) MEASURED IN SQ. YD. (m²).

COMPANY NAME: **STRUC-T**
PROJECT CONTACT: **Kevin M. Kelly**
DATE PLOTTED: **8/23/2011 10:53:33 AM**
FILE NAME: **8610108-DET-001**
PLOT DRIVER: **pdf.plt**
PEN TABLE: **Struct 22x34.tbl**

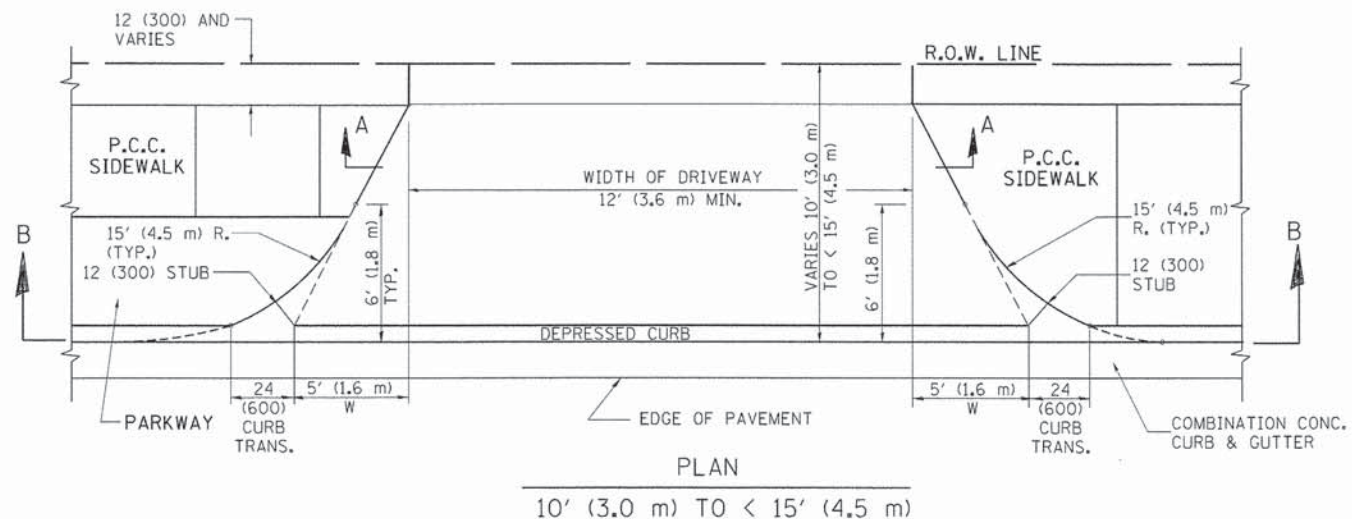
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			R. BORO 01-01-07
		CHECKED -	REVISED -
			R. BORO 06-11-08
		DATE -	REVISED -
		11-04-95	R. BORO 09-06-11

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

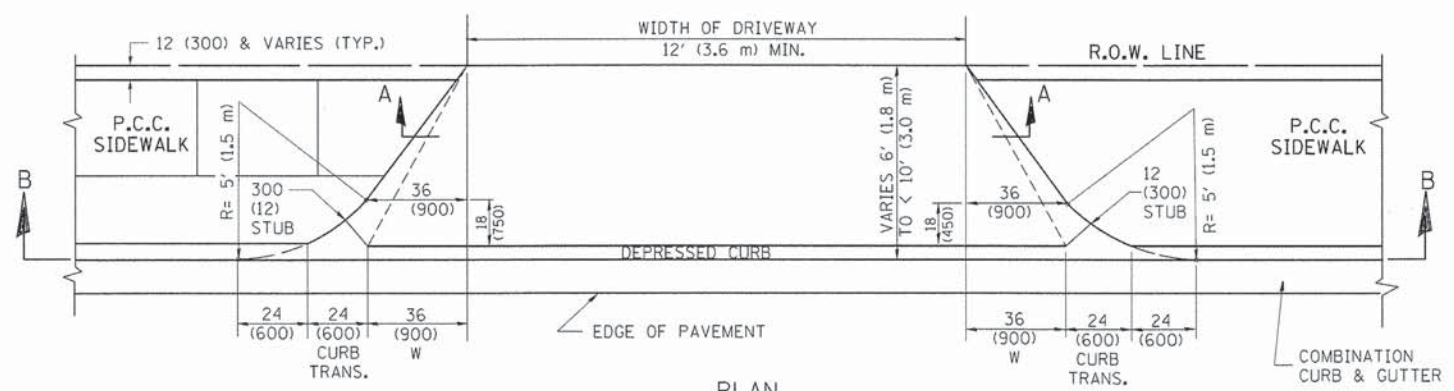
**DRIVEWAY DETAILS - DISTANCE BETWEEN R.O.W.
AND FACE OF CURB & EDGE OF SHOULDER >= 15' (4.5 m)**

SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.
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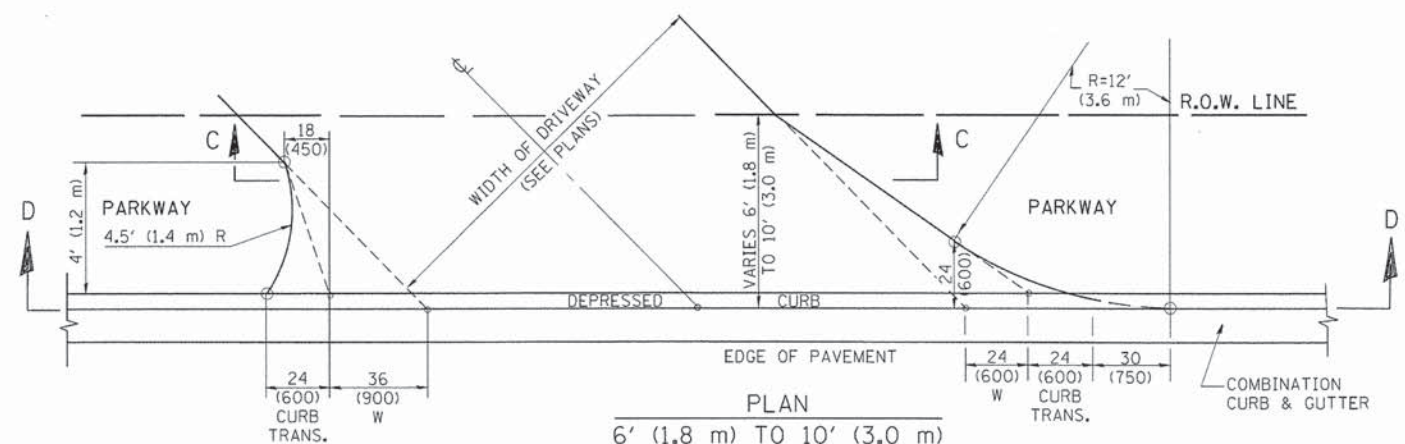
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B00156-07 (BD-01)			CONTRACT NO. 63863	
FED. ROAD DIST. NO. 2 (ILLINOIS) FED. AID PROJECT				



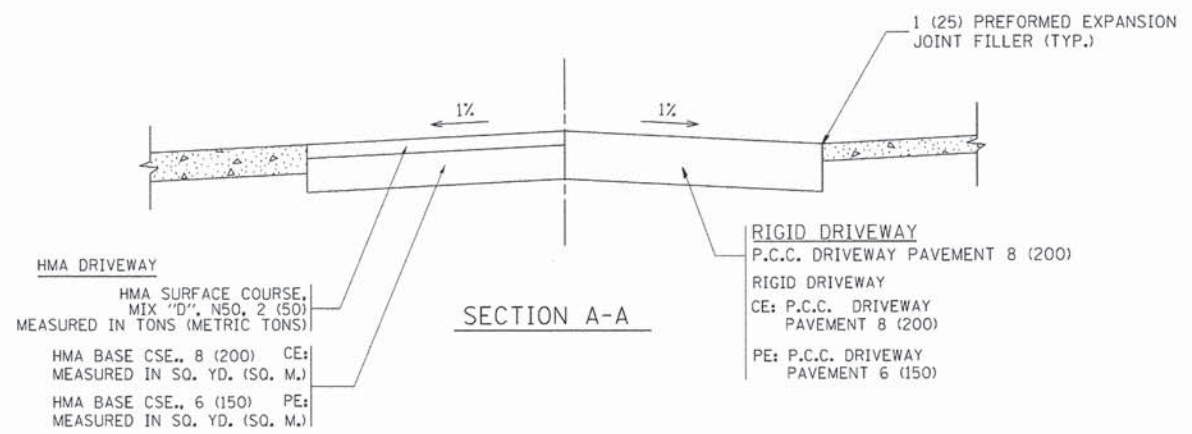
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10' (3.0 m) TO < 15' (4.5 m)



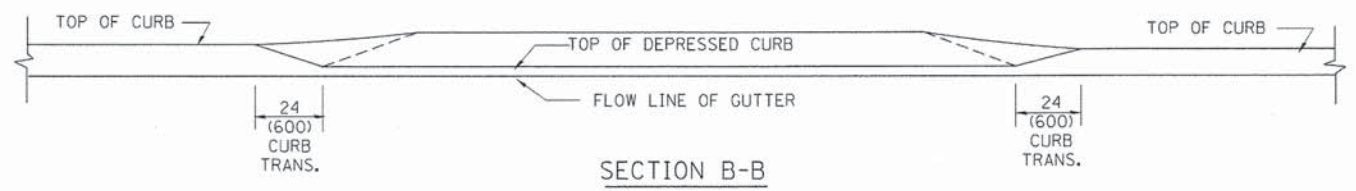
PLAN
6' (1.8 m) TO < 10' (3.0 m)



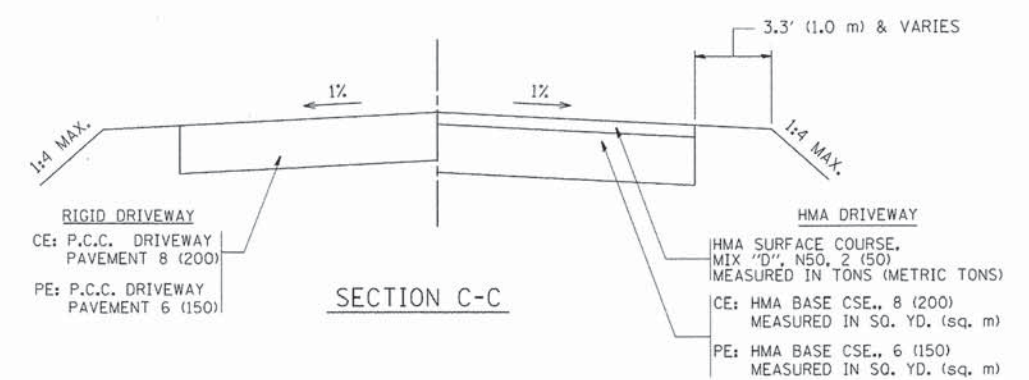
PLAN
6' (1.8 m) TO 10' (3.0 m)



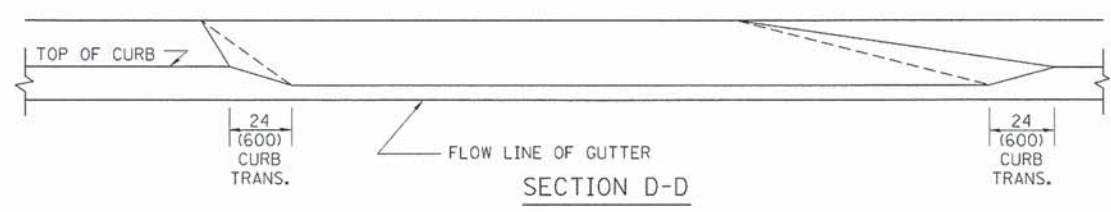
SECTION A-A



SECTION B-B



SECTION C-C



SECTION D-D

GENERAL NOTES

DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATION 10 IN THE PERMIT HANDBOOK. WHERE SIDEWALKS EXIST, DRIVEWAYS SHALL BE REPLACED WITH RIGID PAVEMENT. WHERE NO SIDEWALKS EXIST, DRIVEWAYS SHALL BE REPLACED IN KIND. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.

WHEN THE DISTANCE BETWEEN R.O.W. AND THE BACK OF CURB IS EQUAL TO OR LESS THAN 8' (2.4 m), THE P.C.C. SIDEWALK SHALL EXTEND TO THE BACK OF CURB.

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC PERMIT OFFICE AT 847/ 705-4131 FOR ANY QUESTIONS ON DRIVEWAYS SHOWN IN THE PLANS; SPECIFICALLY IN REFERENCE TO ADDITIONAL AND/OR RELOCATION/REMOVAL OF A DRIVEWAY.

COMBINATION CONCRETE CURB & GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CURB & GUTTER TRANSITION.

THE 1 (25) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK.

"W" VARIES FROM 36 (900) TO 5' (1.5 m) PROPORTIONAL TO THE LENGTH (L), FROM 6' (1.8 m) TO 10' (3 m).

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE NOTED.

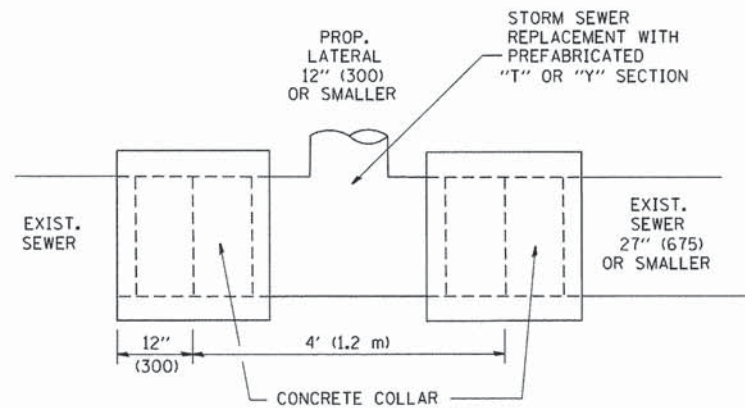
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 PROJECT CONTACT:
 CLIENT:
 DATE PLOTTED:
 FILE NAME:
 PLOT DRIVER:
 PLOT TABLE:

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		DRAWN -	REVISED -
			P. LoFLEUR 04-15-03
		CHECKED -	REVISED -
			R. BORO 01-01-07
		DATE =	REVISED -
		11-06-95	R. BORO 09-06-11

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

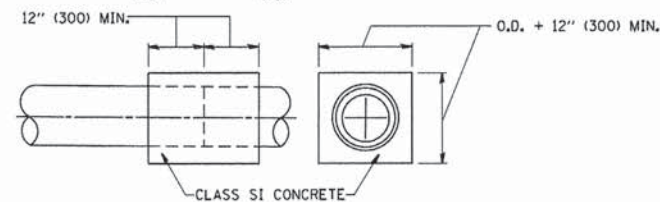
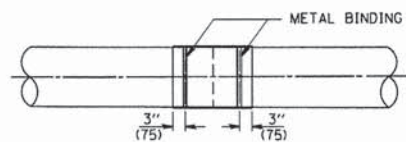
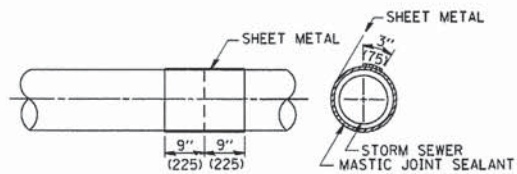
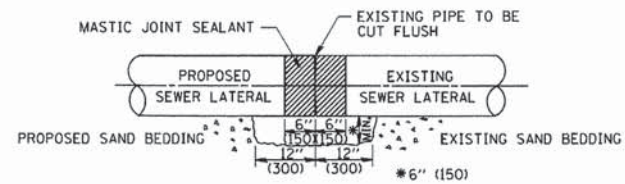
DRIVEWAY DETAILS			
DISTANCE BETWEEN ROW AND FACE OF CURB < 15' (4.5 m)			
SCALE:	SHEET NO.	OF SHEETS	STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	148
BD400-02 (BD-02)			CONTRACT NO. 63863	
FED. ROAD DIST. NO. 2 ILLINOIS FED. AID PROJECT				



DETAIL "A"

LATERAL CONNECTION TO EXISTING SEWER OF 27" (675) OR SMALLER

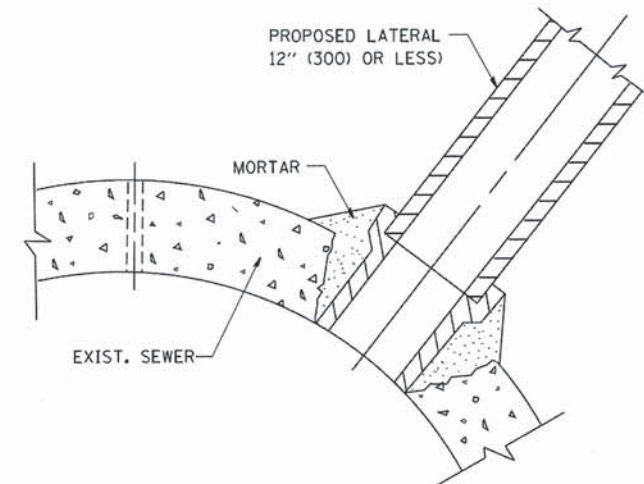


DETAIL "B"

CLASS SI CONCRETE COLLAR

CONSTRUCTION SEQUENCE

1. CUT THE EXISTING END OF THE PIPE SO AS TO PRESENT A FLUSH BUTT JOINT. BRUSH AND CLEAN ALL PIPES.
2. APPLY THE MASTIC JOINT SEALANT TO THE FIRST 6" (150) OF EACH PIPE.
3. BUTT THE PIPES TOGETHER LEAVING A MINIMUM OF 12' x 6' (300 x 150) DEEP EXCAVATION UNDER AND AROUND EACH PIPE END.
4. CUT A PIECE OF SHEET METAL GAGE NO. 19 I.I (0.0418) 18" (450) WIDE BY THE OUTSIDE CIRCUMFERENCE OF THE PIPE PLUS 3" (75) LONG.
5. WRAP THE SHEET METAL AROUND THE PIPES, 9" (225) ON EACH SIDE OF THE JOINT, STARTING AT THE TOP OF THE PIPE.
6. LAP THE SHEET METAL AT LEAST 3" (75) AT THE TOP OF THE PIPE AND PLACE THE MASTIC JOINT SEALANT BETWEEN THE LAP.
7. PLACE TWO METAL BANDS AROUND THE SHEET METAL AND TIGHTEN.
8. WIPE OFF ANY EXCESS MASTIC JOINT SEALANT THAT OZZES OUT FROM BETWEEN THE SHEET METAL AND THE PIPES.
9. PLACE CLASS SI CONCRETE AROUND THE JOINT.



DETAIL "C"

PROPOSED LATERAL CONNECTION TO EXISTING SEWER OF 30" (750) OR LARGER

NOTES

MATERIAL

MATERIAL USED FOR THE TEE OR WYE SECTION SHALL BE COMPATIBLE WITH THE EXISTING STORM SEWER OR THE PROPOSED STORM SEWER.

CONSTRUCTION METHODS

- THIS WORK SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE APPLICABLE PORTIONS OF SECTION 550 OF THE STANDARD SPECIFICATIONS.
- CONNECTION TO AN EXISTING STORM SEWER SHALL BE BY EITHER OF THE FOLLOWING METHODS:
 - PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 27" (675) OR SMALLER SEE DETAIL "A" AND "B".
 - PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 30" (750) OR LARGER SEE DETAIL "C".

IF THE EXISTING SEWER PIPE IS CRACKED, BROKEN OR OTHERWISE DAMAGED BY THE CONTRACTOR IN MAKING THE CIRCULAR OPENING, THE CONTRACTOR SHALL REPLACE THAT SECTION OF PIPE WITH PIPE EQUAL AND SIMILAR IN ALL RESPECTS TO THE PIPE IN THE EXISTING SEWER, IN A CAREFUL WORKMANLIKE MANNER, WITHOUT EXTRA COMPENSATION.

GENERAL

CARE MUST BE TAKEN TO PREVENT DEBRIS FROM ENTERING THE SEWER. ALL DEBRIS WHICH ENTERS THE SEWER MUST BE REMOVED. THE SEWER MUST BE LEFT CLEAN AND UNOBSTRUCTED UPON COMPLETION OF THE CONTRACT.

CARE MUST BE TAKEN TO PREVENT ANY PART OF THE NEW PIPE CONNECTION FROM PROJECTING INTO THE EXISTING SEWER.

BASIS OF PAYMENT

TEE OR WYE CONNECTIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR STORM SEWER TEE OR WYE OF THE TYPE AND SIZE SPECIFIED IN THE PLANS, THIS PRICE SHALL INCLUDE ALL EXCAVATION OF THE TRENCH, REMOVAL OF THE EXISTING STORM SEWER, FURNISHING AND INSTALLING THE SPECIFIED TEE OR WYE SECTION, FURNISHING AND INSTALLING THE REQUIRED CONCRETE COLLAR, AND ALL OTHER MATERIAL NECESSARY TO COMPLETE THIS WORK AS SHOWN AND SPECIFIED.

REMOVAL AND REINSTALLATION OF EXISTING STORM SEWER ADJACENT TO THE PROPOSED TEE OR WYE SECTION, FOR THE PURPOSE OF FACILITATING THE INSTALLATION OF THE TEE OR WYE SECTION, WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE WORK.

TRENCH BACKFILL, EXCAVATION IN ROCK AND REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIAL BELOW PLAN BEDDING GRADE WILL BE PAID FOR SEPARATELY.

CONCRETE COLLAR FOR CONNECTING A PROPOSED STORM SEWER TO AN EXISTING STORM SEWER WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE PROPOSED STORM SEWER.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

COMPANY NAME: Kuhn, M. Arft
 PROJECT CONTACT: City of Aurora
 CLIENT: City of Aurora
 DATE PLOTTED: 8/25/2013 8:02:05 AM
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 PLOT DRIVER: pdfplotter-11f.dwt
 PEN TABLE: Struct 22x34.tbl

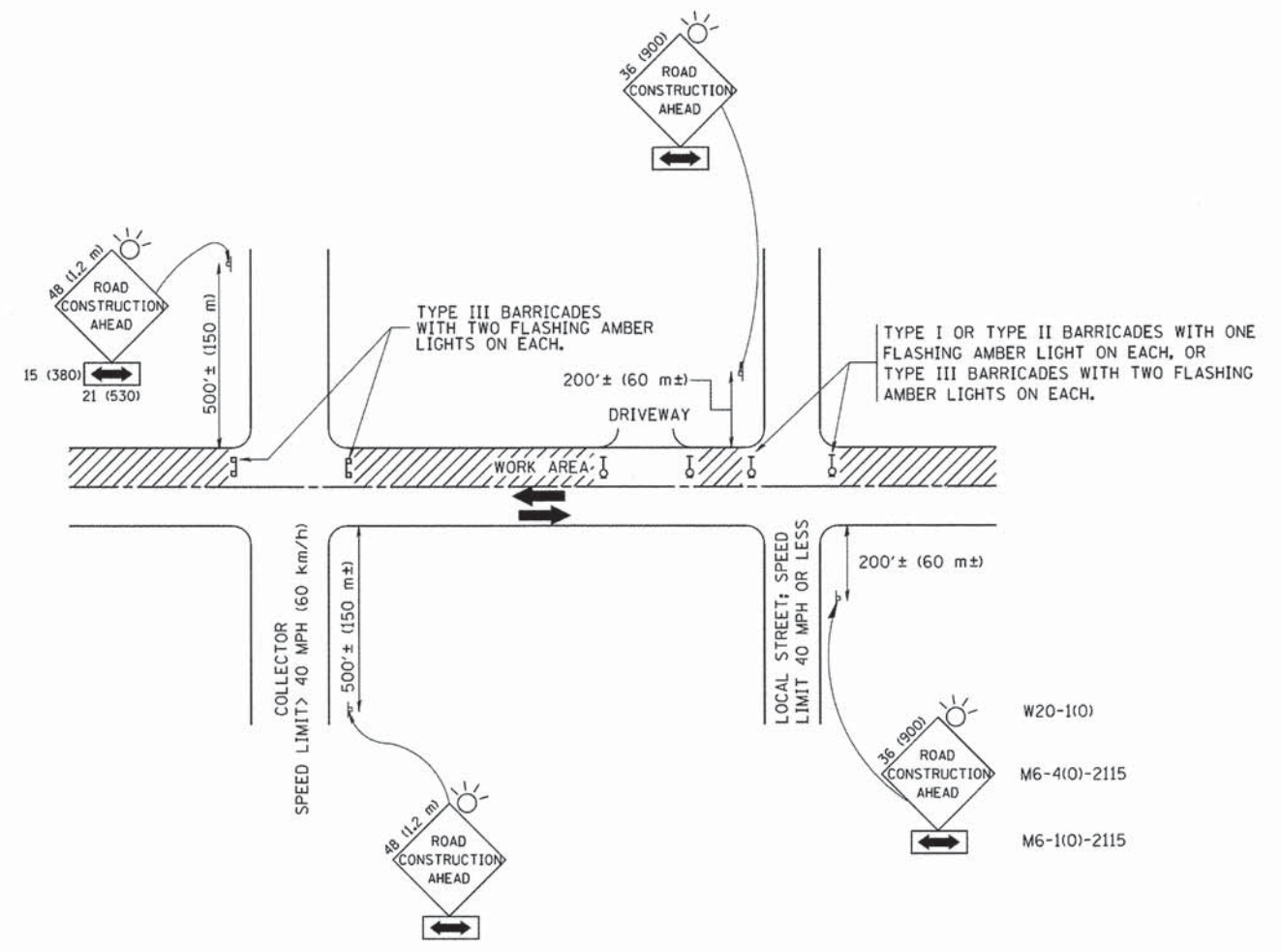
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		PLOT SCALE = 50,000 / IN.	REVISED - R. SHAH 10-25-94
		PLOT DATE = 1/4/2008	REVISED - R. SHAH 06-12-96

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

DETAIL OF STORM SEWER
 CONNECTION TO EXISTING SEWER

SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	149
BD500-01 (BD-7)			CONTRACT NO. 63863	
FED. ROAD DIST. NO. 2 ILLINOIS FED. AID PROJECT				



TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

NOTES:

A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE ROAD CONSTRUCTION AHEAD SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.

C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.

D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

All dimensions are in millimeters (inches) unless otherwise shown.

COMPANY NAME: #COMPANY NAME
 PROJECT CONTACT: #proj. M. Jeff
 CLIENT: City of Aurora
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 FILE NAME: 8610218-01.dgn
 PLOT DRIVER: pdf.plt
 PEN TABLE: Struct 22x34.tbl

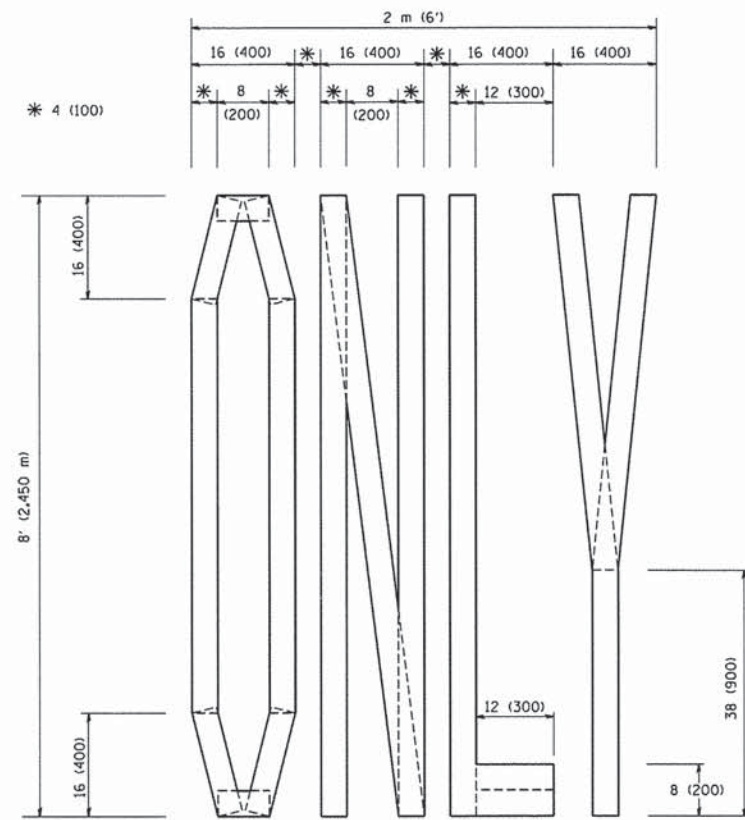
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		DRAWN -	REVISED - A. HOUSEH 03-06-96
	PLOT SCALE = 50,000' / IN.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 1/4/2008	DATE - 06-89	REVISED - T. RAMMACHER 01-06-00

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

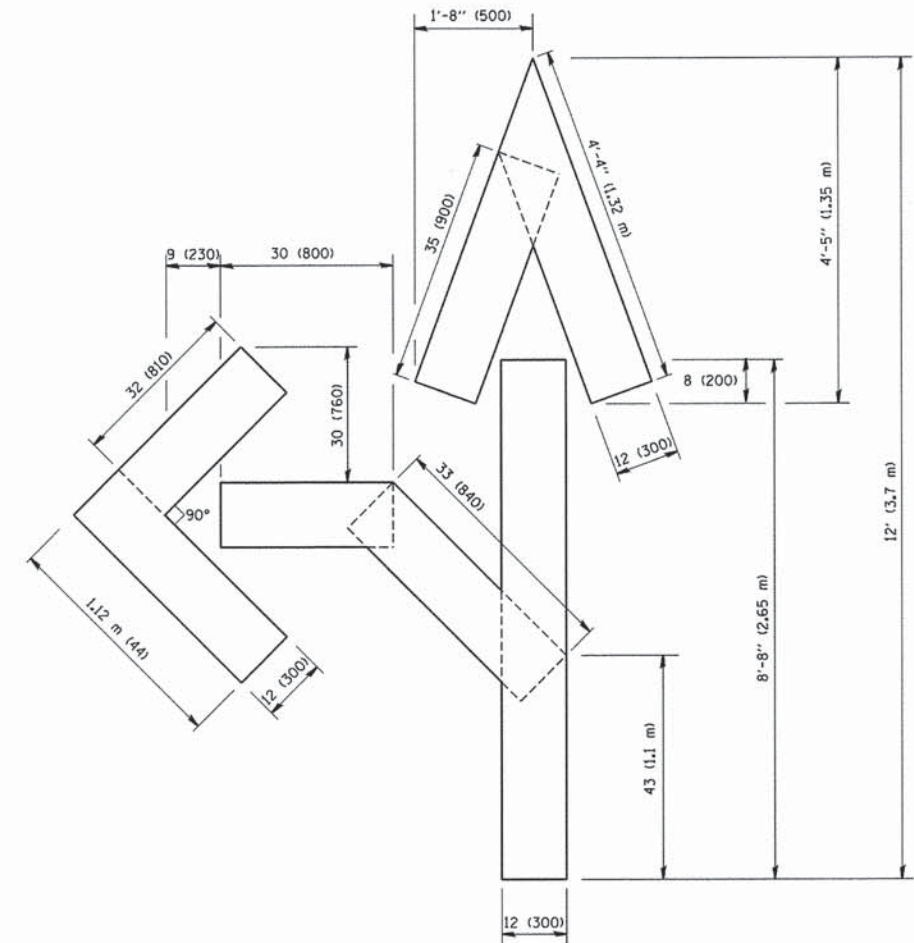
TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS			
SCALE:	SHEET NO.	OF SHEETS	STA. TO STA.

F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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TC-10				CONTRACT NO. 63863
FED. ROAD DIST. NO. 2 ILLINOIS FED. AID PROJECT				

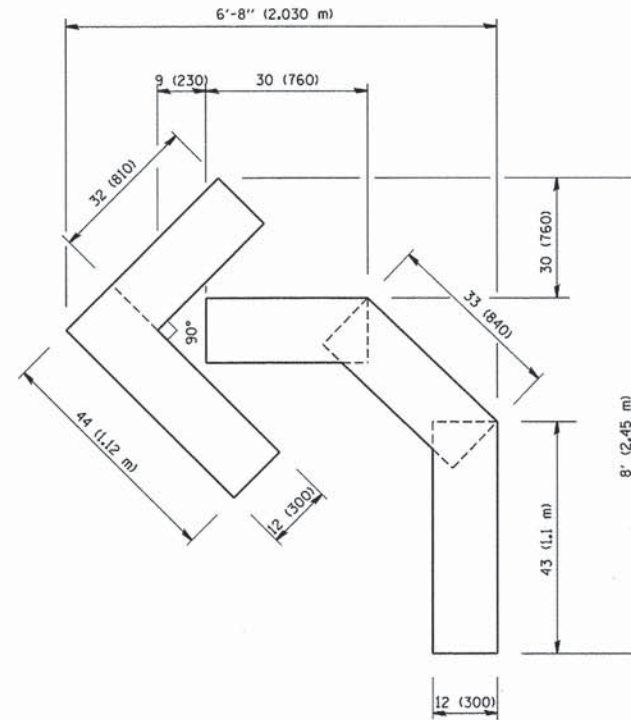
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QUANTITY
4 (100) LINE = 64.1 ft. (19.7 m)
21.1 sq. ft. (1.97 sq. m)



QUANTITY
4 (100) LINE = 82.5 ft. (25.3 m)
27.5 sq. ft. (2.53 sq. m)



QUANTITY
4 (100) LINE = 45.5 ft. (13.9 m)
15.2 sq. ft. (1.39 sq. m)

All dimensions are in inches (millimeters) unless otherwise shown.

COMPANY NAME:
PROJECT CONTACT:
DATE PLOTTED:
FILE NAME:
PLOT DRIVER:
PEN TABLE:

FILE NAME *
USER NAME * goglionobt

DESIGNED -
DRAWN -
PLOT SCALE * 50,0000 / IN.
PLOT DATE * 1/4/2008

REVISOR - T. RAMMACHER 06-05-96
REVISOR - T. RAMMACHER 11-04-97
CHECKED -
DATE - 09-18-94

REVISOR - T. RAMMACHER 03-02-98
REVISOR - E. GOMEZ 08-28-00

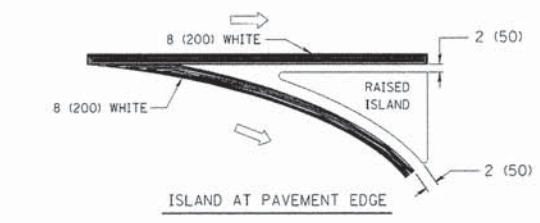
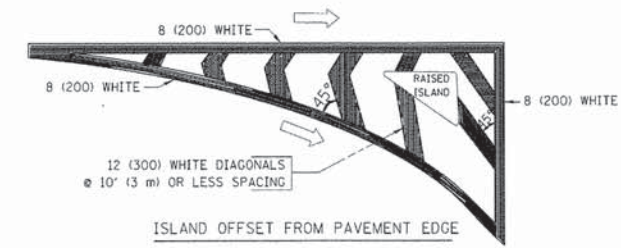
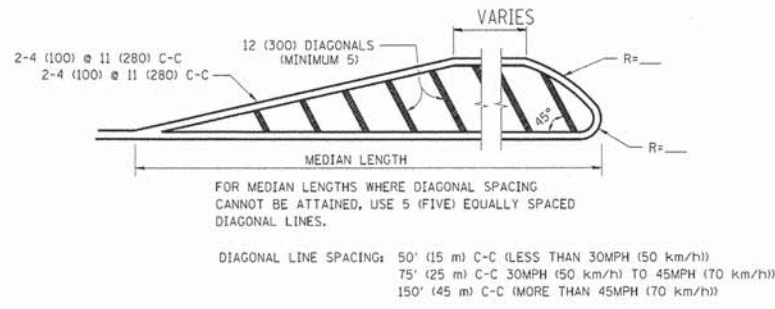
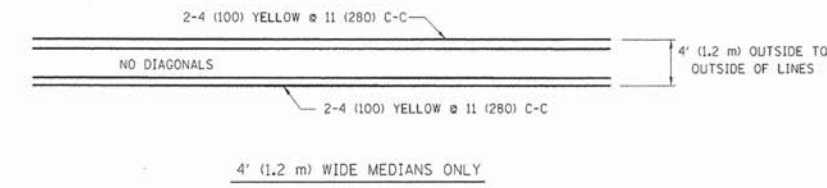
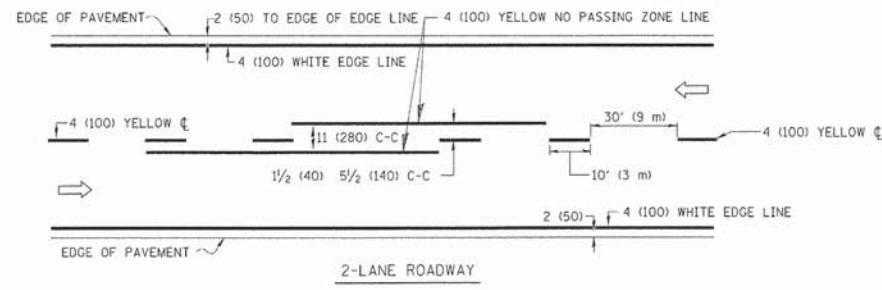
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING LETTERS AND SYMBOLS
FOR TRAFFIC STAGING

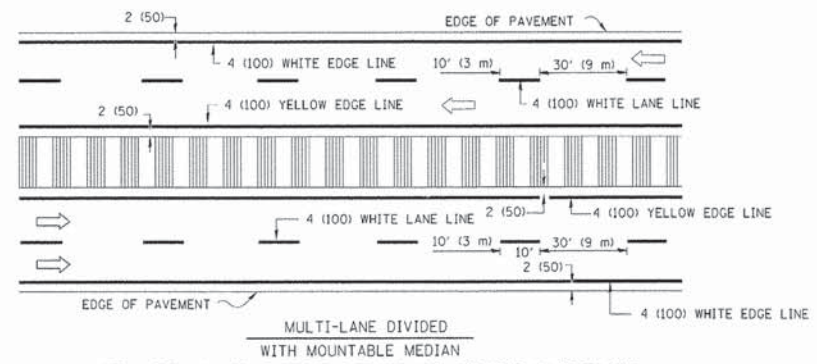
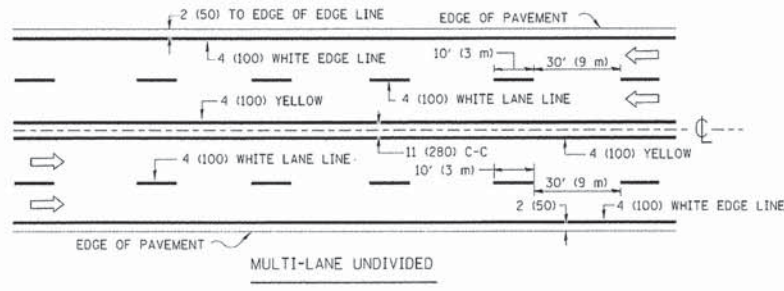
SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	151
TC-16			CONTRACT NO. 63863	
FED. ROAD DIST. NO. 2 ILLINOIS FED. AID PROJECT				

#MODELNAME#

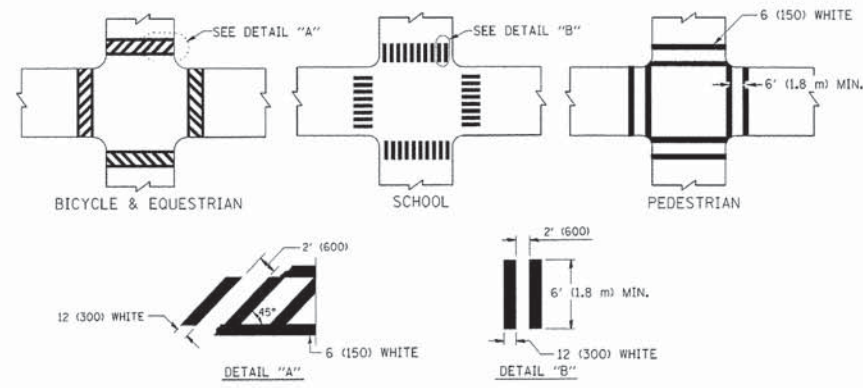


TYPICAL ISLAND MARKING

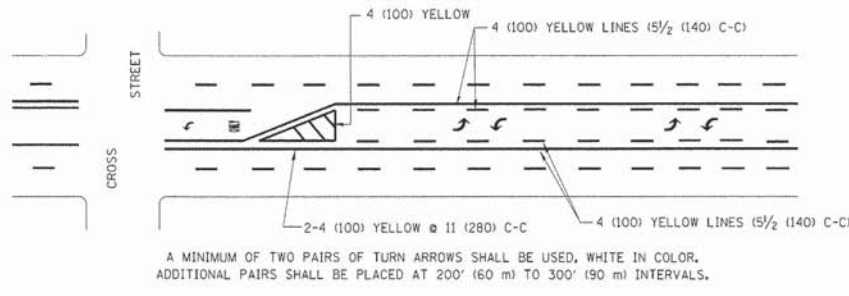


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

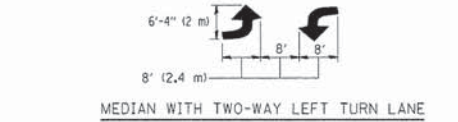
TYPICAL LANE AND EDGE LINE MARKING



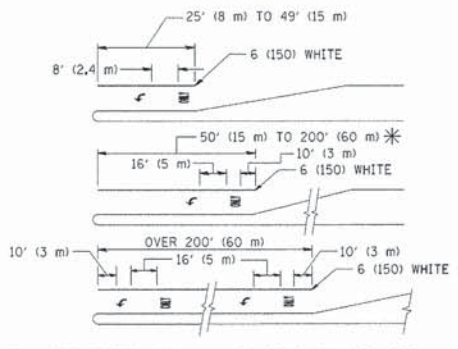
TYPICAL CROSSWALK MARKING



TYPICAL PAINTED MEDIAN MARKING



TYPICAL PAINTED MEDIAN MARKING



FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)

* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT, OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" 15 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m ²) EACH "X"=54.0 SQ. FT. (5.0 m ²)
SHOULDER DIAGONALS	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

All dimensions are in inches (millimeters) unless otherwise shown.

COMPANY NAME: Kiewit M. Jeff
PROJECT CONTACT: City of Aurora
CLIENT: 8/23/2013 8:26:18 AM
DATE PLOTTED: 8/23/2013 8:26:18 AM
FILE NAME: paf_DET-TIFF.dwg
PLOT DRIVER: paf_DET-TIFF.dwt
PEN TABLE: Struct 22x34.tbl

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	PLOT SCALE = 58.000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 9/9/2009	DATE - 03-19-90	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION			
SCALE:	SHEET NO.	OF SHEETS	STA. TO STA.

DISTRICT ONE TYPICAL PAVEMENT MARKINGS			
F.A.U. RITE:	SECTION	COUNTY	TOTAL SHEETS
1503	09-00286-00-BR	KANE	181
TC-13		CONTRACT NO. 63863	
FED. ROAD DIST. NO. 2 [ILLINOIS] FED. AID PROJECT			

SHEET NO.	181	SHEET NO.	152
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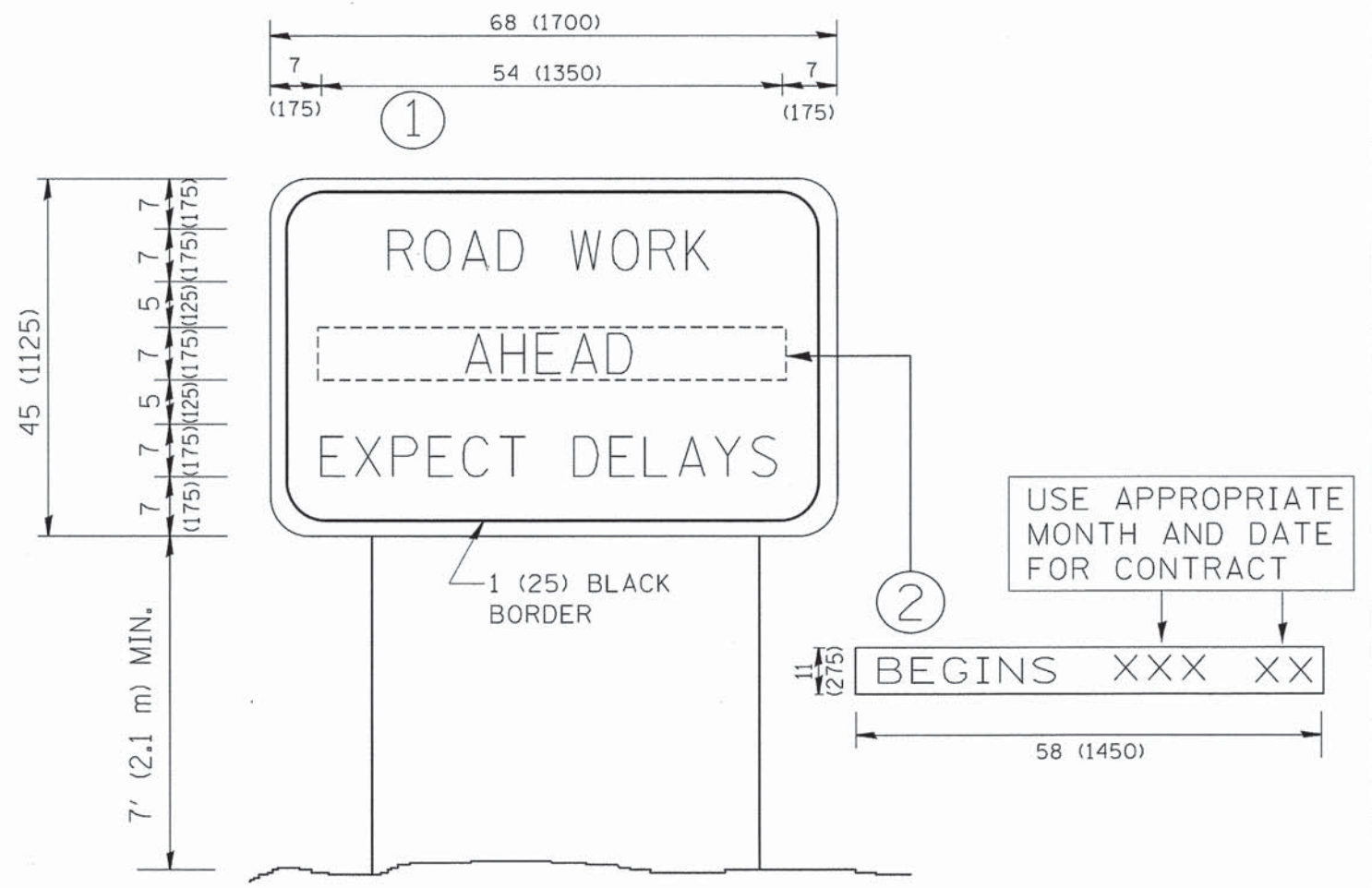
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 PROJECT CONTACT: #00000000
 CLIENT: City of Aurora
 DATE PLOTTED: 8/23/2013 8:37:04 AM
 FILE NAME: 8610218-021.dgn
 PLOT DRIVER: pdf_driver-1111.dif
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	PLOT DATE = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

ARTERIAL ROAD INFORMATION SIGN			
SCALE:	SHEET NO.	OF SHEETS	STA. TO STA.

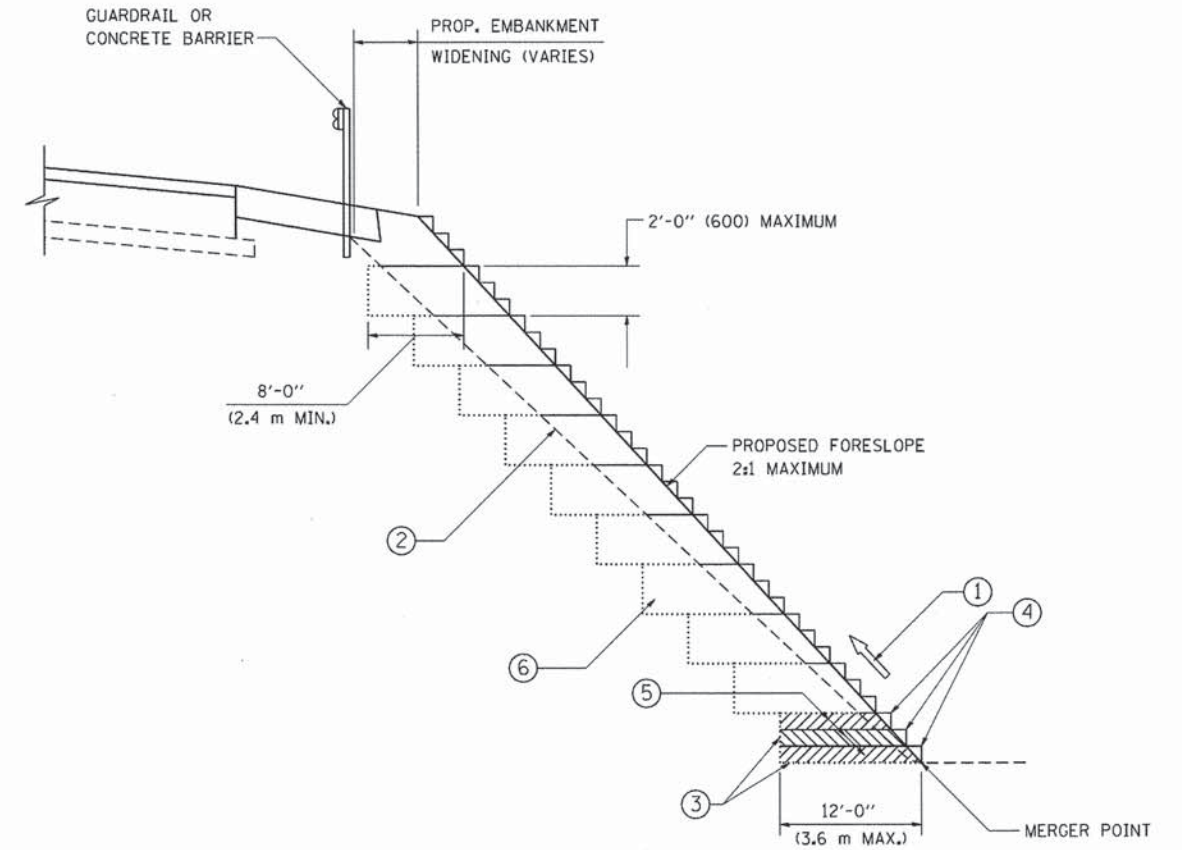
F.A.J. RTE. 1503	SECTION 09-00286-00-BR	COUNTY KANE	TOTAL SHEETS 181	SHEET NO. 153
TC-22		CONTRACT NO. 63863		
FED. ROAD DIST. NO. 2 ILLINOIS FED. AID PROJECT				



NOTES:

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS)
 UNLESS OTHERWISE SHOWN.



**TYPICAL BENCHING DETAIL
FOR EMBANKMENT**

NOTES:

- ① CONSTRUCT SUCCEEDING BENCH CUTS AND EMBANKMENT PLACEMENT AND COMPACTION FROM BOTTOM TO TOP IN STAIRSTEP FASHION.
- ② EXISTING FORESLOPE PREPARED IN ACCORDANCE WITH ARTICLE 205.03 OF THE STANDARD SPECIFICATIONS.
- ③ BENCH CUT EXISTING SLOPE TYPICAL FOR EACH STEP.
- ④ TRIM TO FINAL SLOPE.
- ⑤ EQUAL 8-INCH (200) LIFTS OF EMBANKMENT COMPACTED IN ACCORDANCE WITH ARTICLE 205.05 OF THE STANDARD SPECIFICATIONS.
- ⑥ EXCAVATION OF BENCH CUTS WITHIN EXISTING EMBANKMENT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC METER OR CUBIC YARD FOR "EARTH EXCAVATION". THIS PRICE WILL INCLUDE ALL LABOR AND MATERIAL, NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- ⑦ SLOPES SHALL BE BENCHED ACCORDING TO THIS DETAIL WHEN THE SLOPE IS STEEPER THAN 4:1 AND THE HEIGHT IS GREATER THAN 5' (1.5 m).

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS)
UNLESS OTHERWISE SHOWN.

COMPANY NAME: #COMPANY.NAMES
PROJECT CONTACT: Kevin M. Arff
CLIENT: City of Aurora
DATE PLOTTED: 04/20/08 8:52 AM
PLOT BRWNR: gkg
PEN TABLE: Struct 22x34.tbl

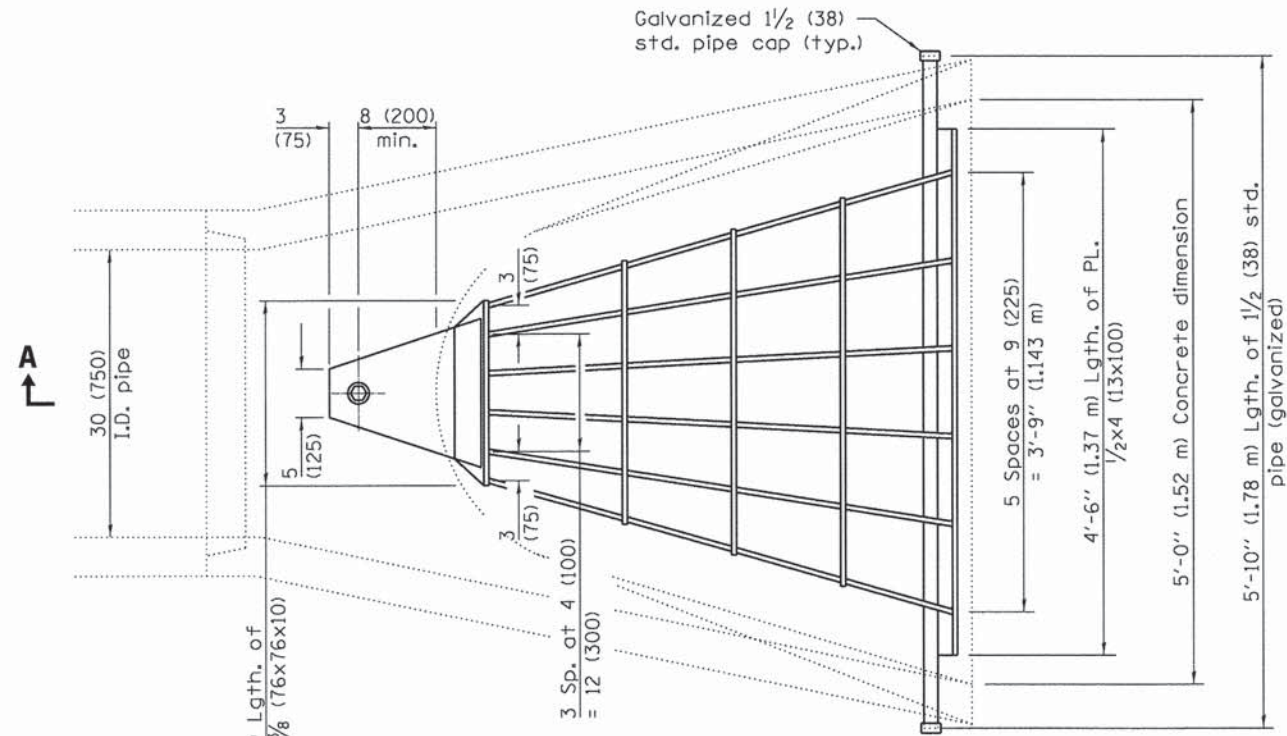
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		DRAWN - CADD	REVISED -
		CHECKED - S.E.B.	REVISED -
		DATE - 06-16-04	REVISED -
PLOT SCALE = 50.0000 "/ IN.			
PLOT DATE = 1/4/2008			

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

BENCHING DETAIL FOR EMBANKMENT WIDENING			
SCALE: NONE	SHEET NO. 1	OF 1 SHEETS	STA. TO STA.

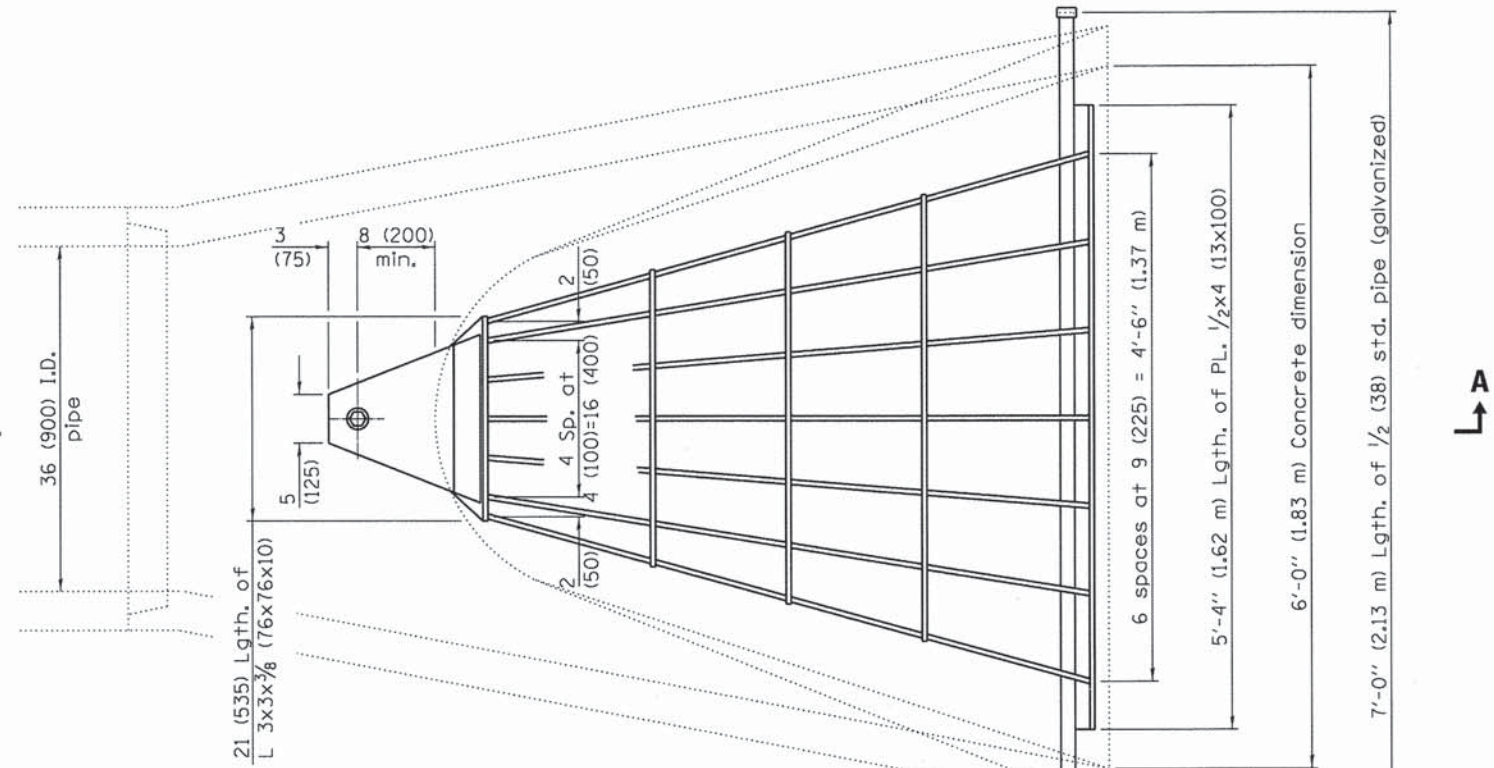
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	155
BD-51			CONTRACT NO.	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

#MODEL.NAMES



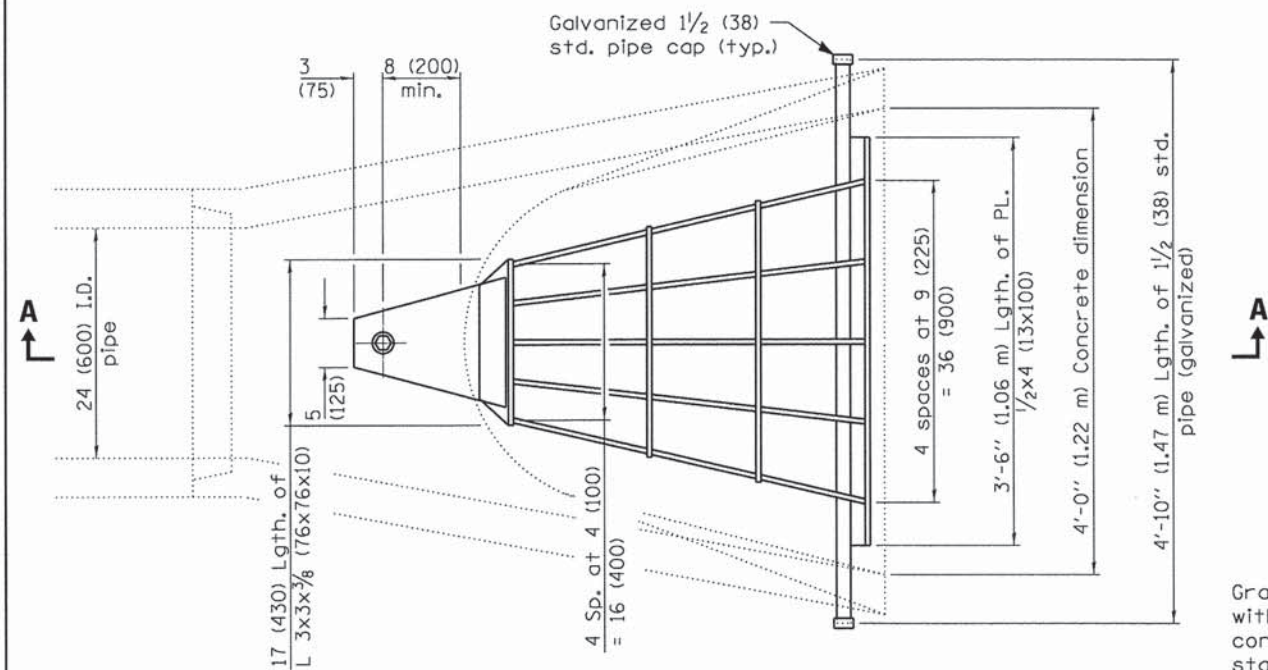
PLAN

Quantity of steel = 210 lbs. (95 kg)



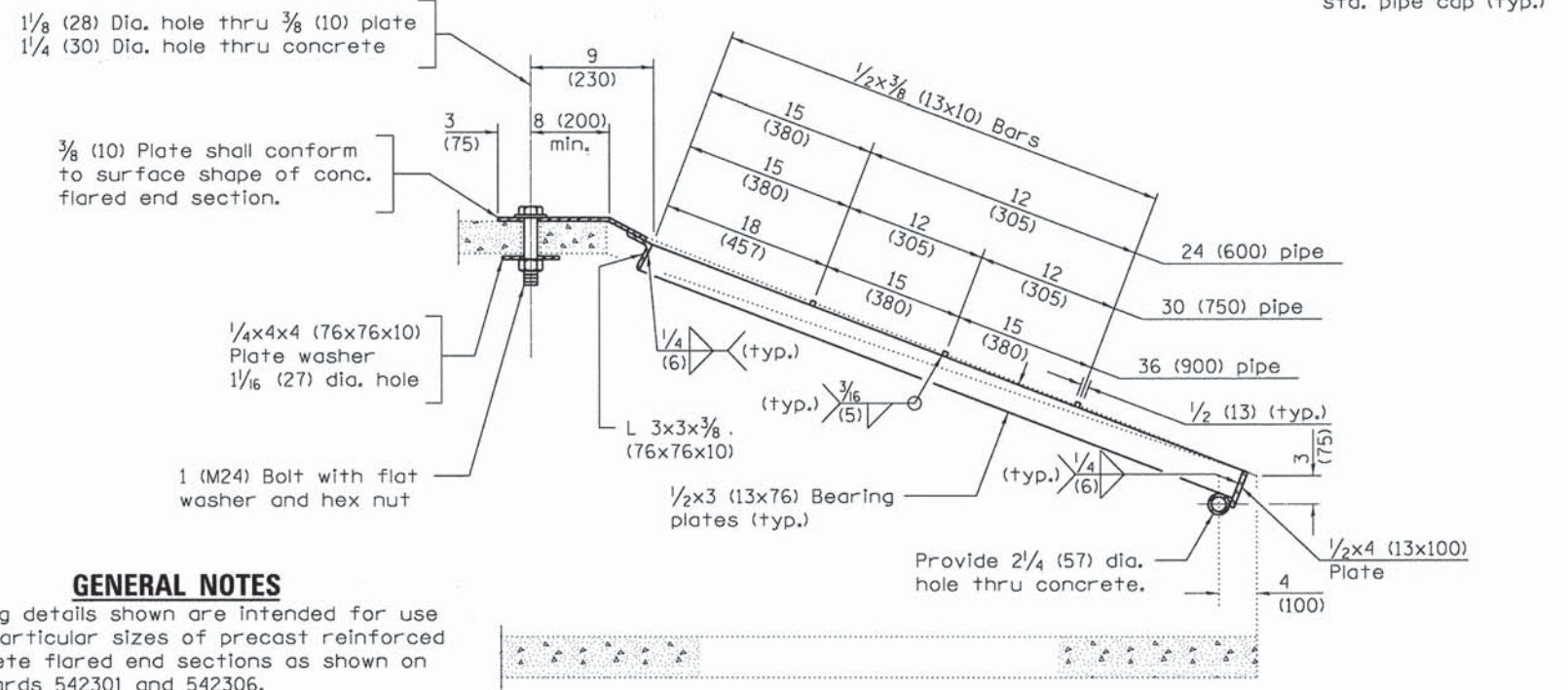
PLAN

Quantity of steel = 280 lbs. (127 kg)



PLAN

Quantity of steel = 150 lbs. (68 kg)



GENERAL NOTES

Grating details shown are intended for use with particular sizes of precast reinforced concrete flared end sections as shown on standards 542301 and 542306.

Approximate quantity of steel shown includes total quantity of grating, bolts, nuts, washers and steel pipe.

Holes in the precast concrete flared end sections shall be cored to the diameters noted. If cone-out on the other end of the hole occurs, the hole shall be filled with grout to correct the diameter of the hole.

SECTION A-A

All dimensions are in inches (millimeters) unless otherwise shown.

COMPANY NAME: HRGreen.com
 PROJECT CONTACT: W. J. H. (WJH)
 CLIENT: State of Illinois
 DATE PLOTTED: 8/23/2013 8:49:06 AM
 FILE NAME: 86110310-DET.dgn
 PLOT DRIVER: pdf_PLOT-11f.dft
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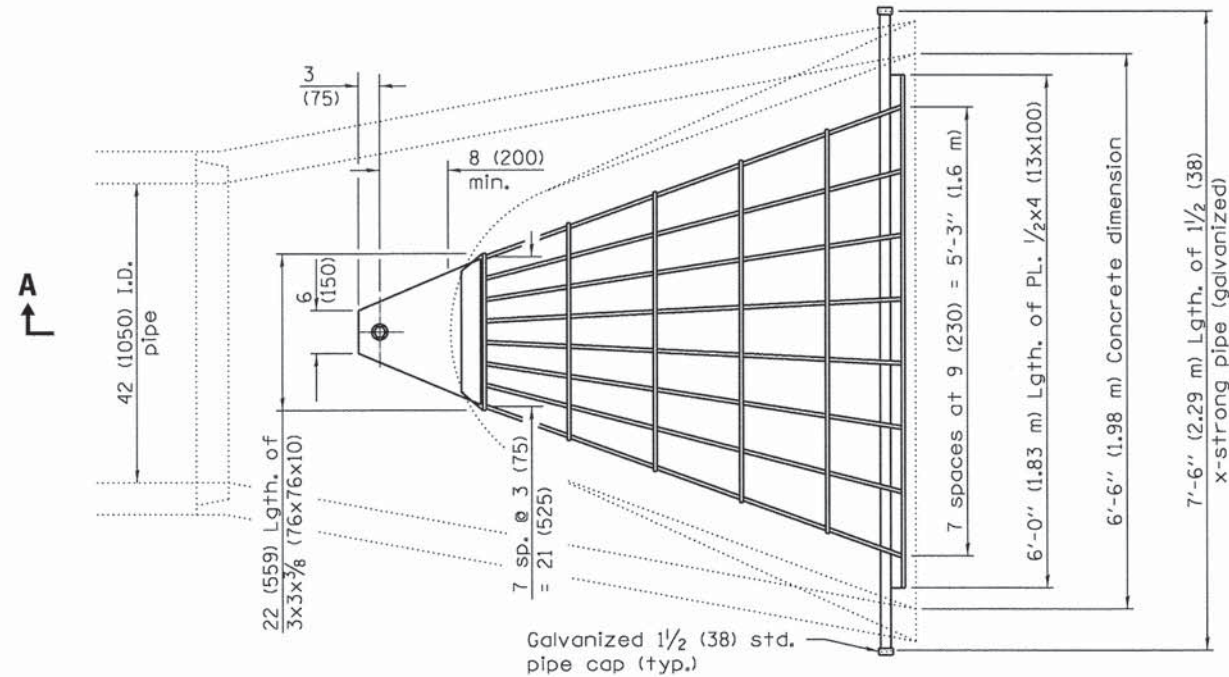


USER NAME = wjhd	DESIGNED - KMA	REVISED -
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PLOT SCALE =	CHECKED - RDG	REVISED -
PLOT DATE = 8/23/2013	DATE - 8/23/13	REVISED -

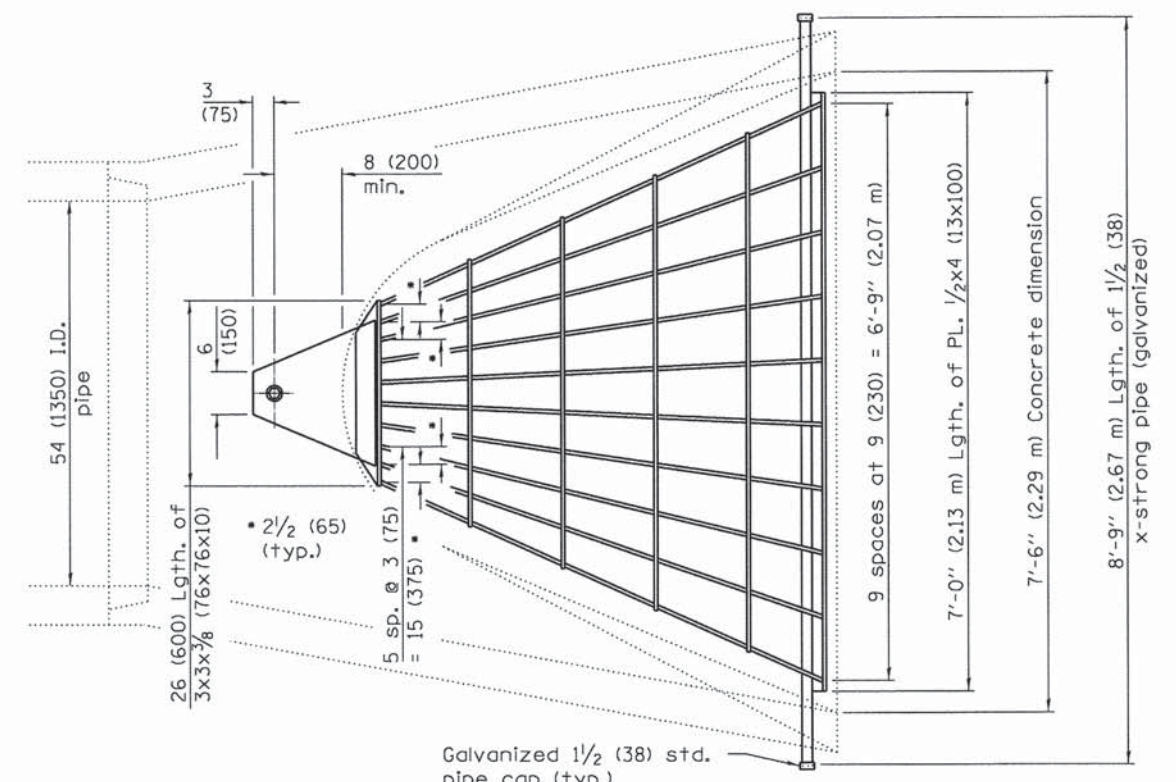
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER GRATING FOR CONCRETE FLARED END SECTIONS (FOR 24" THRU 54" PIPE)		F.A.I. RTE 1503	SECTION 09-00286-00-BR	COUNTY KANE	TOTAL SHEETS 181	SHEET NO. 156
SCALE:	SHEET NO. 1 OF 2 SHEETS	STA.	TO STA.	CONTRACT NO. 63863		

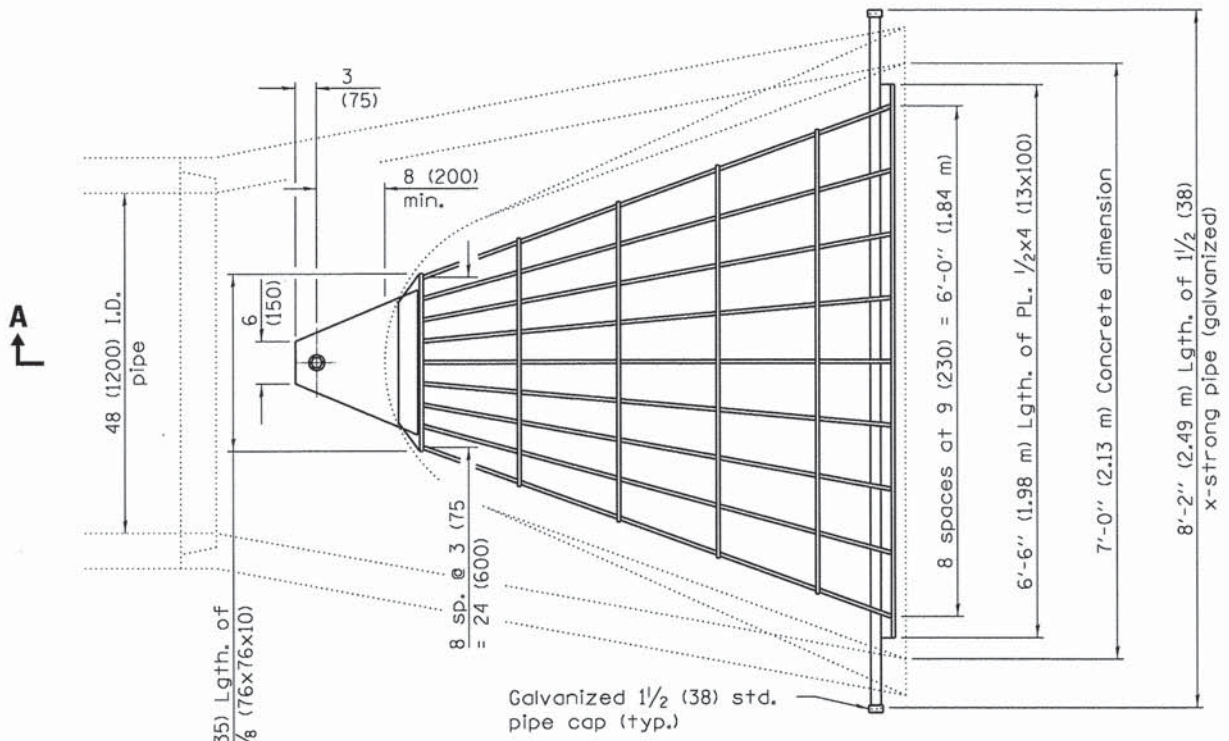
FED. ROAD DIST. NO. 2		ILLINOIS FED. AID PROJECT	
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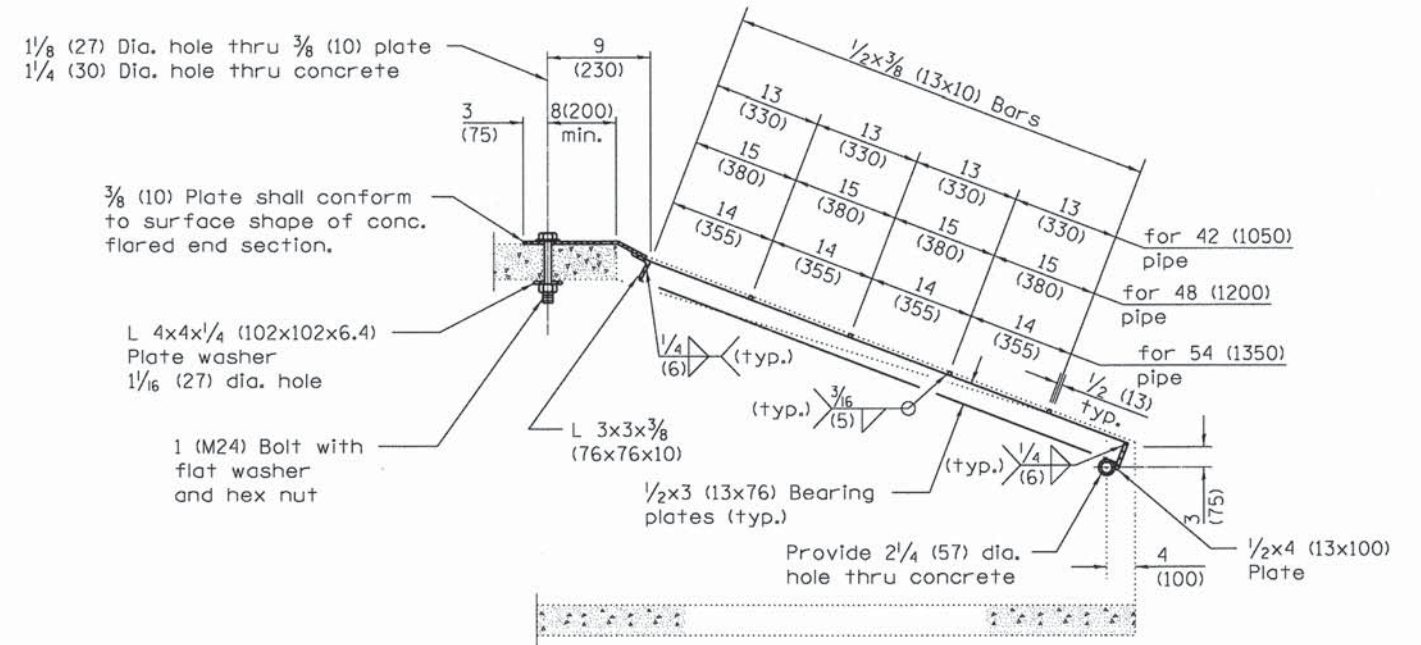
PLAN
Quantity of steel = 320 lbs. (145 kg)



PLAN
Quantity of steel = 425 lbs. (193 kg)



PLAN
Quantity of steel = 400 lbs. (181 kg)



SECTION A-A

COMPANY NAME: HRGreen.com
 PROJECT CONTACT: Kevin M. Arf
 CLIENT: City of Aurora
 DATE PLOTTED: 8/23/2013 8:49:40 AM
 FILE NAME: 86110318-DET.dgn
 PLOT DRIVER: pdf,DEF-TIFF.plt
 PEN TABLE: Struct 22x34.tbl

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Illinois Professional Design Firm	FILE NAME = 86110318-DET.dgn	DRAWN - WJH	REVISED -
#194-01322	PLOT SCALE =	CHECKED - RDG	REVISED -
	PLOT DATE = 8/23/2013	DATE - 8/23/13	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

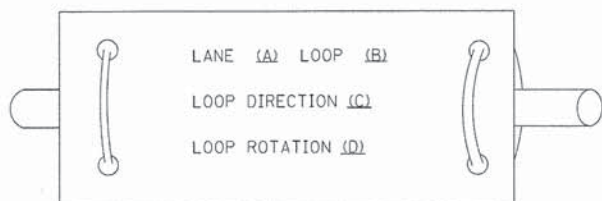
INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER GRATING FOR CONCRETE FLARED END SECTIONS (FOR 24" THRU 54" PIPE)		F.A.J. RTE 1503	SECTION 09-00286-00-BR	COUNTY KANE	TOTAL SHEETS 181	SHEET NO. 157
SCALE:	SHEET NO. 2 OF 2 SHEETS	STA.	TO STA.	CONTRACT NO. 63983		

F.A.J. RTE 1503	SECTION 09-00286-00-BR	COUNTY KANE	TOTAL SHEETS 181	SHEET NO. 157
FED. ROAD DIST. NO. 2 ILLINOIS FED. AID PROJECT				

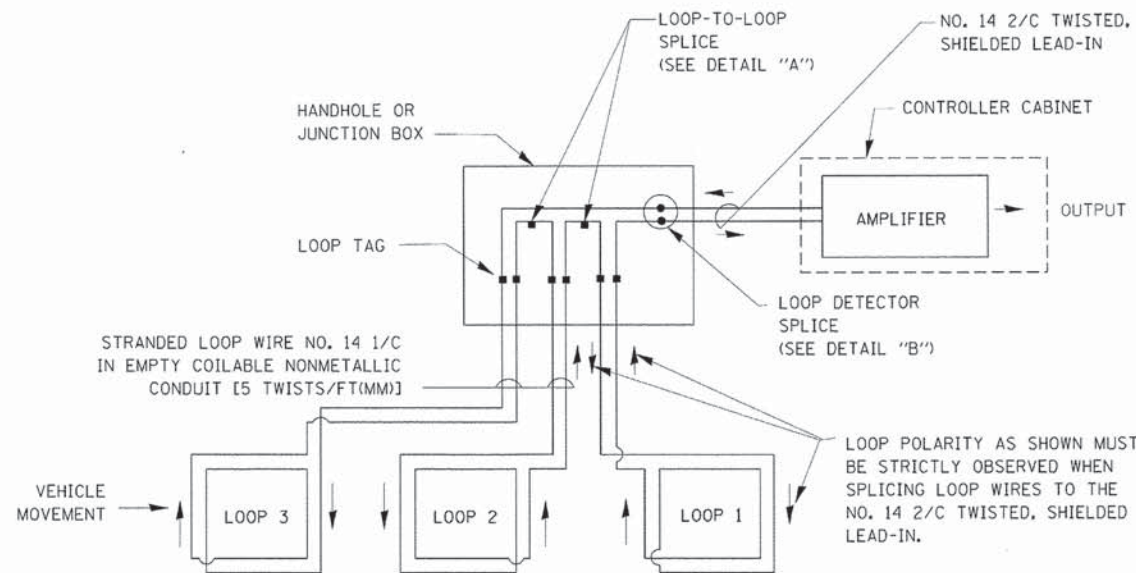
LOOP DETECTOR NOTES

1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVESHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

LOOP LEAD-IN CABLE TAG

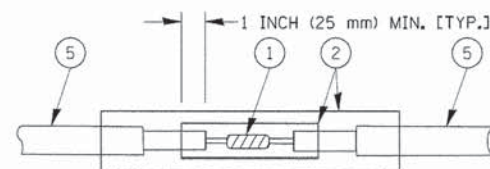


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

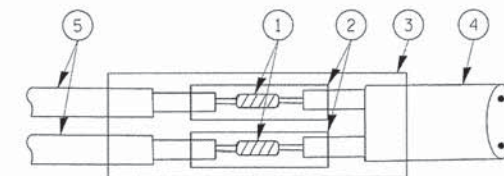


DETECTOR LOOP WIRING SCHEMATIC

- LOOPS SHALL BE SPLICED IN SERIES.
- SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm). IF IN CONCRETE, THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.

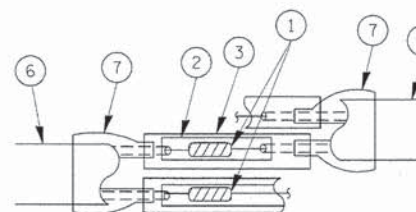


**DETAIL "A"
LOOP-TO-LOOP SPLICE**

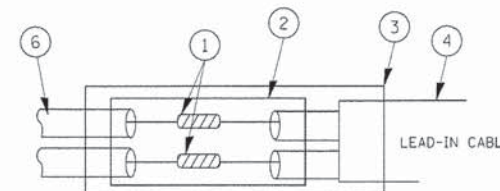


**DETAIL "B"
LOOP-TO-CONTROLLER SPLICE**

TYPE I LOOP



**DETAIL "A"
LOOP-TO-LOOP SPLICE**



**DETAIL "B"
LOOP-TO-CONTROLLER SPLICE**

LOOP DETECTOR SPLICE

- 1 WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH.
- 2 WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- 3 WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGTH 6" (150 mm), UNDERWATER GRADE.
- 4 NO. 14 2/C TWISTED, SHIELDED CABLE.
- 5 LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
- 6 PRE-FORMED LOOP
- 7 XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS, TYCO CBR-2 OR APPROVED EQUAL

COMPANY NAME: KENNEDY
PROJECT CONTACT: Knuth, M. Krft
CLIENT: City of Aurora
DATE PLOTTED: 8/23/2013 8:50:43 AM
FILE NAME: 0810318-DET.dwg
PLOT DRIVER: pdf.LOT-TIFF.dpf
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

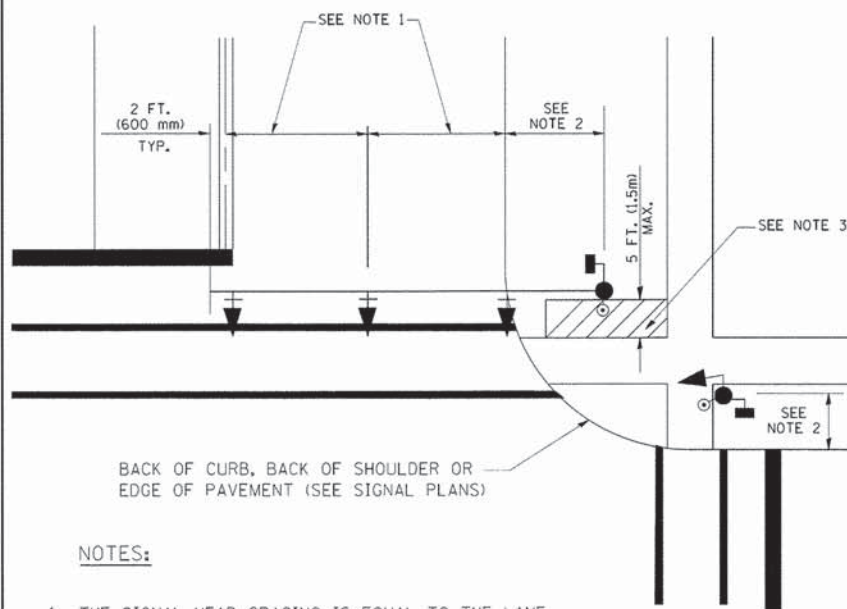
SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	158
TS-05		CONTRACT NO. 63863		
FED. ROAD DIST. NO. 2 ILLINOIS FED. AID PROJECT				

#MODELNAME#

TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

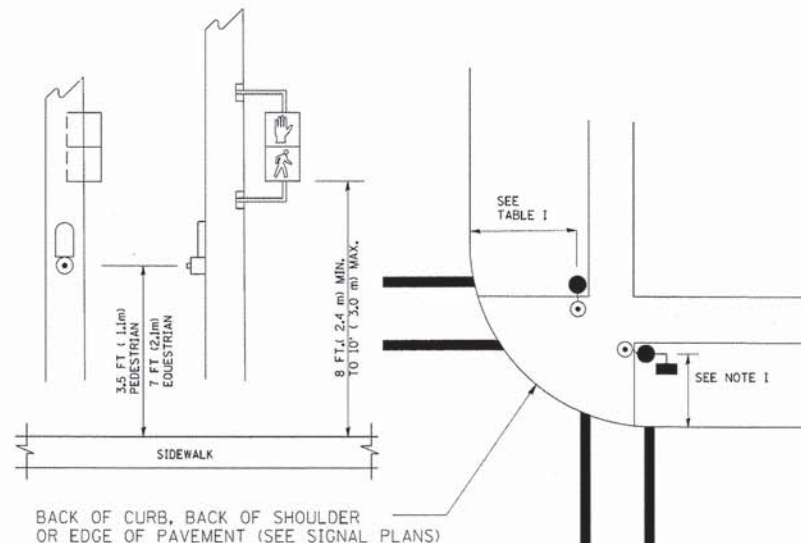
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



NOTES:

1. THE SIGNAL HEAD SPACING IS EQUAL TO THE LANE WIDTH OR AS SHOWN ON THE TRAFFIC SIGNAL PLAN.
2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
3. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST.
4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
5. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

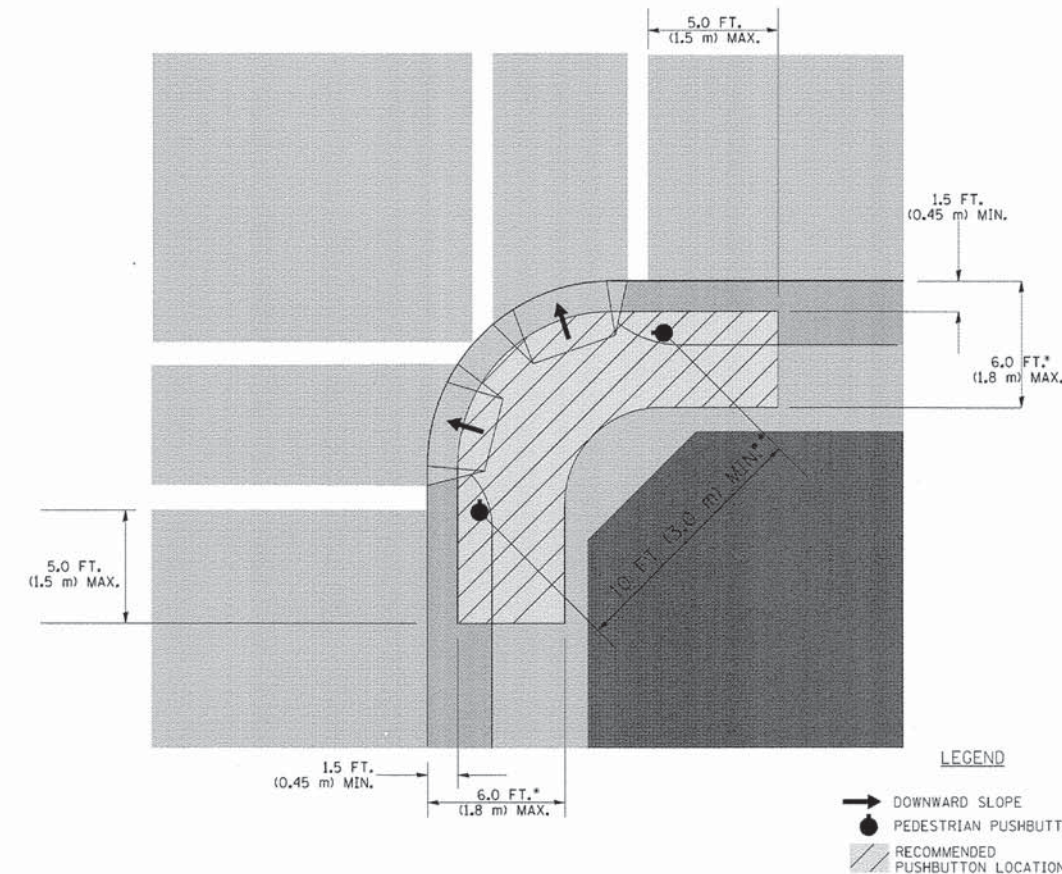
PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST



NOTES:

1. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
2. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE PEDESTRIAN SIGNAL POST OR THE PEDESTRIAN PUSH BUTTON POST.
3. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
4. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

RECOMMENDED PUSHBUTTON LOCATIONS



LEGEND
 ↓ DOWNWARD SLOPE
 ● PEDESTRIAN PUSHBUTTON
 ▨ RECOMMENDED PUSHBUTTON LOCATIONS

- WHERE THERE ARE CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5 FT (0.45 m) AND 6 FT (1.8 m) FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT, IT SHOULD NOT BE FURTHER THAN 10 FT (3 m) FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
- WHERE THERE ARE CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT IMPRACTICAL TO PROVIDE THE 10 FT (3 m) SEPERATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

NOTES:

1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) OF A VEHICULAR SIGNAL FACE THAT IS NOT LOCATED OVER A HIGHWAY SHALL BE AT LEAST 8 FT (2.4 m) BUT NOT MORE THAN 19 FT (5.8 m) ABOVE THE SIDEWALK OR, IF THERE IS NO SIDEWALK, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY.
3. THE BOTTOM OF THE SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001, 877002, 877006, 877011 AND 877012 WITH A MINIMUM OF 16 FT (5.0 m) AND A MAXIMUM OF 18 FT (5.5 m) FROM THE HIGHEST POINT OF PAVEMENT.
4. THE BOTTOM OF THE TEMPORARY SPAN WIRE MOUNTED SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARD 880001 WITH A MINIMUM OF 17 FT (5.18 m) FROM THE HIGHEST POINT OF PAVEMENT.
5. THE TOP OF THE SIGNAL HOUSING OF A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL NOT BE MORE THAN 25.6 FT (7.8 m) ABOVE THE PAVEMENT.

TRAFFIC SIGNAL EQUIPMENT OFFSET

TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN PUSHBUTTON POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TEMPORARY WOOD POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
CONTROLLER CABINET	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.
SERVICE INSTALLATION, GROUND MOUNT	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.

NOTES:

1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TO THE ROADWAY SIDE OF THE FOUNDATION.
4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS, FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" CHART AND THE TRAFFIC SIGNAL INSTALLATION PLAN, COULD AFFECT THE PLACEMENT OF THE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS AND THE PEDESTRIAN PUSHBUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL INSTALLATION PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE. THE PROPOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THE ABOVE REQUIREMENTS. THE PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS MUST MEET THE REQUIREMENTS UNDER THE DETAILS ON THIS SHEET.

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 PROJECT CONTACT: City of Aurora
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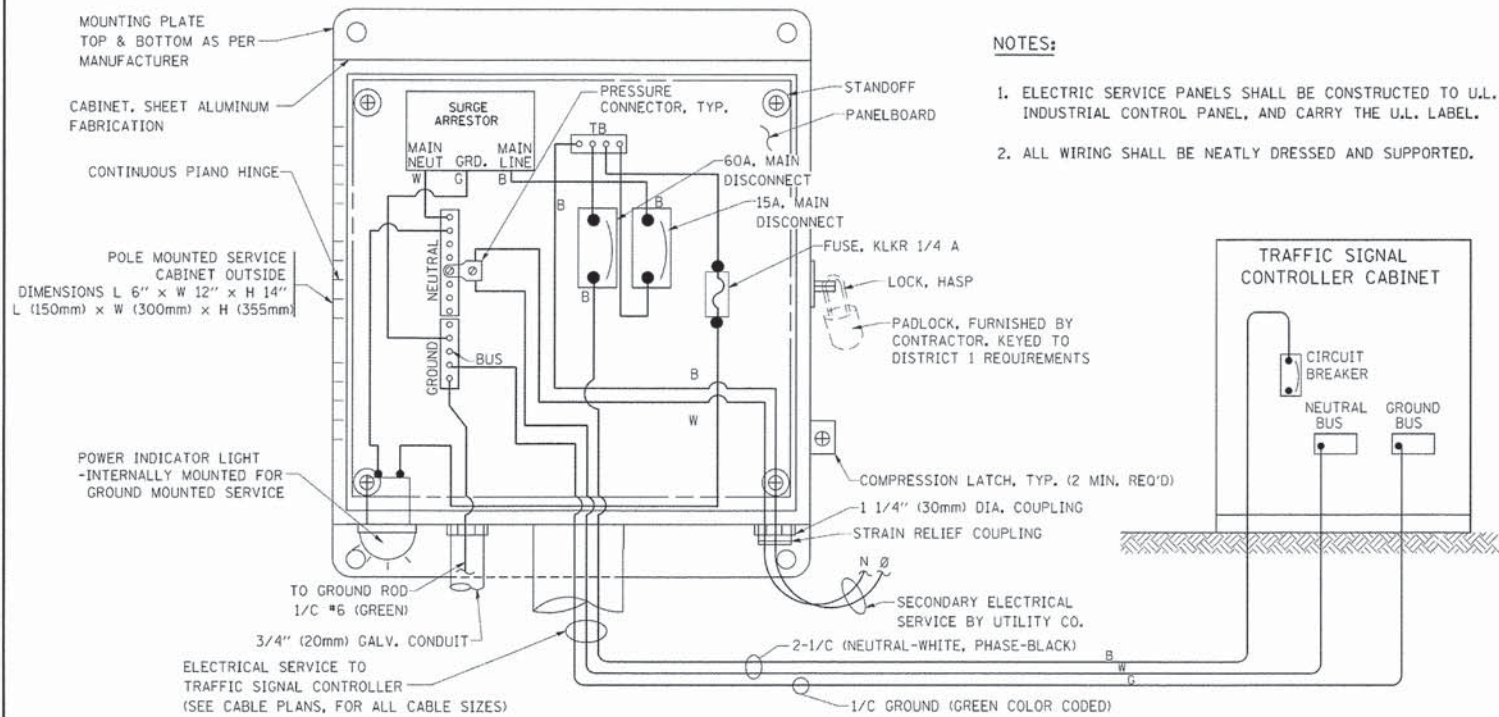
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE
 STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

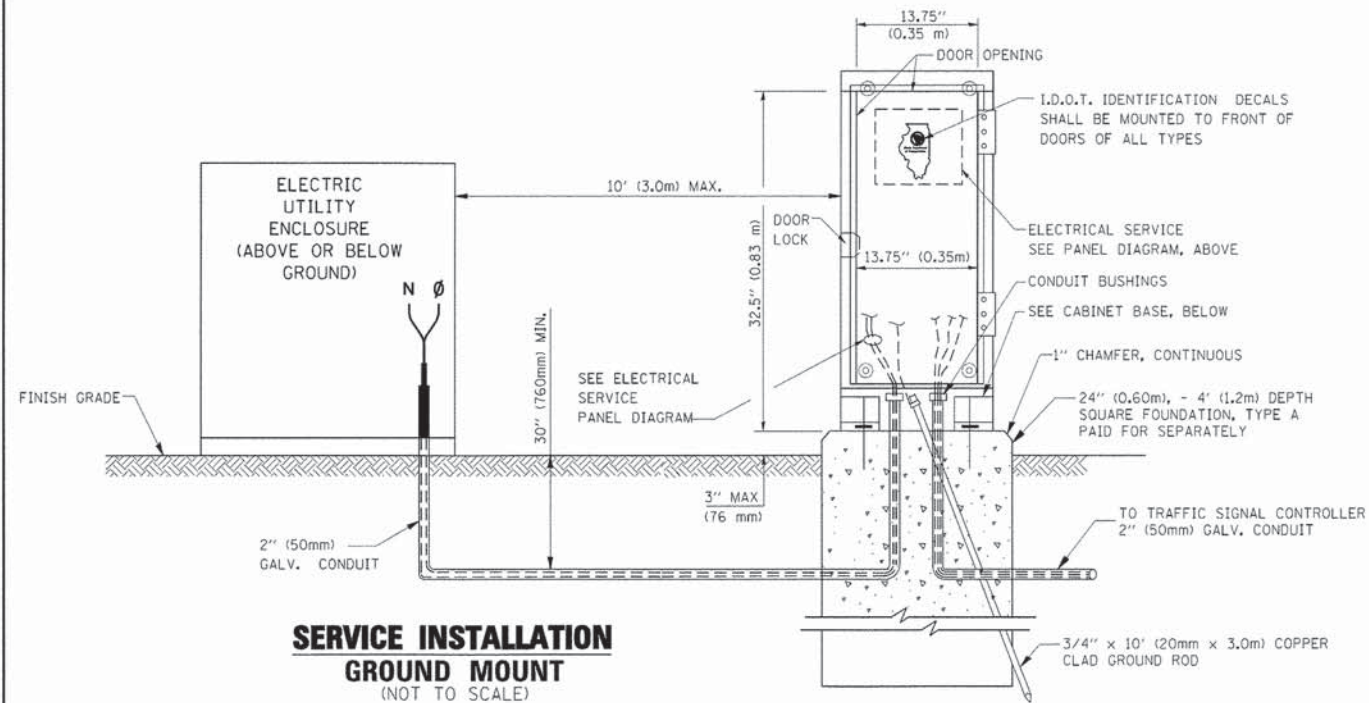
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TS-05		CONTRACT NO. 63863		
FED. ROAD DIST. NO. 2 [ILLINOIS] FED. AID PROJECT				

#MODELNAME#

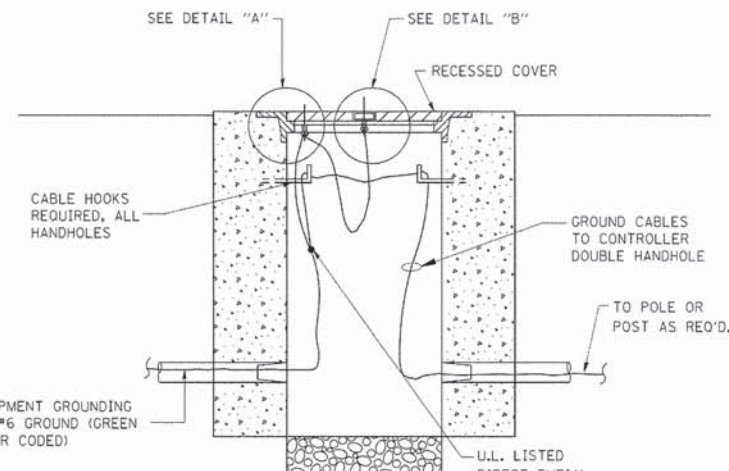
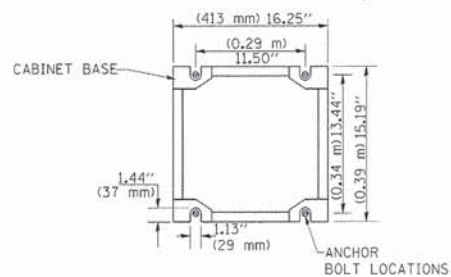


ELECTRICAL SERVICE – PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)
SERVICE INSTALLATION POLE MOUNT (SHOWN)
 (NOT TO SCALE)

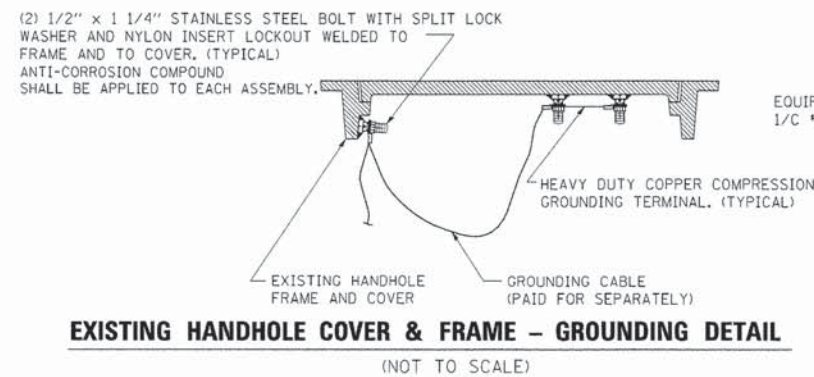


SERVICE INSTALLATION GROUND MOUNT
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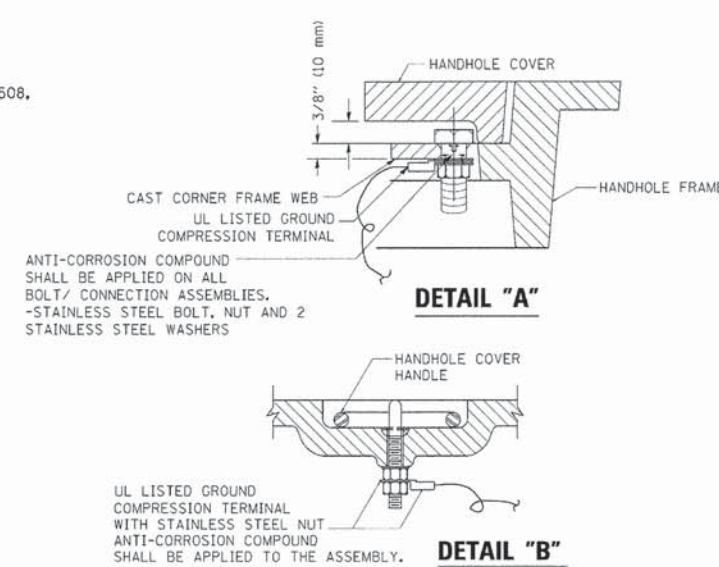
CABINET – BASE BOLT PATTERN
 (NOT TO SCALE)



HANDHOLE COVER & FRAME – GROUNDING DETAIL
 (NOT TO SCALE)



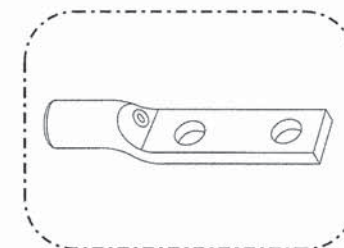
EXISTING HANDHOLE COVER & FRAME – GROUNDING DETAIL
 (NOT TO SCALE)



NOTES:

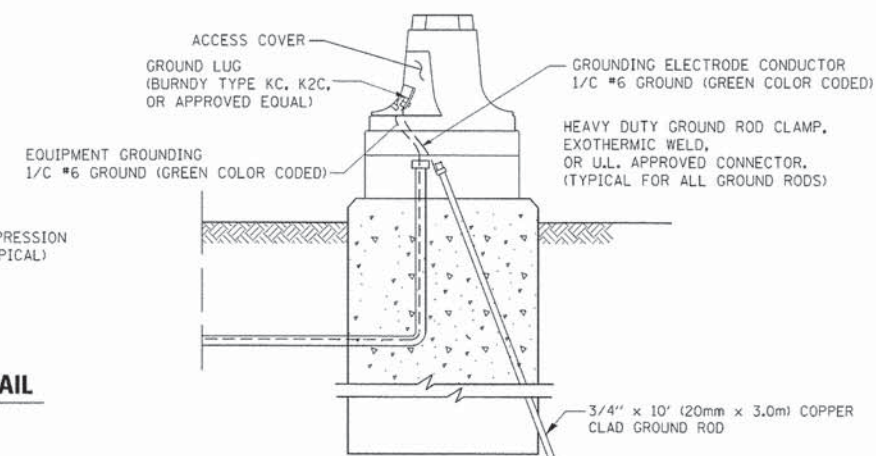
GROUNDING SYSTEM

1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC.). GROUND ROD SHALL BE 3/4" DIA. x 10'-0" (20mm x 3.0m) LONG, COPPER CLAD. ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.
2. THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
3. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
4. THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.



NOTES:

- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
- GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



MAST ARM POLE / POST-GROUNDING DETAIL
 (NOT TO SCALE)

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 PROJECT CONTACT: City of Aurora
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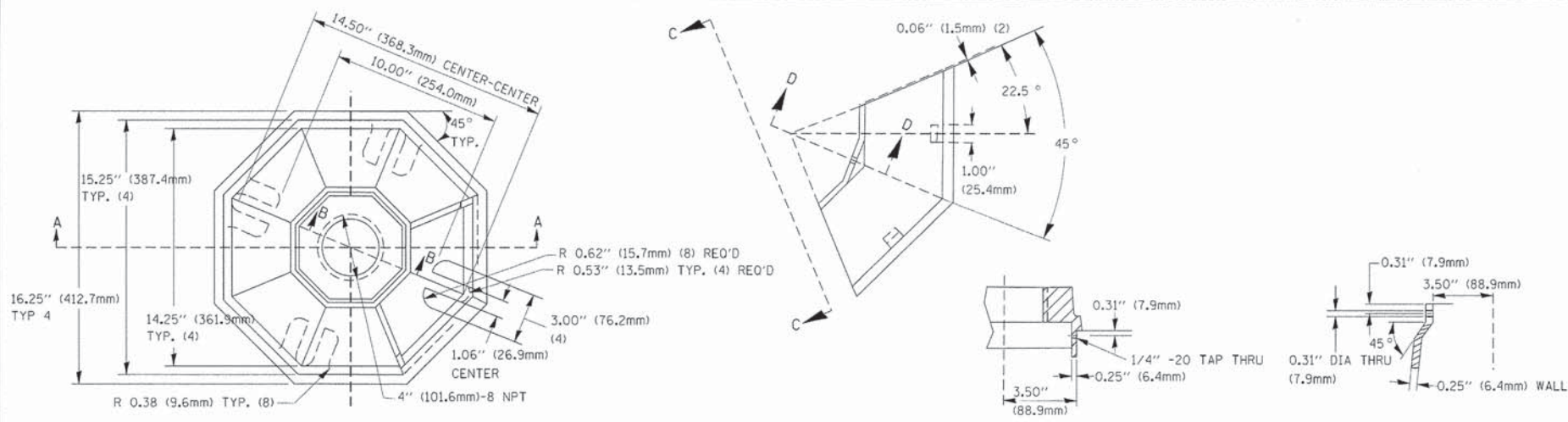
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: SHEET NO. OF SHEETS STA. TO STA.

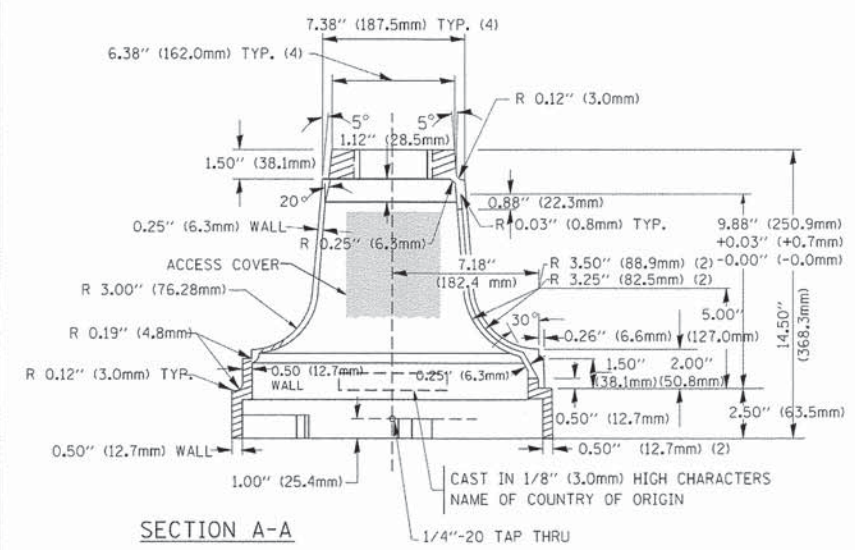
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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TS-05		CONTRACT NO. 63863		
FED. ROAD DIST. NO. 2 ILLINOIS FED. AID PROJECT				



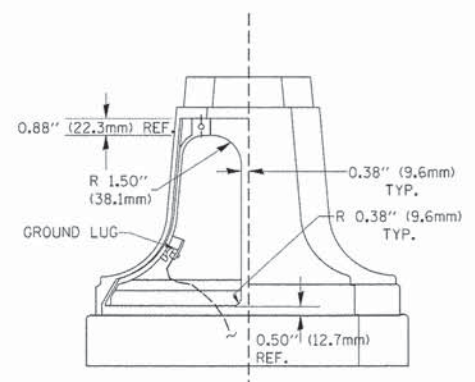
TOP VIEW

SECTION B-B

SECTION D-D

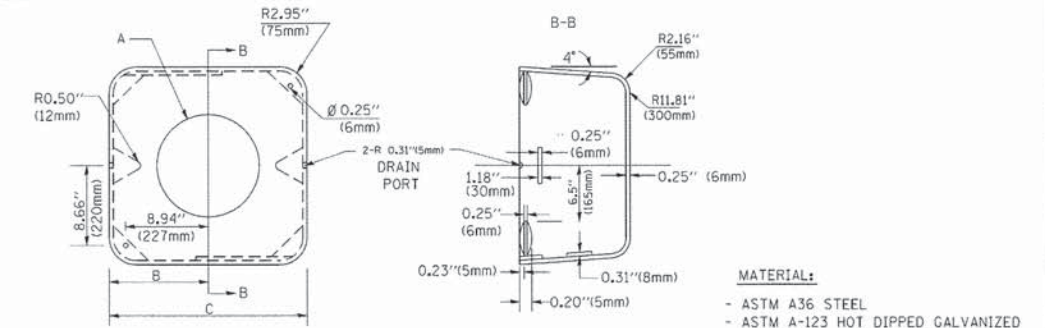


SECTION A-A



VIEW C-C

TRAFFIC SIGNAL POST - MOUNTING BASE - TYPE A



SHROUD

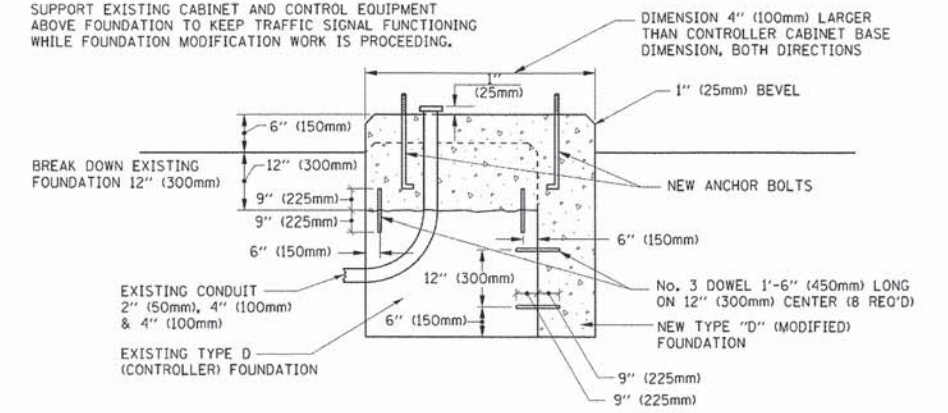
A	B	C	HEIGHT	WEIGHT
VARIES	9.5\"(241mm)	19\"(483mm)	7\"(178mm) - 12\"(300mm)	53 lbs (24kg)
VARIES	10.75\"(273mm)	21.5\"(546mm)	7\"(178mm) - 12\"(300mm)	68 lbs (31 kg)
VARIES	13.0\"(330mm)	26\"(660mm)	7\"(178mm) - 12\"(300mm)	81 lbs (37 kg)
VARIES	18.5\"(470mm)	37\"(940mm)	7\"(178mm) - 12\"(300mm)	126 lbs (57 kg)

NOTES:

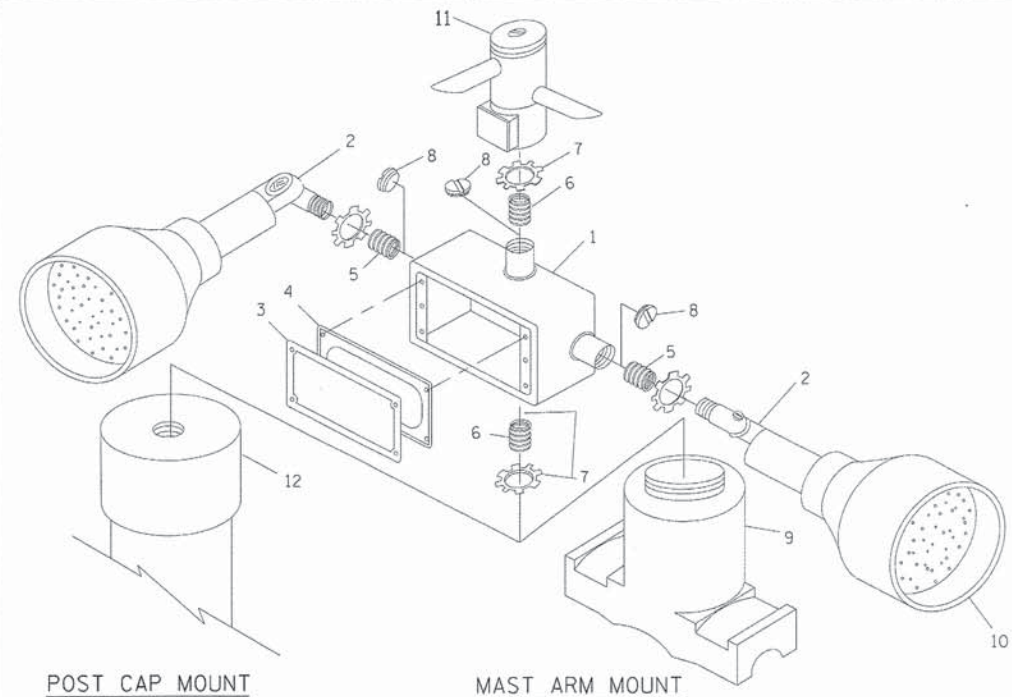
1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
2. THE SUPPLIER SHALL VERIFIED THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.

NOTE:

SUPPORT EXISTING CABINET AND CONTROL EQUIPMENT ABOVE FOUNDATION TO KEEP TRAFFIC SIGNAL FUNCTIONING WHILE FOUNDATION MODIFICATION WORK IS PROCEEDING.



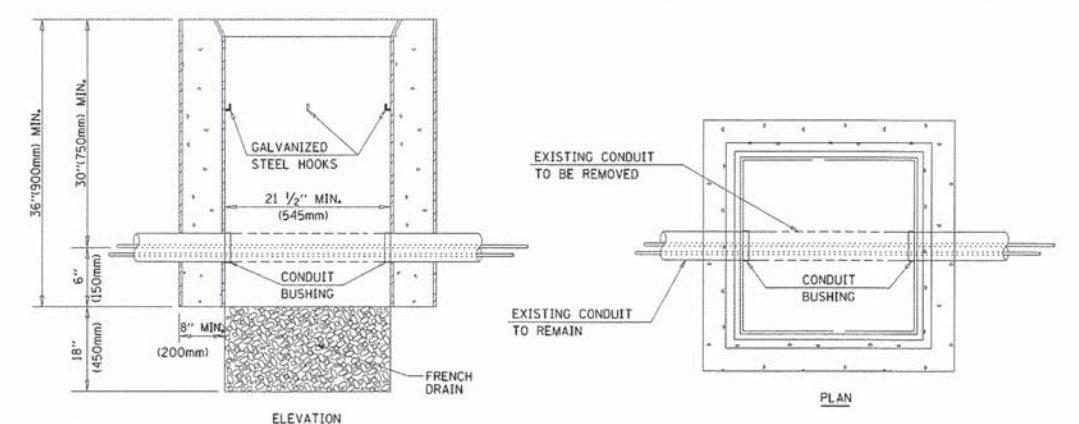
MODIFY EXISTING TYPE "D" FOUNDATION



ITEM NO.	IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU.IN. (0.000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4\"(19 mm) CLOSE NIPPLE
7	3/4\"(19 mm) LOCKNUT
8	3/4\"(19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

NOTES:

1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
2. ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT
ITEM #2- MULBERRY CON-0-SHADE LAMP SHIELD OR EQUIVALENT
ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
3. WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4\"(19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.



NOTES:

1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
2. REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCIDENTAL TO THE HANDHOLE.

HANDHOLE TO INTERCEPT EXISTING CONDUIT

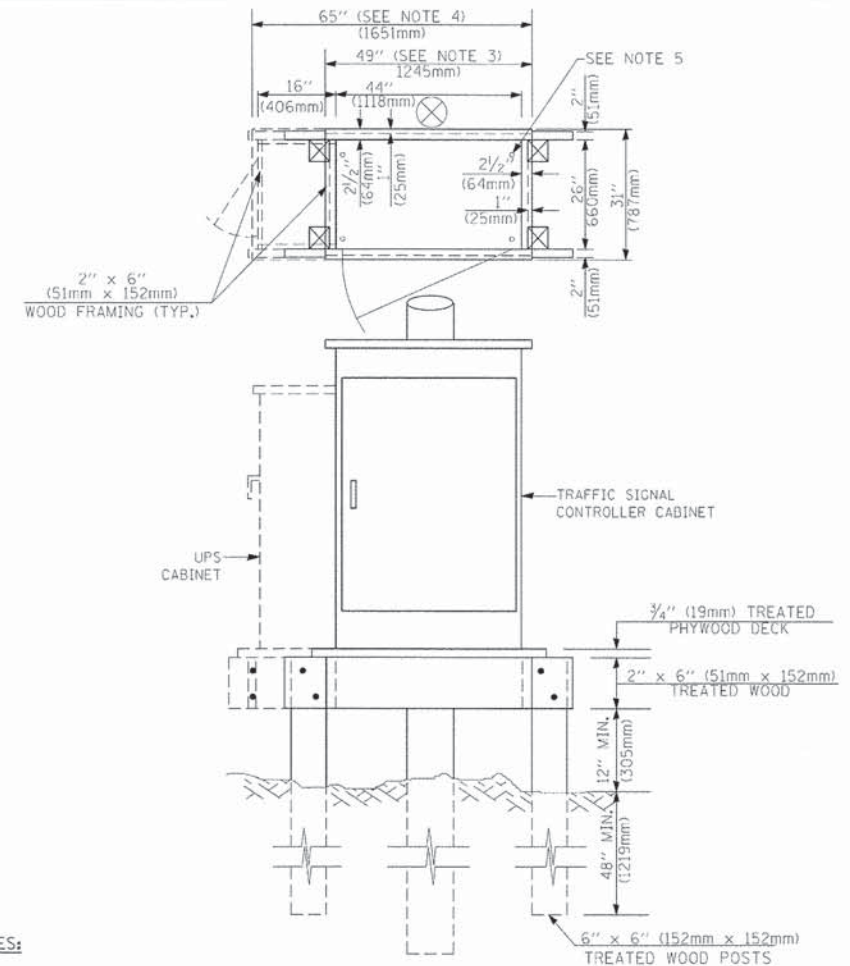
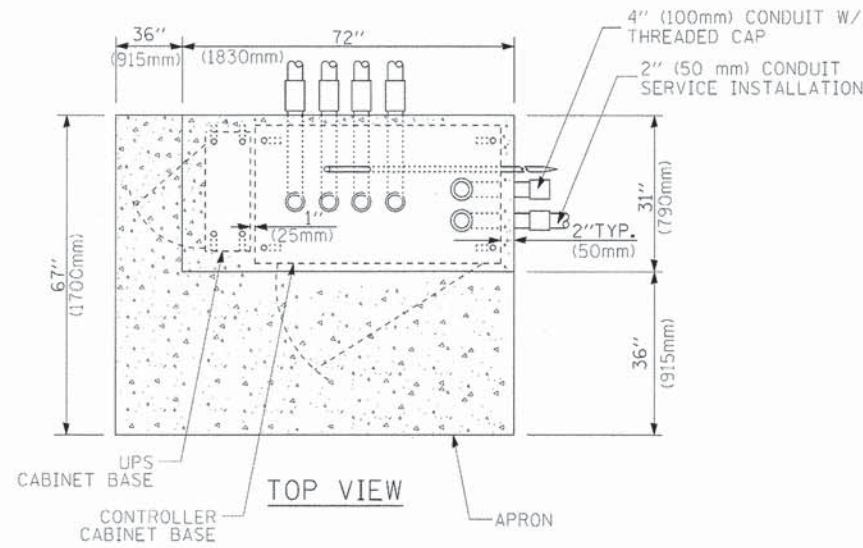
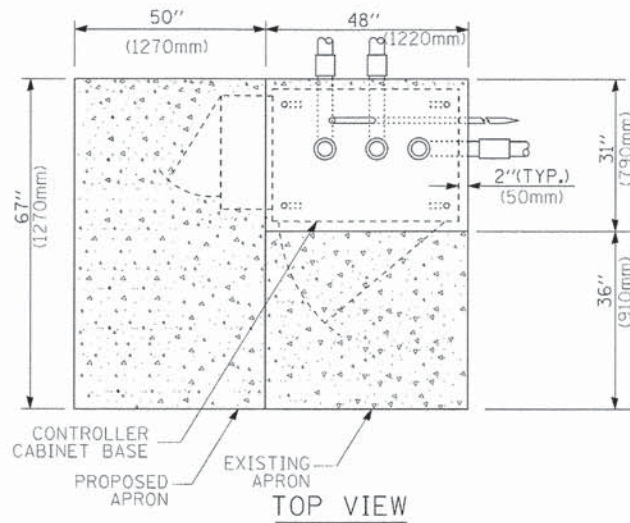
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE			
STANDARD TRAFFIC SIGNAL DESIGN DETAILS			
SCALE:	SHEET NO.	OF SHEETS	STA. TO STA.

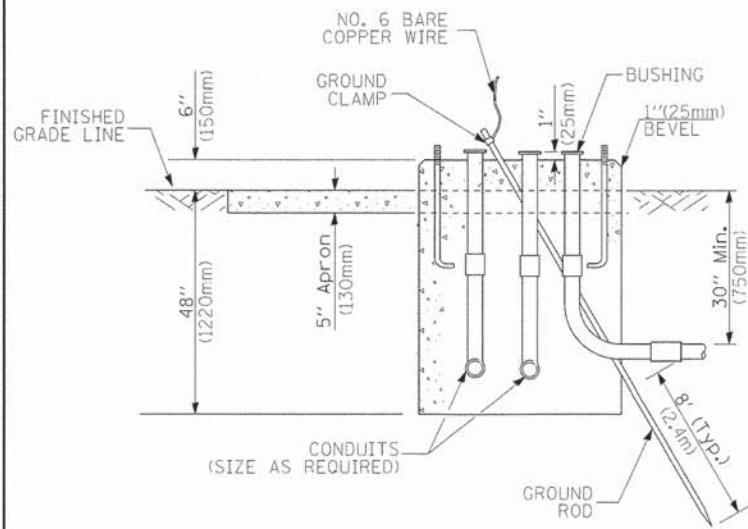
F.A.U. RTE. 1503	SECTION 09-00286-00-BR	COUNTY KANE	TOTAL SHEETS 181	SHEET NO. 161
TS-05		CONTRACT NO. 63863		
FED. ROAD DIST. NO. 2 [ILLINOIS] FED. AID PROJECT				



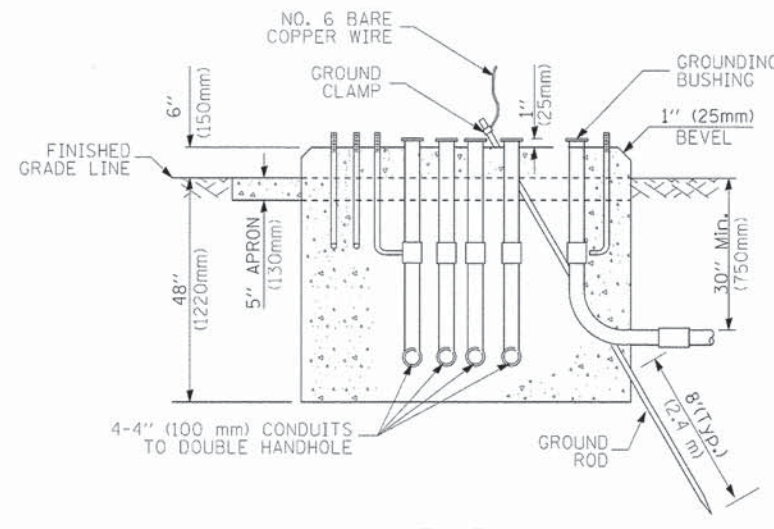
NOTES:

1. BASED ON CONTROLLER CABINET TYPE IV WITH BASE DIMENSIONS OF 26" x 44" (660mm x 1118mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
2. BASED ON UNINTERRUPTIBLE POWER SUPPLY CABINET WITH BASE DIMENSIONS OF 16" x 25" (406mm x 635mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
3. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.
4. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET.
5. DRILLED HOLES THROUGH THE PLATFORM BASE TO MATCH THE CONTROLLER CABINET BOLT TEMPLATE. FASTEN THE CONTROLLER CABINET TO THE PLATFORM WITH CARRIAGE BOLTS, WASHERS AND NUTS.
6. FASTEN ALL SUPPORT WOOD FRAMING TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION.

TEMPORARY SIGNAL CONTROLLER WOOD SUPPORT PLATFORM



TYPE D FOR GROUND MOUNTED CONTROLLER CABINET AND UPS BATTERY CABINET



TYPE C FOR GROUND MOUNTED CONTROLLER CABINET AND UPS BATTERY CABINET

CABLE SLACK LENGTH	FEET	METER
HANDHOLE	6.5	2.0
DOUBLE HANDHOLE	13.0	4.0
SIGNAL POST	2.0	0.6
MAST ARM	2.0	0.6
CONTROLLER CABINET	1.5	0.5
FIBER OPTIC AT CABINET	13.0	4.0
ELECTRIC SERVICE AT (CABINET OR SERVICE LOCATION)	1.5	0.5
GROUND CABLE (SIGNAL POST, MAST ARM, CABINET)	1.5	0.5
GROUND CABLE (BETWEEN FRAME AND COVER)	5.0	1.6

CABLE SLACK

VERTICAL CABLE LENGTH	FEET	METER
MAST ARM POLE (MAST ARM MOUNTED SIGNAL HEAD) (L = MAST ARM LENGTH - DISTANCE TO SIGNAL HEAD FROM END OF ARM)	20.0+L	6.0+L
BRACKET MOUNTED (MAST ARM POLE OR SIGNAL POLE)	13.0	4.0
PEDESTRIAN PUSH BUTTON	6.0	2.0
SERVICE INSTALLATION POLE MOUNT TO SERVICE DROP	13.5	4.1
SERVICE INSTALLATION POLE MOUNT TO GROUND	13.5	4.1
SERVICE INSTALLATION GROUND MOUNT	6.0	2.0
FOUNDATION (SIGNAL POST, MAST ARM POLE, CONTROLLER CABINET, SERVICE-GROUND MOUNT)	3.0	1.0

VERTICAL CABLE LENGTH

FOUNDATION	DEPTH
TYPE A - Signal Post	4'-0" (1.2m)
TYPE C - CONTROLLER W/ UPS	4'-0" (1.2m)
TYPE D - CONTROLLER	4'-0" (1.2m)
SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SQUARE	4'-0" (1.2m)

DEPTH OF FOUNDATION

MAST ARM LENGTH	① FOUNDATION DEPTH	FOUNDATION DIAMETER	SPIRAL DIAMETER	QUANTITY OF REBARS	SIZE OF REBARS
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 55' (16.8 m) and less than 65' (19.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 75' (22.9 m)	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

NOTES:

1. These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average Unconfined Compressive Strength (Qu) > 1.0 tsf (100 kpa). This strength shall be verified by boring data prior to construction or with testing by the Engineer during foundation drilling. The Bureau of Bridges & structures should be contacted for a revised design if other conditions are encountered.
2. Combination mast arm assemblies under 55 feet (16.8 m) shall use 36" (900 mm) diameter foundations.
3. Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm) diameter foundations.
4. For mast arm assemblies with dual arms refer to state standard 878001.

DEPTH OF MAST ARM FOUNDATIONS, TYPE E

COMPANY NAME: Kevin M. Arf
 PROJECT CONTACT: City of Aurora
 CLIENT: 8/23/2011 8:26:59 AM
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STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	F.A.U. RTE. 1503	SECTION 09-00286-00-BR	COUNTY KANE	TOTAL SHEETS 181	SHEET NO. 162
			TS-05		CONTRACT NO. 63863		
FED. ROAD DIST. NO. 2 ILLINOIS FED. AID PROJECT							

TRAFFIC SIGNAL LEGEND

ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED
CONTROLLER CABINET				EMERGENCY VEHICLE LIGHT DETECTOR				ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1/C, UNLESS NOTED OTHERWISE			
RAILROAD CONTROL CABINET				CONFIRMATION BEACON				COAXIAL CABLE			
COMMUNICATIONS CABINET				HANDHOLE				VENDOR CABLE FOR CAMERA			
MASTER CONTROLLER				HEAVY DUTY HANDHOLE				COPPER INTERCONNECT CABLE, NO. 18 3 PAIR TWISTED, SHIELDED			
MASTER MASTER CONTROLLER				DOUBLE HANDHOLE				FIBER OPTIC CABLE NO. 62.5/125, MM12F			
UNINTERRUPTIBLE POWER SUPPLY				JUNCTION BOX				FIBER OPTIC CABLE NO. 62.5/125, MM12F 5M12F			
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT				GALVANIZED STEEL CONDUIT IN TRENCH (T) OR PUSHED (P)				FIBER OPTIC CABLE NO. 62.5/125, MM12F 5M12F			
TELEPHONE CONNECTION (P) POLE OR (G) GROUND MOUNT				TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE				FIBER OPTIC CABLE NO. 62.5/125, MM12F 5M12F			
STEEL MAST ARM ASSEMBLY AND POLE				COMMON TRENCH				FIBER OPTIC CABLE NO. 62.5/125, (NUMBER OF FIBERS & TYPE TO BE NOTED ON PLANS)			
ALUMINUM MAST ARM ASSEMBLY AND POLE				COILABLE NONMETALLIC CONDUIT (EMPTY)				GROUND ROD AT (C) CONTROLLER, (H) HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE			
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE				SYSTEM ITEM		S	S	CONTROLLER CABINET AND FOUNDATION TO BE REMOVED			
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH PTZ CAMERA				INTERSECTION ITEM		I	IP	STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED			
SIGNAL POST				REMOVE ITEM	R			ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED			
TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM				RELOCATE ITEM	RL			STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE AND FOUNDATION TO BE REMOVED			
GUY WIRE				ABANDON ITEM	A			SIGNAL POST AND FOUNDATION TO BE REMOVED			
SIGNAL HEAD				12" (300mm) TRAFFIC SIGNAL SECTION				INTERSECTION & SAMPLING (SYSTEM) DETECTOR			
SIGNAL HEAD CONSTRUCTION STAGES (NUMBERS INDICATE THE CONSTRUCTION STAGE)				12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE				SAMPLING (SYSTEM) DETECTOR			
SIGNAL HEAD WITH BACKPLATE				SIGNAL FACE				EXISTING INTERSECTION LOOP DETECTOR			
SIGNAL HEAD OPTICALLY PROGRAMMED				SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD				PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR			
FLASHER INSTALLATION (S DENOTES SOLAR POWER)				12" (300mm) PEDESTRIAN SIGNAL HEAD WALK/DON'T WALK SYMBOL				EXISTING PREFORMED INTERSECTION LOOP DETECTOR			
PEDESTRIAN SIGNAL HEAD				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, OUTLINED				PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR			
PEDESTRIAN PUSHBUTTON DETECTOR				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, SOLID				PREFORMED SAMPLING (SYSTEM) DETECTOR			
ACCESSIBLE PEDESTRIAN PUSHBUTTON DETECTOR				PEDESTRIAN SIGNAL HEAD, INTERNATIONAL SYMBOL, WITH COUNTDOWN TIMER				RAILROAD SYMBOLS			
ILLUMINATED SIGN "NO LEFT TURN"				RADIO INTERCONNECT				EXISTING		PROPOSED	
ILLUMINATED SIGN "NO RIGHT TURN"				RADIO REPEATER				RAILROAD CONTROL CABINET			
DETECTOR LOOP, TYPE I				DENOTES NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE, ALL DETECTOR LOOP CABLE TO BE SHIELDED				RAILROAD CANTILEVER MAST ARM			
PREFORMED DETECTOR LOOP				GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)				FLASHING SIGNAL			
MICROWAVE VEHICLE SENSOR								CROSSING GATE			
VIDEO DETECTION CAMERA								CROSSBUCK			
VIDEO DETECTION ZONE											
PAN, TILT, ZOOM CAMERA											
WIRELESS DETECTOR SENSOR											
WIRELESS ACCESS POINT											

COMPANY NAME: Kevin M. Arft
 PROJECT CONTACT: City of Aurora
 CLIENT: 8/23/2013 8:27:09 AM
 DATE PLOTTED: 8/23/2013 8:27:09 AM
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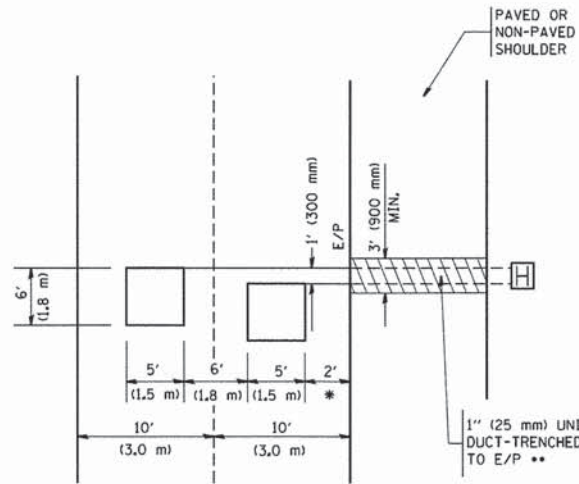
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE			
STANDARD TRAFFIC SIGNAL DESIGN DETAILS			
SCALE:	SHEET NO.	OF SHEETS	STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	163
TS-05		CONTRACT NO. 63863		
FED. ROAD DIST. NO. 2 [ILLINOIS] FED. AID PROJECT				

LOOPS NEXT TO SHOULDERS

PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' (900 mm) X WIDTH OF PAVED SHOULDER.

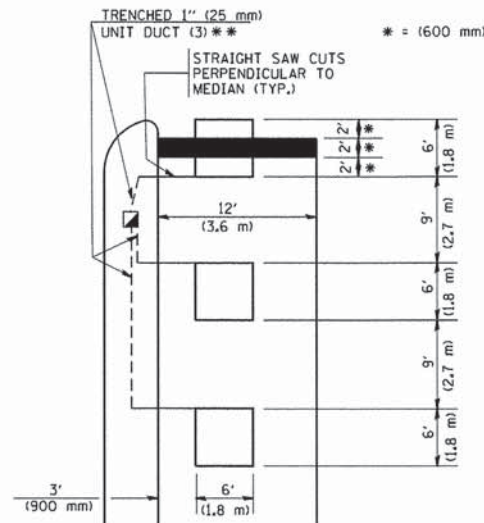


* = (600 mm)

** UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

**LEFT TURN LANES WITH MEDIANS
VOLUME DENSITY ("FAR OUT" DETECTION)
ON SAME APPROACH
(PROTECTED / PERMITTED LEFT TURN PHASING)**

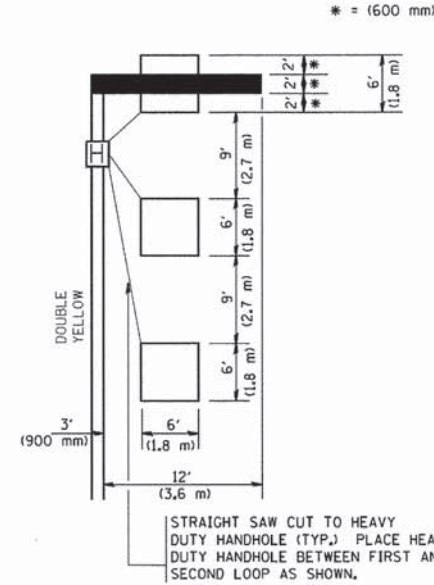
HANDHOLE LOCATION MAY VARY DEPENDING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS. HEAVY-DUTY HANDHOLES TO BE USED WHEN THE MEDIAN IS MOUNTABLE. REFER TO STANDARD 814001 TO ENSURE THAT HANDHOLE FITS IN MEDIAN.



** UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

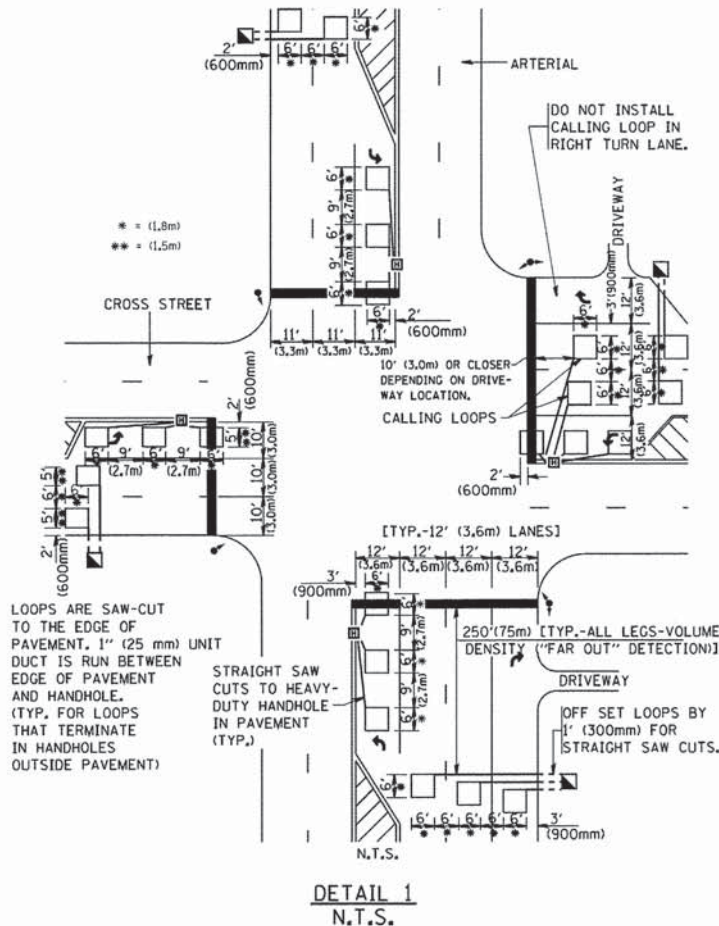
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

**LEFT TURN LANES WITHOUT MEDIANS
VOLUME DENSITY ("FAR OUT" DETECTION)
ON SAME APPROACH
(PROTECTED / PERMITTED LEFT TURN PHASING)**



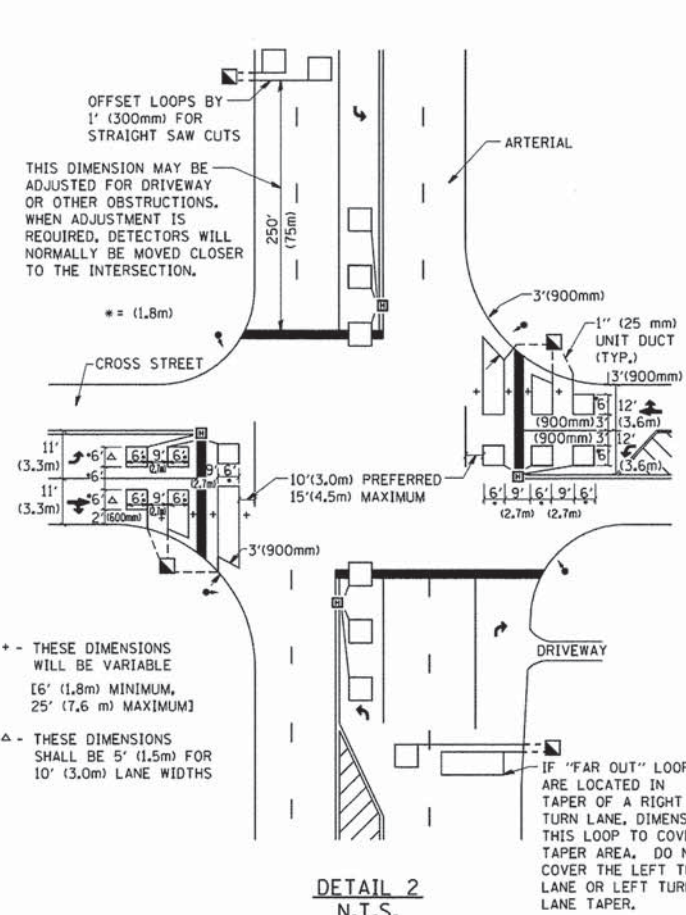
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

**ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION)
CROSS STREET-VOLUME DENSITY ("FAR OUT" DETECTION)**



DETAIL 1
N.T.S.

**ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION)
CROSS STREET-NON VOLUME DENSITY ("UPTIGHT" PRESENCE DETECTION)**



DETAIL 2
N.T.S.

NOTES:

VEHICLES LOOP DETECTORS

- * ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED, SHIELDED.
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE PAVEMENT.
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN ONE INCH (25 mm) UNIT DUCT BETWEEN THE EDGE OF PAVEMENT AND THE FIRST HANDHOLE OR JUNCTION BOX. EACH UNIT DUCT RUN SHALL BE SHOWN ON THE PLANS BY THE DESIGNER, BUT SHALL NOT BE PAID FOR SEPARATELY. THIS ITEM IS INCIDENTAL TO THE PAY ITEM FOR DETECTOR LOOPS.
- * ONE DIMENSION OF ALL DETECTOR LOOPS SHALL BE SIX FEET (1.8 m)
- * EACH LANE OF NON-LOCKING, PRESENCE DETECTION AND EACH LANE OF A DOUBLE LEFT TURN LANE REQUIRES A SEPARATE INDUCTIVE LOOP DETECTOR AND LEAD IN CABLE.
- * WHEN NON-LOCKING, PRESENCE DETECTION IS USED, MORE THAN ONE LOOP PER LANE IS REQUIRED BEHIND THE STOP BAR (i.e. 1-1/2, 1-3/4, 2).
- * WHEN SYSTEM LOOPS ARE REQUIRED ON AN APPROACH OF AN INTERSECTION, THE LOOPS USED FOR VOLUME DENSITY AND INTERSECTION TIMING SHALL ALSO BE USED AS SYSTEM DETECTORS. EACH ONE OF THESE TYPE OF LOOPS REQUIRES A SEPARATE TWO CONDUCTOR NO. 14 TWISTED SHIELDED CABLE AND A SEPARATE INDUCTIVE LOOP DETECTOR WHEN NEW CONTROLLERS ARE UTILIZED. THE DESIGNER SHALL LABEL THESE TYPES OF LOOPS AS "INTERSECTION AND SAMPLING (SYSTEM) DETECTORS" ON THE SIGNAL LAYOUT, THE INTERCONNECT PLAN AND THE SYSTEM CABLE PLAN. WHEN AN EXISTING CONTROLLER IS UTILIZED FOR THIS TYPE OF DETECTION, THE PAY ITEM "INDUCTIVE LOOP DETECTOR WITH SYSTEM OUTPUT" SHOULD BE USED.

PLACEMENT OF DETECTORS

THE FOLLOWING FIGURES REPRESENT THE MOST COMMON DETECTOR LOOP LOCATIONS AND SIZES. ADJUSTMENTS WILL BE NECESSARY FOR SPECIFIC GEOMETRIC CONSIDERATIONS.

LOCATIONS AND DEMENSIONS OF DETECTOR LOOPS ARE REQUIRED ON ALL SIGNAL LAYOUT PLAN SHEETS.

"FAR OUT" DETECTION REFERS TO LOCKING, PRESENCE TYPE DETECTION LOCATED IN THRU LANES, RIGHT TURN LANES, AND RIGHT TURN LANE TAPER AREAS (IF APPLICABLE), USUALLY 250' (75 m) IN ADVANCE OF STOP BARS. "UPTIGHT" DETECTION REFERS TO NON-LOCKING PRESENCE TYPE DETECTION LOCATED IN ALL LANES AND 10'-15' (3.0 m-4.5 m) BEHIND THE CROSSING STREET'S EDGE OF PAVEMENT EXTENDED.

NOTE:

ALL DETAILS AND NOTES SHOWN ARE FROM THE I.D.O.T. DISTRICT 1 TRAFFIC SIGNAL DESIGN GUIDELINES DATED JANUARY 1995

THIS DRAWING HAS BEEN PREPARED TO ASSIST THE RESIDENT ENGINEER FOR ALL ROADWAY RESURFACING OR S.M.A.R.T. PROJECTS WHERE THE DIMENSIONS ARE NOT SHOWN ON THE PLANS AND THE FINAL LOCATIONS FOR CROSSWALKS OR STOP BARS ARE NOT DETERMINED.

COMPANY NAME: Kevin M. Arft
PROJECT CONTACT: City of Aurora
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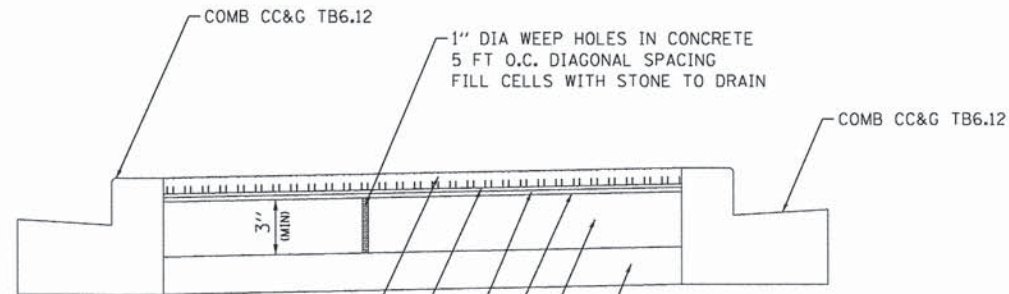
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	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 1 - DETECTOR LOOP INSTALLATION			
DETAILS FOR ROADWAY RESURFACING			
SCALE:	SHEET NO.	OF SHEETS	STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	164
TS-07			CONTRACT NO. 63863	
FED. ROAD DIST. NO. 2 [ILLINOIS] FED. AID PROJECT				



PAVER ACCENT STRIP
BRICK DIMENSIONS 11.70" X 5.85" X 2.73" (RECTANGLE)
(UNILOCK PAVERS SERIES 3000)
COLOR MOCHA BROWN
RUNNING BOND PATTERN

KARNAK #237-2% AF
NEO-ASPHALT (ADHESIVE)
1" SAND MIX ASPHALT (COMPACTED)
FILTER FABRIC
CONCRETE PAVER BED

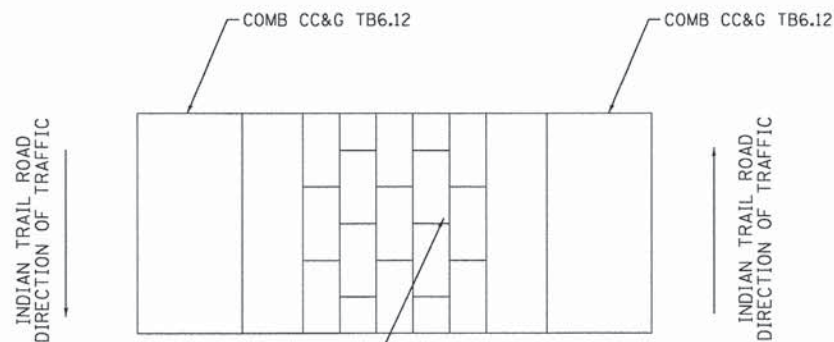
6" AGGREGATE BASE COURSE (CA-7 WASHED)

TYPICAL SECTION

NOTE:
THE NEO-ASPHALT (ADHESIVE), COMPACTED SAND MIX ASPHALT AND FILTER FABRIC WILL BE INCLUDED IN THE CONTRACT UNIT COST FOR BRICK PAVERS.

THE CONCRETE PAVER BED, DRILLING OF WEEP HOLES, AND CA-7 AGGREGATE BASE COURSE WILL BE INCLUDED IN THE CONTRACT UNIT COST FOR BRICK PAVERS.

THE MEDIAN CURB AND GUTTER WILL BE PAID FOR AS COMBINATION CONCRETE CURB & GUTTER, TYPE B6.12.



PAVER ACCENT STRIP
BRICK DIMENSIONS 11.70" X 5.85" X 2.73" (RECTANGLE)
(UNILOCK PAVERS SERIES 3000)
COLOR MOCHA BROWN
RUNNING BOND PATTERN

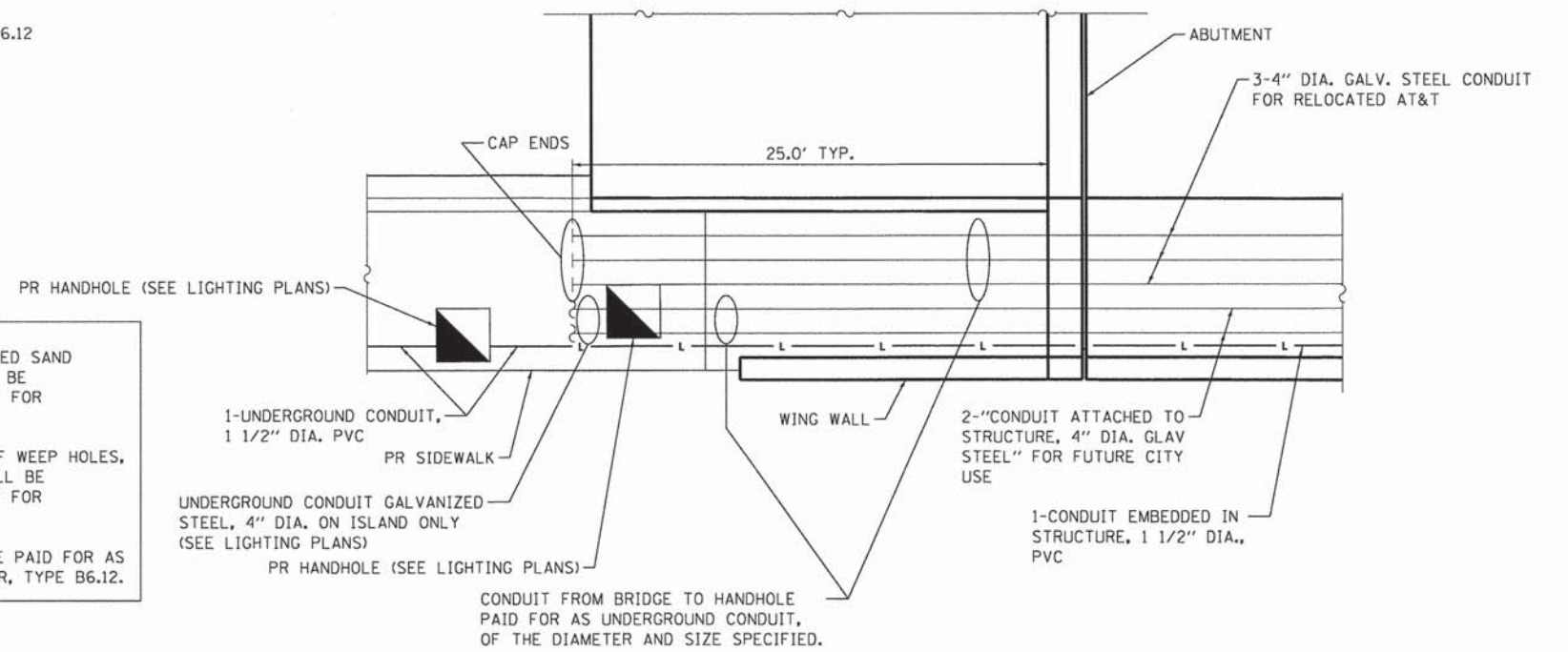
PLAN VIEW

INSTALLATION NOTES:
CONCRETE PAVER BED SHALL BE PLACED BELOW THE BRICK PAVERS AT AN ELEVATION SO THAT THE FINAL GRADE OF THE BRICK MATCHES FLUSH TO THE BACK OF CURB.

PAVERS WILL BE INSTALLED ON TOP OF THE SAND MIX/NEO-ASPHALT (ADHESIVE). INSTALLING ALL FULL STONES FIRST. SMALL CUT PIECES WILL THEN BE INSTALLED. CONTRACTOR SHALL COMPACT PAVING STONES INTO THE SAND MIX/NEO-ASPHALT (ADHESIVE) COURSE WITH A MECHANICAL PLATE COMPACTOR WITH A FORCE OF 2,500-3,500 LBS. POLYMERIC SAND IN THEN SWEEP INTO THE JOINTS AND VIBRATED UNTIL THE JOINTS ARE FULL.

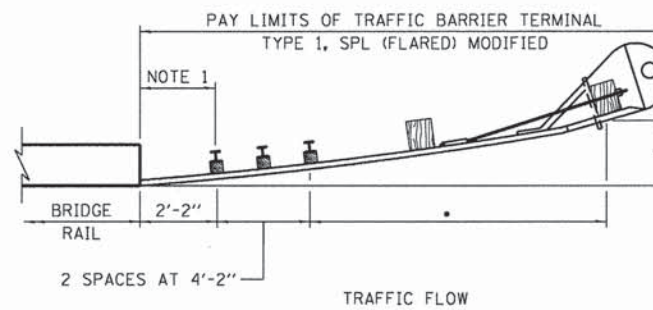
THE PAVERS SHALL BE PLACED ACCORDING TO MANUFACTURED SPECIFICATIONS AND INTERLOCKING CONCRETE PAVEMENT INSTITUTE SPECIFICATIONS.

DETAIL FOR BRICK PAVER MEDIAN

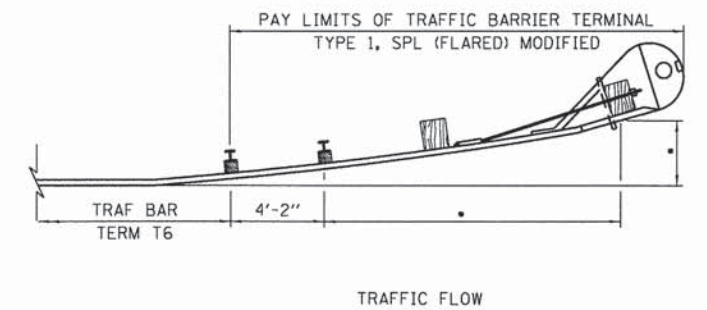


CONDUIT DETAIL AT END OF BRIDGE

SEE TYPICAL SECTIONS, LIGHTING PLANS AND BRIDGE PLANS FOR ADDITIONAL INFORMATION



AT SW CORNER OF SN 045-3089



AT NE CORNER OF SN 045-3089

TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (FLARED), MODIFIED DETAIL

• REFERENCE HIGHWAY STANDARDS
B.L.R. 23-4 AND 631026-05
FOR ADDITIONAL DETAILS.

NOTE 1: UTILIZE CONNECTION PLATES E & G AND NECESSARY HARDWARE FROM HIGHWAY STD. 631026-05 TO CONNECT TO BRIDGE RAIL. COORDINATE WITH BRIDGE RAIL DETAILS. COST INCLUDED WITH "TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (FLARED) MODIFIED."

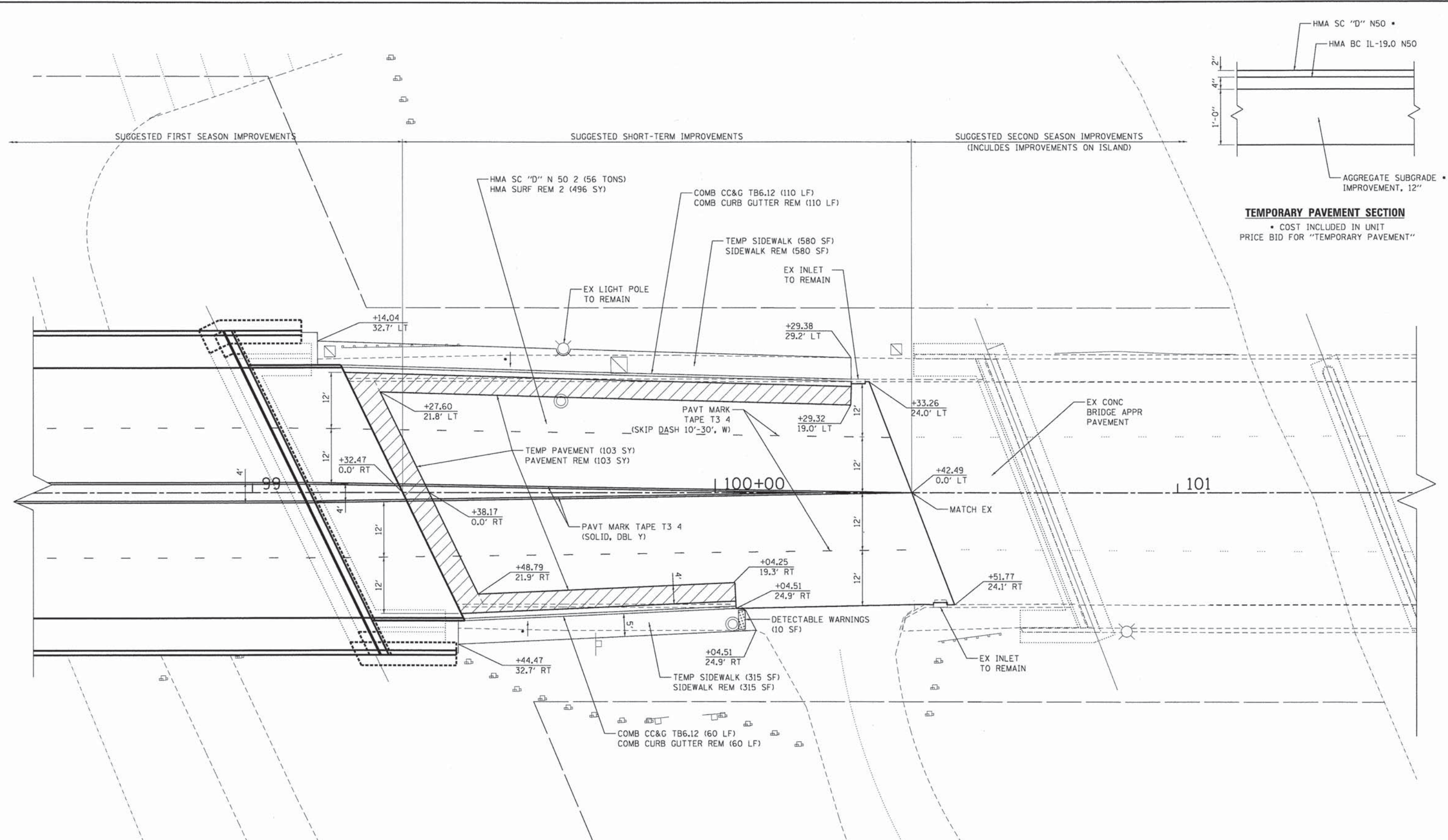
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PROJECT CONTACT: City of Aurora
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER
CONSTRUCTION DETAILS

SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	165
CONTRACT NO. 63863				
FED. ROAD DIST. NO. 2 ILLINOIS FED. AID PROJECT				




TEMPORARY PAVEMENT SECTION
 • COST INCLUDED IN UNIT PRICE BID FOR "TEMPORARY PAVEMENT"

SUGGESTED MAINTENANCE OF ROADWAY DETAIL
 (BASED UPON WEST BRIDGE CONSTRUCTION FIRST)
 SEE TRAFFIC CONTROL AND PROTECTION (SPECIAL) SPECIAL PROVISION FOR ADDITIONAL INFORMATION

• 2% CROSS SLOPE MAX.

LEGEND

 PAVEMENT REM & TEMP PAVEMENT

COMPANY NAME: #COMPANY NAME#
 PROJECT CONTACT: #PROJECT CONTACT#
 CLIENT: #CLIENT#
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HRGreen
 HRGreen.com
 Illinois Professional Design Firm
 #184-091322

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PLOT DATE = 8/23/2013	DATE - 8/23/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER
MAINTENANCE OF ROADWAY DETAIL

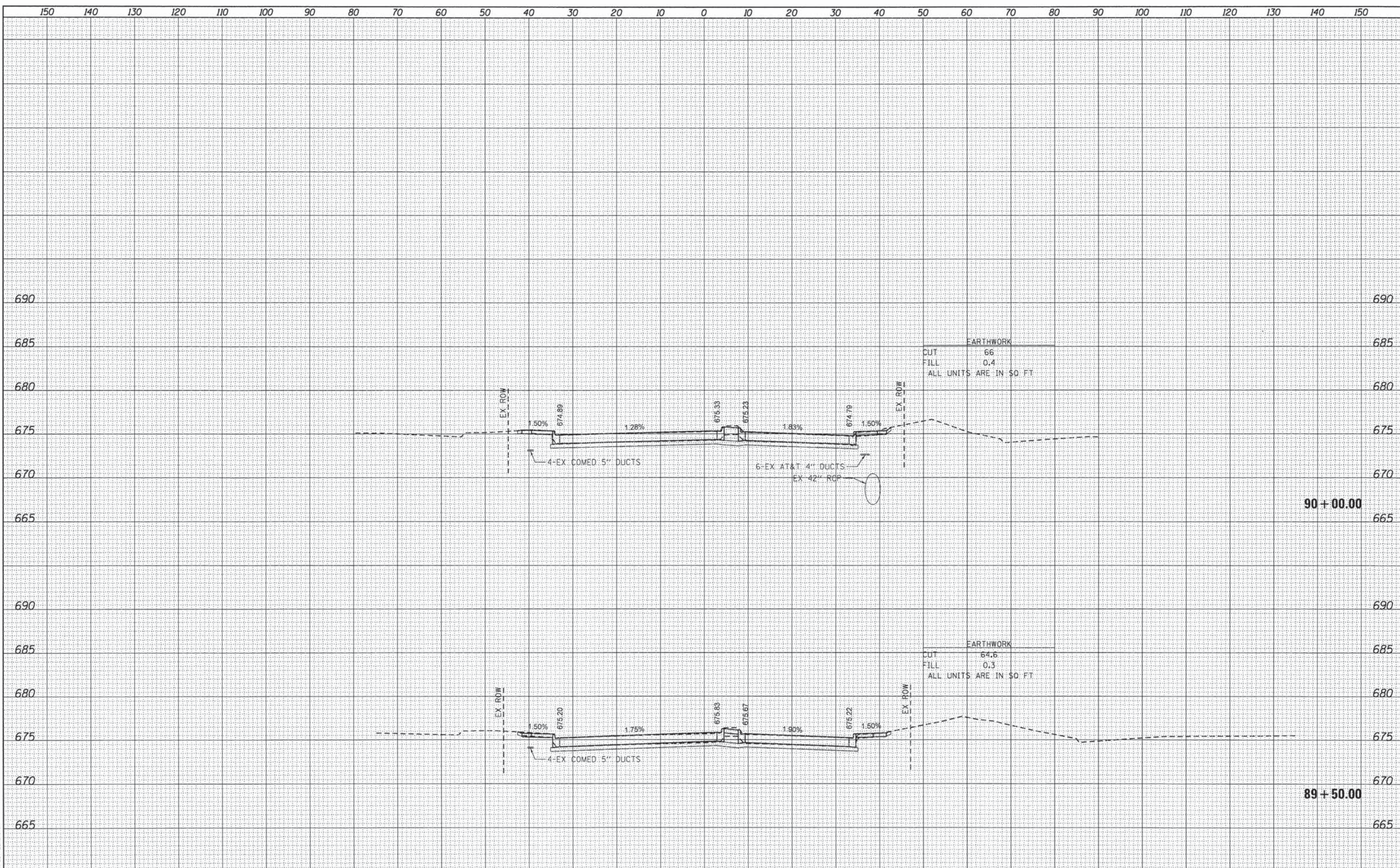
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F.A.U. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	166
CONTRACT NO. 63863				
FED. ROAD DIST. NO. 2 ILLINOIS FED. AID PROJECT				

FINAL SURVEY	DATE
SURVEYED	BY
PLOTTED	DATE
NOTE BOOK	NO.
AREAS	CHECKED

ORIGINAL SURVEY	DATE
SURVEYED	BY
PLOTTED	DATE
NOTE BOOK	NO.
AREAS	CHECKED

COMPANY NAME: HRGreen.com
 PROJECT CONTACT: Kevin M. Arft
 CLIENT: City of Aurora
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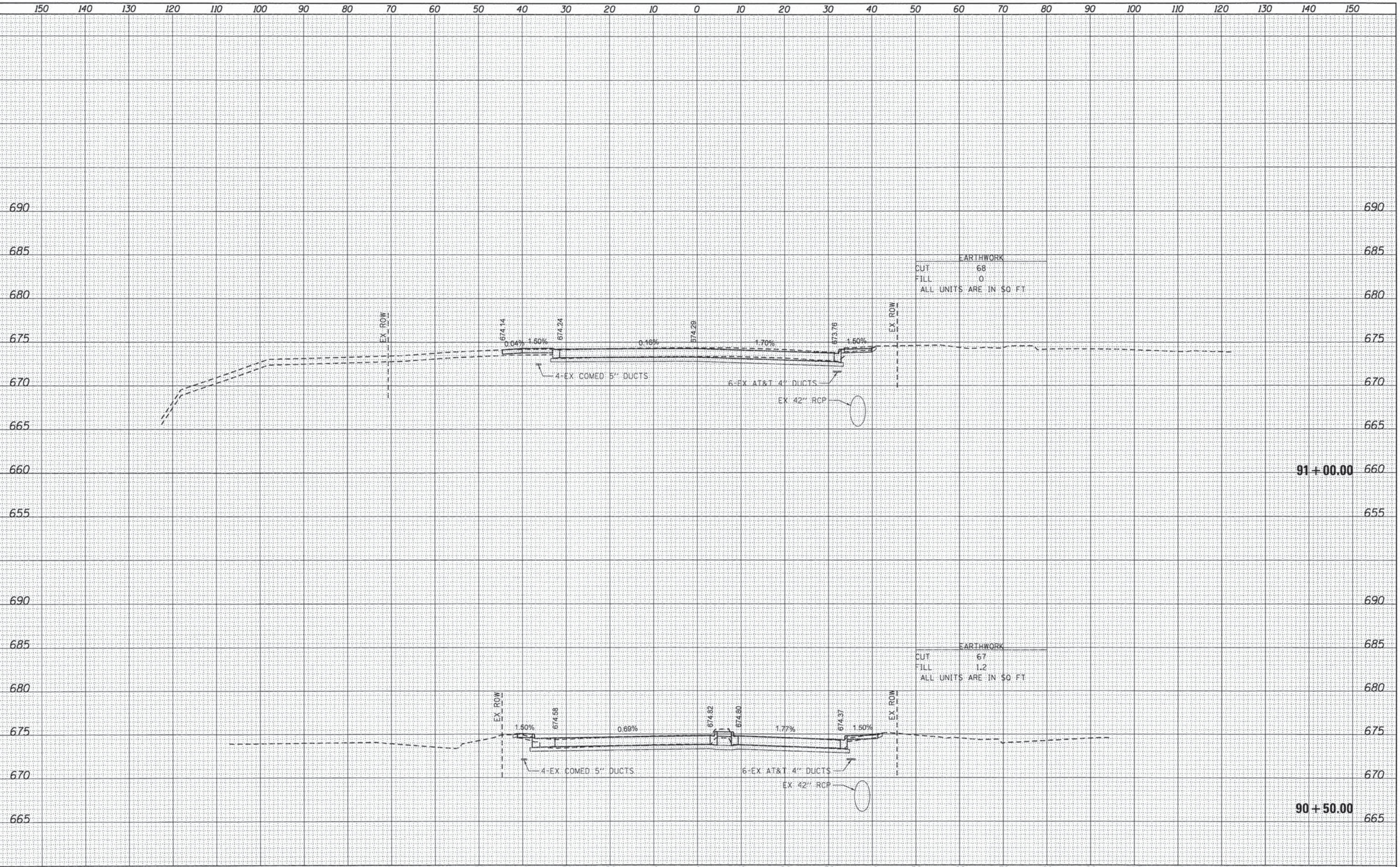


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FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	TEMPLATE		
	AREAS CHECKED		

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
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	AREAS CHECKED		

COMPANY NAME: HRGreen.com
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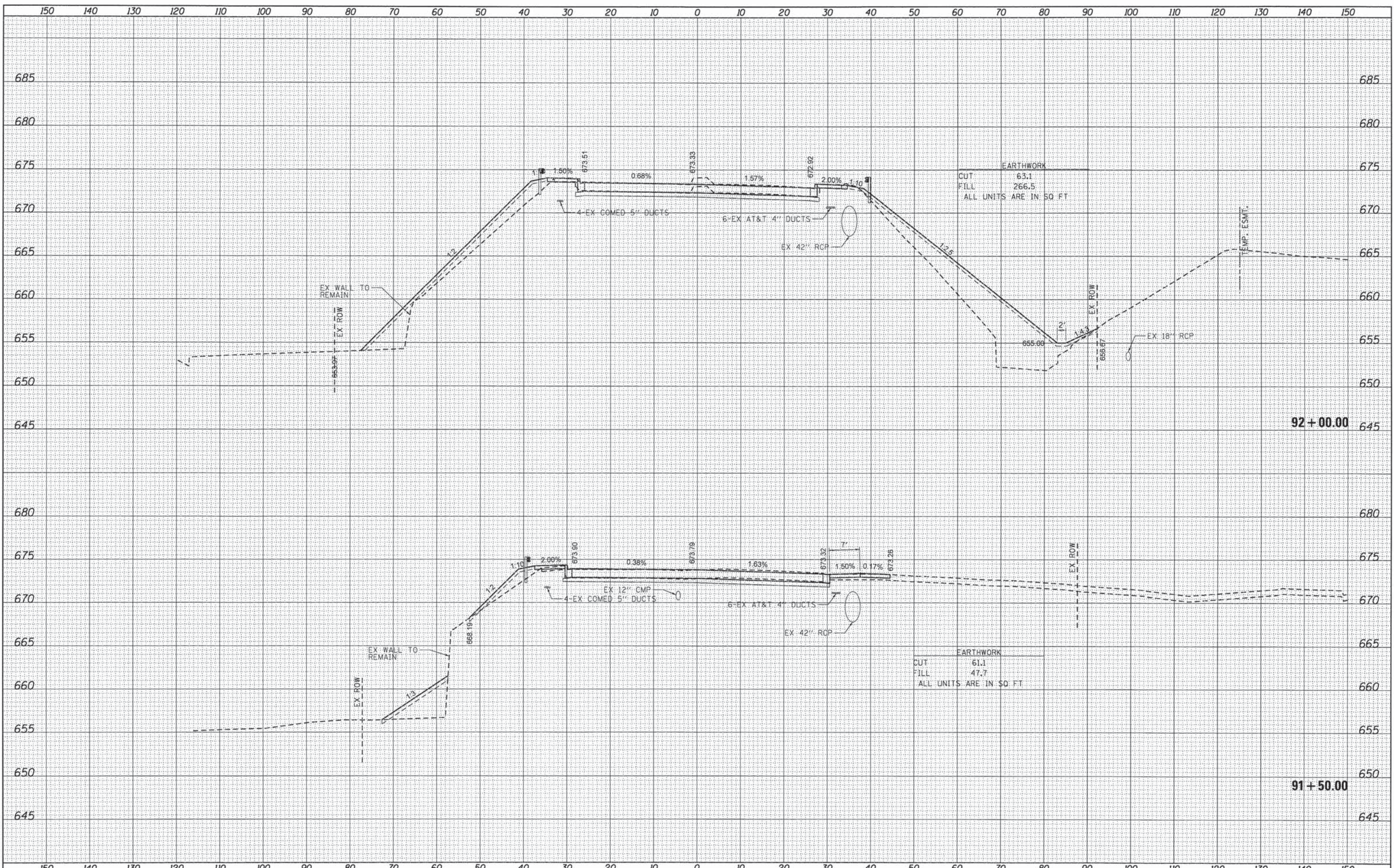


150	140	130	120	110	100	90	80	70	60	50	40	30	20	10	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150
															91 + 00.00															
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															STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION															
															INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER CROSS SECTIONS															
															SCALE: SHEET OF SHEETS STA. 90+50.00 TO STA. 91+00.00															
															F.A. RTE. 1503 SECTION 09-00286-00-BR COUNTY KANE TOTAL SHEETS 181 SHEET NO. 169 CONTRACT NO. [ILLINOIS] FED. AID PROJECT #FEDPROJNO#															

DATE	
BY	
FINAL SURVEY	
SURVEYED	
PLOTTED	
AREA	
AREAS CHECKED	
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DATE	
BY	
ORIGINAL SURVEY	
SURVEYED	
PLOTTED	
AREA	
AREAS CHECKED	
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COMPANY NAME: HRGreen.com
 PROJECT CONTACT: Kevin M. Pratt
 CLIENT: City of Aurora
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REVISOR -	
REVISION -	

SCALE:	SHEET	OF	SHEETS	STA. 91+50.00	TO	STA. 92+00.00
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

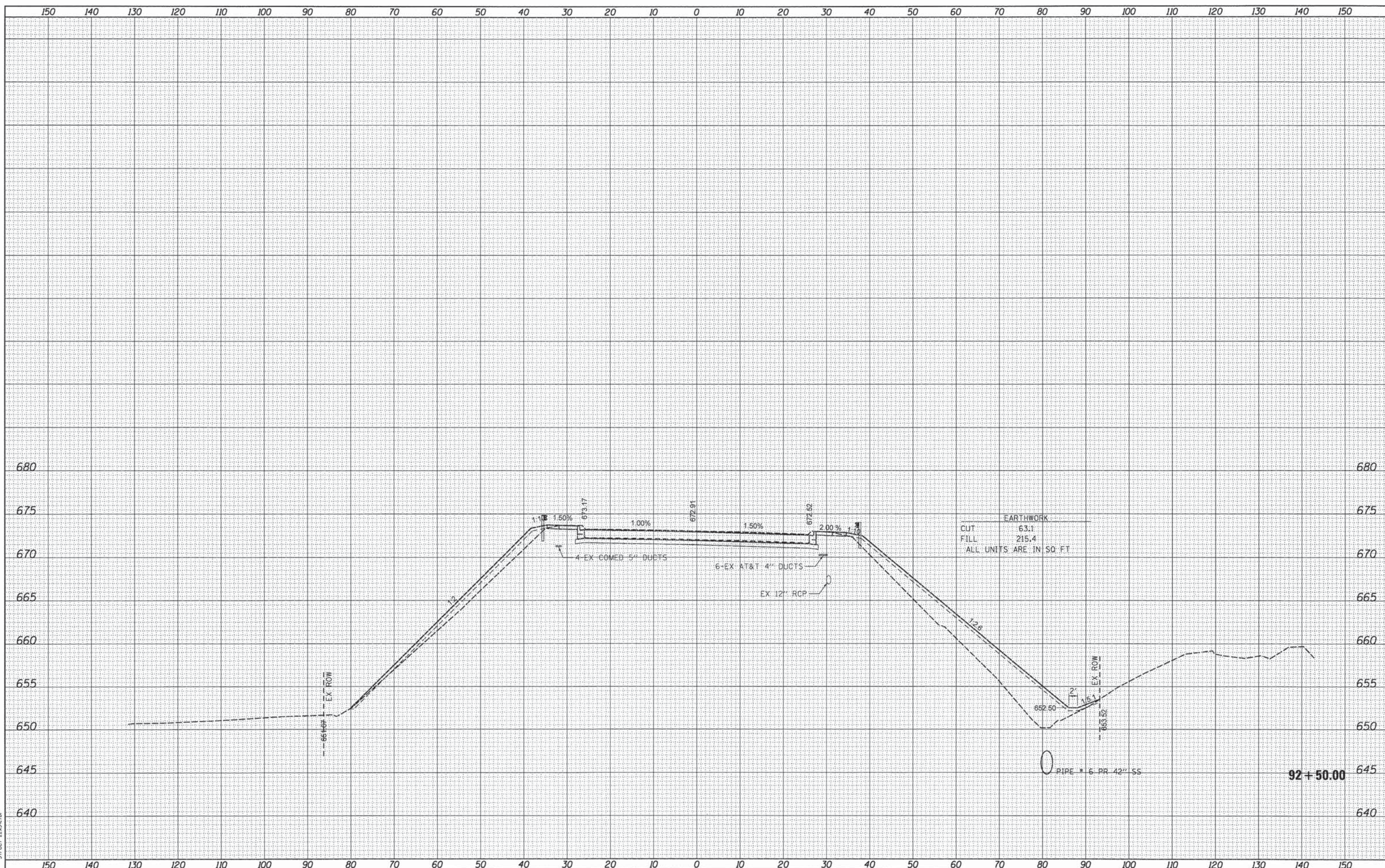
**INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER
CROSS SECTIONS**

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	170
CONTRACT NO.				
ILLINOIS FED. AID PROJECT #FEDPROJNO#				

FINAL SURVEY	SURVEYED	DATE
NOTE BOOK	PLOTTED	
NO.	TEMPLATE	
	AREAS CHECKED	

ORIGINAL SURVEY	SURVEYED	DATE
NOTE BOOK	PLOTTED	
NO.	TEMPLATE	
	AREAS CHECKED	

COMPANY NAME: HRGreen.com
 PROJECT CONTACT: Kevin M. Arff
 DATE PLOTTED: 8/22/2013 8:06:51 PM
 FILE NAME: 8610318-13sect.dgn
 PLOT DRIVER: pdfcut
 PLOT TABLE: Struct 22x34.tbl



EARTHWORK	
CUT	63.1
FILL	215.4
ALL UNITS ARE IN SQ. FT.	

USER NAME = whood	DESIGNED - KMA	REVISED -
	DRAWN - WJH	REVISED -
PLOT SCALE =	CHECKED - RGD	REVISED -
PLOT DATE = 8/22/2013	DATE - 8/22/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

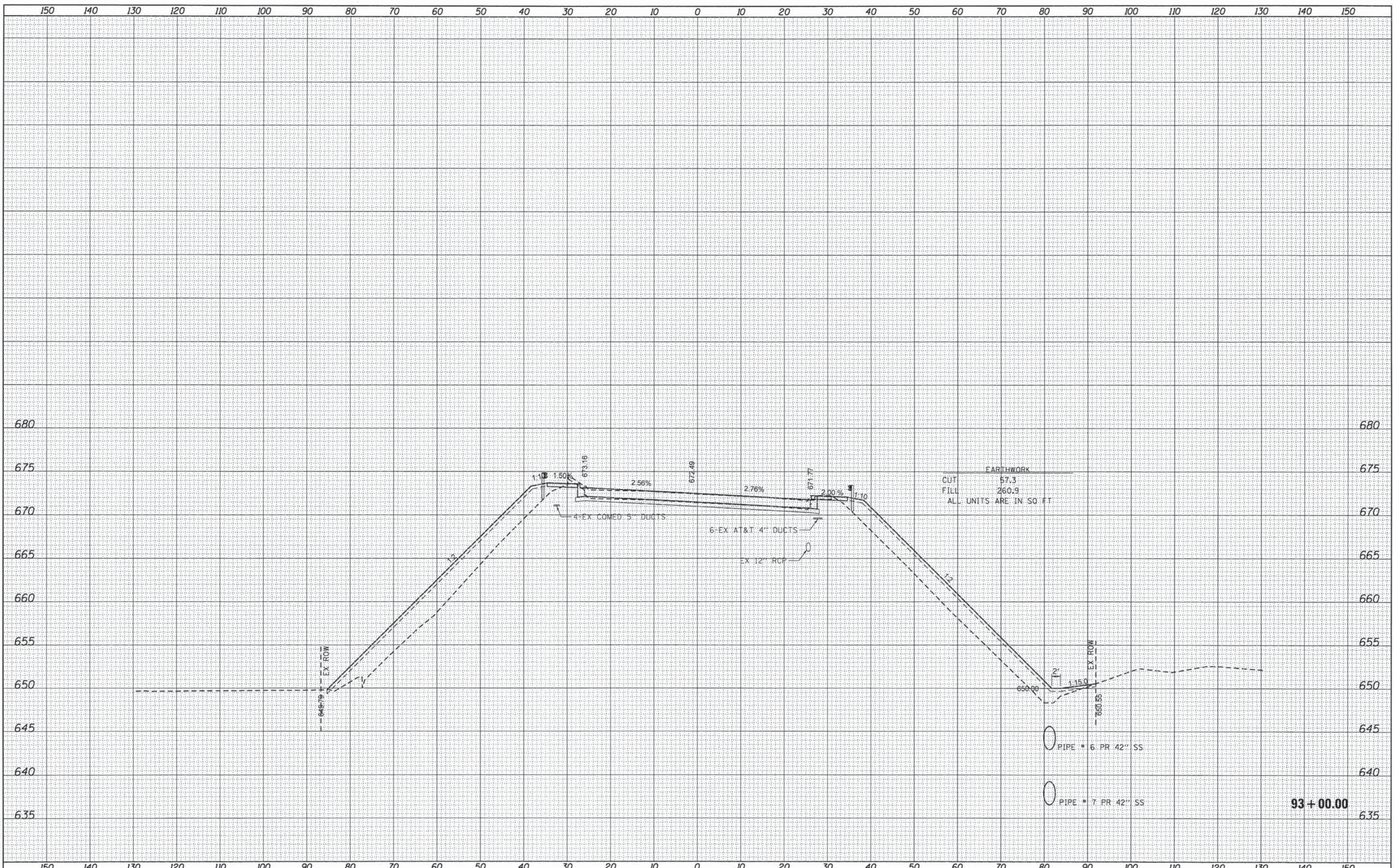
INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER CROSS SECTIONS			
SCALE:	SHEET	OF	SHEETS
STA. 92+50.00		TO STA. 92+50.00	

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	171
CONTRACT NO.				
[ILLINOIS] FED. AID PROJECT #FEDPROJNO#				

FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
IN AREA		
AREAS CHECKED		
NO.		

ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
IN AREA		
AREAS CHECKED		
NO.		

COMPANY NAME: HRGreen.com
 PROJECT CONTACT: Kevin M. Irft
 CLIENT: City of Aurora
 DATE PLOTTED: 8/22/2013 8:06:40 PM
 FILE NAME: 8610318-sec1.dgn
 PLOT DRIVER: pdf.plt
 PEN TABLE: Sfruct 22x34.tbl



USER NAME = wwood
PLOT SCALE =
PLOT DATE = 8/22/2013

DESIGNED - KMA	REVISED -
DRAWN - WJH	REVISED -
CHECKED - RGD	REVISED -
DATE - 8/22/13	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER
 CROSS SECTIONS

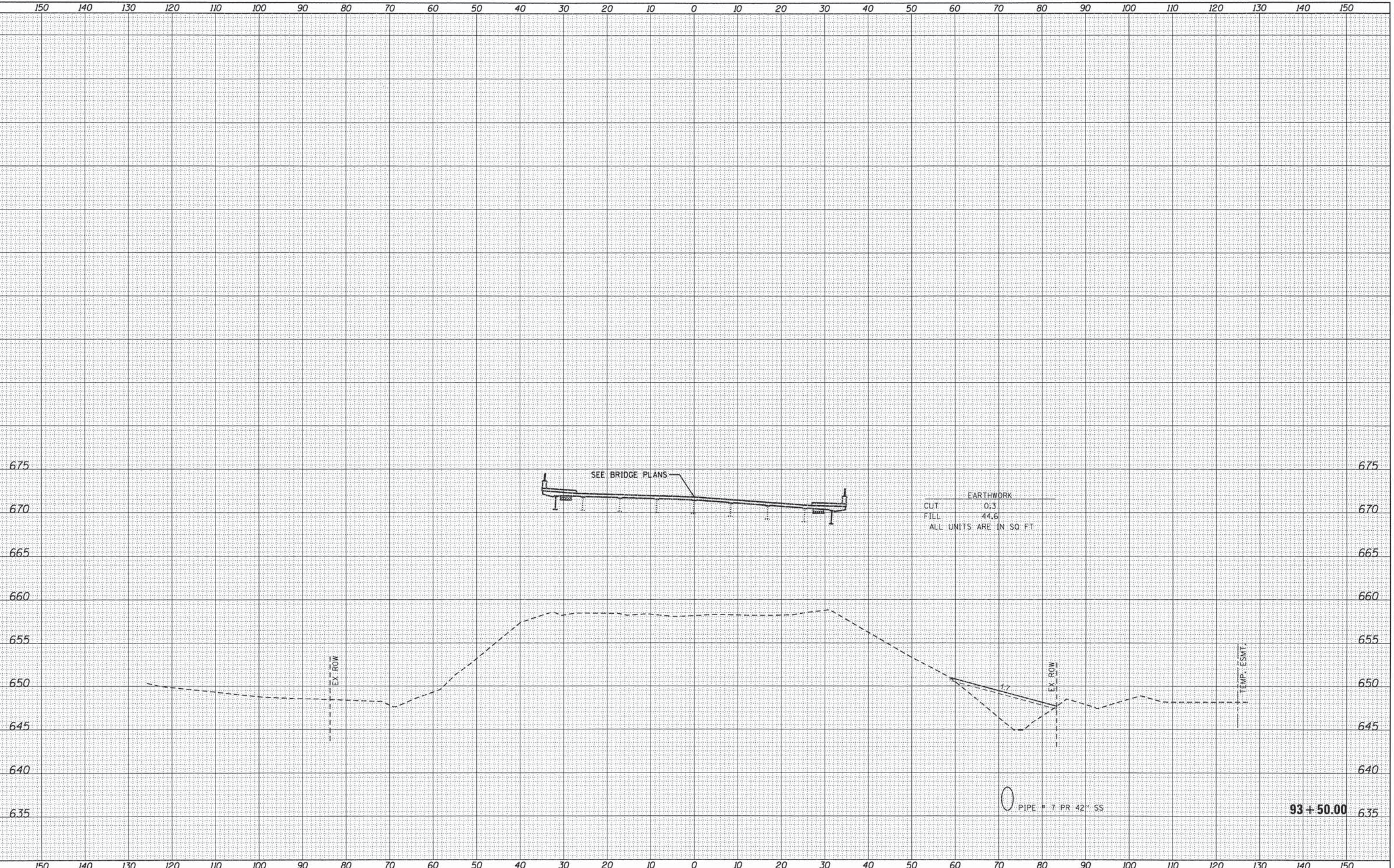
SCALE: SHEET OF SHEETS STA. 93+00.00 TO STA. 93+00.00

F.A. RTE. 1503	SECTION 09-00286-00-BR	COUNTY KANE	TOTAL SHEETS 181	SHEET NO. 172
CONTRACT NO.				
ILLINOIS FED. AID PROJECT #FEDPROJNO#				

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	TEMPLATE		
	AREAS CHECKED		

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	TEMPLATE		
	AREAS CHECKED		

COMPANY NAME: HRGreen.com
 PROJECT CONTACT: Kevin A. Fry
 CLIENT: ILLINOIS
 DATE PLOTTED: 8/22/2013 8:00:00 PM
 FILE NAME: 8610318-ksact.dgn
 PLOT DRIVER: pdfPlot
 PEN TABLE: Struct 22x34.tbl



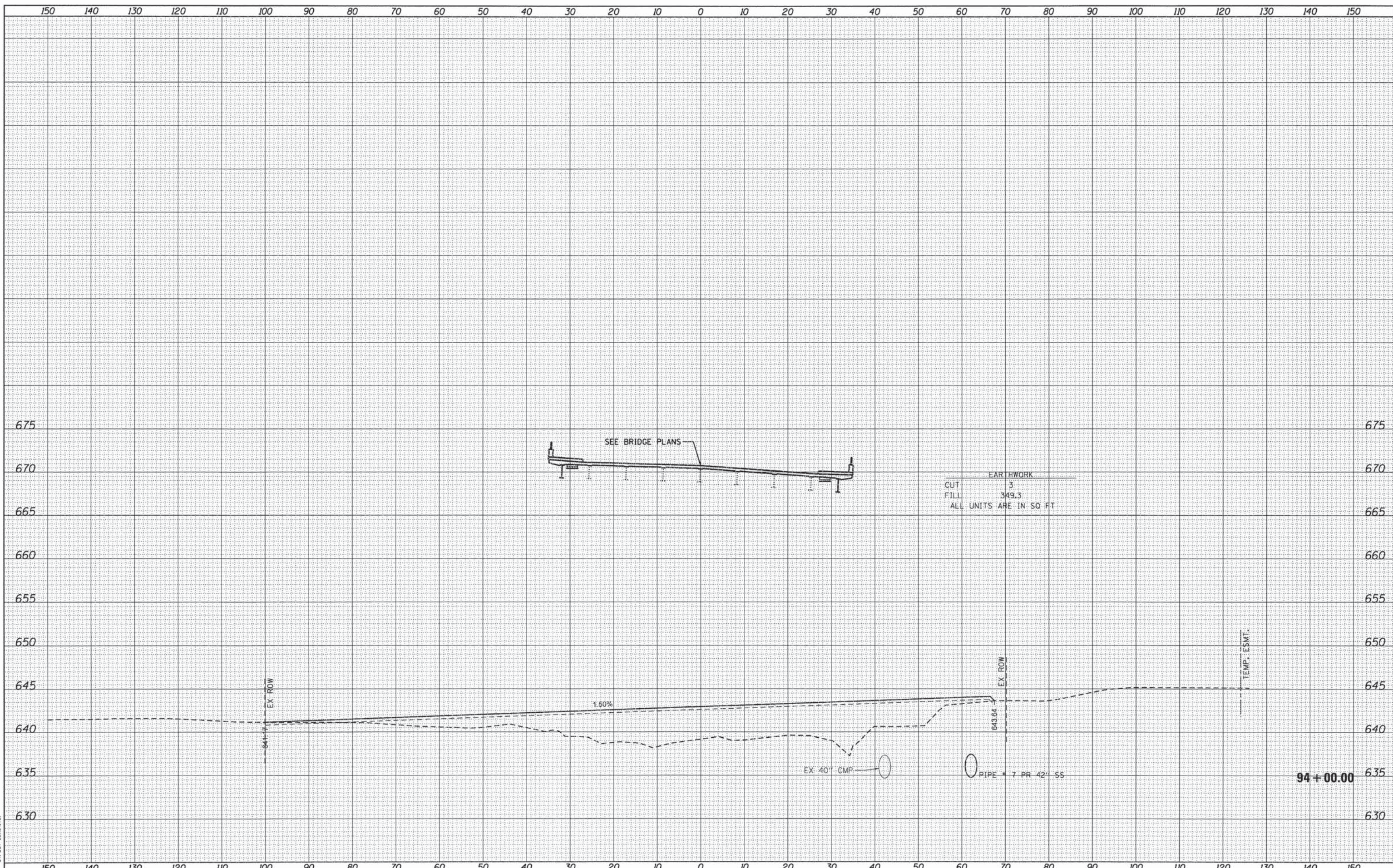
EARTHWORK
 CUT 0.3
 FILL 44.6
 ALL UNITS ARE IN SQ. FT.

USER NAME = whood PLOT SCALE = PLOT DATE = 8/22/2013	DESIGNED - KMA DRAWN - WJH CHECKED - RGD DATE - 8/22/13	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER CROSS SECTIONS	SCALE: SHEET OF SHEETS STA. 93+50.00 TO STA. 93+50.00	F.A. RTE. 1503 SECTION 09-00286-00-BR COUNTY KANE TOTAL SHEETS 181 SHEET NO. 173	CONTRACT NO.	ILLINOIS FED. AID PROJECT #FEDPROJNO#
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BY	DATE
SURVEYED	
PLOTTED	
REPLATE	
AREAS CHECKED	
NO.	

BY	DATE
SURVEYED	
PLOTTED	
REPLATE	
AREAS CHECKED	
NO.	

COMPANY NAME: HRGreen.com
 PROJECT CONTACT: Keith M. Artz
 CLIENT: City of Aurora
 DATE PLOTTED: 8/22/2013 8:07:41 PM
 FILE NAME: 8610318-Xsect.dgn
 PLOT DRIVER: pof.plt
 PLOT TABLE: Struct 22x34.tbl



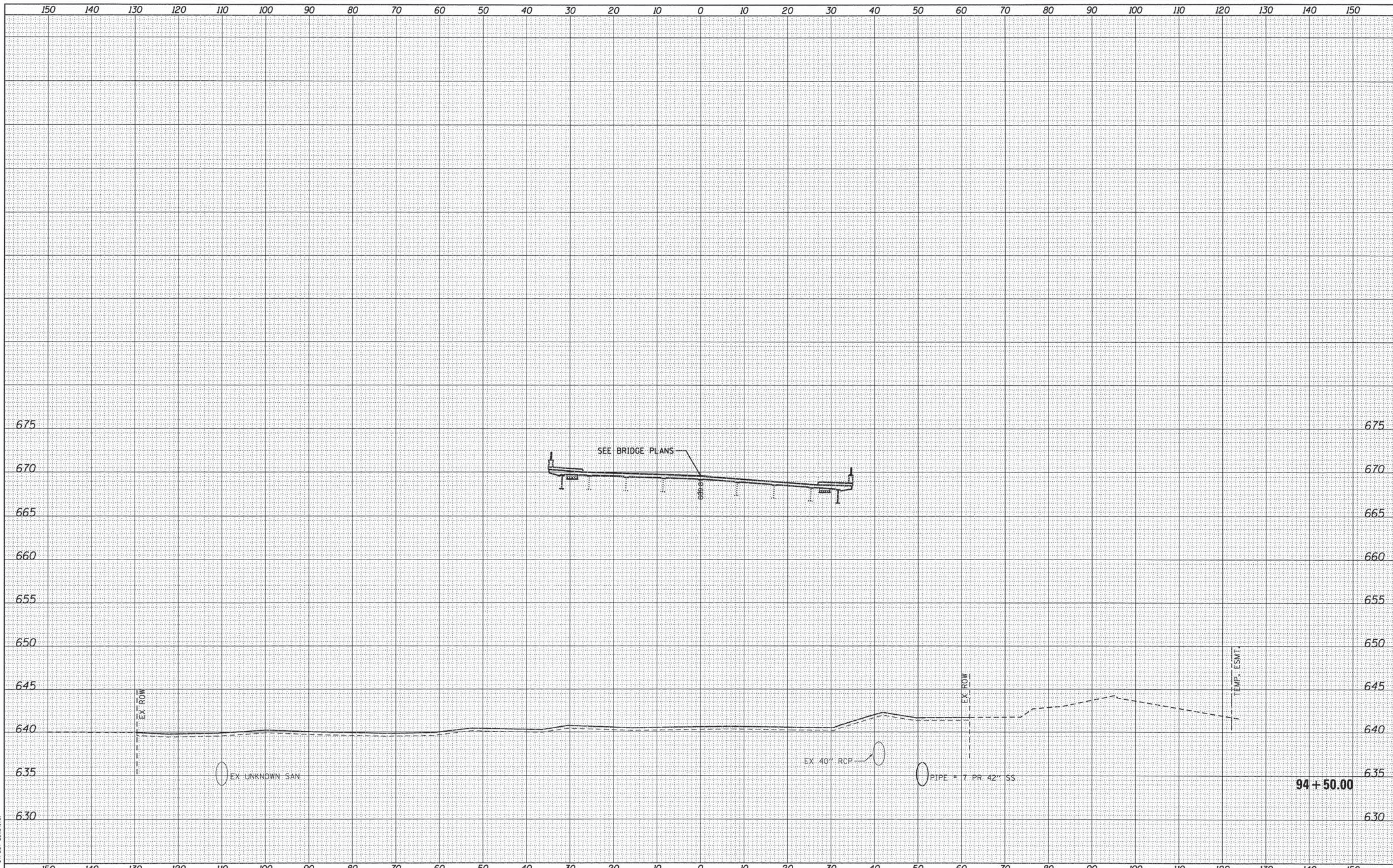
EARTHWORK	
CUT	3
FILL	349.3
ALL UNITS ARE IN SQ. FT.	

HRGreen.com Illinois Professional Design Firm #184-001322	USER NAME = whood PLOT SCALE = PLOT DATE = 8/22/2013	DESIGNED - KMA DRAWN - WJH CHECKED - RGD DATE - 8/22/13	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER CROSS SECTIONS	SCALE: SHEET OF SHEETS STA. 94+00.00 TO STA. 94+00.00	F.A. RTE. 1503 SECTION 09-00286-00-BR COUNTY KANE CONTRACT NO.	TOTAL SHEETS 181 SHEET NO. 174	ILLINOIS FED. AID PROJECT #FEDPROJNO#
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DATE	
BY	
FINAL SURVEY	
SURVEYED	
PLOTTED	
NOTE BOOK	
AREAS CHECKED	

DATE	
BY	
ORIGINAL SURVEY	
SURVEYED	
PLOTTED	
NOTE BOOK	
AREAS CHECKED	

COMPANY NAME: HRGreen.com
 PROJECT CONTACT: Kevin M. Artz
 CLIENT: City of Aurora
 DATE PLOTTED: 8/22/2013 8:08:02 PM
 FILE NAME: 8610218-Xsect.dgn
 PLOT DRIVER: pdt.plt
 PEN TABLE: Struct 22x34.tbl

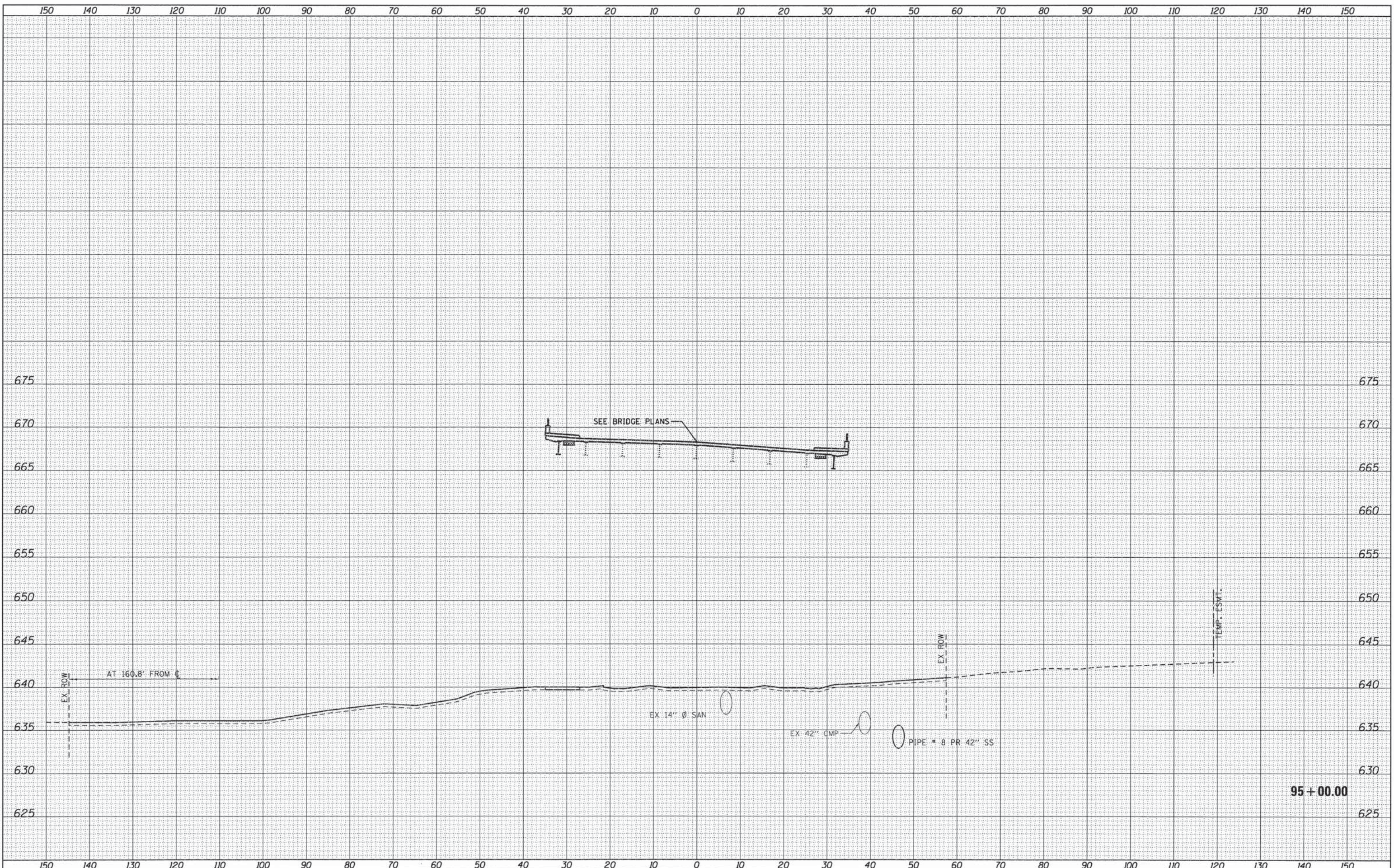


USER NAME = whood	DESIGNED - KMA	REVISED -	SCALE: 1" = 10'	SHEET 01	OF 10 SHEETS	STA. 94+50.00	TO STA. 94+50.00	F.A. RTE. 1503	SECTION 09-00286-00-BR	COUNTY KANE	TOTAL SHEETS 181	SHEET NO. 175
PLOT SCALE =	CHECKED - RGD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION			INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER CROSS SECTIONS			CONTRACT NO. [ILLINOIS] FED. AID PROJECT #FEDPROJNO#			
PLOT DATE = 8/22/2013	DATE - 8/22/13	REVISED -										

DATE	
BY	
SURVEYED	
PLOTTED	
DATE	
FILE NAME	
AREAS CHECKED	
NO.	

DATE	
BY	
SURVEYED	
PLOTTED	
DATE	
FILE NAME	
AREAS CHECKED	
NO.	

COMPANY NAME: Kevin M. Artz
 PROJECT CONTACT: City of Aurora
 CLIENT: 8/22/2013 8:16:23 PM
 DATE PLOTTED: 8610318-Assect.dgn
 FILE NAME: pef.dwg
 PLOT DRIVER: standard-trans.tbl
 PEN TABLE:




HRGreen.com
 Illinois Professional Design Firm
 #184-001322

USER NAME = whood	DESIGNED - KMA	REVISED -
PLLOT SCALE =	DRAWN - WJH	REVISED -
PLLOT DATE = 8/22/2013	CHECKED - RGD	REVISED -
	DATE - 8/22/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

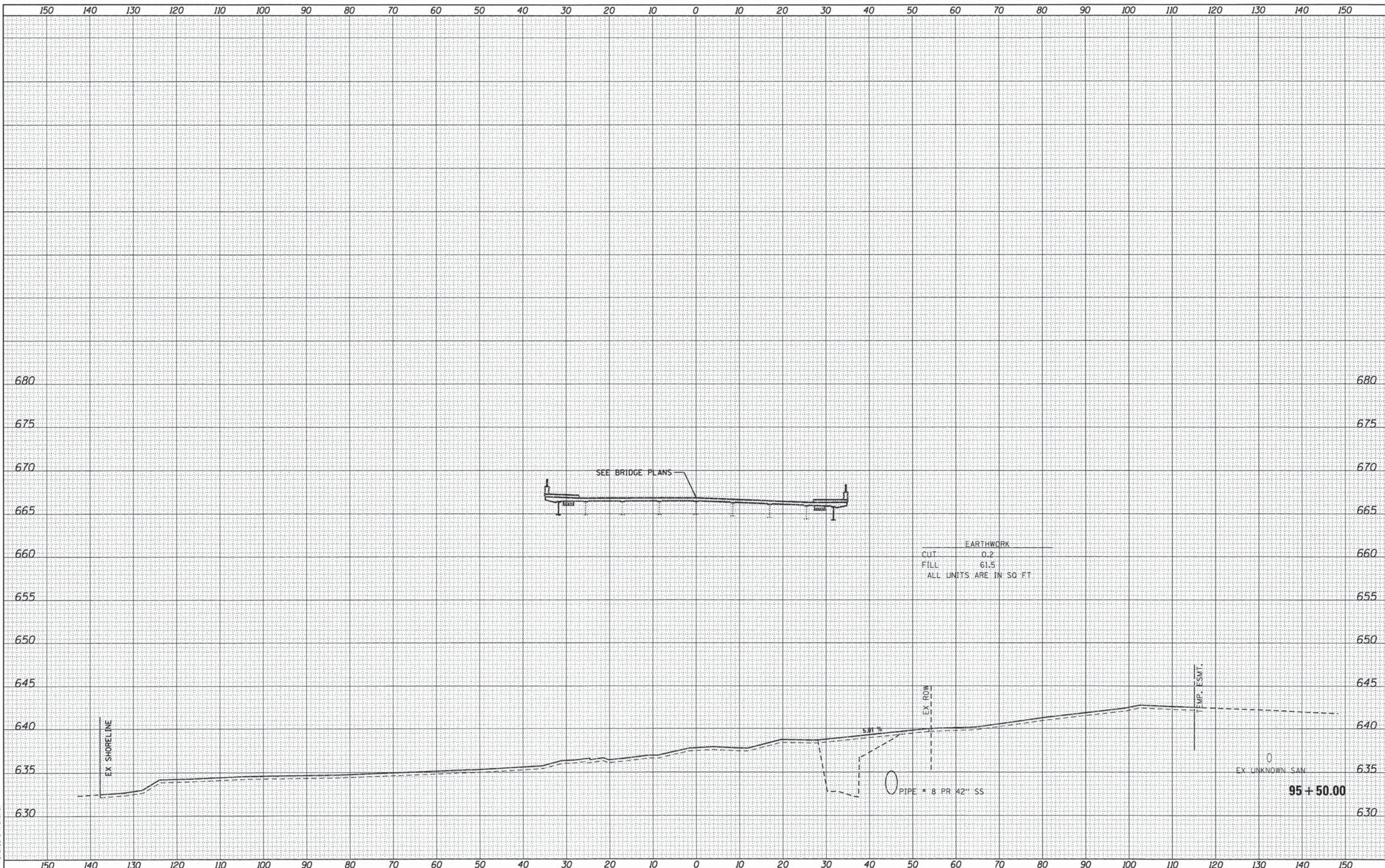
INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER			
CROSS SECTIONS			
SCALE:	SHEET	OF	SHEETS
			STA. 95+00.00 TO STA. 95+00.00

F.A. RTE. 1503	SECTION 09-00286-00-BR	COUNTY KANE	TOTAL SHEETS 181	SHEET NO. 176
CONTRACT NO.				
ILLINOIS FED. AID PROJECT #FEDPROJNO#				

FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
DATE		
AREAS CHECKED		
NO.		

ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
DATE		
AREAS CHECKED		
NO.		

COMPANY NAME: HRGreen.com
 PROJECT CONTACT: Kevin M. Aruff
 CLIENT: City of Aurora
 DATE PLOTTED: 8/22/2013 8:09:18 PM
 FILE NAME: 8610218-Keact.dgn
 PLOT DRIVER: pdf24t
 PEN TABLE: standard-fonts.tbl



USER NAME = whood	DESIGNED - KMA	REVISED -
	DRAWN - WJH	REVISED -
PLOT SCALE =	CHECKED - RGD	REVISED -
PLOT DATE = 8/22/2013	DATE - 8/22/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

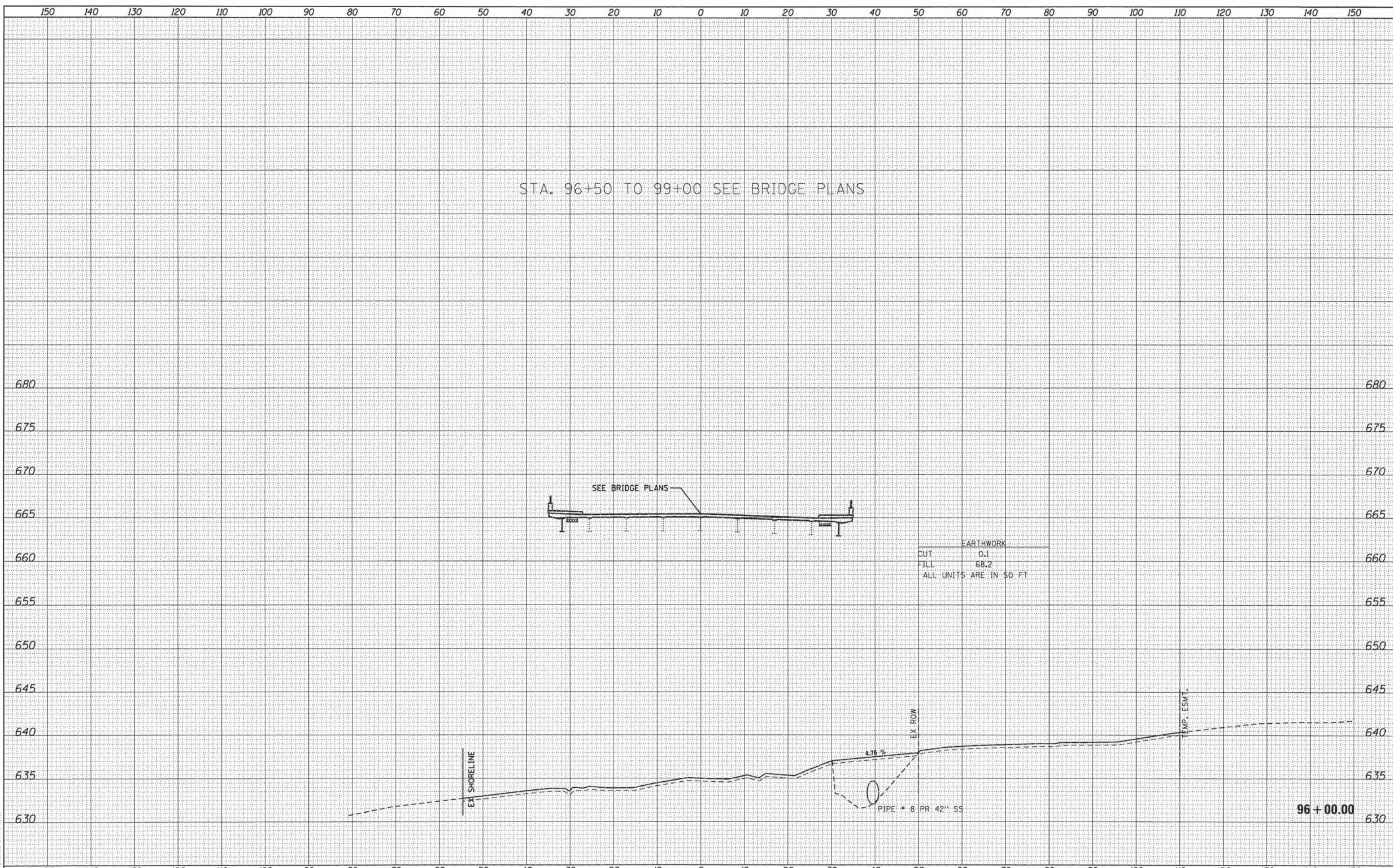
INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER			
CROSS SECTIONS			
SCALE:	SHEET	OF	SHEETS
			STA. 95+50.00 TO STA. 95+50.00

F.A. RTE. 1503	SECTION 09-00286-00-BR	COUNTY KANE	TOTAL SHEETS 181	SHEET NO. 177
CONTRACT NO.				[ILLINOIS] FED. AID PROJECT #FEDPROJNO#

FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
NOTE BOOK		
AREAS CHECKED		
NO.		

ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
NOTE BOOK		
AREAS CHECKED		
NO.		

COMPANY NAME: **HRGreen**
 PROJECT CONTACT: **Kevin M. Arff**
 CLIENT: **City of Aurora**
 DATE PLOTTED: **8/22/2013 8:09:50 AM**
 FILE NAME: **8610318-2sect.dgn**
 PLOT DRIVER: **pdfLpt**
 PEN TABLE: **#standard-trans.tbl**



STA. 96+50 TO 99+00 SEE BRIDGE PLANS

SEE BRIDGE PLANS

EARTHWORK	
CUT	0.1
FILL	68.2
ALL UNITS ARE IN SQ. FT.	

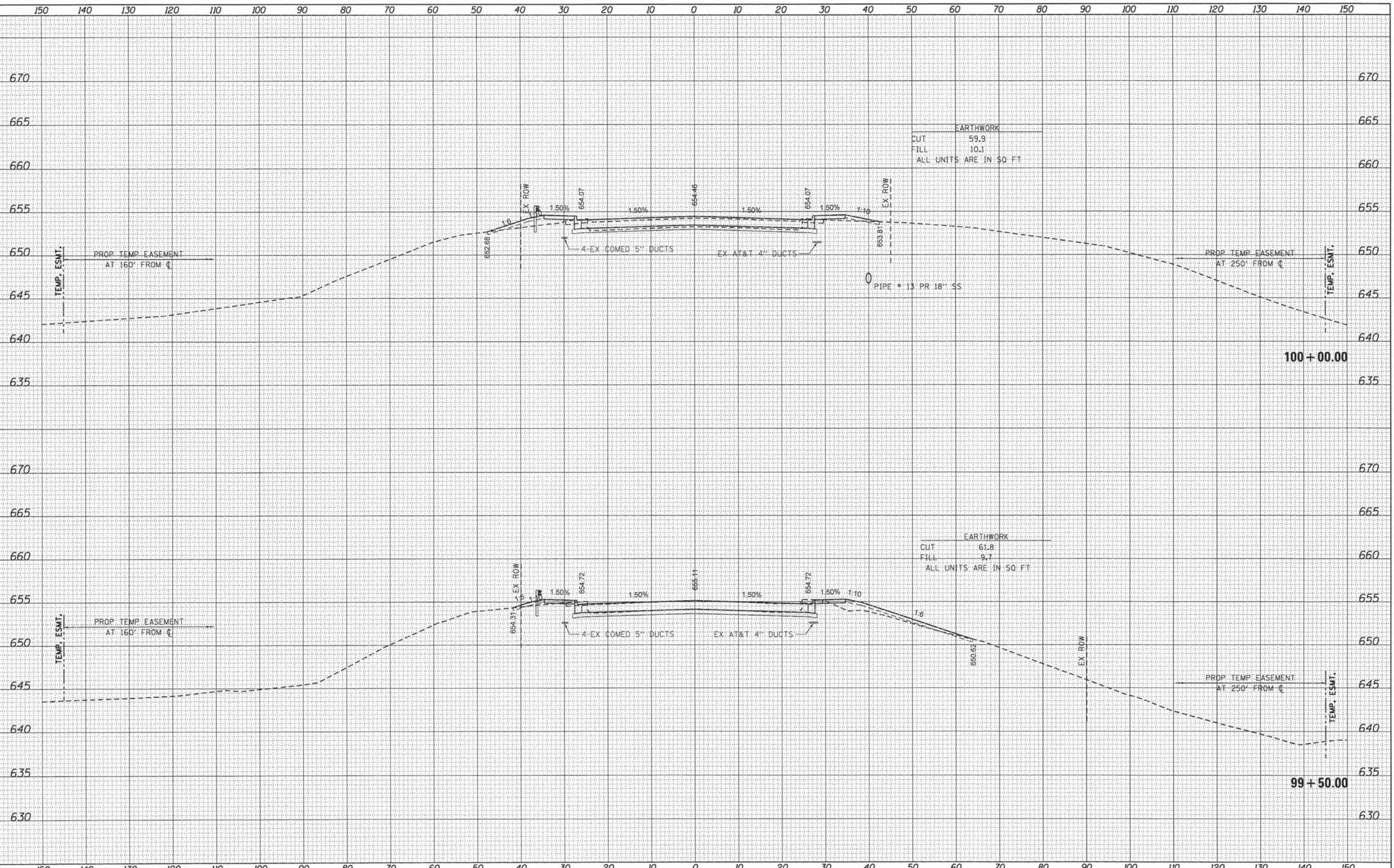
PIPE = 8 PR 42" SS

96 + 00.00

DATE	
BY	
FINISHED SURVEY	
PLOTTED	
TEMPLATE	
NOTE BOOK	
AREAS CHECKED	
NO.	

DATE	
BY	
ORIGINAL SURVEY	
PLOTTED	
TEMPLATE	
NOTE BOOK	
AREAS CHECKED	
NO.	

COMPANY NAME: Kevin M. Arff
 PROJECT CONTACT: City of Aurora
 CLIENT: Kevin M. Arff
 FILE NAME: 8610186-Aurora-09n
 PLOT DRIVER: standard-trans.tbl

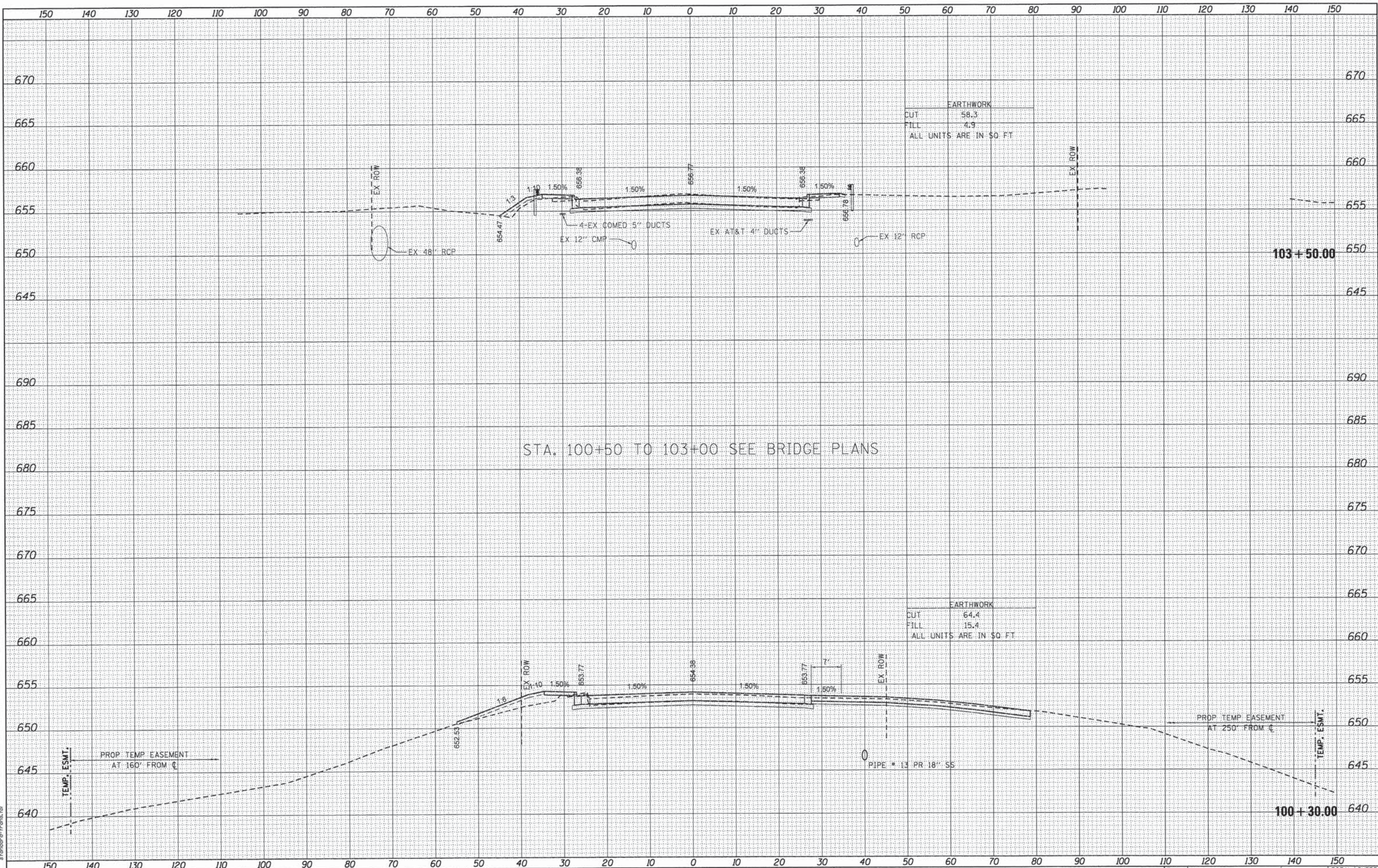


HRGreen.com Illinois Professional Design Firm #184-001322	USER NAME = whoad DESIGNED - KMA DRAWN - WJH CHECKED - RGD PLOT DATE = 8/22/2013	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER CROSS SECTIONS	SCALE: SHEET OF SHEETS STA. 99+50.00 TO STA. 100+00.00	F.A. RTE. 1503 SECTION 09-00286-00-BR COUNTY KANE TOTAL SHEETS 181 SHEET NO. 179 CONTRACT NO. ILLINOIS FED. AID PROJECT #FEDPROJNO#
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DATE	
BY	
FINAL SURVEY	
SURVEYED	
PLOTTED	
REVISIONS	
NOTE BOOK	
AREAS CHECKED	
NO.	

DATE	
BY	
ORIGINAL SURVEY	
PLOTTED	
REVISIONS	
NOTE BOOK	
AREAS CHECKED	
NO.	

COMPANY NAME: **HRGreen.com**
 PROJECT CONTACT: **Kevin M. Arrf**
 CLIENT: **City of Aurora, IL**
 FILE NAME: **09-00286-00-01.dgn**
 PLOT DRIVER: **perflat**
 PEN TABLE: **standard-trans.tbl**



USER NAME =	whood
PLOT SCALE =	
PLOT DATE =	8/22/2013

DESIGNED -	KMA	REVISED -	
DRAWN -	WJH	REVISED -	
CHECKED -	RGD	REVISED -	
DATE -	8/22/13	REVISED -	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

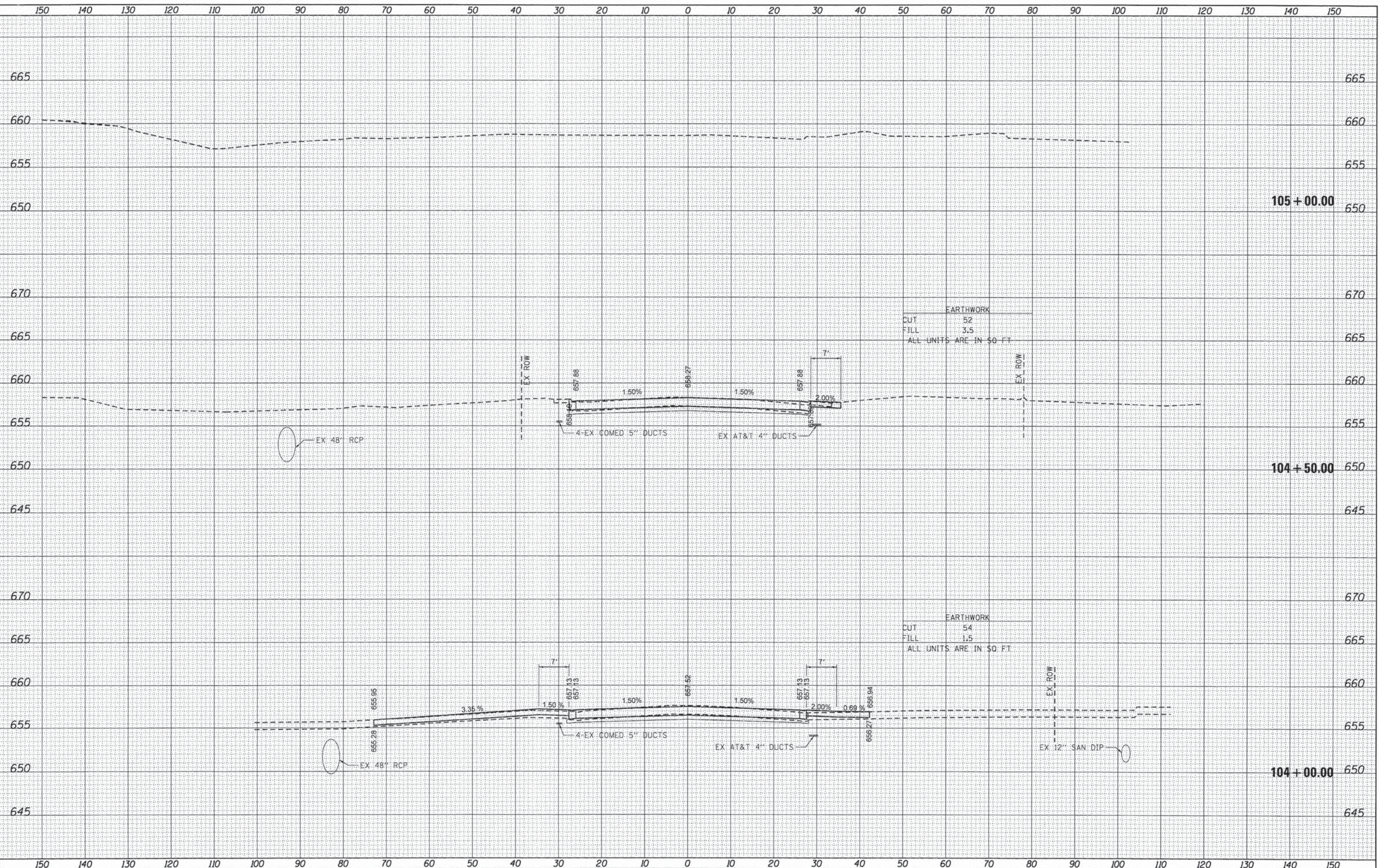
INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER CROSS SECTIONS			
SCALE:	SHEET	OF	SHEETS
STA. 100+30.00		TO STA. 103+50.00	

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	180
CONTRACT NO.				
ILLINOIS FED. AID PROJECT #FEDPROJNO#				

DATE	
BY	
SURVEYED	
PLOTTED	
TEMP. DATE	
NOTE BOOK	
AREAS CHECKED	
NO.	

DATE	
BY	
SURVEYED	
PLOTTED	
TEMP. DATE	
NOTE BOOK	
AREAS CHECKED	
NO.	

COMPANY NAME: Kevin M. Arff
 PROJECT CONTACT: Kevin M. Arff
 CLIENT: City of Chicago
 FILE NAME: 8/22/2013 BR BR
 PLOT DRIVER: pldrvr
 PEN TABLE: standard-fronius.tbl



HRGreen.com
 Illinois Professional Design Firm
 #184-001322

USER NAME = whoad	DESIGNED - KMA	REVISED -
PLOT SCALE =	DRAWN - WJH	REVISED -
PLOT DATE = 8/22/2013	CHECKED - RGD	REVISED -
	DATE - 8/22/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER
CROSS SECTIONS

SCALE: SHEET OF SHEETS STA. 104+00.00 TO STA. 105+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	181
CONTRACT NO.				
ILLINOIS FED. AID PROJECT #FEDPROJNO#				