

SHEET NO.	ITEM
1	COVER SHEET
2-3	HIGHWAY STANDARDS, GENERAL NOTES AND COMMITMENTS
4	STATUS OF UTILITIES
5-14	SUMMARY OF QUANTITIES
15	TYPICAL SECTIONS
16-20	SCHEDULES OF QUANTITIES
21-23	ALIGNMENT TIES & BENCHMARKS
24-26	PLAN AND PROFILE SHEETS
27-41	SUGGESTED STAGES OF CONSTRUCTION AND TRAFFIC CONTROL
42-43	EROSION CONTROL & PAVEMENT MARKING SHEETS
44	RIGHT-OF-WAY PLAN SHEET
45-54	LIGHTING SHEETS (DESIGNED BY DISTRICT 4)
55-104	STRUCTURE PLANS AND STRUCTURE BORINGS
105-115	EXISTING BRIDGE PLANS
116-123	CROSSOVER DETAIL SHEETS
124-127	CONSTRUCTION DETAILS
128-136	DISTRICT 4 STANDARDS
137	CULVERT CROSS SECTION
138-162	CROSS SECTIONS STAGE 1
163-187	CROSS SECTIONS STAGE 2
188-212	CROSS SECTIONS STAGE 3

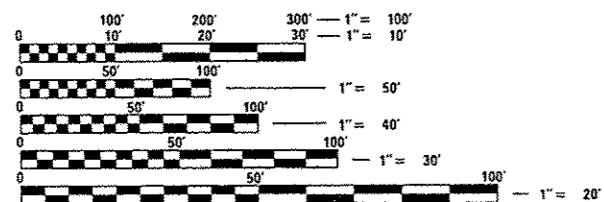
**DESIGN DESIGNATION**

F.A.I. ROUTE 74  
 INTERSTATE (URBAN)  
 CURRENT ADT: 16,400 (2013)  
 DESIGN SPEED: 70 MPH  
 POSTED SPEED: 70 MPH  
 MU = 22.0%, SU = 3.8%

LINCOLN STREET/COUNTY HIGHWAY 40  
 MINOR ARTERIAL (RURAL)  
 CURRENT ADT: 1,750 (2012)  
 DESIGN ADT: 1,804 (2032)  
 DESIGN SPEED: 60 MPH  
 POSTED SPEED: 55 MPH  
 MU = 2.0%, SU = 3.0%

**SCALE IN FEET**

PLAN 1" = 50'  
 PROFILE HORIZ 1" = 50'  
 PROFILE VERT 1" = 5'  
 STAGING 1" = 100'  
 CROSS SECTION HORIZ 1" = 10'  
 CROSS SECTION VERT 1" = 5'



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.  
 JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION  
 1-800-892-0123  
 OR 811

PROJECT ENGINEER MICHAEL JACOBS 309-671-3474  
 PROJECT MANAGER RICH DOTSON 309-671-3455  
 CONTRACT NO. 68B69  
 CATALOG NO. 033400-02D

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

**PROPOSED  
 HIGHWAY PLANS**

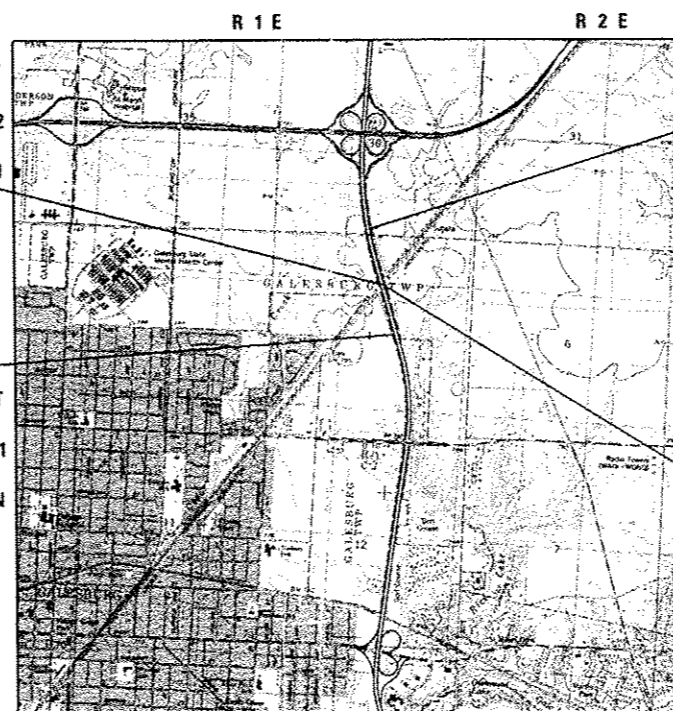
FAI ROUTE 74 (I-74)  
 SECTION (48-26HVB)BR  
 PROJECT ACNHPP-0074(321)  
 BRIDGE REPLACEMENT  
 KNOX COUNTY  
 C-94-048-14

INTERSTATE 74 OVER BNSF RAILROAD AND LINCOLN STREET  
 REPLACEMENT OF EXISTING BRIDGES AND GRADE RAISE

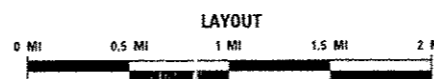
**BRIDGE REPLACEMENT**  
 STA. 250 + 30.37 TO 253 + 54.44 (EB)  
 STA. 249 + 85.56 TO 253 + 09.63 (WB)

**END SECTION**  
 STA. 274 + 78 (EB)  
 STA. 275 + 02 (WB)

**BEGIN SECTION**  
 STA. 231 + 85 (EB)  
 STA. 236 + 46 (WB)

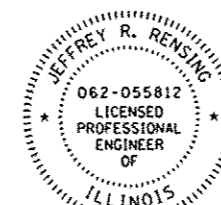


TOWNSHIP: GALESBURG



GROSS LENGTH = 4,293 FT. = 0.81 MILE (EB)  
 = 3,856 FT. = 0.73 MILE (WB)  
 NET LENGTH = 4,293 FT. = 0.81 MILE (EB)  
 = 3,856 FT. = 0.73 MILE (WB)

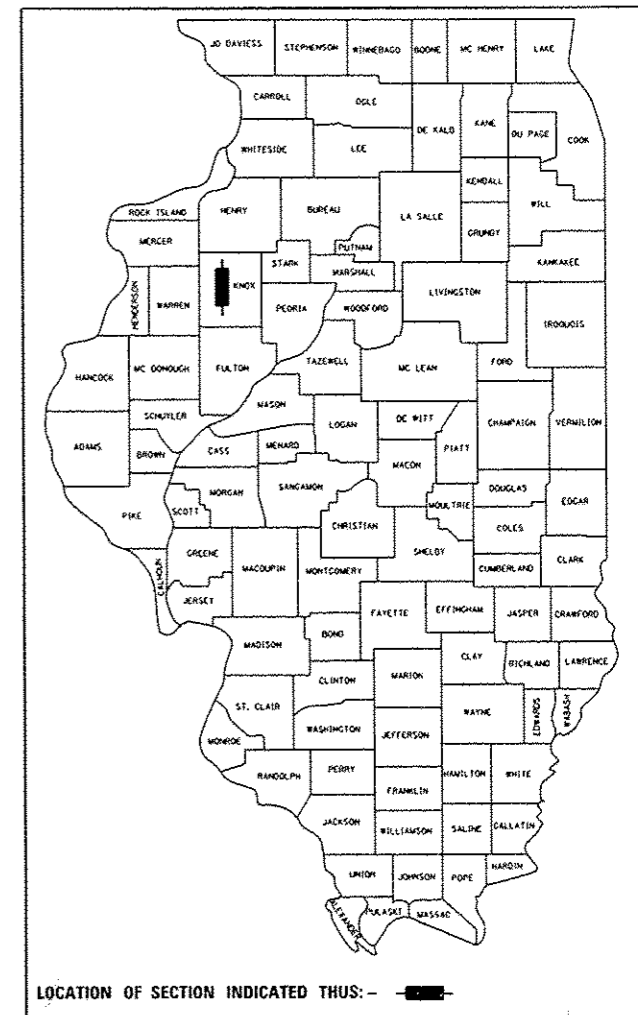
PROJECT INCLUDES TWO 4-SPAN STRUCTURES, CONSISTING OF A REINFORCED CONCRETE DECK ON STEEL PLATE GIRDER SUPERSTRUCTURE FOUNDED ON INTEGRAL ABUTMENTS AND PILE SUPPORTED PIERS  
 EXIST. S.N. 048-0005 AND S.N. 048-0006  
 PROP. S.N. 048-0101 AND S.N. 048-0102



Jeffrey R. Rensing, P.E. Date 2/22/14  
 License Expires 11/30/2017

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	148-26HVB)BR	KNOX	212	1
ILLINOIS			CONTRACT NO. 68B69	

D-94-012-14



LOCATION OF SECTION INDICATED THUS: - [Symbol] -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS

SUBMITTED March 17, 2016  
 [Signature]  
 DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER  
 Dec 9 2016  
 Maureen M. Addis, P.E.  
 ENGINEER OF DESIGN AND ENVIRONMENT  
 Dec 9 2016  
 Omar Condon, P.E.  
 DIRECTOR OF HIGHWAYS, CHIEF ENGINEER



ILLINOIS: Eastport Business Center 1, 100 Lanier Court, Suite 1, Collinsville, IL 62234, tel 618.345.2200, fax 618.345.7233  
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 www.oatesassociates.com

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 OF THE STATE OF ILLINOIS

**GENERAL NOTES**

**1. SOIL REPORT AVAILABILITY**

THE SOILS REPORT AND ALL SOILS DATA COLLECTED AND PROCESSED IN CONJUNCTION WITH THE DESIGN OF IMPROVEMENT IS ON FILE AT THE DISTRICT OFFICE WHERE IT IS AVAILABLE FOR INSPECTION BY CONTRACTOR OR PROSPECTIVE BIDDERS. BY SUBMITTING A BID, THE CONTRACTOR ACKNOWLEDGES THAT THE SOILS REPORT AND DATA HAVE BEEN MADE AVAILABLE. THAT THE CONTRACTOR IS AWARE OF THE REPORT CONTENTS AND APPENDICES, AND THAT THE SOILS REPORT IS PART OF THE CONTRACT DOCUMENTS.

**2. AVAILABILITY OF ELECTRONIC FILES**

MICROSTATION AND GEOPAK FILES OF THIS PROJECT WILL BE MADE AVAILABLE TO THE CONTRACTOR, IF THERE IS A CONFLICT BETWEEN THE ELECTRONIC FILES AND THE PRINTED CONTRACT PLANS AND DOCUMENTS, THE PRINTED CONTRACT PLANS AND DOCUMENTS SHALL TAKE PRECEDENCE OVER THE ELECTRONIC FILES. THE CONTRACTOR SHALL ACCEPT ALL RISK ASSOCIATED WITH USING THE ELECTRONIC FILES AND SHALL HOLD THE DEPARTMENT HARMLESS FOR ANY ERRORS OR OMISSIONS IN THE ELECTRONIC FILES AND THE DATA CONTAINED THEREIN. ERRORS OR DELAYS RESULTING FROM THE USE OF THE ELECTRONIC FILES BY THE CONTRACTOR SHALL NOT RESULT IN AN EXTENSION OF TIME FOR ANY INTERIM OR FINAL COMPLETION DATE OR SHALL NOT BE CONSIDERED CAUSE FOR ADDITIONAL COMPENSATION. THE CONTRACTOR SHALL NOT USE, SHARE, OR DISTRIBUTE THESE ELECTRONIC FILES EXCEPT FOR THE PURPOSE OF CONSTRUCTING THIS CONTRACT. ANY CLAIMS BY THIRD PARTIES DUE TO USE OR ERRORS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL INCLUDE THIS DISCLAIMER WITH THE TRANSFER OF THESE ELECTRONIC FILES TO ANY OTHER PARTIES AND SHALL INCLUDE APPROPRIATE LANGUAGE BINDING THEM TO SIMILAR RESPONSIBILITIES.

**3. TREE REMOVAL - UTILITY RELOCATION**

TREE REMOVAL MAY BE NECESSARY PRIOR TO UTILITY COMPANIES BEING ABLE TO RELOCATE THEIR FACILITIES OUTSIDE THE CONSTRUCTION LIMITS. THE CONTRACTOR SHOULD COORDINATE ANY CONTRACT TREE REMOVAL ACTIVITIES WITH THE UTILITY COMPANIES TO ELIMINATE CONFLICTS AND POTENTIAL DELAYS CAUSED BY UTILITY TREE REMOVAL ACTIVITIES OR INCOMPLETE UTILITY RELOCATIONS.

**4. PLAN ELEVATIONS - U. S. G. S. MEAN SEA LEVEL DATUM**

ALL ELEVATIONS SHOWN ON THE PLANS ARE ESTABLISHED FROM U. S. G. S. MEAN SEA LEVEL DATUM.

**5. PROPERTY OWNER ACCESS REQUIREMENTS**

ACCESS MUST BE MAINTAINED TO ALL EXISTING PROPERTIES DURING CONSTRUCTION PER ARTICLE 107.09 UNLESS ARRANGEMENTS ARE MADE IN WRITING BY THE CONTRACTOR WITH THE PROPERTY OWNERS WITH A COPY TO THE ENGINEER FOR SHORT-TERM CLOSURES.

**6. TEMPORARY MATERIAL REQUIREMENTS - UTILITY AND DRIVEWAY CROSSINGS**

INCIDENTAL HOT-MIX ASPHALT SURFACE SHALL BE USED FOR ALL TEMPORARY SIDE ROAD CROSSINGS. AGGREGATE SURFACE COURSE MAY BE USED FOR ALL DRIVEWAY CROSSINGS EXCEPT DURING WINTER SHUTDOWN IN ACCORDANCE WITH ARTICLE 107.09.

**7. WINTER SHUTDOWN RESTRICTIONS ON COLD MILLED PROJECTS**

PRIOR TO WINTER SHUTDOWN THE FOLLOWING STEPS SHALL BE TAKEN:

- ALL COLD MILLED SURFACES SHALL BE OVERLAID.
- ALL LANES SHALL BE REOPENED TO TRAFFIC.
- MANHOLES, WHERE APPLICABLE, SHALL BE ADJUSTED TO THE ELEVATION OF THE BINDER COURSE/LEVELING BINDER TO EASE IN PLOWING SNOW, AND RE-ADJUSTED TO FINISHED GRADE IN THE SPRING. THE INITIAL MANHOLE ADJUSTMENT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE AND ANY RE-ADJUSTMENT, AS DIRECTED BY THE ENGINEER, WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04.
- TEMPORARY OR PERMANENT PAVEMENT MARKING SHALL BE PLACED AS APPLICABLE.

**8. CRITICAL PATH WORK SCHEDULE REQUIREMENT**

THE CONTRACTOR WILL SUBMIT TO THE ENGINEER A SATISFACTORY PROGRESS SCHEDULE AND CRITICAL PATH SCHEDULE WHICH SHALL SHOW THE PROPOSED SEQUENCE OF WORK AT THE TIME OF THE PRE-CONSTRUCTION CONFERENCE.

**9. CLEARING**

AT LOCATIONS WHERE CLEARING IS INDICATED ON THE PLANS BEYOND THE LIMITS OF THE PROPOSED EXCAVATION OR EMBANKMENT, THE CONTRACTOR SHALL RESTORE THE DISTURBED EARTH BY BLADING AND SHAPING TO BLEND WITH THE ADJACENT GROUND. THE CLEARING WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF EXCAVATION PAY ITEMS IN THE PLANS. PAYMENT FOR RESEEDING OR RESODDING WILL BE AS PROVIDED IN THE PLANS.

**10. TREE REMOVAL**

THE DISTRICT FOUR TREE COMMITTEE SHOULD BE CONTACTED AND PRIOR APPROVAL OBTAINED FOR ANY TREE REMOVAL BEYOND THE LIMITS/LOCATIONS INCLUDED IN THE PLANS.

**11. ENVIRONMENTAL REVIEWS**

PRIOR TO THE USE OF ANY PROPOSED BORROW AREAS, USE AREAS (TEMPORARY ACCESS ROADS, DETOURS, RUN-AROUNDS, ETC.) AND/OR WASTE AREAS, THE CONTRACTOR SHALL FILE THE REQUIRED ENVIRONMENTAL RESOURCE REQUEST SURVEYS ACCORDING TO SECTION 107.22 OF THE STANDARD SPECIFICATIONS. THESE SURVEYS ARE REQUIRED IN ORDER FOR THE DEPARTMENT TO CONDUCT CULTURAL AND BIOLOGICAL RESOURCE SURVEYS FOR THE PROPOSED SITE.

THE REQUIRED ENVIRONMENTAL RESOURCE DOCUMENTATION SHALL INCLUDE THE FOLLOWING:

- BDE FORM 2289 (ENVIRONMENTAL SURVEY REQUEST)
- BDE FORM 2290 (WASTE/USE AREA REVIEW)
- A LOCATION MAP SHOWING THE SIZE LIMITS AND LOCATION OF THE USE AREA
- COLOR PHOTOGRAPHS DEPICTING THE USE AREA
- BORROW AREA ENTRY AGREEMENT FORM-D4 P10101

PRIOR TO ANY WASTE MATERIALS BEING REMOVED FROM THE CONSTRUCTION SITE THE REQUIRED ENVIRONMENTAL RESOURCE SURVEYS SHALL BE OBTAINED AND FILED BY THE CONTRACTOR. EXCESS WASTE PRODUCTS REMOVED FROM THE CONSTRUCTION SITE SHALL BE DISPOSED OF AS REQUIRED IN SECTION 202.03 OF THE STANDARD SPECIFICATIONS.

ANY PROTRUDING METAL BARS SHALL BE REMOVED PRIOR TO THE DISPOSAL OF BROKEN CONCRETE AT APPROVED DISPOSAL SITES.

PLEASE NOTE THAT A MINIMUM OF FOUR WEEKS SHALL BE ALLOWED FOR THE DISTRICT TO OBTAIN THE REQUIRED WASTE SITE ENVIRONMENTAL CLEARANCES AND SIX WEEKS FOR THE REQUIRED BORROW SITE ENVIRONMENTAL CLEARANCES.

**12. SEEDING - SIDE SLOPE RIPPING**

ALL SLOPES STEEPER THAN 3 TO 1 AND OVER 15 FT (4.5 M) IN HEIGHT SHALL BE RIPPED THIS SHALL CONSIST OF RIPPING BETWEEN 18 INCHES TO 24 INCHES (450 MM TO 600 MM) DEEP NORMAL TO THE SLOPE. THE INTERVAL OF RIPPING ALONG THE SLOPE SHALL BE 12 FT. (3.6 M). THIS WORK SHALL BE DONE AFTER THE SEED BED HAS BEEN PREPARED BUT BEFORE ANY FERTILIZER OR SEED HAS BEEN APPLIED. THE FERTILIZER AND SEED SHALL BE APPLIED WITHIN A 24-HOUR PERIOD AFTER THE RIPPING HAS BEEN DONE. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE VARIOUS ITEMS OF SEEDING INVOLVED.

**13. PAVEMENT STATIONING NUMBERS & PLACEMENT**

THE CONTRACTOR SHALL PROVIDE LABOR AND MATERIALS REQUIRED TO IMPRINT PAVEMENT STATION NUMBERS IN THE FINISHED SURFACE OF THE PAVEMENT AND/OR OVERLAY. THE NUMBERS SHALL BE APPROXIMATELY 3/4 INCH (20MM) WIDE, 5 INCHES (125 MM) HIGH AND 5/8 INCH (15 MM) DEEP.

THE PAVEMENT STATION NUMBERS SHALL BE INSTALLED AS SPECIFIED HEREIN:

INTERVAL - 200 FEET (ENGLISH STATIONING) OR 100 METERS (METRIC STATIONING)

BOTTOM OF NUMBERS - 6 INCHES (150 MM) FROM THE INSIDE EDGE OF THE PAVEMENT MARKING

LOCATION:

- 2,3, & 5 LANE PAVEMENTS - RIGHT EDGE OF PAVEMENT IN DIRECTION OF INCREASING STATIONS
- MULTI-LANE DIVIDED ROADWAYS - OUTSIDE EDGE OF PAVEMENT IN BOTH DIRECTIONS
- RAMPS - ALONG BASELINE EDGE OF PAVEMENT

POSITION - STATIONS SHALL BE PLACED SO THEY CAN BE READ FROM THE ADJACENT SHOULDER

FORMAT - ENGLISH (METRIC) PAVEMENT STATIONS SHALL USE THIS FORMAT "XXX (XX+X00)" WHERE X REPRESENTS THE PAVEMENT STATION

THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT WILL BE CONSIDERED INCLUDED IN THE COST OF THE ASSOCIATED PAVEMENT AND/OR OVERLAY PAY ITEMS.


**14. HOT-MIX ASPHALT MIXTURE REQUIREMENTS**

**MIXTURES TABLE**

MIXTURE USE(S)	POLYMER SURFACE 2"	POLYMER BINDER MAINLINE 2"	BINDER VARIABLE DEPTH MAINLINE	SHOULDERS (SURFACE LIFT)	SHOULDERS (LOWER LIFTS)	CROSS-OVER (ALL LIFTS) AND DECK SURFACE REPAIRS
AC/PG	SBS OR SBR 76-22	SBS OR SBR 76-22	PG 64-22	PG 64-22	PG 64-22	PG 64-22
DESIGN AIR VOIDS	4.0% @ N=70	4.0% @ N=70	4.0% @ N=70	4.0% @ N=50	4.0% @ N=50	4.0% @ N=70
MIXTURE COMPOSITION	IL 9.5	IL 9.5	IL 19.0	IL 9.5FG	IL 19.0	IL 9.5
FRICTION AGGREGATE	MIX E	N.A.	N.A.	MIX C	N.A.	MIX D
QUALITY MANAGEMENT PROGRAM	OCP	OCP	OCP	OCPA	OCPA	OCPA

NOTES: 1. INDIVIDUAL LIFT THICKNESS OF EACH MIX TYPE WILL BE NO LESS THAN 3 TIMES NOMINAL MAXIMUM AGGREGATE SIZE AND NO MORE THAN 6 TIMES NOMINAL MAXIMUM AGGREGATE SIZE, UNLESS OTHERWISE APPROVED BY THE ENGINEER.  
 2. FOR DESIGN PURPOSES, MIXTURE WEIGHT FOR ALL MIXES IS DETERMINED TO BE 112.0 LB/S.Y./IN., UNLESS OTHERWISE NOTED.  
 3. SUBLot SIZES FOR OCP MIXES WILL BE 600 TONS, UNLESS OTHERWISE AGREED TO BY THE ENGINEER AND THE PAVING CONTRACTOR.

FILE NAME: D:\6869\1411\6869.dwg

 <p><b>DATES ASSOCIATES</b> Engineering + Architecture ILLINOIS DESIGN FIRM LICENSE NO. 184-00115</p>	USER NAME = kmj thbr	DESIGNED -	REVISED -	<p><b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b></p>	<p><b>GENERAL NOTES &amp; STANDARDS</b></p>	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 100.0000' / 1" = 100'	DRAWN -	REVISID -			74	(48-26HVB)BR	KNOX	212	2
PLOT DATE = 10/28/2016	CHECKED -	REVISID -		SCALE:	SHEET 1 OF 2 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT CONTRACT NO. 68B69		

**GENERAL NOTES CONTINUED**

15. MINIMUM VERTICAL CLEARANCE

THE CONTRACTOR SHALL VERIFY THE EXISTING STRUCTURE VERTICAL CLEARANCE PRIOR TO PLACING BITUMINOUS OVERLAY UNDER ANY STRUCTURE. A MINIMUM (\*) VERTICAL CLEARANCE SHALL BE MAINTAINED UNDER ALL STRUCTURES.

16. BUTT JOINT CUTTING TIME RESTRICTION

BUTT JOINTS SHALL NOT BE MILLED MORE THAN THREE (3) DAYS PRIOR TO PLACEMENT OF THE HMA SURFACE COURSE.

17. SAW CUT - 18" (450 MM) SHOULDER REMOVAL - IN-PLACE WHEEL SAW GRINDING PERMITTED

A FULL-DEPTH SAW CUT SHALL BE REQUIRED AT THE JOINT BETWEEN THE PAVEMENT THAT IS TO BE LEFT IN PLACE AND THE EXISTING SHOULDER THAT IS TO BE REMOVED. THE CONTRACTOR MAY HAVE THE OPTION OF USING A WHEEL SAW TO GRIND UP THE EXISTING SHOULDER AND LEAVE THE FINELY GROUND PIECES ON SITE UNDER THE NEW SHOULDER AND ON THE FORE SLOPE, WITH THE APPROVAL OF THE ENGINEER. MAXIMUM SIZE OF PIECES SHALL BE NO MORE THAN 3" (75 MM). LARGER PIECES SHALL BE PICKED UP/REMOVED FROM THE JOB SITE. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR VARIATIONS IN ASSUMED THICKNESS. THIS WORK SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF THE REMOVAL ITEMS.

18. ORDERING LENGTH CONFIRMATION - DRAINAGE ITEMS

THE CONTRACTOR SHALL CONSULT WITH THE ENGINEER IN REGARD TO THE EXACT LENGTH OF THE BOX/PIPE CULVERTS, STORM SEWERS, AND/OR PIPE DRAINS REQUIRED PRIOR TO ORDERING THESE ITEMS.

19. RIGHT-OF-WAY MARKERS

WHEN INSTALLING RIGHT-OF-WAY MARKERS, CARE SHALL BE TAKEN TO NOT DISTURB ANY EXISTING PROPERTY/RIGHT-OF-WAY PINS. IF A PROPERTY/RIGHT-OF-WAY PIN IS FOUND AT THE LOCATION OF A PROPOSED RIGHT-OF-WAY MARKER, THE MARKER SHALL BE PLACED ONE (1) FOOT IN FRONT OF THE PIN.

20. ENGINEERS FIELD OFFICE

ADD THE FOLLOWING SENTENCE TO THE END OF PARAGRAPH 670.02 (D) AND 670.04 (E): ALL OF THE TELEPHONE LINES PROVIDED SHALL HAVE UNPUBLISHED NUMBERS.

21. SIGNING

SIGN LOCATIONS MAY VARY FROM THE STATIONS SHOWN ON THE PLANS IN ACCORDANCE WITH DIRECTIONS FROM THE ENGINEER AT THE TIME OF CONSTRUCTION. SIGN LOCATIONS MAY BE ADJUSTED IN THE FIELD TO AVOID ANY FOUND UTILITIES.

ALL WOOD POST LOCATIONS SHALL BE VERIFIED WITH THE BUREAU OF OPERATIONS, TRAFFIC SECTION, BEFORE INSTALLATION.

22. APPROXIMATE QUANTITIES

THE FOLLOWING ITEMS AND APPROXIMATE QUANTITIES ARE INCLUDED IN THE SUMMARY OF QUANTITIES IN ORDER TO ESTABLISH A UNIT COST FOR WORK WHICH MAY BE REQUIRED TO CONSTRUCT THIS SECTION. THE ACTUAL QUANTITY OF EACH ITEM SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

AGGREGATE FOR TEMPORARY ACCESS 100 TON

23. THE FOLLOWING ABBREVIATIONS SUPPLEMENT OR SUPERCEDE HIGHWAY STANDARD 000001:

DND DO NOT DISTURB

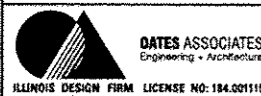
**HIGHWAY STANDARDS**

000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
202001-01	EARTH MEDIAN DITCH CHECK
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
420401-12	PAVEMENT CONNECTOR (PCC) FOR BRIDGE APPROACH SLAB
482001-02	HMA SHOULDER ADJACENT TO FLEXIBLE PAVEMENT
482011-03	HMA SHLD. STRIPS/SHLDS. WITH RESURFACING OR WIDENING AND RESURFACING PROJECTS
515001-03	NAME PLATE FOR BRIDGES
542301-03	PRECAST REINFORCED CONCRETE FLARED END SECTION
542546-01	FLUSH INLET BOX FOR MEDIAN
542606-02	REINFORCED CONCRETE PIPE TEE
601001-05	PIPE UNDERDRAINS
601101-02	CONCRETE HEADWALL FOR PIPE UNDERDRAINS
604106-01	MEDIAN INLET FOR 36" (900 mm) REINFORCED CONCRETE PIPE
630001-11	STEEL PLATE BEAM GUARDRAIL
630301-07	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631026-06	TRAFFIC BARRIER TERMINAL, TYPE 5
631031-15	TRAFFIC BARRIER TERMINAL, TYPE 6
642001-02	SHOULDER RUMBLE STRIP 16 IN.
665001-02	WOVEN WIRE FENCE
666001-01	RIGHT OF WAY MARKERS
701006-05	OFF-RD OPERATIONS, 2L, 2W 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
701101-05	OFF-RD OPERATIONS, MULTILANE, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
701106-02	OFF-RD OPERATIONS, MULTILANE, MORE THAN 15' (4.5 m) AWAY
701326-04	LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS > 45 MPH
701400-09	APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
701401-10	LANE CLOSURE, FREEWAY/EXPRESSWAY
701406-11	LANE CLOSURE, FREEWAY/EXPRESSWAY, DAY OPERATIONS ONLY
701416-10	LANE CLOSURE, FREEWAY/EXPRESSWAY, WITH CROSSOVER AND BARRIER
701426-09	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS > 45 MPH
701901-06	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
720001-01	SIGN PANEL MOUNTING DETAILS
720006-04	SIGN PANEL ERECTION DETAILS
720021-02	SIGN PANELS EXTRUDED ALUMINUM TYPE
725001-01	REFLECTOR AND TERMINAL MARKER PLACEMENT
780001-05	TYPICAL PAVEMENT MARKINGS
781001-04	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
782006	REFLECTOR MARKER AND MOUNTING DETAILS

**DISTRICT 4 STANDARDS**

205001-04	SLOPE STEPS DETAIL
406101-04	BUTT JOINTS
440001-04	HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)
630101-04	GUARDRAIL EROSION CONTROL TREATMENT
667101-04	PERMANENT SURVEY TIE & PERMANENT SURVEY MARKERS TY. I - TY. II
720001-04	SIGNING SCHEDULE

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USER NAME = brianheil	DESIGNED -	REVISED -
PLOT SCALE = 100.0000' / 1" =	DRAWN -	REVISED -
PLOT DATE = 2/8/2016	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**GENERAL NOTES & STANDARDS**

SCALE: SHEET 2 OF 2 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	148-26HV(B)BR	KNOX	212	3
			CONTRACT NO. 68B69	
ILLINOIS FED. AID PROJECT				






SI	SP	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	90 % FED / 10 % STATE		100 % STATE		
						CONSTRUCTION CODE				
						0004	0011	0011	0021	0031
URBAN		ROADWAY	STRUCTURAL	STRUCTURAL	SIGNS/LIGHTING					
			SN 048-0101 (WB)	SN 048-0102 (EB)						
		20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	406	406				
		20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	132	132				
		20100500	TREE REMOVAL, ACRES	ACRE	1.00	1.00				
		20200100	EARTH EXCAVATION	CU YD	10,640	10,640				
		20400800	FURNISHED EXCAVATION	CU YD	19,950	19,950				
		21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	39,000	39,000				
		25000210	SEEDING, CLASS 2A	ACRE	10.00	10.00				
		25000400	NITROGEN FERTILIZER NUTRIENT	POUND	901	901				
		25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	901	901				
		25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	901	901				
		25000750	MOWING	ACRE	4.50				4.50	
		25100115	MULCH, METHOD 2	ACRE	3.25	3.25				
		25100630	EROSION CONTROL BLANKET	SQ YD	15,039	15,039				
		28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	5,336	5,336				

NOTES: SP - SEE PROJECT SPECIFIC SPECIAL PROVISIONS  
SI - SPECIALTY ITEM

FILE NAME: D:\EBBS\14-500.dgn

 <b>DATES ASSOCIATES</b> Engineering + Architecture ILLINOIS DESIGN FIRM LICENSE NO: 184.001115	USER NAME = kas thbr	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>SUMMARY OF QUANTITIES</b>			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 1/8" = 100.0000' / 1" =	DRAWN -	REVISED -		74	(48-26HVB)BR	KNOX	212	5			
PLOT DATE = 10/28/2016	CHECKED -	REVISED -	SCALE: SHEET 1 OF 10 SHEETS STA. TO STA.			CONTRACT NO. 68869						
	DATE -	REVISED -				ILLINOIS FED. AID PROJECT						

SI	SP	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	90% FED		10% STATE		100% STATE					
						URBAN						CONSTRUCTION CODE			
						ROADWAY	STRUCTURAL	STRUCTURAL	SIGNS/LIGHTING						
	SN 048-0101 (WB)	SN 048-0102 (EB)													
		28000305	TEMPORARY DITCH CHECKS	FOOT	1,215	1,215									
		28000400	PERIMETER EROSION BARRIER	FOOT	3,027	3,027									
		28000500	INLET AND PIPE PROTECTION	EACH	11	11									
		35101100	AGGREGATE BASE COURSE, TYPE A 12"	SQ YD	12,845	12,845									
		40600295	POLYMERIZED BITUMINOUS MATERIALS (TACK COAT)	POUND	36,074	36,074									
		40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	1,833	1,833									
		40600990	TEMPORARY RAMP	SQ YD	352	352									
		40603085	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70	TON	3,672	3,672									
		40603208	POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-9.5, N70	TON	704	704									
		40603565	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "E", N70	TON	2,183	2,183									
		42000080	PAVEMENT CONNECTOR (PCC) FOR BRIDGE APPROACH SLAB	SQ YD	212	212									
		44000100	PAVEMENT REMOVAL	SQ YD	8,917	8,917									
		44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 2"	SQ YD	26,564	26,564									
		44004250	PAVED SHOULDER REMOVAL	SQ YD	6,048	6,048									

NOTES: SP - SEE PROJECT SPECIFIC SPECIAL PROVISIONS  
SI - SPECIALTY ITEM

FILE NAME: D:\68869\18-20\18-20.dwg

14

**OATES ASSOCIATES**  
Engineering - Architecture  
ILLINOIS DESIGN FIRM LICENSE NO: 184-001115

USER NAME = ka:Ubr	DESIGNED -	REVISED -
PLOT SCALE = 100.0000' / 1"	DRAWN -	REVISED -
PLOT DATE = 10/20/2016	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES**

SCALE:	SHEET 2 OF 10 SHEETS	STA. TO STA.
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HV)BR	KNOX	212	6
CONTRACT NO. 68869				
ILLINOIS FED. AID PROJECT				

SI	SP	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	90% FED		10% STATE		100% STATE
						CONSTRUCTION CODE				
						0004	0011	0011	0021	0031
URBAN		ROADWAY	STRUCTURAL	STRUCTURAL	SIGNS/LIGHTING					
			SN 048-0101 (WB)	SN 048-0102 (EB)						
		48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	45	45				
		• 48203005	HOT-MIX ASPHALT SHOULDERS, 2"	SQ YD	9,664	9,664				
		• 48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SQ YD	3,470	3,470				
		• 50100100	REMOVAL OF EXISTING STRUCTURES	EACH	2		1	1		
		50105220	PIPE CULVERT REMOVAL	FOOT	228	228				
		50157300	PROTECTIVE SHIELD	SQ YD	1,320		660	660		
		50200100	STRUCTURE EXCAVATION	CU YD	872		432	440		
		50300100	FLOOR DRAINS	EACH	12		6	6		
		50300225	CONCRETE STRUCTURES	CU YD	929.7		465.9	463.8		
		50300255	CONCRETE SUPERSTRUCTURE	CU YD	993.0		496.5	496.5		
		50300260	BRIDGE DECK GROOVING	SQ YD	3,226		1,613	1,613		
		50300300	PROTECTIVE COAT	SQ YD	4,084		2,042	2,042		
		50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	LSUM	1		0.5	0.5		
		50500505	STUD SHEAR CONNECTORS	EACH	16,980		8,490	8,490		

NOTES: SP - SEE PROJECT SPECIFIC SPECIAL PROVISIONS  
SI - SPECIALTY ITEM

FILE NAME: D:\68869\shc500.dgn

14



USER NAME = keithbr	DESIGNED -	REVISED -
PLOT SCALE = 1/8"=1'-0"	DRAWN -	REVISED -
PLOT DATE = 10/28/2016	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES			
SCALE:	SHEET 3	OF 10 SHEETS	STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)BR	KNOX	212	7
CONTRACT NO. 68869			ILLINOIS FED. AID PROJECT	

SI	SP	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE				
						90% FED		10% STATE		100% STATE
						0004 ROADWAY	0011 STRUCTURAL SN 048-0101 (WB)	0011 STRUCTURAL SN 048-0102 (EB)	0021 SIGNS/LIGHTING	0031
			URBAN							
		50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	374,060		186,980	187,080		
		50800530	MECHANICAL SPLICERS	EACH	372		186	186		
		51100100	SLOPE WALL 4 INCH	SO YD	2,745		1,373	1,372		
		51201800	FURNISHING STEEL PILES HP14X73	FOOT	7,179		3,546	3,633		
		51202305	DRIVING PILES	FOOT	7,179		3,546	3,633		
		51203800	TEST PILE STEEL HP14X73	EACH	10		5	5		
		51500100	NAME PLATES	EACH	2		1	1		
		52000110	PREFORMED JOINT STRIP SEAL	FOOT	209		104.5	104.5		
		52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	12		6	6		
		52100520	ANCHOR BOLTS, 1"	EACH	96		48	48		
		52100530	ANCHOR BOLTS, 1 1/4"	EACH	24		12	12		
		52200020	TEMPORARY SOIL RETENTION SYSTEM	SO FT	850		425	425		
		• 54213663	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 18"	EACH	4	4				
		• 54213669	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 24"	EACH	2	2				

NOTES: SP - SEE PROJECT SPECIFIC SPECIAL PROVISIONS  
SI - SPECIALTY ITEM

FILE NAME = D:\BBS69\141-500.dwg

14



USER NAME = kashbr	DESIGNED -	REVISED -
PLOT SCALE = 1/8" = 1'-0"	DRAWN -	REVISED -
PLOT DATE = 10/28/2016	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

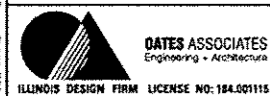
SUMMARY OF QUANTITIES			
SCALE:	SHEET 4	OF 10 SHEETS	STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	148-26HVB19R	KNOX	212	8
			CONTRACT NO. 68B69	
ILLINOIS FED. AID PROJECT				

SI	SP	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	90% FED		10% STATE		100% STATE
						CONSTRUCTION CODE				
						0004	0011	0011	0021	0031
URBAN		ROADWAY	STRUCTURAL	STRUCTURAL	SIGNS/LIGHTING					
							SN 048-0101 (WB)	SN 048-0102 (EB)		
		54213681	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 36"	EACH	2	2				
		5421A012	PIPE CULVERTS, CLASS A, TYPE 1 12" (TEMPORARY)	FOOT	49	49				
		5421A018	PIPE CULVERTS, CLASS A, TYPE 1 18" (TEMPORARY)	FOOT	562	562				
		5421A024	PIPE CULVERTS, CLASS A, TYPE 1 24" (TEMPORARY)	FOOT	851	851				
		542A1081	PIPE CULVERTS, CLASS A, TYPE 2 36"	FOOT	330	330				
		59100100	GEOCOMPOSITE WALL DRAIN	SO YD	213		106	107		
		60100060	CONCRETE HEADWALLS FOR PIPE DRAINS	EACH	21	21				
		60108100	PIPE UNDERDRAINS 4" (SPECIAL)	FOOT	420	420				
		60108104	PIPE UNDERDRAINS, TYPE 1, 4"	FOOT	10,422	10,422				
		• 63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	2,380.0	2,380.0				
		• 63100070	TRAFFIC BARRIER TERMINAL, TYPE 5	EACH	2	2				
		• 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4	4				
		• 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4	4				
		• 63200310	GUARDRAIL REMOVAL	FOOT	2,063	2,063				

NOTES: SP - SEE PROJECT SPECIFIC SPECIAL PROVISIONS  
SI - SPECIALTY ITEM

FILE NAME: D:\6869\6869-100.dwg



USER NAME: keshbr	DESIGNED -	REVISED -
PLOT SCALE: 1/8" = 1'-0"	DRAWN -	REVISED -
PLOT DATE: 10/20/2016	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES			
SCALE:	SHEET 5 OF 10 SHEETS	STA.	TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)BR	KNOX	212	9
CONTRACT NO. 68869			ILLINOIS FED. AID PROJECT	

SI	SP	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE													
						90% FED		10% STATE		100% STATE									
						0004	0011	0011	0021	0031									
URBAN		ROADWAY	STRUCTURAL	STRUCTURAL	SIGNS/LIGHTING	STATE													
		63800920	MODULAR GLARE SCREEN SYSTEM, TEMPORARY	FOOT	5,019	5,019													
		64200116	SHOULDER RUMBLE STRIPS, 16 INCH	FOOT	14,788	14,788													
		66500105	WOVEN WIRE FENCE, 4'	FOOT	2,729	2,729													
		66600105	FURNISHING AND ERECTING RIGHT OF WAY MARKERS	EACH	13	13													
		66700205	PERMANENT SURVEY MARKERS, TYPE I	EACH	2			1		1									
		66700305	PERMANENT SURVEY MARKERS, TYPE II	EACH	2	2													
		67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	30	30													
		67000600	ENGINEER'S FIELD LABORATORY	CAL MO	30	30													
		67100100	MOBILIZATION	L SUM	1	1													
		70100205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	EACH	4	4													
		70100410	TRAFFIC CONTROL AND PROTECTION, STANDARD 701416	EACH	2	2													
		70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	LSUM	1	1													
		70100700	TRAFFIC CONTROL AND PROTECTION, STANDARD 701406	LSUM	1	1													
		70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	60	60													

NOTES: SP - SEE PROJECT SPECIFIC SPECIAL PROVISIONS  
SI - SPECIALTY ITEM

FILE NAME: D:\COURT\14-500.dwg



USER NAME = kwhbr	DESIGNED -	REVISED -
PLOT SCALE = 1/8" = 1'-0"	DRAWN -	REVISED -
PLOT DATE = 10/28/2016	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES**

SCALE: SHEET 6 OF 10 SHEETS STA. TO STA.


F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	148-26HVB/BR	KNOX	212	10
CONTRACT NO. 68B69			ILLINOIS FED. AID PROJECT	



SI	SP	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE													
						90 % FED		10 % STATE		100 % STATE									
						0004	0011	0011	0021	0031									
ROADWAY		STRUCTURAL		STRUCTURAL	SIGNS/LIGHTING														
		70300100	SHORT TERM PAVEMENT MARKING	FOOT	1,640	1,640													
		70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	548	548													
		70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	109,300	109,300													
		70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	6,527	6,527													
		70300904	PAVEMENT MARKING TAPE, TYPE IV 4"	FOOT	4,220	4,220													
		70300906	PAVEMENT MARKING TAPE, TYPE IV 6"	FOOT	318	318													
		70400100	TEMPORARY CONCRETE BARRIER	FOOT	5,019	5,019													
		70500100	TEMPORARY STEEL PLATE BEAM GUARDRAIL, TYPE A	FOOT	350.0	350.0													
		70500615	TEMPORARY TRAFFIC BARRIER TERMINAL, TYPE 1	EACH	2	2													
		70500665	TEMPORARY TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	2	2													
		72000300	SIGN PANEL - TYPE 3	SQ FT	356.3														356.3
		72400330	REMOVE SIGN PANEL - TYPE 3	SQ FT	356.3														356.3
		72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	6	6													
		72700100	STRUCTURAL STEEL SIGN SUPPORT - BREAKAWAY	POUND	4,837														4,837

NOTES: SP - SEE PROJECT SPECIFIC SPECIAL PROVISIONS  
SI - SPECIALTY ITEM

FILE NAME = D:\68857\11-500.dwg

 <b>DATES ASSOCIATES</b> Engineering - Architecture ILLINOIS DESIGN FIRM LICENSE NO. 184.001115	USER NAME = hvdhbr	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>SUMMARY OF QUANTITIES</b>			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 1/8" = 100'	DRAWN -	REVISED -		74	(48-26HV)BR	KNOX	212	11			
PLOT DATE = 10/20/2016	CHECKED -	REVISED -	SCALE:		SHEET 7	OF 10 SHEETS	STA.	TO STA.	<b>CONTRACT NO. 68B69</b>			
	DATE -	REVISED -						ILLINOIS FED. AID PROJECT				

SI	SP	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	90% FED		10% STATE		100% STATE
						CONSTRUCTION CODE				
						0004	0011	0011	0021	0031
URBAN		ROADWAY	STRUCTURAL	STRUCTURAL	SIGNS/LIGHTING					
			SN 048-0101 (WB)	SN 048-0102 (EB)						
		73400100	CONCRETE FOUNDATIONS	CYD	8.7				8.7	
		73700100	REMOVE GROUND MOUNTED SIGN SUPPORT	EACH	4				4	
		73700200	REMOVE CONCRETE FOUNDATION - GROUND MOUNT	EACH	4				4	
		78004230	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - INLAID - LINE 6"	FOOT	3,934	3,934				
		78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	31,468	31,468				
		78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	186	186				
		78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	24	24				
		78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	14	14				
		78200011	BARRIER WALL REFLECTORS, TYPE C	EACH	4	4				
		78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	93	93				
		X0325754	REPLACEMENT OF SENSORS FOR ROADWAY WEATHER INFORMATION SYSTEM	LSUM	1	1				
		X0327979	PAVEMENT MARKING REMOVAL - GRINDING	SQ FT	13,105	13,105				
		X0327980	PAVEMENT MARKING REMOVAL - WATERBLAST	SQ FT	39,310	39,310				
		X5030305	CONCRETE WEARING SURFACE, 5"	SQ YD	567		284	283		

NOTES: SP - SEE PROJECT SPECIFIC SPECIAL PROVISIONS  
SI - SPECIALTY ITEM

FILE NAME: D:\88881\11-500.dgn

**DATES ASSOCIATES**  
Engineering - Architecture  
ILLINOIS DESIGN FIRM LICENSE NO. 184.001115

USER NAME = keithbr	DESIGNED -	REVISED -
PLOT SCALE = 1/8" = 1'-0"	DRAWN -	REVISED -
PLOT DATE = 10/28/2016	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

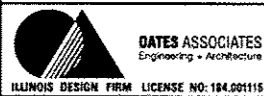
SUMMARY OF QUANTITIES			
SCALE:	SHEET 8	OF 10 SHEETS	STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)BR	KNOX	212	12
			CONTRACT NO. 68B69	
ILLINOIS FED. AID PROJECT				

SI	SP	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE				
						90% FED / 10% STATE		100% STATE		
						0004	0011	0011	0021	0031
URBAN		ROADWAY	STRUCTURAL	STRUCTURAL	SIGNS/LIGHTING					
			SN 048-0101 (WB)	SN 048-0102 (EB)						
		X5040100	PRECAST BRIDGE APPROACH SLAB	SQ FT	4,860		2,430	2,430		
		X5424505	FLUSH INLET BOX FOR MEDIAN, STANDARD 542546, SPECIAL	EACH	6	6				
		X5860110	GRANULAR BACKFILL FOR STRUCTURES	CU YD	376		188	188		
		X6024207	MEDIAN INLET (604106), SPECIAL	EACH	2	2				
		<del>X7010410</del>	<del>SPEED DISPLAY TRAILER</del>	<del>CAL MO</del>	<del>-30</del>	<del>-30</del>				
		X7830070	GROOVING FOR RECESSED PAVEMENT MARKING 5"	FOOT	31,468	31,468				
		X7830074	GROOVING FOR RECESSED PAVEMENT MARKING 7"	FOOT	3,934	3,934				
		X8410102	TEMPORARY LIGHTING SYSTEM	LSUM	1				1	
		Z0001002	GUARDRAIL AGGREGATE EROSION CONTROL	TON	504	504				
		Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1				
		Z0022800	FENCE REMOVAL	FOOT	2,542	2,542				
		Z0024475	TUBULAR MARKER	EACH	14	14				
		Z0034105	MATERIAL TRANSFER DEVICE	TON	5,031	5,031				
		Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	340		170	170		

NOTES: SP - SEE PROJECT SPECIFIC SPECIAL PROVISIONS  
SI - SPECIALTY ITEM

FILE NAME: 046869-11-500.dwg



USER NAME: Kaitlyn	DESIGNED: -	REVISED: -
PLDT SCALE: 1/8" = 1'-0"	DRAWN: -	REVISED: -
PLOT DATE: 10/20/2016	CHECKED: -	REVISED: -
	DATE: -	REVISED: -

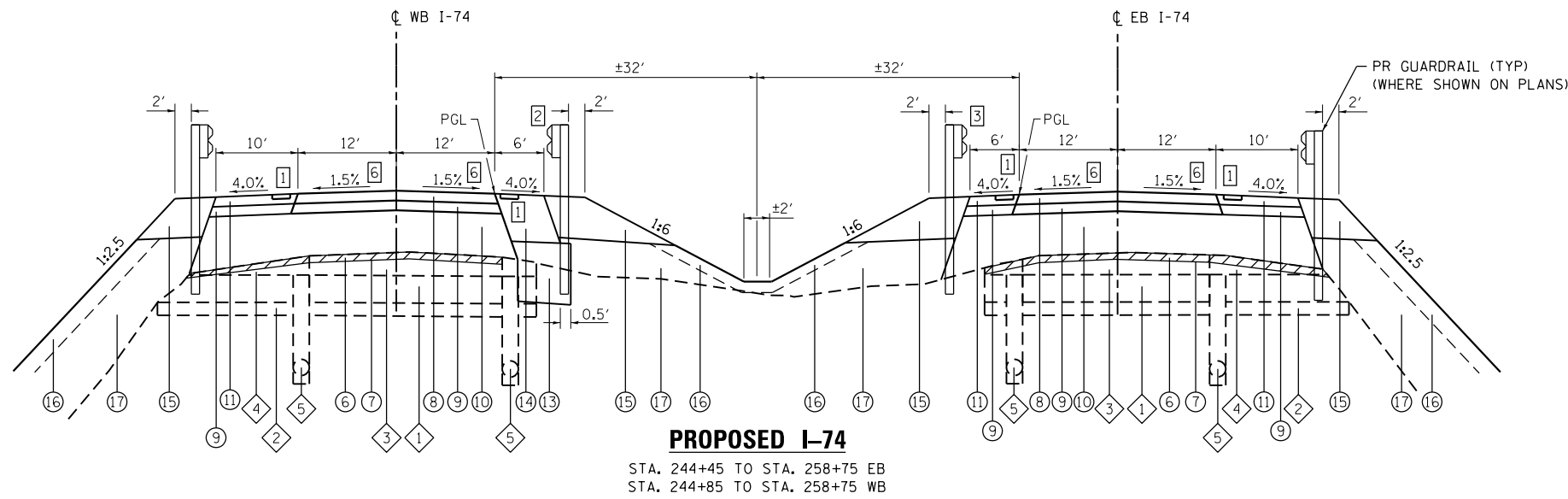
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: SHEET 9 OF 10 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26)HVBR	KNOX	212	13
			CONTRACT NO. 68B69	
ILLINOIS FED. AID PROJECT				

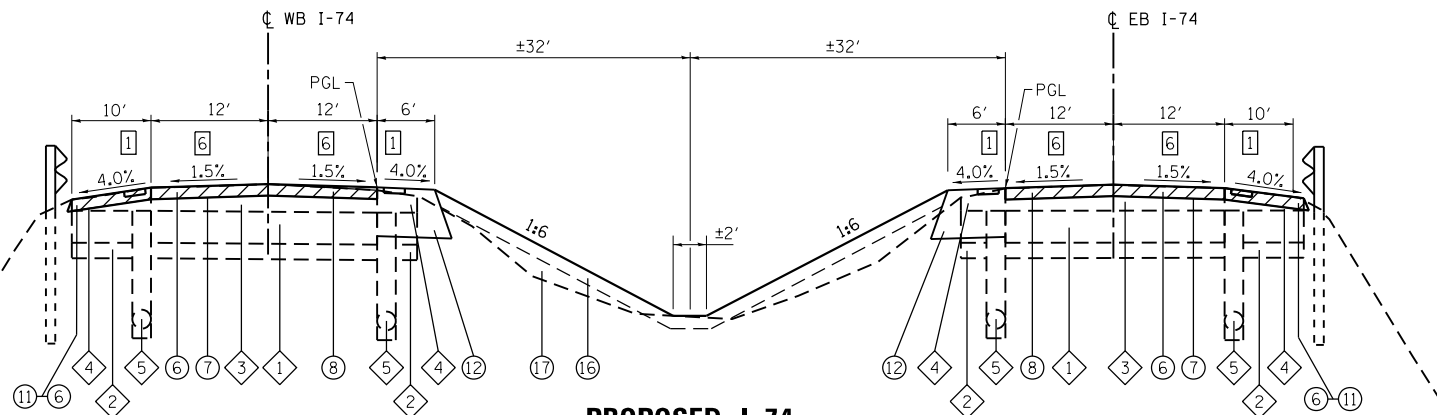




**PROPOSED I-74**

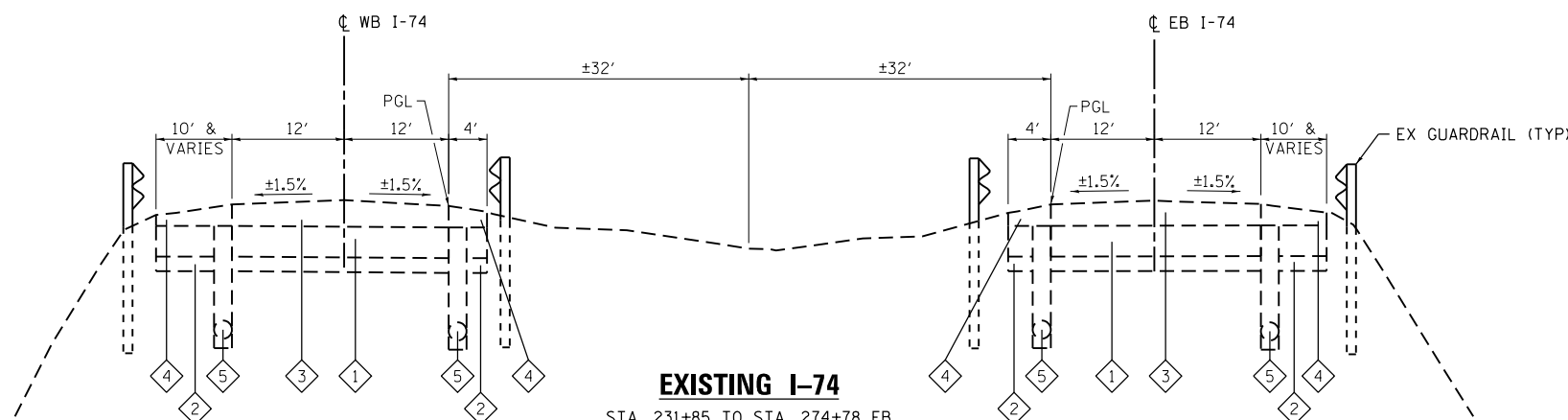
STA. 244+45 TO STA. 258+75 EB  
 STA. 244+85 TO STA. 258+75 WB

STRUCTURE AND BRIDGE APPROACH AND CONNECTOR PAVEMENT OMISSION  
 STA. 249+90.00 TO STA. 254+11.62 EB  
 STA. 249+28.38 TO STA. 253+50.00 WB



**PROPOSED I-74**

STA. 231+85 TO STA. 244+45 EB  
 STA. 236+46 TO STA. 244+85 WB  
 STA. 258+75 TO STA. 274+78 EB  
 STA. 258+75 TO STA. 275+02 WB



**EXISTING I-74**

STA. 231+85 TO STA. 274+78 EB  
 STA. 236+46 TO STA. 275+02 WB

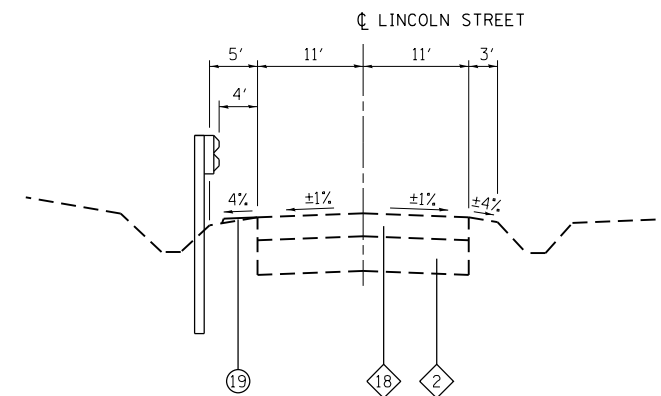
STRUCTURE AND BRIDGE APPROACH PAVEMENT OMISSION  
 STA. 250+07.03 TO STA. 253+92.61 EB  
 STA. 249+62.21 TO STA. 253+47.80 WB

**TYPICAL SECTION LEGEND**

- 1 EXISTING JOINTED PCC PAVEMENT, 10"
- 2 EXISTING AGGREGATE SUBBASE
- 3 EXISTING BITUMINOUS OVERLAYS, VARIABLE DEPTH
- 4 EXISTING BITUMINOUS SHOULDER, VARIABLE DEPTH
- 5 EXISTING PIPE UNDERDRAIN
- 6 PROPOSED HMA SURFACE REMOVAL, 2"
- 7 PROPOSED POLYMERIZED BITUMINOUS MATERIALS (PRIME COAT)
- 8 PROPOSED POLYMERIZED HMA SURFACE COURSE, MIX "E", N70, 2"
- 9 PROPOSED POLYMERIZED HMA BINDER COURSE, IL-9.5, N70, 2"
- 10 PROPOSED HMA BINDER COURSE, IL-19.0, N70, VARIABLE DEPTH
- 11 PROPOSED HMA SHOULDER, 2"
- 12 PROPOSED HMA SHOULDER, 8"
- 13 PROPOSED AGGREGATE BASE COURSE TYPE A, 12"
- 14 PROPOSED TEMPORARY PAVEMENT
- 15 PROPOSED GUARDRAIL AGGREGATE EROSION CONTROL, 8"
- 16 PROPOSED TOPSOIL FURNISH AND PLACE, 4"
- 17 PROPOSED FURNISHED EXCAVATION
- 18 EXISTING PAVEMENT
- 19 PROPOSED AGGREGATE WEDGE SHOULDER, TYPE B

**TYPICAL SECTION NOTES**

- 1 SEE STANDARD 642001 FOR RUMBLE STRIP
- 2 STA. 253+25 TO STA. 256+46
- 3 STA. 246+94 TO STA. 250+15
- 4 REPLACE UNDERDRAINS IF DAMAGED. SEE STAGE CONSTRUCTION SHEETS FOR ESTIMATED REPLACEMENT LOCATION AND QUANTITIES.
- 5 ESTIMATED VARIABLE DEPTH HMA BINDER THICKNESSES  
 EASTBOUND:  
 STA. 245+70 TO 249+90 - VARIES 0" TO 2'-2"  
 STA. 254+12 TO STA. 257+40 - VARIES 1'-9" TO 0"  
 WESTBOUND:  
 STA. 245+70 TO STA. 249+28 - VARIES 0" TO 2'-0"  
 STA. 253+50 TO STA. 257+75 - VARIES 1'-11" TO 0"
- 6 EXISTING SUPERELEVATION TRANSITION RANGE  
 STA. 213+85 TO STA. 246+75 - 2.0% MAX.  
 STA. 268+30 TO STA. 292+40 (EB) & STA. 294+76 (WB) - 3.3% MAX.



**EXISTING/PROPOSED LINCOLN STREET**

STA. 99+24 TO STA. 104+17

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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**TYPICAL SECTIONS**

SCALE: NTS SHEET 1 OF 1 SHEETS STA. 231+85 TO STA. 275+02

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)BR	KNOX	212	15
CONTRACT NO. 68B69				
ILLINOIS FED. AID PROJECT				

**EARTHWORK SCHEDULE**

STATION	STATION	EARTH EXCAVATION	STRUCTURE EXCAVATION	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE	EMBANKMENT	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)	FURNISHED EXCAVATION	TOPSOIL FURNISH & PLACE
		(CU YD)	(CU YD)	(NOTE 1) (CU YD)	(NOTE 2) (CU YD)	(NOTE 3) (CU YD)	(CU YD)	(SQ YD) 4"
<b>STAGE 1</b>								
231+85	275+02	3,045		2,285	15,950	-13,665	13,278	10,775
BRIDGE STRUCTURE		80	436	387		387		
<b>STAGE 2</b>								
231+85	275+00	110		85	7,140	-7,055	6,668	11,000
BRIDGE STRUCTURE		80	436	387		387		
<b>STAGE 3</b>								
231+85	246+50	3,740		2,805	150	2,655		7,183
258+50	275+02	3,585		2,690	430	2,260		10,042
<b>TOTAL</b>		<b>10,640</b>	<b>872</b>	<b>8,640</b>	<b>23,670</b>	<b>-15,035</b>	<b>19,950</b>	<b>39,000</b>

**EARTHWORK NOTES:**

- ESTIMATED SHRINKAGE FACTOR = 25%.
- APPROXIMATE EMBANKMENT QUANTITY IS SHOWN FOR INFORMATION ONLY.
- APPROXIMATE EARTHWORK BALANCE IS SHOWN FOR INFORMATION ONLY.

**PIPE UNDERDRAIN SCHEDULE**

LOCATION	OUTLET STATION	STATION	STATION	CONC HDWL FOR P DRAIN	PIPE UNDERDR T1 4	PIPE UNDERDRAIN 4 SP
				(EACH)	(FOOT)	(FOOT)
EB INSIDE SHOULDER	231+85	231+85	236+85	1	500	20
WB INSIDE SHOULDER	236+46	236+46	241+46	1	500	20
EB INSIDE SHOULDER	236+85	236+85	241+85	1	500	20
WB INSIDE SHOULDER	241+46	241+46	246+46	1	500	20
EB INSIDE SHOULDER	241+85	241+85	246+85	1	500	20
EB OUTSIDE SHOULDER	244+45	244+45	250+18	1	573	20
WB OUTSIDE SHOULDER	244+85	244+85	249+33	1	448	20
WB INSIDE SHOULDER	246+46	246+46	249+57	1	311	20
EB INSIDE SHOULDER	246+85	246+85	250+02	1	317	20
WB OUTSIDE SHOULDER	258+75	253+15	258+75	1	560	20
WB INSIDE SHOULDER	260+02	253+38	260+02	1	664	20
EB INSIDE SHOULDER	260+02	253+83	260+02	1	619	20
EB OUTSIDE SHOULDER	260+02	254+00	260+02	1	602	20
WB INSIDE SHOULDER	265+02	260+02	265+02	1	500	20
EB INSIDE SHOULDER	265+02	260+02	265+02	1	500	20
EB OUTSIDE SHOULDER	265+02	260+02	265+02	1	500	20
WB INSIDE SHOULDER	270+02	265+02	270+02	1	500	20
EB OUTSIDE SHOULDER	268+54	265+02	268+54	1	352	20
EB INSIDE SHOULDER	270+02	265+02	270+02	1	500	20
WB INSIDE SHOULDER	275+02	270+02	275+02	1	500	20
EB INSIDE SHOULDER	274+78	270+02	274+78	1	476	20
<b>TOTAL</b>				<b>21</b>	<b>10,422</b>	<b>420</b>

**SEEDING SCHEDULE**

STATION	STATION	LOCATION	SEEDING CL 2A	NITROGEN FERT NUTR	PHOSPHORUS FERT NUTR	POTASSIUM FERT NUTR	MOWING
			(ACRE)	(POUND)	(POUND)	(POUND)	(ACRE)
231+77	250+08	CENTER MEDIAN	1.88	170	170	170	2.00
243+55	252+02	EB OUTSIDE	1.58	143	143	143	
244+49	250+30	WB OUTSIDE	1.26	114	114	114	
251+67	258+41	WB OUTSIDE	1.55	140	140	140	
252+65	258+50	EB OUTSIDE	1.15	104	104	104	
253+32	275+19	CENTER MEDIAN	2.55	230	230	230	2.50
<b>TOTAL</b>			<b>10.00</b>	<b>901</b>	<b>901</b>	<b>901</b>	<b>4.50</b>

**SEEDING NOTES:**

- APPLICATION RATE FOR FERTILIZER ASSUMES 90 LBS/ACRE.

**EROSION CONTROL SCHEDULE**

STATION	STATION	OFFSET	MULCH METHOD 2	EROSION CONTR BLANKET	TEMP EROS CONTR SEED (NOTE 1)	TEMP DITCH CHECKS	PERIMETER EROS BAR	INLET & PIPE PROTECTION
			(ACRE)	(SQ YD)	(POUND)	(FOOT)	(FOOT)	(EACH)
<b>STAGE 1</b>								
231+77	250+08	CL			553			
231+85	234+42	RT					258	
234+50		CL				10		
236+00		23.26' RT						1
238+00		15.36' RT						1
244+00		10.77' LT						1
245+00		19.06' LT						1
245+98	250+35	LT			505			
249+82		143' LT						1
252+15	258+33	LT			620			
253+32	275+19	CL			792			
262+50		1.60' RT						1
264+00		2.29' RT						1
266+50		21.69' RT						1
267+50		20.85' LT						1
271+00	275+02	LT					404	
271+23	274+78	RT					354	
271+25		CL				10		
<b>STAGE 2</b>								
245+17	250+54	RT			632			
253+74	258+39	RT			461			
<b>STAGE 3</b>								
231+77	250+08	CL			753			
232+00	249+50	CL				525		
242+47		CL						1
243+71	250+57	RT					764	
245+17	250+54	RT	1.00	4,109				
245+37	248+50	LT				40		
245+98	250+35	LT	0.75	3,212				
252+12	258+38	LT					705	
252+15	258+33	LT	1.00	4,613				
253+32	275+19	CL			1020			
253+71	258+47	RT					542	
253+74	258+39	RT	0.50	3,105				
254+00	275+00	CL				630		
265+43		CL						1
<b>TOTAL</b>			<b>3.25</b>	<b>15,039</b>	<b>5,336</b>	<b>1,215</b>	<b>3,027</b>	<b>11</b>

**EROSION CONTROL NOTES:**

- THE QUANTITY FOR TEMPORARY EROSION CONTROL SEEDING ASSUMES FOUR SEPARATE APPLICATIONS AT A RATE OF 100 POUNDS/ACRE PER APPLICATION. THE CONTRACTOR SHALL APPLY AS NECESSARY AND AS DIRECTED BY THE ENGINEER IN THE FIELD.

**FENCE SCHEDULE**

STATION	STATION	OFFSET	WOV W FENCE 4	FENCE REMOVAL
			(FOOT)	(FOOT)
244+55	251+74	RT	863	823
244+59	249+56	LT	584	540
251+62	257+97	LT	786	662
253+66	257+85	RT	496	517
<b>TOTAL</b>			<b>2,729</b>	<b>2,542</b>

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SCHEDULES OF QUANTITIES**

SCALE: SHEET 1 OF 5 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)BR	KNOX	212	16
<b>CONTRACT NO. 68B69</b>				
ILLINOIS FED. AID PROJECT				



**STORM SEWER /PIPE CULVERT SCHEDULE**

STATION	OFFSET	STATION	OFFSET	PIPE CULVERT REMOV (FOOT)	PRC FLAR END SEC 18 (EACH)	PRC FLAR END SEC 24 (EACH)	PRC FLAR END SEC 36 (EACH)	P CUL CL A1 12 TEMP (FOOT)	P CUL CL A1 18 TEMP (FOOT)	P CUL CL A1 24 TEMP (FOOT)	P CUL CL A2 36 (FOOT)	FL INL BX MD 542546SP (EACH)	MED INLET (604106) SP (EACH)
<b>STAGE 1</b>													
234+50	1.16' LT	236+00	23.26' RT		1				152			1	
236+00	23.26' RT	238+00	15.36' RT		1				201				
243+00	13.9' RT	244+00	10.77' LT		1				106			1	
244+00	10.77' LT	245+00	19.06' LT		1				103				
249+84	140.3' LT	250+82	0	142			1				171		
262+50	1.60' RT	264+00	2.29' RT			1				150		1	
264+00	2.29' RT	266+50	21.69' RT							251		1	
266+50	21.69' RT	267+70	23.62' RT			1				120			
267+50	20.85' LT	267+70	23.62' RT					49				1	
267+70	23.62' RT	271+00	0							330		1	
<b>STAGE 2</b>													
250+82	0	251+78	137.7' RT	86			1				159		
<b>STAGE 3</b>													
242+47	0.54' LT												1
265+43	0.44' RT												1
<b>TOTAL</b>				<b>228</b>	<b>4</b>	<b>2</b>	<b>2</b>	<b>49</b>	<b>562</b>	<b>851</b>	<b>330</b>	<b>6</b>	<b>2</b>

**TREE REMOVAL SCHEDULE**

STATION	STATION	OFFSET	TREE REMOV 6-15 (UNIT)	TREE REMOV OVER 15 (UNIT)	TREE REMOV ACRES (ACRE)
246+57		109' RT	12		
248+27		127' RT	6		
248+30		109' RT	8		
248+52		125' RT	6		
248+60		136' RT	6		
248+80		130' RT	8		
249+49		116' RT	12		
250+41		135' RT		18	
250+91		102' RT	12		
251+16		112' RT		36	
251+84		155' LT	12		
251+92		157' LT	12		
252+02		155' LT	12		
252+12		156' LT	12		
252+21		156' LT	12		
252+40		155' LT	12		
252+49		156' LT	12		
252+58		156' LT	12		
252+67		157' LT	12		
252+78		154' LT	12		
252+86		155' LT	12		
252+95		155' LT	12		
253+05		156' LT	12		
253+14		156' LT	12		
253+22		156' LT	12		
253+42		155' LT	12		
253+52		155' LT	12		
253+61		154' LT	12		
253+79		152' LT	12		
253+98		132' RT	12		
254+50		126' RT	6		
254+53		138' LT	10		
254+96		136' RT	6		
255+00		130' RT	6		
255+03		83' LT		36	
255+35		126' LT	12		
255+45		127' LT		18	
255+55		139' LT	6		
255+67		129' LT	6		
255+88		119' LT	6		
256+06		127' LT	6		
256+08		84' LT		24	
256+19		126' LT	12		
256+32		128' LT	10		
256+52		125' LT	10		
244+61	249+44	LT			0.50
251+81	254+18	LT			0.25
257+22	258+27	LT			0.25
<b>TOTAL</b>			<b>406</b>	<b>132</b>	<b>1.00</b>

**GUARDRAIL SCHEDULE**

STATION	STATION	LOCATION	SPBGR TY A 6FT POSTS (FOOT)	TRAF BAR TERM T 5 (EACH)	TRAF BAR TERM T 6 (EACH)	TR BAR TRM T1 SPL TAN (EACH)	GUARDRAIL REMOV (FOOT)	GUARDRAIL MKR TYPE A (EACH)	BAR WALL MKR TYPE C (EACH)	TERMINAL MARKER DA (NOTE 1) (EACH)	GDRL AGG EROS CONT (TON)
<b>STAGE 1</b>											
245+82	249+48	WB OUTSIDE DEPART	353.0	1				1			83
245+82	249+83	WB OUTSIDE DEPART					401				
248+70	250+67	EB MEDIAN APPROACH					202				
249+48	253+00	WB OUTSIDE							1		
249+76	253+28	WB MEDIAN							1		
252+63	257+07	WB OUTSIDE APPROACH					444				
252+86	254+85	WB MEDIAN APPROACH					204				
253+00	257+07	WB OUTSIDE APPROACH	364.0		1			2			92
253+25	256+80	WB MEDIAN APPROACH									80
253+28	256+46	WB MEDIAN APPROACH	225.0		1	1		4		1	
<b>STAGE 2</b>											
246+00	250+40	EB OUTSIDE APPROACH	397.0		1			2			100
246+00	250+91	EB OUTSIDE APPROACH					491				
246+60	250+15	EB MEDIAN APPROACH									80
246+94	250+12	EB MEDIAN APPROACH	225.0		1	1		4		1	
250+12	253+64	EB MEDIAN							1		
250+40	253+92	EB OUTSIDE							1		
253+75	256+96	EB OUTSIDE DEPART					321				
253+92	256+96	EB OUTSIDE DEPART	291.0	1				1			69
<b>LINCOLN STREET</b>											
97+32	103+57	SB SHOULDER	525.0			2				2	
<b>TOTAL</b>			<b>2,380.0</b>	<b>2</b>	<b>4</b>	<b>4</b>	<b>2,063</b>	<b>14</b>	<b>4</b>	<b>4</b>	<b>504</b>

**TRAFFIC CONTROL NOTES:**

- NOT A TOTAL QUANTITY
- SEE TRAFFIC CONTROL SCHEDULE FOR TEMPORARY GUARDRAIL LOCATIONS.
- APPLICATION RATE FOR AGGREGATE EROSION CONTROL ASSUMES 2.1 TON/CU YD.

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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**SCHEDULES OF QUANTITIES**

SCALE: SHEET 2 OF 5 SHEETS STA. TO STA.

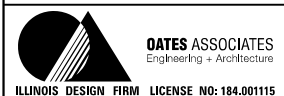
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)BR	KNOX	212	17
<b>CONTRACT NO. 68B69</b>				
ILLINOIS FED. AID PROJECT				

**PAVEMENT MARKING SCHEDULE**

STATION	OFFSET	STATION	OFFSET	COMMENT	REFLECTOR COLOR	SHORT TERM PAVT MKING (NOTE 3) (FOOT)	SHRT TRM PAVT MK REM (NOTE 3) (SQ FT)	TEMP PVT MK LINE 4 (FOOT)	TEMP PVT MK LINE 6 (FOOT)	PAVT MARK TAPE T4 4 (FOOT)	PAVT MARK TAPE T4 6 (FOOT)	PREF PL PM TB INL L6 (NOTE 1) (FOOT)	MOD URETH PM LINE 4 (NOTE 1) (FOOT)	RAISED REFL PAVT MKR (NOTE 2) (EACH)	RAISED REF PVT MKR BR (NOTE 2) (EACH)	PAVT MARKING REMOVAL (SQ FT)	RAISED REF PVT MK REM (EACH)	GRV RCSD PVT MRKG 5 (FOOT)	GRV RCSD PVT MRKG 7 (FOOT)
<b>STAGE 1</b>																			
198+50	RT	274+78	RT	CENTER / EDGE LINES												5,832			
198+50	RT	266+00	RT	EDGE LINE-YELLOW				6,750								2,250			
198+50	RT	268+54	RT	EDGE LINE-WHITE				7,004								2,335			
236+41	LT	295+00	LT	EDGE LINE-YELLOW				5,859								1,953			
236+41	LT	295+00	LT	EDGE LINE-WHITE				5,859								1,953			
231+85	RT	249+90	RT														23		
236+46	RT	249+28	RT														17		
236+41	LT	244+85	LT	CENTER / EDGE LINES												668			
253+50	LT	275+02	LT														27		
254+12	LT	274+78	LT														26		
258+75	LT	317+52	LT	CENTER / EDGE LINES												4,653			
<b>STAGE 1/2</b>																			
198+50	RT	266+00	RT	EDGE LINE-YELLOW				6,750								2,250			
198+50	RT	268+54	RT	EDGE LINE-WHITE				7,004								2,335			
198+50	RT	266+00	RT	SKIP DASH					1,688							844			
236+41	LT	295+00	LT	EDGE LINE-YELLOW				5,437								1,953			
236+41	LT	295+00	LT	EDGE LINE-WHITE				5,437								1,953			
236+41	LT	295+00	LT	SKIP DASH					1,359							732			
249+28	LT	253+50	LT	BRIDGE EDGE LINE-YELLOW						422									
249+28	LT	253+50	LT	BRIDGE EDGE LINE-WHITE						422									
249+28	LT	253+50	LT	BRIDGE SKIP DASH							106								
<b>STAGE 2</b>																			
198+50	RT	274+79	RT	EDGE LINE-YELLOW				7,207								2,543			
198+50	RT	274+79	RT	EDGE LINE-WHITE				7,207								2,543			
237+37	LT	317+52	LT	EDGE LINE-YELLOW				7,593								2,672			
237+37	LT	317+52	LT	EDGE LINE-WHITE				7,593								2,672			
249+28	RT	253+50	RT	BRIDGE EDGE LINE-YELLOW						422									
249+28	RT	253+50	RT	BRIDGE EDGE LINE-WHITE						422									
249+28	LT	253+50	LT	BRIDGE EDGE LINE-YELLOW						422									
249+28	LT	253+50	LT	BRIDGE EDGE LINE-WHITE						422									
<b>STAGE 2/3</b>																			
198+50	RT	274+79	RT	EDGE LINE-YELLOW				7,207								2,543			
198+50	RT	274+79	RT	EDGE LINE-WHITE				7,207								2,543			
198+50	RT	266+00	RT	SKIP DASH					1,582							844			
237+37	LT	317+52	LT	EDGE LINE-YELLOW				7,593								2,672			
237+37	LT	317+52	LT	EDGE LINE-WHITE				7,593								2,672			
237+37	LT	317+52	LT	SKIP DASH					1,898							1,002			
249+28	RT	253+50	RT	BRIDGE EDGE LINE-YELLOW						422									
249+28	RT	253+50	RT	BRIDGE EDGE LINE-WHITE						422									
249+28	RT	253+50	RT	BRIDGE SKIP DASH							106								
249+90	LT	254+12	LT	BRIDGE EDGE LINE-YELLOW						422									
249+90	LT	254+12	LT	BRIDGE EDGE LINE-WHITE						422									
249+90	LT	254+12	LT	BRIDGE SKIP DASH							106								

SCHEDULE CONTINUED ON NEXT PAGE

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SCHEDULES OF QUANTITIES**

SCALE: SHEET 3 OF 5 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)BR	KNOX	212	18
<b>CONTRACT NO. 68B69</b>				
ILLINOIS FED. AID PROJECT				

**PAVEMENT MARKING SCHEDULE (CONT.)**

STATION	OFFSET	STATION	OFFSET	COMMENT	REFLECTOR COLOR	SHORT TERM PAVT MKING (NOTE 3) (FOOT)	SHRT TRM PAVT MK REM (NOTE 3) (SO FT)	TEMP PVT MK LINE 4 (FOOT)	TEMP PVT MK LINE 6 (FOOT)	PAVT MARK TAPE T4 4 (FOOT)	PAVT MARK TAPE T4 6 (FOOT)	PREF PL PM TB INL L6 (NOTE 1) (FOOT)	MOD URETH PM LINE 4 (NOTE 1) (FOOT)	RAISED REFL PAVT MKR (NOTE 2) (EACH)	RAISED REF PVT MKR BR (NOTE 2) (EACH)	PAVT MARKING REMOVAL ** (SO FT)	RAISED REF PVT MK REM (EACH)	GRV RCSD PVT MRKG 5 (FOOT)	GRV RCSD PVT MRKG 7 (FOOT)
STAGE 3																			
231+85	RT	274+78	RT	SKIP DASH		864	288												
198+50	RT	274+78	RT	EDGE LINE-YELLOW									7,628					7,628	
198+50	RT	274+78	RT	SKIP DASH								1,907							1,907
249+28	LT	253+50	LT	WB	CRYSTAL										12				
198+50	RT	274+78	RT	EDGE LINE-WHITE									7,628					7,628	
231+85	RT	249+90	RT	SKIP DASH	CRYSTAL									46					
254+12	RT	274+78	RT	SKIP DASH	CRYSTAL									52					
236+46	LT	275+02	LT	SKIP DASH		776	260												
236+46	LT	317+52	LT	EDGE LINE-YELLOW									8,106					8,106	
236+46	LT	317+52	LT	SKIP DASH								2,027							2,027
249+90	RT	254+12	RT	EB	CRYSTAL										12				
236+46	LT	317+52	LT	EDGE LINE-WHITE									8,106					8,106	
236+46	LT	249+28	LT	SKIP DASH	CRYSTAL									34					
253+50	LT	275+02	LT	SKIP DASH	CRYSTAL									54					
<b>TOTAL</b>						<b>1,640</b>	<b>548</b>	<b>109,300</b>	<b>6,527</b>	<b>4,220</b>	<b>318</b>	<b>3,934</b>	<b>31,468</b>	<b>186</b>	<b>24</b>	<b>52,415</b>	<b>93</b>	<b>31,468</b>	<b>3,934</b>

**PAVEMENT MARKING NOTES:**

- SEE HIGHWAY STANDARD 780001 FOR PAVEMENT MARKING DETAILS.
- SEE HIGHWAY STANDARD 781001 FOR RAISED REFLECTIVE PAVEMENT MARKER DETAILS. DOUBLE LANE LINE MARKERS SHALL BE USED. RAISED REFLECTIVE PAVEMENT MARKER QUANTITY INCLUDES THE FOLLOWING TYPES:  
210 EACH ONE-WAY CRYSTAL MARKERS  
210 EACH TOTAL
- ASSUMES 2 APPLICATIONS (ONCE AFTER MILLING & ONCE AFTER RESURFACING)
- PAVEMENT MARKING REMOVAL ON PAVEMENT TO REMAIN IN PLACE SHALL BE WATER BLASTED, PAVEMENT MARKING REMOVAL ON PAVEMENT TO BE REMOVED CAN BE GROUND. THESE LOCATIONS SHALL BE DETERMINED BY THE ENGINEER

**MISCELLANEOUS SCHEDULE**

DESCRIPTION	UNIT	QUANTITY
ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	30
ENGINEER'S FIELD LABORATORY	CAL MO	30
MOBILIZATION	L SUM	1
TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	EACH	4
TRAFFIC CONTROL AND PROTECTION, STANDARD 701416	EACH	2
TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1
TRAFFIC CONTROL AND PROTECTION, STANDARD 701406	L SUM	1
TRAFFIC CONTROL SURVEILLANCE	CAL DA	60
REPLACEMENT OF SENSORS FOR ROADWAY WEATHER INFORMATION SYSTEM	L SUM	1
SPEED DISPLAY TRAILER	CAL MO	30
TEMPORARY LIGHTING SYSTEM	L SUM	1
CONSTRUCTION LAYOUT	L SUM	1
RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1

**ROW /SURVEY MARKER SCHEDULE**

STATION	OFFSET	COMMENT	FUR ERECT ROW MARKERS (EACH)	PERM SURV MKRS, T1 (EACH)	PERM SURV MKRS, T2 (EACH)
244+50	146.52' LT		1		
249+47	170.00' LT		1		
253+86	170.00' LT		1		
256+50	170.00' LT		1		
253+86	170.00' LT		1		
251+78	170.00' LT		1		
256+50	140.00' LT		1		
245+50	140.00' RT		1		
251+67	160.00' RT		1		
258+00	160.00' RT		1		
244+50	160.00' RT		1		
253+77	160.00' RT		1		
258+00	143.33' RT		1		
		SN 048-0101		1	
		SN 048-0102		1	
245+40.98	CL	PC			1
269+58.16	CL	PT			1
<b>TOTAL</b>			<b>13</b>	<b>2</b>	<b>2</b>

**TRAFFIC CONTROL SCHEDULE**

STATION	OFFSET	STATION	OFFSET	MOD GLAR SCR SYS TEMP (FOOT)	TEMP CONC BARRIER (FOOT)	TEMP SPBGR TY A (FOOT)	TEMP TR BAR TERM T1 (EACH)	TEMP TR BAR TERM T6 (EACH)	TERMINAL MARKER DA (NOTE 1) (EACH)	TUBULAR MARKERS (EACH)
STAGE 1										
23+07	5.0' RT	44+00	32.3' RT	2,095	2,095					
28+35	LT	31+43	LT							7
28+51	RT	31+59	RT							7
31+52	LT	34+21	LT			175.0	1	1	1	
*REFΔ	*REFΔ									
STAGE 2										
106+97	32' LT	136+19	5.0' LT	2,924	2,924					
116+64	RT	119+32	RT			175.0	1	1	1	
*REFΔ	*REFΔ									
<b>TOTAL</b>				<b>5,019</b>	<b>5,019</b>	<b>350.0</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>14</b>

**TRAFFIC CONTROL NOTES:**

- NOT A TOTAL QUANTITY

FILE NAME = D:\68B69-ah-t-schedule.dgn



USER NAME = keathbr	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000' / 1" =	CHECKED -	REVISED -
PLOT DATE = 10/20/2016	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SCHEDULES OF QUANTITIES**

SCALE: SHEET 4 OF 5 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)BR	KNOX	212	19
CONTRACT NO. 68B69				
ILLINOIS FED. AID PROJECT				

**PAVEMENT SCHEDULE**

STATION	STATION	LOCATION	AGG BASE CSE A 12 (SQ YD)	P BIT MATLS PR CT (NOTE 1) (POUND)	HMA SURF REM BUTT JT (SQ YD)	TEMPORARY RAMP (SQ YD)	HMA BC 1L-19.0 N70 (NOTE 1) (TON)	P HMA BC 1L-9.5 N70 (NOTE 1) (TON)	P HMA SC "E" N70 (NOTE 1) (TON)	PVT CON PCC BR APP SL (SQ YD)	PAVEMENT REM (SQ YD)	HMA SURF REM 2 (SQ YD)	PAVED SHLD REMOVAL (SQ YD)	AGG WEDGE SHLD TYPE B (NOTE 1) (TON)	HMA SHOULDERS 2 (SQ YD)	HMA SHOULDERS 8 (SQ YD)	SHOULDER RUM STRIP 16 (FOOT)	MATL TRANSFER DEVICE (NOTE 1) (TON)	TEMP PAVEMENT (SQ YD)
<b>STAGE 1</b>																			
231+85	250+49	CROSSOVER	4,149																3,993
231+85	235+50	EB SHOULDER											197						
236+46	250+03	WB SHOULDER											650						
244+45	250+65	EB SHOULDER	678										670						643
244+85	249+28	WB LANES		4,360	327	62	793	152				1,376						668	
244+85	249+62	WB LANES	370																329
246+00	250+49	EB SHOULDER											235						
249+28	249+57	WB LANES								53									
249+28	249+62	WB LANES									67								
249+34	249+84	WB SHOULDER																	
252+90	253+21	WB SHOULDER																	
253+08	264+50	WB SHOULDER																	
253+22	253+50	WB LANES								53									
253+31	253+50	WB LANES									30								
253+47	258+75	EB LANES	411																382
253+50	258+75	WB LANES		5,252	384	62	865	180				1,627						741	
253+52	260+00	EB SHOULDER	510										600						474
253+70	268+54	EB SHOULDER	1,715										1,715						1,361
258+75	275+02	CROSSOVER	5,012																4,833
268+00	275+02	EB SHOULDER																	
269+50	274+78	WB SHOULDER																	
<b>STAGE 2</b>																			
244+45	249+90	EB LANES		6,108	539	62	1,316	209				1,667							919
246+00	250+46	CROSSOVER									673								
249+90	250+18	EB LANES								53									
250+02	250+65	WB LANES									34								
253+51	253+84	WB LANES									16								
253+70	254+05	WB LANES									20								
253+83	254+12	EB LANES								53									
254+12	258+75	EB LANES		4,764	583	62	698	164				1,479							520
<b>STAGE 3</b>																			
231+85	249+90	EB LANES				26			541										541
231+85	244+45	EB INSIDE SHOULDER														843	1260		
231+85	249+90	EB LANES		3,864								4,796							
231+85	246+00	CROSSOVER									3,302								
231+85	250+25	EB OUTSIDE SHOULDER													2,051		1833		
235+75	244+45	EB SHOULDER											456						
236+46	249+28	WB LANES				26			382										382
236+46	249+40	WB OUTSIDE SHOULDER													1,427		1294		
236+46	249+28	WB LANES		2,726								3,220							
236+46	244+85	WB INSIDE SHOULDER														557	839		
244+45	250+02	EB INSIDE SHOULDER													370		557		
244+85	249+61	WB INSIDE SHOULDER													316		476		
253+14	275+02	WB OUTSIDE SHOULDER													2,433		2188		
253+38	258+75	WB INSIDE SHOULDER													356		537		
253+50	274+78	WB LANES				26			644										644
253+79	260+00	EB INSIDE SHOULDER													412		621		
254+00	274+78	EB OUTSIDE SHOULDER													2,299		2078		
254+12	275+02	EB LANES				26			616										616
253+50	274+78	WB LANES		4,600								6,146							
254+12	275+02	EB LANES		4,400								6,253							
258+75	275+02	CROSSOVER									4,775								
258+75	275+02	WB INSIDE SHOULDER														1,086	1627		
260+00	274+78	EB INSIDE SHOULDER														984	1478		
264+50	269+50	WB SHOULDER																	
265+00	268+00	WB SHOULDER																	
<b>LINCOLN STREET</b>																			
96+72	104+17	SB SHOULDER												45					
<b>TOTAL</b>			<b>12,845</b>	<b>36,074</b>	<b>1,833</b>	<b>352</b>	<b>3,672</b>	<b>704</b>	<b>2,183</b>	<b>212</b>	<b>8,917</b>	<b>26,564</b>	<b>6,048</b>	<b>45</b>	<b>9,664</b>	<b>3,470</b>	<b>14,788</b>	<b>5,031</b>	<b>12,015</b>

**PAVEMENT NOTES:**

- APPLICATION RATES USED FOR QUANTITY ESTIMATES ARE AS FOLLOWS:  
 POLY BITUMINOUS MATLS PRIME COAT: 0.8 LBS / SY (ASSUMES ONE APPLICATION BETWEEN EACH LIFT)  
 HOT-MIX ASPHALT: 112 LBS / SY / INCH THICKNESS

FILE NAME = H:\P\29048\WD 10 SINGAR-0005 & 0006 1-74 Phase 2\Microstation\CAQD Sheets\0468869-ht-schedule.dgn



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PLOT DATE = 2/22/2016	CHECKED -	REVISED -
	DATE -	REVISED -

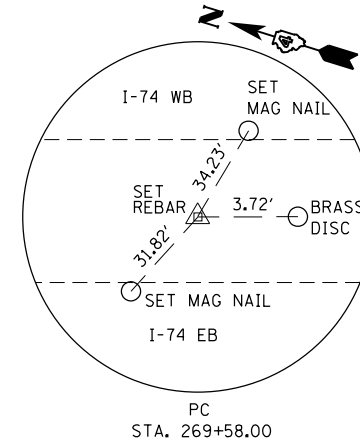
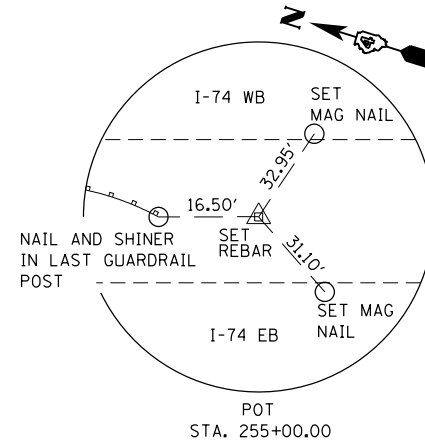
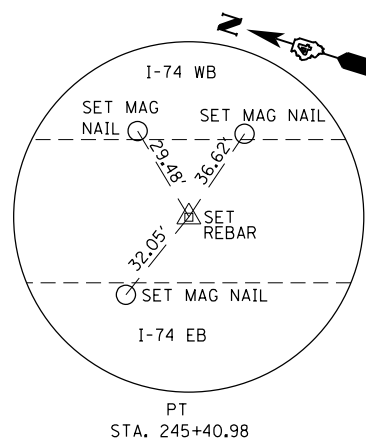
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SCHEDULES OF QUANTITIES**

SCALE: SHEET 5 OF 5 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)BR	KNOX	212	20
<b>CONTRACT NO. 68B69</b>				
ILLINOIS FED. AID PROJECT				

PROP. CURVE I-74-C1  
 PI STA. = 228+38.15  
 $\Delta = 20^\circ 39' 39''$  (LT)  
 $D = 0^\circ 36' 00''$   
 $R = 9,549.30'$   
 $T = 1,740.64'$   
 $L = 3,443.47'$   
 $E = 157.34'$   
 $e = 2.0\%$  (EXISTING)  
 T.R. = MATCH EXISTING  
 S.E. RUN = MATCH EXISTING  
 P.C. STA. = 210+97.52  
 P.T. STA. = 245+40.98



GROUND COORDINATES		
DESCRIPTION	NORTHING	EASTING
I-74 MAINLINE		
PC STA. 210+97.52	1,572,564.43	2,249,884.30
PI STA. 228+38.15	1,570,826.52	2,249,786.90

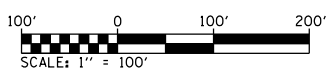
GROUND COORDINATES		
DESCRIPTION	NORTHING	EASTING
I-74 MAINLINE		
PT STA. 245+40.98	1,569,166.02	2,250,308.96
POT STA. 255+00.00	1,568,251.15	2,250,596.59
PC STA. 269+58.16	1,566,860.12	2,254,033.93

GROUND COORDINATES		
DESCRIPTION	NORTHING	EASTING
I-74 MAINLINE		
PI STA. 281+66.43	1,565,707.48	2,251,396.32
PT STA. 293+39.81	1,564,506.65	2,251,262.41

PROP. CURVE I-74-C2  
 PI STA. = 281+66.43  
 $\Delta = 23^\circ 48' 59''$  (RT)  
 $D = 1^\circ 00' 00''$   
 $R = 5,729.58'$   
 $T = 1,208.27'$   
 $L = 2,381.65'$   
 $E = 126.02'$   
 $e = 3.3\%$  (EXISTING)  
 T.R. = MATCH EXISTING  
 S.E. RUN = MATCH EXISTING  
 P.C. STA. = 269+58.16  
 P.T. STA. = 293+39.81

BM #6 - CHISELED SQUARE ON TOP OF THE  
 END OF THE NORTHWEST CONCRETE WINGWALL  
 ON S.N. 048-0005 (W.B.)  
 STA. 249+96.39, 23.96' LT, ELEV. 834.48.

BM #11 - CHISELED SQUARE ON THE  
 SOUTHWEST CORNER OF CONCRETE BASE  
 OF THE SOUTHERN PIER ON S.N. 048-0006 (E.B.)  
 STA. 253+04.01, 61.87' RT, ELEV. 804.95.



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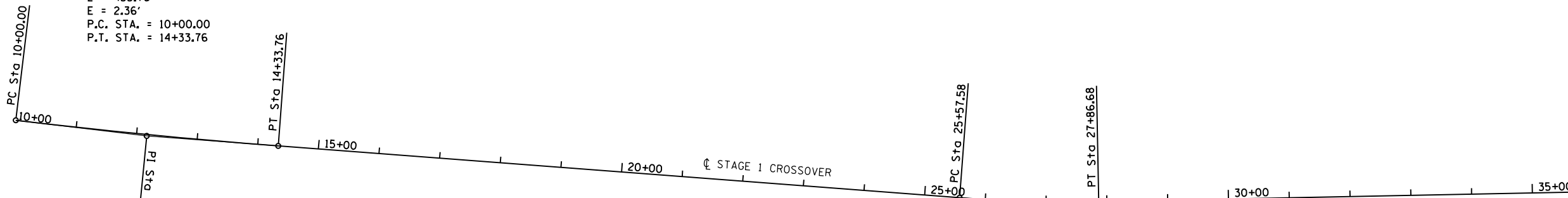
USER NAME = brianheil	DESIGNED -	REVISED -
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PLOT DATE = 2/8/2016	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

ALIGNMENT TIES & BENCHMARKS (MAINLINE)	
SCALE:	SHEET 1 OF 3 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)BR	KNOX	212	21
CONTRACT NO. 68B69				
ILLINOIS FED. AID PROJECT				

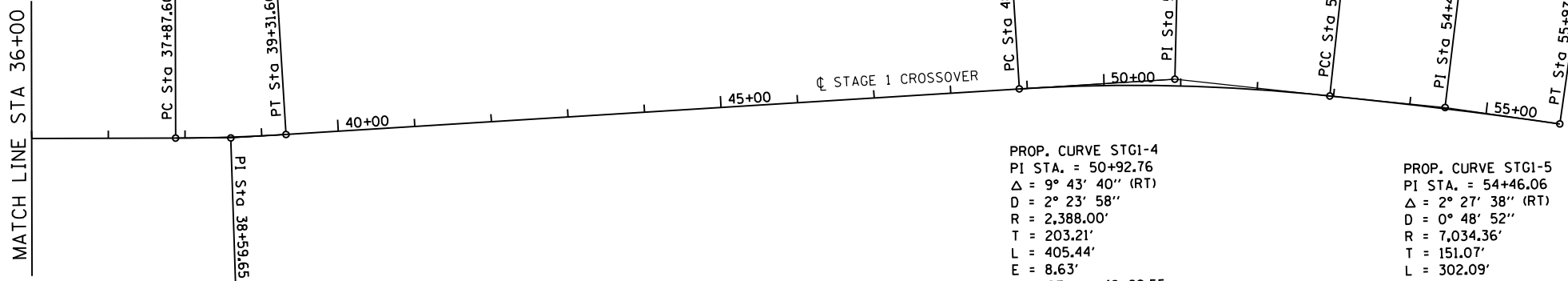
PROP. CURVE STG1-1  
 PI STA. = 12+16.91  
 $\Delta = 2^\circ 29' 27''$  (LT)  
 $D = 0^\circ 34' 27''$   
 $R = 9,978.05'$   
 $T = 216.91'$   
 $L = 433.76'$   
 $E = 2.36'$   
 P.C. STA. = 10+00.00  
 P.T. STA. = 14+33.76



PROP. CURVE STG1-2  
 PI STA. = 26+72.22  
 $\Delta = 5^\circ 28' 10''$  (LT)  
 $D = 2^\circ 23' 14''$   
 $R = 2,400.00'$   
 $T = 114.64'$   
 $L = 229.10'$   
 $E = 2.74'$   
 P.C. STA. = 25+57.58  
 P.T. STA. = 27+86.68

GROUND COORDINATES		
DESCRIPTION	NORTHING	EASTING
I-74 STAGE 1 CROSSOVER		
PC STA. 10+00.00	1,570,463.70	2,250,032.40
PI STA. 12+16.91	1,570,249.74	2,250,068.10
PT STA. 14+33.76	1,570,037.54	2,250,113.06
PC STA. 25+57.58	1,568,938.13	2,250,346.02
PI STA. 26+72.22	1,568,825.98	2,250,369.79
PT STA. 27+86.68	1,568,716.61	2,250,404.13

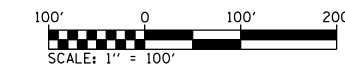
PROP. CURVE STG1-3  
 PI STA. = 38+59.65  
 $\Delta = 3^\circ 25' 20''$  (LT)  
 $D = 2^\circ 22' 32''$   
 $R = 2,412.00'$   
 $T = 72.05'$   
 $L = 144.06'$   
 $E = 1.08'$   
 P.C. STA. = 37+87.60  
 P.T. STA. = 39+31.66



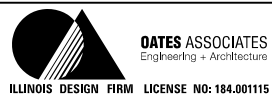
PROP. CURVE STG1-4  
 PI STA. = 50+92.76  
 $\Delta = 9^\circ 43' 40''$  (RT)  
 $D = 2^\circ 23' 58''$   
 $R = 2,388.00'$   
 $T = 203.21'$   
 $L = 405.44'$   
 $E = 8.63'$   
 P.C. STA. = 48+89.55  
 P.T. STA. = 52+94.99

PROP. CURVE STG1-5  
 PI STA. = 54+46.06  
 $\Delta = 2^\circ 27' 38''$  (RT)  
 $D = 0^\circ 48' 52''$   
 $R = 7,034.36'$   
 $T = 151.07'$   
 $L = 302.09'$   
 $E = 1.62'$   
 P.C. STA. = 52+94.99  
 P.T. STA. = 55+97.08

GROUND COORDINATES		
DESCRIPTION	NORTHING	EASTING
I-74 STAGE 1 CROSSOVER		
PC STA. 37+87.60	1,567,761.67	2,250,704.00
PI STA. 38+59.65	1,567,692.93	2,250,725.58
PT STA. 39+31.66	1,567,625.60	2,250,751.23
PC STA. 48+89.55	1,566,730.46	2,251,092.25
PI STA. 50+92.76	1,566,540.57	2,251,164.60
PCC STA. 52+94.99	1,566,341.18	2,251,203.81
PI STA. 54+46.06	1,566,193.19	2,251,234.24
PT STA. 55+97.08	1,566,044.07	2,251,258.27



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DRAWN -	REVISED -	
PLOT SCALE = 200.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 2/8/2016	DATE -	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

ALIGNMENT TIES & BENCHMARKS  
 (STAGE 1)

SCALE: SHEET 2 OF 3 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)BR	KNOX	212	22
CONTRACT NO. 68B69				
ILLINOIS FED. AID PROJECT				

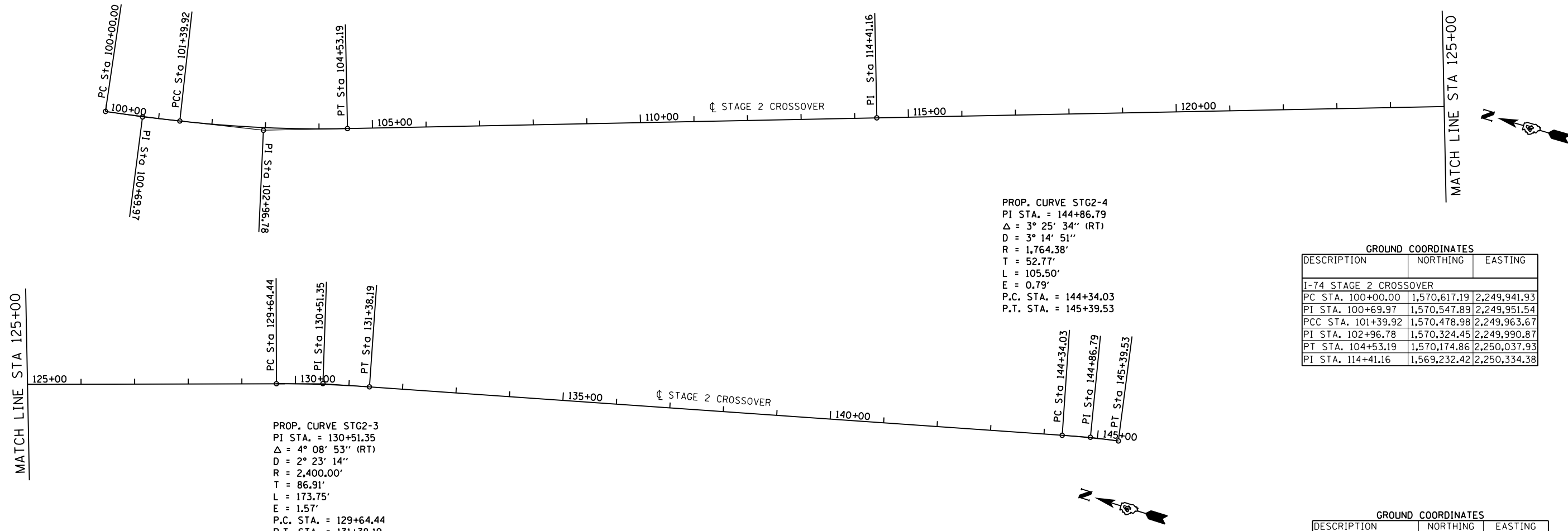


PROP. CURVE STG2-1  
 PI STA. = 100+69.97  
 $\Delta = 2^\circ 05' 22''$  (LT)  
 D = 1° 29' 36"  
 R = 3,836.88'  
 T = 69.97'  
 L = 139.92'  
 E = 0.64'  
 P.C. STA. = 100+00.00  
 P.T. STA. = 101+39.92

PROP. CURVE STG2-2  
 PI STA. = 102+96.78  
 $\Delta = 7^\circ 28' 44''$  (LT)  
 D = 2° 23' 14"  
 R = 2,400.00'  
 T = 156.86'  
 L = 313.27'  
 E = 5.12'  
 P.C. STA. = 101+39.92  
 P.T. STA. = 104+53.19

PROP. CURVE STG2-4  
 PI STA. = 144+86.79  
 $\Delta = 3^\circ 25' 34''$  (RT)  
 D = 3° 14' 51"  
 R = 1,764.38'  
 T = 52.77'  
 L = 105.50'  
 E = 0.79'  
 P.C. STA. = 144+34.03  
 P.T. STA. = 145+39.53

PROP. CURVE STG2-3  
 PI STA. = 130+51.35  
 $\Delta = 4^\circ 08' 53''$  (RT)  
 D = 2° 23' 14"  
 R = 2,400.00'  
 T = 86.91'  
 L = 173.75'  
 E = 1.57'  
 P.C. STA. = 129+64.44  
 P.T. STA. = 131+38.19

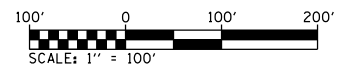


GROUND COORDINATES

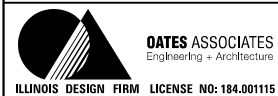
DESCRIPTION	NORTHING	EASTING
I-74 STAGE 2 CROSSOVER		
PC STA. 100+00.00	1,570,617.19	2,249,941.93
PI STA. 100+69.97	1,570,547.89	2,249,951.54
PCC STA. 101+39.92	1,570,478.98	2,249,963.67
PI STA. 102+96.78	1,570,324.45	2,249,990.87
PT STA. 104+53.19	1,570,174.86	2,250,037.93
PI STA. 114+41.16	1,569,232.42	2,250,334.38

GROUND COORDINATES

DESCRIPTION	NORTHING	EASTING
I-74 STAGE 2 CROSSOVER		
PC STA. 129+64.44	1,567,779.21	2,250,791.08
PI STA. 130+51.35	1,567,696.30	2,250,817.14
PT STA. 131+38.19	1,567,611.71	2,250,837.13
PC STA. 144+34.03	1,566,350.63	2,251,135.20
PI STA. 144+86.79	1,566,299.28	2,251,147.34
PT STA. 145+39.53	1,566,247.29	2,251,156.38



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USER NAME = brianheil	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 200.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 2/8/2016	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**ALIGNMENT TIES & BENCHMARKS  
 (STAGE 2)**

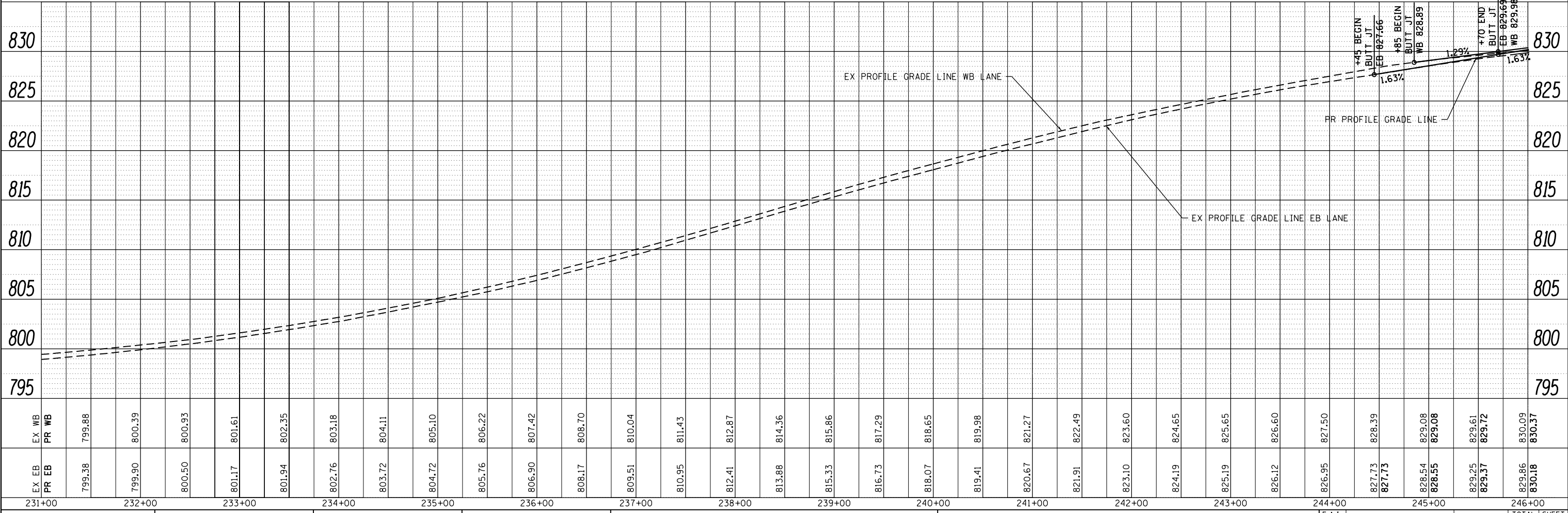
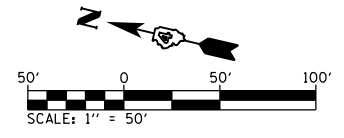
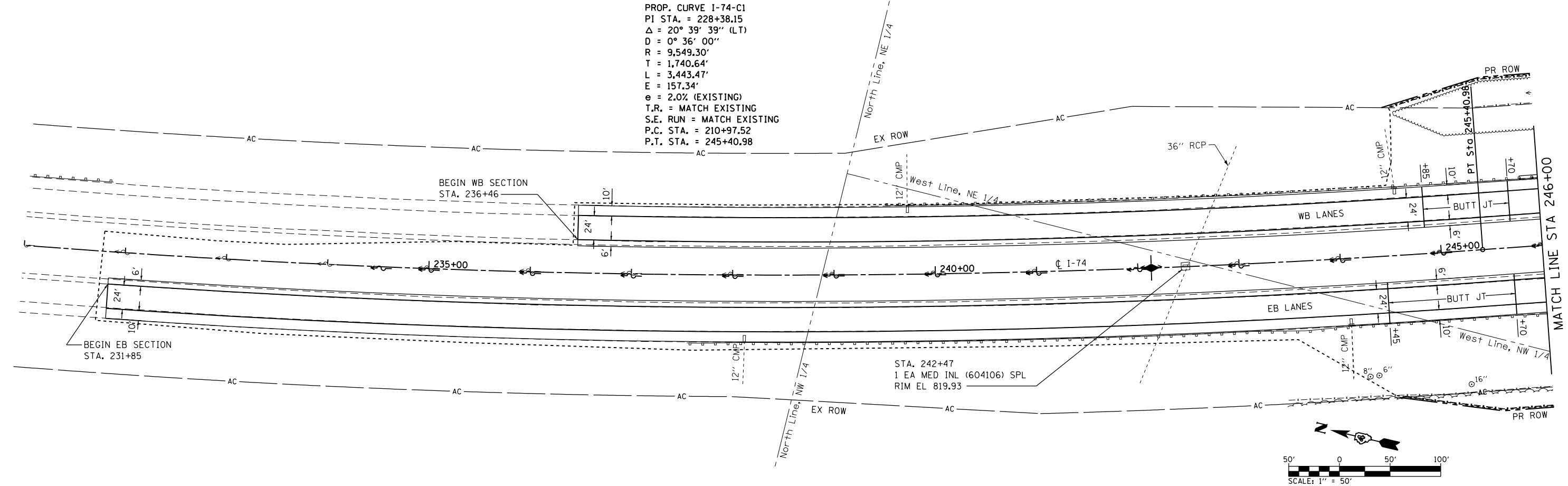
SCALE: SHEET 3 OF 3 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)BR	KNOX	212	23
CONTRACT NO. 68B69				
ILLINOIS FED. AID PROJECT				

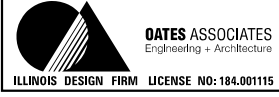
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	PLOTTED	BY
	GRADES CHECKED	
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	NOTE BOOK NO.	
	FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	NOTE BOOK NO.	
	FILE NAME	

PROP. CURVE I-74-C1  
 PI STA. = 228+38.15  
 $\Delta = 20^\circ 39' 39''$  (LT)  
 $D = 0^\circ 36' 00''$   
 $R = 9,549.30'$   
 $T = 1,740.64'$   
 $L = 3,443.47'$   
 $E = 157.34'$   
 $e = 2.0\%$  (EXISTING)  
 T.R. = MATCH EXISTING  
 S.E. RUN = MATCH EXISTING  
 P.C. STA. = 210+97.52  
 P.T. STA. = 245+40.98



EX WB	799.88	800.39	800.93	801.61	802.35	803.18	804.11	805.10	806.22	807.42	808.70	810.04	811.43	812.87	814.36	815.86	817.29	818.65	819.98	821.27	822.49	823.60	824.65	825.65	826.60	827.50	828.39	829.08	829.08	829.61	829.72	830.09	830.37			
PR WB																																				
EX EB	799.38	799.90	800.50	801.17	801.94	802.76	803.72	804.72	805.76	806.90	808.17	809.51	810.95	812.41	813.88	815.33	816.73	818.07	819.41	820.67	821.91	823.10	824.19	825.19	826.12	826.95	827.73	827.73	828.54	828.55	829.25	829.37	829.86	830.18		
PR EB																																				



USER NAME = brianheil	DESIGNED -	REVISIED -
PLOT SCALE = 100.0000' / in.	DRAWN -	REVISIED -
PLOT DATE = 2/8/2016	CHECKED -	REVISIED -
	DATE -	REVISIED -

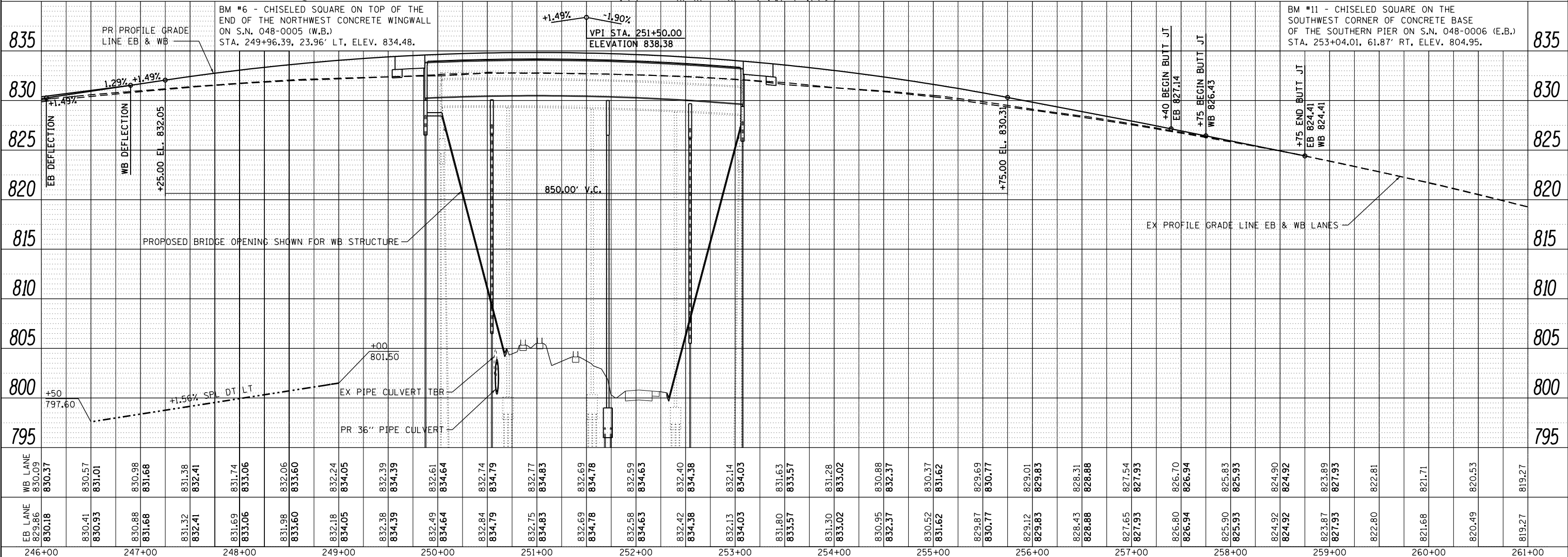
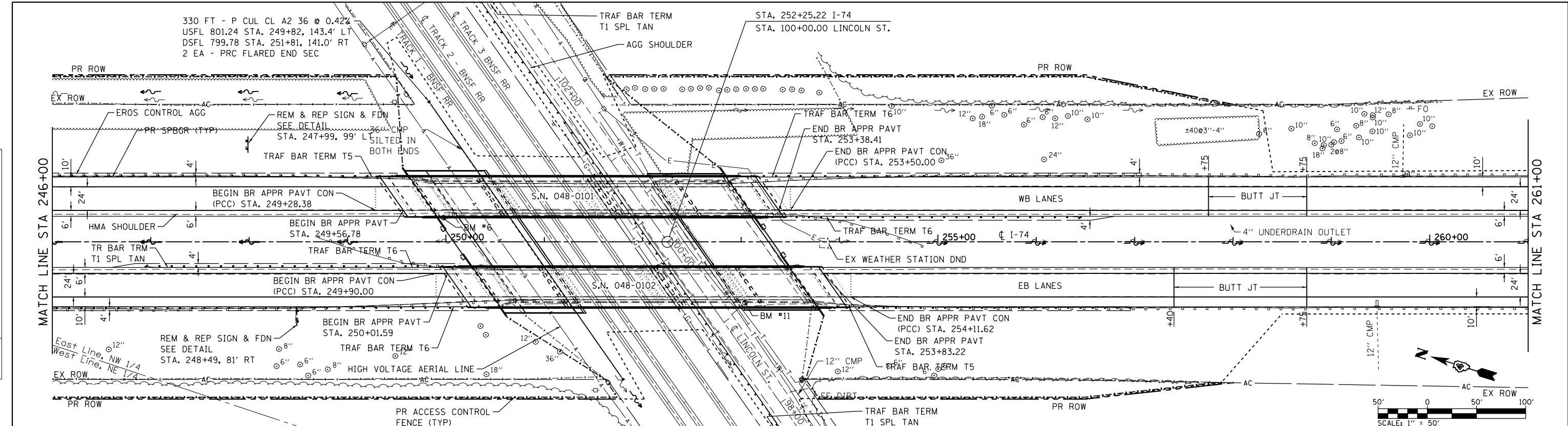
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

PLAN & PROFILE SHEETS  
 SCALE: SHEET 1 OF 3 SHEETS STA. 231+00 TO STA. 246+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)BR	KNOX	212	24
CONTRACT NO. 68B69				
ILLINOIS FED. AID PROJECT				

PLAN	SURVEYED	DATE
	PLOTTED	BY
	ALIGNED	
	CHECKED	
	DESIGNED	
	FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	FILE NAME	



WB LANE	830.09	830.57	831.01	830.98	831.68	831.38	832.41	831.74	833.06	832.06	833.60	832.24	832.24	834.05	832.39	834.39	832.61	834.64	832.74	834.79	832.77	834.83	832.69	834.78	832.59	834.63	832.40	834.38	832.13	834.03	831.80	833.57	831.30	831.28	833.02	834.78	832.37	830.52	831.62	829.87	829.69	830.77	829.01	829.83	828.43	828.31	828.88	827.65	827.54	827.93	826.80	826.70	826.94	825.90	825.83	825.93	824.92	824.90	824.92	823.87	823.89	827.93	821.93	822.80	822.81	821.68	821.71	820.49	820.53	819.27	819.27
EB LANE	830.18	830.41	830.93	830.88	831.68	831.32	832.41	831.69	833.06	833.60	832.18	834.05	832.38	834.39	832.49	834.64	832.84	834.79	832.75	834.83	832.69	834.78	832.58	834.63	832.42	834.38	832.13	834.03	831.80	833.57	831.30	831.28	833.02	834.78	832.37	830.52	831.62	829.87	829.69	830.77	829.01	829.83	828.43	828.31	828.88	827.65	827.54	827.93	826.80	826.70	826.94	825.90	825.83	825.93	824.92	824.90	824.92	823.87	823.89	827.93	821.93	822.80	822.81	821.68	821.71	820.49	820.53	819.27	819.27		

**DATES ASSOCIATES**  
Engineering - Architecture  
ILLINOIS DESIGN FIRM LICENSE NO. 184.001115

USER NAME = brianheil	DESIGNED -	REVISIED -
	DRAWN -	REVISIED -
PLOT SCALE = 100.0000' / in.	CHECKED -	REVISIED -
PLOT DATE = 2/8/2016	DATE -	REVISIED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**PLAN & PROFILE SHEETS**

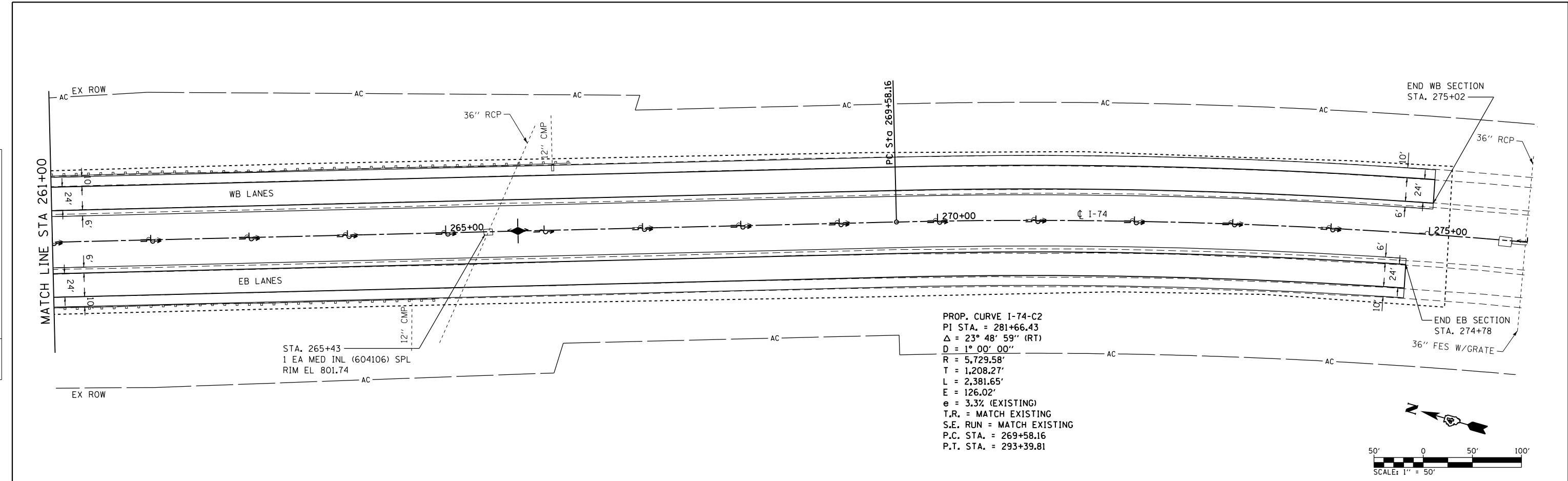
SCALE: SHEET 2 OF 3 SHEETS STA. 246+00 TO STA. 261+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)BR	KNOX	212	25
CONTRACT NO. 68B69				
ILLINOIS FED. AID PROJECT				

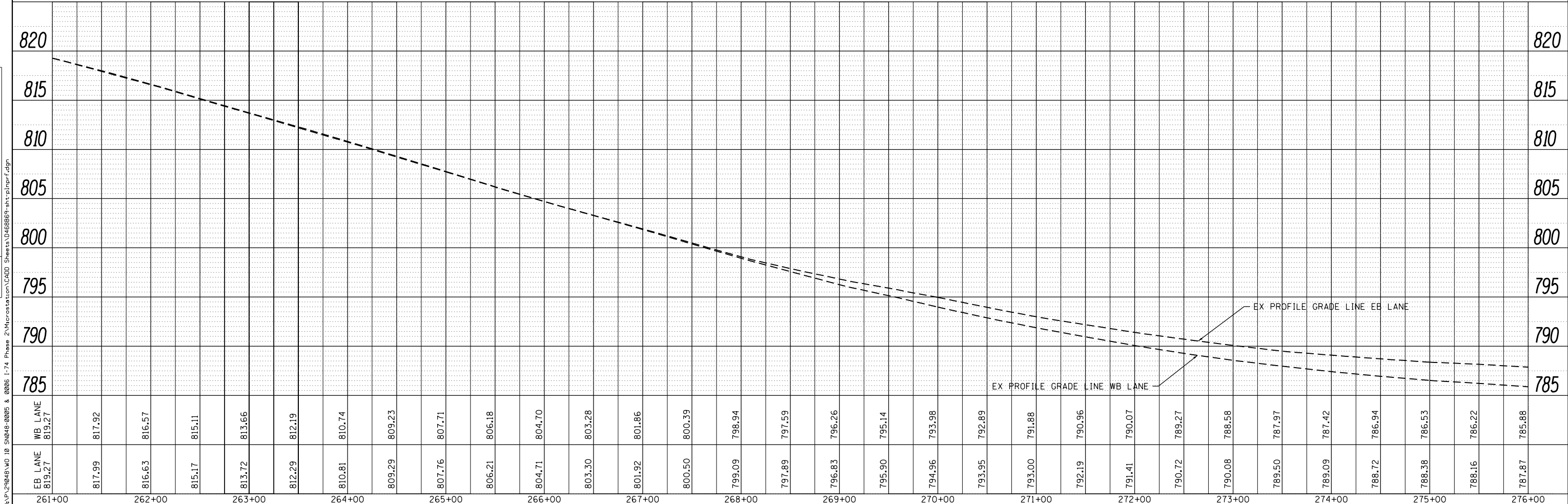
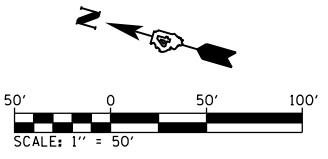
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	PLOTTED		
	GRADES CHECKED		
	STRUCTURE NOTATIONS CHECKED		
	NOTE BOOK NO.		
	CADD FILE NAME		

PROFILE	SURVEYED	BY	DATE
	PLOTTED		
	GRADES CHECKED		
	STRUCTURE NOTATIONS CHECKED		
	NOTE BOOK NO.		
	CADD FILE NAME		



PROP. CURVE I-74-C2  
 PI STA. = 281+66.43  
 $\Delta = 23^\circ 48' 59''$  (RT)  
 D =  $1^\circ 00' 00''$   
 R = 5,729.58'  
 T = 1,208.27'  
 L = 2,381.65'  
 E = 126.02'  
 e = 3.3% (EXISTING)  
 T.R. = MATCH EXISTING  
 S.E. RUN = MATCH EXISTING  
 P.C. STA. = 269+58.16  
 P.T. STA. = 293+39.81



FILE NAME = H:\P2\2008\100\_10\_50048-0005 & 0006 I-74 Phase 2\Microstation\CADD Sheets\0468B69-sh1-plnpr.f.dgn

**DATES ASSOCIATES**  
 Engineering - Architecture  
 ILLINOIS DESIGN FIRM LICENSE NO: 184.001115

USER NAME = brianheil	DESIGNED -	REVISED -
PLOT SCALE = 100.0000' / in.	DRAWN -	REVISED -
PLOT DATE = 2/8/2016	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

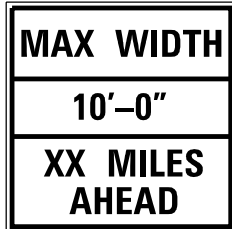
**PLAN & PROFILE SHEETS**

SCALE: SHEET 3 OF 3 SHEETS STA. 261+00 TO STA. 276+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)BR	KNOX	212	26
CONTRACT NO. 68B69				
ILLINOIS FED. AID PROJECT				

**STAGE 1**

1. REMOVE THE INSIDE AND OUTSIDE SHOULDER OF THE EASTBOUND LANES AND CONSTRUCT THE TEMPORARY PAVEMENT IN ITS PLACE UTILIZING TRAFFIC CONTROL AND PROTECTION STANDARDS 701400 AND 701401 TO THE STATION LIMITS SHOWN ON THE PLANS. REMOVE SIGNS IN CONFLICT AS SHOWN ON THE PLANS AND STORE AS DIRECTED BY THE ENGINEER.
2. CONSTRUCT THE CROSSOVERS UTILIZING TRAFFIC CONTROL AND PROTECTION STANDARDS 701101, 701400, AND 701401. INSTALL THE TEMPORARY DRAINAGE PIPES AND INLETS AS SHOWN ON THE PLANS. REGRADE MEDIAN TO DRAIN TO TEMPORARY PIPES IN THESE AREAS. CONSTRUCT THE TEMPORARY END TERMINAL FOR THE WESTBOUND STAGE TRAFFIC AND GUARDRAIL ALONG THE MEDIAN SIDE OF THE APPROACH TO S.N. 048-0006.
3. INSTALL THE TEMPORARY LIGHTING AT THE CROSSOVERS UTILIZING TRAFFIC CONTROL AND PROTECTION STANDARD 701406.
4. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES INCLUDING CONCRETE BARRIER, BARRICADES, BARRELS, TEMPORARY PAVEMENT MARKINGS, VERTICAL PANELS, AND FLEXIBLE DELINEATORS AS SHOWN ON THE PLANS AND ON HIGHWAY STANDARD 701416. SWITCH WESTBOUND TRAFFIC ONTO THE EASTBOUND LANES UTILIZING THE CROSSOVERS AND TRAFFIC CONTROL AND PROTECTION STANDARDS 701400 AND 701416.
5. REMOVE WESTBOUND STRUCTURE (S.N. 048-0005) AND CONSTRUCT NEW BRIDGE. REMOVE AND REINSTALL RCP PIPE CULVERT AT STATION 250+80 PRIOR TO CONSTRUCTION OF SLOPEWALL. CONSTRUCT THE ADJACENT PAVEMENT AND PROFILE ADJUSTMENT IN THE WESTBOUND LANES AND REDRESS THE SIDE SLOPES AS NEEDED AS SHOWN ON THE PLANS.
6. INSTALL THE GUARDRAIL END TREATMENTS IN EACH QUADRANT AND THE NEW GUARDRAIL ON BOTH SIDES OF THE BRIDGE.
7. SWITCH TRAFFIC BACK TO THE WESTBOUND AND EASTBOUND LANES. REMOVE THE TEMPORARY CONCRETE BARRIER AND STORE OFF OF ROW IN PREPARATION FOR USE IN STAGE 2. REMOVE TEMPORARY PAVEMENT MARKINGS INSTALLED AT THE BEGINNING OF STAGE 1 AND INSTALL TEMPORARY PAVEMENT MARKING FOR TWO LANE TRAFFIC IN EACH DIRECTION.



W12-1103

**WIDTH RESTRICTION SIGNING DETAILS**

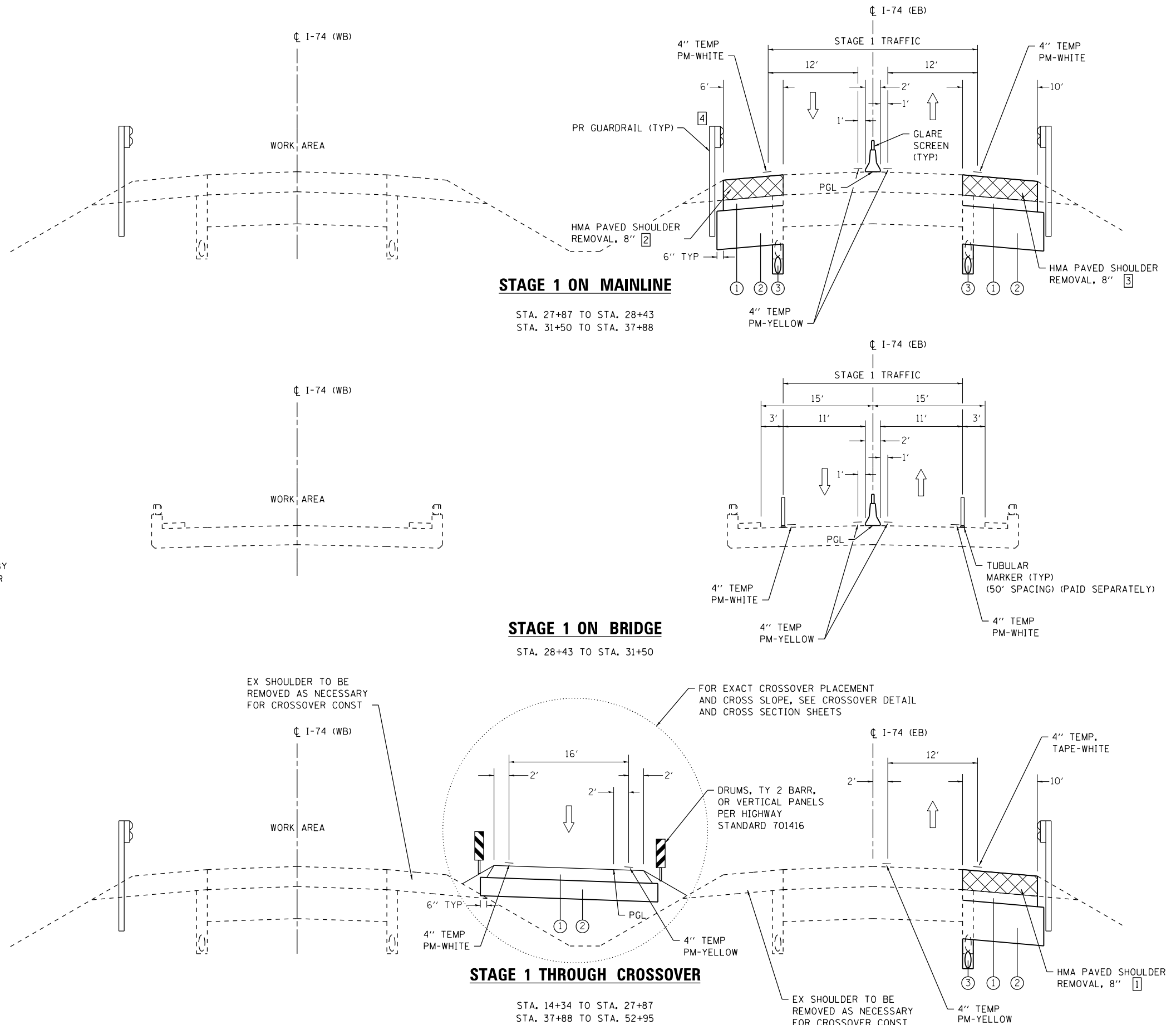
**LEGEND**

- ① PROPOSED TEMPORARY PAVEMENT
- ② PROPOSED AGGREGATE BASE COURSE TYPE A, 12"
- ③ PROPOSED PIPE UNDERDRAINS 4"
- ④ PROPOSED HMA SHOULDERS, 8"

**SECTION NOTES**

- 1 STA. 22+36 TO STA. 28+54
- 2 STA. 31+38 TO STA. 37+88
- 3 STA. 31+59 TO STA. 46+41
- 4 STA. 31+50 TO STA. 34+21

7 ASSEMBLIES REQUIRED. LOCATIONS DESIGNATED BY THE IDOT DISTRICT 4 TRAFFIC CONTROL SUPERVISOR  
SEE SPECIAL PROVISION "WIDTH RESTRICTION SIGNING" FOR FURTHER DETAILS.



FILE NAME = D468869-ah1-staging-1.dgn



USER NAME = keathbr	DESIGNED -	REVISED -
PLOT SCALE = 100.0000' / 1"	DRAWN -	REVISED -
PLOT DATE = 10/20/2016	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

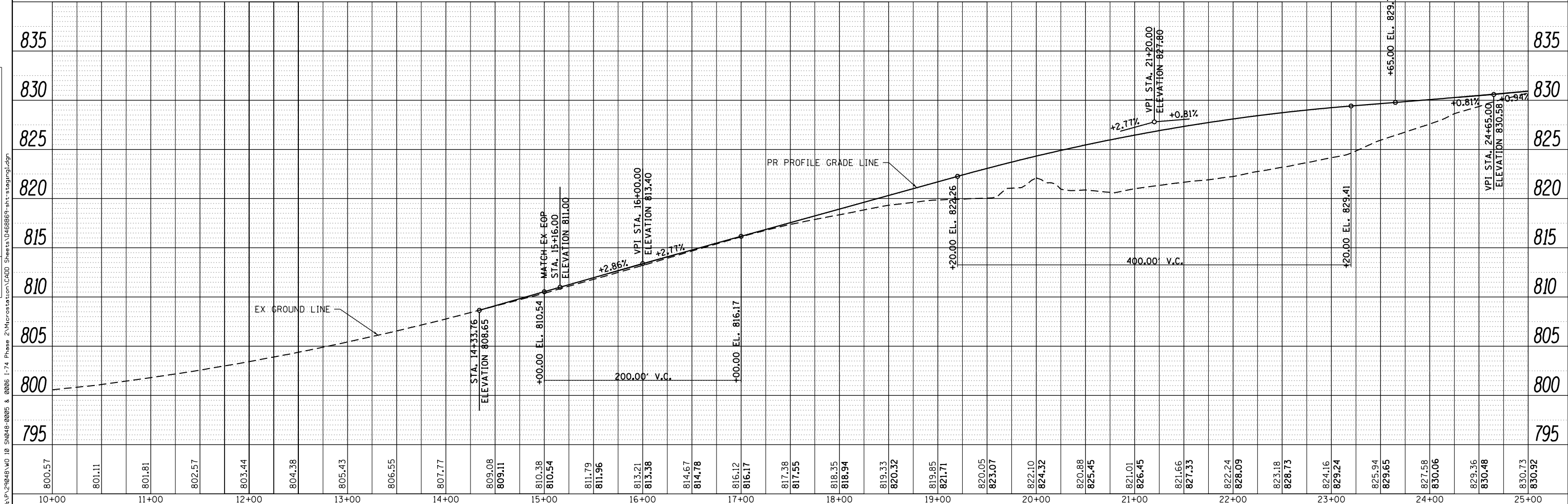
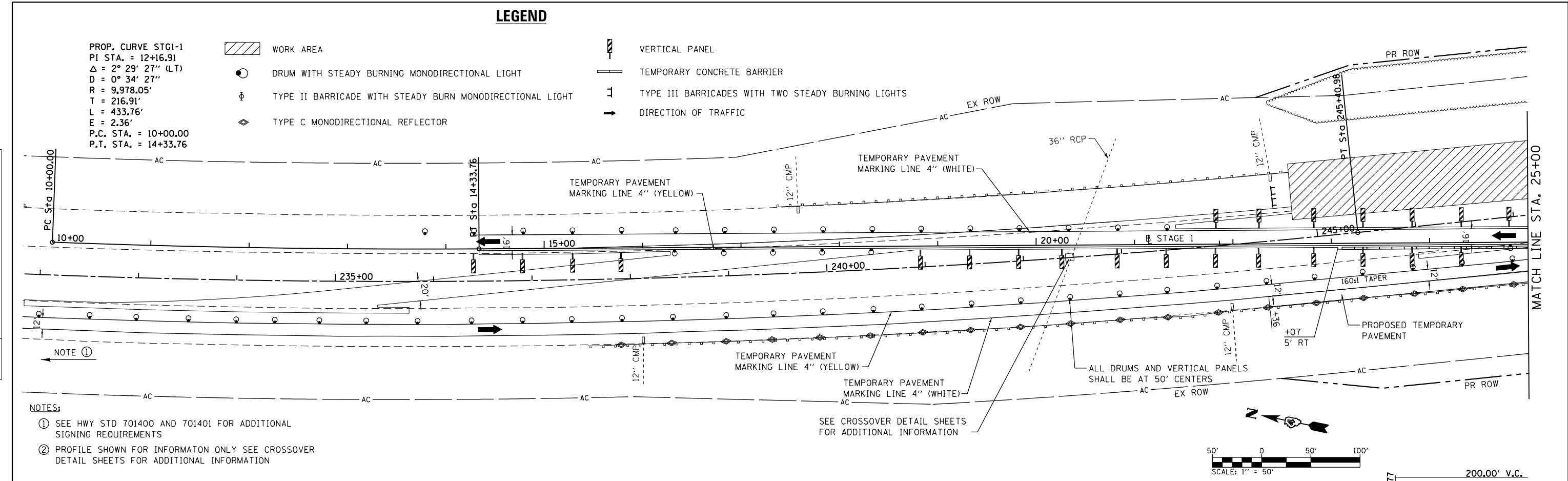
**SUGGESTED STAGES OF CONSTRUCTION & TRAFFIC CONTROL  
(STAGE 1 TYPICALS)**

SCALE: SHEET 1 OF 15 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)BR	KNOX	212	27
CONTRACT NO. 68B69				
ILLINOIS FED. AID PROJECT				

PLAN	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	NOTES CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	NO.	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	NOTES CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	NO.	



800.57	801.11	801.81	802.57	803.44	804.38	805.43	806.55	807.77	809.08	809.11	810.38	810.54	811.79	811.96	813.21	813.38	814.67	814.78	816.12	816.17	817.38	817.55	818.35	818.94	819.33	820.32	821.71	820.05	823.07	822.10	824.32	820.88	825.45	821.01	826.45	821.66	827.33	822.24	828.09	823.18	828.73	824.16	829.24	825.94	829.65	827.58	830.06	829.36	830.48	830.73	830.92
10+00	11+00	12+00	13+00	14+00	15+00	16+00	17+00	18+00	19+00	20+00	21+00	22+00	23+00	24+00	25+00																																				

**DATES ASSOCIATES**  
 Engineering - Architecture  
 ILLINOIS DESIGN FIRM LICENSE NO. 184.001115

USER NAME = brianheil	DESIGNED -	REVISED -
PLOT SCALE = 100.0000' / in.	DRAWN -	REVISED -
PLOT DATE = 2/8/2016	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**SUGGESTED STAGES OF CONSTRUCTION & TRAFFIC CONTROL**  
**(STAGE 1 PLAN LAYOUT)**

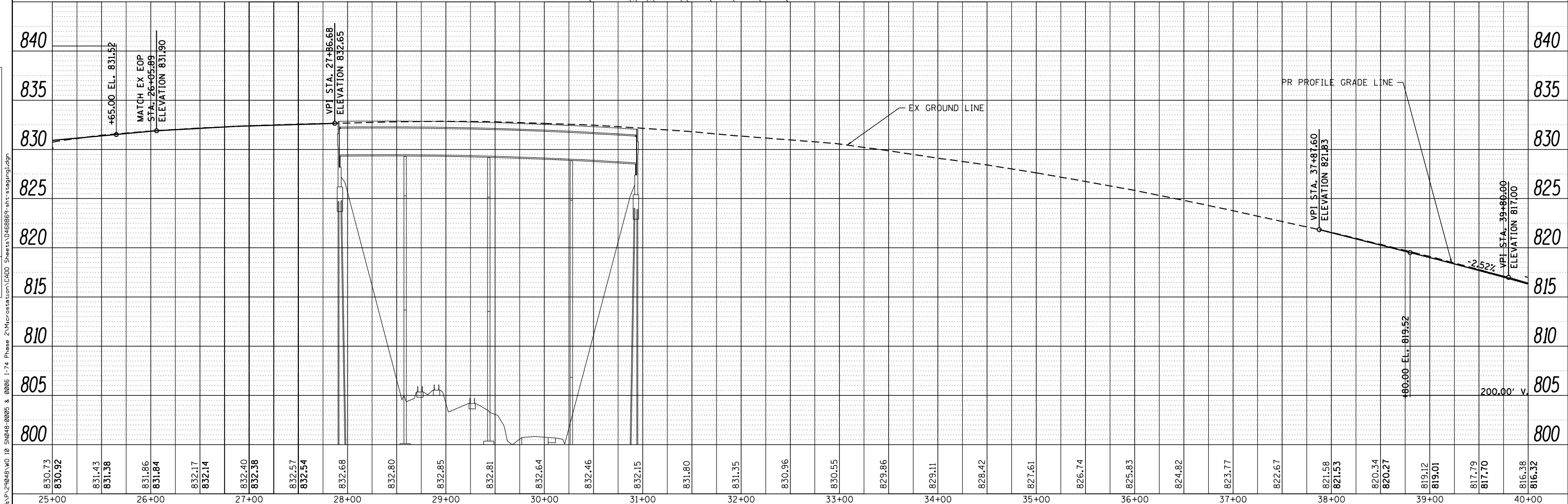
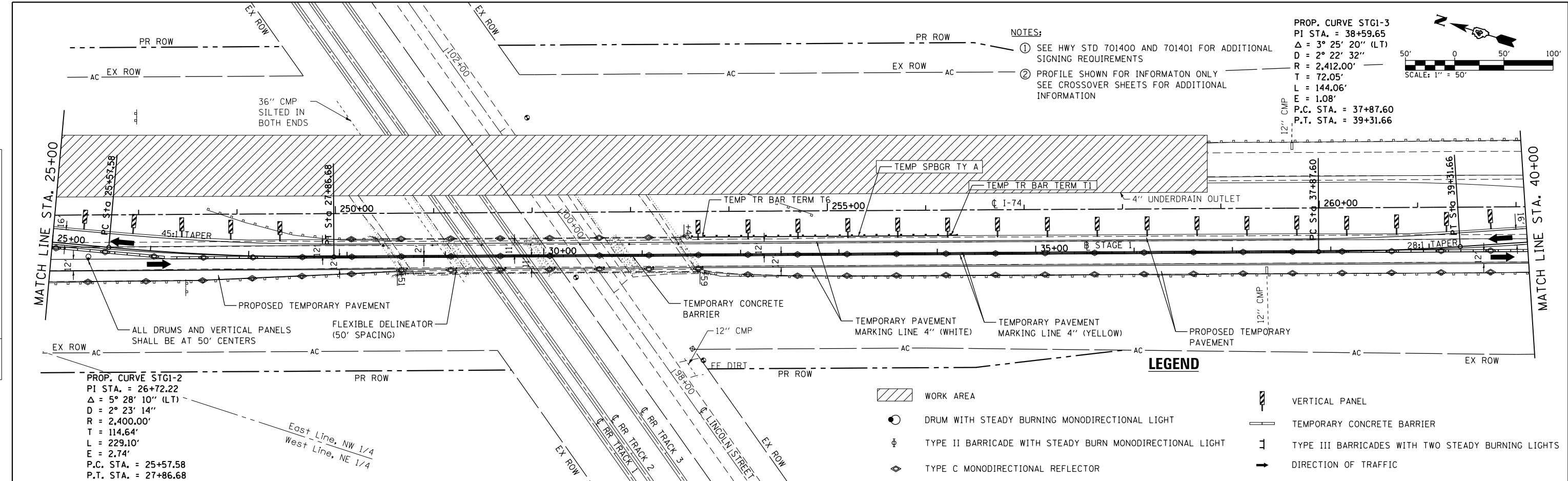
SCALE: SHEET 2 OF 15 SHEETS STA. 10+00 TO STA. 25+00

F.A.I. RTE. 74	SECTION (48-26HVB)BR	COUNTY KNOX	TOTAL SHEETS 212	SHEET NO. 28
CONTRACT NO. 68B69				
ILLINOIS FED. AID PROJECT				



PLAN	SURVEYED	BY	DATE
	PLOTTED		
	NOTE BOOK		
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PROFILE	SURVEYED	BY	DATE
	PLOTTED		
	GRADES CHECKED		
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	NO.		



**DATES ASSOCIATES**  
 Engineering - Architecture  
 ILLINOIS DESIGN FIRM LICENSE NO: 184.001115

USER NAME = brianheil	DESIGNED -	REVISED -
	DRAWN -	REVISED -
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PLOT DATE = 2/8/2016	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

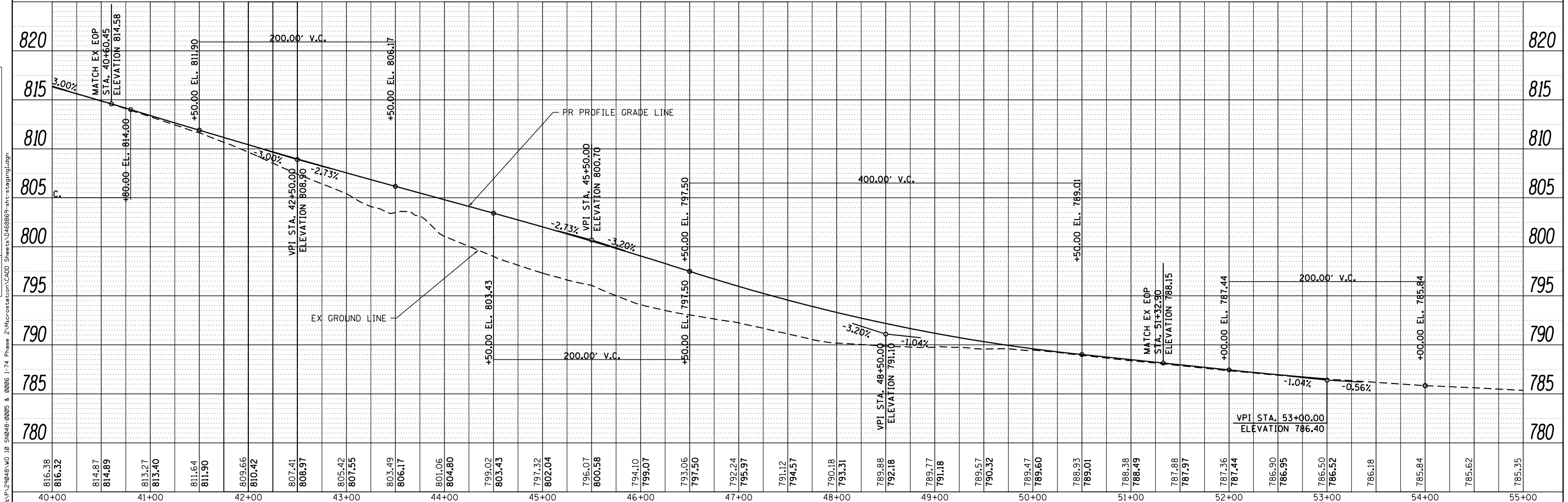
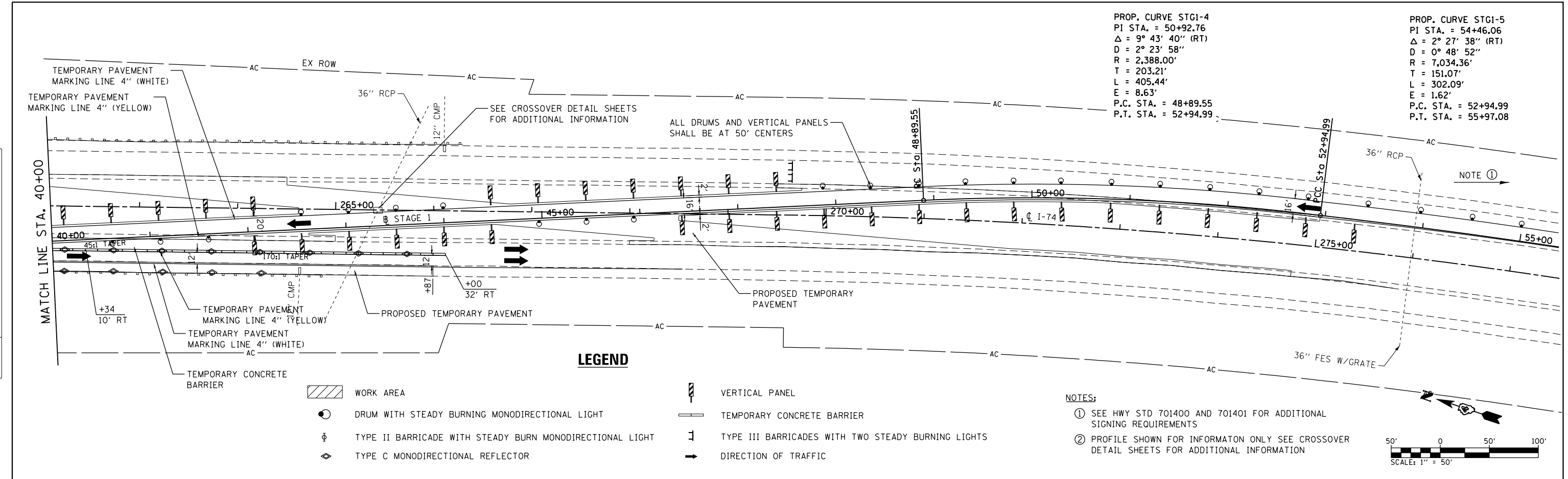
**SUGGESTED STAGES OF CONSTRUCTION & TRAFFIC CONTROL  
 (STAGE 1 PLAN LAYOUT)**

SCALE: SHEET 3 OF 15 SHEETS STA. 25+00 TO STA. 40+00

F.A.I. RT. 74	SECTION (48-26HVB)BR	COUNTY KNOX	TOTAL SHEETS 212	SHEET NO. 29
CONTRACT NO. 68B69				ILLINOIS FED. AID PROJECT

PLAN	SURVEYED	BY	DATE
	PLOTTED		
	GRADES CHECKED		
	STRUCTURE NOTATIONS CHECKED		
	NOTE BOOK NO.		
	CADD FILE NAME		

PROFILE	SURVEYED	BY	DATE
	PLOTTED		
	GRADES CHECKED		
	STRUCTURE NOTATIONS CHECKED		
	NOTE BOOK NO.		
	CADD FILE NAME		



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40+00	41+00	42+00	43+00	44+00	45+00	46+00	47+00	48+00	49+00	50+00	51+00	52+00	53+00	54+00	55+00																																										

**DATES ASSOCIATES**  
 Engineering - Architecture  
 ILLINOIS DESIGN FIRM LICENSE NO: 184.001115

USER NAME = brianheil	DESIGNED -	REVISED -
PLOT SCALE = 100.0000' / in.	DRAWN -	REVISED -
PLOT DATE = 2/8/2016	CHECKED -	REVISED -
	DATE -	REVISED -






**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

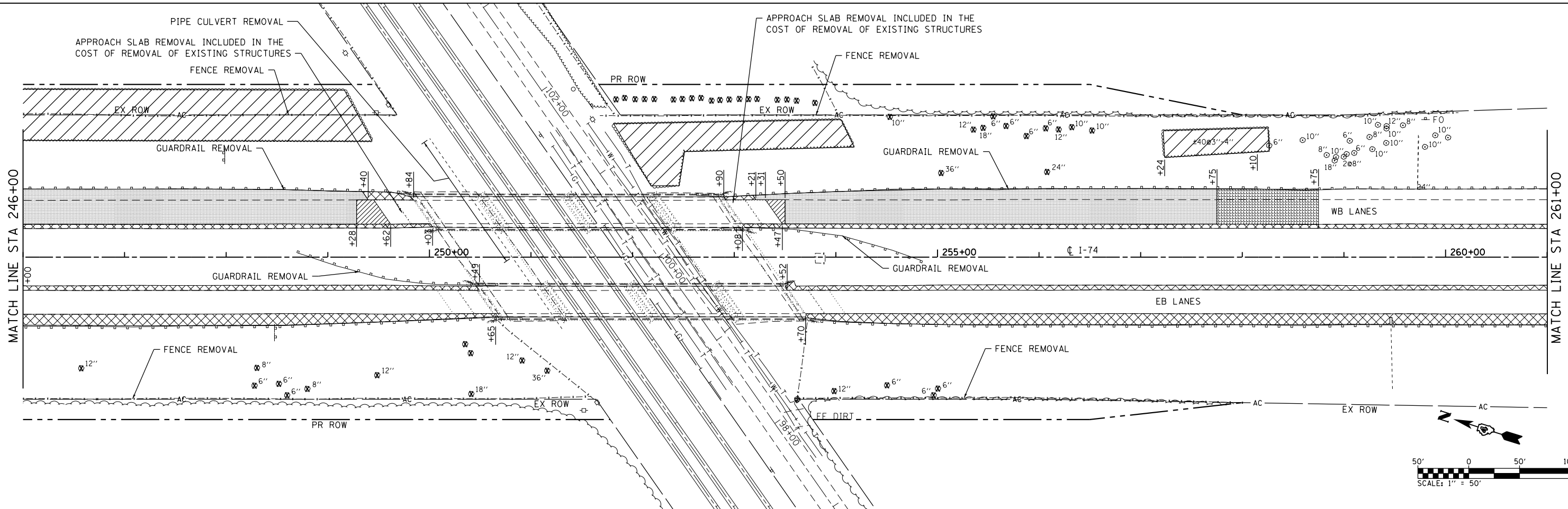
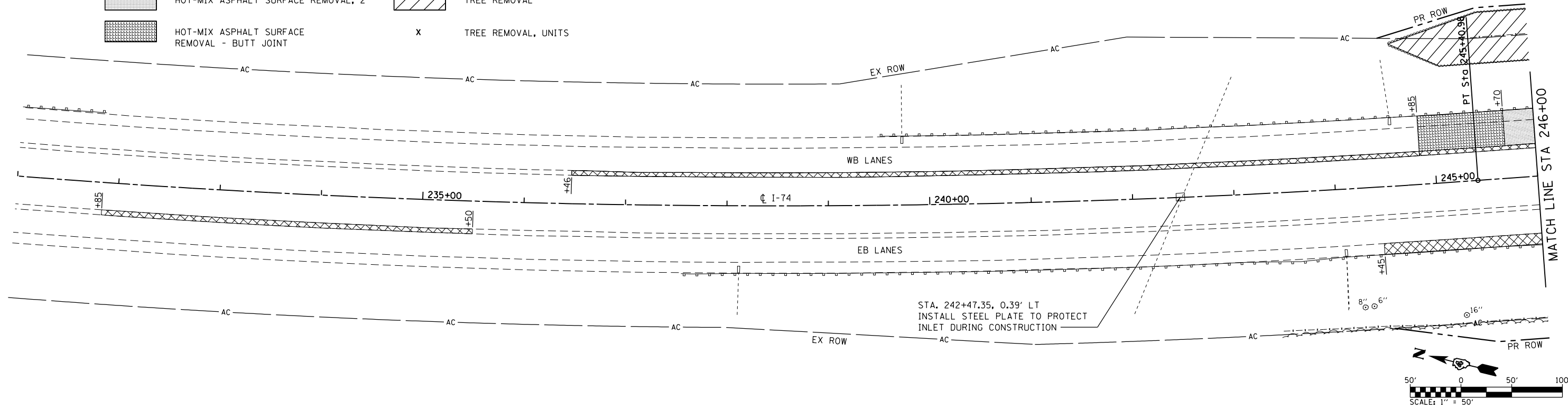
**SUGGESTED STAGES OF CONSTRUCTION & TRAFFIC CONTROL  
 (STAGE 1 PLAN LAYOUT)**

SCALE: SHEET 4 OF 15 SHEETS STA. 40+00 TO STA. 52+94.99

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)BR	KNOX	212	30
CONTRACT NO. 68B69				
ILLINOIS FED. AID PROJECT				

**REMOVAL LEGEND**

-  PAVED SHOULDER REMOVAL
-  HOT-MIX ASPHALT SURFACE REMOVAL, 2"
-  HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT
-  PAVEMENT REMOVAL
-  TREE REMOVAL
- x** TREE REMOVAL, UNITS



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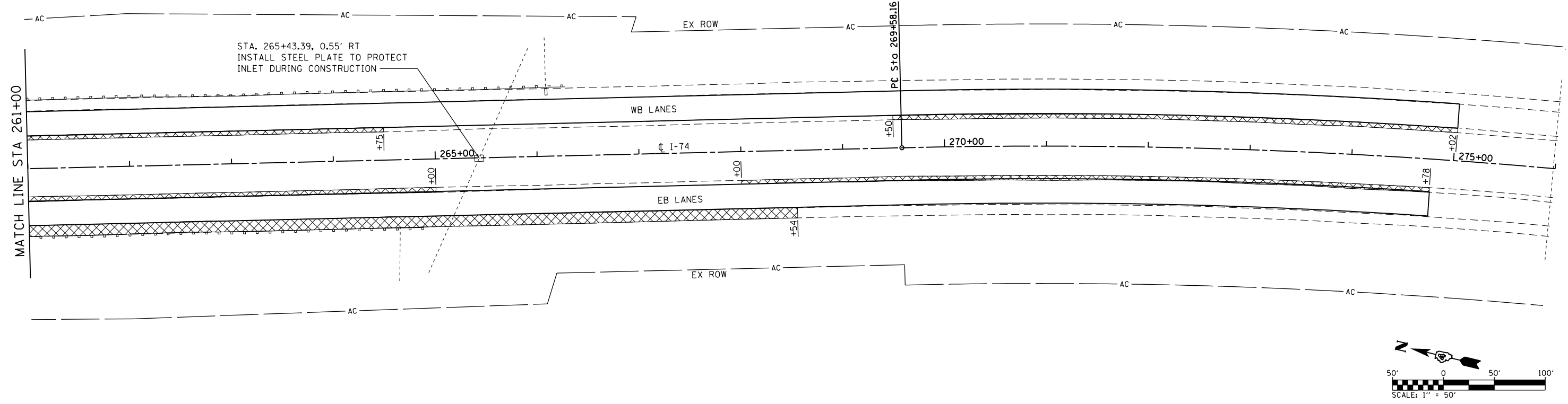
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PLOT DATE = 2/8/2016	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**




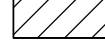

**SUGGESTED STAGES OF CONSTRUCTION & TRAFFIC CONTROL  
(STAGE 1 REMOVALS)**

SCALE: 1" = 50'    SHEET 5 OF 15 SHEETS    STA. 231+00 TO STA. 251+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)BR	KNOX	212	31
CONTRACT NO. 68B69				
ILLINOIS FED. AID PROJECT				



**REMOVAL LEGEND**

-  PAVED SHOULDER REMOVAL
-  PAVEMENT REMOVAL
-  HOT-MIX ASPHALT SURFACE REMOVAL, 2"
-  TREE REMOVAL
-  HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT
- X TREE REMOVAL, UNITS

FILE NAME = H:\P\2014\10\_SIN048-0005 & 0006 I-74 Phase 2\Microstation\CAQD Sheets\0468669-ht-removal.dgn



USER NAME = brianheil	DESIGNED -	REVISED -	
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PLOT DATE = 2/8/2016	DATE -	REVISED -	

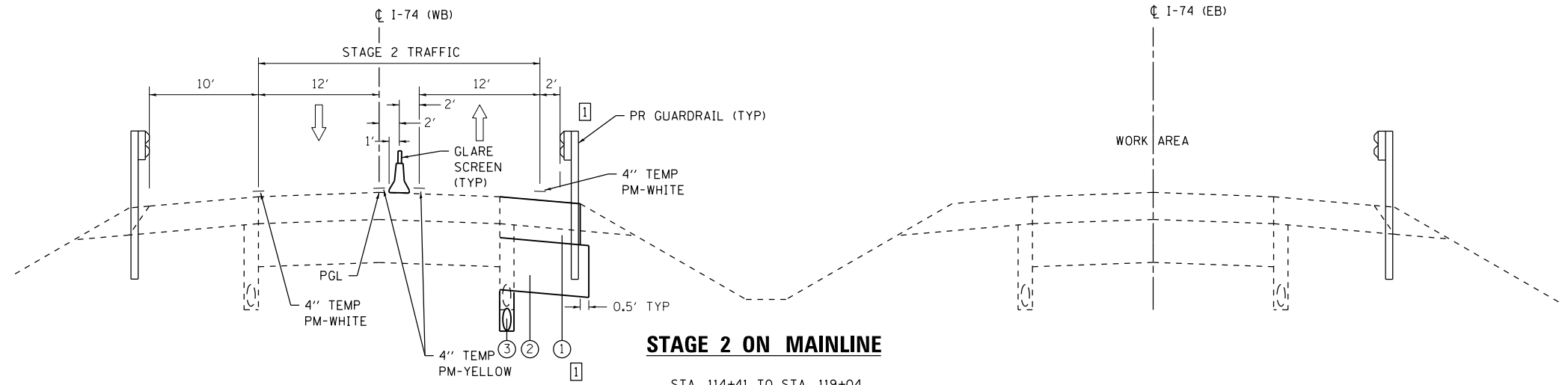
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

SUGGESTED STAGES OF CONSTRUCTION & TRAFFIC CONTROL (STAGE 1 REMOVALS)			
SCALE:	SHEET 6 OF 15 SHEETS	STA. 261+00	TO STA. 276+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HV)BR	KNOX	212	32
CONTRACT NO. 68B69				
ILLINOIS FED. AID PROJECT				

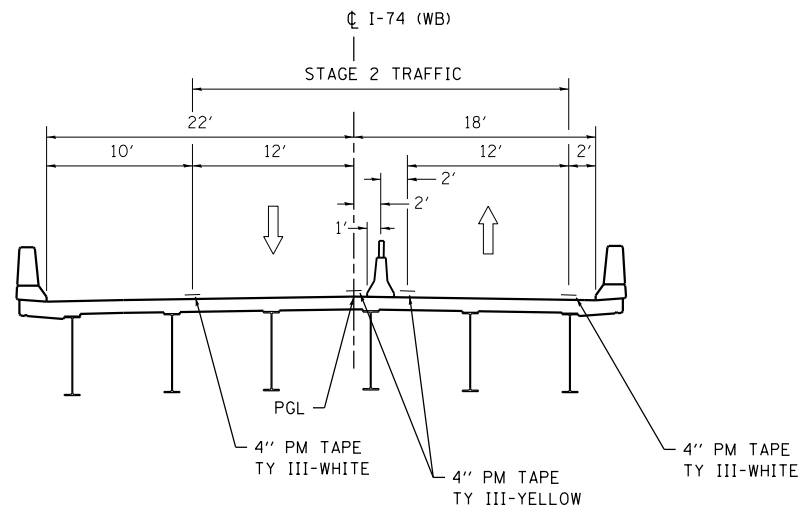
**STAGE 2**

1. RELOCATE THE TEMPORARY CONCRETE BARRIERS TO THE STAGE 2 LOCATIONS AND SWITCH TRAFFIC TO THE WESTBOUND LANES UTILIZING THE CROSSOVERS AND TRAFFIC CONTROL AND PROTECTION STANDARDS 701400 AND 701416.
2. REMOVE THE EASTBOUND STRUCTURE (S.N. 048-0006) AND CONSTRUCT THE NEW BRIDGE. CONSTRUCT THE ADJACENT ROADWAY AND THE PROFILE ADJUSTMENT IN THE EASTBOUND LANES AND REDRESS THE SIDE SLOPES AS NEEDED AS SHOWN ON THE PLANS.
3. INSTALL THE GUARDRAIL END TREATMENTS IN EACH QUADRANT AND THE NEW GUARDRAIL ON BOTH SIDES OF THE BRIDGE AS SHOWN.
4. INSTALL THE PERMANENT PAVEMENT MARKINGS AND RAISED REFLECTIVE MARKERS IN THE EASTBOUND LANES.



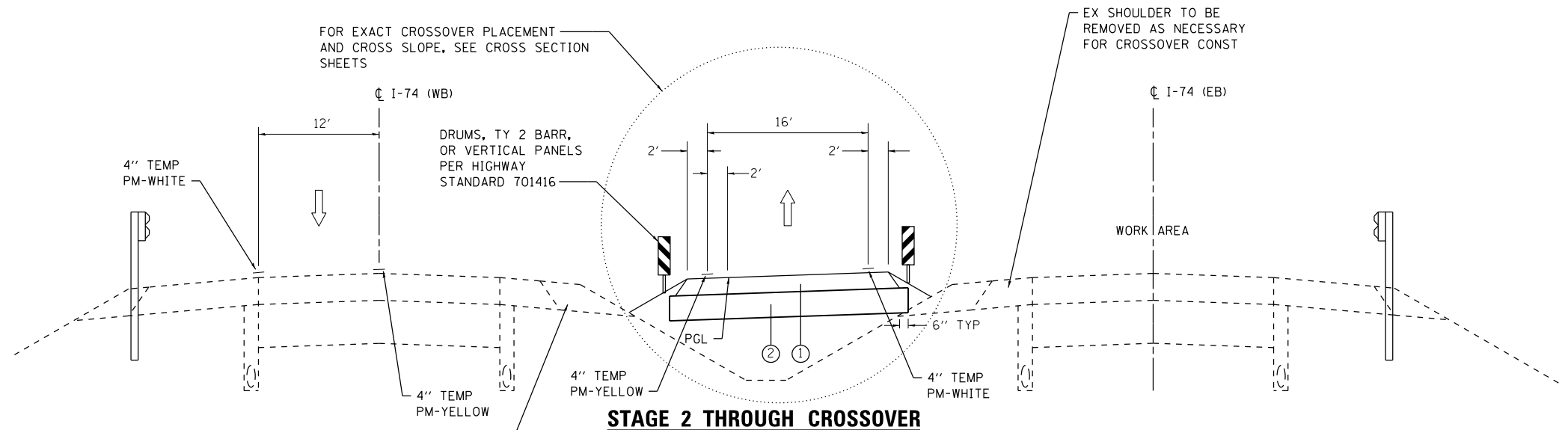
**STAGE 2 ON MAINLINE**

STA. 114+41 TO STA. 119+04  
STA. 122+87 TO STA. 129+64



**STAGE 2 ON BRIDGE**

STA. 119+04 TO STA. 122+87



**STAGE 2 THROUGH CROSSOVER**

STA. 101+40 TO STA. 114+41  
STA. 129+64 TO STA. 144+34

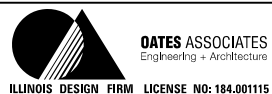
**LEGEND**

- ① PROPOSED TEMPORARY PAVEMENT
- ② PROPOSED AGGREGATE BASE COURSE TYPE A, 12"
- ③ PROPOSED PIPE UNDERDRAINS 4"
- ④ PROPOSED HMA SHOULDERS, 8"

**SECTION NOTES**

- 1 STA. 114+41 TO STA. 128+31

FILE NAME = H:\P\29048\WD 10 SIN048-0005 & 0006 I-74 Phase 2\Microstation\CAQD Sheets\048B69-ht-stage2-tp.dgn



USER NAME = brianheil	DESIGNED -	REVISED -
PLOT SCALE = 100.0000' / in.	DRAWN -	REVISED -
PLOT DATE = 2/8/2016	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

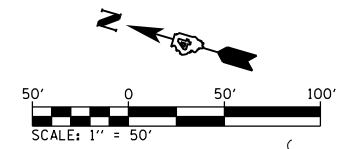
**SUGGESTED STAGES OF CONSTRUCTION & TRAFFIC CONTROL  
(STAGE 2 TYPICALS)**

SCALE: SHEET 7 OF 15 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)BR	KNOX	212	33
CONTRACT NO. 68B69				
ILLINOIS FED. AID PROJECT				

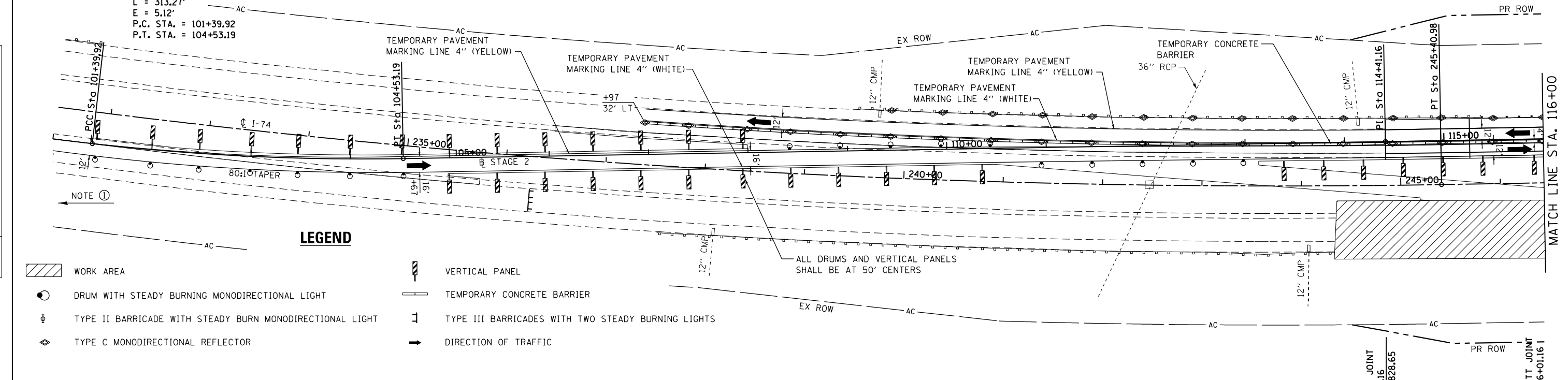
PROP. CURVE STG2-2  
 PI STA. = 102+96.78  
 $\Delta = 7^\circ 28' 44''$  (LT)  
 $D = 2^\circ 23' 14''$   
 $R = 2,400.00'$   
 $T = 156.86'$   
 $L = 313.27'$   
 $E = 5.12'$   
 P.C. STA. = 101+39.92  
 P.T. STA. = 104+53.19

- NOTES:  
 ① SEE HWY STD 701400 AND 701401 FOR ADDITIONAL SIGNING REQUIREMENTS  
 ② PROFILE SHOWN FOR INFORMATION ONLY SEE CROSSOVER DETAIL SHEETS FOR ADDITIONAL INFORMATION



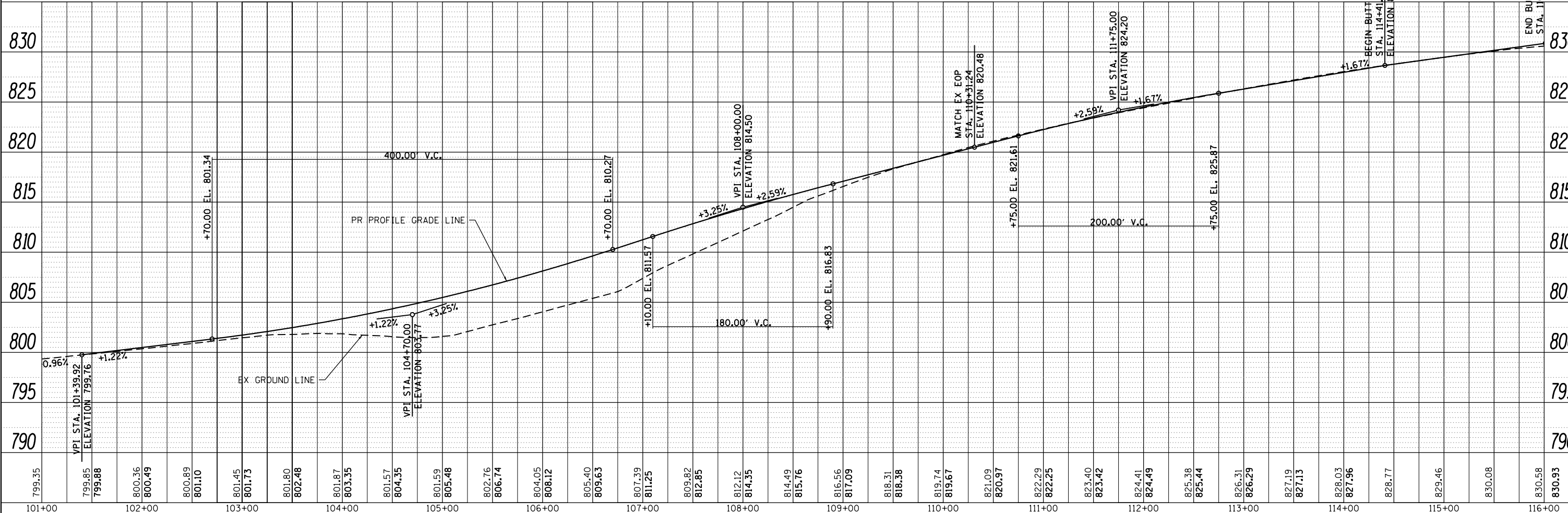
PLAN	SURVEYED	DATE
	PLOTTED	BY
	NOTE BOOK	
	NO.	
	CHECKED	
	FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	NO.	



**LEGEND**

- WORK AREA
- DRUM WITH STEADY BURNING MONODIRECTIONAL LIGHT
- TYPE II BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
- TYPE C MONODIRECTIONAL REFLECTOR
- VERTICAL PANEL
- TEMPORARY CONCRETE BARRIER
- TYPE III BARRICADES WITH TWO STEADY BURNING LIGHTS
- DIRECTION OF TRAFFIC



USER NAME = brianheil	DESIGNED -	REVISED -
PLOT SCALE = 100.0000' / in.	DRAWN -	REVISED -
PLOT DATE = 2/8/2016	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**SUGGESTED STAGES OF CONSTRUCTION & TRAFFIC CONTROL  
 (STAGE 2 PLAN LAYOUT)**

SCALE: SHEET 8 OF 15 SHEETS STA. 101+39.92 TO STA. 116+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)BR	KNOX	212	34
CONTRACT NO. 68B69				
ILLINOIS FED. AID PROJECT				

NOTES:

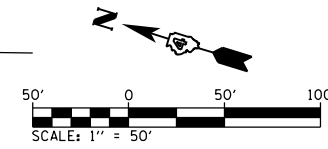
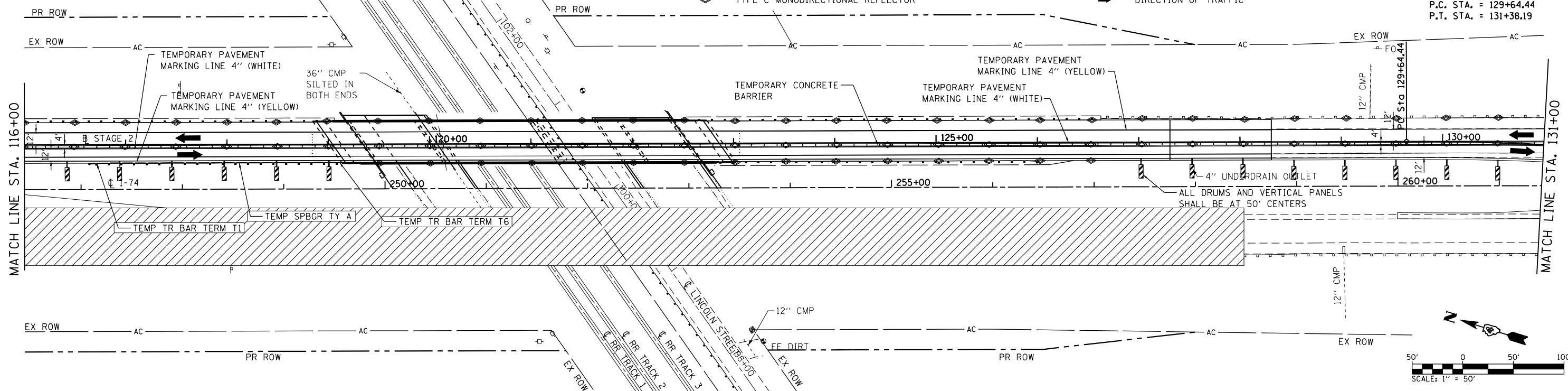
- ① SEE HWY STD 701400 AND 701401 FOR ADDITIONAL SIGNING REQUIREMENTS
- ② PROFILE SHOWN FOR INFORMATION ONLY SEE CROSSOVER DETAIL SHEETS FOR ADDITIONAL INFORMATION

LEGEND

- WORK AREA
- DRUM WITH STEADY BURNING MONODIRECTIONAL LIGHT
- TYPE II BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
- TYPE C MONODIRECTIONAL REFLECTOR
- VERTICAL PANEL
- TEMPORARY CONCRETE BARRIER
- TYPE III BARRICADES WITH TWO STEADY BURNING LIGHTS
- DIRECTION OF TRAFFIC

PROP. CURVE STG2-3  
 PI STA. = 130+51.35  
 $\Delta = 4^\circ 08' 53''$  (RT)  
 $D = 2^\circ 23' 14''$   
 $R = 2,400.00'$   
 $T = 86.91'$   
 $L = 173.75'$   
 $E = 1.57'$   
 P.C. STA. = 129+64.44  
 P.T. STA. = 131+38.19

PLAN	SURVEYED	BY	DATE
	PLOTTED		
	GRADES CHECKED		
	STRUCTURE NOTATIONS CHECKED		
	NOTE BOOK NO.		
	CADD FILE NAME		



PROFILE	SURVEYED	BY	DATE
	PLOTTED		
	GRADES CHECKED		
	STRUCTURE NOTATIONS CHECKED		
	NOTE BOOK NO.		
	CADD FILE NAME		



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 ILLINOIS DESIGN FIRM LICENSE NO: 184.001115

USER NAME = brianheil	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 2/8/2016	DATE -	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

SUGGESTED STAGES OF CONSTRUCTION & TRAFFIC CONTROL  
 (STAGE 2 PLAN LAYOUT)

SCALE: SHEET 9 OF 15 SHEETS STA. 116+00 TO STA. 131+00

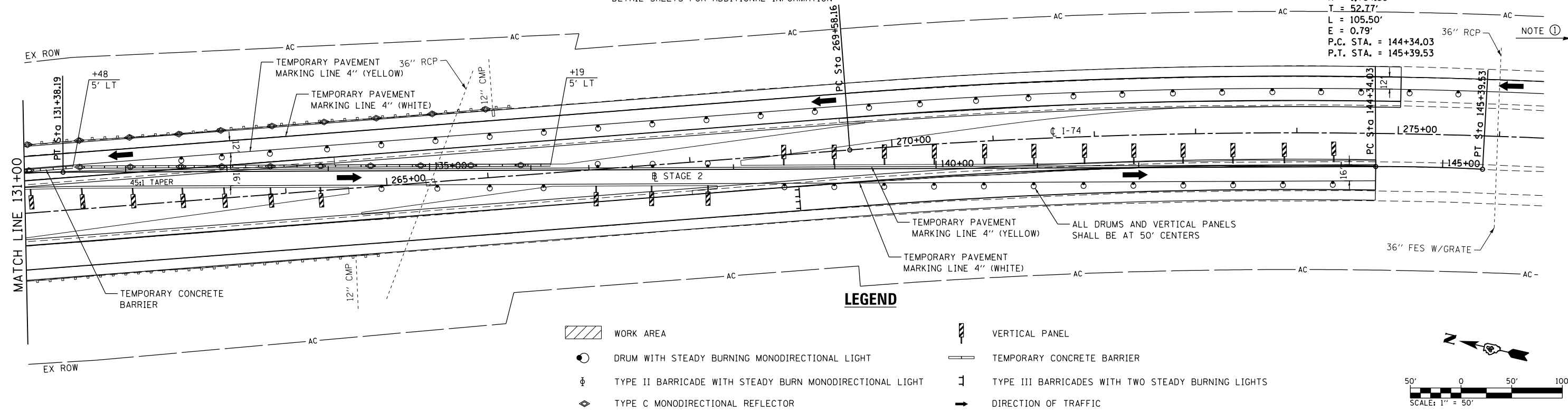
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)BR	KNOX	212	35
CONTRACT NO. 68B69				
ILLINOIS FED. AID PROJECT				

PLAN	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	NOTE BOOK NO.	
	CADD FILE NAME	

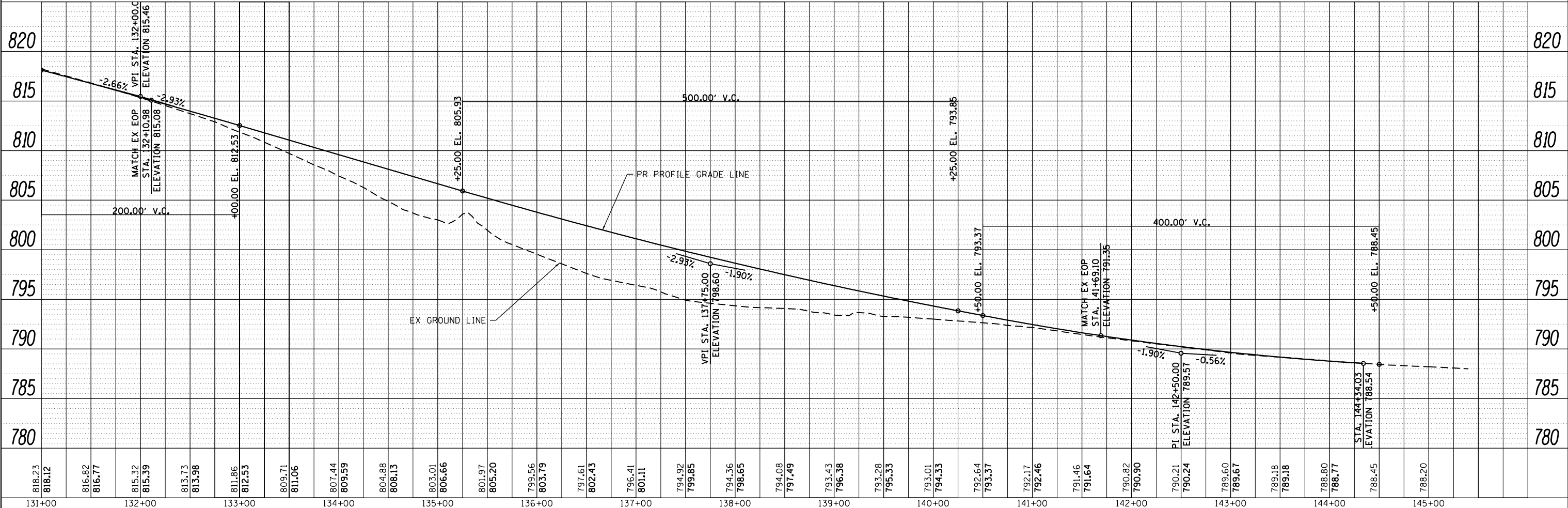
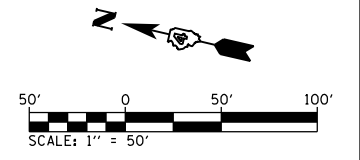
PROFILE	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	NOTE BOOK NO.	
	CADD FILE NAME	

- NOTES:
- SEE HWY STD 701400 AND 701401 FOR ADDITIONAL SIGNING REQUIREMENTS
  - PROFILE SHOWN FOR INFORMATION ONLY SEE CROSSOVER DETAIL SHEETS FOR ADDITIONAL INFORMATION

PROP. CURVE STG2-4  
 PI STA. = 144+86.79  
 $\Delta = 3^\circ 25' 34''$  (RT)  
 $D = 3^\circ 14' 51''$   
 $R = 1,764.38'$   
 $T = 52.77'$   
 $L = 105.50'$   
 $E = 0.79'$   
 P.C. STA. = 144+34.03  
 P.T. STA. = 145+39.53



- LEGEND**
- WORK AREA
  - DRUM WITH STEADY BURNING MONODIRECTIONAL LIGHT
  - TYPE II BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
  - TYPE C MONODIRECTIONAL REFLECTOR
  - VERTICAL PANEL
  - TEMPORARY CONCRETE BARRIER
  - TYPE III BARRICADES WITH TWO STEADY BURNING LIGHTS
  - DIRECTION OF TRAFFIC



USER NAME = brianheil	DESIGNED -	REVISED -
PLOT SCALE = 100.0000' / in.	DRAWN -	REVISED -
PLOT DATE = 2/8/2016	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
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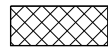
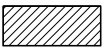
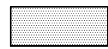
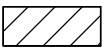
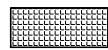
SUGGESTED STAGES OF CONSTRUCTION & TRAFFIC CONTROL (STAGE 2 PLAN LAYOUT)		
SCALE:	SHEET 10 OF 15 SHEETS	STA. 131+00 TO STA. 145+39.53

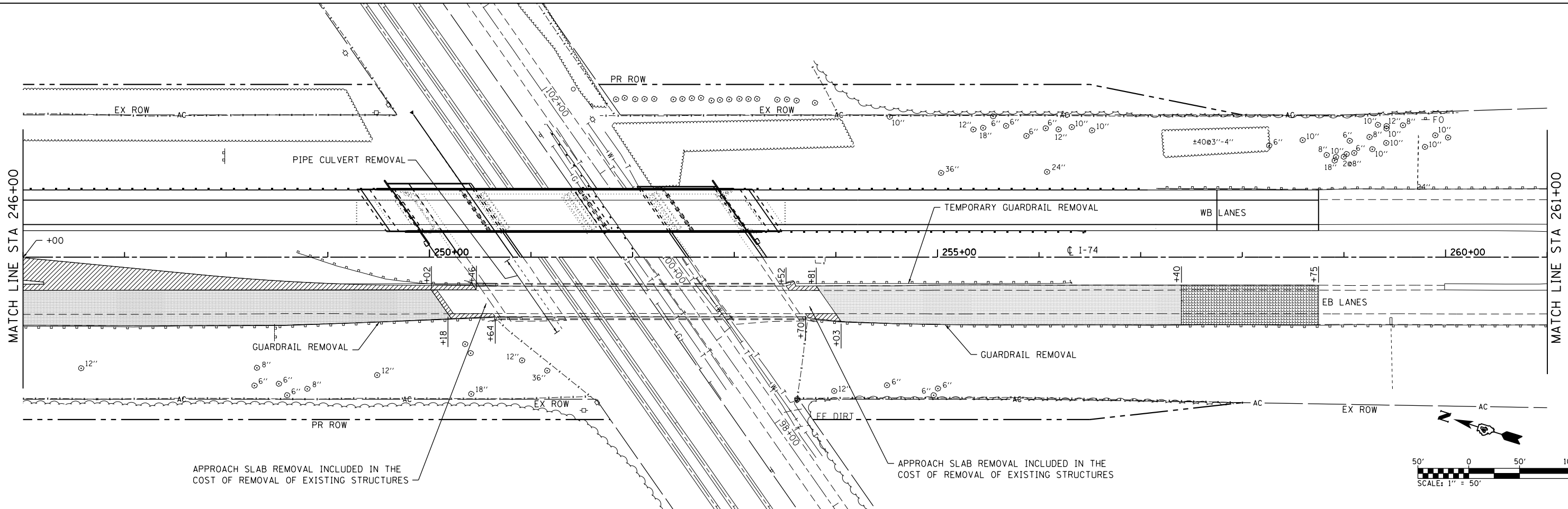
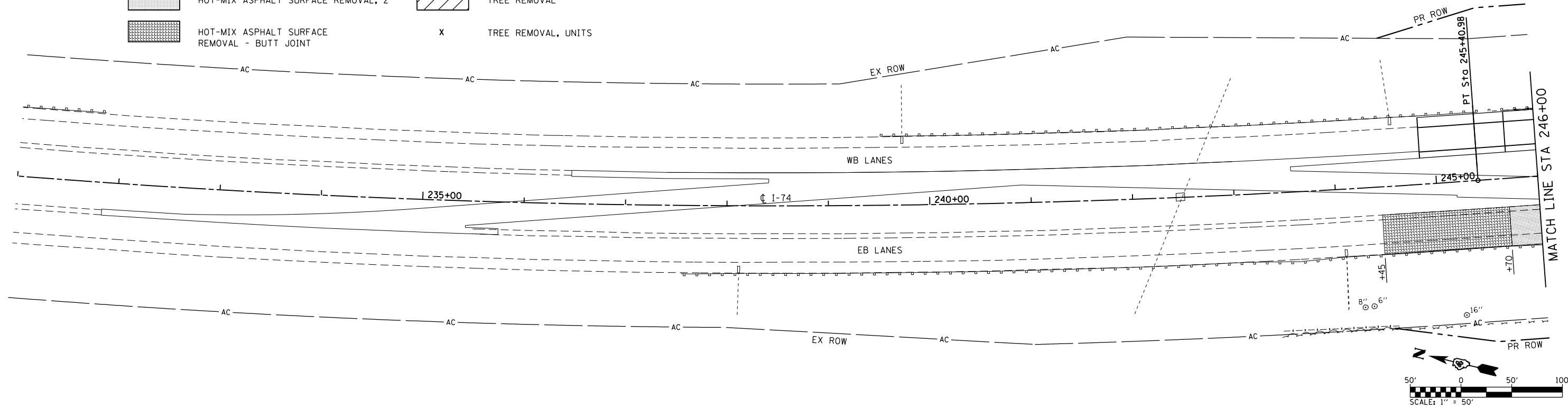
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)BR	KNOX	212	36
CONTRACT NO. 68B69				
ILLINOIS FED. AID PROJECT				

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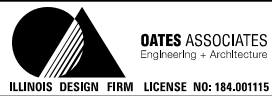


**REMOVAL LEGEND**

- |   |  |  |                     |
|---|--|--|---------------------|
|  | PAVED SHOULDER REMOVAL                       |  | PAVEMENT REMOVAL    |
|  | HOT-MIX ASPHALT SURFACE REMOVAL, 2"          |  | TREE REMOVAL        |
|  | HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT | X  | TREE REMOVAL, UNITS |



FILE NAME = H:\P\2014\NO. 10 SIGNAGE-0005 & 0006 I-74 Phase 2\Microstation\CAD Sheets\0468669-ht-removal.dgn



USER NAME = brianheil  
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 DRAWN -  
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 CHECKED -  
 DATE = 2/8/2016

DESIGNED -  
 DRAWN -  
 CHECKED -  
 DATE -

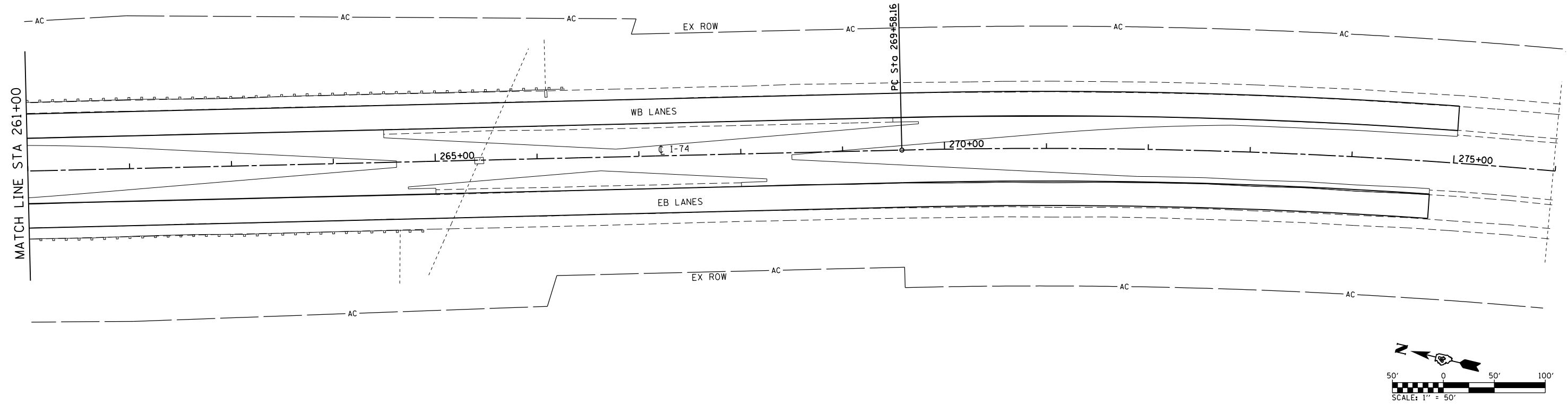
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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**






**SUGGESTED STAGES OF CONSTRUCTION & TRAFFIC CONTROL  
 (STAGE 2 REMOVALS)**

SCALE: 1" = 50' SHEET 11 OF 15 SHEETS STA. 231+00 TO STA. 251+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)BR	KNOX	212	37
				CONTRACT NO. 68B69
ILLINOIS FED. AID PROJECT				



**REMOVAL LEGEND**

-  PAVED SHOULDER REMOVAL
-  PAVEMENT REMOVAL
-  HOT-MIX ASPHALT SURFACE REMOVAL, 2"
-  TREE REMOVAL
-  HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT
- x TREE REMOVAL, UNITS

FILE NAME = H:\P\20048\NO.10.SIN048-0005 & 0006 I-74 Phase 2\Microstation\CAQD Sheets\0468669-ht-removal.dgn



USER NAME = brianheil	DESIGNED -	REVISED -	
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PLOT DATE = 2/8/2016	DATE -	REVISED -	

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SUGGESTED STAGES OF CONSTRUCTION & TRAFFIC CONTROL  
(STAGE 2 REMOVALS)**

SCALE: SHEET 12 OF 15 SHEETS STA. 261+00 TO STA. 276+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)BR	KNOX	212	38
<b>CONTRACT NO. 68B69</b>				
ILLINOIS FED. AID PROJECT				

**STAGE 3**

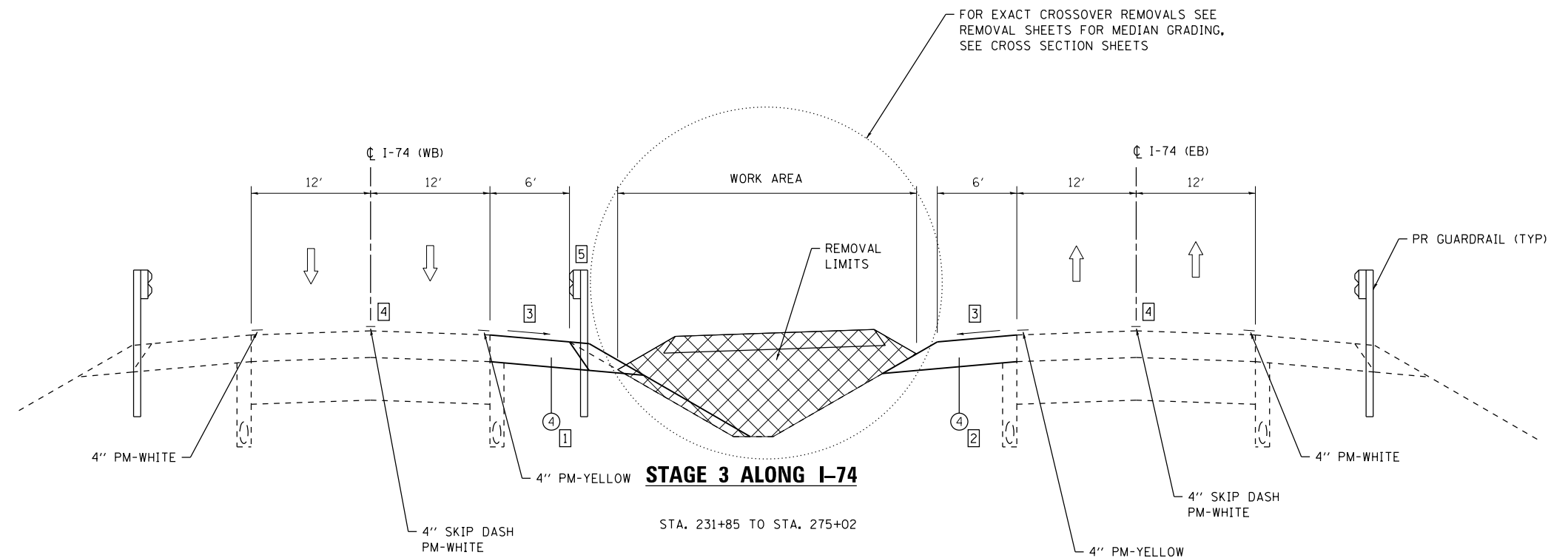
1. UTILIZE TRAFFIC CONTROL AND PROTECTION STANDARD 701406 FOR ALL ITEMS IN STAGE 3. UTILIZE SHORT TERM PAVEMENT MARKINGS FOR STAGE 3 PER SECTION 703.
2. REMOVE THE TEMPORARY CONCRETE BARRIERS AND SWITCH TRAFFIC BACK TO THEIR PROPER LANES.
3. REMOVE THE CROSSOVER AND TEMPORARY DRAINAGE ITEMS AND REPAIR / ADJUST PERMANENT DRAINAGE STRUCTURES AS REQUIRED. REGRADE THE MEDIAN TO DRAIN SIMILAR TO THE PRECONSTRUCTION CONDITION.
4. REMOVE TEMPORARY LIGHTING AT THE CROSSOVERS UTILIZING TRAFFIC CONTROL AND PROTECTION STANDARD 701406.
5. RESURFACE THE ROADWAY AND SHOULDERS FROM THE GRADE RAISE TO THE PROJECT LIMITS. INSTALL THE PERMANENT PAVEMENT MARKINGS AND RAISED REFLECTIVE PAVEMENT MARKINGS IN THE WESTBOUND LANES.
6. INSTALL THE SHOULDER RUMBLE STRIPS ON BOTH LANES TO THE LIMITS SHOWN ON THE PLANS.
7. REINSTALL SIGNS, DELINEATORS, AND MILE MARKERS AS SHOWN IN THE SCHEDULE.

**LEGEND**

- ① PROPOSED TEMPORARY PAVEMENT
- ② PROPOSED AGGREGATE BASE COURSE TYPE A, 12"
- ③ PROPOSED PIPE UNDERDRAINS 4"
- ④ PROPOSED HMA SHOULDERS, 8"

**SECTION NOTES**

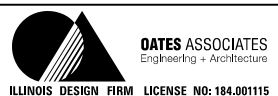
- ① STA. 236+46 TO STA. 244+85  
STA. 258+75 TO STA. 275+02
- ② STA. 231+85 TO STA. 244+45  
STA. 260+00 TO STA. 274+78
- ③ SEE HIGHWAY STANDARD 482001 FOR SHOULDER CROSS SLOPE
- ④ SEE HIGHWAY STANDARD 780001 FOR LANE LINE SPACING
- ⑤ STA. 235+25 TO STA. 256+46



**STAGE 3 ALONG I-74**

STA. 231+85 TO STA. 275+02

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USER NAME = brianheil	DESIGNED -	REVISED -
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PLOT DATE = 2/8/2016	DATE -	REVISED -






**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

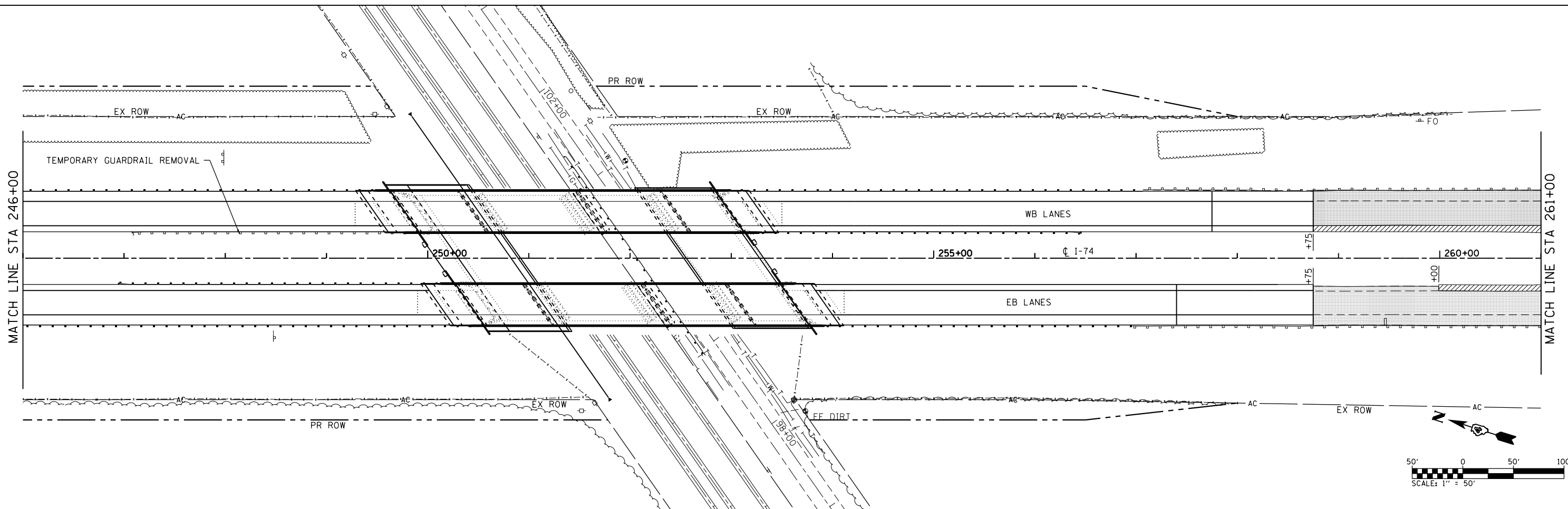
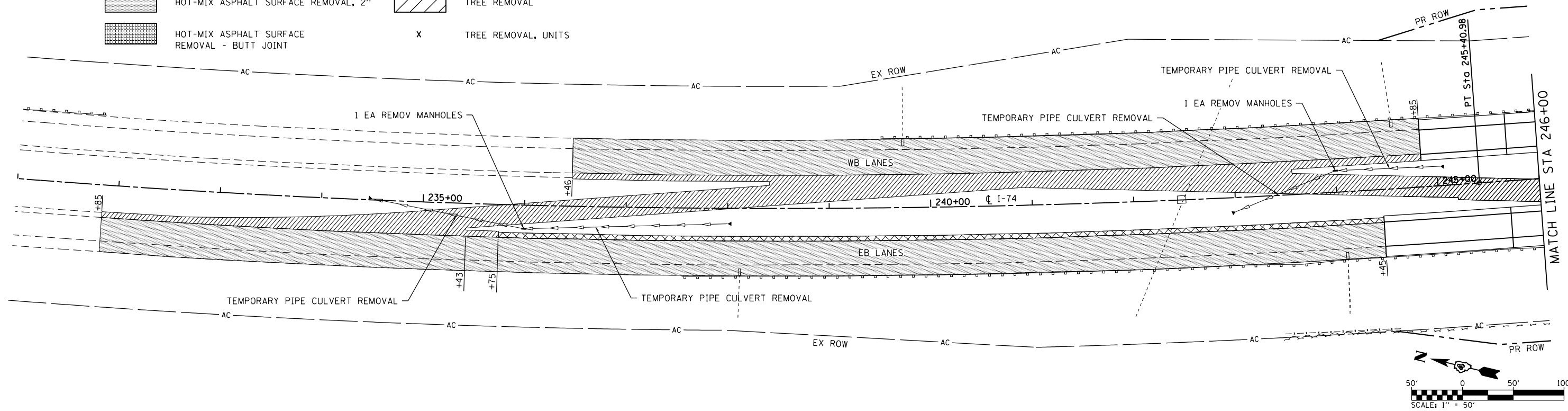
**SUGGESTED STAGES OF CONSTRUCTION & TRAFFIC CONTROL  
(STAGE 3 TYPICAL)**

SCALE: SHEET 13 OF 15 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)BR	KNOX	212	39
<b>CONTRACT NO. 68B69</b>				
ILLINOIS FED. AID PROJECT				

**REMOVAL LEGEND**

-  PAVED SHOULDER REMOVAL
-  HOT-MIX ASPHALT SURFACE REMOVAL, 2"
-  HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT
-  PAVEMENT REMOVAL
-  TREE REMOVAL
- x** TREE REMOVAL, UNITS



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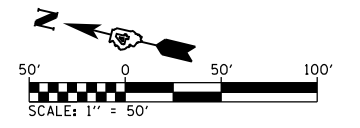
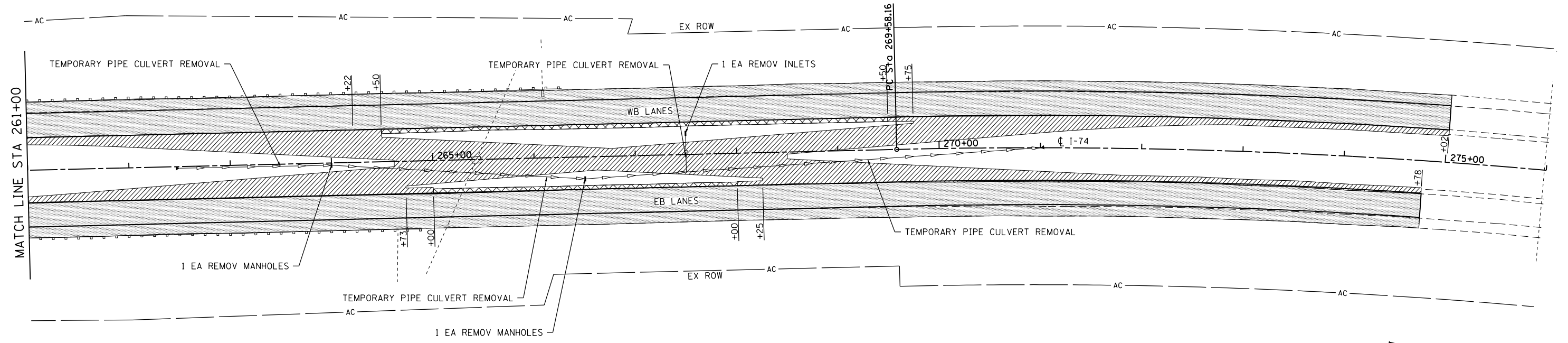
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	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**



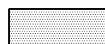
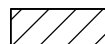

**SUGGESTED STAGES OF CONSTRUCTION & TRAFFIC CONTROL  
(STAGE 3 REMOVALS)**

SCALE: 1" = 50'    SHEET 14 OF 15 SHEETS    STA. 231+00 TO STA. 251+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)BR	KNOX	212	40
				CONTRACT NO. 68B69
ILLINOIS FED. AID PROJECT				



**REMOVAL LEGEND**

-  PAVED SHOULDER REMOVAL
-  PAVEMENT REMOVAL
-  HOT-MIX ASPHALT SURFACE REMOVAL, 2"
-  TREE REMOVAL
-  HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT
- x TREE REMOVAL, UNITS

FILE NAME = H:\P\2014\10\_SIN048-0005 & 0006 I-74 Phase 2\Microstation\CAQD Sheets\0468669-ht-removal.dgn



USER NAME = brianheil	DESIGNED -	REVISED -
DRAWN -	REVISOR -	REVISED -
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PLOT DATE = 2/8/2016	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SUGGESTED STAGES OF CONSTRUCTION & TRAFFIC CONTROL  
(STAGE 3 REMOVALS)**

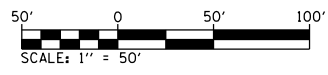
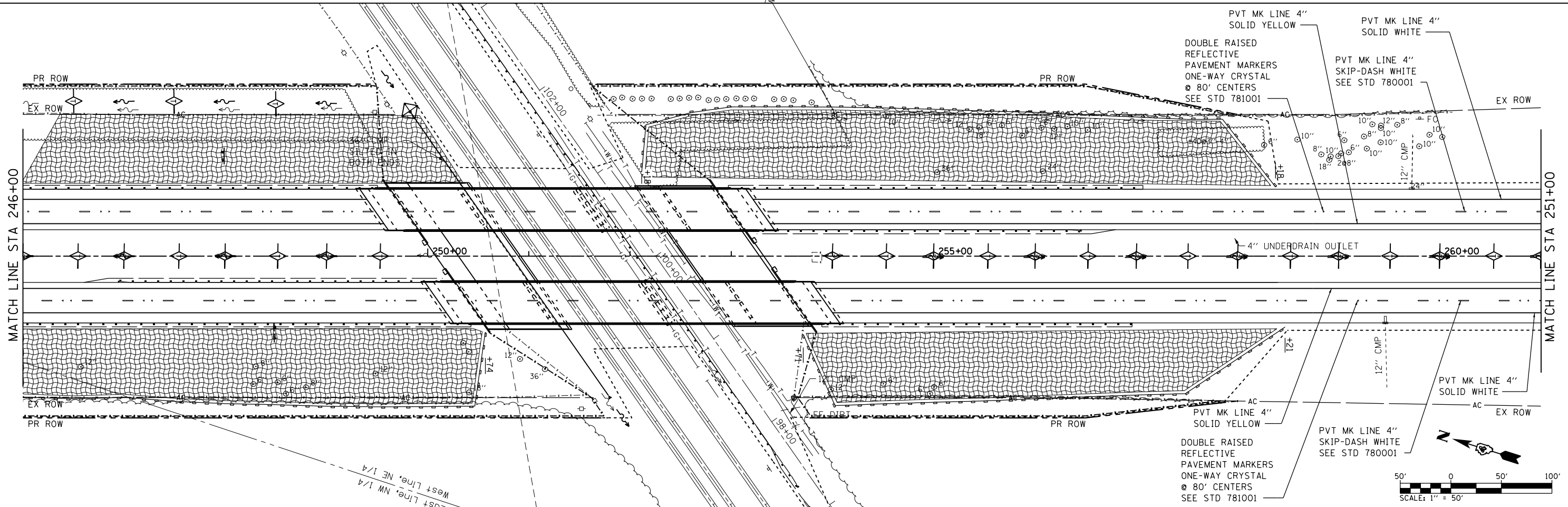
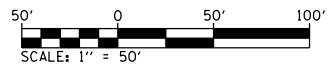
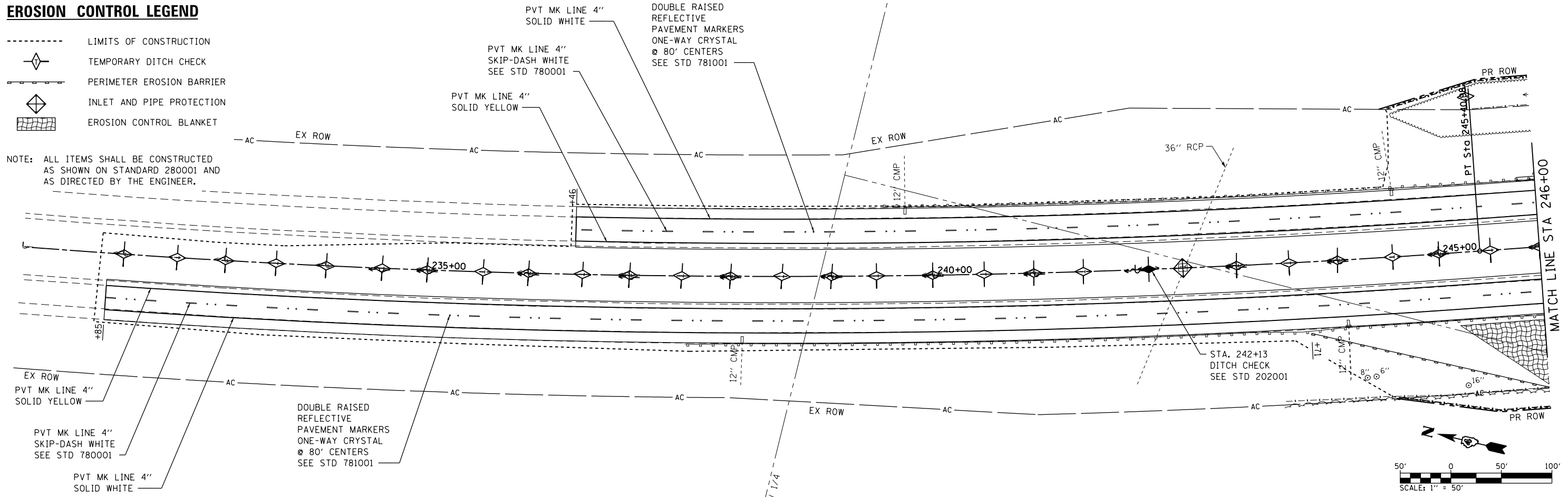
SCALE: SHEET 15 OF 15 SHEETS STA. 261+00 TO STA. 276+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)BR	KNOX	212	41
<b>CONTRACT NO. 68B69</b>				
ILLINOIS FED. AID PROJECT				

**EROSION CONTROL LEGEND**

- LIMITS OF CONSTRUCTION
- ◇ TEMPORARY DITCH CHECK
- PERIMETER EROSION BARRIER
- ◇ INLET AND PIPE PROTECTION
- ▨ EROSION CONTROL BLANKET

NOTE: ALL ITEMS SHALL BE CONSTRUCTED AS SHOWN ON STANDARD 280001 AND AS DIRECTED BY THE ENGINEER.



FILE NAME = H:\P\2004\NO. 10 SINGAR-0005 & 0006 1-74 Phase 2\Microstation\CADD Sheets\0468669-ht-arcas.dgn



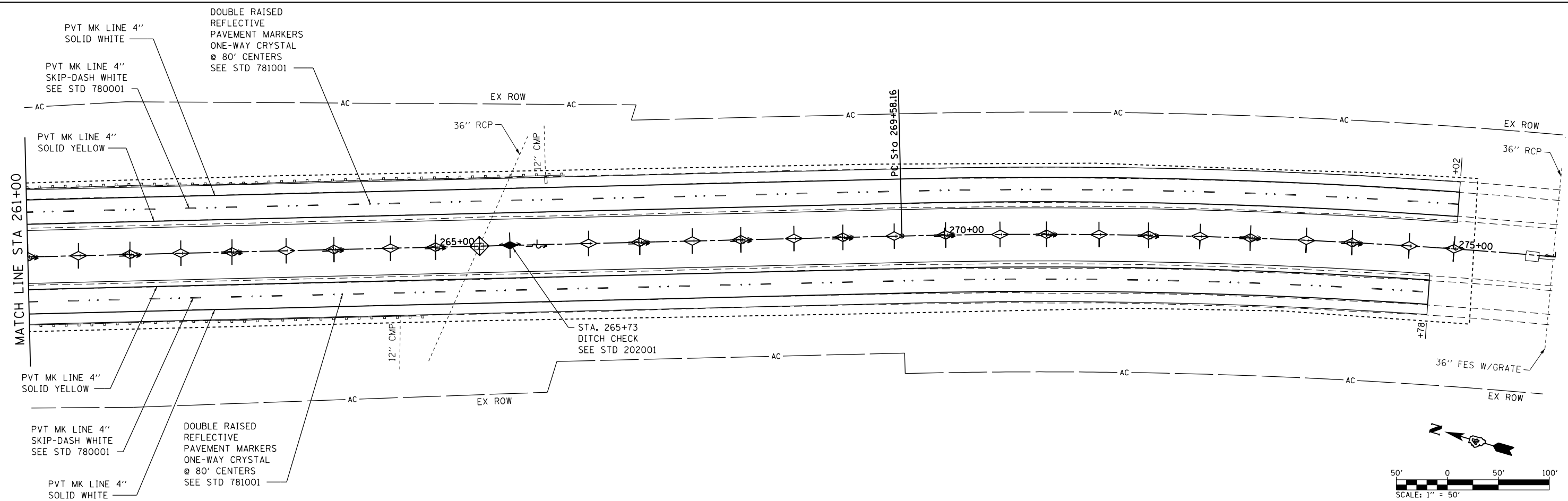
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PLOT DATE = 2/8/2016	CHECKED -	REVISED -
DATE -	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**EROSION CONTROL & PAVEMENT MARKING SHEETS**

SCALE: SHEET 1 OF 2 SHEETS STA. 231+00 TO STA. 251+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)BR	KNOX	212	42
CONTRACT NO. 68B69				
ILLINOIS FED. AID PROJECT				



DITCH CHECK SPACING

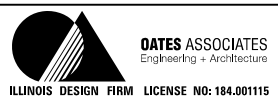
% SLOPE	HT. AT CENTER OVERFLOW PT. DITCH CHECK	SPACING OF DITCH CHECK IN FEET
8%	1.0 FT.	13
	1.5 FT.	20
	2.0 FT.	26
7%	1.0 FT.	14
	1.5 FT.	21
	2.0 FT.	28
6%	1.0 FT.	17
	1.5 FT.	26
	2.0 FT.	34
5%	1.0 FT.	20
	1.5 FT.	30
	2.0 FT.	40
4%	1.0 FT.	25
	1.5 FT.	38
	2.0 FT.	50
3%	1.0 FT.	33
	1.5 FT.	50
	2.0 FT.	66
2%	1.0 FT.	50
	1.5 FT.	75
	2.0 FT.	100
1% & BELOW	1.0 FT.	100
	1.5 FT.	150
	2.0 FT.	200

**EROSION CONTROL LEGEND**

- LIMITS OF CONSTRUCTION
- ◆ PERIMETER EROSION BARRIER
- ◆ INLET AND PIPE PROTECTION
- ▨ EROSION CONTROL BLANKET

NOTE: ALL ITEMS SHALL BE CONSTRUCTED AS SHOWN ON STANDARD 280001 AND AS DIRECTED BY THE ENGINEER.

FILE NAME = H:\P\20048\NO. 10 SINGAR-0005 & 0006 1-74 Phase 2\Microstation\CAQD Sheets\0468669-ht-ercas.dgn



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PLOT SCALE = 100.0000' / in.	DRAWN -	REVISED -
PLOT DATE = 2/8/2016	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EROSION CONTROL & PAVEMENT MARKING SHEETS

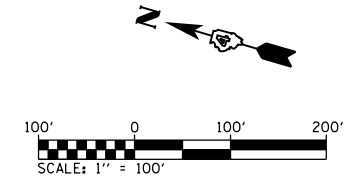
SCALE: SHEET 2 OF 2 SHEETS STA. 261+00 TO STA. 276+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)BR	KNOX	212	43
CONTRACT NO. 68B69				
ILLINOIS FED. AID PROJECT				

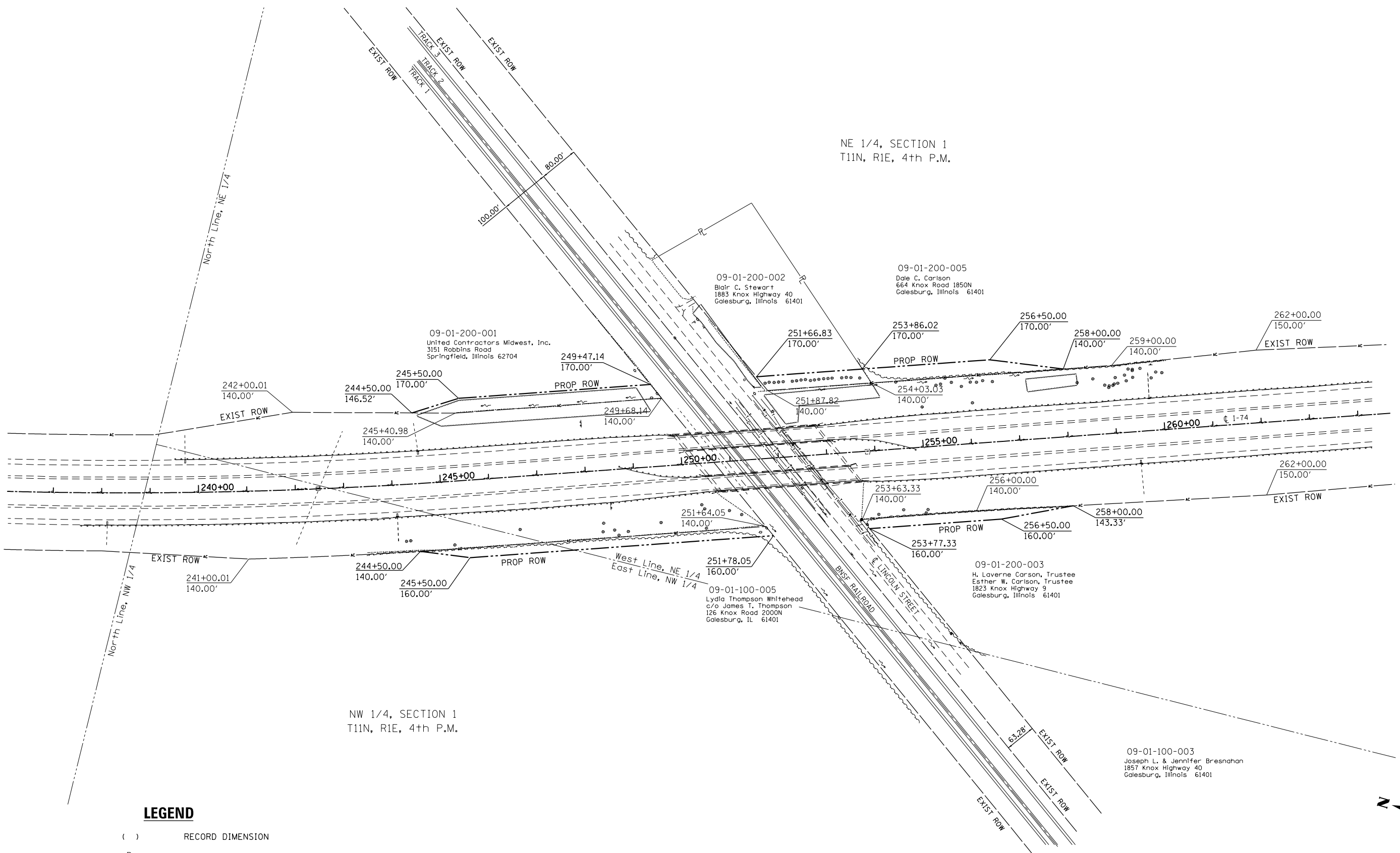
NE 1/4, SECTION 1  
T11N, R1E, 4th P.M.

NW 1/4, SECTION 1  
T11N, R1E, 4th P.M.

- LEGEND**
- ( ) RECORD DIMENSION
  - P- PROPERTY LINE
  - - - - - PROPOSED ROW LINE



FILE NAME = H:\P\2048\NO.10\_SIN948-0005 & 0006 1-74 Phase 2\Microstation\CAQD Sheets\0468669-sh1-ROW.dgn



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PLOT DATE = 2/8/2016	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**RIGHT-OF-WAY PLAN SHEET**

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HV)BR	KNOX	212	44
CONTRACT NO. 68B69				
ILLINOIS FED. AID PROJECT				



## INDEX OF SHEETS

1	INDEX OF SHEETS, LIGHTING NOTES, SUMMARY OF QUANTITIES, LUMINAIRE PERFORMANCE TABLE
2-3	TEMPORARY LIGHTING PLAN, NORTH CROSSOVER STAGE I
4-5	TEMPORARY LIGHTING PLAN, SOUTH CROSSOVER STAGE I
6-7	TEMPORARY LIGHTING PLAN NORTH CROSSOVER STAGE II
8-9	TEMPORARY LIGHTING PLAN SOUTH CROSSOVER STAGE II
10	SERVICE INSTALLATION AND CONTROLLER DETAIL

### TEMPORARY LIGHTING NOTES

1. POLE HEIGHT SHALL BE INCREASED AS NECESSARY TO MAINTAIN REQUIRED CLEARANCE OF AERIAL CABLE OVER THE ROADWAY.
2. GUYS AND ANCHORS ARE SHOWN AS AN EXAMPLE AND SHALL BE INSTALLED AS NECESSARY TO THE SATISFACTION OF THE ENGINEER.
3. TEMPORARY WOOD POLES SHALL BE SET BACK A MINIMUM OF 30 FEET FROM EXISTING EDGE OF PAVEMENT AND OUTSIDE THE CLEAR ZONE OR 5 FEET BEHIND GUARDRAIL.

06/18/15

ILLINOIS DEPARTMENT OF TRANSPORTATION  
LUMINAIRE PERFORMANCE TABLE – TEMPORARY LIGHTING

#### GIVEN CONDITIONS

ROADWAY DATA:	Pavement Width	24 FT
	Number Of Lanes (In Direction of Travel)	2
	Median Width	N/A
	IES Surface Classification	R3
	Q-Zero Value	.07
LIGHT POLE DATA:	Mounting Height	42 FT
	Mast Arm Length	N/A
	Pole Set-Back From Edge Of Pavement	30 FT
LUMINAIRE DATA:	Lamp Type	HPS
	Lamp Lumens	28500
	IES Vertical Distribution	L
	IES Control Of Distribution	NC
	IES Lateral Distribution	4
	Total Light Loss Factor	0.684
LAYOUT DATA:	Spacing	200 FT
	Configuration	One Side
	Luminaire Overhang Over Edge Of Pavement Lane	-30 FT

NOTE: Variations from the above specified IES distribution pattern may be requested and acceptance of variations will be subject to review by the Engineer based on how well the performance requirements are met.

#### PERFORMANCE REQUIREMENTS

NOTE: These performance requirements shall be the minimum acceptable standards of photometric performance for the luminaire, based on the given conditions listed above.

ILLUMINATION:	Average Horizontal Illumination, ( $E_{Ave}$ )	0.60 fc
	Uniformity Ratio, ( $E_{Ave}/E_{Min}$ )	3.0
LUMINANCE:	Average Luminance: ( $L_{Ave}$ )	0.40 Cd/m <sup>2</sup>
	Uniformity Ratios: ( $L_{Ave}/L_{Min}$ )	3.5
	( $L_{Max}/L_{Min}$ )	6.0
	Maximum Veiling Luminance Ratio: ( $L_v/L_{Ave}$ )	_____

MS:cs:s:\gen\wpdocs\cks\luminaireperformancetable

FILE NAME =	USER NAME = brian.heil	DESIGNED -	REVISED -
H:\P\29048\WO 10 SN048-0025 & 0026 1-7	Phase 2\Microstation\CADD Sheets\0468869-0	DRW	REVISED -
Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 2/8/2016	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

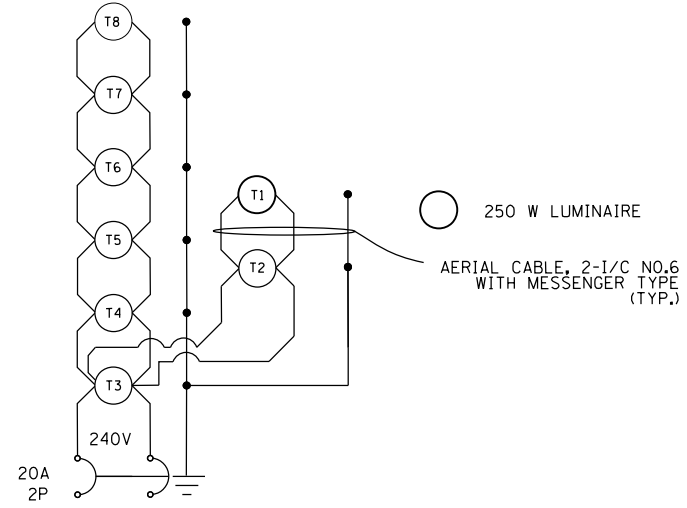
**INDEX OF SHEETS, LIGHTING NOTES, SUMMARY OF QUANTITIES  
LUMINAIRE PERFORMANCE TABLE**

SCALE: 1" = 50'    SHEET 1 OF 10 SHEETS    STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

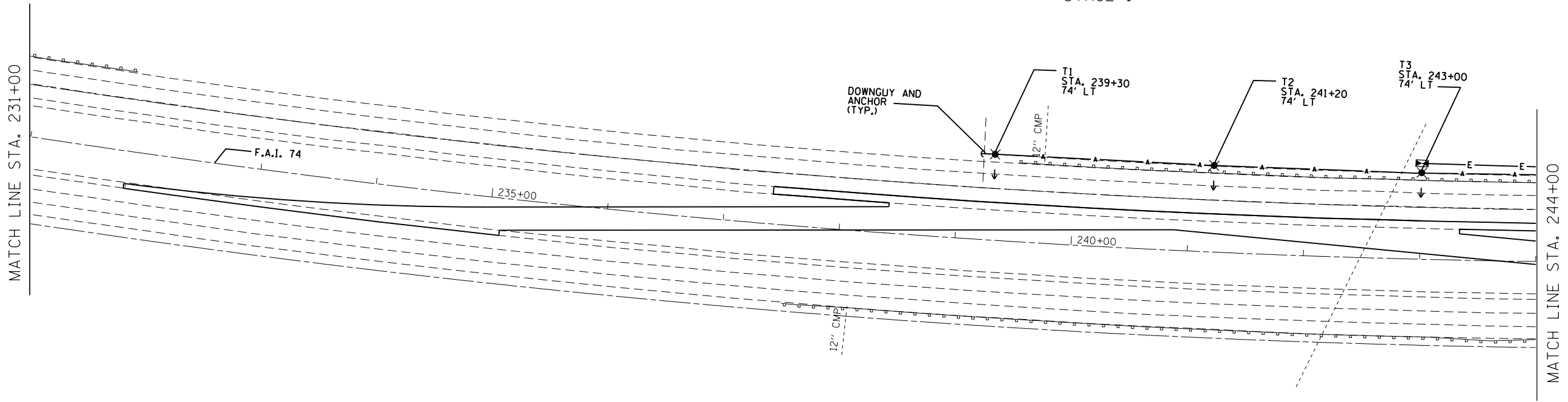
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HV)BR	KNOX	212	45
CONTRACT NO. 68B69				
ILLINOIS FED. AID PROJECT				

**LEGEND**

- ☒ TEMPORARY LIGHTING CONTROLLER, 240V, POLE MOUNTED
- SERVICE INSTALLATION
- ↑ TEMPORARY LIGHTING UNIT, 50' WOOD POLE, CLASS 3 WITH 250 W HPS MULTIMOUNT LUMINAIRE, 42' MOUNTING HEIGHT, ARROW INDICATES LUMINAIRE AIMING DIRECTION
- ↑ RL RELOCATED TEMPORARY LIGHTING UNIT
- ▲— AERIAL CABLE, 2-1/C NO.6 ALUMINUM WITH MESSENGER WIRE
- E— ELECTRIC CABLE IN TRENCH, QUADRUPLIX, 3-1/C NO.2 AND NO.2 GROUND, STRANDED ALUMINUM



CIRCUIT DIAGRAM 1  
NORTH CROSSOVER  
STAGE 1

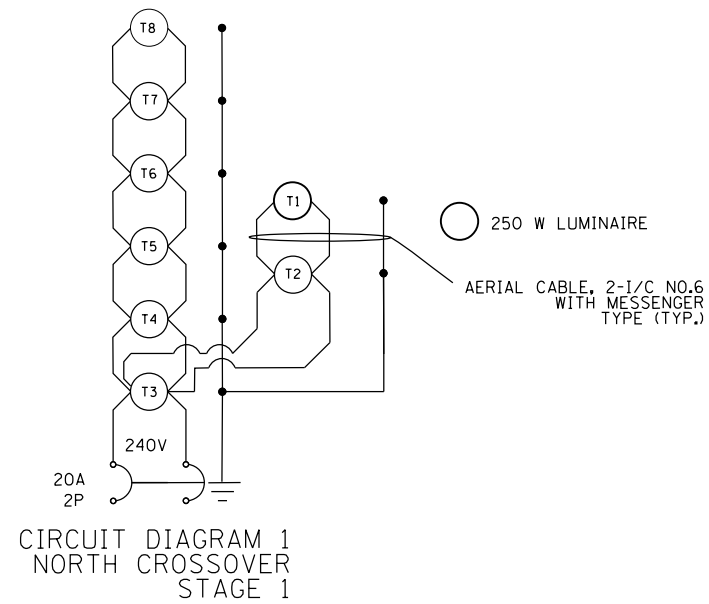


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	PLOT DATE = 2/8/2016	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

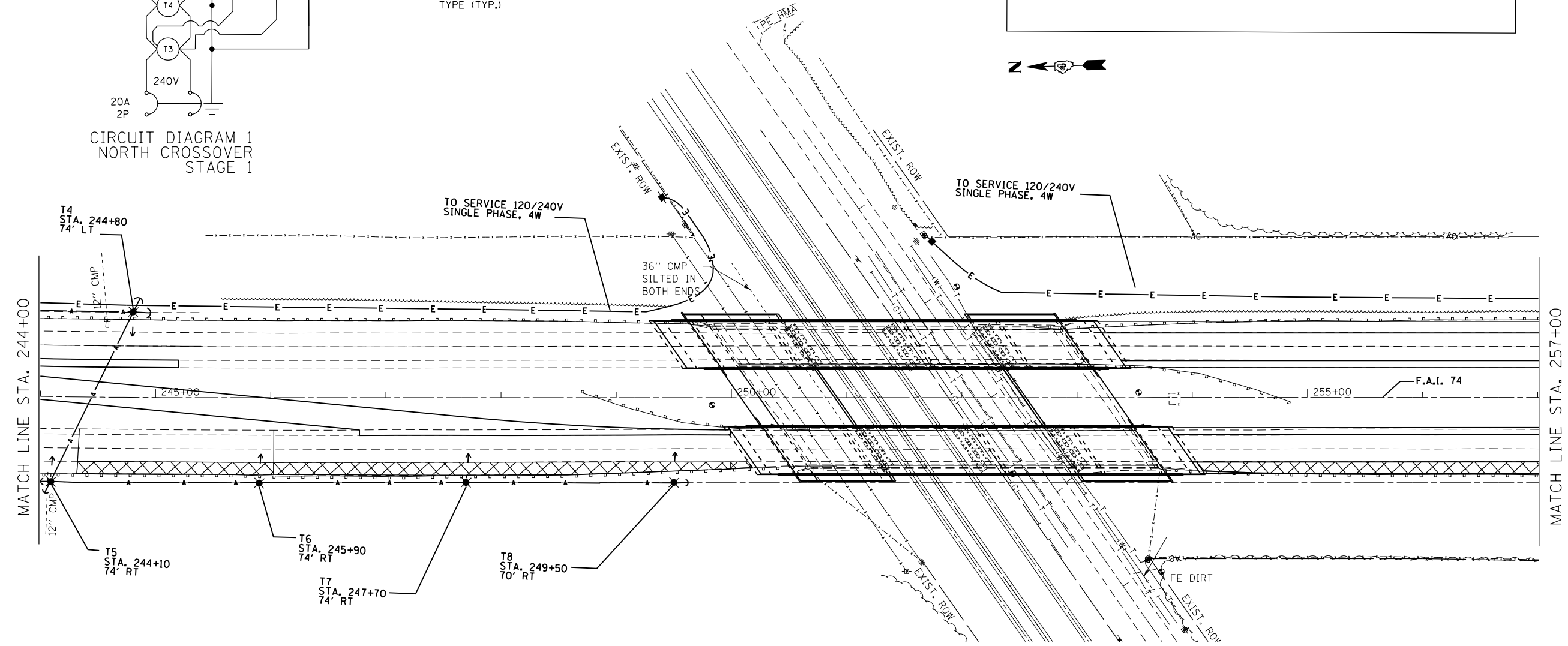
<b>TEMPORARY LIGHTING PLAN NORTH CROSSOVER STAGE I</b>	
SCALE: 1" = 50'	SHEET 2 OF 10 SHEETS
STA.	TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVBJBR)	KNOX	212	46
CONTRACT NO. 68B69				
ILLINOIS FED. AID PROJECT				



**LEGEND**

- ☒ TEMPORARY LIGHTING CONTROLLER, 240V, POLE MOUNTED
- SERVICE INSTALLATION
- ↑ TEMPORARY LIGHTING UNIT, 50' WOOD POLE, CLASS 3 WITH 250 W HPS MULTIMOUNT LUMINAIRE, 42' MOUNTING HEIGHT, ARROW INDICATES LUMINAIRE AIMING DIRECTION
- ↑ RL RELOCATED TEMPORARY LIGHTING UNIT
- ▲— AERIAL CABLE, 2-1/2" NO.6 ALUMINUM WITH MESSENGER WIRE
- E— ELECTRIC CABLE IN TRENCH, QUADRUPLIX, 3-IC NO.2 AND NO.2 GROUND, STRANDED ALUMINUM



FILE NAME =	USER NAME = brian.heil	DESIGNED -	REVISED -
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

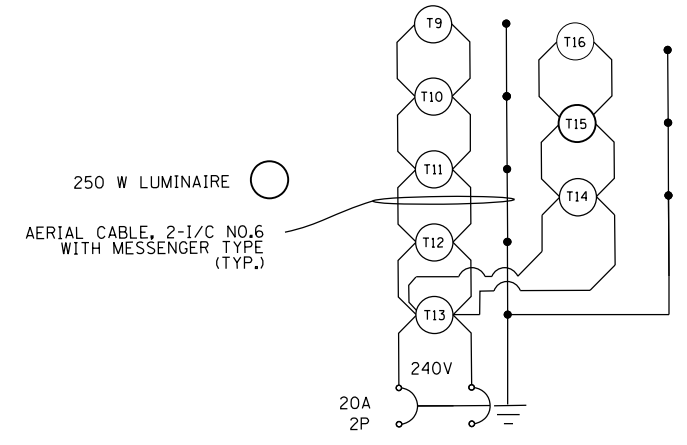
**TEMPORARY LIGHTING PLAN  
NORTH CROSSOVER STAGE I**

SCALE: 1' = 50"    SHEET 3 OF 10 SHEETS    STA.    TO STA.

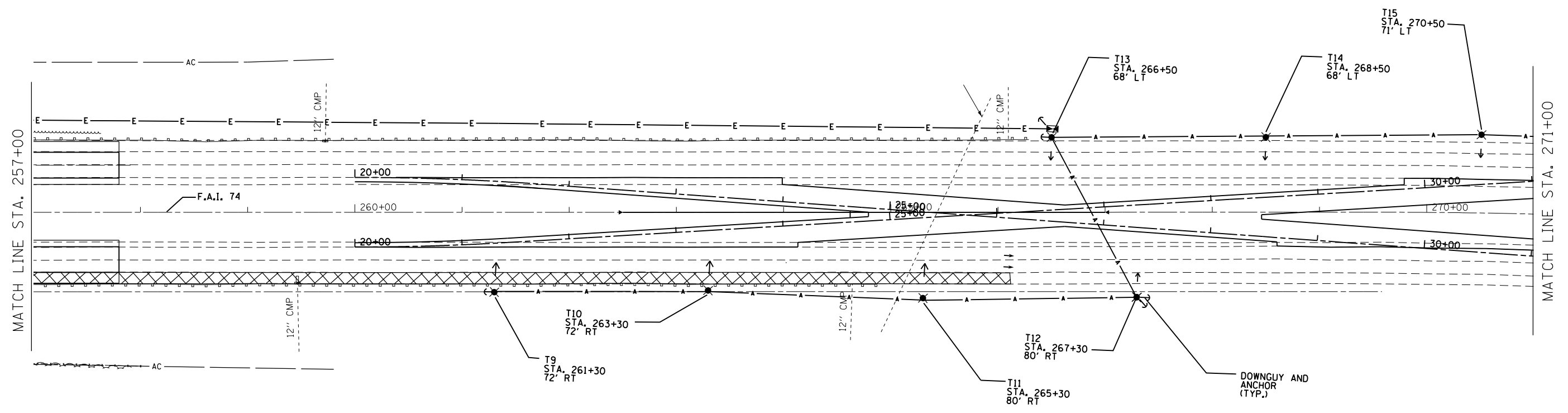
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)BR	KNOX	212	47
CONTRACT NO. 68B69				
ILLINOIS FED. AID PROJECT				

**LEGEND**

- ☒ TEMPORARY LIGHTING CONTROLLER, 240V, POLE MOUNTED
- SERVICE INSTALLATION
- ↑ TEMPORARY LIGHTING UNIT, 50' WOOD POLE, CLASS 3 WITH 250 W HPS MULTIMOUNT LUMINAIRE, 42' MOUNTING HEIGHT, ARROW INDICATES LUMINAIRE AIMING DIRECTION
- ⬆ RL RELOCATED TEMPORARY LIGHTING UNIT
- A— AERIAL CABLE, 2-1/C NO.6 ALUMINUM WITH MESSENGER WIRE
- E— ELECTRIC CABLE IN TRENCH, QUADRUPLEX, 3-1/C NO.2 AND NO.2 GROUND, STRANDED ALUMINUM

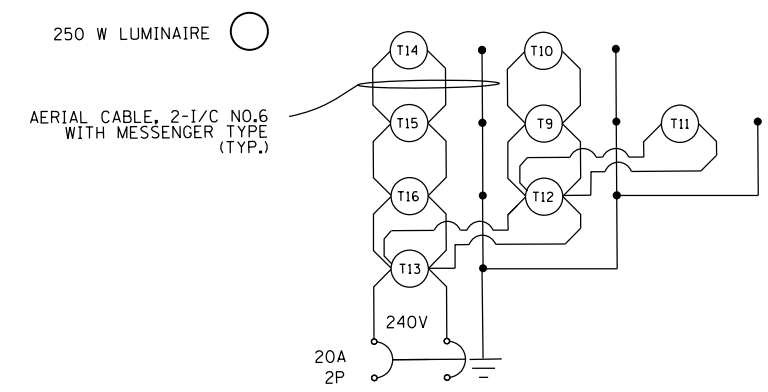


CIRCUIT DIAGRAM 2  
SOUTH CROSSOVER  
STAGE 1

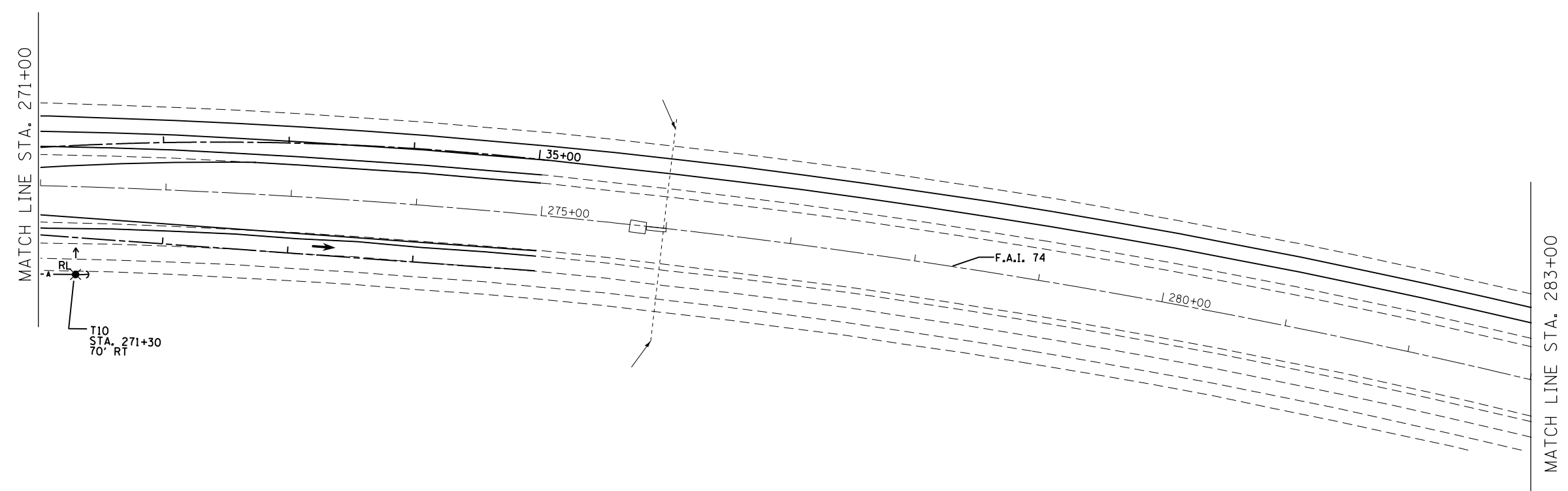


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H:\P\29048\WO 10 SN048-0005 & 0006 1-7	Phase 2\Microstation\CADD Sheets\0468869-1	DRW	REVISED -			74	(48-26HVB)BR	KNOX	212	48	
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	PLOT DATE = 2/8/2016	DATE -	REVISED -			ILLINOIS FED. AID PROJECT					

LEGEND	
	TEMPORARY LIGHTING CONTROLLER, 240V, POLE MOUNTED
	SERVICE INSTALLATION
	TEMPORARY LIGHTING UNIT, 50' WOOD POLE, CLASS 3 WITH 250 W HPS MULTIMOUNT LUMINAIRE, 42' MOUNTING HEIGHT, ARROW INDICATES LUMINAIRE AIMING DIRECTION
	RELOCATED TEMPORARY LIGHTING UNIT
	AERIAL CABLE, 2-1/C NO.6 ALUMINUM WITH MESSENGER WIRE
	ELECTRIC CABLE IN TRENCH, QUADRUPLIX, 3-1/C NO.2 AND NO.2 GROUND, STRANDED ALUMINUM



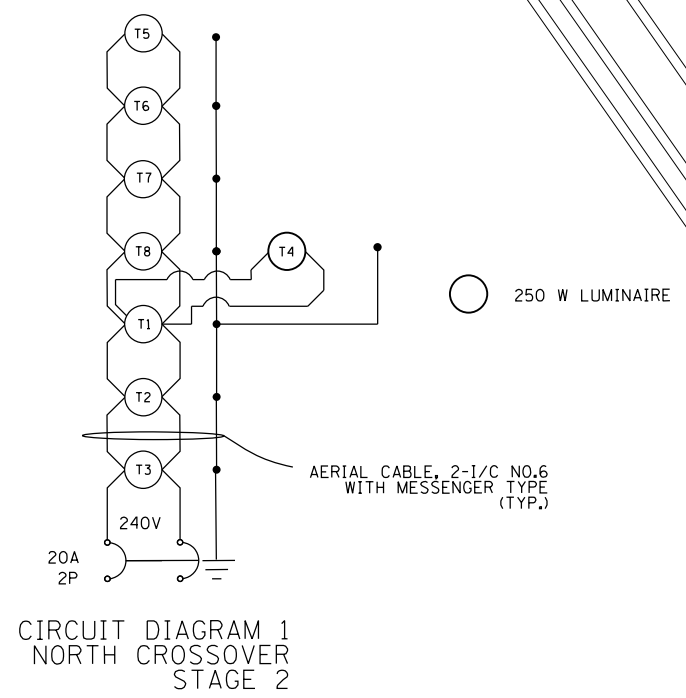
CIRCUIT DIAGRAM 2  
SOUTH CROSSOVER  
STAGE 2



FILE NAME =	USER NAME = brian.heil	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY LIGHTING PLAN SOUTH CROSSOVER STAGE I</b>			F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
H:\P\29048\WO 10 SN048-0025 & 0026 1-7	Phase 2\Microstation\CADD Sheets\0468869-1\DRAWING\stage1.dgn	CHECKED -	REVISED -					74	(48-26HVB)BR	KNOX	212	49
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	PLOT DATE = 2/8/2016				ILLINOIS FED. AID PROJECT							

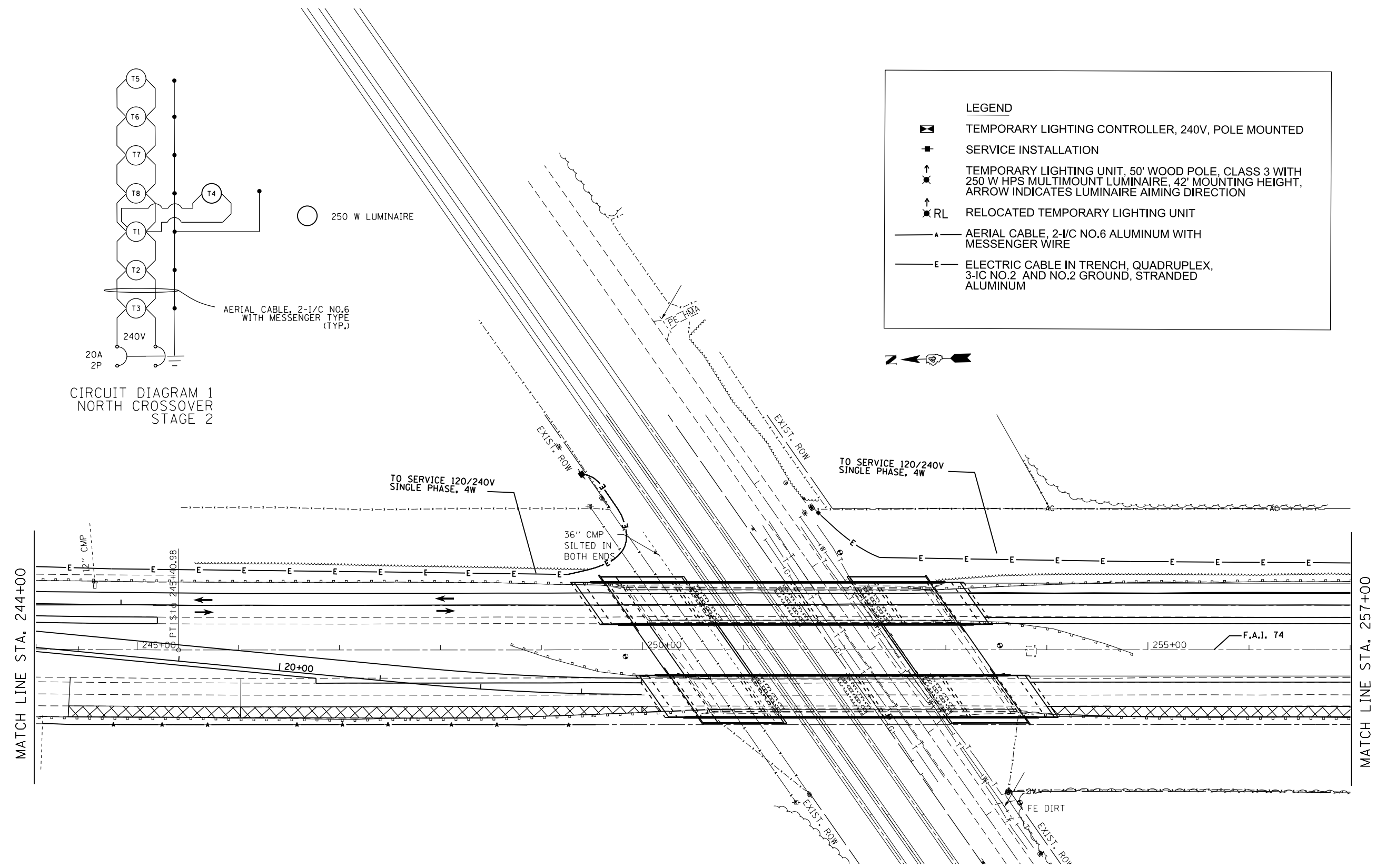
SCALE: 1" = 50' SHEET 5 OF 10 SHEETS STA. TO STA.





**LEGEND**

- ▣ TEMPORARY LIGHTING CONTROLLER, 240V, POLE MOUNTED
- SERVICE INSTALLATION
- ↑ TEMPORARY LIGHTING UNIT, 50' WOOD POLE, CLASS 3 WITH 250 W HPS MULTIMOUNT LUMINAIRE, 42' MOUNTING HEIGHT, ARROW INDICATES LUMINAIRE AIMING DIRECTION
- ⬆ RL RELOCATED TEMPORARY LIGHTING UNIT
- A— AERIAL CABLE, 2-1/C NO.6 ALUMINUM WITH MESSENGER WIRE
- E— ELECTRIC CABLE IN TRENCH, QUADRUPLEX, 3-1/C NO.2 AND NO.2 GROUND, STRANDED ALUMINUM



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Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 2/8/2016	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

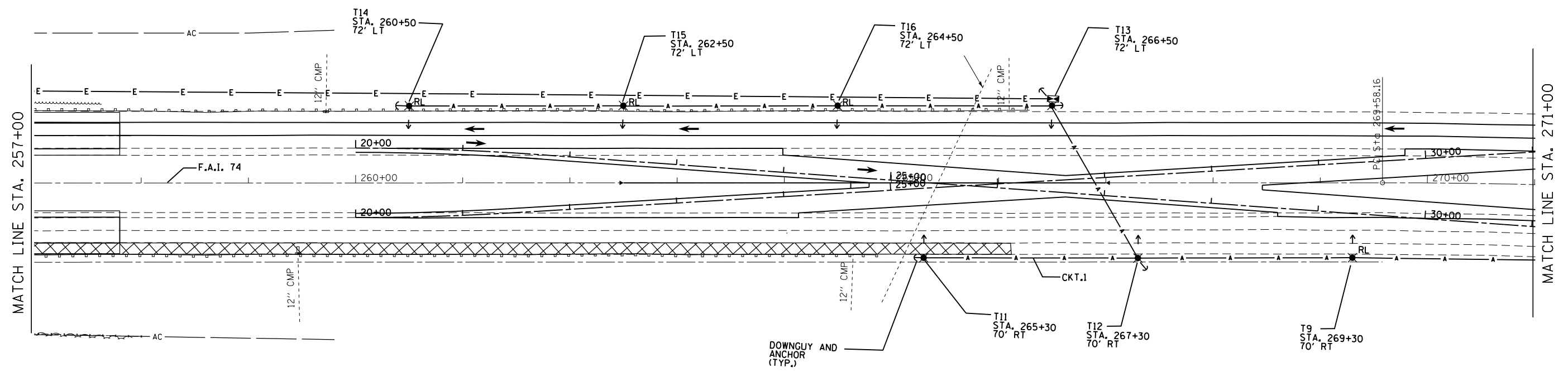
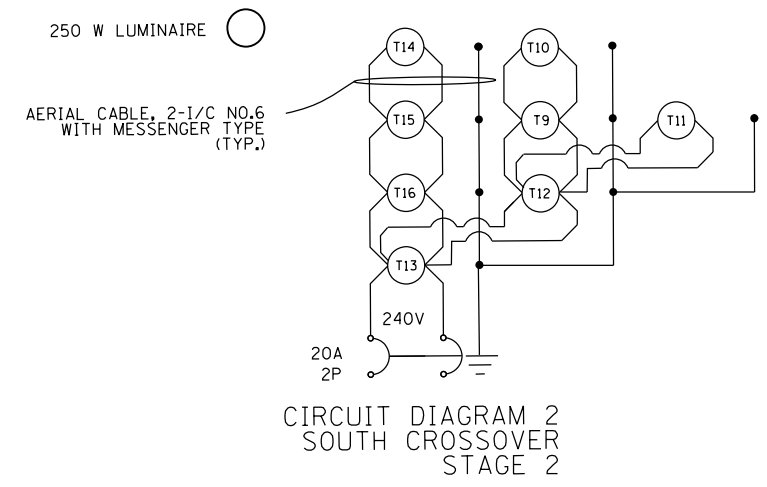
**TEMPORARY LIGHTING PLAN  
NORTH CROSSOVER STAGE II**

SCALE: 1' = 50"    SHEET 7 OF 10 SHEETS    STA.    TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)BR	KNOX	212	51
CONTRACT NO. 68B69				
ILLINOIS FED. AID PROJECT				

**LEGEND**

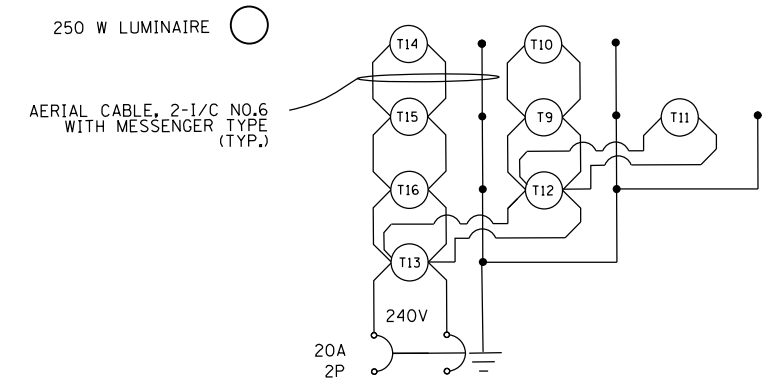
- TEMPORARY LIGHTING CONTROLLER, 240V, POLE MOUNTED
- SERVICE INSTALLATION
- TEMPORARY LIGHTING UNIT, 50' WOOD POLE, CLASS 3 WITH 250 W HPS MULTIMOUNT LUMINAIRE, 42' MOUNTING HEIGHT, ARROW INDICATES LUMINAIRE AIMING DIRECTION
- RELOCATED TEMPORARY LIGHTING UNIT
- AERIAL CABLE, 2-1/C NO.6 ALUMINUM WITH MESSENGER WIRE
- ELECTRIC CABLE IN TRENCH, QUADRUPLIX, 3-1/C NO.2 AND NO.2 GROUND, STRANDED ALUMINUM



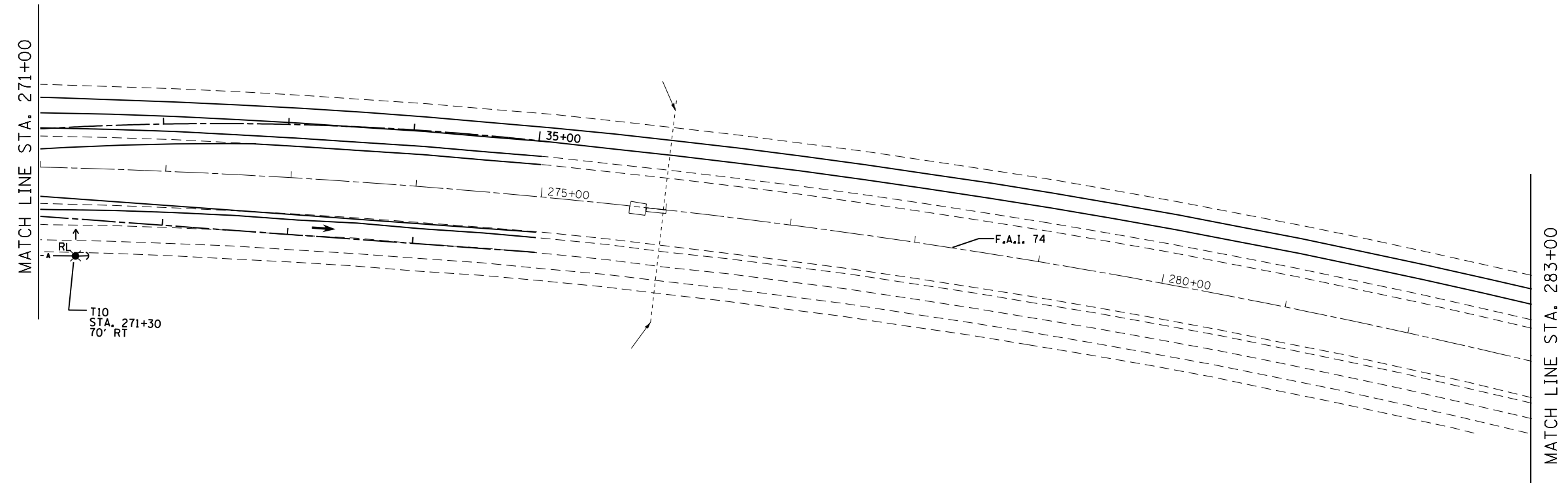
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	Default	PLOT SCALE = 100.0000' / in.	CHECKED -				REVISED -	SCALE: 1" = 50' SHEET 8 OF 10 SHEETS STA. TO STA.		CONTRACT NO. 68B69 ILLINOIS FED. AID PROJECT	
	PLOT DATE = 2/8/2016	DATE -	REVISED -								



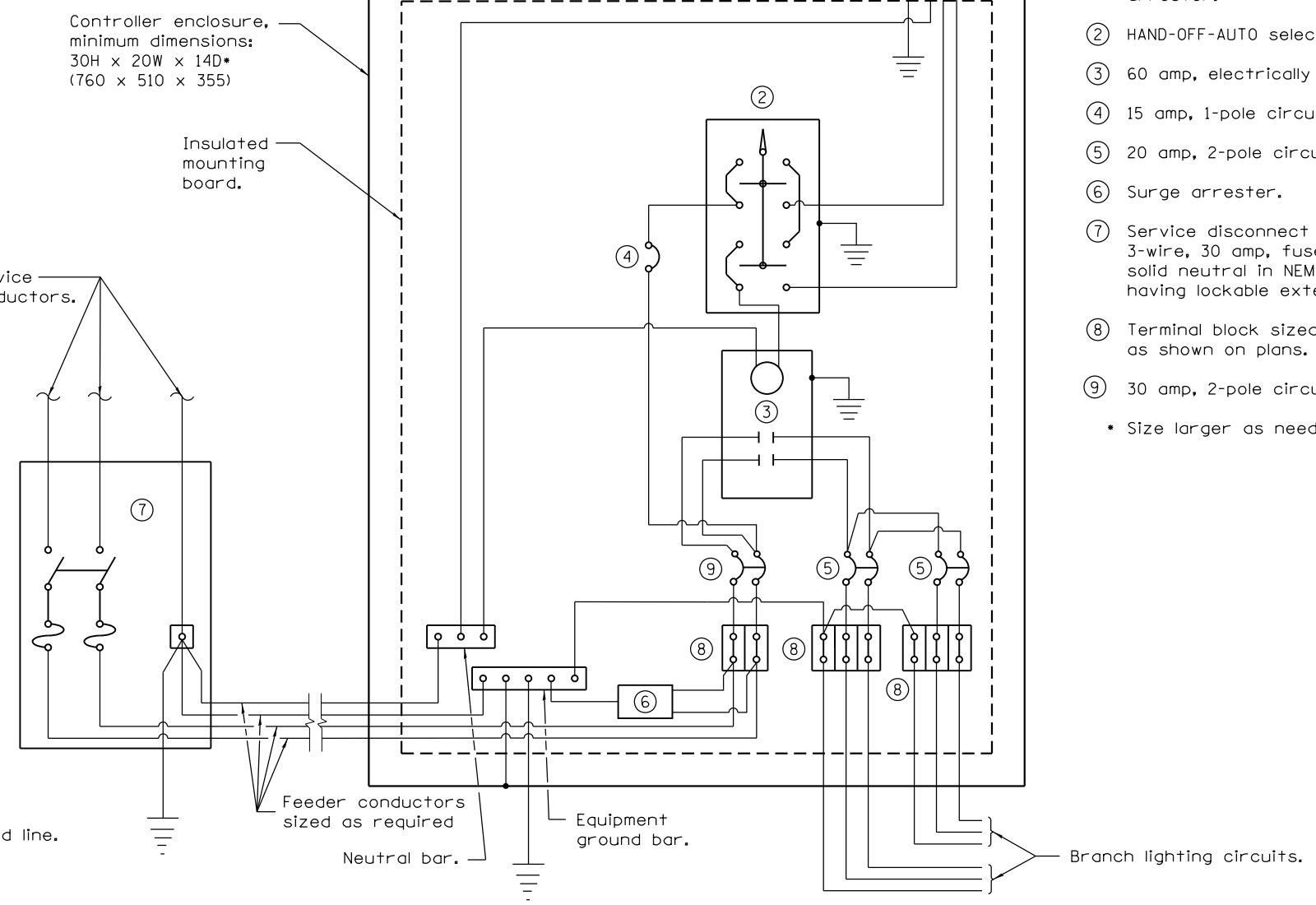
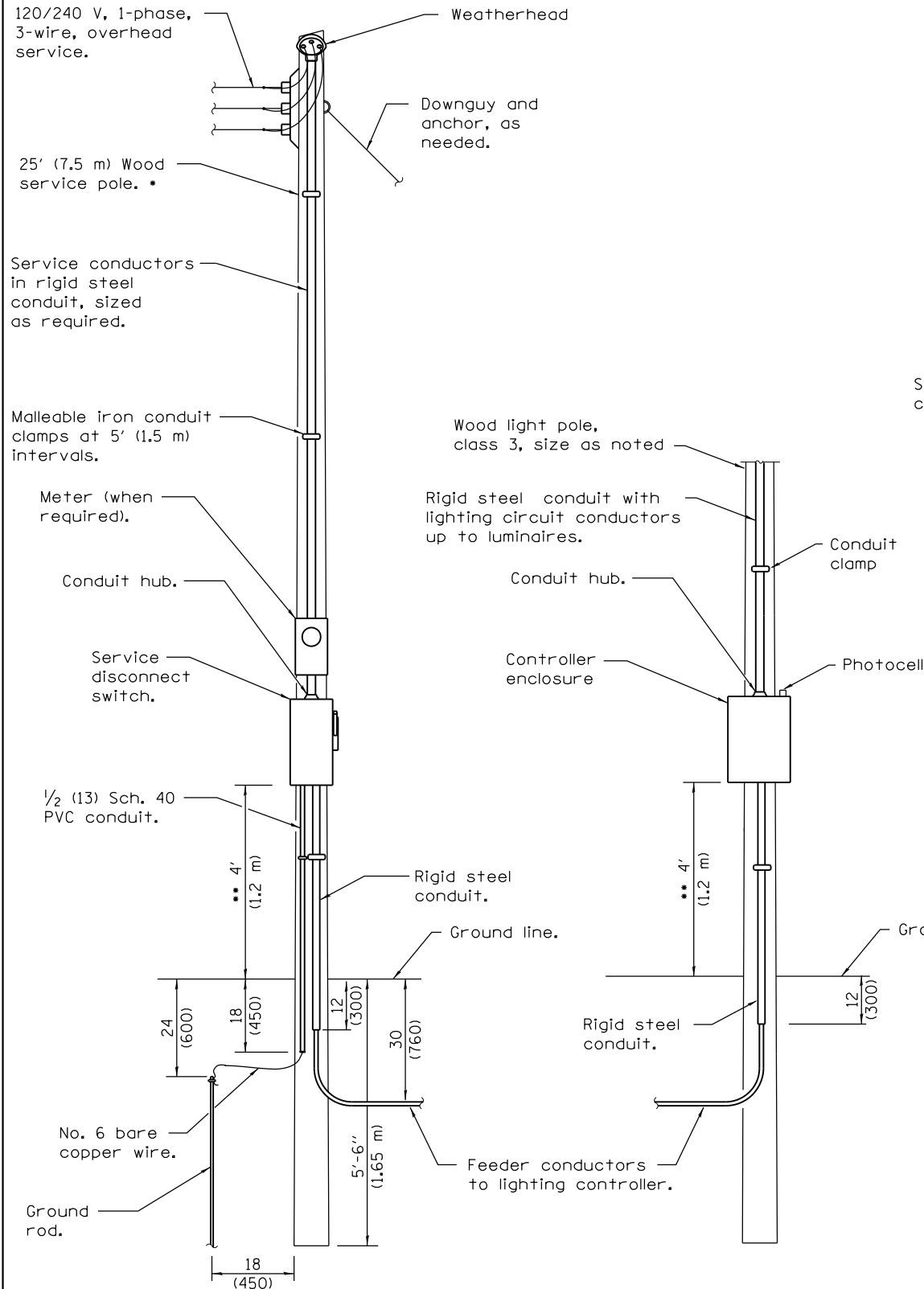
LEGEND	
	TEMPORARY LIGHTING CONTROLLER, 240V, POLE MOUNTED
	SERVICE INSTALLATION
	TEMPORARY LIGHTING UNIT, 50' WOOD POLE, CLASS 3 WITH 250 W HPS MULTIMOUNT LUMINAIRE, 42' MOUNTING HEIGHT, ARROW INDICATES LUMINAIRE AIMING DIRECTION
	RELOCATED TEMPORARY LIGHTING UNIT
	AERIAL CABLE, 2-1/C NO.6 ALUMINUM WITH MESSENGER WIRE
	ELECTRIC CABLE IN TRENCH, QUADRUPLEX, 3-1/C NO.2 AND NO.2 GROUND, STRANDED ALUMINUM



CIRCUIT DIAGRAM 2  
SOUTH CROSSOVER  
STAGE 2



FILE NAME =	USER NAME = brianheil	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY LIGHTING PLAN SOUTH CROSSOVER STAGE II</b>		F.A.I. RTE. =	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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	PLOT DATE = 2/8/2016				SCALE: 1" = 50'	SHEET 9	OF 10 SHEETS	STA.	TO STA.		



- ① Photocell with integral surge arrester.
- ② HAND-OFF-AUTO selector switch.
- ③ 60 amp, electrically held contactor.
- ④ 15 amp, 1-pole circuit breaker.
- ⑤ 20 amp, 2-pole circuit breaker.
- ⑥ Surge arrester.
- ⑦ Service disconnect switch - 2-pole, 3-wire, 30 amp, fused at 30 amp, solid neutral in NEMA 4X enclosure having lockable external handle.
- ⑧ Terminal block sized for conductors as shown on plans.
- ⑨ 30 amp, 2-pole circuit breaker
- \* Size larger as needed.

**GENERAL NOTES**

Provide engraved nameplate on front of enclosure reading "LIGHTING".

Enclosure shall be mounted to pole with pole-bands and lag-bolts.

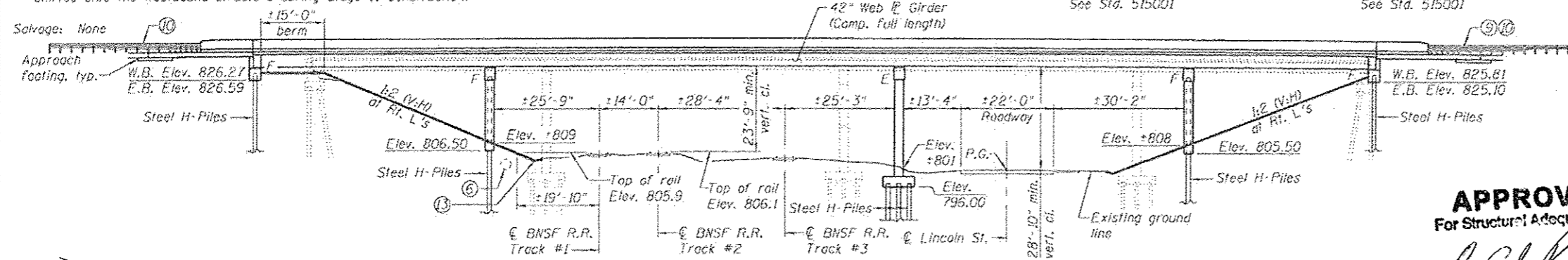
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = brianheil	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>LIGHTING CONTROLLER POLE MOUNTED, 240V</b>	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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	PLOT DATE = 2/8/2016	DATE -	REVISED -			ILLINOIS FED. AID PROJECT					

Bench Mark: BM 11-Chiseled square on southwest corner of concrete base of southern pier on S.N. 048-0006 (E.B.), Sta. 253+04.01, 61.87' RT. Elev. 804.95.

Existing Structure: S.N. 048-0005 (W.B.) and S.N. 048-0006 (E.B.) were originally built in 1965 as F.A.I. 74, Section 48-26 HVB. The back-to-back abutment length is 305'-7" and the out-to-out deck width is 36'-0". Each structure consists of a four span steel WF36 superstructure supported by concrete abutments founded on concrete piles and concrete column piers founded on timber pile supported footings. Structures are to be removed and replaced.

Traffic Control: Traffic will be maintained by constructing median crossovers to the north and south of the structures. Stage I will shift westbound traffic onto the existing eastbound structure. Upon completion of the new westbound structure, eastbound traffic will be shifted onto the westbound structure during Stage II construction.



STATION 251+70.00  
BUILT 20\_\_ BY  
STATE OF ILLINOIS  
F.A.I. RT. 74 SEC. (48-26HVB)BR  
LOADING HL-93  
STRUCTURE NO. 048-0101

STATION 251+70.00  
BUILT 20\_\_ BY  
STATE OF ILLINOIS  
F.A.I. RT. 74 SEC. (48-26HVB)BR  
LOADING HL-93  
STRUCTURE NO. 048-0102

- Notes:
- Existing weather station, see Roadway plans for details.
  - No freefall deck drains will be permitted in the span over the tracks or within 10 feet of cross arms of a railroad pole line.
  - The elevations of the existing top-of-rail profiles shall be verified prior to beginning construction.
  - See sheet 2 of 61 for Section A-A and Top of Rail Elevations.
  - Horizontal dimensions shown at right angles unless noted otherwise.
  - Existing 36" CMP and 36" proposed RCP culvert, see Roadway plans for details.
  - Floor drains are located in span 1 only, typical each side of each structure.
  - Existing gas line to be relocated.
  - Traffic Barrier Terminal, Type 5, Std. 631026.
  - Traffic Barrier Terminal, Type 6, Std. 631031.
  - Temporary Soil Retention System.
  - Temporary Traffic Barrier Terminal, Type 6, Std. 631031.
  - Set north slope gutter elevations so that flowing slopes 0.5% min, and adjacent ground slopes 0.5% min. to the gutter.

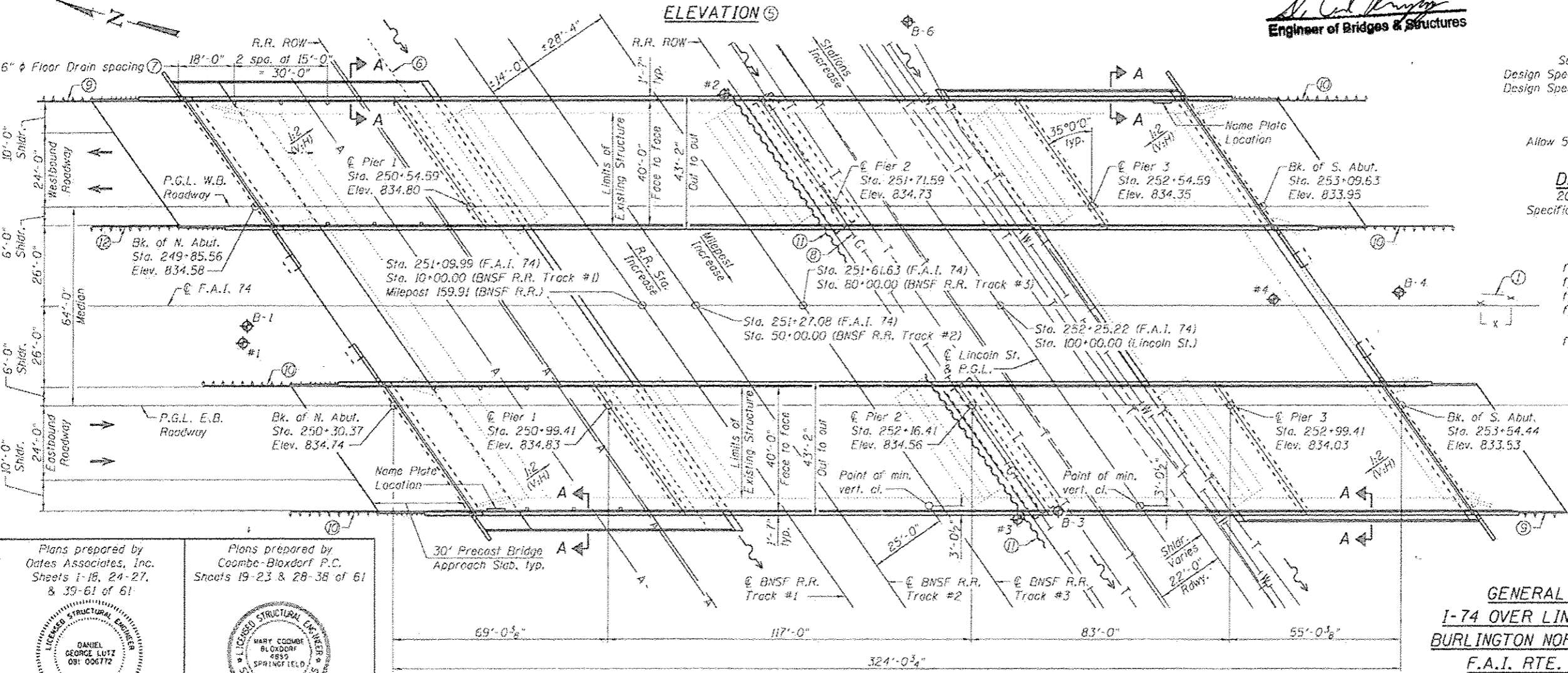
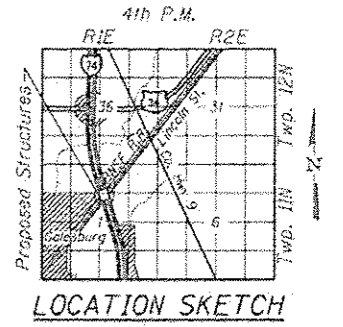
**APPROVED**  
For Structural Adequacy Only  
*[Signature]*  
Engineer of Bridges & Structures

**SEISMIC DATA**  
Seismic Performance Zone (SPZ) = 1  
Design Spectral Acceleration at 1.0 sec. (SD1) = 0.100g  
Design Spectral Acceleration at 0.2 sec. (SDS) = 0.149g  
Soil Site Class = D

**LOADING HL-93**  
Allow 50#/sq. ft. for future wearing surface.

**DESIGN SPECIFICATIONS**  
2012 AASHTO LRFD Bridge Design Specifications, 6th Edition with 2013 Interims

**DESIGN STRESSES**  
**FIELD UNITS**  
f'c = 3,500 psi  
fy = 60,000 psi (Reinforcement)  
fy = 50,000 psi (AASHTO M 270 Grade 50)  
fy = 36,000 psi (AASHTO M 270 Grade 36)  
**PRECAST UNITS**  
f'c = 6,000 psi



PLAN

Plans prepared by  
Oates Associates, Inc.  
Sheets 1-18, 24-27,  
& 39-61 of 61

Plans prepared by  
Coombe-Bloxdorf P.C.  
Sheets 19-23 & 28-38 of 61

**DANIEL GEORGE LUTZ**  
091 006772  
LICENSED STRUCTURAL ENGINEER  
STATE OF ILLINOIS

**MARY COOMBE BLOXDOFF**  
4899 SPRINGFIELD  
LICENSED STRUCTURAL ENGINEER  
STATE OF ILLINOIS

DATE: 02/19/2016  
EXPIRATION: 11/30/2016

DATE: 02-17-2016  
EXPIRATION: 11-30-2016

**GENERAL PLAN AND ELEVATION**  
**I-74 OVER LINCOLN STREET (C.H. 40) AND**  
**BURLINGTON NORTHERN SANTA FE RAILROAD**  
**F.A.I. RTE. 74 - SEC. (48-26HVB)BR**  
**KNOX COUNTY**  
**STATION 251+70.00**  
**STRUCTURE NO. 048-0101 (W.B.)**  
**STRUCTURE NO. 048-0102 (E.B.)**

<p><b>DATES ASSOCIATES</b> ILLINOIS DESIGN FIRM LICENSE NO. 184-001155</p>	USER NAME	DESIGNED - JAD	REVISOR -	<p><b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b></p>	<p><b>GENERAL PLAN AND ELEVATION</b> <b>STRUCTURE NO. 048-0101 (W.B.) &amp; 048-0102 (E.B.)</b></p>	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLLOT SCALE	CHECKED - KBC	REVISOR -			74	48-26HVB)BR	KNOX	212	55
PLLOT DATE	DRAWN - JAD	REVISOR -	2/8/2016					CONTRACT NO. 68B69		
	CHECKED - KBC	REVISOR -								

**GENERAL NOTES**

Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts. Bolts 7/8 in.  $\phi$ , holes 15/16 in.  $\phi$ , unless otherwise noted.

Calculated weight of Structural Steel: AASHTO M 270 Grade 50 = 786,020 pounds  
AASHTO M 270 Grade 36 = 58,120 pounds

All Structural Steel shall be galvanized as specified in the special provision for Hot Dip Galvanizing for Structural Steel.

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

Reinforcement bars designated (E) shall be epoxy coated.

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.

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

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

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
Removal of Existing Structures	Each	-	-	2
Protective Shield	Sq. Yd.	-	-	1,320
Structure Excavation	Cu. Yd.	-	872	872
Floor Drains	Each	12	-	12
Concrete Structures	Cu. Yd.	-	929.7	929.7
Concrete Superstructure	Cu. Yd.	993.0	-	993.0
Bridge Deck Grooving	Sq. Yd.	3,226	-	3,226
Protective Coat	Sq. Yd.	4,084	-	4,084
Furnishing and Erecting Structural Steel	L. Sum	1	-	1
Stud Shear Connectors	Each	16,980	-	16,980
Reinforcement Bars, Epoxy Coated	Pound	254,520	119,540	374,060
Mechanical Splicers	Each	-	372	372
Slope Wall 4 Inch	Sq. Yd.	-	2,745	2,745
Furnishing Steel Piles HP14x73	Foot	-	7,179	7,179
Driving Piles	Foot	-	7,179	7,179
Test Pile Steel HP14x73	Each	-	10	10
Name Plates	Each	2	-	2
Preformed Joint Strip Seal	Foot	209.0	-	209.0
Elastomeric Bearing Assembly, Type I	Each	12	-	12
Anchor Bolts, 1"	Each	96	-	96
Anchor Bolts, 1 1/4"	Each	24	-	24
Geocomposite Wall Drain	Sq. Yd.	-	213	213
Pipe Underdrains for Structures 4"	Sq. Ft.	-	340	340
Temporary Soil Retention System	Foot	-	850	850
Concrete Wearing Surface, 5"	Sq. Yd.	567	-	567
Precast Bridge Approach Slab	Sq. Ft.	4,860	-	4,860
Granular Backfill for Structures	Cu. Yd.	-	376	376

**TOP OF RAIL ELEVATIONS - BNSF R.R. (TRACK #1)**

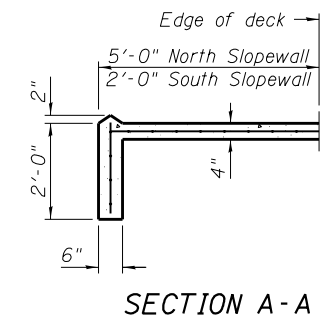
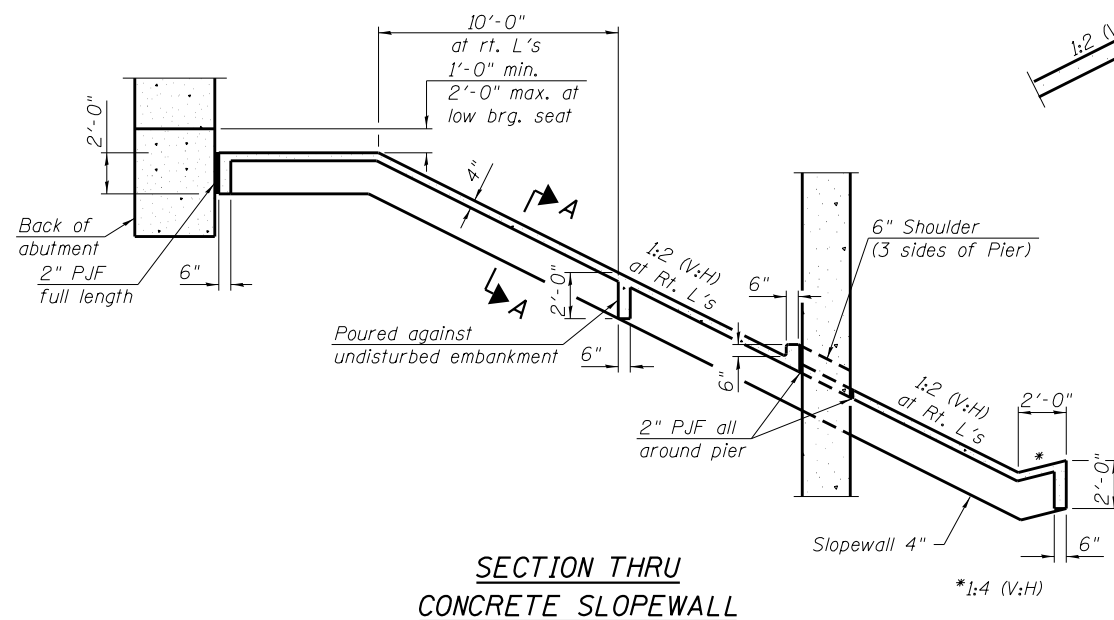
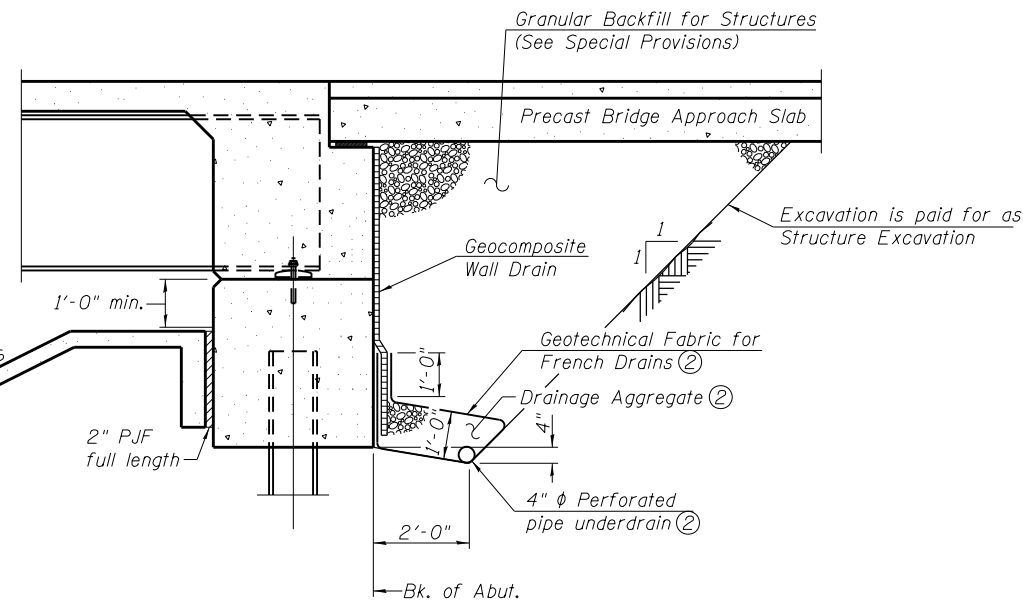
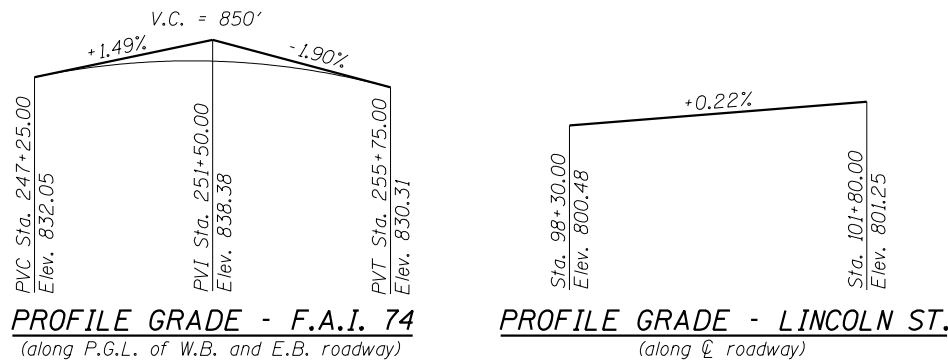
Station	Elev.
1+00	804.08
2+00	804.44
3+00	804.79
4+00	805.11
5+00	805.37
6+00	805.60
7+00	805.79
8+00	805.87
9+00	805.87
10+00	805.85
11+00	805.84
12+00	805.88
13+00	805.94
14+00	805.94
15+00	805.93
16+00	805.90
17+00	805.84
18+00	805.74
19+00	805.59

**TOP OF RAIL ELEVATIONS - BNSF R.R. (TRACK #2)**

Station	Elev.
41+00	803.73
42+00	804.44
43+00	804.50
44+00	804.81
45+00	805.06
46+00	805.33
47+00	805.57
48+00	805.80
49+00	805.87
50+00	806.10
51+00	806.13
52+00	806.11
53+00	806.14
54+00	806.12
55+00	806.15
56+00	806.14
57+00	806.07
58+00	805.92
59+00	805.79

**TOP OF RAIL ELEVATIONS - BNSF R.R. (TRACK #3)**

Station	Elev.
71+00	803.49
72+00	803.85
73+00	804.23
74+00	804.48
75+00	804.57
76+00	804.64
77+00	804.60
78+00	804.48
79+00	804.53
80+00	804.60
81+00	804.63
82+00	804.71
83+00	804.80
84+00	804.99
85+00	805.35
86+00	805.69
87+00	806.04
88+00	806.49
89+00	806.91

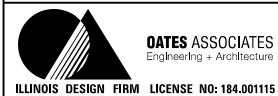


- Notes:
- ① All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).
  - ② Included in the cost of Pipe Underdrains for Structures 4", see Special Provisions.

**INDEX OF SHEETS**

Sheet No.	Description
1	General Plan and Elevation
2	General Data
3	Footing Plan
4	Construction Details
5	Temporary Concrete Barrier for Stage Construction
6-12	Top of Slab Elevations
13-14	Top of Approach Slab Elevations
15-16	Superstructure
17	Superstructure Details
18	Diaphragm Details
19-23	Precast Bridge Approach Slab
24	Framing Plan
25-26	Girder Details
27	Bearing Details
28-31	Abutment Details
32-37	Pier Details
38	HP Pile Details
39	Bar Splicer Assembly and Mechanical Splicer Details
40	Concrete Parapet Slipforming Option
41-50	Soil Boring Logs
51-61	Existing Bridge Plans

FILE NAME = H:\P\29048\WD 10 SING48-0005 & 0006 1-74 Phase 2\Structure\Final Plans\Microstation\0480101\_0102-68B69-002-General Data.dgn



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DEPARTMENT OF TRANSPORTATION**

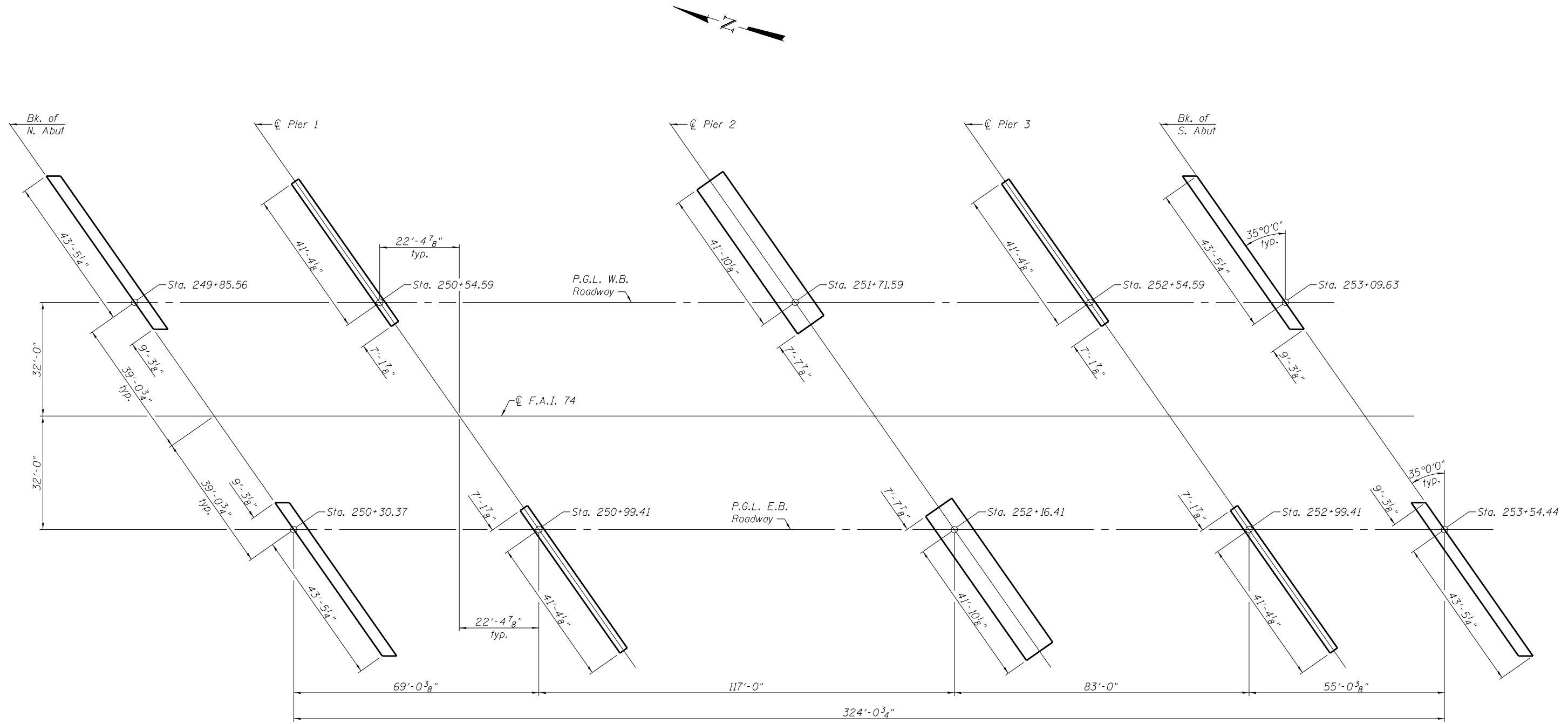
**GENERAL DATA  
STRUCTURE NO. 048-0101 (W.B.) & 048-0102 (E.B.)**

SHEET NO. 2 OF 61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)BR	KNOX	212	56
CONTRACT NO. 68B69				

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PLAN



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	CHECKED - JAD	REVISED -

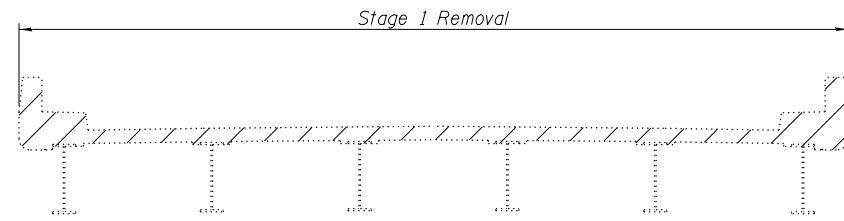
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

FOOTING PLAN  
STRUCTURE NO. 048-0101 (W.B.) & 048-0102 (E.B.)

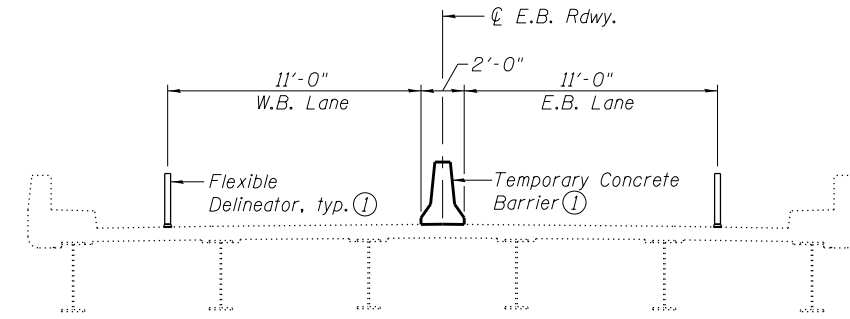
SHEET NO. 3 OF 61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)BR	KNOX	212	57
CONTRACT NO. 68B69				

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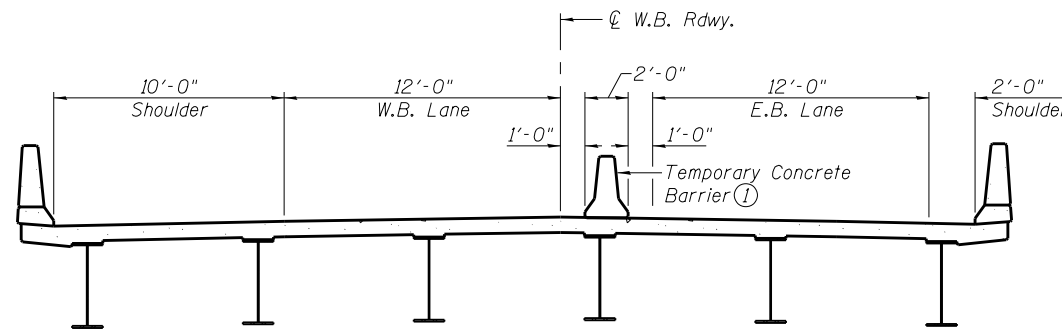


WESTBOUND

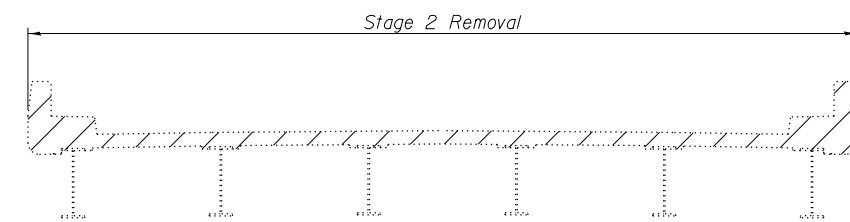


EASTBOUND

**STAGE 1 REMOVAL & TRAFFIC STAGING**  
(Looking South)

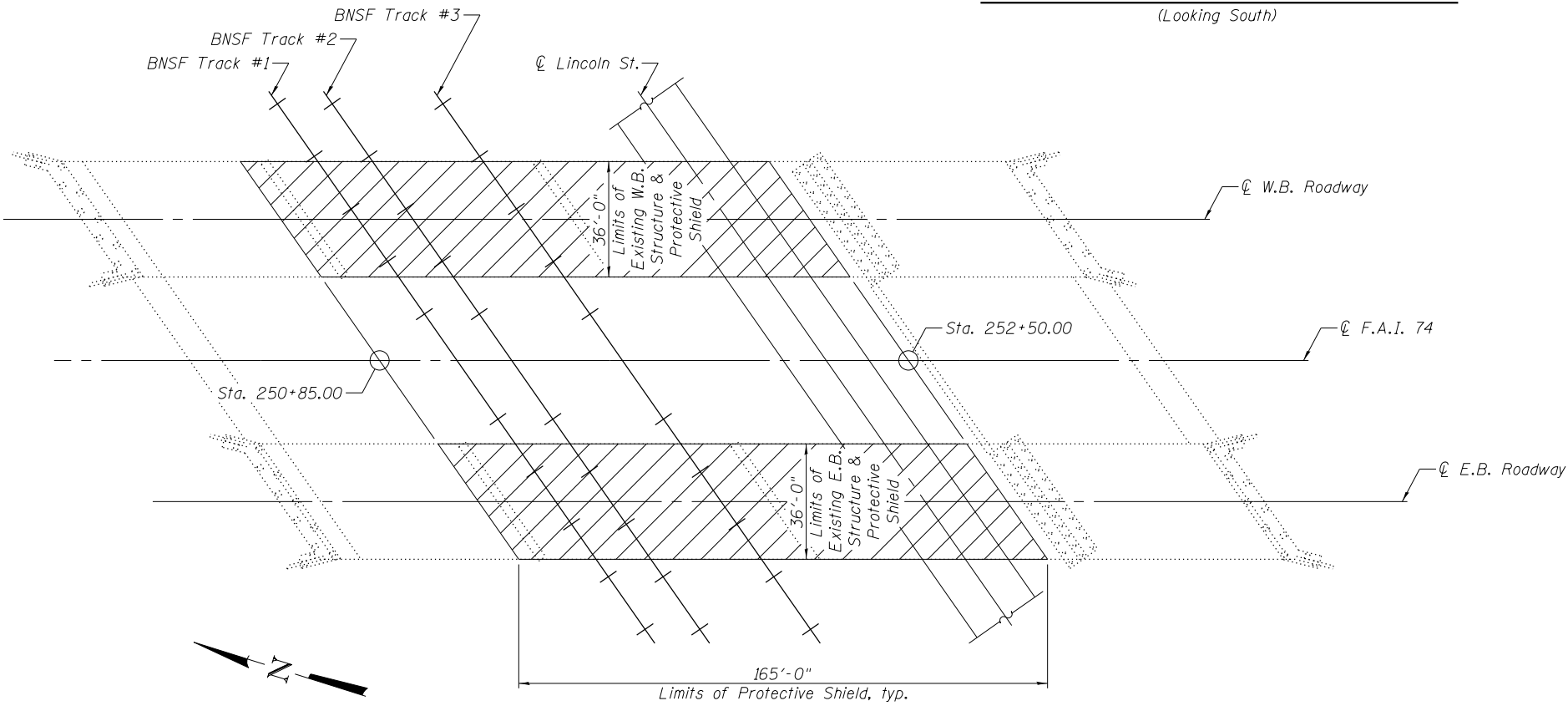


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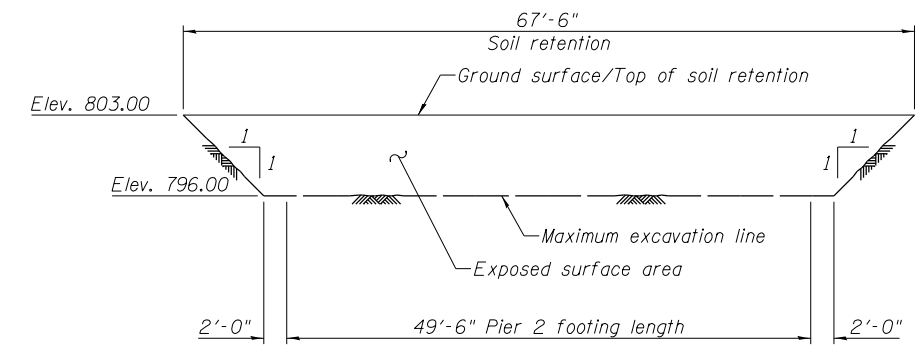


EASTBOUND

**STAGE 2 REMOVAL & TRAFFIC STAGING**  
(Looking South)



**PROTECTIVE SHIELD DETAIL**



**TEMPORARY SOIL RETENTION SYSTEM DETAIL ③**  
(Typical E.B. and W.B. Pier 2)

- Notes:
- ① For quantity of Temporary Concrete Barrier, Flexible Delineator, and related traffic control, see Roadway Plans.
  - ② The construction of Pier 2 requires shoring that complies with railroad guidelines. In addition to any submittals required by the railroad, the Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.
  - ③ A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a Temporary Soil Retention System design including plan details and calculations for review and acceptance by the Engineer. For general location of Temporary Soil Retention System, see Plan on sheet 1 of 61.

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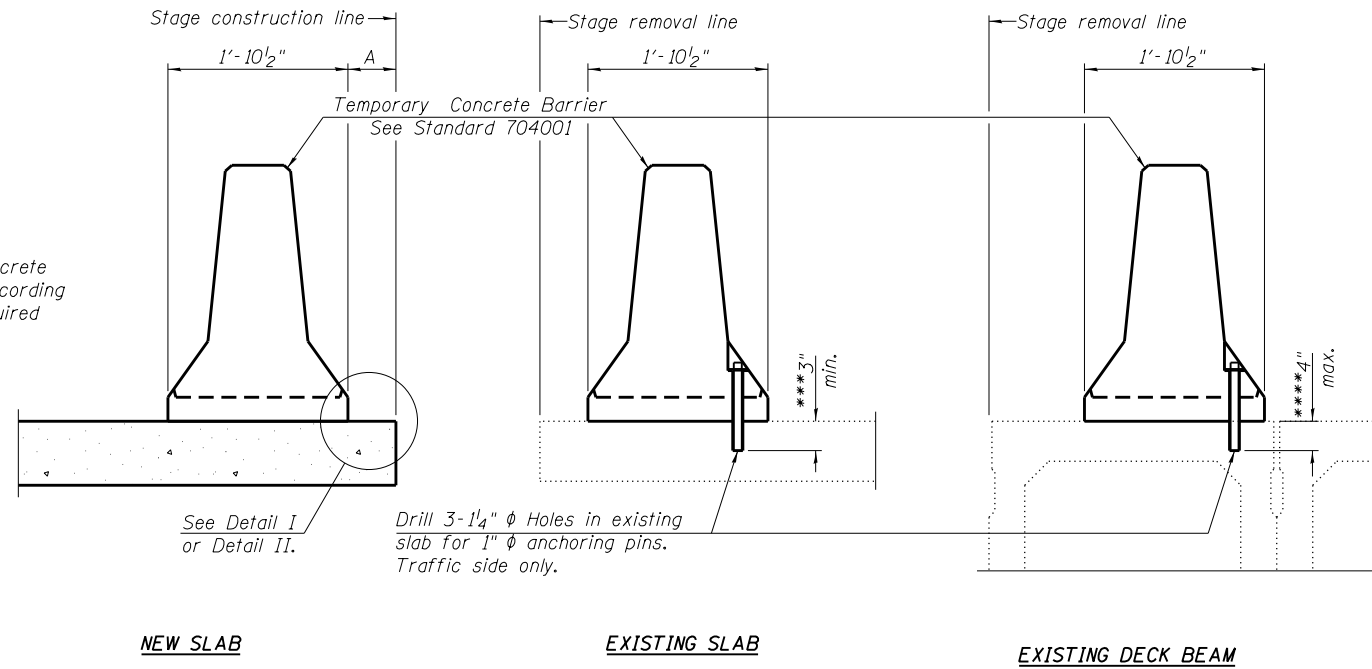
**CONSTRUCTION DETAILS  
STRUCTURE NO. 048-0101 (W.B.) & 048-0102 (E.B.)**

SHEET NO. 4 OF 61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)BR	KNOX	212	58
CONTRACT NO. 68B69				

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When "A" is 3'-1" 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'-1".



**SECTIONS THRU SLAB OR DECK BEAM**

**NOTES**

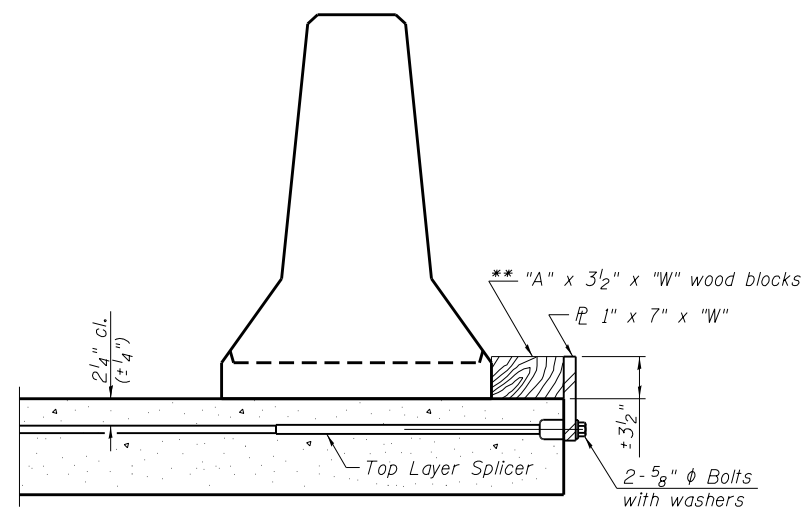
Detail I - With Bar Splicer or Couplers:  
Connect one (1) 1" x 7" x "W" steel PL to the top layer of couplers with 2-5/8" φ bolts screwed to coupler at approximate C of each barrier panel.

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

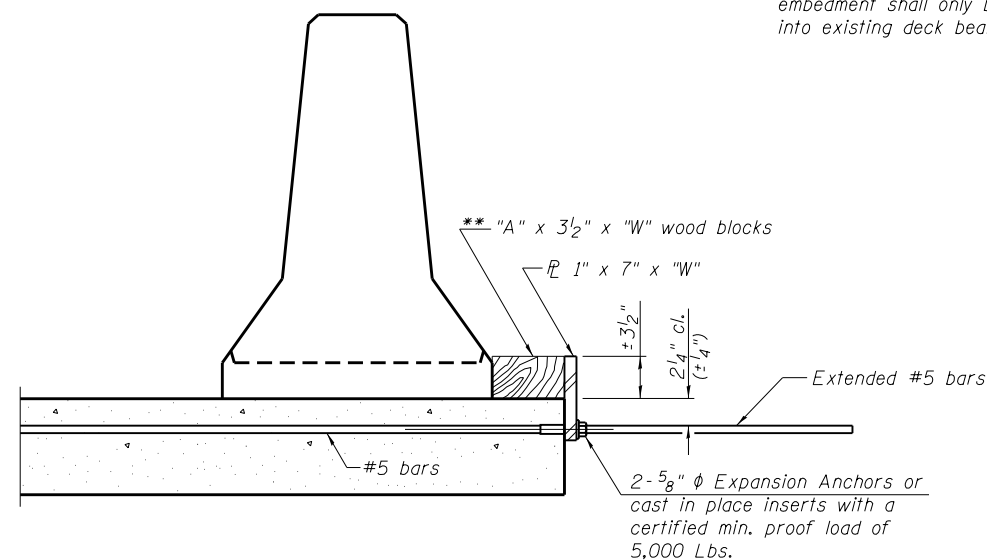
Cost of retainer assembly is included with Temporary Concrete Barrier. The 1" x 7" x "W" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

\*\*\* 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.

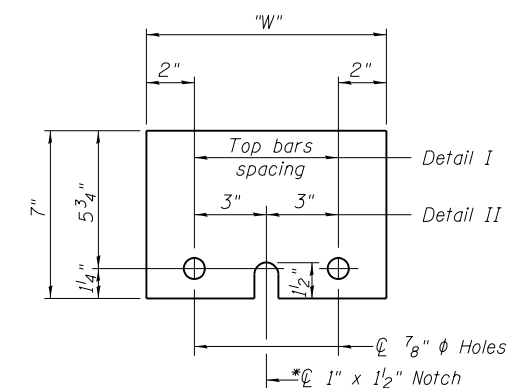
\*\*\*\* If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



**DETAIL I**



**DETAIL II**



**STEEL RETAINER PL 1" x 7" x "W"**

\* Required only with Detail II

**RETAINER ASSEMBLY**

\*\* 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.

R-27

1-12-15



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	CHECKED -	REVISED -

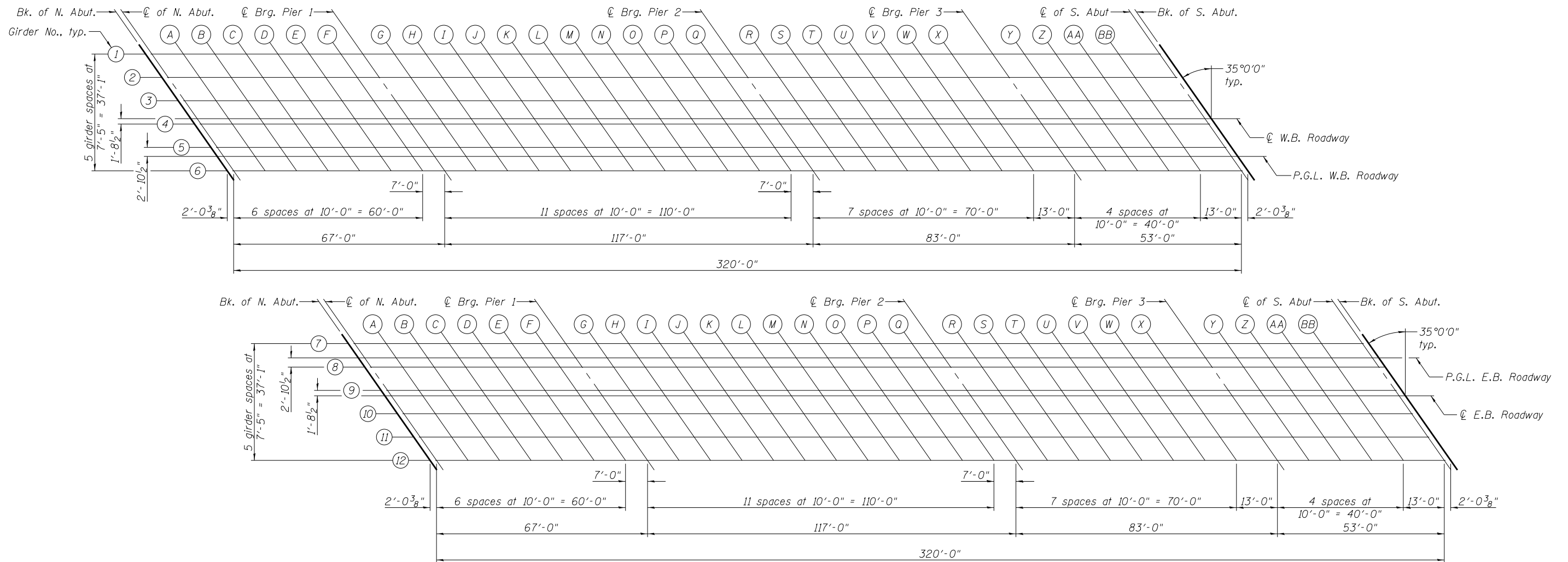
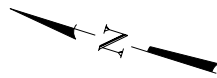
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION  
STRUCTURE NO. 048-0101 (W.B.) & 048-0102 (E.B.)**

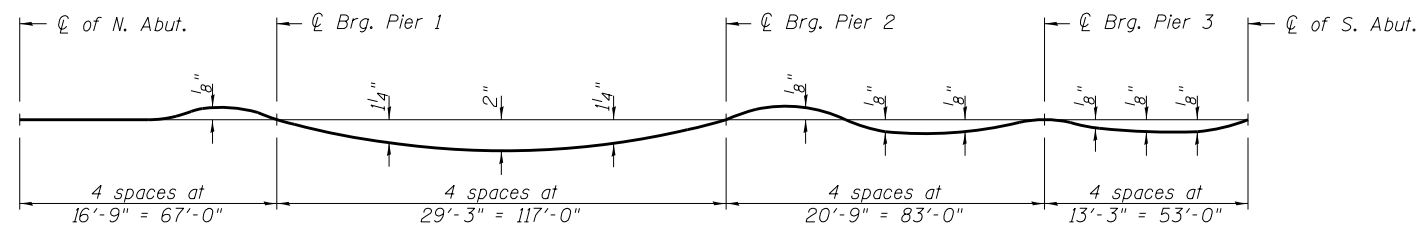
SHEET NO. 5 OF 61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)BR	KNOX	212	59
			CONTRACT NO. 68B69	
ILLINOIS FED. AID PROJECT				

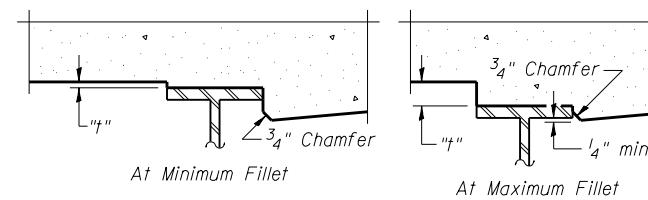
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**PLAN**



**DEAD LOAD DEFLECTION DIAGRAM ①**  
(Includes weight of concrete only.)

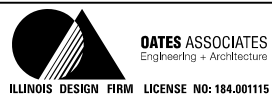


**FILLET HEIGHTS ②**

**Notes:**

- ① The Dead Load Deflections are not to be used in the field if the Engineer is working from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" as shown on sheets 7 thru 12 of 61.
- ② To determine "t": After all structural steel has been erected, elevations of the top flanges of the girders shall be taken at intervals shown above. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on sheets 7 thru 12 of 61, minus slab thickness, equals the fillet heights "t" above top flanges of girders.

FILE NAME = H:\P\2014\NO. 10\_SIN048-0005 & 0006 1-74 Phase 2\Structure\Final\_Plans\Microstation\0480101\_0102-68B69-006-Top of Slab Elevations.dgn



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PLOT DATE = 2/8/2016	DRAWN - KBC	REVISED -
	CHECKED - JAD	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TOP OF SLAB ELEVATIONS  
STRUCTURE NO. 048-0101 (W.B.) & 048-0102 (E.B.)**

SHEET NO. 6 OF 61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVBI)BR	KNOX	212	60
				CONTRACT NO. 68B69
ILLINOIS FED. AID PROJECT				



**GIRDER 1**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. of N. Abut.	249+62.77	-32.54	834.29	834.29
☉ of N. Abut.	249+64.81	-32.54	834.30	834.30
A	249+74.81	-32.54	834.35	834.35
B	249+84.81	-32.54	834.40	834.40
C	249+94.81	-32.54	834.44	834.44
D	250+04.81	-32.54	834.48	834.48
E	250+14.81	-32.54	834.52	834.51
F	250+24.81	-32.54	834.55	834.54
☉ Brg. Pier 1	250+31.81	-32.54	834.57	834.57
G	250+41.81	-32.54	834.59	834.62
H	250+51.81	-32.54	834.61	834.68
I	250+61.81	-32.54	834.63	834.74
J	250+71.81	-32.54	834.64	834.79
K	250+81.81	-32.54	834.65	834.82
L	250+91.81	-32.54	834.66	834.83
M	251+01.81	-32.54	834.66	834.82
N	251+11.81	-32.54	834.65	834.79
O	251+21.81	-32.54	834.65	834.74
P	251+31.81	-32.54	834.63	834.69
Q	251+41.81	-32.54	834.62	834.64
☉ Brg. Pier 2	251+48.81	-32.54	834.61	834.61
R	251+58.81	-32.54	834.58	834.58
S	251+68.81	-32.54	834.56	834.55
T	251+78.81	-32.54	834.53	834.53
U	251+88.81	-32.54	834.49	834.50
V	251+98.81	-32.54	834.46	834.47
W	252+08.81	-32.54	834.41	834.43
X	252+18.81	-32.54	834.37	834.37
☉ Brg. Pier 3	252+31.81	-32.54	834.30	834.30
Y	252+41.81	-32.54	834.25	834.25
Z	252+51.81	-32.54	834.19	834.20
AA	252+61.81	-32.54	834.13	834.14
BB	252+71.81	-32.54	834.06	834.07
☉ of S. Abut.	252+84.81	-32.54	833.97	833.97
Bk. of S. Abut.	252+86.84	-32.54	833.95	833.95

**GIRDER 2**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. of N. Abut.	249+67.97	-25.13	834.47	834.47
☉ of N. Abut.	249+70.00	-25.13	834.48	834.48
A	249+80.00	-25.13	834.53	834.53
B	249+90.00	-25.13	834.58	834.58
C	250+00.00	-25.13	834.62	834.62
D	250+10.00	-25.13	834.65	834.65
E	250+20.00	-25.13	834.69	834.68
F	250+30.00	-25.13	834.72	834.71
☉ Brg. Pier 1	250+37.00	-25.13	834.74	834.74
G	250+47.00	-25.13	834.76	834.79
H	250+57.00	-25.13	834.78	834.85
I	250+67.00	-25.13	834.79	834.90
J	250+77.00	-25.13	834.80	834.95
K	250+87.00	-25.13	834.81	834.97
L	250+97.00	-25.13	834.81	834.98
M	251+07.00	-25.13	834.81	834.97
N	251+17.00	-25.13	834.80	834.94
O	251+27.00	-25.13	834.80	834.89
P	251+37.00	-25.13	834.78	834.84
Q	251+47.00	-25.13	834.76	834.78
☉ Brg. Pier 2	251+54.00	-25.13	834.75	834.75
R	251+64.00	-25.13	834.73	834.72
S	251+74.00	-25.13	834.70	834.69
T	251+84.00	-25.13	834.67	834.67
U	251+94.00	-25.13	834.63	834.64
V	252+04.00	-25.13	834.59	834.60
W	252+14.00	-25.13	834.55	834.56
X	252+24.00	-25.13	834.50	834.50
☉ Brg. Pier 3	252+37.00	-25.13	834.43	834.43
Y	252+47.00	-25.13	834.37	834.38
Z	252+57.00	-25.13	834.31	834.32
AA	252+67.00	-25.13	834.25	834.26
BB	252+77.00	-25.13	834.18	834.19
☉ of S. Abut.	252+90.00	-25.13	834.08	834.08
Bk. of S. Abut.	252+92.04	-25.13	834.07	834.07

**GIRDER 3**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. of N. Abut.	249+73.16	-17.71	834.62	834.62
☉ of N. Abut.	249+75.19	-17.71	834.63	834.63
A	249+85.19	-17.71	834.68	834.68
B	249+95.19	-17.71	834.72	834.72
C	250+05.19	-17.71	834.76	834.76
D	250+15.19	-17.71	834.79	834.79
E	250+25.19	-17.71	834.83	834.82
F	250+35.19	-17.71	834.85	834.84
☉ Brg. Pier 1	250+42.19	-17.71	834.87	834.87
G	250+52.19	-17.71	834.89	834.92
H	250+62.19	-17.71	834.91	834.98
I	250+72.19	-17.71	834.92	835.03
J	250+82.19	-17.71	834.93	835.07
K	250+92.19	-17.71	834.93	835.10
L	251+02.19	-17.71	834.93	835.10
M	251+12.19	-17.71	834.93	835.09
N	251+22.19	-17.71	834.92	835.06
O	251+32.19	-17.71	834.91	835.01
P	251+42.19	-17.71	834.90	834.95
Q	251+52.19	-17.71	834.88	834.89
☉ Brg. Pier 2	251+59.19	-17.71	834.86	834.86
R	251+69.19	-17.71	834.83	834.82
S	251+79.19	-17.71	834.80	834.80
T	251+89.19	-17.71	834.77	834.77
U	251+99.19	-17.71	834.73	834.74
V	252+09.19	-17.71	834.69	834.70
W	252+19.19	-17.71	834.64	834.65
X	252+29.19	-17.71	834.59	834.60
☉ Brg. Pier 3	252+42.19	-17.71	834.52	834.52
Y	252+52.19	-17.71	834.46	834.47
Z	252+62.19	-17.71	834.40	834.41
AA	252+72.19	-17.71	834.33	834.35
BB	252+82.19	-17.71	834.26	834.27
☉ of S. Abut.	252+95.19	-17.71	834.16	834.16
Bk. of S. Abut.	252+97.23	-17.71	834.15	834.15

Notes:  
 ① Offsets are from P.G.L. W.B. Roadway.

FILE NAME = H:\P\2004\WD 10 SINGAR-0005 & 0006 L-74 Phase 2\Structure\Final Plans\Microstation\0480101\_0102-68B69-007-Top of Slab Elevations.dgn



USER NAME =	DESIGNED - JAD	REVISED -
	CHECKED - KBC	REVISED -
PLOT SCALE =	DRAWN - KBC	REVISED -
PLOT DATE = 2/8/2016	CHECKED - JAD	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**TOP OF SLAB ELEVATIONS  
 STRUCTURE NO. 048-0101 (W.B.)**  
 SHEET NO. 7 OF 61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)BR	KNOX	212	61
CONTRACT NO. 68B69				
ILLINOIS FED. AID PROJECT				

**☉ W.B. ROADWAY**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. of N. Abut.	249+77.16	-12.00	834.73	834.73
☉ of N. Abut.	249+79.19	-12.00	834.74	834.74
A	249+89.19	-12.00	834.78	834.79
B	249+99.19	-12.00	834.83	834.83
C	250+09.19	-12.00	834.86	834.86
D	250+19.19	-12.00	834.90	834.89
E	250+29.19	-12.00	834.93	834.92
F	250+39.19	-12.00	834.95	834.94
☉ Brg. Pier 1	250+46.19	-12.00	834.97	834.97
G	250+56.19	-12.00	834.99	835.02
H	250+66.19	-12.00	835.00	835.07
I	250+76.19	-12.00	835.01	835.12
J	250+86.19	-12.00	835.02	835.16
K	250+96.19	-12.00	835.02	835.19
L	251+06.19	-12.00	835.02	835.19
M	251+16.19	-12.00	835.02	835.18
N	251+26.19	-12.00	835.01	835.14
O	251+36.19	-12.00	834.99	835.09
P	251+46.19	-12.00	834.98	835.03
Q	251+56.19	-12.00	834.96	834.97
☉ Brg. Pier 2	251+63.19	-12.00	834.94	834.94
R	251+73.19	-12.00	834.91	834.90
S	251+83.19	-12.00	834.88	834.87
T	251+93.19	-12.00	834.84	834.84
U	252+03.19	-12.00	834.80	834.81
V	252+13.19	-12.00	834.76	834.77
W	252+23.19	-12.00	834.71	834.72
X	252+33.19	-12.00	834.66	834.67
☉ Brg. Pier 3	252+46.19	-12.00	834.59	834.59
Y	252+56.19	-12.00	834.53	834.53
Z	252+66.19	-12.00	834.46	834.47
AA	252+76.19	-12.00	834.39	834.41
BB	252+86.19	-12.00	834.32	834.33
☉ of S. Abut.	252+99.19	-12.00	834.22	834.22
Bk. of S. Abut.	253+01.23	-12.00	834.20	834.20

**GIRDER 4**

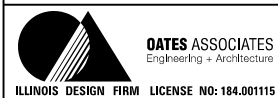
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. of N. Abut.	249+78.35	-10.29	834.71	834.71
☉ of N. Abut.	249+80.39	-10.29	834.72	834.72
A	249+90.39	-10.29	834.76	834.77
B	250+00.39	-10.29	834.80	834.81
C	250+10.39	-10.29	834.84	834.84
D	250+20.39	-10.29	834.87	834.87
E	250+30.39	-10.29	834.90	834.89
F	250+40.39	-10.29	834.93	834.92
☉ Brg. Pier 1	250+47.39	-10.29	834.94	834.94
G	250+57.39	-10.29	834.96	834.99
H	250+67.39	-10.29	834.98	835.04
I	250+77.39	-10.29	834.99	835.10
J	250+87.39	-10.29	834.99	835.14
K	250+97.39	-10.29	835.00	835.16
L	251+07.39	-10.29	834.99	835.17
M	251+17.39	-10.29	834.99	835.15
N	251+27.39	-10.29	834.98	835.11
O	251+37.39	-10.29	834.97	835.06
P	251+47.39	-10.29	834.95	835.00
Q	251+57.39	-10.29	834.93	834.95
☉ Brg. Pier 2	251+64.39	-10.29	834.91	834.91
R	251+74.39	-10.29	834.88	834.87
S	251+84.39	-10.29	834.85	834.84
T	251+94.39	-10.29	834.81	834.81
U	252+04.39	-10.29	834.77	834.78
V	252+14.39	-10.29	834.73	834.74
W	252+24.39	-10.29	834.68	834.69
X	252+34.39	-10.29	834.63	834.63
☉ Brg. Pier 3	252+47.39	-10.29	834.55	834.55
Y	252+57.39	-10.29	834.49	834.50
Z	252+67.39	-10.29	834.43	834.44
AA	252+77.39	-10.29	834.36	834.37
BB	252+87.39	-10.29	834.28	834.30
☉ of S. Abut.	253+00.39	-10.29	834.18	834.18
Bk. of S. Abut.	253+02.42	-10.29	834.17	834.17

**GIRDER 5**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. of N. Abut.	249+83.55	-2.88	834.62	834.62
☉ of N. Abut.	249+85.58	-2.88	834.62	834.62
A	249+95.58	-2.88	834.67	834.67
B	250+05.58	-2.88	834.71	834.71
C	250+15.58	-2.88	834.74	834.74
D	250+25.58	-2.88	834.77	834.77
E	250+35.58	-2.88	834.80	834.79
F	250+45.58	-2.88	834.82	834.82
☉ Brg. Pier 1	250+52.58	-2.88	834.84	834.84
G	250+62.58	-2.88	834.85	834.88
H	250+72.58	-2.88	834.87	834.93
I	250+82.58	-2.88	834.87	834.98
J	250+92.58	-2.88	834.88	835.02
K	251+02.58	-2.88	834.88	835.04
L	251+12.58	-2.88	834.88	835.05
M	251+22.58	-2.88	834.87	835.03
N	251+32.58	-2.88	834.86	834.99
O	251+42.58	-2.88	834.84	834.94
P	251+52.58	-2.88	834.82	834.88
Q	251+62.58	-2.88	834.80	834.82
☉ Brg. Pier 2	251+69.58	-2.88	834.78	834.78
R	251+79.58	-2.88	834.75	834.74
S	251+89.58	-2.88	834.71	834.71
T	251+99.58	-2.88	834.68	834.68
U	252+09.58	-2.88	834.63	834.64
V	252+19.58	-2.88	834.59	834.60
W	252+29.58	-2.88	834.54	834.55
X	252+39.58	-2.88	834.48	834.49
☉ Brg. Pier 3	252+52.58	-2.88	834.41	834.41
Y	252+62.58	-2.88	834.34	834.35
Z	252+72.58	-2.88	834.28	834.29
AA	252+82.58	-2.88	834.20	834.22
BB	252+92.58	-2.88	834.13	834.14
☉ of S. Abut.	253+05.58	-2.88	834.03	834.03
Bk. of S. Abut.	253+07.61	-2.88	834.01	834.01

Notes:  
 ① Offsets are from P.G.L. W.B. Roadway.

FILE NAME = H:\P\2004\NO. 10 SIGNAGE-0005 & 0006 I-74 Phase 2\Structure\Final Plans\Microstation\0480101\_0102-68B69-008-Top of Slab Elevations.dgn



USER NAME =	DESIGNED - JAD	REVISED -
	CHECKED - KBC	REVISED -
PLOT SCALE =	DRAWN - KBC	REVISED -
PLOT DATE = 2/8/2016	CHECKED - JAD	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TOP OF SLAB ELEVATIONS  
STRUCTURE NO. 048-0101 (W.B.)**

SHEET NO. 8 OF 61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)BR	KNOX	212	62
CONTRACT NO. 68B69				
ILLINOIS FED. AID PROJECT				

**P.G.L. W.B. ROADWAY**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. of N. Abut.	249+85.56	0.00	834.58	834.58
☉ of N. Abut.	249+87.59	0.00	834.59	834.59
A	249+97.59	0.00	834.63	834.64
B	250+07.59	0.00	834.67	834.67
C	250+17.59	0.00	834.70	834.70
D	250+27.59	0.00	834.73	834.73
E	250+37.59	0.00	834.76	834.75
F	250+47.59	0.00	834.78	834.77
☉ Brg. Pier 1	250+54.59	0.00	834.80	834.80
G	250+64.59	0.00	834.81	834.84
H	250+74.59	0.00	834.82	834.89
I	250+84.59	0.00	834.83	834.94
J	250+94.59	0.00	834.83	834.98
K	251+04.59	0.00	834.83	835.00
L	251+14.59	0.00	834.83	835.00
M	251+24.59	0.00	834.82	834.98
N	251+34.59	0.00	834.81	834.94
O	251+44.59	0.00	834.79	834.89
P	251+54.59	0.00	834.77	834.83
Q	251+64.59	0.00	834.75	834.77
☉ Brg. Pier 2	251+71.59	0.00	834.73	834.73
R	251+81.59	0.00	834.70	834.69
S	251+91.59	0.00	834.66	834.66
T	252+01.59	0.00	834.62	834.62
U	252+11.59	0.00	834.58	834.59
V	252+21.59	0.00	834.53	834.55
W	252+31.59	0.00	834.48	834.49
X	252+41.59	0.00	834.43	834.43
☉ Brg. Pier 3	252+54.59	0.00	834.35	834.35
Y	252+64.59	0.00	834.29	834.29
Z	252+74.59	0.00	834.22	834.23
AA	252+84.59	0.00	834.14	834.16
BB	252+94.59	0.00	834.07	834.08
☉ of S. Abut.	253+07.59	0.00	833.96	833.96
Bk. of S. Abut.	253+09.63	0.00	833.95	833.95

**GIRDER 6**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. of N. Abut.	249+88.74	4.54	834.50	834.50
☉ of N. Abut.	249+90.77	4.54	834.51	834.51
A	250+00.77	4.54	834.55	834.55
B	250+10.77	4.54	834.59	834.59
C	250+20.77	4.54	834.62	834.62
D	250+30.77	4.54	834.65	834.64
E	250+40.77	4.54	834.67	834.66
F	250+50.77	4.54	834.69	834.69
☉ Brg. Pier 1	250+57.77	4.54	834.71	834.71
G	250+67.77	4.54	834.72	834.75
H	250+77.77	4.54	834.73	834.80
I	250+87.77	4.54	834.74	834.85
J	250+97.77	4.54	834.74	834.88
K	251+07.77	4.54	834.74	834.90
L	251+17.77	4.54	834.73	834.90
M	251+27.77	4.54	834.72	834.88
N	251+37.77	4.54	834.71	834.84
O	251+47.77	4.54	834.69	834.79
P	251+57.77	4.54	834.67	834.73
Q	251+67.77	4.54	834.64	834.66
☉ Brg. Pier 2	251+74.77	4.54	834.62	834.62
R	251+84.77	4.54	834.59	834.58
S	251+94.77	4.54	834.56	834.55
T	252+04.77	4.54	834.52	834.52
U	252+14.77	4.54	834.47	834.48
V	252+24.77	4.54	834.42	834.43
W	252+34.77	4.54	834.37	834.38
X	252+44.77	4.54	834.31	834.32
☉ Brg. Pier 3	252+57.77	4.54	834.23	834.23
Y	252+67.77	4.54	834.17	834.17
Z	252+77.77	4.54	834.10	834.11
AA	252+87.77	4.54	834.03	834.04
BB	252+97.77	4.54	833.95	833.96
☉ of S. Abut.	253+10.77	4.54	833.84	833.84
Bk. of S. Abut.	253+12.81	4.54	833.83	833.83

Notes:  
 ① Offsets are from P.G.L. W.B. Roadway.

FILE NAME = H:\P\2004\NO. 10 SIGNAGE-0005 & 0006 L-74 Phase 2\Structure\Final Plans\Microstation\0480101\_0102-68B69-003-Top of Slab Elevations.dgn



USER NAME =	DESIGNED - JAD	REVISED -
	CHECKED - KBC	REVISED -
PLOT SCALE =	DRAWN - KBC	REVISED -
PLOT DATE = 2/8/2016	CHECKED - JAD	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TOP OF SLAB ELEVATIONS  
STRUCTURE NO. 048-0101 (W.B.)**

SHEET NO. 9 OF 61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVBJBR	KNOX	212	63
CONTRACT NO. 68B69			ILLINOIS FED. AID PROJECT	

**GIRDER 7**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. of N. Abut.	250+27.19	-4.54	834.64	834.64
☉ of N. Abut.	250+29.23	-4.54	834.64	834.64
A	250+39.23	-4.54	834.67	834.67
B	250+49.23	-4.54	834.69	834.70
C	250+59.23	-4.54	834.71	834.71
D	250+69.23	-4.54	834.72	834.72
E	250+79.23	-4.54	834.73	834.72
F	250+89.23	-4.54	834.74	834.73
☉ Brg. Pier 1	250+96.23	-4.54	834.74	834.74
G	251+06.23	-4.54	834.74	834.77
H	251+16.23	-4.54	834.73	834.80
I	251+26.23	-4.54	834.72	834.83
J	251+36.23	-4.54	834.71	834.86
K	251+46.23	-4.54	834.69	834.86
L	251+56.23	-4.54	834.67	834.85
M	251+66.23	-4.54	834.65	834.81
N	251+76.23	-4.54	834.62	834.75
O	251+86.23	-4.54	834.59	834.68
P	251+96.23	-4.54	834.55	834.61
Q	252+06.23	-4.54	834.51	834.53
☉ Brg. Pier 2	252+13.23	-4.54	834.48	834.48
R	252+23.23	-4.54	834.43	834.42
S	252+33.23	-4.54	834.38	834.37
T	252+43.23	-4.54	834.32	834.32
U	252+53.23	-4.54	834.26	834.27
V	252+63.23	-4.54	834.20	834.21
W	252+73.23	-4.54	834.13	834.14
X	252+83.23	-4.54	834.06	834.07
☉ Brg. Pier 3	252+96.23	-4.54	833.96	833.96
Y	253+06.23	-4.54	833.88	833.89
Z	253+16.23	-4.54	833.80	833.81
AA	253+26.23	-4.54	833.71	833.72
BB	253+36.23	-4.54	833.61	833.62
☉ of S. Abut.	253+49.23	-4.54	833.49	833.49
Bk. of S. Abut.	253+51.26	-4.54	833.47	833.47

**P.G.L. E.B. ROADWAY**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. of N. Abut.	250+30.37	0.00	834.74	834.74
☉ of N. Abut.	250+32.41	0.00	834.75	834.75
A	250+42.41	0.00	834.77	834.78
B	250+52.41	0.00	834.79	834.80
C	250+62.41	0.00	834.81	834.81
D	250+72.41	0.00	834.82	834.82
E	250+82.41	0.00	834.83	834.82
F	250+92.41	0.00	834.83	834.83
☉ Brg. Pier 1	250+99.41	0.00	834.83	834.83
G	251+09.41	0.00	834.83	834.86
H	251+19.41	0.00	834.83	834.89
I	251+29.41	0.00	834.82	834.92
J	251+39.41	0.00	834.80	834.95
K	251+49.41	0.00	834.78	834.95
L	251+59.41	0.00	834.76	834.93
M	251+69.41	0.00	834.73	834.89
N	251+79.41	0.00	834.70	834.84
O	251+89.41	0.00	834.67	834.77
P	251+99.41	0.00	834.63	834.69
Q	252+09.41	0.00	834.59	834.61
☉ Brg. Pier 2	252+16.41	0.00	834.56	834.56
R	252+26.41	0.00	834.51	834.50
S	252+36.41	0.00	834.46	834.45
T	252+46.41	0.00	834.40	834.40
U	252+56.41	0.00	834.34	834.35
V	252+66.41	0.00	834.27	834.29
W	252+76.41	0.00	834.20	834.22
X	252+86.41	0.00	834.13	834.14
☉ Brg. Pier 3	252+99.41	0.00	834.03	834.03
Y	253+09.41	0.00	833.95	833.95
Z	253+19.41	0.00	833.86	833.87
AA	253+29.41	0.00	833.77	833.79
BB	253+39.41	0.00	833.68	833.69
☉ of S. Abut.	253+52.41	0.00	833.55	833.55
Bk. of S. Abut.	253+54.44	0.00	833.53	833.53

**GIRDER 8**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. of N. Abut.	250+32.39	2.88	834.79	834.79
☉ of N. Abut.	250+34.42	2.88	834.80	834.80
A	250+44.42	2.88	834.82	834.82
B	250+54.42	2.88	834.84	834.84
C	250+64.42	2.88	834.86	834.86
D	250+74.42	2.88	834.87	834.86
E	250+84.42	2.88	834.88	834.87
F	250+94.42	2.88	834.88	834.87
☉ Brg. Pier 1	251+01.42	2.88	834.88	834.88
G	251+11.42	2.88	834.88	834.91
H	251+21.42	2.88	834.87	834.94
I	251+31.42	2.88	834.86	834.97
J	251+41.42	2.88	834.84	834.99
K	251+51.42	2.88	834.82	834.99
L	251+61.42	2.88	834.80	834.97
M	251+71.42	2.88	834.77	834.93
N	251+81.42	2.88	834.74	834.88
O	251+91.42	2.88	834.71	834.80
P	252+01.42	2.88	834.67	834.72
Q	252+11.42	2.88	834.63	834.64
☉ Brg. Pier 2	252+18.42	2.88	834.59	834.59
R	252+28.42	2.88	834.54	834.53
S	252+38.42	2.88	834.49	834.48
T	252+48.42	2.88	834.43	834.43
U	252+58.42	2.88	834.37	834.38
V	252+68.42	2.88	834.30	834.32
W	252+78.42	2.88	834.23	834.25
X	252+88.42	2.88	834.16	834.17
☉ Brg. Pier 3	253+01.42	2.88	834.06	834.06
Y	253+11.42	2.88	833.98	833.98
Z	253+21.42	2.88	833.89	833.90
AA	253+31.42	2.88	833.80	833.81
BB	253+41.42	2.88	833.70	833.71
☉ of S. Abut.	253+54.42	2.88	833.57	833.57
Bk. of S. Abut.	253+56.45	2.88	833.55	833.55

Notes:  
 ① Offsets are from P.G.L. E.B. Roadway.

FILE NAME = H:\P\2004\NO. 10 SINGAR-0005 & 0006 L-74 Phase 2\Structure\Final Plans\Microstation\0480101\_0102-68B69-010-Top of Slab Elevations.dgn



USER NAME =	DESIGNED - JAD	REVISED -
	CHECKED - KBC	REVISED -
PLOT SCALE =	DRAWN - KBC	REVISED -
PLOT DATE = 2/8/2016	CHECKED - JAD	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TOP OF SLAB ELEVATIONS  
STRUCTURE NO. 048-0102 (E.B.)**

SHEET NO. 10 OF 61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)BR	KNOX	212	64
CONTRACT NO. 68B69				
ILLINOIS FED. AID PROJECT				

FILE NAME = H:\P\2048\WD\_10\_SINGLES\0005 & 0006 1-74 Phase 2\Structure\Final Plans\Microstation\048010\_0102-68B69-011-Top of Slab Elevations.dgn

**GIRDER 9**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. of N. Abut.	250+37.58	10.29	834.92	834.92
☉ of N. Abut.	250+39.61	10.29	834.93	834.93
A	250+49.61	10.29	834.95	834.95
B	250+59.61	10.29	834.97	834.97
C	250+69.61	10.29	834.98	834.98
D	250+79.61	10.29	834.99	834.98
E	250+89.61	10.29	834.99	834.98
F	250+99.61	10.29	835.00	834.99
☉ Brg. Pier 1	251+06.61	10.29	834.99	834.99
G	251+16.61	10.29	834.99	835.02
H	251+26.61	10.29	834.98	835.05
I	251+36.61	10.29	834.97	835.08
J	251+46.61	10.29	834.95	835.09
K	251+56.61	10.29	834.93	835.09
L	251+66.61	10.29	834.90	835.07
M	251+76.61	10.29	834.87	835.03
N	251+86.61	10.29	834.84	834.97
O	251+96.61	10.29	834.80	834.90
P	252+06.61	10.29	834.76	834.82
Q	252+16.61	10.29	834.72	834.74
☉ Brg. Pier 2	252+23.61	10.29	834.68	834.68
R	252+33.61	10.29	834.63	834.62
S	252+43.61	10.29	834.58	834.57
T	252+53.61	10.29	834.52	834.52
U	252+63.61	10.29	834.45	834.46
V	252+73.61	10.29	834.38	834.40
W	252+83.61	10.29	834.31	834.32
X	252+93.61	10.29	834.24	834.24
☉ Brg. Pier 3	253+06.61	10.29	834.13	834.13
Y	253+16.61	10.29	834.05	834.05
Z	253+26.61	10.29	833.96	833.97
AA	253+36.61	10.29	833.87	833.88
BB	253+46.61	10.29	833.77	833.78
☉ of S. Abut.	253+59.61	10.29	833.64	833.64
Bk. of S. Abut.	253+61.65	10.29	833.62	833.62

**☉ E.B. ROADWAY**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. of N. Abut.	250+38.77	12.00	834.95	834.95
☉ of N. Abut.	250+40.81	12.00	834.96	834.96
A	250+50.81	12.00	834.98	834.98
B	250+60.81	12.00	834.99	835.00
C	250+70.81	12.00	835.01	835.01
D	250+80.81	12.00	835.02	835.01
E	250+90.81	12.00	835.02	835.01
F	251+00.81	12.00	835.02	835.01
☉ Brg. Pier 1	251+07.81	12.00	835.02	835.02
G	251+17.81	12.00	835.01	835.04
H	251+27.81	12.00	835.01	835.07
I	251+37.81	12.00	834.99	835.10
J	251+47.81	12.00	834.97	835.12
K	251+57.81	12.00	834.95	835.12
L	251+67.81	12.00	834.93	835.10
M	251+77.81	12.00	834.90	835.06
N	251+87.81	12.00	834.86	835.00
O	251+97.81	12.00	834.83	834.92
P	252+07.81	12.00	834.78	834.84
Q	252+17.81	12.00	834.74	834.76
☉ Brg. Pier 2	252+24.81	12.00	834.70	834.70
R	252+34.81	12.00	834.65	834.64
S	252+44.81	12.00	834.60	834.59
T	252+54.81	12.00	834.54	834.54
U	252+64.81	12.00	834.47	834.48
V	252+74.81	12.00	834.40	834.42
W	252+84.81	12.00	834.33	834.34
X	252+94.81	12.00	834.25	834.26
☉ Brg. Pier 3	253+07.81	12.00	834.15	834.15
Y	253+17.81	12.00	834.06	834.07
Z	253+27.81	12.00	833.97	833.99
AA	253+37.81	12.00	833.88	833.89
BB	253+47.81	12.00	833.78	833.79
☉ of S. Abut.	253+60.81	12.00	833.65	833.65
Bk. of S. Abut.	253+62.84	12.00	833.63	833.63

**GIRDER 10**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. of N. Abut.	250+42.77	17.71	834.87	834.87
☉ of N. Abut.	250+44.81	17.71	834.88	834.88
A	250+54.81	17.71	834.89	834.90
B	250+64.81	17.71	834.91	834.91
C	250+74.81	17.71	834.92	834.92
D	250+84.81	17.71	834.93	834.92
E	250+94.81	17.71	834.93	834.92
F	251+04.81	17.71	834.93	834.92
☉ Brg. Pier 1	251+11.81	17.71	834.93	834.93
G	251+21.81	17.71	834.92	834.95
H	251+31.81	17.71	834.91	834.98
I	251+41.81	17.71	834.90	835.00
J	251+51.81	17.71	834.88	835.02
K	251+61.81	17.71	834.85	835.02
L	251+71.81	17.71	834.83	835.00
M	251+81.81	17.71	834.79	834.95
N	251+91.81	17.71	834.76	834.89
O	252+01.81	17.71	834.72	834.82
P	252+11.81	17.71	834.68	834.73
Q	252+21.81	17.71	834.63	834.65
☉ Brg. Pier 2	252+28.81	17.71	834.59	834.59
R	252+38.81	17.71	834.54	834.53
S	252+48.81	17.71	834.48	834.48
T	252+58.81	17.71	834.42	834.42
U	252+68.81	17.71	834.36	834.36
V	252+78.81	17.71	834.29	834.30
W	252+88.81	17.71	834.21	834.22
X	252+98.81	17.71	834.13	834.14
☉ Brg. Pier 3	253+11.81	17.71	834.03	834.03
Y	253+21.81	17.71	833.94	833.94
Z	253+31.81	17.71	833.85	833.86
AA	253+41.81	17.71	833.75	833.77
BB	253+51.81	17.71	833.65	833.67
☉ of S. Abut.	253+64.81	17.71	833.52	833.52
Bk. of S. Abut.	253+66.84	17.71	833.50	833.50

Notes:  
 ① Offsets are from P.G.L. E.B. Roadway.



USER NAME =	DESIGNED - JAD	REVISED -
	CHECKED - KBC	REVISED -
PLOT SCALE =	DRAWN - KBC	REVISED -
PLOT DATE = 2/8/2016	CHECKED - JAD	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TOP OF SLAB ELEVATIONS  
STRUCTURE NO. 048-0102 (E.B.)**

SHEET NO. 11 OF 61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)BR	KNOX	212	65
CONTRACT NO. 68B69				
ILLINOIS FED. AID PROJECT				

**GIRDER 11**

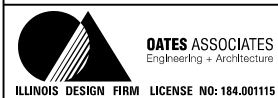
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. of N. Abut.	250+47.96	25.13	834.76	834.76
☉ of N. Abut.	250+50.00	25.13	834.76	834.76
A	250+60.00	25.13	834.78	834.79
B	250+70.00	25.13	834.80	834.80
C	250+80.00	25.13	834.80	834.80
D	250+90.00	25.13	834.81	834.80
E	251+00.00	25.13	834.81	834.80
F	251+10.00	25.13	834.81	834.80
☉ Brg. Pier 1	251+17.00	25.13	834.80	834.80
G	251+27.00	25.13	834.80	834.82
H	251+37.00	25.13	834.78	834.85
I	251+47.00	25.13	834.76	834.87
J	251+57.00	25.13	834.74	834.89
K	251+67.00	25.13	834.72	834.88
L	251+77.00	25.13	834.69	834.86
M	251+87.00	25.13	834.66	834.82
N	251+97.00	25.13	834.62	834.75
O	252+07.00	25.13	834.58	834.67
P	252+17.00	25.13	834.53	834.59
Q	252+27.00	25.13	834.48	834.50
☉ Brg. Pier 2	252+34.00	25.13	834.45	834.45
R	252+44.00	25.13	834.39	834.38
S	252+54.00	25.13	834.33	834.32
T	252+64.00	25.13	834.27	834.27
U	252+74.00	25.13	834.20	834.21
V	252+84.00	25.13	834.13	834.14
W	252+94.00	25.13	834.05	834.06
X	253+04.00	25.13	833.97	833.98
☉ Brg. Pier 3	253+17.00	25.13	833.86	833.86
Y	253+27.00	25.13	833.77	833.78
Z	253+37.00	25.13	833.68	833.69
AA	253+47.00	25.13	833.58	833.59
BB	253+57.00	25.13	833.48	833.49
☉ of S. Abut.	253+70.00	25.13	833.34	833.34
Bk. of S. Abut.	253+72.03	25.13	833.32	833.32

**GIRDER 12**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. of N. Abut.	250+53.16	32.54	834.62	834.62
☉ of N. Abut.	250+55.19	32.54	834.62	834.62
A	250+65.19	32.54	834.63	834.64
B	250+75.19	32.54	834.65	834.65
C	250+85.19	32.54	834.65	834.65
D	250+95.19	32.54	834.66	834.65
E	251+05.19	32.54	834.66	834.65
F	251+15.19	32.54	834.65	834.64
☉ Brg. Pier 1	251+22.19	32.54	834.65	834.65
G	251+32.19	32.54	834.63	834.66
H	251+42.19	32.54	834.62	834.69
I	251+52.19	32.54	834.60	834.71
J	251+62.19	32.54	834.58	834.72
K	251+72.19	32.54	834.55	834.71
L	251+82.19	32.54	834.52	834.69
M	251+92.19	32.54	834.48	834.64
N	252+02.19	32.54	834.44	834.58
O	252+12.19	32.54	834.40	834.50
P	252+22.19	32.54	834.35	834.41
Q	252+32.19	32.54	834.30	834.32
☉ Brg. Pier 2	252+39.19	32.54	834.26	834.26
R	252+49.19	32.54	834.20	834.20
S	252+59.19	32.54	834.14	834.14
T	252+69.19	32.54	834.08	834.08
U	252+79.19	32.54	834.01	834.01
V	252+89.19	32.54	833.93	833.94
W	252+99.19	32.54	833.85	833.87
X	253+09.19	32.54	833.77	833.78
☉ Brg. Pier 3	253+22.19	32.54	833.66	833.66
Y	253+32.19	32.54	833.57	833.57
Z	253+42.19	32.54	833.47	833.48
AA	253+52.19	32.54	833.37	833.39
BB	253+62.19	32.54	833.27	833.28
☉ of S. Abut.	253+75.19	32.54	833.13	833.13
Bk. of S. Abut.	253+77.23	32.54	833.11	833.11

Notes:  
 ① Offsets are from P.G.L. E.B. Roadway.

FILE NAME = H:\P\2048\NO. 10 STRUCTURE\Final Plans\Microstation\048010\_0102-68B69-012-Top of Slab Elevations.dgn



USER NAME =	DESIGNED - JAD	REVISED -
	CHECKED - KBC	REVISED -
PLOT SCALE =	DRAWN - KBC	REVISED -
PLOT DATE = 2/8/2016	CHECKED - JAD	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**TOP OF SLAB ELEVATIONS  
 STRUCTURE NO. 048-0102 (E.B.)**

SHEET NO. 12 OF 61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HV)BR	KNOX	212	66
CONTRACT NO. 68B69			ILLINOIS FED. AID PROJECT	

**EAST EDGE OF SHOULDER**

Location	Station	Offset	Theoretical Grade Elevations
N. End of North Appr. Slab	249+32.97	-34.00	834.08
A1	249+42.97	-34.00	834.14
A2	249+52.97	-34.00	834.20
S. End of North Appr. Slab	249+62.97	-34.00	834.26
N. End of South Appr. Slab	252+84.60	-34.00	833.94
A3	252+94.60	-34.00	833.86
A4	253+04.60	-34.00	833.78
S. End of South Appr. Slab	253+14.60	-34.00	833.70

**EAST EDGE OF PAVEMENT**

Location	Station	Offset	Theoretical Grade Elevations
N. End of North Appr. Slab	249+39.97	-24.00	834.33
A1	249+49.97	-24.00	834.39
A2	249+59.97	-24.00	834.45
S. End of North Appr. Slab	249+69.97	-24.00	834.50
N. End of South Appr. Slab	252+91.60	-24.00	834.09
A3	253+01.60	-24.00	834.01
A4	253+11.60	-24.00	833.93
S. End of South Appr. Slab	253+21.60	-24.00	833.84

**☐ W.B. ROADWAY**

Location	Station	Offset	Theoretical Grade Elevations
N. End of North Appr. Slab	249+48.38	-12.00	834.57
A1	249+58.38	-12.00	834.63
A2	249+68.38	-12.00	834.68
S. End of North Appr. Slab	249+78.38	-12.00	834.73
N. End of South Appr. Slab	253+00.00	-12.00	834.21
A3	253+10.00	-12.00	834.13
A4	253+20.00	-12.00	834.04
S. End of South Appr. Slab	253+30.00	-12.00	833.95

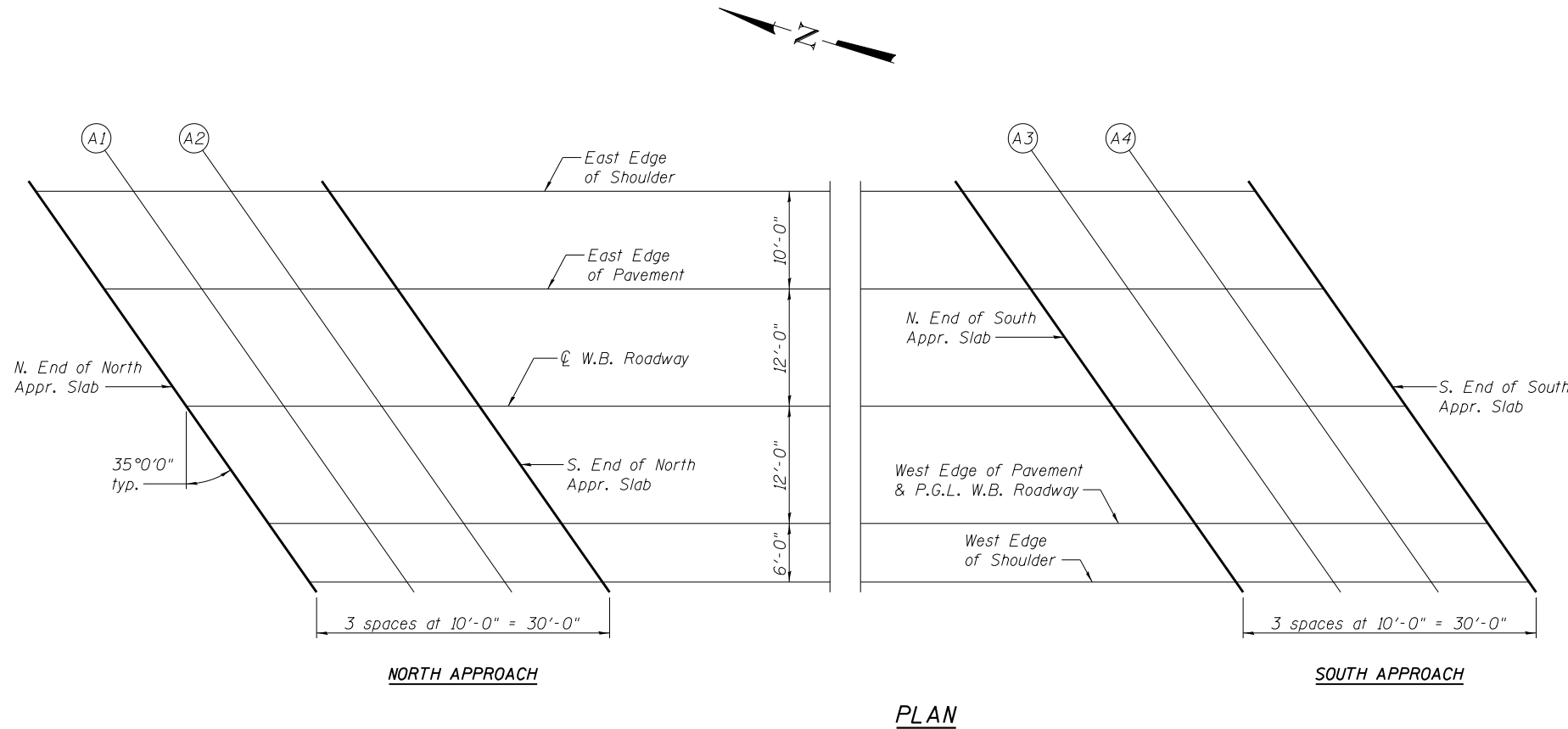
**WEST EDGE OF PAVEMENT & P.G.L. W.B. ROADWAY**

Location	Station	Offset	Theoretical Grade Elevations
N. End of North Appr. Slab	249+56.78	0.00	834.43
A1	249+66.78	0.00	834.49
A2	249+76.78	0.00	834.54
S. End of North Appr. Slab	249+86.78	0.00	834.59
N. End of South Appr. Slab	253+08.41	0.00	833.96
A3	253+18.41	0.00	833.87
A4	253+28.41	0.00	833.78
S. End of South Appr. Slab	253+38.41	0.00	833.69

**WEST EDGE OF SHOULDER**

Location	Station	Offset	Theoretical Grade Elevations
N. End of North Appr. Slab	249+60.98	6.00	834.33
A1	249+70.98	6.00	834.38
A2	249+80.98	6.00	834.43
S. End of North Appr. Slab	249+90.98	6.00	834.48
N. End of South Appr. Slab	253+12.61	6.00	833.80
A3	253+22.61	6.00	833.71
A4	253+32.61	6.00	833.62
S. End of South Appr. Slab	253+42.61	6.00	833.52

Notes:  
 ① Offsets are from P.G.L. W.B. Roadway.



FILE NAME = H:\P\2014\10\_SIN\48-0101\_0102-68B69-013-Top of Approach Slab Elevations.dgn

**EAST EDGE OF SHOULDER**

Location	Station	Offset	Theoretical Grade Elevations
N. End of North Appr. Slab	249+97.39	-6.00	834.51
A1	250+07.39	-6.00	834.54
A2	250+17.39	-6.00	834.58
S. End of North Appr. Slab	250+27.39	-6.00	834.61
N. End of South Appr. Slab	253+49.02	-6.00	833.46
A3	253+59.02	-6.00	833.36
A4	253+69.02	-6.00	833.25
S. End of South Appr. Slab	253+79.02	-6.00	833.14

**EAST EDGE OF PAVEMENT & P.G.L. E.B. ROADWAY**

Location	Station	Offset	Theoretical Grade Elevations
N. End of North Appr. Slab	250+01.59	0.00	834.65
A1	250+11.59	0.00	834.68
A2	250+21.59	0.00	834.72
S. End of North Appr. Slab	250+31.59	0.00	834.75
N. End of South Appr. Slab	253+53.22	0.00	833.54
A3	253+63.22	0.00	833.44
A4	253+73.22	0.00	833.33
S. End of South Appr. Slab	253+83.22	0.00	833.22

**☉ E.B. ROADWAY**

Location	Station	Offset	Theoretical Grade Elevations
N. End of North Appr. Slab	250+10.00	12.00	834.87
A1	250+20.00	12.00	834.90
A2	250+30.00	12.00	834.93
S. End of North Appr. Slab	250+40.00	12.00	834.95
N. End of South Appr. Slab	253+61.62	12.00	833.64
A3	253+71.62	12.00	833.54
A4	253+81.62	12.00	833.42
S. End of South Appr. Slab	253+91.62	12.00	833.31

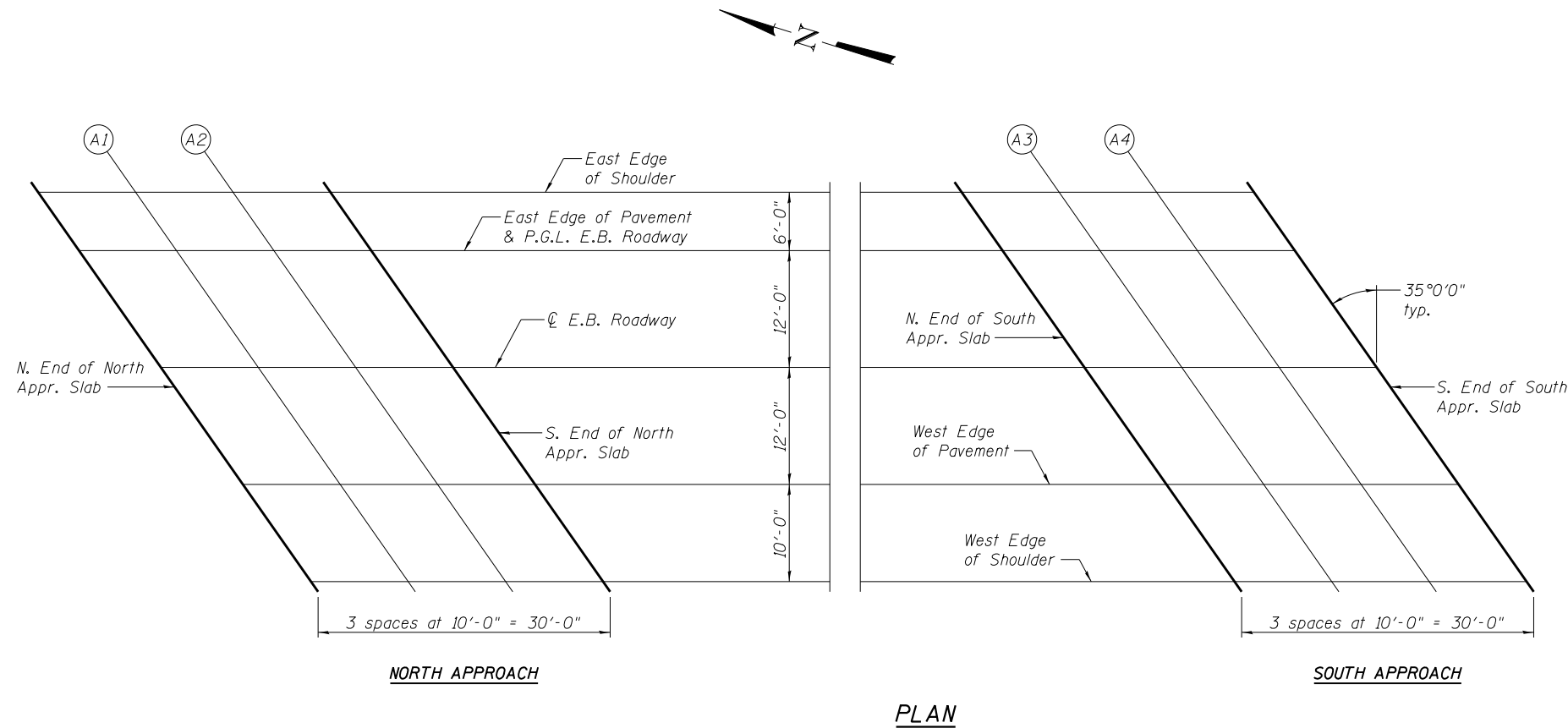
**WEST EDGE OF PAVEMENT**

Location	Station	Offset	Theoretical Grade Elevations
N. End of North Appr. Slab	250+18.40	24.00	834.71
A1	250+28.40	24.00	834.74
A2	250+38.40	24.00	834.76
S. End of North Appr. Slab	250+48.40	24.00	834.78
N. End of South Appr. Slab	253+70.03	24.00	833.37
A3	253+80.03	24.00	833.26
A4	253+90.03	24.00	833.14
S. End of South Appr. Slab	254+00.03	24.00	833.02

**WEST EDGE OF SHOULDER**

Location	Station	Offset	Theoretical Grade Elevations
N. End of North Appr. Slab	250+25.40	34.00	834.52
A1	250+35.40	34.00	834.55
A2	250+45.40	34.00	834.57
S. End of North Appr. Slab	250+55.40	34.00	834.59
N. End of South Appr. Slab	253+77.03	34.00	833.08
A3	253+87.03	34.00	832.97
A4	253+97.03	34.00	832.85
S. End of South Appr. Slab	254+07.03	34.00	832.73

Notes:  
 ① Offsets are from P.G.L. E.B. Roadway.



**PLAN**

FILE NAME = H:\P\2014\10\_SIN\48-0102\_0102-68B69-014-Top of Approach Slab Elevations.dgn



USER NAME =	DESIGNED - JAD	REVISED -
	CHECKED - KBC	REVISED -
PLOT SCALE =	DRAWN - KBC	REVISED -
PLOT DATE = 2/8/2016	CHECKED - JAD	REVISED -

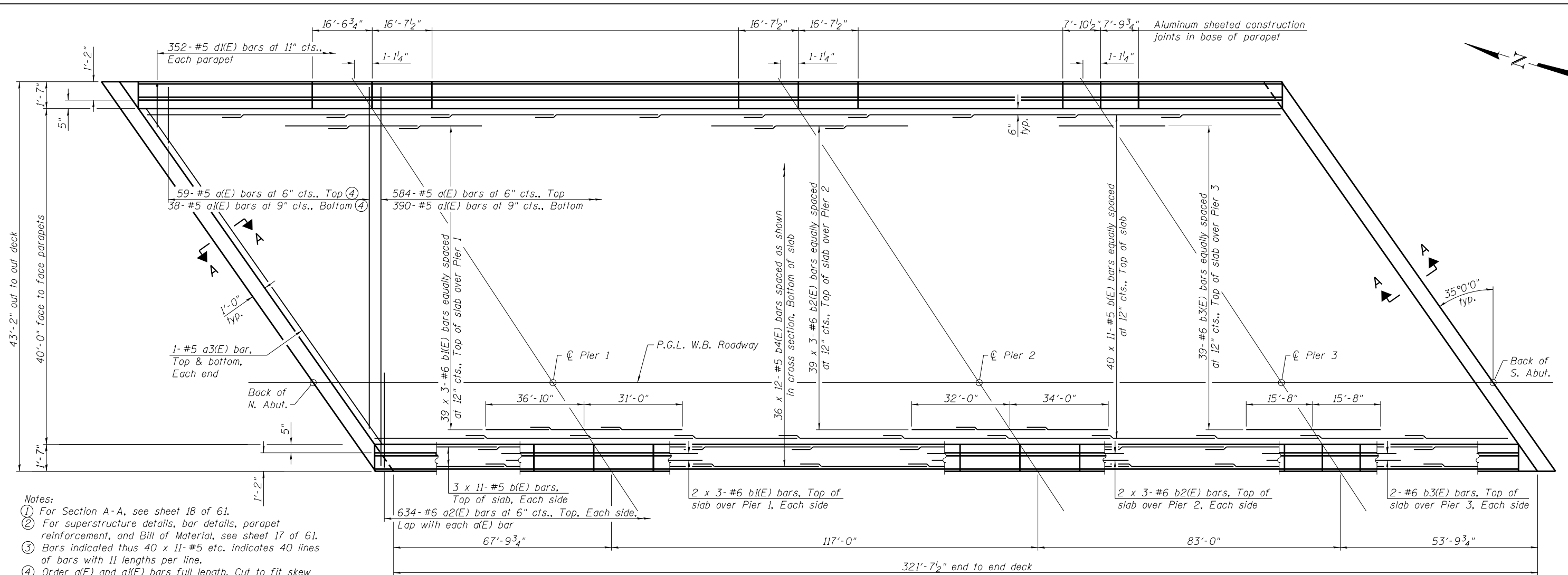
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TOP OF APPROACH SLAB ELEVATIONS  
STRUCTURE NO. 048-0102 (E.B.)**

SHEET NO. 14 OF 61 SHEETS

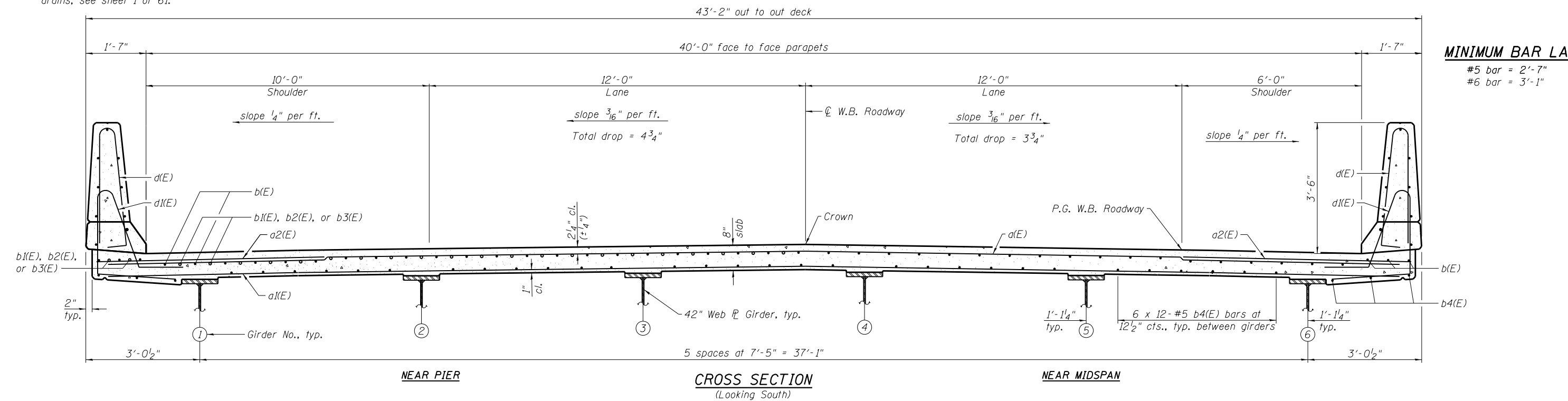
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)BR	KNOX	212	68
				CONTRACT NO. 68B69
ILLINOIS FED. AID PROJECT				





- Notes:
- ① For Section A-A, see sheet 18 of 61.
  - ② For superstructure details, bar details, parapet reinforcement, and Bill of Material, see sheet 17 of 61.
  - ③ Bars indicated thus 40 x 11-#5 etc. indicates 40 lines of bars with 11 lengths per line.
  - ④ Order d(E) and a(E) bars full length. Cut to fit skew and use remainder of bars in opposite end.
  - ⑤ Floor drains not shown for clarity. For location of floor drains, see sheet 1 of 61.

**PLAN**

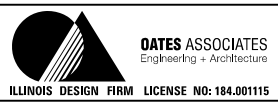


**MINIMUM BAR LAP**

- #5 bar = 2'-7"
- #6 bar = 3'-1"

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SUPERSTRUCTURE  
STRUCTURE NO. 048-0101 (W.B.)**

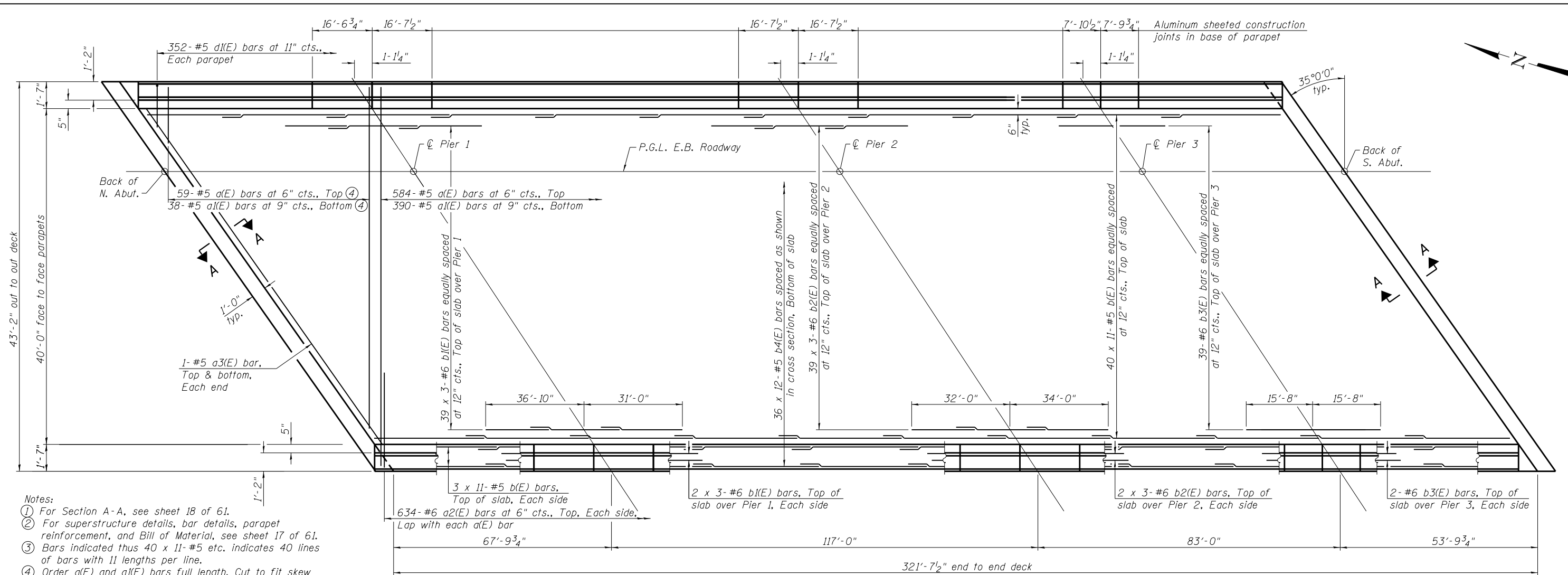


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PLOT SCALE =	CHECKED - JAD	REVISED -
PLOT DATE = 2/8/2016	DRAWN - HJC	REVISED -
	CHECKED - JAD	REVISED -

F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)BR	KNOX	212	69
CONTRACT NO. 68B69				
ILLINOIS FED. AID PROJECT				

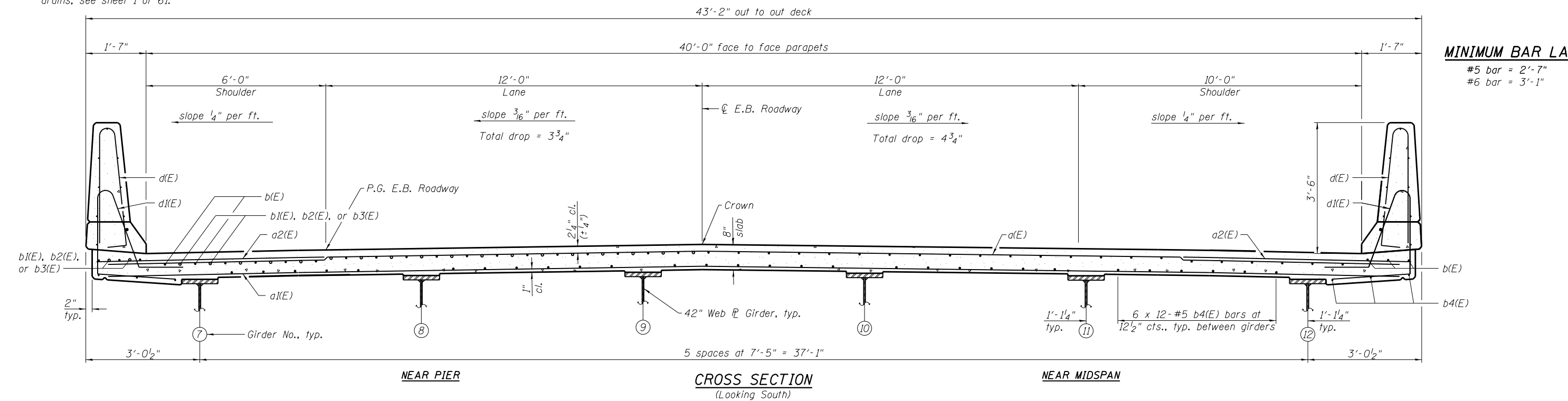
SHEET NO. 15 OF 61 SHEETS

FILE NAME = H:\P\29048\WD 10 519048-0005 & 0006 1-74 Phase 2\Structure\Final Plans\Microstation\0480101\_0102-68B69-015-Superstructure (W.B.).dgn



- Notes:
- ① For Section A-A, see sheet 18 of 61.
  - ② For superstructure details, bar details, parapet reinforcement, and Bill of Material, see sheet 17 of 61.
  - ③ Bars indicated thus 40 x 11-#5 etc. indicates 40 lines of bars with 11 lengths per line.
  - ④ Order a(E) and a(E) bars full length. Cut to fit skew and use remainder of bars in opposite end.
  - ⑤ Floor drains not shown for clarity. For location of floor drains, see sheet 1 of 61.

**PLAN**



**CROSS SECTION**  
(Looking South)

**MINIMUM BAR LAP**  
 #5 bar = 2'-7"  
 #6 bar = 3'-1"

FILE NAME = H:\P\29048\WD 10 SING48-0005 & 0006 1-74 Phase 2\Structure\Final Plans\Microstation\0480101\_0102-68859-016-Superstructure\_E.B.dgn

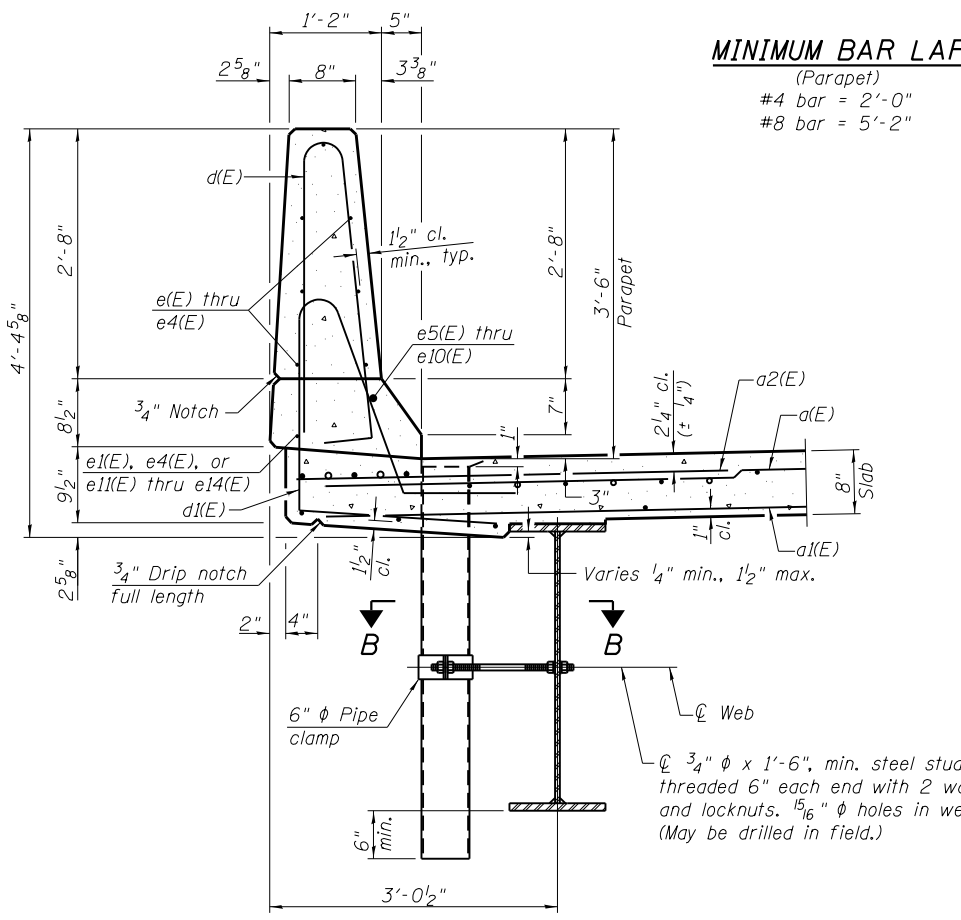
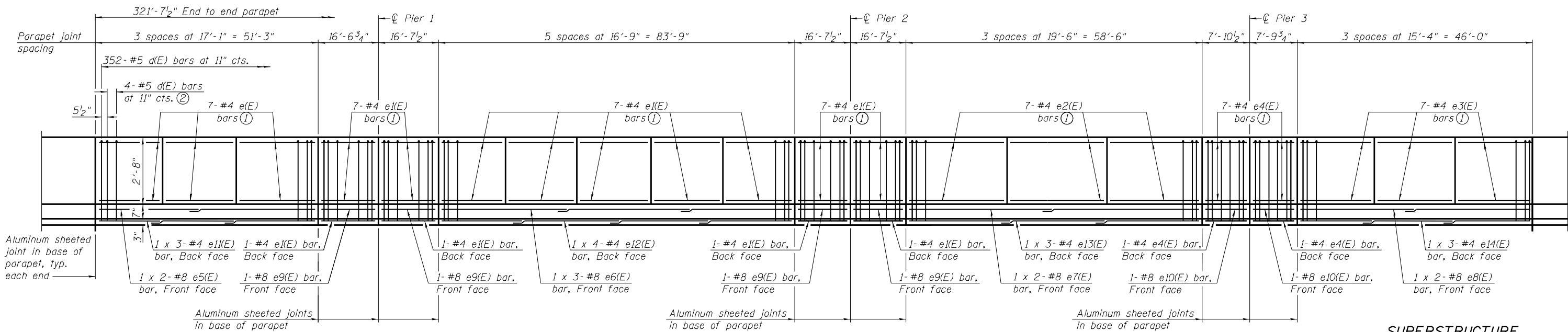


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	CHECKED - JAD	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

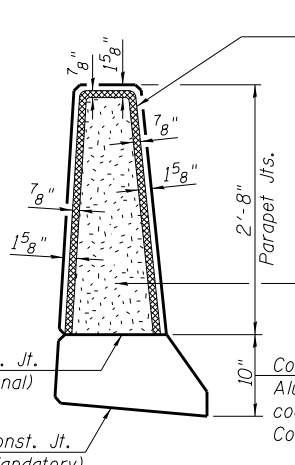
**SUPERSTRUCTURE**  
**STRUCTURE NO. 048-0102 (E.B.)**  
SHEET NO. 16 OF 61 SHEETS

F.A.I. RTE. 74	SECTION (48-26HVB)BR	COUNTY KNOX	TOTAL SHEETS 212	SHEET NO. 70
CONTRACT NO. 68B69				
ILLINOIS FED. AID PROJECT				



**MINIMUM BAR LAP**  
(Parapet)  
#4 bar = 2'-0"  
#8 bar = 5'-2"

**INSIDE ELEVATION OF PARAPET**  
(East parapet shown, west parapet similar)



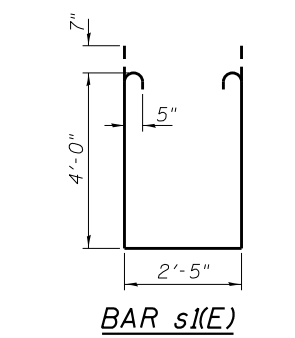
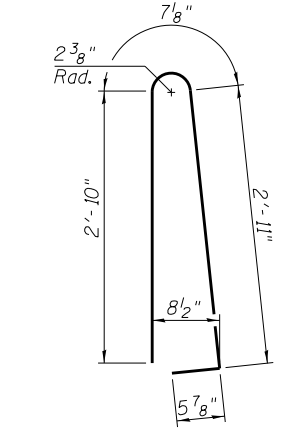
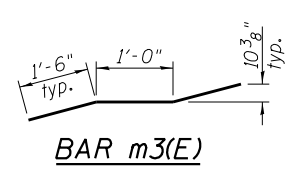
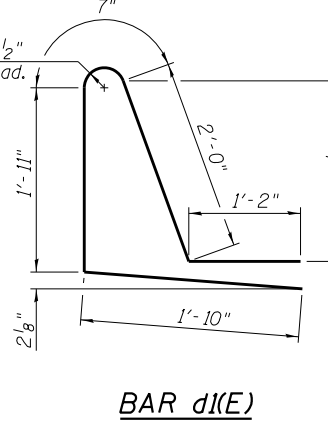
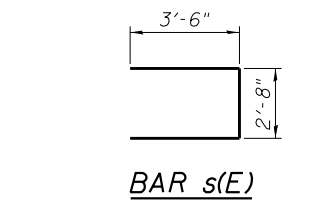
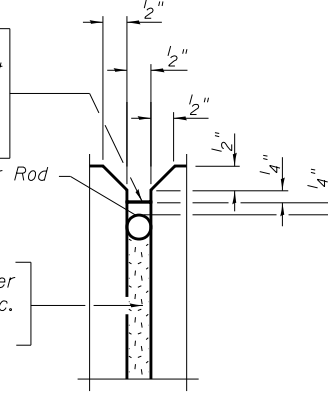
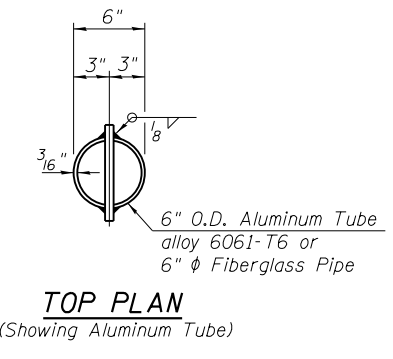
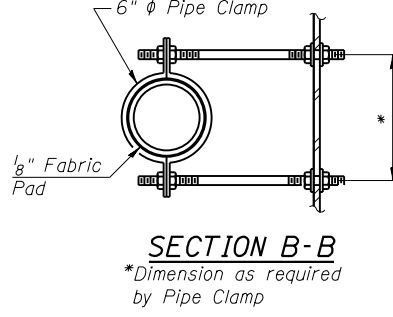
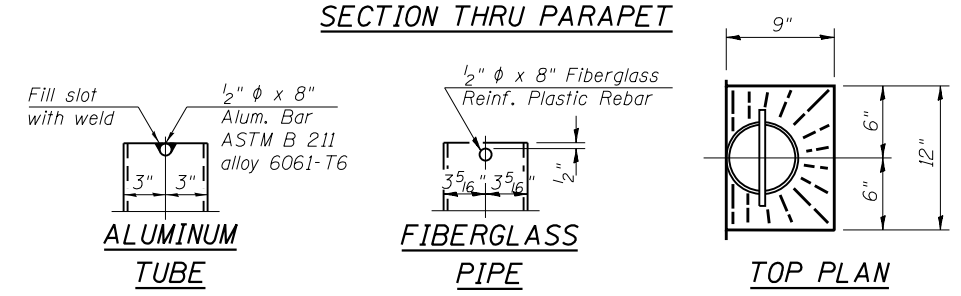
Non-staining gray one component non-sag elastomeric gun grade polyurethane sealant meeting the requirements of ASTM C-920, Type S, Grade NS, Class 25, use T with a 5/8" backer rod.

1/2" Preformed Self-Expanding Cork Joint Filler according to Article 1051.07 of the Std. Spec. Cost included with Concrete Superstructure.

Const. Jts. at Piers and Abutments 1/8" Aluminum sheet ASTM B 209 alloy 3003-H14, coated to minimize reaction with wet concrete. Cost included with Concrete Superstructure

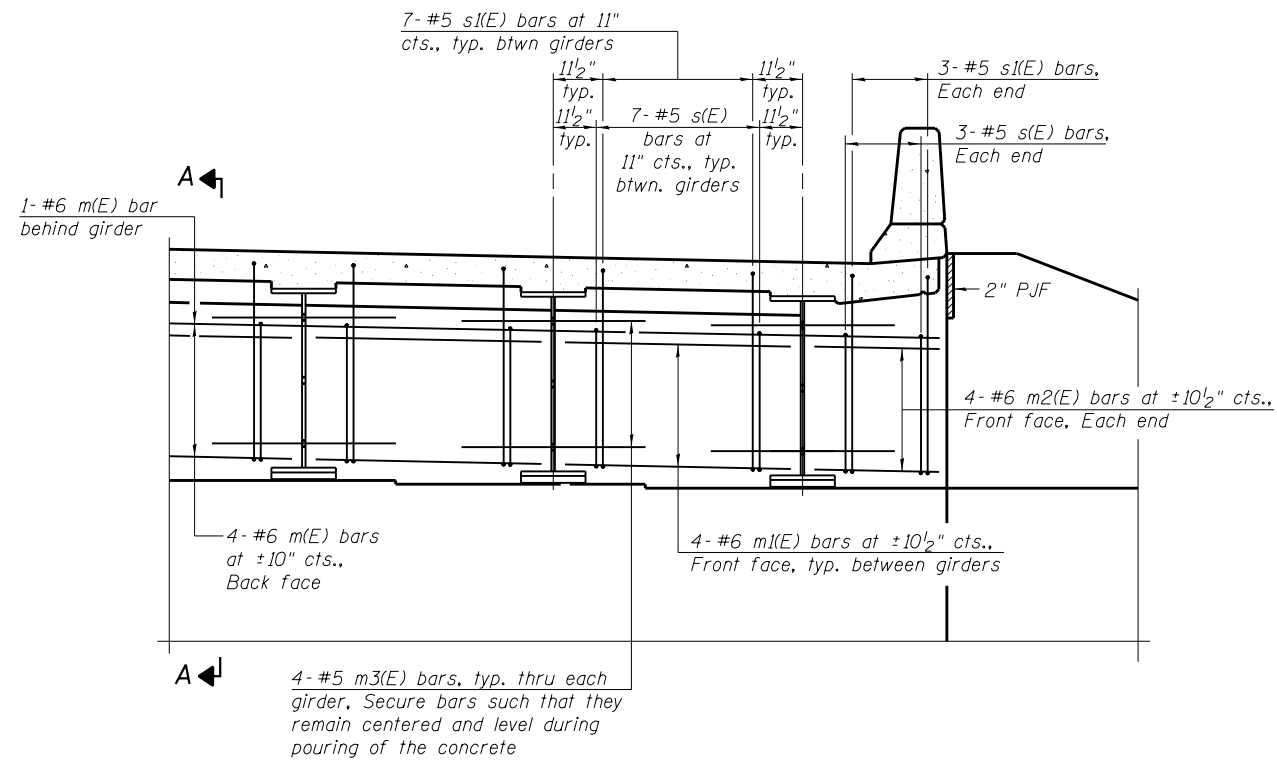
**PARAPET JOINT DETAILS**

- Notes:
- See section thru parapet.
  - Typical parapet ends and each side of aluminum sheeted joints.
  - Bars indicated thus 1 x 2-#8 etc. indicates 1 line of bars with 2 lengths per line.
  - Floor drains need not be painted.
  - Fiberglass pipe shall conform to ASTM D 2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.
  - Galvanize clamping device according to AASHTO M232. Cost of clamping device and inserts is included with Floor Drains.

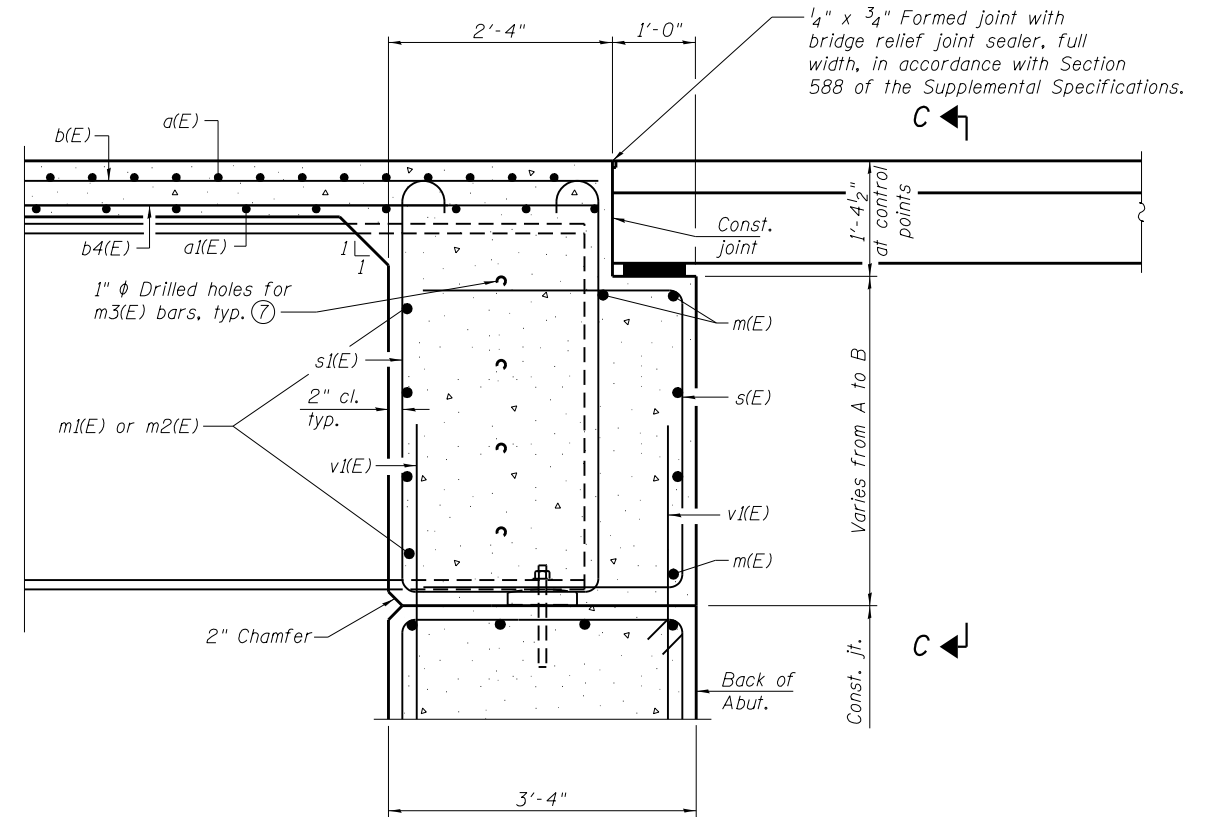


**SUPERSTRUCTURE BILL OF MATERIAL**  
(Two Structures)

Bar	No.	Size	Length	Shape
a(E)	1286	#5	42'-6"	—
a1(E)	856	#5	41'-10"	—
a2(E)	2536	#6	6'-6"	—
a3(E)	8	#5	51'-10"	—
b(E)	1012	#5	31'-7"	—
b1(E)	258	#6	24'-8"	—
b2(E)	258	#6	24'-1"	—
b3(E)	86	#6	31'-4"	—
b4(E)	864	#5	29'-2"	—
d(E)	1728	#5	6'-10"	⌒
d1(E)	1408	#5	7'-6"	⌒
e(E)	84	#4	16'-9"	—
e1(E)	268	#4	16'-3"	—
e2(E)	84	#4	19'-2"	—
e3(E)	84	#4	15'-0"	—
e4(E)	64	#4	7'-6"	—
e5(E)	8	#8	28'-1"	—
e6(E)	12	#8	31'-3"	—
e7(E)	8	#8	31'-8"	—
e8(E)	8	#8	25'-5"	—
e9(E)	16	#8	16'-3"	—
e10(E)	8	#8	7'-6"	—
e11(E)	12	#4	18'-4"	—
e12(E)	16	#4	22'-5"	—
e13(E)	12	#4	20'-9"	—
e14(E)	12	#4	16'-7"	—
m(E)	20	#6	52'-3"	—
m1(E)	80	#6	8'-7"	—
m2(E)	32	#6	3'-3"	—
m3(E)	96	#5	4'-0"	—
s(E)	164	#5	9'-8"	⌒
s1(E)	164	#5	11'-7"	⌒
Concrete Superstructure		Cu. Yd.		977.6
Reinforcement Bars, Epoxy Coated		Pound		242,670



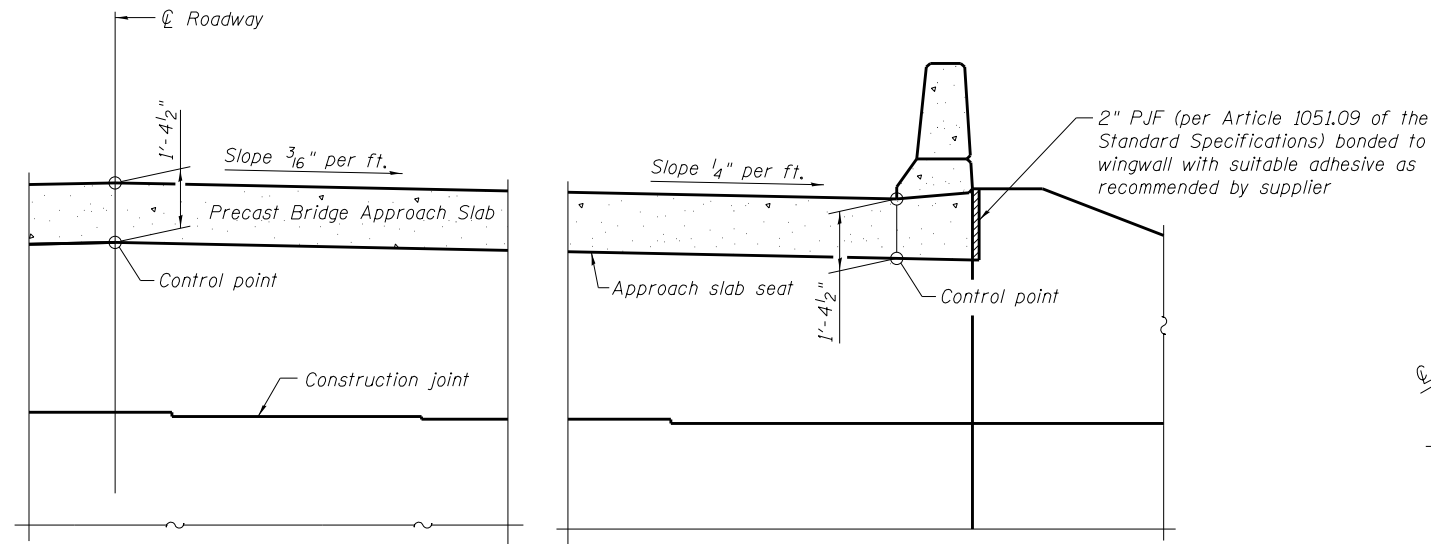
**DIAPHRAGM ELEVATION AT ABUTMENT**



**SECTION A-A**  
(Dimensions at Rt. L's)

**DIMENSION TABLE**

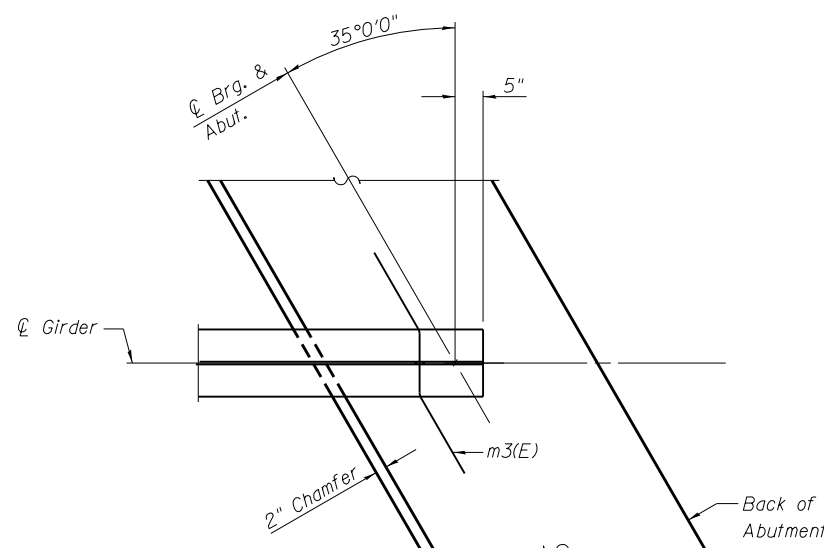
Abutment	A	B
W.B. North	3'-0 3/4"	3'-2 7/8"
W.B. South	3'-0 5/8"	3'-2 7/8"
E.B. North	3'-0 5/8"	3'-2 7/8"
E.B. South	3'-0 1/2"	3'-3"



**SECTION C-C**

**CONTROL POINT ELEVATIONS ⑧**

Abutment	East Parapet	Center Roadway	West Parapet
W.B. North	832.88	833.35	833.10
W.B. South	832.55	832.83	832.41
E.B. North	833.23	833.58	833.21
E.B. South	832.07	832.25	831.69



**PARTIAL PLAN AT ABUTMENT**  
(Showing bottom flange of girder)

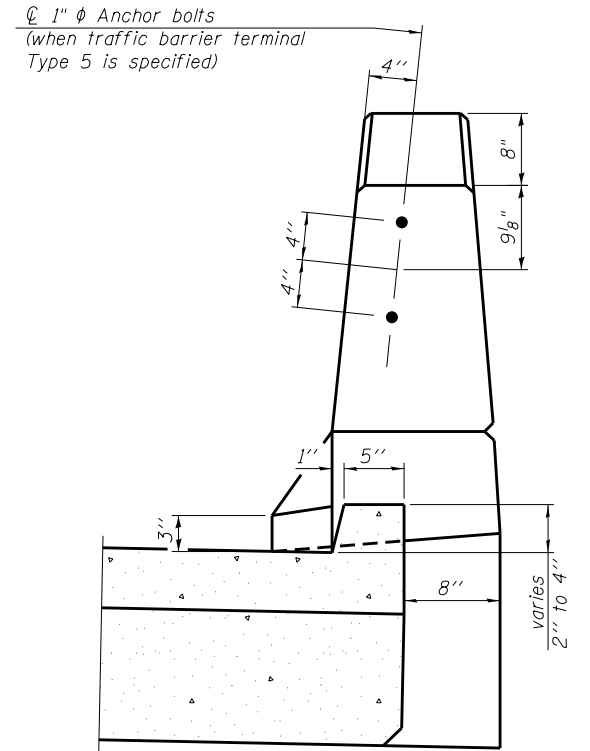
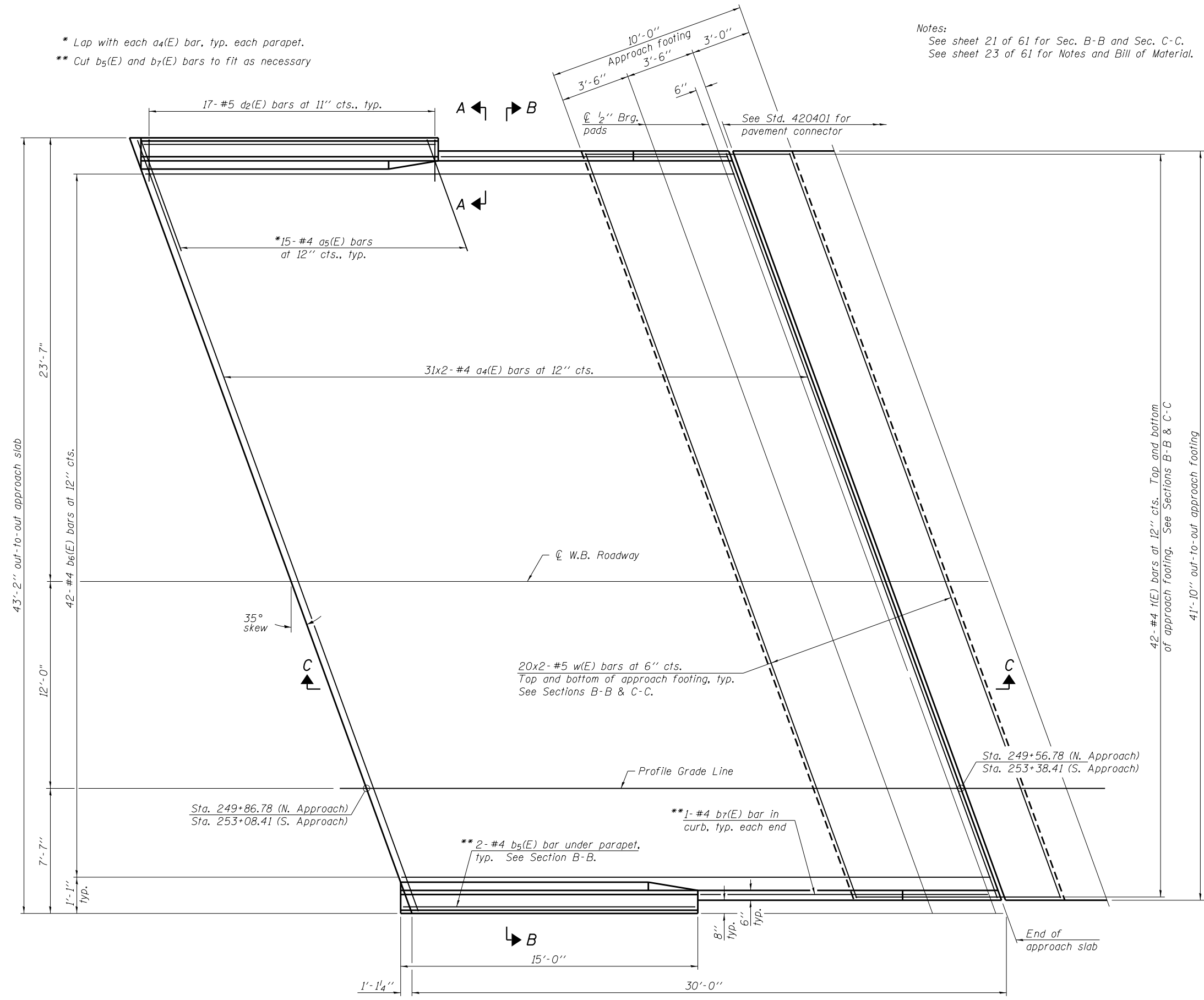
**Notes:**

- ① Reinforcement bars in diaphragm are billed with superstructure on sheet 17 of 61.
- ② Concrete in diaphragm is included with Concrete Superstructure on sheet 17 of 61.
- ③ For details of bars m3(E), s(E), and s(E), see sheet 17 of 61.
- ④ The s(E) and s(E) bars shall be placed parallel to the girders. Spacing for these bars shall be at right angles to the girders.
- ⑤ The approach slab seat shall have a constant slope determined from the control points shown.
- ⑥ For bearing details, see sheet 27 of 61.
- ⑦ For hole locations, see sheet 25 of 61.
- ⑧ Control point elevations are taken at top of approach slab seat as shown in Section C-C.

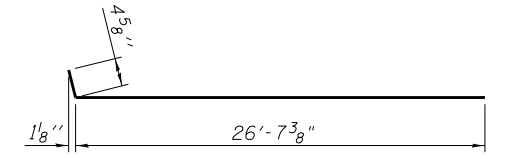
FILE NAME = H:\P\29048\NO. 10. SINGAR-0005 & 0006 1-74 Phase 2\Structure\Final Plans\Microstation\0480101\_0102-68B69-018-Diaphragm\_Details.dgn

\* Lap with each a<sub>4</sub>(E) bar, typ. each parapet.  
 \*\* Cut b<sub>5</sub>(E) and b<sub>7</sub>(E) bars to fit as necessary

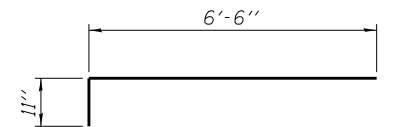
Notes:  
 See sheet 21 of 61 for Sec. B-B and Sec. C-C.  
 See sheet 23 of 61 for Notes and Bill of Material.



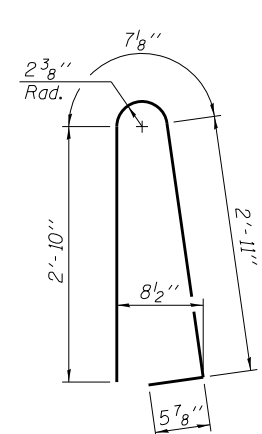
SECTION A-A



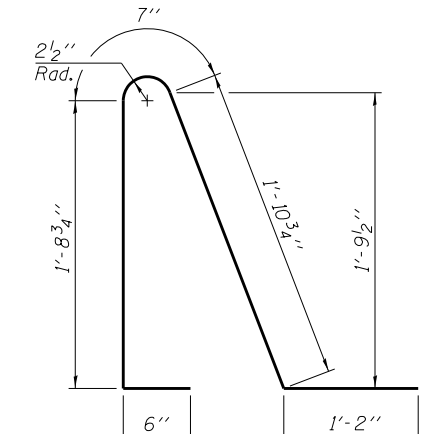
BAR a<sub>4</sub>(E)



BAR a<sub>5</sub>(E)



BAR d(E)



BAR d<sub>2</sub>(E)

PLAN  
 (Showing wearing surface)  
 (S. Approach shown, N. Approach mirrored)

FILE NAME: I:\010\_S\048-0025 & 0026 1-74 Phase 2\Structural\Final Plans\Microstation\0480101\_0102-68B69-01P-approach-plan\_VB.dgn  
 CB PROJECT NO. 04801-10

**BA-P-R**  
 Coombe-Bloxdorf P.C.  
 CIVIL ENGINEERS-  
 STRUCTURAL ENGINEERS-  
 LAND SURVEYORS  
 Design Firm License No. 184-002703

12-12-12 (Beams: 36" min. width; 72" max. width)

USER NAME = brianheil	DESIGNED -	REVISD -
PLOT SCALE = @2' = 1" in.	CHECKED -	REVISD -
PLOT DATE = 2/8/2016	DRAWN - MMY	REVISD -
	CHECKED -	REVISD -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

PRECAST BRIDGE APPROACH SLAB  
 STRUCTURE NO. 048-0101 (W.B.)

SHEET NO. 19 OF 61 SHEETS

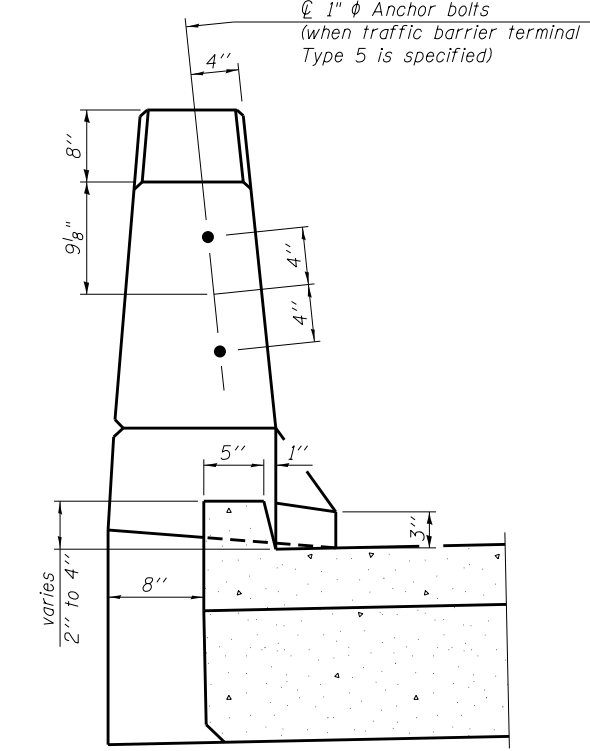
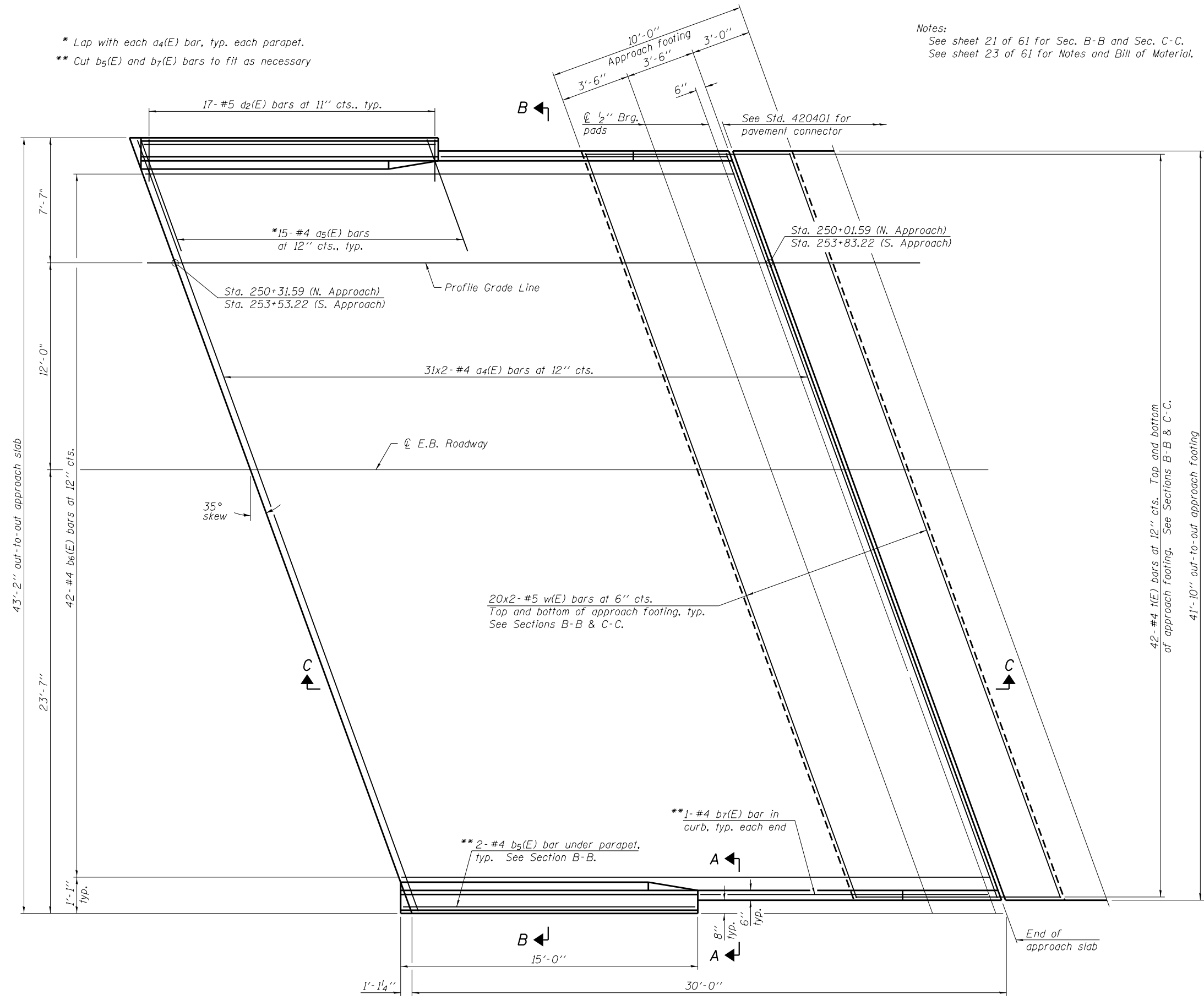
F.A.I. RTE. 74	SECTION (48-26HVB)IBR	COUNTY KNOX	TOTAL SHEETS 212	SHEET NO. 73
CONTRACT NO. 68B69				
ILLINOIS FED. AID PROJECT				

(Sheet 1 of 5)

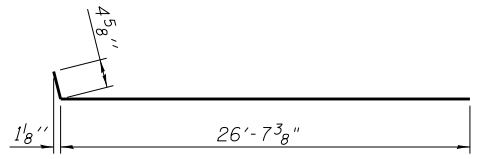
\* Lap with each a4(E) bar, typ. each parapet.  
 \*\* Cut b5(E) and b7(E) bars to fit as necessary

Notes:  
 See sheet 21 of 61 for Sec. B-B and Sec. C-C.  
 See sheet 23 of 61 for Notes and Bill of Material.

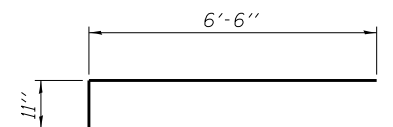
Ø 1" Ø Anchor bolts  
 (when traffic barrier terminal  
 Type 5 is specified)



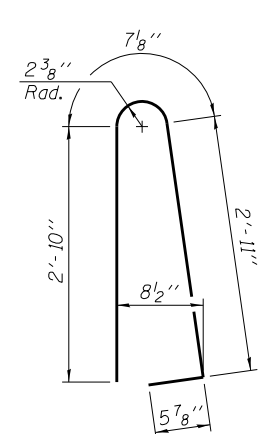
SECTION A-A



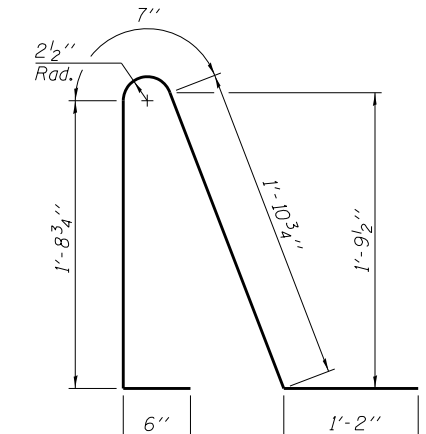
BAR a4(E)



BAR a5(E)



BAR d(E)



BAR d2(E)

PLAN  
 (Showing wearing surface)  
 (S. Approach shown, N. Approach mirrored)

FILE NAME: I:\048-0102\048-0102-0102-68B69-020-approach-plan-EB.dgn  
 PROJECT NO: 048-0102-0102-68B69-020-approach-plan-EB.dgn  
 DATE: 12-12-12  
 DESIGNER: brianheil  
 CHECKER: MMY  
 DRAWN: MMY  
 PLOT DATE: 2/8/2016

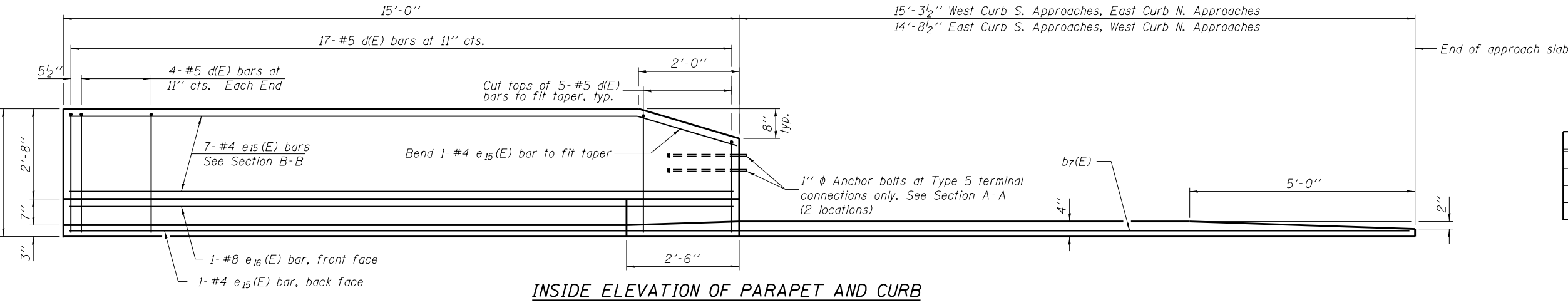
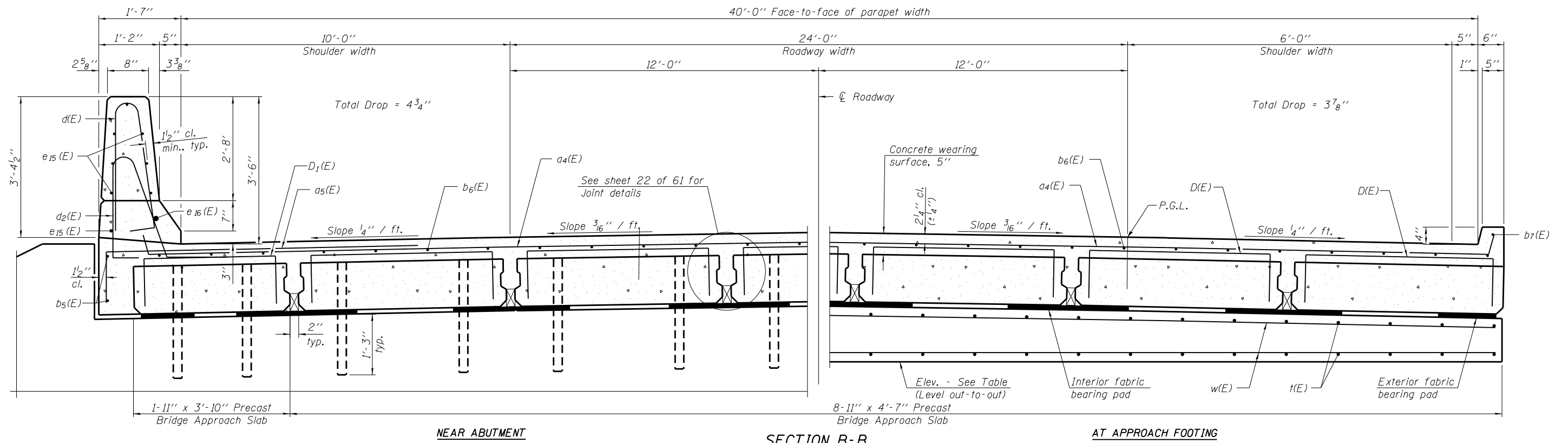
**BA-P-R**  
 Coombe-Bloxdorf P.C.  
 CIVIL ENGINEERS-  
 STRUCTURAL ENGINEERS-  
 LAND SURVEYORS  
 Design Firm License No. 184-002703

USER NAME = brianheil	DESIGNED -	REVISIONS -
PLOT SCALE = 0.2' = 1" IN.	CHECKED -	REVISIONS -
PLOT DATE = 2/8/2016	DRAWN - MMY	REVISIONS -
	CHECKED -	REVISIONS -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

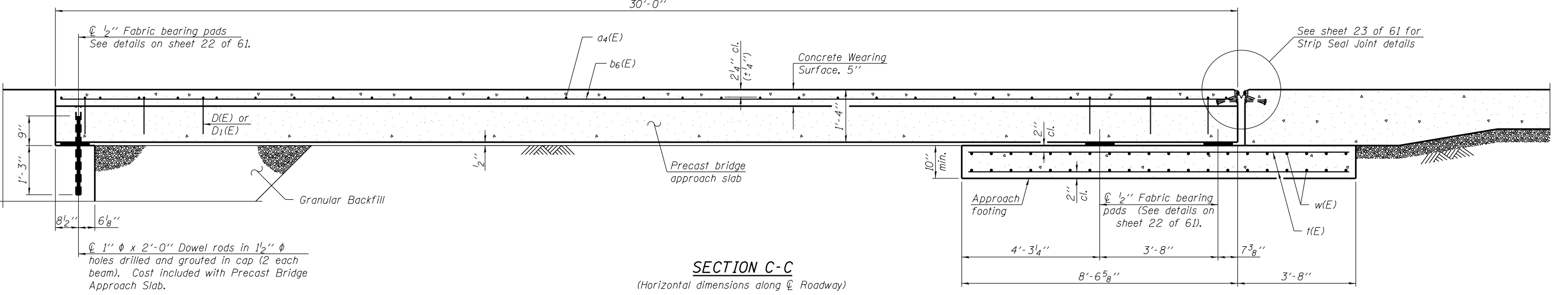
**PRECAST BRIDGE APPROACH SLAB**  
**STRUCTURE NO. 048-0102 (E.B.)**

F.A.I. R.T.E. 74	SECTION (48-26HVB)BR	COUNTY KNOX	TOTAL SHEETS 212	SHEET NO. 74
CONTRACT NO. 68B69				
ILLINOIS FED. AID PROJECT				



**ELEVATION TABLE**

Location	Elevation
N. Approach W.B.	831.85
S. Approach W.B.	831.26
N. Approach E.B.	832.28
S. Approach E.B.	830.47



FILE NAME: I:\NO. 10. ENR048-0005 & 0006 1-74 Phase 2\Structural\Final Plans\Microstation\0480101\_0102-68B69-021-approach.dwg  
 CB PROJECT NO. 04801-10

**BA-P-R**      12-12-12      (Beams: 36" min. width; 72" max. width)

**Coombe-Bloxdorf P.C.**  
 CIVIL ENGINEERS-  
 STRUCTURAL ENGINEERS-  
 LAND SURVEYORS  
 Design Firm License No. 184-002703

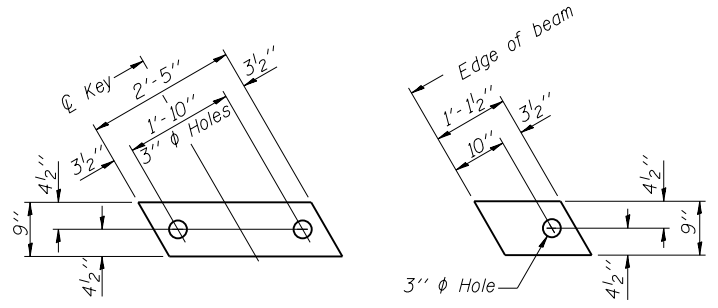
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	CHECKED -	REVISD -
PLOT SCALE = 0:2.000000 '1' / in.	DRAWN - MMY	REVISD -
PLOT DATE = 2/8/2016	CHECKED -	REVISD -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**PRECAST BRIDGE APPROACH SLAB**  
**STRUCTURE NO. 048-0101 (W.B.) & STRUCTURE NO. 048-0102 (E.B.)**  
 SHEET NO. 21 OF 61 SHEETS

F.A.I. RTE. 74	SECTION (48-26HVB)BR	COUNTY KNOX	TOTAL SHEETS 212	SHEET NO. 75
CONTRACT NO. 68B69				
ILLINOIS FED. AID PROJECT				

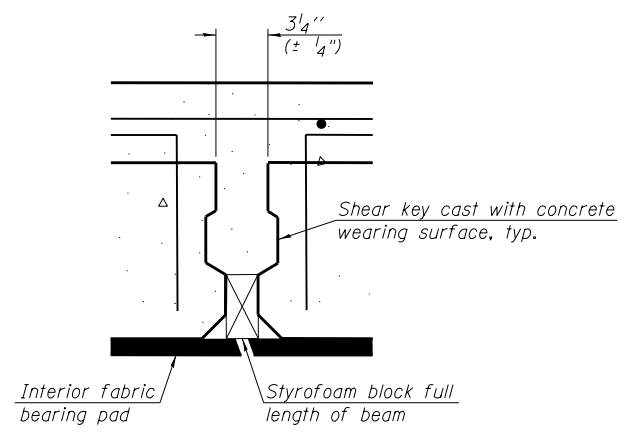
(Sheet 3 of 5)



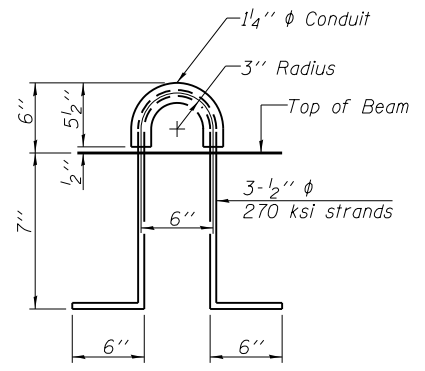
**INTERIOR**      **EXTERIOR**

**FABRIC BEARING PAD**

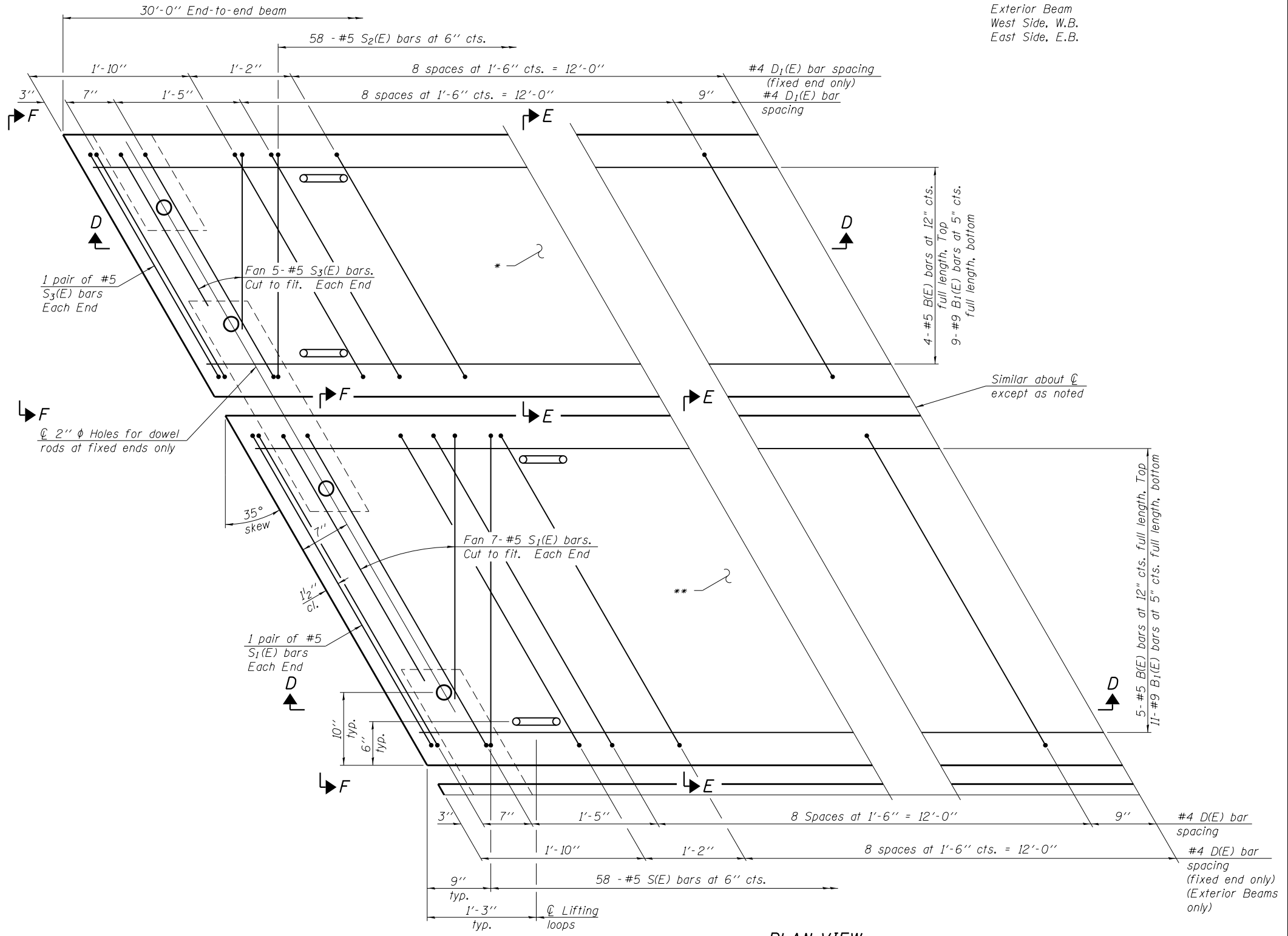
Notes:  
 All bearing pads shall be 1/2" thick.  
 Omit holes for fabric bearing pads at approach slab footing end of beams.  
 Expansion bearing pad shall be bonded to the approach slab footing.



**SECTION THRU SHEAR KEY JOINT**



**LIFTING LOOP DETAIL**



**PLAN VIEW**  
 (showing precast bridge approach beams)

\* Exterior Beam  
 East Side, W.B.  
 West Side, E.B.

\*\* Interior Beams and  
 Exterior Beam  
 West Side, W.B.  
 East Side, E.B.

FILE NAME: \\s045-0005 & 0006 1-74 Phase 2\Structural\Final Plans\Microstation\0480101\_0102-68669-022-approach.dgn  
 PROJECT NO. 0480101-0102-68669-022-approach.dgn

BA-P-R

12-12-12

(Beams: 36" min. width; 72" max. width)

(Sheet 4 of 5)

**Coombe-Bloxdorf P.C.**  
 CIVIL ENGINEERS  
 STRUCTURAL ENGINEERS  
 LAND SURVEYORS  
 Design Firm License No. 184-002703

USER NAME = brianheil	DESIGNED -	REVISD -
PLOT SCALE = 0:2.000000 '1' / in.	CHECKED -	REVISD -
PLOT DATE = 2/8/2016	DRAWN - MMY	REVISD -
	CHECKED -	REVISD -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

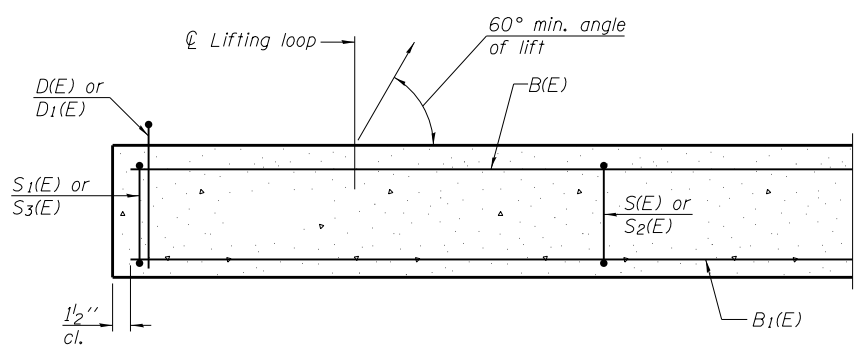
**PRECAST BRIDGE APPROACH SLAB**  
**STRUCTURE NO. 048-0101 (W.B.) & STRUCTURE NO. 048-0102 (E.B.)**

SHEET NO. 22 OF 61 SHEETS

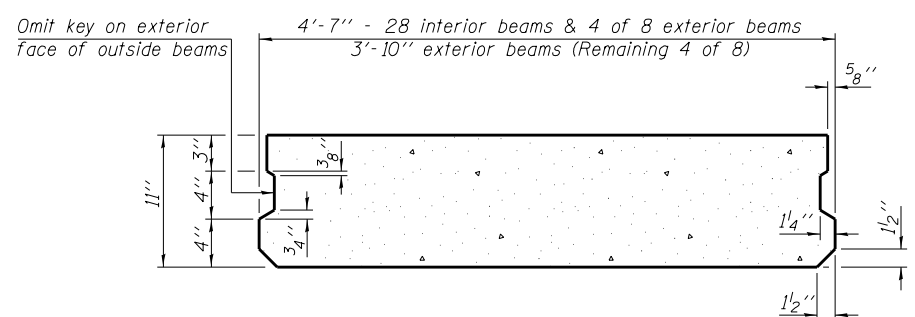
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)BR	KNOX	212	76
CONTRACT NO. 68B69				
ILLINOIS FED. AID PROJECT				



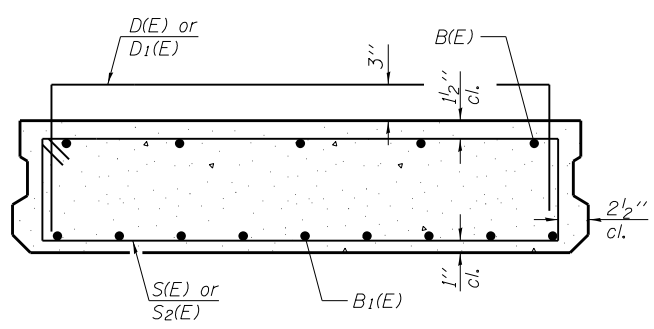
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 Phase 2: Structural Plans  
 12-12-12  
 08/27/10  
 08/27/10



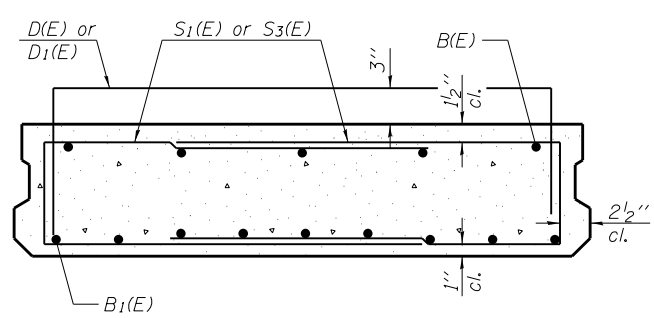
**SECTION D-D**



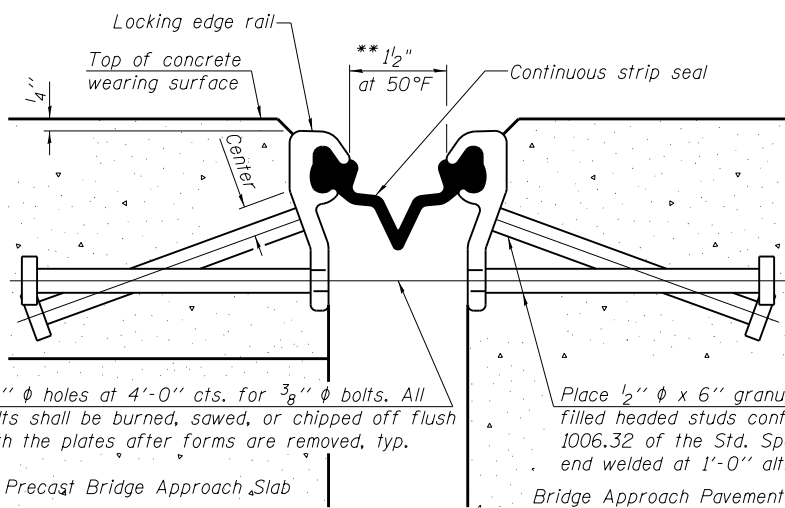
**SECTION E-E**  
(Showing dimensions)



**SECTION E-E**  
(Showing reinforcement)



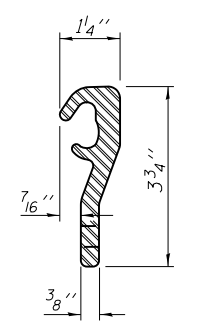
**VIEW F-F**  
(Showing reinforcement)



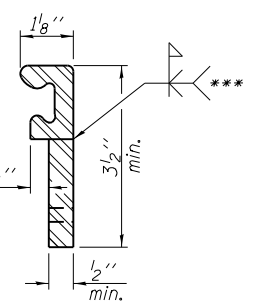
**SECTION THRU STRIP SEAL JOINT**  
(at rt. angles)

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

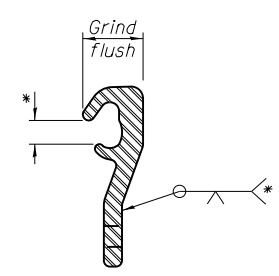
Place  $\frac{1}{2}$ "  $\phi$  x 6" granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded at 1'-0" alt. cts.



**ROLLED (EXTRUDED) RAIL**



**WELDED RAIL**

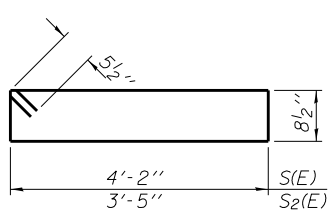


**LOCKING EDGE RAIL SPLICE**

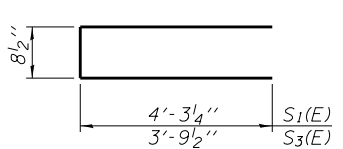
Rolled rail shown, welded rail similar.

**LOCKING EDGE RAIL**

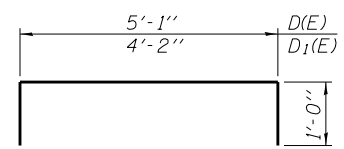
- \* Omit weld at seal opening.
- \*\* The joint opening shall be determined per Article 520.04 except that on jointless structures, the distance described as the bridge length between the nearest fixed bearings each way from the joint shall be taken as half the bridge length plus the approach slab length. The minimum dimension shall be 1 1/2" for installation purposes.
- \*\*\* Back gouge not required if complete joint penetration is verified by mock-up.



**BARS S(E) & S2(E)**



**BARS S1(E) & S3(E)**



**BARS D(E) & D1(E)**

**MIN. LAP LENGTH**

- #4 2'-7"
- #5 3'-3"

**BAR LIST**  
28-4'-7" INTERIOR BEAMS  
(For information only)

Bar	No.	Size	Length	Shape
B(E)	5	#5	29'-8"	—
B1(E)	11	#9	29'-8"	—
D(E)	22	#4	7'-1"	□
S(E)	58	#5	10'-8"	□
S1(E)	18	#5	9'-3"	□

**BAR LIST**  
4-3'-10" EXTERIOR BEAMS  
(For information only)

Bar	No.	Size	Length	Shape
B(E)	4	#5	29'-8"	—
B1(E)	9	#9	29'-8"	—
D1(E)	32	#4	6'-2"	□
S2(E)	58	#5	9'-2"	□
S3(E)	14	#5	8'-4"	□

**BAR LIST**  
4-4'-7" EXTERIOR BEAMS  
(For information only)

Bar	No.	Size	Length	Shape
B(E)	5	#5	29'-8"	—
B1(E)	11	#9	29'-8"	—
D(E)	32	#4	7'-1"	□
S(E)	58	#5	10'-8"	□
S1(E)	18	#5	9'-3"	□

**FOUR APPROACHES**  
**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a4(E)	248	#4	27'-0"	—
a5(E)	120	#4	7'-5"	—
b5(E)	16	#4	15'-7"	—
b6(E)	168	#4	29'-8"	—
b7(E)	8	#4	15'-2"	—
d(E)	200	#5	6'-10"	—
d2(E)	136	#5	5'-11"	—
e15(E)	64	#4	14'-8"	—
e16(E)	8	#8	14'-8"	—
t(E)	336	#4	11'-10"	—
w(E)	320	#5	27'-0"	—
Concrete Superstructure		Cu. Yd.	15.4	
Concrete Structures		Cu. Yd.	88.9	
Reinforcement Bars, Epoxy Coated		Pound	23,520	
Precast Bridge Approach Slab		Sq. Ft.	4860	
Concrete Wearing Surface, 5"		Sq. Yd.	567	
Preformed Joint Strip Seal		Foot	209.0	

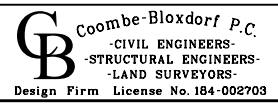
Bars indicated thus 20 x 2 - #5 etc. indicates 20 lines of bars with 2 lengths per line.

\*\*\*\* 11,850 lbs Superstructure  
11,670 lbs Substructure

BA-P-R

12-12-12

(Beams: 36" min. width; 72" max. width)



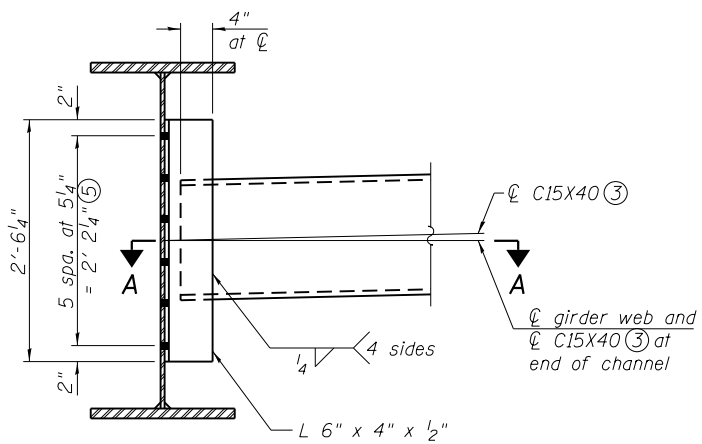
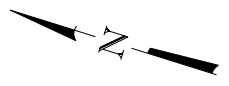
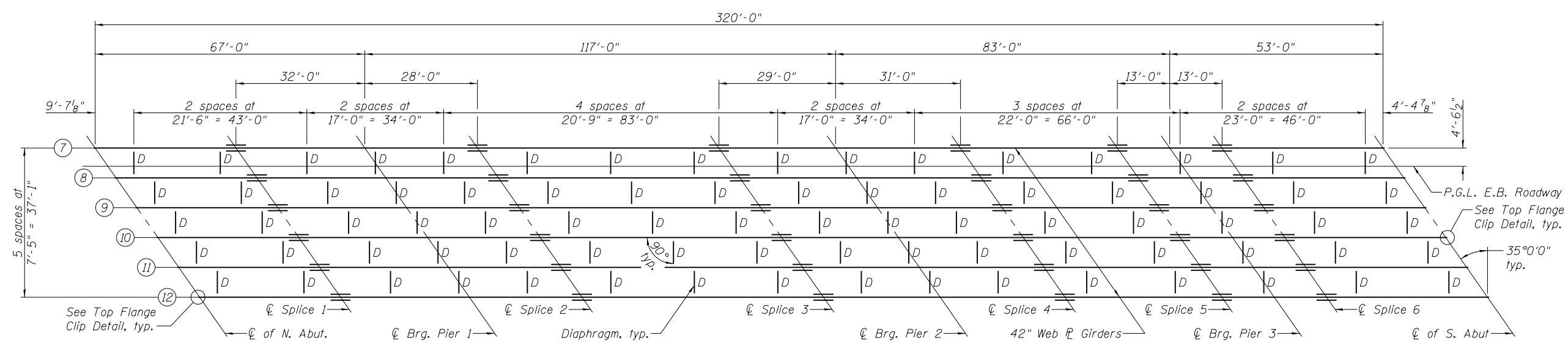
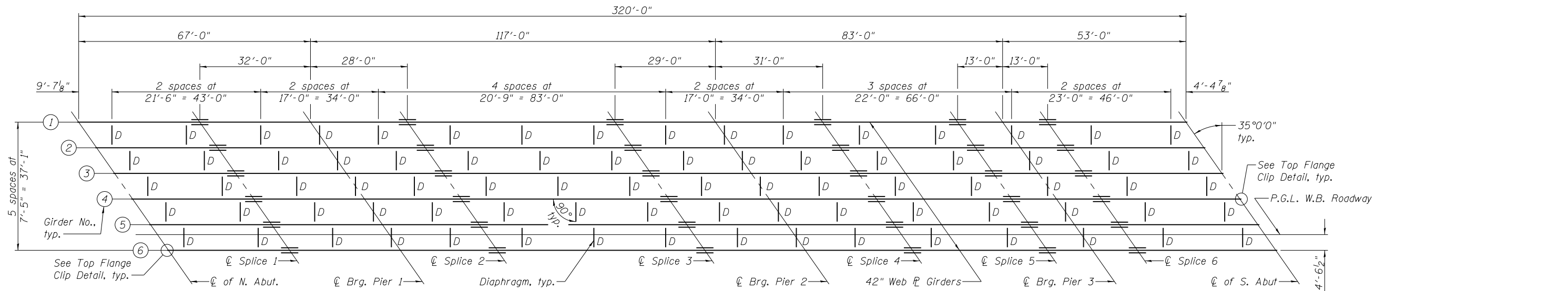
USER NAME	DESIGNED	REVISION
brianhehl	-	-
	CHECKED	REVISION
	-	-
	DRAWN	REVISION
	MMY	-
	CHECKED	REVISION
	-	-

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

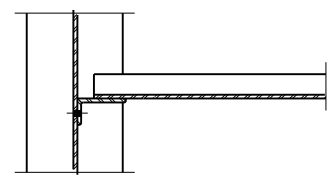
PRECAST BRIDGE APPROACH SLAB  
STRUCTURE NO. 048-0101 (W.B.) & STRUCTURE NO. 048-0102 (E.B.)

SHEET NO. 23 OF 61 SHEETS

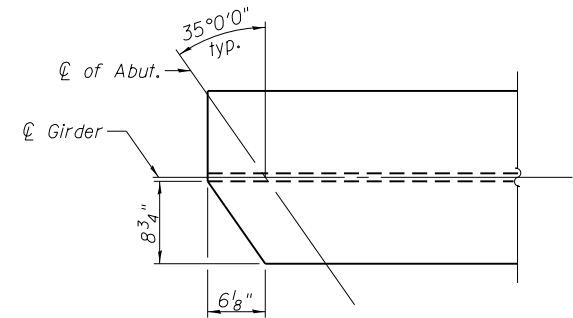
F.A.I. RT.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)BR	KNOX	212	77
CONTRACT NO. 68B69				
ILLINOIS FED. AID PROJECT				



INTERIOR DIAPHRAGM D



SECTION A-A



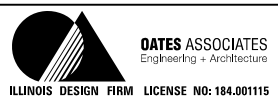
TOP FLANGE CLIP DETAIL

(Do not clip bottom flange)

FRAMING PLAN

- Notes:
- ① For girder elevation and details, see sheets 25 and 26 of 61.
  - ② All diaphragms shall be installed as steel is erected and secured with erection pins and bolts. Individual diaphragms at supports may be temporarily disconnected to install bearing anchor rods.
  - ③ Alternate C15X50 channels are permitted to facilitate material acquisition. Calculated weight of structural steel is based on C15X40 sections. The alternate, if utilized, shall be provided at no additional cost to the Department.
  - ④ Two hardened washers required for each set of oversized holes.
  - ⑤ 3/4" φ HS bolts, 15/16" φ holes.

FILE NAME = H:\P\29048\WD 10 SING48-0005 & 0006 1-74 Phase 2\Structural\Final Plans\Microstation\0480101\_0102-68669-024-Framing Plan.dgn



USER NAME =	DESIGNED - JAD	REVISED -
PLOT SCALE =	CHECKED - KBC	REVISED -
PLOT DATE = 2/8/2016	DRAWN - KBC	REVISED -
	CHECKED - JAD	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

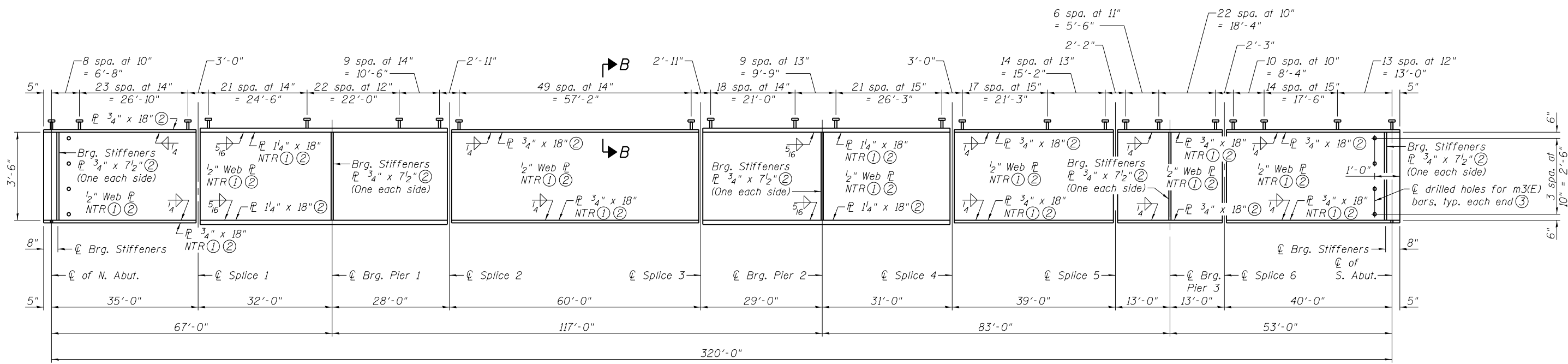
FRAMING PLAN  
STRUCTURE NO. 048-0101 (W.B.) & 048-0102 (E.B.)

SHEET NO. 24 OF 61 SHEETS

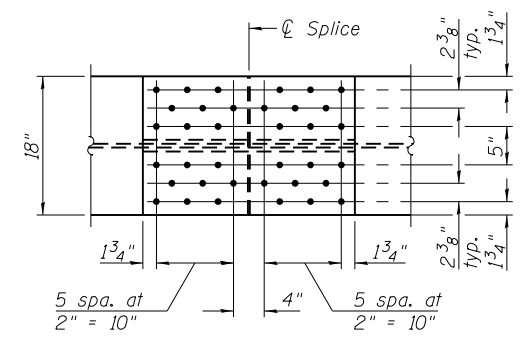
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVBJBR)	KNOX	212	78
CONTRACT NO. 68B69				

ILLINOIS FED. AID PROJECT

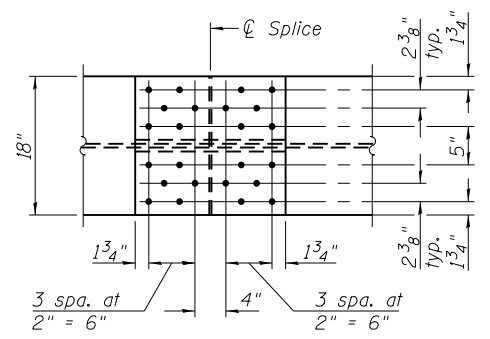
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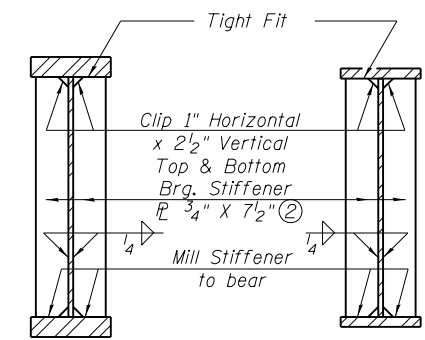
**GIRDER ELEVATION**  
(12 Required)



**TOP & BOTTOM PLAN**

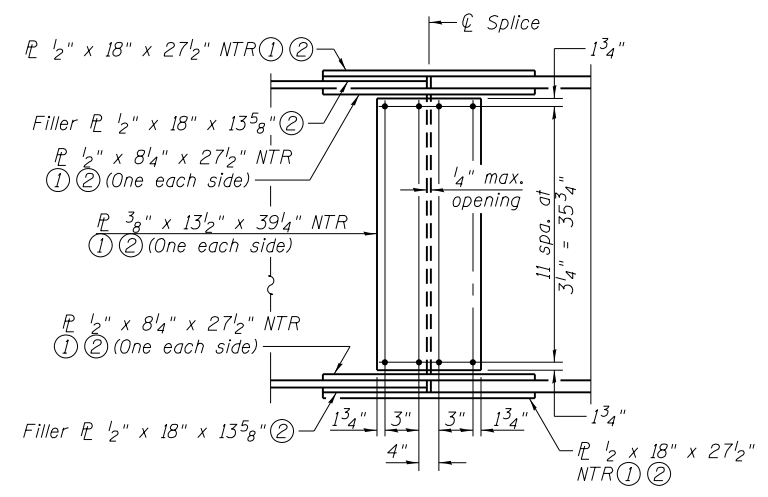


**TOP & BOTTOM PLAN**

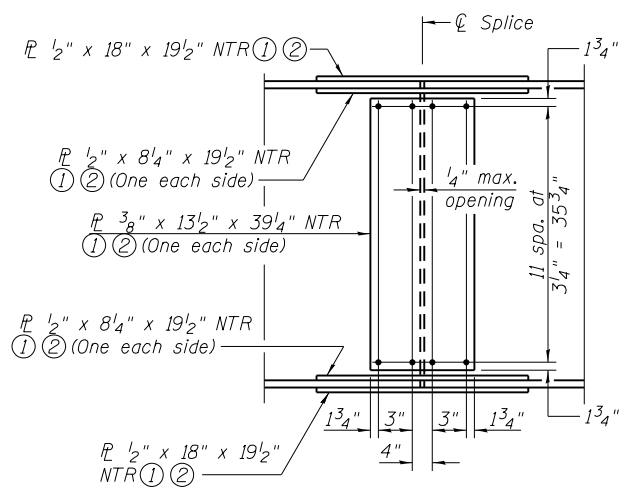


**SECTION AT PIERS 1 & 2**

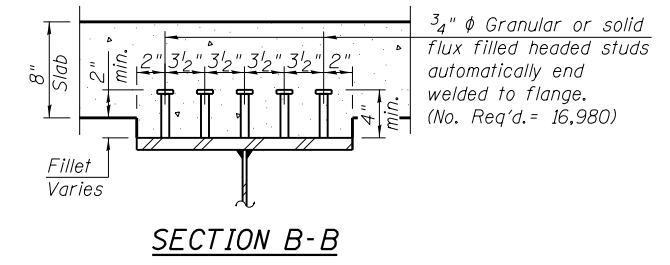
**SECTION AT ABUTMENTS & PIER 3**



**SPLICE 1, 2, 3, & 4 DETAIL**  
(48 Required)

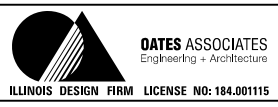


**SPLICE 5 & 6 DETAIL**  
(24 Required)



**SECTION B-B**

- Notes:
- ① Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.
  - ② AASHTO M 270 Grade 50 Steel
  - ③ For hole  $\phi$ , see sheet 18 of 61.
  - ④ All Structural Steel shall be galvanized as specified in the special provision for Hot Dip Galvanizing for Structural Steel.



USER NAME =	DESIGNED - JAD	REVISED -
PLOT SCALE =	CHECKED - KBC	REVISED -
PLOT DATE = 2/8/2016	DRAWN - KBC	REVISED -
	CHECKED - JAD	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**GIRDER DETAILS**  
**STRUCTURE NO. 048-0101 (W.B.) & 048-0102 (E.B.)**  
SHEET NO. 25 OF 61 SHEETS

F.A.I. RTE. = 74	SECTION = (48-26HVB)BR	COUNTY = KNOX	TOTAL SHEETS = 212	SHEET NO. = 79
CONTRACT NO. 68B69				
ILLINOIS FED. AID PROJECT				

**INTERIOR GIRDER MOMENT TABLE**

	0.4 Span 1	Pier 1	0.5 Span 2	Pier 2	0.5 Span 3	Pier 3	0.6 Span 4
$I_s$	(in <sup>4</sup> )	15,424	24,137	15,424	24,137	15,424	15,424
$I_c(n)$	(in <sup>4</sup> )	35,654	49,352	35,654	49,352	35,654	35,654
$I_c(3n)$	(in <sup>4</sup> )	26,850	37,262	26,850	37,262	26,850	26,850
$I_c(cr)$	(in <sup>4</sup> )	-	28,709	-	28,709	-	19,663
$S_s$	(in <sup>3</sup> )	709	1,085	709	1,085	709	709
$S_c(n)$	(in <sup>3</sup> )	944	1,350	944	1,350	944	944
$S_c(3n)$	(in <sup>3</sup> )	869	1,253	869	1,253	869	869
$S_c(cr)$	(in <sup>3</sup> )	-	1,153	-	1,153	-	781
DC1	(k/')	0.939	1.011	0.939	1.011	0.939	0.939
$M_{DC1}$	(k)	111.1	1,035.2	587.7	1,062.1	162.9	321.7
DC2	(k/')	0.173	0.173	0.173	0.173	0.173	0.173
$M_{DC2}$	(k)	21.6	181.0	112.5	186.0	31.2	59.8
DW	(k/')	0.333	0.333	0.333	0.333	0.333	0.333
$M_{DW}$	(k)	41.6	348.8	216.8	358.4	60.1	115.2
$M_{\xi + IM}$	(k)	846.9	1,374.6	1,029.0	1,318.7	790.7	792.4
$M_u$ (Strength I)	(k)	1,710.4	4,449.0	3,001.2	4,405.5	1,716.5	2,036.4
$\phi_r M_n$	(k)	4,926.7	4,617.2	4,744.5	4,605.9	4,926.7	3,048.8
$f_s$ DC1	(ksi)	1.88	11.45	9.95	11.74	2.76	5.45
$f_s$ DC2	(ksi)	0.30	1.88	1.55	1.78	0.43	0.83
$f_s$ DW	(ksi)	0.57	3.63	2.99	3.43	0.83	1.59
$f_s$ ( $\xi + IM$ )	(ksi)	10.77	14.31	13.08	11.72	10.05	10.07
$f_s$ (Service II)	(ksi)	16.75	35.56	31.49	32.19	17.09	20.96
$0.95R_n F_{yr}$	(ksi)	47.50	47.50	47.50	47.50	47.50	47.50
$f_s$ (Total)(Strength I)	(ksi)	-	-	-	-	-	-
$\phi_r F_n$	(ksi)	-	-	-	-	-	-
$V_f$	(k)	66.2	63.1	48.6	61.9	52.4	65.8

$I_s, S_s$ : Non-composite moment of inertia and section modulus of the steel section used for computing  $f_s$  (Total-Strength I, and Service II) due to non-composite dead loads (in<sup>4</sup> and in<sup>3</sup>).

$I_c(n), S_c(n)$ : Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing  $f_s$  (Total-Strength I, and Service II) in uncracked sections due to short-term composite live loads (in<sup>4</sup> and in<sup>3</sup>).

$I_c(3n), S_c(3n)$ : 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-Strength I, and Service II) in uncracked sections, due to long-term composite (superimposed) dead loads (in<sup>4</sup> and in<sup>3</sup>).

$I_c(cr), S_c(cr)$ : Composite moment of inertia and section modulus of the steel and longitudinal deck reinforcement, used for computing  $f_s$  (Total-Strength I and Service II) in cracked sections, due to both short-term composite live loads and long-term composite (superimposed) dead loads (in<sup>4</sup> and in<sup>3</sup>).

DC1: Un-factored non-composite dead load (kips/ft.).

$M_{DC1}$ : Un-factored moment due to non-composite dead load (kip-ft.).

DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).

$M_{DC2}$ : Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).

DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).

$M_{DW}$ : Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).

$M_{\xi + IM}$ : Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).

$M_u$  (Strength I): Factored design moment (kip-ft.).  
 $1.25 (M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M_{\xi + IM}$

$\phi_r M_n$ : Compact composite positive moment capacity computed according to Article 6.10.7.1 or non-slender negative moment capacity according to Article A6.1.1 or A6.1.2 (kip-ft).

$f_s$  DC1: Un-factored stress at edge of flange for controlling steel flange due to vertical non-composite dead loads as calculated below (ksi).  
 $M_{DC1} / S_s$

$f_s$  DC2: Un-factored stress at edge of flange for controlling steel flange due to vertical composite dead loads as calculated below (ksi).  
 $M_{DC2} / S_c(3n)$  or  $M_{DC2} / S_c(cr)$  as applicable.

$f_s$  DW: Un-factored stress at edge of flange for controlling steel flange due to vertical composite future wearing surface loads as calculated below (ksi).  
 $M_{DW} / S_c(3n)$  or  $M_{DW} / S_c(cr)$  as applicable.

$f_s$  ( $\xi + IM$ ): Un-factored stress at edge of flange for controlling steel flange due to vertical composite live load plus impact loads as calculated below (ksi).  
 $M_{\xi + IM} / S_c(n)$  or  $M_{\xi + IM} / S_c(cr)$  as applicable.

$f_s$  (Service II): Sum of stresses as computed below (ksi).  
 $f_{sDC1} + f_{sDC2} + f_{sDW} + 1.3 f_s (\xi + IM)$

$0.95R_n F_{yr}$ : Composite stress capacity for Service II loading according to Article 6.10.4.2 (ksi).

$f_s$  (Total)(Strength I): Sum of stresses as computed below on non-compact section (ksi).  
 $1.25 (f_{sDC1} + f_{sDC2}) + 1.5 f_{sDW} + 1.75 f_s (\xi + IM)$

$\phi_r F_n$ : Non-Compact composite positive or negative stress capacity for Strength I loading according to Article 6.10.7 or 6.10.8 (ksi).

$V_f$ : Maximum factored shear range in span computed according to Article 6.10.10.

**TOP OF WEB ELEVATIONS - W.B. STRUCTURE ①**

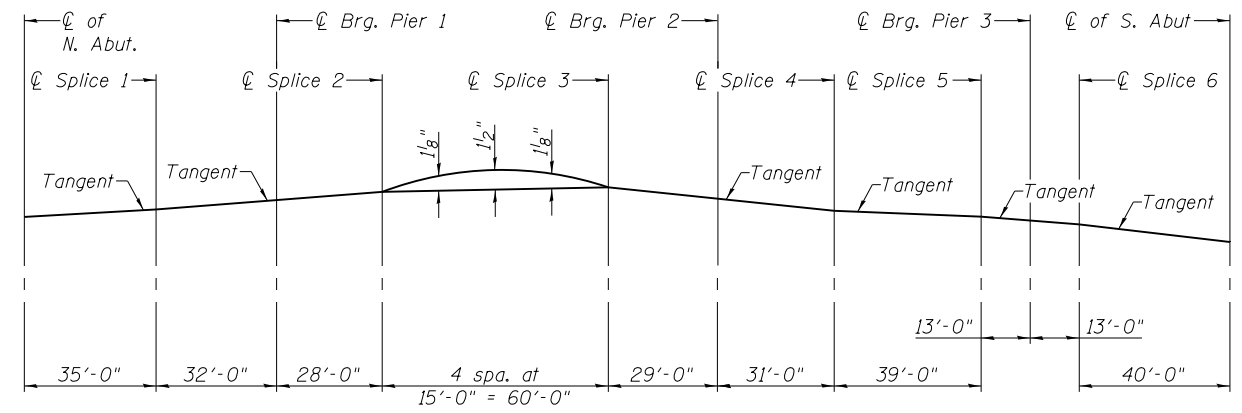
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☐ of N. Abut.	833.51	833.69	833.84	833.93	833.83	833.72
☐ Splice 1	833.58	833.75	833.89	833.97	833.87	833.75
☐ Brg. Pier 1	833.72	833.89	834.03	834.10	833.99	833.86
☐ Splice 2	833.85	834.02	834.14	834.21	834.10	833.96
☐ Splice 3	833.88	834.03	834.14	834.20	834.07	833.92
☐ Brg. Pier 2	833.76	833.91	834.02	834.07	833.94	833.78
☐ Splice 4	833.64	833.78	833.88	833.93	833.79	833.63
☐ Splice 5	833.54	833.67	833.76	833.80	833.65	833.48
☐ Brg. Pier 3	833.47	833.59	833.69	833.72	833.57	833.40
☐ Splice 6	833.40	833.52	833.61	833.64	833.49	833.32
☐ of S. Abut.	833.17	833.29	833.37	833.39	833.23	833.05

**TOP OF WEB ELEVATIONS - E.B. STRUCTURE ①**

	Girder 7	Girder 8	Girder 9	Girder 10	Girder 11	Girder 12
☐ of N. Abut.	833.85	834.01	834.13	834.08	833.97	833.83
☐ Splice 1	833.83	833.98	834.10	834.04	833.92	833.77
☐ Brg. Pier 1	833.90	834.04	834.15	834.09	833.96	833.80
☐ Splice 2	833.95	834.09	834.20	834.13	833.99	833.83
☐ Splice 3	833.82	833.94	834.04	833.96	833.81	833.64
☐ Brg. Pier 2	833.64	833.75	833.84	833.75	833.60	833.42
☐ Splice 4	833.44	833.54	833.63	833.53	833.38	833.19
☐ Splice 5	833.23	833.33	833.41	833.30	833.14	832.94
☐ Brg. Pier 3	833.13	833.22	833.30	833.19	833.03	832.83
☐ Splice 6	833.02	833.12	833.19	833.08	832.91	832.71
☐ of S. Abut.	832.70	832.78	832.85	832.73	832.55	832.34

**INTERIOR GIRDER REACTION TABLE**

	N. Abut.	Pier 1	Pier 2	Pier 3	S. Abut.	
$R_{DC1}$	(k)	16.6	105.4	106.9	61.4	18.8
$R_{DC2}$	(k)	3.1	18.6	18.9	11.4	3.5
$R_{DW}$	(k)	6.0	35.8	36.4	21.9	6.7
$R_{\xi + IM}$	(k)	96.9	156.7	157.7	136.9	91.7
$R_{Total}$	(k)	122.6	316.5	319.9	231.6	120.7



**CAMBER DIAGRAM**

Notes:  
 ① For fabrication only.

FILE NAME = H:\P\29048\WD 10 SING48-0005 & 0006 1-74 Phase 2\Structure\Final Plans\Microstation\0480101\_0102-68859-026-Girder\_Details.scd



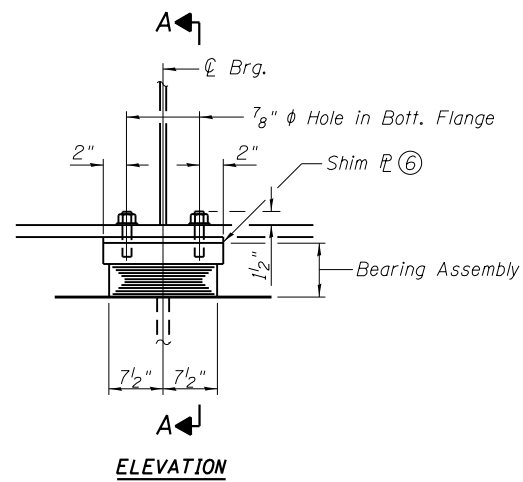
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PLOT SCALE =	CHECKED - KBC	REVISED -
PLOT DATE = 2/8/2016	DRAWN - KBC	REVISED -
	CHECKED - JAD	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

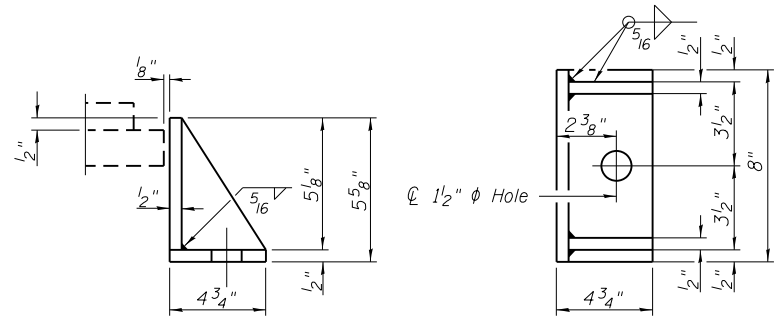
GIRDER DETAILS  
 STRUCTURE NO. 048-0101 (W.B.) & 048-0102 (E.B.)

SHEET NO. 26 OF 61 SHEETS

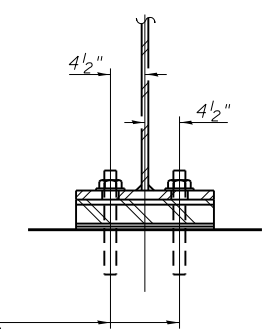
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)BR	KNOX	212	80
CONTRACT NO. 68B69				
ILLINOIS FED. AID PROJECT				



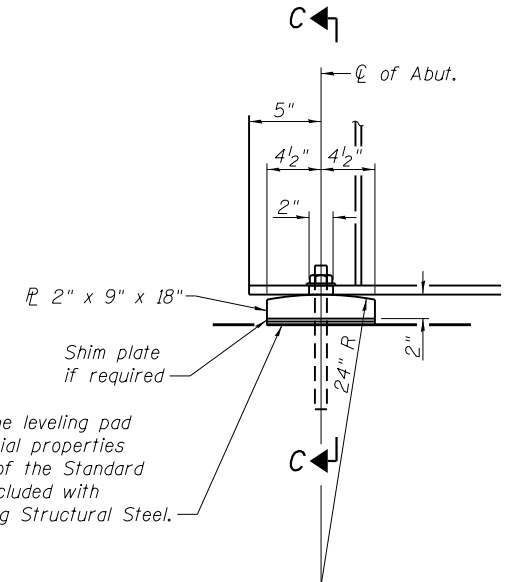
ELEVATION



SIDE RETAINER ⑩



SECTION C-C

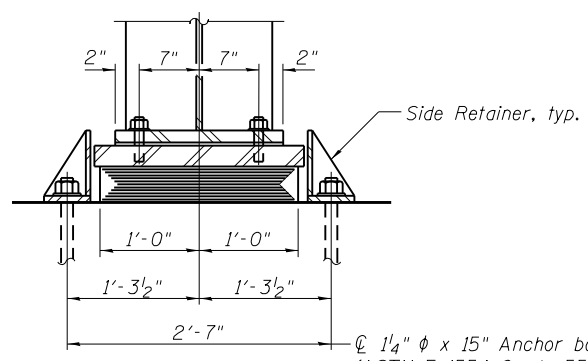


ELEVATION

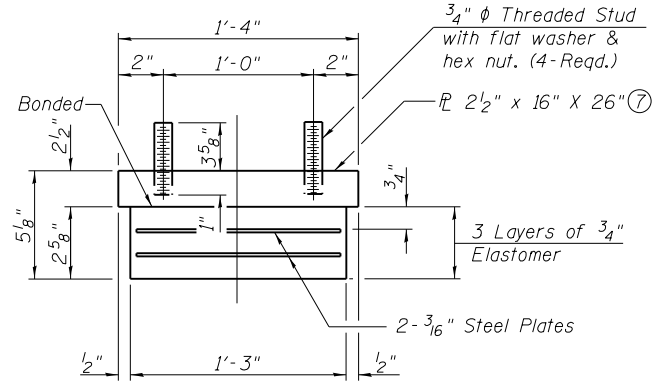
1"  $\phi$  x 12" Anchor bolts (ASTM F1554 Grade 36) with 2 1/4" x 2 1/4" x 5/16"  $\mathbb{R}$  washer under nut. 1 3/8" x 2" slotted hole in flange. 1/2"  $\phi$  holes in bearing plate.

1/8" elastomeric neoprene leveling pad according to the material properties of Article 1052.02(a) of the Standard Specifications. Cost included with Furnishing and Erecting Structural Steel.

**FIXED BEARING AT ABUTMENTS**  
(24 Required)

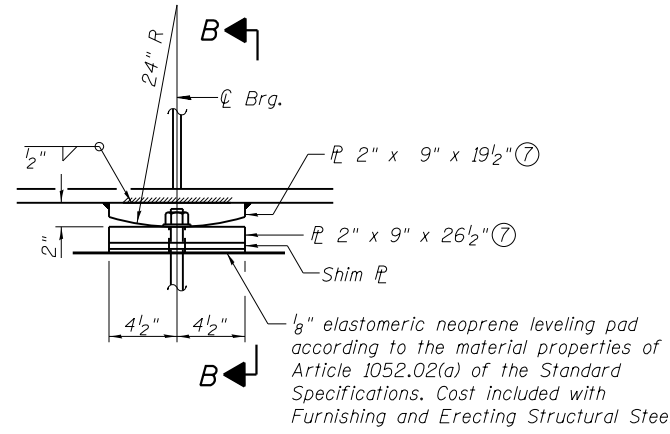


SECTION A-A

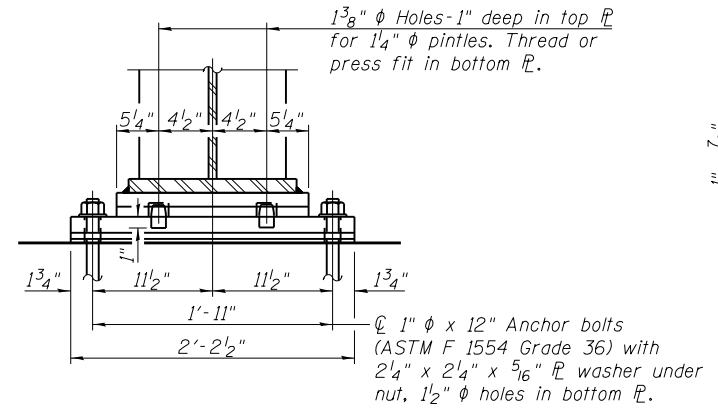


BEARING ASSEMBLY ⑥

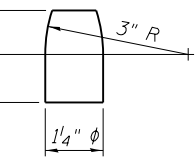
**TYPE I ELASTOMERIC EXP. BRG. AT PIER 2**  
(12 Required)



ELEVATION



SECTION B-B



PINTLE

**BEARING SHIM PLATES - W.B. STRUCTURE**

	Girder 1	Girder 2	Girder 3	Girder 4	Girder 5	Girder 6
Pier 2	-	-	-	5/8"	-	-
Pier 3	-	-	-	3/8"	-	-
S. Abut	-	-	-	1/4"	-	-

**BEARING SHIM PLATES - E.B. STRUCTURE**

	Girder 7	Girder 8	Girder 9	Girder 10	Girder 11	Girder 12
N. Abut	-	-	5/8"	-	-	-

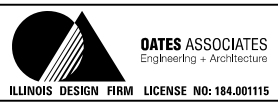
**BILL OF MATERIAL**  
(Two Structures)

Item	Unit	Total
Elastomeric Bearing Assembly, Type I	Each	12
Anchor Bolts, 1"	Each	96
Anchor Bolts, 1 1/4"	Each	24

- Notes:
- Anchor bolts shall be ASTM F1554 all-thread or an Engineer-approved alternate material of the grades and diameters specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
  - Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.
  - Anchor bolts for side retainers may be cast in place or installed in holes drilled before or after members are in place.
  - 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 I.
  - Shim plates shall not be placed under Bearing Assembly.
  - The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M 270 Grade 50.
  - Two 1/8 inch adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown.
  - All bearing plates, shim plates, side retainers, anchor bolts, nuts, washers, and pintles shall be galvanized according to the special provision for Hot Dip Galvanizing for Structural Steel.
  - Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

**FIXED BEARING AT PIERS 1 & 3**  
(24 Required)

FILE NAME = H:\P\29048\NO. 10 SINGAR-0005 & 0006 1-74 Phase 2\Structural\Final Plans\Microstation\0480101\_0102-68869-027-Bearing Details.dgn



USER NAME =	DESIGNED - JAD	REVISED -
PLOT SCALE =	CHECKED - KBC	REVISED -
PLOT DATE = 2/8/2016	DRAWN - KBC	REVISED -
	CHECKED - JAD	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

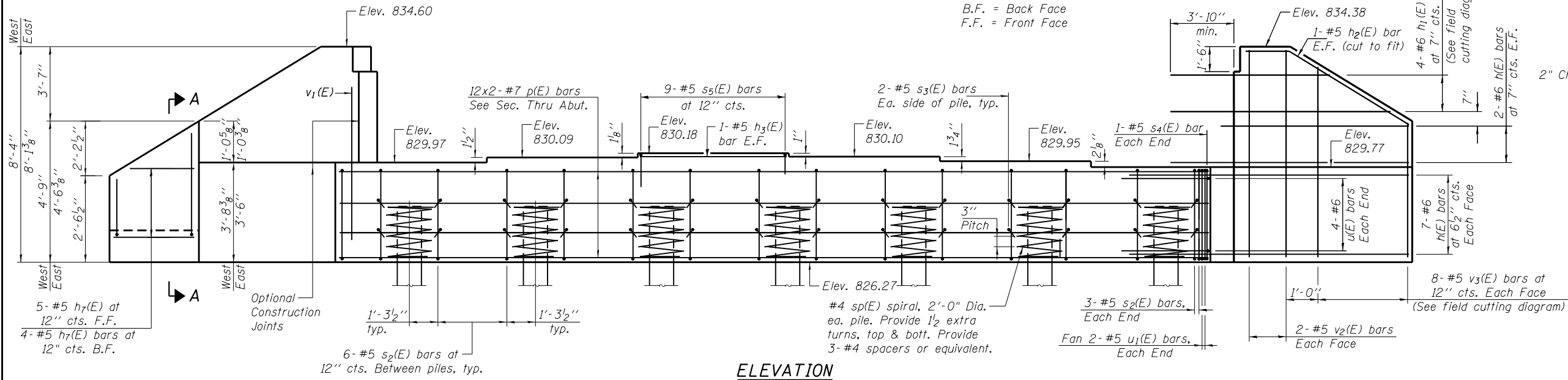
BEARING DETAILS  
STRUCTURE NO. 048-0101 (W.B.) & 048-0102 (E.B.)

SHEET NO. 27 OF 61 SHEETS

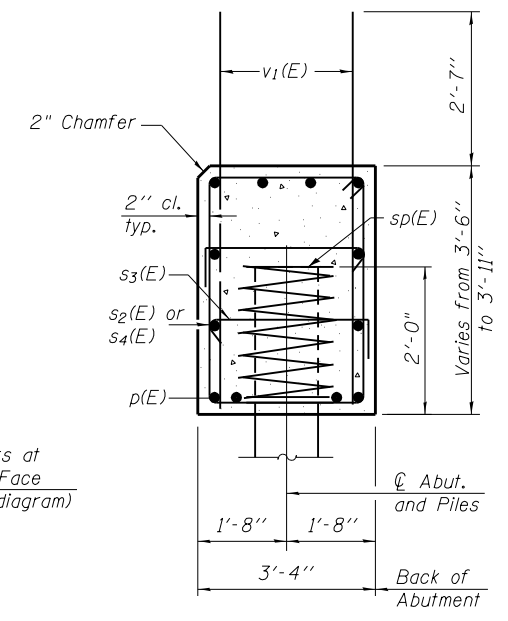
F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)BR	KNOX	212	81
CONTRACT NO. 68B69				
ILLINOIS FED. AID PROJECT				

Notes:  
Pour steps monolithically with cap.

E.F. = Each Face  
B.F. = Back Face  
F.F. = Front Face

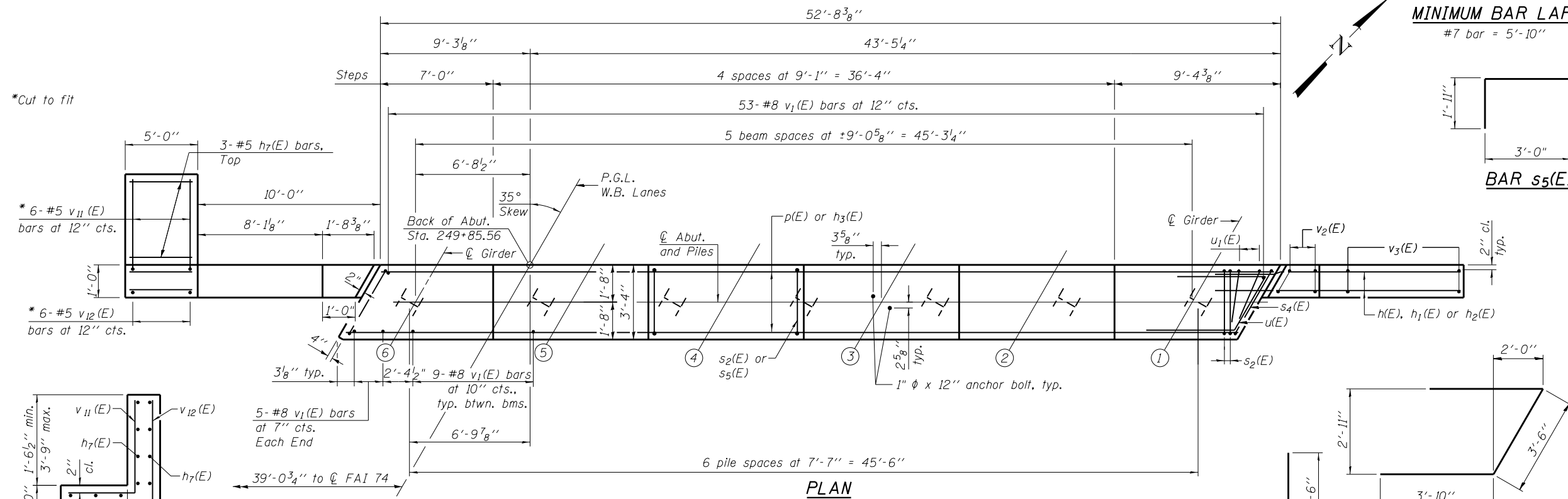


**ELEVATION**



**SEC. THRU ABUT.**

Dimensions at right angles to abutment.



**PLAN**

**SECTION A-A**

**PILE DATA**

Type: HP 14x73  
Nominal Required Bearing: 318 kips  
Factored Resistance Available: 175 kips  
Est. Length: 66'  
No. Production Piles: 6  
No. Test Piles: 1

**FIELD CUTTING DIAGRAM**

Order h1(E) and v3(E) full length. Cut as shown and use remainder of bars in opposite face.

**BAR h2(E)**

**BARS s2(E) & s4(E)**

**BAR s3(E)**

**BAR u1(E)**

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	36	#6	14'-4"	—
h1(E)	8	#6	23'-4"	—
h2(E)	4	#5	10'-4"	—
h3(E)	2	#5	8'-8"	—
h7(E)	12	#5	4'-8"	—
p(E)	24	#7	29'-2"	—
s2(E)	42	#5	13'-3"	□
s3(E)	28	#5	4'-0"	□
s4(E)	2	#5	14'-7"	□
s5(E)	9	#5	6'-10"	□
sp(E)	7	#4	2'-0"	≡≡≡
u(E)	8	#6	11'-2"	—
u1(E)	4	#5	8'-2"	—
v1(E)	108	#8	5'-11"	—
v2(E)	8	#5	7'-9"	—
v3(E)	16	#5	11'-4"	—
v11(E)	6	#5	6'-6"	└
v12(E)	6	#5	4'-2"	—
Structure Excavation	Cu. Yd.		138	
Concrete Structures	Cu. Yd.		30.3	
Reinforcement Bars, Epoxy Coated	Pound		5920	
Furnishing Steel Piles, HP 14 x 73	Foot		396	
Driving Piles	Foot		396	
Test Pile, Steel HP 14 x 73	Each		1	

\*\* Length is height of spiral.  
For details of piles see sheet 38 of 61.

FILE NAME: \\010\_S\045-0005 & 0006 1-74 Phase 2\Structural\Final Plans\Microstation\0480101\_0102-68869-028-m-abut.mbd.dgn  
 CB PROJECT NO. 048071-10  
 AI-40S-R  
 8-31-12

**Coombe-Bloxdorf P.C.**  
 CIVIL ENGINEERS-  
 STRUCTURAL ENGINEERS-  
 LAND SURVEYORS-  
 Design Firm License No. 184-002703

USER NAME	DESIGNED	REVISIONS
brianheil	AMC	-
	CHECKED	REVIS
	DRAWN	REVIS
	CHECKED	REVIS

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

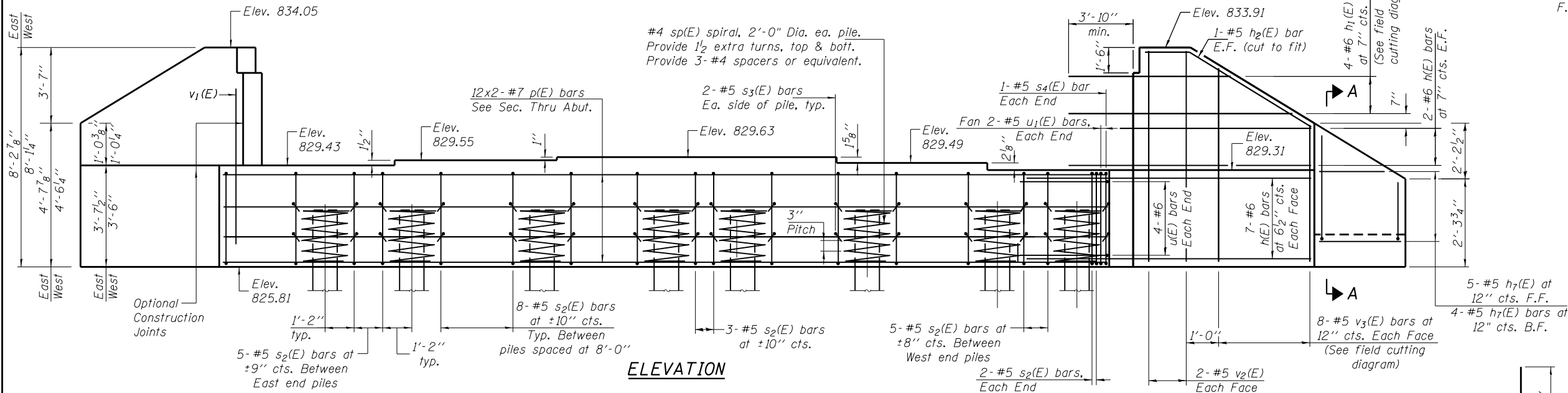
**NORTH ABUTMENT DETAILS  
STRUCTURE NO. 048-0101 (W.B.)**

SHEET NO. 28 OF 61 SHEETS

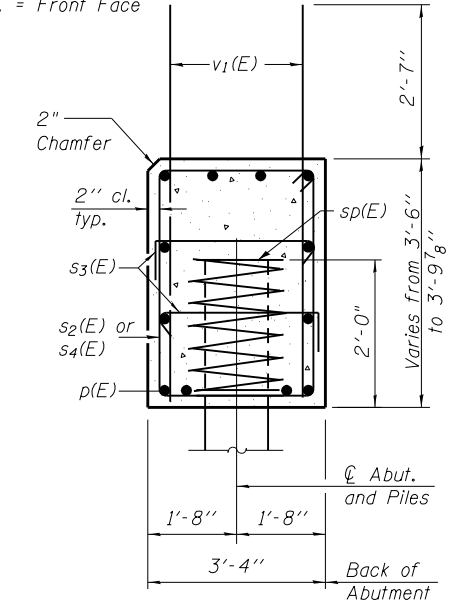
F.A.I. RT.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)BR	KNOX	212	82
				CONTRACT NO. 68B69

ILLINOIS FED. AID PROJECT

Notes:  
Pour steps monolithically with cap.

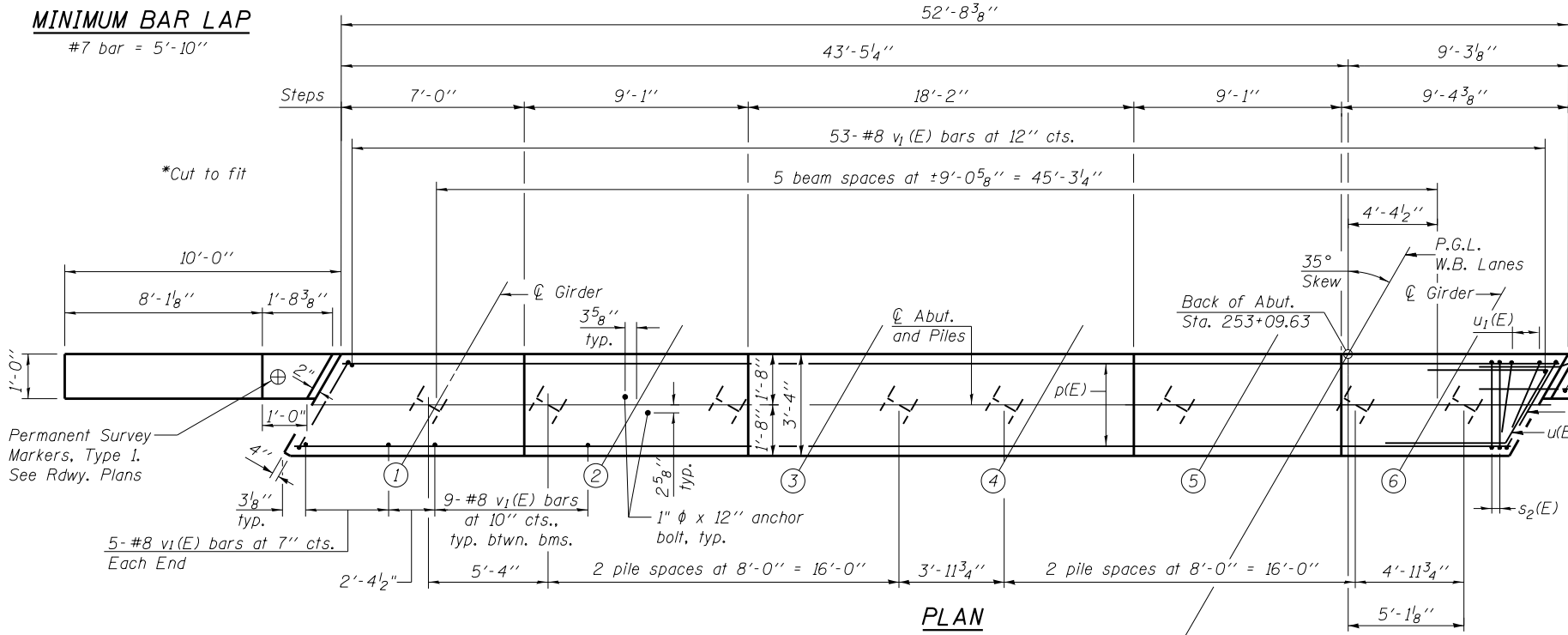


E.F. = Each Face  
B.F. = Back Face  
F.F. = Front Face



**MINIMUM BAR LAP**

#7 bar = 5'-10"

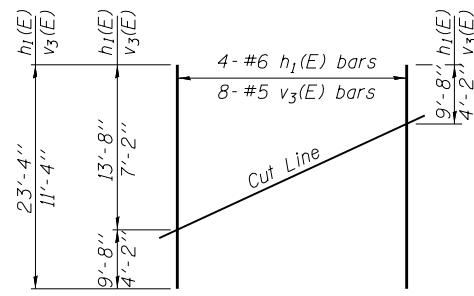


Permanent Survey Markers, Type 1. See Rdwy. Plans

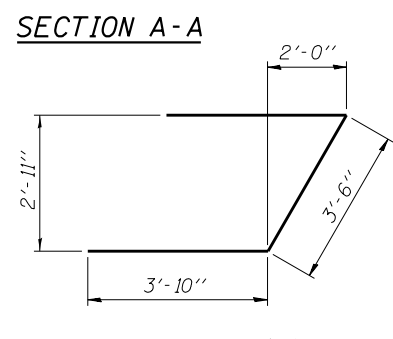
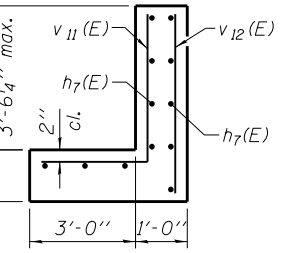
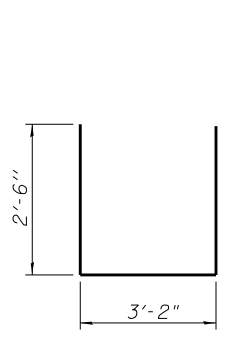
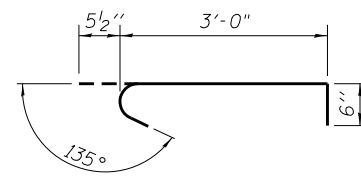
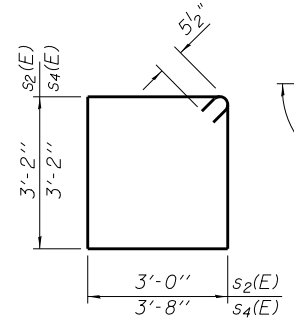
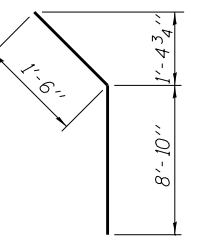
**PILE DATA**

Type: HP 14x73  
Nominal Required Bearing: 278 kips  
Factored Resistance Available: 153 kips  
Est. Length: 55'  
No. Production Piles: 7  
No. Test Piles: 1

Note:  
The proposed piles at the south abutment may need to be relocated in order to miss the existing piles. Adjusted pile spacing to be no more than 8' and no less than 3'-8" and shall be approved by the Engineer. Cost included with Driving Piles.



Order h1(E) and v3(E) full length. Cut as shown and use remainder of bars in opposite face.



**SEC. THRU ABUT.**

Dimensions at right angles to abutment.

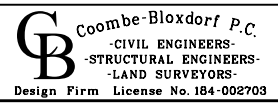
**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	36	#6	14'-4"	—
h1(E)	8	#6	23'-4"	—
h2(E)	4	#5	10'-4"	—
h7(E)	12	#5	4'-8"	—
p(E)	24	#7	29'-2"	—
s2(E)	49	#5	13'-3"	□
s3(E)	32	#5	4'-0"	□
s4(E)	2	#5	14'-7"	□
sp(E)	8	#4	2'-0"	≡≡≡
u(E)	8	#6	11'-2"	—
u1(E)	4	#5	8'-2"	—
v1(E)	108	#8	5'-11"	—
v2(E)	8	#5	7'-9"	—
v3(E)	16	#5	11'-4"	—
v11(E)	6	#5	6'-6"	└
v12(E)	6	#5	4'-2"	—
Structure Excavation		Cu. Yd.	90	
Concrete Structures		Cu. Yd.	30.0	
Reinforcement Bars, Epoxy Coated		Pound	5990	
Furnishing Steel Piles, HP 14 x 73		Foot	385	
Driving Piles		Foot	385	
Test Pile, Steel HP 14 x 73		Each	1	

\* Length is height of spiral.  
For details of piles see sheet 38 of 61.

FILE NAME: \\0.10.5845-0005 & 0006 1-74 Phase 2\Structural\Final Plans\Microstation\0480101\_0102-68669-029-abut.LB.dgn

AI-40S-R 8-31-12



USER NAME = brianheil	DESIGNED - AMC	REVISED -
PLOT SCALE = 0:2.000000 '1' / in.	CHECKED -	REVISED -
PLOT DATE = 2/8/2016	DRAWN - MMY	REVISED -
	CHECKED -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

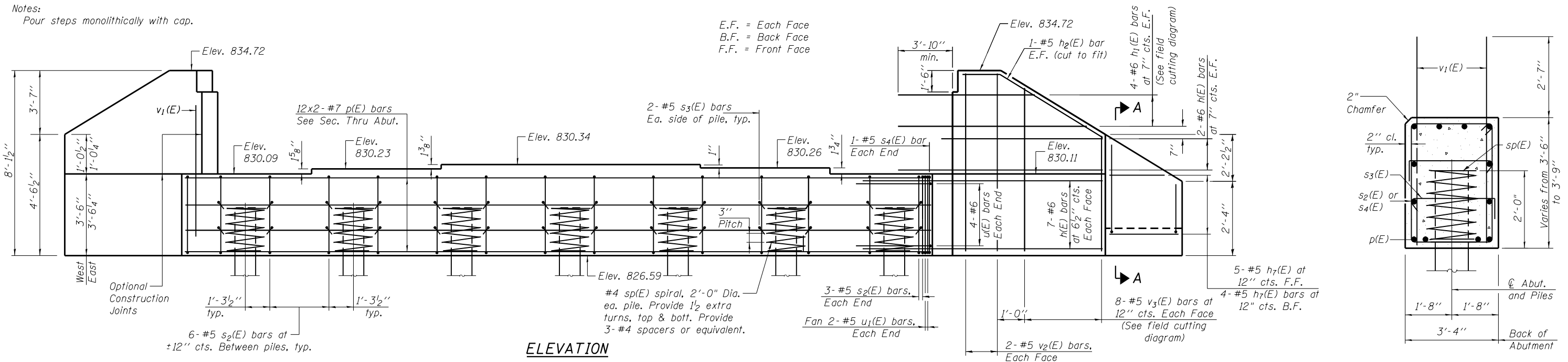
SOUTH ABUTMENT DETAILS  
STRUCTURE NO. 048-0101 (W.B.)

SHEET NO. 29 OF 61 SHEETS

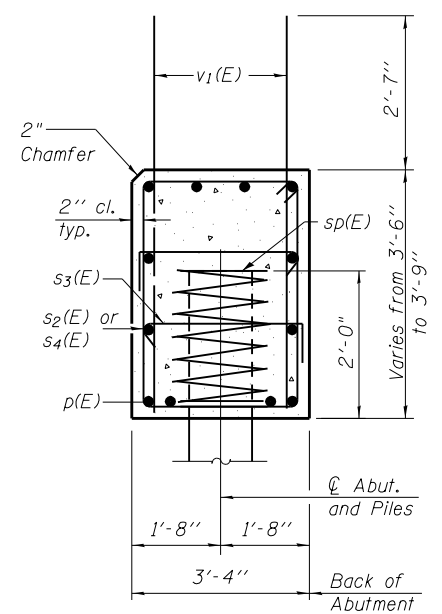
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)BR	KNOX	212	83
CONTRACT NO. 68B69				
ILLINOIS FED. AID PROJECT				

Notes:  
Pour steps monolithically with cap.

E.F. = Each Face  
B.F. = Back Face  
F.F. = Front Face

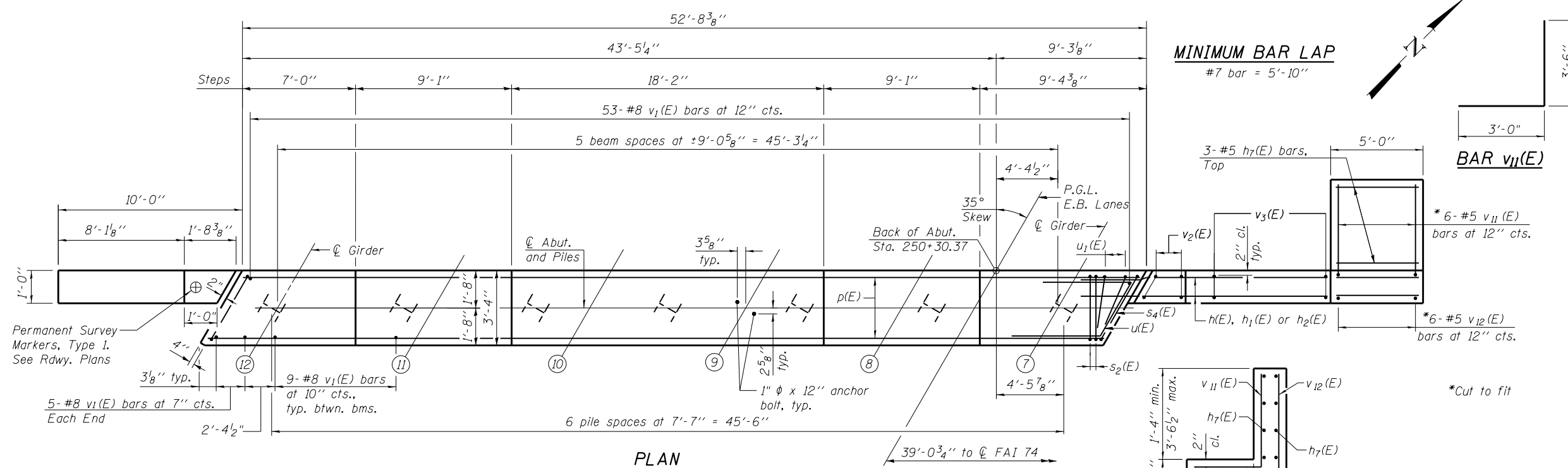


**ELEVATION**



**SEC. THRU ABUT.**

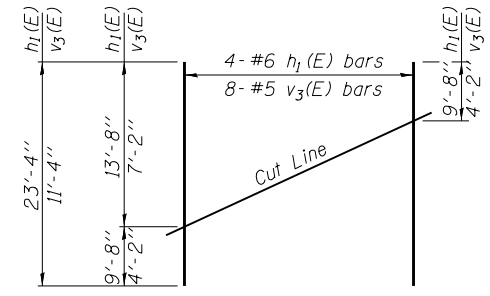
Dimensions at right angles to abutment.



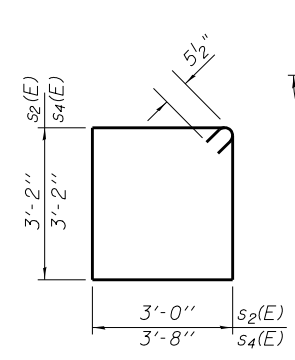
**PLAN**

**MINIMUM BAR LAP**  
#7 bar = 5'-10"

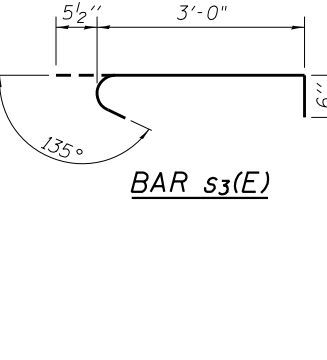
**PILE DATA**  
Type: HP 14x73  
Nominal Required Bearing: 318k  
Factored Resistance Available: 175k  
Est. Length: 66'  
No. Production Piles: 6  
No. Test Piles: 1



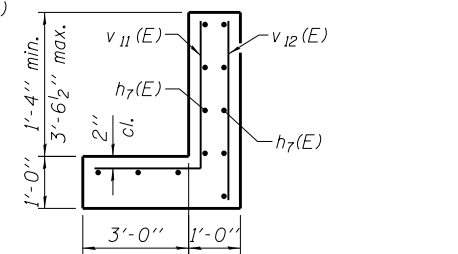
**FIELD CUTTING DIAGRAM**



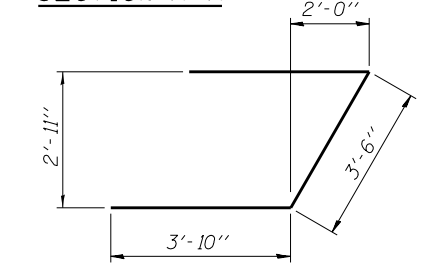
**BARS s2(E) & s4(E)**



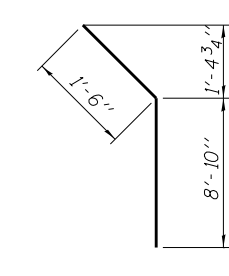
**BAR u1(E)**



**SECTION A-A**



**BAR u(E)**



**BAR h2(E)**

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	36	#6	14'-4"	—
h1(E)	8	#6	23'-4"	—
h2(E)	4	#5	10'-4"	—
h7(E)	12	#5	4'-8"	—
p(E)	24	#7	29'-2"	—
s2(E)	42	#5	13'-3"	□
s3(E)	28	#5	4'-0"	□
s4(E)	2	#5	14'-7"	□
sp(E)	7	#4	2'-0"	WWW
u(E)	8	#6	11'-2"	—
u1(E)	4	#5	8'-2"	—
v1(E)	108	#8	5'-11"	—
v2(E)	8	#5	7'-9"	—
v3(E)	16	#5	11'-4"	—
v11(E)	6	#5	6'-6"	—
v12(E)	6	#5	4'-2"	—
Structure Excavation		Cu. Yd.	133	
Concrete Structures		Cu. Yd.	29.6	
Reinforcement Bars, Epoxy Coated		Pound	5830	
Furnishing Steel Piles, HP 14 x 73		Foot	396	
Driving Piles		Foot	396	
Test Pile, Steel HP 14 x 73		Each	1	

\* Length is height of spiral.  
For details of piles see sheet 38 of 61.

FILE NAME: \\010\_10\_S\048-0102\_012-68669-030-abut.EB.dgn  
 PROJECT NO: 048010-012-68669-030-abut.EB.dgn  
 AI-40S-R  
 8-31-12  
 Order h1(E) and v3(E) full length.  
 Cut as shown and use remainder of bars in opposite face.

**AI-40S-R**  
8-31-12  
Coombe-Bloxdorf P.C.  
CIVIL ENGINEERS-  
STRUCTURAL ENGINEERS-  
LAND SURVEYORS  
Design Firm License No. 184-002703

USER NAME = brianheil	DESIGNED - AMC	REVISIONS
PLOT SCALE = 0.2:000000 '1' / in.	CHECKED -	REVISIONS
PLOT DATE = 2/8/2016	DRAWN - MMY	REVISIONS
	CHECKED -	REVISIONS

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

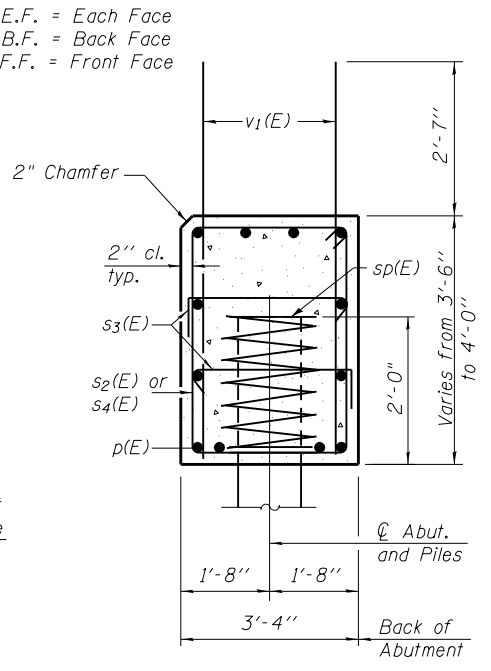
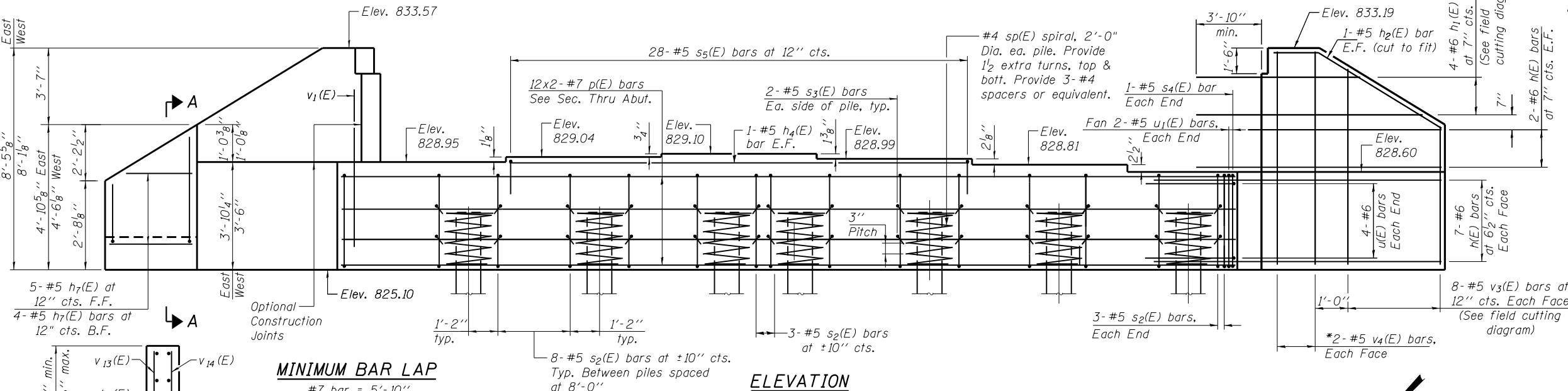
**NORTH ABUTMENT DETAILS**  
**STRUCTURE NO. 048-0102 (E.B.)**

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)BR	KNOX	212	84
CONTRACT NO. 68B69				
ILLINOIS FED. AID PROJECT				

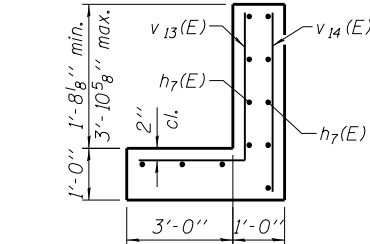
SHEET NO. 30 OF 61 SHEETS



Notes:  
Pour steps monolithically with cap.



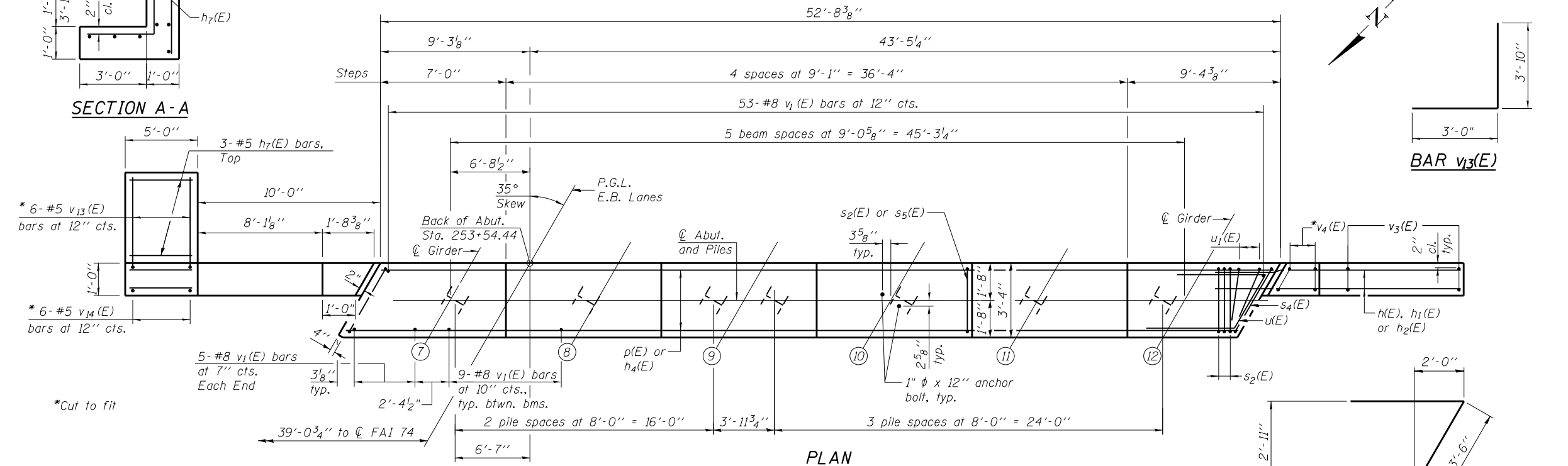
**SEC. THRU ABUT.**  
Dimensions at right angles to abutment.



**SECTION A-A**

**MINIMUM BAR LAP**  
#7 bar = 5'-10"

**ELEVATION**

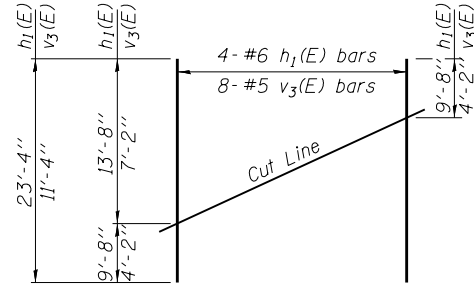


**PLAN**

**PILE DATA**

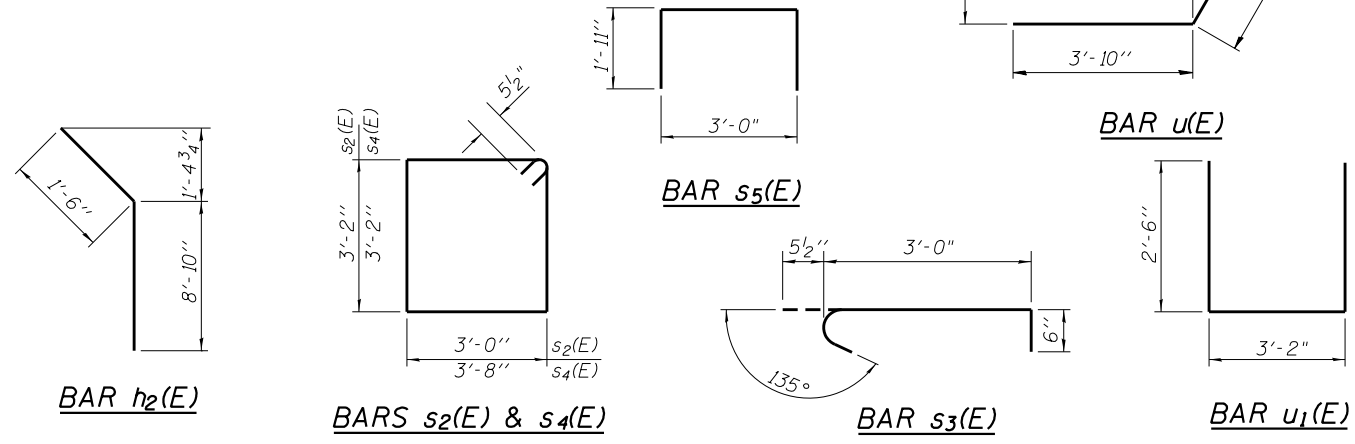
Type: HP 14x73  
Nominal Required Bearing: 318 kips  
actored Resistance Available: 175 kips  
Est. Length: 60'  
No. Production Piles: 6  
No. Test Piles: 1

Note:  
The proposed piles at the south abutment may need to be relocated in order to miss the existing piles. Adjusted pile spacing to be no more than 8' and no less than 3'-8" and shall be approved by the Engineer. Cost included with Driving Piles.



**FIELD CUTTING DIAGRAM**

Order h1(E) and v3(E) full length. Cut as shown and use remainder of bars in opposite face.



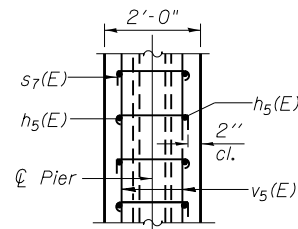
**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	36	#6	14'-4"	—
h1(E)	8	#6	23'-4"	—
h2(E)	4	#5	10'-4"	—
h4(E)	2	#5	26'-10"	—
h7(E)	12	#5	4'-8"	—
p(E)	24	#7	29'-2"	—
s2(E)	49	#5	13'-3"	□
s3(E)	28	#5	4'-0"	□
s4(E)	2	#5	14'-7"	□
s5(E)	28	#5	6'-10"	□
sp(E)	7	#4	2'-0"	▩
u(E)	8	#6	11'-2"	—
u1(E)	4	#5	8'-2"	—
v1(E)	108	#8	5'-11"	—
v3(E)	16	#5	11'-4"	—
v4(E)	8	#5	8'-1"	—
v3(E)	6	#5	6'-10"	—
v4(E)	6	#5	4'-6"	—
Structure Excavation	Cu. Yd.		103	
Concrete Structures	Cu. Yd.		30.9	
Reinforcement Bars, Epoxy Coated	Pound		6190	
Furnishing Steel Piles, HP 14 x 73	Foot		360	
Driving Piles	Foot		360	
Test Pile, Steel HP 14 x 73	Each		1	

\*\* Length is height of spiral.  
For details of piles see sheet 38 of 61.

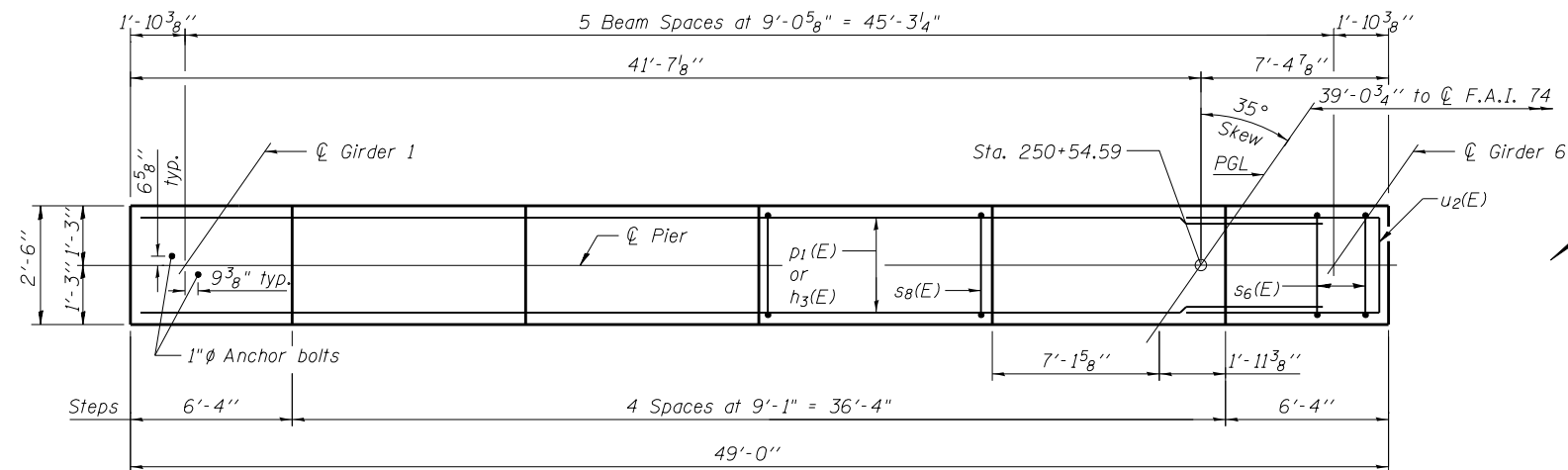
FILE NAME: \\s0101010101010101\Projects\174 Phase 2\Structural\Final Plans\Microstation\0480101\_0102-68669-031-abut.EB.dgn  
 CB PROJECT NO. 0480101-0102-68669-031-abut.EB.dgn  
 AI-40S-R  
 8-31-12  
 Coombe-Bloedort P.C.  
 CIVIL ENGINEERS-  
 STRUCTURAL ENGINEERS-  
 LAND SURVEYORS-  
 Design Firm License No. 184-002703  
 USER NAME = brianheil  
 DESIGNED - AMC  
 CHECKED -  
 PLOT SCALE = 0:2.000000 '1' / in.  
 DRAWN - MMY  
 PLOT DATE = 2/8/2016  
 CHECKED -  
 REVISIONS:  
 REVISIONS:  
 REVISIONS:  
 REVISIONS:  
 REVISIONS:  
 STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 SOUTH ABUTMENT DETAILS  
 STRUCTURE NO. 048-0102 (E.B.)  
 SHEET NO. 31 OF 61 SHEETS  
 F.A.I. RT. SECTION COUNTY TOTAL SHEETS SHEET NO.  
 74 (48-26HVB)IBR KNOX 212 85  
 CONTRACT NO. 68B69  
 ILLINOIS FED. AID PROJECT

Notes:  
 Space reinforcement in cap to miss anchor bolts.  
 Pour steps monolithically with cap.  
 For details of piles, see sheet 38 of 61.



**SECTION THRU WALL AT PILE LOCATION**

Showing alternating placement of  $s_7(E)$  bars

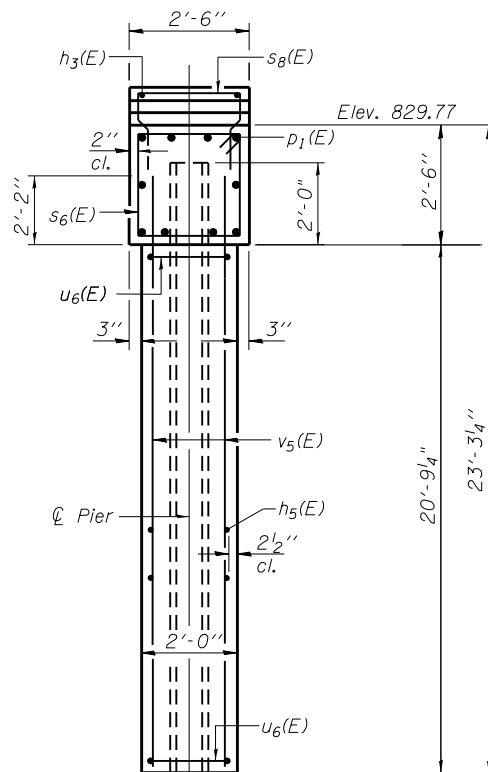


**TOP PLAN**

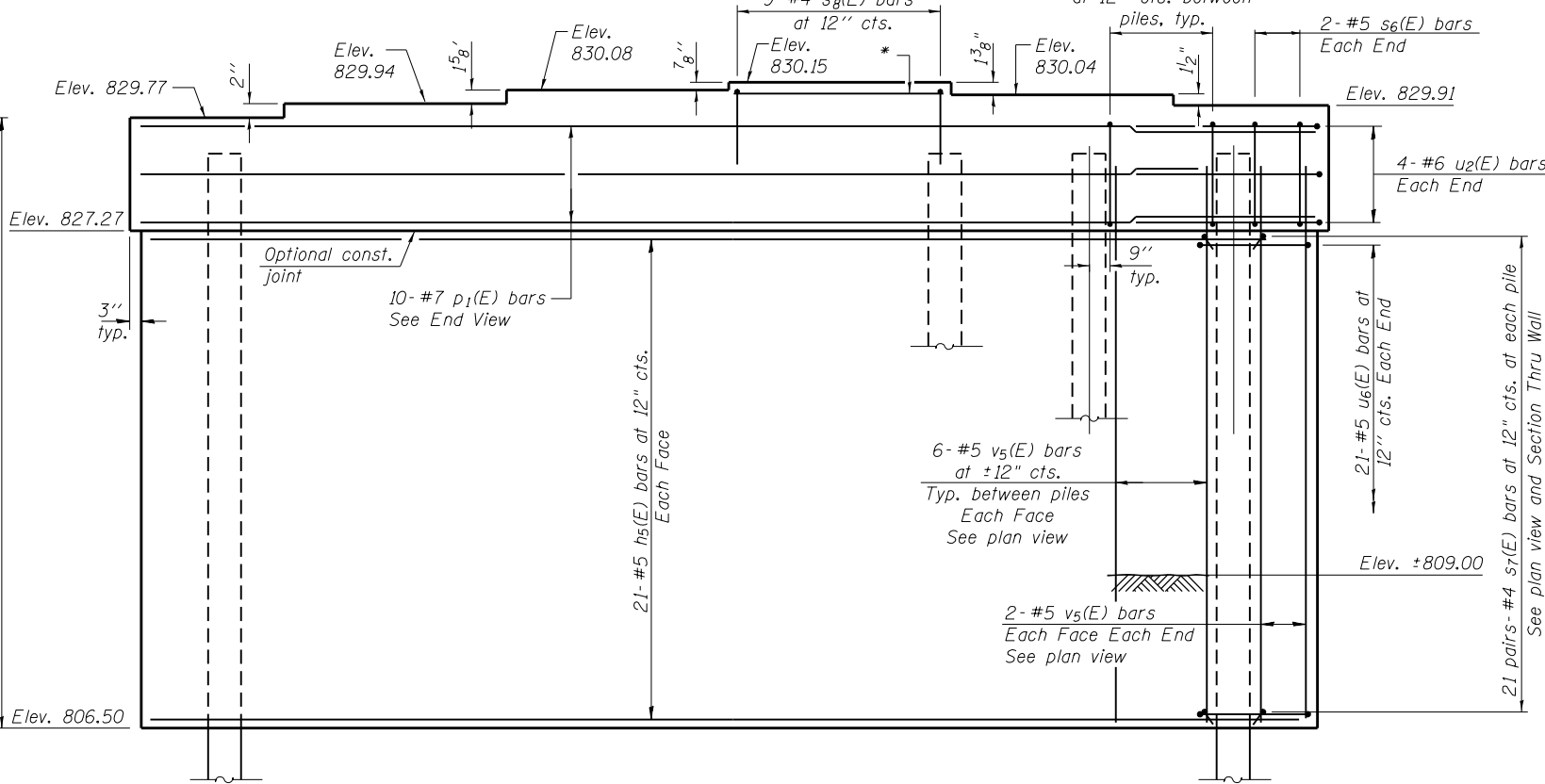
\*1- #5  $h_3(E)$  bar Each Face

6- #5  $s_6(E)$  bars at 12" cts. between piles, typ.

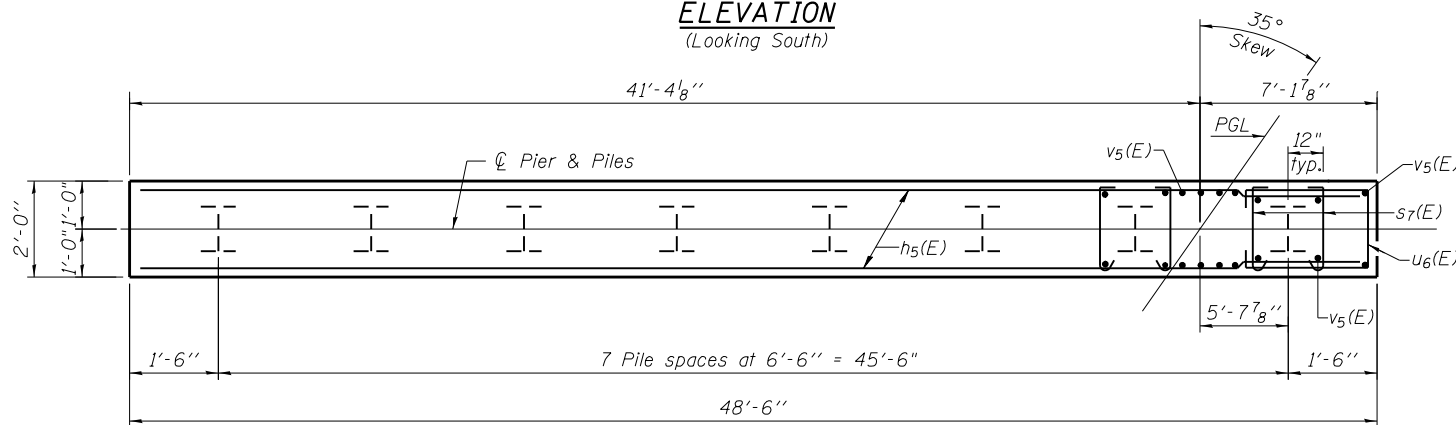
2- #5  $s_6(E)$  bars Each End



**END VIEW**



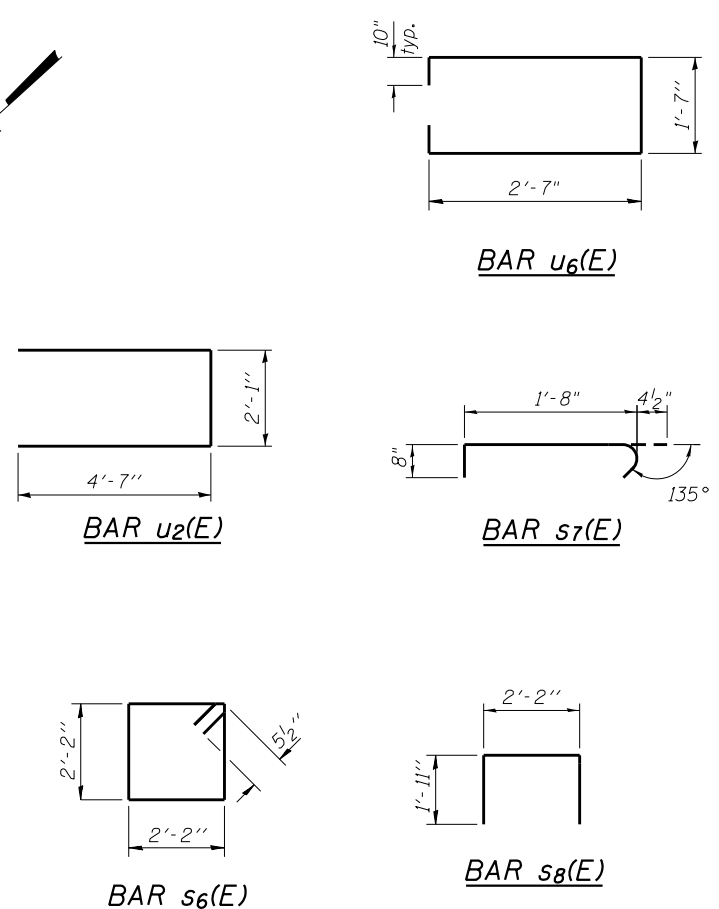
**ELEVATION (Looking South)**



**PLAN**

**PILE DATA**

Type: Steel HP 14x73  
 Nominal Required Bearing: 578 kips  
 Factored Resistance Available: 317 kips  
 Est. Length: 105 ft.  
 No. Production Piles: 7  
 No. Test Piles: 1



**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
$h_3(E)$	2	#5	8'-8"	—
$h_5(E)$	42	#5	48'-2"	—
$p_1(E)$	10	#7	48'-8"	—
$s_6(E)$	46	#5	9'-7"	□
$s_7(E)$	336	#4	2'-9"	□
$s_8(E)$	9	#4	6'-0"	□
$u_2(E)$	8	#6	11'-3"	—
$u_6(E)$	42	#5	8'-5"	—
$v_5(E)$	92	#5	22'-10"	—
Structure Excavation	Cu. Yd.		31	
Concrete Structures	Cu. Yd.		87.0	
Reinforcement Bars, Epoxy Coated	Pound		6930	
Furnishing Steel Piles HP 14 x 73	Foot		735	
Driving Piles	Foot		735	
Test Pile Steel HP 14 x 73	Each		1	

FILE NAME: \\s01010101\Projects\174 Phase 2\Structural\Final Plans\Microstation\0480101\_0102-68B69-032-pier1.wb.dgn  
 CB PROJECT NO. 0480101-0102-68B69-032-pier1.wb.dgn

**Coombe-Bloxdorf P.C.**  
 CIVIL ENGINEERS-  
 STRUCTURAL ENGINEERS-  
 LAND SURVEYORS-  
 Design Firm License No. 184-002703

USER NAME = brianheil	DESIGNED - GJB	REVISED -
PLOT SCALE = 0:2.000000 '1' / in.	CHECKED -	REVISED -
PLOT DATE = 2/8/2016	DRAWN - MMY	REVISED -
	CHECKED -	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

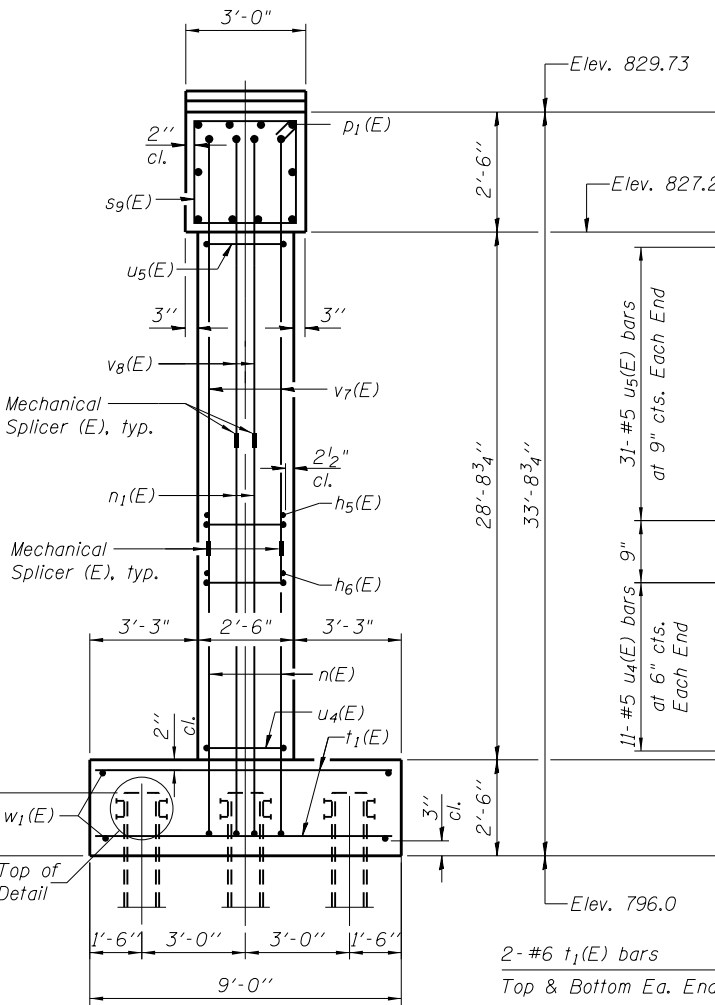
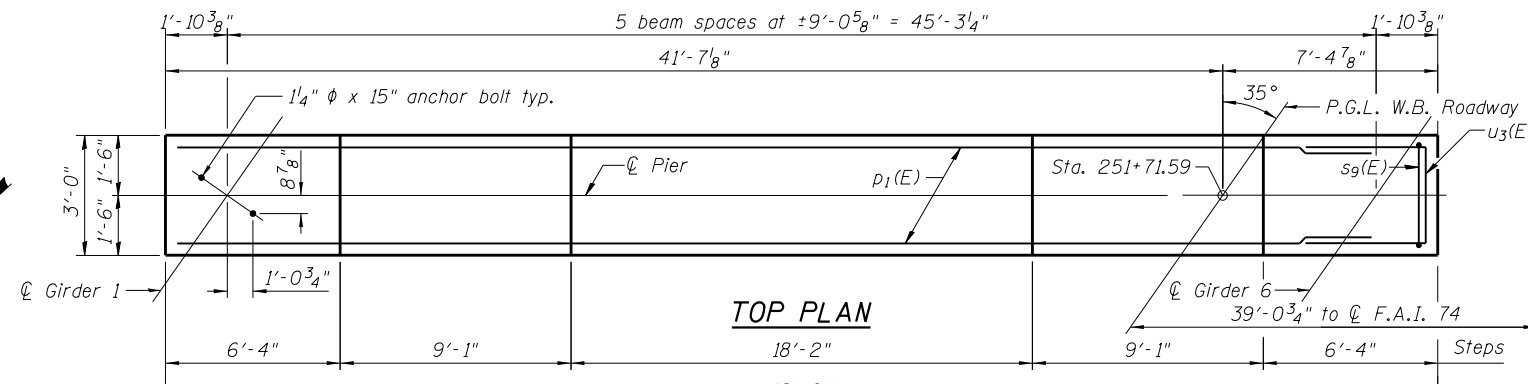
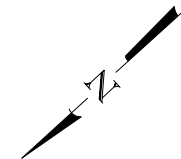
PIER 1  
 STRUCTURE NO. 048-0101 (W.B.)  
 SHEET NO. 32 OF 61 SHEETS

F.A.I. R.T. 74	SECTION (48-26HVB)BR	COUNTY KNOX	TOTAL SHEETS 212	SHEET NO. 86
CONTRACT NO. 68B69				
ILLINOIS FED. AID PROJECT				

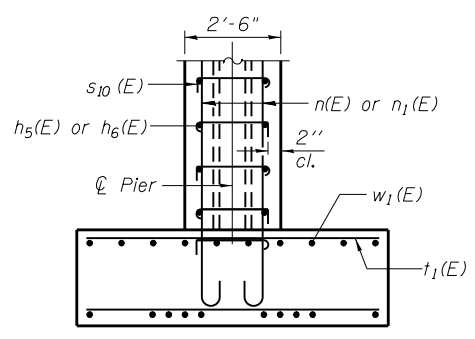
Notes:  
 Space reinforcement in cap to miss anchor bolts.  
 Pour steps monolithically with cap.  
 For details of piles, see sheet 38 of 61.  
 See sheet 39 of 61 for Mechanical Splicer Details.

**PILE DATA**

Type: HP 14 x 73  
 Nominal Required Bearing: 578 kips  
 Factored Resistance Available: 317 kips  
 Est. Length: 70'  
 No. Production Piles: 20  
 No. Test Piles: 1

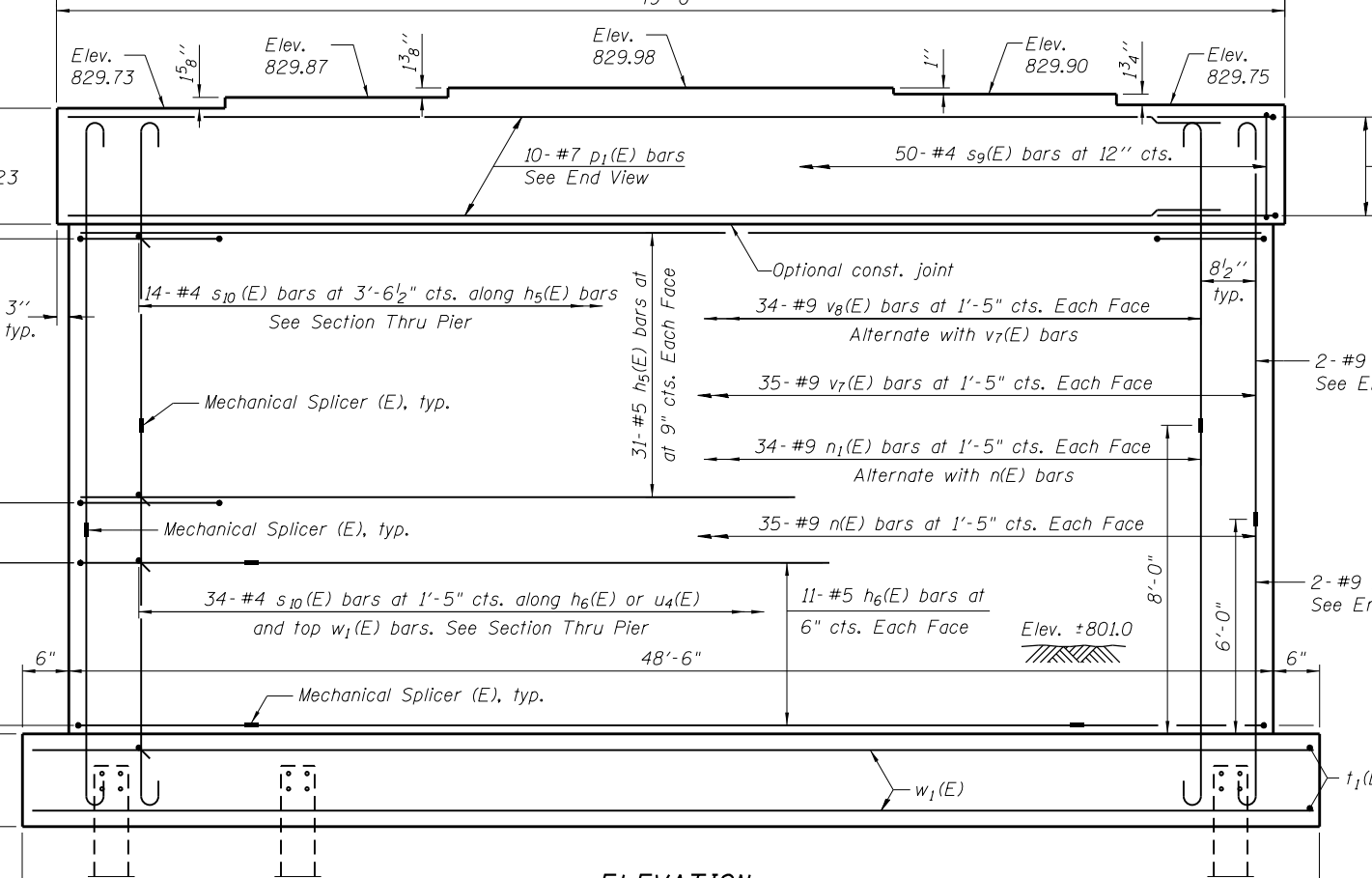


**END VIEW**

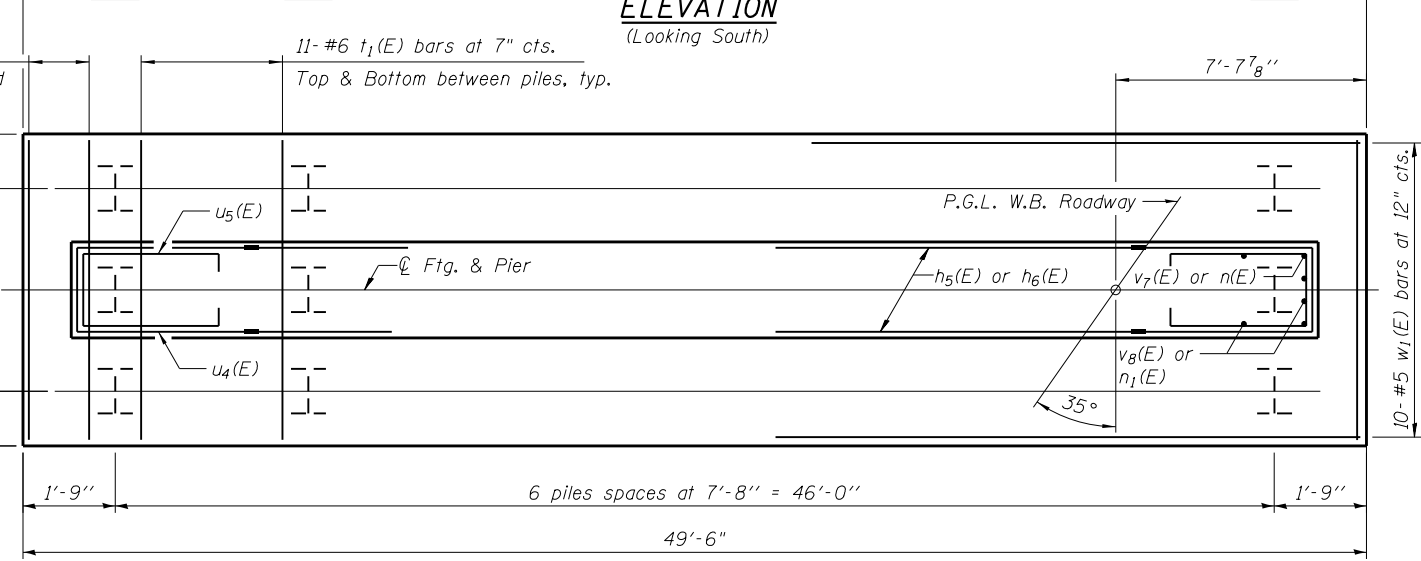


**SECTION THRU PIER**

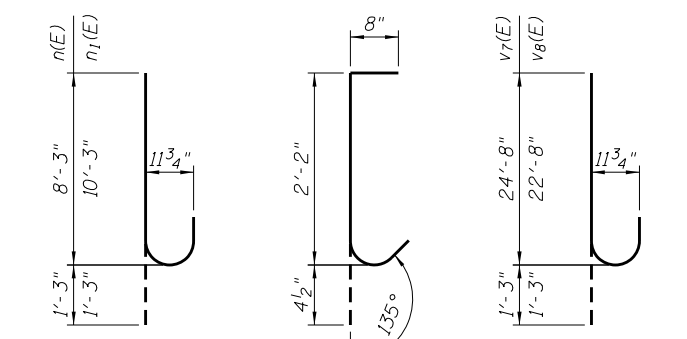
Showing alternating placement of s<sub>10</sub>(E) bars  
 (Piles omitted for clarity)



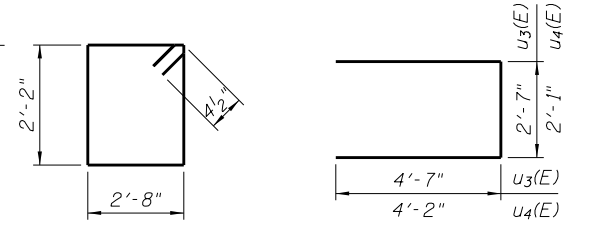
**ELEVATION**  
 (Looking South)



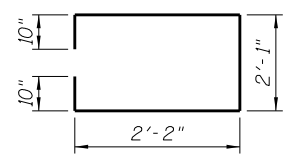
**FOOTING PLAN**



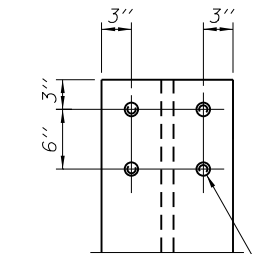
**BAR n<sub>1</sub>(E) or n<sub>1</sub>(E)**      **BAR s<sub>10</sub>(E)**      **BAR v<sub>7</sub>(E) or v<sub>8</sub>(E)**



**BAR s<sub>9</sub>(E)**      **BAR u<sub>3</sub>(E) & u<sub>4</sub>(E)**



**BAR u<sub>5</sub>(E)**



**TOP OF PILE  
 DETAIL**

4- 3/4" φ x 4" Granular or solid flux filled headed studs automatically end welded. Typ. each flange, each pile. Cost included with Furnishing Piles.

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h <sub>5</sub> (E)	62	#5	48'-2"	—
h <sub>6</sub> (E)	22	#5	39'-10"	—
n(E)	70	#9	9'-6"	U
n <sub>1</sub> (E)	72	#9	11'-6"	U
p <sub>1</sub> (E)	10	#7	48'-8"	—
s <sub>9</sub> (E)	50	#4	10'-5"	□
s <sub>10</sub> (E)	842	#4	3'-3"	U
t <sub>1</sub> (E)	140	#6	8'-8"	—
u <sub>3</sub> (E)	8	#6	11'-9"	U
u <sub>4</sub> (E)	22	#5	10'-5"	U
u <sub>5</sub> (E)	62	#5	8'-1"	U
v <sub>7</sub> (E)	70	#9	25'-11"	U
v <sub>8</sub> (E)	72	#9	23'-11"	U
w <sub>1</sub> (E)	20	#5	49'-2"	—
Structure Excavation			Cu. Yd.	142
Concrete Structures			Cu. Yd.	184.7
Reinforcement Bars, Epoxy Coated			Pound	28,050
Furnishing Steel Piles, HP 14x73			Foot	1,400
Driving Piles			Foot	1,400
Test Pile, HP 14x73			Each	1

FILE NAME: \\010\_S\048-0025 & 0026 1-74 Phase 2\Structural\Final Plans\Microstation\0480101\_0102-68669-033-pier2.MB.dgn  
 CB PROJECT NO. 048071-10

**Coombe-Bloxdorf P.C.**  
 CIVIL ENGINEERS-  
 STRUCTURAL ENGINEERS-  
 LAND SURVEYORS-  
 Design Firm License No. 184-002703

USER NAME = brianhel	DESIGNED -	REVISED -
PLOT SCALE = 0:2.0000 1' = 1"	CHECKED -	REVISED -
PLOT DATE = 2/8/2016	DRAWN - MMY/CFC	REVISED -
	CHECKED -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

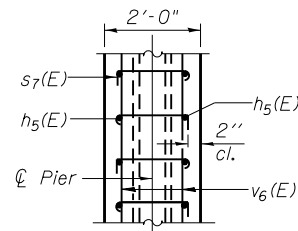
**PIER 2  
 STRUCTURE NO. 048-0101 (W.B.)**

SHEET NO. 33 OF 61 SHEETS

F.A.I. RT.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)IBR	KNOX	212	87
CONTRACT NO. 68B69				

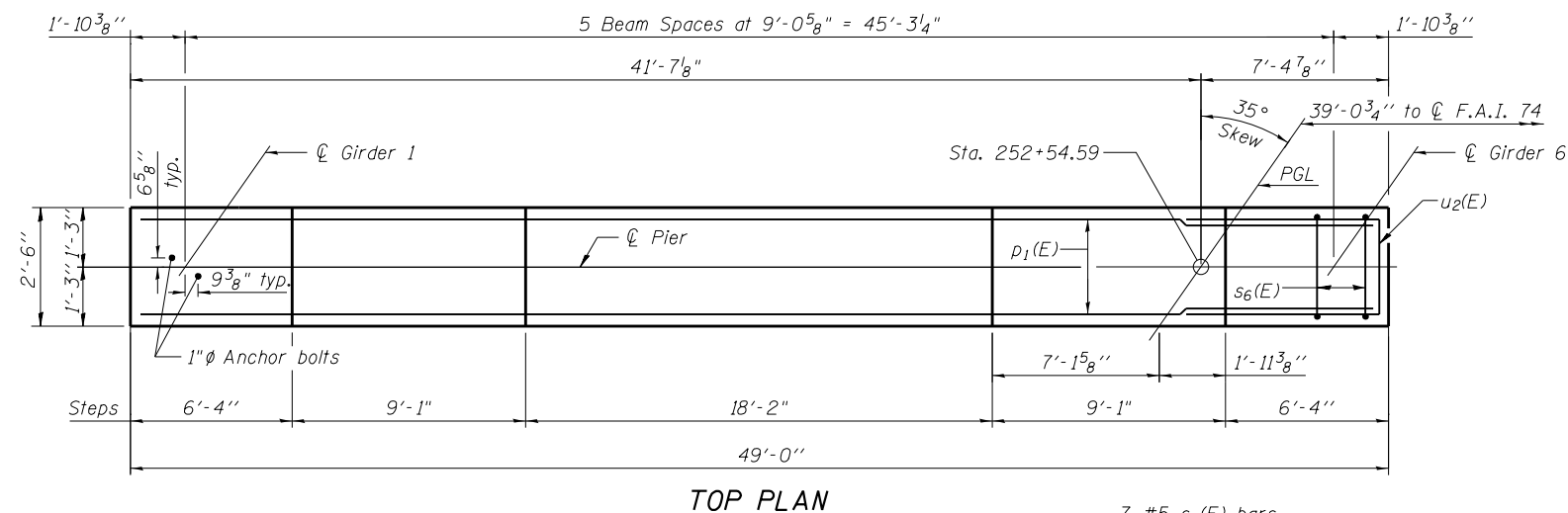
ILLINOIS FED. AID PROJECT

Notes:  
 Space reinforcement in cap to miss anchor bolts.  
 Four steps monolithically with cap.  
 For details of piles, see sheet 38 of 61.

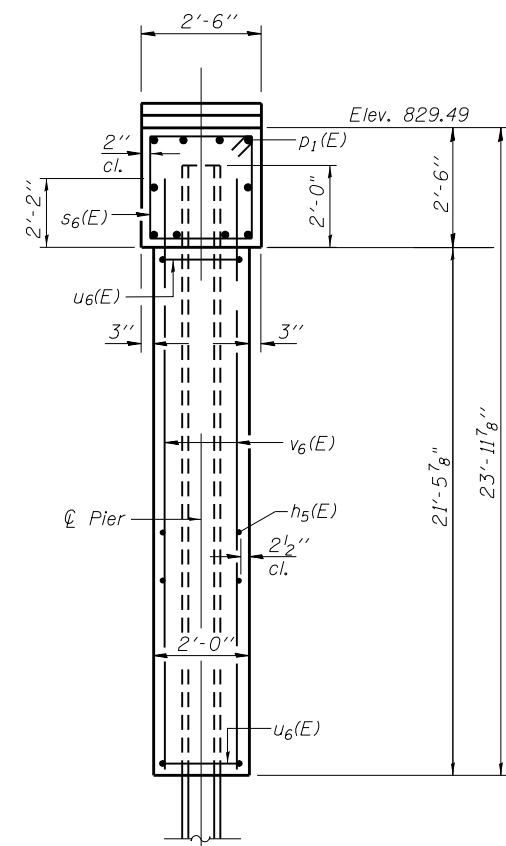


**SECTION THRU WALL  
 AT PILE LOCATION**

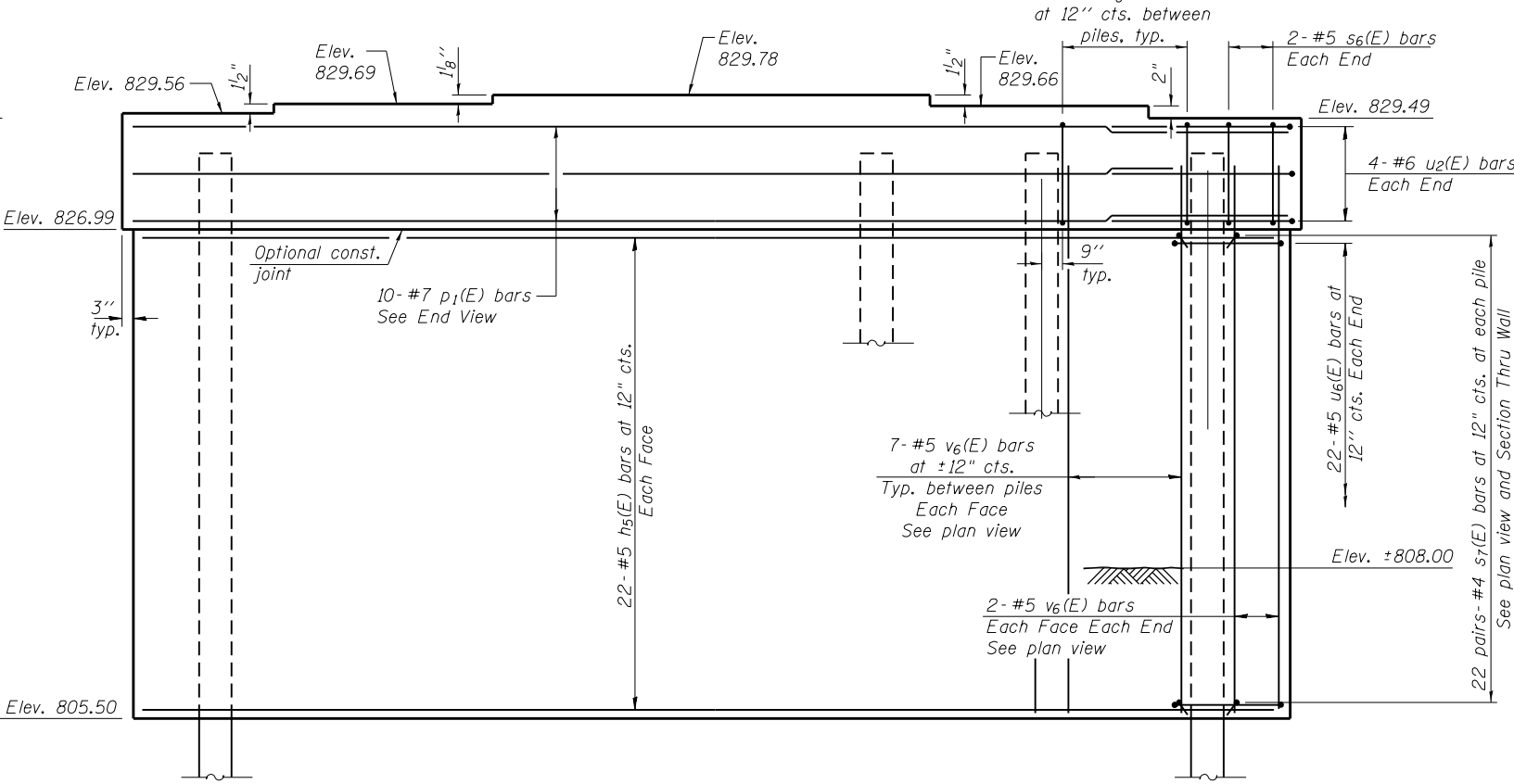
Showing alternating placement of  $s_7(E)$  bars



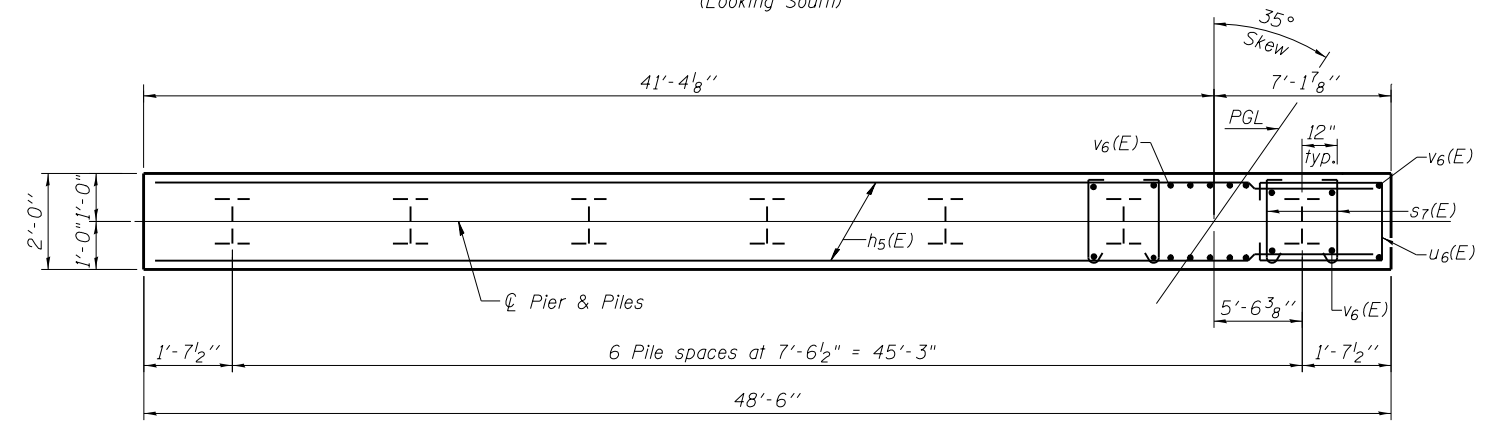
**TOP PLAN**



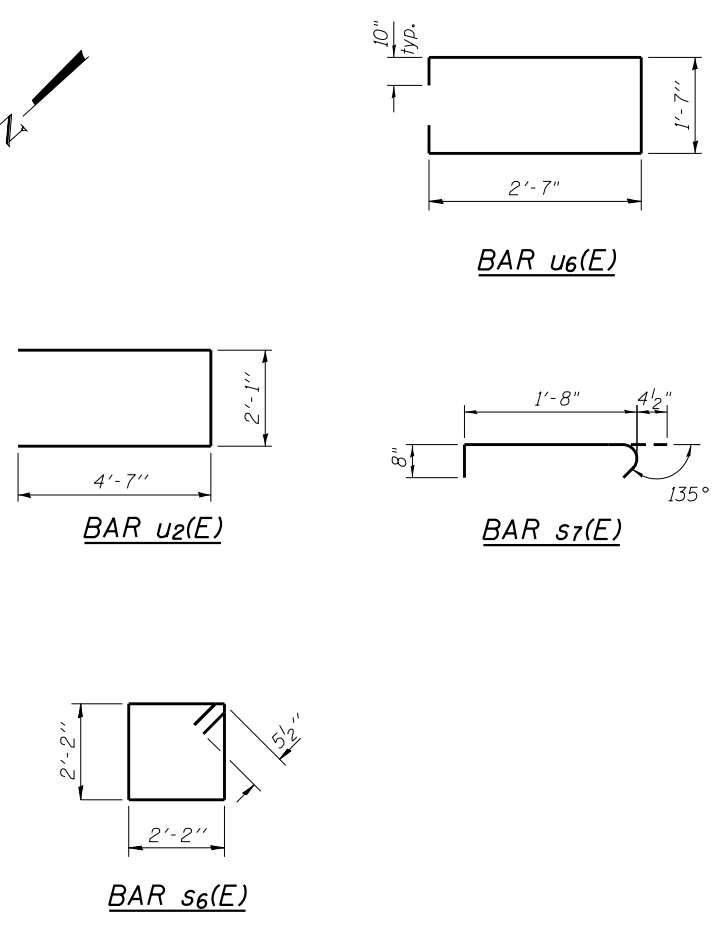
**END VIEW**



**ELEVATION  
 (Looking South)**



**PLAN**



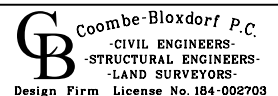
**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
$h_5(E)$	44	#5	48'-2"	—
$p_1(E)$	10	#7	48'-8"	—
$s_6(E)$	46	#5	9'-7"	□
$s_7(E)$	308	#4	2'-9"	┌
$u_2(E)$	8	#6	11'-3"	▭
$u_6(E)$	44	#5	8'-5"	▭
$v_6(E)$	92	#5	23'-5"	—
Structure Excavation		Cu. Yd.	31	
Concrete Structures		Cu. Yd.	89.4	
Reinforcement Bars, Epoxy Coated		Pound	7000	
Furnishing Steel Piles HP 14 x 73		Foot	630	
Driving Piles		Foot	630	
Test Pile Steel HP 14 x 73		Each	1	

**PILE DATA**

Type: Steel HP 14x73  
 Nominal Required Bearing: 578 kips  
 Factored Resistance Available: 317 kips  
 Est. Length: 105 ft.  
 No. Production Piles: 6  
 No. Test Piles: 1

FILE NAME: \\0.10.58048-0005 & 0006 1-74 Phase 2\Structural\Final Plans\Microstation\0480101\_0102-68B69-034-per-3\_MBD.dgn  
 PROJECT NO. 0480101-0102-68B69-034



USER NAME = brianheil	DESIGNED - GJB	REVISED -
PLOT SCALE = 0:2.000000 '1' / in.	CHECKED -	REVISED -
PLOT DATE = 2/8/2016	DRAWN - MMY	REVISED -
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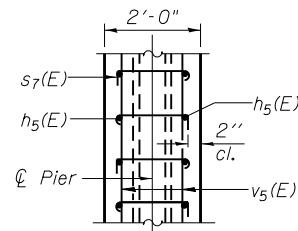
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**PIER 3  
 STRUCTURE NO. 048-0101 (W.B.)**

SHEET NO. 34 OF 61 SHEETS

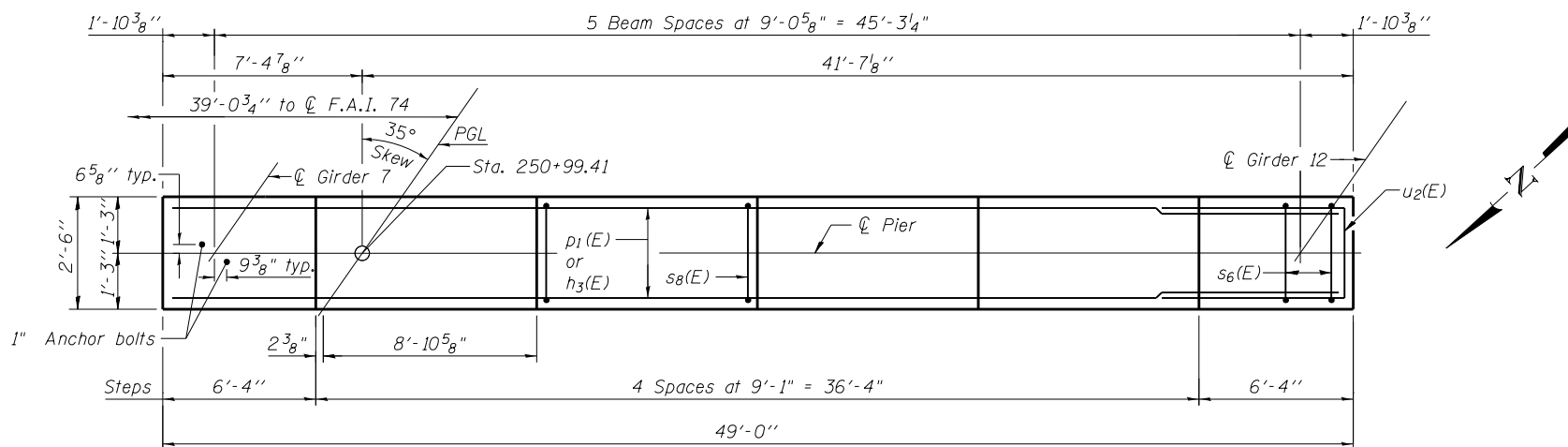
F.A.I. R.T.E. 74	SECTION (48-26HVB)BR	COUNTY KNOX	TOTAL SHEETS 212	SHEET NO. 88
CONTRACT NO. 68B69			ILLINOIS FED. AID PROJECT	

Notes:  
 Space reinforcement in cap to miss anchor bolts.  
 Pour steps monolithically with cap.  
 For details of piles, see sheet 38 of 61.



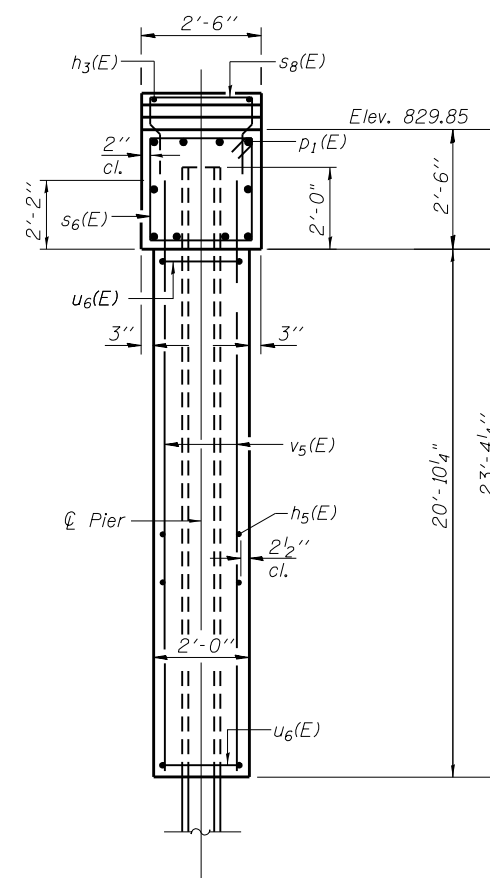
**SECTION THRU WALL  
 AT PILE LOCATION**

Showing alternating placement of  $s_7(E)$  bars

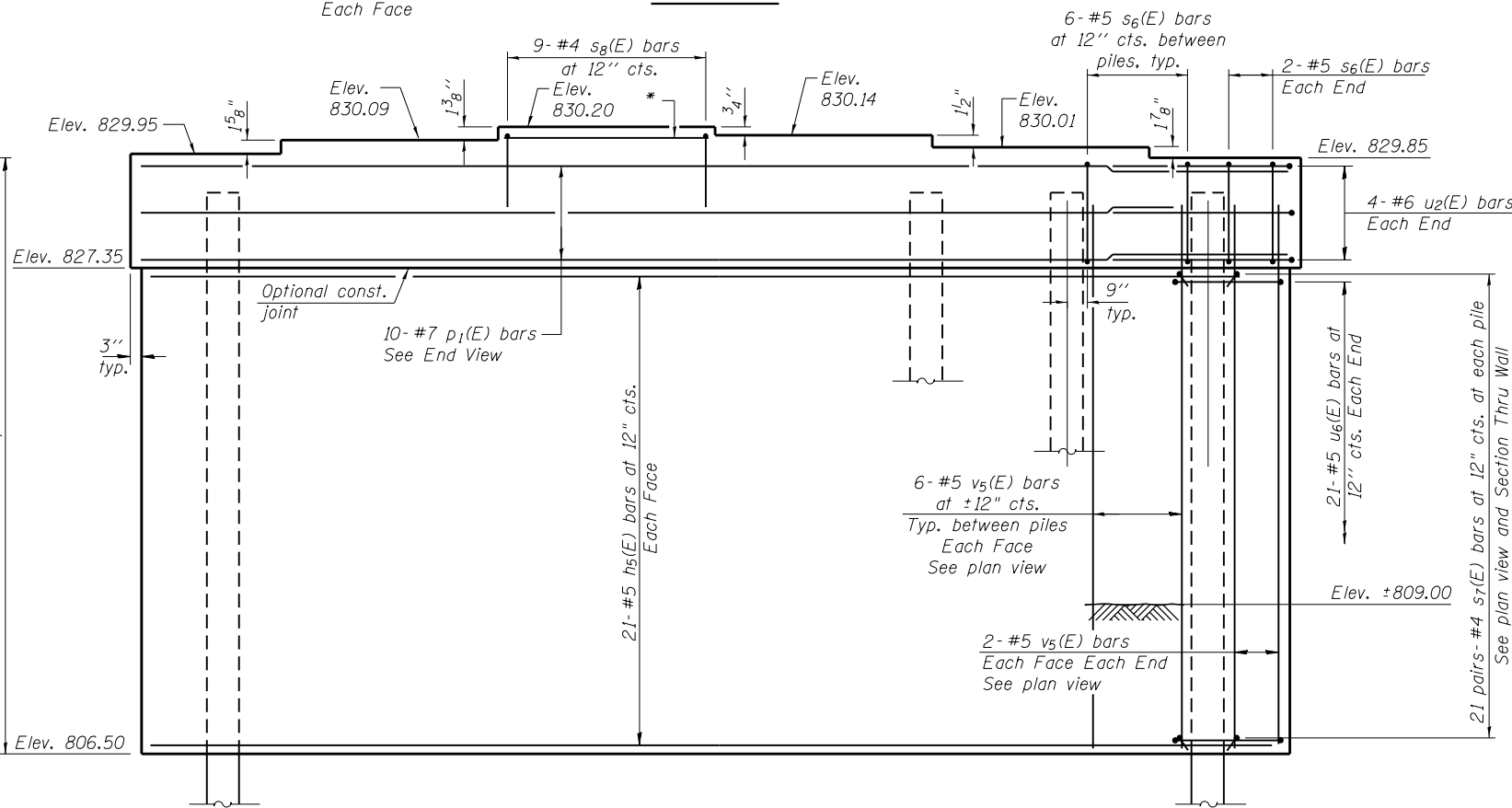


**TOP PLAN**

\*1- #5  $h_3(E)$  bar  
 Each Face

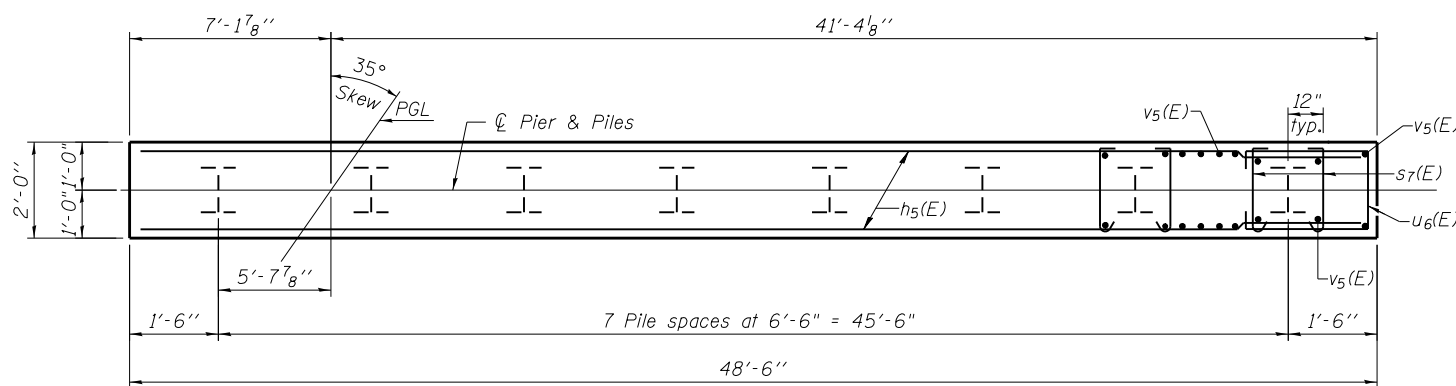


**END VIEW**

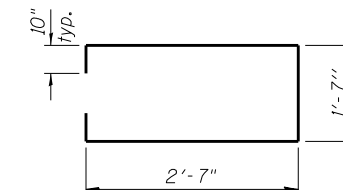


**ELEVATION**

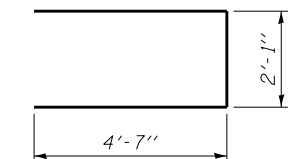
(Looking South)



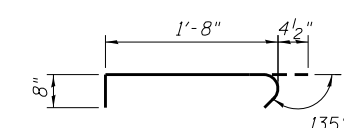
**PLAN**



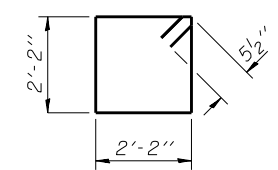
**BAR  $u_6(E)$**



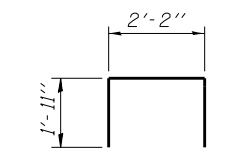
**BAR  $u_2(E)$**



**BAR  $s_7(E)$**



**BAR  $s_6(E)$**



**BAR  $s_8(E)$**

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
$h_3(E)$	2	#5	8'-8"	—
$h_5(E)$	42	#5	48'-2"	—
$p_1(E)$	10	#7	48'-8"	—
$s_6(E)$	46	#5	9'-7"	□
$s_7(E)$	336	#4	2'-9"	┌┐
$s_8(E)$	9	#4	6'-0"	┌┐
$u_2(E)$	8	#6	11'-3"	—
$u_6(E)$	42	#5	8'-5"	—
$v_5(E)$	92	#5	22'-10"	—
Structure Excavation		Cu. Yd.	31	
Concrete Structures		Cu. Yd.	87.2	
Reinforcement Bars, Epoxy Coated		Pound	6930	
Furnishing Steel Piles HP 14 x 73		Foot	735	
Driving Piles		Foot	735	
Test Pile Steel HP 14 x 73		Each	1	

**PILE DATA**

Type: Steel HP 14x73  
 Nominal Required Bearing: 578 kips  
 Factored Resistance Available: 317 kips  
 Est. Length: 105 ft.  
 No. Production Piles: 7  
 No. Test Piles: 1

FILE NAME: \\S:\Projects\048-0102\048-0102-0102-68B69-025-per1.EB.dgn  
 PROJECT NO: 048-0102  
 DATE: 2/8/2016

**Coombe-Bloedort P.C.**  
 CIVIL ENGINEERS-  
 STRUCTURAL ENGINEERS-  
 LAND SURVEYORS-  
 Design Firm License No. 184-002703

USER NAME = brianheil	DESIGNED - GJB	REVISED -
PLOT SCALE = 0:2.000000 '1' / in.	CHECKED -	REVISED -
PLOT DATE = 2/8/2016	DRAWN - MMY	REVISED -
	CHECKED -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**PIER 1  
 STRUCTURE NO. 048-0102 (E.B.)**

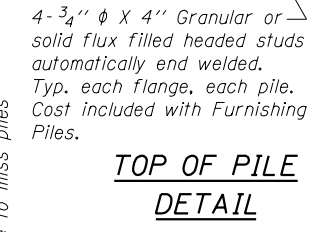
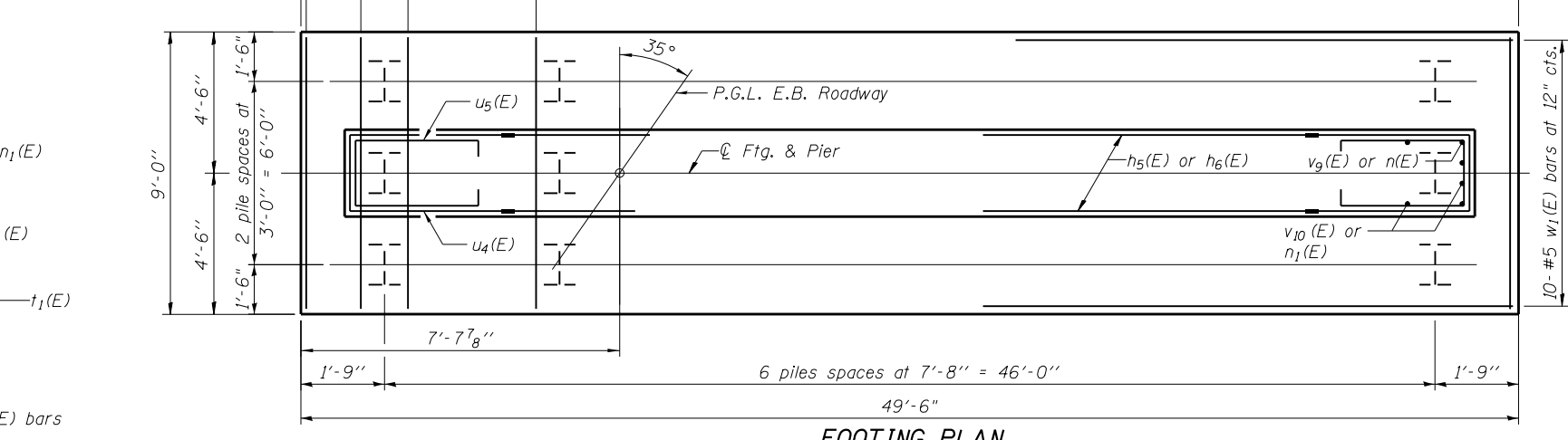
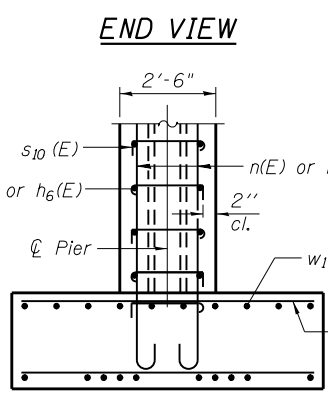
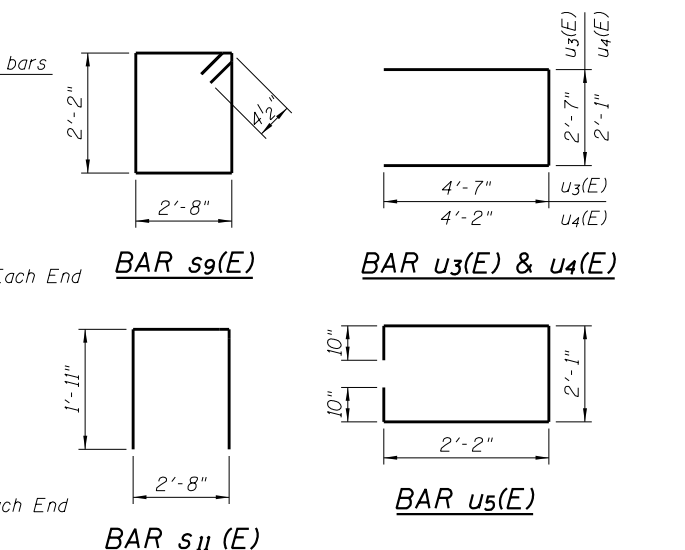
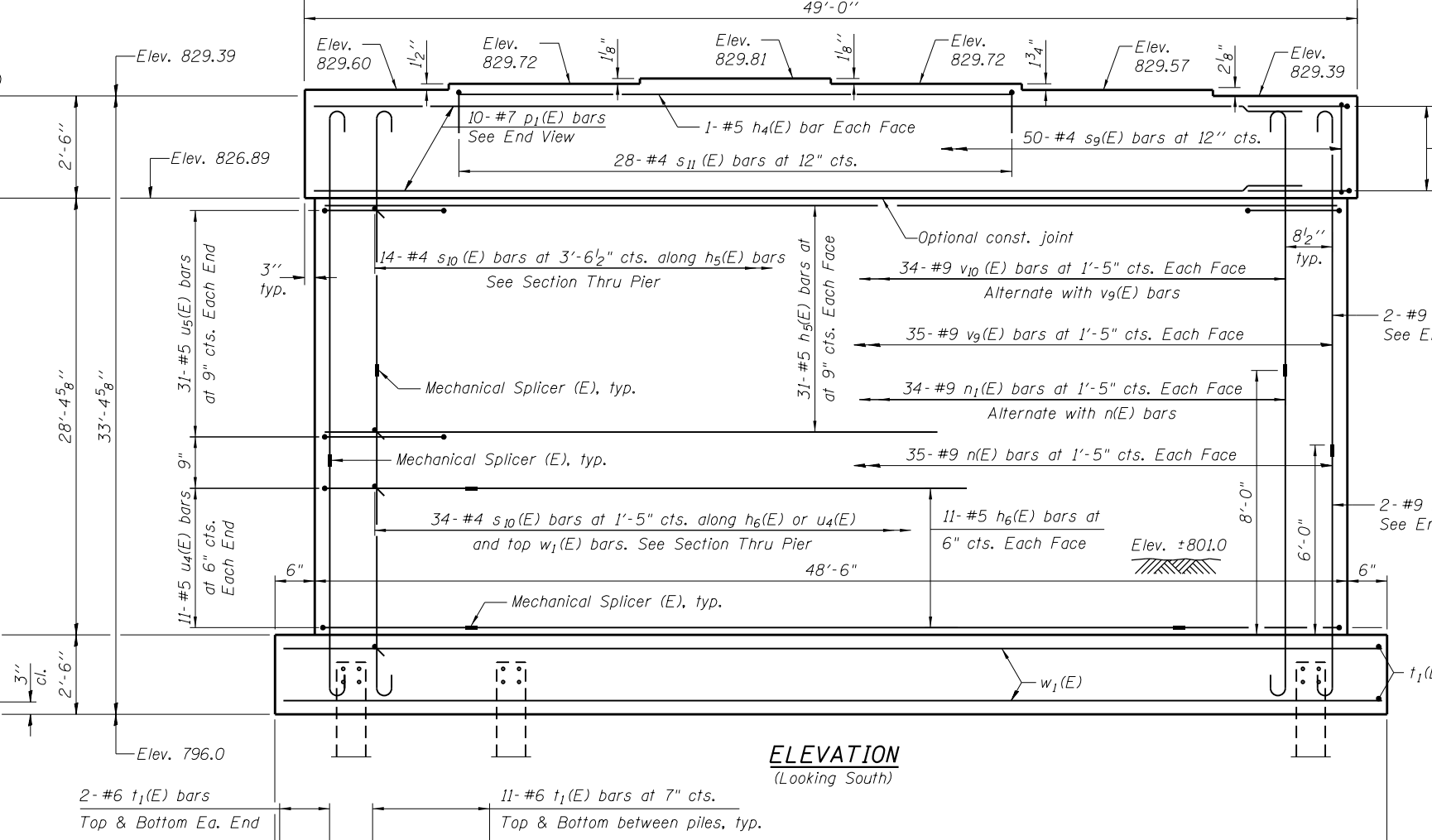
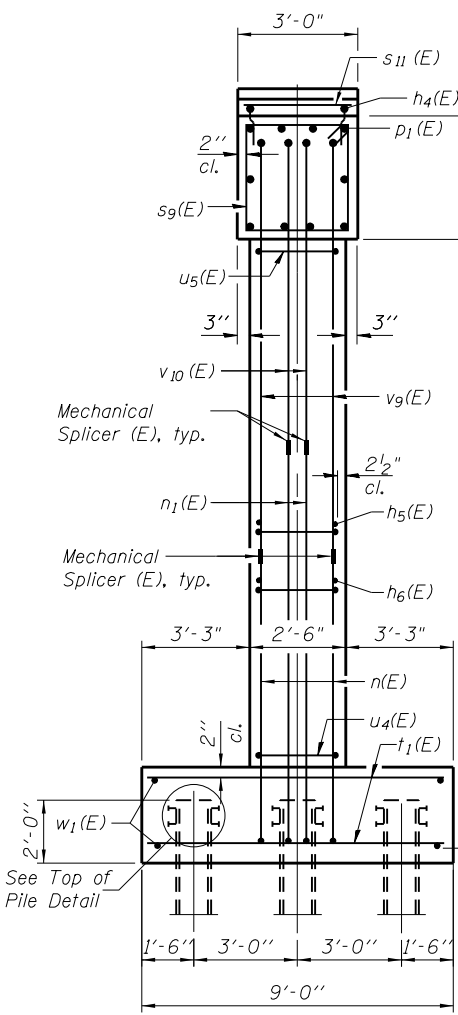
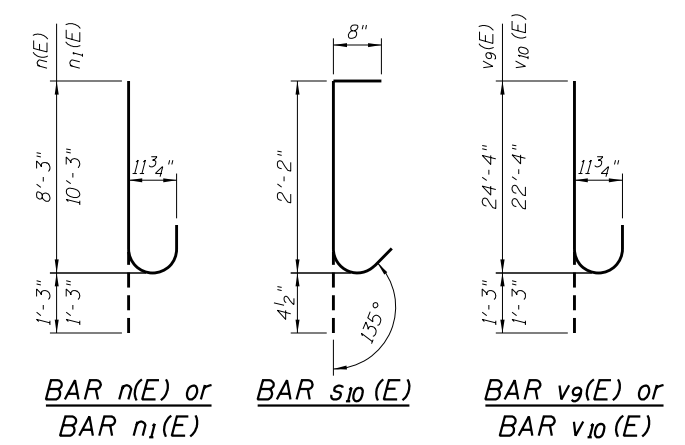
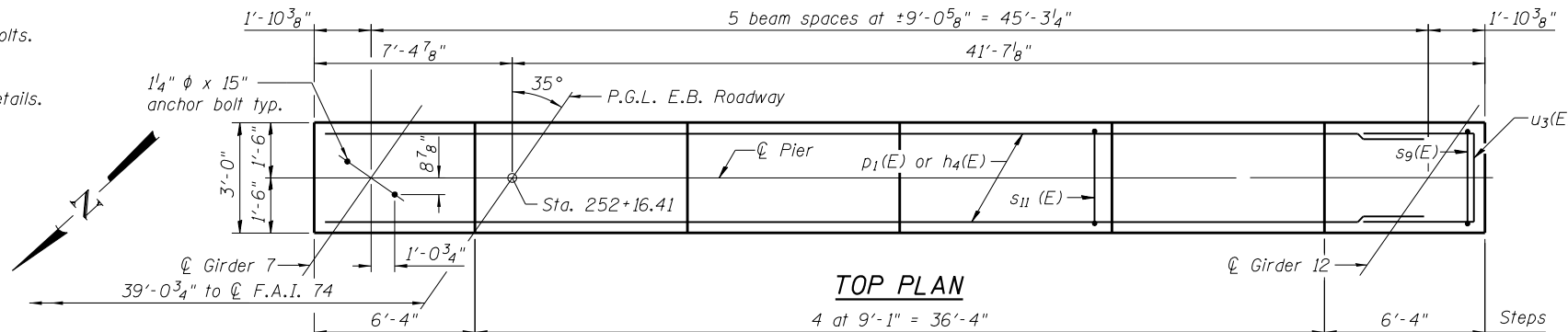
SHEET NO. 35 OF 61 SHEETS

F.A.I. RTE. 74	SECTION (48-26HVB)BR	COUNTY KNOX	TOTAL SHEETS 212	SHEET NO. 89
CONTRACT NO. 68B69				
ILLINOIS FED. AID PROJECT				

Notes:  
 Space reinforcement in cap to miss anchor bolts.  
 Pour steps monolithically with cap.  
 For details of piles, see sheet 38 of 61.  
 See sheet 39 of 61 for Mechanical Splicer Details.

**PILE DATA**

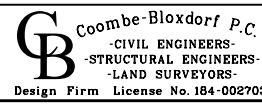
Type: HP 14 x 73  
 Nominal Required Bearing: 578 kips  
 Factored Resistance Available: 317 kips  
 Est. Length: 75'  
 No. Production Piles: 20  
 No. Test Piles: 1



**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h4(E)	2	#5	26'-10"	—
h5(E)	62	#5	48'-2"	—
h6(E)	22	#5	39'-10"	—
n(E)	70	#9	9'-6"	U
n1(E)	72	#9	11'-6"	U
p1(E)	10	#7	48'-8"	—
s9(E)	50	#4	10'-5"	□
s10(E)	842	#4	3'-3"	U
s11(E)	28	#4	6'-6"	□
t1(E)	140	#6	8'-8"	—
u3(E)	8	#6	11'-9"	U
u4(E)	22	#5	10'-5"	U
u5(E)	62	#5	8'-1"	U
v9(E)	70	#9	25'-7"	U
v10(E)	72	#9	23'-7"	U
w1(E)	20	#5	49'-2"	—
Structure Excavation			Cu. Yd.	142
Concrete Structures			Cu. Yd.	183.8
Reinforcement Bars, Epoxy Coated			Pound	28,070
Furnishing Steel Piles, HP 14x73			Foot	1,500
Driving Piles			Foot	1,500
Test Pile, HP 14x73			Each	1

FILE NAME: I:\010\_S\048-0025 & 0026 1-74 Phase 2\Structural\Final Plans\Microstation\0480101\_0102-68B69-025-pier2\_EB.dgn  
 CB PROJECT NO. 0480101-0102-68B69-025-pier2\_EB.dgn  
 Design Firm License No. 184-002703



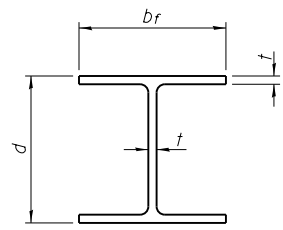
USER NAME = brianheil	DESIGNED -	REVISED -
PLOT SCALE = 0/2" = 1' / in.	CHECKED -	REVISED -
PLOT DATE = 2/8/2016	DRAWN - MMY/CFC	REVISED -
	CHECKED -	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**PIER 2**  
**STRUCTURE NO. 048-0102 (E.B.)**  
 SHEET NO. 36 OF 61 SHEETS

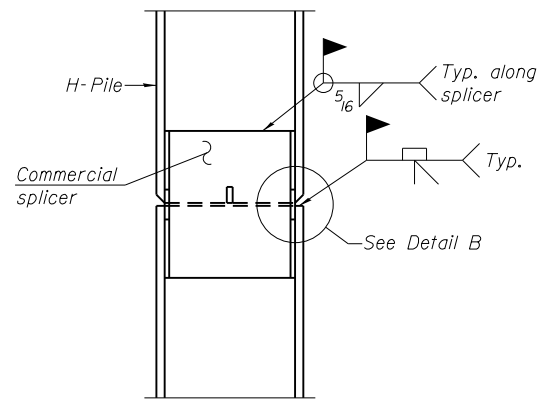
F.A.I. RTE. 74	SECTION (48-26HVB)IBR	COUNTY KNOX	TOTAL SHEETS 212	SHEET NO. 90
CONTRACT NO. 68B69			ILLINOIS FED. AID PROJECT	



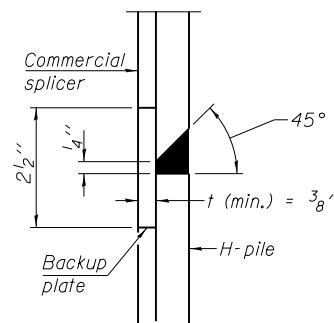


**STEEL PILE TABLE**

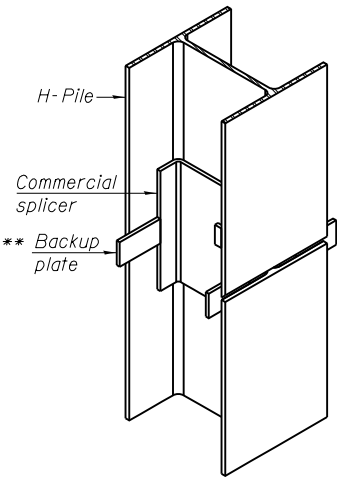
Designation	Depth d	Flange width br	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	1 3/16"	30"
x102	14"	14 3/4"	1/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	1/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"
x53	11 3/4"	12"	7/16"	24"
HP 10x57	10"	10 1/4"	9/16"	24"
x42	9 3/4"	10 1/8"	7/16"	24"
HP 8x36	8"	8 1/8"	7/16"	18"



**ELEVATION**

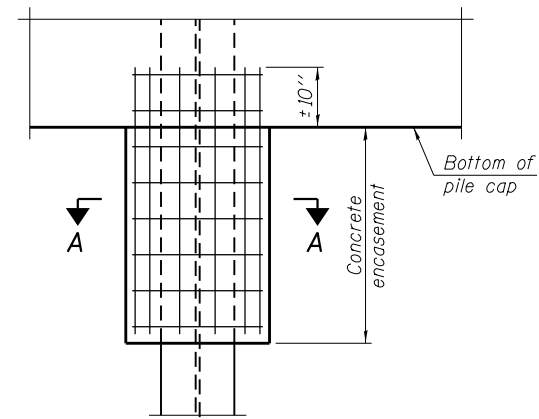


**DETAIL "B"**



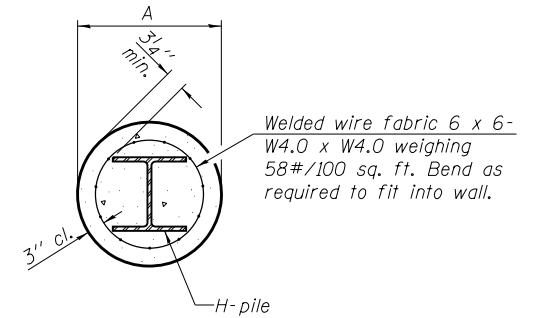
**ISOMETRIC VIEW**

**WELDED COMMERCIAL SPLICE**



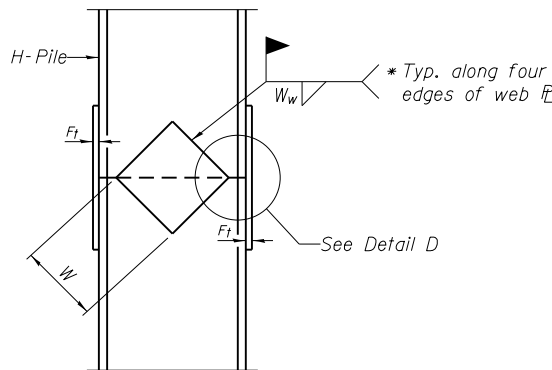
**ELEVATION**

**PILE ENCASEMENT**



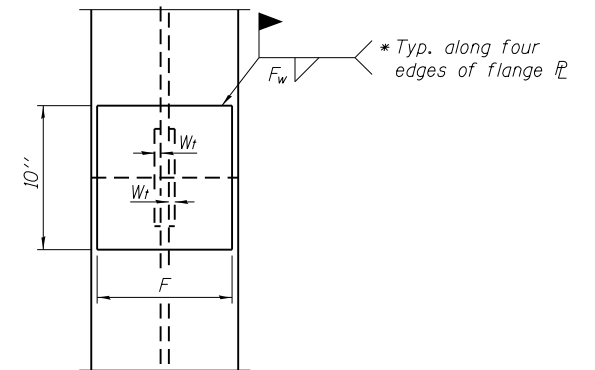
**SECTION A-A**

Note: Forms for encasement may be omitted when soil conditions permit.



**ELEVATION**

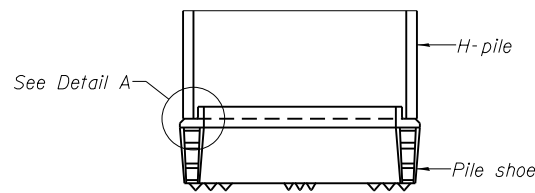
**DETAIL D**



**END VIEW**

**WELDED PLATE FIELD SPLICE**

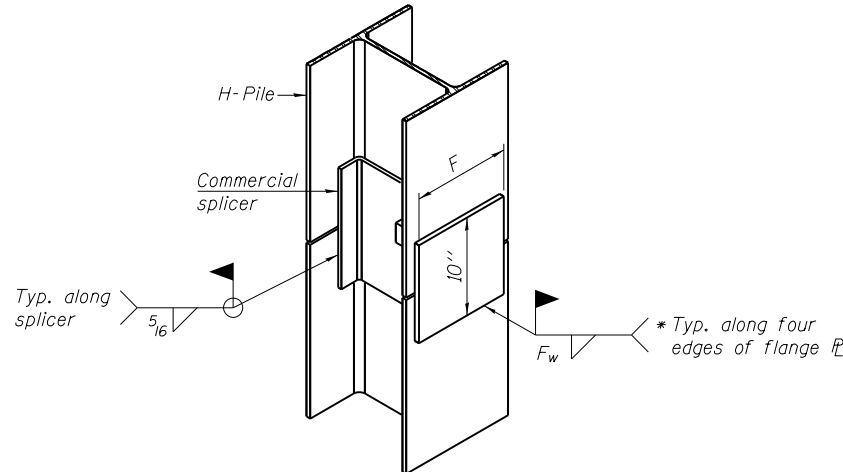
Designation	F	F <sub>t</sub>	F <sub>w</sub>	W	W <sub>t</sub>	W <sub>w</sub>
HP 14x117	12 1/2"	1"	7/8"	7 3/4"	5/8"	1/2"
x102	12 1/2"	7/8"	3/4"	7 3/4"	5/8"	1/2"
x89	12 1/2"	3/4"	1/16"	7 3/4"	5/8"	1/2"
x73	12 1/2"	5/8"	9/16"	7 3/4"	5/8"	1/2"
HP 12x84	10"	7/8"	1/16"	6 1/2"	5/8"	1/2"
x74	10"	7/8"	1/16"	6 1/2"	5/8"	1/2"
x63	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
x53	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
HP 10x57	8"	3/4"	9/16"	5 1/4"	1/2"	3/8"
x42	8"	5/8"	9/16"	5 1/4"	1/2"	3/8"
HP 8x36	7"	5/8"	7/16"	4 1/4"	1/2"	3/8"



**ELEVATION**

**DETAIL A**

**H-PILE SHOE ATTACHMENT**



**ISOMETRIC VIEW**

**WELDED COMMERCIAL SPLICE ALTERNATE**

- \* Interrupt welds 1/4" from end of web and/or each flange.
- \*\* Remove portions of backup plates that extend outside the flanges.
- \*\*\* Weld size per pile shoe manufacturer (5/16" min.).

Note: The steel H-piles shall be according to AASHTO M270 Grade 50.

FILE NAME: \\010\_S\048-0025 & 0026 1-74 Phase 2\Structural\Final Plans\Microstation\0480101\_0102-68669-028-piles.dgn  
 CB PROJECT NO. 048071-10

**F-HP**  
**Coome-Bloedort P.C.**  
 CIVIL ENGINEERS-  
 STRUCTURAL ENGINEERS-  
 LAND SURVEYORS  
 Design Firm License No. 184-002703

1-27-12

USER NAME = brianheil	DESIGNED - GJB	REVISD -
PLOT SCALE = 0:2.000000 '1' / in.	CHECKED -	REVISD -
PLOT DATE = 2/8/2016	DRAWN - MMY	REVISD -
	CHECKED -	REVISD -

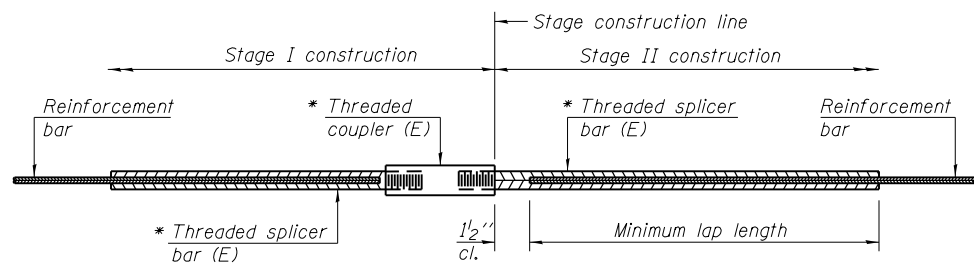
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**HP PILE DETAILS**  
**STRUCTURE NO. 048-0101 (W.B.) & 048-0102 (E.B.)**

SHEET NO. 38 OF 61 SHEETS

F.A.I. RE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)BR	KNOX	212	92
CONTRACT NO. 68B69				
ILLINOIS FED. AID PROJECT				





**STANDARD BAR SPLICER ASSEMBLY**

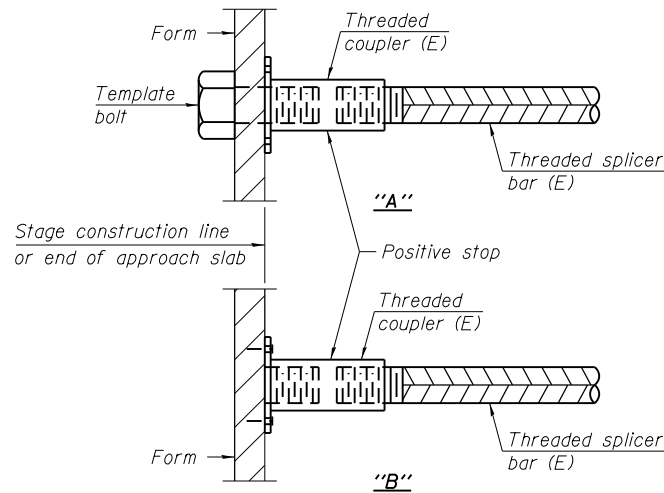
Minimum Lap Lengths						
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5	Table 6
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-7"	2'-11"
5	1'-9"	2'-5"	2'-7"	2'-11"	3'-3"	3'-8"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-10"	4'-5"
7	2'-9"	3'-10"	4'-2"	4'-8"	5'-2"	5'-10"
8	3'-8"	5'-1"	5'-5"	6'-2"	6'-9"	7'-8"
9	4'-7"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

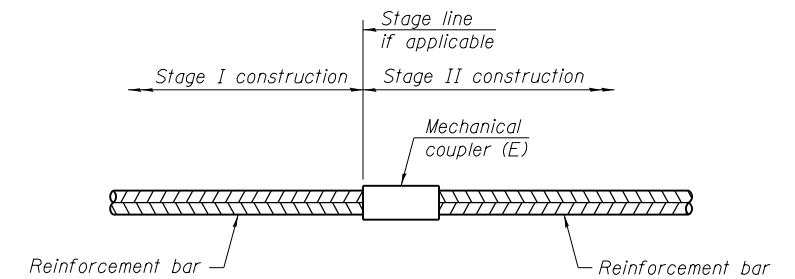
\* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length



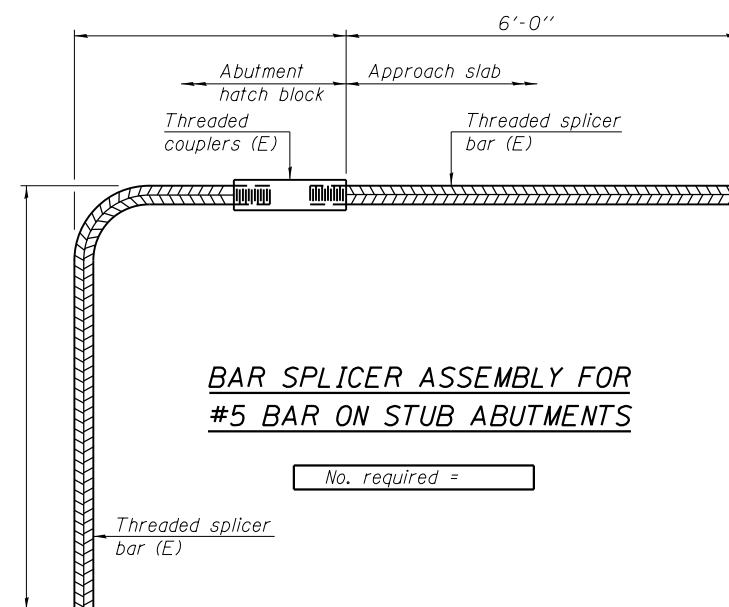
**INSTALLATION AND SETTING METHODS**

"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
Pier 2 (W.B.)	#9	142
Pier 2 (E.B.)	#9	142
Pier 2 (W.B.)	#5	44
Pier 2 (E.B.)	#5	44



**BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS**

No. required =

**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.  
 100% silicone caulk shall be liberally applied to threads of splicers when reinforcement bars are screwed in.

FILE NAME = H:\P\29048\WD 10 SIN948-0005 & 0006 1-74 Phase 2\Structure\Final Plans\Microstation\0480101\_0102-68869-035-Bar Splicer Assembly and Mechanical Splicer-Details.dgn

BSD-1

8-31-12



USER NAME =	DESIGNED -	REVISED -
PLOT SCALE =	CHECKED -	REVISED -
PLOT DATE = 2/8/2016	DRAWN -	REVISED -
	CHECKED -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS  
STRUCTURE NO. 048-0101 (W.B.) & 048-0102 (E.B.)

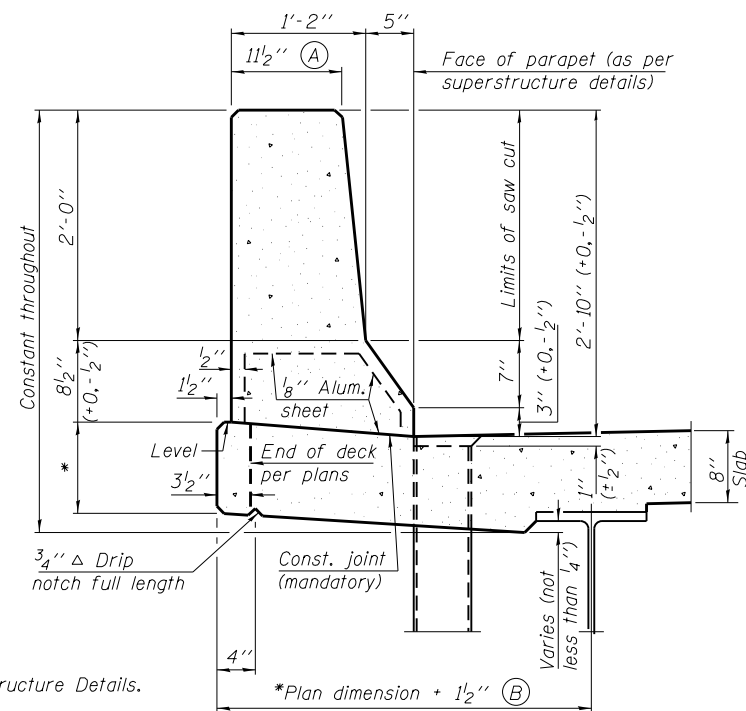
SHEET NO. 39 OF 61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HV)BR	KNOX	212	93
CONTRACT NO. 68B69				

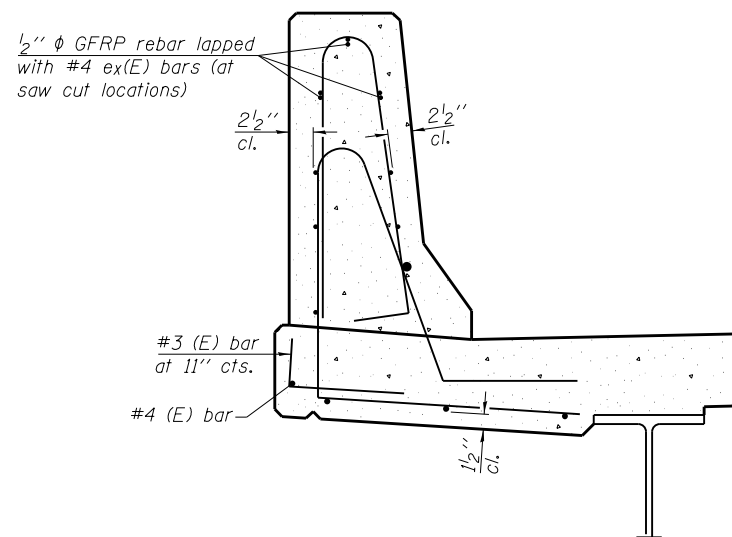
ILLINOIS FED. AID PROJECT

**GENERAL NOTES**

All dimensions shall remain the same as shown on superstructure details, except dimensions A and B which are to be revised as shown to provide additional clearance. Additional concrete needed to revise dimension A and B = 0.0165 cu. yds./ft. for 34" parapet or = 0.0223 cu. yds./ft. for 42" parapet. Place aluminum sheet in curb portion at and near piers. Full thickness saw cut at all joint locations in lieu of cork joint filler. Steel superstructure shown. Other superstructure types similar.

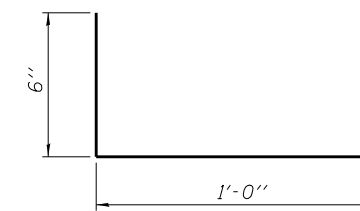


**34" F SHAPE PARAPET SECTION**  
(Showing dimensions)

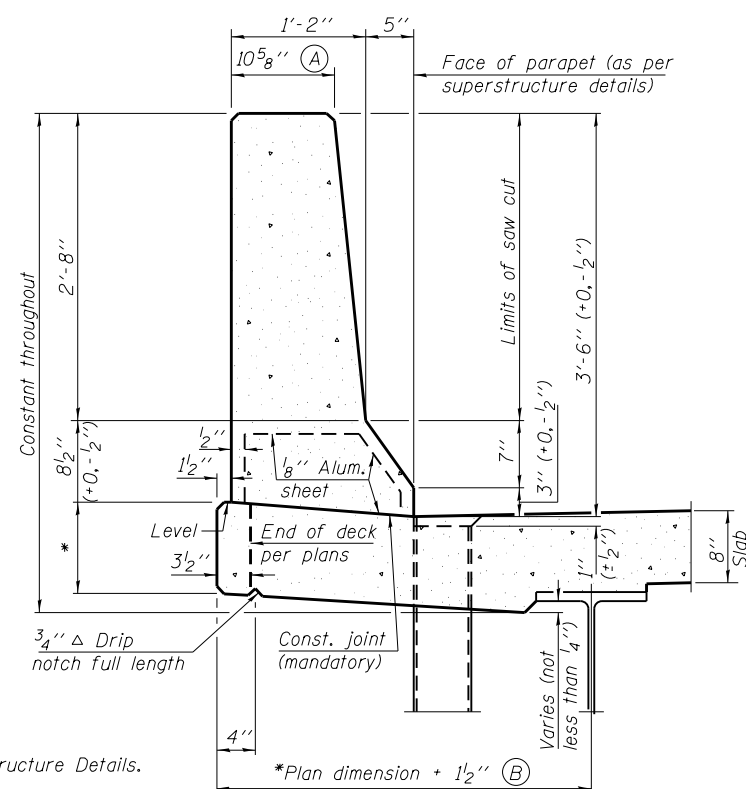


**SECTION**

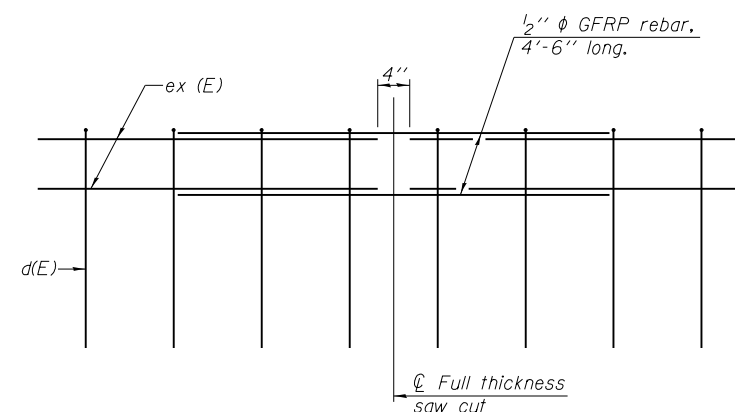
(34" parapet shown - 42" parapet similar)  
(Showing reinforcement clearances for slip forming and additional reinforcement bars)



**#3 (E) BAR**

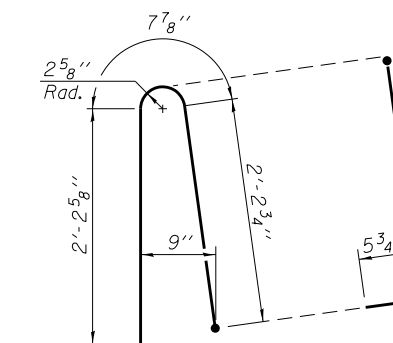


**42" F SHAPE PARAPET SECTION**  
(Showing dimensions)

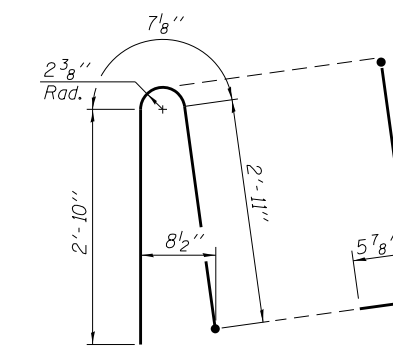


**GFRP REBAR STIFFENING DETAIL**

(Place as shown in parapet section at each parapet joint location.)



**ALTERNATE BAR d(E)**  
(For 34" parapet when conduit is present)



**ALTERNATE BAR d(E)**  
(For 42" parapet when conduit is present)

SFP 34-42

8-16-12



USER NAME =	DESIGNED -	REVISED -
PLOT SCALE =	CHECKED -	REVISED -
PLOT DATE = 2/8/2016	DRAWN -	REVISED -
	CHECKED -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CONCRETE PARAPET SLIPFORMING OPTION  
STRUCTURE NO. 048-0101 (W.B.) & 048-0102 (E.B.)

SHEET NO. 40 OF 61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HV8)BR	KNOX	212	94
CONTRACT NO. 68B69				
ILLINOIS FED. AID PROJECT				

FILE NAME = H:\P\29048\NO. 10 SING48-0005 & 0006 1-74 Phase 2\Structure\Final Plans\Microstation\0480101\_0102-68B69-048-Concrete Parapet Slipforming Option.dgn



SOIL BORING LOG

ROUTE I-74 over Lincoln St DESCRIPTION Between N. Abutments of 048-0005 and 048-0006 LOGGED BY JAS

SECTION 48-26 HVB LOCATION I-74 over BNRR & Lincoln St., SEC., TWP., RNG.

COUNTY Knox DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Hammer, 30" fall

STRUCT. NO. 048-0005, 048-0006 Station 251+78.29 BORING NO. B-1 (N. Abutment) Station 249+83.17 Offset 6.50ft RT Ground Surface Elev. 832.00 ft

Table with columns for depth (ft), D, B, U, M, S, P, T, H, W, S, Qu, T, H, S, Qu, T, H, S, Qu, T. Soil description: Moist, stiff, brown and gray SILTY LOAM (FILL). Includes notes on supplemental boring and hydrometer analysis.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, from 137 (Rev. 8-99)



SOIL BORING LOG

ROUTE I-74 over Lincoln St DESCRIPTION Between N. Abutments of 048-0005 and 048-0006 LOGGED BY JAS

SECTION 48-26 HVB LOCATION I-74 over BNRR & Lincoln St., SEC., TWP., RNG.

COUNTY Knox DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Hammer, 30" fall

STRUCT. NO. 048-0005, 048-0006 Station 251+78.29 BORING NO. B-1 (N. Abutment) Station 249+83.17 Offset 6.50ft RT Ground Surface Elev. 832.00 ft

Table with columns for depth (ft), D, B, U, M, S, P, T, H, W, S, Qu, T, H, S, Qu, T, H, S, Qu, T. Soil description: LOESS (continued), TILL (continued).

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, from 137 (Rev. 8-99)



SOIL BORING LOG

ROUTE I-74 over Lincoln St DESCRIPTION Between N. Abutments of 048-0005 and 048-0006 LOGGED BY JAS

SECTION 48-26 HVB LOCATION I-74 over BNRR & Lincoln St., SEC., TWP., RNG.

COUNTY Knox DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Hammer, 30" fall

STRUCT. NO. 048-0005, 048-0006 Station 251+78.29 BORING NO. B-1 (N. Abutment) Station 249+83.17 Offset 6.50ft RT Ground Surface Elev. 832.00 ft

Table with columns for depth (ft), D, B, U, M, S, P, T, H, W, S, Qu, T, H, S, Qu, T, H, S, Qu, T. Soil description: Moist, very stiff, grayish brown CLAY, trace sand, gravel, limestone pieces (TILL) (continued), Moist, hard, brownish gray SILTY CLAY, trace gravel (TILL), - 1/4" sand seam at 83.5 ft., Moist, hard, gray CLAY LOAM, with gravel, shale pieces (TILL).

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, from 137 (Rev. 8-99)

FILE NAME = H:\P\29048\WD 10 SINGAR-0005 & 0006 I-74 Phase 2\Structure\Final Plans\Microstation\0480101\_0102-68B69-041-Soil Boring Log.dgn



Table with columns for USER NAME, DESIGNED, CHECKED, PLOT SCALE, PLOT DATE, REVISED, DRAWN, CHECKED.

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS STRUCTURE NO. 048-0101 (W.B.) & 048-0102 (E.B.)

Table with columns for F.A.I. RTE., SECTION, COUNTY, TOTAL SHEETS, SHEET NO., CONTRACT NO.



Illinois Department of Transportation  
Division of Highways  
TSI Engineering, Inc.

### SOIL BORING LOG

Page 1 of 3

Date 1/10/13

ROUTE I-74 over Lincoln St DESCRIPTION Between BNRR & Lincoln St., near S.N. 048-0006 W side of EB lane LOGGED BY JAS

SECTION 48-26 HVB LOCATION I-74 over BNRR & Lincoln St., SEC., TWP., RNG.

COUNTY Knox DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Hammer, 30" fall

STRUCT. NO. 048-0006  
Station 251+78.29  
BORING NO. B-3 (Pier 2)  
Station 252+44.19  
Offset 66.21 ft RT  
Ground Surface Elev. 800.70 ft

DEPTH (ft)	SOIL DESCRIPTION	U	M	Surface Water Elev. (ft)	Stream Bed Elev. (ft)	Groundwater Elev. (ft)	First Encounter (ft)	Upon Completion (ft)	After (Hrs.)
0	LOESS								
796.70	TILL								

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
BBS, from 137 (Rev. 8-99)



Illinois Department of Transportation  
Division of Highways  
TSI Engineering, Inc.

### SOIL BORING LOG

Page 2 of 3

Date 1/10/13

ROUTE I-74 over Lincoln St DESCRIPTION Between BNRR & Lincoln St., near S.N. 048-0006 W side of EB lane LOGGED BY JAS

SECTION 48-26 HVB LOCATION I-74 over BNRR & Lincoln St., SEC., TWP., RNG.

COUNTY Knox DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Hammer, 30" fall

STRUCT. NO. 048-0006  
Station 251+78.29  
BORING NO. B-3 (Pier 2)  
Station 252+44.19  
Offset 66.21 ft RT  
Ground Surface Elev. 800.70 ft

DEPTH (ft)	SOIL DESCRIPTION	U	M	Surface Water Elev. (ft)	Stream Bed Elev. (ft)	Groundwater Elev. (ft)	First Encounter (ft)	Upon Completion (ft)	After (Hrs.)
0	TILL (continued)								
732.20	Moist, stiff, gray CLAY, trace limestone pieces and gravel (TILL)	5	15						
728.70	Moist, stiff, gray, SILTY CLAY LOAM (TILL)								
726.70	Moist, very stiff, grey, CLAY, trace limestone pieces (TILL)	15	18						
725.70	Gray, weathered SHALE - rough drilling below 75.0 ft.								

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
BBS, from 137 (Rev. 8-99)



Illinois Department of Transportation  
Division of Highways  
TSI Engineering, Inc.

### SOIL BORING LOG

Page 3 of 3

Date 1/10/13

ROUTE I-74 over Lincoln St DESCRIPTION Between BNRR & Lincoln St., near S.N. 048-0006 W side of EB lane LOGGED BY JAS

SECTION 48-26 HVB LOCATION I-74 over BNRR & Lincoln St., SEC., TWP., RNG.

COUNTY Knox DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Hammer, 30" fall

STRUCT. NO. 048-0006  
Station 251+78.29  
BORING NO. B-3 (Pier 2)  
Station 252+44.19  
Offset 66.21 ft RT  
Ground Surface Elev. 800.70 ft

DEPTH (ft)	SOIL DESCRIPTION	U	M	Surface Water Elev. (ft)	Stream Bed Elev. (ft)	Groundwater Elev. (ft)	First Encounter (ft)	Upon Completion (ft)	After (Hrs.)
0	Gray, weathered SHALE (continued)								
50/2'									
715.60	Boring terminated at 85.1 ft. End of Boring								

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
BBS, from 137 (Rev. 8-99)

FILE NAME = H:\P\29048\NO. 10 SIGN\48-0005 & 0006 I-74 Phase 2\Structure\Final Plans\Microstation\0480101\_0102-68B69-042-Soil Boring Log.dgn



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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS  
STRUCTURE NO. 048-0101 (W.B.) & 048-0102 (E.B.)

SHEET NO. 42 OF 61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)BR	KNOX	212	96
CONTRACT NO. 68B69				

ILLINOIS FED. AID PROJECT



Illinois Department of Transportation  
Division of Highways  
TSI Engineering, Inc.

SOIL BORING LOG

Page 1 of 4

Date 1/18/13

ROUTE I-74 over Lincoln St DESCRIPTION Between S. Abutments of 048-0005 and 048-0006 LOGGED BY JAS  
SECTION 48-26 HVB LOCATION I-74 over BNRR & Lincoln St., SEC. TWP. RNG.  
COUNTY Knox DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Hammer, 30" fall

STRUCT. NO. 048-0005, 048-0006  
Station 251+78.29  
BORING NO. B-4 (S. Abutment)  
Station 253+53.48  
Offset 4.36 ft LT  
Ground Surface Elev. 831.30 ft

DEPTH (ft)	SOIL DESCRIPTION	U (blows)	M (blows)	Surface Water Elev. (ft)	DEPTH (ft)	SOIL DESCRIPTION	U (blows)	M (blows)
0	Moist, medium stiff, dark gray SILTY LOAM, trace organics (FILL)				0	Moist, medium stiff, dark gray SILTY LOAM, trace organics (FILL)		
5					5			
10					10			
12.0		3.3	26		12.0			
15					15			
20					20			
					30	LOESS		
					40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
BBS, from 137 (Rev. 8-99)

NOTE: Supplemental boring, to extend Boring #4, performed 7-18-95. Soil strata above 53.5 feet as observed from drill cuttings, drill action.

- @ 12.0 ft., hydrometer analysis performed and unconsolidated-undrained triaxial test performed, su = 0.99 tsf.



Illinois Department of Transportation  
Division of Highways  
TSI Engineering, Inc.

SOIL BORING LOG

Page 2 of 4

Date 1/18/13

ROUTE I-74 over Lincoln St DESCRIPTION Between S. Abutments of 048-0005 and 048-0006 LOGGED BY JAS  
SECTION 48-26 HVB LOCATION I-74 over BNRR & Lincoln St., SEC. TWP. RNG.  
COUNTY Knox DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Hammer, 30" fall

STRUCT. NO. 048-0005, 048-0006  
Station 251+78.29  
BORING NO. B-4 (S. Abutment)  
Station 253+53.48  
Offset 4.36 ft LT  
Ground Surface Elev. 831.30 ft

DEPTH (ft)	SOIL DESCRIPTION	U (blows)	M (blows)	Surface Water Elev. (ft)	DEPTH (ft)	SOIL DESCRIPTION	U (blows)	M (blows)
0	LOESS (continued)				0	TILL (continued)		
46					46			
50					50			
55					55			
70					70			
78					78			
80					80			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
BBS, from 137 (Rev. 8-99)

FILE NAME = H:\P\29048\WD 10 SINGAR-0005 & 0006 I-74 Phase 2\Structure\Final Plans\Microstation\0480101\_0102-68869-043-Soil Boring Log.dgn



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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS  
STRUCTURE NO. 048-0101 (W.B.) & 048-0102 (E.B.)

SHEET NO. 43 OF 61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)BR	KNOX	212	97
CONTRACT NO. 68B69				

ILLINOIS FED. AID PROJECT





SOIL BORING LOG

ROUTE I-74 over Lincoln St DESCRIPTION Between Lincoln St. & S. Abutment of 048-0006 E side of EB lane LOGGED BY JAS
SECTION 48-26 HVB LOCATION I-74 over BNRR & Lincoln St., SEC., TWP., RNG.
COUNTY Knox DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Hammer, 30" fall

Table with columns for Depth (ft), Blows (16"), (tsf), and Soil Description. Includes data for Surface Water Elev., Stream Bed Elev., and Groundwater Elev. (First Encounter, Upon Completion, After 48 Hrs.).

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, from 137 (Rev. 8-89)



SOIL BORING LOG

ROUTE I-74 over Lincoln St DESCRIPTION Between Lincoln St. & S. Abutment of 048-0006 E side of EB lane LOGGED BY JAS
SECTION 48-26 HVB LOCATION I-74 over BNRR & Lincoln St., SEC., TWP., RNG.
COUNTY Knox DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Hammer, 30" fall

Table with columns for Depth (ft), Blows (16"), (tsf), and Soil Description. Includes data for Surface Water Elev., Stream Bed Elev., and Groundwater Elev. (First Encounter, Upon Completion, After 48 Hrs.).

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, from 137 (Rev. 8-89)



SOIL BORING LOG

ROUTE I-74 over Lincoln St DESCRIPTION Between Lincoln St. & S. Abutment of 048-0006 E side of EB lane LOGGED BY JAS
SECTION 48-26 HVB LOCATION I-74 over BNRR & Lincoln St., SEC., TWP., RNG.
COUNTY Knox DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Hammer, 30" fall

Table with columns for Depth (ft), Blows (16"), (tsf), and Soil Description. Includes data for Surface Water Elev., Stream Bed Elev., and Groundwater Elev. (First Encounter, Upon Completion, After 48 Hrs.).

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, from 137 (Rev. 8-89)

FILE NAME = H:\P\29048\NO. 10\_SIN048-0006 & 0006 I-74 Phase 2\Structure\Final\_Plans\Microstation\0480101\_0102-68869-045-Soil\_Boring\_Log.dgn



Table with columns: USER NAME, DESIGNED, CHECKED, PLOT SCALE, DRAWN, CHECKED, REVISED, REVISIONS.

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS STRUCTURE NO. 048-0101 (W.B.) & 048-0102 (E.B.) SHEET NO. 45 OF 61 SHEETS

Table with columns: F.A.I. RTE., SECTION, COUNTY, TOTAL SHEETS, SHEET NO., CONTRACT NO.



# SOIL BORING LOG

STRUCT. NO. 048-0005  
 Station 251+78.29

ROUTE I-74 over Lincoln St. DESCRIPTION Between Lincoln St. & S. Abutment of 048-0005 E side of WB lane LOGGED BY JAS

SECTION 48-26 HVB LOCATION I-74 over BNRR & Lincoln St., SEC., TWP., RNG.

COUNTY Knox DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Hammer, 30" fall

DEPTH (ft)	B	L	U	M	DESCRIPTION	DEPTH (ft)	B	L	U	M
(ft)	(#)	(#)	(#)	(%)		(ft)	(#)	(#)	(#)	(%)
0					Surface Water Elev. _____ ft	0				
					Stream Bed Elev. _____ ft					
					Groundwater Elev.: _____ ft					
					First Encounter _____ ft					
					Upon Completion _____ ft					
					After 0.25 Hrs. _____ ft					
0					Ground Surface Elev. 801.40 ft	0				
3					Moist, medium stiff, dark brown, SILTY CLAY (LOESS)	3				
2						2				
2						2				
798.40					Moist, brown and gray, medium stiff, SILTY CLAY LOAM (LOESS)	798.40				
3						3				
2						2				
2						2				
775.90					Moist, medium stiff, brown, SILTY CLAY, trace gravel (TILL)	775.90				
2						2				
2						2				
775.90					Wet, medium dense, brown, clayey GRAVEL	775.90				
2						2				
2						2				
771.80					Moist, very stiff, brown, SILTY CLAY LOAM, trace gravel (TILL)	771.80				
2						2				
2						2				
768.40					Moist, very stiff, gray, SILTY CLAY, trace limestone pieces and gravel (TILL)	768.40				
2						2				
2						2				
768.65					Moist, stiff, brown, SILTY LOAM (TILL)	768.65				
3						3				
2						2				
769.40					Wet, soft, brown, SILTY CLAY (TILL)	769.40				
1						1				
1						1				
782.00						782.00				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
 BBS, from 137 (Rev. 8-99)



# SOIL BORING LOG

STRUCT. NO. 048-0005  
 Station 251+78.29

ROUTE I-74 over Lincoln St. DESCRIPTION Between Lincoln St. & S. Abutment of 048-0005 E side of WB lane LOGGED BY JAS

SECTION 48-26 HVB LOCATION I-74 over BNRR & Lincoln St., SEC., TWP., RNG.

COUNTY Knox DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Hammer, 30" fall

DEPTH (ft)	B	L	U	M	DESCRIPTION	DEPTH (ft)	B	L	U	M
(ft)	(#)	(#)	(#)	(%)		(ft)	(#)	(#)	(#)	(%)
0					Surface Water Elev. _____ ft	0				
					Stream Bed Elev. _____ ft					
					Groundwater Elev.: _____ ft					
					First Encounter _____ ft					
					Upon Completion _____ ft					
					After 0.25 Hrs. _____ ft					
0					Ground Surface Elev. 801.40 ft	0				
2					Wet, very dense, gray, medium to coarse SAND, with gravel (continued)	2				
5						5				
8						8				
757.60					Moist, hard, gray, SILTY CLAY, with gravel (TILL)	757.60				
50						50				
45						45				
755.40					Wet, dense, gray, medium to coarse SAND, with gravel	755.40				
6						6				
7						7				
10						10				
751.90					Moist, hard, gray, CLAY, trace fine gravel and limestone pieces (TILL)	751.90				
24						24				
18						18				
731.40					Moist, very stiff, gray, SILTY LOAM (TILL)	731.40				
6						6				
18						18				
21						21				
744.40					Moist, very stiff, gray, SILTY LOAM (TILL)	744.40				
6						6				
18						18				
21						21				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
 BBS, from 137 (Rev. 8-99)



# SOIL BORING LOG

STRUCT. NO. 048-0005  
 Station 251+78.29

ROUTE I-74 over Lincoln St. DESCRIPTION Between Lincoln St. & S. Abutment of 048-0005 E side of WB lane LOGGED BY JAS

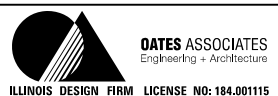
SECTION 48-26 HVB LOCATION I-74 over BNRR & Lincoln St., SEC., TWP., RNG.

COUNTY Knox DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Hammer, 30" fall

DEPTH (ft)	B	L	U	M	DESCRIPTION	DEPTH (ft)	B	L	U	M
(ft)	(#)	(#)	(#)	(%)		(ft)	(#)	(#)	(#)	(%)
0					Surface Water Elev. _____ ft	0				
					Stream Bed Elev. _____ ft					
					Groundwater Elev.: _____ ft					
					First Encounter _____ ft					
					Upon Completion _____ ft					
					After 0.25 Hrs. _____ ft					
0					Ground Surface Elev. 801.40 ft	0				
6					Gray, SHALE (continued)	6				
100/2						100/2				
719.20					Boring terminated at 82.2 ft. End of Boring	719.20				
100/2						100/2				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
 BBS, from 137 (Rev. 8-99)

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STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS  
 STRUCTURE NO. 048-0101 (W.B.) & 048-0102 (E.B.)  
 SHEET NO. 46 OF 61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(48-26HVB)BR	KNOX	212	100
CONTRACT NO. 68B69				
ILLINOIS FED. AID PROJECT				