06-13-14 LETTING ITEM 231

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	1
FED. ROAD DIST. NO. 4	ILLINOIS	CONTRACT NO. 68697		

#89+1 =90

D-94-026-07

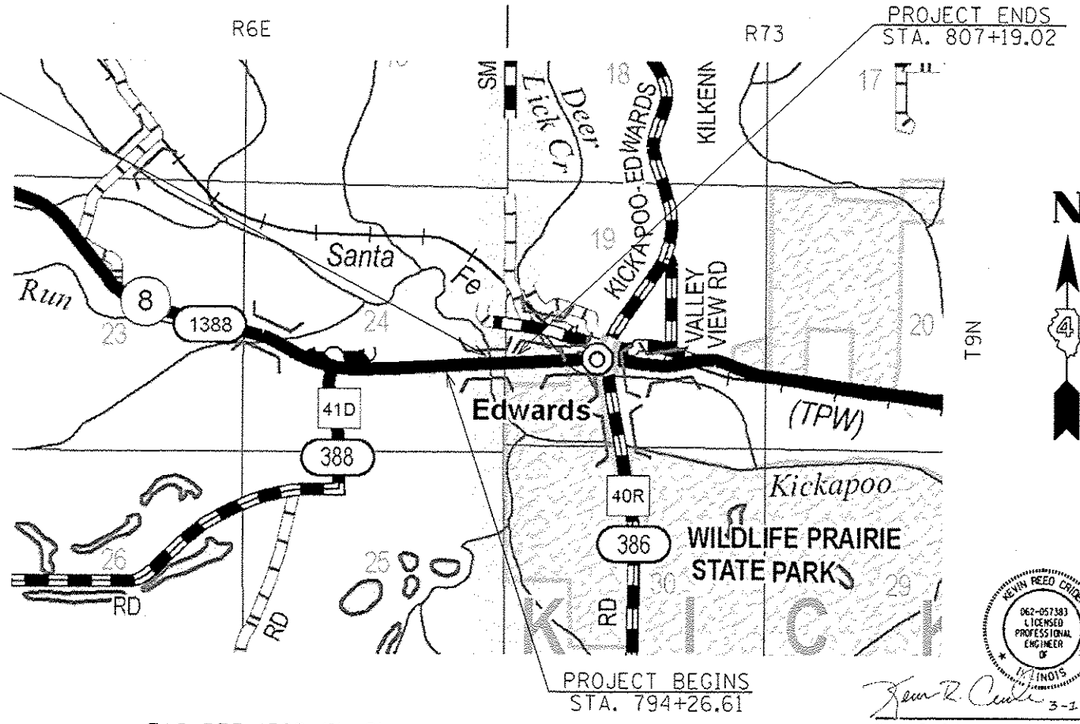
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

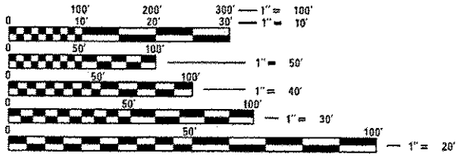
PROPOSED
HIGHWAY PLANS

FAS ROUTE 1388 (IL 8)
SECTION (Z-1D-BR-1)BR
PROJECT ACRS-1388(103)
PEORIA COUNTY
C-94-030-07
STRUCTURE REPLACEMENT OVER KICKAPOO CREEK

LOCATION OF SECTION INDICATED THUS:-

PROPOSED BRIDGE ON IL 8
OVER KICKAPOO CREEK
STRUCTURE NUMBER 072-0229
STRUCTURE ℄ STA. 800+90.22
FIVE SPAN STEEL WIDE FLANGE
BEAM BRIDGE
359'-8" BK TO BK ABUTS: 0° SKEW
EXIST. STRUCTURE NUMBER 072-0047





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

FOR INDEX OF SHEETS, SEE SHEET NO. 2
FOR SUMMARY OF QUANTITIES, SEE SHEET NO. 4

OMISSIONS:

TRAFFIC DATA:
MAJOR COLLECTOR (RURAL)
ADT(2011) = 2650
SU = 6.79%
MU = 2.26%

TOWNSHIPS: ROSEFIELD
KICKAPOO

PROJECT ENGINEER RICH DOTSON (309) 671-3455
PROJECT MANAGER TERRISA WORSFOLD (309) 671-3465

CONTRACT NO. 68697
CATALOG NO. 033473-00D

FAS RTE 1388 (IL 8):
GROSS LENGTH OF PROJECT : 1292.41 FT. = 0.24 MILES
SN 072-0229
ROADWAY LENGTH = 932.74 FT
BRIDGE LENGTH = 359.67 FT
NET LENGTH OF PROJECT = 1292.41 FT. = 0.24 MILES

APPROX. SCALE
1" = 1500'

KEVIN REED CRIDER
062-057383
LICENSED PROFESSIONAL ENGINEER OF ILLINOIS

3-17-14

Kevin R. Crider Date
Professional Engineer
State of Illinois No. 062-057383
Expires 11/30/2015

BFW
BACON | FARMER | WORKMAN
ENGINEERING & TESTING, INC.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED May 21 20 14

DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

May 9 20 14

John D. Baranzelli, P.E. BC
ENGINEER OF DESIGN AND ENVIRONMENT

May 9 20 14

Omer Osman, P.E. BC
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

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482011-03	HMA SHOULDER STRIPS/SHOULDERS WITH RESURFACING OR WIDENING AND RESURFACING PROJECTS
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701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
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720011-01	METAL POST FOR SIGNS, MARKERS AND DELINEATORS
780001-04	TYPICAL PAVEMENT MARKINGS
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COMMITMENTS: NONE

GENERAL NOTES

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 SOLE 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.

UTILITIES - LOCATIONS/INFORMATION ON PLANS

THE LOCATIONS OF EXISTING WATER MAINS, GAS MAINS, SEWERS, ELECTRIC POWER LINES, TELEPHONE LINES AND OTHER UTILITIES AS SHOWN ON THE PLANS ARE BASED ON CAREFUL FIELD INVESTIGATION AND THE BEST INFORMATION AVAILABLE, BUT THEY ARE NOT GUARANTEED. UNLESS ELEVATIONS ARE SHOWN ALL UTILITY LOCATIONS SHOWN ON THE CROSS SECTIONS ARE BASED ON THE APPROXIMATE DEPTH SUPPLIED BY THE UTILITY COMPANY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN THEIR EXACT LOCATION FROM THE UTILITY COMPANIES AND BY FIELD INSPECTION.

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.

PLAN ELEVATIONS - U.S.C.S. MEAN SEA LEVEL DATUM

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

COMMITMENTS

COMMITMENTS ARE NOT TO BE ALTERED WITHOUT THE WRITTEN APPROVAL OF ALL PARTIES TO WHICH THE COMMITMENT WAS MADE.

PROPERTY OWNER ACCESS REQUIREMENT

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.

TREE REMOVAL

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

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.

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

Mixture Use(s):	Surface Course (1 1/2")	Binder Course (2 1/4")	HMA Shoulder (Surface Lift)
AC/PG:	SBS or SBR 76-22	SBS or SBR 76-22	PG 64-22
RAP % (Max):	10%	10%	15%
Design Air Voids:	4.0% @ N=50	4.0% @ N=50	3.0% @ N=50
Mixture Composition: (Gradation Mixture)	IL 9.5 or IL 12.5	IL 9.5 or IL 12.5	IL 9.5 or IL 12.5
Friction Aggregate:	Mixture D (Dolomite only)	N.A.	Mixture C

Mixture Use(s):	HMA Binder (Var. Depth)	HMA Shoulder (Lower Lifts)	HMA Base Course Widening
AC/PG:	PG 64-22	PG 64-22	PG 64-22
RAP % (Max):	25%	25%	25%
Design Air Voids:	4.0% @ N=50	4.0% @ N=50	4.0% @ N=50
Mixture Composition: (Gradation Mixture)	IL 19.0	IL 19.0	IL 19.0
Friction Aggregate:	N.A.	N.A.	N.A.

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.
2) FOR IL 12.5 MIXES, CA14 WILL BE ALLOWED IN CONJUNCTION WITH CA16.

STATUS OF UTILITIES TO BE ADJUSTED

COMPANY	OFFSET	LOCATION	TYPE OF UTILITY	CONFLICT	DISPOSITION
1. AMEREN ILLINOIS	58' RT.	STA. 805+76	POWER POLE	NEW DITCH	RELOCATE
2. PATEC/ MCLEOD USA/ WINDSTREAM	42' RT.	STA. 803+50 TO 804+50	FIBER OPTIC	NEW DITCH	CAUTION

THE ABOVE REPRESENTS THE BEST INFORMATION OF THE DEPARTMENT AND IS INCLUDED SOLELY FOR THE CONVENIENCE OF THE BIDDER. THE APPLICABLE PROVISIONS OF ARTICLES 105.07 AND 107.20 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SHALL APPLY.

FILE NAME = P:\Projects\2009 Projects\00379 IL 8 over Kickapoo Creek\CV\CADD Sheets\D468697-sht-GRAL01.dgn	USER NAME = bemery	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 100.000 ' / in.	CHECKED -	REVISED -
	PLOT DATE = 3/20/2014	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES, STANDARDS, INDEX OF SHEETS
IL 8 OVER KICKAPOO CREEK

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

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	2
		CONTRACT NO. 68697		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

GENERAL NOTES

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. PRIOR TO ANY WASTE MATERIALS BEING REMOVED FROM THE CONSTRUCTION SITE THE REQUIRED ENVIRONMENTAL RESOURCE SURVEYS WILL NEED TO 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.

THE REQUIRED ENVIRONMENTAL RESOURCE DOCUMENTATION SHALL INCLUDE THE FOLLOWING:

BDE FORM 2289 (CULTURAL AND NATURAL RESOURCES REVIEW OF BORROW AREAS)
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 P1010I

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.

AGGREGATE (SURFACE COURSE), TYPE B

AGGREGATE (SURFACE COURSE), TYPE B SHALL BE REQUIRED FOR ALL GRANULAR CONSTRUCTION OF SIDE ROADS, ENTRANCES, AND MAILBOX TURNOUTS, WHETHER OR NOT PORTIONS OF THE SURFACES THUS CONSTRUCTED ARE TO BE COVERED WITH A BITUMINOUS SURFACE, EXCEPT WHERE NOTED DIFFERENTLY ON THE PLANS.

PAVEMENT STATION 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 (20 MM) 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+XOD)$\frac{3}{12}$, WHERE X REPRESENTS THE PAVEMENT STATION

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

GENERAL NOTES

AGGREGATE FOR DRIVEWAY REPLACEMENT

THE MATERIAL USED FOR CONSTRUCTION OF PERMANENT AGGREGATE DRIVEWAYS SHALL BE GRAVEL OR CRUSHED STONE, AS DIRECTED BY THE ENGINEER, TO REPLACE IN KIND THE EXISTING AGGREGATE DRIVEWAYS.

NO ADDITIONAL COMPENSATION SHALL BE PROVIDED FOR THIS REQUIREMENT BUT SHALL BE CONSIDERED AS INCLUDED IN THE COST OF THE PAY ITEM FOR THE AGGREGATE AS SPECIFIED ON THE PLANS.

BUTT JOINT CUTTING TIME RESTRICTION

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

PAVING SURFACE COURSE

CONTINUOUS PAVING OPERATIONS ON THE MAIN ROADWAY SHALL BE MAINTAINED AT ALL TIMES DURING THE CONSTRUCTION OF THE HOT-MIX ASPHALT SURFACE. NO INTERRUPTIONS FOR SIDE ROADS, ENTRANCES, TURN LANES, ETC. WILL BE ALLOWED.

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.

RIGHT-OF-WAY MARKERS

WHEN INSTALLING RIGHT-OF-WAY MAKERS, 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.

ENGINEERS FIELD OFFICE

ADD THE FOLLOWING SENTENCE TO THE END OF PARAGRAPH 670.02 (I) AND 670.04(E):

ALL OF THE TELEPHONE LINES PROVIDED SHALL HAVE UNPUBLISHED NUMBERS.

NO PASSING ZONE VERIFICATION

THE RESIDENT SHALL CONTACT OPERATIONS TO VERIFY THE LOCATION OF NO PASSING ZONES PRIOR TO PLACEMENT OF CENTERLINE STRIPING.

CROSSING EXISTING STRUCTURES WITH EQUIPMENT

The following structure, SN 072-0047, shall not be crossed with any of the following: loaded MTD, unloaded MTD, or milling machine.

MISCELLANEOUS

TREES SHALL BE PRESERVED THROUGHOUT THIS SECTION AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER. GENERALLY, TREES OUTSIDE THE CLEAR ZONE, AND WHICH DO NOT INTERFERE WITH CONSTRUCTION, SHALL NOT BE DISTURBED.

IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING FIELD DIMENSIONS AND CONDITIONS PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.

PROJECT SPECIFIC NOTES

ANY TIME THE CONCRETE BARRIER IS NOT IN THE PROPER POSITION, FLAGGERS SHALL BE IN PLACE TO CONTROL TRAFFIC. THE TEMPORARY TRAFFIC SIGNALS SHALL BE SET TO FLASH TO RED.

THE EXISTING ROAD SIGNS THAT INTERFERE WITH CONSTRUCTION SHALL BE RELOCATED AS DIRECTED BY THE ENGINEER. AFTER THE CONSTRUCTION IS COMPLETED, THE CONTRACTOR WILL REPLACE THE SIGNS AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

THE CONTRACTOR SHALL INSTALL EROSION CONTROL MEARURES PRIOR TO STARTING ANY GRADING EXCAVATION, PAVEMENT REMOVAL OR EMBANKMENT WORK AT THE SITE. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE LEFT IN PLACE UNTIL REMOVAL IS REQUIRED TO CONSTRUCT FINAL GRADE LINES.

AT ALL LOCATIONS WHERE THE PROPOSED HOT-MIX ASPHALT OR CONCRETE PAVEMENT JOINS AN EXISTING HOT-MIX ASPHALT OR CONCRETE PAVEMENT, A FULL DEPTH SAWED JOINT SHALL BE CONSTRUCTED. THE COST OF THIS JOINT WILL BE INCLUDED IN THE COST OF THE TYPE OF PAVEMENT BEING CONSTRUCTED.

IN ADDITION TO THE REQUIREMENTS OF ARTICLE 107.16 THE CONTRACTOR SHALL PROTECT THE SURFACE OF ALL BRIDGE DECKS AND BRIDGE APPROACH PAVEMENTS IN A MANNER SATISFACTORY TO THE ENGINEER BEFORE ANY EQUIPMENT IS ALLOWED TO CROSS THE STRUCTURE. PROTECTION SHALL BE PROVIDED FOR ALL EQUIPMENT AS DEFINED IN ARTICLE 101.16 REGARDLESS IF TRACK MOUNTED OR WHEELED.

PROTECTIVE COAT SHALL BE APPLIED TO THE BRIDGE AND THE BRIDGE APPROACH PAVEMENT IN ACCORDANCE WITH ARTICLE 503.19 OF THE STANDARD SPECIFICATION. THE SEASONAL EXCEPTION SHALL NOT APPLY. THE PROTECTIVE COAT SHALL BE APPLIED REGARDLESS OF THE CURING METHOD USED. THE RATE OF APPLICATION FOR EACH COAT ON SAW CUT GROOVED AREAS SHALL BE 25 SQUARE YARDS PER GALLON OF MIXTURE.

QUANTITIES SHOWN IN THE PLANS FOR BRIDGE DECK GROOVING AND PROTECTIVE COAT INCLUDE THE BRIDGE AND THE BRIDGE APPROACH PAVEMENTS.

DISTURBED AREAS SHALL RECEIVE PERMANENT STABILIZATION WITHIN 7 DAYS OF COMPLETION OF CONSTRUCTION ACTIVITIES. TEMPORARY STABILIZATION OF WORK AREAS IS REQUIRED FOR ALL AREAS REMAINING UNDISTURBED FOR 14 DAYS, UNLESS WORK RESUMES PRIOR TO 21 DAYS. TEMPORARY STABILIZATION MUST BE APPROVED BY THE ENGINEER

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STATE OF ILLINOIS
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GENERAL NOTES, STANDARDS, INDEX OF SHEETS
IL 8 OVER KICKAPOO CREEK

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F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-10-BR-1)BR	PEORIA	89	3
		CONTRACT NO. 68697		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

			URBAN	CONSTRUCTION CODE		
				PEORIA COUNTY 80% FED. 20% STATE	PEORIA COUNTY 0% FED. 100% STATE	PEORIA COUNTY 80% FED. 20% STATE
				ROADWAY	ROADWAY	BRIDGE
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0004	0004	0011
						S.N. 072-0229
20200100	EARTH EXCAVATION	CU YD	2515	2515		
20200500	EARTH EXCAVATION (WIDENING)	CU YD	60	60		
20400100	BORROW EXCAVATION	CU YD	8595	8595		
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	7280	7280		
25000300	SEEDING, CLASS 3	ACRE	1.75	1.75		
25000350	SEEDING, CLASS 7	ACRE	3	3		
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	277	277		
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	277	277		
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	277	277		
25000700	AGRICULTURAL GROUND LIMESTONE	TON	6.1	6.1		
□ 25000750	MOWING	ACRE	2.25		2.25	
25100115	MULCH, METHOD 2	ACRE	4.5	4.5		
25100630	EROSION CONTROL BLANKET	SQ YD	4007	4007		
25100635	HEAVY DUTY EROSION CONTROL BLANKET	SQ YD	2698	2698		

□ NON-PART. (100% STATE)

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
IL 8 OVER KICKAPOO CREEK

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		CONTRACT NO. 68697		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CODE NO.	ITEM	UNIT	URBAN TOTAL QUANTITY	CONSTRUCTION CODE PEORIA COUNTY 80% FED. 20% STATE ROADWAY 0004	CONSTRUCTION CODE PEORIA COUNTY 0% FED. 100% STATE ROADWAY 0004	CONSTRUCTION CODE PEORIA COUNTY 80% FED. 20% STATE BRIDGE 0011 S.N. 072-0229
28000305	TEMPORARY DITCH CHECKS	FOOT	144	144		
28000400	PERIMETER EROSION BARRIER	FOOT	2862	2862		
28000500	INLET AND PIPE PROTECTION	EACH	2	2		
28100109	STONE RIPRAP, CLASS A5	SQ YD	1179			1179
28200200	FILTER FABRIC	SQ YD	1179			1179
31101400	SUBBASE GRANULAR MATERIAL, TYPE B 6"	SQ YD	753	753		
35650300	BASE COURSE WIDENING 8"	SQ YD	753	753		
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	864	864		
40600115	POLYMERIZED BITUMINOUS MATERIALS (PRIME COAT)	GALLON	710	710		
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	611	611		
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	922	922		
40603212	POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-12.5, N50	TON	350	350		
40603535	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	263	263		
42001420	BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)	SQ YD	45	45		

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FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

			URBAN	CONSTRUCTION CODE		
				PEORIA COUNTY 80% FED. 20% STATE	PEORIA COUNTY 0% FED. 100% STATE	PEORIA COUNTY 80% FED. 20% STATE
				ROADWAY	ROADWAY	BRIDGE
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0004	0004	0011
						S.N. 072-0229
44000100	PAVEMENT REMOVAL	SQ YD	466	466		
44004250	PAVED SHOULDER REMOVAL	SQ YD	432	432		
48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SQ YD	140	140		
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1			1
50104400	CONCRETE HEADWALL REMOVAL	EACH	2	2		
50105220	PIPE CULVERT REMOVAL	FOOT	158	158		
50200100	STRUCTURE EXCAVATION	CU YD	188			188
50300225	CONCRETE STRUCTURES	CU YD	208.7			208.7
50300255	CONCRETE SUPERSTRUCTURE	CU YD	432.5			432.5
50300260	BRIDGE DECK GROOVING	SQ YD	1392			1392
50300300	PROTECTIVE COAT	SQ YD	1817			1817
50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1			1
50500505	STUD SHEAR CONNECTORS	EACH	7902			7902
50800105	REINFORCEMENT BARS	POUND	12550			12550

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	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
	PLOT DATE = 3/20/2014	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
IL 8 OVER KICKAPOO CREEK

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

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(2-10-BR-1)BR	PEORIA	89	6
		CONTRACT NO. 68697		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

URBAN

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE PEORIA COUNTY 80% FED. 20% STATE ROADWAY 0004	CONSTRUCTION CODE PEORIA COUNTY 0% FED. 100% STATE ROADWAY 0004	CONSTRUCTION CODE PEORIA COUNTY 80% FED. 20% STATE BRIDGE 0011 S.N. 072-0229
	50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	169240			169240
	50800515	BAR SPLICERS	EACH	1700			1700
	50800530	MECHANICAL SPLICERS	EACH	224			224
	51201600	FURNISHING STEEL PILES HP12X53	FOOT	435			435
	51202305	DRIVING PILES	FOOT	435			435
	51203600	TEST PILE STEEL HP12X53	EACH	2			2
	51500100	NAME PLATES	EACH	1			1
*	51603000	DRILLED SHAFT IN SOIL	CU YD	110.6			110.6
*	51604000	DRILLED SHAFT IN ROCK	CU YD	53.8			53.8
	52000110	PREFORMED JOINT STRIP SEAL	FOOT	68.0			68.0
	52100520	ANCHOR BOLTS, 1"	EACH	72			72
	542D0229	PIPE CULVERTS, CLASS D, TYPE 1 24"	FOOT	85	85		
	542D1069	PIPE CULVERTS, CLASS D, TYPE 2 24"	FOOT	110	110		
	54213879	STEEL END SECTIONS 24"	EACH	2	2		

* SPECIALTY ITEM

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		DRAWN -	REVISED -
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
	PLOT DATE = 3/20/2014	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
IL 8 OVER KICKAPOO CREEK

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

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(2-1D-8R-1)BR	PEORIA	89	7
		CONTRACT NO. 68697		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

				URBAN	CONSTRUCTION CODE		
					PEORIA COUNTY 80% FED. 20% STATE	PEORIA COUNTY 0% FED. 100% STATE	PEORIA COUNTY 80% FED. 20% STATE
					ROADWAY	ROADWAY	BRIDGE
					0004	0004	0011
	CODE NO.	ITEM	UNIT	TOTAL QUANTITY			S.N. 072-0229
	59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	56			56
*	63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	350.0	350.0		
*	63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4	4		
*	63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4	4		
	63200310	GUARDRAIL REMOVAL	FOOT	400	400		
	66600105	FURNISHING AND ERECTING RIGHT OF WAY MARKERS	EACH	8	8		
	66700205	PERMANENT SURVEY MARKERS, TYPE I	EACH	1	1		
	67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	20	20		
	67100100	MOBILIZATION	L SUM	1	1		
	70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1	1		
	70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1		
	70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1	1		
	70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	14	14		
	70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1		

* SPECIALTY ITEM

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	PLOT DATE = 3/20/2014	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
IL 8 OVER KICKAPOO CREEK

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

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(2-10-BR-1)BR	PEORIA	89	8
		CONTRACT NO. 68697		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

				URBAN	CONSTRUCTION CODE		
					PEORIA COUNTY 80% FED. 20% STATE	PEORIA COUNTY 0% FED. 100% STATE	PEORIA COUNTY 80% FED. 20% STATE
CODE NO.	ITEM	UNIT	TOTAL QUANTITY		ROADWAY 0004	ROADWAY 0004	BRIDGE 0011 S.N. 072-0229
70106700	TEMPORARY RUMBLE STRIPS	EACH	6		6		
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	1		1		
70300100	SHORT TERM PAVEMENT MARKING	FOOT	164		164		
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	2820		2820		
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	26		26		
70300520	PAVEMENT MARKING TAPE, TYPE III 4"	FOOT	2669		2669		
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	942		942		
70400100	TEMPORARY CONCRETE BARRIER	FOOT	1200.0		1200.0		
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	1175.0		1175.0		
70600250	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2		2		
70600350	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2		2		
* 78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	3666		3666		
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	8		8		
* 78200410	GUARDRAIL MARKERS, TYPE A	EACH	6		6		

* SPECIALTY ITEM

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	PLOT DATE = 3/20/2014	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
IL 8 OVER KICKAPOO CREEK

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

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(2-1D-BR-1)BR	PEORIA	89	9
		CONTRACT NO. 68697		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

				URBAN	CONSTRUCTION CODE		
					PEORIA COUNTY 80% FED. 20% STATE	PEORIA COUNTY 0% FED. 100% STATE	PEORIA COUNTY 80% FED. 20% STATE
					ROADWAY	ROADWAY	BRIDGE
	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0004	0004	0011
							S.N. 072-0229
*	78200520	BARRIER WALL MARKERS, TYPE B	EACH	6	6		
*	78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4		
	78300100	PAVEMENT MARKING REMOVAL	SQ FT	53	53		
	78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	8	8		
	X4401198	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	SQ YD	180	180		
	X5030305	CONCRETE WEARING SURFACE, 5"	SQ YD	230			230
	X5040100	PRECAST BRIDGE APPROACH SLAB	SQ FT	1980			1980
	X5860110	GRANULAR BACKFILL FOR STRUCTURES	CU YD	100			100
	X6081000	FLAP GATE (SPECIAL)	EACH	2	2		
	Z0001002	GUARDRAIL AGGREGATE EROSION CONTROL	TON	165	165		
	Z0004552	APPROACH SLAB REMOVAL	SQ YD	23	23		
	Z0018002	DRAINAGE SCUPPERS, DS-11	EACH	4			4
	Z0026407	TEMPORARY SHEET PILING	SQ FT	910			910
	Z0034105	MATERIAL TRANSFER DEVICE	TON	263	263		

* SPECIALTY ITEM

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		DRAWN -	REVISED -						1388	(Z-10-BR-1)BR	PEORIA	89	10
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	PLOT DATE = 3/20/2014	DATE -	REVISED -		SCALE:	SHEET NO. OF SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CODE NO.	ITEM	UNIT	URBAN TOTAL QUANTITY	CONSTRUCTION CODE PEORIA COUNTY 80% FED. 20% STATE ROADWAY 0004	PEORIA COUNTY 0% FED. 100% STATE ROADWAY 0004	PEORIA COUNTY 80% FED. 20% STATE BRIDGE 0011 S.N. 072-0229
Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	132			132
Z0073002	TEMPORARY SOIL RETENTION SYSTEM	SQ FT	930			930
ϕ Z0076600	TRAINEES	HOUR	1000	1000		
ϕ Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOUR	1000	1000		

ϕ 0042

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

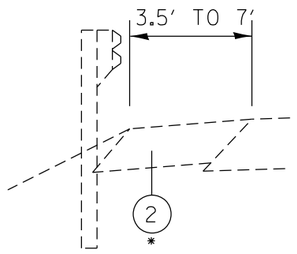
SUMMARY OF QUANTITIES
IL 8 OVER KICKAPOO CREEK

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

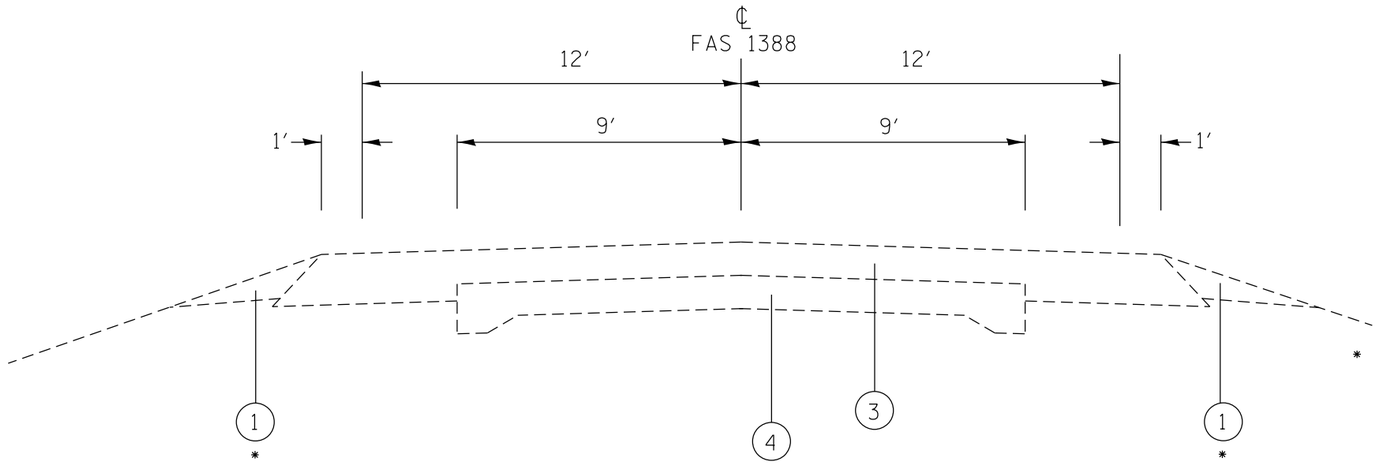
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-10-BR-11BR	PEORIA	89	11

CONTRACT NO. 68697

FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT



EXISTING HMA
SHOULDER DETAIL



EXISTING TYPICAL SECTION
STA. 794+26.61 TO STA. 799+71.10
STA. 802+47.27 TO STA. 807+19.02

* EXISTING AGGREGATE SHOULDER
LT. STA. 794+26.61 TO STA. 797+57
RT. STA. 794+26.61 TO STA. 797+55
LT. STA. 804+50 TO STA. 807+19.02
RT. STA. 804+50 TO STA. 807+19.02

EXISTING HMA SHOULDER
LT. STA. 797+57 TO STA. 799+71
RT. STA. 797+55 TO STA. 799+71
LT. STA. 802+47 TO STA. 804+50
RT. STA. 802+47 TO STA. 804+50

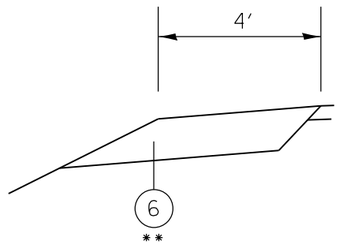
EXISTING GUARDRAIL
RT. STA. 798+70.82 TO STA. 799+70.68
LT. STA. 798+71.21 TO STA. 799+70.77
LT. STA. 802+48.64 TO STA. 803+48.99
RT. STA. 802+49.33 TO STA. 803+48.99

(1) EXISTING AGGREGATE SHOULDER

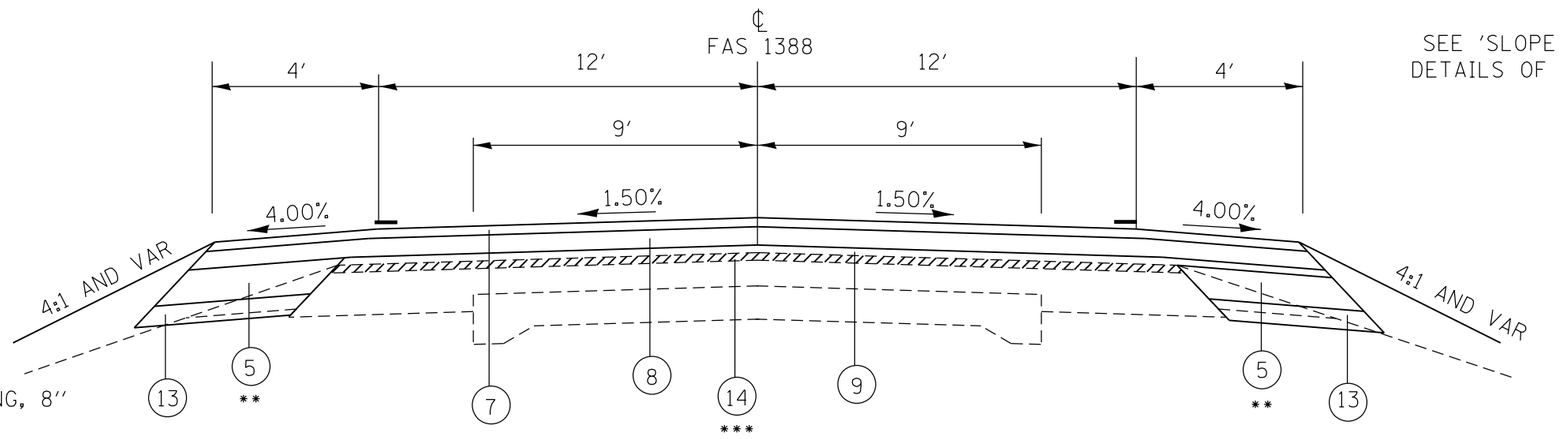
(2) EXISTING HMA SHOULDER

(3) EXISTING HOT-MIX PAVEMENT

(4) EXISTING PCC PAVEMENT (9-6-9)



PROPOSED HMA
SHOULDER, 8″ DETAIL



SEE 'SLOPE STEPS DETAIL' SHEET FOR DETAILS OF BENCHING EXISTING SLOPES.

(5) PROPOSED BASE COURSE WIDENING, 8″

(6) PROPOSED HOT-MIX ASPHALT SHOULDER, 8″

(7) PROPOSED POLYMERIZED HOT MIX ASPHALT SURFACE COURSE, MIX "D", N50 1 1/2″

(8) PROPOSED POLYERMIZED HOT MIX ASPHALT BINDER COURSE, IL-12.5, N50 2 1/4″

(9) PROPOSED HOT MIX ASPHALT BINDER COURSE, IL-19.0, N50 (VARIABLE DEPTH)

(13) PROPOSED SUBBASE GRANULAR MATERIAL, TYPE B 6″

(14) PROPOSED HOT MIX ASPHALT SURFACE REMOVAL

PROPOSED TYPICAL SECTION
STA. 794+26.61 TO STA. 796+59.82
STA. 804+70.62 TO STA. 807+19.02

*SEE SHOULDER & GUARDRAIL SHEET FOR LIMITS AND WIDTHS OF GUARDRAIL AGGREGATE (EROSION CONTROL)

**SEE STAGE CONSTRUCTION PLAN SHEET FOR LIMITS AND WIDTHS OF BASE COURSE WIDENING 8″ OR HMA SHOULDER 8″.

***STA. 794+26.61 TO 795+35.24
STA. 806+15.58 TO STA. 807+19.02

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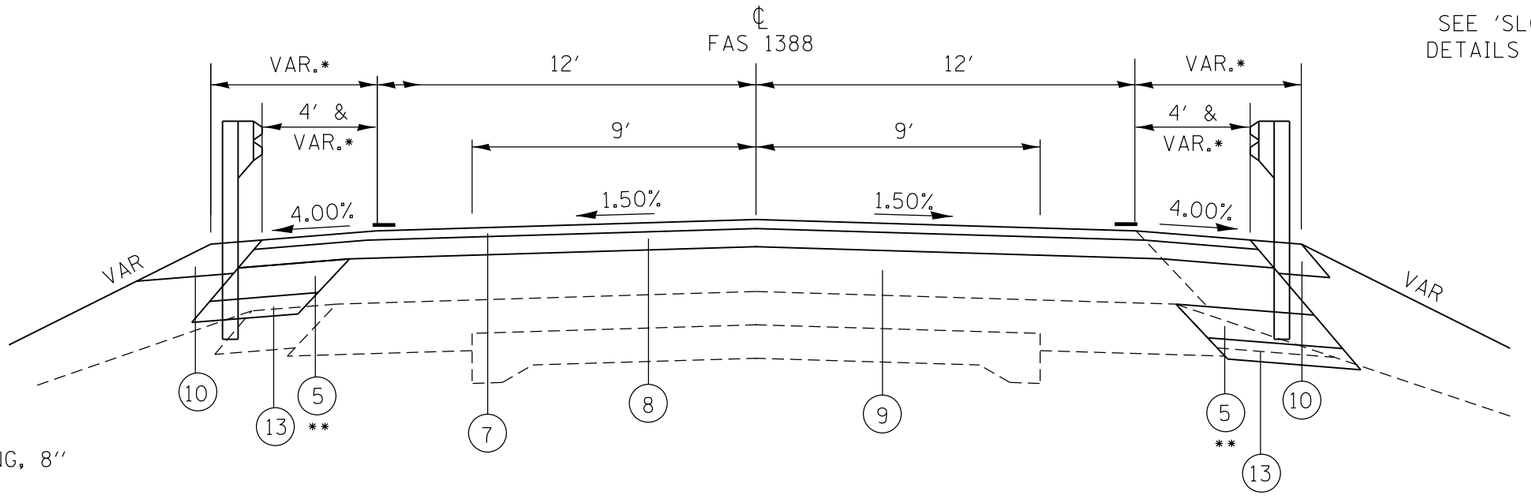
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS
IL 8 OVER KICKAPOO CREEK

SCALE: N.T.S. | SHEET NO. 1 OF 3 SHEETS | STA. | TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	12
		CONTRACT NO. 68697		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SEE 'SLOPE STEPS DETAIL' SHEET FOR DETAILS OF BENCHING EXISTING SLOPES.



(5) PROPOSED BASE COURSE WIDENING, 8''

(7) PROPOSED POLYMERIZED HOT MIX ASPHALT SURFACE COURSE, MIX ''D'', N50 1 1/2''

(8) PROPOSED POLYERMIZED HOT MIX ASPHALT BINDER COURSE, IL-12.5, N50 2 1/4''

(9) PROPOSED HOT MIX ASPHALT BINDER COURSE, IL-19.0, N50 (VARIABLE DEPTH)

(10) PROPOSED GUARDRAIL AGGREGATE (EROSION CONTROL)

(13) PROPOSED SUBBASE GRANULAR MATERIAL, TYPE B 6''

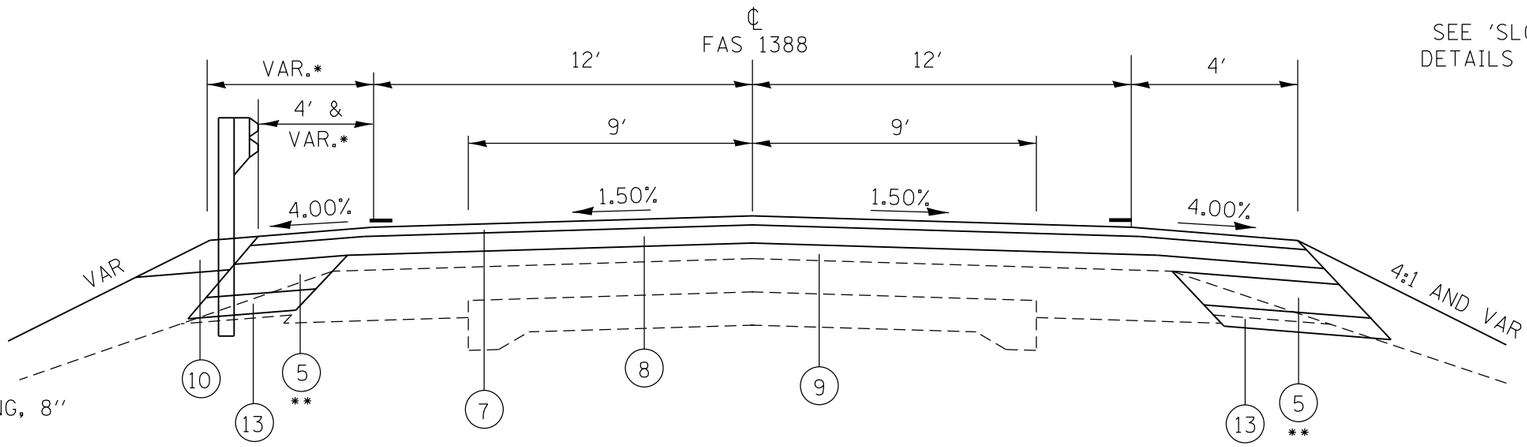
PROPOSED TYPICAL SECTION

STA. 796+59.82 TO STA. 798+75.39
STA. 803+05.05 TO STA. 804+20.62

*SEE SHOULDER & GUARDRAIL SHEET FOR LIMITS AND WIDTHS OF GUARDRAIL AGGREGATE (EROSION CONTROL)

**SEE STAGE CONSTRUCTION PLAN SHEET FOR LIMITS AND WIDTHS OF BASE COURSE WIDENING 8'' OR HMA SHOULDER 8''.

SEE 'SLOPE STEPS DETAIL' SHEET FOR DETAILS OF BENCHING EXISTING SLOPES.



(5) PROPOSED BASE COURSE WIDENING, 8''

(7) PROPOSED POLYMERIZED HOT MIX ASPHALT SURFACE COURSE, MIX ''D'', N50 1 1/2''

(8) PROPOSED POLYERMIZED HOT MIX ASPHALT BINDER COURSE, IL-12.5, N50 2 1/4''

(9) PROPOSED HOT MIX ASPHALT BINDER COURSE, IL-19.0, N50 (VARIABLE DEPTH)

(10) PROPOSED GUARDRAIL AGGREGATE (EROSION CONTROL)

(13) PROPOSED SUBBASE GRANULAR MATERIAL, TYPE B 6''

(14) PROPOSED HOT MIX ASPHALT SURFACE REMOVAL

PROPOSED TYPICAL SECTION

STA. 804+20.62 TO STA. 804+70.62

*SEE SHOULDER & GUARDRAIL SHEET FOR LIMITS AND WIDTHS OF GUARDRAIL AGGREGATE (EROSION CONTROL)

**SEE STAGE CONSTRUCTION PLAN SHEET FOR LIMITS AND WIDTHS OF BASE COURSE WIDENING 8'' OR HMA SHOULDER 8''.

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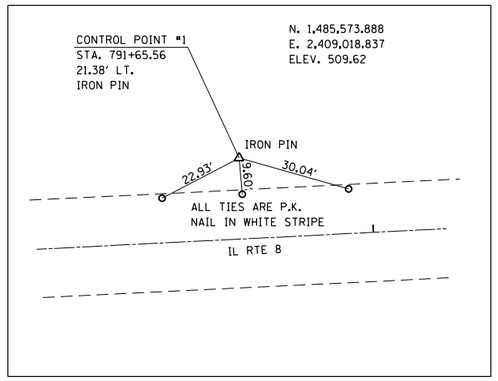
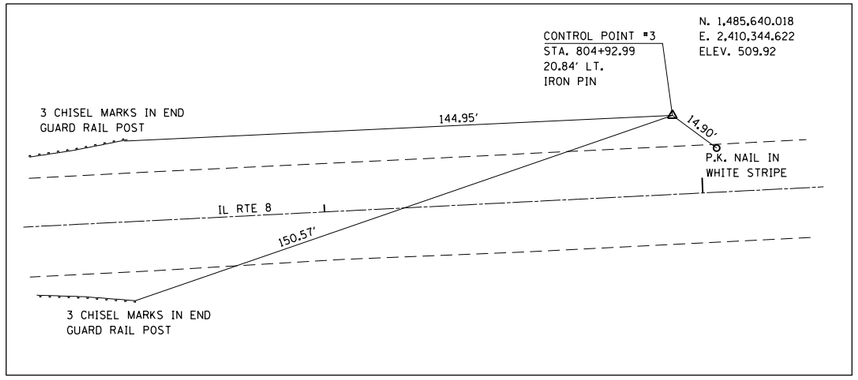
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

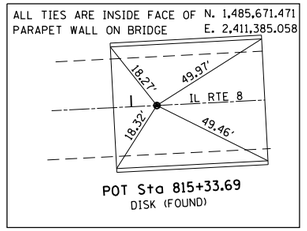
TYPICAL SECTIONS
IL 8 OVER KICKAPOO CREEK

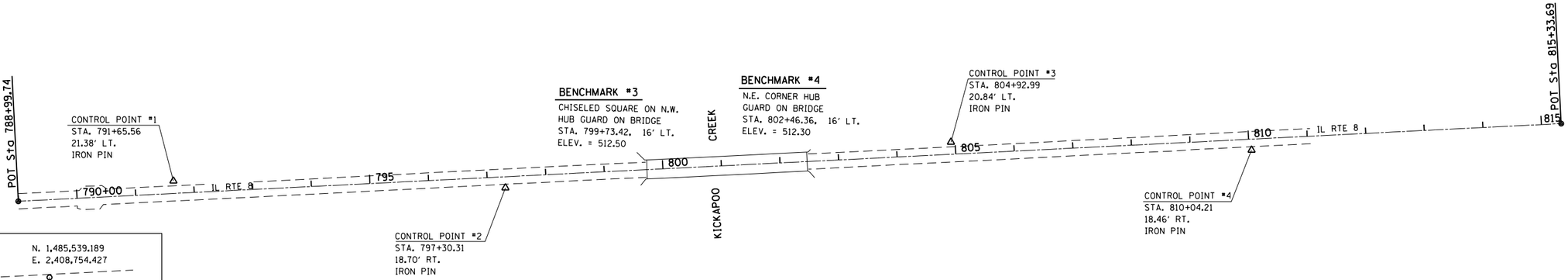
SCALE: N.T.S. | SHEET NO. 2 OF 3 SHEETS | STA. | TO STA.

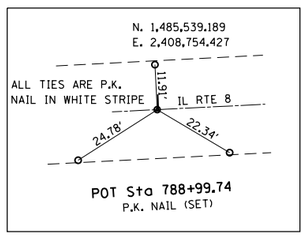
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	13
		CONTRACT NO. 68697		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

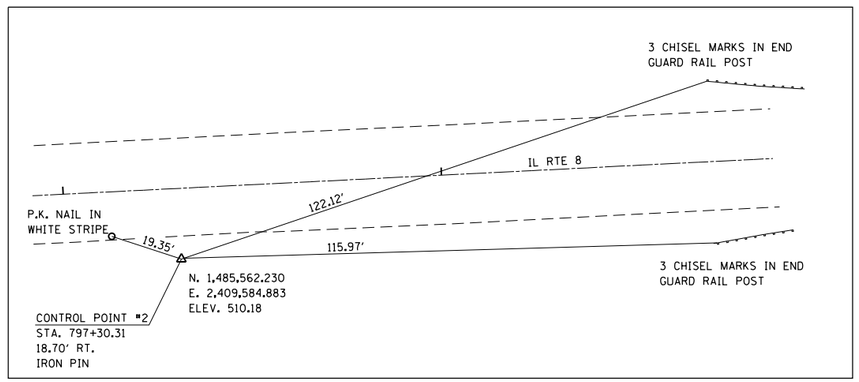


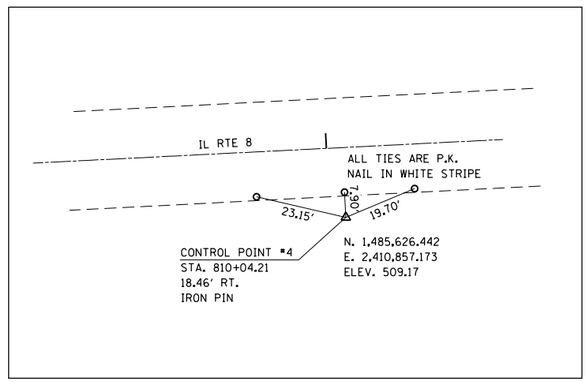












BENCHMARK #1
CONTROL POINT #1
IRON PIN
STA. 791+65.56, 21.38' LT.
ELEV. = 509.62

BENCHMARK #2
CONTROL POINT #2
IRON PIN
STA. 797+30.31, 18.70' RT.
ELEV. = 510.18

BENCHMARK #3
CHISELED SQUARE ON N.W.
HUB GUARD ON BRIDGE
STA. 799+73.42, 16' LT.
ELEV. = 512.50

BENCHMARK #4
N.E. CORNER HUB
GUARD ON BRIDGE
STA. 802+46.36, 16' LT.
ELEV. = 512.30

BENCHMARK #5
CONTROL POINT #3
IRON PIN
STA. 804+92.99, 20.84' LT.
ELEV. = 509.92

BENCHMARK #6
CONTROL POINT #4
IRON PIN
STA. 810+04.21, 18.46' RT.
ELEV. = 509.17

ALL ELEVATIONS NAVD 29

FILE NAME: P:\Projects\2008 Projects\08379 IL 8 over Kickapoo Creek\CV\CADD Sheets\D468697 - sht_alignmentties benchmarks.dgn	USER NAME = bemery	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 199.9996 ' / in.	CHECKED -	REVISED -
	PLOT DATE = 3/20/2014	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ALIGNMENT, TIES & BENCHMARKS

	PROJECT	JOB NO. R-94-002-12
SCALE: 1" = 100'	SHEET NO. 1 OF 1 SHEETS	STA. 788+99.74 TO STA. 815+33.69

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	14
		CONTRACT NO. 68697		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

PAVEMENT SCHEDULE

LOCATION STATION TO STATION	AGGREGATE SURFACE COURSE, TYPE B	POLYMERIZED BITUMINOUS MATERIALS (PRIME COAT)	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-12.5, N50	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)	HOT-MIX ASPHALT SHOULDERS, 8"	BASE COURSE WIDENING 8"	SUBBASE GRANULAR MATERIAL TYPE B 6"
	TON	GALLON	TON	TON	TON	SQ YD	SQ YD	SQ YD	SQ YD
PRE - STAGE 1									
STA RT 794+79.34 TO 799+71.10		23.1						230.9	230.9
STA RT 802+47.27 TO 806+78.94		18.0						180.0	180.0
STA RT 803+61.10 TO 806+54.60	435.8								
STA LT 803+68.86 TO 806+55.08	428.0								
STAGE 1									
STA LT 794+26.61 TO 794+79.40							23.4		
STA LT 794+26.61 TO 798+75.41				91.1					
STA LT 794+79.34 TO 798+75.00		192.1						176.0	176.0
STA LT 795+50.00 TO 799+00.00			296.6						
STA LT 798+75.39 TO 798+81.39						12.4			
STA LT 802+99.05 TO 803+05.05						12.4			
STA LT 803+00.00 TO 806+00.00			225.5						
STA LT 803+05.05 TO 806+78.80		159.5		86.1				166.1	166.1
STA LT 805+89.97 TO 806+60.03							28.5		
STA LT 806+76.74 TO 807+19.02							17.9		
STAGE 2									
STA RT 794+26.61 TO 794+79.40							23.4		
STA RT 794+79.34 TO 798+75.41		89.6		88.7	15.8				
STA RT 796+50.00 TO 798+50.00		85.0							
STA RT 795+50.00 TO 799+00.00			225.3						
STA RT 798+75.39 TO 798+81.39						10.2			
STA RT 802+99.05 TO 803+05.05						10.2			
STA RT 803+00.00 TO 806+00.00			174.7						
STA RT 803+05.05 TO 806+78.80		143.1		83.8	235.6				
STA RT 805+89.97 TO 806+60.03							28.5		
STA TT 806+78.74 TO 807+19.02					12.0		17.9		
PROJECT TOTAL	864	710	922	350	263	45	140	753	753

NOTE: SEE BRIDGE BILL OF MATERIAL FOR ADDITIONAL QUANTITIES

REMOVAL

LOCATION STATION TO STATION	PAVEMENT REMOVAL	PAVED SHOULDER REMOVAL	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	HOT-MIX ASPHALT SURFACE REMOVAL, BUTT JOINT	APPROACH SLAB REMOVAL
	SQ YD	SQ YD	SQ YD	SQ YD	SQ YD
PRE-STAGE 1					
STA 797+54.72 TO 799+71.10		107.7			
STA 802+47.27 TO 804+50.75		102.0			
STAGE 1					
STA 794+56.61 TO 794+86.33			43.0		
STA 794+86.48 TO 795+35.00				156.7	
STA 797+54.72 TO 799+71.10		108.3			
STA 798+78.39 TO 799+67.01	143.0				
STA 799+67.10 TO 799+71.10					5.7
STA 802+47.27 TO 802+51.27					5.8
STA 802+47.27 TO 804+50.75		114.2			
STA 802+51.27 TO 803+02.05	80.7				
STA 806+15.21 TO 806+56.38				146.3	
STA 806+56.30 TO 806+89.03			46.3		
STAGE 2					
STA 794+26.61 TO 795+35.00				157.3	
STA 794+56.61 TO 794+86.33			43.3		
STA 798+78.39 TO 799+67.01	112.3				
STA 798+78.00 TO 799+71.00	44.6				
STA 799+67.10 TO 799+71.10					5.8
STA 802+47 TO 802+51					5.9
STA 802+51.27 TO 803+02.05	66.6				
STA 802+47 TO 803+02	19.2				
STA 806+15.21 TO 806+56.38				150.7	
STA 806+56.30 TO 806+89.03			47.7		
PROJECT TOTAL	466	432	180	611	23

CONCRETE BARRIER

LOCATION STATION TO STATION	TEMPORARY CONCRETE BARRIER	RELOCATE TEMPORARY CONCRETE BARRIER	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3
	FOOT	FOOT	EACH	EACH
STAGE 1				
STA LT 794+51.85 TO 794+79.35			1	
STA LT 794+79.35 TO 795+79.00	100.0			
STA RT 795+79.00 TO 805+79.16	1000.0			
STA LT 805+79.16 TO 806+78.74	100.0			
STA LT 806+78.74 TO 807+06.24			1	
STAGE 2				
STA RT 794+64.30 TO 794+91.59				1
STA RT 794+91.72 TO 795+79.00		87.5		
STA LT 795+79.00 TO 805+79.16		1000.0		
STA RT 805+79.16 TO 806+94.70		87.5		
STA RT 806+66.20 TO 806+93.70				1
PROJECT TOTAL	1200.0	1175.0	2	2

GUARDRAIL

LOCATION STATION TO STATION	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6' FOOT POSTS	TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (TANGENT)	TRAFFIC BARRIER TERMINAL TYPE 6	GUARDRAIL REMOVAL	GUARDRAIL MARKERS TYPE A	BARRIER WALL MARKERS TYPE B	TERMINAL MARKER DIRECT APPLIED
	FOOT	EACH	EACH	FOOT	EACH	EACH	EACH
STAGE 1							
STA LT 796+78.24							1
STA LT 796+78.24 TO 797+28.24		1					
STA LT 796+78.24 TO 799+98.89					2		
STA LT 797+28.24 TO 798+53.24	125.0						
STA LT 798+53.24 TO 798+98.89			1				
STA LT 798+70.82 TO 799+70.68				99.8			
STA LT 798+98.89 TO 802+81.55						3	
STA LT 802+49.33 TO 803+48.98				100.6			
STA LT 802+81.55 TO 803+27.20			1				
STA LT 802+81.55 TO 804+52.15					1		
STA LT 803+27.20 TO 804+02.20	75.0						
STA LT 804+02.02 TO 804+52.15		1					
STA LT 804+52.16							1
STAGE 2							
STA RT 796+78.24							1
STA RT 796+78.24 TO 797+28.24		1					
STA RT 796+78.24 TO 798+28.24					1		
STA RT 797+28.24 TO 798+53.24	125.0						
STA RT 798+53.24 TO 798+98.89			1				
STA RT 798+70.82 TO 799+70.68				100.1			
STA RT 798+98.89 TO 802+81.55						3	
STA RT 802+49.33 TO 803+48.98				99.9			
STA RT 802+81.55 TO 803+27.20			1				
STA RT 802+81.55 TO 804+02.20					2		
STA RT 803+27.20 TO 803+52.20	25.0						
STA RT 803+52.20 TO 804+02.20		1					
STA RT 804+02.21							1
PROJECT TOTAL	350.0	4	4	400	6	6	4

GUARDRAIL EROSION CONTROL

LOCATION STATION TO STATION	SHOULDER WIDTH	GUARDRAIL AGGREGATE EROSION CONTROL
	FOOT	TON
STAGE 1		
STA LT 796+60.41 TO 798+96.39	4	48.8
STA LT 802+84.05 TO 804+71.00	5	38.7
STAGE 2		
STA RT 796+63.86 TO 798+96.39	5	48.8
STA LT 802+84.05 TO 804+20.61	4	28.6
PROJECT TOTAL	18	165

EARTHWORK

LOCATION STATION TO STATION	EARTHWORK EXCAVATION (WIDENING)	EARTHWORK EXCAVATION	FOR INFORMATION ONLY				BORROW SWELL FACTOR	BORROW EXCAVATION	TOPSOIL FURNISH AND PLACE, 4"	REMARKS
			AVERAGE SHRINKAGE FACTOR	EARTH EXCAVATION (ADJUSTED)	EMBANKMENT	EARTHWORK BALANCE WASTE (+) SHORTAGE (-)				
	CU YD	CU YD	%	CU YD	CU YD	CU YD	%	CU YD	SQ YD	
PRE-STAGE 1										
STA RT 797+50.00 TO 800+00.00	28		41.70%	11.81	0	12	0.18	14		
STA RT 802+40.00 TO 805+00.00	27		41.68%	11.35	0	11	0.18	13		
STA RT 803+50.00 TO 807+00.00		14	41.71%	5.76	6517	-6511	0.18	7683		
STA RT 804+00.00 TO 807+00.00									3605	
STAGE 1										
STA LT 794+50.00 TO 807+50.00		1164	75.50%	878.47	453	425	0.18	502	1479	* OMIT STA 800+00.00 TO 802+00.00
STAGE 2										
STA RT 794+50.00 TO 807+50.00		1334	76.09%	1014.69	1395	-380		380	2194	* OMIT STA 800+00.00 TO 802+00.00
PROJECT TOTAL	60	2515						8595	7280	

PAVEMENT MARKING

LOCATION STATION TO STATION	TEMPORARY PAVEMENT MARKING - LINE 24" (FOOT)		TEMPORARY PAVEMENT MARKING - LINE 4" (FOOT)		PAVEMENT MARKING TAPE, TYPE III 4" (FOOT)		MODIFIED URETHANE PAVEMENT MARKING - LINE 4"		TEMPORARY RUMBLE STRIPS	SHORT - TERM PAVEMENT MARKING
	WHITE	YELLOW	WHITE	YELLOW	WHITE	YELLOW	WHITE	YELLOW	EACH	FOOT
STAGE 1										
STA RT 775+60.25									1	
STA RT 780+60.25									1	
STA RT 785+60.25									1	
STA LT 787+86.26									1	
STA LT 785+86.26									1	
STA LT 785+86.26									1	
STA RT 792+60.30	13									
STA RT 793+21.28 TO 808+37.30			1518							
STA RT 795+04.46 TO 806+52.09			1302							
STA LT 808+86.26	13									
STAGE 2										
STA 791+60.30 TO 808+88.47										184
STA 792+60.30 TO 808+88.48							3258	408		
STA LT 793+34.60 TO 808+24.27					1496					
STA LT 794+92.50 TO 806+65.49					1173					
PROJECT TOTAL	26	0	2820	0	2669	0	3258	408	6	184

SEEDING

LOCATION STATION TO STATION	SEEDING, CLASS 3	SEEDING, CLASS 7	NITROGEN FERTILIZER NUTRIENT	PHOSPHORUS FERTILIZER NUTRIENT	POTASSIUM FERTILIZER NUTRIENT	AGRICULTURAL GROUND LIMESTONE	MULCH METHOD 2
	ACRE	ACRE	POUND	POUND	POUND	TON	ACRE
PRE-STAGE 1							
STA RT 794+79.35 TO 799+00.39		0.29					0.29
STA RT 802+68.86 TO 806+78.74		0.48					0.48
STA RT 803+68.86 TO 806+85.04		0.45					0.45
STAGE 1							
STA LT 794+26.61 TO 799+54.24	0.19	0.19	34.7	34.7	34.7	0.8	0.38
STA LT 802+13.08 TO 802+37.91	0.00	0.00	0.9	0.9	0.9	0.0	0.01
STA LT 802+41.82 TO 806+05.00	0.34	0.34	61.5	61.5	61.5	1.4	0.68
STA LT 804+03.19 TO 807 +19.02	0.17	0.17	30.2	30.2	30.2	0.7	0.34
STAGE 2							
STA RT 794+28.85 TO 799+88.96	0.33	0.33	59.8	59.8	59.8	1.3	0.66
STA RT 802+53.08 TO 802+67.30	0.00	0.00	0.2	0.2	0.2	0.0	0.002
STA RT 802+79.02 TO 806+05.00	0.33	0.33	58.8	58.8	58.8	1.3	0.65
STA RT 803+91.37 TO 807+19.02	0.17	0.17	30.7	30.7	30.7	0.7	0.34
PROJECT TOTAL	1.75	3.00	277	277	277	6.1	4.50

R.O.W. & SURVEY MARKERS

LOCATION	FURNISHING AND ERECTING R.O.W. MARKERS	PERMANENT SURVEY MARKERS, TYPE 1
	EACH	EACH
STAGE 2		
PLACED ON BRIDGE		1
STA 803+58.52	1	
STA 803+61.75	1	
STA 803+68.21	1	
STA 803+71.44	1	
STA 806+60.00	2	
STA 806+95.00	2	
PROJECT TOTAL	8	1

PAVEMENT MARKING REMOVAL

LOCATION STATION TO STATION	WORK ZONE PAVEMENT MARKING REMOVAL	PAVEMENT MARKING REMOVAL
	SQ FT	SQ FT
STAGE 1		
STA 792+60.44 TO 795+79.00		27
STA 805+79.08 TO 808+88.56		26
STAGE 2		
STA RT 792+60.30	26	
STA 793+34.60 TO 808+24.27	499	
STA 794+92.50 TO 806+65.49	391	
STA LT 808+86.26	26	
PROJECT TOTAL	942	53

DRAINAGE REMOVAL

LOCATION STATION TO STATION	CONCRETE HEADWALL REMOVAL	PIPE CULVERT REMOVAL
	EACH	FOOT
STAGE 1		
STA LT 798+70.48 TO 799+51.31		81
STA LT 798+70.74	1	
STAGE 2		
STA LT 799+02.61	1	
STA LT 799+02.62 TO 799+78.68		77
PROJECT TOTAL	2	158

EROSION CONTROL

LOCATION STATION TO STATION	EROSION CONTROL BLANKET	HEAVY DUTY EROSION CONTROL BLANKET	TEMPORARY DITCH CHECKS	PERIMETER EROSION BARRIER	INLET & PIPE PROTECTION
	SQ YD	SQ YD	FOOT	FOOT	EACH
PRE-STAGE 1					
STA RT 794+26.61 TO 798+54.25				458.7	
STA LT 794+26.61 TO 798+54.25				353.0	
STA RT 800+6.82 TO 806+79.26				804.1	
STA LT 800+6.82 TO 806+79.26				673.4	
STAGE 1					
STA LT 794+26.61 TO 798+51.72				456.4	
STA LT 794+26.61 TO 796+59.82	188.6				
STA LT 796+60.83 TO 799+54.10		769.5			
STA LT 798+58.29 TO 798+64.80					1
STA LT 798+64.91 TO 799+78.75				116.5	
STA LT 802+13.08 TO 802+37.00		23.5			
STA LT 802+41.00 TO 802+50.00		202.5			
STA LT 803+50.00 TO 806+06.00	1452.5				
STA LT 803+91.76 TO 804+08.42			12		
STA LT 804+03.24 TO 805+50.00	229.0				
STA LT 804+41.64 TO 804+58.40			12		
STA LT 804+91.70 TO 805+08.37			12		
STA LT 805+50.53 TO 807+19.02		582.9			
STA LT 805+42.06 TO 805+58.37			12		
STA LT 805+55.71 TO 805+72.37			12		
STA LT 805+69.71 TO 805+86.37			12		
STAGE 2					
STA RT 794+26.61 TO 796+59.82	401.3				
STA RT 796+59.82 TO 799+88.06		446.9			
STA RT 798+60.95 TO 798+67.34					1
STA RT 802+53.08 TO 802+67.65		4.1			
STA RT 802+79.05 TO 803+50.50		85.7			
STA RT 803+50.50 TO 806+05.00	1493.7				
STA RT 803+91.71 TO 804+08.01			12		
STA RT 803+90.79 TO 805+50.00	242.2				
STA RT 804+41.71 TO 804+58.37			12		
STA RT 804+91.71 TO 805+08.37			12		
STA RT 805+50.00 TO 807+19.02		583.2			
STA RT 805+42.01 TO 805+58.60			12		
STA RT 805+55.71 TO 805+72.38			12		
STA RT 805+69.71 TO 805+86.38			12		
PROJECT TOTAL	4007	2698	144	2862	2

PIPE CULVERTS

LOCATION STATION TO STATION	PIPE CULVERTS, CLASS D, TYPE 1 24"	PIPE CULVERTS, CLASS D, TYPE 2 24"	STEEL END SECTIONS 24"	FLAP GATE (SPECIAL)
	FOOT		EACH	EACH
STAGE 1				
STA LT 798+68.48 TO 799+53.34	85			
STA LT 798+68.35			1	
STA LT 798+52.98				1
STAGE 2				
STA RT 798+70.94 TO 799+80.75		110		
STA RT 798+70.35			1	
STA RT 799+80.83				1
PROJECT TOTAL	85	110	2	2

RAISED REFLECTIVE PAVEMENT MARKERS

LOCATION STATION TO STATION	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	RAISED REFLECTIVE PAVEMENT MARKER
		TWO-WAY AMBER
	EACH	EACH
STAGE 1		
STA 792+60.44 TO 795+79.00	4	
STA 805+79.08 TO 808+88.56	4	
STAGE 2		
STA 792+60.44 TO 808+88.56		8
PROJECT TOTAL	8	8

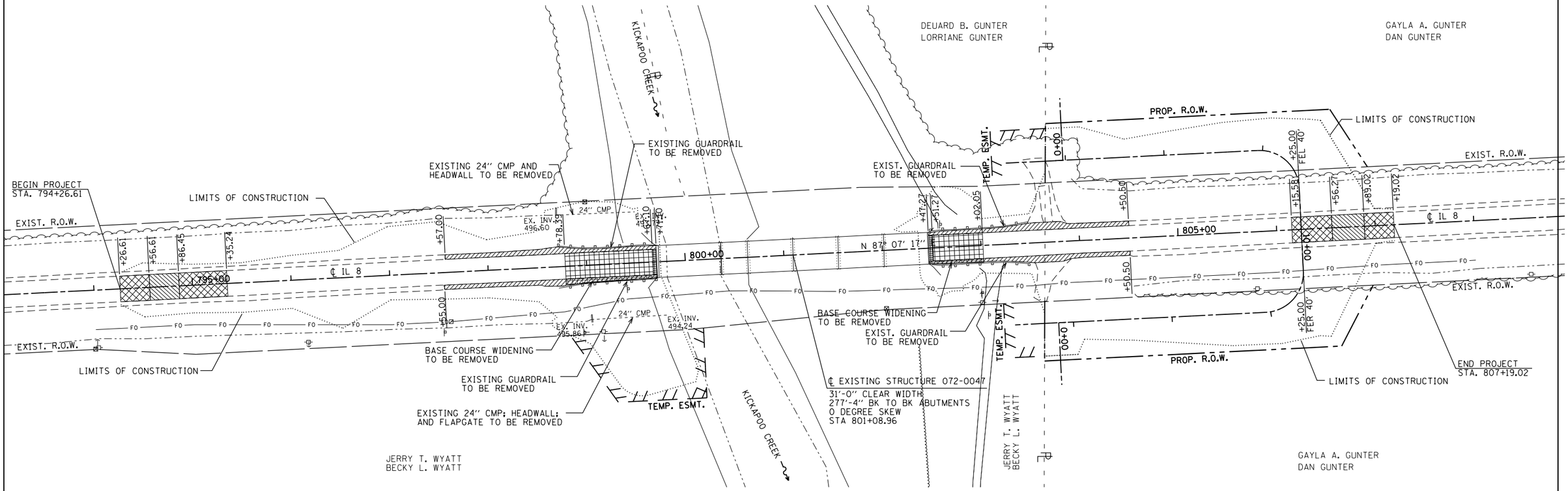
FILE NAME = P:\Projects\2008 Projects\08379 IL 8 over Kickapoo Creek\CV\CADD Sheets\D468697-sht[illegible].dgn	USER NAME = bemery	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
	PLOT DATE = 3/20/2014	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES
IL 8 OVER KICKAPOO CREEK

SCALE: | SHEET NO. 2 OF 2 SHEETS | STA. | TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	16
		CONTRACT NO. 68697		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



REMOVAL LEGEND

- HOT-MIX ASPHALT SURFACE REMOVAL-BUTT JOINT
- HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH
- PAVEMENT REMOVAL
- APPROACH SLAB REMOVAL
- PAVED SHOULDER REMOVAL

N

SCALE: 1" = 50'

FILE NAME = P:\Projects\2008 Projects\08379 IL 8 over Kickapoo Creek\CV\CADD Sheets\D468697-sht_removal.dgn	USER NAME = bemery	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
	PLOT DATE = 3/20/2014	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REMOVAL PLAN
IL 8 OVER KICKAPOO CREEK

SCALE: 1"=50' | SHEET NO. 1 OF 1 SHEETS | STA. 794+00.00 TO STA. 808+00.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1-1D-BR-1)BR	PEORIA	89	17
		CONTRACT NO. 68697		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

PLAN — SURVEYED / PLOTTED / ALIGNMENT CHECKED / RT. OF WAY CHECKED / CADD FILE NAME / NOTE BOOK / NO. / BY / DATE

PROFILE — SURVEYED / PLOTTED / PROFILE CHECKED / ELEV. NOTED / STRUCTURE NOTATNS CHKD / NOTE BOOK / NO. / BY / DATE

PIPE CULVERTS, CLASS D, TYPE 1 24" - 85 FT.
STEEL END SECTION, 24" - 1 EACH
FLAP GATE (SPECIAL) 24" - 1 EACH
52.40' LT. STA. 798+68.28 USFL 496.68
51.70' LT. STA. 799+53.31 DSFL 493.70

℄ PROPOSED STRUCTURE SN 072-0229
32'-0" CLEAR WIDTH
359'-8" BK TO BK ABUTMENTS
0 DEGREE SKEW
STA 800+90.22

DEUARD B. GUNTER
LORRIANE GUNTER

GAYLA A. GUNTER
DAN GUNTER

TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL TANGENT)
STEEL PLATE BEAM GUARDRAIL, TYPE A
TRAFFIC BARRIER TERMINAL, TYPE 6
GUARDRAIL AGGREGATE (EROSION CONTROL)
LIMITS OF CONSTRUCTION
HOT-MIX ASPHALT SHOULDERS, 8"
EXIST. R.O.W.
BEGIN PROJECT STA. 794+26.61
795+00
800+00
805+00
℄ IL 8
N 88° 07' 17" E
PROP. R.O.W.
TEMP. ESMT.
0+00
+25.00 FEER 40'
24" CMP
EX. INV. 496.60
EX. INV. 493.77
EX. INV. 495.86
EX. INV. 494.24
PRECAST BRIDGE APPROACH PAVEMENT (TYP) (SEE BRIDGE PLANS)
BRIDGE APPROACH PAVEMENT CONNECTOR (PCC) (TYP)
END PROJECT STA. 807+19.02
KICKAPOO CREEK

℄ EXISTING STRUCTURE 072-0047
31'-0" CLEAR WIDTH
277'-4" BK TO BK ABUTMENTS
0 DEGREE SKEW
STA 801+08.96

JERRY T. WYATT
BECKY L. WYATT

PIPE CULVERTS, CLASS D, TYPE 2 24" - 110 FT.
STEEL END SECTION, 24" - 1 EACH
FLAP GATE (SPECIAL) 24" - 1 EACH
56.97' RT. STA. 798+70.89 USFL 496.67
54.30' RT. STA. 799+80.86 DSFL 494.53

BENCHMARK #1
CHISELED SQUARE
IN NW CORNER OF BRIDGE
ELEV. 513.97

N

SCALE: 1" = 50'

K = 227
250.00' V.C.
BUTT JOINT
+26.61 EL. 511.27
+56.61 EL. 511.25
+07.80 EL. 511.43
+57.80 EL. 512.56
PROPOSED PROFILE
EXISTING PROFILE
VPI STA. 800+90.22
ELEVATION 515.88
+1.00%
-1.00%
-0.10%
VPI STA. 796+32.80
ELEVATION 511.31
50 YR. PROP. HWEL. 509.73
+23.22 EL. 514.21
+57.22 EL. 514.21
K = 167
334.00' V.C.
FLOW LINE ELEV. 486.53
LOW BEAM ELEV. 510.62
K = 174
200.00' V.C.
+28.21 EL. 512.50
+28.21 EL. 511.65
+89.02 EL. 511.35
+19.02 EL. 511.32
BUTT JOINT
END PROJECT STA. 807+19.02
LEFT DITCH PROFILE
+66.00 EL. 501.33
+50.00 EL. 501.58
+0.30%
+2.87%
VPI STA. 805+28.21
ELEVATION 511.30
+50.00 EL. 504.55
-7.38%
+00.00 EL. 508.24
+60.00 EL. 501.26
+50.00 EL. 501.53
+3.17%
+7.16%
+50.00 EL. 504.70
+00.00 EL. 508.28
RIGHT DITCH PROFILE PLOTTED 5' LOWER

SCALE: VERT. = 5
HORIZ. = 50

525 520 515 510 505 500 495 490 485

511.29 | 511.26 511.26 | 511.22 511.40 | 511.21 511.43 | 511.18 511.53 | 511.06 511.73 | 511.03 512.05 | 511.11 512.48 | 511.26 512.98 | 511.46 513.48 | 511.71 513.98 | 511.84 514.46 | 486.53 514.80 | 491.38 515.00 | 499.24 515.04 | 498.01 514.94 | 498.49 514.68 | 511.68 514.28 | 511.61 513.78 | 511.44 513.28 | 511.27 512.78 | 511.19 512.30 | 511.21 511.93 | 511.32 511.71 | 511.40 511.63 | 511.39 511.54 | 511.34 511.34 | 511.29 | 511.08

794+00 795+00 796+00 797+00 798+00 799+00 800+00 801+00 802+00 803+00 804+00 805+00 806+00 807+00 808+00

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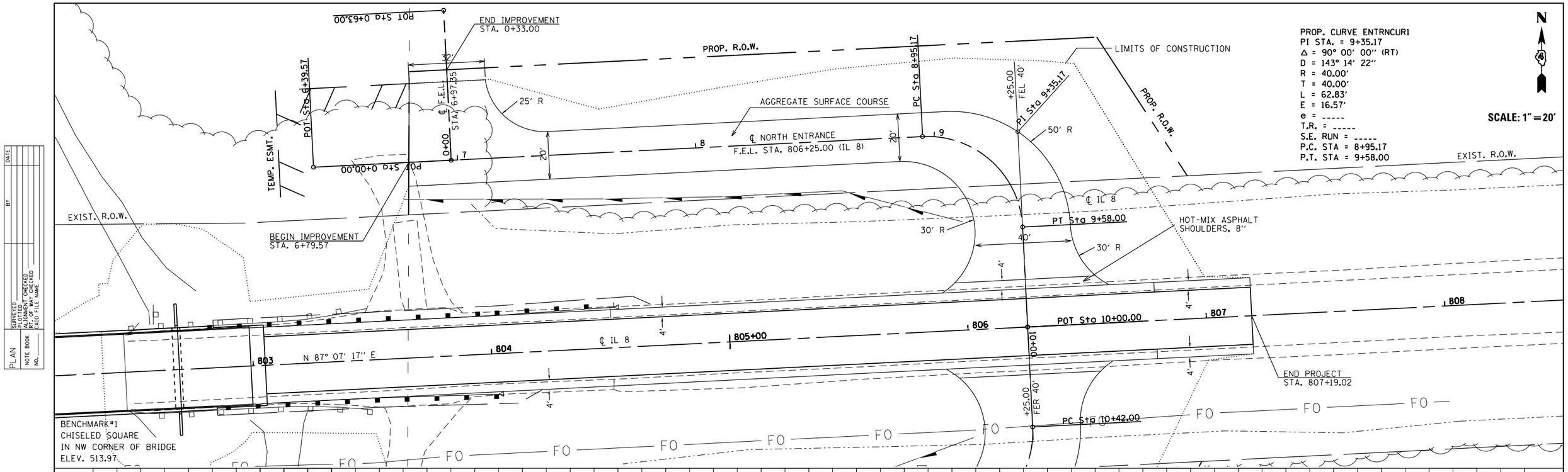
	PLOT SCALE = 100.0002 ' / in.	CHECKED -	REVISED -
	PLOT DATE = 3/20/2014	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

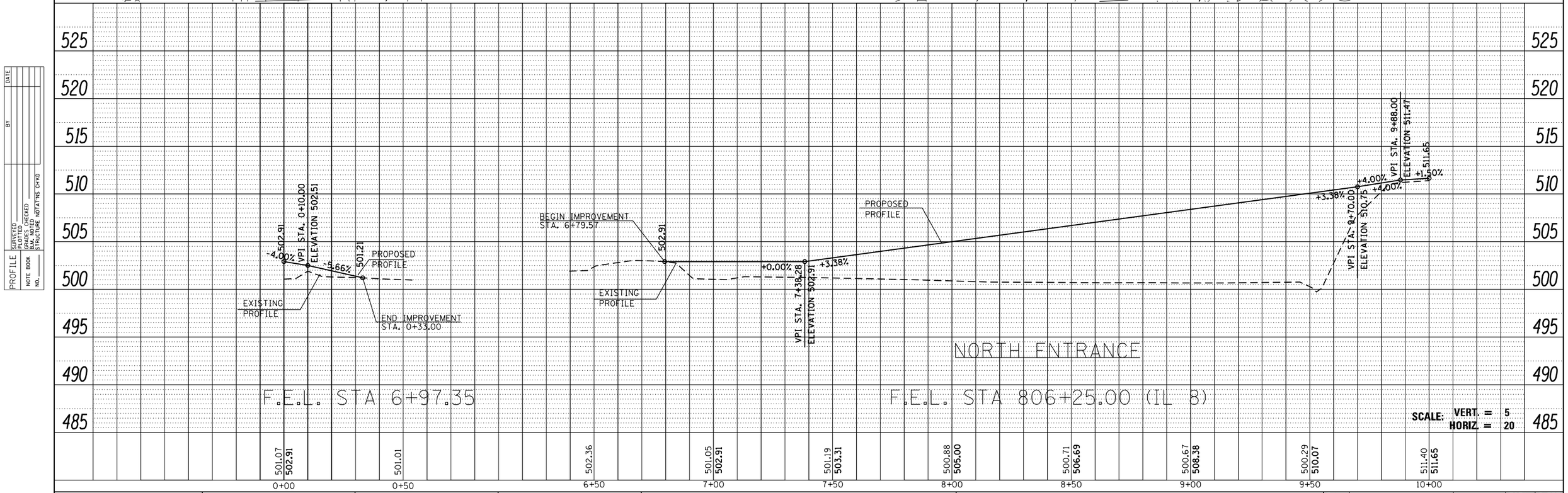
PLAN AND PROFILE
IL 8 OVER KICKAPOO CREEK

SCALE: 1" = 50' | SHEET NO. 1 OF 1 SHEETS | STA. 794+00.00 TO STA. 808+00.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	18
		CONTRACT NO. 68697		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



PLAN — SURVEYED, PLOTTED, ALIGNMENT CHECKED, RT. OF WAY CHECKED, CADD FILE NAME, NOTE BOOK, NO., BY, DATE



PROFILE — SURVEYED, PLOTTED, ALIGNMENT CHECKED, RT. OF WAY CHECKED, BAK. NOTED, STRUCTURE NOTATNS CHKD, NOTE BOOK, NO., BY, DATE

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		DRAWN -	REVISED -
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	PLOT DATE = 3/20/2014	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

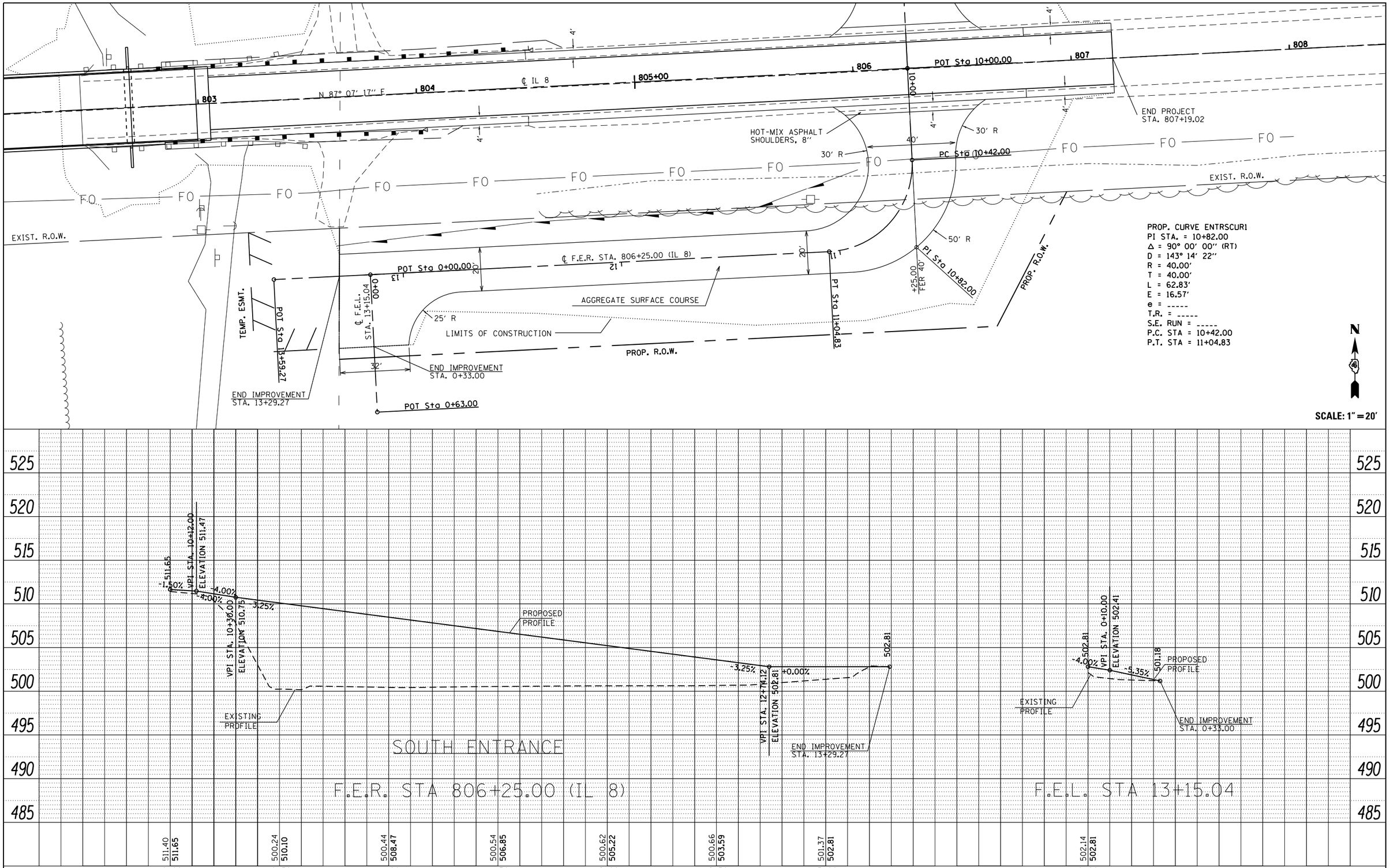
NORTH ENTRANCE PLAN AND PROFILE
IL 8 OVER KICKAPOO CREEK

SCALE: 1" = 20' | SHEET 1 OF 2 SHEETS | STA. 6+50.00 TO STA. 10+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	19
		CONTRACT NO. 68697		
	ILLINOIS FED. AID PROJECT			

PLAN
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
CADD FILE NAME
NOTE BOOK
NO.
BY
DATE

PROFILE
SURVEYED
PLOTTED
GRADES CHECKED
BM. NOTED
STRUCTURE NOTATNS CHKD
NOTE BOOK
NO.
BY
DATE



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		DRAWN -	REVISED -
	PLOT SCALE = 40.0000 ' / in.	CHECKED -	REVISED -
	PLOT DATE = 3/20/2014	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOUTH ENTRANCE PLAN AND PROFILE
IL 8 OVER KICKAPOO CREEK

SCALE: 1" = 20' | SHEET 2 OF 2 SHEETS | STA. 10+00.00 TO STA. 13+50.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	20
		CONTRACT NO. 68697		
	ILLINOIS FED. AID PROJECT			

GENERAL STAGING NOTES

1. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.
2. USE AGGREGATE AT DRIVEWAYS AS REQUIRED TO MAINTAIN TEMPORARY ACCESS AND AT THE DIRECTION OF THE ENGINEER.
3. THE CONTRACTOR SHALL REMOVE EXISTING PAVEMENT MARKINGS WHERE REQUIRED TO AVOID CONFLICT WITH THE TEMPORARY PAVEMENT MARKINGS.
4. ALL REQUIRED TEMPORARY CONSTRUCTION SIGNS SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OT THE M.U.T.C.D. THE COST OF FURNISHING, INSTALLING AND RELOCATING THSES SIGNS WHERE NECESSARY IS TO BE INCLUDED IN THE TRAFFIC CONTROL PAY ITEMS.
5. FOURTY-EIGHT HOURS BEFORE STARTING EXCAVATION THE CONTRACTOR SHALL CALL J.U.L.I.E. (1-800-892-0123) TO HAVE THE LOCATION OF EXISTING UTILITIES STAKED. THE CONTRACTOR IS RESPONSIBLE FOR LOCATION AND PROTECTION OF ALL EXISTING UNDERGROUND UTILITIES.
6. THE CONTRACTORS OPERATIONS AND TEMPORARY STORAGE ACTIVITIES SHALL BE LIMITED TO THE WORK AREA AND/OR CONSTRUCTION LIMITS. ANY ADDITIONAL STAGING AREAS ADJACENT TO THE PROJECT AREA ARE SUBJECT TO PRIOR APPROVAL BY THE ENGINEER AND MUST NOT CONFLICT WITH EXISTING SIDE ROADS, INTERSECTIONS, DRIVEWAYS OR DRAINAGE. ALL OPERATIONS SHALL BE SUBJECT TO REGULATORY REQUIREMENTS PERMITTED FOR THIS PROJECT. ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR COMPLIANCE WITH THESE REQUIREMENTS.

TEMPORARY TRAFFIC SIGNAL NOTES

1. TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH STANDARD 701321 EXCEPT WHERE MODIFIED IN THE PLANS AND SPECIAL PROVISIONS.
2. TWO PHASE SIGNAL OPERATION IS REQUIRED. THE ENGINEER OF TRAFFIC SHALL APPROVE ALL TIMING PARAMETERS. FOURTY-EIGHT HOURS PRIOR TO SIGNAL ACTIVATION, THE CONTRACTOR SHALL CONTACT THE DISTRICT 4 TRAFFIC SIGNAL TECHNICIAN AT (309) 671-4474.
3. THE CONTRACTOR SHALL INSTALL EITHER A CONVENTIONAL TRAFFIC SIGNAL INSTALLATION THAT HAS ALL OF THE REQUIRED FUNCTIONALITY DESCRIBED WITHIN THE CONTRACT PLANS AND SPECIAL PROVISIONS OR USE SOLAR POWERED TRAILER MOUNTED TRAFFIC SIGNALS.
4. THE CONTRACTOR SHALL INSTALL ADVANCED DETECTOR LOOPS FOR BOTH MAINLINE APPROACHES FOR USE WITH THE TEMPORARY TRAFFIC SIGNALS IN ACCORDANCE WITH HIGHWAY STANDARD 701321. THE ADVANCE DETECTOR LOOPS ARE TYPICALY LOCATED 100 FEET IN ADVANCE OF THE STOP BAR. THE BUREAU OF OPERATIONS SHOULD APPROVE THE DETECTOR LOOP LOCATIONS PRIOR TO INSTALLATION. THE CONTRACTOR MAY ELECT TO UTILIZE MICROWAVE DECTECTION.
5. ALL TRAFFIC SIGNAL SECTIONS SHALL HAVE 12" DIAMETER LED LENSES.
6. THE TEMPORARY TRAFFIC SIGNAL HEADS SHALL BE PLACED AT THE LOCATIONS INDICATED ON THE PLAN SHEETS OR DIRECTED BY THE ENGINEER.
7. THE CONTRACTOR SHALL FURNISH AND INSTALL A TEMPORARY ELECTRICAL SERVICE FOR THE TRAFFIC SIGNALS. THE CONTRACTOR SHALL PROVIDE ELECTRICAL CABLE, WOOD POLES, SERVICE DISCONNECT AND ALL OTHER ITEMS REQUIRED FOR THE TEMPORARY SERCIVE INSTALLATION. THE CONTRACTOR SHALL FIELD VERIFY THE DISTANCE FROM THE TEMPORARY TRAFFIC SIGNALS TO THE TEMPORARY ELECTRICAL SERVICE PRIOR TO BIDDING.
8. THE TEMPORARY TRAFFIC SIGNAL INSTALLATION SHALL CONFORM TO ALL M.U.T.C.D. REQUIREMENTS.
9. ALL LABOR, EQUIPMENT AND MATERIALS REQUIRED TO COMPLY WITH THESE REQUIREMENTS AND PLAN SHEET DETAILS SHALL BE INCLUDED IN THE CONTRACT BID PRICE FOR THE TEMPORARY BRIDGE TRAFFIC SIGNAL INSTALLATION. THERE WILL BE NO ADDITIONAL COMPENSATION.

STAGE 1 CONSTRUCTION OF NORTH SIDE

1. INSTALL TEMPORARY CONCRETE BARRIERS, SIGNS, TRAFFIC SIGNALS, IMPACT ATTENUATORS AND TEMPORARY PAVEMENT MARKINGS AS DETAILED ON TRAFFIC CONTROL AND PROTECTION STANDARD 701321 AND WHICH ARE NECESSARY TO CLOSE NORTH SIDE. ANCHORS WILL BE REQUIRED FOR TEMPORARY CONCRETE BARRIERS.
2. EXISTING GUARDRAIL ON SOUTH SIDE TO REMAIN IN PLACE DURING STAGE 1 CONSTRUCTION.
3. INSTALL PERIMETER EROSION CONTROL FEATURES IN PREPERATION FOR EMBANKMENT AND EXCAVATION WORK ON NORTH SIDE.
4. REMOVE GUARDRAIL, BRIDGE APPROACH PAVEMENT, PAVEMENT, AND SHOULDERS ON NORTH SIDE.
5. REMOVE EXISTING STRUCTURE ON NORTH SIDE.
6. INSTALL TEMPORARY SOIL RETENTION SYSTEM AS SHOWN IN STRUCTURAL PLANS.
7. CONSTRUCT NORTH PORTION OF PROPOSED STRUCTURE (SEE BRIDGE PLAN STAGE 1).
8. CONSTRUCT BRIDGE APPROACH PAVEMENT, APPROACH PAVEMENT CONNECTORS, PAVEMENT ,AND HMA SHOULDER SECTION ON NORTH SIDE.
9. CONSTRUCT PROPOSED GUARDRAIL AND ALL OTHER COLLATERAL WORK FOR NORTH SIDE OF THE ROADWAY AS SHOWN.
10. STABILIZE AND PROTECT NEWLY COMPLETED EARTHWORK AREAS AS DETAILED IN THE PLANS AND AS DIRECTED BY THE ENGINEER.

STAGE 2 CONSTRUCTION OF SOUTH SIDE

1. RELOCATE TEMPORARY CONCRETE BARRIERS, SIGNS, TEMPORARY IMPACT ATTENUATORS AND TEMPORARY MARKINGS AS DETAILED ON TRAFFIC CONTROL AND PROTECTION STANDARD 701321 AND WHICH ARE NECESSARY TO CLOSE THE SOUTH SIDE.
2. INSTALL PERIMETER EROSION CONTROL FEATURES IN PREPERATION FOR EMBANKMENT AND EXCAVATION WORK ON SOUTH SIDE.
3. REMOVE GUARDRAIL, BRIDGE APPROACH PAVEMENT, AND PAVEMENT ON SOUTH SIDE.
4. REMOVE REMAINING EXISTING STRUCTURE ON SOUTH SIDE.
5. REMOVE SECTIONS OF TEMPORARY SOIL RETENTION SYSTEM DESIGNATED TO BE REMOVED AFTER STAGE 1 CONSTRUCTION.
6. CONSTRUCT REMAINING SOUTH PORTION OF PROPOSED STRUCTURE (SEE BRIDGE PLAN STAGE 2).
7. CONSTRUCT BRIDGE APPROACH PAVEMENT, APPROACH PAVEMENT CONNECTORS, PAVEMENT, AND HMA SHOULDER SECTION ON SOUTH SIDE.
8. CONSTRUCT GUARDRAIL AND ALL OTHER COLLATERAL WORK FOR SOUTH SIDE OF THE ROADWAY AS SHOWN.
9. STABILIZE AND PROTECT NEWLY COMPLETED EARTHWORK AREAS AS DETAILED IN THE PLANS AND AS DIRECTED BY THE ENGINEER.
10. UPON COMPLETION OF STAGE 2, REMOVE TRAFFIC CONTROL PAVEMENT MARKINGS, TEMPORARY CONCRETE BARRIERS, IMPACT ATTENUATORS AND TEMPORARY SIGNALS. COST IS INCLUDED IN TRAFFIC CONTROL AND PROTECTION STANDARD 701321.
11. PLACE FINAL 1 1/2" HMA SURFACE COURSE ON BOTH LANES.
12. UPON COMPLETION OF STAGE 2, INSTALL ALL PERMANENT PAVEMENT MARKINGS.

PRE-STAGE 1

1. CONSTRUCT RELOCATED FIELD ENTRANCES TO PROVIDE ACCESS TO FARM FIELDS PRIOR TO PLACING TEMPORARY CONCRETE BARRIERS.
2. REMOVE EXISTING HMA SHOULDERS ON SOUTH SIDE. CONSTRUCT BASE COUSE WIDENING ON SOUTH SIDE FOR STAGE 1 TRAFFIC.
3. INSTALL TEMPORARY EROSION CONTROL ITEMS IN AREAS OF DISTURBED SOIL.

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	PLOT SCALE = 100.000 ' / in.	CHECKED -	REVISED -
Default	PLOT DATE = 3/20/2014	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE CONSTRUCTION NOTES
IL 8 OVER KICKPOO CREEK

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

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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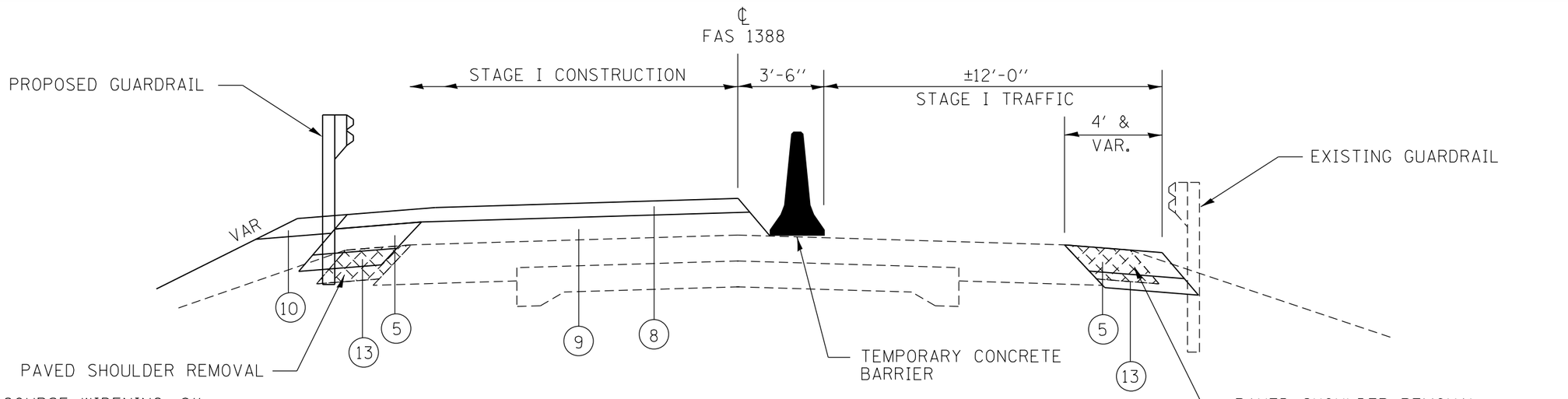
		CONTRACT NO. 68697		
	ILLINOIS FED. AID PROJECT			



(5) PROPOSED BASE COURSE WIDENING, 8"

(8) PROPOSED POLYERMIZED HOT MIX ASPHALT BINDER COURSE, IL-12.5, N50 2 1/4"

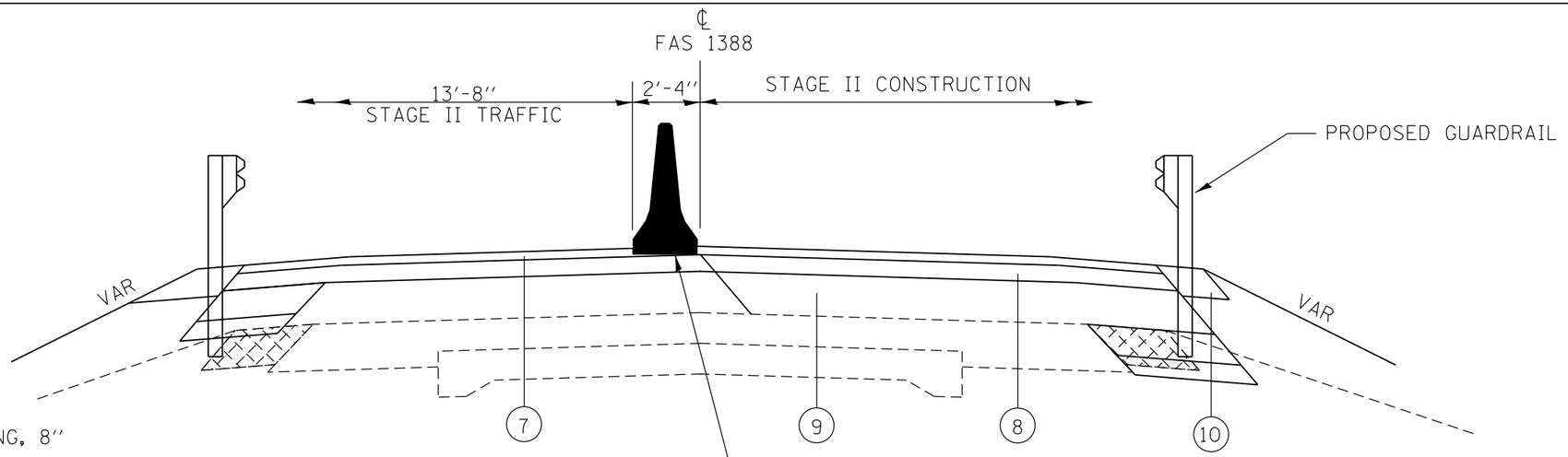
(9) PROPOSED HOT MIX ASPHALT BINDER COURSE, IL-19.0, N50 (VARIABLE DEPTH)

(10) PROPOSED GUARDRAIL AGGREGATE (EROSION CONTROL)

(13) PROPOSED SUBBASE GRANULAR MATERIAL, TYPE B 6"

STAGE 1

NOT TO SCALE



(5) PROPOSED BASE COURSE WIDENING, 8"

(7) PROPOSED POLYMERIZED HOT MIX ASPHALT SURFACE COURSE, MIX "D", N50 1 1/2"

(8) PROPOSED POLYERMIZED HOT MIX ASPHALT BINDER COURSE, IL-12.5, N50 2 1/4"

(9) PROPOSED HOT MIX ASPHALT BINDER COURSE, IL-19.0, N50 (VARIABLE DEPTH)

(10) PROPOSED GUARDRAIL AGGREGATE (EROSION CONTROL)

(13) PROPOSED SUBBASE GRANULAR MATERIAL, TYPE B 6"

STAGE 2

NOT TO SCALE

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		DRAWN -	REVISED -
	PLOT SCALE = 100.000 ' / in.	CHECKED -	REVISED -
	PLOT DATE = 3/20/2014	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGING TYPICAL SECTIONS
IL 8 OVER KICKAPOO CREEK

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

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	22
		CONTRACT NO. 68697		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

NOTES:
1. PLACE TRAFFIC CONTROL SIGNS AND DEVICES AS SHOWN IN STANDARD 701321.

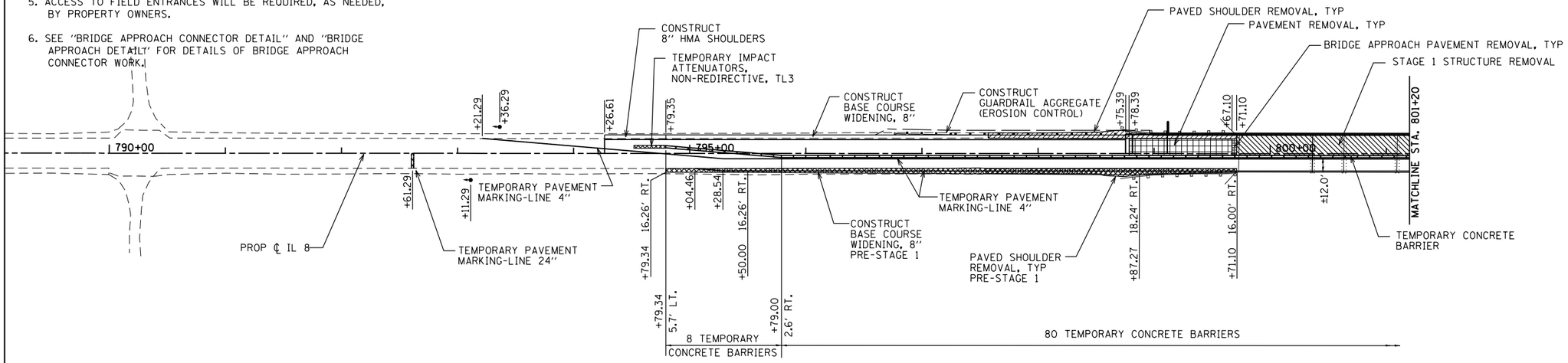
2. ALL TEMPORARY BRIDGE TRAFFIC SIGNALS FOR STAGE 1 AND STAGE 2 SHALL BE CONSIDERED AS ONE EACH.

3. BARRIER OFFSETS ARE FROM THE CENTER ON THE BARRIER.

4. TEMPORARY PAVEMENT MARKINGS INCLUDED IN COST OF TRAFFIC CONTROL AND PROTECTION 701321.

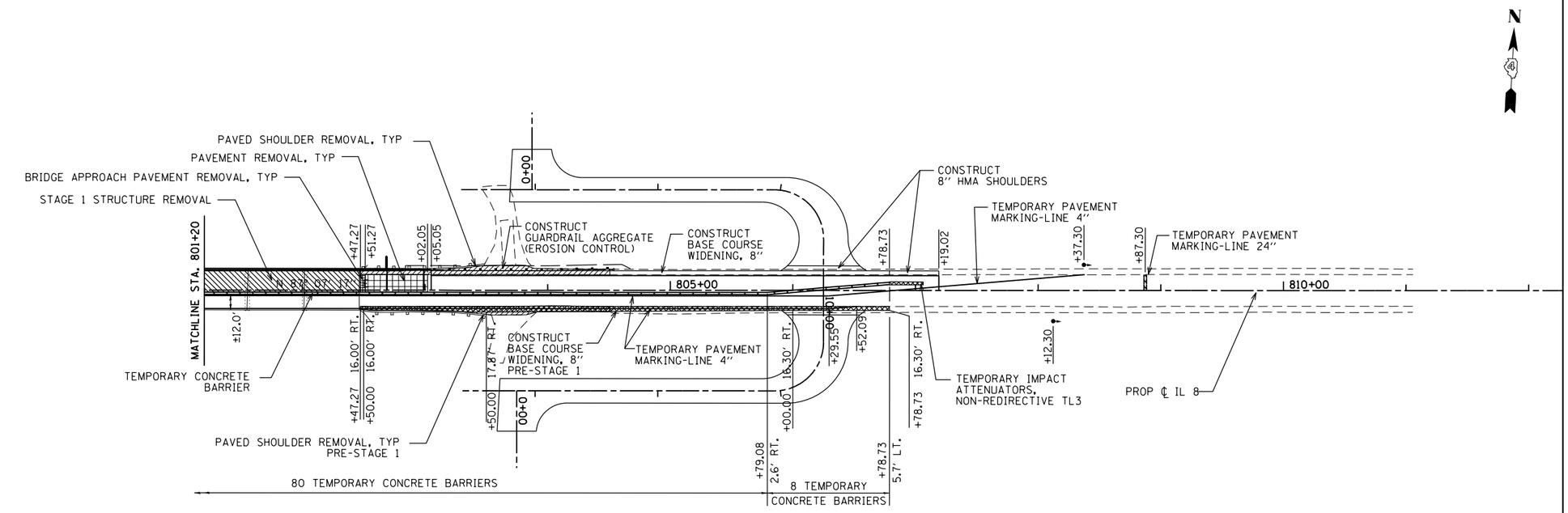
5. ACCESS TO FIELD ENTRANCES WILL BE REQUIRED, AS NEEDED, BY PROPERTY OWNERS.

6. SEE "BRIDGE APPROACH CONNECTOR DETAIL" AND "BRIDGE APPROACH DETAIL" FOR DETAILS OF BRIDGE APPROACH CONNECTOR WORK.



SCALE: 1" = 50'

STAGE I TRAFFIC



SCALE: 1" = 50'

STAGE I TRAFFIC

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	PLOT DATE = 3/20/2014	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE 1 CONSTRUCTION PLAN
IL 8 OVER KICKAPOO CREEK

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

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	23
		CONTRACT NO. 68697		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

NOTES:
1. PLACE TRAFFIC CONTROL SIGNS AND DEVICES AS SHOWN IN STANDARD 701321.

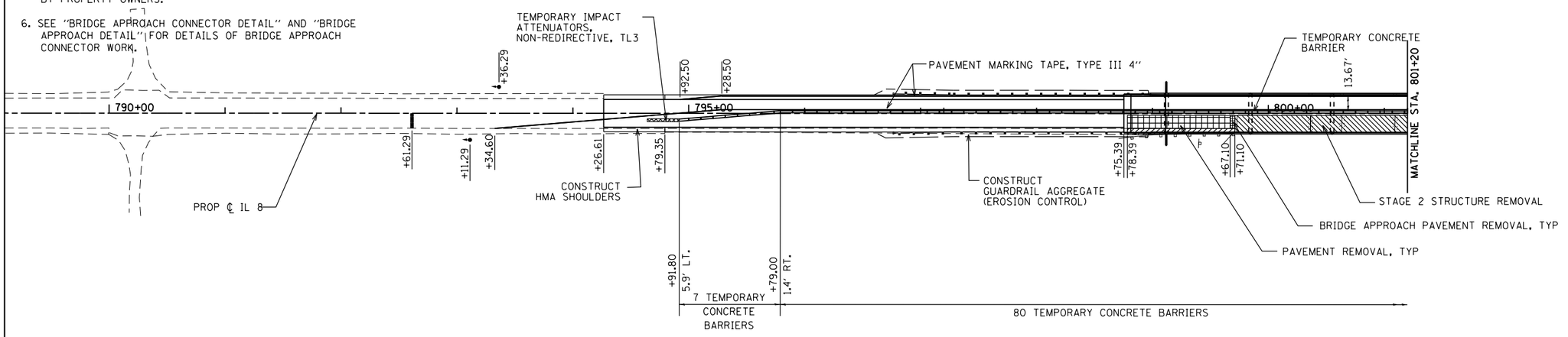
2. ALL TEMPORARY BRIDGE TRAFFIC SIGNALS FOR STAGE 1 AND STAGE 2 SHALL BE CONSIDERED AS ONE EACH.

3. BARRIER OFFSETS ARE FROM THE CENTER ON THE BARRIER.

4. TEMPORARY PAVEMENT MARKINGS INCLUDED IN COST OF TRAFFIC CONTROL AND PROTECTION 701321.

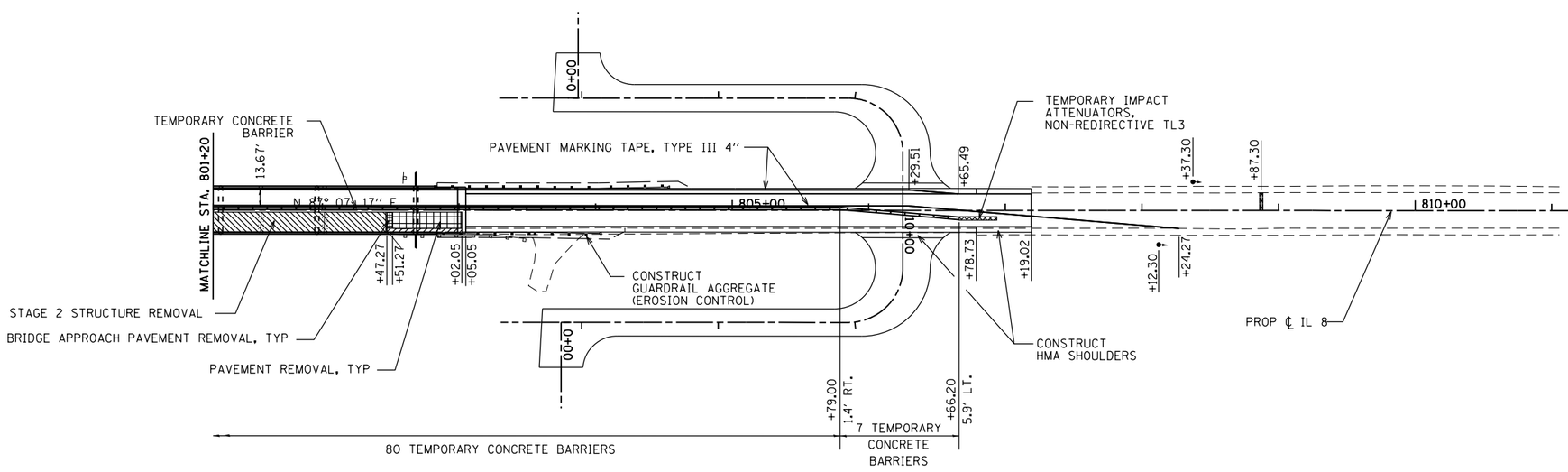
5. ACCESS TO FIELD ENTRANCES WILL BE REQUIRED, AS NEEDED, BY PROPERTY OWNERS.

6. SEE "BRIDGE APPROACH CONNECTOR DETAIL" AND "BRIDGE APPROACH DETAIL" FOR DETAILS OF BRIDGE APPROACH CONNECTOR WORK.



SCALE: 1" = 50'

STAGE II TRAFFIC



SCALE: 1" = 50'

STAGE II TRAFFIC

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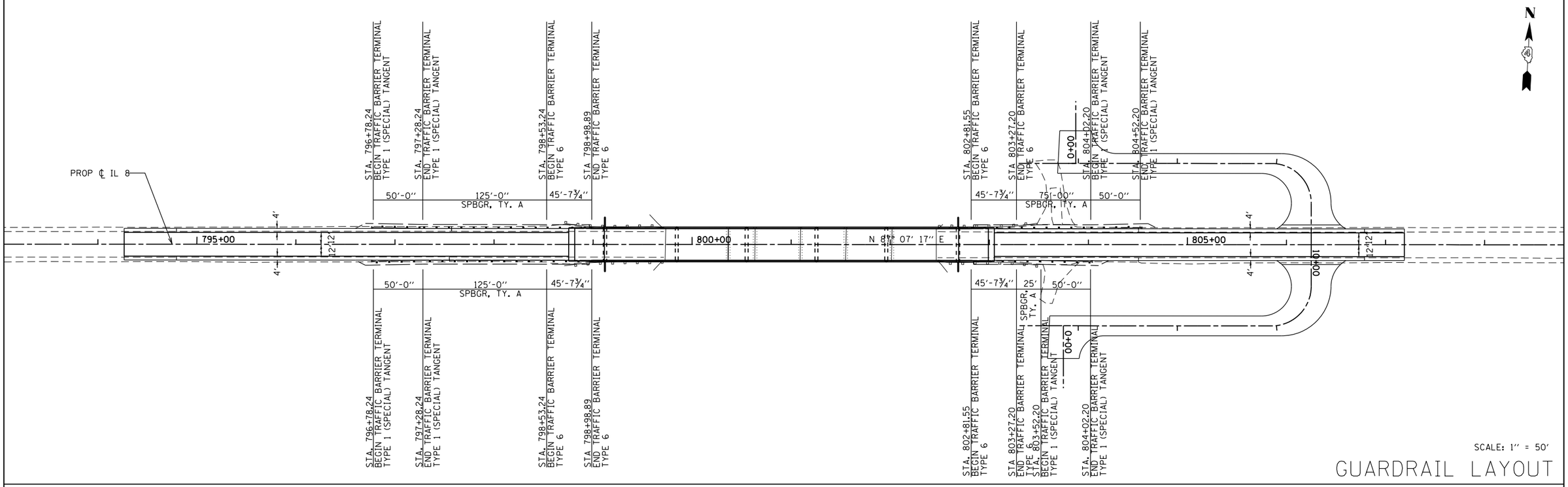
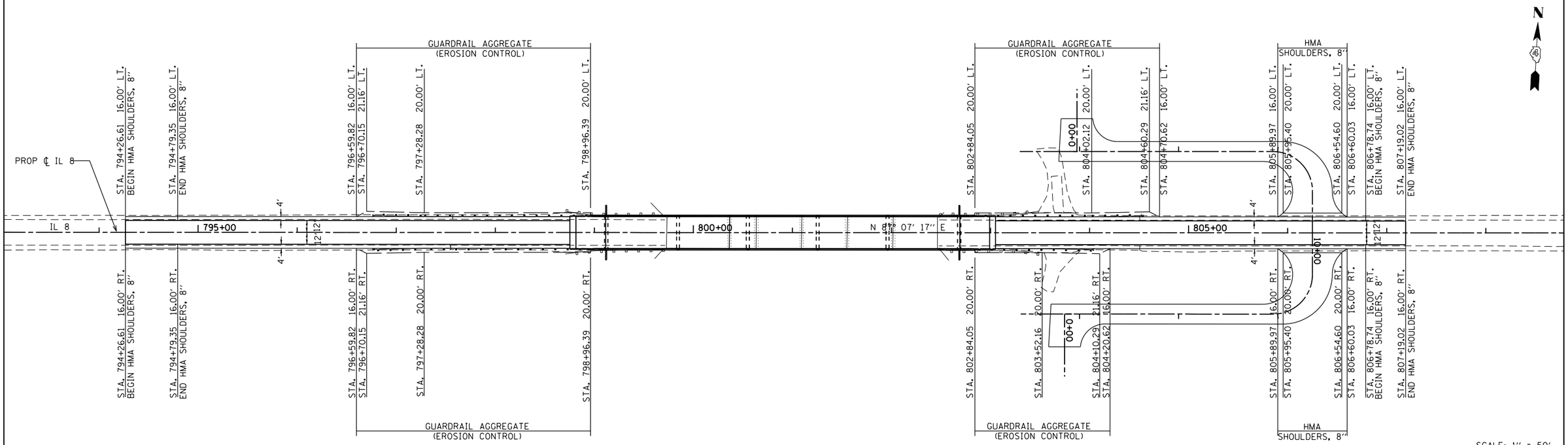
		DRAWN -	REVISED -			1388	(Z-1D-BR-1)BR	PEORIA	89	24
	PLOT SCALE = 100.000 ' / in.	CHECKED -	REVISED -						CONTRACT NO. 68697	
	PLOT DATE = 3/20/2014	DATE -	REVISED -		SCALE: SHEET NO. OF SHEETS STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		





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	PLOT DATE = 3/20/2014	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHOULDER & GUARDRAIL PLAN
IL 8 OVER KICKAPOO CREEK

SCALE: 1"=20' | SHEET NO. 1 OF 1 SHEETS | STA. 794+00.00 TO STA. 808+00.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	25
		CONTRACT NO. 68697		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

TEMPORARY DITCH CHECKS

PERIMETER EROSION BARRIER

INLET AND PIPE PROTECTION

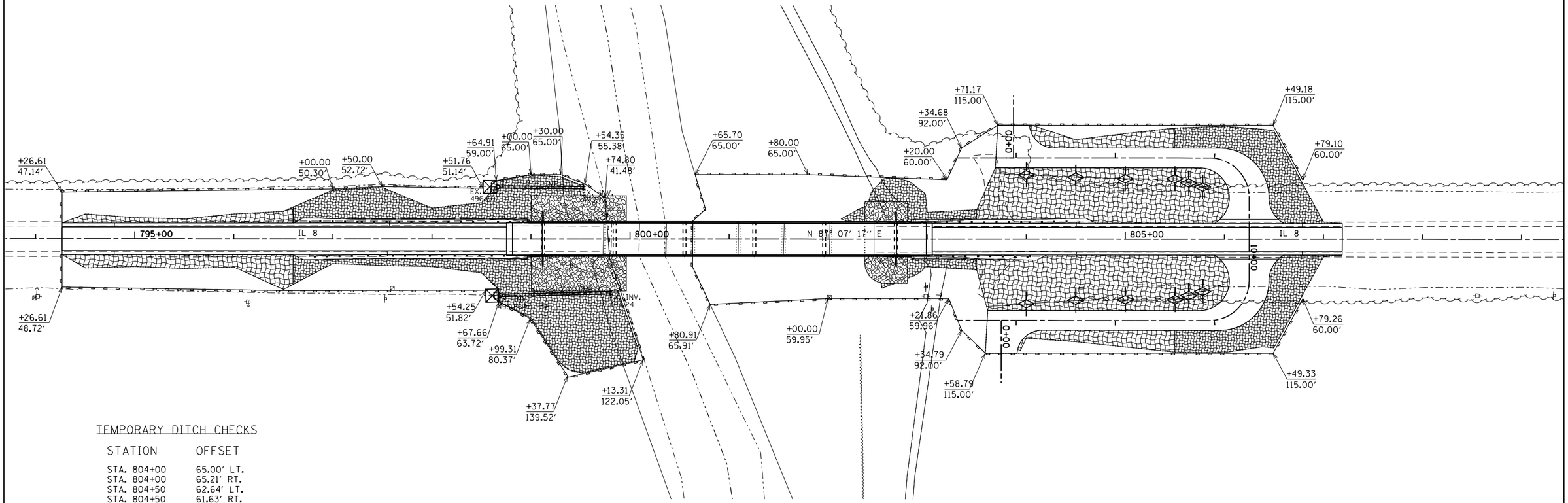
EROSION CONTROL BLANKET

HEAVY DUTY EROSION CONTROL BLANKET

RIP-RAP SLOPE PROTECTION

N

SCALE: 1" = 50'



TEMPORARY DITCH CHECKS

STATION	OFFSET
STA. 804+00	65.00' LT.
STA. 804+00	65.21' RT.
STA. 804+50	62.64' LT.
STA. 804+50	61.63' RT.
STA. 805+00	61.00' LT.
STA. 805+00	61.00' RT.
STA. 805+50	61.00' LT.
STA. 805+50	61.00' RT.
STA. 805+64	56.65' LT.
STA. 805+64	56.59' RT.
STA. 805+78	52.31' LT.
STA. 805+78	52.17' RT.

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	PLOT DATE = 3/20/2014	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EROSION CONTROL PLAN
IL 8 OVER KICKAPOO CREEK

SCALE: 1" = 50' | SHEET NO. 1 OF 1 SHEETS | STA. 794+00.00 TO STA. 808+00.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1-1D-BR-1)BR	PEORIA	89	26
		CONTRACT NO. 68697		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

804+10.85
851.78'
NE. COR., SE.¼
SECTION 24
TOWNSHIP 9 NORTH
RANGE 6 EAST, 4TH P.M.
FOUND PIN
DOC. 92-23522

804+12.37
912.14'
NW. COR., SW.¼
SECTION 19
TOWNSHIP 9 NORTH
RANGE 7 EAST, 4TH P.M.
FOUND PIPE
DOC. 78-24495

N

0 50' 100'
SCALE IN FEET

WEST LINE, SW. ¼ SEC. 19
EAST LINE, SE. ¼ SEC. 24

SE. ¼ SEC. 24

SW. ¼ SEC. 19

KICKAPOO CREEK

4ACD002 TE
DEUARD B. GUNTER
LORRAINE F. GUNTER

4ACD003 TRACT 1
DAN GUNTER
GAYLA GUNTER

4ACD001 TE1 & TE2
JERRY T. WYATT
BECKY L. WYATT

4ACD003 TRACT 2
DAN GUNTER
GAYLA GUNTER

POT Sta 788+99.74

790+25.23
65.00'

790+18.72
60.00'

EXISTING R.O.W. LINE

794+00.00
60.00'

795+00.00
70.00'

790+00

795

800

805

810

℄ IL. RTE 8 N 87°07'17 E

798+80.00
70.00'

799+25.00
140.00'

800+00.00
70.00'

800+15.00
69.25'

800+15.00
140.00'

801+79.59
65.00'

802+00.00
60.00'

803+00.00
60.00'

803+15.00
60.00'

803+15.00
115.00'

803+20.00
60.00'

803+20.00
115.00'

803+58.52
120.00'

803+58.79
115.00'

803+61.75
60.00'

803+64.98

803+68.21
60.00' LT.

803+71.17
115.00'

803+71.44
120.00'

806+60.00
120.00'

806+95.00
60.00'

PROPOSED R.O.W. LINE

806+60.00
120.00'

806+95.00
60.00'

EXISTING R.O.W. LINE

POT Sta 815+33.69

815+33.69
60.00'

815+33.69
60.00'

802+67.06
1,818.22'
SE. COR., SE.¼
SECTION 24
TOWNSHIP 9 NORTH
RANGE 7 EAST, 4TH P.M.
FOUND PIN
DOC. 92-38479

802+70.67
1,751.22'
SW. COR., SW.¼
SECTION 19
TOWNSHIP 9 NORTH
RANGE 7 EAST, 4TH P.M.
FOUND PIPE
DOC. 78-24495

WEST LINE, SW. ¼ SEC. 19
EAST LINE, SE. ¼ SEC. 24

LEGEND

- ⊠ R.O.W. MARKER FOUND
- ○ SET ⅝" IRON PIN W/ CAP
- EXISTING R.O.W. AND A/C LINE
- PROPOSED CENTERLINE
- SECTION LINE
- PROPOSED TEMPORARY EASEMENT
- PROPOSED R.O.W. LINE
- SECTION CORNER

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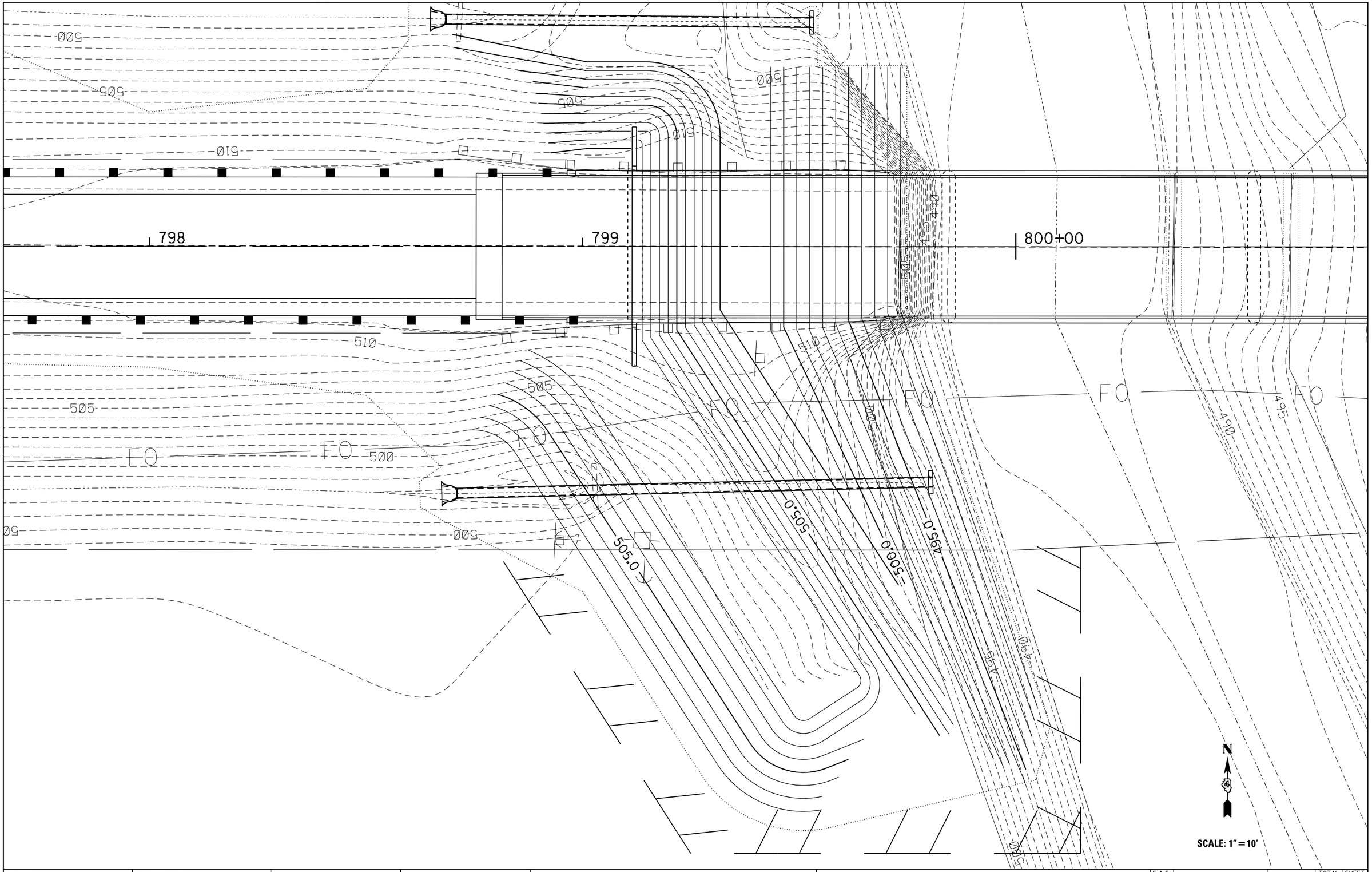
		DRAWN -	REVISED -
	PLOT SCALE = 199.9996 ' / in.	CHECKED -	REVISED -
	PLOT DATE = 3/20/2014	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RIGHT OF WAY PLANS

	PROJECT	JOB NO. R-94-002-12
SCALE: 1" = 100'	SHEET NO. 1 OF 1 SHEETS	STA. 788+99.74 TO STA. 815+33.69

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	27
		CONTRACT NO. 68697		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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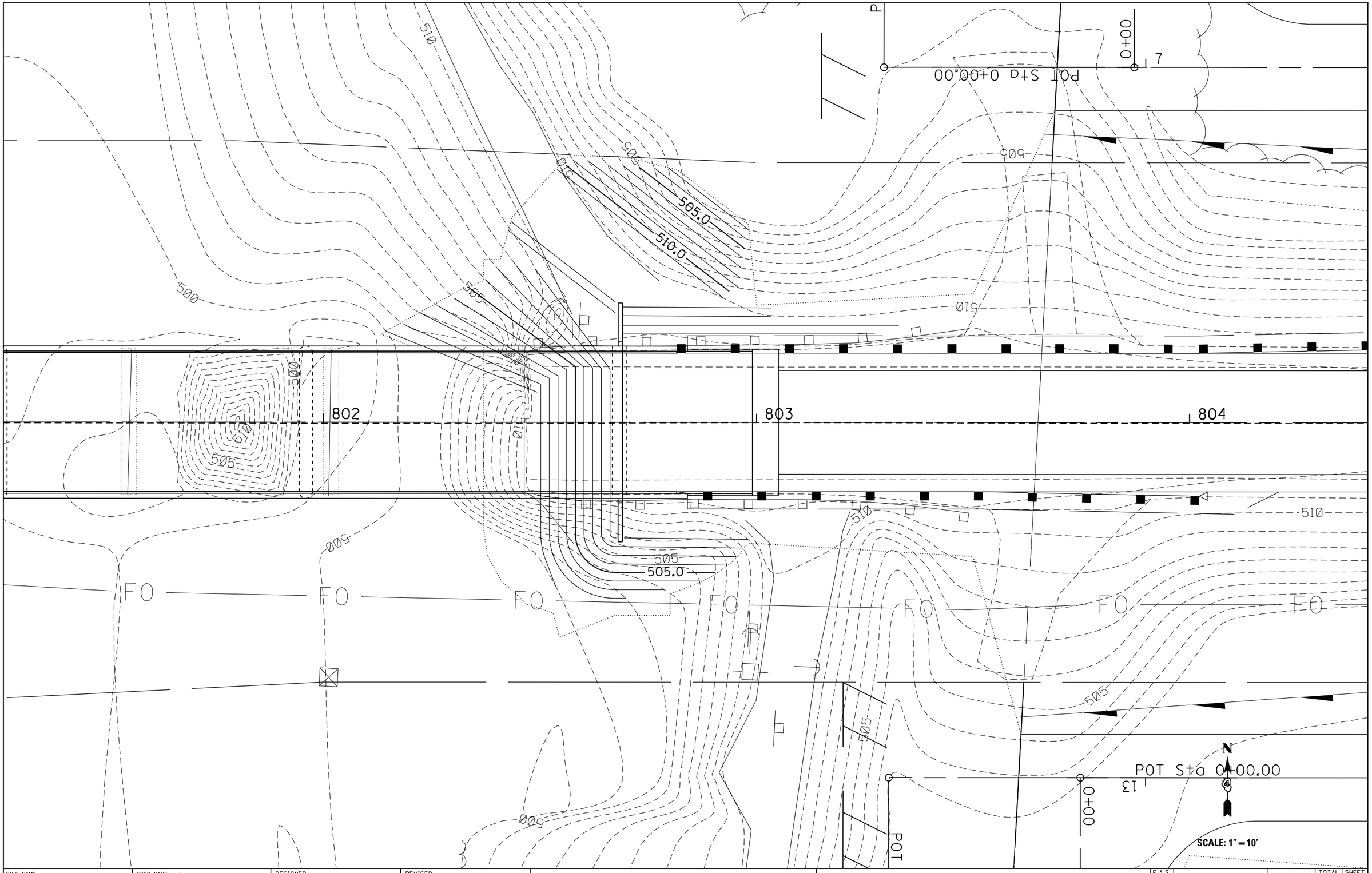
	PLOT DATE = 3/20/2014	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GRADING PLAN
IL 8 OVER KICKAPOO CREEK

SCALE: 1" = 10' | SHEET NO. 1 OF 2 SHEETS | STA. 798+00.00 TO STA. 800+50.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	28
		CONTRACT NO. 68697		
	ILLINOIS FED. AID PROJECT			



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		DRAWN -	REVISED -
	PLOT SCALE = 20.000 ' / in.	CHECKED -	REVISED -
	PLOT DATE = 3/20/2014	DATE -	REVISED -

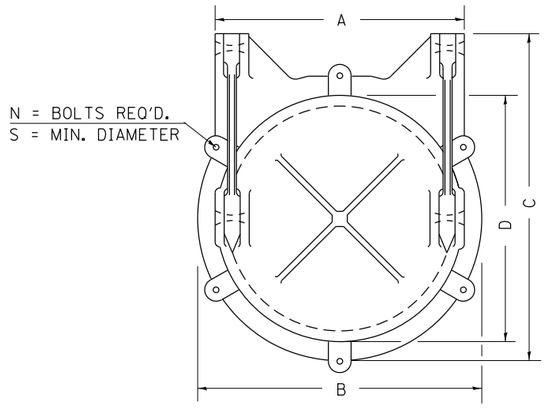
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GRADING PLAN
IL 8 OVER KICKAPOO CREEK

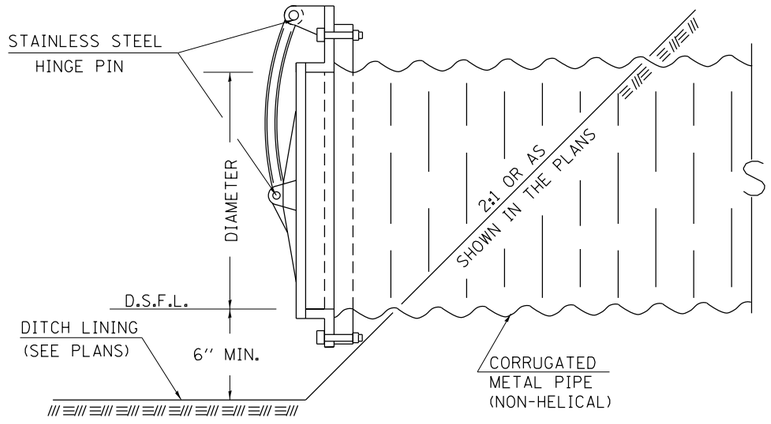
SCALE: 1" = 10' | SHEET NO. 2 OF 2 SHEETS | STA. 801+50.00 TO STA. 804+00.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	29
		CONTRACT NO. 68697		
	ILLINOIS FED. AID PROJECT			

FLAP GATE (SPECIAL) 24"



FRONT FACE



SECTION

TYPICAL DIMENSIONS IN INCHES

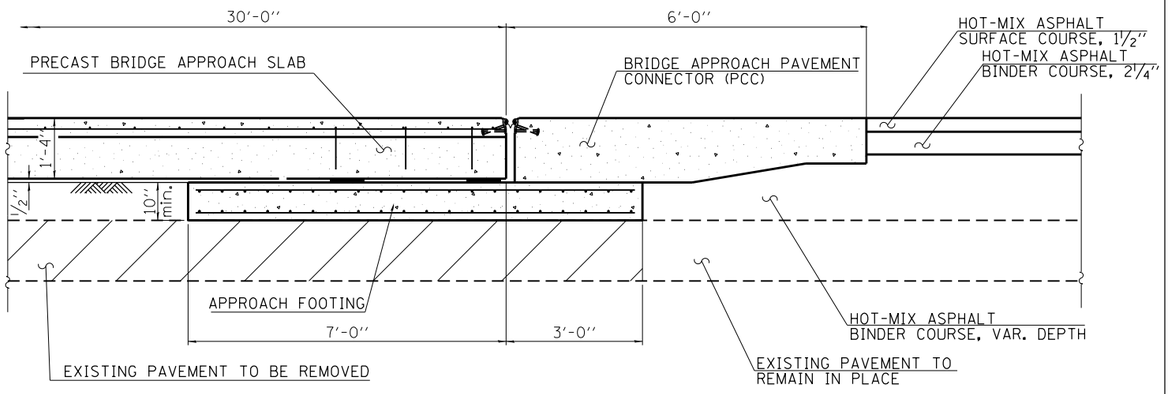
PIPE DIAMETER	A	B	C	D	N	S
12	13 1/4	15 7/8	18	13 1/4	4	5/8
15	16 1/4	19	21	16 1/4	4	5/8
18	19 1/4	22 1/8	24 1/4	19 1/4	4	3/4
21	22 1/4	25 1/8	27 1/4	22 1/4	4	3/4
24	25 1/4	28 1/4	30 1/4	25 1/4	6	3/4
27	28 1/4	31 1/4	33 1/4	28 1/4	6	7/8
30	31 1/4	34 1/4	36 1/2	31 1/4	6	7/8
36	37 1/4	41 1/2	43 1/2	37 1/2	6	7/8
42	43 1/2	47 1/2	49 1/2	43 1/2	6	7/8
48	49 1/2	54	56 1/2	49 1/2	6	1

GENERAL NOTES

THE FLAP GATE (SPECIAL) SHALL BE COMMERCIALLY PRODUCED BY A RELIABLE MANUFACTURER. THE GATE MAY BE MADE OF CAST IRON, CAST STEEL, OR OTHER SUITABLE MATERIAL. THE DESIGN MAY DIFFER FROM THE DRAWING IF THE GATE WILL WORK IN A SATISFACTORY, TROUBLE FREE MANNER AND WILL WITHSTAND THE ANTICIPATED WATER PRESSURE. THE GATE SHALL BE APPROVED BY THE ENGINEER.

THE SIZE OF FLAP GATE (SPECIAL) REFERS TO THE DIAMETER OF THE PIPE.

THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR **FLAP GATE (SPECIAL) XX"** OF THE SIZE SPECIFIED AND SHALL INCLUDE ALL LABOR AND MATERIALS NECESSARY TO COMPLETE THE INSTALLATION.

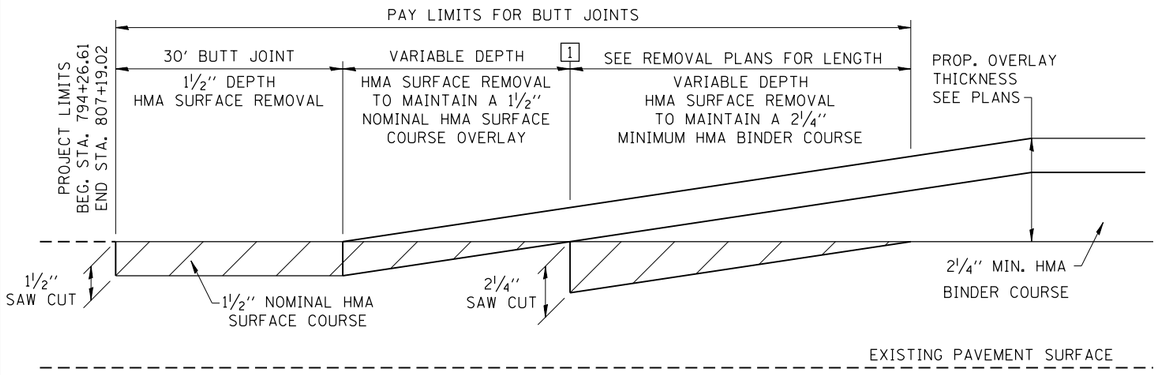


BRIDGE APPROACH PAVEMENT CONNECTOR DETAIL

GENERAL NOTES

1. The work shall be done in accordance with Article 406.08 and the Special Provision for Butt Joints.
2. The pavement surface to be removed may be either bituminous or P.C. concrete. The work shall be performed in accordance with Article 440.04 and the Special Provisions for Butt Joints.
3. The saw cut joints shall be primed just prior to the placing of bituminous material. The work will be in accordance with the applicable portions of Article 406.05.

[1] REPRESENTS STATION WHERE THE PROPOSED SURFACE ELEVATION MINUS THE EXISTING SURFACE ELEVATION EQUALS 0.125'.



BUTT JOINT AND MILLING DETAIL

THIS DETAIL APPLIES TO THE BEGIN AND END OF PROJECT

FILE NAME = P:\Projects\2008 Projects\08379 IL 8 over Kickapoo Creek\CV\CADD Sheets\D468697-sht-DRAWN.dgn	USER NAME = bemery	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
	PLOT DATE = 3/20/2014	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

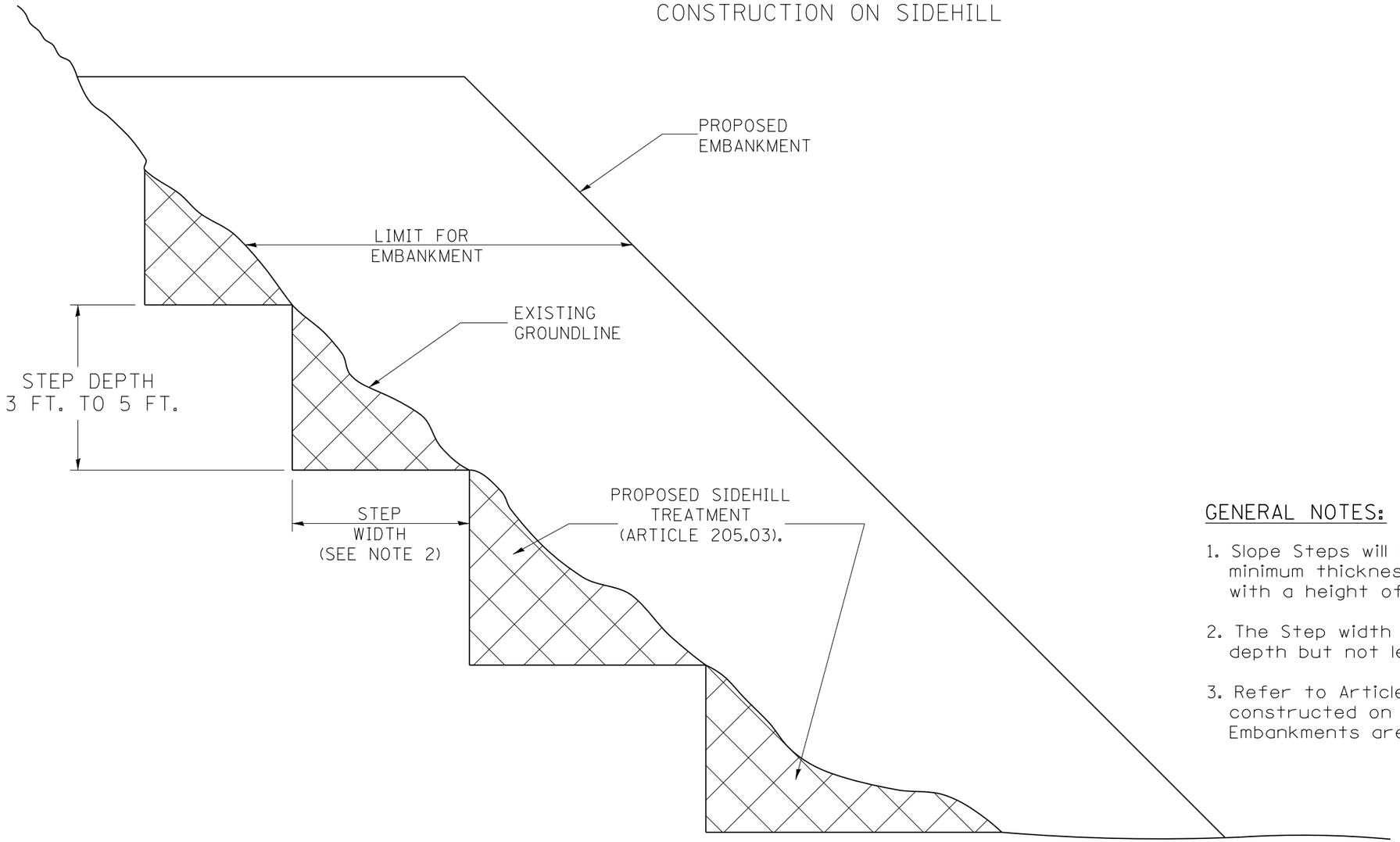
DETAILS
IL 8 OVER KICKAPOO CREEK

NOT TO SCALE | SHEET NO. 1 OF 13 SHEETS | STA. | TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	30
		CONTRACT NO. 68697		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SLOPE STEPS DETAIL

TYPICAL CROSS-SECTION EMBANKMENT CONSTRUCTION ON SIDEHILL



GENERAL NOTES:

1. Slope Steps will be required for all 12 (300) minimum thickness "silver fills" and on all fills with a height of 10' (3.0m).
2. The Step width shall be twice the Step depth but not less than 6 feet.
3. Refer to Article 205.03 for Embankment to be constructed on Hillside or Slopes, or if existing Embankments are to be widened.

REPLACEMENT MATERIAL:

STANDARD EMBANKMENT (IN ACCORDANCE WITH 205 OF THE STANDARD SPECIFACATION).

DESIGNER NOTE:

1. EACH PROJECT SHOULD BE REVIEWED INDEPENDENTLY FOR TREATMENT REQUIRED.
2. REFER TO THIS DETAIL WITH NOTE ON APPLICABLE TYPICAL SECTIONS.

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

1-1-97	RENUM. L-5.03, NEW REVISION BOX, REVISED TITLE	T.P.
	BOX, REVISED GENERAL NOTES.	
10-16-06	REVISED TO 2007 SPEC.	M.A.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NOT TO SCALE

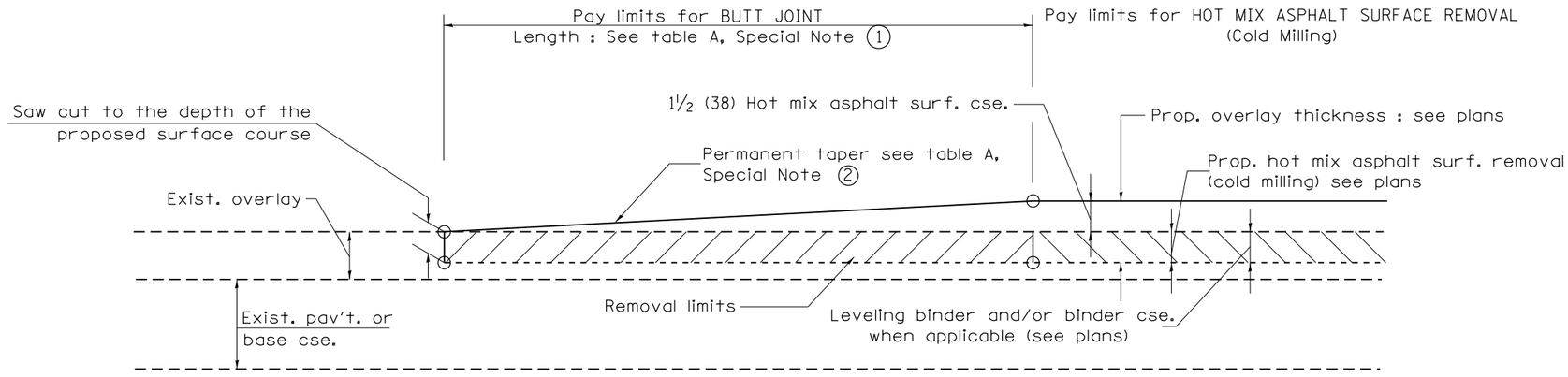
SHEET NO. 2 OF 13 SHEETS

SLOPE STEPS DETAIL
IL 8 OVER KICKAPOO CREEK

SHT. 1 OF 1

CADD STD. 205001-D4

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	31
		CONTRACT NO. 68697		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



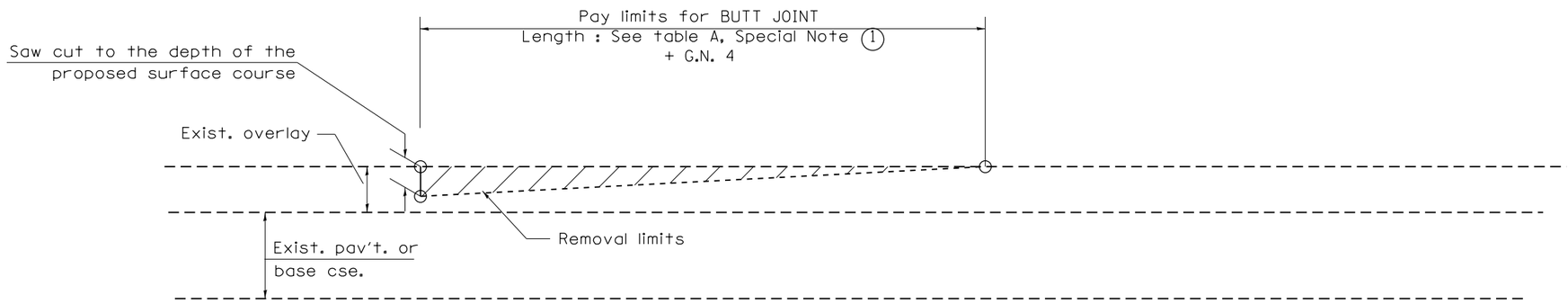
CASE 1 : WITH HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)

TABLE A
TAPER RATES

SPECIAL NOTE NUMBER	ELEMENT	MAINLINE INTERSTATES & 4-LANE EXPRESSWAYS	ALL OTHERS
(1)	BUTT JOINT TAPER RATE	1:480	1:240
(2)	TEMPORARY RAMP TAPER RATE	1:80	1:40

GENERAL NOTES

1. The work shall be done in accordance with Article 406.08 and the Special Provision for Butt Joints.
2. The pavement surface to be removed may be either bituminous or P.C. concrete. The work shall be performed in accordance with Article 440.04 and the Special Provisions for Butt Joints.
3. The saw cut joints shall be primed just prior to the placing of bituminous material. The work will be in accordance with the applicable portions of Article 406.05.
4. The length of butt joint is based on the taper rate times change in cold miling depth within the butt joint pay limits, unless otherwise indicated.



CASE 2 : NO HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)

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

01-01-97	RENUM. C-23.01, NEW REVISION BOX	T.P.	08-21-13	MAJOR MODIFICATIONS	R.D.
04-01-97	CORRECTION TO DEPTH	J.A.			
09-15-05	REVISED DESIGNER NOTE	M.M.A.			
10-16-06	REVISED TO 2007 SPEC.	M.A.			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

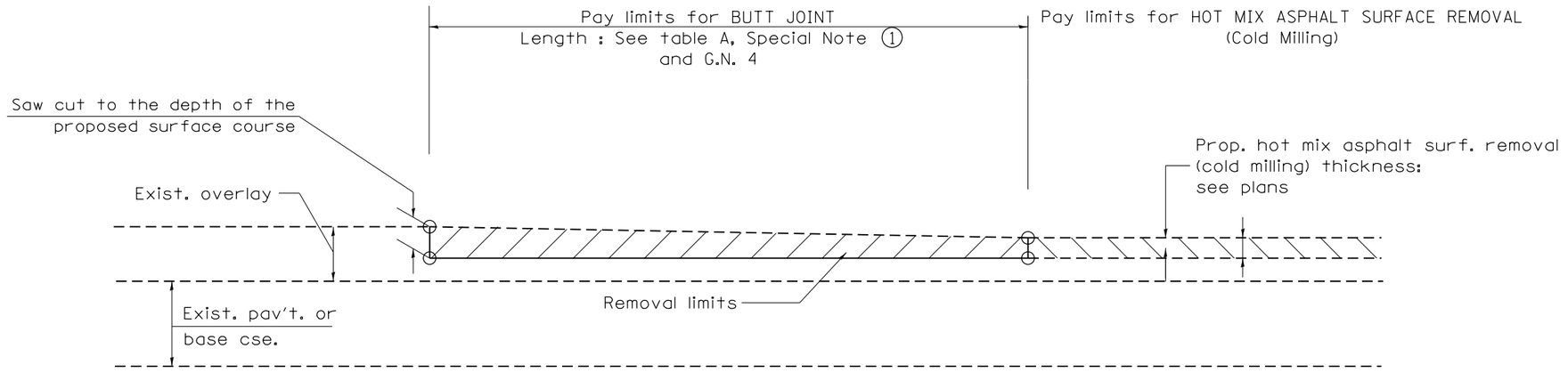
NOT TO SCALE

BUTT JOINTS
IL 8 OVER KICKAPOO CREEK

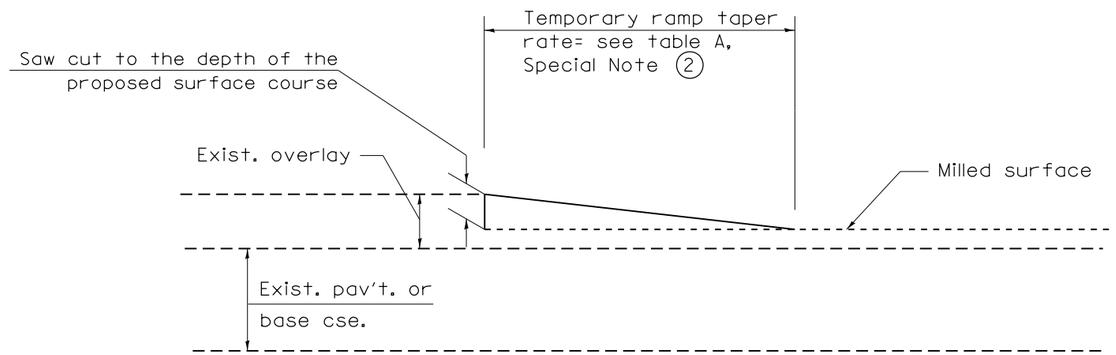
SHEET NO. 3 OF 13 SHEETS

SHT. 1 OF 3
CADD STD. 406101-D4

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	32
		CONTRACT NO. 68697		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



CASE 4 : NO HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)
TIE-IN TO EXISTING BITUMINOUS TAPER



DETAIL TEMPORARY RAMP

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

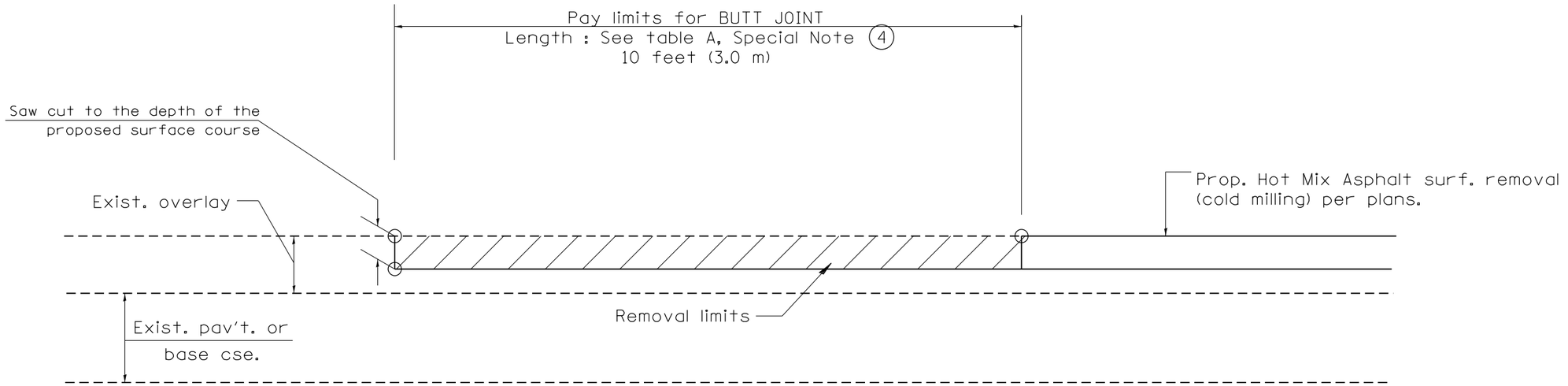
NOT TO SCALE

BUTT JOINTS
IL 8 OVER KICKAPOO CREEK

SHEET NO. 4 OF 13 SHEETS

SHT. 2 OF 3
CADD STD. 406101-D4

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	33
		CONTRACT NO. 68697		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



CASE 4 : SINGLE LIFT OVERLAY WITH EQUIVALENT DEPTH HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING) TIE-IN TO EXISTING BITUMINOUS TAPER

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NOT TO SCALE

BUTT JOINTS
IL 8 OVER KICKAPOO CREEK

SHEET NO. 5 OF 13 SHEETS

SHT. 3 OF 3
CADD STD. 406101-D4

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	34
		CONTRACT NO. 68697		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

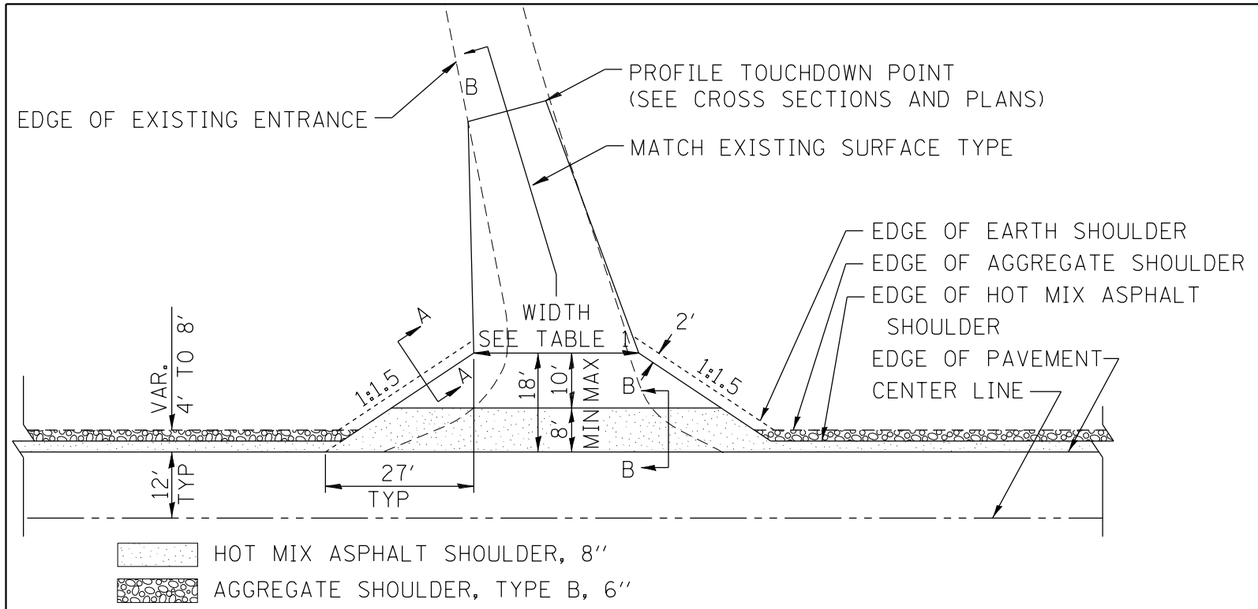
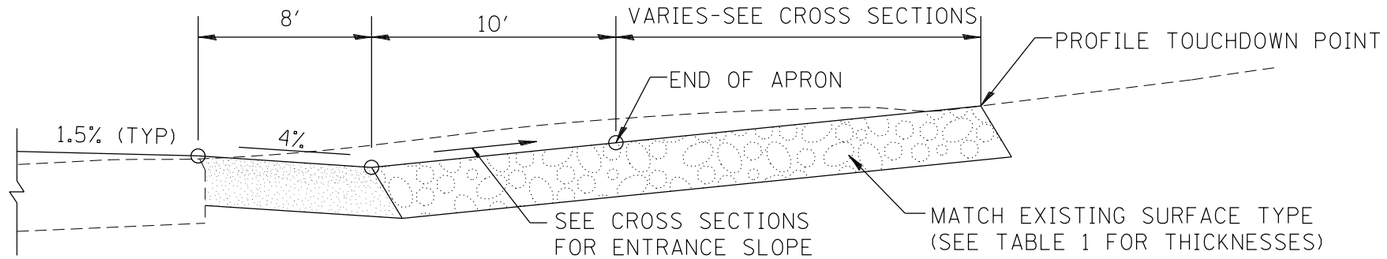


TABLE 1								
RURAL ENTRANCE DESIGN								
ELEMENT	NON-COMMERCIAL		NON-COMMERCIAL W/ LARGE FARM EQUIPMENT		COMMERCIAL			
					1-WAY OPERATION		2-WAY OPERATION	
WIDTH (W)	12'(3.6m) Min.	24'(7.2m) Max.	20' (6.1m)Max.	30' (9.0m)Max.	14'(4.3m) Min.	24'(7.2m) Max.	24'(7.2m) Min.	35'(10.7m) Max.
FLARE	1:1.5							
MAX. GRADE (G)	12%		12%		10%			
SURFACE TYPE								
INCIDENTAL HOT MIX ASPHALT SURFACING	6''		—		8''			
AGGREGATE SURFACE COURSE	6''		8''		8''			
PCC DRIVEWAY PAVEMENT	6''		—		7''			

PLAN

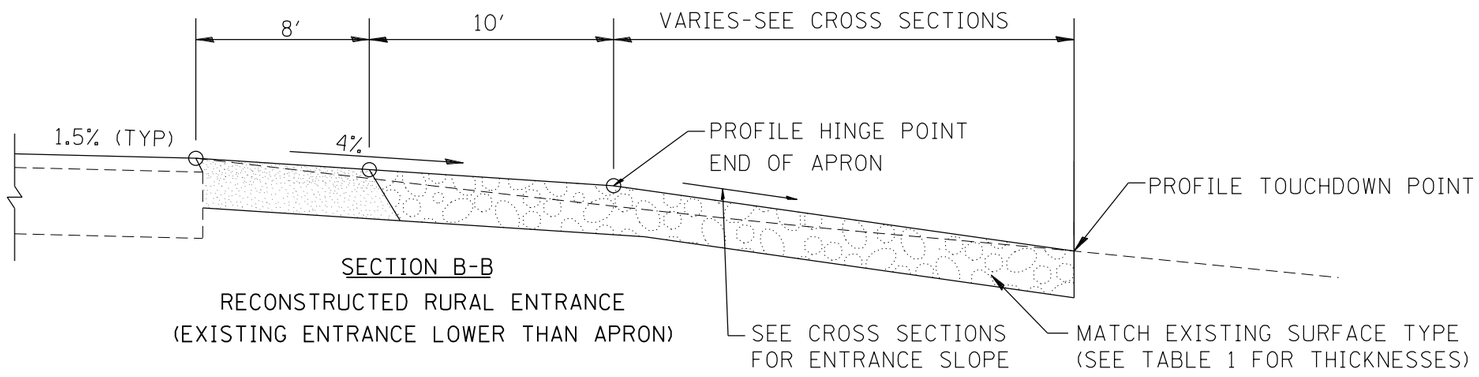
COMMERCIAL / FARM-RELATED ENTRANCE



SECTION B-B

RECONSTRUCTED RURAL ENTRANCE

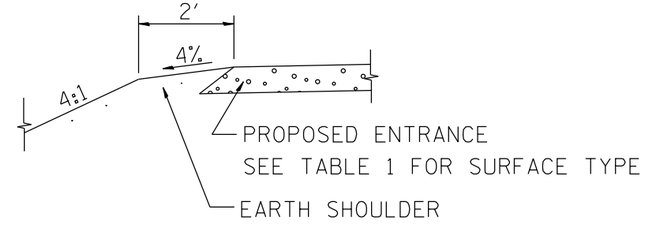
(EXISTING ENTRANCE HIGHER THAN APRON)



SECTION B-B

RECONSTRUCTED RURAL ENTRANCE

(EXISTING ENTRANCE LOWER THAN APRON)



SECTION A-A

SHOULDER TREATMENT FOR RURAL ENTRANCES

GENERAL NOTES

1. ENTRANCES SHALL SLOPE AWAY FROM THE PAVEMENT AT A RATE EQUAL TO THE SHOULDER SLOPE FOR A MINIMUM DISTANCE OF 8'.

2. A MINIMUM 8' PAVED SHOULDER SHALL BE CONSTRUCTED BETWEEN LOCATIONS WHERE THE RURAL ENTRANCE IS LESS THAN 50' FROM AN ADJACENT SIDEROAD, ENTRANCE OR MAILBOX TURNOUT.

3. A TAPER RATE OF 5:1 IS DESIRABLE WHEN TRANSITING FROM THE RURAL ENTRANCE WIDTH SHOWN IN TABLE 1, TO THE EXISTING ENTRANCE WIDTH.

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

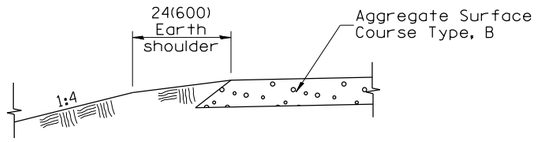
01-01-97	RENUM. C-103.06, NEW REVISION BOX	T.P.	10-16-06	REVISED TO 2007 SPEC.	M.A.
07-01-97	REVISE DESIGNER NOTES	J.A.			
01-17-03	ADJUST DESIGN, CHANGE ENTRANCE	JATR			
09-15-05	RADIUS FOR FLARE	M.M.A.			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RURAL ENTRANCES FOR "3R" PROJECTS
IL 8 OVER KICKAPOO CREEK

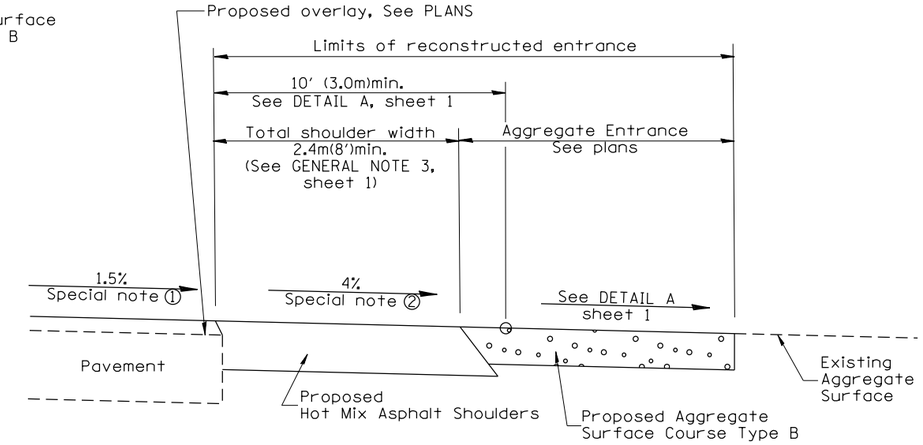
NOT TO SCALE | SHEET NO. 6 OF 13 SHEETS | SHT. 1 OF 2 | CADD STD. 406301-D4

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	35
		CONTRACT NO. 68697		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



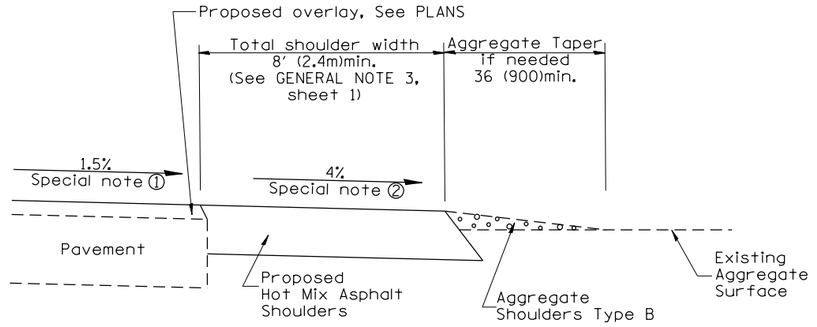
SECTION A-A

SHOULDER TREATMENT FOR AGGREGATE ENTRANCES



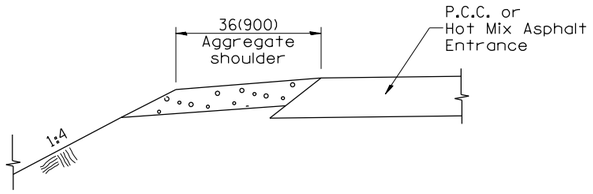
SECTION B-B

RECONSTRUCTED AGGREGATE ENTRANCE



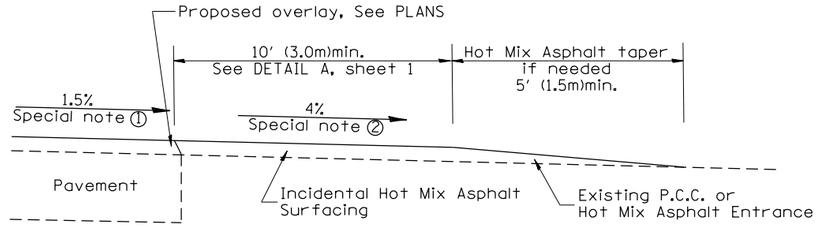
SECTION B-B

EXISTING AGGREGATE ENTRANCE



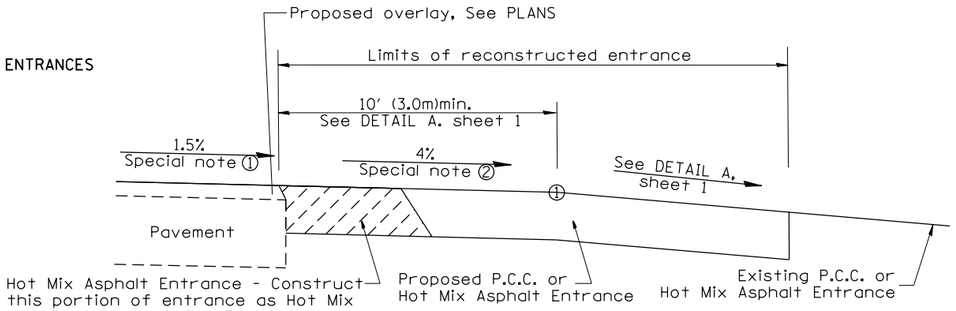
SECTION C-C

SHOULDER TREATMENT FOR P.C.C. OR HOT MIX ASPHALT ENTRANCES



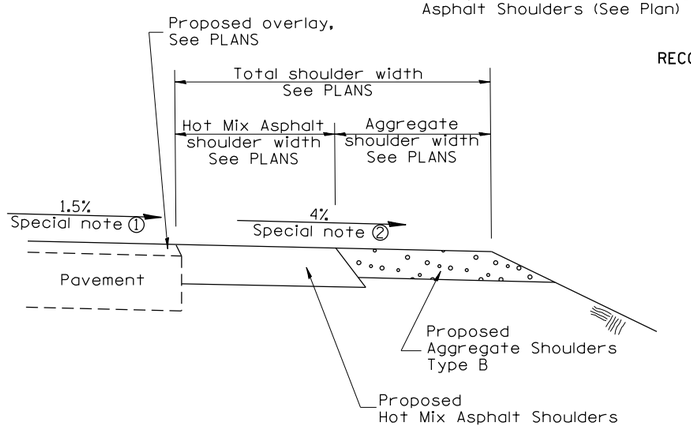
SECTION D-D

EXISTING P.C.C. OR HOT MIX ASPHALT ENTRANCE



SECTION D-D

RECONSTRUCTED P.C.C. OR HOT MIX ASPHALT ENTRANCE



SECTION E-E

MAINLINE SHOULDER TREATMENT

SPECIAL NOTES

(1) The mainline pavement cross-slope is 1.5% for tangent alignment. See PLANS for cross-slope on superelevated horizontal curves.

(2) The shoulder slope shall control the entrance profile for a distance of 10' (3.0m) minimum from the pavement edge. The shoulder cross-slope is 4% for tangent alignment. Through superelevated curves, the maximum pavement-shoulder breakover should not be greater than 10% for shoulders 6' (1.8m) and wider and 12% for shoulders 4' (1.2m) and less. Where 12' (366cm) paved shoulders are provided, the breakover should be at the edge of the paved shoulder rather than at the pavement edge.

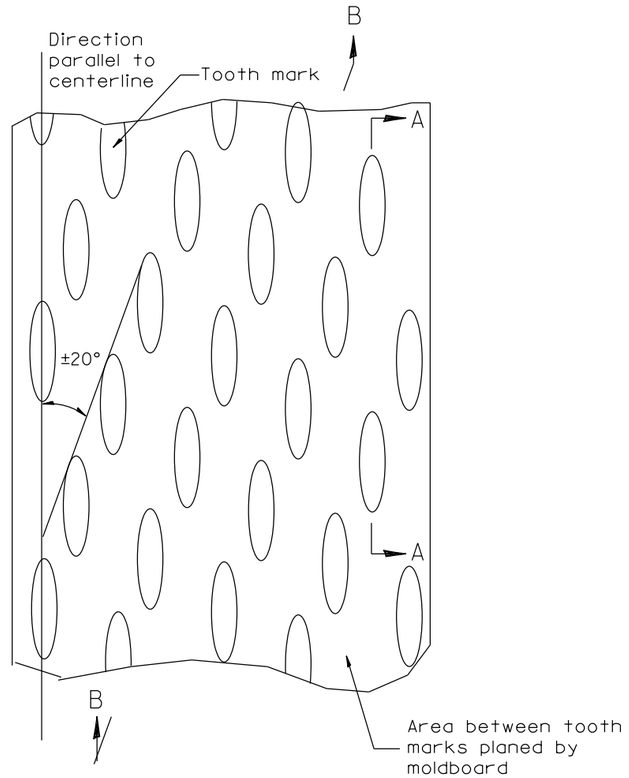
All dimensions are in inches (millimeters) unless otherwise noted.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

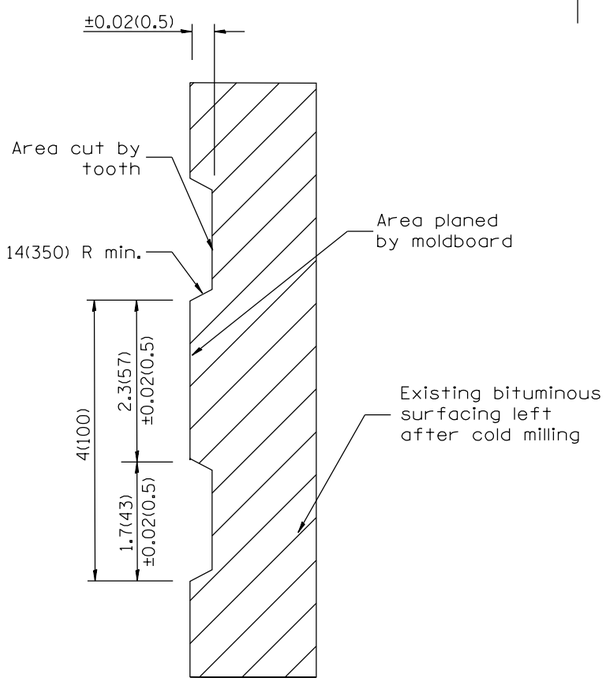
RURAL ENTRANCES FOR "3R" PROJECTS
IL 8 OVER KICKAPOO CREEK

NOT TO SCALE | SHEET NO. 7 OF 13 SHEETS | SHT. 2 OF 2 | CADD STD. 406301-D4

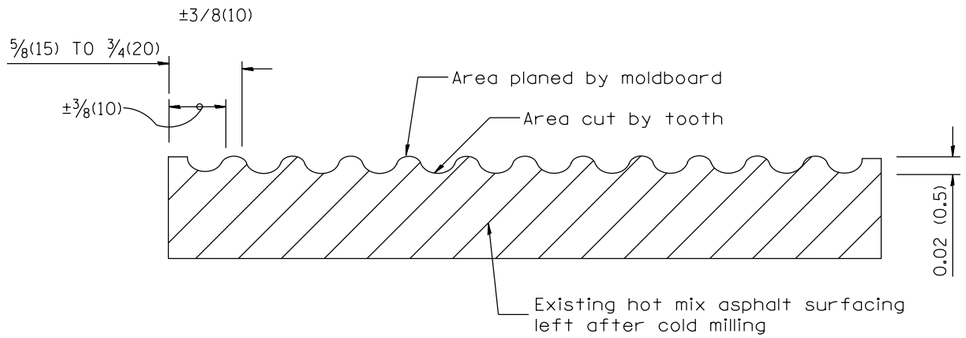
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	36
		CONTRACT NO. 68697		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



PLAN



SECTION A-A



SECTION B-B PROJECTED
PERPENDICULAR TO CENTERLINE

General notes:

1. Coldmilling shall consist of two processes: Cutting with carbide teeth mounted on a rotating drum, and planing with a moldboard mounted immediately behind the cutting drum.
2. Other similar patterns will be acceptable if they consist of a smooth, flat, planed surface interspersed with a pattern of discontinuous longitudinal striations.

DESIGNER NOTES:
1. INCLUDE DISTRICT SPECIAL PROVISION, IF APPLICABLE.

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

01-01-97	RENUM. C-104.01, NEW REVISION BOX	T.P.
04-20-98	REMOVED MILLING DETAIL FROM STANDARD	J.A.
09-08-98	CORRECT NOTE LEADER PLACEMENT	R.W.
10-16-06	REVISED TO 2007 SPEC.	M.A.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

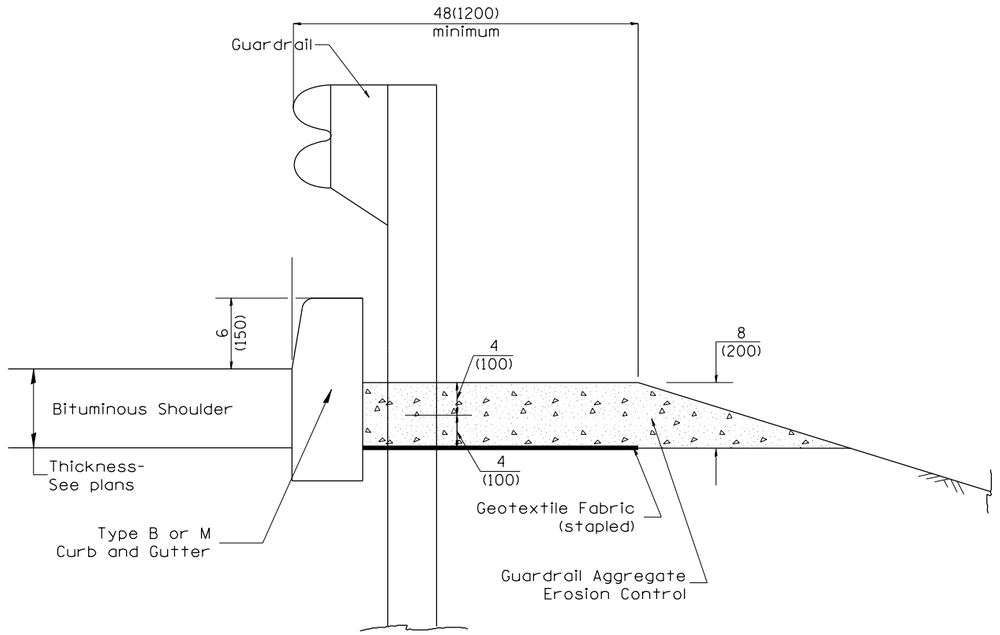
HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)
IL 8 OVER KICKAPOO CREEK

NOT TO SCALE — SHEET NO. 8 OF 13 SHEETS — SHT. 1 OF 1 — CADD STD. 440001-D4

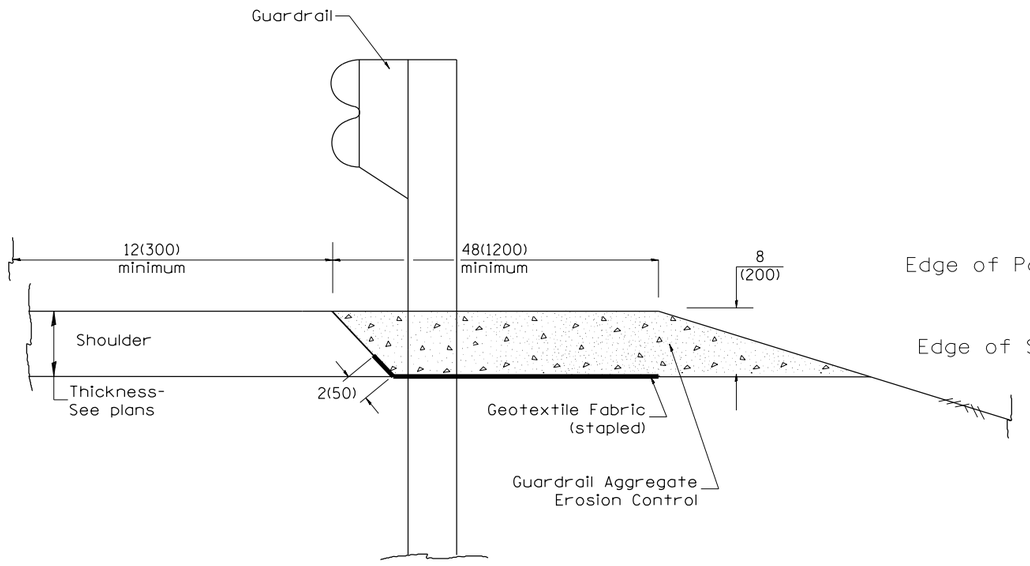
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	37
		CONTRACT NO. 68697		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

DESIGNER NOTES:

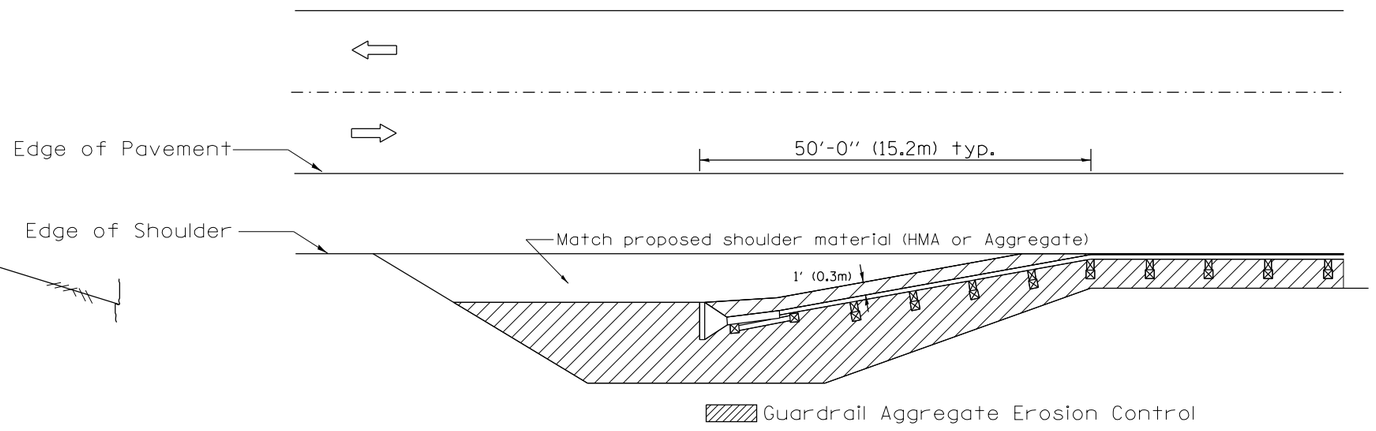
1. Consider using a "B" curb pay item at guardrail installations where grades are equal to or greater than 1% and at inlets. [Include District Special Provision]
2. Use GUARDRAIL AGGREGATE EROSION CONTROL at guardrail installations where grades are less than 1% [Include District Special Provision]
3. Include State Standards 609001, 609006 or 610001 if applicable.
4. Include the following District Cadd Standards as needed: Slope Drains for Exposed Pipes; Slope Drains for Buried Pipes; Seepage Collars for Buried Pipes; Seepage Collars for Exposed Pipes; Concrete Thrust Blocks and Pipe Elbow.
5. Include District Special Provision "Aggregate Quality" for projects located in the Western Area of the District - approx. dividing line is IL 97.



TYPICAL SECTION WITH EROSION CONTROL CURB



TYPICAL SECTION WITHOUT EROSION CONTROL CURB



GENERAL NOTES: GUARDRAIL AGGREGATE EROSION CONTROL

1. This work shall consist of grading as needed, furnishing and installing geotextile fabric and staples, and furnishing, placing and shaping crushed aggregate around and behind Steel Plate Beam Guardrail posts in accordance with Plan Details.

2. Before placing the aggregate and the Geotextile Fabric, weeds and grass shall be removed from the area to be covered.

3. After the area has been prepared, and in a dry condition, the Geotextile fabric shall be placed with a 12(300) minimum overlap. A knife cut for guardrail post installation is necessary.

4. The aggregate shall be deposited, compacted and shaped by either mechanical or hand methods, in a manner reasonably true to line and grade.

5. The Contractor shall have the option of placing the guardrail before or after the Geotextile Fabric and Aggregate are in place. If the guardrail is placed after the Geotextile Fabric and Aggregate, then any voids must be filled and the aggregate returned to line and grade.

6. Materials shall meet the following requirements:

   A. The crushed aggregate shall be CA1 gradation in accordance with Article 1004.01(c) of the Standard Specifications.

   B. The Geotextile Fabric shall be nonwoven fabric in accordance with Article 1080.02 of the Standard Specifications.

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

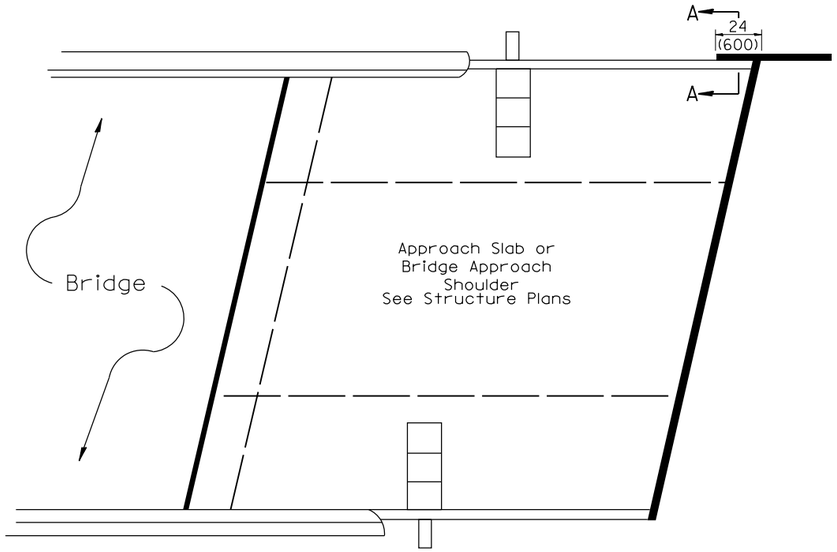
01-01-97	RENUM. C-22.01, NEW REVISION BOX	T.P.	3-7-11	Added Detail showing plan view	R.D.
03-01-97	CORRECT STD. NUMBERS IN NOTES PG. 2	J.A.	8-10-12	Revised curb "B" and aggregate	R.D.
11-03-00	CORRECTION TO NOTES	M.A.			
10-16-06	REVISED TO 2007 SPEC.	M.A.			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GUARDRAIL EROSION CONTROL TREATMENTS
IL 8 OVER KICKAPOO CREEK

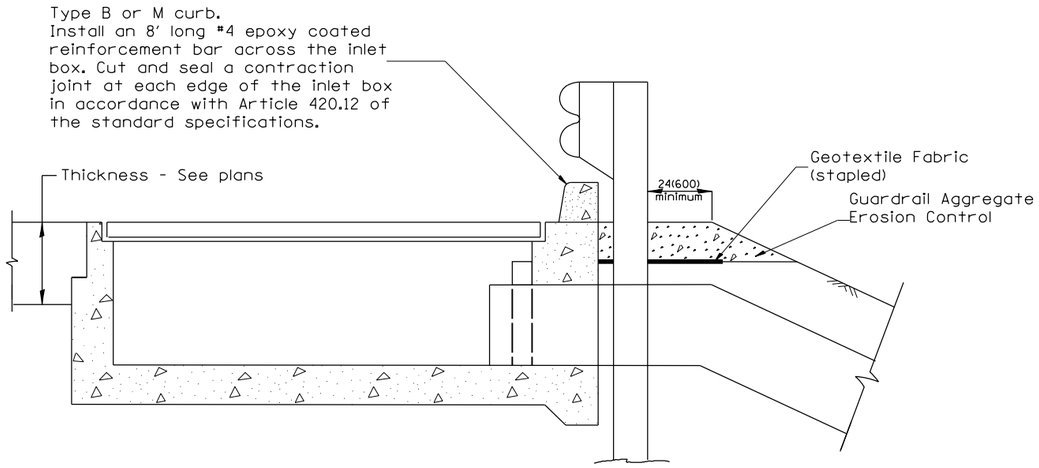
NOT TO SCALE | SHEET NO. 9 OF 13 SHEETS | SHT. 1 OF 2 | CADD STD. 630101-D4

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	38
		CONTRACT NO. 68697		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

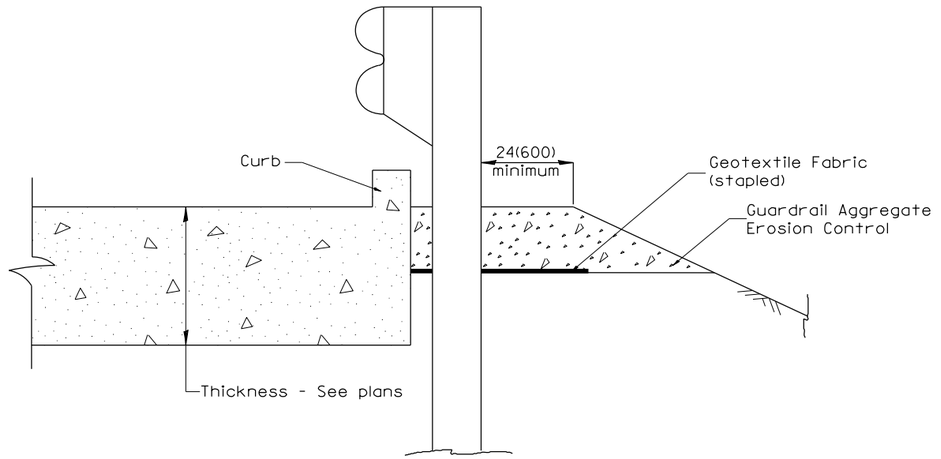


PLAN VIEW

APPROACH SLAB OR BRIDGE APPROACH SHOULDER
(STANDARD 609001 or 609006)



TYPICAL SECTION AT INLETS
TYPE E & F (STANDARD 610001)



SECTION A-A
TYPICAL SECTION WITH BRIDGE APPROACH CURB

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

FILE NAME =		USER NAME = bemery		DESIGNED	-	REVISED	-	
P:\Projects\2008 Projects\08379 IL 8 over Kickapoo Creek\CV\CADD Sheets\D468697-sht-DRAWN.dgn				DRAWN	-	REVISED	-	
		PLOT SCALE = 100.0000 ' / in.		CHECKED	-	REVISED	-	
Default		PLOT DATE = 3/20/2014		DATE	-	REVISED	-	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GUARDRAIL EROSION CONTROL TREATMENTS
IL 8 OVER KICKAPOO CREEK
SHT. 2 OF 2

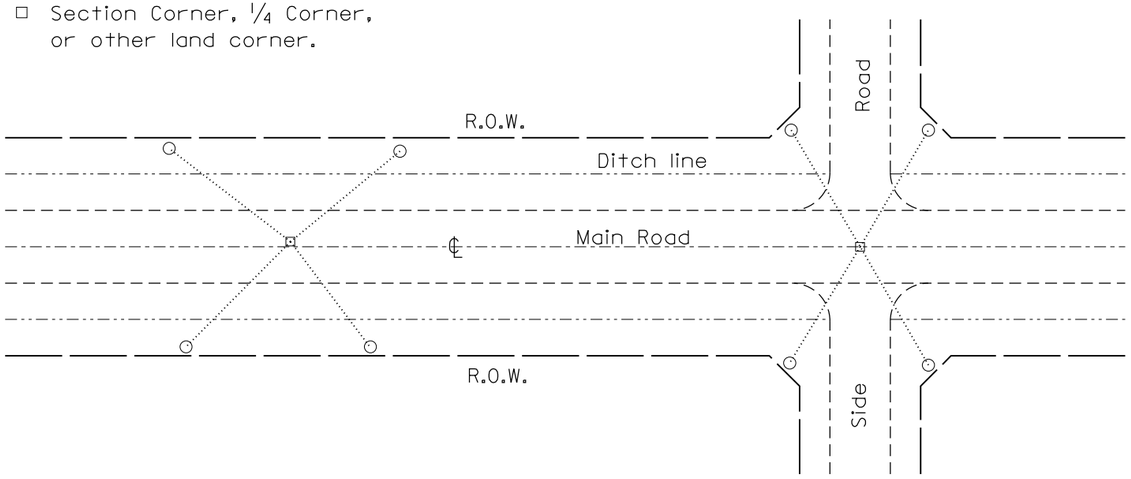
NOT TO SCALE | SHEET NO. 10 OF 13 SHEETS | CADD STD. 630101-D4

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	39
		CONTRACT NO. 68697		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

DESIGNER NOTES:
1. ADD DISTRICT SPECIAL PROVISION IF PLACING A TYPE 1 MARKER ON A STRUCTURE.
2. MODIFIES STATE STD 667101. DON'T USE STATE STD IF USING CADD STANDARD
3. PERMANENT SURVEY MARKERS SHALL BE PLACED TO PERPETUATE THE SURVEY LINES OF DIVIDED HIGHWAYS AND THE CENTERLINE OF ALL OTHERS WHERE THESE LINES HAVE BEEN ESTABLISHED BY SURVEY.
4. PERMANENT SURVEY MARKERS SHALL BE PLACED AT ALL LAND SECTION CORNERS WITHIN THE STATE R.O.W. WHERE THE MONUMENTS HAVE BEEN FOUND OR RELOCATED BY SURVEY.

PERMANENT SURVEY TIES

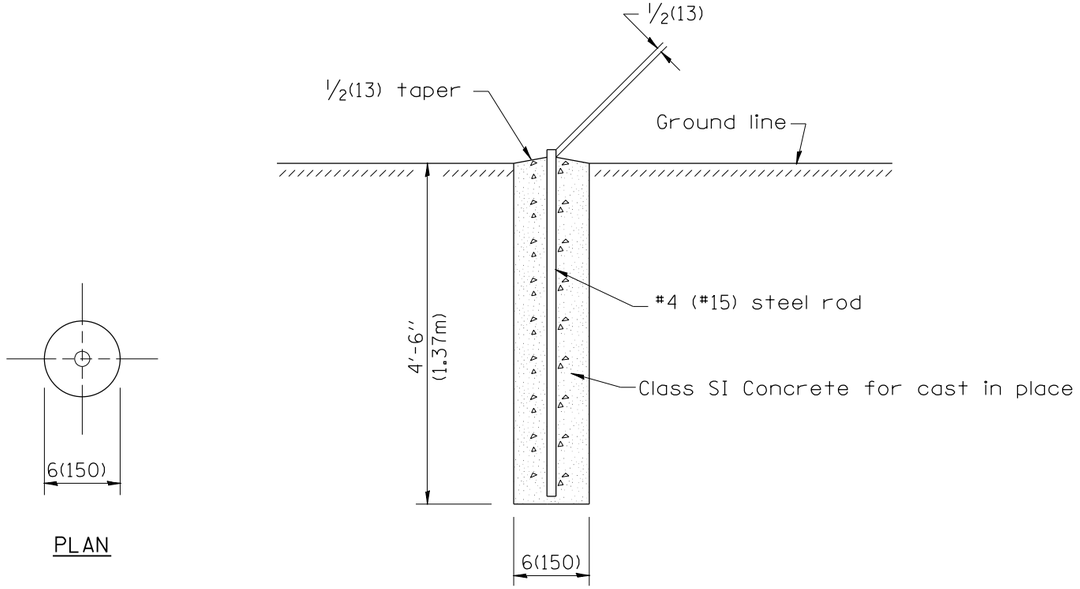
○ Permanent Survey Tie
□ Section Corner, 1/4 Corner, or other land corner.



TYPICAL APPLICATION

GENERAL NOTES

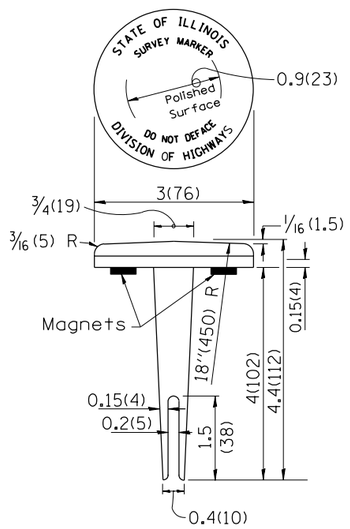
1. The marker shall be cast in place of Class SI Concrete.
2. Tie marker shall be installed after the final seeding has been completed unless otherwise specified by the Engineer.
3. The tie distances to the section corner shall be measured and recorded by the surveyor setting the PSM. All ties shall be turned over to the IDOT Chief of Surveys or Chief of Plats for recordation.
4. All documentation shall be performed by a PLS

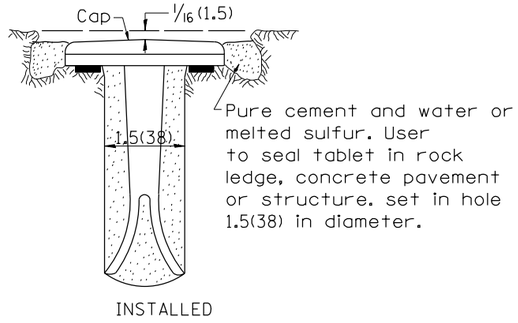


PLAN

SECTION

PERMANENT SURVEY MARKERS



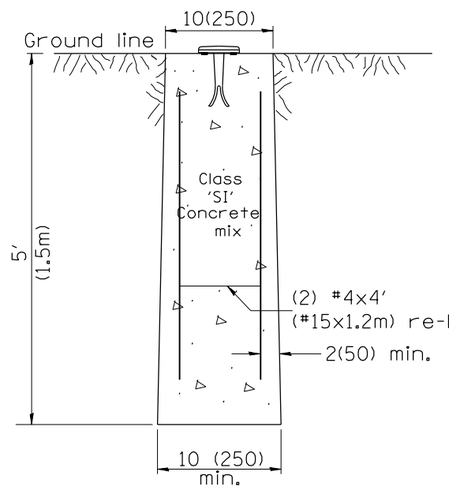


INSTALLED

TYPE I

GENERAL NOTES

1. All type II markers shall be cast in place, and precast markers will not be allowed.
2. Two permanent magnets, each having a diameter of 3/4 (19) and a thickness of 1/4 (6), or equivalent, shall be attached to the underside of the tablet with an approved epoxy bonding agent.
3. The location of the markers shall be in accordance with the plans in general, the markers will be placed at the P.T.'s, P.C.'s, and P.I.'s located within the R.O.W. of horizontal curves and spaces along the tangents in a way that a minimum of two markers are always inter-visible, and not to exceed 1000' (300m).
4. The markers shall be placed under the direction of the Engineer and shall be installed in a workmanlike manner in order that there will be no further settlement or horizontal shifting. The monuments shall be placed in a way that the survey point will fall within the portion of the plaque provided for that purpose.
5. The project designation, the centerline station, the survey point, and the elevation shall be permanently marked by the use of metal dies after marker has been installed.



MARKER CAST IN PLACE
TYPE II

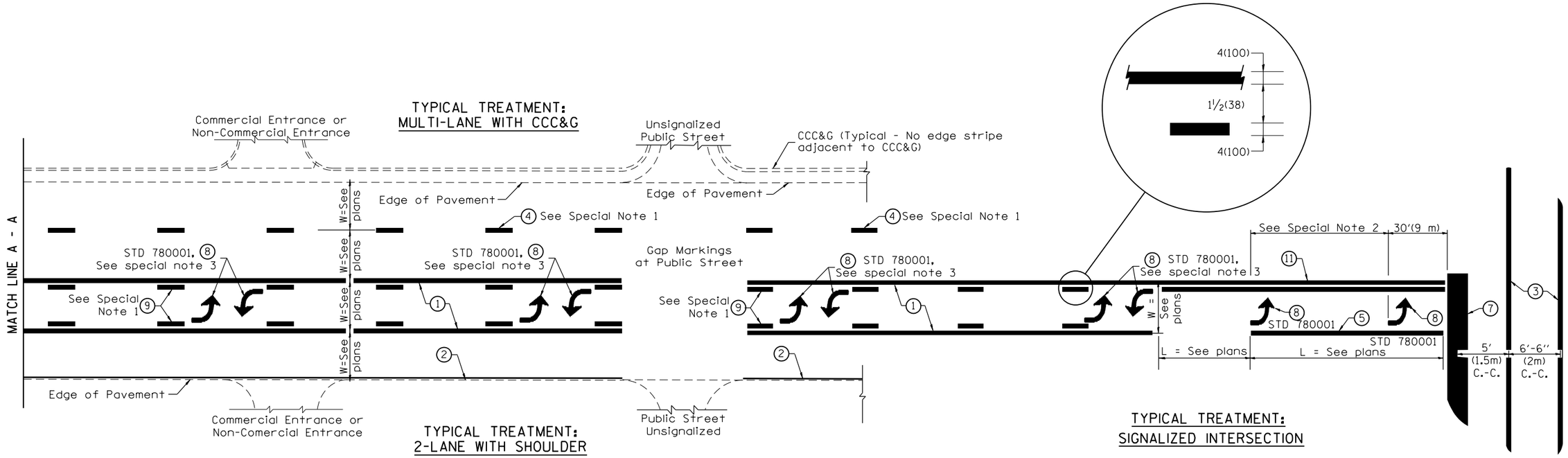
All dimensions are in inches (millimeters) unless otherwise noted.

01-01-97	RENUM. D-3.01, NEW REVISION BOX, REVISED	T.P.	10-16-06	REVISED TO 2007 SPEC.	M.A.
	TITLE BOX, ADD DESIGNER NOTE		01-04-11	REVISED FOR CORRECTIONS	R.D.
07-07-98	ADD DESIGNER NOTE	J.A.	08-21-13	CHANGED MIN. DIAMETER	R.D.
05-24-06	REMOVED GEN. NOTE UNDER TIES	M.A.			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PERMANENT SURVEY TIE & PERMANENT SURVEY MARKERS TY.I – TY.II
IL 8 OVER KICKAPOO CREEK
NOT TO SCALE
SHEET NO. 11 OF 13 SHEETS
SHT. 1 OF 1
CADD STD. 667101-D4

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	40
		CONTRACT NO. 68697		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



FLUSH PAVED MEDIAN: TWO-WAY LEFT TURN LANE WITH ONE-WAY LEFT TURN LANE AT SIGNALIZED INTERSECTION

TYPICAL PAVEMENT MARKING LEGEND

(Note: This is a District Standard Legend. Some elements may not apply to specific project.)

1. 4(100) Solid (Yellow)
2. 4(100) Solid (White)
3. 2-6(150) Crosswalk @ 6'-6" (2m)min C.-C. (White)
   2-8(200) Crosswalk @ 6'-6" (2m)min C.-C. (White) (When traffic signals are present.)
4. 6(150) Skip-Dash (White) — 10' (3.05m) / 30' (9.14m) / 10' (3.05m) (See Special Note 1)
5. 8(200) Solid (White)
6. 12(300) Diagonal (White) (Item 6 is shown on Std. 780001)
7. 24(600) Stop Bar (White)
8. Letters & Arrows — 33' (10m) (See Std. 780001 and Special Notes 2 & 3)
9. 4(100) Skip-Dash (Yellow) — 10' (3.05m) / 30' (9.14m) / 10' (3.05m) (See Special Note 1)
10. 12(300) Diagonal (Yellow) (See Table A) — 45°
11. 4(100) Double Solid (Yellow) — 11(280) C.-C. — See Table A

SPECIAL NOTES

1. Skip-Dash markings will be centered between both ends of city blocks and shall be placed in alignment transversly across the pavement.
2. The following shall apply to arrows located in one-way left turn lanes:
   A. A minimum of two (2) arrows is required.
   B. The maximum spacing between arrows is 80' (24 m).
   C. Arrows shall be evenly spaced if three (3) or more are required.
3. The following shall apply to arrow pairs located in two-way left turn lanes:
   A. A minimum of two (2) arrow pairs is required.
   B. The maximum spacing between arrow pairs is 200' (61 m).
   C. Arrow pairs shall be evenly spaced if three (3) or more are required.
   D. The spacing between Bi Directional Left Turn Arrows is 33' (10 m).

GENERAL NOTES

1. Refer to State Standard 780001 for additional Pavement Markings including letters & arrows.
2. See Plans for Pavement Markings adjacent to curbed islands and medians, and through lane reductions.

DESIGNER NOTES:
1. Include State Standard 780001 (Typical Pavement Markings)

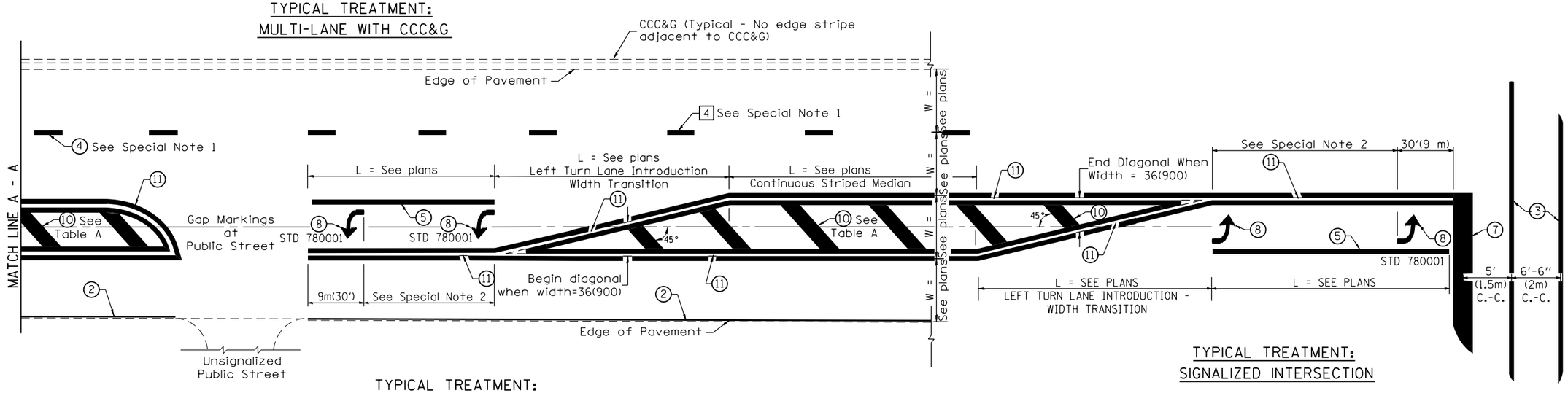
01-01-97	RENUM. F-8.03, NEW REVISION BOX	T.P.	10-16-06	REVISED TO 2007 SPEC.	
02-07-97	ADD BI DIRECTIONAL DIMENSION	J.A.			
10-97	CORRECT BI DIRECTIONAL DIMENSION	J.A.			
08-02	ADD CROSSWALK DMNS. WITH T.S.	M.A.			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL PAVEMENT MARKINGS
IL 8 OVER KICKAPOO CREEK

NOT TO SCALE — SHEET NO. 12 OF 13 SHEETS — SHT. 1 OF 2 — CADD STD. 780001-D4

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	41
		CONTRACT NO. 68697		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



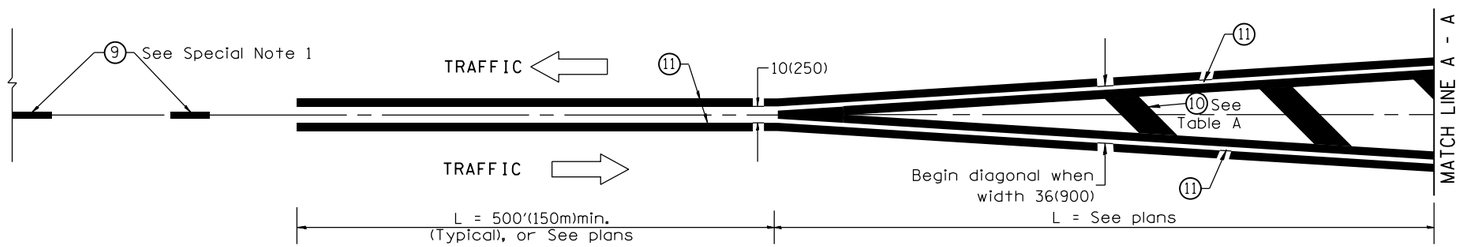
TYPICAL MEDIAN TRANSITIONS

FLUSH PAVED MEDIAN: RESTRICTED LEFT TURN LANE

TABLE A

RECOMMENDED SPACING BETWEEN DIAGONAL LINES

SPEED LIMIT RANGE	CONTINUOUS	INTERSECTION CHANNELIZATION (Includes Width Transitions for Median and Left Turn Lane Introductions)
Less Than 30 mph (50 km/h)	50' (15m)	15' (5m)
30 - 45 mph (50 - 70 km/h)	75' (23m)	20' (6m)
Over 45 mph (70 km/h)	150' (46m)	30' (9m)



MEDIAN INTRODUCTION - WIDTH TRANSITIONS

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL PAVEMENT MARKINGS
IL 8 OVER KICKAPOO CREEK

NOT TO SCALE | SHEET NO. 13 OF 13 SHEETS | SHT. 2 OF 2 | CADD STD. 780001-D4

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	42
		CONTRACT NO. 68697		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

Bench Mark: Chiseled "□" NW Wingwall of IL 8 Bridge over Kickapoo Creek. Elevation 512.50

Existing Structure: S.N. 072-0047 was built in 1931 under FAS 384, Section Z-1D at Station 101+16. In 1974 the east span of the original three span truss bridge was replaced with 2 simple span PPC deck beams and 1 new pier was added under FAS 384, Section Z-1D-BR. In 1979 the two spans reconstructed in 1974 were widened and the remaining two truss spans were replaced with 4 simple span PPC deck beams and 2 new piers were added under FAS 384, Section Z-1D-BR-1. The existing structure consists of a 6 span PPC deck beam superstructure with bituminous overlay on closed abutments, three solid wall encased pile bent piers supported by steel H-piles, and two concrete piers. 277'-4" back-to-back abutments, 33'-0" out-to-out deck. Structure to be removed and replaced using stage construction.

Traffic is to be maintained using staged construction.

Salvage: Temporary support beams and clamps. Deliver to IDOT Bridge Maintenance Yard, 604 Camp St. East Peoria, IL Contact Brian Ruder, 309-699-3822

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	W. Abut.	Pier 1	Pier 2	Pier 3	Pier 4	E. Abut.
	506.61	467.3	467.1	468.9	468.7	506.61

* Remove Existing Bent 1 and Existing Pier 1 to match the elevation of existing slope mattress. Existing reinforcement shall be cut off flush with the surface to which the old concrete has been removed.

LOADING HL-93

Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS

2010 AASHTO LRFD Bridge Design Specifications with 2010 Interims

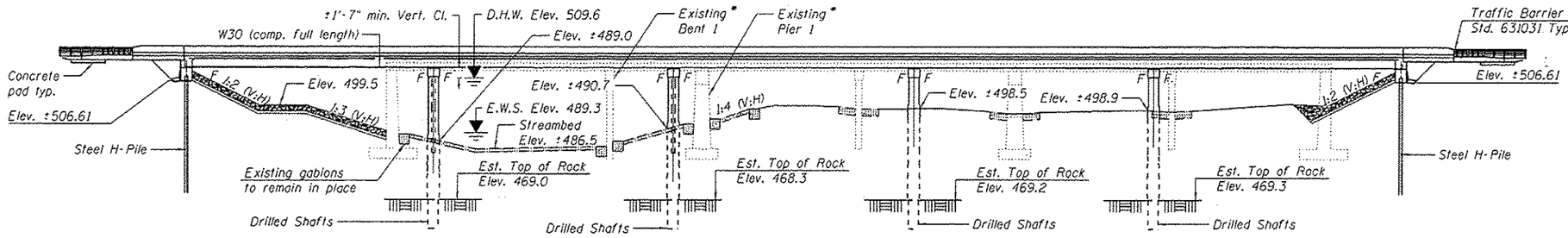
DESIGN STRESSES

FIELD UNITS

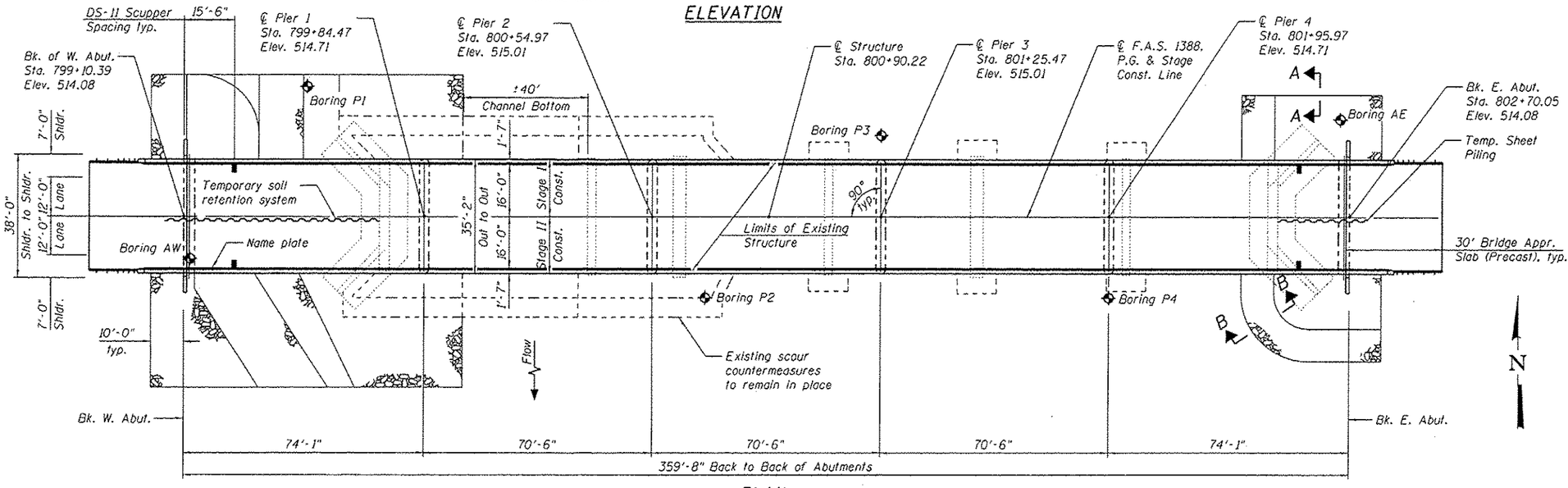
f'_c = 3,500 psi
f_y = 60,000 psi (reinforcement)
f_y = 50,000 psi (M270 Grade 50)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.110g
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.171g
Soil Site Class = D



ELEVATION



PLAN

Note: For Sections A-A & B-B see sheet 2 of 34.

STATION 800+90.22
BUILT BY
STATE OF ILLINOIS
F.A.S. RT. 1388 SEC. (Z-1D-BR-1)BR
LOADING HL-93
STRUCTURE NO. 072-0229

NAME PLATE

See Std. 515001

WATERWAY INFORMATION

Existing Overtopping Elev. 511.0 @ Sta. 799+50
Drainage Area = 235 Sq. Mi. Proposed Overtopping Elev. 511.0 @ Sta. 799+50

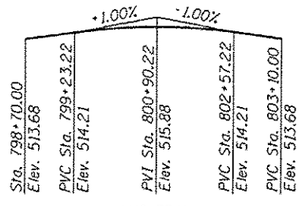
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Hat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	13900	2201	2592	506.6	1.3	1.0	507.9	507.6
Design	50	23000	2587	3530	509.6	1.6	1.6	511.2	511.2
Base	100	27700	2587	3856	511.2	0.9	0.7	512.1	511.9
Scour Design Check	200	37500	2587	3856	514.2	0.5	0.5	514.7	514.7
Overtop (Exist.)	25	18800	2488	-	508.2	3.0	-	511.2	-
Overtop (Prop.)	50	23000	-	3530	509.6	-	1.4	-	511.0
Max. Calc.	500	40400	2587	3856	514.9	0.5	0.5	515.4	515.4

10 Year Velocity through Exist. Bridge = 6.3 ft/s 10 Year Velocity through Prop. Bridge = 5.4 ft/s

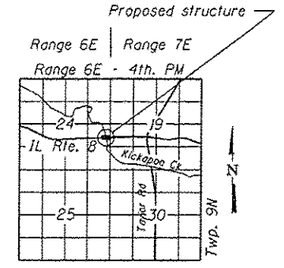
APPROVED
For Structural Adequacy Only
Engineer of Bridges & Structures

LICENSED STRUCTURAL ENGINEER
BRANDON W. POTTER
081-006327
STATE OF ILLINOIS

Brandon W. Potter 3-18-14
EXP. 11-30-14



PROFILE GRADE
(along ℄ roadway)



LOCATION SKETCH

GENERAL PLAN & ELEVATION
ILLINOIS ROUTE 8 OVER
KICKAPOO CREEK
F.A.S. RT. 1388 - SEC. (Z-1D-BR-1)BR
PEORIA COUNTY
STATION 800+90.22
STRUCTURE NO. 072-0229

FILE NAME = 072022S-68697-001-GPE.dgn	USER NAME =	DESIGNED - BWP	REVISED -
BFW BACON | FARMER | WORKMAN ENGINEERING & TESTING, INC.		CHECKED - RSB	REVISED -
	PLOT SCALE =	DRAWN - BWP	REVISED -
	PLOT DATE = 3/19/2014	CHECKED - RSB	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET NO. 1 OF 34 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	43
		CONTRACT NO. 68697		
		ILLINOIS FED. AID PROJECT		

INDEX OF SHEETS

GENERAL NOTES

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

Calculated weight of Structural Steel: AASHTO M 270 Gr. 50 = 288,650 lbs.
AASHTO M 270 Gr. 36 = 22,860 lbs.

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 $\frac{1}{8}$ inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.

The Inorganic Zinc Rich Primer / Acrylic / Acrylic Paint System shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the final finish coat for all interior steel surfaces shall be gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Blue, Munsell No. 10B 3/6.

Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.

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

Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure. The Contractor shall sawcut the upper portion of the existing abutment at the stage removal line before Stage I removal to ensure the remaining portion will not be prematurely damaged.

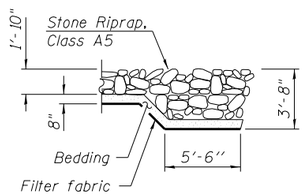
Slipforming of parapets is not allowed.

Deliver temporary support beams and clamps to: IDOT Bridge Maintenance Yard
604 Camp St.
East Peoria, IL

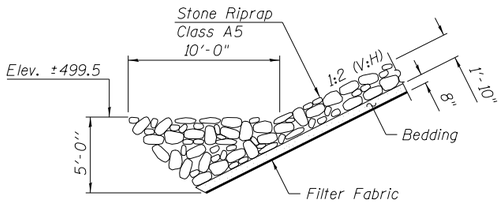
Contact: Brian Ruder,
Phone: 309-699-3822

TOTAL BILL OF MATERIAL

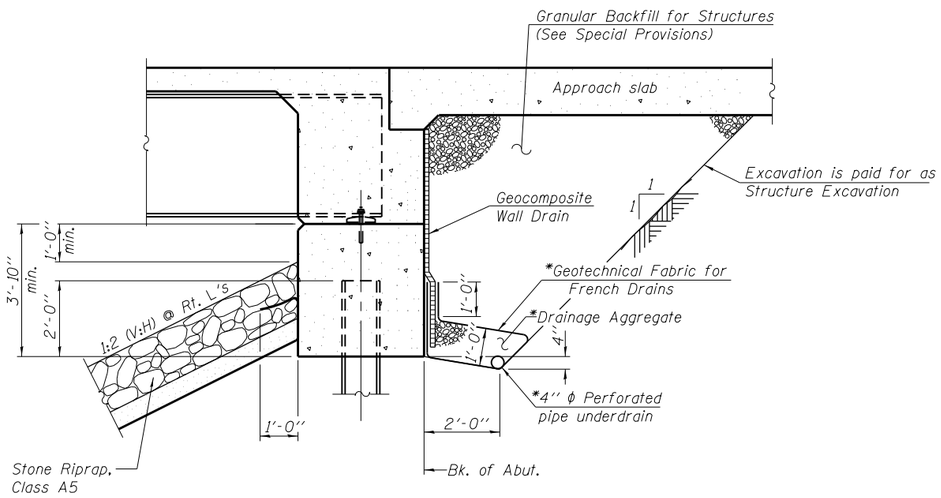
ITEM	UNIT	SUPER	SUB	TOTAL
Stone Riprap, Class A5	Sq. Yd.		1179	1179
Filter Fabric	Sq. Yd.		1179	1179
Removal of Existing Structures	Each			1
Structure Excavation	Cu. Yd.		188	188
Concrete Structures	Cu. Yd.		208.7	208.7
Concrete Superstructure	Cu. Yd.	432.5		432.5
Bridge Deck Grooving	Sq. Yd.	1392		1392
Protective Coat	Sq. Yd.	1817		1817
Furnishing and Erecting Structural Steel	L. Sum	1		1
Stud Shear Connectors	Each	7902		7902
Reinforcement Bars	Pound		12550	12550
Reinforcement Bars, Epoxy Coated	Pound	111790	57450	169240
Bar Splicers	Each	1120	580	1700
Mechanical Splicers	Each		224	224
Furnishing Steel Piles HP 12x53	Foot		435	435
Driving Piles	Foot		435	435
Test Pile Steel HP 12x53	Each		2	2
Name Plates	Each	1		1
Drilled Shaft in Soil	Cu. Yd.		110.6	110.6
Drilled Shaft in Rock	Cu. Yd.		53.8	53.8
Preformed Joint Strip Seal	Foot	68		68
Anchor Bolts, 1''	Each		72	72
Geocomposite Wall Drain	Sq. Yd.		56	56
Concrete Wearing Surface, 5"	Sq. Yd.	230		230
Precast Bridge Approach Slab	Sq. Ft.	1980		1980
Granular Backfill for Structures	Cu. Yd.		100	100
Drainage Scupper, DS-11	Each	4		4
Temporary Sheet Piling	Sq. Ft.		910	910
Pipe Underdrains for Structures 4''	Foot		132	132
Temporary Soil Retention System	Sq. Ft.		930	930



SECTION A-A



SECTION B-B

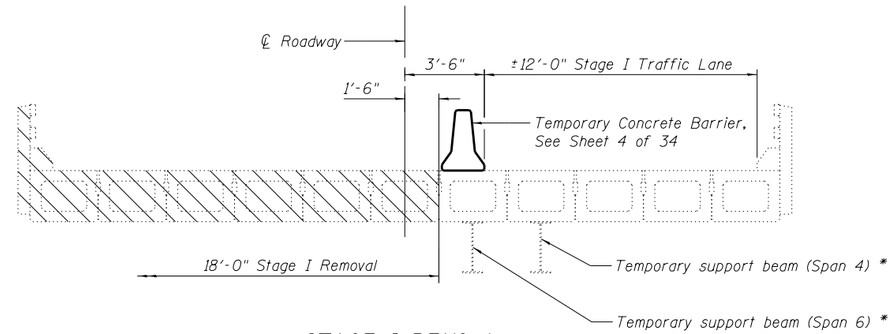


SECTION THRU INTEGRAL ABUTMENT
(Horiz. dim. @ Rt. L's)

*Included in the cost of Pipe Underdrains for Structures. (See Special Provisions)

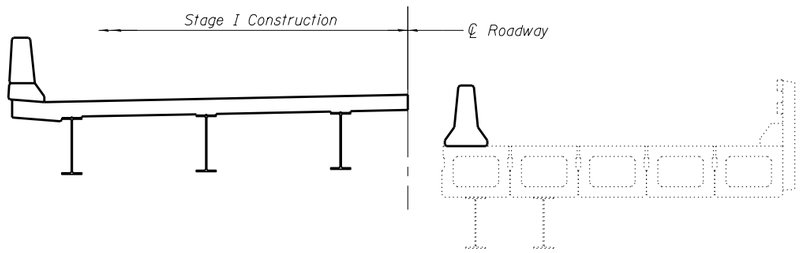
Note:
All drainage system components shall extend to 2'-0'' from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).

FILE NAME = 0720229-68697-002-General Data.dgn	USER NAME =	DESIGNED - BWP	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL DATA STRUCTURE NO. 072-0229	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
BACON | FARMER | WORKMAN ENGINEERING & TESTING, INC. 403 NORTH COURT STREET MARION, ILLINOIS 62959 PHONE: 618.997.9190		CHECKED - CMV	REVISED -			1388	(Z-1D-BR-1)BR	PEORIA	89	44
	PLOT SCALE =	DRAWN - BWP	REVISED -					CONTRACT NO. 68697		
	PLOT DATE = 3/18/2014	CHECKED - CMV	REVISED -		SHEET NO. 2 OF 34 SHEETS			ILLINOIS FED. AID PROJECT		

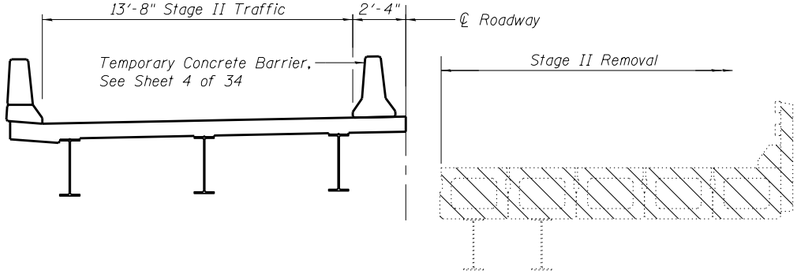


STAGE I REMOVAL

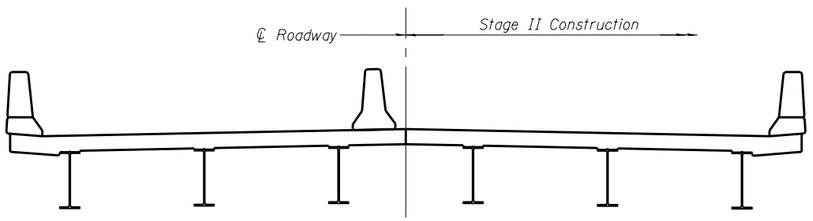
* Temporary support beams to be removed and salvaged. Cost included with Removal of Existing Structures.



STAGE I CONSTRUCTION



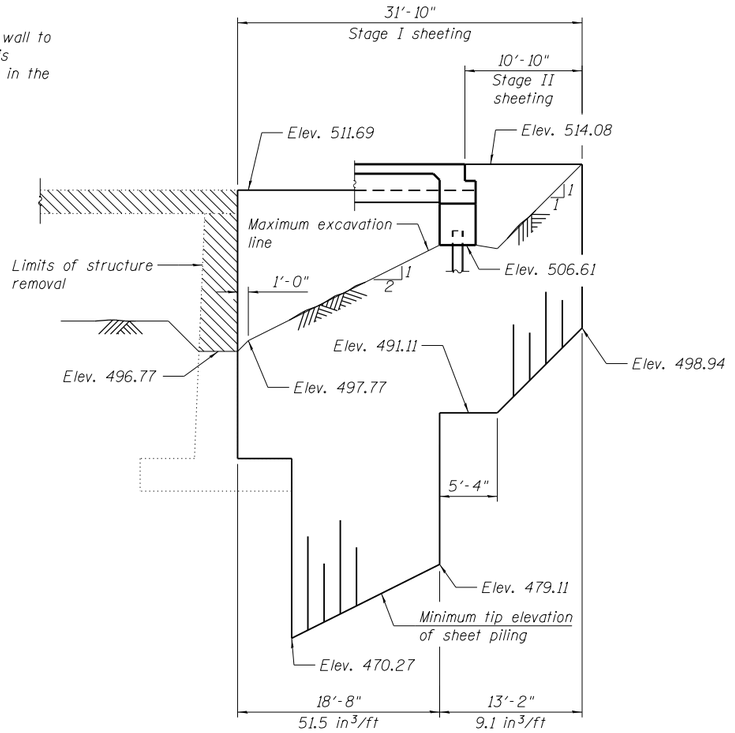
STAGE II REMOVAL



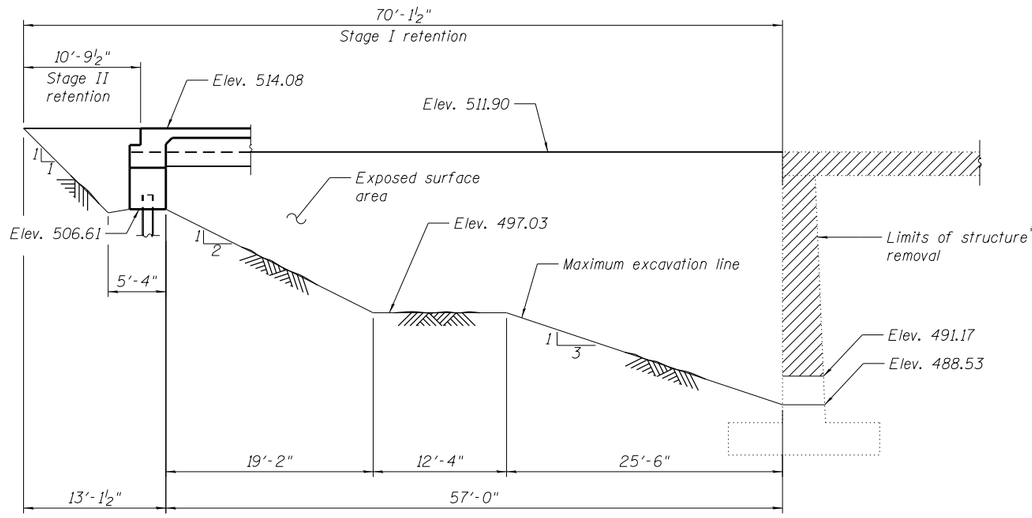
STAGE II CONSTRUCTION

Notes:
The Contractor shall connect the first sheet to the existing abutment wall to ensure stability of sheets driven to the top of the existing footing. This connection shall be reviewed and accepted by the Engineer and included in the cost for Temporary Sheet Piling.
If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.

Notes:
All staging cross sections are looking East.
For quantity of Temporary Concrete Barrier, see roadway plans.
Hatched area indicates Removal of Existing Structures.



TEMPORARY SHEET PILING AT EAST ABUTMENT



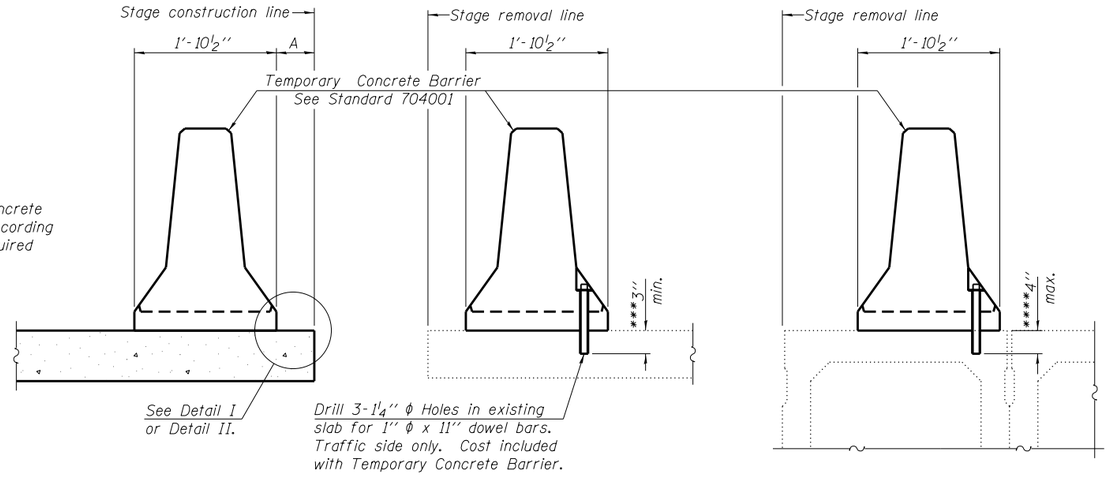
* Existing reinforcement shall be cut off flush with the surface to which the old concrete has been removed.

TEMPORARY SOIL RETENTION AT WEST ABUTMENT

Note:
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.

FILE NAME = 0720229-68697-003-Stg Const Details.dgn	USER NAME =	DESIGNED - BWP	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STAGE CONSTRUCTION DETAILS STRUCTURE NO. 072-0229	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
BFW BACON | FARMER | WORKMAN ENGINEERING & TESTING, INC. 403 NORTH COURT STREET MARION, ILLINOIS 62959 PHONE - 618.997.3190		CHECKED - CMV	REVISED -			1388	(Z-1D-BR-1)BR	PEORIA	89	45
	PLOT SCALE =	DRAWN - BJV	REVISED -						CONTRACT NO. 68697	
	PLOT DATE = 3/18/2014	CHECKED - CMV	REVISED -		SHEET NO. 3 OF 34 SHEETS			ILLINOIS	FED. AID PROJECT	

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



NEW SLAB

EXISTING SLAB

EXISTING DECK BEAM

NOTES

Detail I - With Bar Splicer or Couplers:
Connect one (1) 1'' x 7' 'x ''W'' steel ℙ to the top layer of couplers with 2-⅝'' ϕ bolts screwed to coupler at approximate ℄ of each barrier panel.

Detail II - With Extended Reinforcement Bars:
Connect one (1) 1'' x 7'' x ''W'' steel ℙ to the concrete slab or concrete wearing surface with 2-⅝'' ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate ℄ of each barrier panel.

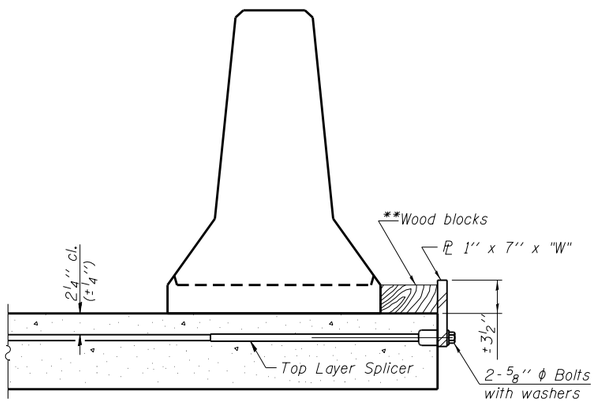
Cost of anchorage is included with Temporary Concrete Barrier.

The 1'' x 7'' x ''W'' plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

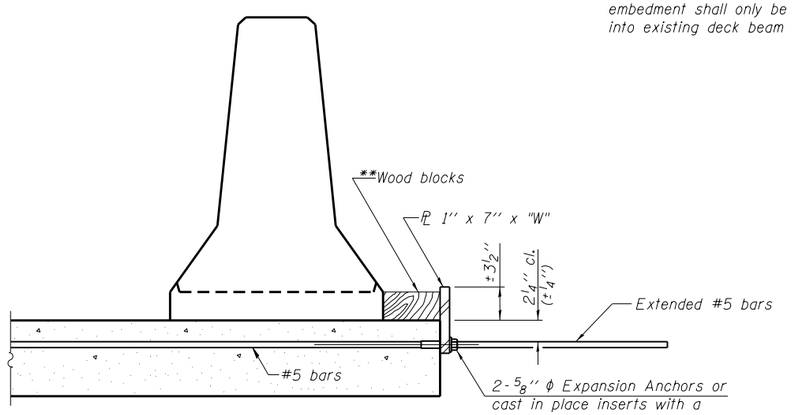
SECTIONS THRU SLAB OR DECK BEAM

*** 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.

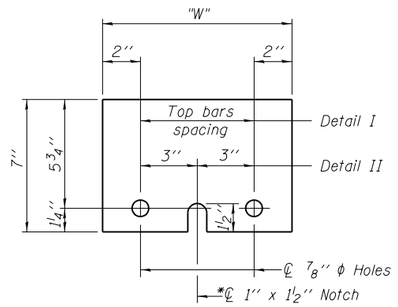
**** If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



DETAIL I



DETAIL II



STEEL RETAINER ℙ 1'' x 7'' x ''W''

* Required only with Detail II

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

"W" = Top bars spacing + 4''

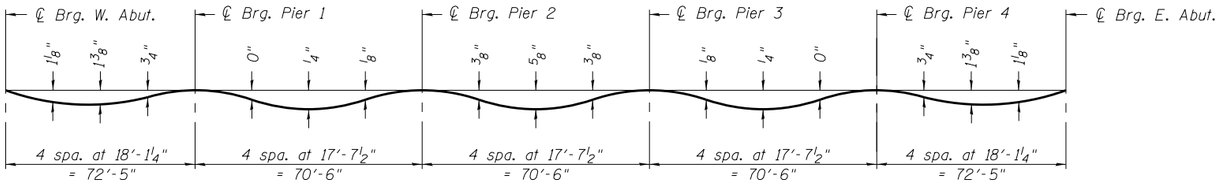
R-27 7-1-10

FILE NAME = 0720229-68697-04-Temporary Concrete Barrier	USERNAME =	DESIGNED - BWP	REVISED -
BACON | FARMER | WORKMAN ENGINEERING & TESTING, INC. 403 NORTH COURT STREET MARION, ILLINOIS 62959 PHONE - 618.997.9160		CHECKED - CMV	REVISED -
	PLOT SCALE =	DRAWN - BWP	REVISED -
	PLOT DATE = 3/18/2014	CHECKED - CMV	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
STRUCTURE NO. 072-0229
SHEET NO. 4 OF 34 SHEETS

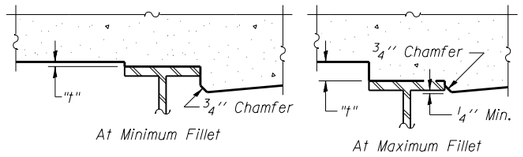
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	46
		CONTRACT NO. 68697		
	ILLINOIS FED. AID PROJECT			



DEAD LOAD DEFLECTION DIAGRAM

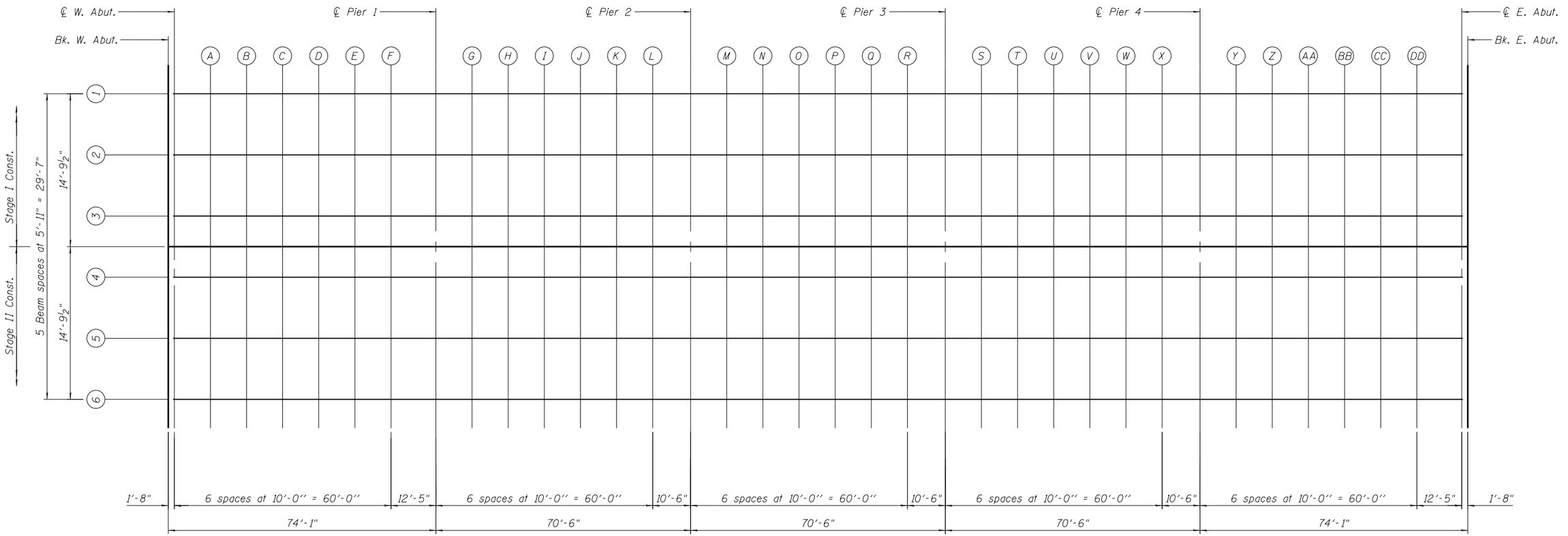
(Includes weight of concrete only.)

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



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on sheets 6, 7, and 8 of 34, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS



PLAN

FILE NAME = 0720229-68697-005-TOS Elevations.dgn	USER NAME =	DESIGNED - BWP	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TOP OF SLAB ELEVATIONS STRUCTURE NO. 072-0229	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
BACON | FARMER | WORKMAN ENGINEERING & TESTING, INC. 403 NORTH COURT STREET MARION, ILLINOIS 62959 PHONE - 618.997.9190		CHECKED - CMV	REVISED -			1388	(Z-1D-BR-1)BR	PEORIA	89	47
	PLOT SCALE =	DRAWN - CMV	REVISED -						CONTRACT NO. 68697	
	PLOT DATE = 3/18/2014	CHECKED - BWP	REVISED -		SHEET NO. 5 OF 34 SHEETS			ILLINOIS	FED. AID PROJECT	

BEAM 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	799+10.39	-14.79	513.84	513.84
℄ W. Abut.	799+12.06	-14.79	513.85	513.85
A	799+22.06	-14.79	513.95	514.01
B	799+32.06	-14.79	514.05	514.15
C	799+42.06	-14.79	514.14	514.26
D	799+52.06	-14.79	514.23	514.34
E	799+62.06	-14.79	514.31	514.39
F	799+72.06	-14.79	514.38	514.42
℄ Pier 1	799+84.47	-14.79	514.46	514.46
G	799+94.47	-14.79	514.52	514.52
H	800+04.47	-14.79	514.58	514.59
I	800+14.47	-14.79	514.63	514.65
J	800+24.47	-14.79	514.67	514.69
K	800+34.47	-14.79	514.71	514.72
L	800+44.47	-14.79	514.74	514.74
℄ Pier 2	800+54.97	-14.79	514.76	514.76
M	800+64.97	-14.79	514.78	514.80
N	800+74.97	-14.79	514.79	514.83
O	800+84.97	-14.79	514.80	514.85
P	800+94.97	-14.79	514.80	514.85
Q	801+04.97	-14.79	514.79	514.83
R	801+14.97	-14.79	514.78	514.80
℄ Pier 3	801+25.47	-14.79	514.76	514.76
S	801+35.47	-14.79	514.74	514.74
T	801+45.47	-14.79	514.71	514.72
U	801+55.47	-14.79	514.67	514.69
V	801+65.47	-14.79	514.63	514.65
W	801+75.47	-14.79	514.58	514.59
X	801+85.47	-14.79	514.53	514.52
℄ Pier 4	801+95.97	-14.79	514.46	514.46
Y	802+05.97	-14.79	514.40	514.43
Z	802+15.97	-14.79	514.33	514.40
AA	802+25.97	-14.79	514.25	514.35
BB	802+35.97	-14.79	514.16	514.28
CC	802+45.97	-14.79	514.07	514.17
DD	802+55.97	-14.79	513.98	514.04
℄ E. Abut.	802+68.38	-14.79	513.85	513.85
Bk. E. Abut.	802+70.05	-14.79	513.84	513.84

BEAM 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	799+10.39	-8.88	513.94	513.94
℄ W. Abut.	799+12.06	-8.88	513.96	513.96
A	799+22.06	-8.88	514.06	514.12
B	799+32.06	-8.88	514.16	514.25
C	799+42.06	-8.88	514.25	514.36
D	799+52.06	-8.88	514.33	514.44
E	799+62.06	-8.88	514.41	514.49
F	799+72.06	-8.88	514.49	514.53
℄ Pier 1	799+84.47	-8.88	514.57	514.57
G	799+94.47	-8.88	514.63	514.63
H	800+04.47	-8.88	514.69	514.69
I	800+14.47	-8.88	514.73	514.75
J	800+24.47	-8.88	514.78	514.80
K	800+34.47	-8.88	514.81	514.83
L	800+44.47	-8.88	514.84	514.85
℄ Pier 2	800+54.97	-8.88	514.87	514.87
M	800+64.97	-8.88	514.89	514.90
N	800+74.97	-8.88	514.90	514.93
O	800+84.97	-8.88	514.91	514.95
P	800+94.97	-8.88	514.91	514.95
Q	801+04.97	-8.88	514.90	514.94
R	801+14.97	-8.88	514.89	514.90
℄ Pier 3	801+25.47	-8.88	514.87	514.87
S	801+35.47	-8.88	514.85	514.85
T	801+45.47	-8.88	514.81	514.83
U	801+55.47	-8.88	514.78	514.80
V	801+65.47	-8.88	514.74	514.75
W	801+75.47	-8.88	514.69	514.70
X	801+85.47	-8.88	514.63	514.63
℄ Pier 4	801+95.97	-8.88	514.57	514.57
Y	802+05.97	-8.88	514.51	514.54
Z	802+15.97	-8.88	514.43	514.51
AA	802+25.97	-8.88	514.35	514.46
BB	802+35.97	-8.88	514.27	514.39
CC	802+45.97	-8.88	514.18	514.28
DD	802+55.97	-8.88	514.08	514.14
℄ E. Abut.	802+68.38	-8.88	513.96	513.96
Bk. E. Abut.	802+70.05	-8.88	513.94	513.94

BEAM 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	799+10.39	-2.96	514.04	514.04
℄ W. Abut.	799+12.06	-2.96	514.05	514.05
A	799+22.06	-2.96	514.15	514.21
B	799+32.06	-2.96	514.25	514.35
C	799+42.06	-2.96	514.34	514.46
D	799+52.06	-2.96	514.43	514.54
E	799+62.06	-2.96	514.51	514.59
F	799+72.06	-2.96	514.58	514.62
℄ Pier 1	799+84.47	-2.96	514.66	514.66
G	799+94.47	-2.96	514.72	514.72
H	800+04.47	-2.96	514.78	514.79
I	800+14.47	-2.96	514.83	514.84
J	800+24.47	-2.96	514.87	514.89
K	800+34.47	-2.96	514.91	514.92
L	800+44.47	-2.96	514.94	514.94
℄ Pier 2	800+54.97	-2.96	514.96	514.96
M	800+64.97	-2.96	514.98	514.99
N	800+74.97	-2.96	514.99	515.03
O	800+84.97	-2.96	515.00	515.05
P	800+94.97	-2.96	515.00	515.05
Q	801+04.97	-2.96	514.99	515.03
R	801+14.97	-2.96	514.98	515.00
℄ Pier 3	801+25.47	-2.96	514.96	514.96
S	801+35.47	-2.96	514.94	514.94
T	801+45.47	-2.96	514.91	514.92
U	801+55.47	-2.96	514.87	514.89
V	801+65.47	-2.96	514.83	514.85
W	801+75.47	-2.96	514.78	514.79
X	801+85.47	-2.96	514.73	514.72
℄ Pier 4	801+95.97	-2.96	514.66	514.66
Y	802+05.97	-2.96	514.60	514.63
Z	802+15.97	-2.96	514.53	514.60
AA	802+25.97	-2.96	514.45	514.55
BB	802+35.97	-2.96	514.36	514.48
CC	802+45.97	-2.96	514.27	514.37
DD	802+55.97	-2.96	514.18	514.24
℄ E. Abut.	802+68.38	-2.96	514.05	514.05
Bk. E. Abut.	802+70.05	-2.96	514.04	514.04

℄ ROADWAY, P.G. & STAGE CONSTRUCTION JOINT

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	799+10.39	0.00	514.08	514.08
℄ W. Abut.	799+12.06	0.00	514.10	514.10
A	799+22.06	0.00	514.20	514.25
B	799+32.06	0.00	514.30	514.39
C	799+42.06	0.00	514.39	514.50
D	799+52.06	0.00	514.47	514.58
E	799+62.06	0.00	514.55	514.63
F	799+72.06	0.00	514.63	514.67
℄ Pier 1	799+84.47	0.00	514.71	514.71
G	799+94.47	0.00	514.77	514.77
H	800+04.47	0.00	514.82	514.83
I	800+14.47	0.00	514.87	514.89
J	800+24.47	0.00	514.92	514.94
K	800+34.47	0.00	514.95	514.97
L	800+44.47	0.00	514.98	514.99
℄ Pier 2	800+54.97	0.00	515.01	515.01
M	800+64.97	0.00	515.03	515.04
N	800+74.97	0.00	515.04	515.07
O	800+84.97	0.00	515.04	515.09
P	800+94.97	0.00	515.04	515.09
Q	801+04.97	0.00	515.04	515.07
R	801+14.97	0.00	515.03	515.04
℄ Pier 3	801+25.47	0.00	515.01	515.01
S	801+35.47	0.00	514.98	514.99
T	801+45.47	0.00	514.95	514.97
U	801+55.47	0.00	514.92	514.94
V	801+65.47	0.00	514.88	514.89
W	801+75.47	0.00	514.83	514.83
X	801+85.47	0.00	514.77	514.77
℄ Pier 4	801+95.97	0.00	514.71	514.71
Y	802+05.97	0.00	514.64	514.67
Z	802+15.97	0.00	514.57	514.64
AA	802+25.97	0.00	514.49	514.60
BB	802+35.97	0.00	514.41	514.53
CC	802+45.97	0.00	514.32	514.42
DD	802+55.97	0.00	514.22	514.28
℄ E. Abut.	802+68.38	0.00	514.10	514.10
Bk. E. Abut.	802+70.05	0.00	514.08	514.08

BEAM 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	799+10.39	2.96	514.04	514.04
℄ W. Abut.	799+12.06	2.96	514.05	514.05
A	799+22.06	2.96	514.15	514.21
B	799+32.06	2.96	514.25	514.35
C	799+42.06	2.96	514.34	514.46
D	799+52.06	2.96	514.43	514.54
E	799+62.06	2.96	514.51	514.59
F	799+72.06	2.96	514.58	514.62
℄ Pier 1	799+84.47	2.96	514.66	514.66
G	799+94.47	2.96	514.72	514.72
H	800+04.47	2.96	514.78	514.79
I	800+14.47	2.96	514.83	514.84
J	800+24.47	2.96	514.87	514.89
K	800+34.47	2.96	514.91	514.92
L	800+44.47	2.96	514.94	514.94
℄ Pier 2	800+54.97	2.96	514.96	514.96
M	800+64.97	2.96	514.98	514.99
N	800+74.97	2.96	514.99	515.03
O	800+84.97	2.96	515.00	515.05
P	800+94.97	2.96	515.00	515.05
Q	801+04.97	2.96	514.99	515.03
R	801+14.97	2.96	514.98	515.00
℄ Pier 3	801+25.47	2.96	514.96	514.96
S	801+35.47	2.96	514.94	514.94
T	801+45.47	2.96	514.91	514.92
U	801+55.47	2.96	514.87	514.89
V	801+65.47	2.96	514.83	514.85
W	801+75.47	2.96	514.78	514.79
X	801+85.47	2.96	514.73	514.72
℄ Pier 4	801+95.97	2.96	514.66	514.66
Y	802+05.97	2.96	514.60	514.63
Z	802+15.97	2.96	514.53	514.60
AA	802+25.97	2.96	514.45	514.55
BB	802+35.97	2.96	514.36	514.48
CC	802+45.97	2.96	514.27	514.37
DD	802+55.97	2.96	514.18	514.24
℄ E. Abut.	802+68.38	2.96	514.05	514.05
Bk. E. Abut.	802+70.05	2.96	514.04	514.04

BEAM 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	799+10.39	8.88	513.94	513.94
℄ W. Abut.	799+12.06	8.88	513.96	513.96
A	799+22.06	8.88	514.06	514.12
B	799+32.06	8.88	514.16	514.25
C	799+42.06	8.88	514.25	514.36
D	799+52.06	8.88	514.33	514.44
E	799+62.06	8.88	514.41	514.49
F	799+72.06	8.88	514.49	514.53
℄ Pier 1	799+84.47	8.88	514.57	514.57
G	799+94.47	8.88	514.63	514.63
H	800+04.47	8.88	514.69	514.69
I	800+14.47	8.88	514.73	514.75
J	800+24.47	8.88	514.78	514.80
K	800+34.47	8.88	514.81	514.83
L	800+44.47	8.88	514.84	514.85
℄ Pier 2	800+54.97	8.88	514.87	514.87
M	800+64.97	8.88	514.89	514.90
N	800+74.97	8.88	514.90	514.93
O	800+84.97	8.88	514.91	514.95
P	800+94.97	8.88	514.91	514.95
Q	801+04.97	8.88	514.90	514.94
R	801+14.97	8.88	514.89	514.90
℄ Pier 3	801+25.47	8.88	514.87	514.87
S	801+35.47	8.88	514.85	514.85
T	801+45.47	8.88	514.81	514.83
U	801+55.47	8.88	514.78	514.80
V	801+65.47	8.88	514.74	514.75
W	801+75.47	8.88	514.69	514.70
X	801+85.47	8.88	514.63	514.63
℄ Pier 4	801+95.97	8.88	514.57	514.57
Y	802+05.97	8.88	514.51	514.54
Z	802+15.97	8.88	514.43	514.51
AA	802+25.97	8.88	514.35	514.46
BB	802+35.97	8.88	514.27	514.39
CC	802+45.97	8.88	514.18	514.28
DD	802+55.97	8.88	514.08	514.14
℄ E. Abut.	802+68.38	8.88	513.96	513.96
Bk. E. Abut.	802+70.05	8.88	513.94	513.94

BEAM 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	799+10.39	14.79	513.84	513.84
℄ W. Abut.	799+12.06	14.79	513.85	513.85
A	799+22.06	14.79	513.95	514.01
B	799+32.06	14.79	514.05	514.15
C	799+42.06	14.79	514.14	514.26
D	799+52.06	14.79	514.23	514.34
E	799+62.06	14.79	514.31	514.39
F	799+72.06	14.79	514.38	514.42
℄ Pier 1	799+84.47	14.79	514.46	514.46
G	799+94.47	14.79	514.52	514.52
H	800+04.47	14.79	514.58	514.59
I	800+14.47	14.79	514.63	514.65
J	800+24.47	14.79	514.67	514.69
K	800+34.47	14.79	514.71	514.72
L	800+44.47	14.79	514.74	514.74
℄ Pier 2	800+54.97	14.79	514.76	514.76
M	800+64.97	14.79	514.78	514.80
N	800+74.97	14.79	514.79	514.83
O	800+84.97	14.79	514.80	514.85
P	800+94.97	14.79	514.80	514.85
Q	801+04.97	14.79	514.79	514.83
R	801+14.97	14.79	514.78	514.80
℄ Pier 3	801+25.47	14.79	514.76	514.76
S	801+35.47	14.79	514.74	514.74
T	801+45.47	14.79	514.71	514.72
U	801+55.47	14.79	514.67	514.69
V	801+65.47	14.79	514.63	514.65
W	801+75.47	14.79	514.58	514.59
X	801+85.47	14.79	514.53	514.52
℄ Pier 4	801+95.97	14.79	514.46	514.46
Y	802+05.97	14.79	514.40	514.43
Z	802+15.97	14.79	514.33	514.40
AA	802+25.97	14.79	514.25	514.35
BB	802+35.97	14.79	514.16	514.28
CC	802+45.97	14.79	514.07	514.17
DD	802+55.97	14.79	513.98	514.04
℄ E. Abut.	802+68.38	14.79	513.85	513.85
Bk. E. Abut.	802+70.05	14.79	513.84	513.84

NORTH EDGE OF SHOULDER

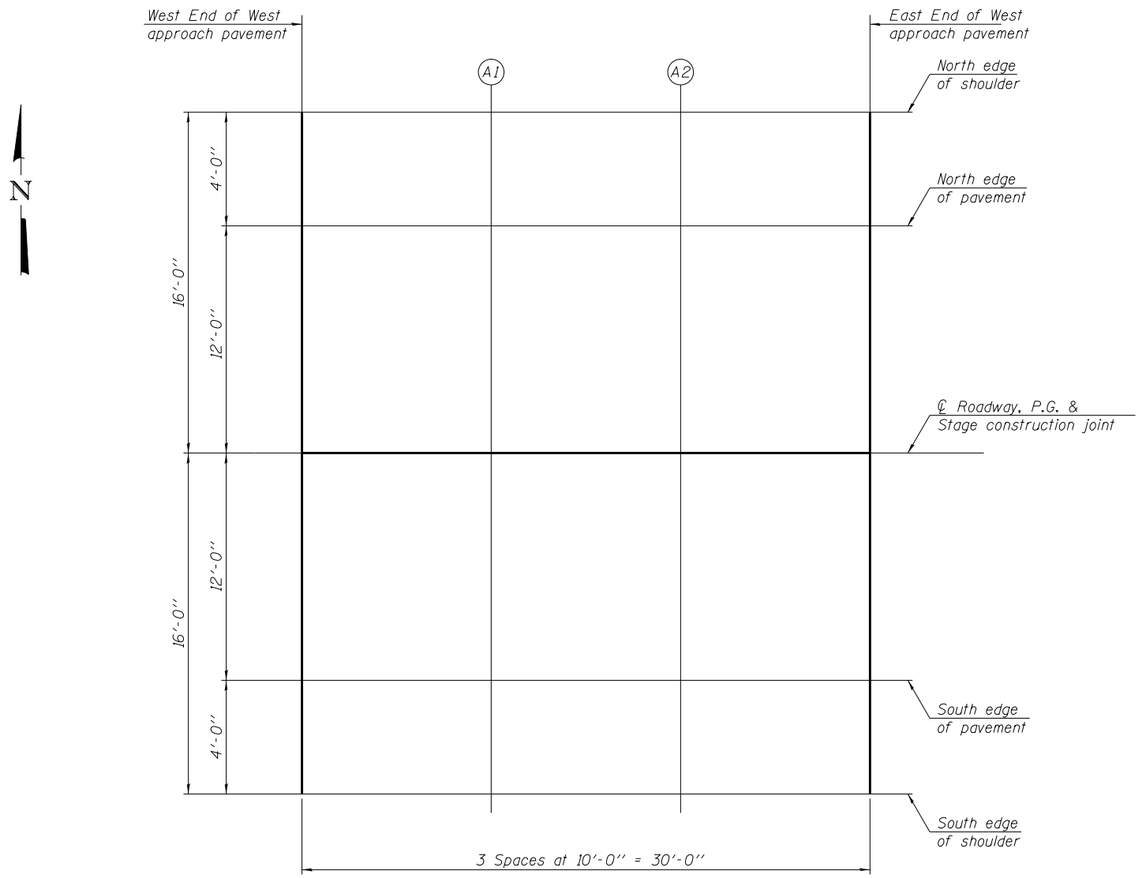
Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr. Pav't.	798+81.39	-16.00	513.52
A1	798+91.39	-16.00	513.62
A2	799+01.39	-16.00	513.72
E. End W. Appr. Pav't.	799+11.39	-16.00	513.82

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr. Pav't.	798+81.39	-12.00	513.60
A1	798+91.39	-12.00	513.70
A2	799+01.39	-12.00	513.80
E. End W. Appr. Pav't.	799+11.39	-12.00	513.90

℄ ROADWAY, PG & STAGE CONSTRUCTION JOINT

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr. Pav't.	798+81.39	0.00	513.79
A1	798+91.39	0.00	513.89
A2	799+01.39	0.00	513.99
E. End W. Appr. Pav't.	799+11.39	0.00	514.09



PLAN

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr. Pav't.	798+81.39	12.00	513.60
A1	798+91.39	12.00	513.70
A2	799+01.39	12.00	513.80
E. End W. Appr. Pav't.	799+11.39	12.00	513.90

SOUTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr. Pav't.	798+81.39	16.00	513.52
A1	798+91.39	16.00	513.62
A2	799+01.39	16.00	513.72
E. End W. Appr. Pav't.	799+11.39	16.00	513.82

NORTH EDGE OF SHOULDER

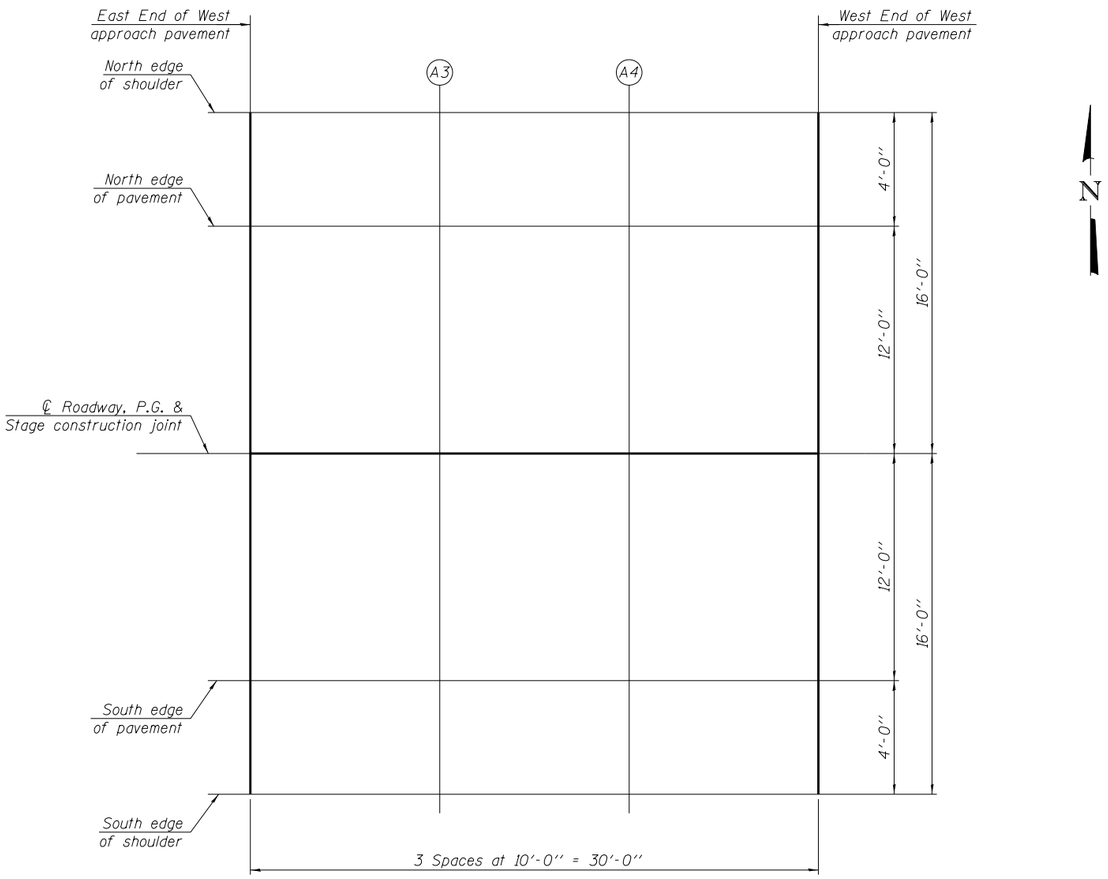
Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr. Pav't.	802+69.05	-16.00	513.82
A3	802+79.05	-16.00	513.72
A4	802+89.05	-16.00	513.62
E. End E. Appr. Pav't.	802+99.05	-16.00	513.52

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr. Pav't.	802+69.05	-12.00	513.90
A3	802+79.05	-12.00	513.80
A4	802+89.05	-12.00	513.70
E. End E. Appr. Pav't.	802+99.05	-12.00	513.60

℄ ROADWAY, PG & STAGE CONSTRUCTION JOINT

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr. Pav't.	802+69.05	0.00	514.09
A3	802+79.05	0.00	513.99
A4	802+89.05	0.00	513.89
E. End E. Appr. Pav't.	802+99.05	0.00	513.79



PLAN

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr. Pav't.	802+69.05	12.00	513.90
A3	802+79.05	12.00	513.80
A4	802+89.05	12.00	513.70
E. End E. Appr. Pav't.	802+99.05	12.00	513.60

SOUTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr. Pav't.	802+69.05	16.00	513.82
A3	802+79.05	16.00	513.72
A4	802+89.05	16.00	513.62
E. End E. Appr. Pav't.	802+99.05	16.00	513.52

FILE NAME = 0720229-68697-010-TOS E Appr Elev.dgn
USER NAME =
PLOT SCALE =
PLOT DATE = 3/18/2014

DESIGNED - BWP
CHECKED - CMV
DRAWN - CMV
CHECKED - BWP

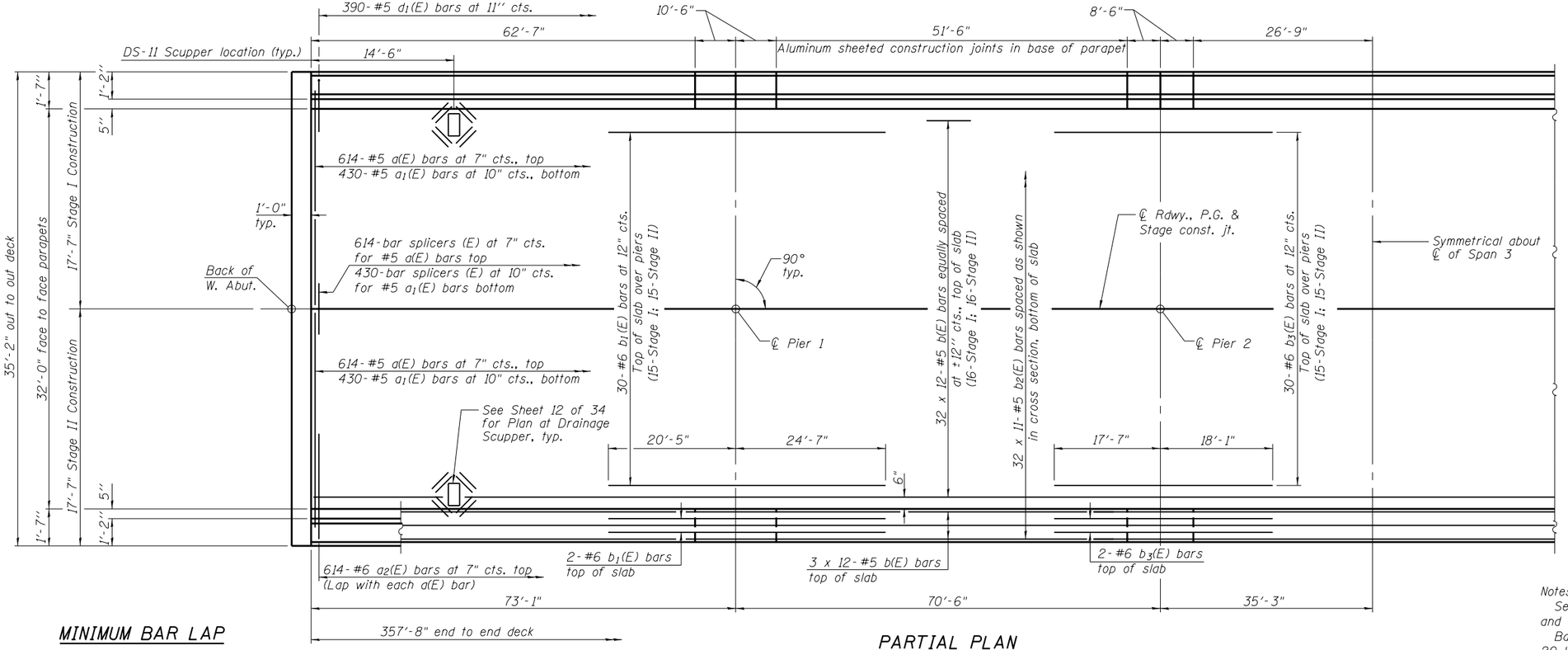
REVISED -
REVISED -
REVISED -
REVISED -

BFW
BACON | FARMER | WORKMAN
ENGINEERING & TESTING, INC.
403 NORTH COURT STREET
MARION, ILLINOIS 62959
PHONE - 618.997.9150

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF EAST APPROACH SLAB ELEVATIONS
STRUCTURE NO. 072-0229
SHEET NO. 10 OF 34 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	52
		CONTRACT NO. 68697		
	ILLINOIS FED. AID PROJECT			

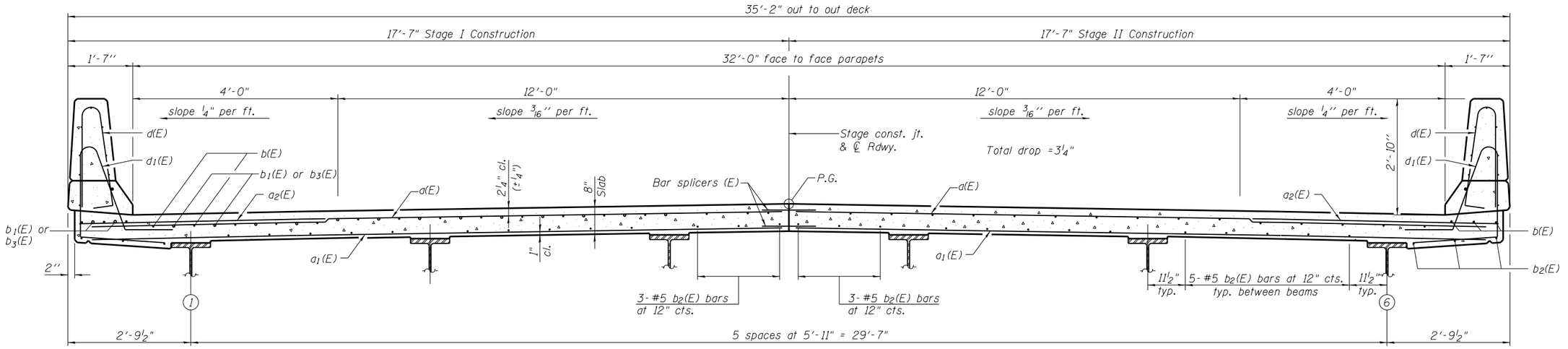


MINIMUM BAR LAP

#5 bar = 2'-7"

PARTIAL PLAN

Notes:
See Sheet 12 of 34 for superstructure details and Bill of Material.
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
See Sheet 12 of 34 for parapet reinforcement.



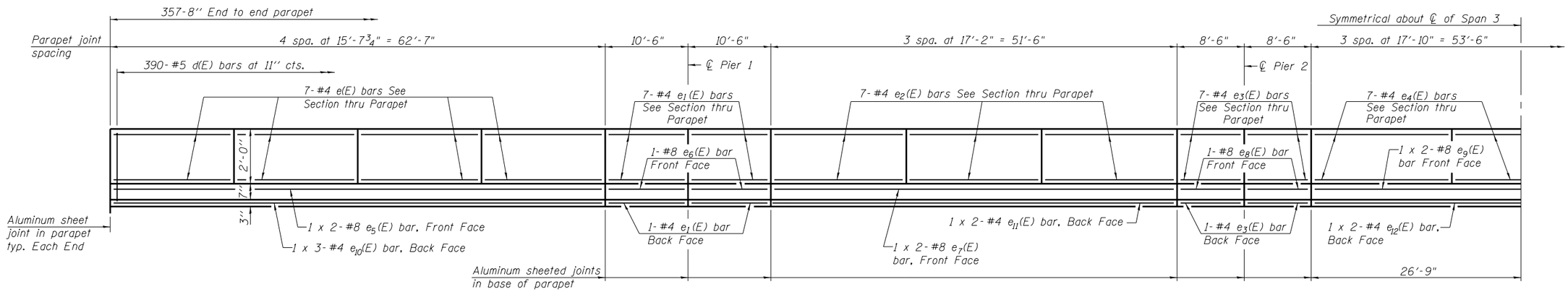
NEAR PIER

NEAR MIDSPAN

CROSS SECTION

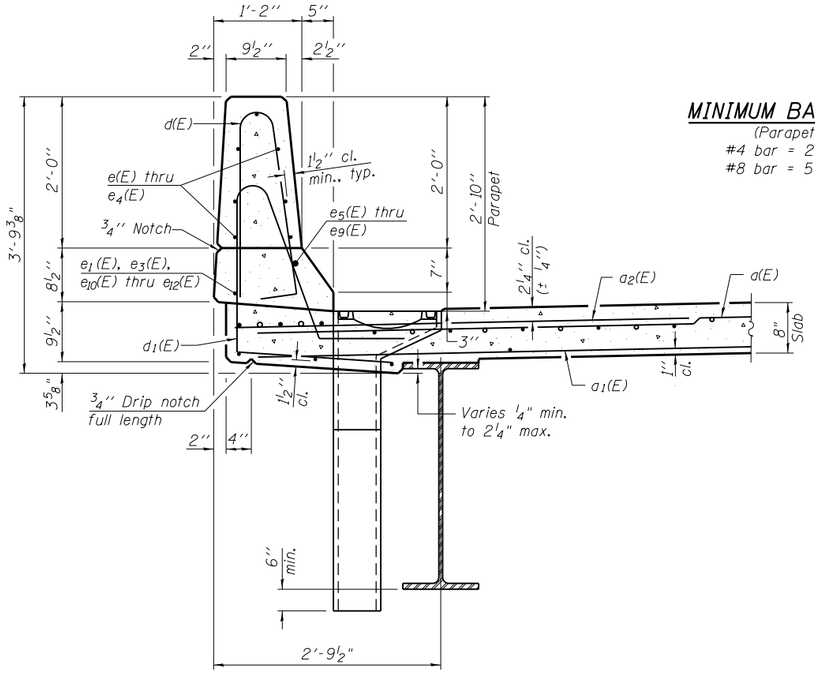
(Looking East)

FILE NAME = 0720229-68697-011-Superstructure.dgn	USER NAME =	DESIGNED - CMV	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUPERSTRUCTURE STRUCTURE NO. 072-0229	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
BACON | FARMER | WORKMAN ENGINEERING & TESTING, INC. 403 NORTH COURT STREET MARION, ILLINOIS 62959 PHONE - 618.997.9190		CHECKED - BWP	REVISED -			1388	(Z-1D-BR-1)BR	PEORIA	89	53
	PLOT SCALE =	DRAWN - BJV	REVISED -						CONTRACT NO. 68697	
	PLOT DATE = 3/18/2014	CHECKED - CMV	REVISED -		SHEET NO. 11 OF 34 SHEETS			ILLINOIS	FED. AID PROJECT	



INSIDE ELEVATION OF PARAPET

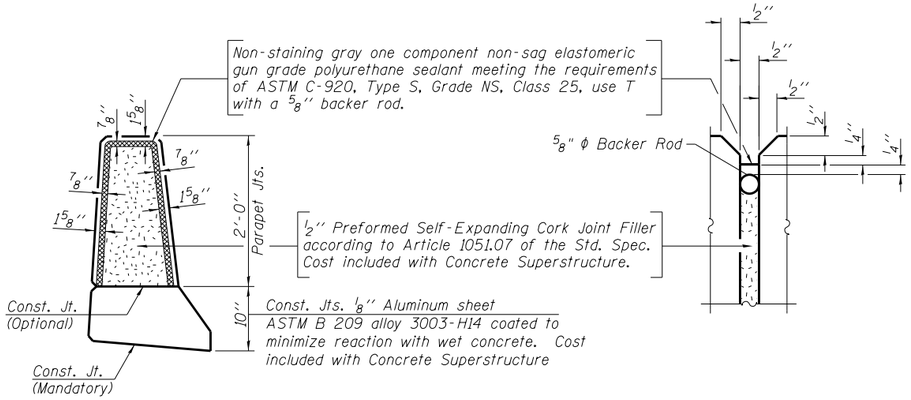
(Looking north-south parapet similar)



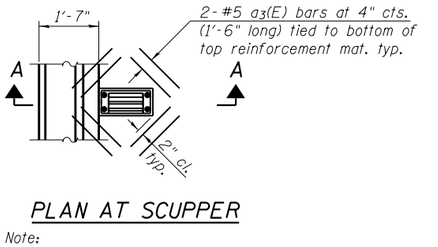
SECTION THRU PARAPET

MINIMUM BAR LAP

(Parapet)
#4 bar = 2'-0"
#8 bar = 5'-2"

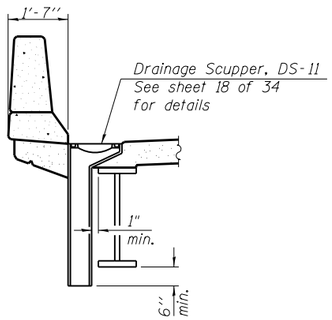


PARAPET JOINT DETAILS

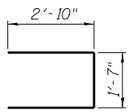


PLAN AT SCUPPER

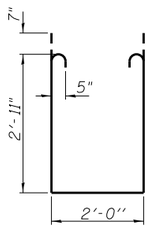
Note:
Cut longitudinal reinforcement to clear drainage scuppers.



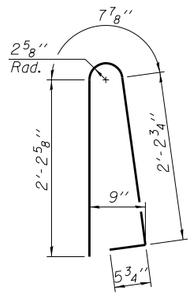
SECTION A-T



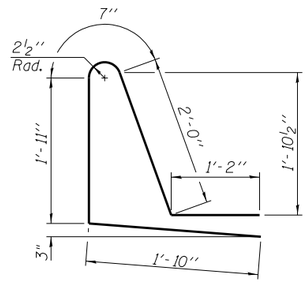
BAR s(E)



BAR s1(E)



BAR d(E)



BAR d1(E)

SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d(E)	1228	#5	17'-1"	
a1(E)	860	#5	16'-9"	
a2(E)	1228	#6	6'-6"	
a3(E)	32	#5	1'-6"	
b(E)	456	#5	32'-2"	
b1(E)	68	#6	45'-0"	
b2(E)	352	#5	34'-10"	
b3(E)	68	#6	35'-8"	
d(E)	780	#5	5'-7"	
d1(E)	780	#5	7'-6"	
e(E)	112	#4	15'-3"	
e1(E)	64	#4	10'-2"	
e2(E)	84	#4	16'-10"	
e3(E)	64	#4	8'-2"	
e4(E)	42	#4	17'-6"	
e5(E)	8	#8	33'-9"	
e6(E)	8	#8	10'-2"	
e7(E)	8	#8	28'-3"	
e8(E)	8	#8	8'-2"	
e9(E)	4	#8	29'-3"	
e10(E)	12	#4	22'-2"	
e11(E)	8	#4	26'-9"	
e12(E)	4	#4	27'-7"	
m(E)	16	#6	17'-3"	
m1(E)	30	#6	5'-7"	
m2(E)	12	#6	2'-5"	
m3(E)	36	#5	4'-0"	
s(E)	72	#5	7'-3"	
s1(E)	64	#5	9'-0"	
Reinforcement Bars, Epoxy Coated		Pound	103,700	
Concrete Superstructure		Cu. Yds.	425.9	

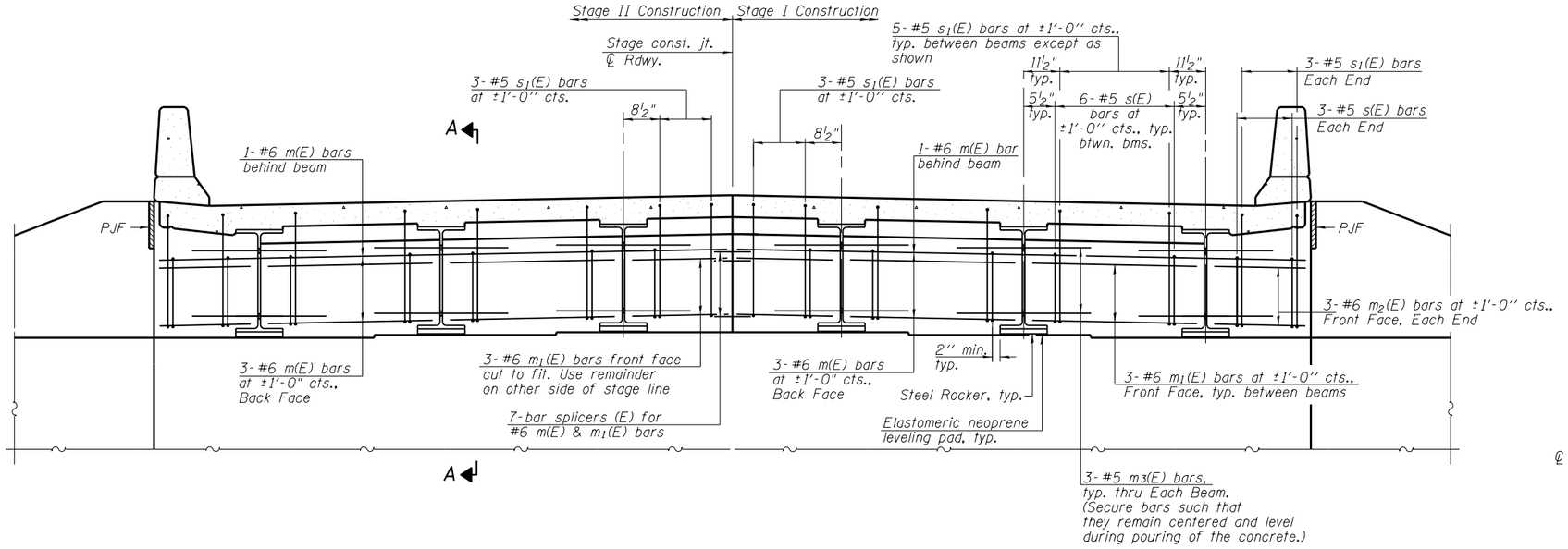
Bars indicated thus 1 x 2-#8 etc. indicates 1 line of bars with 2 lengths per line.

FILE NAME = 8720229-68697-012-Super Details.dgn
USER NAME =
PLOT SCALE =
PLOT DATE = 3/18/2014
DESIGNED - CMV
CHECKED - BWP
DRAWN - BJV
CHECKED - CMV
REVISED -
BFW BACON | FARMER | WORKMAN ENGINEERING & TESTING, INC.
403 NORTH COURT STREET MARION, ILLINOIS 62959 PHONE - 618.997.3190

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

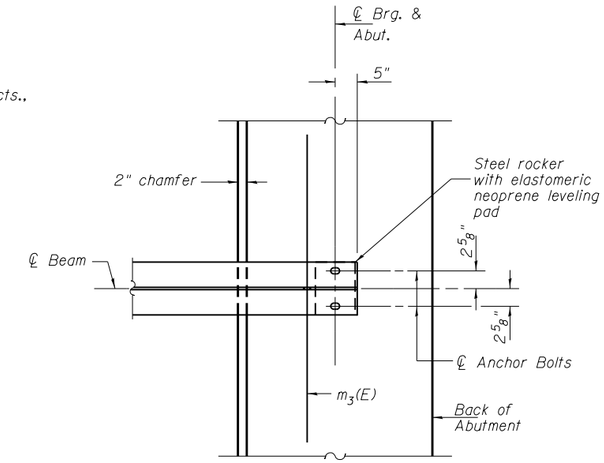
SUPERSTRUCTURE DETAILS
STRUCTURE NO. 072-0229
SHEET NO. 12 OF 34 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	54
		CONTRACT NO. 68697		
	ILLINOIS FED. AID PROJECT			



DIAPHRAGM ELEVATION AT WEST ABUTMENT

(Looking west - East abutment similar)



PARTIAL PLAN AT ABUTMENT

(Showing bottom flange of beam)

Notes:

Reinforcement bars in diaphragm are billed with superstructure on sheet 12 of 34.

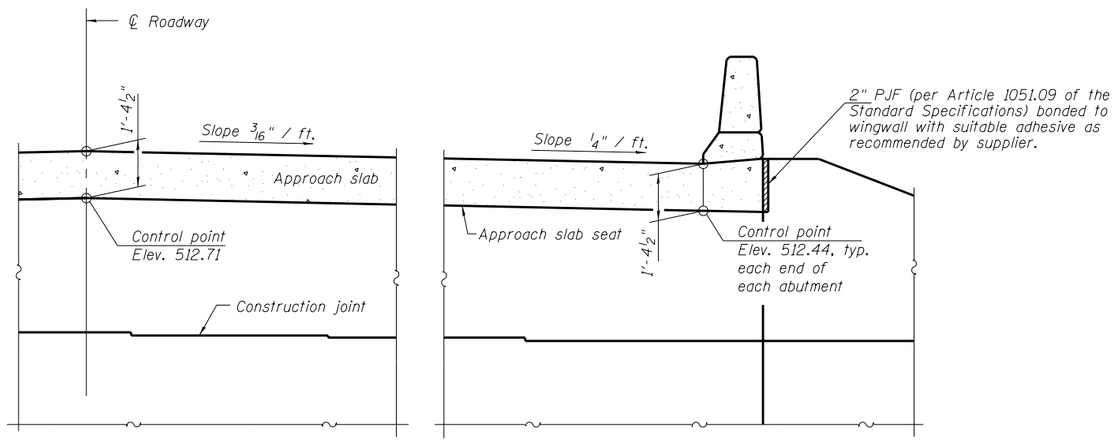
Concrete in diaphragm is included with Concrete Superstructure on sheet 12 of 34.

For details of bars s(E) and s_1(E) see sheet 12 of 34.

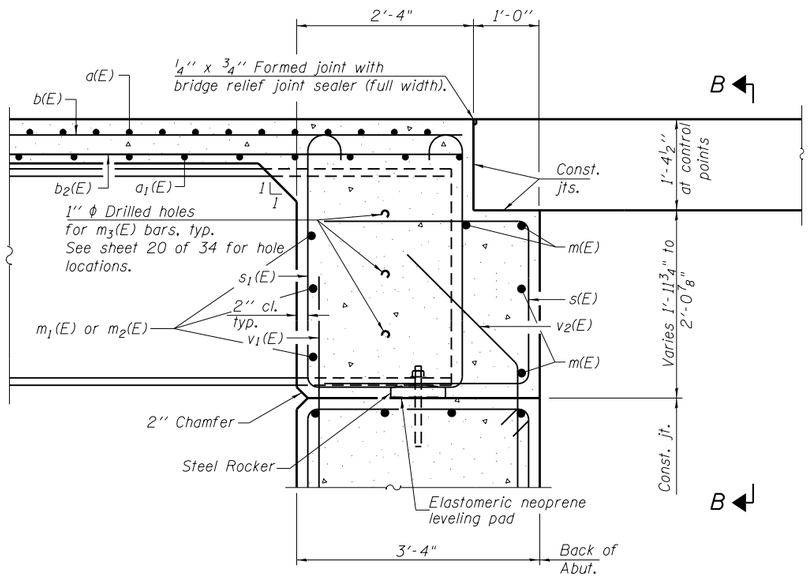
The approach slab seat shall have a constant slope determined from the control points shown.

For bearing details see sheet 20 of 34.

For details of bar v_2(E) see sheet 21 of 34.



SECTION B-B



SECTION A-A

FILE NAME = 0720229-68697-013-Diaphragm Details.dgn	USER NAME =	DESIGNED - CMV	REVISED -
BFW BACON | FARMER | WORKMAN ENGINEERING & TESTING, INC. 403 NORTH COURT STREET MARION, ILLINOIS 62959 PHONE - 618.997.9190		CHECKED - BWP	REVISED -
	PLOT SCALE =	DRAWN - BJV	REVISED -
	PLOT DATE = 3/18/2014	CHECKED - CMV	REVISED -

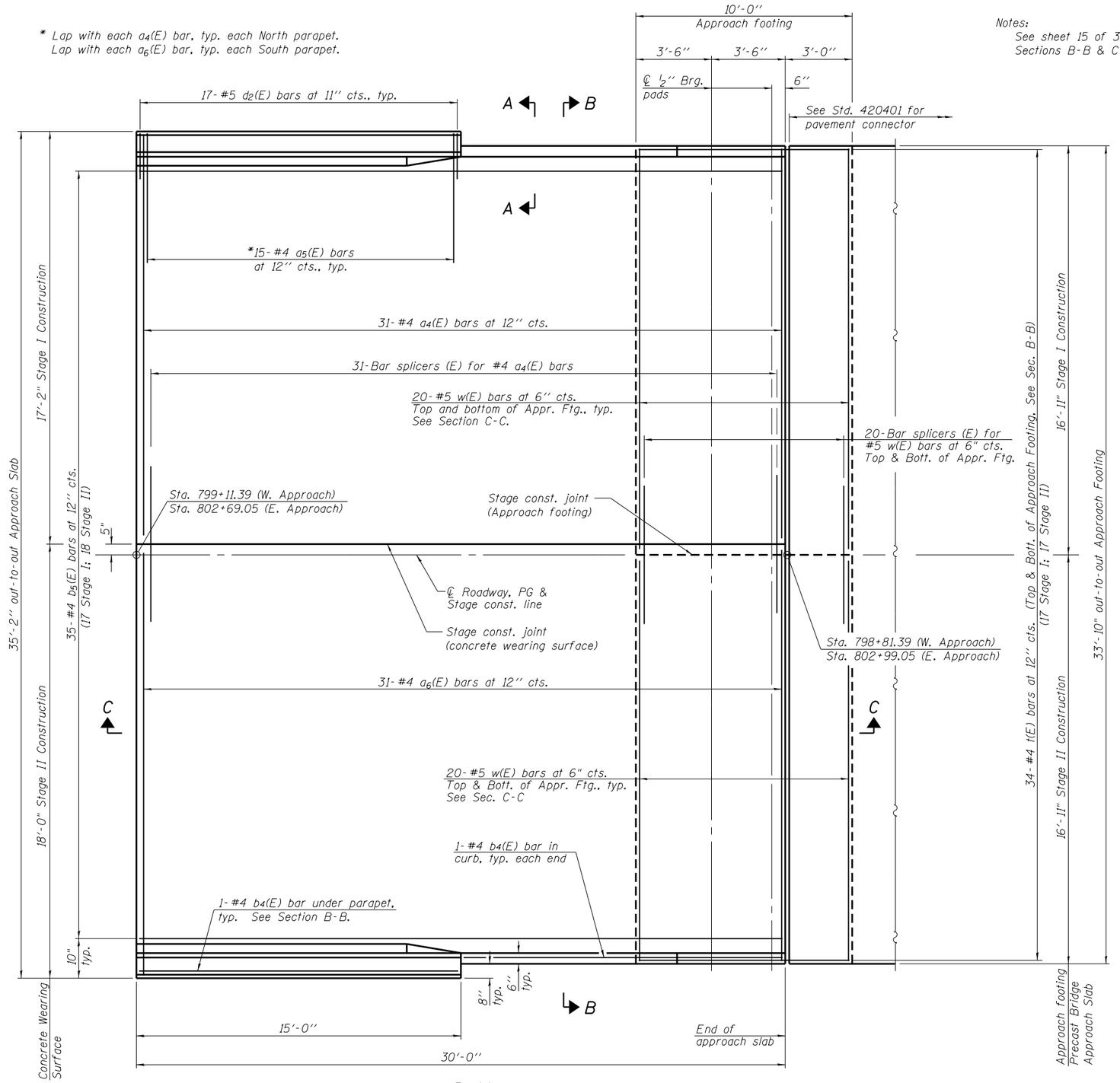
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DIAPHRAGM DETAILS
STRUCTURE NO. 072-0229
SHEET NO. 13 OF 34 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	55
		CONTRACT NO. 68697		
	ILLINOIS FED. AID PROJECT			

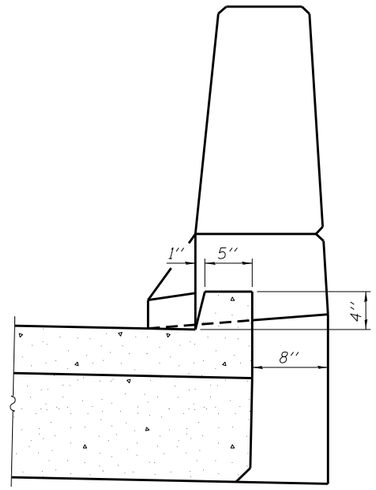
* Lap with each $a_4(E)$ bar, typ. each North parapet.
Lap with each $a_6(E)$ bar, typ. each South parapet.

Notes:
See sheet 15 of 34 for Sections B-B & C-C.

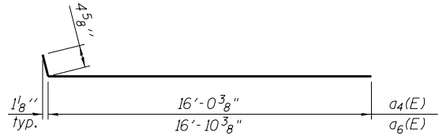


PLAN

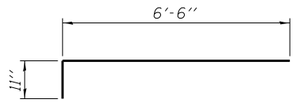
(Showing wearing surface. East approach shown. West approach similar by mirror image.)



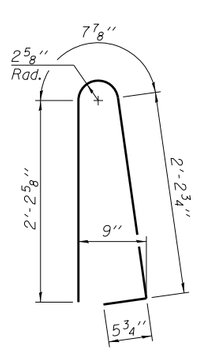
SECTION A-A



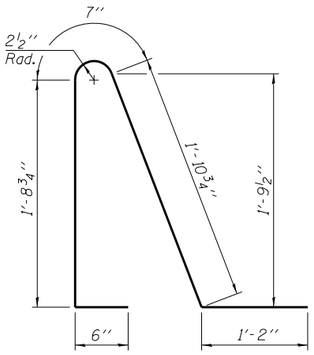
BAR $a_4(E)$ & $a_6(E)$



BAR $a_5(E)$

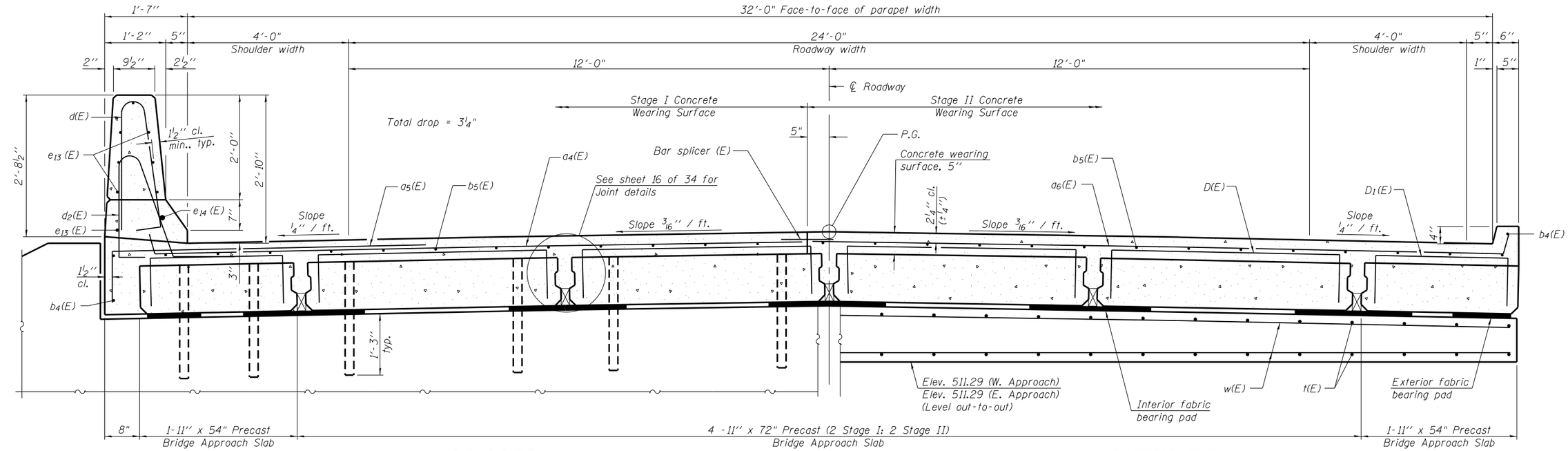


BAR d(E)

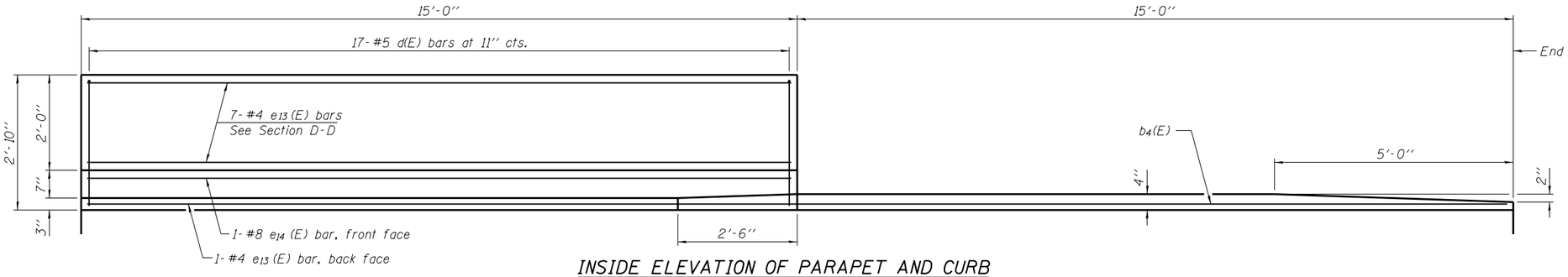


BAR $d_2(E)$

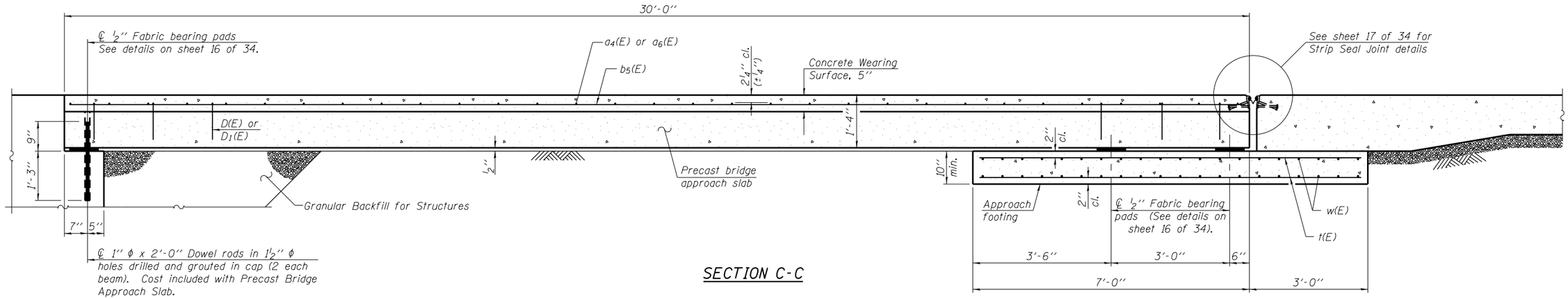
FILE NAME = 0720229-68697-014-Prec Br Appr Slab.dgn	USER NAME =	DESIGNED - BWP	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PRECAST BRIDGE APPROACH SLAB STRUCTURE NO. 072-0229	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
BFW BACON | FARMER | WORKMAN ENGINEERING & TESTING, INC. 403 NORTH COURT STREET MARION, ILLINOIS 62959 PHONE - 618.997.3190		CHECKED - CMV	REVISED -			1388	(Z-1D-BR-1)BR	PEORIA	89	56
	PLOT SCALE =	DRAWN - BJV	REVISED -		SHEET NO. 14 OF 34 SHEETS			CONTRACT NO. 68697		
	PLOT DATE = 3/18/2014	CHECKED - BWP	REVISED -					ILLINOIS FED. AID PROJECT		



SECTION B-B

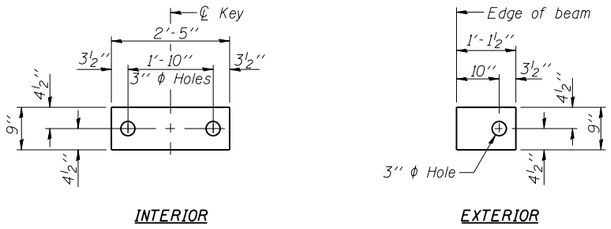


INSIDE ELEVATION OF PARAPET AND CURB



SECTION C-C

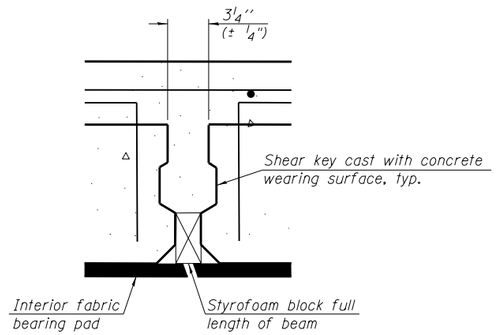
FILE NAME = 0720229-68697-015-Prec Br Appr Slab.dgn	USER NAME =	DESIGNED - BWP	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PRECAST BRIDGE APPROACH SLAB STRUCTURE NO. 072-0229	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
BFW BACON | FARMER | WORKMAN ENGINEERING & TESTING, INC. 403 NORTH COURT STREET MARION, ILLINOIS 62959 PHONE - 618.997.9150		CHECKED - CMV	REVISED -			1388	(Z-1D-BR-1)BR	PEORIA	89	57
	PLOT SCALE =	DRAWN - BJV	REVISED -		SHEET NO. 15 OF 34 SHEETS			CONTRACT NO. 68697		
	PLOT DATE = 3/18/2014	CHECKED - BWP	REVISED -					ILLINOIS FED. AID PROJECT		



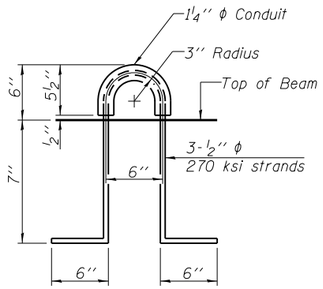
INTERIOR EXTERIOR

FABRIC BEARING PAD

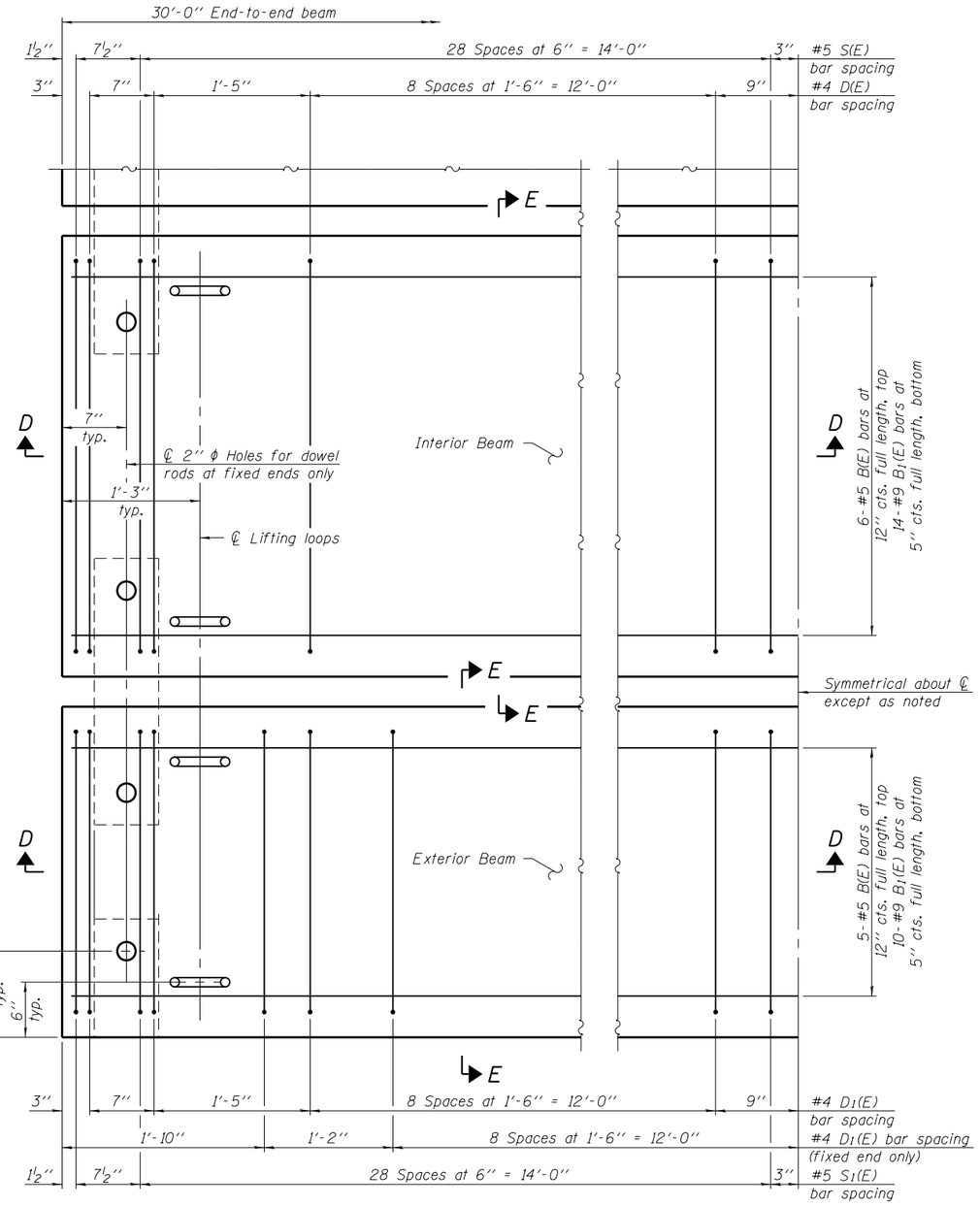
Notes:
All bearing pads shall be ½" thick.
Omit holes for fabric bearing pads at approach slab footing end of beams.
Expansion bearing pad shall be bonded to the approach slab footing.



SECTION THRU SHEAR KEY JOINT

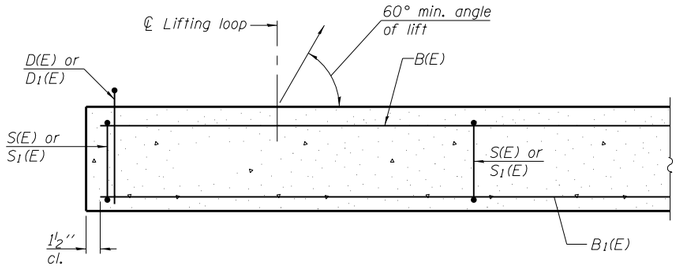


LIFTING LOOP DETAIL

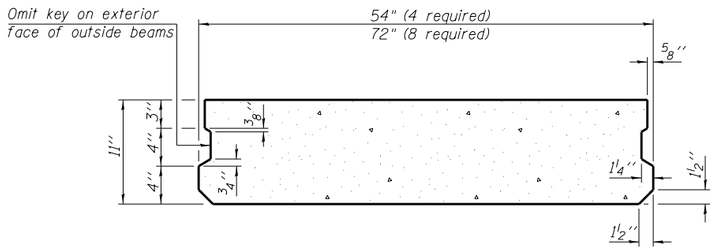


PLAN

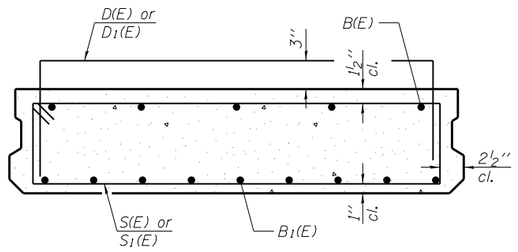
FILE NAME = 0720229-68697-016-Prec Br Appr Slab.dgn	USER NAME =	DESIGNED - BWP	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PRECAST BRIDGE APPROACH SLAB STRUCTURE NO. 072-0229	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
BFW BACON | FARMER | WORKMAN ENGINEERING & TESTING, INC. 403 NORTH COURT STREET MARION, ILLINOIS 62959 PHONE - 618.997.9190		CHECKED - CMV	REVISED -			1388	(Z-1D-BR-1)BR	PEORIA	89	58
	PLOT SCALE =	DRAWN - BJV	REVISED -		SHEET NO. 16 OF 34 SHEETS				CONTRACT NO. 68697	
	PLOT DATE = 3/18/2014	CHECKED - BWP	REVISED -					ILLINOIS	FED. AID PROJECT	



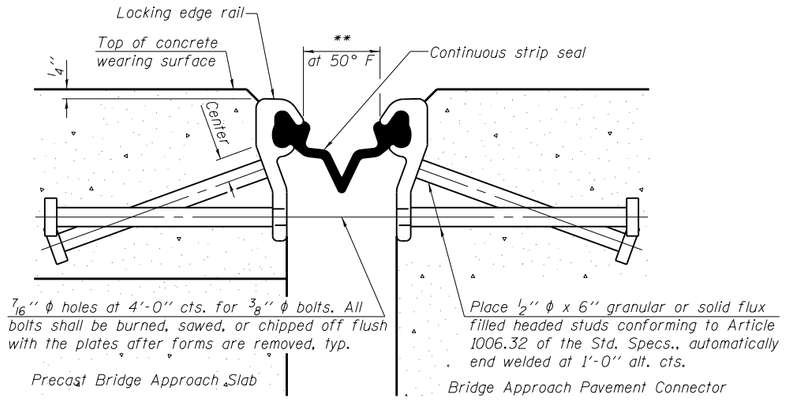
SECTION D-D



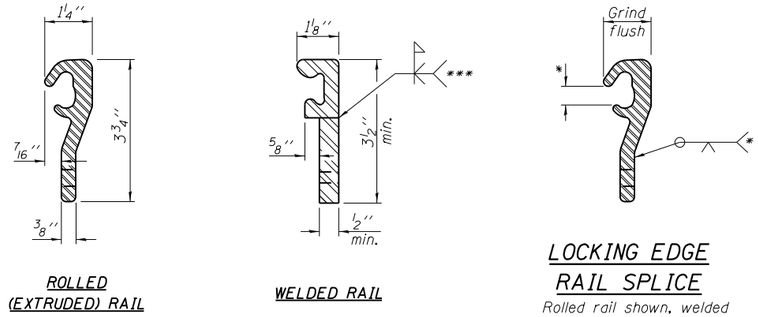
SECTION E-E
(Showing dimensions)



SECTION E-E
(Showing reinforcement)



SECTION THRU STRIP SEAL JOINT
(at rt. angles)



ROLLED (EXTRUDED) RAIL

WELDED RAIL

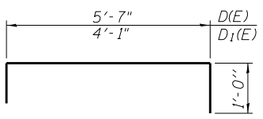
LOCKING EDGE RAIL SPLICE
Rolled rail shown, welded rail similar.

LOCKING EDGE RAIL

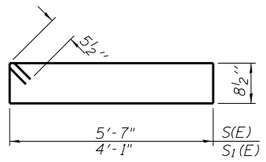
* Omit weld at seal opening.

** 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 1½" for installation purposes.

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



BARS D(E) & D1(E)



BARS S(E) & S1(E)

BAR LIST EACH INTERIOR BEAM
(For information only)

Bar	No.	Size	Length	Shape
B(E)	6	#5	29'-8"	—
B1(E)	14	#9	29'-8"	—
D(E)	22	#4	7'-7"	⊓
S(E)	58	#5	13'-6"	⊓

BAR LIST EACH EXTERIOR BEAM
(For information only)

Bar	No.	Size	Length	Shape
B(E)	5	#5	29'-8"	—
B1(E)	10	#9	29'-8"	—
D1(E)	31	#4	6'-1"	⊓
S1(E)	58	#5	10'-6"	⊓

Notes:

The precast bridge approach slab shall be according to Section 504 of the Standard Specifications and shall be paid for at the contract unit price per square foot for Precast Bridge Approach Slab.

Cast-in-place substitution of Precast Bridge Approach Slab is not allowed.

Parapet concrete shall be paid for as Concrete Superstructure.

Parapet and wearing surface reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.

Approach footing concrete shall be paid for as Concrete Structures.

The top surface of precast bridge approach slabs shall be roughened to a depth of ¼" according to the IDOT "Manual for Fabrication of Precast Prestressed Concrete Products."

After precast bridge approach slab has been erected, holes shall be drilled into abutment and anchor dowels placed. Dowel holes shall be filled with non-shrink grout to top of precast slab and allowed to cure fully prior to placement of the Concrete Wearing Surface, 5".

Two ⅛" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location. Cost included with Precast Bridge Approach Slab.

A minimum 2 ½" ϕ lifting pins shall be used to engage the lifting loops during handling.

Compressive strength of precast concrete, f'c shall be 6,000 psi.

For additional parapet details, see sheet 15 of 34.

Any concrete poured monolithically with the wearing surface, such as curbs, will not be paid for separately, but will be included in the cost of Concrete Wearing Surface, 5".

The strip seal shall be made continuous and shall have a minimum thickness of ¼". The strip seal shall extend 6" beyond the edge of the approach slab on each end. The configuration of the strip seal shall match the configuration of the Locking Edge Rails.

The height and thickness of the Locking Edge Rails shown are minimum dimensions. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed.

The inside of the Locking Edge Rail groove shall be free of weld residue.

Locking Edge Rails may be spliced at slope discontinuities and stage construction joints.

The manufacturer's recommended installation methods shall be followed.

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

Maximum space between rail segments at stage lines shall be 3/16", sealed with a suitable sealant

TWO APPROACHES BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a4(E)	62	#4	16'-5"	⌒
a5(E)	60	#4	7'-5"	⌐
a6(E)	62	#4	17'-3"	⌒
b4(E)	8	#4	14'-8"	—
b5(E)	70	#4	29'-8"	—
d(E)	68	#5	5'-7"	⌐
d2(E)	68	#5	5'-11"	⌐
e13(E)	32	#4	14'-8"	—
e14(E)	4	#8	14'-8"	—
t(E)	136	#4	9'-8"	—
w(E)	160	#5	16'-7"	—
Concrete Superstructure			Cu. Yd.	6.6
Concrete Structures			Cu. Yd.	24.6
Reinforcement Bars, Epoxy Coated			Pound	8,090
Precast Bridge Approach Slab			Sq. Ft.	1,980
Concrete Wearing Surface, 5"			Sq. Yd.	230
Preformed Joint Strip Seal			Foot	68

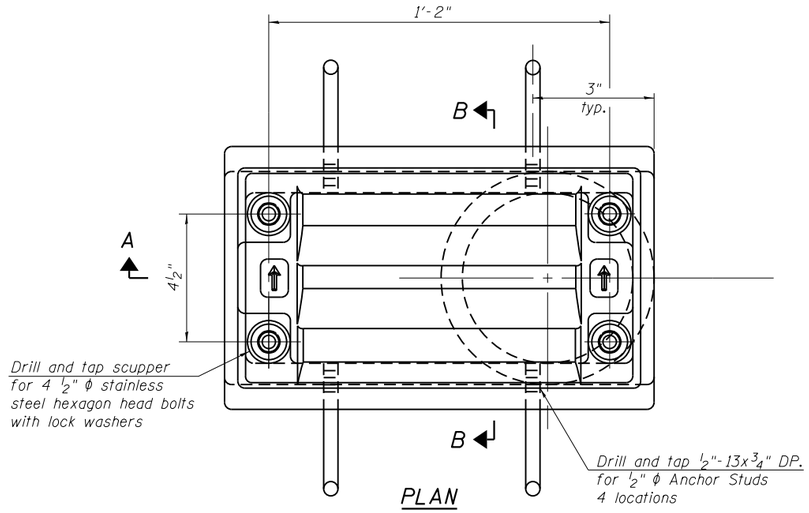
FILE NAME = 0720229-68697-017-Prec Br Appr Slab.dgn | USER NAME = | DESIGNED - BWP | REVISED -
PLOT SCALE = | DRAWN - BJV | REVISED -
PLOT DATE = 3/18/2014 | CHECKED - BWP | REVISED -

BFW — BACON | FARMER | WORKMAN ENGINEERING & TESTING, INC.
403 NORTH COURT STREET, MARION, ILLINOIS 62959, PHONE - 618.997.9150

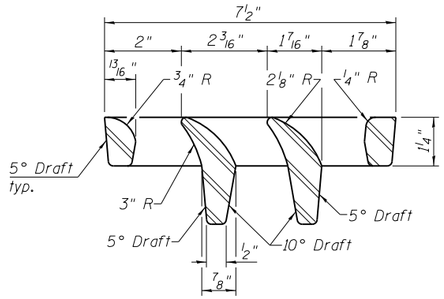
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PRECAST BRIDGE APPROACH SLAB
STRUCTURE NO. 072-0229
SHEET NO. 17 OF 34 SHEETS

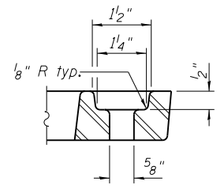
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	59
		CONTRACT NO. 68697		
	ILLINOIS FED. AID PROJECT			



PLAN



VANE GRATE DETAIL



BOLT HOLE DETAIL

Notes:

All cast iron parts shall be gray iron conforming to the requirements of AASHTO M 105, Class 35B.

Bolts, anchor studs, washers and nuts shall conform to the requirements of ASTM A 307 and shall be galvanized according to AASHTO M 232.

Downspouts located on the exterior side of a painted steel fascia beam shall be painted with the finish coat specified for the exterior side of the fascia beam.

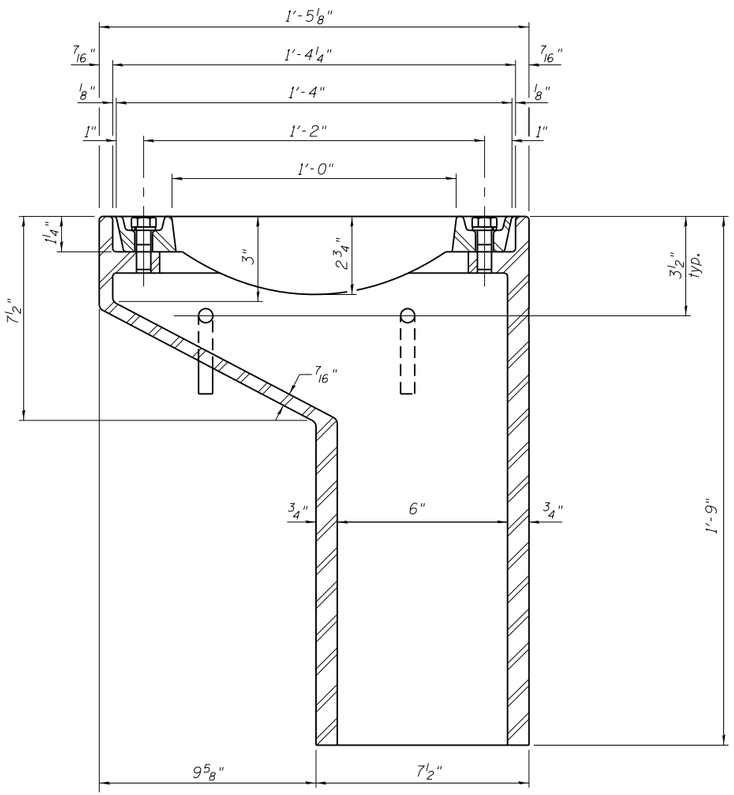
As an alternate, bolts, anchor studs, washers and nuts may be stainless steel according to Article 1006.29(d) of the Standard Specifications.

Structural steel weldments of equal sections and of the same configuration may be substituted for the cast iron scupper frame. Fillet or full penetration welds shall be used for the weldments. Details shall be submitted to the Engineer for approval. Structural steel weldments shall not be substituted for the cast iron scupper grate. Structural steel frames and downspouts shall be galvanized according to AASHTO M111.

The Contractor shall take appropriate measures to assure that Protective Coat is not applied to the scupper.

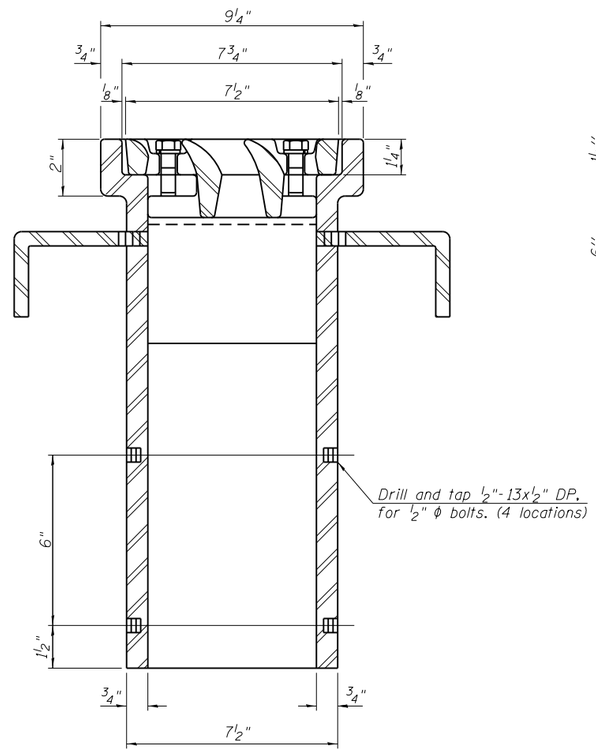
Cost of the Grate, Frame, Downspout, Anchor Studs, Bolts, Washers and Nuts including complete installation of the scupper shall be paid for at the contract unit price each for Drainage Scupper, DS-11.

Alternate fiberglass downspout conforming to ASTM D 2996 with a short-time rupture strength hoop tensile stress of 30,000 psi min. may be used in lieu of the cast iron or steel equivalent.

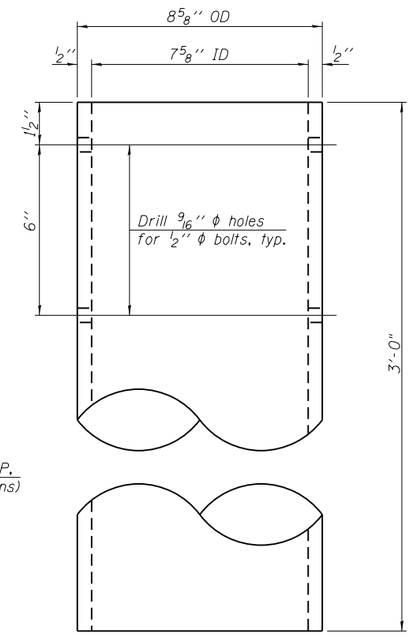


SECTION A-A

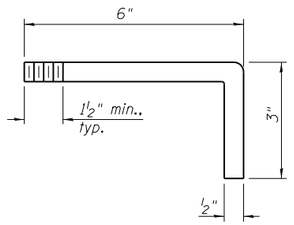
See sheet 12 of 34 for scupper location relative to parapet.



SECTION B-B



DOWNSPOUT



ANCHOR STUD DETAIL

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage Scupper, DS-11	Each	4

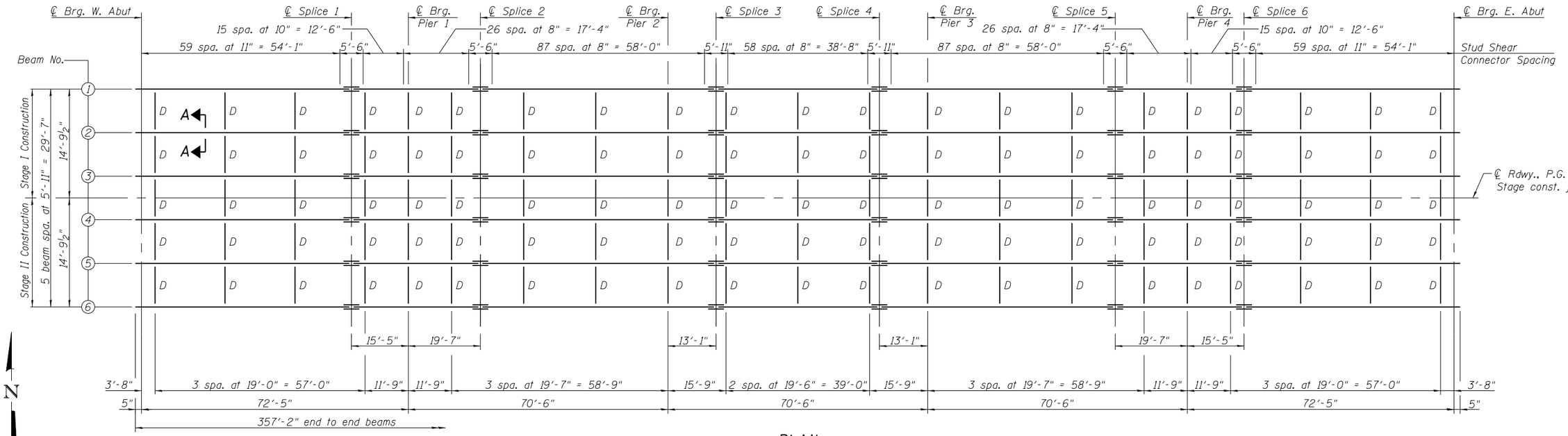
DS-11 7-1-10

FILE NAME = 0720229-68697-018-Drainage Scupper.dgn	USER NAME =	DESIGNED - BWP	REVISED -
BACON | FARMER | WORKMAN ENGINEERING & TESTING, INC. 403 NORTH COURT STREET MARION, ILLINOIS 62959 PHONE - 618.997.9190		CHECKED - CMV	REVISED -
	PLOT SCALE =	DRAWN - BWP	REVISED -
	PLOT DATE = 3/18/2014	CHECKED - CMV	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

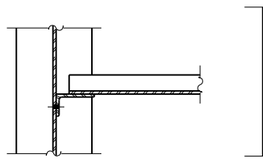
DRAINAGE SCUPPER, DS-11
STRUCTURE NO. 072-0229
SHEET NO. 18 OF 34 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	60
		CONTRACT NO. 68697		
	ILLINOIS FED. AID PROJECT			

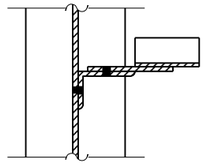


PLAN

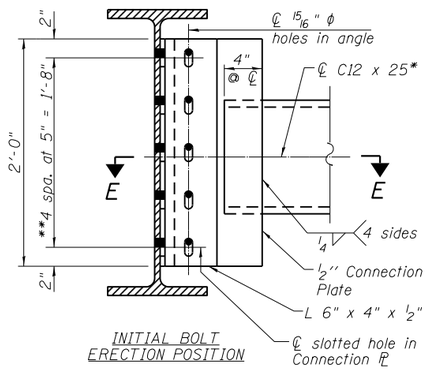
All beams are W30x124, AASHTO M270 Grade 50 (NTR).



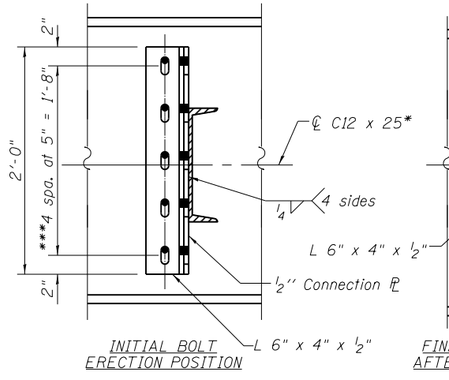
SECTION B-B



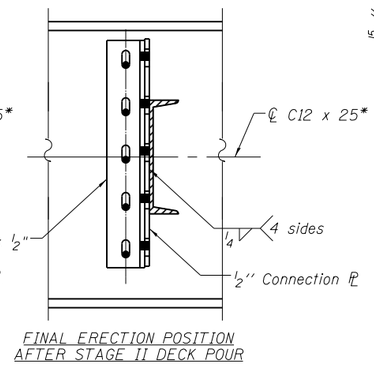
SECTION E-E



INITIAL BOLT ERECTION POSITION



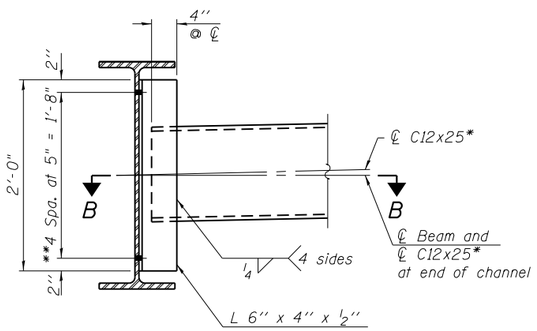
INITIAL BOLT ERECTION POSITION



FINAL ERECTION POSITION AFTER STAGE II DECK POUR

DIAPHRAGM D

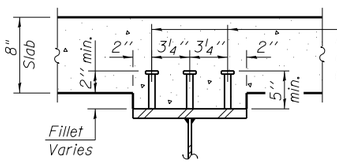
(North Side Beam 4)



DIAPHRAGM D

Note:
Two hardened washers required for each set of oversized holes.
*Alternate channel C12x30 is permitted to facilitate material acquisition. Calculated weight of structural steel is based on the lighter section.
The alternate, if utilized, shall be provided at no additional cost to the Department.
***3/4" ϕ HS bolts, 15/16" ϕ holes

***3/4" ϕ HS bolts, on the North side of Beam 4 provide 13/16" x 1 7/8" vertical slotted holes in the angle at the web and in the connection plate. Bolts in slotted holes shall be finger tightened until the second stage pour is completed. Position slots so bolts move from one end with no concrete load to the opposite end under the deck load. The slotted holes in the angle and connection plate shall be positioned as shown to allow the bolts to move to the final erection positions under deck load. The holes shall be positioned to allow maximum bolt displacement without laterally stressing the girders.



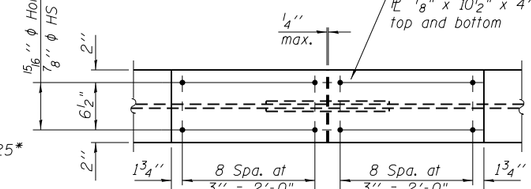
SECTION A-A

3/4" ϕ Granular or solid flux filled headed studs, automatically end welded to flange. (7.902 Required)

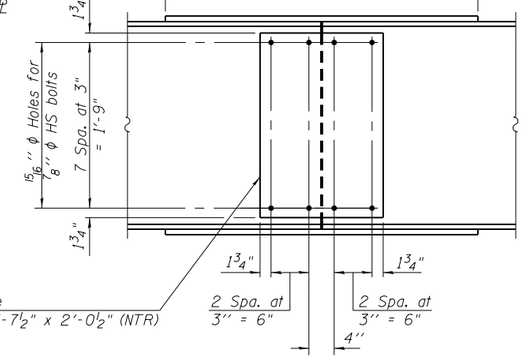
All diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual cross frames or diaphragms at supports may be temporarily disconnected to install bearing anchor rods.

Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.

All web and flange splice plates shall be AASHTO M270, Grade 50.



PLAN



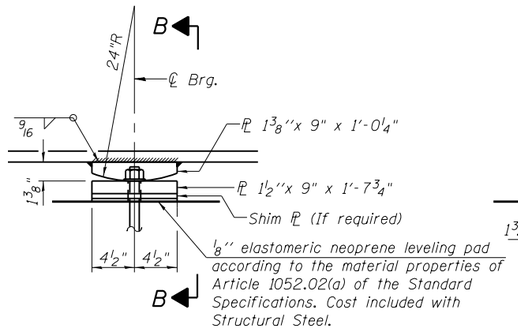
ELEVATION

SPLICE DETAIL

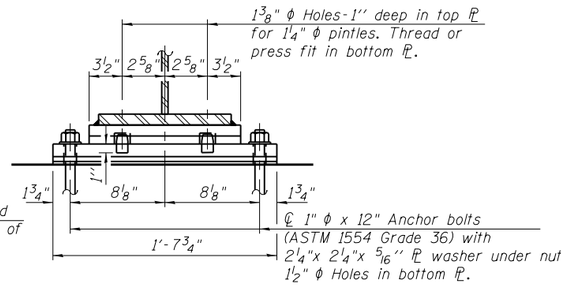
(36 Required)

FILE NAME = 0720229-68697-019-Structural Steel.dgn	USER NAME =	DESIGNED - BWP	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STRUCTURAL STEEL STRUCTURE NO. 072-0229
BFW BACON | FARMER | WORKMAN ENGINEERING & TESTING, INC. 403 NORTH COURT STREET MARION, ILLINOIS 62959 PHONE - 618.997.9190		CHECKED - CMV	REVISED -		SHEET NO. 19 OF 34 SHEETS
	PLOT SCALE =	DRAWN - BJV	REVISED -		
	PLOT DATE = 3/18/2014	CHECKED - BWP	REVISED -		

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	61
		CONTRACT NO. 68697		
	ILLINOIS FED. AID PROJECT			

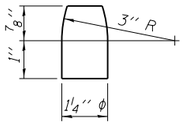


ELEVATION AT PIER

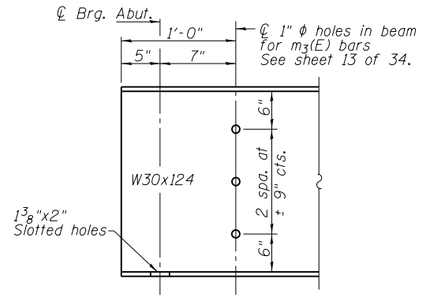


SECTION B-B

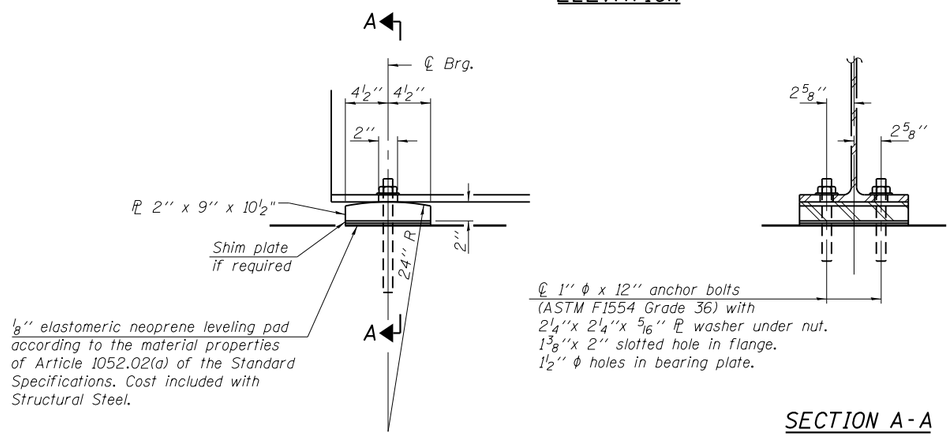
FIXED BEARING



PINTLE



TYP. END OF BEAM ELEVATION



SECTION A-A

ELEVATION AT ABUTMENT

FIXED BEARING

EXTERIOR GIRDER MOMENT TABLE						
		0.4 Sp. 1 or 0.6 Sp. 5	Pier 1 or Pier 4	0.5 Sp. 2 or 0.5 Sp. 4	Pier 2 or Pier 3	0.5 Sp. 3
I_s	(in^4)	5360	5360	5360	5360	5360
$I_c(n)$	(in^4)	13933	13933	13933	13933	13933
$I_c(3n)$	(in^4)	10157	10157	10157	10157	10157
$I_c(cr)$	(in^4)	-----	7204	-----	7204	-----
S_s	(in^3)	355	355	355	355	355
$S_c(n)$	(in^3)	517	1238	517	1238	517
$S_c(3n)$	(in^3)	465	620	465	620	465
$S_c(cr)$	(in^3)	-----	405	-----	405	-----
DC1	(k/')	0.779	0.779	0.779	0.779	0.779
M_{DC1}	('k)	323	419	125	300	184
DC2	(k/')	0.15	0.15	0.15	0.15	0.15
M_{DC2}	('k)	62	81	23	58	35
DW	(k/')	0.267	0.267	0.267	0.267	0.267
M_{DW}	('k)	110	145	42	104	62
M_{L+IM}	('k)	733	678	571	588	575
M_u (Strength I)	('k)	1929	2029	1247	1633	1373
$\phi_f M_n$	('k)	2526.4	2109.2	2576.7	1924.5	2576.7
f_s DC1	(ksi)	10.9	14.2	4.2	10.1	6.2
f_s DC2	(ksi)	1.6	2.4	0.6	1.7	0.9
f_s DW	(ksi)	2.8	4.3	1.1	3.1	1.6
f_s (L+IM)	(ksi)	17.0	20.1	13.3	17.4	13.4
f_s (Service II)	(ksi)	37.5	47.0	23.1	37.6	26.1
$0.95R_hF_{yf}$	(ksi)	47.5	47.5	47.5	47.5	47.5
f_s (Total)(Strength I)	(ksi)	-----	-----	-----	-----	-----
$\phi_f F_n$	(ksi)	-----	-----	-----	-----	-----
Vf	(k)	21.2	-----	22.3	-----	22.3

INTERIOR GIRDER REACTION TABLE				
		Abut.	Piers 1 & 4	Piers 2 & 3
R_{DC1}	(k)	22.3	60.8	51.3
R_{DC2}	(k)	4.3	12.2	10.3
R_{DW}	(k)	7.7	21.7	18.2
R_{L+IM}	(k)	67.1	99.6	96.3
R_{Total}	(k)	101.4	194.3	176.1

Notes:

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

All bearing plates and pintles shall be AASHTO M270 Grade 50.

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.^{4} and in.^{3}).

$I_c(n)$, $S_c(n)$: 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.^{4} and in.^{3}).

$I_c(3n)$, $S_c(3n)$: 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.^{4} and in.^{3}).

$I_c(cr)$, $S_c(cr)$: 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.^{4} and in.^{3}).

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_{L+IM}: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).

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

$\phi_f M_n$: Compact composite positive moment capacity computed according to Article 6.10.7.1 or non-slender negative moment capacity according to Article A6.1.2 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_{nc}

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 (L+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).
$M_{L+IM} / S_c(n)$ or $M_{DW} / S_c(cr)$ as applicable.

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

$0.95R_hF_yf$: 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).
$1.25\ (f_{sDC1} + f_{sDC2}) + 1.5\ f_{sDW} + 1.75\ f_s(L+IM)$

$\phi_f F_n$: 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 BEAM ELEVATIONS

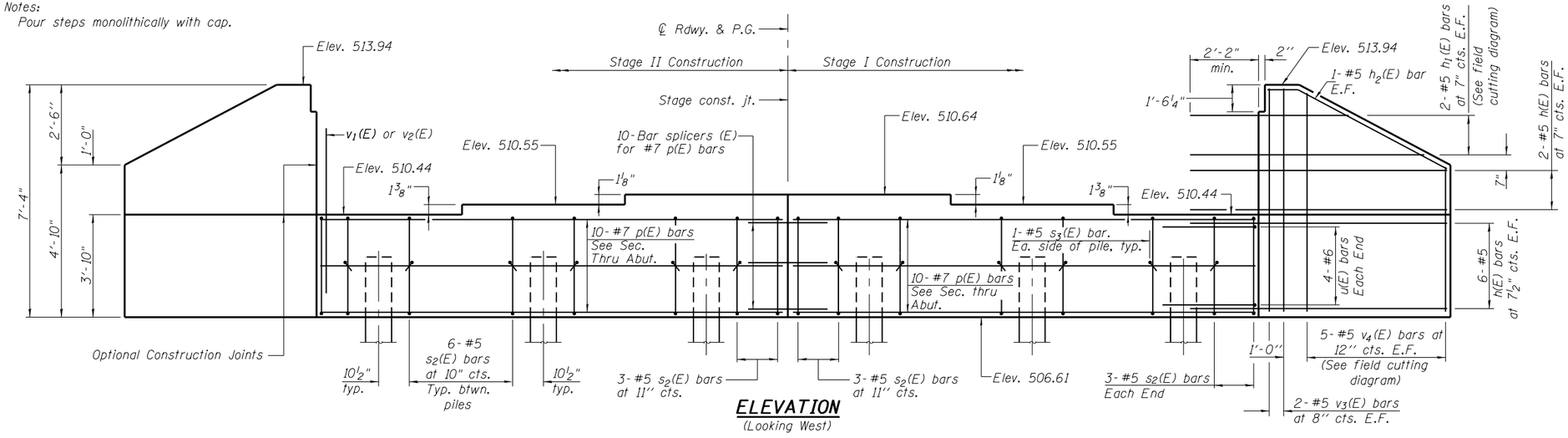
Location	℄ Brg. W. Abut.	℄ Splice 1	℄ Brg. Pier 1	℄ Splice 2	℄ Brg. Pier 2	℄ Splice 3	℄ Splice 4	℄ Brg. Pier 3	℄ Splice 5	℄ Brg. Pier 4	℄ Splice 6	℄ Brg. E. Abut.
Beam 1	513.14	513.62	513.70	513.79	513.97	514.02	514.02	513.97	513.79	513.70	513.62	513.14
Beam 2	513.24	513.73	513.81	513.90	514.08	514.12	514.12	514.08	513.90	513.81	513.73	513.24
Beam 3	513.34	513.82	513.90	513.99	514.17	514.22	514.22	514.17	513.99	513.90	513.82	513.34
Beam 4	513.34	513.82	513.90	513.99	514.17	514.22	514.22	514.17	513.99	513.90	513.82	513.34
Beam 5	513.24	513.73	513.81	513.90	514.08	514.12	514.12	514.08	513.90	513.81	513.73	513.24
Beam 6	513.14	513.62	513.70	513.79	513.97	514.02	514.02	513.97	513.79	513.70	513.62	513.14

*For fabrication use only.

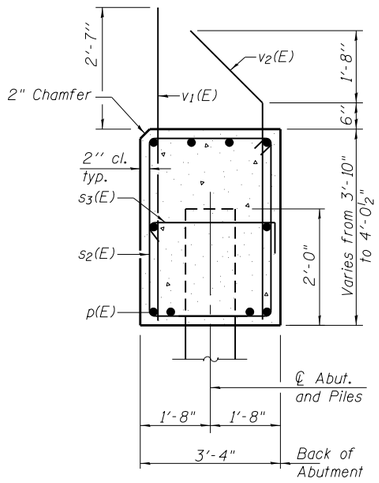
BILL OF MATERIAL

Item	Unit	Total
Anchor Bolts, 1" ϕ	Each	72

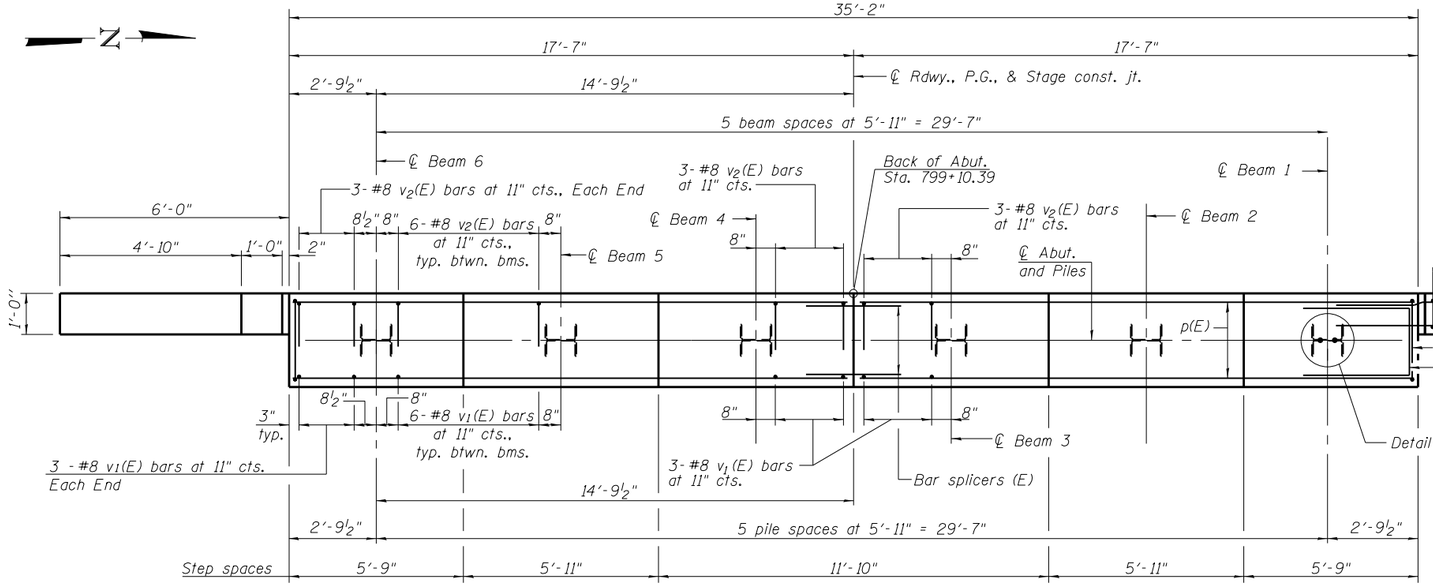
Notes:
Pour steps monolithically with cap.



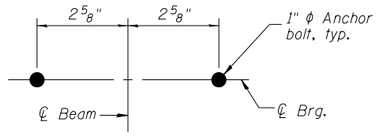
ELEVATION
(Looking West)



SEC. THRU ABUT.



PLAN



DETAIL A

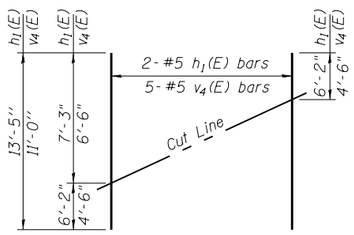
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	32	#5	8'-0"	
h_1(E)	4	#5	13'-5"	
h_2(E)	4	#5	6'-1"	
p(E)	20	#7	17'-3"	
s_2(E)	36	#5	13'-11"	
s_3(E)	12	#5	4'-0"	
u(E)	8	#6	10'-7"	
v_1(E)	36	#8	6'-3"	
v_2(E)	36	#8	6'-6"	
v_3(E)	8	#5	7'-0"	
v_4(E)	10	#5	11'-0"	
Structure Excavation		Cu. Yd.	81	
Concrete Structures		Cu. Yd.	19.9	
Reinforcement Bars, Epoxy Coated		Pound	3,150	
Furnishing Steel Piles HP 12x53		Foot	215	
Driving Piles		Foot	215	
Test Pile HP 12x53		Each	1	

For details of piles see sheet 27 of 34.

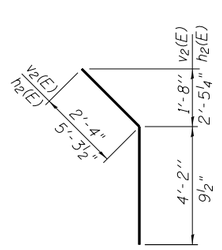
PILE DATA

Type: HP 12x53
Nominal Required Bearing: 419
Factored Resistance Available: 230
Est. Length: 43'
No. Production Piles: 5
No. Test Piles: 1

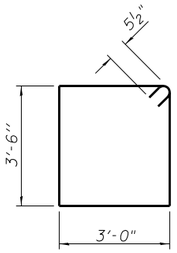


FIELD CUTTING DIAGRAM

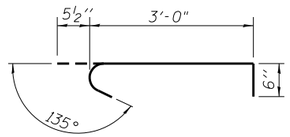
Order h_1(E) and v4(E) full length. Cut as shown and use remainder of bars in opposite face.



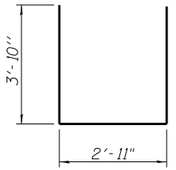
BAR v_2(E) & h_2(E)



BAR s_2(E)



BAR s_3(E)



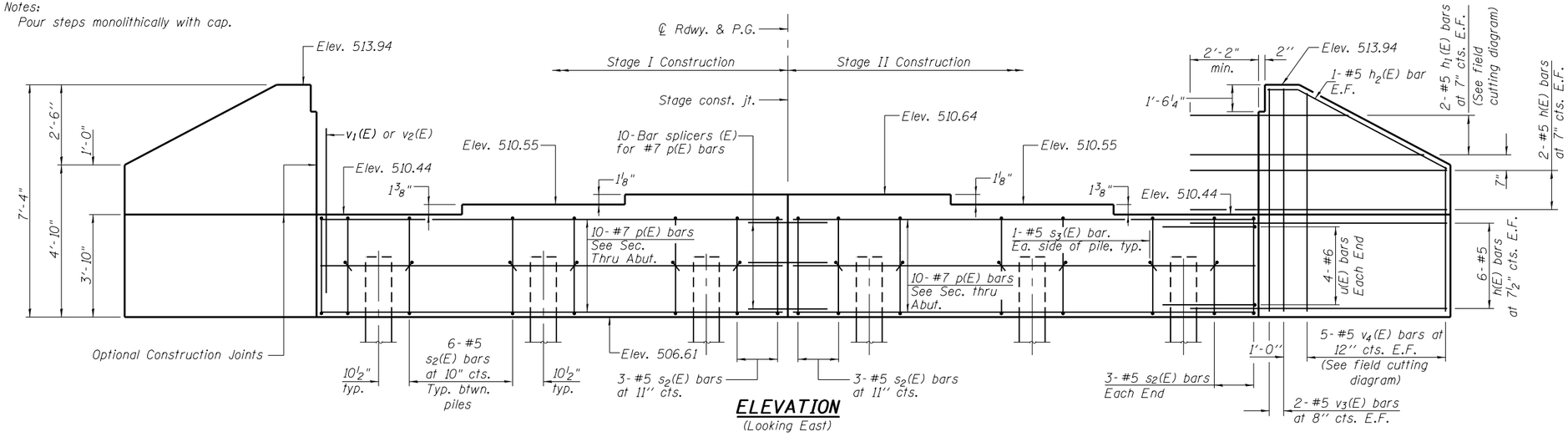
BAR u(E)

FILE NAME = 0720229-68697-02I-West Abutment.dgn	USER NAME =	DESIGNED - BWP	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
BFW BACON | FARMER | WORKMAN ENGINEERING & TESTING, INC. 403 NORTH COURT STREET MARION, ILLINOIS 62959 PHONE - 618.997.3190		CHECKED - CMV	REVISED -	
	PLOT SCALE =	DRAWN - BJV	REVISED -	
	PLOT DATE = 3/18/2014	CHECKED - BWP	REVISED -	

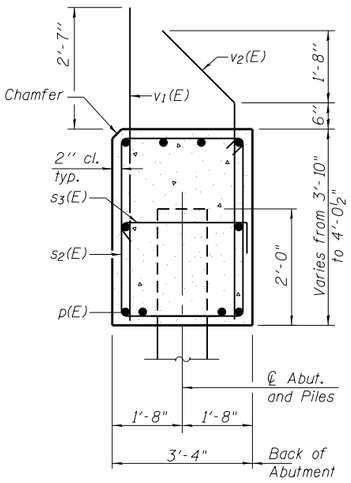
WEST ABUTMENT
STRUCTURE NO. 072-0229
SHEET NO. 21 OF 34 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	63
		CONTRACT NO. 68697		
	ILLINOIS	FED. AID PROJECT		

Notes:
Pour steps monolithically with cap.



ELEVATION
(Looking East)



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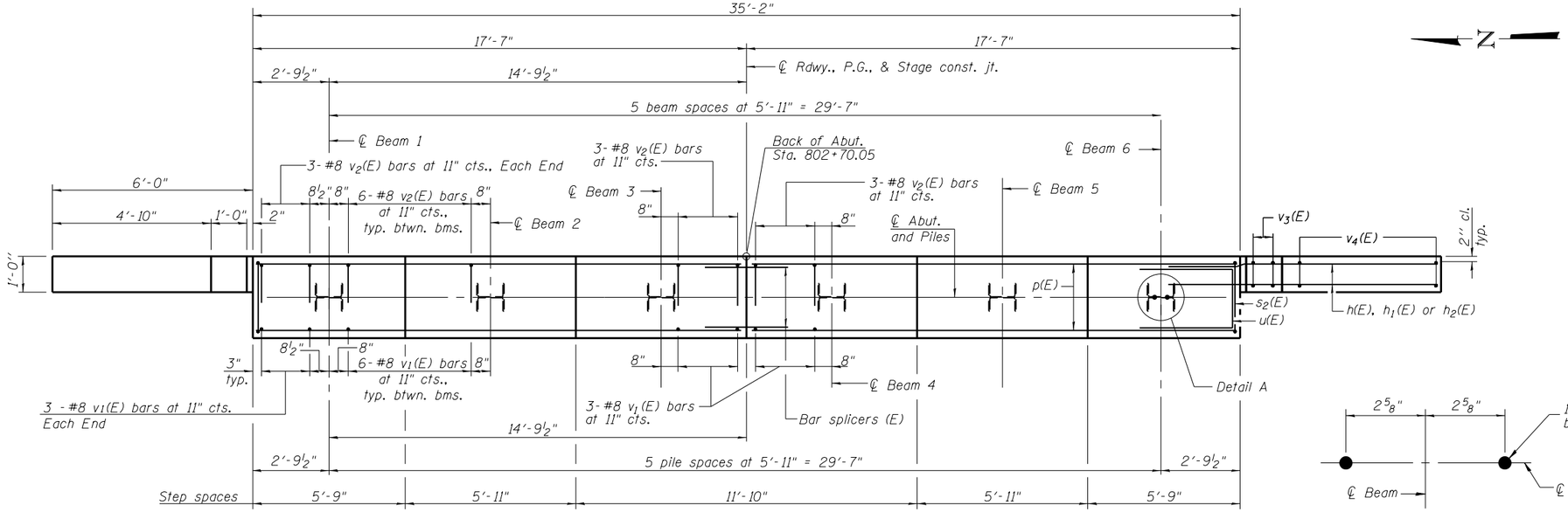
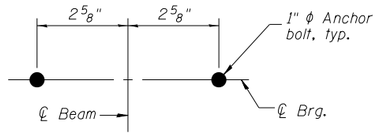


PLAN



DETAIL A

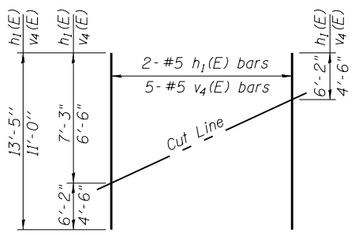
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	32	#5	8'-0"	
$h_1(E)$	4	#5	13'-5"	
$h_2(E)$	4	#5	6'-1"	
p(E)	20	#7	17'-3"	
$s_2(E)$	36	#5	13'-11"	
$s_3(E)$	12	#5	4'-0"	
u(E)	8	#6	10'-7"	
$v_1(E)$	36	#8	6'-3"	
$v_2(E)$	36	#8	6'-6"	
$v_3(E)$	8	#5	7'-0"	
$v_4(E)$	10	#5	11'-0"	
Structure Excavation	Cu. Yd.		81	
Concrete Structures	Cu. Yd.		19.9	
Reinforcement Bars, Epoxy Coated	Pound		3,150	
Furnishing Steel Piles HP 12x53	Foot		220	
Driving Piles	Foot		220	
Test Pile HP 12x53	Each		1	

For details of piles see sheet 27 of 34.

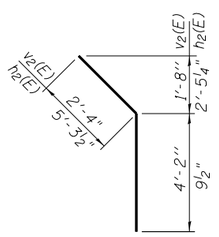
PILE DATA

Type: HP 12x53
Nominal Required Bearing: 419
Factored Resistance Available: 230
Est. Length: 44'
No. Production Piles: 5
No. Test Piles: 1

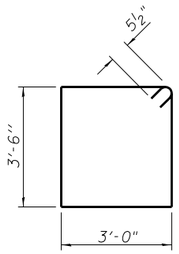


FIELD CUTTING DIAGRAM

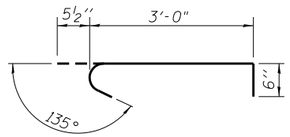
Order $h_1(E)$ and $v_4(E)$ full length. Cut as shown and use remainder of bars in opposite face.



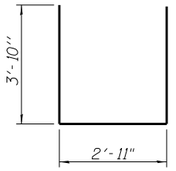
BAR $v_2(E)$ & $h_2(E)$



BAR $s_2(E)$



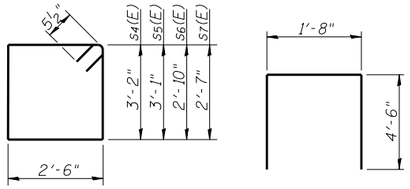
BAR $s_3(E)$



BAR u(E)

FILE NAME = 0720229-68697-022-East Abutment.dgn	USER NAME =	DESIGNED - BWP	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
BFW BACON | FARMER | WORKMAN ENGINEERING & TESTING, INC. 403 NORTH COURT STREET MARION, ILLINOIS 62959 PHONE - 618.997.3190		CHECKED - CMV	REVISED -	EAST ABUTMENT STRUCTURE NO. 072-0229
	PLOT SCALE =	DRAWN - BJV	REVISED -	SHEET NO. 22 OF 34 SHEETS
	PLOT DATE = 3/18/2014	CHECKED - BWP	REVISED -	

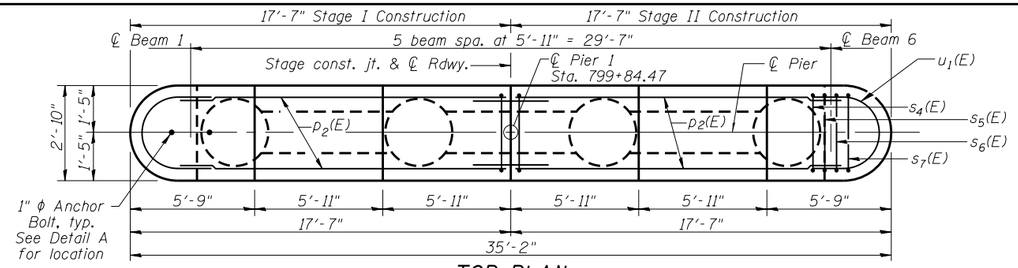
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	64
		CONTRACT NO. 68697		
	ILLINOIS	FED. AID PROJECT		



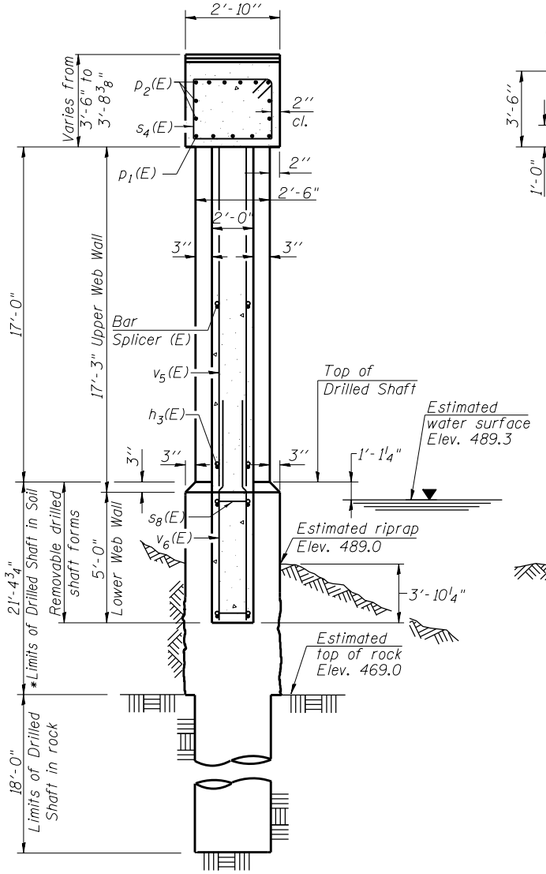
BAR $s_4(E)$, $s_5(E)$, $s_6(E)$ & $s_7(E)$

BAR $s_8(E)$

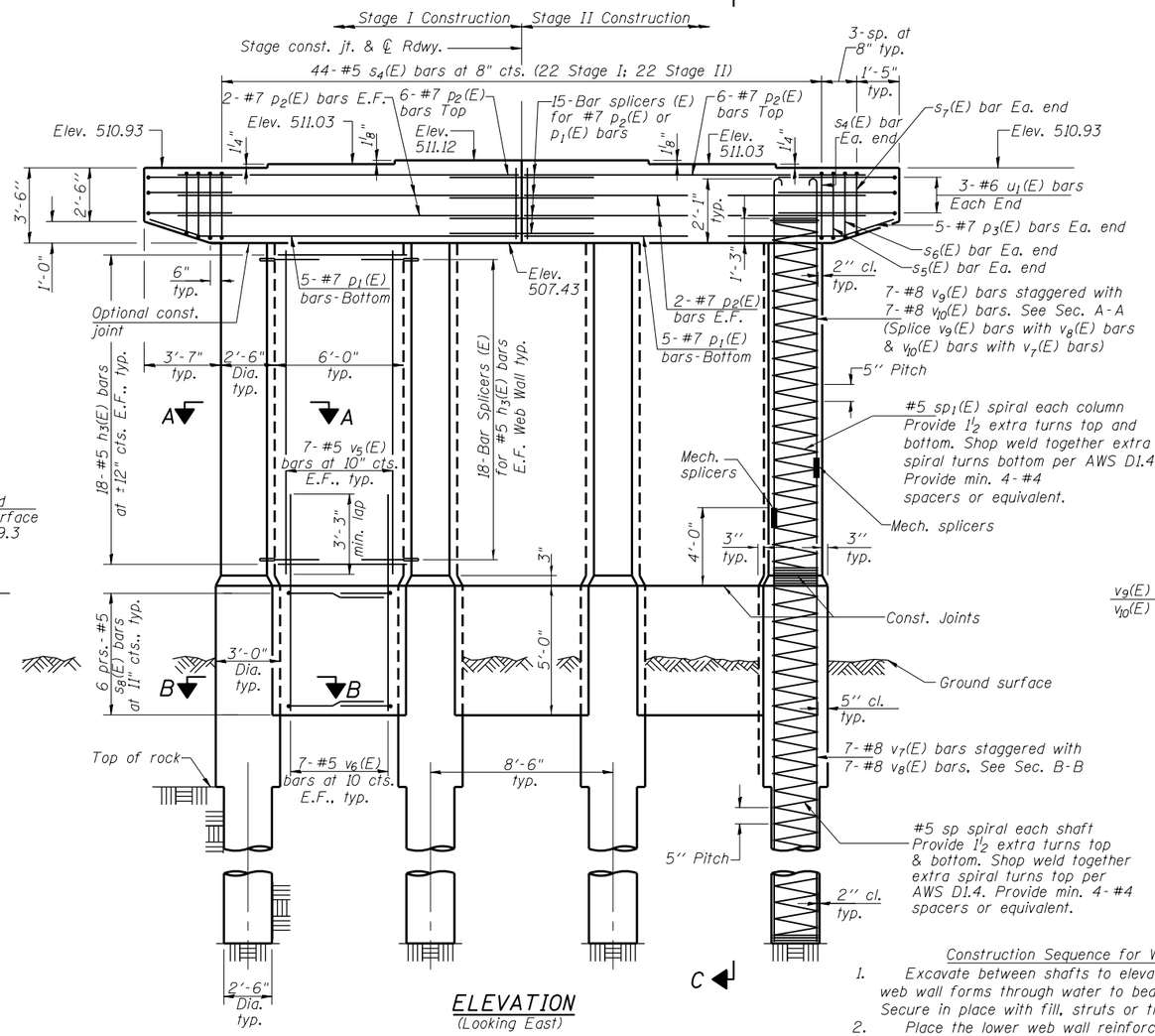
Note: When splicing of spiral reinforcement is necessary, the spirals shall be provided with $1\frac{1}{2}$ extra turns at the ends to be spliced. These additional turns shall either be welded together according to AWS D1.4 or shall both terminate with a 135° standard hook.
Center web wall shall be constructed during Stage II Construction.



TOP PLAN



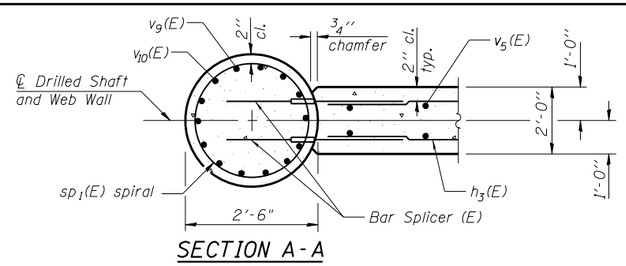
SECTION C-C



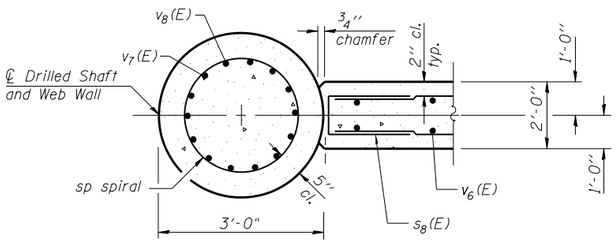
ELEVATION
(Looking East)

Note: If a portion of the drilled shaft web walls or concrete encasement is under water, reinforcement may be placed underwater into forms. Concrete shall be tremied according to Article 503.08 of the Standard Specifications to an elevation of 1'-0" above the water line at the time of construction.

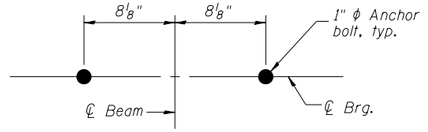
* If the prevailing water surface elevation during construction is consistently different than estimated on the plans, the contractor may propose an adjustment to the top of the drilled shaft elevation as part of their installation procedure. The top of all drilled shafts within a substructure unit shall be constructed to the same elevation and extend above the prevailing water surface. The quantities and reinforcement detailing are based on the top of shaft and the estimated elevations shown and may change based on the actual elevations encountered at each shaft and the final top of shaft elevation.



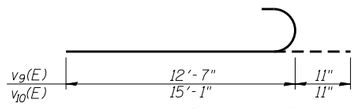
SECTION A-A



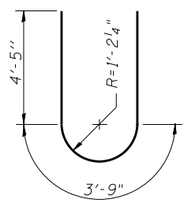
SECTION B-B



DETAIL A



BAR $v_9(E)$ & $v_{10}(E)$



BAR $u_1(E)$

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
$h_3(E)$	108	#5	5'-8"	
$p_1(E)$	10	#7	14'-4"	
$p_2(E)$	20	#7	16'-0"	
$p_3(E)$	10	#7	3'-1"	
$s_4(E)$	44	#5	12'-3"	
$s_5(E)$	2	#5	12'-1"	
$s_6(E)$	2	#5	11'-7"	
$s_7(E)$	2	#5	11'-1"	
$s_8(E)$	36	#5	10'-8"	
** sp	4	#5	39'-2"	
** $sp_1(E)$	4	#5	18'-3"	
$u_1(E)$	6	#6	12'-7"	
$v_5(E)$	42	#5	16'-11"	
$v_6(E)$	42	#5	8'-3"	
$v_7(E)$	28	#8	43'-5"	
$v_8(E)$	28	#8	45'-11"	
$v_9(E)$	28	#8	13'-6"	
$v_{10}(E)$	28	#8	16'-0"	
Structure Excavation			Cu. Yd.	13.1
Concrete Structures			Cu. Yd.	55.0
Reinforcement Bars			Pound	2760
Reinforcement Bars, Epoxy Coated			Pound	14,110
Drilled Shaft in Soil			Cu. Yd.	22.4
Drilled Shaft in Rock			Cu. Yd.	13.1

Cast steps monolithically with cap.
Space cap reinforcement to miss anchor bolts.
Minimum lap for spirals = 3'-9"
** Length is height of spiral.

Construction Sequence for Web Wall:

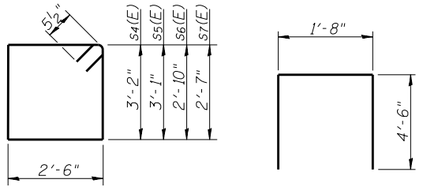
1. Excavate between shafts to elevation of web wall base and set lower web wall forms through water to bear on the circular edge of drilled shafts. Secure in place with fill, struts or tie forms together as required.
2. Place the lower web wall reinforcement cage into the forms using spacers to maintain proper clearances.
3. If the forms can be sealed against the shafts and streambed to allow dewatering, the reinforcement and the concrete placement may be completed in the dry. Alternatively, the rebar cage can be lowered into position through water and the concrete discharged at the base of the excavation through a tremie pipe or pump hose, displacing water, sediment, and tainted concrete out the top of the forms.
4. Construct Columns.
5. Construct upper web walls.

BFW
BACON | FARMER | WORKMAN
ENGINEERING & TESTING, INC.
403 NORTH COURT STREET
MARION, ILLINOIS 62959
PHONE - 618.997.9190

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 1
STRUCTURE NO. 072-0229
SHEET NO. 23 OF 34 SHEETS

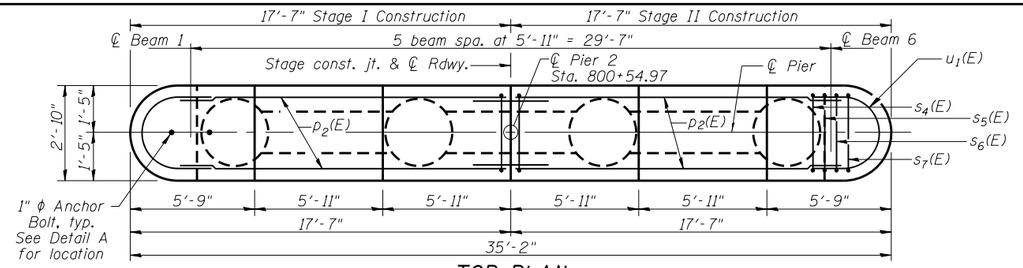
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	65
		CONTRACT NO. 68697		
	ILLINOIS FED. AID PROJECT			



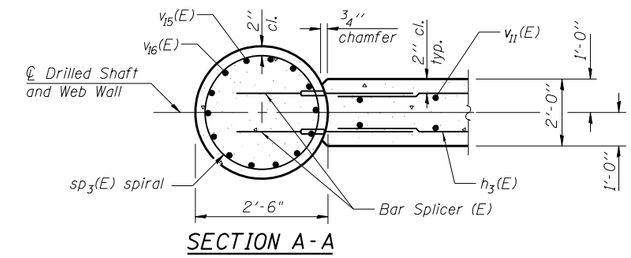
BAR $s_4(E)$, $s_5(E)$, $s_6(E)$ & $s_7(E)$

BAR $s_8(E)$

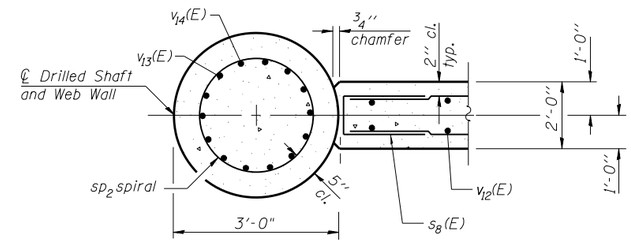
Note: When splicing of spiral reinforcement is necessary, the spirals shall be provided with $1\frac{1}{2}$ extra turns at the ends to be spliced. These additional turns shall either be welded together according to AWS D1.4 or shall both terminate with a 135° standard hook.
Center web wall shall be constructed during Stage II Construction.



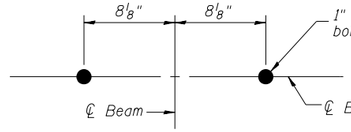
TOP PLAN



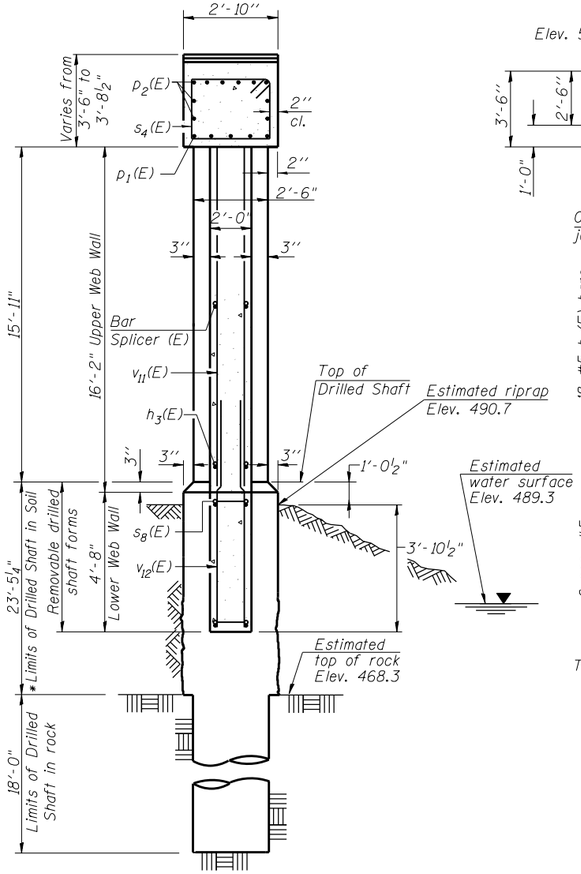
SECTION A-A



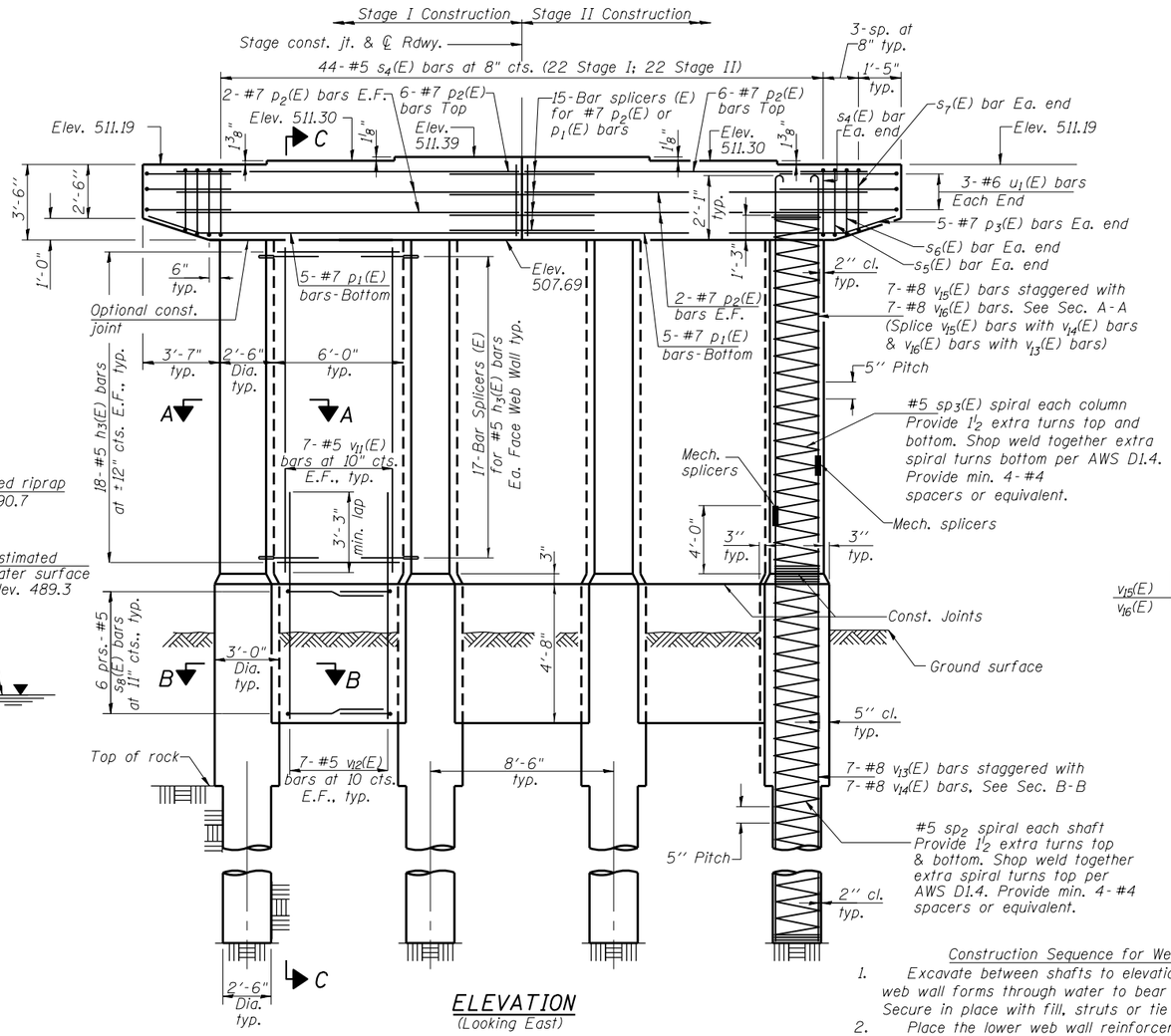
SECTION B-B



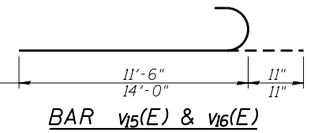
DETAIL A



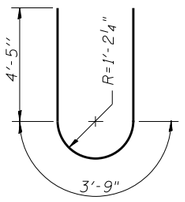
SECTION C-C



ELEVATION
(Looking East)



BAR $v_{15}(E)$ & $v_{16}(E)$



BAR $u_1(E)$

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
$h_3(E)$	102	#5	5'-8"	—
$p_1(E)$	10	#7	14'-4"	—
$p_2(E)$	20	#7	16'-0"	—
$p_3(E)$	10	#7	3'-1"	—
$s_4(E)$	44	#5	12'-3"	⌐
$s_5(E)$	2	#5	12'-1"	⌐
$s_6(E)$	2	#5	11'-7"	⌐
$s_7(E)$	2	#5	11'-1"	⌐
$s_8(E)$	36	#5	10'-8"	□
** sp_2	4	#5	41'-2"	∿∿∿
** $sp_3(E)$	4	#5	17'-2"	∿∿∿
$u_1(E)$	6	#6	12'-7"	⊃
$v_{11}(E)$	42	#5	15'-10"	—
$v_{12}(E)$	42	#5	7'-11"	—
$v_{13}(E)$	28	#8	45'-6"	—
$v_{14}(E)$	28	#8	48'-0"	—
$v_{15}(E)$	28	#8	12'-5"	⊃
$v_{16}(E)$	28	#8	14'-11"	⊃
Structure Excavation			Cu. Yd.	13.1
Concrete Structures			Cu. Yd.	52.0
Reinforcement Bars			Pound	2900
Reinforcement Bars, Epoxy Coated			Pound	14,090
Drilled Shaft in Soil			Cu. Yd.	24.5
Drilled Shaft in Rock			Cu. Yd.	13.1

Cast steps monolithically with cap.
Space cap reinforcement to miss anchor bolts.
Minimum lap for spirals = 3'-9"
** Length is height of spiral.

Note: If a portion of the drilled shaft web walls or concrete encasement is under water, reinforcement may be placed underwater into forms. Concrete shall be tremied according to Article 503.08 of the Standard Specifications to an elevation of 1'-0" above the water line at the time of construction.

* If the prevailing water surface elevation during construction is consistently different than estimated on the plans, the contractor may propose an adjustment to the top of the drilled shaft elevation as part of their installation procedure. The top of all drilled shafts within a substructure unit shall be constructed to the same elevation and extend above the prevailing water surface. The quantities and reinforcement detailing are based on the top of shaft and the estimated elevations shown and may change based on the actual elevations encountered at each shaft and the final top of shaft elevation.

Construction Sequence for Web Wall:

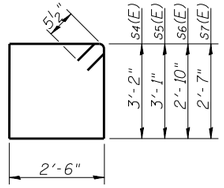
1. Excavate between shafts to elevation of web wall base and set lower web wall forms through water to bear on the circular edge of drilled shafts. Secure in place with fill, struts or tie forms together as required.
2. Place the lower web wall reinforcement cage into the forms using spacers to maintain proper clearances.
3. If the forms can be sealed against the shafts and streambed to allow dewatering, the reinforcement and the concrete placement may be completed in the dry. Alternatively, the rebar cage can be lowered into position through water and the concrete discharged at the base of the excavation through a tremie pipe or pump hose, displacing water, sediment, and tainted concrete out the top of the forms.
4. Construct Columns.
5. Construct upper web walls.

FILE NAME = 0720229-68697-024-Pier 2.dgn	USER NAME =	DESIGNED - BWP	REVISED -
BFW BACON | FARMER | WORKMAN ENGINEERING & TESTING, INC. 403 NORTH COURT STREET MARION, ILLINOIS 62959 PHONE - 618.997.9190		CHECKED - CMV	REVISED -
	PLOT SCALE =	DRAWN - BJV	REVISED -
	PLOT DATE = 3/18/2014	CHECKED - CMV	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

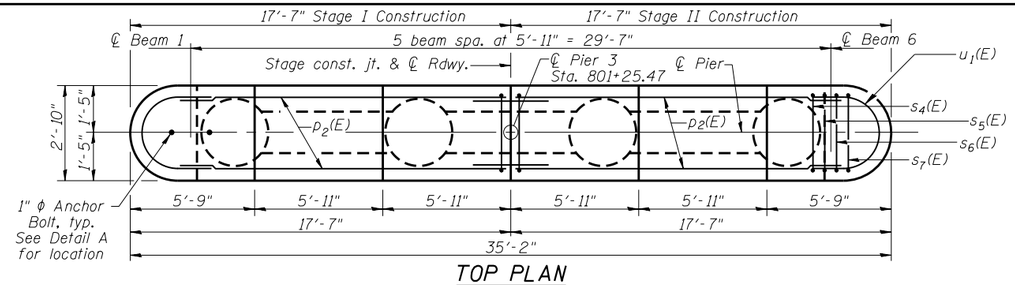
PIER 2
STRUCTURE NO. 072-0229
SHEET NO. 24 OF 34 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	66
		CONTRACT NO. 68697		
	ILLINOIS FED. AID PROJECT			

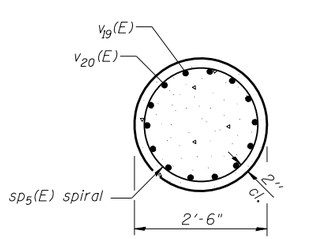


BAR $s_4(E)$, $s_5(E)$, $s_6(E)$ & $s_7(E)$

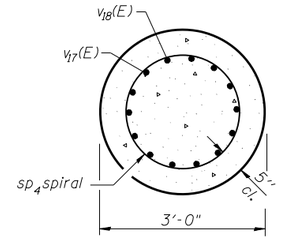
Note: When splicing of spiral reinforcement is necessary, the spirals shall be provided with $1\frac{1}{2}$ extra turns at the ends to be spliced. These additional turns shall either be welded together according to AWS D1.4 or shall both terminate with a 135° standard hook.



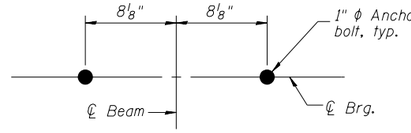
TOP PLAN



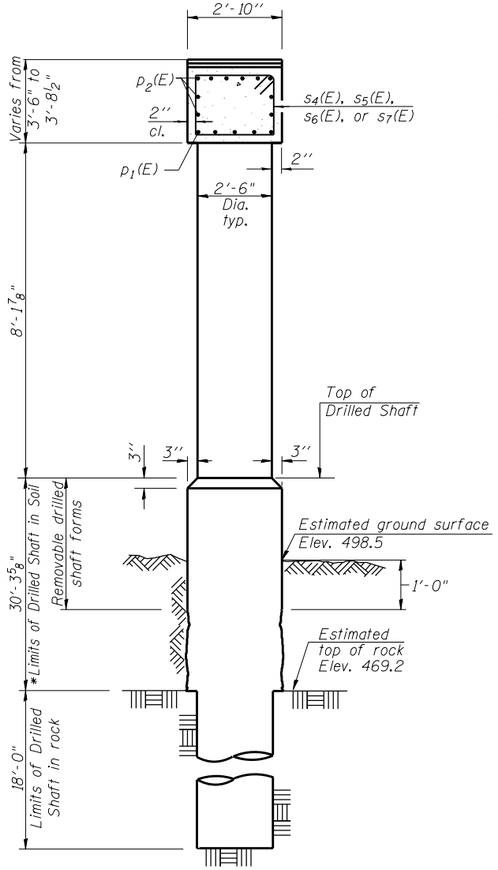
SECTION A-A



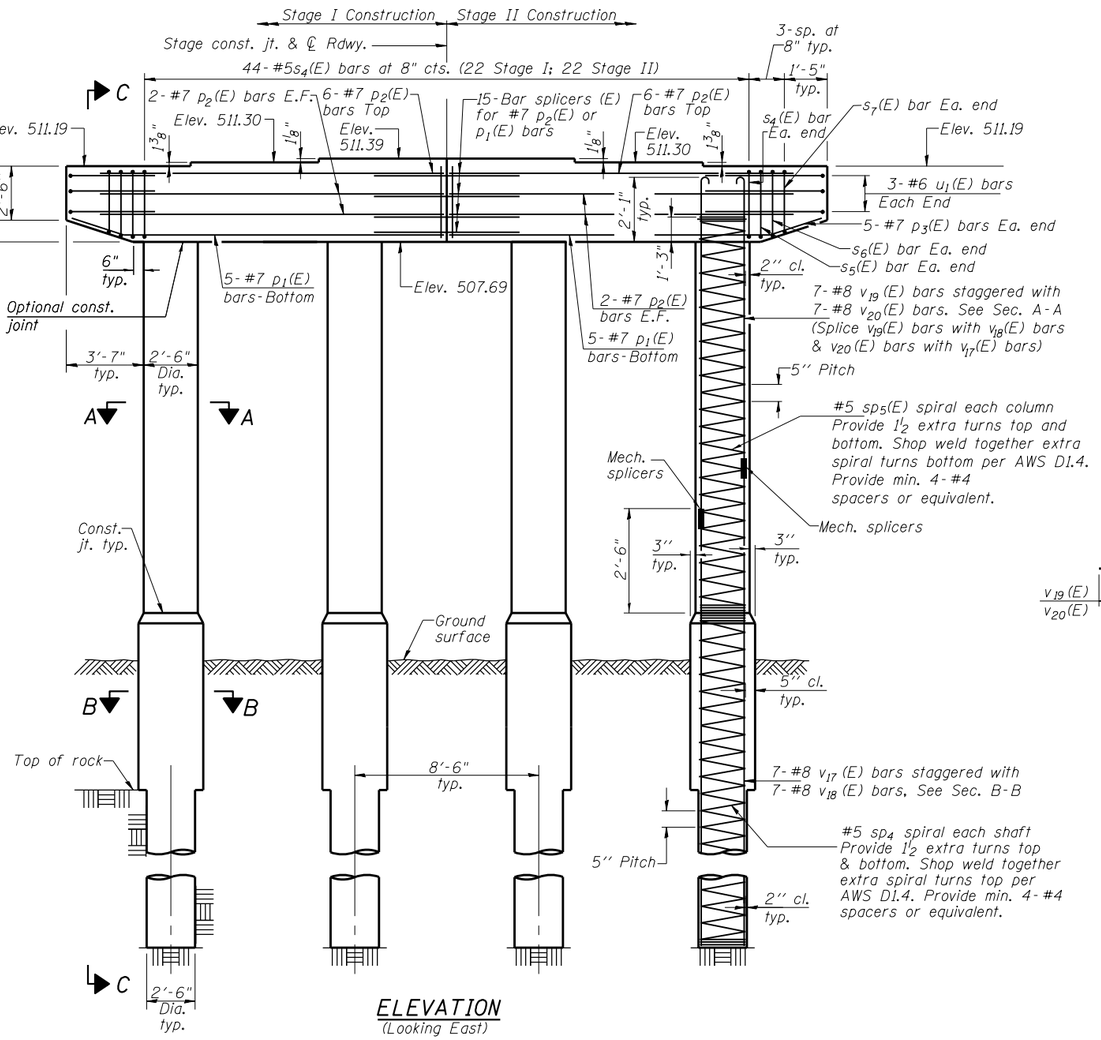
SECTION B-B



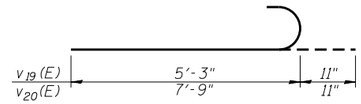
DETAIL A



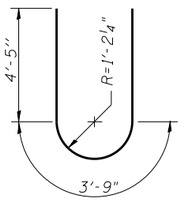
SECTION C-C



ELEVATION
(Looking East)



BAR $v_{19}(E)$ & $v_{20}(E)$



BAR $u_1(E)$

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
$p_1(E)$	10	#7	14'-4"	——
$p_2(E)$	20	#7	16'-0"	——
$p_3(E)$	10	#7	3'-1"	——
$s_4(E)$	44	#5	12'-3"	☐
$s_5(E)$	2	#5	12'-1"	☐
$s_6(E)$	2	#5	11'-7"	☐
$s_7(E)$	2	#5	11'-1"	☐
** sp_4	4	#5	48'-1"	∿∿∿
** $sp_5(E)$	4	#5	9'-5"	∿∿∿
$u_1(E)$	6	#6	12'-7"	⊃
$v_{17}(E)$	28	#8	50'-10"	——
$v_{18}(E)$	28	#8	53'-4"	——
$v_{19}(E)$	28	#8	6'-2"	⊃
$v_{20}(E)$	28	#8	8'-8"	⊃
Concrete Structures		Cu. Yd.	18.9	
Reinforcement Bars		Pound	3370	
Reinforcement Bars, Epoxy Coated		Pound	11,380	
Drilled Shaft in Soil		Cu. Yd.	31.7	
Drilled Shaft in Rock		Cu. Yd.	13.1	

Cast steps monolithically with cap.
Space cap reinforcement to miss anchor bolts.
Minimum lap for spirals = 3'-9"
** Length is height of spiral.

* If the prevailing water surface elevation during construction is consistently different than estimated on the plans, the contractor may propose an adjustment to the top of the drilled shaft elevation as part of their installation procedure. The top of all drilled shafts within a substructure unit shall be constructed to the same elevation and extend above the prevailing water surface. The quantities and reinforcement detailing are based on the top of shaft and the estimated elevations shown and may change based on the actual elevations encountered at each shaft and the final top of shaft elevation.

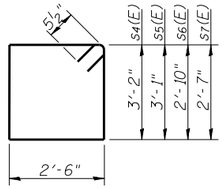
FILE NAME = 0720229-68697-025-Pier 3.dgn | USER NAME = | DESIGNED - BWP | REVISED -
CHECKED - CMV | REVISED -
PLOT SCALE = | DRAWN - BJV | REVISED -
PLOT DATE = 3/18/2014 | CHECKED - CMV | REVISED -

BFW BACON | FARMER | WORKMAN ENGINEERING & TESTING, INC.
403 NORTH COURT STREET MARION, ILLINOIS 62959 PHONE - 618.997.9190

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

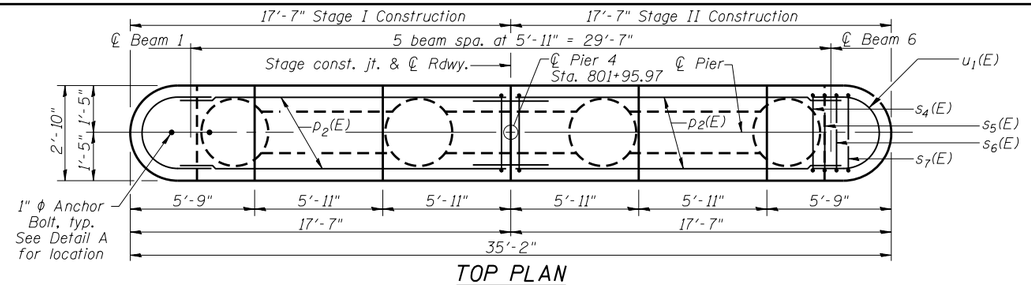
PIER 3
STRUCTURE NO. 072-0229
SHEET NO. 25 OF 34 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	67
		CONTRACT NO. 68697		
	ILLINOIS FED. AID PROJECT			

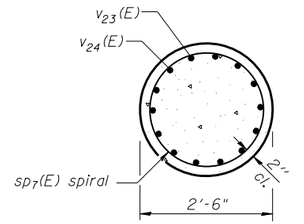


BAR $s_4(E)$, $s_5(E)$, $s_6(E)$ & $s_7(E)$

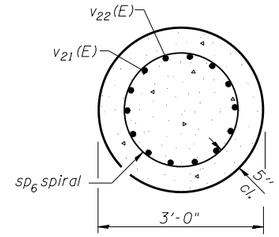
Note: When splicing of spiral reinforcement is necessary, the spirals shall be provided with $1\frac{1}{2}$ extra turns at the ends to be spliced. These additional turns shall either be welded together according to AWS D1.4 or shall both terminate with a 135° standard hook.



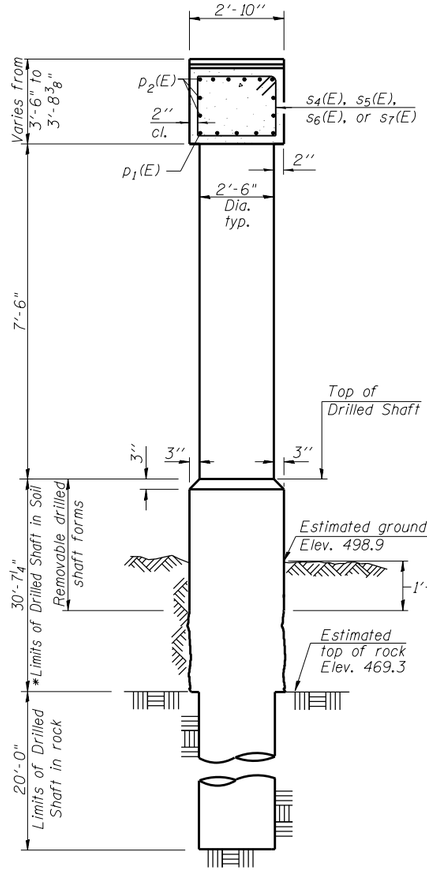
TOP PLAN



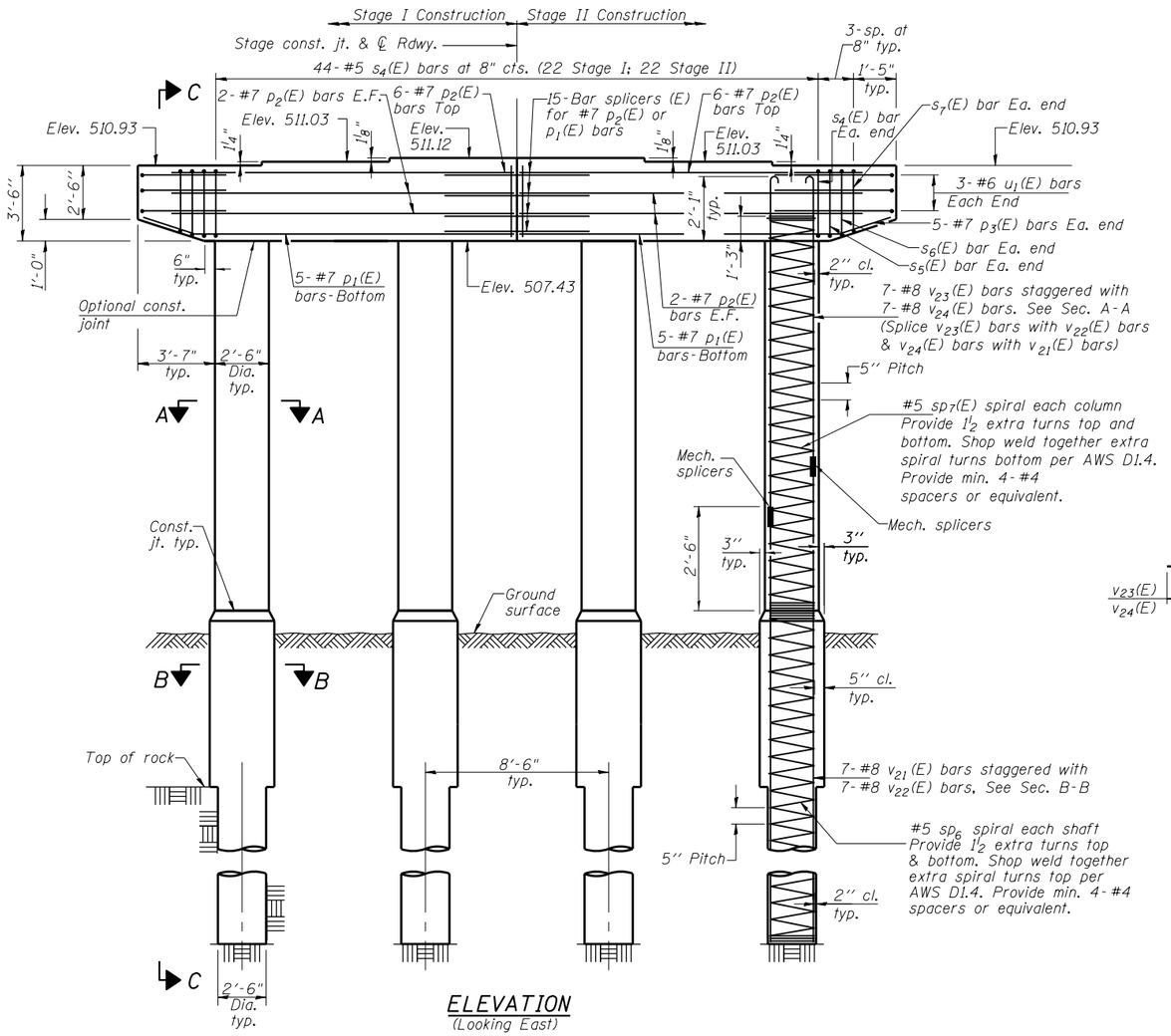
SECTION A-A



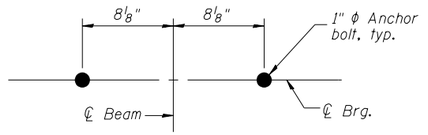
SECTION B-B



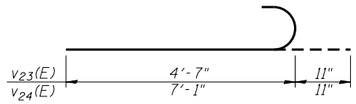
SECTION C-C



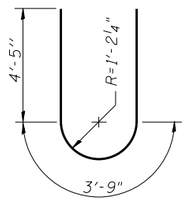
ELEVATION
(Looking East)



DETAIL A



BAR $v_{23}(E)$ & $v_{24}(E)$



BAR $u_1(E)$

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
$p_1(E)$	10	#7	14'-4"	——
$p_2(E)$	20	#7	16'-0"	——
$p_3(E)$	10	#7	3'-1"	——
$s_4(E)$	44	#5	12'-3"	☐
$s_5(E)$	2	#5	12'-1"	☐
$s_6(E)$	2	#5	11'-7"	☐
$s_7(E)$	2	#5	11'-1"	☐
** sp_6	4	#5	50'-4"	∿∿∿
** $sp_7(E)$	4	#5	8'-9"	∿∿∿
$u_1(E)$	6	#6	12'-7"	⊃
$v_{21}(E)$	28	#8	53'-1"	——
$v_{22}(E)$	28	#8	55'-7"	——
$v_{23}(E)$	28	#8	5'-6"	⊃
$v_{24}(E)$	28	#8	8'-0"	⊃

Concrete Structures	Cu. Yd.	18.4
Reinforcement Bars	Pound	3520
Reinforcement Bars, Epoxy Coated	Pound	11,570
Drilled Shaft in Soil	Cu. Yd.	32.0
Drilled Shaft in Rock	Cu. Yd.	14.5

Cast steps monolithically with cap.
Space cap reinforcement to miss anchor bolts.
Minimum lap for spirals = 3'-9"
** Length is height of spiral.

* If the prevailing water surface elevation during construction is consistently different than estimated on the plans, the contractor may propose an adjustment to the top of the drilled shaft elevation as part of their installation procedure. The top of all drilled shafts within a substructure unit shall be constructed to the same elevation and extend above the prevailing water surface. The quantities and reinforcement detailing are based on the top of shaft and the estimated elevations shown and may change based on the actual elevations encountered at each shaft and the final top of shaft elevation.

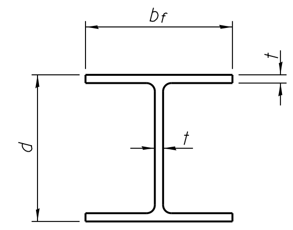
FILE NAME = 0720229-68697-026-Pier 4.dgn | USER NAME = | DESIGNED - BWP | REVISED -
CHECKED - CMV | REVISED -
PLOT SCALE = | DRAWN - BJV | REVISED -
PLOT DATE = 3/18/2014 | CHECKED - CMV | REVISED -

BFW BACON | FARMER | WORKMAN ENGINEERING & TESTING, INC.
403 NORTH COURT STREET MARION, ILLINOIS 62959 PHONE - 618.997.9190

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

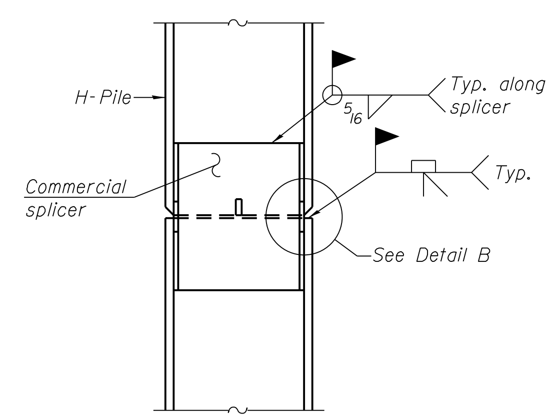
PIER 4
STRUCTURE NO. 072-0229
SHEET NO. 26 OF 34 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	68
		CONTRACT NO. 68697		
	ILLINOIS FED. AID PROJECT			

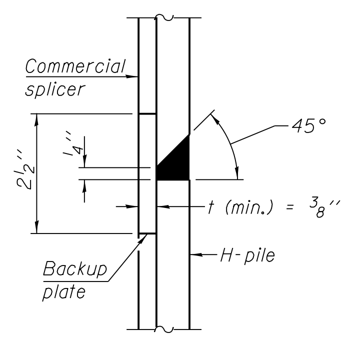


STEEL PILE TABLE

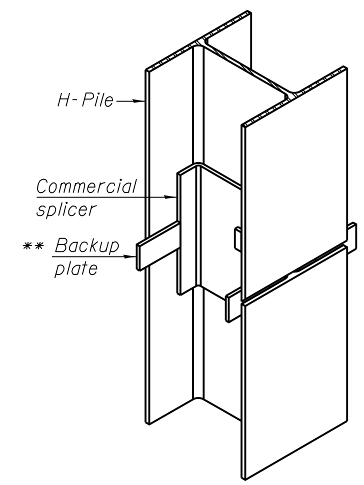
Designation	Depth d	Flange width b_f	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4''	14 7/8''	13/16''	30''
x102	14''	14 3/4''	11/16''	30''
x89	13 7/8''	14 3/4''	5/8''	30''
x73	13 5/8''	14 5/8''	1/2''	30''
HP 12x84	12 1/4''	12 1/4''	11/16''	24''
x74	12 1/8''	12 1/4''	5/8''	24''
x63	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

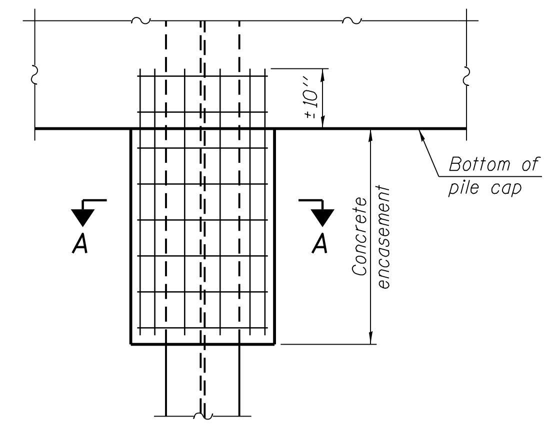


DETAIL "B"

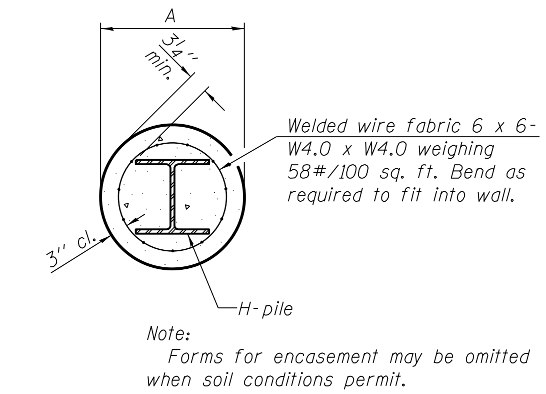


ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE



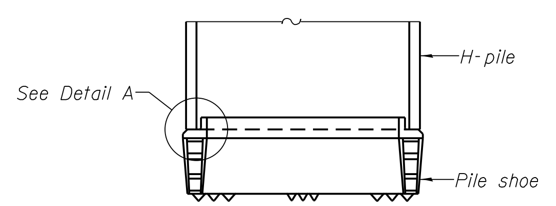
ELEVATION



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

SECTION A-A

PILE ENCASEMENT



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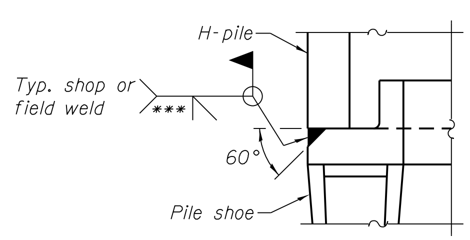
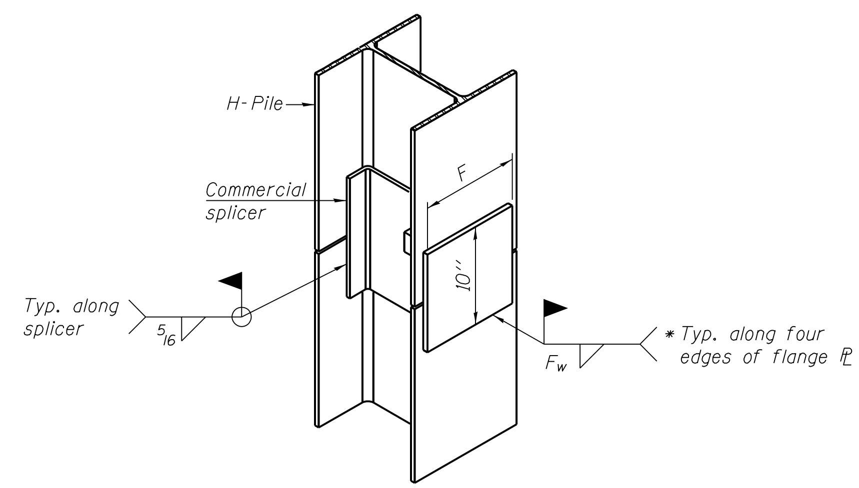


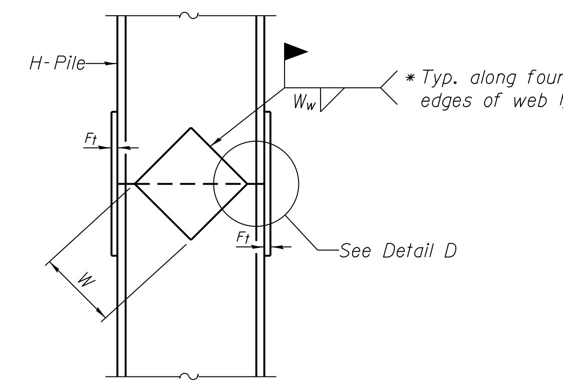
DETAIL A

H-PILE SHOE ATTACHMENT

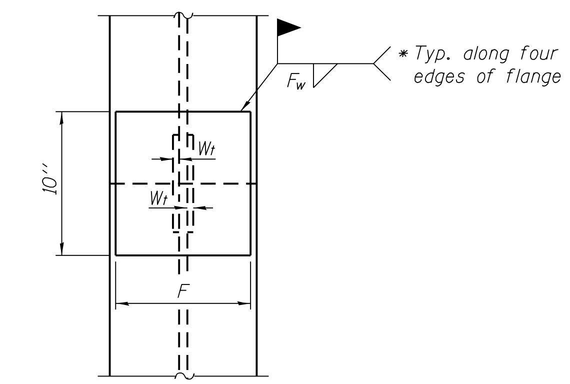


ISOMETRIC VIEW

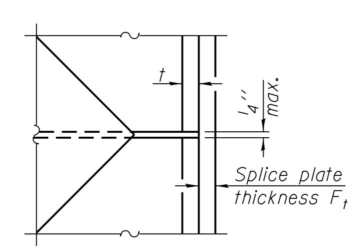
WELDED COMMERCIAL SPLICE ALTERNATE



ELEVATION



END VIEW



DETAIL D

Designation	F	F_t	F_w	W	W_t	W_w
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''	11/16''	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''	11/16''	6 1/2''	5/8''	1/2''
x74	10''	7/8''	11/16''	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''

WELDED PLATE FIELD SPLICE

* 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.

F-HP 1-27-12

FILE NAME = 0720229-68697-027-HP Piles Details.dgn

BACON | FARMER | WORKMAN ENGINEERING & TESTING, INC.

USER NAME =	DESIGNED - BWP	REVISED -
	CHECKED - CMV	REVISED -
PLOT SCALE =	DRAWN - BWP	REVISED -
PLOT DATE = 3/18/2014	CHECKED - CMV	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

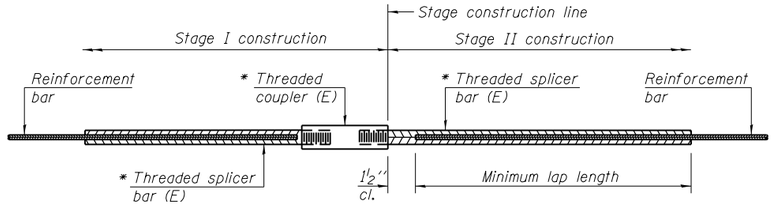
HP PILE DETAILS
STRUCTURE NO. 072-0229

SHEET NO. 27 OF 34 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	69

CONTRACT NO. 68697

ILLINOIS FED. AID PROJECT



STANDARD BAR SPLICER ASSEMBLY

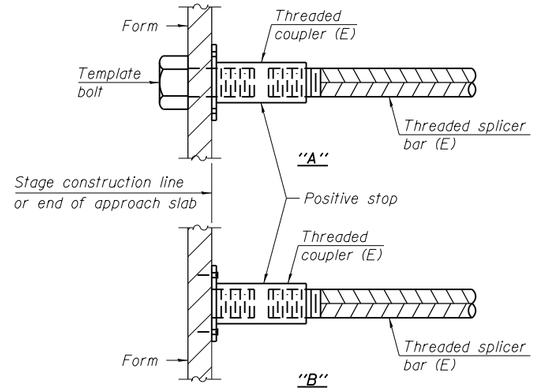
Minimum Lap Lengths						
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5	Table 6
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-7"	2'-11"
5	1'-9"	2'-5"	2'-7"	2'-11"	3'-3"	3'-8"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-10"	4'-5"
7	2'-9"	3'-10"	4'-2"	4'-8"	5'-2"	5'-10"
8	3'-8"	5'-1"	5'-5"	6'-2"	6'-9"	7'-8"
9	4'-7"	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 + 1½" + thread length

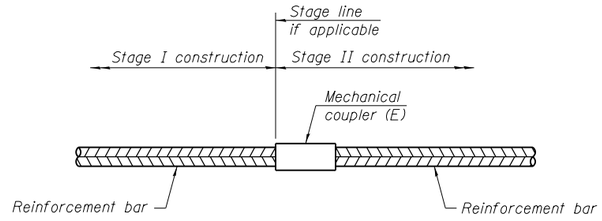
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length
Deck	#5	1044	3
Diaphragms	#6	14	4
Approaches	#4	62	3
Approach Footings	#5	80	3
West Abutment	#7	10	4
East Abutment	#7	10	4
Pier 1 (Web Wall)	#5	216	4
Pier 2 (Web Wall)	#5	204	4
Pier 1 (Cap)	#7	15	4
Pier 2 (Cap)	#7	15	4
Pier 3 (Cap)	#7	15	4
Pier 4 (Cap)	#7	15	4



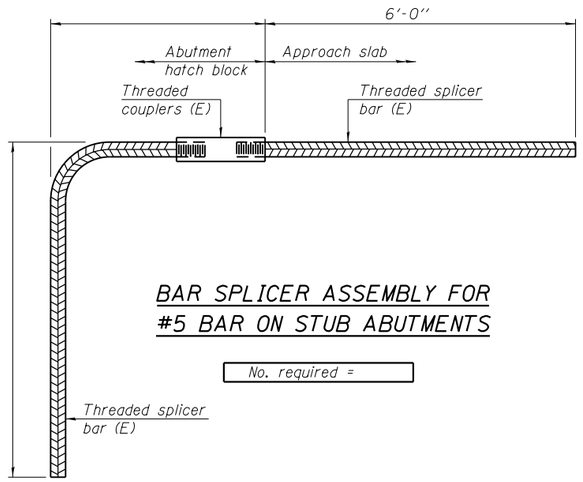
INSTALLATION AND SETTING METHODS

"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 1	#8	56
Pier 2	#8	56
Pier 3	#8	56
Pier 4	#8	56



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.

BSD-1 8-31-12

FILE NAME = 0720229-68697-028-Bar Splicers.dgn	USER NAME =	DESIGNED - BWP	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS STRUCTURE NO.	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
BACON | FARMER | WORKMAN ENGINEERING & TESTING, INC. 403 NORTH COURT STREET MARION, ILLINOIS 62959 PHONE - 618.997.9190		CHECKED - CMV	REVISED -			1388	(Z-1D-BR-1)BR	PEORIA	89	70
	PLOT SCALE =	DRAWN - BWP	REVISED -						CONTRACT NO. 68697	
	PLOT DATE = 3/18/2014	CHECKED - CMV	REVISED -		SHEET NO. 28 OF 34 SHEETS			ILLINOIS	FED. AID PROJECT	

Illinois Department of Transportation
Division of Highways
Geotech Engineering & Testing, Inc.

SOIL BORING LOG

Date 11/18/10

ROUTE FAS 1388 (IL 8) **DESCRIPTION** IL 8 Over Kickapoo Creek **LOGGED BY** C. Farmer

SECTION (Z-1D-BR-1) BR **LOCATION** SE 1/4, **SEC.** 24, **TWP.** 9N, **RNG.** 6E, 4th **PM,**
Latitude , Longitude

COUNTY Peoria **DRILLING METHOD** HSA **HAMMER TYPE** AUTO

STRUCT. NO. 072-0047
Station 792+64.23

BORING NO. AW
Station 799+14.97
Offset 13.0 ft RT
Ground Surface Elev. 511.44 ft

Surface Water Elev. 488.96 ft
Stream Bed Elev. 488.00 ft

Groundwater Elev.:
First Encounter 487.4 ft ▼
Upon Completion 486.4 ft ▽
After 24 **Hrs.** 486.8 ft ▼

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
				ASPHALT
510.44				
	2			Firm, Dark Brown, Moist, SILTY CLAY
	2	1.8	22	
	4	S		
507.94				
	2			Soft, Dark Brown, Wet, SILTY CLAY LOAM
	2	1.0	23	
-5	2	B		
504.44				
	3			Soft, Dark Brown, Wet, SANDY CLAY LOAM w/ Sand Lenses
	2	0.5	25	
	2	B		
501.94				
-10	1			Soft to Firm, Dark Brown to Brown Gray, Wet, SANDY CLAY LOAM
	2	0.8	23	
	2	B		
	2			
	3	0.9	22	
	3	B		
496.94				
-15	2			Very Loose to Loose, Brown, Wet, Fine SAND
	3		16	
	2			
	2			
	2		15	
	2			
491.94				
-20	1			Firm, Dark Brown, Wet, LOAM
	2		22	Firm, Dark Brown, Wet, LOAM *(continued)*
	3			
489.44				
	3			Loose, Brown, Saturated, Fine SAND
	4		15	
	3			
486.94				
-25	1			Very Loose to Firm, Brown to Gray, Saturated, Coarse SAND
	2		21	
	3			
	2			
	2		19	
	2			
-30	2			
	5		17	
	6			
476.94				
-35	2			Very Loose, Brown to Gray, Saturated, Coarse SAND, w/ Small Aggregate
	1		18	
	1			
471.94				
-40	7			

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, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Geotech Engineering & Testing, Inc.

SOIL BORING LOG

Date 11/18/10

ROUTE FAS 1388 (IL 8) **DESCRIPTION** IL 8 Over Kickapoo Creek **LOGGED BY** C. Farmer

SECTION (Z-1D-BR-1) BR **LOCATION** SE 1/4, **SEC.** 24, **TWP.** 9N, **RNG.** 6E, 4th **PM,**
Latitude , Longitude

COUNTY Peoria **DRILLING METHOD** HSA **HAMMER TYPE** AUTO

STRUCT. NO. 072-0047
Station 792+64.23

BORING NO. AW
Station 799+14.97
Offset 13.0 ft RT
Ground Surface Elev. 511.44 ft

Surface Water Elev. 488.96 ft
Stream Bed Elev. 488.00 ft

Groundwater Elev.:
First Encounter 487.4 ft ▼
Upon Completion 486.4 ft ▽
After 24 **Hrs.** 486.8 ft ▼

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
	4		11	Firm to Very Hard, Dark Gray, Wet, CLAY SHALE *(continued)*
	4			
-45	6			
	50/0.2		10	
-50	50/0.3			
			20	
-55	11			
	50/0.3		12	
455.44				
				End of Boring
-60				

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, form 137 (Rev. 8-99)

FILE NAME = 0720229-68697-029-Soil Boring Logs.dgn	USER NAME =	DESIGNED - BWP	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**SOIL BORING LOGS STRUCTURE NO. 072-0229**
BACON | FARMER | WORKMAN ENGINEERING & TESTING, INC. 403 NORTH COURT STREET MARION, ILLINOIS 62959 PHONE: 618.997.3190		CHECKED - CMV	REVISED -		SHEET NO. 29 OF 34 SHEETS
	PLOT SCALE =	DRAWN - BWP	REVISED -		
	PLOT DATE = 3/18/2014	CHECKED - CMV	REVISED -		

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	71
		CONTRACT NO. 68697		
	ILLINOIS FED. AID PROJECT			

Illinois Department of Transportation
Division of Highways
Geotech Engineering & Testing, Inc.

SOIL BORING LOG

Date 12/8/10

ROUTE FAS 1388 (IL 8) DESCRIPTION IL 8 Over Kickapoo Creek LOGGED BY C. Farmer

SECTION (Z-1D-BR-1) BR LOCATION SE 1/4, SEC. 24, TWP. 9N, RNG. 6E, 4th PM,
Latitude , Longitude

COUNTY Peoria DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. 072-0047
Station 792+64.23

BORING NO. Pier 01
Station 799+48.38
Offset 42.0 ft LT
Ground Surface Elev. 499.05 ft

Surface Water Elev. 489.04 ft
Stream Bed Elev. 488.00 ft

Groundwater Elev.:
First Encounter 485.1 ft ▼
Upon Completion 481.1 ft ▽
After 24 Hrs. 484.1 ft ▼

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Very Soft, Brown, Moist, TOPSOIL with Organics	1		
497.55	0		24
	0		
Very Stiff, Brown, Moist, SILTY CLAY LOAM	13		
	10		12
494.05 -5	10		
Loose, Tan, Moist, SANDY LOAM	4		
	3		8
491.55	3		
Very Loose to Loose, Brown to Tan, Coarse SANDY LOAM	1		
	1		20
	2		28
-10	1		
	1		
	1		29
	1		
	1		
	2		15
▽	2		
-15	2		
	4		16
	2		
481.55	4		
Very Loose to Firm, Brown to Tan, Coarse SAND w/ Soft Shale Lenses	2		24
	1		
-20			
Very Loose to Firm, Brown to Tan, Coarse SAND w/ Soft Shale Lenses *(continued)*	4		
	8		16
476.55	12		
Very Stiff, Brown, Saturated, SILTY CLAY LOAM	3		
	5		19
474.05 -25	12		
Firm, Brown to Tan, Saturated, Coarse SAND	3		
	5		17
	15		
470.55			20
Firm, Brown to Tan, Saturated, Coarse SAND w/ Shale Fragments	7		
469.05 -30	8		
Dark Gray, Highly Weathered, Interbedded, CLAY SHALE	6		
468.55	50/0.4		
Borehole continued with rock coring.			
-35			
-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, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
BACON | FARMER | WORKMAN ENGINEERING & TESTING INC.

ROCK CORE LOG

Date 12/8/10

ROUTE FAS 1388 (IL 8) DESCRIPTION IL 8 Over Kickapoo Creek LOGGED BY C. Farmer

SECTION (Z-1D-BR-1) BR LOCATION SE 1/4, SEC. 24, TWP. 9N, RNG. 6E, 4th PM,
Latitude , Longitude

COUNTY Peoria CORING METHOD Rotary, Surf Set Diamond Bit

STRUCT. NO. 072-0047
Station 792+64.23

CORING BARREL TYPE & SIZE NX-2, conv, dbl,bbl, solid in.
Core Diameter 2 in
Top of Rock Elev. 468.55 ft
Begin Core Elev. 468.85 ft

BORING NO. Pier 01
Station 799+48.38
Offset 42.0 ft LT
Ground Surface Elev. 499.05 ft

DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
Dark Gray, Highly Weathered, Fractured, Interbedded, CLAY SHALE and CLAY					
468.55					
Rock Core P1C2 from 30.5' to 33.0' deoth. Rock Mass Rating = 33 (Class No. IV - Poor Rock)					
466.05	P1C2	95	50	1.5	19.4
Dark Gray, Highly Weathered, Fractured, Interbedded, CLAY SHALE and CLAY					
Rock Core P1C1 from 33' to 38' depth. Rock Mass Rating = 33 (Class No. IV - Poor Rock)					
-35					
461.05	P1C3	79	55	1.5	15.3
Dark Gray, Highly Weathered, Interbedded, CLAY SHALE					
Rock Core P1C3 from 38' to 40' depth. Rock Mass Rating = 33 (Class No. IV - Poor Rock)					
459.05 -40	P1C4	42	60	2	
Dark Gray, Highly Weathered, Fractured, Interbedded, CLAY SHALE and CLAY					
Rock Core P1C4 from 40' to 45' depth. Rock Mass Rating = 33 (Class No. IV - Poor Rock)					
454.05 -45	P1C4	97	60	2	
Dark Gray, Highly Weathered, Interbedded, CLAY SHALE					
Rock Core P1C5 from 45' to 50' depth. Rock Mass Rating = 33 (Class No. IV - Poor Rock)					
449.05 -50					
End of Boring					

Color pictures of the cores Yes
Cores will be stored for examination until 12/8/12
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS, form 138 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Geotech Engineering & Testing, Inc.

SOIL BORING LOG

Date 11/30/10

ROUTE FAS 1388 (IL 8) DESCRIPTION IL 8 Over Kickapoo Creek LOGGED BY C. Farmer

SECTION (Z-1D-BR-1) BR LOCATION SE 1/4, SEC. 24, TWP. 9N, RNG. 6E, 4th PM,
Latitude , Longitude

COUNTY Peoria DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. 072-0047
Station 792+64.23

BORING NO. Pier 02
Station 800+76.38
Offset 25.0 ft RT
Ground Surface Elev. 497.27 ft

Surface Water Elev. 489.04 ft
Stream Bed Elev. 488.00 ft

Groundwater Elev.:
First Encounter 481.3 ft ▼
Upon Completion 480.3 ft ▽
After 36 Hrs. 486.1 ft ▼

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Very Loose, Tan, Moist, SANDY LOAM w/ LIMESTONE RIP RAP	3		
	1		
	1		
492.27 -5			
Very Soft to Firm, Brown, moist, SILTY CLAY LOAM w/ Some Organics	1		23
	1		
	2		
	2		
	3		
487.27 -10	2		
Very Soft, Dark Brown to Black, Very Moist to Wet, SILTY CLAY LOAM w/ Organics ▽	0		36
	0		
	1		
	0	0.1	21
483.27	0	B	
Very Loose to Dense, Brown to Tan, Wet, Coarse SAND -15	1		
▼	1		23
	1		
▽	3		
	3		21
-20	3		
Very Loose to Dense, Brown to Tan, Wet, Coarse SAND *(continued)*	9		
	12		10
	20		
474.77			
Very Firm to Dense, Brown to Tan, Saturated, Coarse SAND w/ Gravel and Shale Fragments	18		
	19		12
	17		
-25			
	6		
	10		15
	12		
			12
468.37	21		
Borehole continued with rock coring.	15		
	17		
-30			
-35			
-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, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
BACON | FARMER | WORKMAN ENGINEERING & TESTING INC.

ROCK CORE LOG

Date 11/30/10

ROUTE FAS 1388 (IL 8) DESCRIPTION IL 8 Over Kickapoo Creek LOGGED BY C. Farmer

SECTION (Z-1D-BR-1) BR LOCATION SE 1/4, SEC. 24, TWP. 9N, RNG. 6E, 4th PM,
Latitude , Longitude

COUNTY Peoria CORING METHOD Rotary, Surf Set Diamond Bit

STRUCT. NO. 072-0047
Station 792+64.23

CORING BARREL TYPE & SIZE NX-2, conv, dbl,bbl, solid in.
Core Diameter 2 in
Top of Rock Elev. 468.27 ft
Begin Core Elev. 468.27 ft

BORING NO. Pier 02
Station 800+76.38
Offset 25.0 ft RT
Ground Surface Elev. 497.27 ft

DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
Dark Gray, Highly Weathered, Stratified, CLAY SHALE with Dark Gray CLAY Seams -30	P2C1	100	57	2	
Rock Core P2C1 from 29.0' to 36.0' deoth. Rock Mass Rating = 27 (Class No. IV - Poor Rock) (continued)					
-35					
461.27					
Dark Gray, Highly Weathered, Stratified, CLAY SHALE	P2C2	84	62	2	26.1
Rock Core P2C2 from 36.0' to 44.0' deoth. Rock Mass Rating = 33 (Class No. IV - Poor Rock)					
-40					
453.27					
End of Boring -45					

Color pictures of the cores Yes
Cores will be stored for examination until 12/8/12
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS, form 138 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Geotech Engineering & Testing, Inc.

SOIL BORING LOG

Date 11/29/10

ROUTE FAS 1388 (IL 8) DESCRIPTION IL 8 Over Kickapoo Creek LOGGED BY C. Farmer

SECTION (Z-1D-BR-1) BR LOCATION SE 1/4, SEC. 24, TWP. 9N, RNG. 6E, 4th PM,
Latitude , Longitude

COUNTY Peoria DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. 072-0047
Station 792+64.23

BORING NO. Pier 03
Station 801.25.46
Offset 25.0 ft LT
Ground Surface Elev. 499.28 ft

Surface Water Elev. 489.04 ft
Stream Bed Elev. 488.00 ft

Groundwater Elev.:
First Encounter 483.3 ft ▼
Upon Completion 481.3 ft ▽
After 36 Hrs. 487.7 ft ▼

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Soil Description
	1			TOPSOIL
	2		24	
497.78	2			
				Very Stiff, Brown, Moist, SILTY CLAY w/ Rock Fragments
	8			
	8		19	
	8			
494.28 -5				
	1			Very Soft, Dark Brown, Moist to Wet, SILTY CLAY LOAM w/ Sand Lenses
	1	1.3 B	31	
	1			
491.78				
	2			Very Soft to Soft, Brown, Wet, SILTY CLAY LOAM
	1	1.3 B	24	
	1			
-10				
	1			
	1	1.6 B	23	
▼	3			
486.78				
	1			Very Soft, Brown to Gray, SILTY CLAY LOAM
	1	1.1 B	28	
	1			
484.28 -15				
	1			Firm, Brown to Tan, Wet to Saturated, Coarse SAND w/ Some Aggregate
▼	2		15	
	3			
482.28				
	4			Very Loose to Very Firm, Brown to Tan, Saturated, Coarse SAND
▽	2		20	
	1			
-20				

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Soil Description
	3			Very Loose to Very Firm, Brown to Tan, Saturated, Coarse SAND *(continued)*
	7		18	
	11			
	10			
	6		13	
	8			
-25				
	4			
	4		19	
	5			
	15			
	17		18	
	12			
469.28 -30				
				Borehole continued with rock coring.
-35				
-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, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
BACON | FARMER | WORKMAN ENGINEERING & TESTING INC.

ROCK CORE LOG

Date 11/29/10

ROUTE FAS 1388 (IL 8) DESCRIPTION IL 8 Over Kickapoo Creek LOGGED BY C. Farmer

SECTION (Z-1D-BR-1) BR LOCATION SE 1/4, SEC. 24, TWP. 9N, RNG. 6E, 4th PM,
Latitude , Longitude

COUNTY Peoria CORING METHOD Rotary, Surf Set Diamond Bit

STRUCT. NO. 072-0047
Station 792+64.23

CORING BARREL TYPE & SIZE NX-2, conv, dbl,bbl, solid in.
Core Diameter 2 in
Top of Rock Elev. 469.28 ft
Begin Core Elev. 468.28 ft

BORING NO. Pier 03
Station 801.25.46
Offset 25.0 ft LT
Ground Surface Elev. 499.28 ft

DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)	Rock Description
469.28						Firm, Dark Gray, Wet, CLAY and CLAY SHALE
468.28						
	P3C1	90	52	2	28.0	Dark Gray, Highly Weathered, Stratified, CLAY SHALE with Dark Gray CLAY Seams
						Rock Core P3C1 from 30.0' to 40.0' deoth. Rock Mass Rating = 33 (Class No. IV - Poor Rock)
-35						
459.28 -40						
	P3C2	70	60	2		Dark Gray, Highly Weathered, Stratified, CLAY SHALE
						Rock Core P3C2 from 40.0' to 45.0' deoth. Rock Mass Rating = 33 (Class No. IV - Poor Rock)
454.28 -45						
-50						End of Boring

Color pictures of the cores Yes
Cores will be stored for examination until 12/8/12
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS, form 138 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Geotech Engineering & Testing, Inc.

SOIL BORING LOG

Date 12/1/10

ROUTE FAS 1388 (IL 8) DESCRIPTION IL 8 Over Kickapoo Creek LOGGED BY C. Farmer

SECTION (Z-1D-BR-1) BR LOCATION SE 1/4, SEC. 24, TWP. 9N, RNG. 6E, 4th PM,
Latitude , Longitude

COUNTY Peoria DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. 072-0047
Station 792+64.23

BORING NO. Pier 04
Station 801.95.96
Offset 25.0 ft RT
Ground Surface Elev. 499.39 ft

Surface Water Elev. 489.04 ft
Stream Bed Elev. 488.00 ft

Groundwater Elev.:
First Encounter 483.4 ft ▼
Upon Completion 481.4 ft ▽
After 36 Hrs. 492.4 ft ▼

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
	4			TOPSOIL
	2	0.7	19	
497.89	2	B		
				Firm, Brown and Black, moist, SILTY CLAY LOAM w/ Some Organics
	2			
	3	1.8	10	
	3	B		
494.39 -5				
	2			Firm, Dark Brown to Black, moist, SILTY CLAY
	4	1.6	23	
	4	B		
492.39 ▽				
	2			Soft, Brown. Moist SANDY CLAY LOAM
	1	1.8	23	
	2	B		
489.39 -10				
	1			Very Loose, Brown, Wet, SANDY LOAM
	1	0.4	23	
	1	B		
	1			
	1		22	
	1			
484.39 -15				
	3			Firm, Brown, Wet, GRAVEL w/ Sand
▼	5		10	
	6			
481.89				
	4			Loose, Brown to Tan, Wet to Saturated, SANDY LOAM
▽	4		15	
	4			
479.39 -20				
	11			Very Firm, Brown, Wet to Saturated, SAND w/ Small Aggregate
	8		13	
477.89	17			
				Firm, Brown, Saturated, Coarse SAND
	12			
	10		13	
475.89	6			
				Firm, Black. Saturated SANDY LOAM
475.39				
	9			Firm, Brown, Wet to Saturated, Coarse SAND
-25				
	10		14	
	16			
471.89				
	20			Dense, Brown, Wet to Saturated, Coarse SAND w/ Shale Fragments
	23		14	
	18			
469.39 -30				
-35				Borehole continued with rock coring.
-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, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
BACON | FARMER | WORKMAN ENGINEERING & TESTING INC.

ROCK CORE LOG

Date 12/1/10

ROUTE FAS 1388 (IL 8) DESCRIPTION IL 8 Over Kickapoo Creek LOGGED BY C. Farmer

SECTION (Z-1D-BR-1) BR LOCATION SE 1/4, SEC. 24, TWP. 9N, RNG. 6E, 4th PM,
Latitude , Longitude

COUNTY Peoria CORING METHOD Rotary, Surf Set Diamond Bit

STRUCT. NO. 072-0047
Station 792+64.23

CORING BARREL TYPE & SIZE NX-2, conv, dbl,bbl, solid in.
Core Diameter 2 in
Top of Rock Elev. 469.39 ft
Begin Core Elev. 469.39 ft

BORING NO. Pier 04
Station 801.95.96
Offset 25.0 ft RT
Ground Surface Elev. 499.39 ft

DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)	Description
469.39	P4C1	88	62	2	29.5	Dark Gray, Highly Weathered, Stratified, CLAY SHALE with Dark Gray CLAY Seams
						Rock Core P4C1 from 30.0' to 37.0' deoth. Rock Mass Rating = 33 (Class No. IV - Poor Rock)
-35						
462.39	P4C2	85	52	2		Dark Gray, Highly Weathered, Stratified, CLAY SHALE
						Rock Core P4C2 from 37.0' to 45.0' deoth. Rock Mass Rating = 30 (Class No. IV - Poor Rock)
-40						
454.39 -45						End of Boring
-50						

Color pictures of the cores Yes
Cores will be stored for examination until 12/8/12
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS, form 138 (Rev. 8-99)

FILE NAME = 0720229-68697-033-Soil Boring Logs.dgn	USER NAME =	DESIGNED - BWP	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
BFW BACON | FARMER | WORKMAN ENGINEERING & TESTING, INC. 403 NORTH COURT STREET MARION, ILLINOIS 62959 PHONE +1(618)7.9190		CHECKED - CMV	REVISED -	SOIL BORING LOGS STRUCTURE NO. 072-0229
	PLOT SCALE =	DRAWN - BWP	REVISED -	
	PLOT DATE = 3/18/2014	CHECKED - CMV	REVISED -	SHEET NO. 33 OF 34 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	75
		CONTRACT NO. 68697		
	ILLINOIS FED. AID PROJECT			

Illinois Department of Transportation
Division of Highways
Geotech Engineering & Testing, Inc.

SOIL BORING LOG

Date 11/29/10

ROUTE FAS 1388 (IL 8) DESCRIPTION IL 8 Over Kickapoo Creek LOGGED BY C. Farmer

SECTION (Z-1D-BR-1) BR LOCATION SE 1/4, SEC. 24, TWP. 9N, RNG. 6E, 4th PM,
Latitude , Longitude

COUNTY Peoria DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. 072-0047
Station 792+64.23

BORING NO. AE
Station 802+67.18
Offset 30.0 ft LT
Ground Surface Elev. 510.24 ft

Surface Water Elev. 489.04 ft
Stream Bed Elev. 488.00 ft

Groundwater Elev.:
First Encounter 485.2 ft ▼
Upon Completion 485.2 ft ▽
After 24 Hrs. 487.9 ft ▼

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Brown silty TOPSOIL w/ rock, stiff, low to medium plasticity 509.24	3		
	7	1.6	17
Soft to Stiff, Dark Brown to Black, Moist, SILTY CLAY	5		
	4		
	6	1.6	23
	6	B	
-5	1		
	2	0.9	21
	2	B	
	1		
	2	0.2	23
	3	B	
500.24 -10	1		
Firm, Dark Brown Black, Moist, SILTY CLAY w/ Sand	3	0.7	23
	2	B	
497.74	1		
Soft, Dark Brown to Black, Moist, SILTY CLAY	1	0.0	18
	2	B	
495.24 -15	1		
Soft, Dark Brown to Black, Moist, SILTY CLAY w/ Sand	2		23
	2		
	2		
	2		19
490.24 -20	2		

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Firm, Dark Brown to Black, Very Moist, SILTY CLAY	2		
	2	0.6	19
	4	B	
▼			
	1		
	1	0.1	14
	3	B	
485.24 ▼ -25	1		
Very Stiff, Brown, Very Moist to Saturated, SANDY CLAY LOAM w/ Gravel	50		9
	50		
480.24 -30	3		
Loose to Dense, Tan Brown, Very Moist to Saturated, Coarse SAND	4		
	5		
-35	12		
	15		
	21		
-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, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Geotech Engineering & Testing, Inc.

SOIL BORING LOG

Date 11/29/10

ROUTE FAS 1388 (IL 8) DESCRIPTION IL 8 Over Kickapoo Creek LOGGED BY C. Farmer

SECTION (Z-1D-BR-1) BR LOCATION SE 1/4, SEC. 24, TWP. 9N, RNG. 6E, 4th PM,
Latitude , Longitude

COUNTY Peoria DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. 072-0047
Station 792+64.23

BORING NO. AE
Station 802+67.18
Offset 30.0 ft LT
Ground Surface Elev. 510.24 ft

Surface Water Elev. 489.04 ft
Stream Bed Elev. 488.00 ft

Groundwater Elev.:
First Encounter 485.2 ft ▼
Upon Completion 485.2 ft ▽
After 24 Hrs. 487.9 ft ▼

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Loose to Dense, Tan Brown, Very Moist to Saturated, Coarse SAND 469.24	12		
(continued)	22		
Stiff to Hard, Dark Gray to Black, moist, CLAY SHALE	32		
-45	50/0.3		
	50/0.3		
460.24 -50			
End of Boring			
-55			
-60			

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, form 137 (Rev. 8-99)

FILE NAME = 0720229-68697-034-Soil Boring Logs.dgn
USER NAME =
PLOT SCALE =
PLOT DATE = 3/18/2014

DESIGNED - BWP
CHECKED - CMV
DRAWN - BWP
CHECKED - CMV

REVISED -
REVISED -
REVISED -
REVISED -

BACON | FARMER | WORKMAN
ENGINEERING & TESTING, INC.
403 NORTH COURT STREET
MARION, ILLINOIS 62959
PHONE - 618.997.9190

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

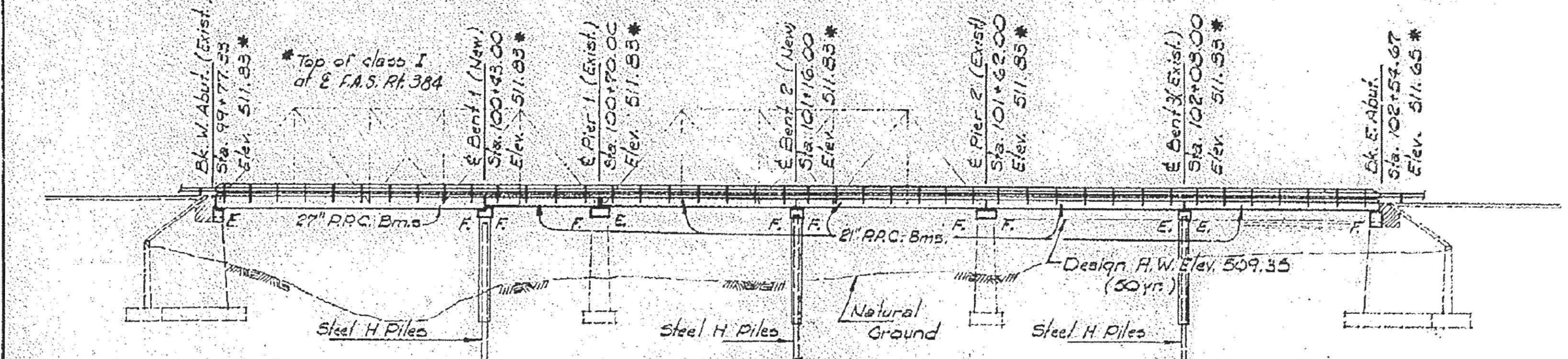
SOIL BORING LOGS
STRUCTURE NO. 072-0229
SHEET NO. 34 OF 34 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	76
		CONTRACT NO. 68697		
	ILLINOIS	FED. AID PROJECT		

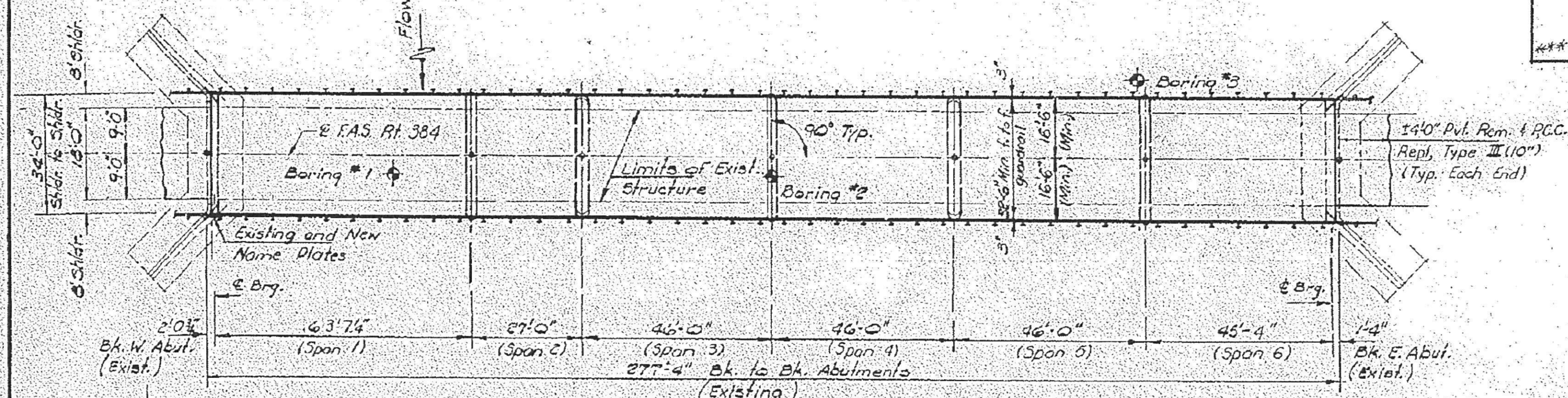
B.M.: Chiseled square on N.W. Wing wall - Existing Bridge, Elev. 510.88. Existing Structure No. 072-0047: Built as a three (3) span truss bridge on conc. piers and closed abutments. Built as S.A. Route 11, Sec. Z-1D, at Sta. 101+15.9 in 1931. East span truss replaced in 1974 with a two (2) spans P.P.C. Deck Bms. Superstructure on a pile bent pier. The remaining 2 Truss spans to be replaced with a P.P.C. Deck Bm. Superstructure on enclosed pile bent piers. The two (2) spans which were built in 1974 shall be widened. The existing 36" wide P.P.C. Deck Beams shall be repositioned to accommodate the proposed Rdwy. crown. The existing 48" wide P.P.C. Deck Beams shall be removed and replaced with 36" wide Deck Beams.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Route No.	Section	County	Total Sheets	Sheet No.
F.A.S.-384	Z-1D-BR-1	Peoria	89	76a



ELEVATION



PLAN

N

FOR INFORMATION ONLY

STATION 101+16.00
KICKAPOO CREEK
REBUILT 19
F.A.S. RT. 384 SEC. Z-1D-BR-1

LOADING HS20
*** STR. NO.

NAME PLATE
(See Std. 2113)
*** Structure No. to be supplied by District.

GENERAL NOTES

Reinforcement bars shall conform to the requirements of AASHTO M31 or M53, Grade 60.

For Boring Data see the Proposal.

All structural steel shall be shop painted with two coats of basic lead silico chromate paint.

Expansion guards which are not cast in the precast unit shall be fabricated and erected in accordance with Article 503.07(c) of the Standard Specifications and are included in quantity of structural steel.

It shall be the responsibility of the Contractor to verify all dimensions and conditions existing in the field prior to construction and ordering of materials.

The top surface of the beams shall be finished in accordance with Article 505.06 of the Standard Specifications except that the surface shall not be roughened by brooming. The finished surface shall be free of depressions or high spots with sharp corners.

Protective Coat shall not be applied to surfaces to which Waterproofing Membrane System is applied.

Expansion bolts shall consist of self drilling expansion anchors and ¾ϕ x 12" hooked bolts.

The Contractor shall drive one steel (HP8x36) test pile in a permanent location at Bent #1 as directed by the Engineer before ordering the remainder of piles.

Limits of Waterproofing Membrane System shall be from end of deck at west end to back of abutment at east end and face to face of curbs.

The concrete section above the mandatory construction joint at the top of the exterior beams shall be constructed of Class X Concrete, except the aggregates shall conform to the requirements of Handrail Concrete.

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Structure Excavation	Cu. Yd.		75	75
Bituminous Concrete Surface Course, Class I	Tons	65		65
** Removal of Existing Superstructures	Each	1		1
Concrete Removal	Cu. Yd.		47	47
* Removal of Existing Concrete Deck Beams	Each	2		2
* Remove and Reset Existing Precast Prestressed Concrete Beams	Each	12		12
Precast Prestressed Concrete Deck Beams (27" Depth)	Sq. Ft.	2117		2117
Precast Prestressed Concrete Deck Beams (21" Depth)	Sq. Ft.	5294		5294
Expansion Bolts (¾"ϕ)	Each		110	110
Pavement Removal and Portland Cement Concrete Replacement, Type III (10")	Sq. Yd.	16		16
Protective Coat	Sq. Yd.	92		92
Class X Concrete	Cu. Yd.	18.7	192.2	210.9
Reinforcement Bars	Pound	1600	18,940	20,540
Structural Steel	Pound	4890		4890
Waterproofing Membrane System	Sq. Yd.	957		957
Steel Railing, Type "T"	Lin. Ft.	551		551
Preformed Joint Sealer (2½")	Lin. Ft.	99		99
Steel Piles (HP8x36)	Lin. Ft.		702	702
Test Piles Steel (HP8x36)	Each		1	1
Name Plates	Each		1	1
Portland Cement Mortar Fairing Course	Lin. Ft.	2721		2721

* See Special Provisions. (Spans 5 & 6 only).
** Spans 1 thru 4 only.

DESIGN STRESSES (New Construction)

f'c = 3,500 psi
fy = 60,000 psi (Reinf.)
fs = 20,000 psi (Struct.)

PRECAST PRESTRESSED UNITS

f'c = 5000 psi
f'ci = 4000 psi
f's = 270,000 psi (½"ϕ strands)
f'si = 188,700 psi (½"ϕ strands)

WATERWAY INFORMATION

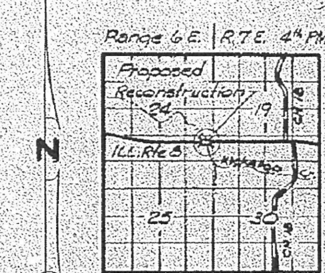
Drainage Area	= 230 sq. mi.
Existing Opening	= 3800 sq. ft.
Required Opening	= 3800 sq. ft.
Proposed Opening	= 3800 sq. ft.
Design Discharge (50 yr.)	= 27,700 c.f.s.
Created Head for Design Flood	= 0.45'
100 yr. Discharge	= 32,000 c.f.s.
Created Head for 100 yr. Flood	= 0.62'
100 yr. H.W. Elev.	= 510.86
50 yr. Design H.W. Elev.	= 509.35

LOADING HS 20-44

Allow 25#/sq. ft. for future wearing surface. (New Construction)
Design Specification AASHTO 1973, 1974, 1975, 1976 and 1977 Interim Specification.

DESIGNED	[signature]
CHECKED	[signature]
DRAWN	R. Doty
CHECKED	D.K.A.
EXAMINED	[signature] January 23, 1978
PASSED	
APPROVED	

STATE OF ILLINOIS 2287 (seal)

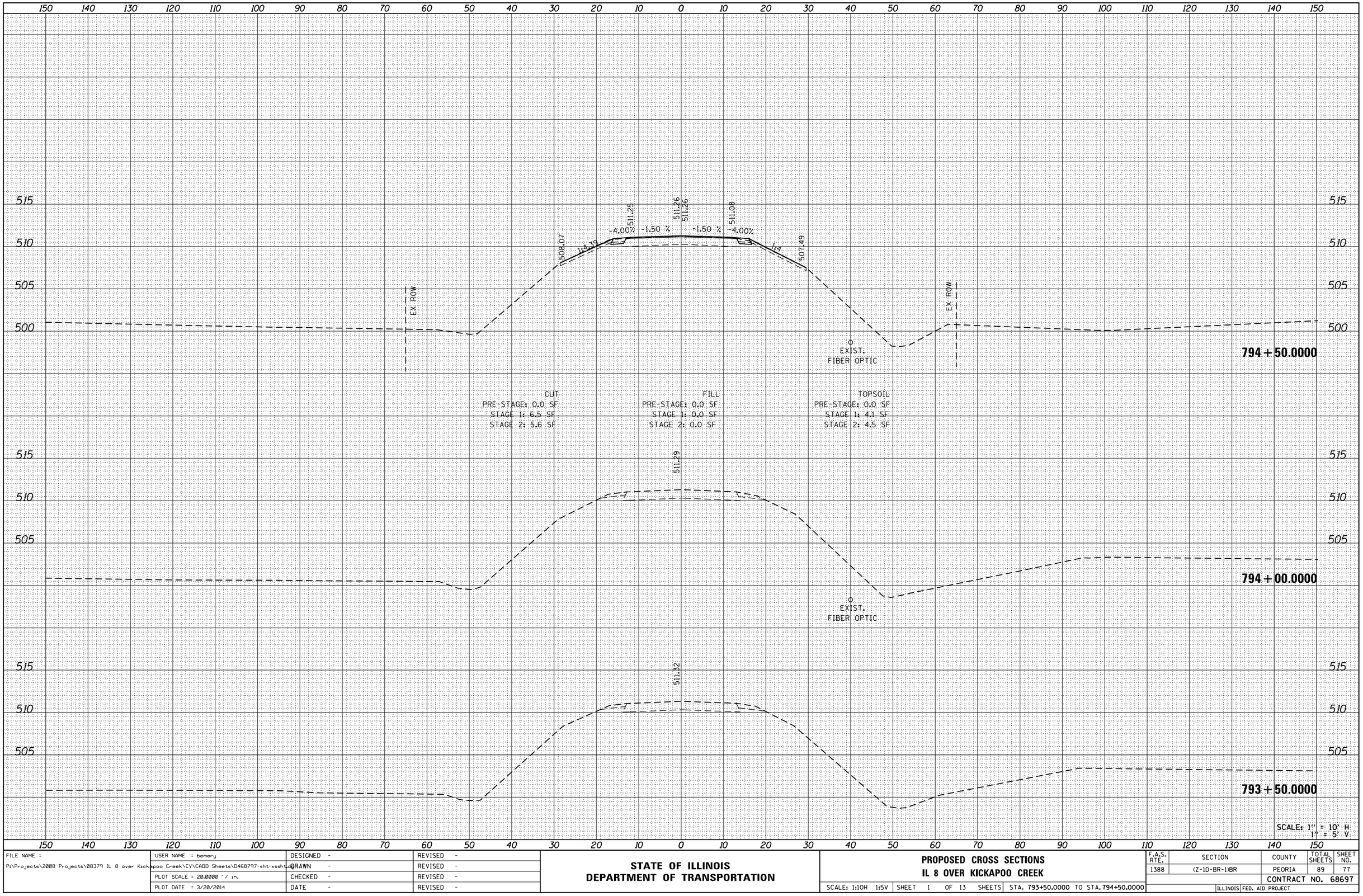


LOCATION SKETCH

GENERAL PLAN & ELEVATION
F.A.S. Rte. 384 Over Kickapoo Creek at Edwards
F.A.S. Rte. 384 SECTION Z-1D-BR-1
PEORIA COUNTY
Sta. 101+16.00

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

BY	DATE



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

BY	DATE

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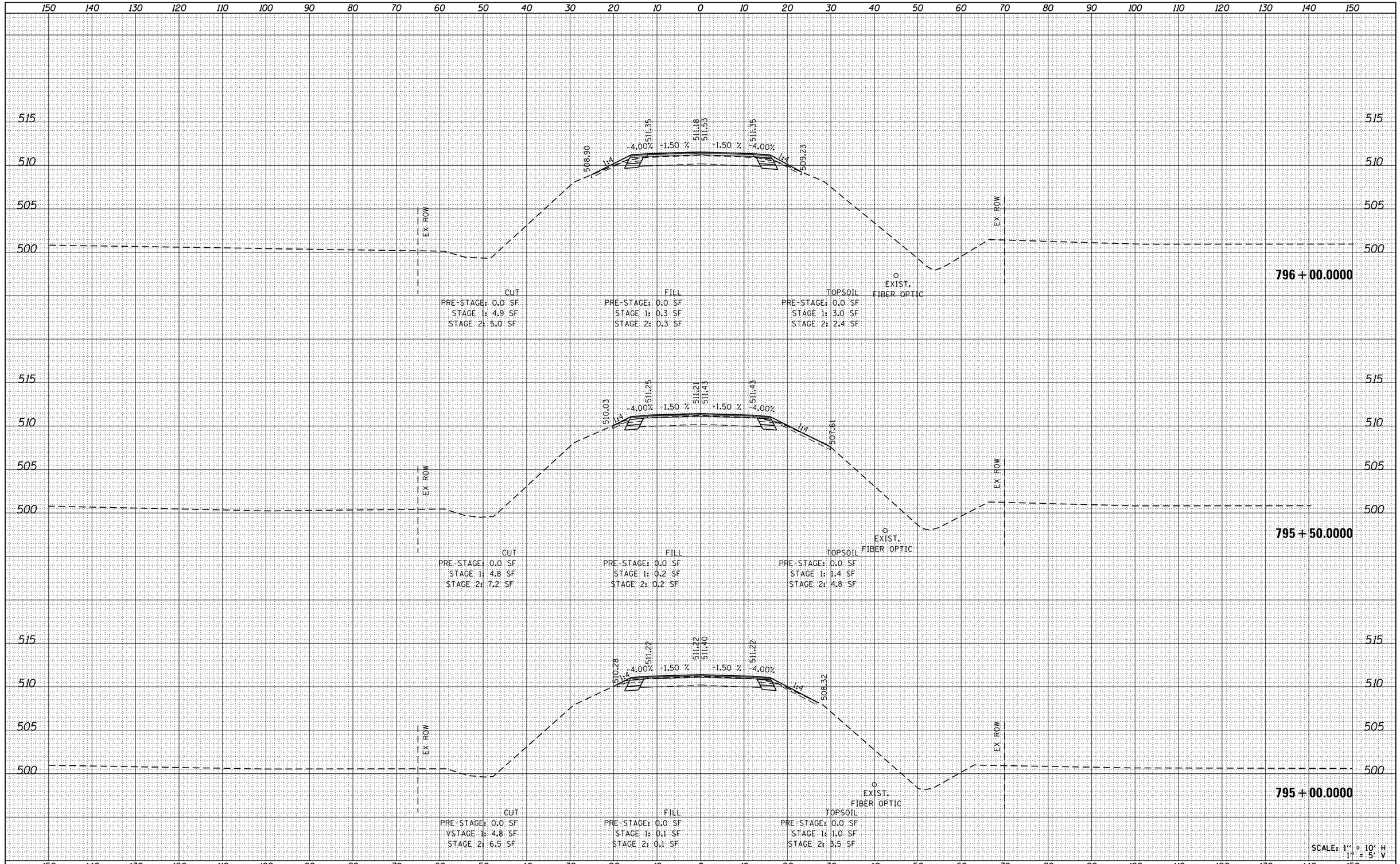
		DRAWN -	REVISED -
	PLOT SCALE = 20.0000 ' / in.	CHECKED -	REVISED -
	PLOT DATE = 3/20/2014	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
IL 8 OVER KICKAPOO CREEK

SCALE: 1:10H 1:5V | SHEET 1 OF 13 SHEETS | STA. 793+50.0000 TO STA. 794+50.0000

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	77
		CONTRACT NO. 68697		
	ILLINOIS FED. AID PROJECT			



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

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

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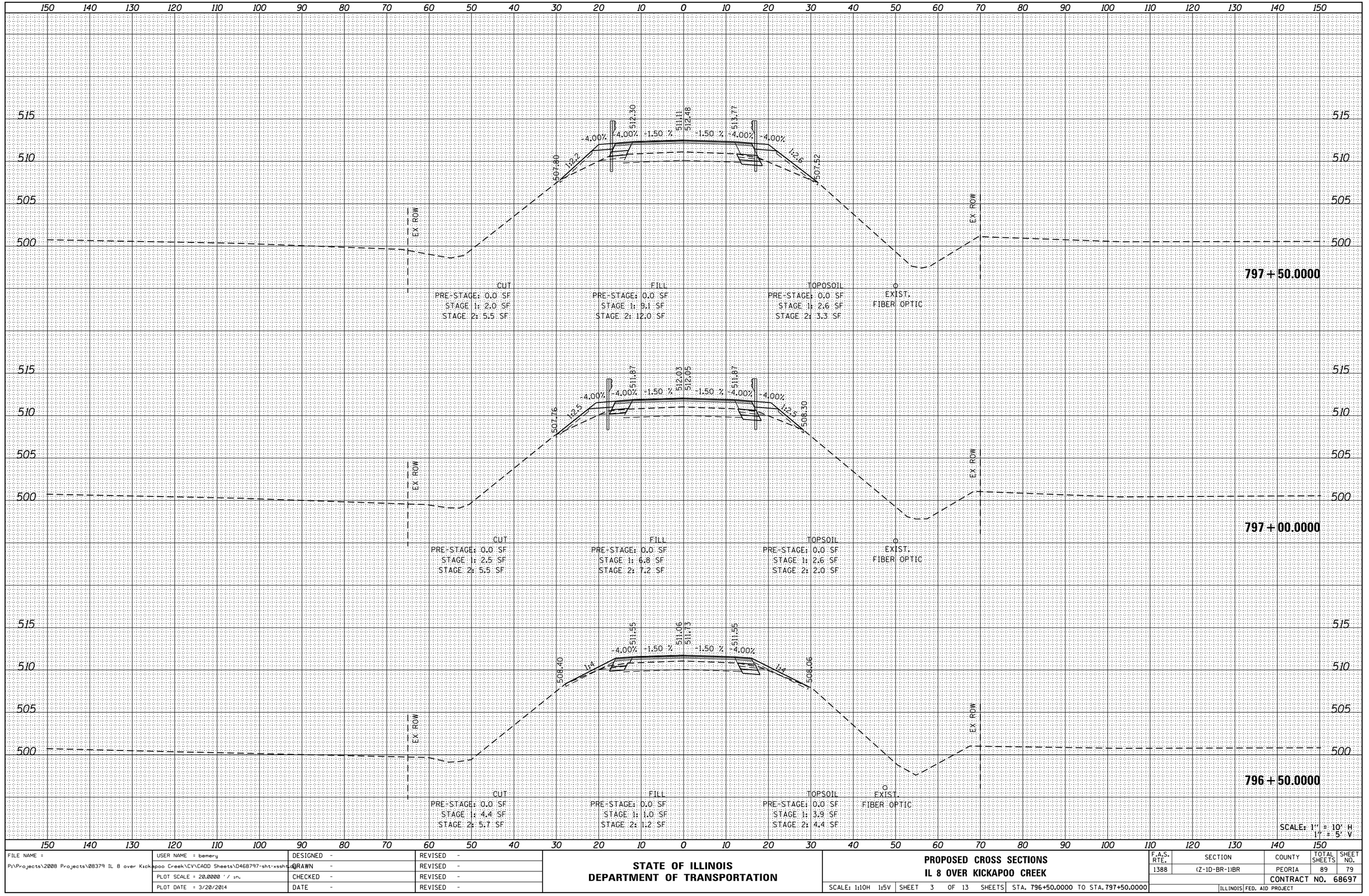
	PLOT DATE = 3/20/2014	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
IL 8 OVER KICKAPOO CREEK

SCALE: 1:10H 1:5V | SHEET 2 OF 13 SHEETS | STA. 795+00.0000 TO STA.796+00.0000

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	78
		CONTRACT NO. 68697		
		ILLINOIS FED. AID PROJECT		



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

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

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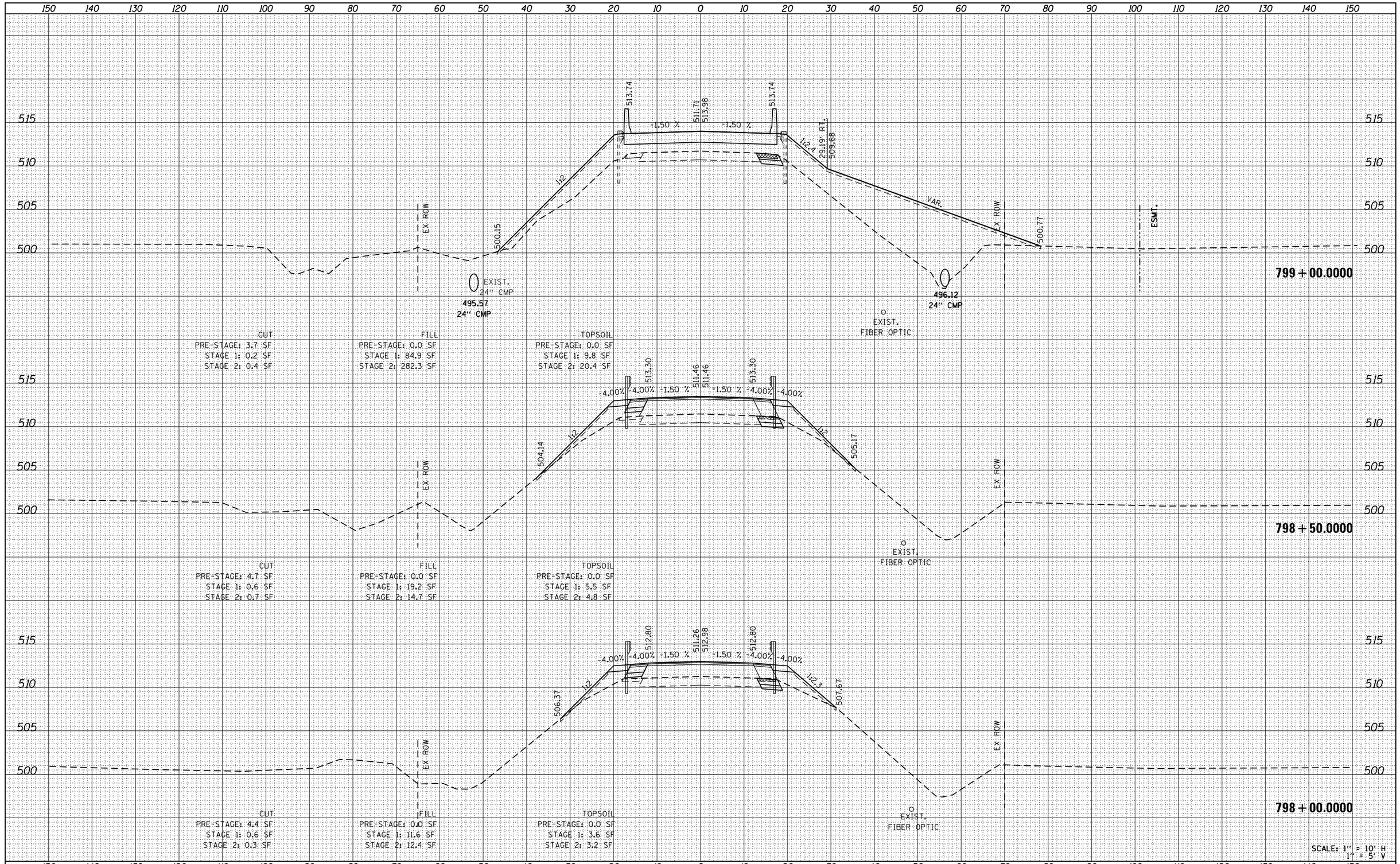
	PLOT DATE = 3/20/2014	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
IL 8 OVER KICKAPOO CREEK

SCALE: 1:10H 1:5V | SHEET 3 OF 13 SHEETS | STA. 796+50.0000 TO STA. 797+50.0000

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	79
		CONTRACT NO. 68697		
	ILLINOIS FED. AID PROJECT			



FINAL SURVEY

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

ORIGINAL SURVEY

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

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	PLOT DATE = 3/20/2014	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

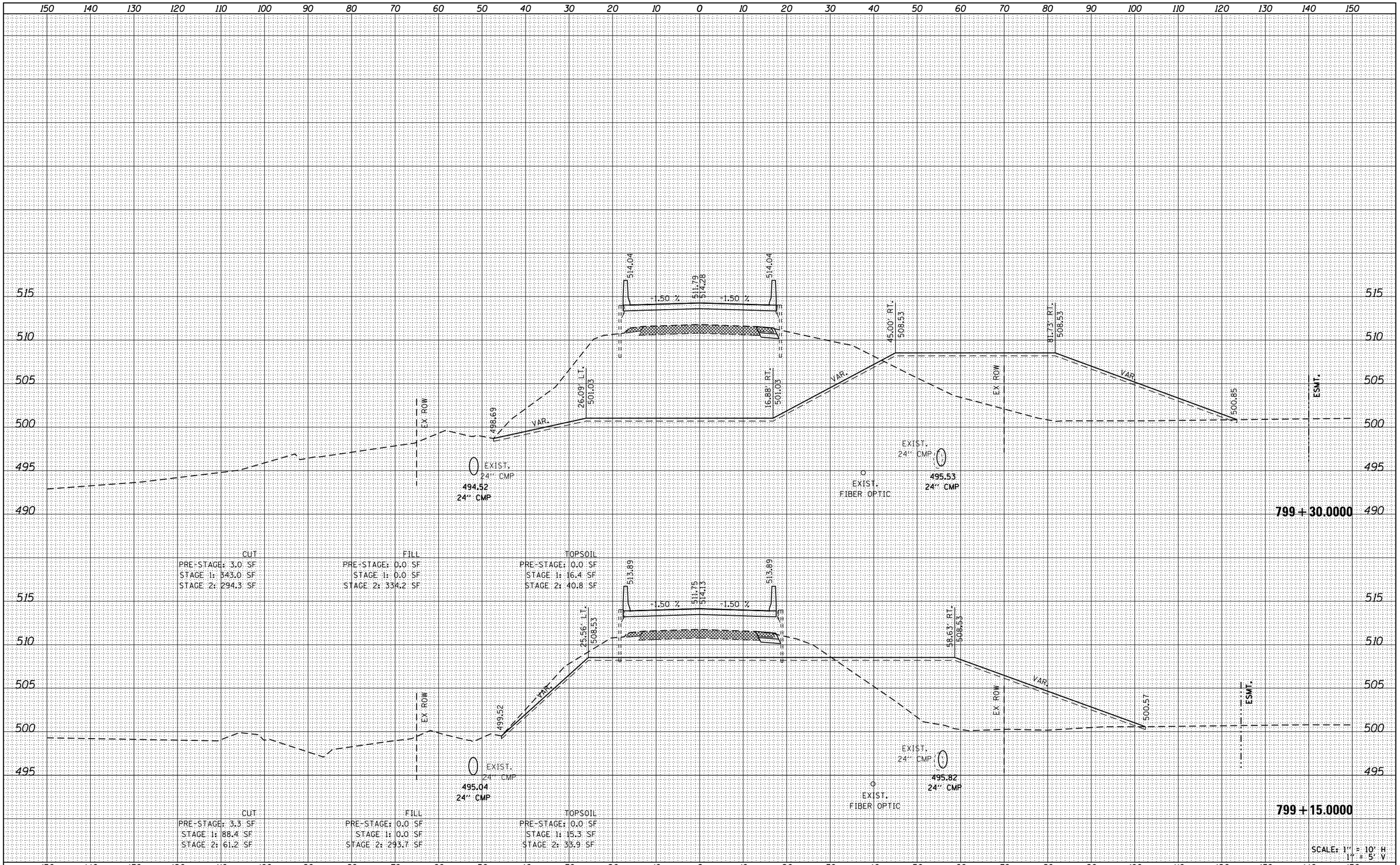
PROPOSED CROSS SECTIONS
IL 8 OVER KICKAPOO CREEK

SCALE: 1:10H 1:5V | SHEET 4 OF 13 SHEETS | STA. 798+00.0000 TO STA. 799+00.0000

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	80
		CONTRACT NO. 68697		
		ILLINOIS FED. AID PROJECT		

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

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



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	PLOT DATE = 3/20/2014	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
IL 8 OVER KICKAPOO CREEK

SCALE: 1:10H 1:5V | SHEET 5 OF 13 SHEETS | STA. 799+15.0000 TO STA. 799+30.0000

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	81
		CONTRACT NO. 68697		
		ILLINOIS FED. AID PROJECT		

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

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

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

520 515 510 505 500 495 490 485

514.56 514.80 514.56
-1.50 % -1.50 %

EX ROW 486.53 EX ROW ESMT.

800 + 00.0000

EXIST. FIBER OPTIC
34.44' RT.
19.42' BELOW EXIST. GROUND

514.22 511.84 514.46 514.22
-1.50 % -1.50 %

EX ROW 498.78 EX ROW 75.81' RT. 508.53 110.59' RT. 508.53 ESMT.

17.61' RT. 498.78 VAR. 22.67' RT. 499.53 42.75' RT. 499.53 VAR. VAR. 501.14

EXIST. 24" CMP 493.82 24" CMP

EXIST. 24" CMP 495.14 24" CMP

EXIST. FIBER OPTIC

799 + 50.0000

CUT
PRE-STAGE: 2.5 SF
STAGE 1: 373.1 SF
STAGE 2: 545.0 SF

FILL
PRE-STAGE: 0.0 SF
STAGE 1: 0.0 SF
STAGE 2: 224.7 SF

TOPSOIL
PRE-STAGE: 0.0 SF
STAGE 1: 14.4 SF
STAGE 2: 44.1 SF

SCALE: 1" = 10' H
1" = 5' V

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

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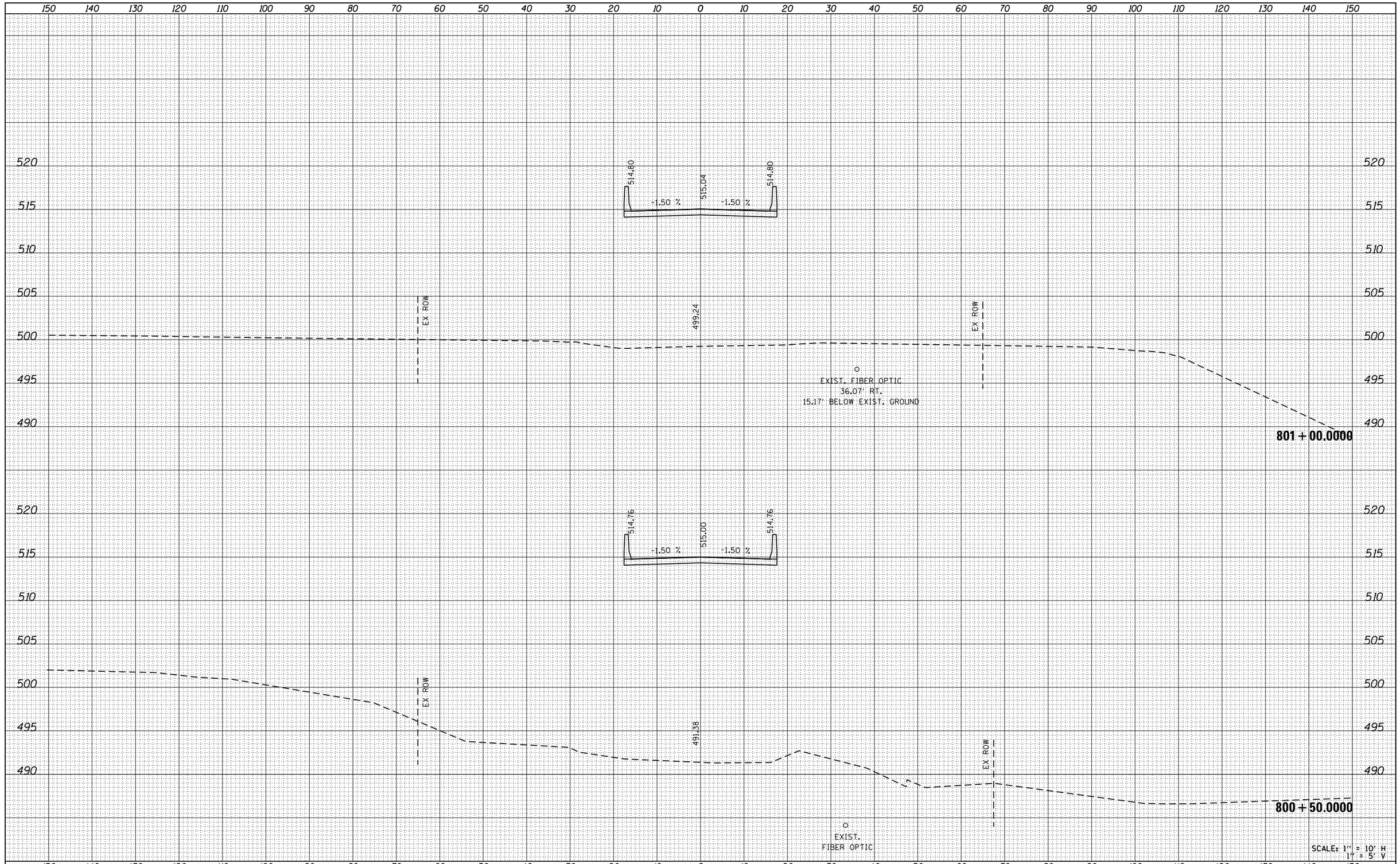
	PLOT DATE = 3/20/2014	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
IL 8 OVER KICKAPOO CREEK

SCALE: 1:10H 1:5V | SHEET 6 OF 13 SHEETS | STA. 799+50.0000 TO STA.800+00.0000

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	82
		CONTRACT NO. 68697		
	ILLINOIS FED. AID PROJECT			



FINAL SURVEY

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

ORIGINAL SURVEY

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

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	PLOT DATE = 3/20/2014	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
IL 8 OVER KICKAPOO CREEK

SCALE: 1:10H 1:5V | SHEET 7 OF 13 SHEETS | STA. 800+50.0000 TO STA.801+00.0000

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	83
		CONTRACT NO. 68697		
		ILLINOIS FED. AID PROJECT		

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

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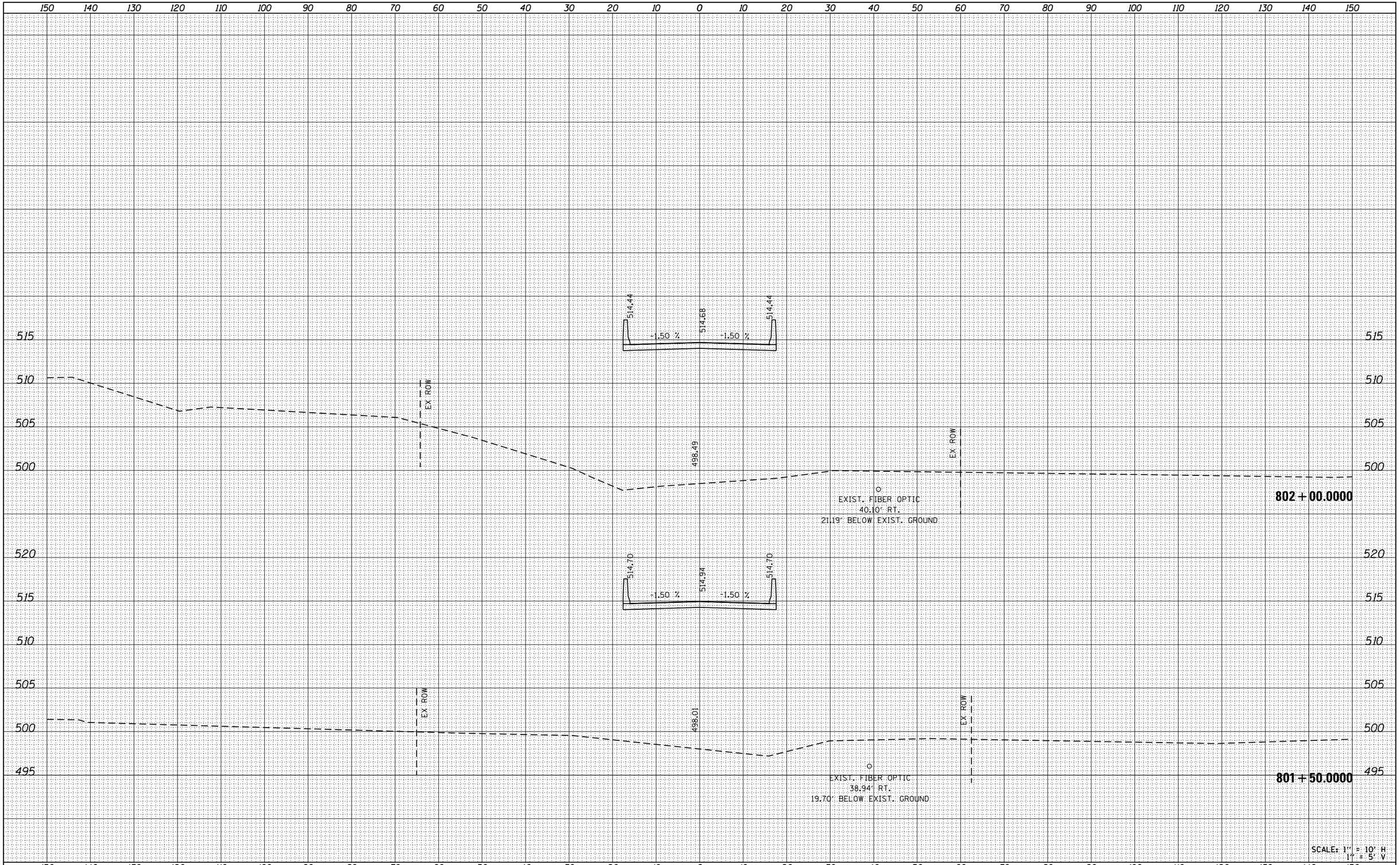
TEMPLATE		
NOTE BOOK		
AREAS		
NO.	AREAS CHECKED	



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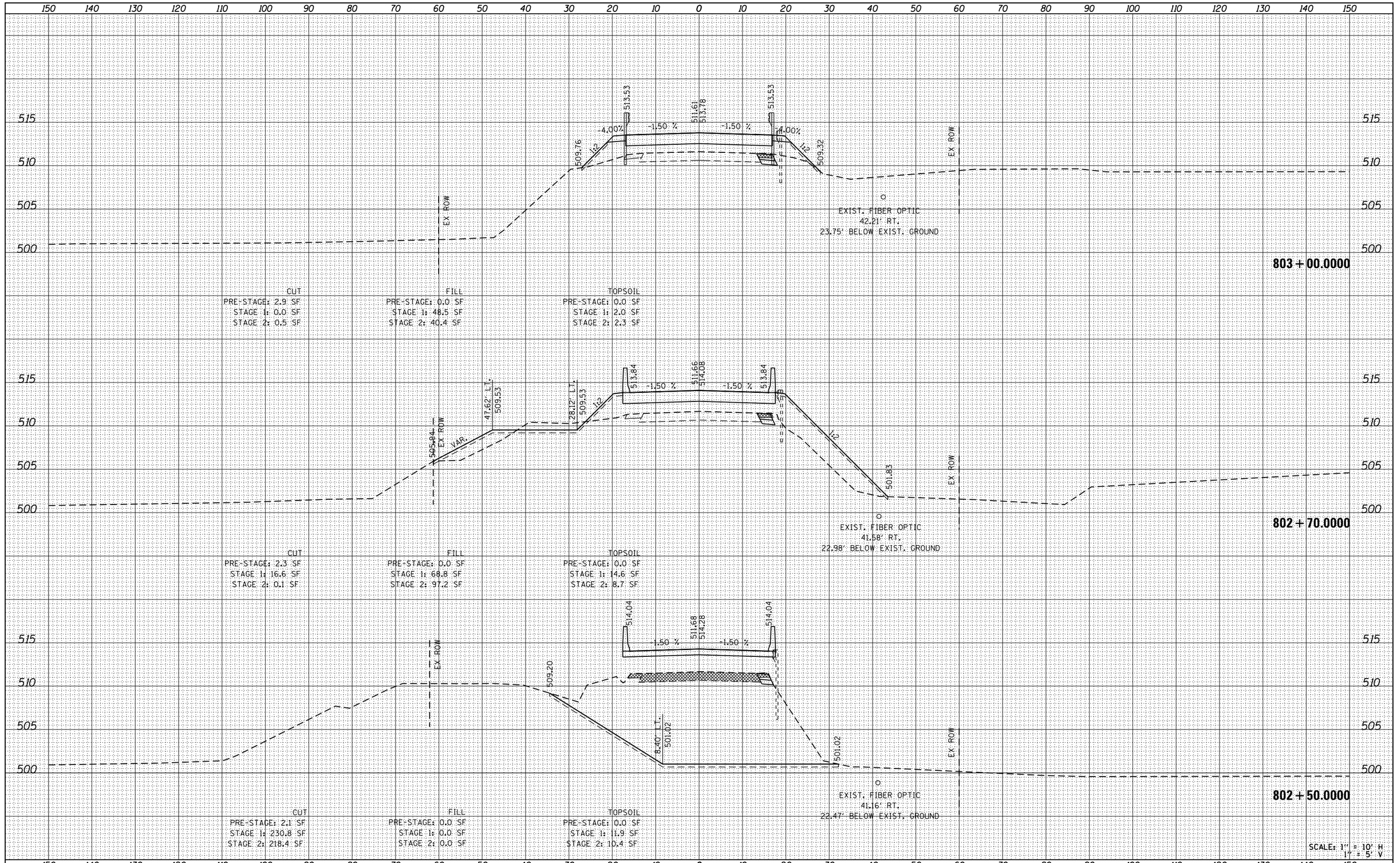
	PLOT DATE = 3/20/2014	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
IL 8 OVER KICKAPOO CREEK

SCALE: 1:10H 1:5V | SHEET 8 OF 13 SHEETS | STA. 801+50.0000 TO STA. 802+00.0000

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	84
		CONTRACT NO. 68697		
	ILLINOIS FED. AID PROJECT			



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

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

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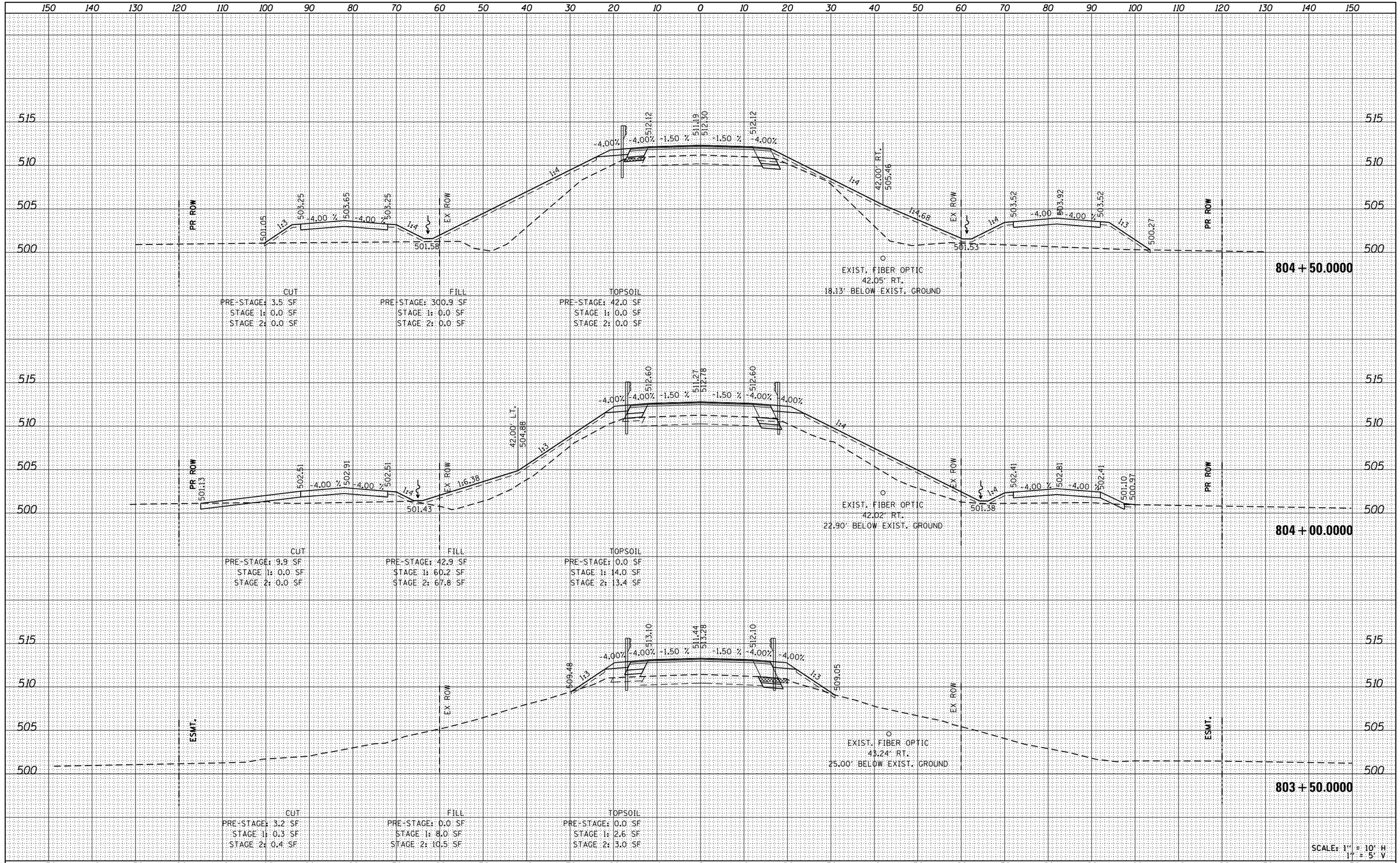
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
IL 8 OVER KICKAPOO CREEK

SCALE: 1:10H 1:5V | SHEET 9 OF 13 SHEETS | STA. 802+50.0000 TO STA.803+00.0000

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	85
		CONTRACT NO. 68697		
		ILLINOIS FED. AID PROJECT		



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NOTE BOOK		
AREAS		
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TEMPLATE		
NOTE BOOK		
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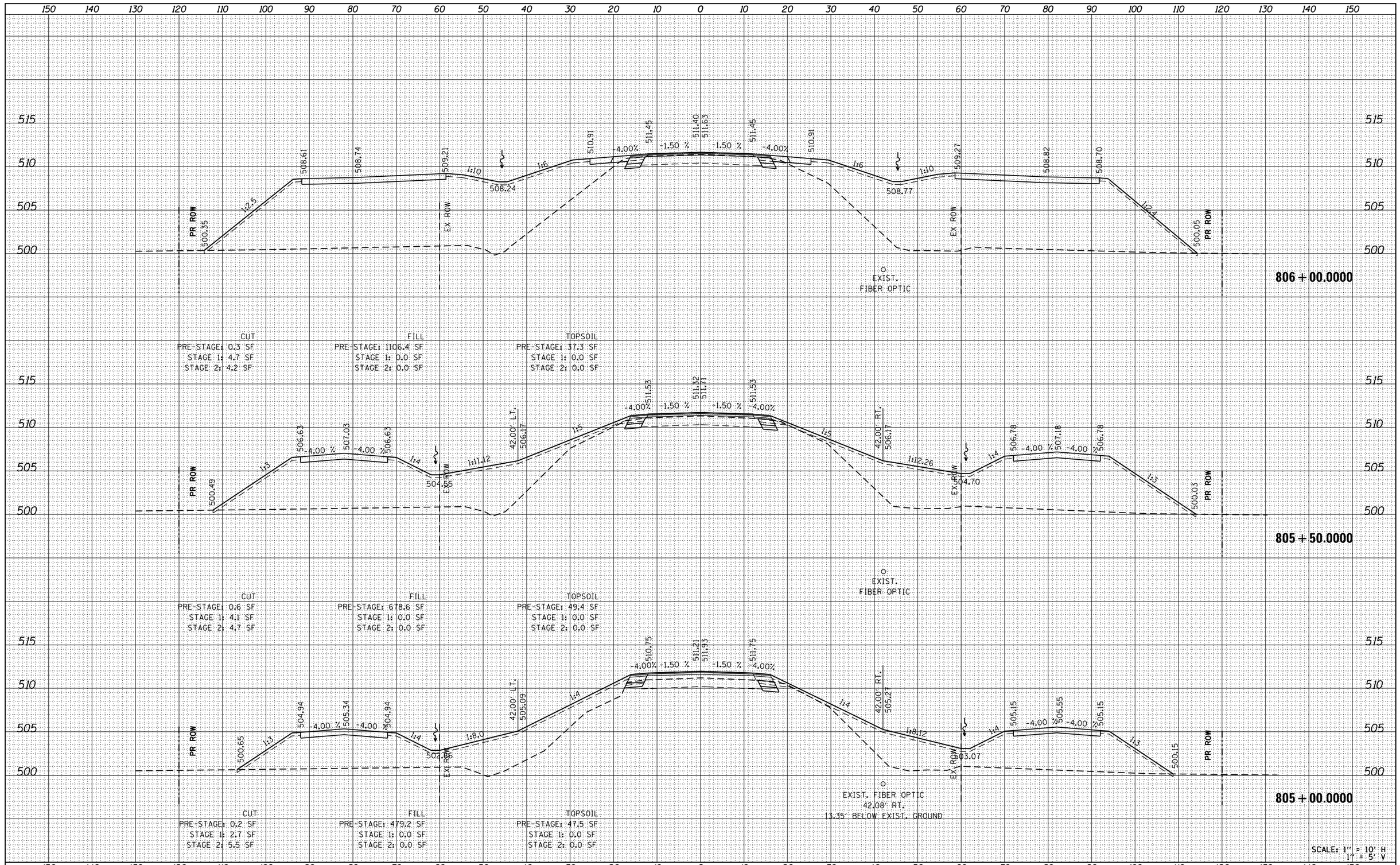
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
IL 8 OVER KICKAPOO CREEK

SCALE: 1:10H 1:5V | SHEET 10 OF 13 SHEETS | STA. 803+50.0000 TO STA. 804+50.0000

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	86
		CONTRACT NO. 68697		
	ILLINOIS FED. AID PROJECT			



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NO.	AREAS CHECKED	

ORIGINAL SURVEY	BY	DATE
NOTE BOOK	SURVEYED	
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
IL 8 OVER KICKAPOO CREEK

SCALE: 1:10H 1:5V | SHEET 11 OF 13 SHEETS | STA. 805+00.0000 TO STA.806+00.0000

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	87
		CONTRACT NO. 68697		
	ILLINOIS FED. AID PROJECT			

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

ORIGINAL SURVEY	BY	DATE
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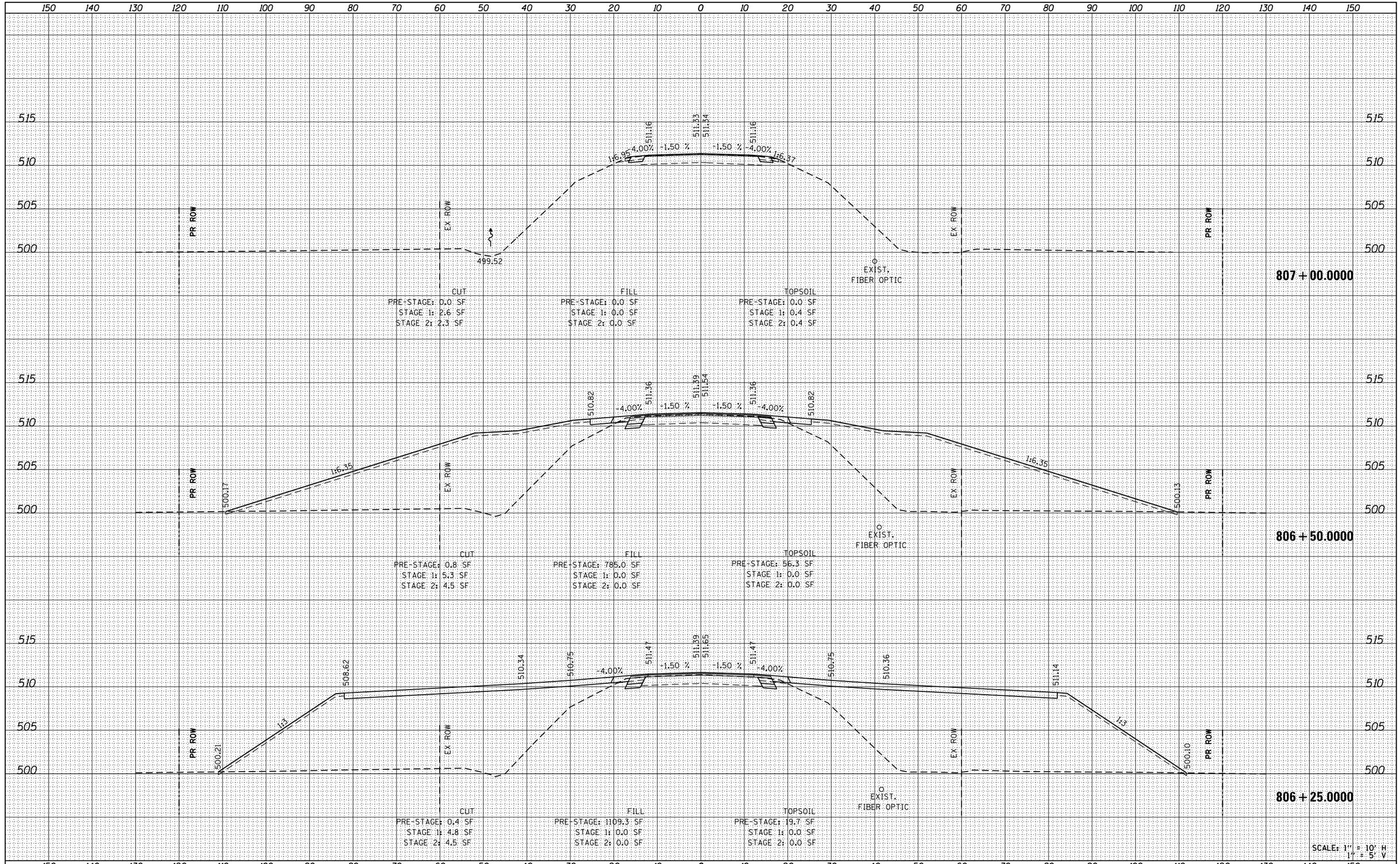
NO.	AREAS CHECKED	



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	PLOT DATE = 3/20/2014	DATE -	REVISED -

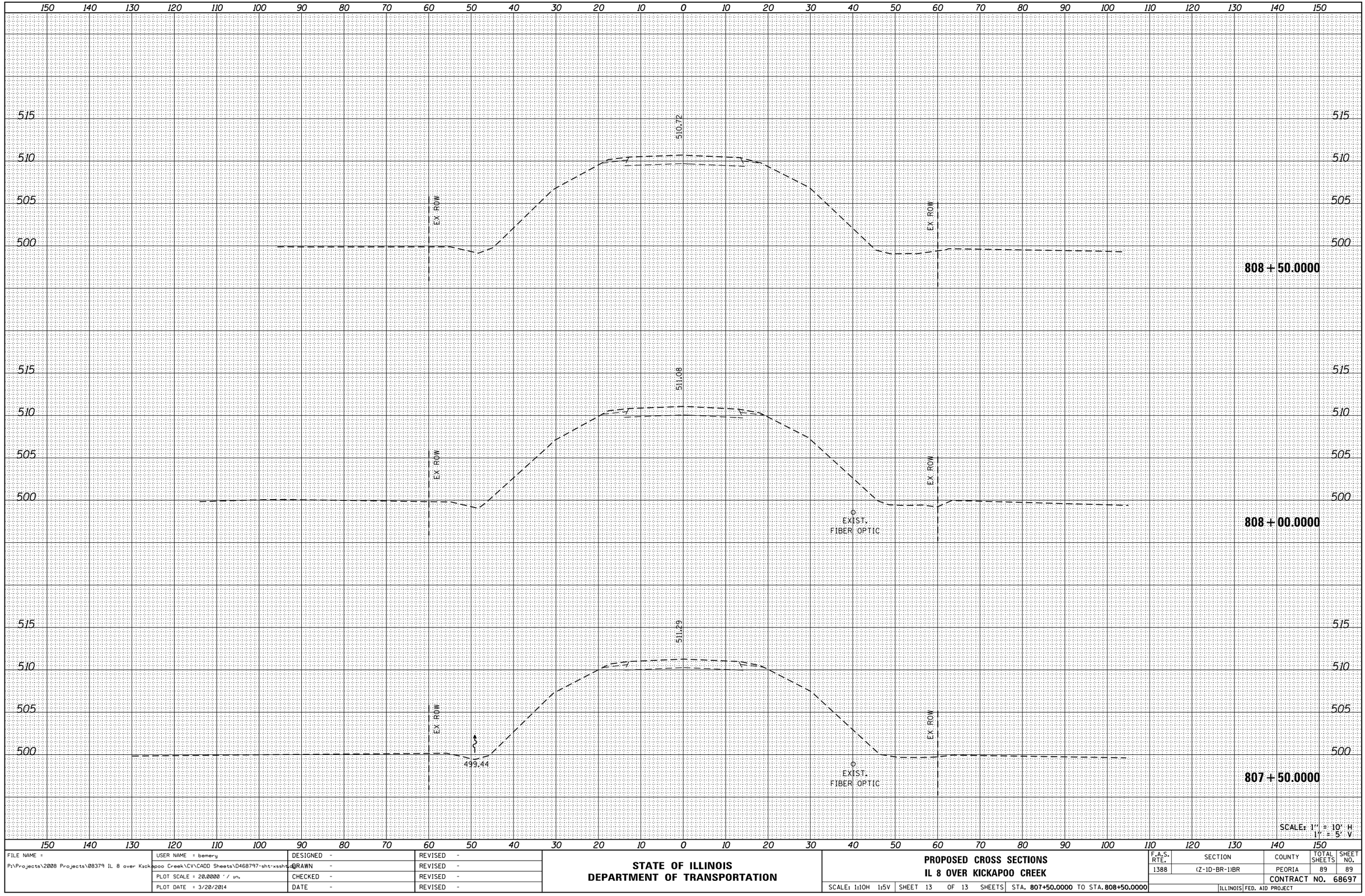
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
IL 8 OVER KICKAPOO CREEK

SCALE: 1:10H 1:5V | SHEET 12 OF 13 SHEETS | STA. 806+38.8731 TO STA.807+00.0000

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	88
		CONTRACT NO. 68697		
	ILLINOIS FED. AID PROJECT			

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



SCALE: 1" = 10' H
1" = 5' V

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

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	PLOT DATE = 3/20/2014	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
IL 8 OVER KICKAPOO CREEK

SCALE: 1:10H 1:5V | SHEET 13 OF 13 SHEETS | STA. **807+50.0000** TO STA. **808+50.0000**

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1388	(Z-1D-BR-1)BR	PEORIA	89	89
		CONTRACT NO. 68697		
	ILLINOIS FED. AID PROJECT			