04-27-12 LETTING ITEM 046

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	1
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 78056		

D-99-027-08

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

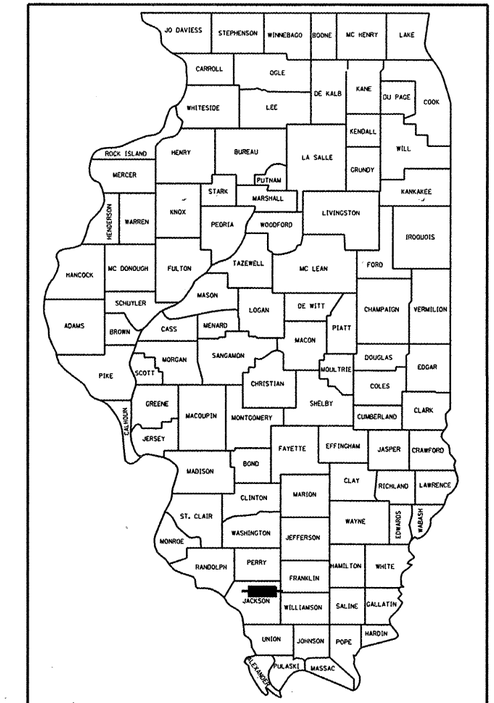
PROPOSED
HIGHWAY PLANS

FAP ROUTE 331 (IL 13)
SECTION (12-1)B-1
PROJECT ACNHF-0331(060)
JACKSON COUNTY

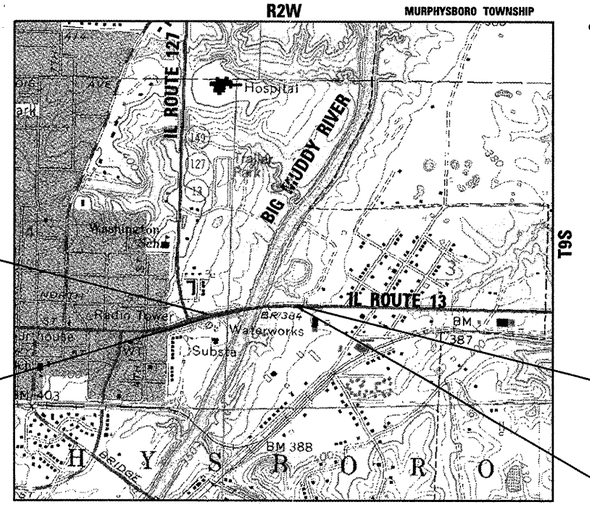
C - 99 - 040 - 08

STRUCTURE REPLACEMENT OVER BIG MUDDY RIVER

FOR INDEX OF SHEETS SEE SHEET NO. 2



LOCATION OF SECTION INDICATED THUS:- ▬



END PROJECT
STA. 347+90.00 (WB)

END PROJECT
STA. 347+67.50 (EB)

BEGIN PROJECT
STA. 334+70.00 (WB)

BEGIN PROJECT
STA. 334+70.00 (EB)

SECTION (12-1)B-1 INCLUDES TWO 5-SPAN CURVED STEEL GIRDERS WITH CONCRETE DECKS, AND STUB ABUTMENTS CARRYING IL ROUTE 13 OVER THE BIG MUDDY RIVER
PROPOSED S.N. 039-0075 EB STRUCTURE
BACK OF ABUTMENT STA. 338+67.12 AND STA. 343+33.08
PROPOSED S.N. 039-0076 WB STRUCTURE
BACK OF ABUTMENT STA. 338+41.25 AND STA. 343+07.16
SPANS 77'-0", 97'-0", 110'-0", 97'-0", 77'-0"

MICROFILMED _____
REEL NUMBER _____
AWARDED _____
RESIDENT ENGINEER _____
AS BUILT CHANGES WERE MADE
ON THE FOLLOWING SHEETS _____

100' 200' 300' — 1"= 100'
0 10' 20' 30' — 1"= 10'
0 50' 100' — 1"= 50'
0 50' 100' — 1"= 40'
0 50' 100' — 1"= 30'
0 50' 100' — 1"= 20'

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

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

PROJECT MANAGER : DAVID PICHE
(618) 549-2171

CONTRACT NO. 78056

FUNCTIONAL CLASSIFICATION

RURAL MINOR ARTERIAL - F.A.P. 331 (IL RTE. 13)
ADT 19,180 (2008)
PV = 92.6%
SU = 5.0%
MU = 2.4%
DESIGN SPEED = 40 MPH
POSTED SPEED = 40 MPH

DESIGN DESIGNATION

1023(14) ARTERIAL 1.19 (FD-5) (TEMPORARY)

LOCATION MAP

0 FT 1000 FT 2000 FT 3000 FT
1" = 1000 FT

EASTBOUND ALIGNMENT
SECTION (12-1)B-1 GROSS LENGTH = 1300.00' = 0.247 MILES
NET LENGTH OF ROADWORK = 834.67' = 0.159 MILES
NET LENGTH OF BRIDGE = 465.33' = 0.088 MILES

WESTBOUND ALIGNMENT
SECTION (12-1)B-1 GROSS LENGTH = 1320.00' = 0.251 MILES
NET LENGTH OF ROADWORK = 854.67' = 0.162 MILES
NET LENGTH OF BRIDGE = 465.33' = 0.088 MILES

MICHAEL D. BUSCH
062-055295
LICENSED PROFESSIONAL ENGINEER
OF
ILLINOIS

EXPIRES 11/30/13

Michael D. Busch 1/25/12
MICHAEL D. BUSCH DATE

COVERS ALL SHEETS EXCEPT:
LIGHTING PLANS SHT 44-50 BY OTHERS
BRIDGE PLANS SHT 60-165 SEE FOR SEAL

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED Feb 1 20 12
Omer Osman
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
March 23 20 12
John D. Baranzelli, P.E. for
actng ENGINEER OF DESIGN AND ENVIRONMENT
March 23 20 12
William R. Pfeiffer for
actng DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

OATES ASSOCIATES
Engineering + Architecture

28018.001

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830006	LIGHT POLE ALUMINUM DAVIT ARM
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GENERAL NOTES

1) FACTORS USED FOR ESTIMATING PLAN QUANTITIES ARE AS FOLLOWS AND SHALL NOT BE USED FOR THE BASIS OF FINAL QUANTITIES:

ALL HOT MIX ASPHALT 2.016 TONS/CU.YD.
ALL AGGREGATE 2.05 TONS/CU.YD.
BITUMINOUS MATERIALS:
ON PAVEMENT 0.09 GAL./SQ.YD.
INTERMEDIATE LIFTS (FOG COAT) 0.04 GAL./SQ.YD.
ON AGGREGATE SURFACE 0.32 GAL./SQ.YD.
AGGREGATE (PRIME COAT) 0.0015 TONS/SQ.YD.
RIPRAP 1.50 TONS/CU.YD.

2) ALL OBSTRUCTIONS WHICH ARE WITHIN THE CLEAR ZONE, AND ARE NOT SHIELDED BY THE PROPOSED GUARDRAIL, SHALL BE REMOVED BETWEEN STATION 334+70 EB AND STATION 347+67.50 EB AND STATION 334+70 WB AND STATION 347+90 WB. TYPICAL OBSTRUCTIONS ARE HEADWALLS, FOUNDATION, ETC. WHICH PROJECT 4 IN. OR MORE ABOVE THE GROUND LINE; AND TREES WHICH WILL MATURE TO A DIAMETER OF 4 IN. OR GREATER.

3) EARTH EXCAVATION INCLUDES THE REMOVAL OF THE EXISTING AGGREGATE SHOULDERS. THE CONTRACTOR MAY INCORPORATE THESE MATERIALS INTO THE PROPOSED EMBANKMENT.

4) 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.

5) EARTHWORK COMPACTION SHALL BE TO THE SATISFACTION OF THE ENGINEER.

6) THE QUANTITY OF SHORT TERM PAVEMENT MARKING SHOWN IN THE PLANS IS BASED ON THREE APPLICATIONS.

7) ATTAINMENT OF PROPER CROWN OR SUPERELEVATION SHALL BE FULLY ACCOMPLISHED WITH THE HOT MIX ASPHALT SURFACE REMOVAL OR HOT MIX ASPHALT BINDER COURSE OR LEVELING BINDER, WHEN SPECIFIED.

8) THE ALGEBRAIC DIFFERENCE BETWEEN THE PAVEMENT AND SHOULDER SLOPES SHALL NOT EXCEED 8.0%. THE SHOULDER ON THE OUTSIDE OF SUPERELEVATED CURVES SHALL BE FLATTENED ACCORDINGLY.

9) ON ALL SUPERELEVATED CURVES, THE PROPOSED BASE COURSE WIDENING SHALL BE CONSTRUCTED WITH A SLOPE CONFORMING TO THE RATE OF SUPERELEVATION OF THE EXISTING PAVEMENT, UNLESS OTHERWISE NOTED ON STAGING PLAN SHEETS.

10) 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.

11) THE LIMITS OF ROCK AND EARTH SLOPES SHOWN IN THE CROSS SECTIONS ARE APPROXIMATE. THE ACTUAL SLOPE USED SHALL BE DETERMINED BY THE MATERIAL CLASSIFICATION AS DEFINED IN ARTICLE 202.04, AND AS DIRECTED BY THE ENGINEER.

12) BITUMINOUS RESURFACING SHALL BE PLACED IN A SEQUENCE THAT WILL MINIMIZE THE TIME THE CENTERLINE EDGE IS EXPOSED TO TRAFFIC. WHEN AT THE END OF THE DAY'S OPERATION THE EXPOSED CENTERLINE EDGE IS GREATER THAN 2,000 FT. THE CONTRACTOR SHALL BE REQUIRED TO PAVE THE ADJACENT LANE ON THE FOLLOWING WORK DAY. PRIOR TO WINTER SHUTDOWN, ALL ADJACENT LANES SHALL BE BROUGHT UP TO THE SAME ELEVATION WITH RESURFACING.

13) CONNECTING OF NEW OR EXISTING STORM SEWER TO NEW OR EXISTING INLETS OR MANHOLES SHALL BE MADE IN A MANNER WHICH RESULTS IN A NEAT AND WATERTIGHT JOINT. WHEN PLACED THROUGH THE WALL OF AN INLET OR MANHOLE, STORM SEWER PIPE SHALL BE PLACED OR CUT FLUSH WITH THE INSIDE FACE OF THE WALL AND DRESSED WITH MORTAR TO PROVIDE A SMOOTH ROUNDED OR BEVELED EDGE. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE CONTRACT UNIT PRICE OF THE STORM SEWERS AND STRUCTURES INVOLVED.

14) STORM SEWER INVERTS SHOWN ON THE PLANS HAVE BEEN CALCULATED TO THE CENTER OF THE STRUCTURE.

15) IN ADDITION TO THE REQUIREMENTS OF ARTICLE 107.16 THE CONTRACTOR SHALL PROTECT THE SURFACE OF ALL BRIDGE DECKS, BRIDGE APPROACH PAVEMENTS, AND PCC CONNECTOR 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 107.16 REGARDLESS IF TRACK MOUNTED OR WHEELED.

16) PRIOR TO PLACEMENT OF THE FINAL PAVEMENT MARKINGS THE RESIDENT ENGINEER SHOULD CONTACT THE BUREAU OF OPERATIONS AND ARRANGE FOR INSPECTION AND APPROVAL OF THE PAVEMENT MARKING LAYOUT.

18) STRUCTURES WITHIN PROJECT LIMITS

STRUCTURE NO.	OPERATING RATING	INVENTORY RATING	POSTING
039-0013 (EB)	33.1	19.5	NO POSTING REQUIRED
039-0049 (WB)	55.0	33.4	NO POSTING REQUIRED

19) PLAN DIMENSIONS AND DETAILS RELATIVE TO THE EXISTING STRUCTURE HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE A CAUSE FOR ADDITIONAL COMPENSATION OR A CHANGE IN THE SCOPE OF THE WORK. THE CONTRACTOR, HOWEVER, WILL BE PAID FOR THE ACTUAL QUANTITY FURNISHED AT THE UNIT PRICE BID FOR THE WORK. CONSTRUCTION PLANS ARE AVAILABLE FOR REVIEW AT THE DISTRICT 9 HEADQUARTERS IN CARBONDALE, ILLINOIS.

HMA MIXTURE DESIGNS

LOCATION(S):	HOT-MIX ASPHALT SURFACE COURSE & TOP LIFT OF CROSSOVER PAVEMENT	HOT-MIX ASPAHLT LEVELING BINDER	HOT-MIX ASPHALT BINDER COURSE & LOWER LIFTS OF CROSSOVER PAVEMENT	HOT-MIX ASPHALT SHOULDERS
MIXTURE USE(S):	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N105	POLYMERIZED LEVELING BINDER (MACHINE METHOD), N105	POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, N105, IL19.0	HOT-MIX ASPHALT SHOULDERS
AC/PG:	SBS PG 76-22	PG 64-22	PG64-22	PG 58-22
RAP % (MAX):	0	10	10	50
DESIGN AIR VOIDS:	4.0%, 105 GYRATION DESIGN	4.0% 105 GYRATION DESIGN	4.0% 105 GYRATION DESIGN	2.0% 30 GYRATION DESIGN
MIX COMPOSITION: (GRADATION MIXTURE)	IL-9.5 mm OR IL-12.5 mm	IL 9.5mm OR IL 12.5mm	IL 19.0mm	HMA SHOULDER
FRICTION AGGREGATE:	D SURFACE	NONE	NONE	NONE

COMMITMENTS

NONE AS OF 02/03/2012, REFER TO COMMITMENT FILE FOR REVISIONS.

Prepared By: Joe Mankiewicz
DISTRICT STUDIES & PLANS ENGINEER

Examined By: Travis Emerson
DISTRICT LAND ACQUISITION ENGINEER

Examined By: Connie Nolen
DISTRICT PROGRAM DEVELOPMENT ENGINEER

Examined By: Kevin Hall
DISTRICT OPERATIONS ENGINEER

Examined By: Doug Kellerville
DISTRICT CONSTRUCTION ENGINEER

Examined By: Bruce Wibbles
DISTRICT MATERIALS ENGINEER

Approved By: Omer Osmanovic
DEPUTY DIRECTOR OF HIGHWAYS, REGION 5 ENGINEER

Feb 1, 2012
DATE

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS, GENERAL NOTES, AND COMMITMENTS
IL RTE 13 OVER BIG MUDDY RIVER

SCALE: | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)-B-1	JACKSON	200	2
		CONTRACT NO. 78056		
		ILLINOIS FED. AID PROJECT		

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	HBP: 80% FED & 20% STATE CONSTRUCTION CODE 0003	0010				
	20100500	TREE REMOVAL, ACRES	ACRE	0.25	0.25					
	20200100	EARTH EXCAVATION	CU YD	5,250	5,250					
*	25000200	SEEDING, CLASS 2	ACRE	1.5	1.5					
*	25000350	SEEDING, CLASS 7	ACRE	1.5	1.5					
*	25000400	NITROGEN FERTILIZER NUTRIENT	POUND	135	135					
*	25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	135	135					
*	25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	135	135					
*	25100115	MULCH, METHOD 2	ACRE	1.5	1.5					
*	25100630	EROSION CONTROL BLANKET	SQ YD	2,743	2,743					
	28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	450	450					
	28000305	TEMPORARY DITCH CHECKS	FOOT	348	348					
	28000400	PERIMETER EROSION BARRIER	FOOT	2,574	2,574					
	28000500	INLET AND PIPE PROTECTION	EACH	6	6					
	28100105	STONE RIPRAP, CLASS A3	SQ YD	22	22					

* SPECIALTY ITEM

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANITY SHEETS
IL RTE 13 OVER BIG MUDDY RIVER

SCALE: | SHEET NO. 1 OF 10 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)-B-1	JACKSON	200	3
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		

HBP: 80% FED & 20% STATE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE					
				0003	0010				
28100107	STONE RIPRAP, CLASS A4	SQ YD	4,941		4,941				
28200200	FILTER FABRIC	SQ YD	4,963	22	4,941				
40600115	POLYMERIZED BITUMINOUS MATERIALS (PRIME COAT)	GALLON	382	382					
40600300	AGGREGATE (PRIME COAT)	TON	9	9					
40600855	POLYMERIZED LEVELING BINDER (MACHINE METHOD), N105	TON	266	266					
40600990	TEMPORARY RAMP	SQ YD	603	603					
40603550	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N105	TON	357	357					
40701911	HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 11 1/2"	SQ YD	2,108	2,108					
42001420	BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)	SQ YD	295	295					
42400100	PORTLAND CEMENT CONCRETE SIDEWALK 4 INCH	SQ FT	1,016	1,016					
44000100	PAVEMENT REMOVAL	SQ YD	1,697	1,697					
44000151	HOT-MIX ASPHALT SURFACE REMOVAL, 1/2"	SQ YD	2,187	2,187					
44000300	CURB REMOVAL	FOOT	181	181					
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	658	658					

* SPECIALTY ITEM

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANITY SHEETS
IL RTE 13 OVER BIG MUDDY RIVER

SCALE: | SHEET NO. 2 OF 10 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)-B-1	JACKSON	200	4
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		

HBP: 80% FED & 20% STATE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE					
				0003	0010				
44000600	SIDEWALK REMOVAL	SQ FT	861	861					
44003100	MEDIAN REMOVAL	SQ FT	8,171	8,171					
44004250	PAVED SHOULDER REMOVAL	SQ YD	1,308	1,308					
48203100	HOT-MIX ASPHALT SHOULDERS	TON	450	450					
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	2		2				
50200100	STRUCTURE EXCAVATION	CU YD	2,255		2,255				
50200300	COFFERDAM EXCAVATION	CU YD	4,750		4,750				
50201121	COFFERDAM (TYPE 2) (LOCATION - 1)	EACH	1		1				
50201122	COFFERDAM (TYPE 2) (LOCATION - 2)	EACH	1		1				
50201123	COFFERDAM (TYPE 2) (LOCATION - 3)	EACH	1		1				
50201124	COFFERDAM (TYPE 2) (LOCATION - 4)	EACH	1		1				
50300225	CONCRETE STRUCTURES	CU YD	3,951.3		3,951.3				
50300255	CONCRETE SUPERSTRUCTURE	CU YD	1,866.9		1,866.9				
50300260	BRIDGE DECK GROOVING	SQ YD	4,946		4,946				

* SPECIALTY ITEM

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANITY SHEETS
IL RTE 13 OVER BIG MUDDY RIVER

SCALE: | SHEET NO. 3 OF 10 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)-B-1	JACKSON	200	5
		CONTRACT NO. 78056		
		ILLINOIS FED. AID PROJECT		

HBP: 80% FED & 20% STATE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE					
				0003	0010				
50300265	SEAL COAT CONCRETE	CU YD	2065.2		2065.2				
50300280	CONCRETE ENCASEMENT	CU YD	60.2		60.2				
50300300	PROTECTIVE COAT	SQ YD	6,690		6,690				
50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1		1				
50500505	STUD SHEAR CONNECTORS	EACH	15,504		15,504				
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	1,192,890		1,192,890				
50800515	BAR SPLICERS	EACH	199		199				
50800530	MECHANICAL SPLICERS	EACH	3,248		3,248				
50901735	BRIDGE FENCE RAILING (SIDEWALK)	FOOT	575		575				
50901750	PARAPET RAILING	FOOT	571		571				
51201800	FURNISHING STEEL PILES HP14X73	FOOT	9,798		9,798				
51201900	FURNISHING STEEL PILES HP14X89	FOOT	9,435		9,435				
51202305	DRIVING PILES	FOOT	19,233		19,233				
51203800	TEST PILE STEEL HP14X73	EACH	8		8				

* SPECIALTY ITEM

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANITY SHEETS
IL RTE 13 OVER BIG MUDDY RIVER

SCALE: | SHEET NO. 4 OF 10 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)-B-1	JACKSON	200	6
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	HBP: 80% FED & 20% STATE CONSTRUCTION CODE 0003	0010				
51203900	TEST PILE STEEL HP14X89	EACH	4		4				
51500100	NAME PLATES	EACH	2		2				
52000110	PREFORMED JOINT STRIP SEAL	FOOT	217		217				
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	12		12				
52100020	ELASTOMERIC BEARING ASSEMBLY, TYPE II	EACH	24		24				
52100520	ANCHOR BOLTS, 1"	EACH	120		120				
52100540	ANCHOR BOLTS, 1 1/2"	EACH	24		24				
542A0217	PIPE CULVERTS, CLASS A, TYPE 1 12"	FOOT	501	501					
54213657	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 12"	EACH	1	1					
54213669	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 24"	EACH	1	1					
550A0050	STORM SEWERS, CLASS A, TYPE 1 12"	FOOT	8	8					
550A0120	STORM SEWERS, CLASS A, TYPE 1 24"	FOOT	48	48					
55100500	STORM SEWER REMOVAL 12"	FOOT	240	240					
58700300	CONCRETE SEALER	SQ FT	2,387		2,387				

* SPECIALTY ITEM

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		DRAWN -	REVISED -
	PLOT SCALE = 100.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 1/25/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANITY SHEETS
IL RTE 13 OVER BIG MUDDY RIVER

SCALE: | SHEET NO. 5 OF 10 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)-B-1	JACKSON	200	7
		CONTRACT NO. 78056		
		ILLINOIS FED. AID PROJECT		

HBP: 80% FED & 20% STATE

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE 0003	0010				
	59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	189		189				
	60238305	INLETS, TYPE A, WITH MEDIAN INLET (604101)	EACH	2	2					
	60262405	INLETS TO BE ADJUSTED WITH NEW MEDIAN INLET (604101)	EACH	1	1					
	60263000	INLETS TO BE RECONSTRUCTED WITH NEW TYPE 1 FRAME, CLOSED LID	EACH	1	1					
	60500060	REMOVING INLETS	EACH	6	6					
	60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	39.0	39.0					
*	63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	100.0	100.0					
*	63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	4	4					
*	63100070	TRAFFIC BARRIER TERMINAL, TYPE 5	EACH	4	4					
*	63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4	4					
*	63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4	4					
	63200310	GUARDRAIL REMOVAL	FOOT	494	494					
*	63301210	REMOVE AND REERECT STEEL PLATE BEAM GUARDRAIL, TYPE A	FOOT	62.5	62.5					
*	63302700	REMOVE AND REERECT TRAFFIC BARRIER TERMINALS, TYPE 6	EACH	1	1					

* SPECIALTY ITEM

FILE NAME = m:\28018\microstation\@phase1\0978056-smt-S00.dgn	USER NAME = default	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 100.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 1/25/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANITY SHEETS
IL RTE 13 OVER BIG MUDDY RIVER

SCALE: | SHEET NO. 6 OF 10 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-11-B-1	JACKSON	200	8
		CONTRACT NO. 78056		
		ILLINOIS FED. AID PROJECT		

				HBP: 80% FED & 20% STATE					
				CONSTRUCTION CODE					
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0003	0010				
67100100	MOBILIZATION	L SUM	1	1					
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	29	29					
70100315	TRAFFIC CONTROL AND PROTECTION, STANDARD 701422	EACH	6	6					
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	29	29					
70300100	SHORT TERM PAVEMENT MARKING	FOOT	2,543	2,543					
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	14,943	14,943					
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	5,264	5,264					
70400100	TEMPORARY CONCRETE BARRIER	FOOT	1,048	1,048					
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	1,023	1,023					
70500100	TEMPORARY STEEL PLATE BEAM GUARDRAIL, TYPE A	FOOT	137.5	137.5					
70500665	TEMPORARY TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	1	1					
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	63	63					
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	3,597	3,597					

* SPECIALTY ITEM

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	PLOT DATE = 2/2/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANITY SHEETS
IL RTE 13 OVER BIG MUDDY RIVER

SCALE: | SHEET NO. 7 OF 10 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)-B-1	JACKSON	200	9
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		

HBP: 80% FED & 20% STATE

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE 0003	0010				
*	78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	1,063	1,063					
*	78008210	POLYUREA PAVEMENT MARKING TYPE I - LINE 4"	FOOT	2,477	2,477					
*	78008230	POLYUREA PAVEMENT MARKING TYPE I - LINE 6"	FOOT	309	309					
*	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	175	175					
*	78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	32	32					
*	78200420	GUARDRAIL MARKERS, TYPE B	EACH	17	17					
*	78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	6	6					
*	78200520	BARRIER WALL MARKERS, TYPE B	EACH	29	29					
	78300100	PAVEMENT MARKING REMOVAL	SQ FT	1,649	1,649					
	78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	155	155					
*	81028760	UNDERGROUND CONDUIT, COILABLE NONMETALIC CONDUIT, 2 1/2" DIA.	FOOT	182	182					
*	81200230	CONDUIT EMBEDDED IN STRUCTURE, 2" DIA., PVC	FOOT	1,025	1,025					
*	81300530	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 12" X 10" X 6"	EACH	4	4					
*	81300610	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 14" X 12" X 6"	EACH	1	1					
*	81603030	UNIT DUCT, 600V, 2-1C NO.4, 1/C NO.6 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE	FOOT	1,102	1,102					

* SPECIALTY ITEM

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANITY SHEETS
IL RTE 13 OVER BIG MUDDY RIVER

SCALE: | SHEET NO. 8 OF 10 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)-B-1	JACKSON	200	10
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	HBP: 80% FED & 20% STATE CONSTRUCTION CODE 0003	0010				
*	81702130	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 6	FOOT	1,025	1,025					
*	81702140	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 4	FOOT	2,050	2,050					
*	82102250	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 250 WATT	EACH	8	8					
*	83002200	LIGHT POLE, ALUMINUM, 40 FT. M.H., 6 FT. DAVIT ARM	EACH	6	6					
*	83003600	LIGHT POLE, ALUMINUM, 45 FT. M.H., 15 FT. DAVIT ARM	EACH	2	2					
*	83600355	LIGHT POLE FOUNDATION, METAL, 15" BOLT CIRCLE, 8" X 6'	EACH	2	2					
*	83800650	BREAKAWAY DEVICE, COUPLING WITH STAINLESS STEEL SCREEN	EACH	8	8					
	84200600	REMOVAL OF LIGHTING UNIT, NO SALVAGE	EACH	5	5					
	84200804	REMOVAL OF POLE FOUNDATION	EACH	3	3					
	Z0013798	CONSTRUCTION LAYOUT	L SUM	1	0.5	0.5				
	Z0018002	DRAINAGE SCUPPERS, DS-11	EACH	4		4				
	Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	340		340				
	Z0075400	TIE RODS	EACH	30		30				
+	Z0076600	TRAINEES	HOUR	2,000		2,000				
	X0321809	PERMANENT GROUND ANCHOR	EACH	30		30				

* SPECIALTY ITEM +0042

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANITY SHEETS
IL RTE 13 OVER BIG MUDDY RIVER

SCALE: | SHEET NO. 9 OF 10 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)-B-1	JACKSON	200	11
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		

HBP: 80% FED & 20% STATE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE 0003	CONSTRUCTION CODE 0010
X2070304	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	422		422
X4401198	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	SQ YD	2,055	2,055	
* X6330103	REMOVE AND RE-ERECT TRAFFIC BARRIER TERMINAL, TYPE 1 SPECIAL, TANGENT	EACH	1	1	
X7010212	TRAFFIC CONTROL AND PROTECTION, STANDARD 701416 (SPECIAL)	EACH	2	2	
X7050167	TEMPORARY TRAFFIC BARRIER TERMINAL, TYPE 1, SPECIAL (TANGENT)	EACH	1	1	

* SPECIALTY ITEM

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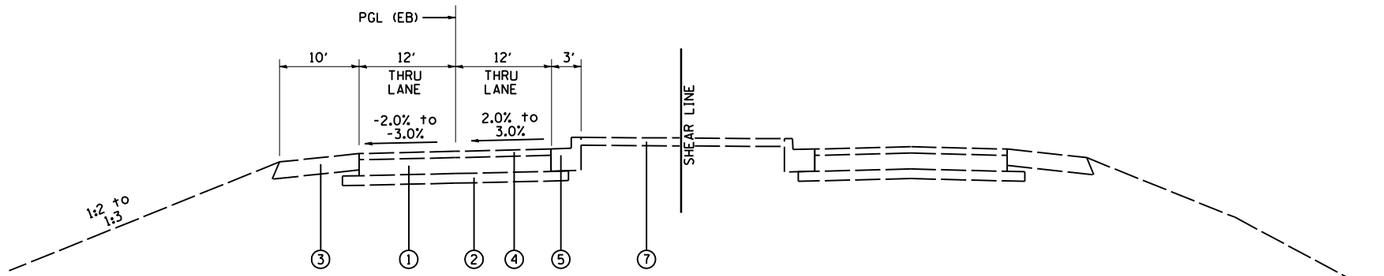
	PLOT DATE = 2/2/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANITY SHEETS
IL RTE 13 OVER BIG MUDDY RIVER

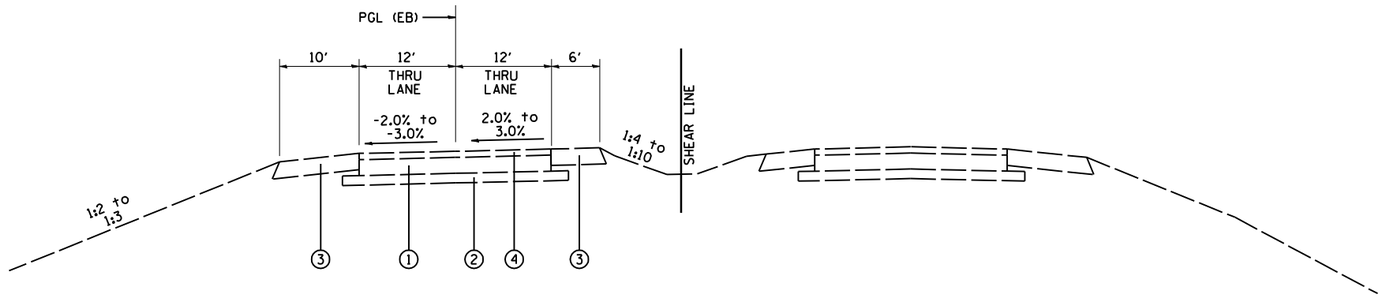
SCALE: | SHEET NO. 10 OF 10 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)-B-1	JACKSON	200	12
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		



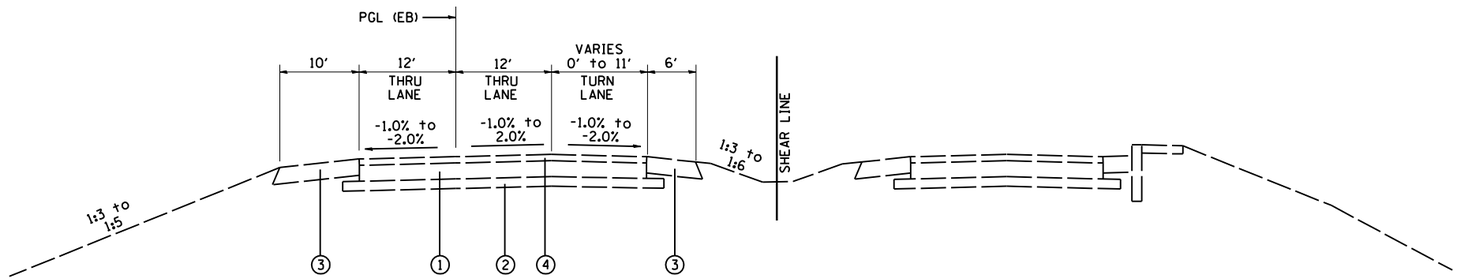
EXISTING TYPICAL SECTION IL RTE 13 (EASTBOUND)

STA. 344+45.50 TO STA. 347+67.50



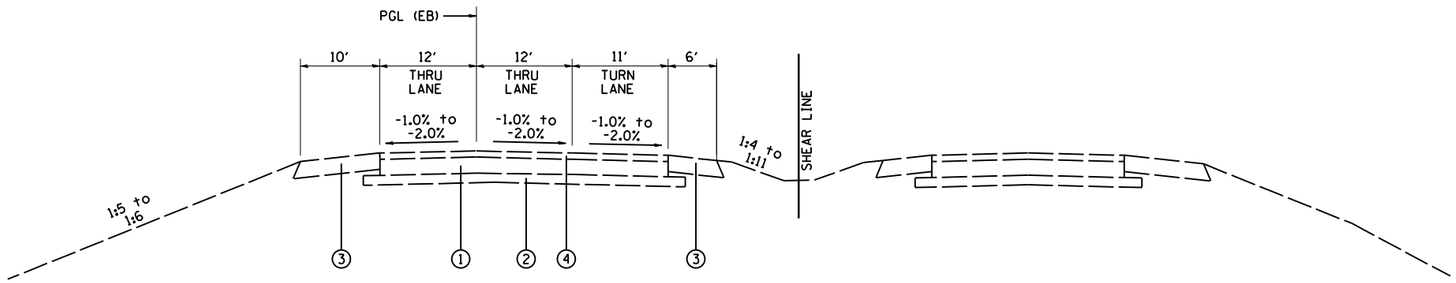
EXISTING TYPICAL SECTION IL RTE 13 (EASTBOUND)

STA. 338+32.40 TO STA. 344+45.50
STRUCTURE & BRIDGE APPROACH PAVEMENT OMISSION:
STA. 338+89.03 TO STA. 343+06.90



EXISTING TYPICAL SECTION IL RTE 13 (EASTBOUND)

STA. 336+41.00 TO STA. 338+32.40



EXISTING TYPICAL SECTION IL RTE 13 (EASTBOUND)

STA. 334+70.00 TO STA. 336+41.00

TYPICAL SECTION LEGEND

1. EXISTING CONTINOUSLY REINFORCED PCC PAVEMENT, 8"
2. EXISTING STABILIZED SUB-BASE, 4" (BAM)
3. EXISTING STABILIZED SHOULDER, 8" (BAM)
4. EXISTING HMA RESURFACING, 2" (ESTIMATED)
5. EXISTING CONCRETE CURB
6. EXISTING CONCRETE SIDEWALK
7. EXISTING CONCRETE MEDIAN, 4" (ESTIMATED)
8. PROPOSED POLYMERIZED BITUMINOUS MATERIALS (PRIME COAT)
9. PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N105, 1 1/2"
10. PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), N105, (VARIABLE DEPTH)
11. PROPOSED PAVEMENT REMOVAL, (VARIABLE DEPTH)
12. PROPOSED PAVEMENT REMOVAL, 1/2"
13. PROPOSED HOT-MIX ASPHALT SHOULDERS, (VARIABLE DEPTH)
14. PROPOSED HOT-MIX ASPHALT SHOULDERS, 8"
15. PROPOSED PCC SIDEWALK, 4"

NOTE:
1.) SEE EASTBOUND TYPICAL SECTIONS FOR ADDITIONAL INFORMATION
2.) "-" SLOPE INDICATES CROSS GRADE AWAY FROM PROPOSED GRADE LINE

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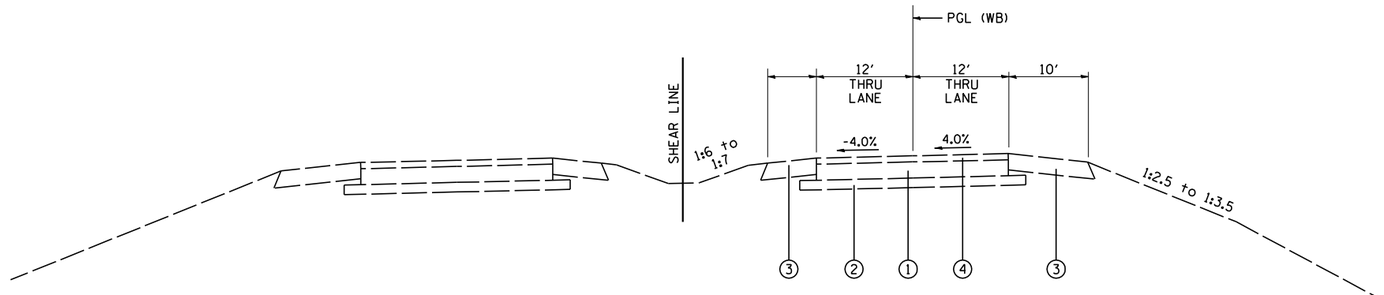
	PLOT DATE = 1/25/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING EASTBOUND TYPICAL SECTION SHEETS

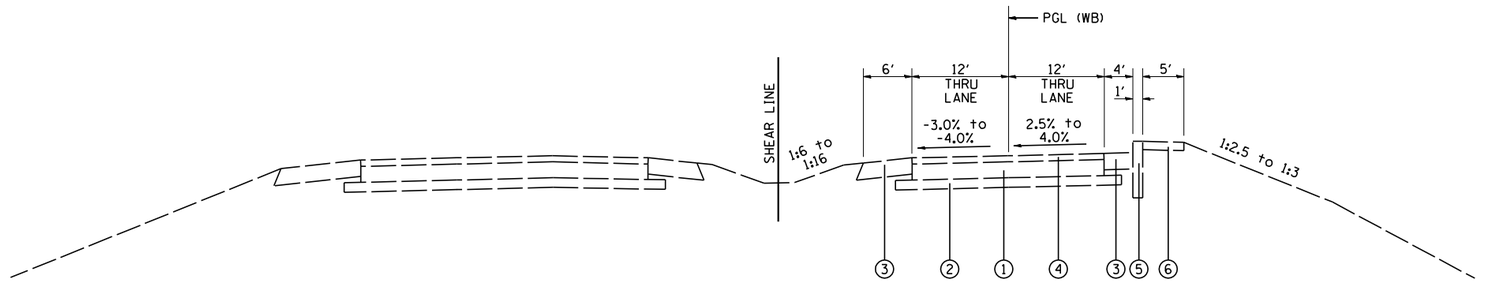
SCALE: NTS | SHEET NO. 1 OF 5 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)-B-1	JACKSON	200	13
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			



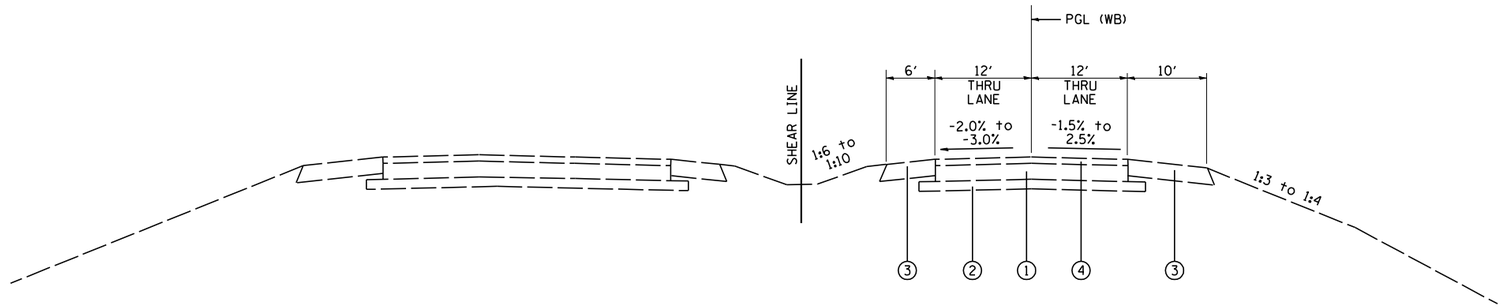
EXISTING TYPICAL SECTION IL RTE 13 (WESTBOUND)

STA 343+29.00 TO STA 344+87.60



EXISTING TYPICAL SECTION IL RTE 13 (WESTBOUND)

STA 337+35.30 TO STA 343+29.00
STRUCTURE & BRIDGE APPROACH PAVEMENT OMISSION:
STA. 338+65.91 TO STA. 342+80.67



EXISTING TYPICAL SECTION IL RTE 13 (WESTBOUND)

STA 334+70.00 TO STA 337+35.30

TYPICAL SECTION LEGEND

1. EXISTING CONTINOUSLY REINFORCED PCC PAVEMENT, 8''
2. EXISTING STABILIZED SUB-BASE, 4'' (BAM)
3. EXISTING STABILIZED SHOULDER, 8'' (BAM)
4. EXISTING HMA RESURFACING, 2'' (ESTIMATED)
5. EXISTING CONCRETE CURB
6. EXISTING CONCRETE SIDEWALK
7. EXISTING CONCRETE MEDIAN, 4'' (ESTIMATED)
8. PROPOSED POLYMERIZED BITUMINOUS MATERIALS (PRIME COAT)
9. PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX ''D'', N105, 1 1/2''
10. PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), N105, (VARIABLE DEPTH)
11. PROPOSED PAVEMENT REMOVAL, (VARIABLE DEPTH)
12. PROPOSED PAVEMENT REMOVAL, 1/2''
13. PROPOSED HOT-MIX ASPHALT SHOULDERS, (VARIABLE DEPTH)
14. PROPOSED HOT-MIX ASPHALT SHOULDERS, 8''
15. PROPOSED PCC SIDEWALK, 4''

NOTE:
1.) SEE EASTBOUND TYPICAL SECTIONS FOR ADDITIONAL INFORMATION
2.) ''-'' SLOPE INDICATES CROSS GRADE AWAY FROM PROPOSED GRADE LINE

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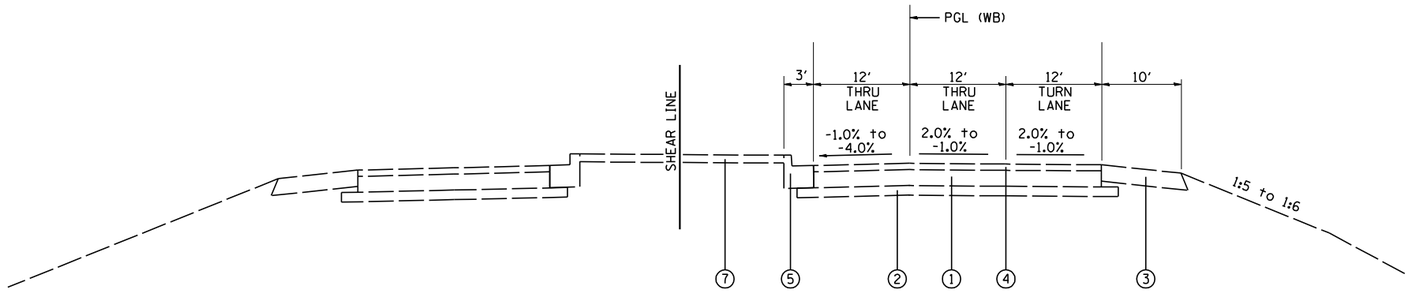
	PLOT DATE = 1/25/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING WESTBOUND TYPICAL SECTION SHEETS

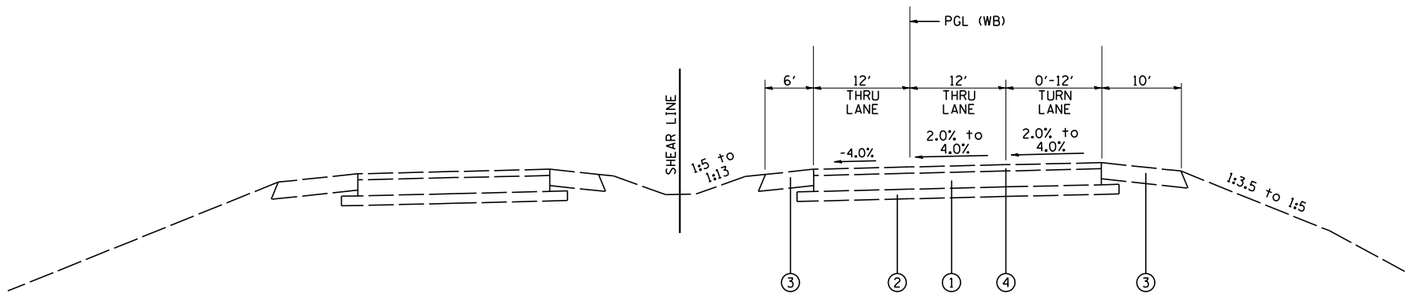
SCALE: NTS | SHEET NO. 2 OF 5 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)-B-1	JACKSON	200	14
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			



EXISTING TYPICAL SECTION IL RTE 13 (WESTBOUND)

STA 346+85.70 TO STA 347+90.00



EXISTING TYPICAL SECTION IL RTE 13 (WESTBOUND)

STA 344+87.60 TO STA 346+85.70

TYPICAL SECTION LEGEND

1. EXISTING CONTINOUSLY REINFORCED PCC PAVEMENT, 8''
2. EXISTING STABILIZED SUB-BASE, 4'' (BAM)
3. EXISTING STABILIZED SHOULDER, 8'' (BAM)
4. EXISTING HMA RESURFACING, 2'' (ESTIMATED)
5. EXISTING CONCRETE CURB
6. EXISTING CONCRETE SIDEWALK
7. EXISTING CONCRETE MEDIAN, 4'' (ESTIMATED)
8. PROPOSED POLYMERIZED BITUMINOUS MATERIALS (PRIME COAT)
9. PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX ''D'', N105, 1 1/2''
10. PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), N105, (VARIABLE DEPTH)
11. PROPOSED PAVEMENT REMOVAL, (VARIABLE DEPTH)
12. PROPOSED PAVEMENT REMOVAL, 1/2''
13. PROPOSED HOT-MIX ASPHALT SHOULDERS, (VARIABLE DEPTH)
14. PROPOSED HOT-MIX ASPHALT SHOULDERS, 8''
15. PROPOSED PCC SIDEWALK, 4''

NOTE:
1.) SEE EASTBOUND TYPICAL SECTIONS FOR ADDITIONAL INFORMATION
2.) ''-'' SLOPE INDICATES CROSS GRADE AWAY FROM PROPOSED GRADE LINE

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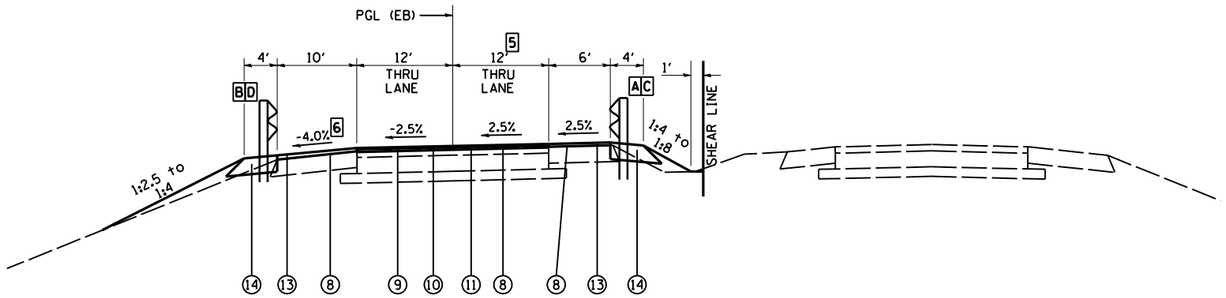
	PLOT DATE = 1/25/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING WESTBOUND TYPICAL SECTION SHEETS

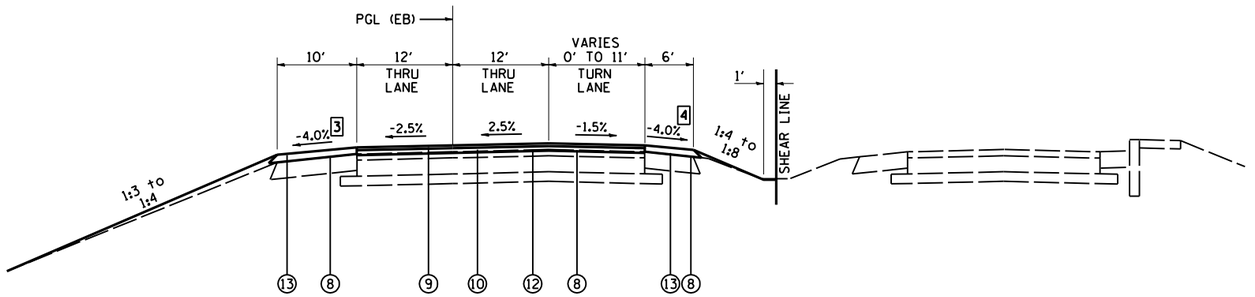
SCALE: NTS | SHEET NO. 3 OF 5 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)-B-1	JACKSON	200	15
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			



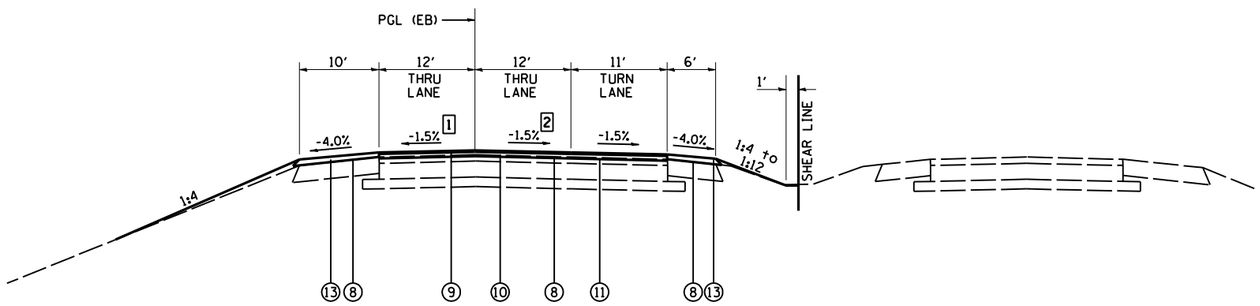
PROPOSED TYPICAL SECTION IL RTE 13 (EASTBOUND)

STA 337+94.04 TO STA 347+67.50
STRUCTURE, BRIDGE APPROACH PAVEMENT, AND CONNECTOR PAVEMENT OMISSION:
STA. 337+94.04 TO STA. 344+12.44



PROPOSED TYPICAL SECTION IL RTE 13 (EASTBOUND)

STA 336+41.00 TO STA 337+94.04



PROPOSED TYPICAL SECTION IL RTE 13 (EASTBOUND)

STA. 334+70.00 TO STA. 336+41.00

TYPICAL SECTION LEGEND

1. EXISTING CONTINOUSLY REINFORCED PCC PAVEMENT, 8"
2. EXISTING STABILIZED SUB-BASE, 4" (BAM)
3. EXISTING STABILIZED SHOULDER, 8" (BAM)
4. EXISTING HMA RESURFACING, 2" (ESTIMATED)
5. EXISTING CONCRETE CURB
6. EXISTING CONCRETE SIDEWALK
7. EXISTING CONCRETE MEDIAN, 4" (ESTIMATED)
8. PROPOSED POLYMERIZED BITUMINOUS MATERIALS (PRIME COAT)
9. PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N105, 1 1/2"
10. PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), N105, (VARIABLE DEPTH)
11. PROPOSED PAVEMENT REMOVAL, (VARIABLE DEPTH)
12. PROPOSED PAVEMENT REMOVAL, 1/2"
13. PROPOSED HOT-MIX ASPHALT SHOULDERS, (VARIABLE DEPTH)
14. PROPOSED HOT-MIX ASPHALT SHOULDERS, 8"
15. PROPOSED PCC SIDEWALK, 4"

TYPICAL SECTION NOTES

[1] VARIES -1.5% TO -2.5%
FROM STA. 335+81.79 TO STA. 336+02.79

[2] VARIES -1.5% TO 2.5%
FROM STA. 335+18.79 TO STA. 336+02.79

[3] VARIES -4.0% TO -2.5%
FROM STA. 337+50.00 TO STA. 337+94.04

[4] VARIES -4.0% TO 2.5%
FROM STA. 336+62.00 TO STA. 337+94.04

[5] VARIES 12' TO 14'
FROM STA. 347+01.00 TO STA. 347+67.50

[6] VARIES -2.5% TO -4.0%
FROM STA. 344+12.44 TO STA. 344+50.00

[A] GUARDRAIL LIMITS
FROM STA. 338+16.50 TO STA. 338+43.50

[B] GUARDRAIL LIMITS
FROM STA. 338+33.90 TO STA. 338+61.20

[C] GUARDRAIL LIMITS
FROM STA. 343+37.40 TO STA. 344+79.60

[D] GUARDRAIL LIMITS
FROM STA. 343+62.10 TO STA. 344+56.10

ESTIMATED VARIABLE DEPTH LEVELING BINDER THICKNESS
STA. 334+70.00 TO STA. 335+40.00 - NONE ANTICIPATED
STA. 335+40.00 TO STA. 337+94.00 - VARIES 3/4" TO 4 1/2"
STA. 344+12.00 TO STA. 346+38.00 - VAREIS 7" TO 3/4"
STA. 346+38.00 TO STA. 347+67.50 - NONE ANTICIPATED

NOTE:
1.) SEE EASTBOUND TYPICAL SECTIONS FOR ADDITIONAL INFORMATION
2.) "-" SLOPE INDICATES CROSS GRADE AWAY FROM PROPOSED GRADE LINE

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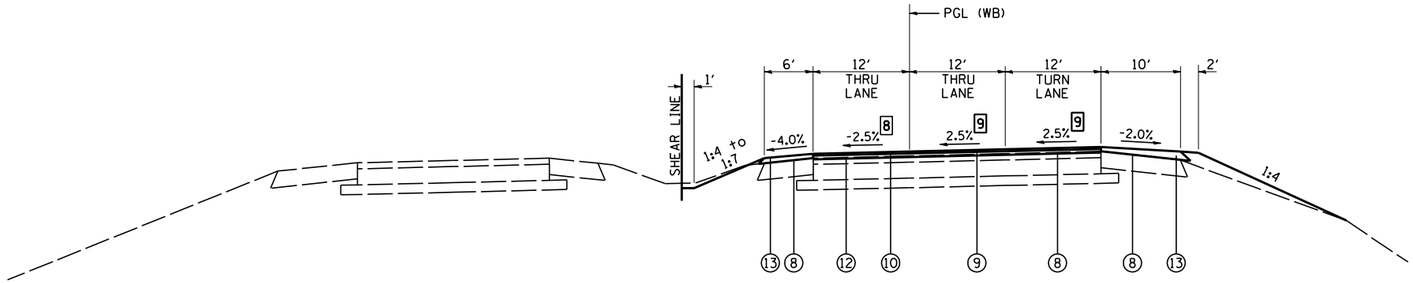
		DRAWN -	REVISED -
	PLOT SCALE = 40.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 1/25/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED EASTBOUND TYPICAL SECTION SHEETS

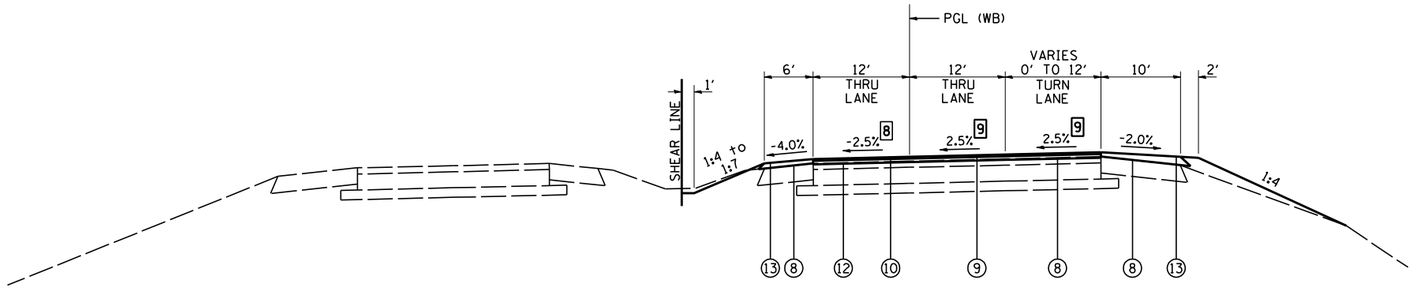
SCALE: NTS | SHEET NO. 4 OF 5 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)-B-1	JACKSON	200	16
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		



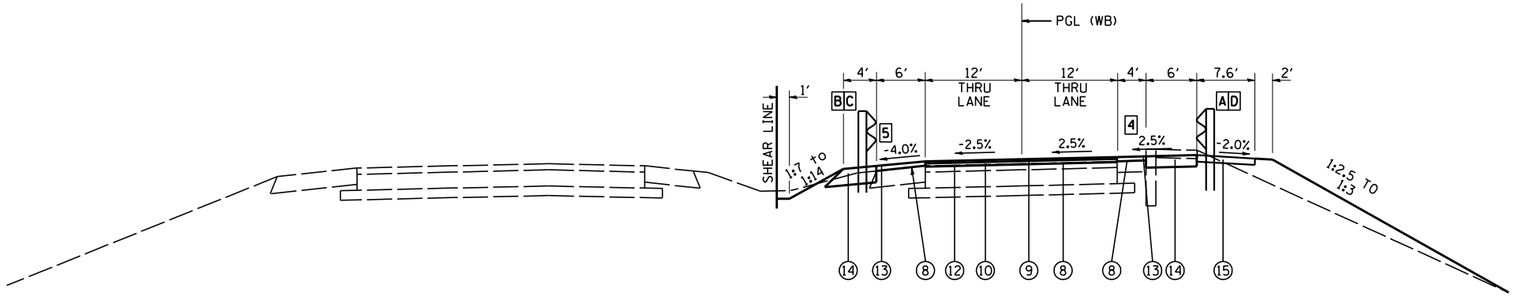
PROPOSED TYPICAL SECTION IL RTE 13 (WESTBOUND)

STA 346+86.00 TO STA 347+90.00



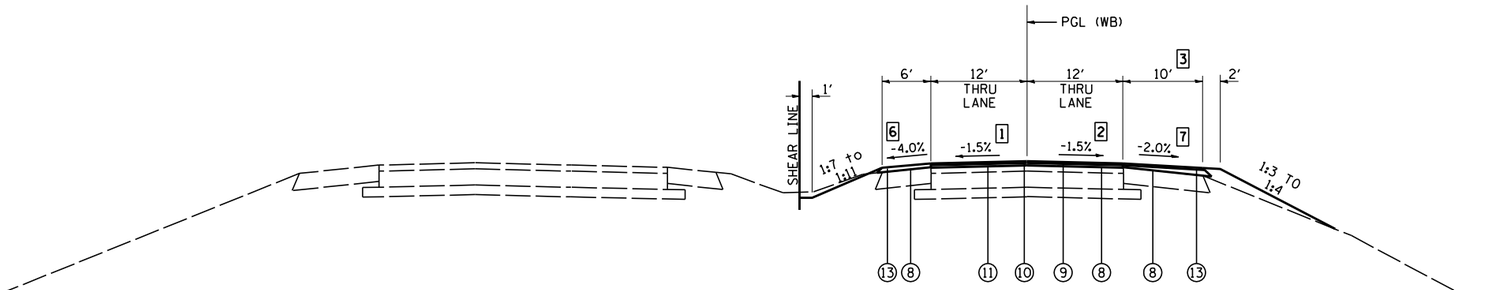
PROPOSED TYPICAL SECTION IL RTE 13 (WESTBOUND)

STA 345+11.00 TO STA 346+86.00



PROPOSED TYPICAL SECTION IL RTE 13 (WESTBOUND)

STA 336+79.90 TO STA 343+90.70
STRUCTURE, BRIDGE APPROACH PAVEMENT, AND CONNECTOR PAVEMENT OMISSION:
STA. 337+67.16 TO STA. 343+84.56



PROPOSED TYPICAL SECTION IL RTE 13 (WESTBOUND)

STA 334+70.00 TO STA 336+79.90
STA 343+90.70 TO STA 345+11.00

TYPICAL SECTION LEGEND

1. EXISTING CONTINOUSLY REINFORCED PCC PAVEMENT, 8''
2. EXISTING STABILIZED SUB-BASE, 4'' (BAM)
3. EXISTING STABILIZED SHOULDER, 8'' (BAM)
4. EXISTING HMA RESURFACING, 2'' (ESTIMATED)
5. EXISTING CONCRETE CURB
6. EXISTING CONCRETE SIDEWALK
7. EXISTING CONCRETE MEDIAN, 4'' (ESTIMATED)
8. PROPOSED POLYMERIZED BITUMINOUS MATERIALS (PRIME COAT)
9. PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX ''D'', N105, 1 1/2''
10. PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), N105, (VARIABLE DEPTH)
11. PROPOSED PAVEMENT REMOVAL, (VARIABLE DEPTH)
12. PROPOSED PAVEMENT REMOVAL, 1/2''
13. PROPOSED HOT-MIX ASPHALT SHOULDERS, (VARIABLE DEPTH)
14. PROPOSED HOT-MIX ASPHALT SHOULDERS, 8''
15. PROPOSED PCC SIDEWALK, 4''

TYPICAL SECTION NOTES

[1] VARIES -1.5% TO -2.5%
FROM STA. 336+09.00 TO STA. 336+30.00

[2] VARIES -1.5% TO 2.5%
FROM STA. 335+46.00 TO STA. 336+30.00

[3] VARIES 10' TO 17.58'
FROM STA. 335+88.90 TO STA. 336+79.90
VARIES 17.58' TO 10'
FROM STA. 343+90.70 TO STA. 344+84.60

[4] VARIES -2.0% TO 2.5%
FROM STA. 336+74.16 TO STA. 337+67.16

[5] VARIES -4.0% TO -2.5%
FROM STA. 337+17.20 TO STA. 337+67.16

[6] VARIES -2.5% TO -4.0%
FROM STA. 343+84.56 TO STA. 344+34.60

[7] VARIES 2.5% TO -2.0%
FROM STA. 343+84.56 TO STA. 344+77.56

[8] VARIES -2.5% TO -1.0%
FROM STA. 346+53.30 TO STA. 346+93.30

[9] VARIES 2.5% TO -1.0%
FROM STA. 346+53.30 TO STA. 347+90.00

[A] GUARDRAIL LIMITS
FROM STA. 336+79.90 TO STA. 337+73.60

[B] GUARDRAIL LIMITS
FROM STA. 337+01.30 TO STA. 338+33.10

[C] GUARDRAIL LIMITS
FROM STA. 343+34.20 TO STA. 343+61.60

[D] GUARDRAIL LIMITS
FROM STA. 343+51.30 TO STA. 343+90.70

ESTIMATED VARIABLE DEPTH LEVELING BINDER THICKNESS
STA. 334+70.00 TO STA. 337+37.00 - NONE ANTICIPATED
STA. 337+37.00 TO STA. 337+67.00- VARIES 3/4'' TO 2''
STA. 343+85.00 TO STA. 346+05.00 - VAREIS 5'' TO 3/4''
STA. 346+05.00 TO STA. 347+90.00 - NONE ANTICIPATED

NOTE:
1.) SEE EASTBOUND TYPICAL SECTIONS FOR ADDITIONAL INFORMATION
2.) ''-'' SLOPE INDICATES CROSS GRADE AWAY FROM PROPOSED GRADE LINE

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		DRAWN -	REVISED -
	PLOT SCALE = 40.0000 '/ IN.	CHECKED -	REVISED -
	PLOT DATE = 1/25/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED WESTBOUND TYPICAL SECTION SHEETS

SCALE: NTS | SHEET NO. 5 OF 5 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)-B-1	JACKSON	200	17
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

PAVEMENT SCHEDULE

STATION	STATION	OFFSET	P BIT MATLS PR CT (GALLON)	AGG PR CT (TON)	P LEV BIND MM N105 (TON)	TEMPORARY RAMP (SQ YD)	P HMA SC "D" N105 (TON)	HMA PAVT FD 11 1/2 (SQ YD)	BR APPR PVT CON (PCC) (SQ YD)	PAVEMENT REM (SQ YD)	HMA SURF REM 1/2 (SQ YD)	MEDIAN REMOVAL (SQ FT)	PAVED SHLD REMOVAL (SQ YD)	HMA SHOULDERS (TON)	HMA SURF REM VAR DP (SQ YD)
EASTBOUND ALIGNMENT															
334+70	334+75	CL				19									
334+70	335+40	CL													272
334+70	337+94	CL	104	2			97								
334+70	337+94	LT												56	
334+70	337+94	RT												44	
335+40	337+94	CL			128						884				
335+68	337+73	RT								266					
337+94	338+38	CL							64						
343+63	344+12	CL							83						
343+69	347+02	RT								441					
343+78	345+14	RT												24	
344+06	344+92	LT												14	
344+12	346+38	CL			67						601				
344+12	347+67	LT												41	
344+12	347+67	RT												18	
344+12	347+67	CL	86	2			80								
346+38	347+67	CL													353
347+62	347+67	CL				14									
WESTBOUND ALIGNMENT															
334+70	334+75	CL				13									
334+70	337+37	CL													712
334+70	337+67	CL	71	2			67								
334+70	337+67	LT												27	
334+70	337+67	RT												37	
335+89	336+80	RT												17	
336+67	337+91	LT												22	
337+35	337+67	RT												10	
337+37	337+67	CL			6						80				
337+67	337+89	CL							62						
343+52	343+85	CL							86						
343+85	346+05	CL			65						622				
343+85	347+90	CL	121	3			113								
343+85	347+90	LT												71	
343+85	347+90	RT												51	
343+91	344+85	RT												18	
346+05	347+90	CL													718
347+85	347+90	CL				20									
STAGE 1															
099+97	103+83	RT											254		
099+97	103+98	LT											279		
100+00	103+83	CL						721							
101+68	103+71	RT						99					101		
101+94	103+28	LT						92							
101+94	104+12	LT											177		
102+70	103+28	LT				205									
103+28	104+05	LT								187					
108+24	110+28	RT						103					101		
108+40	113+18	CL						985							
108+41	110+15	RT											133		
108+65	110+17	LT											102		
108+67	109+61	LT								208					
108+83	110+62	LT											127		
109+60	109+99	LT				174									
109+62	110+62	LT						108							
110+18	113+18	RT										8,171			
STAGE 2															
202+23	202+61	RT				80									
202+57	203+49	RT								294					
207+85	208+74	RT								301					
208+20	208+75	RT											34		
208+73	209+06	RT				78									
TOTAL			382	9	266	603	357	2,108	295	1,697	2,187	8,171	1,308	450	2,055

SIDEWALK SCHEDULE

STATION	STATION	OFFSET	PC CONC SIDEWALK 4 (SQ FT)	SIDEWALK REM (SQ FT)
WESTBOUND ALIGNMENT				
336+80	337+73	RT	702	
343+47	343+91	RT	314	
STAGE 2				
202+19	203+55	RT		553
207+60	208+19	RT		308
TOTAL			1,016	861

CURB & GUTTER SCHEDULE

STATION	STATION	OFFSET	CURB REM (FOOT)	COMB CONC GUTTER REM (FOOT)	COMB CC&G TB 6.24 (FOOT)
STAGE 1					
109+89	113+18	RT		329	
109+92	113+18	LT		329	
113+05	113+18	RT			39.0
STAGE 2					
202+20	203+55	RT	124		
207+63	208+19	RT	57		
TOTAL			181	658	39.0

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		DRAWN -	REVISED -
	PLOT SCALE = 100.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 1/25/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE SHEETS
IL RTE 13 OVER BIG MUDDY RIVER

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

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)-B-1	JACKSON	200	18
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		

TRAFFIC CONTROL ITEMS

STATION	STATION	OFFSET	COMMENT	SHORT-TERM PAVT MKING (FOOT)	TEMP PVT MK LINE 4 (FOOT)	WORK ZONE PAVT MK REM (SQ FT)	TEMP CONC BARRIER (FOOT)	REL TEMP CONC BARRIER (FOOT)	RAISED REFL PAVT MKR (NOTE 1) (EACH)	PAVT MARKING REMOV (SQ FT)	RAISED REF PVT MK REM (EACH)
EASTBOUND ALIGNMENT											
334+70	338+16	RT	LANE LINE	104		12					
334+70	347+67	RT	EDGE LINE	389		43					
334+70	347+67	CL	CENTER LINE	389		43					
334+70	347+67	LT	EDGE LINE	389		43					
WESTBOUND ALIGNMENT											
334+70	347+91	RT	EDGE LINE	396		44					
334+70	347+91	CL	CENTER LINE	396		44					
334+70	347+91	LT	EDGE LINE	396		44					
345+11	347+91	RT	LANE LINE	84		9					
STAGE 1											
100+00	101+06	RT	EB TURN LANE		26	9					
100+00	103+59	LT	EX EB LANE LINE							29	
100+00	103+59	LT	EX EB EDGE LINE							118	
100+00	103+59	LT	EX EB CENTER LINE							44	4
100+00	113+17	RT	EX WB EDGE LINE							438	
100+00	113+17	RT	WB INSIDE LANE LINE		1,322	441					
100+00	113+17	RT	EX WB CENTER LINE							165	16
100+00	113+17	RT	EB INSIDE LANE LINE		1,323	441					
100+00	113+41	LT	EB OUTSIDE LANE LINE		1,342	447					
101+68	110+29	RT	WB OUTSIDE LANE LINE		884	295				296	
101+59	111+69	RT					1,023				
109+29	113+17	LT	EX EB EDGE LINE							129	
109+30	113+41	LT	EX EB CENTER LINE							51	5
WESTBOUND TRAVEL LANES ON IL 13			WB LANE LINE		1,200	400			15	160	11
EASTBOUND TRAVEL LANES ON IL 13			EB LANE LINE		947	316			21	79	12
SOUTHBOUND TRAVEL LANES ON IL 127			SB LANE LINE		1,036				22	86	13
STAGE 2											
200+00	212+79	RT	WB OUTSIDE LANE LINE		1,278	426					
200+00	212+79	LT	WB INSIDE LANE LINE		1,285	428					
200+00	212+81	LT	EB INSIDE LANE LINE		1,285	428					
200+80	211+29	LT					25	1,023			
201+88	210+07	LT	EB OUTSIDE LANE LINE		830	277					
201+88	203+25	LT	EX EB EDGE LINE							12	
208+87	210+07	LT	EX EB EDGE LINE							42	
WESTBOUND TRAVEL LANES ON IL 13			WB LANE LINE		1,012	337			22		15
EASTBOUND TRAVEL LANES ON IL 13			EB LANE LINE		1,173	391			14		21
SOUTHBOUND TRAVEL LANES ON IL 127			SB LANE LINE			345					
TOTAL				2,543	14,943	5,264	1,048	1,023	94	1,649	97

TRAFFIC CONTROL NOTES:

1. SEE HIGHWAY STANDARD 701422 FOR RAISED REFLECTIVE PAVEMENT MARKER DETAILS.
2. EASTBOUND TRAVEL LANES AND WESTBOUND TRAVEL LANES ON IL 13 AND SOUTHBOUND TRAVEL LANES ON IL 127 DENOTES TEMPORARY PAVEMENT MARKING RELATED TO HIGHWAY STANDARD 701422.

DRAINAGE SCHEDULE

STATION	OFFSET	STATION	OFFSET	P CUL CL A 1 12 (FOOT)	PRC FLAR END SEC 12 (EACH)	PRC FLAR END SEC 24 (EACH)	STORM SEW CL A 1 12 (FOOT)	STORM SEW CL A 1 24 (FOOT)	STORM SEWER REM 12 (FOOT)	INLET TA M INL 604101 (EACH)	INLET ADJ N MI 604101 (EACH)	INL RECON NEW TIF CL (EACH)	REMOV INLETS (EACH)
EASTBOUND ALIGNMENT													
335+67	37' RT												1
337+03	35' RT										1		
337+05	42' RT	337+06	94' RT			1		48					
342+86	34' RT	343+17	34' RT						31				1
344+96	31' RT	344+96	44' RT		1		8						
346+76	29' RT												1
STAGE 1													
101+00	27' RT	102+35	9' LT	138						1			
108+61	16' LT	112+24	22' RT	363						1			
110+41	7' RT	111+06	15' RT						67			1	1
111+06	15' RT	111+76	25' RT						71				1
112+47	25' RT	113+20	35' RT						71				1
TOTAL				501	1	1	8	48	240	2	1	1	6

SEEDING SCHEDULE

STATION	STATION	OFFSET	SEEDING CL 2 (ACRE)	SEEDING CL 7 (ACRE)	NITROGEN FERT NUTR (POUND)	PHOSPHORUS FERT NUTR (POUND)	POTASSIUM FERT NUTR (POUND)	MULCH METHOD 2 (ACRE)	TEMP EROS CONTR SEED (POUND)
EASTBOUND ALIGNMENT									
334+70	338+59	RT	0.21	0.21	19	19	19	0.21	63
334+70	338+62	LT	0.16	0.16	14	14	14	0.16	48
343+05	347+56	RT	0.22	0.22	20	20	20	0.22	66
343+63	347+67	LT	0.29	0.29	26	26	26	0.29	87
WESTBOUND ALIGNMENT									
334+70	338+14	RT	0.44	0.44	40	40	40	0.44	132
343+05	347+90	RT	0.18	0.18	16	16	16	0.18	54
TOTAL			1.5	1.5	135	135	135	1.5	450

EROSION CONTROL SCHEDULE

STATION	STATION	OFFSET	STONE RIPRAP CL A3 (SQ YD)	FILTER FAB FOR RIPRAP (SQ YD)	EROSION CONTROL BLANKET (SQ YD)	TEMP DITCH CHECKS (FOOT)	PERIMETER EROS BAR (FOOT)	INLET & PIPE PROTECTION (EACH)
EASTBOUND ALIGNMENT								
334+70	337+03	RT				45		
334+70	339+63	LT					608	
337+03		35' RT						1
337+03	338+40	RT				30		
338+00	338+62	LT			344			
338+46	338+51	LT	4	4				
343+30	344+96	RT				24		
343+63	345+50	LT			974			
342+32	347+68	LT					629	
343+95	344+00	LT	4	4				
344+96		30' RT						1
344+96	347+53	RT				36		
WESTBOUND ALIGNMENT								
334+70	339+48	RT					606	
337+00	338+14	RT			892			
337+03	337+08	RT	6	6				
338+15	338+20	LT	4	4				
342+44	347+90	RT					731	
343+05	344+00	RT			533			
343+49	343+54	LT	4	4				
STAGE 1								
099+97	101+00	RT				15		
101+00		27' RT						1
101+00	101+55	RT				24		
102+12	102+35	LT				12		
102+35		9' LT						1
102+35	103+81	LT				42		
108+61		16' LT						1
108+61	110+63	LT				60		
111+65	112+24	RT				24		
112+24		22' RT						1
112+24	112+98	RT				36		
TOTAL			22	22	2,743	348	2,574	6

EROSION CONTROL NOTES:

1. HEIGHT OF TEMPORARY DITCH CHECKS ASSUMED TO BE 12 INCHES.

FILE NAME = M:\28018\Microstation\0Phase II\CADD Sheets\D978056-sht-schedules.dgn	USER NAME = default	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SCHEDULE SHEETS IL RTE 13 OVER BIG MUDDY RIVER	F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 100.0000 ' / IN.	DRAWN -	REVISED -			331	(12-1)-B-1	JACKSON	200	19
	PLOT DATE = 1/26/2012	CHECKED -	REVISED -		SCALE: SHEET NO. 2 OF 3 SHEETS STA. TO STA.			CONTRACT NO. 78056		
		DATE -	REVISED -					ILLINOIS FED. AID PROJECT		

GUARDRAIL REMOVAL / REPLACEMENT

STATION	STATION	OFFSET	SPBGR TY A 6FT POSTS (FOOT)	TRAF BAR TERM T2 (EACH)	TRAF BAR TERM T5 (EACH)	TRAF BAR TERM T6 (EACH)	TR BAR TRM T1 SPL TAN (EACH)	GUARDRAIL REMOV (FOOT)	REM RE-E SPBGR TY A (FOOT)	REM RE-E T B TERM T6 (EACH)	TEMP SPBGR TY A (FOOT)	TEMP TR BAR TERM T6 (EACH)	GUARDRAIL MKR TYPE B (EACH)	TERMINAL MARKER -DA (EACH)	BAR WALL MKR TYPE B (EACH)	R & R TRB TM T1 SPL TAN (EACH)	TEMP TRBT T1 SPL TAN (EACH)
EASTBOUND ALIGNMENT																	
338+16	338+29	RT		1													
338+29	338+44	RT			1								1				
338+34	338+47	LT		1													
338+43	343+38	RT													7		
338+47	338+62	LT			1								1				
338+61	343+63	LT													7		
343+38	343+81	RT				1							2				
343+62	344+06	LT				1							2				
343+81	344+30	RT	50.0														
344+06	344+56	LT					1							1			
344+30	344+80	RT					1							1			
WESTBOUND ALIGNMENT																	
336+80	337+30	RT					1							1			
337+01	337+51	LT					1							1			
337+30	337+74	RT				1							2				
337+51	337+89	LT	37.5														
337+73	343+52	RT													8		
337+89	338+33	LT				1							2				
338+32	343+35	LT													7		
343+34	343+49	LT			1								1				
343+49	343+62	LT		1													
343+51	343+66	RT			1								1				
343+66	343+78	RT	12.5														
343+78	343+91	RT		1													
STAGE 1																	
102+80	103+95	LT						115									
108+20	108+64	LT										1					
108+38	109+57	LT						119									
108+59	110+25	LT						157									
108+65	110+03	LT									137.5		3				
110+03	110+53	LT												1			1
STAGE 2																	
201+88	202+38	RT														1	
202+16	203+31	RT						103									
202+38	203+01	RT							62.5				2				
203+01	203+45	RT								1				1			
TOTAL			100.0	4	4	4	4	494	62.5	1	137.5	1	17	6	29	1	1

TREE REMOVAL SCHEDULE

STATION	STATION	TREE REMOV (ACRE)
EASTBOUND ALIGNMENT		
343+16	344+32	0.25
TOTAL		0.25

PAVEMENT MARKING SCHEDULE

STATION	STATION	OFFSET	COMMENT	THPL PVT MK LTR & SYM (NOTE 1) (SQ FT)	THPL PVT MK LINE 4 (NOTE 1) (FOOT)	THPL PVT MK LINE 6 (NOTE 1) (FOOT)	POLYUREA PM T1 LN 4 (NOTE 1) (FOOT)	POLYUREA PM T1 LN 6 (NOTE 1) (FOOT)	RAISED REFL PAVT MKR (NOTE 2) (EACH)	RAISED REFL PAVT MKR BR (NOTE 2) (EACH)	RAISED REF PVT MK REM (EACH)
EASTBOUND ALIGNMENT											
334+70	337+94	RT	LANE LINE		210				5		
334+70	337+94	RT	EDGE LINE		325						
334+70	337+94	CL	CENTER LINE			82			9		
334+70	337+94	LT	EDGE LINE		323						
334+84		RT	LEFT TURN ONLY	21							
335+65		RT	LEFT TURN ONLY	21							
337+94	344+12	RT	EDGE LINE				620				
337+94	344+12	CL	CENTER LINE					155		16	
337+94	344+12	LT	EDGE LINE				616				
344+12	347+67	RT	EDGE LINE		357						
344+12	347+67	CL	CENTER LINE			88			9		
344+12	347+67	LT	EDGE LINE		353						
EASTBOUND TRAVEL LANES ON IL 13					213	236			12		22
WESTBOUND ALIGNMENT											
334+70	337+67	RT	EDGE LINE		297						
334+70	337+67	CL	CENTER LINE			74			8		
334+70	337+67	LT	EDGE LINE		298						
337+67	343+85	RT	EDGE LINE				623				
337+67	343+85	CL	CENTERLINE					154		16	
337+67	343+85	LT	EDGE LINE				618				
343+85	347+90	RT	EDGE LINE		408						
343+85	347+91	CL	CENTER LINE			102			11		
343+85	347+90	LT	EDGE LINE		405						
345+11	347+90	RT	LANE LINE		149				3		
347+40		RT	RIGHT TURN ONLY	21							
WESTBOUND TRAVEL LANES ON IL 13					259	222			11		14
IL RTE 127											
SOUTHBOUND TRAVEL LANES ON IL 127						259			13		22
TOTAL				63	3,597	1,063	2,477	309	81	32	58

PAVEMENT MARKING NOTES:

1. SEE HIGHWAY STANDARD 780001 FOR PAVEMENT MARKING DETAILS.
2. SEE HIGHWAY STANDARD 781001 FOR RAISED REFLECTIVE PAVEMENT MARKER DETAILS.
3. EASTBOUND TRAVEL LANES AND WESTBOUND TRAVEL LANES ON IL 13 AND SOUTHBOUND TRAVEL LANES ON IL 127 DENOTES PAVEMENT MARKING DISTURBED WITH HIGHWAY STANDARD 701422.

EARTHWORK SCHEDULE

STATION	STATION	EARTH EXCAVATION (CU YD)	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE (NOTE 1) (CU YD)	EMBANKMENT (CU YD)	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-) (CU YD)
EASTBOUND ALIGNMENT					
334+50	338+00	15	10	70	-60
338+00	339+54	1,280	960	131	829
342+17	344+00	1,086	815	317	498
344+00	347+68	40	30	285	-255
WESTBOUND ALIGNMENT					
334+50	338+00	45	35	815	-780
338+00	339+54	1,165	875	238	637
342+29	343+50	1,154	865	581	284
343+50	347+90	40	30	295	-265
STAGE 1					
100+00	104+04	85	65	80	-15
108+10	113+18	340	255	80	175
TOTAL		5,250	3,940	2,892	1,048

EARTHWORK NOTES:

1. ESTIMATED SHRINKAGE FACTOR = 25%.

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		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

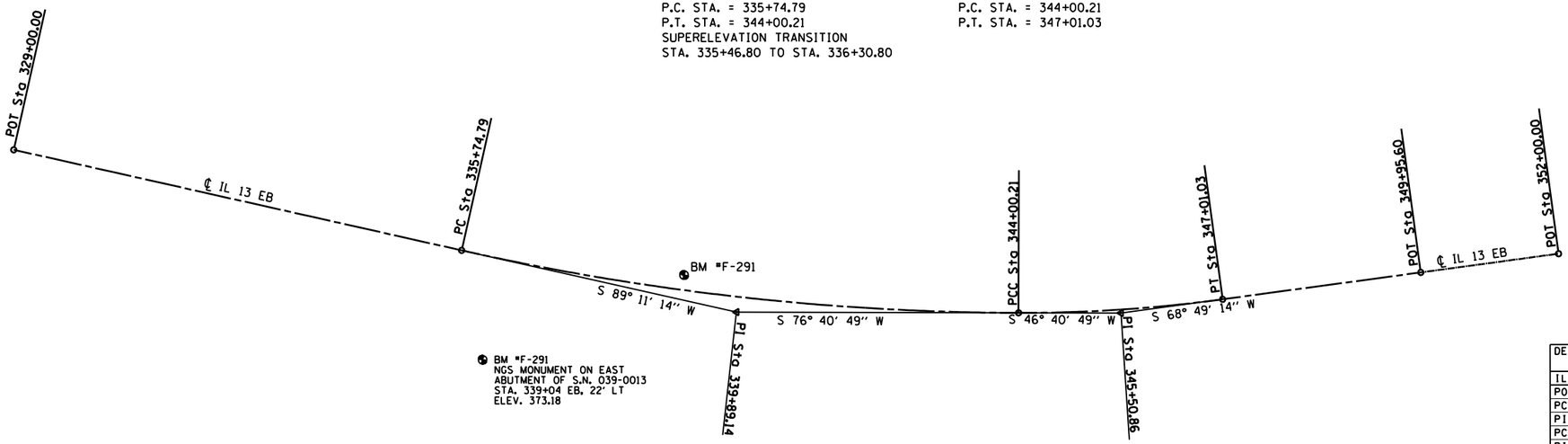
SCHEDULE SHEETS
IL RTE 13 OVER BIG MUDDY RIVER

SCALE: | SHEET NO. 3 OF 3 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)-B-1	JACKSON	200	20
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		

PROP. CURVE 13EPP1
PI STA. = 339+89.14
Δ = 12° 30′ 25″ (LT)
D = 1° 30′ 55″
R = 3,781.36′
T = 414.36′
L = 825.42′
e = 2.5%
E = 22.63′
P.C. STA. = 335+74.79
P.T. STA. = 344+00.21
SUPERELEVATION TRANSITION
STA. 335+46.80 TO STA. 336+30.80

PROP. CURVE 13EPP2
PI STA. = 345+50.86
Δ = 7° 51′ 36″ (LT)
D = 2° 36′ 46″
R = 2,192.89′
T = 150.65′
L = 300.82′
E = 5.17′
e = 2.5%
P.C. STA. = 344+00.21
P.T. STA. = 347+01.03

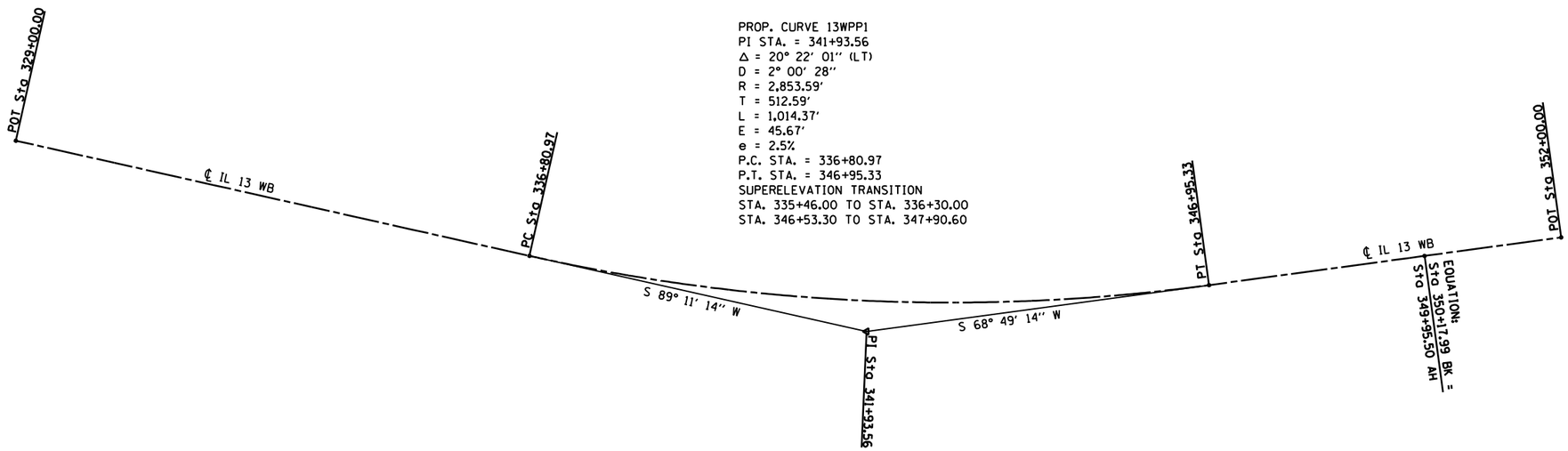


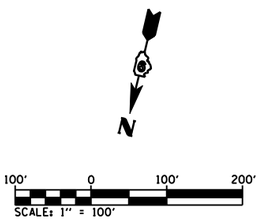
BM "F-291
NGS MONUMENT ON EAST
ABUTMENT OF S.N. 039-0013
STA. 339+04 EB, 22′ LT
ELEV. 373.18

GROUND COORDINATES

DESCRIPTION	NORTHING	EASTING
IL RTE 13 (EB)		
POT STA. 329+00.00	401,159.054	2,541,681.422
PC STA. 335+74.79	401,149.484	2,541,006.705
PI STA. 339+89.14	401,143.607	2,540,592.387
PCC STA. 344+00.21	401,048.145	2,540,042.579
PI STA. 345+50.86	401,013.439	2,540,042.579
PT STA. 347+01.03	400,959.010	2,539,902.106
POT STA. 349+95.60	400,852.809	2,539,628.012
POT STA. 352+00.00	400,778.962	2,539,437.422

PROP. CURVE 13WPP1
PI STA. = 341+93.56
Δ = 20° 22′ 01″ (LT)
D = 2° 00′ 28″
R = 2,853.59′
T = 512.59′
L = 1,014.37′
E = 45.67′
e = 2.5%
P.C. STA. = 336+80.97
P.T. STA. = 346+95.33
SUPERELEVATION TRANSITION
STA. 335+46.00 TO STA. 336+30.00
STA. 346+53.30 TO STA. 347+90.60





GROUND COORDINATES

DESCRIPTION	NORTHING	EASTING
IL RTE 13 (WB)		
POT STA. 329+00.00	401,224.247	2,541,680.497
PC STA. 336+80.97	401,213.171	2,540,899.610
PI STA. 341+93.56	401,205.901	2,540,387.071
PT STA. 346+95.33	401,020.706	2,539,909.103
POT STA. 350+17.99BK = STA. 349+95.50 AH	400,904.131	2,539,608.238
POT STA. 352+00.00	400,830.247	2,539,417.551

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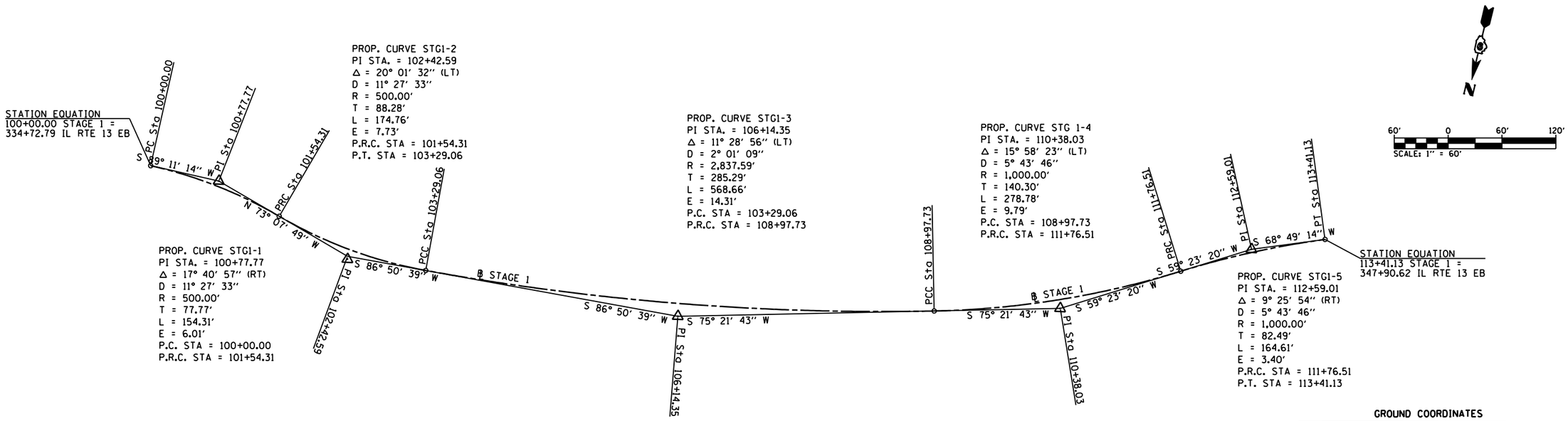
	PLOT DATE = 1/25/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ALIGNMENT AND TIE SHEETS
IL RTE 13 OVER BIG MUDDY RIVER

SCALE: | SHEET NO. 1 OF 2 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)-B-1	JACKSON	200	21
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			



PROP. CURVE STG1-1
PI STA. = 100+77.77
Δ = 17° 40' 57" (RT)
D = 11° 27' 33"
R = 500.00'
T = 77.77'
L = 154.31'
E = 6.01'
P.C. STA = 100+00.00
P.R.C. STA = 101+54.31

PROP. CURVE STG1-2
PI STA. = 102+42.59
Δ = 20° 01' 32" (LT)
D = 11° 27' 33"
R = 500.00'
T = 88.28'
L = 174.76'
E = 7.73'
P.R.C. STA = 101+54.31
P.T. STA = 103+29.06

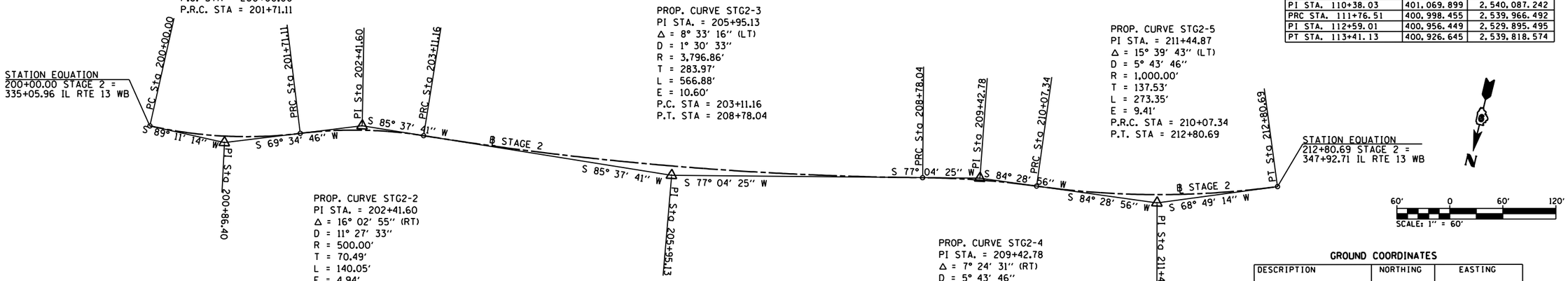
PROP. CURVE STG1-3
PI STA. = 106+14.35
Δ = 11° 28' 56" (LT)
D = 2° 01' 09"
R = 2,837.59'
T = 285.29'
L = 568.66'
E = 14.31'
P.C. STA = 103+29.06
P.R.C. STA = 108+97.73

PROP. CURVE STG 1-4
PI STA. = 110+38.03
Δ = 15° 58' 23" (LT)
D = 5° 43' 46"
R = 1,000.00'
T = 140.30'
L = 278.78'
E = 9.79'
P.C. STA = 108+97.73
P.R.C. STA = 111+76.51

PROP. CURVE STG1-5
PI STA. = 112+59.01
Δ = 9° 25' 54" (RT)
D = 5° 43' 46"
R = 1,000.00'
T = 82.49'
L = 164.61'
E = 3.40'
P.R.C. STA = 111+76.51
P.T. STA = 113+41.13

GROUND COORDINATES

DESCRIPTION	NORTHING	EASTING
STAGE 1		
PC STA. 100+00.00	401,150.930	2,541,108.686
PI STA. 100+77.77	401,149.827	2,541,030.921
PRC STA. 101+54.31	401,172.397	2,540,956.496
PI STA. 102+42.59	401,198.015	2,540,872.016
PCC STA. 103+29.06	401,193.155	2,540,783.871
PI STA. 106+14.35	401,177.450	2,540,499.017
PCC STA. 108+97.73	401,105.355	2,540,222.990
PI STA. 110+38.03	401,069.899	2,540,087.242
PRC STA. 111+76.51	400,998.455	2,539,966.492
PI STA. 112+59.01	400,956.449	2,529,895.495
PT STA. 113+41.13	400,926.645	2,539,818.574



PROP. CURVE STG2-1
PI STA. = 200+86.40
Δ = 19° 36' 28" (LT)
D = 11° 27' 33"
R = 500.00'
T = 86.40'
L = 171.11'
E = 7.41'
P.C. STA = 200+00.00
P.R.C. STA = 201+71.11

PROP. CURVE STG2-2
PI STA. = 202+41.60
Δ = 16° 02' 55" (RT)
D = 11° 27' 33"
R = 500.00'
T = 70.49'
L = 140.05'
E = 4.94'
P.R.C. STA = 201+71.11
P.T. STA = 203+11.16

PROP. CURVE STG2-3
PI STA. = 205+95.13
Δ = 8° 33' 16" (LT)
D = 1° 30' 33"
R = 3,796.86'
T = 283.97'
L = 566.88'
E = 10.60'
P.C. STA = 203+11.16
P.T. STA = 208+78.04

PROP. CURVE STG2-4
PI STA. = 209+42.78
Δ = 7° 24' 31" (RT)
D = 5° 43' 46"
R = 1,000.00'
T = 64.74'
L = 129.30'
E = 2.09'
P.C. STA = 208+78.04
P.R.C. STA = 210+07.34

PROP. CURVE STG2-5
PI STA. = 211+44.87
Δ = 15° 39' 43" (LT)
D = 5° 43' 46"
R = 1,000.00'
T = 137.53'
L = 273.35'
E = 9.41'
P.R.C. STA = 210+07.34
P.T. STA = 212+80.69

GROUND COORDINATES

DESCRIPTION	NORTHING	EASTING
STAGE 2		
PC STA. 200+00.00	401,215.653	2,541,074.596
PI STA. 200+86.40	401,214.428	2,540,988.204
PRC STA. 201+71.11	401,184.282	2,540,907.234
PI STA. 202+41.60	401,159.689	2,540,841.178
PRC STA. 203+11.16	401,154.316	2,540,770.896
PI STA. 205+95.13	401,132.670	2,540,487.757
PRC STA. 208+78.04	401,069.146	2,540,210.987
PI STA. 209+42.78	401,054.663	2,540,147.885
PRC STA. 210+07.34	401,048.439	2,540,083.443
PI STA. 211+44.87	401,035.214	2,539,946.547
PT STA. 212+80.69	400,985.524	2,539,818.304

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		DRAWN -	REVISED -
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	PLOT DATE = 1/25/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ALIGNMENT AND TIE SHEETS
IL RTE 13 OVER BIG MUDDY RIVER

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

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)-B-1	JACKSON	200	22
		CONTRACT NO. 78056		
		ILLINOIS FED. AID PROJECT		

PLAN AND PROFILE

LEGEND

- TREE REMOVAL
- STONE RIPRAP, CL A4

+37.81
145' LT

+26.56
110' LT

TEMPORARY RAMP
SEE EAST PAVEMENT
TRANSITION IL RTE 13
EB DETAIL

EXISTING ROW

TRAFFIC BARRIER
TERMINAL, TYPE 2

BEGIN PROJECT
STA. 334+70.00

RC Sta 335+74.79

HMA SHOULDERS

BEGIN APP. PAVT.
STA. 338+07.67

BEGIN CONN. PAVT.
STA. 337+94.04

CONST LIMITS

+94.0
12' RT

11'-12'-12'-0

6%

335+00

4:1 TAPER (154')

+41.0
23' RT

CONST LIMITS

STA 337+03, 34.90' RT
INLET ADJ N MI 604101
PROP RIM ELEV 381.10
EX RIM ELEV 380.56
EX INV N 377.52

EXISTING ROW

PROP. CURVE 13EPP1
PI STA. = 339+89.14
Δ = 12° 30' 25" (LT)
D = 1° 30' 55"
R = 3,781.36'
T = 414.36'
L = 825.42'
E = 22.63'
e = 2.5%
P.C. STA. = 335+74.79
P.T. STA. = 344+00.21
SUPERELEVATION TRANSITION
STA. 335+18.79 TO STA. 336+02.79

+77.55
167' LT

+66.33
145' LT

BIG MUDDY RIVER

TRAFFIC BARRIER
TERMINAL, TYPE 5

BK. OF ABUT.
STA. 338+67.12
BM #F-291

PROPOSED E.B.
STRUCTURE
S.N. 039-0075

340+00

℄ IL 13 (EB)

PI Sta 339+89.14

BIG MUDDY RIVER

PROP. CURVE 13EPP2
PI STA. = 345+50.86
Δ = 7° 51' 36" (LT)
D = 2° 36' 46"
R = 2,192.89'
T = 150.65'
L = 300.82'
E = 5.17'
e = 2.5%
P.C. STA. = 344+00.21
P.T. STA. = 347+01.03

5'x7' STONE RIPRAP
CL A3 (TYP.)

TREE REMOVAL

TRAFFIC BARRIER
TERMINAL, TYPE 6

BK. OF ABUT.
STA. 343+33.08

PCC Sta 344+00.21

END APP. PAVT.
STA. 343+92.50

END CONN. PAVT.
STA. 344+12.44

+90.0
22' RT

344+96, 43.6' RT
INL RECON NEW TIF CL
EX RIM ELEV. 383.04
RIM ELEV. 383.35
EX INV. N 379.42
EX INV. W 379.47
INV. S 379.42

+50.0
135' LT

+50.0
111' LT

+50.0
90' LT

EXISTING ROW

+12.19
177' LT

+90.95
120' LT

TEMPORARY RAMP
SEE WEST PAVEMENT
TRANSITION IL RTE 13
EB DETAIL

END PROJECT
STA. 347+67.50

TRAFFIC BARRIER TERMINAL,
TYPE 1 (SPECIAL) TANGENT

+66.0
26' LT

CONST LIMITS

PT Sta 347+01.03

11'-12'-12'-0

6%

345+00

PRC Sta 345+50.86

+01.5
12' RT

CONST LIMITS

+67.5
14.2' RT

30:1 TAPER (66')

344+96, 31' RT
PRC FLAR END SEC 12
INV. 380.7

8 FEET STORM SEWER
CL A T 1 12" @ 9.10%

EXISTING ROW

N

50' 0 50' 100'
SCALE: 1" = 50'

NOTE:
1.) SEE WESTBOUND PLAN AND PROFILE SHEET FOR ADDITIONAL INFORMATION

BM #F-291
NGS MONUMENT ON EAST
ABUTMENT OF S.N. 039-0013
STA. 339+04 EB, 22' LT
ELEV. 373.18

HMA SURFACE REMOVAL
& RESURFACING VARIABLE

K = 200
120.00' V.C.

+70.00 ELEV. 383.10

BEGIN PROJECT
MATCH EXISTING

+10.00 ELEV. 382.86

-0.10%

+0.50%

+30.00 ELEV. 383.10

VPI STA. 337+70.00
ELEVATION 382.80

SPECIAL DITCH
RT +0.70%

+40
382.0

SPECIAL DITCH RT -0.50%

+70
382.3

K = 120
120.00' V.C.

+50.00 ELEV. 384.20

+0.50%

VPI STA. 341+10.00
ELEVATION 384.50

-0.50%

+70.00 ELEV. 384.20

DESIGN H.W.E.
372.34 (50 Yr.)

+38
381.5

K = 194
20.00' V.C.

+90.00 ELEV. 383.10

-0.50%

VPI STA. 344+50.00
ELEVATION 382.80

+0.12%

+10.00 ELEV. 382.87

+96
380.7

SPECIAL DITCH
RT -0.50%

HMA SURFACE REMOVAL
& RESURFACING VARIABLE

+67.50 ELEV. 383.18

PROPOSED PROFILE GRADE

EXISTING PROFILE GRADE

END PROJECT
MATCH EXISTING

SPECIAL DITCH RT +0.80%

+53
382.8

| | | |

PLAN AND PROFILE LEGEND

- STONE RIPRAP, CL A4

EXISTING ROW

TEMPORARY RAMP SEE EAST PAVEMENT TRANSITION IL RTE 13 WB DETAIL

BEGIN CONN. PAVT. STA. 337+67.16

TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT

CONST LIMITS

PROP CURVE 13WPP1
PI STA. = 341+93.56
Δ = 20° 22' 01" (LT)
D = 2° 00' 28"
R = 2,853.59'
T = 512.59'
L = 1,014.37'
E = 45.67'
e = 2.5%
P.C. STA. = 336+80.97
P.T. STA. = 346+95.33
SUPERELEVATION TRANSITION
STA. 335+46.00 TO STA. 336+30.00
STA. 346+53.30 TO STA. 347+90.60

BIG MUDDY RIVER

TRAFFIC BARRIER TERMINAL, TYPE 6

5'x7' STONE RIPRAP CL A3 (TYP.)

END CONN. PAVT. STA. 343+84.56

TEMPORARY RAMP SEE WEST PAVEMENT TRANSITION IL RTE 13 WB DETAIL

HMA SHOULDERS

PC Sta 336+80.97

PT Sta 346+95.33

BEGIN PROJECT STA. 334+70.00

END PROJECT STA. 347+90.00

+88.9 22' RT

+91.2 22' LT

+79.9 29.6' RT

+86.0 24' RT

12:1 TAPER (91')

15:1 TAPER (175')

BK. OF ABUT. STA. 338+41.25

BK. OF ABUT. STA. 343+07.16

℄ IL 13 (WB)

+93.16 109.8' RT

337+06, 94' RT PRC FLAR END SEC 24 INV. 360.81

+74.79 149.8' RT

+11.0 12' RT

+84.6 22' RT

+54.37 120' RT

BEGIN APP. PAVT. STA. 337+81.79

PCC SIDEWALK, 4"

PROPOSED W.B. STRUCTURE S.N. 039-0076

TRAFFIC BARRIER TERMINAL, TYPE 5

TRAFFIC BARRIER TERMINAL, TYPE 2

+90.7 29.6' RT

END APP. PAVT. STA. 343+66.57

115.4'

5'x10' STONE RIPRAP CL A3

48 FEET STORM SEWER CL A T 1 24 @ 12.70% (SEE CROSS SECTIONS FOR MORE INFORMATION)

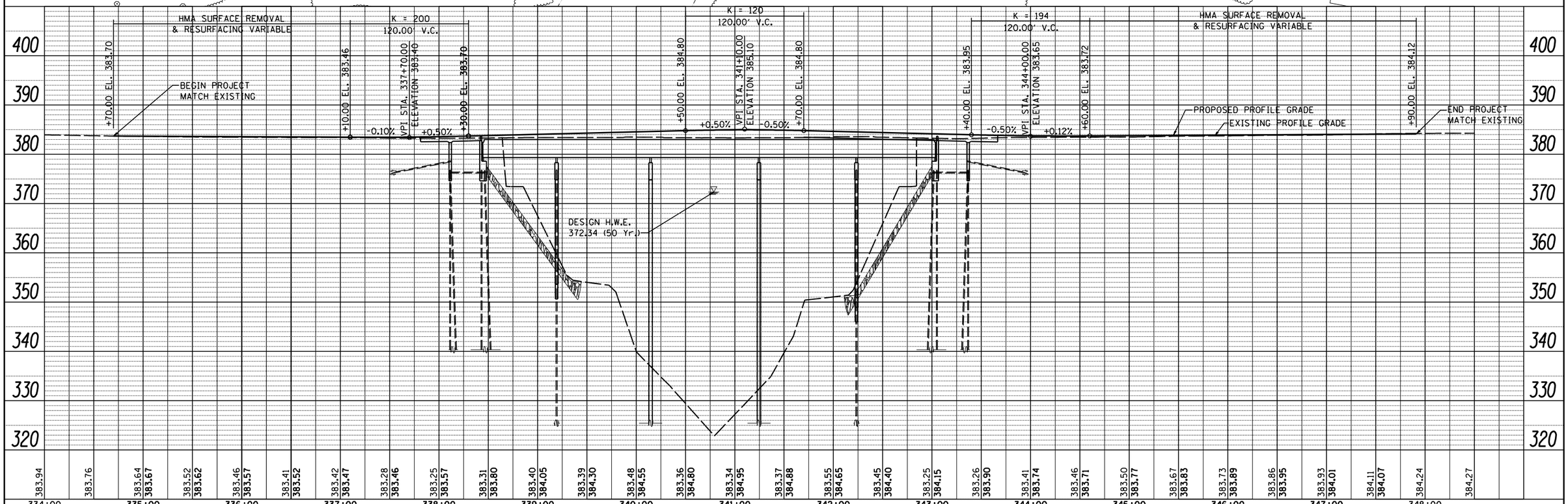
PI Sta 341+93.56

NOTE:
1.) SEE EASTBOUND PLAN AND PROFILE SHEET FOR ADDITIONAL INFORMATION.

N

50' 0 50' 100'
SCALE: 1" = 50'

PLAN
SURVEYED
PLOTTED
ADDED TO SHEET
NOTE BOOK
NO.
BY
DATE
CHECKED
R/T. OF WAY CHECKED
CADD FILE NAME



PROFILE
SURVEYED
PLOTTED
ADDED TO SHEET
NOTE BOOK
NO.
BY
DATE
CHECKED
R/T. OF WAY CHKD
STRUCTURE NOTATNS CHKD

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	PLOT DATE = 1/25/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE SHEETS (WESTBOUND)

SCALE: 1"=50' | SHEET NO. 1 OF 1 SHEETS | STA. 334+70.00 TO STA. 347+90.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	24
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

SUGGESTED SEQUENCE OF CONSTRUCTION OPERATIONS STAGE 1

1. THE CONSTRUCTION SPEED LIMIT SHALL BE 30 MPH.
2. REMOVE EXISTING SHOULDERS ACCORDING TO STAGE 1 REMOVAL SHEET.
3. CONSTRUCT DRAINAGE FEATURES INCLUDING RECONSTRUCTING INLET AT STATION 110+41 ACCORDING TO STAGE 1 LAYOUT SHEETS.
4. CONSTRUCT CROSSOVERS AND SHOULDERS, FROM STA 99+97 TO STA 103+83 AND FROM STA 108+40 TO STA 113+18 ACCORDING TO STAGE 1 ELEVATIONS SHEETS.
5. MAINTAIN 2-WAY TRAFFIC ON WESTBOUND STRUCTURE ACCORDING TO STAGE 1 PAVEMENT MARKING/TRAFFIC CONTROL SHEETS.
6. REMOVE AND RECONSTRUCT THE EXISTING EASTBOUND STRUCTURE OVER THE BIG MUDDY RIVER.
7. CONSTRUCT TEMPORARY RAMPS AND PAVEMENT WIDENING CONNECTING EXISTING EASTBOUND TRAVEL LANES TO NEW EASTBOUND STRUCTURE ACCORDING TO STAGE 1 ELEVATIONS SHEETS.
8. TRANSITION TRAFFIC CONTROL ACCORDING TO STAGE 2 PAVEMENT MARKING/TRAFFIC CONTROL SHEETS.

REMOVAL LEGEND

- PAVED MEDIAN REMOVAL
- SHOULDER REMOVAL
- COMBINATION CURB AND GUTTER REMOVAL
- PAVEMENT REMOVAL

APPROACH SLAB REMOVAL INCLUDED IN REMOVAL OF EXISTING STRUCTURE

EX EB STRUCTURE TO BE REMOVED

PAVEMENT REMOVAL STA 103+28 TO STA 104+05

PAVED SHOULDER REMOVAL STA 101+94 TO STA 104+12

℄ IL 13 EB

100+00

101

℄ STG 1

PAVED SHOULDER REMOVAL STA 99+97 TO STA 103+98

102

103

104

EX WB STRUCTURE

105+00

PAVED SHOULDER REMOVAL STA 99+97 TO STA 103+83

℄ IL 13 WB

PAVED SHOULDER REMOVAL STA 101+68 TO STA 103+71

GUARDRAIL REMOVAL STA 102+80 TO STA 103+95

N

20' 0 20' 40'

SCALE: 1" = 20'

EX EB STRUCTURE TO BE REMOVED

PAVEMENT REMOVAL STA 108+67 TO STA 109+61

GUARDRAIL REMOVAL STA 108+59 TO STA 110+25

PAVED SHOULDER REMOVAL STA 108+83 TO STA 110+62

APPROACH SLAB REMOVAL INCLUDED IN REMOVAL OF EXISTING STRUCTURE

℄ IL 13 EB

COMBINATION CURB AND GUTTER REMOVAL STA 109+92 TO STA 113+18

113

112

℄ STG 1

STORM SEWER REMOVAL 12 STA 110+41 TO STA 111+06

CAP INLET INCLUDED IN THE COST OF STORM SEWER REMOVAL

GUARDRAIL REMOVAL STA 108+38 TO STA 109+57

PAVED SHOULDER REMOVAL STA 108+65 TO STA 110+17

111

1 EA - REMOVING INLETS STA 112+47

STORM SEWER REMOVAL 12 STA 112+47 TO STA 113+20

108

109

110+00

1 EA - REMOVING INLETS STA 111+76

COMBINATION CURB AND GUTTER REMOVAL STA 109+89 TO STA 113+18

PAVED SHOULDER REMOVAL STA 108+41 TO STA 110+15

℄ IL 13 WB

1 EA - REMOVING INLETS STA 111+06

MEDIAN REMOVAL STA 110+18 TO STA 113+18

STORM SEWER REMOVAL 12 STA 111+06 TO STA 111+76

PAVED SHOULDER REMOVAL STA 108+24 TO STA 110+28

EX WB STRUCTURE

CAP INLET INCLUDED IN THE COST OF STORM SEWER REMOVAL

N

20' 0 20' 40'

SCALE: 1" = 20'

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE 1 SHEETS
REMOVAL

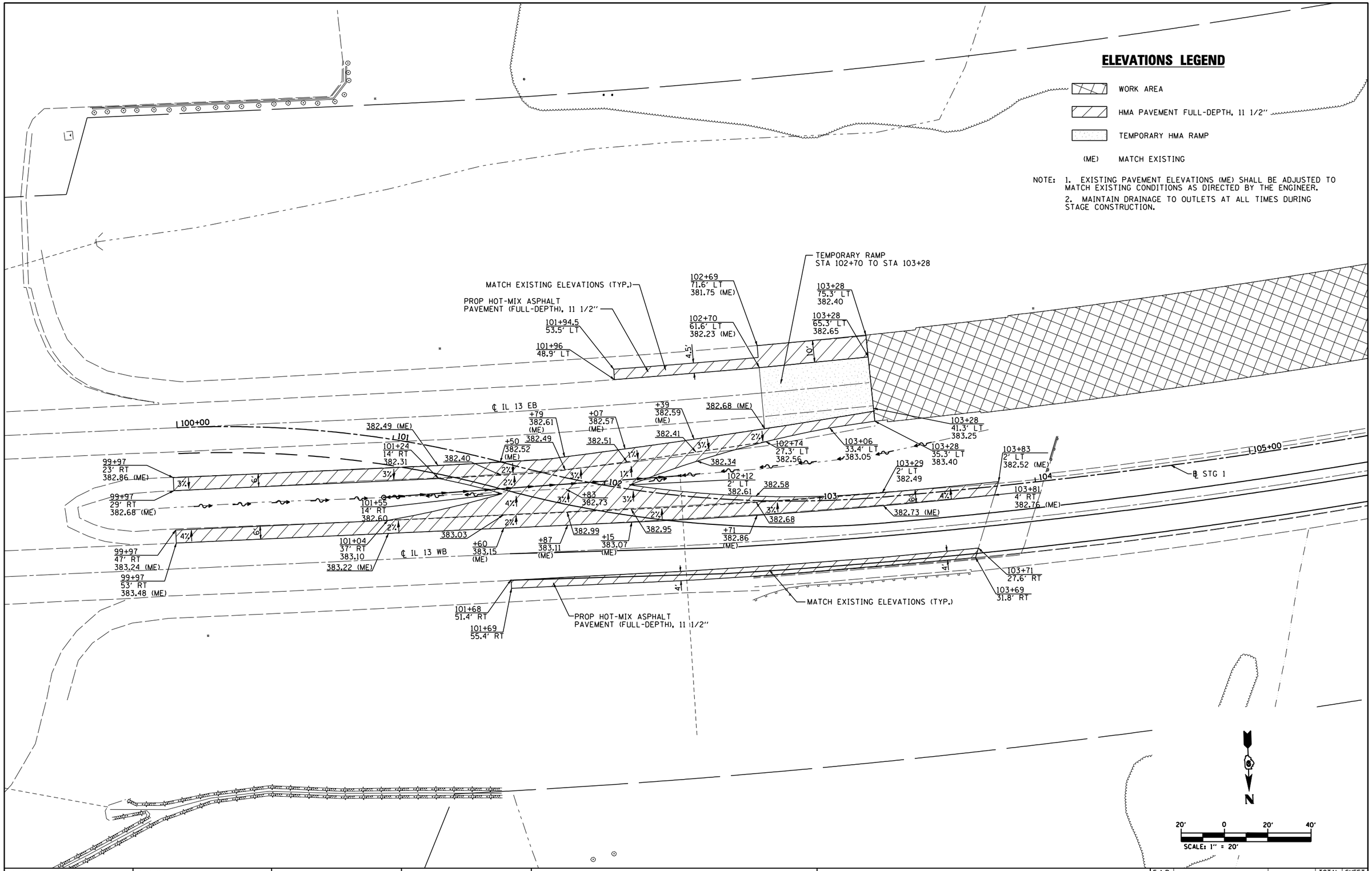
SCALE: 1"=20' | SHEET NO. 1 OF 9 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	25
		CONTRACT NO. 78056		
		ILLINOIS FED. AID PROJECT		

ELEVATIONS LEGEND

- WORK AREA
- HMA PAVEMENT FULL-DEPTH, 11 1/2"
- TEMPORARY HMA RAMP
- (ME) MATCH EXISTING

NOTE: 1. EXISTING PAVEMENT ELEVATIONS (ME) SHALL BE ADJUSTED TO MATCH EXISTING CONDITIONS AS DIRECTED BY THE ENGINEER.
2. MAINTAIN DRAINAGE TO OUTLETS AT ALL TIMES DURING STAGE CONSTRUCTION.



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	PLOT DATE = 1/25/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE 1 SHEETS
ELEVATIONS

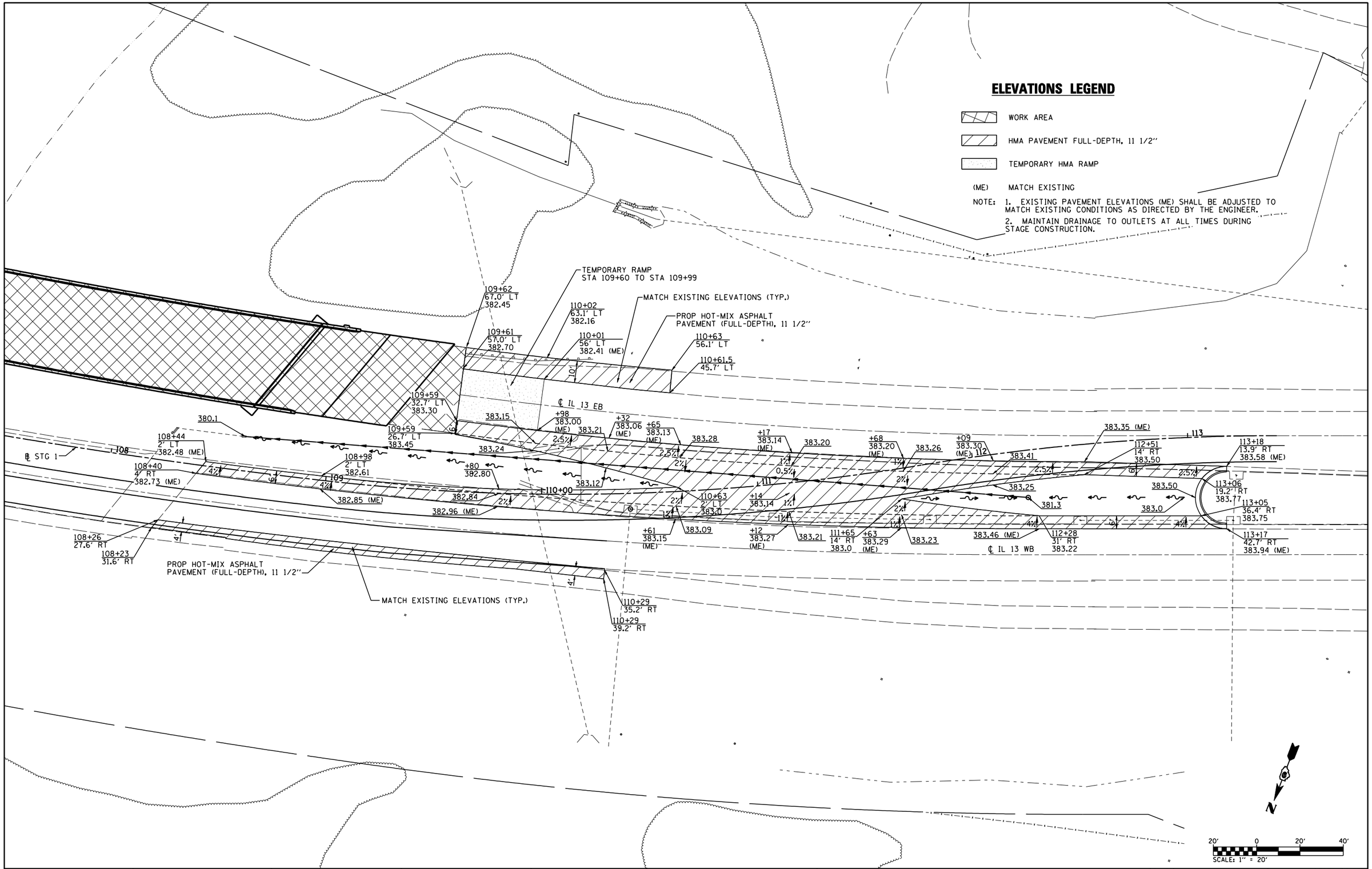
SCALE: 1"=20' | SHEET NO. 2 OF 9 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	26
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

ELEVATIONS LEGEND

- WORK AREA
- HMA PAVEMENT FULL-DEPTH, 11 1/2"
- TEMPORARY HMA RAMP
- (ME) MATCH EXISTING

NOTE: 1. EXISTING PAVEMENT ELEVATIONS (ME) SHALL BE ADJUSTED TO MATCH EXISTING CONDITIONS AS DIRECTED BY THE ENGINEER.
2. MAINTAIN DRAINAGE TO OUTLETS AT ALL TIMES DURING STAGE CONSTRUCTION.



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE 1 SHEETS
ELEVATIONS

SCALE: 1"=20' | SHEET NO. 3 OF 9 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	27
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

LAYOUT LEGEND

- TYPE III BARRICADE WITH FLASHING LIGHTS
- DRUM WITH STEADY BURNING LIGHT
- TYPE C BI-DIRECTIONAL REFLECTOR
- INLET PROTECTION
- SIGN
- DIRECTION OF TRAFFIC
- TEMPORARY DITCH CHECK
- WORK AREA
- HMA PAVEMENT FULL-DEPTH, 11 1/2"
- TEMPORARY HMA RAMP

PROP. CURVE STG1-2
PI STA. = 102+42.59
Δ = 20° 01' 32" (LT)
D = 11° 27' 33"
R = 500.00'
T = 88.28'
L = 174.76'
E = 7.73'
P.R.C. STA = 101+54.31
P.T. STA = 103+29.06

PC Sta 100+00.00
PI Sta 100+77.77
℄ IL 13 EB
100+00
101
℄ STG 1
PRC Sta 101+54.31
TEMP STORM SEWER 12 @ 1.0%
102+35, 9' LT
EX MEDIAN INLET
EX RIM ELEV. 380.6
INV. E 377.6
EX INV. N 377.5
PCC Sta 103+22.90
103+81
26.4' LT
381.7
103+26
19.5' LT
381.3
1'-3" SHLDR
105+00
104
103
102
12'
99+97
37' RT
382.0
101+59
15.9' RT
102+20
15.8' RT
101+00, 27' RT
INLETS TA M
INL 604101
RIM ELEV. 381.2
INV. W 379.0
℄ IL 13 WB
PI Sta 102+42.59
102+68.5
16.3' RT
2' SHLDR (TYP.)
103+29
15' RT
2' SHLDR (TYP.)
TEMPORARY CONCRETE BARRIER
GUARDRAIL
DO NOT DISTURB
B ST

PROP. CURVE STG1-1
PI STA. = 100+77.77
Δ = 17° 40' 57" (RT)
D = 11° 27' 33"
R = 500.00'
T = 77.77'
L = 154.31'
E = 6.01'
P.C. STA = 100+00.00
P.R.C. STA = 101+54.31

N

20' 0 20' 40'
SCALE: 1" = 20'

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE 1 SHEETS
LAYOUT

SCALE: 1"=20' | SHEET NO. 4 OF 9 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	28
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

LAYOUT LEGEND

- TYPE III BARRICADE WITH FLASHING LIGHTS
- DRUM WITH STEADY BURNING LIGHT
- TYPE C BI-DIRECTIONAL REFLECTOR
- INLET PROTECTION
- SIGN
- DIRECTION OF TRAFFIC
- TEMPORARY DITCH CHECK
- WORK AREA
- HMA PAVEMENT FULL-DEPTH, 11 1/2"
- TEMPORARY HMA RAMP

PROP. CURVE STG1-3
PI STA. = 106+14.35
Δ = 11° 28' 56" (LT)
D = 2° 01' 09"
R = 2,837.59'
T = 285.29'
L = 568.66'
E = 14.31'
P.C. STA = 103+29.06
P.R.C. STA = 108+97.73

PROP. CURVE STG1-4
PI STA. = 110+38.03
Δ = 15° 58' 23" (LT)
D = 5° 43' 46"
R = 1,000.00'
T = 140.30'
L = 278.78'
E = 9.79'
P.C. STA = 108+97.73
P.R.C. STA = 111+76.51

PROP. CURVE STG1-5
PI STA. = 112+59.01
Δ = 9° 25' 54" (RT)
D = 5° 43' 46"
R = 1,000.00'
T = 82.49'
L = 164.61'
E = 3.40'
P.R.C. STA = 111+76.51
P.T. STA = 113+41.13

109+08
69.8' LT

TRAF BAR
TERM T6

109+55
67.1' LT

TR BAR TRM
T1 SPL TAN

110+08
63.5' LT

108+60.5, 15.8' LT
EX MEDIAN INLET
EX RIM ELEV. 380.1
EX INV E. 377.85
INV W. 377.85

TEMP TR BAR TRM T6

108+20
2' LT

108+64
2' LT

PCC Sta 108+97.73

TEMP STORM
SEWER 12 ø 0.40%

℄ IL 13 EB

TEMP TRBT
T1 SPL TAN

TEMP SPBGR
TY A

110+03
2' LT

2' SHLDR

110+53
3' LT

110+00

12'

2' SHLDR (TYP.)

TAPER RATE 50:1

110+01
15' RT

109+51
15.9' RT

TEMPORARY CONCRETE BARRIER

PRC Sta 111+76.51

PI Sta 112+59.01

PT Sta 113+41.13

℄ STG 1

2' SHLDR

14.4' RAD

COMB CC&G TB6.24

TAPER RATE 8:1

111+68.5
26.4' RT

℄ IL 13 WB

112+98
27.5' RT
383.0

112+24, 21.8' RT
INLETS TA M
INL 604101
RIM ELEV. 381.3
INV. E 379.3

PI Sta 110+38.03

110+41, 7.2' RT
INL RECON NEW T1F CL
EX RIM ELEV. 383.40
RIM ELEV. 383.04

N

20' 0 20' 40'
SCALE: 1" = 20'

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE 1 SHEETS
LAYOUT

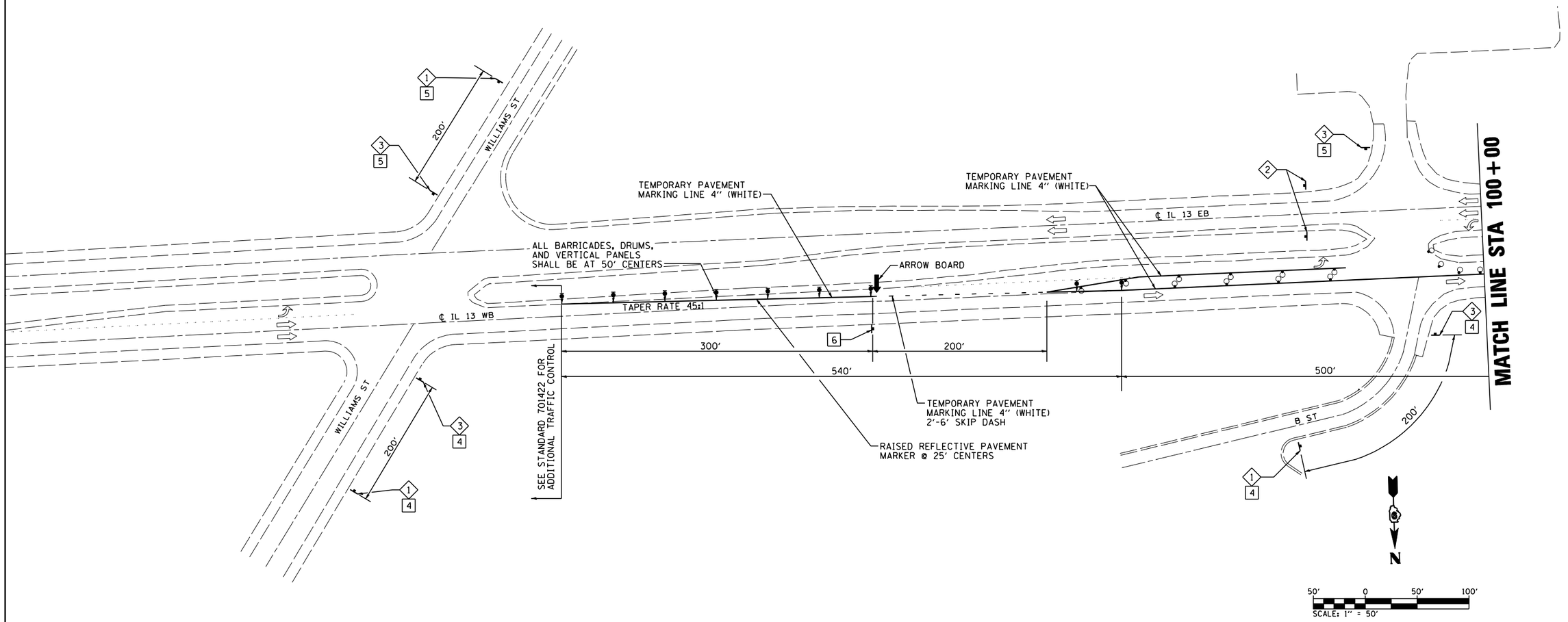
SCALE: 1"=20' | SHEET NO. 5 OF 9 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	29
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

PAVEMENT MARKING/TRAFFIC CONTROL LEGEND

- ① ROAD CONSTRUCTION AHEAD-W20-03(0)-48
- ② END ROAD WORK-G20-2(0)-36
- ③ LEFT LANE CLOSED AHEAD-W20-5L(0)-48
- [4] 24" X 24"
- [5] 24" X 24"
- [6] 36" X 24" — LEFT TURN LANE OPEN AHEAD

- SIGNAGE
- BARRICADE OR DRUM WITH FLASHING LIGHT
- DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONODIRECTION LIGHT
- DIRECTION OF TRAFFIC (INFORMATION ONLY)



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

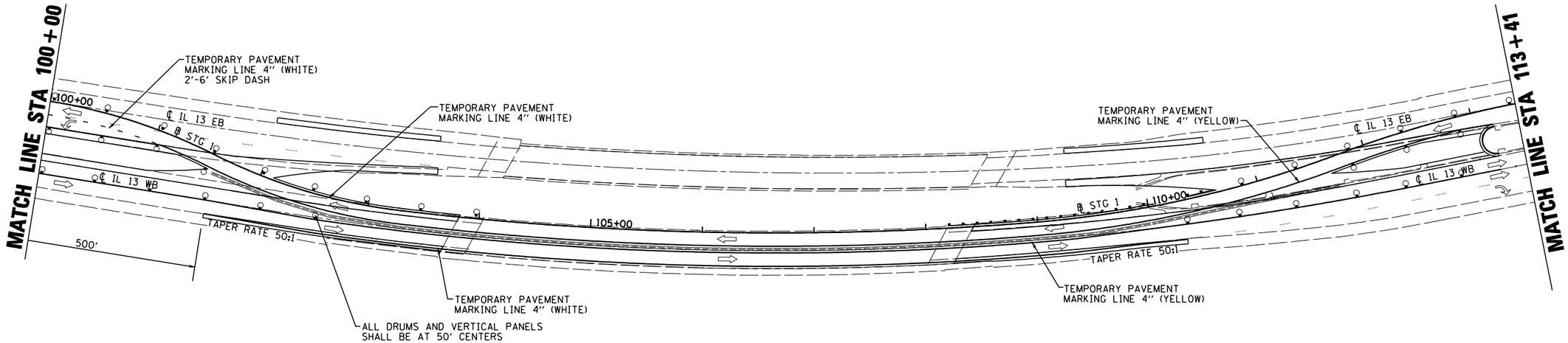
STAGE 1 SHEETS
PAVEMENT MARKINGS / TRAFFIC CONTROL SHEETS

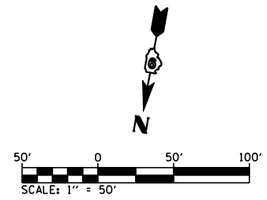
SCALE: 1"=50' | SHEET NO. 6 OF 9 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	30
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

PAVEMENT MARKING/TRAFFIC CONTROL LEGEND

- ROAD CONSTRUCTION AHEAD-W20-03(0)-48
- END ROAD WORK-G20-2(0)-36
- LEFT LANE CLOSED AHEAD-W20-5L(0)-48
- 24" X 24"
- 24" X 24"
- SIGNAGE
- BARRICADE OR DRUM WITH FLASHING LIGHT
- DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONO DIRECTION LIGHT
- DIRECTION OF TRAFFIC (INFORMATION ONLY)





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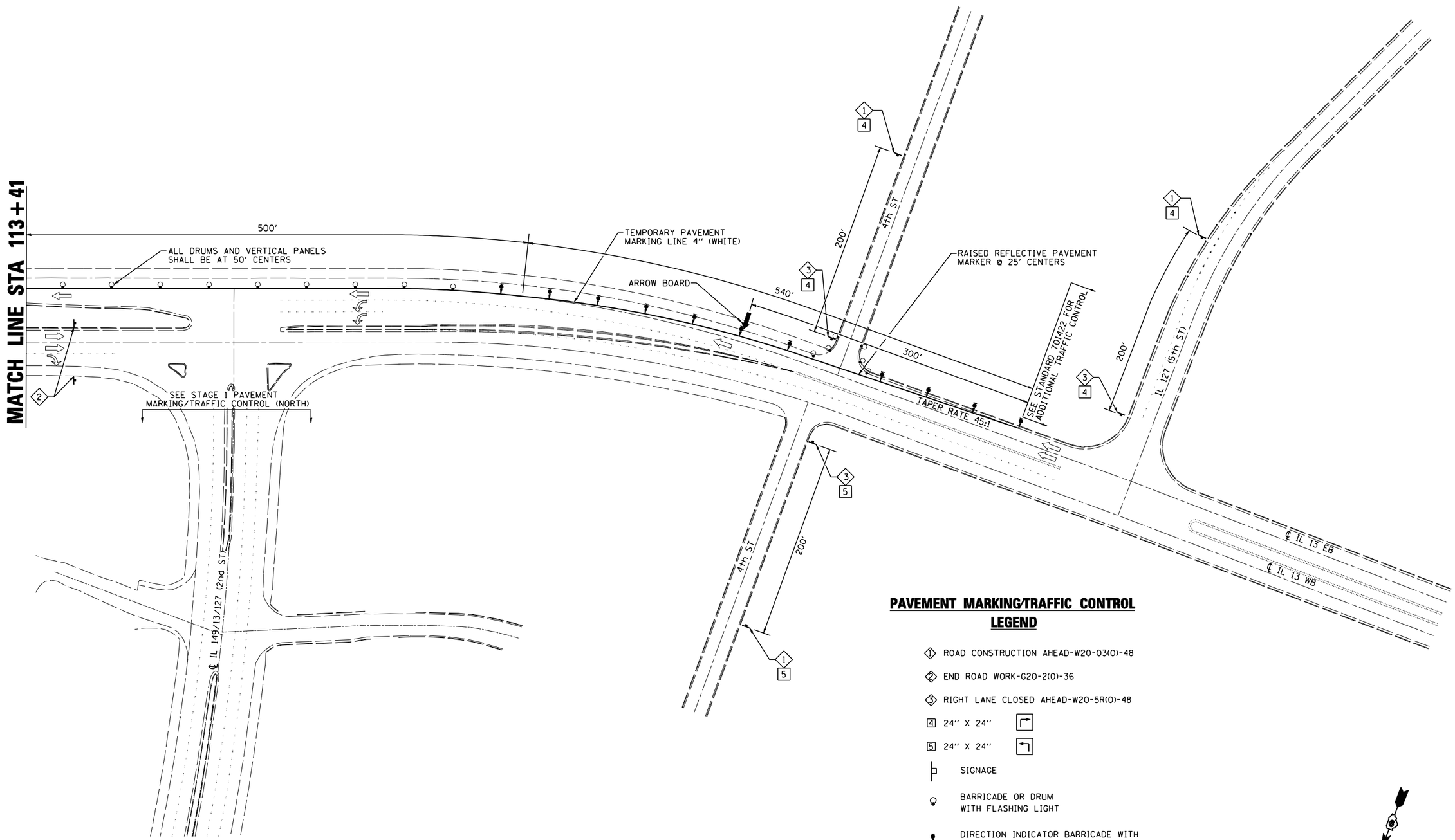
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE 1 SHEETS
PAVEMENT MARKINGS / TRAFFIC CONTROL SHEETS

SCALE: 1"=50' | SHEET NO. 7 OF 9 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	31
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			



PAVEMENT MARKING/TRAFFIC CONTROL LEGEND

- 1 ROAD CONSTRUCTION AHEAD-W20-03(0)-48
- 2 END ROAD WORK-G20-2(0)-36
- 3 RIGHT LANE CLOSED AHEAD-W20-5R(0)-48
- 4 24" X 24"
- 5 24" X 24"
- SIGNAGE
- BARRICADE OR DRUM WITH FLASHING LIGHT
- DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONO DIRECTION LIGHT
- DIRECTION OF TRAFFIC (INFORMATION ONLY)

N

50' 0 50' 100'

SCALE: 1" = 50'

WEST

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

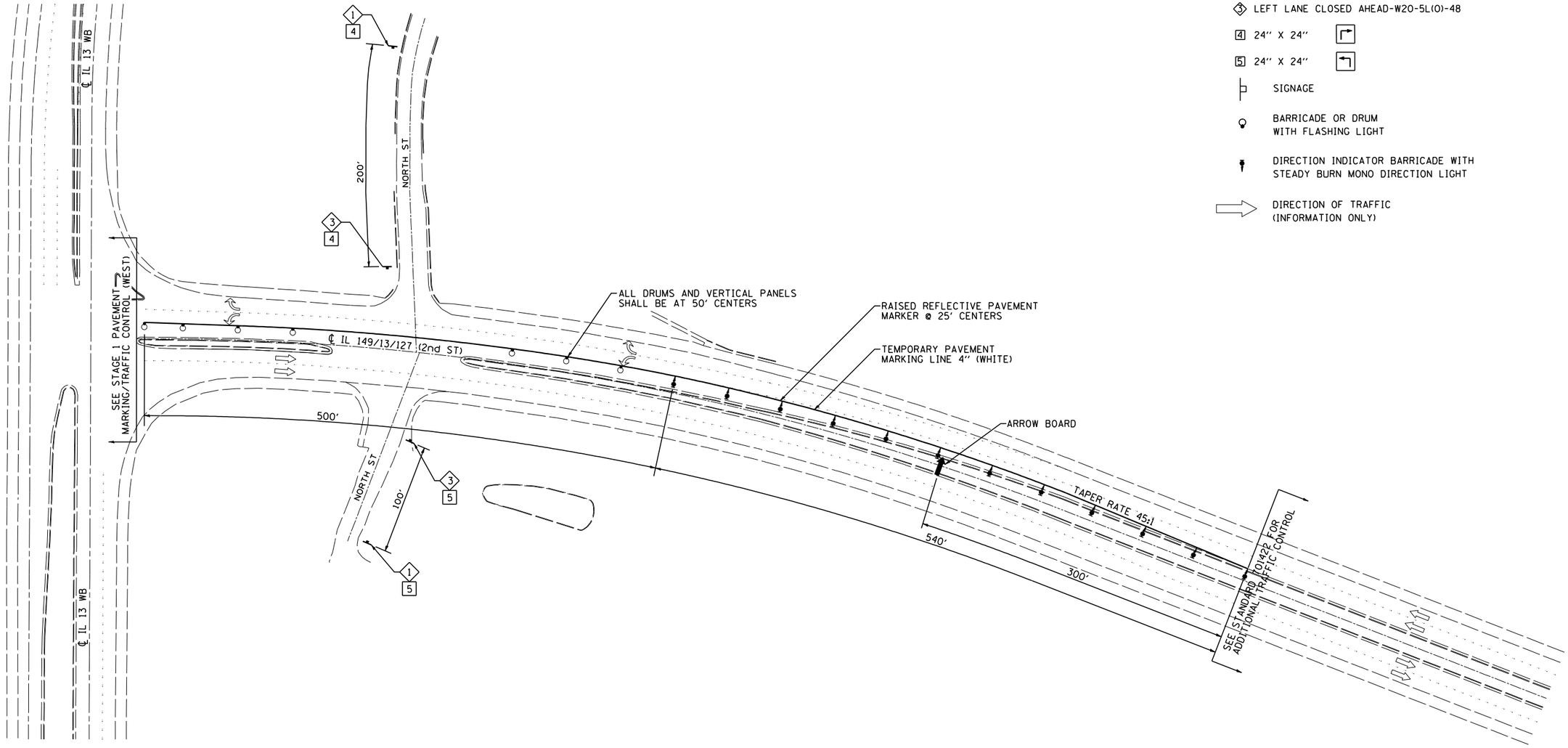
STAGE 1 SHEETS
PAVEMENT MARKINGS / TRAFFIC CONTROL SHEETS

SCALE: 1"=50' | SHEET NO. 8 OF 9 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	32
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

PAVEMENT MARKING/TRAFFIC CONTROL LEGEND

- 1 ROAD CONSTRUCTION AHEAD-W20-03(0)-48
- 2 END ROAD WORK-G20-2(0)-36
- 3 LEFT LANE CLOSED AHEAD-W20-5L(0)-48
- 4 24" X 24"
- 5 24" X 24"
- SIGNAGE
- BARRICADE OR DRUM WITH FLASHING LIGHT
- DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONO DIRECTION LIGHT
- DIRECTION OF TRAFFIC (INFORMATION ONLY)



NORTH

50' 0 50' 100'
SCALE: 1" = 50'

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE 1 SHEETS
PAVEMENT MARKINGS / TRAFFIC CONTROL

SCALE: 1"=50' | SHEET NO. 9 OF 9 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	33
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

REMOVAL LEGEND

PAVEMENT REMOVAL

SIDEWALK REMOVAL

℄ IL 13 EB

℄ IL 13 WB

200+00 201 202 203 204 205+00

APPROACH SLAB REMOVAL INCLUDED IN REMOVAL OF EXISTING STRUCTURE

EX WB STRUCTURE TO BE REMOVED

PAVEMENT REMOVAL STA 202+57 TO STA 203+49

SIDEWALK REMOVAL STA 202+19 TO STA 203+55

GUARDRAIL REMOVAL STA 202+16 TO STA 203+31

CURB REMOVAL STA 202+20 TO STA 203+55

N

20' 0 20' 40'

SCALE: 1" = 20'

SUGGESTED SEQUENCE OF CONSTRUCTION OPERATIONS STAGE 2

1. THE CONSTRUCTION SPEED LIMIT SHALL BE 30 MPH.
2. TRANSITION TO 2-WAY TRAFFIC ON NEW EASTBOUND STRUCTURE ACCORDING TO STAGE 2 PAVEMENT MARKING/TRAFFIC CONTROL SHEETS.
3. REMOVE EXISTING PAVEMENT ACCORDING TO STAGE 2 REMOVAL SHEETS.
4. REMOVE AND RECONSTRUCT THE EXISTING WESTBOUND STRUCTURE OVER THE BIG MUDDY RIVER.
5. CONSTRUCT TEMPORARY RAMPS FOR WESTBOUND STRUCTURE ACCORDING TO STAGE 2 LAYOUT SHEETS.
6. RETURN TRAFFIC TO 2 LANES IN EACH DIRECTION.
7. REMOVE WORK ZONE TRAFFIC CONTROL AND PAVEMENT MARKINGS ON PAVEMENT NOT BEING RESURFACED.
8. REMOVE EXISTING STAGE 2 PAVEMENT ACCORDING TO STAGE 2 FINAL REMOVAL SHEETS.
9. MILL AND RESURFACE EASTBOUND AND WESTBOUND IL ROUTE 13 TRAVEL LANES AND ASPHALT SHOULDERS.
10. APPLY FINAL PAVEMENT MARKINGS TO EASTBOUND AND WESTBOUND IL ROUTE 13.

℄ IL 13 EB

℄ IL 13 WB

207 208 209 210+00 211 212

TEMPORARY GUARDRAIL REMOVAL STA 207+80 TO STA 210+19

EX WB STRUCTURE TO BE REMOVED

APPROACH SLAB REMOVAL INCLUDED IN REMOVAL OF EXISTING STRUCTURE

PAVEMENT REMOVAL STA 207+85 TO STA 208+74

PAVED SHOULDER REMOVAL STA 208+20 TO STA 208+75

SIDEWALK REMOVAL STA 207+60 TO STA 208+19

CURB REMOVAL STA 207+63 TO STA 208+19

N

20' 0 20' 40'

SCALE: 1" = 20'

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE 2 SHEETS
REMOVALS

SCALE: 1"=20' | SHEET NO. 1 OF 8 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	34
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

LAYOUT LEGEND

- TYPE III BARRICADE WITH FLASHING LIGHTS
- DRUM WITH STEADY BURNING LIGHT
- TYPE C BI-DIRECTIONAL REFLECTOR
- EXISTING INLET PROTECTION
- SIGN
- DIRECTION OF TRAFFIC
- EXISTING TEMPORARY DITCH CHECK
- WORK AREA
- TEMPORARY RAMP

PROP. CURVE STG2-1
PI STA. = 200+86.40
Δ = 19° 36′ 28″ (LT)
D = 11° 27′ 33″
R = 500.00′
T = 86.40′
L = 171.11′
E = 7.41′
P.C. STA = 200+00.00
P.R.C. STA = 201+71.11

199+36
28′ LT
382.0

PC Sta 200+00.00

200+80
36′ LT

℄ IL 13 EB

200+64
24.8′ LT
381.2

TAPER 8:1

201+20
14′ LT
382.6

PRC Sta 201+71.11

PI Sta 202+41.60

202+82
16′ LT

337+94.04 (EB)

PRC Sta 203+11.16

TEMPORARY CONCRETE BARRIER

2′ SHLDR (TYP.)

6′
6′
12′
12′
8′
12′

2′ SHLDR

200+00

℄ STG 2

201

202

203

204

205+00

201+78
2′ RT
382.6

201+88
3′ RT

R&R TRB TM
T1 SPL TAN

2′ SHLDR

202+02
6′ RT
380.6

202+38
2′ RT

REM RE-E
SPBGR TY A

203+01
2.4′ RT

202+29.0
33.5′ RT
382.86

202+60.9
38.6′ RT
383.18

203+45
2.5′ RT

203+47
12′ RT
381.7

REM RE-E T B
TERM T6

2′ SHLDR (TYP.)

PI Sta 200+86.40

℄ IL 13 WB

202+23.4
57.0′ RT
383.68

TEMPORARY RAMP
STA 202+23 TO STA 202+61

337+97.16 (WB)

202+57.2
62.4′ RT
383.78

PROP. CURVE STG2-2
PI STA. = 202+41.60
Δ = 16° 02′ 55″ (RT)
D = 11° 27′ 33″
R = 500.00′
T = 70.49′
L = 140.05′
E = 4.94′
P.R.C. STA = 201+71.11
P.T. STA = 203+11.16

N

20′ 0 20′ 40′
SCALE: 1″ = 20′

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE 2 SHEETS
LAYOUT

SCALE: 1″=20′ | SHEET NO. 2 OF 8 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	35
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

LAYOUT LEGEND

- TYPE III BARRICADE WITH FLASHING LIGHTS
- DRUM WITH STEADY BURNING LIGHT
- TYPE C BI-DIRECTIONAL REFLECTOR
- EXISTING INLET PROTECTION
- SIGN
- DIRECTION OF TRAFFIC
- EXISTING TEMPORARY DITCH CHECK
- WORK AREA
- TEMPORARY RAMP

PROP. CURVE STG2-3
PI STA. = 205+95.13
Δ = 8° 33′ 16″ (LT)
D = 1° 30′ 33″
R = 3,796.86′
T = 283.97′
L = 566.88′
E = 10.60′
P.C. STA = 203+11.16
P.T. STA = 208+78.04

PROP. CURVE STG2-5
PI STA. = 211+44.87
Δ = 15° 39′ 43″ (LT)
D = 5° 43′ 46″
R = 1,000.00′
T = 137.53′
L = 273.35′
E = 9.41′
P.R.C. STA = 210+07.34
P.T. STA = 212+80.69

TEMPORARY CONCRETE BARRIER
2′ SHLDR (TYP.)
2′ SHLDR (TYP.)
8′
12′
12′
207
208
209
210
211
212
℄ IL 13 EB
℄ IL 13 WB
℄ STG 2
2′ SHLDR
2′ SHLDR
12′
12′
6′
6′
208+91
15.2′ LT
344+12.44 (EB)
PRC Sta 208+78.04
209+41′
15.2′ LT
209+78
15.1′ LT
PI Sta 209+42.78
PRC Sta 210+07.34
210+15
15′ LT
210+53.5
15′ LT
210+91
15′ LT
211+29.5
15′ LT
211+84
24.5′ RT
381.3
PI Sta 212+80.69
212+59
26′ RT
383.0
208+21
18.1′ RT
380.1
208+73.4
36.1′ RT
383.48
209+04.2
34.6′ RT
382.94
210+22
2′ RT
383.0
211+26
14′ LT
383.0
PI Sta 211+44.87
209+06.0
58.0′ RT
383.80
208+74.0
59.7′ RT
384.08
343+84.56 (WB)
TEMPORARY RAMP
STA 208+73 TO STA 209+06

PROP. CURVE STG2-4
PI STA. = 209+42.78
Δ = 7° 24′ 31″ (RT)
D = 5° 43′ 46″
R = 1,000.00′
T = 64.74′
L = 129.30′
E = 2.09′
P.C. STA = 208+78.04
P.R.C. STA = 210+07.34

N

20′ 0 20′ 40′
SCALE: 1″ = 20′

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

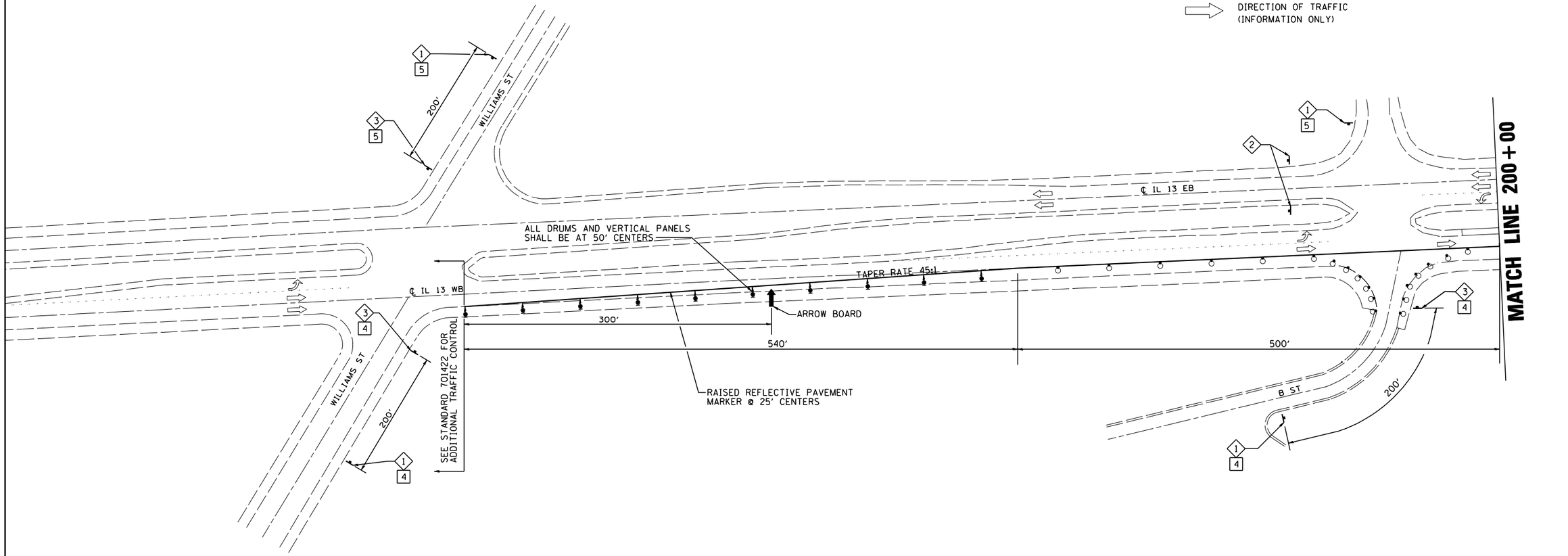
STAGE 2 SHEETS
LAYOUT

SCALE: 1:=20′ | SHEET NO. 3 OF 8 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	36
		CONTRACT NO. 78056		
		ILLINOIS FED. AID PROJECT		

PAVEMENT MARKING/TRAFFIC CONTROL LEGEND

- (1) ROAD CONSTRUCTION AHEAD-W20-03(0)-48
- (2) END ROAD WORK-G20-2(0)-36
- (3) RIGHT LANE CLOSED AHEAD-W20-5R(0)-48
- [4] 24" X 24"
- [5] 24" X 24"
- SIGNAGE
- BARRICADE OR DRUM WITH FLASHING LIGHT
- DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONO DIRECTION LIGHT
- DIRECTION OF TRAFFIC (INFORMATION ONLY)



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

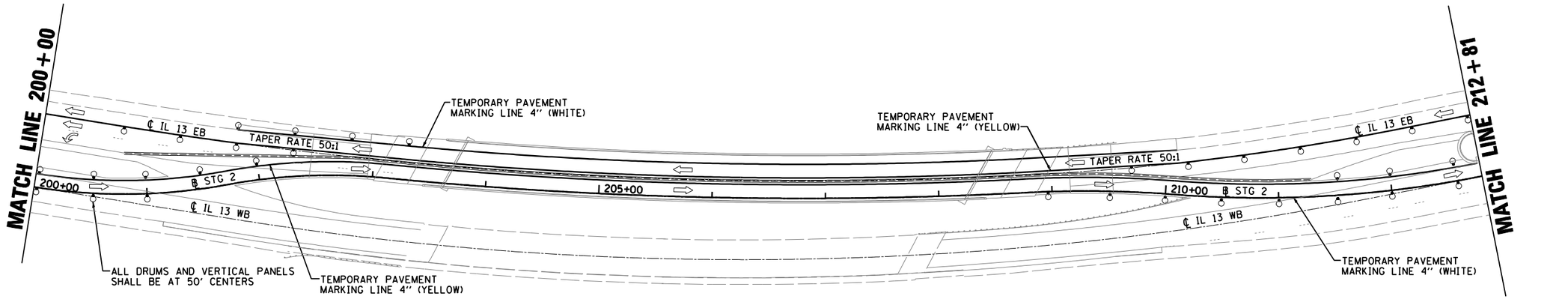
STAGE 2 SHEETS
PAVEMENT MARKING / TRAFFIC CONTROL

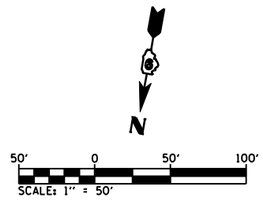
SCALE: 1"=50' | SHEET NO. 4 OF 8 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	37
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

PAVEMENT MARKING/TRAFFIC CONTROL LEGEND

- ROAD CONSTRUCTION AHEAD-W20-03(0)-48
- END ROAD WORK-G20-2(0)-36
- LEFT LANE CLOSED AHEAD-W20-5L(0)-48
- 24" X 24"
- 24" X 24"
- SIGNAGE
- BARRICADE OR DRUM WITH FLASHING LIGHT
- DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONO DIRECTION LIGHT
- DIRECTION OF TRAFFIC (INFORMATION ONLY)





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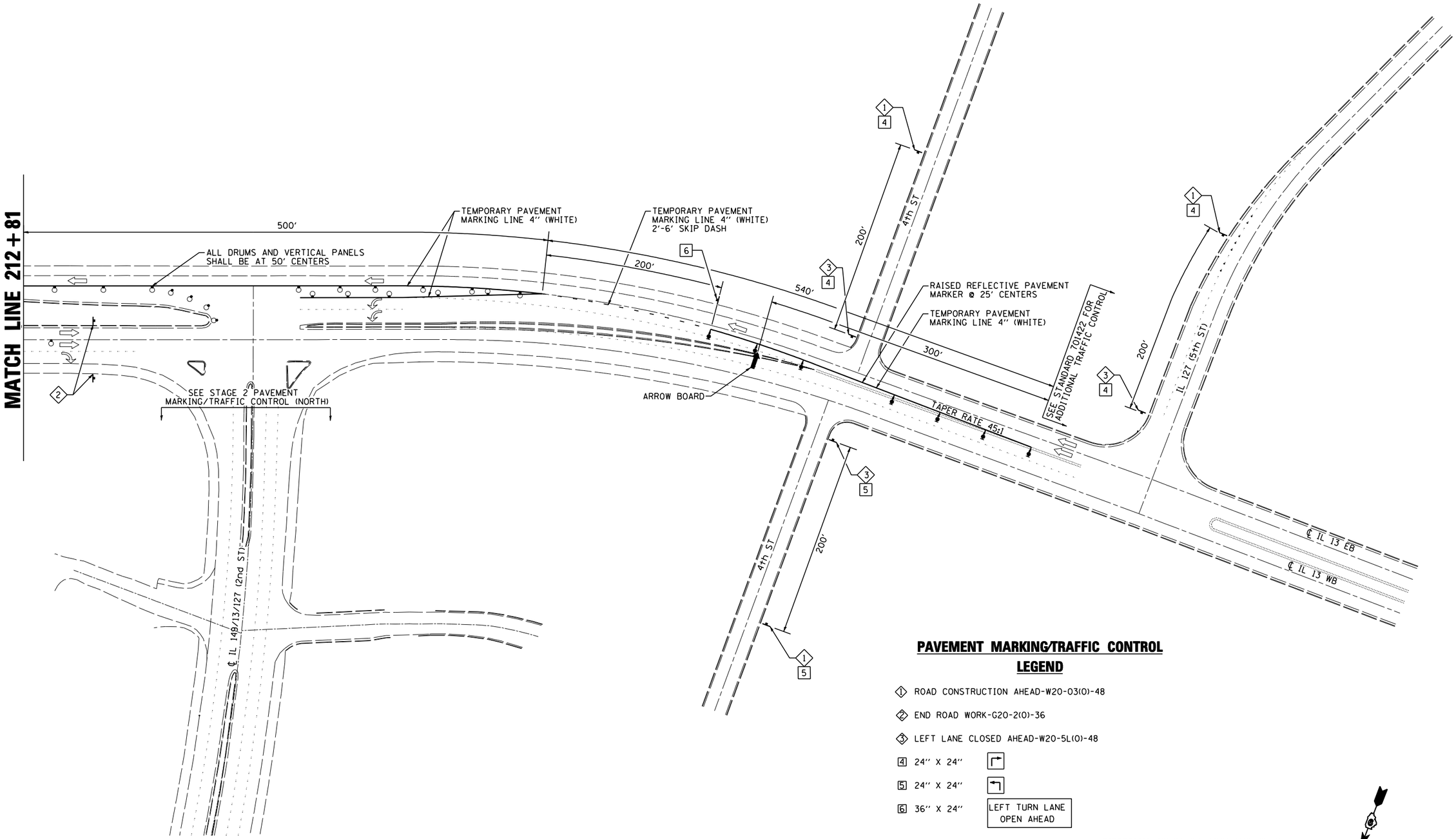
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE 2 SHEETS
PAVEMENT MARKINGS / TRAFFIC CONTROL SHEETS

SCALE: 1"=50' | SHEET NO. 5 OF 8 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	38
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		



PAVEMENT MARKING/TRAFFIC CONTROL LEGEND

- 1 ROAD CONSTRUCTION AHEAD-W20-03(0)-48
- 2 END ROAD WORK-G20-2(0)-36
- 3 LEFT LANE CLOSED AHEAD-W20-5L(0)-48
- 4 24" X 24"
- 5 24" X 24"
- 6 36" X 24" — LEFT TURN LANE OPEN AHEAD

SIGNAGE

DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONO DIRECTION LIGHT

BARRICADE OR DRUM WITH FLASHING LIGHT

DIRECTION OF TRAFFIC (INFORMATION ONLY)

N

50' 0 50' 100'
SCALE: 1" = 50'

WEST

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

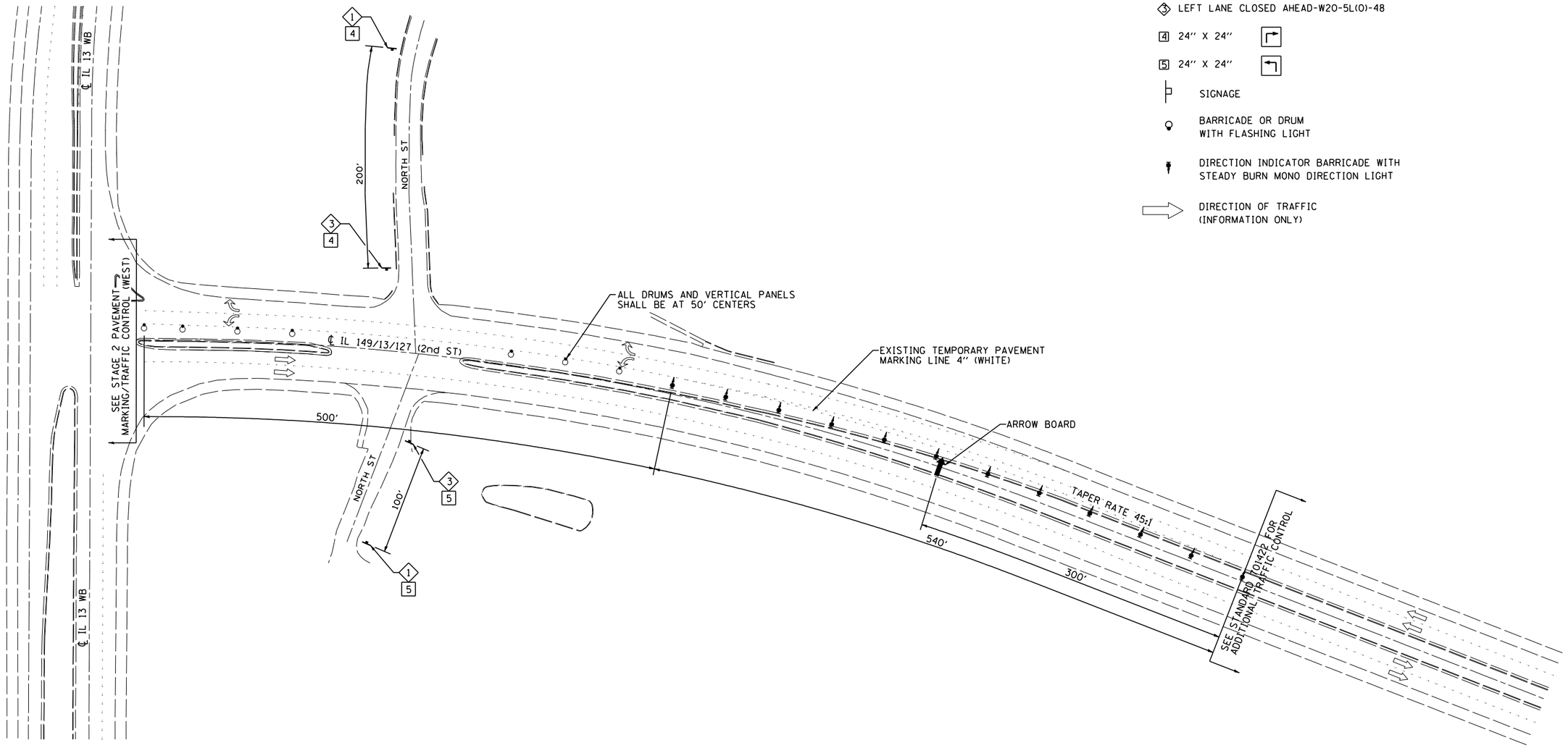
STAGE 2 SHEETS
PAVEMENT MARKINGS / TRAFFIC CONTROL

SCALE: 1"=50' | SHEET NO. 6 OF 8 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	39
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		

PAVEMENT MARKING/TRAFFIC CONTROL LEGEND

- ① ROAD CONSTRUCTION AHEAD-W20-03(0)-48
- ② END ROAD WORK-G20-2(0)-36
- ③ LEFT LANE CLOSED AHEAD-W20-5L(0)-48
- [4] 24" X 24"
- [5] 24" X 24"
- SIGNAGE
- BARRICADE OR DRUM WITH FLASHING LIGHT
- DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONO DIRECTION LIGHT
- DIRECTION OF TRAFFIC (INFORMATION ONLY)



NORTH

SCALE: 1" = 50'

FILE NAME = m:\28018\microstation\0phase1\D978056-sht-staging2.dgn	USER NAME = default	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STAGE 2 SHEETS PAVEMENT MARKINGS / TRAFFIC CONTROL	F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -			331	(12-1)B-1	JACKSON	200	40
	PLOT SCALE = 100.0000 ' / IN.	CHECKED -	REVISED -						CONTRACT NO. 78056	
	PLOT DATE = 1/25/2012	DATE -	REVISED -		SCALE: SHEET NO. 7 OF 8 SHEETS STA. TO STA.			ILLINOIS	FED. AID PROJECT	

REMOVAL LEGEND

PAVEMENT REMOVAL

BIG MUDDY RIVER

1 EA - REMOVING INLETS
STA 335+67

REMOVE TEMPORARY STORM SEWER
STA 335+67 TO STA 337+03

335+00

℄ IL 13 (EB)

+92

+73

+68

+64

340+00

PAVEMENT REMOVAL
STA 335+68 TO STA 347+73

TEMPORARY GUARDRAIL REMOVAL
STA 336+87 TO STA 338+43

1 EA - REMOVING
INLETS STA 343+17

REMOVE TEMPORARY STORM SEWER
STA 343+17 TO STA 346+76

1 EA - REMOVING
INLETS STA 346+76

345+00

+12

+81

+02

+69

PAVEMENT REMOVAL
STA 343+69 TO STA 347+02

STORM SEWER REMOVAL 12
STA 342+86 TO STA 343+17

BIG MUDDY RIVER

N

50′ 0 50′ 100′
SCALE: 1″ = 50′

NOTES:
1.) STATIONING REFERENCES EASTBOUND ALIGNMENT.
2.) EXISTING GROUNDWORK INCLUDES STAGE 1 AND STAGE 2 CONSTRUCTION.

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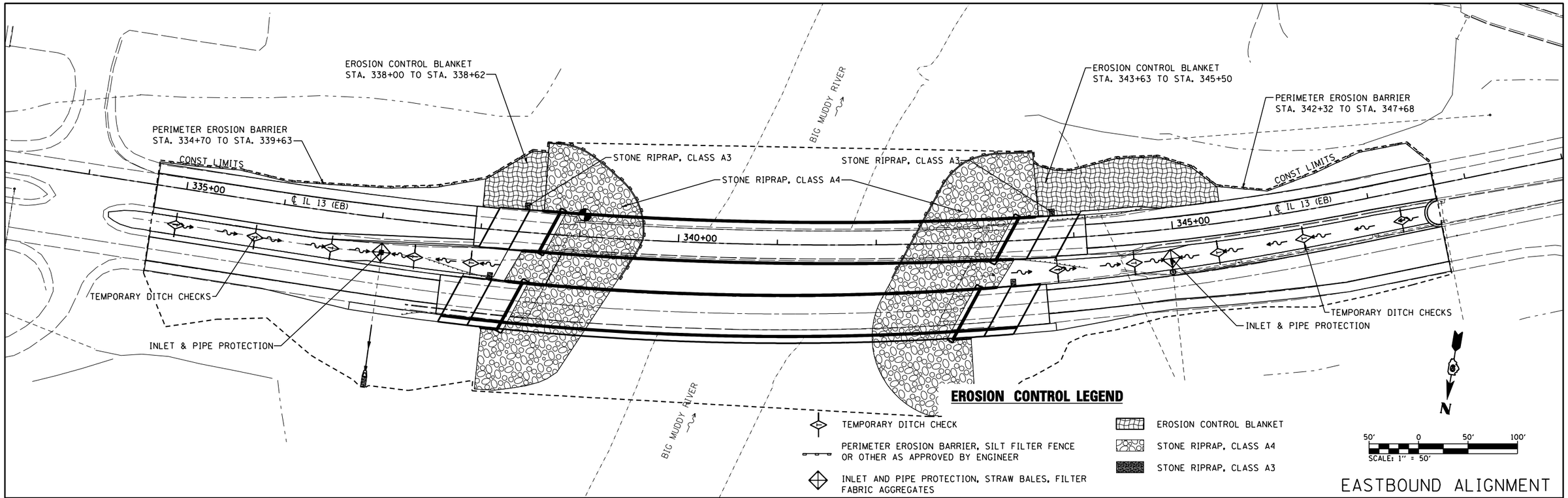
	PLOT DATE = 1/25/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

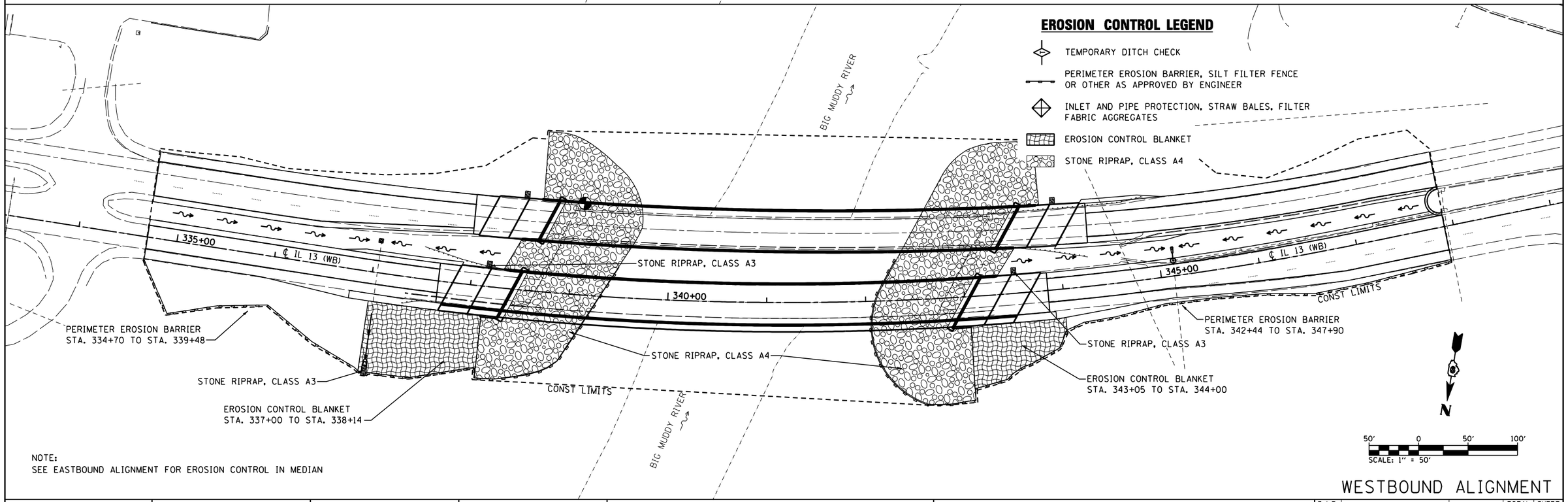
STAGE 2 SHEETS
FINAL REMOVAL

SCALE: 1″=50′ | SHEET NO. 8 OF 8 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)-B-1	JACKSON	200	41
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			



EASTBOUND ALIGNMENT



NOTE:
SEE EASTBOUND ALIGNMENT FOR EROSION CONTROL IN MEDIAN

WESTBOUND ALIGNMENT

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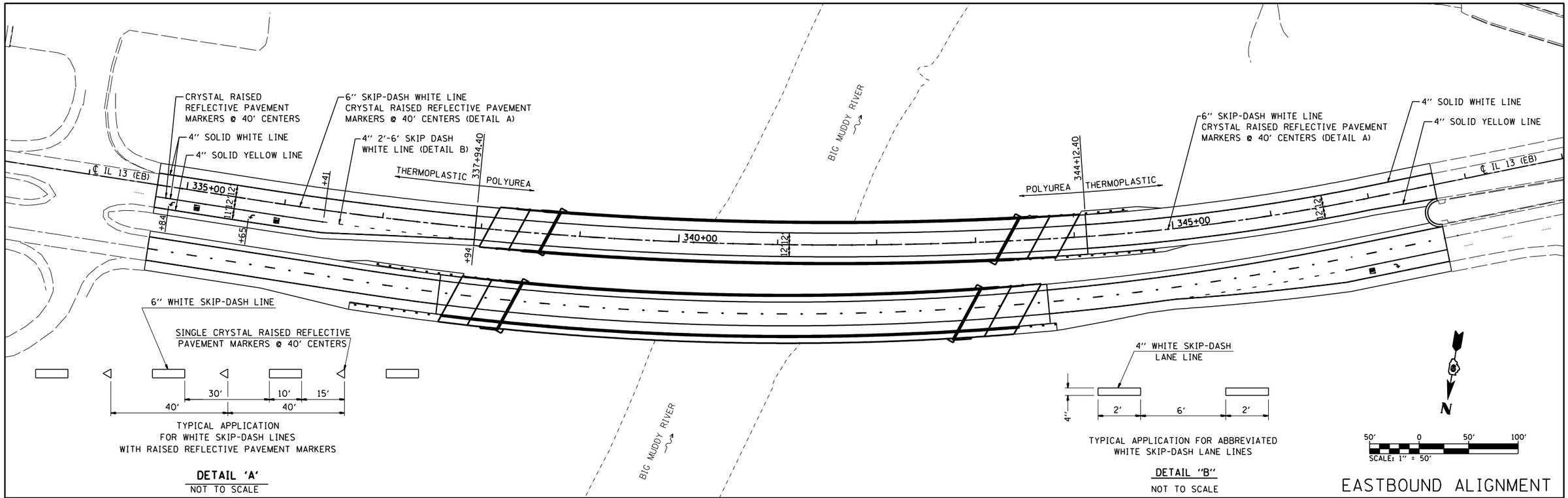
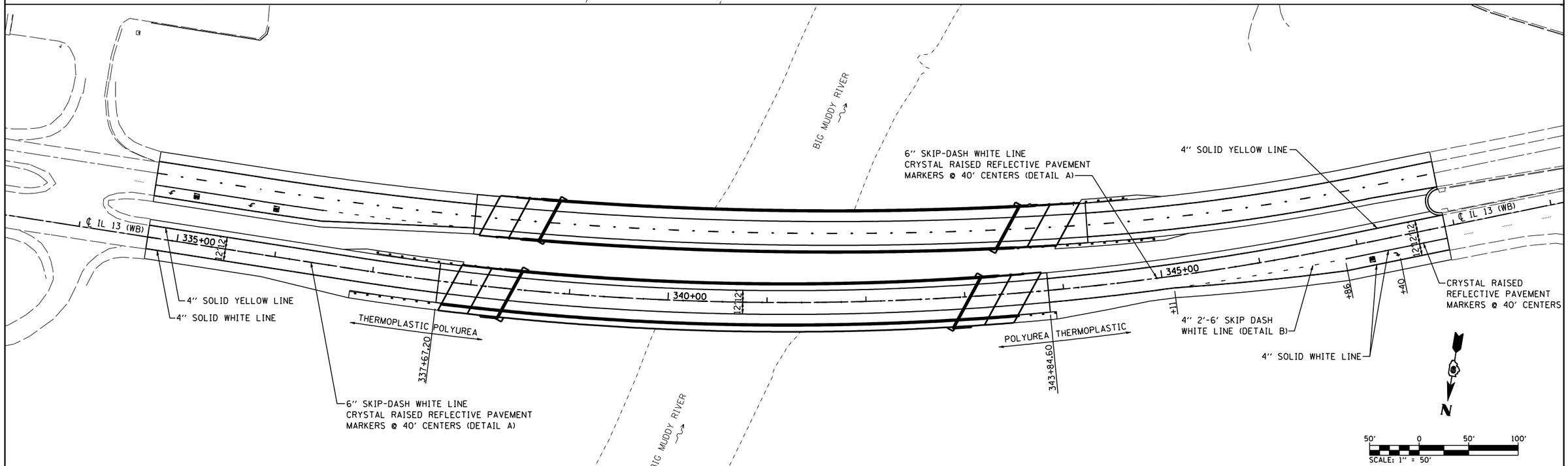
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EROSION CONTROL SHEET
IL RTE 13 OVER BIG MUDDY RIVER

SCALE: 1″=50′ | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)-B-1	JACKSON	200	42
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			





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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING SHEET
IL RTE 13 OVER BIG MUDDY RIVER

SCALE: 1"=50' | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)-B-1	JACKSON	200	43
		CONTRACT NO. 78056		
		ILLINOIS FED. AID PROJECT		

LIGHTING GENERAL NOTES

1.) ALL PROPOSED LIGHTING UNITS SHALL BE LABELED ACCORDING TO THE STANDARD SPECIFICATIONS, WITH POLE NUMBERS ATTACHED WITH STAINLESS STEEL BANDING. LIGHTING UNIT NUMBERING SHALL BE AS DIRECTED BY THE ENGINEER.

2.) CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE ELECTRICAL WORK WITH OTHER TRADES.

3.) THE CONTRACTOR IS RESPONSIBLE FOR UNCOVERING OR HAND DIGGING AROUND UTILITIES AS NECESSARY. THE COST OF THIS WORK IS TO BE INCLUDED WITH THE "UNIT DUCT, 600V, 2-1C NO.4, 1/C NO.6 GROUND, (XLP-TYPE USE), 1" DIA POLYETHYLENE" PAY ITEM.

4.) ALL PROPOSED LIGHT POLES TO BE INSTALLED AT A MINIMUM OF 15 FEET BEHIND THE EDGE OF PAVEMENT. NO POLES TO BE INSTALLED IN THE FLOWLINE OF DITCH. POLE SETBACK TO BE INCREASED IF NECESSARY AS DIRECTED BY THE ENGINEER.

5.) NO LIGHTING CIRCUIT OR PORTION THEREOF SHALL BE REMOVED FROM NIGHTTIME OPERATION WITHOUT APPROVAL OF THE ENGINEER.

6.) THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE LIGHTING SYSTEM UNTIL IDOT HAS TAKEN ACCEPTANCE OF THE SYSTEM. ALL EXISTING CIRCUITS AND CABLES TO THE LIGHT POLES SHALL BE MAINTAINED AS NEEDED AND THIS WORK SHALL BE INCIDENTAL TO THE CONTRACT.

7.) ALL ATTACHED CONDUIT, JUNCTION BOXES, CONDUIT HANGERS, SUPPORTS AND APPURTENANCES SHALL BE REMOVED FROM THE BRIDGE. REMOVED MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF ACCORDING TO ARTICLE 202.03. THE COST OF THIS WORK SHALL BE INCLUDED IN THE BRIDGE REMOVAL, AND NO ADDITIONAL PAYMENT WILL BE ALLOWED.

8.) ALL EXISTING LIGHTING UNITS, EXCEPT 7G AND B15 AS SHOWN ON THE PLANS, SHALL REMAIN FULLY OPERATIONAL DURING STAGE 1 CONSTRUCTION. ALL LIGHTING UNITS ON CIRCUIT 1-2 SHALL BE INSTALLED AND MADE FULLY OPERATIONAL PRIOR TO STAGE 2 CONSTRUCTION.

9.) THE CONTRACTOR SHALL TAKE INSULATION RESISTANCE MEASUREMENTS OF ALL EXISTING CIRCUITS BEFORE ANY MODIFICATIONS ARE MADE AND PROVIDE THE WRITTEN RESULTS TO THE ENGINEER. EXISTING CIRCUITS IN THE LIGHTING CONTROLLERS LOCATED AT STA. 327+70 AND STA. 349+00 NOT TESTED AND PROPERLY DOCUMENTED SHALL BE SUBJECT TO THE INSULATION REQUIREMENTS OF ARTICLE 801.13 AT THE CONTRACTOR'S EXPENSE.

10.) THE CONTRACTOR SHALL TAKE INSULATION RESISTANCE MEASUREMENTS OF THE EXISTING PORTION OF THE CIRCUIT FED FROM THE EXISTING CONTROLLER AT STA. 349+00 PRIOR TO CONNECTING THE NEW FACILITIES TO THIS CIRCUIT. WRITTEN RESULTS SHALL BE PROVIDED TO THE ENGINEER.

11.) AFTER THE PROPOSED CIRCUITS ARE FULLY INSTALLED THE CONTRACTOR SHALL TAKE INSULATION RESISTANCE MEASUREMENTS ACCORDING TO ARTICLE 801.13 AND PROVIDE THE WRITTEN RESULTS TO THE ENGINEER. IF THE TEST RESULTS DO NOT COMPLY WITH ARTICLE 801.13, THE CONTRACTOR SHALL THEN TEST ONLY THE PORTIONS OF THE CIRCUIT WHICH ARE NEW. ANY WORK NECESSARY TO BRING THE CIRCUITS INTO COMPLIANCE SHALL BE AT THE CONTRACTOR'S OWN EXPENSE AND NO ADDITIONAL PAYMENT WILL BE ALLOWED.

12.) THE CONTRACTOR SHALL PLACE A COPY OF REVISED AS-BUILT PLANS INSIDE THE EXISTING LIGHTING CONTROLLERS LOCATED AT STA. 327+70 AND STA. 349+00.

13.) THE LOCATIONS OF ALL EXISTING LIGHTING FACILITIES SHOWN ON THE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY EXISTING FIELD CONDITIONS.

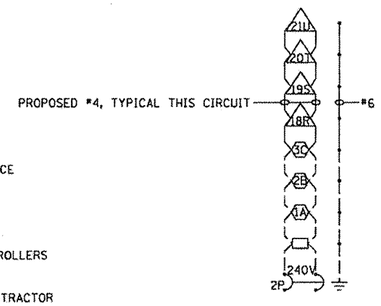
14.) PROPOSED LIGHT POLE FOUNDATION SHALL BE installed plumb and flush with the existing grade and shall meet the height requirements of Article 836.03 of the Standard Specifications. After unit duct is installed, foundations shall be filled with fine aggregate according to Article 836.03. Washers used to install the pole shall be large enough to fully cover the slotted holes in the pole base plate.

15.) Underground conduit, Coilable Nonmetallic Conduit, 2 1/2" Dia. shall be Schedule 80 as noted in the plans.

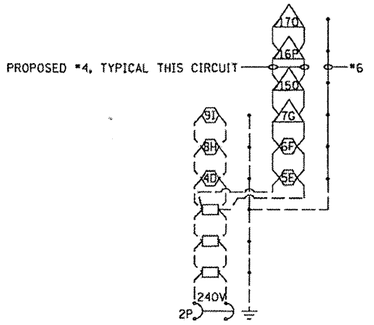
LIGHTING PLAN QUANTITIES

81200230	CONDUIT EMBEDDED IN STRUCTURE, 2" DIA., PVC	FOOT	1,025
81300530	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 12" X 10" X 6"	EACH	4
81300610	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 14" X 12" X 6"	EACH	1
81603030	UNIT DUCT, 600V, 2-1C NO.4, 1/C NO.6 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE	FOOT	1,102
81702130	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 6	FOOT	1,025
81702140	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 4	FOOT	2,050
82102250	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 250 WATT	EACH	8
83002200	LIGHT POLE, ALUMINUM, 40 FT. M.H., 6 FT. DAVIT ARM	EACH	6
83003600	LIGHT POLE, ALUMINUM, 45 FT. M.H., 15 FT. DAVIT ARM	EACH	2
83500355	LIGHT POLE FOUNDATION, METAL, 15" BOLT CIRCLE, 8" X 6'	EACH	2
87800650	BREAKAWAY DEVICE, COUPLING WITH STAINLESS STEEL SCREEN	EACH	8
84200600	REMOVAL OF LIGHTING UNIT, NO SALVAGE	EACH	5
84200804	REMOVAL OF POLE FOUNDATION	EACH	3

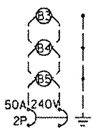
Underground Conduit, Coilable Nonmetallic Conduit, 2 1/2" Dia. Foot 182



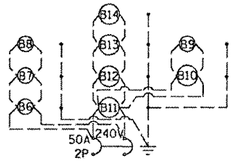
LIGHTING CKT 1-1
EXISTING LIGHTING CONTROLLER
LOCATED AT IL 13 AND IL 127



LIGHTING CKT 1-2
EXISTING LIGHTING CONTROLLER
LOCATED AT IL 13 AND IL 127



LIGHTING CKT 2-1
EXISTING LIGHTING CONTROLLER
NORTH SIDE OF IL 13, EAST OF THE BRIDGE



LIGHTING CKT 2-2
EXISTING LIGHTING CONTROLLER
NORTH SIDE OF IL 13, EAST OF THE BRIDGE

NOTES:

1.) ALL NECESSARY REVISIONS TO THE WIRING SHOWN ON THIS SHEET SHALL BE MADE AT NO ADDITIONAL COST TO THE DEPARTMENT AND TO THE SATISFACTION OF THE ENGINEER.

2.) EXISTING POLE NUMBERS ARE BASED ON THE AS-BUILT PLANS.

3.) CONTRACTOR SHALL VERIFY THE RATING OF ALL BRANCH CIRCUIT BREAKERS IN THE EXISTING CONTROLLER LOCATED AT STA. 349+00. LARGER BREAKERS SHALL BE FURNISHED AND INSTALLED IF NEEDED ACCORDING TO NEC REQUIREMENTS. THIS WORK SHALL BE PAID FOR ACCORDING TO ARTICLE 109.04.

LIGHTING CIRCUIT LEGEND

- EXISTING ELECTRIC CABLE
- EXISTING HANDHOLE
- EXISTING 250W HPS LUMINAIRE
- EXISTING 700W MV LUMINAIRE
- PROPOSED 250W HPS LUMINAIRE

LIGHTING CIRCUITS

FILE NAME = e:\28018\micro-station\2phase1\078056-lt-light.dgn	USER NAME = default	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 100.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 1/25/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHTING PLANS
GENERAL NOTES, QUANTITIES, AND CIRCUIT DIAGRAMS

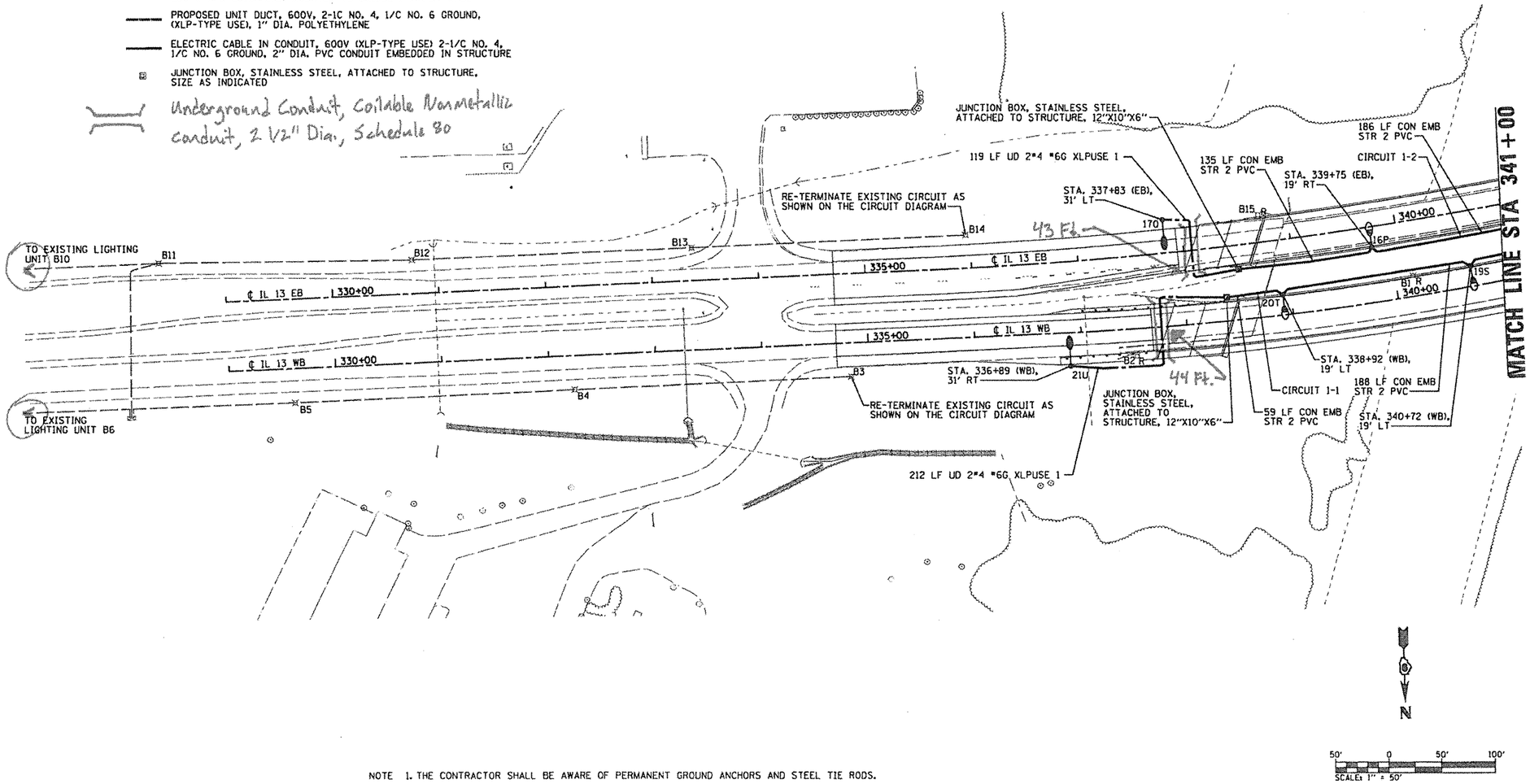
SCALE: | SHEET NO. 1 OF 7 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	44
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		

LIGHTING LEGEND

- EXISTING LIGHTING CONTROLLER
- EXISTING HANDHOLE
- EXISTING LIGHTING UNIT TO REMAIN
- EXISTING UNIT DUCT
- EXISTING LIGHTING UNIT TO BE REMOVED, NO SALVAGE
- LIGHT POLE, ALUMINUM, 45 FT M.H., 15 FT DAVIT ARM WITH 250 W HPS LUMINAIRE, METAL FOUNDATION
- LIGHT POLE, ALUMINUM, 40 FT M.H., 6 FT DAVIT ARM WITH 250 W HPS LUMINAIRE, MOUNTED TO BRIDGE PARAPET WALL
- PROPOSED UNIT DUCT, 600V, 2-1C NO. 4, 1/C NO. 6 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE
- ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 2-1/C NO. 4, 1/C NO. 6 GROUND, 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
- JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, SIZE AS INDICATED

Underground Conduit, Coilable Nonmetallic conduit, 2 1/2" Dia., Schedule 80

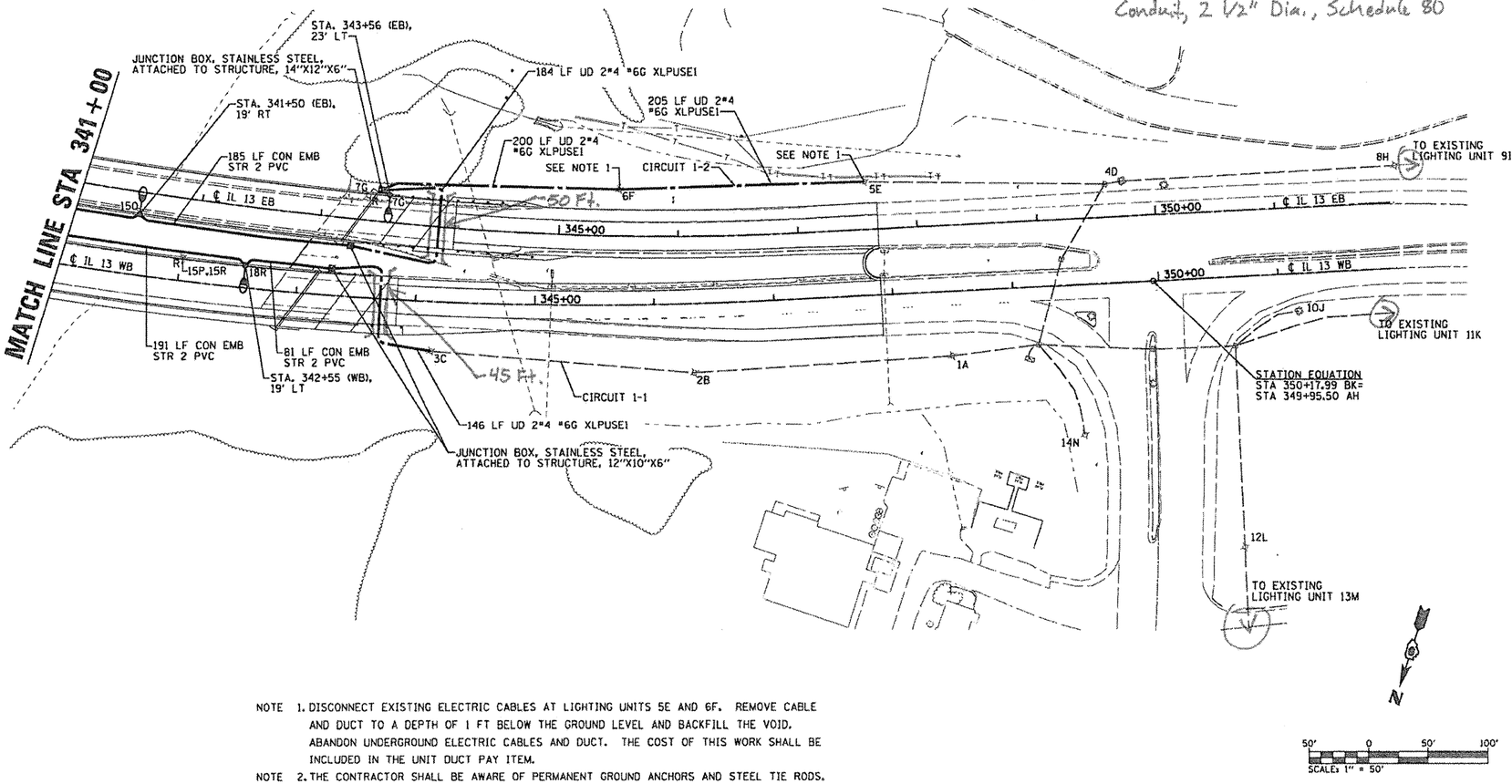


NOTE 1. THE CONTRACTOR SHALL BE AWARE OF PERMANENT GROUND ANCHORS AND STEEL TIE RODS. NO ADDITIONAL COMPENSATION SHALL BE PROVIDED DUE TO CONFLICTS.

FILE NAME = M:\28818\Microstation\@Phase II\D978056-ant-light.dgn	USER NAME = default	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	LIGHTING PLANS LAYOUT	F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 100.0000 ' / IN.	DRAWN -	REVISED -			331	(12-1)B-1	JACKSON	200	45
	PLOT DATE = 1/25/2012	CHECKED -	REVISED -					CONTRACT NO. 78056		
		DATE -	REVISED -		SCALE: 1"=50' SHEET NO. 2 OF 7 SHEETS STA. TO STA.			ILLINOIS FED. AID PROJECT		

LIGHTING LEGEND

- EXISTING LIGHTING CONTROLLER
- EXISTING HANDHOLE
- EXISTING LIGHTING UNIT TO REMAIN
- EXISTING UNIT DUCT
- $_{R}$ EXISTING LIGHTING UNIT TO BE REMOVED, NO SALVAGE
- LIGHT POLE, ALUMINUM, 45 FT M.H., 15 FT DAVIT ARM WITH 250 W HPS LUMINAIRE, METAL FOUNDATION
- LIGHT POLE, ALUMINUM, 40 FT M.H., 6 FT DAVIT ARM WITH 250 W HPS LUMINAIRE, MOUNTED TO BRIDGE PARAPET WALL
- PROPOSED UNIT DUCT, 600V, 2-1C NO. 4, 1/C NO. 6 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE
- ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 2-1/C NO. 4, 1/C NO. 6 GROUND, 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
- JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, SIZE AS INDICATED
- Underground Conduit, Coilable Nonmetallic Conduit, 2 1/2" Dia., Schedule 80



NOTE 1. DISCONNECT EXISTING ELECTRIC CABLES AT LIGHTING UNITS 5E AND 6F. REMOVE CABLE AND DUCT TO A DEPTH OF 1 FT BELOW THE GROUND LEVEL AND BACKFILL THE VOID. ABANDON UNDERGROUND ELECTRIC CABLES AND DUCT. THE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT DUCT PAY ITEM.

NOTE 2. THE CONTRACTOR SHALL BE AWARE OF PERMANENT GROUND ANCHORS AND STEEL TIE RODS. NO ADDITIONAL COMPENSATION SHALL BE PROVIDED DUE TO CONFLICTS.

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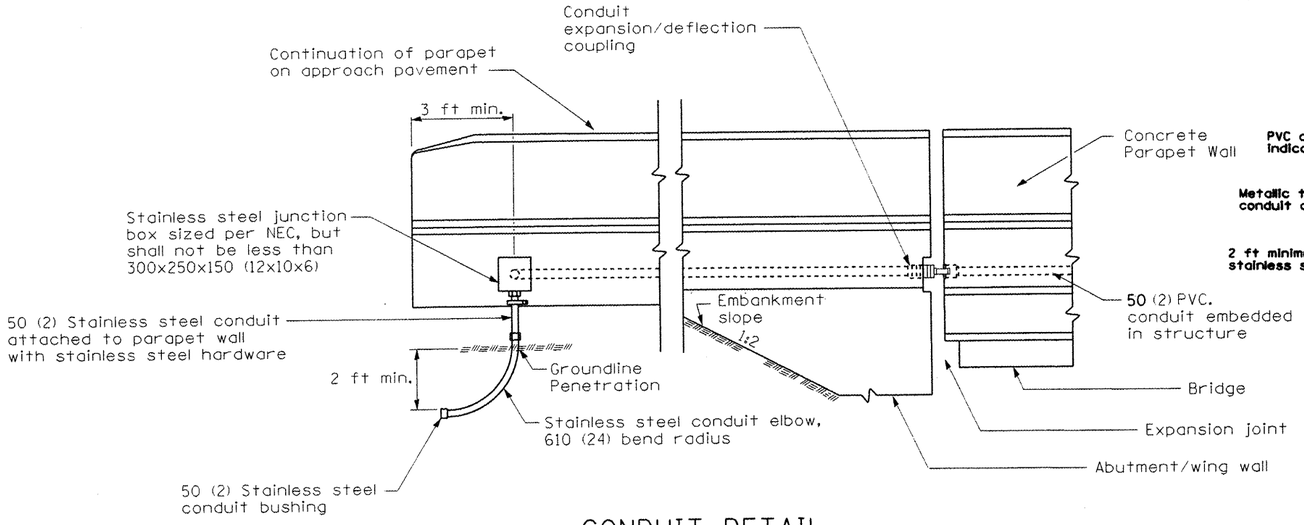
		DRAWN -	REVISED -
	PLOT SCALE = 100.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 1/25/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHTING PLANS
LAYOUT

SCALE: 1"=50' | SHEET NO. 3 OF 7 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	46
		CONTRACT NO. 78056		
		ILLINOIS FED. AID PROJECT		



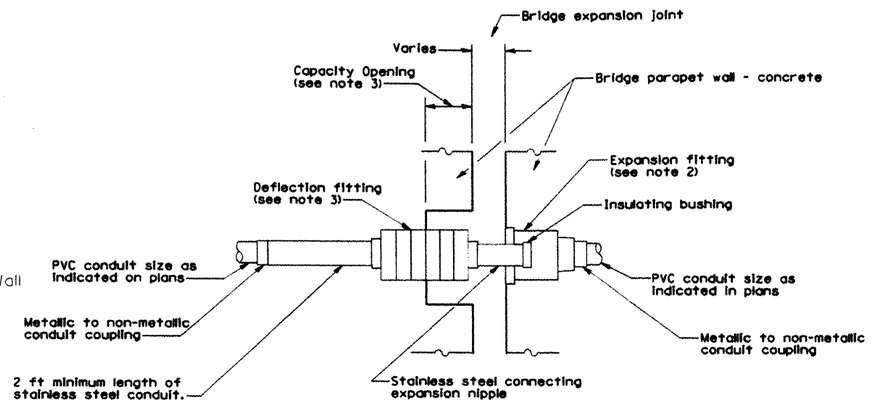
CONDUIT DETAIL
(Open Abutment)

GENERAL NOTES

Stainless steel conduit, couplings, and elbows shall be according to Section 810 of the Standard Specifications, as applicable, shall be Type 304 or Type 316, and shall be manufactured according to UL Standard 6A and ANSI Standard C 80.1.

Conduit fittings shall be the threaded type, shall be Type 304 or Type 316 stainless steel, and shall be manufactured according to UL Standard 514B.

All stainless steel and liquid tight flexible non-metallic conduit, including all fittings, bushings, couplings, and elbows shall be included in the cost of the "Junction Box, Stainless Steel, Attached to Structure, 12" X 10" X 6" " pay item.



CONDUIT EXPANSION / DEFLECTION COUPLING DETAIL

GENERAL NOTES

1.) The Contractor shall install a conduit expansion/deflection coupling at the joints in the concrete parapet on the bridge capable of accepting the longitudinal movement. All mettalic parts of the coupling shall be made of stainless steel or as approved by the Engineer. Any non-stainless metal shall be hot dip galvanized and coated to prevent reaction with the concrete. The cost of the coupling shall be part of and incidental to the conduit system.

2.) The barrel in the expansion fitting shall be fully embedded in the concrete on one side of the expansion joint. One half the length of the deflection fitting shall be embedded in the concrete on the other side of the coupling.

3.) A cavity opening 3" larger in diameter than the deflection fitting shall be provided in the concrete to ensure proper performance of the coupling.

4.) Careful attention to joint movement over a range of temperatures shall be coordinated with the selection and installation of the coupling to ensure the range of movement of the coupling is not exceeded at temperature extremes.

5.) All manufacturer's installation instructions shall be carefully followed to ensure optimum performance of the expansion/deflection coupling.

6.) The Contractor shall install couplings at all bridge expansion joints and shall be responsible to determine the proper number of couplings required.

7.) With the approval of the Engineer, the Contractor may substitute two (2) stainless steel junction boxes attached to the back of the wall and connected by a high grade of flexible non-metallic conduit for all expansion joints. This substitution shall be made at no cost to the Department.

CONDUIT COUPLING EXPANSION /DEFLECTION

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

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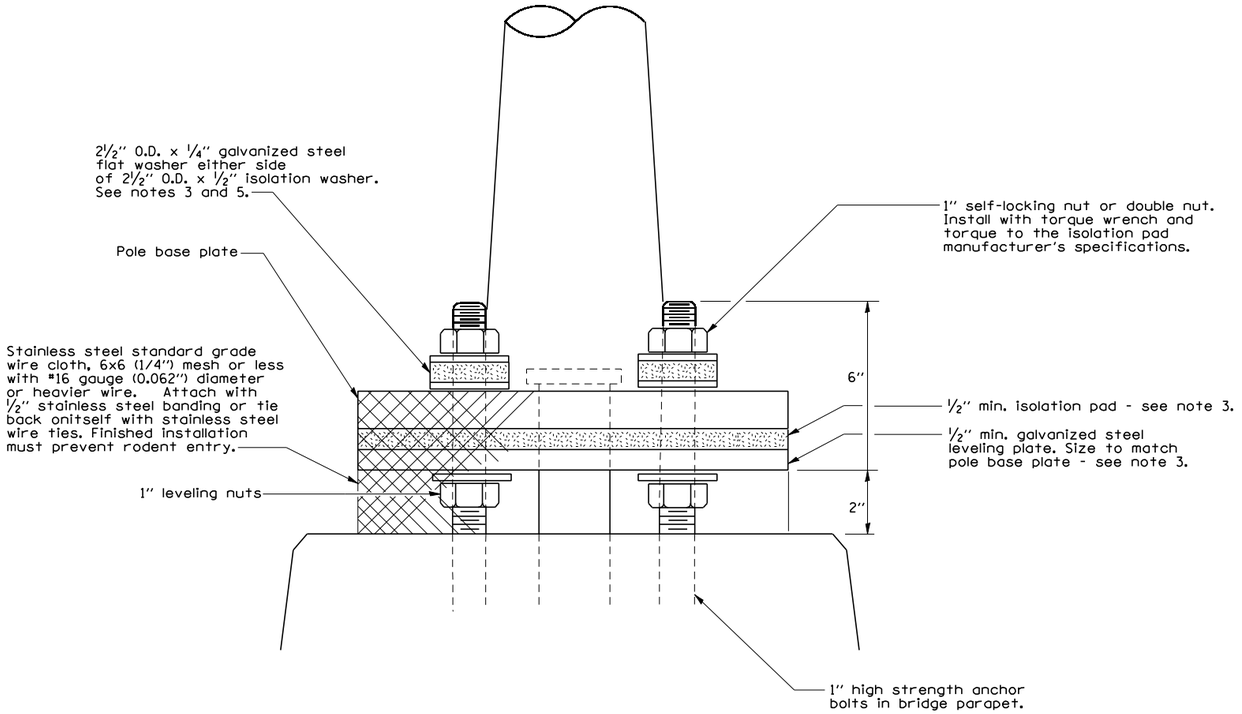
	PLOT SCALE = 100.0000 / IN.	CHECKED -	REVISED -
	PLOT DATE = 1/25/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHTING PLANS
DETAILS

SCALE: | SHEET NO. 4 OF 7 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	47
		CONTRACT NO. 78056		
		ILLINOIS FED. AID PROJECT		



POLE MOUNTED ON BRIDGE PARAPET DETAIL

GENERAL NOTES

1.) Locate poles as shown on lighting plans layout sheets.

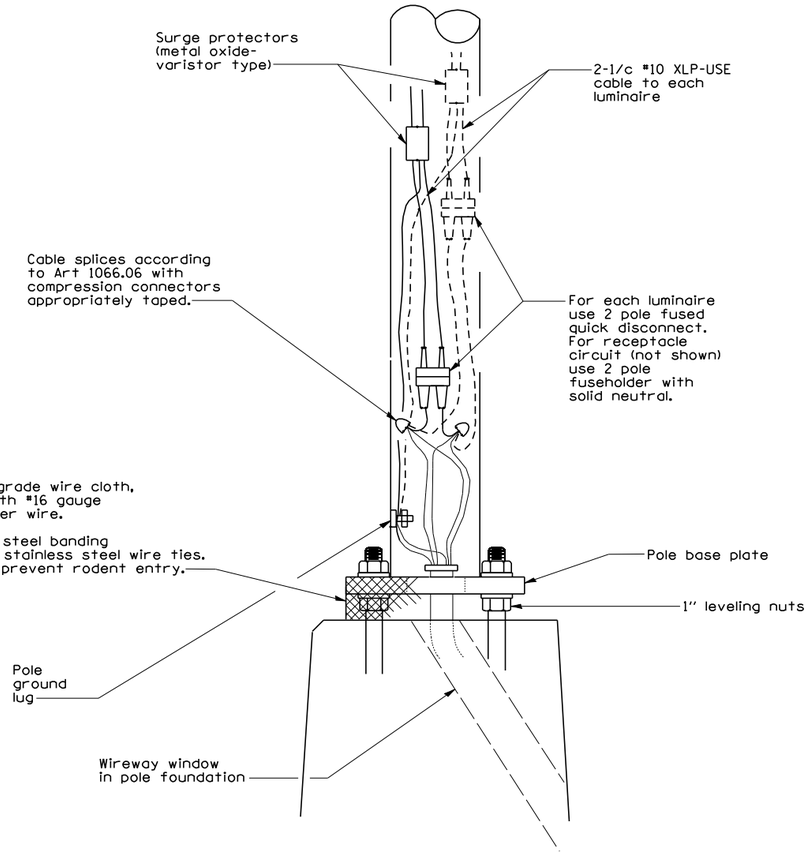
2.) The vibration isolation pad and leveling plate shall match the footprint of the pole base plate.

3.) Thickness of isolation pad and washers shall be according to the isolation pad manufacturer's recommendations based upon pole height and loading.

4.) Should the length of the exposed anchor bolts be too short on an existing bridge to mount the poles as shown, then the leveling plate shall be mounted directly on the concrete and leveled with stainless steel washers. Remove concrete as directed by the Engineer to fully thread the top nut.

5.) The diameter of the flat washer on either side of the isolation washer shall be at least the same as the diameter of the isolation washer.

POLE MOUNTED ON BRIDGE PARAPET



WIRING DETAIL

NOT TO SCALE

GENERAL NOTES

1.) All taped splices shall use 2 layers of electrical tape over 3 layers of rubber tape as required by the Standard Specifications. Coat the finished taped splice with bonding compound.

2.) All cable splices shall be taped unless another method has been specifically approved by the Engineer.

3.) For example purposes the pole is shown on an anchor base. If the pole is required to be set on a breakaway base, consult the Standard Specifications.

POLE HANDHOLE WIRING

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

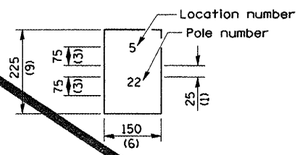
FILE NAME = mi\28018\microstation\0phase1\D978056-sht-light.dgn	USER NAME = default	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 100.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 1/25/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHTING PLANS DETAILS

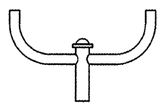
SCALE: | SHEET NO. 5 OF 7 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	48
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

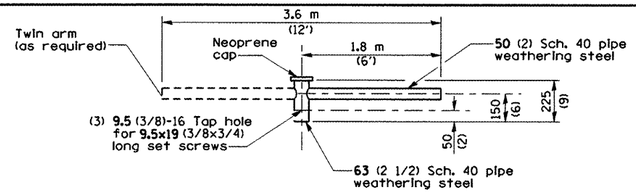


The contractor shall furnish and install a light pole identification of each new light pole as shown above, incidental to the respective light pole pay item. The numerals shall be 75 (3) series "D", black, screened on silver-white type B pressure sensitive reflective sheeting conforming to the requirements of section 1091.01 of the Standard Specifications for Traffic Control Items. The numerals shall conform to the FHWA "Standard Alphabets for Highway Signs".

The light pole identification shall be applied to sign base material as specified in section 1069.06 of the Standard Specifications, approximately 180 (7) above the adjacent pavement grade visible to approaching traffic in accordance with Highway Standard 720001.

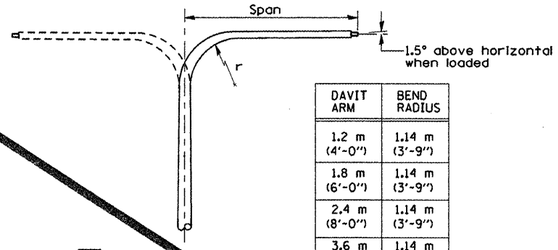


☐ TWIN TENON



☐ TENON MOUNT BRACKET ARM

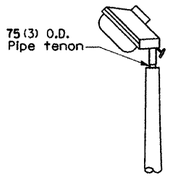
NOTE: Single or twin arm assembly shall be tilted 3° above horizontal.



DAVIT ARM	BEND RADIUS
1.2 m (4'-0")	1.14 m (3'-9")
1.8 m (6'-0")	1.14 m (3'-9")
2.4 m (8'-0")	1.14 m (3'-9")
3.6 m (12'-0")	1.14 m (3'-9")

☒ DAVIT ARM

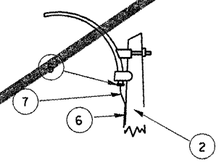
☐ DAVIT ARM-TWIN



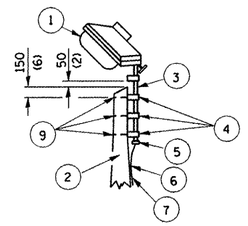
☐ TENON

☐ SHORT BRACKET

☐ SHORT BRACKET - TWIN

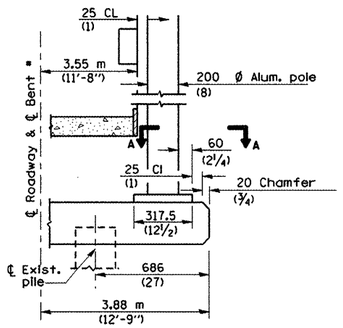


☐ MAST ARM

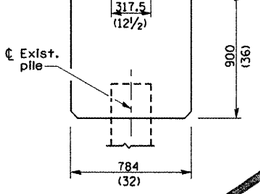


☐ TENON

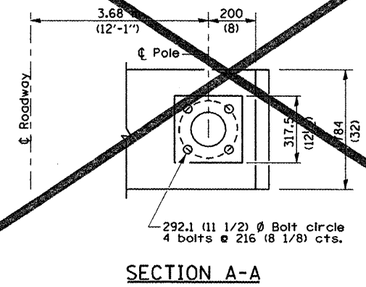
1. Luminaire
2. Wood pole, class 3 or better
3. 63 (2 1/2) Galv. steel conduit
4. Single offset pole band
5. Conduit bushing
6. Cable clamps on 600 (24) centers
7. 2/c #12 Type use cable
8. 25 (1) Galv. steel conduit in length 3.0 m (10')
9. (16 5/8) Ø hot dipped galvanized bolt with flat washer & locknut (3 req'd)
10. Conduit clamps on 900 (36) centers
11. Unit duct
12. Threaded reducer
13. "C" Conduiet, threaded
14. 40 (1 1/2) Galv. steel conduit for 1 unit duct or 75 (3) galv. steel conduit for 2 or 3 unit ducts.



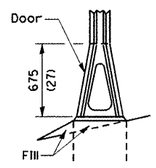
BENT # (Looking)



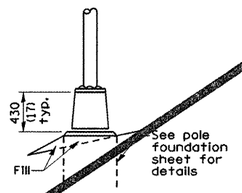
☐ BRIDGE PIER MOUNT



SECTION A-A

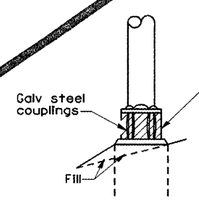


☐ STAINLESS STEEL FLAIR BASE

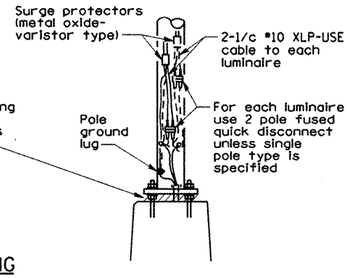


☐ TRANSFORMER BASE

☒ FRANGIBLE



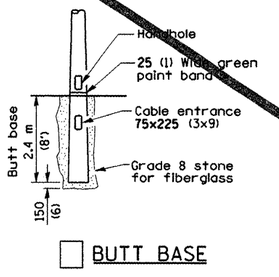
☒ BREAKAWAY COUPLING



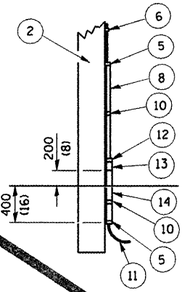
☐ ANCHOR

☒ METAL OR ☐ CONCRETE

Details for underground distribution if required



☐ BUTT BASE



☐ POLE, WOOD

POLE LENGTH	DEPTH IN GROUND
19.8 m (65')	3.6 m (12')
18.0 m (60')	3.0 m (10')
16.8 m (55')	2.7 m (9')
16.0 m (50')	2.4 m (8')
13.7 m (45')	2.1 m (7')
12.0 m (40')	2.0 m (6.5')
10.7 m (35')	1.8 m (6')
9.0 m (30')	1.7 m (5.5')

POLE STANDARDS

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

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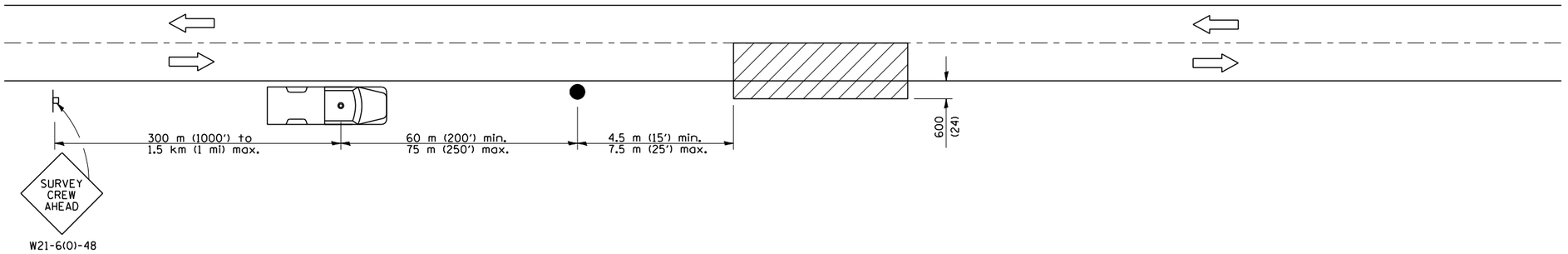
		DRAWN -	REVISED -
	PLOT SCALE = 100.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 1/25/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHTING PLANS
DETAILS

SCALE: | SHEET NO. 6 OF 7 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	49
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			



SYMBOLS

Work area

Sign on portable or permanent support

Truck with flashing amber light and dual emergency flashers

Flagger with traffic control sign

TYPICAL APPLICATIONS

Utility operations

DETAIL FOR NIGHTTIME LIGHTING INSPECTION

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

FILE NAME = m:\28018\microstation\0phase11\D978056-snt-light.dgn	USER NAME = default	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 100.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 1/25/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

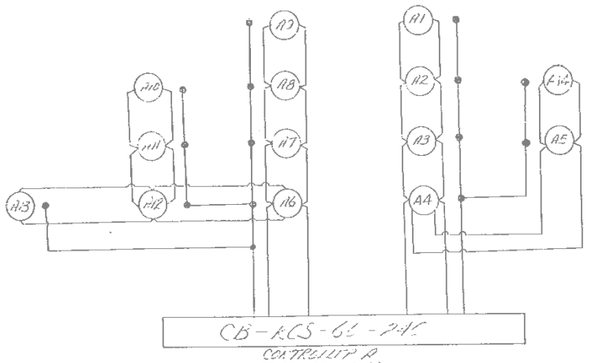
LIGHTING PLANS
DETAILS

SCALE: | SHEET NO. 7 OF 7 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	50
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

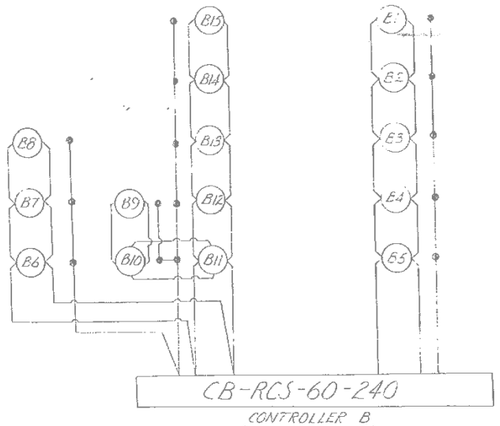
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 14	12-2	JACKSON	204	81
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

WIRING DIAGRAM



CONTROLLER A
(RT STA 349 + 46 ±)

WIRING DIAGRAM



CONTROLLER B
(RT. STA. 327 + 70 ±)

POLE LOCATION

POLE NO.	PATTERN	STATION	MAST ARM	SETBACK *
A1	III	LT. 357+30 (F.A. 14)	8'	14'
A2	III	LT. 355+40 (F.A. 14)	8'	14'
A3	III	LT. 353+30 (F.A. 14)	8'	20'
A4	III	LT. 351+60 (F.A. 101)	8'	20'
A5	III	LT. 323+50 (F.A. 101)	5'	20'
A6	III	RT. 349+40 (F.A. 14)	8'	20'
A7	III	RT. 347+60 (F.A. 14)	8'	20'
A8	III	RT. 344+45 (F.A. 14)	8'	20'
A9	II & III	LT. 342+00 (F.A. 14)	4'	ON PARAPET
A10	III	LT. 343+45 (F.A. 14)	8'	16'
A11	III	LT. 346+15 (F.A. 14)	8'	14'
A12	III	LT. 348+85 (F.A. 14)	8'	14'
A13	III	LT. 351+10 (F.A. 14)	8'	14'
A14	III	LT. 326+30 (F.A. 101)	8'	20'

POLE LOCATION

POLE NO.	PATTERN	STATION	MAST ARM	SETBACK *
B1	II & III	LT. 340+15 (F.A. 14)	4'	ON PARAPET
B2	III	RT. 337+50 (F.A. 14)	8'	14'
B3	III	RT. 334+80 (F.A. 14)	8'	20'
B4	III	RT. 332+20 (F.A. 14)	8'	20'
B5	III	RT. 329+50 (F.A. 14)	8'	20'
B6	III	RT. 327+20 (F.A. 14)	8'	20'
B7	III	RT. 324+75 (F.A. 14)	8'	20'
B8	III	RT. 322+15 (F.A. 14)	8'	20'
B9	III	LT. 323+25 (F.A. 14)	8'	20'
B10	III	LT. 325+90 (F.A. 14)	8'	20'
B11	III	LT. 328+30 (F.A. 14)	8'	20'
B12	III	LT. 330+75 (F.A. 14)	8'	20'
B13	III	LT. 333+35 (F.A. 14)	8'	25'
B14	III	LT. 335+95 (F.A. 14)	8'	20'
B15	III	LT. 338+70 (F.A. 14)	8'	14'

* DISTANCE FROM EDGE PAVEMENT TO CENTER OF POLE FOUNDATION
(SEE SHT. NO. 91)

SCHEDULE OF CONDUIT (ILLUMINATION)

STA. OF:	GALV. STEEL CONDUIT 1½" RIGID, 2" LIN. FT.	GALV. STEEL CONDUIT ATTACHED TO STRUCTURE, 2" LIN. FT.
2+60 (E. WILLIAMS ST.)	77	
11+35 (E. WILLIAMS ST.)	71	
NORTH LANES - F.A. 14		
327+70	44	
LT. 327+70	52	
RT. 333+22	74	
LT. 333+22	77	
RT. 338+55 TO LT. 340+15		178
LT. 338+22 TO RT. 342+67		135
355+23	70	
LT. 365+30	6	
LT. 356+20	28	
LT. 357+00	48	
LT. 31+35 (F.A. RTE 10.)	57	
CLIFF (ELEVATOR ST.)	42	
TOTALS	635	313

F.A. RTE. 14 SEC. 12-2 JACKSON CO. (ILLUMINATION)

FILE NAME =	USER NAME = default	DESIGNED -	REVISED -
D978056-sht-ex-light.dgn		DRAWN -	REVISED -
	PLOT SCALE = 40.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 1/25/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING LIGHTING PLANS (FOR INFORMATION ONLY)

SCALE: | SHEET NO. 1 OF 9 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1) B-1	JACKSON	200	51
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

ROUTE NO.	SEC	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 14	12-2	JACKSON	204	83

15" P-CULV.

GENERAL TELEPHONE CO. BURIED TELEPHONE CABLE

℄ EXIST. R.O.W. LINE

E. WILLIAMS STREET

B9

EDGE OF STAB. SHLDR.

EDGE OF STAB. SHLDR.

320 321 322 323 324 10 325

℄ PROPOSED NORTH LANES F.A. RTE. 14

77'-P 2"

B7

B8

EQ. STA. 324+28.47 N. LANES = STA. 10+00 WILLIAMS ST.

℄ EXIST. R.O.W. LINE

24" P-CULV.

18" P-CULV.

SCALE

20' 0' 10' 20'

PLAN LEGEND
(ILLUMINATION & TRAFFIC SIGNALS)

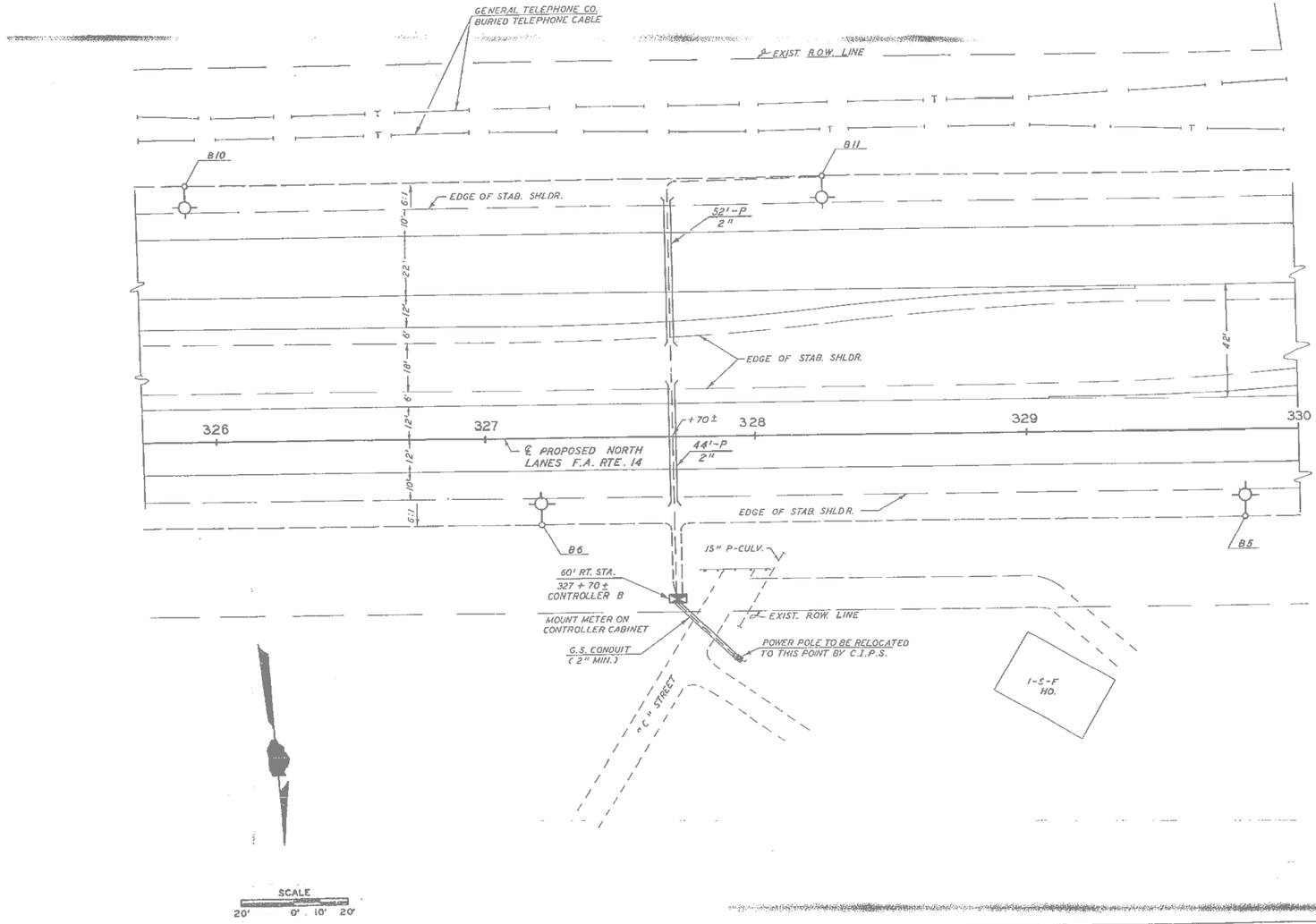
- INDICATES PROPOSED GALVANIZED STEEL CONDUIT. UPPER NUMERAL INDICATES LENGTH. "T" INDICATES PROPOSED G.S. CONDUIT IN TRENCH. "P" INDICATES PROPOSED G.S. CONDUIT PUSHED. LOWER NUMERAL INDICATES SIZE OF CONDUIT. (31'-T 3")
- INDICATES PROPOSED TRAFFIC SIGNAL CABLE IN CONDUIT.
- INDICATES PROPOSED TRAFFIC SIGNAL AND LIGHTING CABLES IN SAME CONDUIT.
- INDICATES PROPOSED LIGHTING CONTROLLER.
- INDICATES PROPOSED TRAFFIC SIGNAL CONTROLLER
- INDICATES PROPOSED TRAFFIC SIGNAL FACE AND POST
- INDICATES PROPOSED TRAFFIC SIGNAL FACE WITH BAFFLE PLATE
- INDICATES PROPOSED MAST ARM ASSEMBLY AND POLE.
- INDICATES PROPOSED WOOD POLE AND SERVICE INSTALLATION, SPECIAL
- INDICATES EXISTING 400 WATT MERCURY VAPOR LUMINAIRE ON 30' M.H. ALUM. POLE TO BE REMOVED.
- (4) INDICATES EXISTING PAVED DITCH TYPE 4
- INDICATES PROPOSED 700 WATT MERCURY VAPOR LUMINAIRE, 6 FT. MAST ARM ON 46' M.H. METAL POLE.
- INDICATES PROPOSED 700 WATT MERCURY VAPOR LUMINAIRES, 4 FT. TWIN MAST ARMS ON 46' M.H. METAL POLE.
- INDICATES PROPOSED ELECTRIC CABLE, UNIT DUCT, 2-600V. XLP NO. 6; 1 INCH POLYETHYLENE AND 1-1/C NO. 6 BARE COPPER CONTINUOUS GROUND.
- INDICATES PROPOSED HANDHOLE

F.A. RTE. 14 SECTION 12-2 JACKSON COUNTY (ILLUMINATION) STA. 320+00 TO 325+73

FILE NAME = D978056-sht-ex-light.dgn	USER NAME = default	DESIGNED -	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**EXISTING LIGHTING PLANS (FOR INFORMATION ONLY)**
		DRAWN -	REVISED -		
	PLOT SCALE = 40.0000 ' / IN.	CHECKED -	REVISED -		SCALE: SHEET NO. 2 OF 9 SHEETS STA. TO STA.
	PLOT DATE = 1/25/2012	DATE -	REVISED -		

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1) B-1	JACKSON	200	52
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

F.A.P. RTE.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 14	12-2	JACKSON	204	84



F.A. RTE. 14 SEC. 12-2 JACKSON CO. (ILLUMINATION) STA. 325+73 TO 330+00

FILE NAME = D978056-sht-ex-light.dgn	USER NAME = default	DESIGNED -	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**EXISTING LIGHTING PLANS (FOR INFORMATION ONLY)**
		DRAWN -	REVISED -		
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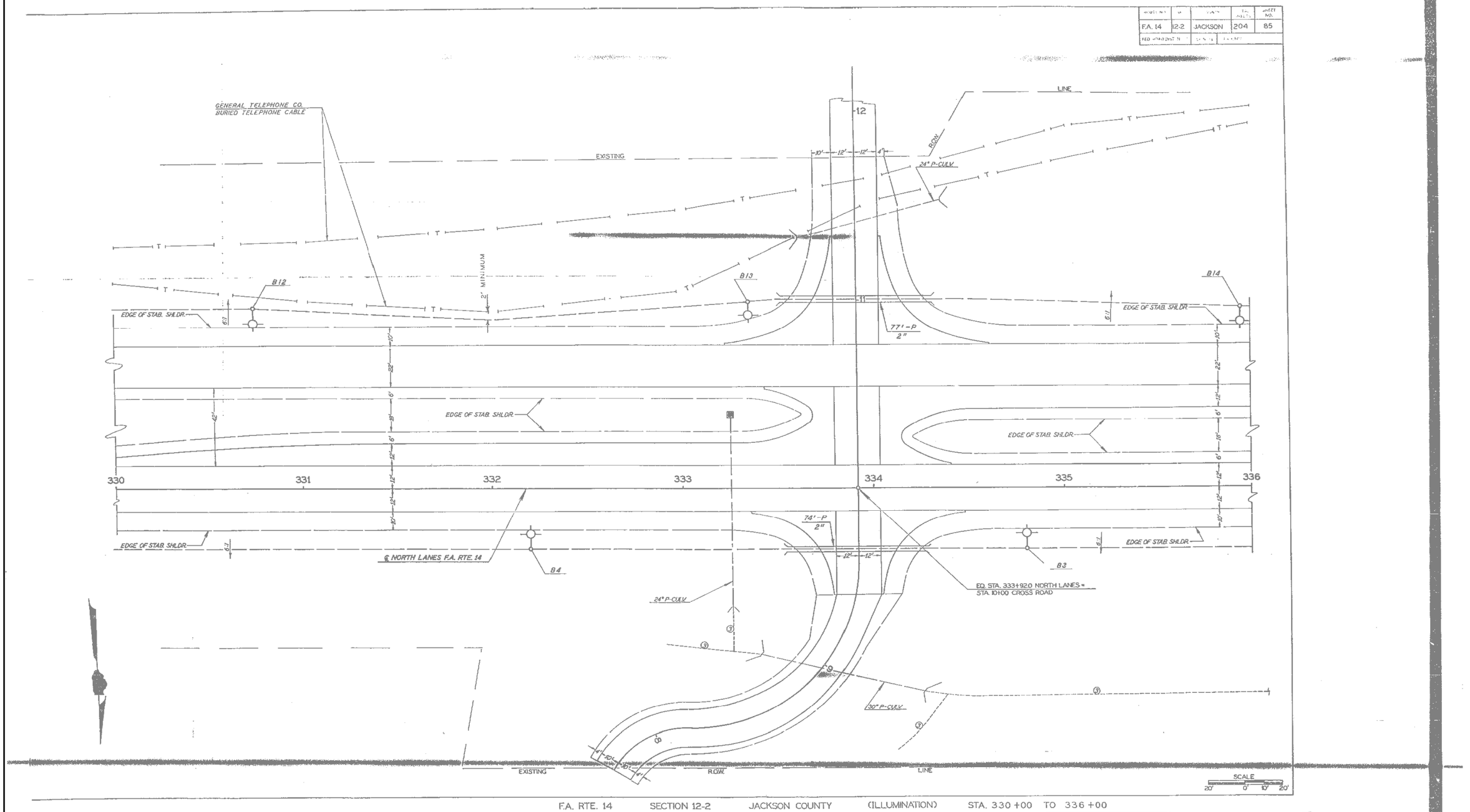
	PLOT DATE = 1/25/2012	DATE -	REVISED -		

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1) B-1	JACKSON	200	53
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

FED. ROAD DIST. NO.	STATE	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 14	12-2	JACKSON	204	85
FED. AID PROJECT NO.	CONTRACT NO.	PARCEL		



F.A. RTE. 14 SECTION 12-2 JACKSON COUNTY (ILLUMINATION) STA. 330+00 TO 336+00

FILE NAME = D978056-sht-ex-light.dgn	USER NAME = default	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 40.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 1/25/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING LIGHTING PLANS
(FOR INFORMATION ONLY)

SCALE: | SHEET NO. 4 OF 9 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1) B-1	JACKSON	200	54
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

POLITE NO.	SEC	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 14	12-2	JACKSON	204	86
(ILLUMINATION)				

B15

BK. TO BK. ABUTS. 417'-0" (S. LANES)
OPEN ABUT. -3 SPAN 84" ℄ GIRDER
2 @ 126'-0" ; 1 @ 160'-2"

RIVER

MUDDY

B1
SEE NOTE

CONDUIT ATTACHED TO STRUCTURE,
2" DIA. G.S. 178 LIN. FT. EST.

337 338 339 340 341 342

℄ NORTH LANES - F.A. RTE. 14

B2

2 1/2 G.S. CONDUIT
(BY BRIDGE CONTRACTOR)

24"P-CULV.

BK. TO BK. OF ABUT. STA. 338+63.14 TO STA. 342+79.33 (N. LANES)
OPEN ABUT. -3 SPAN 78" ℄ GIRDER 2@ 125'-3" ; 1@ 159'-11"

B16

NOTE: USE 4 1/C NO. 12 CABLES FROM POLE
, HANDHOLE TO TWIN MAST ARM LUMINAIRES.

30"S.S.

22" SANITARY SEWER

A10

A11

CONDUIT ATTACHED TO STRUCTURE,
DIA. G.S. 125 LIN. FT. EST.

A9
SEE NOTE

15"P-CULV.

VAR.

15" S.S.

342 343 344 345 346 347 348

℄ NORTH LANES - F.A. RTE. 14

2 1/2 G.S. CONDUIT
(BY BRIDGE CONTRACTOR)

A8

30"P-CULV.

15"S.S.

A7

12"S.S.

SCALE
20' 0' 10' 20'

F.A. RTE. 14 SEC. 12-2 JACKSON COUNTY (ILLUMINATION) STA. 336+00 TO 348+00

FILE NAME = D978056-sht-ex-light.dgn	USER NAME = default	DESIGNED -	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**EXISTING LIGHTING PLANS (FOR INFORMATION ONLY)**			
		DRAWN -	REVISED -					
	PLOT SCALE = 40.0000 ' / IN.	CHECKED -	REVISED -		SCALE:	SHEET NO. 5 OF 9 SHEETS	STA.	TO STA.
	PLOT DATE = 1/25/2012	DATE -	REVISED -					

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1) B-1	JACKSON	200	55
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	(13-1)R	JACKSON	164	83A
STA.		TO STA.		
ILL. Route Est. No.	ILLINOIS	FED. AID PROJECT		

LEGEND

- Steel Light Pole , 45' With Multi-mount 250 Watt Sodium Vapor Luminaire
- (71) Number Indicates Position of Pole in Wiring Diagram, See Sheet 86. Letter Denotes Position of Luminaire
- or — Proposed Advanced Detector Loop With Core-Drilled Corners
- 1-1/4" PVC 205' T. (or A.) — Proposed PVC Conduit: No. Above Line is Size of Conduit, No. Below Line is Length of Trench or Auger

N

1"=20'

20 0 20 40

SCALE IN FEET

2 #10 XLP , 1 #10 Bare Ground in 3 /4" Polyethylene Unit Duct

P.C. STA. 344+60.06 MATCH+EXISTING

See Note 2

Sta. 344+15 , Rt. 30' (E.P.)

P.I. STA. 345+67.62

P.T. STA. 346+75.06

Sta. 346+30 , Rt. 30' (E.P.)

2 #10 XLP , 1 #10 Bare Ground in 3 /4" Polyethylene Unit Duct

2 Detector Loops Located 206' From Thru Lane Stop Bar

Splice Point

1-1/4" PVC 165' T.

5'x5' (Typ.)

MATCH LINE STA. 348+20 (SEE SHEET 83)

10' Bit. Shldr.

Sta. 345+65 , Lt. 30' (E.P.)

2 #10 XLP , 1 #10 Bare Ground in 3 /4" Polyethylene Unit Duct

Sta. 343+50 , Lt. 30' (E.P.)

(END CIRCUIT)

See Note 1

Sta. 347+80 , Lt. 30' (E.P.)

2 #10 XLP , 1 #10 Bare Ground in 3 /4" Polyethylene Unit Duct

See Sht. No. 97A For Luminaire Mounting Heights

NOTES

1. Existing Pole and Luminaires to Remain on This Contract. Pull Existing Cable to Junction Box on North Side of Bridge and Install New Lighting Cable and Ground in Existing Galvanized Steel Conduit. Use The 4-1/C #12 Cables in Pole to Rewire Luminaires.
2. Existing Junction Box and 2 1 /2" Galvanized Steel Conduit to Remain and be Reused as Indicated Above. DRILL EXISTING JUNCTION BOX - 1 Each at this Location.

ILL. 13 & 127 &149 AND WALNUT STREET TRAFFIC SIGNALS & LIGHTING - PLAN SHEET

C B A 0 A B C D

TAMERAN

FILE NAME = D978056-sht-ex-light.dgn	USER NAME = default	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 40.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 1/25/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING LIGHTING PLANS (FOR INFORMATION ONLY)

SCALE: | SHEET NO. 6 OF 9 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1) B-1	JACKSON	200	56
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	(13-1)R	JACKSON	164	838

STA. TO STA.

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

See Sht. No. 97A For Luminaire Mounting Heights

FOR NOTES SEE SHEET NO. 83

LEGEND

- Steel Light Pole , 45' With Multi-mount 250 Watt Sodium Vapor Luminaire
- U — Unit Duct
- (71) Number Indicates Position of Pole In Wiring Diagram, See Sheet 86. Letter Denotes Position of Luminaire
- or — Proposed Advanced Detector Loop With Core-Drilled Corners
- Proposed PVC Conduit: No. Above Line Is Size of Conduit, No. Below Line Is Length of Trench or Auger (e.g. 1-1/4" PVC / 205' T. (or A.))

N

1"=20' SCALE IN FEET 20 0 20 40

2 #10 XLP , 1 #10 Bare Ground In 3 /4" Polyethylene Unit Duct

2 Detector Loops Located 195' From Left Turn Lane Stop Bar

MATCH LINE STA. 352+00 (SEE SHEET 93)

P.C. STA. 352+93.46

Sta. 353+87 , Rt. 30'(E.P.J (End Circuit)

Prop. Conc. Median Surf.

℄ Prop. W.B. Lanes WALNUT ST.

Prop. Conc. C&G TY B6.24 (SP)

10' Blt. Shldr.

Transit Line

354

355

Prop. Conc. C&G TY B6.12

5'x5' (Typ.)

1½" PVC 175' T.

2 #10 XLP , 1 #10 Bare Ground In 3 /4" Polyethylene Unit Duct

Sta. 352+09 , Lt.30' (E.P.J

Splice Point

2 Detector Loops Located 206' From Thru Lane Stop Bar

1¼" PVC 15' T.

1¼" PVC 200' T.

P.I. STA. 354+89.74

P.T. STA. 356+77.34 BK
STA. 356+95.50 AH

2 Detector Loops Located 412' From Thru lane Stop Bar

2 #10 XLP , 1 #10 Bare Ground In 3 /4" Polyethylene Unit Duct

Splice Point

Sta. 354+23 , Lt. 16' (E.P.J (End Circuit)

ILL. 13 & 127 &149 AND WALNUT STREET TRAFFIC SIGNALS & LIGHTING PLAN SHEET

C B A 0 A B C D

TAMERAN

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		DRAWN -	REVISED -		
	PLOT SCALE = 40.0000 ' / IN.	CHECKED -	REVISED -		
	PLOT DATE = 1/25/2012	DATE -	REVISED -		SCALE: SHEET NO. 7 OF 9 SHEETS STA. TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1) B-1	JACKSON	200	57
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	(13-1)R	JACKSON	164	84
STA.		TO STA.		

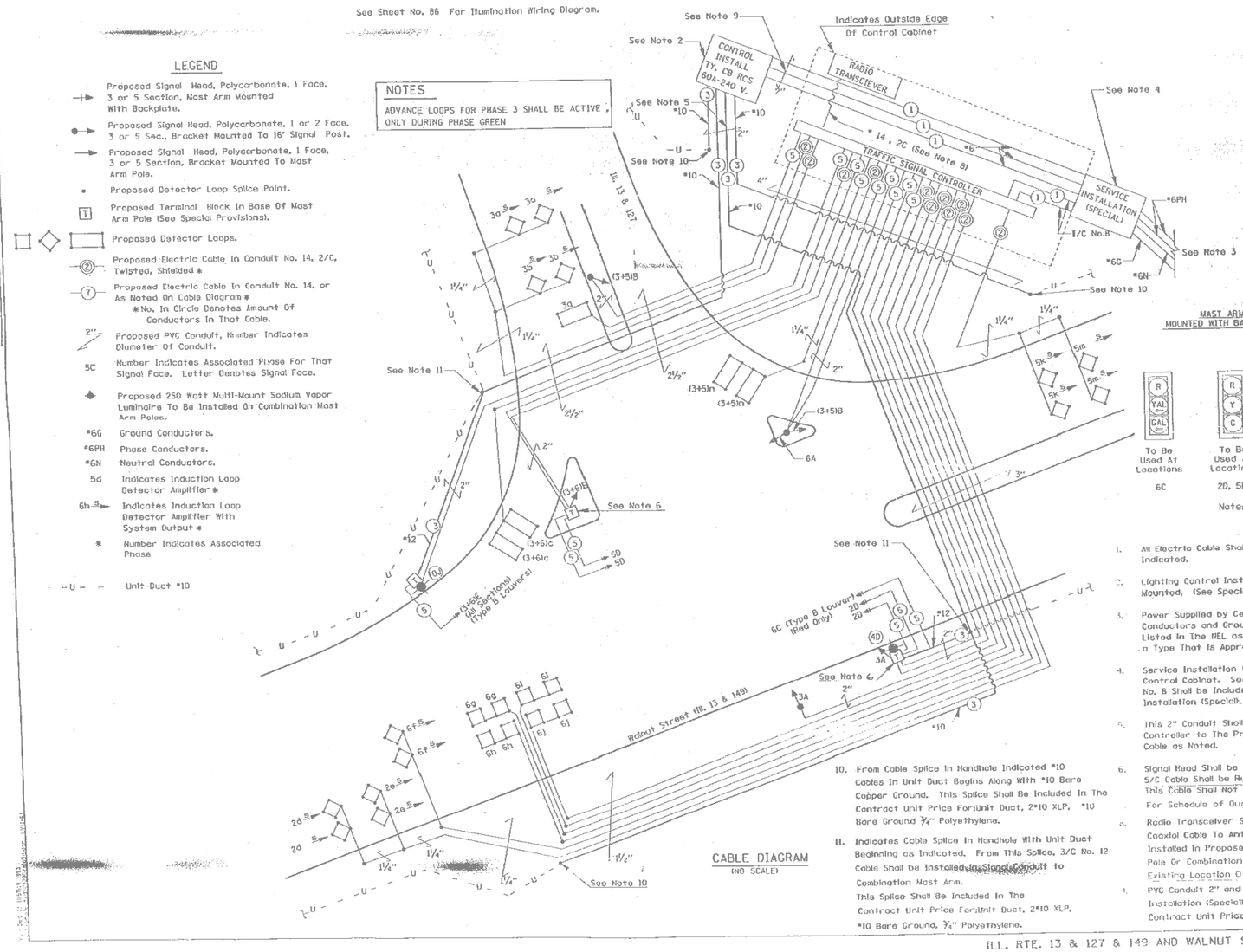
See Sheet No. 86 For Illumination Wiring Diagram.

LEGEND

- Proposed Signal Head, Polycarbonate, 1 Face, 3 or 5 Section, Mast Arm Mounted With Backplate.
- Proposed Signal Head, Polycarbonate, 1 or 2 Face, 3 or 5 Sec., Bracket Mounted To 16' Signal Post.
- Proposed Signal Head, Polycarbonate, 1 Face, 3 or 5 Section, Bracket Mounted To Mast Arm Pole.
- Proposed Detector Loop Splice Point.
- Proposed Terminal Block In Base Of Mast Arm Pole (See Special Provisions).
- Proposed Detector Loops.
- (2) Proposed Electric Cable In Conduit No. 14, 2/C, Twisted, Shielded *
- (7) Proposed Electric Cable In Conduit No. 14, or As Noted On Cable Diagram * * No. In Circle Denotes Amount Of Conductors In That Cable.
- 2" Proposed PVC Conduit, Number Indicates Diameter Of Conduit.
- 5C Number Indicates Associated Phase For That Signal Face. Letter Denotes Signal Face.
- Proposed 250 Watt Multi-Mount Sodium Vapor Luminaire To Be Installed On Combination Mast Arm Poles.
- *6G Ground Conductors.
- *6PH Phase Conductors.
- *6N Neutral Conductors.
- 5d Indicates Induction Loop Detector Amplifier *
- 6h S Indicates Induction Loop Detector Amplifier With System Output *
- * Number Indicates Associated Phase
- --U-- Unit Duct *10

NOTES

ADVANCE LOOPS FOR PHASE 3 SHALL BE ACTIVE ONLY DURING PHASE GREEN



10. From Cable Splice In Handhole Indicated *10 Cables In Unit Duct Begins Along With *10 Bare Copper Ground. This Splice Shall Be Included In The Contract Unit Price For Unit Duct, 2*10 XLP, *10 Bare Ground ¾" Polyethylene.
11. Indicates Cable Splice In Handhole With Unit Duct Beginning as Indicated. From This Splice, 3/C No. 12 Cable Shall be Installed In Signal Conduit to Combination Mast Arm. This Splice Shall Be Included In The Contract Unit Price For Unit Duct, 2*10 XLP, *10 Bare Ground, ¾" Polyethylene.

TRAFFIC SIGNAL FACES

MAST ARM MOUNTED WITH BACKPLATE			BRACKET MOUNTED	
To Be Used At Locations	To Be Used At Locations	To Be Used At Locations	To Be Used At Locations	To Be Used At Locations
6C	2D, 5D	(3+61E	3A, 6A	(3+51B (3+61B

Note: All Signal Lenses Shall Be 12"

NOTES

1. All Electric Cable Shall be A.W.G. No. 14 Unless Otherwise Indicated.
2. Lighting Control Installation, Type CB RSC Shall be Pedestal Mounted, (See Special Provisions.)
3. Power Supplied by Central Illinois Public Service Company. Phase Conductors and Ground Shall be Copper, Marked -Type Use- and be Listed In The NEC as Suitable For Direct Burial. Use Type RUH or a Type That Is Approved by C.I.P.S.
4. Service Installation (Special) to be Mounted on Traffic Signal Control Cabinet. See Detail Sheet No. 97. Cable Denoted as I/C No. 8 Shall be Included In the Contract Unit Price for Service Installation (Special).
5. This 2" Conduit Shall be Installed Directly From The Lighting Controller to The Proposed Handhole in The Northeast Quadrant With Cable as Noted.
6. Signal Head Shall be Bracket Mounted to Mast Arm Pole. A Separate 5/C Cable Shall be Run From The Controller to This Signal Head. This Cable Shall Not Go Through The Mast Arm Terminal Block. For Schedule of Quantities See Sheet No.15
8. Radio Transceiver Shall Be Installed Inside Traffic Controller Cabinet. Coaxial Cable To Antenna Shall Be a Maximum Length Of 100' and Shall be Installed In Proposed Conduit System to Light Pole Or Combination Mast Arm Pole Designated In Plans. Existing Location Of Master Controller - 5th and Walnut St.
9. PVC Conduit 2" and *6 I/C Cables to be Installed From Service Installation (Special) To Lighting Controller Shall be Included In The Contract Unit Price Each For Control Installation, TY CB RCS 60-240

ILL. RTE. 13 & 127 & 149 AND WALNUT STREET CABLE DIAGRAM : SIGNAL FACES

C B A 0 A B C

TAMERAN

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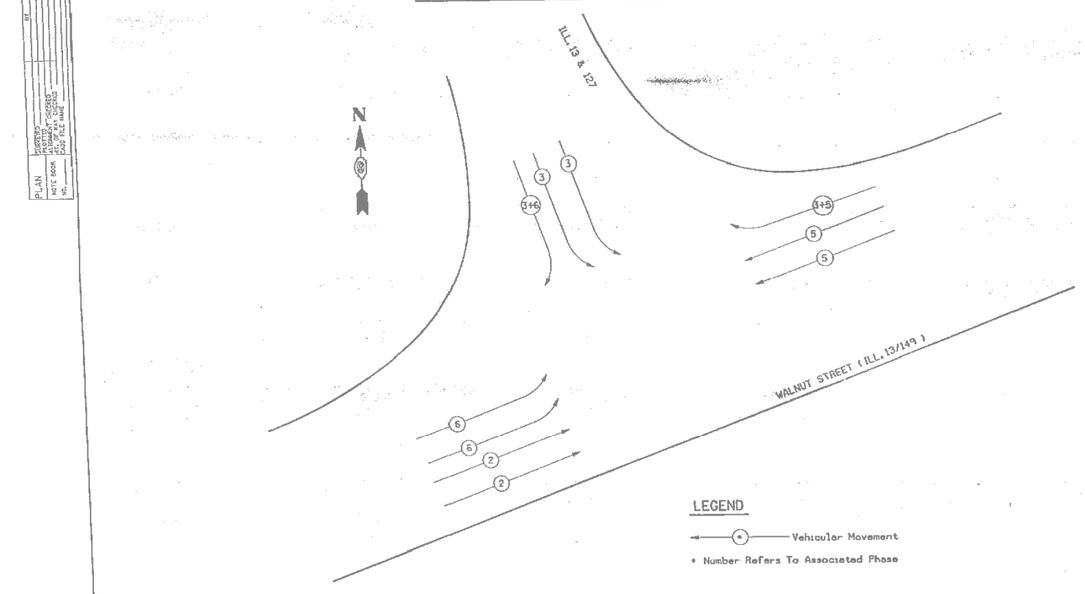
		DRAWN -	REVISED -			331	(12-1) B-1	JACKSON	200	58
	PLOT SCALE = 40.0000 ' / IN.	CHECKED -	REVISED -						CONTRACT NO. 78056	
	PLOT DATE = 1/25/2012	DATE -	REVISED -		SCALE: SHEET NO. 8 OF 9 SHEETS STA. TO STA.			ILLINOIS	FED. AID PROJECT	

FA RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	(13-1)R	JACKSON	164	83
STA.		TO STA.		

PHASE DESIGNATION DIAGRAM



LEGEND

Vehicular Movement

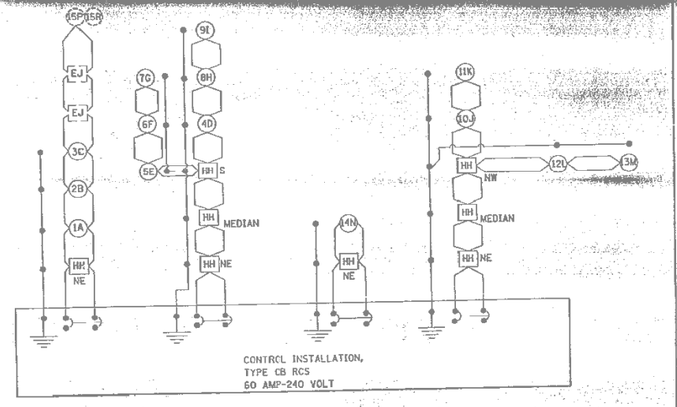
* Number Refers To Associated Phase

NAME OF INTERSECTION: Walnut Street and Ill. 13 & 127 & 149

CONTROLLER SPECIFIED: Full Actuated Controller, Standard Sequence IV, 8 Phases In Type IV Cabinet.

REFERRING TO STANDARD 2393-1, THE VEHICULAR AND PEDESTRIAN PHASES USED ARE DESIGNATED ON DIAGRAM.

WIRING DIAGRAM FOR LIGHTING



NOTES

1. For Size and Type of Cable Used For Lighting Installation, See Cable Diagram, Sht. No. 84.
2. Power to Control Installation Shall be as Shown on Detail Sht. No. 84 .
3. Electrical Service Required For Lighting and Signal Installation Shall be A 60 AMP-240 Volt Service.

LEGEND FOR WIRING DIAGRAM

- HH / NE — Indicates Proposed Handhole With Lighting Cable Splice. Letters Below Indicates Quadrant Location of Handhole.
- (1A) — Number Indicates Position of Proposed Pole In Wiring Diagram. Letter Indicates Luminare on That Pole.
- Indicates Continuous Ground From Control Installation.
- (NE) — Indicates Existing Pole and Luminaire to Remain.
- [EJ] — Existing Junction Box be Re-Used.
- ● — Indicates Proposed Ground at Structure.

ILL. RTE. 13 & 127 & 149 AND WALNUT STREET-PHASE DESIGNATION AND WIRING DIAGRAM FOR LIGHTING

C B A 0 A B C D

TAMERAN

FILE NAME = D978056-sht-ex-light.dgn	USER NAME = default	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 40.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 1/25/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING LIGHTING PLANS (FOR INFORMATION ONLY)

SCALE: | SHEET NO. 9 OF 9 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1) B-1	JACKSON	200	59
		CONTRACT NO. 78056		
		ILLINOIS FED. AID PROJECT		

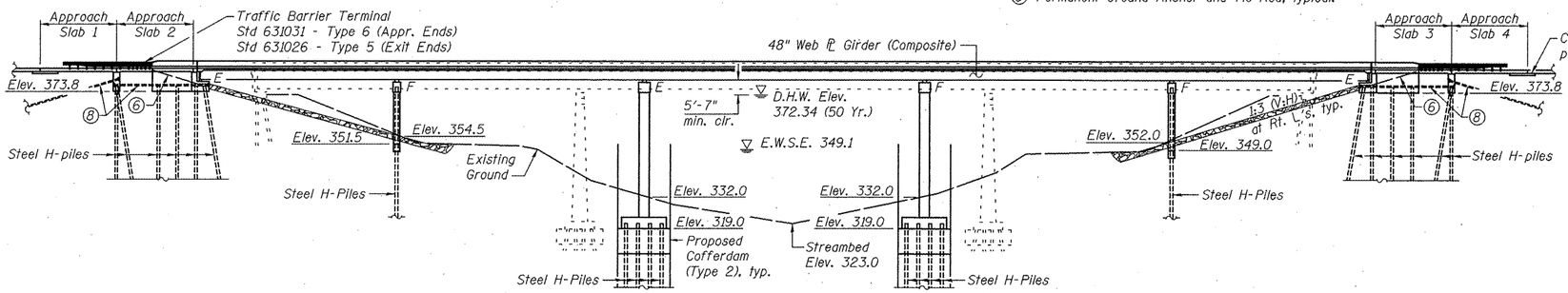
Bench Mark: F-291, NGS Monument on east abutment of S.N. 039-0013, 22' left of Sta. 339+04, Elev. 373.18.

Existing Structure: S.N. 039-0013 was originally built in 1954 along F.A. 14, Section 12-1B-2,1F-2 and reconstructed in 1980 as F.A.P. 107, Section 12-1BJ-2. The back to back abutment length is 417'-0" and the out-to-out deck width is 33'-8". The structure consists of a three span continuous steel plate girder superstructure horizontally curved supported on pile stub abutments and solid wall piers. Structure to be removed and replaced.

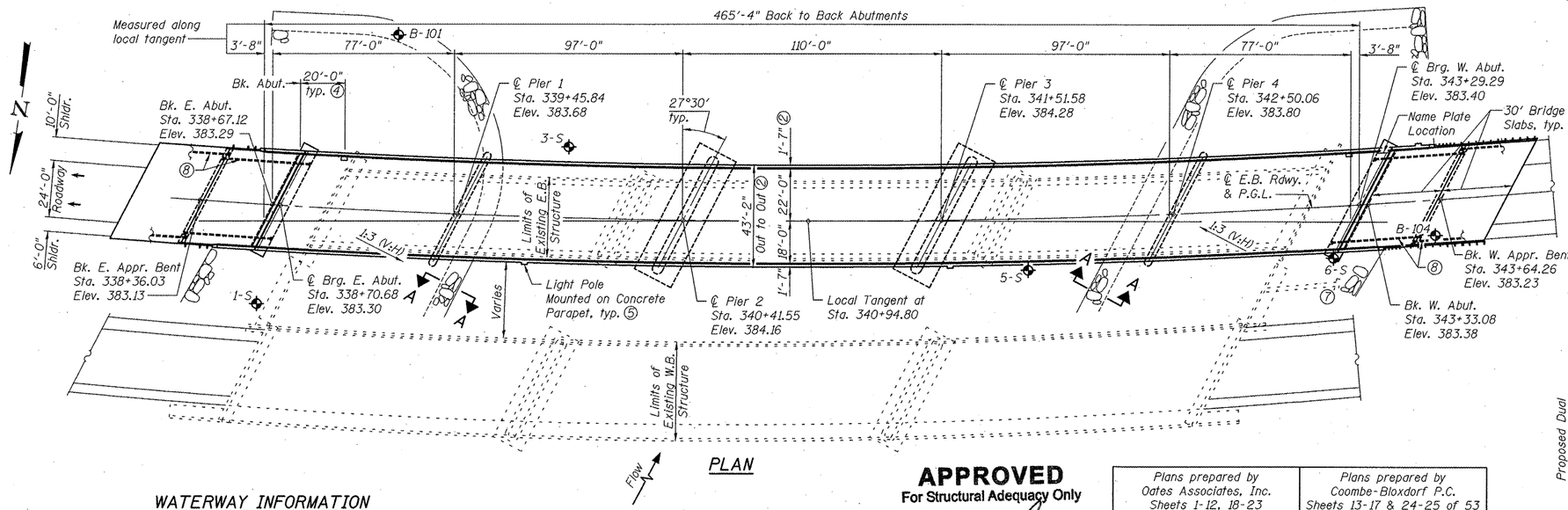
Traffic Control: Traffic will be maintained by providing a temporary crossover from the existing eastbound roadway to the existing westbound structure for Stage I. Upon completion of the new eastbound structure, traffic will be maintained with a temporary crossover from the existing westbound roadway to the eastbound structure for Stage II.

Salvage: None

Notes:
1. Light poles not shown for clarity.
2. Measured radially.
3. For Section A-A, see sheet 2 of 53.
4. DS-11 Drainage Scuppers to be located on the south side only at each end of the structure.
5. For light pole locations, pole heights, and anchor bolt patterns, see Lighting Plan Details.
6. Slope 1:2 (V:H) at right angles to abutment along face of wingwalls, typical.
7. After removal of existing west median drain pipe, drainage to be accommodated by Contractor until completion of final median grading.
8. Permanent Ground Anchor and Tie Rod, typical.



ELEVATION ①



PLAN

DESIGN SPECIFICATIONS

2010 AASHTO LRFD Bridge Design Specifications

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (AASHTO M 270 Grade 50W)
fy = 50,000 psi (AASHTO M 270 Grade 50)
fy = 150,000 psi (AASHTO M 275 Grade 150)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 3
Design Spectral Acceleration at 1.0 sec. (SD1) = 0.35g
Design Spectral Acceleration at 0.2 sec. (SDS) = 0.82g
Soil Site Class = D

LOADING HL-93

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

STATION 340+96.56
BUILT 20.... BY
STATE OF ILLINOIS
FAP ROUTE 331 SEC (12-1)B-1
LOADING HL-93
STRUCTURE NO. 039-0075

NAME PLATE

See Std. 515001

WATERWAY INFORMATION

Drainage Area = 2,159 Sq. Mi.
Exist. Low Grade Elev. 382.5 @ Sta. 337+50
Prop. Low Grade Elev. 382.5 @ Sta. 337+50

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	26,344	7,286	7,458	366.94	0.05	0.05	366.99	366.99
Design	50	38,509	9,259	9,562	372.34	0.08	0.07	372.42	372.41
Base	100	43,714	10,054	10,601	374.84	0.23	0.14	375.07	374.98
Overtopping	-	-	-	-	-	-	-	-	-
Max. Calc.	500	55,669	10,054	11,926	378.10	0.27	0.18	378.37	378.28

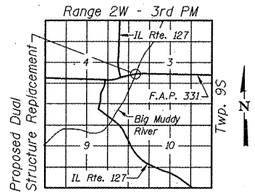
DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	E. Abut.	Pier 1	Pier 2	Pier 3	Pier 4	W. Abut.
	373.8	349.1	314.8	314.8	345.0	373.8

APPROVED
For Structural Adequacy Only
Engineer of Bridges & Structures

Plans prepared by Oates Associates, Inc. Sheets 1-12, 18-23 & 26-53 of 53
Exp. 11-30-12
LICENSED STRUCTURAL ENGINEER
DANIEL GEORGE LUTZ
081 006772
STATE OF ILLINOIS
1-24-12

Plans prepared by Coombe-Bloxdorf P.C. Sheets 13-17 & 24-25 of 53
Exp. 11-30-12
LICENSED STRUCTURAL ENGINEER
MARY COOMBE BLOXDORF
4859
SPRINGFIELD
STATE OF ILLINOIS
1-23-12



LOCATION SKETCH

GENERAL PLAN & ELEVATION
IL RTE. 13 OVER BIG MUDDY RIVER
F.A.P. RTE. 331 - SEC. (12-1)B-1
JACKSON COUNTY
STATION 340+96.56 (E.B.)
STRUCTURE NO. 039-0075 (E.B.)

OATES ASSOCIATES Engineering + Architecture
ILLINOIS: Everport Business Center 1, 100 Lenox Court, Suite 1, Collinsville, IL 62234, tel 618.345.5200, fax 618.345.7233
MISSOURI: Lackland Oaks Building, 720 Olive, Suite 1900, St. Louis, MO 63101, tel 314.588.9361, fax 314.588.9606
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PLOT DATE =	CHECKED - DGL	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET NO. 1 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	60
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

GENERAL NOTES

Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts in painted areas and M164 Type 3 in unpainted areas. Bolts $\frac{7}{8}$ in. ϕ, holes $\frac{15}{16}$ in. ϕ, unless otherwise noted.

Calculated weight of Structural Steel = AASHTO M 270 Grade 50W = 618,800 pounds

All structural steel shall be AASHTO M 270 Grade 50W except expansion joints which shall be AASHTO M 270 Grade 50.

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.

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

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

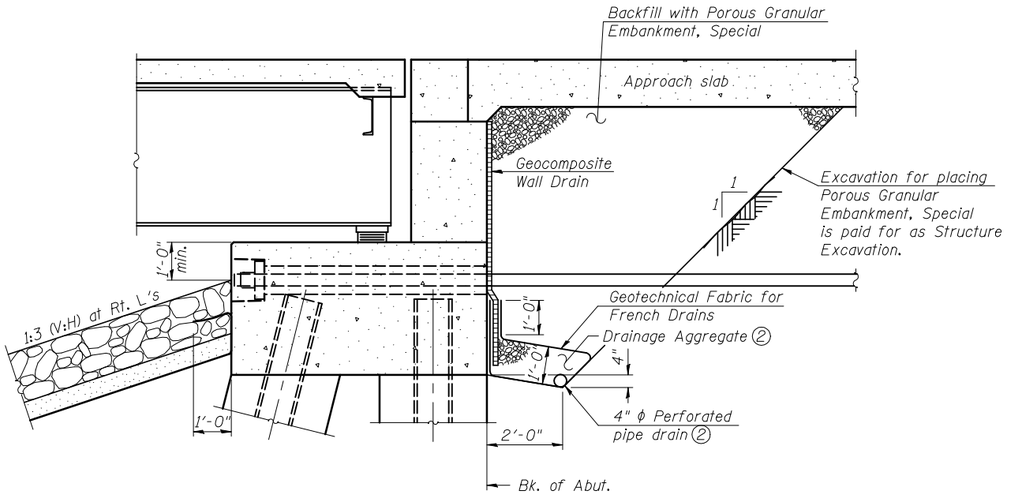
All structural steel and exposed surfaces of bearings within a distance of 10 ft. each way from the deck joints shall be painted.

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

Slipforming of the parapets is not allowed.

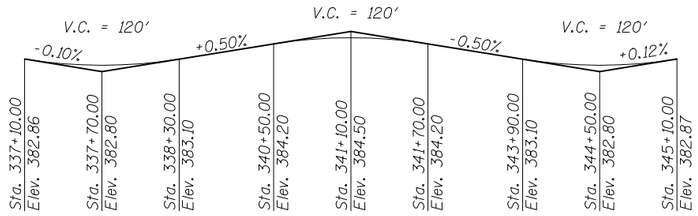
TOTAL BILL OF MATERIAL

	ITEM	UNIT	SUPER	SUB	TOTAL
(3)	Stone Riprap, Class A4	Sq. Yd.	-	2,496	2,496
(3)	Filter Fabric	Sq. Yd.	-	2,496	2,496
	Removal of Existing Structures	Each	-	-	1
	Structure Excavation	Cu. Yd.	-	1,017	1,017
	Cofferdam Excavation	Cu. Yd.	-	2,236	2,236
	Cofferdam (Type 2) (Location-1)	Each	-	1	1
	Cofferdam (Type 2) (Location-2)	Each	-	1	1
	Concrete Structures	Cu. Yd.	-	1,817.4	1,817.4
	Concrete Superstructure	Cu. Yd.	871.6	-	871.6
	Bridge Deck Grooving	Sq. Yd.	2,479	-	2,479
	Seal Coat Concrete	Cu. Yd.	-	971.8	971.8
	Concrete Encasement	Cu. Yd.	-	28.4	28.4
	Protective Coat	Sq. Yd.	3,036	-	3,036
	Furnishing and Erecting Structural Steel	L. Sum	0.5	-	0.5
	Stud Shear Connectors	Each	7,368	-	7,368
	Reinforcement Bars, Epoxy Coated	Pound	236,410	309,280	545,690
	Bar Splicers	Each	-	91	91
	Furnishing Steel Piles HP14x73	Foot	-	4,590	4,590
	Furnishing Steel Piles HP14x89	Foot	-	4,440	4,440
	Driving Piles	Foot	-	9,030	9,030
	Test Pile Steel HP14x73	Each	-	4	4
	Test Pile Steel HP14x89	Each	-	2	2
	Name Plates	Each	1	-	1
	Preformed Joint Strip Seal	Foot	95	-	95
	Elastomeric Bearing Assembly, Type I	Each	6	-	6
	Elastomeric Bearing Assembly, Type II	Each	12	-	12
	Anchor Bolts, 1"	Each	60	-	60
	Anchor Bolts, $1\frac{1}{2}$"	Each	12	-	12
	Concrete Sealer	Sq. Ft.	-	1,062	1,062
	Geocomposite Wall Drain	Sq. Yd.	-	81	81
	Drainage Scuppers, DS-11	Each	2	-	2
	Pipe Underdrains for Structures 4"	Foot	-	160	160
	Permanent Ground Anchor	Each	-	14	14
	Porous Granular Embankment, Special	Cu. Yd.	-	177	177
	Mechanical Splicers	Each	-	1,560	1,560
	Tie Rod	Each	-	14	14



SECTION THRU PILE SUPPORTED STUB ABUTMENT (1)

(Horiz. dim. at Rt. L's)



PROFILE GRADE - IL RTE. 13 (E.B.)

(along ℄ roadway)

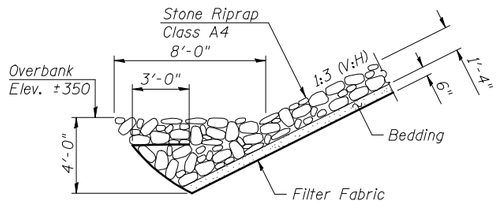
CURVE DATA - IL RTE. 13 (E.B.)

Δ = 12°30'25"
D = 1°30'55"
R = 3,781.36'
T = 414.36'
L = 825.42'
E = 22.63'
S.E. = 0.025'/'
P.C. Sta. = 335+74.79
P.I. Sta. = 339+89.14
P.T. Sta. = 344+00.21

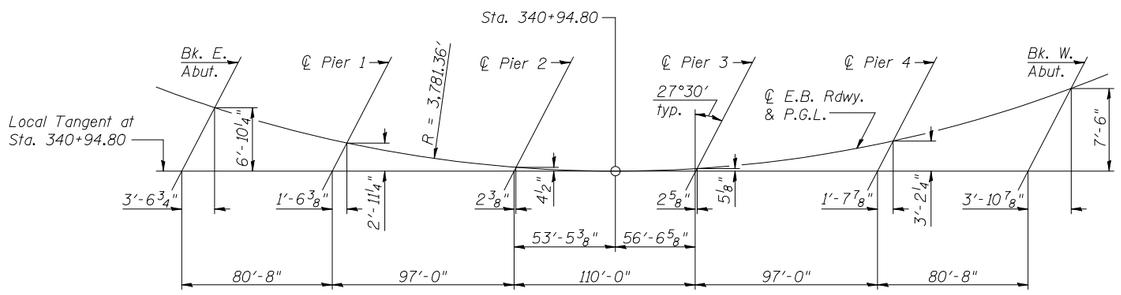
INDEX OF SHEETS

Sheet No.	Description
1	General Plan & Elevation
2	General Data
3	Footing Layout
4	Construction Details
5-8	Top of Slab Elevations
9-12	Top of Approach Slab Elevations
13-14	Superstructure
15-17	Superstructure Details
18-23	Bridge Approach Slab Details
24	Preformed Joint Strip Seal
25	Drainage Scupper, DS-11
26	Framing Plan and Girder Details
27-28	Girder Details
29-30	Bearing Details
31	East Approach Bent Details
32	West Approach Bent Details
33-35	East Abutment Details
36-38	West Abutment Details
39	Tie Rod and Permanent Ground Anchor Details
40	Pier 1 Details
41-42	Pier 2 Details
43-44	Pier 3 Details
45	Pier 4 Details
46	HP Pile Details
47	Bar Splicer Assembly and Mechanical Splicer Details
48-53	Soil Boring Logs

Notes:
(1) All drainage system components shall extend parallel to the abutment back wall until they intersect the wingwalls. The pipe shall extend under the wingwall until intersecting the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).
(2) Included in the cost of Pipe Underdrains for Structures 4".
(3) Quantity is total assumed to be placed during construction of S.N. 039-0075. Actual quantity as directed by the Engineer.



SECTION A-A



OFFSET SKETCH - IL RTE. 13 (E.B.)

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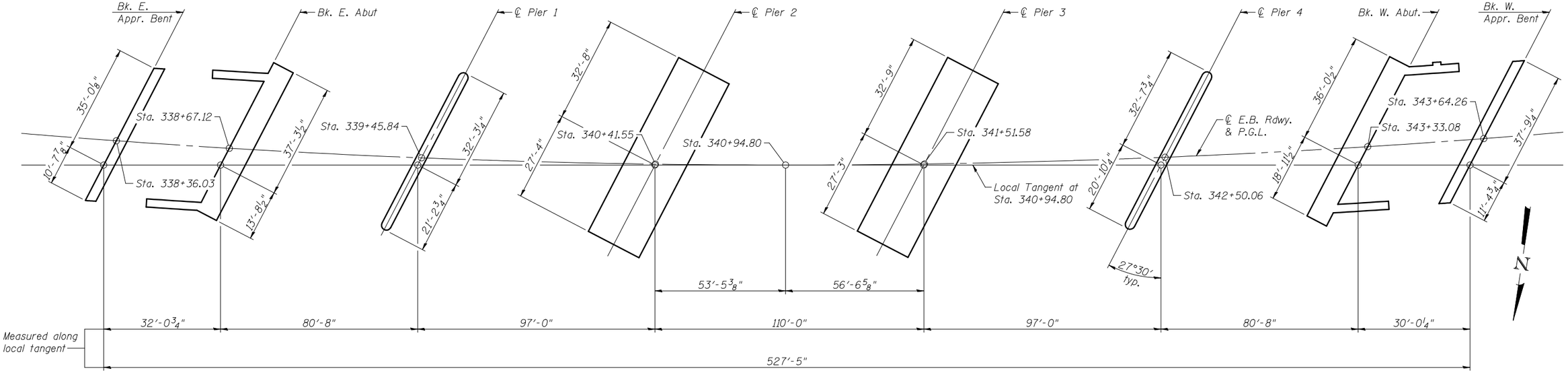
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL DATA
STRUCTURE NO. 039-0075 (E.B.)
SHEET NO. 2 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	61
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		



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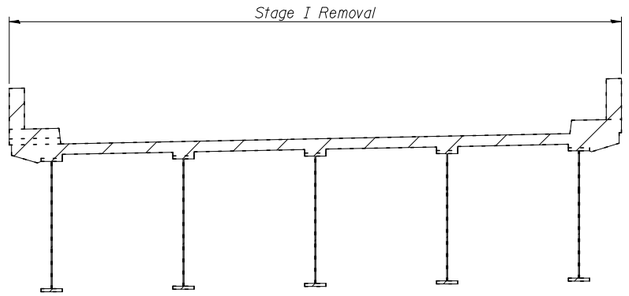
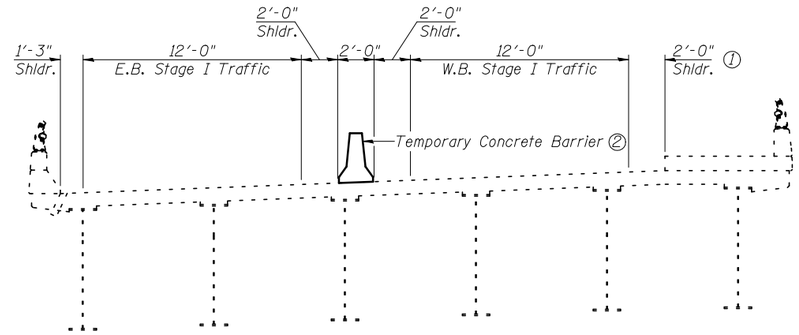
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FOOTING LAYOUT
STRUCTURE NO. 039-0075 (E.B.)
SHEET NO. 3 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	62
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		



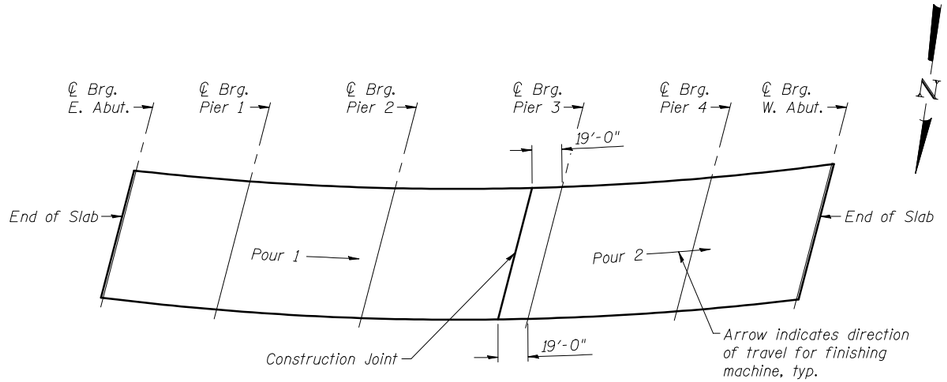
EASTBOUND



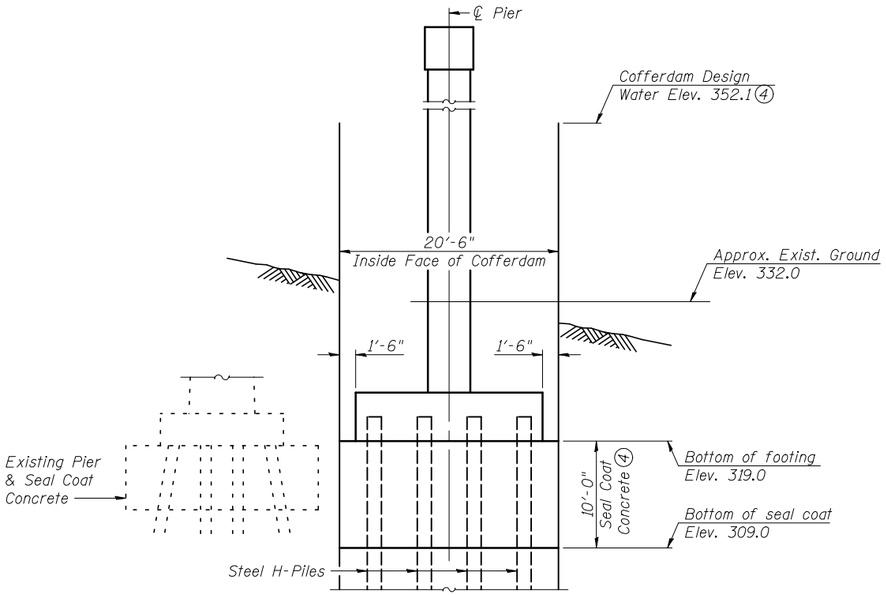
WESTBOUND

STAGE I REMOVAL & TRAFFIC STAGING

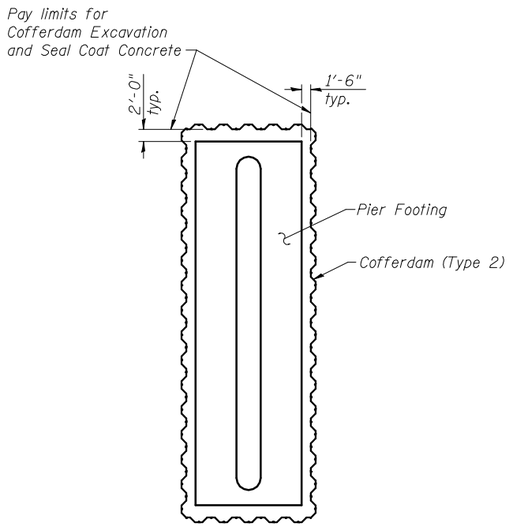
(Looking West)



DECK POURING SEQUENCE



COFFERDAM DETAIL



COFFERDAM PLAN

Notes:

① Measured radially, typ.

② See roadway plans for quantity of Temporary Concrete Barrier and related traffic control.

③ When the deck pour is stopped for the day at the transverse bonded construction joint in the deck pouring sequence as shown, the next pour shall not be made until both of the following are met:
1) At least 72 hours shall have elapsed from the end of the previous pour.
2) The concrete strength shall have attained a minimum flexural strength of 650 psi or a minimum compressive strength of 3500 psi.

④ Seal coat thickness design is based on the Cofferdam Design Water Elevation shown. Cofferdam design details and proposed changes in seal coat thickness shall be submitted to the Engineer for approval with the cofferdam design. See Special Provisions.

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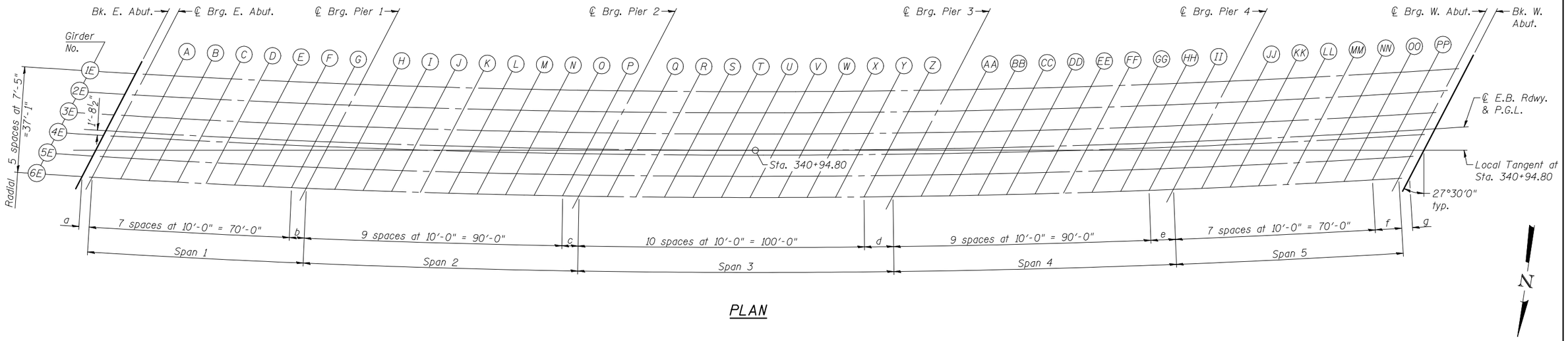
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS
STRUCTURE NO. 039-0075 (E.B.)
SHEET NO. 4 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	63
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			



PLAN

DIMENSION TABLE ①

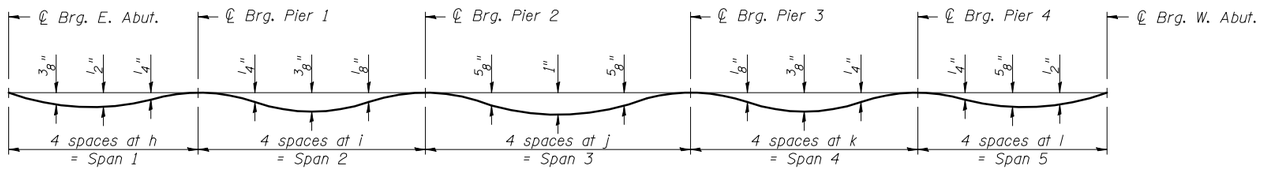
Girder	Radius	Span 1	Span 2	Span 3	Span 4	Span 5	a	b	c	d	e	f	g	h	i	j	k	l
1E	3760.81′	75′-3"	95′-9 15/16"	110′-2 5/16"	98′-7 3/4"	79′-4 9/16"	3′-6 3/4"	5′-3"	5′-9 15/16"	10′-2 5/16"	8′-7 3/4"	9′-4 9/16"	3′-9 5/8"	18′-9 3/4"	23′-11 1/2"	27′-6 9/16"	24′-7 15/16"	19′-10 1/8"
2E	3768.23′	75′-2 5/8"	95′-9 7/16"	110′-1 5/8"	98′-7"	79′-3 15/16"	3′-6 3/4"	5′-2 5/8"	5′-9 7/16"	10′-1 5/8"	8′-7"	9′-3 15/16"	3′-9 5/8"	18′-9 11/16"	23′-11 3/8"	27′-6 7/16"	24′-7 3/4"	19′-10"
3E	3775.65′	75′-2 1/4"	95′-8 7/8"	110′-0 15/16"	98′-6 5/16"	79′-3 1/4"	3′-6 3/4"	5′-2 1/4"	5′-8 7/8"	10′-0 15/16"	8′-6 5/16"	9′-3 1/4"	3′-9 9/16"	18′-9 9/16"	23′-11 3/16"	27′-6 1/4"	24′-7 9/16"	19′-9 13/16"
℄ Rdwy.	3781.36′	75′-1 15/16"	95′-8 7/16"	110′-0 3/8"	98′-5 3/4"	79′-2 3/4"	3′-6 11/16"	5′-1 15/16"	5′-8 7/16"	10′-0 3/8"	8′-5 3/4"	9′-2 3/4"	3′-9 9/16"	18′-9 1/2"	23′-11 1/8"	27′-6 1/8"	24′-7 1/16"	19′-9 11/16"
4E	3783.06′	75′-1 7/8"	95′-8 5/16"	110′-0 3/16"	98′-5 9/16"	79′-2 5/8"	3′-6 11/16"	5′-1 7/8"	5′-8 5/16"	10′-0 3/16"	8′-5 9/16"	9′-2 5/8"	3′-9 1/2"	18′-9 1/2"	23′-11 1/16"	27′-6 1/16"	24′-7 3/8"	19′-9 11/16"
5E	3790.48′	75′-1 1/2"	95′-7 13/16"	109′-11 1/2"	98′-4 7/8"	79′-2"	3′-6 11/16"	5′-1 1/2"	5′-7 13/16"	9′-11 1/2"	8′-4 7/8"	9′-2"	3′-9 1/2"	18′-9 3/8"	23′-10 15/16"	27′-5 7/8"	24′-7 3/16"	19′-9 1/2"
6E	3797.90′	75′-1 1/8"	95′-7 1/4"	109′-10 13/16"	98′-4 1/8"	79′-1 7/8"	3′-6 11/16"	5′-1 1/8"	5′-7 1/4"	9′-10 13/16"	8′-4 1/8"	9′-1 7/8"	3′-9 7/16"	18′-9 5/16"	23′-10 13/16"	27′-5 11/16"	24′-7"	19′-9 5/16"

Notes:

① *Horizontal dimensions are taken along centerline of each individual girder.*

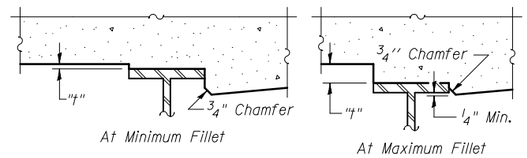
② *The Girder Dead Load Deflections are not to be used in the field if the Engineer is working from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" as shown on sheets 6 thru 8 of 53.*

③ *To determine "f": After all structural steel has been erected, elevations of the top flanges of the girders shall be taken at intervals shown above. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on sheets 6 thru 8 of 53, minus slab thickness, equals the fillet heights "f" above top flange of girders.*



DEAD LOAD DEFLECTION DIAGRAM ②

(Includes weight of concrete only.)



FILLET HEIGHTS ③

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	CHECKED - DGL	REVISED -	**DEPARTMENT OF TRANSPORTATION**
PLOT SCALE =	DRAWN - JAD	REVISED -	**TOP OF SLAB ELEVATIONS**
PLOT DATE =	CHECKED - DGL	REVISED -	**STRUCTURE NO. 039-0075 (E.B.)**
			SHEET NO. 5 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	64
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

GIRDER 1E

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. E. Abut.	338+76.34	-20.54	382.82	382.82
℄ Brg. E. Abut.	338+79.93	-20.54	382.84	382.84
A	338+89.98	-20.54	382.89	382.91
B	339+00.03	-20.54	382.94	382.97
C	339+10.09	-20.54	382.99	383.03
D	339+20.14	-20.54	383.04	383.08
E	339+30.20	-20.54	383.09	383.12
F	339+40.25	-20.54	383.14	383.15
G	339+50.31	-20.54	383.19	383.19
℄ Brg. Pier 1	339+55.59	-20.54	383.21	383.21
H	339+65.64	-20.54	383.26	383.27
I	339+75.70	-20.54	383.32	383.33
J	339+85.75	-20.54	383.37	383.39
K	339+95.81	-20.54	383.42	383.45
L	340+05.86	-20.54	383.47	383.50
M	340+15.91	-20.54	383.52	383.55
N	340+25.97	-20.54	383.57	383.59
O	340+36.02	-20.54	383.62	383.62
P	340+46.08	-20.54	383.67	383.67
℄ Brg. Pier 2	340+51.94	-20.54	383.70	383.70
Q	340+61.99	-20.54	383.74	383.76
R	340+72.05	-20.54	383.78	383.81
S	340+82.10	-20.54	383.80	383.87
T	340+92.16	-20.54	383.82	383.91
U	341+02.21	-20.54	383.83	383.93
V	341+12.27	-20.54	383.84	383.93
W	341+22.32	-20.54	383.83	383.91
X	341+32.38	-20.54	383.82	383.88
Y	341+42.43	-20.54	383.79	383.83
Z	341+52.49	-20.54	383.76	383.78
℄ Brg. Pier 3	341+62.74	-20.54	383.72	383.72
AA	341+72.79	-20.54	383.67	383.68
BB	341+82.85	-20.54	383.62	383.64
CC	341+92.90	-20.54	383.57	383.60
DD	342+02.95	-20.54	383.52	383.56
EE	342+13.01	-20.54	383.47	383.51
FF	342+23.06	-20.54	383.42	383.46
GG	342+33.12	-20.54	383.37	383.40
HH	342+43.17	-20.54	383.32	383.34
II	342+53.23	-20.54	383.27	383.27
℄ Brg. Pier 4	342+61.92	-20.54	383.23	383.23
JJ	342+71.98	-20.54	383.18	383.19
KK	342+82.03	-20.54	383.13	383.15
LL	342+92.09	-20.54	383.08	383.12
MM	343+02.14	-20.54	383.03	383.08
NN	343+12.19	-20.54	382.98	383.03
OO	343+22.25	-20.54	382.93	382.97
PP	343+32.30	-20.54	382.88	382.90
℄ Brg. W. Abut.	343+41.74	-20.54	382.83	382.83
Bk. W. Abut.	343+45.56	-20.54	382.81	382.81

GIRDER 2E

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. E. Abut.	338+73.00	-13.13	382.99	382.99
℄ Brg. E. Abut.	338+76.57	-13.13	383.00	383.00
A	338+86.61	-13.13	383.05	383.07
B	338+96.64	-13.13	383.11	383.14
C	339+06.68	-13.13	383.16	383.19
D	339+16.71	-13.13	383.21	383.24
E	339+26.75	-13.13	383.26	383.28
F	339+36.78	-13.13	383.31	383.32
G	339+46.82	-13.13	383.36	383.36
℄ Brg. Pier 1	339+52.06	-13.13	383.38	383.38
H	339+62.09	-13.13	383.43	383.44
I	339+72.12	-13.13	383.48	383.49
J	339+82.16	-13.13	383.53	383.55
K	339+92.19	-13.13	383.58	383.61
L	340+02.23	-13.13	383.63	383.66
M	340+12.26	-13.13	383.68	383.70
N	340+22.30	-13.13	383.73	383.74
O	340+32.33	-13.13	383.78	383.79
P	340+42.37	-13.13	383.83	383.83
℄ Brg. Pier 2	340+48.17	-13.13	383.86	383.86
Q	340+58.21	-13.13	383.91	383.92
R	340+68.24	-13.13	383.95	383.98
S	340+78.28	-13.13	383.98	384.03
T	340+88.31	-13.13	384.00	384.08
U	340+98.35	-13.13	384.02	384.10
V	341+08.38	-13.13	384.02	384.11
W	341+18.42	-13.13	384.02	384.09
X	341+28.45	-13.13	384.01	384.06
Y	341+38.49	-13.13	383.99	384.02
Z	341+48.52	-13.13	383.96	383.97
℄ Brg. Pier 3	341+58.69	-13.13	383.92	383.92
AA	341+68.73	-13.13	383.88	383.88
BB	341+78.76	-13.13	383.83	383.83
CC	341+88.80	-13.13	383.78	383.79
DD	341+98.83	-13.13	383.73	383.75
EE	342+08.87	-13.13	383.68	383.71
FF	342+18.90	-13.13	383.63	383.66
GG	342+28.94	-13.13	383.58	383.60
HH	342+38.97	-13.13	383.53	383.54
II	342+49.00	-13.13	383.48	383.48
℄ Brg. Pier 4	342+57.62	-13.13	383.43	383.43
JJ	342+67.65	-13.13	383.38	383.39
KK	342+77.69	-13.13	383.33	383.36
LL	342+87.72	-13.13	383.28	383.32
MM	342+97.76	-13.13	383.23	383.28
NN	343+07.79	-13.13	383.18	383.23
OO	343+17.83	-13.13	383.13	383.17
PP	343+27.86	-13.13	383.08	383.10
℄ Brg. W. Abut.	343+37.22	-13.13	383.04	383.04
Bk. W. Abut.	343+41.04	-13.13	383.02	383.02

GIRDER 3E

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. E. Abut.	338+69.67	-5.71	383.16	383.16
℄ Brg. E. Abut.	338+73.24	-5.71	383.17	383.17
A	338+83.25	-5.71	383.22	383.24
B	338+93.27	-5.71	383.27	383.30
C	339+03.28	-5.71	383.32	383.36
D	339+13.30	-5.71	383.37	383.41
E	339+23.31	-5.71	383.42	383.45
F	339+33.33	-5.71	383.47	383.49
G	339+43.34	-5.71	383.52	383.53
℄ Brg. Pier 1	339+48.54	-5.71	383.55	383.55
H	339+58.55	-5.71	383.60	383.60
I	339+68.57	-5.71	383.65	383.66
J	339+78.58	-5.71	383.70	383.72
K	339+88.60	-5.71	383.75	383.77
L	339+98.61	-5.71	383.80	383.82
M	340+08.63	-5.71	383.85	383.87
N	340+18.64	-5.71	383.90	383.91
O	340+28.66	-5.71	383.95	383.95
P	340+38.67	-5.71	384.00	384.00
℄ Brg. Pier 2	340+44.42	-5.71	384.03	384.03
Q	340+54.44	-5.71	384.08	384.09
R	340+64.45	-5.71	384.12	384.15
S	340+74.47	-5.71	384.15	384.21
T	340+84.48	-5.71	384.18	384.25
U	340+94.50	-5.71	384.20	384.28
V	341+04.51	-5.71	384.21	384.29
W	341+14.53	-5.71	384.21	384.28
X	341+24.54	-5.71	384.20	384.25
Y	341+34.56	-5.71	384.18	384.21
Z	341+44.57	-5.71	384.16	384.17
℄ Brg. Pier 3	341+54.66	-5.71	384.12	384.12
AA	341+64.68	-5.71	384.08	384.08
BB	341+74.70	-5.71	384.03	384.04
CC	341+84.71	-5.71	383.98	384.00
DD	341+94.73	-5.71	383.93	383.96
EE	342+04.74	-5.71	383.88	383.91
FF	342+14.76	-5.71	383.83	383.86
GG	342+24.77	-5.71	383.78	383.80
HH	342+34.79	-5.71	383.73	383.74
II	342+44.80	-5.71	383.68	383.69
℄ Brg. Pier 4	342+53.34	-5.71	383.64	383.64
JJ	342+63.35	-5.71	383.59	383.60
KK	342+73.37	-5.71	383.54	383.56
LL	342+83.38	-5.71	383.49	383.53
MM	342+93.40	-5.71	383.44	383.48
NN	343+03.41	-5.71	383.39	383.44
OO	343+13.43	-5.71	383.34	383.38
PP	343+23.44	-5.71	383.29	383.31
℄ Brg. W. Abut.	343+32.73	-5.71	383.24	383.24
Bk. W. Abut.	343+36.53	-5.71	383.22	383.22

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 039-0075 (E.B.)
SHEET NO. 6 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	65
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		

℄ E.B. RDWY. & P.G.L.

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. E. Abut.	338+67.12	0.00	383.29	383.29
℄ Brg. E. Abut.	338+70.68	0.00	383.30	383.30
A	338+80.68	0.00	383.35	383.37
B	338+90.68	0.00	383.40	383.43
C	339+00.68	0.00	383.45	383.49
D	339+10.68	0.00	383.50	383.54
E	339+20.68	0.00	383.55	383.58
F	339+30.68	0.00	383.60	383.62
G	339+40.68	0.00	383.65	383.66
℄ Brg. Pier 1	339+45.84	0.00	383.68	383.68
H	339+55.84	0.00	383.73	383.73
I	339+65.84	0.00	383.78	383.79
J	339+75.84	0.00	383.83	383.85
K	339+85.84	0.00	383.88	383.90
L	339+95.84	0.00	383.93	383.95
M	340+05.84	0.00	383.98	384.00
N	340+15.84	0.00	384.03	384.04
O	340+25.84	0.00	384.08	384.08
P	340+35.84	0.00	384.13	384.13
℄ Brg. Pier 2	340+41.55	0.00	384.16	384.16
Q	340+51.55	0.00	384.21	384.22
R	340+61.55	0.00	384.25	384.28
S	340+71.55	0.00	384.29	384.34
T	340+81.55	0.00	384.32	384.39
U	340+91.55	0.00	384.34	384.41
V	341+01.55	0.00	384.35	384.43
W	341+11.55	0.00	384.35	384.42
X	341+21.55	0.00	384.34	384.40
Y	341+31.55	0.00	384.33	384.36
Z	341+41.55	0.00	384.31	384.32
℄ Brg. Pier 3	341+51.58	0.00	384.28	384.28
AA	341+61.58	0.00	384.24	384.24
BB	341+71.58	0.00	384.19	384.20
CC	341+81.58	0.00	384.14	384.16
DD	341+91.58	0.00	384.09	384.11
EE	342+01.58	0.00	384.04	384.07
FF	342+11.58	0.00	383.99	384.02
GG	342+21.58	0.00	383.94	383.96
HH	342+31.58	0.00	383.89	383.90
II	342+41.58	0.00	383.84	383.84
℄ Brg. Pier 4	342+50.06	0.00	383.80	383.80
JJ	342+60.06	0.00	383.75	383.76
KK	342+70.06	0.00	383.70	383.72
LL	342+80.06	0.00	383.65	383.69
MM	342+90.06	0.00	383.60	383.64
NN	343+00.06	0.00	383.55	383.59
OO	343+10.06	0.00	383.50	383.54
PP	343+20.06	0.00	383.45	383.47
℄ Brg. W. Abut.	343+29.29	0.00	383.40	383.40
Bk. W. Abut.	343+33.08	0.00	383.38	383.38

GIRDER 4E

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. E. Abut.	338+66.36	1.71	383.32	383.32
℄ Brg. E. Abut.	338+69.92	1.71	383.34	383.34
A	338+79.91	1.71	383.39	383.41
B	338+89.91	1.71	383.44	383.47
C	338+99.90	1.71	383.49	383.53
D	339+09.90	1.71	383.54	383.58
E	339+19.89	1.71	383.59	383.62
F	339+29.89	1.71	383.64	383.66
G	339+39.88	1.71	383.69	383.70
℄ Brg. Pier 1	339+45.04	1.71	383.72	383.72
H	339+55.03	1.71	383.77	383.77
I	339+65.03	1.71	383.82	383.83
J	339+75.02	1.71	383.87	383.88
K	339+85.02	1.71	383.92	383.94
L	339+95.02	1.71	383.97	383.99
M	340+05.01	1.71	384.02	384.03
N	340+15.01	1.71	384.07	384.08
O	340+25.00	1.71	384.12	384.12
P	340+35.00	1.71	384.17	384.17
℄ Brg. Pier 2	340+40.69	1.71	384.20	384.20
Q	340+50.68	1.71	384.25	384.26
R	340+60.68	1.71	384.29	384.32
S	340+70.68	1.71	384.33	384.38
T	340+80.67	1.71	384.36	384.43
U	340+90.67	1.71	384.38	384.46
V	341+00.66	1.71	384.39	384.47
W	341+10.66	1.71	384.39	384.46
X	341+20.65	1.71	384.39	384.44
Y	341+30.65	1.71	384.37	384.41
Z	341+40.64	1.71	384.35	384.37
℄ Brg. Pier 3	341+50.66	1.71	384.32	384.32
AA	341+60.65	1.71	384.29	384.29
BB	341+70.65	1.71	384.24	384.25
CC	341+80.64	1.71	384.19	384.20
DD	341+90.64	1.71	384.14	384.16
EE	342+00.63	1.71	384.09	384.12
FF	342+10.63	1.71	384.04	384.06
GG	342+20.62	1.71	383.99	384.01
HH	342+30.62	1.71	383.94	383.95
II	342+40.62	1.71	383.89	383.89
℄ Brg. Pier 4	342+49.08	1.71	383.85	383.85
JJ	342+59.07	1.71	383.80	383.81
KK	342+69.07	1.71	383.75	383.77
LL	342+79.06	1.71	383.70	383.73
MM	342+89.06	1.71	383.65	383.69
NN	342+99.05	1.71	383.60	383.64
OO	343+09.05	1.71	383.55	383.58
PP	343+19.05	1.71	383.50	383.52
℄ Brg. W. Abut.	343+28.26	1.71	383.45	383.45
Bk. W. Abut.	343+32.05	1.71	383.43	383.43

GIRDER 5E

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. E. Abut.	338+63.06	9.13	383.49	383.49
℄ Brg. E. Abut.	338+66.61	9.13	383.51	383.51
A	338+76.58	9.13	383.56	383.58
B	338+86.56	9.13	383.61	383.64
C	338+96.54	9.13	383.66	383.70
D	339+06.51	9.13	383.71	383.75
E	339+16.49	9.13	383.76	383.79
F	339+26.46	9.13	383.81	383.82
G	339+36.44	9.13	383.86	383.86
℄ Brg. Pier 1	339+41.55	9.13	383.89	383.89
H	339+51.53	9.13	383.94	383.94
I	339+61.50	9.13	383.99	384.00
J	339+71.48	9.13	384.04	384.06
K	339+81.46	9.13	384.09	384.11
L	339+91.43	9.13	384.14	384.16
M	340+01.41	9.13	384.19	384.20
N	340+11.38	9.13	384.24	384.25
O	340+21.36	9.13	384.28	384.29
P	340+31.34	9.13	384.33	384.33
℄ Brg. Pier 2	340+36.97	9.13	384.36	384.36
Q	340+46.95	9.13	384.41	384.43
R	340+56.92	9.13	384.46	384.50
S	340+66.90	9.13	384.50	384.56
T	340+76.88	9.13	384.53	384.61
U	340+86.85	9.13	384.56	384.64
V	340+96.83	9.13	384.57	384.65
W	341+06.80	9.13	384.58	384.65
X	341+16.78	9.13	384.58	384.63
Y	341+26.76	9.13	384.57	384.60
Z	341+36.73	9.13	384.55	384.56
℄ Brg. Pier 3	341+46.67	9.13	384.52	384.52
AA	341+56.64	9.13	384.49	384.49
BB	341+66.62	9.13	384.44	384.45
CC	341+76.59	9.13	384.40	384.41
DD	341+86.57	9.13	384.35	384.37
EE	341+96.55	9.13	384.30	384.33
FF	342+06.52	9.13	384.25	384.27
GG	342+16.50	9.13	384.20	384.22
HH	342+26.47	9.13	384.15	384.16
II	342+36.45	9.13	384.10	384.10
℄ Brg. Pier 4	342+44.83	9.13	384.05	384.05
JJ	342+54.81	9.13	384.00	384.01
KK	342+64.79	9.13	383.95	383.98
LL	342+74.76	9.13	383.90	383.94
MM	342+84.74	9.13	383.85	383.90
NN	342+94.71	9.13	383.80	383.85
OO	343+04.69	9.13	383.75	383.79
PP	343+14.67	9.13	383.70	383.73
℄ Brg. W. Abut.	343+23.81	9.13	383.66	383.66
Bk. W. Abut.	343+27.59	9.13	383.64	383.64

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 039-0075 (E.B.)
SHEET NO. 7 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	66
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		

GIRDER 6E

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. E. Abut.	338+59.77	16.54	383.66	383.66
℄ Brg. E. Abut.	338+63.31	16.54	383.68	383.68
A	338+73.27	16.54	383.73	383.75
B	338+83.23	16.54	383.78	383.82
C	338+93.18	16.54	383.83	383.88
D	339+03.14	16.54	383.88	383.92
E	339+13.10	16.54	383.93	383.96
F	339+23.05	16.54	383.98	384.00
G	339+33.01	16.54	384.03	384.03
℄ Brg. Pier 1	339+38.08	16.54	384.05	384.05
H	339+48.04	16.54	384.10	384.11
I	339+57.99	16.54	384.15	384.17
J	339+67.95	16.54	384.20	384.23
K	339+77.91	16.54	384.25	384.29
L	339+87.86	16.54	384.30	384.34
M	339+97.82	16.54	384.35	384.38
N	340+07.78	16.54	384.40	384.42
O	340+17.73	16.54	384.45	384.46
P	340+27.69	16.54	384.50	384.50
℄ Brg. Pier 2	340+33.27	16.54	384.53	384.53
Q	340+43.23	16.54	384.58	384.60
R	340+53.18	16.54	384.63	384.67
S	340+63.14	16.54	384.67	384.74
T	340+73.10	16.54	384.71	384.79
U	340+83.05	16.54	384.73	384.83
V	340+93.01	16.54	384.75	384.85
W	341+02.97	16.54	384.76	384.85
X	341+12.92	16.54	384.76	384.83
Y	341+22.88	16.54	384.76	384.80
Z	341+32.84	16.54	384.74	384.76
℄ Brg. Pier 3	341+42.69	16.54	384.72	384.72
AA	341+52.65	16.54	384.69	384.69
BB	341+62.61	16.54	384.65	384.66
CC	341+72.56	16.54	384.60	384.63
DD	341+82.52	16.54	384.55	384.59
EE	341+92.48	16.54	384.50	384.54
FF	342+02.43	16.54	384.45	384.49
GG	342+12.39	16.54	384.40	384.43
HH	342+22.35	16.54	384.35	384.37
II	342+32.30	16.54	384.30	384.31
℄ Brg. Pier 4	342+40.61	16.54	384.26	384.26
JJ	342+50.57	16.54	384.21	384.22
KK	342+60.52	16.54	384.16	384.19
LL	342+70.48	16.54	384.11	384.16
MM	342+80.44	16.54	384.06	384.12
NN	342+90.39	16.54	384.01	384.07
OO	343+00.35	16.54	383.96	384.01
PP	343+10.31	16.54	383.91	383.94
℄ Brg. W. Abut.	343+19.38	16.54	383.87	383.87
Bk. W. Abut.	343+23.15	16.54	383.85	383.85

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 039-0075 (E.B.)

SHEET NO. 8 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	67
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		

SOUTH EDGE OF SHOULDER

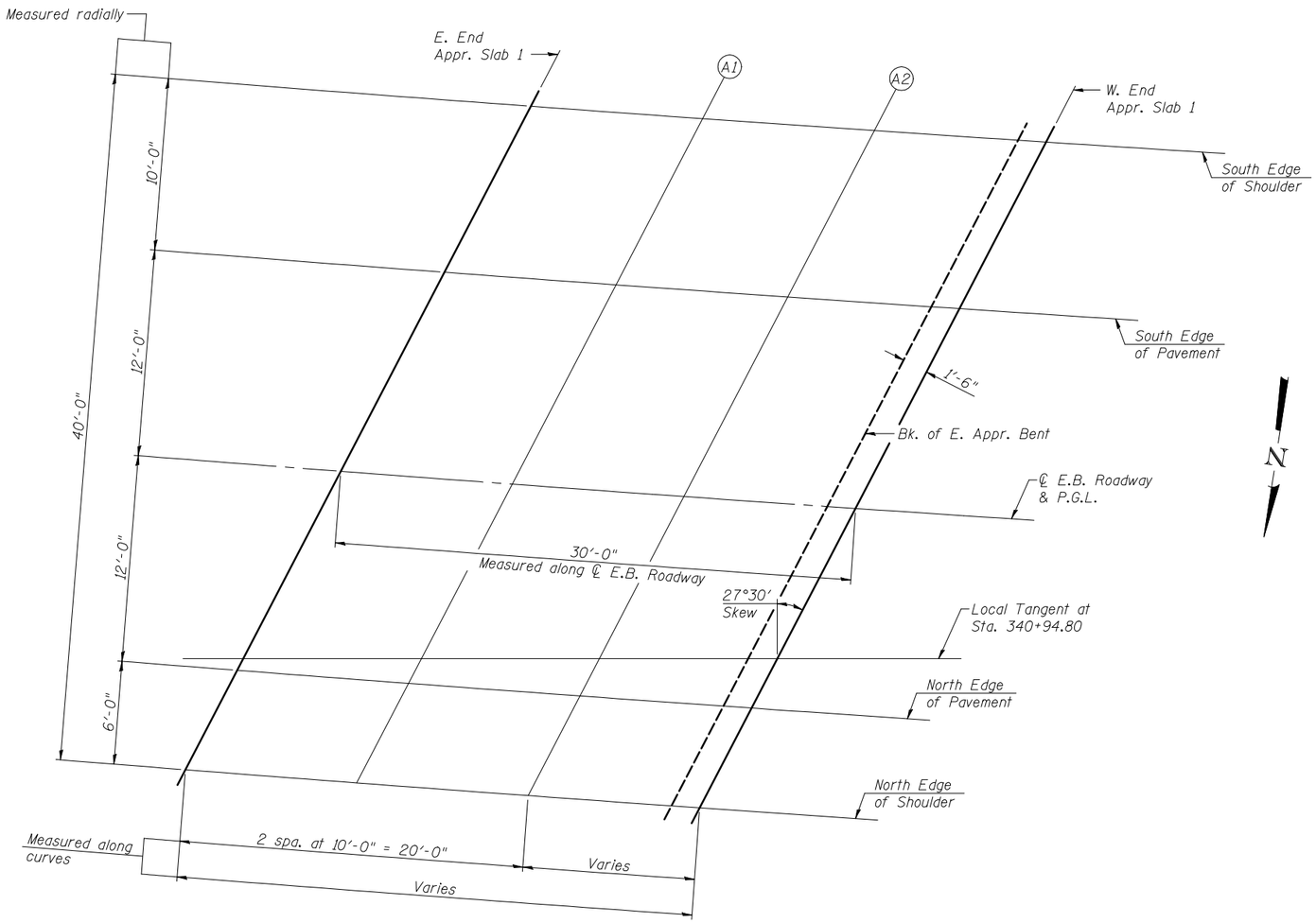
Location	Station	Offset	Theoretical Grade Elevations
E. End Appr. Slab 1	338+17.14	-22.00	382.49
A1	338+27.19	-22.00	382.54
A2	338+37.25	-22.00	382.59
W. End Appr. Slab 1	338+47.35	-22.00	382.64

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
E. End Appr. Slab 1	338+12.82	-12.00	382.72
A1	338+22.85	-12.00	382.77
A2	338+32.88	-12.00	382.81
W. End Appr. Slab 1	338+42.93	-12.00	382.86

℄ E.B. ROADWAY & P.G.L.

Location	Station	Offset	Theoretical Grade Elevations
E. End Appr. Slab 1	338+07.67	0.00	383.00
A1	338+17.67	0.00	383.04
A2	338+27.67	0.00	383.09
W. End Appr. Slab 1	338+37.67	0.00	383.14



PLAN

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
E. End Appr. Slab 1	338+02.56	12.00	383.28
A1	338+12.53	12.00	383.32
A2	338+22.49	12.00	383.36
W. End Appr. Slab 1	338+32.44	12.00	383.41

NORTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
E. End Appr. Slab 1	338+00.01	18.00	383.42
A1	338+09.97	18.00	383.46
A2	338+19.92	18.00	383.50
W. End Appr. Slab 1	338+29.85	18.00	383.55

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF APPROACH SLAB 1 ELEVATIONS
STRUCTURE NO. 039-0075 (E.B.)
SHEET NO. 9 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	68
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		

SOUTH EDGE OF SHOULDER

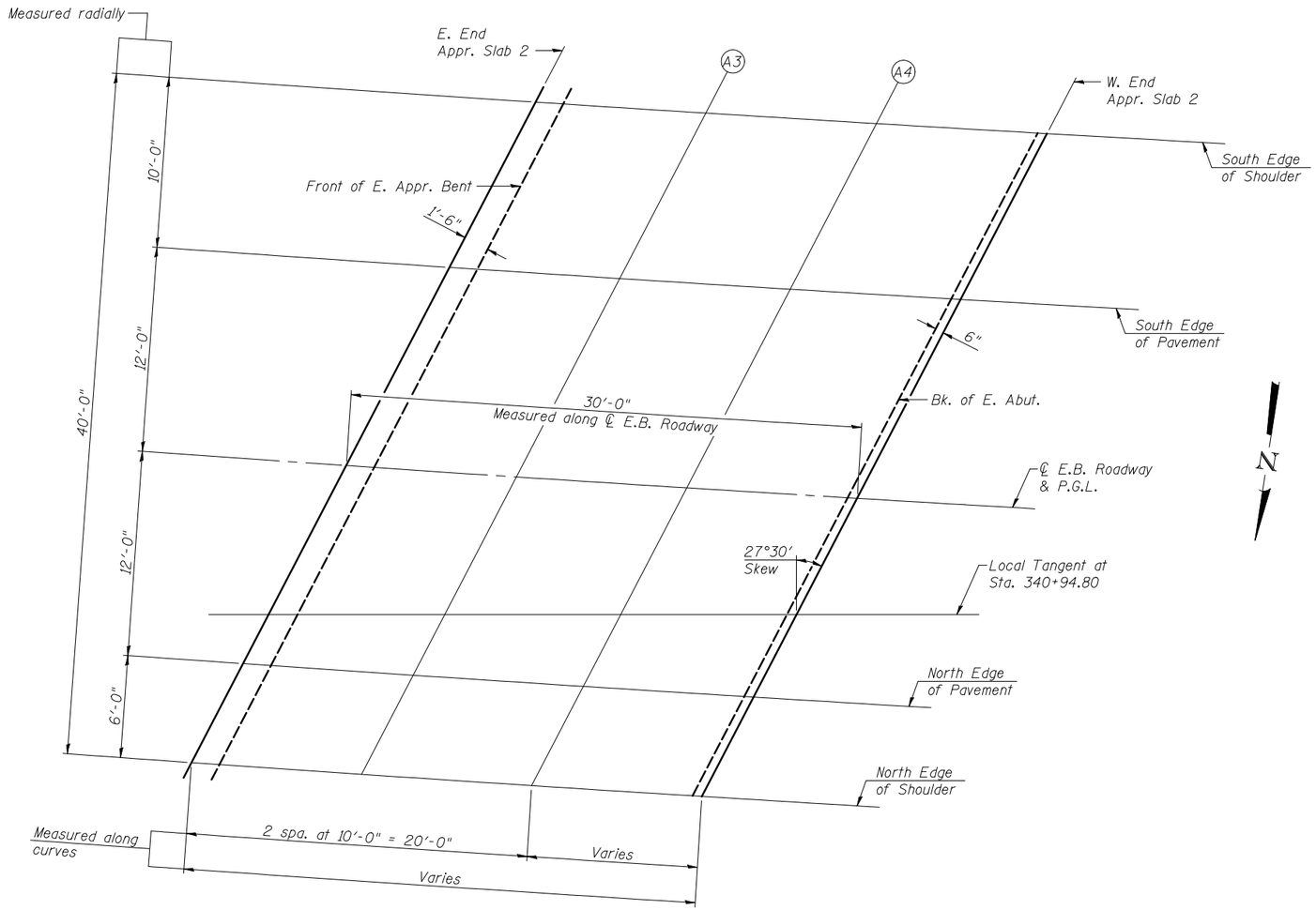
Location	Station	Offset	Theoretical Grade Elevations
E. End Appr. Slab 2	338+47.35	-22.00	382.64
A3	338+57.40	-22.00	382.69
A4	338+67.46	-22.00	382.74
W. End Appr. Slab 2	338+77.55	-22.00	382.79

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
E. End Appr. Slab 2	338+42.93	-12.00	382.86
A3	338+52.96	-12.00	382.91
A4	338+63.00	-12.00	382.97
W. End Appr. Slab 2	338+73.04	-12.00	383.02

℄ E.B. ROADWAY & P.G.L.

Location	Station	Offset	Theoretical Grade Elevations
E. End Appr. Slab 2	338+37.67	0.00	383.14
A3	338+47.67	0.00	383.19
A4	338+57.67	0.00	383.24
W. End Appr. Slab 2	338+67.67	0.00	383.29



PLAN

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
E. End Appr. Slab 2	338+32.44	12.00	383.41
A3	338+42.41	12.00	383.46
A4	338+52.38	12.00	383.51
W. End Appr. Slab 2	338+62.33	12.00	383.56

NORTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
E. End Appr. Slab 2	338+29.85	18.00	383.55
A3	338+39.80	18.00	383.60
A4	338+49.75	18.00	383.65
W. End Appr. Slab 2	338+59.67	18.00	383.70

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF APPROACH SLAB 2 ELEVATIONS
STRUCTURE NO. 039-0075 (E.B.)
SHEET NO. 10 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	69
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		

SOUTH EDGE OF SHOULDER

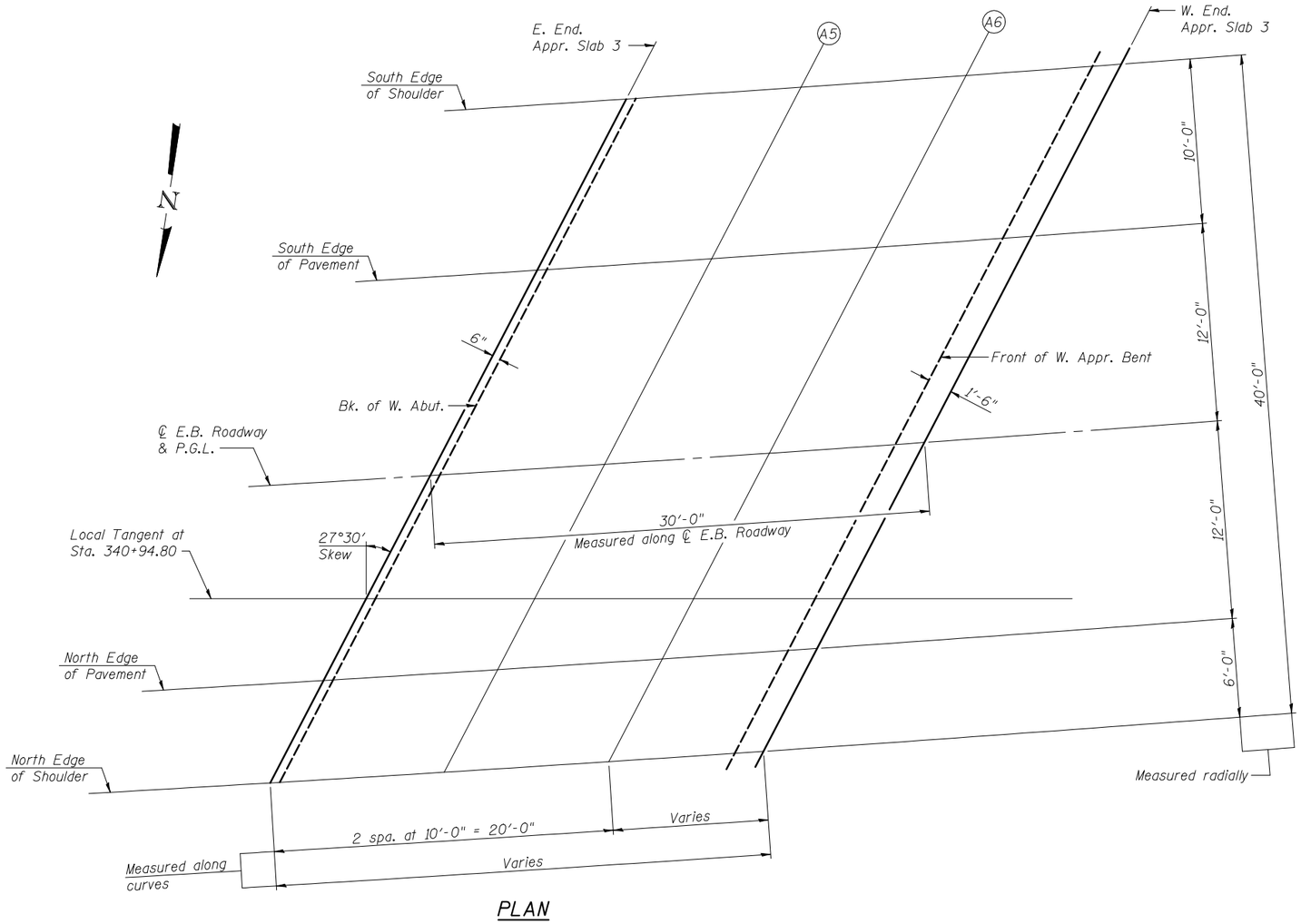
Location	Station	Offset	Theoretical Grade Elevations
E. End. Appr. Slab 3	343+45.86	-22.00	382.77
A5	343+55.92	-22.00	382.72
A6	343+65.98	-22.00	382.67
W. End. Appr. Slab 3	343+76.11	-22.00	382.62

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
E. End. Appr. Slab 3	343+39.77	-12.00	383.05
A5	343+49.80	-12.00	383.00
A6	343+59.83	-12.00	382.95
W. End. Appr. Slab 3	343+69.90	-12.00	382.90

℄ E.B. ROADWAY & P.G.L.

Location	Station	Offset	Theoretical Grade Elevations
E. End. Appr. Slab 3	343+32.50	0.00	383.39
A5	343+42.50	0.00	383.34
A6	343+52.50	0.00	383.29
W. End. Appr. Slab 3	343+62.50	0.00	383.24



PLAN

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
E. End. Appr. Slab 3	343+25.29	12.00	383.72
A5	343+35.25	12.00	383.67
A6	343+45.22	12.00	383.62
W. End. Appr. Slab 3	343+55.16	12.00	383.57

NORTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
E. End. Appr. Slab 3	343+21.70	18.00	383.89
A5	343+31.65	18.00	383.84
A6	343+41.61	18.00	383.79
W. End. Appr. Slab 3	343+51.51	18.00	383.74

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF APPROACH SLAB 3 ELEVATIONS
STRUCTURE NO. 039-0075 (E.B.)
SHEET NO. 11 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	70
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

SOUTH EDGE OF SHOULDER

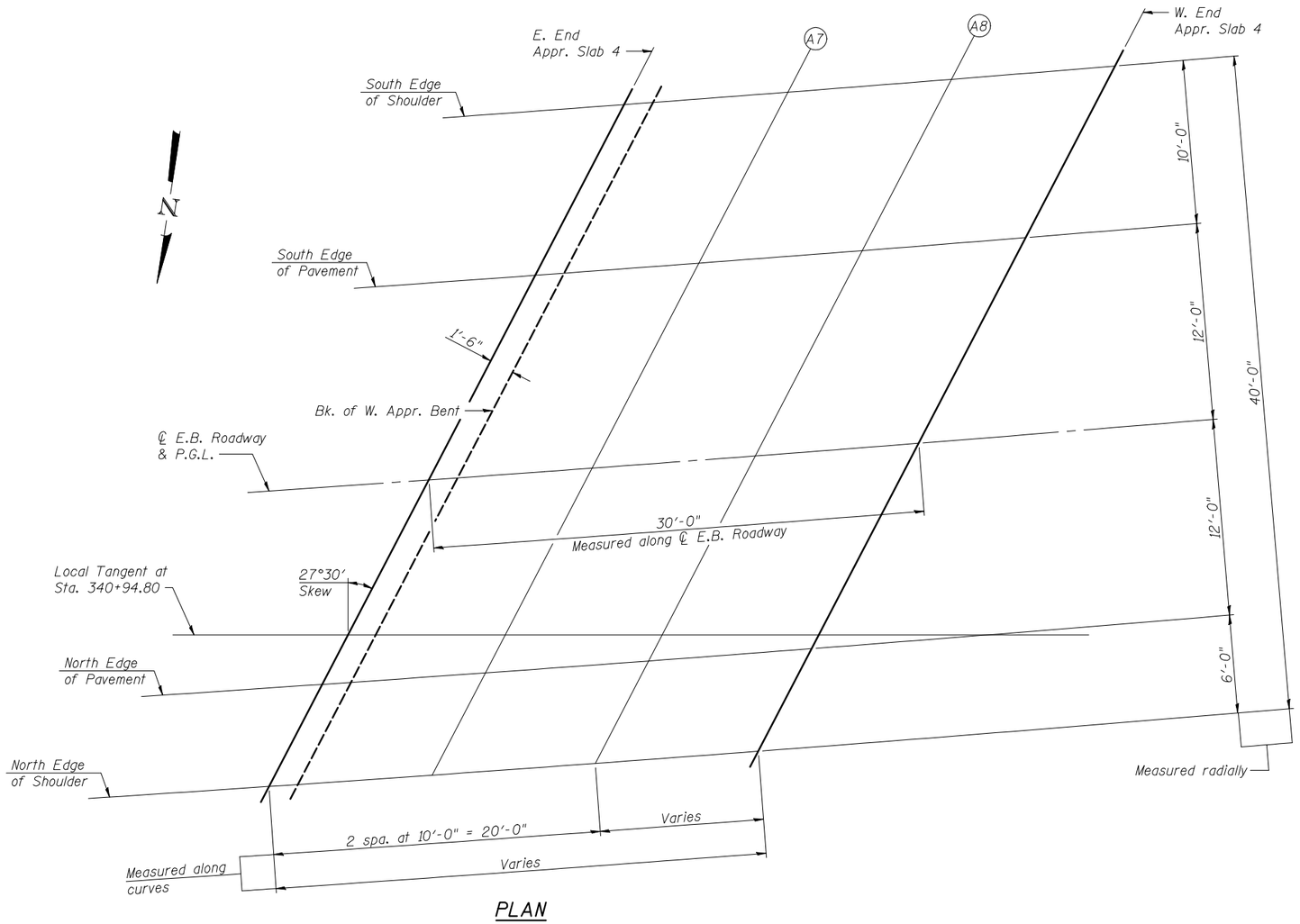
Location	Station	Offset	Theoretical Grade Elevations
E. End Appr. Slab 4	343+76.11	-22.00	382.62
A7	343+86.16	-22.00	382.57
A8	343+96.22	-22.00	382.52
W. End Appr. Slab 4	344+06.38	-22.00	382.48

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
E. End Appr. Slab 4	343+69.90	-12.00	382.90
A7	343+79.93	-12.00	382.85
A8	343+89.96	-12.00	382.80
W. End Appr. Slab 4	344+00.03	-12.00	382.75

℄ E.B. ROADWAY & P.G.L.

Location	Station	Offset	Theoretical Grade Elevations
E. End Appr. Slab 4	343+62.50	0.00	383.24
A7	343+72.50	0.00	383.19
A8	343+82.50	0.00	383.14
W. End Appr. Slab 4	343+92.50	0.00	383.09



PLAN

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
E. End Appr. Slab 4	343+55.16	12.00	383.57
A7	343+65.13	12.00	383.52
A8	343+75.09	12.00	383.47
W. End Appr. Slab 4	343+85.03	12.00	383.42

NORTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
E. End Appr. Slab 4	343+51.51	18.00	383.74
A7	343+61.46	18.00	383.69
A8	343+71.41	18.00	383.64
W. End Appr. Slab 4	343+81.31	18.00	383.59

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PLOT DATE =	CHECKED - JAD	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

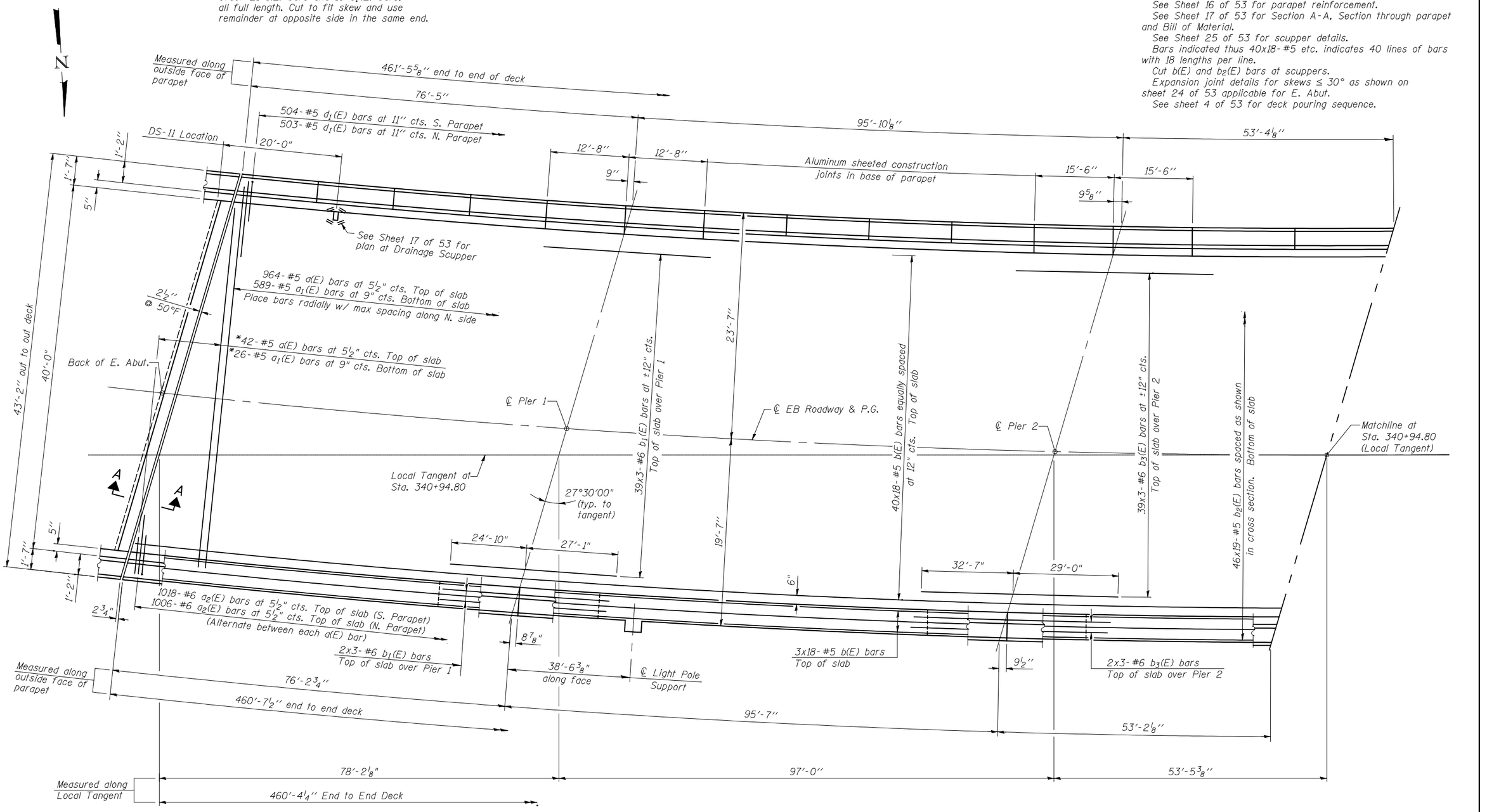
TOP OF APPROACH SLAB 4 ELEVATIONS
STRUCTURE NO. 039-0075 (E.B.)

SHEET NO. 12 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	71
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

*Order 21 a(E) bars and 13 a_1(E) bars, all full length. Cut to fit skew and use remainder at opposite side in the same end.

Notes:
See Sheet 16 of 53 for parapet reinforcement.
See Sheet 17 of 53 for Section A-A, Section through parapet and Bill of Material.
See Sheet 25 of 53 for scupper details.
Bars indicated thus 40x18-#5 etc. indicates 40 lines of bars with 18 lengths per line.
Cut b(E) and b_2(E) bars at scuppers.
Expansion joint details for skews ≤ 30° as shown on sheet 24 of 53 applicable for E. Abut.
See sheet 4 of 53 for deck pouring sequence.



PARTIAL PLAN

MINIMUM BAR LAP

#5 bar = 2'-7"
#6 bar = 3'-1" (for bars over piers)
#6 bar = 4'-5" (for bars at ends of deck)

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

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		CHECKED - MCB	REVISED -
	PLOT SCALE = $SCALE$	DRAWN - MML	REVISED -
CB PROJECT NO. 08024-2	PLOT DATE = $DATE$	CHECKED - CME	REVISED -

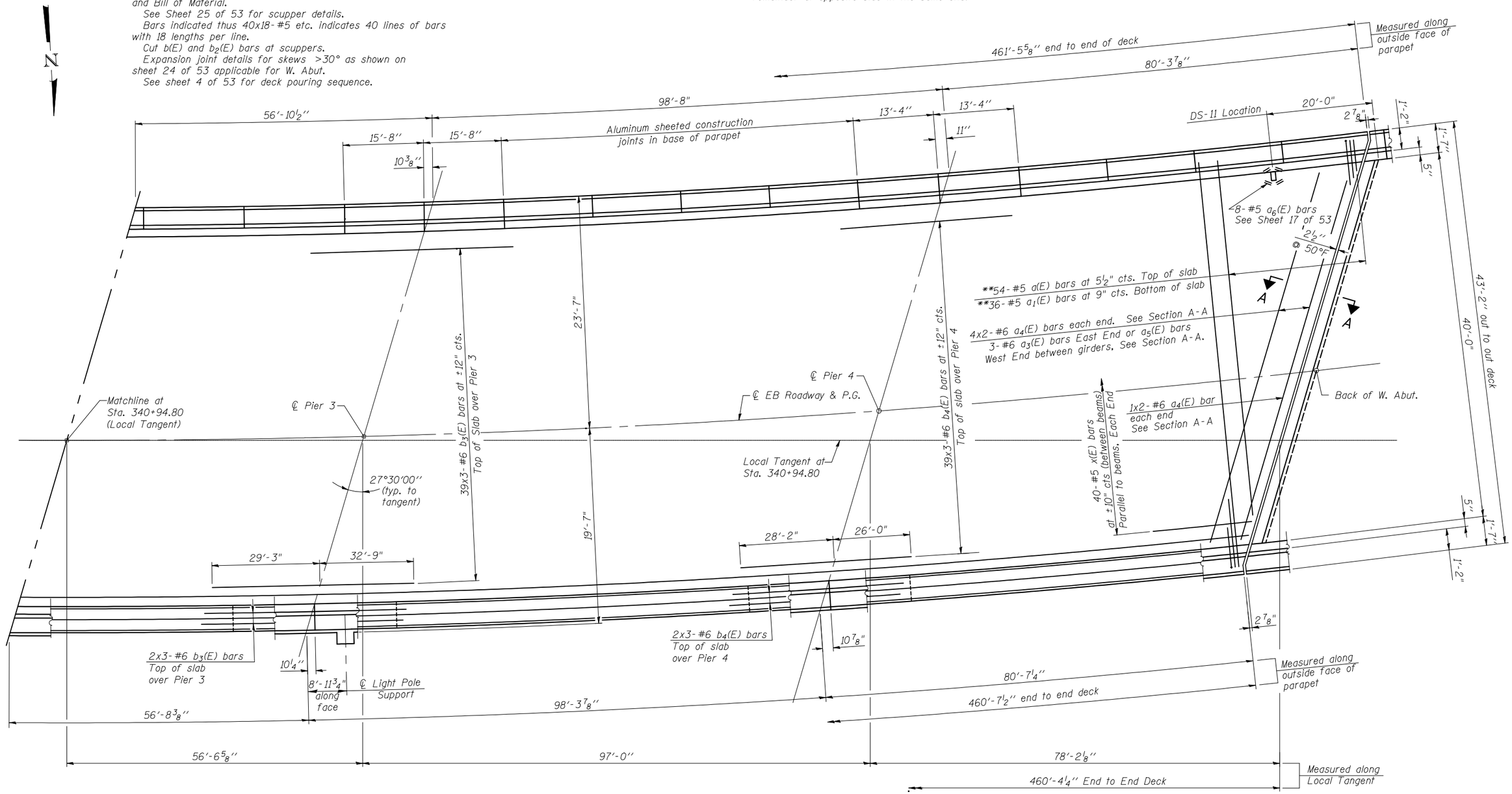
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE
STRUCTURE NO. 039-0075 (EB)
SHEET NO. 13 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	72
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

Notes:
See Sheet 16 of 53 for parapet reinforcement.
See Sheet 17 of 53 for Section A-A, Section through parapet and Bill of Material.
See Sheet 25 of 53 for scupper details.
Bars indicated thus 40x18-#5 etc. indicates 40 lines of bars with 18 lengths per line.
Cut b(E) and b_2(E) bars at scuppers.
Expansion joint details for skews >30° as shown on sheet 24 of 53 applicable for W. Abut.
See sheet 4 of 53 for deck pouring sequence.

**Order 27 a(E) bars and 18 a_1(E) bars, all full length. Cut to fit skew and use remainder at opposite side in the same end.



PARTIAL PLAN

MINIMUM BAR LAP

#5 bar = 2'-7"
#6 bar = 3'-1" (for bars over piers)
#6 bar = 4'-5" (for bars at ends of deck)

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

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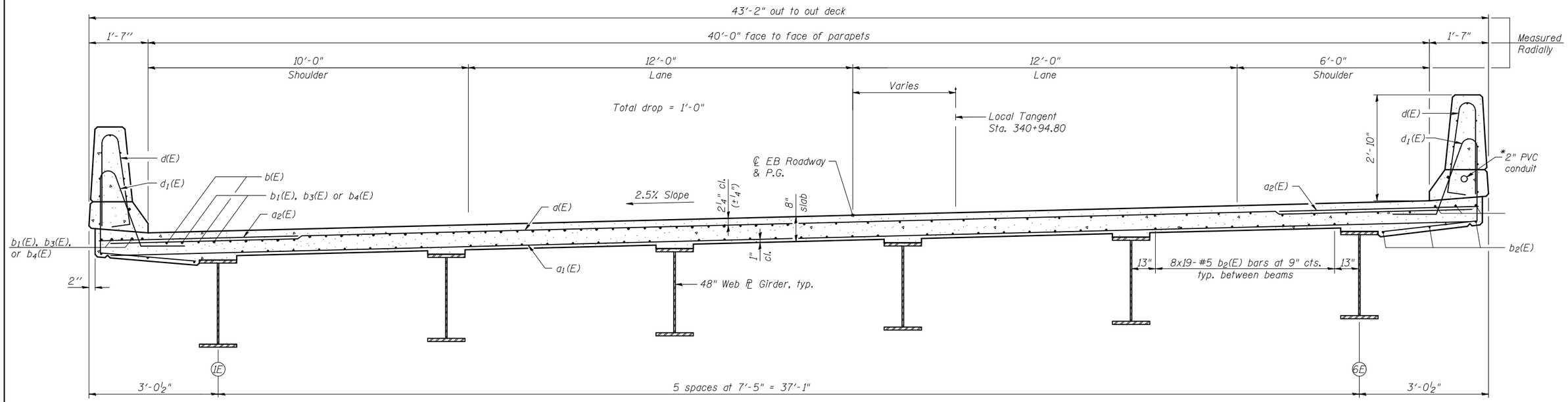
CB PROJECT NO. 08024-2	PLOT DATE = $DATE$	CHECKED - CME	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE
STRUCTURE NO. 039-0075 (EB)
SHEET NO. 14 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	73
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			



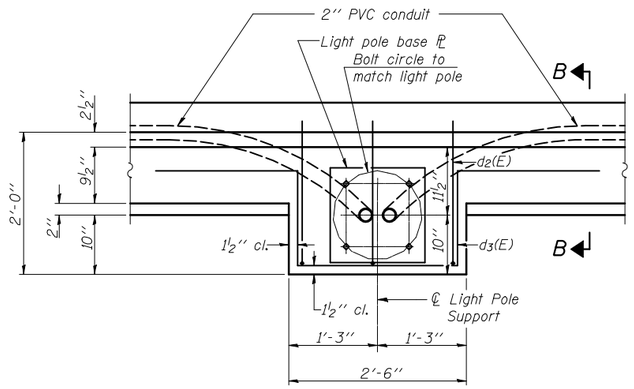
NEAR PIER

NEAR MIDSPAN

*Conduit shall have a minimum clearance of 1½" from all reinforcement

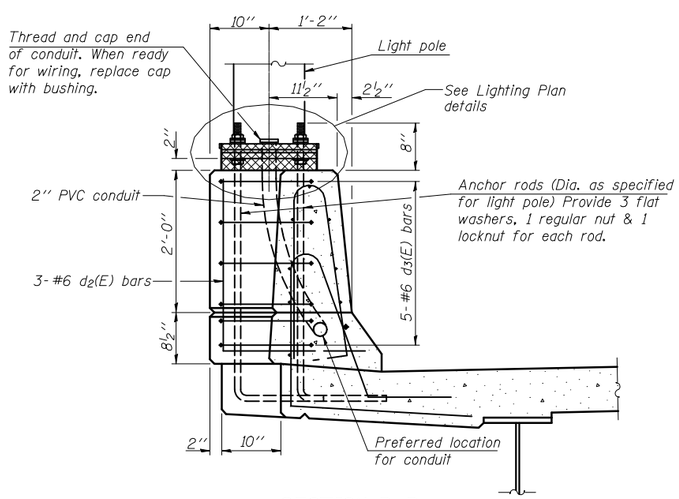
CROSS SECTION

(Looking West)



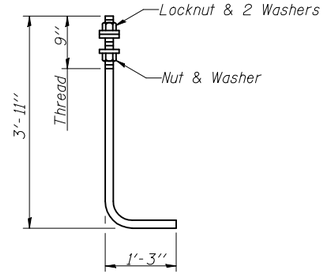
PLAN

Notes:
Cost of anchor rods is included with Concrete Superstructure.
Conduit is paid for as Conduit Embedded in Structure, 2"ϕ PVC. See Lighting Plan.



SECTION B-B

(two locations)
See Lighting Plan Details for dimensions and requirements not shown.



ANCHOR ROD

Diameter as specified for light poles. (ASTM F 1554 Grade 105)

LIGHT POLE DETAIL

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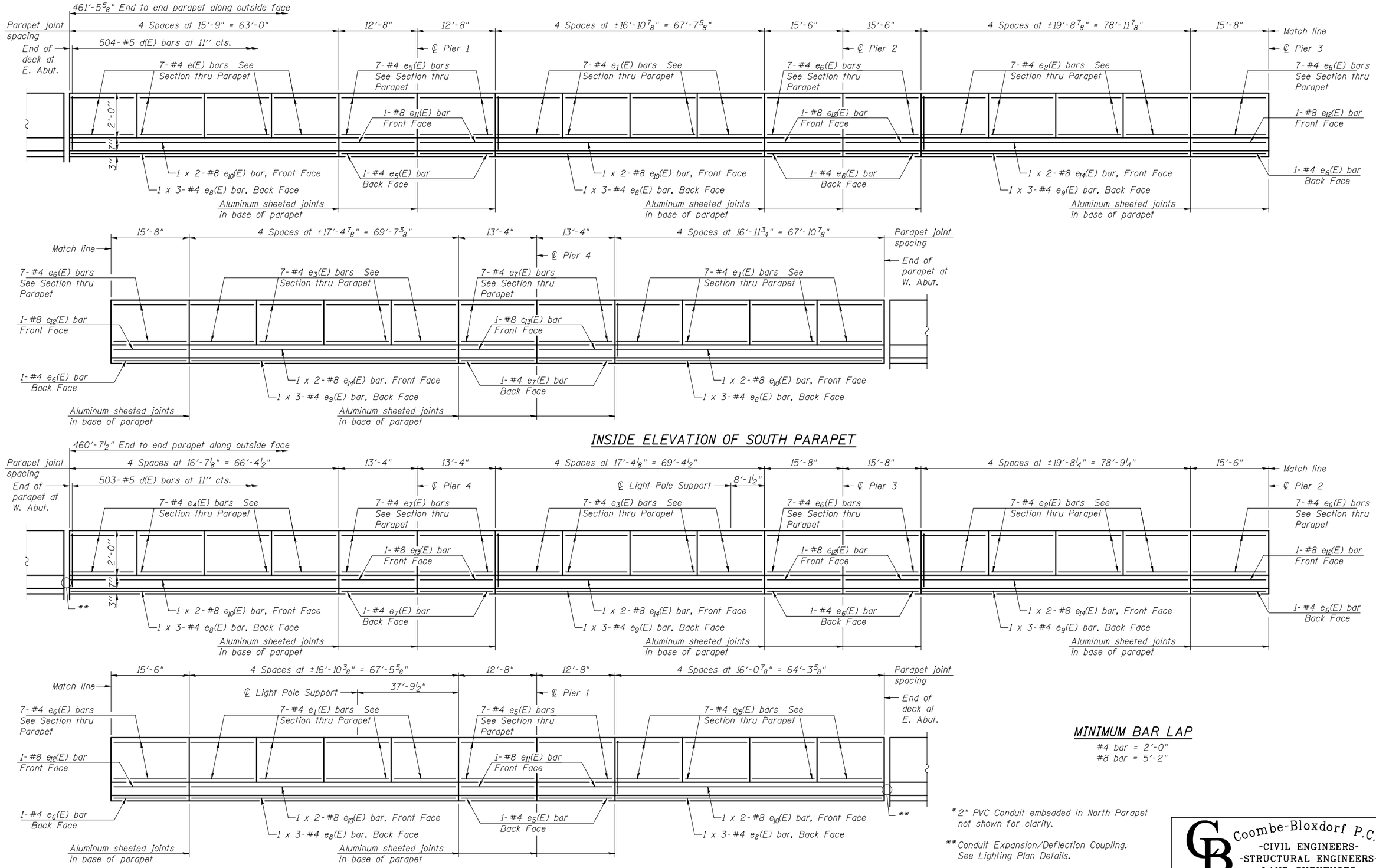
-STRUCTURAL ENGINEERS-
-LAND SURVEYORS-
Design Firm License No. 184-002703

FILE NAME = $FILEL$	USER NAME = $USER$	DESIGNED - GB	REVISED -
		CHECKED - MCB	REVISED -
	PLOT SCALE = $SCALE$	DRAWN - MML	REVISED -
CB PROJECT NO. 08024-2	PLOT DATE = $DATE$	CHECKED - MCB	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS
STRUCTURE NO. 039-0075 (EB)
SHEET NO. 15 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	74
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			



MINIMUM BAR LAP

#4 bar = 2'-0"
#8 bar = 5'-2"

* 2" PVC Conduit embedded in North Parapet not shown for clarity.

** Conduit Expansion/Deflection Coupling. See Lighting Plan Details.

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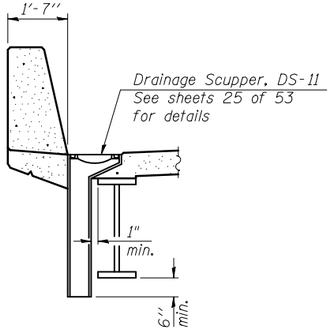
-STRUCTURAL ENGINEERS-
-LAND SURVEYORS-
Design Firm License No. 184-002703

FILE NAME = $FILE$	USER NAME = $USER$	DESIGNED - GB	REVISED -
		CHECKED - MCB	REVISED -
	PLOT SCALE = $SCALE$	DRAWN - MML	REVISED -
CB PROJECT NO. 08024-2	PLOT DATE = $DATE$	CHECKED - MCB	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

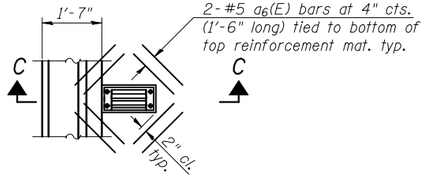
SUPERSTRUCTURE DETAILS
STRUCTURE NO. 039-0075 (EB)
SHEET NO. 16 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	75
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		



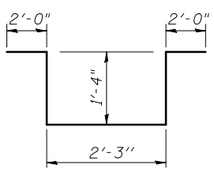
SECTION C-C

(At SE and SW Corners)

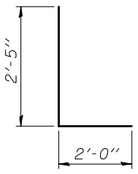


PLAN AT DRAINAGE SCUPPER

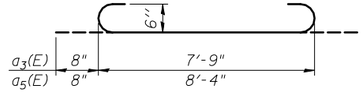
Note:
Cut longitudinal reinforcement to clear drainage scuppers.



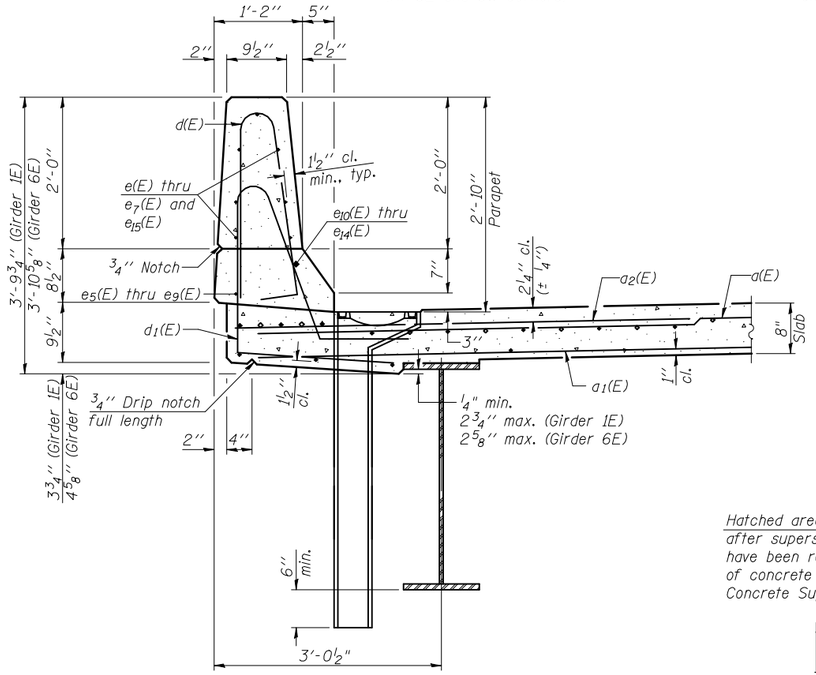
BAR d_3(E)



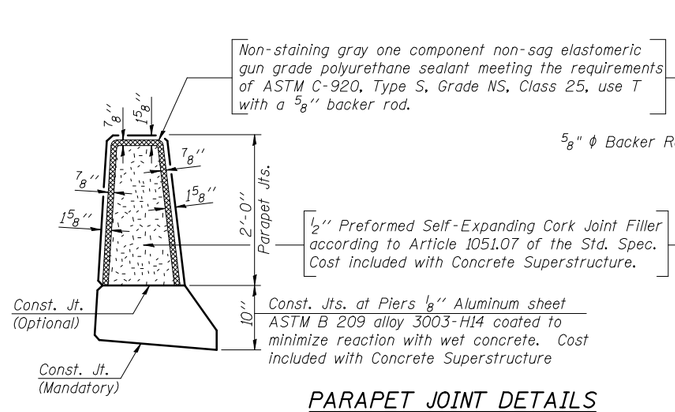
BAR d_2(E)



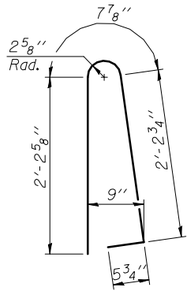
a_3(E) & a_5(E) BAR



SECTION THRU PARAPET



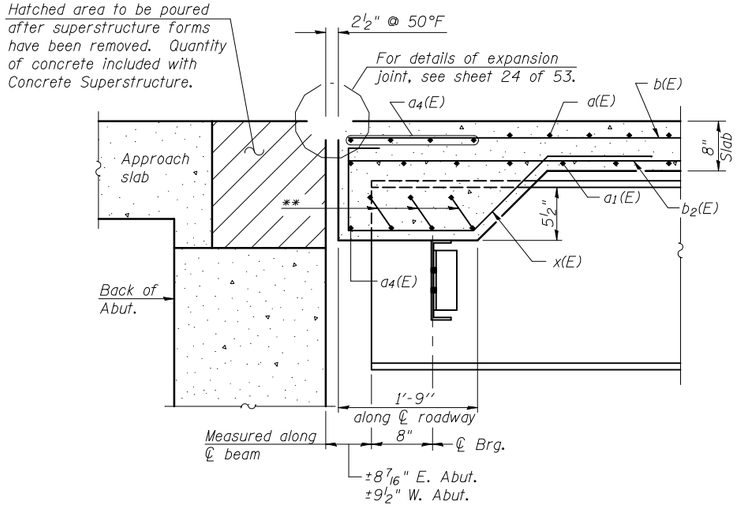
PARAPET JOINT DETAILS



BAR d(E)

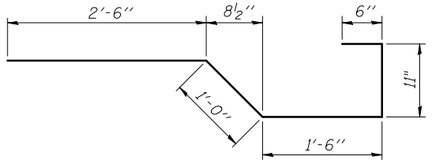
SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d(E)	1012	#5	42'-6"	
a_1(E)	620	#5	41'-10"	
a_2(E)	2024	#6	6'-6"	
a_3(E)	15	#6	9'-1"	
a_4(E)	20	#6	27'-3"	
a_5(E)	15	#6	9'-8"	
a_6(E)	16	#5	1'-6"	
b(E)	828	#5	28'-1"	
b_1(E)	129	#6	19'-7"	
b_2(E)	874	#5	26'-9"	
b_3(E)	258	#6	22'-9"	
b_4(E)	129	#6	20'-8"	
d(E)	1007	#5	5'-7"	
d_1(E)	1007	#5	7'-7"	
d_2(E)	6	#6	4'-5"	
d_3(E)	10	#6	8'-11"	
e(E)	28	#4	15'-5"	
e_1(E)	84	#4	16'-6"	
e_2(E)	56	#4	19'-5"	
e_3(E)	56	#4	17'-0"	
e_4(E)	28	#4	16'-3"	
e_5(E)	32	#4	12'-4"	
e_6(E)	64	#4	15'-2"	
e_7(E)	32	#4	13'-0"	
e_8(E)	18	#4	23'-10"	
e_9(E)	12	#4	27'-7"	
e_{10}(E)	12	#8	36'-3"	
e_{11}(E)	4	#8	12'-4"	
e_{12}(E)	8	#8	15'-2"	
e_{13}(E)	4	#8	13'-0"	
e_{14}(E)	8	#8	41'-11"	
e_{15}(E)	28	#4	15'-8"	
x(E)	80	#5	6'-5"	
Reinforcement Bars, Epoxy Coated		Pound	180,250	
Concrete Superstructure		Cu. Yds.	632.9	

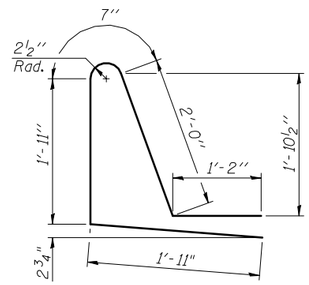


SECTION A-A

** a_3(E) or a_5(E). Tilt hook to miss beam flange.



BAR x(E)



BAR d_1(E)

S-D

7-1-10

FILE NAME = $FILE$	USER NAME = $USER$	DESIGNED - GB	REVISED -
		CHECKED - MCB	REVISED -
	PLOT SCALE = $SCALE$	DRAWN - MML	REVISED -
CB PROJECT NO. 08024-2	PLOT DATE = $DATE$	CHECKED - MCB	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS
STRUCTURE NO. 039-0075 (EB)

SHEET NO. 17 OF 53 SHEETS

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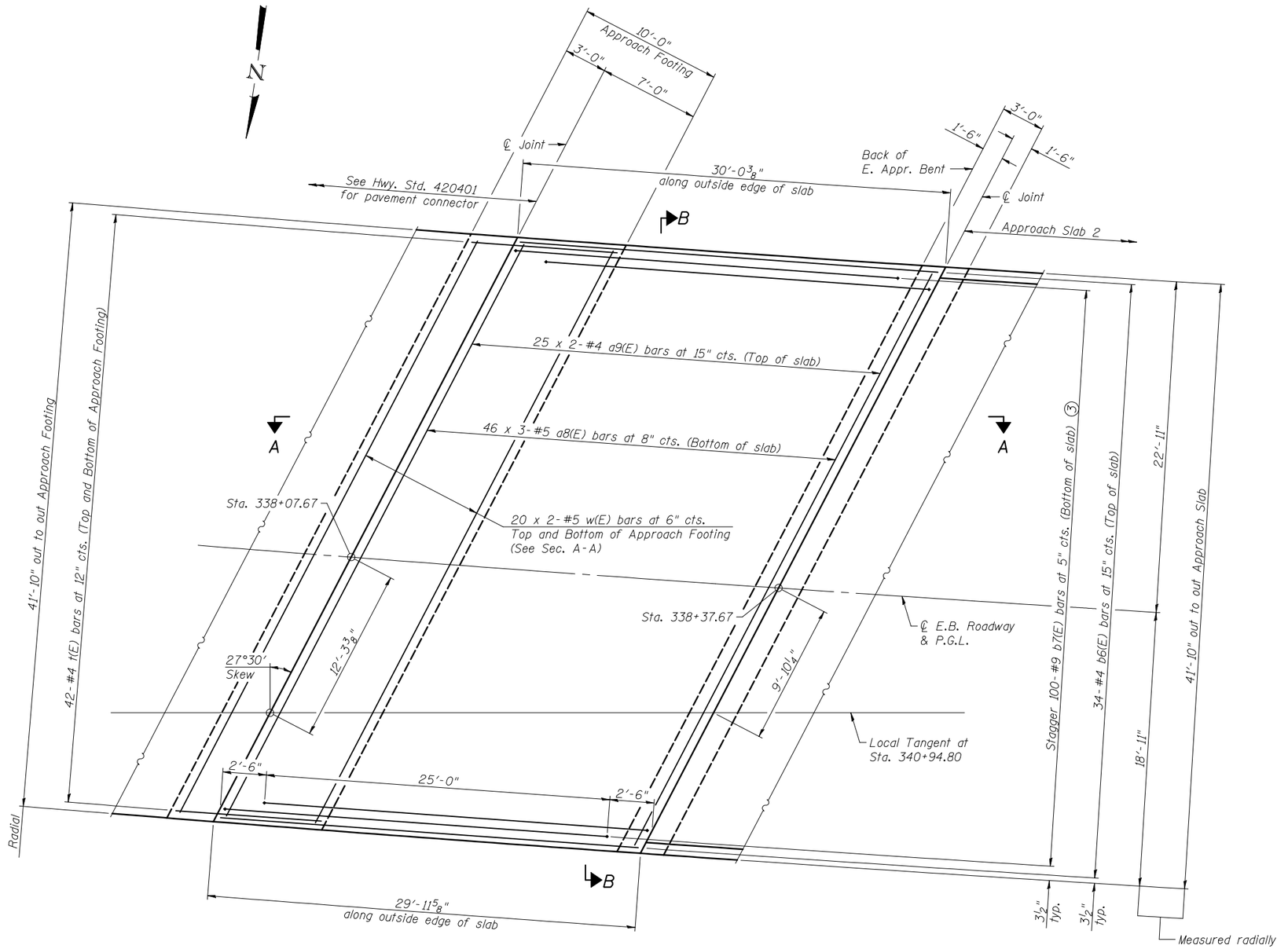
-STRUCTURAL ENGINEERS-
-LAND SURVEYORS-
Design Firm License No. 184-002703

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	76
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

Notes:
1. For Sections A-A and B-B, see sheet 20 of 53.
2. a9(E) and a8(E) bar spacings measured along ℄ Roadway.
3. Tilt #9 b7(E) bars as required to maintain clearance.



PLAN

MIN. BAR LAP

#4 bar = 2'-4"
#5 bar = 2'-11"

ILLINOIS
Eastport Business Center 1
100 Lanter Court, Suite 1
Collinsville, IL 62234
tel 618.345.2220
fax 618.345.7235

MISSOURI
Laclede Gas Building
720 Olive, Suite 1600
St. Louis, MO 63101
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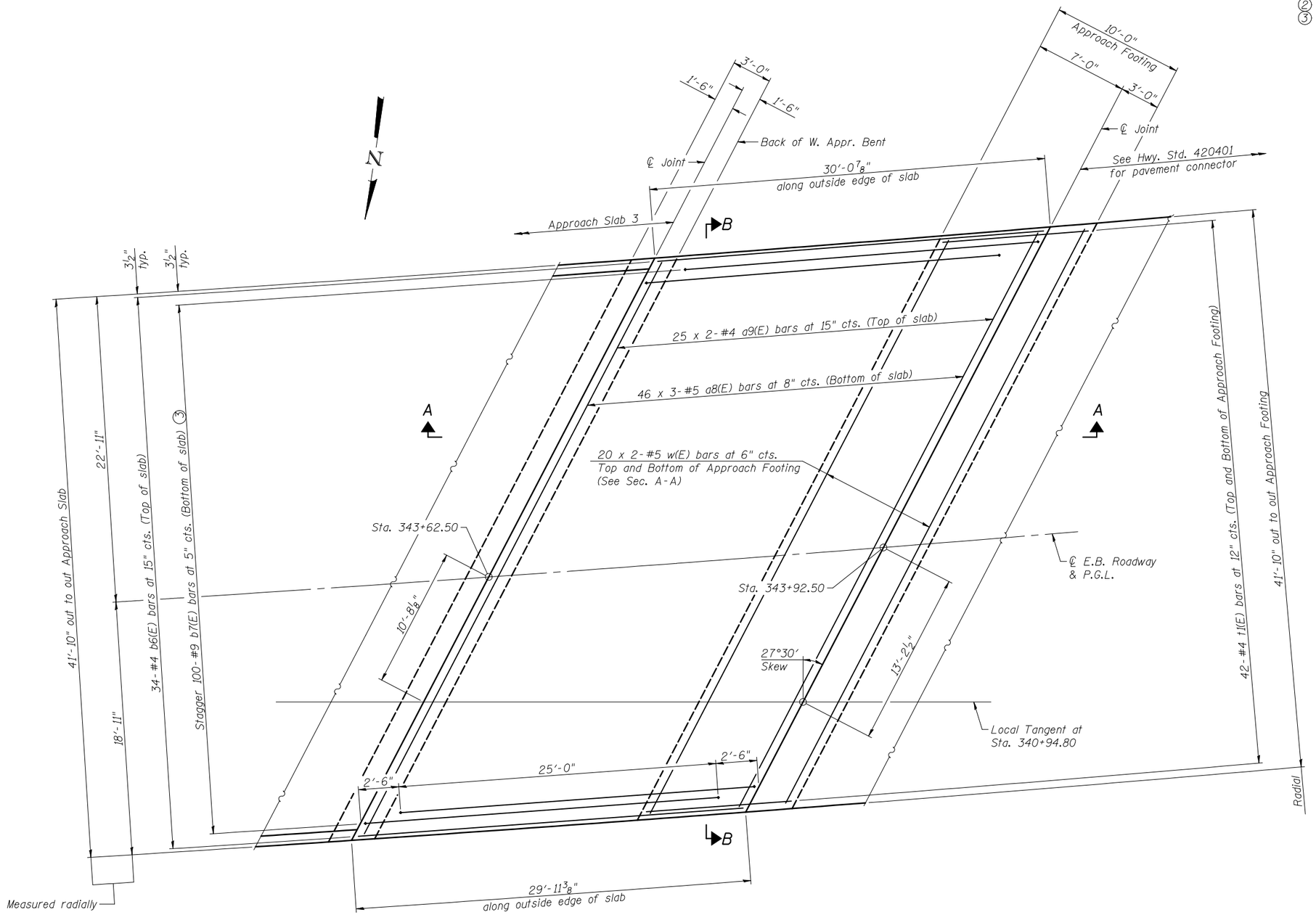
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB 1 DETAILS
STRUCTURE NO. 039-0075 (E.B.)

SHEET NO. 18 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	77
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

Notes:
1. For Sections A-A and B-B, see sheet 20 of 53.
2. a9(E) and a8(E) bar spacings measured along ℄ Roadway.
3. Tilt #9 b7(E) bars as required to maintain clearance.



PLAN

MIN. BAR LAP

#4 bar = 2'-4"
#5 bar = 2'-11"

BATES ASSOCIATES Engineering + Architecture	USER NAME =	DESIGNED - MAG	REVISED -
ILLINOIS: Edwardsville Business Center 1, 100 Lanter Court, Suite 1, Collinsville, IL 62234, tel 618.345.2200, fax 618.345.7235		CHECKED - JAD	REVISED -
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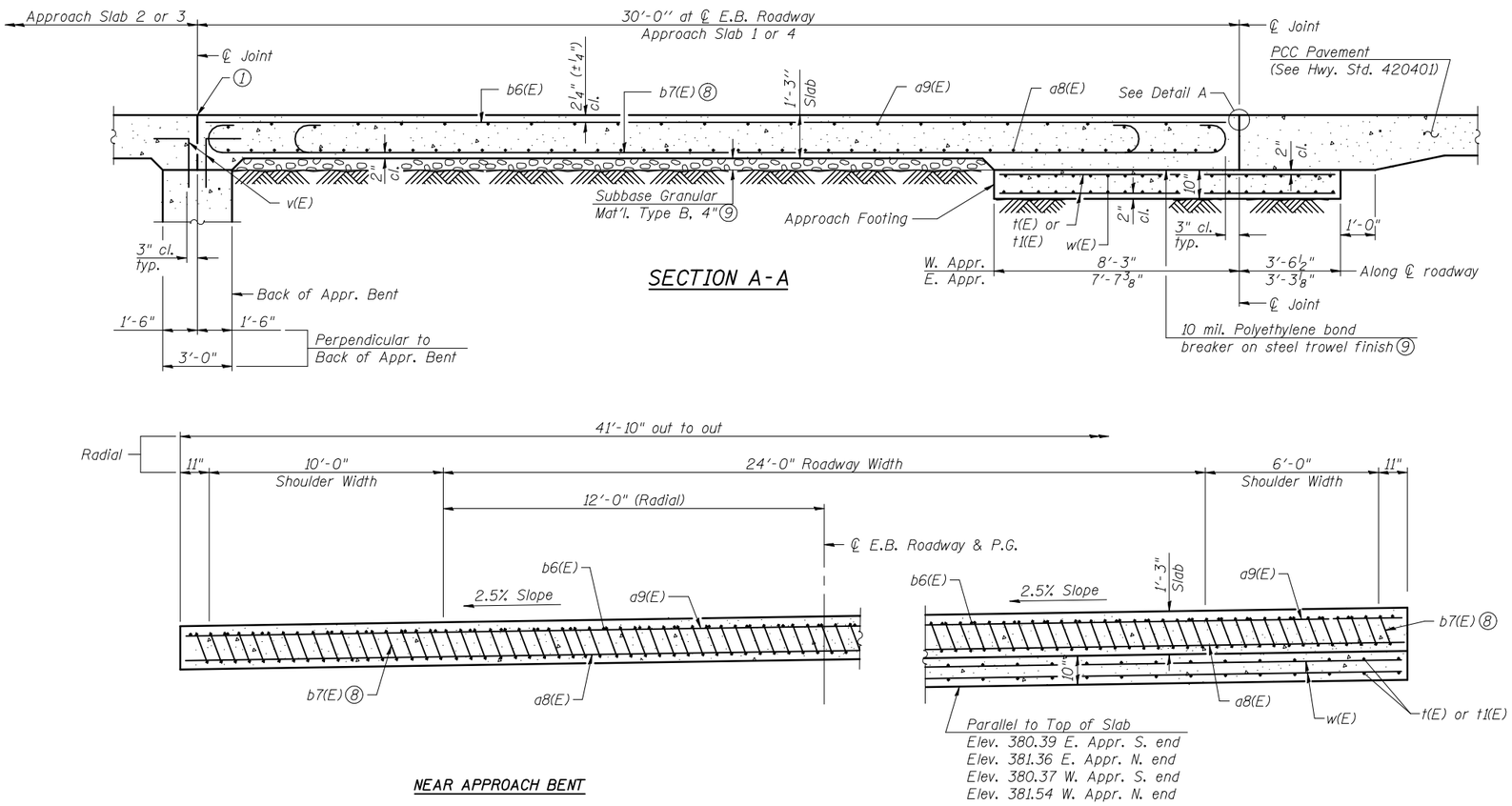
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB 4 DETAILS
STRUCTURE NO. 039-0075 (E.B.)
SHEET NO. 19 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	78
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		



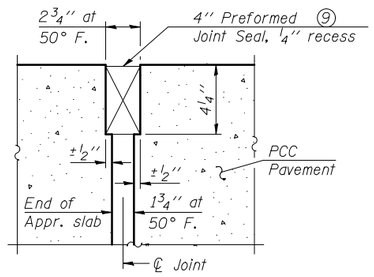
SECTION A-A

NEAR APPROACH BENT

AT APPROACH FOOTING

SECTION B-B

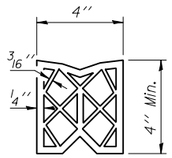
(See Plan for dimensions not shown)
(Looking West)



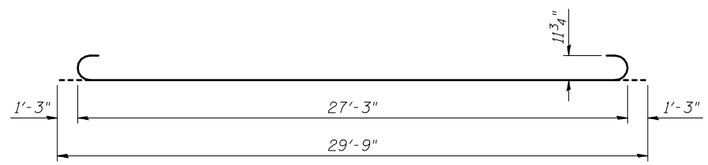
RIGID PAVEMENT

DETAIL A

Note:
Minimum dimensions shown, actual dimensions per manufacturer's recommendation.



PREFORMED JOINT SEAL



BAR b7(E)

Notes:
① 1/4" x 3/4" formed joint with concrete joint sealer without the backer rod (full width). Cost included with Concrete Superstructure.
② Approach slab shall be paid for as Concrete Superstructure.
③ Approach footing concrete shall be paid for as Concrete Structures.
④ Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
⑤ For v(E) bar details, see sheets 31 and 32 of 53.
⑥ The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
⑦ Cost of excavation for approach footing included with Concrete Structures.
⑧ Tilt #9 b7(E) bars as required to maintain clearance.
⑨ Cost included with Concrete Superstructure.

TWO APPROACHES
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a8(E)	276	#5	18'-4"	———
a9(E)	100	#4	25'-8"	———
b6(E)	68	#4	29'-8"	———
b7(E)	200	#9	29'-9"	⊂——⊃
t(E)	84	#4	10'-5"	———
t1(E)	84	#4	11'-5"	———
w(E)	160	#5	26'-0"	———
Concrete Superstructure			Cu. Yd.	117.1
Concrete Structures			Cu. Yd.	29.2
See Note A Reinforcement Bars, Epoxy Coated			Pound	34,130

Note A: 28,570 lbs. (Superstr.)
5,560 lbs. (Substr.)

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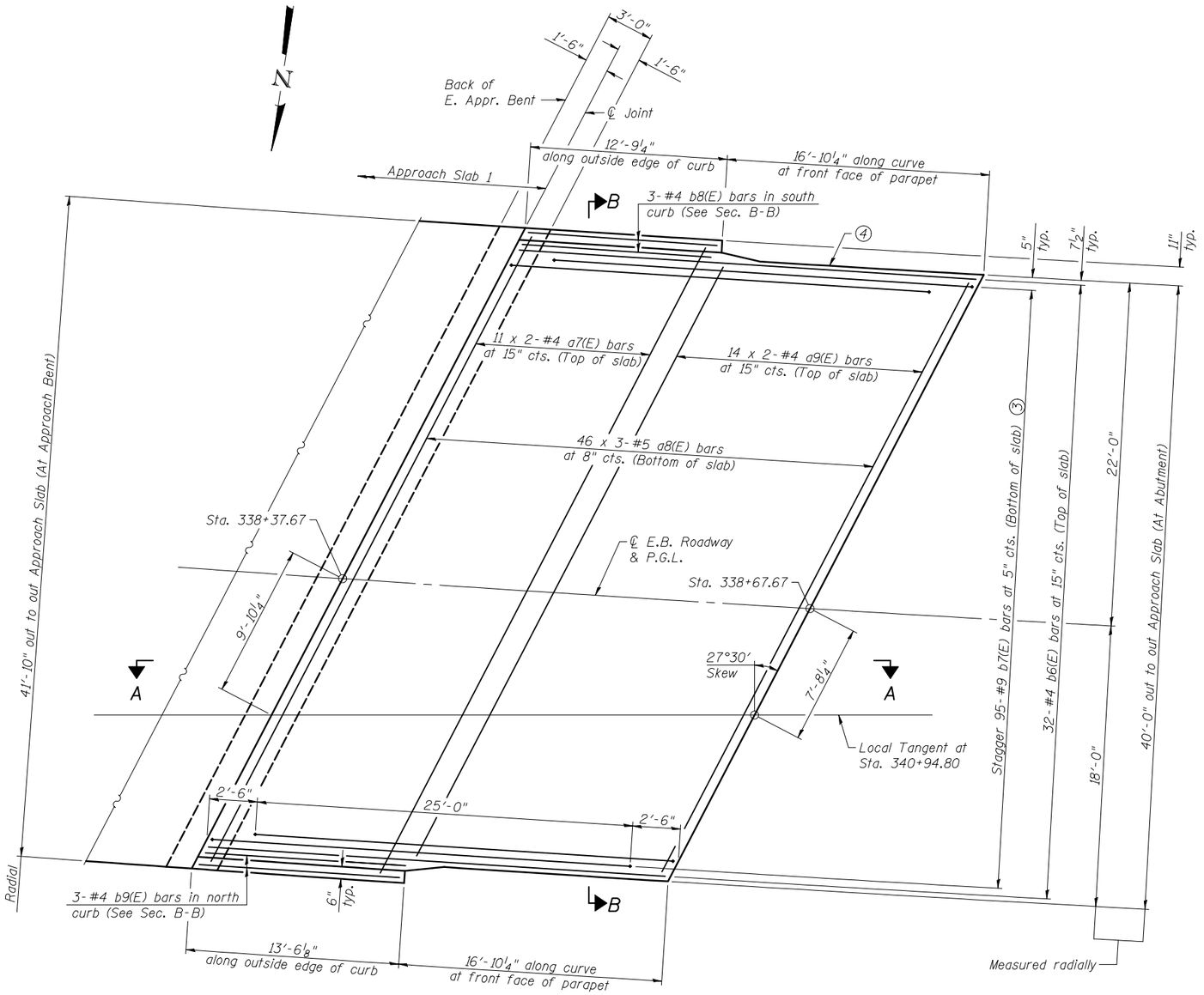
PLOT SCALE =	DRAWN - MAG	REVISED -	
PLOT DATE =	CHECKED - JAD	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB 1 AND 4 DETAILS
STRUCTURE NO. 039-0075 (E.B.)
SHEET NO. 20 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	79
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

Notes:
1. For Sections A-A and B-B, see sheet 23 of 53.
2. a7(E), a8(E) and a9(E) bar spacings measured along ℄ Roadway.
3. Tilt #9 b7(E) bars as required to maintain clearance.
4. Flexible foam expansion joint filler according to Article 1051.09 of the Std. Specifications; full depth of slab, full length of parapet. Typical each parapet. Cost included with Concrete Superstructure.



PLAN

MIN. BAR LAP

#4 bar = 2'-4"
#5 bar = 2'-11"

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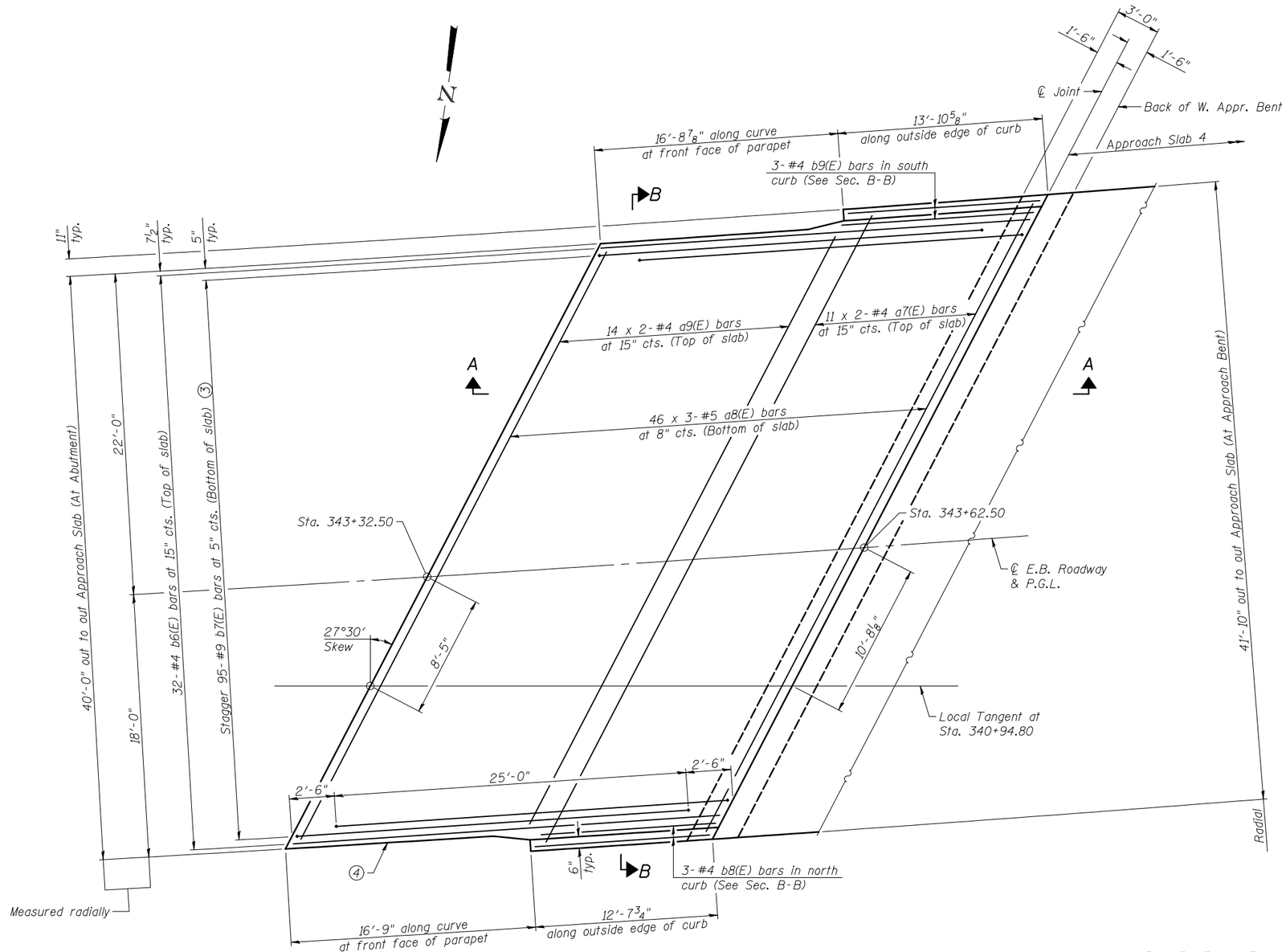
PLOT SCALE =	DRAWN - MAG	REVISED -
PLOT DATE =	CHECKED - JAD	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB 2 DETAILS
STRUCTURE NO. 039-0075 (E.B.)
SHEET NO. 21 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	80
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		

Notes:
1. For Sections A-A and B-B, see sheet 23 of 53.
2. a7(E), a8(E) and a9(E) bar spacings measured along ℄ Roadway.
3. Tilt #9 b7(E) bars as required to maintain clearance.
4. Flexible foam expansion joint filler according to Article 1051.09 of the Std. Specifications; full depth of slab, full length of parapet. Typical each parapet. Cost included with Concrete Superstructure.



PLAN

MIN. BAR LAP

#4 bar = 2'-4"
#5 bar = 2'-11"

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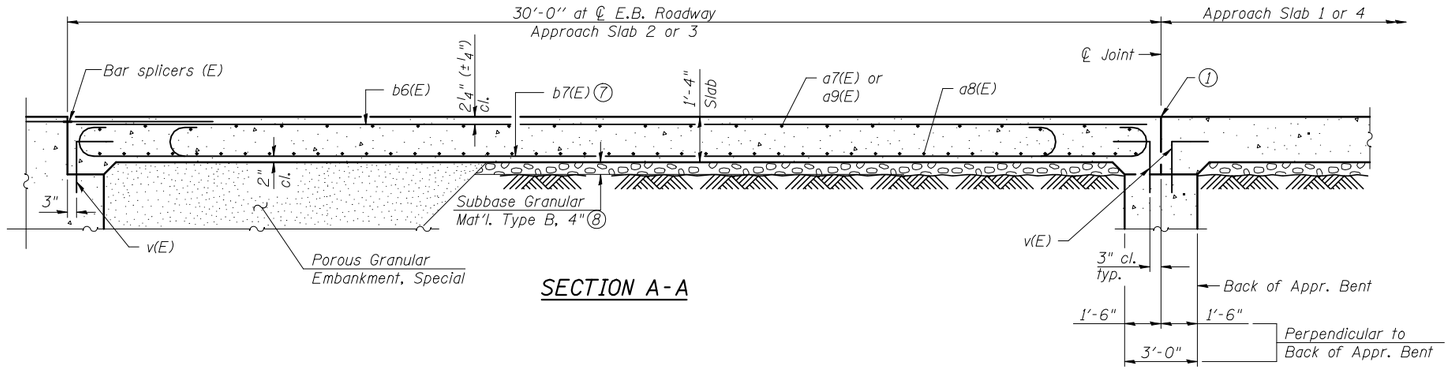
	CHECKED - JAD	REVISED -
PLOT SCALE =	DRAWN - MAG	REVISED -
PLOT DATE =	CHECKED - JAD	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

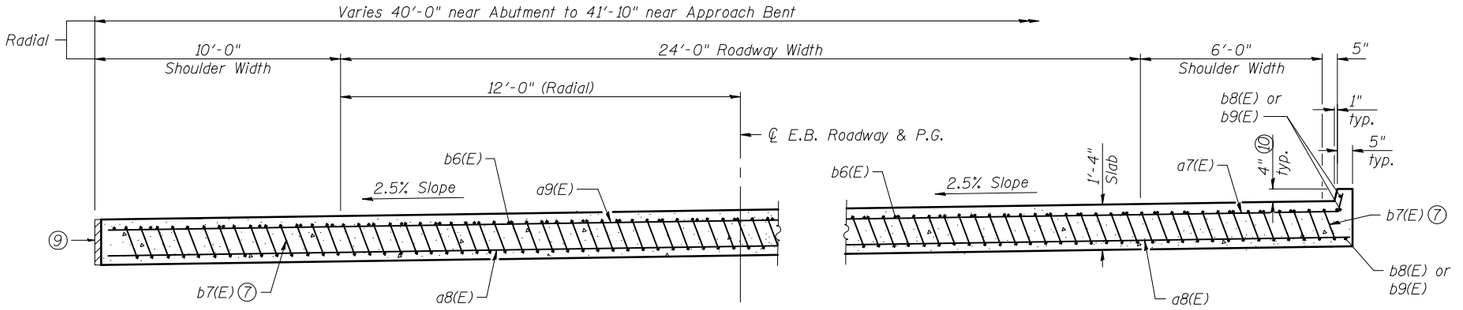
BRIDGE APPROACH SLAB 3 DETAILS
STRUCTURE NO. 039-0075 (E.B.)
SHEET NO. 22 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	81
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		

Notes:
1. 1/4" x 3/4" formed joint with concrete joint sealer without the backer rod (full width). Cost included with Concrete Superstructure.
2. Approach slab shall be paid for as Concrete Superstructure.
3. Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
4. For v(E) bar details, see sheets 31 thru 38 of 53.
5. For bar splicer details, see sheet 47 of 53.
6. For Porous Granular Embankment, Special and drainage treatment details, see sheet 2 of 53.
7. Tilt #9 b7(E) bars as required to maintain clearance.
8. Cost included with Concrete Superstructure.
9. Flexible foam expansion joint filler. Cost included with Concrete Superstructure. See Plan on sheets 21 and 22 of 53.
10. Taper curb height to 2" in 5'-0" at E. End Appr. Slab 2 and W. End Appr. Slab 3.



SECTION A-A



NEAR ABUTMENT

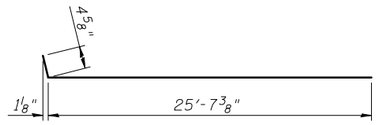
NEAR APPROACH BENT

SECTION B-B

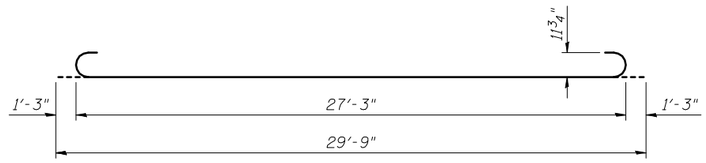
(See Plan for dimensions not shown)
(Looking West)

TWO APPROACHES BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a7(E)	44	#4	26'-0"	
a8(E)	276	#5	18'-4"	
a9(E)	56	#4	25'-8"	
b6(E)	64	#4	29'-8"	
b7(E)	190	#9	29'-9"	
b8(E)	6	#4	12'-3"	
b9(E)	6	#4	13'-2"	
Concrete Superstructure			Cu. Yd.	121.6
Reinforcement Bars, Epoxy Coated			Pound	27,590



BAR a7(E)



BAR b7(E)

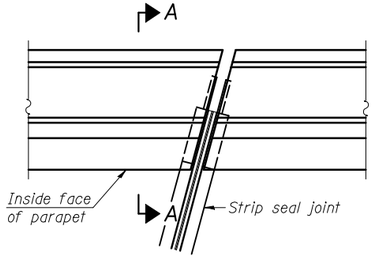
BATES ASSOCIATES
Engineering + Architecture
ILLINOIS
Eastport Business Center 1
100 Lenter Court, Suite 1
Collinsville, IL 62234
tel 618.345.2220
fax 618.345.7233
MISSOURI
Laclede Gas Building
720 Olive, Suite 1950
St. Louis, MO 63101
tel 314.588.8581
fax 314.588.9805
www.batesassociates.com

USER NAME =	DESIGNED - MAG	REVISED -	
	CHECKED - JAD	REVISED -	
PLOT SCALE =	DRAWN - MAG	REVISED -	
PLOT DATE =	CHECKED - JAD	REVISED -	

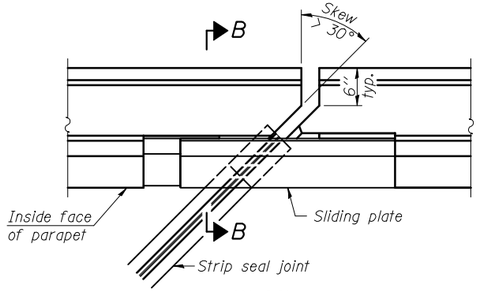
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB 2 AND 3 DETAILS
STRUCTURE NO. 039-0075 (E.B.)
SHEET NO. 23 OF 53 SHEETS

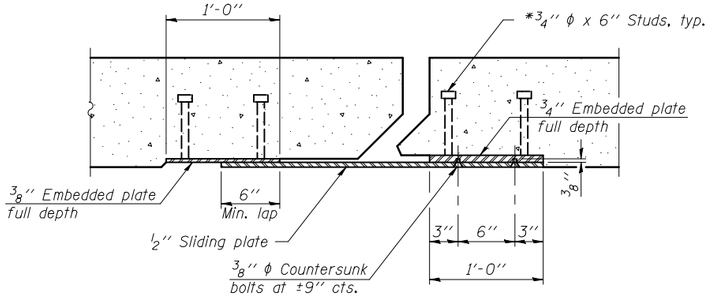
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	82
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			



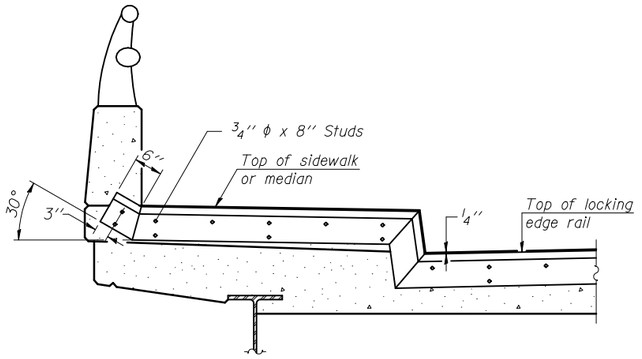
PLAN
(For skews ≤ 30°)



PLAN
(For skews > 30°)
Showing point block

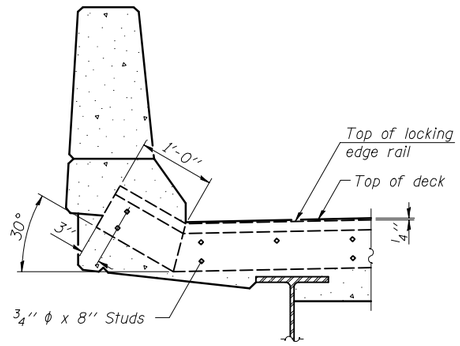


SECTION C-C

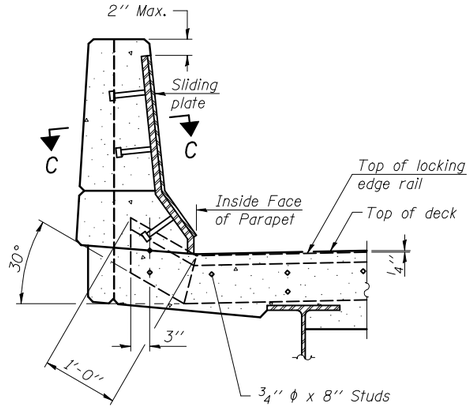


TYPICAL END TREATMENT AT SIDEWALK OR MEDIAN

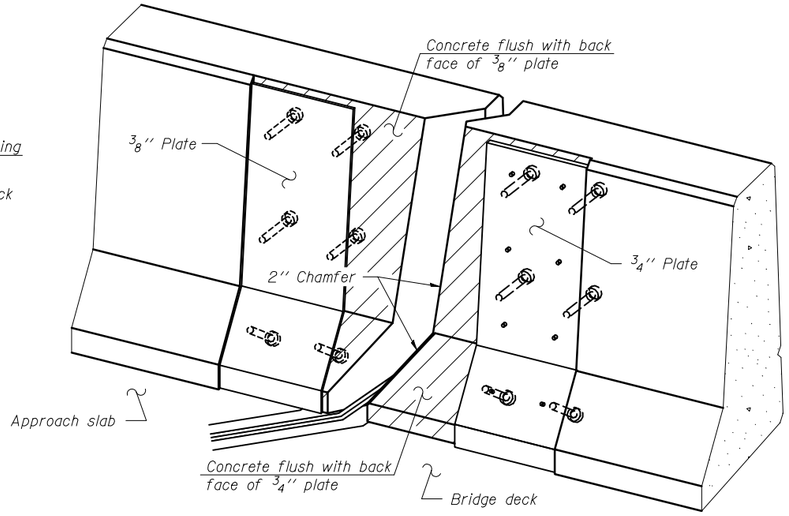
Shorter plates with a single row of studs at 12" cts. may be necessary on medians which are shallower than 9". See manufacturer's recommendation.



SECTION A-A



SECTION B-B



TRIMETRIC VIEW
(Showing back plates only)

Notes:

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

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

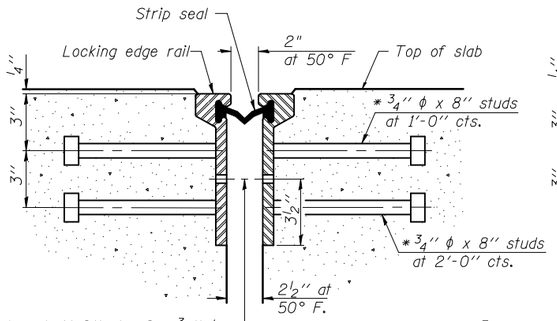
The manufacturer's recommended installation methods shall be followed.

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

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

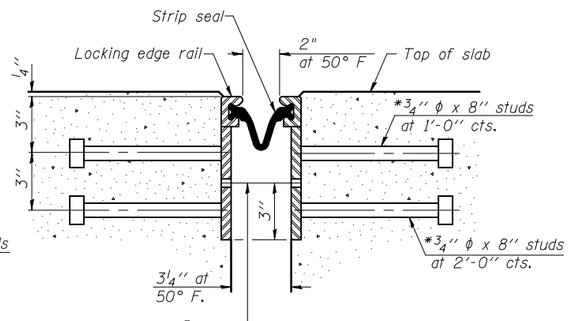
Maximum space between rail segments at stage lines shall be 3/16", sealed with a suitable sealant.

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



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

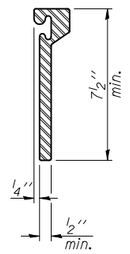
SECTION THRU ROLLED RAIL JOINT



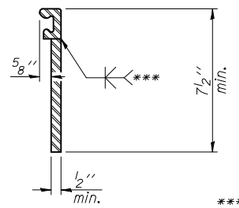
7/16" ϕ holes at 4'-0" cts. for 3/8" ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

SECTION THRU WELDED RAIL JOINT

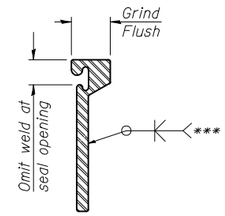
* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.



ROLLED EXTRUDED RAIL



WELDED RAIL



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

LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue.

Rolled rail shown, welded rail similar.

LOCKING EDGE RAILS

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	95

EJ-SSJ 7-1-10

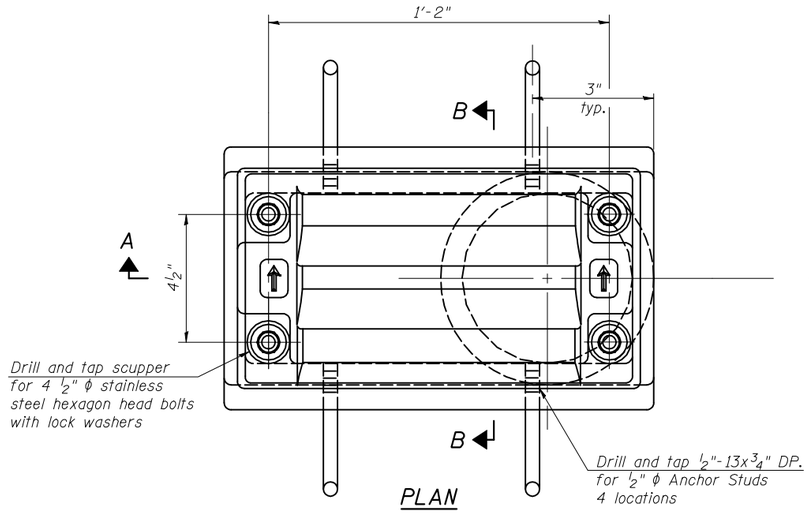
Coombe-Bloxdorf P.C.
-CIVIL ENGINEERS-
-STRUCTURAL ENGINEERS-
-LAND SURVEYORS-
Design Firm License No. 184-002703

FILE NAME = $FILE$	USER NAME = $USER$	DESIGNED - GB	REVISED -
		CHECKED - MCB	REVISED -
	PLOT SCALE = $SCALE$	DRAWN - MML	REVISED -
CB PROJECT NO. 08024-2	PLOT DATE = $DATE$	CHECKED - MCB	REVISED -

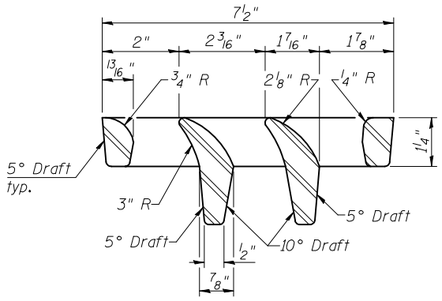
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL
STRUCTURE NO. 039-0075 (EB)
SHEET NO. 24 OF 53 SHEETS

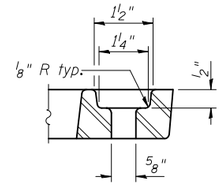
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	83
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		



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.

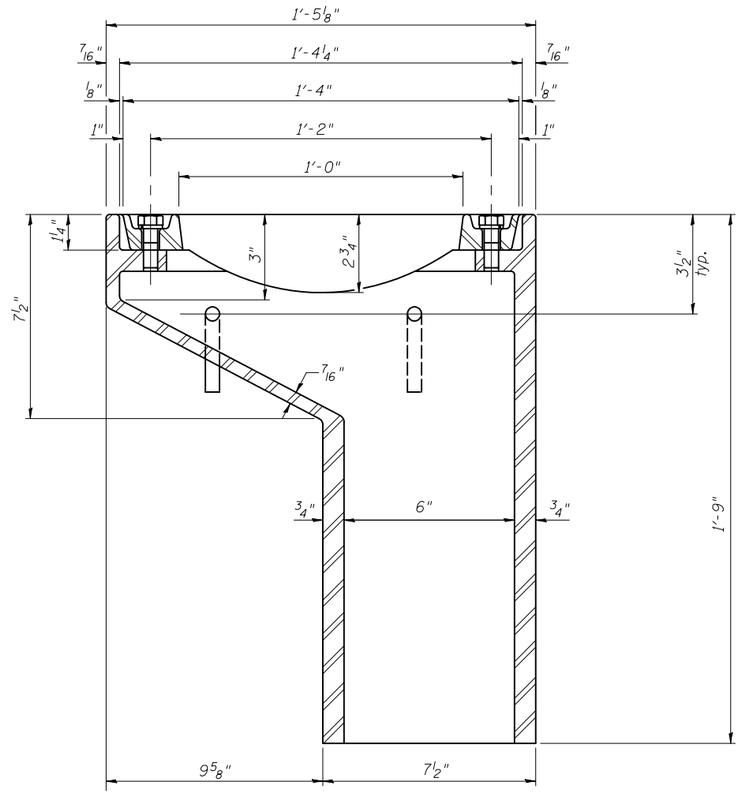
As an alternate, bolts, anchor studs, washers and nuts may be stainless steel according to Article 1006.29(d) of the Standard Specifications.

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.

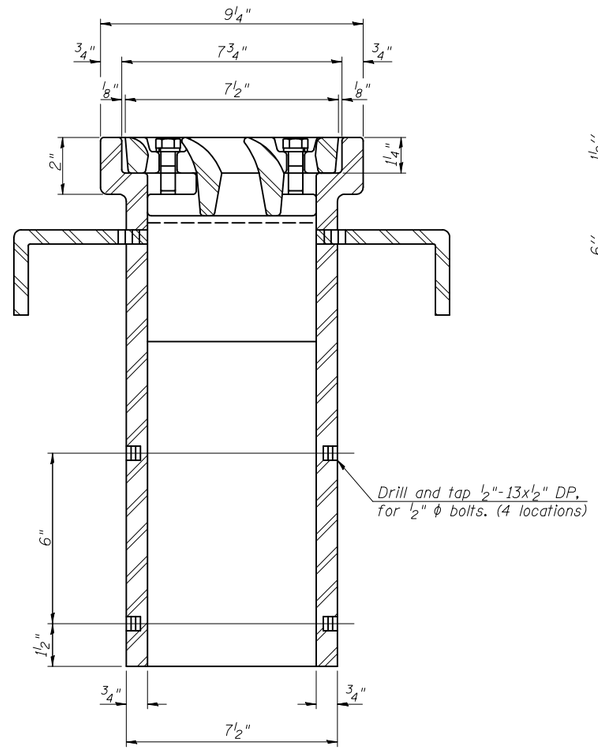
Cost of the Grate, Frame, Downspout, Anchor Studs, Bolts, Washers and Nuts including complete installation of the scupper shall be paid for at the contract unit price each for Drainage Scuppers, DS-11.

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.

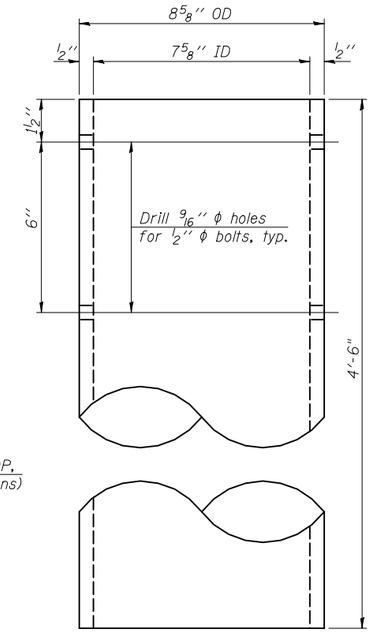


SECTION A-A

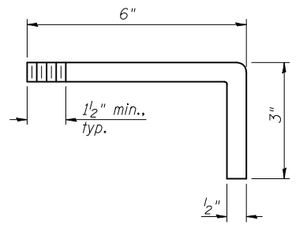
See sheets 17 of 53 for scupper location relative to parapet.



SECTION B-B



DOWNSPOUT



ANCHOR STUD DETAIL

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage Scuppers, DS-11	Each	2

DS-11

7-1-10

FILE NAME = $FILE1$	USER NAME = $USER$	DESIGNED - GB	REVISED -
		CHECKED - MCB	REVISED -
	PLOT SCALE = $SCALE$	DRAWN - MML	REVISED -
CB PROJECT NO. 08024-2	PLOT DATE = $DATE$	CHECKED - MCB	REVISED -

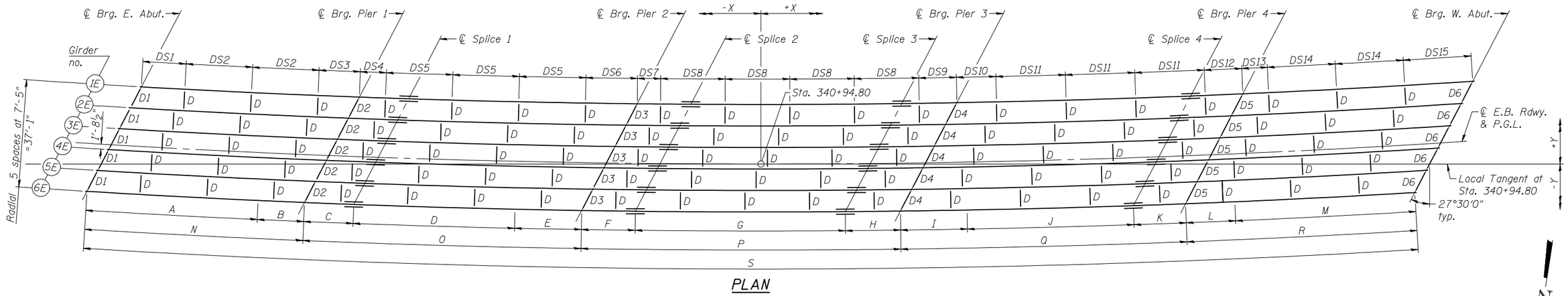
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRAINAGE SCUPPER, DS-11
STRUCTURE NO. 039-0075 (EB)

SHEET NO. 25 OF 53 SHEETS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	84
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			



ELEVATION

DIAPHRAGM SPACING

Girder	Location	DS1	DS2	DS3	DS4	DS5	DS6	DS7	DS8	DS9	DS10	DS11	DS12	DS13	DS14	DS15
1E	North Face	15'-0"	23'-0"	14'-3"	9'-0"	23'-0"	17'-9 15/16"	8'-0"	22'-3 9/16"	13'-0"	13'-7 3/4"	24'-0"	13'-0"	8'-10 9/16"	23'-6"	23'-6"
2E	South Face	18'-4 7/16"	23'-0 9/16"	10'-9 1/16"	12'-6 7/16"	23'-0 9/16"	14'-1 5/16"	11'-9 3/16"	22'-4 3/8"	8'-11 15/16"	17'-8 7/16"	24'-0 9/16"	8'-8 7/8"	13'-2 1/4"	23'-6 9/16"	19'-0 9/16"
2E	North Face	15'-0"	23'-0"	14'-2 5/8"	9'-0"	23'-0"	17'-9 7/16"	8'-0"	22'-3 3/8"	13'-0"	13'-7"	24'-0"	13'-0"	8'-9 15/16"	23'-6"	23'-6"
3E	South Face	18'-4 5/16"	23'-0 9/16"	10'-8 13/16"	12'-6 5/16"	23'-0 9/16"	14'-0 7/8"	11'-9 1/8"	22'-3 15/16"	9'-0 1/16"	17'-7 5/8"	24'-0 9/16"	8'-9"	13'-1 7/16"	23'-6 9/16"	19'-0 11/16"
3E	North Face	15'-0"	23'-0"	14'-2 1/4"	9'-0"	23'-0"	17'-8 7/8"	8'-0"	22'-3 1/4"	13'-0"	13'-6 5/16"	24'-0"	13'-0"	8'-9 1/4"	23'-6"	23'-6"
4E	South Face	18'-4 1/4"	23'-0 9/16"	10'-8 1/2"	12'-6 3/16"	23'-0 9/16"	14'-0 7/16"	11'-9"	22'-3 3/4"	9'-0 3/16"	17'-6 3/4"	24'-0 9/16"	8'-9 1/8"	13'-0 5/8"	23'-6 9/16"	19'-0 7/8"
4E	North Face	15'-0"	23'-0"	14'-1 7/8"	9'-0"	23'-0"	17'-8 5/16"	8'-0"	22'-3 1/16"	13'-0"	13'-5 9/16"	24'-0"	13'-0"	8'-8 5/8"	23'-6"	23'-6"
5E	South Face	18'-4 1/8"	23'-0 9/16"	10'-8 1/4"	12'-6 1/8"	23'-0 9/16"	14'-0"	11'-8 15/16"	22'-3 5/16"	9'-0 5/16"	17'-5 7/8"	24'-0 9/16"	8'-9 5/16"	12'-11 1/8"	23'-6 9/16"	19'-1"
5E	North Face	15'-0"	23'-0"	14'-1 1/2"	9'-0"	23'-0"	17'-7 13/16"	8'-0"	22'-2 7/8"	13'-0"	13'-4 7/8"	24'-0"	13'-0"	8'-8"	23'-6"	23'-6"
6E	South Face	18'-4"	23'-0 9/16"	10'-8"	12'-6"	23'-0 9/16"	13'-11 9/16"	11'-8 13/16"	22'-3 3/8"	9'-0 1/2"	17'-5 1/16"	24'-0 9/16"	8'-9 3/8"	12'-11 1/16"	23'-6 9/16"	19'-1 3/16"

TOP OF WEB ELEVATIONS*

	Girder 1E	Girder 2E	Girder 3E	Girder 4E	Girder 5E	Girder 6E
℄ Brg. E. Abut.	382.04	382.21	382.38	382.55	382.72	382.89
℄ Brg. Pier 1	382.35	382.51	382.68	382.85	383.02	383.19
℄ Splice 1	382.39	382.55	382.72	382.89	383.06	383.23
℄ Brg. Pier 2	382.77	382.94	383.11	383.28	383.45	383.62
℄ Splice 2	382.82	382.98	383.15	383.33	383.50	383.67
℄ Splice 3	382.84	383.05	383.24	383.43	383.63	383.82
℄ Brg. Pier 3	382.80	383.01	383.21	383.40	383.60	383.80
℄ Splice 4	382.41	382.61	382.82	383.02	383.23	383.44
℄ Brg. Pier 4	382.36	382.56	382.77	382.98	383.18	383.39
℄ Brg. W. Abut.	382.04	382.24	382.45	382.66	382.87	383.07

*For fabrication only.

LAYOUT DIMENSIONS

Girder	℄ Brg. E. Abut.		℄ Brg. Pier 1		℄ Splice 1		℄ Brg. Pier 2		℄ Splice 2		℄ Splice 3		℄ Brg. Pier 3		℄ Splice 4		℄ Brg. Pier 4		℄ Brg. W. Abut.	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
1E	-213'-7 3/16"	26'-7 3/8"	-138'-5 3/16"	23'-1 1/16"	-121'-5 1/4"	22'-6 1/16"	-42'-7 9/16"	20'-9 3/8"	-24'-1 9/16"	20'-7 7/16"	48'-6 3/4"	20'-10 1/4"	67'-6 11/16"	21'-1 13/16"	148'-2 1/16"	23'-5 9/16"	166'-1 7/8"	24'-2 9/16"	245'-5"	28'-6 11/16"
2E	-217'-4 3/16"	19'-4 13/16"	-142'-2 5/8"	15'-9 11/16"	-125'-2 3/4"	15'-2 1/2"	-46'-5 5/8"	13'-4 15/16"	-27'-11 5/8"	13'-2 3/4"	44'-8"	13'-4 11/16"	63'-7 15/16"	13'-7 15/16"	144'-2 9/16"	15'-10 5/8"	162'-2 1/16"	16'-7 7/16"	241'-4 15/16"	20'-10 3/8"
3E	-221'-1 1/4"	12'-2 1/4"	-146'-0 1/8"	8'-6 3/8"	-129'-0 1/4"	7'-10 15/16"	-50'-3 5/8"	6'-0 1/2"	-31'-9 11/16"	5'-10 1/8"	40'-9 1/4"	5'-11 1/8"	59'-9 3/16"	6'-2 3/16"	140'-3 1/8"	8'-3 3/4"	158'-3"	9'-0 5/16"	237'-4 15/16"	13'-2 3/16"
4E	-224'-10 5/16"	4'-11 3/4"	-149'-9 9/16"	1'-3 1/8"	-132'-9 11/16"	7'2"	-54'-1 5/8"	-1'-3 7/8"	-35'-7 11/16"	-1'-6 1/2"	36'-10 1/2"	-1'-6 5/16"	55'-10 1/2"	-1'-3 9/16"	136'-3 3/4"	9"	154'-3 5/8"	1'-5 1/4"	233'-4 15/16"	5'-6"
5E	-228'-7 5/16"	-2'-2 11/16"	-153'-6 15/16"	-6'-0 1/8"	-136'-7 1/8"	-6'-7 15/16"	-57'-11 5/8"	-8'-8 3/16"	-39'-5 5/8"	-8'-11 1/16"	32'-11 13/16"	-8'-11 3/4"	51'-11 13/16"	-8'-9 1/4"	132'-4 3/8"	-6'-9 3/4"	150'-4 1/4"	-6'-1 11/16"	229'-5"	-2'-2 1/8"
6E	-232'-4 5/16"	-9'-5 1/8"	-157'-4 3/8"	-13'-3 3/8"	-140'-4 1/2"	-13'-11 3/8"	-61'-9 9/16"	-16'-0 1/16"	-43'-3 5/8"	-16'-3 9/16"	29'-1 3/16"	-16'-5 3/16"	48'-1 3/16"	-16'-2 7/8"	128'-5 1/16"	-14'-4 7/16"	146'-4 7/8"	-13'-8 5/8"	225'-5 1/8"	-9'-10 3/8"

GIRDER DIMENSIONS

Girder	Radius	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1E	3760.81'	59'-3"	16'-0"	17'-0"	55'-9 15/16"	23'-0"	18'-6"	72'-8 5/16"	19'-0"	23'-0"	57'-7 3/4"	18'-0"	17'-0"	62'-4 9/16"	75'-3"	95'-9 15/16"	110'-2 5/16"	98'-7 3/4"	79'-4 9/16"	459'-3 9/16"
2E	3768.23'	59'-2 5/8"	16'-0"	17'-0"	55'-9 1/16"	23'-0"	18'-6"	72'-7 5/8"	19'-0"	23'-0"	57'-7"	18'-0"	17'-0"	62'-3 15/16"	75'-2 5/8"	95'-9 1/16"	110'-1 5/8"	98'-7"	79'-3 15/16"	459'-0 5/8"
3E	3775.65'	59'-2 1/4"	16'-0"	17'-0"	55'-8 7/8"	23'-0"	18'-6"	72'-6 15/16"	19'-0"	23'-0"	57'-6 5/16"	18'-0"	17'-0"	62'-3 1/4"	75'-2 1/4"	95'-8 7/8"	110'-0 15/16"	98'-6 5/16"	79'-3 1/4"	458'-9 5/8"
4E	3783.06'	59'-1 7/8"	16'-0"	17'-0"	55'-8 5/16"	23'-0"	18'-6"	72'-6 3/16"	19'-0"	23'-0"	57'-5 9/16"	18'-0"	17'-0"	62'-2 5/8"	75'-1 7/8"	95'-8 5/16"	110'-0 1/16"	98'-5 9/16"	79'-2 5/8"	458'-6 9/16"
5E	3790.48'	59'-1 1/2"	16'-0"	17'-0"	55'-7 13/16"	23'-0"	18'-6"	72'-5 1/2"	19'-0"	23'-0"	57'-4 7/8"	18'-0"	17'-0"	62'-2"	75'-1 1/2"	95'-7 13/16"	109'-11 1/2"	98'-4 7/8"	79'-2"	458'-3 1/16"
6E	3797.90'	59'-1 1/8"	16'-0"	17'-0"	55'-7 1/4"	23'-0"	18'-6"	72'-4 13/16"	19'-0"	23'-0"	57'-4 1/8"	18'-0"	17'-0"	62'-1 3/8"	75'-1 1/8"	95'-7 1/4"	109'-10 13/16"	98'-4 1/8"	79'-1 3/8"	458'-0 11/16"

Notes:
1. Load carrying components designated "NTR" shall conform to the Impact Testing Requirements, Zone 2.
2. All diaphragms between girders shall be installed with erection pins and bolts in accordance with the erection plan approved by the Engineer. Individual diaphragms at supports may be temporarily disconnected to install bearing anchor rods.
3. For diaphragm and splice details, Section A-A, and Detail B, see sheet 28 of 53.
4. Girder dimensions, diaphragm spacing, and shear stud spacing are taken along centerline of each individual girder.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN AND GIRDER DETAILS
STRUCTURE NO. 039-0075 (E.B.)
SHEET NO. 26 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	85
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

GIRDER MOMENT TABLE (GIRDER 6E)										
		0.4 Sp. 1	Pier 1	0.5 Sp. 2	Pier 2	0.5 Sp. 3	Pier 3	0.5 Sp. 4	Pier 4	0.6 Sp. 5
I_s	(in^4)	18,869	28,869	20,051	34,020	20,051	34,020	20,051	28,869	18,869
$I_c(n)$	(in^4)	43,984	-	47,574	-	47,574	-	47,574	-	43,984
$I_c(3n)$	(in^4)	33,078	-	35,464	-	35,464	-	35,464	-	33,078
$I_c(cr)$	(in^4)	-	-	-	-	-	-	-	-	-
S_s	(in^3)	762	1,143	840	1,334	840	1,334	840	1,143	762
$S_c(n)$	(in^3)	1,031	-	1,130	-	1,130	-	1,130	-	1,031
$S_c(3n)$	(in^3)	947	-	1,038	-	1,038	-	1,038	-	947
$S_c(cr)$	(in^3)	-	-	-	-	-	-	-	-	-
S_{xc}	(in^3)	989	1,143	1,100	1,334	1,075	1,334	1,097	1,143	984
DC1	(k/')	0.971	1.035	0.980	1.066	0.980	1.066	0.980	1.035	0.971
M_{DC1}	('k)	324.2	680.0	229.9	948.7	433.4	963.6	246.4	743.9	362.3
② DC2	(k/')	0.450	0.450	0.450	0.450	0.450	0.450	0.450	0.450	0.450
M_{DC2}	('k)	139.1	302.4	116.6	392.7	167.2	408.1	138.7	329.0	162.0
③ DW	(k/')	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333
M_{DW}	('k)	117.1	181.6	91.7	268.9	179.0	273.0	105.9	195.5	134.0
M_{L+IM}	('k)	979.1	968.4	1,069.8	1,307.4	1,308.7	1,269.7	1,211.7	1,074.1	1,102.8
f_t (Strength I)	(ksi)	3.23	1.02	2.76	2.24	3.54	2.20	3.41	0.95	3.80
$M_u + \frac{1}{3} f_t S_{xc}$	('k)	2,556.9	3,227.5	2,527.1	4,450.9	3,415.0	4,427.5	2,864.6	3,544.1	2,890.2
$\phi_f M_n$	('k)	-	-	-	-	-	-	-	-	-
f_s DC1	(ksi)	5.10	7.14	3.29	8.54	6.19	8.67	3.52	7.81	5.70
f_s DC2	(ksi)	1.76	3.17	1.35	3.53	1.93	3.67	1.60	3.45	2.05
f_s DW	(ksi)	1.48	1.91	1.06	2.42	2.07	2.46	1.22	2.05	1.70
f_s (L+IM)	(ksi)	11.40	10.17	11.36	11.76	13.90	11.42	12.87	11.28	12.84
f_t (Service II)	(ksi)	2.42	0.74	2.06	1.32	2.65	1.30	2.55	0.69	2.85
$f_s + f_f/2$ (Service II)	(ksi)	24.37	25.81	21.50	30.44	29.59	30.30	24.35	28.32	27.57
$0.95R_hF_{yf}$	(ksi)	47.50	-	47.50	-	47.50	-	47.50	-	47.50
$0.80R_hF_{yf}$	(ksi)	-	40.00	-	40.00	-	40.00	-	40.00	-
$f_s + f_f/3$ (Total)(Strength I)	(ksi)	31.83	33.89	28.19	40.05	38.76	39.83	31.89	37.21	35.98
$\phi_f F_n$	(ksi)	50.00	46.28	50.00	44.14	50.00	44.19	50.00	46.93	50.00
Vr	(k)	56.0	-	48.6	-	53.9	-	50.3	-	60.0

GIRDER REACTION TABLE (GIRDER 6E)							
		E. Abut.	Pier 1	Pier 2	Pier 3	Pier 4	W. Abut.
R_{DC1}	(k)	25.0	84.5	98.2	99.2	88.3	26.2
R_{DC2}	(k)	13.2	44.1	48.0	49.9	46.3	14.9
R_{DW}	(k)	7.6	24.2	27.7	29.2	24.7	9.2
R_{L+IM}	(k)	63.8	114.1	130.4	135.2	126.5	88.3
R_{Total}	(k)	109.6	266.9	304.3	313.5	285.8	138.6

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 dead loads ($in.^4$ and $in.^3$).

S_{xc}: Section modulus about the major axis of section to the controlling flange, tension or compression, taken as yield moment with respect to the controlling flange over the yield strength of the controlling flange ($in.^3$).

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.).
$1.25\ (M_{DC1} + M_{DC2}) + 1.5\ M_{DW} + 1.75\ M_{L+IM}$

f_t: Factored calculated normal stress at edge of flange for controlling steel flange plate due to lateral bending, Strength I or Service II as applicable (ksi).

$\phi_f M_n$: Factored resistance available according to A6.1.1 (k).

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 plus impact loads as calculated below (ksi).
$M_{L+IM} / S_c(3n)$ or $M_{L+IM} / S_c(cr)$ as applicable.

$f_s + f_f/2$ (Service II): Sum of stresses as computed below (ksi).
$f_{s\,DC1} + f_{sDC2} + f_{sDW} + 1.3\ f_{sL+IM} + f_f/2$

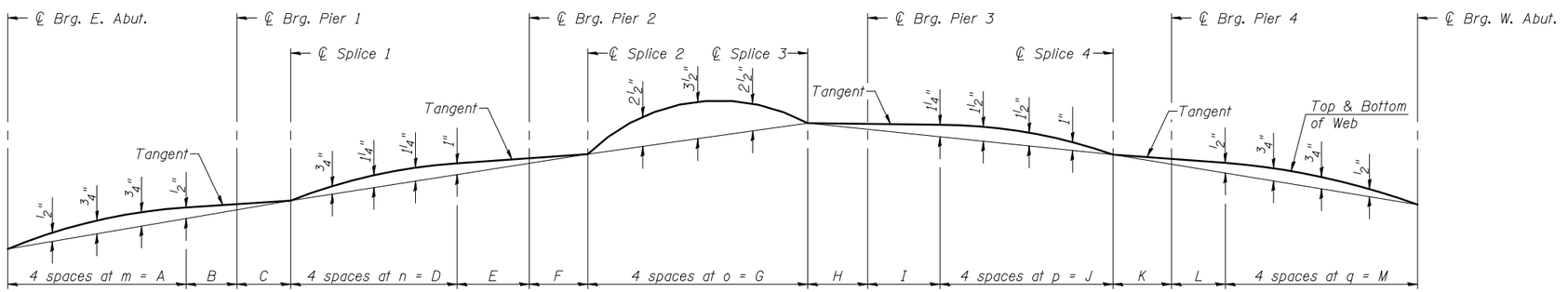
$0.95R_hF_{yf}$: Composite stress capacity for Service II loading according to Article 6.10.4.2 (ksi).

$f_s + f_f/3$ (Total)(Strength I): Sum of stresses as computed below on non-compact section (ksi).
$1.25\ (f_{sDC1} + f_{sDC2}) + 1.5\ f_{sDW} + 1.75\ f_{sL+IM} + f_f/3$

$\phi_f F_n$: Non-Compact composite positive or negative stress capacity for Strength I loading according to Article 6.10.7.2 (ksi).

Vr: Maximum factored shear range computed according to Article 6.10.10.

Note:
M_L and R_L include the effects of centrifugal force and superelevation.



CAMBER DIAGRAM

DIMENSION TABLE ①

Girder	A	B	C	D	E	F	G	H	I	J	K	L	M	m	n	o	p	q
1E	59'-3"	16'-0"	17'-0"	55'-9 15/16"	23'-0"	18'-6"	72'-8 5/16"	19'-0"	23'-0"	57'-7 3/4"	18'-0"	17'-0"	62'-4 9/16"	14'-9 3/4"	13'-11 1/2"	18'-2 1/16"	14'-4 15/16"	15'-7 1/8"
2E	59'-2 5/8"	16'-0"	17'-0"	55'-9 1/16"	23'-0"	18'-6"	72'-7 5/8"	19'-0"	23'-0"	57'-7"	18'-0"	17'-0"	62'-3 15/16"	14'-9 1/16"	13'-11 3/8"	18'-1 15/16"	14'-4 3/4"	15'-7"
3E	59'-2 1/4"	16'-0"	17'-0"	55'-8 7/8"	23'-0"	18'-6"	72'-6 15/16"	19'-0"	23'-0"	57'-6 5/16"	18'-0"	17'-0"	62'-3 1/4"	14'-9 1/16"	13'-11 1/4"	18'-1 3/4"	14'-4 9/16"	15'-6 13/16"
4E	59'-1 7/8"	16'-0"	17'-0"	55'-8 5/16"	23'-0"	18'-6"	72'-6 3/16"	19'-0"	23'-0"	57'-5 9/16"	18'-0"	17'-0"	62'-2 5/8"	14'-9 1/2"	13'-11 1/16"	18'-1 9/16"	14'-4 3/8"	15'-6 1/16"
5E	59'-1 1/2"	16'-0"	17'-0"	55'-7 13/16"	23'-0"	18'-6"	72'-5 1/2"	19'-0"	23'-0"	57'-4 7/8"	18'-0"	17'-0"	62'-2"	14'-9 3/8"	13'-10 15/16"	18'-1 3/8"	14'-4 1/4"	15'-6 1/2"
6E	59'-1 1/8"	16'-0"	17'-0"	55'-7 1/4"	23'-0"	18'-6"	72'-4 13/16"	19'-0"	23'-0"	57'-4 1/8"	18'-0"	17'-0"	62'-1 3/8"	14'-9 5/16"	13'-10 13/16"	18'-1 3/16"	14'-4 1/16"	15'-6 3/8"

Notes:
① Horizontal dimensions are taken along centerline of each individual girder.
② Analyzed in model as a 0.450 k/ft line load applied at edge of deck.
③ Analyzed in model as a 0.050 ksf area load applied from face to face of parapets.

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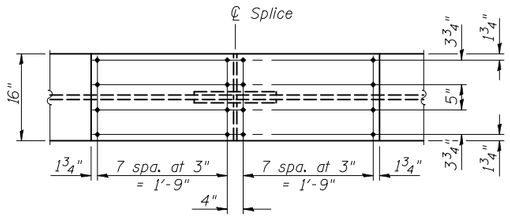
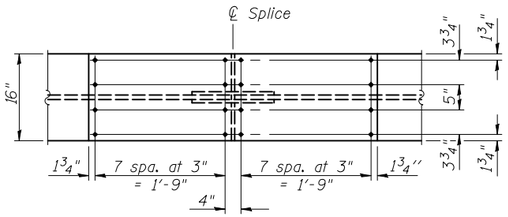
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GIRDER DETAILS
STRUCTURE NO. 039-0075 (E.B.)
SHEET NO. 27 OF 53 SHEETS

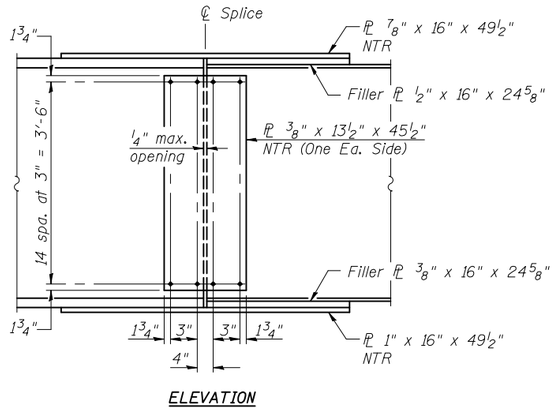
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	86
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			



TOP & BOTTOM PLAN



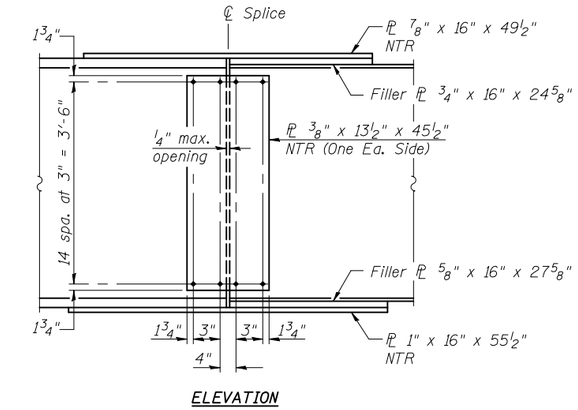
TOP PLAN



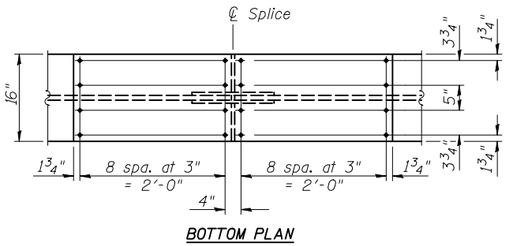
ELEVATION

SPLICE 1 & 4 DETAIL

(12 Required)



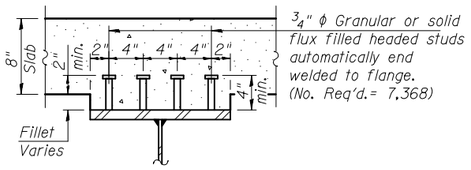
ELEVATION



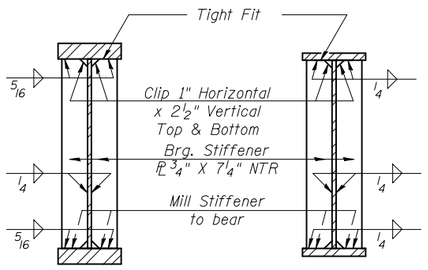
BOTTOM PLAN

SPLICE 2 & 3 DETAIL

(12 Required)

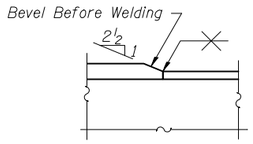


SECTION A-A

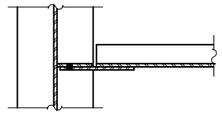


SECTION AT PIER SECTION AT ABUTMENT

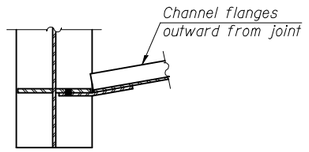
BEARING STIFFENER



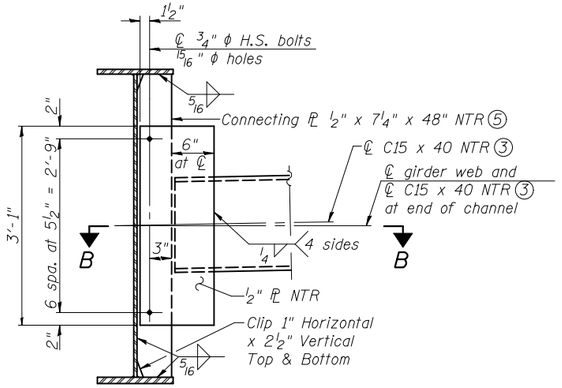
DETAIL B



SECTION B-B

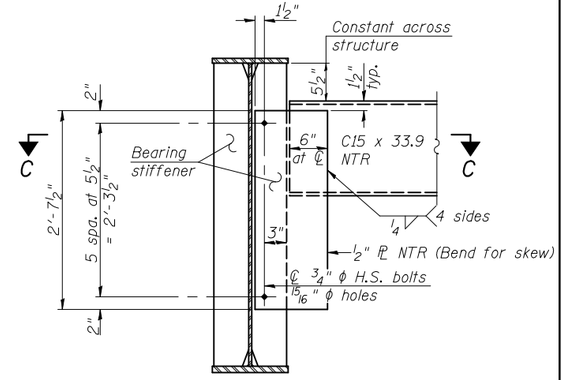


SECTION C-C



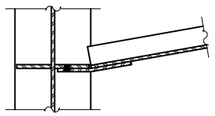
INTERIOR DIAPHRAGM D

(95 Required)

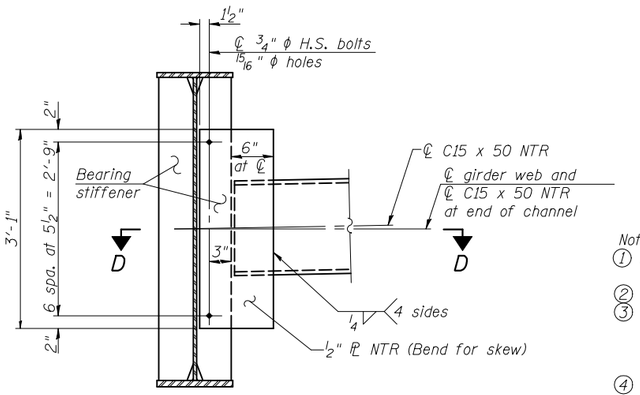


END DIAPHRAGM D1 or D6 ④

(5 of Each Required)



SECTION D-D



INTERIOR DIAPHRAGM D2, D3, D4, or D5 ④

(5 of Each Required)

Notes:

1. Load carrying components designated "NTR" shall conform to the Impact Testing Requirements, Zone 2.
2. Two hardened washers required for each set of oversized holes.
3. Alternate channels C15x50 are permitted to facilitate material acquisition. Calculated weight of structural steel is based on C15x40 sections. The alternate, if utilized, shall be provided at no extra cost to the department.
4. Similar diaphragms are numbered uniquely due to a difference in length.
5. Do not provide plate on exterior face of fascia girders.

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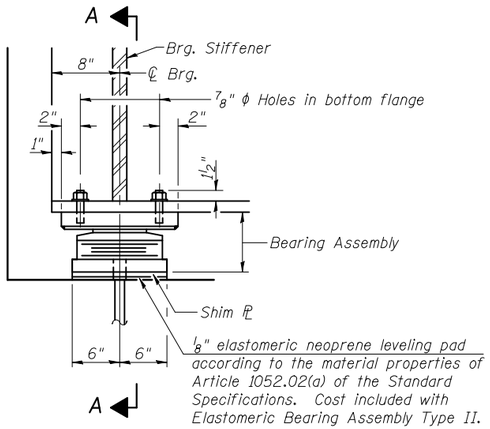
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

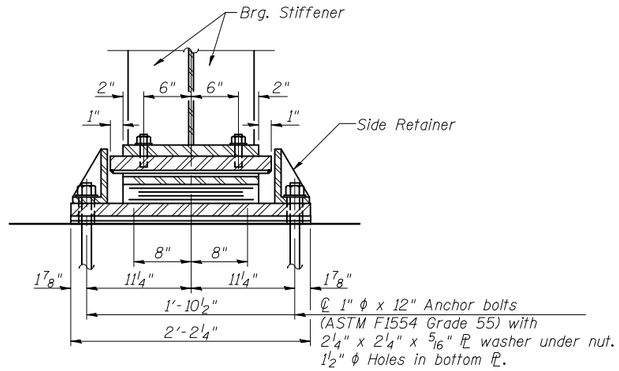
GIRDER DETAILS
STRUCTURE NO. 039-0075 (E.B.)

SHEET NO. 28 OF 53 SHEETS

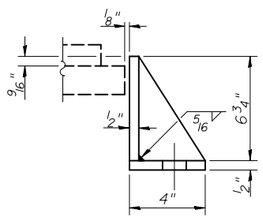
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	87
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

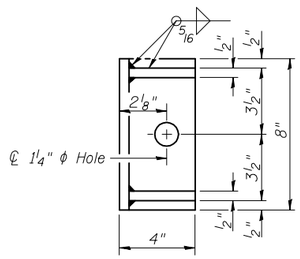


ELEVATION

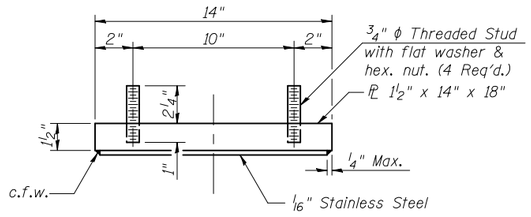


SECTION A-A

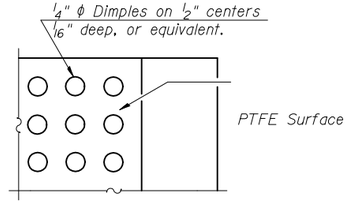




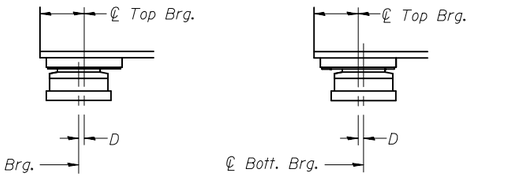
SIDE RETAINER ⑩



TOP BEARING ASSEMBLY



PLAN-PTFE SURFACE

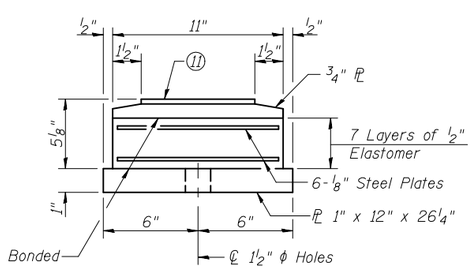


BELOW 50°F.
(Move bott. brg. away from fixed brg.)

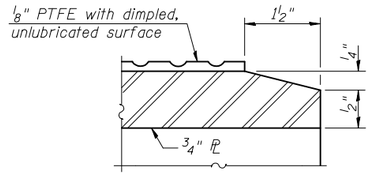
ABOVE 50°F.
(Move bott. brg. toward fixed brg.)

SETTING ANCHOR BOLTS AT EXP. BRG.

D= 1/8" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F. Design Expansion Lengths are: E. Abut. = 272'
W. Abut. = 187'



BOTTOM BEARING ASSEMBLY



SECTION THRU PTFE

TYPE II ELASTOMERIC EXP. BRG.
(EAST & WEST ABUTMENTS)

Notes:
① Anchor bolts shall be ASTM F1554 all-thread or an Engineer-approved alternate material of the grade and diameter specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
② Anchor bolts for Type II bearings shall be placed in holes drilled in the concrete through holes in the bottom bearing plate after members are in place. Side retainers shall be placed after bolts are installed.
③ Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
④ Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type II.
⑤ The 1/8" PTFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.
⑥ Bonding of 1/8" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.
⑦ The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M 270 Grade 50W.
⑧ Two 1/8" adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.
⑨ The anchor bolt sizes and grades shown constitute a calculated seismic structural fuse. Substitution of higher diameter and/or grade anchor bolts will not be allowed.
⑩ Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.
⑪ 1/8" PTFE dimpled, unlubricated.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type II	Each	12
Anchor Bolts, 1"	Each	24

BATES ASSOCIATES Engineering + Architecture
ILLINOIS Eastport Business Center 1 100 Lantar Court, Suite 1 Collinsville, IL 62234 tel 618.345.2220 fax 618.345.7233
MISSOURI Laclede Gas Building 720 Olive, Suite 1650 St. Louis, MO 63101 tel 314.588.8581 fax 314.588.9605
www.batesassociates.com

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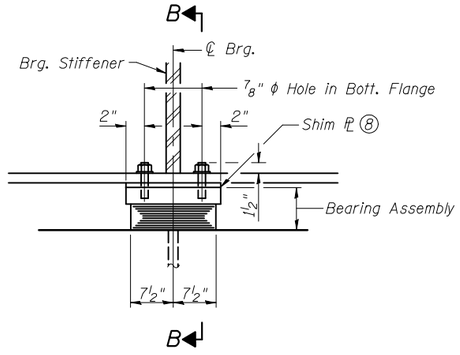
PLOT DATE =	CHECKED - DGL	REVISED -

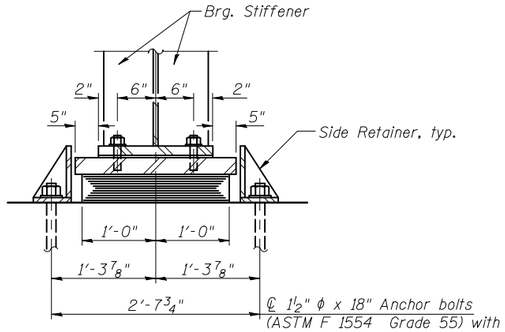
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEARING DETAILS
STRUCTURE NO. 039-0075 (E.B.)
SHEET NO. 29 OF 53 SHEETS

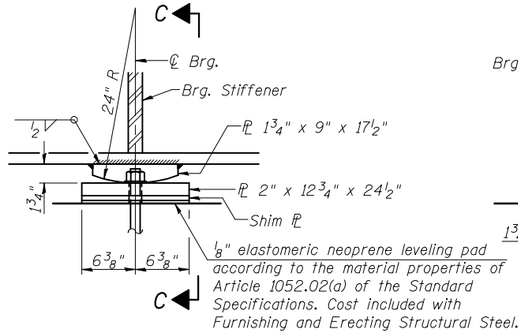
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	88
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			



ELEVATION



SECTION B-B



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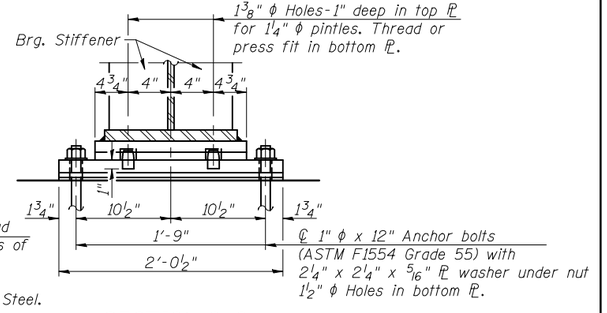
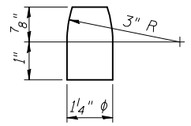
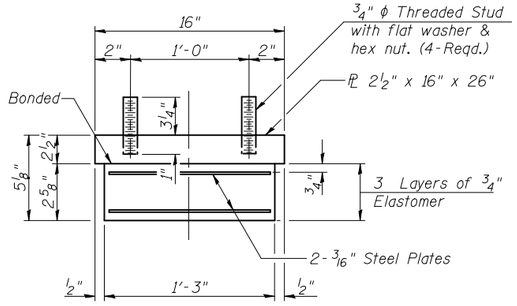


SECTION C-C

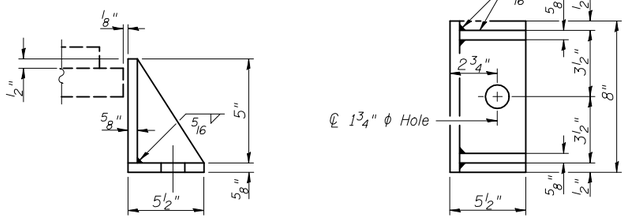


PINTLE

FIXED BEARING
(PIERS 1, 3, & 4)



BEARING ASSEMBLY ⑧



SIDE RETAINER ⑨

TYPE I ELASTOMERIC EXP. BRG.
(PIER 2)

Notes:

① Anchor bolts shall be ASTM F1554 all-thread or an Engineer-approved alternate material of the grades and diameters specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

② Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.

③ Anchor bolts for side retainers may be cast in place or installed in holes drilled before or after members are in place.

④ Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

⑤ Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.

⑥ The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M 270 Grade 50W.

⑦ Two 1/8" adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

⑧ Shim plates shall not be placed under Bearing Assembly.

⑨ Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

⑩ The anchor bolt sizes and grades shown constitute a calculated seismic structural fuse. Substitution of higher diameter and/or grade anchor bolts will not be allowed.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	6
Anchor Bolts, 1"	Each	36
Anchor Bolts, 1 1/2"	Each	12

BATES ASSOCIATES Engineering + Architecture

ILLINOIS
Belmont Business Center 1
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St. Louis, MO 63101
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PLOT DATE =	CHECKED - DGL	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEARING DETAILS
STRUCTURE NO. 039-0075 (E.B.)
SHEET NO. 30 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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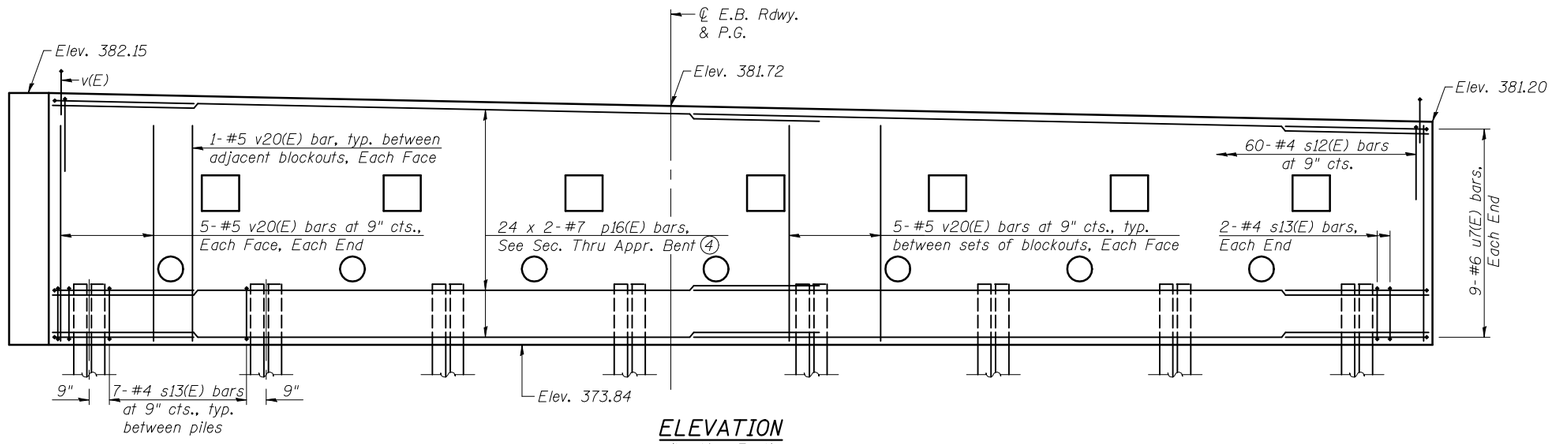
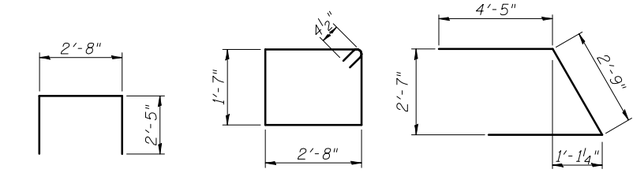
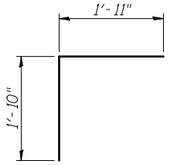
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		



ELEVATION
(Looking East)

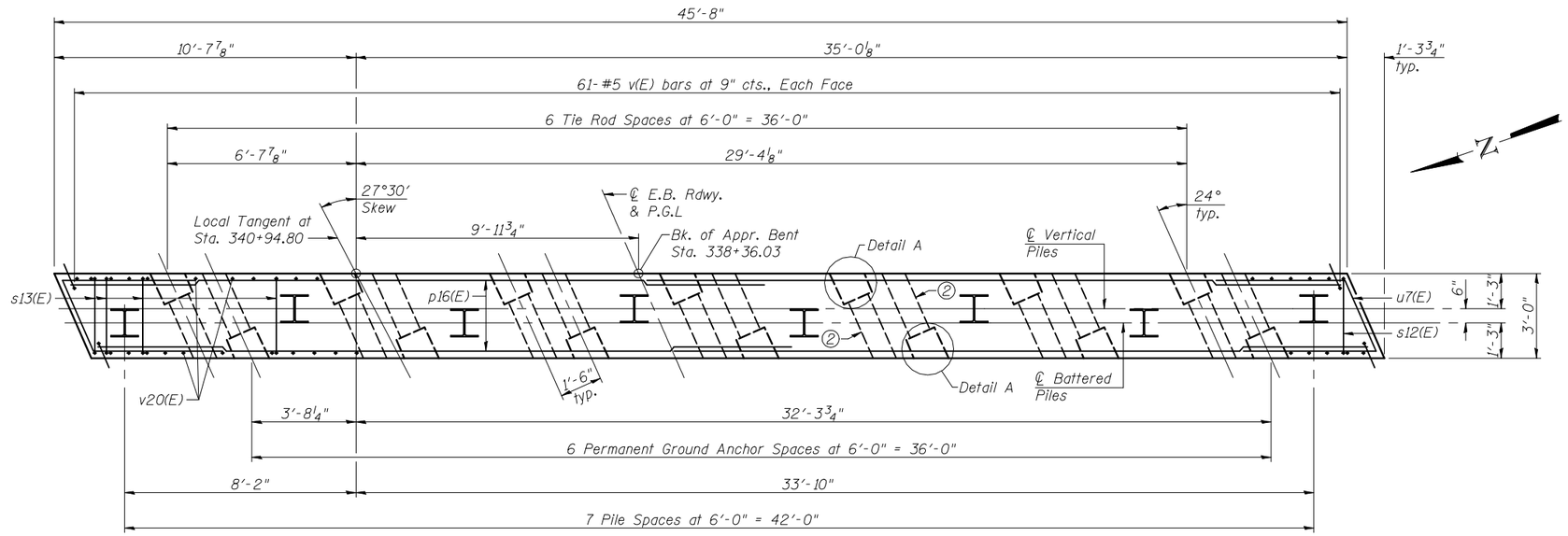




MIN. BAR LAP
#7 bar = 5'-10"

BILL OF MATERIAL

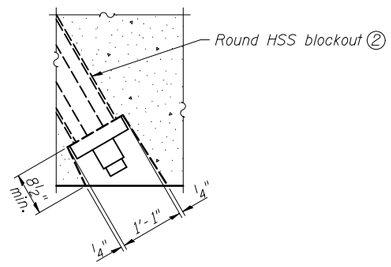
Bar	No.	Size	Length	Shape
p16(E)	48	#7	25'-7"	
s12(E)	60	#4	7'-6"	
s13(E)	53	#4	9'-3"	
u7(E)	18	#6	11'-7"	
v(E)	122	#5	3'-9"	
v20(E)	94	#5	7'-0"	
Structure Excavation		Cu. Yd.	118	
Concrete Structures		Cu. Yd.	38.9	
Reinforcement Bars, Epoxy Coated		Pound	4,610	
Furnishing Steel Piles HP14x89		Foot	752	
Driving Piles		Foot	752	



PLAN

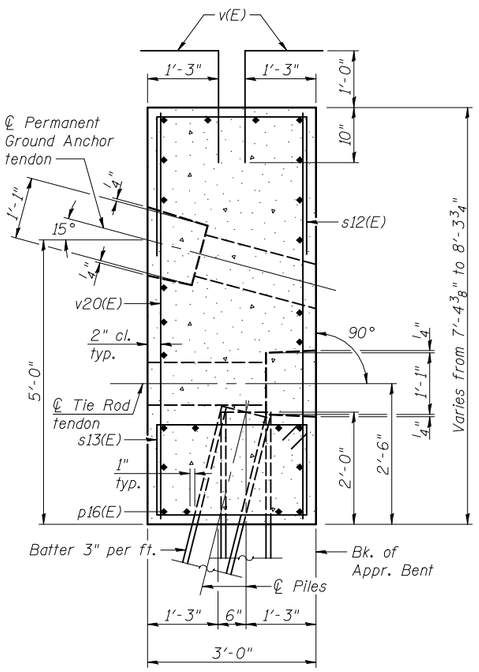
PILE DATA

Type: Steel HP 14x89
Nominal Required Bearing: 705 kips
Factored Resistance Available: 390 kips
Est. Length: 94 ft
No. Production Piles: 8
No. Test Piles: 0

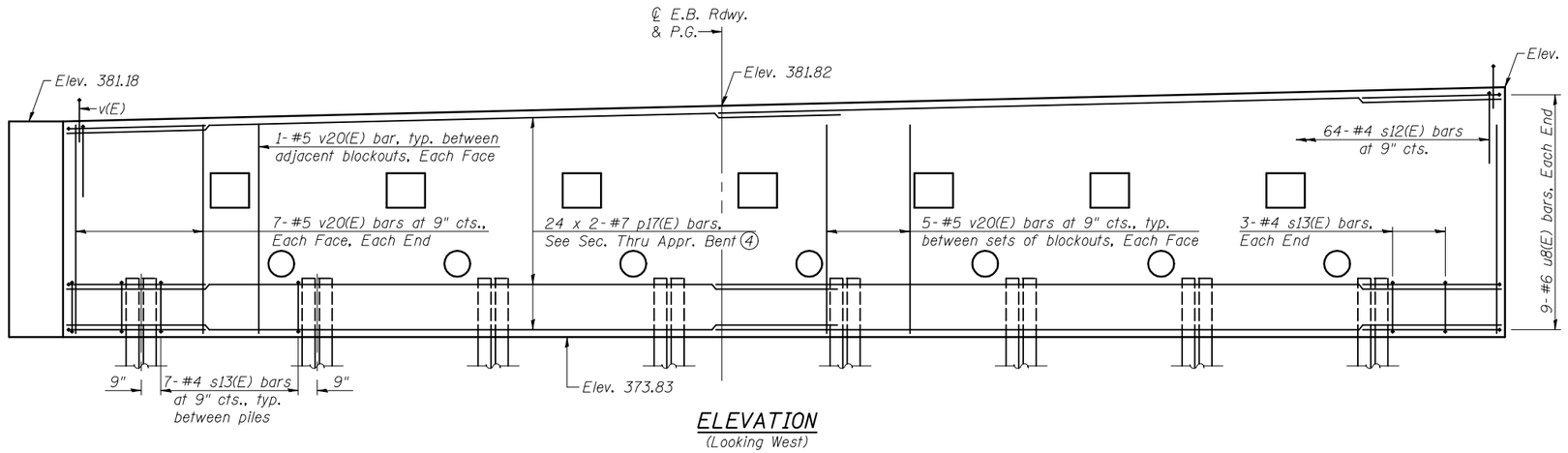


DETAIL A (3)

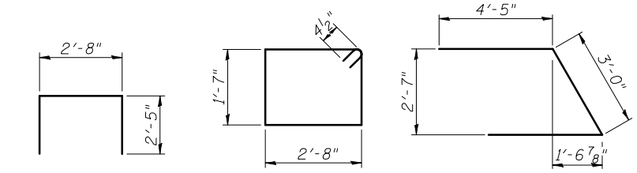
Notes:
(1) For details of piles, see sheet 46 of 53.
(2) Round HSS9.625x0.188 conforming to the requirements of ASTM A500 Grade B cast into bent for Tie Rod and Permanent Ground Anchor blockouts. Cost included with Concrete Structures.
(3) For details of Tie Rod and Permanent Ground Anchor, see sheet 39 of 53.
(4) Fan bars located above the Permanent Ground Anchor blockouts.
(5) Bars indicated thus 24 x 2-#7 etc. indicates 24 lines of bars with 2 lengths per line.



SEC. THRU APPR. BENT



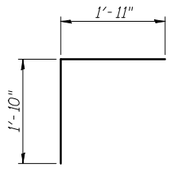
ELEVATION
(Looking West)



BARS s12(E)

BARS s13(E)

BAR u8(E)

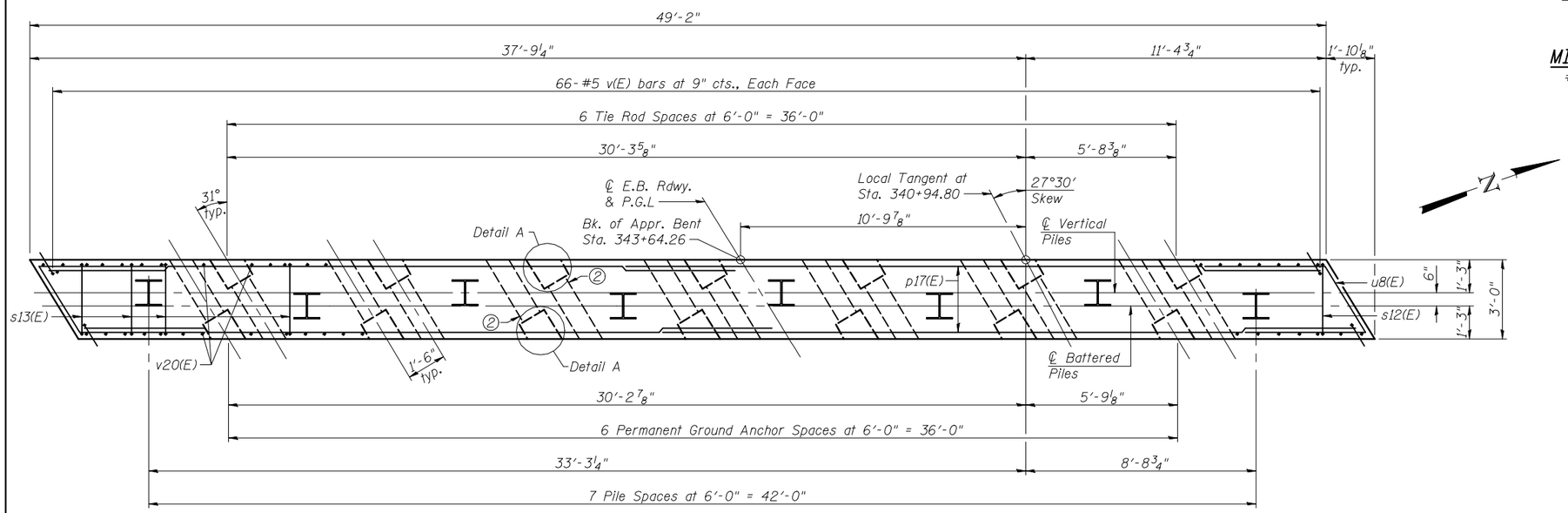


BAR v(E)

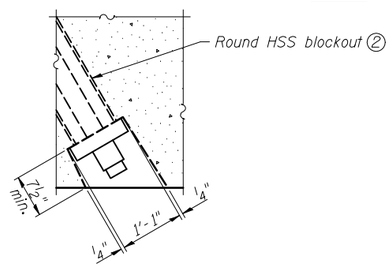
MIN. BAR LAP
#7 bar = 5'-10"

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
p17(E)	48	#7	27'-4"	
s12(E)	64	#4	7'-6"	
s13(E)	55	#4	9'-3"	
u8(E)	18	#6	11'-10"	
v(E)	132	#5	3'-9"	
v20(E)	102	#5	7'-0"	
Structure Excavation		Cu. Yd.	126	
Concrete Structures		Cu. Yd.	42.4	
Reinforcement Bars, Epoxy Coated		Pound	4,920	
Furnishing Steel Piles HP14x89		Foot	728	
Driving Piles		Foot	728	



PLAN

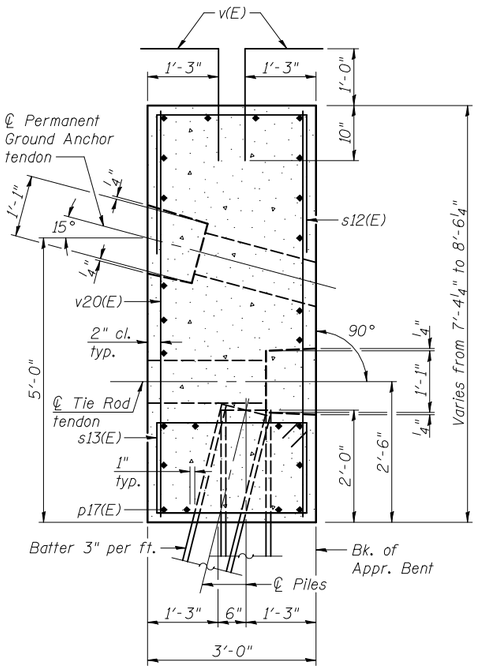


DETAIL A (3)

PILE DATA

Type: Steel HP 14x89
Nominal Required Bearing: 705 kips
Factored Resistance Available: 390 kips
Est. Length: 91 ft
No. Production Piles: 8
No. Test Piles: 0

Notes:
(1) For details of piles, see sheet 46 of 53.
(2) Round HSS9.625x0.188 conforming to the requirements of ASTM A500 Grade B cast into bent for Tie Rod and Permanent Ground Anchor blockouts. Cost included with Concrete Structures.
(3) For details of Tie Rod and Permanent Ground Anchor, see sheet 39 of 53.
(4) Fan bars located above the Permanent Ground Anchor blockouts.
(5) Bars indicated thus 24 x 2-#7 etc. indicates 24 lines of bars with 2 lengths per line.



SEC. THRU APPR. BENT

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DEPARTMENT OF TRANSPORTATION

WEST APPROACH BENT DETAILS
STRUCTURE NO. 039-0075 (E.B.)
SHEET NO. 32 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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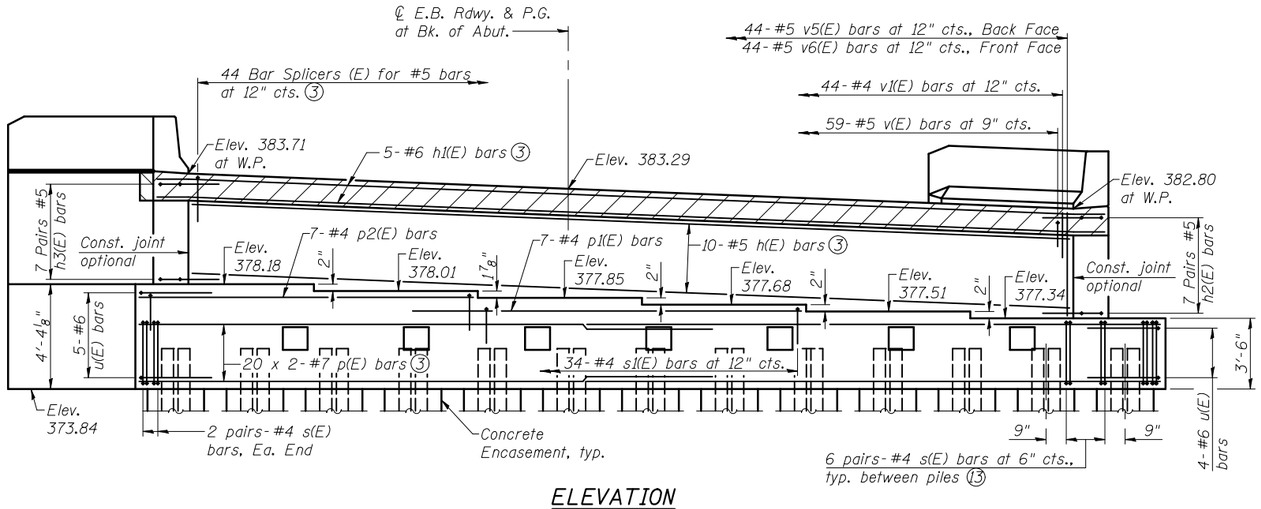
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			



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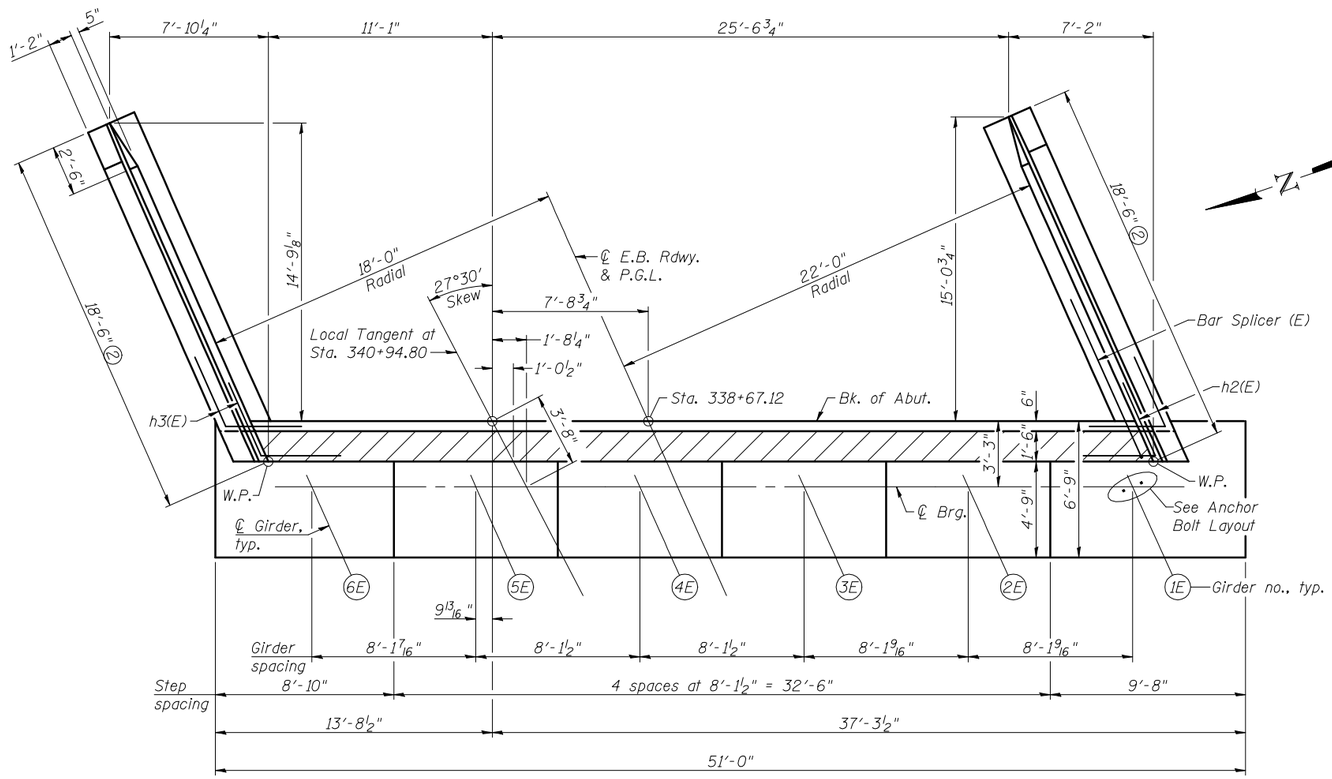
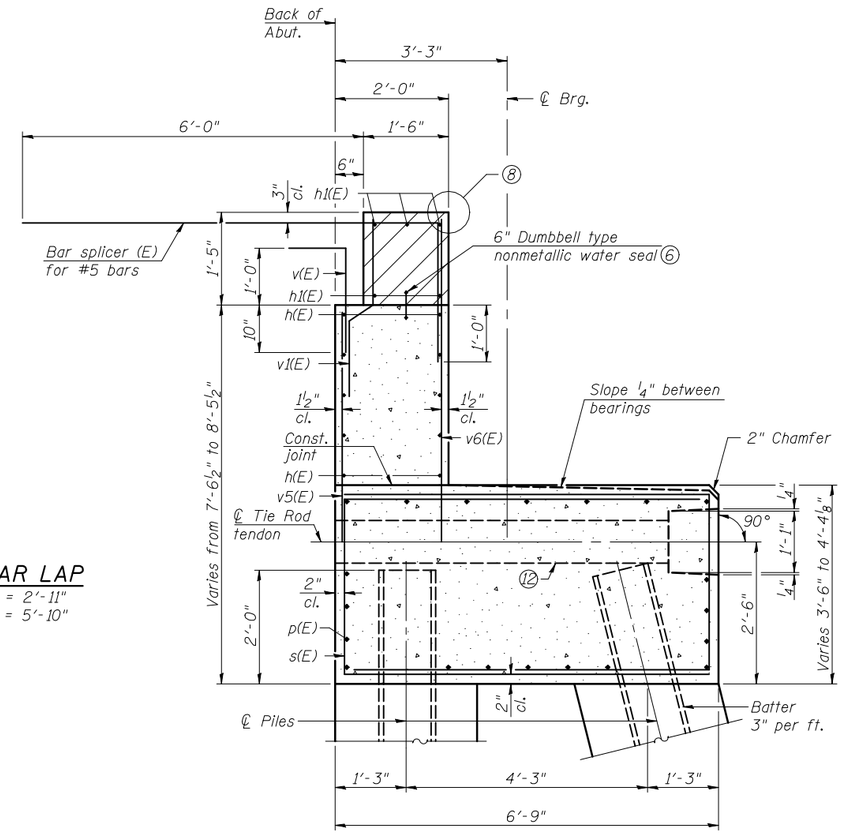


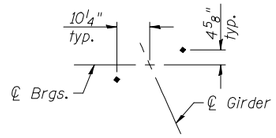
TOP VIEW

MIN. BAR LAP

#4 bar = 2'-11"
#7 bar = 5'-10"



SEC. THRU ABUT.



ANCHOR BOLT LAYOUT (4)

Notes:
1. For details of Bar Splicers, see sheet 47 of 53.
2. Wingwall length is along front face of end post.
3. For bar locations, see Sec. Thru Abut.
4. Space reinforcement in cap to miss anchor bolts.
5. Hatched area to be poured after superstructure falsework has been removed. Cost of concrete included with Concrete Superstructure on sheet 17 of 53.
6. 6" Dumbbell type nonmetallic water seal shall be in accordance with Sections 503.12 and 1054 of the Standard Specifications. Cost included with Concrete Structures.
7. Pour steps monolithically with cap.
8. For Expansion Joint details, see sheet 24 of 53.
9. Expansion joint details for skews less than 30°, as shown on sheet 24 of 53, are applicable for the East Abutment.
10. The abutments shall have all exposed surfaces of backwalls, bridge seats, and front faces of pile caps treated with Concrete Sealer.
11. Bars indicated thus 20 x 2-#7 etc. indicates 20 lines of bars with 2 lengths per line.
12. Round HSS blockouts cast into cap for Tie Rod. For additional details, see sheet 34 of 53.
13. Adjust orientation of pairs of s(E) bars as needed to miss piles and round HSS blockouts by varying bar lap.

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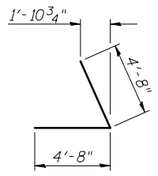
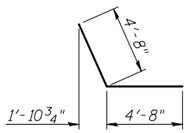
DEPARTMENT OF TRANSPORTATION

EAST ABUTMENT DETAILS
STRUCTURE NO. 039-0075 (E.B.)
SHEET NO. 33 OF 53 SHEETS

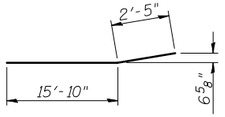
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	92
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			



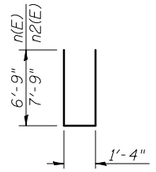
BAR h2(E)



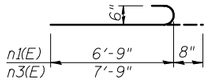
BAR h3(E)



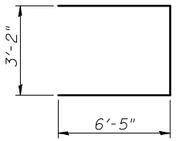
BAR h4(E)



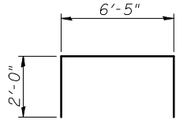
BARS n(E) & n2(E)



BARS n1(E) & n3(E)



BAR s(E)



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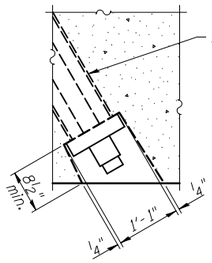
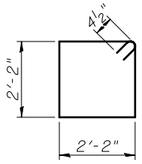


DETAIL A (3)



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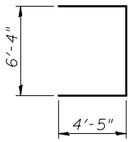
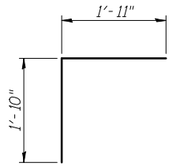
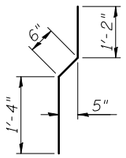


BAR u(E)



BAR v(E)



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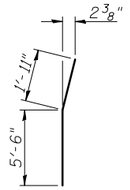

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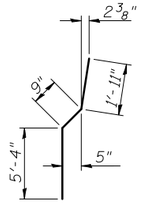

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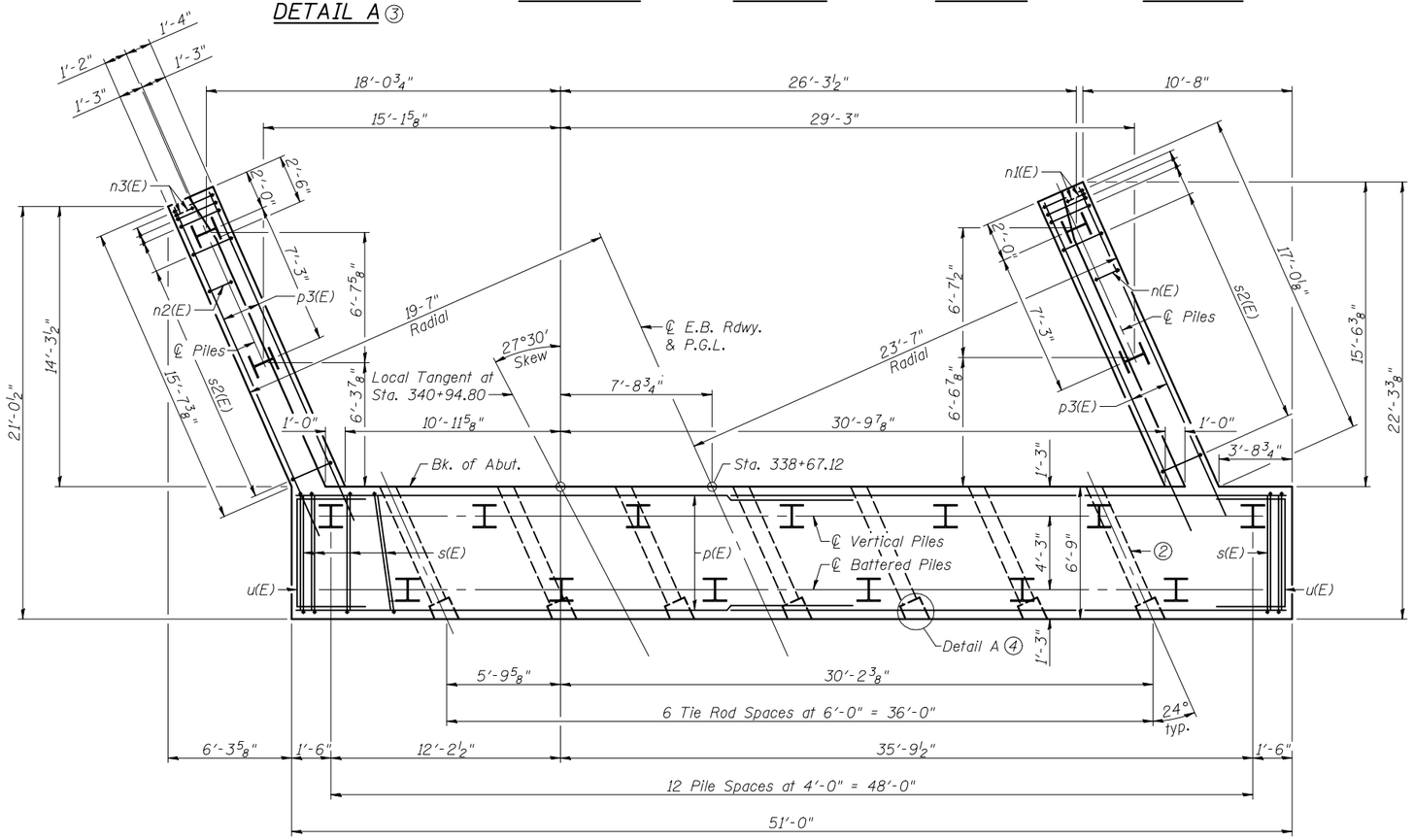

PLAN-PILE CAP

EAST ABUTMENT
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	10	#5	43'-5"	
h1(E)	5	#6	47'-0"	
h2(E)	14	#5	9'-4"	
h3(E)	14	#5	9'-4"	
h4(E)	16	#4	18'-3"	
h5(E)	12	#4	17'-5"	
h6(E)	12	#4	18'-9"	
n(E)	16	#6	14'-10"	
n1(E)	6	#6	7'-5"	
n2(E)	16	#6	16'-10"	
n3(E)	6	#6	8'-5"	
p(E)	40	#7	28'-3"	
p1(E)	7	#4	18'-3"	
p2(E)	7	#4	16'-7"	
p3(E)	12	#7	20'-0"	
s(E)	152	#4	16'-0"	
s1(E)	34	#4	10'-5"	
s2(E)	56	#4	9'-5"	
u(E)	9	#6	15'-2"	
v(E)	59	#5	3'-9"	
v1(E)	44	#4	3'-0"	
v2(E)	38	#6	7'-6"	
v3(E)	6	#6	7'-5"	
v4(E)	32	#6	8'-0"	
v5(E)	44	#5	6'-0"	
v6(E)	44	#5	7'-4"	
Structure Excavation			Cu. Yd.	335
Concrete Structures			Cu. Yd.	84.9
Concrete Encasement			Cu. Yd.	9.3
Reinforcement Bars, Epoxy Coated			Pound	9,660
Furnishing Steel Piles HP14x89			Foot	1,504
Driving Piles			Foot	1,504
Test Pile Steel HP14x89			Each	1
Concrete Sealer			Sq. Ft.	508

PILE DATA

Type: Steel HP 14x89
Nominal Required Bearing: 705 kips
Factored Resistance Available: 390 kips
Est. Length: 94 ft
No. Production Piles: 16
No. Test Piles: 1

Notes:
(1) For details of piles and Concrete Encasement, see sheet 46 of 53.
(2) Round HSS9.625x0.188 conforming to the requirements of ASTM A500 Grade B cast into cap for Tie Rod blockouts. Cost included with Concrete Structures. Adjust location as necessary to miss anchor bolts and adjust corresponding approach bent location.
(3) For details of Tie Rod, see sheet 39 of 53.
(4) Cut piles as necessary to provide clearance for blockouts.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST ABUTMENT DETAILS
STRUCTURE NO. 039-0075 (E.B.)
SHEET NO. 34 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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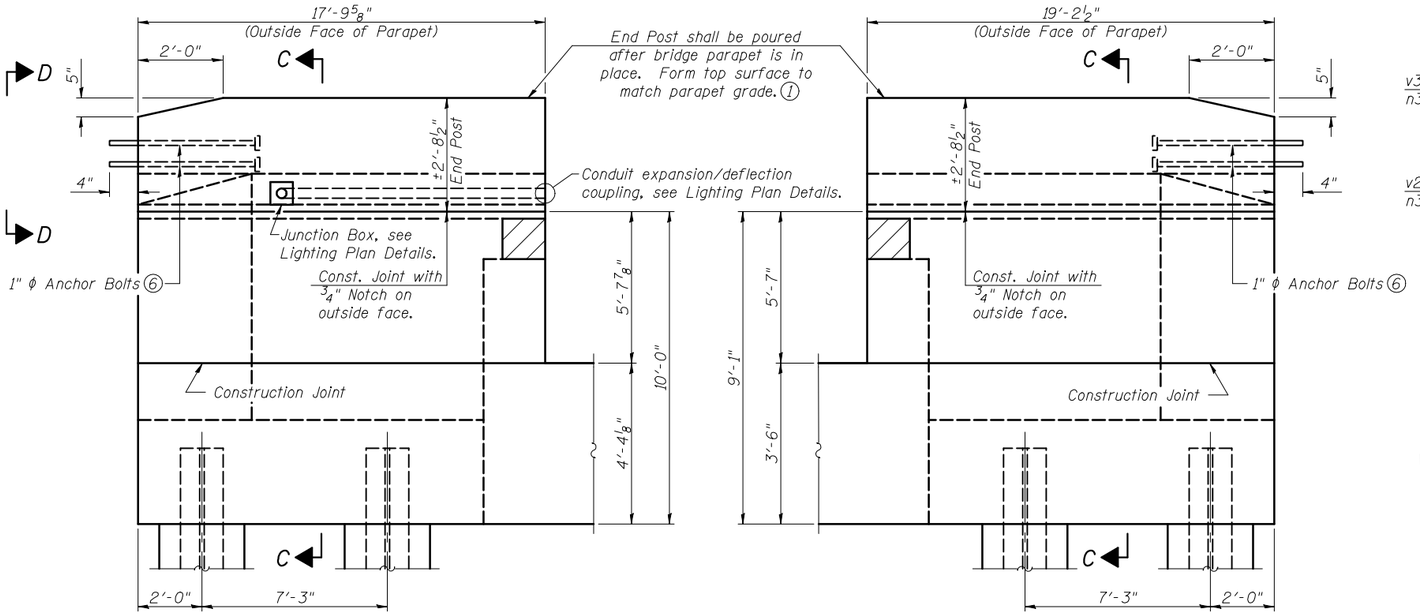
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

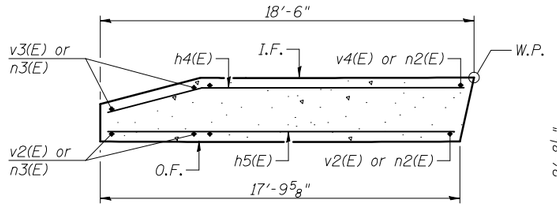


NORTH WINGWALL ELEVATION

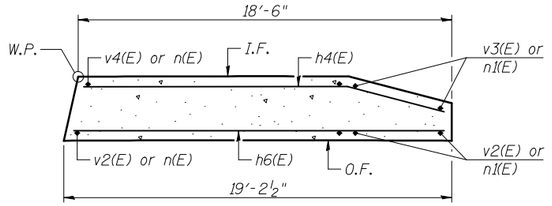
Showing Dimensions (Looking South)

SOUTH WINGWALL ELEVATION

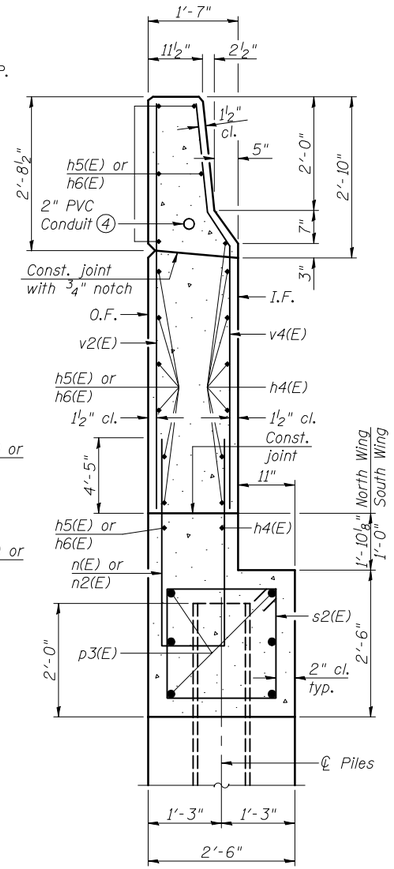
Showing Dimensions (Looking North)



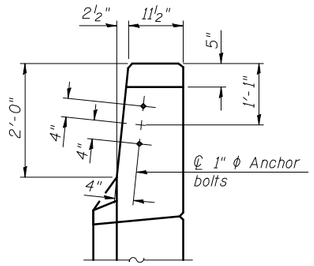
SECTION A-A



SECTION B-B

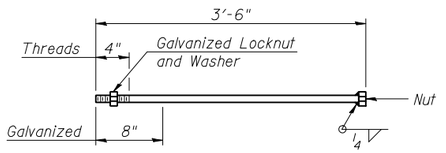


SECTION C-C

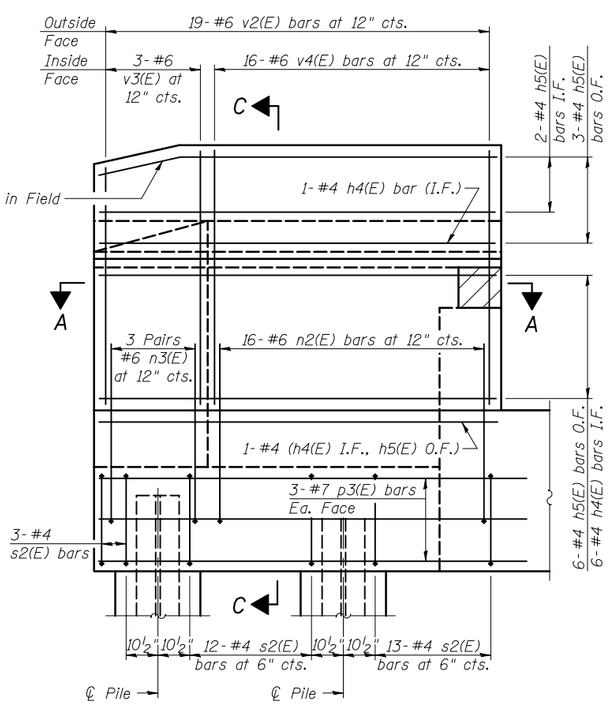


VIEW D-D

(Showing North Wingwall, South Wingwall similar)

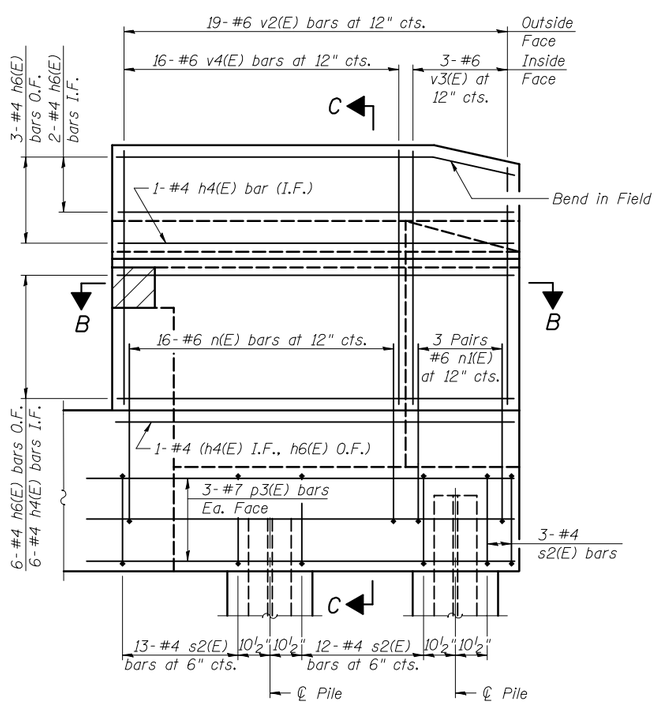


1" ϕ ANCHOR BOLT



NORTH WINGWALL ELEVATION (5)

Showing Reinforcement (Looking South)



SOUTH WINGWALL ELEVATION

Showing Reinforcement (Looking North)

Notes:

1. Quantity of concrete in end post included with Concrete Superstructure on sheet 17 of 53.
2. For Concrete Encasement details, see sheet 46 of 53.
3. I.F. denotes inside face and O.F. denotes outside face.
4. Conduit in North Wingwall only. Conduit shall have a minimum 1 1/2" clearance from all reinforcement. See Lighting Plan Details for additional requirements.
5. Conduit not shown for clarity.
6. Cost included with Concrete Superstructure on sheet 17 of 53.
7. Hatched area to be poured after superstructure falsework has been removed.

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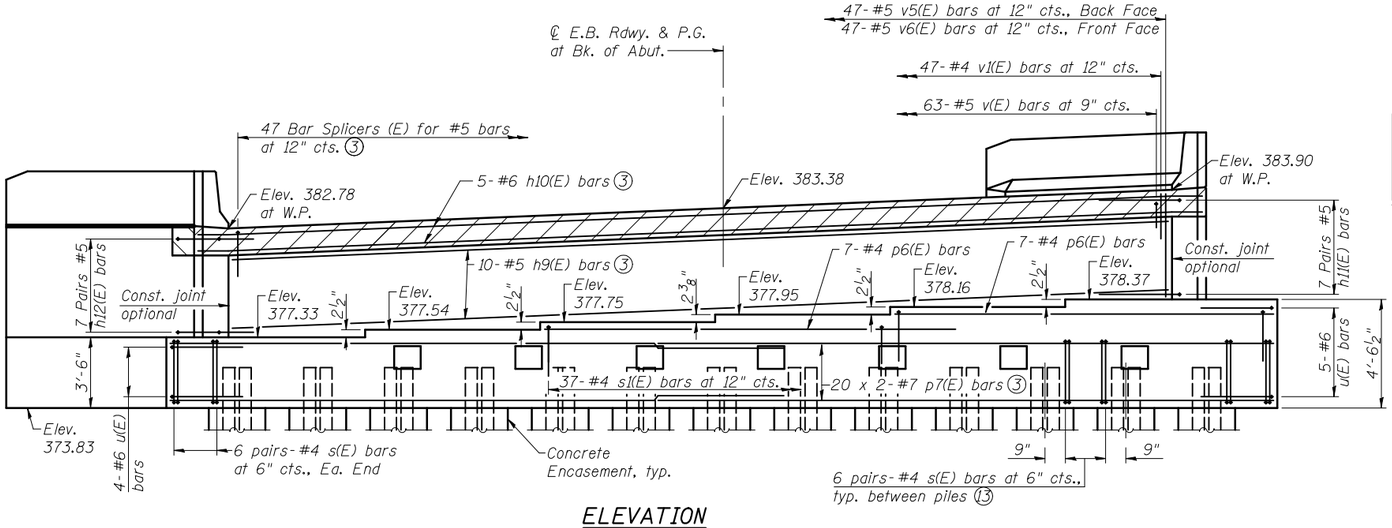
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

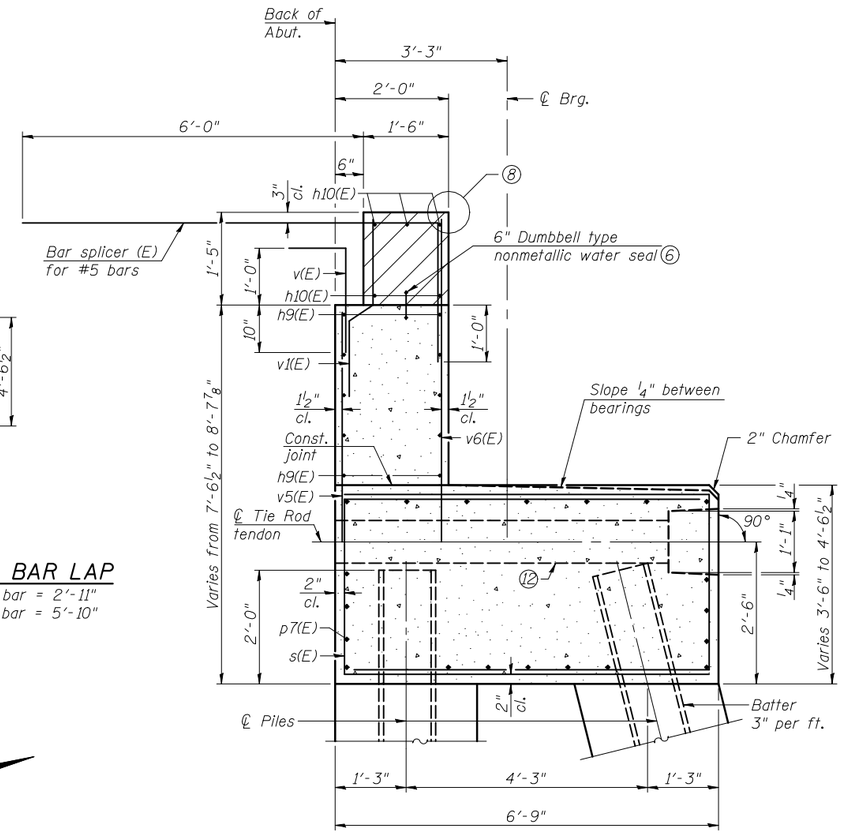
EAST ABUTMENT DETAILS
STRUCTURE NO. 039-0075 (E.B.)

SHEET NO. 35 OF 53 SHEETS

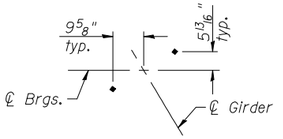
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	94
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		



ELEVATION



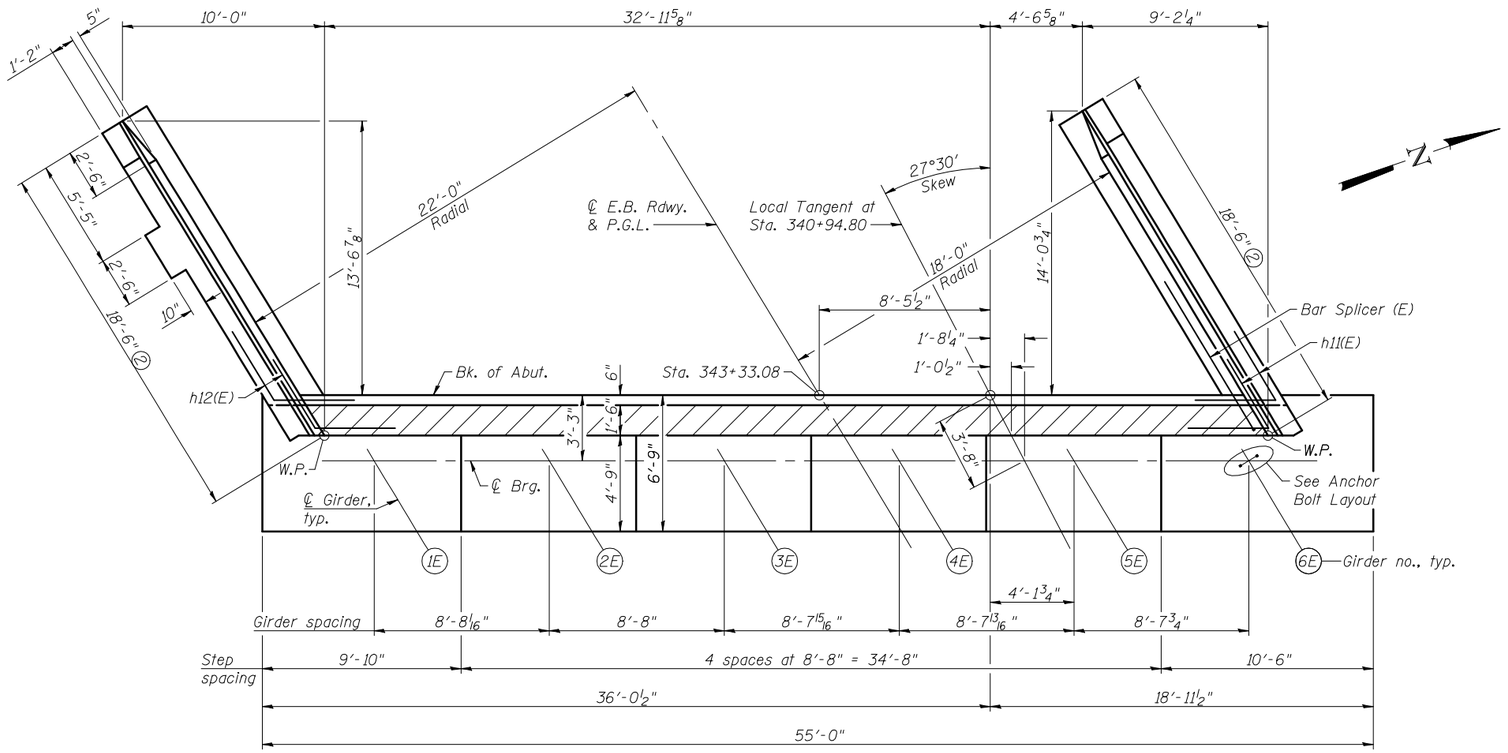
SEC. THRU ABUT.



ANCHOR BOLT LAYOUT (4)

MIN. BAR LAP

#4 bar = 2'-11"
#7 bar = 5'-10"



TOP VIEW

Notes:

1. For details of Bar Splicers, see sheet 47 of 53.
2. Wingwall length is along front face of end post.
3. For bar locations, see Sec. Thru Abut.
4. Space reinforcement in cap to miss anchor bolts.
5. Hatched area to be poured after superstructure falsework has been removed. Cost of concrete included with Concrete Superstructure on sheet 17 of 53.
6. 6" Dumbbell type nonmetallic water seal shall be in accordance with Sections 503.12 and 1054 of the Standard Specifications. Cost included with Concrete Structures.
7. Pour steps monolithically with cap.
8. For Expansion Joint details, see sheet 24 of 53.
9. Expansion joint details for skews greater than 30°, as shown on sheet 24 of 53, are applicable for the West Abutment.
10. The abutments shall have all exposed surfaces of backwalls, bridge seats, and front faces of pile caps treated with Concrete Sealer.
11. Bars indicated thus 20 x 2-#7 etc. indicates 20 lines of bars with 2 lengths per line.
12. Round HSS blockouts cast into cap for Tie Rod. For additional details, see sheet 37 of 53.
13. Adjust orientation of pairs of s(E) bars as needed to miss piles and round HSS blockouts by varying bar lap.

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STATE OF ILLINOIS
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WEST ABUTMENT DETAILS
STRUCTURE NO. 039-0075 (E.B.)
SHEET NO. 36 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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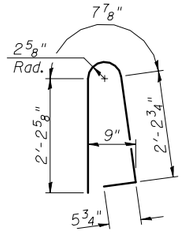
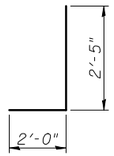
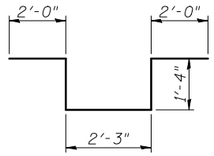
		CONTRACT NO. 78056		
		ILLINOIS FED. AID PROJECT		



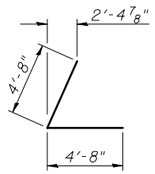
BAR d(E)



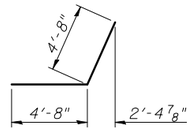
BAR d2(E)



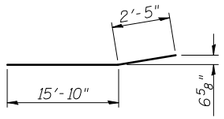
BAR d3(E)



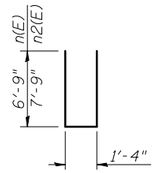
BAR h11(E)



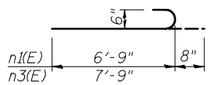
BAR h12(E)



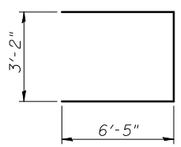
BAR h4(E)



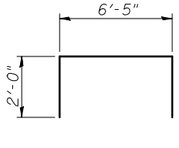
BARS n(E) & n2(E)



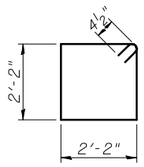
BARS n1(E) & n3(E)



BAR s(E)



BAR s1(E)



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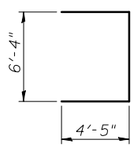
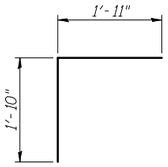


BAR u(E)



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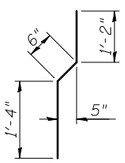

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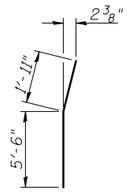

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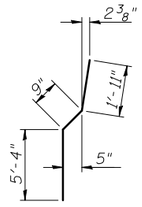
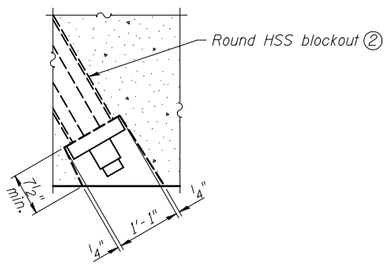
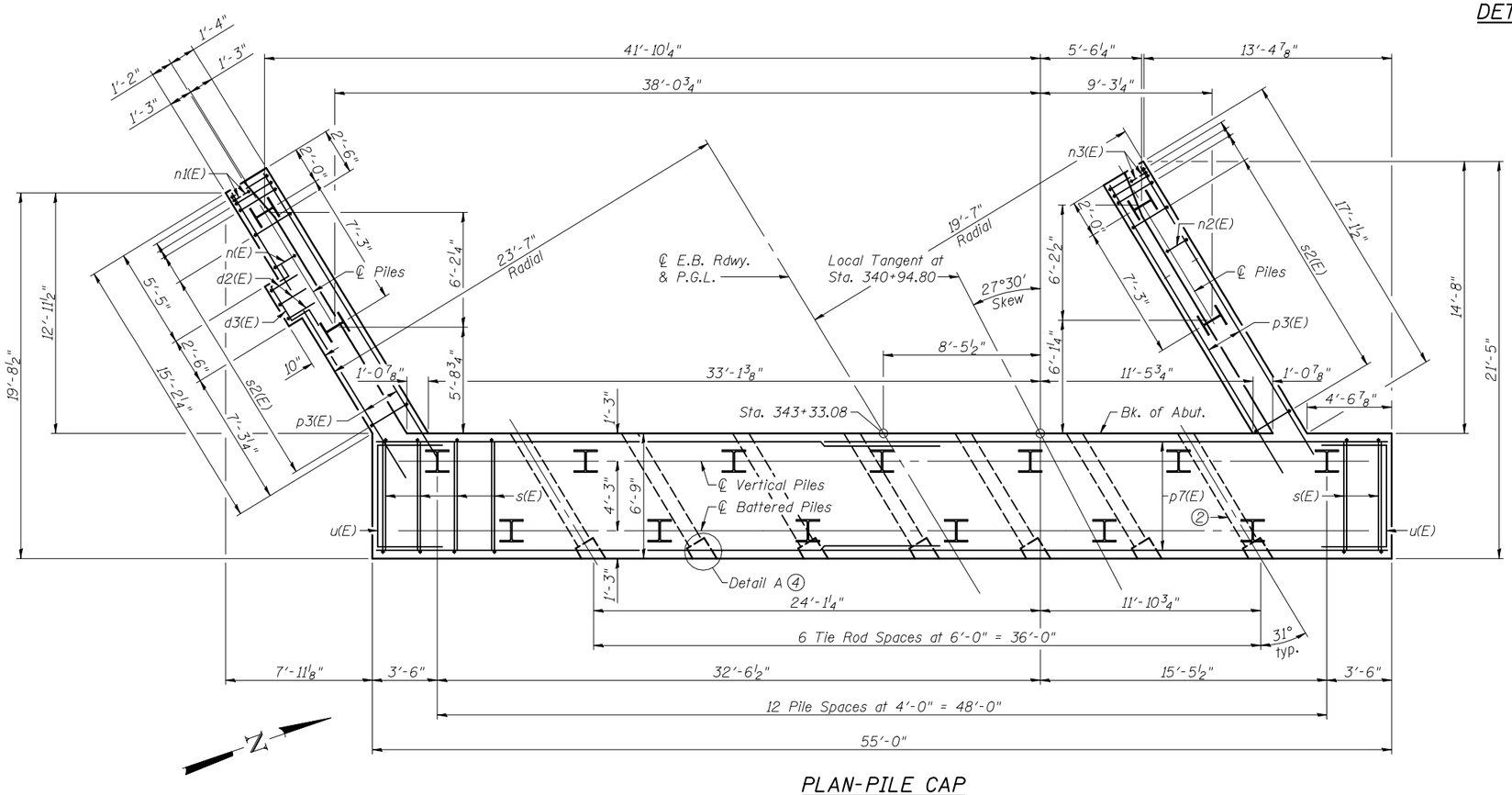


BAR v4(E)



DETAIL A ③



PLAN-PILE CAP

WEST ABUTMENT BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d(E)	8	#5	5'-7"	
d2(E)	3	#6	4'-5"	
d3(E)	11	#6	8'-11"	
h4(E)	16	#4	18'-3"	
h5(E)	12	#4	17'-5"	
h6(E)	12	#4	18'-9"	
h9(E)	10	#5	46'-4"	
h10(E)	5	#6	50'-0"	
h11(E)	14	#5	9'-4"	
h12(E)	14	#5	9'-4"	
n(E)	21	#6	14'-10"	
n1(E)	6	#6	7'-5"	
n2(E)	16	#6	16'-10"	
n3(E)	6	#6	8'-5"	
p3(E)	12	#7	20'-0"	
p6(E)	14	#4	18'-10"	
p7(E)	40	#7	30'-3"	
s(E)	168	#4	16'-0"	
s1(E)	37	#4	10'-5"	
s2(E)	56	#4	9'-5"	
u(E)	9	#6	15'-2"	
v(E)	63	#5	3'-9"	
v1(E)	47	#4	3'-0"	
v2(E)	46	#6	7'-6"	
v3(E)	6	#6	7'-5"	
v4(E)	37	#6	8'-0"	
v5(E)	47	#5	6'-0"	
v6(E)	47	#5	7'-4"	
Structure Excavation		Cu. Yd.	354	
Concrete Structures		Cu. Yd.	91.1	
Concrete Encasement		Cu. Yd.	9.3	
Reinforcement Bars, Epoxy Coated		Pound	10,620	
Furnishing Steel Piles HP14x89		Foot	1,456	
Driving Piles		Foot	1,456	
Test Pile Steel HP14x89		Each	1	
Concrete Sealer		Sq. Ft.	554	

PILE DATA

Type: Steel HP 14x89
Nominal Required Bearing: 705 kips
Factored Resistance Available: 390 kips
Est. Length: 91 ft
No. Production Piles: 16
No. Test Piles: 1

Notes:
1. For details of piles and Concrete Encasement, see sheet 46 of 53.
2. Round HSS9.625x0.188 conforming to the requirements of ASTM A500 Grade B cast into cap for Tie Rod blockouts. Cost included with Concrete Structures. Adjust location as necessary to miss anchor bolts and adjust corresponding approach bent location.
3. For details of Tie Rod, see sheet 39 of 53.
4. Cut piles as necessary to provide clearance for blockouts.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WEST ABUTMENT DETAILS
STRUCTURE NO. 039-0075 (E.B.)
SHEET NO. 37 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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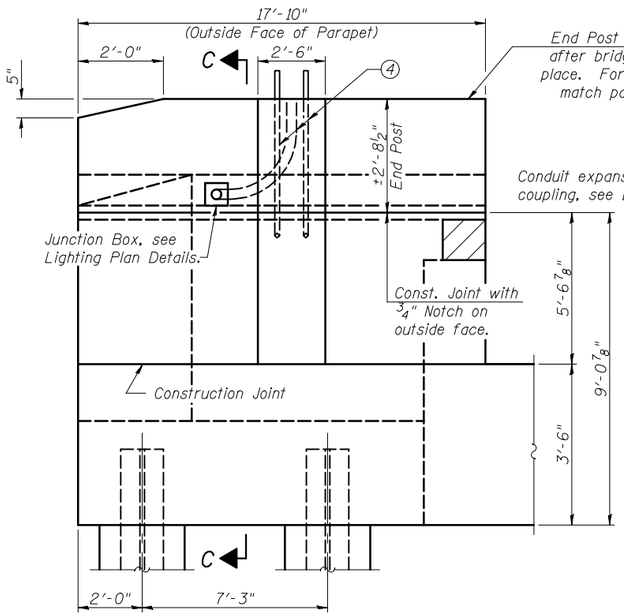
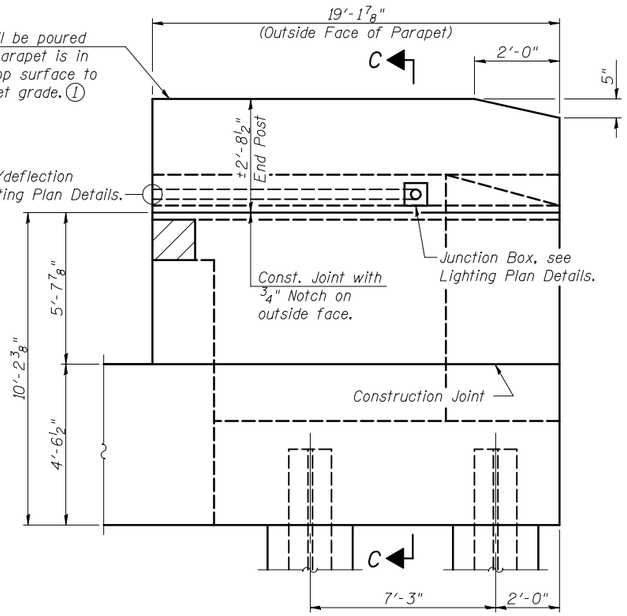
		CONTRACT NO. 78056		
		ILLINOIS	FED. AID PROJECT	



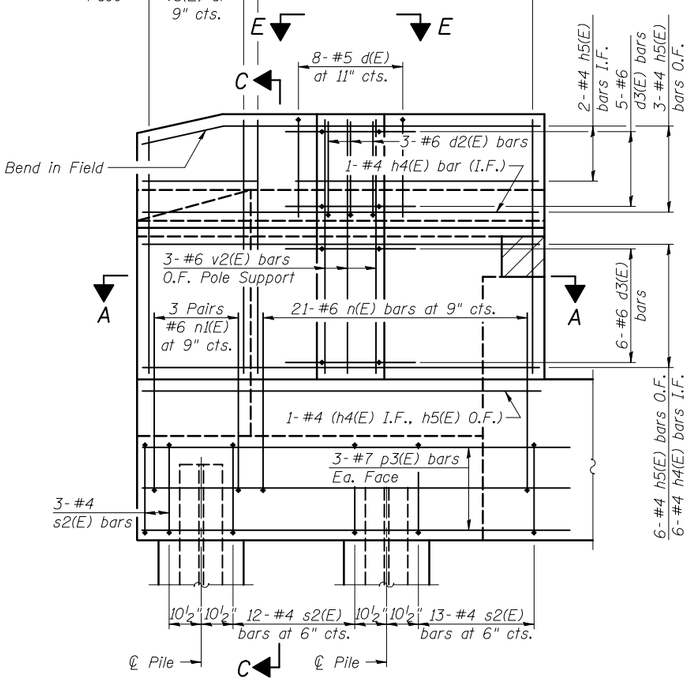
SOUTH WINGWALL ELEVATION

Showing Dimensions (Looking North)



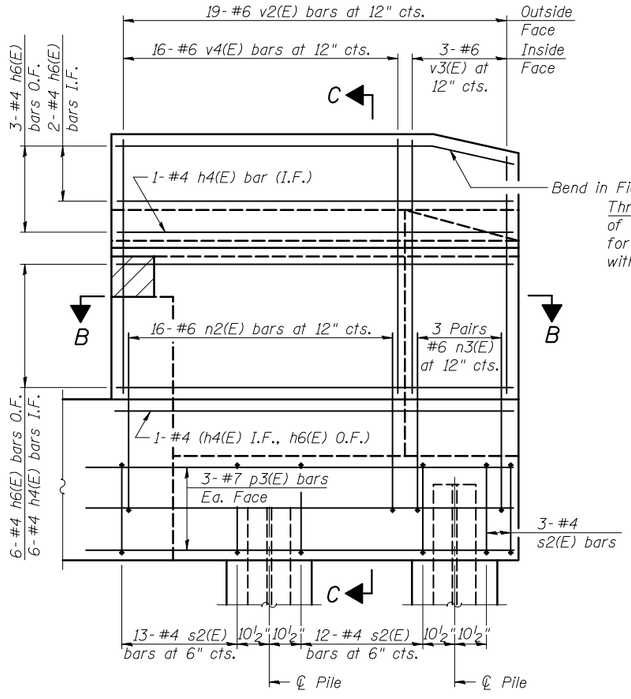
NORTH WINGWALL ELEVATION

Showing Dimensions (Looking South)



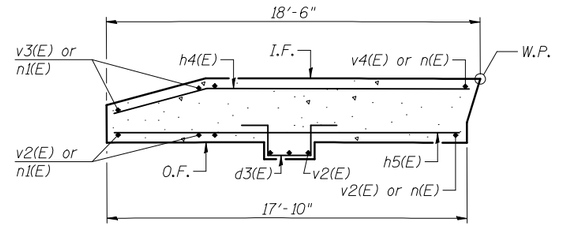
SOUTH WINGWALL ELEVATION (7)

Showing Reinforcement (Looking North)

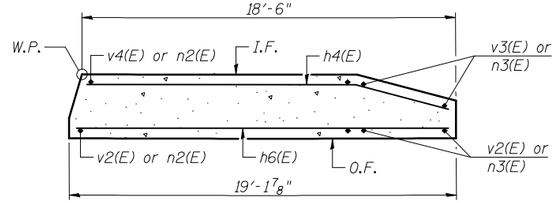


NORTH WINGWALL ELEVATION (7)

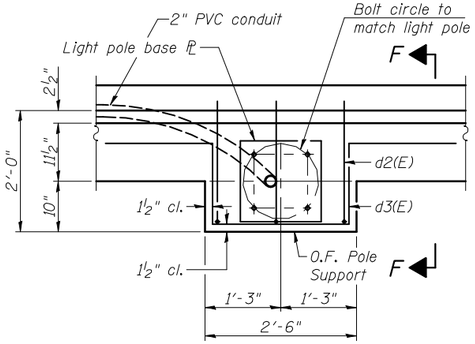
Showing Reinforcement (Looking South)



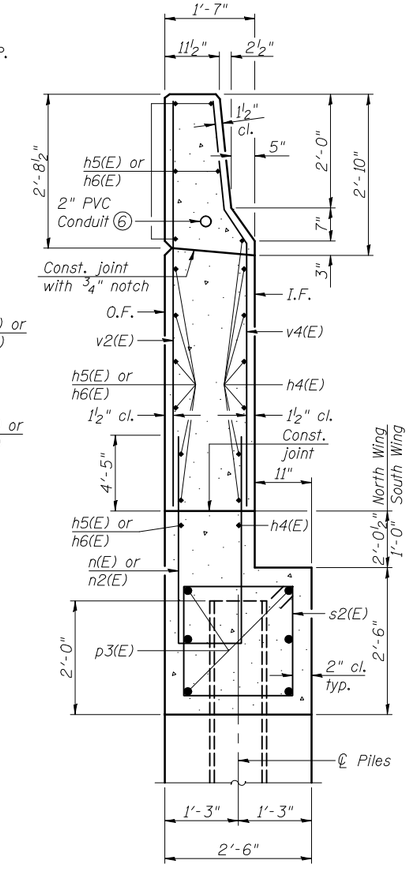
SECTION A-A



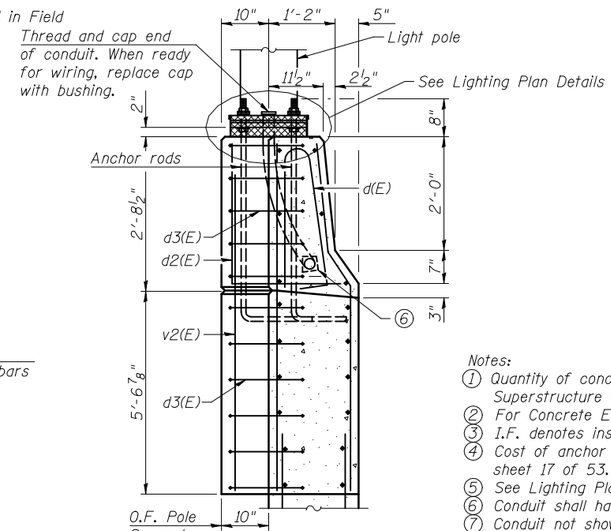
SECTION B-B



VIEW E-E (5)

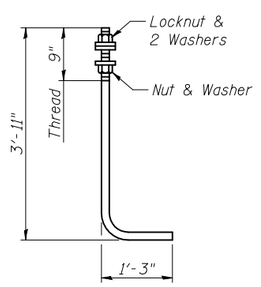


SECTION C-C



SECTION F-F (5)

(One location)



ANCHOR ROD (4)

Diameter as specified for light poles.
(ASTM F 1554 Grade 105)

Notes:

1. Quantity of concrete in end post included with Concrete Superstructure on sheet 17 of 53.
2. For Concrete Encasement details, see sheet 46 of 53.
3. I.F. denotes inside face and O.F. denotes outside face.
4. Cost of anchor rods is included with Concrete Superstructure on sheet 17 of 53.
5. See Lighting Plan Details for dimensions and requirements not shown.
6. Conduit shall have a minimum 1½" clearance from all reinforcement.
7. Conduit not shown for clarity.
8. Hatched area to be poured after superstructure falsework has been removed.

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DEPARTMENT OF TRANSPORTATION

WEST ABUTMENT DETAILS
STRUCTURE NO. 039-0075 (E.B.)

SHEET NO. 38 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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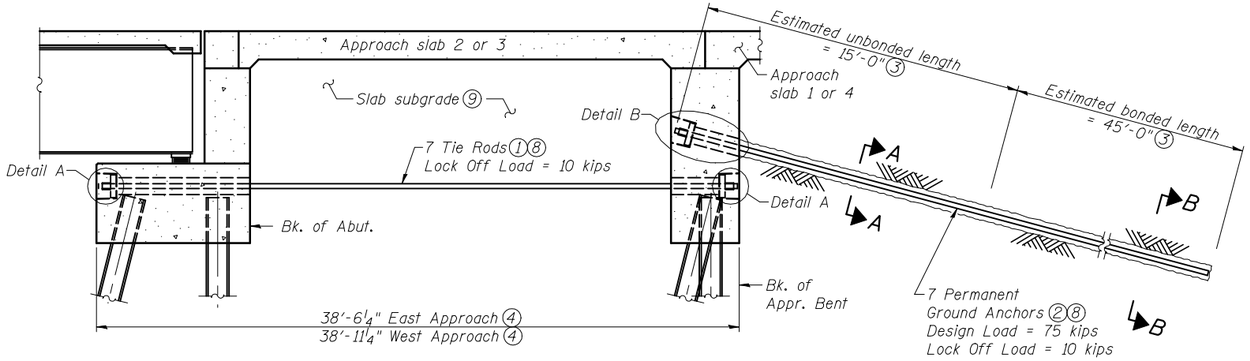
		CONTRACT NO. 78056		
		ILLINOIS	FED. AID PROJECT	

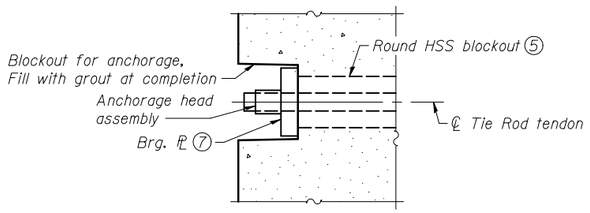


ABUTMENT

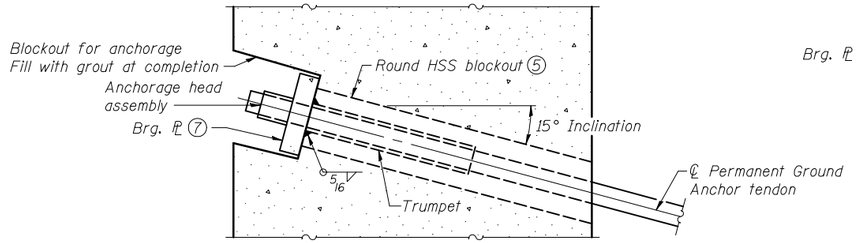
APPROACH BENT

SEQUENCE OF ABUTMENT & APPROACH BENT SYSTEM CONSTRUCTION

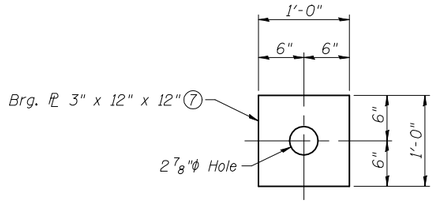
1. Construct abutments and approach bents.
2. Install Tie Rod assemblies. Apply a 10 kip tensile load to each Tie Rod and transfer load to anchorage device in accordance with the Special Provisions.
3. Grout Tie Rod anchorage head assembly and round HSS blockout.
4. Backfill behind approach bent.
5. Install Permanent Ground Anchor system and load test in accordance with the Special Provisions. Reduce test load to specified lock off load and transfer load to anchorage device.
6. Grout Permanent Ground Anchor anchorage head assembly and round HSS blockout if not previously grouted.
7. Backfill between abutment and approach bent as required and construct approach slabs.



DETAIL A



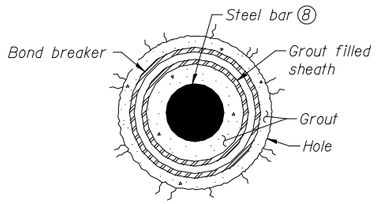
DETAIL B



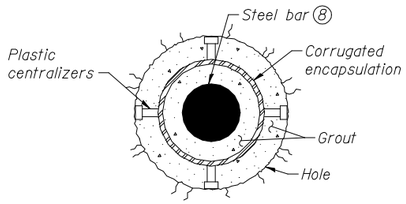
BEARING PLATE

BILL OF MATERIAL

Item	Unit	Quantity
Permanent Ground Anchor	Each	14
Tie Rod	Each	14



SECTION A-A



SECTION B-B

Notes:

(1) For Tie Rod spacing, see Abutment and Approach Bent details. Self weight of Tie Rod tendon shall be supported its entire length before tendons are stressed.
(2) For Permanent Ground Anchor spacing, see Approach Bent Details.
(3) Actual length as required by Contractor design.
(4) Length measured along ℄ Tie Rod.
(5) For round HSS blockout details, see Abutment and Approach Bent details. Fill round HSS blockout with grout after completion.
(6) The design of the Tie Rod tendon and Permanent Ground Anchor tendon is based on deflection requirements. Substitution of a smaller diameter or material other than those specified will not be allowed.
(7) The structural steel bearing plates shall conform to the requirements of AASHTO M 270 Grade 50.
(8) Round solid steel bars conforming to the requirements of AASHTO M 275 Grade 150 with a nominal diameter of 2½" shall be used for the tendons of both the Tie Rod and the Permanent Ground Anchor.
(9) For subgrade below slab, see Section Thru Pile Supported Stub Abutment on sheet 2 of 53 and Section A-A on sheets 20 and 23 of 53.

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STATE OF ILLINOIS
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TIE ROD AND PERMANENT GROUND ANCHOR DETAILS
STRUCTURE NO. 039-0075 (E.B.)
SHEET NO. 39 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		CONTRACT NO. 78056		
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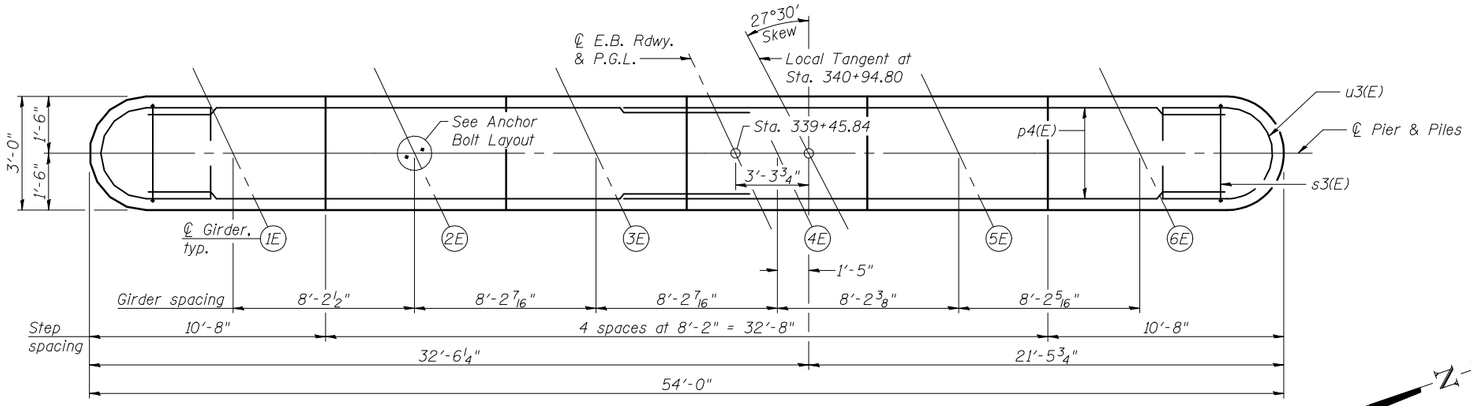
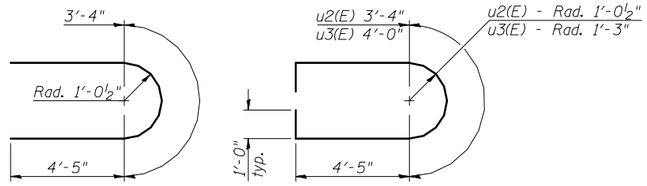
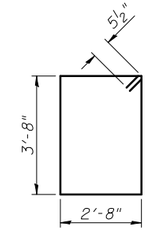


TOP PLAN

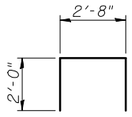


BAR u1(E)

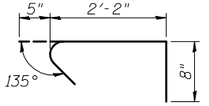
BARS u2(E) & u3(E)



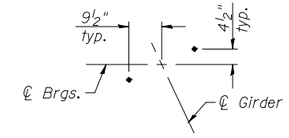
BAR s3(E)



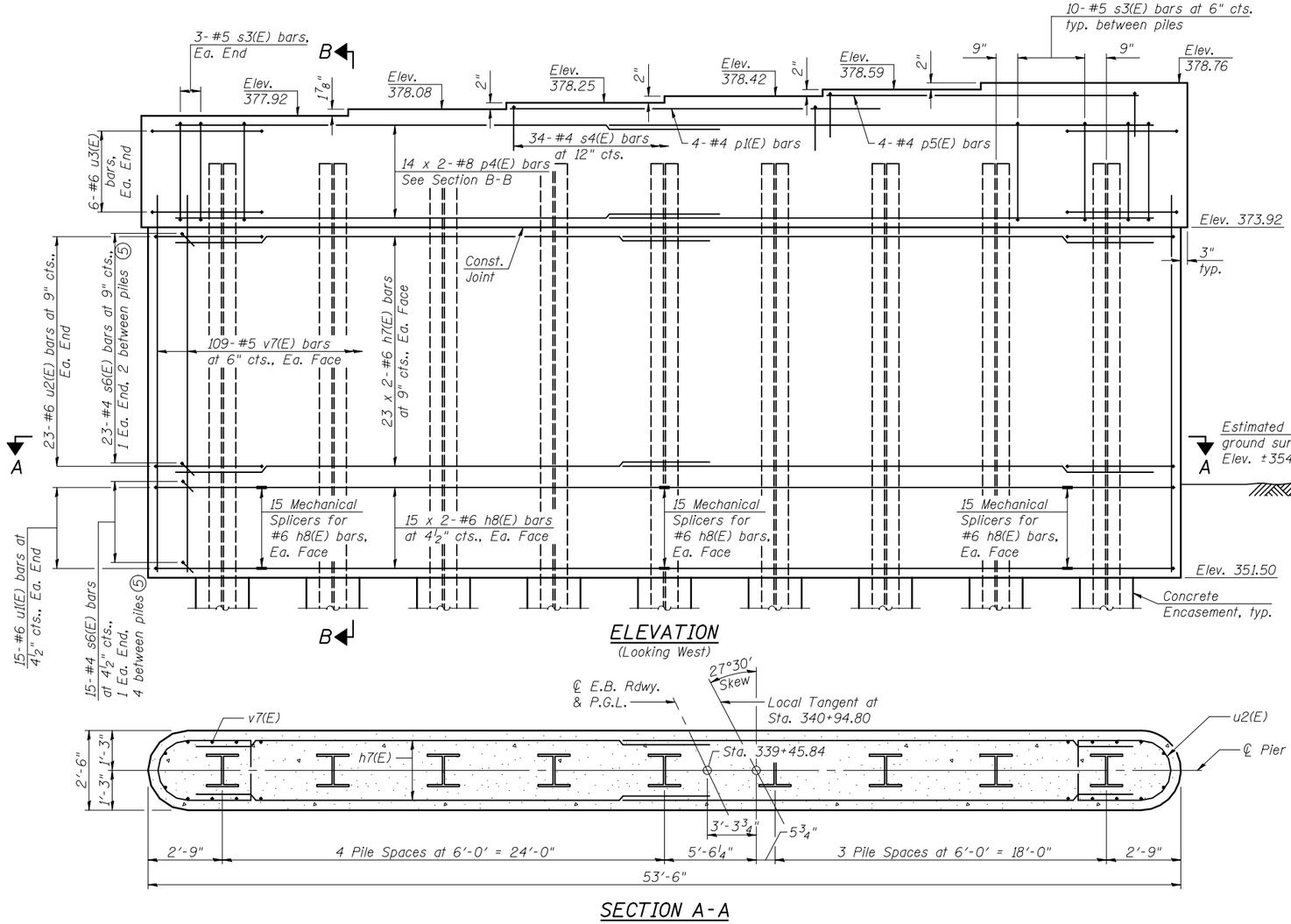
BAR s4(E)



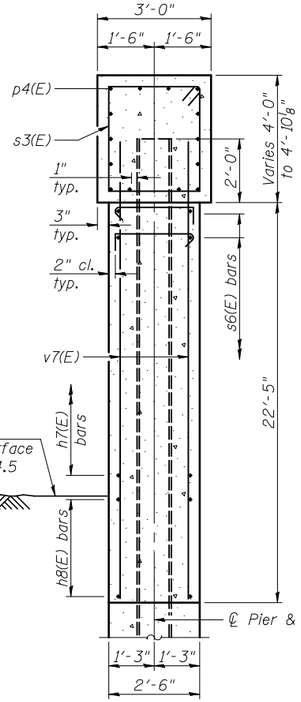
BAR s6(E)



ANCHOR BOLT LAYOUT ④



ELEVATION
(Looking West)



SECTION B-B

MIN. BAR LAP

#8 bar = 7'-8"
#6 bar = 4'-5"

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h7(E)	92	#6	27'-9"	——
h8(E)	60	#6	21'-1"	——
p1(E)	4	#4	18'-3"	——
p4(E)	28	#8	29'-4"	——
p5(E)	4	#4	16'-11"	——
s3(E)	86	#5	13'-7"	
s4(E)	34	#4	6'-8"	
s5(E)	-	-	-	
s6(E)	924	#4	3'-3"	
u1(E)	30	#6	12'-2"	
u2(E)	46	#6	14'-2"	
u3(E)	12	#6	14'-10"	
v7(E)	218	#5	24'-2"	——
Structure Excavation		Cu. Yd.	42	
Concrete Structures		Cu. Yd.	136.1	
Concrete Encasement		Cu. Yd.	4.9	
Reinforcement Bars, Epoxy Coated		Pound	18,690	
Furnishing Steel Piles HP14x73		Foot	720	
Driving Piles		Foot	720	
Test Pile Steel HP14x73		Each	1	
Mechanical Splicers		Each	90	

SECTION A-A

PILE DATA

Type: Steel HP14x73
Nominal Required Bearing: 578 kips
Factored Resistance Available: 320 kips
Est. Length: 90 ft
No. Production Piles: 8
No. Test Piles: 1

Notes:
① Pour steps monolithically with cap.
② For details of Mechanical Splicers, see sheet 47 of 53.
③ For details of piles and Concrete Encasement, see sheet 46 of 53.
④ Space reinforcement in cap to miss anchor bolts.
⑤ Alternate s6(E) bars end for end as shown in Section B-B.
⑥ Bars indicated thus 14 x 2-#8 etc. indicates 14 lines of bars with 2 lengths per line.

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STATE OF ILLINOIS
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PIER 1 DETAILS
STRUCTURE NO. 039-0075 (E.B.)
SHEET NO. 40 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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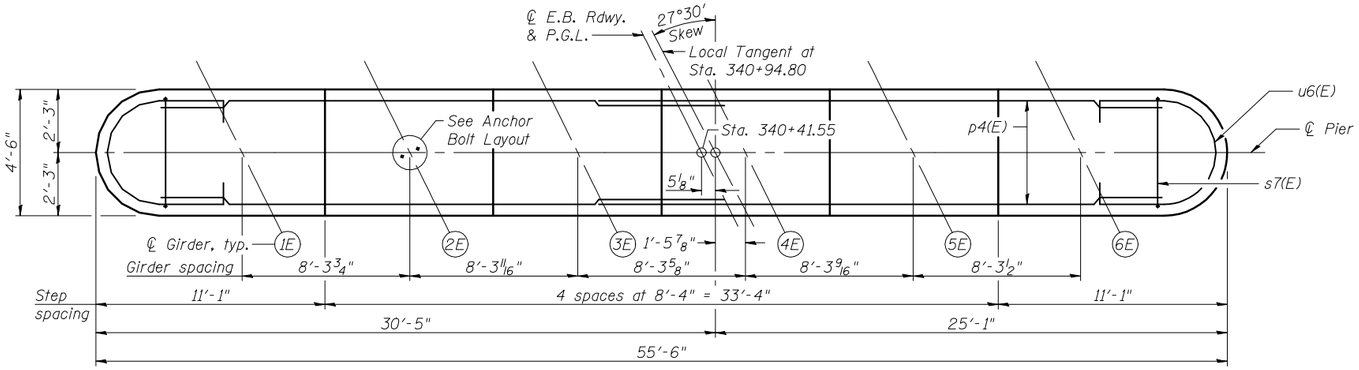
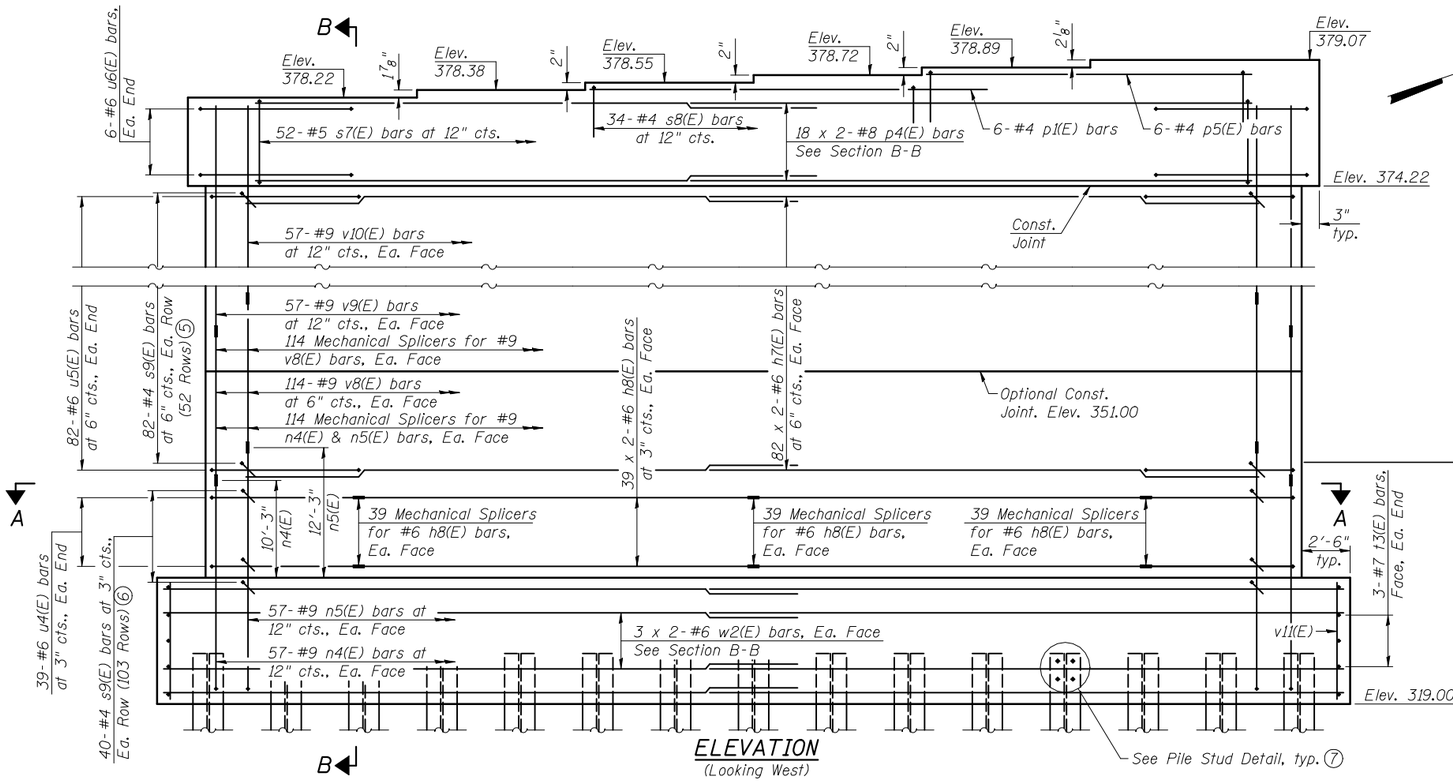
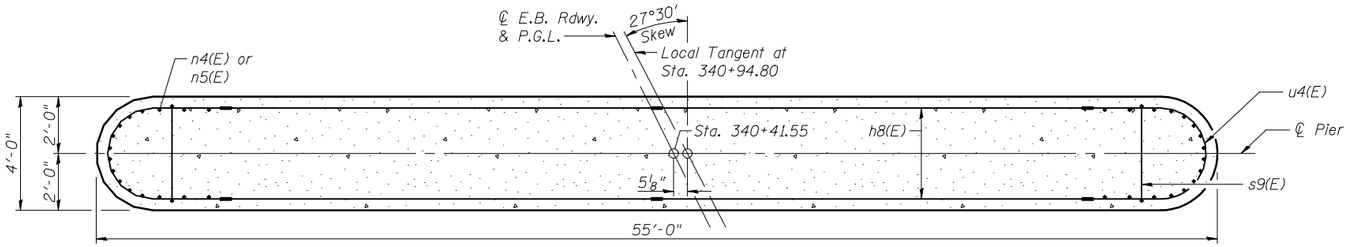
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			



TOP PLAN



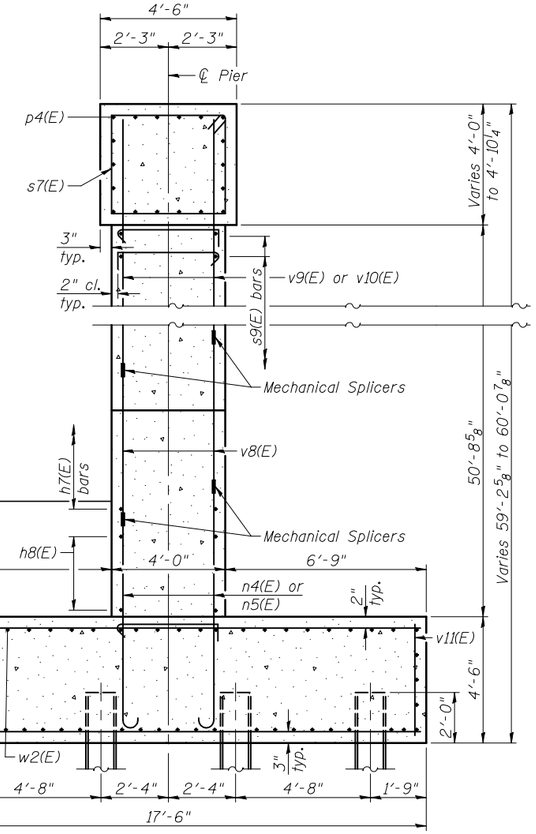
ELEVATION
(Looking West)



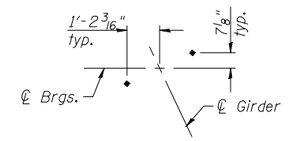
SECTION A-A

MIN. BAR LAP
#8 bar = 7'-8"
#6 bar = 4'-5"

Notes:
1. Pour steps monolithically with cap.
2. For details of Mechanical Splicers, see sheet 47 of 53.
3. For details of Cofferdam (Type 2), see sheet 4 of 53.
4. Space reinforcement in cap to miss anchor bolts.
5. Space s9(E) bars horizontally with each v8(E) & v9(E) or v8(E) & v10(E) bar and vertically with h7(E) bars. Alternate s9(E) bars end for end as shown in Section B-B.
6. Space s9(E) bars horizontally with each n4(E) & n5(E) bar and vertically with h8(E) bars. Alternate s9(E) bars end for end as shown in Section B-B. Total includes one row of bars in top of footing.
7. For Bill of Materials, Bar Details, Pile Stud Detail, Footing Plan, and footing reinforcement, see sheet 42 of 53.
8. Bars indicated thus 18 x 2-#8 etc. indicates 18 lines of bars with 2 lengths per line.



SECTION B-B

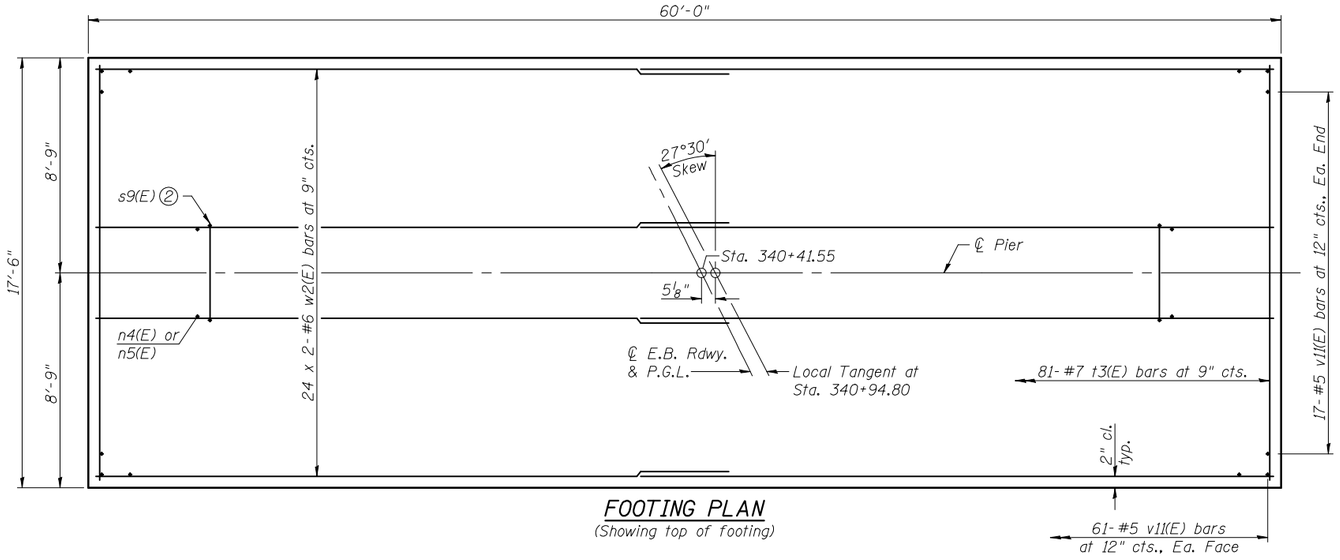


ANCHOR BOLT LAYOUT ④

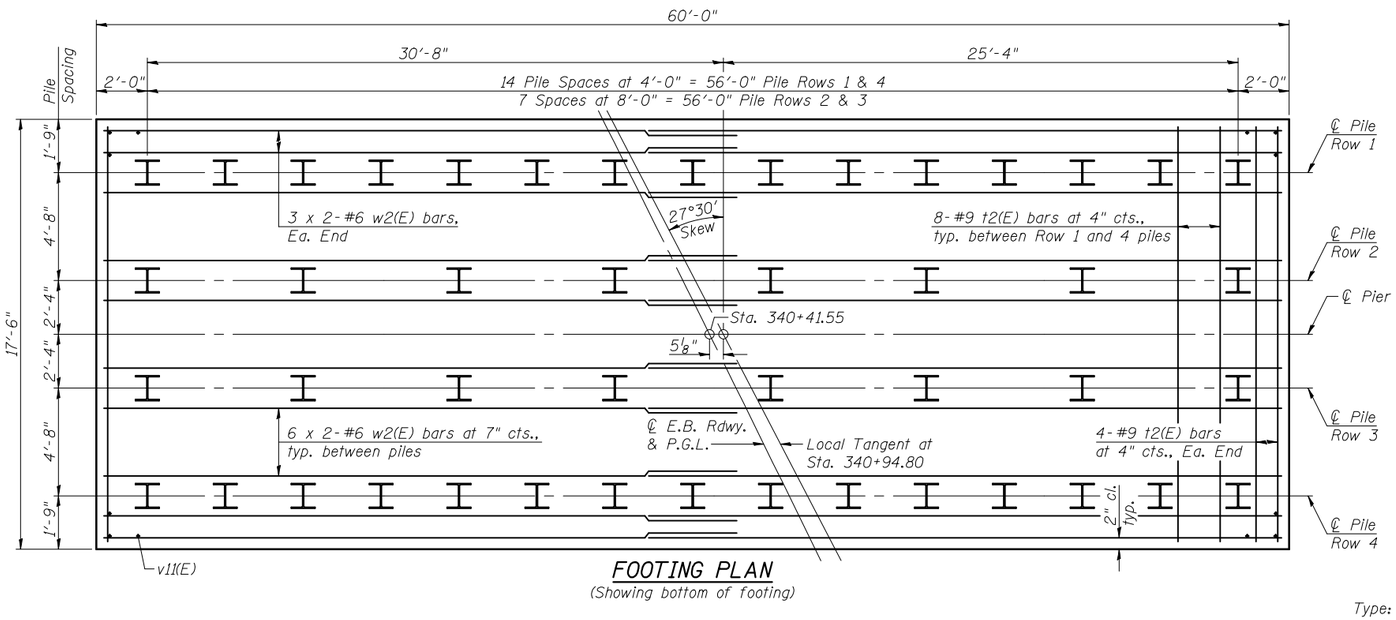
BATES ASSOCIATES Engineering + Architecture	ILLINOIS Eastport Business Center 1, 100 Lanter Court, Suite 1, Collinsville, IL 62234, tel 618.345.2220, fax 618.345.7220 / MISSOURI Laclede Gas Building, 720 Olive, Suite 1600, St. Louis, MO 63101, tel 314.588.8391, fax 314.588.9005 / www.batesassociates.com	USER NAME =	DESIGNED - JAD	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**
			CHECKED - DGL	REVISED -	
		PLOT SCALE =	DRAWN - JAD	REVISED -	
		PLOT DATE =	CHECKED - MAG	REVISED -	

PIER 2 DETAILS
STRUCTURE NO. 039-0075 (E.B.)
SHEET NO. 41 OF 53 SHEETS

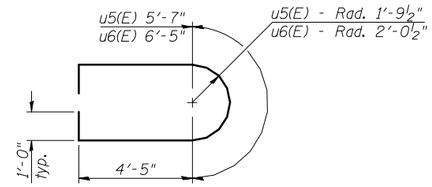
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	100
		CONTRACT NO. 78056		
		ILLINOIS FED. AID PROJECT		



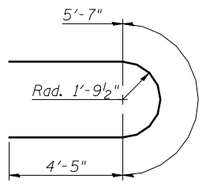
FOOTING PLAN
(Showing top of footing)



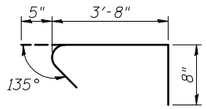
FOOTING PLAN
(Showing bottom of footing)



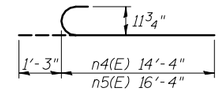
BARS u5(E) & u6(E)



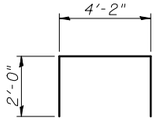
BAR u4(E)



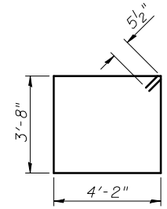
BAR s9(E)



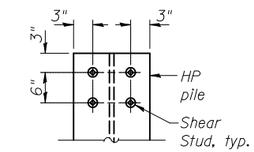
BARS n4(E) & n5(E)



BAR s8(E)



BAR s7(E)



PILE STUD DETAIL ③

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h7(E)	328	#6	27'-9"	——
h8(E)	156	#6	21'-1"	——
n4(E)	114	#9	15'-7"	⌒
n5(E)	114	#9	17'-7"	⌒
p1(E)	6	#4	18'-3"	——
p4(E)	36	#8	29'-4"	——
p5(E)	6	#4	16'-11"	——
s7(E)	52	#5	16'-7"	□
s8(E)	34	#4	8'-2"	⊓
s9(E)	8,384	#4	4'-9"	⊐
t2(E)	120	#9	17'-2"	——
t3(E)	87	#7	17'-2"	——
u4(E)	78	#6	14'-5"	⊔
u5(E)	164	#6	16'-5"	⊔
u6(E)	12	#6	17'-3"	⊔
v8(E)	228	#9	18'-3"	——
v9(E)	114	#9	26'-0"	——
v10(E)	114	#9	24'-0"	——
v11(E)	156	#5	4'-1"	——
w2(E)	108	#6	32'-1"	——
Cofferdam Excavation			Cu. Yd.	1,118
Cofferdam (Type 2) (Location-1)			Each	1
Concrete Structures			Cu. Yd.	622.0
Seal Coat Concrete			Cu. Yd.	485.9
Reinforcement Bars, Epoxy Coated			Pound	117,610
Furnishing Steel Piles HP14x73			Foot	1,575
Driving Piles			Foot	1,575
Test Pile Steel HP14x73			Each	1
Mechanical Splicers			Each	690

MIN. BAR LAP
#6 bar = 4'-5"

PILE DATA
Type: Steel HP 14x73
Nominal Required Bearing: 578 kips
Factored Resistance Available: 320 kips
Est. Length: 35 ft
No. Production Piles: 45
No. Test Piles: 1

Notes:
① For details of piles, see sheet 46 of 53.
② Alternate s9(E) bars end for end as shown in Section B-B on sheet 41 of 53.
③ Provide 4 - ¾" ϕ x 4" granular or solid flux filled headed studs conforming to Article 1006.32 of the Standard Specifications automatically end welded to piling, each flange, each pile. Cost included with Furnishing Steel Piles HP14x73.
④ Bars indicated thus 24 x 2-#6 etc. indicates 24 lines of bars with 2 lengths per line.

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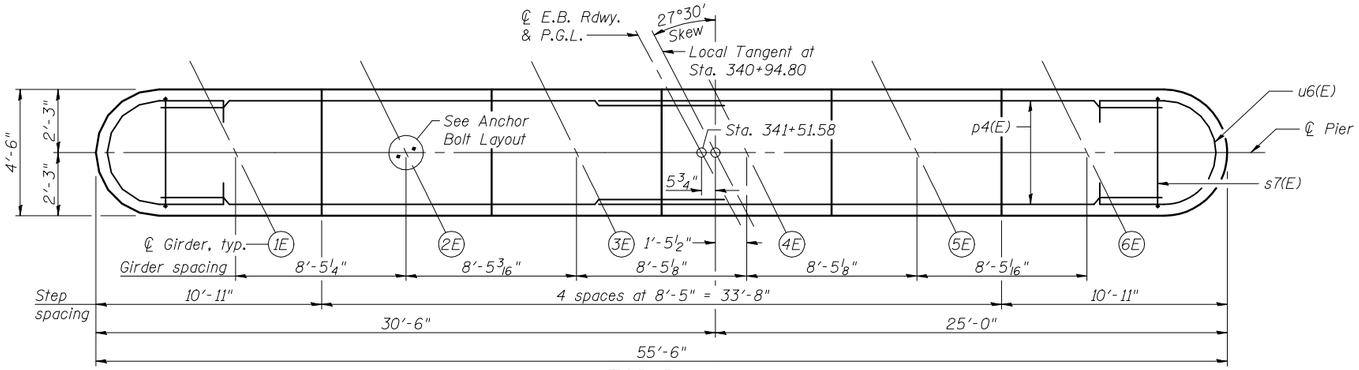
PLOT SCALE =	DRAWN - JAD	REVISED -	
PLOT DATE =	CHECKED - MAG	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 2 DETAILS
STRUCTURE NO. 039-0075 (E.B.)
SHEET NO. 42 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	101
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			



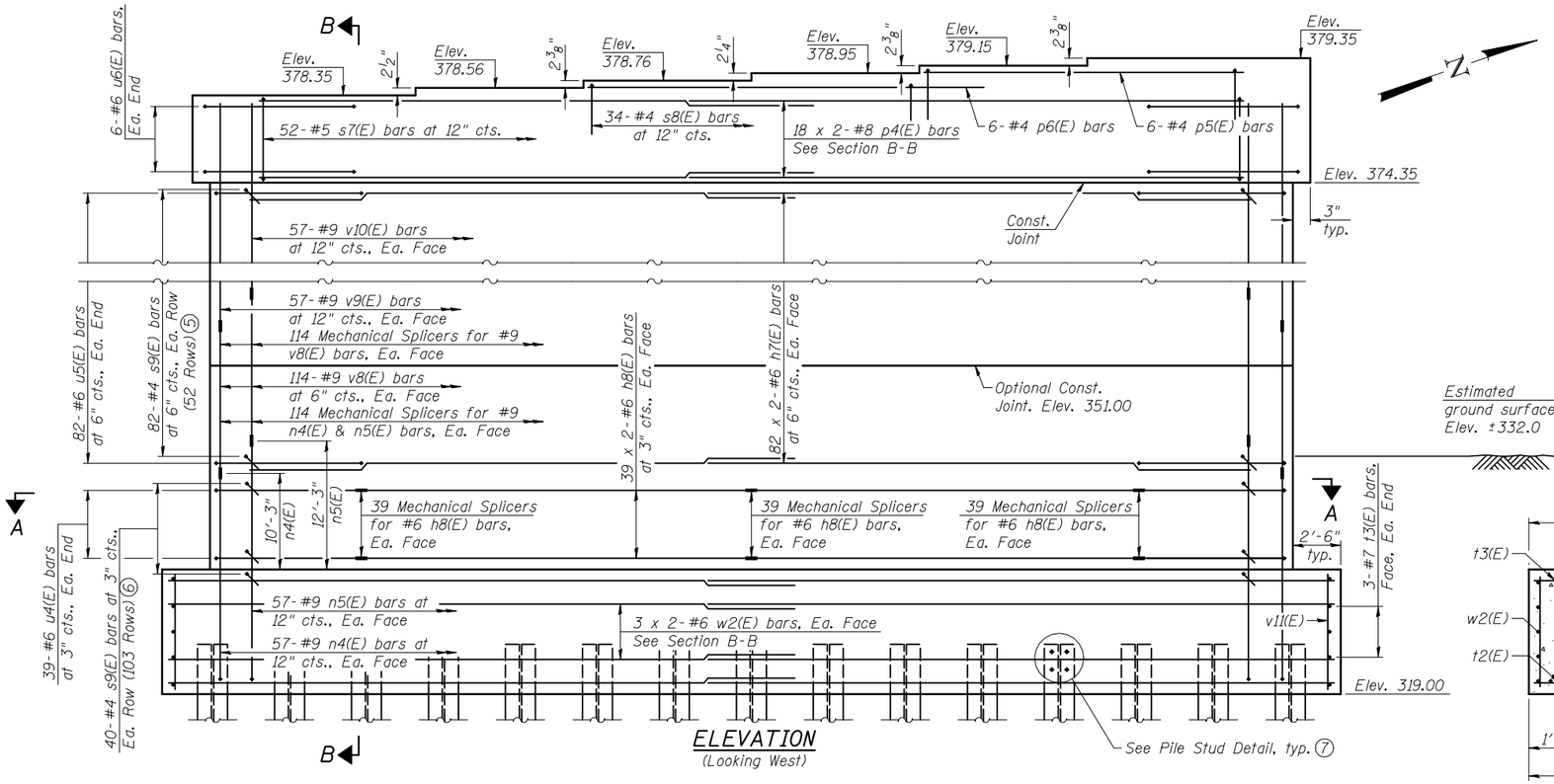
TOP PLAN

Notes:

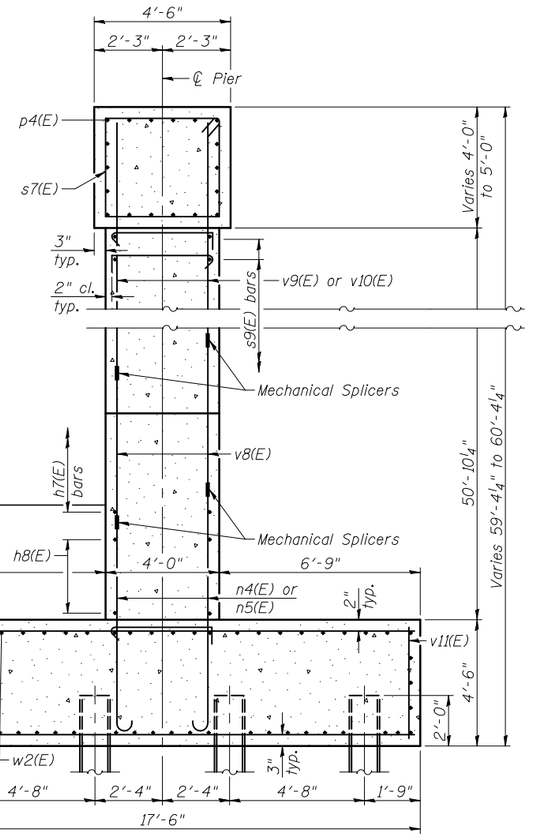
1. Pour steps monolithically with cap.
2. For details of Mechanical Splicers, see sheet 47 of 53.
3. For details of Cofferdam (Type 2), see sheet 4 of 53.
4. Space reinforcement in cap to miss anchor bolts.
5. Space s9(E) bars horizontally with each v8(E) & v9(E) or v8(E) & v10(E) bar and vertically with h7(E) bars. Alternate s9(E) bars end for end as shown in Section B-B.
6. Space s9(E) bars horizontally with each n4(E) & n5(E) bar and vertically with h8(E) bars. Alternate s9(E) bars end for end as shown in Section B-B. Total includes one row of bars in top of footing.
7. For Bill of Materials, Bar Details, Pile Stud Detail, Footing Plan, and footing reinforcement, see sheet 44 of 53.
8. Bars indicated thus 18 x 2-#8 etc. indicates 18 lines of bars with 2 lengths per line.

MIN. BAR LAP

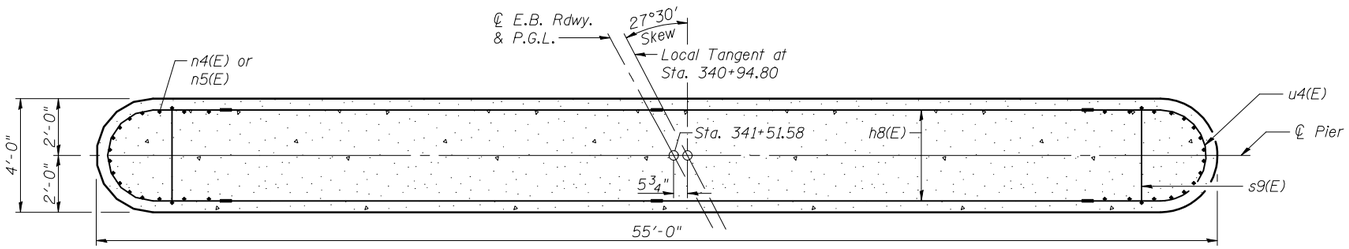
#8 bar = 7'-8"
#6 bar = 4'-5"



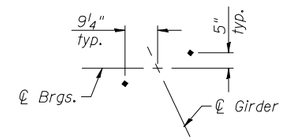
ELEVATION
(Looking West)



SECTION B-B



SECTION A-A



ANCHOR BOLT LAYOUT ④

USER NAME =	DESIGNED - JAD	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**
	CHECKED - DGL	REVISED -	
PLOT SCALE =	DRAWN - JAD	REVISED -	
PLOT DATE =	CHECKED - MAG	REVISED -	

PIER 3 DETAILS
STRUCTURE NO. 039-0075 (E.B.)
SHEET NO. 43 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	102
		CONTRACT NO. 78056		
ILLINOIS FED. AID PROJECT				

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100 Lanter Court, Suite 1
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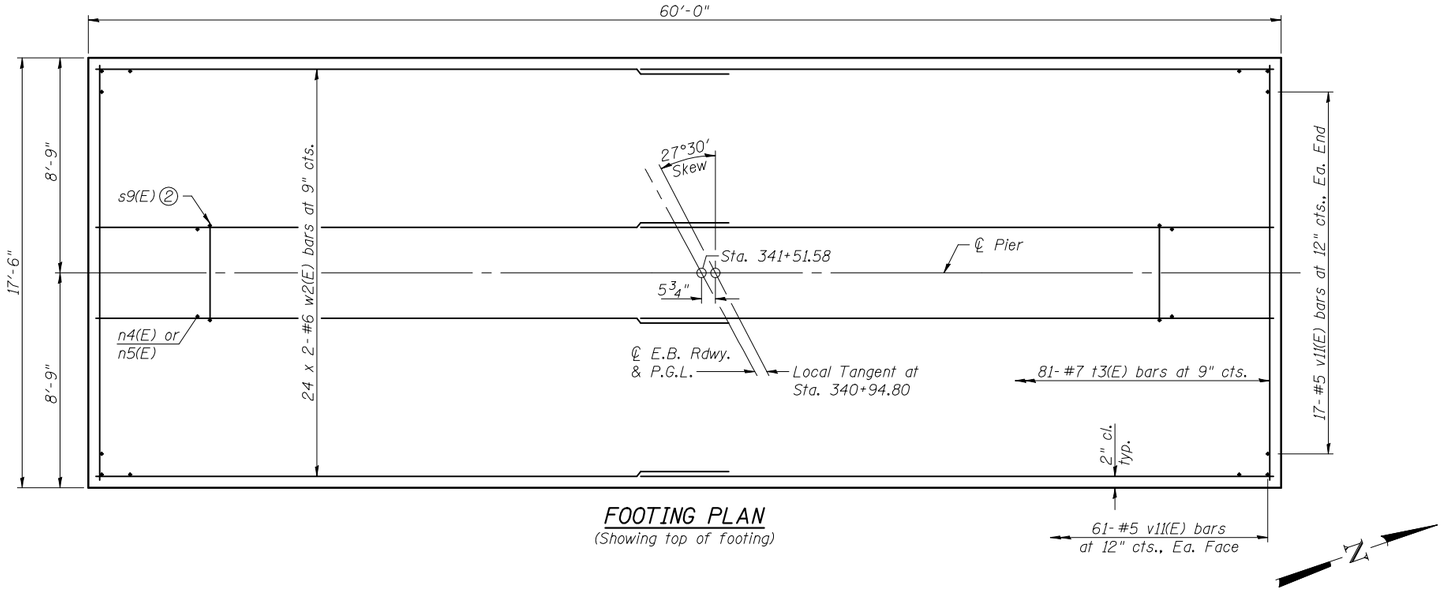
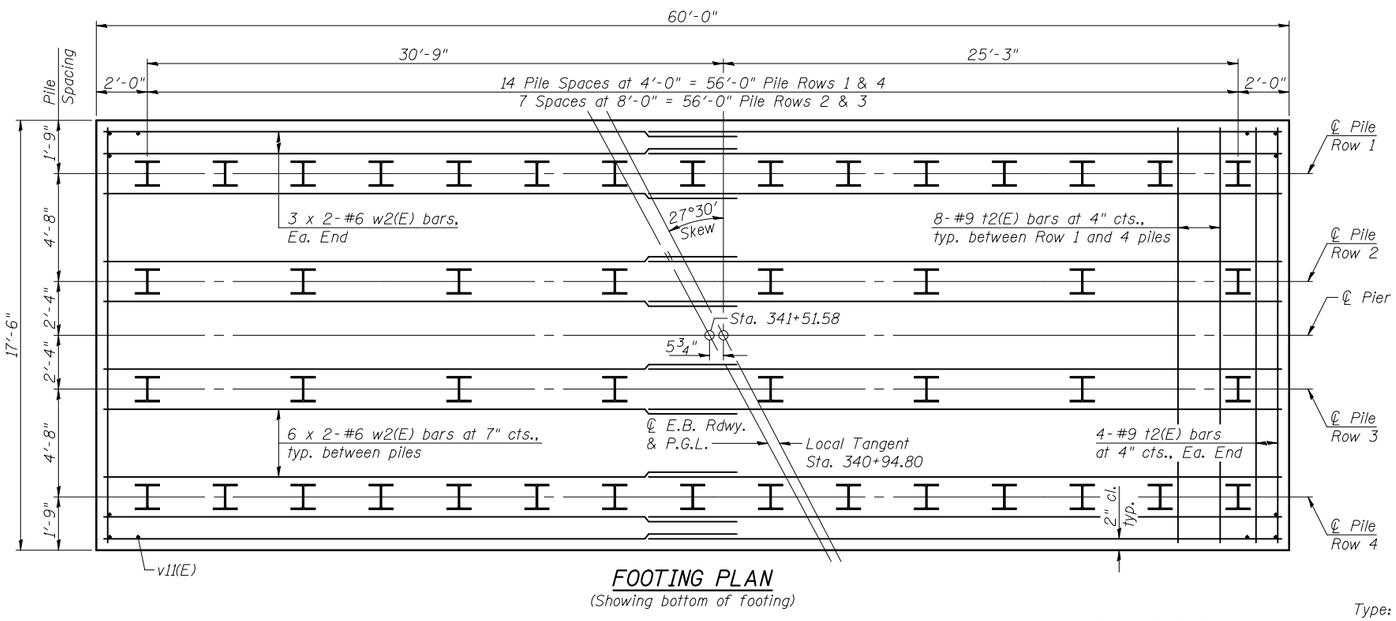


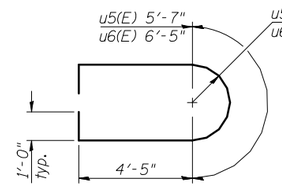
FOOTING PLAN
(Showing top of footing)



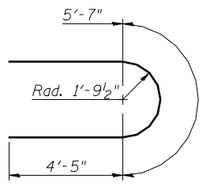
FOOTING PLAN
(Showing bottom of footing)

MIN. BAR LAP

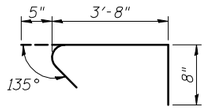
#6 bar = 4'-5"



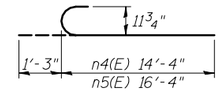
BARS u5(E) & u6(E)



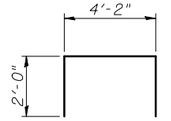
BAR u4(E)



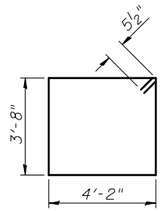
BAR s9(E)



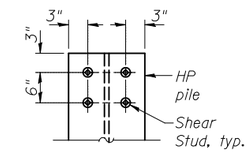
BARS n4(E) & n5(E)



BAR s8(E)



BAR s7(E)



PILE STUD DETAIL ③

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h7(E)	328	#6	27'-9"	
h8(E)	156	#6	21'-1"	
n4(E)	114	#9	15'-7"	
n5(E)	114	#9	17'-7"	
p4(E)	36	#8	29'-4"	
p5(E)	6	#4	16'-11"	
p6(E)	6	#4	18'-10"	
s7(E)	52	#5	16'-7"	
s8(E)	34	#4	8'-2"	
s9(E)	8,384	#4	4'-9"	
t2(E)	120	#9	17'-2"	
t3(E)	87	#7	17'-2"	
u4(E)	78	#6	14'-5"	
u5(E)	164	#6	16'-5"	
u6(E)	12	#6	17'-3"	
v8(E)	228	#9	18'-3"	
v9(E)	114	#9	26'-0"	
v10(E)	114	#9	24'-0"	
v11(E)	156	#5	4'-1"	
w2(E)	108	#6	32'-1"	
Cofferdam Excavation		Cu. Yd.	1,118	
Cofferdam (Type 2) (Location-2)		Each	1	
Concrete Structures		Cu. Yd.	623.8	
Seal Coat Concrete		Cu. Yd.	485.9	
Reinforcement Bars, Epoxy Coated		Pound	117,610	
Furnishing Steel Piles HP14x73		Foot	1,575	
Driving Piles		Foot	1,575	
Test Pile Steel HP14x73		Each	1	
Mechanical Splicers		Each	690	

PILE DATA

Type: Steel HP 14x73
Nominal Required Bearing: 578 kips
Factored Resistance Available: 320 kips
Est. Length: 35 ft
No. Production Piles: 45
No. Test Piles: 1

Notes:
① For details of piles, see sheet 46 of 53.
② Alternate s9(E) bars end for end as shown in Section B-B on sheet 43 of 53.
③ Provide 4 - 3/4" ϕ x 4" granular or solid flux filled headed studs conforming to Article 1006.32 of the Standard Specifications automatically end welded to piling, each flange, each pile. Cost included with Furnishing Steel Piles HP14x73.
④ Bars indicated thus 24 x 2-#6 etc. indicates 24 lines of bars with 2 lengths per line.

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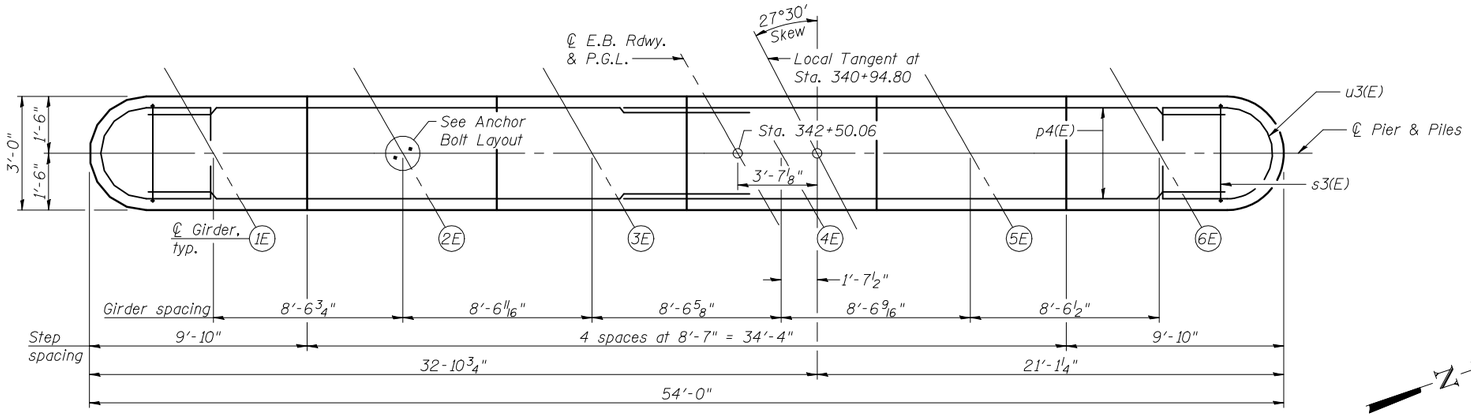
USER NAME =	DESIGNED - JAD	REVISED -	
	CHECKED - DGL	REVISED -	
PLOT SCALE =	DRAWN - JAD	REVISED -	
PLOT DATE =	CHECKED - MAG	REVISED -	

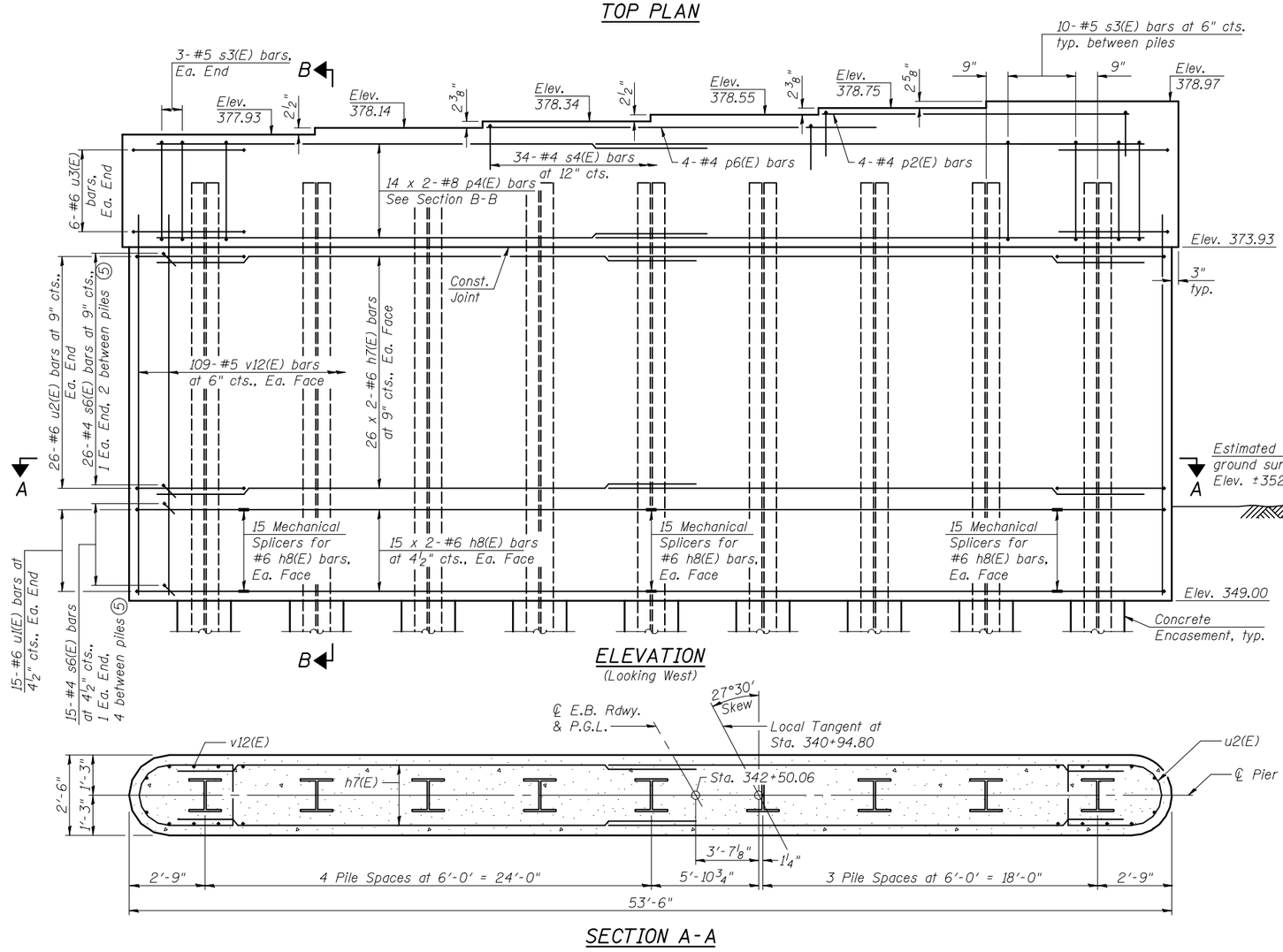
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 3 DETAILS
STRUCTURE NO. 039-0075 (E.B.)
SHEET NO. 44 OF 53 SHEETS

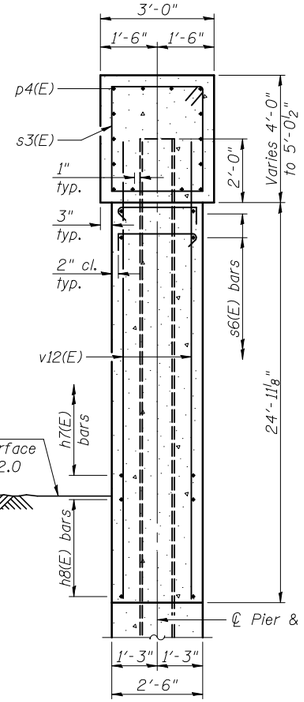
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	103
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			



TOP PLAN

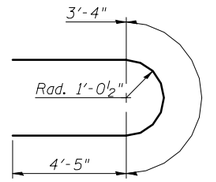


ELEVATION
(Looking West)

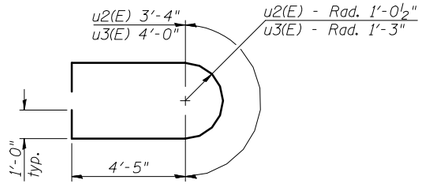


SECTION B-B

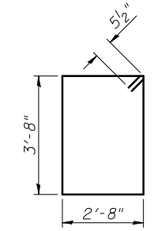
SECTION A-A



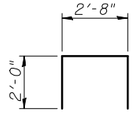
BAR u1(E)



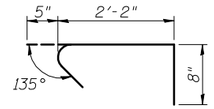
BARS u2(E) & u3(E)



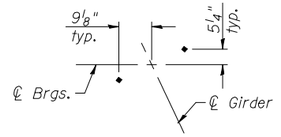
BAR s3(E)



BAR s4(E)



BAR s6(E)



ANCHOR BOLT LAYOUT ④

MIN. BAR LAP

#8 bar = 7'-8"
#6 bar = 4'-5"

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h7(E)	104	#6	27'-9"	
h8(E)	60	#6	21'-1"	
p2(E)	4	#4	16'-7"	
p4(E)	28	#8	29'-4"	
p6(E)	4	#4	18'-10"	
s3(E)	86	#5	13'-7"	
s4(E)	34	#4	6'-8"	
s5(E)	-	-	-	
s6(E)	978	#4	3'-3"	
u1(E)	30	#6	12'-2"	
u2(E)	52	#6	14'-2"	
u3(E)	12	#6	14'-10"	
v12(E)	218	#5	26'-8"	
Structure Excavation		Cu. Yd.	42	
Concrete Structures		Cu. Yd.	149.0	
Concrete Encasement		Cu. Yd.	4.9	
Reinforcement Bars, Epoxy Coated		Pound	20,000	
Furnishing Steel Piles HP14x73		Foot	720	
Driving Piles		Foot	720	
Test Pile Steel HP14x73		Each	1	
Mechanical Splicers		Each	90	

PILE DATA

Type: Steel HP 14x73
Nominal Required Bearing: 578 kips
Factored Resistance Available: 320 kips
Est. Length: 90 ft
No. Production Piles: 8
No. Test Piles: 1

Notes:
① Pour steps monolithically with cap.
② For details of Bar Splicers, see sheet 47 of 53.
③ For details of piles and Concrete Encasement, see sheet 46 of 53.
④ Space reinforcement in cap to miss anchor bolts.
⑤ Alternate s6(E) bars end for end as shown in Section B-B.
⑥ Bars indicated thus 14 x 2-#8 etc. indicates 14 lines of bars with 2 lengths per line.

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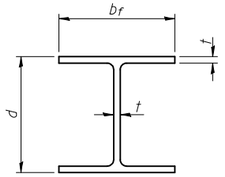
PLOT DATE =	CHECKED - MAG	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

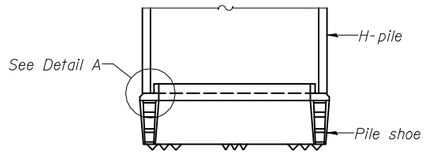
PIER 4 DETAILS
STRUCTURE NO. 039-0075 (E.B.)
SHEET NO. 45 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	104
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

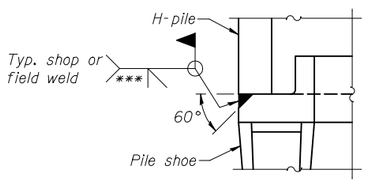


STEEL PILE TABLE

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"

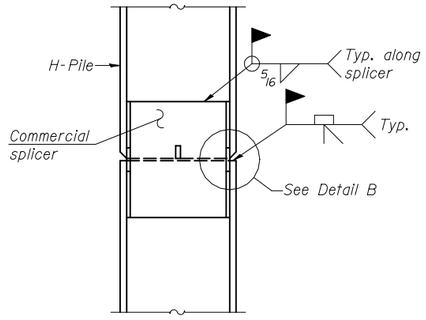


ELEVATION

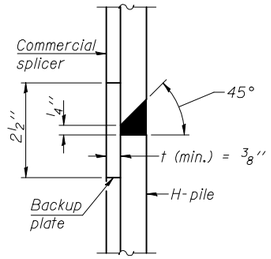


DETAIL A

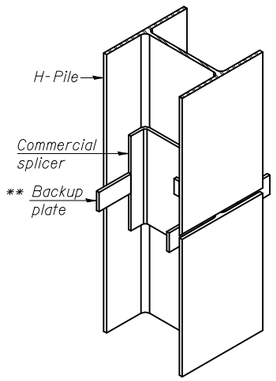
H-PILE SHOE ATTACHMENT



ELEVATION

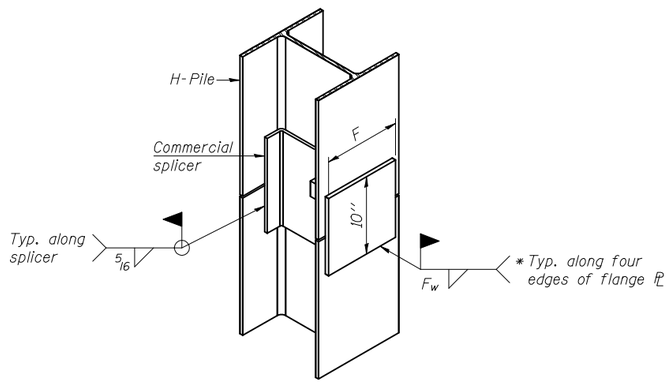


DETAIL "B"



ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE



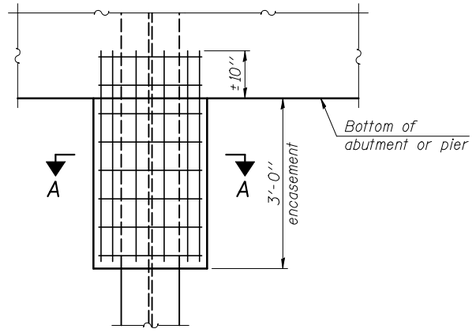
ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE ALTERNATE

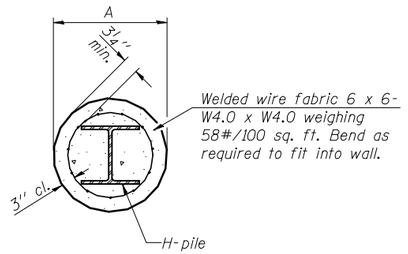
* Interrupt welds 1/4" from end of web and/or each flange.

** Remove portions of backup plates that extend outside the flanges.

*** Weld size per pile shoe manufacturer (5/16" min.).



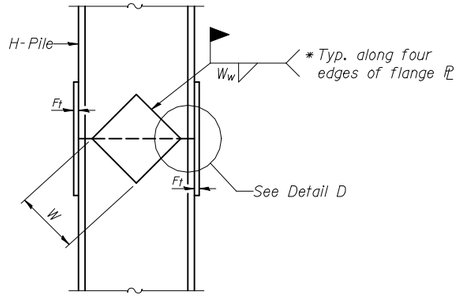
ELEVATION



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

SECTION A-A

PILE ENCASEMENT



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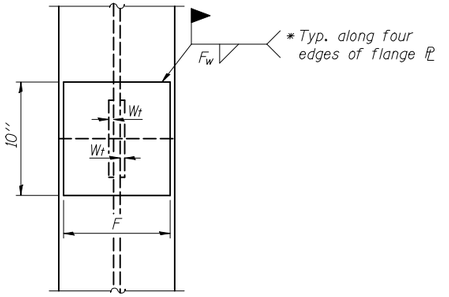
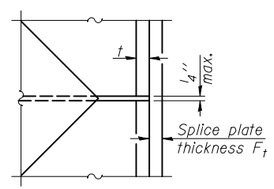


END VIEW



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

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

F-HP 7-1-10

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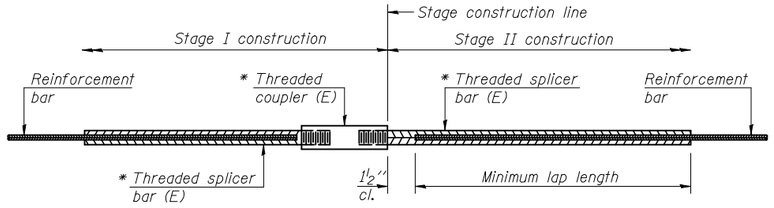
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HP PILE DETAILS
STRUCTURE NO. 039-0075 (E.B.)
SHEET NO. 46 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	105
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			



STANDARD BAR SPLICER ASSEMBLY

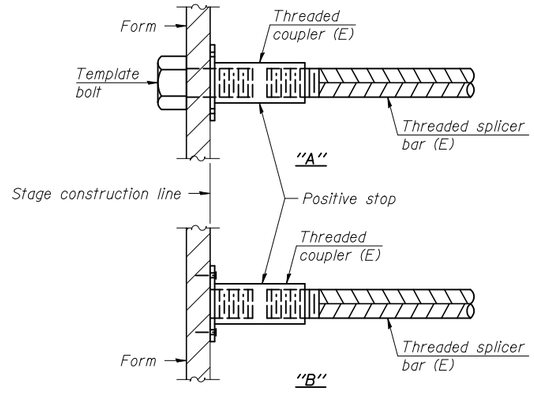
Minimum Lap Lengths					
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-3"
5	1'-9"	2'-5"	2'-7"	2'-11"	2'-10"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-4"
7	2'-9"	3'-10"	4'-2"	4'-8"	4'-6"
8	3'-8"	5'-1"	5'-5"	6'-2"	5'-10"
9	4'-7"	6'-5"	6'-10"	7'-9"	7'-5"

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, Top bar lap, Class B

Threaded splicer bar length = min. lap length + 1½" + thread length

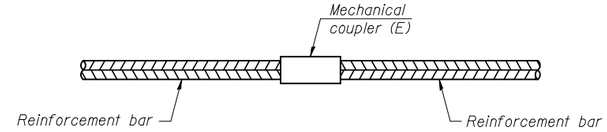
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

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



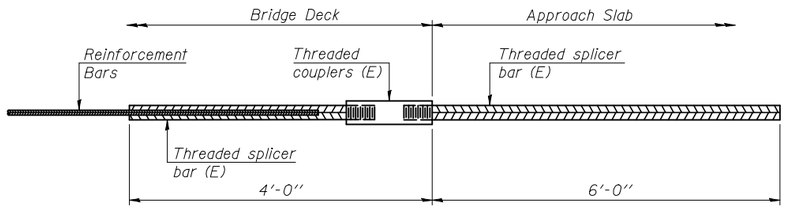
INSTALLATION AND SETTING METHODS

"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.



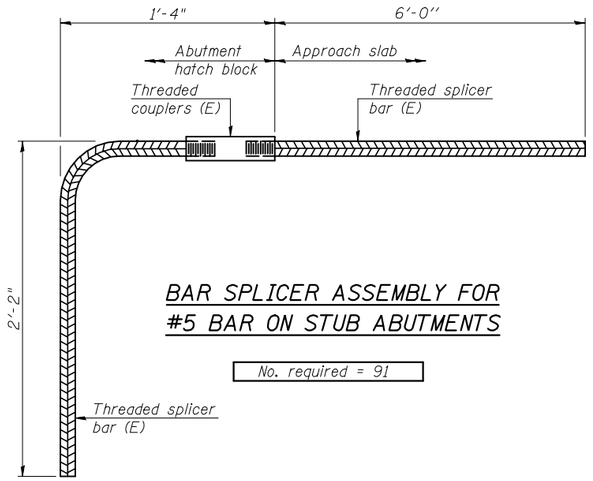
STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required
Pier 1	#6	90
Pier 2	#6	234
Pier 2	#9	456
Pier 3	#6	234
Pier 3	#9	456
Pier 4	#6	90



BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

No. required =



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required = 91

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 7-1-10

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 039-0075 (E.B.)
SHEET NO. 47 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	106
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		

ILLINOIS DEPARTMENT OF TRANSPORTATION
District Nine Materials

Bridge Foundation Boring Log

Sheet 1 of 3

ILL 13 Over Big Muddy River

Route: ILL 13 Structure Number: 039-0013 and 039-0049 Date: 10/20/2004

Section Bored By: Bryan Keller

County: Jackson Location: E. Edge of Murphysboro Checked By: Rob Graeff

Boring No 1-S
Station 338+68
Offset 28' LT WB CL
Ground Surface 383.2 Ft

Surf Wat Elev: 339.7
Ground Water Elevation
when Drilling 343.7
At Completion 351.4
At: 24 Hrs: 355.0

DEPTH	BLOW	Qu tsf	W%	DEPTH	BLOW	Qu tsf	W%
Very stiff, damp, brown, Silty Clay A-6				Stiff, very moist, brown mottled grey, Silty Clay to Clay A7-6	3	1.9B	23
					5		
	5						
	9	2.9B	13		1		
	10				2	1.3B	26
378.7				353.7	3		
Stiff, moist, brown, Silty Clay Loam A-6	5.0 2			Stiff, very moist, brown, Clay to Silty Clay A7-6	30.0 1		
	5	1.7B	16		2	1.2B	23
	7				3		
				351.2			
	1			Very stiff, very moist, brown	1		
	5	1.2S	15	mottled, grey, Clay to Silty Clay	3	2.4B	22
	7			A7-6	4		
				348.7			
	10.0 1			Medium, very moist, brown	35.0 WH		
	5	1.2S	19	mottled grey, Clay to Silty Clay	3	0.9B	25
	5			A7-6	3		
371.2				346.2			
Very stiff, moist, brown, Silty	1			Stiff, very moist, brown	1		
Clay Loam A-6	5	2.4S	17	mottled grey, Clay to Silty Clay	2	1.7B	25
	6			A7-6	3		
368.7				343.7			
Very stiff, moist, brown mottled	15.0 1			Stiff, very moist, grey, Silty Clay	40.0 1		
grey, Silty Clay A-6	4	2.6B	23	Loam A-6	1	1.5P	31
	5				1		
366.2							
Stiff, very moist, brown	1						
mottled grey, Silty Clay A-6	3	1.2B	25				
	3						
363.7				338.7			
Stiff, moist, grey, Silt Loam	20.0 1			Stiff, wet, grey, Clay	45.0 WH		
A-4	5	1.2B	21	A7-6	1	1.1B	55
	4				WH		
361.2							
Stiff, moist to very moist, grey,	1						
Silty Clay A-6	2	1.6B	22				
	4						
358.7				333.7			
	25.0 1				50.0 WH		

N-Std Pentr Test: 2" OD Sampler,
140# Hammer, 30" Fall (Type Fail, B-Bulge S-Shear E-Estimated P-Penetrometer)

(1)

Route: ILL 13
Section:
County: Jackson

Sheet 2 of 3
Date: 10/20/2004

Boring No: 1-S
Station: 338+68
Offset: 28' LT WB CL
Ground Surface: 383.2 Ft

DEPTH	BLOW	Qu tsf	W%	DEPTH	BLOW	Qu tsf	W%
Very stiff, moist, brown, Clay A7-6 with Sand Layers	1	2.6B	19	Medium, wet. brown. Clay A7-6	1	0.9B	52
	2				3		
328.7				303.7			
Stiff, very moist, grey, Clay A7-6 with Sand and Silt Loam Layers	55.0 1			Medium, very moist, brown, Clay A7-6 with Sand Layers	80.0 WH		
	3	1.8S	26		3	0.6B	25
	9				5		
	60.0 1				85.0		
	2	1.1B	35				
	6						
318.7				293.7			
Stiff, very moist, brown, Clay A7-6	65.0 2			Medium, wet, grey, fine to medium Sand 93% Sand 3% Silt 4% Clay	90.0 10		
	4	1.8S	32		13		21
	4				16		
313.7				288.7			
Very stiff, very moist, brown, Clay A7-6	70.0 3			Hard, dry, grey, Clay Shale over Coal	95.0 100/11"		
	6	2.1B	31	287.7			
	7			Bottom of hole = 95.5 ft Free water observed at 39.5 ft. Elevation referenced to Bk .E. Abut Sta 338+89 Elevation = 383.47 ft. To convert "N" values to "N60" valuesmultiply by 1.25.			
308.7							
	75.0 WH				100.0		

N-Std Pentr Test: 2" OD Sampler,
140# Hammer, 30" Fall (Type Fail, B-Bulge S-Shear E-Estimated P-Penetrometer)

(1)

Note:
(1) Only 2 Boring 1-S sheets.

ILLINOIS DEPARTMENT OF TRANSPORTATION
District Nine Materials

Bridge Foundation Boring Log
Sheet 1 of 2

ILL 13 EB Over Big Muddy River

Route: ILL 13 Structure Number: 039-0013 and 039-0049 Date: 10/5/2004
Section Bored By: Bryan Keller
County: Jackson Location: E. Edge of Murphysboro Checked By: Rob Graeff

Boring No 3-S
Station 339+94
Offset 30' LT CL
Ground Surface 353.7 Ft

Surf Wat Elev: 338.5
Ground Water Elevation
when Drilling 324.2
At Completion
At: 24 Hrs: 350.4

DEPTH	BLOW	Qu tsf	W%	DEPTH	BLOW	Qu tsf	W%
Hard, damp, brown, Silty Clay A7-6				Medium, very moist, grey, Silty Clay A-6	WH	0.6B	28
					WH		
				326.7			
	2			Medium, very moist, grey, Clay	WH		
	8	4.5P	17	A7-6	WH	0.7B	26
	15				WH		
349.2				324.2			
Very stiff, damp to moist, brown, Silty Clay A7-6 5.0	2			Medium, very moist, grey, Clay 30.0	WH		
	3	2.5P	16	to Silty Clay A7-6 with	3	0.7B	32
	3			Sand layers	2		
346.7				321.7			
Stiff, moist, brown, Silty Clay	WH			Very loose, wet, grey, fine	WH		
to Clay A7-6	1	1.2B	17	Silty Sand with Silty Clay Layers	WH		24
	1			90% Sand; 7% Silt; 3% Clay	WH		
344.2				319.2			
Soft, very moist, grey, Clay to 10.0	WH			Mdium, wey, grey, Sandy 35.0	WH		
Silty Clay A7-6	1	0.4B	31	Gravel	9		14
	WH			45% Sand	8		
				11% Silt			
				3% Clay; 41% Gravel 316.7			
	WH			Loose, wet, grey, Sandy	4		
	WH	0.3B	33	Gravel	4		
	WH			45% Sand	4		
				11% Silt			
				3% Clay; 41% Gravel 314.2			
15.0	WH			Stiff, very moist, brown, Clay 40.0	1		
	WH	0.3B	31	A7-6 with some Gravel	1	1.2B	30
	WH				2		
336.7				309.2			
Soft to medium, very moist, grey,	WH						
Clay to Silty Clay A7-6	WH	0.5B	29				
	WH						
20.0	WH			Medium, very moist, grey, Clay 45.0	1		
	WH	0.5B	29	A7-6	2	0.8B	34
	WH				2		
331.7							
Soft, very moist, grey, Clay to	WH						
Silty Clay A7-6	WH	0.3B	30				
	WH						
329.2				304.2			
25.0	WH			50.0	WH		

N-Std Pentr Test: 2" OD Sampler,
140# Hammer, 30" Fall (Type Fail, B-Bulge S-Shear E-Estimated P-Penetrometer)

Sheet 2 of 2

Route: ILL 13 Date: 10/5/2004
Section:
County: Jackson

Boring No: 3 S
Station: 339+94
Offset: 30' LT CL
Ground Surface: 353.7 Ft

DEPTH	BLOW	Qu tsf	W%		DEPTH	BLOW	Qu tsf	W%
Soft, wet, brown, Silty Clay	4	0.4B	27					
A7-6 with Silt Loam layers	3							
				Bottom of hole = 75.0 ft				
				Free water observed at 29.5 ft				
				Elevation referenced to Bk				
				East Abut Sta 338+89				
299.2				Elevation = 383.47 ft.				
Very loose, wet, grey, fine 55.0	1				80.0			
Silty Sand 298.2	1		18	To convert "N" values to "N60"				
Medium, wet, brown,	2	0.9B	43	values multiply by 1.25.				
Clay A7-6								
294.2								
Medium, very moist, brown, 60.0	2				85.0			
Clay A7-6	3	0.6B	29					
	7							
289.2								
Hard, dry, black Coal 65.0	100/5"				90.0			
Hard, dry, black Coal 70.0	100/3"				95.0			
Hard, dry, black Coal								
278.7	75.0	100/3"			100.0			

N-Std Pentr Test: 2" OD Sampler,
140# Hammer, 30" Fall (Type Fail, B-Bulge S-Shear E-Estimated P-Penetrometer)

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS
STRUCTURE NO. 039-0075 (E.B.)
SHEET NO. 49 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	108
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		

ILLINOIS DEPARTMENT OF TRANSPORTATION
District Nine Materials

Bridge Foundation
Boring Log
Sheet 1 of 2

ILL 13 EB Over Big Muddy River

Route: ILL 13 Structure Number: 039-0013 and 039-0049 Date: 10/4/2004
Section Bored By: Bryan Keller
County: Jackson Location: E. Edge of Murphysboro Checked By: Rob Graeff

Boring No 5 S
Station 341+88
Offset 22' RT CL
Ground Surface 351.6 Ft

Surf Wat Elev: 338.5
Ground Water Elevation
when Drilling 312.1
At Completion
At: 24 Hrs: 346.4

DEPTH	BLOW	Qu tsf	W%	DEPTH	BLOW	Qu tsf	W%
Stiff, very moist, brown, Silty Clay A-6				Medium, very moist, grey, Silty Clay to Clay A7-6	WH	0.6B	29
					WH		
	1				WH		
	3	1.6S	23		WH	0.8B	28
	3				1		
347.1							
Stiff, very moist, grey, Clay to Silty Clay A7-6 5.0	1			30.0	WH		
	3	1.2B	22		1	0.9B	25
	4				1		
344.6				319.6			
Very soft, wet, grey, Silty Clay A-6	WH			Medium to stiff, very moist, grey, Clay to Silty Clay A7-6	WH		
	1	0.2B	30		WH	1.0B	25
	1				3		
10.0	WH			317.1			
	1	0.2B	33	Stiff, very moist, grey, Clay A7-6 35.0	WH		
	1				1	1.1B	24
339.6					2		
Soft, wet, grey mottled brown, Silty Clay A-6	WH			314.6			
	WH	0.3B	29	Medium, very moist, brown, Clay A7-6 with Silt Loam seams	1		
	WH				2	0.9S	35
337.1					2		
Soft, wet, grey, Clay to Silty Clay A7-6 15.0	WH			312.1			
	WH	0.4B	30	Stiff, very moist, brown, Clay A7-6 with fine Sand layers 40.0	WH		
	WH				2	1.1S	27
334.6					2		
Medium, very moist, grey, Clay to Silty Clay A7-6	WH						
	WH	0.6B	27				
	WH						
332.1				307.1			
Soft, very moist, grey, Silty Clay Loam A-6 20.0	WH			Very stiff, very moist, grey, Clay Loam A-6 with Sand layers 45.0	3		
	WH	0.4B	27		6	2.6P	28
	WH				5		
329.6							
Medium, very moist, grey, Silty Clay to Clay A7-6	WH						
	WH	0.6B	27				
	WH						
				302.1			
25.0	WH			50.0	WH		

N-Std Pentr Test: 2" OD Sampler,
140# Hammer, 30" Fall (Type Fail, B-Bulge S-Shear E-Estimated P-Penetrometer)

Sheet 2 of 2

Route: ILL 13 Date: 10/4/2004
Section:
County: Jackson

Boring No: 5-S
Station: 341+88
Offset: 22' RT CL
Ground Surface: 351.6 Ft

DEPTH	BLOW	Qu tsf	W%	DEPTH	BLOW	Qu tsf	W%
Very loose, wet, grey, very fine Silty Sand 93% Sand 5% Silt 2% Clay	2		21				
	1						
297.1							
Stiff, wet, brown, Clay A7-6 with Sand layers 55.0	WH			80.0			
	4	1.1B	51				
	10						
292.1							
Medium, wet, grey, fine Sand with Gravel and Coal Chips 291.1 60.0	4		25	85.0			
	18						
Hard, dry, grey, weathered Clay Shale	49						
289.6							
Hard, dry, grey, Clay Shale over Coal 288.6	100/5"						
Bottom of hole = 63.0 ft.							
Free water observed at 39.5 ft. 65.0				90.0			
Elevation referenced to BK of W Abut Sta 343+06 CL Elevation = 383.47 ft.							
To convert "N" values to "N60" values multiply by 1.25.							
70.0				95.0			
75.0				100.0			

N-Std Pentr Test: 2" OD Sampler,
140# Hammer, 30" Fall (Type Fail, B-Bulge S-Shear E-Estimated P-Penetrometer)

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DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS
STRUCTURE NO. 039-0075 (E.B.)
SHEET NO. 50 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	109
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

ILLINOIS DEPARTMENT OF TRANSPORTATION
District Nine Materials

Bridge Foundation
Boring Log
Sheet 1 of 3

ILL 13 Over Big Muddy River

Route: ILL 13 Structure Number: 039-0013 and 039-0049 Date: 10/8/2004
Section: Bored By: Bryan Keller
County: Jackson Location: E. Edge of Murphysboro Checked By: Rob Graeff

Boring No 6-S
Station 343+17
Offset 22' RT EB CL
Ground Surface 383.0 Ft

Surf Wat Elev: 338.5
Ground Water Elevation
when Drilling 333
At Completion
At: 68 Hrs: 357.5

DEPTH	BLOW	Qu tsf	W%	DEPTH	BLOW	Qu tsf	W%
Very stiff, damp, brown, Silty Clay A-6				Very stiff, moist, brown, Silty Clay A-6	3 4	2.1B	21
	1			356.0			
	4 8	2.5B	11	Soft, very moist, brown, Silty Clay loam A-6	WH 1 2	0.4B	24
				353.5			
5.0	2			Stiff, moist to very moist, grey, Clay A7-6	30.0 WH		
	4 3	2.1B	15		2 2	1.1B	21
376.0				351.0			
Very stiff, moist to very moist, brown, Silty Clay A-6	1			Medium, very moist, grey, Clay A7-6	WH		
	3 3	2.1B	20		2 2	0.9B	29
373.5							
Stiff, very moist, brown, Silty Clay A7-6 10.0	1			35.0	WH		
	2 2	1.1B	24		1 2	0.8B	29
371.0				346.0			
Stiff, moist to very moist, brown, Silty Clay to Silty Clay Loam A-6	1			Medium, very moist, brown mottled grey, Clay to Silty Clay A7-6	WH		
	3 4	1.3S	20		2 3	0.9B	27
				343.5			
15.0	1			Medium, very moist, grey, Clay A7-6	40.0 WH		
	2 4	1.3S	23		1 3	0.7B	26
366.0							
Medium, very moist, brown, Silty Clay Loam A-6	WH						
	2 2	0.7S	22				
363.5				338.5			
Medium, very moist, brown, Silty Clay to Silty Clay Loam A-6 20.0	WH			Stiff, very moist, brown, Clay A7-6	45.0 WH		
	1 1	0.6S	25		1 1	1.2S	31
361.0							
Medium, moist to very moist, grey, Clay Loam A-6	WH						
	3 3	0.9B	20				
358.5				333.5			
25.0	WH			50.0	WH		

N-Std Pentr Test: 2" OD Sampler,
140# Hammer, 30" Fall (Type Fail, B-Bulge S-Shear E-Estimated P-Penetrometer)

Sheet 2 of 3

Route: ILL 13 Date: 10/8/2004
Section:
County: Jackson

Boring No: 6-S
Station: 343+17
Offset: 22' RT EB CL
Ground Surface: 383.0 Ft

DEPTH	BLOW	Qu tsf	W%		DEPTH	BLOW	Qu tsf	W%
Medium, very moist, brown, Clay A7-6	2 1	0.8S	28	Medium, very moist, brown, Clay A7-6 with Sand Layers		4 2	0.9B	32
328.5				303.5				
Stiff, very moist, brown, Clay A7-6 55.0	1			Loose to medium, wet, grey, fine Sand with Coal Chips and some Gravel 57% Sand 6% Silt 4% Clay 33% Gravel	80.0	4		
	1 1	1.4S	30			5 5		23
323.5								
Soft to medium, very moist, grey, Clay to Silty Clay A7-6 with Sand Layers 60.0	WH				85.0			
	2 2	0.5B	24					
318.5				293.5				
Stiff, very moist, brown, Clay A7-6 with Clay Loam and Sand Layers 65.0	4			Medium, wet, grey, Sandy Gravel 72% Sand; 15% Silt 6% Clay; 7% Gravel	90.0	4		
	7 4	1.3B	32			10 15		17
313.5				291.0				
Stiff, very moist, brown, Clay A7-6 with Sand Layers 70.0	WH			Hard, dry, black Coal		100/3"		
	3 3	1.1S	35		95.0			
308.5				Hard, dry, black Coal		100/5"		
75.0	1				100.0			

N-Std Pentr Test: 2" OD Sampler,
140# Hammer, 30" Fall (Type Fail, B-Bulge S-Shear E-Estimated P-Penetrometer)

Sheet 3 of 3

Route: ILL 13 Date: 10/8/2004
Section:
County: Jackson

Boring No: 6-S
Station: 343+17
Offset: 22' RT EB CL
Ground Surface: 383.0 Ft

DEPTH	BLOW	Qu tsf	W%	DEPTH	BLOW	Qu tsf	W%
Hard, dry, black Clay Shale 280.5	100/3"						
Bottom of hole = 102.5 ft.							
Free water observed at 50.0 ft.							
105.0				130.0			
Elevation referenced to Bk W Abut Str # 039-0013 Sta 343+06 Elevation = 383.47							
To convert "N" values to "N60" values multiply by 1.25.							
110.0				135.0			
115.0				140.0			
120.0				145.0			
125.0				150.0			

N-Std Pentr Test: 2" OD Sampler,
140# Hammer, 30" Fall (Type Fail, B-Bulge S-Shear E-Estimated P-Penetrometer)

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS
STRUCTURE NO. 039-0075 (E.B.)
SHEET NO. 51 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	110
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

Illinois Department of Transportation
Division of Highways
SCI Engineering

SOIL BORING LOG

Page 1 of 1

Date 07/15/09

ROUTE FAP 331 **DESCRIPTION** Structure Replacement crossing Big Muddy River **LOGGED BY** SCI

SECTION 12-2B-2 **LOCATION** East of Murphysboro; SW 1/4, **SEC.** 3, **TWP.** 9S, **RNG.** 2W

COUNTY Jackson **DRILLING METHOD** CME 750 w/HSA **HAMMER TYPE** Automatic

STRUCT. NO. 039-0013
Station 340+71.00

BORING NO. B-101
Station 339+28
Offset 75 ft Lt EB
Ground Surface Elev. 363.0 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 345.0 ft ▼
Upon Completion - ft
After - **Hrs.** - ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	
				SILTY CLAY: Brown (A-7)
				Classification of materials in upper 20 feet based on observation of augered cuttings.
-5				Temporary benchmark - brass disk at southeast corner of east abutment. USGS Topographic Map - El. 384
-10				
-15				
343.0 -20				

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	
				SILTY CLAY: Gray, some fine sand (A-6)
				ST pushed 20' to 22'. Recovery 22"; UU - 1.0 tsf; DD - 94.2 pcf; MC - 28%
				Becomes brownish gray, trace fine sand
				ST pushed 22' to 24'. Recovery 24"; UU - 1.2 tsf; DD - 92.9 pcf; MC - 29%
-25				Becomes gray, some fine sand 338.3
				SAND: Gray, fine (A-3)
				ST pushed 24' to 26'. 336.8 Recovery 23"; UU - 1.1 tsf; DD - 90.5 pcf; MC - 31% 336.0
				CLAY: Gray, trace fine sand (A-7)
				ST pushed from 26' to 28'. Recovery 23"; UU - 1.1 tsf; DD - 87.7 pcf; MC- 33%
-30				SILTY CLAY: Gray, some fine sand (A-6)
				Becomes maroon and gray
				Triaxial shear test performed on ST pushed from 28' to 30'; LL-25, PL-18, PI-7
				331.0 SAND: Maroon and gray, fine (A-3) 329.8
-35				SILTY CLAY: Maroon, some fine sand (A-6) 329.0
				ST pushed 32' to 34'. Recovery 23"; UU - 3.0 tsf; DD - 99.7 pcf; MC - 25%
				SAND: Brown, fine (A-3) 327.0
-40				Boring terminated at 36.0 ft.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
SCI Engineering

SOIL BORING LOG

Date 7/13,14/2009

ROUTE FAP 331 DESCRIPTION Structure Replacement crossing Big Muddy River LOGGED BY SCI

SECTION 12-2B-2 LOCATION East of Murphysboro; SW 1/4, SEC. 3, TWP. 9S, RNG. 2W

COUNTY Jackson DRILLING METHOD CME 750 w/HSA HAMMER TYPE Automatic

STRUCT. NO. 039-0013
Station 340+71.00

BORING NO. B-104
Station 343+61
Offset 14 ft Rt EB
Ground Surface Elev. 383.0 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 343.0 ft ▼
Upon Completion - ft
After - Hrs. - ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
ASPHALT - 9 inches	382.3			
CRUSHED ROCK	382.0			
FILL: Brown, sandy clay, some gravel, cinders (A-4)	380.8	12 9 5	4.5 P	7
FILL: Brown, sandy clay (A-6)				
Becomes reddish brown		3 3 4	2.0 B	21
	-5			
	377.5			
FILL: Brown, silty clay, trace to some sand (A-7)		3 3 3	2.3 P	21
Poor recovery				
		1 2 4	1.5 P	24
	-10			
Temporary benchmark - brass disk at southeast corner of east abutment. USGS Topographic Map - El. 384		3 4 5	2.0 P	22
Poor recovery				
Becomes gray		1 3 4	1.7 B	29
Becomes brown and gray	-15			
	367.5			
FILL: Gray, silty clay (A-6)		2 3 5	1.2 B	23
Becomes brown and gray, trace to some sand		2 4 7	2.8 B	22
	363.0 -20			

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
FILL: Brown, clay (A-7)		4 6 9	3.0 P	28
FILL: Gray, clayey silt (A-4)	361.5			
FILL: Gray, silty clay, trace to some sand (A-7)	360.0	1 3 5	1.4 B	25
	-25			
		3 4 8	2.3 P	22
SILTY CLAY: Gray (A-6)	355.0			
		1 1 3	0.6 B	25
	-30			
CLAY: Brown, trace sand (A-7)	351.0			
		2 4 4	1.2 B	24
SILTY CLAY: Brown (A-7)	348.8 -35			
CLAY: Gray and brown, trace shells (A-7)	346.0			
		3 5 6	3.1 S/10	44
	-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
SCI Engineering

SOIL BORING LOG

Date 7/13,14/2009

ROUTE FAP 331 DESCRIPTION Structure Replacement crossing Big Muddy River LOGGED BY SCI

SECTION 12-2B-2 LOCATION East of Murphysboro; SW 1/4, SEC. 3, TWP. 9S, RNG. 2W

COUNTY Jackson DRILLING METHOD CME 750 w/HSA HAMMER TYPE Automatic

STRUCT. NO. 039-0013
Station 340+71.00

BORING NO. B-104
Station 343+61
Offset 14 ft Rt EB
Ground Surface Elev. 383.0 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 343.0 ft ▼
Upon Completion - ft
After - Hrs. - ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
	342.0			
SAND: Greenish gray, fine to medium (A-3)		WH 3 5	1.0 B	65
CLAY: Gray (A-7)	339.0			
Interbedded with of brown, clayey silt	-45			
Becomes brown and interbedded with brown, silty clay		2 3 3	0.4 B	33
	-50			
Interbedded with of brown, clayey silt		3 5 4	1.2 B	32
	-55			
Interbedded with brown, clayey silt and gray, fine to medium sand		2 4 7	0.6 B	40
	-60			

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
CLAY: Gray (A-7) *(continued)*	321.0			
SANDY CLAY: Brown (A-6)		3 2 3	0.5 B	24
CLAY: Brown (A-7)	318.5 -65			
		3 3 3	1.1 B	29
	-70			
SAND: Gray, fine, some clay and with clay and sandy clay deposits (A-2)	311.0			
		5 6 9	-	
	-75			
CLAY: Brown (A-7)	306.0			
		13 14 13	3.8 P	25
	-80			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
SCI Engineering

SOIL BORING LOG

Date 7/13,14/2009

ROUTE FAP 331 DESCRIPTION Structure Replacement crossing Big Muddy River LOGGED BY SCI

SECTION 12-2B-2 LOCATION East of Murphysboro; SW 1/4, SEC. 3, TWP. 9S, RNG. 2W

COUNTY Jackson DRILLING METHOD CME 750 w/HSA HAMMER TYPE Automatic

STRUCT. NO. 039-0013
Station 340+71.00

BORING NO. B-104
Station 343+61
Offset 14 ft Rt EB
Ground Surface Elev. 383.0 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 343.0 ft ▼
Upon Completion - ft
After - Hrs. - ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SAND: Bluish gray, greenish gray, and gray, fine to coarse, trace weathered shale fragments and gravel (A-1) *(continued)*	301.0			
SAND: Greenish gray and gray, fine to medium, trace fine gravel (A-3)		11 17 16	-	
	-85			
Becomes brown		13 12 12	-	25
CLAY: Brown, with trace limestone fragments (A-7)	293.8 -90			
COAL	291.5			
		50/1.5" 50/1"	-	37
	-95			
		50/2" 50/0.5"	-	24
CLAYEY SHALE: Grayish brown	285.0			
	284.0	50/5"	-	13
Boring terminated at 99.0 ft.		50/1.5"		
	-100			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

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DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS
STRUCTURE NO. 039-0075 (E.B.)
SHEET NO. 53 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	112
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		

Bench Mark: F-291. NGS Monument on east abutment of S.N. 039-0013, 22' left of Sta. 339+04, Elev. 373.18.

Existing Structure: S.N. 039-0049 was originally built in 1974 along F.A. 14, Section 12-2B-2. The back to back abutment length is 416'-5" and the out-to-out deck width is 42'-0". The structure consists of a three span continuous steel plate girder superstructure horizontally curved supported on pile stub abutments and solid wall piers. Structure to be removed and replaced.

Traffic Control: Traffic will be maintained by providing a temporary crossover from the existing eastbound roadway to the existing westbound structure for Stage I. Upon completion of the new eastbound structure, traffic will be maintained with a temporary crossover from the existing westbound roadway to the eastbound structure for Stage II.

Salvage: None

Notes:
1. Bridge Fence Railing, Std. R-33 on north side of structure and light poles not shown for clarity.
2. Measured radially.
3. For Section A-A, see sheet 2 of 53.
4. DS-11 Drainage Scuppers to be located on the south side only at each end of the structure.
5. For light pole locations, pole heights, and anchor bolt patterns, see Lighting Plan Details.
6. Slope 1:2 (V:H) at right angles to abutment along face of wingwalls, typical.
7. Permanent Ground Anchor and Tie Rod, typical.

DESIGN SPECIFICATIONS

2010 AASHTO LRFD Bridge Design Specifications

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (AASHTO M 270 Grade 50W)
fy = 50,000 psi (AASHTO M 270 Grade 50)
fy = 150,000 psi (AASHTO M 275 Grade 150)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 3
Design Spectral Acceleration at 1.0 sec. (SD1) = 0.35g
Design Spectral Acceleration at 0.2 sec. (SDS) = 0.82g
Soil Site Class = D

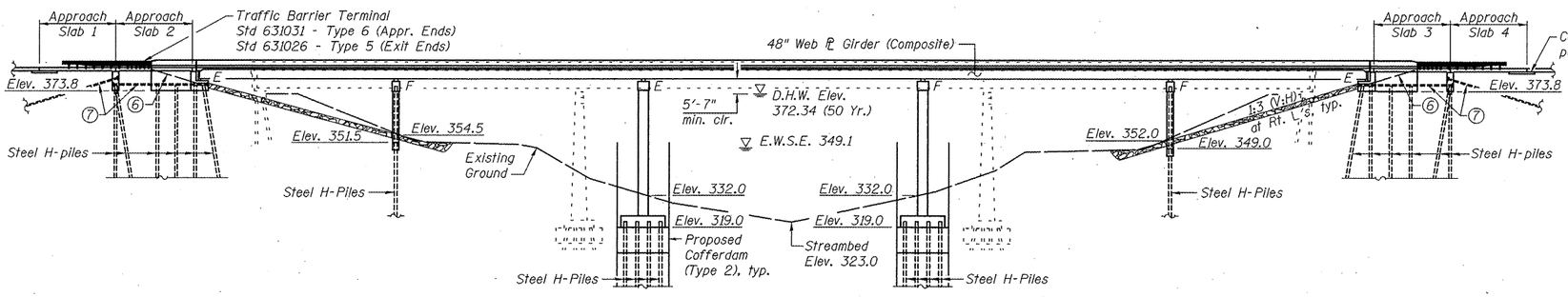
LOADING HL-93

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

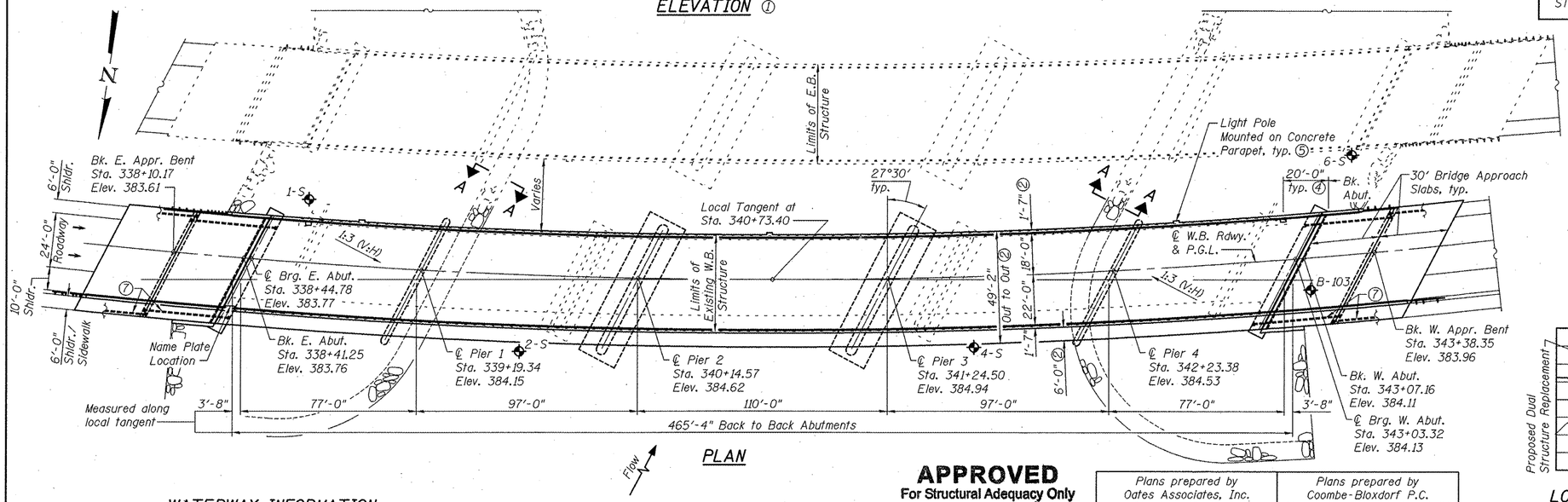
STATION 340+69.53
BUILT 20__ BY
STATE OF ILLINOIS
FAP ROUTE 331 SEC (12-1)B-1
LOADING HL-93
STRUCTURE NO. 039-0076

NAME PLATE

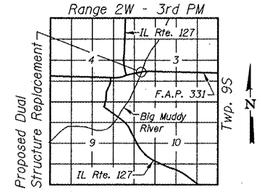
See Std. 515001



ELEVATION ①



PLAN



LOCATION SKETCH

WATERWAY INFORMATION

Drainage Area = 2,159 Sq. Mi.
Exist. Low Grade Elev. 382.5 @ Sta. 337+50
Prop. Low Grade Elev. 382.5 @ Sta. 337+50

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	26,344	7,286	7,458	366.94	0.05	0.05	366.99	366.99
Design	50	38,509	9,259	9,562	372.34	0.08	0.07	372.42	372.41
Base	100	43,714	10,054	10,601	374.84	0.23	0.14	375.07	374.98
Overtopping	-	-	-	-	-	-	-	-	-
Max. Calc.	500	55,669	10,054	11,926	378.10	0.27	0.18	378.37	378.28

APPROVED
For Structural Adequacy Only
Engineer of Bridges & Structures

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	E. Abut.	Pier 1	Pier 2	Pier 3	Pier 4	W. Abut.
	373.8	349.1	314.8	314.8	345.0	373.8

Plans prepared by Oates Associates, Inc. Sheets 1-12, 18-24 & 27-53 of 53
Exp. 11-30-12
LICENSED STRUCTURAL ENGINEER — DANIEL GEORGE LUTZ 081 006772 — STATE OF ILLINOIS
1-24-12

Plans prepared by Coombe-Bloxdorf P.C. Sheets 13-17 & 25-26 of 53
Exp 11-30-12
LICENSED STRUCTURAL ENGINEER — MARY COOMBE BLOXDORF 4659 SPRINGFIELD — STATE OF ILLINOIS
1-23-12

GENERAL PLAN & ELEVATION
IL RTE. 13 OVER BIG MUDDY RIVER
F.A.P. RTE. 331 - SEC. (12-1)B-1
JACKSON COUNTY
STATION 340+69.53 (W.B.)
STRUCTURE NO. 039-0076 (W.B.)

OATES ASSOCIATES Engineering + Architecture
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PLOT DATE =	CHECKED - DGL	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET NO. 1 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	113
		CONTRACT NO. 78056		
		ILLINOIS FED. AID PROJECT		

GENERAL NOTES

Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts in painted areas and M164 Type 3 in unpainted areas. Bolts $\frac{7}{8}$ in. ϕ, holes $\frac{15}{16}$ in. ϕ, unless otherwise noted.

Calculated weight of Structural Steel = AASHTO M 270 Grade 50W = 627,070 pounds

All structural steel shall be AASHTO M 270 Grade 50W except expansion joints which shall be AASHTO M 270 Grade 50.

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.

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

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

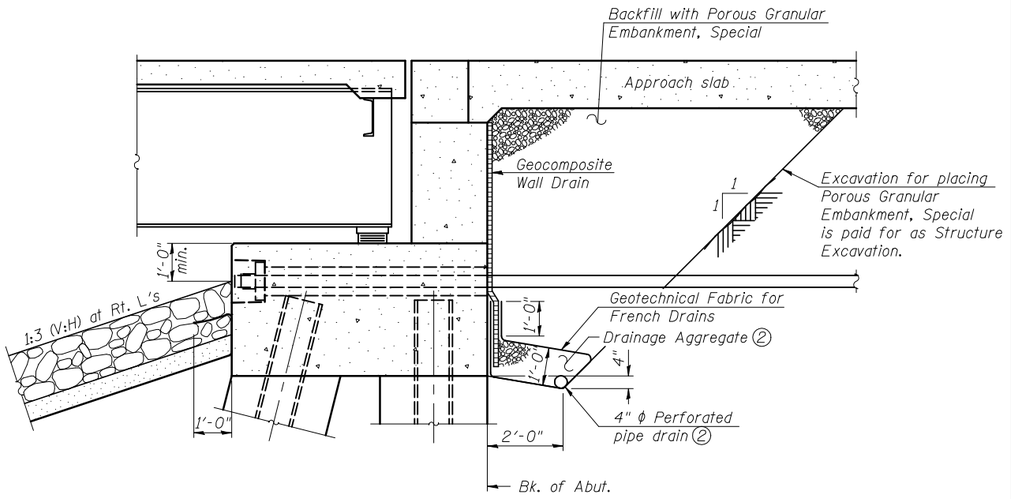
All structural steel and exposed surfaces of bearings within a distance of 10 ft. each way from the deck joints shall be painted.

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

Slipforming of the parapets is not allowed.

TOTAL BILL OF MATERIAL

	ITEM	UNIT	SUPER	SUB	TOTAL
(3)	Stone Riprap, Class A4	Sq. Yd.	-	2,445	2,445
(3)	Filter Fabric	Sq. Yd.	-	2,445	2,445
	Removal of Existing Structures	Each	-	-	1
	Structure Excavation	Cu. Yd.	-	1,238	1,238
	Cofferdam Excavation	Cu. Yd.	-	2,514	2,514
	Cofferdam (Type 2) (Location-3)	Each	-	1	1
	Cofferdam (Type 2) (Location-4)	Each	-	1	1
	Concrete Structures	Cu. Yd.	-	2,133.9	2,133.9
	Concrete Superstructure	Cu. Yd.	995.3	-	995.3
	Bridge Deck Grooving	Sq. Yd.	2,467	-	2,467
	Seal Coat Concrete	Cu. Yd.	-	1,093.4	1,093.4
	Concrete Encasement	Cu. Yd.	-	31.8	31.8
	Protective Coat	Sq. Yd.	3,654	-	3,654
	Furnishing and Erecting Structural Steel	L. Sum	0.5	-	0.5
	Stud Shear Connectors	Each	8,136	-	8,136
	Reinforcement Bars, Epoxy Coated	Pound	292,890	354,310	647,200
	Bar Splicers	Each	-	108	108
	Bridge Fence Railing (Sidewalk)	Foot	575	-	575
	Parapet Railing	Foot	571	-	571
	Furnishing Steel Piles HP14x73	Foot	-	5,208	5,208
	Furnishing Steel Piles HP14x89	Foot	-	4,995	4,995
	Driving Piles	Foot	-	10,203	10,203
	Test Pile Steel HP14x73	Each	-	4	4
	Test Pile Steel HP14x89	Each	-	2	2
	Name Plates	Each	1	-	1
	Preformed Joint Strip Seal	Foot	122	-	122
	Elastomeric Bearing Assembly, Type I	Each	6	-	6
	Elastomeric Bearing Assembly, Type II	Each	12	-	12
	Anchor Bolts, 1"	Each	60	-	60
	Anchor Bolts, $1\frac{1}{2}$"	Each	12	-	12
	Concrete Sealer	Sq. Ft.	-	1,325	1,325
	Geocomposite Wall Drain	Sq. Yd.	-	108	108
	Drainage Scuppers, DS-11	Each	2	-	2
	Pipe Underdrains for Structures 4"	Foot	180	-	180
	Permanent Ground Anchor	Each	-	16	16
	Porous Granular Embankment, Special	Cu. Yd.	-	245	245
	Mechanical Splicers	Each	-	1,688	1,688
	Tie Rod	Each	-	16	16



SECTION THRU PILE SUPPORTED STUB ABUTMENT (1)

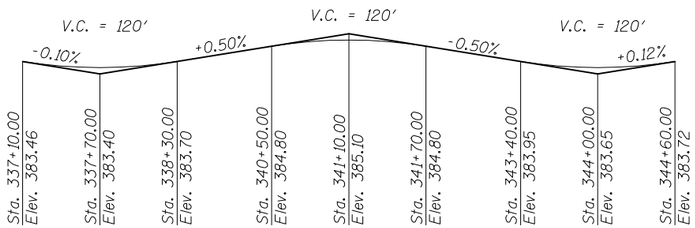
(Horiz. dim. at Rt. L's)

CURVE DATA - IL RTE. 13 (W.B.)

Δ = 20°22'01"
D = 2°00'28"
R = 2,853.59'
T = 512.59'
L = 1,014.37'
E = 45.67'
S.E. = 0.025'/'
P.C. Sta. = 336+80.97
P.I. Sta. = 341+93.56
P.T. Sta. = 346+95.33

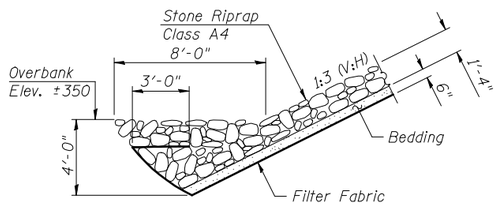
INDEX OF SHEETS

Sheet No.	Description
1	General Plan & Elevation
2	General Data
3	Footing Layout
4	Construction Details
5-8	Top of Slab Elevations
9-12	Top of Approach Slab Elevations
13-14	Superstructure
15-17	Superstructure Details
18-23	Bridge Approach Slab Details
24	Bridge Fence Railing, Sidewalk Mounted
25	Preformed Joint Strip Seal
26	Drainage Scupper, DS-11
27	Framing Plan and Girder Details
28-29	Girder Details
30-31	Bearing Details
32	East Approach Bent Details
33	West Approach Bent Details
34-36	East Abutment Details
37-39	West Abutment Details
40	Tie Rod and Permanent Ground Anchor Details
41	Pier 1 Details
42-43	Pier 2 Details
44-45	Pier 3 Details
46	Pier 4 Details
47	HP Pile Details
48	Bar Splicer Assembly and Mechanical Splicer Details
49-53	Soil Boring Logs

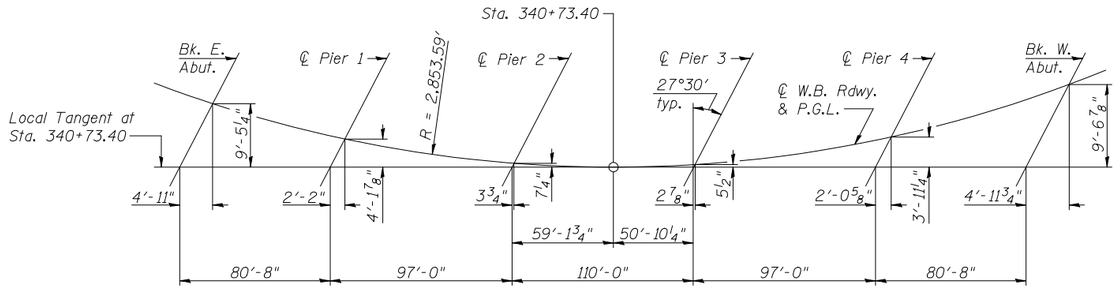


PROFILE GRADE - IL RTE. 13 (W.B.)

(along ℄ roadway)



SECTION A-A



OFFSET SKETCH - IL RTE. 13 (W.B.)

Notes:
(1) All drainage system components shall extend parallel to the abutment back wall until they intersect the wingwalls. The pipe shall extend under the wingwall until intersecting the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).
(2) Included in the cost of Pipe Underdrains for Structures 4".
(3) Quantity is total assumed to be placed during construction of S.N. 039-0076. Actual quantity as directed by the Engineer.

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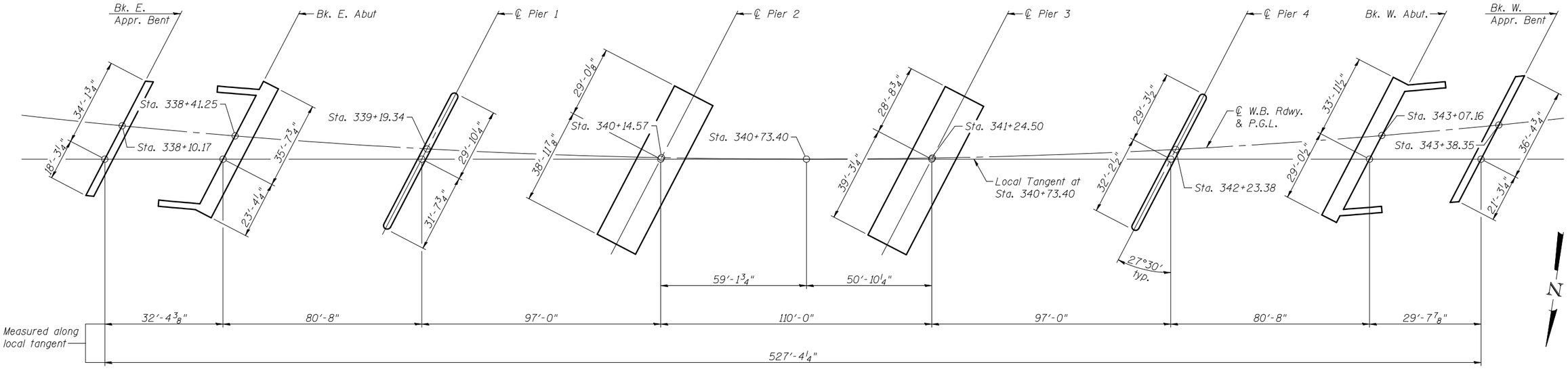
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL DATA
STRUCTURE NO. 039-0076 (W.B.)
SHEET NO. 2 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	114
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			



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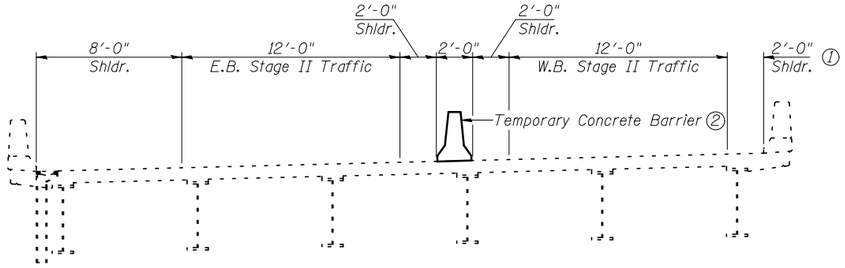
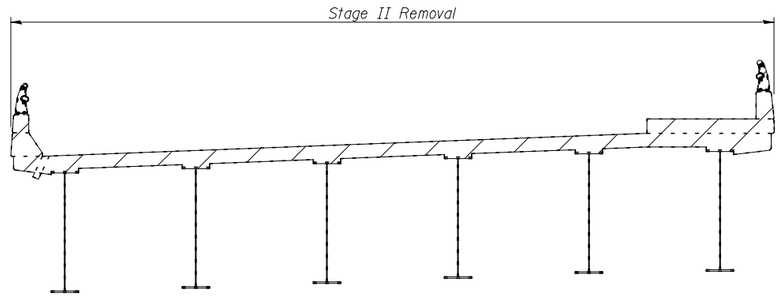
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FOOTING LAYOUT
STRUCTURE NO. 039-0076 (W.B.)
SHEET NO. 3 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	115
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			



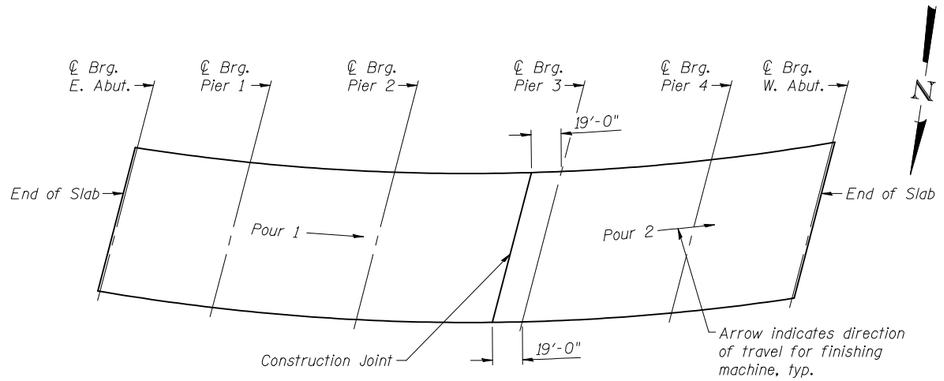
EASTBOUND



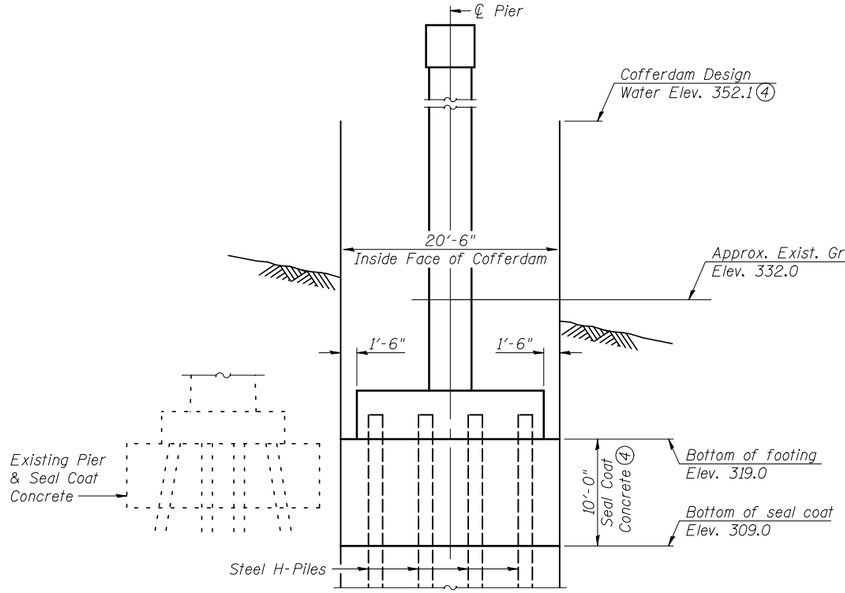
WESTBOUND

STAGE II REMOVAL & TRAFFIC STAGING

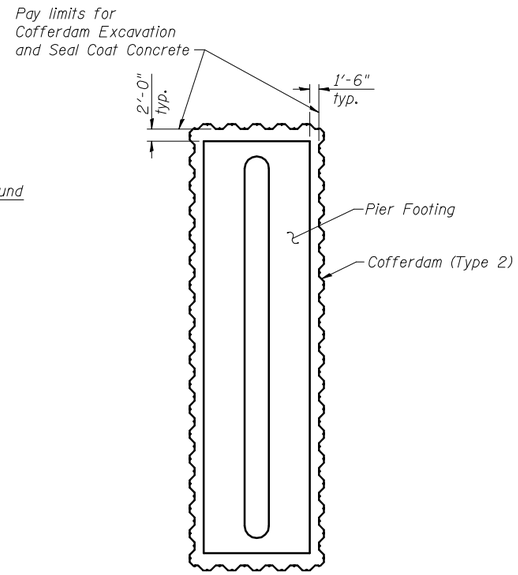
(Looking West)



DECK POURING SEQUENCE



COFFERDAM DETAIL



COFFERDAM PLAN

Notes:

① Measured radially, typ.

② See roadway plans for quantity of Temporary Concrete Barrier and related traffic control.

③ When the deck pour is stopped for the day at the transverse bonded construction joint in the deck pouring sequence as shown, the next pour shall not be made until both of the following are met:
1) At least 72 hours shall have elapsed from the end of the previous pour.
2) The concrete strength shall have attained a minimum flexural strength of 650 psi or a minimum compressive strength of 3500 psi.

④ Seal coat thickness design is based on the Cofferdam Design Water Elevation shown. Cofferdam design details and proposed changes in seal coat thickness shall be submitted to the Engineer for approval with the cofferdam design. See Special Provisions.

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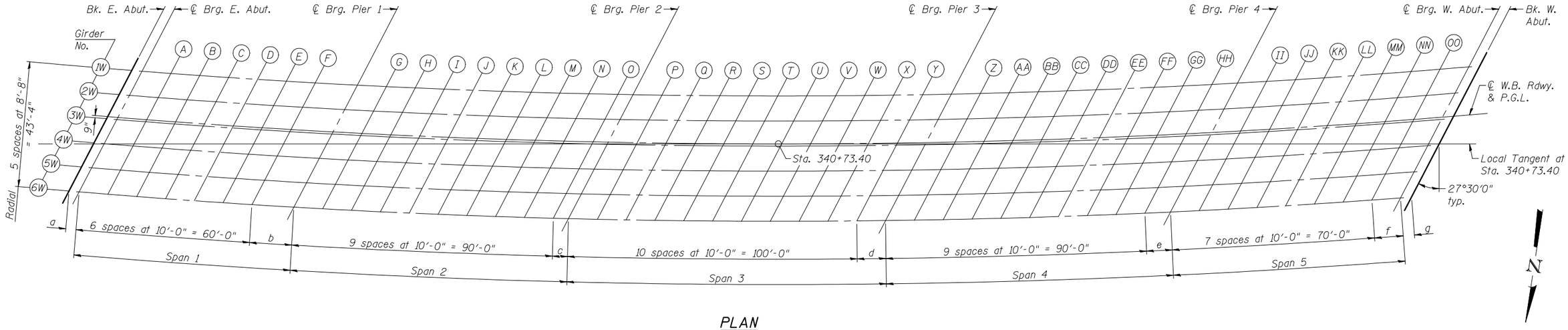
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS
STRUCTURE NO. 039-0076 (W.B.)

SHEET NO. 4 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	116
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		

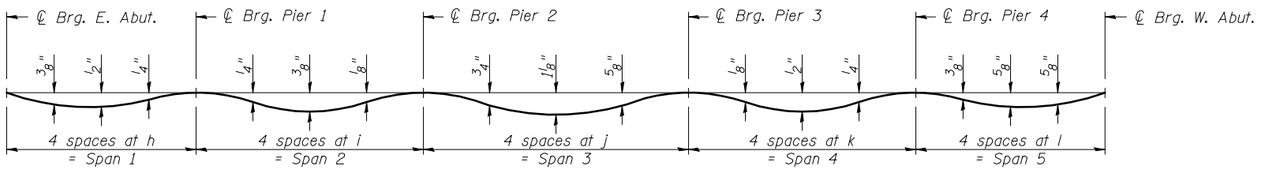


PLAN

DIMENSION TABLE ①

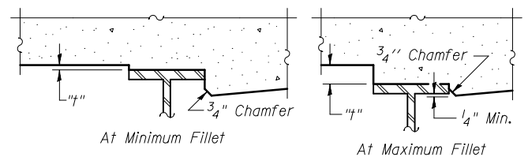
Girder	Radius	Span 1	Span 2	Span 3	Span 4	Span 5	a	b	c	d	e	f	g	h	i	j	k	l
1W	2837.01'	74'-7 13/16"	95'-4 3/16"	110'-1 1/4"	99'-0 13/16"	80'-1 7/16"	3'-6 3/8"	14'-7 13/16"	5'-4 3/16"	10'-1 1/4"	9'-0 13/16"	10'-1 7/16"	3'-10 3/16"	18'-7 15/16"	23'-10 1/16"	27'-6 5/16"	24'-9 3/16"	20'-0 3/8"
2W	2845.68'	74'-7 5/16"	95'-3 3/8"	110'-0 1/8"	98'-11 5/8"	80'-0 3/8"	3'-6 3/8"	14'-7 5/16"	5'-3 3/8"	10'-0 1/8"	8'-11 5/8"	10'-0 3/8"	3'-10 1/8"	18'-7 13/16"	23'-9 7/8"	27'-6 1/16"	24'-8 15/16"	20'-0 1/8"
℄ Rdwy.	2853.59'	74'-6 3/4"	95'-2 11/16"	109'-11 7/8"	98'-10 9/16"	79'-11 3/8"	3'-6 5/16"	14'-6 3/4"	5'-2 11/16"	9'-11 7/8"	8'-10 9/16"	9'-11 3/8"	3'-10 1/16"	18'-7 11/16"	23'-9 11/16"	27'-5 3/4"	24'-8 5/8"	19'-11 13/16"
3W	2854.34'	74'-6 13/16"	95'-2 5/8"	109'-11 1/16"	98'-10 1/16"	79'-11 1/4"	3'-6 5/16"	14'-6 13/16"	5'-2 5/8"	9'-11 1/16"	8'-10 1/16"	9'-11 1/4"	3'-10 1/16"	18'-7 11/16"	23'-9 11/16"	27'-5 3/4"	24'-8 5/8"	19'-11 13/16"
4W	2863.01'	74'-6 1/4"	95'-1 13/16"	109'-10"	98'-9 5/16"	79'-10 3/16"	3'-6 5/16"	14'-6 1/4"	5'-1 13/16"	9'-10"	8'-9 5/16"	9'-10 3/16"	3'-10"	18'-7 9/16"	23'-9 7/16"	27'-5 1/2"	24'-8 5/16"	19'-11 9/16"
5W	2871.68'	74'-5 3/4"	95'-1 1/16"	109'-8 15/16"	98'-8 3/16"	79'-9 1/8"	3'-6 5/16"	14'-5 3/4"	5'-1 1/16"	9'-8 15/16"	8'-8 3/16"	9'-9 1/8"	3'-9 15/16"	18'-7 7/16"	23'-9 1/4"	27'-5 1/4"	24'-8 1/16"	19'-11 5/16"
6W	2880.34'	74'-5 1/4"	95'-0 5/16"	109'-7 1/8"	98'-7 1/16"	79'-8 1/8"	3'-6 1/4"	14'-5 1/4"	5'-0 5/16"	9'-7 1/8"	8'-7 1/16"	9'-8 1/8"	3'-9 1/8"	18'-7 5/16"	23'-9 1/16"	27'-5"	24'-7 3/4"	19'-11"

Notes:
① Horizontal dimensions are taken along centerline of each individual girder.
② The Girder Dead Load Deflections are not to be used in the field if the Engineer is working from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" as shown on sheets 6 thru 8 of 53.
③ To determine "f": After all structural steel has been erected, elevations of the top flanges of the girders shall be taken at intervals shown above. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on sheets 6 thru 8 of 53, minus slab thickness, equals the fillet heights "f" above top flange of girders.



DEAD LOAD DEFLECTION DIAGRAM ②

(Includes weight of concrete only.)



FILLET HEIGHTS ③

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TOP OF SLAB ELEVATIONS
STRUCTURE NO. 039-0076 (W.B.)
SHEET NO. 5 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	117
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		

GIRDER 1W

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. E. Abut.	338+48.28	-16.58	383.38	383.38
℄ Brg. E. Abut.	338+51.83	-16.58	383.39	383.39
A	338+61.89	-16.58	383.44	383.47
B	338+71.95	-16.58	383.50	383.54
C	338+82.00	-16.58	383.55	383.60
D	338+92.06	-16.58	383.60	383.64
E	339+02.12	-16.58	383.65	383.68
F	339+12.18	-16.58	383.70	383.71
℄ Brg. Pier 1	339+26.92	-16.58	383.77	383.77
G	339+36.98	-16.58	383.82	383.83
H	339+47.03	-16.58	383.87	383.89
I	339+57.09	-16.58	383.92	383.95
J	339+67.15	-16.58	383.97	384.01
K	339+77.21	-16.58	384.02	384.06
L	339+87.27	-16.58	384.07	384.10
M	339+97.33	-16.58	384.12	384.14
N	340+07.39	-16.58	384.17	384.18
O	340+17.44	-16.58	384.22	384.22
℄ Brg. Pier 2	340+22.82	-16.58	384.25	384.25
P	340+32.88	-16.58	384.30	384.32
Q	340+42.94	-16.58	384.35	384.39
R	340+53.00	-16.58	384.40	384.47
S	340+63.06	-16.58	384.44	384.53
T	340+73.12	-16.58	384.48	384.58
U	340+83.17	-16.58	384.51	384.61
V	340+93.23	-16.58	384.52	384.61
W	341+03.29	-16.58	384.53	384.60
X	341+13.35	-16.58	384.53	384.58
Y	341+23.41	-16.58	384.53	384.54
℄ Brg. Pier 3	341+33.57	-16.58	384.51	384.51
Z	341+43.63	-16.58	384.49	384.49
AA	341+53.69	-16.58	384.46	384.47
BB	341+63.75	-16.58	384.42	384.44
CC	341+73.80	-16.58	384.37	384.41
DD	341+83.86	-16.58	384.32	384.36
EE	341+93.92	-16.58	384.27	384.31
FF	342+03.98	-16.58	384.22	384.25
GG	342+14.04	-16.58	384.17	384.18
HH	342+24.10	-16.58	384.11	384.12
℄ Brg. Pier 4	342+33.22	-16.58	384.07	384.07
II	342+43.27	-16.58	384.02	384.03
JJ	342+53.33	-16.58	383.97	384.00
KK	342+63.39	-16.58	383.92	383.97
LL	342+73.45	-16.58	383.87	383.93
MM	342+83.51	-16.58	383.82	383.88
NN	342+93.57	-16.58	383.77	383.82
OO	343+03.62	-16.58	383.72	383.75
℄ Brg. W. Abut.	343+13.81	-16.58	383.67	383.67
Bk. W. Abut.	343+17.68	-16.58	383.65	383.65

GIRDER 2W

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. E. Abut.	338+44.59	-7.92	383.58	383.58
℄ Brg. E. Abut.	338+48.13	-7.92	383.59	383.59
A	338+58.16	-7.92	383.64	383.67
B	338+68.19	-7.92	383.69	383.73
C	338+78.21	-7.92	383.74	383.79
D	338+88.24	-7.92	383.79	383.83
E	338+98.27	-7.92	383.84	383.87
F	339+08.30	-7.92	383.89	383.91
℄ Brg. Pier 1	339+22.95	-7.92	383.97	383.97
G	339+32.98	-7.92	384.02	384.02
H	339+43.00	-7.92	384.07	384.08
I	339+53.03	-7.92	384.12	384.14
J	339+63.06	-7.92	384.17	384.20
K	339+73.09	-7.92	384.22	384.25
L	339+83.11	-7.92	384.27	384.29
M	339+93.14	-7.92	384.32	384.33
N	340+03.17	-7.92	384.37	384.37
O	340+13.20	-7.92	384.42	384.42
℄ Brg. Pier 2	340+18.49	-7.92	384.44	384.44
P	340+28.52	-7.92	384.49	384.51
Q	340+38.55	-7.92	384.54	384.58
R	340+48.58	-7.92	384.60	384.66
S	340+58.61	-7.92	384.64	384.73
T	340+68.63	-7.92	384.68	384.78
U	340+78.66	-7.92	384.71	384.81
V	340+88.69	-7.92	384.73	384.82
W	340+98.72	-7.92	384.75	384.81
X	341+08.75	-7.92	384.75	384.79
Y	341+18.77	-7.92	384.75	384.76
℄ Brg. Pier 3	341+28.81	-7.92	384.74	384.74
Z	341+38.84	-7.92	384.72	384.72
AA	341+48.87	-7.92	384.69	384.70
BB	341+58.90	-7.92	384.65	384.67
CC	341+68.92	-7.92	384.61	384.64
DD	341+78.95	-7.92	384.56	384.59
EE	341+88.98	-7.92	384.51	384.54
FF	341+99.01	-7.92	384.46	384.48
GG	342+09.04	-7.92	384.41	384.42
HH	342+19.06	-7.92	384.36	384.36
℄ Brg. Pier 4	342+28.06	-7.92	384.31	384.31
II	342+38.08	-7.92	384.26	384.27
JJ	342+48.11	-7.92	384.21	384.24
KK	342+58.14	-7.92	384.16	384.21
LL	342+68.17	-7.92	384.11	384.17
MM	342+78.19	-7.92	384.06	384.12
NN	342+88.22	-7.92	384.01	384.06
OO	342+98.25	-7.92	383.96	383.99
℄ Brg. W. Abut.	343+08.31	-7.92	383.91	383.91
Bk. W. Abut.	343+12.16	-7.92	383.89	383.89

℄ W.B. RDWY. & P.G.L.

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. E. Abut.	338+41.25	0.00	383.76	383.76
℄ Brg. E. Abut.	338+44.78	0.00	383.77	383.77
A	338+54.78	0.00	383.82	383.84
B	338+64.78	0.00	383.87	383.91
C	338+74.78	0.00	383.92	383.96
D	338+84.78	0.00	383.97	384.01
E	338+94.78	0.00	384.02	384.05
F	339+04.78	0.00	384.07	384.09
℄ Brg. Pier 1	339+19.34	0.00	384.15	384.15
G	339+29.34	0.00	384.20	384.20
H	339+39.34	0.00	384.25	384.26
I	339+49.34	0.00	384.30	384.32
J	339+59.34	0.00	384.35	384.37
K	339+69.34	0.00	384.40	384.42
L	339+79.34	0.00	384.45	384.47
M	339+89.34	0.00	384.50	384.51
N	339+99.34	0.00	384.55	384.55
O	340+09.34	0.00	384.60	384.60
℄ Brg. Pier 2	340+14.57	0.00	384.62	384.62
P	340+24.57	0.00	384.67	384.69
Q	340+34.57	0.00	384.72	384.76
R	340+44.57	0.00	384.77	384.83
S	340+54.57	0.00	384.82	384.90
T	340+64.57	0.00	384.86	384.95
U	340+74.57	0.00	384.90	384.99
V	340+84.57	0.00	384.92	385.00
W	340+94.57	0.00	384.94	385.00
X	341+04.57	0.00	384.95	384.98
Y	341+14.57	0.00	384.95	384.96
℄ Brg. Pier 3	341+24.50	0.00	384.94	384.94
Z	341+34.50	0.00	384.93	384.93
AA	341+44.50	0.00	384.90	384.91
BB	341+54.50	0.00	384.87	384.88
CC	341+64.50	0.00	384.83	384.85
DD	341+74.50	0.00	384.78	384.81
EE	341+84.50	0.00	384.73	384.76
FF	341+94.50	0.00	384.68	384.70
GG	342+04.50	0.00	384.63	384.64
HH	342+14.50	0.00	384.58	384.58
℄ Brg. Pier 4	342+23.38	0.00	384.53	384.53
II	342+33.38	0.00	384.48	384.49
JJ	342+43.38	0.00	384.43	384.46
KK	342+53.38	0.00	384.38	384.42
LL	342+63.38	0.00	384.33	384.39
MM	342+73.38	0.00	384.28	384.34
NN	342+83.38	0.00	384.23	384.28
OO	342+93.38	0.00	384.18	384.21
℄ Brg. W. Abut.	343+03.32	0.00	384.13	384.13
Bk. W. Abut.	343+07.16	0.00	384.11	384.11

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 039-0076 (W.B.)
SHEET NO. 6 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	118
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		

GIRDER 3W

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. E. Abut.	338+40.93	0.75	383.77	383.77
℄ Brg. E. Abut.	338+44.46	0.75	383.79	383.79
A	338+54.46	0.75	383.84	383.86
B	338+64.45	0.75	383.89	383.93
C	338+74.45	0.75	383.94	383.98
D	338+84.45	0.75	383.99	384.03
E	338+94.45	0.75	384.04	384.07
F	339+04.44	0.75	384.09	384.11
℄ Brg. Pier 1	339+19.00	0.75	384.16	384.16
G	339+29.00	0.75	384.21	384.22
H	339+39.00	0.75	384.26	384.27
I	339+49.00	0.75	384.31	384.33
J	339+58.99	0.75	384.36	384.39
K	339+68.99	0.75	384.41	384.44
L	339+78.99	0.75	384.46	384.48
M	339+88.99	0.75	384.51	384.52
N	339+98.98	0.75	384.56	384.57
O	340+08.98	0.75	384.61	384.61
℄ Brg. Pier 2	340+14.20	0.75	384.64	384.64
P	340+24.19	0.75	384.69	384.71
Q	340+34.19	0.75	384.74	384.78
R	340+44.19	0.75	384.79	384.85
S	340+54.19	0.75	384.84	384.92
T	340+64.18	0.75	384.88	384.97
U	340+74.18	0.75	384.92	385.00
V	340+84.18	0.75	384.94	385.02
W	340+94.17	0.75	384.96	385.02
X	341+04.17	0.75	384.97	385.00
Y	341+14.17	0.75	384.97	384.98
℄ Brg. Pier 3	341+24.09	0.75	384.96	384.96
Z	341+34.09	0.75	384.94	384.94
AA	341+44.08	0.75	384.92	384.93
BB	341+54.08	0.75	384.89	384.91
CC	341+64.08	0.75	384.85	384.87
DD	341+74.08	0.75	384.80	384.83
EE	341+84.07	0.75	384.75	384.78
FF	341+94.07	0.75	384.70	384.72
GG	342+04.07	0.75	384.65	384.66
HH	342+14.06	0.75	384.60	384.60
℄ Brg. Pier 4	342+22.93	0.75	384.55	384.55
II	342+32.93	0.75	384.50	384.51
JJ	342+42.93	0.75	384.45	384.48
KK	342+52.93	0.75	384.40	384.45
LL	342+62.92	0.75	384.35	384.41
MM	342+72.92	0.75	384.30	384.36
NN	342+82.92	0.75	384.25	384.30
OO	342+92.91	0.75	384.20	384.23
℄ Brg. W. Abut.	343+02.85	0.75	384.15	384.15
Bk. W. Abut.	343+06.69	0.75	384.14	384.14

GIRDER 4W

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. E. Abut.	338+37.30	9.42	383.97	383.97
℄ Brg. E. Abut.	338+40.81	9.42	383.99	383.99
A	338+50.78	9.42	384.04	384.06
B	338+60.74	9.42	384.09	384.12
C	338+70.71	9.42	384.14	384.18
D	338+80.68	9.42	384.19	384.23
E	338+90.65	9.42	384.24	384.27
F	339+00.61	9.42	384.29	384.30
℄ Brg. Pier 1	339+15.09	9.42	384.36	384.36
G	339+25.05	9.42	384.41	384.41
H	339+35.02	9.42	384.46	384.47
I	339+44.99	9.42	384.51	384.53
J	339+54.96	9.42	384.56	384.58
K	339+64.92	9.42	384.61	384.63
L	339+74.89	9.42	384.66	384.68
M	339+84.86	9.42	384.71	384.72
N	339+94.82	9.42	384.76	384.76
O	340+04.79	9.42	384.81	384.81
℄ Brg. Pier 2	340+09.93	9.42	384.84	384.84
P	340+19.89	9.42	384.88	384.90
Q	340+29.86	9.42	384.93	384.97
R	340+39.83	9.42	384.98	385.04
S	340+49.79	9.42	385.03	385.11
T	340+59.76	9.42	385.08	385.17
U	340+69.73	9.42	385.12	385.21
V	340+79.70	9.42	385.15	385.23
W	340+89.66	9.42	385.17	385.23
X	340+99.63	9.42	385.18	385.22
Y	341+09.60	9.42	385.19	385.20
℄ Brg. Pier 3	341+19.40	9.42	385.18	385.18
Z	341+29.36	9.42	385.17	385.17
AA	341+39.33	9.42	385.15	385.16
BB	341+49.30	9.42	385.12	385.14
CC	341+59.27	9.42	385.08	385.11
DD	341+69.23	9.42	385.04	385.07
EE	341+79.20	9.42	384.99	385.02
FF	341+89.17	9.42	384.94	384.96
GG	341+99.13	9.42	384.89	384.90
HH	342+09.10	9.42	384.84	384.84
℄ Brg. Pier 4	342+17.85	9.42	384.80	384.80
II	342+27.81	9.42	384.75	384.76
JJ	342+37.78	9.42	384.70	384.72
KK	342+47.75	9.42	384.65	384.69
LL	342+57.72	9.42	384.60	384.65
MM	342+67.68	9.42	384.55	384.60
NN	342+77.65	9.42	384.50	384.54
OO	342+87.62	9.42	384.45	384.47
℄ Brg. W. Abut.	342+97.44	9.42	384.40	384.40
Bk. W. Abut.	343+01.26	9.42	384.38	384.38

GIRDER 5W

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. E. Abut.	338+33.68	18.08	384.17	384.17
℄ Brg. E. Abut.	338+37.19	18.08	384.19	384.19
A	338+47.12	18.08	384.24	384.26
B	338+57.06	18.08	384.29	384.32
C	338+67.00	18.08	384.34	384.38
D	338+76.93	18.08	384.39	384.43
E	338+86.87	18.08	384.44	384.47
F	338+96.81	18.08	384.49	384.50
℄ Brg. Pier 1	339+11.20	18.08	384.56	384.56
G	339+21.13	18.08	384.61	384.61
H	339+31.07	18.08	384.66	384.67
I	339+41.01	18.08	384.71	384.73
J	339+50.94	18.08	384.76	384.79
K	339+60.88	18.08	384.81	384.83
L	339+70.82	18.08	384.86	384.88
M	339+80.75	18.08	384.91	384.92
N	339+90.69	18.08	384.96	384.96
O	340+00.63	18.08	385.01	385.00
℄ Brg. Pier 2	340+05.68	18.08	385.03	385.03
P	340+15.62	18.08	385.08	385.10
Q	340+25.56	18.08	385.13	385.17
R	340+35.50	18.08	385.18	385.25
S	340+45.43	18.08	385.23	385.32
T	340+55.37	18.08	385.28	385.38
U	340+65.31	18.08	385.32	385.42
V	340+75.24	18.08	385.35	385.44
W	340+85.18	18.08	385.38	385.44
X	340+95.12	18.08	385.39	385.43
Y	341+05.06	18.08	385.40	385.42
℄ Brg. Pier 3	341+14.74	18.08	385.40	385.40
Z	341+24.67	18.08	385.39	385.39
AA	341+34.61	18.08	385.38	385.39
BB	341+44.55	18.08	385.35	385.37
CC	341+54.49	18.08	385.32	385.35
DD	341+64.42	18.08	385.28	385.31
EE	341+74.36	18.08	385.23	385.26
FF	341+84.30	18.08	385.18	385.20
GG	341+94.23	18.08	385.13	385.14
HH	342+04.17	18.08	385.08	385.08
℄ Brg. Pier 4	342+12.80	18.08	385.04	385.04
II	342+22.73	18.08	384.99	385.00
JJ	342+32.67	18.08	384.94	384.97
KK	342+42.61	18.08	384.89	384.94
LL	342+52.55	18.08	384.84	384.90
MM	342+62.48	18.08	384.79	384.85
NN	342+72.42	18.08	384.74	384.79
OO	342+82.36	18.08	384.69	384.72
℄ Brg. W. Abut.	342+92.06	18.08	384.64	384.64
Bk. W. Abut.	342+95.86	18.08	384.62	384.62

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 039-0076 (W.B.)
SHEET NO. 7 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	119
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		

GIRDER 6W

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. E. Abut.	338+30.10	26.75	384.23	384.23
℄ Brg. E. Abut.	338+33.58	26.75	384.24	384.24
A	338+43.49	26.75	384.29	384.32
B	338+53.40	26.75	384.34	384.38
C	338+63.31	26.75	384.39	384.44
D	338+73.21	26.75	384.44	384.49
E	338+83.12	26.75	384.49	384.52
F	338+93.03	26.75	384.54	384.56
℄ Brg. Pier 1	339+07.33	26.75	384.61	384.61
G	339+17.24	26.75	384.66	384.67
H	339+27.14	26.75	384.71	384.73
I	339+37.05	26.75	384.76	384.79
J	339+46.96	26.75	384.81	384.85
K	339+56.87	26.75	384.86	384.89
L	339+66.77	26.75	384.91	384.94
M	339+76.68	26.75	384.96	384.98
N	339+86.59	26.75	385.01	385.01
O	339+96.49	26.75	385.06	385.06
℄ Brg. Pier 2	340+01.47	26.75	385.08	385.08
P	340+11.38	26.75	385.13	385.15
Q	340+21.29	26.75	385.18	385.22
R	340+31.19	26.75	385.23	385.30
S	340+41.10	26.75	385.28	385.37
T	340+51.01	26.75	385.33	385.43
U	340+60.92	26.75	385.38	385.47
V	340+70.82	26.75	385.41	385.50
W	340+80.73	26.75	385.44	385.51
X	340+90.64	26.75	385.46	385.50
Y	341+00.54	26.75	385.47	385.49
℄ Brg. Pier 3	341+10.11	26.75	385.48	385.48
Z	341+20.02	26.75	385.47	385.47
AA	341+29.92	26.75	385.46	385.47
BB	341+39.83	26.75	385.44	385.47
CC	341+49.74	26.75	385.41	385.45
DD	341+59.65	26.75	385.37	385.42
EE	341+69.55	26.75	385.33	385.37
FF	341+79.46	26.75	385.28	385.31
GG	341+89.37	26.75	385.23	385.25
HH	341+99.27	26.75	385.18	385.18
℄ Brg. Pier 4	342+07.78	26.75	385.14	385.14
II	342+17.69	26.75	385.09	385.10
JJ	342+27.60	26.75	385.04	385.07
KK	342+37.50	26.75	384.99	385.04
LL	342+47.41	26.75	384.94	385.00
MM	342+57.32	26.75	384.89	384.95
NN	342+67.23	26.75	384.84	384.89
OO	342+77.13	26.75	384.79	384.82
℄ Brg. W. Abut.	342+86.72	26.75	384.74	384.74
Bk. W. Abut.	342+90.51	26.75	384.72	384.72

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 039-0076 (W.B.)
SHEET NO. 8 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	120
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		

SOUTH EDGE OF SHOULDER

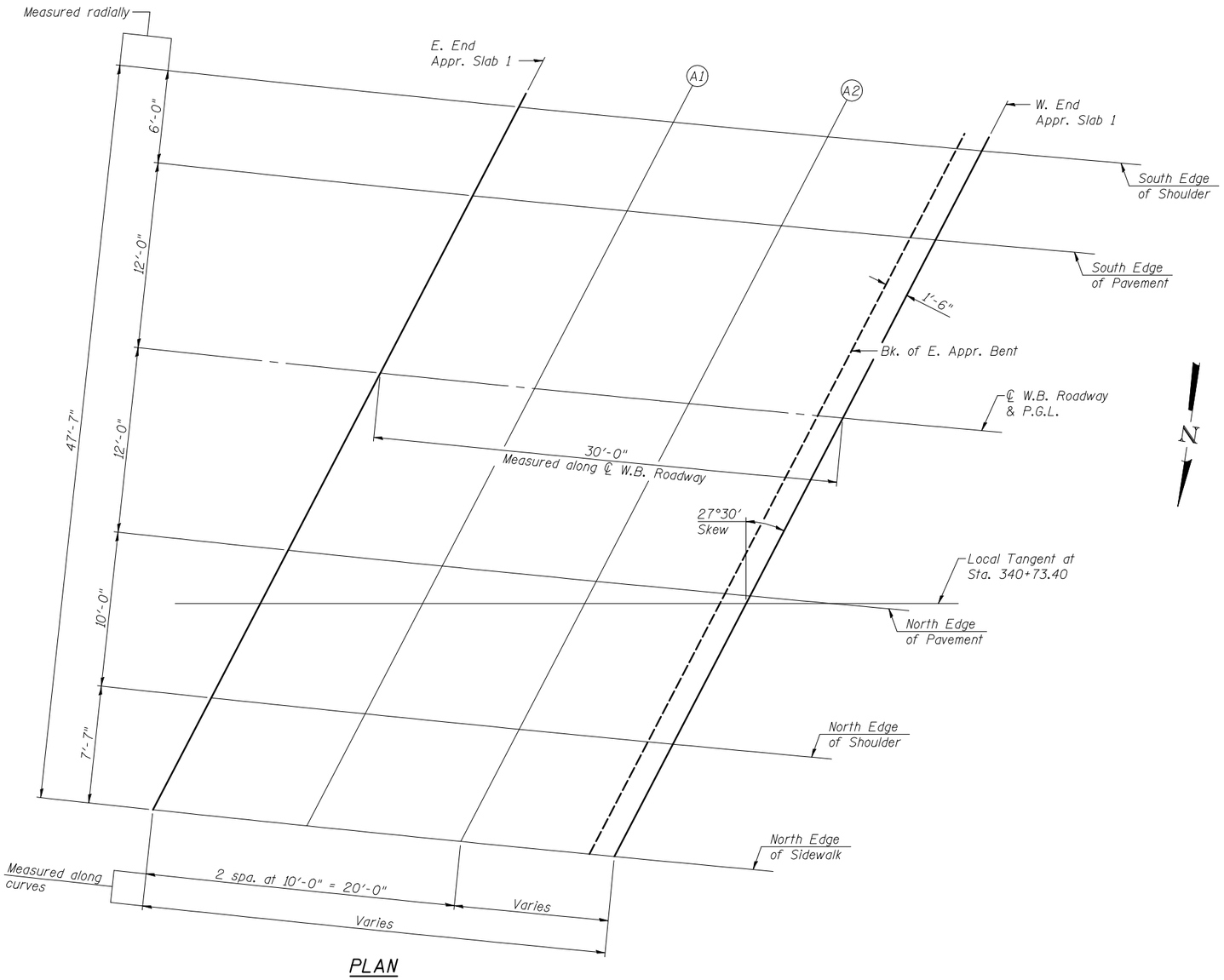
Location	Station	Offset	Theoretical Grade Elevations
E. End Appr. Slab 1	337+88.98	-18.00	383.09
A1	337+99.05	-18.00	383.12
A2	338+09.11	-18.00	383.16
W. End Appr. Slab 1	338+19.20	-18.00	383.20

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
E. End Appr. Slab 1	337+86.57	-12.00	383.23
A1	337+96.62	-12.00	383.26
A2	338+06.66	-12.00	383.30
W. End Appr. Slab 1	338+16.72	-12.00	383.34

℄ W.B. ROADWAY & P.G.L.

Location	Station	Offset	Theoretical Grade Elevations
E. End Appr. Slab 1	337+81.79	0.00	383.52
A1	337+91.79	0.00	383.55
A2	338+01.79	0.00	383.58
W. End Appr. Slab 1	338+11.79	0.00	383.62



PLAN

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
E. End Appr. Slab 1	337+77.05	12.00	383.81
A1	337+87.01	12.00	383.83
A2	337+96.97	12.00	383.86
W. End Appr. Slab 1	338+06.90	12.00	383.90

NORTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
E. End Appr. Slab 1	337+73.13	22.00	384.05
A1	337+83.06	22.00	384.07
A2	337+92.98	22.00	384.10
W. End Appr. Slab 1	338+02.87	22.00	384.13

NORTH EDGE OF SIDEWALK

Location	Station	Offset	Theoretical Grade Elevations
E. End Appr. Slab 1	337+70.18	29.58	383.96
A1	337+80.08	29.58	383.98
A2	337+89.97	29.58	384.01
W. End Appr. Slab 1	337+99.82	29.58	384.04

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF APPROACH SLAB 1 ELEVATIONS
STRUCTURE NO. 039-0076 (W.B.)
SHEET NO. 9 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	121
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		

SOUTH EDGE OF SHOULDER

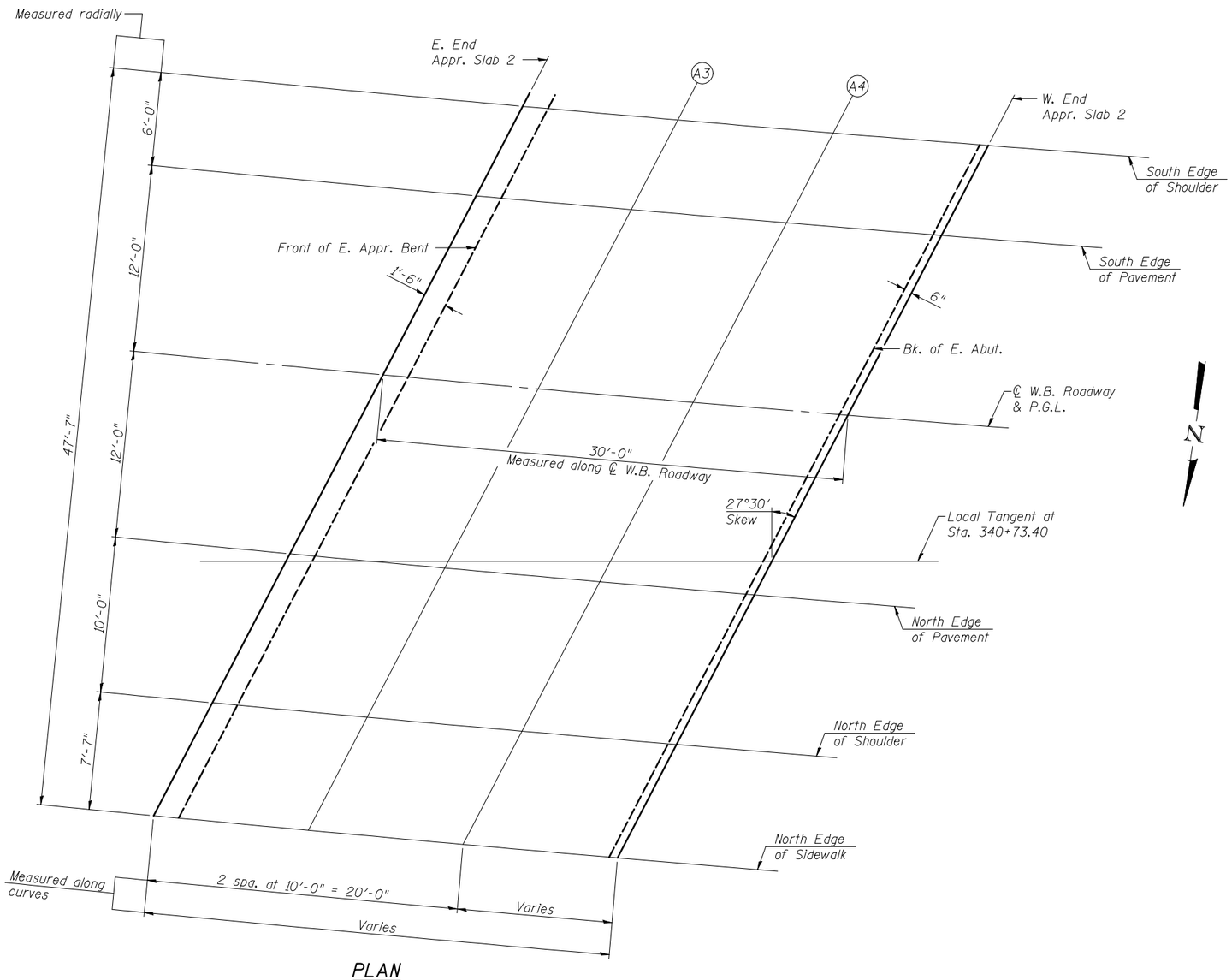
Location	Station	Offset	Theoretical Grade Elevations
E. End Appr. Slab 2	338+19.20	-18.00	383.20
A3	338+29.27	-18.00	383.25
A4	338+39.33	-18.00	383.30
W. End Appr. Slab 2	338+49.43	-18.00	383.35

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
E. End Appr. Slab 2	338+16.72	-12.00	383.34
A3	338+26.76	-12.00	383.38
A4	338+36.81	-12.00	383.43
W. End Appr. Slab 2	338+46.87	-12.00	383.48

℄ W.B. ROADWAY & P.G.L.

Location	Station	Offset	Theoretical Grade Elevations
E. End Appr. Slab 2	338+11.79	0.00	383.62
A3	338+21.79	0.00	383.66
A4	338+31.79	0.00	383.71
W. End Appr. Slab 2	338+41.79	0.00	383.76



PLAN

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
E. End Appr. Slab 2	338+06.90	12.00	383.90
A3	338+16.86	12.00	383.94
A4	338+26.82	12.00	383.98
W. End Appr. Slab 2	338+36.76	12.00	384.03

NORTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
E. End Appr. Slab 2	338+02.87	22.00	384.13
A3	338+12.79	22.00	384.17
A4	338+22.71	22.00	384.21
W. End Appr. Slab 2	338+32.60	22.00	384.26

NORTH EDGE OF SIDEWALK

Location	Station	Offset	Theoretical Grade Elevations
E. End Appr. Slab 2	337+99.82	29.58	384.04
A3	338+09.72	29.58	384.08
A4	338+19.62	29.58	384.12
W. End Appr. Slab 2	338+29.46	29.58	384.17

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF APPROACH SLAB 2 ELEVATIONS
STRUCTURE NO. 039-0076 (W.B.)
SHEET NO. 10 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	122
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

SOUTH EDGE OF SHOULDER

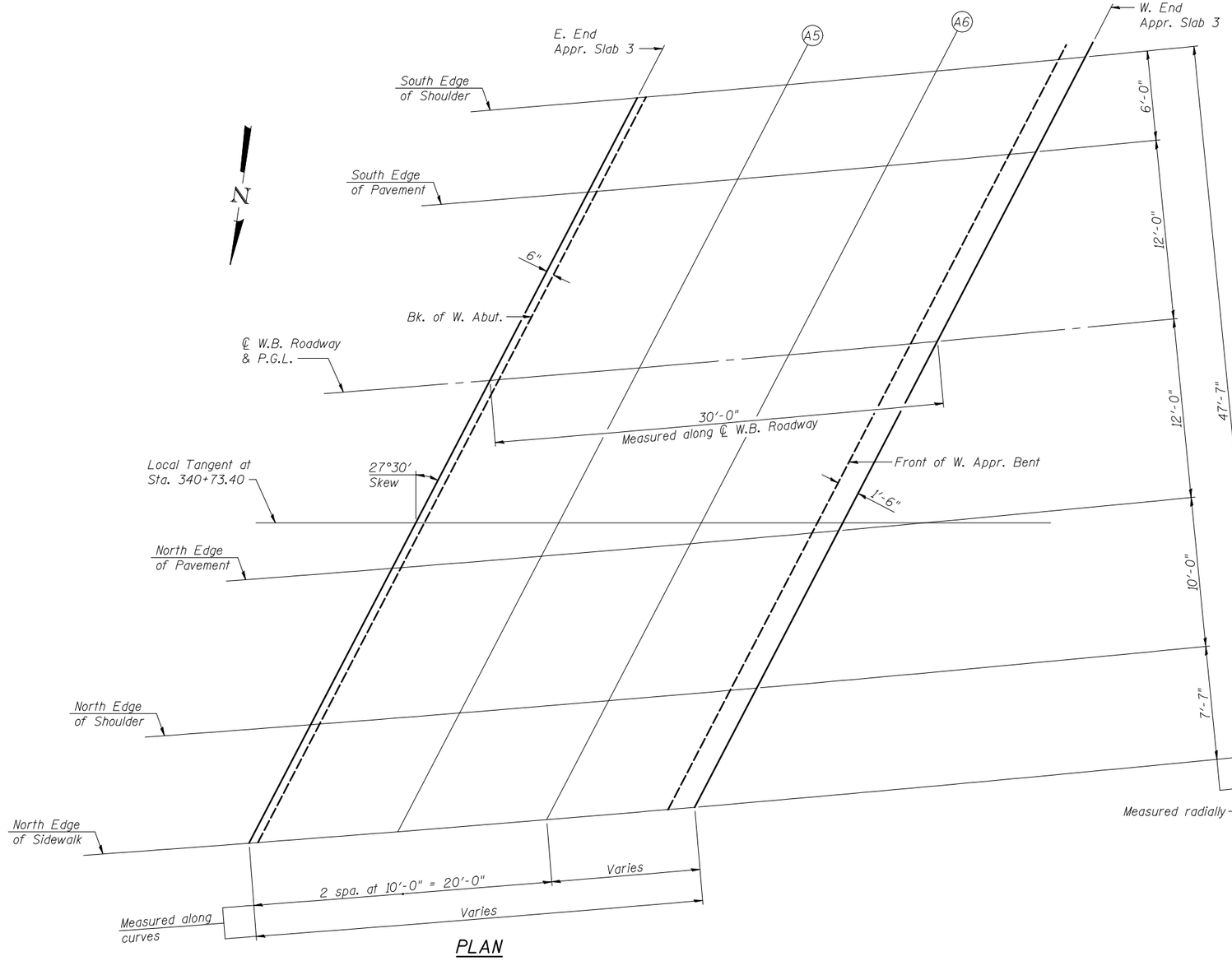
Location	Station	Offset	Theoretical Grade Elevations
E. End Appr. Slab 3	343+17.98	-18.00	383.61
A5	343+28.05	-18.00	383.56
A6	343+38.11	-18.00	383.51
W. End Appr. Slab 3	343+48.25	-18.00	383.46

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
E. End Appr. Slab 3	343+14.16	-12.00	383.78
A5	343+24.20	-12.00	383.73
A6	343+34.25	-12.00	383.68
W. End Appr. Slab 3	343+44.34	-12.00	383.63

℄ W.B. ROADWAY & P.G.L.

Location	Station	Offset	Theoretical Grade Elevations
E. End Appr. Slab 3	343+06.57	0.00	384.12
A5	343+16.57	0.00	384.07
A6	343+26.57	0.00	384.02
W. End Appr. Slab 3	343+36.57	0.00	383.97



PLAN

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
E. End Appr. Slab 3	342+99.06	12.00	384.45
A5	343+09.02	12.00	384.40
A6	343+18.97	12.00	384.36
W. End Appr. Slab 3	343+28.88	12.00	384.31

NORTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
E. End Appr. Slab 3	342+92.85	22.00	384.74
A5	343+02.78	22.00	384.69
A6	343+12.70	22.00	384.64
W. End Appr. Slab 3	343+22.53	22.00	384.59

NORTH EDGE OF SIDEWALK

Location	Station	Offset	Theoretical Grade Elevations
E. End Appr. Slab 3	342+88.18	29.58	384.68
A5	342+98.08	29.58	384.63
A6	343+07.98	29.58	384.58
W. End Appr. Slab 3	343+17.75	29.58	384.53

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF APPROACH SLAB 3 ELEVATIONS
STRUCTURE NO. 039-0076 (W.B.)
SHEET NO. 11 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	123
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

SOUTH EDGE OF SHOULDER

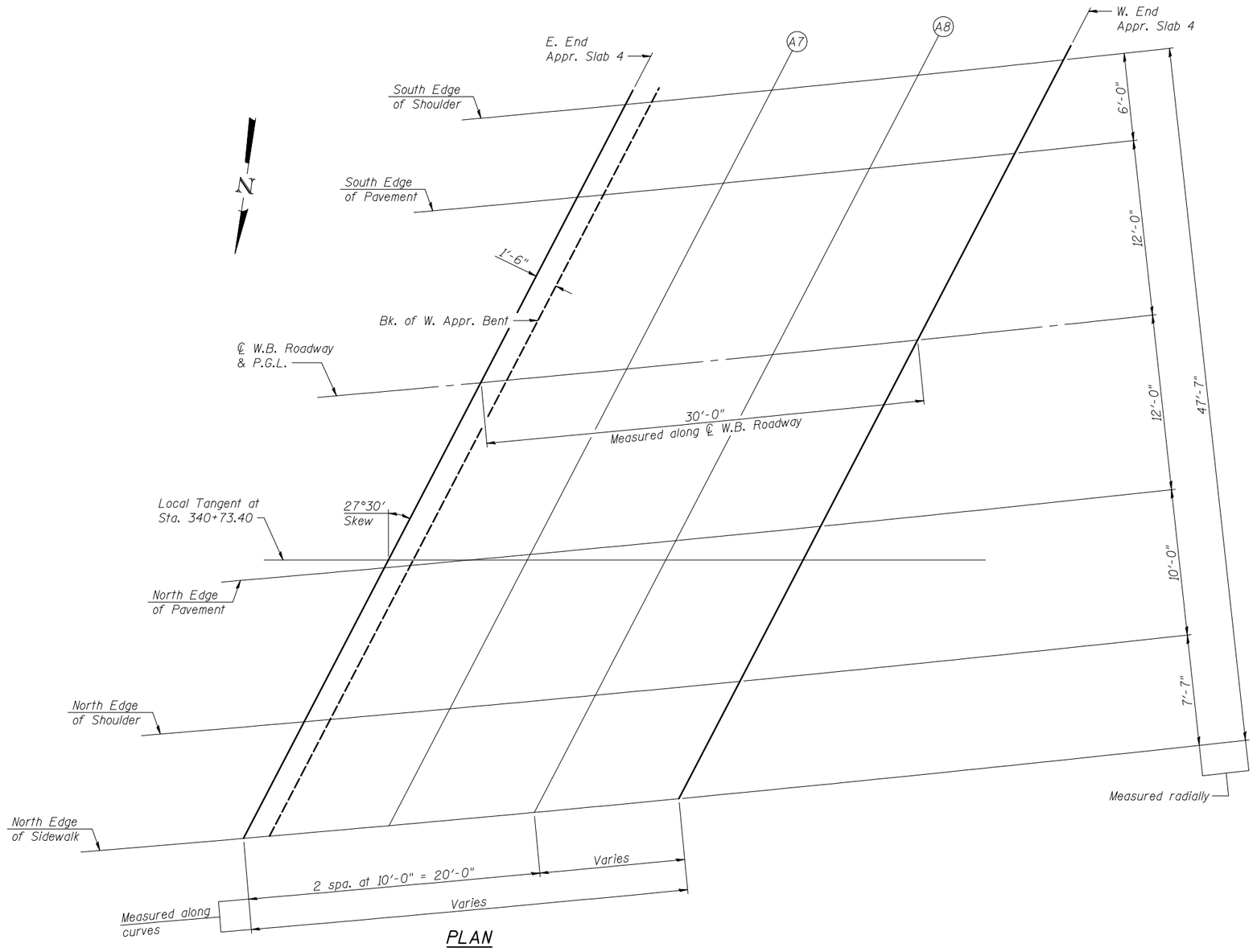
Location	Station	Offset	Theoretical Grade Elevations
E. End Appr. Slab 4	343+48.25	-18.00	383.46
A7	343+58.32	-18.00	383.42
A8	343+68.38	-18.00	383.38
W. End Appr. Slab 4	343+78.52	-18.00	383.35

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
E. End Appr. Slab 4	343+44.34	-12.00	383.63
A7	343+54.38	-12.00	383.58
A8	343+64.42	-12.00	383.54
W. End Appr. Slab 4	343+74.52	-12.00	383.51

℄ W.B. ROADWAY & P.G.L.

Location	Station	Offset	Theoretical Grade Elevations
E. End Appr. Slab 4	343+36.57	0.00	383.97
A7	343+46.57	0.00	383.92
A8	343+56.57	0.00	383.87
W. End Appr. Slab 4	343+66.57	0.00	383.84



PLAN

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
E. End Appr. Slab 4	343+28.88	12.00	384.31
A7	343+38.84	12.00	384.26
A8	343+48.80	12.00	384.21
W. End Appr. Slab 4	343+58.70	12.00	384.17

NORTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
E. End Appr. Slab 4	343+22.53	22.00	384.59
A7	343+32.45	22.00	384.54
A8	343+42.38	22.00	384.49
W. End Appr. Slab 4	343+52.21	22.00	384.44

NORTH EDGE OF SIDEWALK

Location	Station	Offset	Theoretical Grade Elevations
E. End Appr. Slab 4	343+17.75	29.58	384.53
A7	343+27.65	29.58	384.48
A8	343+37.55	29.58	384.43
W. End Appr. Slab 4	343+47.32	29.58	384.38

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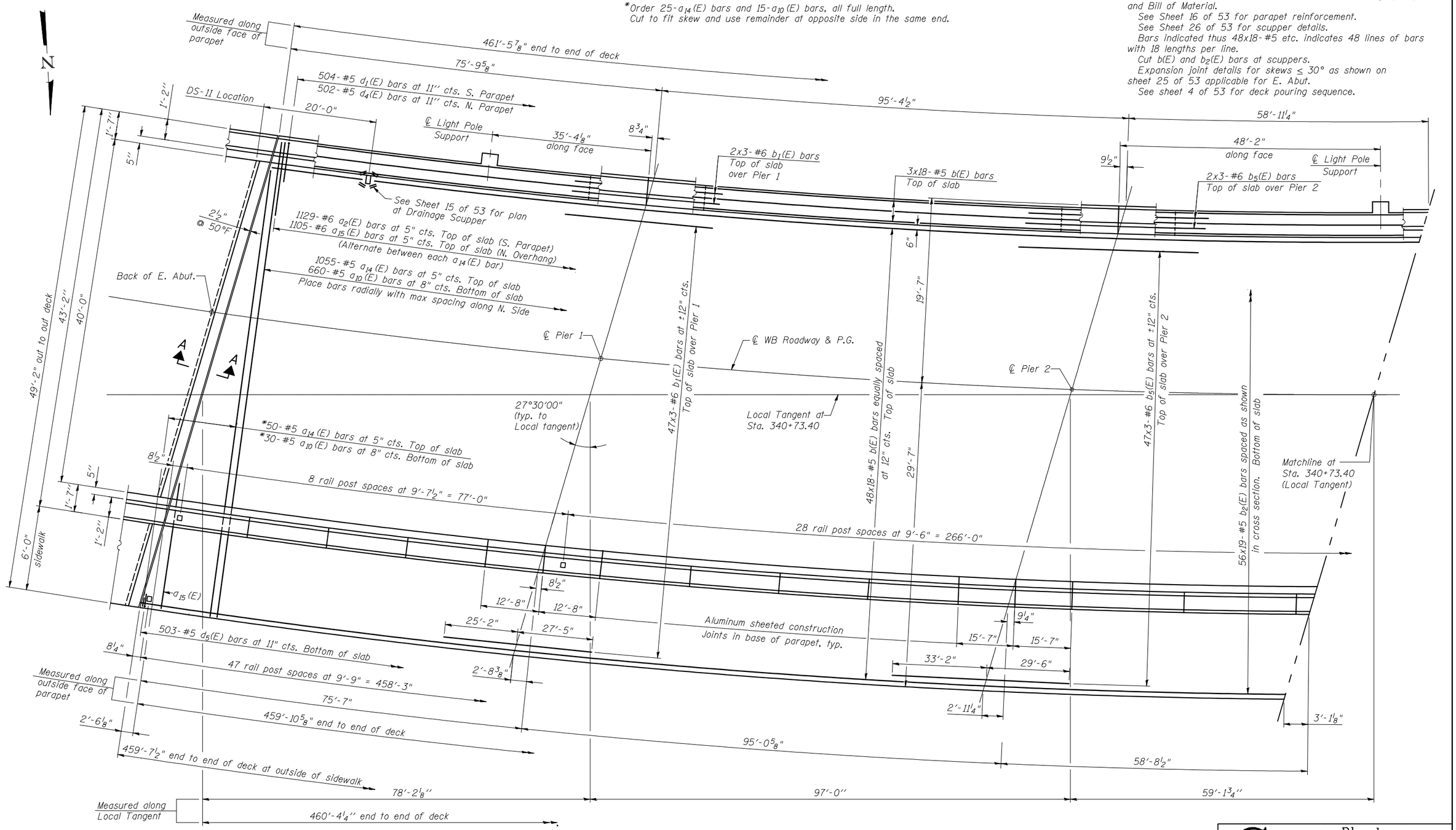
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF APPROACH SLAB 4 ELEVATIONS
STRUCTURE NO. 039-0076 (W.B.)
SHEET NO. 12 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	124
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			



PARTIAL PLAN

MINIMUM BAR LAP

#5 bar = 2'-7"
#6 bar = 3'-1" bars over piers
#6 bar = 4'-5" bars at end of deck

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

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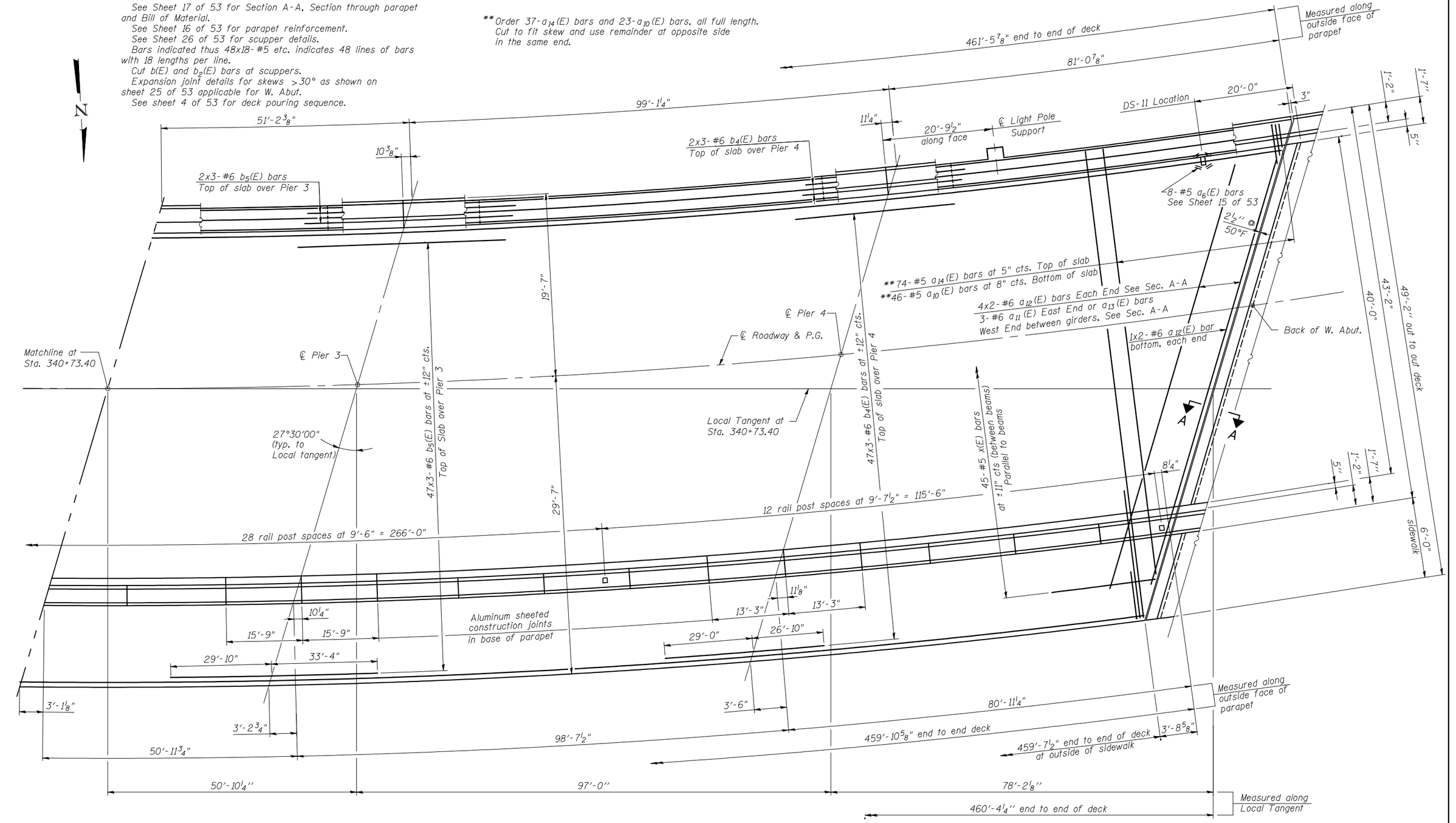
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE
STRUCTURE NO. 039-0076 (WB)
SHEET NO. 13 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	125
		CONTRACT NO. 78056		
		ILLINOIS FED. AID PROJECT		

Notes:
See Sheet 17 of 53 for Section A-A, Section through parapet and Bill of Material.
See Sheet 16 of 53 for parapet reinforcement.
See Sheet 26 of 53 for scupper details.
Bars indicated thus 48x18-#5 etc. indicates 48 lines of bars with 18 lengths per line.
Cut b(E) and b_2(E) bars at scuppers.
Expansion joint details for skews >30° as shown on sheet 25 of 53 applicable for W. Abut.
See sheet 4 of 53 for deck pouring sequence.

** Order 37-a_{14}(E) bars and 23-a_{10}(E) bars, all full length. Cut to fit skew and use remainder at opposite side in the same end.



MINIMUM BAR LAP

#5 bar = 2'-7"
#6 bar = 3'-1" bars over piers
#6 bar = 4'-5" bars at end of deck

PARTIAL PLAN

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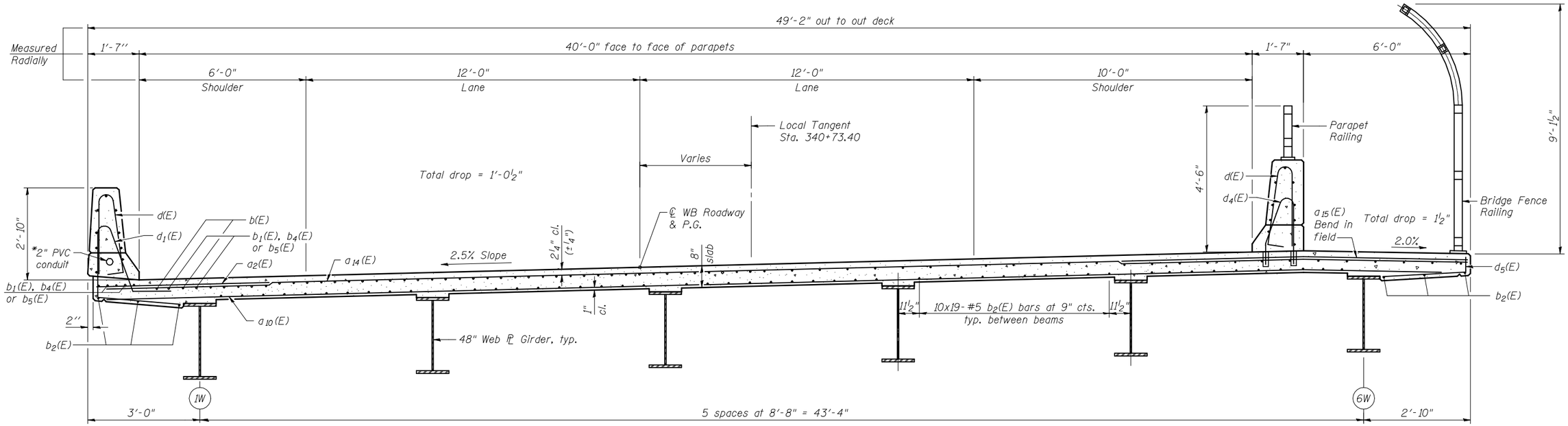
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE
STRUCTURE NO. 039-0076 (WB)
SHEET NO. 14 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	126
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			



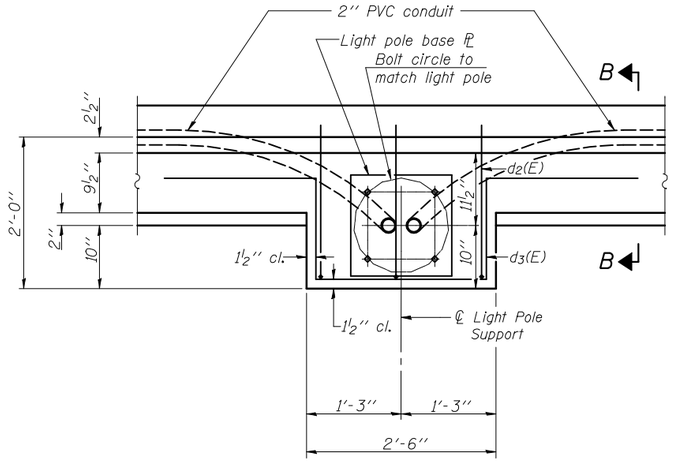
NEAR PIER

NEAR MIDSPAN

*Conduit shall have a minimum clearance of 1 1/2" from all reinforcement

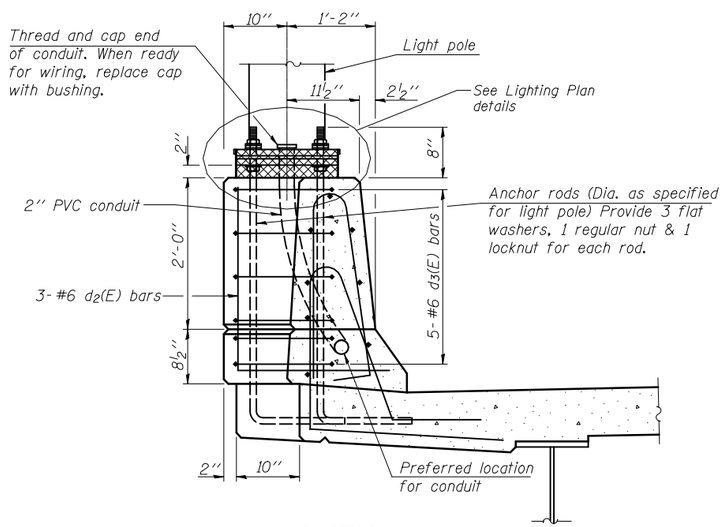
CROSS SECTION

(Looking West)



PLAN

Note:
Cost of anchor rods is included with Concrete Superstructure.
Conduit is paid for as Conduit Embedded in Structure, 2"ϕ PVC. See Lighting Plan.

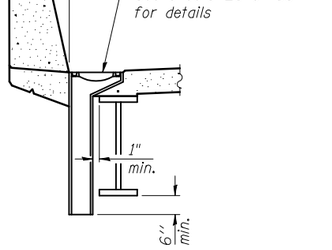


SECTION B-B

(three locations)
See Lighting Plan Details for dimensions and requirements not shown.

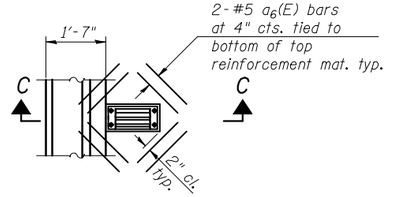
LIGHT POLE DETAIL

(at south parapet)



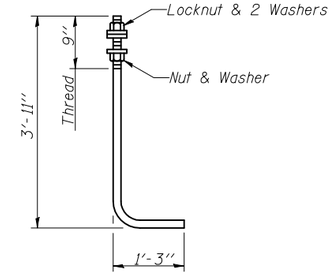
SECTION C-C

(At SE and SW Corners)



PLAN AT DRAINAGE SCUPPER

Note:
Cut longitudinal reinforcement to clear drainage scuppers.



ANCHOR ROD

Diameter as specified for light poles.
(ASTM F 1554 Grade 105)

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STATE OF ILLINOIS
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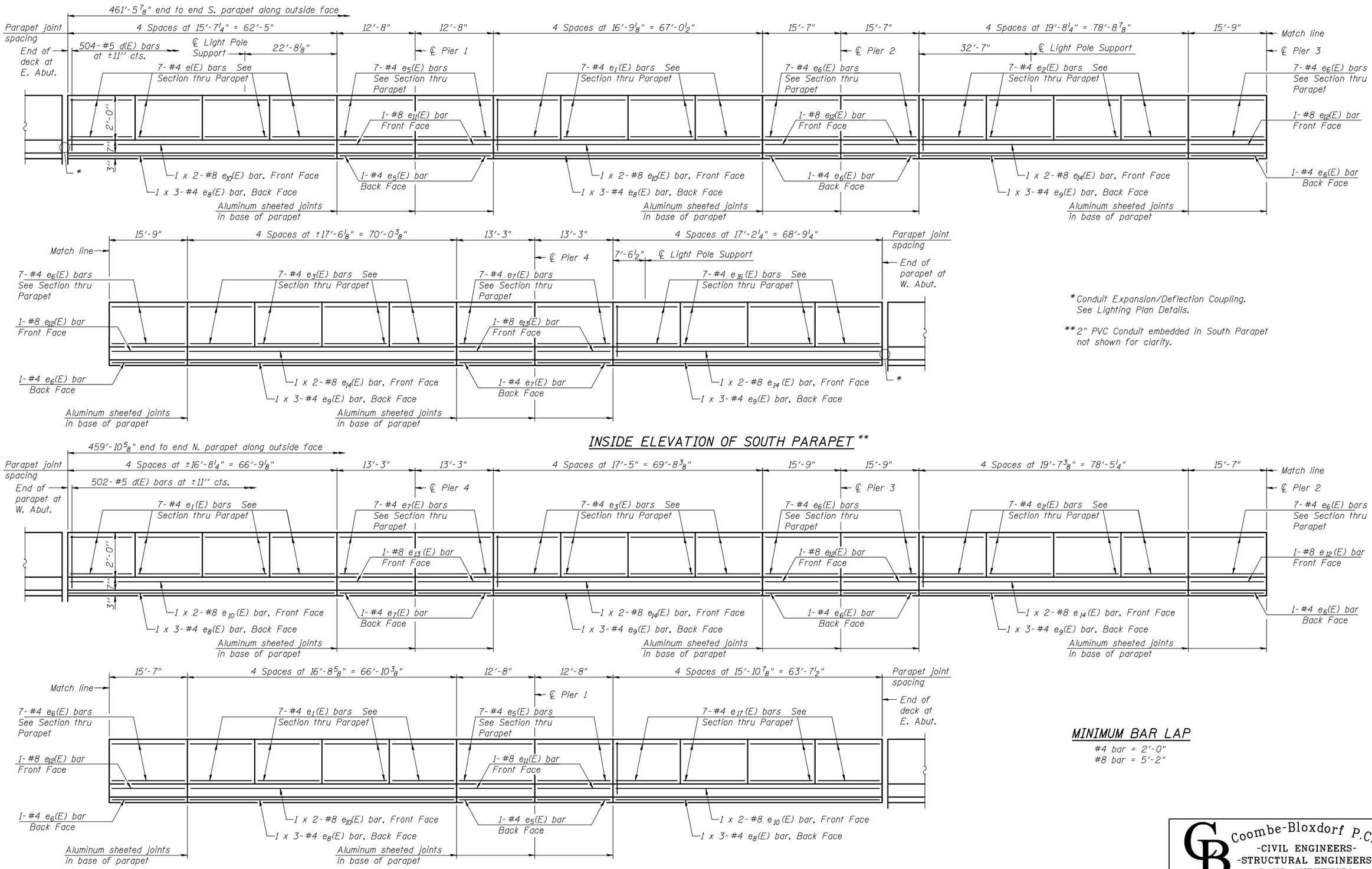
SUPERSTRUCTURE DETAILS
STRUCTURE NO. 039-0076 (WB)
SHEET NO. 15 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	127
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		



INSIDE ELEVATION OF SOUTH PARAPET **

INSIDE ELEVATION OF NORTH PARAPET

MINIMUM BAR LAP

#4 bar = 2′-0″
#8 bar = 5′-2″

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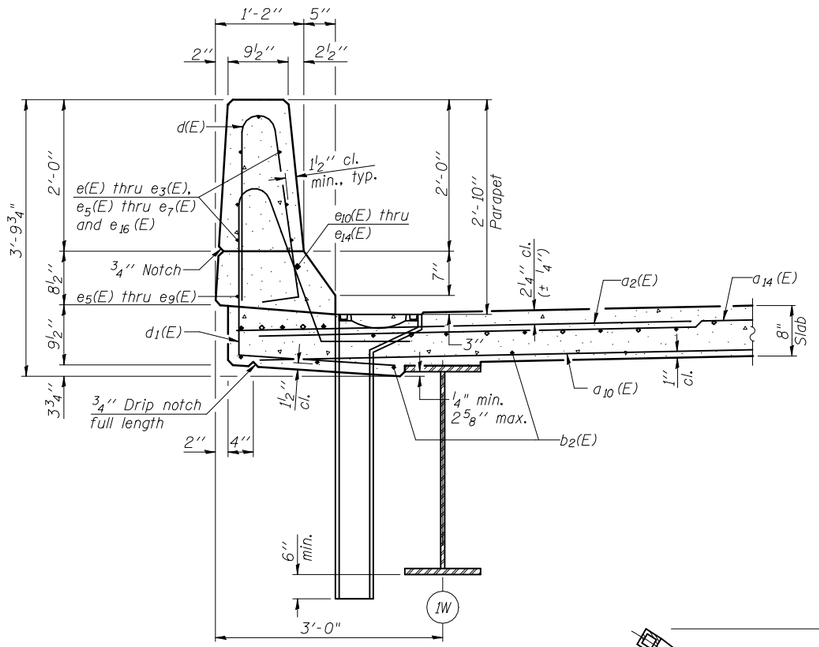
-STRUCTURAL ENGINEERS-
-LAND SURVEYORS-
Design Firm License No. 184-002703

FILE NAME = $FILE$	USER NAME = $USER$	DESIGNED - GB	REVISED -
		CHECKED - MCB	REVISED -
	PLOT SCALE = $SCALE$	DRAWN - MML	REVISED -
CB PROJECT NO. 08024-2	PLOT DATE = $DATE$	CHECKED - MCB	REVISED -

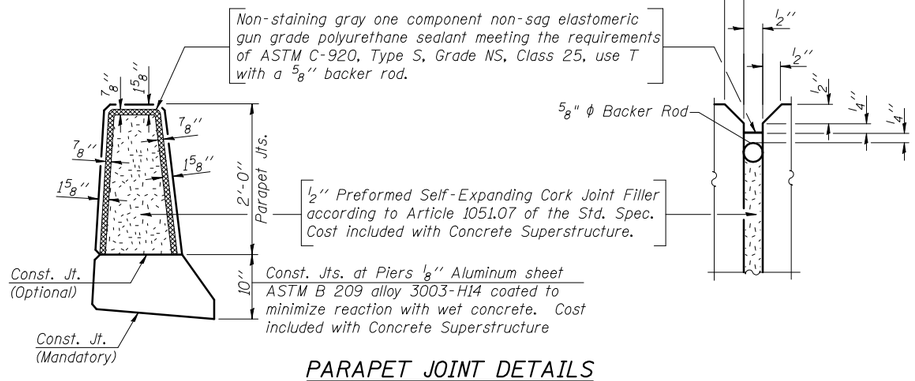
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS
STRUCTURE NO. 039-0076 (WB)
SHEET NO. 16 OF 53 SHEETS

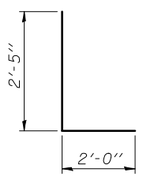
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	128
		CONTRACT NO. 78056		
		ILLINOIS FED. AID PROJECT		



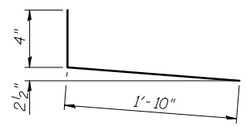
SECTION THRU SOUTH PARAPET



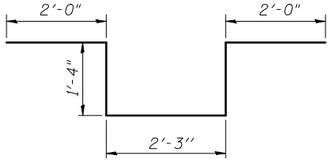
PARAPET JOINT DETAILS



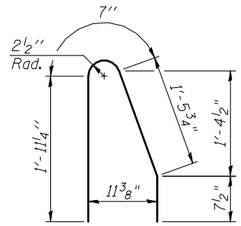
BAR $d_2(E)$



BAR $d_5(E)$



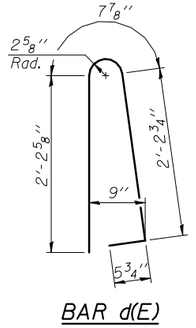
BAR $d_3(E)$



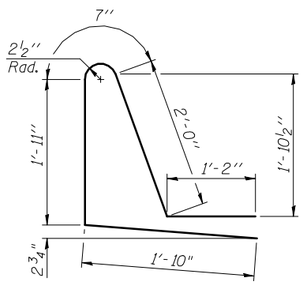
BAR $d_4(E)$

SUPERSTRUCTURE BILL OF MATERIAL

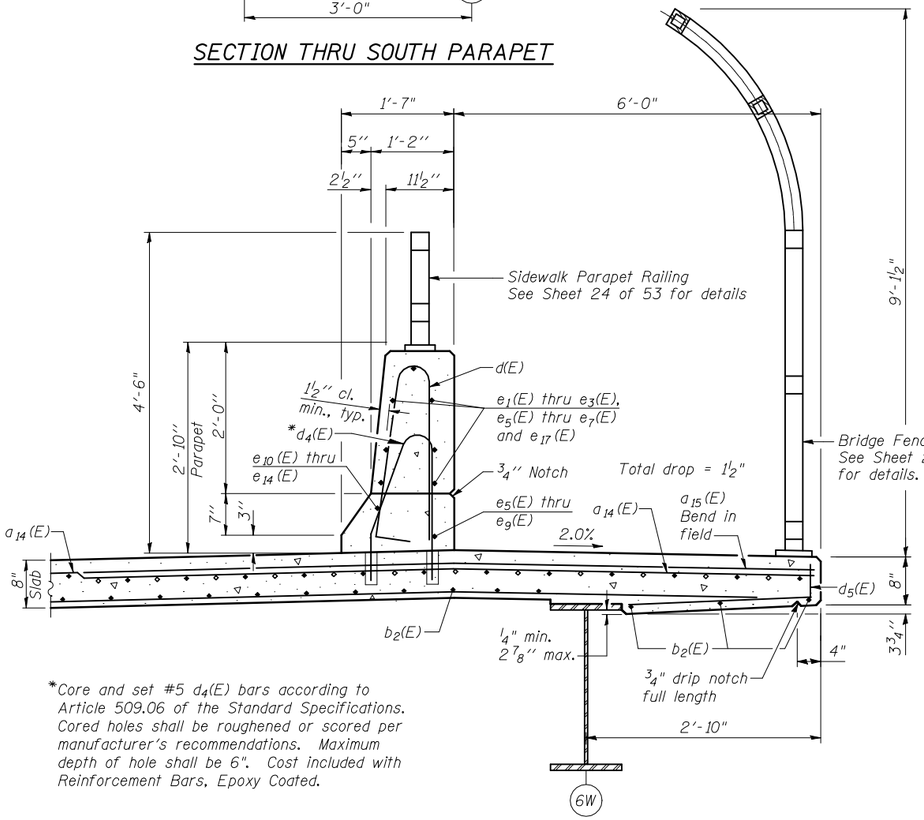
Bar	No.	Size	Length	Shape
$a_2(E)$	1129	#6	6'-6"	
$a_6(E)$	16	#5	1'-6"	
$a_{10}(E)$	698	#5	47'-10"	
$a_{11}(E)$	15	#6	10'-5"	
$a_{12}(E)$	20	#6	30'-11"	
$a_{13}(E)$	15	#6	11'-2"	
$a_{14}(E)$	1117	#5	48'-8"	
$a_{15}(E)$	1105	#6	12'-8"	
$b(E)$	918	#5	28'-1"	
$b_1(E)$	147	#6	19'-7"	
$b_2(E)$	1064	#5	26'-9"	
$b_4(E)$	147	#6	20'-8"	
$b_5(E)$	294	#6	23'-2"	
$d(E)$	1006	#5	5'-7"	
$d_1(E)$	504	#5	7'-6"	
$d_2(E)$	9	#6	4'-5"	
$d_3(E)$	15	#6	8'-11"	
$d_4(E)$	502	#5	4'-8"	
$d_5(E)$	503	#5	2'-2"	
$e(E)$	28	#4	15'-3"	
$e_1(E)$	84	#4	16'-4"	
$e_2(E)$	56	#4	19'-3"	
$e_3(E)$	56	#4	17'-1"	
$e_5(E)$	32	#4	12'-4"	
$e_6(E)$	64	#4	15'-3"	
$e_7(E)$	32	#4	12'-11"	
$e_8(E)$	15	#4	23'-10"	
$e_9(E)$	15	#4	27'-7"	
$e_{10}(E)$	10	#8	36'-3"	
$e_{11}(E)$	4	#8	12'-4"	
$e_{12}(E)$	8	#8	15'-3"	
$e_{13}(E)$	4	#8	12'-11"	
$e_{14}(E)$	10	#8	41'-11"	
$e_{16}(E)$	28	#4	16'-8"	
$e_{17}(E)$	28	#4	15'-6"	
$x(E)$	90	#5	6'-5"	
Reinforcement Bars, Epoxy Coated		Pound	222,500	
Concrete Superstructure		Cu. Yds.	701.7	



BAR $d(E)$

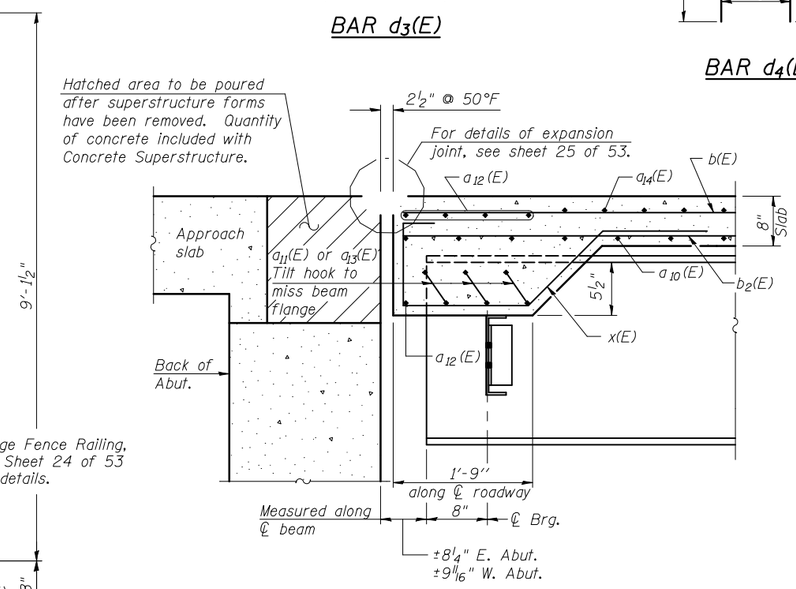


BAR $d_1(E)$

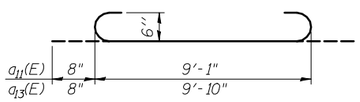


*Core and set #5 $d_4(E)$ bars according to Article 509.06 of the Standard Specifications. Cored holes shall be roughened or scored per manufacturer's recommendations. Maximum depth of hole shall be 6". Cost included with Reinforcement Bars, Epoxy Coated.

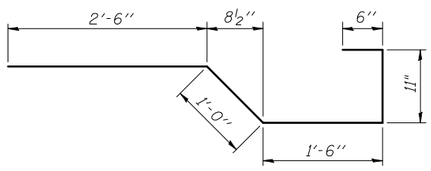
SECTION THRU NORTH PARAPET



SECTION A-A



$a_{11}(E)$ & $a_{13}(E)$ BAR



BAR $x(E)$

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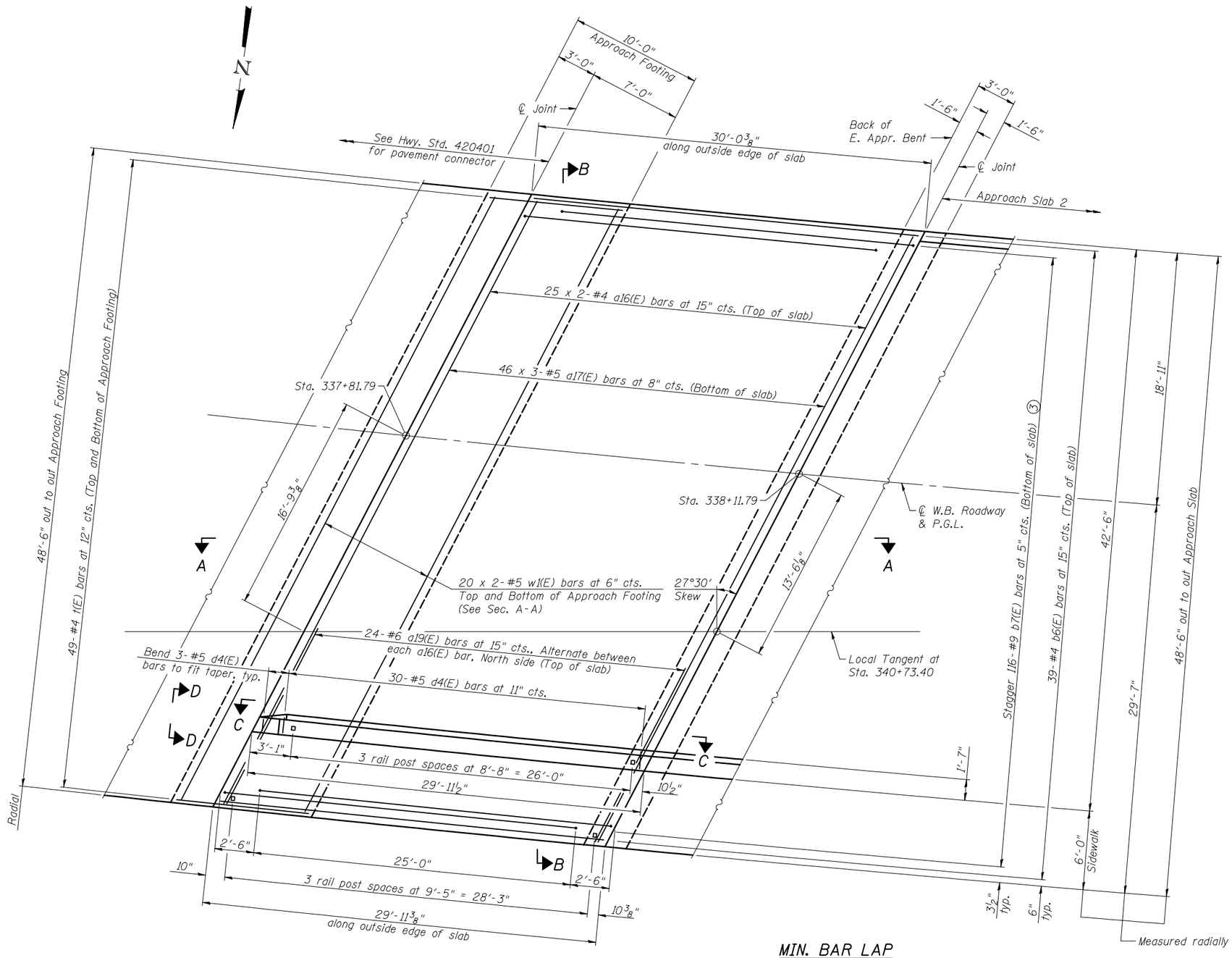
		CHECKED - MCB	REVISED -
	PLOT SCALE = $SCALE$	DRAWN - MML	REVISED -
CB PROJECT NO. 08024-2	PLOT DATE = $DATE$	CHECKED - MCB	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS
STRUCTURE NO. 039-0076 (WB)
SHEET NO. 17 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	129
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

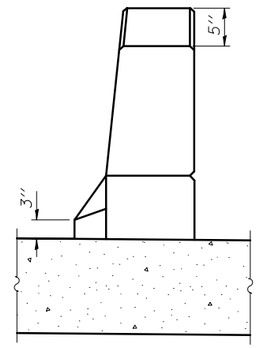
Notes:
1. For Sections A-A, B-B and View C-C, see sheet 20 of 53.
2. a16(E), a17(E) and a19(E) bar spacings measured along ℄ Roadway.
3. Tilt #9 b7(E) bars as required to maintain clearance.



PLAN

MIN. BAR LAP

#4 bar = 2'-4"
#5 bar = 2'-11"

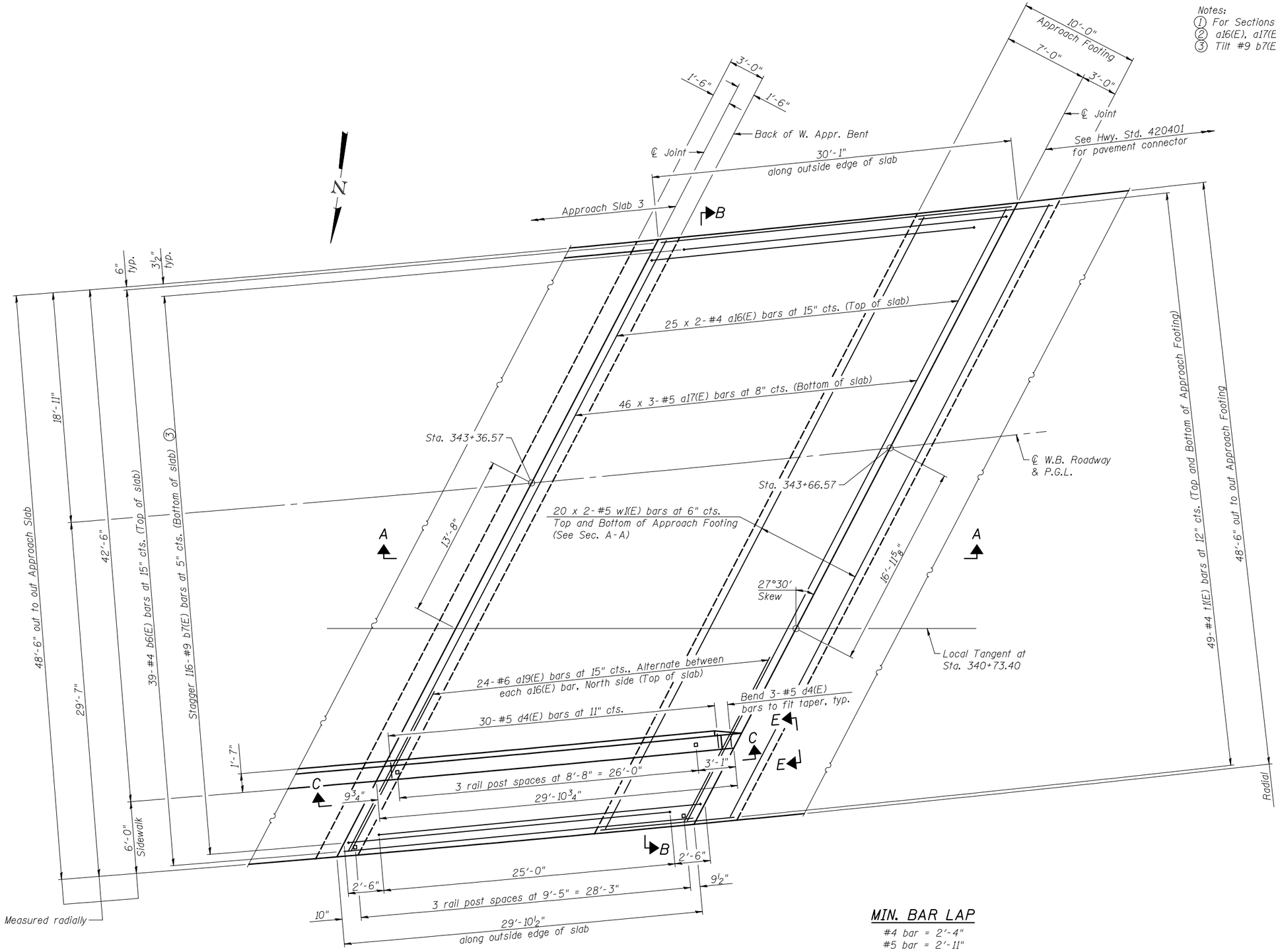


VIEW D-D

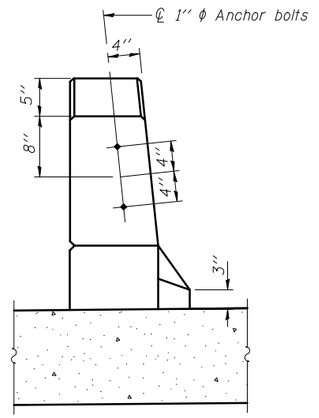
BATES ASSOCIATES Engineering + Architecture	USER NAME =	DESIGNED - MAG	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BRIDGE APPROACH SLAB 1 DETAILS STRUCTURE NO. 039-0076 (W.B.)
		CHECKED - JAD	REVISED -		
	PLOT SCALE =	DRAWN - MAG	REVISED -		SHEET NO. 18 OF 53 SHEETS
	PLOT DATE =	CHECKED - JAD	REVISED -		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	130
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

Notes:
1. For Sections A-A, B-B and View C-C, see sheet 20 of 53.
2. a16(E), a17(E) and a19(E) bar spacings measured along ℄ Roadway.
3. Tilt #9 b7(E) bars as required to maintain clearance.



PLAN



VIEW E-E

MIN. BAR LAP

#4 bar = 2'-4"
#5 bar = 2'-11"

USER NAME =	DESIGNED - MAG	REVISED -	
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PLOT DATE =	CHECKED - JAD	REVISED -	

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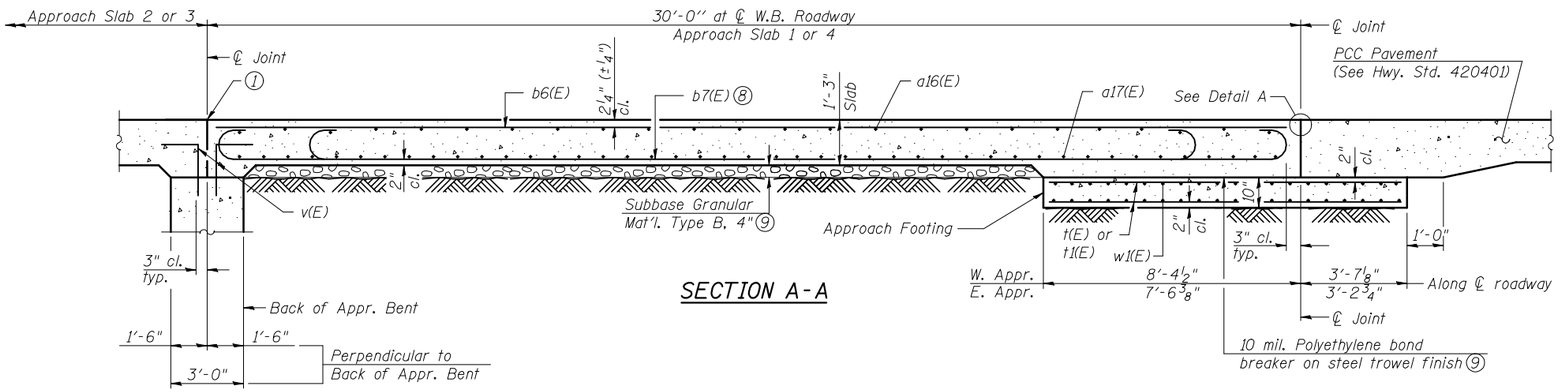
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB 4 DETAILS
STRUCTURE NO. 039-0076 (W.B.)
SHEET NO. 19 OF 53 SHEETS

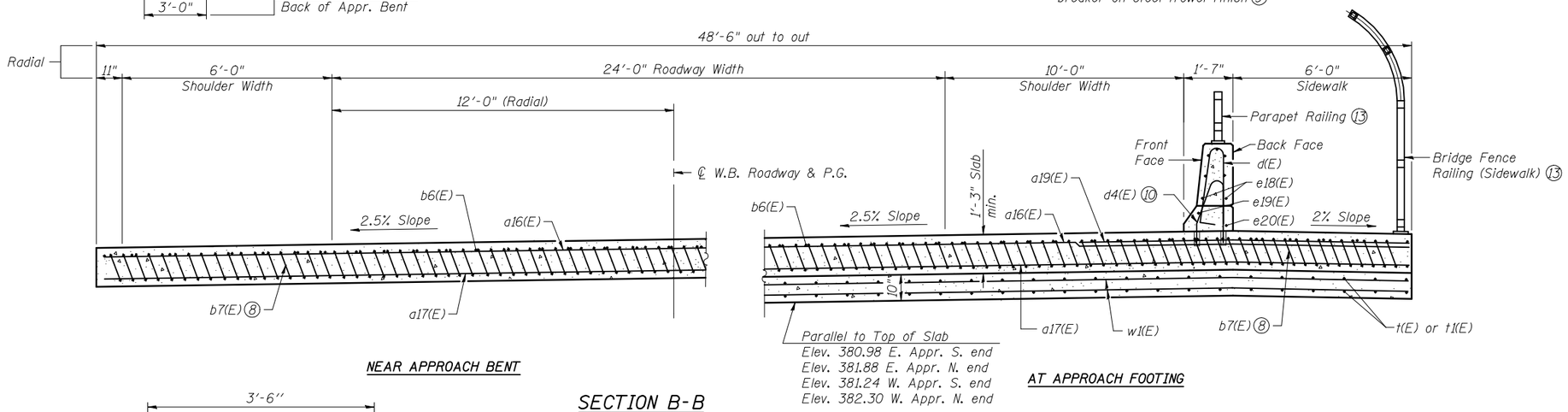
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	131
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			



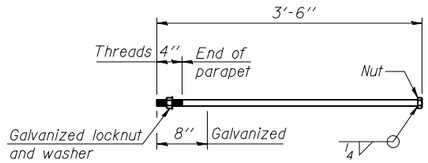
SECTION A-A

Notes:

① ¼" x ¾" formed joint with concrete joint sealer without the backer rod (full width). Cost included with Concrete Superstructure.
② Approach slab and parapet concrete shall be paid for as Concrete Superstructure.
③ Approach footing concrete shall be paid for as Concrete Structures.
④ Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
⑤ For v(E) bar details, see sheets 32 and 33 of 53.
⑥ The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
⑦ Cost of excavation for approach footing included with Concrete Structures.
⑧ Tilt #9 b7(E) bars as required to maintain clearance.
⑨ Cost included with Concrete Superstructure.
⑩ Core and set #5 d4(E) bars according to Article 509.06 of the Standard Specifications. Cored holes shall be roughened or scored per manufacturer's recommendations. Maximum depth of hole shall be 6". Cost included with Reinforcement Bars, Epoxy Coated.
⑪ For additional parapet details and parapet joint details, see sheets 17 thru 19 of 53.
⑫ Parapet dimensions taken along back face of parapet.
⑬ For Bridge Fence Railing (Sidewalk) details and Parapet Railing details, see sheet 24 of 53.
⑭ Cut e18(E) bars as required to fit skew.
⑮ For View E-E, see sheet 19 of 53.



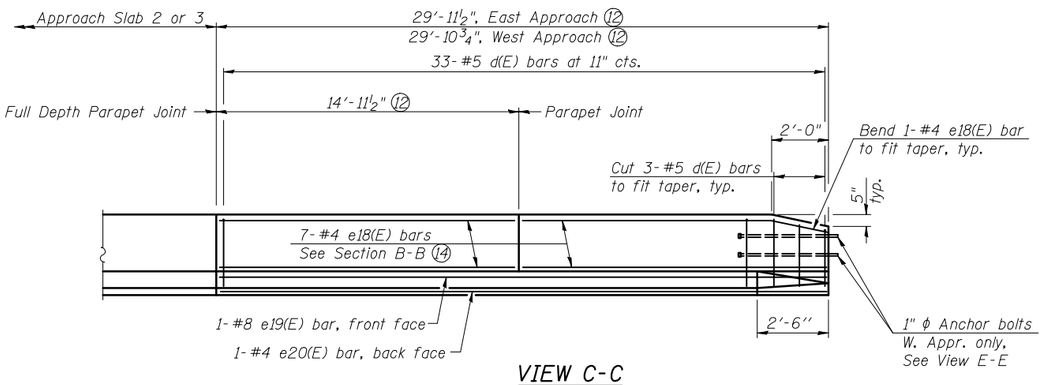
NEAR APPROACH BENT



1"ϕ ANCHOR BOLT ⑨

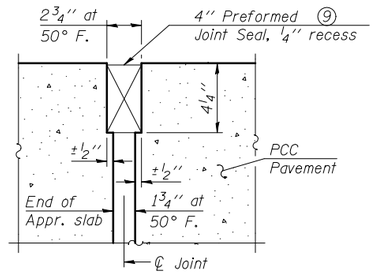
SECTION B-B

(See Plan for dimensions not shown)
(Looking West)



VIEW C-C

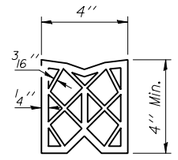
AT APPROACH FOOTING



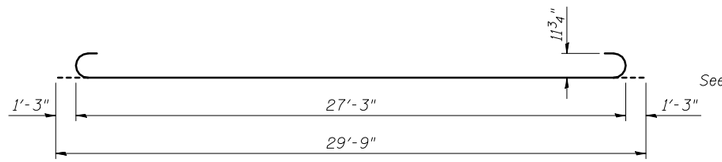
RIGID PAVEMENT

DETAIL A

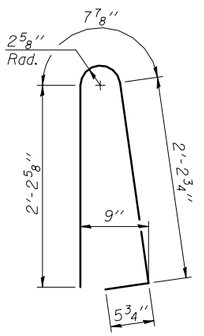
Note:
Minimum dimensions shown, actual dimensions per manufacturer's recommendation.



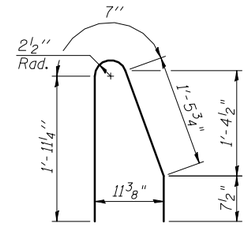
PREFORMED JOINT SEAL



BAR b7(E)



BAR d(E)



BAR d4(E)

TWO APPROACHES
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a16(E)	100	#4	29'-11"	
a17(E)	276	#5	21'-2"	
a19(E)	48	#6	14'-11"	
b6(E)	78	#4	29'-8"	
b7(E)	232	#9	29'-9"	
d(E)	66	#5	5'-7"	
d4(E)	66	#5	4'-8"	
e18(E)	28	#4	14'-7"	
e19(E)	2	#8	29'-6"	
e20(E)	2	#4	29'-6"	
t(E)	98	#4	10'-5"	
t1(E)	98	#4	11'-5"	
w1(E)	160	#5	30'-3"	
Concrete Superstructure			Cu. Yd.	143.1
Concrete Structures			Cu. Yd.	33.9
Reinforcement Bars, Epoxy Coated			Pound	41,840

Note A: 35,360 lbs. (Superstr.)
6,480 lbs. (Substr.)

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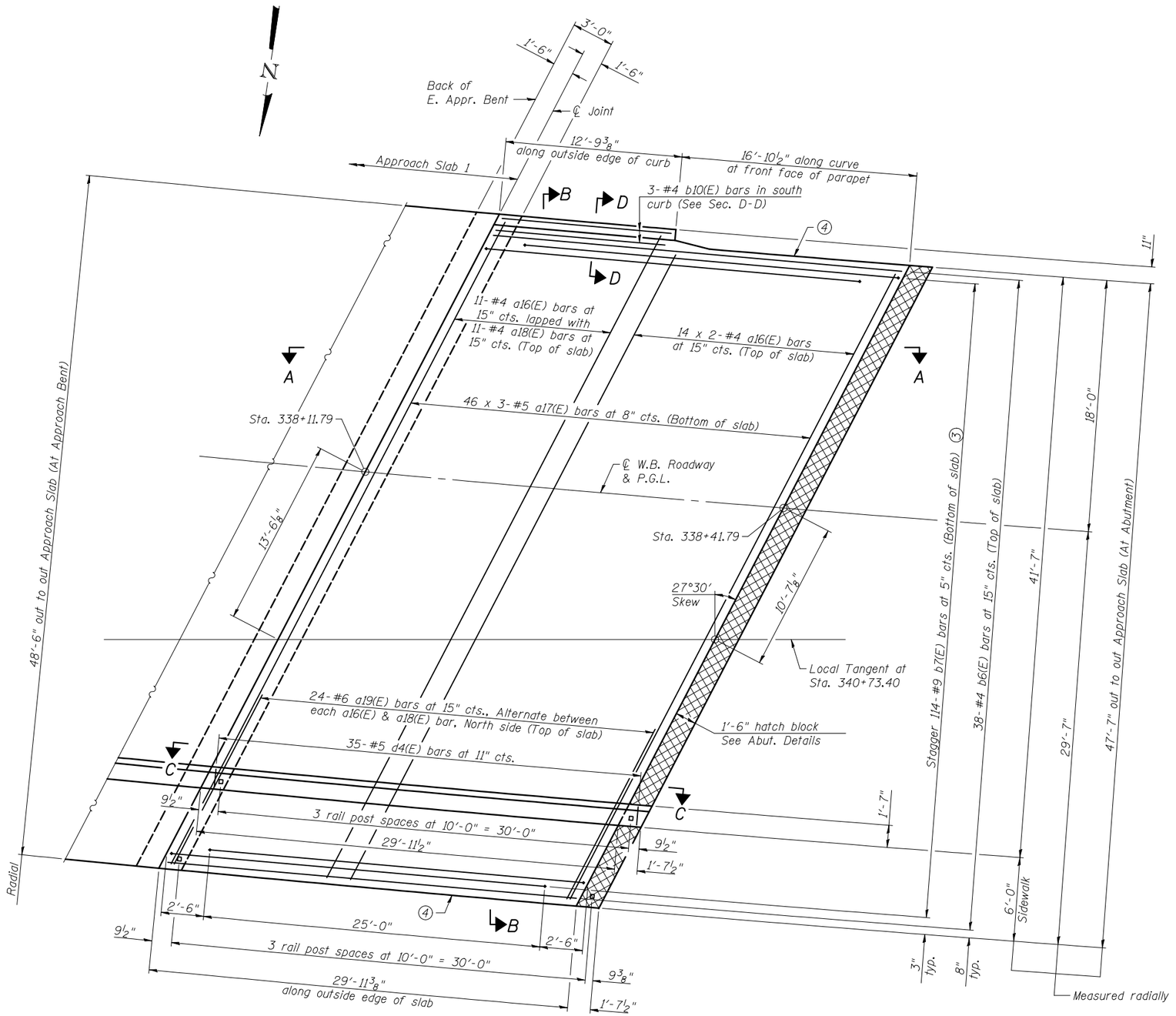
PLOT SCALE =	DRAWN - MAG	REVISED -	
PLOT DATE =	CHECKED - JAD	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB 1 AND 4 DETAILS
STRUCTURE NO. 039-0076 (W.B.)
SHEET NO. 20 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	132
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

Notes:
1. For Sections A-A, B-B, D-D and View C-C, see sheet 23 of 53.
2. a16(E), a17(E), a18(E) and a19(E) bar spacings measured along ℄ Roadway.
3. Tilt #9 b7(E) bars as required to maintain clearance.
4. Flexible foam expansion joint filler according to Article 1051.09 of the Std. Specifications; full depth of slab, full length of parapet. Cost included with Concrete Superstructure.



PLAN

MIN. BAR LAP

#4 bar = 2'-4"
#5 bar = 2'-11"

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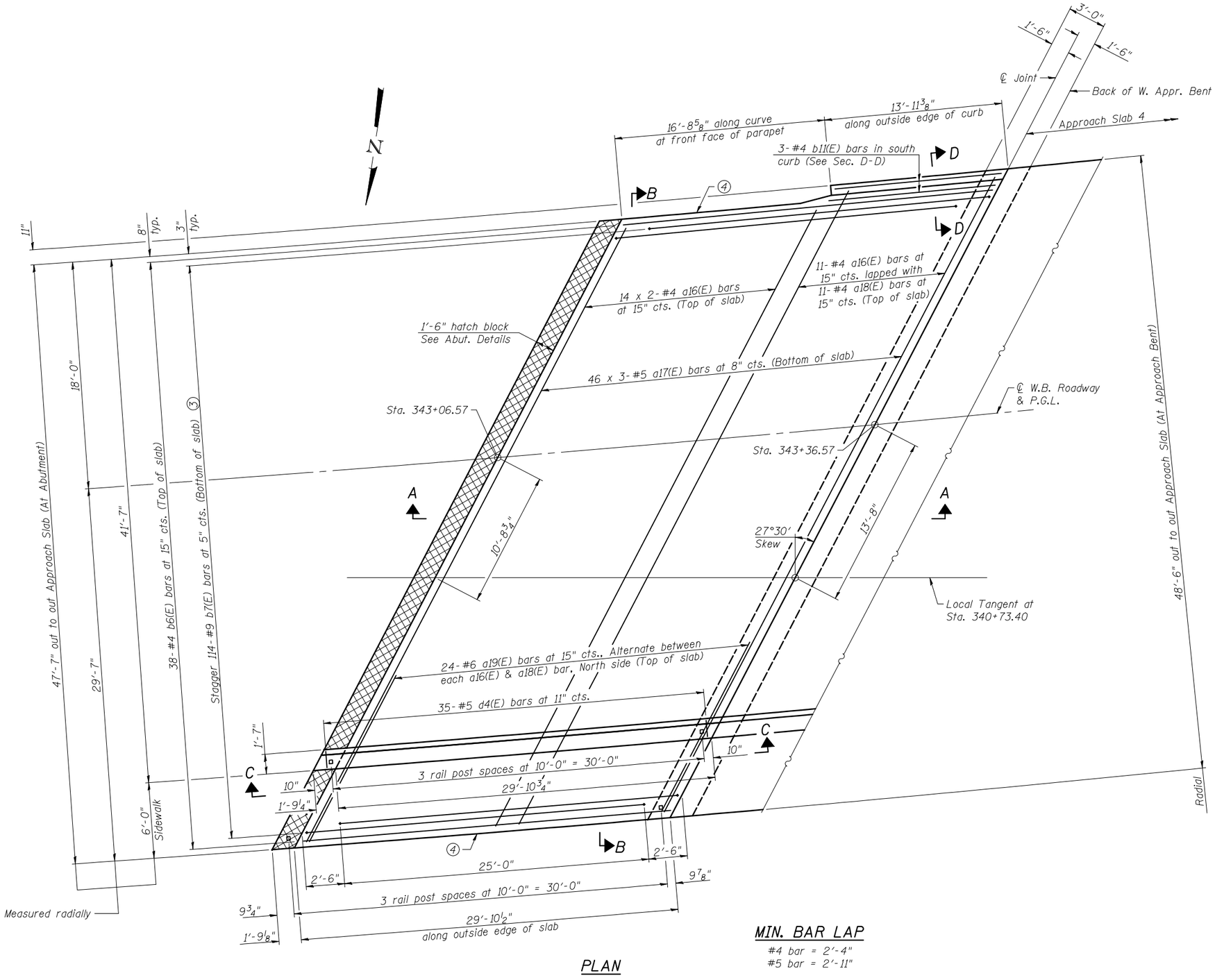
			CHECKED - JAD	REVISED -	
		PLOT SCALE =	DRAWN - MAG	REVISED -	
		PLOT DATE =	CHECKED - JAD	REVISED -	

BRIDGE APPROACH SLAB 2 DETAILS
STRUCTURE NO. 039-0076 (W.B.)
SHEET NO. 21 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	133
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

Notes:
1. For Sections A-A, B-B, D-D and View C-C, see sheet 23 of 53.
2. a16(E), a17(E), a18(E) and a19(E) bar spacings measured along ℄ Roadway.
3. Tilt #9 b7(E) bars as required to maintain clearance.
4. Flexible foam expansion joint filler according to Article 1051.09 of the Std. Specifications; full depth of slab, full length of parapet. Cost included with Concrete Superstructure.



PLAN

MIN. BAR LAP

#4 bar = 2'-4"
#5 bar = 2'-11"

USER NAME =	DESIGNED - MAG	REVISED -	
	CHECKED - JAD	REVISED -	
PLOT SCALE =	DRAWN - MAG	REVISED -	
PLOT DATE =	CHECKED - JAD	REVISED -	

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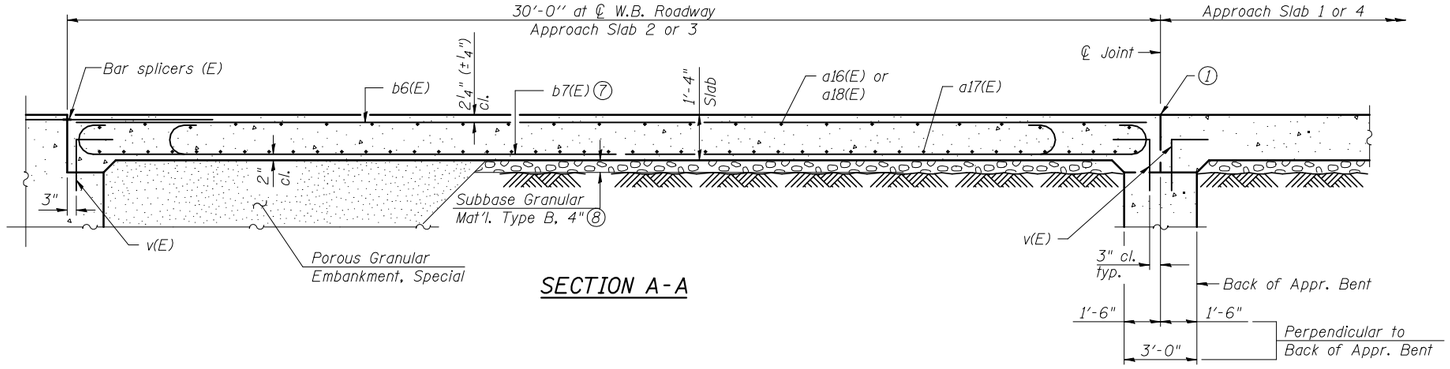
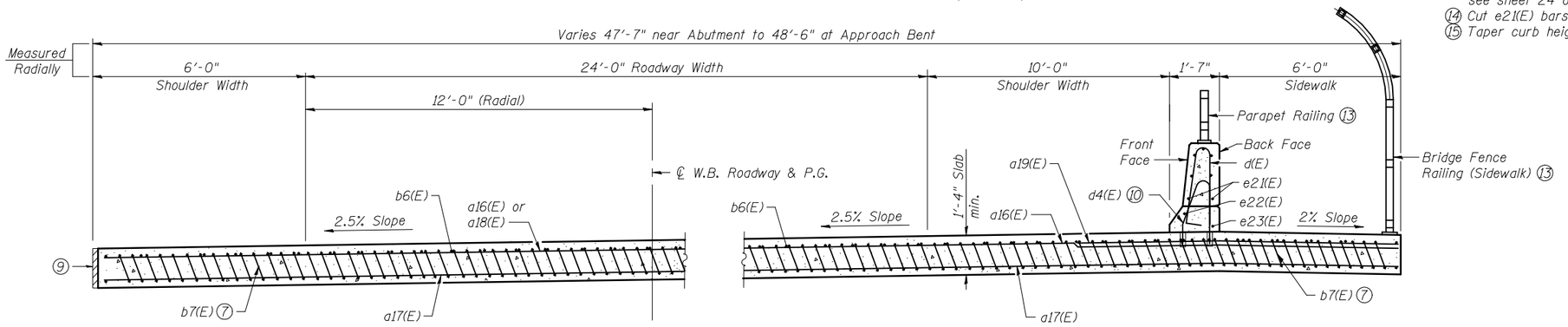
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB 3 DETAILS
STRUCTURE NO. 039-0076 (W.B.)
SHEET NO. 22 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	134
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

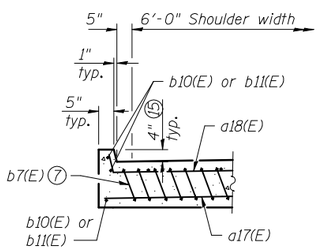


SECTION A-A



NEAR ABUTMENT

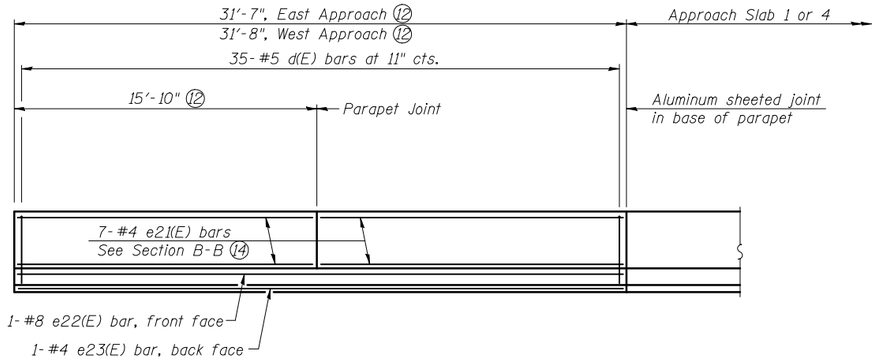
NEAR APPROACH BENT



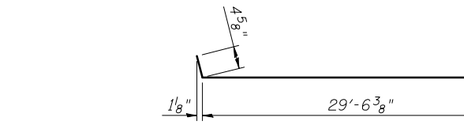
SECTION B-B

(See Plan for dimensions not shown)
(Looking West)

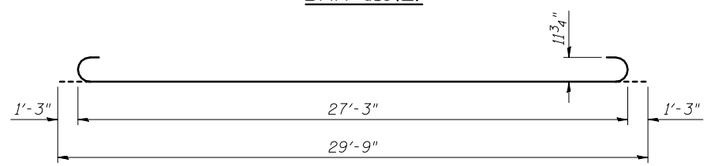
SECTION D-D



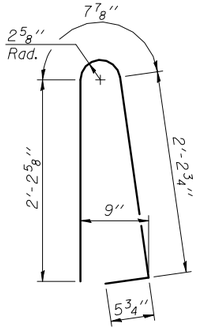
VIEW C-C



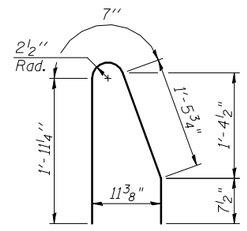
BAR a18(E)



BAR b7(E)



BAR d(E)



BAR d4(E)

Notes:
① ¼" x ¾" formed joint with concrete joint sealer without the backer rod (full width). Cost included with Concrete Superstructure.
② Approach slab and parapet concrete shall be paid for as Concrete Superstructure.
③ Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
④ For v(E) bar details, see sheets 32 thru 39 of 53.
⑤ For bar splicer details, see sheet 48 of 53.
⑥ For Porous Granular Embankment, Special and drainage treatment details, see sheet 2 of 53.
⑦ Tilt #9 b7(E) bars as required to maintain clearance.
⑧ Cost included with Concrete Superstructure
⑨ Flexible foam expansion joint filler. Cost included with Concrete Superstructure. See Plan on sheets 21 and 22 of 53.
⑩ Core and set #5 d4(E) bars according to Article 509.06 of the Standard Specifications. Cored holes shall be roughened or scored per manufacturer's recommendations. Maximum depth of hole shall be 6". Cost included with Reinforcement Bars, Epoxy Coated.
⑪ For additional parapet details and parapet joint details, see sheets 17, 21 and 22 of 53.
⑫ Parapet dimensions taken along back face of parapet.
⑬ For Bridge Fence Railing (Sidewalk) details and Parapet Railing details, see sheet 24 of 53.
⑭ Cut e21(E) bars as required to fit skew.
⑮ Taper curb height to 2" in 5'-0" at E. End Appr. Slab 2 and W. End Appr. Slab 3.

TWO APPROACHES BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a16(E)	78	#4	29'-11"	
a17(E)	276	#5	21'-2"	
a18(E)	22	#4	29'-11"	
a19(E)	48	#6	14'-11"	
b6(E)	76	#4	29'-8"	
b7(E)	228	#9	29'-9"	
b10(E)	3	#4	12'-5"	
b11(E)	3	#4	13'-7"	
d(E)	70	#5	5'-7"	
d4(E)	70	#5	4'-8"	
e21(E)	28	#4	15'-5"	
e22(E)	2	#8	31'-3"	
e23(E)	2	#4	31'-3"	
Concrete Superstructure			Cu. Yd.	150.5
Reinforcement Bars, Epoxy Coated			Pound	35,030

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	CHECKED - JAD	REVISED -	
PLOT SCALE =	DRAWN - MAG	REVISED -	
PLOT DATE =	CHECKED - JAD	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB 2 AND 3 DETAILS
STRUCTURE NO. 039-0076 (W.B.)
SHEET NO. 23 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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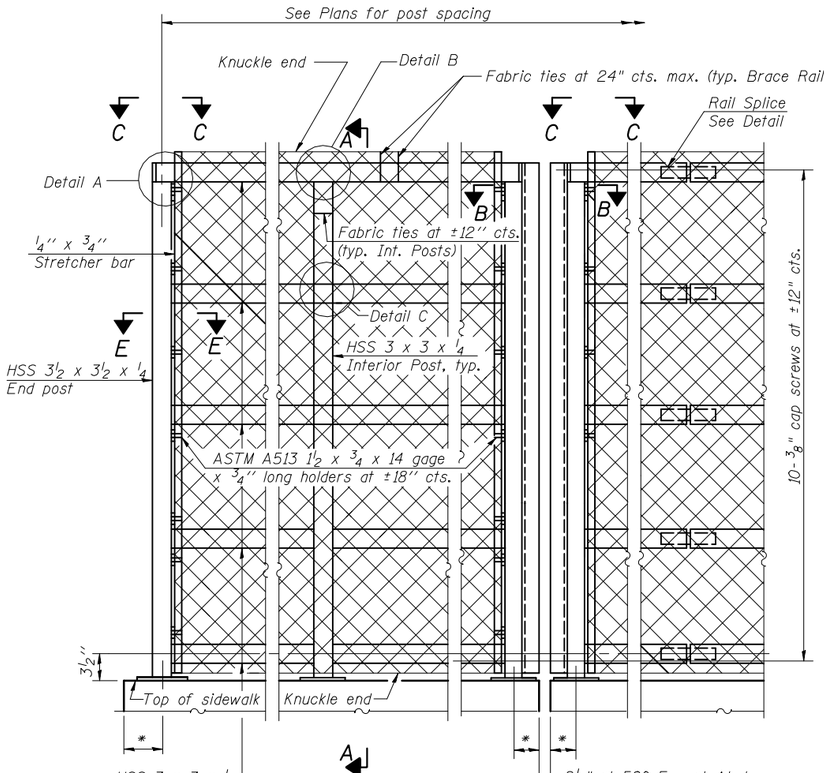
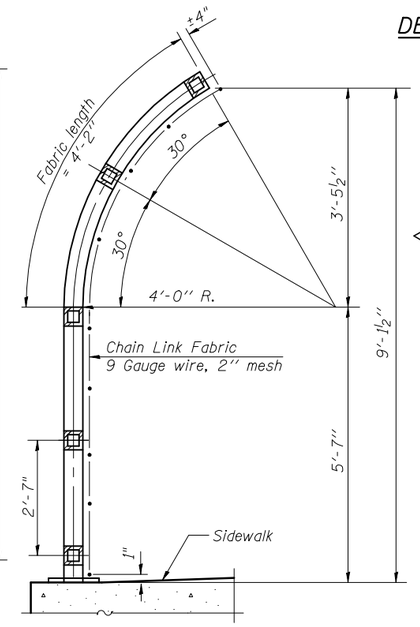
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			



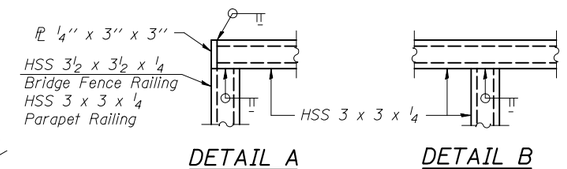
ELEVATION
(Inside Face)

*See Sheets 13, 14, 18, 19, 21 and 22 of 53 for dimensions

(10'-0" Maximum Post Spacing)

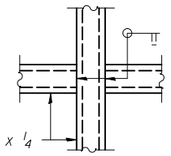


SECTION A-A



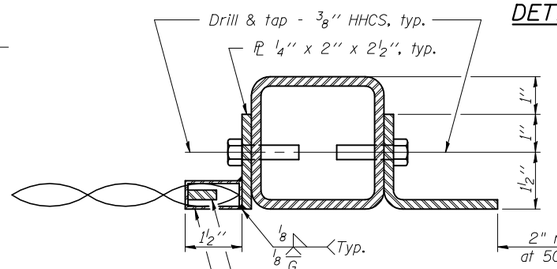
DETAIL A

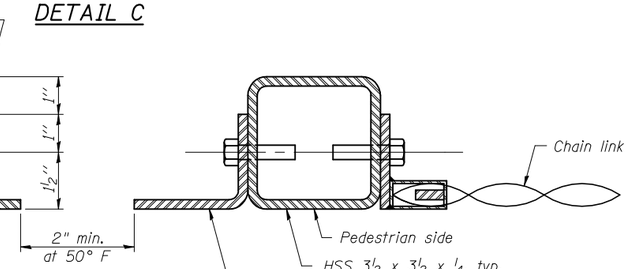
DETAIL B



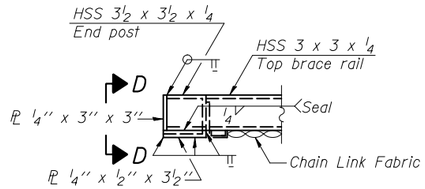
DETAIL C

Note:
All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.

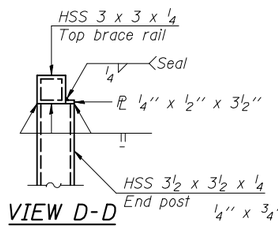




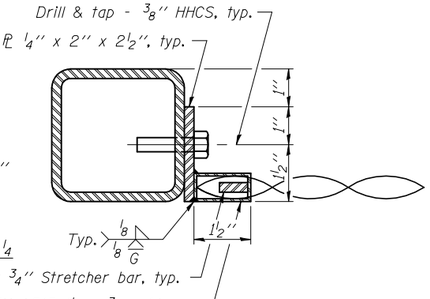
SECTION B-B



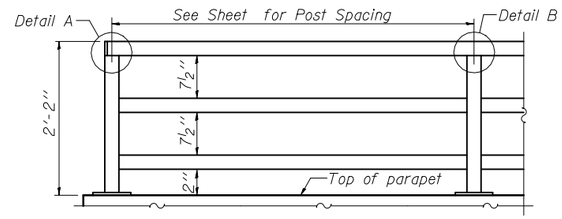
VIEW C-C



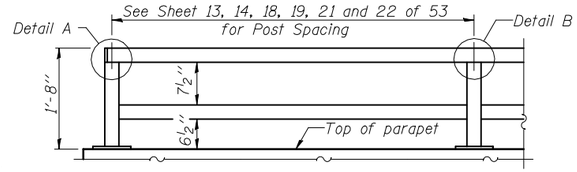
VIEW D-D



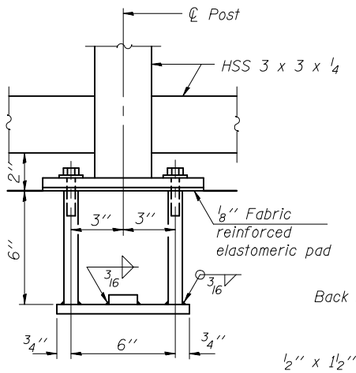
SECTION E-E

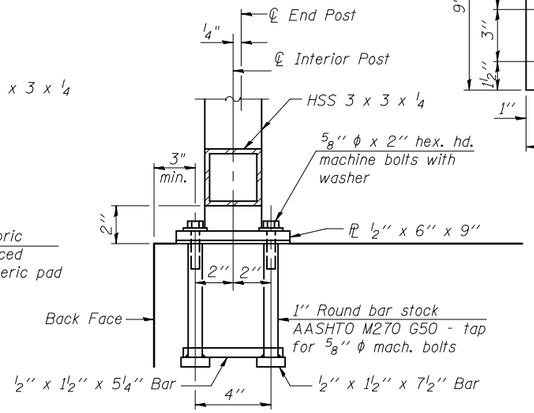


PARAPET RAILING ELEVATION
(Inside Face of Three Element Rail)



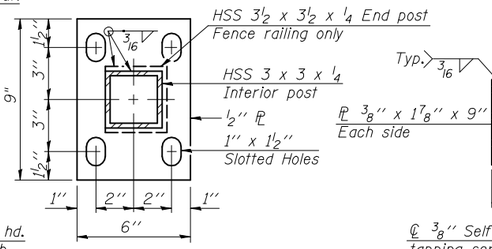
PARAPET RAILING ELEVATION
(Inside face of two element rail)



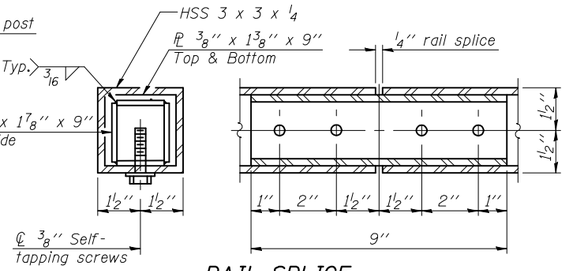


ANCHOR BOLT DETAILS

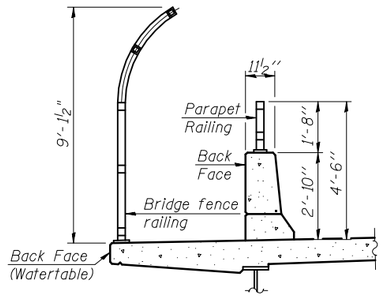
In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting 5/8" ϕ anchor rods according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.



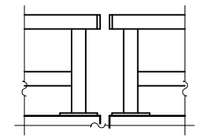
BASE PL



RAIL SPLICE



SECTION THRU DECK



PARAPET RAILING ELEVATION AT ABUTMENT AND APPROACH BENT JOINT
(Two element rail shown - Three element rail similar)

BILL OF MATERIAL

Item	Unit	Quantity
Bridge Fence Railing (Sidewalk)	Foot	575
Parapet Railing	Foot	571

BATES ASSOCIATES
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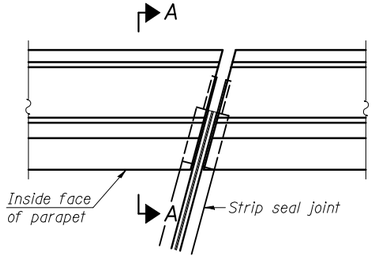
PLOT SCALE =	DRAWN - MAG	REVISED -
PLOT DATE =	CHECKED - JAD	REVISED -

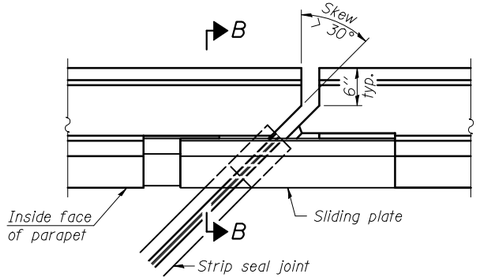
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE FENCE RAILING, SIDEWALK MOUNTED
STRUCTURE NO. 039-0076 (W.B.)
SHEET NO. 24 OF 53 SHEETS

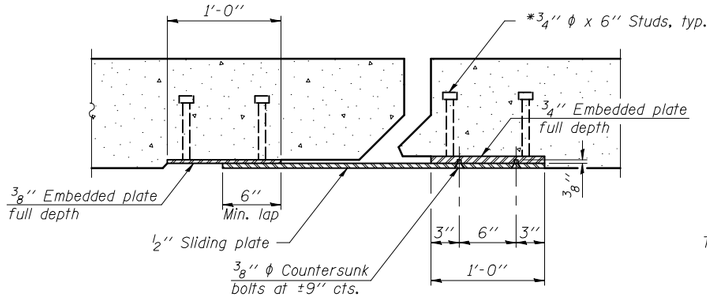
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	136
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			



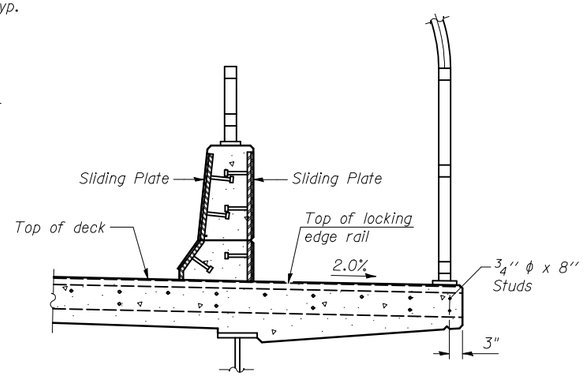
PLAN
(For skews ≤ 30°)



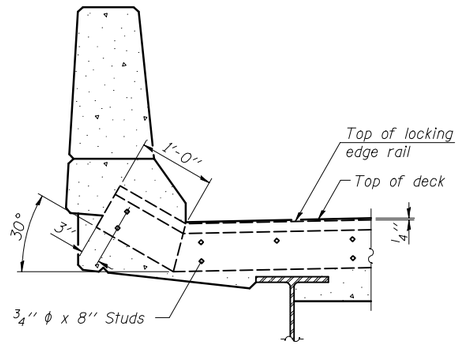
PLAN AT SOUTH PARAPET
(For skews > 30°)
Showing point block



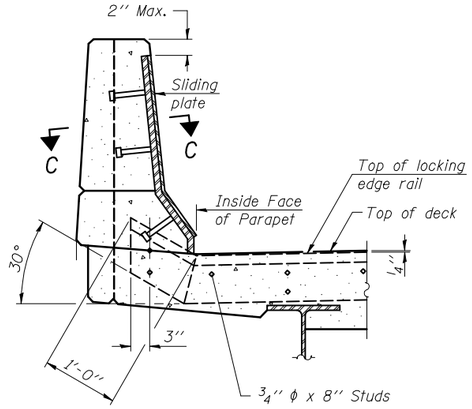
SECTION C-C



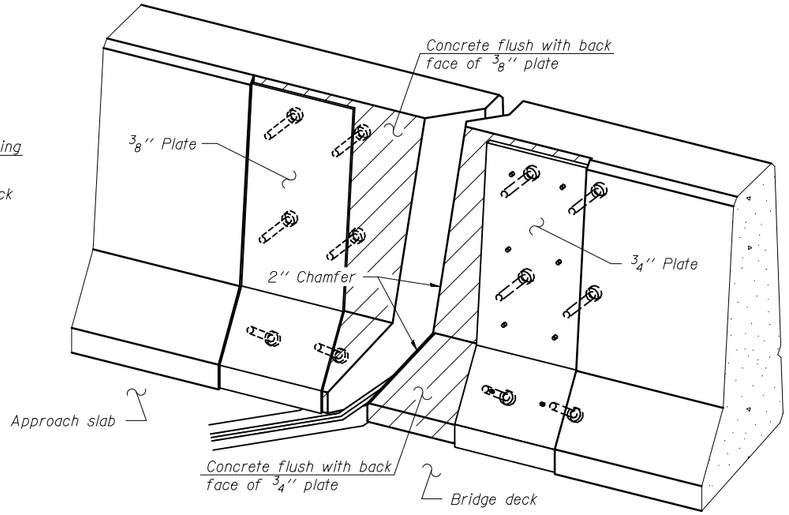
TYPICAL END TREATMENT AT SIDEWALK



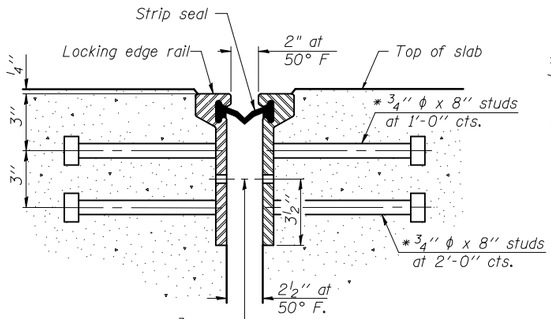
SECTION A-A



SECTION B-B

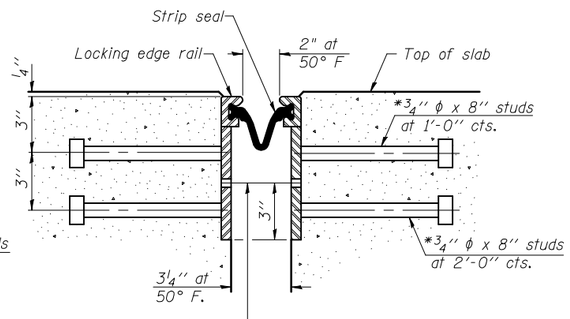


TRIMETRIC VIEW
(Showing back plates only)



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

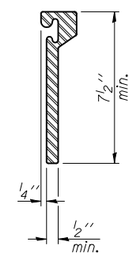
SECTION THRU ROLLED RAIL JOINT



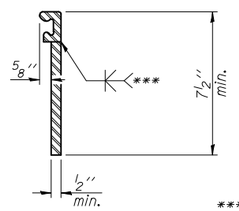
7/16" ϕ holes at 4'-0" cts. for 3/8" ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

SECTION THRU WELDED RAIL JOINT

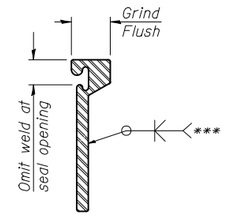
* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.



ROLLED EXTRUDED RAIL



WELDED RAIL



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

LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue.

Rolled rail shown, welded rail similar.

LOCKING EDGE RAILS

Notes:

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

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

The manufacturer's recommended installation methods shall be followed.

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

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.

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

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	122

EJ-SSJ 7-1-10

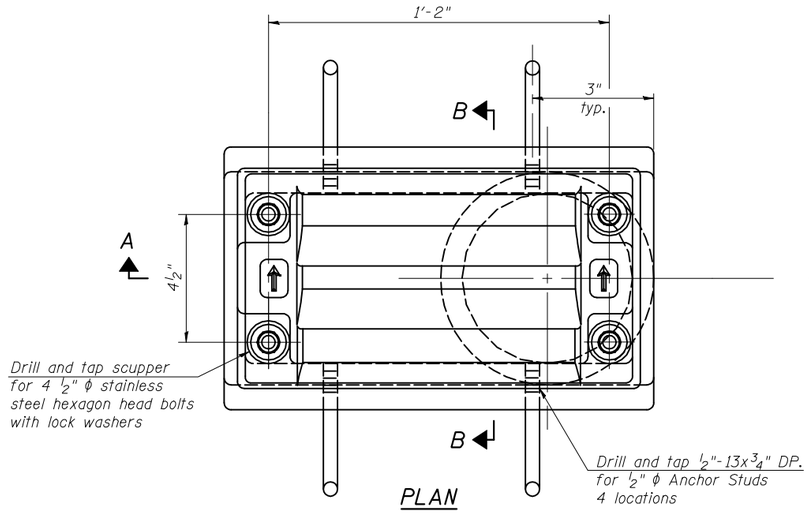
Coombe-Bloxdorf P.C.
-CIVIL ENGINEERS-
-STRUCTURAL ENGINEERS-
-LAND SURVEYORS-
Design Firm License No. 184-002703

FILE NAME = $FILE$	USER NAME = $USER$	DESIGNED - GB	REVISED -
		CHECKED - MCB	REVISED -
	PLOT SCALE = $SCALE$	DRAWN - MML	REVISED -
CB PROJECT NO. 08024-2	PLOT DATE = $DATE$	CHECKED - MCB	REVISED -

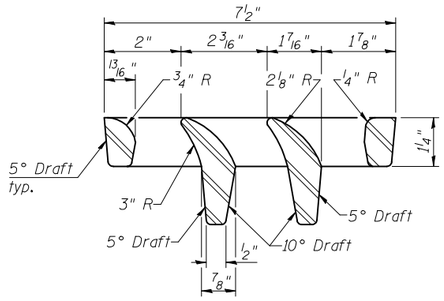
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL
STRUCTURE NO. 039-0076 (WB)
SHEET NO. 25 OF 53 SHEETS

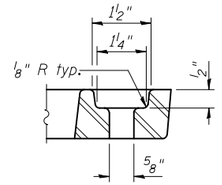
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	137
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		



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.

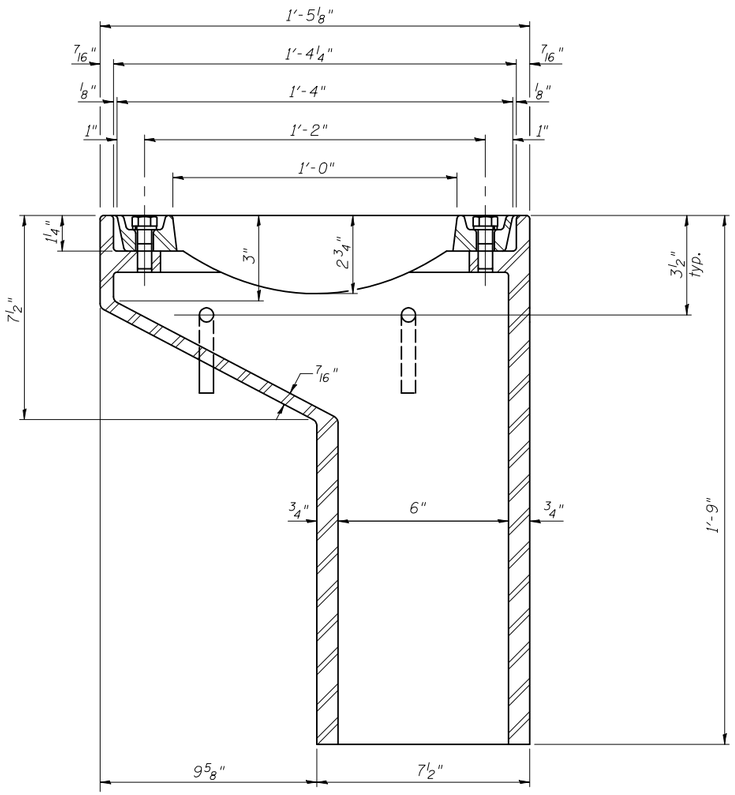
As an alternate, bolts, anchor studs, washers and nuts may be stainless steel according to Article 1006.29(d) of the Standard Specifications.

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.

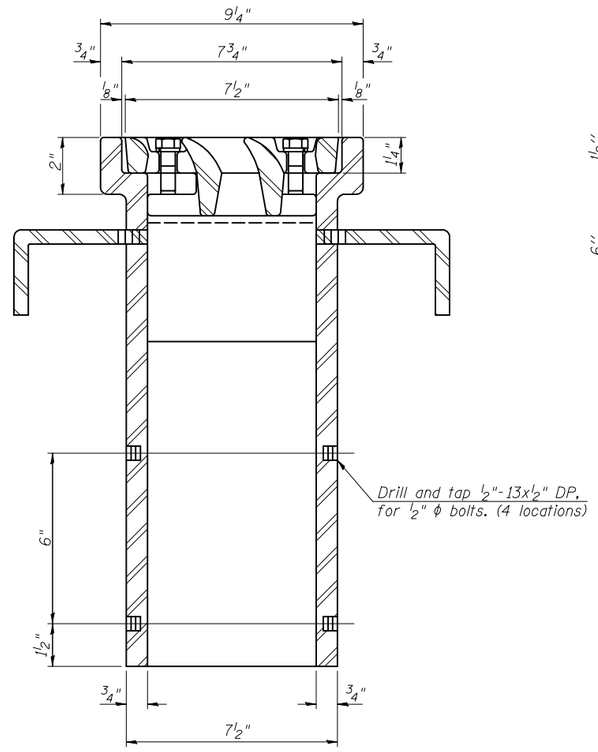
Cost of the Grate, Frame, Downspout, Anchor Studs, Bolts, Washers and Nuts including complete installation of the scupper shall be paid for at the contract unit price each for Drainage Scuppers, DS-11.

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.

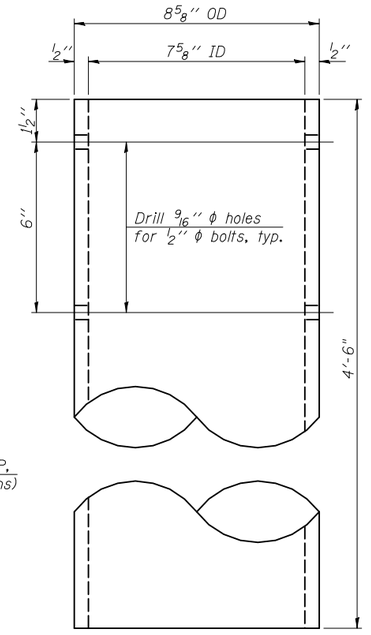


SECTION A-A

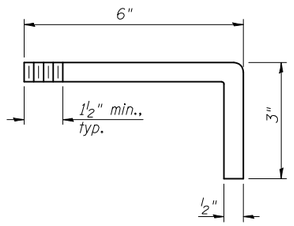
See sheets 15 & 17 of 53 for scupper location relative to parapet.



SECTION B-B



DOWNSPOUT



ANCHOR STUD DETAIL

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage Scuppers, DS-11	Each	2

DS-11

7-1-10

FILE NAME = $FILE$	USER NAME = $USER$	DESIGNED - GB	REVISED -
		CHECKED - MCB	REVISED -
	PLOT SCALE = $SCALE$	DRAWN - MML	REVISED -
CB PROJECT NO. 08024-2	PLOT DATE = $DATE$	CHECKED - MCB	REVISED -

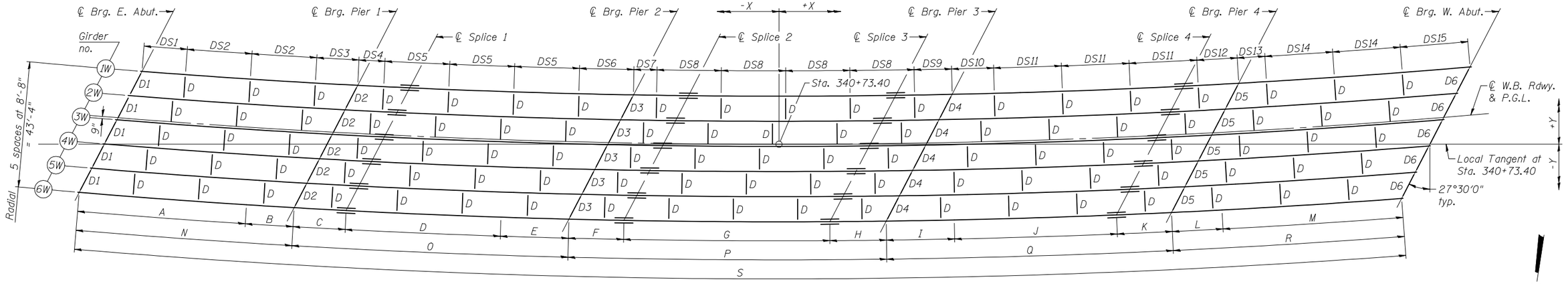
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRAINAGE SCUPPER, DS-11
STRUCTURE NO. 039-0076 (WB)

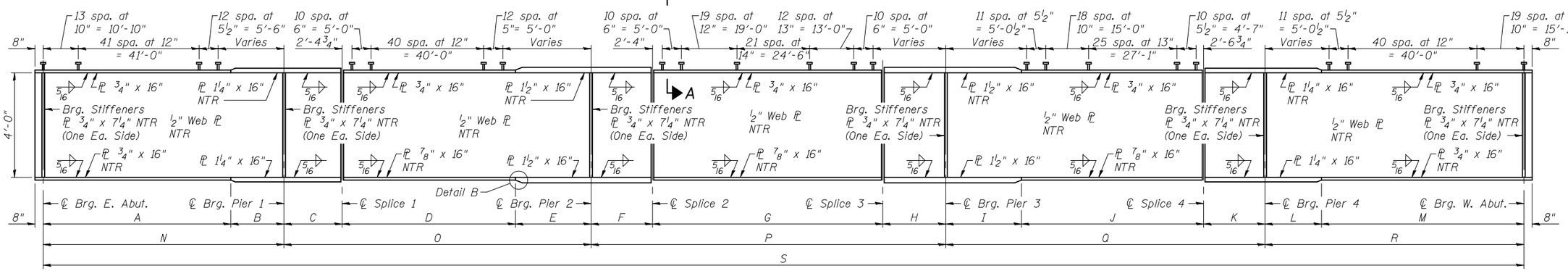
SHEET NO. 26 OF 53 SHEETS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	138
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			



PLAN



ELEVATION

DIAPHRAGM SPACING

Girder	Location	DS1	DS2	DS3	DS4	DS5	DS6	DS7	DS8	DS9	DS10	DS11	DS12	DS13	DS14	DS15
1W	North Face	15'-0"	22'-6"	14'-7 13/16"	9'-0"	22'-6"	18'-10 3/16"	8'-0"	22'-3 5/16"	13'-0"	14'-6 13/16"	23'-6"	14'-0"	9'-7 1/16"	23'-6"	23'-6"
2W	South Face	18'-8 13/16"	22'-6 13/16"	10'-8 1/8"	12'-11 13/16"	22'-6 13/16"	14'-7 1/8"	12'-4 1/16"	22'-4 1/8"	8'-3 9/16"	19'-4 1/4"	23'-6 7/8"	8'-10 3/4"	14'-9 9/16"	23'-6 7/8"	18'-1 1/16"
2W	North Face	15'-0"	22'-6"	14'-7 5/16"	9'-0"	22'-6"	18'-9 3/8"	8'-0"	22'-3 1/16"	13'-0"	14'-5 5/8"	23'-6"	14'-0"	9'-6 3/8"	23'-6"	23'-6"
3W	South Face	18'-8 5/8"	22'-6 13/16"	10'-8 9/16"	12'-11 1/16"	22'-6 13/16"	14'-6 1/2"	12'-3 13/16"	22'-3 7/8"	8'-3 3/4"	19'-2 13/16"	23'-6 7/8"	8'-11"	14'-8 3/16"	23'-6 7/8"	18'-1 5/16"
3W	North Face	15'-0"	22'-6"	14'-6 13/16"	9'-0"	22'-6"	18'-8 5/8"	8'-0"	22'-2 3/4"	13'-0"	14'-4 1/16"	23'-6"	14'-0"	9'-5 1/4"	23'-6"	23'-6"
4W	South Face	18'-8 1/2"	22'-6 13/16"	10'-8 1/8"	12'-11 1/2"	22'-6 13/16"	14'-5 7/8"	12'-3 3/4"	22'-3 5/16"	8'-4"	19'-1 7/16"	23'-6 7/8"	8'-11 1/4"	14'-6 3/16"	23'-6 7/8"	18'-1 5/8"
4W	North Face	15'-0"	22'-6"	14'-6 1/4"	9'-0"	22'-6"	18'-7 13/16"	8'-0"	22'-2 1/2"	13'-0"	14'-3 5/16"	23'-6"	14'-0"	9'-4 3/16"	23'-6"	23'-6"
5W	South Face	18'-8 5/16"	22'-6 13/16"	10'-7 13/16"	12'-11 5/16"	22'-6 13/16"	14'-5 5/16"	12'-3 1/2"	22'-3 5/16"	8'-4 3/16"	19'-0 1/16"	23'-6 7/8"	8'-11 1/2"	14'-5 1/2"	23'-6 7/8"	18'-1 7/8"
5W	North Face	15'-0"	22'-6"	14'-5 3/4"	9'-0"	22'-6"	18'-7 1/16"	8'-0"	22'-2 1/4"	13'-0"	14'-2 3/16"	23'-6"	14'-0"	9'-3 1/8"	23'-6"	23'-6"
6W	South Face	18'-8 3/16"	22'-6 13/16"	10'-7 1/16"	12'-11 1/8"	22'-6 13/16"	14'-4 3/4"	12'-3 1/4"	22'-3 1/16"	8'-4 3/8"	18'-10 1/16"	23'-6 7/8"	8'-11 3/4"	14'-4 3/16"	23'-6 7/8"	18'-2 3/16"

TOP OF WEB ELEVATIONS*

	Girder 1W	Girder 2W	Girder 3W	Girder 4W	Girder 5W	Girder 6W
℄ Brg. E. Abut.	382.60	382.80	383.00	383.20	383.40	383.45
℄ Brg. Pier 1	382.91	383.10	383.29	383.49	383.69	383.75
℄ Splice 1	382.95	383.14	383.34	383.53	383.73	383.79
℄ Brg. Pier 2	383.34	383.54	383.73	383.93	384.12	384.16
℄ Splice 2	383.39	383.59	383.78	383.97	384.17	384.21
℄ Splice 3	383.61	383.82	384.03	384.25	384.46	384.51
℄ Brg. Pier 3	383.60	383.82	384.04	384.26	384.48	384.54
℄ Splice 4	383.26	383.50	383.74	383.98	384.22	384.33
℄ Brg. Pier 4	383.20	383.45	383.69	383.93	384.17	384.27
℄ Brg. W. Abut.	382.87	383.12	383.36	383.61	383.85	383.95

*For fabrication only.

LAYOUT DIMENSIONS

Girder	℄ Brg. E. Abut.		℄ Brg. Pier 1		℄ Splice 1		℄ Brg. Pier 2		℄ Splice 2		℄ Splice 3		℄ Brg. Pier 3		℄ Splice 4		℄ Brg. Pier 4		℄ Brg. W. Abut.	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
1W	-220'-0 11/16"	25'-1 9/16"	-145'-6 3/4"	20'-3 13/16"	-128'-1"	19'-5 11/16"	-50'-3 5/16"	17'-0 3/8"	-31'-3 3/8"	16'-9 1/16"	40'-3 7/8"	16'-10 7/16"	59'-9 13/16"	17'-2 9/16"	139'-10"	20'-0 3/8"	158'-9 11/16"	21'-0 3/8"	238'-8 3/4"	26'-7 3/4"
2W	-224'-4 7/8"	16'-9 3/8"	-149'-11 9/16"	11'-10 7/16"	-132'-5 13/16"	11'-0"	-54'-8 15/16"	8'-5 5/16"	-35'-9"	8'-1 11/16"	35'-9 1/8"	8'-1 11/16"	55'-3 1/8"	8'-5 7/16"	135'-2 1/8"	11'-1 9/16"	154'-1 7/8"	12'-1 1/8"	233'-11 15/16"	17'-6 5/8"
3W	-228'-9"	8'-5 3/16"	-154'-4 5/16"	3'-5 1/8"	-136'-10 7/16"	2'-6 7/16"	-59'-2 9/16"	1 5/8"	-40'-2 9/16"	5 5/8"	31'-2 7/16"	6 15/16"	50'-8 7/16"	3 5/8"	130'-6 3/8"	2'-2 13/16"	149'-6 1/16"	3'-2"	229'-3 1/4"	8'-5 11/16"
4W	-233'-1 1/8"	1 1/16"	-158'-9"	-5'-0 1/8"	-141'-3 5/16"	-5'-11 1/8"	-63'-8 1/8"	-8'-8 1/2"	-44'-8 1/8"	-9'-0 13/16"	26'-7 15/16"	-9'-3 1/2"	46'-1 13/16"	-9'-0 9/16"	125'-10 5/8"	-6'-7 3/4"	144'-10 3/8"	-5'-9"	224'-6 9/16"	7 3/16"
5W	-237'-5 1/4"	-8'-3"	-163'-1 11/16"	-13'-5 3/8"	-145'-8"	-14'-4 5/8"	-68'-1 5/8"	-17'-3 5/16"	-49'-1 11/16"	-17'-7 15/16"	22'-1 1/4"	-18'-0"	41'-7 1/4"	-17'-9 3/8"	121'-3"	-15'-6 1/4"	140'-2 3/4"	-14'-7 7/8"	219'-10"	-9'-7 7/8"
6W	-241'-9 5/16"	-16'-7"	-167'-6 5/16"	-21'-10 1/2"	-150'-0 11/16"	-22'-10 1/16"	-72'-7 1/16"	-25'-10"	-53'-7 1/8"	-26'-3"	17'-6 11/16"	-26'-8 3/8"	37'-0 11/16"	-26'-6 1/8"	116'-7 3/8"	-24'-4 11/16"	135'-7 1/8"	-23'-6 11/16"	215'-1 7/16"	-18'-8 1/16"

GIRDER DIMENSIONS

Girder	Radius	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1W	2837.01'	58'-1 13/16"	16'-6"	17'-6"	54'-4 3/16"	23'-6"	19'-0"	71'-7 1/4"	19'-6"	23'-6"	56'-6 13/16"	19'-0"	17'-6"	62'-7 7/16"	74'-7 13/16"	95'-4 3/16"	110'-1 1/4"	99'-0 13/16"	80'-1 7/16"	459'-3 1/2"
2W	2845.68'	58'-1 5/16"	16'-6"	17'-6"	54'-3 3/8"	23'-6"	19'-0"	71'-6 1/8"	19'-6"	23'-6"	56'-5 5/8"	19'-0"	17'-6"	62'-6 3/8"	74'-7 5/16"	95'-3 3/8"	110'-0 1/8"	98'-11 5/8"	80'-0 3/8"	458'-10 13/16"
3W	2854.34'	58'-0 13/16"	16'-6"	17'-6"	54'-2 5/8"	23'-6"	19'-0"	71'-5 1/16"	19'-6"	23'-6"	56'-4 7/16"	19'-0"	17'-6"	62'-5 1/4"	74'-6 13/16"	95'-2 5/8"	109'-11 1/16"	98'-10 7/16"	79'-11 1/4"	458'-6 3/16"
4W	2863.01'	58'-0 1/4"	16'-6"	17'-6"	54'-1 13/16"	23'-6"	19'-0"	71'-4"	19'-6"	23'-6"	56'-3 5/16"	19'-0"	17'-6"	62'-4 3/16"	74'-6 1/4"	95'-1 13/16"	109'-10"	98'-9 5/16"	79'-10 3/16"	458'-1 9/16"
5W	2871.68'	57'-11 3/4"	16'-6"	17'-6"	54'-1 1/16"	23'-6"	19'-0"	71'-2 15/16"	19'-6"	23'-6"	56'-2 3/16"	19'-0"	17'-6"	62'-3 1/8"	74'-5 3/4"	95'-1 1/16"	109'-8 15/16"	98'-8 3/16"	79'-9 1/8"	457'-9 1/16"
6W	2880.34'	57'-11 1/4"	16'-6"	17'-6"	54'-0 5/16"	23'-6"	19'-0"	71'-1 7/8"	19'-6"	23'-6"	56'-1 1/16"	19'-0"	17'-6"	62'-2 1/8"	74'-5 1/4"	95'-0 5/16"	109'-7 7/8"	98'-7 1/16"	79'-8 1/8"	457'-4 5/8"

Notes:
1. Load carrying components designated "NTR" shall conform to the Impact Testing Requirements, Zone 2.
2. All diaphragms between girders shall be installed with erection pins and bolts in accordance with the erection plan approved by the Engineer. Individual diaphragms at supports may be temporarily disconnected to install bearing anchor rods.
3. For diaphragm and splice details, Section A-A, and Detail B, see sheet 29 of 53.
4. Girder dimensions, diaphragm spacing, and shear stud spacing are taken along centerline of each individual girder.

BATES ASSOCIATES Engineering + Architecture
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MISSOURI: Laclede Gas Building, 720 Olive, Suite 1600, St. Louis, MO 63101, tel 314.885.8081, fax 314.588.9005
www.oatesassociates.com

USER NAME =	DESIGNED - JAD	REVISED -	
	CHECKED - DGL	REVISED -	
PLOT SCALE =	DRAWN - JAD	REVISED -	
PLOT DATE =	CHECKED - DGL	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN AND GIRDER DETAILS
STRUCTURE NO. 036-0076 (W.B.)
SHEET NO. 27 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	139
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

GIRDER MOMENT TABLE (GIRDER 6W)										
		0.4 Sp. 1	Pier 1	0.5 Sp. 2	Pier 2	0.5 Sp. 3	Pier 3	0.5 Sp. 4	Pier 4	0.6 Sp. 5
I_s	(in^4)	18,869	28,869	20,051	34,020	20,051	34,020	20,051	28,869	18,869
$I_c(n)$	(in^4)	45,477	-	49,247	-	49,247	-	43,247	-	45,477
$I_c(3n)$	(in^4)	34,543	-	37,078	-	37,078	-	37,078	-	35,543
$I_c(cr)$	(in^4)	-	-	-	-	-	-	-	-	-
S_s	(in^3)	762	1,143	840	1,334	840	1,334	840	1,143	762
$S_c(n)$	(in^3)	1,041	-	1,140	-	1,140	-	1,140	-	1,041
$S_c(3n)$	(in^3)	960	-	1,053	-	1,053	-	1,053	-	960
$S_c(cr)$	(in^3)	-	-	-	-	-	-	-	-	-
S_{xc}	(in^3)	995	1,143	1,107	1,334	1,082	1,334	1,105	1,143	988
DC1	(k/')	1.096	1.160	1.105	1.191	1.105	1.191	1.105	1.160	1.096
M_{DC1}	('k)	347.9	681.9	247.9	964.9	446.3	986.1	267.4	772.1	407.4
② DC2	(k/')	0.450	0.450	0.450	0.450	0.450	0.450	0.450	0.450	0.450
M_{DC2}	('k)	150.5	314.6	129.7	409.6	164.9	423.3	135.3	349.9	163.8
③ DW	(k/')	0.385	0.385	0.385	0.385	0.385	0.385	0.385	0.385	0.385
M_{DW}	('k)	127.0	193.1	103.7	291.4	190.9	298.0	114.9	217.7	145.5
M_{L+IM}	('k)	1,062.0	1,040.6	1,167.7	1,416.2	1,388.6	1,395.3	1,220.2	1,166.3	1,136.9
f_t (Strength I)	(ksi)	4.47	1.53	3.87	3.85	4.91	4.25	4.43	1.84	5.33
$M_u + \frac{1}{3} f_t S_{xc}$	('k)	2,795.5	3,404.8	2,790.0	4,776.3	3,627.9	4,807.9	2,946.9	3,828.5	3,068.1
$\phi_f M_n$	('k)	-	-	-	-	-	-	-	-	-
f_s DC1	(ksi)	5.48	7.16	3.54	8.68	6.38	8.87	3.82	8.11	6.42
f_s DC2	(ksi)	1.88	3.30	1.48	3.68	1.88	3.81	1.54	3.67	2.05
f_s DW	(ksi)	1.59	2.03	1.18	2.62	2.18	2.68	1.31	2.29	1.82
f_s (L+IM)	(ksi)	12.24	10.92	12.29	12.74	14.62	12.55	12.84	12.25	13.11
f_t (Service II)	(ksi)	3.35	1.07	2.90	2.04	3.68	2.16	3.32	1.23	4.00
$f_s + f_f/2$ (Service II)	(ksi)	26.54	27.23	23.63	32.56	31.29	32.76	25.02	30.62	29.33
$0.95R_hF_{yf}$	(ksi)	47.50	-	47.50	-	47.50	-	47.50	-	47.50
$0.80R_hF_{yf}$	(ksi)	-	40.00	-	40.00	-	40.00	-	40.00	-
$f_s + f_f/3$ (Total)(Strength I)	(ksi)	34.50	35.74	30.84	42.96	40.82	43.25	32.62	40.21	38.04
$\phi_f F_n$	(ksi)	50.00	46.02	50.00	43.51	50.00	43.19	50.00	45.91	50.00
V_r	(k)	57.3	-	48.2	-	56.1	-	50.7	-	62.2

GIRDER REACTION TABLE (GIRDER 6W)							
		E. Abut.	Pier 1	Pier 2	Pier 3	Pier 4	W. Abut.
R_{DC1}	(k)	26.0	86.7	100.9	102.0	91.9	27.6
R_{DC2}	(k)	13.3	44.5	48.5	49.9	46.8	14.7
R_{DW}	(k)	8.2	25.9	30.0	31.4	26.9	10.0
R_{L+IM}	(k)	69.4	121.5	137.5	142.8	133.1	92.7
R_{Total}	(k)	116.9	278.6	316.9	326.1	298.7	145.0

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 dead loads ($in.^4$ and $in.^3$).

S_{xc}: Section modulus about the major axis of section to the controlling flange, tension or compression, taken as yield moment with respect to the controlling flange over the yield strength of the controlling flange ($in.^3$).

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.).
$1.25\ (M_{DC1} + M_{DC2}) + 1.5\ M_{DW} + 1.75\ M_{L+IM}$

f_t: Factored calculated normal stress at edge of flange for controlling steel flange plate due to lateral bending, Strength I or Service II as applicable (ksi).

$\phi_f M_n$: Factored resistance available according to A6.1.1 (k).

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 plus impact loads as calculated below (ksi).
$M_{L+IM} / S_c(3n)$ or $M_{L+IM} / S_c(cr)$ as applicable.

$f_s + f_f/2$ (Service II): Sum of stresses as computed below (ksi).
$f_{s\,DC1} + f_{sDC2} + f_{sDW} + 1.3\ f_{sL+IM} + f_f/2$

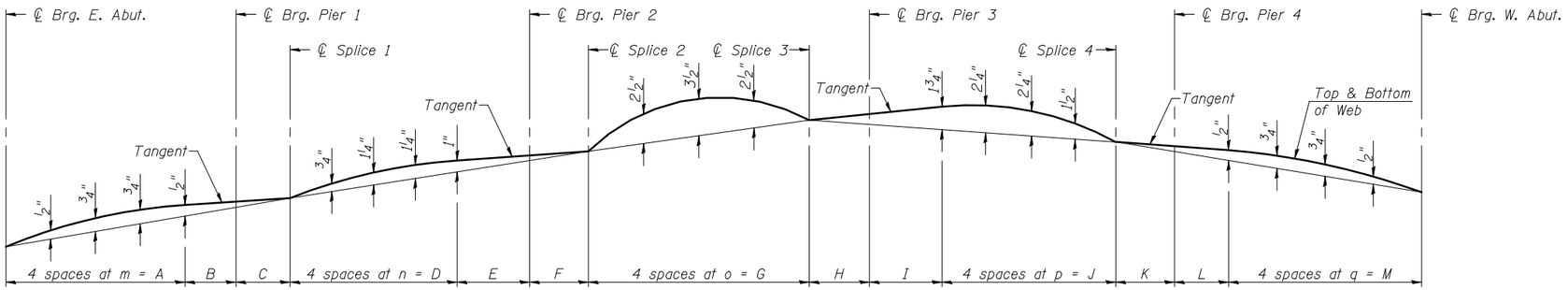
$0.95R_hF_{yf}$: Composite stress capacity for Service II loading according to Article 6.10.4.2 (ksi).

$f_s + f_f/3$ (Total)(Strength I): Sum of stresses as computed below on non-compact section (ksi).
$1.25\ (f_{sDC1} + f_{sDC2}) + 1.5\ f_{sDW} + 1.75\ f_{sL+IM} + f_f/3$

$\phi_f F_n$: Non-Compact composite positive or negative stress capacity for Strength I loading according to Article 6.10.7.2 (ksi).

V_r: Maximum factored shear range computed according to Article 6.10.10.

Note:
M_L and R_L include the effects of centrifugal force and superelevation.



CAMBER DIAGRAM

DIMENSION TABLE ①

Girder	A	B	C	D	E	F	G	H	I	J	K	L	M	m	n	o	p	q
1W	58'-1 13/16"	16'-6"	17'-6"	54'-4 3/16"	23'-6"	19'-0"	71'-7 1/4"	19'-6"	23'-6"	56'-6 13/16"	19'-0"	17'-6"	62'-7 7/16"	14'-6 7/16"	13'-7 1/16"	17'-10 13/16"	14'-1 11/16"	15'-7 7/8"
2W	58'-1 5/16"	16'-6"	17'-6"	54'-3 3/8"	23'-6"	19'-0"	71'-6 1/8"	19'-6"	23'-6"	56'-5 5/8"	19'-0"	17'-6"	62'-6 3/8"	14'-6 5/16"	13'-6 7/8"	17'-10 9/16"	14'-1 1/16"	15'-7 9/16"
3W	58'-0 13/16"	16'-6"	17'-6"	54'-2 5/8"	23'-6"	19'-0"	71'-5 1/16"	19'-6"	23'-6"	56'-4 7/16"	19'-0"	17'-6"	62'-5 1/4"	14'-6 3/16"	13'-6 1/16"	17'-10 1/4"	14'-1 1/8"	15'-7 5/16"
4W	58'-0 1/4"	16'-6"	17'-6"	54'-1 13/16"	23'-6"	19'-0"	71'-4"	19'-6"	23'-6"	56'-3 5/16"	19'-0"	17'-6"	62'-4 3/16"	14'-6 1/16"	13'-6 1/16"	17'-10"	14'-0 13/16"	15'-7 1/16"
5W	57'-11 3/4"	16'-6"	17'-6"	54'-1 1/16"	23'-6"	19'-0"	71'-2 15/16"	19'-6"	23'-6"	56'-2 3/16"	19'-0"	17'-6"	62'-3 1/8"	14'-5 15/16"	13'-6 1/4"	17'-9 3/4"	14'-0 9/16"	15'-6 3/4"
6W	57'-11 1/4"	16'-6"	17'-6"	54'-0 5/16"	23'-6"	19'-0"	71'-1 7/8"	19'-6"	23'-6"	56'-1 1/16"	19'-0"	17'-6"	62'-2 1/8"	14'-5 13/16"	13'-6 1/16"	17'-9 1/2"	14'-0 1/4"	15'-6 9/16"

Notes:
① Horizontal dimensions are taken along centerline of each individual girder.
② Analyzed in model as a 0.450k/ft line load applied at the edge of deck.
③ Analyzed in model as a 0.050 ksf area load applied from face to face of parapets.

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		CHECKED - DGL	REVISED -	
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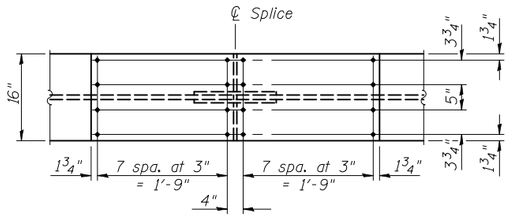
PLOT DATE =		CHECKED - DGL	REVISED -	

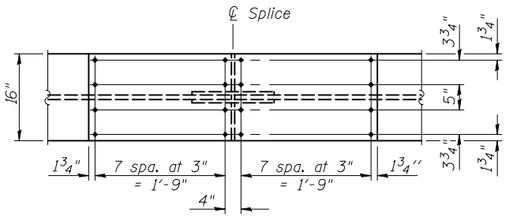
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GIRDER DETAILS
STRUCTURE NO. 039-0076 (W.B.)
SHEET NO. 28 OF 53 SHEETS

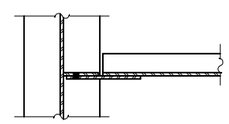
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	140
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			



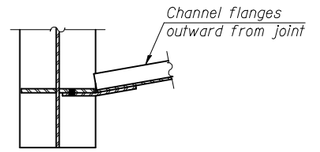
TOP & BOTTOM PLAN



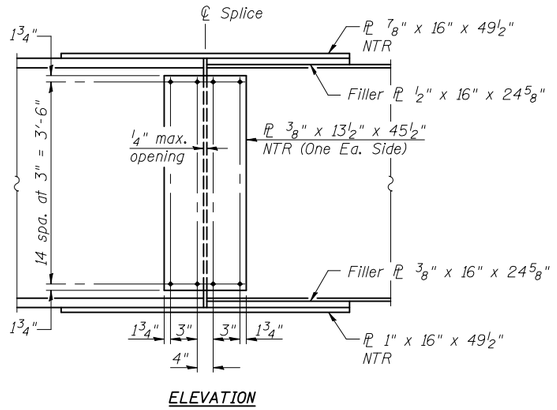
TOP PLAN



SECTION B-B



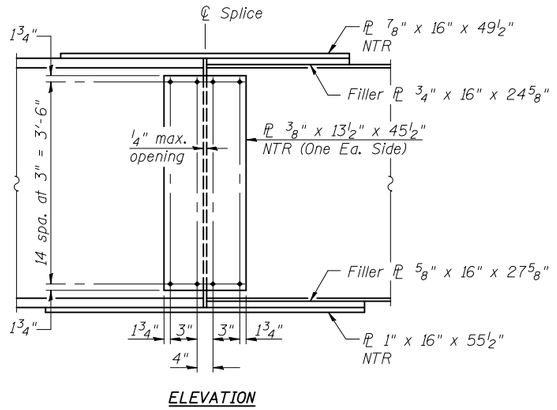
SECTION C-C



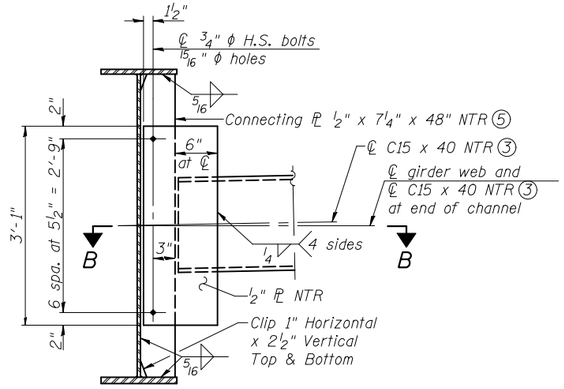
ELEVATION

SPLICE 1 & 4 DETAIL

(12 Required)

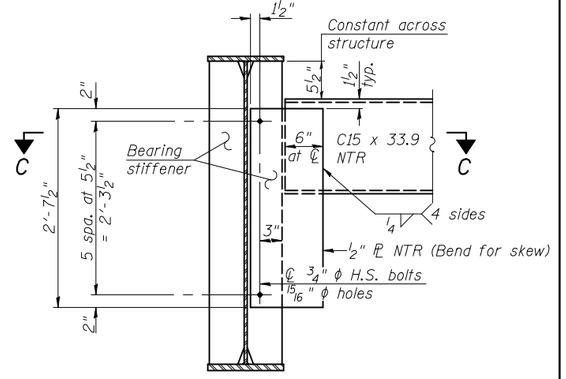


ELEVATION



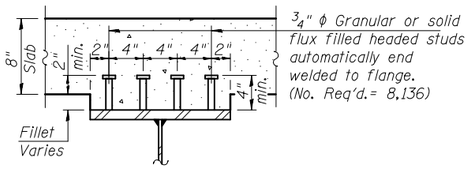
INTERIOR DIAPHRAGM D

(95 Required)



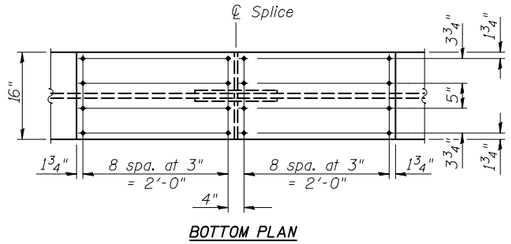
END DIAPHRAGM D1 or D6 ④

(5 of Each Required)



¾" ϕ Granular or solid flux filled headed studs automatically end welded to flange. (No. Req'd.= 8,136)

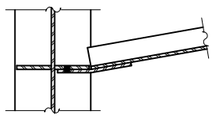
SECTION A-A



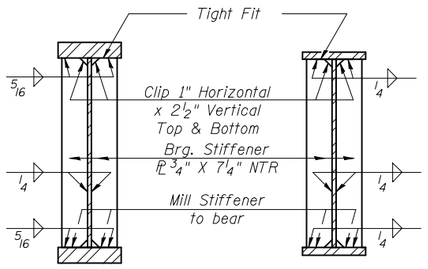
BOTTOM PLAN

SPLICE 2 & 3 DETAIL

(12 Required)

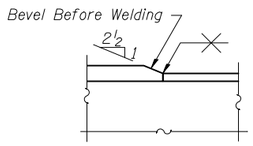


SECTION D-D

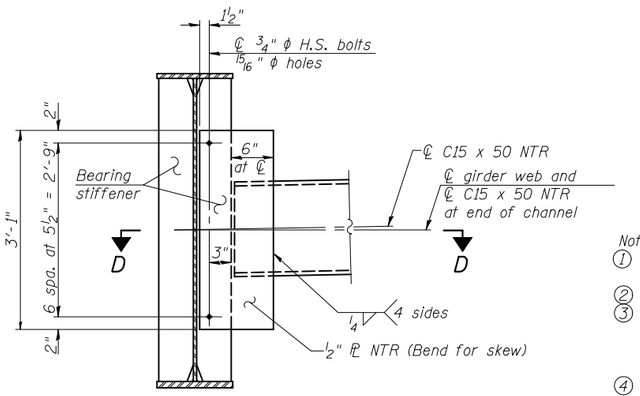


SECTION AT PIER SECTION AT ABUTMENT

BEARING STIFFENER



DETAIL B



INTERIOR DIAPHRAGM D2, D3, D4, or D5 ④

(5 of Each Required)

Notes:

1. Load carrying components designated "NTR" shall conform to the Impact Testing Requirements, Zone 2.
2. Two hardened washers required for each set of oversized holes.
3. Alternate channels C15x50 are permitted to facilitate material acquisition. Calculated weight of structural steel is based on C15x40 sections. The alternate, if utilized, shall be provided at no extra cost to the department.
4. Similar diaphragms are numbered uniquely due to a difference in length.
5. Do not provide plate on exterior face of fascia girders.

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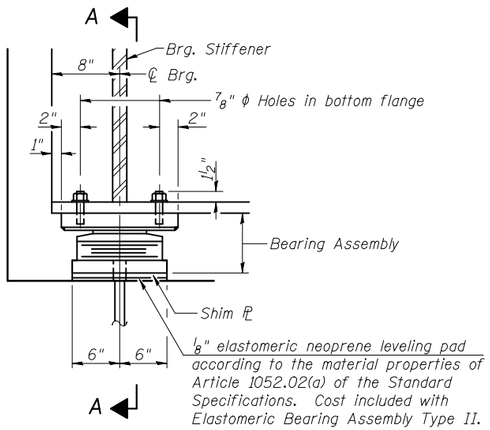
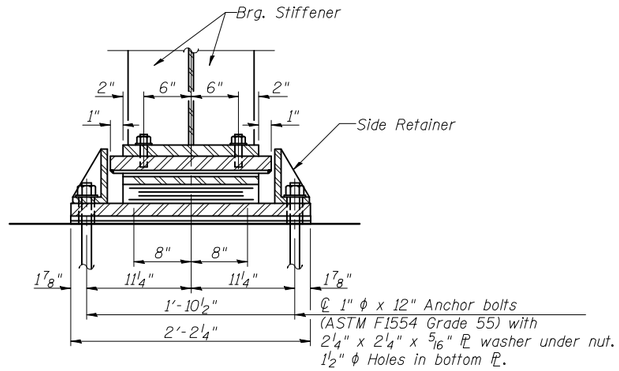
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GIRDER DETAILS
STRUCTURE NO. 039-0076 (W.B.)
SHEET NO. 29 OF 53 SHEETS

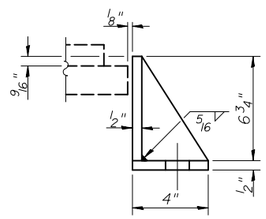
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	141
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

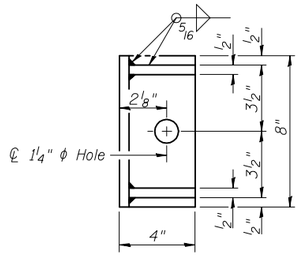


ELEVATION

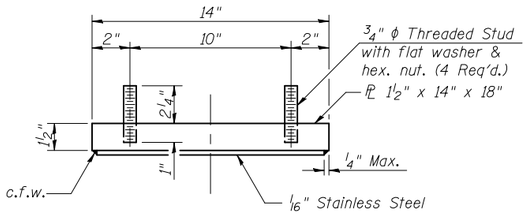


SECTION A-A

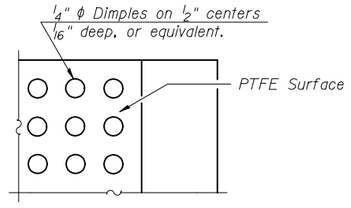




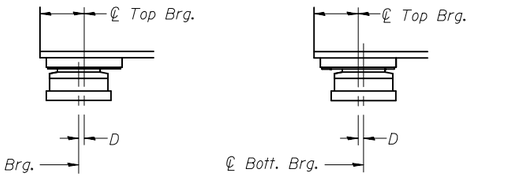
SIDE RETAINER ⑩



TOP BEARING ASSEMBLY



PLAN-PTFE SURFACE

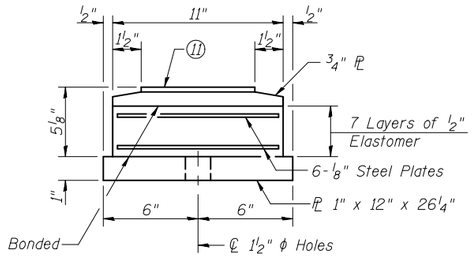


BELOW 50°F.
(Move bott. brg. away from fixed brg.)

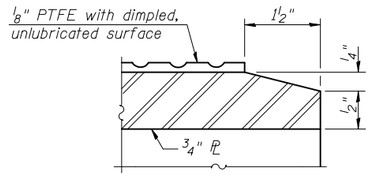
ABOVE 50°F.
(Move bott. brg. toward fixed brg.)

SETTING ANCHOR BOLTS AT EXP. BRG.

D= 1/8" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F. Design Expansion Lengths are: E. Abut. = 272'
W. Abut. = 187'



BOTTOM BEARING ASSEMBLY



SECTION THRU PTFE

TYPE II ELASTOMERIC EXP. BRG.
(EAST & WEST ABUTMENTS)

Notes:
① Anchor bolts shall be ASTM F1554 all-thread or an Engineer-approved alternate material of the grade and diameter specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
② Anchor bolts for Type II bearings shall be placed in holes drilled in the concrete through holes in the bottom bearing plate after members are in place. Side retainers shall be placed after bolts are installed.
③ Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
④ Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type II.
⑤ The 1/8" PTFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.
⑥ Bonding of 1/8" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.
⑦ The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M 270 Grade 50W.
⑧ Two 1/8" adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.
⑨ The anchor bolt sizes and grades shown constitute a calculated seismic structural fuse. Substitution of higher diameter and/or grade anchor bolts will not be allowed.
⑩ Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.
⑪ 1/8" PTFE dimpled, unlubricated.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type II	Each	12
Anchor Bolts, 1"	Each	24

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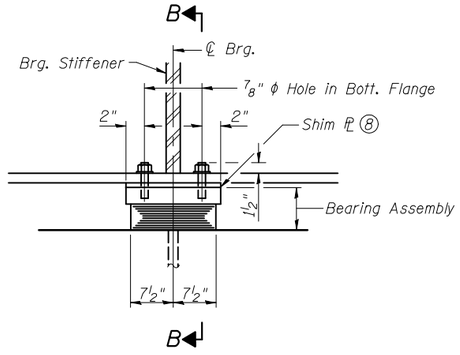
	CHECKED - DGL	REVISED -	
PLOT SCALE =	DRAWN - JAD	REVISED -	
PLOT DATE =	CHECKED - DGL	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEARING DETAILS
STRUCTURE NO. 036-0076 (W.B.)
SHEET NO. 30 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	142
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			



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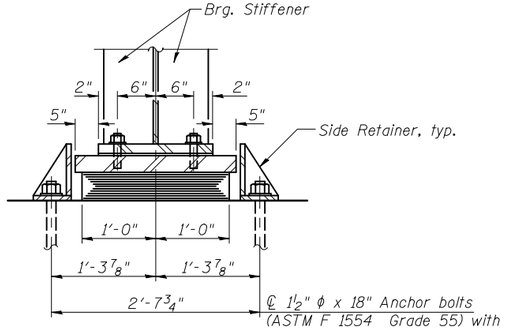
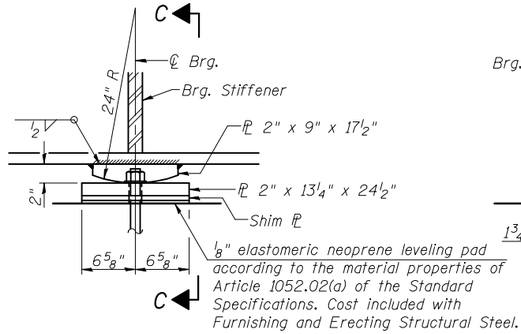
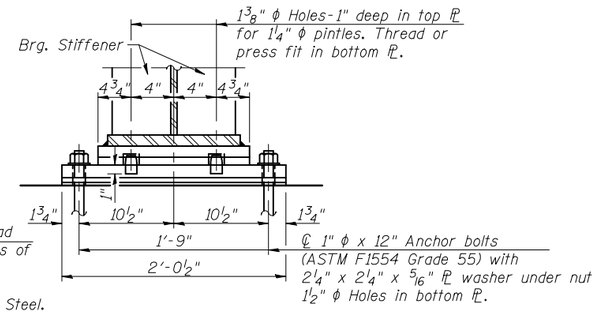


SECTION B-B

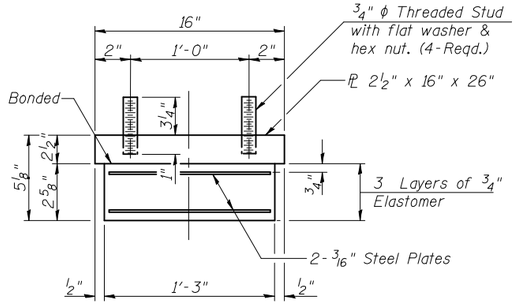


ELEVATION

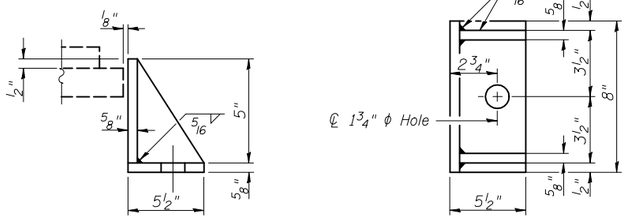


SECTION C-C

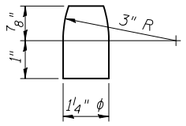
FIXED BEARING (PIER 1, 3, & 4)



BEARING ASSEMBLY ⑧



SIDE RETAINER ⑨



PINTLE

TYPE I ELASTOMERIC EXP. BRG. (PIER 2)

BEARING SHIM PLATES

	Girder 1W	Girder 2W	Girder 3W	Girder 4W	Girder 5W	Girder 6W
Pier 2	-	-	-	-	1/4"	-

Notes:

① Anchor bolts shall be ASTM F1554 all-thread or an Engineer-approved alternate material of the grades and diameters specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

② Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.

③ Anchor bolts for side retainers may be cast in place or installed in holes drilled before or after members are in place.

④ Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

⑤ Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.

⑥ The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M 270 Grade 50W.

⑦ Two 1/8" adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

⑧ Shim plates shall not be placed under Bearing Assembly.

⑨ Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

⑩ The anchor bolt sizes and grades shown constitute a calculated seismic structural fuse. Substitution of higher diameter and/or grade anchor bolts will not be allowed.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	6
Anchor Bolts, 1"	Each	36
Anchor Bolts, 1 1/2"	Each	12

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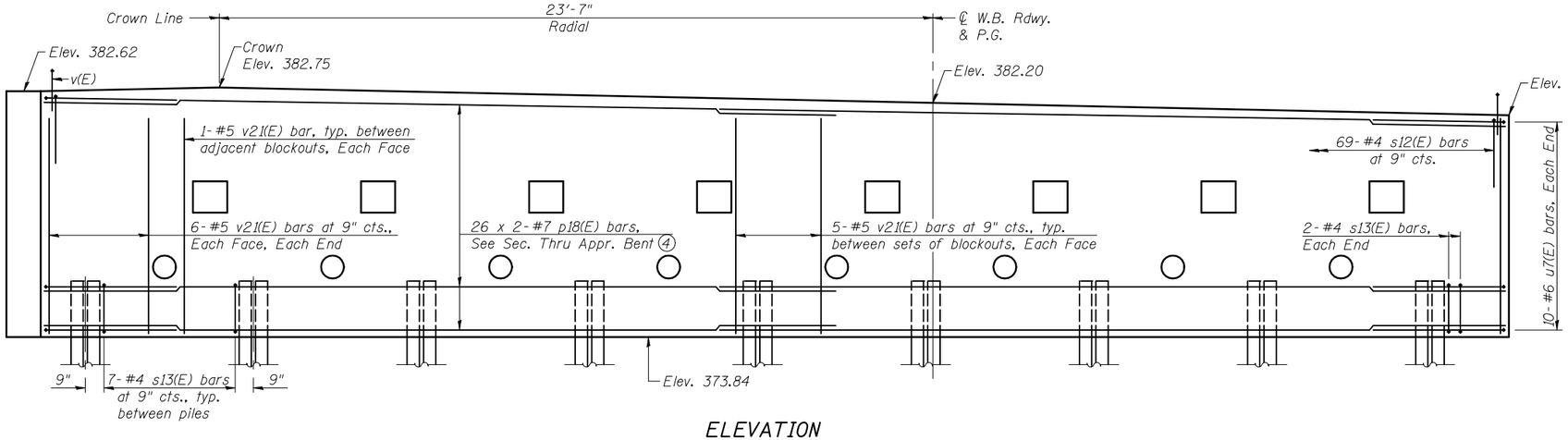
PLOT DATE =	CHECKED - DGL	REVISED -	

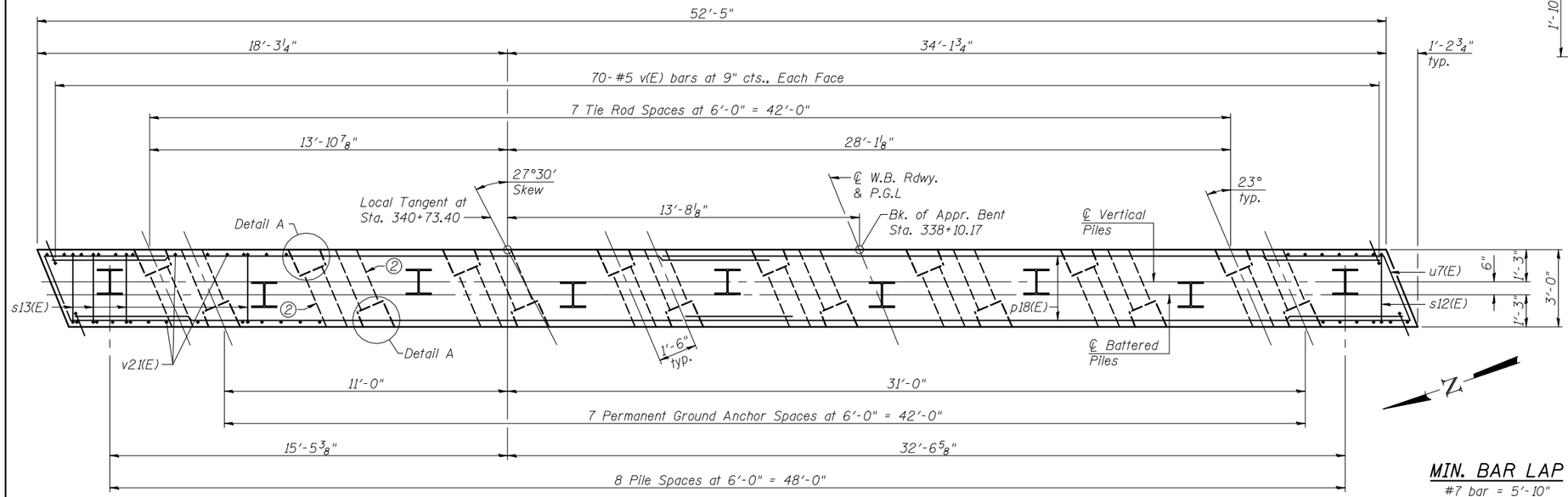
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEARING DETAILS
STRUCTURE NO. 039-0076 (W.B.)
SHEET NO. 31 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	143
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		



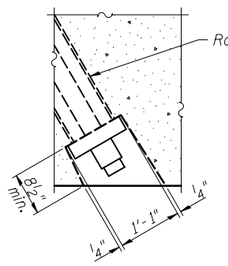
ELEVATION
(Looking East)



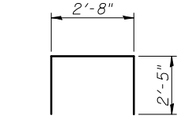
PLAN

PILE DATA

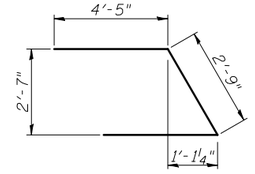
Type: Steel HP 14x89
Nominal Required Bearing: 705 kips
Factored Resistance Available: 390 kips
Est. Length: 94 ft
No. Production Piles: 9
No. Test Piles: 0



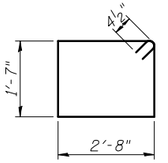
DETAIL A ③



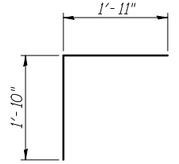
BARS s12(E)



BAR u7(E)



BARS s13(E)



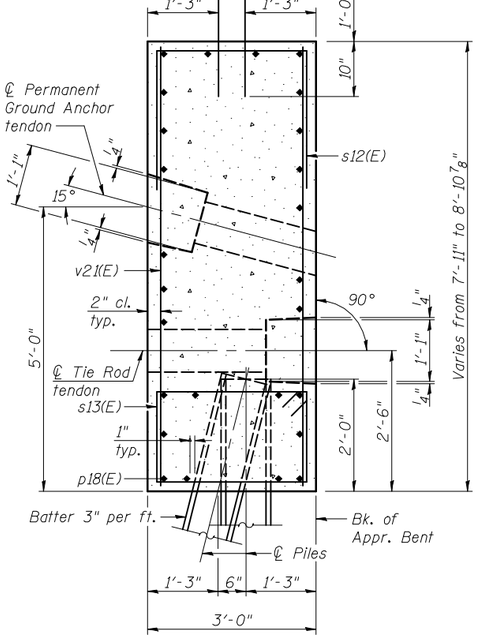
BAR v(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
p18(E)	52	#7	29'-0"	
s12(E)	69	#4	7'-6"	
s13(E)	60	#4	9'-3"	
u7(E)	20	#6	11'-7"	
v(E)	140	#5	3'-9"	
v21(E)	110	#5	7'-7"	
Structure Excavation		Cu. Yd.	143	
Concrete Structures		Cu. Yd.	48.3	
Reinforcement Bars, Epoxy Coated		Pound	5,560	
Furnishing Steel Piles HP14x89		Foot	846	
Driving Piles		Foot	846	

MIN. BAR LAP
#7 bar = 5'-10"

Notes:
1. For details of piles, see sheet 47 of 53.
2. Round HSS9.625x0.188 conforming to the requirements of ASTM A500 Grade B cast into bent for Tie Rod and Permanent Ground Anchor blockouts. Cost included with Concrete Structures.
3. For details of Tie Rod and Permanent Ground Anchor, see sheet 40 of 53.
4. Fan bars located above the Permanent Ground Anchor blockouts.
5. Bars indicated thus 26 x 2-#7 etc. indicates 26 lines of bars with 2 lengths per line.



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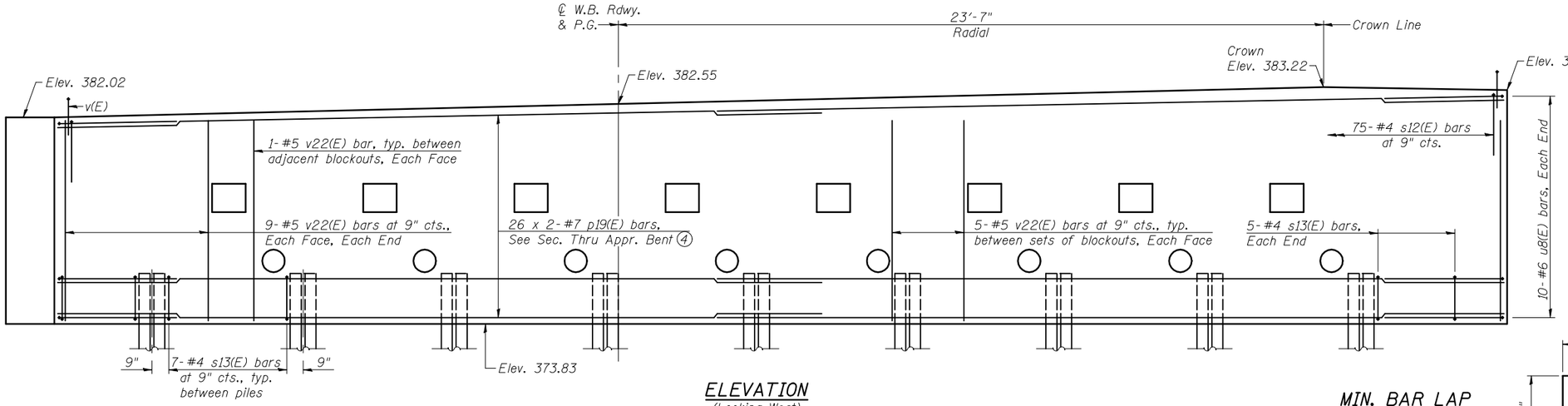
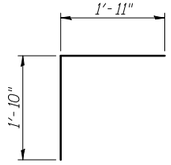
DEPARTMENT OF TRANSPORTATION

EAST APPROACH BENT DETAILS
STRUCTURE NO. 039-0076 (W.B.)
SHEET NO. 32 OF 53 SHEETS

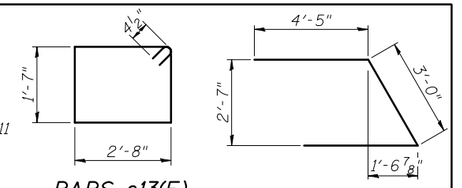
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	144
		CONTRACT NO. 78056		
		ILLINOIS	FED. AID PROJECT	



ELEVATION
(Looking West)

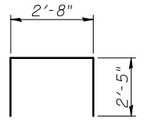


MIN. BAR LAP
#7 bar = 5'-10"



BARS s13(E)

BAR u8(E)

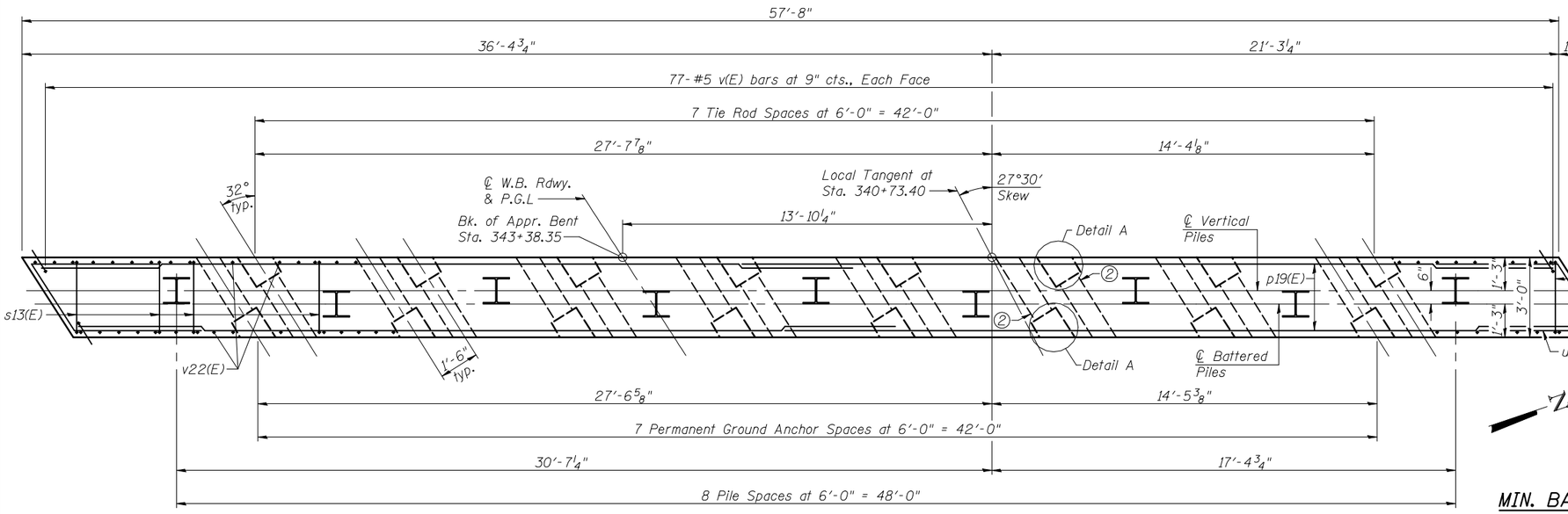


BARS s12(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
p19(E)	52	#7	31'-7"	
s12(E)	75	#4	7'-6"	
s13(E)	66	#4	9'-3"	
u8(E)	20	#6	11'-10"	
v(E)	154	#5	3'-9"	
v22(E)	122	#5	7'-10"	
Structure Excavation		Cu. Yd.	157	
Concrete Structures		Cu. Yd.	55.7	
Reinforcement Bars, Epoxy Coated		Pound	6,090	
Furnishing Steel Piles HP14x89		Foot	819	
Driving Piles		Foot	819	

BAR v(E)

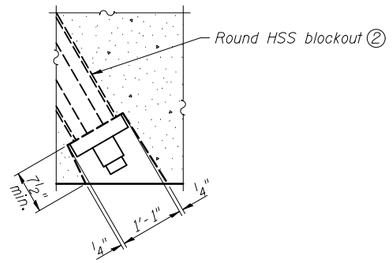


PLAN

MIN. BAR LAP
#7 bar = 5'-10"

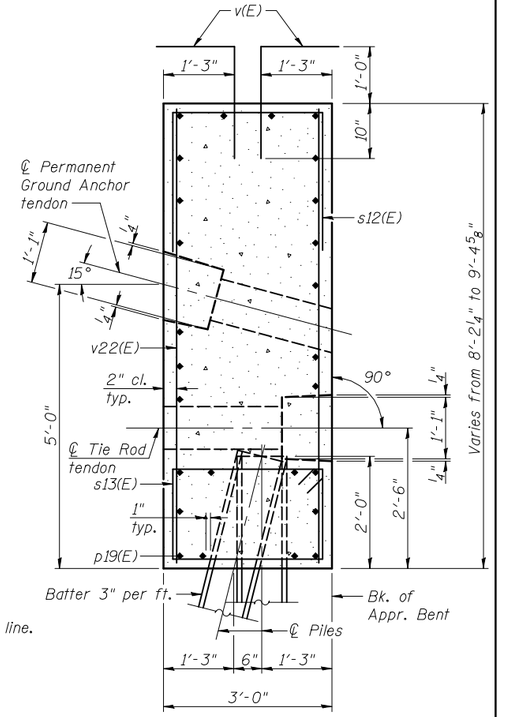
PILE DATA

Type: Steel HP 14x89
Nominal Required Bearing: 705 kips
Factored Resistance Available: 390 kips
Est. Length: 91 ft
No. Production Piles: 9
No. Test Piles: 0



DETAIL A (3)

Notes:
(1) For details of piles, see sheet 47 of 53.
(2) Round HSS9.625x0.188 conforming to the requirements of ASTM A500 Grade B cast into bent for Tie Rod and Permanent Ground Anchor blockouts. Cost included with Concrete Structures.
(3) For details of Tie Rod and Permanent Ground Anchor, see sheet 40 of 53.
(4) Fan bars located above the Permanent Ground Anchor blockouts.
(5) Bars indicated thus 26 x 2-#7 etc. indicates 26 lines of bars with 2 lengths per line.



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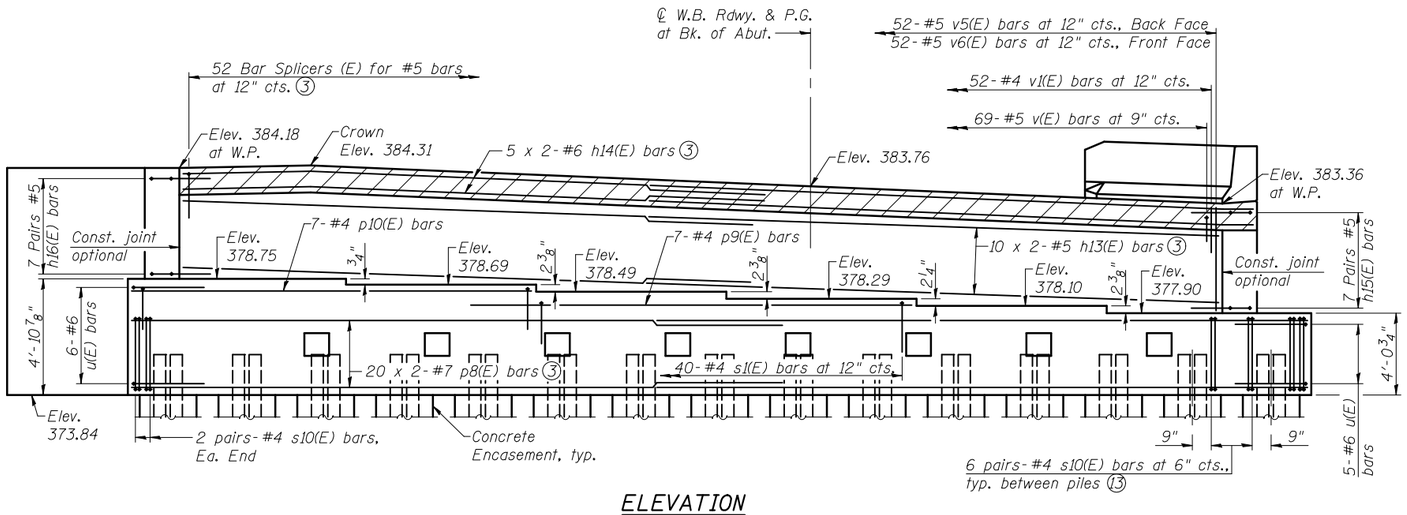
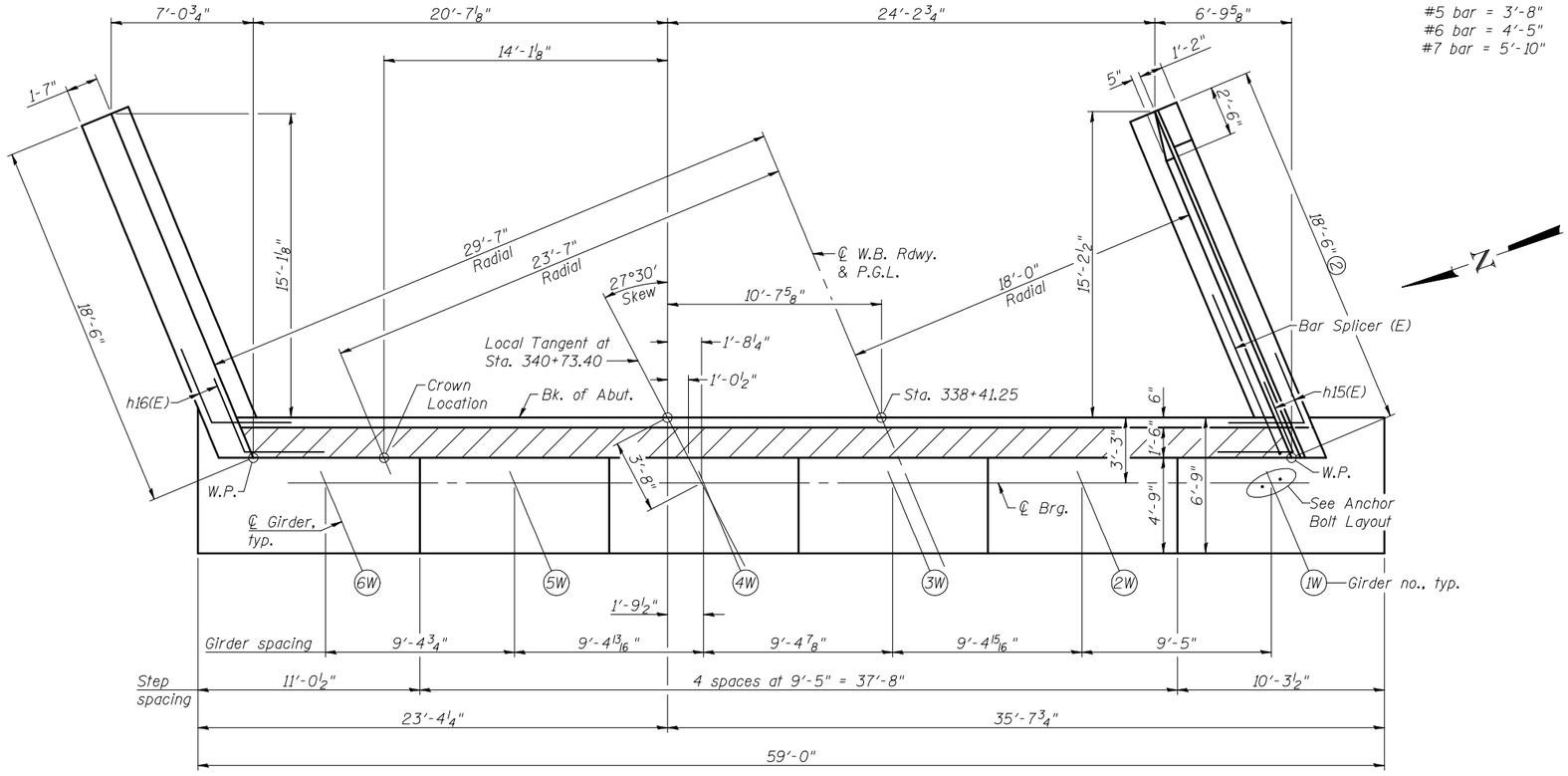
WEST APPROACH BENT DETAILS
STRUCTURE NO. 039-0076 (W.B.)
SHEET NO. 33 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	145
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			



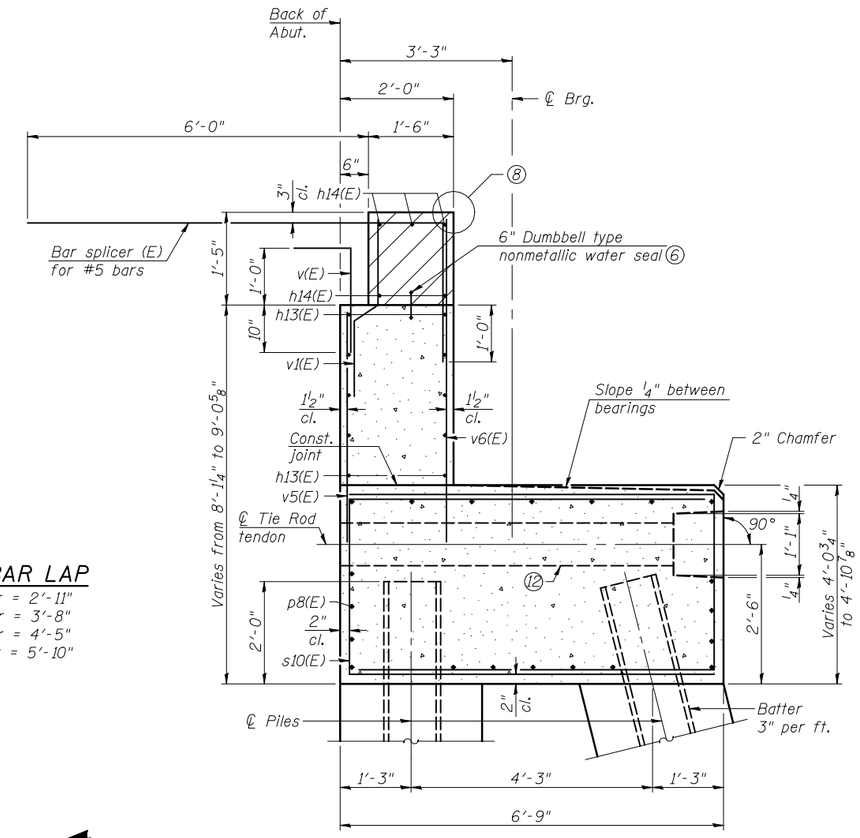
ELEVATION



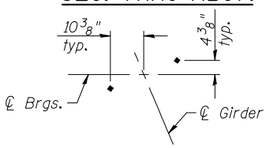
TOP VIEW

MIN. BAR LAP

#4 bar = 2'-11"
#5 bar = 3'-8"
#6 bar = 4'-5"
#7 bar = 5'-10"



SEC. THRU ABUT.



ANCHOR BOLT LAYOUT ④

Notes:
1. For details of Bar Splicers, see sheet 48 of 53.
2. Wingwall length is along front face of end post.
3. For bar locations, see Sec. Thru Abut.
4. Space reinforcement in cap to miss anchor bolts.
5. Hatched area to be poured after superstructure falsework has been removed. Cost of concrete included with Concrete Superstructure on sheet 17 of 53.
6. 6" Dumbbell type nonmetallic water seal shall be in accordance with Sections 503.12 and 1054 of the Standard Specifications. Cost included with Concrete Structures.
7. Pour steps monolithically with cap.
8. For Expansion Joint details, see sheet 25 of 53.
9. Expansion joint details for skews less than 30°, as shown on sheet 25 of 53, are applicable for the East Abutment.
10. The abutments shall have all exposed surfaces of backwalls, bridge seats, and front faces of pile caps treated with Concrete Sealer.
11. Bars indicated thus 20 x 2-#7 etc. indicates 20 lines of bars with 2 lengths per line.
12. Round HSS blockout cast into cap for Tie Rod. For additional details, see sheet 35 of 53.
13. Adjust orientation of pairs of s10(E) bars as needed to miss piles and round HSS blockouts by varying bar lap.

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EAST ABUTMENT DETAILS
STRUCTURE NO. 039-0076 (W.B.)
SHEET NO. 34 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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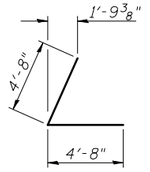
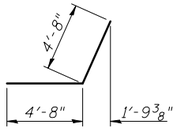
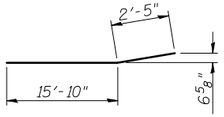
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			



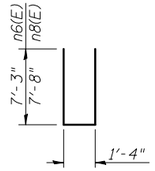
BAR h15(E)



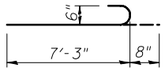
BAR h16(E)



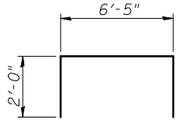
BAR h4(E)



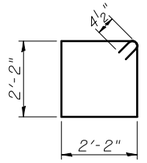
BARS n6(E) & n8(E)



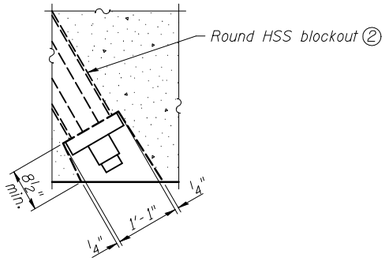
BAR n7(E)



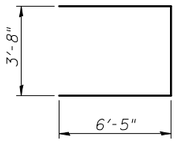
BAR s1(E)



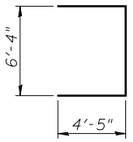
BARS s2(E)



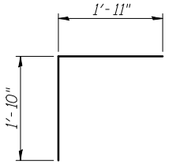
DETAIL A (3)



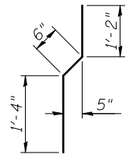
BAR s10(E)



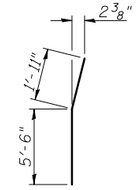
BAR u(E)



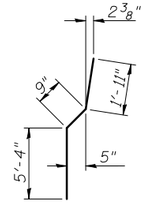
BAR v(E)



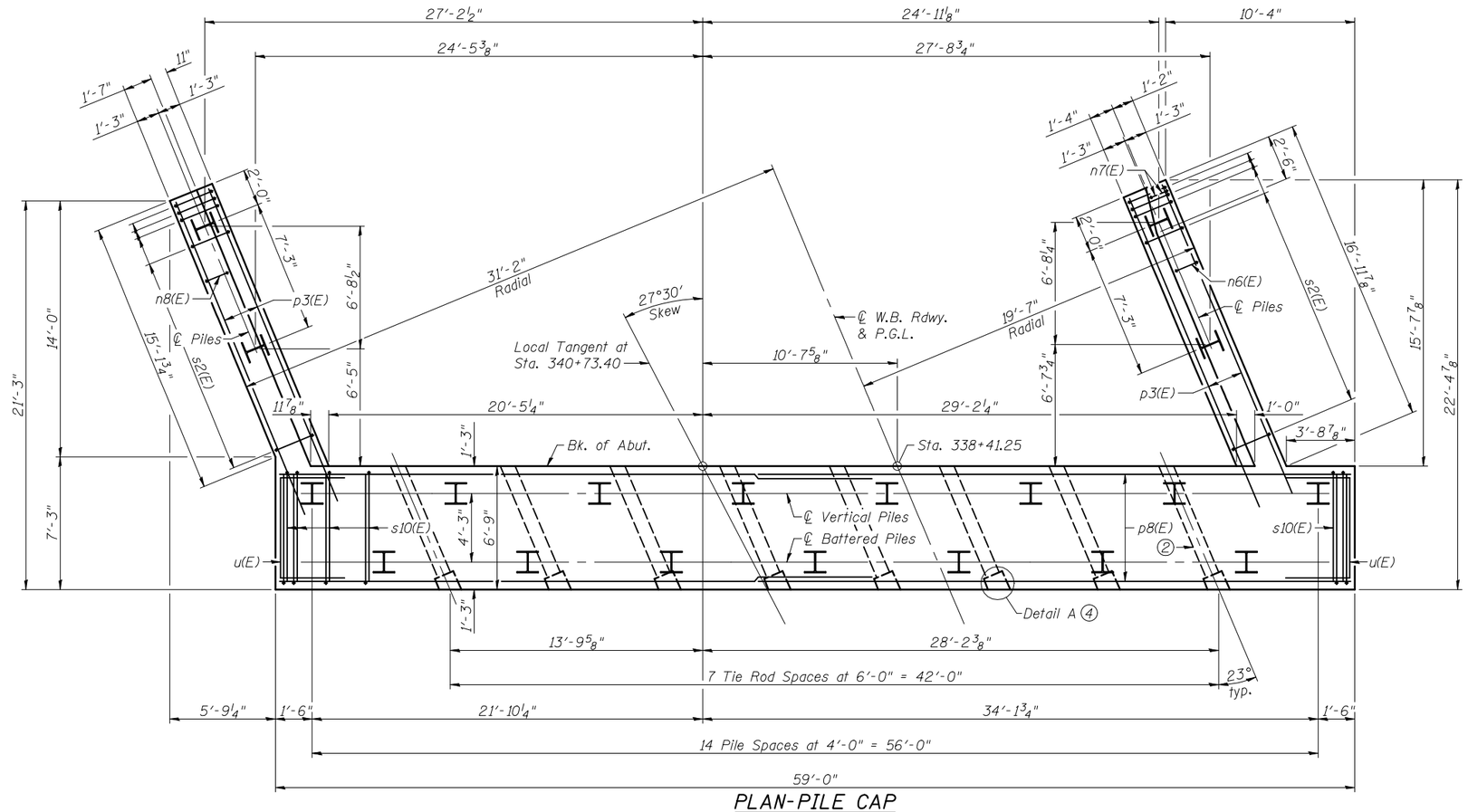
BAR v1(E)



BAR v3(E)



BAR v4(E)



PLAN-PILE CAP

EAST ABUTMENT
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h4(E)	8	#4	18'-3"	
h5(E)	7	#4	17'-5"	
h6(E)	12	#4	18'-9"	
h13(E)	20	#5	27'-6"	
h14(E)	10	#6	28'-9"	
h15(E)	14	#5	9'-4"	
h16(E)	14	#5	9'-4"	
h17(E)	7	#4	18'-2"	
n6(E)	16	#6	15'-10"	
n7(E)	6	#6	7'-11"	
n8(E)	18	#6	16'-8"	
p3(E)	12	#7	20'-0"	
p8(E)	40	#7	32'-3"	
p9(E)	7	#4	20'-11"	
p10(E)	7	#4	19'-10"	
s1(E)	40	#4	10'-5"	
s2(E)	56	#4	9'-5"	
s10(E)	176	#4	16'-6"	
u(E)	11	#6	15'-2"	
v(E)	69	#5	3'-9"	
v1(E)	52	#4	3'-0"	
v2(E)	19	#6	7'-6"	
v3(E)	3	#6	7'-5"	
v4(E)	16	#6	8'-0"	
v5(E)	52	#5	6'-0"	
v6(E)	52	#5	7'-4"	
v13(E)	36	#6	5'-1"	
Structure Excavation			Cu. Yd.	410
Concrete Structures			Cu. Yd.	104.4
Concrete Encasement			Cu. Yd.	10.4
Reinforcement Bars, Epoxy Coated			Pound	10,550
Furnishing Steel Piles HP14x89			Foot	1,692
Driving Piles			Foot	1,692
Test Pile Steel HP14x89			Each	1
Concrete Sealer			Sq. Ft.	627

PILE DATA

Type: Steel HP 14x89
Nominal Required Bearing: 705 kips
Factored Resistance Available: 390 kips
Est. Length: 94 ft
No. Production Piles: 18
No. Test Piles: 1

Notes:
(1) For details of piles and Concrete Encasement, see sheet 47 of 53.
(2) Round HSS9.625x0.188 conforming to the requirements of ASTM A500 Grade B cast into cap for Tie Rod. Cost included with Concrete Structures. Adjust location as necessary to miss anchor bolts and adjust corresponding approach bent location.
(3) For details of Tie Rod, see sheet 40 of 53.
(4) Cut piles as necessary to provide clearance for blockouts.

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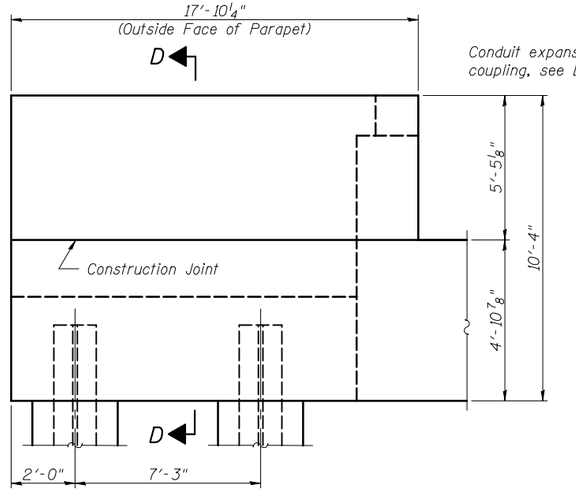
PLOT DATE =	CHECKED - MAG	REVISED -	

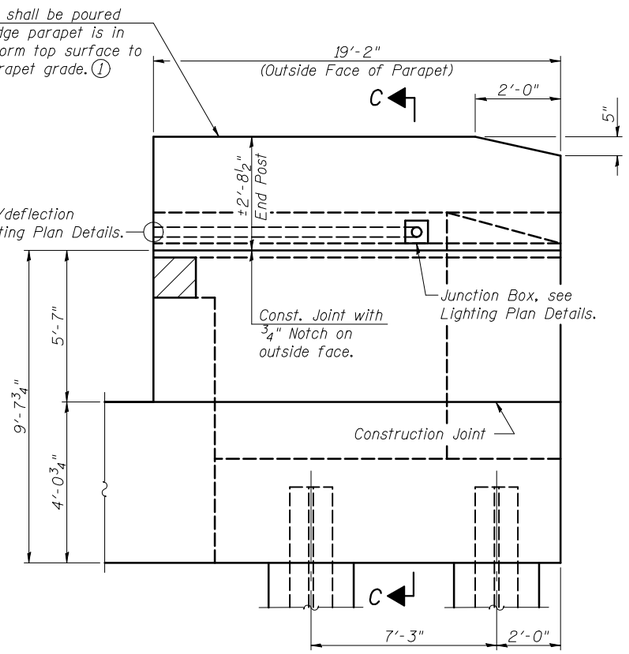
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST ABUTMENT DETAILS
STRUCTURE NO. 039-0076 (W.B.)
SHEET NO. 35 OF 53 SHEETS

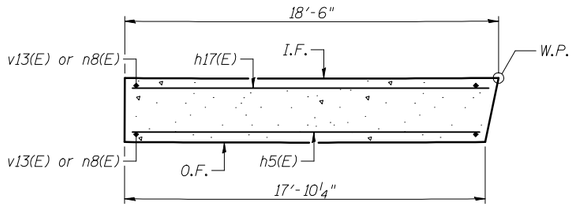
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	147
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		



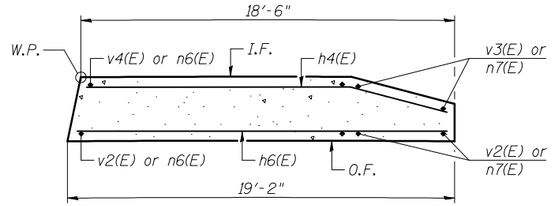
NORTH WINGWALL ELEVATION
Showing Dimensions (Looking South)



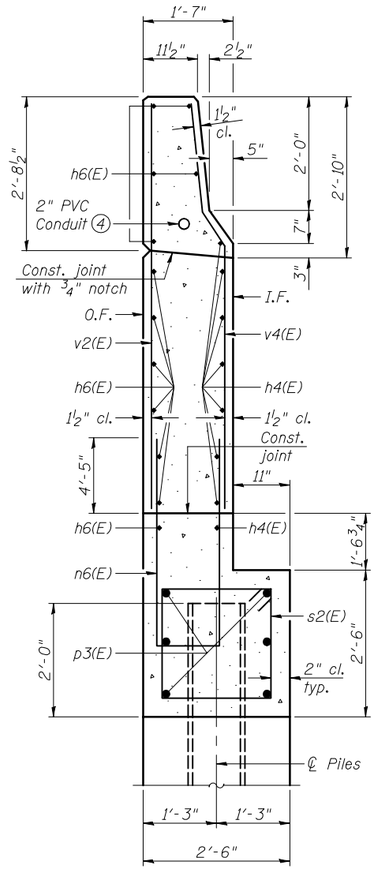
SOUTH WINGWALL ELEVATION
Showing Dimensions (Looking North)



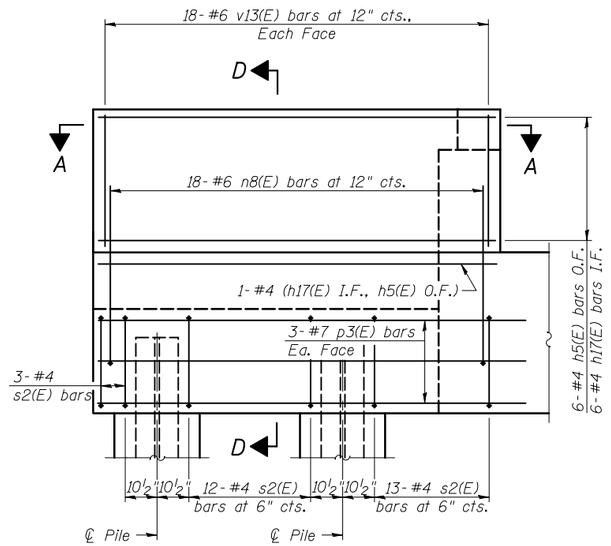
SECTION A-A



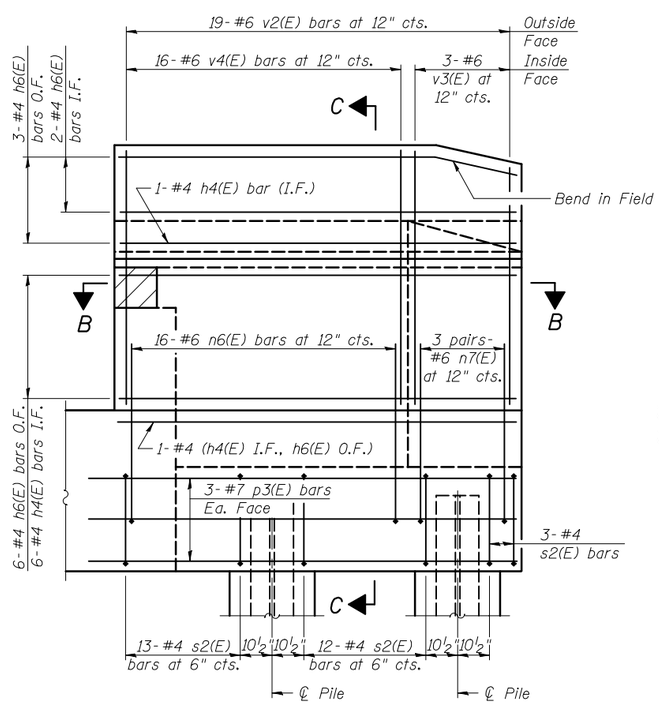
SECTION B-B



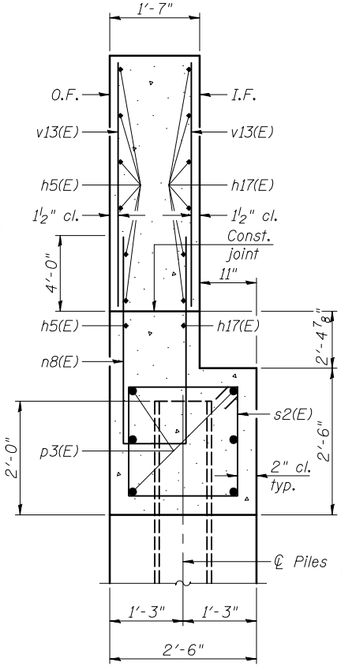
SECTION C-C



NORTH WINGWALL ELEVATION
Showing Reinforcement (Looking South)



SOUTH WINGWALL ELEVATION (5)
Showing Reinforcement (Looking North)



SECTION D-D

Notes:
1. Quantity of concrete in end post included with Concrete Superstructure on sheet 17 of 53.
2. For Concrete Encasement details, see sheet 47 of 53.
3. I.F. denotes inside face and O.F. denotes outside face.
4. Conduit shall have a minimum 1½" clearance from all reinforcement. See Lighting Plan Details for additional requirements.
5. Conduit not shown for clarity.
6. Hatched area to be poured after superstructure falsework has been removed.

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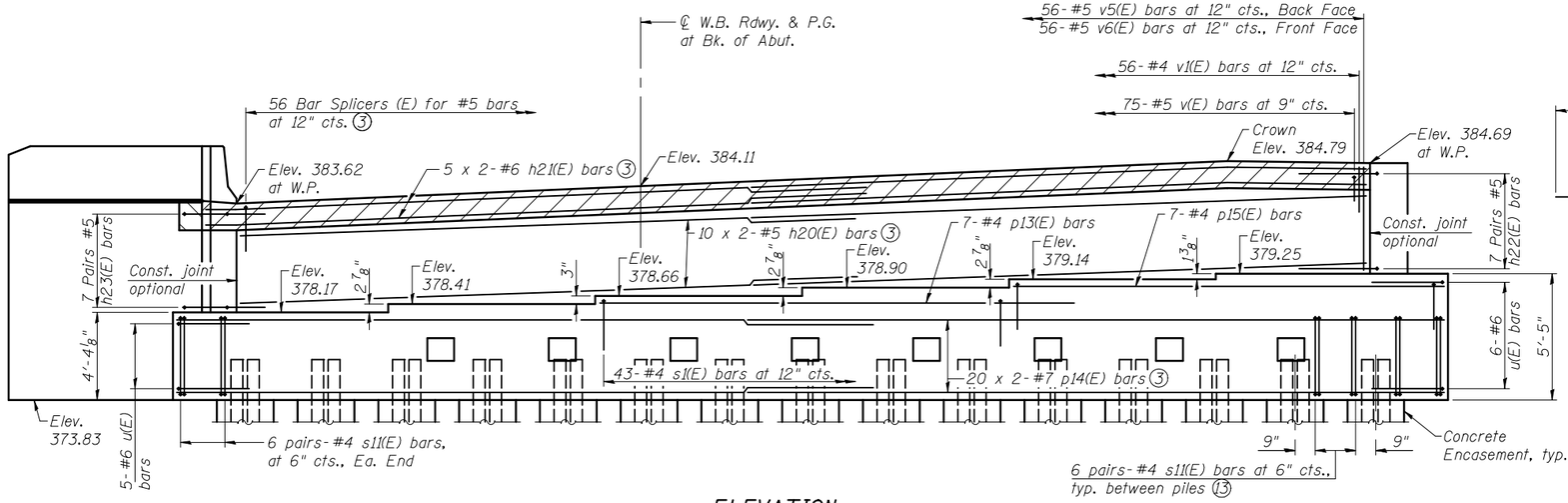
PLOT DATE =	CHECKED - MAG	REVISED -	

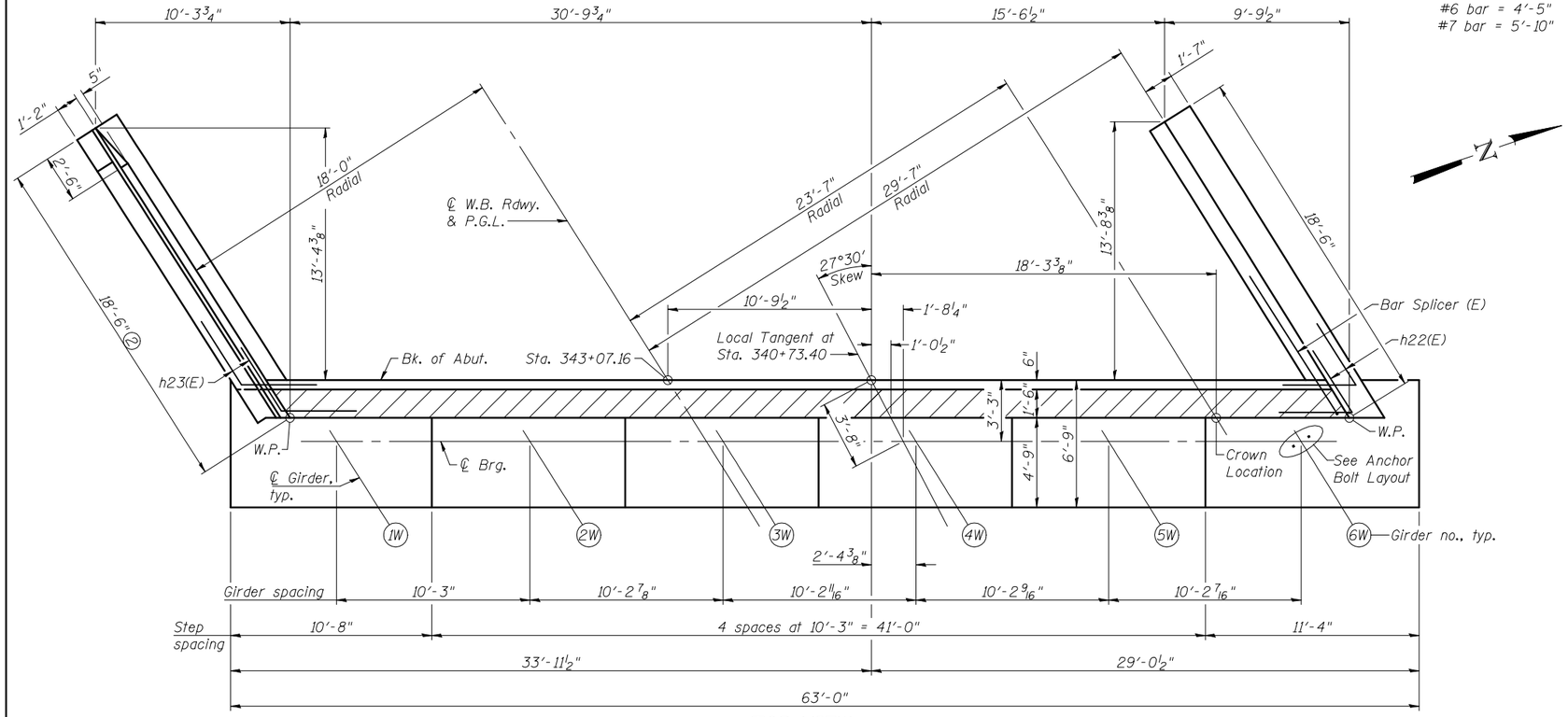
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST ABUTMENT DETAILS
STRUCTURE NO. 039-0076 (W.B.)
SHEET NO. 36 OF 53 SHEETS

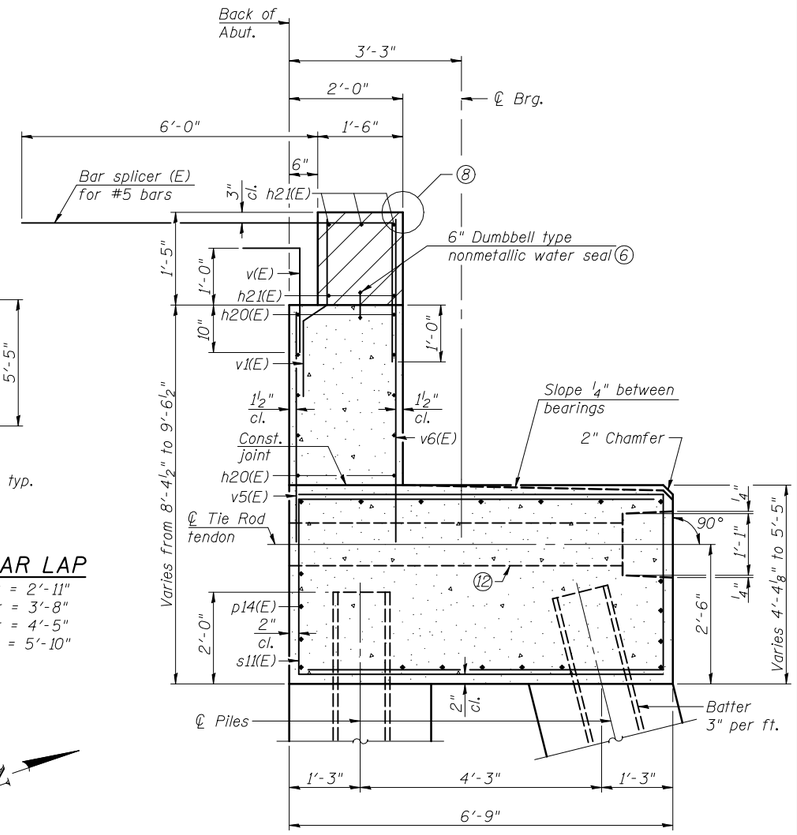
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	148
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		



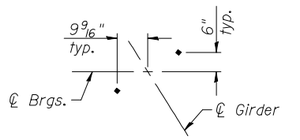
ELEVATION



TOP VIEW



SEC. THRU ABUT.



ANCHOR BOLT LAYOUT (4)

MIN. BAR LAP

#4 bar = 2'-11"
#5 bar = 3'-8"
#6 bar = 4'-5"
#7 bar = 5'-10"

Notes:
1. For details of Bar Splicers, see sheet 48 of 53.
2. Wingwall length is along front face of end post.
3. For bar locations, see Sec. Thru Abut.
4. Space reinforcement in cap to miss anchor bolts.
5. Hatched area to be poured after superstructure falsework has been removed. Cost of concrete included with Concrete Superstructure on sheet 17 of 53.
6. 6" Dumbbell type nonmetallic water seal shall be in accordance with Sections 503.12 and 1054 of the Standard Specifications. Cost included with Concrete Structures.
7. Pour steps monolithically with cap.
8. For Expansion Joint details, see sheet 25 of 53.
9. Expansion joint details for skews greater than 30°, as shown on sheet 25 of 53, are applicable for the West Abutment.
10. The abutments shall have all exposed surfaces of backwalls, bridge seats, and front faces of pile caps treated with Concrete Sealer.
11. Bars indicated thus 20 x 2-#7 etc. indicates 20 lines of bars with 2 lengths per line.
12. Round HSS blockout cast into cap for Tie Rod. For additional details, see sheet 38 of 53.
13. Adjust orientation of pairs of s11(E) bars as needed to miss piles and round HSS blockouts by varying bar lap.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WEST ABUTMENT DETAILS
STRUCTURE NO. 039-0076 (W.B.)
SHEET NO. 37 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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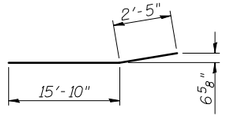
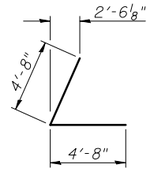
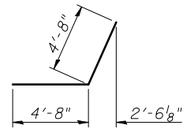
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			



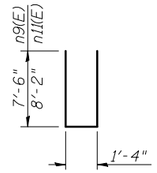
BAR h4(E)



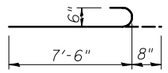
BAR h22(E)



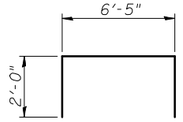
BAR h23(E)



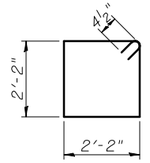
BARS n9(E) & n11(E)



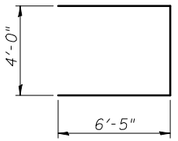
BAR n10(E)



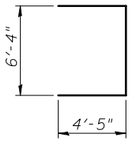
BAR s1(E)



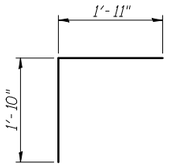
BARS s2(E)



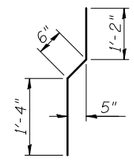
BAR s11(E)



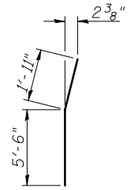
BAR u(E)



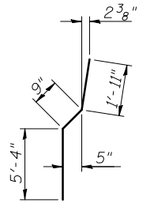
BAR v(E)



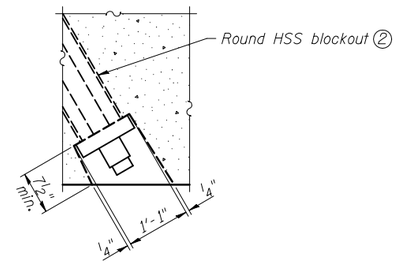
BAR v1(E)



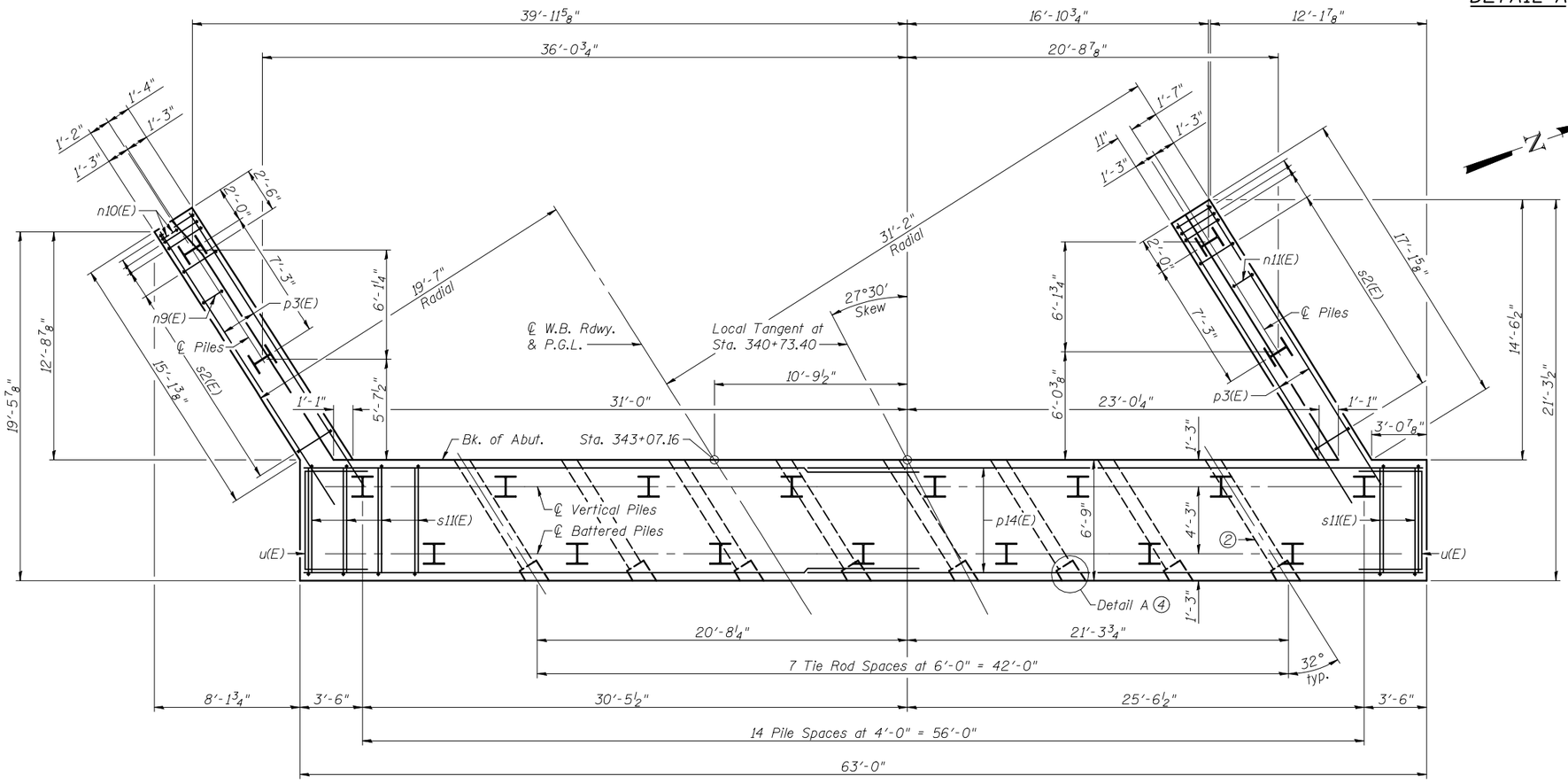
BAR v3(E)



BAR v4(E)



DETAIL A ③



PLAN-PILE CAP

WEST ABUTMENT BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h4(E)	8	#4	18'-3"	
h5(E)	12	#4	17'-5"	
h17(E)	7	#4	18'-2"	
h20(E)	20	#5	29'-9"	
h21(E)	10	#6	31'-1"	
h22(E)	14	#5	9'-4"	
h23(E)	14	#5	9'-4"	
h24(E)	7	#4	19'-1"	
n9(E)	16	#6	16'-4"	
n10(E)	6	#6	8'-2"	
n11(E)	19	#6	17'-8"	
p3(E)	12	#7	20'-0"	
p13(E)	7	#4	22'-1"	
p14(E)	40	#7	34'-3"	
p15(E)	7	#4	21'-3"	
s1(E)	43	#4	10'-5"	
s2(E)	56	#4	9'-5"	
s11(E)	192	#4	16'-10"	
u(E)	11	#6	15'-2"	
v(E)	75	#5	3'-9"	
v1(E)	56	#4	3'-0"	
v2(E)	18	#6	7'-6"	
v3(E)	3	#6	7'-5"	
v4(E)	16	#6	8'-0"	
v5(E)	56	#5	6'-0"	
v6(E)	56	#5	7'-4"	
v13(E)	38	#6	5'-1"	
Structure Excavation		Cu. Yd.	432	
Concrete Structures		Cu. Yd.	117.4	
Concrete Encasement		Cu. Yd.	10.4	
Reinforcement Bars, Epoxy Coated		Pound	11,200	
Furnishing Steel Piles HP14x89		Foot	1,638	
Driving Piles		Foot	1,638	
Test Pile Steel HP14x89		Each	1	
Concrete Sealer		Sq. Ft.	698	

PILE DATA

Type: Steel HP 14x89
Nominal Required Bearing: 705 kips
Factored Resistance Available: 390 kips
Est. Length: 91 ft
No. Production Piles: 18
No. Test Piles: 1

Notes:
① For details of piles and Concrete Encasement, see sheet 47 of 53.
② Round HSS9.625x0.188 conforming to the requirements of ASTM A500 Grade B cast into cap for Tie Rod. Cost included with Concrete Structures. Adjust location as necessary to miss anchor bolts and adjust corresponding approach bent location.
③ For details of Tie Rod, see sheet 40 of 53.
④ Cut piles as necessary to provide clearance for blockouts.

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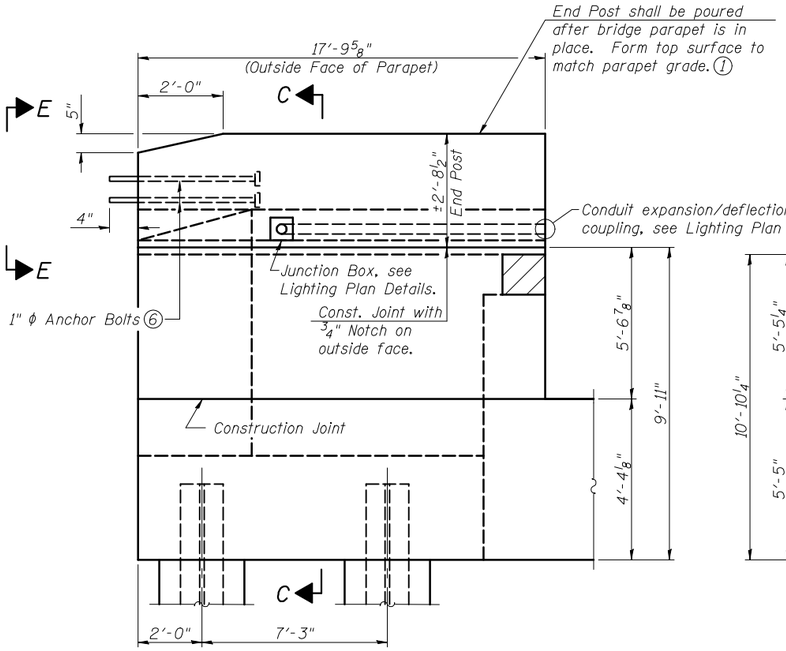
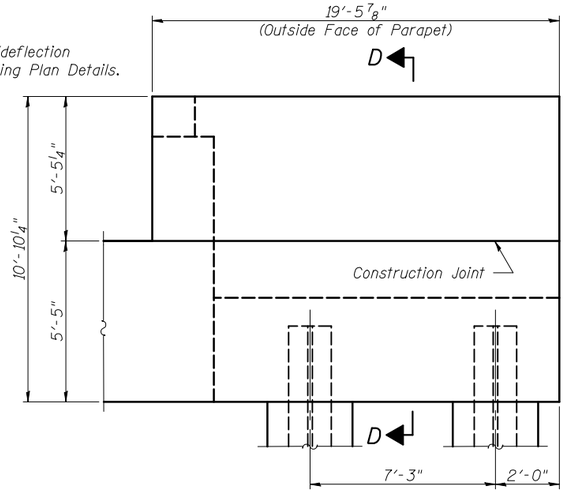
WEST ABUTMENT DETAILS
STRUCTURE NO. 039-0076 (W.B.)
SHEET NO. 38 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	150
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			



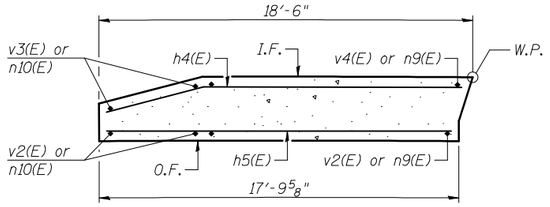
SOUTH WINGWALL ELEVATION

Showing Dimensions (Looking North)

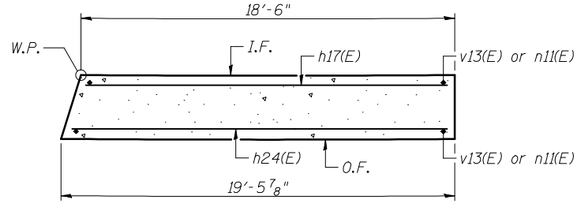


NORTH WINGWALL ELEVATION

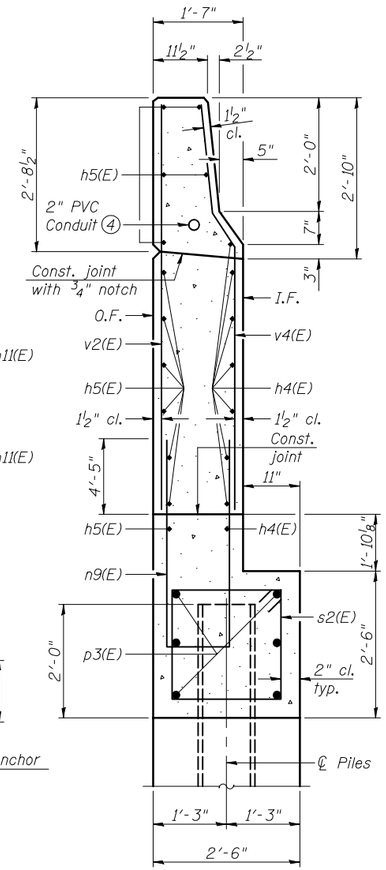
Showing Dimensions (Looking South)



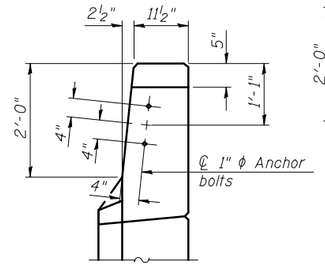
SECTION A-A



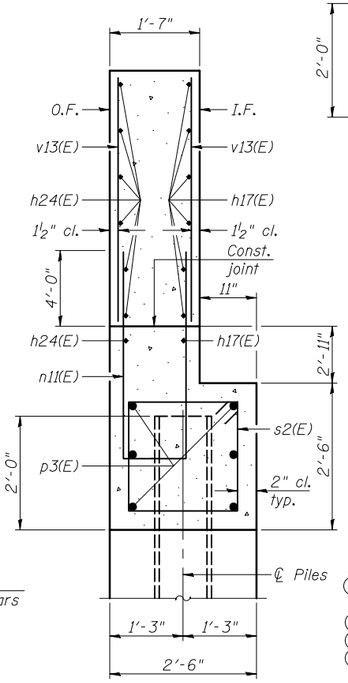
SECTION B-B



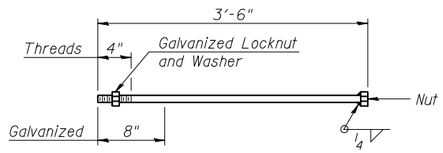
SECTION C-C



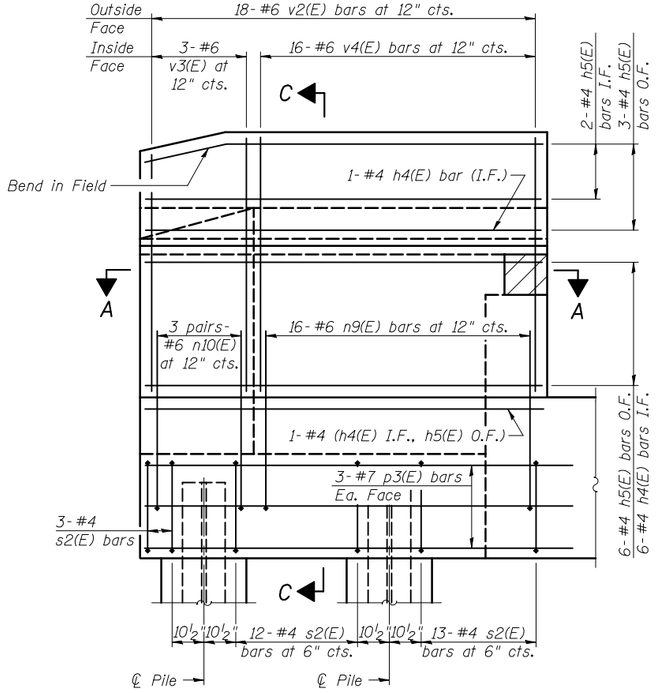
VIEW E-E



SECTION D-D

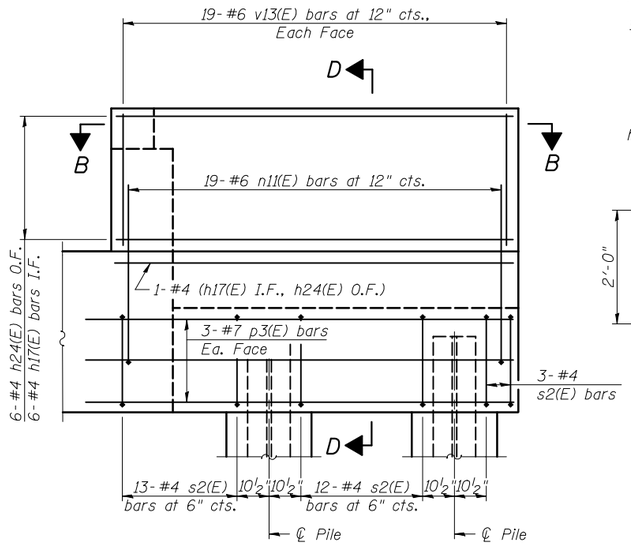


1" ϕ ANCHOR BOLT



SOUTH WINGWALL ELEVATION (5)

Showing Reinforcement (Looking North)



NORTH WINGWALL ELEVATION

Showing Reinforcement (Looking South)

Notes:

1. Quantity of concrete in end post included with Concrete Superstructure on sheet 17 of 53.
2. For Concrete Encasement details, see sheet 47 of 53.
3. I.F. denotes inside face and O.F. denotes outside face.
4. Conduit shall have a minimum 1 1/2" clearance from all reinforcement. See Lighting Plan Details for additional requirements.
5. Conduit not shown for clarity.
6. Cost included with Concrete Superstructure on sheet 17 of 53.
7. Hatched area to be poured after superstructure falsework has been removed.

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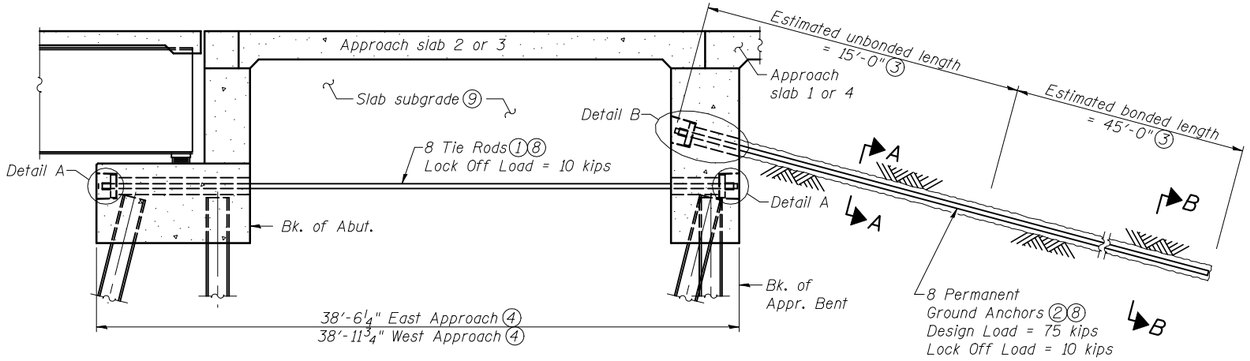
PLOT DATE =	CHECKED - MAG	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WEST ABUTMENT DETAILS
STRUCTURE NO. 039-0076 (W.B.)
SHEET NO. 39 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	151
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		

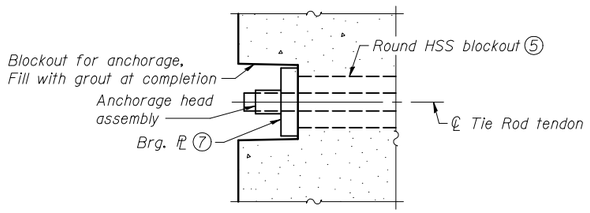


ABUTMENT

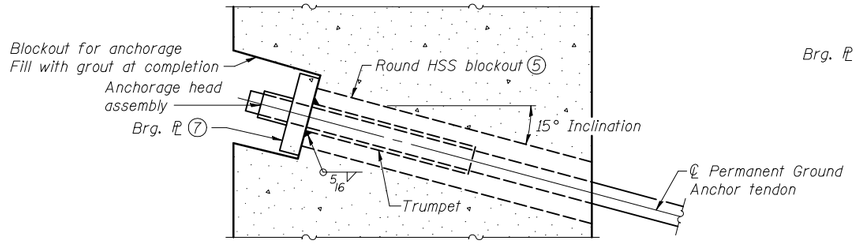
APPROACH BENT

SEQUENCE OF ABUTMENT & APPROACH BENT SYSTEM CONSTRUCTION

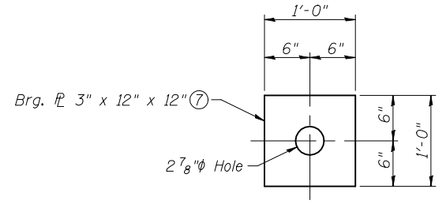
1. Construct abutments and approach bents.
2. Install Tie Rod assemblies. Apply a 10 kip tensile load to each Tie Rod and transfer load to anchorage device in accordance with the Special Provisions.
3. Grout Tie Rod anchorage head assembly and round HSS blockout.
4. Backfill behind approach bent.
5. Install Permanent Ground Anchor system and load test in accordance with the Special Provisions. Reduce test load to specified lock off load and transfer load to anchorage device.
6. Grout Permanent Ground Anchor anchorage head assembly and round HSS blockout if not previously grouted.
7. Backfill between abutment and approach bent as required and construct approach slabs.



DETAIL A



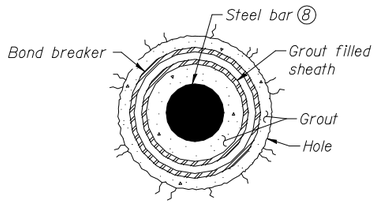
DETAIL B



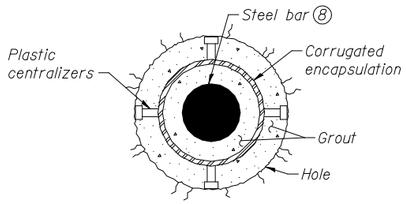
BEARING PLATE

BILL OF MATERIAL

Item	Unit	Quantity
Permanent Ground Anchor	Each	16
Tie Rod	Each	16



SECTION A-A



SECTION B-B

Notes:

1. For Tie Rod spacing, see Abutment and Approach Bent details. Self weight of Tie Rod tendon shall be supported its entire length before tendons are stressed.
2. For Permanent Ground Anchor spacing, see Approach Bent Details.
3. Actual length as required by Contractor design.
4. Length measured along ℄ Tie Rod.
5. For round HSS blockout details, see Abutment and Approach Bent details. Fill round HSS blockout with grout after completion.
6. The design of the Tie Rod tendon and Permanent Ground Anchor tendon is based on deflection requirements. Substitution of a smaller diameter or material other than those specified will not be allowed.
7. The structural steel bearing plates shall conform to the requirements of AASHTO M 270 Grade 50.
8. Round solid steel bars conforming to the requirements of AASHTO M 275 Grade 150 with a nominal diameter of 2½" shall be used for the tendons of both the Tie Rod and the Permanent Ground Anchor.
9. For subgrade below slab, see Section Thru Pile Supported Stub Abutment on sheet 2 of 53 and Section A-A on sheets 20 and 23 of 53.

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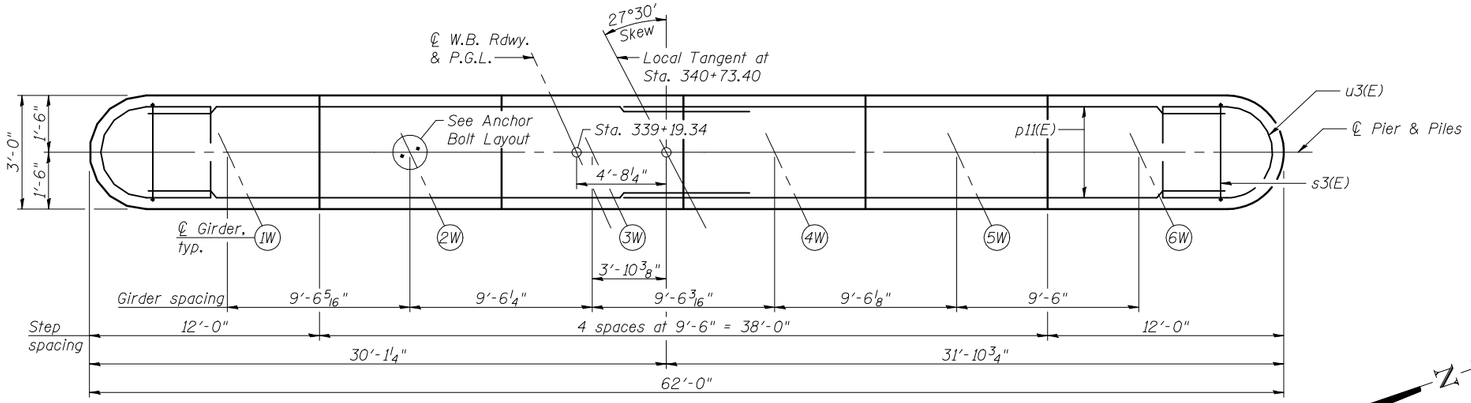
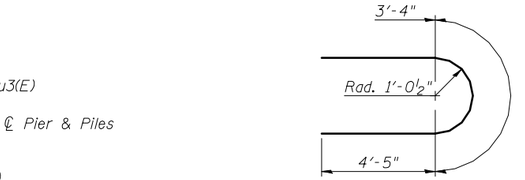
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TIE ROD AND PERMANENT GROUND ANCHOR DETAILS
STRUCTURE NO. 039-0076 (W.B.)
SHEET NO. 40 OF 53 SHEETS

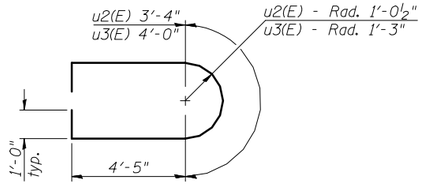
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	152
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		



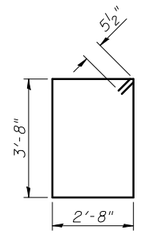
TOP PLAN



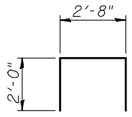
BAR u1(E)



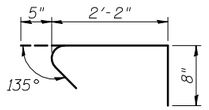
BARS u2(E) & u3(E)



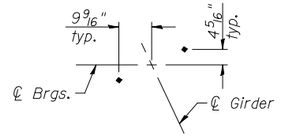
BAR s3(E)



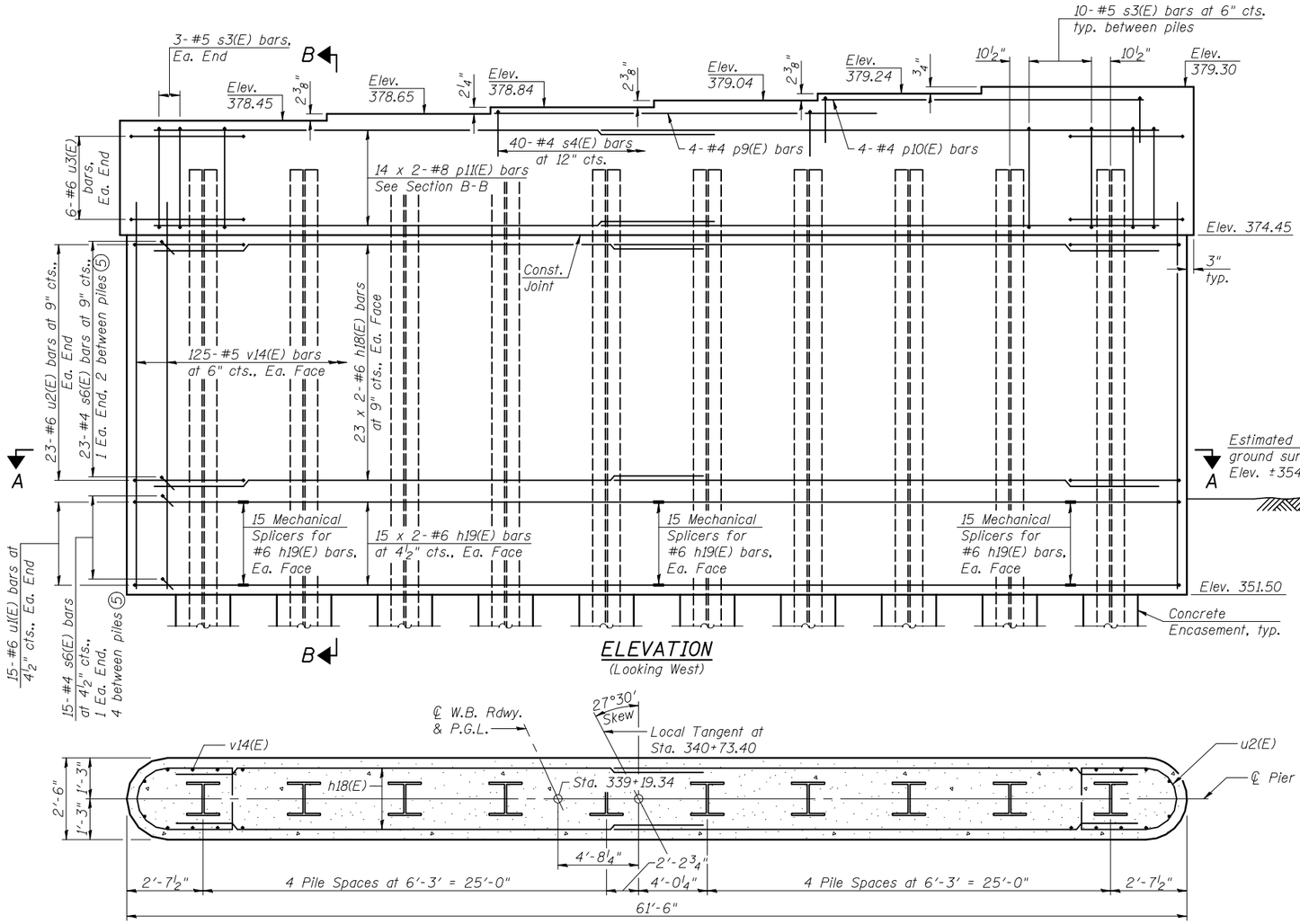
BAR s4(E)



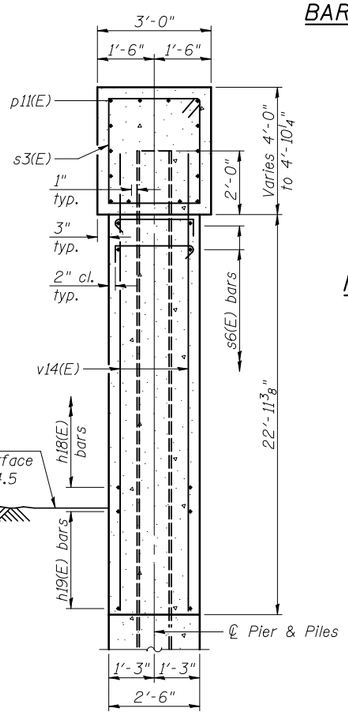
BAR s6(E)



ANCHOR BOLT LAYOUT ④



ELEVATION
(Looking West)



SECTION B-B

MIN. BAR LAP
#8 bar = 7'-8"
#6 bar = 4'-5"

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h18(E)	92	#6	31'-9"	——
h19(E)	60	#6	25'-1"	——
p9(E)	4	#4	20'-11"	——
p10(E)	4	#4	19'-10"	——
p11(E)	28	#8	33'-4"	——
s3(E)	96	#5	13'-7"	⌐
s4(E)	40	#4	6'-8"	⊓
s5(E)	-	-	-	
s6(E)	1,030	#4	3'-3"	⌐
u1(E)	30	#6	12'-2"	⊃
u2(E)	46	#6	14'-2"	⊃
u3(E)	12	#6	14'-10"	⊃
v14(E)	250	#5	24'-9"	——
Structure Excavation		Cu. Yd.	48	
Concrete Structures		Cu. Yd.	160.0	
Concrete Encasement		Cu. Yd.	5.5	
Reinforcement Bars, Epoxy Coated		Pound	21,270	
Furnishing Steel Piles HP14x73		Foot	819	
Driving Piles		Foot	819	
Test Pile Steel HP14x73		Each	1	
Mechanical Splicers		Each	90	

SECTION A-A

PILE DATA
Type: Steel HP14x73
Nominal Required Bearing: 578 kips
Factored Resistance Available: 320 kips
Est. Length: 91'
No. Production Piles: 9
No. Test Piles: 1

Notes:
① Pour steps monolithically with cap.
② For details of Mechanical Splicers, see sheet 48 of 53.
③ For details of piles and Concrete Encasement, see sheet 47 of 53.
④ Space reinforcement in cap to miss anchor bolts.
⑤ Alternate s6(E) bars end for end as shown in Section B-B.
⑥ Bars indicated thus 14 x 2-#8 etc. indicates 14 lines of bars with 2 lengths per line.

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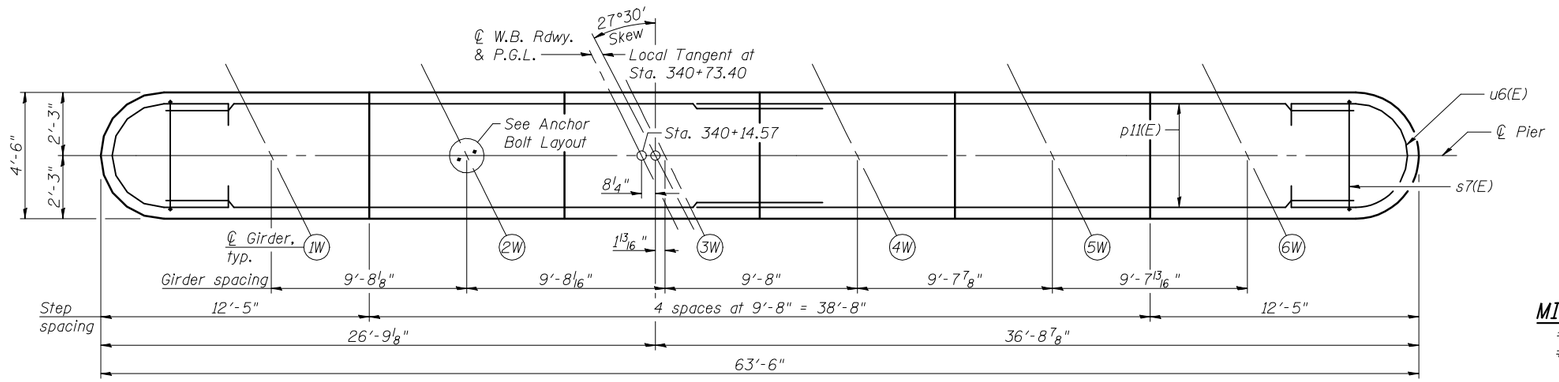
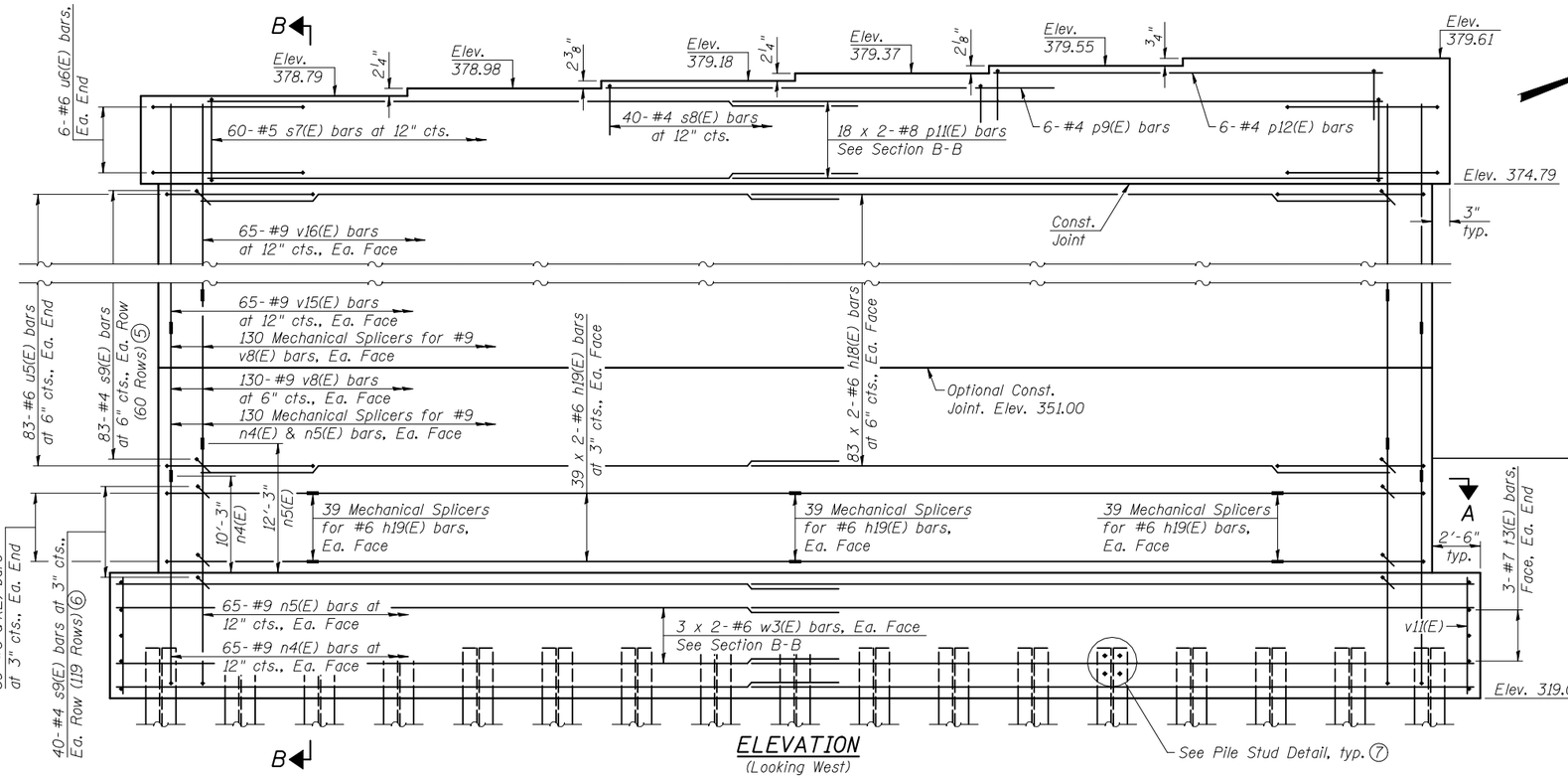
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 1 DETAILS
STRUCTURE NO. 039-0076 (W.B.)
SHEET NO. 41 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	153
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

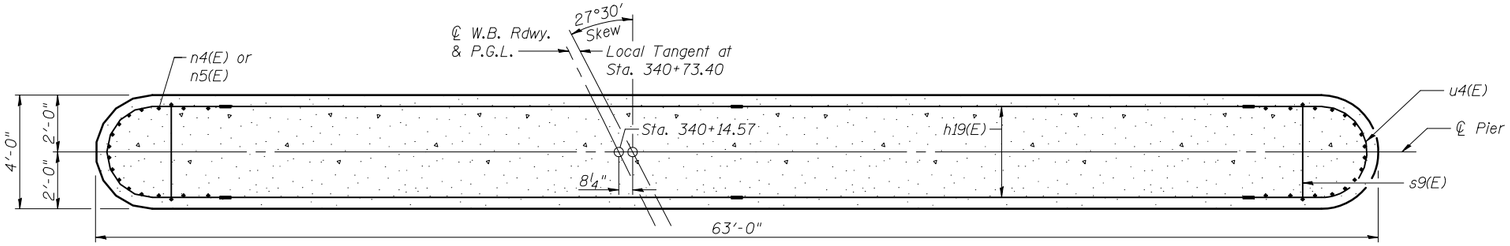


TOP PLAN

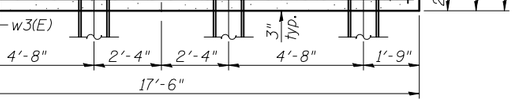


ELEVATION
(Looking West)

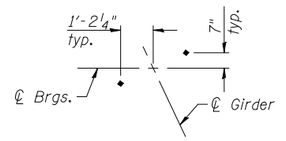
MIN. BAR LAP
#8 bar = 7'-8"
#6 bar = 4'-5"



SECTION A-A



SECTION B-B



ANCHOR BOLT LAYOUT ④

Notes:
1. Pour steps monolithically with cap.
2. For details of Mechanical Splicers, see sheet 48 of 53.
3. For details of Cofferdam (Type 2), see sheet 4 of 53.
4. Space reinforcement in cap to miss anchor bolts.
5. Space s9(E) bars horizontally with each v8(E) & v15(E) or v8(E) & v16(E) bar and vertically with h18(E) bars. Alternate s9(E) bars end for end as shown in Section B-B.
6. Space s9(E) bars horizontally with each n4(E) & n5(E) bar and vertically with h19(E) bars. Alternate s9(E) bars end for end as shown in Section B-B. Total includes one row of bars in top of footing.
7. For Bill of Materials, Bar Details, Pile Stud Detail, Footing Plan, and footing reinforcement, see sheet 43 of 53.
8. Bars indicated thus 18 x 2-#8 etc. indicates 18 lines of bars with 2 lengths per line.

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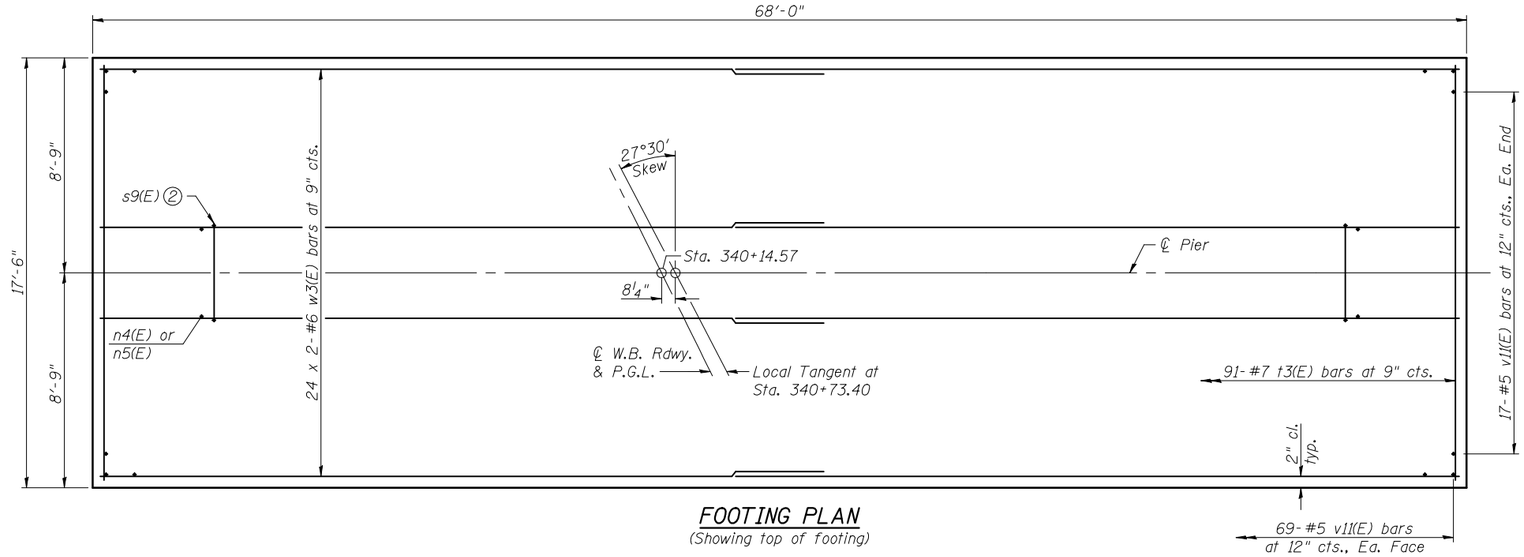
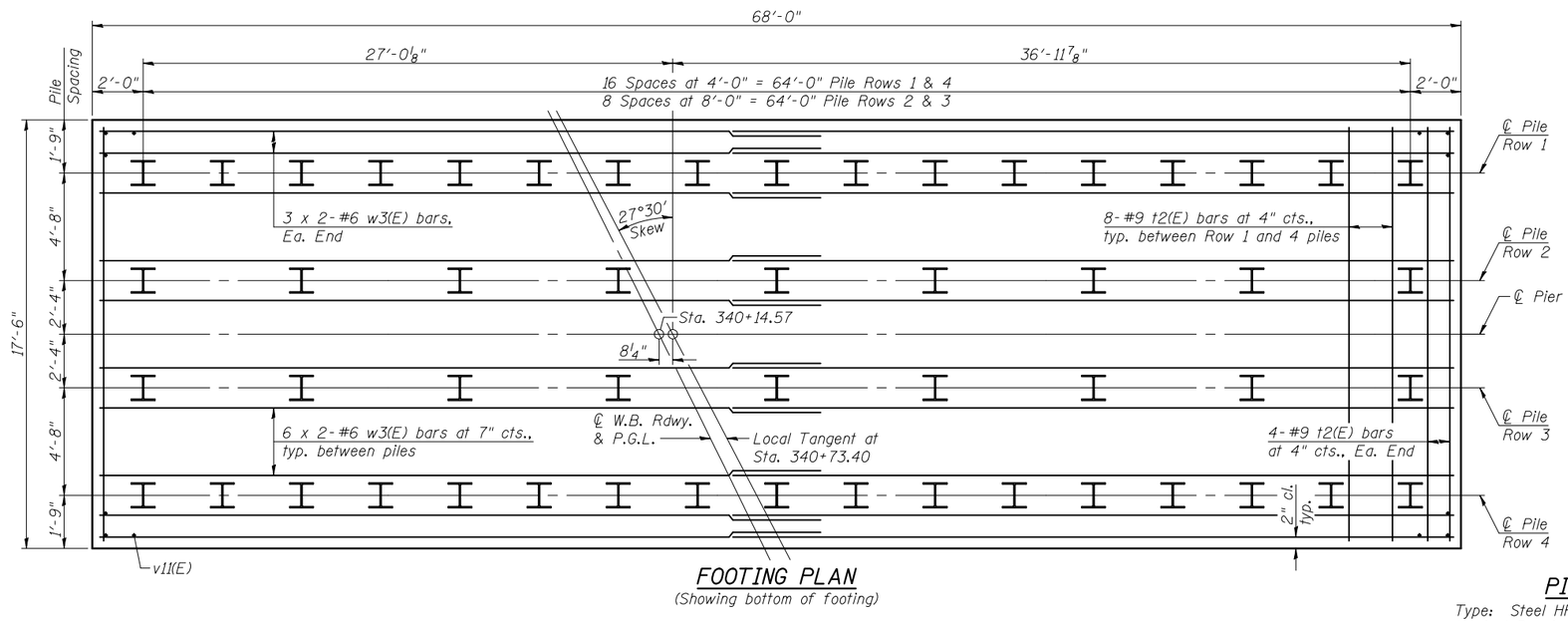
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 2 DETAILS
STRUCTURE NO. 039-0076 (W.B.)
SHEET NO. 42 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	154
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

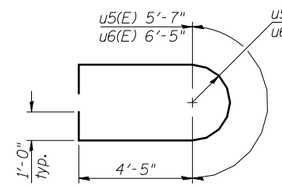


FOOTING PLAN
(Showing top of footing)

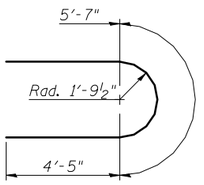


FOOTING PLAN
(Showing bottom of footing)

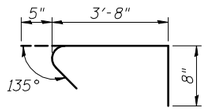
MIN. BAR LAP
#6 bar = 4'-5"



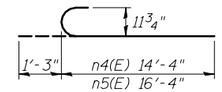
BARS u5(E) & u6(E)



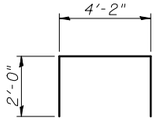
BAR u4(E)



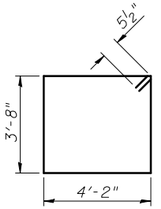
BAR s9(E)



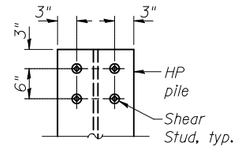
BARS n4(E) & n5(E)



BAR s8(E)



BAR s7(E)



PILE STUD DETAIL (3)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h18(E)	332	#6	31'-9"	
h19(E)	156	#6	25'-1"	
n4(E)	130	#9	15'-7"	
n5(E)	130	#9	17'-7"	
p9(E)	6	#4	20'-11"	
p11(E)	36	#8	33'-4"	
p12(E)	6	#4	19'-4"	
s7(E)	60	#5	16'-7"	
s8(E)	40	#4	8'-2"	
s9(E)	9,740	#4	4'-9"	
t2(E)	136	#9	17'-2"	
t3(E)	97	#7	17'-2"	
u4(E)	78	#6	14'-5"	
u5(E)	166	#6	16'-5"	
u6(E)	12	#6	17'-3"	
v8(E)	260	#9	18'-3"	
v11(E)	172	#5	4'-1"	
v15(E)	130	#9	26'-7"	
v16(E)	130	#9	24'-7"	
w3(E)	108	#6	36'-1"	
Cofferdam Excavation		Cu. Yd.	1,257	
Cofferdam (Type 2) (Location-3)		Each	1	
Concrete Structures		Cu. Yd.	716.9	
Seal Coat Concrete		Cu. Yd.	546.7	
Reinforcement Bars, Epoxy Coated		Pound	134,660	
Furnishing Steel Piles HP14x73		Foot	1,785	
Driving Piles		Foot	1,785	
Test Pile Steel HP14x73		Each	1	
Mechanical Splicers		Each	754	

PILE DATA
Type: Steel HP14x73
Nominal Required Bearing: 578 kips
Factored Resistance Available: 320 kips
Est. Length: 35'
No. Production Piles: 51
No. Test Piles: 1

Notes:
(1) For details of piles, see sheet 47 of 53.
(2) Alternate s9(E) bars end for end as shown in Section B-B on sheet 42 of 53.
(3) Provide 4 - ¾" ϕ x 4" granular or solid flux filled headed studs conforming to Article 1006.32 of the Standard Specifications automatically end welded to piling, each flange, each pile. Cost included with Furnishing Steel Piles HP14x73.
(4) Bars indicated thus 24 x 2-#6 etc. indicates 24 lines of bars with 2 lengths per line.

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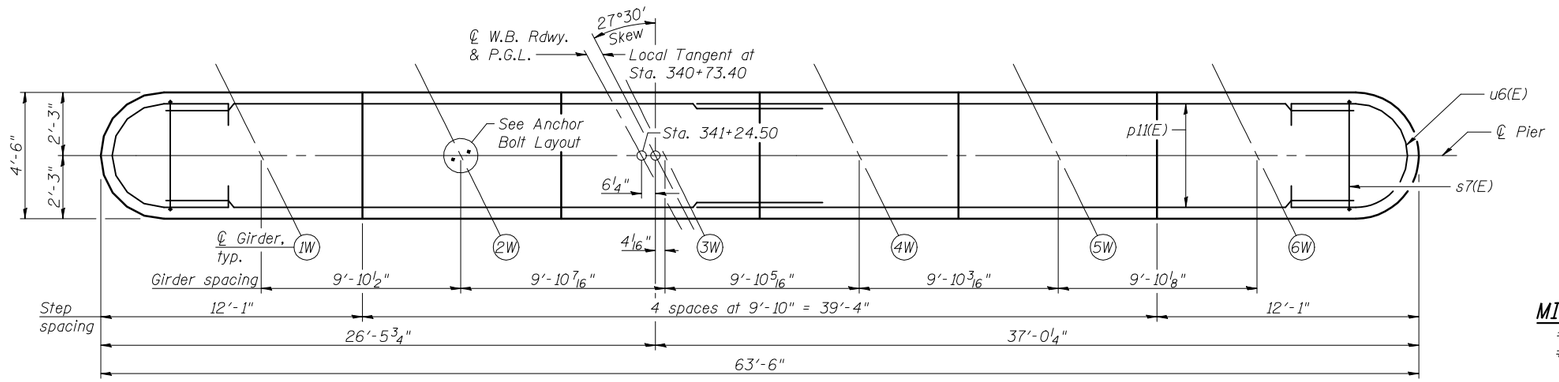
PLOT DATE =	CHECKED - MAG	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 2 DETAILS
STRUCTURE NO. 039-0076 (W.B.)
SHEET NO. 43 OF 53 SHEETS

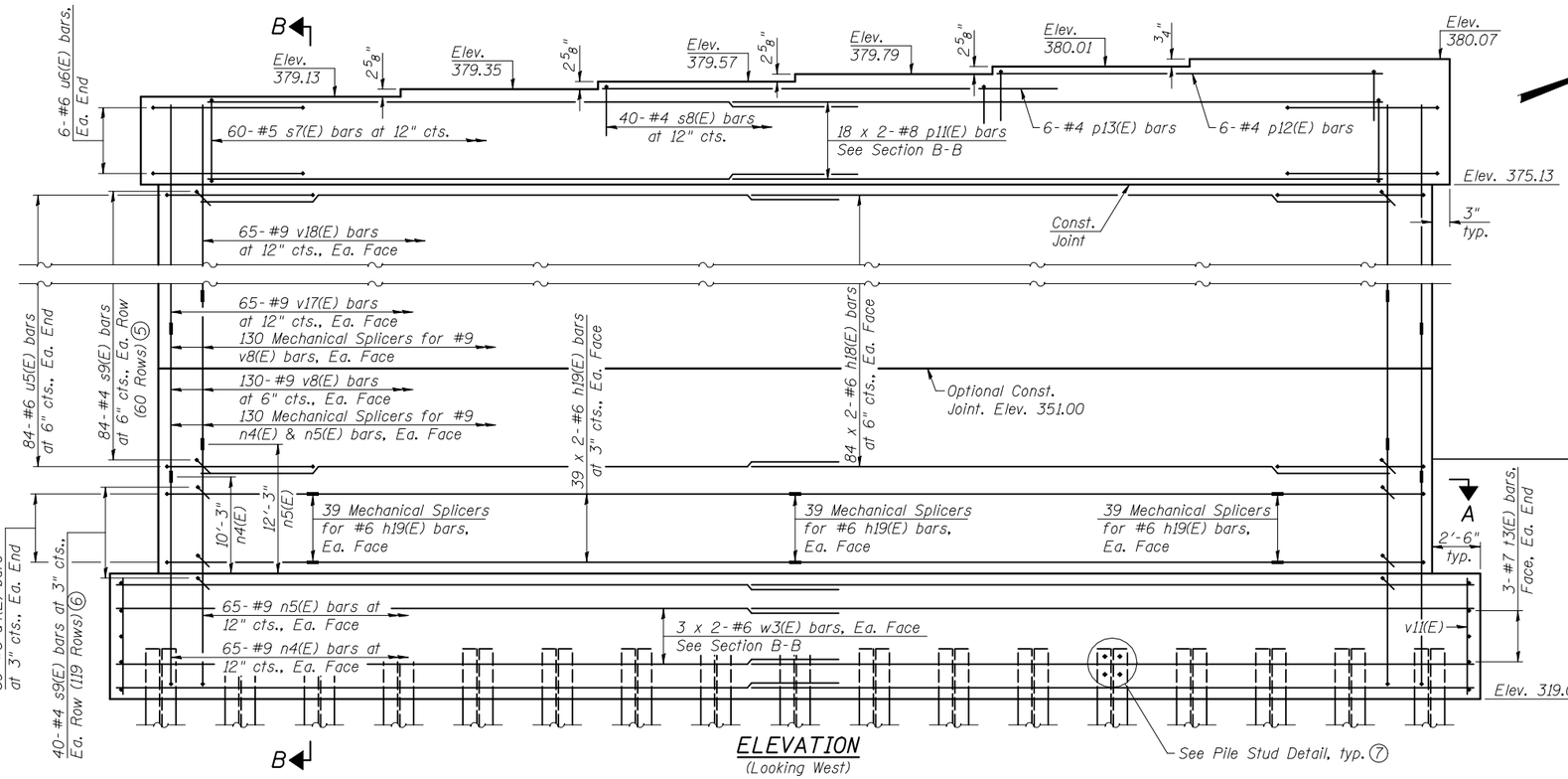
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	155
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			



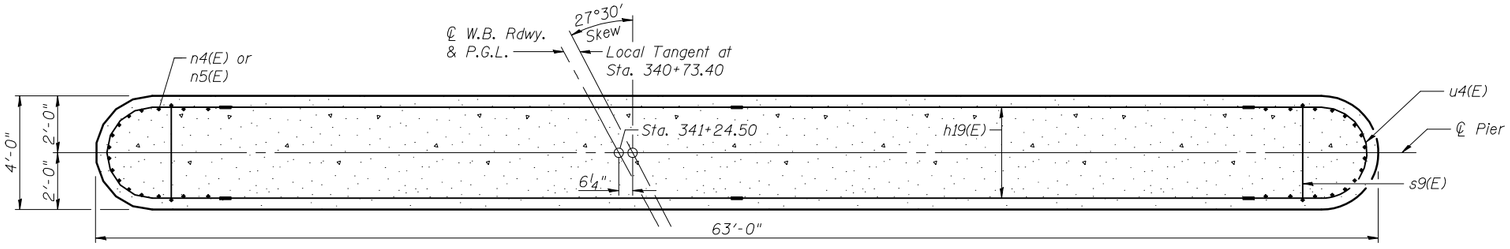
TOP PLAN

MIN. BAR LAP
#8 bar = 7'-8"
#6 bar = 4'-5"

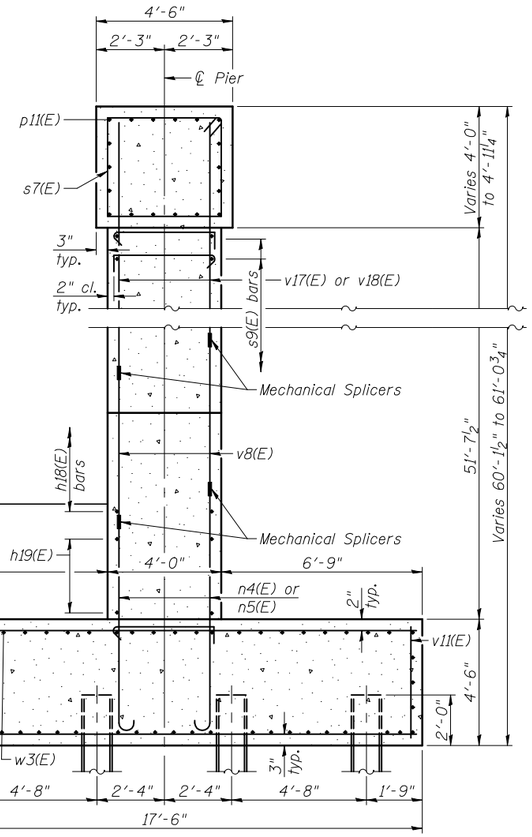
Notes:
1. Pour steps monolithically with cap.
2. For details of Mechanical Splicers, see sheet 48 of 53.
3. For details of Cofferdam (Type 2), see sheet 4 of 53.
4. Space reinforcement in cap to miss anchor bolts.
5. Space s9(E) bars horizontally with each v8(E) & v17(E) or v8(E) & v18(E) bar and vertically with h18(E) bars. Alternate s9(E) bars end for end as shown in Section B-B.
6. Space s9(E) bars horizontally with each n4(E) & n5(E) bar and vertically with h19(E) bars. Alternate s9(E) bars end for end as shown in Section B-B. Total includes one row of bars in top of footing.
7. For Bill of Materials, Bar Details, Pile Stud Detail, Footing Plan, and footing reinforcement, see sheet 45 of 53.
8. Bars indicated thus 18 x 2-#8 etc. indicates 18 lines of bars with 2 lengths per line.



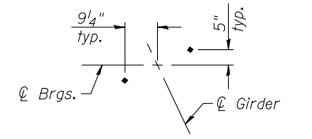
ELEVATION
(Looking West)



SECTION A-A



SECTION B-B



ANCHOR BOLT LAYOUT ④

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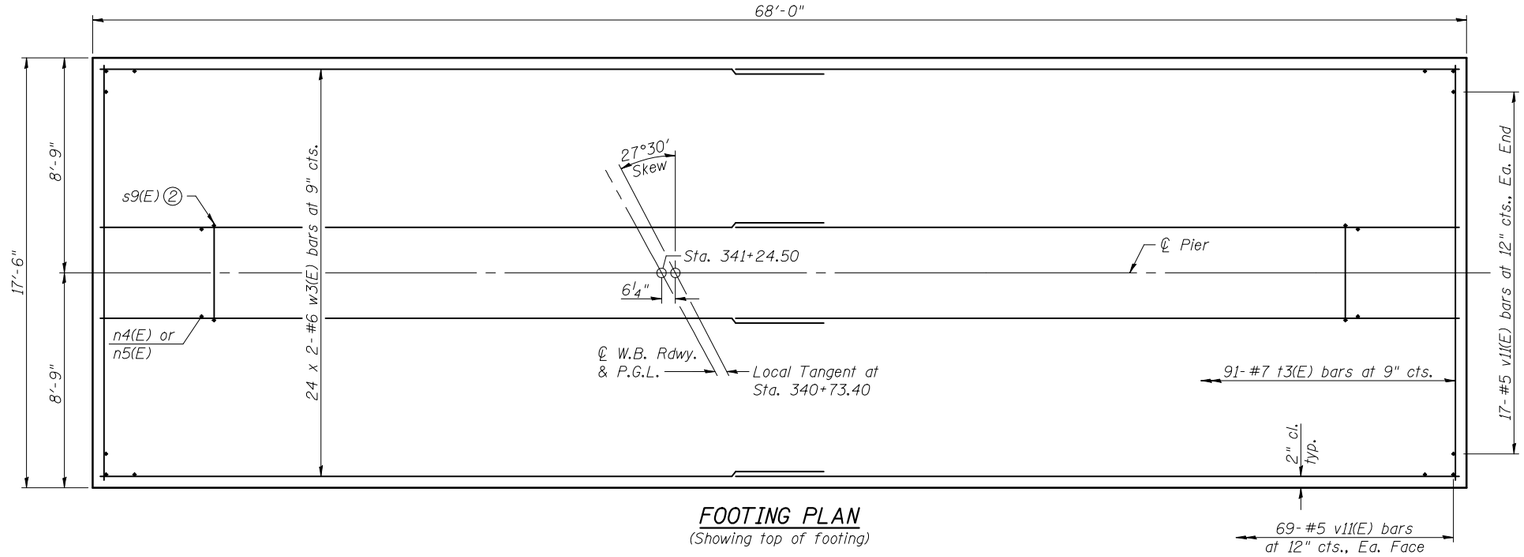
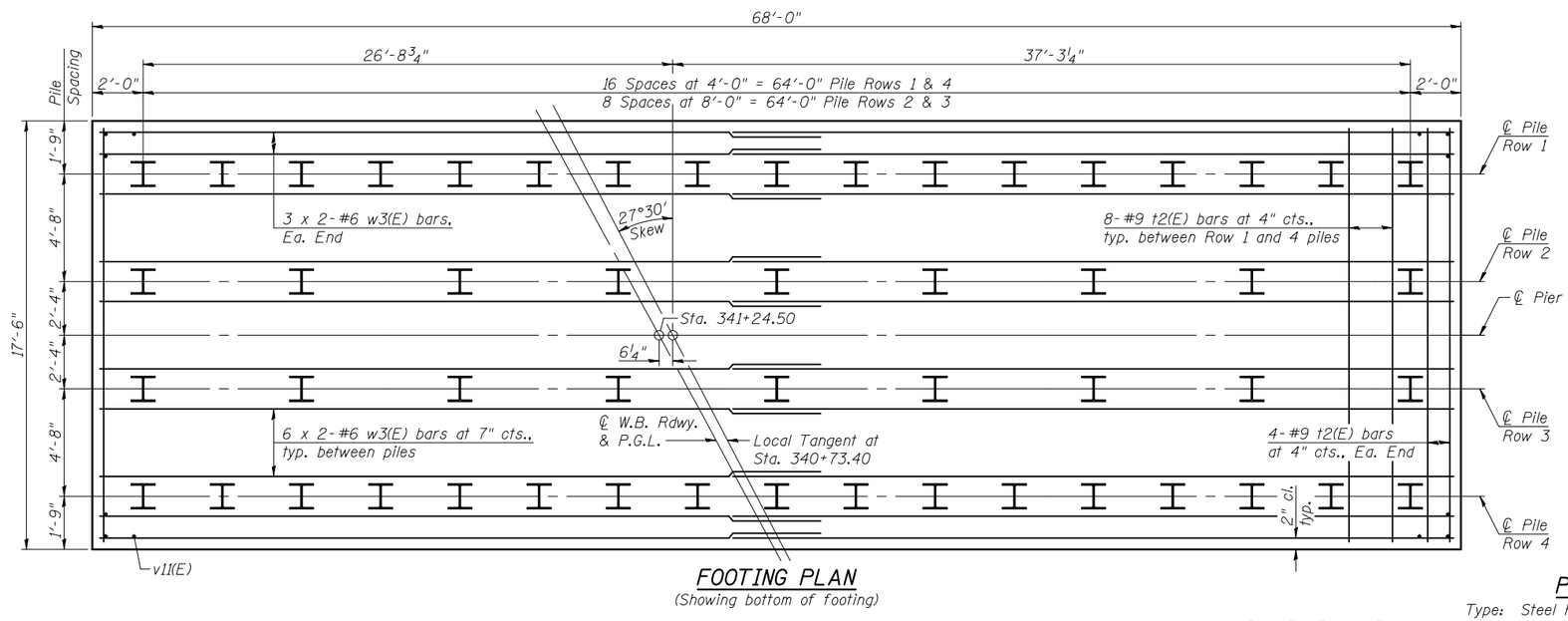
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 3 DETAILS
STRUCTURE NO. 039-0076 (W.B.)
SHEET NO. 44 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	156
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

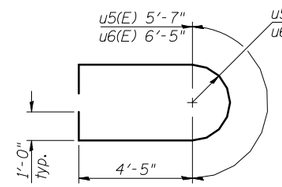


FOOTING PLAN
(Showing top of footing)

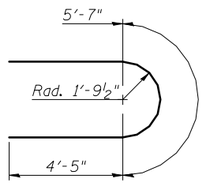


FOOTING PLAN
(Showing bottom of footing)

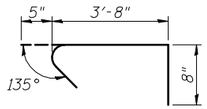
MIN. BAR LAP
#6 bar = 4'-5"



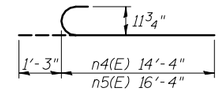
BARS u5(E) & u6(E)



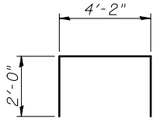
BAR u4(E)



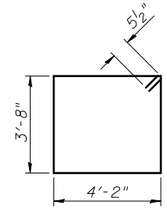
BAR s9(E)



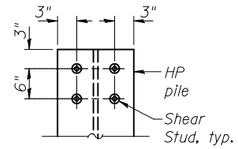
BARS n4(E) & n5(E)



BAR s8(E)



BAR s7(E)



PILE STUD DETAIL (3)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h18(E)	336	#6	31'-9"	
h19(E)	156	#6	25'-1"	
n4(E)	130	#9	15'-7"	
n5(E)	130	#9	17'-7"	
p11(E)	36	#8	33'-4"	
p12(E)	6	#4	19'-4"	
p13(E)	6	#4	22'-1"	
s7(E)	60	#5	16'-7"	
s8(E)	40	#4	8'-2"	
s9(E)	9,800	#4	4'-9"	
t2(E)	136	#9	17'-2"	
t3(E)	97	#7	17'-2"	
u4(E)	78	#6	14'-5"	
u5(E)	168	#6	16'-5"	
u6(E)	12	#6	17'-3"	
v8(E)	260	#9	18'-3"	
v11(E)	172	#5	4'-1"	
v17(E)	130	#9	26'-11"	
v18(E)	130	#9	24'-11"	
w3(E)	108	#6	36'-1"	
Cofferdam Excavation		Cu. Yd.	1,257	
Cofferdam (Type 2) (Location-4)		Each	1	
Concrete Structures		Cu. Yd.	720.7	
Seal Coat Concrete		Cu. Yd.	546.7	
Reinforcement Bars, Epoxy Coated		Pound	135,400	
Furnishing Steel Piles HP14x73		Foot	1,785	
Driving Piles		Foot	1,785	
Test Pile Steel HP14x73		Each	1	
Mechanical Splicers		Each	754	

PILE DATA
Type: Steel HP14x73
Nominal Required Bearing: 578 kips
Factored Resistance Available: 320 kips
Est. Length: 35'
No. Production Piles: 51
No. Test Piles: 1

Notes:
(1) For details of piles, see sheet 47 of 53.
(2) Alternate s9(E) bars end for end as shown in Section B-B on sheet 44 of 53.
(3) Provide 4 - ¾" ϕ x 4" granular or solid flux filled headed studs conforming to Article 1006.32 of the Standard Specifications automatically end welded to piling, each flange, each pile. Cost included with Furnishing Steel Piles HP14x73.
(4) Bars indicated thus 24 x 2-#6 etc. indicates 24 lines of bars with 2 lengths per line.

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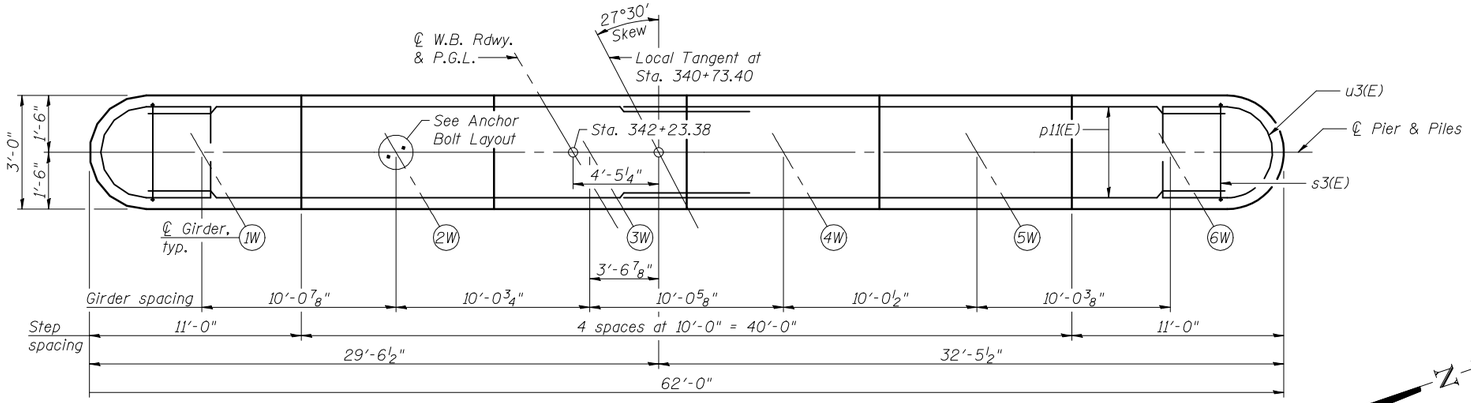
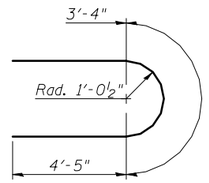
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 3 DETAILS
STRUCTURE NO. 039-0076 (W.B.)
SHEET NO. 45 OF 53 SHEETS

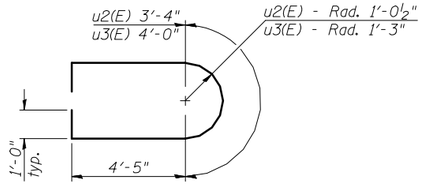
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	157
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			



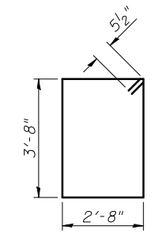
TOP PLAN



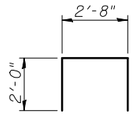
BAR u1(E)



BARS u2(E) & u3(E)



BAR s3(E)



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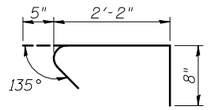
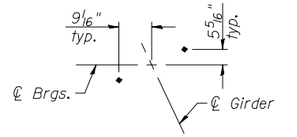
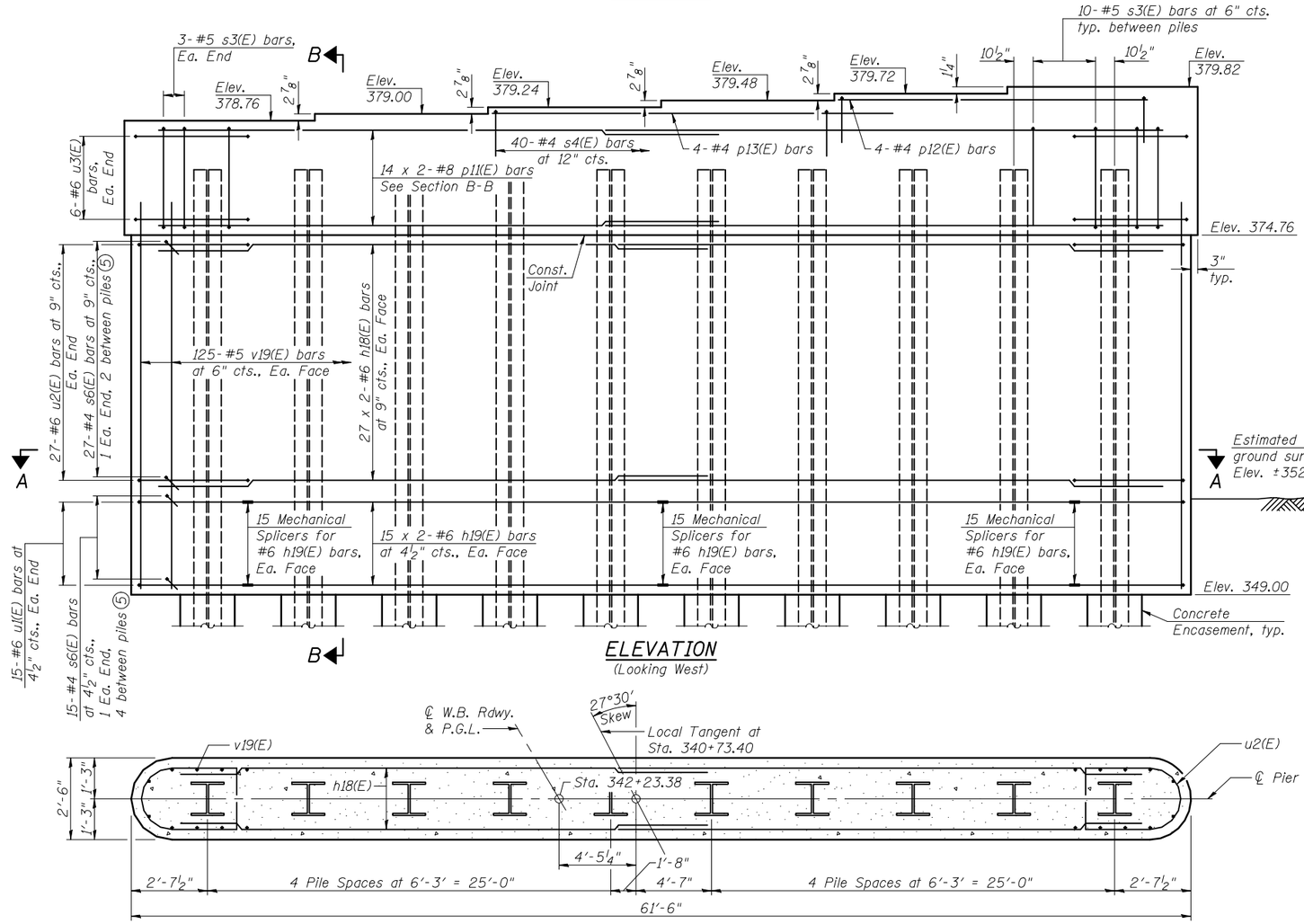


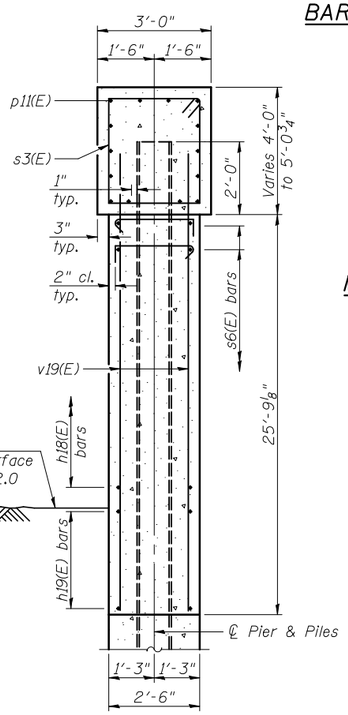
BAR s6(E)



ANCHOR BOLT LAYOUT ④



ELEVATION
(Looking West)



SECTION B-B

SECTION A-A

MIN. BAR LAP

#8 bar = 7'-8"
#6 bar = 4'-5"

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h18(E)	108	#6	31'-9"	——
h19(E)	60	#6	25'-1"	——
p11(E)	28	#8	33'-4"	——
p12(E)	4	#4	19'-4"	——
p13(E)	4	#4	22'-1"	——
s3(E)	96	#5	13'-7"	⌐
s4(E)	40	#4	6'-8"	⊓
s5(E)	-	-	-	
s6(E)	1,110	#4	3'-3"	⊐
u1(E)	30	#6	12'-2"	⊃
u2(E)	54	#6	14'-2"	⊃
u3(E)	12	#6	14'-10"	⊃
v19(E)	250	#5	27'-6"	——
Structure Excavation		Cu. Yd.	48	
Concrete Structures		Cu. Yd.	176.6	
Concrete Encasement		Cu. Yd.	5.5	
Reinforcement Bars, Epoxy Coated		Pound	23,100	
Furnishing Steel Piles HP14x73		Foot	819	
Driving Piles		Foot	819	
Test Pile Steel HP14x73		Each	1	
Mechanical Splicers		Each	90	

PILE DATA

Type: Steel HP14x73
Nominal Required Bearing: 578 kips
Factored Resistance Available: 320 kips
Est. Length: 91'
No. Production Piles: 9
No. Test Piles: 1

Notes:
① Pour steps monolithically with cap.
② For details of Mechanical Splicers, see sheet 48 of 53.
③ For details of piles and Concrete Encasement, see sheet 47 of 53.
④ Space reinforcement in cap to miss anchor bolts.
⑤ Alternate s6(E) bars end for end as shown in Section B-B.
⑥ Bars indicated thus 14 x 2-#8 etc. indicates 14 lines of bars with 2 lengths per line.

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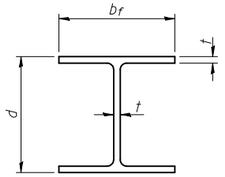
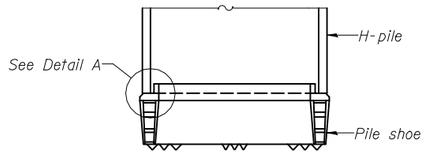
PIER 4 DETAILS
STRUCTURE NO. 039-0076 (W.B.)
SHEET NO. 46 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	158
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

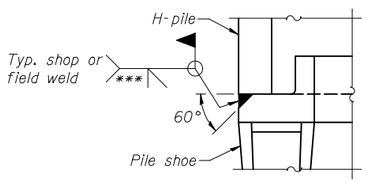


STEEL PILE TABLE

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"

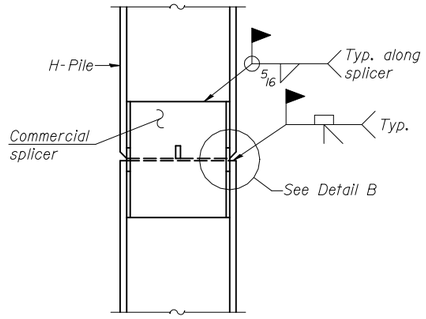


ELEVATION



DETAIL A

H-PILE SHOE ATTACHMENT



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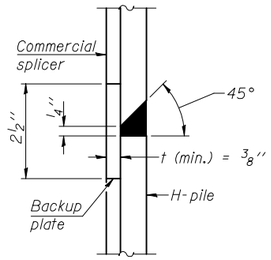
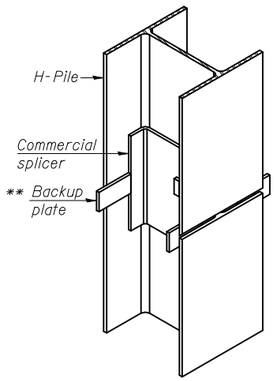
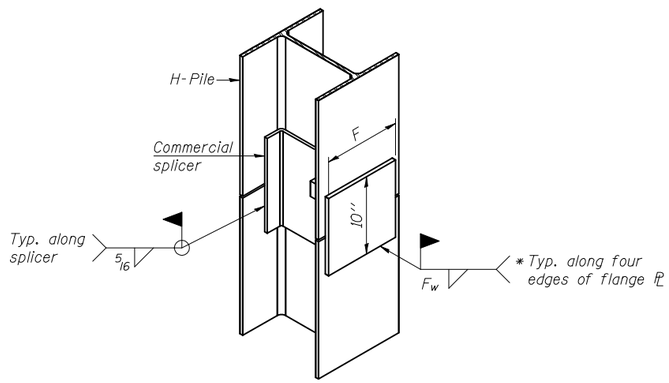


DETAIL "B"



ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE



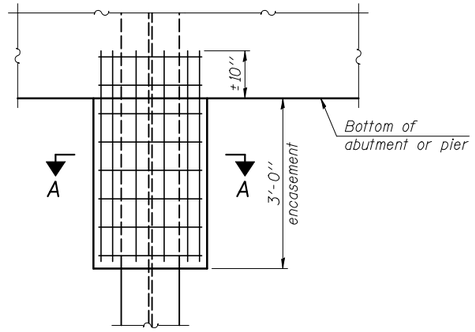
ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE ALTERNATE

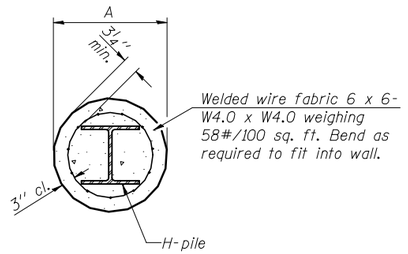
* Interrupt welds 1/4" from end of web and/or each flange.

** Remove portions of backup plates that extend outside the flanges.

*** Weld size per pile shoe manufacturer (5/16" min.).



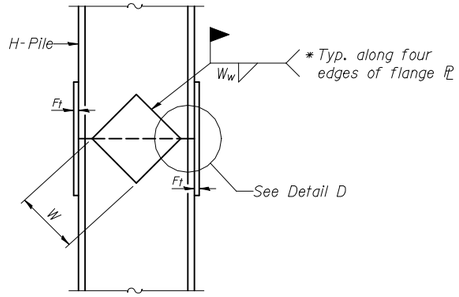
ELEVATION



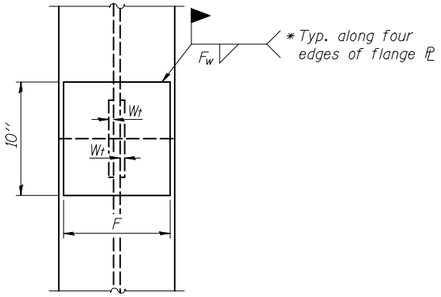
Note:
Forms for encasement may be omitted when soil conditions permit.

SECTION A-A

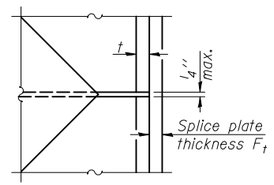
PILE ENCASEMENT



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

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

F-HP 7-1-10

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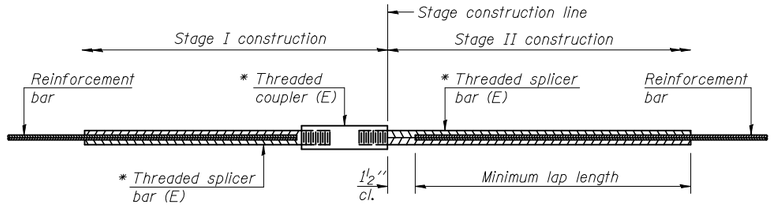
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HP PILE DETAILS
STRUCTURE NO. 039-0076 (W.B.)
SHEET NO. 47 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	159
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			



STANDARD BAR SPLICER ASSEMBLY

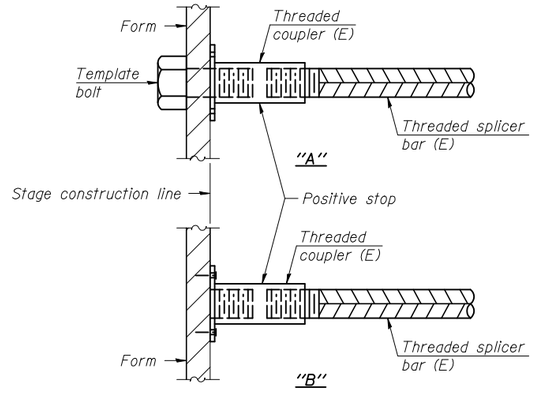
Minimum Lap Lengths					
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-3"
5	1'-9"	2'-5"	2'-7"	2'-11"	2'-10"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-4"
7	2'-9"	3'-10"	4'-2"	4'-8"	4'-6"
8	3'-8"	5'-1"	5'-5"	6'-2"	5'-10"
9	4'-7"	6'-5"	6'-10"	7'-9"	7'-5"

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, Top bar lap, Class B

Threaded splicer bar length = min. lap length + 1½" + thread length

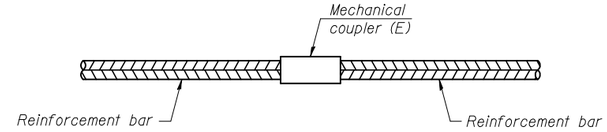
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

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



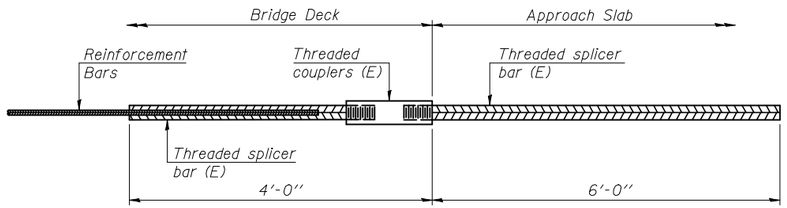
INSTALLATION AND SETTING METHODS

"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.



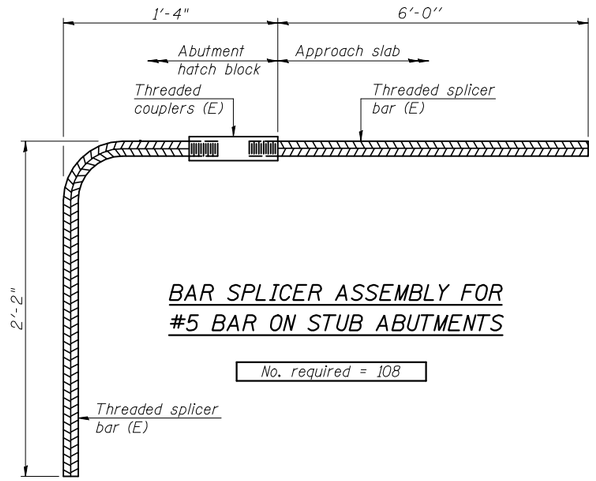
STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required
Pier 1	#6	90
Pier 2	#6	234
Pier 2	#9	520
Pier 3	#6	234
Pier 3	#9	520
Pier 4	#6	90



BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

No. required =



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required = 108

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 7-1-10

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 039-0076 (W.B.)
SHEET NO. 48 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	160
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		

ILLINOIS DEPARTMENT OF TRANSPORTATION
District Nine Materials

Bridge Foundation Boring Log

Sheet 1 of 3

ILL 13 Over Big Muddy River

Route: ILL 13 Structure Number: 039-0013 and 039-0049 Date: 10/20/2004

Section Bored By: Bryan Keller

County: Jackson Location: E. Edge of Murphysboro Checked By: Rob Graeff

Boring No 1-S
Station 338+68
Offset 28' LT WB CL
Ground Surface 383.2 Ft

Surf Wat Elev: 339.7
Ground Water Elevation
when Drilling 343.7
At Completion 351.4
At: 24 Hrs: 355.0

DEPTH	BLOW	Qu tsf	W%	DEPTH	BLOW	Qu tsf	W%
Very stiff, damp, brown, Silty Clay A-6				Stiff, very moist, brown mottled grey, Silty Clay to Clay A7-6	3	1.9B	23
					5		
	5						
	9	2.9B	13		1		
	10				2	1.3B	26
378.7				353.7	3		
Stiff, moist, brown, Silty Clay Loam A-6	5.0 2			Stiff, very moist, brown, Clay to Silty Clay A7-6	30.0 1		
	5	1.7B	16		2	1.2B	23
	7				3		
				351.2			
	1			Very stiff, very moist, brown mottled, grey, Clay to Silty Clay A7-6	1		
	5	1.2S	15		3	2.4B	22
	7				4		
				348.7			
	10.0 1			Medium, very moist, brown mottled grey, Clay to Silty Clay A7-6	35.0 WH		
	5	1.2S	19		3	0.9B	25
	5				3		
371.2				346.2			
Very stiff, moist, brown, Silty Clay Loam A-6	1			Stiff, very moist, brown mottled grey, Clay to Silty Clay A7-6	1		
	5	2.4S	17		2	1.7B	25
	6				3		
368.7				343.7			
Very stiff, moist, brown mottled grey, Silty Clay A-6	15.0 1			Stiff, very moist, grey, Silty Clay Loam A-6	40.0 1		
	4	2.6B	23		1	1.5P	31
	5				1		
366.2				338.7			
Stiff, very moist, brown mottled grey, Silty Clay A-6	1						
	3	1.2B	25				
	3						
363.7							
Stiff, moist, grey, Silt Loam A-4	20.0 1			Stiff, wet, grey, Clay A7-6	45.0 WH		
	5	1.2B	21		1	1.1B	55
	4				WH		
361.2							
Stiff, moist to very moist, grey, Silty Clay A-6	1						
	2	1.6B	22				
	4						
358.7				333.7			
	25.0 1				50.0 WH		

N-Std Pentr Test: 2" OD Sampler,
140# Hammer, 30" Fall (Type Fail, B-Bulge S-Shear E-Estimated P-Penetrometer)

Route: ILL 13
Section:
County: Jackson

Sheet 2 of 3
Date: 10/20/2004

Boring No: 1-S
Station: 338+68
Offset: 28' LT WB CL
Ground Surface: 383.2 Ft

DEPTH	BLOW	Qu tsf	W%		DEPTH	BLOW	Qu tsf	W%
Very stiff, moist, brown, Clay A7-6 with Sand Layers	1	2.6B	19	Medium, wet. brown. Clay A7-6		1	0.9B	52
	2					3		
328.7				303.7				
Stiff, very moist, grey, Clay A7-6 with Sand and Silt Loam Layers	55.0 1			Medium, very moist, brown, Clay A7-6 with Sand Layers	80.0	WH		
	3	1.8S	26			3	0.6B	25
	9					5		
	60.0 1				85.0			
	2	1.1B	35					
	6							
318.7				293.7				
Stiff, very moist, brown, Clay A7-6	65.0 2			Medium, wet, grey, fine to medium Sand 93% Sand 3% Silt 4% Clay	90.0	10		
	4	1.8S	32			13		21
	4					16		
313.7				288.7				
Very stiff, very moist, brown, Clay A7-6	70.0 3			Hard, dry, grey, Clay Shale over Coal	95.0	100/11"		
	6	2.1B	31	287.7				
	7			Bottom of hole = 95.5 ft Free water observed at 39.5 ft. Elevation referenced to Bk .E. Abut Sta 338+89 Elevation = 383.47 ft. To convert "N" values to "N60" valuesmultiply by 1.25.				
308.7								
	75.0 WH				100.0			

N-Std Pentr Test: 2" OD Sampler,
[illegible] Hammer, 30" Fall (Type Fail, B-Bulge S-Shear E-Estimated P-Penetrometer)

Note:
(1) Only 2 Boring 1-S sheets.

ILLINOIS DEPARTMENT OF TRANSPORTATION
District Nine Materials

Bridge Foundation Boring Log
Sheet 1 of 2

ILL 13 WB Over Big Muddy River

Route: ILL 13 Structure Number: 039-0013 and 039-0049 Date: 10/7/2004
Section Bored By: Bryan Keller
County: Jackson Location: E. Edge of Murphysboro Checked By: Rob Graeff

Boring No 2-S
Station 339+62
Offset 36' RT CL
Ground Surface 354.4 Ft

Surf Wat Elev: 338.5
Ground Water Elevation
when Drilling 322.4
At Completion
At: 24 Hrs: 349.6

DEPTH	BLOW	Qu tsf	W%
Very stiff, moist, brown, Silty Clay A-6			
	2		
	5	2.6B	17
349.9	8		
Stiff, moist, brown, Silty Clay A-6 5.0	2		
	4	1.7S	20
347.4	5		
Medium, very moist, grey, Clay A7-6	1		
	2	0.7B	39
344.9	2		
Soft to medium, very moist, grey, Clay to Silty Clay A7-6 10.0	WH		
	1	0.5B	31
342.4	1		
Very soft, very moist, grey, Clay to Silty Clay A7-6	WH		
	WH	0.2B	32
339.9	WH		
Soft, very moist, grey, Clay to Silty Clay A7-6 15.0	WH		
	WH	0.3B	32
337.4	WH		
Soft to medium, very moist, grey, Clay A7-6	WR		
	WH	0.5B	29
334.9	WH		
Soft, very moist, grey, Clay A7-6 20.0	WH		
	WH	0.4B	29
	WH		
	WH		
	WH	0.4B	29
25.0	WH		
327.4	WH	0.4B	27
	WH		
Medium, very moist, grey, Clay A7-6	WR		
	WH	0.7B	24
324.9	WH		
Medium, very moist, brown, Clay A7-6 30.0	1		
	2	0.7B	28
322.4	2		
Soft, wet, brown, Clay A7-6 with Sand layers	WH		
	1	0.4B	29
319.9	1		
Medium, wet, brown, Clay to Silty Clay A7-6 35.0	WH		
	3	0.8B	26
317.4	5		
Stiff, very moist, brown, Clay A7-6 with some Gravel	1		
	2	1.3S	34
314.9	2		
Dense, wet, grey, Sandy Gravel 33% Sand 17% Silt 6% Clay 44% Gravel 40.0	1		
	20		14
309.9	21		
Stiff, wet, brown, Clay A7-6 45.0	WH		
	1	1.1S	43
	2		
304.9			
50.0	1		

N-Std Pentr Test: 2" OD Sampler,

Sheet 2 of 2

Route: ILL 13
Section:
County: Jackson
Date: 10/7/2004

Boring No: 2-S
Station: 339+62
Offset: 36' RT CL
Ground Surface: 354.4 Ft

DEPTH	BLOW	Qu tsf	W%
Stiff, very moist, grey, Clay A7-6 with Sand layers	1	1.3B	28
	2		
299.9			
Very loose, wet, grey, very fine Silty Sand 92% Sand 2% Silt 6% Clay 55.0	WR		
	WR		25
	WR		
294.9			
Medium, wet, grey, very fine Silty Sand with some Gravel and Clay layers 79% Sand 4% Silt 8% Clay 9% Gravel 60.0	4		
	5		21
	7		
289.9			
Hard, dry, black Clay Shale 289.4	65.0 100/8"		
Bottom of hole = 65.0 ft.			
Free water observed at 32.0 ft.			
Elevation referenced to Bk East Abutment Sta 338+65 Elevation = 383.64 ft.			
To convert "N" values to "N60" values multiply by 1.25.	70.0		
	75.0		

DEPTH	BLOW	Qu tsf	W%
80.0			
85.0			
90.0			
95.0			
100.0			

N-Std Pentr Test: 2" OD Sampler,

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS
STRUCTURE NO. 039-0076 (W.B.)
SHEET NO. 50 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	162
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

ILLINOIS DEPARTMENT OF TRANSPORTATION
District Nine Materials

Bridge Foundation Boring Log
Sheet 1 of 2

ILL 13 WB Over Big Muddy River

Route: ILL 13 Structure Number: 039-0013 and 039-0049 Date: 9/29/2004
Section Bored By: Bryan Keller
County: Jackson Location: E. Edge of Murphysboro Checked By: Rob Graeff

Boring No 4-S
Station 341+61
Offset 31' RT CL
Ground Surface 351.7 Ft

Surf Wat Elev: 339.7
Ground Water Elevation
when Drilling 342.2
At Completion
At: 96 Hrs: 344.7

	DEPTH	BLOW	Qu tsf	W%
Stiff, very moist, brown, Silty Clay A7-6				
		1		
		2	1.2B	28
		3		
	347.2			
Soft, very moist, brown mottled grey, Silty Clay A-6	5.0	1		
		1	0.4B	28
		2		
	344.7			
Very soft, wet, grey mottled brown, Silty Clay A-6		WH		
		WH	0.2B	31
		WH		
	342.2			
Soft, wet, grey, Clay to Silty Clay A7-6	10.0	WH		
		1	0.3B	31
		WH		
	339.7			
Soft to medium, wet, brown mottled grey, Silty Clay to Clay A7-6		WH		
		WH	0.5B	29
		WH		
	337.2			
Soft, wet, brown mottled grey, Silty Clay to Clay A7-6	15.0	WH		
		WH	0.4B	28
		WH		
		WH		
		WH	0.4B	28
		WH		
	20.0	WH		
		WH	0.4B	28
		WH		
	329.7			
Medium, very moist, grey, Clay to Silty Clay A7-6		WH		
		WH	0.7B	26
		WH		
	327.2			
	25.0	WH		

	DEPTH	BLOW	Qu tsf	W%
Soft to medium, very moist, grey, Clay A7-6		WH	0.5B	28
		WH		
		WH		
		WH	0.5B	26
		WH		
	322.2			
Medium, very moist, brown mottled grey, Clay to Silty Clay A7-6	30.0	WH		
		WH	0.6B	26
		WH		
	319.7			
Stiff, very moist, grey, Clay A7-6		1		
		2	1.2B	24
		2		
	317.2			
Medium, very moist, grey, Clay A7-6	35.0	WH		
		WH	0.7B	24
		WH		
		WH		
	312.2			
Stiff, very moist, brown, Clay A7-6	40.0	WH		
		1	1.2B	27
		1		
	307.2			
Stiff, wet, brown, Clay A7-6 with fine Sand layers	45.0	2		
		2	1.2B	43
		WH		
	302.2			
	50.0	1		

N-Std Pentr Test: 2" OD Sampler,
140# Hammer, 30" Fall (Type Fail, B-Bulge S-Shear E-Estimated P-Penetrometer)

Sheet 2 of 2

Route: ILL 13
Section:
County: Jackson
Date: 9/29/2004

Boring No: 4-S
Station: 341+61
Offset: 31' RT CL
Ground Surface: 351.7 Ft

	DEPTH	BLOW	Qu tsf	W%
Medium, wet, grey, Silty Clay A-6		4	0.7S	27
		4		
	297.2			
Loose to medium, wet, grey, fine Silty Sand with some Gravel 81% Sand 7% Silt 4% Clay 8% Gravel	55.0	1		
		5		21
		5		
	292.2			
Medium, wet, grey, fine Silty Sand with some Gravel 69% Sand 9% Silt 7% Clay 15% Gravel	60.0	3		
		6		21
		10		
	288.7			
Hard, dry, black Coal	65.0	100/3"		
Hard, moist, black, Coal with Clay Shale Layers	70.0	100/5"		
Hard, dry, grey, Clay Shale	276.7	75.0	100/3"	
		100.0		

Botom of hole = 75.0ft.

Free water observed at 9.5 ft.

Elevation referenced to BK W. Abut Elevation = 383.64 ft.

To convert "N" values to "N60" values multiply by 1.25.

DEPTH
80.0
85.0
90.0
95.0
100.0

N-Std Pentr Test: 2" OD Sampler,
140# Hammer, 30" Fall (Type Fail, B-Bulge S-Shear E-Estimated P-Penetrometer)

ILLINOIS DEPARTMENT OF TRANSPORTATION
District Nine Materials

Bridge Foundation
Boring Log
Sheet 1 of 3

ILL 13 Over Big Muddy River

Route: ILL 13 Structure Number: 039-0013 and 039-0049 Date: 10/8/2004
Section: Bored By: Bryan Keller
County: Jackson Location: E. Edge of Murphysboro Checked By: Rob Graeff

Boring No 6-S
Station 343+17
Offset 22' RT EB CL
Ground Surface 383.0 Ft

Surf Wat Elev: 338.5
Ground Water Elevation
when Drilling 333
At Completion
At: 68 Hrs: 357.5

DEPTH	BLOW	Qu tsf	W%	DEPTH	BLOW	Qu tsf	W%
Very stiff, damp, brown, Silty Clay A-6				Very stiff, moist, brown, Silty Clay A-6	3 4	2.1B	21
	1			356.0			
	4 8	2.5B	11	Soft, very moist, brown, Silty Clay loam A-6	WH 1 2	0.4B	24
				353.5			
5.0	2			Stiff, moist to very moist, grey, Clay A7-6	30.0 WH 2 3	1.1B	21
	4 3	2.1B	15	351.0			
376.0							
Very stiff, moist to very moist, brown, Silty Clay A-6	1 3 3	2.1B	20	Medium, very moist, grey, Clay A7-6	WH 2 2	0.9B	29
373.5							
Stiff, very moist, brown, Silty Clay A7-6	10.0 1 2 2	1.1B	24	35.0	WH 1 2	0.8B	29
371.0				346.0			
Stiff, moist to very moist, brown, Silty Clay to Silty Clay Loam A-6	1 3 4	1.3S	20	Medium, very moist, brown mottled grey, Clay to Silty Clay A7-6	WH 2 3	0.9B	27
				343.5			
15.0	1			Medium, very moist, grey, Clay A7-6	40.0 WH 1	0.7B	26
	2 4	1.3S	23		3		
366.0				338.5			
Medium, very moist, brown, Silty Clay Loam A-6	WH 2 2	0.7S	22				
363.5							
Medium, very moist, brown, Silty Clay to Silty Clay Loam A-6	20.0 WH 1 1	0.6S	25	Stiff, very moist, brown, Clay A7-6	45.0 WH 1 1	1.2S	31
361.0							
Medium, moist to very moist, grey, Clay Loam A-6	WH 3 3	0.9B	20				
358.5				333.5			
25.0	WH			50.0	WH		

N-Std Pentr Test: 2" OD Sampler,
140# Hammer, 30" Fall (Type Fail, B-Bulge S-Shear E-Estimated P-Penetrometer)

Sheet 2 of 3

Route: ILL 13 Date: 10/8/2004
Section:
County: Jackson

Boring No: 6-S
Station: 343+17
Offset: 22' RT EB CL
Ground Surface: 383.0 Ft

DEPTH	BLOW	Qu tsf	W%	DEPTH	BLOW	Qu tsf	W%
Medium, very moist, brown, Clay A7-6	2 1	0.8S	28	Medium, very moist, brown, Clay A7-6 with Sand Layers	4 2	0.9B	32
328.5				303.5			
Stiff, very moist, brown, Clay A7-6	55.0 1 1 1	1.4S	30	Loose to medium, wet, grey, fine Sand with Coal Chips and some Gravel 57% Sand 6% Silt 4% Clay 33% Gravel	80.0 4 5 5		23
323.5							
Soft to medium, very moist, grey, Clay to Silty Clay A7-6 with Sand Layers	60.0 WH 2 2	0.5B	24		85.0		
318.5				293.5			
Stiff, very moist, brown, Clay A7-6 with Clay Loam and Sand Layers	65.0 4 7 4	1.3B	32	Medium, wet, grey, Sandy Gravel 72% Sand; 15% Silt 6% Clay; 7% Gravel	90.0 4 10 15		17
313.5				291.0			
Stiff, very moist, brown, Clay A7-6 with Sand Layers	70.0 WH 3 3	1.1S	35	Hard, dry, black Coal	95.0 100/3"		
308.5				Hard, dry, black Coal	100/5"		
75.0	1			100.0			

N-Std Pentr Test: 2" OD Sampler,
140# Hammer, 30" Fall (Type Fail, B-Bulge S-Shear E-Estimated P-Penetrometer)

Sheet 3 of 3

Route: ILL 13 Date: 10/8/2004
Section:
County: Jackson

Boring No: 6-S
Station: 343+17
Offset: 22' RT EB CL
Ground Surface: 383.0 Ft

DEPTH	BLOW	Qu tsf	W%	DEPTH	BLOW	Qu tsf	W%
Hard, dry, black Clay Shale 280.5	100/3"						
Bottom of hole = 102.5 ft.							
Free water observed at 50.0 ft.							
105.0				130.0			
Elevation referenced to Bk W Abut Str # 039-0013 Sta 343+06 Elevation = 383.47							
To convert "N" values to "N60" values multiply by 1.25.							
110.0				135.0			
115.0				140.0			
120.0				145.0			
125.0				150.0			

N-Std Pentr Test: 2" OD Sampler,
140# Hammer, 30" Fall (Type Fail, B-Bulge S-Shear E-Estimated P-Penetrometer)

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tel 314.588.9391
fax 314.588.9936
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USER NAME =	DESIGNED -	REVISED -
	CHECKED -	REVISED -
PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE =	CHECKED -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS
STRUCTURE NO. 039-0076 (W.B.)
SHEET NO. 52 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	164
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

Illinois Department of Transportation

Division of Highways
SCI Engineering

SOIL BORING LOG

Date 07/14/09

ROUTE FAP 331 DESCRIPTION Structure Replacement crossing Big Muddy River LOGGED BY SCI

SECTION 12-2B-2 LOCATION East of Murphysboro; SW 1/4, SEC. 3, TWP. 9S, RNG. 2W

COUNTY Jackson DRILLING METHOD CME 750 w/HSA HAMMER TYPE Automatic

STRUCT. NO. 039-0049
Station 340+71.00

BORING NO. B-103
Station 343+09
Offset 14 ft Rt WB
Ground Surface Elev. 374.0 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 329.0 ft ▼
Upon Completion - ft
After - Hrs. - ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
ASPHALT - 4 inches	373.7			
CONCRETE - 9 inches	372.9			
CRUSHED ROCK	372.5			
FILL: Brown, silty clay, trace to some sand (A-6)				
Classification of materials based on observation of augered cuttings.	369.0	-5		
FILL: Gray, silty clay (A-7)				
Becomes brown Temporary benchmark - brass disk at southeast corner of east abutment. USGS Topographic Map - El. 384		-10		
FILL: Grayish brown, silty clay (A-6)	361.0	-15		
FILL: Gray, silty clay, trace to some sand (A-7)	358.5	-20		
FILL: Gray, silty clay, trace to some sand (A-7) *(continued)*	352.0			
CLAY: Brown and gray (A-7) ST pushed 22' to 24'. Recovery 16". UU - 2.3 tsf; DD - 97.4 pcf; MC - 24%	348.5	-25		
SILTY CLAY: Brown and gray (A-7) Triaxial shear test performed on ST pushed from 27' to 29'; LL-47, PL-17, PI-30	344.0	-30		
CLAY: Gray, some sand (A-7)	340.0	-35		
SILTY CLAY: Brown and gray (A-6) ST pushed 34' to 36'. Recovery 19". UU - 1.3 tsf; DD - 96.2 pcf; MC - 27%	334.0	-40		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation

Division of Highways
SCI Engineering

SOIL BORING LOG

Date 07/14/09

ROUTE FAP 331 DESCRIPTION Structure Replacement crossing Big Muddy River LOGGED BY SCI

SECTION 12-2B-2 LOCATION East of Murphysboro; SW 1/4, SEC. 3, TWP. 9S, RNG. 2W

COUNTY Jackson DRILLING METHOD CME 750 w/HSA HAMMER TYPE Automatic

STRUCT. NO. 039-0049
Station 340+71.00

BORING NO. B-103
Station 343+09
Offset 14 ft Rt WB
Ground Surface Elev. 374.0 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 329.0 ft ▼
Upon Completion - ft
After - Hrs. - ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SILTY CLAY: Brown, trace to some sand (A-7)				
	329.0 ▼	-45		
SAND: Brown and gray, fine to coarse (A-1)	328.5			
CLAY: Gray (A-7) ST pushed 45' to 47'. Recovery 23". UU - 3.1 tsf; DD - 95.6 pcf; MC - 27%	327.5			
SILTY CLAY: Gray (A-6)	327.0			
Boring terminated at 47.0 ft.		-50		
		-55		
		-60		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

BATES ASSOCIATES
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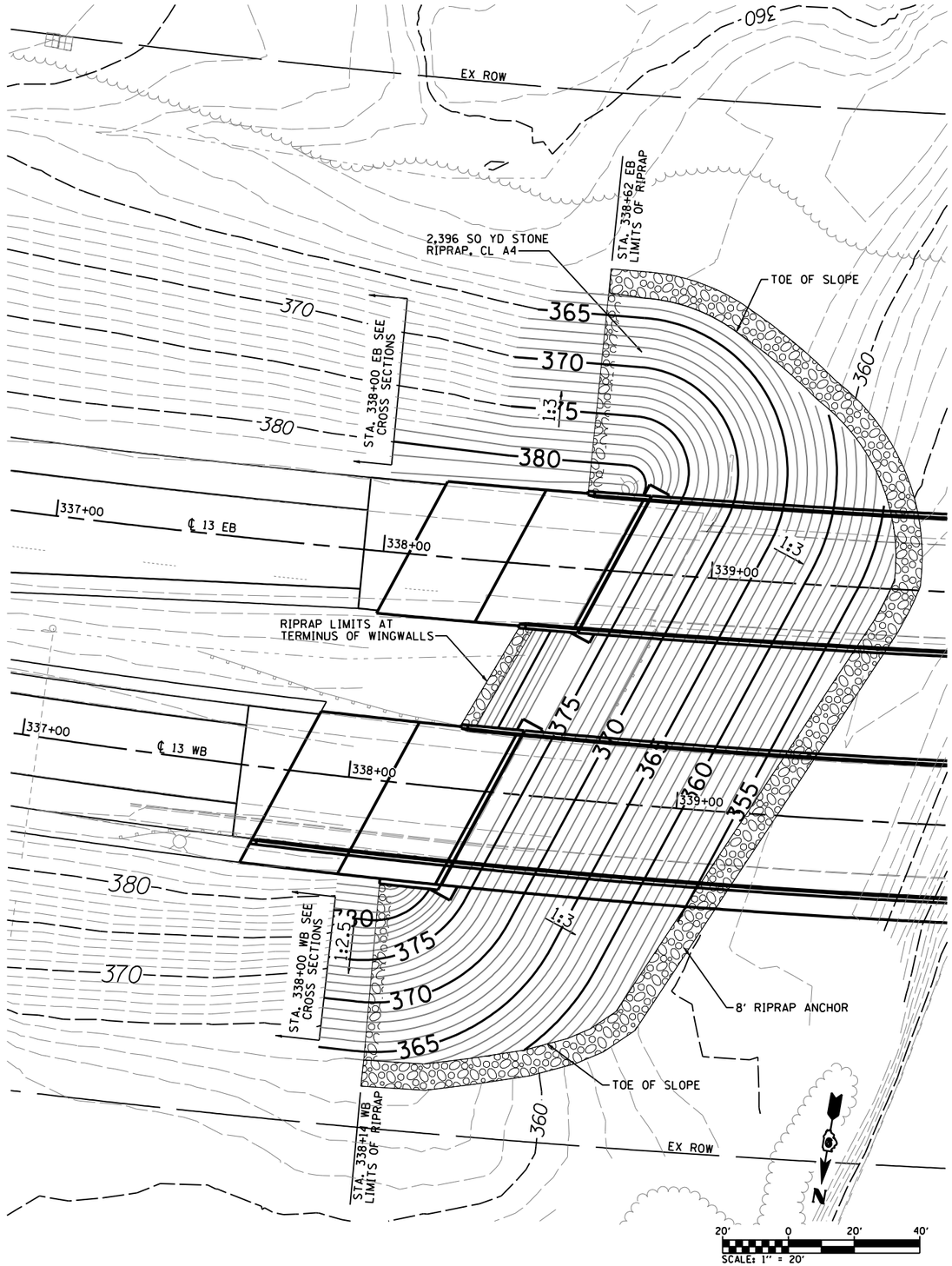
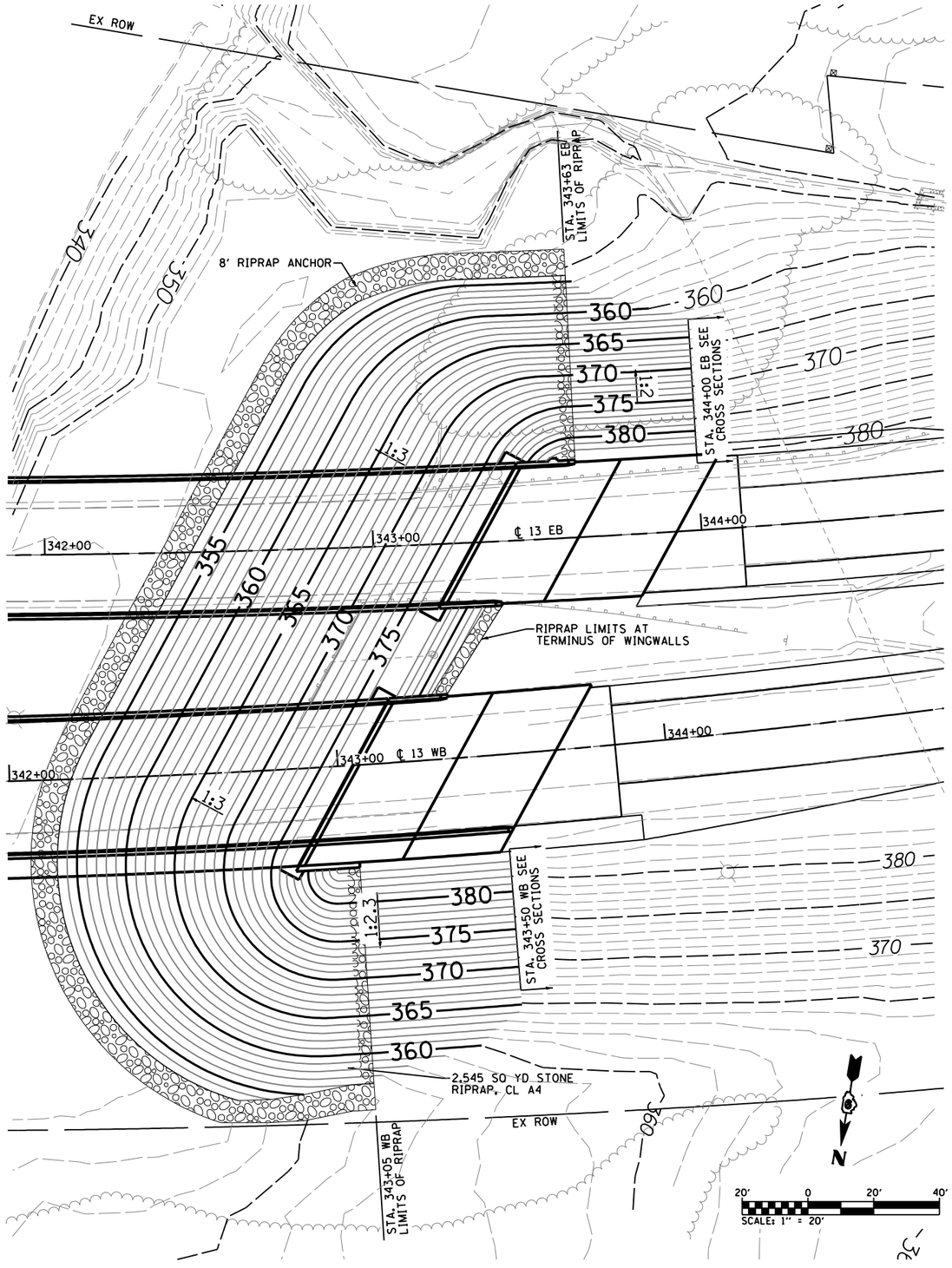
	CHECKED -	REVISED -	
PLOT SCALE =	DRAWN -	REVISED -	
PLOT DATE =	CHECKED -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS
STRUCTURE NO. 039-0076 (W.B.)
SHEET NO. 53 OF 53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	165
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		





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	PLOT DATE = 1/25/2012	DATE -	REVISED -

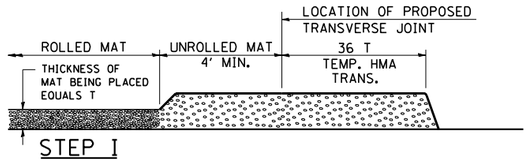
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GRADING PLAN
IL RTE 13 OVER BIG MUDDY RIVER

SCALE: 1"=20' | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

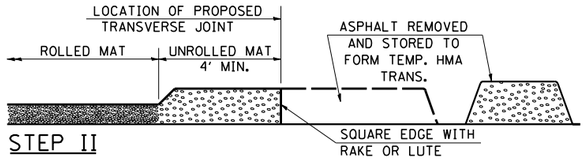
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)-B-1	JACKSON	200	166
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		

TEMPORARY HOT-MIX ASPHALT TRANSITIONS



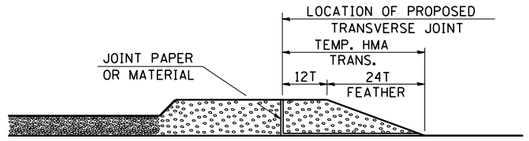
STEP I

1. PLACE HOT-MIX ASPHALT MAT, LENGTH 36 TIMES THE THICKNESS OF THE MAT BEING PLACED PAST THE PROPOSED TRANSVERSE JOINT LOCATION USING NORMAL OPERATING PROCEDURES.
2. EXTREME CARE SHOULD BE TAKEN TO MAINTAIN ENOUGH MATERIAL IN FRONT OF THE SCREED TO MAINTAIN REQUIRED PAVING DEPTH.



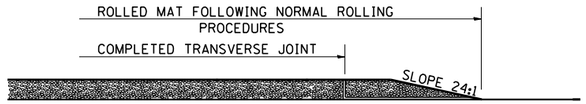
STEP II

1. MOVE THE PAVER OUT OF THE WAY AND REMOVE THE ASPHALT FROM THE AREA OF THE PROPOSED TEMPORARY HOT-MIX ASPHALT TRANSITION.
2. SQUARE UP THE END OF THE MAT WITH A RAKE OR LUTE.
3. NOTE THAT THE MAT WITHIN 4' OF THE END OF JOINT IS NOT TO BE ROLLED AT THIS TIME.



STEP III

1. JOINT PAPER OR OTHER PRESELECTED JOINT MATERIAL IS THEN PLACED IN THE CLEARED AREA AND THE EXCESS ASPHALT USED TO HAND FORM A TRANSITION TO THE DIMENSIONS SHOWN ABOVE.
2. NOTE THAT IN CONSTRUCTING THE TRANSITION, THE MAT DEPTH IS CONTINUED AS PART OF THE TRANSITION BEFORE FORMING THE FEATHER.



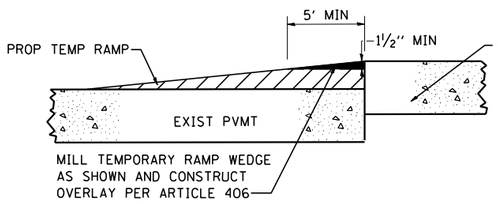
STEP IV

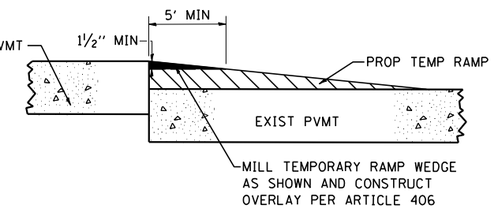
1. COMPLETE TEMPORARY TRANSITION BY ROLLING.
2. TO RESUME PAVING, AT THE JOINT, REMOVE TEMPORARY TRANSITION AND DISPOSE OF THE MATERIAL ACCORDING TO ART. 202.03 OF THE STD. SPECS. (COST INCLUDED IN THE CONTRACT).
3. CONSTRUCTING THE TEMPORARY TRANSITIONS WILL NOT BE PAID FOR SEPARATELY IN ACCORDANCE WITH ARTICLE 406.14 OF THE STANDARD SPECIFICATIONS.

STD. 9-26

REVISIONS	
REDRAWN	2-15-89
REVISED	8-16-94
REVISED	01-09-07
REVISED	

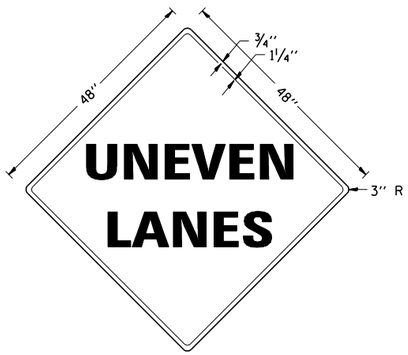
TEMPORARY RAMP REMOVAL AT PROPOSED STRUCTURES

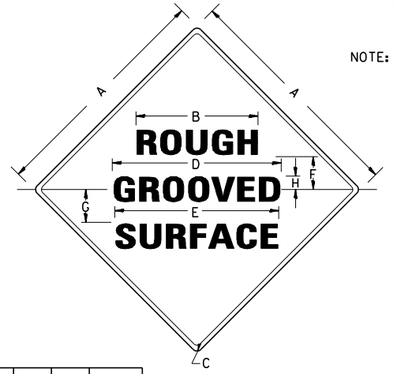




UNEVEN LANES / ROUGH GROOVED SURFACE SIGNS

W8-11 (48" x 48") / W8-I106 (48" x 48")





SIGN SIZE	SERIES LINES 1	2	3	MARGIN	BORDER	BLANK STD.
48X48	7C	7C	7C	0.8	1.2	B4-48D

ALL DIMENSIONS IN INCHES

COLORS:
LEGEND AND BORDER - BLACK NON-REFLECTORIZED
BACKGROUND - ORANGE REFLECTORIZED

NOTE: PRIOR TO ALLOWING TRAFFIC ON ANY PORTION OF THE ROADWAY THAT HAS BEEN COLDMILLED OR BEFORE RESURFACING OPERATIONS BEGIN, THE CONTRACTOR SHALL HAVE ERECTED "UNEVEN PAVEMENT" / "ROUGH GROOVED SURFACE" SIGNS THAT CONFORM TO THE ABOVE DETAILS. A MINIMUM OF ONE SIGN AT EACH END OF THE IMPROVEMENT WILL BE REQUIRED. THE CONTRACTOR SHALL MAINTAIN THE "UNEVEN PAVEMENT"/ "ROUGH GROOVED PAVEMENT" SIGNS UNTIL THE RESURFACING OPERATIONS ARE COMPLETED.

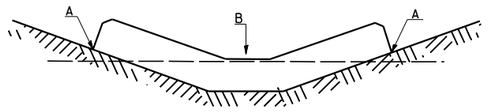
IF AT ANY TIME THE SIGNS ARE IN PLACE BUT NOT APPLICABLE, THEY SHALL BE TURNED FROM THE VIEW OF MOTORISTS OR COVERED AS DIRECTED BY THE ENGINEER.

THE COST OF FURNISHING, ERECTING, MAINTAINING, AND REMOVING THE REQUIRED SIGNS SHALL BE INCLUDED IN THE CONTRACT.

SIGN SIZE	DIMENSIONS A	B	C	D	E	F	G	H
48X48	48.0	24.1	3.0	34.0	33.0	6.0	13.0	3.5

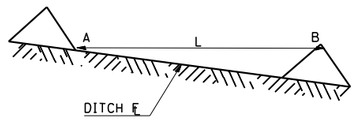
TEMPORARY DITCH CHECK DETAIL

PLACEMENT OF TEMPORARY DITCH CHECK IN DRAINAGE WAY



POINTS A SHOULD BE HIGHER THAN POINT B

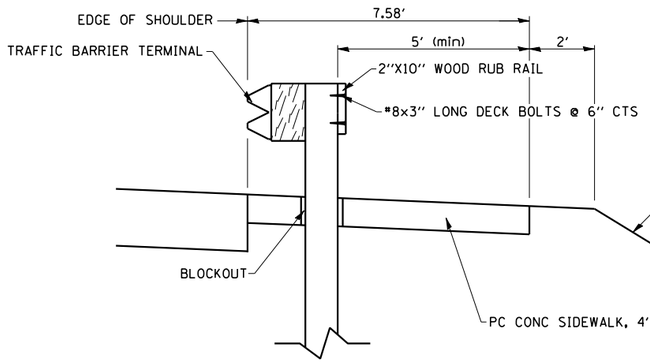
SPACING BETWEEN TEMPORARY DITCH CHECKS



L = THE DISTANCE SUCH THAT POINTS A AND B ARE OF EQUAL ELEVATION

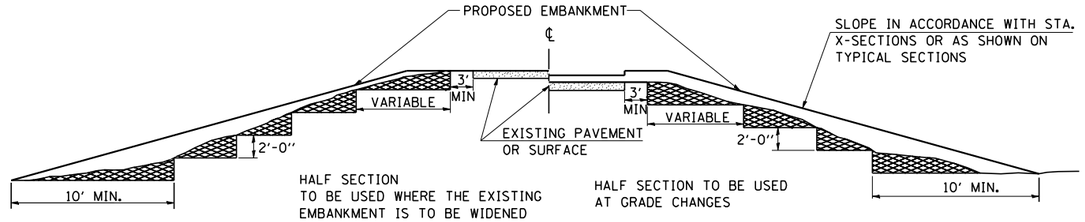
B = THE LOW POINT IN CENTER OF CHECK

TRAFFIC BARRIER TERMINAL WITH RUB RAIL



NOTE: CONSTRUCT PCC SIDEWALK, 4" PRIOR TO INSTALLATION OF THE STEEL PLATE BEAM GUARDRAIL. INSTALL BLOCKOUT AT ALL PROPOSED POST LOCATIONS. BACKFILL WITH GROUT TO PROPOSED GROUNDLINE.

TYPICAL CROSS SECTION SHOWING STEP CONSTRUCTION ON EXISTING FILL



HALF SECTION TO BE USED WHERE THE EXISTING EMBANKMENT IS TO BE WIDENED

HALF SECTION TO BE USED AT GRADE CHANGES

MATERIAL TO BE REMOVED AND REPLACED IN THE EMBANKMENT IN ACCORDANCE WITH ART. 205.04 OF THE STANDARD SPECIFICATION. COST TO BE INCLUDED IN THE VARIOUS ITEMS OF EXCAVATION AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED BECAUSE OF THIS WORK.

ROADWAY CROSS SECTION SHOWN.
BRIDGE CONE, INCLUDING END SLOPE, SIMILAR.

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		DATE -	REVISED -

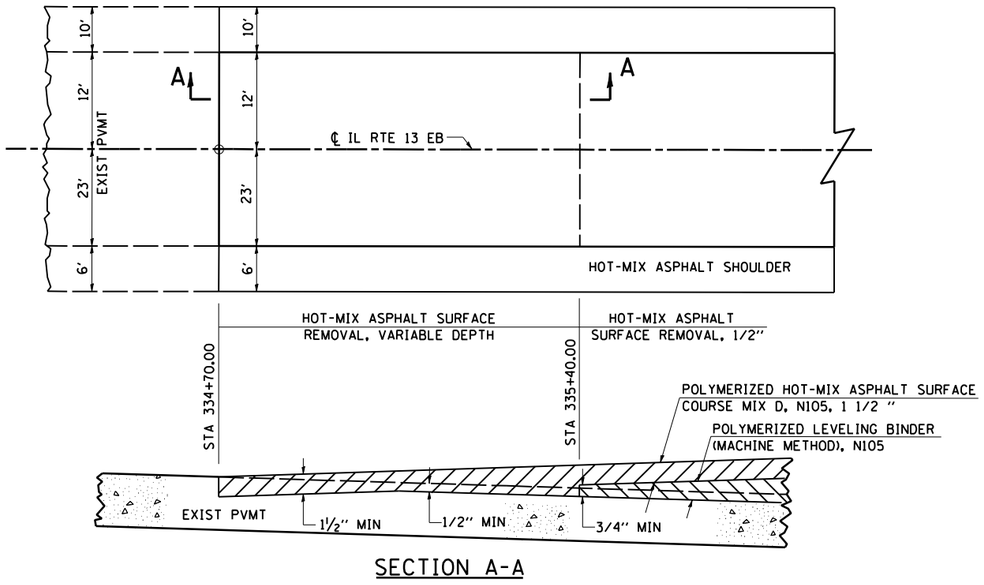
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAIL SHEETS
IL RTE 13 OVER BIG MUDDY RIVER

SCALE: | SHEET NO. 1 OF 2 SHEETS | STA. | TO STA.

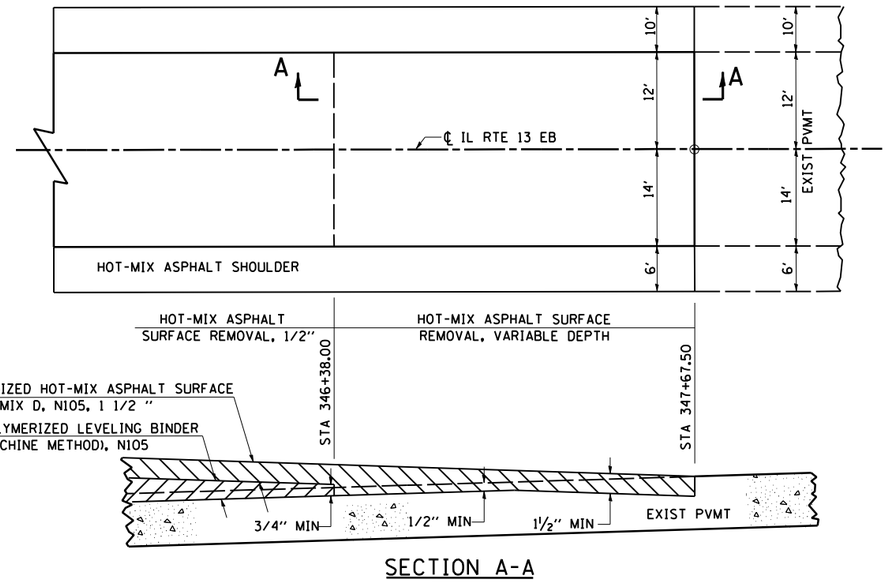
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)-B-1	JACKSON	200	167
		CONTRACT NO. 78056		
		ILLINOIS FED. AID PROJECT		

EAST PAVEMENT TRANSITION
IL RTE 13 EB



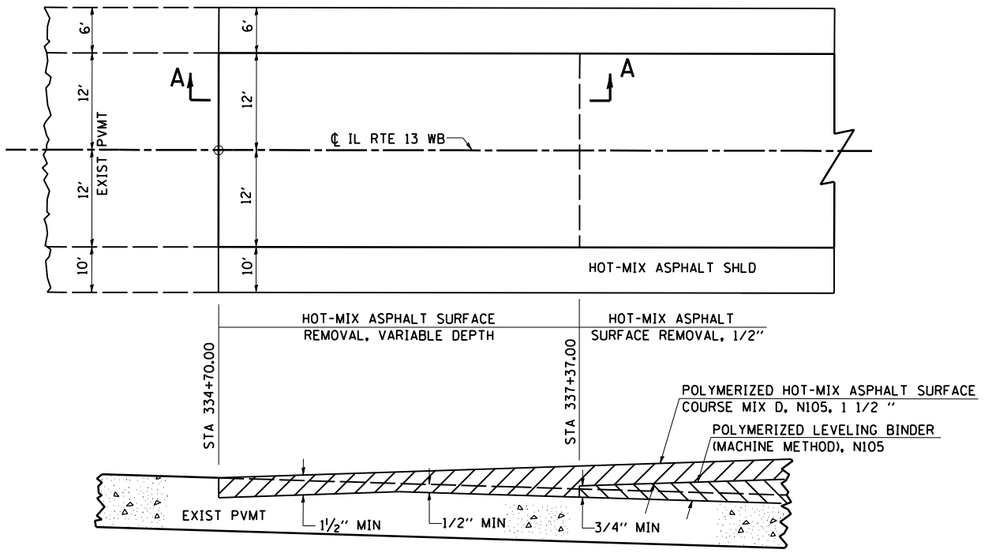
SECTION A-A

WEST PAVEMENT TRANSITION
IL RTE 13 EB



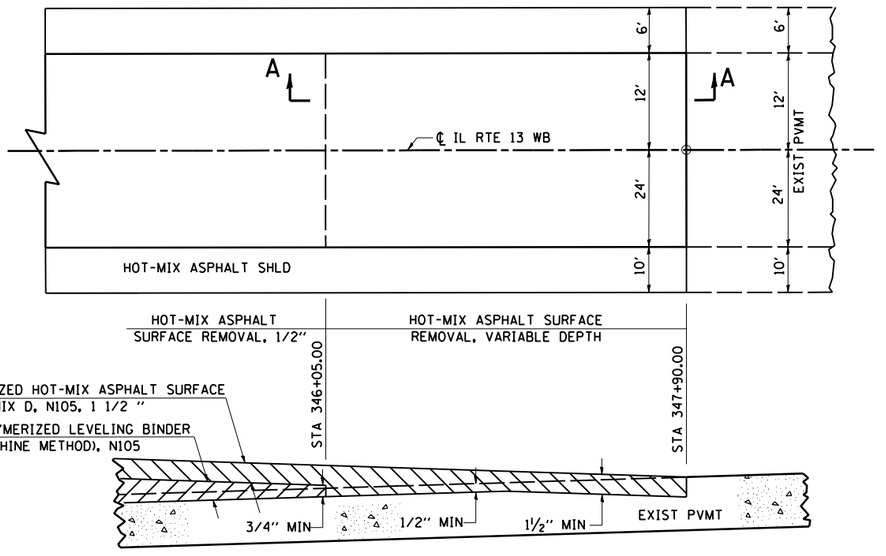
SECTION A-A

EAST PAVEMENT TRANSITION
IL RTE 13 WB



SECTION A-A

WEST PAVEMENT TRANSITION
IL RTE 13 WB



SECTION A-A

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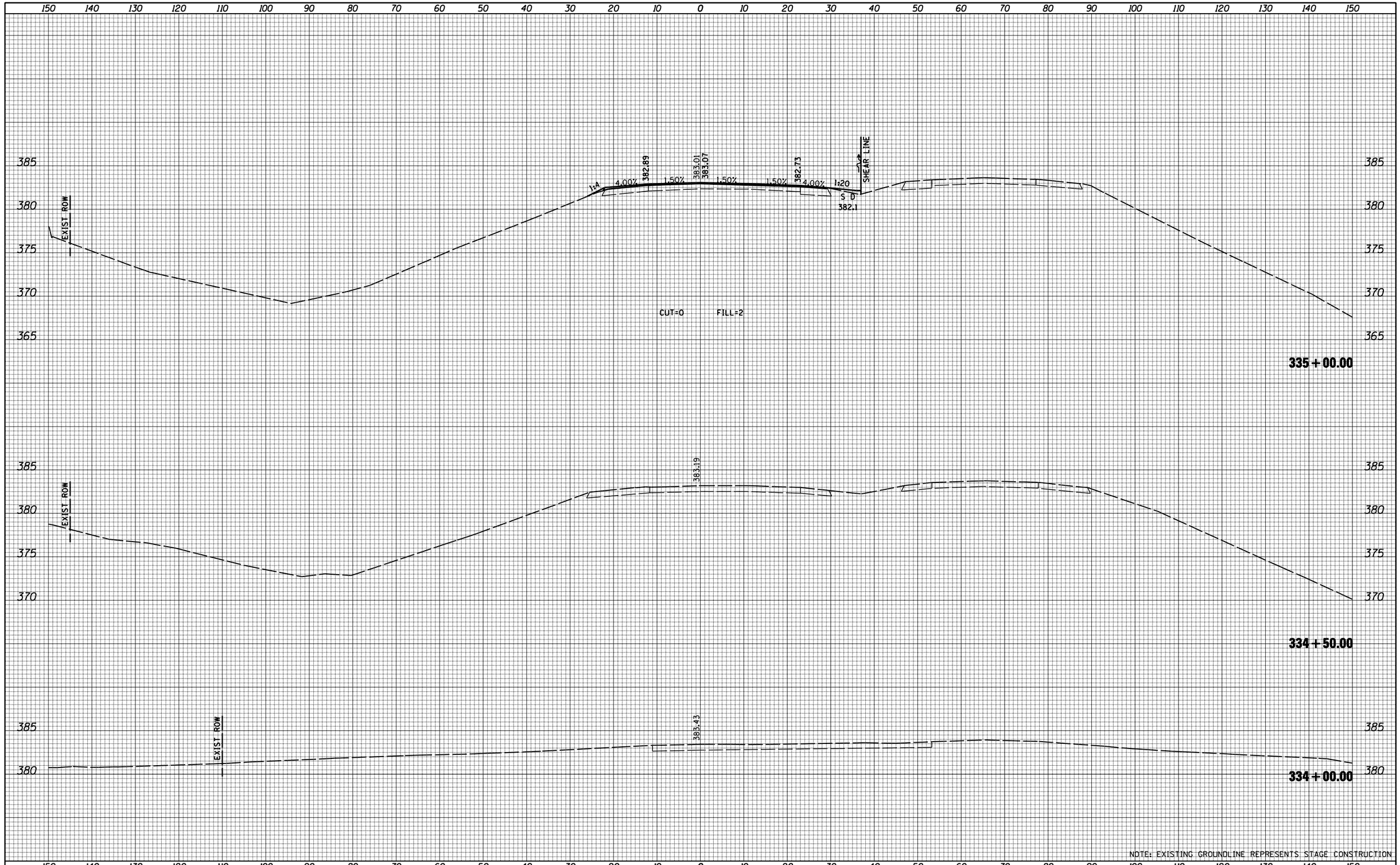
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAIL SHEETS
IL RTE 13 OVER BIG MUDDY RIVER

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

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)-B-1	JACKSON	200	168
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		



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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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

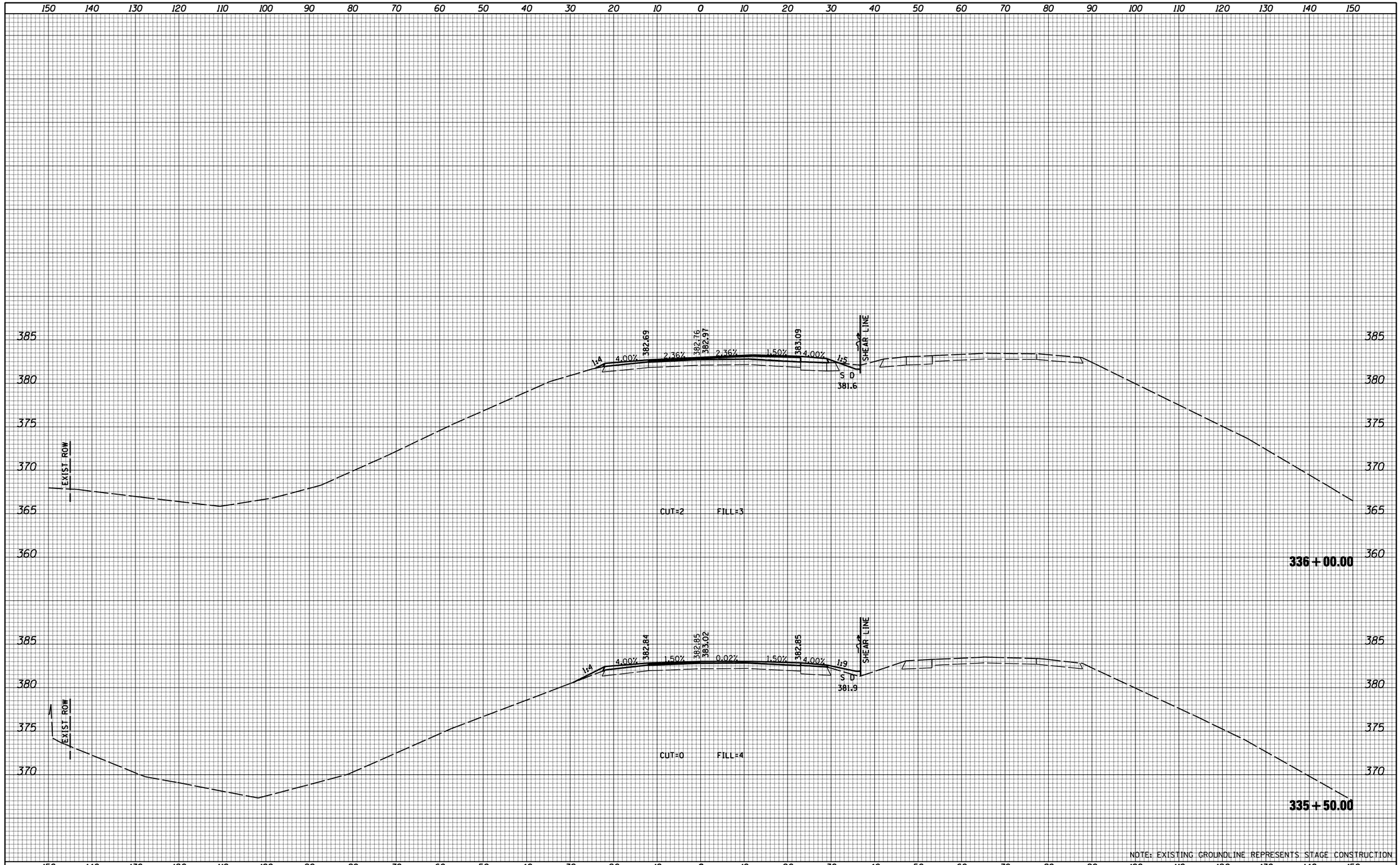
EASTBOUND CROSS SECTION SHEETS
IL RTE 13 OVER BIG MUDDY RIVER

SCALE: | SHEET NO. 1 OF 8 SHEETS | STA. 334+00.00 TO STA. 335+00.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	169
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY	
NOTE BOOK	
NO.	

	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		



ORIGINAL SURVEY	
NOTE BOOK	
NO.	

	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

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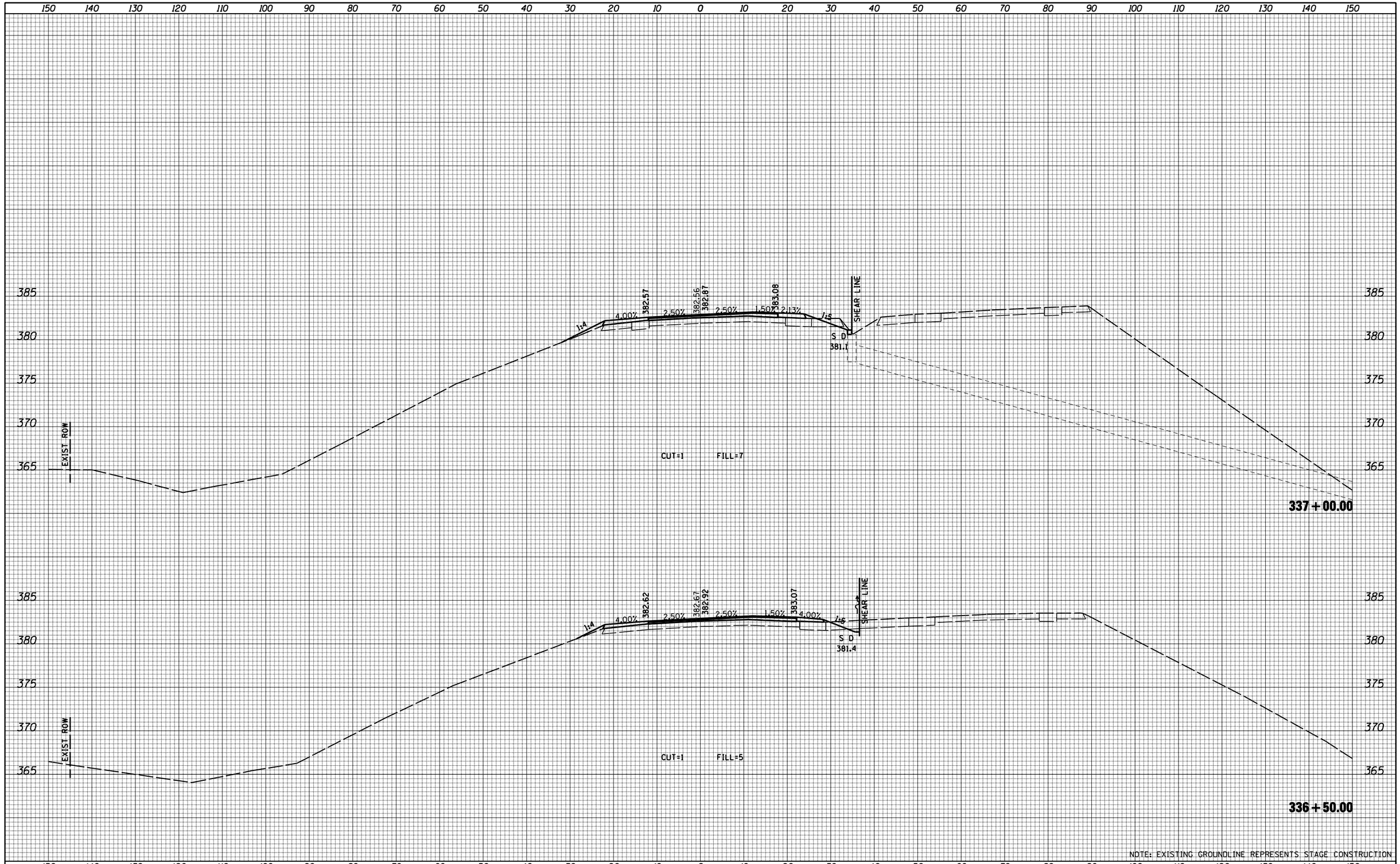
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EASTBOUND CROSS SECTION SHEETS
IL RTE 13 OVER BIG MUDDY RIVER

SCALE: | SHEET NO. 2 OF 8 SHEETS | STA. 335+50.00 TO STA. 336+00.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	170
		CONTRACT NO. 78056		
	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

EASTBOUND CROSS SECTION SHEETS
IL RTE 13 OVER BIG MUDDY RIVER

SCALE: | SHEET NO. 3 OF 8 SHEETS | STA. 336+50.00 TO STA. 337+00.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	171
		CONTRACT NO. 78056		
		ILLINOIS FED. AID PROJECT		

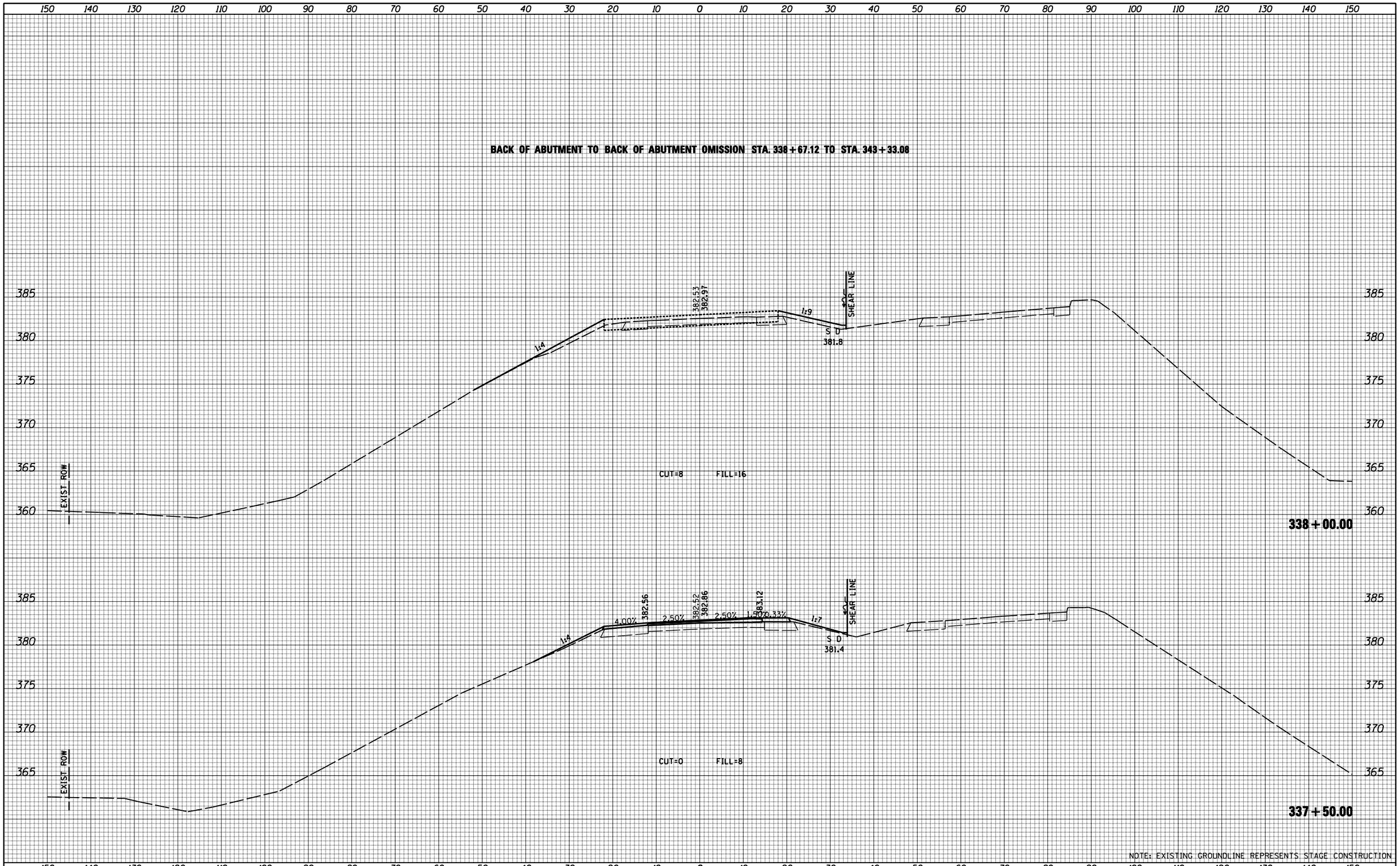
FINAL SURVEY	
NOTE BOOK	
NO.	

	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

ORIGINAL SURVEY	
NOTE BOOK	
NO.	

	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BACK OF ABUTMENT TO BACK OF ABUTMENT OMISSION STA. 338+67.12 TO STA. 343+33.08



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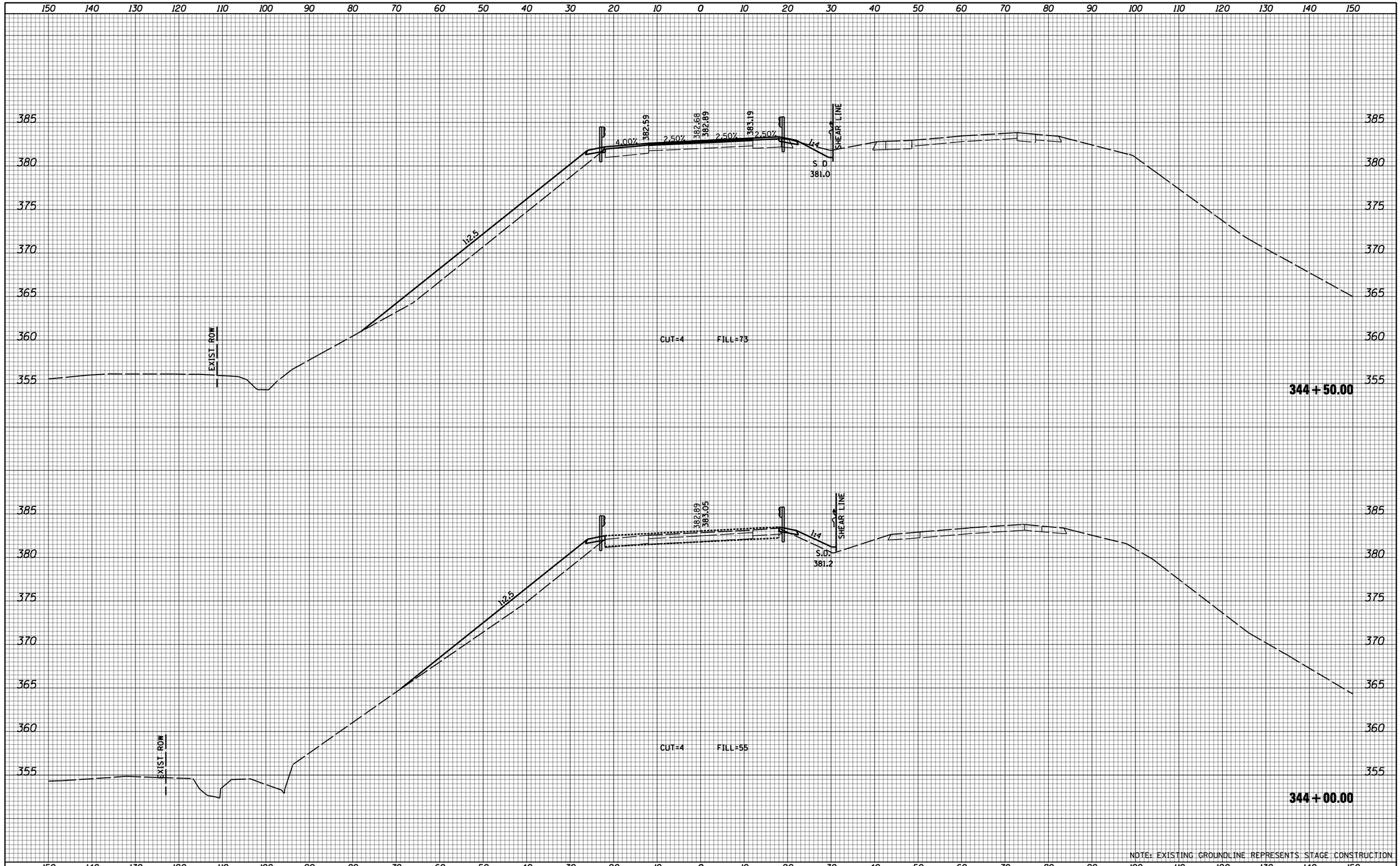
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EASTBOUND CROSS SECTION SHEETS
IL RTE 13 OVER BIG MUDDY RIVER

SCALE: | SHEET NO. 4 OF 8 SHEETS | STA. 337+50.00 TO STA. 338+00.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	172
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		



NOTE: EXISTING GROUNDLINE REPRESENTS STAGE CONSTRUCTION

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

FILE NAME = D978056-sht-xssht-EB.dgn	USER NAME = default	DESIGNED -	REVISED -
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	PLOT DATE = 1/25/2012	DATE -	REVISED -

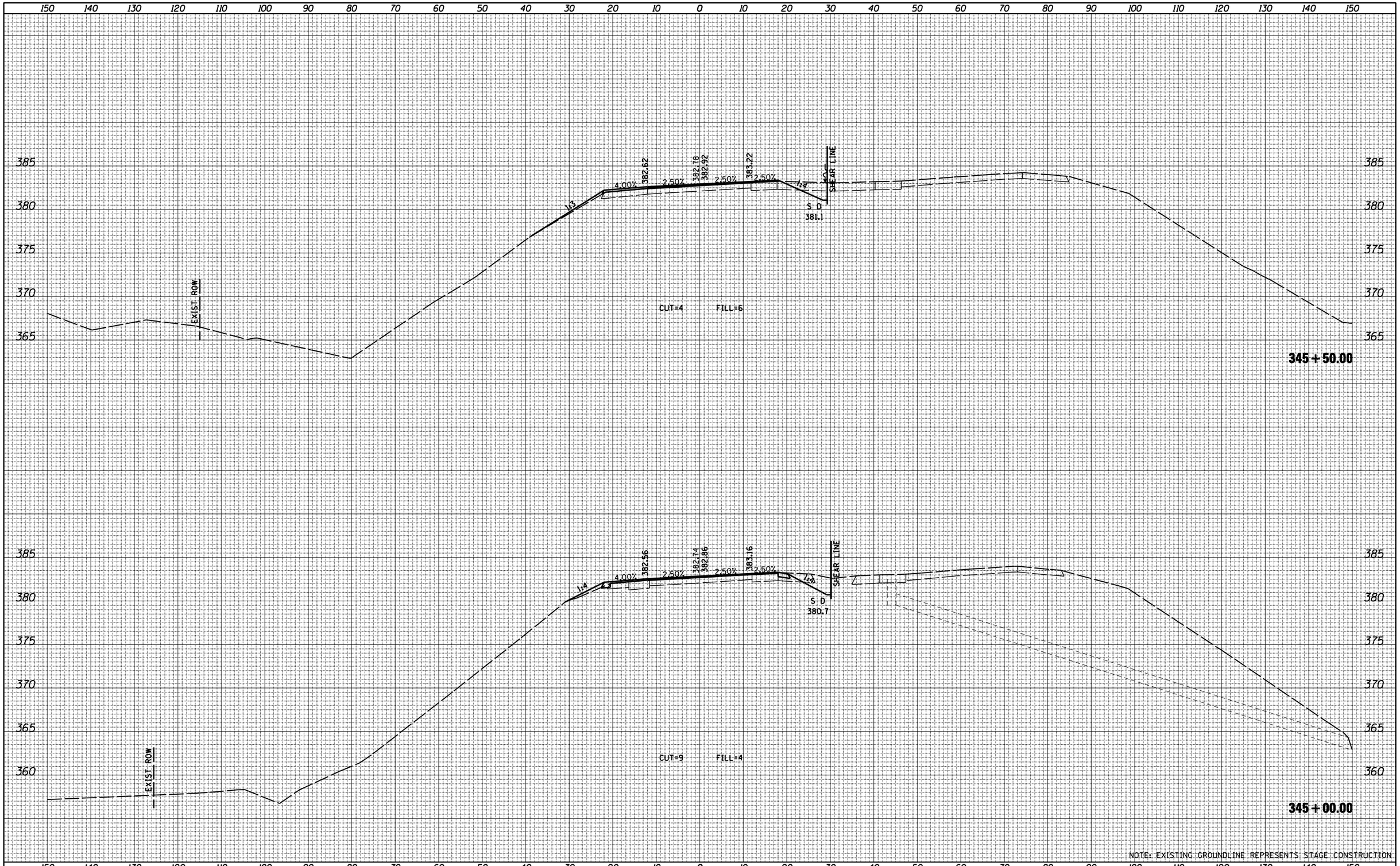
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EASTBOUND CROSS SECTION SHEETS
IL RTE 13 OVER BIG MUDDY RIVER

SCALE: | SHEET NO. 5 OF 8 SHEETS | STA. 343+50.00 TO STA. 344+00.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	173
		CONTRACT NO. 78056		
		ILLINOIS FED. AID PROJECT		

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



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

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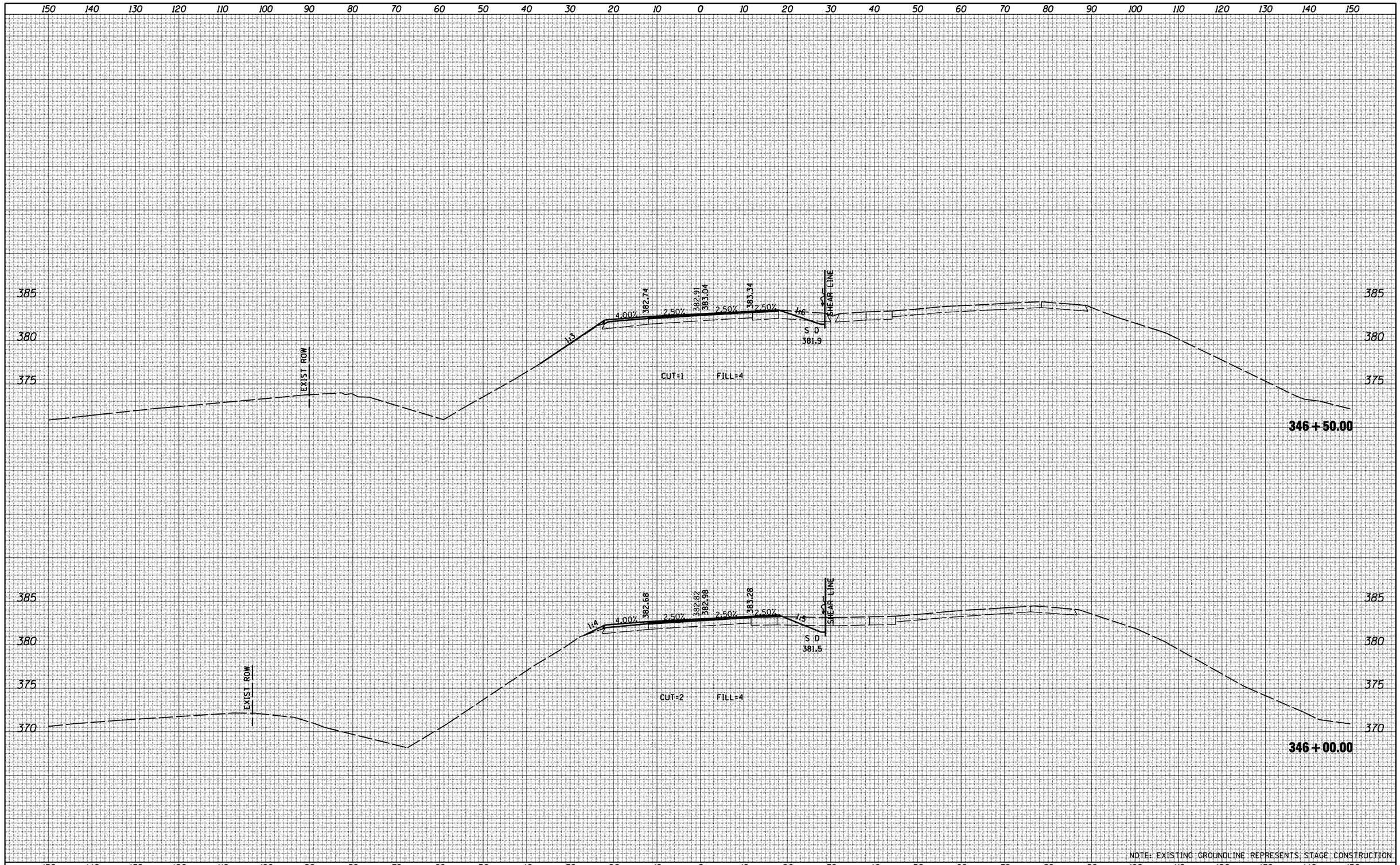
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EASTBOUND CROSS SECTION SHEETS
IL RTE 13 OVER BIG MUDDY RIVER

SCALE: | SHEET NO. 6 OF 8 SHEETS | STA. 344+50.00 TO STA. 345+00.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	174
		CONTRACT NO. 78056		
		ILLINOIS	FED. AID PROJECT	



FINAL SURVEY

NOTE BOOK	BY	DATE
NO.		

SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED

ORIGINAL SURVEY

NOTE BOOK	BY	DATE
NO.		

SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED

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	PLOT DATE = 1/25/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EASTBOUND CROSS SECTION SHEETS
IL RTE 13 OVER BIG MUDDY RIVER

SCALE: | SHEET NO. 7 OF 8 SHEETS | STA. 345+50.00 TO STA. 346+50.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	175
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		

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

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

385 380 375 370

EXIST. ROW

388.37

348 + 00.00

385 380 375

EXIST. ROW

4.00% 382.86 2.50% 383.20 383.16 2.50% 383.50 2.50% 1:9 ℄ SHEAR LINE

1:4

S D 382.7

CUT=0 FILL=10

347 + 50.00

385 380 375

EXIST. ROW

4.00% 382.80 2.50% 383.05 383.10 2.50% 383.40 2.50% 1:8 ℄ SHEAR LINE

1:4

S D 382.3

CUT=0 FILL=28

347 + 00.00

NOTE: EXISTING GROUNDLINE REPRESENTS STAGE CONSTRUCTION

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

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

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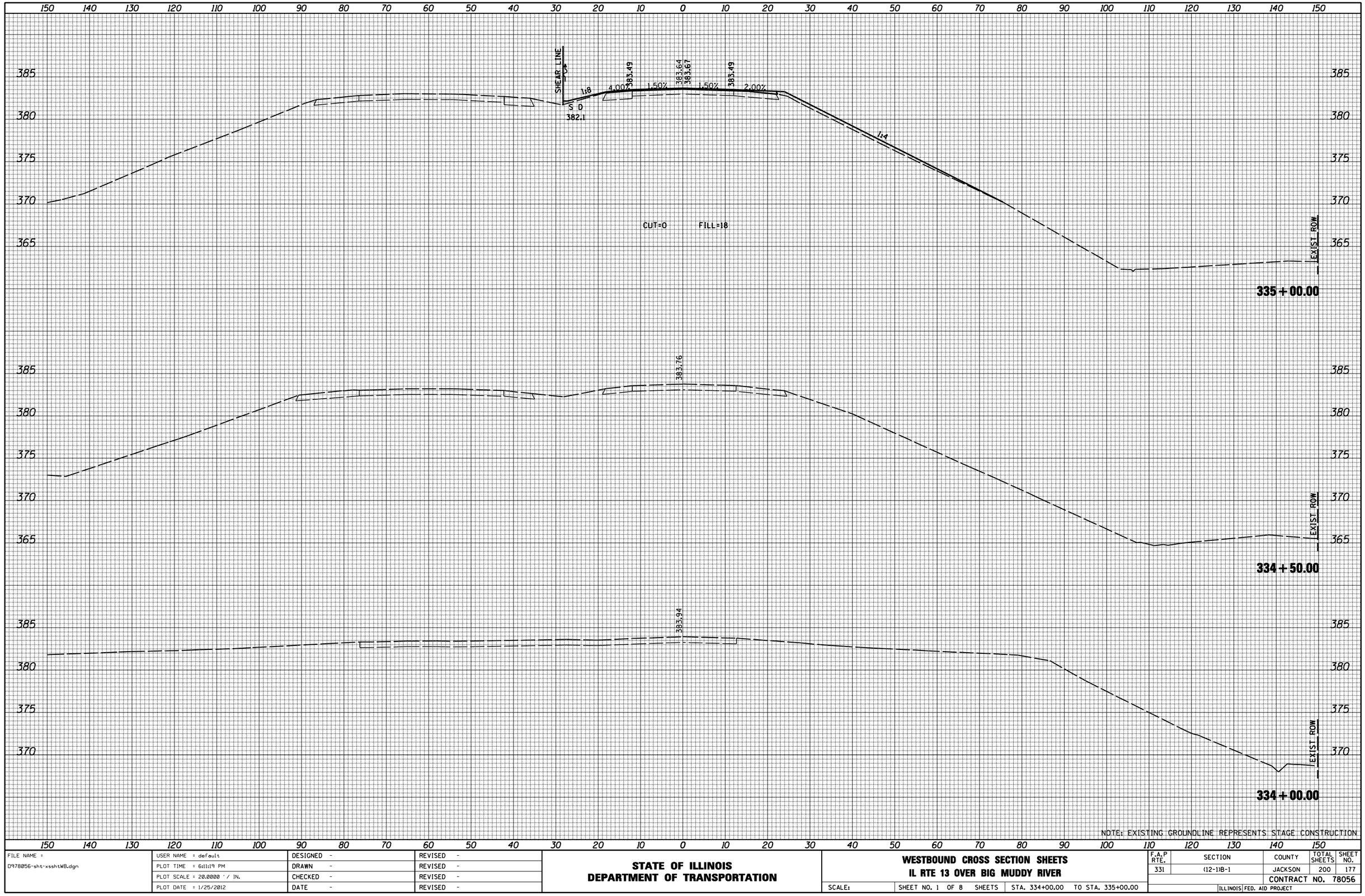
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EASTBOUND CROSS SECTION SHEETS
IL RTE 13 OVER BIG MUDDY RIVER

SCALE: | SHEET NO. 8 OF 8 SHEETS | STA. 347+00.00 TO STA. 348+00.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	176
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		



NOTE: EXISTING GROUNDLINE REPRESENTS STAGE CONSTRUCTION

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

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

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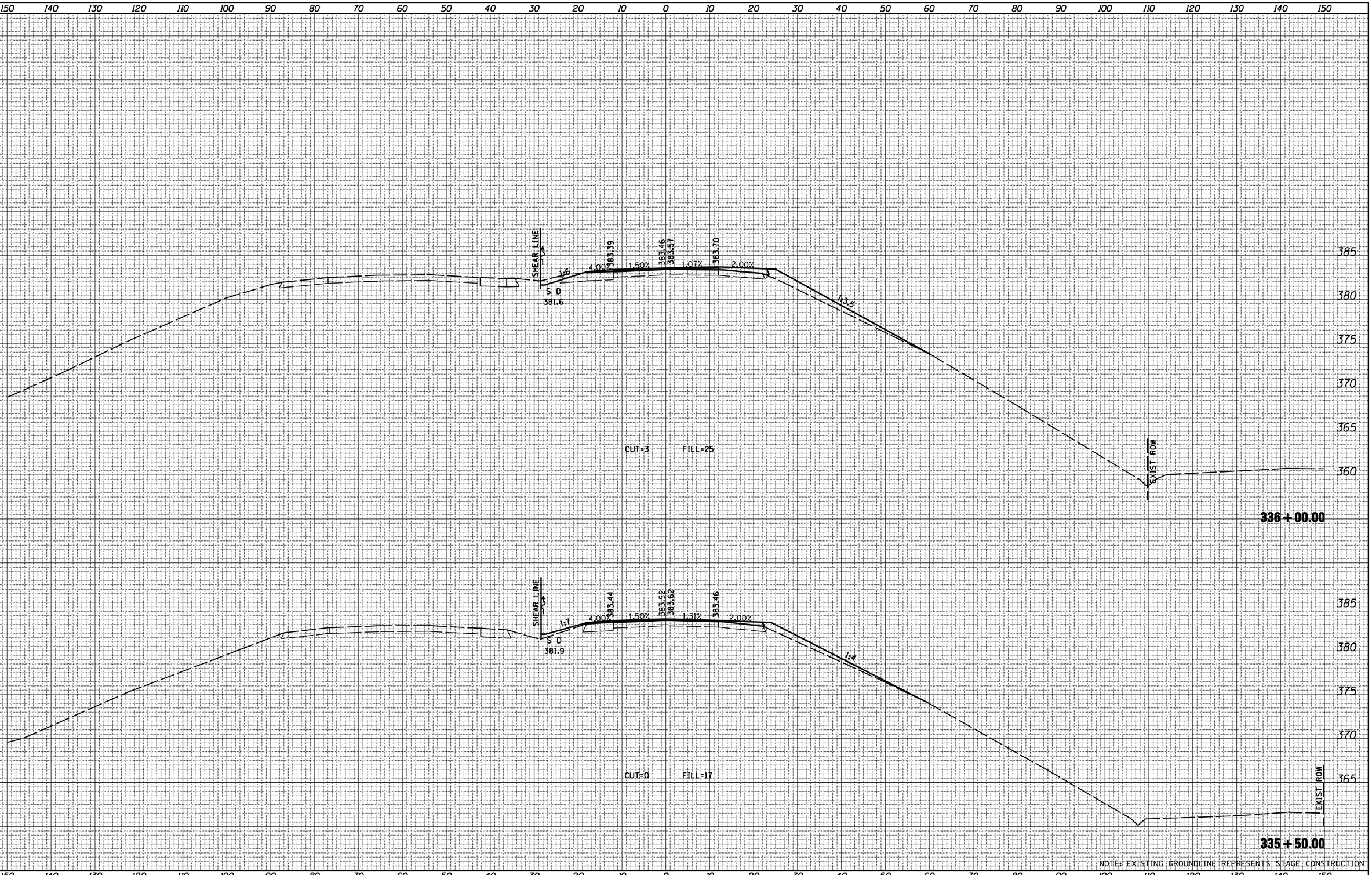
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WESTBOUND CROSS SECTION SHEETS
IL RTE 13 OVER BIG MUDDY RIVER

SCALE: | SHEET NO. 1 OF 8 SHEETS | STA. 334+00.00 | TO STA. 335+00.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	177
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		

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



NOTE: EXISTING GROUNDLINE REPRESENTS STAGE CONSTRUCTION

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

FILE NAME = D978056-sht-xsshtWB.dgn	USER NAME = default	DESIGNED -	REVISED -
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	PLOT DATE = 1/25/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

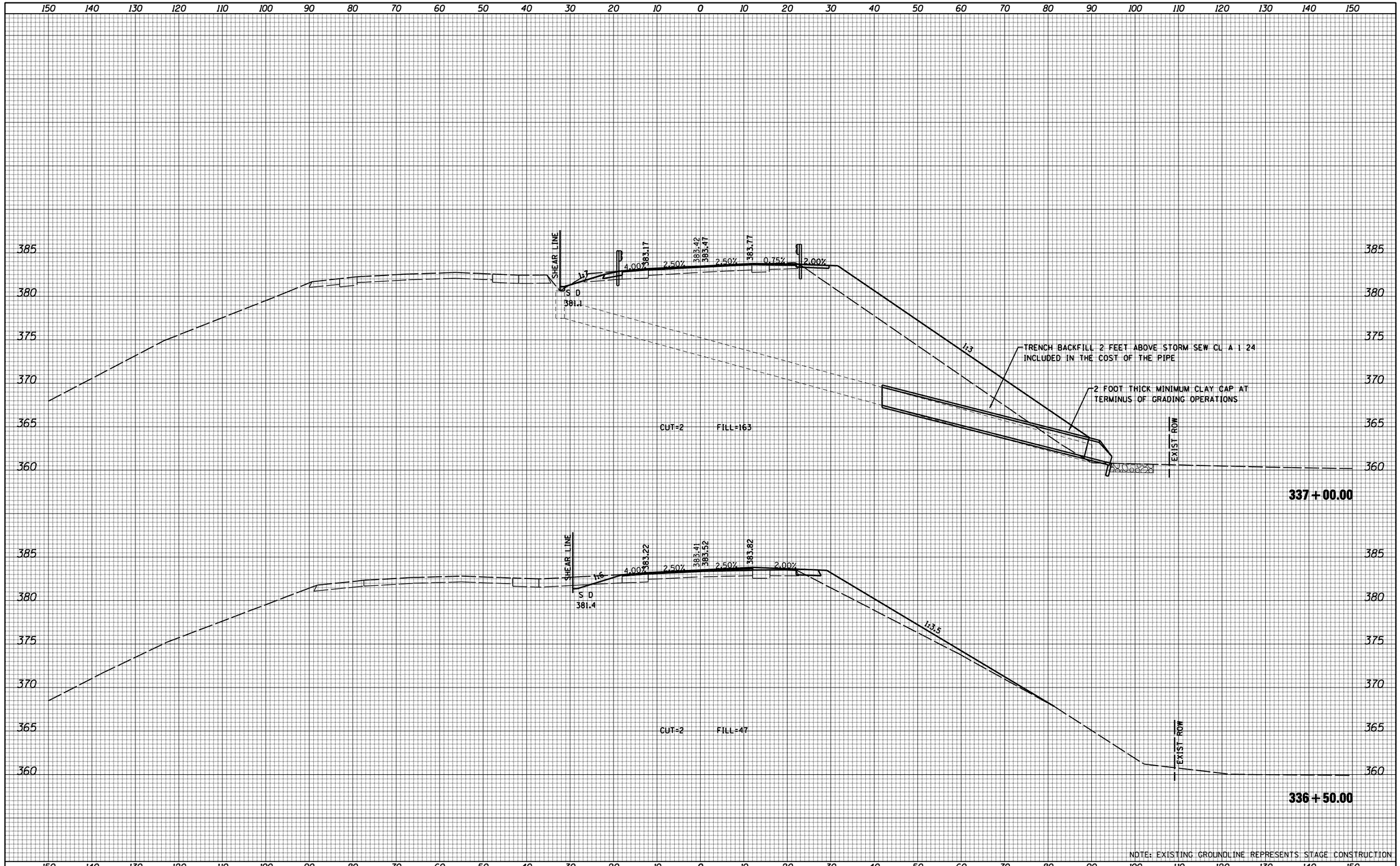
WESTBOUND CROSS SECTION SHEETS
IL RTE 13 OVER BIG MUDDY RIVER

SCALE: | SHEET NO. 2 OF 8 SHEETS | STA. 335+50.00 TO STA. 336+00.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	178
		CONTRACT NO. 78056		
		ILLINOIS FED. AID PROJECT		

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

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



NOTE: EXISTING GROUNDLINE REPRESENTS STAGE CONSTRUCTION

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	PLOT DATE = 1/25/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WESTBOUND CROSS SECTION SHEETS
IL RTE 13 OVER BIG MUDDY RIVER

SCALE: | SHEET NO. 3 OF 8 SHEETS | STA. 336+50.00 TO STA. 337+00.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	179
		CONTRACT NO. 78056		
		ILLINOIS FED. AID PROJECT		

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

BY	DATE

BACK OF ABUTMENT TO BACK OF ABUTMENT OMISSION STA. 338+41.25 TO STA. 343+07.16

NOTE: EXISTING GROUNDLINE REPRESENTS STAGE CONSTRUCTION

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

BY	DATE

FILE NAME = D978056-sht-xsshtWB.dgn	USER NAME = default	DESIGNED -	REVISED -
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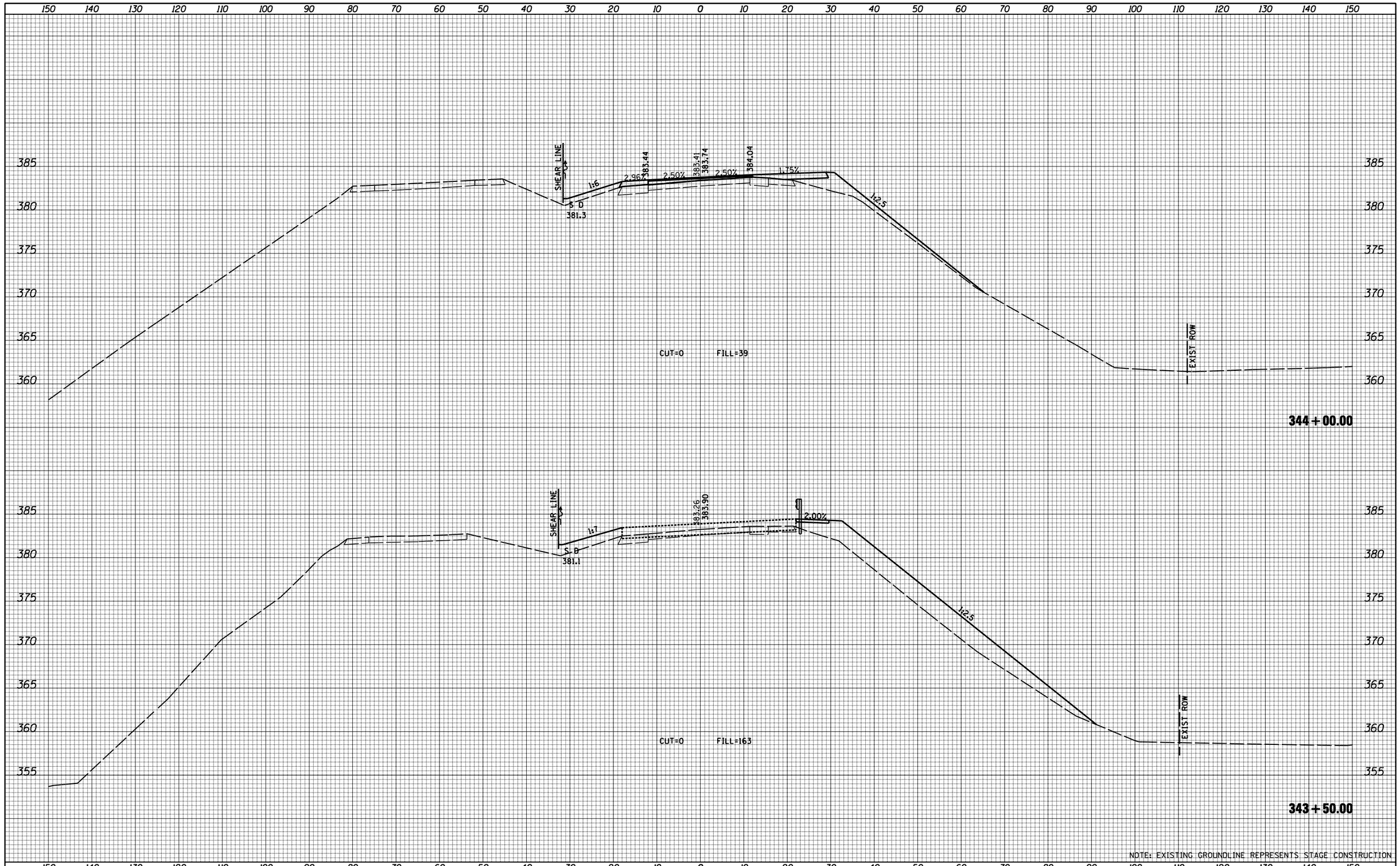
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WESTBOUND CROSS SECTION SHEETS
IL RTE 13 OVER BIG MUDDY RIVER

SCALE: | SHEET NO. 4 OF 8 SHEETS | STA. 337+50.00 TO STA. 338+00.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	180
		CONTRACT NO. 78056		
		ILLINOIS FED. AID PROJECT		



FINAL SURVEY

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

ORIGINAL SURVEY

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

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

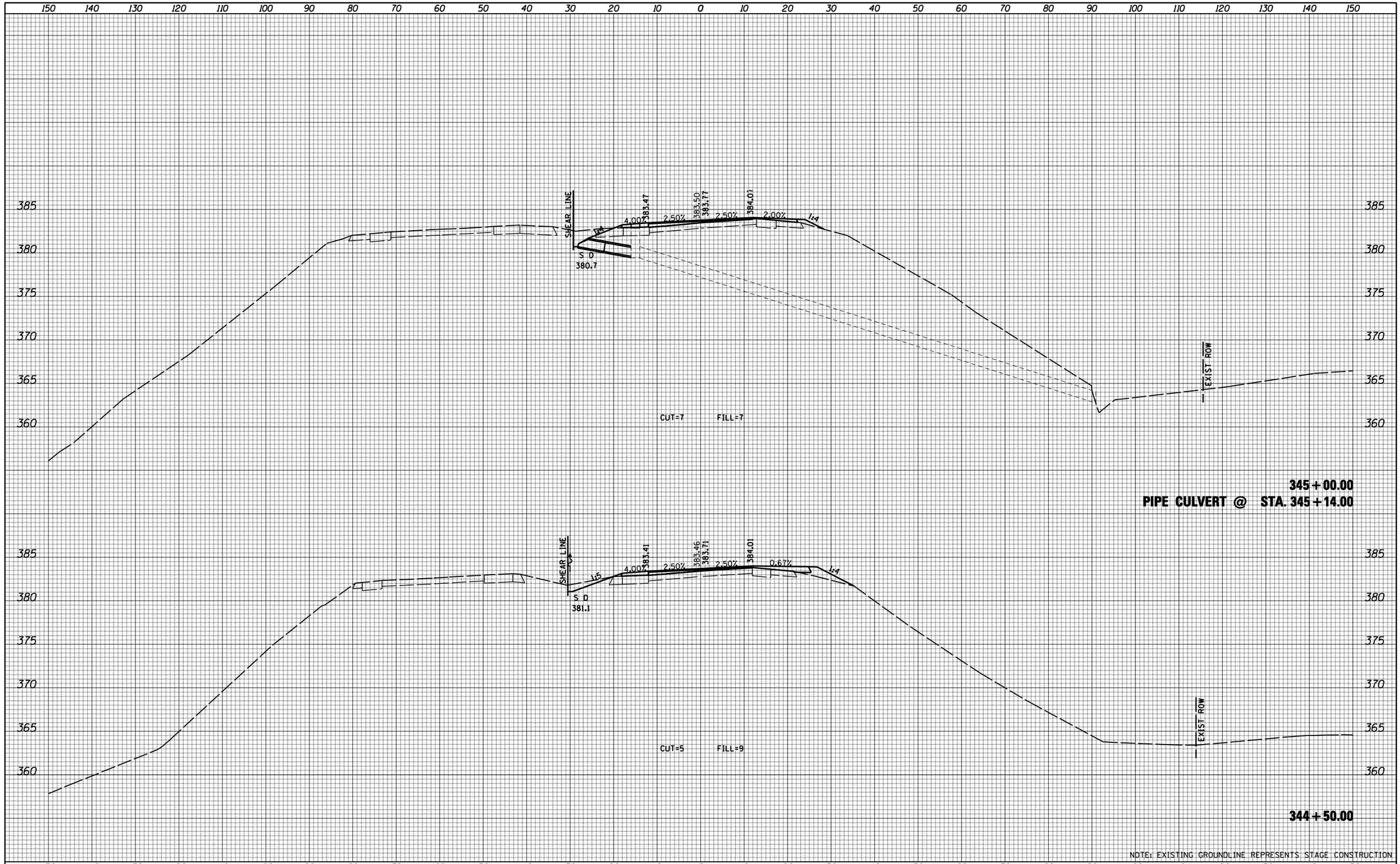
WESTBOUND CROSS SECTION SHEETS
IL RTE 13 OVER BIG MUDDY RIVER

SCALE: | SHEET NO. 5 OF 8 SHEETS | STA. 343+50.00 TO STA. 344+00.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	181
		CONTRACT NO. 78056		
		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 = 1/25/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WESTBOUND CROSS SECTION SHEETS
IL RTE 13 OVER BIG MUDDY RIVER

SCALE: | SHEET NO. 6 OF 8 SHEETS | STA. 344+50.00 TO STA. 345+00.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	182

CONTRACT NO. 78056

ILLINOIS | FED. AID PROJECT

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

385 380 375 370

SHEAR LINE

1:4

4.00%

383.65

2.50%

383.86

383.95

2.50%

2.50%

384.49

2.00%

1:4

S D
381.7

CUT=2 FILL=6

EXIST ROW

346 + 50.00

385 380 375 370

SHEAR LINE

1:4

4.00%

383.59

2.50%

383.73

383.89

2.50%

2.50%

384.34

2.00%

1:4

S D
381.3

CUT=3 FILL=4

EXIST ROW

346 + 00.00

385 380 375 370 365 360

SHEAR LINE

1:4

4.00%

383.53

2.50%

383.67

383.83

2.50%

2.50%

384.20

2.00%

1:4

S D
380.9

CUT=4 FILL=4

EXIST ROW

345 + 50.00

NOTE: EXISTING GROUNDLINE REPRESENTS STAGE CONSTRUCTION

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

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	

FILE NAME = D978056-sht-xsshtWB.dgn	USER NAME = default	DESIGNED -	REVISED -
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	PLOT DATE = 1/25/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WESTBOUND CROSS SECTION SHEETS
IL RTE 13 OVER BIG MUDDY RIVER

SCALE: | SHEET NO. 7 OF 8 SHEETS | STA. 345+50.00 | TO STA. 346+50.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	183
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		

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

385
380
375

384.24

EXIST ROW

348 + 00.00

SHEAR LINE
℄

1:6 4.00% 383.89 1.50% 384.11 384.07 0.04% 0.04% 384.08 2.00% 1:4

S D
382.5

CUT=1 FILL=1

EXIST ROW

347 + 50.00

SHEAR LINE
℄

1:5 4.00% 383.83 1.50% 383.93 384.01 1.31% 1.31% 384.32 2.00% 1:4

S D
382.1

CUT=0 FILL=7

EXIST ROW

347 + 00.00

NOTE: EXISTING GROUNDLINE REPRESENTS STAGE CONSTRUCTION

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

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

FILE NAME = D978056-sht-xssht WB.dgn	USER NAME = default	DESIGNED -	REVISED -
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	PLOT DATE = 1/25/2012	DATE -	REVISED -

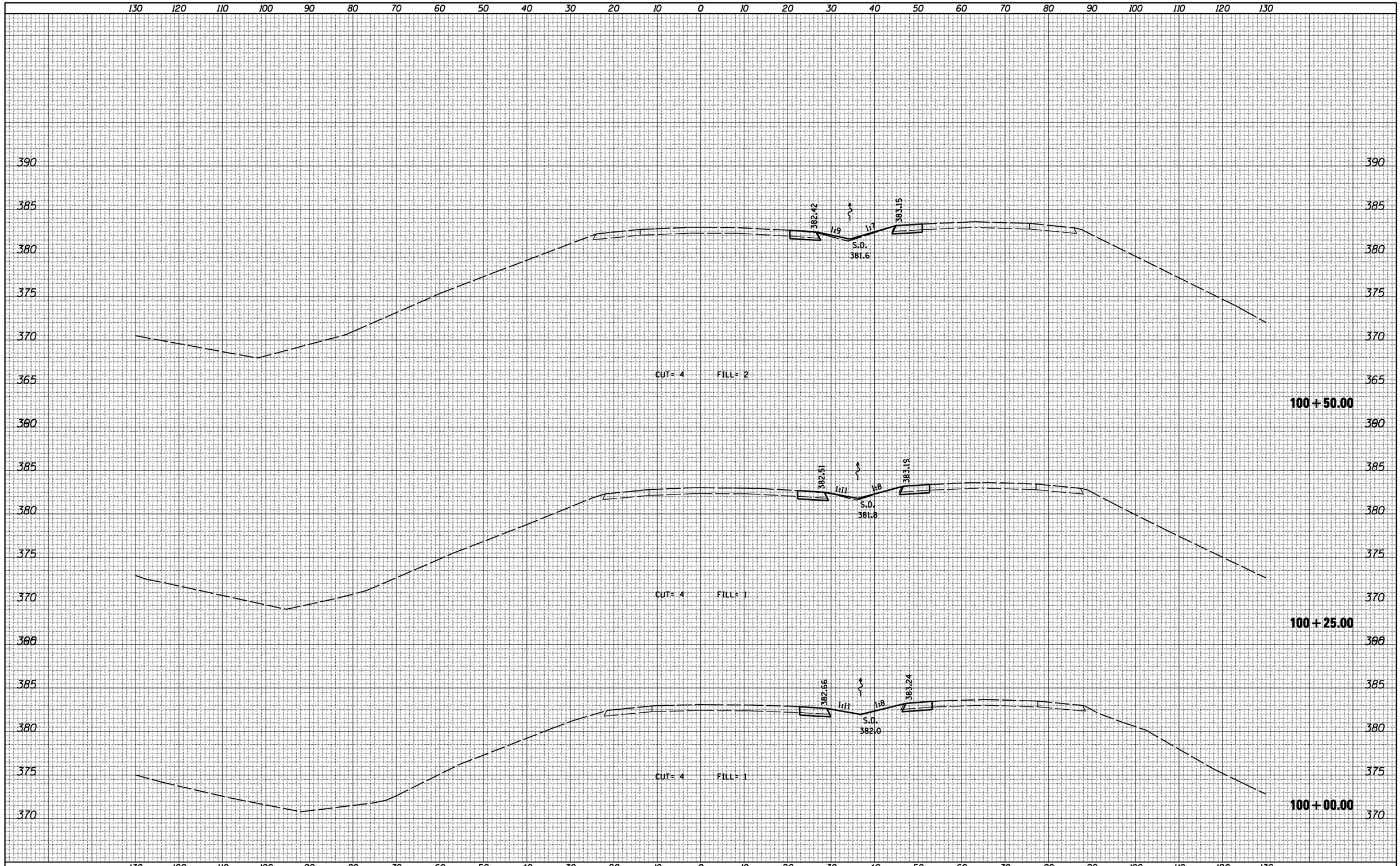
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WESTBOUND CROSS SECTION SHEETS
IL RTE 13 OVER BIG MUDDY RIVER

SCALE: | SHEET NO. 8 OF 8 SHEETS | STA. 347+00.00 TO STA. 348+00.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	184
		CONTRACT NO. 78056		
		ILLINOIS FED. AID PROJECT		

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



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

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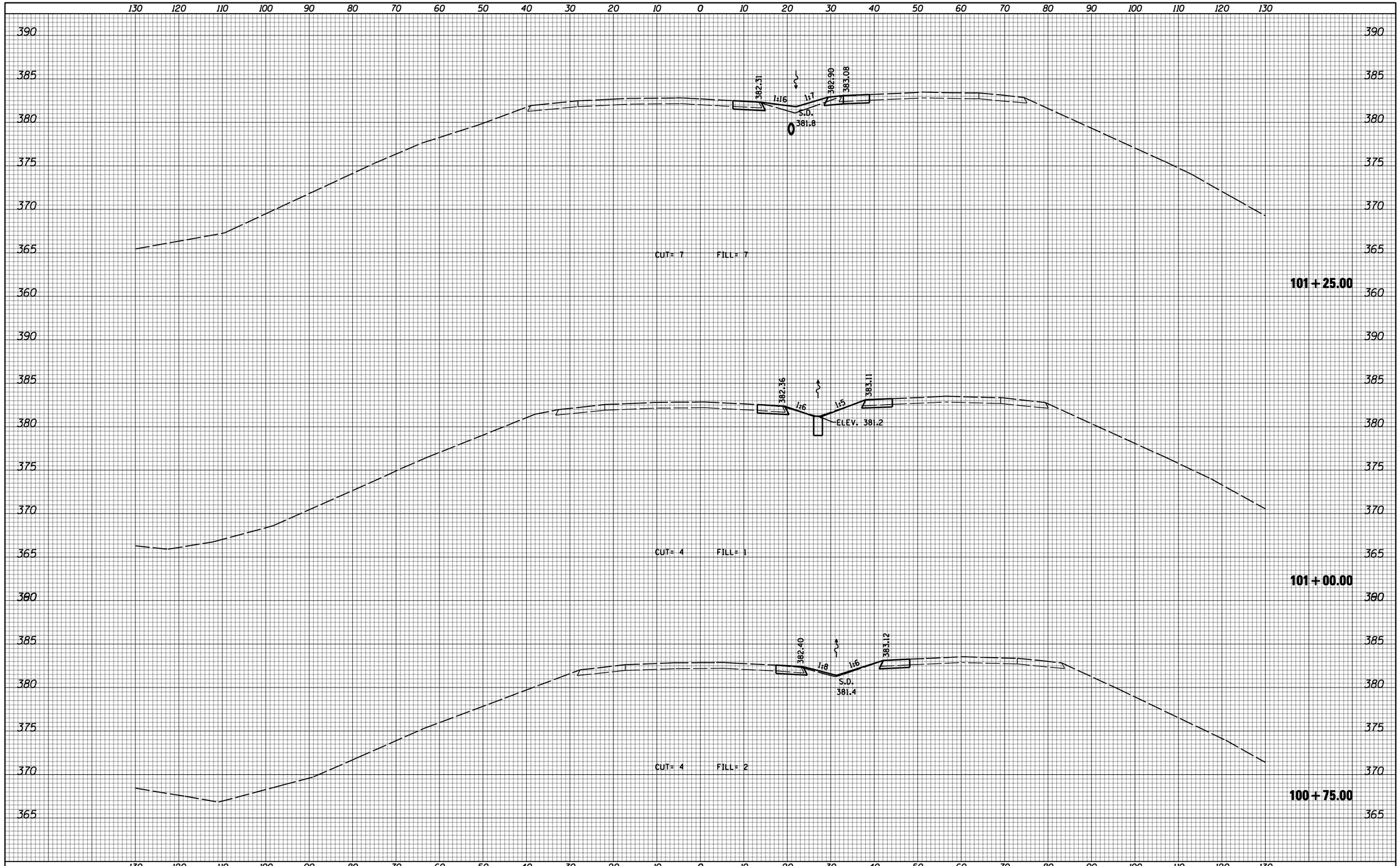
	PLOT DATE = 1/25/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGING CROSS SECTION SHEETS
IL RTE 13 OVER BIG MUDDY RIVER

SCALE: | SHEET NO. 1 OF 16 SHEETS | STA. 100+00.00 TO STA. 100+50.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	185
		CONTRACT NO. 78056		
		ILLINOIS FED. AID PROJECT		



FINAL SURVEY

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

ORIGINAL SURVEY

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

FILE NAME = D978056-sht-xsshtstgl.dgn	USER NAME = default	DESIGNED -	REVISED -
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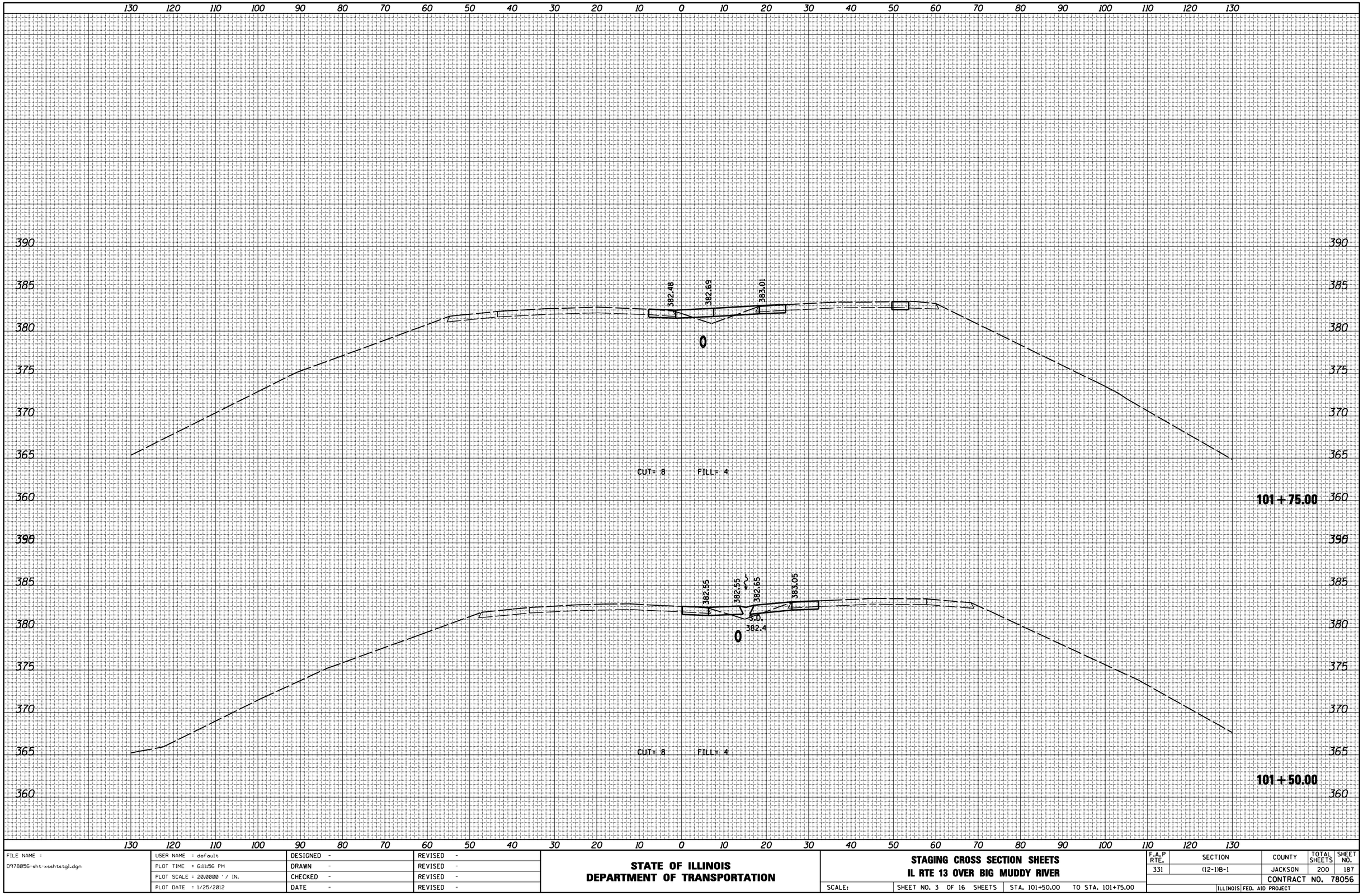
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGING CROSS SECTION SHEETS
IL RTE 13 OVER BIG MUDDY RIVER

SCALE: | SHEET NO. 2 OF 16 SHEETS | STA. 100+75.00 TO STA. 101+25.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	186
		CONTRACT NO. 78056		
		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 = 1/25/2012	DATE -	REVISED -

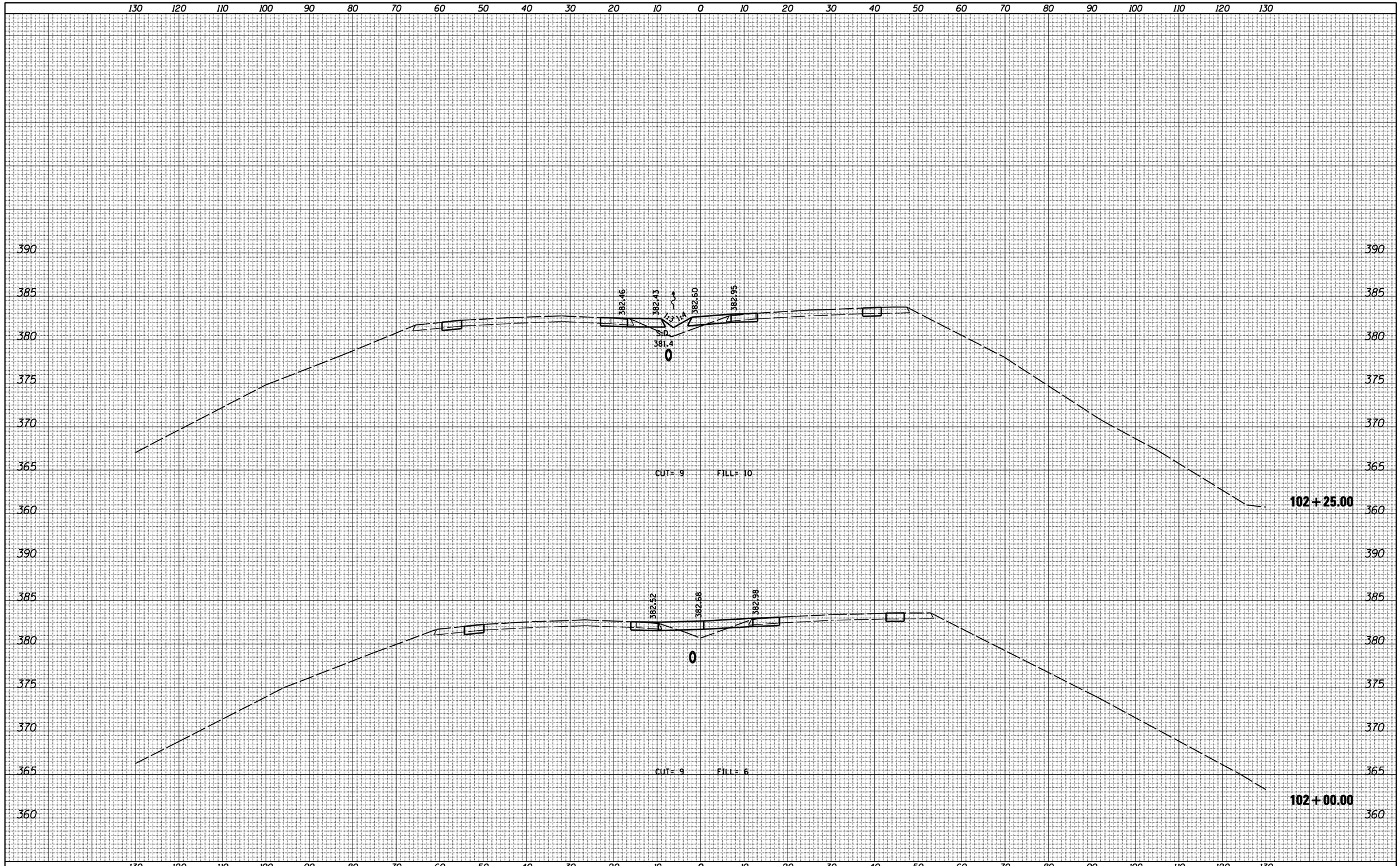
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGING CROSS SECTION SHEETS
IL RTE 13 OVER BIG MUDDY RIVER

SCALE: | SHEET NO. 3 OF 16 SHEETS | STA. 101+50.00 | TO STA. 101+75.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	187
		CONTRACT NO. 78056		
	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 = 1/25/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGING CROSS SECTION SHEETS
IL RTE 13 OVER BIG MUDDY RIVER

SCALE: | SHEET NO. 4 OF 16 SHEETS | STA. 102+00.00 TO STA. 102+25.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	188
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

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

390 385 380 375 370 365 360

382.27 382.59 382.56 1:7 1:8 382.58 382.65

S.D. 380.9

CUT= 12 FILL= 3

EXIST. ROW

102+75.00

382.52 382.40 1:5 1:5 382.68 382.81

S.D. 380.7

CUT= 9 FILL= 6

102+50.00

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 = 1/25/2012	DATE -	REVISED -

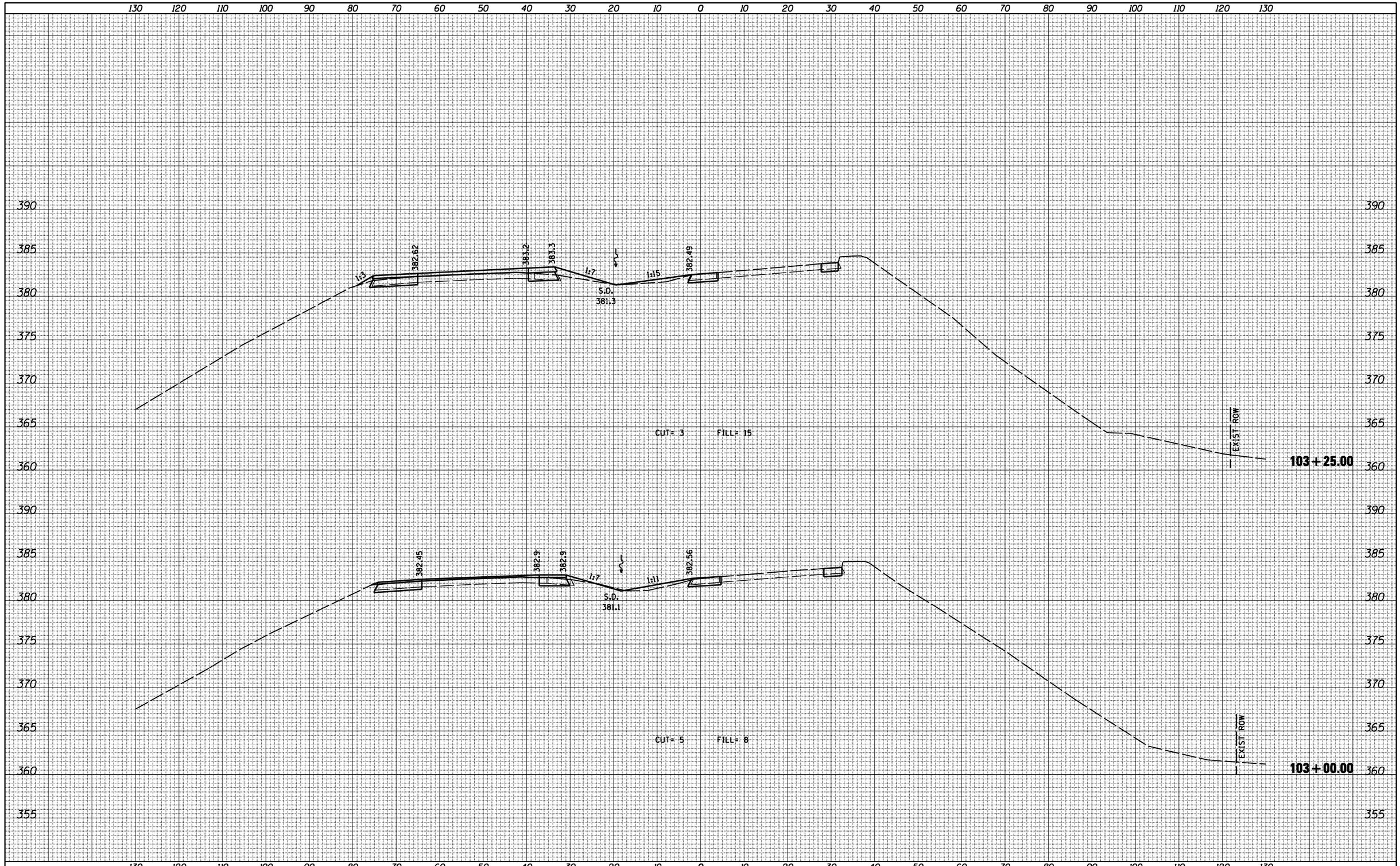
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGING CROSS SECTION SHEETS
IL RTE 13 OVER BIG MUDDY RIVER

SCALE: | SHEET NO. 5 OF 16 SHEETS | STA. 102+50.00 TO STA. 102+75.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	189
		CONTRACT NO. 78056		
	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 = 1/25/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGING CROSS SECTION SHEETS
IL RTE 13 OVER BIG MUDDY RIVER

SCALE: | SHEET NO. 6 OF 16 SHEETS | STA. 103+00.00 TO STA. 103+25.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	190
		CONTRACT NO. 78056		
		ILLINOIS FED. AID PROJECT		

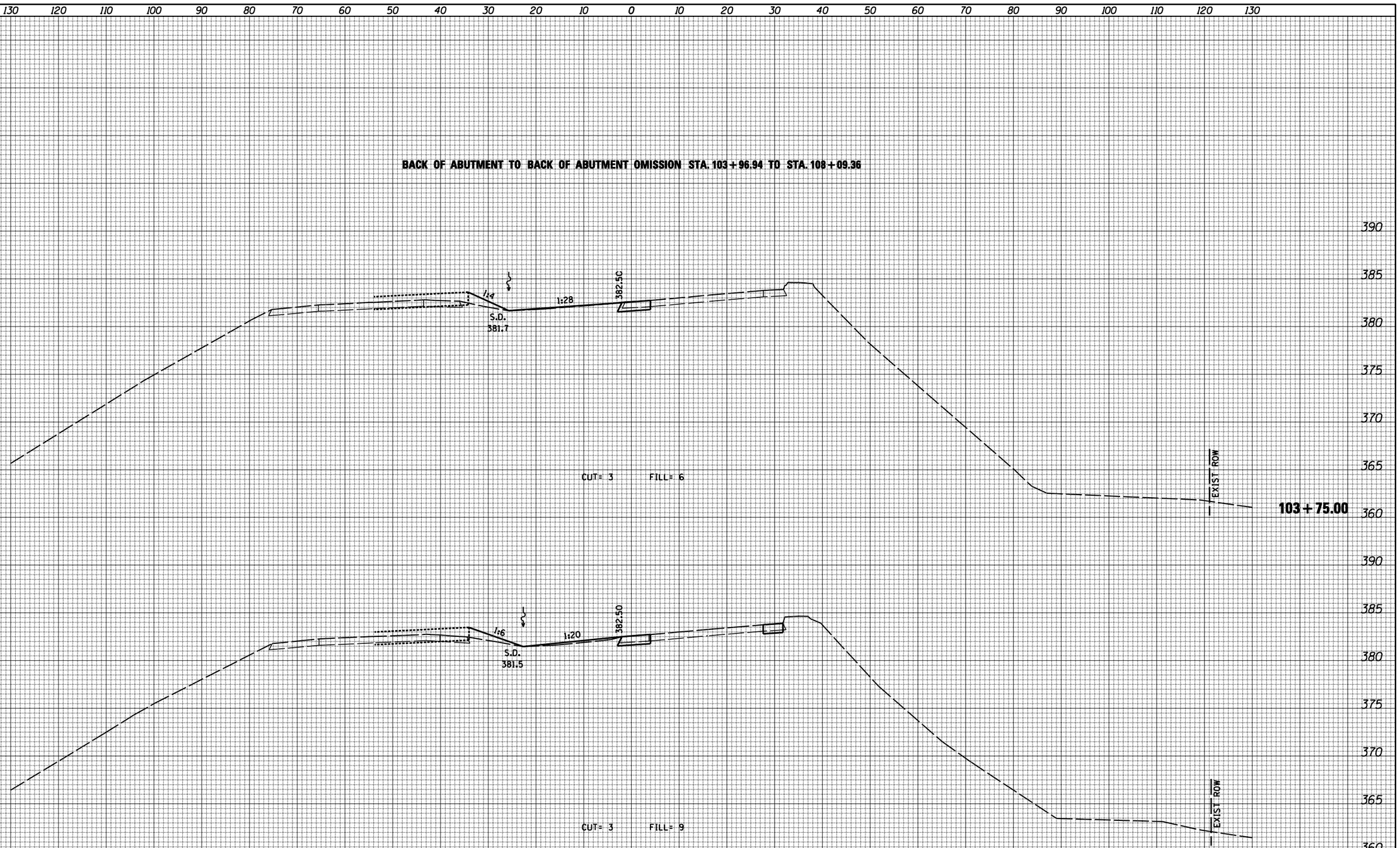
FINAL SURVEY	
NOTE BOOK	
NO.	

	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

ORIGINAL SURVEY	
NOTE BOOK	
NO.	

	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BACK OF ABUTMENT TO BACK OF ABUTMENT OMISSION STA. 103+96.94 TO STA. 108+09.36



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	PLOT DATE = 1/25/2012	DATE -	REVISED -

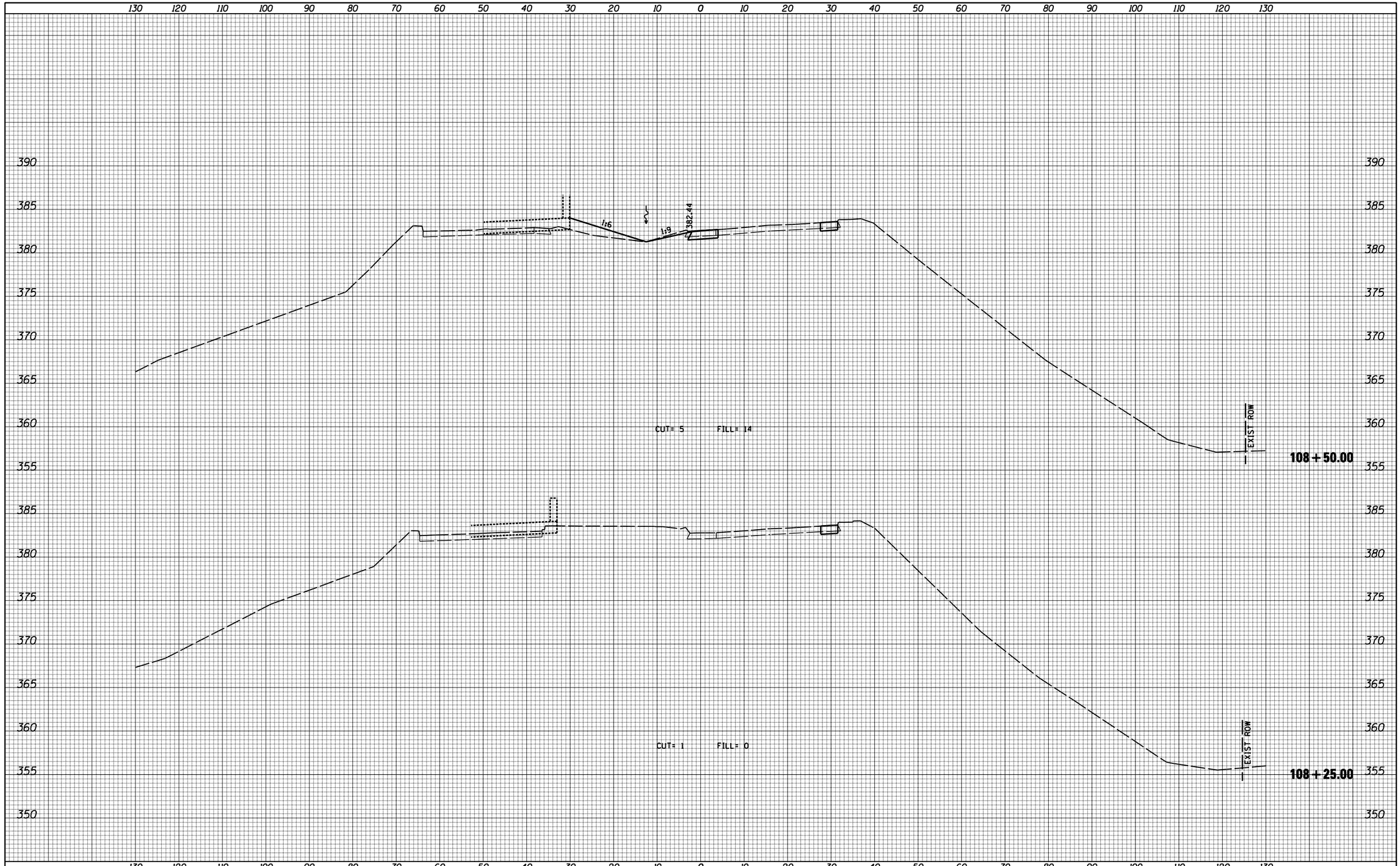
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGING CROSS SECTION SHEETS
IL RTE 13 OVER BIG MUDDY RIVER

SCALE: | SHEET NO. 7 OF 16 SHEETS | STA. 103+50.00 TO STA. 103+75.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	191
		CONTRACT NO. 78056		
		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	

FILE NAME = D978056-sht-xsshtstgl.dgn	USER NAME = default	DESIGNED -	REVISED -
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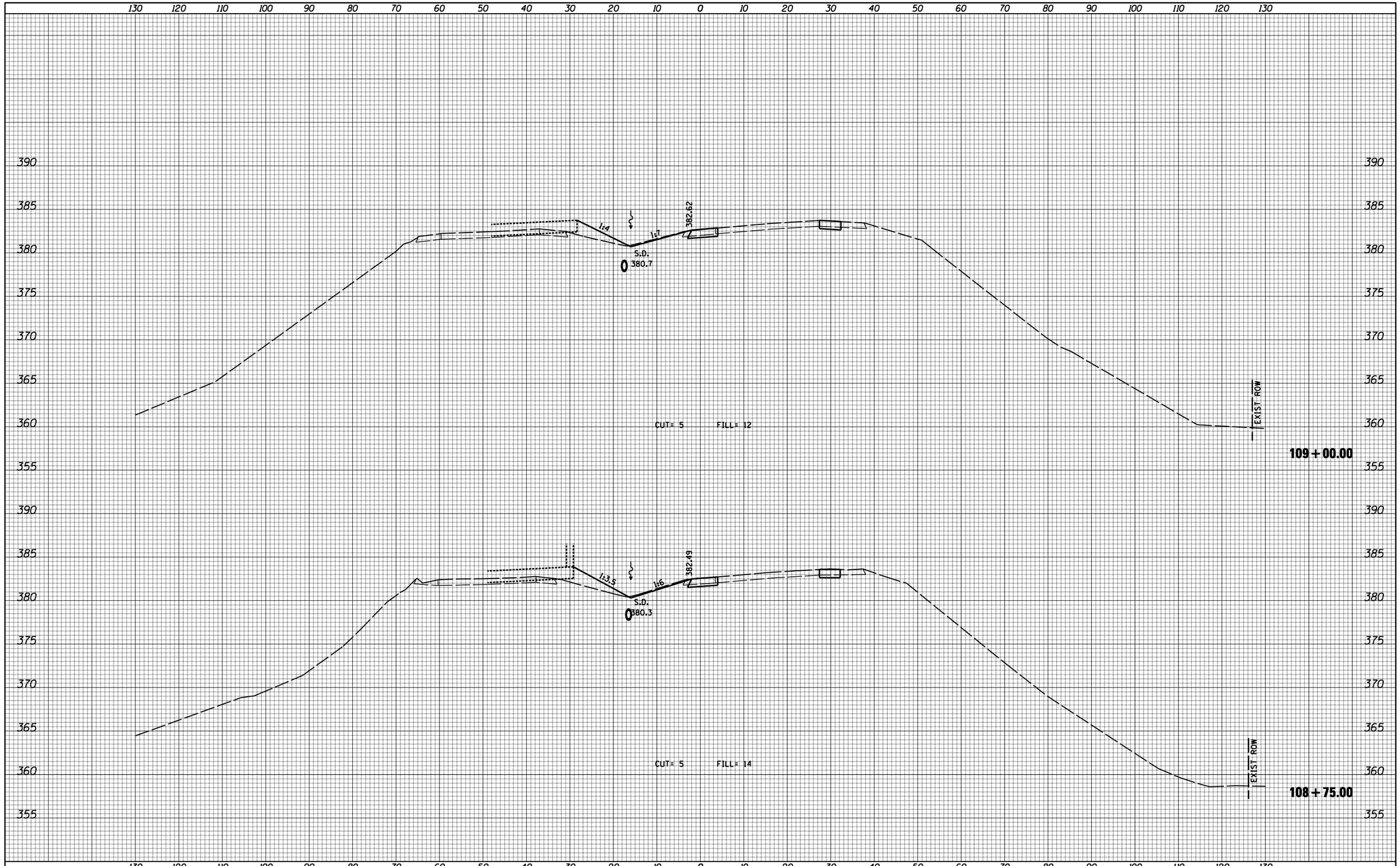
	PLOT DATE = 1/25/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGING CROSS SECTION SHEETS
IL RTE 13 OVER BIG MUDDY RIVER

SCALE: | SHEET NO. 8 OF 16 SHEETS | STA. 108+25.00 | TO STA. 108+50.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	192
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			



FINAL SURVEY

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

ORIGINAL SURVEY

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

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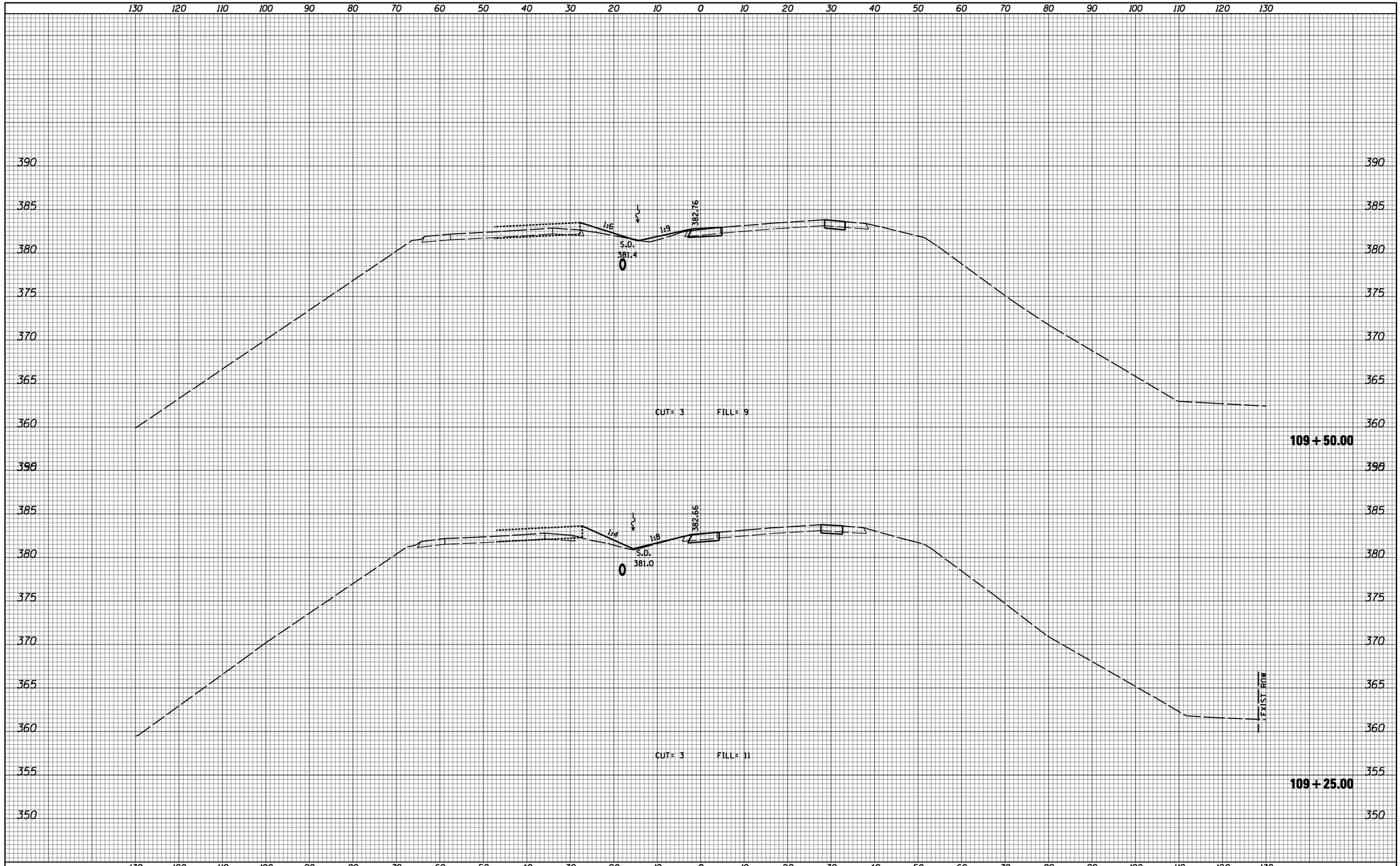
	PLOT DATE = 1/25/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGING CROSS SECTION SHEETS
IL RTE 13 OVER BIG MUDDY RIVER

SCALE: | SHEET NO. 9 OF 16 SHEETS | STA. 108+75.00 | TO STA. 109+00.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	193
		CONTRACT NO. 78056		
		ILLINOIS FED. AID PROJECT		



ORIGINAL SURVEY	BY	DATE
NOTE BOOK		
NO.		

SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED

FINAL SURVEY	BY	DATE
NOTE BOOK		
NO.		

SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED

FILE NAME =	USER NAME = default	DESIGNED -	REVISED -
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	PLOT DATE = 1/25/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

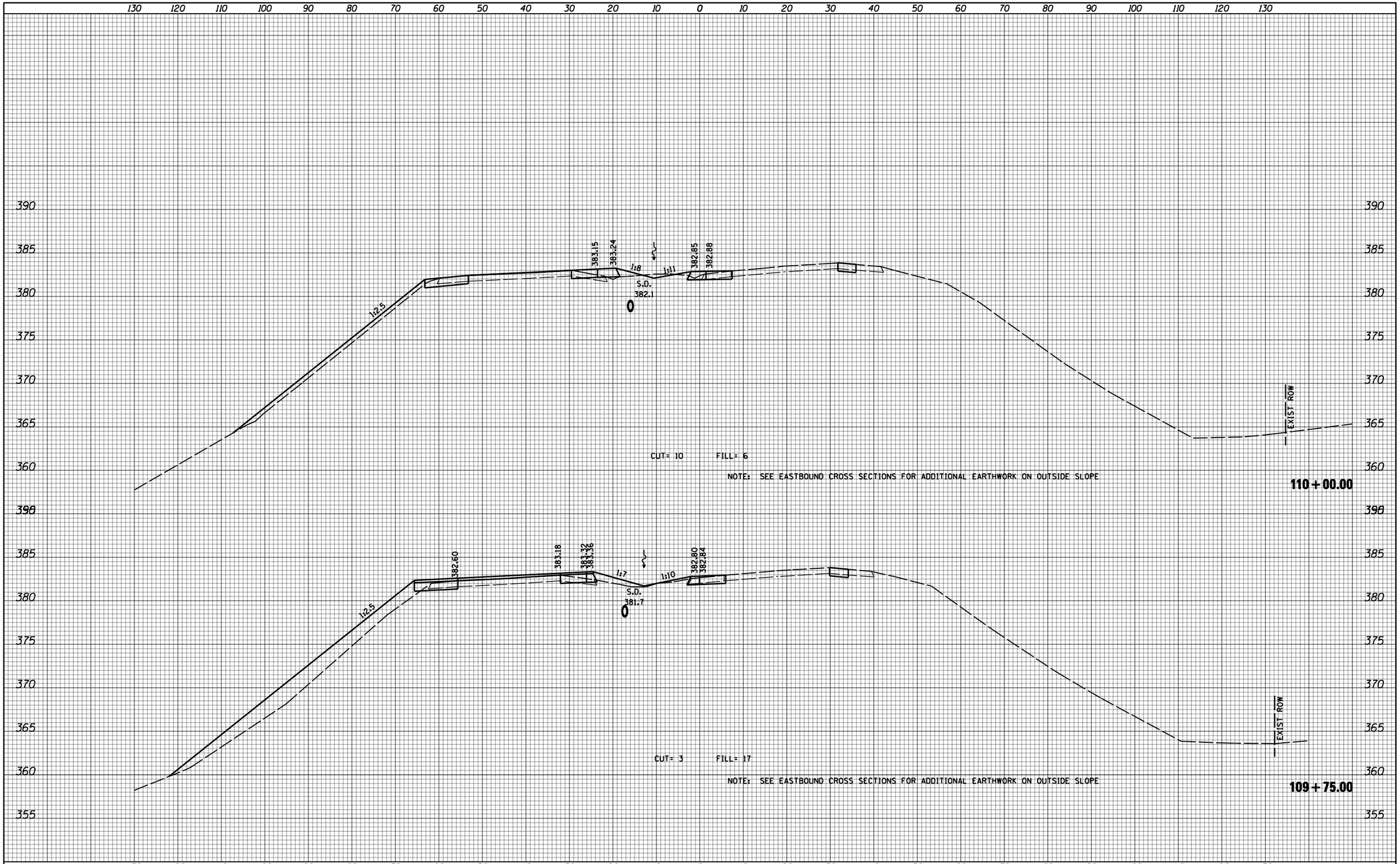
STAGING CROSS SECTION SHEETS
IL RTE 13 OVER BIG MUDDY RIVER

SCALE: | SHEET NO. 10 OF 16 SHEETS | STA. 109+25.00 | TO STA. 109+50.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	194
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		

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

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



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	PLOT DATE = 1/25/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

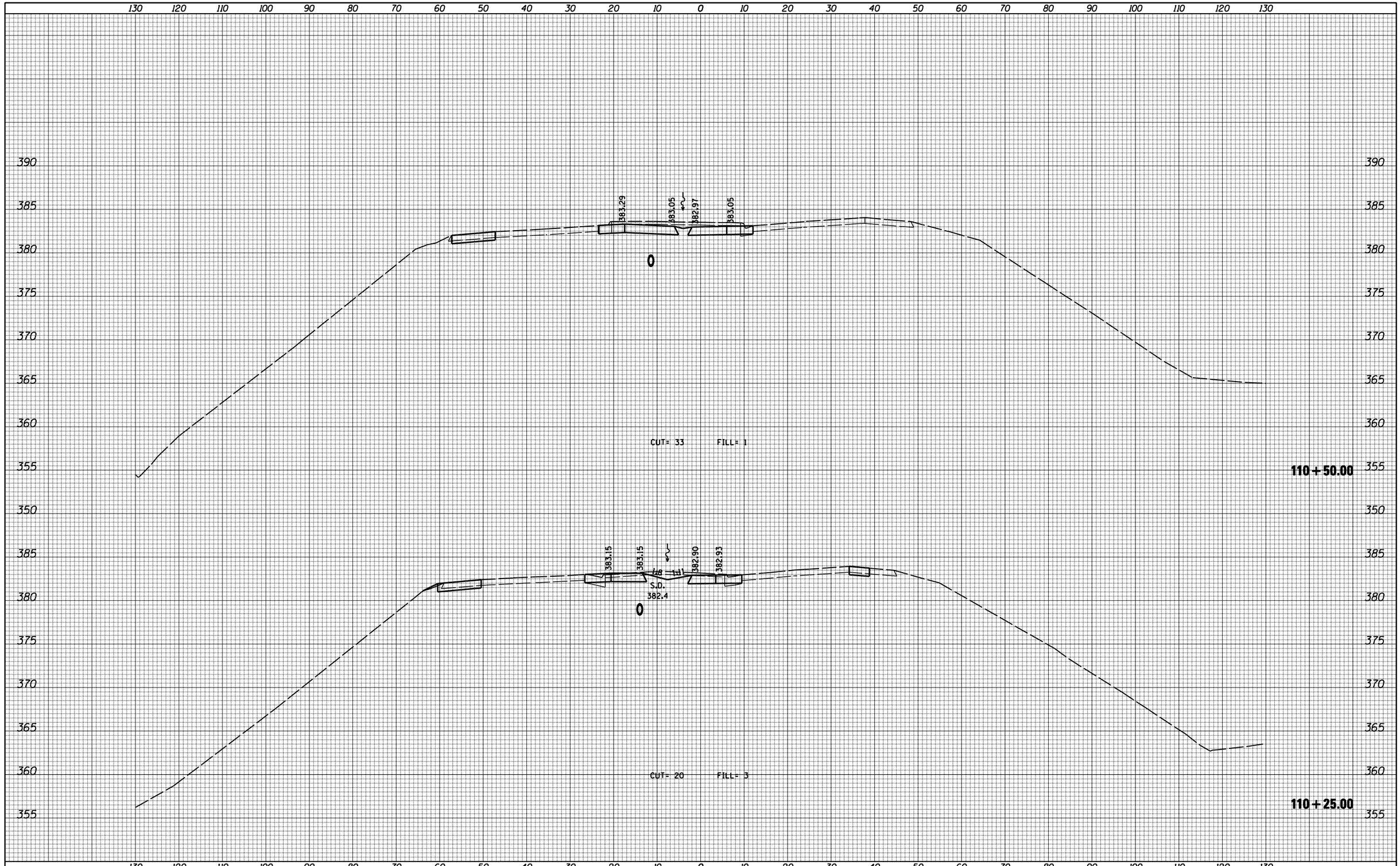
STAGING CROSS SECTION SHEETS
IL RTE 13 OVER BIG MUDDY RIVER

SCALE: | SHEET NO. 11 OF 16 SHEETS | STA. 109+75.00 | TO STA. 110+00.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	195
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		

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

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



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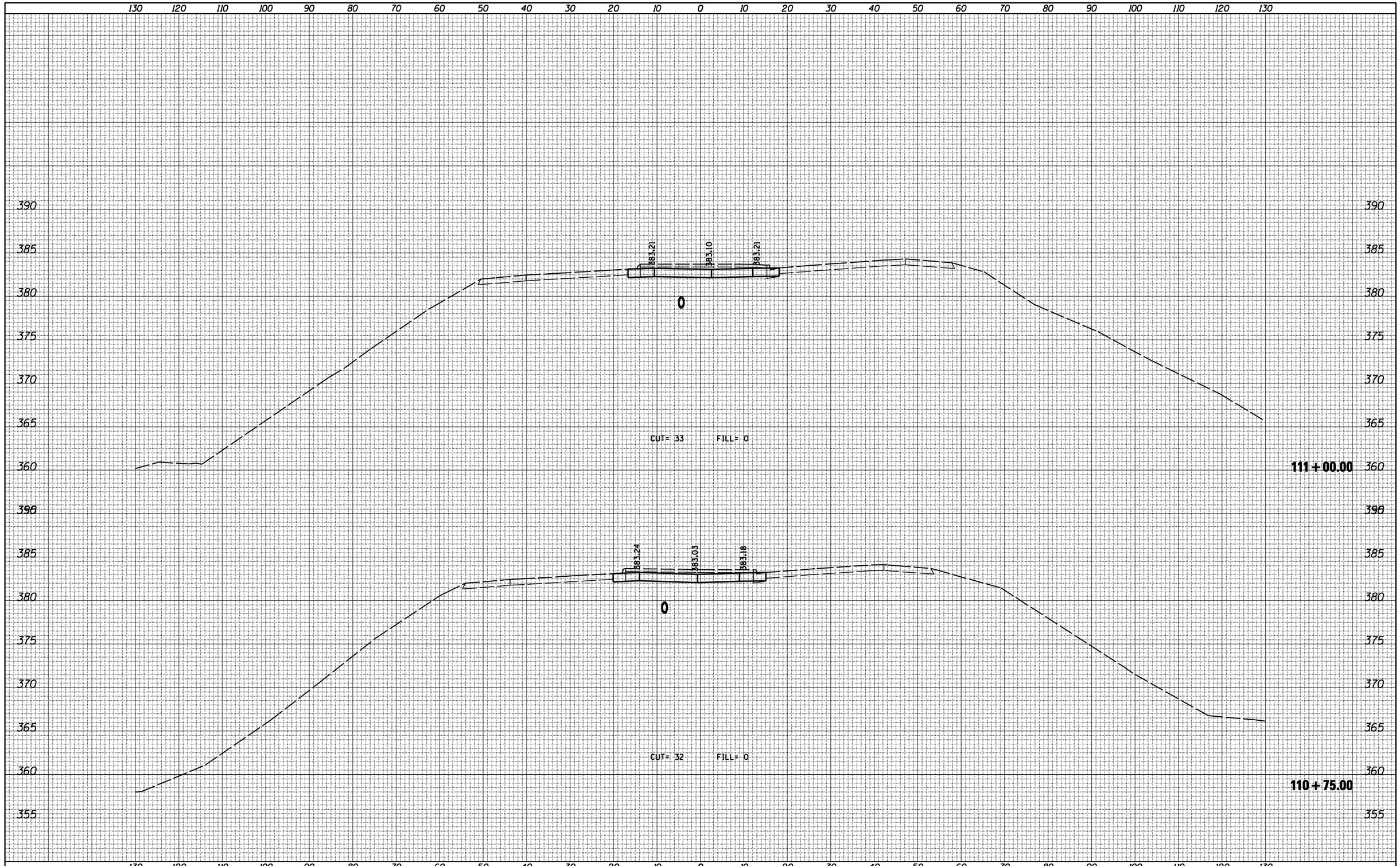
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGING CROSS SECTION SHEETS
IL RTE 13 OVER BIG MUDDY RIVER

SCALE: | SHEET NO. 12 OF 16 SHEETS | STA. 110+25.00 | TO STA. 110+50.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	196
		CONTRACT NO. 78056		
		ILLINOIS FED. AID PROJECT		



FINAL SURVEY

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

ORIGINAL SURVEY

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

FILE NAME = D978056-sht-xssht stgl.dgn	USER NAME = default	DESIGNED -	REVISED -
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	PLOT DATE = 1/25/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

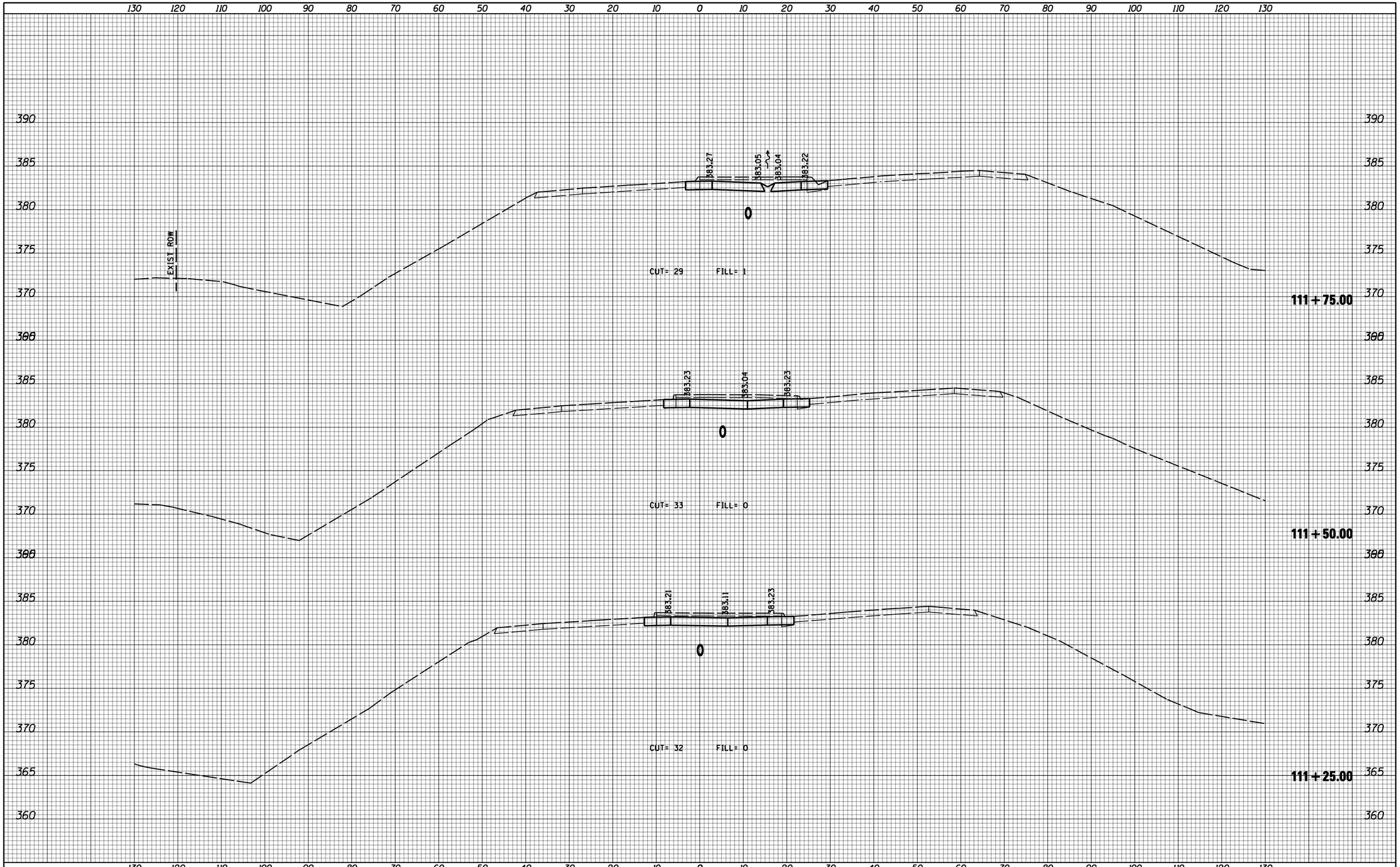
STAGING CROSS SECTION SHEETS
IL RTE 13 OVER BIG MUDDY RIVER

SCALE: | SHEET NO. 13 OF 16 SHEETS | STA. 110+75.00 | TO STA. 111+00.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	197
		CONTRACT NO. 78056		
		ILLINOIS FED. AID PROJECT		

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

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



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	PLOT DATE = 1/25/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGING CROSS SECTION SHEETS
IL RTE 13 OVER BIG MUDDY RIVER

SCALE: | SHEET NO. 14 OF 16 SHEETS | STA. 111+25.00 | TO STA. 111+75.00

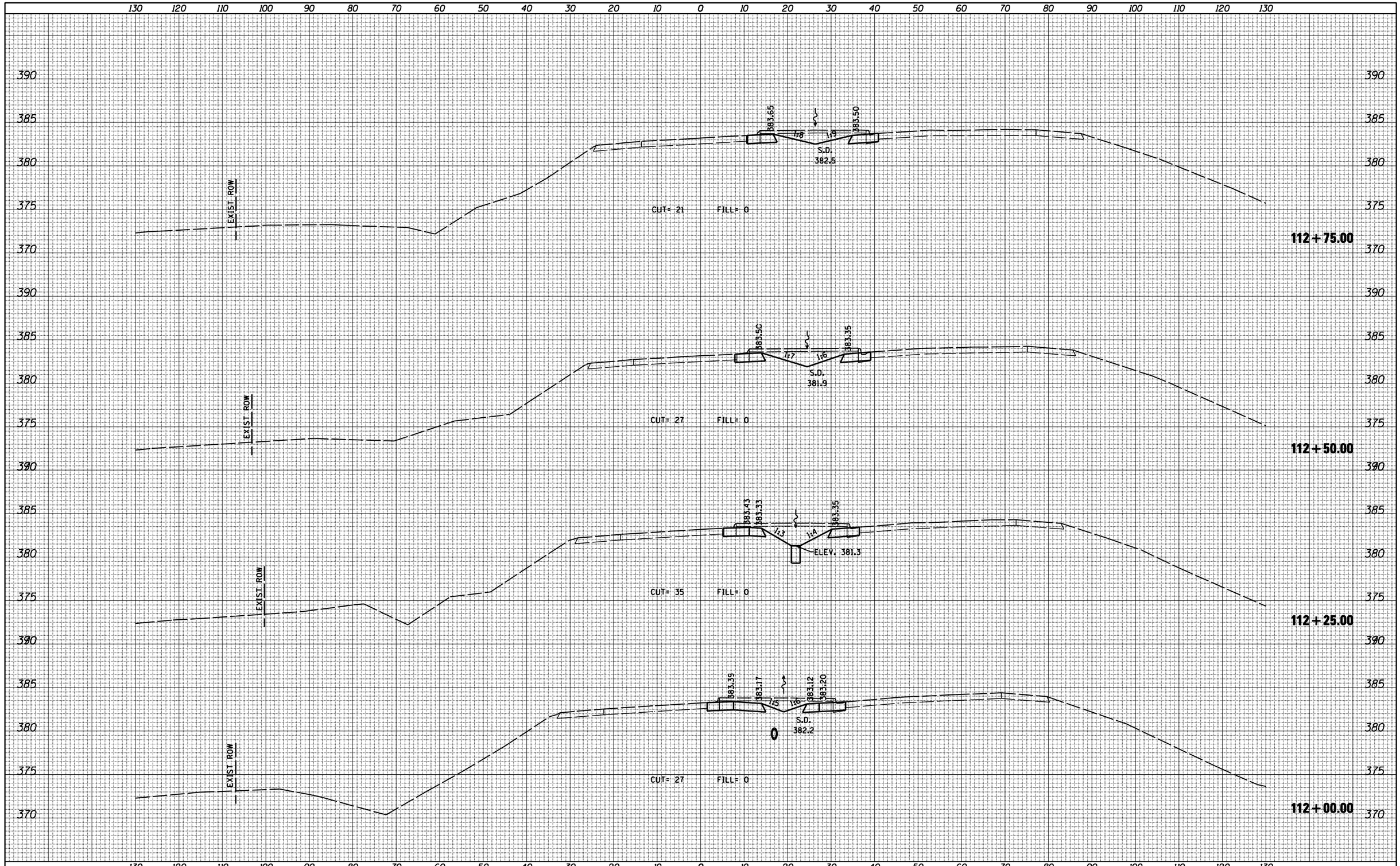
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	198
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		

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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	PLOT DATE = 1/25/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGING CROSS SECTION SHEETS
IL RTE 13 OVER BIG MUDDY RIVER

SCALE: | SHEET NO. 15 OF 16 SHEETS | STA. 112+00.00 | TO STA. 112+75.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	199
		CONTRACT NO. 78056		
		ILLINOIS FED. AID PROJECT		

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

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

385 380 375 370 390 385 380 375 370

EXIST. ROW

113+25.00

583.71 1:8 1:20 583.66

S.D. 383.2

CUT= 15 FILL= 0

EXIST. ROW

113+00.00

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

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

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	PLOT DATE = 1/25/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGING CROSS SECTION SHEETS
IL RTE 13 OVER BIG MUDDY RIVER

SCALE: | SHEET NO. 16 OF 16 SHEETS | STA. 113+00.00 | TO STA. 113+25.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	200
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		