

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**PROPOSED  
HIGHWAY PLANS**

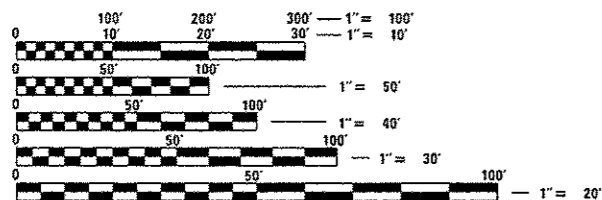
FAS ROUTE 779 (US 40)  
SECTION 35-1-BR  
BRIDGE REPLACEMENT  
BOND COUNTY

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	35-1-BR	BOND	57	1
ILLINOIS				76E04

FOR INDEX OF SHEETS, SEE SHEET NO. 2

**TRAFFIC DATA**

2013 ADT = 1200 (ACTUAL)  
2018 ADT = 1250 (ESTIMATED)  
2038 ADT = 1550 (ESTIMATED)  
SU = 4.2% MU = 1.0%



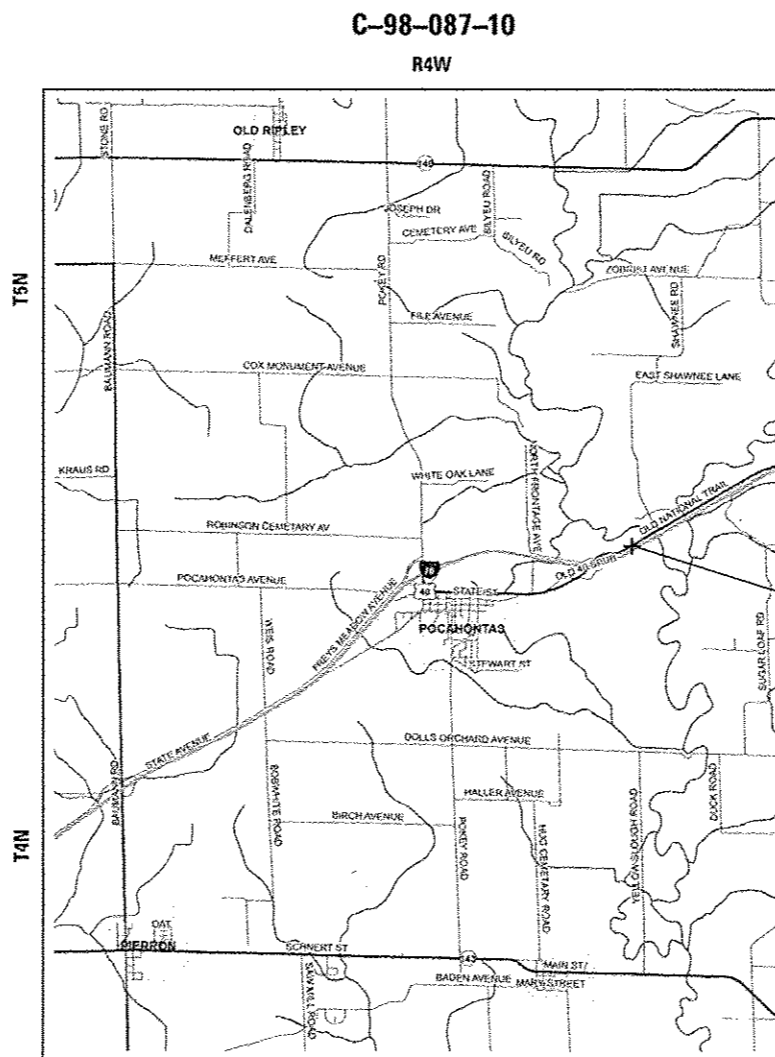
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

DESIGN DESIGNATION  
N/A

PROJECT ENGINEER: HERVE GELIN (618) 346-3179  
PROJECT MANAGER: BILLIE OWEN (618) 346-3209

CONTRACT NO. 76E04



MAP NOT TO SCALE

GROSS /NET LENGTH = 0.158 MILE

PROPOSED SINGLE SPAN 45" WEB R GIRDER  
BRIDGE OVER WEST FORK SHOAL CREEK  
108'-0" BACK TO BACK ABUTS, 0° SKEW  
STA. 1574+34.5  
S.N. 003-0020 (E), SN 003-0063 (P)  
BEGIN STA. 1571+45  
END STA. 1579+80  
LAT: 38.8352  
LONG: -89.5087



LOCATION OF SECTION INDICATED THUS: - [shaded box] -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED Aug. 5 20 16

*Jeffrey Z. Klein*  
REGIONAL ENGINEER

Sept 30 20 16  
*Maureen M. Addis, P.E.*  
ENGINEER OF DESIGN AND ENVIRONMENT

Sept 30 20 16  
*Isabelle [Signature]*  
DIRECTOR OF PROGRAM DEVELOPMENT

PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS

INDEX OF SHEETS

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- 001006 DECIMAL OF AN INCH AND OF A FOOT
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- 701001-02 OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' AWAY
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- 701301-04 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
- 701311-03 LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
- 701901-05 TRAFFIC CONTROL DEVICES
- 725001 OBJECT AND TERMINAL MARKERS
- 780001-05 TYPICAL PAVEMENT MARKINGS
- 781001-04 TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
- 782006 GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS
- BLR 21-9 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

COMMITMENTS

- 1. TREE CLEARING WILL BE PROHIBITED BETWEEN APRIL 1st AND SEPTEMBER 30th OF ANY CONSTRUCTION YEAR OF THE SUBJECT PROJECT TO AVOID DIRECT IMPACTS TO THE INDIANA AND NORTHERN LONG-EARED BATS.
- 2. COORDINATE WITH THE MAYOR OF POCAHONTAS THREE (3) WEEKS PRIOR TO CONSTRUCTION.  
KAREN HEILIG  
P.O. BOX 275  
POCAHONTAS, IL 62275  
PHONE: (618) 669-2431

PERTINENT INFORMATION

- 1. NO DETOUR SIGNING SHALL BE INSTALLED WITHOUT SUBMITTAL AND APPROVAL OF THE OPER 2410 FORM TO THE BUREAU OF OPERATIONS BY THE RESIDENT ENGINEER.

GENERAL NOTES

- 1. ILLINOIS STATE LAW REQUIRES A 48-HOUR NOTICE BE GIVEN TO ALL UTILITIES WITHIN THE PROJECT AREA BEFORE DIGGING. FIELD MARKING OF FACILITIES MAY BE OBTAINED BY CONTACTING J.U.L.I.E. OR FOR NON-MEMBERS, THE UTILITY COMPANY DIRECTLY. AGENCIES KNOWN TO HAVE FACILITIES WITHIN THE PROJECT AREA ARE AS FOLLOWS:
  - AT&T ILLINOIS (COMMUNICATIONS)
  - BOND MADISON WATER COMPANY (WATER)
  - DEPARTMENT OF CENTRAL MANAGEMENT SERVICES (COMMUNICATIONS)
  - FRONTIER NORTH, INC. (COMMUNICATIONS)
  - VILLAGE OF POCAHONTAS (WATER & SANITARY SEWER)
  - SOUTHWESTERN ELECTRIC COOPERATIVE, INC. (ELECTRIC)

MEMBERS OF J.U.L.I.E. CALL TOLL FREE (800) 892-0123 OR 811 AND ARE INDICATED BY •. NON-J.U.L.I.E. MEMBERS MUST BE NOTIFIED INDIVIDUALLY.
- 2. ALL ELEVATIONS REFER TO THE USCS MEAN SEA LEVEL DATUM.
- 3. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING MATERIALS.
- 4. THE THICKNESS OF HOT-MIX ASPHALT MIXTURE SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS MAY OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE BITUMINOUS MIXTURE IS PLACED.
- 5. AN ESTIMATED QUANTITY OF 140 TONS OF CUTTINGS FROM THE HOT-MIX ASPHALT SURFACE REMOVAL OPERATION IS ANTICIPATED.
- 6. THE REMOVAL OF THE BRIDGE APPROACH PAVEMENT, CONNECTOR, AND SLEEPER SLAB IS INCLUDED IN THE COST OF THE PAVEMENT REMOVAL.
- 7. OVERNIGHT DROP-OFFS WILL NOT BE PERMITTED NEXT TO AN OPEN LANE OF TRAFFIC.
- 8. PROPERTY LINES AND/OR EXISTING ROW SHOWN IS APPROXIMATE.
- 9. IF THE CONTRACTOR, FOR HIS CONSTRUCTION ACTIVITY, REMOVES TREES WITHIN THE RIGHT-OF-WAY LIMITS WHICH ARE NOT DESIGNATED ON THE PLANS FOR REMOVAL, I.E. IN ORDER TO GAIN ACCESS TO THE PROJECT SITE; IT WILL BE HIS RESPONSIBILITY TO REPLACE THE TREES AT A 1:1 RATIO. THE TREES WILL BE REPLACED WITH A 1 GALLON NATIVE ILLINOIS TREE SPECIES AND SHALL BE APPROVED BY THE ENGINEER. THE TREE REMOVAL AND TREE REPLACEMENT WILL BE AT THE CONTRACTOR'S EXPENSE, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- 10. THE RESIDENT ENGINEER SHALL VERIFY THE EXISTENCE OF HIGHWAY LIGHTING AND/OR INTELLIGENT TRANSPORTATION SYSTEMS (I.T.S.) UTILITIES WITHIN THE PROJECT LIMITS. IF HIGHWAY LIGHTING AND/OR I.T.S. EXISTS WITHIN THE PROJECT LIMITS, AND IF THESE ITEMS REQUIRE LOCATING, THE CONTRACTOR SHALL BE DIRECTED TO DO SO ACCORDING TO SECTION 803 OF THE STANDARD SPECIFICATIONS. THIS WORK SHALL BE PAID FOR ACCORDING TO ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.
- 11. TWO (2) CHANGEABLE MESSAGE BOARDS SHALL BE REQUIRED FOR THIS PROJECT. THEY SHALL BE PLACED TWO (2) WEEKS PRIOR TO ANY LANE CLOSURE AND SHALL REMAIN UP FOR THE DURATION OF THE PROJECT. THE CHANGEABLE MESSAGE BOARDS SHALL BE PLACED ALONG US 40 OR AT THE DIRECTION OF THE ENGINEER.
- 12. THE CONTRACTOR SHALL PROVIDE POSITIVE AND ADEQUATE DRAINAGE AT ALL LOCATIONS AT ALL TIMES. THIS MAY INCLUDE, BUT IS NOT LIMITED TO, REPLACEMENT OR RECONSTRUCTION OF EXISTING DRAINAGE STRUCTURES THAT HAVE BEEN DAMAGED OR REMOVED, REGRADING, PLUGGING ABANDONED PIPES, OR OTHER ACTIVITIES REQUIRED BY THE ENGINEER.
- 13. "ROAD CONSTRUCTION AHEAD" SIGNS SHALL BE PLACED AT EACH END OF THE PROJECT PLUS THE INTERSECTING SIDE ROADS, AND WILL BE CONSIDERED INCLUDED IN THE TRAFFIC CONTROL PAY ITEMS. ALL CONSTRUCTION SIGNS SHALL BE 48" X 48" FLUORESCENT ORANGE.
- 14. THE PROPOSED PAVEMENT MARKING SHALL MATCH THE LOCATIONS OF THE EXISTING PAVEMENT MARKING, AS DIRECTED BY THE ENGINEER.

FILE NAME =	USER NAME = herbaughd	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>INDEX OF SHEETS, HIGHWAY STANDARDS, GENERAL NOTES, &amp; COMMITMENTS</b>			F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
p:\11084EBID\INTEG\Illinois.gov\PIDOT\Docu	uments\DOT Offices\District 8\Projects\DOT	OR 21-9	REVISED -		779	35-1-BR	BOND	57	2			
	ments\DOT Offices\District 8\Projects\DOT	OR 21-9	CHECKED -									
	ments\DOT Offices\District 8\Projects\DOT	OR 21-9	REVISED -									
	PLOT SCALE = 100.0000' / 1" =	CHECKED -	REVISED -	SCALE: N/A	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	CONTRACT NO. 76E04		
	PLOT DATE = 8/19/2016	DATE -	REVISED -									







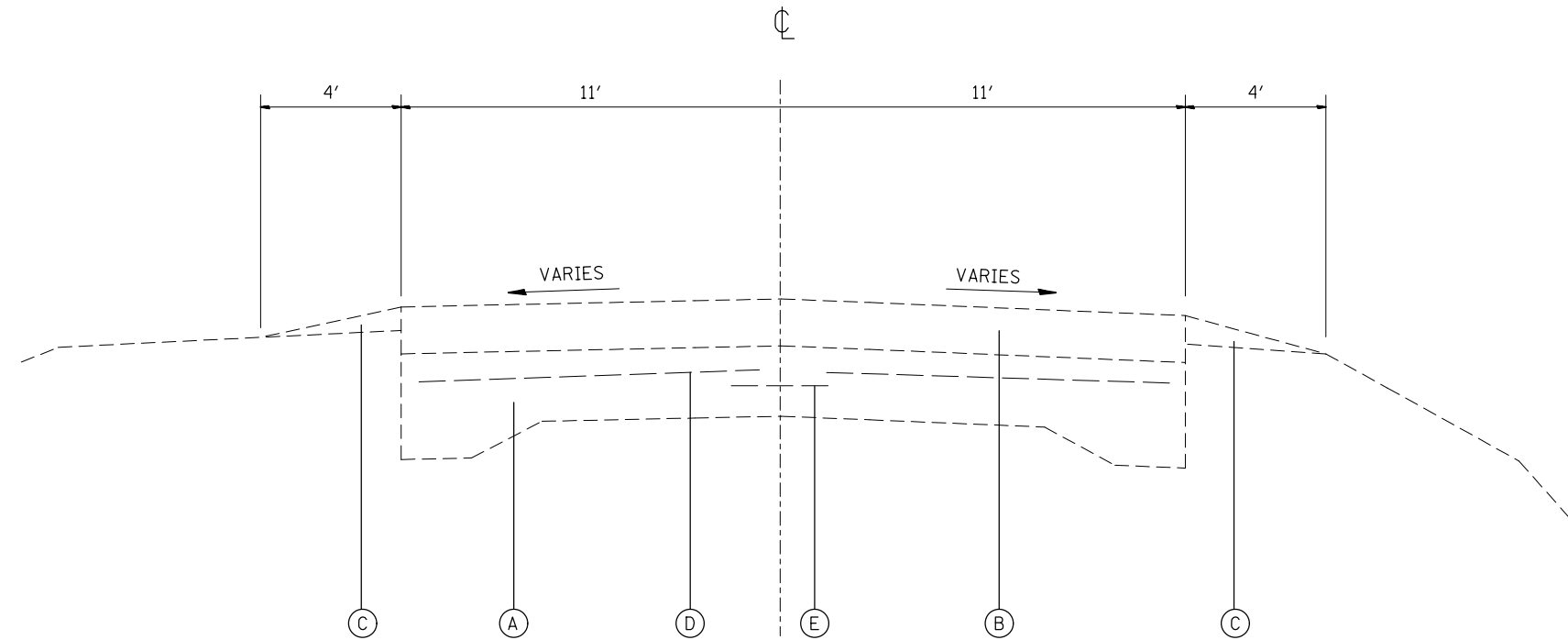


CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE
				100% STATE
				BRIDGE
				0011
				003-0063
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4	4
63200310	GUARDRAIL REMOVAL	FOOT	1099	1099
66500105	WOVEN WIRE FENCE, 4'	FOOT	835	835
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	8	8
67100100	MOBILIZATION	LSUM	1	1
70101830	TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 21	LSUM	1	1
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	5	5
* 72400100	REMOVE SIGN PANEL ASSEMBLY - TYPE A	EACH	6	6
* 72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	1518	1518
* 78008210	POLYUREA PAVEMENT MARKING TYPE I - LINE 4"	FOOT	382	382
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	9	9
* 78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	4	4
14 * 78200410	GUARDRAIL MARKERS, TYPE A	EACH	4	4

\* SPECIALTY ITEM

FILE NAME =	USER NAME = harbaughd	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SUMMARY OF QUANTITIES</b>				F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
p:\11\884EBID\INTEG\11\mesa.gov\PW\DOT\Do	umanta\DOT Offices\District 8\Projects\0875	CHECKED -	REVISED -		779	35-1-BR	BOND	57	6				
PLOT SCALE = 100.0000' / 1" =	DATE -	DATE -	DATE -		SCALE: NA SHEET NO. 4 OF 5 SHEETS STA. TO STA.				FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	CONTRACT NO. 76E04	
PLOT DATE = 8/5/2016	DATE -	DATE -	DATE -										



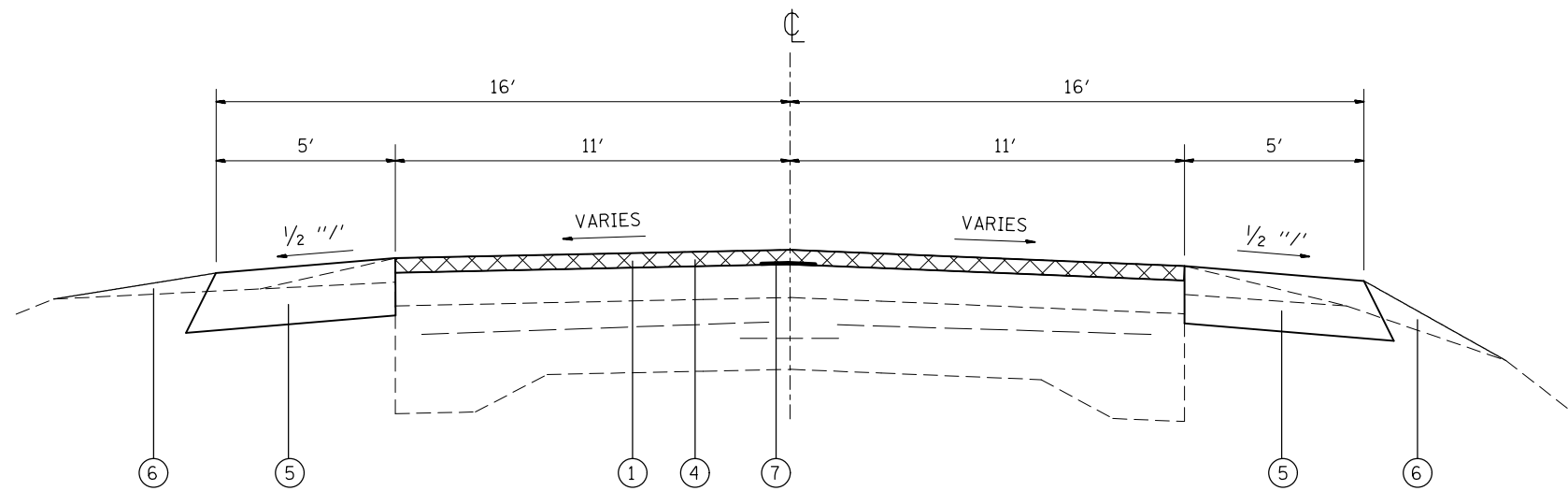


- LEGEND**
- (A) EXISTING PCC PAVEMENT, 9"-7"-9"
  - (B) EXISTING HOT-MIX ASPHALT, ±4"
  - (C) EXISTING AGGREGATE SHOULDERS, TYPE B, 6" & VARIES
  - (D) EXISTING WIRE FABRIC
  - (E) EXISTING LONGITUDINAL METAL JOINT WITH 1/2" TIE BARS
- 
- ① PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH
  - ② PROPOSED HOT-MIX ASPHALT BINDER COURSE (VARIABLE DEPTH)
  - ③ PROPOSED LEVELING BINDER (MACHINE METHOD)
  - ④ PROPOSED HOT-MIX ASPHALT SURFACE COURSE, 1 1/2"
  - ⑤ PROPOSED HOT-MIX ASPHALT SHOULDERS, 8"
  - ⑥ PROPOSED EARTHWORK
  - ⑦ PROPOSED LONGITUDINAL JOINT SEALANT (TO BE PLACED PRIOR TO ALL HMA LIFTS)

EXISTING TYPICAL SECTION

STA 1571+45 TO STA 1573+61.57  
 STA 1575+07.34 TO STA 1579+80

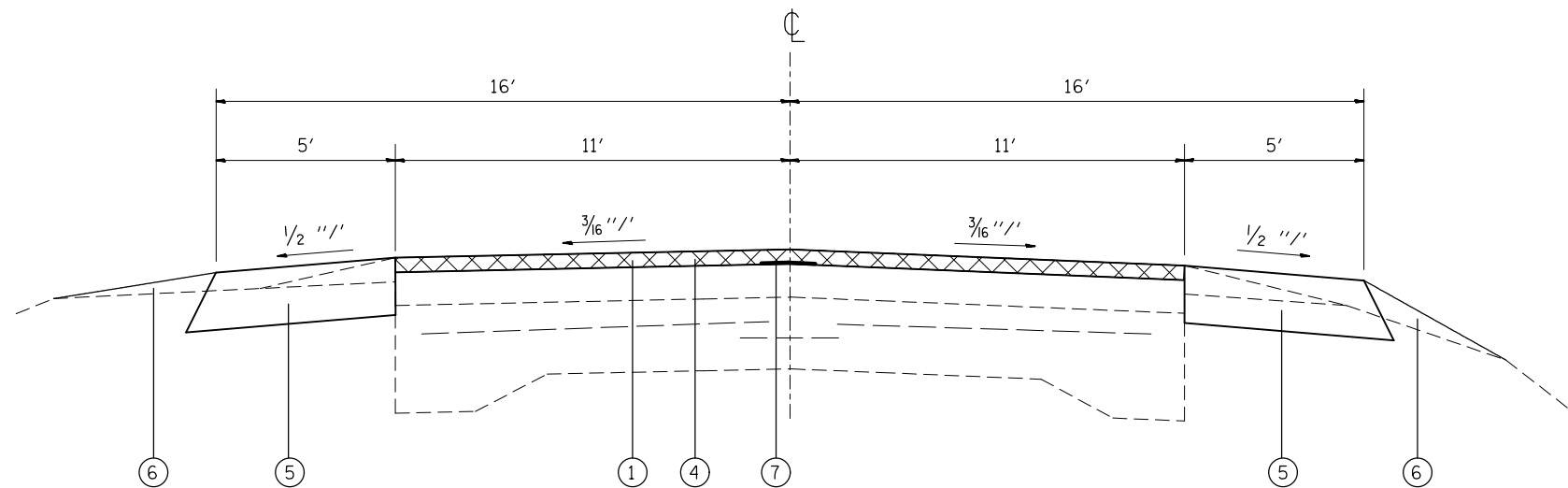
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PLOT SCALE = 100.0000' / 1in.		DATE -	REVISED -		CONTRACT NO. 76E04							
PLOT DATE = 8/5/2016					SCALE: N/A	SHEET NO. 1 OF 3 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT		



**PROPOSED TYPICAL SECTION**

TRANSITION LENGTH TO MATCH EXISTING PAVEMENT  
 STA 1571+45 TO STA 1571+85  
 STA 1579+40 TO STA 1579+80

- LEGEND**
- (A) EXISTING PCC PAVEMENT, 9"-7"-9"
  - (B) EXISTING HOT-MIX ASPHALT, ±4"
  - (C) EXISTING AGGREGATE SHOULDERS, TYPE B, 6" & VARIES
  - (D) EXISTING WIRE FABRIC
  - (E) EXISTING LONGITUDINAL METAL JOINT WITH 1/2" TIE BARS
  - (1) PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH
  - (2) PROPOSED HOT-MIX ASPHALT BINDER COURSE (VARIABLE DEPTH)
  - (3) PROPOSED LEVELING BINDER (MACHINE METHOD)
  - (4) PROPOSED HOT-MIX ASPHALT SURFACE COURSE, 1 1/2"
  - (5) PROPOSED HOT-MIX ASPHALT SHOULDERS, 8"
  - (6) PROPOSED EARTHWORK
  - (7) PROPOSED LONGITUDINAL JOINT SEALANT (TO BE PLACED PRIOR TO ALL HMA LIFTS)

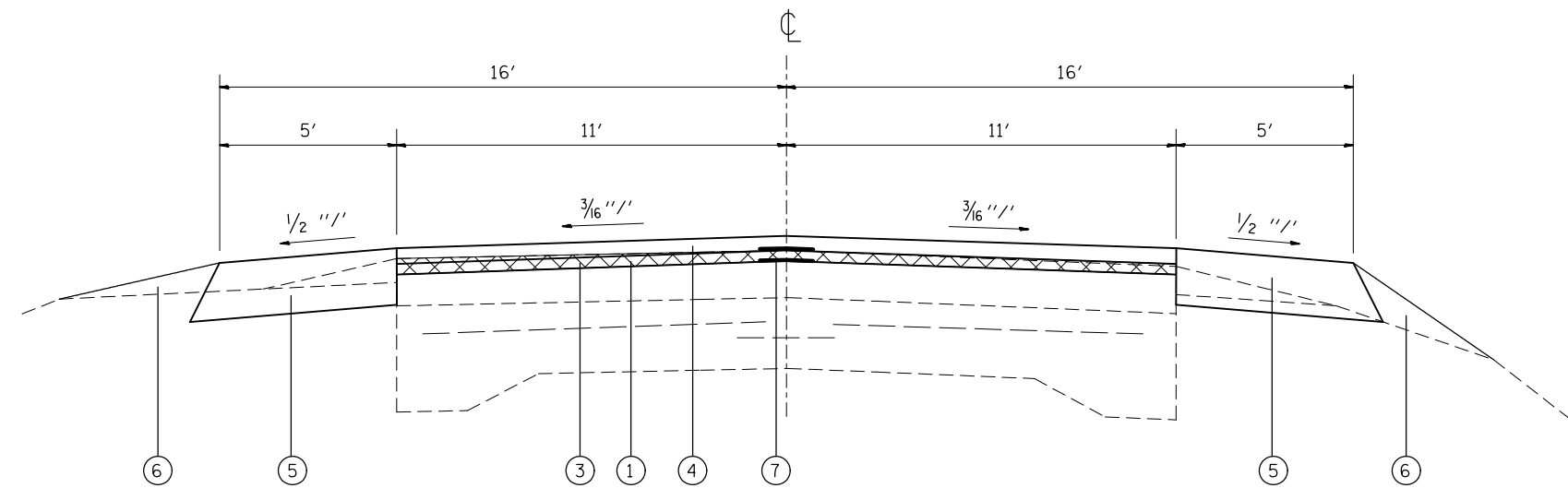


**PROPOSED TYPICAL SECTION**

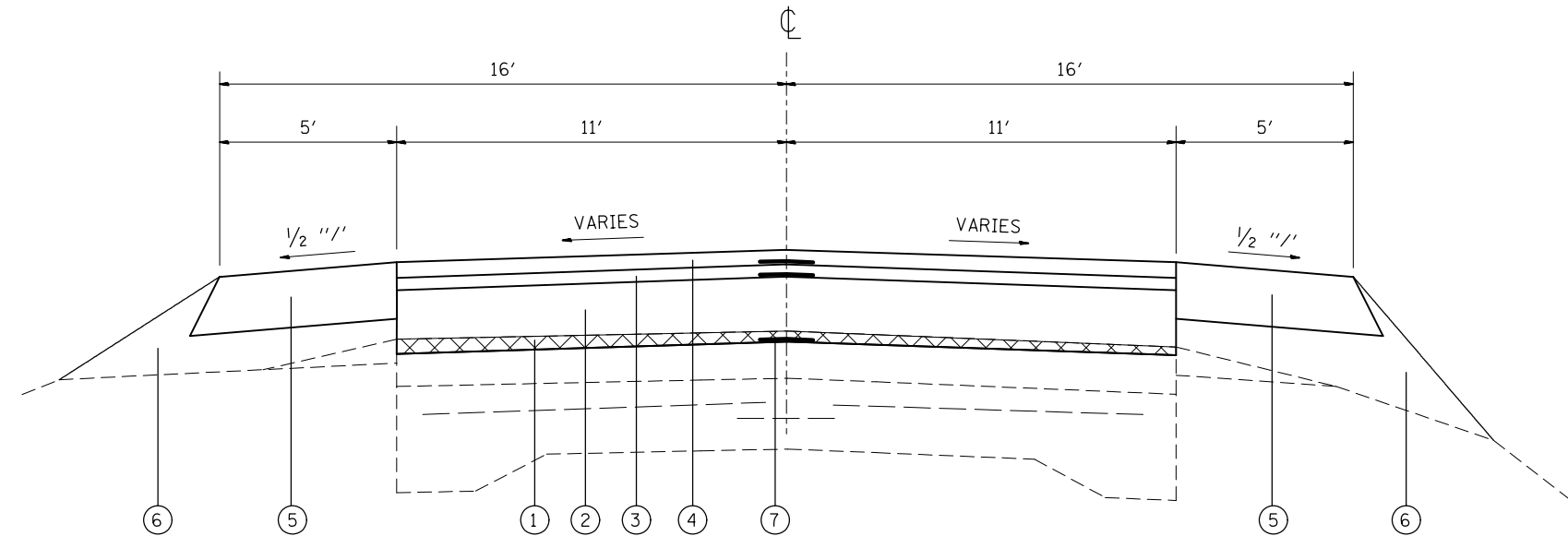
STA 1571+85 TO STA 1572+00  
 STA 1578+75 TO STA 1579+40

MIXTURE USE	SURFACE	BINDER	LEVEL BINDER	SHOULDER ≥ 2.25"	SHOULDER < 2.25"
AC/PG	PG 64-22	PG 64-22	PG 64-22	PG 64-22	PG 64-22
RAP % (MAX)	SEE SPECIAL PROVISION	SEE SPECIAL PROVISION	SEE SPECIAL PROVISION	SEE SPECIAL PROVISION	SEE SPECIAL PROVISION
DESIGN AIR VOIDS	4.0% @ Ndes=70	4.0% @ Ndes=70	4.0% @ Ndes=70	4.0% @ Ndes=30	4.0% @ Ndes=30
MIX COMPOSITION (GRADATION)	IL 9.5	IL 19.0	IL 9.5 FG	IL 19.0L	IL 9.5L
FRICTION AGG	MIXTURE "C"	MIXTURE "B"	MIXTURE "C"		
QUALITY MGMT PROGRAM	QC/QA	QC/QA	QC/QA	QC/QA	QC/QA

PLAN QUANTITIES FOR BITUMINOUS CONCRETE SURFACE COURSE ITEMS ARE CALCULATED USING A UNIT WEIGHT OF 112 LB/SQ YD/IN.



**PROPOSED TYPICAL SECTION**  
 STA 1572+00 TO STA 1573+41.50  
 STA 1577+95 TO STA 1578+75



**PROPOSED TYPICAL SECTION**  
 STA 1575+27.5 TO STA 1577+95

**LEGEND**

- (A) EXISTING PCC PAVEMENT, 9"-7"-9"
- (B) EXISTING HOT-MIX ASPHALT, ±4"
- (C) EXISTING AGGREGATE SHOULDERS, TYPE B, 6" & VARIES
- (D) EXISTING WIRE FABRIC
- (E) EXISTING LONGITUDINAL METAL JOINT WITH 1/2" TIE BARS
- (1) PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH
- (2) PROPOSED HOT-MIX ASPHALT BINDER COURSE (VARIABLE DEPTH)
- (3) PROPOSED LEVELING BINDER (MACHINE METHOD)
- (4) PROPOSED HOT-MIX ASPHALT SURFACE COURSE, 1 1/2"
- (5) PROPOSED HOT-MIX ASPHALT SHOULDERS, 8"
- (6) PROPOSED EARTHWORK
- (7) PROPOSED LONGITUDINAL JOINT SEALANT (TO BE PLACED PRIOR TO ALL HMA LIFTS)

**PROPOSED HMA - REMOVAL, BINDER, LEVELING BINDER AND SURFACE THICKNESSES**

LOCATION STA.	REMOVAL					BINDER			LEVELING BINDER			SURFACE				
	LEFT		CEN	RIGHT		LEFT EDGE	CEN	RIGHT EDGE	LEFT EDGE	CEN	RIGHT EDGE	LEFT		CEN	RIGHT	
	EDGE	SLOPE		SLOPE	EDGE							EDGE	SLOPE		EDGE	SLOPE
	INCH	%	INCH	%	INCH	INCH	INCH	INCH	INCH	INCH	INCH	INCH	%	INCH	%	INCH
1571+45.00	1.5	-1.22	1.5	0	1.5	-	-	-	-	-	-	1.5	-1.22	1.5	0	1.5
1571+70.00	2	-1.43	1	-0.98	1.9	-	-	-	-	-	-	1.5	-1.43	1.5	-0.98	1.5
1571+85.00	2	-1.50	1	-1.27		-	-	-	-	-	-	1.5	-1.56	1.5	-1.56	1.5
1572+00.00	2.1	-1.56	1	-1.56	2.4	-	-	-	1.25	1.25	1.25	1.5	-1.56	1.5	-1.56	1.5
1572+25.00	2	-1.52	0.9	-1.56		-	-	-	1.9	2.25	2.0	1.5	-1.56	1.5	-1.56	1.5
1572+50.00	2	-1.48	0.8	-1.56	1.5	-	-	-	2.6	2.7	2.7	1.5	-1.56	1.5	-1.56	1.5
1572+75.00	2	-1.24	0.7	-1.56		-	-	-	2.2	2.75	2.6	1.5	-1.56	1.5	-1.56	1.5
1573+00.00	2	-1.03	0.5	-1.56	1.9	-	-	-	1.7	2.4	2.4	1.5	-1.56	1.5	-1.56	1.5
1573+25.00	2	-1.46	0.5	-1.56	0.6	-	-	-	1.8	1.9	1.9	1.5	-1.56	1.5	-1.56	1.5
1573+41.50	2	-1.50	0.5	-1.56	0.6	-	-	-	1.9	2.5	1.9	1.5	-1.56	1.5	-1.56	1.5
<b>BRIDGE OMISSION</b>																
1575+27.50	2	-1.47	1.5	-1.56	1.8	4.2	4.4	4.4	1.25	1.25	1.25	1.5	-1.56	1.5	-1.56	1.5
1575+50.00	2	-1.46	1.5	-1.56	1.8	4.7	4.9	4.9	1.25	1.25	1.25	1.5	-1.56	1.5	-1.56	1.5
1575+75.00	2	-1.45	1.5	-1.56	1.8	5.2	5.4	5.4	1.25	1.25	1.25	1.5	-1.56	1.5	-1.56	1.5
1576+00.00	2	-1.44	1.5	-1.56	1.8	5.7	5.8	5.8	1.25	1.25	1.25	1.5	-1.56	1.5	-1.56	1.5
1576+25.00	2	-1.33	1.5	-1.60	1.7	5.8	6	6.1	1.25	1.25	1.25	1.5	-1.56	1.5	-1.56	1.5
1576+50.00	2	-1.21	1.5	-1.63	1.5	5.8	6.2	6.3	1.25	1.25	1.25	1.5	-1.56	1.5	-1.56	1.5
1576+75.00	2	-1.35	1.5	-1.67	1.5	5.7	6	6.1	1.25	1.25	1.25	1.5	-1.56	1.5	-1.56	1.5
1577+00.00	2	-1.49	1.5	-1.70	1.5	5.6	5.7	5.9	1.25	1.25	1.25	1.5	-1.56	1.5	-1.56	1.5
1577+25.00	2	-1.40	1.5	-1.63	1.6	4.9	5.1	5.2	1.25	1.25	1.25	1.5	-1.56	1.5	-1.56	1.5
1577+50.00	2	-1.30	1.5	-1.56	1.6	4.2	4.5	4.5	1.25	1.25	1.25	1.5	-1.56	1.5	-1.56	1.5
1577+75.00	2	-1.25	1.5	-1.72	1.5	3.1	3.5	3.7	1.25	1.25	1.25	1.5	-1.56	1.5	-1.56	1.5
1577+95.00	2	-1.31	1.5	-1.48	1.5	2.25	2.5	2.4	1.25	1.25	1.25	1.5	-1.56	1.5	-1.56	1.5
1578+00.00	2	-1.33	1.5	-1.42	0.8	-	-	-	1.25	1.25	1.25	1.5	-1.56	1.5	-1.56	1.5
1578+25.00	2	-1.43	1.5	-1.56	0.8	-	-	-	1.25	1.25	1.25	1.5	-1.56	1.5	-1.56	1.5
1578+50.00	2	-1.35	1.5	-1.56	0.6	-	-	-	1.25	1.25	1.25	1.5	-1.56	1.5	-1.56	1.5
1578+65.00	2.4	-1.48	1.5	-1.56	0.5	-	-	-	1.25	1.25	1.25	1.5	-1.56	1.5	-1.56	1.5
1578+75.00	2.7	-1.56	1.5	-1.56	0.5	-	-	-	-	-	-	1.5	-1.56	1.5	-1.56	1.5
1578+90.00	1.8	-1.56	0.9	-1.56	0.5	-	-	-	-	-	-	1.5	-1.56	1.5	-1.56	1.5
1579+00.00	1.9	-1.56	1.2	-1.56	0.5	-	-	-	-	-	-	1.5	-1.56	1.5	-1.56	1.5
1579+15.00	2.1	-1.56	1.3	-1.56	0.5	-	-	-	-	-	-	1.5	-1.56	1.5	-1.56	1.5
1579+25.00	2.2	-1.56	1.4	-1.56	0.5	-	-	-	-	-	-	1.5	-1.56	1.5	-1.56	1.5
1579+35.00	2.2	-1.56	1.4	-1.56	0.5	-	-	-	-	-	-	1.5	-1.56	1.5	-1.56	1.5
1579+40.00	2.3	-1.56	1.3	-1.56	0.5	-	-	-	-	-	-	1.5	-1.56	1.5	-1.56	1.5
1579+50.00	2.1	-1.37	1.3	-1.74	0.7	-	-	-	-	-	-	1.5	-1.37	1.5	-1.74	1.5
1579+65.00	1.8	-1.07	1.4	-2.02	1.1	-	-	-	-	-	-	1.5	-1.07	1.5	-2.02	1.5
1579+80.00	1.5	-0.78	1.5	-2.29	1.5	-	-	-	-	-	-	1.5	-0.78	1.5	-2.29	1.5

EARTHWORK SCHEDULE

LOCATION			EARTH EXCAVATION	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE (25%)	EMBANKMENT	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)
STA.	TO	STA.	CU YD	CU YD	CU YD	CU YD
1571+45	TO	1572+00	12.3	9.3	2.8	+6.5
1572+00	TO	1573+00	18.8	14.1	21.5	-7.4
1573+00	TO	1574+00	47.1	35.3	33.1	+2.2
1574+00	TO	1575+00	4.2	3.2	6.8	-3.6
1575+00	TO	1576+00	34.0	25.5	44.1	-18.6
1576+00	TO	1577+00	0.5	0.4	37.8	-37.4
1577+00	TO	1578+00	3.2	2.4	44.5	-42.1
1578+00	TO	1579+00	50.7	38.1	93.8	-55.7
1579+00	TO	1580+00	24.2	18.3	240.3	-222.0
1580+00	TO	1580+60	0	0.0	91.9	-91.9
TOTAL			195	146.6	616.6	-470

REMOVAL SCHEDULE

LOCATION			HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	PAVEMENT REMOVAL	WOVEN WIRE FENCE REMOVAL	REMOVE SIGN PANEL ASSEMBLY - TYPE A
STA.	TO	STA.	SQ YD	SQ YD	FOOT	EACH
1571+45.00	TO	1573+41.50	243.4		330	
1573+41.50	TO	1573+51.50		25		
1573+51.50	TO	1573+81.50		75		
BRIDGE OMISSION						6
1574+87.50	TO	1575+17.50		75	505	
1575+17.50	TO	1575+27.50		25		
1575+27.50	TO	1579+80.00	560.6			
TOTAL			804	200	835	6

EROSION CONTROL SCHEDULE

LOCATION			PERIMETER EROSION BARRIER		TEMPORARY EROSION CONTROL SEEDING	SEEDING, CLASS 2	NITROGEN FERTILIZER NUTRIENT	PHOSPHORUS FERTILIZER NUTRIENT	POTASSIUM FERTILIZER NUTRIENT	MULCH, METHOD 2	EROSION CONTROL BLANKET	
STA.	TO	STA.	LEFT	RIGHT	FOOT	POUND	ACRE	POUND	POUND	POUND	ACRE	RIGHT
STA.	TO	STA.	FOOT		POUND	ACRE	POUND	POUND	POUND	ACRE	SQ YD	
1571+45.00	TO	1573+81.50	235.0	240.0	45	0.15	15	15	15	0.45	351.3	
*REFΔ	TO	1574+00.00										
CHANNEL												
1574+00.00	TO	1574+87.50			105	0.35	35	35	35	1.05	114.7	
1574+87.50	TO	1579+80.00	510.0	495.0								
1579+80.00	TO	1581+21.00	290.0									
TOTAL			1770		150	0.5	50	50	50	1.5	466	

NOTE: MULCH, METHOD 2 CALCULATED AS 3 APPLICATIONS

TREE REMOVAL SCHEDULE

LOCATION			RT/LT	DIAMETER 6" TO 15"
STA.	TO	STA.		UNITS
1571+45	TO	1574+35	RT	54
1574+35	TO	1579+80	RT	54
TOTAL				108

RESURFACING SCHEDULE

LOCATION			BITUMINOUS MATERIALS (TACK COAT) POUND	LONGITUDINAL JOINT SEALANT FOOT	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70 TON	LEVELING BINDER (MACHINE METHOD), IL-9.5FG, N70 TON	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N70 TON	PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB SQ YD	HOT-MIX ASPHALT SHOULDERS, 8"	
STA.	TO	STA.							LEFT SQ YD	RIGHT SQ YD
1571+45.00	TO	1571+85.00	44	40			8.6		22.2	22.2
1571+85.00	TO	1572+00.00	16.5	15			3.2		8.3	8.3
1572+00.00	TO	1573+41.50	155.7	283		38.8	29.2		78.6	78.6
1573+41.50	TO	1573+51.50						37.5		
BRIDGE OMISSION										
1575+17.50	TO	1575+27.50						37.5		
1575+27.50	TO	1577+95.00	294.3	1070	175	47.7	55.3		148.7	148.7
1577+95.00	TO	1578+75.00	88	160		14.5	16.6		44.4	44.4
1578+75.00	TO	1579+40.00	71.5	65			13.5		36.1	36.1
1579+40.00	TO	1579+80.00	44	40			8.6		22.2	22.2
SUBTOTAL									360.5	360.5
TOTAL			714	1673	175	101	135	75	721	

GUARDRAIL SCHEDULE

LOCATION	GUARDRAIL REMOVAL	BRIDGE RAIL REMOVAL	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	TRAFFIC BARRIER TERMINAL, TYPE 6	GUARDRAIL MARKERS, TYPE A	BARRIER WALL MARKERS, TYPE B (BARRIER FACE)	BARRIER WALL MARKERS, TYPE C (TOP OF PARAPET)	TERMINAL MARKER - DIRECT APPLIED
	FOOT	FOOT	FOOT	EACH	EACH	EACH	EACH	EACH	EACH
EASTBOUND US 40		106				2	2	2	
WESTBOUND US 40		106				2	2	2	
NE QUADRANT	282		50	1	1				1
NW QUADRANT	279		6.25	1	1				1
SE QUADRANT	270		6.25	1	1				1
SW QUADRANT	268		56.25	1	1				1
TOTAL	1099	212	118.75	4	4	4	4	4	4

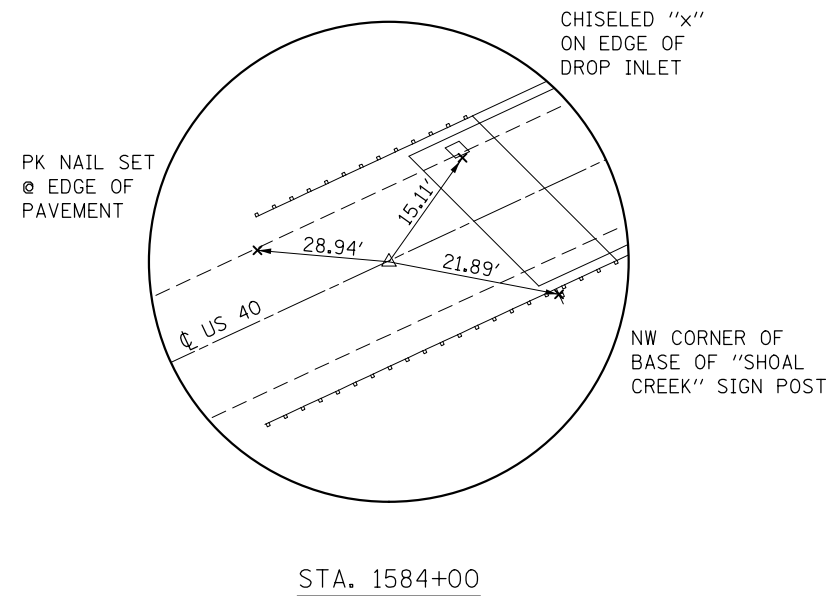
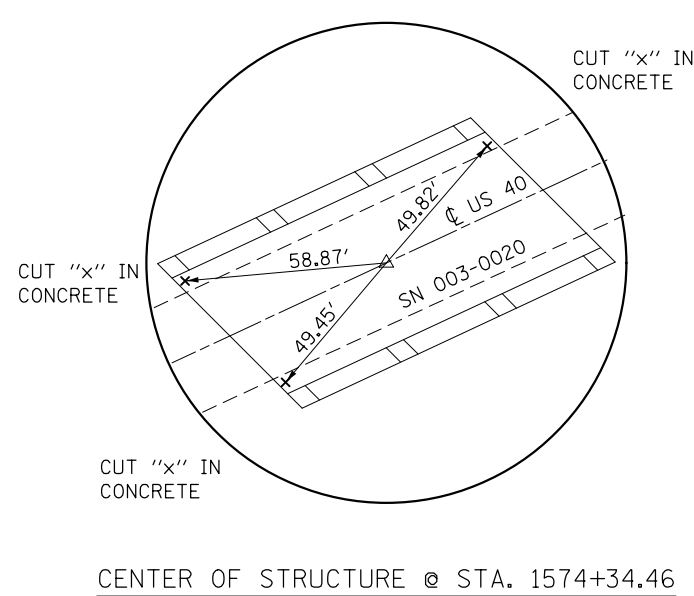
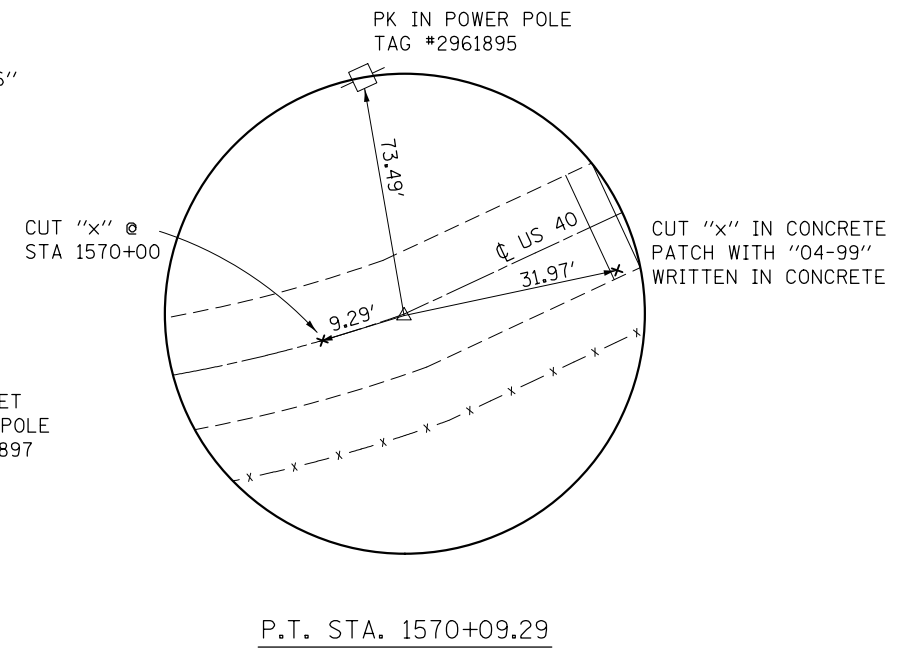
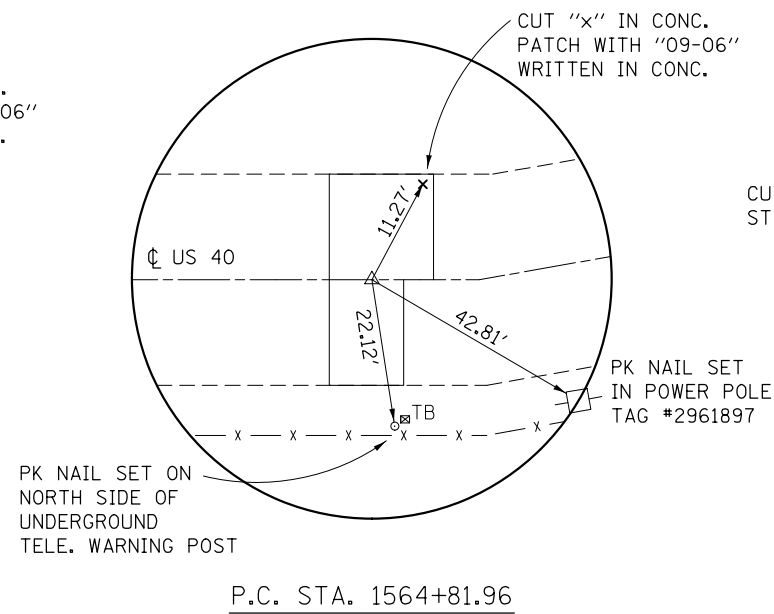
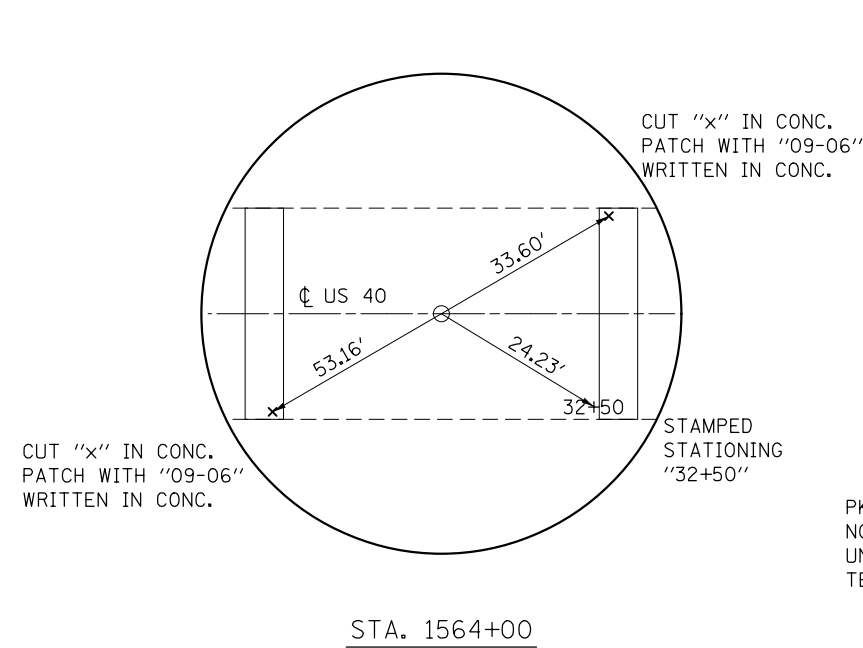
PAVEMENT MARKING SCHEDULE

LOCATION	THERMOPLASTIC PAVEMENT MARKING - LINE 4"			POLYUREA PAVEMENT MARKING TYPE I - LINE 4"			RAISED REFLECTIVE PAVEMENT MARKER					
	STA.	TO	STA.	CENTERLINE	EDGE LINE		CENTERLINE	EDGE LINE		REMOVAL	2-WAY AMBER	(BRIDGE) 2-WAY AMBER
				SKIP-DASH	SOLID WHITE	SKIP-DASH		SOLID WHITE				
				YELLOW	LEFT	RIGHT		YELLOW	LEFT			
FOOT	FOOT	FOOT	FOOT	FOOT	FOOT	FOOT	EACH	EACH	EACH			
1571+45.00	TO	1573+51.50	60	206.5	206.5				3	3		
1573+51.50	TO	1573+81.50				10	30	30	1		1	
1573+81.50	TO	1574+87.50				30	106	106			2	
1574+87.50	TO	1575+17.50				10	30	30	1		1	
1575+17.50	TO	1579+80.00	120	462.5	462.5				6	6		
SUBTOTAL			180	669	669	50	166	166				
TOTAL				1518			382			11	9	4



**BENCHMARKS**

BM 1: CHISELED "X" SET IN NW PARAPET WALL OF SN 003-0016, CARRYING US 40 OVER I-70, ELEVATION 529.49  
 BM 2: CHISELED "X" SET IN SE CORNER OF BRIDGE ABUTMENT EXT. SN 003-0020, ELEVATION 480.68  
 BM 3: EXISTING RR SPIKE FOUND IN POWERPOLE OFF NE END OF SN 003-0058, ELEVATION 480.06

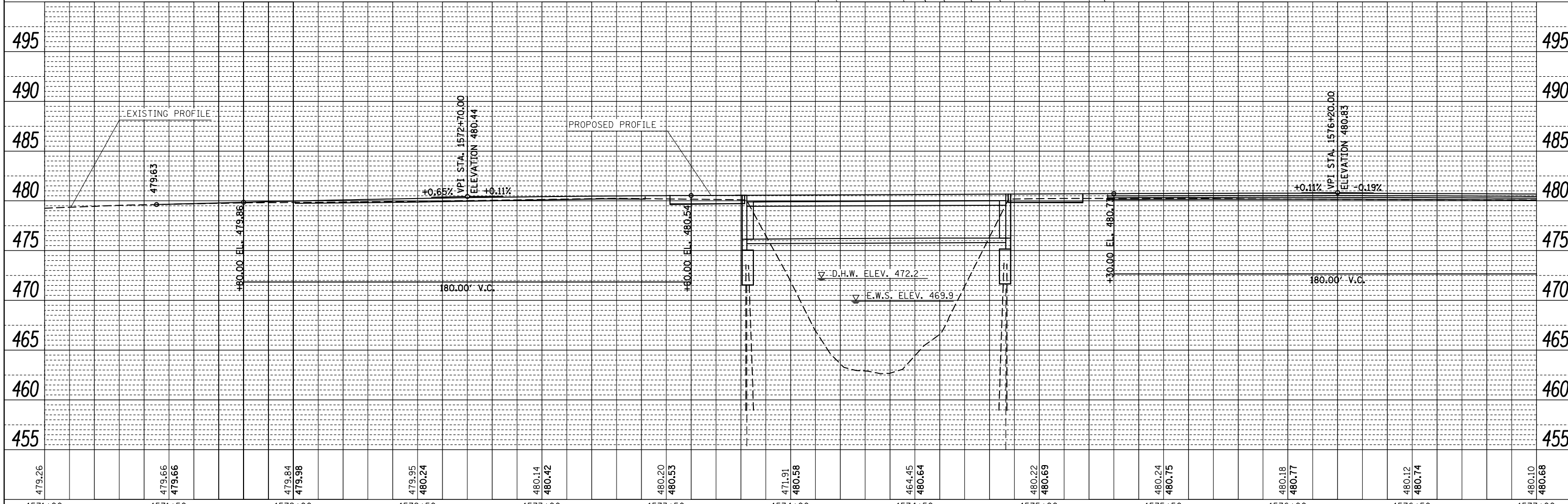
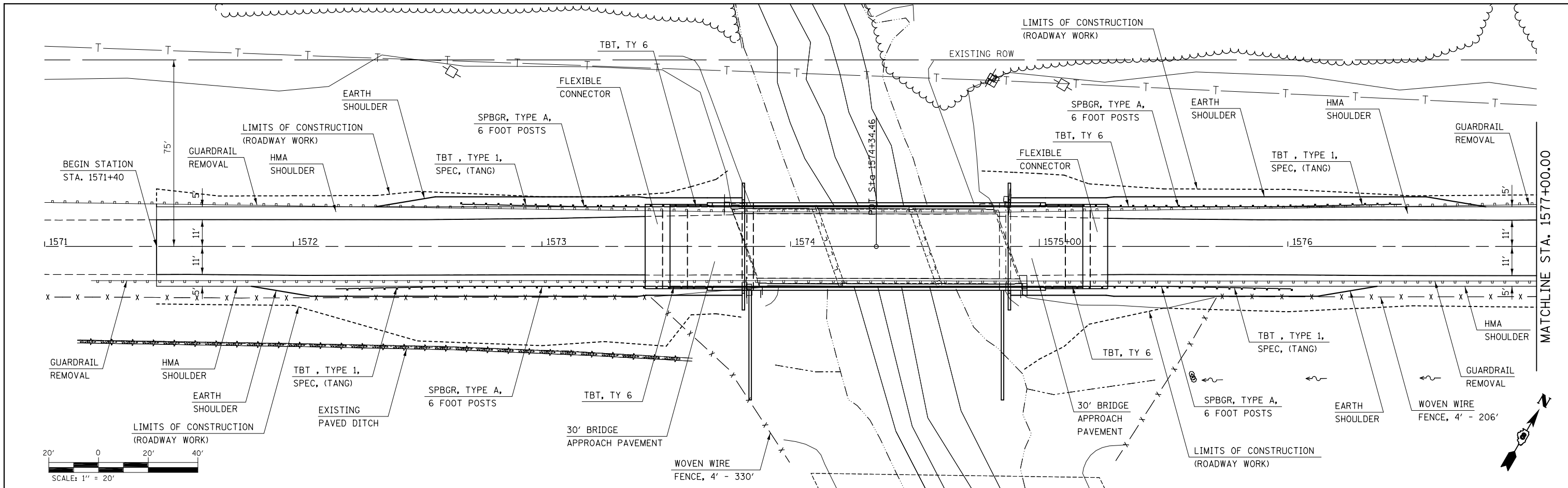


NOTES:  
 NOT TO SCALE.  
 ALL TIES ARE PULLED DIRECT.

FILE NAME =	USER NAME = harbaughrd	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TIES AND BENCHMARKS</b>			F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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PLOT SCALE = 100.0000' / 1"	CHECKED -	REVISED -	REVISED -		CONTRACT NO. 76E04			FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
PLOT DATE = 8/5/2016	DATE -	REVISED -	REVISED -		SCALE:	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.				

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

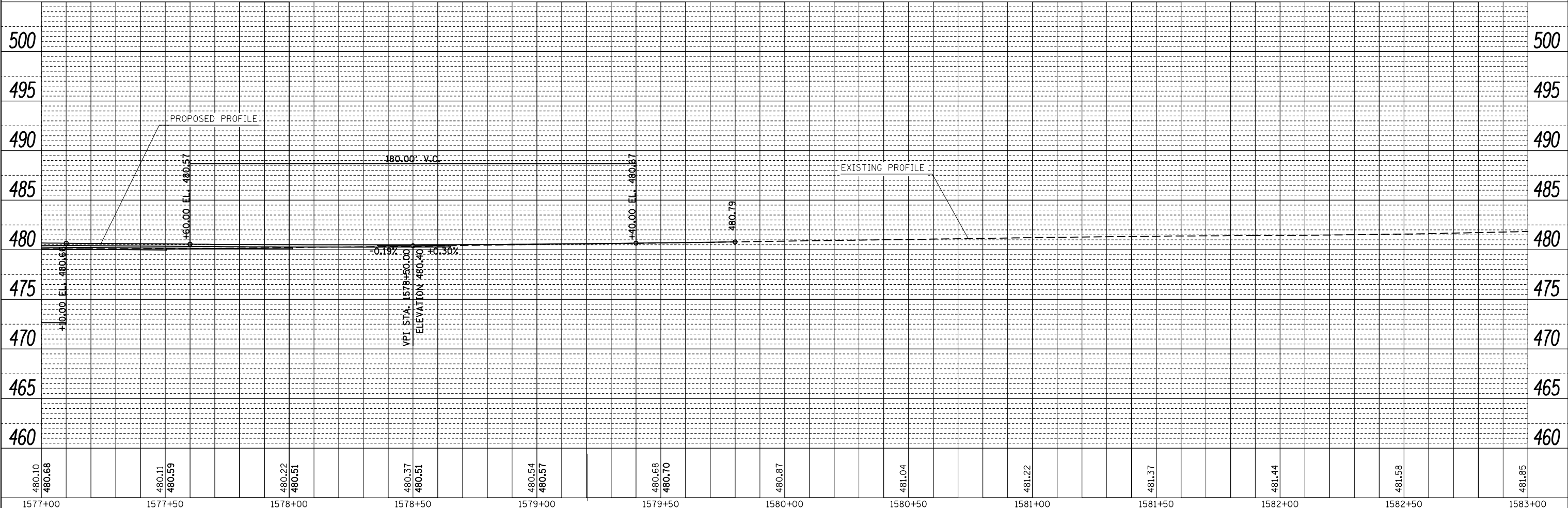
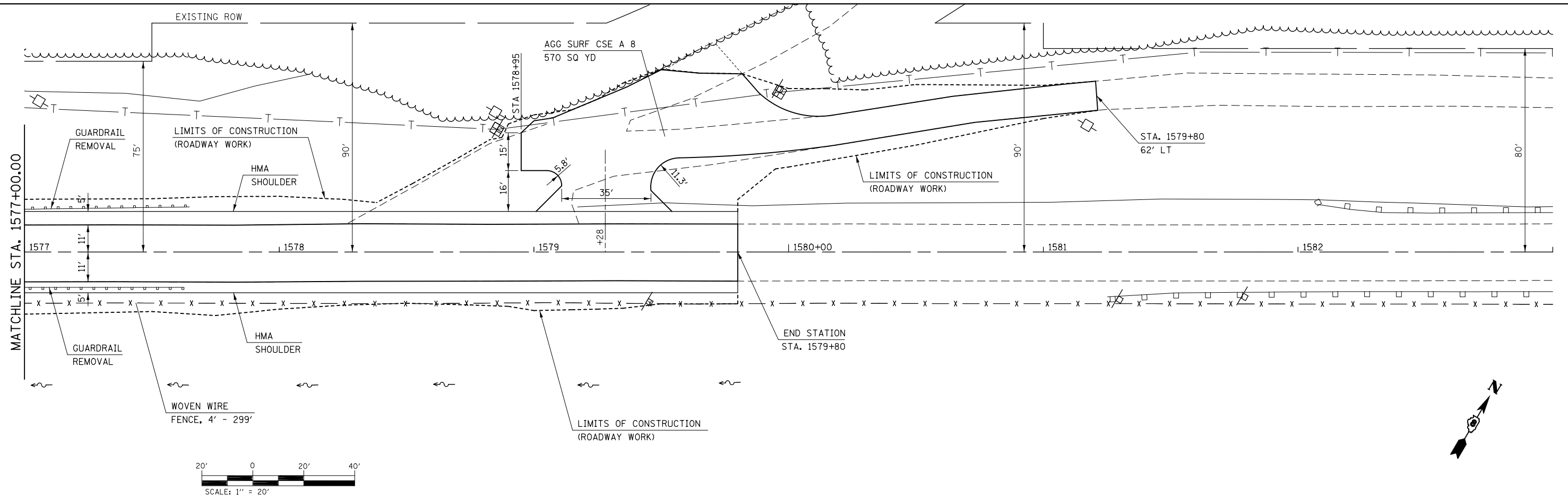
PROFILE	SURVEYED	BY	DATE
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	GRADES CHECKED		
	NO.		
	STRUCTURE		
	NOTATIONS		



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Default		CHECKED -	REVISED -		SCALE: 20	SHEET 1	OF 2 SHEETS	STA. 1571+00	TO STA. 1577+00	779	35-1-BR	BOND	57	14
		DATE -	REVISED -									CONTRACT NO. 76E04		
												ILLINOIS FED. AID PROJECT		

PLAN	SURVEYED	DATE
	PLOTTED	BY
	CHECKED	
	ALIGNED	
	FILED	
	NO. _____	
	FILE NAME	

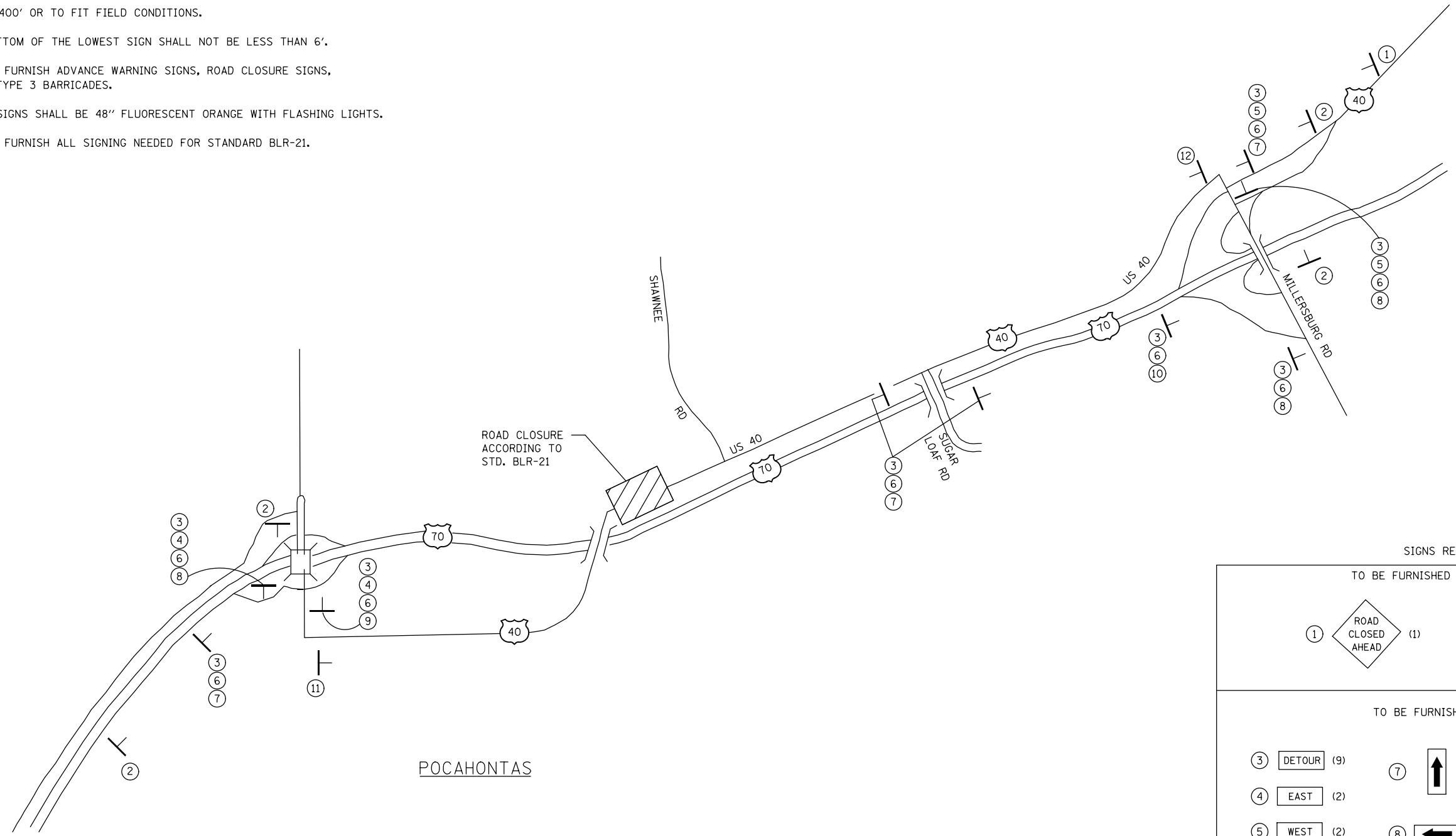
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	CHECKED	
	GRADES	
	STRUCTURE	
	NOTATIONS	
	CHKD	
	NO. _____	



FILE NAME =	USER NAME = harbaughrd	DESIGNED -	REVISED -	<p align="center"><b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b></p> <p align="center"><b>PLAN AND PROFILE SHEET</b></p>	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Default	PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -		779	35-1-BR	BOND	57	15
	PLOT DATE = 8/5/2016	DATE -	REVISED -		CONTRACT NO. 76E04				
					SCALE: 20	SHEET 2	OF 2 SHEETS	STA. 1577+00	TO STA. 1583+00

NOTES:

1. DETOUR SIGNS REQUIRED WILL BE SUPPLIED TO THE CONTRACTOR BY I.D.O.T.
2. THE CONTRACTOR SHALL FURNISH THE POSTS AND ERECT SIGNS AT THE LOCATIONS SHOWN ON THIS SHEET, AS DIRECTED BY THE R.E./R.T. THE POSTS SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.
3. THE CONTRACTOR SHALL GIVE ILLINOIS DEPARTMENT OF TRANSPORTATION, BUREAU OF OPERATIONS TWO WEEKS NOTICE FOR SIGNS. THE CONTRACTOR SHALL PICK UP THE SIGNS AT THE T.M. BUILDING IN FAIRVIEW HEIGHTS, AND RETURN THEM UPON COMPLETION OF THE CONTRACT. CONTACT JEAN SLAPE, PHONE (618) 394-2189.
4. THE ABOVE NOTED WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE, LUMP SUM, FOR DETOUR SIGNING AND NO OTHER COMPENSATION WILL BE ALLOWED.
5. SIGN SPACING WILL BE 400' OR TO FIT FIELD CONDITIONS.
6. THE HEIGHT TO THE BOTTOM OF THE LOWEST SIGN SHALL NOT BE LESS THAN 6'.
7. THE CONTRACTOR SHALL FURNISH ADVANCE WARNING SIGNS, ROAD CLOSURE SIGNS, MESSAGE BOARDS, AND TYPE 3 BARRICADES.
8. ALL ADVANCE WARNING SIGNS SHALL BE 48" FLUORESCENT ORANGE WITH FLASHING LIGHTS.
9. THE CONTRACTOR SHALL FURNISH ALL SIGNING NEEDED FOR STANDARD BLR-21.

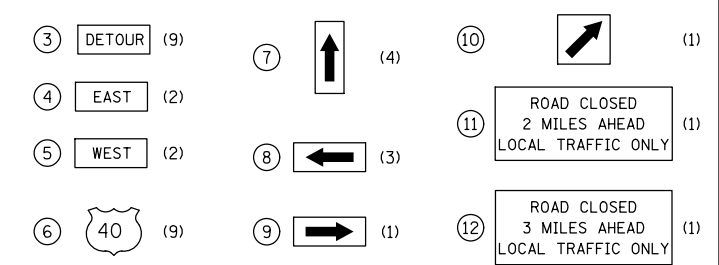


SIGNS REQUIRED

TO BE FURNISHED BY CONTRACTOR



TO BE FURNISHED BY IDOT



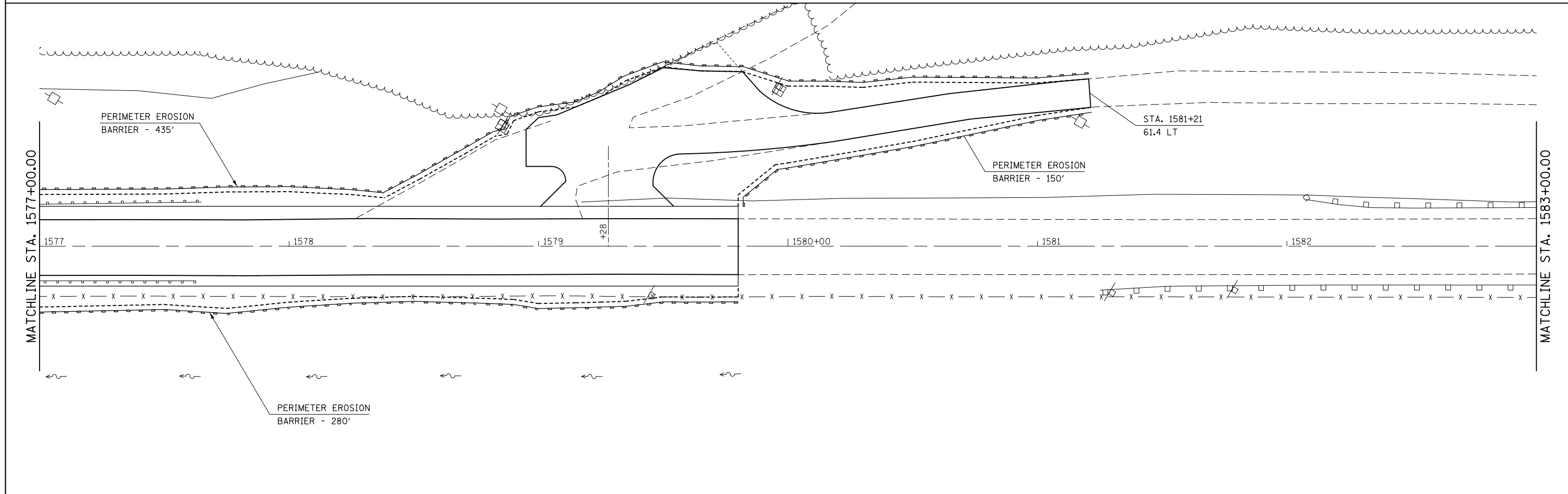
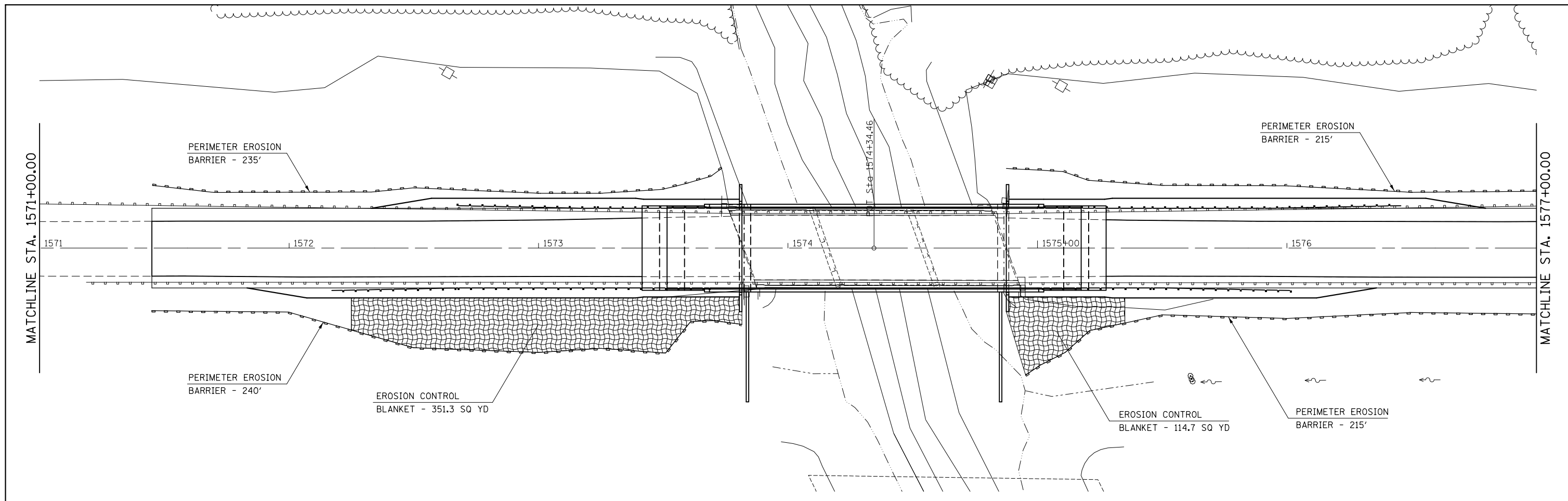
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		DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DETOUR SIGNING PLAN

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

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	35-1-BR	BOND	57	16
CONTRACT NO. 76E04				
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			



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Default	PLOT DATE = 8/5/2016	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**EROSION AND SEDIMENT  
CONTROL DETAILS**

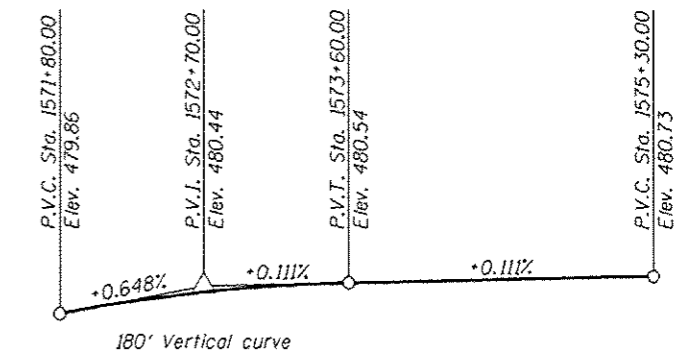
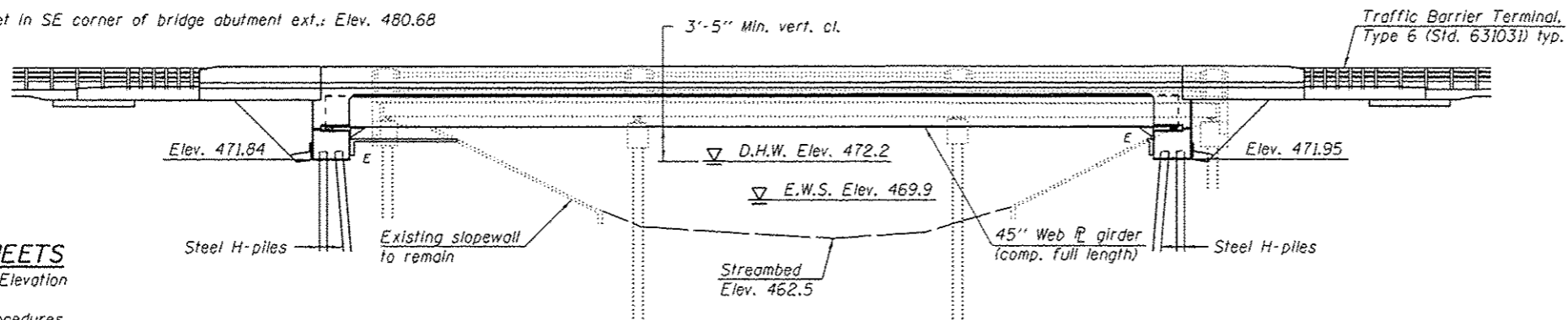
SCALE: 20      SHEET 1 OF 1 SHEETS      STA. 1571+00 TO STA. 1583+00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	35-1-BR	BOND	57	17
CONTRACT NO. 76E04				
ILLINOIS FED. AID PROJECT				

Existing Structure: S.N. 003-0020 built 1938 as F.A. 12, Section 35-1-B-1 at Sta. 1574+34.46 as a 3-span steel wide flange bridge, 105'-9 1/4" back-to-back spill thru abutments supported on concrete piles. Existing bridge to be removed and replaced. New bridge built temporarily next to existing bridge with traffic maintained on existing bridge. New bridge to be moved into final location using lateral slide-in-bridge-construction (SIBC) techniques with traffic detoured. Accelerated Bridge Construction (ABC) contract to reduce traffic detour days.

Benchmark: Chiseled "a" set in SE corner of bridge abutment ext.; Elev. 480.68

No salvage.



**PROFILE GRADE**  
(Along  $\bar{C}$  U.S. Rte. 40)

**DESIGN SPECIFICATIONS**  
2014 AASHTO LRFD Bridge Design Specifications, 7th Edition with 2016 Interims

**DESIGN STRESSES**

**FIELD UNITS**  
 $f'_c = 3,500$  psi  
 $f'_c = 4,000$  psi (Concrete Superstructure)  
 $f_y = 60,000$  psi (Reinforcement)  
 $f_y = 50,000$  psi (M270 Grade 50W)

**LOADING HL-93**

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

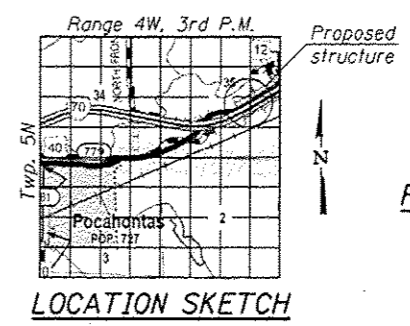
**SEISMIC DATA**

Seismic Performance Zone (SPZ) = 2  
 Design Spectral Acceleration at 1.0 sec. ( $S_{p1}$ ) = 0.238 g  
 Design Spectral Acceleration at 0.2 sec. ( $S_{p5}$ ) = 0.534 g  
 Soil Site Class = D

STATION 1574+34.50  
 BUILT 20 BY  
 STATE OF ILLINOIS  
 F.A.S. RTE. 779 - SEC. 35-1-BR  
 LOADING HL-93  
 STRUCTURE NO. 003-0063

**NAME PLATE**  
See Std. 515001

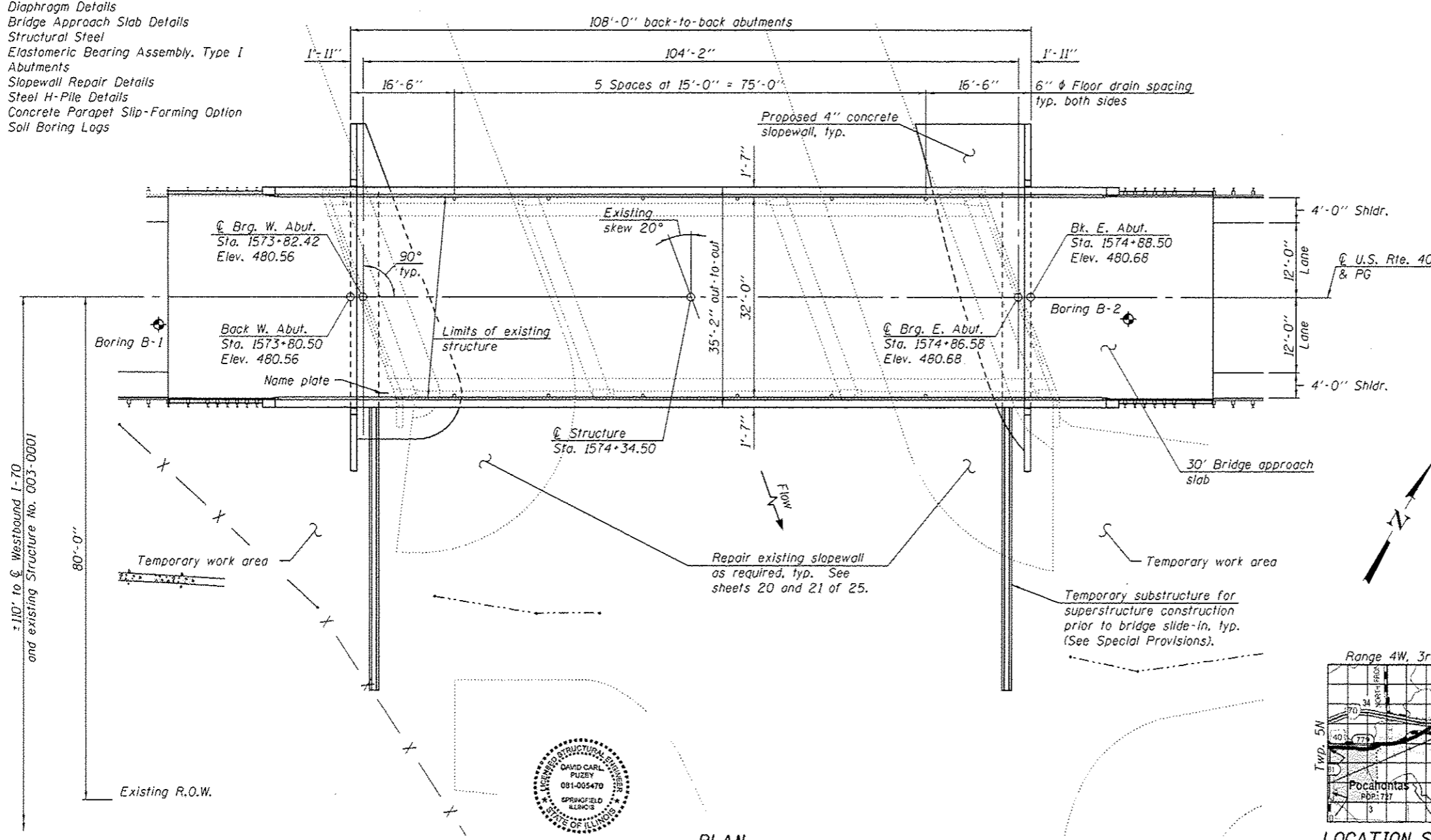
**GENERAL PLAN & ELEVATION**  
**U.S. ROUTE 40 OVER**  
**WEST FORK SHOAL CREEK**  
**F.A.S. RTE. 779 - SEC. 35-1-BR**  
**BOND COUNTY**  
**STATION 1574+34.50**  
**STRUCTURE NO. 003-0063**



**INDEX OF SHEETS**

- 1 - General Plan & Elevation
- 2 - General Data
- 3 - Construction Procedures
- 4-5 - Top of Slab Elevations
- 6-7 - Top of Approach Slab Elevations
- 8-9 - Superstructure
- 10 - Diaphragm Details
- 11-12 - Bridge Approach Slab Details
- 13-14 - Structural Steel
- 15 - Elastomeric Bearing Assembly, Type I
- 16-19 - Abutments
- 20-21 - Slopewall Repair Details
- 22 - Steel H-Pile Details
- 23 - Concrete Parapet Slip-Forming Option
- 24-25 - Soil Boring Logs

**ELEVATION**



**PLAN**



EXPIRES 11-30-2018

DESIGNED - <i>David Carl Puzey</i>	EXAMINED - <i>James F. Jull</i>	DATE - 9-29-2016
CHECKED - <i>Michael B. Mossman</i>	PASSED - <i>Michael B. Mossman</i>	REVISOR
DRAWN - <i>Michael B. Mossman</i>	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISIONS
CHECKED - <i>PGT/CK/ERA</i>		

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SHEET NO. 1 OF 25 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	35-1-BR	BOND	57	18
				CONTRACT NO. 76E04
ILLINOIS FED. AID PROJECT				

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
Removal of Existing Structures	Each	1		1
Structure Excavation	Cu. Yd.		211.4	211.4
Floor Drains	Each	12		12
Concrete Structures	Cu. Yd.		68.7	68.7
Concrete Superstructure	Cu. Yd.	167.4		167.4
Bridge Deck Grooving	Sq. Yd.	556		556
Protective Coat	Sq. Yd.	714		714
Concrete Superstructure (Approach Slab)	Cu. Yd.	100.2		100.2
Furnishing and Erecting Structural Steel	L. Sum	1		1
Stud Shear Connectors	Each	1,098		1,098
Reinforcement Bars, Epoxy Coated	Pound	59,990	5,160	65,150
Slope Wall 4 Inch	Sq. Yd.		99.1	99.1
Furnishing Steel Piles HP 12 x 74	Foot		642	642
Driving Piles	Foot		642	642
Test Pile Steel HP 12 x 74	Each		1	1
Name Plates	Each	1		1
Elastomeric Bearing Assembly, Type I	Each	12		12
Anchor Bolts, 1"	Each		24	24
Geocomposite Wall Drain	Sq. Yd.		75	75
Controlled Low-Strength Material	Cu. Yd.		0.9	0.9
Pipe Underdrains for Structures 4"	Foot		142	142
Slope Wall Repair	Sq. Yd.		7.9	7.9
Precast Concrete Substructure	L. Sum		1	1
Bar Splicers, Special	Each		16	16
Granular Backfill for Structures	Cu. Yd.		136.8	136.8
Lateral Slide-In Bridge Superstructure	L. Sum		1	1

**GENERAL NOTES**

Fasteners shall be ASTM A325 Type 3, mechanically galvanized bolts. Bolts  $\frac{3}{4}$  in.  $\phi$ , holes  $\frac{15}{16}$  in.  $\phi$ , unless otherwise noted.  
 Calculated weight of Structural Steel = 127,560 Lbs.  
 All structural steel shall be AASHTO M 270 Grade 50W.  
 No field welding is permitted except as specified in the contract documents.  
 Reinforcement bars designated (E) shall be epoxy coated.  
 The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.  
 Structural steel shall only be painted for a distance equal to the depth of embedment into the concrete diaphragm plus 1'-6". Painted areas shall be primed in the shop with a Department approved zinc rich primer. Field painting will not be required.  
 Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.  
 The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.  
 Protective coat may be applied upon completion of bridge deck grooving. The requirement of Article 420.18 of the Standard Specifications to wait until concrete is at least 14 days old prior to the application of protective coat will be waived.

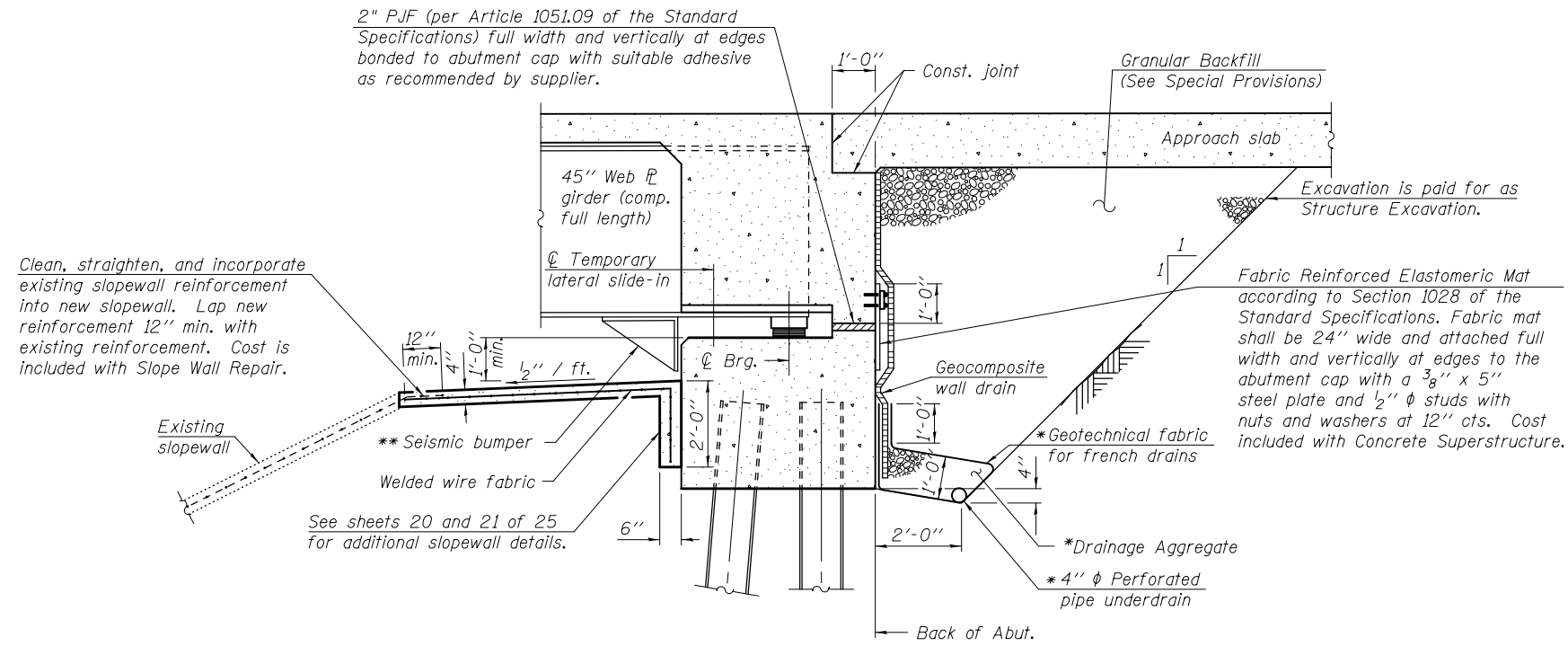
**WATERWAY INFORMATION**

Flood Event		Discharge (cfs)		Opening (sq. ft.)		Natural H.W.E. (ft.)	Head (ft.)		Headwater Elev.	
		Exist.	Prop.	Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
10	Main Channel	16164	15277	3032	3032	470.7	0.6	0.5	471.3	471.2
	003-0063	1836	2723	355	527					
	Total	18000	18000	3387	3559					
50	Main Channel	24548	22996	3655	3655	472.2	0.9	0.9	473.1	473.1
	003-0063	2852	4404	458	679					
	Total	27400	27400	4113	4334					
100	Main Channel	28206	26336	3915	3915	472.9	1.1	1.0	474.0	473.9
	003-0063	3294	5164	503	744					
	Total	31500	31500	4418	4659					
200	Main Channel	31956	29761	4165	4165	473.5	1.2	1.1	474.7	474.6
	003-0063	3744	5939	547	807					
	Total	35700	35700	4712	4972					
Overtopping	Main Channel	-	-	-	-	-	-	-	-	-
	003-0063	-	-	-	-					
	Total	-	-	-	-					
500	Main Channel	36742	35575	4470	4470	474.2	1.5	1.4	475.7	475.6
	003-0063	4458	5625	603	886					
	Total	41200	41200	5073	5356					

10 Year velocity through existing bridge = 4.59 ft./sec.  
 10 Year velocity through proposed bridge = 4.62 ft./sec.

**DESIGN SCOUR ELEVATION TABLE**

Event / Limit	Design Scour Elevations (ft.)		Item 113
	W. Abut.	E. Abut.	
Q100	472.34	472.46	8
Q200	472.34	472.46	
Design	472.34	472.46	
Check	472.34	472.46	



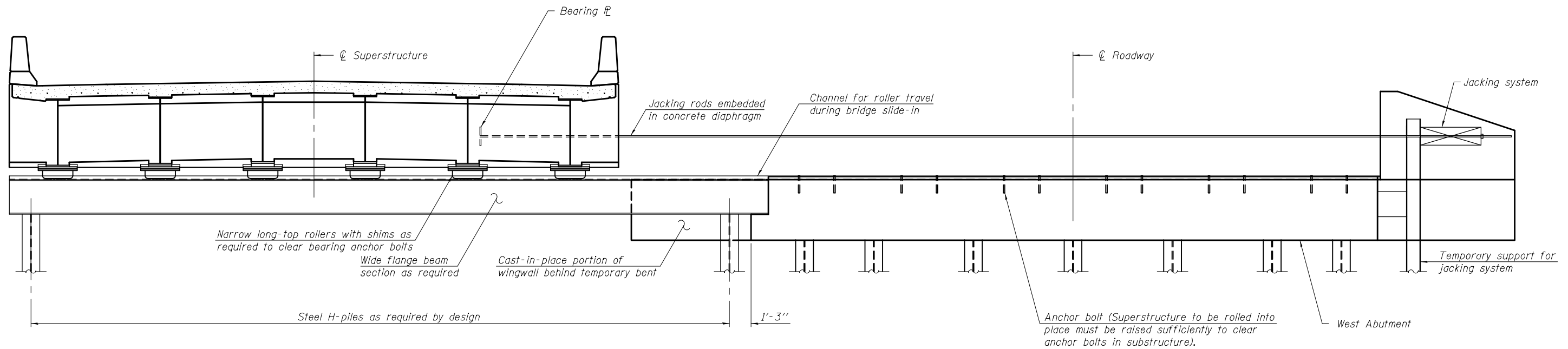
**SECTION THRU SEMI-INTEGRAL ABUTMENT**

- \* Included in the cost of Pipe Underdrains for Structures. (See Special Provisions)
- \*\* Included in the cost of Furnishing and Erecting Structural Steel.

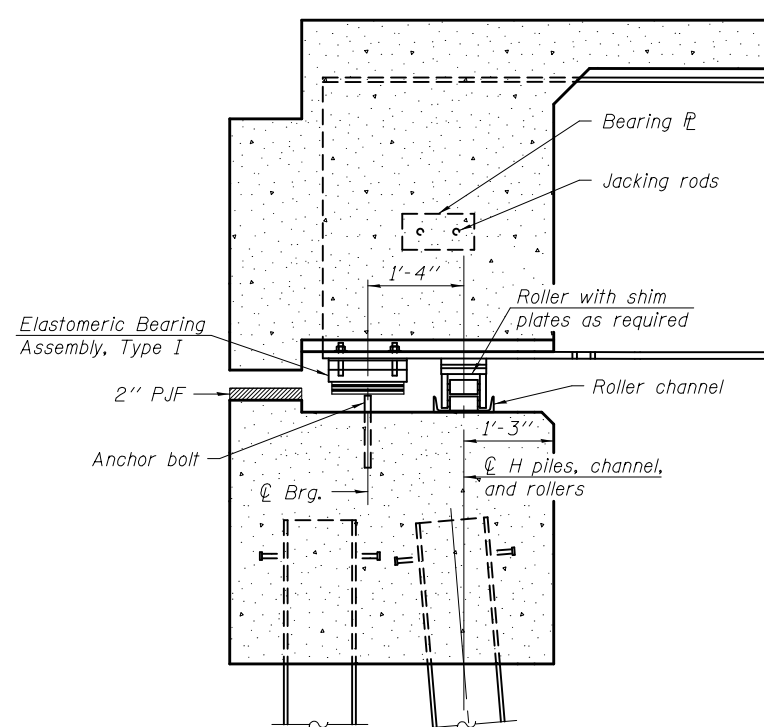
Note:  
 All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).

SDATES \$TIMES

DESIGNED - PAUL GURKLYS	EXAMINED - <i>Jaime F. J. [Signature]</i>	DATE - SEPTEMBER 29, 2016	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>GENERAL DATA</b> <b>STRUCTURE NO. 003 - 0063</b>	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
CHECKED - CORY D. KOLTVET	PASSED - <i>Carl [Signature]</i>	REVIS			779	35-1-BR	BOND	57	19	
DRAWN - MICHAEL B. MOSSMAN	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVIS			CONTRACT NO. 76E04			ILLINOIS FED. AID PROJECT		
CHECKED - P.G. / C.D.K. / G.R.A.					SHEET NO. 2 OF 25 SHEETS					



**SECTION THRU BRIDGE PRIOR TO SLIDE-IN**  
 (Looking West at West abutment. East abutment mirror image)



**SECTION THRU ABUTMENT**  
 (Showing superstructure just prior to lowering into final position)

**SUGGESTED CONSTRUCTION SEQUENCE**

1. Prepare temporary work area as needed.
2. Construct temporary substructure.
3. Construct proposed superstructure on temporary substructure.
4. Detour traffic, remove existing structure and portion of slopewalls.
5. Drive abutment piles.
6. Construct abutments, NW and NE wingwalls, and the lower sections of SW and SE wingwalls.
7. Install anchor bolts.
8. Install jacking and slide-in systems.
9. Roll bridge to final position.
10. Jack bridge sufficiently to remove rollers, rolling appenditures, and to install side retainers.
11. Lower bridge to final position.
12. Install precast wingwall sections atop cast-in-place lower sections of SW and SE wingwalls.
13. Construct approach slabs, remaining slopewall, and guardrail.

The suggested construction sequence is a general list of major activities and not an exhaustive list of all necessary activities.

**Notes:**

The Contractor shall construct the bridge superstructure offline and laterally slide it into its final positions utilizing lateral bridge slide-in methods to minimize the road closure period. Alternate methods not utilizing the lateral slide-in method will not be considered or allowed. The slide-in schematics depicted on this sheet represent a viable bridge slide-in procedure. The Contractor shall employ the services of a State of Illinois Licensed Structural Engineer to design the temporary substructure and provide the final slide-in procedure to suit the Contractor's particular means and methods. The Contractor shall submit a temporary substructure design and the bridge slide-in procedure including plan details and calculations for review and acceptance by the Engineer. The construction of temporary substructure and the hardware required for jacking and rolling of the bridge is included with the cost of Lateral Slide-In Bridge Superstructure, Lump Sum. Recommend using total of 10 jacks at the abutments. 5 - 72 ton minimum jack capacity (one jack between girders) at each abutment. The estimated total weight of the superstructure for the purpose of rolling horizontally is 240 tons.

SDATES \$TIMES

DESIGNED - PAUL GURKLYS	EXAMINED	DATE - SEPTEMBER 29, 2016
CHECKED - CORY D. KOLTVEIT	PASSED	REVISOR
DRAWN - MICHAEL B. MOSSMAN		REVISOR
CHECKED - P.G. / C.D.K. / G.R.A.		

*James F. J...*  
 ENGINEER OF BRIDGE DESIGN  
*Carl...*  
 ACTING ENGINEER OF BRIDGES AND STRUCTURES

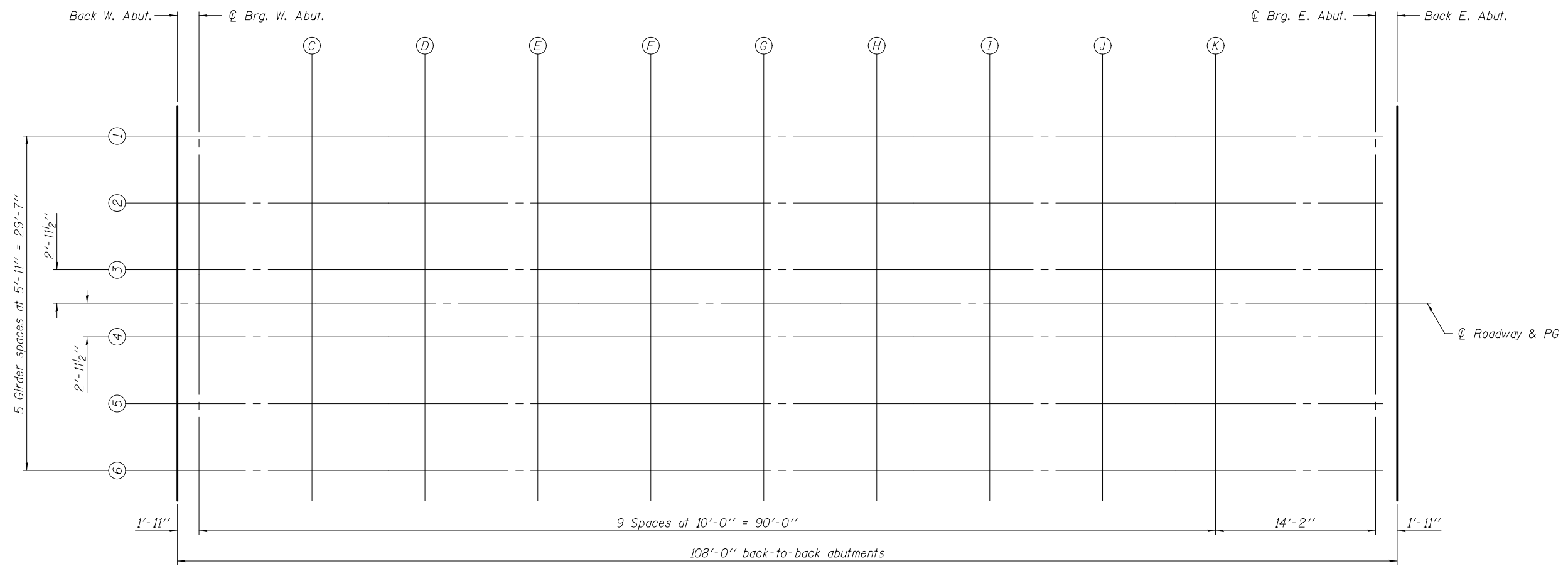
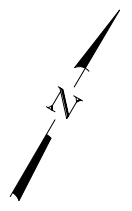
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**CONSTRUCTION PROCEDURES  
 STRUCTURE NO. 003 - 0063**

SHEET NO. 3 OF 25 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	35-1-BR	BOND	57	20
CONTRACT NO. 76E04				
ILLINOIS FED. AID PROJECT				





PLAN

SDATES \$TIMES

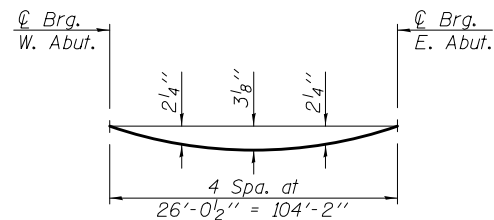
DESIGNED - PAUL GURKLYS	EXAMINED	DATE - SEPTEMBER 29, 2016
CHECKED - CORY D. KOLTVEIT	 <small>ENGINEER OF BRIDGE DESIGN</small>  <small>ACTING ENGINEER OF BRIDGES AND STRUCTURES</small>	REVISED
DRAWN - MICHAEL B. MOSSMAN		REVISED
CHECKED - P.G. / C.D.K. / G.R.A.		REVISED

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TOP OF SLAB ELEVATIONS  
STRUCTURE NO. 003 - 0063**

SHEET NO. 4 OF 25 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	35-1-BR	BOND	57	21
CONTRACT NO. 76E04				
ILLINOIS FED. AID PROJECT				



**DEAD LOAD DEFLECTION DIAGRAM**

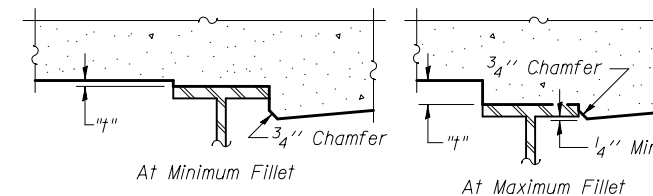
(Includes weight of concrete only.)

**Note:**

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

**GIRDER 1**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back W. Abut.	1573+80.50	-14.79	480.32	480.32
C Brg. W. Abut.	1573+82.42	-14.79	480.32	480.32
C	1573+92.42	-14.79	480.33	480.40
D	1574+02.42	-14.79	480.34	480.48
E	1574+12.42	-14.79	480.35	480.55
F	1574+22.42	-14.79	480.36	480.59
G	1574+32.42	-14.79	480.37	480.63
H	1574+42.42	-14.79	480.39	480.62
I	1574+52.42	-14.79	480.40	480.61
J	1574+62.42	-14.79	480.41	480.58
K	1574+72.42	-14.79	480.42	480.52
C Brg. E. Abut.	1574+86.58	-14.79	480.43	480.43
Back E. Abut.	1574+88.50	-14.79	480.44	480.44



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown on sheet 4 of 25. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown below, minus slab thickness, equals the fillet heights "t" above top flange of beams.

**FILLET HEIGHTS**

**GIRDER 2**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back W. Abut.	1573+80.50	-8.88	480.42	480.42
C Brg. W. Abut.	1573+82.42	-8.88	480.43	480.43
C	1573+92.42	-8.88	480.44	480.51
D	1574+02.42	-8.88	480.45	480.59
E	1574+12.42	-8.88	480.46	480.66
F	1574+22.42	-8.88	480.47	480.70
G	1574+32.42	-8.88	480.48	480.74
H	1574+42.42	-8.88	480.49	480.73
I	1574+52.42	-8.88	480.50	480.71
J	1574+62.42	-8.88	480.51	480.69
K	1574+72.42	-8.88	480.53	480.63
C Brg. E. Abut.	1574+86.58	-8.88	480.54	480.54
Back E. Abut.	1574+88.50	-8.88	480.54	480.54

**GIRDER 3**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back W. Abut.	1573+80.50	-2.96	480.52	480.52
C Brg. W. Abut.	1573+82.42	-2.96	480.52	480.52
C	1573+92.42	-2.96	480.53	480.60
D	1574+02.42	-2.96	480.54	480.68
E	1574+12.42	-2.96	480.55	480.75
F	1574+22.42	-2.96	480.56	480.79
G	1574+32.42	-2.96	480.57	480.83
H	1574+42.42	-2.96	480.59	480.82
I	1574+52.42	-2.96	480.60	480.81
J	1574+62.42	-2.96	480.61	480.78
K	1574+72.42	-2.96	480.62	480.72
C Brg. E. Abut.	1574+86.58	-2.96	480.63	480.63
Back E. Abut.	1574+88.50	-2.96	480.64	480.64

**C ROADWAY & PG**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back W. Abut.	1573+80.50	0.00	480.56	480.56
C Brg. W. Abut.	1573+82.42	0.00	480.56	480.56
C	1573+92.42	0.00	480.58	480.65
D	1574+02.42	0.00	480.59	480.73
E	1574+12.42	0.00	480.60	480.80
F	1574+22.42	0.00	480.61	480.84
G	1574+32.42	0.00	480.62	480.88
H	1574+42.42	0.00	480.63	480.87
I	1574+52.42	0.00	480.64	480.85
J	1574+62.42	0.00	480.65	480.83
K	1574+72.42	0.00	480.66	480.77
C Brg. E. Abut.	1574+86.58	0.00	480.68	480.68
Back E. Abut.	1574+88.50	0.00	480.68	480.68

**GIRDER 4**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back W. Abut.	1573+80.50	2.96	480.52	480.52
C Brg. W. Abut.	1573+82.42	2.96	480.52	480.52
C	1573+92.42	2.96	480.53	480.60
D	1574+02.42	2.96	480.54	480.68
E	1574+12.42	2.96	480.55	480.75
F	1574+22.42	2.96	480.56	480.79
G	1574+32.42	2.96	480.57	480.83
H	1574+42.42	2.96	480.59	480.82
I	1574+52.42	2.96	480.60	480.81
J	1574+62.42	2.96	480.61	480.78
K	1574+72.42	2.96	480.62	480.72
C Brg. E. Abut.	1574+86.58	2.96	480.63	480.63
Back E. Abut.	1574+88.50	2.96	480.64	480.64

**GIRDER 5**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back W. Abut.	1573+80.50	8.88	480.42	480.42
C Brg. W. Abut.	1573+82.42	8.88	480.43	480.43
C	1573+92.42	8.88	480.44	480.51
D	1574+02.42	8.88	480.45	480.59
E	1574+12.42	8.88	480.46	480.66
F	1574+22.42	8.88	480.47	480.70
G	1574+32.42	8.88	480.48	480.74
H	1574+42.42	8.88	480.49	480.73
I	1574+52.42	8.88	480.50	480.71
J	1574+62.42	8.88	480.51	480.69
K	1574+72.42	8.88	480.53	480.63
C Brg. E. Abut.	1574+86.58	8.88	480.54	480.54
Back E. Abut.	1574+88.50	8.88	480.54	480.54

**GIRDER 6**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back W. Abut.	1573+80.50	14.79	480.32	480.32
C Brg. W. Abut.	1573+82.42	14.79	480.32	480.32
C	1573+92.42	14.79	480.33	480.40
D	1574+02.42	14.79	480.34	480.48
E	1574+12.42	14.79	480.35	480.55
F	1574+22.42	14.79	480.36	480.59
G	1574+32.42	14.79	480.37	480.63
H	1574+42.42	14.79	480.39	480.62
I	1574+52.42	14.79	480.40	480.61
J	1574+62.42	14.79	480.41	480.58
K	1574+72.42	14.79	480.42	480.52
C Brg. E. Abut.	1574+86.58	14.79	480.43	480.43
Back E. Abut.	1574+88.50	14.79	480.44	480.44

SDAT\$TIMES

DESIGNED - PAUL GURKLYS	EXAMINED - <i>Joanne F. J...</i>	DATE - SEPTEMBER 29, 2016
CHECKED - CORY D. KOLTVEIT	PASSED - <i>Carl...</i>	REVISED
DRAWN - MICHAEL B. MOSSMAN	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED
CHECKED - P.G. / C.D.K. / G.R.A.		

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TOP OF SLAB ELEVATIONS  
STRUCTURE NO. 003 - 0063**

SHEET NO. 5 OF 25 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	35-1-BR	BOND	57	22
CONTRACT NO. 76E04				
ILLINOIS FED. AID PROJECT				

NORTH EDGE OF SHOULDER

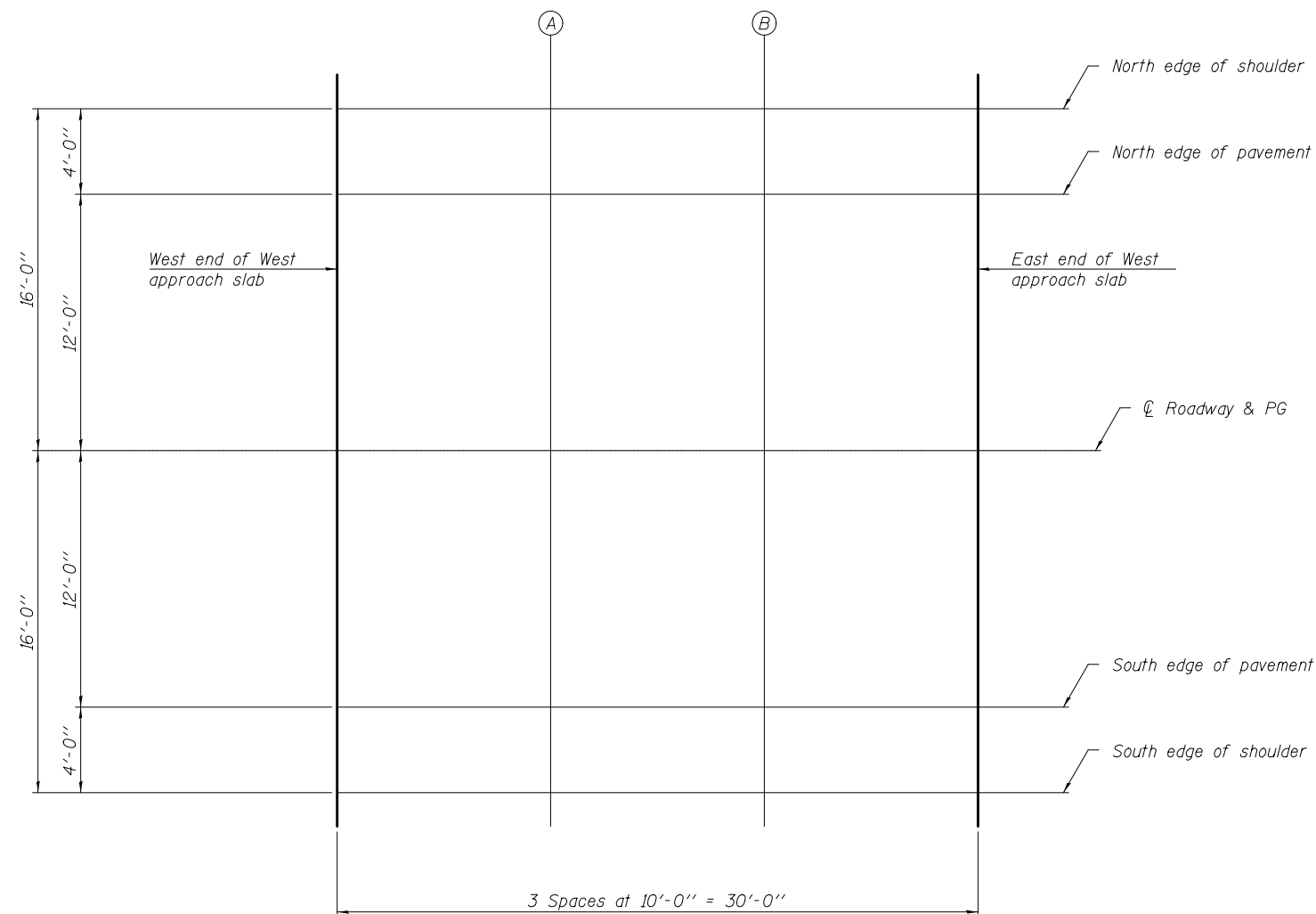
Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Appr. Slab	1573+51.50	-16.00	480.26
A	1573+61.50	-16.00	480.27
B	1573+71.50	-16.00	480.28
E. End of W. Appr. Slab	1573+81.50	-16.00	480.29

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Appr. Slab	1573+51.50	-12.00	480.34
A	1573+61.50	-12.00	480.35
B	1573+71.50	-12.00	480.37
E. End of W. Appr. Slab	1573+81.50	-12.00	480.38

☐ ROADWAY & PG

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Appr. Slab	1573+51.50	0.00	480.53
A	1573+61.50	0.00	480.54
B	1573+71.50	0.00	480.55
E. End of W. Appr. Slab	1573+81.50	0.00	480.56



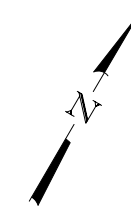
PLAN

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Appr. Slab	1573+51.50	12.00	480.34
A	1573+61.50	12.00	480.35
B	1573+71.50	12.00	480.37
E. End of W. Appr. Slab	1573+81.50	12.00	480.38

SOUTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Appr. Slab	1573+51.50	16.00	480.26
A	1573+61.50	16.00	480.27
B	1573+71.50	16.00	480.28
E. End of W. Appr. Slab	1573+81.50	16.00	480.29



SDATES \$TIMES

DESIGNED - PAUL GURKLYS	EXAMINED	DATE - SEPTEMBER 29, 2016
CHECKED - CORY D. KOLTVEIT	 ENGINEER OF BRIDGE DESIGN  ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED
DRAWN - MICHAEL B. MOSSMAN		REVISED
CHECKED - P.G. / C.D.K. / G.R.A.		REVISED

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TOP OF WEST APPROACH SLAB ELEVATIONS  
STRUCTURE NO. 003 - 0063**

SHEET NO. 6 OF 25 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	35-1-BR	BOND	57	23
CONTRACT NO. 76E04				
ILLINOIS FED. AID PROJECT				

NORTH EDGE OF SHOULDER

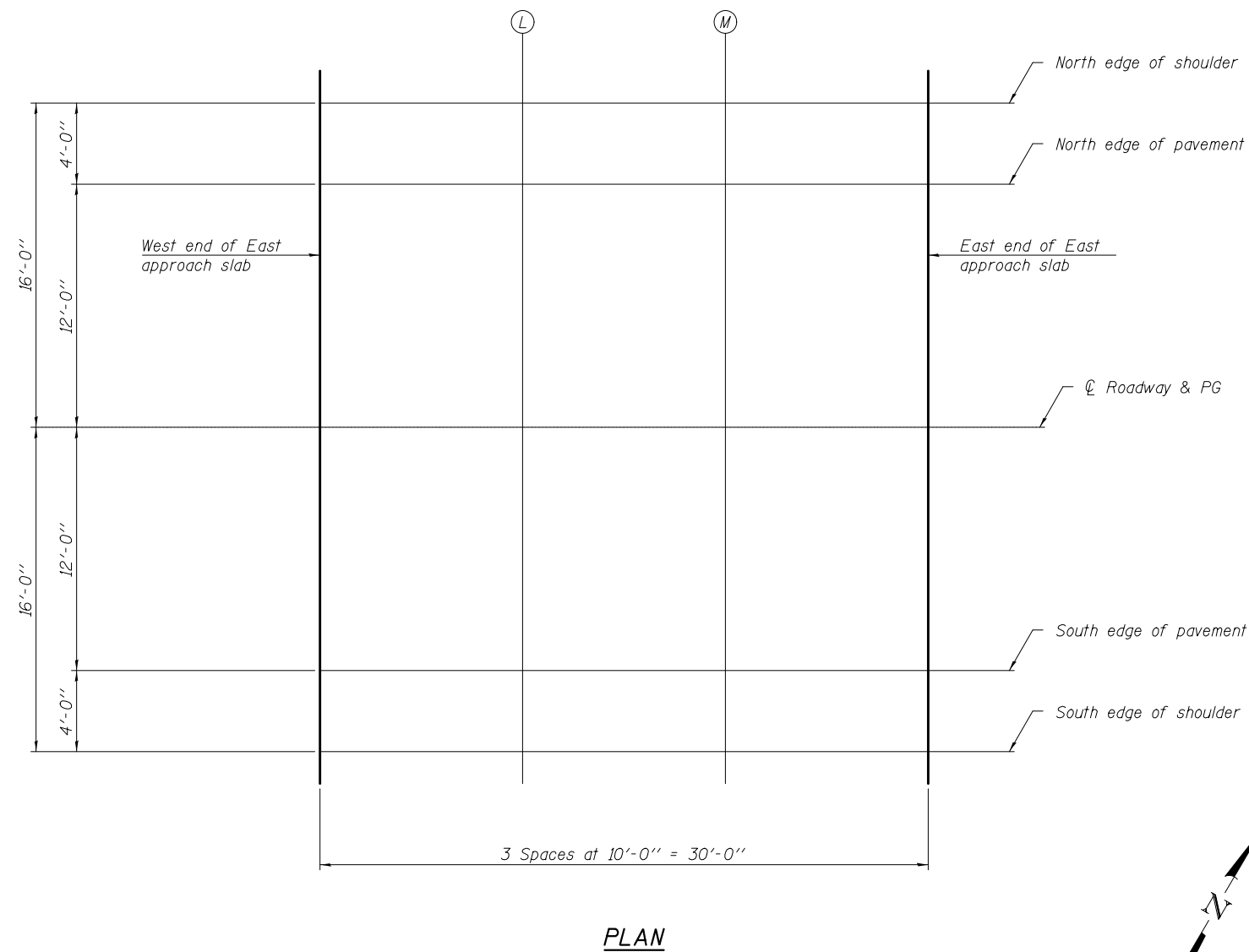
Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Appr. Slab	1574+87.50	-16.00	480.41
L	1574+97.50	-16.00	480.42
M	1575+07.50	-16.00	480.43
E. End of E. Appr. Slab	1575+17.50	-16.00	480.44

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Appr. Slab	1574+87.50	-12.00	480.49
L	1574+97.50	-12.00	480.51
M	1575+07.50	-12.00	480.52
E. End of E. Appr. Slab	1575+17.50	-12.00	480.53

☉ ROADWAY & PG

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Appr. Slab	1574+87.50	0.00	480.68
L	1574+97.50	0.00	480.69
M	1575+07.50	0.00	480.70
E. End of E. Appr. Slab	1575+17.50	0.00	480.71



SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Appr. Slab	1574+87.50	12.00	480.49
L	1574+97.50	12.00	480.51
M	1575+07.50	12.00	480.52
E. End of E. Appr. Slab	1575+17.50	12.00	480.53

SOUTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Appr. Slab	1574+87.50	16.00	480.41
L	1574+97.50	16.00	480.42
M	1575+07.50	16.00	480.43
E. End of E. Appr. Slab	1575+17.50	16.00	480.44

SDATES \$TIMES

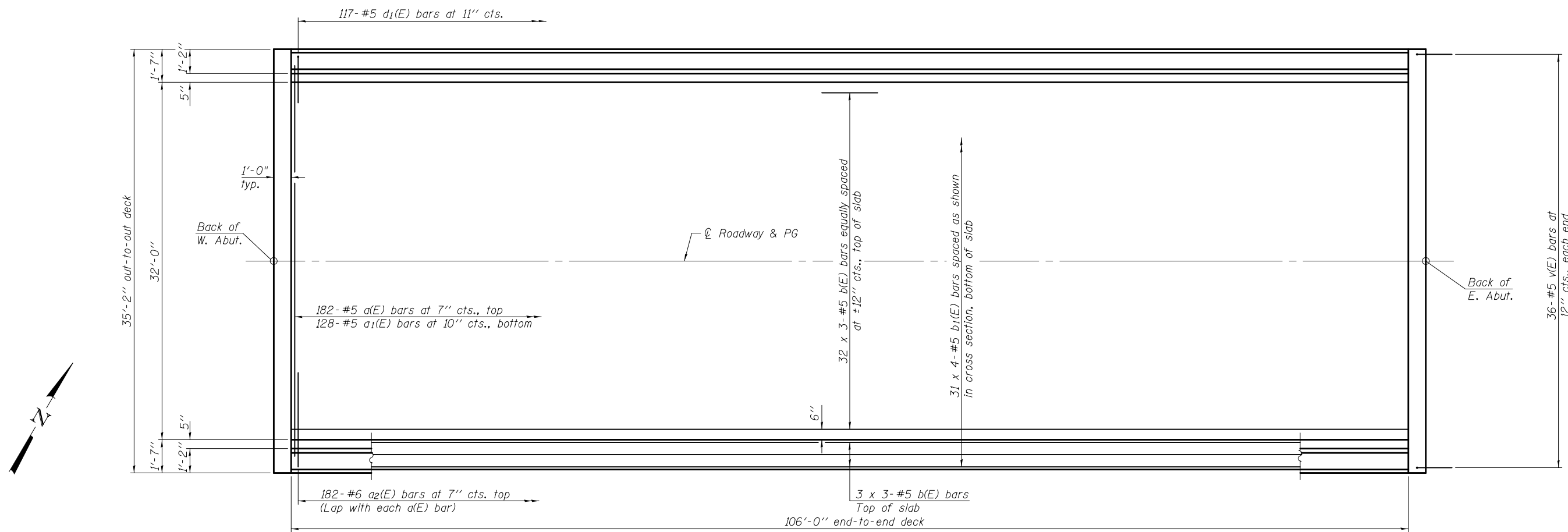
DESIGNED - PAUL GURKLYS	EXAMINED - <i>Jaime F. J. [Signature]</i>	DATE - SEPTEMBER 29, 2016
CHECKED - CORY D. KOLTVEIT	PASSED - <i>Carl [Signature]</i>	REVISOR
DRAWN - MICHAEL B. MOSSMAN	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISOR
CHECKED - P.G. / C.D.K. / G.R.A.		

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TOP OF EAST APPROACH SLAB ELEVATIONS  
STRUCTURE NO. 003 - 0063**

SHEET NO. 7 OF 25 SHEETS

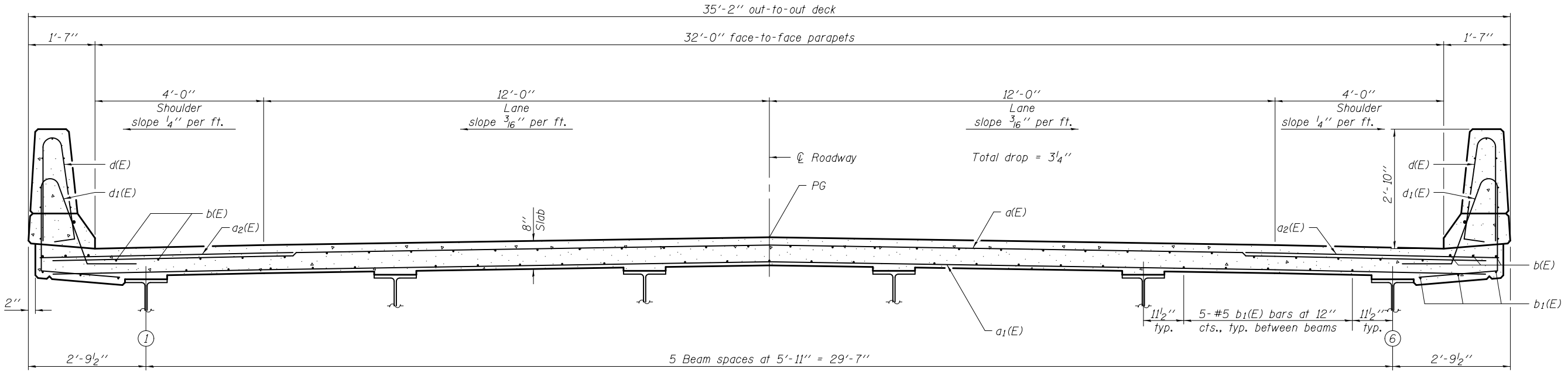
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	35-1-BR	BOND	57	24
CONTRACT NO. 76E04				
ILLINOIS FED. AID PROJECT				



**PLAN**

Notes:  
 See Sheet 9 of 25 for superstructure details and Bill of Material.  
 Bars indicated thus 32 x 3-#5 etc. indicates 32 lines of bars with 3 lengths per line.  
 See Sheet 9 of 25 for parapet reinforcement.

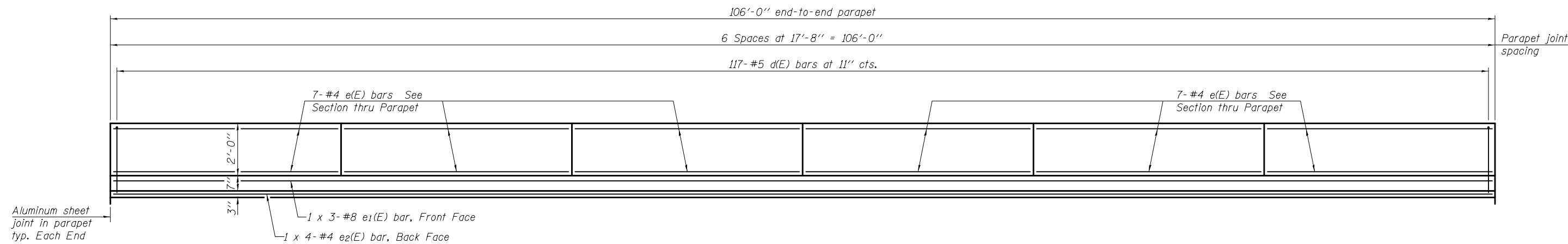
**MINIMUM BAR LAP**  
 #5 bar = 3'-6"



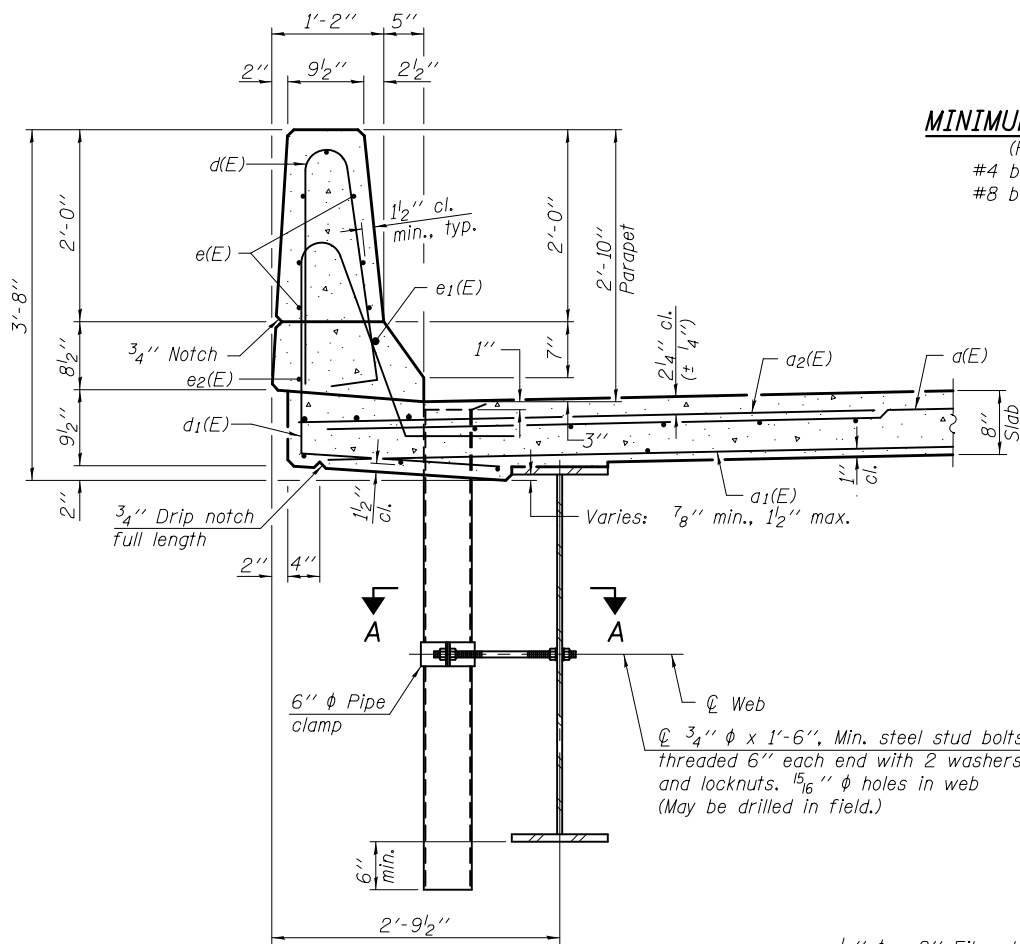
**CROSS SECTION**  
 (Looking East)

SDATES \$TIMES

DESIGNED - PAUL GURKLYS	EXAMINED - <i>Joanne F. J...</i>	DATE - SEPTEMBER 29, 2016	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>		<b>SUPERSTRUCTURE STRUCTURE NO. 003 - 0063</b>		F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED - CORY D. KOLTVEIT	PASSED - <i>Carl...</i>	REVISED					779	35-1-BR	BOND	57	25
DRAWN - MICHAEL B. MOSSMAN	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED	SHEET NO. 8 OF 25 SHEETS		ILLINOIS FED. AID PROJECT		CONTRACT NO. 76E04				
CHECKED - P.G. / C.D.K. / G.R.A.		REVISED									

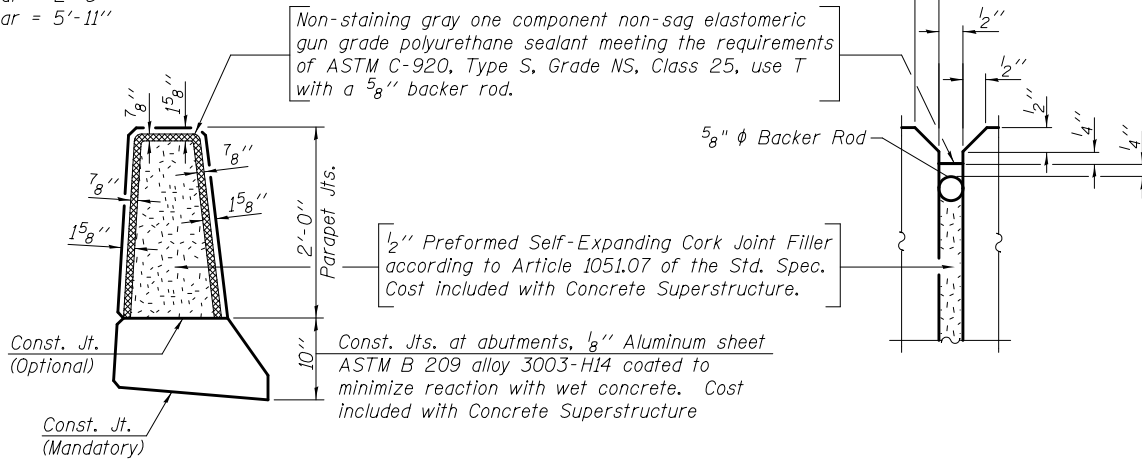


**INSIDE ELEVATION OF PARAPET**



**MINIMUM BAR LAP**

(Parapet)  
 #4 bar = 2'-8"  
 #8 bar = 5'-11"



**PARAPET JOINT DETAILS**

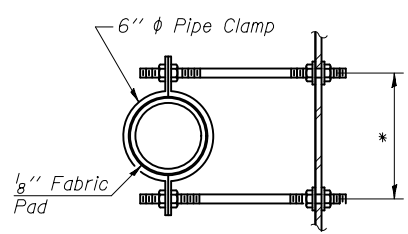
**Notes:**  
 Drains shall be located clear of all diaphragms.  
 The exterior surfaces of the floor drains shall be painted according to Article 506 with the finish coat as specified. The exterior surfaces of the drains shall be cleaned according to Society of Protective Coatings Spec. SSPC-SP1 prior to painting.  
 Fiberglass pipe shall conform to ASTM D 2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.  
 Galvanize clamping device according to AASHTO M232. Cost of clamping device and inserts is included with Floor Drains.

**SUPERSTRUCTURE BILL OF MATERIAL**

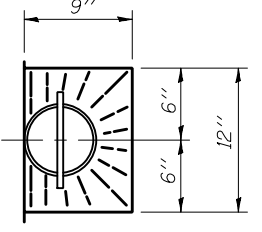
Bar	No.	Size	Length	Shape
a(E)	182	#5	34'-7"	—
a1(E)	128	#5	32'-10"	—
a2(E)	364	#6	6'-6"	—
b(E)	114	#5	37'-7"	—
b1(E)	124	#5	29'-1"	—
d(E)	234	#5	5'-7"	⌒
d1(E)	234	#5	7'-4"	⌒
e(E)	84	#4	17'-5"	—
e1(E)	6	#8	39'-3"	—
e2(E)	8	#4	28'-6"	—
m(E)	60	#6	5'-6"	—
m1(E)	24	#6	2'-5"	—
m2(E)	48	#5	4'-0"	—
m3(E)	18	#6	34'-10"	—
s(E)	96	#5	10'-7"	⊓
s1(E)	72	#5	12'-4"	⊓
u(E)	72	#5	5'-2"	⊓
v(E)	72	#5	3'-1"	⊓
Reinforcement Bars, Epoxy Coated		Pound	31,970	
Concrete Superstructure		Cu. Yds.	160.7	

Bars indicated thus 1 x 3-#8 etc. indicates 1 line of bars with 3 lengths per line.

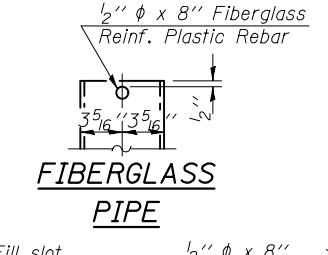
**SECTION THRU PARAPET**



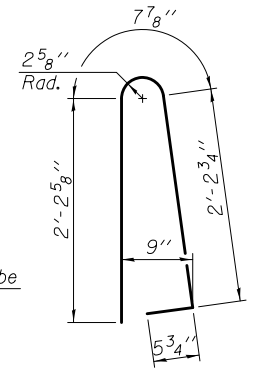
**SECTION A-A**  
 \*Dimension as required by Pipe Clamp



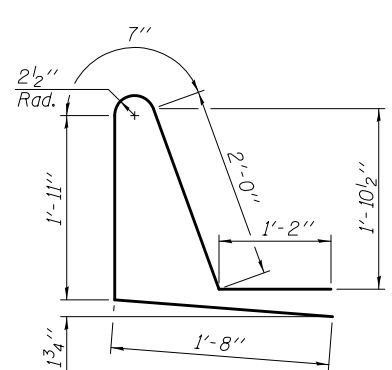
**TOP PLAN**



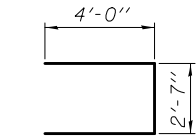
**TOP PLAN (Showing Aluminum Tube)**



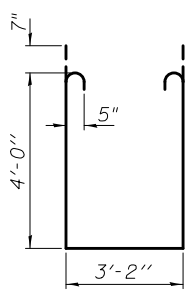
**BAR d(E)**



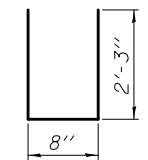
**BAR d1(E)**



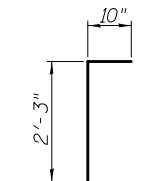
**BAR s(E)**



**BAR s1(E)**



**BAR u(E)**



**BAR v(E)**

SDATES \$TIMES

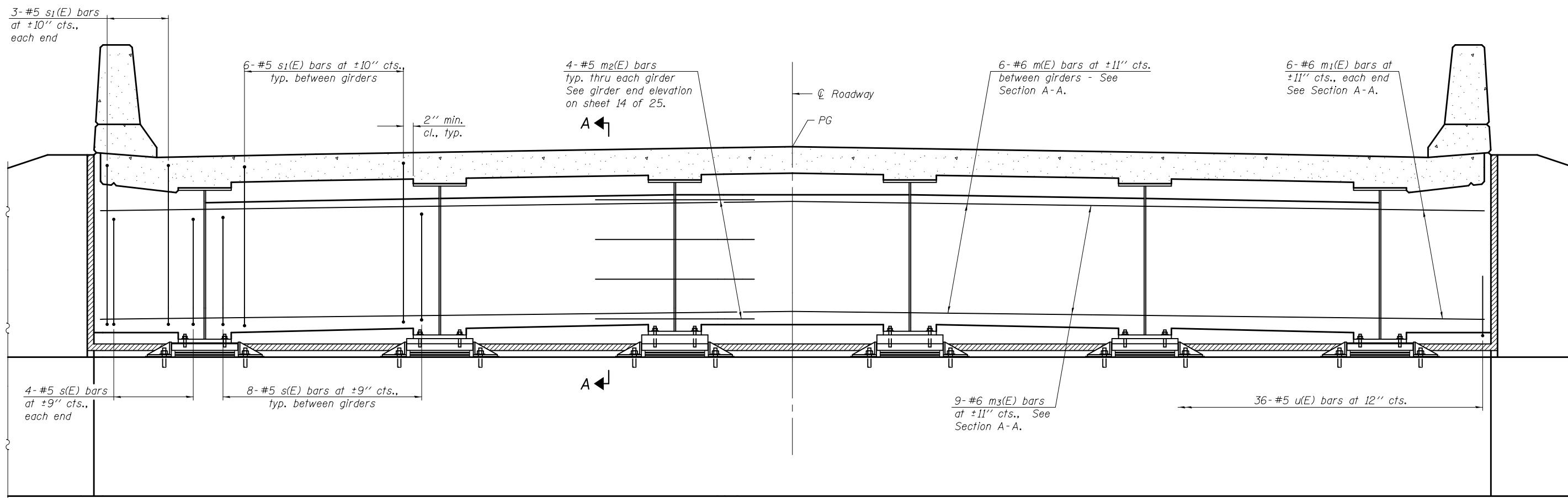
DESIGNED - PAUL GURKLYS	EXAMINED - <i>Jaime F. J. [Signature]</i>	DATE - SEPTEMBER 29, 2016
CHECKED - CORY D. KOLTVEIT	PASSED - <i>Carl [Signature]</i>	REVISOR
DRAWN - MICHAEL B. MOSSMAN	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISOR
CHECKED - P.G. / C.D.K. / G.R.A.		

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

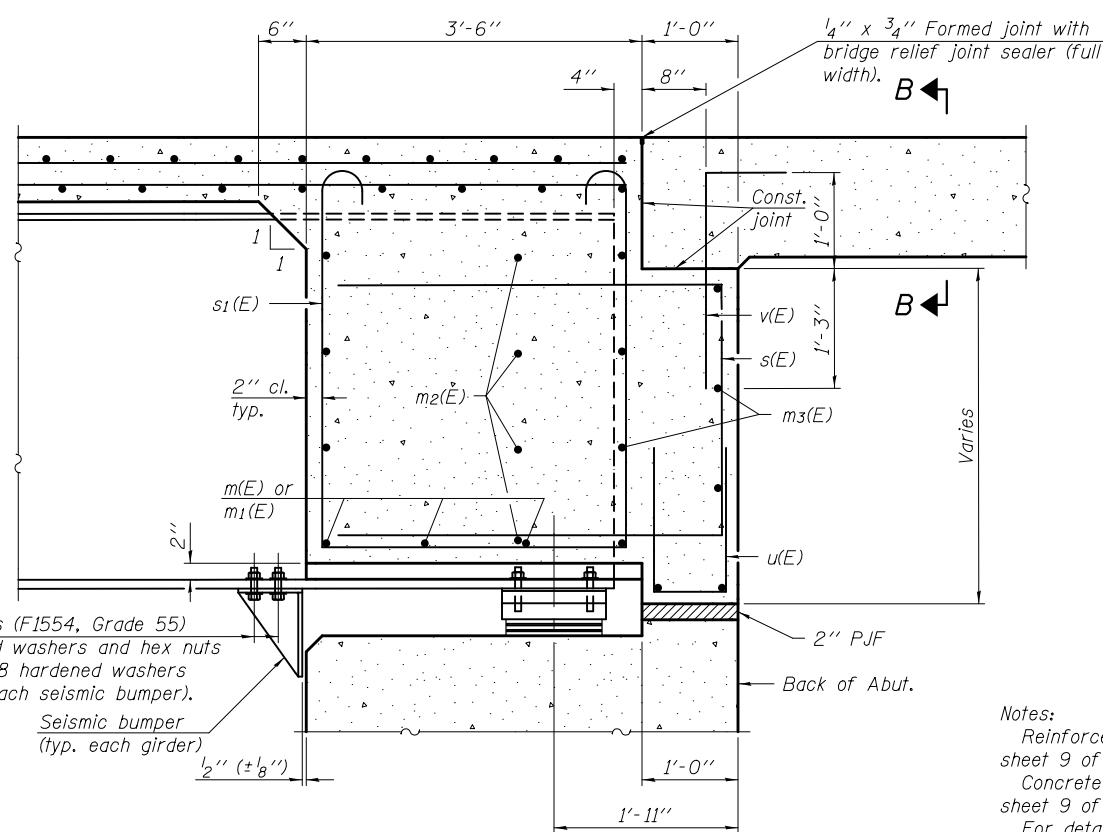
**SUPERSTRUCTURE DETAILS STRUCTURE NO. 003 - 0063**

SHEET NO. 9 OF 25 SHEETS

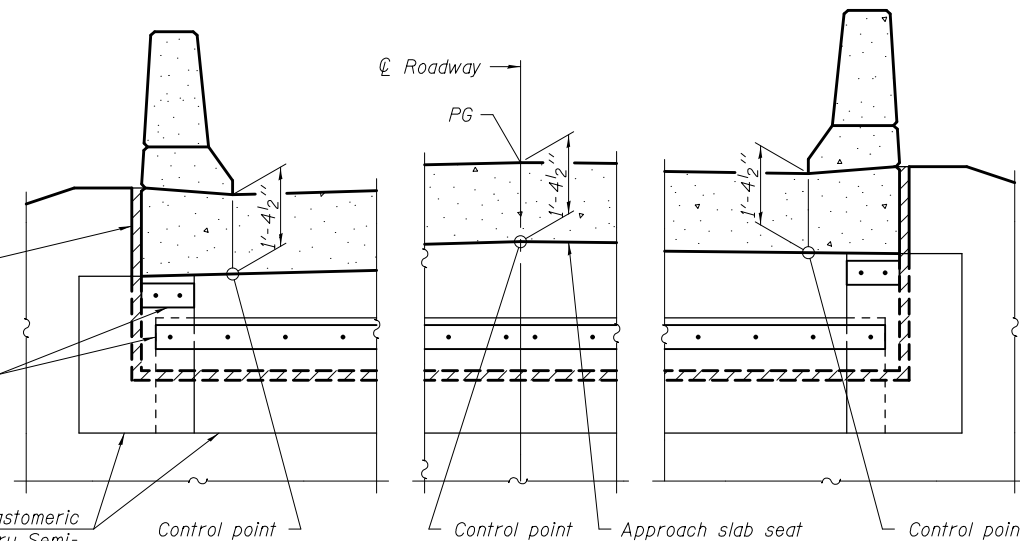
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	35-1-BR	BOND	57	26
CONTRACT NO. 76E04			ILLINOIS FED. AID PROJECT	



**DIAPHRAGM ELEVATION**



**SECTION A-A**



**VIEW B-B**

(Showing approach seat control point locations, 2" P.J.F., and limits of Fabric Reinforced Elastomeric Mat.)

- Notes:**
- Reinforcement bars in diaphragm are billed with superstructure on sheet 9 of 25.
  - Concrete in diaphragm is included with Concrete Superstructure on sheet 9 of 25.
  - For details of bars s(E), s1(E), u(E), and v(E), see sheet 9 of 25.
  - The approach slab seat shall have a constant slope determined from the control points shown in View B-B.
  - The structure is detailed in its final position following the bridge slide.

SDATES \$TIMES

DESIGNED - PAUL GURKLYS	EXAMINED	DATE - SEPTEMBER 29, 2016
CHECKED - CORY D. KOLTVEIT	PASSED	
DRAWN - MICHAEL B. MOSSMAN		
CHECKED - P.G. / C.D.K. / G.R.A.		

*James F. J...*  
 ENGINEER OF BRIDGE DESIGN  
*Carl...*  
 ACTING ENGINEER OF BRIDGES AND STRUCTURES

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**DIAPHRAGM DETAILS  
 STRUCTURE NO. 003 - 0063**

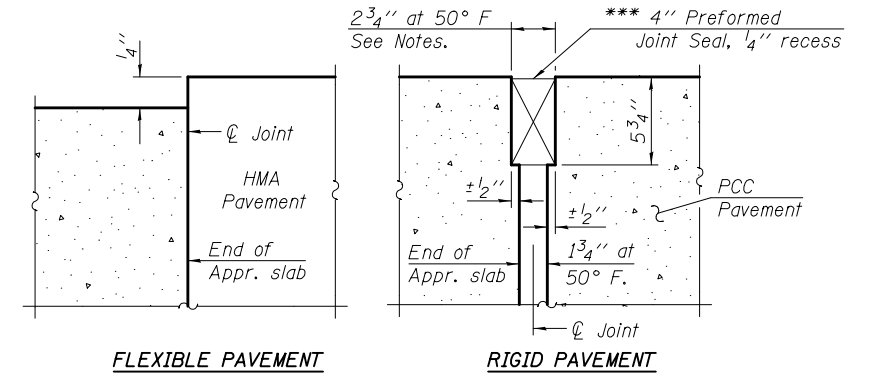
SHEET NO. 10 OF 25 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	35-1-BR	BOND	57	27
CONTRACT NO. 76E04				

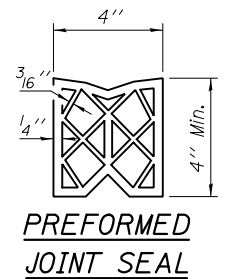
ILLINOIS FED. AID PROJECT

Notes:  
 See sheet 12 of 25 for Sections C-C & D-D and View E-E.  
 The joint opening shall be determined per Article 520.04 except that on jointless structures, the distance described as the bridge length between the nearest fixed bearings each way from the joint shall be taken as half the bridge length plus the approach slab length. The minimum dimension shall be 1/2" for installation purposes.

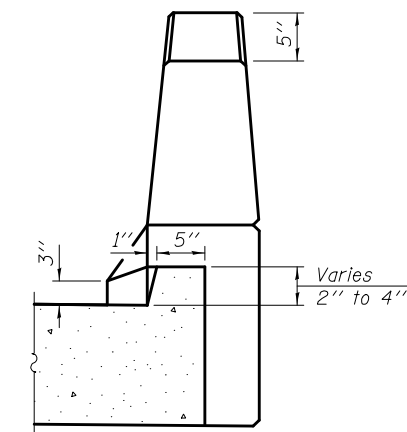
\*\*\* Cost included with Concrete Superstructure (Approach Slab).



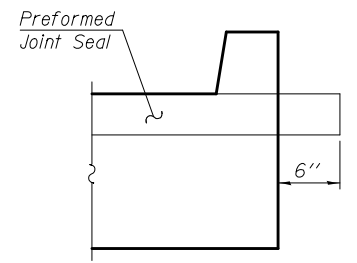
DETAIL A



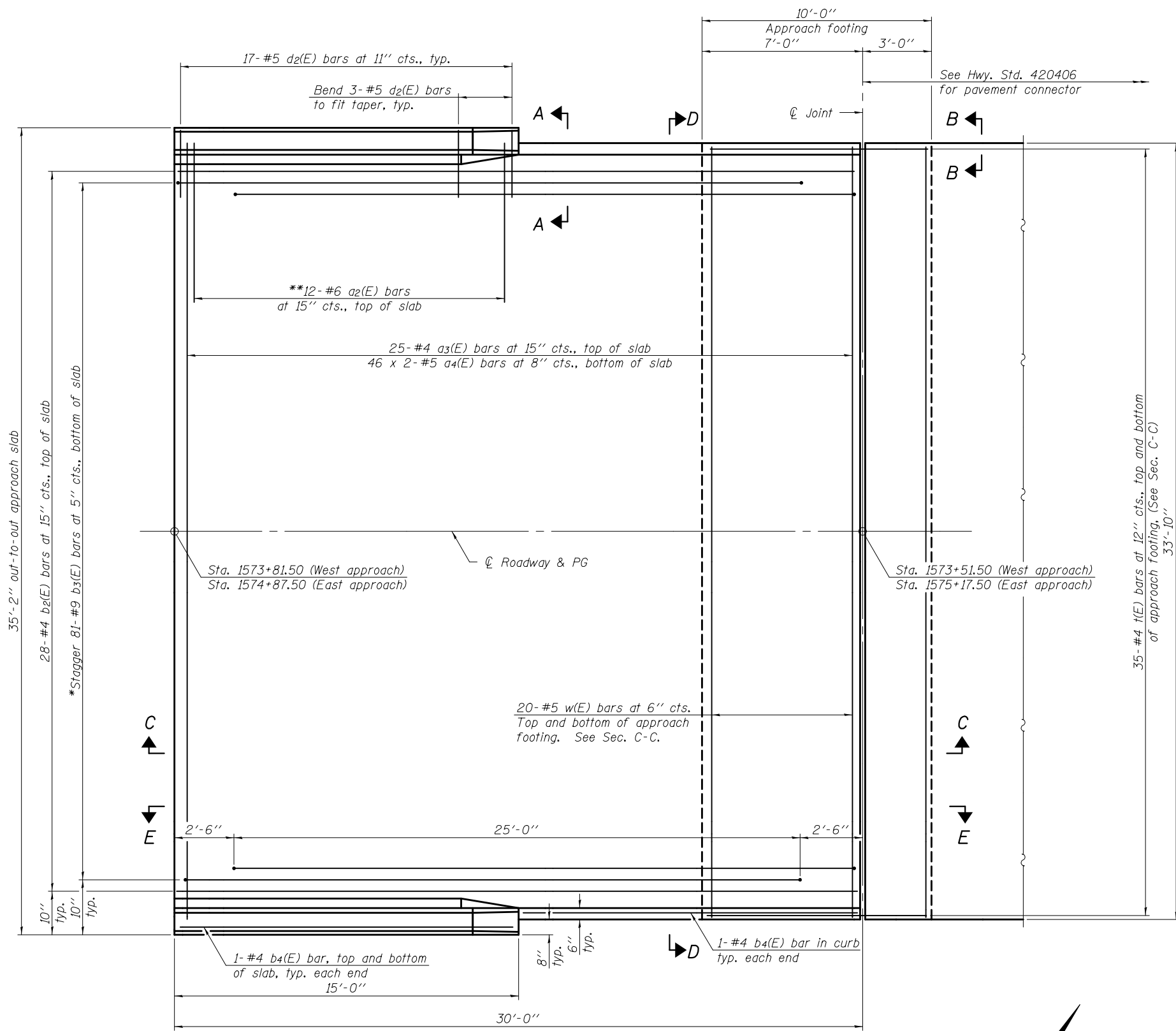
PREFORMED JOINT SEAL



VIEW A-A



VIEW B-B



PLAN

(East approach shown; West approach similar by 180° rotation)

MINIMUM BAR LAP

#5 bar = 3'-6"

\* Tilt #9 b3(E) bars as required to maintain clearance.  
 \*\* Space between a3(E) bars, typ. each parapet.

SDATES \$TIMES

DESIGNED - PAUL GURKLYS	EXAMINED - <i>Joanne F. J...</i>	DATE - SEPTEMBER 29, 2016
CHECKED - CORY D. KOLTVEIT	PASSED - <i>Carl...</i>	REVISED
DRAWN - MICHAEL B. MOSSMAN		REVISED
CHECKED - P.G. / C.D.K. / G.R.A.	ACTING ENGINEER OF BRIDGES AND STRUCTURES	

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

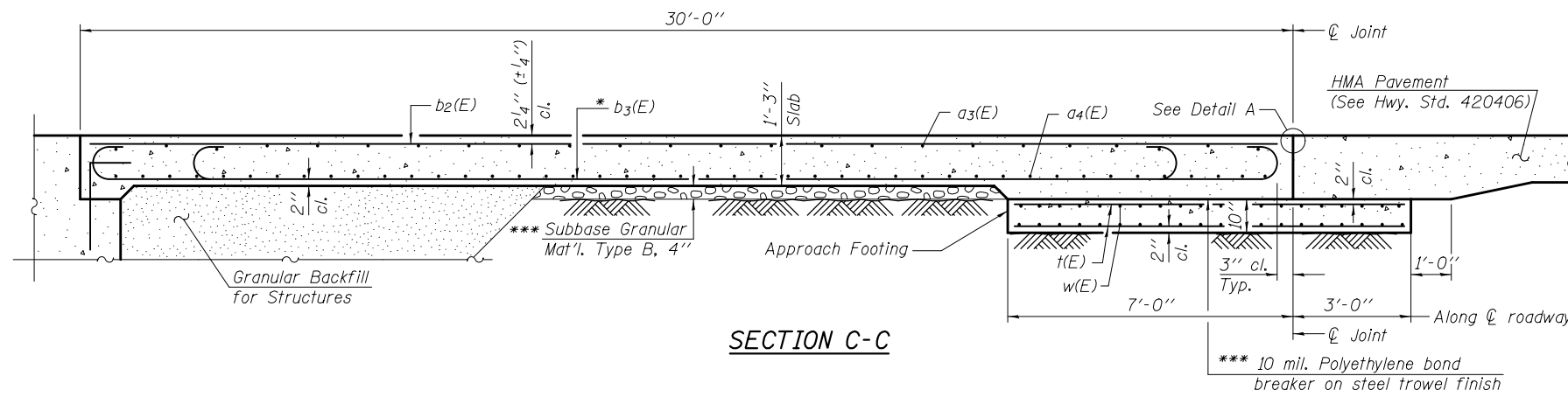
BRIDGE APPROACH SLAB DETAILS  
 STRUCTURE NO. 003 - 0063

SHEET NO. 11 OF 25 SHEETS

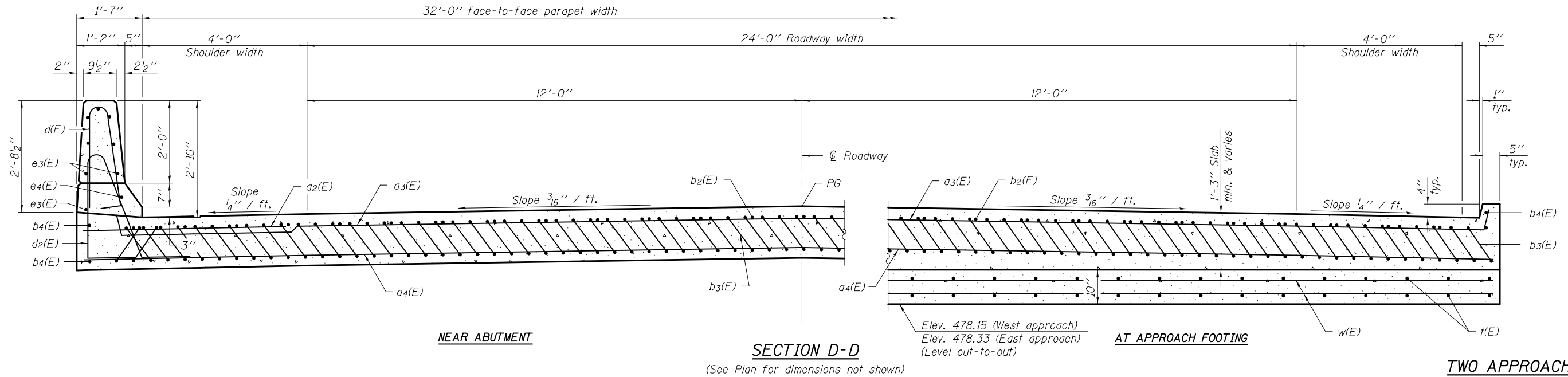
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	35-1-BR	BOND	57	28
CONTRACT NO. 76E04				
ILLINOIS FED. AID PROJECT				

(Sheet 1 of 2)





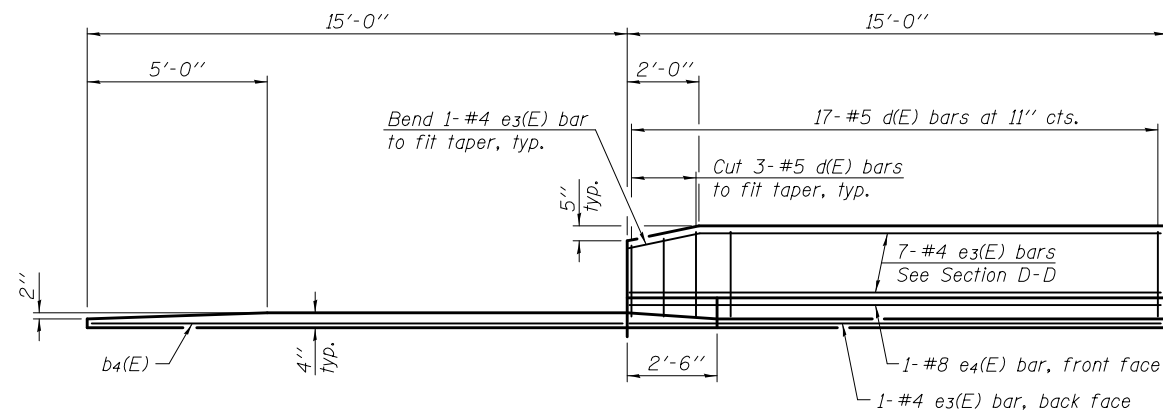
Notes:  
 See sheet 11 of 25 for Detail A.  
 Parapet concrete shall be paid for as Concrete Superstructure (Approach Slab).  
 Approach slab shall be paid for as Concrete Superstructure (Approach Slab).  
 Approach footing concrete shall be paid for as Concrete Structures.  
 Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.  
 The approach footing maximum applied service bearing pressure ( $Q_{max}$ ) = 2.0 ksf.  
 Cost of excavation for approach footing included with Concrete Structures.  
 For Granular Backfill for Structures and drainage treatment details, see sheet 2 of 25.  
 For additional parapet details, see sheet 9 of 25.



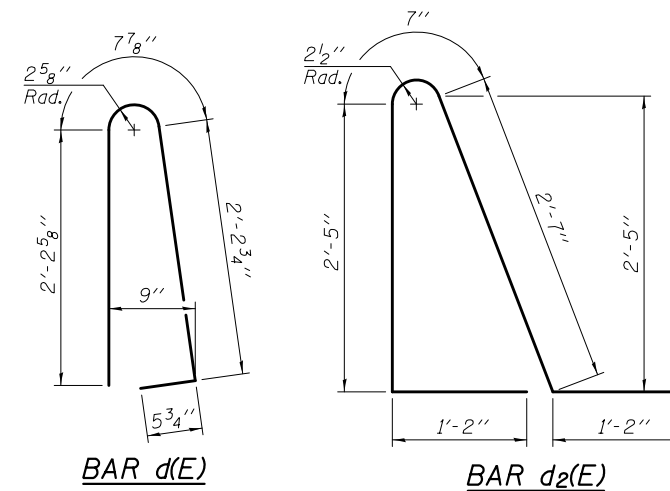
**TWO APPROACHES  
 BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a2(E)	48	#6	6'-6"	—
a3(E)	50	#4	33'-11"	—
a4(E)	184	#5	19'-2"	—
b2(E)	56	#4	29'-8"	—
b3(E)	162	#9	29'-9"	—
b4(E)	12	#4	14'-8"	—
d(E)	68	#5	5'-7"	—
d2(E)	68	#5	7'-11"	—
e3(E)	32	#4	14'-8"	—
e4(E)	4	#8	14'-8"	—
t(E)	140	#4	9'-8"	—
w(E)	80	#5	33'-6"	—
Concrete Superstructure			Cu. Yd.	6.7
Concrete Superstructure (Approach Slab)			Cu. Yd.	100.2
Concrete Structures			Cu. Yd.	20.9
Reinforcement Bars, Epoxy Coated			Pound	28,020

Bars indicated thus 46 x 2-#5 etc. indicates 46 line of bars with 2 lengths per line.



\* Tilt #9 b3(E) bars as required to maintain clearance.  
 \*\*\* Cost included with Concrete Superstructure (Approach Slab).



(Sheet 2 of 2)

SDATES \$TIMES

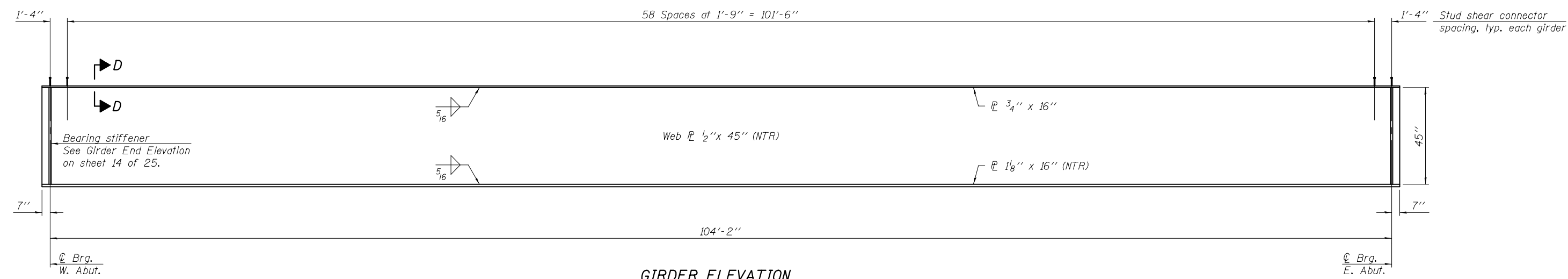
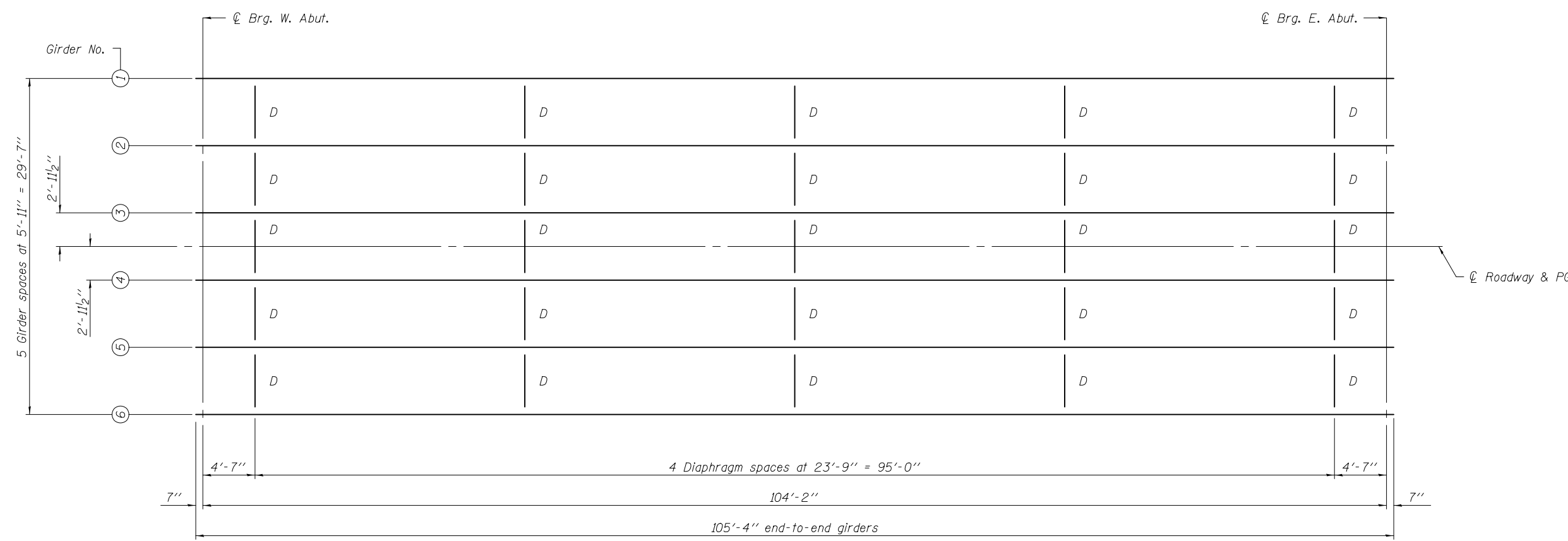
DESIGNED - PAUL GURKLYS	EXAMINED - <i>Joanne F. J...</i>	DATE - SEPTEMBER 29, 2016
CHECKED - CORY D. KOLTVEIT	PASSED - <i>Carl...</i>	REVISOR
DRAWN - MICHAEL B. MOSSMAN	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISOR
CHECKED - P.G. / C.D.K. / G.R.A.		

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**BRIDGE APPROACH SLAB DETAILS  
 STRUCTURE NO. 003-0063**

SHEET NO. 12 OF 25 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	35-1-BR	BOND	57	29
CONTRACT NO. 76E04				
ILLINOIS FED. AID PROJECT				



Notes:  
 Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.  
 Omit connecting plates on exterior side of exterior girder. See sheet 14 of 25 for Section D-D.  
 Two hardened washers shall be required for all oversized holes in diaphragms.  
 All diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted.  
 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.

SDATES \$TIMES

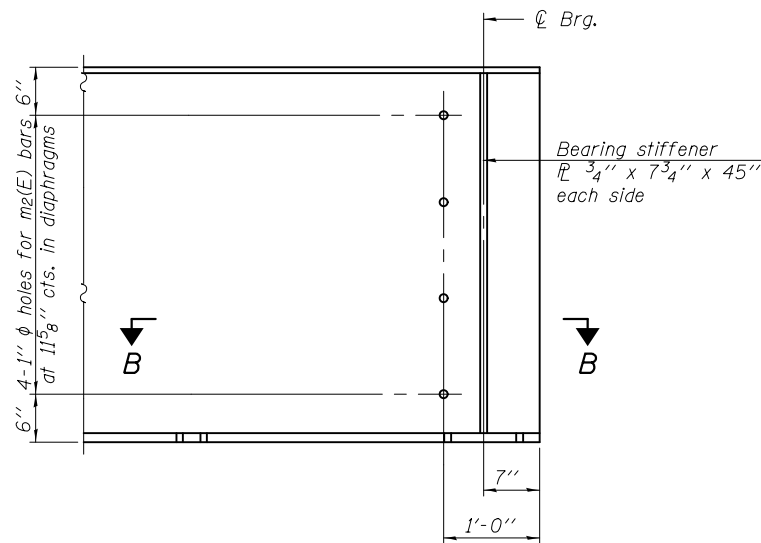
DESIGNED - PAUL GURKLYS	EXAMINED	DATE - SEPTEMBER 29, 2016
CHECKED - CORY D. KOLTVEIT	 ENGINEER OF BRIDGE DESIGN  ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED
DRAWN - MICHAEL B. MOSSMAN		REVISED
CHECKED - P.G. / C.D.K. / G.R.A.		REVISED

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

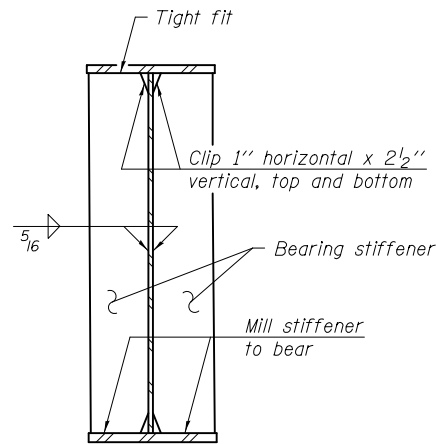
STRUCTURAL STEEL  
 STRUCTURE NO. 003 - 0063

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	35-1-BR	BOND	57	30
CONTRACT NO. 76E04				
ILLINOIS FED. AID PROJECT				

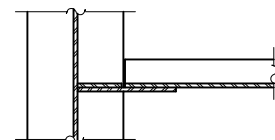
SHEET NO. 13 OF 25 SHEETS



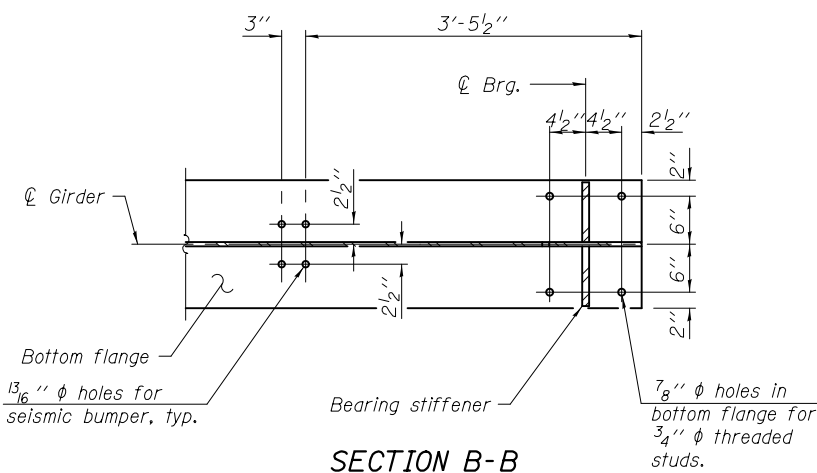
**GIRDER END ELEVATION**  
(Typical at all girders, each end)



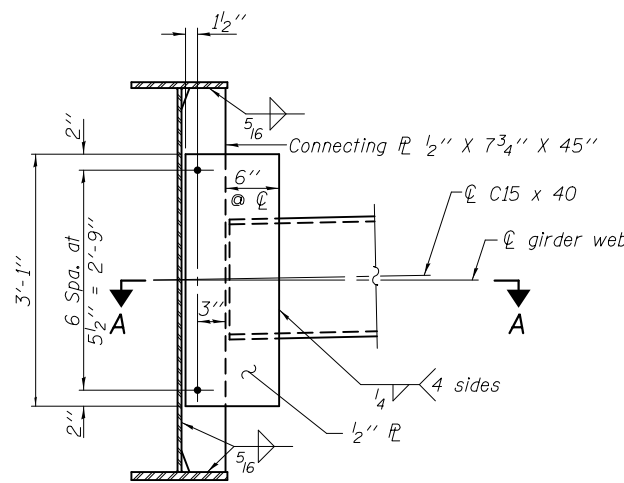
**BEARING STIFFENER**



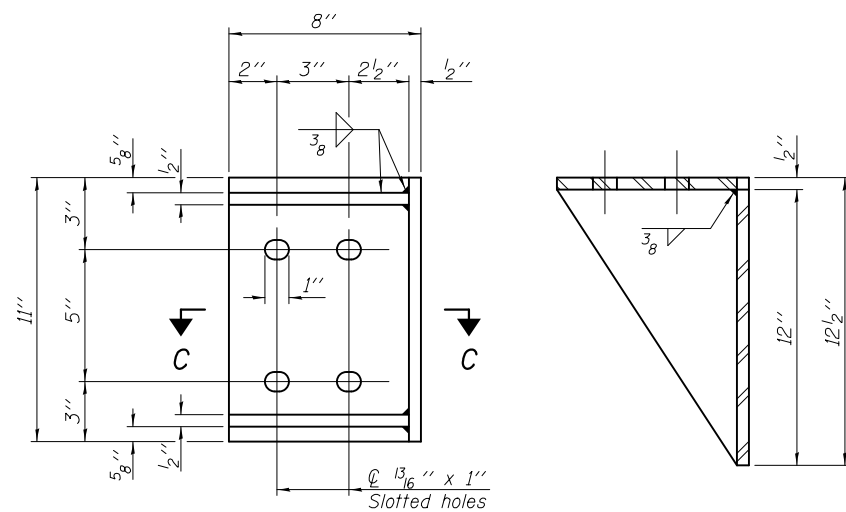
**SECTION A-A**



**SECTION B-B**



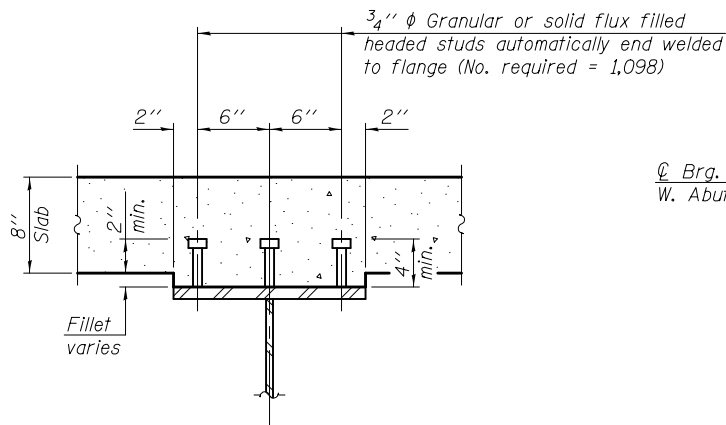
**INTERIOR DIAPHRAGM**



**BOTTOM PLAN**

**SECTION C-C**

**SEISMIC BUMPER DETAILS**  
(12 Required)



**SECTION D-D**

INTERIOR GIRDER MOMENT TABLE		0.5 Span 1
$I_s$	(in <sup>4</sup> )	19276
$I_c(n)$	(in <sup>4</sup> )	48127
$I_c(3n)$	(in <sup>4</sup> )	34812
$I_c(cr)$	(in <sup>4</sup> )	-
$S_s$	(in <sup>3</sup> )	920
$S_c(n)$	(in <sup>3</sup> )	1246
$S_c(3n)$	(in <sup>3</sup> )	1141
$S_c(cr)$	(in <sup>3</sup> )	-
DC1	(k/')	0.818
M <sub>DC1</sub>	(k)	1109.5
DC2	(k/')	0.15
M <sub>DC2</sub>	(k)	203.5
DW	(k/')	0.296
M <sub>DW</sub>	(k)	401.2
LLDF		0.492
M <sub>± + IM</sub>	(k)	1470.8
M <sub>u</sub> (Strength I)	(k)	4817.0
φ <sub>r</sub> M <sub>n</sub>	(k)	6147.8
f <sub>s</sub> DC1	(ksi)	14.47
f <sub>s</sub> DC2	(ksi)	2.14
f <sub>s</sub> DW	(ksi)	4.22
f <sub>s</sub> (± + IM)	(ksi)	14.17
f <sub>s</sub> (Service II)	(ksi)	39.25
0.95R <sub>n</sub> F <sub>y</sub> f	(ksi)	47.5
f <sub>s</sub> (Total)(Strength I)	(ksi)	-
φ <sub>r</sub> F <sub>n</sub>	(ksi)	-
V <sub>r</sub>	(k)	25.5

	GIRDER REACTION TABLE	
	Abut.	
	Interior	Exterior
LLDF	0.664	0.575
OCF	-	1
* R <sub>DC1</sub>	(k) 76.8	(k) 75.1
R <sub>DC2</sub>	(k) 7.8	(k) 7.8
R <sub>DW</sub>	(k) 15.4	(k) 14.5
R <sub>±</sub>	(k) 65.7	(k) 56.9
R <sub>IM</sub>	(k) 14.3	(k) 12.4
R <sub>Total</sub>	(k) 180.0	(k) 166.7

\* R<sub>DC1</sub> includes service reaction due to weight of deck, diaphragm, approach slab, and parapet on approach slab.

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

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

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

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

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

M<sub>DC1</sub>: 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<sub>DC2</sub>: 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<sub>DW</sub>: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).

M<sub>± + IM</sub>: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).

M<sub>u</sub> (Strength I): Factored design moment (kip-ft.).

1.25 (M<sub>DC1</sub> + M<sub>DC2</sub>) + 1.5 M<sub>DW</sub> + 1.75 M<sub>± + IM</sub>

φ<sub>r</sub>M<sub>n</sub>: Compact composite positive moment capacity computed according to Article 6.10.7.1 or non-slender negative moment capacity according to Article A6.1.1 or A6.1.2 (kip-ft.).

f<sub>s</sub> DC1: Un-factored stress at edge of flange for controlling steel flange due to vertical non-composite dead loads as calculated below (ksi).

M<sub>DC1</sub> / S<sub>nc</sub>

f<sub>s</sub> DC2: Un-factored stress at edge of flange for controlling steel flange due to vertical composite dead loads as calculated below (ksi).

M<sub>DC2</sub> / S<sub>c(3n)</sub> or M<sub>DC2</sub> / S<sub>c(cr)</sub> as applicable.

f<sub>s</sub> 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<sub>DW</sub> / S<sub>c(3n)</sub> or M<sub>DW</sub> / S<sub>c(cr)</sub> as applicable.

f<sub>s</sub> (± + IM): Un-factored stress at edge of flange for controlling steel flange due to vertical composite live load plus impact loads as calculated below (ksi).

M<sub>± + IM</sub> / S<sub>c(n)</sub> or M<sub>± + IM</sub> / S<sub>c(cr)</sub> as applicable.

f<sub>s</sub> (Service II): Sum of stresses as computed below (ksi).

f<sub>sDC1</sub> + f<sub>sDC2</sub> + f<sub>sDW</sub> + 1.3 f<sub>s</sub> (± + IM)

0.95R<sub>n</sub>F<sub>y</sub>f: Composite stress capacity for Service II loading according to Article 6.10.4.2 (ksi).

f<sub>s</sub> (Total)(Strength I): Sum of stresses as computed below on non-compact section (ksi).

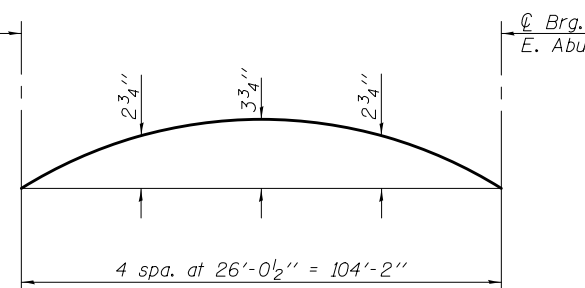
1.25 (f<sub>sDC1</sub> + f<sub>sDC2</sub>) + 1.5 f<sub>sDW</sub> + 1.75 f<sub>s</sub> (± + IM)

φ<sub>r</sub>F<sub>n</sub>: Non-Compact composite positive or negative stress capacity for Strength I loading according to Article 6.10.7 or 6.10.8 (ksi).

V<sub>r</sub>: Maximum factored shear range in span computed according to Article 6.10.10.

LLDF: Live load distribution factor for moment and shear

OCF: Obtuse correction factor



**CAMBER DIAGRAM**

**\*TOP OF WEB ELEVATIONS**

Location	W. Abut.	E. Abut.
Girder 1	479.53	479.64
Girder 2	479.64	479.75
Girder 3	479.73	479.84
Girder 4	479.73	479.84
Girder 5	479.64	479.75
Girder 6	479.53	479.64

\* For fabrication use only.

SDATES STIMES

Note:  
See sheet 10 of 25 for placement of seismic bumpers.

DESIGNED - PAUL GURKLYS  
CHECKED - CORY D. KOLTVEIT  
DRAWN - MICHAEL B. MOSSMAN  
CHECKED - P.G. / C.D.K. / G.R.A.

EXAMINED  
PASSED

DATE - SEPTEMBER 29, 2016  
REVISOR  
REVISOR

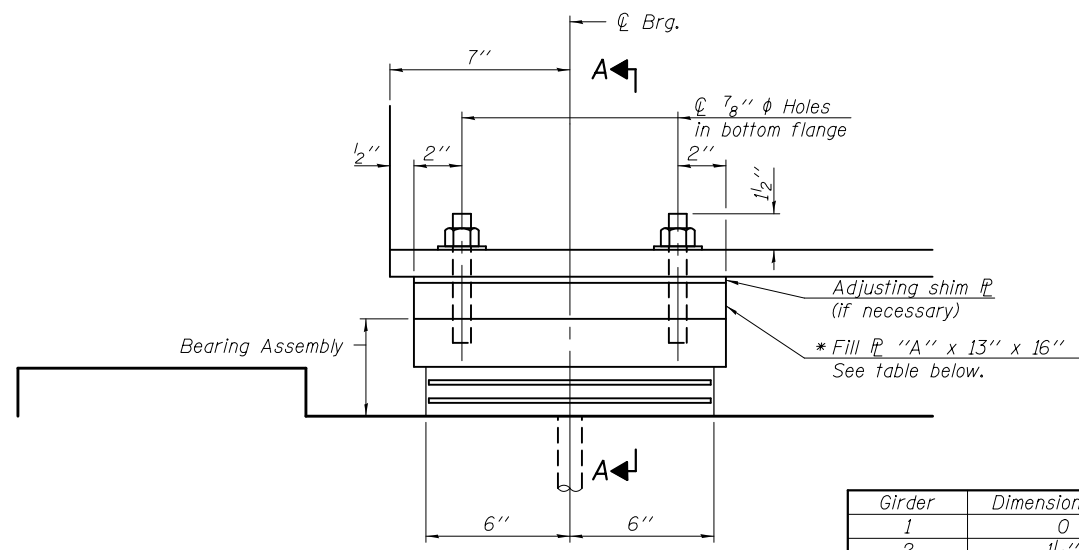
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

STRUCTURAL STEEL DETAILS  
STRUCTURE NO. 003 - 0063

SHEET NO. 14 OF 25 SHEETS

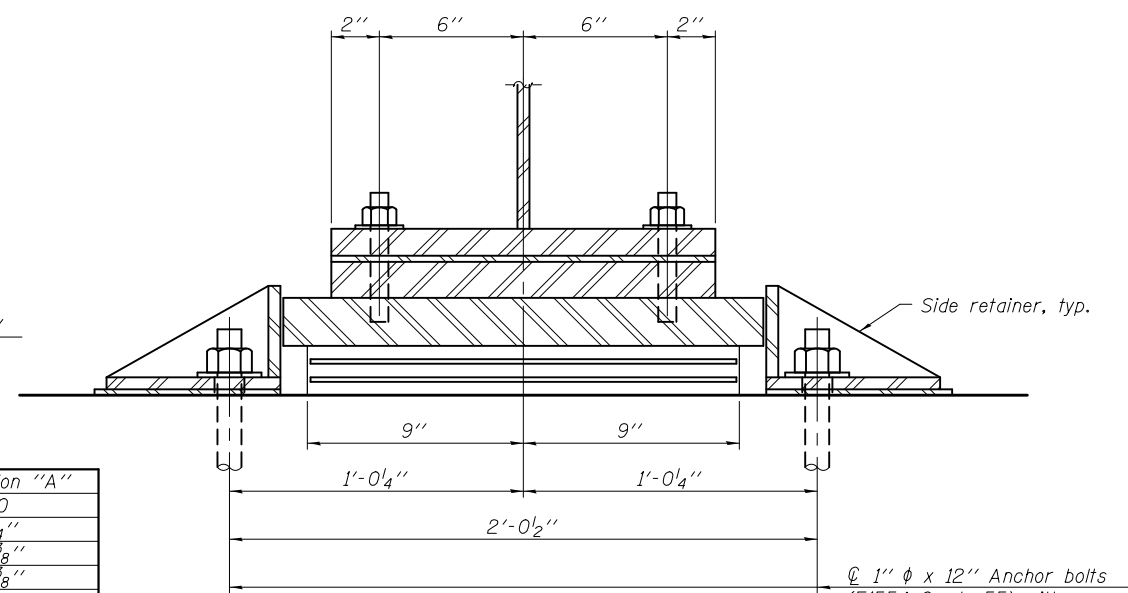
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	35-1-BR	BOND	57	31
CONTRACT NO. 76E04				

ILLINOIS FED. AID PROJECT



**ELEVATION AT ABUT.**

Girder	Dimension "A"
1	0
2	1 1/4"
3	2 3/8"
4	2 3/8"
5	1 1/4"
6	0

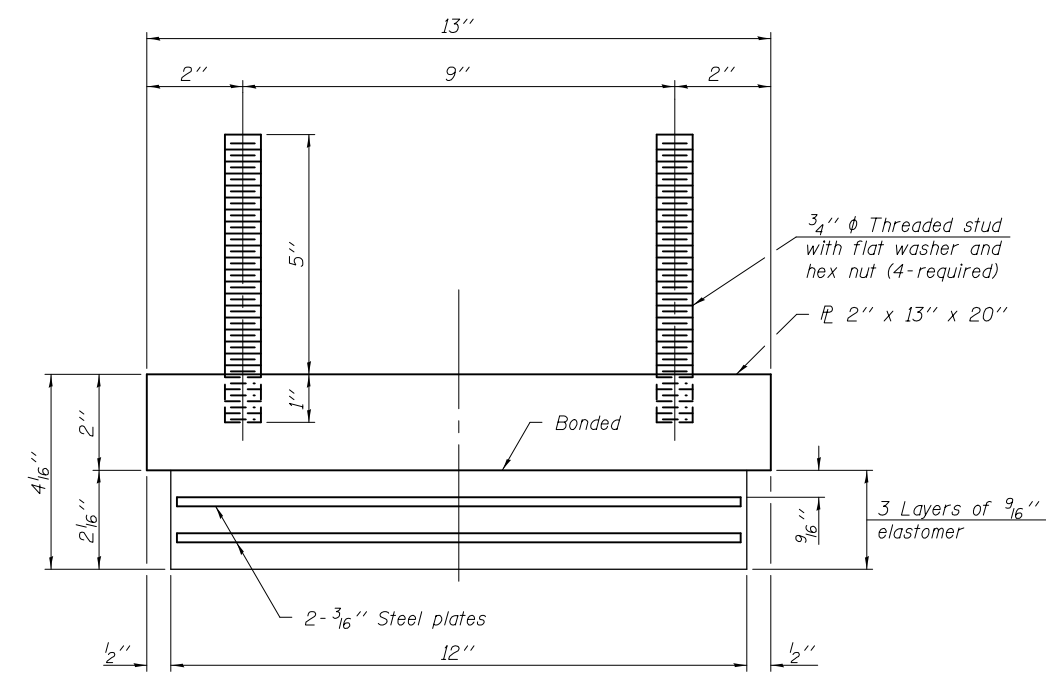


**SECTION A-A**

**Notes:**  
 Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.  
 Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.  
 The anchor bolt size and grade shown constitute a calculated seismic structural fuse. Substitution of higher diameter and/or grade anchor bolts will not be allowed.  
 Two 3/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.  
 All bearing plates shall be AASHTO M270 Grade 50W.

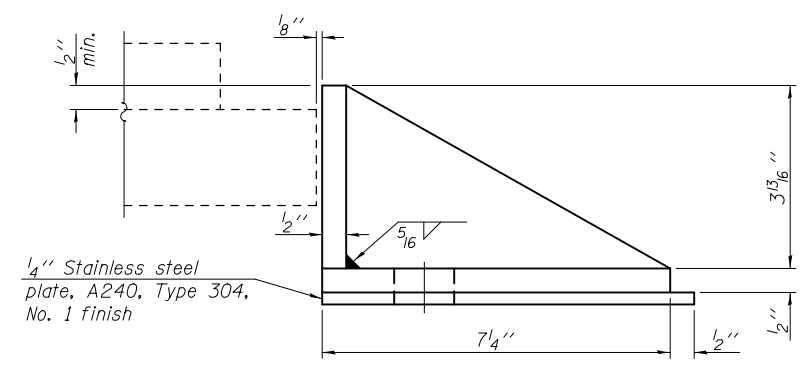
**TYPE I ELASTOMERIC EXP. BRG.**

\* Included in the cost of Elastomeric Bearing Assembly, Type I.



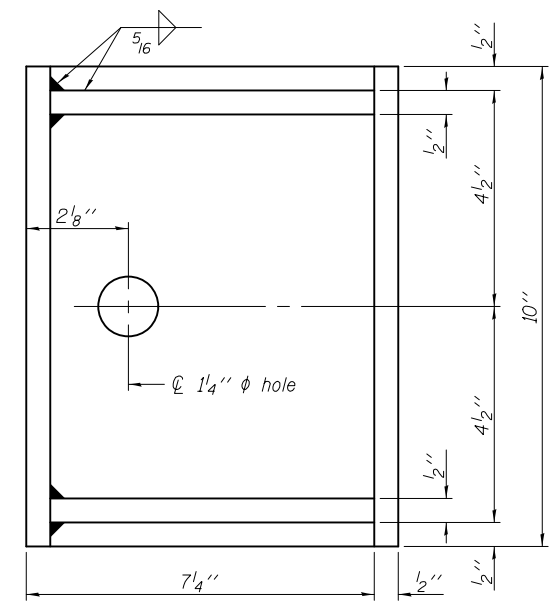
**BEARING ASSEMBLY**

Note:  
 Shim plates shall not be placed under Bearing Assembly.



**SIDE RETAINER**

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



**BILL OF MATERIAL**

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

SDATES \$TIMES

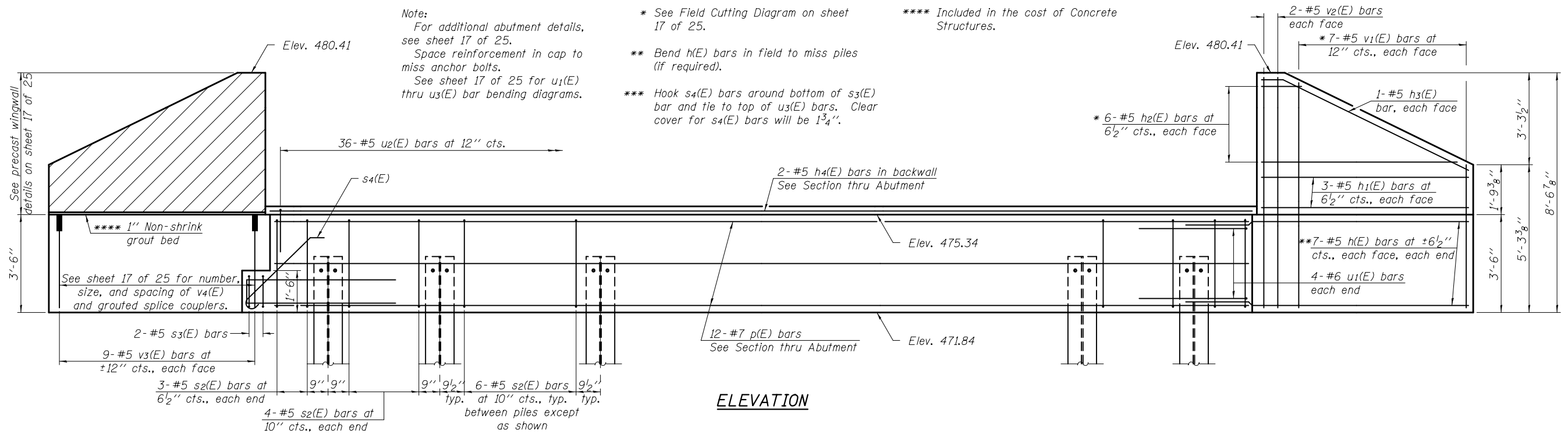
DESIGNED - PAUL GURKLYS	EXAMINED - <i>Joanne F. J...</i>	DATE - SEPTEMBER 29, 2016
CHECKED - CORY D. KOLTVEIT	PASSED - <i>Carl...</i>	REVISOR
DRAWN - MICHAEL B. MOSSMAN	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISOR
CHECKED - P.G. / C.D.K. / G.R.A.		

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

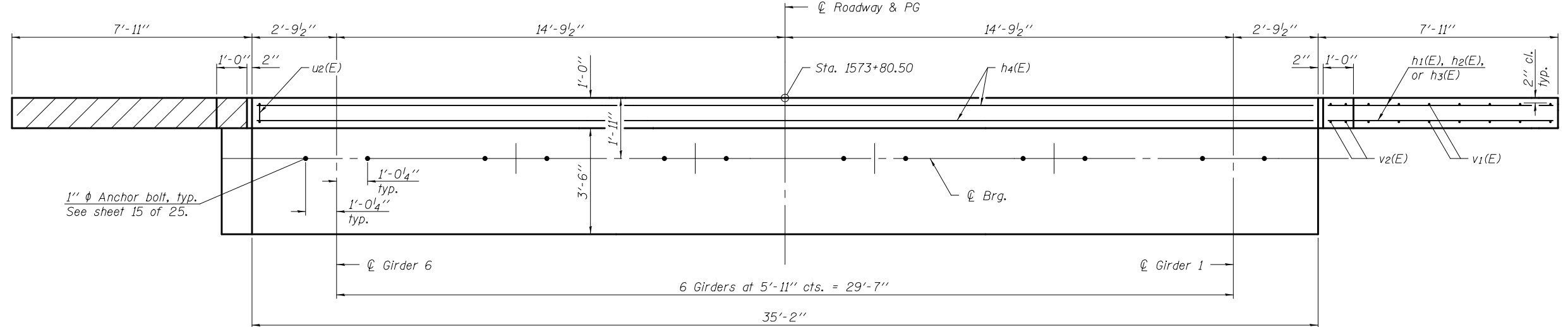
**BEARING DETAILS  
 STRUCTURE NO. 003 - 0063**

SHEET NO. 15 OF 25 SHEETS

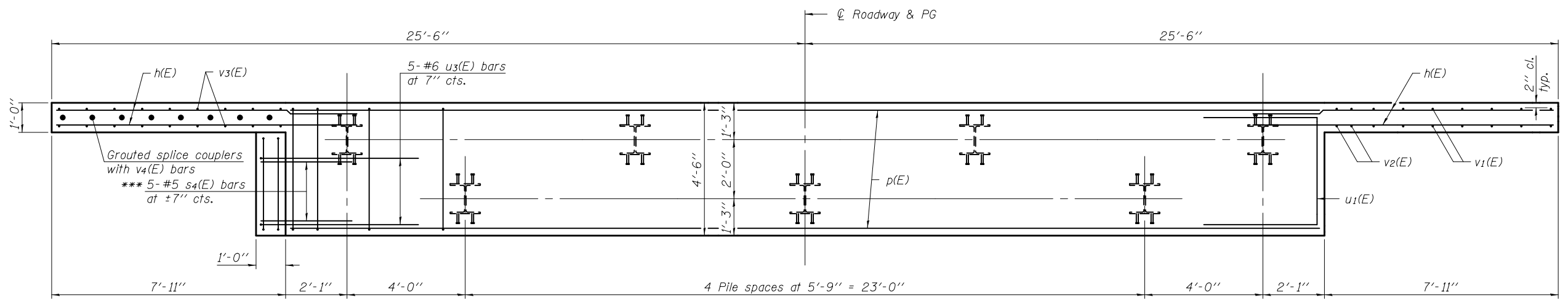
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	35-1-BR	BOND	57	32
CONTRACT NO. 76E04				
ILLINOIS FED. AID PROJECT				



**ELEVATION**



**TOP-PLAN**



**PLAN-CAP**

Note:  
For additional abutment details, see sheet 17 of 25.  
Space reinforcement in cap to miss anchor bolts.  
See sheet 17 of 25 for u1(E) thru u3(E) bar bending diagrams.

\* See Field Cutting Diagram on sheet 17 of 25.  
\*\* Bend h(E) bars in field to miss piles (if required).  
\*\*\* Hook s4(E) bars around bottom of s3(E) bar and tie to top of u3(E) bars. Clear cover for s4(E) bars will be 13/4".

\*\*\*\* Included in the cost of Concrete Structures.

SDATES \$TIMES

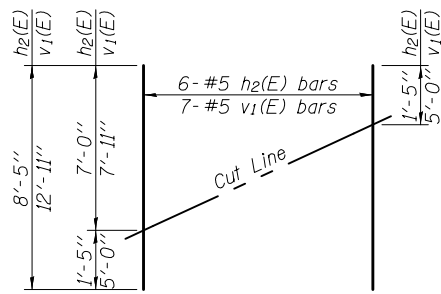
DESIGNED - PAUL GURKLYS	EXAMINED - <i>Jaime F. Joffe</i>	DATE - SEPTEMBER 29, 2016
CHECKED - CORY D. KOLTVEIT	PASSED - <i>Michael B. Mossman</i>	REVISOR
DRAWN - MICHAEL B. MOSSMAN	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISOR
CHECKED - P.G. / C.D.K. / G.R.A.		

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**WEST ABUTMENT  
STRUCTURE NO. 003 - 0063**

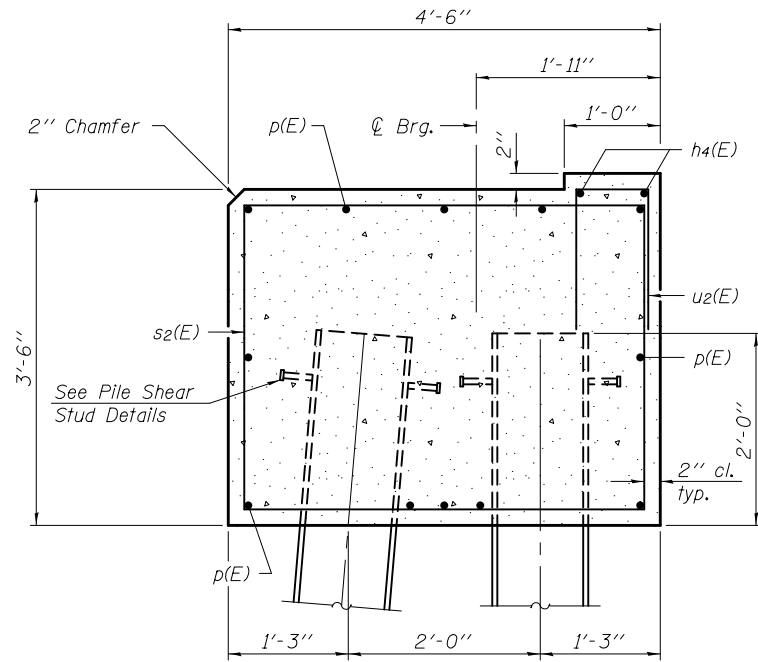
SHEET NO. 16 OF 25 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	35-1-BR	BOND	57	33
CONTRACT NO. 76E04				
ILLINOIS FED. AID PROJECT				

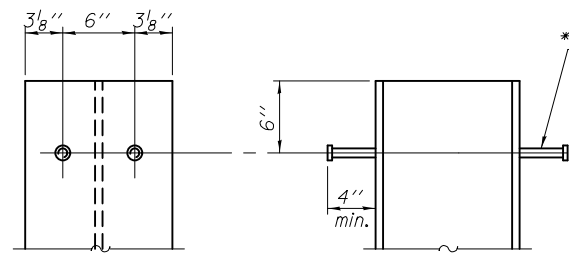


**FIELD CUTTING DIAGRAM**

Order  $h_2(E)$  and  $v_1(E)$  full length. Cut as shown and use remainder of bars in opposite face.



**SECTION THRU ABUTMENT**

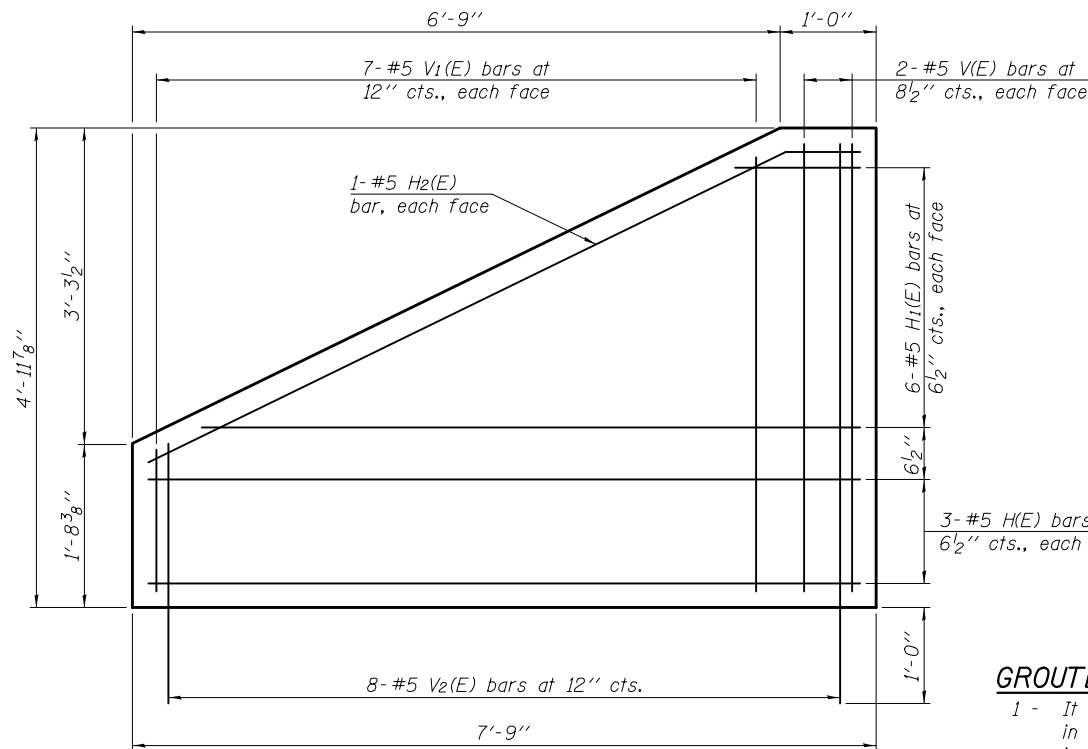


**PILE SHEAR STUD DETAILS**

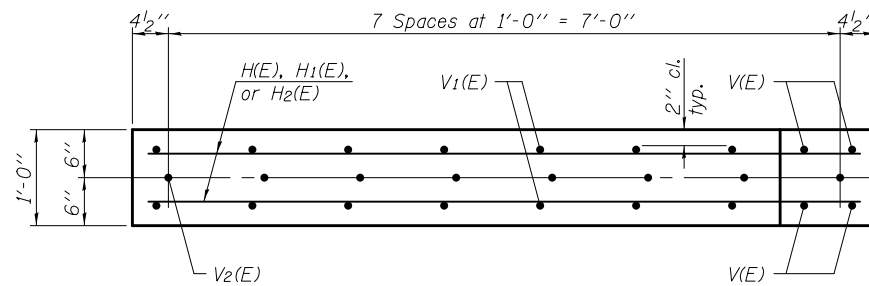
**PILE DATA**

Type: HP 12 x 74  
 Nominal Required Bearing: 589 kips  
 Factored Resistance Available: 324 kips  
 Est. Length: 48 ft.  
 No. Production Piles: 7  
 No. Test Piles: 0

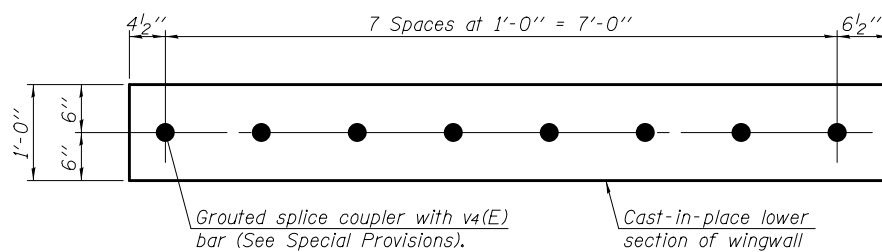
\* Typical each flange, each pile. (Cost included with Furnishing Steel Piles, HP 12 x 74).



**PRECAST WINGWALL ELEVATION**



**PRECAST WINGWALL PLAN**



**GROUTED SPLICE COUPLER &  $v_4(E)$  BAR LOCATIONS**

$h(E)$  and  $v_3(E)$  bars omitted for clarity.

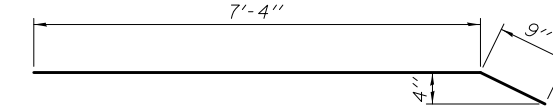
**PRECAST WINGWALL BAR LIST**

(For information only)

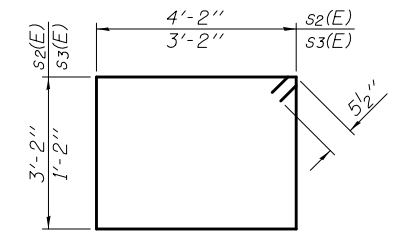
Bar	No.	Size	Length	Shape
$h(E)$	6	#5	7'-5"	—
$h_1(E)$	6	#5	8'-5"	—
$h_2(E)$	2	#5	8'-1"	—
$v(E)$	4	#5	4'-8"	—
$v_1(E)$	7	#5	6'-0"	—
$v_2(E)$	8	#5	8'-5"	—

**Notes:**

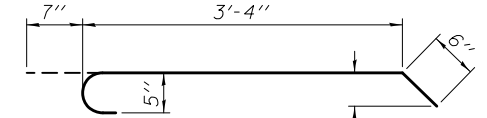
See sheet 16 of 25 for additional details.  
 Precast wingwalls are billed as Precast Concrete Substructure, Lump Sum.  
 Order  $h_1(E)$  and  $v_2(E)$  bars full length. Cut to fit and use remainder on opposing side.



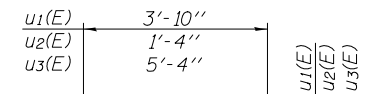
**BAR  $h_2(E)$  &  $h_3(E)$**



**BARS  $s_2(E)$  &  $s_3(E)$**



**BAR  $s_4(E)$**



**BARS  $u_1(E)$  THRU  $u_3(E)$**

**WEST ABUTMENT BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
$h(E)$	28	#5	10'-6"	—
$h_1(E)$	6	#5	7'-5"	—
$h_2(E)$	6	#5	8'-5"	—
$h_3(E)$	2	#5	8'-1"	—
$h_4(E)$	2	#5	35'-2"	—
$p(E)$	12	#7	34'-10"	—
$s_2(E)$	38	#5	15'-7"	□
$s_3(E)$	2	#5	9'-7"	□
$s_4(E)$	5	#5	4'-5"	┌
$u_1(E)$	8	#6	11'-8"	┌
$u_2(E)$	36	#5	3'-4"	┌
$u_3(E)$	5	#6	11'-9"	┌
$v_1(E)$	7	#5	12'-11"	—
$v_2(E)$	4	#5	8'-2"	—
$v_3(E)$	18	#5	3'-3"	—
$v_4(E)$	8	#5	3'-0"	—
Structure Excavation		Cu. Yd.	105.7	
Concrete Structures		Cu. Yd.	23.9	
Reinforcement Bars, Epoxy Coated		Pound	2,580	
Furnishing Steel Piles, HP 12 x 74		Foot	336	
Driving Piles		Foot	336	
Bar Splicers, Special Precast Concrete		Each	8	
Substructure		L. Sum	0.5	

For details of piles see sheet 22 of 25.

**GROUTED SPLICE COUPLER CONNECTION SEQUENCE**

- It is recommended that the grouting procedure be completed in the presence of a Contractor's supervisor that is experienced in the installation of grouted sleeves. Manufacturer training may be required for inexperienced staff.
- Follow the written installation procedures of the coupler manufacturer. The following are general procedures that apply to most coupler manufacturers.
- It is recommended that the element with the reinforcement bar extensions be fabricated with extended lengths of reinforcement.
- Survey location and elevation of lower element.
- Determine the required reinforcing bar extension lengths based on the survey.
- Cut the bar extensions to the required length based on the survey and the coupler manufacturer's recommendations. For coated bars, the ends of the bars need not be re-coated.
- Place bedding grout on top of cast-in-place wingwall portion. The use of extra grout that is allowed to flow out during precast wingwall placement is recommended. In lieu of pre-placement of bedding grout, the bedding grout can be flowed into place after precast wingwall erection, but prior to grouting of couplers.
- Erect precast wingwall to within the specified erection tolerances shown on sheet 16 of 25. Prevent bedding grout from flowing into coupler.
- Maintain integrity of grout bed during setting operation. Repair grout that is displaced or gaps that develop in the grout joint using hand tools.
- Brace the precast wingwall.
- Install grout in couplers following the manufacturer's written procedures. If the coupler is below the joint, the coupler grout can be installed prior to application of bedding grout.
- Backfilling of wingwalls above a connection should not commence until the connection has achieved adequate strength as determined through strength testing of the grout. The timing of subsequent construction steps are specified in the construction sequence on sheet 3 of 25.

SDATES \$TIMES

DESIGNED - PAUL GURKLYS	EXAMINED - <i>Joanne F. J...</i>
CHECKED - CORY D. KOLTVEIT	ENGINEER OF BRIDGE DESIGN
DRAWN - MICHAEL B. MOSSMAN	<i>Carl...</i>
CHECKED - P.G. / C.D.K. / G.R.A.	ACTING ENGINEER OF BRIDGES AND STRUCTURES

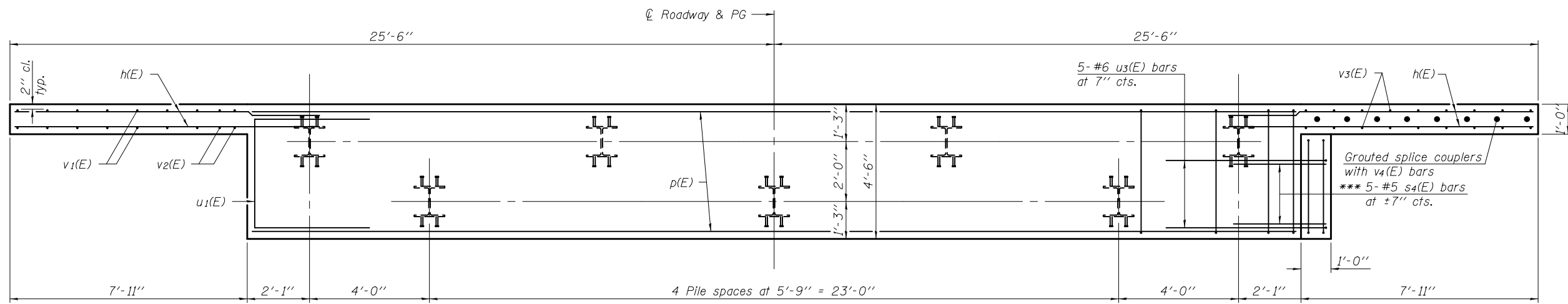
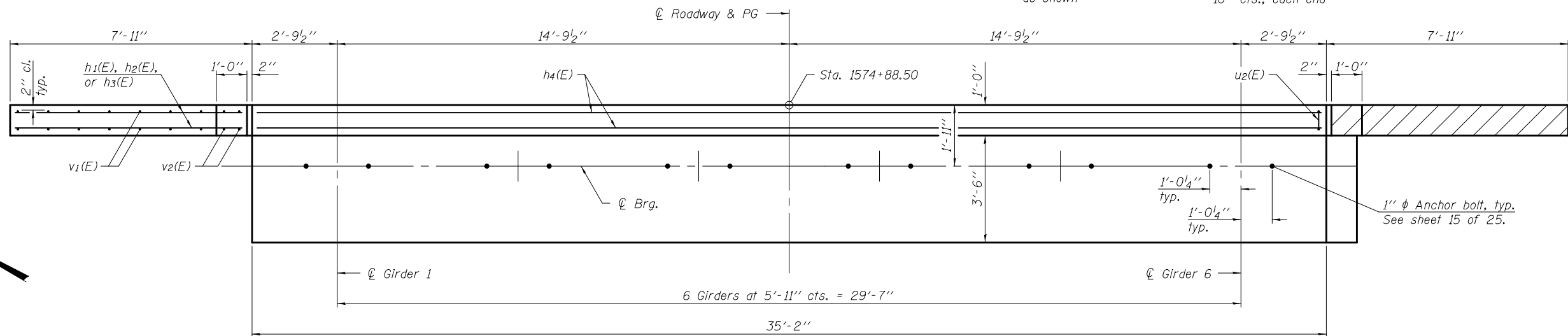
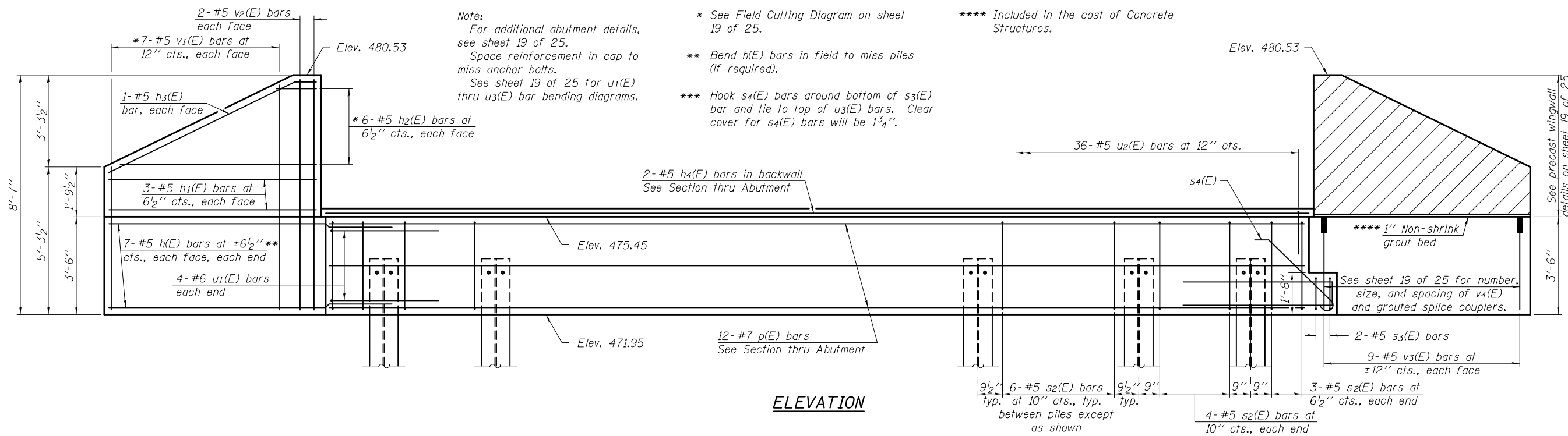
DATE - SEPTEMBER 29, 2016	REVISED
REVISED	REVISED

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

**WEST ABUTMENT DETAILS STRUCTURE NO. 003 - 0063**

SHEET NO. 17 OF 25 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	35-1-BR	BOND	57	34
				CONTRACT NO. 76E04
ILLINOIS FED. AID PROJECT				



SDATES \$TIMES

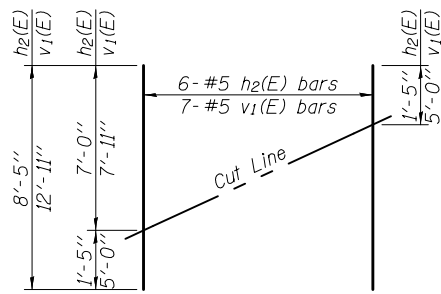
DESIGNED - PAUL GURKLYS	EXAMINED - <i>Joanne F. J...</i>	DATE - SEPTEMBER 29, 2016
CHECKED - CORY D. KOLTVEIT	PASSED - <i>Carl...</i>	REVISOR
DRAWN - MICHAEL B. MOSSMAN	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISOR
CHECKED - P.G. / C.D.K. / G.R.A.		

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**EAST ABUTMENT  
 STRUCTURE NO. 003 - 0063**

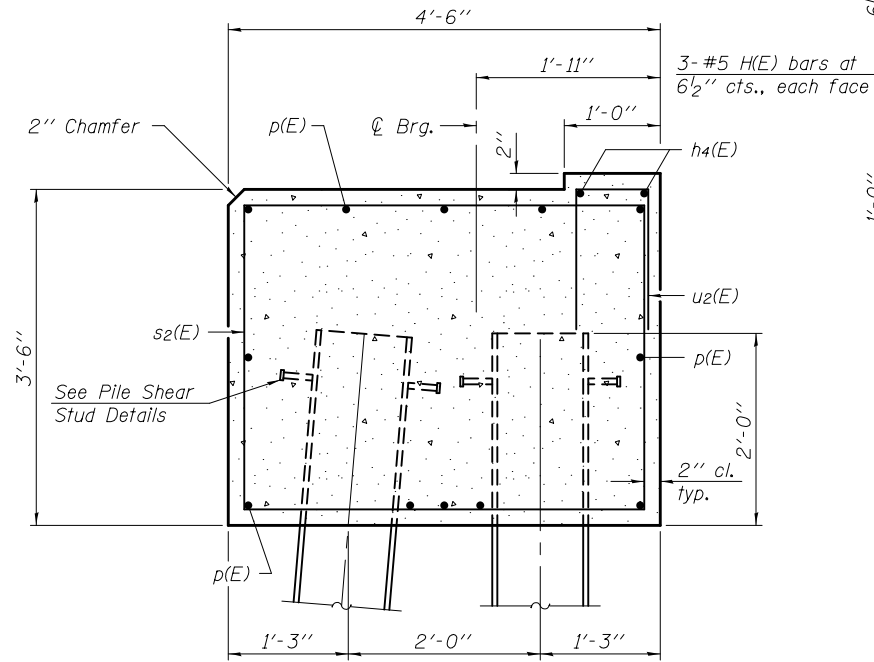
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	35-1-BR	BOND	57	35
CONTRACT NO. 76E04				
ILLINOIS FED. AID PROJECT				

SHEET NO. 18 OF 25 SHEETS

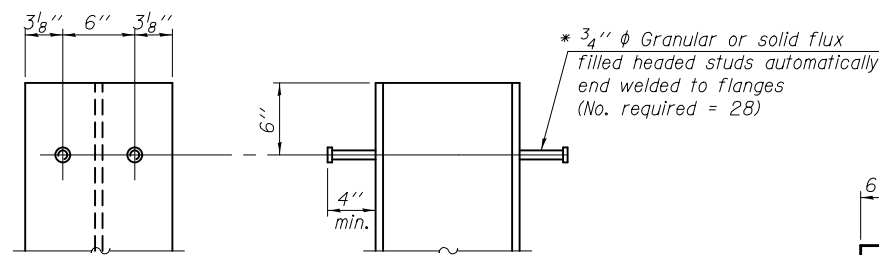


**FIELD CUTTING DIAGRAM**

Order h2(E) and v1(E) full length. Cut as shown and use remainder of bars in opposite face.



**SECTION THRU ABUTMENT**

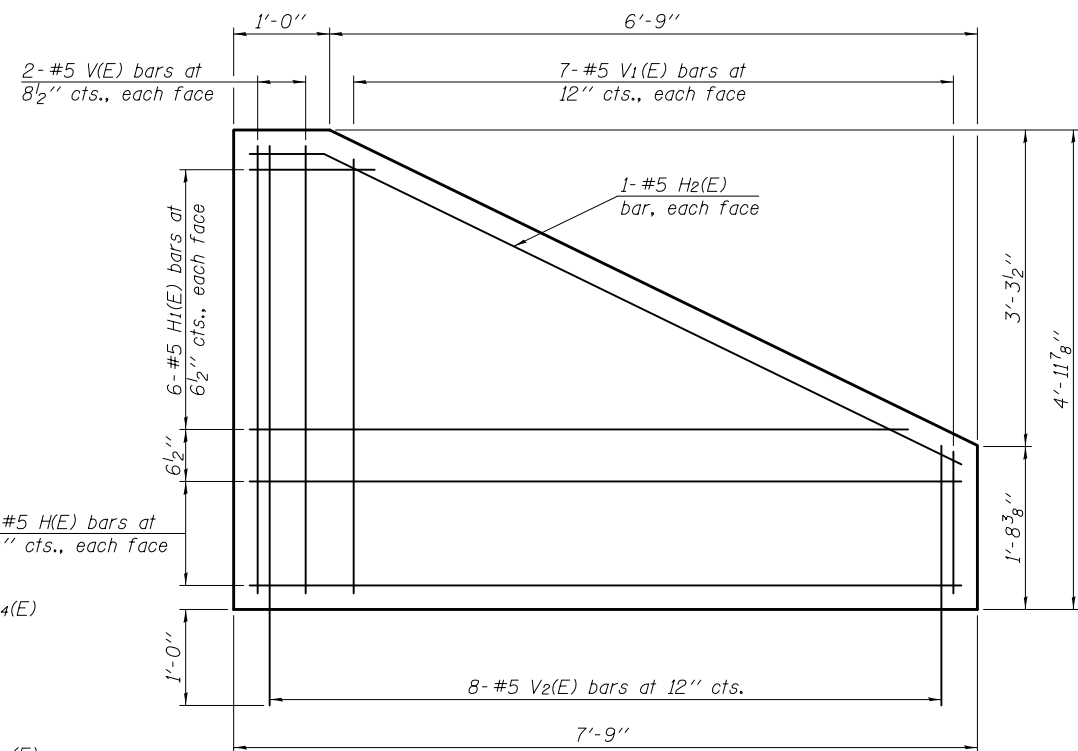


**PILE SHEAR STUD DETAILS**

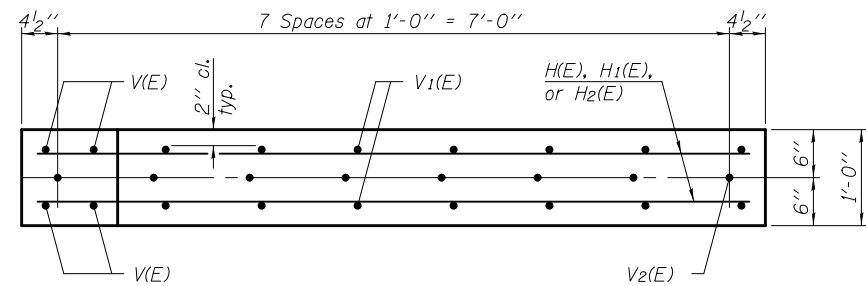
**PILE DATA**

Type: HP 12 x 74  
 Nominal Required Bearing: 589 kips  
 Factored Resistance Available: 324 kips  
 Est. Length: 51 ft.  
 No. Production Piles: 6  
 No. Test Piles: 1

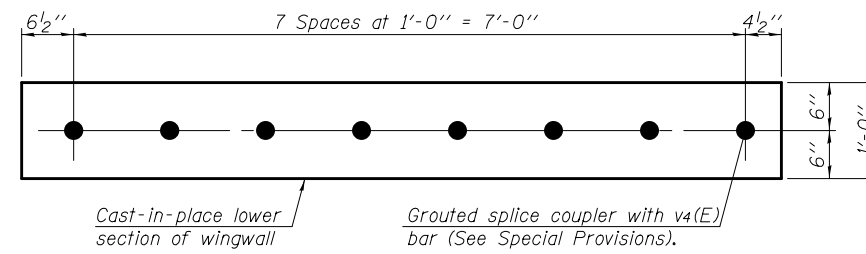
\* Typical each flange, each pile. (Cost included with Furnishing Steel Piles, HP 12 x 74).



**PRECAST WINGWALL ELEVATION**



**PRECAST WINGWALL PLAN**



**GROUTED SPLICE COUPLER & v4(E) BAR LOCATIONS**

h(E) and v3(E) bars omitted for clarity.

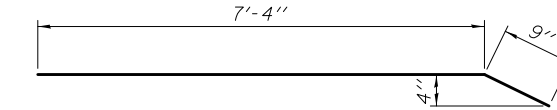
**PRECAST WINGWALL BAR LIST**

(For information only)

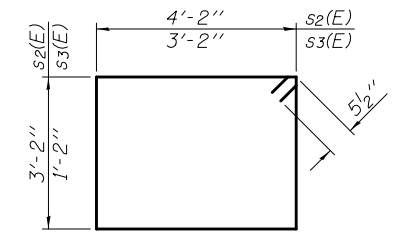
Bar	No.	Size	Length	Shape
H(E)	6	#5	7'-5"	—
H1(E)	6	#5	8'-5"	—
H2(E)	2	#5	8'-1"	—
V(E)	4	#5	4'-8"	—
V1(E)	7	#5	6'-0"	—
V2(E)	8	#5	8'-5"	—

**Notes:**

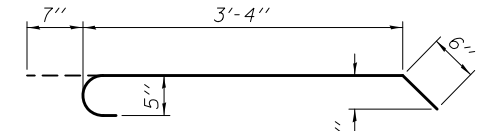
See sheet 18 of 25 for additional details.  
 Precast wingwalls are billed as Precast Concrete Substructure, Lump Sum.  
 Order H1(E) and V2(E) bars full length. Cut to fit and use remainder on opposing side.



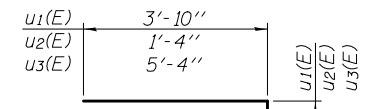
**BAR H2(E) & h3(E)**



**BARS s2(E) & s3(E)**



**BAR s4(E)**



**BARS u1(E) THRU u3(E)**

**EAST ABUTMENT BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	28	#5	10'-6"	—
h1(E)	6	#5	7'-5"	—
h2(E)	6	#5	8'-5"	—
h3(E)	2	#5	8'-1"	—
h4(E)	2	#5	35'-2"	—
p(E)	12	#7	34'-10"	—
s2(E)	38	#5	15'-7"	□
s3(E)	2	#5	9'-7"	□
s4(E)	5	#5	4'-5"	┌
u1(E)	8	#6	11'-8"	┌
u2(E)	36	#5	3'-4"	┌
u3(E)	5	#6	11'-9"	┌
v1(E)	7	#5	12'-11"	—
v2(E)	4	#5	8'-2"	—
v3(E)	18	#5	3'-3"	—
v4(E)	8	#5	3'-0"	—
Structure Excavation			Cu. Yd.	105.7
Concrete Structures			Cu. Yd.	23.9
Reinforcement Bars, Epoxy Coated			Pound	2,580
Furnishing Steel Piles, HP 12 x 74			Foot	306
Driving Piles			Foot	306
Test Pile Steel HP 12 x 74			Each	1
Bar Splicers, Special			Each	8
Precast Concrete Substructure			L. Sum	0.5

For details of piles see sheet 22 of 25.

**GROUTED SPLICE COUPLER CONNECTION SEQUENCE**

- 1 - It is recommended that the grouting procedure be completed in the presence of a Contractor's supervisor that is experienced in the installation of grouted sleeves. Manufacturer training may be required for inexperienced staff.
- 2 - Follow the written installation procedures of the coupler manufacturer. The following are general procedures that apply to most coupler manufacturers.
- 3 - It is recommended that the element with the reinforcement bar extensions be fabricated with extended lengths of reinforcement.
- 4 - Survey location and elevation of lower element.
- 5 - Determine the required reinforcing bar extension lengths based on the survey.
- 6 - Cut the bar extensions to the required length based on the survey and the coupler manufacturer's recommendations. For coated bars, the ends of the bars need not be re-coated.
- 7 - Place bedding grout on top of cast-in-place wingwall portion. The use of extra grout that is allowed to flow out during precast wingwall placement is recommended. In lieu of pre-placement of bedding grout, the bedding grout can be flowed into place after precast wingwall erection, but prior to grouting of couplers.
- 8 - Erect precast wingwall to within the specified erection tolerances shown on sheet 18 of 25. Prevent bedding grout from flowing into coupler.
- 9 - Maintain integrity of grout bed during setting operation. Repair grout that is displaced or gaps that develop in the grout joint using hand tools.
- 10 - Brace the precast wingwall.
- 11 - Install grout in couplers following the manufacturer's written procedures. If the coupler is below the joint, the coupler grout can be installed prior to application of bedding grout.
- 12 - Backfilling of wingwalls above a connection should not commence until the connection has achieved adequate strength as determined through strength testing of the grout. The timing of subsequent construction steps are specified in the construction sequence on sheet 3 of 25.

SDATES \$TIMES

DESIGNED - PAUL GURKLYS	EXAMINED - <i>Joanne F. J...</i>	DATE - SEPTEMBER 29, 2016
CHECKED - CORY D. KOLTVEIT	PASSED - <i>Carl...</i>	REVISOR
DRAWN - MICHAEL B. MOSSMAN	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISOR
CHECKED - P.G. / C.D.K. / G.R.A.		

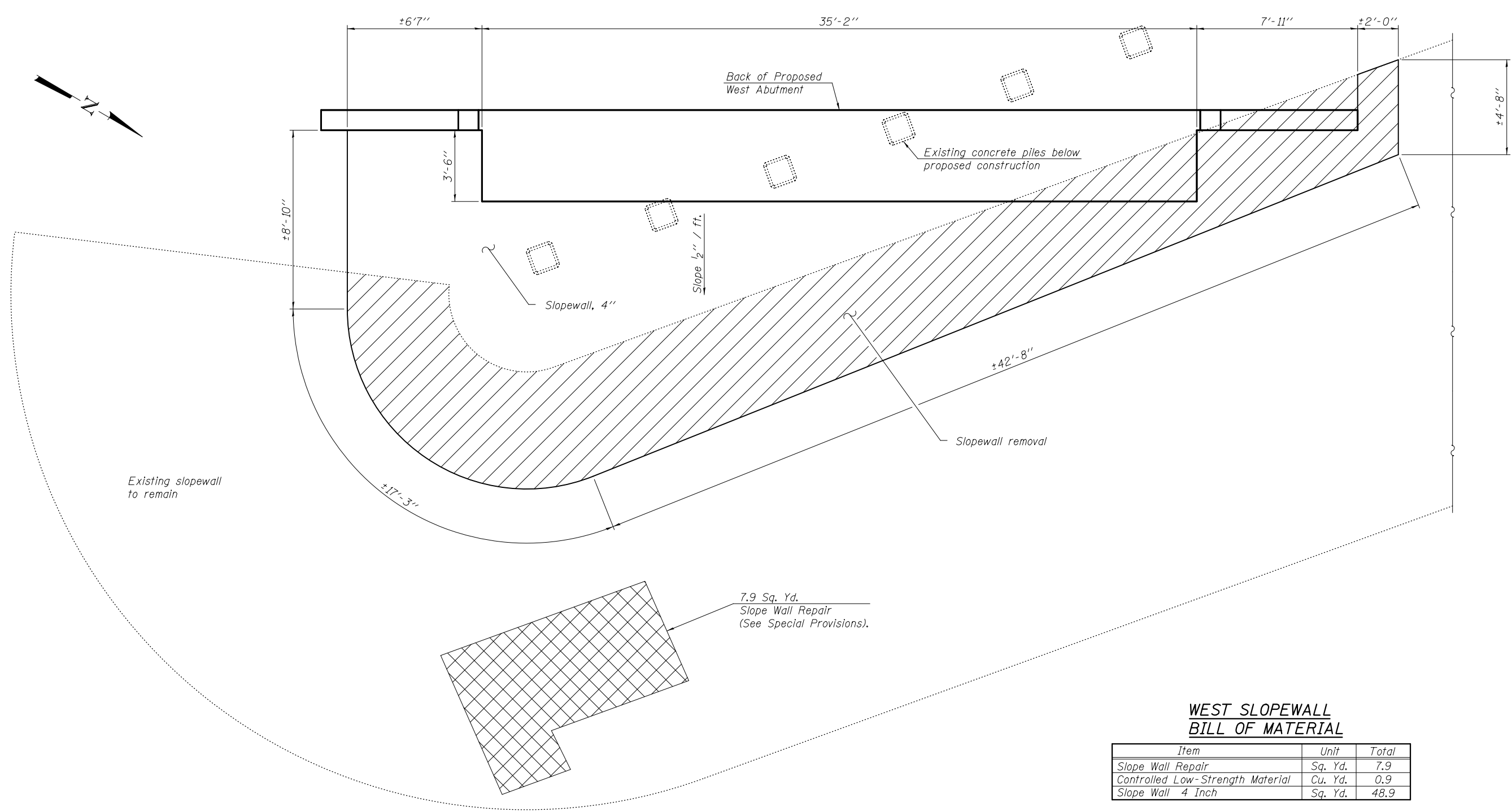
**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

**EAST ABUTMENT DETAILS STRUCTURE NO. 003 - 0063**

SHEET NO. 19 OF 25 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	35-1-BR	BOND	57	36
CONTRACT NO. 76E04				
ILLINOIS FED. AID PROJECT				





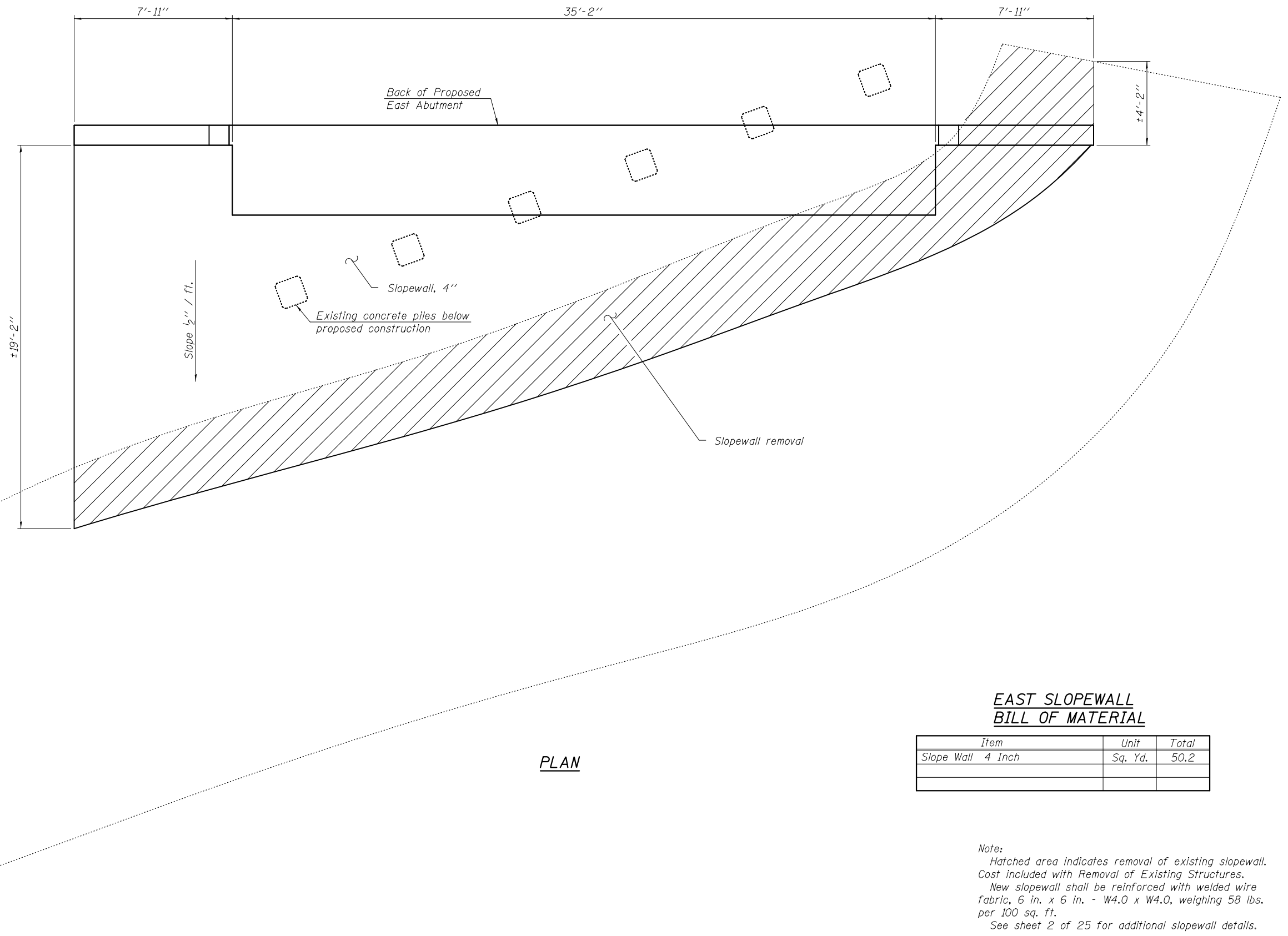
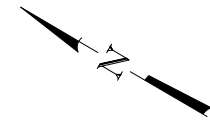
**PLAN**

**WEST SLOPEWALL  
BILL OF MATERIAL**

Item	Unit	Total
Slope Wall Repair	Sq. Yd.	7.9
Controlled Low-Strength Material	Cu. Yd.	0.9
Slope Wall 4 Inch	Sq. Yd.	48.9

*Note:*  
 Hatched area indicates removal of existing slopewall.  
 Cost included with Removal of Existing Structures.  
 New slopewall shall be reinforced with welded wire fabric, 6 in. x 6 in. - W4.0 x W4.0, weighing 58 lbs. per 100 sq. ft.  
 See sheet 2 of 25 for additional slopewall details.

SDATES \$TIMES



PLAN

**EAST SLOPEWALL  
BILL OF MATERIAL**

Item	Unit	Total
Slope Wall 4 Inch	Sq. Yd.	50.2

Note:  
Hatched area indicates removal of existing slopewall. Cost included with Removal of Existing Structures.  
New slopewall shall be reinforced with welded wire fabric, 6 in. x 6 in. - W4.0 x W4.0, weighing 58 lbs. per 100 sq. ft.  
See sheet 2 of 25 for additional slopewall details.

Note:  
Hatched area indicates removal of existing slopewall. Cost included with Removal of Existing Structures.

SDATES \$TIMES

DESIGNED - PAUL GURKLYS  
CHECKED - CORY D. KOLTVEIT  
DRAWN - MICHAEL B. MOSSMAN  
CHECKED - P.G. / C.D.K. / G.R.A.

EXAMINED  
PASSED  
  
 ACTING ENGINEER OF BRIDGES AND STRUCTURES

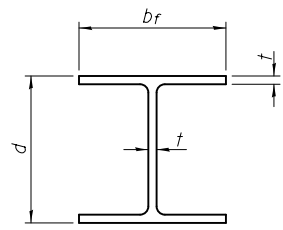
DATE - SEPTEMBER 29, 2016  
REVISED  
REVISED

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**EAST SLOPEWALL REPAIR DETAILS  
STRUCTURE NO. 003 - 0063**

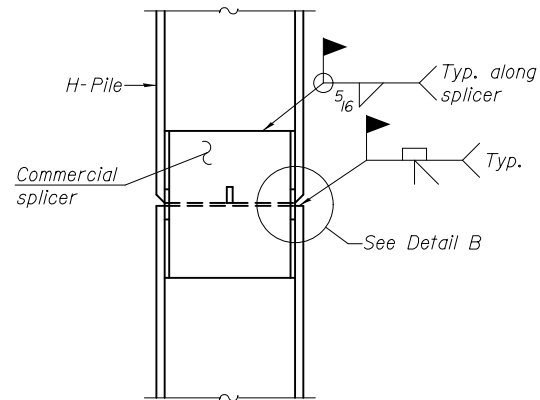
SHEET NO. 21 OF 25 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	35-1-BR	BOND	57	38
CONTRACT NO. 76E04				
ILLINOIS FED. AID PROJECT				

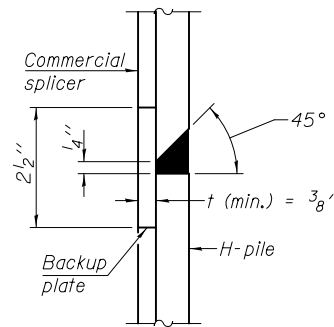


**STEEL PILE TABLE**

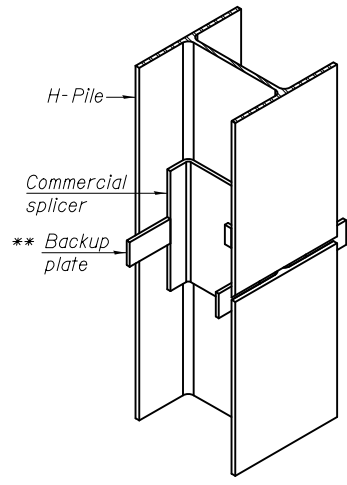
Designation	Depth d	Flange width br	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	1 3/16"	30"
x102	14"	14 3/4"	1 1/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	1 1/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"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



**ELEVATION**

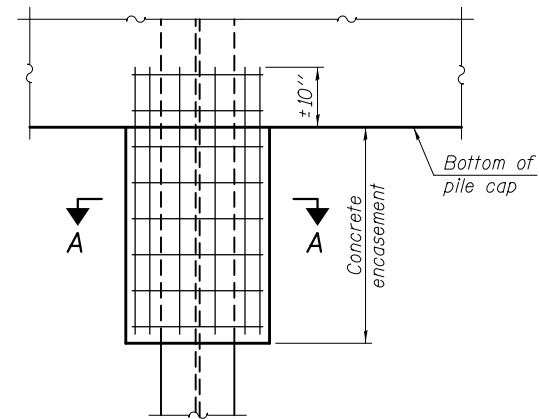


**DETAIL "B"**



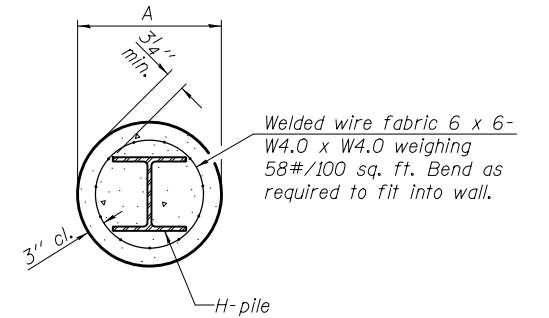
**ISOMETRIC VIEW**

**WELDED COMMERCIAL SPLICE**



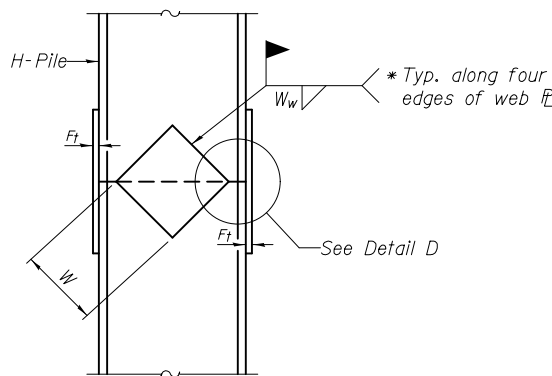
**ELEVATION**

**PILE ENCASEMENT**



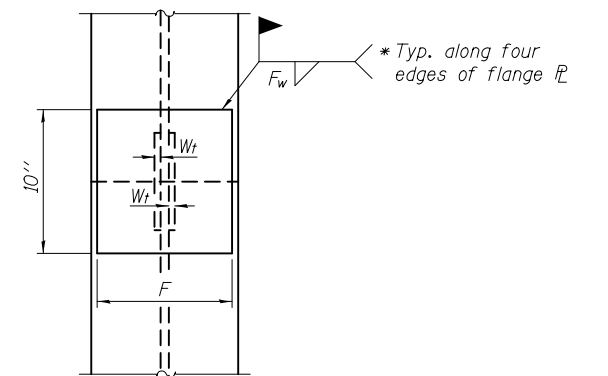
**SECTION A-A**

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



**ELEVATION**

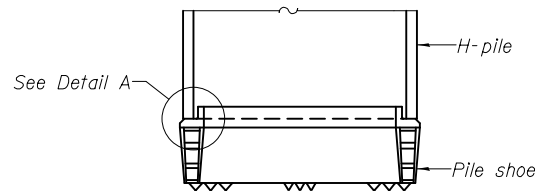
**DETAIL D**



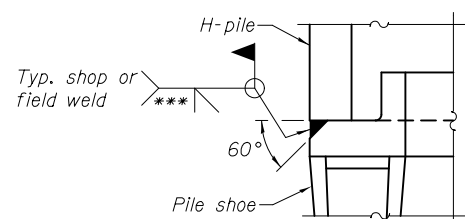
**END VIEW**

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

**WELDED PLATE FIELD SPLICE**

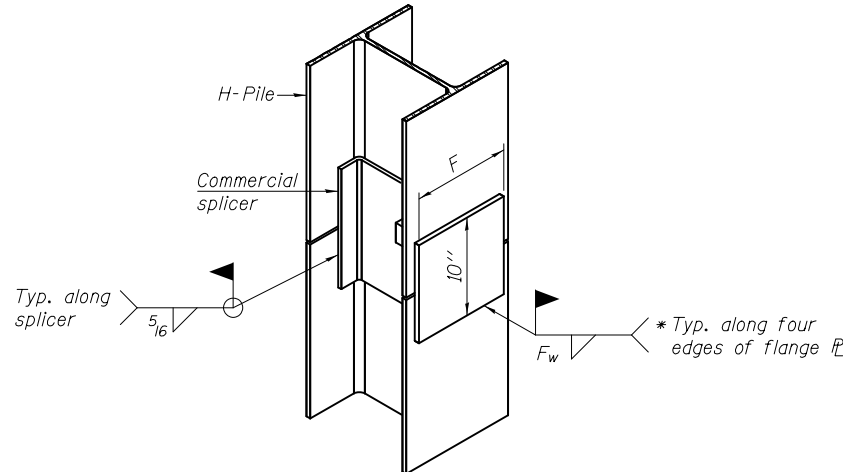


**ELEVATION**



**DETAIL A**

**H-PILE SHOE ATTACHMENT**



**ISOMETRIC VIEW**

**WELDED COMMERCIAL SPLICE ALTERNATE**

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

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

SDATES - 5 TIMES

F-HP 1-27-12

DESIGNED - PAUL GURKLYS	EXAMINED
CHECKED - CORY D. KOLTVEIT	PASSED
DRAWN - MICHAEL B. MOSSMAN	
CHECKED - P.G. / C.D.K. / G.R.A.	

DATE - SEPTEMBER 29, 2016

REVISOR

REVISOR

DATE - SEPTEMBER 29, 2016

REVISOR

REVISOR

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

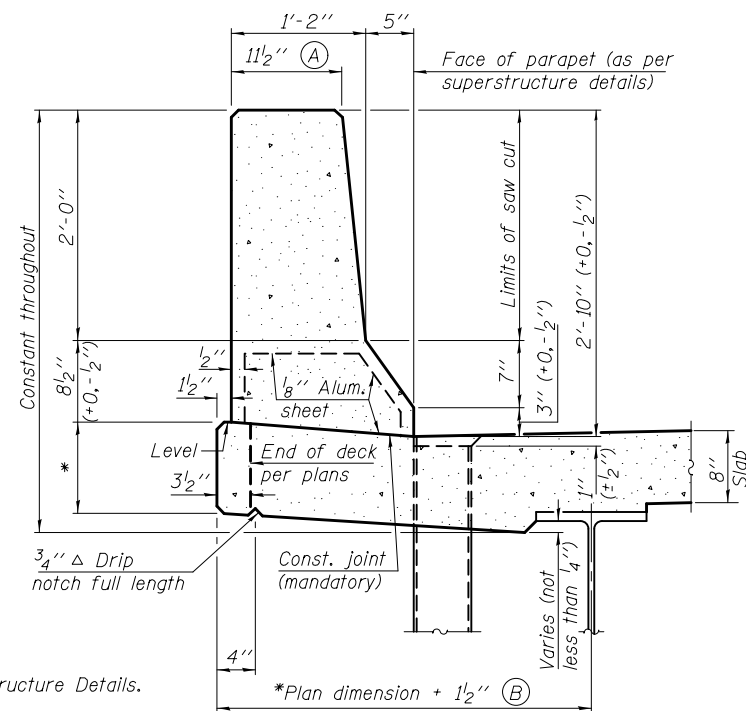
HP PILE DETAILS  
STRUCTURE NO. 003 - 0063

SHEET NO. 22 OF 25 SHEETS

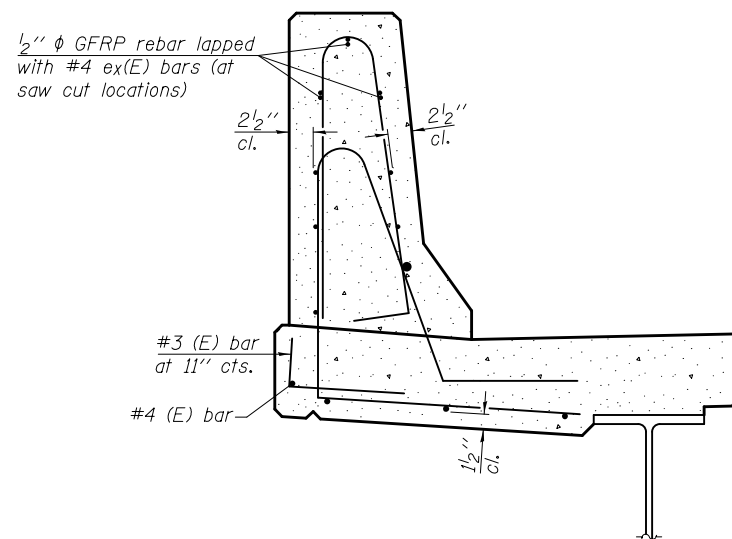
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	35-1-BR	BOND	57	39
CONTRACT NO. 76E04				
ILLINOIS FED. AID PROJECT				

**GENERAL NOTES**

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

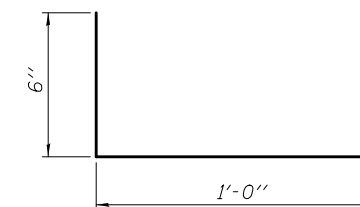


**34" F SHAPE PARAPET SECTION**  
(Showing dimensions)

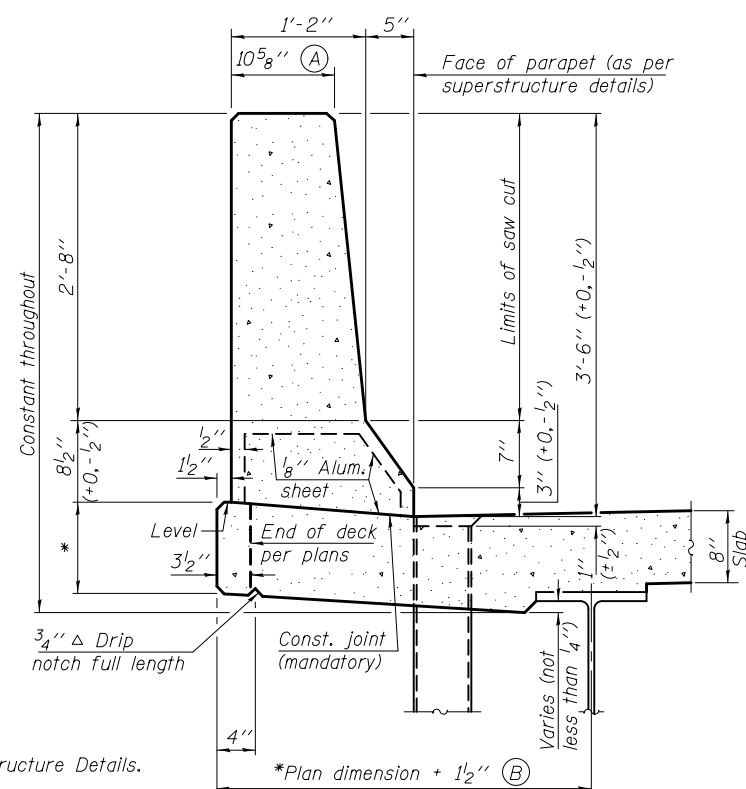


**SECTION**

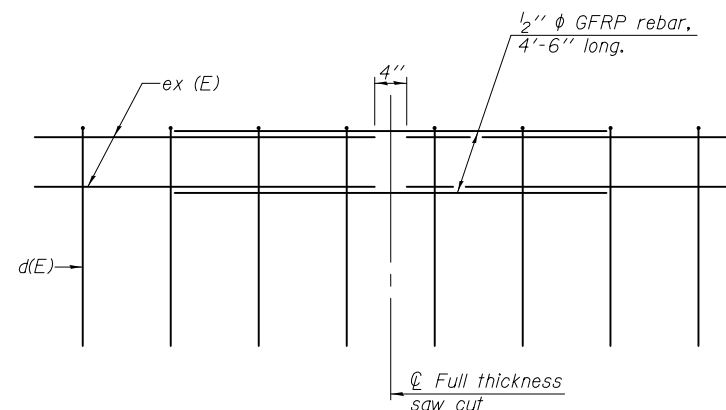
(34" parapet shown - 42" parapet similar)  
(Showing reinforcement clearances for slip forming and additional reinforcement bars)



**#3 (E) BAR**

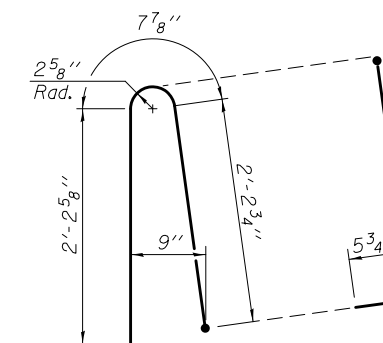


**42" F SHAPE PARAPET SECTION**  
(Showing dimensions)

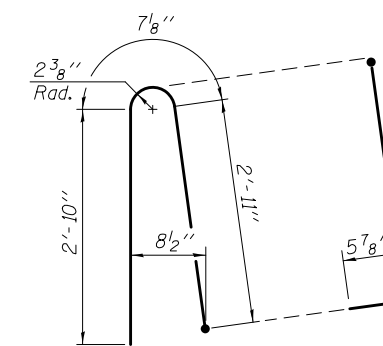


**GFRP REBAR STIFFENING DETAIL**

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



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



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

SFP 34-42

8-16-12

SDATES \$TIMES

DESIGNED - PAUL GURKLYS	EXAMINED
CHECKED - CORY D. KOLTVEIT	PASSED
DRAWN - MICHAEL B. MOSSMAN	
CHECKED - P.G. / C.D.K. / G.R.A.	

DATE - SEPTEMBER 29, 2016  
 REVISIONS  
 REVISIONS  
 ACTING ENGINEER OF BRIDGES AND STRUCTURES

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CONCRETE PARAPET SLIPFORMING OPTION  
STRUCTURE NO. 003 - 0063

SHEET NO. 23 OF 25 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	35-1-BR	BOND	57	40
CONTRACT NO. 76E04				
ILLINOIS FED. AID PROJECT				



**Illinois Department of Transportation**  
Division of Highways  
Illinois Department of Transportation

**SOIL BORING LOG**

Page 1 of 2

Date 9/9/15

ROUTE FAS 779 DESCRIPTION US 40 over West Fork Shoal Creek LOGGED BY DI (TSI)

SECTION 35-1-BR LOCATION SEC. 35, TWP. 5N, RNG. 4W, 3 PM

COUNTY Bond DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 003-0020 (E) / Station 1574+34.46  
BORING NO. B-1 W Abut Station 1573+50 Offset 4.50ft Right Ground Surface Elev. 480.2 ft

DEPTH (ft)	BLOW COUNT (B)	UNIFIED SOIL CLASSIFICATION (U)	MOISTURE CONTENT (%) (M)	DESCRIPTION	DEPTH (ft)	BLOW COUNT (B)	UNIFIED SOIL CLASSIFICATION (U)	MOISTURE CONTENT (%) (M)
0				Asphaltic Concrete (4"), Portland Cement Concrete (8")	0			
479.2				See Class @ 19.5 ft	479.2			
5	1.02	S	20	Greenish Gray (Medium Moist, Medium Stiff) Clay LOAM with Trace Sand and Limestone Pieces A-6(7) See Class @ 5 ft	457.7	10	2.04	20
14	1.31	B	15	Trace Sand and Gravel		11	1.88	21
7	1.64	B	20	Stiff	452.7	5	0.49	24
7	1.83	B	20	No Trace Materials		6	1.55	22
4	1.14	B	22	Medium Stiff, Trace Sand	447.7			
4	0.94	B	23	Dark Brown (Medium Moist to Moist, Medium Stiff) Silty Clay LOAM with Trace Sand A-6(15) See Class @ 15 ft	444.7	2	0.20	24
5	0.94	S	23	Greenish Gray (Moist, Medium Stiff) Silty CLAY A-6(13) See Class @ 17 ft				
8	2.45	B	22	Brown & Gray (Moist, Stiff) Silty Clay LOAM A-6(15)	441.2	4	0.12	23
				Gray (Very Moist, Very Soft) Sandy CLAY	440.2			
				2" Sand Seam				
				Brown (Wet) Well Graded SAND See Gradation @ 36 ft				
				Gray (Very Moist, Very Soft) Sandy LOAM				

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



**Illinois Department of Transportation**  
Division of Highways  
Illinois Department of Transportation

**SOIL BORING LOG**

Page 2 of 2

Date 9/9/15

ROUTE FAS 779 DESCRIPTION US 40 over West Fork Shoal Creek LOGGED BY DI (TSI)

SECTION 35-1-BR LOCATION SEC. 35, TWP. 5N, RNG. 4W, 3 PM

COUNTY Bond DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 003-0020 (E) / Station 1574+34.46  
BORING NO. B-1 W Abut Station 1573+50 Offset 4.50ft Right Ground Surface Elev. 480.2 ft

DEPTH (ft)	BLOW COUNT (B)	UNIFIED SOIL CLASSIFICATION (U)	MOISTURE CONTENT (%) (M)	DESCRIPTION	DEPTH (ft)	BLOW COUNT (B)	UNIFIED SOIL CLASSIFICATION (U)	MOISTURE CONTENT (%) (M)
2				Brown & Gray (Wet, Very Soft) Sandy Clay LOAM with Gravel	435.7	24	1.61	13
50/4"		S		Gray (Dry, Very Stiff) SHALE with Trace Sand	431.9	50/5"	1.47	16
				Auger Refusal - END OF BORING				
				NOTE: Ponding water in augers at water table to reduce hydrostatic pressure				
				NOTE: Top of Water is 13 feet below bridge deck				
				NOTE: Bottom of Creek is 17 feet below bridge deck				
				NOTE: For samples between 0 feet and 40 feet, blow count is "N-Value" for respective sample				

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

SDATES \$TIMES

DESIGNED - PAUL GURKLYS	EXAMINED - <i>James F. J...</i>	DATE - SEPTEMBER 29, 2016
CHECKED - CORY D. KOLTVEIT	PASSED - <i>Carl...</i>	REVISER
DRAWN - MICHAEL B. MOSSMAN	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISER
CHECKED - P.G. / C.D.K. / G.R.A.		

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

**SOIL BORING LOGS  
STRUCTURE NO. 003 - 0063**

F.A.S. RTE. 779	SECTION 35-1-BR	COUNTY BOND	TOTAL SHEETS 57	SHEET NO. 41
CONTRACT NO. 76E04				
ILLINOIS FED. AID PROJECT				

SHEET NO. 24 OF 25 SHEETS



SOIL BORING LOG

Page 1 of 3

ROUTE FAS 779 DESCRIPTION US 40 over West Fork Shoal Creek LOGGED BY DI (TSI)

SECTION 35-1-BR LOCATION SEC. 35, TWP. 5N, RNG. 4W, 3 PM

COUNTY Bond DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 003-0020 (E) / 003-0063 (P) Station 1574+34.46 BORING NO. B-2 E Abut Station 1575+04 Offset 3.50ft Right Ground Surface Elev. 480.2 ft

Table with columns for Depth (ft), Blows (6"), UCS (tsf), Moisture (%), and Soil Description. Includes soil layers like Asphaltic Concrete, Brown & Gray (Medium Moist, Medium Stiff) Clay LOAM, and Gray (Wet, Very Soft) Loamy SAND.

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



SOIL BORING LOG

Page 2 of 3

ROUTE FAS 779 DESCRIPTION US 40 over West Fork Shoal Creek LOGGED BY DI (TSI)

SECTION 35-1-BR LOCATION SEC. 35, TWP. 5N, RNG. 4W, 3 PM

COUNTY Bond DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 003-0020 (E) / 003-0063 (P) Station 1574+34.46 BORING NO. B-2 E Abut Station 1575+04 Offset 3.50ft Right Ground Surface Elev. 480.2 ft

Table with columns for Depth (ft), Blows (6"), UCS (tsf), Moisture (%), and Soil Description. Includes soil layers like Gray (Wet, Very Soft) Loamy SAND with Trace Gravel and Gray (Dry, Hard) Shale.

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



ROCK CORE LOG

Page 3 of 3

ROUTE FAS 779 DESCRIPTION US 40 over West Fork Shoal Creek LOGGED BY DI (TSI)

SECTION 35-1-BR LOCATION SEC. 35, TWP. 5N, RNG. 4W, 3 PM

COUNTY Bond CORING METHOD NQ Conventional

STRUCT. NO. 003-0020 (E) / 003-0063 (P) Station 1574+34.46 BORING NO. B-2 E Abut Station 1575+04 Offset 3.50ft Right Ground Surface Elev. 480.2 ft

Table with columns for Depth (ft), Core Diameter (in), Recovery (%), RQD (%), Core Length (min/ft), and Core Type. Includes rock layers like Dark Gray (Moderately Soft, Moderately Weathered) Very Fine Grained SHALE.

Color pictures of the cores Cores will be stored for examination until The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938) BBS, form 138 (Rev. 8-99)

SDATES \$TIMES

DESIGNED - PAUL GURKLYS EXAMINED [Signature] DATE - SEPTEMBER 29, 2016 CHECKED - CORY D. KOLTVEIT PASSED [Signature] ENGINEER OF BRIDGE DESIGN REVISIONS

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS STRUCTURE NO. 003 - 0063

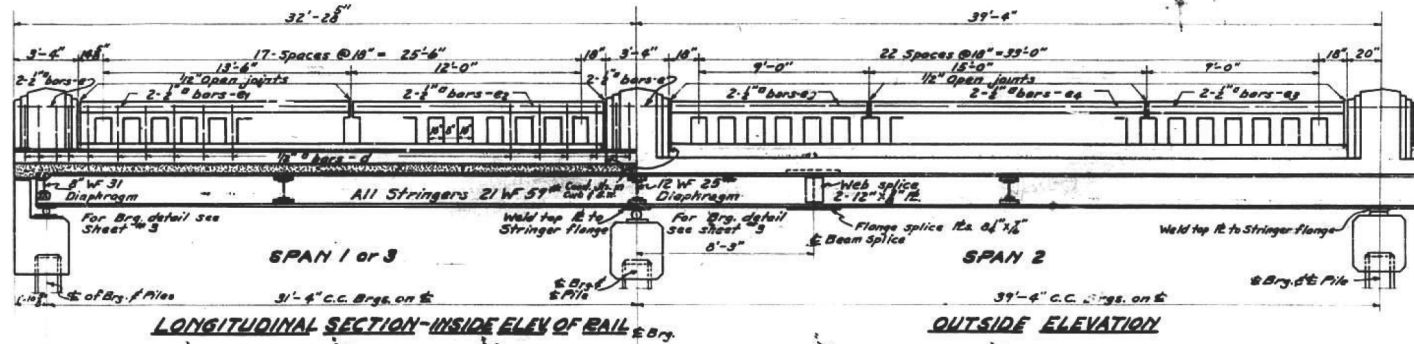
F.A.S. RTE. 779 SECTION 35-1-BR COUNTY BOND 57 SHEETS 42 CONTRACT NO. 76E04 SHEET NO. 25 OF 25 SHEETS ILLINOIS FED. AID PROJECT



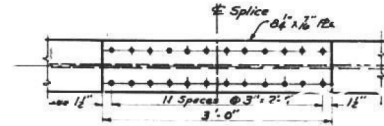
STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
35-1F	Bond	17	3
35-1B			
35-1D			

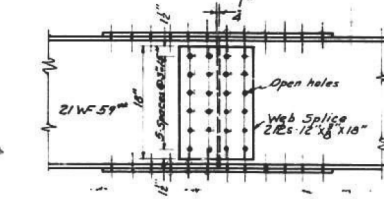
SHEET NO. 2  
4 SHEETS



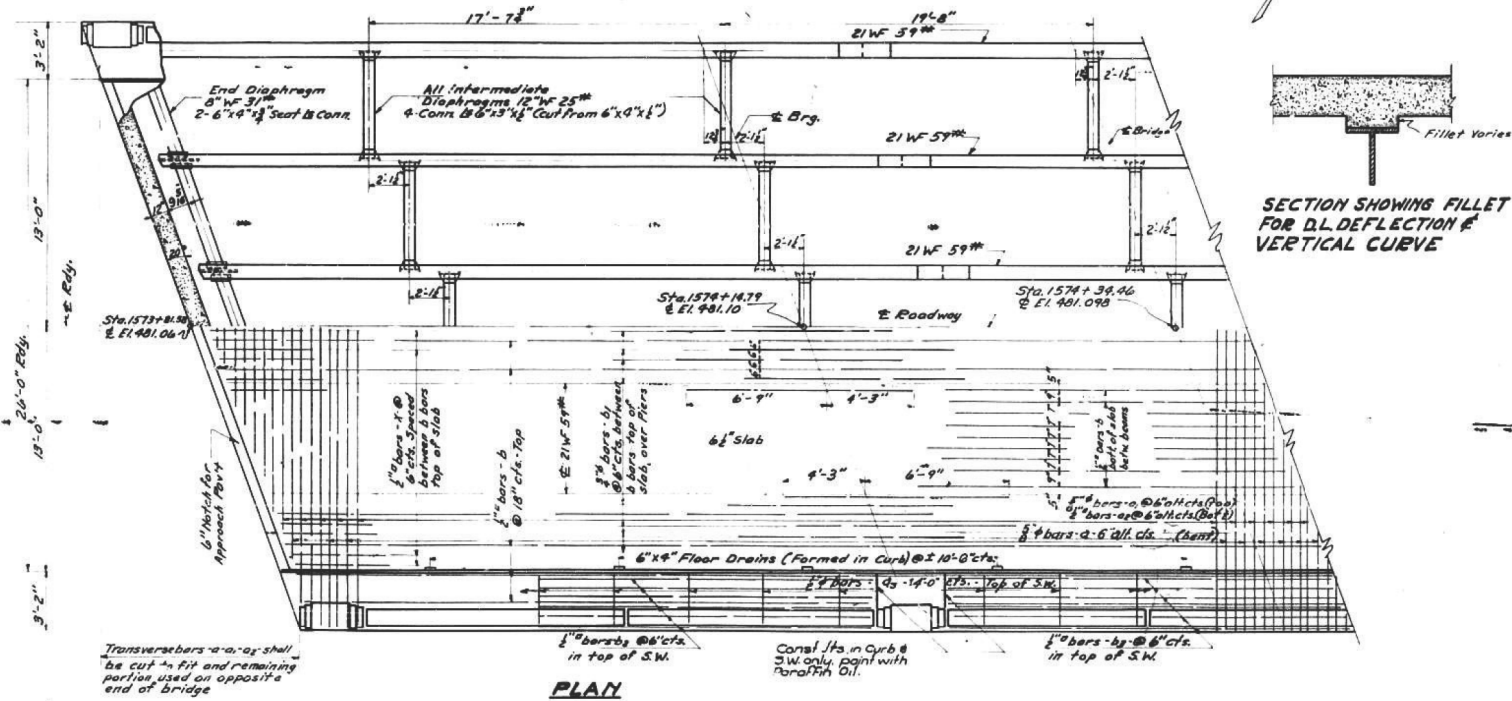
DEAD LOAD DEFLECTION DIAGRAM AT 4 POINTS



DETAIL OF FLANGE SPLICE



DETAIL OF WEB SPLICE

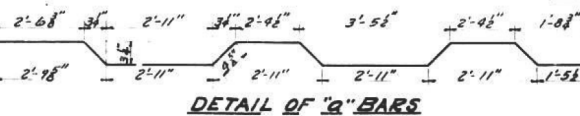


SECTION SHOWING FILLET FOR D.L. DEFLECTION & VERTICAL CURVE

BILL OF MATERIAL

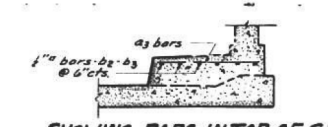
Bar	No.	Size	Length
a	104	3/8"	33'-0"
a1	105	3/8"	33'-0"
a2	105	1/2"	32'-6"
a3	54	1/2"	2'-9"
b	276	1/2"	27'-0"
b1	84	3/8"	11'-0"
b2	24	1/2"	31'-3"
b3	12	1/2"	35'-9"
x	84	1/2"	3'-6"
e	16	1/2"	3'-0"
e1	8	1/2"	14'-6"
e2	8	1/2"	13'-3"
e3	8	1/2"	10'-3"
e4	4	1/2"	14'-9"
d	156	1/2"	35'-0"

Handrail Concrete	Cu. Yds.	11.1
Class X Concrete	Cu. Yds.	88.1
Reinforcement Bars	Lbs.	18,920
Nome Plate	Each One	
Structural Steel	Lbs	48260



COMPUTED	J. H. [Signature]
CHECKED	A. Y. [Signature]
DRAWN	L. B. Diver
CHECKED	W. N. S.
SPECIAL ASSEMBLED	
CHECKED	

EXAMINED 1-20-1938  
A. F. [Signature]  
PASSED [Signature]  
APPROVED [Signature]



DETAIL OF 'x' BARS

F.A. PROJECT-9  
BIG SHOAL CREEK OVERFLOW BRIDGE  
F.A. RT. 12 - SEC. 35-10-1F  
BOND COUNTY  
STA. 1574+34.46

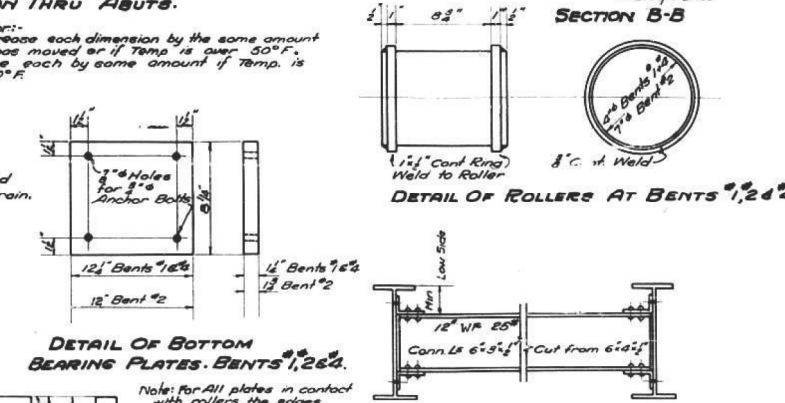
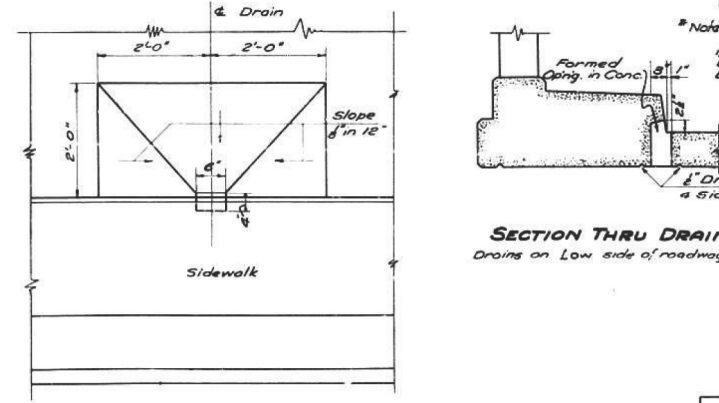
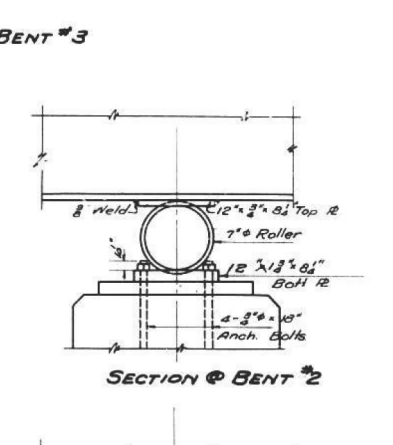
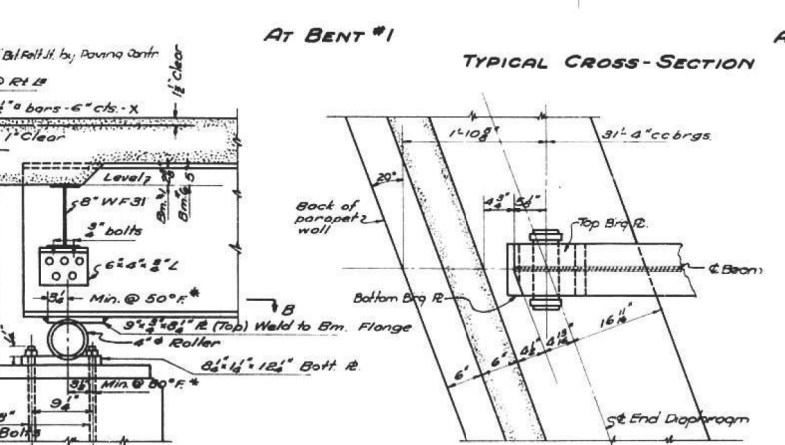
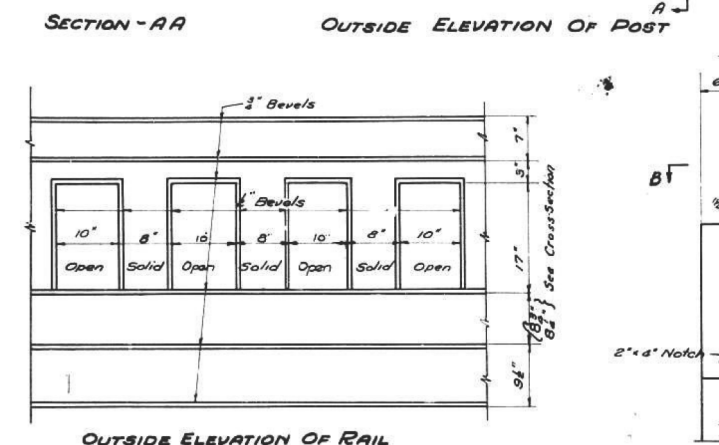
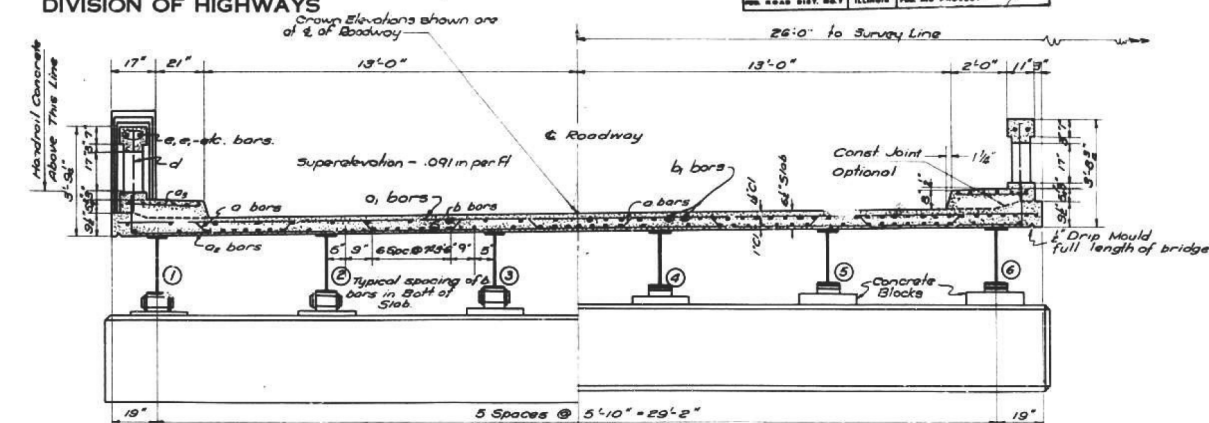
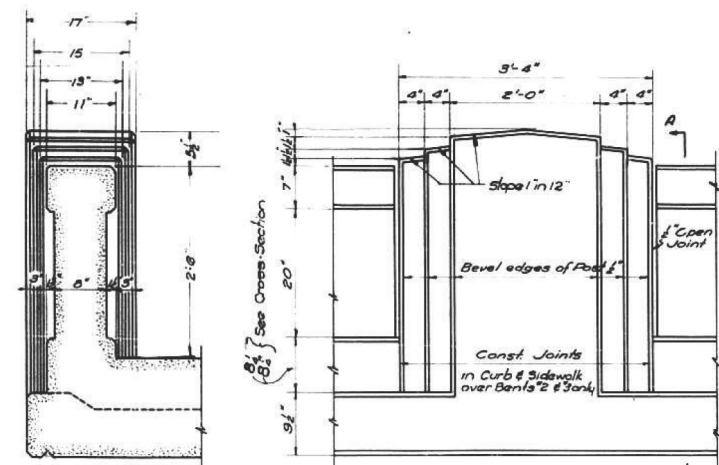
FOR INFORMATION ONLY



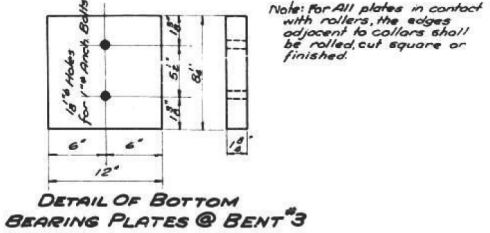
STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

ROAD DIST. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
12	35-1B	Bond	17	6
ILLINOIS FED. AID PROJECT - 7				

SHEET NO. 3  
4 SHEETS

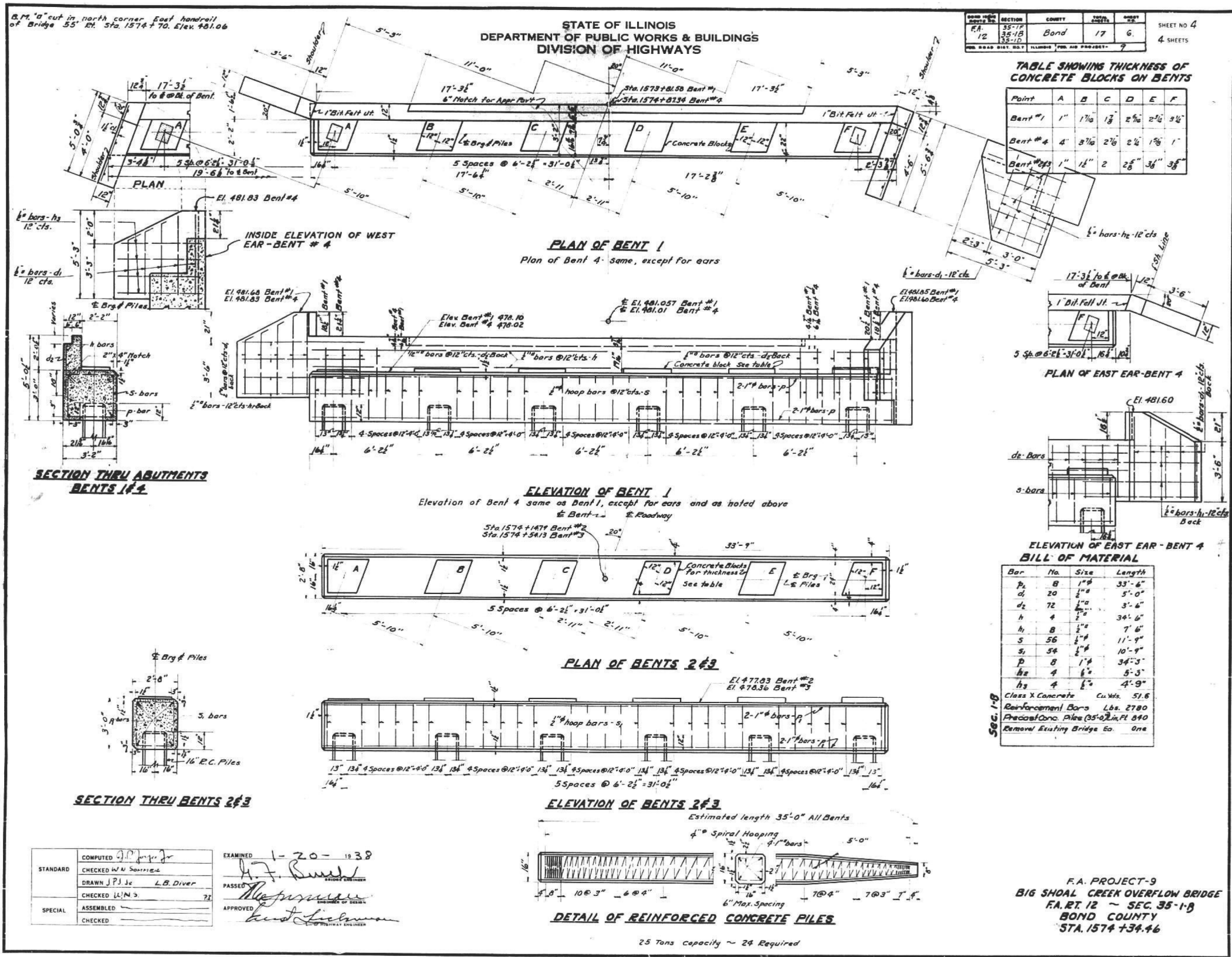


COMPUTED	J. P. Ryan	EXAMINED	1-30-1939
CHECKED	W. F. Sommer	PASSED	[Signature]
DRAWN	[Signature]	APPROVED	[Signature]
CHECKED	W. N. S.		
SPECIAL	ASSEMBLED		
	CHECKED		

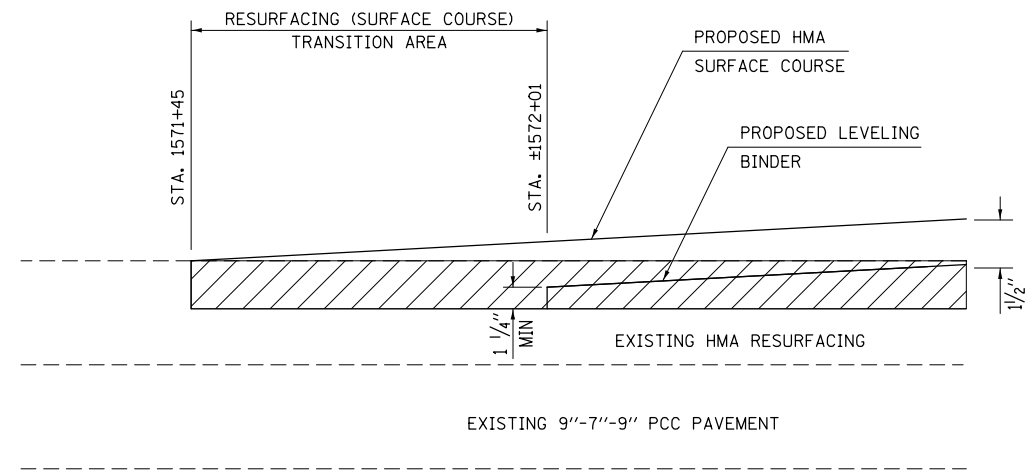


F.A. PROJ-9  
BIG SHOAL CREEK OVERFLOW BRIDGE  
F.A. 12 SEC. 35-1D #1F  
BOND COUNTY  
STA. 1574+34.46

FOR INFORMATION ONLY

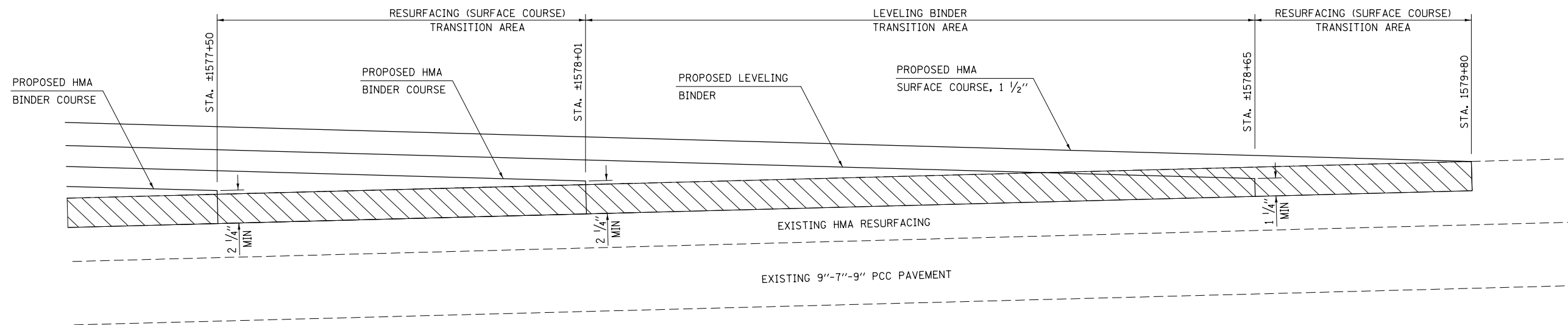


FOR INFORMATION ONLY



TRANSITION DETAIL

 PROPOSED HMA SURFACE REMOVAL, VARIABLE DEPTH



TRANSITION DETAIL

 PROPOSED HMA SURFACE REMOVAL, VARIABLE DEPTH

FILE NAME =	USER NAME = harbaughrd	DESIGNED -	REVISED -
pw:\11084EBIDINTEG.illinois.gov\PIDOT\Documents\IDOT Offices\District 8\Projects\0876\DRAWING\DATA\EA0\Sheets\D876E04-sht-details		CHECKED -	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

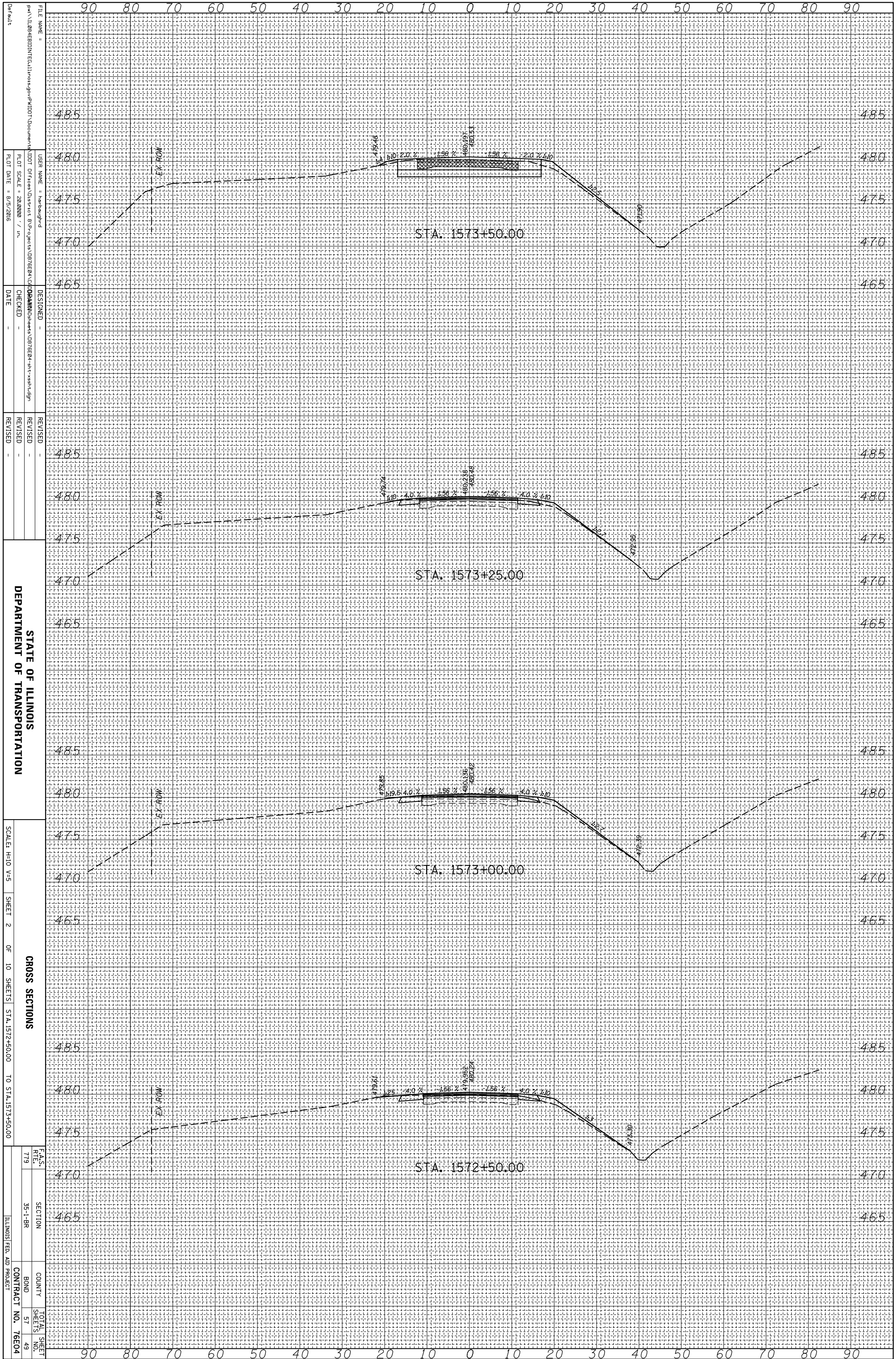
MISCELLANEOUS DETAILS	
SCALE: N/A	SHEET NO. 1 OF 1 SHEETS
STA.	TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	35-1-BR	BOND	57	47
CONTRACT NO. 76E04				
ILLINOIS FED. AID PROJECT				



ORIGINAL SURVEY	SURVEYED _____	BY _____	DATE _____
NOTE BOOK	PLOTTED _____		
	TEMPLATE _____		
	AREAS _____		
	AREAS CHECKED _____		

FINAL SURVEY	SURVEYED _____	BY _____	DATE _____
NOTE BOOK	PLOTTED _____		
	TEMPLATE _____		
	AREAS _____		
	AREAS CHECKED _____		



STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS  
SCALE: H=10 V=5  
SHEET 2 OF 10 SHEETS STA. 1572+50.00 TO STA. 1573+50.00

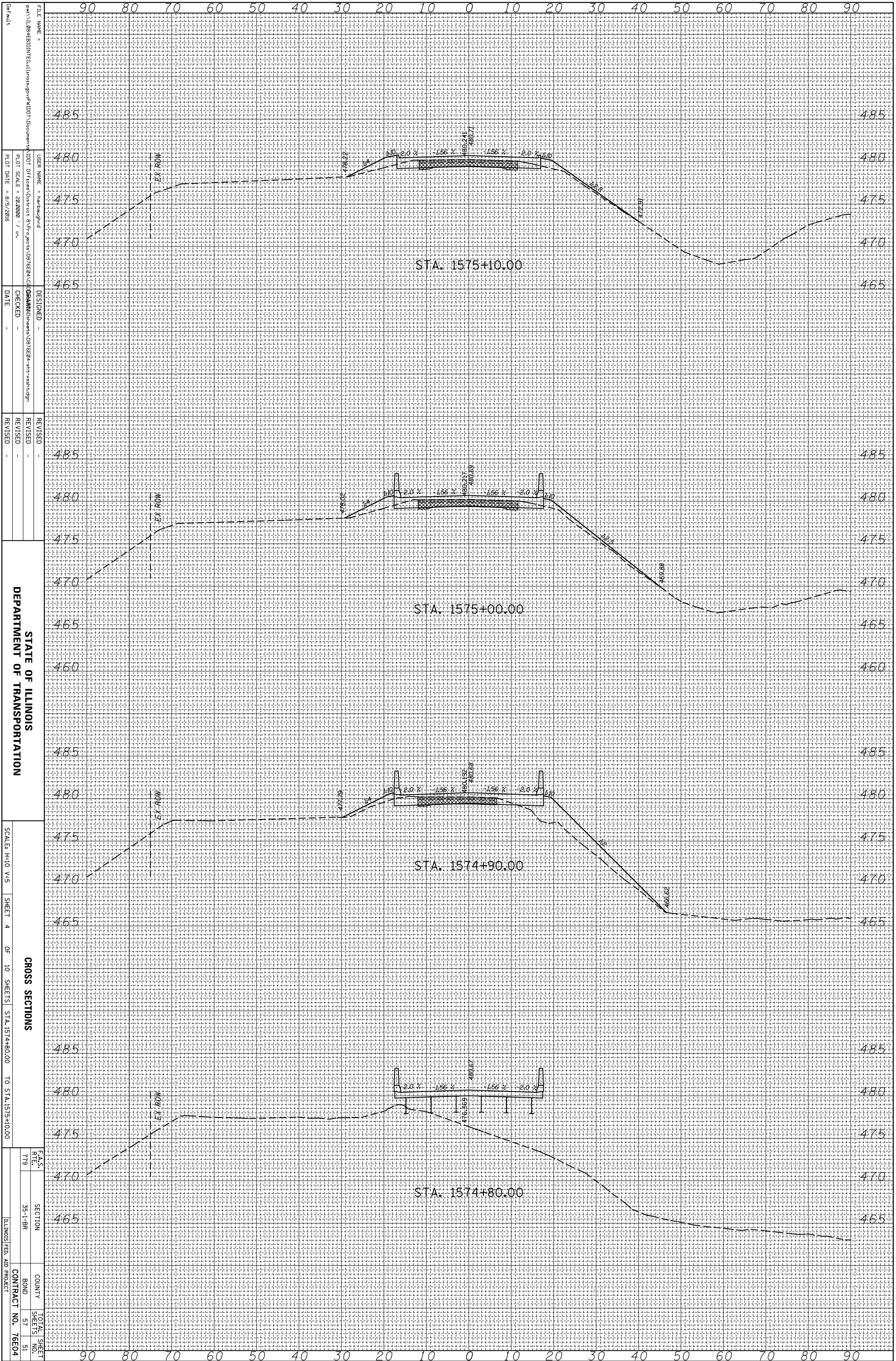
F.A.S. R.T.E.	SECTION	COUNTY	TOTAL SHEET NO.
719	35-1-BR	BOND	57
		CONTRACT NO.	76E04
		ILLINOIS FED. AID PROJECT	





ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		



STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS  
SCALE: H=10 V=5  
SHEET 4 OF 10 SHEETS STA. 1574+80.00 TO STA. 1575+10.00

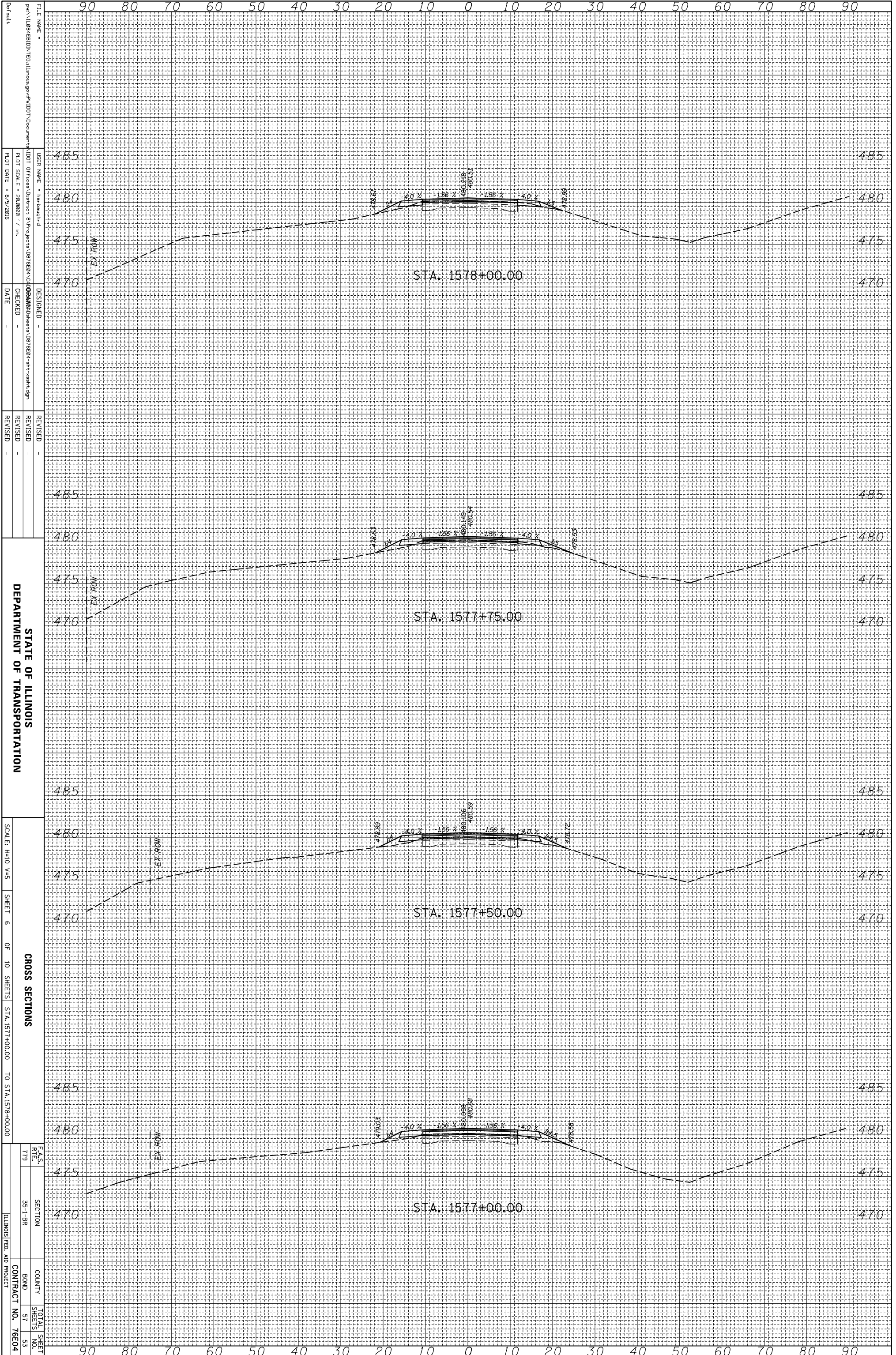
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PLT SCALE = 28.0000 / in.	CHECKED =	DATE =	REVISOR =			BOND	57
PLT DATE = 8/5/2016						CONTRACT NO.	76E04
						ILLINOIS FED. AID PROJECT	





ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		



FILE NAME =  
 USER NAME =  
 PLOT SCALE =  
 PLOT DATE =

DESIGNED -  
 CHECKED -  
 DATE -

REVISED -  
 REVISED -  
 REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

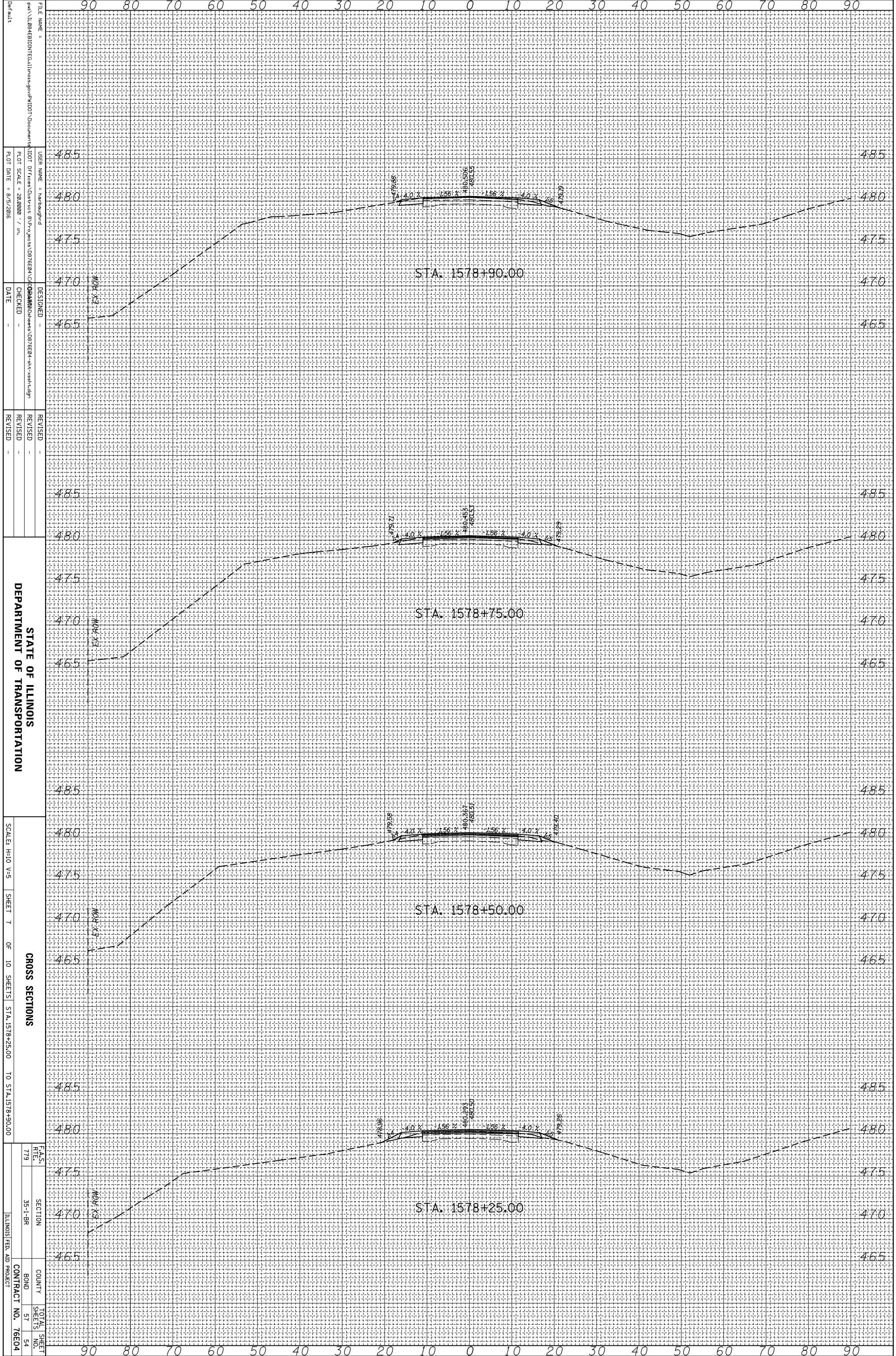
SCALE: H=10 V=5  
 SHEET 6 OF 10 SHEETS

CROSS SECTIONS  
 STA. 1577+00.00 TO STA. 1578+00.00

F.A.S. R.T.E. 719  
 SECTION 35-1-BR  
 COUNTY  
 BOND 57  
 CONTRACT NO. 76E04  
 ILLINOIS FED. AID PROJECT

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		



FILE NAME =  
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 PLOT SCALE =  
 PLOT DATE =

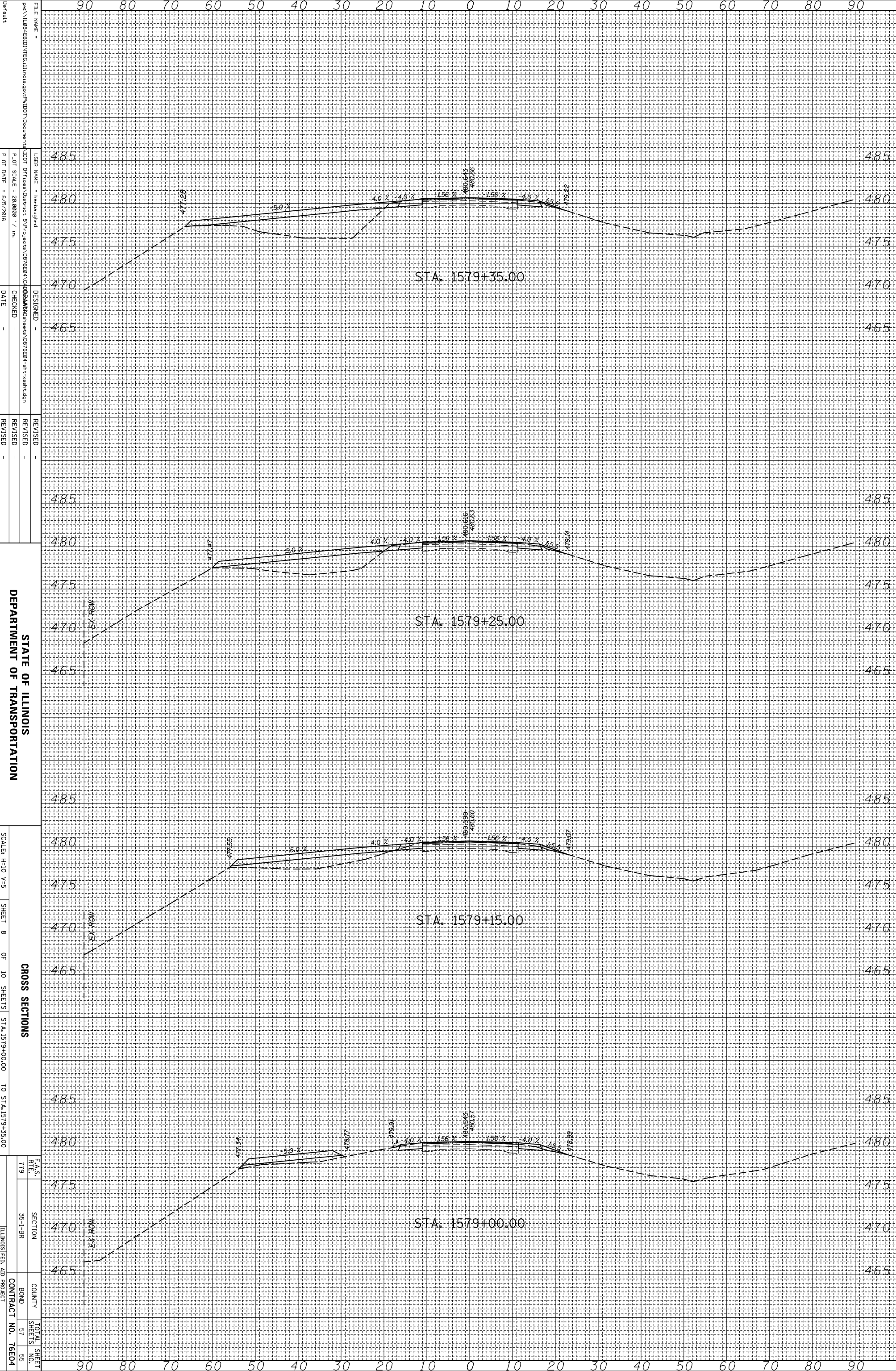
DESIGNED  
 CHECKED  
 DATE

REVISOR  
 REVISION  
 DATE

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 CROSS SECTIONS  
 SCALE: H=10 V=5  
 SHEET 7 OF 10 SHEETS  
 STA. 1578+25.00 TO STA. 1578+90.00  
 F.A.S. RITE SECTION BOND CONTRACT NO.  
 719 35-1-BR 57 54  
 ILLINOIS FED. AID PROJECT

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

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



FILE NAME =  
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 PLOT SCALE =  
 PLOT DATE =

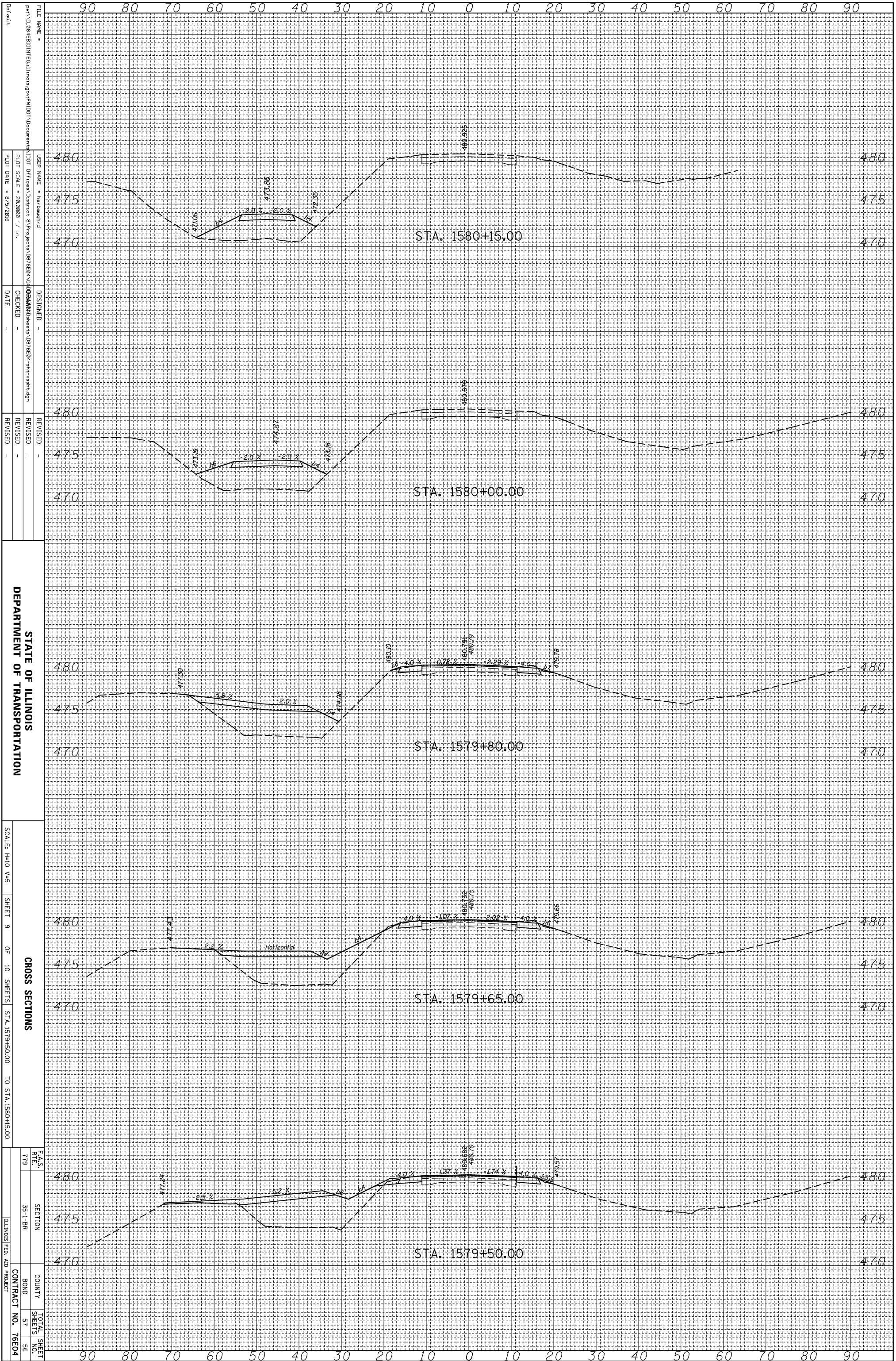
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 DATE -

REVISID -  
 REVISID -  
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STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 SCALE: H=10 V=5  
 SHEET 8 OF 10 SHEETS  
 STA. 1579+00.00 TO STA. 1579+35.00  
 CROSS SECTIONS  
 F.A.S. R.T.E. 719  
 SECTION 35-1-BR  
 COUNTY  
 BOND 57  
 CONTRACT NO. 76E04  
 ILLINOIS FED. AID PROJECT

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		



STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS  
SCALE: H=10 V=5  
SHEET 9 OF 10 SHEETS STA. 1579+50.00 TO STA. 1580+15.00

F.A.S. R.T.E.	SECTION	COUNTY	TOTAL SHEET NO.
719	35-1-BR	BOND	57
		CONTRACT NO.	76E04
			56

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USER NAME =  
DESIGNED =  
CHECKED =  
DATE =  
REVISOR =  
REVISION =  
REVISION =  
REVISION =

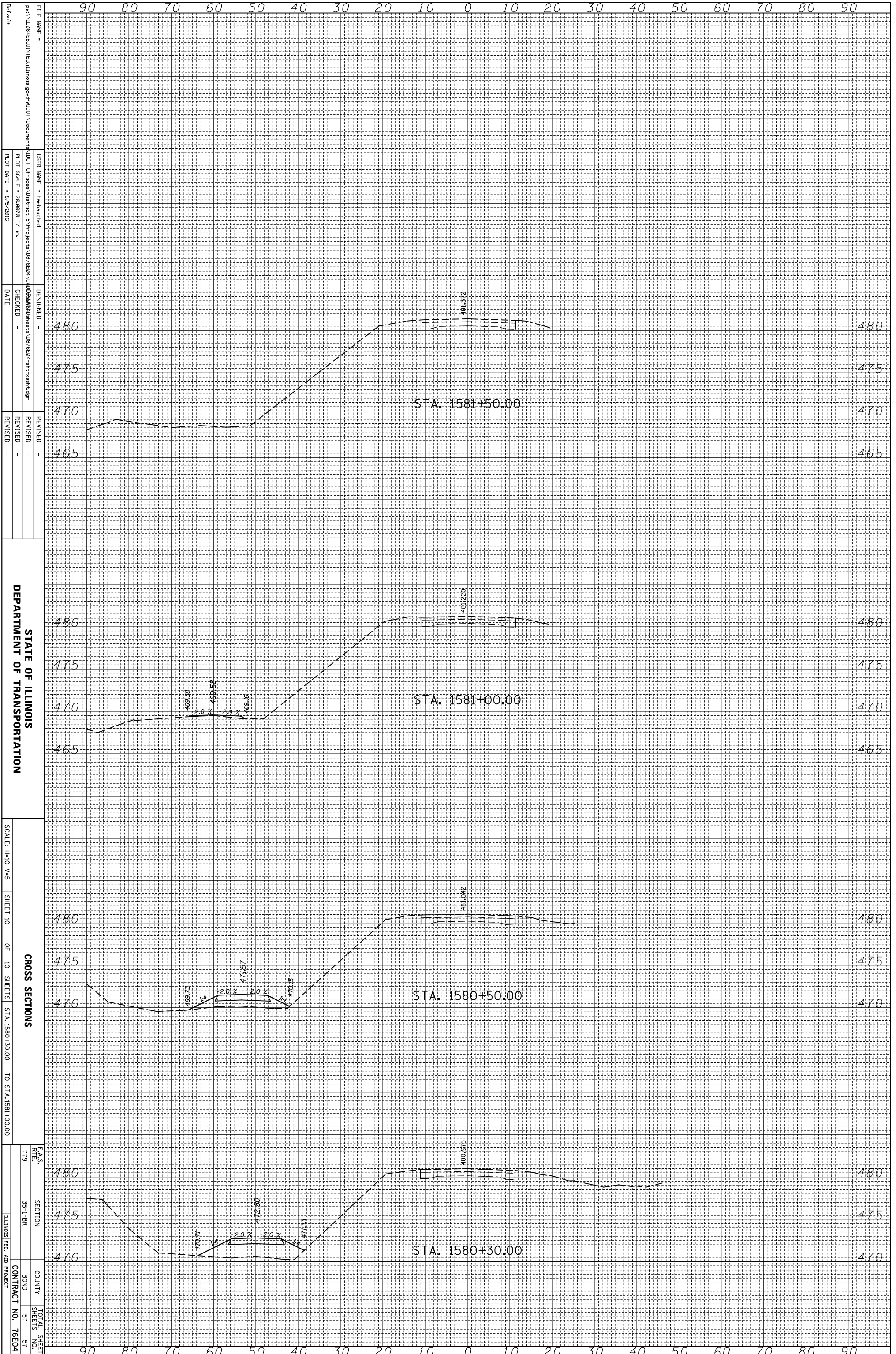
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DRAWN: 08/26/04  
CHECKED: 08/26/04  
DATE: 08/26/04

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DRAWN: 08/26/04  
CHECKED: 08/26/04  
DATE: 08/26/04

PROJECT: 08/26/04  
DRAWN: 08/26/04  
CHECKED: 08/26/04  
DATE: 08/26/04

ORIGINAL SURVEY	SURVEYED _____	BY _____	DATE _____
NOTE BOOK	PLOTTED _____		
	TEMPLATE _____		
	AREAS _____		
	AREAS CHECKED _____		

FINAL SURVEY	SURVEYED _____	BY _____	DATE _____
NOTE BOOK	PLOTTED _____		
	TEMPLATE _____		
	AREAS _____		
	AREAS CHECKED _____		



FILE NAME =  
 USER NAME =  
 PLOT SCALE =  
 PLOT DATE =

DESIGNED -  
 CHECKED -  
 DATE -

REVISIED -  
 REVISIED -  
 REVISIED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

SCALE: H=10 V=5  
 SHEET 10 OF 10 SHEETS  
 STA. 1580+30.00 TO STA. 1581+00.00

CROSS SECTIONS

F.A.S. RITE	SECTION	COUNTY	TOTAL SHEET NO.
719	35-1-BR	BOND	57
		CONTRACT NO.	76504

ILLINOIS FED. AID PROJECT