

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

FAI ROUTE 255 (I-255)
SECTION 82-7HB-1
PROJECT: ACIM-255-7(217)021
BRIDGE JOINT REPAIRS
ST. CLAIR COUNTY

C-98-107-08

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-7HB-1	ST. CLAIR	43	1
		ILLINOIS	CONTRACT NO. 76C33	

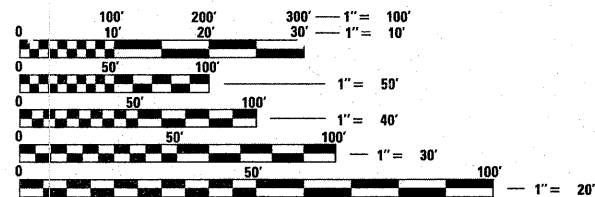
FOR INDEX OF SHEETS, SEE SHEET NO. 2

DESIGN DESIGNATION

NA

ADT

SN 082-0217 I-255 NB TO IL 3 NB	SN 082-0218 IL 3 SB TO I-255 NB
ADT: 5200 (2008)	ADT: 400 (2008)
ADT: 6500 (2030)	ADT: 500 (2030)
SU%: 1.7%	SU%: 5.0%
MU%: 2.9%	MU%: 5.0%

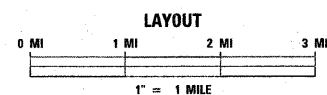
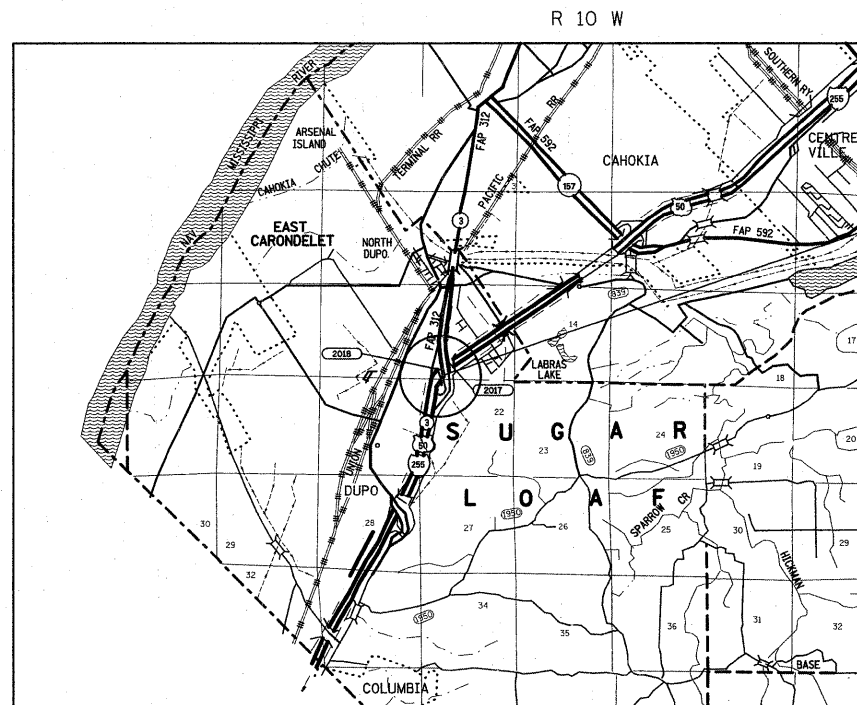


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

PROJECT ENGINEER: PATTI LeBEAU (618) 346-3179
PROJECT MANAGER: ARTHUR MUEHLFELD (618) 346-3209

CONTRACT NO. 76C33



LATITUDE: 38.5301°
LONGITUDE: 90.1962°

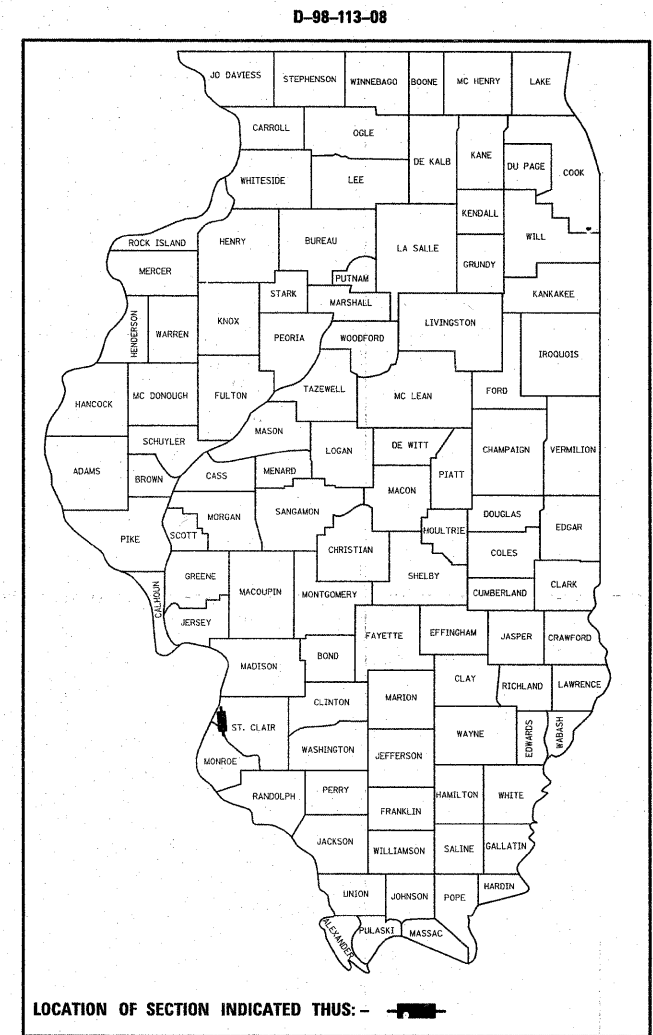
7 SPAN R/C DECK WITH PRECAST DECK PANELS COMPOSITE WITH PLATE GIRDERS OVER I-255

SN 082-0217
(RAMP E - NB I-255 TO NB IL 3)
@ STA 48+33.63

SN 082-0218
(RAMP F - SB IL 3 TO NB I-255)
@ STA 131+68.03

SN 082-0217 RAMP E
GROSS LENGTH = 1016.21 FT. = 0.192 MILE

SN 082-0218 RAMP F
GROSS LENGTH = 1111.13 FT. = 0.210 MILE



LOCATION OF SECTION INDICATED THIS: - [black rectangle]

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED Aug 12 20 2010
M. C. Ramis
DEPUTY DIRECTOR OF HIGHWAYS, REGION 5 ENGINEER

October 1 20 10
Scott E. Stitt, P.E. /s/
acting ENGINEER OF DESIGN AND ENVIRONMENT

October 1 20 10
Christine M. Reed /s/
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

**PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS**

SUMMARY OF QUANTITIES

SUMMARY OF QUANTITIES			URBAN 90% FED. / 10% STATE	CONSTRUCTION TYPE CODE		
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	0014		
28100107	STONE RIPRAP, CLASS A4	SQ YD	164	164		
28200200	FILTER FABRIC	SQ YD	164	164		
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	38	38		
40600635	LEVELING BINDER (MACHINE METHOD), N70	TON	89	89		
40600985	PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT	SQ YD	100	100		
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	42	42		
44000155	HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"	SQ YD	500	500		
45200300	JOINT OR CRACK FILLING	POUND	70	70		
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	15	15		
50102400	CONCRETE REMOVAL	CU YD	60.7	60.7		
50300100	FLOOR DRAINS	EACH	4	4		
50300255	CONCRETE SUPERSTRUCTURE	CU YD	57.6	57.6		
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	6930	6930		
52000110	PREFORMED JOINT STRIP SEAL	FOOT	97	97		
52000216	FINGER PLATE EXPANSION JOINT, 5"	FOOT	132	132		
52000600	FABRIC REINFORCED ELASTOMERIC TROUGH	FOOT	140.5	140.5		
58700300	CONCRETE SEALER	SQ FT	80151	80151		
66101150	HOT-MIX ASPHALT SHOULDER CURB	FOOT	100	100		
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	10	10		
67100100	MOBILIZATION	L SUM	1	1		
70100820	TRAFFIC CONTROL AND PROTECTION, STANDARD 701451	L SUM	1	1		
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	300	300		
* 78008210	POLYUREA PAVEMENT MARKING TYPE I - LINE 4"	FOOT	4209	4209		
* 78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	3	3		
78300100	PAVEMENT MARKING REMOVAL	SQ FT	1503	1503		
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	3	3		
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	400	400		
X5080600	MECHANICAL SPLICERS	EACH	280	280		
Z0016002	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ YD	100	100		
Z0016200	DECK SLAB REPAIR (PARTIAL)	SQ YD	100	100		
Z0018800	DRAINAGE SYSTEM	L SUM	1	1		
Z0073350	TEMPORARY SLAB SUPPORT SYSTEM	EACH	4	4		
20076000	TRAINERS	HOUR	500	500		

INDEX OF SHEETS

- 1 COVER SHEET
- 2 SUMMARY OF QUANTITIES, INDEX OF SHEETS, HIGHWAY STANDARDS, GENERAL NOTES, & COMMITMENTS
- 3 TYPICAL SECTION
- 4 SCHEDULES OF QUANTITIES & DETAILS
- 5 PLAN & PROFILE SHEET
- 6-7 DETOUR SIGNING
- 8-23 STRUCTURE PLANS
- 24-43 EXISTING STRUCTURE PLANS FOR REFERENCE ONLY

HIGHWAY STANDARDS

000001-05	701451-01
001001-02	701901-01
001006	780001-02
701400-04	781001-03

GENERAL NOTES

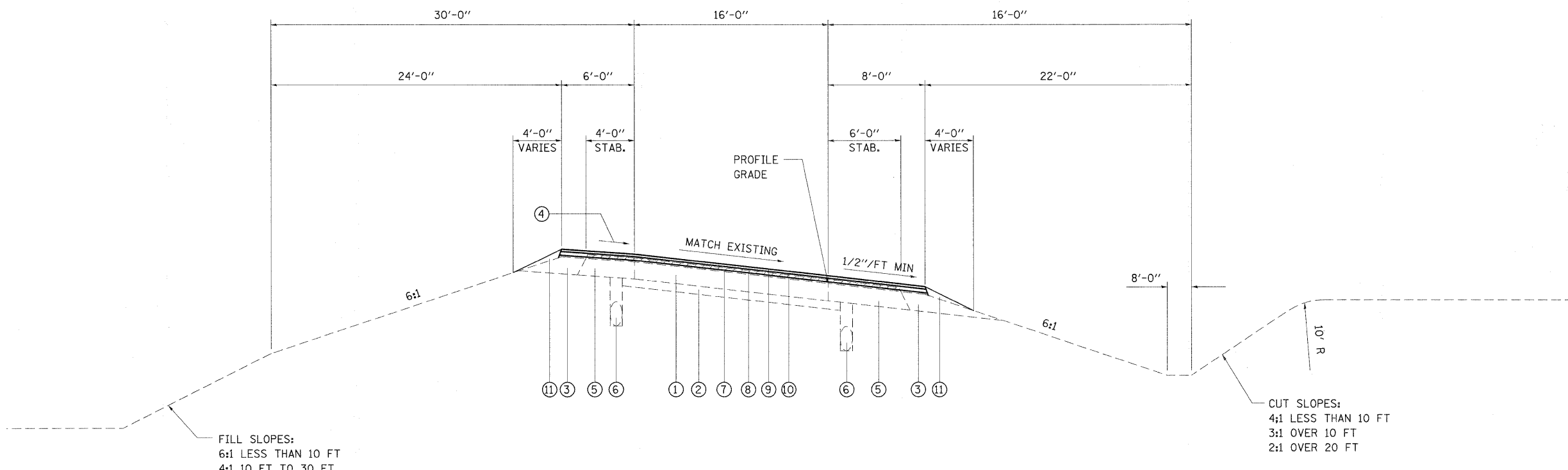
1. THE STANDARDS AND REVISION NUMBERS LISTED SHALL APPLY TO THIS PROJECT.
2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING MATERIALS.
3. ILLINOIS STATE LAW REQUIRES A 48-HOUR NOTICE BE GIVEN TO ALL UTILITIES WITHIN THE PROJECT AREA BEFORE DIGGING. 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:
 - AMERENIP (GAS & ELECTRIC)
 - CHARTER COMMUNICATIONS, INC. (CABLE TV)
 - CITY OF COLUMBIA (WATER & SANITARY SEWER)
 - VILLAGE OF DUPO (WATER & SANITARY SEWER)
 - VILLAGE OF DUPO (GAS)
 - HARRISONVILLE TELEPHONE CO. (COMMUNICATIONS)
 - PRAIRIE DU PONT PUBLIC WATER (WATER)
 - SUGAR LOAF TOWNSHIP SEWER SYSTEM (SANITARY SEWER)
- MEMBERS OF J.U.L.I.E. CALL TOLL FREE (800) 892-0123 OR 811 AND ARE INDICATED BY *.
NON-MEMBERS MUST BE NOTIFIED INDIVIDUALLY.
4. PAVEMENT MARKING REMOVAL SHALL BE BY WATER BLAST METHOD.
5. THE DETOUR SIGNING WILL BE PAID FOR UNDER CONTRACT #76882. THE SIGNS FOR THE CLOSURE OF THE BRIDGE OVER THE UPRR SHALL REMAIN UP FOR THE DURATION OF THAT PROJECT, COORDINATE WITH CONTRACT #76882.
6. ANY AREAS DISTURBED DUE TO CONSTRUCTION ACTIVITIES SHALL BE SEEDED (TEMPORARY AND PERMANENT) AT THE CONTRACTOR'S EXPENSE AND NO OTHER COMPENSATION WILL BE PERMITTED.
7. PROPOSED PAVEMENT MARKINGS SHALL COORDINATE WITH EXISTING PAVEMENT MARKINGS. "POLYUREA PAVEMENT MARKING - LINE 4 INCH" SHALL BE USED ON CONCRETE. "THERMOPLASTIC PAVEMENT MARKING - LINE 4 INCH" SHALL BE USED ON HMA.
8. THE COST TO GRADE, SMOOTH, OR OTHERWISE FILL WITH SOIL ALL IRREGULARITIES IN THE AREA TO BE COVERED WITH FILTER FABRIC SHALL BE INCLUDED IN THE COST OF "FILTER FABRIC".

COMMITMENTS

NONE

*Specialty Items

FILE NAME =	USER NAME = owebnj	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES			F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ca:\pw\work\pwwid\owebnj\dms66748\d876c33-shr-plan.dgn	PLOT SCALE = 50,0000' / IN.	DRAWN -	REVISED -		255	82-7HB-I	ST. CLAIR	43	2			
PLOT DATE = 8/11/2010	DATE -	CHECKED -	REVISED -		CONTRACT NO. 76C33			ILLINOIS FED. AID PROJECT				
		DATE -	REVISED -		SCALE: NA	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.				



FILL SLOPES:
6:1 LESS THAN 10 FT
4:1 10 FT TO 30 FT

CUT SLOPES:
4:1 LESS THAN 10 FT
3:1 OVER 10 FT
2:1 OVER 20 FT

SUPERELEVATED SECTION
RAMP "F"
STA. 36+48.60 TO STA. 37+98.60

LEGEND

- ① EXISTING CONTINUOUSLY REINFORCED P.C.C. PAVEMENT 8"
- ② EXISTING STABILIZED SUB-BASE 4"
- ③ EXISTING AGGREGATE SHOULDERS, TYPE B
- ④ THE EXISTING WIDTH OF SHOULDERS ADJACENT TO THE PAVEMENT SHALL BE SLOPED SO THAT THE ALGEBRAIC DIFFERENCE BETWEEN THE PAVEMENT AND THE SHOULDER WILL NOT BE GREATER THAN 0.07 FT/FT
- ⑤ EXISTING HOT-MIX ASPHALT SHOULDERS 8"
- ⑥ EXISTING PIPE UNDERDRAIN 4" (STANDARD 2327)
- ⑦ EXISTING HOT-MIX ASPHALT, VARIABLE DEPTH
- ⑧ PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"
- ⑨ PROPOSED HOT-MIX ASPHALT SURFACE, 1 1/2"
- ⑩ PROPOSED LEVELING BINDER, VARIES 3/4" TO 5"
- ⑪ PROPOSED AGGREGATE WEDGE SHOULDER, TYPE B

FILE NAME =	USER NAME = owerbj	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INDEX OF SHEETS, HIGHWAY STANDARDS, GENERAL NOTES, AND COMMITMENTS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pwork\pwork\overb\dm66748\087633-sht-plan.dgn	33-sht-plan.dgn	DRAWN -	REVISED -			255	82-7HB-1	ST. CLAIR	43	3	
PLOT SCALE = 50.0000' / 1".		CHECKED -	REVISED -			CONTRACT NO. 76C33					
PLOT DATE = 8/18/2010		DATE -	REVISED -			SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.

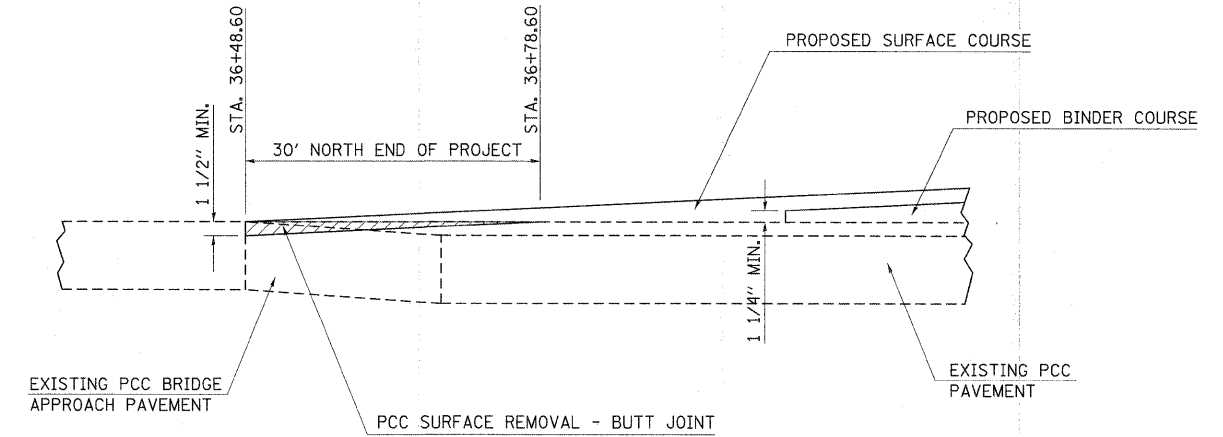
PAVEMENT SCHEDULE

LOCATION	HMA SURFACE REMOVAL, 1 1/2"	PCC SURFACE REMOVAL - BUTT JOINT	BITUMINOUS MATERIALS (PRIME COAT)	LEVELING BINDER	HMA SURFACE COURSE	AGGREGATE WEDGE SHOULDERS, TYPE B	HMA SHOULDER CURB
SN 082-0218	SQ YD	SQ YD	GAL	TONS	TON	TON	FOOT
STA 36+48.60 TO STA 37+98.60	500	100	38	89	42	15	100
SUBTOTALS							
TOTALS							
	500	100	38	89	42	15	100

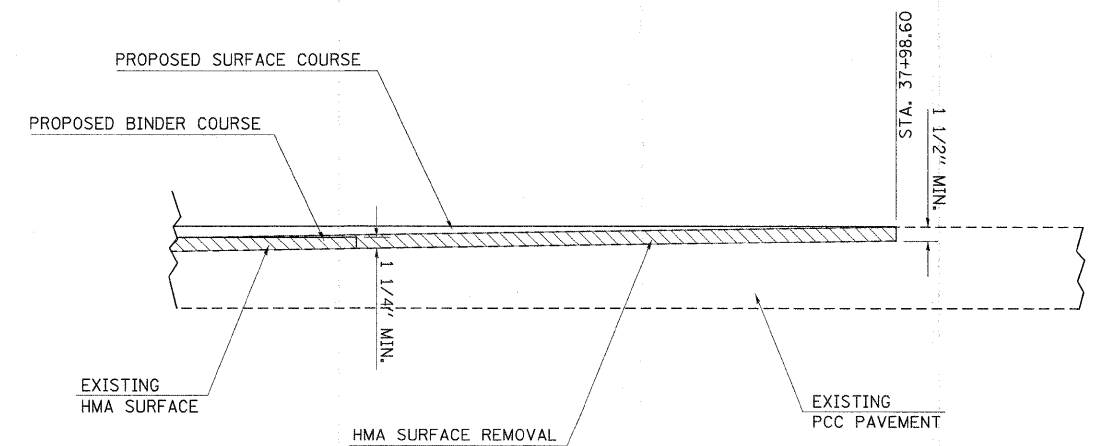
PAVEMENT MARKING SCHEDULE

LOCATION	PAVEMENT MARKING REMOVAL	POLYUREA PAVEMENT MARKING TYPE 1 - LINE 4"			THERMOPLASTIC PAVEMENT MARKING - LINE 4"		RAISED REFLECTIVE PAVEMENT MARKER REMOVAL EACH	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE) EACH
		SOLID		SKIP-DASH	SOLID			
		WHITE	YELLOW	WHITE	WHITE	YELLOW		
SN 082-0217	SQ FT	FT	FT	FT	FT	FT	EACH	EACH
STA 43+25.53 TO STA 53+41.74	762.2	1016.2	1016.2	254.2			3	3
SN 082-0218								
STA 126+87.47 TO STA 131+73.25	323.9	485.8	485.8					
STA 31+73.25 TO STA 36+48.60	316.9	475.4	475.4					
STA 36+48.60 TO STA 37+98.60	100.0				150	150		
SUBTOTALS			1977.4	1977.4	254.2	150	150	
TOTALS		1503	4209		300		3	3

STATION EQUATION: STA.131+73.25 BK = STA 31+73.25 AHEAD



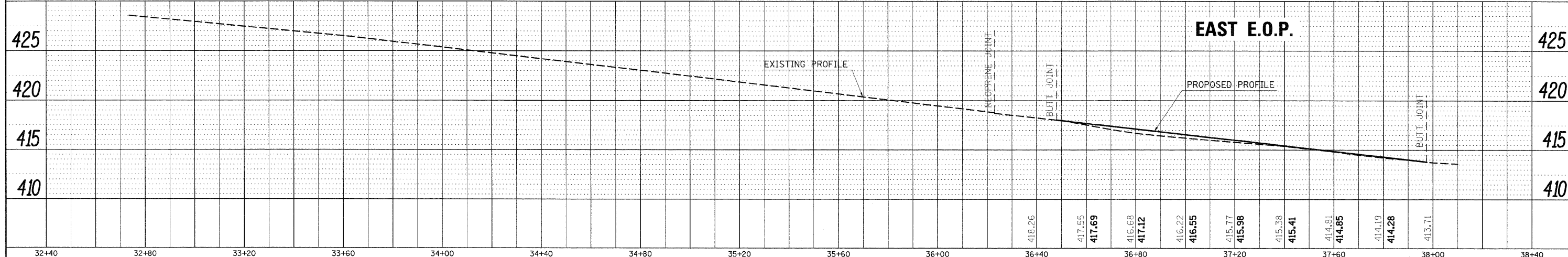
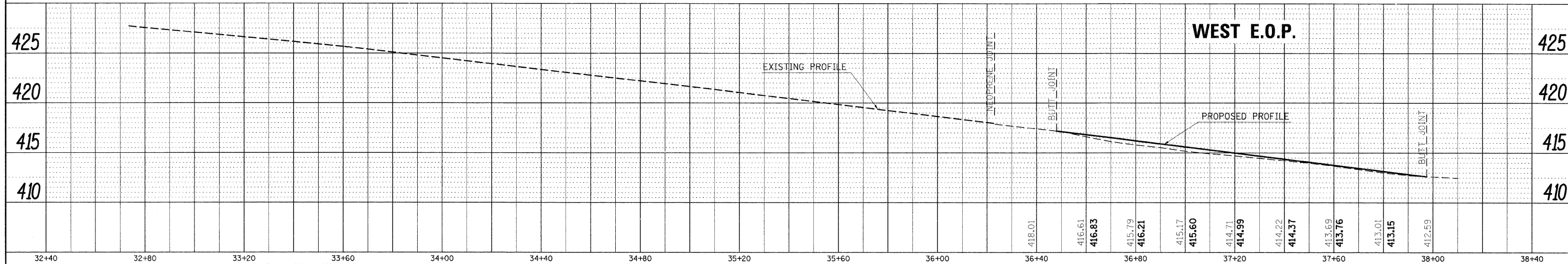
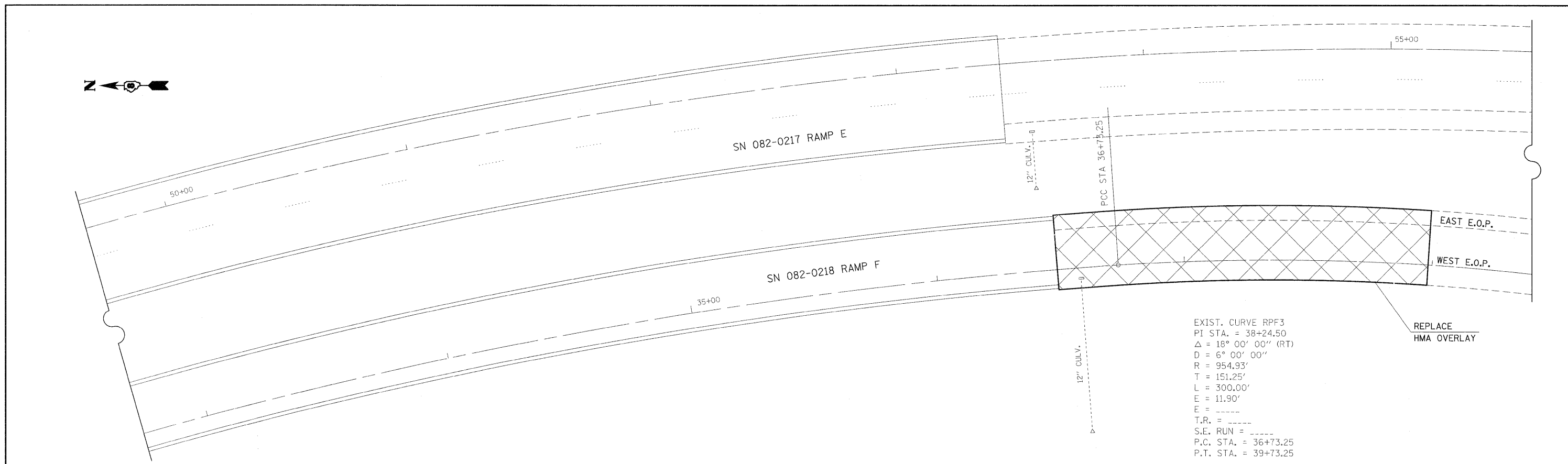
BUTT JOINT DETAIL



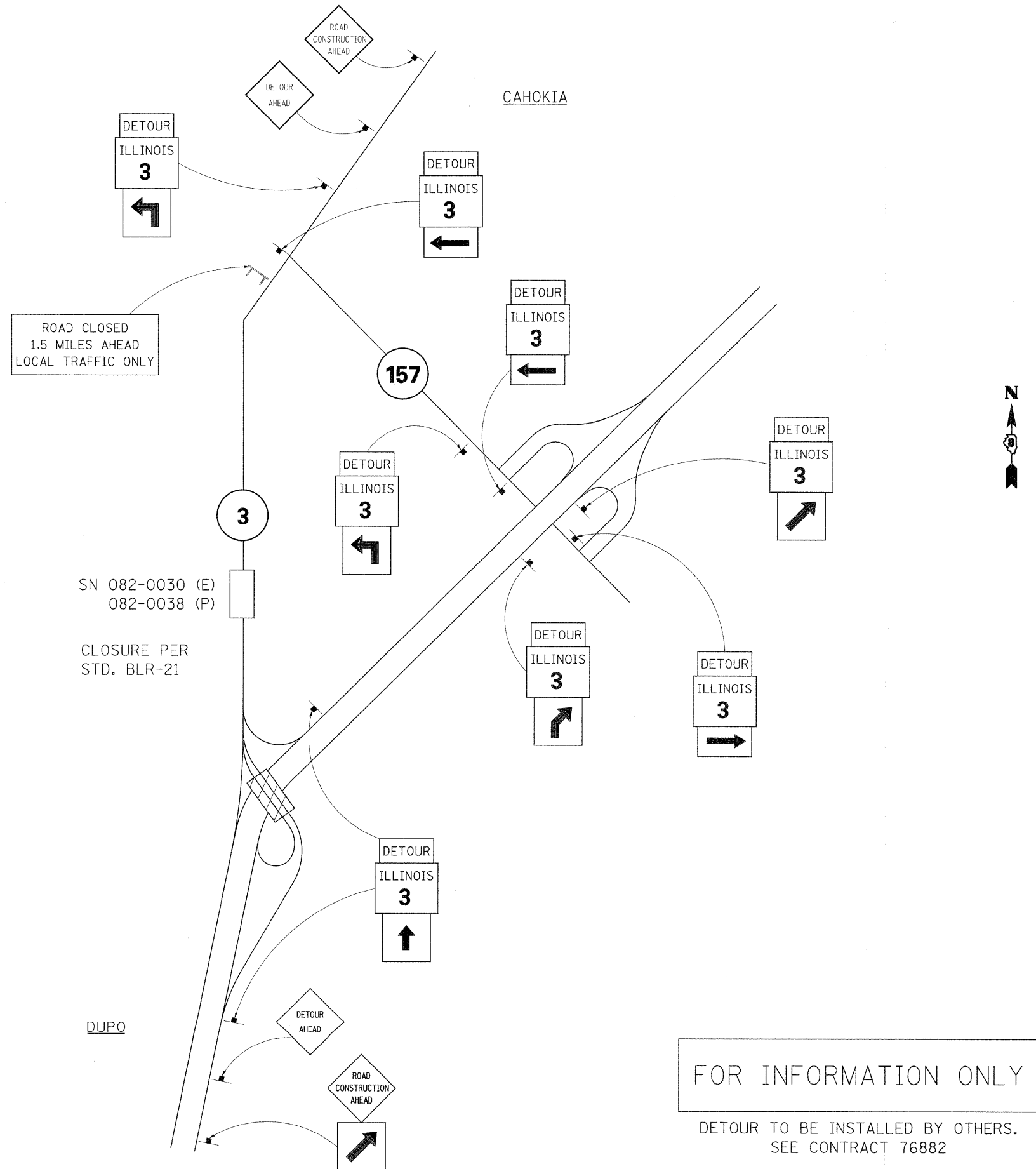
HMA SURFACE REMOVAL DETAIL

PLAN	DESIGNED	BY	DATE
	PLOTTED		
	ALIGNMENT CHECKED		
	GRADES CHECKED		
	NOTE BOOK NO.		
	FILE NAME		

PROFILE	DESIGNED	BY	DATE
	PLOTTED		
	GRADES CHECKED		
	NOTE BOOK NO.		
	STRUCTURE NOTATIONS CHKD		



FILE NAME =	USER NAME = owenbj	DESIGNED -	REVISED -	<p align="center">STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</p>	<p align="center">RAMP F PROFILES</p>			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
at:\pwork\pwork\owenbj\dms66748\d876c33	int-plan.dgn	CHECKED -	REVISED -					255	82-7HB-I	ST. CLAIR	43	5
	PLOT SCALE = 20.0000' / IN.	DRAWN -	REVISED -					CONTRACT NO. 76C33				
	PLOT DATE = 8/11/2010	CHECKED -	REVISED -					ILLINOIS FED. AID PROJECT				
				SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.			



SIGNS REQUIRED

TO BE PROVIDED BY IDOT

- DETOUR (9)
- (2)
- (1)
- ILLINOIS 3 (9)
- (2)
- (1)
- (3)
- (1)

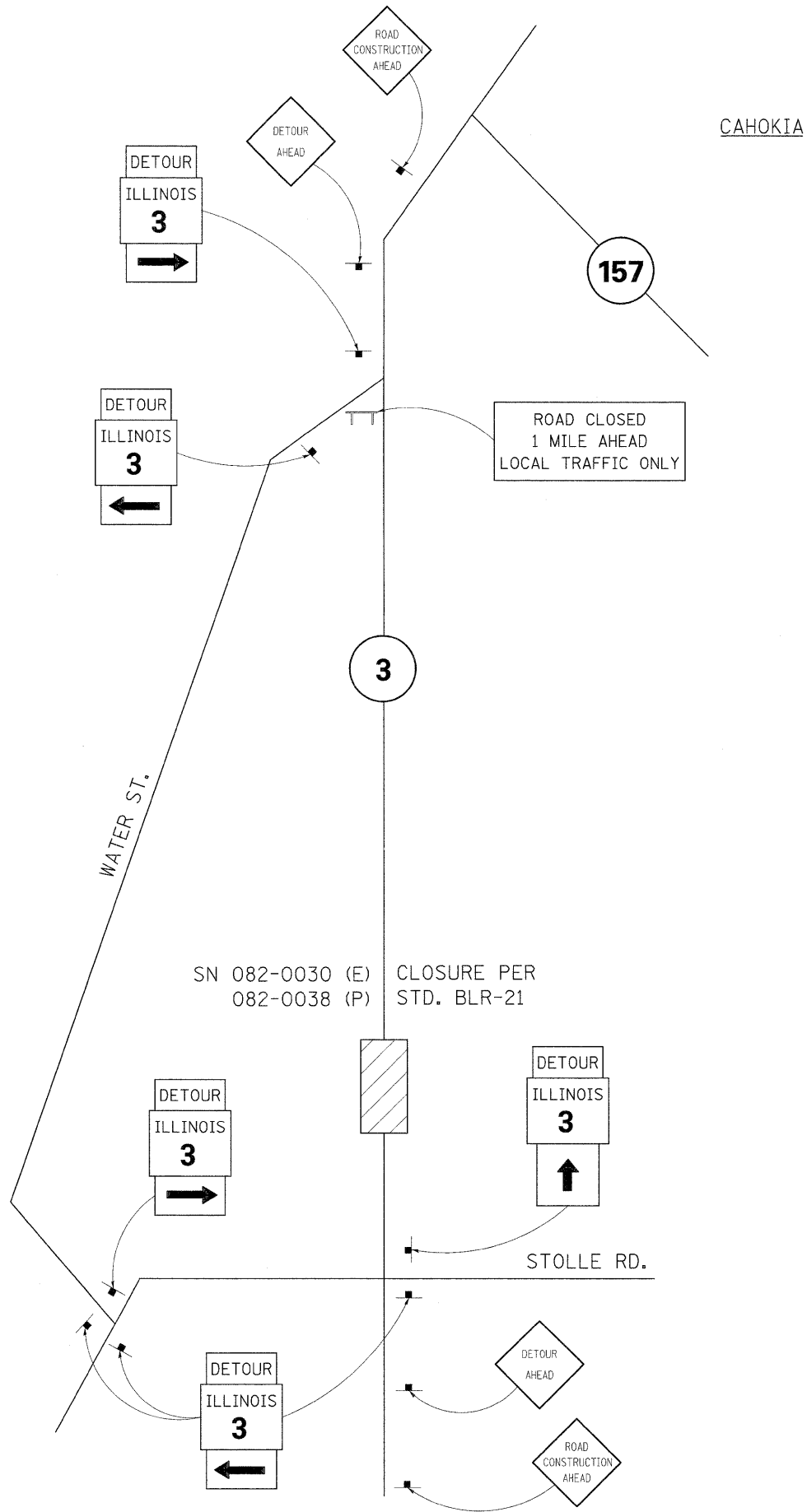
TO BE PROVIDED BY CONTRACT 76882

- (2)
- (2)
- (1)

FOR INFORMATION ONLY

DETOUR TO BE INSTALLED BY OTHERS.
SEE CONTRACT 76882

FILE NAME =	USER NAME = owenbj	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	IL 3 DETOUR	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
o:\pwork\owidat\owenbj\dms66748\876633-aht-plan.dgn		DRAWN -	REVISED -			255	82-7HB-I	ST. CLAIR	43	6	
PLOT SCALE = 50,0000' / IN.		CHECKED -	REVISED -			CONTRACT NO. 76C33					
PLOT DATE = 8/13/2010		DATE -	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					
					SCALE:	SHEET NO. OF SHEETS		STA. TO STA.			



SIGNS REQUIRED

TO BE PROVIDED BY IDOT

ROAD CLOSED 1 MILE AHEAD LOCAL TRAFFIC ONLY (1)

DETOUR (7) → (6)

ILLINOIS 3 (7) ↑ (1)

TO BE PROVIDED BY CONTRACT 76882

ROAD CONSTRUCTION AHEAD (2) DETOUR AHEAD (2)

FOR INFORMATION ONLY

DETOUR TO BE INSTALLED BY OTHERS. SEE CONTRACT 76882

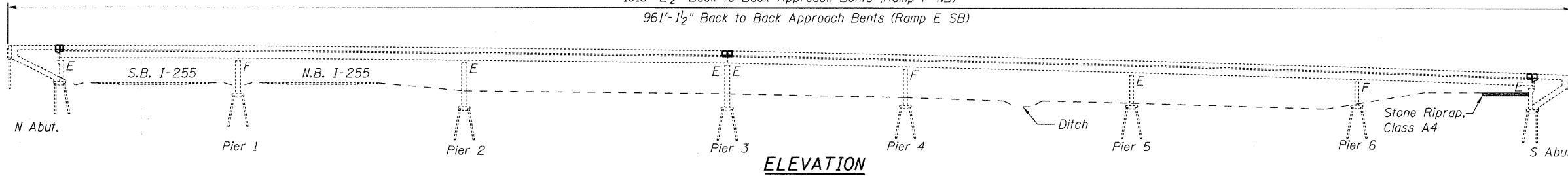
FILE NAME =	USER NAME = owerbj	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	IL 3 DETOUR (LOCAL)			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
o:\p\work\p\dot\owenbj\dms66748\d87633-sht-plan.dgn		DRAWN -	REVISED -					255	82-7HB-I	ST. CLAIR	43	7
PLOT SCALE = 50.0000' / IN.		CHECKED -	REVISED -					CONTRACT NO. 76C33				
PLOT DATE = 8/18/2010		DATE -	REVISED -					FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
				SCALE:		SHEET NO.	OF SHEETS	STA.	TO STA.			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET INDEX

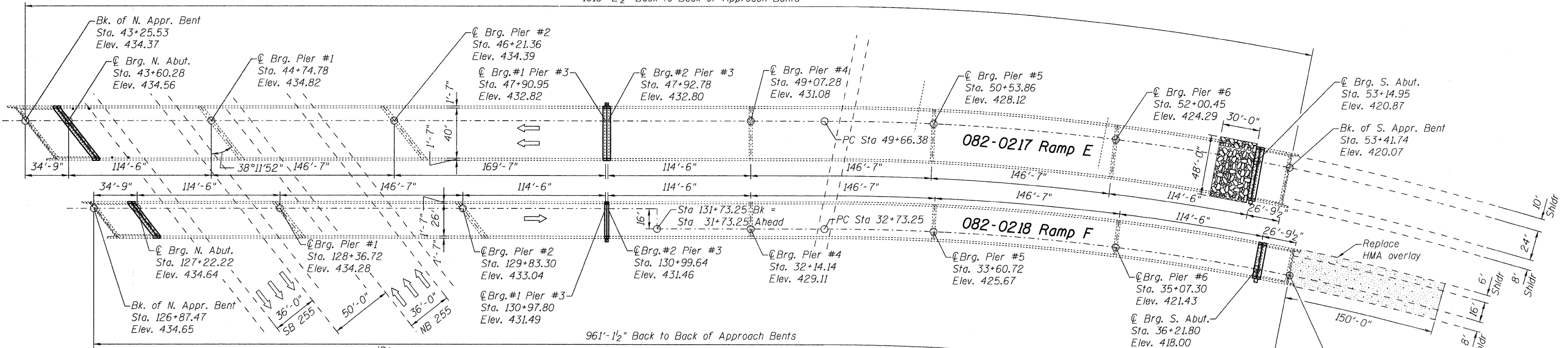
1. General Plan & Elevation
2. General Notes
3. North Abutment Concrete Replacement - Ramp E
4. North Abutment Concrete Replacement - Ramp F
5. Pier 3 Concrete Replacement - Ramp E
6. Pier 3 Concrete Replacement - Ramp F
7. South Abutment Concrete Replacement - Ramp E
8. South Abutment Concrete Replacement - Ramp F
9. Pier 3 Finger Plate - Ramp E
10. Pier 3 Finger Plate - Ramp F
11. Pier 3 Finger Plate Details
12. South Abutment Finger Plate - Ramp E
13. South Abutment Finger Plate - Ramp F
14. South Abutment Elevation - Ramps E & F
15. South Abutment Finger Plate Details
16. Strip Seal Details

1016'-2 1/2" Back to Back Approach Bents (Ramp F NB)
961'-1 1/2" Back to Back Approach Bents (Ramp E SB)



ELEVATION

1016'-2 1/2" Back to Back of Approach Bents



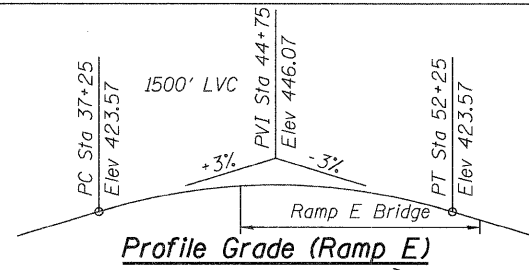
PLAN

CURVE DATA (Ramp E)

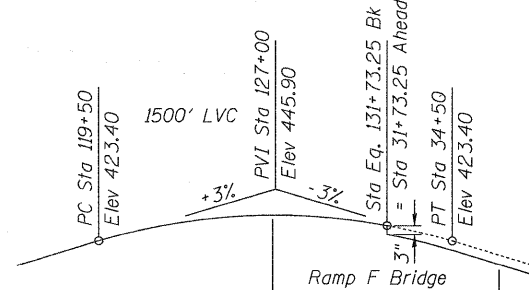
$\Delta = 53^{\circ}00'00''$
 $D = 3^{\circ}00'00''$
 $T = 952.22'$
 $E = 224.22'$
 $R = 1909.86'$
 $L = 1766.67'$
 $S.E. = 5.2\%$ attained
 $Sta\ 48+58.38\ to\ 50+20.38\ (162')$
 $P.C. = Sta.\ 49+66.38$
 $P.I. = Sta.\ 59+18.60$

CURVE DATA (Ramp F)

$\Delta = 12^{\circ}00'00''$
 $D = 3^{\circ}00'00''$
 $T = 200.73'$
 $E = 10.52'$
 $R = 1909.86'$
 $L = 400.00'$
 $S.E. = 5.2\%$ attained
 $Sta\ 131+73.25\ to\ 33+23.25\ (150')$
 $P.C. = Sta.\ 32+73.25$
 $P.I. = Sta.\ 34+73.98$



Profile Grade (Ramp E)



Profile Grade (Ramp F)

(PG shifts 16' right & drops 0.25' at the Sta Eq.)

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Stone Riprap, Class A4	Sq. Yd.	164
Filter Fabric	Sq. Yd.	164
Joint or Crack Filling	Pound	70
Concrete Removal	Cu. Yd.	60.7
Floor Drains	Each	4
Concrete Superstructure	Cu. Yd.	57.6
Reinforcement Bars, Epoxy Coated	Pound	6,930
Preformed Joint Strip Seal	Foot	97.0
Finger Plate Expansion Joint, 5"	Foot	132.0
Fabric Reinforced Elastomeric Trough	Foot	140.5
Concrete Sealer	Sq. Ft.	80,151
Structural Repair of Concrete (Depth <= 5")	Sq. Ft.	400
Mechanical Splicers	Each	280
Deck Slab Repair-Full Depth Type II	Sq. Yd.	100
Deck Slab Repair (Partial)	Sq. Yd.	100
Drainage System	L. Sum	1
Temporary Slab Support System	Each	4

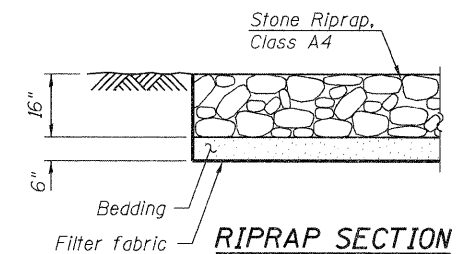
DESIGN SPECIFICATIONS

2007 AASHTO LRFD Bridge Design Specifications
with 2008 and 2009 Interims

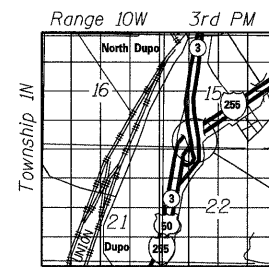
DESIGN STRESSES

FIELD UNITS

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



RIPRAP SECTION



LOCATION SKETCH

GENERAL PLAN AND ELEVATION
SN 082-0217 & 0218

DESIGNED	J. Uehle
CHECKED	A. Hallway
DRAWN	J. Uehle
CHECKED	A. Hallway

November 5, 2010
 EXAMINED
 PASSED



Expires Nov 30, 2012

SHEET NO. 1 16 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	255	82-7HB-1	ST. CLAIR	43	8
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT		
			CONTRACT NO. 76C33		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts (in painted areas and M164 Type 3 in unpainted areas). Bolts $\frac{3}{4}$ " ϕ , holes $\frac{7}{8}$ " ϕ , unless otherwise noted.

Calculated weight of Structural Steel = 78,560 lbs.

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.

Reinforcement bars designated (E) shall be epoxy coated.

Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.

As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer. Any cracks that cannot be removed by grinding $\frac{1}{4}$ inch deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

The contractor shall support the vaulted abutment slabs, prior to removal of the ends of the slabs. No equipment will be allowed on the vaulted slabs while any portion of the slabs are removed. See special provisions for "Temporary Slab Support System".

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

Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with "Concrete Removal".

Existing structural steel shall only be cleaned and painted as required by the Special Provision "Cleaning and Painting Contact Surfaces of Existing Steel Structures".

Any reinforcement bars that are damaged during concrete removal shall be repaired or replaced using an approved bar splicer or anchorage system. Cost included with "Concrete Removal".

The finger plates shall be flame cut as provided in Article 505.04(k) of the Standard Specifications.

The cost of removal and re-installation of all members necessary to complete the work shall be included with "Finger Plate Expansion Joint, 5in."

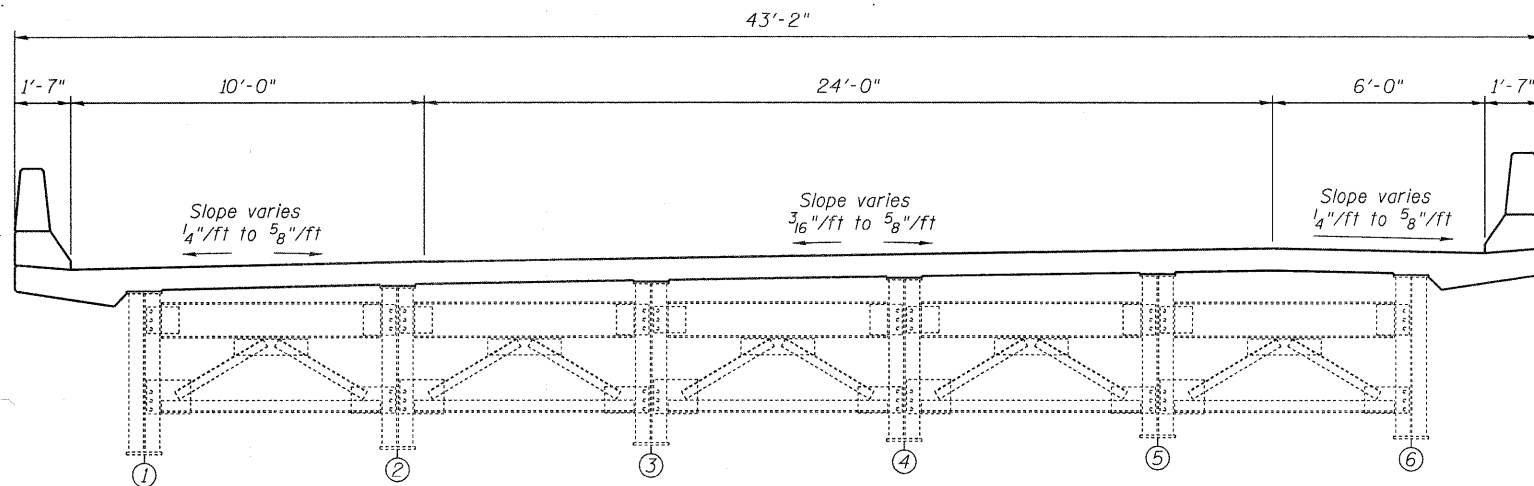
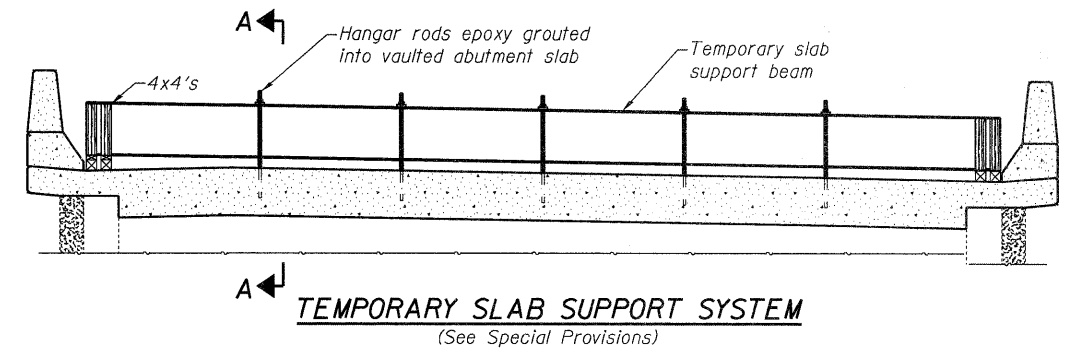
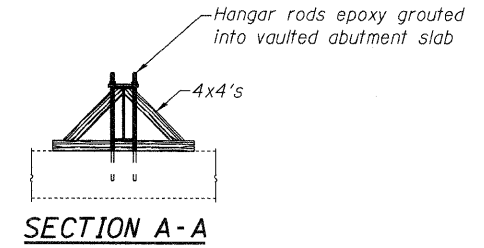
The deck surface shall be tined according to Article 420.09(e)(1) of the Standard Specifications. Cost included with "Concrete Superstructures".

All plates, bolts, anchor bolts, nuts, washers, and studs shall be galvanized according to AASHTO M111 or M232 as applicable.

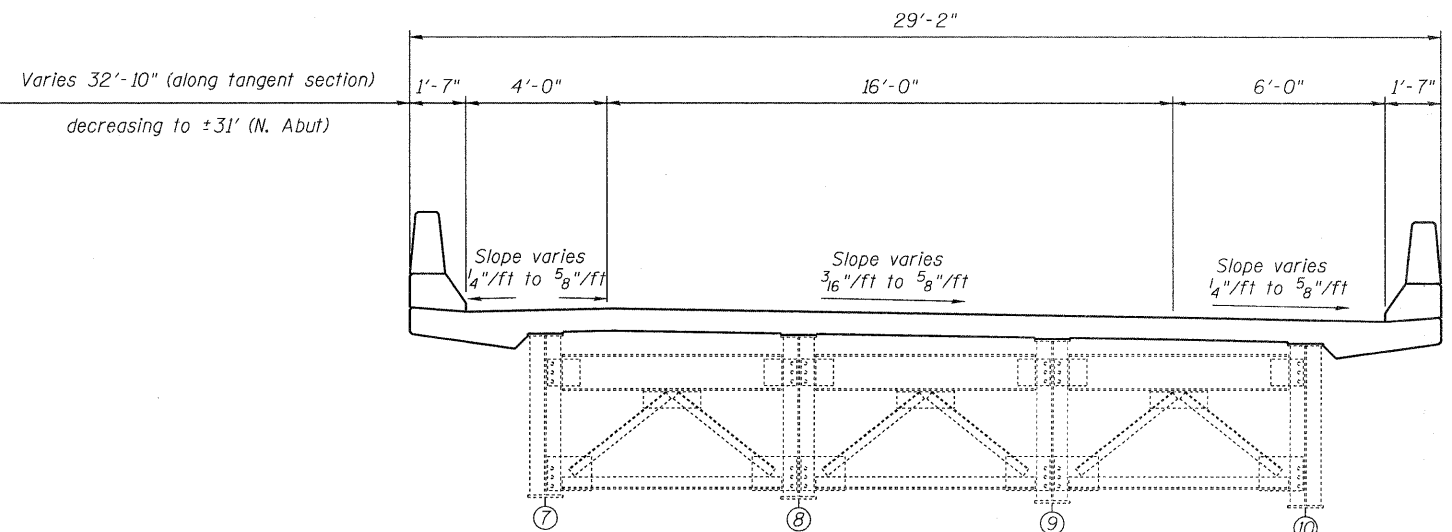
The quantity for "Structural Repair of Concrete (Depth \leq 5") is for the north abutment and pier 3 caps.

The quantity for "Joint or Crack Filling" is for the joints between all 4 vaulted abutment slabs and the approach slabs. It is also for the joints between the curtain wall stone facing and the slopewall aprons on each side of both north abutments. Quantities were calculated assuming 72.7pcf x $\frac{3}{4}$ " x $\frac{3}{4}$ " x 255' = 72 lb.

The quantity for "Concrete Sealer" is for the top of deck, top of parapets, and inside faces of parapets at new concrete areas.



082-0217 NB RAMP E
(Looking South)



082-0218 SB RAMP F
(Looking South)

DESIGNED	J. Uehle
CHECKED	A. Halloway
DRAWN	J. Uehle
CHECKED	A. Halloway

November 5, 2010

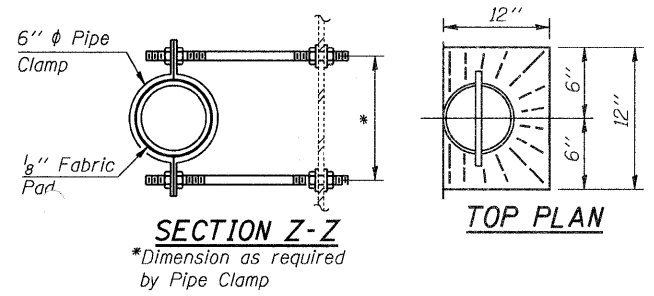
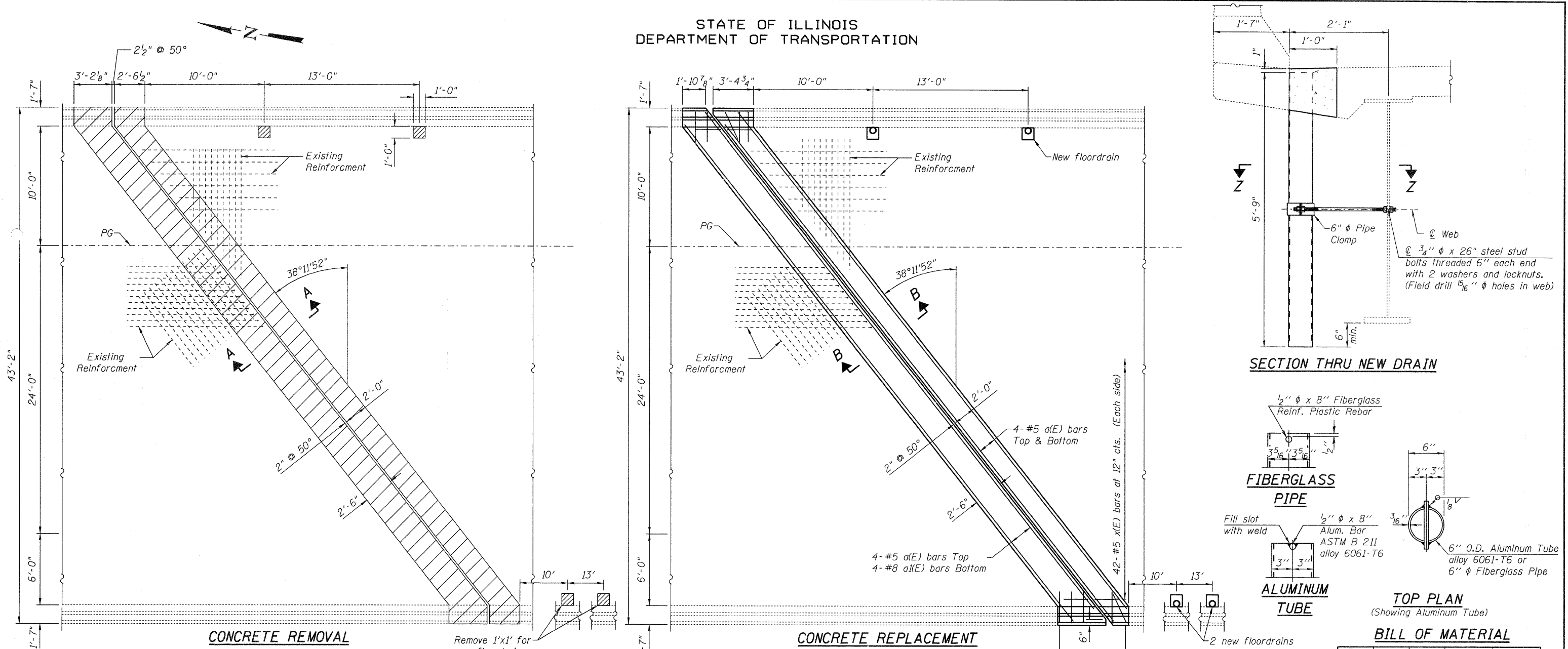
EXAMINED	<i>Carl Perry</i>
PASSED BY	<i>Ralph E. Anderson</i>

ENGINEER OF STRUCTURAL SERVICES
ENGINEER OF BRIDGES AND STRUCTURES

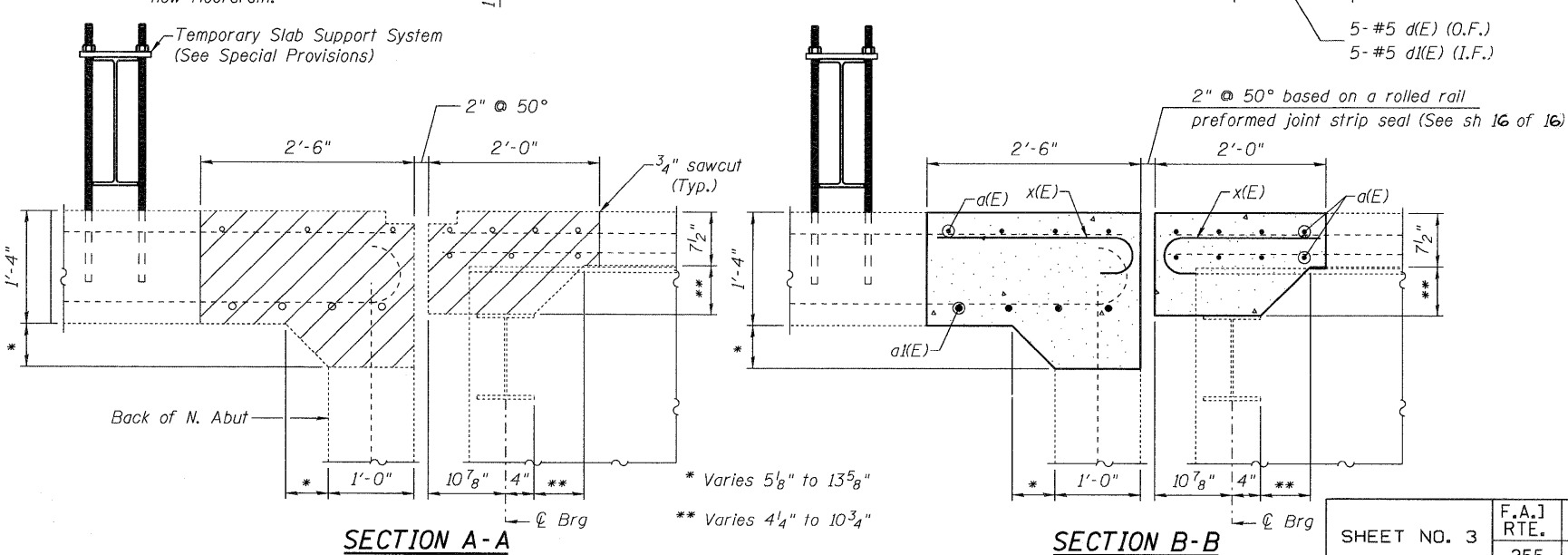
GENERAL NOTES
082-0217 & 0218

SHEET NO. 2 16 SHEETS	F.A.I. RTE. 255	SECTION 82-7HB-1	COUNTY ST. CLAIR	TOTAL SHEETS 43	SHEET NO. 9
	CONTRACT NO. 76C33 ILLINOIS FED. AID PROJECT				

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



Notes:
The floor drains shall be painted to match the outside of the fascia beams.
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.



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	12	#5	52'-3"	—
a(E)	4	#8	48'-0"	—
d(E)	10	#5	5'-8"	L
d(E)	10	#5	3'-11"	L
x(E)	84	#5	2'-7"	—
Reinforcement Bars, Epoxy Coated		Pound	1490	
Concrete Superstructure		Cu. Yds.	13.7	
Concrete Removal		Cu. Yds.	13.7	

Bars indicated thus 4x2 - #5 etc. indicates 4 line of bars with 2 lengths per line.

See sheet 4 of 16 for parapet sections and bar details.

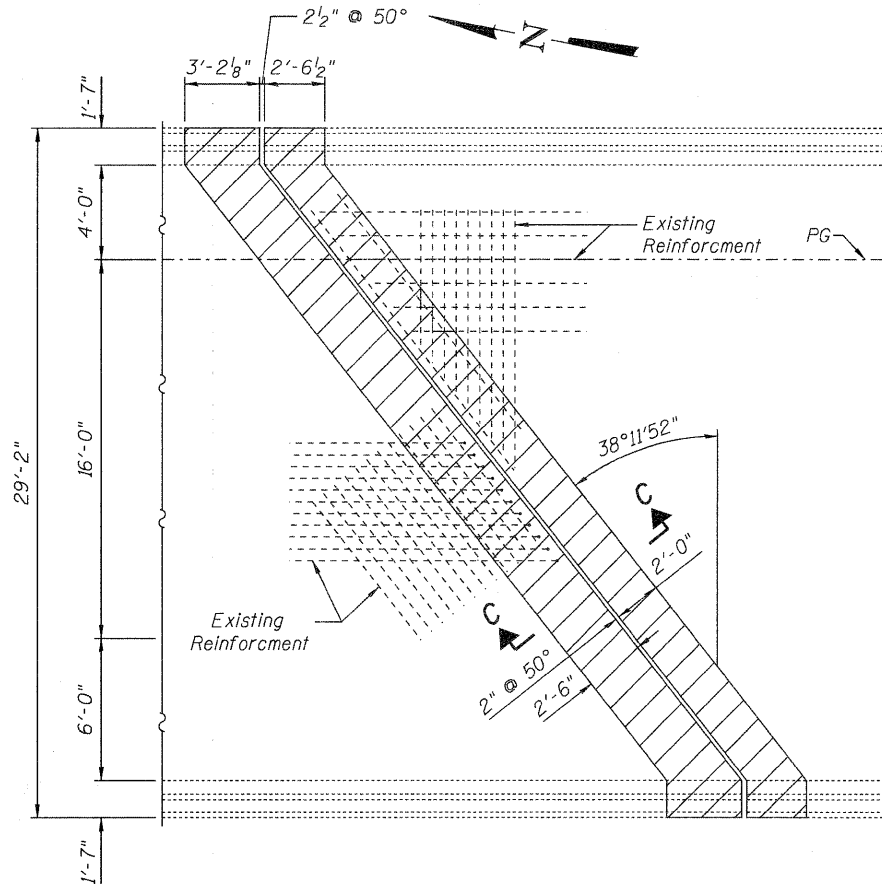
**RAMP E
N. ABUTMENT CONCRETE REPLACEMENT
082-0217 & 0218**

DESIGNED	J. Uehle
CHECKED	A. Hallway
DRAWN	J. Uehle
CHECKED	A. Hallway

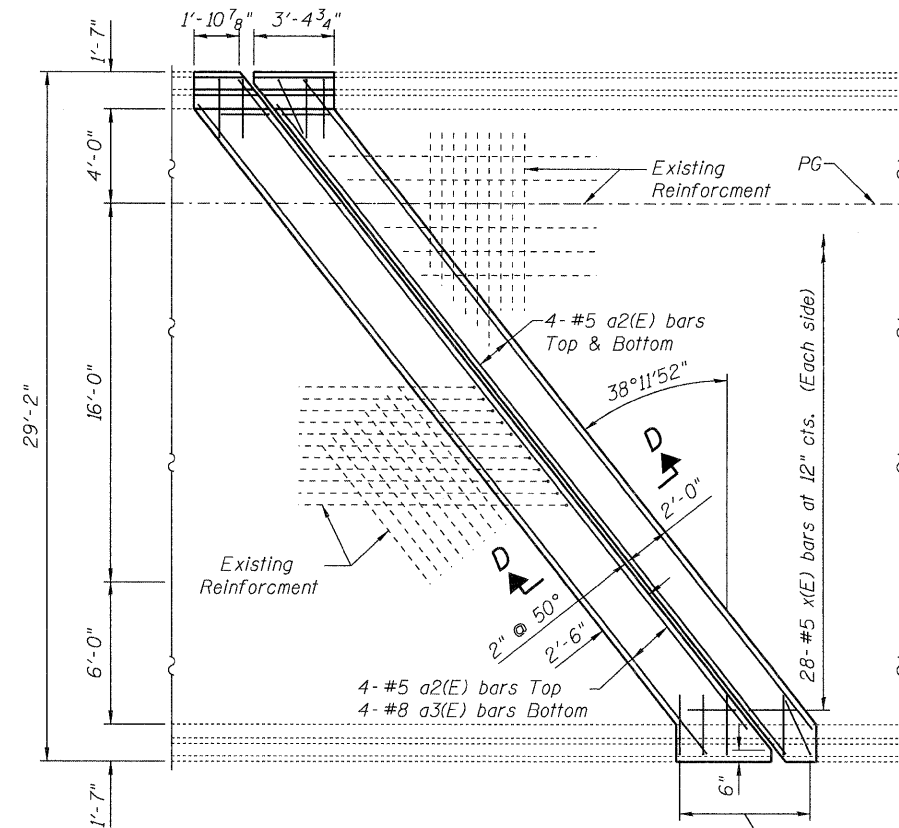
November 5, 2010
EXAMINED *J. Cal Perry*
PASSED *Ralph E. Anderson*
ENGINEER OF STRUCTURAL SERVICES
ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO. 3 16 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	255	82-7HB-1	ST. CLAIR	43	10
				CONTRACT NO. 76C33	
ILLINOIS FED. AID PROJECT					

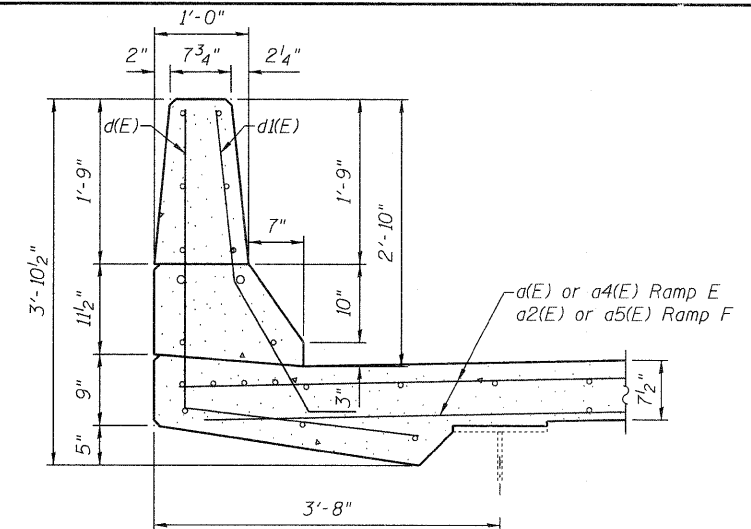
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



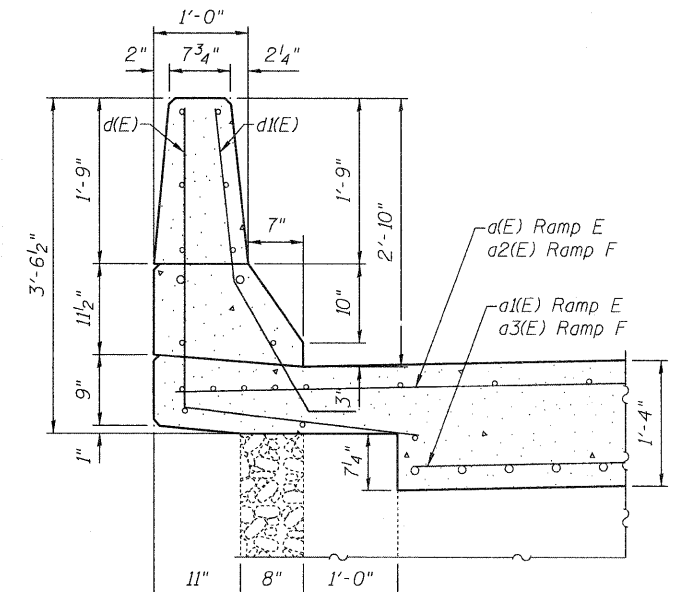
CONCRETE REMOVAL



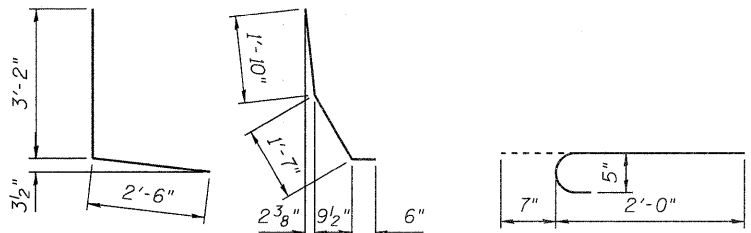
CONCRETE REPLACEMENT



DECK PARAPET SECTION



VAULTED N. ABUTMENT SLAB PARAPET SECTION



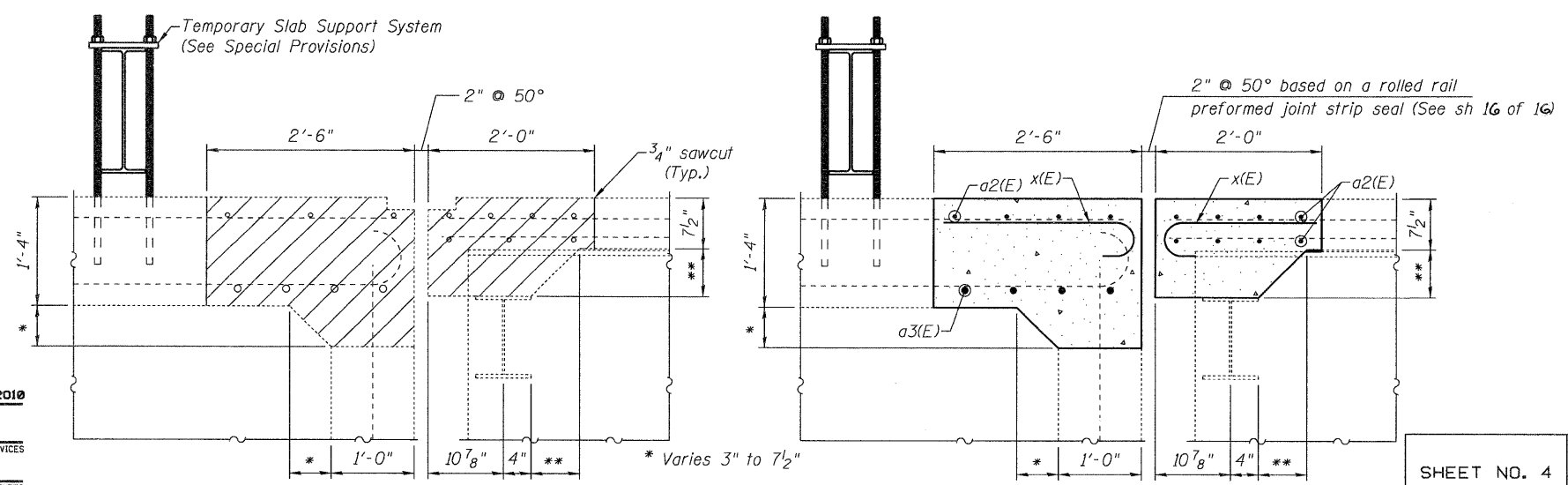
BAR d(E) BAR d1(E) BAR x(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape	
a2(E)	12	#5	34'-6"	—	
a3(E)	4	#8	30'-2"	—	
d(E)	10	#5	5'-8"	L	
d1(E)	10	#5	3'-11"	L	
x(E)	56	#5	2'-7"	C	
Reinforcement Bars, Epoxy Coated				Pound	1000
Concrete Superstructure				Cu. Yds.	8.6
Concrete Removal				Cu. Yds.	8.6

Bars indicated thus 4x2 - #5 etc. indicates 4 line of bars with 2 lengths per line.

RAMP F
N. ABUTMENT CONCRETE REPLACEMENT
082-0217 & 0218



SECTION C-C

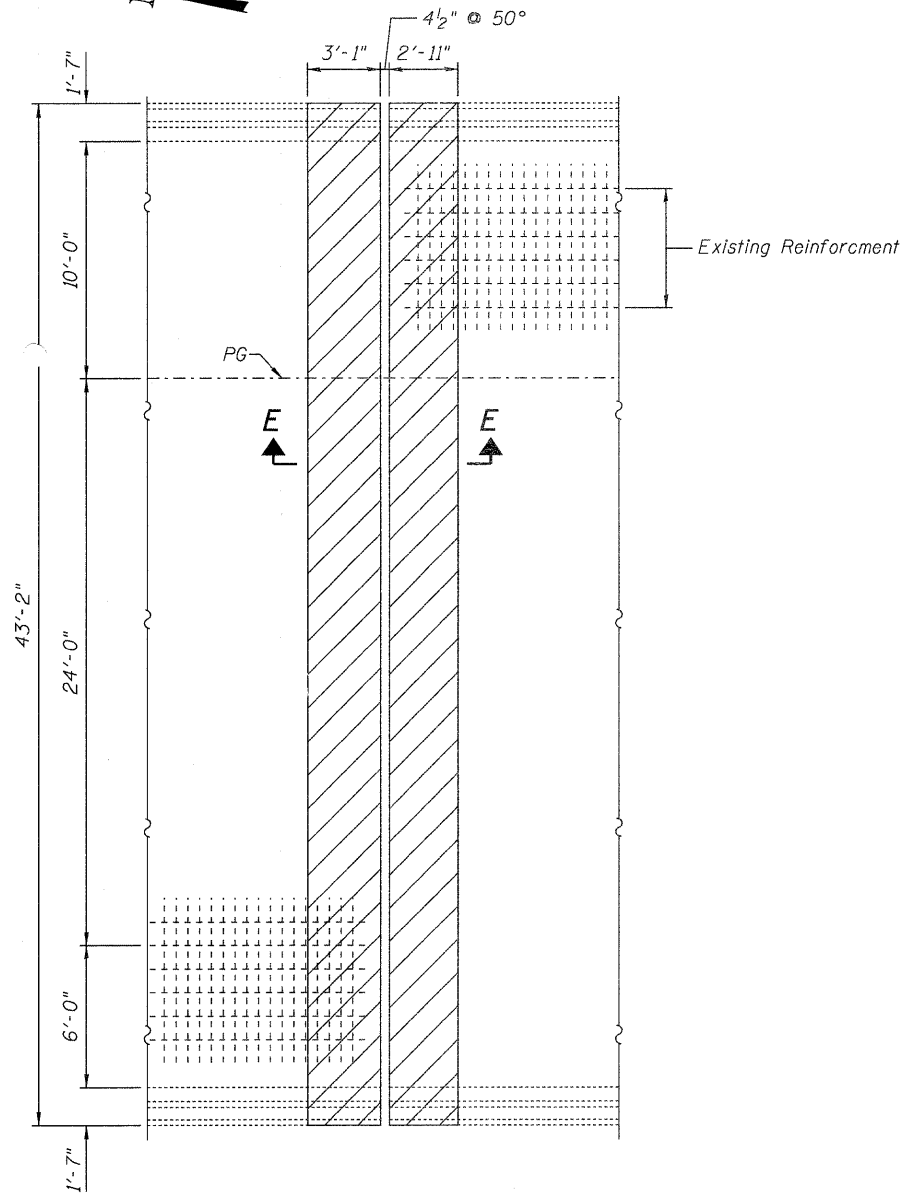
SECTION D-D

DESIGNED J. Uehle
CHECKED A. Halloway
DRAWN J. Uehle
CHECKED A. Halloway

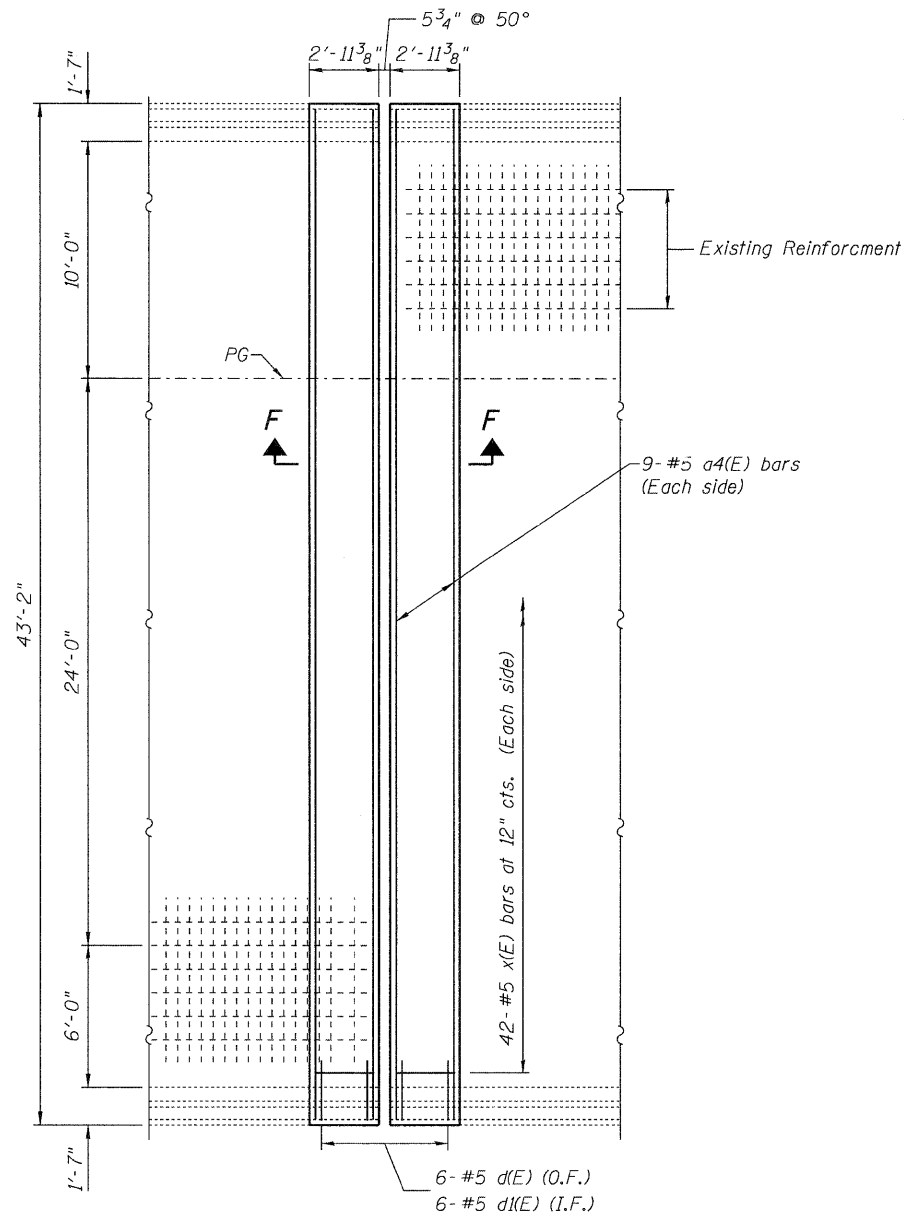
November 5, 2018
EXAMINED *A. Carl Long*
ENGINEER OF STRUCTURAL SERVICES
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO. 4 16 SHEETS	F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	255	82-7HB-1	ST. CLAIR	43	11
			CONTRACT NO. 76C33		
ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



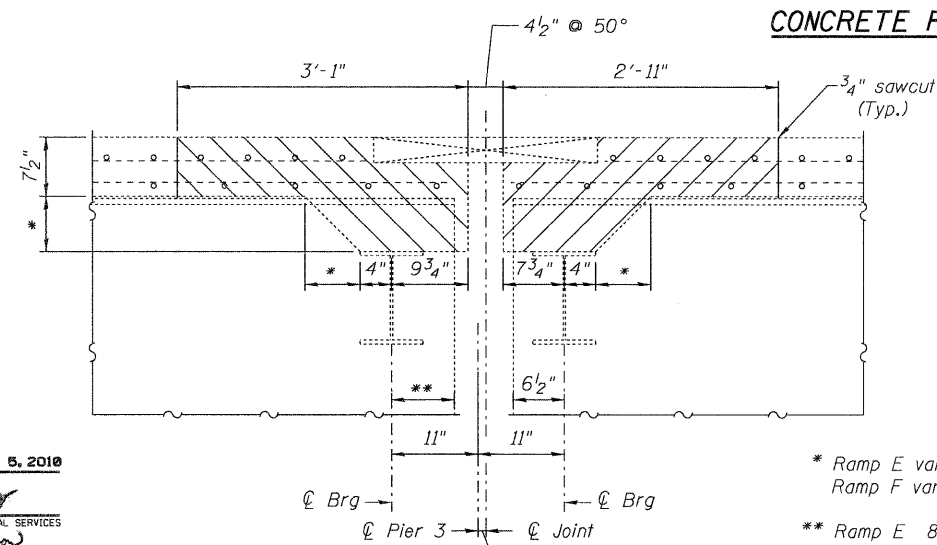
CONCRETE REMOVAL



CONCRETE REPLACEMENT

The \mathcal{C} of existing joint is offset 1" south from the \mathcal{C} of pier, since the existing north bearings and north beam end extensions are longer. The reconstructed joint will be centered on the pier.

See sheet 11 of 16 for Section F-F.



SECTION E-E

* Ramp E varies 4 1/4" to 10 3/4"
Ramp F varies 4 1/4" to 8 1/8"

** Ramp E 8 1/2" (Beams 1-2); 8" (Beams 3-6)
Ramp F 7 1/2" (Beams 7-10)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a4(E)	18	#5	41'-2"	—
d(E)	12	#5	5'-8"	L
d1(E)	12	#5	3'-11"	U
x(E)	84	#5	2'-7"	—
Mechanical Splicers	Each		84	
Reinforcement Bars, Epoxy Coated	Pound		1120	
Concrete Superstructure	Cu. Yds.		8.8	
Concrete Removal	Cu. Yds.		9.9	

Bars indicated thus 4x2 - #5 etc. indicates 4 line of bars with 2 lengths per line.

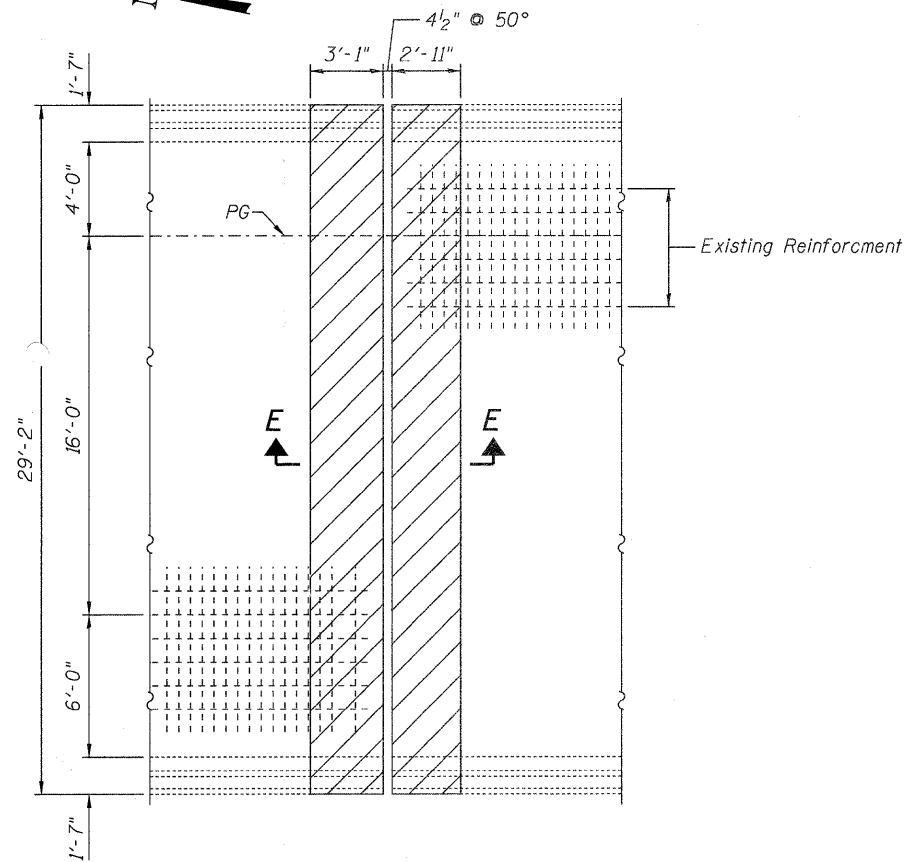
RAMP E
PIER 3 CONCRETE REPLACEMENT
082-0217 & 0218

DESIGNED	J. Uehle
CHECKED	A. Halloway
DRAWN	J. Uehle
CHECKED	A. Halloway

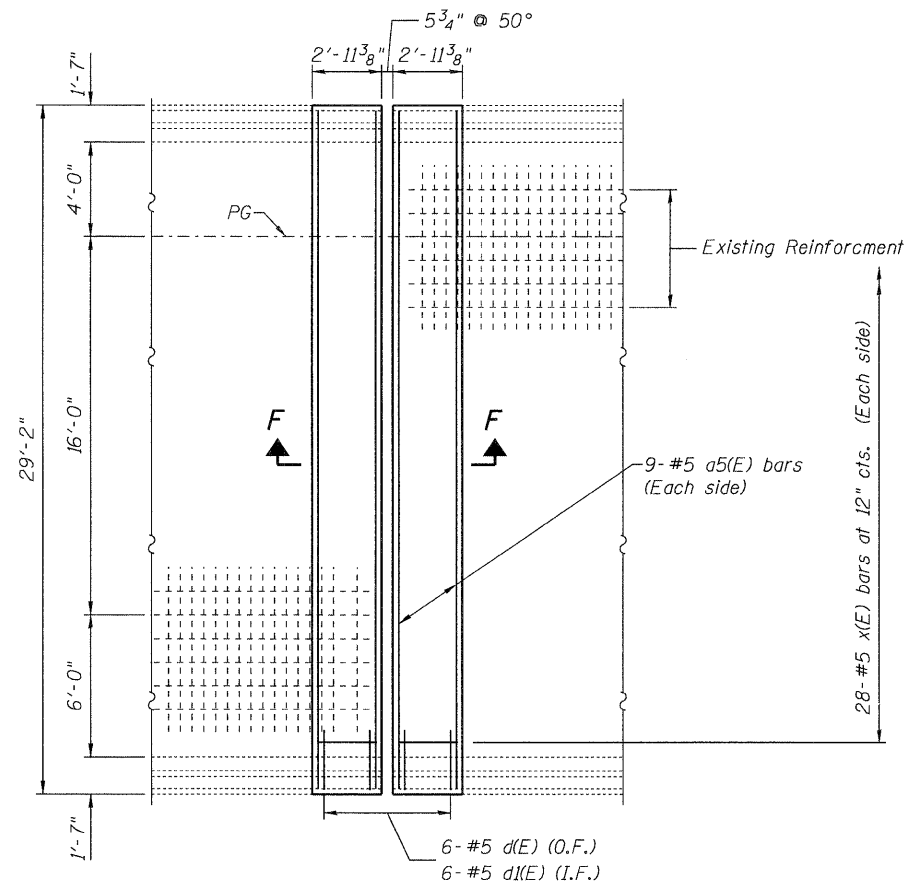
EXAMINED	November 5, 2010
<i>Dr. Carl Perry</i>	
ENGINEER OF STRUCTURAL SERVICES	
PASSED	<i>Ralph E. Anderson</i>
ENGINEER OF BRIDGES AND STRUCTURES	

SHEET NO. 5 16 SHEETS	F.A.] RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	255	82-7HB-1	ST. CLAIR	43	12
			CONTRACT NO. 76C33		
ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



CONCRETE REMOVAL



CONCRETE REPLACEMENT

The ϕ of existing joint is offset 1" south from the ϕ of pier, since the north bearings and north beam end extensions are longer. The reconstructed joint will be centered on the pier.

See sheet 5 of 16 for Section E-E.

See sheet 11 of 16 for Section F-F.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a5(E)	18	#5	27'-2"	—
d(E)	12	#5	5'-8"	L
d(E)	12	#5	3'-11"	U
x(E)	56	#5	2'-7"	C
Mechanical Splicers	Each			56
Reinforcement Bars, Epoxy Coated	Pound			780
Concrete Superstructure	Cu. Yds.			6.1
Concrete Removal	Cu. Yds.			6.7

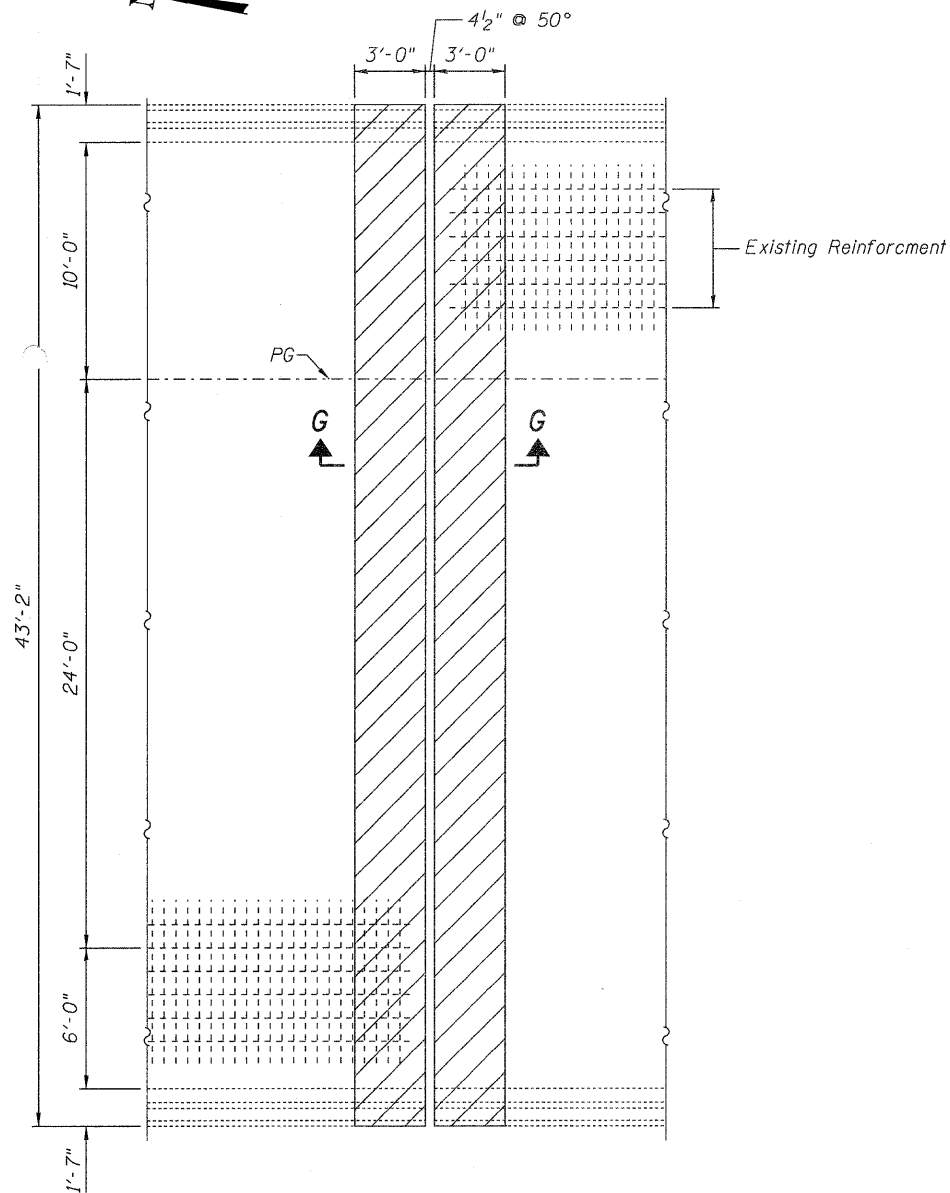
Bars indicated thus 4x2 -#5 etc. indicates 4 line of bars with 2 lengths per line.

**RAMP F
PIER 3 CONCRETE REPLACEMENT
082-0217 & 0218**

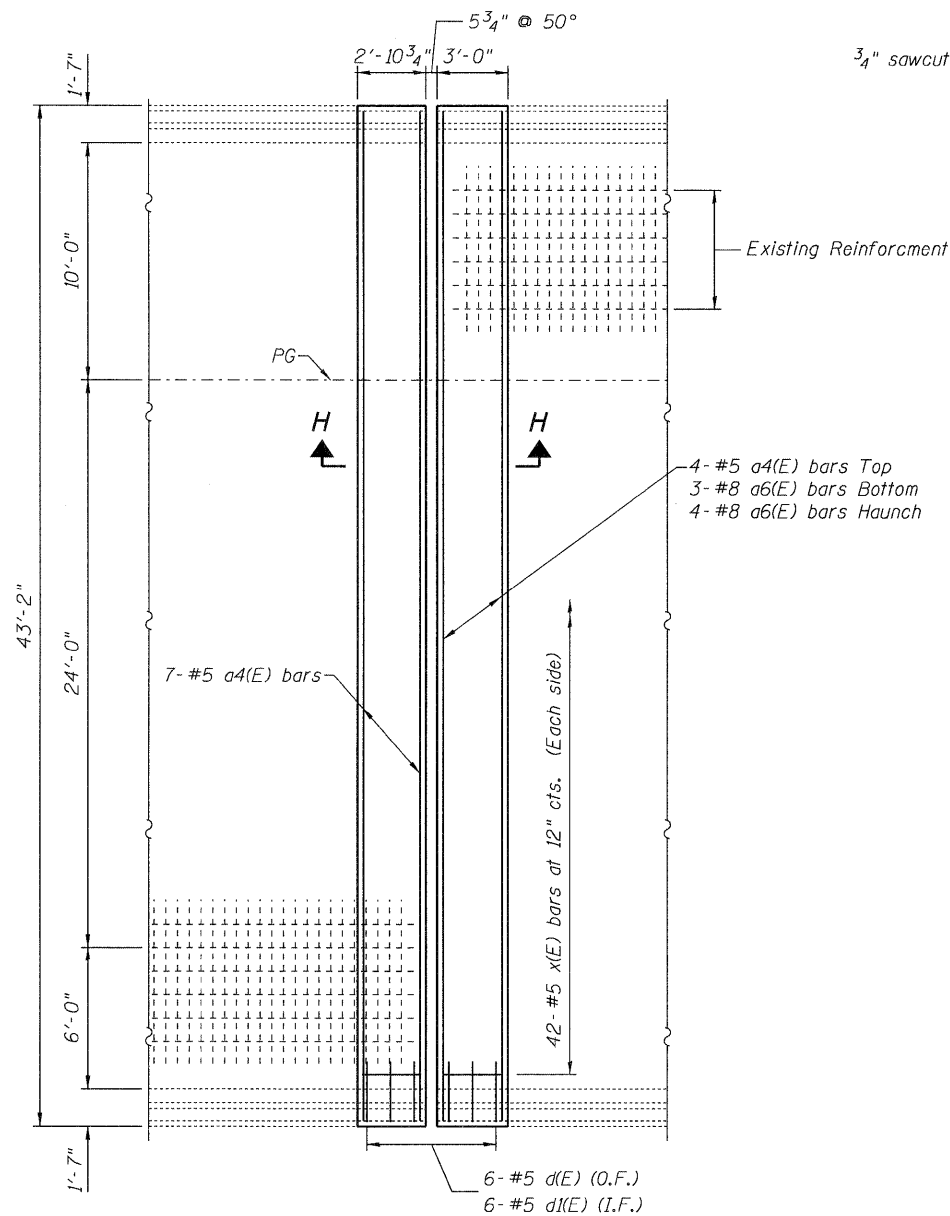
DESIGNED J. Uehle	November 5, 2010
CHECKED A. Halloway	EXAMINED <i>J. Carl King</i>
DRAWN J. Uehle	PASSED <i>Ralph E. Anderson</i>
CHECKED A. Halloway	ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO. 6 16 SHEETS	F.A.] RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	255	82-7HB-1	ST. CLAIR	43	13
			CONTRACT NO. 76C33		
ILLINOIS FED. AID PROJECT					

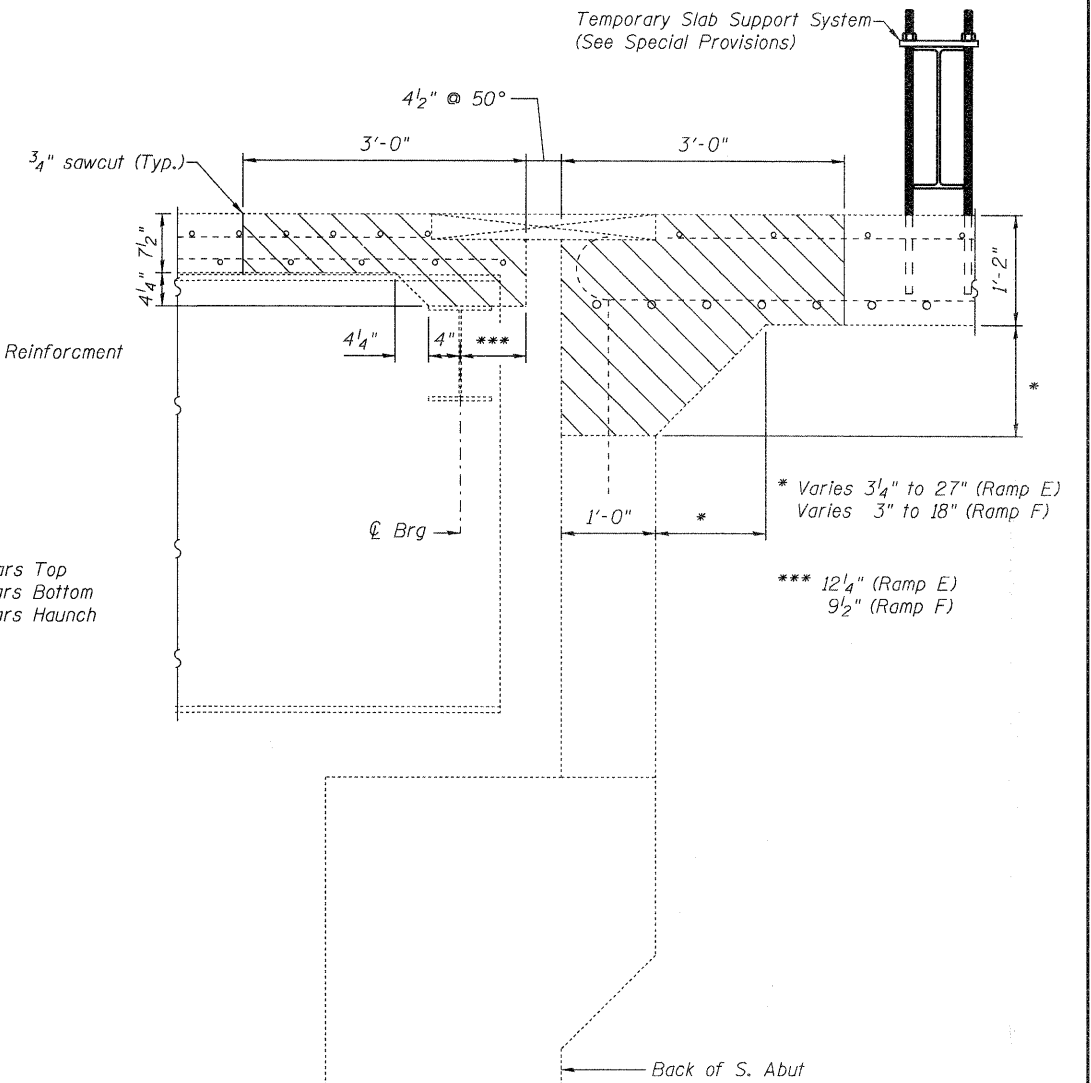
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



CONCRETE REMOVAL



CONCRETE REPLACEMENT



SECTION G-G

See sheet 15 of 16 for Section H-H.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a4(E)	11	#5	41'-2"	—
a6(E)	7	#8	37'-8"	—
d(E)	12	#5	5'-8"	L
d1(E)	12	#5	3'-11"	L
x(E)	84	#5	2'-7"	C
Mechanical Splicers		Each		84
Reinforcement Bars, Epoxy Coated		Pound		1520
Concrete Superstructure		Cu. Yds.		12.5
Concrete Removal		Cu. Yds.		13.3

Bars indicated thus 4x2 - #5 etc. indicates 4 line of bars with 2 lengths per line.

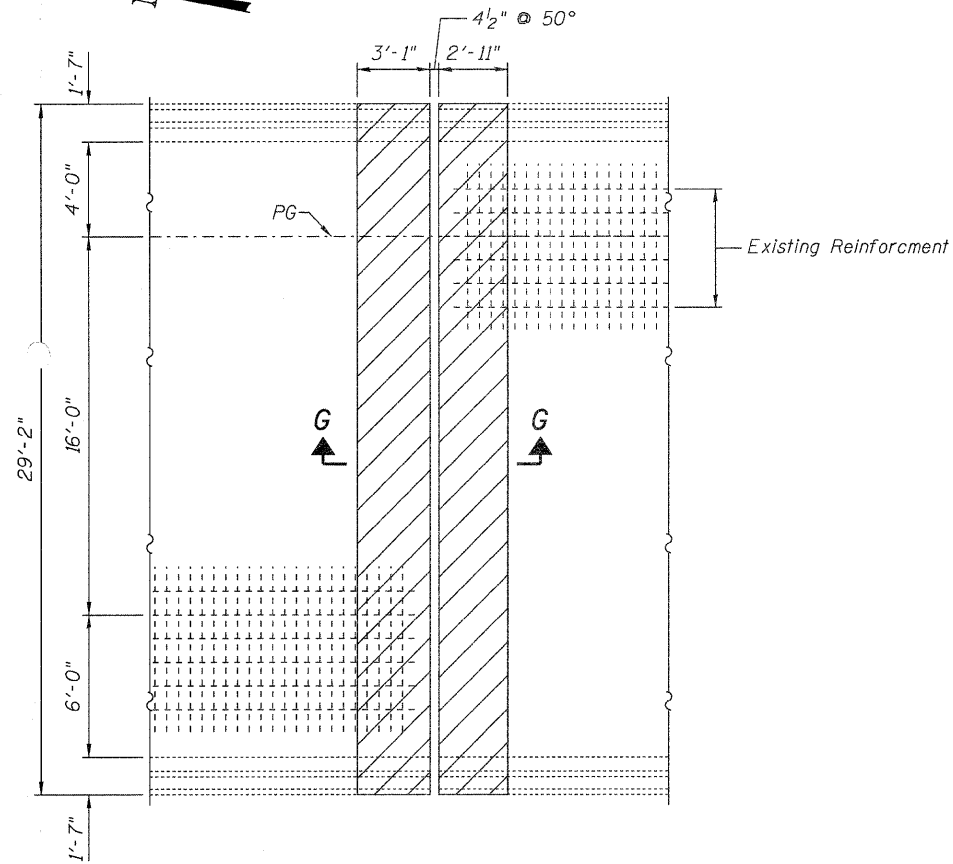
**RAMP E
S. ABUTMENT CONCRETE REPLACEMENT
082-0217 & 0218**

DESIGNED	J. Uehle
CHECKED	A. Holloway
DRAWN	J. Uehle
CHECKED	A. Holloway

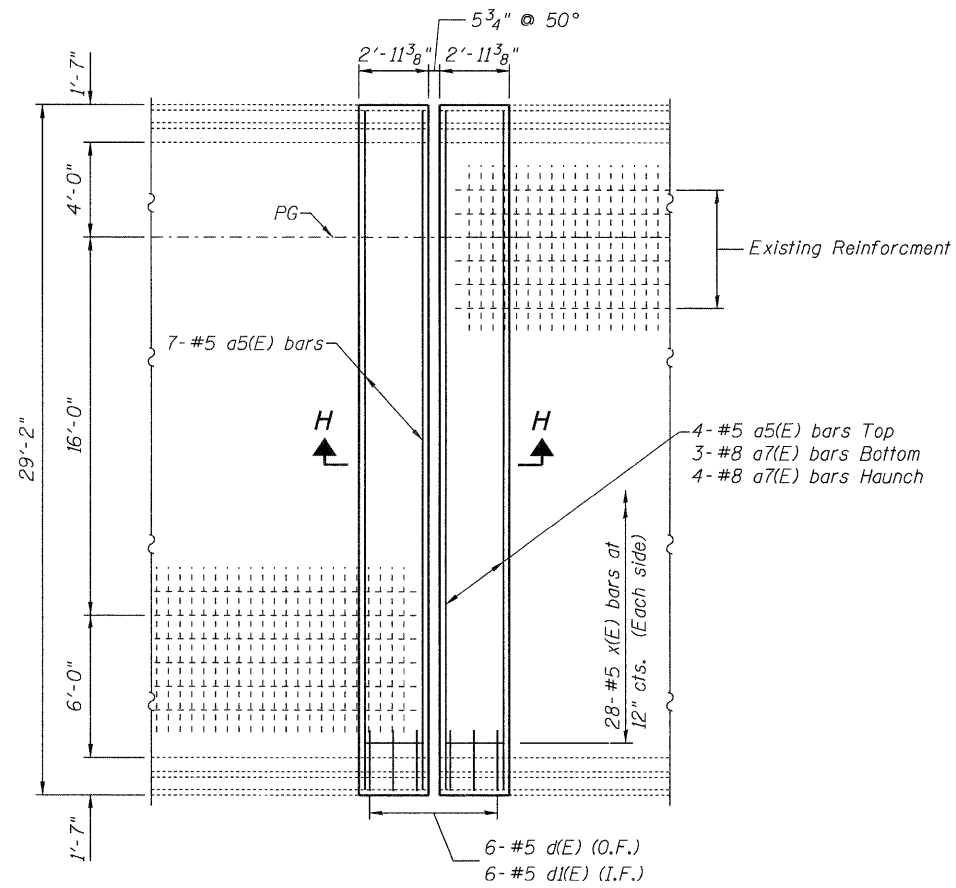
EXAMINED	<i>J. Cal Long</i> November 6, 2010 ENGINEER OF STRUCTURAL SERVICES
PASSED	<i>Ralph E. Anderson</i> ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO. 7 16 SHEETS	F.A.] RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	255	82-7HB-I	ST. CLAIR	43	14
			CONTRACT NO. 76C33		
ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



CONCRETE REMOVAL



CONCRETE REPLACEMENT

See sheet 7 of 16 for Section G-G.

See sheet 15 of 16 for Section H-H.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a5(E)	11	#5	27'-2"	—
a7(E)	7	#8	23'-8"	—
d(E)	12	#5	5'-8"	L
d1(E)	12	#5	3'-11"	L
x(E)	56	#5	2'-7"	C
Mechanical Splicers		Each		56
Reinforcement Bars, Epoxy Coated		Pound		1020
Concrete Superstructure		Cu. Yds.		7.9
Concrete Removal		Cu. Yds.		8.5

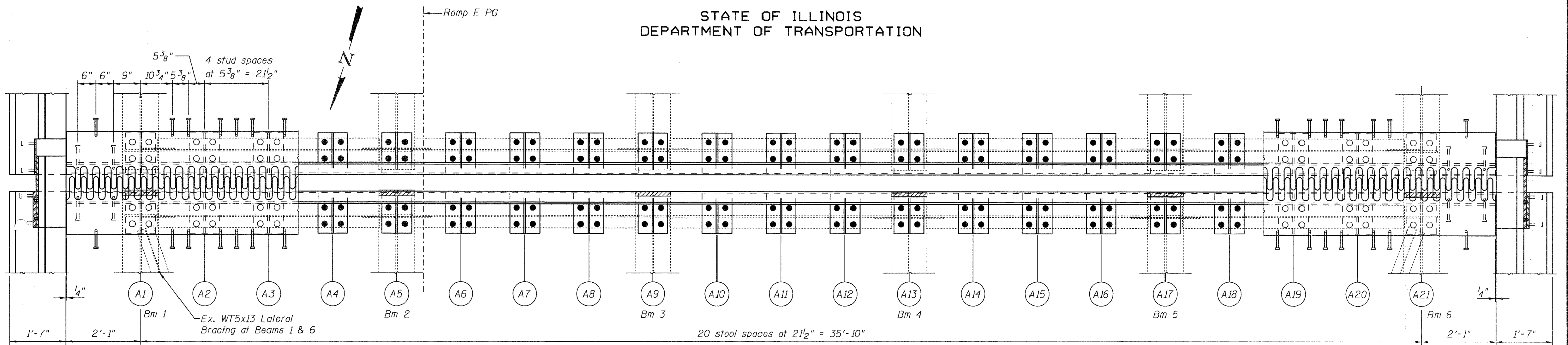
Bars indicated thus 4x2 - #5 etc. indicates 4 line of bars with 2 lengths per line.

RAMP F
S. ABUTMENT CONCRETE REPLACEMENT
082-0217 & 0218

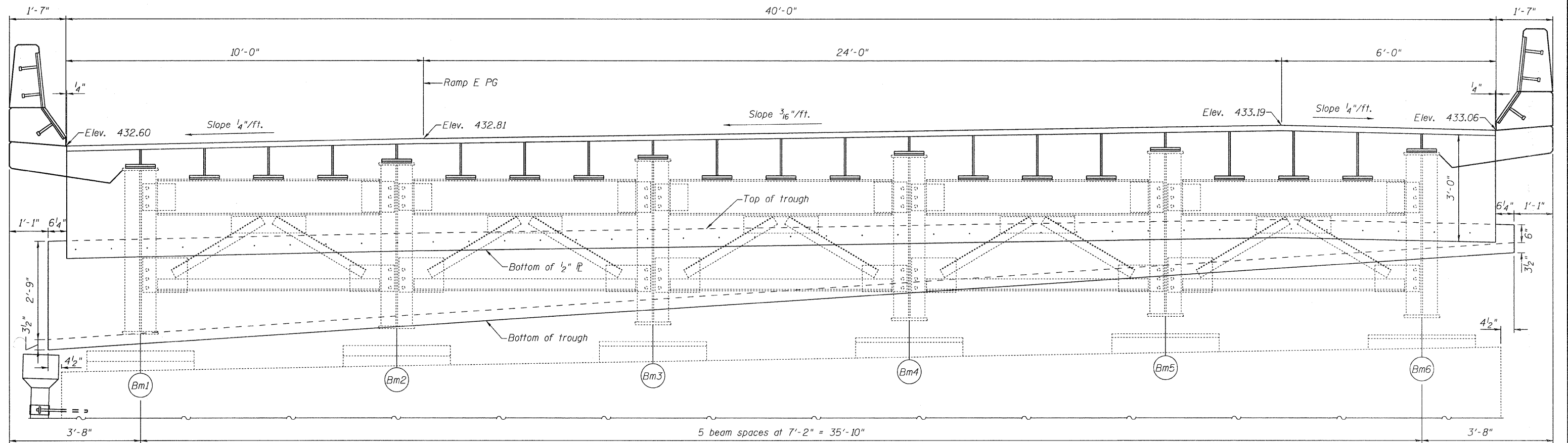
DESIGNED J. Uehle	November 6, 2010
CHECKED A. Halloway	EXAMINED <i>De Carl Perry</i>
DRAWN J. Uehle	PASSED <i>Ralph E. Anderson</i>
CHECKED A. Halloway	ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO. 8	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	255	82-7HB-I	ST. CLAIR	43	15
16 SHEETS	CONTRACT NO. 76C33			ILLINOIS FED. AID PROJECT	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



PLAN
(Pier 3 - Ramp E)



ELEVATION (SECTION I-I)
(Looking South)

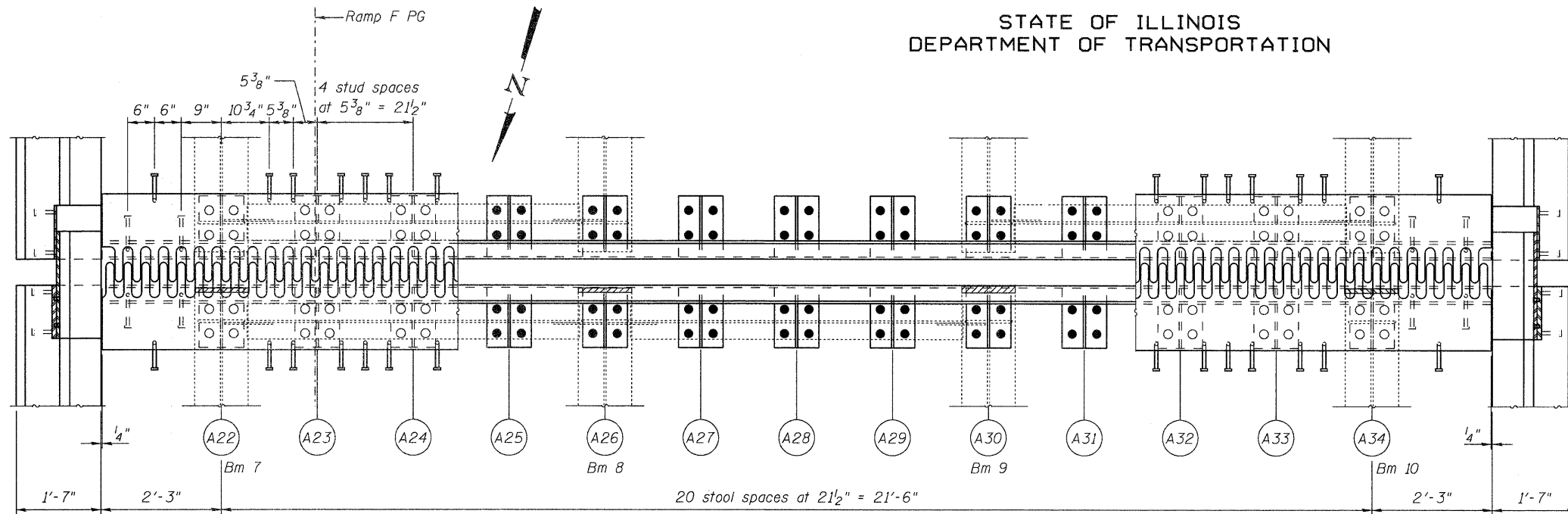
RAMP E
PIER 3 FINGER PLATE
SN 082-0217 & 0218

DESIGNED <i>B. Williams</i>	EXAMINED <i>Jan 15, 2018</i> <i>J. Carl Perry</i> ENGINEER OF STRUCTURAL SERVICES
CHECKED <i>J. Uehle</i>	PASSED <i>Ralph E. Anderson</i> ENGINEER OF BRIDGES AND STRUCTURES
DRAWN <i>A. Holloway</i>	
CHECKED <i>J. Uehle</i>	

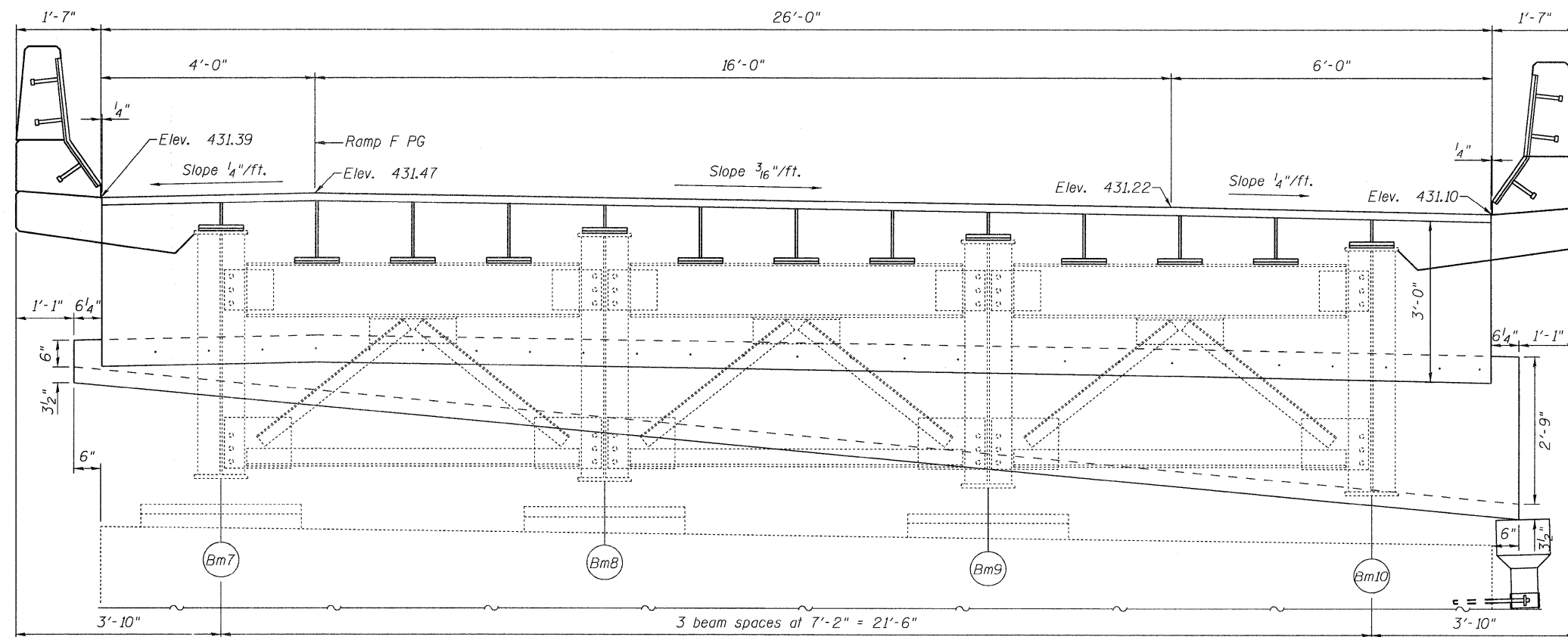
Beam end removal. See sheet 11 of 16 for details.

SHEET NO. 9 16 SHEETS	F.A.I. RTE. 255	SECTION 82-7HB-1	COUNTY ST. CLAIR	TOTAL SHEETS 43	SHEET NO. 16
	CONTRACT NO. 76C33			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	

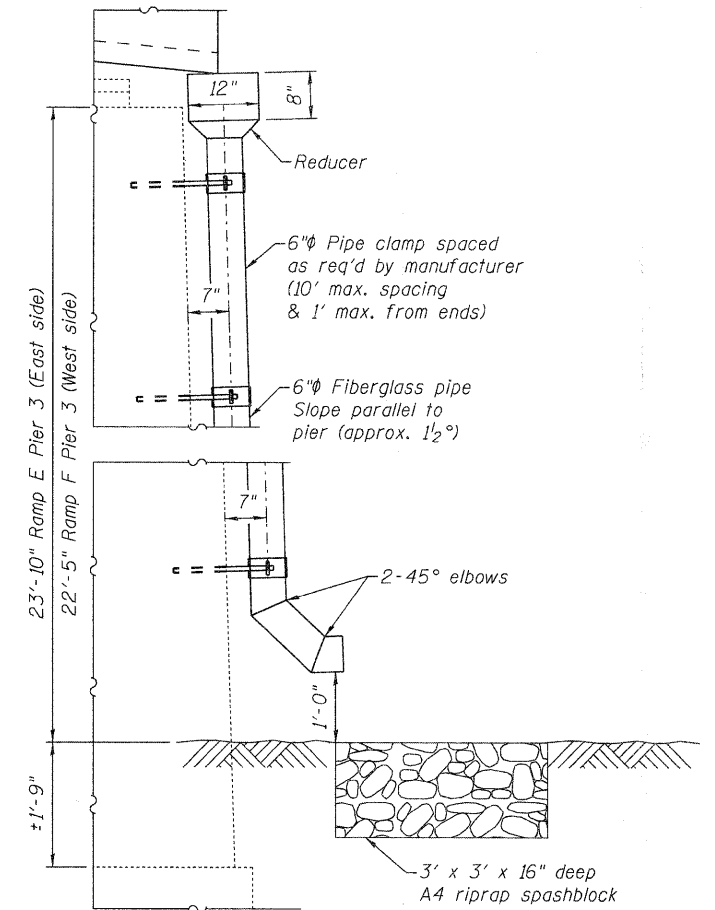
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



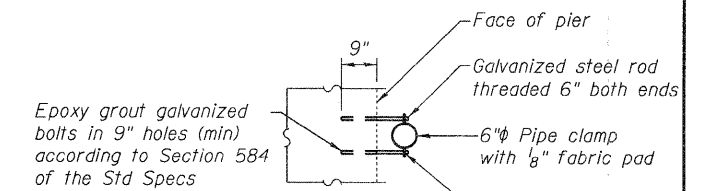
PLAN
(Pier 3 - Ramp F)



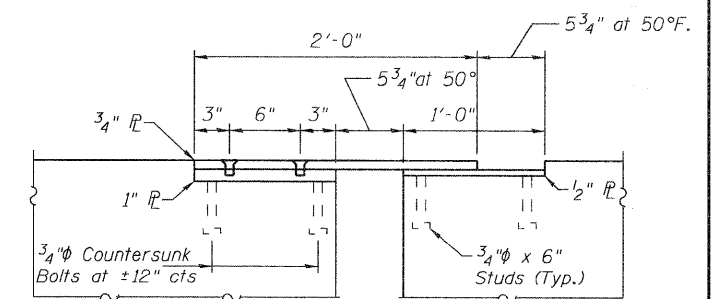
ELEVATION (SECTION I-I)
(Looking South)



DRAIN PIPE DETAILS
(Pier 3 Ramp E - Looking North)
(Pier 3 Ramp F - Looking South)



PIPE CLAMP DETAIL



PARAPET SLIDING PLATE DETAIL

**RAMP F
PIER 3 FINGER PLATE
SN 082-017 & 0218**

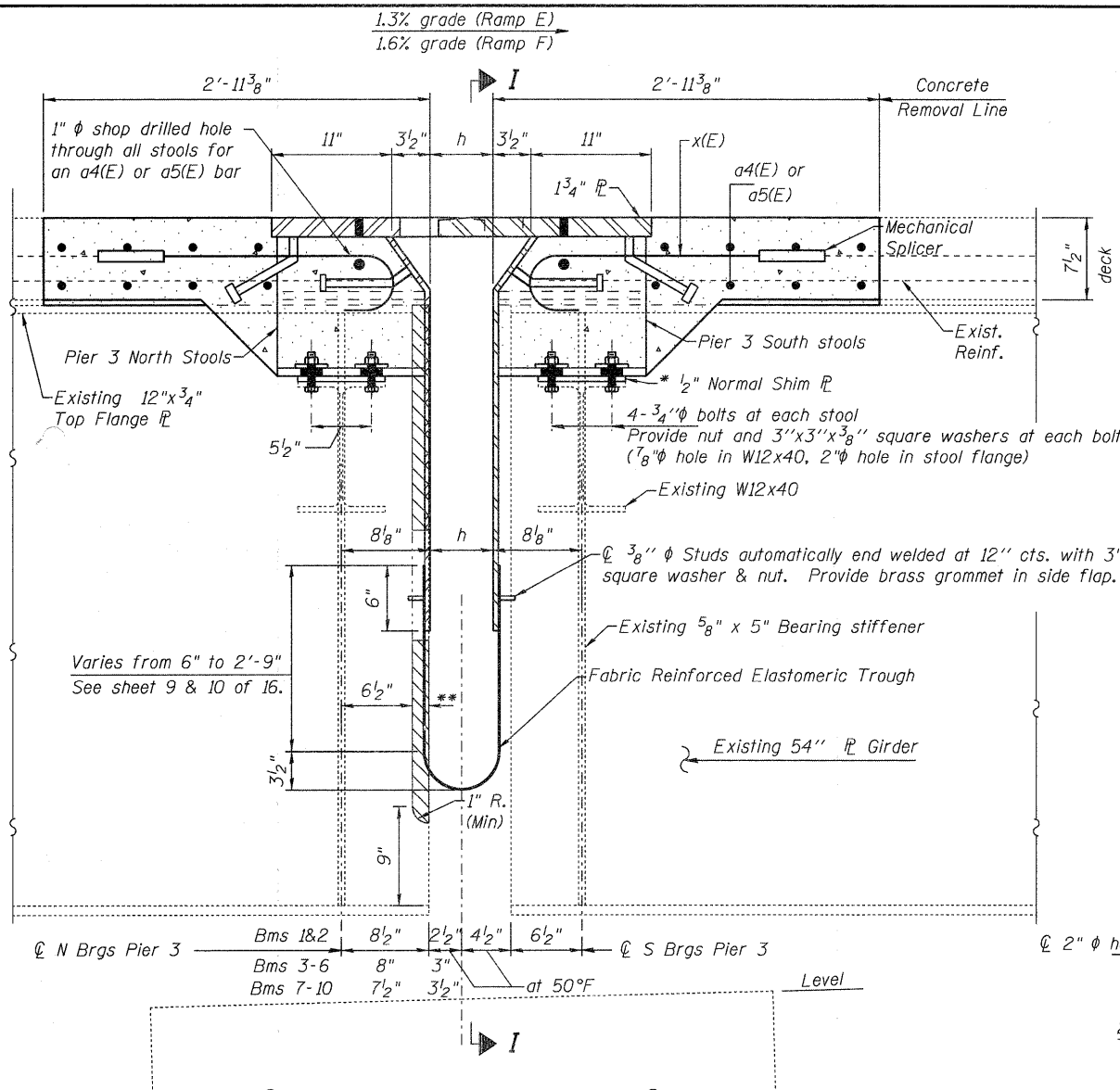
DESIGNED	A. Holloway
CHECKED	J. Uehle
DRAWN	A. Holloway
CHECKED	J. Uehle

EXAMINED	<i>R. Calvey</i> ENGINEER OF STRUCTURAL SERVICES
PASSED	<i>Ralph E. Anderson</i> ENGINEER OF BRIDGES AND STRUCTURES

Beam end removal. See sheet 11 of 16 for details.

SHEET NO. 10 16 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	255	82-7HB-I	ST. CLAIR	43	17
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT		
			CONTRACT NO. 76C33		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



SECTION F-F
(Looking East)
(Section shown rotated level to grade)

Notes: See sheets 9 & 10 of 16 for stool locations & Section I-I.

- Stool heights are measured at ϕ of bearings.
- All plates shall be AASHTO M270, Gr. 50.
- Existing shear studs that interfere with the finger plate stool shall be removed using the air-arc method and grind smooth all weld material remaining on the top flange. Cost included with Finger Plate Expansion Joint, 5".
- Finger Plate Expansion Joints shall be assembled in the proper position with the ends in place and shall be left assembled for shop inspection.
- Existing reinforcement shall extend 6" min. into the removal area to allow attachment of the mechanical splicers.

DESIGNED	J. Uehle
CHECKED	A. Hallway
DRAWN	J. Uehle
CHECKED	A. Hallway

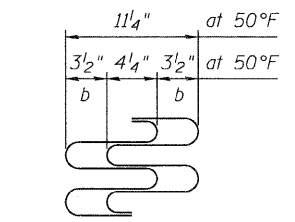
May 8, 2009
EXAMINED *Carl Perry*
ENGINEER OF STRUCTURAL SERVICES
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

RAMP E DIMENSION A

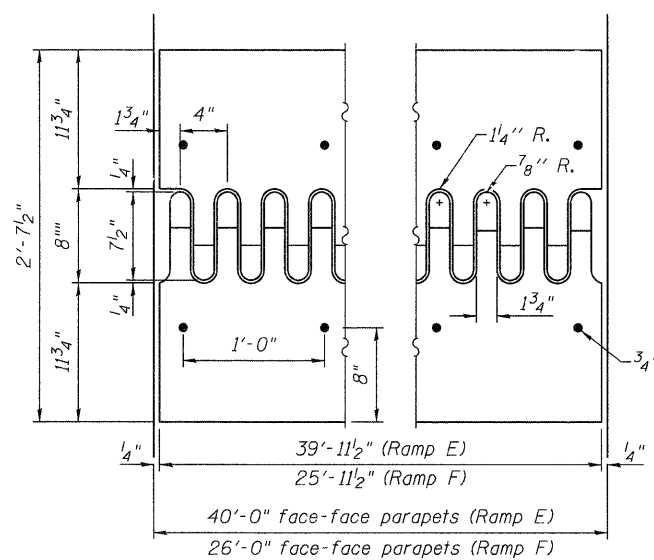
Stool No.	Height
A2	9 ¹⁵ / ₁₆ "
A3	10 ³ / ₈ "
A4	10 ¹³ / ₁₆ "
A6	11 ¹¹ / ₁₆ "
A7	12"
A8	12 ⁵ / ₁₆ "
A10	13"
A11	13 ⁵ / ₁₆ "
A12	13 ¹¹ / ₁₆ "
A14	14 ³ / ₈ "
A15	14 ¹¹ / ₁₆ "
A16	15"
A18	15 ¹¹ / ₁₆ "
A19	15 ⁷ / ₈ "
A20	15 ⁷ / ₁₆ "

RAMP F DIMENSION A

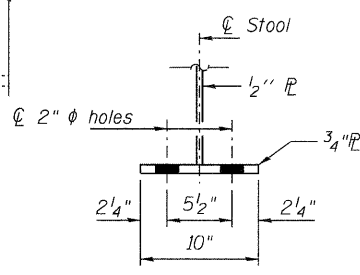
Stool No.	Height
A23	13 ⁷ / ₁₆ "
A24	13 ¹ / ₁₆ "
A25	12 ³ / ₄ "
A27	12 ¹ / ₁₆ "
A28	11 ³ / ₄ "
A29	11 ⁷ / ₁₆ "
A31	10 ³ / ₄ "
A32	10 ³ / ₈ "
A33	9 ¹⁵ / ₁₆ "



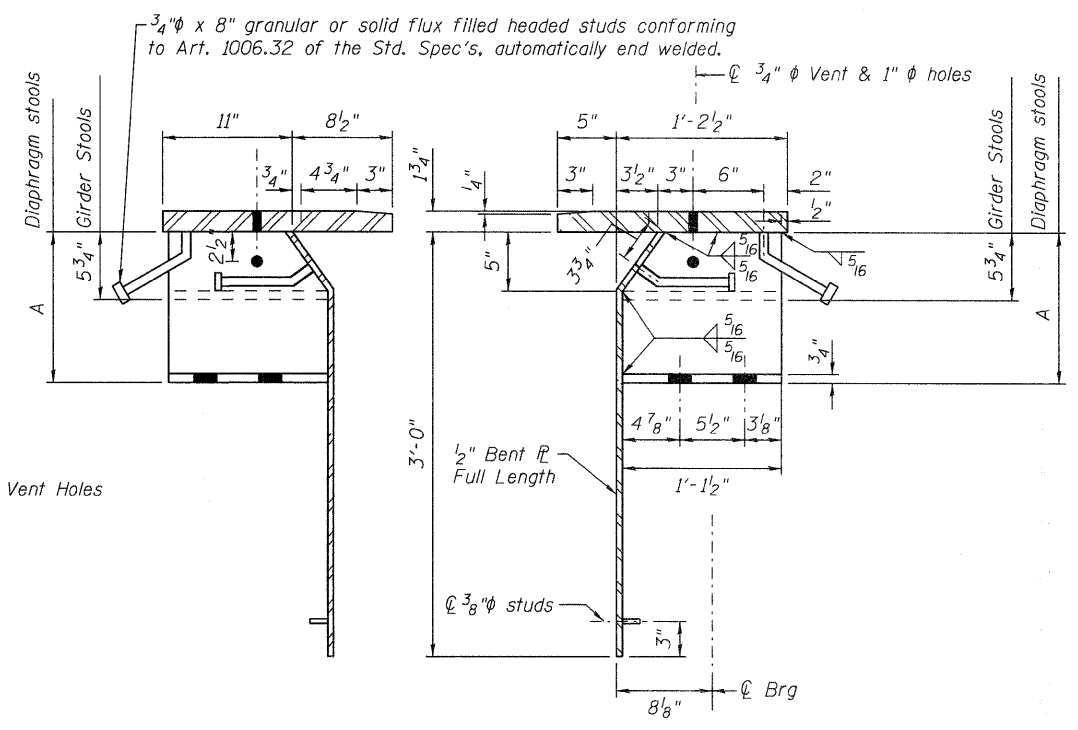
FINGER DETAILS



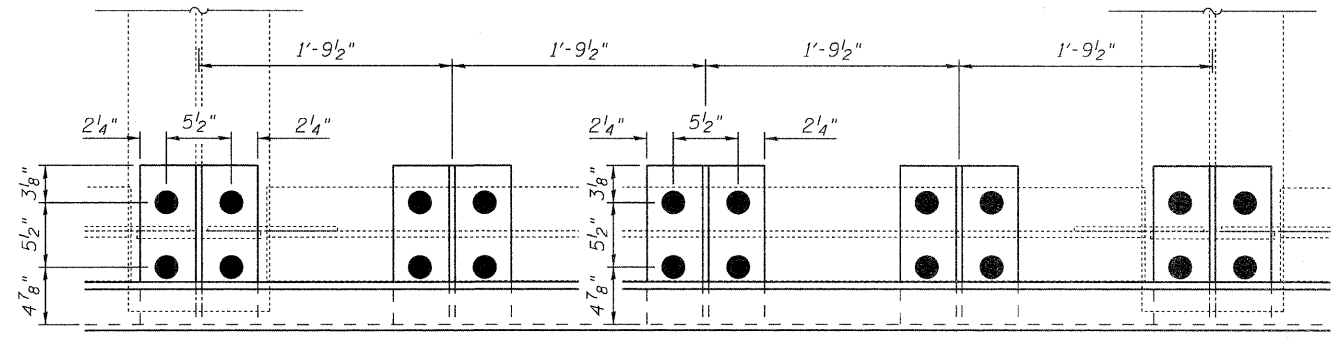
FLAME CUTTING DIAGRAM
(Cut from M270 Gr. 50 PL)



STOOL SECTION



STOOLS
(Looking East)



PARTIAL PLAN OF STOOLS

Pier 3 Ramp E (431' Expansion Length)

Temp.	b	h
-30°F	6 ¹ / ₈ "	8 ³ / ₈ "
50°F	3 ¹ / ₂ "	5 ³ / ₄ "
130°F	7 ⁸ / ₈ "	3 ¹ / ₈ "

Pier 3 Ramp F (376' Expansion Length)

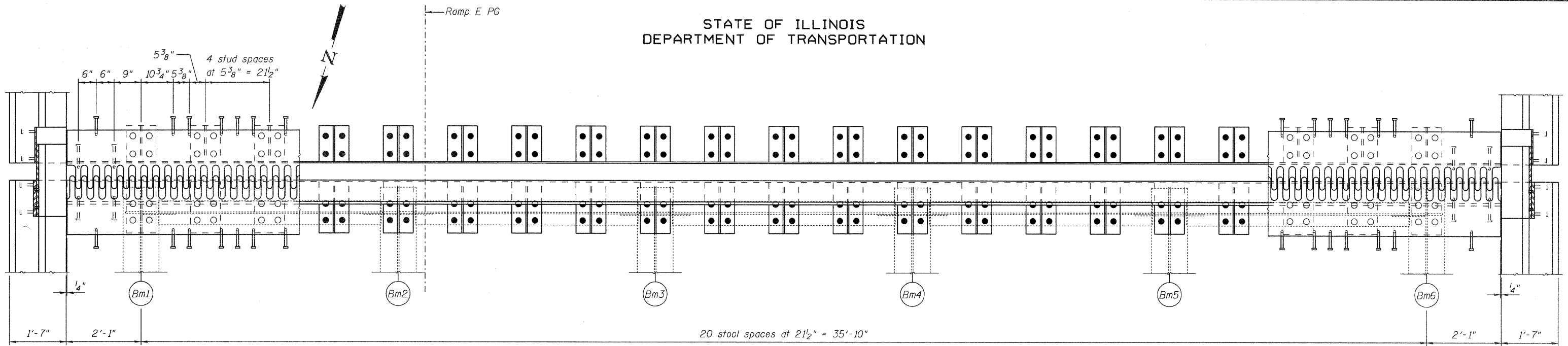
Temp.	b	h
-30°F	5 ⁷ / ₈ "	8 ¹ / ₈ "
50°F	3 ¹ / ₂ "	5 ³ / ₄ "
130°F	1 ¹ / ₈ "	3 ³ / ₈ "

- * Provide 1/2" normal shim, plus one 1/4" shim, plus one 1/8" shim, and one 1/16" shim for height adjustment. Tapered shims shall be added under the stools as required by the Engineer to make a smooth finger joint.
- ** Cut off the top flange & webs of the 6 north side plate girders. Remove 2" (Beams 1 & 2), 1 1/2" (Beams 3-6), and 1" (Beams 7-10)

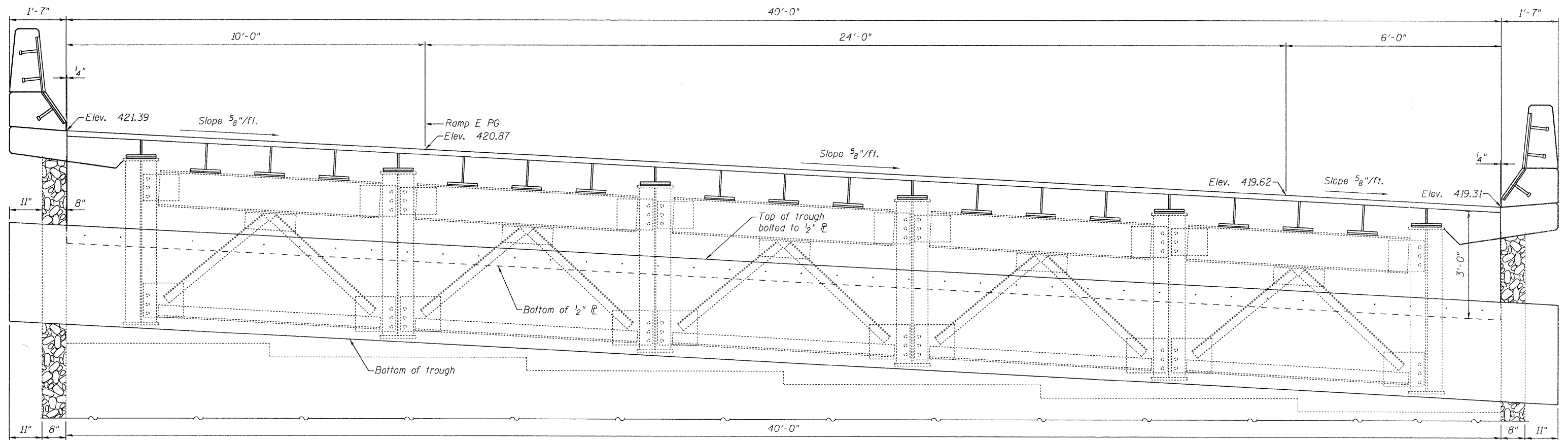
**RAMPS E & F
PIER 3 FINGER PLATE DETAILS
SN 082-0217 & 0218**

SHEET NO. 11 16 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	255	82-7HB-1	ST. CLAIR	43	18
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT IM-255()		
CONTRACT NO. 76C33					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



PLAN



ELEVATION (SECTION J-J)
(Diaphragm & Girder Stools Looking South)

DESIGNED	A. Hallowsy
CHECKED	J. Uehle
DRAWN	A. Hallowsy
CHECKED	J. Uehle

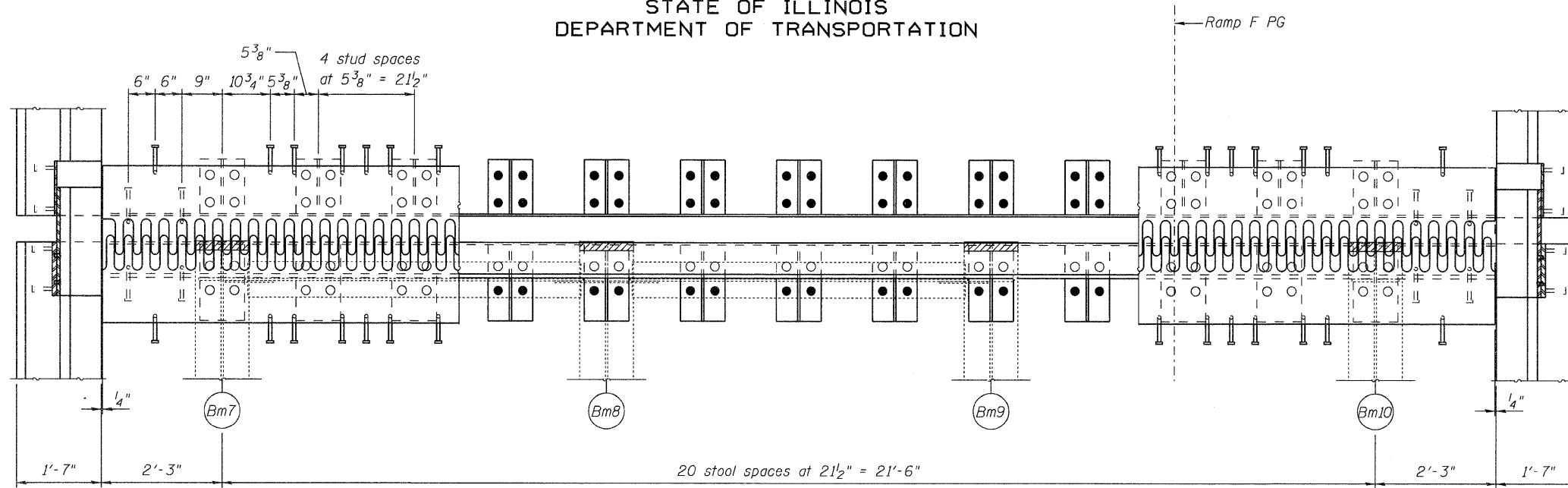
Jan 15, 2010
 EXAMINED *Carl Perry*
 ENGINEER OF STRUCTURAL SERVICES
 PASSED *Ralph E. Anderson*
 ENGINEER OF BRIDGES AND STRUCTURES

Elevations are at \odot Brg.

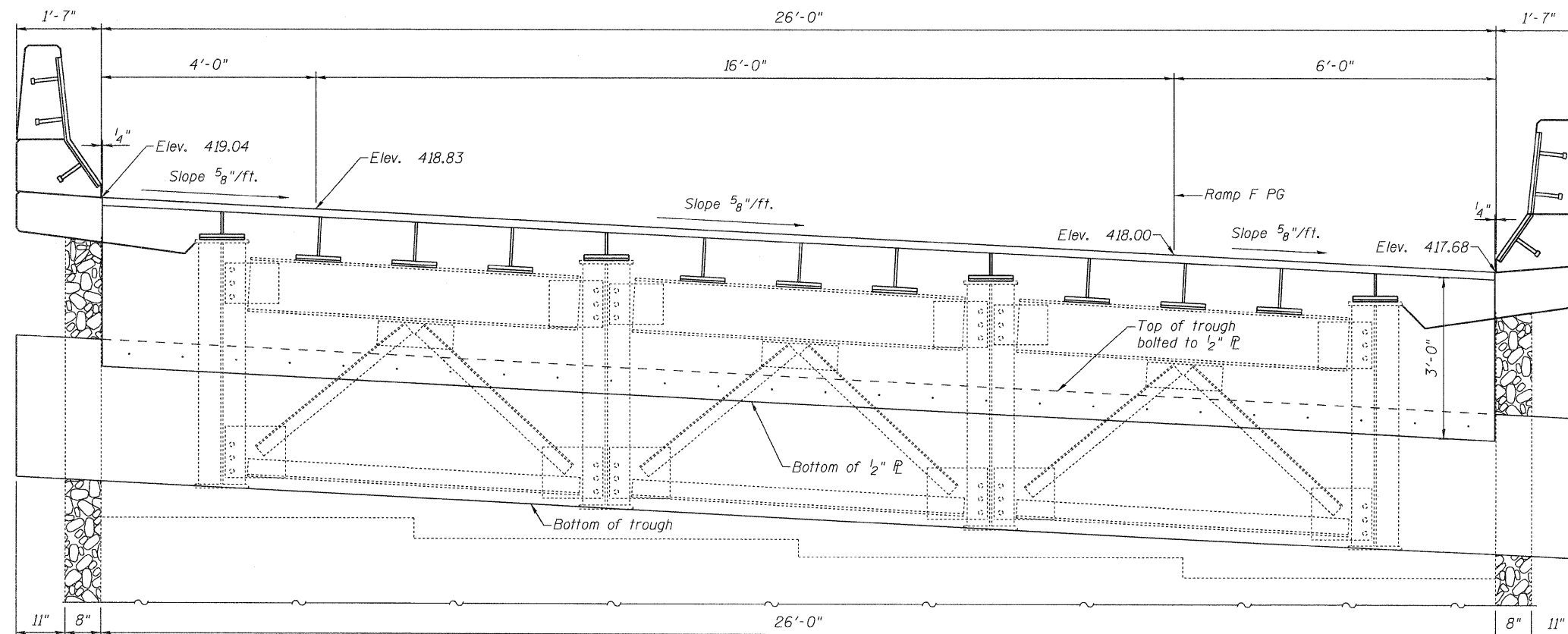
SHEET NO. 12 16 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	255	82-7HB-I	ST. CLAIR	43	19
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT		
CONTRACT NO. 76C33					

RAMP E
SOUTH ABUTMENT FINGER PLATE
SN 082-0217 & 0218

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



PLAN



ELEVATION (SECTION J-J)
(Diaphragm & Girder Stools Looking South)

RAMP F
SOUTH ABUTMENT FINGER PLATE
SN 082-0217 & 0218

DESIGNED	A. Halloway
CHECKED	J. Uehle
DRAWN	A. Halloway
CHECKED	J. Uehle

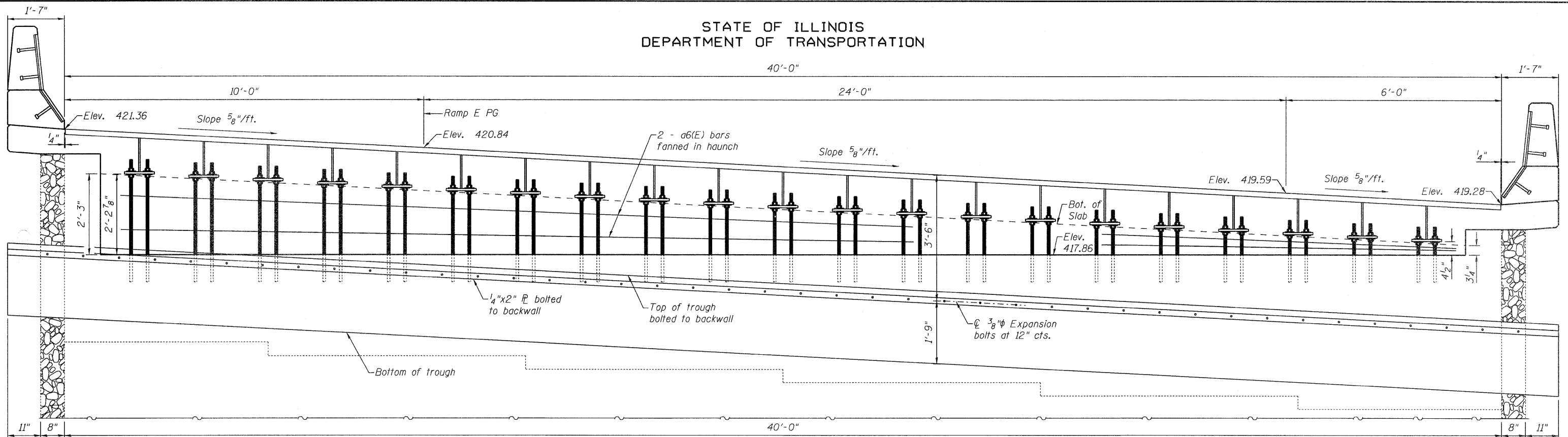
EXAMINED	<i>Carl King</i> ENGINEER OF STRUCTURAL SERVICES	Jan 15, 2010
PASSED	<i>Ralph E. Anderson</i> ENGINEER OF BRIDGES AND STRUCTURES	

Beam end removal. See sheet 11 of 16 for details.

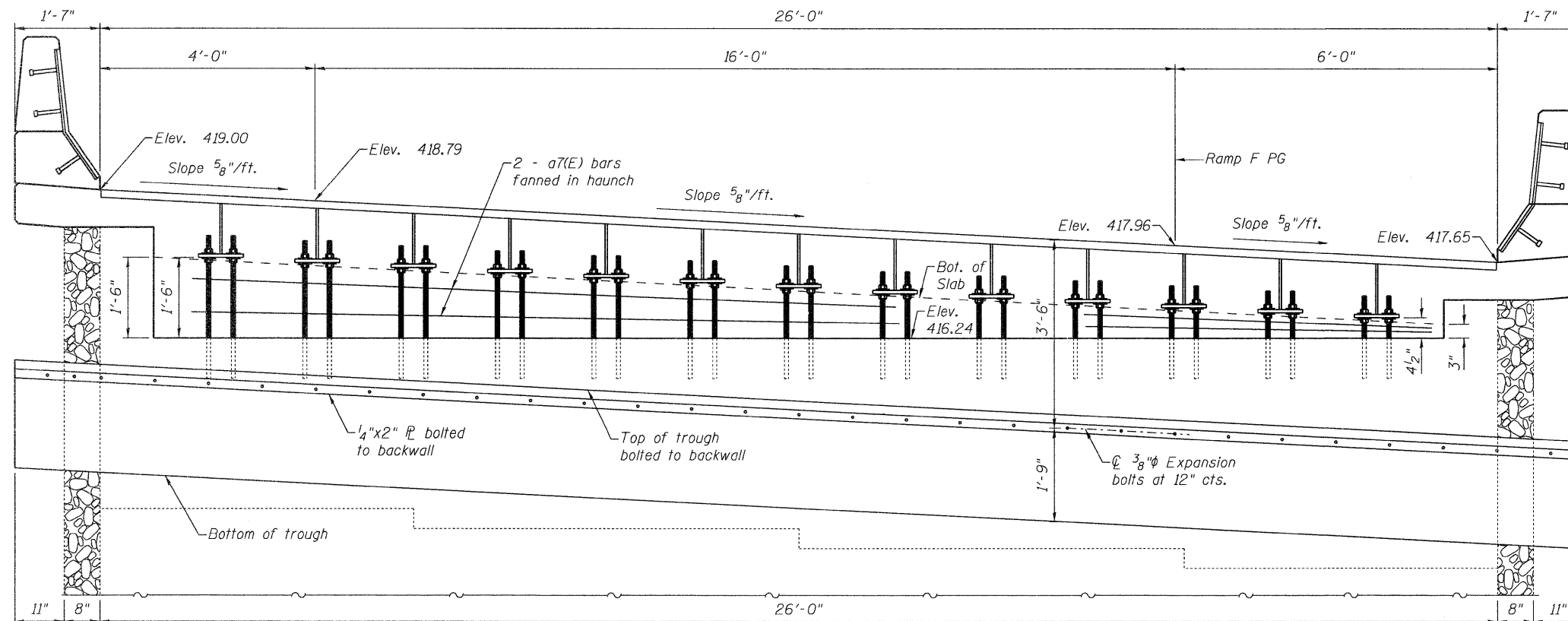
Elevations are at \odot Brg.

SHEET NO. 13 16 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	255	82-7HB-I	ST. CLAIR	43	20
FED. ROAD DIST. NO.			ILLINOIS	FED. AID PROJECT	
			CONTRACT NO. 76C33		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



RAMP E ELEVATION (SECTION K-K)
(South Abutment - Looking South)



RAMP F ELEVATION (SECTION K-K)
(South Abutment - Looking South)

RAMPS E & F
SOUTH ABUTMENT ELEVATION
SN 082-0217 & 0218

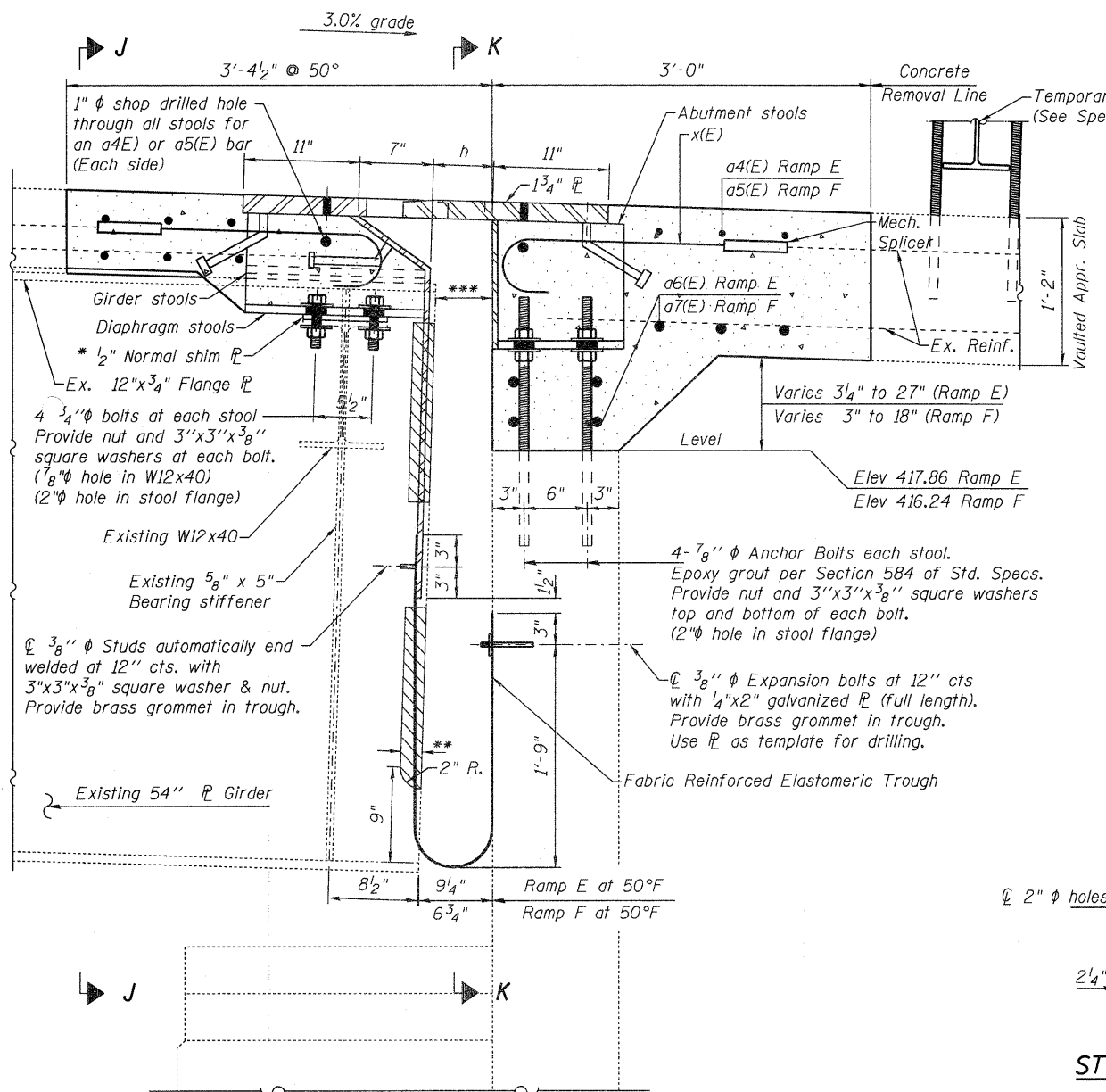
DESIGNED	A. Halloway
CHECKED	J. Uehle
DRAWN	A. Halloway
CHECKED	J. Uehle

EXAMINED *Jan 15, 2018*
Carl Perry
ENGINEER OF STRUCTURAL SERVICES
PASSED *Robert E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

Elevations are at
Front Face of Backwall.

SHEET NO. 14 16 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	255	82-7HB-1	ST. CLAIR	43	21
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT		
			CONTRACT NO. 76C33		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



SECTION H-H
(Looking East)

Notes: See sheet 12 & 14 of 16 for stool locations & Section J-J.

See sheet 13 & 15 of 16 for Section K-K.

Stool heights are measured at ϕ of bearings.

All plates shall be AASHTO M270, Gr. 50.

Existing shear studs that interfere with the finger plate stool shall be removed using the air-arc method and grind smooth all weld material remaining on the top flange. Cost included with Finger Plate Expansion Joint, 5".

Finger Plate Expansion Joints shall be assembled in the proper position with the ends in place and shall be left assembled for shop inspection.

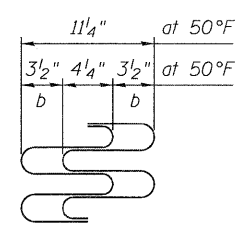
Existing reinforcement shall extend 6" min. into the removal area to allow attachment of the mechanical splicers.

DESIGNED	J. Uehle
CHECKED	A. Hallway
DRAWN	J. Uehle
CHECKED	A. Hallway

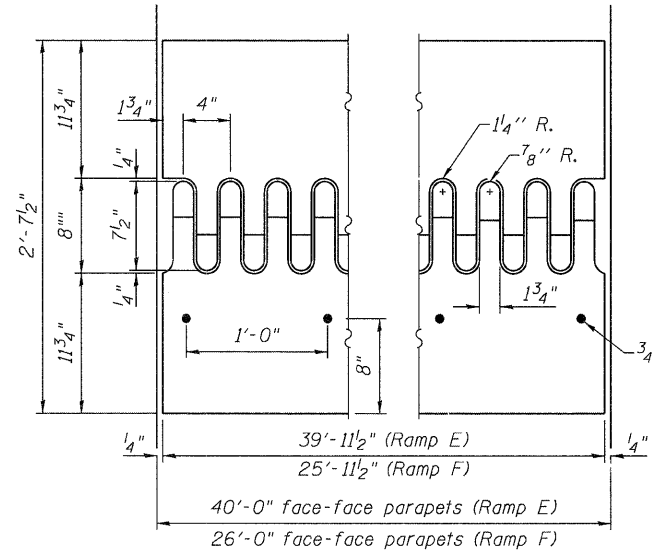
May 8, 2009
EXAMINED *Carl Perry*
ENGINEER OF STRUCTURAL SERVICES
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

S Abut Ramps E & F
(408' Expansion Length)

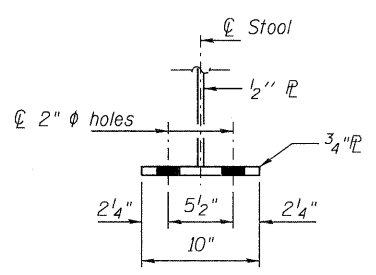
Temp.	b	h
-30°F	6"	8 1/4"
50°F	3 1/2"	5 3/4"
130°F	1"	3 1/4"



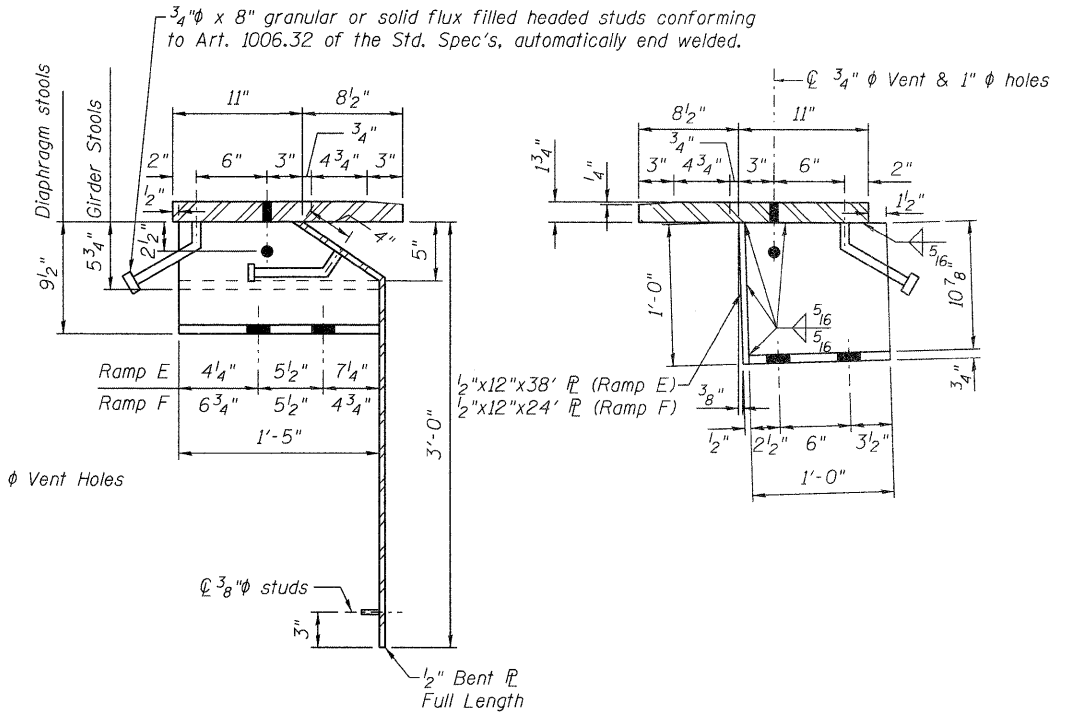
FINGER DETAILS



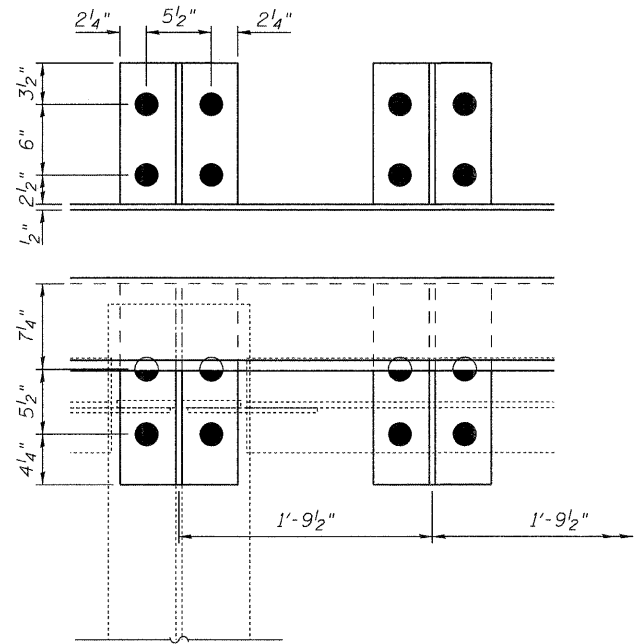
FLAME CUTTING DIAGRAM
(Cut from M270 Gr. 50 \bar{R})



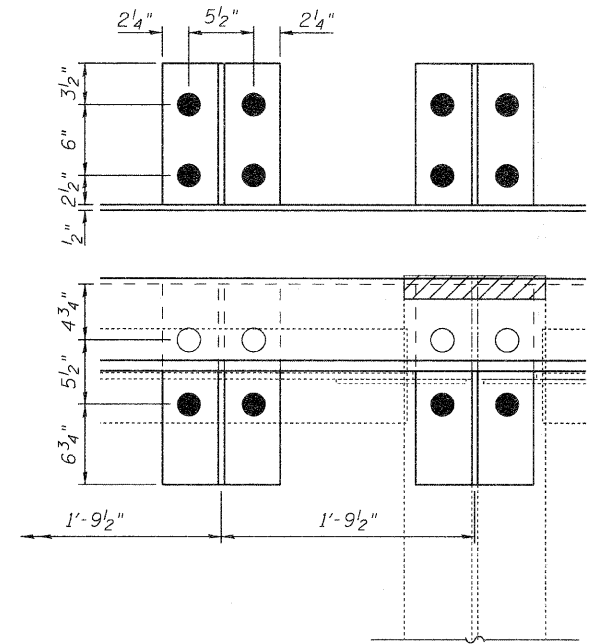
STOOL SECTION



STOOLS
(Looking East)



PARTIAL PLAN OF RAMP E STOOLS



PARTIAL PLAN OF RAMP F STOOLS

* Provide 1/2" normal shim, plus one 1/4" shim, plus one 1/8" shim, and one 1/16" shim for height adjustment. Tapered shims shall be added under the stools as required by the Engineer to make a smooth finger joint.

** Cut 2" from the top flange & webs of the 4 plate girders at Ramp F only (beams 7-10).

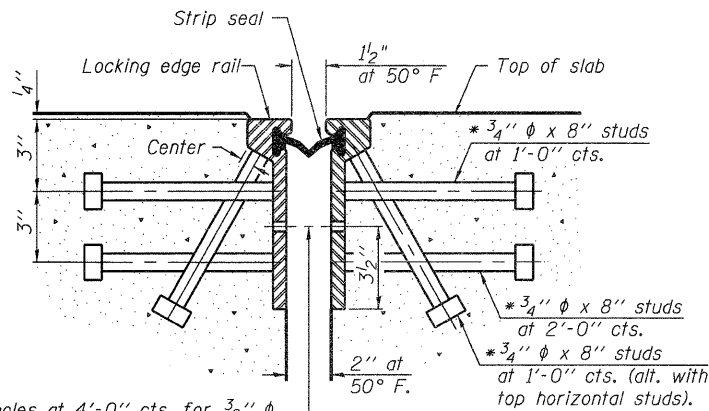
*** 8" at 50°F (Ramp E); 5 1/2" at 50°F (Ramp F) calculated from field measurements.

RAMPS E & F
S ABUTMENT FINGER PLATE DETAILS
SN 082-0217 & 0218

SHEET NO. 15 16 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	255	82-7HB-1	ST. CLAIR	43	22
			CONTRACT NO. 76C33		
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	IM-255()	

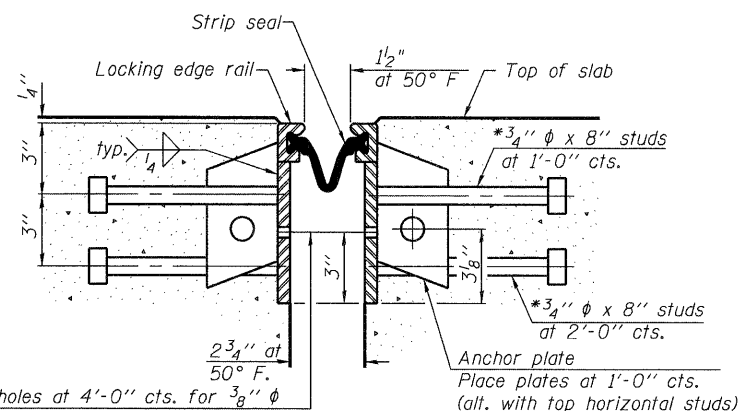
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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



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

SECTION THRU
ROLLED RAIL JOINT



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

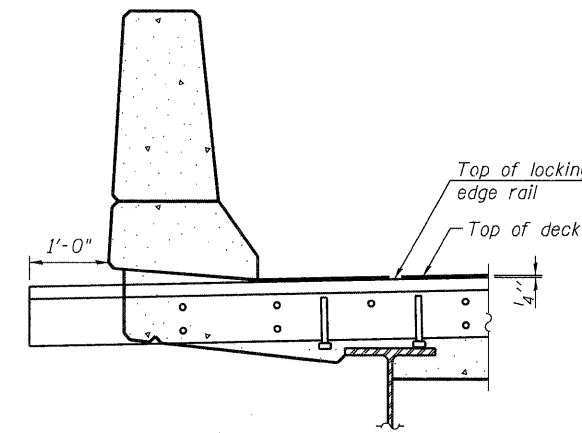
SECTION THRU
WELDED RAIL JOINT

Notes:

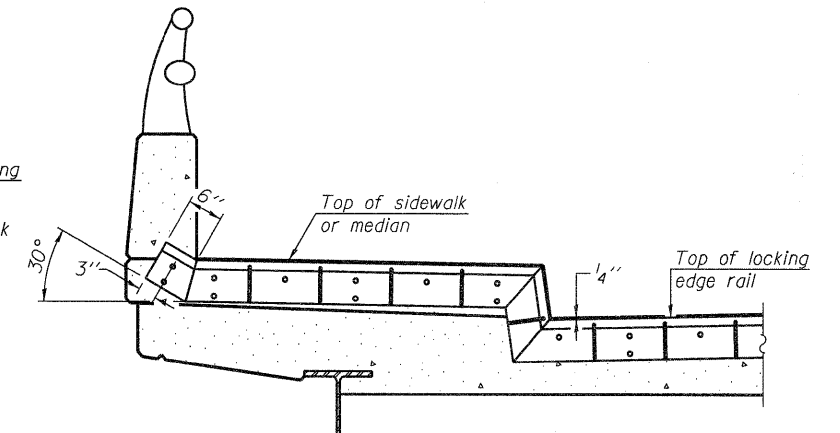
The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches. The height and thickness of the Locking Edge Rails shown are minimum dimensions. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities and stage construction joints.

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

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

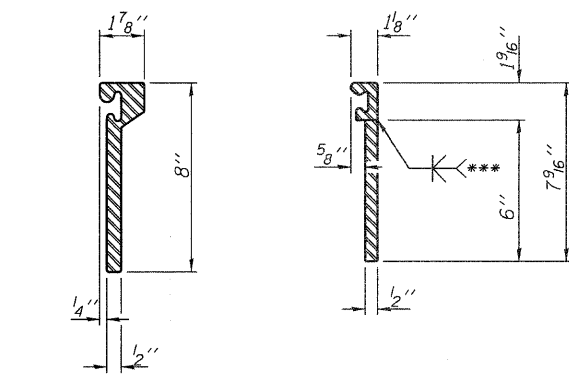


AT PARAPET

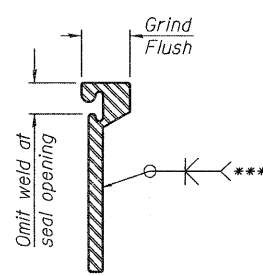


AT SIDEWALK OR MEDIAN

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



ROLLED
EXTRUDED RAIL WELDED RAIL

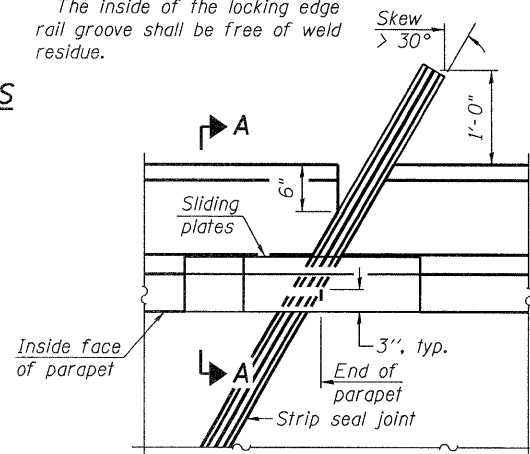


***Back gauge not required if complete joint penetration is verified by mock-up.

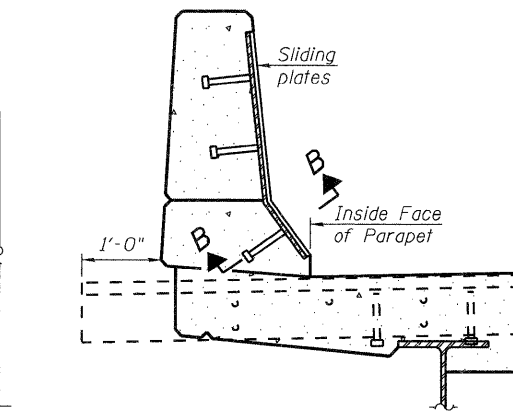
LOCKING EDGE
RAIL SPLICE

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

LOCKING EDGE RAILS

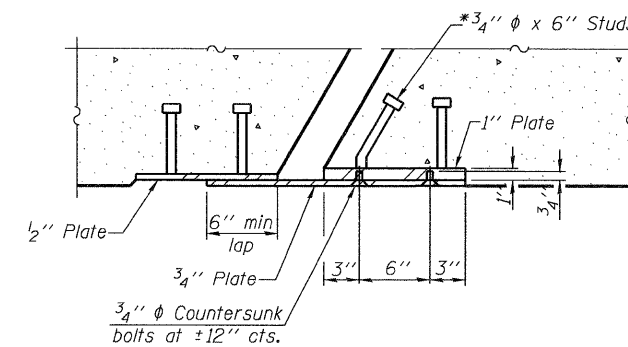


PLAN



SECTION A-A

POINT BLOCK DETAILS
(for skews > 30°)



SECTION B-B

TYPICAL END TREATMENTS

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	97.0

DESIGNED	J. Uehle
CHECKED	A. Hallway
DRAWN	J. Uehle
CHECKED	A. Hallway

EXAMINED	November 5, 2010 <i>De Carl Perry</i>
PASSED	<i>Ralph E. Anderson</i>

PREFORMED JOINT STRIP SEAL
SN 082-0217 & 0218

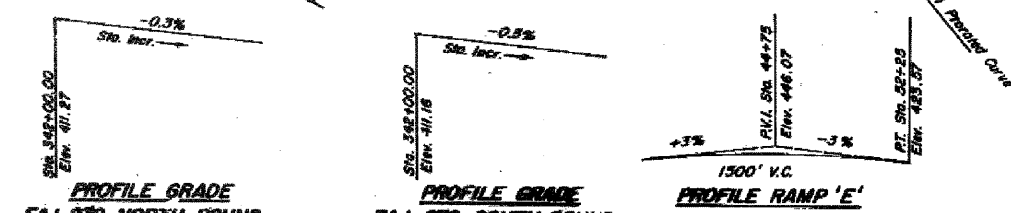
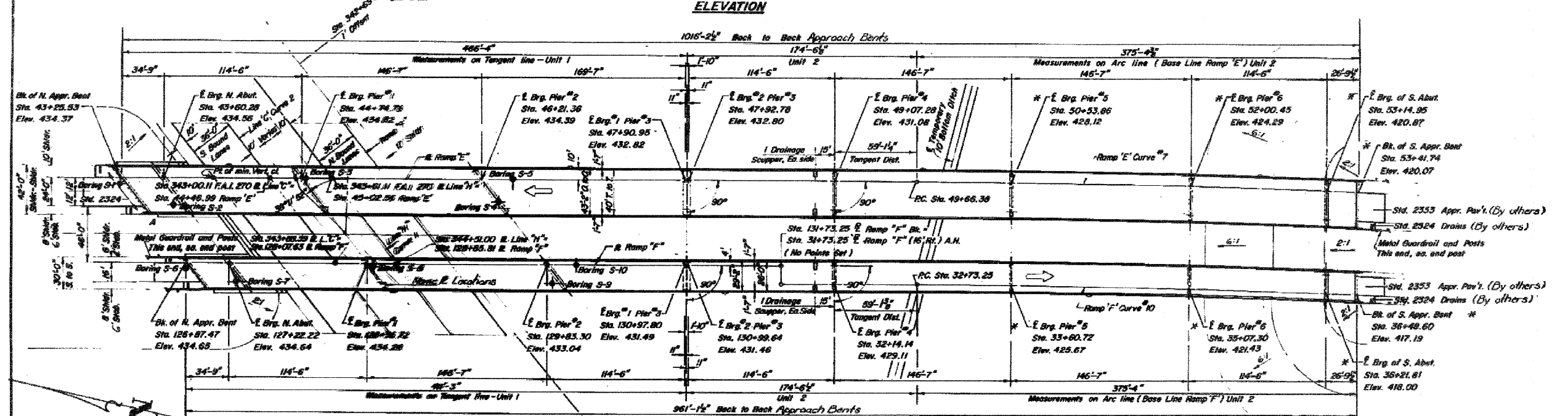
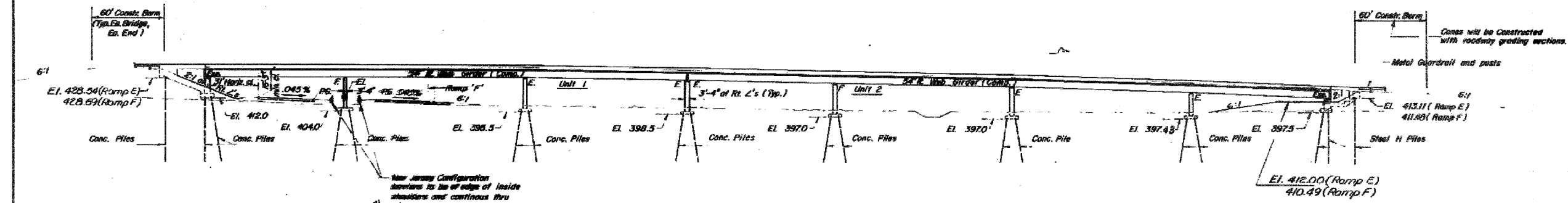
SHEET NO. 16	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
16 SHEETS	255	82-7HB-1	ST. CLAIR	43	23
CONTRACT NO. 76C33					
ILLINOIS FED. AID PROJECT					

B.M. Nail Head spike in south face 36" Cottonwood Tree.
 Benchmark TBM A-20 Station 338+92 Rt. 525' Elev. 409.99

No Existing Structure.

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

DATE	PROJECT	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. /
11-25-82	82-7HB	St. Clair	83	15	69 SHEETS



HORIZONTAL CURVE DATA			
Line 'H' Curve #1	Line 'C' Curve #2	Line 'E' Curve #7	Line 'F' Curve #10
PI = 347+59.77	PI = 347+85.87	PI = 59+18.60	PI = 34+73.98
Δ = 45° 43' 12"	Δ = 45° 43' 12"	Δ = 53° 00' 00"	Δ = 12° 00' 00"
D = 1° 30' 00"	D = 1° 30' 00"	D = 3° 00' 00"	D = 3° 00' 00"
R = 3819.72'	R = 3819.72'	T = 952.22'	T = 200.73'
T = 1610.37'	T = 1610.37'	R = 1909.86'	R = 1909.86'
L = 3048.00'	L = 3048.00'	L = 1766.67'	L = 400.00'
E = 325.59' S.E. = 0.45%	E = 325.59' S.E. = 0.45%	E = 224.22' S.E. = 0.52%	E = 10.52' S.E. = 0.52%
S.E. Attainment			
Sta. 49+58.38 to Sta. 50+20.38			
Sta. 131+73.25 to Sta. 33+23.25			
Range 10 W 3 rd P.M.			

DESIGN STRESSES

$f_c = 3500$ p.s.i.

$f_y = 60,000$ p.s.i. (Reinforcement)

$f_s = 27,000$ p.s.i. (M23 Grade 50)

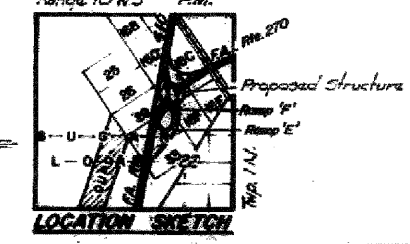
$f_b = 30,000$ p.s.i. (M183)

LOADING HS 20-44

Allow 25 lbs./sq. ft. for future wearing surfaces.

Design Specifications: 1977 AASHTO; 1978 and 1979 Interim Specifications, as applicable.

Epoxy Coated reinforcement bars shall be used in top layer of deck slab.



GENERAL PLAN
 FAL Rte. 410, Ramps 'E' & 'F' Over FAL 270
 FAL Rte. 270, Sec. 8E-7HB
 ST. CLAIR COUNTY
 Sta. 343+61.8 (FAL Rte. 270)

DESIGNED	Rev Brunette
CHECKED	Jim Konow
DRAWN	[Signature]
CHECKED	J.K.

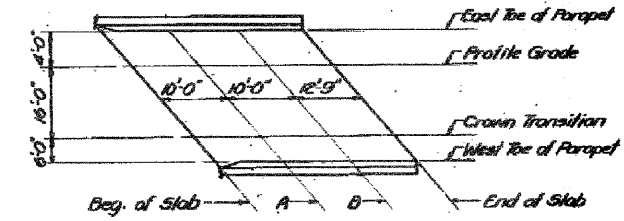
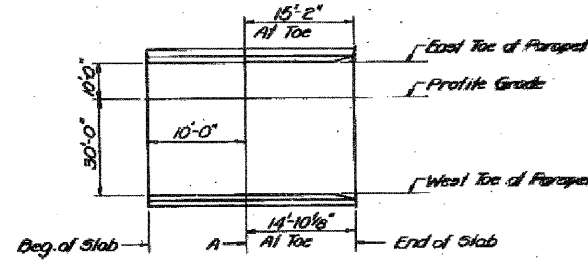
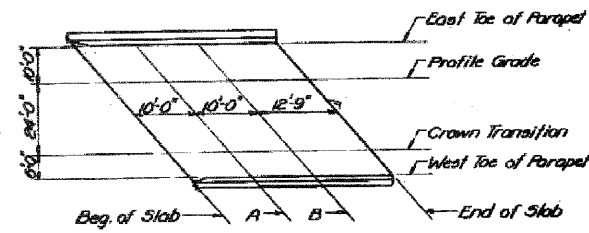
EXAMINED	[Signature]
PASSED	[Signature]
APPROVED	[Signature]



FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255-827HB	St. Clair	83	20	69



NORTH APPROACH-RAMP-E

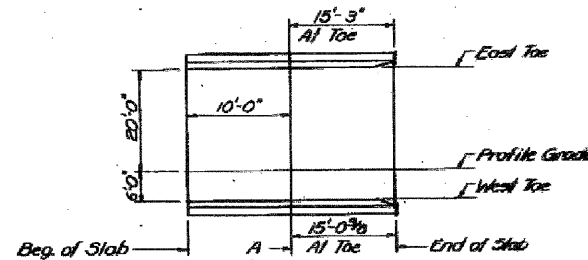
Line	Location	Station	Offset from PG	Top of Slab
East Toe	Beg. of Slab	43+18.297	-10.0	434.121
	A	43+28.297	-10.0	434.182
	B	43+38.297	-10.0	434.238
P.G.	Beg. of Slab	43+26.166	0.0	434.377
	A	43+36.166	0.0	434.435
	B	43+46.166	0.0	434.488
Crown Transition	Beg. of Slab	43+58.915	0.0	434.550
	A	43+45.051	24.0	434.857
	B	43+55.051	24.0	434.907
West Toe	Beg. of Slab	43+65.051	24.0	434.953
	A	43+77.800	24.0	435.006
	B	43+89.772	30.0	434.756
West Toe	Beg. of Slab	43+59.772	30.0	434.804
	A	43+69.772	30.0	434.849
	B	43+82.521	30.0	434.899

SOUTH APPROACH-RAMP-E

Line	Location	Radial Sta.	Rad. Off. from PG	Top of Slab
East Toe	Beg. of Slab	53+16.154	-10.0	421.566
	A	53+26.154	-10.0	421.655
	B	53+41.243	-10.0	420.863
P.G.	Beg. of Slab	53+16.158	0.0	420.555
	A	53+26.158	0.0	420.555
	B	53+41.240	0.0	420.583
West Toe	Beg. of Slab	53+16.180	30.0	419.275
	A	53+26.180	30.0	419.375
	B	53+41.232	30.0	419.523

NORTH APPROACH-RAMP-F

Line	Location	Station	Offset from PG	Top of Slab
East Toe	Beg. of Slab	126+84.959	-4.0	434.562
	A	126+94.959	-4.0	434.567
	B	127+04.959	-4.0	434.567
P.G.	Beg. of Slab	127+17.708	-4.0	434.561
	A	126+88.106	0.0	434.647
	B	126+98.106	0.0	434.650
Crown Transition	Beg. of Slab	127+08.106	0.0	434.649
	A	127+20.855	0.0	434.641
	B	127+00.596	16.0	434.400
West Toe	Beg. of Slab	127+10.696	16.0	434.398
	A	127+20.696	16.0	434.391
	B	127+33.445	16.0	434.378
West Toe	Beg. of Slab	127+05.417	22.0	434.274
	A	127+15.417	22.0	434.270
	B	127+25.417	22.0	434.262
West Toe	Beg. of Slab	127+38.166	22.0	434.245
	A			
	B			



SOUTH APPROACH-RAMP-F

Line	Location	Radial Sta.	Rad. Off. from PG	Top of Slab
East Toe	Beg. of Slab	36+23.006	-20.0	419.004
	A	36+33.006	-20.0	418.704
	B	36+48.105	-20.0	418.252
P.G.	Beg. of Slab	36+23.018	0.0	417.964
	A	36+33.018	0.0	417.664
	B	36+48.100	0.0	417.212
West Toe	Beg. of Slab	36+23.022	6.0	417.652
	A	36+33.022	6.0	417.352
	B	36+48.098	6.0	416.900

DESIGNED	By: Rick Brunette	DATE	May 31, 1981
CHECKED	By: Jim M... ..		
APPROVED	By: S.B. Bachow		
	By: J.H.		

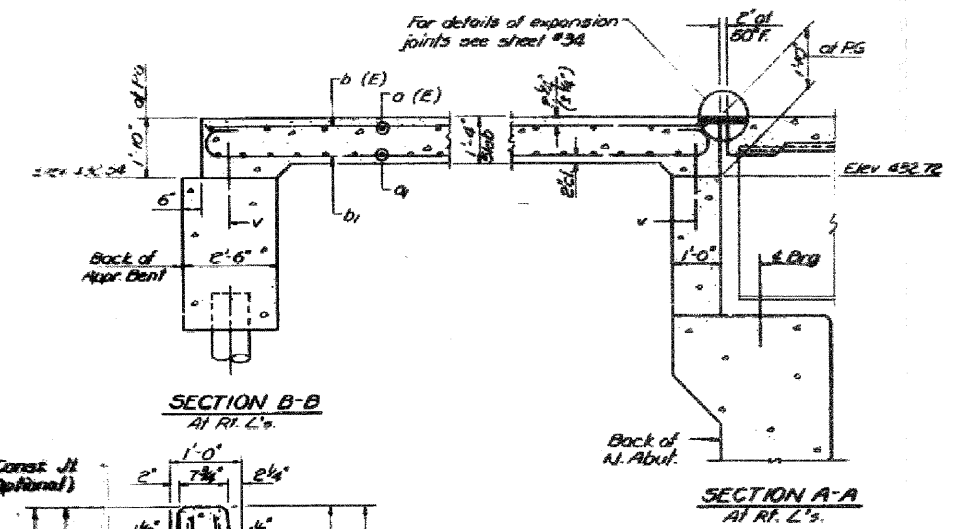
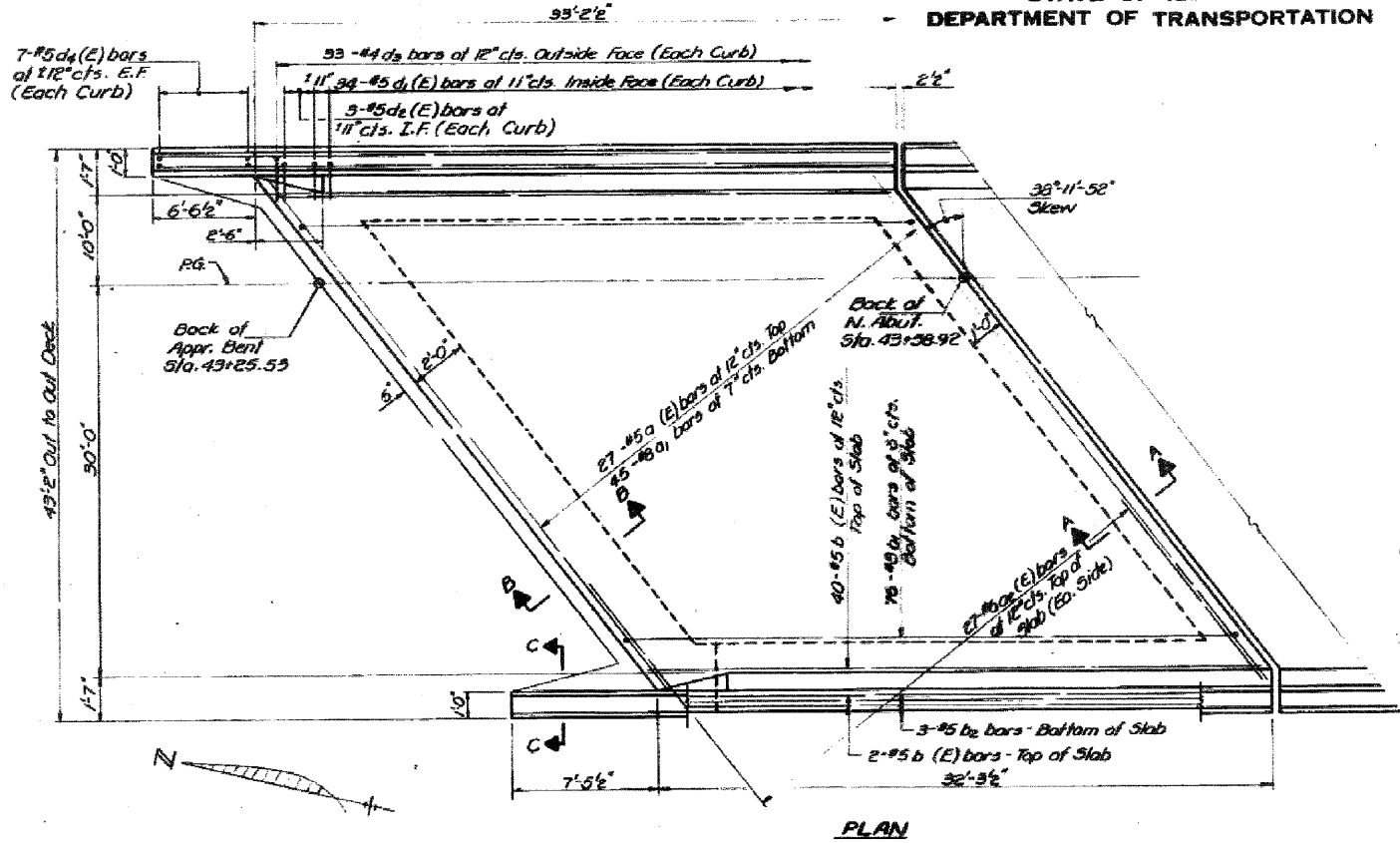
APPROACHES-RAMPS E-F
TOP OF SLAB ELEVATIONS
F.A.I. RT. 270 - SEC. 82-7HB
ST. CLAIR COUNTY
STATION 343+61.11

FOR INFORMATION ONLY

FILE NAME =	USER NAME = #USER#	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING STRUCTURE PLANS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
#FILE#		DRAWN -	REVISED -			255	82-7HB-1	ST. CLAIR	43	25	
		CHECKED -	REVISED -			SCALE: NA	SHEET NO. 2 OF 20 SHEETS	TO STA.	CONTRACT NO. 76C33		
		DATE -	REVISED -			FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255-82-7HB	St. Clair	83	31	69

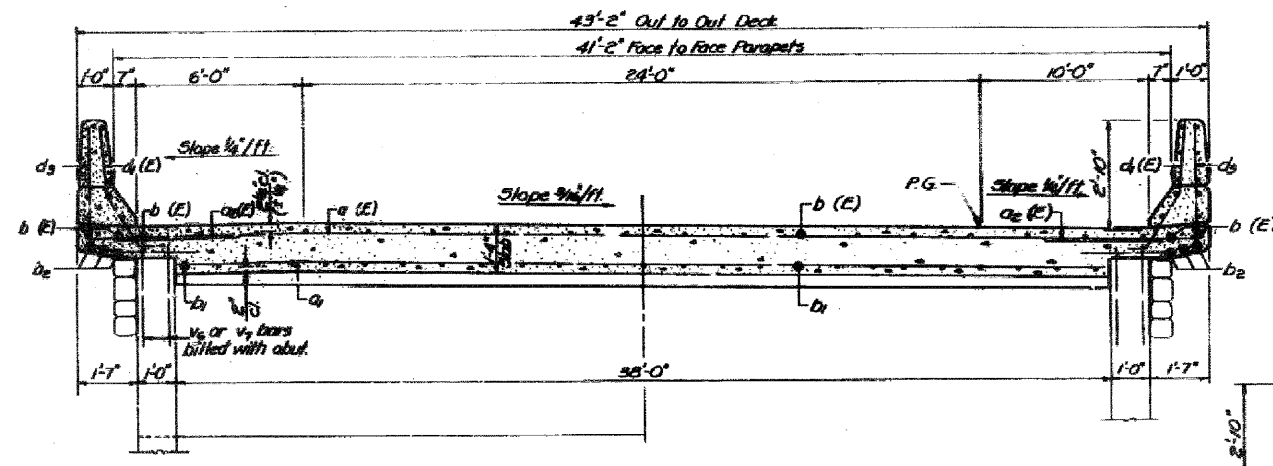


Note: Parapet Class X Concrete and reinforcement are billed with superstructure.

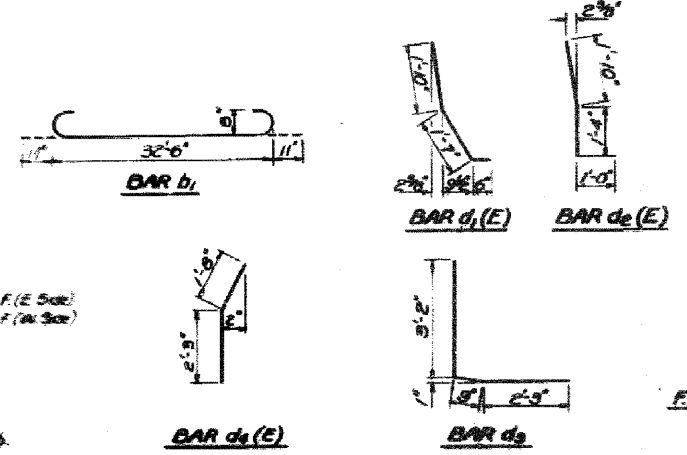
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a1(E)	27	#5	32'-5"	
a2	45	#8	48'-0"	
a2(E)	54	#6	4'-0"	
b1(E)	44	#5	32'-5"	
b2	76	#8	39'-4"	
b2	6	#5	38'-6"	
d1	4	#5	6'-0"	
d1	4	#5	7'-2"	
d1(E)	68	#5	3'-11"	L
d2(E)	6	#5	4'-2"	L
d2	66	#4	6'-2"	L
d2(E)	28	#5	3'-11"	L

Reinforcement Bars Lbs. 13,260
Reinforcement Bars (Epoxy Coated) Lbs. 2710
Class X Concrete Cu.Yds. 70.8



SECTION THRU PARAPET



DESIGNED	May 7 1981
CHECKED	
DRAWN	
APPROVED	

GROSS SECTION
At Rt. L's
Looking North

SECTION C-C
*This quantity to be billed with Approach Slab.

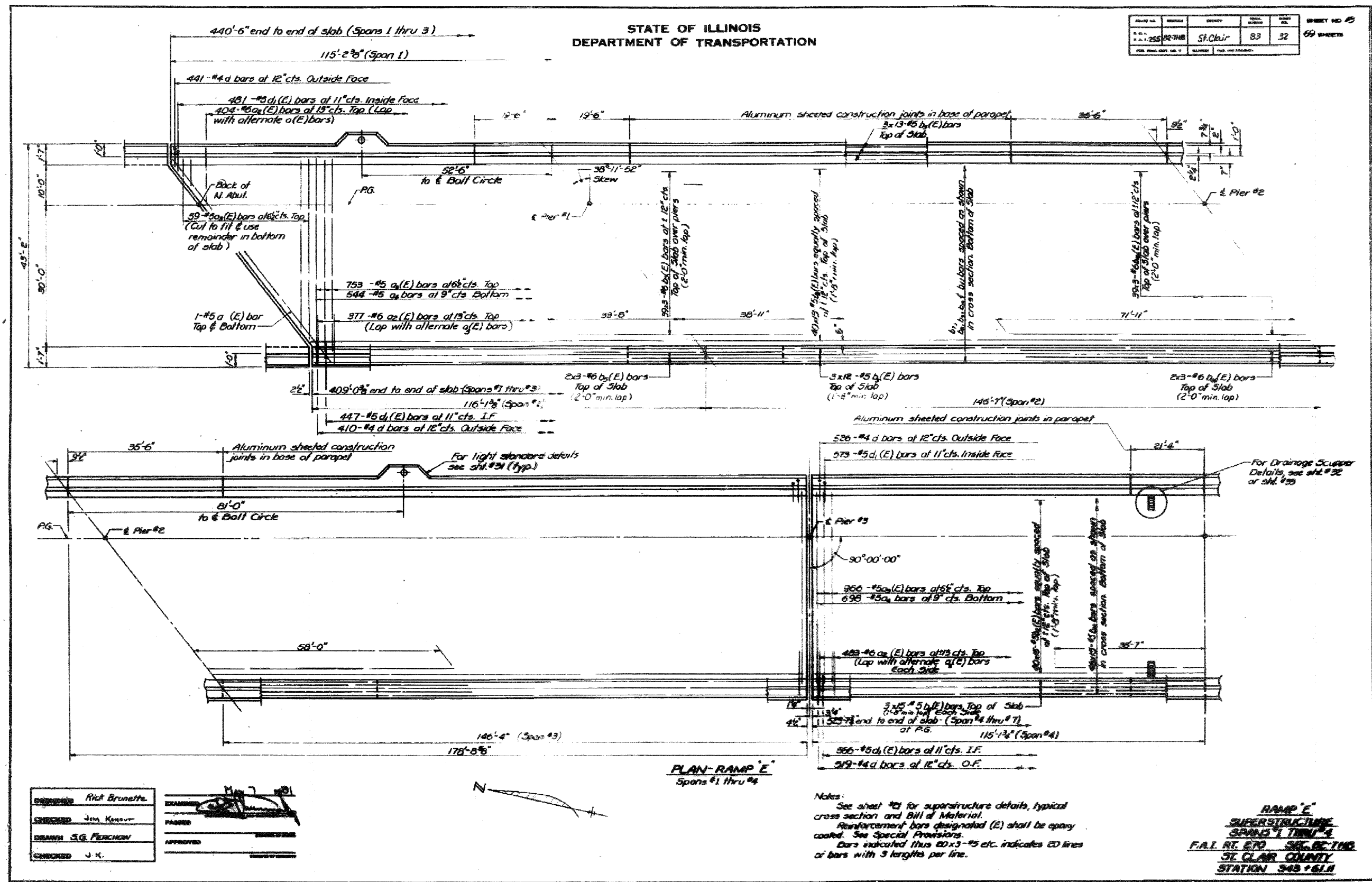
APPROACH SLAB
NORTH END - RAMP 'E'
F.A.I. RT. 870 SEC. 02-7HB
ST. CLAIR COUNTY
STATION 345+61.11

FOR INFORMATION ONLY

FILE NAME =	USER NAME = #USER#	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING STRUCTURE PLANS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
#FILEL#		DRAWN -	REVISED -			255	82-7HB-1	ST. CLAIR	43	26
	PLOT SCALE = #SCALE#	CHECKED -	REVISED -		SCALE: NA					
	PLOT DATE = #DATE#	DATE -	REVISED -		SHEET NO. 3 OF 20 SHEETS	STA.	TO STA.			CONTRACT NO. 76C33
						FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-7HB-1	St. Clair	43	32
SHEET NO. 32 OF 43 SHEETS				



DESIGNED	Rick Brunette	EXAMINED	[Signature]
CHECKED	Jim Kasour	PASSED	
DRAWN	S.G. FERCHON	APPROVED	
CHECKED	J.K.		

Notes:
See sheet #21 for superstructure details, typical cross section and Bill of Material.
Reinforcement bars designated (E) shall be epoxy coated. See Special Provisions.
Bars indicated thus 20x3-#5 etc. indicates 20 lines of bars with 3 lengths per line.

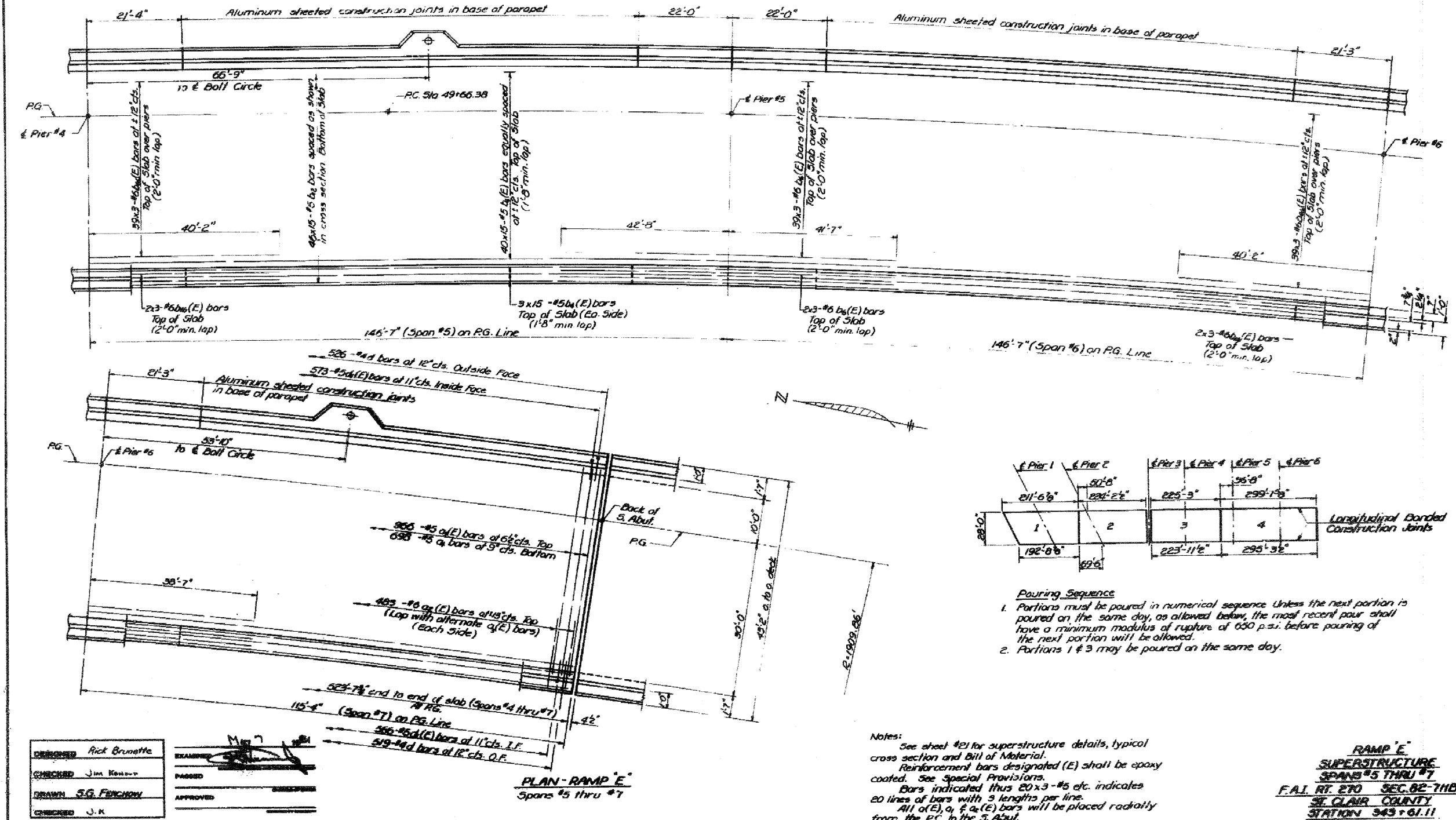
RAMP 'E'
SUPERSTRUCTURE
SPANS 1 THRU 4
F.A.I. RT. 270 SEC. 82-7HB
ST. CLAIR COUNTY
STATION 343+61.1

FOR INFORMATION ONLY

FILE NAME =	USER NAME = #USER#	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING STRUCTURE PLANS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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	PLOT DATE = #DATE#	DATE	REVISED			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					
					SCALE: NA	SHEET NO. 4 OF 20 SHEETS		STA.	TO STA.		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-7HB	St. Clair	83	33
SHEET NO. 33				



FOR INFORMATION ONLY

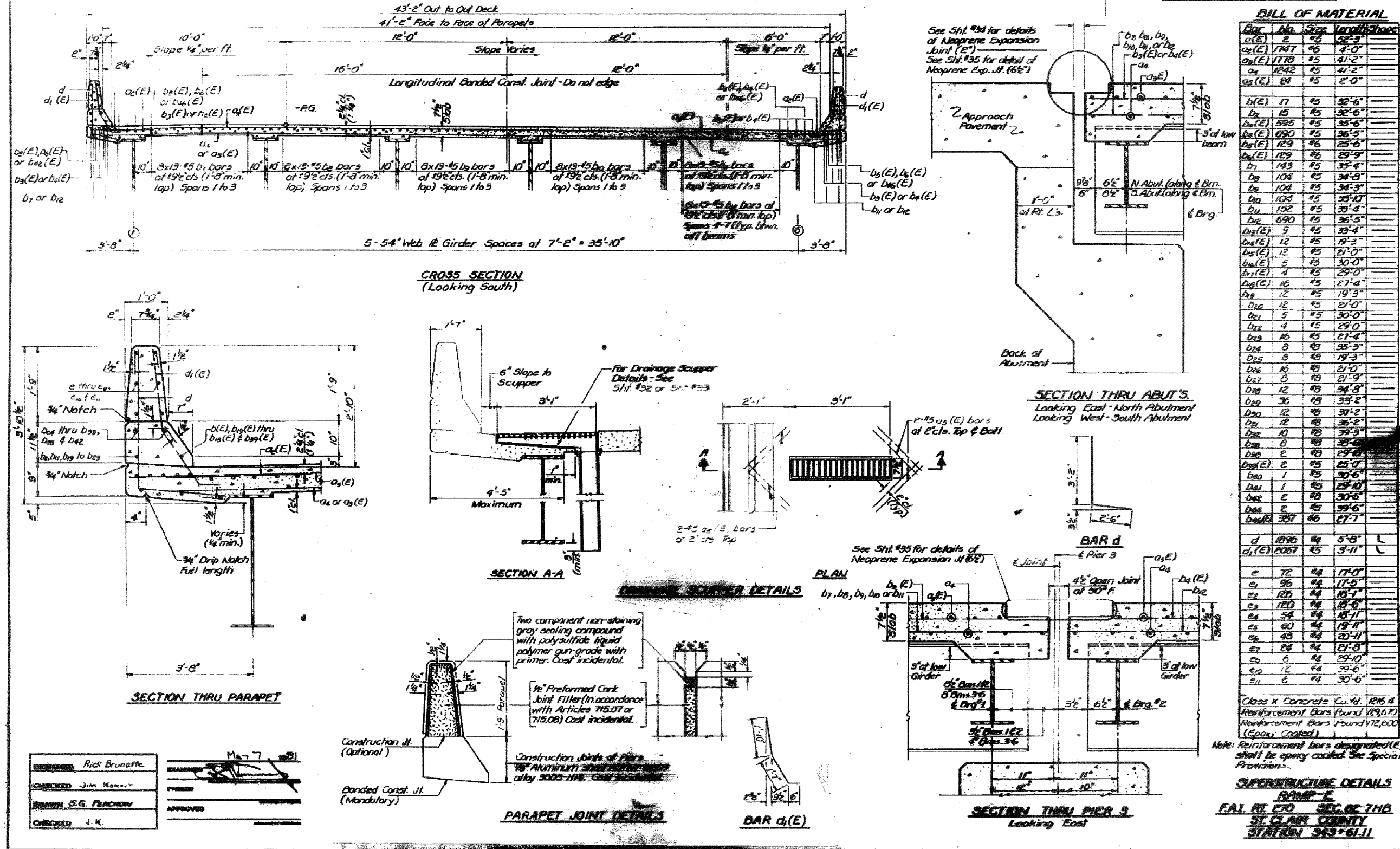
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#FILEL#		DRAWN -	REVISED -			255	82-7HB-I	ST. CLAIR	43	28	
		CHECKED -	REVISED -			CONTRACT NO. 76C33					
		DRAWN - S.G. FENCHON	REVISED -			SCALE: NA	SHEET NO. 5 OF 20 SHEETS	STA.	TO STA.		FED. ROAD DIST. NO.
		CHECKED - J.K.	DATE -								

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

2' Open Joint at 50' of Rt. L's. (N. Abut.)
4' Open Joint at 50' of Rt. L's. (S. Abut.)

PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-7HB	ST. CLAIR	43	35

69 SHEETS

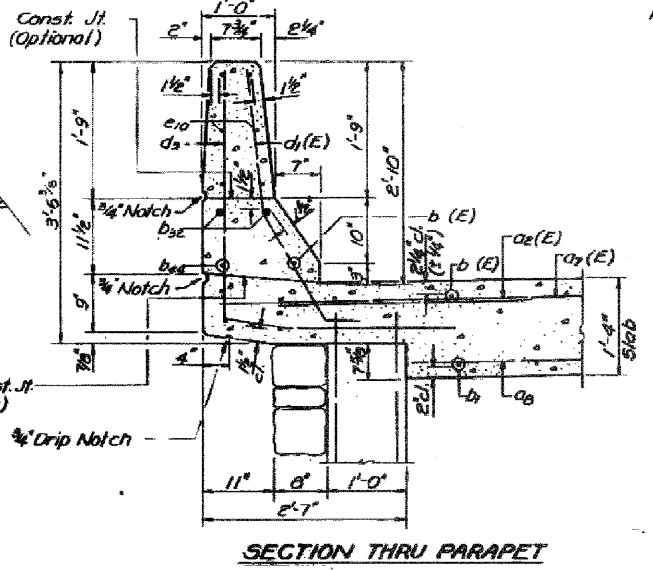
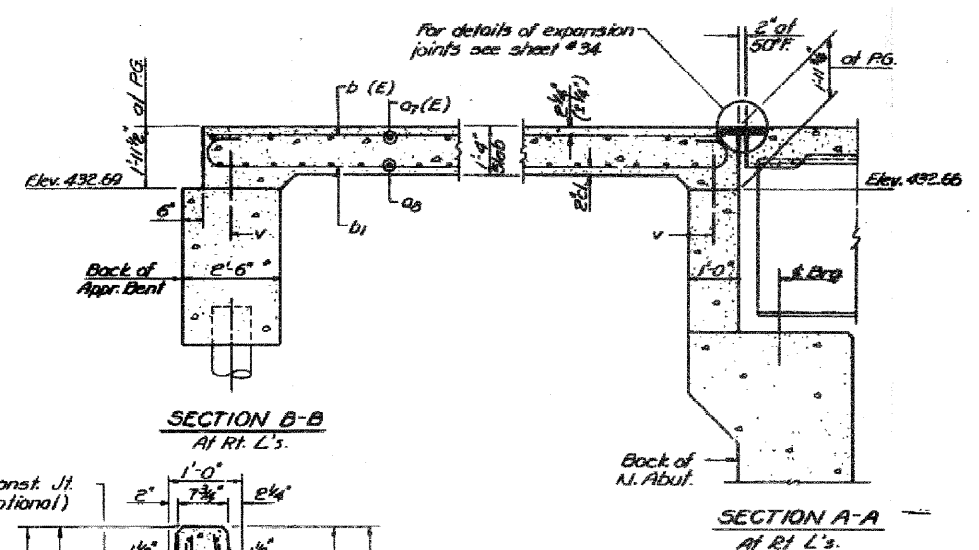
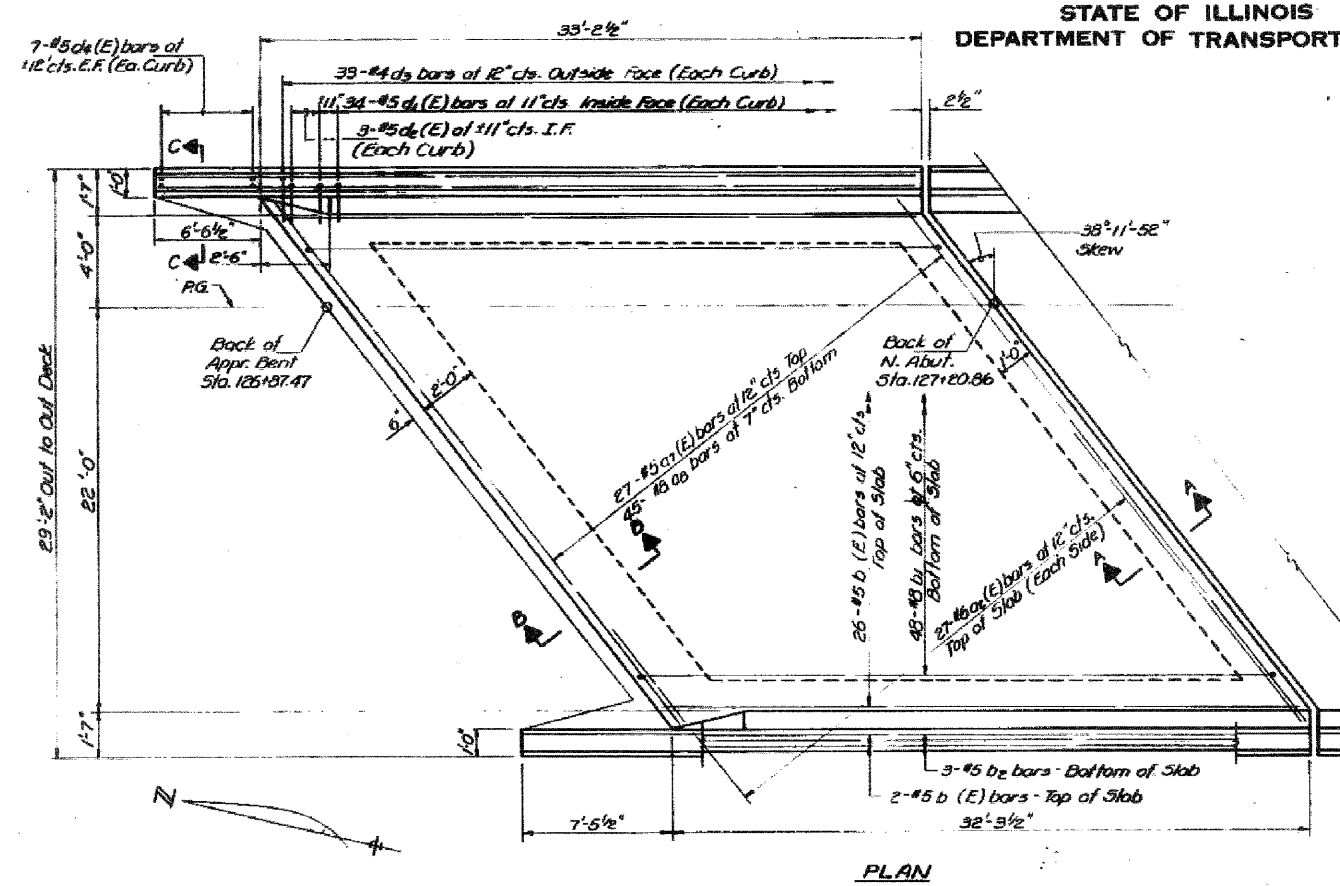


FOR INFORMATION ONLY

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	PLOT DATE = #DATE#	DATE -	REVISED -			SCALE: NA	SHEET NO. 7 OF 20 SHEETS	STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT

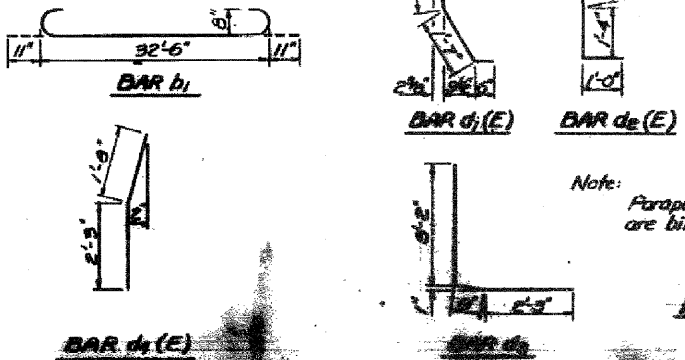
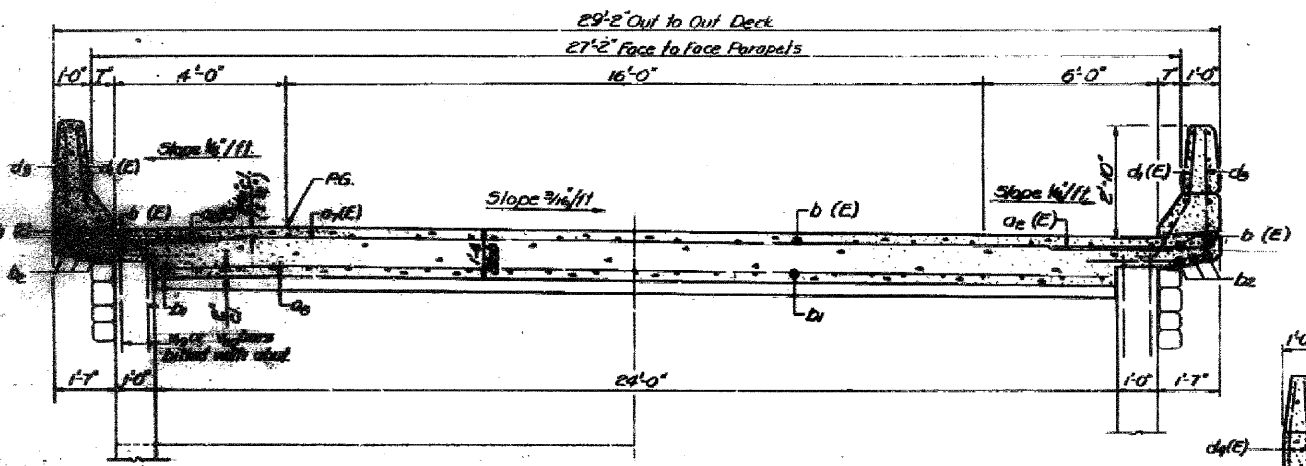
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DATE	BY	CHECKED	SCALE	SHEET NO.
11-25-69	82-74B	St. Clair	B3	38
FOR ROAD DIST. NO. 7				ILL. AID PROJECT



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
oa(E)	54	#6	4'-0"	
o1(E)	27	#5	34'-6"	
oa	45	#6	30'-2"	
b(E)	30	#5	32'-6"	
b1	48	#8	34'-4"	
b2	6	#5	32'-6"	
b3a	4	#5	6'-0"	
b3b	4	#5	7'-2"	
d1(E)	68	#5	3'-11"	
d2(E)	6	#5	4'-2"	
d3	68	#4	6'-2"	
d4(E)	20	#5	3'-11"	
Reinforcement Bars				Lbs. 6550
Reinforcement Bars (Epoxy Coated)				Lbs. 2750
Class X Concrete				Cufts. 452

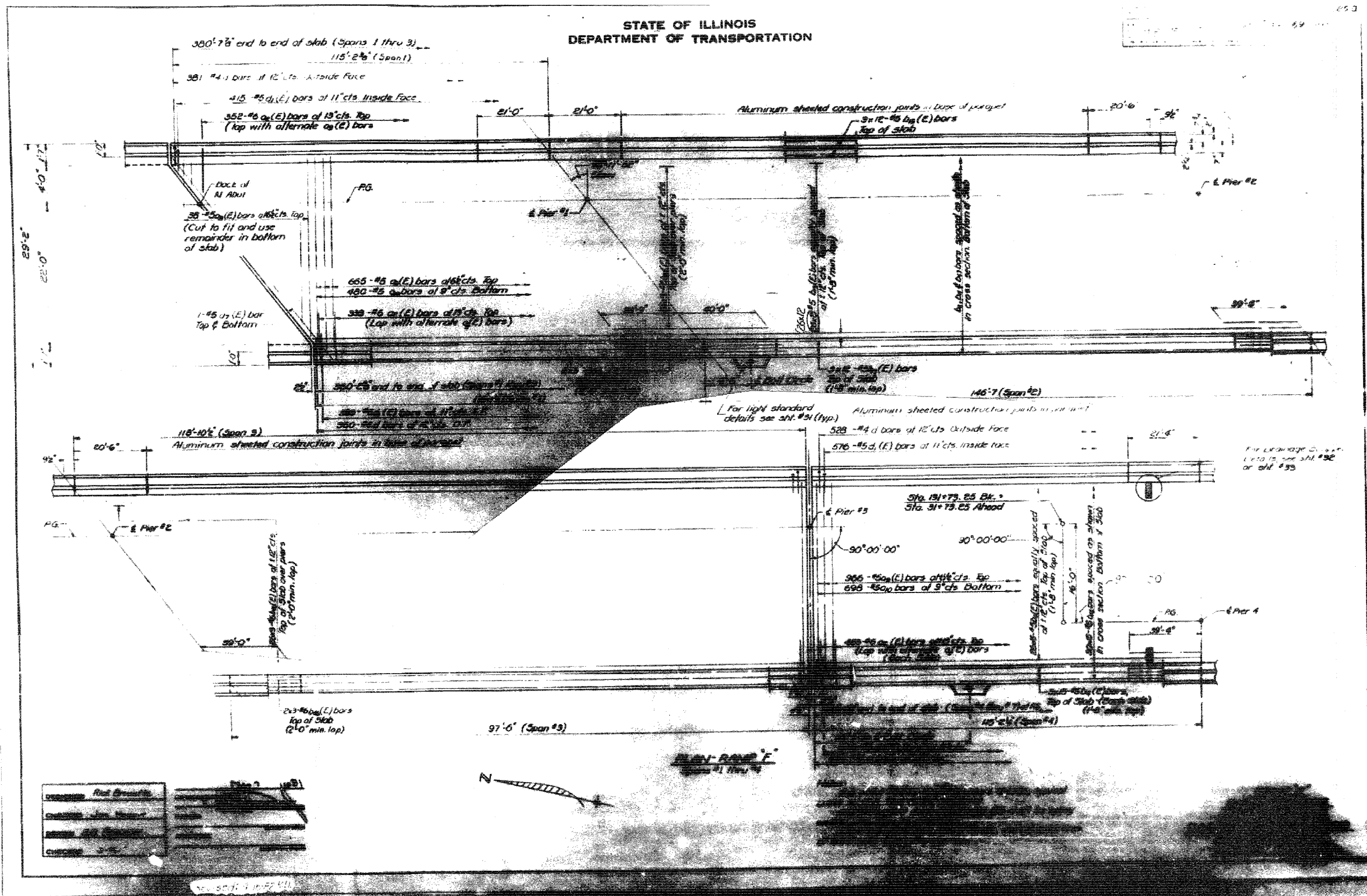


Note: Reinforcement bars dimensioned (E) shall be epoxy coated, non-splined Prestressers. Parapet Class X Conc. & reinforcement are bilt with superstructure.

ink Brunette	11/27/69
Jim K... ..	
...	

FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

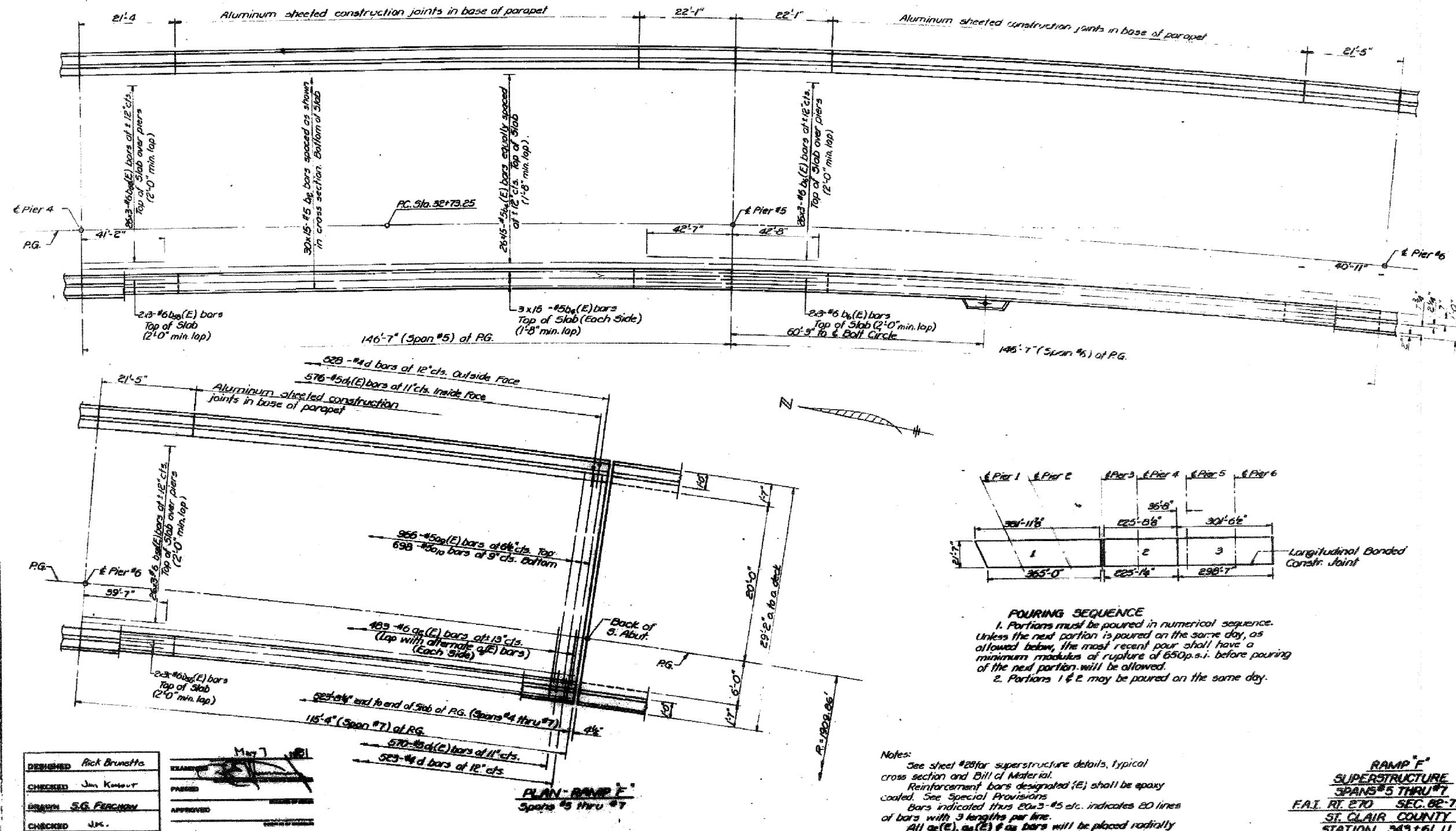


FOR INFORMATION ONLY

FILE NAME =	USER NAME = #USER#	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING STRUCTURE PLANS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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PLOT DATE = #DATE#		DATE -	REVISED -			ILLINOIS FED. AID PROJECT					
				SCALE: NA		SHEET NO. 9 OF 20 SHEETS		STA. TO STA.			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
255	82-7NB	St. Clair	83	40	69 SHEETS

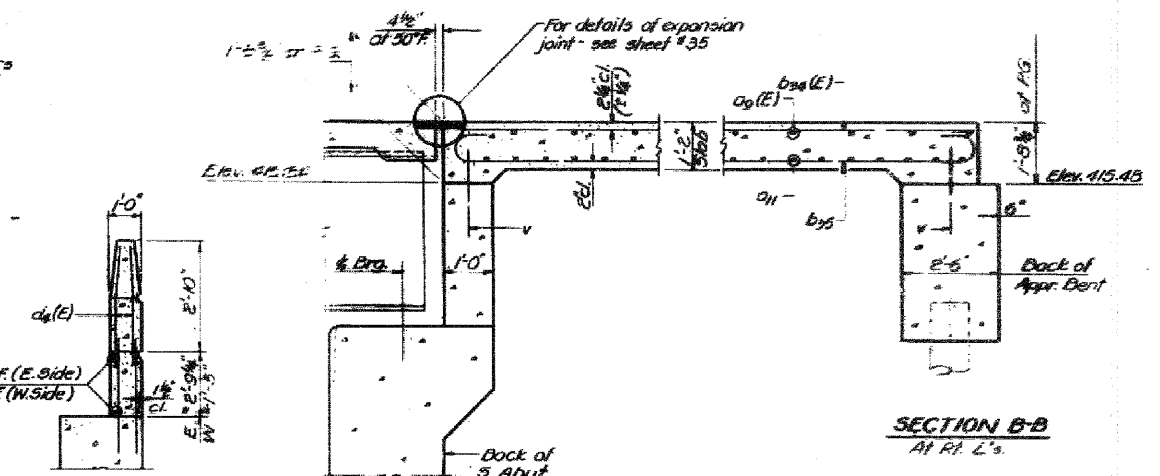
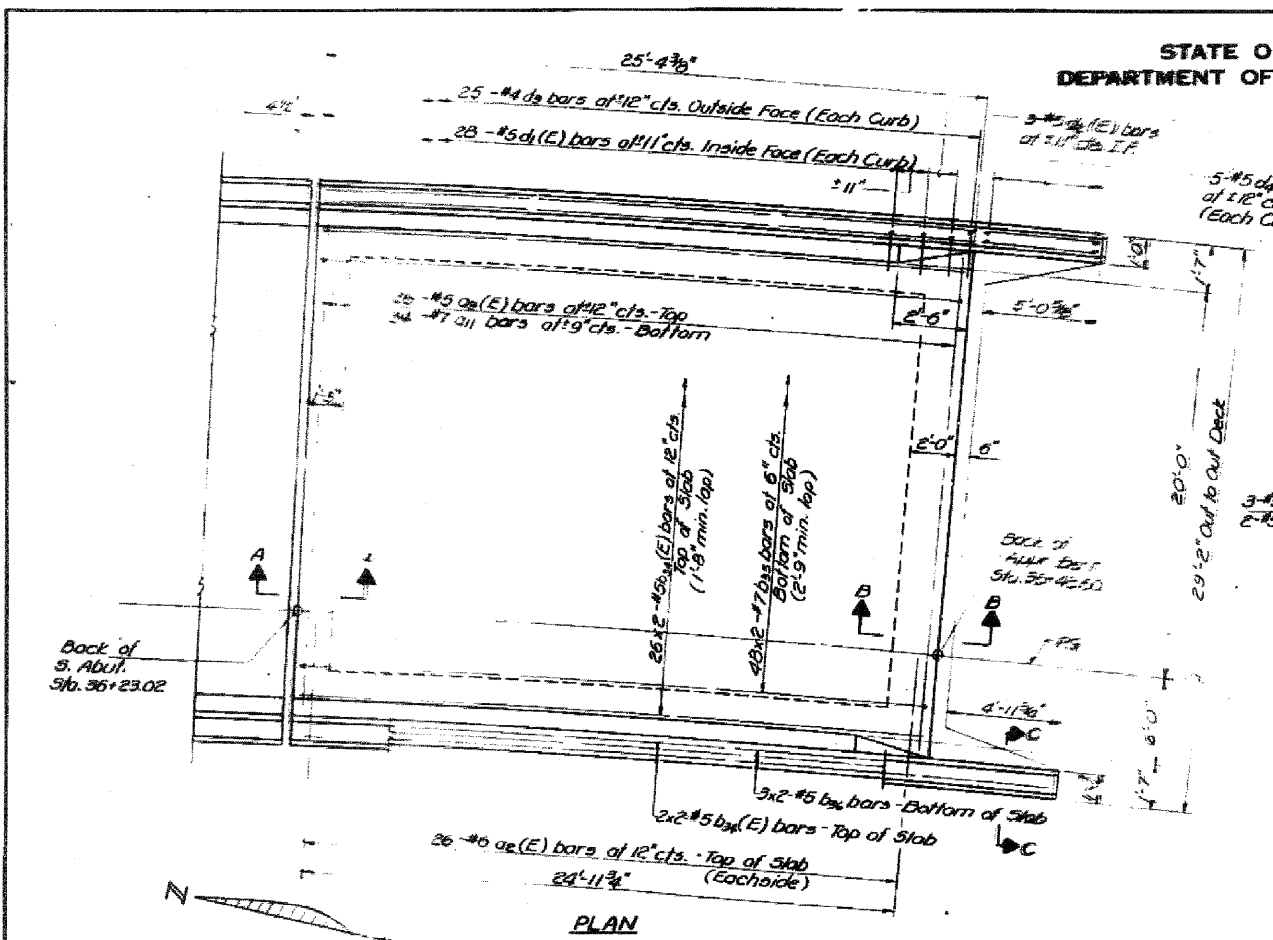


FOR INFORMATION ONLY

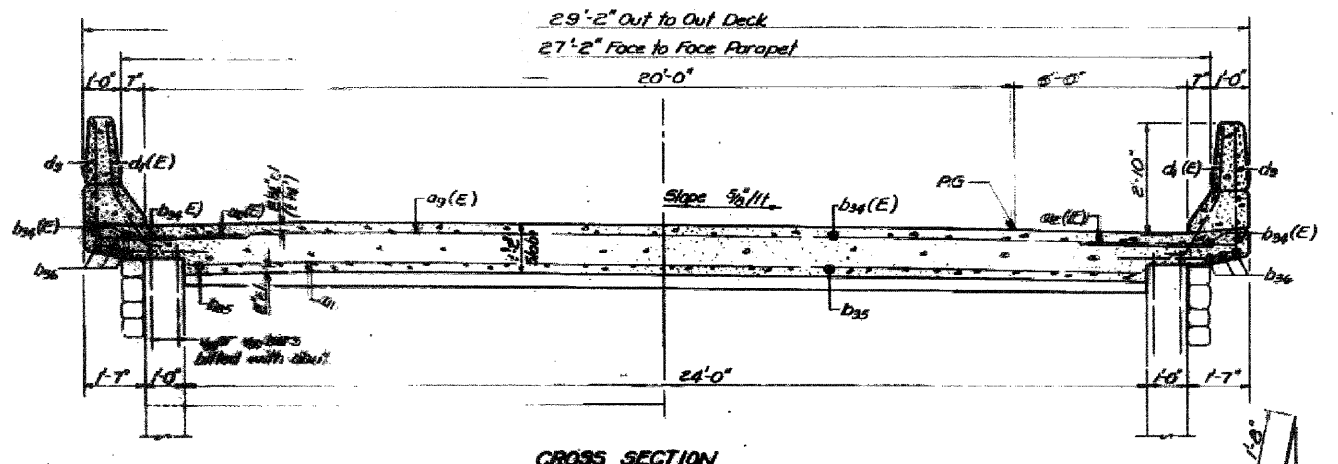
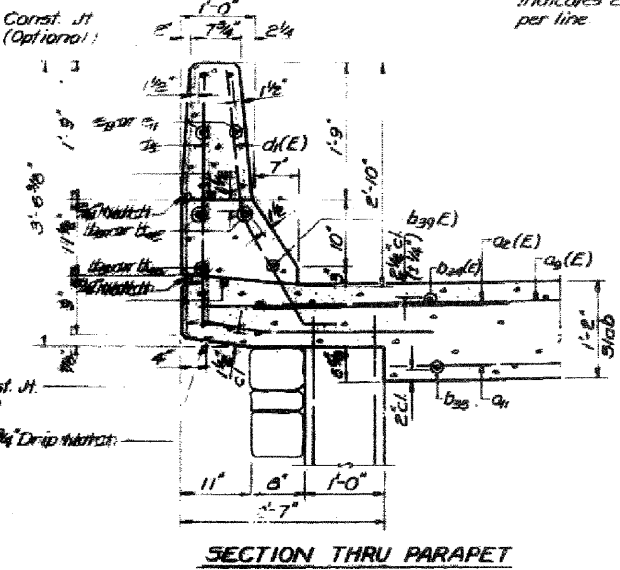
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	PLOT DATE = #DATE#	DATE -	REVISED -			SCALE: NA	SHEET NO. 10 OF 20 SHEETS	STA.	TO STA.		FED. ROAD DIST. NO.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DATE	BY	NO.	REV.	SHEET NO. 17
12-1-83	5-DAR	83	41	69 SHEETS

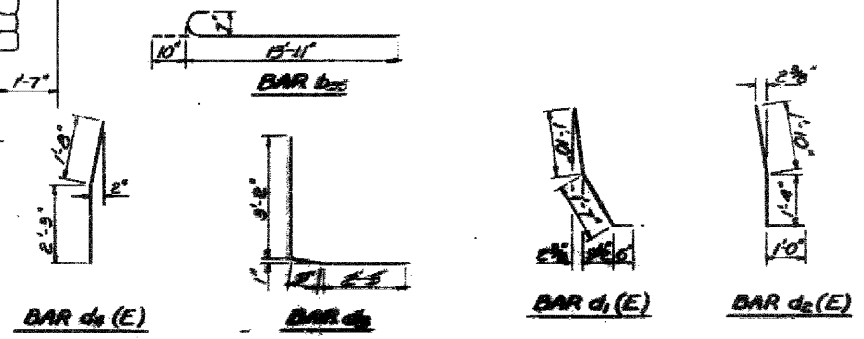


Notes: Parapet Class I Concrete and reinforcement are billed with Superstructure. Bars indicated thus 20x5-#5 etc., indicates 20 lines of bars with 5 lengths per line



DESIGNED	Rick Brunette
CHECKED	Jim Kemur
DRAWN	J.B. FERCHON
DATE	J.R.

Note: All d9(E), d11(E) & d11 bars will be placed radially.



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d4(E)	52	45	4'-0"	
d9(E)	26	45	2'-2"	
d11	34	47	23'-0"	
d4(E)	60	45	13'-4"	
b35	36	47	14'-9"	C
b34	12	45	13'-11"	
b35	10	45	5'-2"	
d4(E)	56	45	3'-11"	L
d9(E)	6	45	6'-2"	L
d11	50	44	6'-2"	L
d2(E)	20	45	3'-11"	L
Reinforcement Bars	Lbs.	4970		
Reinforcement Bars (epoxy coated)	Lbs.	2220		
Class X Concrete	Cu/Yds.	35.0		

Reinforcement bars designated (E) shall be epoxy coated. See Special Provisions

APPROACH SLAB
SOUTH END - RAMP F
F.A.I. RTE. SEC. 82-7HB-1
ST. CLAIR COUNTY
STATION 343+61.11

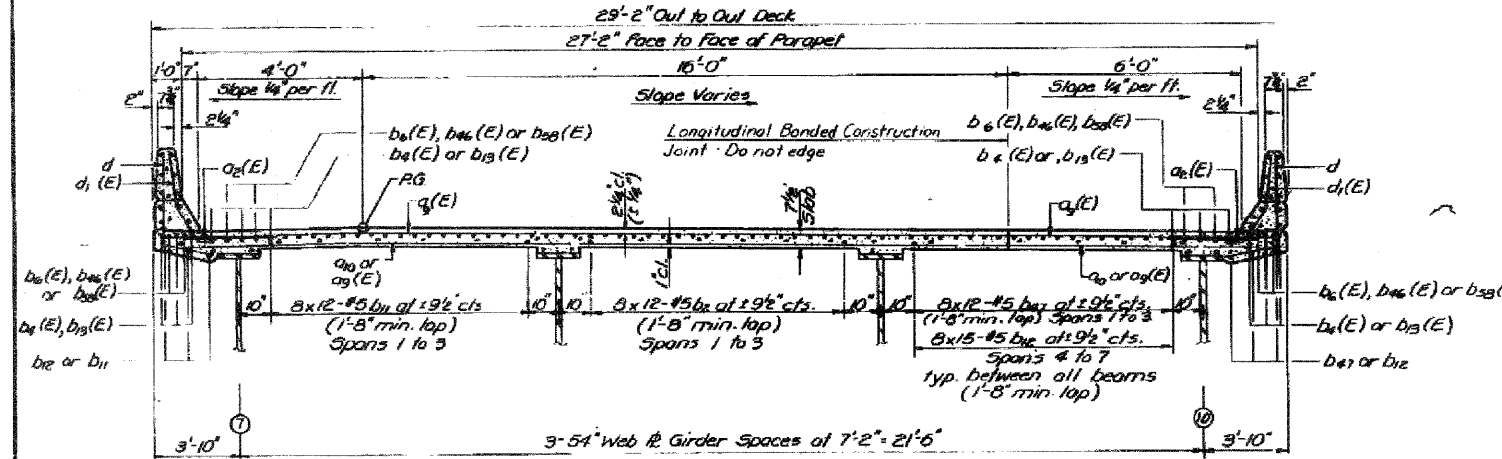
FOR INFORMATION ONLY

FILE NAME =	USER NAME = #USER#	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING STRUCTURE PLANS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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		DATE	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					
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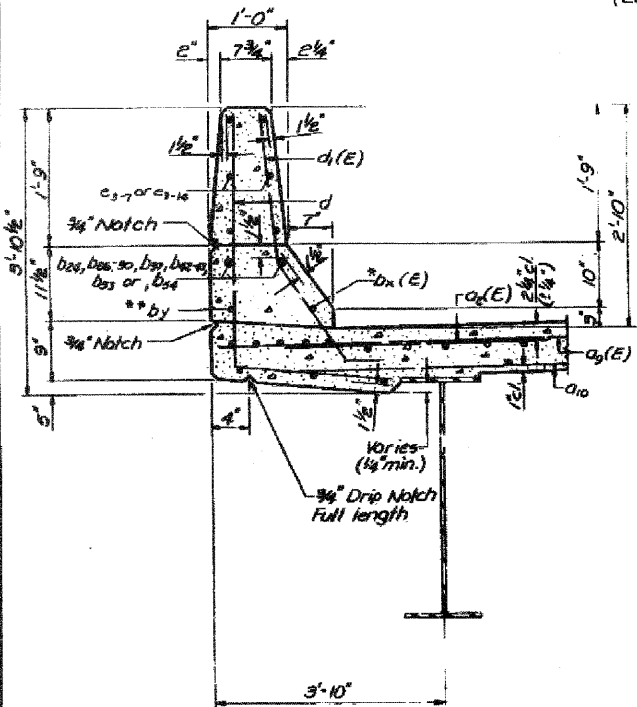
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

2" Open Joint of 50°F. of Rt. L's. (N. Abut.)
4" Open Joint of 50°F. of Rt. L's. (S. Abut.)

PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
82-7HB	St. Clair	83	42	69

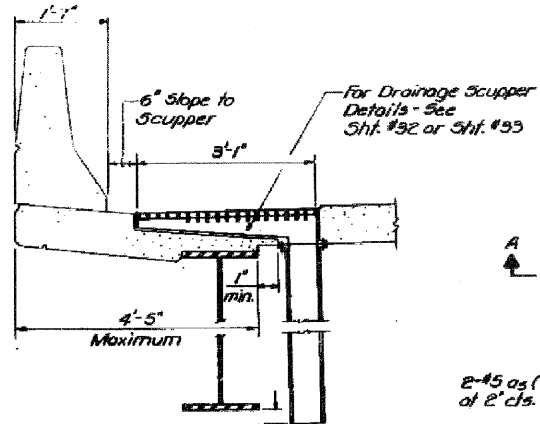


CROSS SECTION
(Looking South)

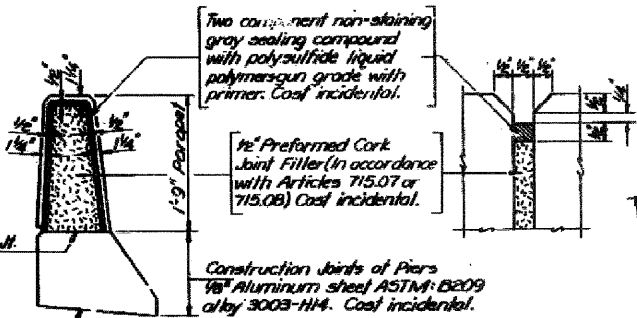


SECTION THRU PARAPET

* x = 0, 3, 4, 13, 15, 18, 31, 48-50
** y = 2, 7, 10-12, 20, 21, 23, 24, 40, 44, 51 & 52



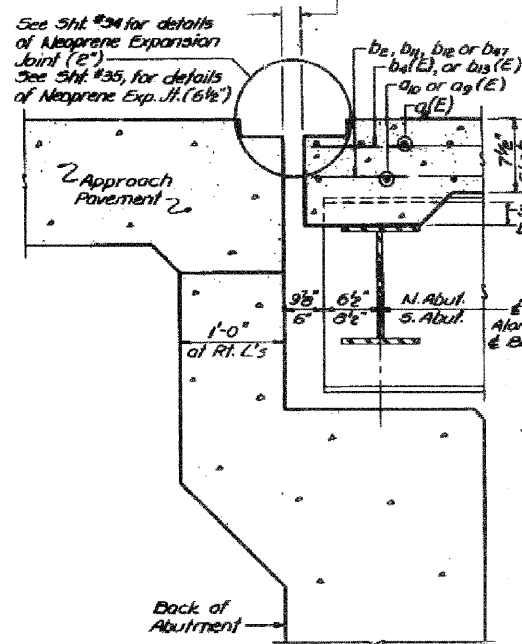
SECTION A-A
DRAINAGE SCUPPER DETAILS



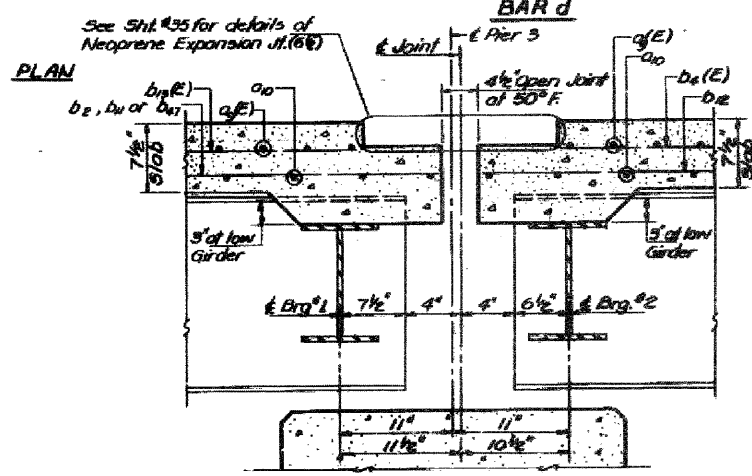
PARAPET JOINT DETAILS



BAR d(E)



SECTION THRU ABUT'S
Looking East-North Abutment
Looking West-South Abutment



SECTION THRU PIER 3
Looking East

BAR	NO.	SIZE	LENGTH	GRADE
ax(E)	1651	45	4'-0"	
ax(E)	28	45	2'-0"	
ay(E)	2	45	34'-6"	
az(E)	1669	45	27'-2"	
az	1178	45	27'-2"	
b(E)	11	45	32'-6"	
bz	105	45	32'-6"	
bx(E)	6	45	35'-6"	
bx(E)	496	45	36'-5"	
bx(E)	30	45	29'-9"	
bx	6	45	36'-4"	
bx	3	45	35'-10"	
bx	141	45	33'-4"	
bx	456	45	36'-5"	
bx(E)	393	45	33'-4"	
bx(E)	12	45	21'-0"	
bx(E)	8	45	27'-4"	
bx	12	45	21'-0"	
bx	1	45	30'-0"	
bx	8	45	27'-4"	
bx	6	45	35'-3"	
bx	16	45	21'-0"	
bx	16	45	21'-9"	
bx	12	45	34'-8"	
bx	24	45	30'-2"	
bx	12	45	37'-2"	
bx	4	45	35'-3"	
bx	2	45	30'-0"	
bx(E)	2	45	25'-0"	
bx	2	45	30'-6"	
bx	12	45	36'-6"	
bx	4	45	39'-6"	
bx(E)	180	45	27'-2"	
bx	132	45	32'-0"	
bx(E)	8	45	20'-0"	
bx(E)	3	45	33'-9"	
bx(E)	4	45	21'-10"	
bx	8	45	20'-0"	
bx	4	45	21'-10"	
bx	16	45	20'-0"	
bx	12	45	37'-8"	
bx(E)	180	45	25'-2"	
d	1792	44	5'-8"	
d(E)	1954	45	5'-11"	
ea	150	44	18'-6"	
ea	34	44	18'-11"	
ea	24	44	19'-11"	
ea	108	44	20'-11"	
ea	24	44	21'-5"	
ea	6	44	30'-0"	
ea	12	44	30'-6"	
ea	6	44	30'-6"	
ea	24	44	20'-3"	
ea	30	44	19'-3"	
ea	60	44	20'-7"	

Class X Concrete Cuyth 63916
Reinforcement Bars Found 89,950
Reinforcement Bars (Epoxy Coated) Found 110,000
Reinforcement bars designated (E) shall be epoxy coated. See Special Provisions.

SUPERSTRUCTURE DETAILS
RAMP-F
F.A.I. RT. 670 SEC. 82-7HB
ST. CLAIR COUNTY
STATION 343+61.11

FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

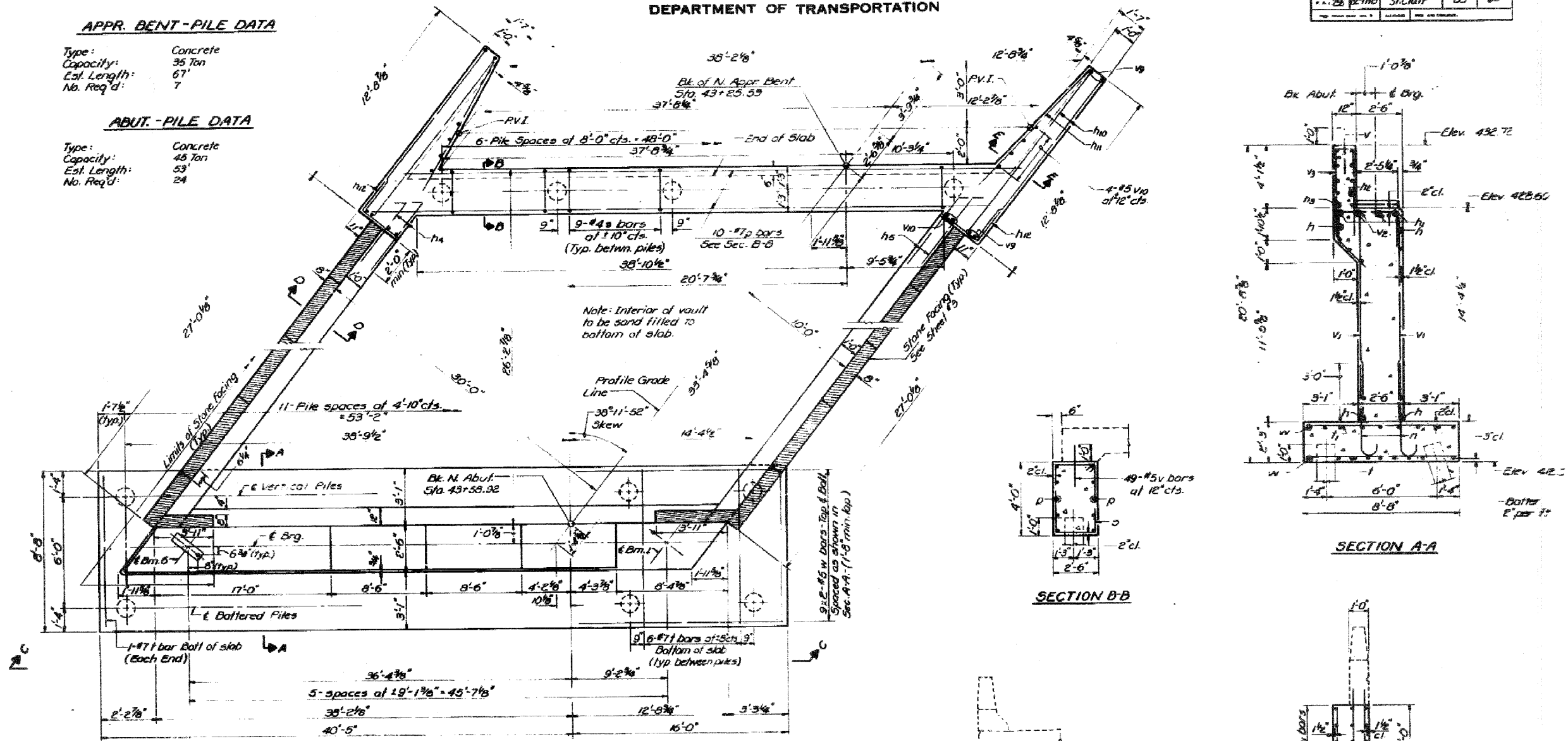
PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
82-7HB	St. Clair	B3	63	69

APPR. BENT-PILE DATA

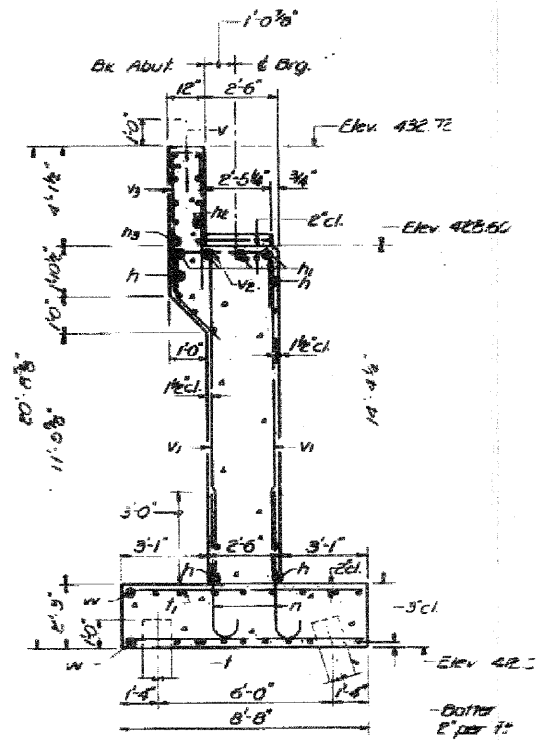
Type: Concrete
Capacity: 35 Ton
Est. Length: 67'
No. Req'd: 7

ABUT.-PILE DATA

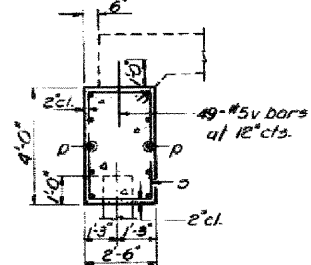
Type: Concrete
Capacity: 45 Ton
Est. Length: 53'
No. Req'd: 24



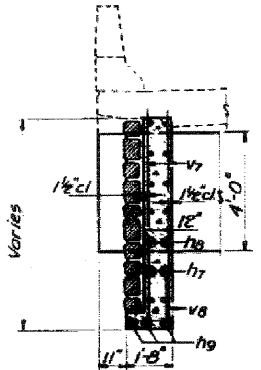
PLAN
(Looking North)



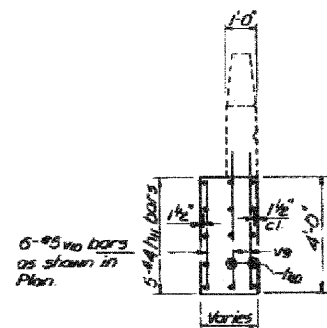
SECTION A-A



SECTION B-B



SECTION D-D



SECTION E-E

Notes:
For all remaining Sections, Abutment details and Bill of Materials, see sheet #50
Bars indicated thus 10x2-#7 etc. indicates 10 lines of bars with 2 lengths per line.
Steps shall be poured monolithically with stem.
Space reinforcement in top to miss anchor balls.
All edges shall have standard 3/4" chamfers except as noted

DESIGNED	Rect Brunette	DATE	May 7 1981
CHECKED	Jim Kemout	APPROVED	
DESIGNED	S.G. FERCHOV	APPROVED	
CHECKED	J.R.	APPROVED	

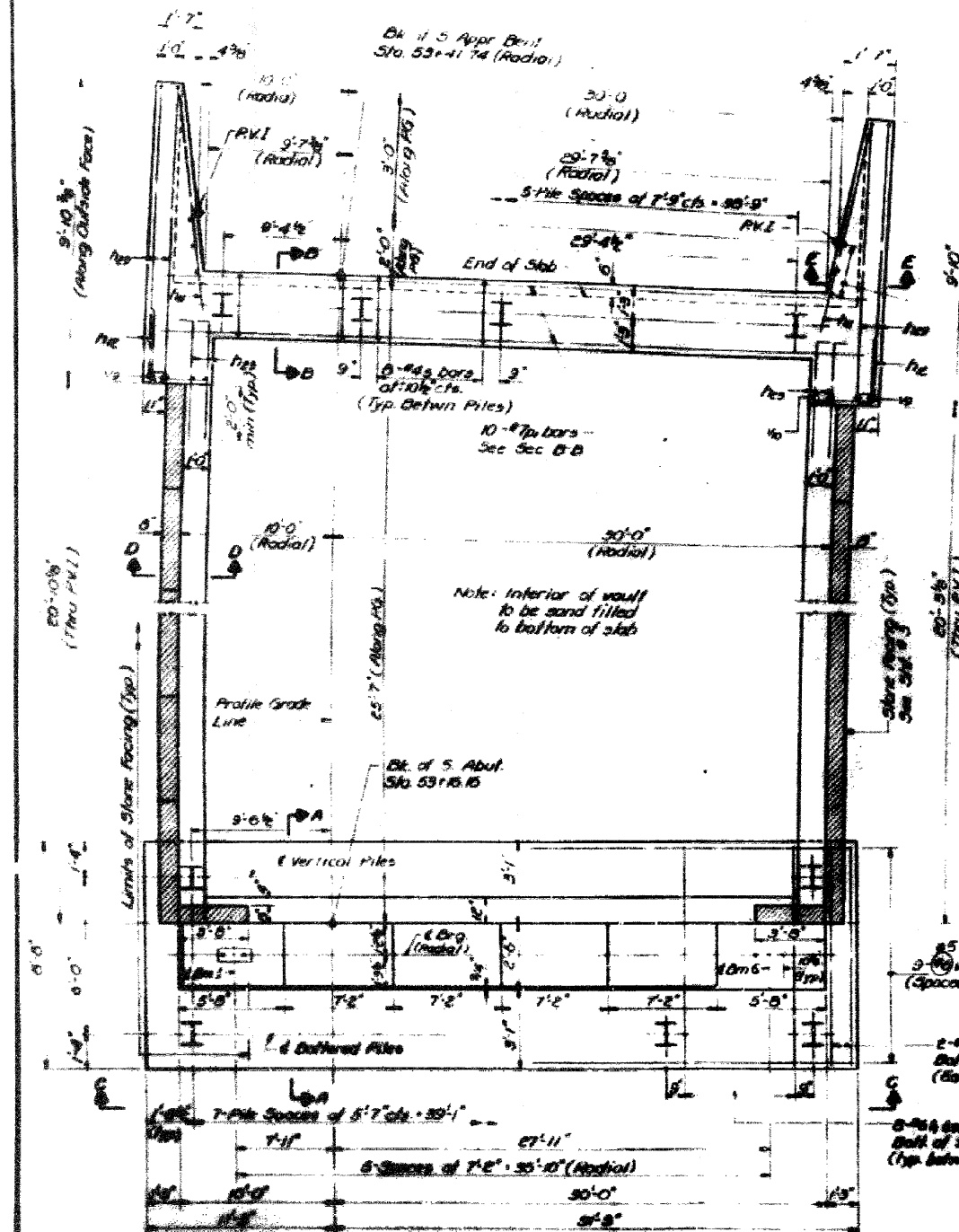
RAMP-E
NORTH ABUTMENT
F.A.I. RT. 270 SEC. 82-7HB
ST. CLAIR COUNTY
STATION 34316.11

FOR INFORMATION ONLY

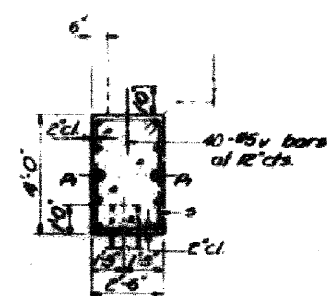
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#FILE#		DRAWN -	REVISED -			255	82-7HB-1	ST. CLAIR	43	36
		CHECKED -	REVISED -							CONTRACT NO. 76C33
		DATE -	REVISED -		SCALE: NA	SHEET NO. 13 OF 20 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET NO. 570
69 SHEETS



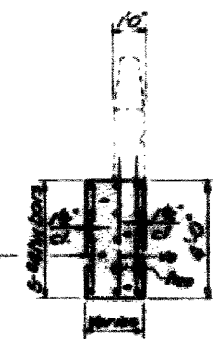
3-#5 v.b. bars
of 12" c/c



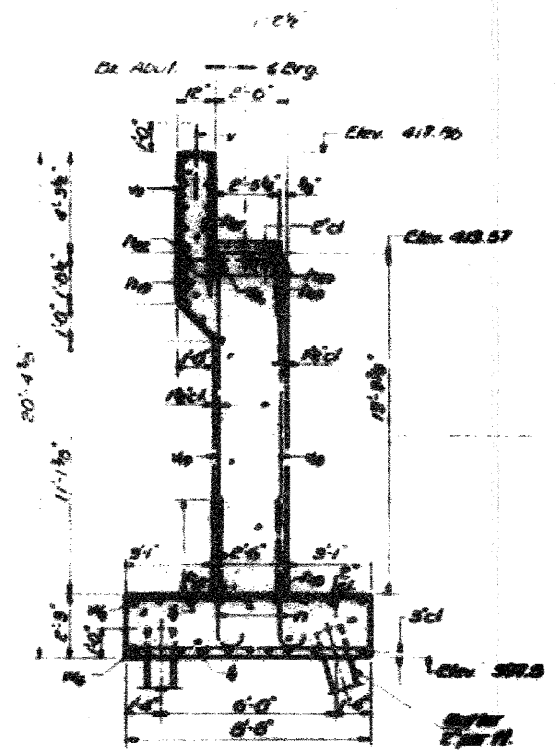
SECTION B-B



SECTION D-D



SECTION E-E



SECTION A-A

Note: Interior of vault
to be sand filled
to bottom of slab

Notes:
For all remaining Sections, Abutment details and
Bill of Materials, see sheet 569
Bars indicated thus 10#E-17 etc., indicates 10 lines
of bars with E length per line.
Slabs shall be poured monolithically with piles.
Splice reinforcement in top to join anchor bolts.
All edges shall have standard 1/2" chamfers used
as noted.

APPR. BENT-PILE DATA
Type: Steel #40 x 67
Capacity: Design to refusal
Est. Length: 142'
No. Piles: 5 - piles (3 bent piles driven in
a permanent location)

PILE DATA
Type: Steel #40 x 67
Capacity: Design to refusal
Est. Length: 142'
No. Piles: 5 - piles (3 bent piles driven in
a permanent location)

(Looking South)

FOR INFORMATION ONLY

FILE NAME: #FILEL#	USER NAME: #USER#	DESIGNED: -	REVISED: -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING STRUCTURE PLANS			F.A.I. RTE. 255	SECTION 82-7HB-1	COUNTY ST. CLAIR	TOTAL SHEETS 43	SHEET NO. 38
	PLOT SCALE: #SCALE#	DRAWN: -	REVISED: -		SCALE: NA	SHEET NO. 15 OF 20 SHEETS	STA. TO STA.	CONTRACT NO. 76C33				
	PLOT DATE: #DATE#	CHECKED: -	REVISED: -		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT							
		DATE: -	REVISED: -									

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

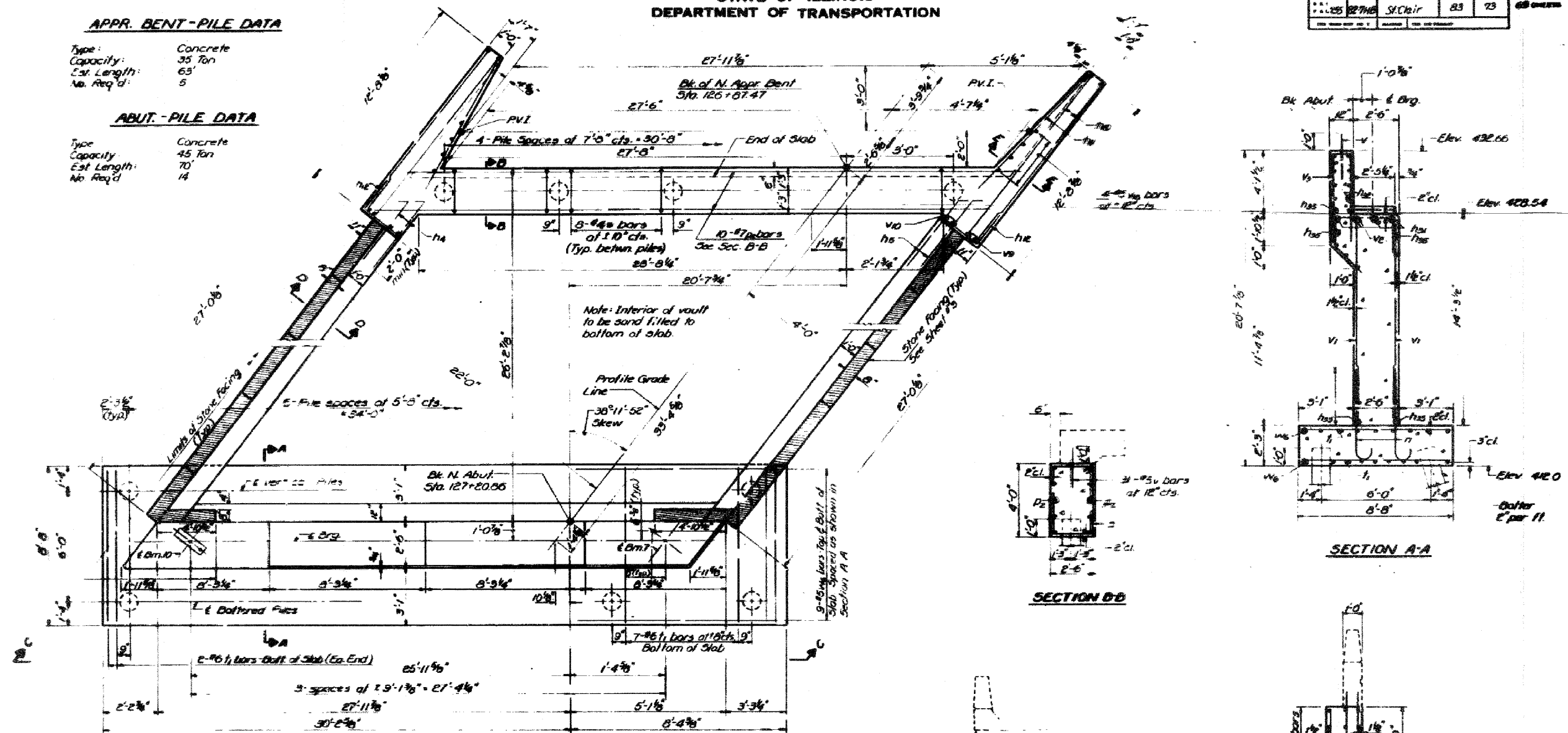
PROJECT NO.	82-7HB	ST. Clair	83	73
SHEET NO.	17 OF 20			

APPR. BENT-PILE DATA

Type: Concrete
Capacity: 35 Ton
Est. Length: 63'
No. Req'd: 5

ABUT.-PILE DATA

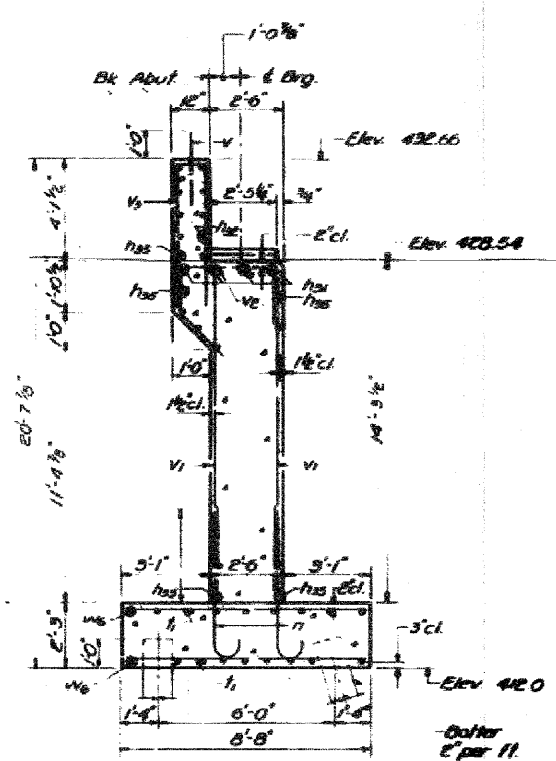
Type: Concrete
Capacity: 45 Ton
Est. Length: 70'
No. Req'd: 14



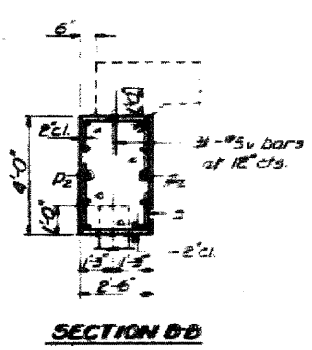
PLAN
(Looking North)

Notes:
For all remaining Sections, Abutment details and Bill of Materials, see sheet #40
Bars indicated thus #10-47 etc. indicates 10 lines of bars with 47 lengths per line.
Slabs shall be placed monolithically with stem.
Splice reinforcement in top bars shall be staggered.
All edges shall have standard 1/2" chamfers except as noted.

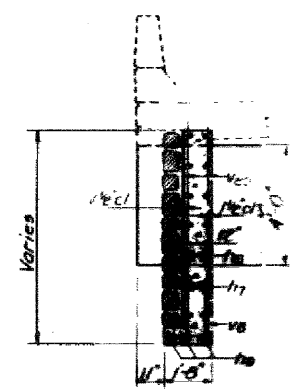
Rev. No.	1	2	3
Date			
By			



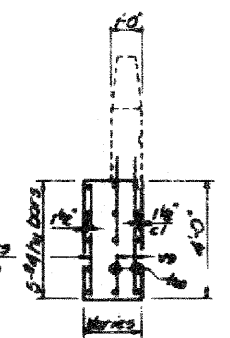
SECTION A-A



SECTION B-B



SECTION C-C



SECTION D-D

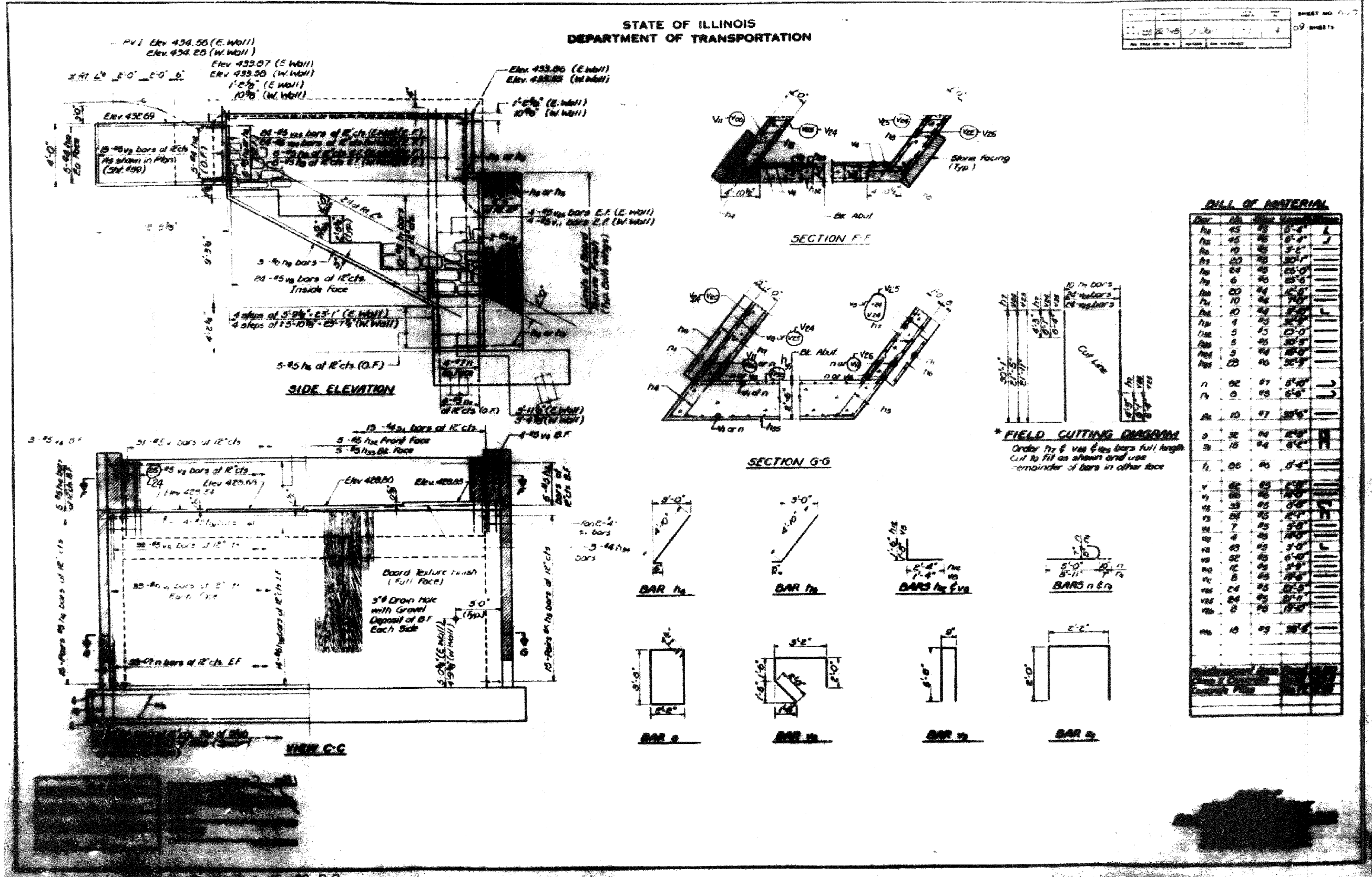
6-#5 bars as shown in Plan

FOR INFORMATION ONLY

FILE NAME = #FILE#	USER NAME = #USER#	DESIGNED -	REVISIONS -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING STRUCTURE PLANS	F.A.I. RTE. 255	SECTION 82-7HB-I	COUNTY ST. CLAIR	TOTAL SHEETS 43	SHEET NO. 40		
	PLOT SCALE = #SCALE#	DRAWN -	REVISIONS -			SCALE: NA	SHEET NO. 17 OF 20 SHEETS	STA. TO STA.	CONTRACT NO. 76C33			
	PLOT DATE = #DATE#	CHECKED -	REVISIONS -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT						
		DATE -	REVISIONS -									

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SHEET NO. 18 OF 20 SHEETS



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