

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
E57	(114 BR 1)CBR,BRR	HENDERSON	35	1

D-94-039-18



LOCATION OF SECTION INDICATED THUS: [shaded rectangle symbol]

PROJECT DISCRPTION: BRIDGE JOINT REPLACEMENT, PIER REPAIR & LATEX OVERLAY TO SN 036-0039 CARRING FAP 657 (IL 164) OVER HENDERSON CREEK, 3 MILES NORTH OF GLADSTONE IN HENDERSON COUNTY.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED March 21 20 19
Paul A. Jones
REGIONAL ENGINEER

May 19 20 19
E.A. Elk
ENGINEER OF DESIGN AND ENVIRONMENT

May 19 20 19
Paul A. Jones
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

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06-14-2019 LETTING ITEM 080

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

**PROPOSED
HIGHWAY PLANS**

FAP ROUTE 657 (IL164)
SECTION (114-BR-1)BJR,BRR
PROJECT STP-3135(937)
BRIDGE REPAIR
HENDERSON COUNTY

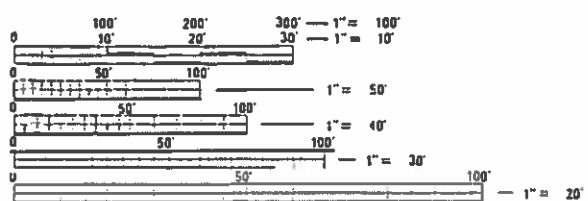
C-94-061-18

HIGHWAY STANDARDS DISTRICT 4 STANDARDS

001001-02	701006-05	406101-D4
482001-02	701011-04	440001-D4
630001-12	701301-04	630101-D4
630301-09	701311-03	760001-D4
631033-07		
642006		
701201-05		
701321-17		
701326-04		
701901-08		
704001-08		
780001-05		
782006		

TRAFFIC COUNT

ADT 2600
PV 2205
SU 275
ML 120



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.

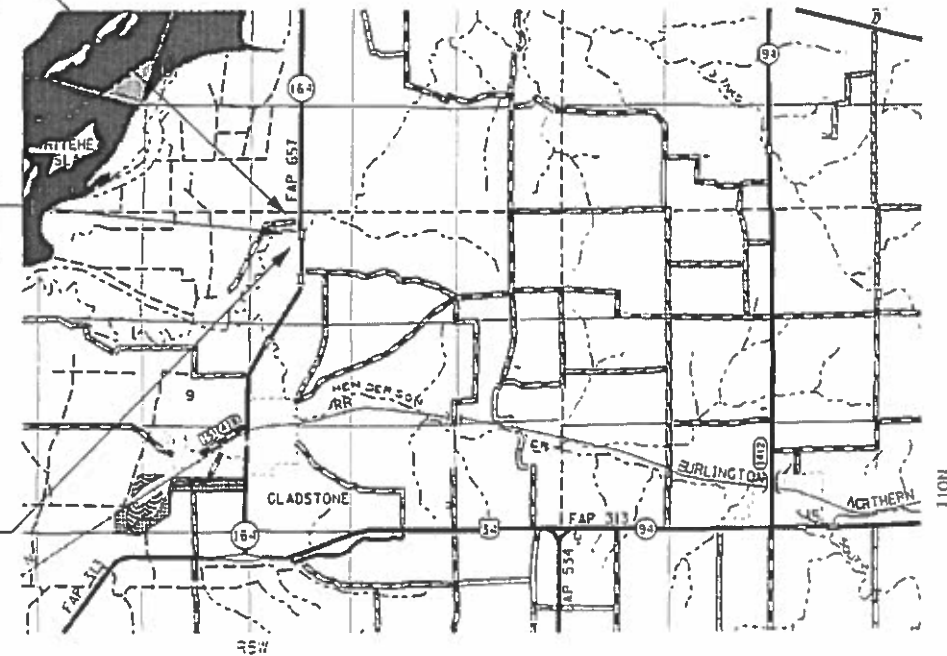
J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATORS
1-800-892-0123
OR 811

PROJECT ENGINEER: MICHAEL WILLI
PROJECT MANAGER: NICHOLAS JACK 309-671-3451
CATALOG NO. 035613-00D
CONTRACT NO. 68E26

PROJECT BEGINS
STA. 240+07

EXISTING SN 036-0039
OVER HENDERSON CREEK

PROJECT ENDS
STA. 249+14



GROSS LENGTH = 0.17 MILE
NET LENGTH = 907 FT

PROPERTY OWNER ACCESS REQUIREMENTS

Access must be maintained to all existing properties during construction per Article 107.09 unless arrangements are made in writing by the Contractor with the property owners with a copy to the Engineer for short-term closures.

CRITICAL PATH WORK SCHEDULE REQUIREMENT

The Contractor will submit to the Engineer a satisfactory progress schedule and critical path schedule which shall show the proposed sequence of work at the time of the pre-construction conference.

ENVIRONMENTAL REVIEWS

Prior to the use of any proposed borrow areas, use areas (temporary access roads, detours, run-arounds, etc.) and/or waste areas, the Contractor shall file the required environmental resource request surveys according to Section 107.22 of the Standard Specifications. These surveys are required in order for the Department to conduct cultural and biological resource surveys for the proposed site.

The required environmental resource documentation shall include the following:

- * BDE Form 2289 (Cultural and Natural Resources Review of Borrow Areas)
- * BDE Form 2290 (Waste/Use Area Review)
- * A location map showing the size limits and location of the use area
- * Color photographs depicting the use area
- * Borrow Area Entry Agreement form - D4 PI0101

Prior to any waste materials being removed from the construction site the required environmental resource surveys shall be obtained and filed by the Contractor. Excess waste products removed from the construction site shall be disposed of as required in Section 202.03 of the Standard Specifications.

Any protruding metal bars shall be removed prior to the disposal of broken concrete at approved disposal sites.

Please note that a minimum of four weeks shall be allowed for the District to obtain the required environmental clearances and six weeks for the required borrow site environmental clearances.

BRIDGE OVERLAY NOTIFICATION

After placement of the bridge deck overlay, the Resident Engineer shall notify the District Bridge Maintenance Engineer of the "as constructed" milling depth and overlay thickness for updating the Illinois Highway Information System.

POLYMERIZED BITUMINOUS MATERIALS (TACK COAT) RATES

Surface Type	Residual Rate
Milled (HMA or PCC)	0.08 lb /sq ft
Existing Pavement	0.08 lb /sq ft
Fog Coat (between lifts)	0.08 lb /sq ft

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

Pay Item	HMA SRF CRS, MIX "D", N50	HMA SHOULDERS 8"	HMA SHOULDERS 8"
Thickness	1.5"	1.5"	4" AND 2.5"
Use	SURFACE COURSE	TOP LIFT	LOWER LIFTS
AC/PC:	64-22	64-22	64-22
Design Air Voids:	4.0% N=50	4.0% N=50	4.0% N=50
Mixture Composition: (Gradation Mixture):	IL 9.5	IL 9.5	IL 19.0
Friction Aggregate:	Mix D	Mix D	N.A.
Quality Management:	QC/QA	QC/QA	QC/QA

Notes:

- 1) Individual lift thickness of each mix type will be no less than 3 times nominal maximum aggregate size and no more than 6 times nominal maximum.
- 2) For design purposes, mixture weight for all mixes is determined to be 112.0 lb/s.y/in., unless otherwise noted.
- 3) Sublot sizes for PFP and QCP mixes will be 1,000 tons, unless otherwise agreed to by the Engineer and the paving Contractor.

BUTT JOINT CUTTING TIME RESTRICTION

Butt joints shall not be milled more than three (3) days prior to placement of the HMA surface course.

PAVING SURFACE COURSE

Continuous paving operations on the main roadway shall be maintained at all times during the construction of the hot-mix asphalt surface. No interruptions for side roads, entrances, turn lanes, etc. will be allowed.

SECURING DRAINAGE STRUCTURE GRATES

Prior to routing traffic onto the shoulders as shown in the staging plans, the Contractor shall secure gratings on shoulder inlets as directed by the Engineer. This work will not be paid for separately, but shall be included in the cost of the traffic control pay item.

NO PASSING ZONE VERIFICATION

The resident shall contact Operations to verify the location of no passing zones prior to placement of centerline striping.

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	DRAWN -	REVISED -
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PLOT DATE = \$DATES	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

GENERAL NOTES

SCALE: NONE SHEET 2 OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
657	(114-BR-1)BJR,BRR	HENDERSON	35	2
CONTRACT NO. 68E26				
ILLINOIS FED. AID PROJECT: STP-3135(937)				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONST. CODE
				80/20
				FED/STATE
				BRIDGE PRES.
				047
				036-0039
20200500	EARTH EXCAVATION (WIDENING)	CU YD	52	52
28100125	STONE RIPRAP, CLASS B3	SO YD	190	190
40600295	POLYMERIZED BITUMINOUS MATERIALS (TACK COAT)	POUND	668	668
40600982	HOT - MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SO YD	54	54
40600990	TEMPORARY RAMP	SO YD	46	46
40603335	HOT - MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	78	78
42001300	PROTECTIVE COAT	SO YD	1993	1993
44000155	HOT - MIX ASPHALT SURFACE REMOVAL, 1 1/2"	SO YD	587	587
44213200	SAW CUTS	FOOT	260	260
48203029	HOT - MIX ASPHALT SHOULDERS, 8"	SO YD	232	232
50102400	CONCRETE REMOVAL	CU YD	7.5	7.5
50300255	CONCRETE SUPERSTRUCTURE	CU YD	8.4	8.4
50300260	BRIDGE DECK GROOVING	SO YD	1860	1860
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	1320	1320
50800515	BAR SPLICERS	EACH	16	16

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	DRAWN -	REVISED -
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
657	(114-BR-1)BJR,BRR	HENDERSON	35	3
CONTRACT NO. 68E26				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONST. CODE
				80/20 FED/STATE BRIDGE PRES. 047 036-0039
52000110	PREFORMED JOINT STRIP SEAL	FOOT	106	106
60500305	FILLING INLETS	EACH	4	4
* 63000001	STEEL PLATE BEAM GUARD RAIL, TYPE A, 6 FOOT POSTS	FOOT	176	176
* 63100089	TRAFFIC BARRIER TERMINAL, TYPE 6B	EACH	4	4
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4	4
63200310	GUARDRAIL REMOVAL	FOOT	676	676
67000500	ENGINEER'S FIELD OFFICE, TYPE B	CAL MO	5	5
67100100	MOBILIZATION	L SUM	1	1
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1
70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1	1
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	2	2
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1
70106700	TEMPORARY RUMBLE STRIP	EACH	6	6

*= SPECIALTY ITEM

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
657	(114-BR-1)BJR,BRR	HENDERSON	35	4
			CONTRACT NO. 68E26	
			ILLINOIS FED. AID PROJECT: STP-3135(937)	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONST. CODE
				80/20 FED/STATE BRIDGE PRES. 047 036-0039
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	6065	6065
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SO FT	2022	2022
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	2054	2054
70400100	TEMPORARY CONCRETE BARRIER	FOOT	938	938
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	825	825
70600250	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2	2
70600350	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2	2
* 72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4
* 78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	2054	2054
* 78200006	GUARDRAIL REFLECTORS, TYPE B	EACH	12	12
* 78200011	BARRIER WALL RELFLECTORS, TYPE C	EACH	71	71
X0326444	SURFACE FILLER (SPECIAL)	GALLON	9.8	9.8
X0327980	PAVEMENT MARKING REMOVAL - WATER BLASTING	SO FT	1370	1370
X4401198	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	SO YD	160	160

*= SPECIALTY ITEM

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
657	(114-BR-1)BJR,BRR	HENDERSON	35	5
CONTRACT NO. 68E26				
ILLINOIS FED. AID PROJECT: STP-3135(937)				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONST. CODE
				80/20
				FED/STATE
				BRIDGE PRES. 047 036-0039
X5030550	PROTECTIVE COAT (SPECIAL)	SQ YD	392	392
Z0001002	GUARDRAIL AGGREGATE EROSION CONTROL	TON	80	80
Z0006012	BRIDGE DECK LATEX CONCRETE OVERLAY, 2 1/4 INCHES	SQ YD	1968	1968
Z0012130	BRIDGE DECK SCARIFICATION 3/4"	SQ YD	1968	1968
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	34	34
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1
Z0023600	FILLING EXISTING CULVERTS	EACH	4	4

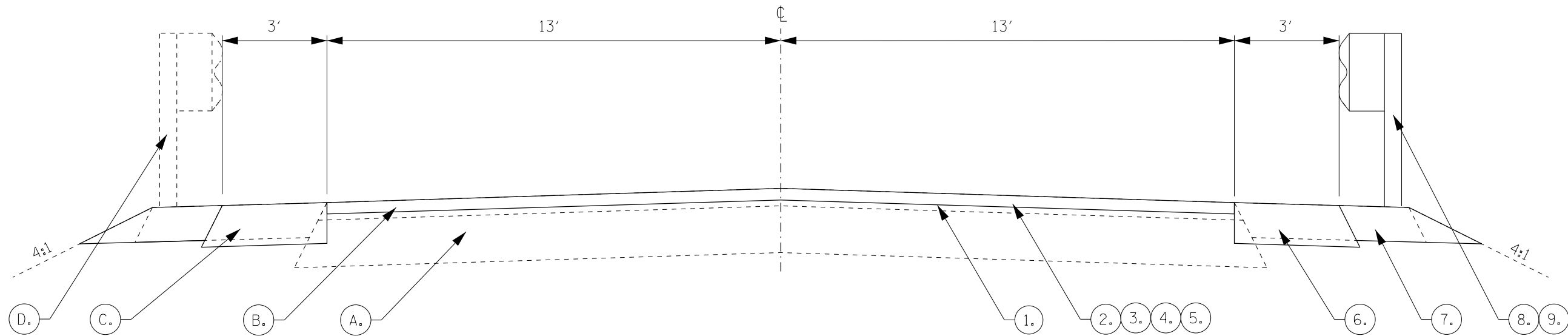
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PLOT DATE = #DATE*	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
657	(114-BR-1)BJR,BRR	HENDERSON	35	6
ILLINOIS				FED. AID PROJECT: STP-3135(937)



ROADWAY TYPICAL SECTION

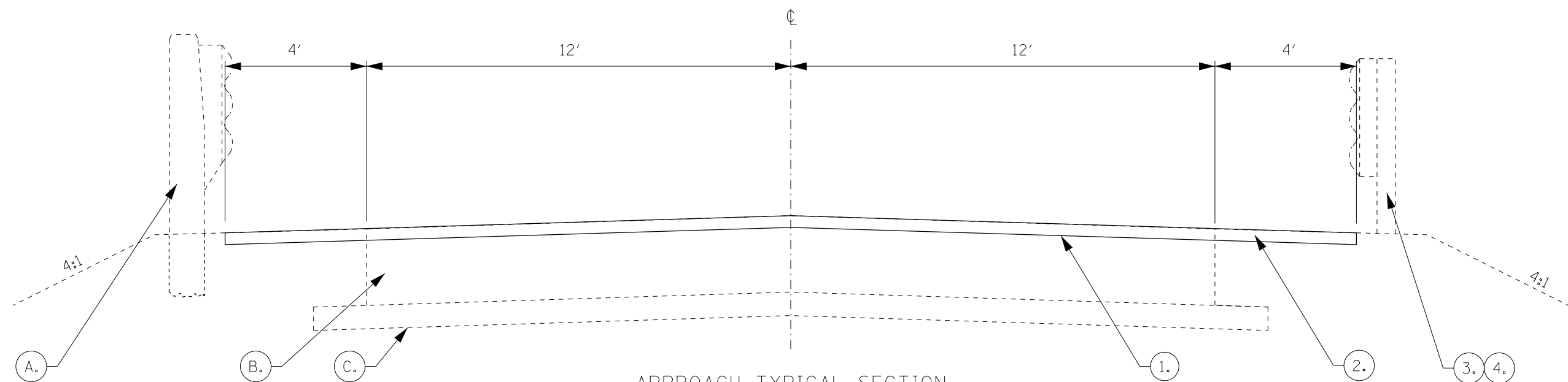
STA. 240+07 to 241+47
 STA. 247+74 to 249+14

EXISTING ELEMENTS

- A. EXISTING 8" BITUMINOUS BASE COURSE
- B. EXISTING HMA OVERLAY
- C. EXISTING 6" AGGREGATE SHOULDERS
- D. EXISTING GUARDRAIL

PROPOSED IMPROVEMENTS

- 1. POLYMERIZED BITUMINOUS MATERIALS (TACK COAT)
- 2. HMA SURFACE REMOVAL VARIABLE DEPTH
- 3. HMA SURFACE REMOVAL, 1 1/2"
- 4. HMA SURFACE REMOVAL - BUTT JOINT
- 5. HMA SURFACE COURSE, MIX "D", N50
- 6. HMA SHOULDERS 8"
- 7. GUARDRAIL AGGREGATE EROSION CONTROL
- 8. STEEL PLATE BEAM GUARDRAIL, TYPE A, 6' POSTS
- 9. TRAFFIC BARRIER TERMINAL, TY 1 (SPECIAL) TANGENT



APPROACH TYPICAL SECTION

STA. 241+47 to 241+80
 STA. 247+40 to 247+74

EXISTING ELEMENTS

- A. END POST
- B. 13" APPROCH SLAB
- C. SUB-BASE GRANULAR MAT'L, TY A, 4"

PROPOSED IMPROVEMENTS

- 1. BITUMINOUS MATERIALS (TACK COAT)
- 2. HOT MIX ASPHALT SURFACE COURSE, MIX "D", N50
- 3. STEEL PLATE BEAM GUARDRAIL, TYPE A, 6' POSTS
- 4. TRAFFIC BARRIER TERMINAL, TY 6B

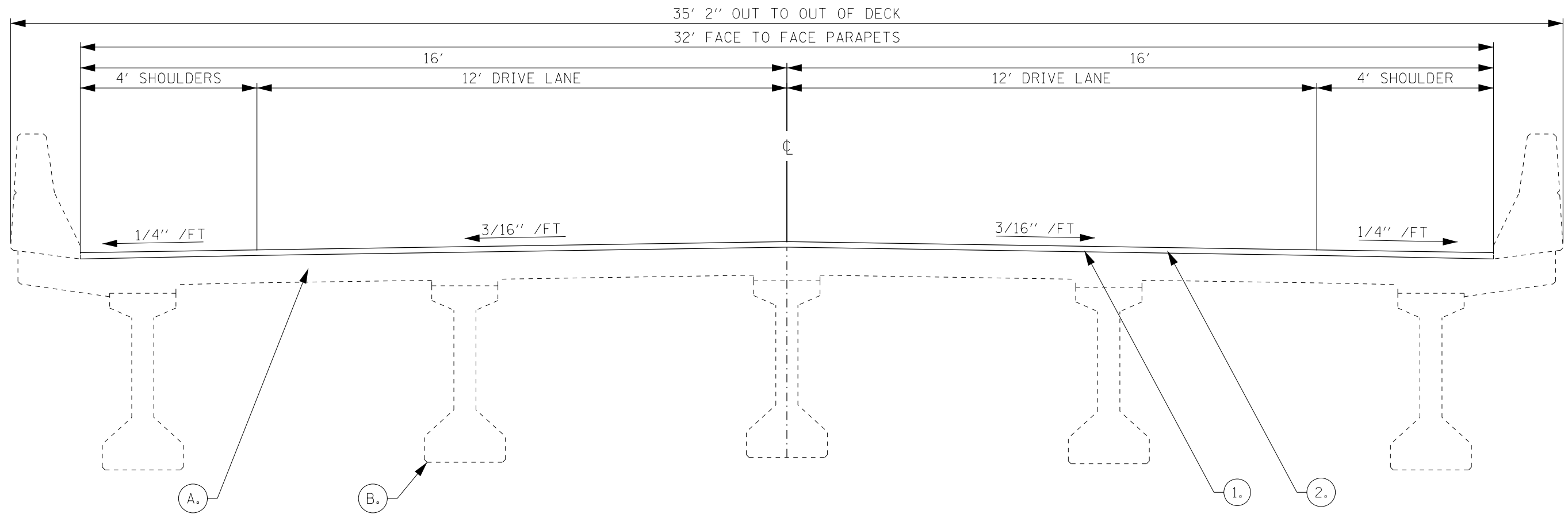
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PLOT DATE = \$DATES	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

TYPICAL SECTIONS	
SCALE:	SHEET OF SHEETS STA. TO STA.

F.A.P. RTE. 657	SECTION (114-BR-1)BJR,BRR	COUNTY HENDERSON	TOTAL SHEETS 35	SHEET NO. 7
CONTRACT NO. 68E26			ILLINOIS FED. AID PROJ.	



- *NORTH ABUTMENT to PIER 4 - 54" PCC I BEAMS
- *PIER 4 to SOUTH ABUTMENT - 48" PCC I BEAMS

EXISTING ELEMENTS

- A. 7 1/2" SLAB
- B. PCC I BEAMS

PROPOSED IMPROVEMENTS

- 1. BRIDGE DECK SCARIFICATION 3/4"
- 2. BRIDGE DECK LATEX CONCRETE OVERLAY, 2 1/4"

BRIDGE TYPICAL SECTION
STA. 241+80 to 247+40

MODEL: 140DELMAMES
FILE NAME: 31E25

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	DRAWN -	REVISED -
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PLOT DATE = \$DATE\$	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

TYPICAL SECTIONS		SCALE:	SHEET	OF	SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
657	(114-BR-1)BJR,BRR	HENDERSON	35	8
CONTRACT NO. 68E26			ILLINOIS FED. AID PROJ.	

STONE RIPRAP, CLASS B3	
LOCATIONS	28100125
	SY
NW QUAD	68
NE QUAD	53
SE QUAD	20
SW QUAD	49
TOTAL	190

MOBILIZATION	
LOCATION	67100100
	L SUM
JOBSITE	1
TOTAL	1

ENGINEER'S FIELD OFFICE, TYPE B	
LOCATION	67000500
	CAL MO
JOBSITE	5
TOTAL	5

FILLING INLETS	
LOCATION	60500305
	EACH
ALL APPROACH INLETS ON S.N. 036-009	4
TOTAL	4

GUARDRAIL AGGREGATE EROSION CONTROL	
LOCATION	Z0001002
	TON
STA. 240+25 TO 241+80 LT	20.8
STA. 240+37 TO 241+80 RT	19.1
STA. 247+40 TO 248+93 RT	20.5
STA. 247+40 TO 248+84 LT	19.3
TOTAL	80

FILL EXISTING CULVERTS	
LOCATION	Z0023600
	EACH
NW QUAD	1
NE QUAD	1
SE QUAD	1
SW QUAD	1
TOTAL	4

TABULATION OF RESURFACING QUANTITIES									
STATION	TO	STATION	LT/RT	44000155	X4401198	40600982	40600295	48203029	40603335
				HMA SURFACE REMOVAL, 1 1/2"	HMA SURFACE REMOVAL, VARIABLE DEPTH	HMA SURFACE REMOVAL, BUTT JOINT	POLYMERIZED BITUMINOUS MATERIALS (TACK COAT)	HMA SHOULDERS 8"	HMA SURF CSE, MIX "D", N50
				SY	SY	SY	POUND	SY	TON
240+07	TO	240+17	LT AND RT			27			
249+04	TO	249+14	LT AND RT			27			
240+17	TO	241+27	LT AND RT	293.5					
247+94	TO	249+04	LT AND RT	293.5					
241+27	TO	241+57	LT AND RT		80				
247+64	TO	247+94	LT AND RT		80				
240+07	TO	241+81	LT AND RT				334.1	116.0	39.0
247+40	TO	249+14	LT AND RT				334.1	116.0	39.0
TOTAL				587	160	54	668	232	78

CONSTRUCTION LAYOUT	
LOCATION	Z0013798
	L SUM
JOBSITE	1
TOTAL	1

EARTH EXCAVATION (WIDENING)				
STATION	TO	STATION	LT/RT	20200500
				SY
240+07	TO	241+81	LT AND RT	26
247+40	TO	249+14	LT AND RT	26
TOTAL				52

SAW CUTS	
LOCATIONS	44213200
	FOOT
NORTH ABUTMENT	87
PIER 4	87
SOUTH ABUTMENT	87
TOTAL	260

GUARDRAIL SCHEDULE						
LOCATION	6300001	63100089	63100167	7820006	72501000	63200310
	SPBGR, TY A, 6' POSTS	TRAFFIC BARRIER TERMINAL, TYPE 6B	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	GUARDRAIL REFLECTORS, TYPE B	TERMINAL MARKER-DIRECT APPLIED	GUARDRAIL REMOVAL
	FOOT	EACH	EACH	EACH	EACH	FOOT
STA. 240+35 TO 240+85 LT			1		1	
STA. 240+85 TO 241+24 LT	39					
STA. 241+24 TO 241+86 LT		1				
STA. 240+47 TO 241+33 RT			1		1	
STA. 240+97 TO 241+33 RT	36					
STA. 241+33 TO 241+95 RT		1				
STA. 248+33 TO 248+83 RT			1		1	
STA. 247+83 TO 248+33 RT	50					
STA. 247+21 TO 247+83 RT		1				
STA. 248+24 TO 248+74 LT			1		1	
STA. 247+73 TO 248+24 LT	51					
STA. 247+11 TO 247+73 LT		1				
NW QUADRANT				3		146
NE QUADRANT				3		172
SE QUADRANT				3		173
SW QUADRANT				3		185
TOTAL	176	4	4	12	4	676

TEMPORARY RAMP	
LOCATIONS	44213200
	SY
240+07	11.6
241+81	11.6
247+40	11.6
249+14	11.6
TOTAL	46

TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	
LOCATION	70100405
	EACH
STA. 237+88 TO 251+30	1
TOTAL	1

TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	
LOCATION	70100500
	L SUM
	1
TOTAL	1

TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	
LOCATION	70100450
	L SUM
	1
TOTAL	1

TRAFFIC CONTROL SURVEILLANCE	
LOCATION	70103815
	CAL DAY
JOBSITE	2
TOTAL	2

MODEL: SMOBELNAMES
FILE NAME: STILES

USER NAME = \$USERS	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = \$SCALES	CHECKED -	REVISED -
PLOT DATE = \$DATES	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SCHEDULE OF QUANTITIES			
SCALE:	SHEET	OF	SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
657	(114-BR-1)BJR,BRR	HENDERSON	35	9
			CONTRACT NO. 68E26	
	ILLINOIS		FED. AID PROJECT	

TRAFFIC CONTROL ITEMS							
LOCATION	70106500	70106700	70400100	70400200	78200011	70600250	70600350
	TEMPORARY BRIDGE TRAFFIC SIGNALS	TEMPORARY RUMBLE STRIPS	TEMPORARY CONCRETE BARRIER	RELOCATE TEMPORARY CONCRETE BARRIER	BARRIER WALL REFLECTORS, TYPE C	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE) TEST LEVEL 3	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE) TEST LEVEL 3
	EACH	EACH	FOOT	FOOT	EACH	EACH	EACH
STA. 239+68 to STA. 240+00						1	
STA. 249+26 to STA. 249+58						1	
STA. 240+36 TO STA. 240+68							1
STA. 248+82 TO STA. 249+14							1
STA. 238+38, STA. 238+63, STA. 239+90, STA. 250+55, STA. 250+80	1						
STA. 220+88, STA. 225+88, STA. 230+88, STA. 258+30, STA. 263+30, STA. 268+30		6					
STA. 240+00 TO STA. 249+38			938		38		
STA. 240+60 TO STA. 248+85				825	33		
TOTAL	1	6	938	825	71	2	2

PAVEMENT MARKINGS							
LOCATION			70300100	70300150	X0327980	70300220	78009004
STA	TO	STA	SHORT-TERM PAVEMENT MARKING	SHORT TERM PAVEMENT MARKING REMOVAL	PAVEMENT MARKING REMOVAL - WATER BLASTING	TEMPORARY PAVEMENT MARKING - LINE 4"	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"
			FOOT	FOOT	SF	FOOT	FOOT
STAGE 1							
238+48	TO	251+20	1272	424			
240+54	TO	249+02	848	283			
STOP BARS			216	72			
STAGE 2							
239+13	TO	249+87	1074	358			
240+93	TO	248+43	750	250			
PAVING SKIP-DASH			91	30			
PAVING SOLID EDGE			1814	605			
240+07	TO	249+14			1370	2054	2054
TOTALS			6065	2022	1370	2054	2054

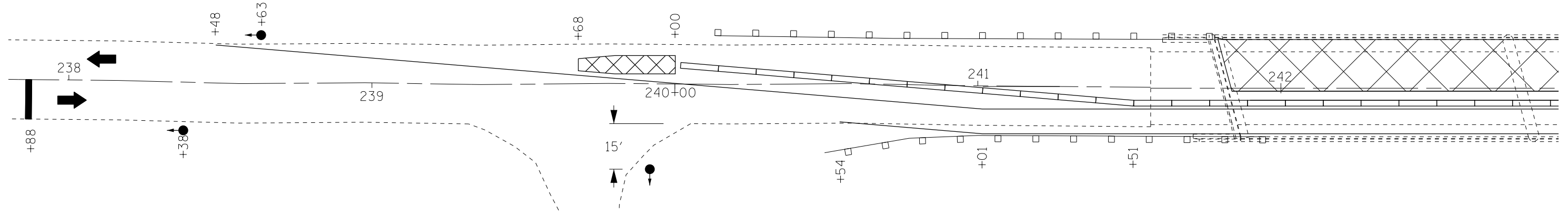
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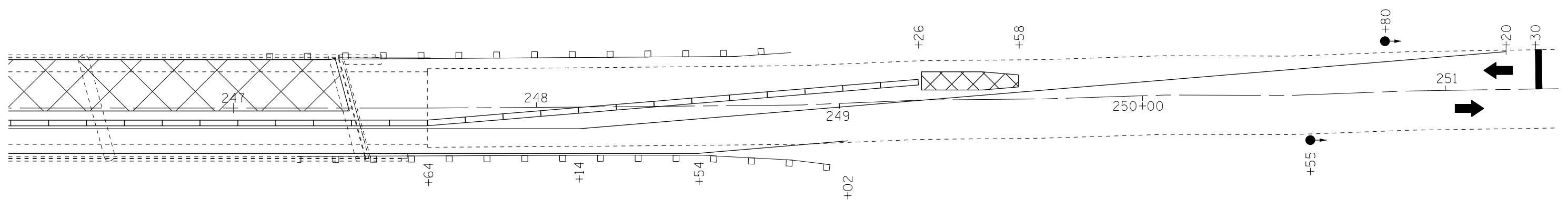
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SCHEDULE OF QUANTITIES			
SCALE:	SHEET	OF	SHEETS
	STA.	TO	STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
657	(114-BR-1)BJR,BRR	HENDERSON	35	10
			CONTRACT NO. 68E26	
			ILLINOIS FED. AID PROJECT	



LEGEND	
	TRAFFIC SIGNAL
	CRASH ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3
	TEMPORARY CONCRETE BARRIER
	DIRECTION OF TRAVEL
	SHORT TERM PAVEMENT MARKING
	STOP BAR
	WORK AREA



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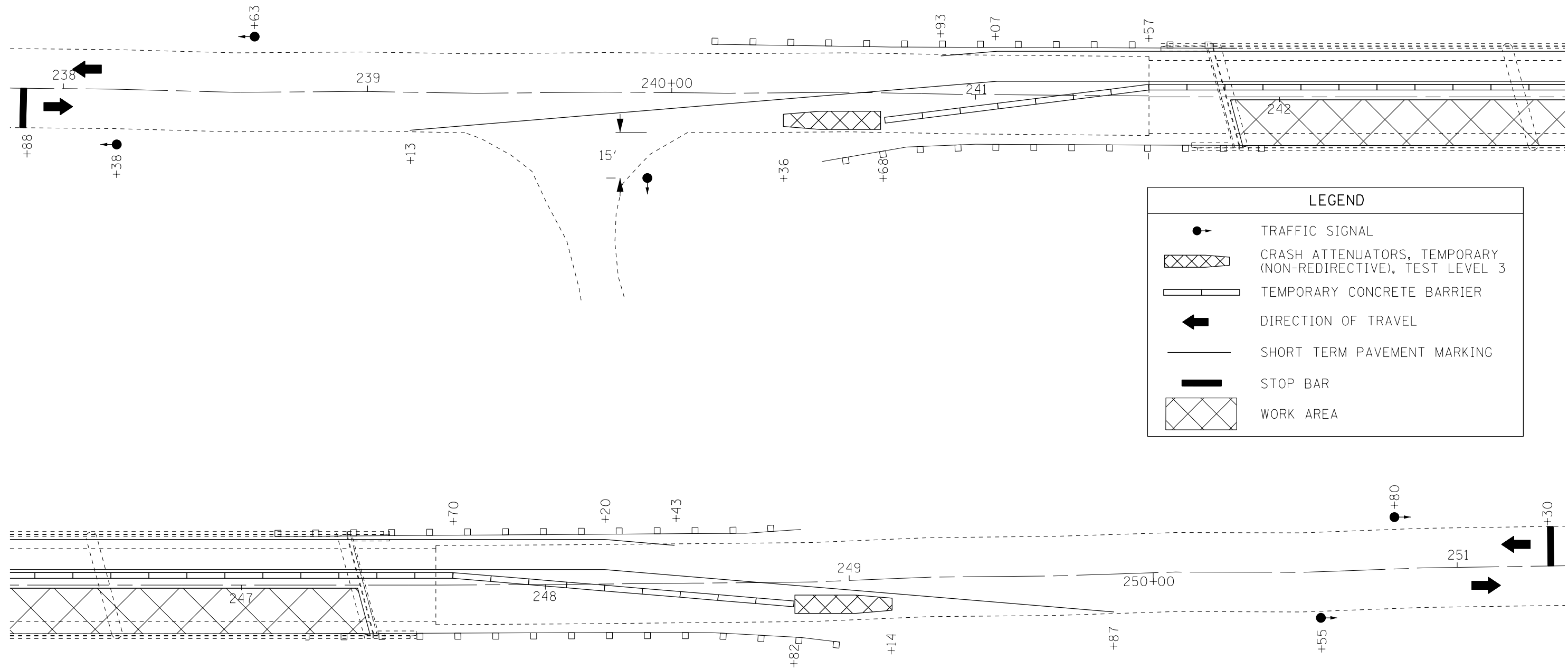
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PLOT DATE = \$DATE\$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL
STAGE I

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
657	(114-BR-1)BJR,BRR	HENDERSON	35	11
CONTRACT NO. 68E26			ILLINOIS FED. AID PROJ.	



LEGEND	
	TRAFFIC SIGNAL
	CRASH ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3
	TEMPORARY CONCRETE BARRIER
	DIRECTION OF TRAVEL
	SHORT TERM PAVEMENT MARKING
	STOP BAR
	WORK AREA

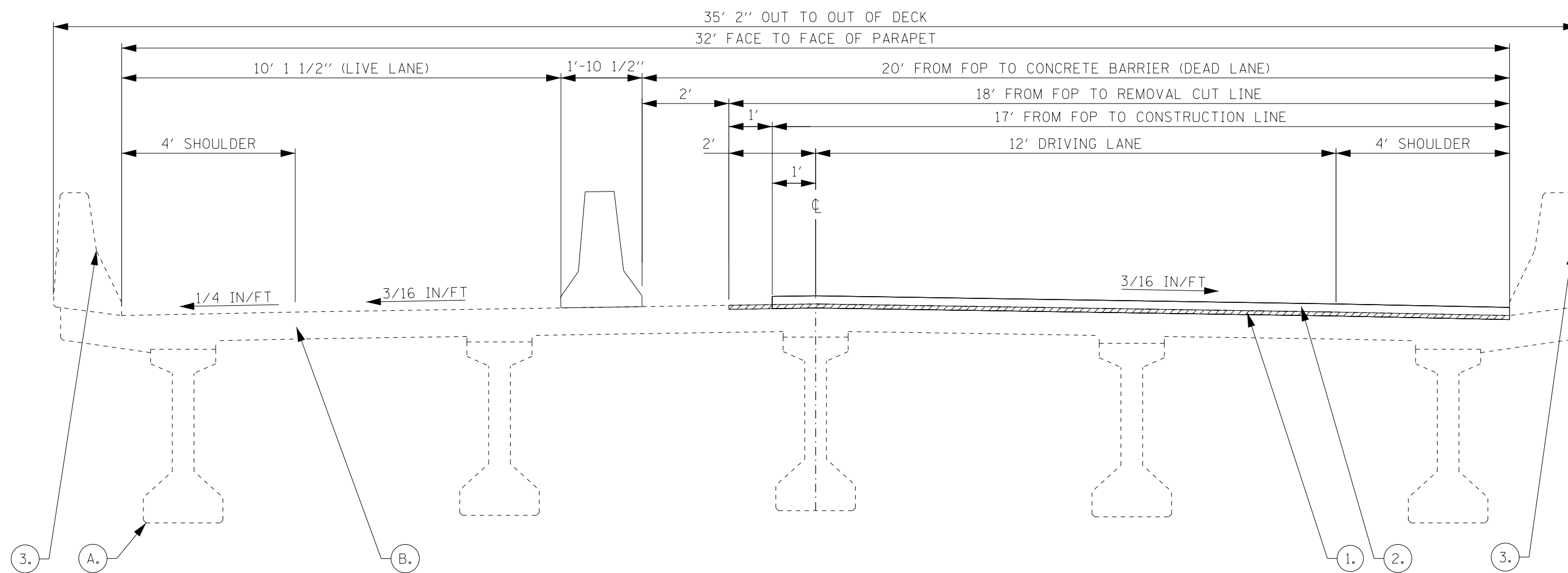
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PLOT DATE = \$DATE\$	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

TRAFFIC CONTROL STAGE II				
SCALE:	SHEET	OF	SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
657	(114-BR-1)BJR,BRR	HENDERSON	35	12
CONTRACT NO. 68E26			ILLINOIS FED. AID PROJ.	



*NORTH ABUTMENT to PIER 4 - 54" PCC I BEAMS
 *PIER 4 to SOUTH ABUTMENT - 48" PCC I BEAMS

EXISTING ELEMENTS

- A. PCC I BEAMS
- B. 7 1/2" SLAB

PROPOSED IMPROVEMENTS

1. BRIDGE DECK SCARIFICATION 3/4"
2. BRIDGE DECK LATEX CONCRETE OVERLAY, 2 1/4"
3. PROTECTIVE COAT (SPECIAL)

TRAFFIC CONTROL DETAIL - STAGE I
 (LOOKING NORTH)
 STA. 241+80 to 247+40

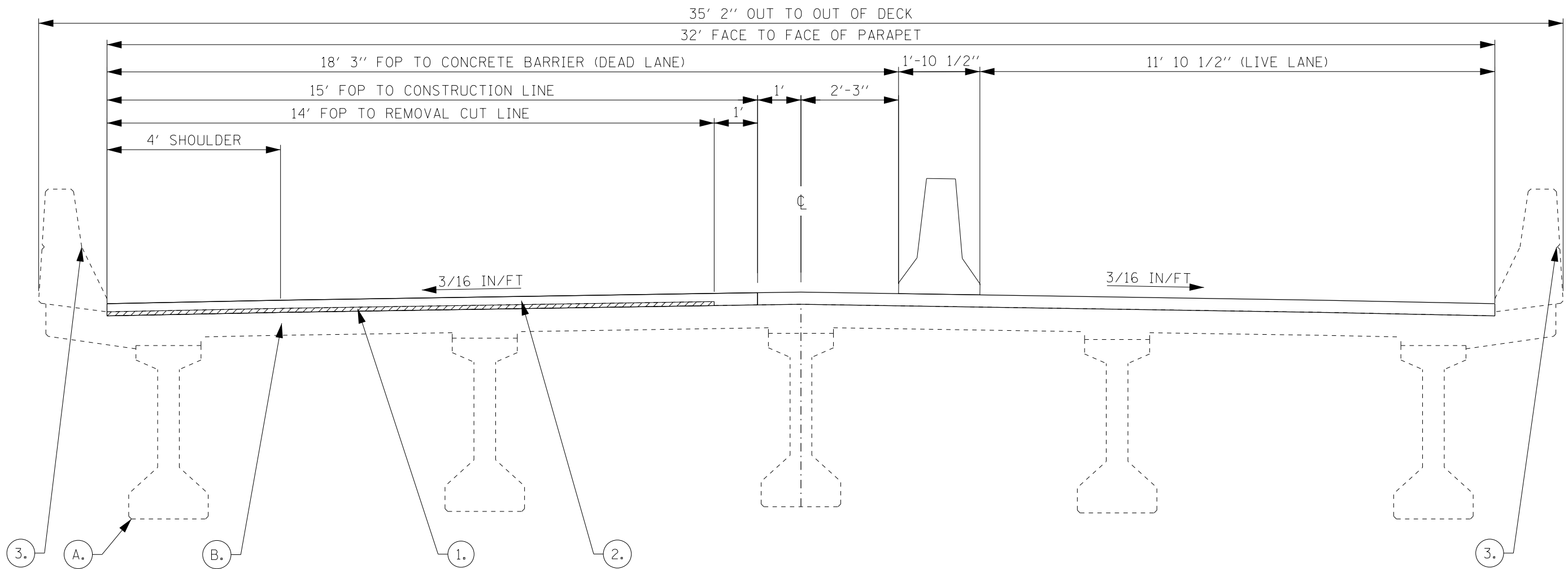
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PLOT DATE = \$DATE\$	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

TRAFFIC CONTROL DETAIL STAGE I	
SCALE:	SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
657	(114-BR-1)BJR,BRR	HENDERSON	35	13
CONTRACT NO. 68E26			ILLINOIS FED. AID PROJ.	



*NORTH ABUTMENT to PIER 4 - 54" PCC I BEAMS
 *PIER 4 to SOUTH ABUTMENT - 48" PCC I BEAMS

EXISTING ELEMENTS

- A. PCC I BEAMS
- B. 7 1/2" SLAB

PROPOSED IMPROVEMENTS

- 1. BRIDGE DECK SCARIFICATION 3/4"
- 2. BRIDGE DECK LATEX CONCRETE OVERLAY, 2 1/4"
- 3. PROTECTIVE COAT (SPECIAL)

TRAFFIC CONTROL DETAIL - STAGE II
 (LOOKING NORTH)
 STA. 241+80 to 247+40

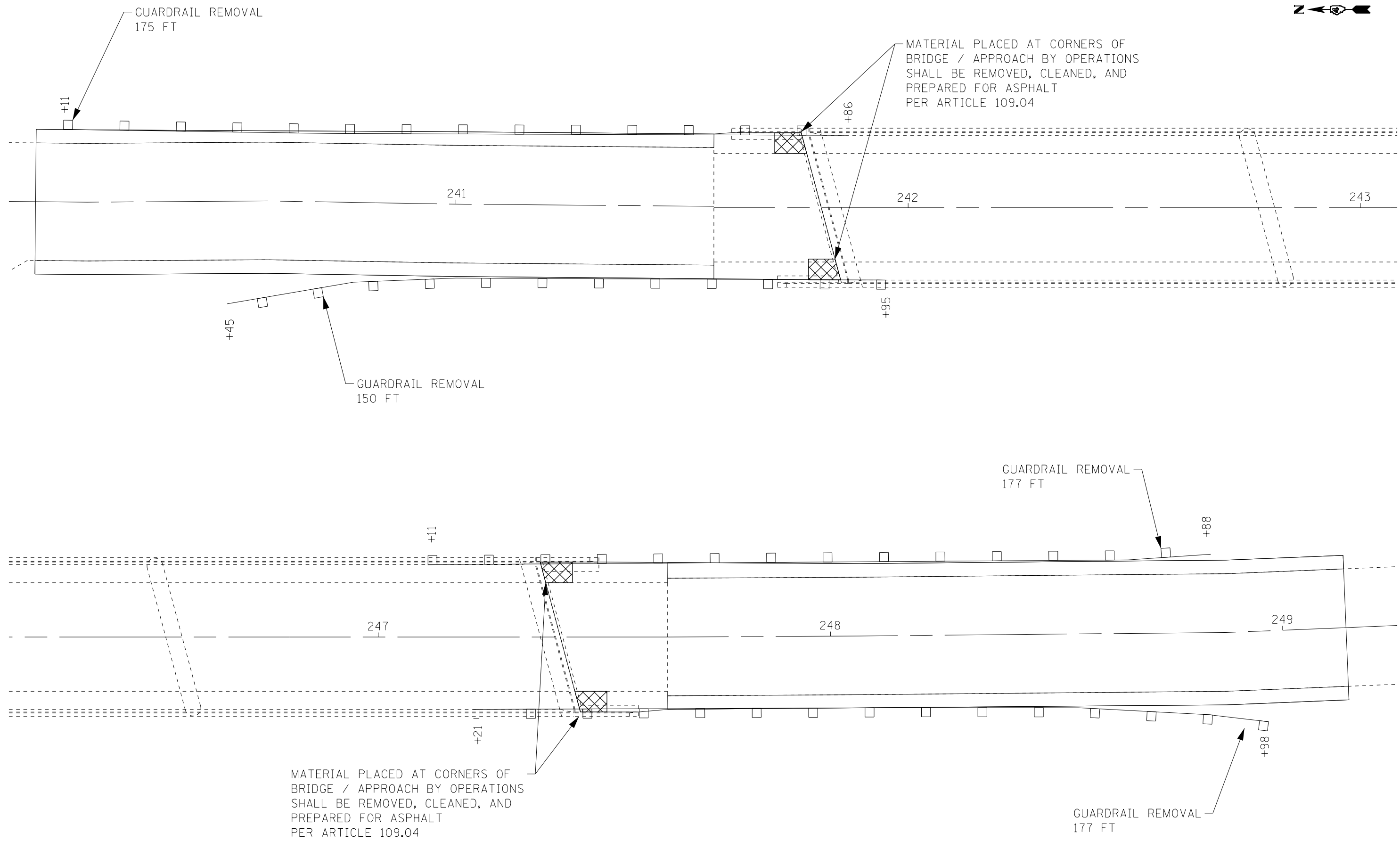
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PLOT DATE = \$DATE\$	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

TRAFFIC CONTROL DETAIL STAGE II	
SCALE:	SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
657	(114-BR-1)BJR,BRR	HENDERSON	35	14
CONTRACT NO. 68E26			ILLINOIS FED. AID PROJ.	



MODEL: 140DELMARIES
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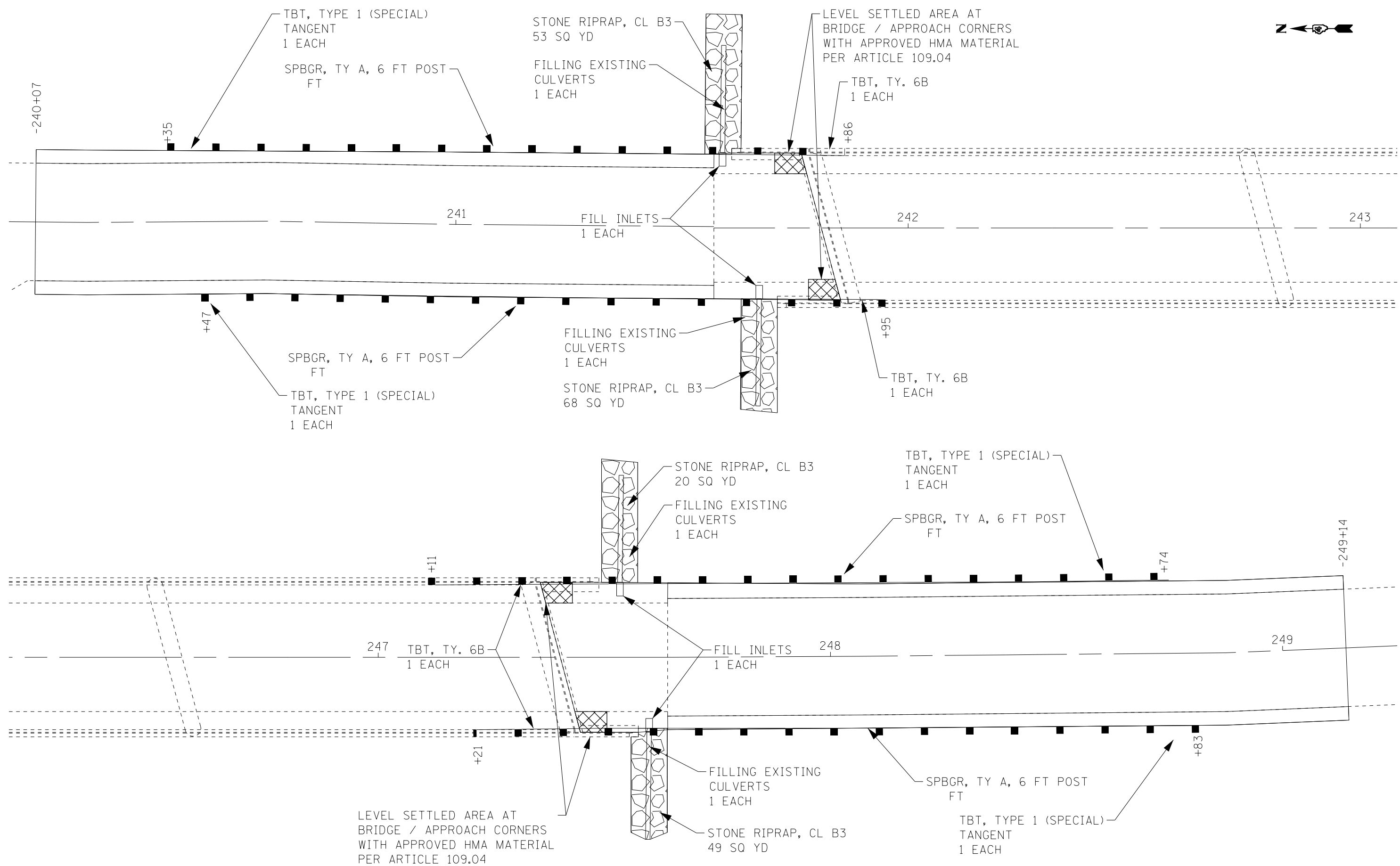
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

EXISTING & REMOVAL

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
657	(114-BR-1)BJR,BRR	HENDERSON	35	15
CONTRACT NO. 68E26				
ILLINOIS		FED. AID PROJECT		



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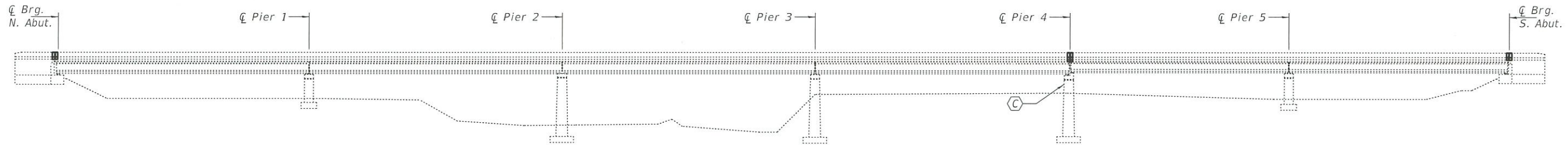
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

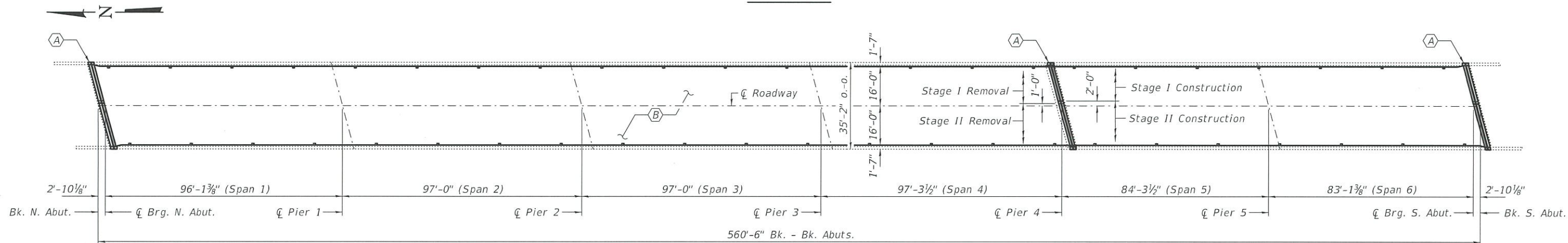
PROPOSED IMPROVEMENTS

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
657	(114-BR-1)BJR,BRR	HENDERSON	35	16
CONTRACT NO. 68E26			ILLINOIS FED. AID PROJECT	



ELEVATION



PLAN

- (A) - Remove existing Expansion Joint and install new Preformed Joint Strip Seal.
- (B) - Install new 2 1/4" Latex Overlay on the existing deck. See sheet 2 of 9 for details.
- (C) - Structural Repair of Concrete

GENERAL NOTES

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.

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.

Reinforcement bars designated (E) shall be epoxy coated.

Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.

Joint openings shall be adjusted according to Article 520.04 of the Standard Specifications when the deck is poured at an ambient temperature other than 50° F.

Synthetic fibers shall be added to the Bridge Deck Latex Concrete Overlay, see Special Provisions.

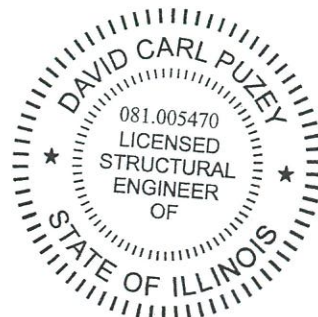
The Contractor shall use extreme care during concrete removal so as not to damage the PPC I-Beam.

Traffic will be maintained using stage construction.

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Concrete Removal	Cu. Yd.	7.5
Concrete Superstructure	Cu. Yd.	8.4
Preformed Joint Strip Seal	Foot	106
Reinforcement Bars, Epoxy Coated	Pound	1320
Bridge Deck Scarification, 3/4"	Sq. Yd.	1968
Bridge Deck Latex Conc. Overlay, 2 1/4"	Sq. Yd.	1968
Bridge Deck Grooving	Sq. Yd.	1860
Bar Splicers	Each	16
Structural Repair of Concrete (Depth ≤ 5")	Sq. Ft.	34
* Protective Coat	Sq. Yd.	1993
** Protective Coat (Special)	Sq. Yd.	392
** Surface Filler (Special)	Gallon	9.8

* Apply to new concrete and overlay only.
 ** Apply to existing parapets only.



EXPIRES 11-30-2020

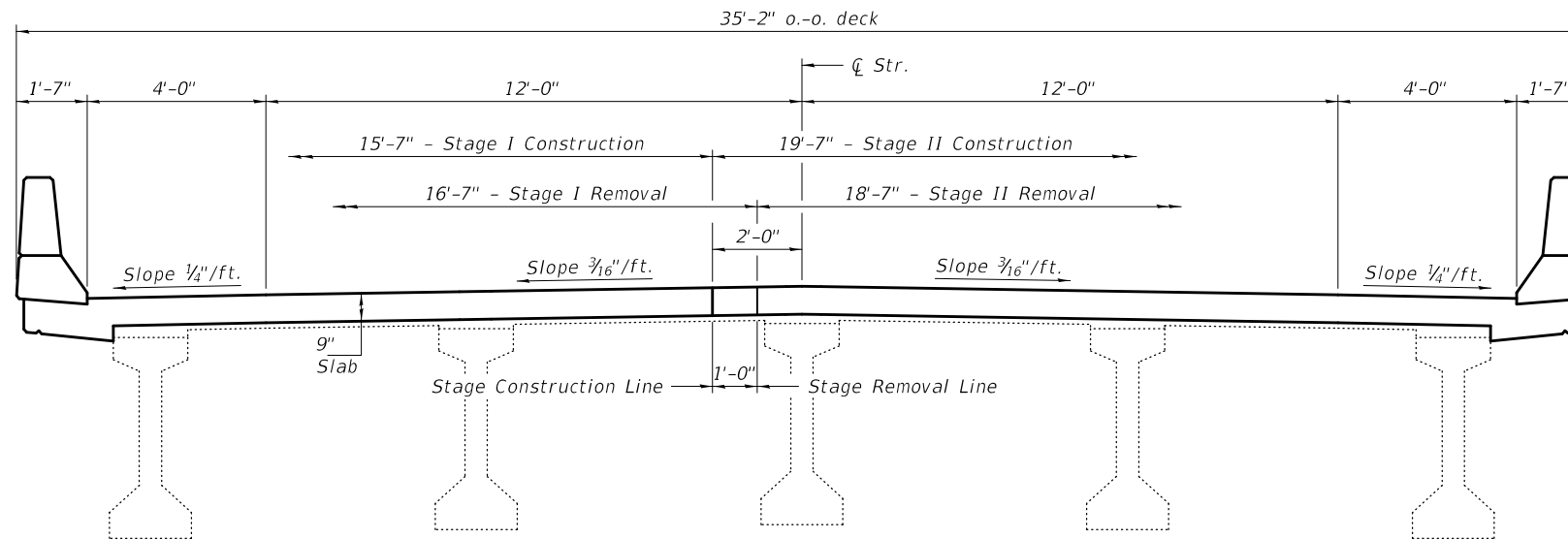
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CHECKED - <i>[Signature]</i>	PASSED - <i>[Signature]</i>	REVISSED -
DRAWN - <i>[Signature]</i>		REVISSED -
CHECKED - <i>[Signature]</i>		

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

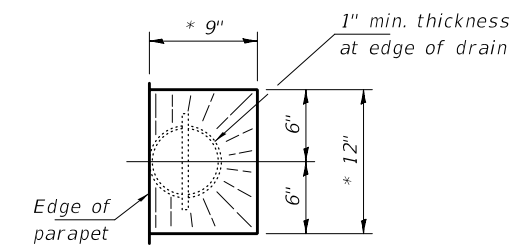
GENERAL PLAN AND ELEVATION
 FAP 657 OVER HENDERSON CREEK
 SN 036-0039

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 68E26			ILLINOIS FED. AID PROJECT	

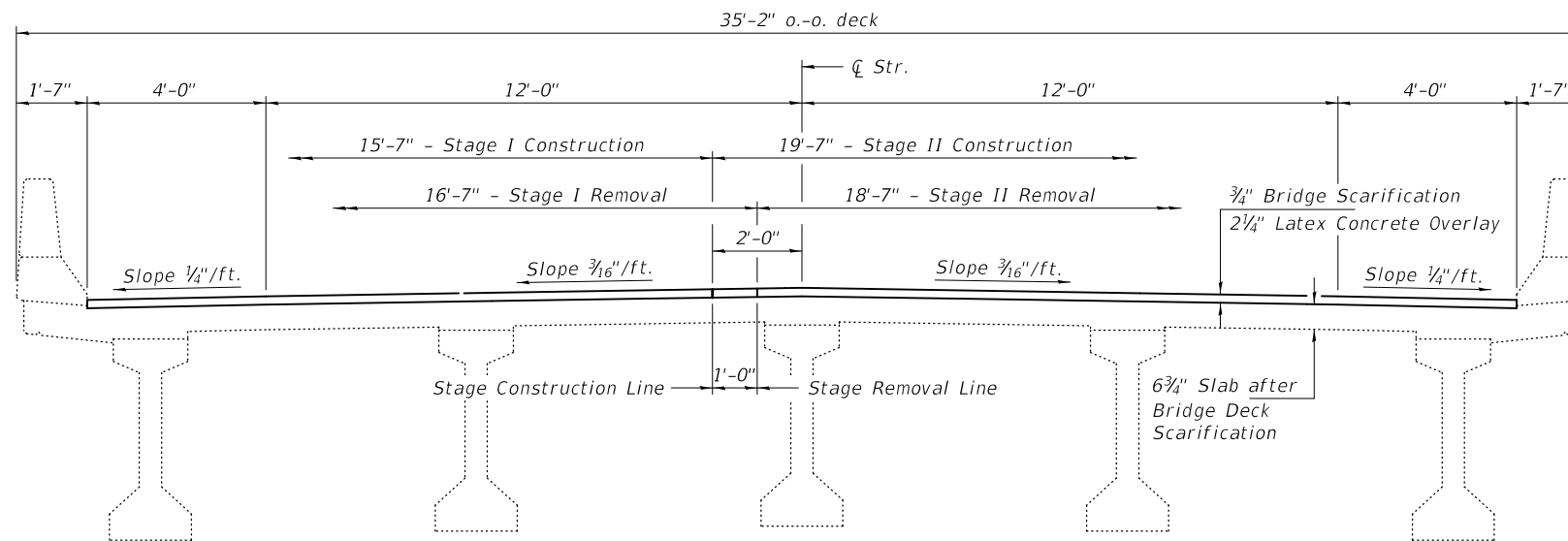
SHEET NO. 1 OF 9 SHEETS



CROSS SECTION AT ABUTMENTS
(Looking South)





DRAIN DETAIL
* slope to drain



CROSS SECTION AT MID-SPAN
(Looking South)

DESIGNED - JOV
CHECKED - SMR
DRAWN - daburdell
CHECKED - JOV SMR

EXAMINED
PASSED


 ENGINEER OF STRUCTURAL SERVICES
 ENGINEER OF BRIDGES AND STRUCTURES

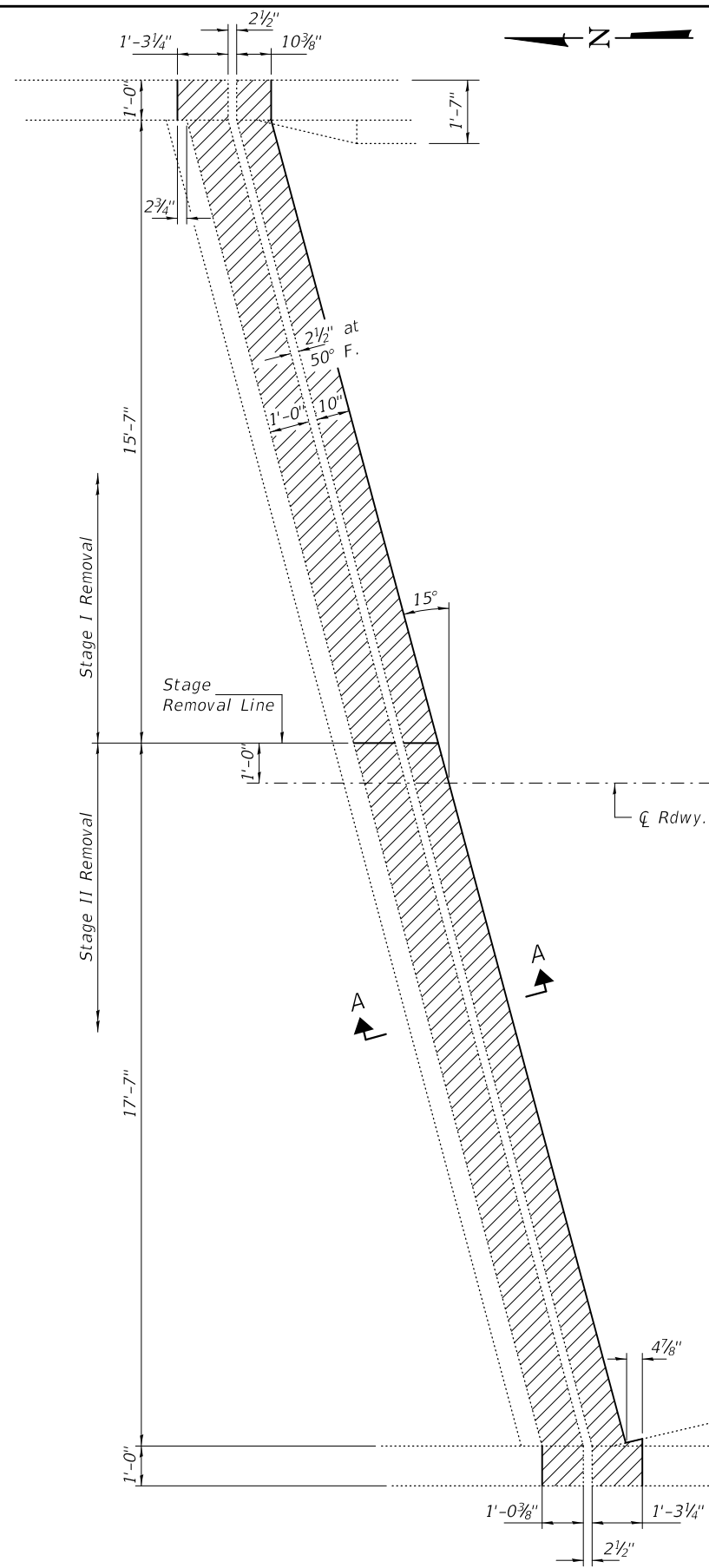
DATE - MAY 7, 2019
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

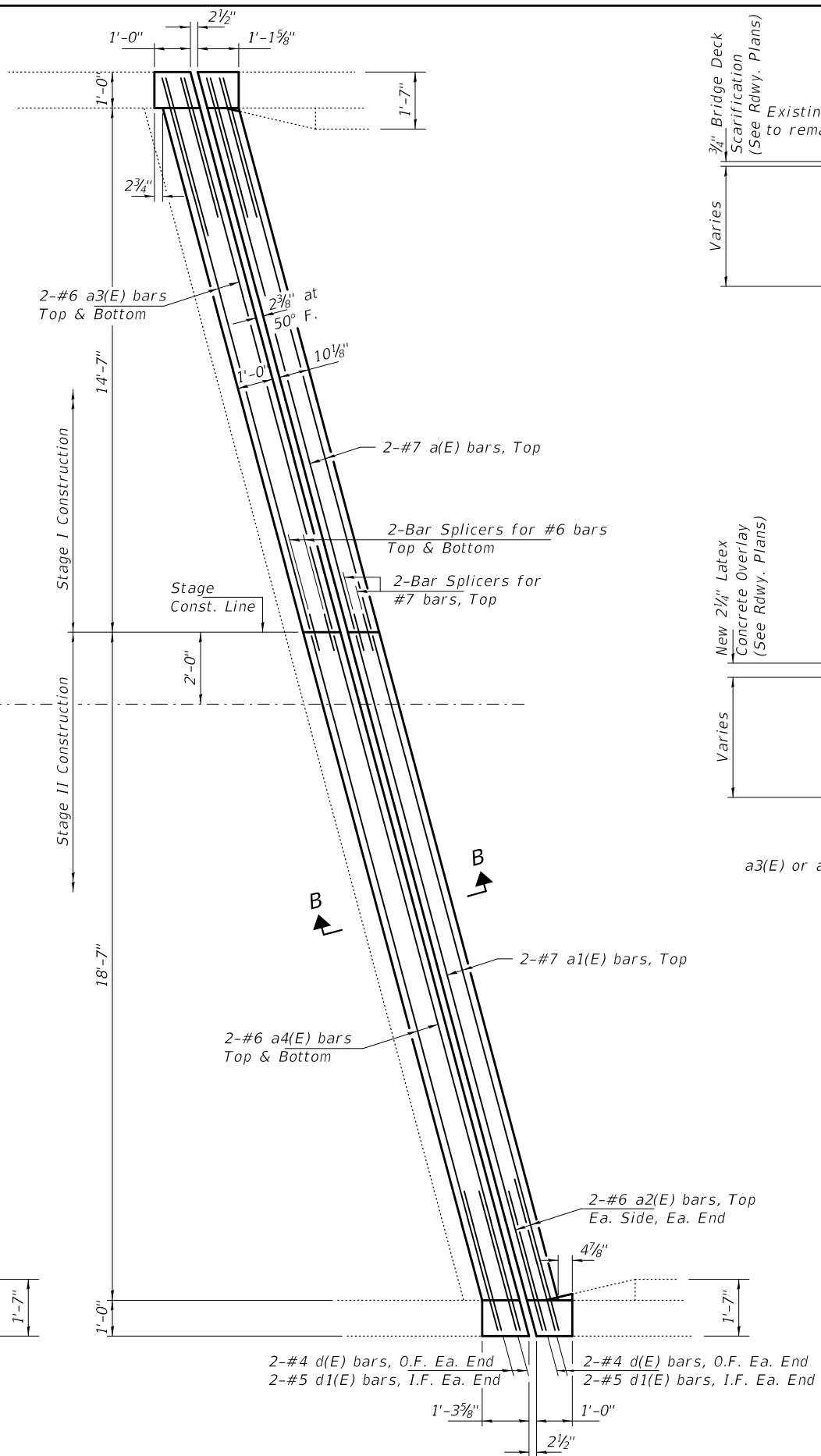
CROSS SECTIONS & STAGING DETAILS
SN 036-0039

SHEET NO. 2 OF 9 SHEETS

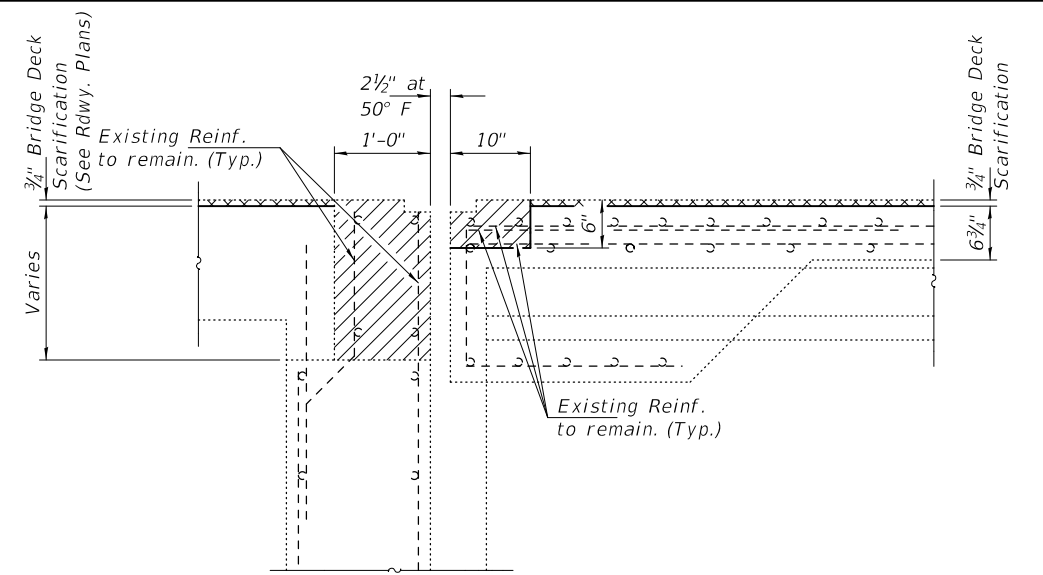
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657	(114-BR-1) BJR,BRR	HENDERSON	35	18
CONTRACT NO. 68E26				
ILLINOIS		FED. AID PROJECT		



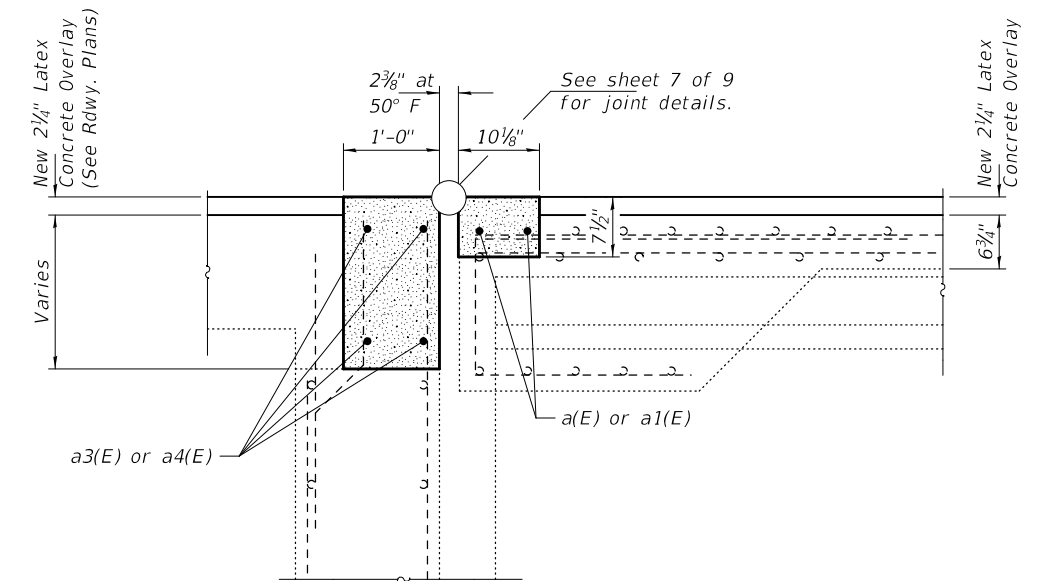
REMOVAL PLAN



REPLACEMENT PLAN



SECTION A-A



SECTION B-B

Notes:
 See sheet 6 of 9 for Section Thru Bridge Parapet, Section Thru Approach Parapet, Bill of Material and reinforcement bending diagrams.
 Hatched areas indicate Concrete Removal.

DESIGNED - JOV
 CHECKED - SMR
 DRAWN - daburdell
 CHECKED - JOV SMR

EXAMINED
 PASSED
 ENGINEER OF STRUCTURAL SERVICES
 ENGINEER OF BRIDGES AND STRUCTURES

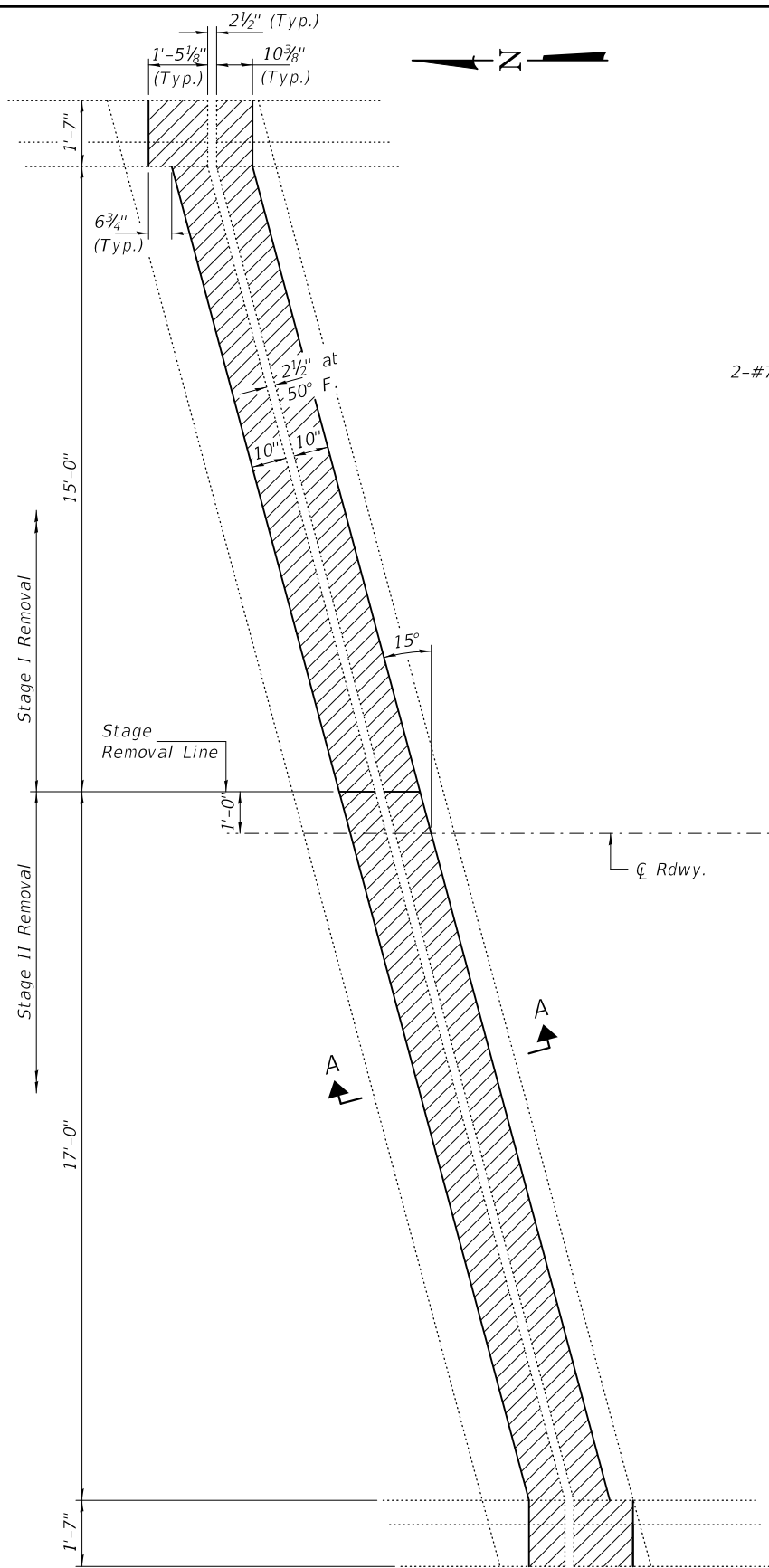
DATE - MAY 7, 2019
 REVISED -
 REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

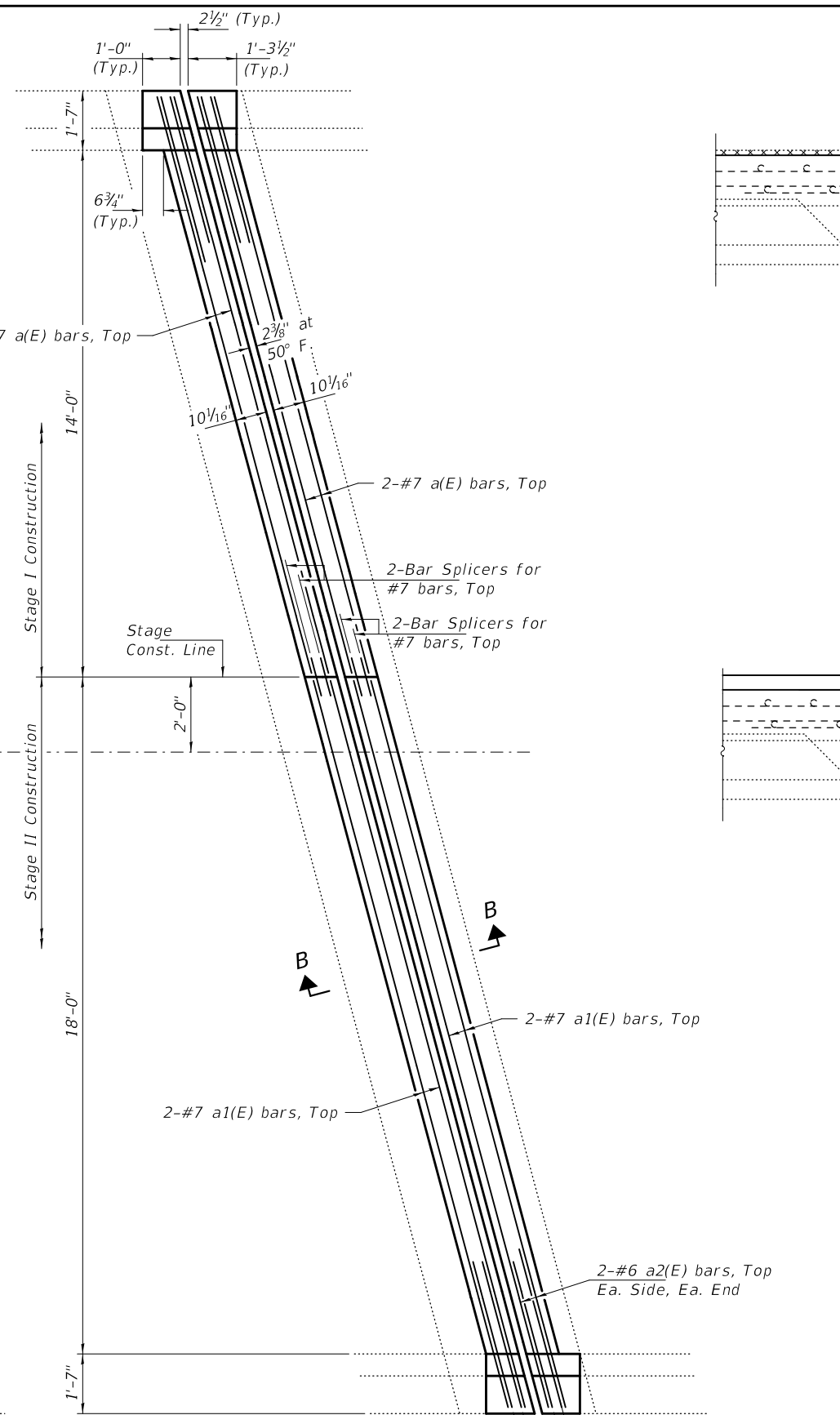
JOINT REPLACEMENT DETAILS - NORTH ABUTMENT
 SN 036-0039

SHEET NO. 3 OF 9 SHEETS

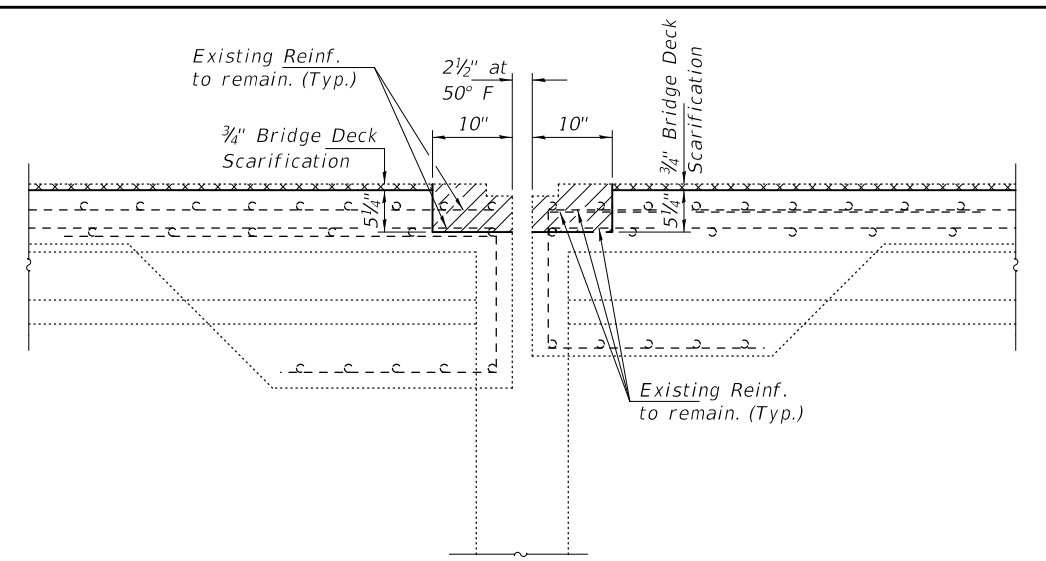
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CONTRACT NO. 68E26				
ILLINOIS FED. AID PROJECT				



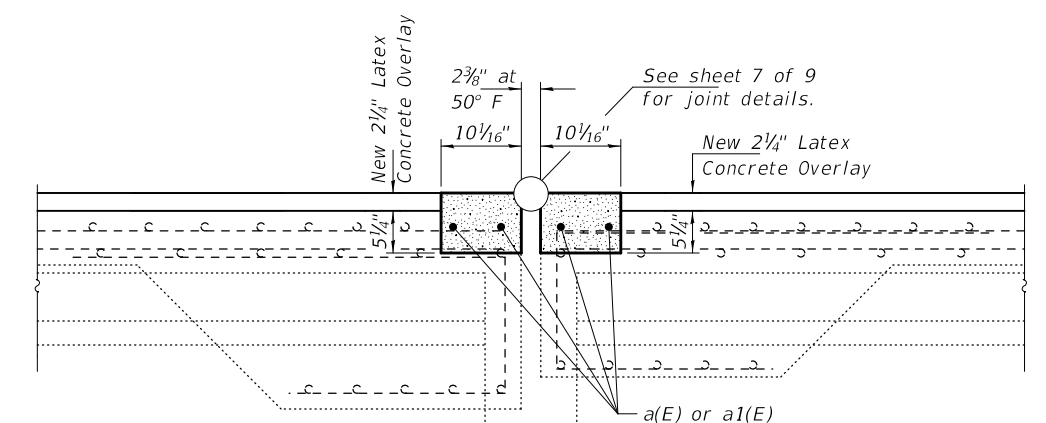
REMOVAL PLAN



REPLACEMENT PLAN



SECTION A-A



SECTION B-B

Notes:
 See sheet 6 of 9 for Section Thru Bridge Parapet, Section Thru Parapet, Bill of Material and reinforcement bending diagrams.
 Hatched areas indicate Concrete Removal.

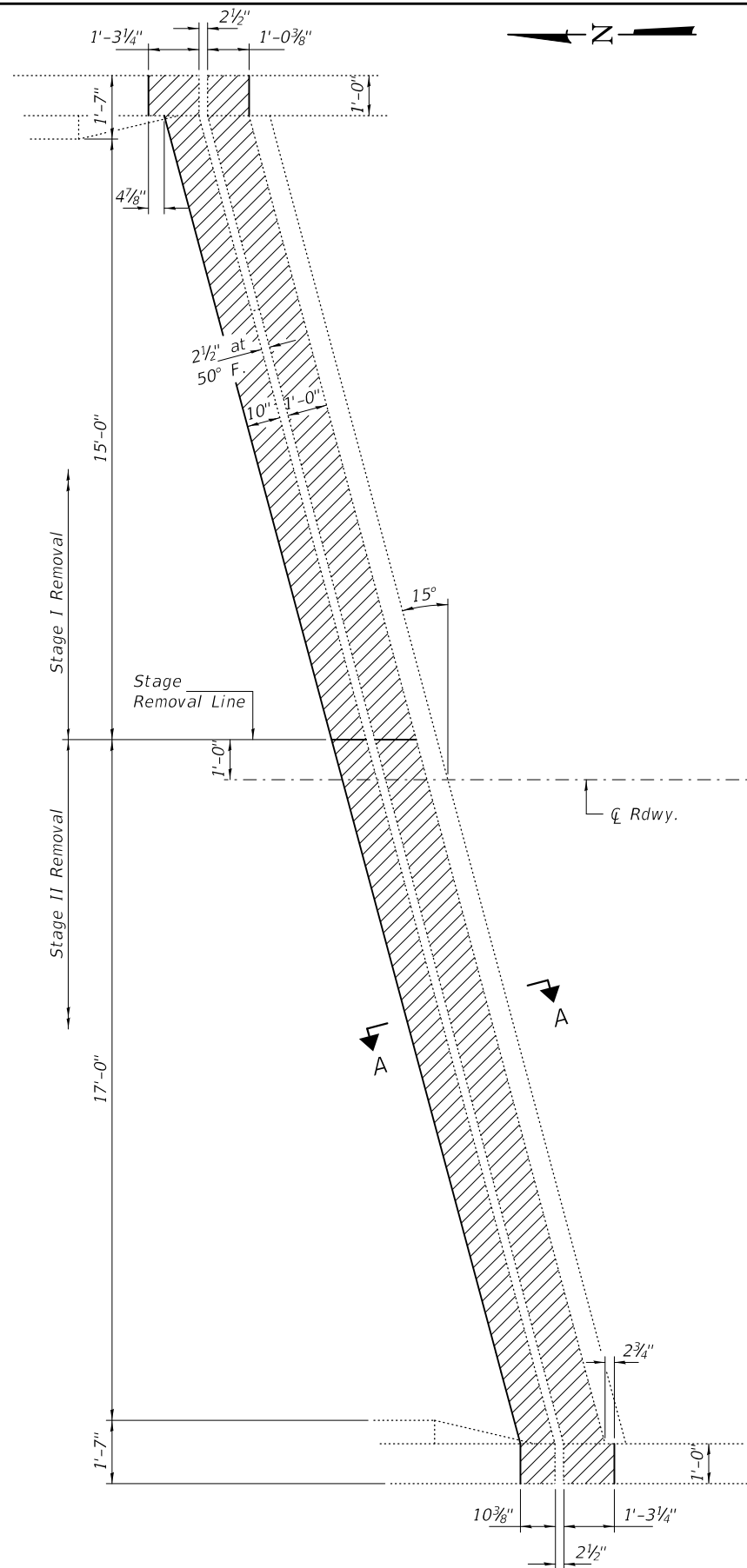
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CHECKED - SMR	ENGINEER OF STRUCTURAL SERVICES	
DRAWN - <i>daburdell</i>	PASSED - <i>Carl R. Meyer</i>	REVISED -
CHECKED - JOV SMR	ENGINEER OF BRIDGES AND STRUCTURES	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

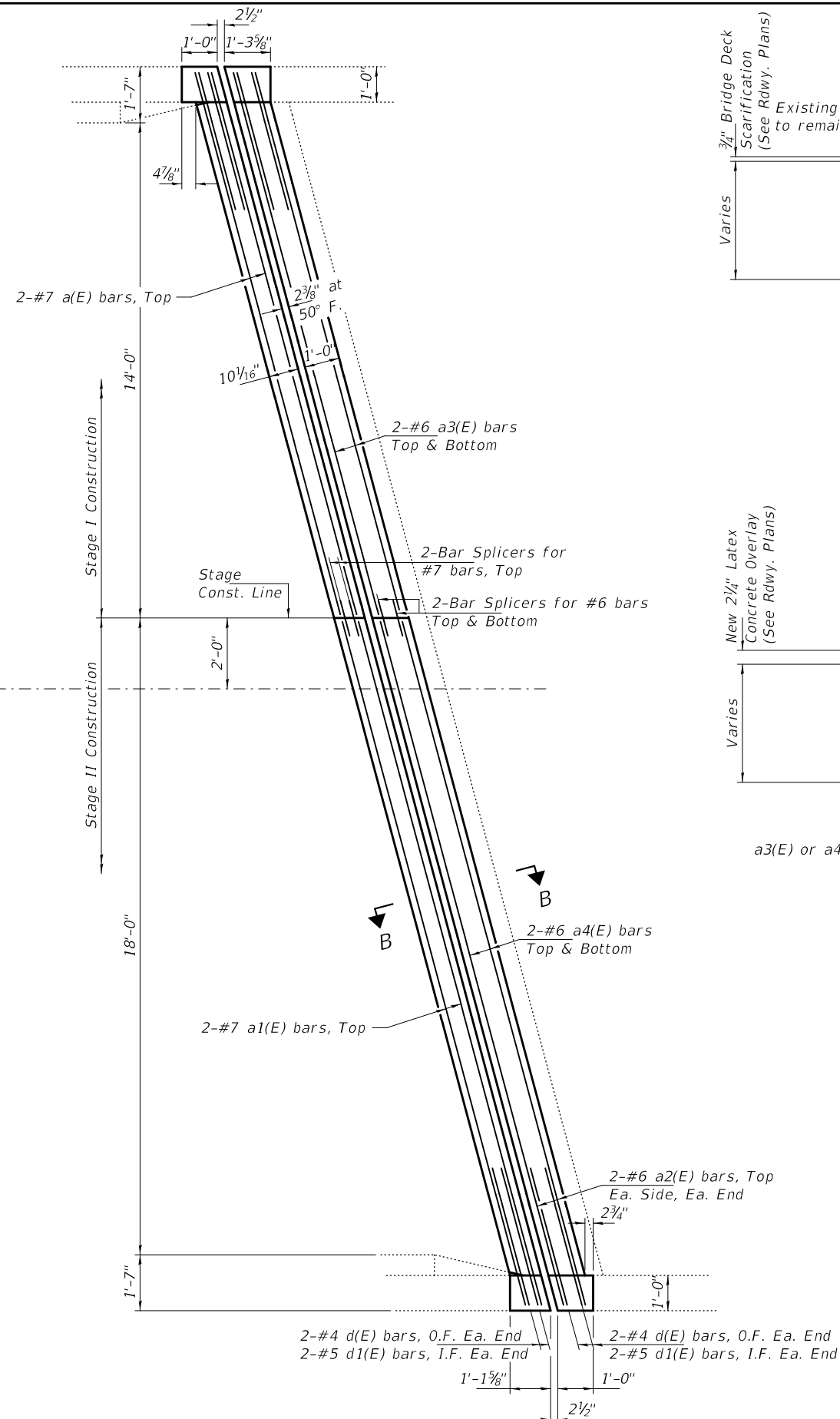
**JOINT REPLACEMENT DETAILS - PIER 4
 SN 036-0039**

F.A.P. RTE. 657	SECTION (114-BR-1) BJR,BRR	COUNTY HENDERSON	TOTAL SHEETS 35	SHEET NO. 20
			CONTRACT NO. 68E26	
ILLINOIS FED. AID PROJECT				

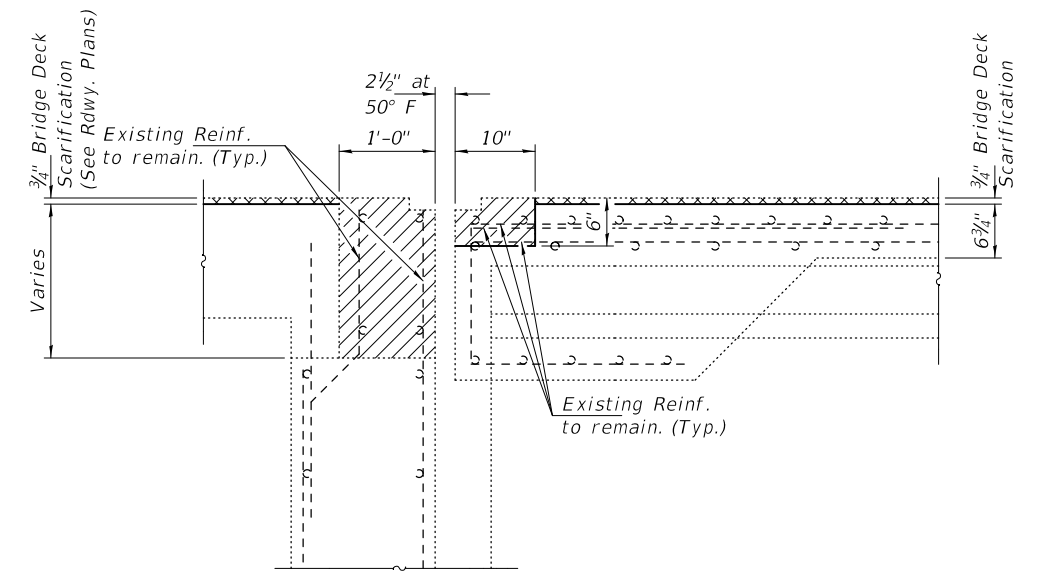
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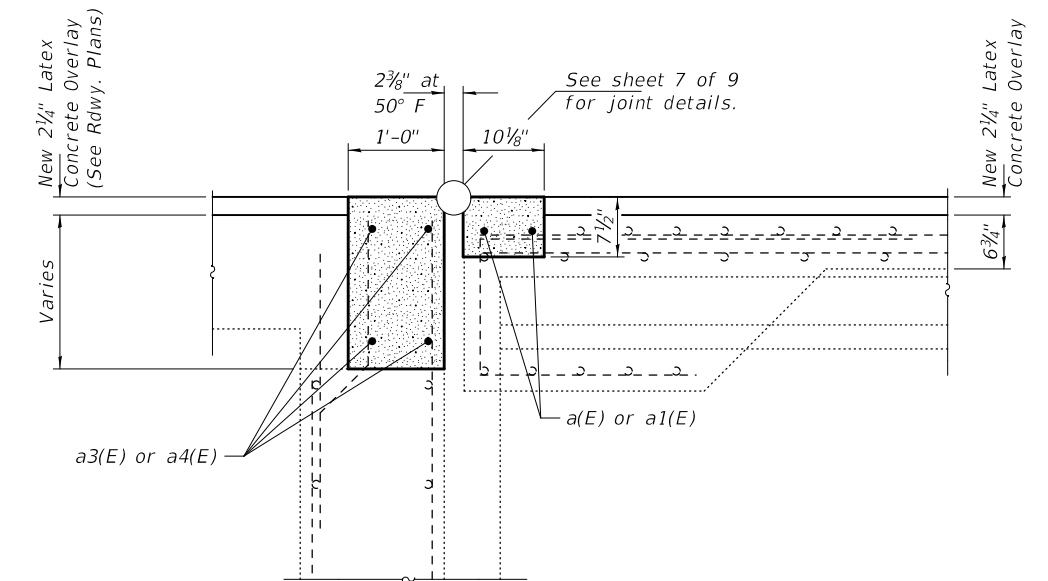
REMOVAL PLAN



REPLACEMENT PLAN



SECTION A-A



SECTION B-B

Notes:
 See sheet 6 of 9 for Section Thru Bridge Parapet, Section Thru Approach Parapet, Bill of Material and reinforcement bending diagrams.
 Hatched areas indicate Concrete Removal.

DESIGNED - JOV
 CHECKED - SMR
 DRAWN - daburdell
 CHECKED - JOV SMR

EXAMINED
 PASSED
 ENGINEER OF STRUCTURAL SERVICES
 ENGINEER OF BRIDGES AND STRUCTURES

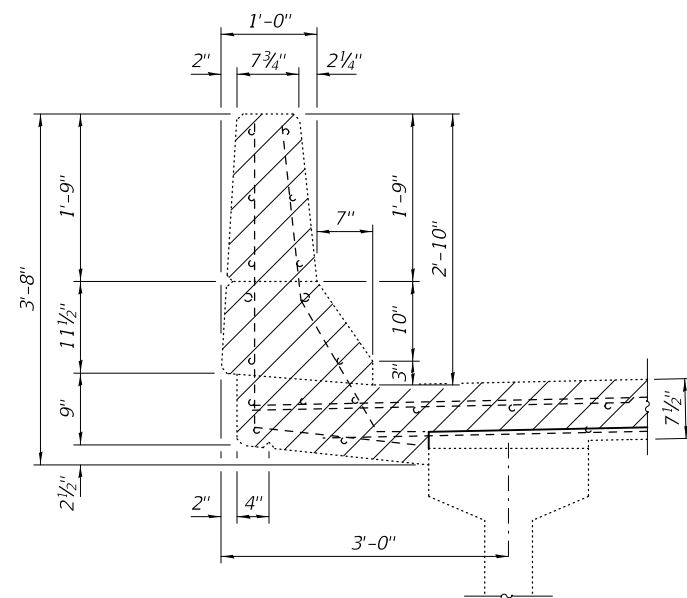
DATE - MAY 7, 2019
 REVISED -
 REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

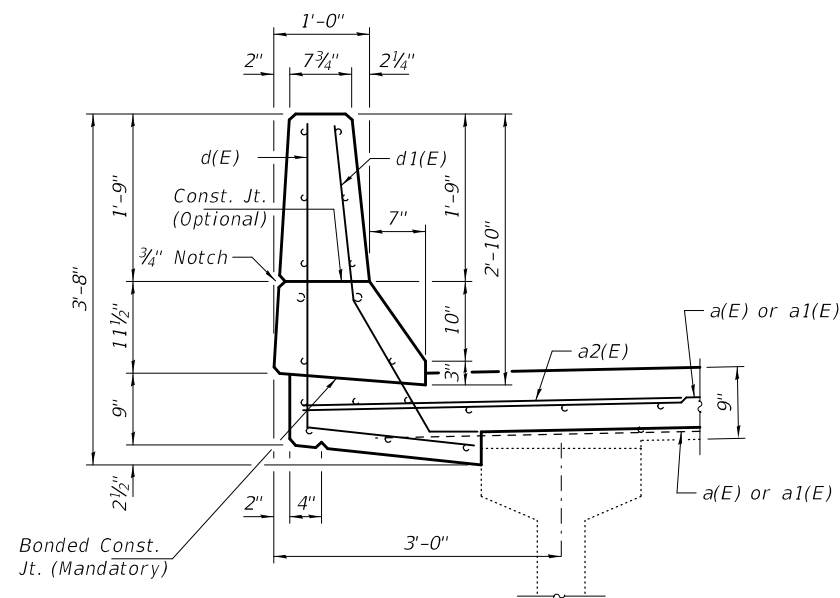
JOINT REPLACEMENT DETAILS - SOUTH ABUTMENT
 SN 036-0039

SHEET NO. 5 OF 9 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
657	(114-BR-1) BJR,BRR	HENDERSON	35	21
CONTRACT NO. 68E26				
ILLINOIS FED. AID PROJECT				



SECTION THRU BRIDGE PARAPET



SECTION THRU BRIDGE PARAPET



BILL OF MATERIAL
(2 ABUTS. & 1 PIER)

Bar	No.	Size	Length	Shape
a(E)	8	#7	15'-7"	—
a1(E)	8	#7	19'-9"	—
a2(E)	24	#6	4'-0"	—
a3(E)	8	#6	15'-7"	—
a4(E)	8	#6	19'-9"	—
d(E)	24	#4	4'-11"	L
d1(E)	24	#5	3'-11"	L
Concrete Removal			Cu. Yd.	7.5
Concrete Superstructure			Cu. Yd.	8.4
Bar Splicers			Each	16
Reinforcement Bars, Epoxy Coated			Pound	1320

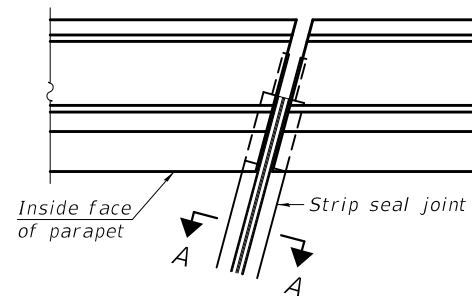
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CHECKED - SMR	<i>Timothy A. Daburdell</i> ENGINEER OF STRUCTURAL SERVICES	
DRAWN - daburdell	PASSED	REVISED -
CHECKED - JOV SMR	<i>Carl R. Rupp</i> ENGINEER OF BRIDGES AND STRUCTURES	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

JOINT REPLACEMENT DETAILS
SN 036-0039

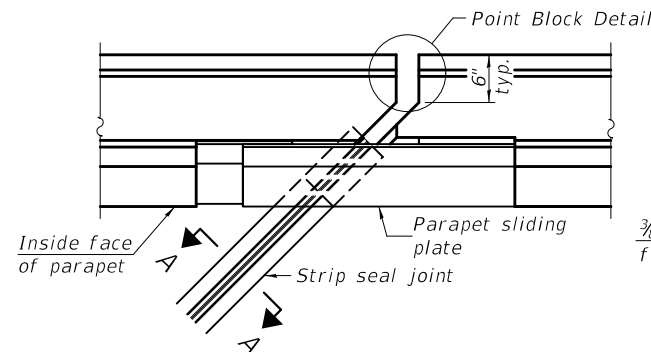
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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			CONTRACT NO. 68E26	
		ILLINOIS FED. AID PROJECT		

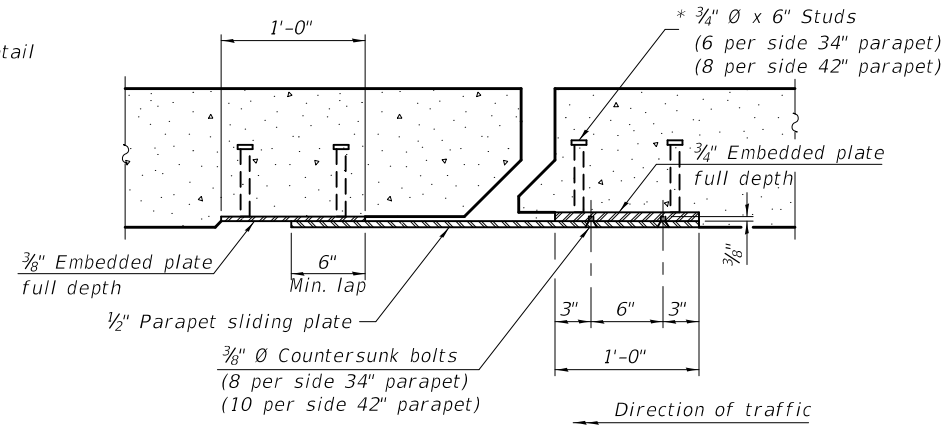


FOR SKEWS $\leq 30^\circ$

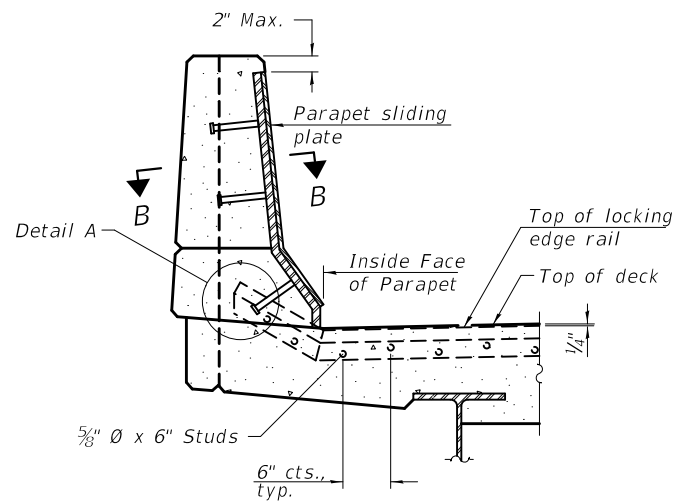
PLAN AT PARAPET



FOR SKEWS $> 30^\circ$

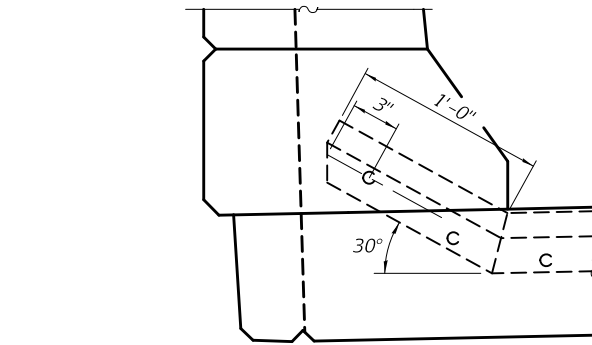


SECTION B-B

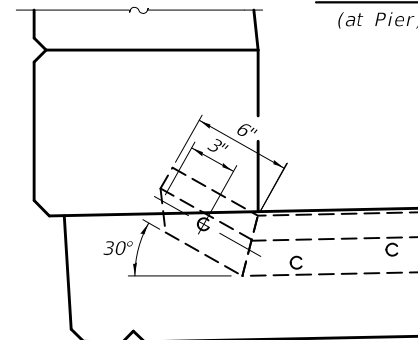


ELEVATION AT PARAPET

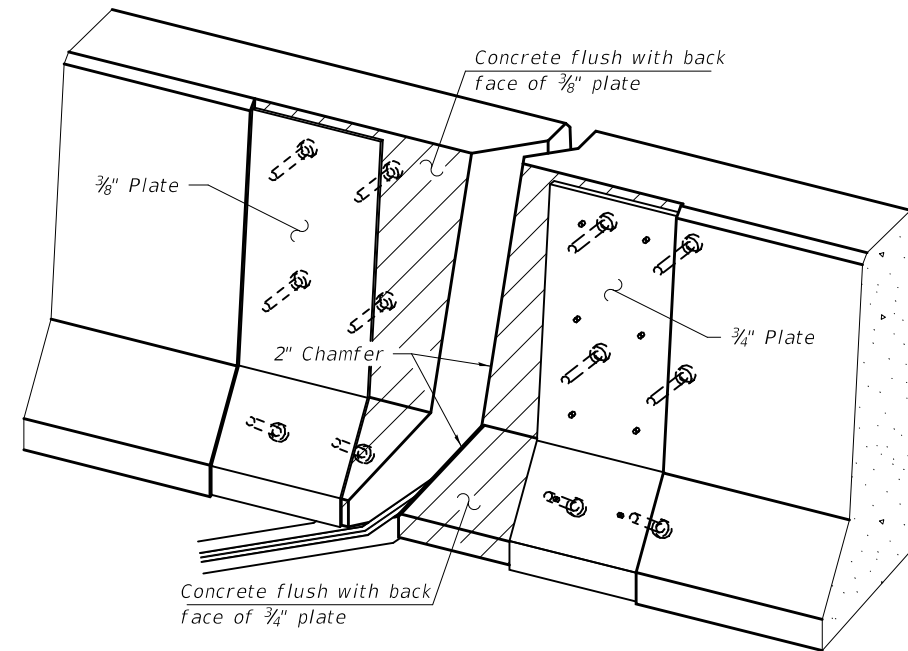
(Skews $> 30^\circ$ shown. Skews $\leq 30^\circ$ similar except as shown in plan view.)



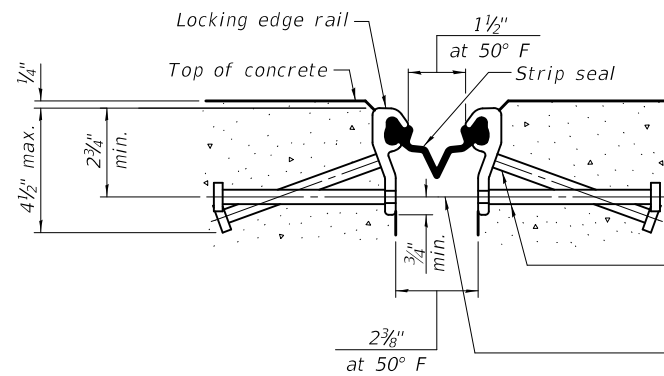
DETAIL A
(at Pier)



DETAIL A
(at Abutments)



TRIMETRIC VIEW
(Showing embedded plates only)



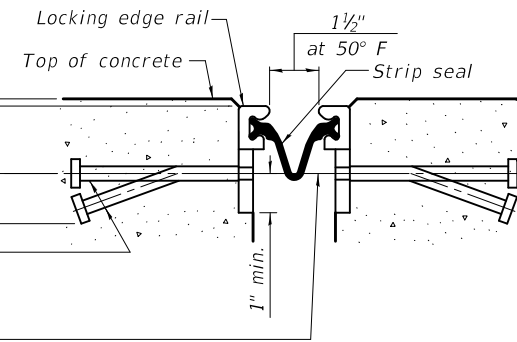
SHOWING ROLLED RAIL JOINT

* $5/8"$ ϕ x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)

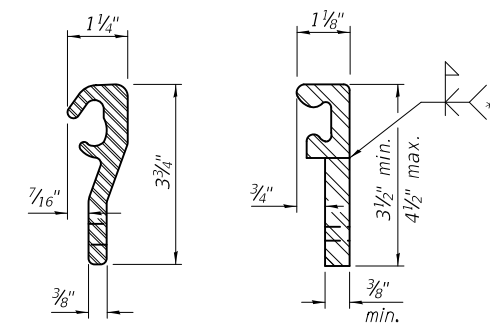
$3/8"$ ϕ threaded rods in $7/16"$ ϕ holes at $\pm 4'-0"$ cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

SECTION A-A

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



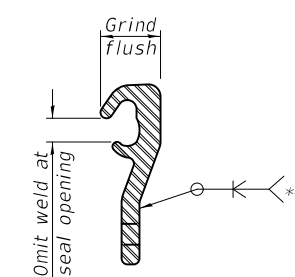
SHOWING WELDED RAIL JOINT



ROLLED (EXTRUDED) RAIL
WELDED RAIL

LOCKING EDGE RAILS

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



LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue. Rolled rail shown, welded rail similar.

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	106

8-11-17

DESIGNED - JOV
CHECKED - SMR
DRAWN - daburdell
CHECKED - JOV SMR

EXAMINED
PASSED
Timothy A. Daulton
ENGINEER OF STRUCTURAL SERVICES
Carl Berger
ENGINEER OF BRIDGES AND STRUCTURES

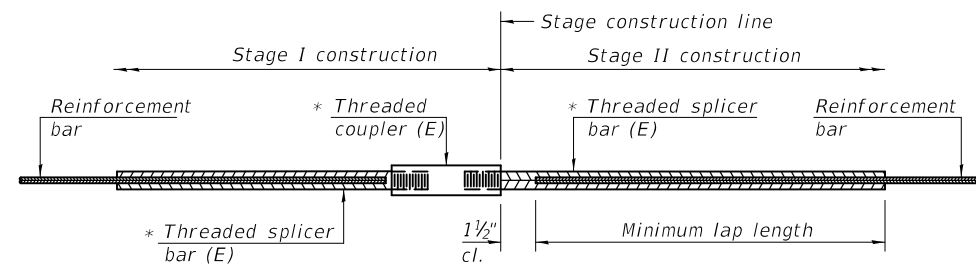
DATE - MAY 7, 2019
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL
SN 036-0039

SHEET NO. 7 OF 9 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
657	(114-BR-1) BJR,BRR	HENDERSON	35	23
CONTRACT NO. 68E26			ILLINOIS FED. AID PROJECT	

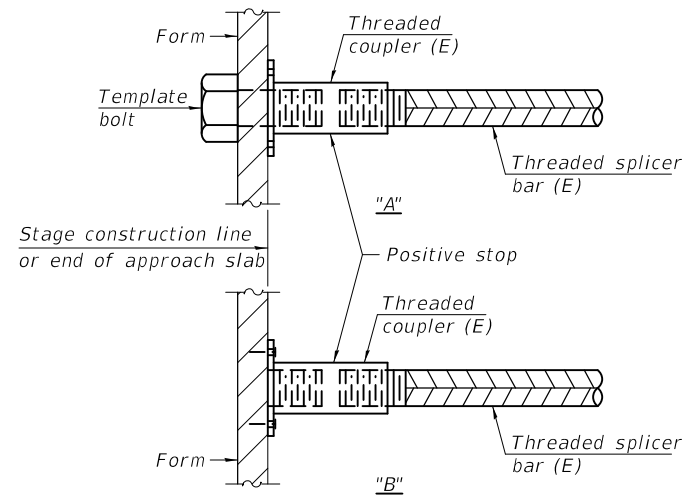


STANDARD BAR SPLICER ASSEMBLY

Threaded splicer bar length = min. lap length + 1 1/2" + thread length

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

Location	Bar size	No. assemblies required	Minimum lap length
N. Abut. (Backwall)	#6	4	4'-0"
N. Abut. (Deck)	#7	2	4'-2"
Pier 4	#7	4	4'-2"
S. Abut. (Backwall)	#6	4	4'-0"
S. Abut. (Deck)	#7	2	4'-2"

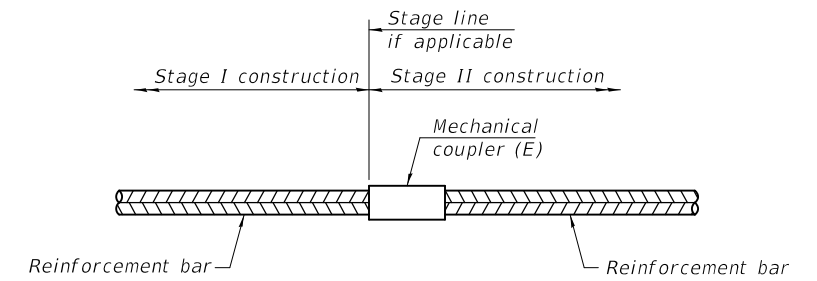


INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.

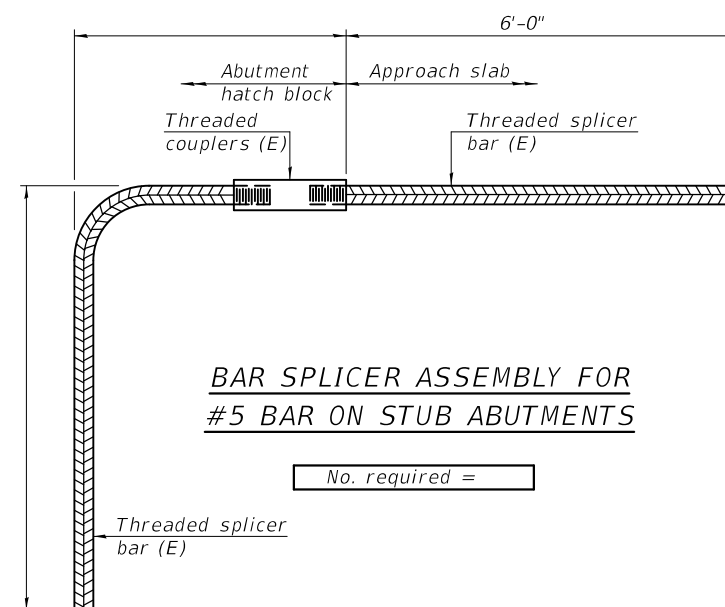
"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.

(E) : Indicates epoxy coating.



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required =

NOTES

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.

All reinforcement shall be lapped and tied to the splicer bars.

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.

See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BSD-1

2-17-2017

DESIGNED - JOV
 CHECKED - SMR
 DRAWN - daburdell
 CHECKED - JOV SMR

EXAMINED
 PASSED
 Timothy A. Daburdell
 ENGINEER OF STRUCTURAL SERVICES
 Carl R. Meyer
 ENGINEER OF BRIDGES AND STRUCTURES

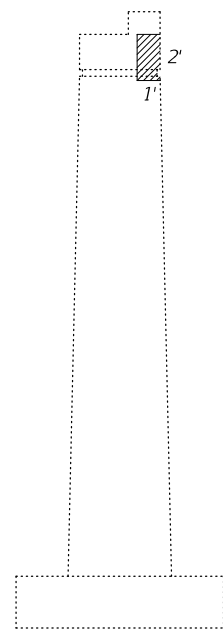
DATE - MAY 7, 2019
 REVISED -
 REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
 SN 036-0039

SHEET NO. 8 OF 9 SHEETS

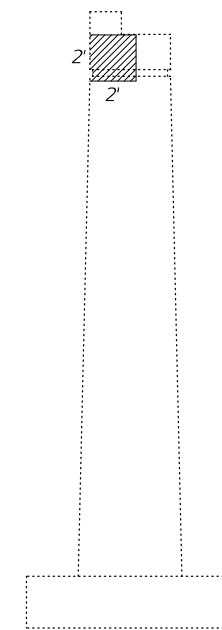
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
657	(114-BR-1) BJR,BRR	HENDERSON	35	24
CONTRACT NO. 68E26				
ILLINOIS FED. AID PROJECT				



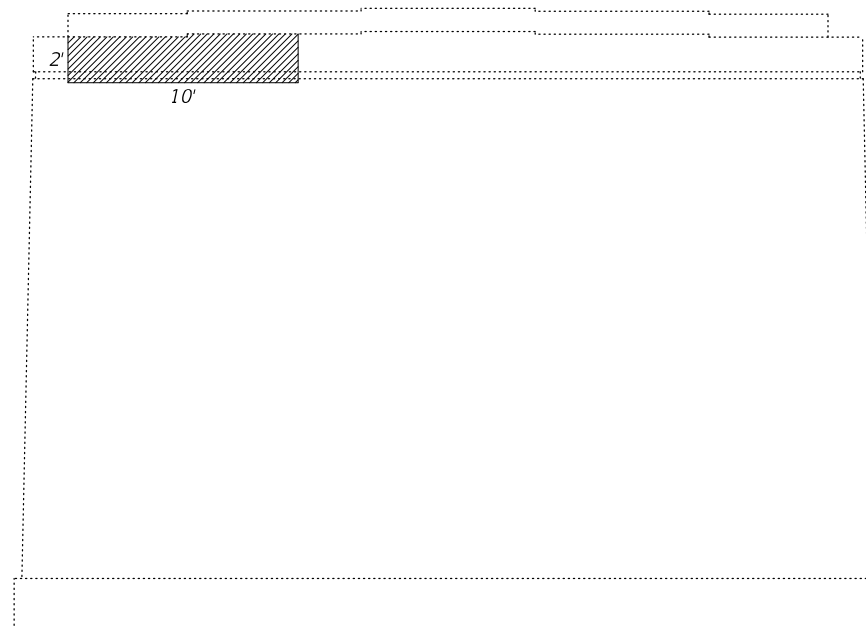
WEST END VIEW
(Looking East)



ELEVATION
(Looking North)



EAST END VIEW
(Looking West)



ELEVATION
(Looking South)

BILL OF MATERIAL

Item	Unit	Total
Structural Repair of Concrete (Depth ≤ 5")	Sq. Ft.	34

DESIGNED - JOV
 CHECKED - SMR
 DRAWN - daburdell
 CHECKED - JOV SMR

EXAMINED
 PASSED
Timothy A. Daburdell
 ENGINEER OF STRUCTURAL SERVICES
Carl R. Meyer
 ENGINEER OF BRIDGES AND STRUCTURES

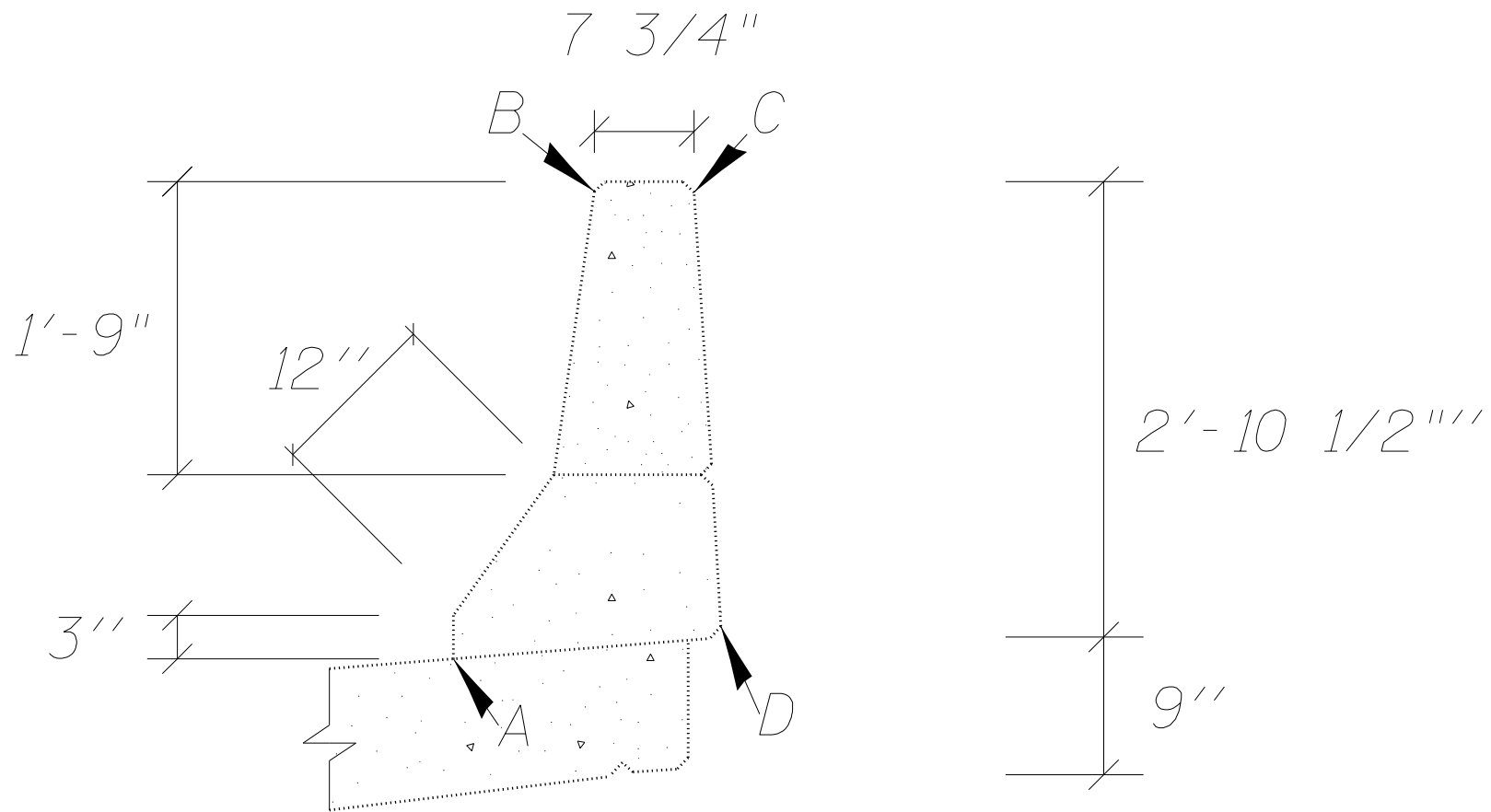
DATE - MAY 7, 2019
 REVISED -
 REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PIER 4 CONCRETE REPAIR
 SN 036-0039

SHEET NO. 9 OF 9 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
657	(114-BR-1) BJR,BRR	HENDERSON	35	25
CONTRACT NO. 68E26				
ILLINOIS		FED. AID PROJECT		



BRIDGE PARAPET
(EXISTING AND PROPOSED)

NOTE:

1. PROTECTIVE COAT TO COVER FROM POINT A THROUGH POINTS B, C, AND D OF THE PROPOSED PARAPET.
2. PROTECTIVE COAT (SPECIAL) TO COVER FROM POINT A THROUGH POINTS B, C, AND D OF THE EXISTING PARAPET.

MODEL: \$MODELNAME\$
FILE: \$NAME\$. \$FILE\$

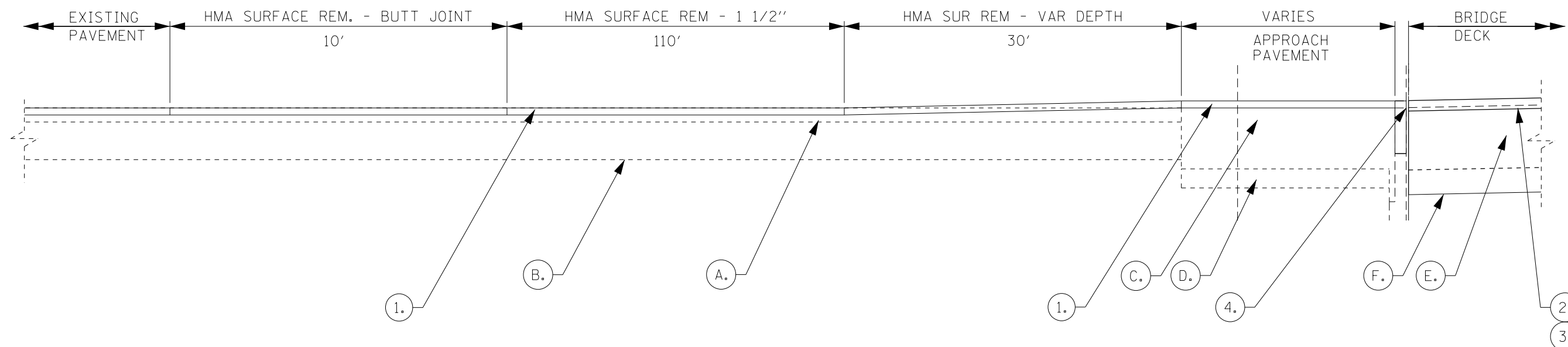
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	DRAWN - 05-15-2018	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED -	REVISED -
PLOT DATE = \$DATE\$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PARAPET PROTECTIVE COATING DETAIL

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
657	(114-BR-1)BJR,BRR	HENDERSON	35	26
CONTRACT NO. 68E26				
ILLINOIS FED. AID PROJECT				



HMA PAVEMENT PROFILE
NORTH & SOUTH APPROACHES

EXISTING ELEMENTS

- A. HMA OVERLAY
- B. BITUMINOUS BASE COURSE 8"
- C. APPROACH SLAB 13"
- D. SUB-BASE GRANULAR MAT'L, TY A , 4"
- E. DECK SLAB 7 1/2"
- F. PCC I BEAMS

PROPOSED IMPROVEMENTS

- 1. HMA SURFACE COURSE, MIX D, N50
- 2. BRIDGE DECK SCARIFICATION 3/4"
- 3. BRIDGE DECK LATEX CONCRETE OVERLAY, 2 1/4"
- 4. PREFORMED JOINT STRIP SEAL

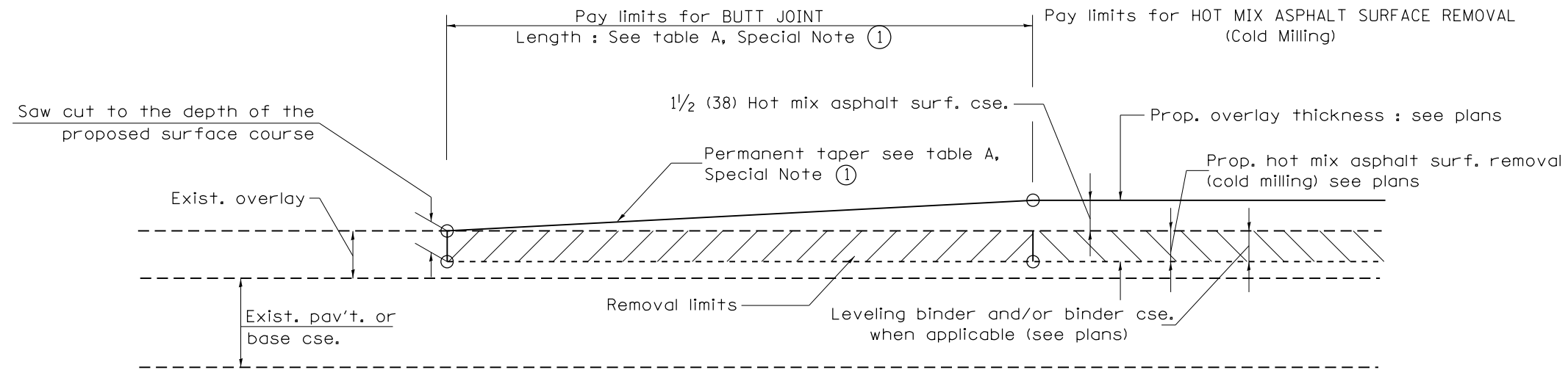
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FILE NAME: 311213

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	DRAWN -	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED -	REVISED -
PLOT DATE = \$DATE\$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HMA PAVEMENT PROFILE			
SCALE:	SHEET	OF	SHEETS
	STA.	TO	STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
657	(114-BR-1)BJR,BRR	HENDERSON	35	27
CONTRACT NO. 68E26				
ILLINOIS FED. AID PROJECT:				



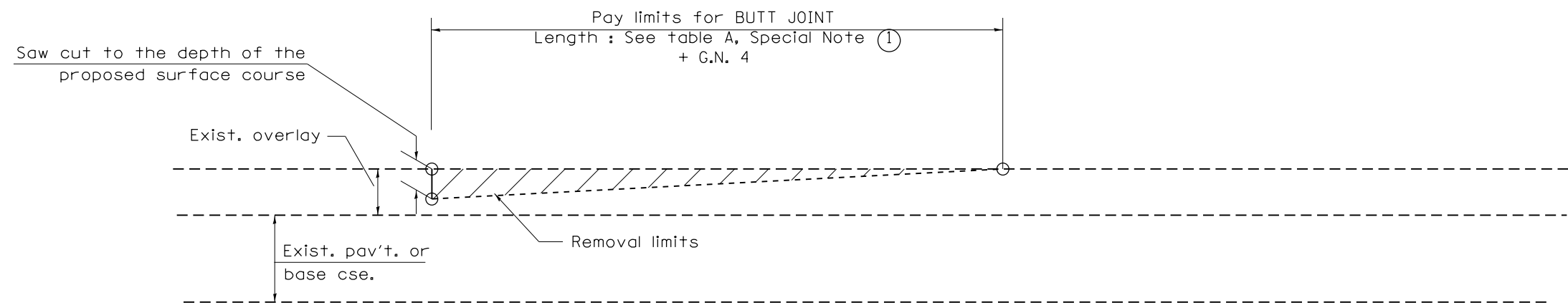
CASE 1 : WITH HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)

**TABLE A
TAPER RATES**

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

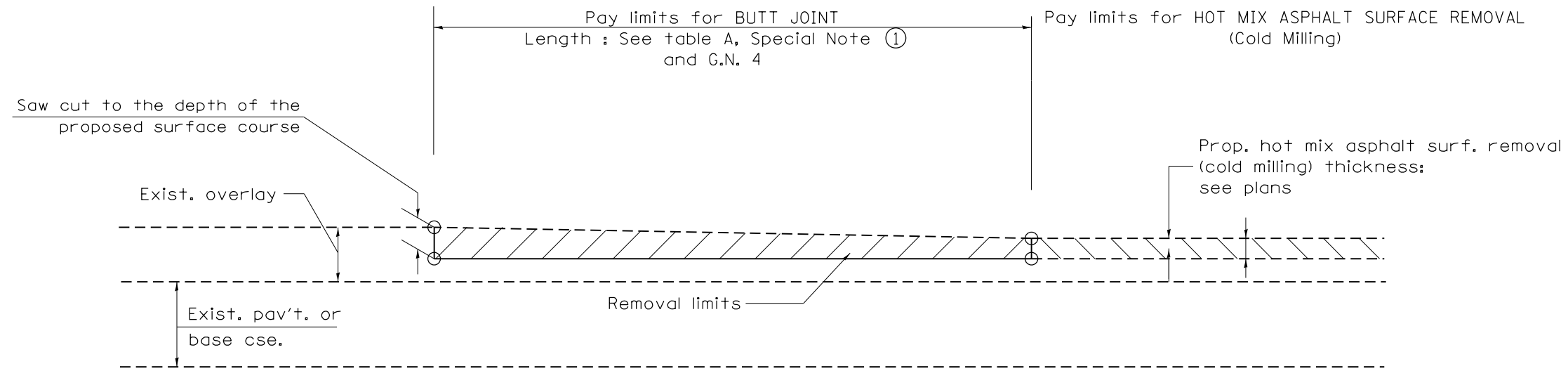
GENERAL NOTES

1. The work shall be done in accordance with Article 406.08 and the Special Provision for Butt Joints.
2. The pavement surface to be removed may be either bituminous or P.C. concrete. The work shall be performed in accordance with Article 440.04 and the Special Provisions for Butt Joints.
3. The saw cut joints shall be primed just prior to the placing of bituminous material. The work will be in accordance with the applicable portions of Article 406.05.
4. The length of butt joint is based on the taper rate times change in cold milling depth within the butt joint pay limits, unless otherwise indicated.
5. Temporary ramps are paid for separately and not included in the cost of the butt joints.

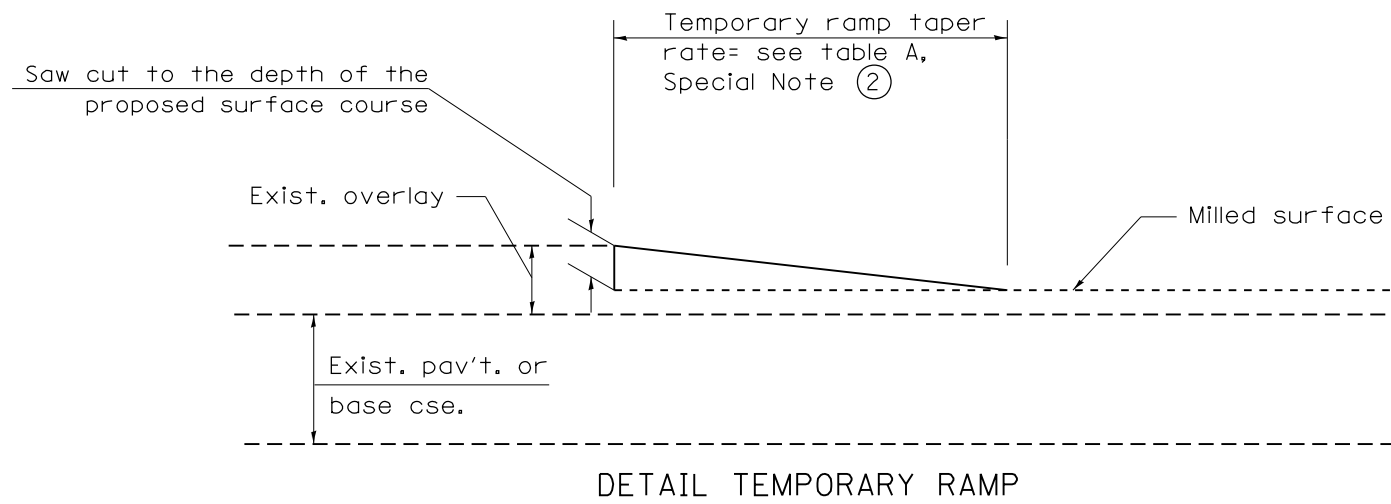


CASE 2 : NO HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)

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

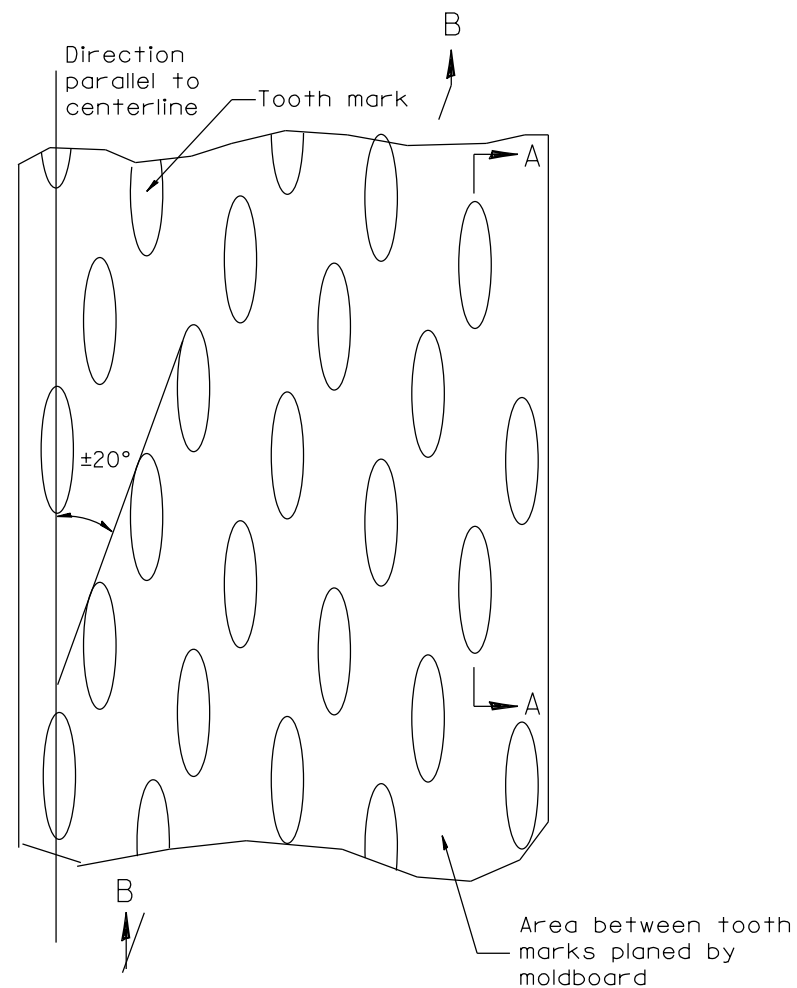


CASE 3 : HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)
TIE-IN TO EXISTING BITUMINOUS TAPER

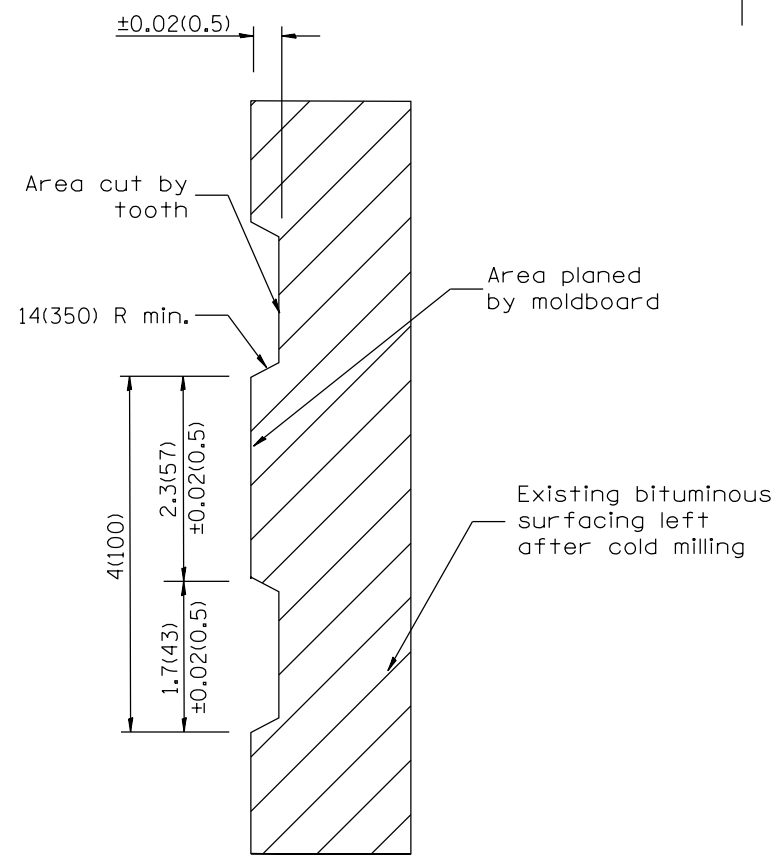


All dimensions are in inches (millimeters) unless otherwise noted.

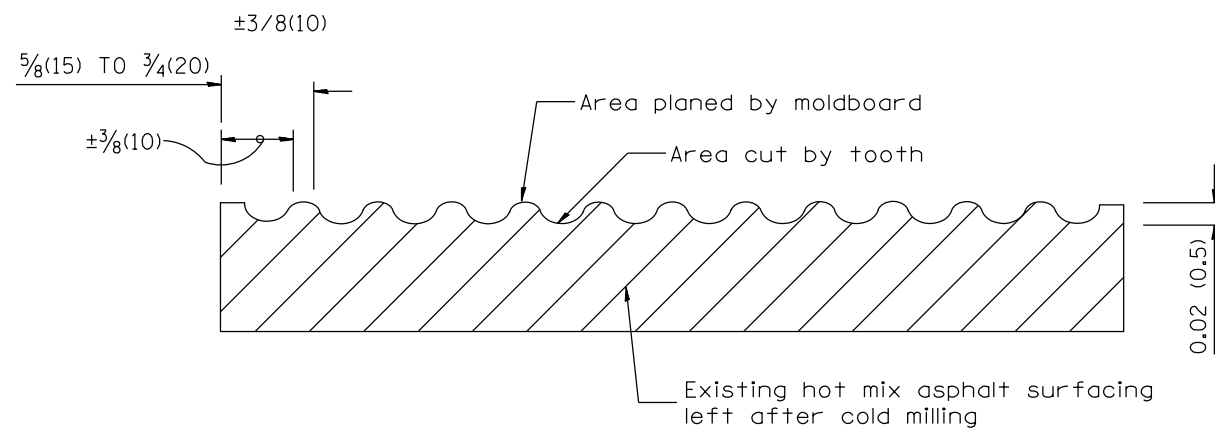
				STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		BUTT JOINTS		SHT. 2 OF 3 CADD STD. 406101-D4	
				NOT TO SCALE				CONTRACT NO. 68E26	
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.					
657	(114-BR-1)BJR,BRR	HENDERSON	35	29					
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT							



PLAN



SECTION A-A



SECTION B-B PROJECTED
PERPENDICULAR TO CENTERLINE

General notes:

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

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

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

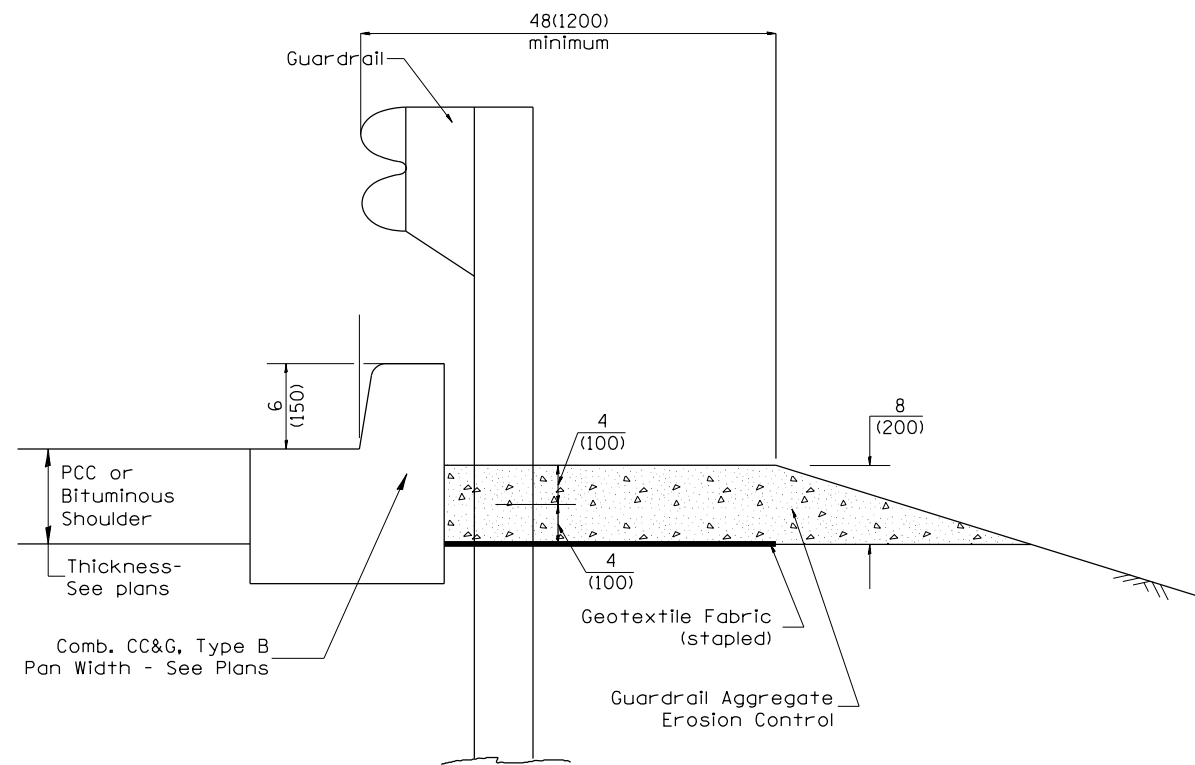
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)

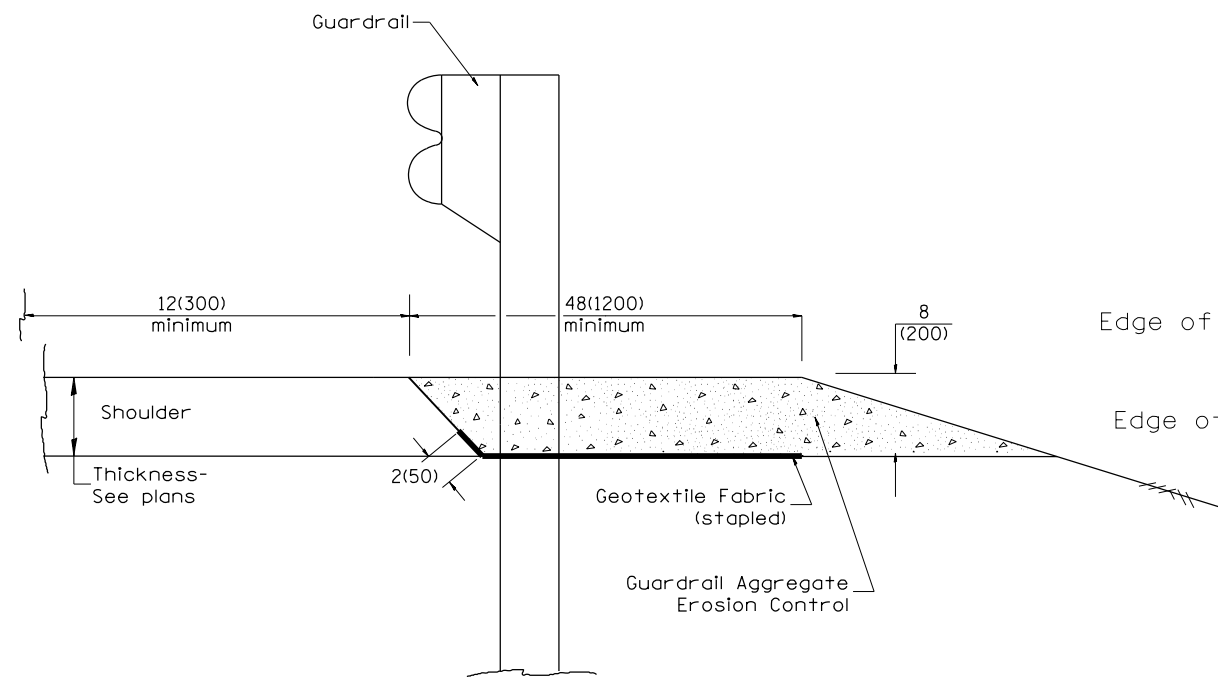
NOT TO SCALE

CADD STD. 440001-D4

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
657	(114-BR-1)BJR,BRR	HENDERSON	35	31
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 68E26	



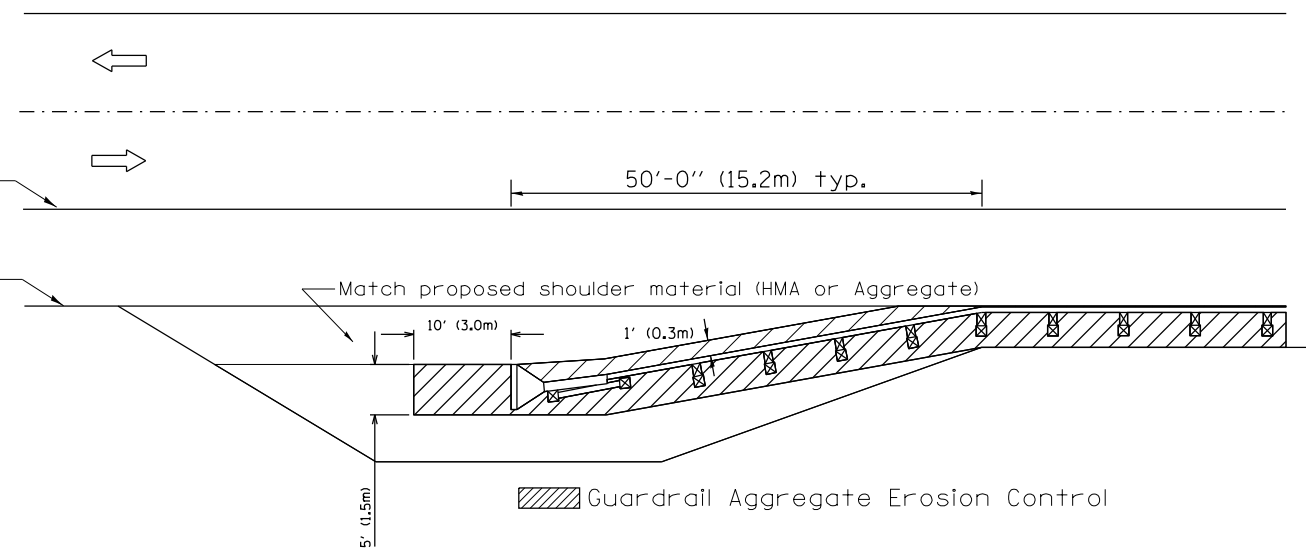
TYPICAL SECTION WITH COMBINATION CONCRETE CURB & GUTTER



TYPICAL SECTION WITHOUT EROSION CONTROL CURB

GENERAL NOTES: GUARDRAIL AGGREGATE EROSION CONTROL

1. This work shall consist of grading as needed, furnishing and installing geotextile fabric and staples, and furnishing, placing and shaping crushed aggregate around and behind Steel Plate Beam Guardrail posts in accordance with Plan Details.
2. Before placing the aggregate and the Geotextile Fabric, weeds and grass shall be removed from the area to be covered.
3. After the area has been prepared, and in a dry condition, the Geotextile fabric shall be placed with a 12(300) minimum overlap. A knife cut for guardrail post installation is necessary.
4. The aggregate shall be deposited, compacted and shaped by either mechanical or hand methods, in a manner reasonably true to line and grade.
5. The Contractor shall have the option of placing the guardrail before or after the Geotextile Fabric and Aggregate are in place. If the guardrail is placed after the Geotextile Fabric and Aggregate, then any voids must be filled and the aggregate returned to line and grade.
6. Materials shall meet the following requirements:
 - A. The crushed aggregate shall be CA1 gradation in accordance with Article 1004.01(c) of the Standard Specifications.
 - B. The Geotextile Fabric shall be nonwoven fabric in accordance with Article 1080.02 of the Standard Specifications.



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

03-07-11	ADDED DETAIL SHOWING PLAN VIEW	R.D.	5-30-18	CHANGE B CURB TO CC&G	R.D.
08-10-12	REVISED CURB "B" AND AGGREGATE	R.D.			
07-15-15	ADDRESSED SHOULDER INLET CURB	R.D.			
01-26-17	REVISED	R.D.			

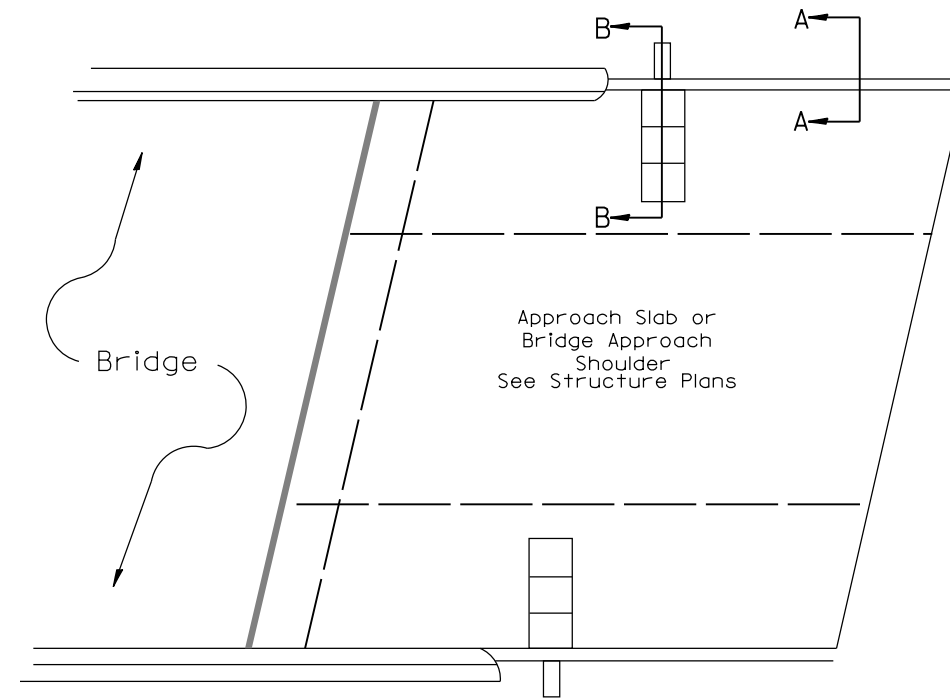
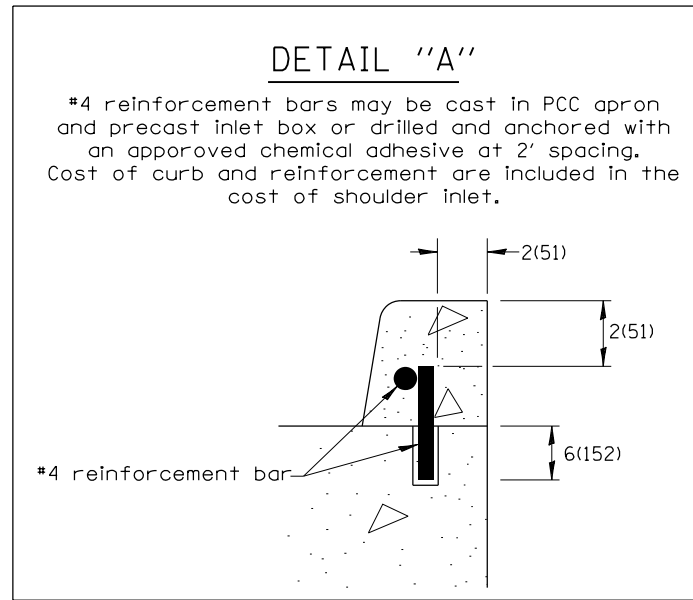
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

GUARDRAIL EROSION CONTROL TREATMENTS

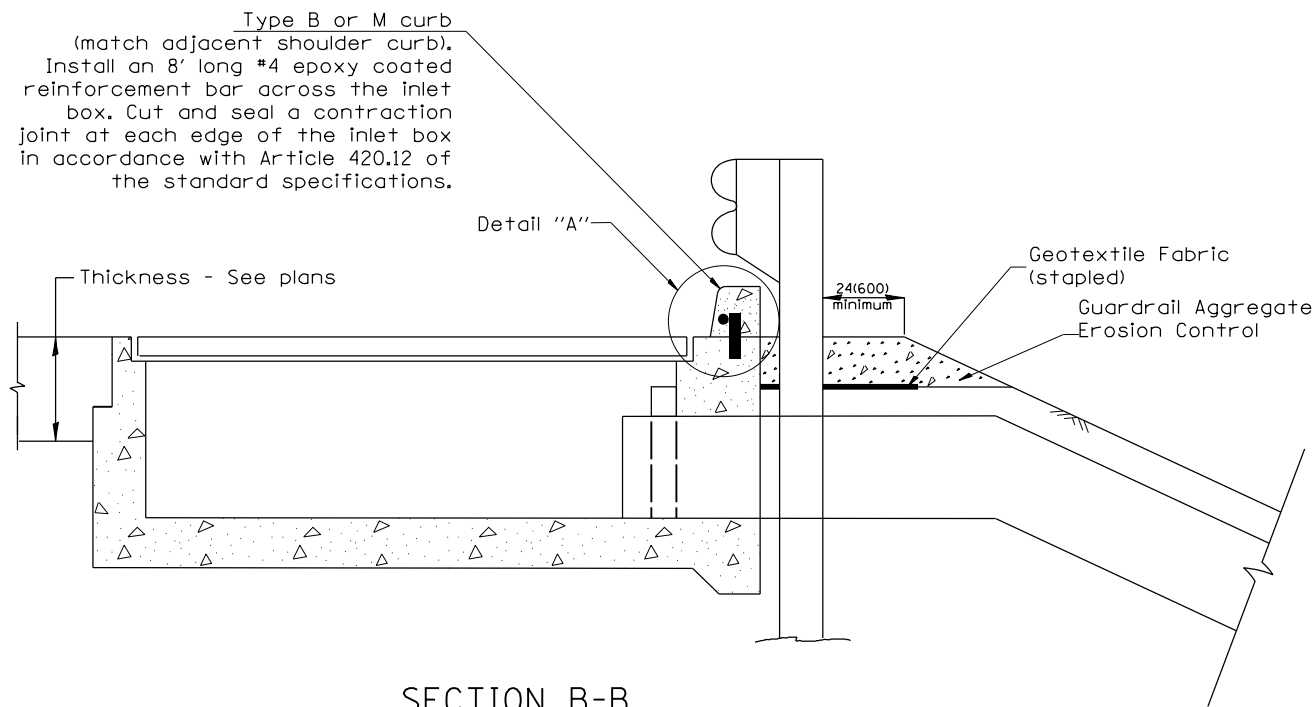
NOT TO SCALE

SHT. 1 OF 2
CADD STD. 630101-D4

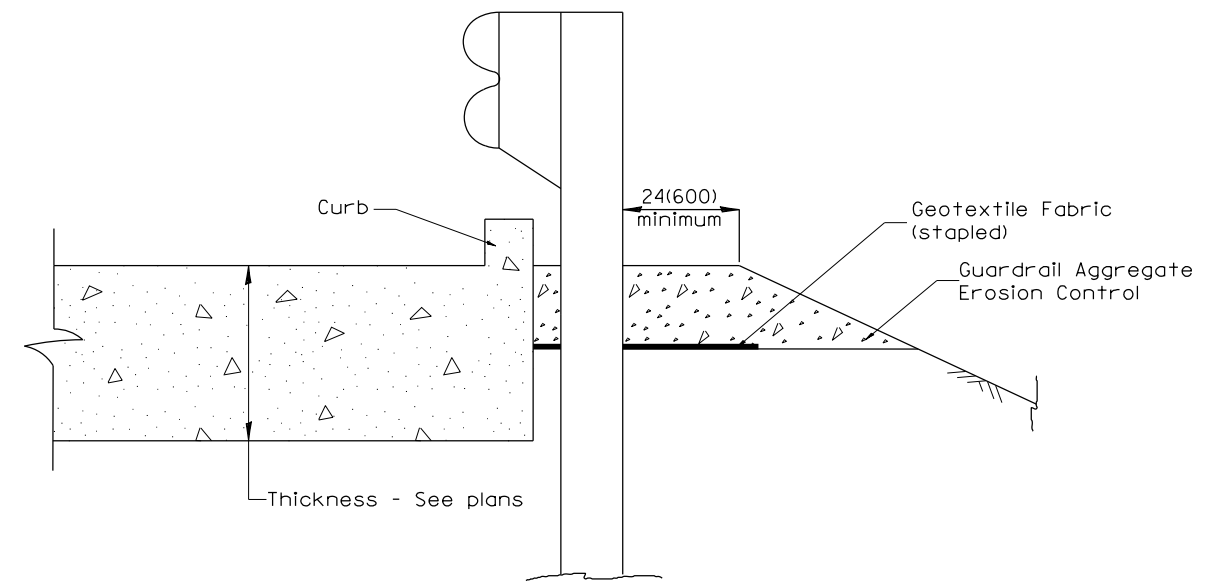
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
657	(114-BR-1)BJR,BRR	HENDERSON	35	32
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 68E26	



PLAN VIEW
APPROACH SLAB OR SHOULDER PLACEMENT



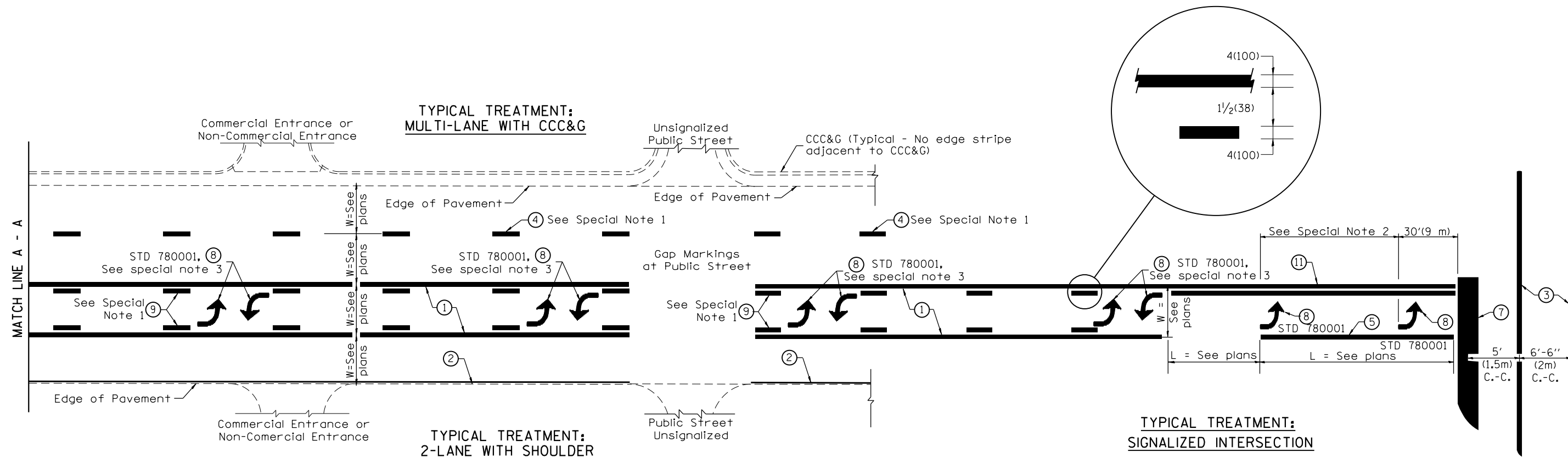
SECTION B-B
TYPICAL SECTION AT INLETS
TYPE E, F & G (HIGHWAY STANDARD 610001)



SECTION A-A
TYPICAL SECTION WITH BRIDGE APPROACH CURB

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

STATE OF ILLINOIS				GUARDRAIL EROSION CONTROL TREATMENTS				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DEPARTMENT OF TRANSPORTATION				NOT TO SCALE				657	(114-BR-1)BJR,BRR	HENDERSON	35	33
				SHT. 2 OF 2				CONTRACT NO. 68E26				
				CADD STD. 630101-D4				ILLINOIS FED. AID PROJECT				



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

TYPICAL PAVEMENT MARKING LEGEND

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

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

SPECIAL NOTES

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

GENERAL NOTES

1. Refer to State Standard 780001 for additional Pavement Markings including letters & arrows.
2. See Plans for Pavement Markings adjacent to curbed islands and medians, and through lane reductions.
3. Refer to Article 780.13 for letter, number and symbol areas (sq. ft.)
4. Areas are grooved 1" beyond each edge for the following symbols:
Through Arrow= 14.8 sq. ft.
Large Left or Right Arrow= 21.9 sq. ft.
2 Arrow Combination Left (or Right) and Through= 34.9 sq. ft.
Wrong Way Arrow= 29.5 sq. ft.
Railroad Crossing Symbol= 69.8 sq. ft.
(For further information, refer to BDE Special Provision: Grooving for Recessed Pavement Markings)

01-01-97	RENUM. F-8.03, NEW REVISION BOX	T.P.	10-16-06	REVISED TO 2007 SPEC.	
02-07-97	ADD BI DIRECTIONAL DIMENSION	J.A.	2/29/16	ADDED GROOVING AREAS	R.D.
10-97	CORRECT BI DIRECTIONAL DIMENSION	J.A.			
08-02	ADD CROSSWALK DMNS. WITH T.S.	M.A.			

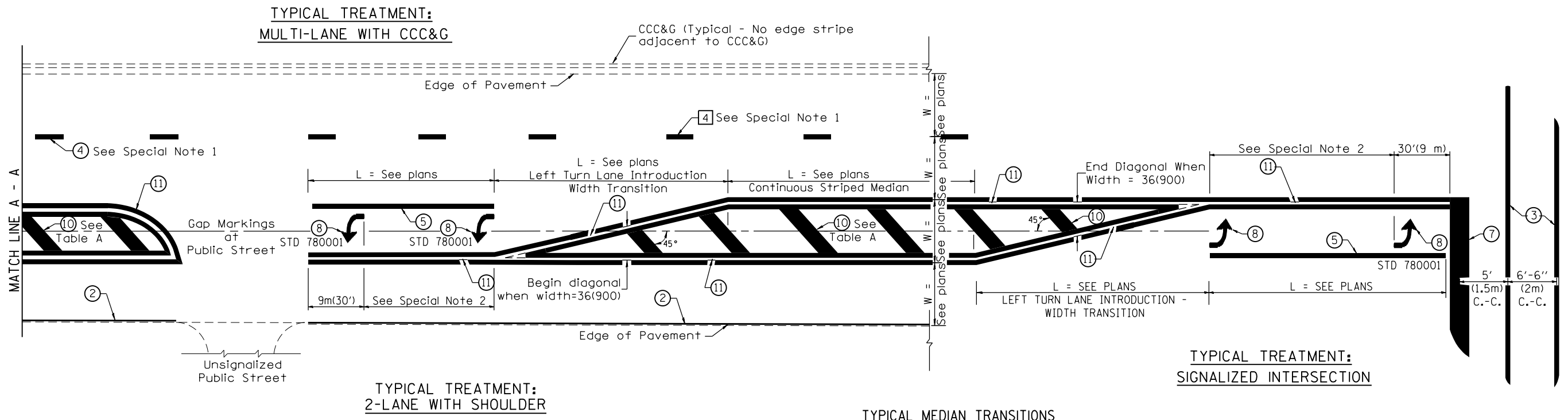
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

NOT TO SCALE

TYPICAL PAVEMENT MARKINGS

SHT. 1 OF 2
CADD STD. 780001-D4

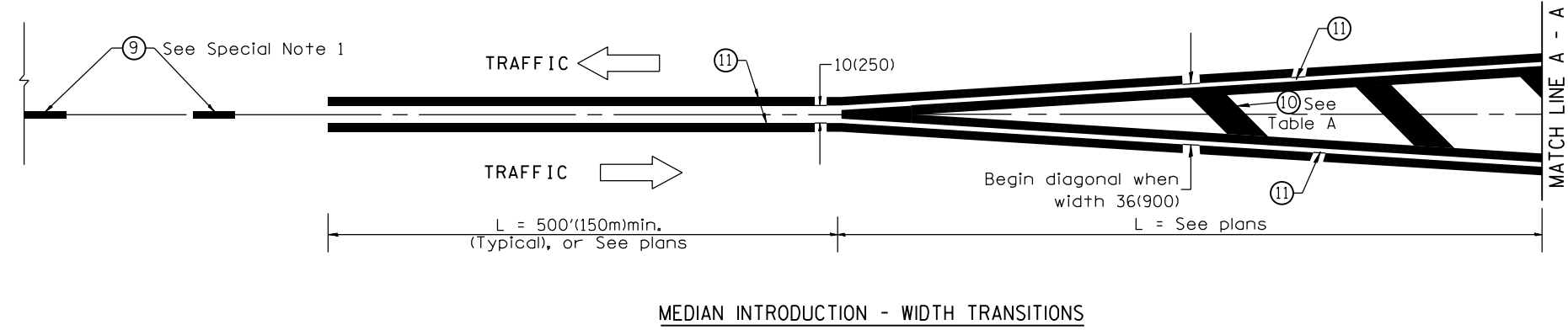
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
657	(114-BR-1)BJR,BRR	HENDERSON	35	34
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 68E26	



FLUSH PAVED MEDIAN: RESTRICTED LEFT TURN LANE

TABLE A
RECOMMENDED SPACING BETWEEN DIAGONAL LINES

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



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