

04-28-2017 LETTING ITEM 166

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
789	1-VB-R-1	MADISON	31	1
		ILLINOIS	CONTRACT NO. T6J77	

FOR INDEX OF SHEETS, SEE SHEET NO. 2

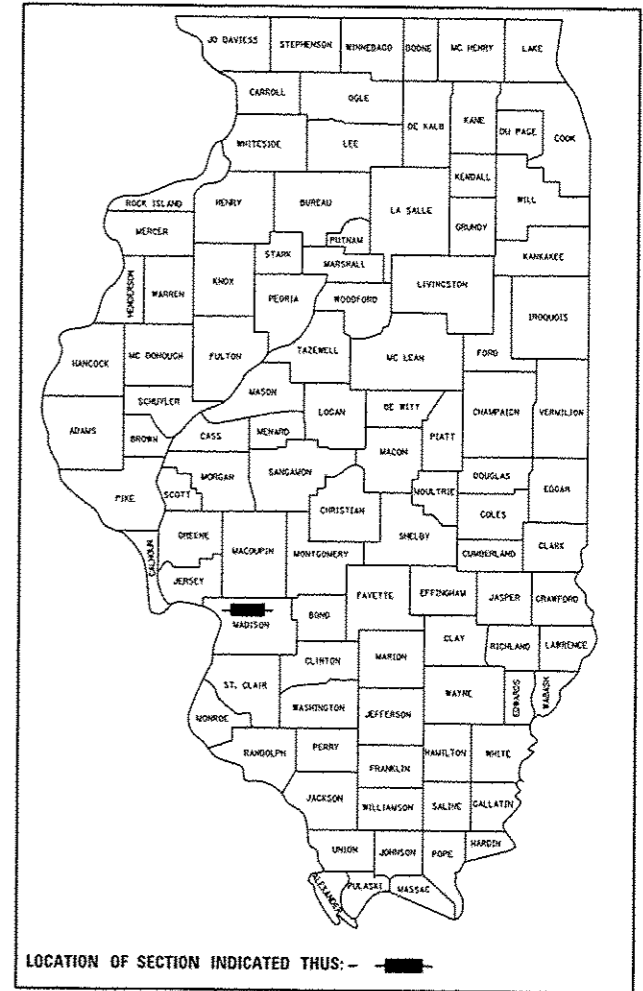
TRAFFIC DATA
2015 ADT = 13800
2037 ADT = 17200
SU = 3.6% MU = 1.4%

PROPOSED
HIGHWAY PLANS

FAP ROUTE 789 (IL 143)
SECTION 1-VB-R-1

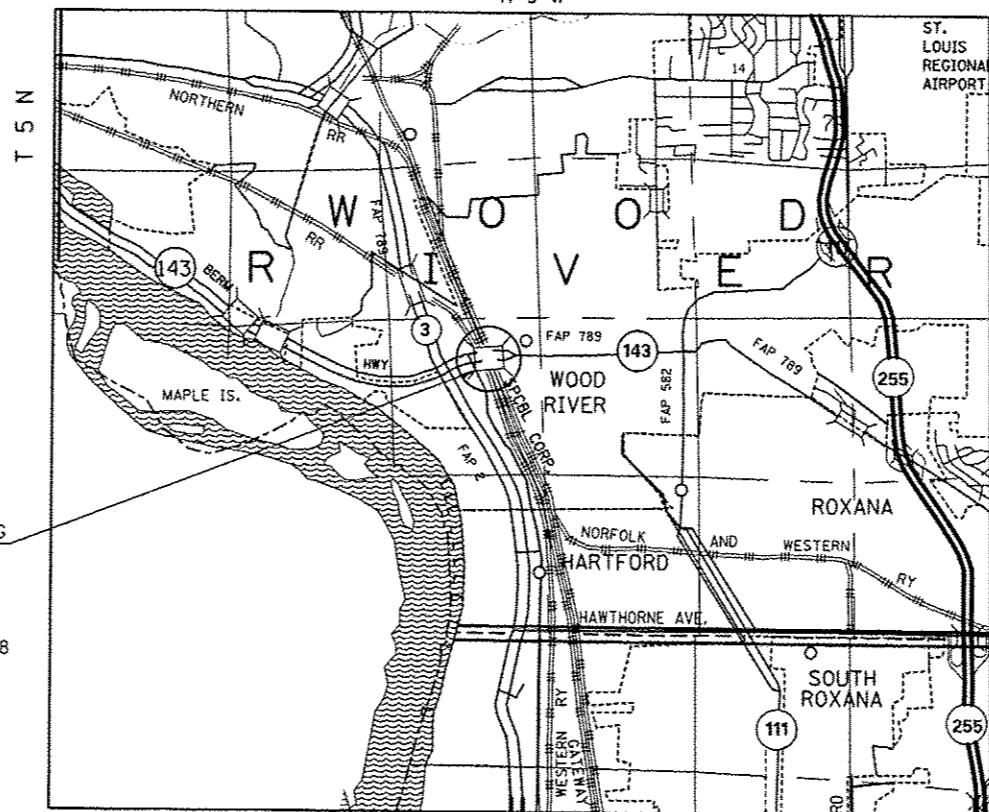
BRIDGE DECK WATERPROOFING &
JOINT REPAIR
MADISON COUNTY

D-98-061-16

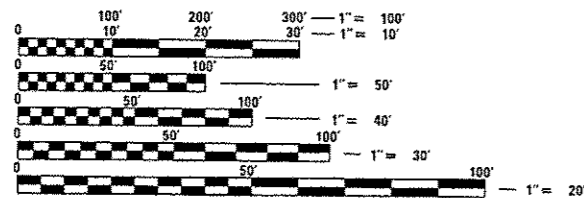


C-98-055-16

R 9 W



PROJECT LOCATION
IL 143 OVER N&W, ICG
& CONRAIL RAILROAD
SN 060-0212
STA. 15+90.00
LATITUDE: 38.859879
LONGITUDE: -90.102248

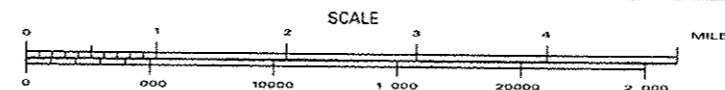


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

PROJECT ENGINEER: TIM PADGETT (618) 346-3325
PROJECT MANAGER: JOHNSON DUROSIER (618) 346-3454

CONTRACT NO. 76J77



GROSS LENGTH = 656 FT. = 0.124 MILE
NET LENGTH = 656 FT. = 0.124 MILE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED *Feb 6 20 17*
Jeffrey Z. Kas REGIONAL ENGINEER
Mar 24 20 17
Mawson M. Adair PE ENGINEER OF DESIGN AND ENVIRONMENT
Mar 24 20 17
Amel Alotaibi DIRECTOR OF PROGRAM DEVELOPMENT

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

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- 001006 DECIMAL OF AN INCH AND OF A FOOT
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- 782001-01 CURB REFLECTORS
- 782006 GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS

GENERAL NOTES

- ① ILLINOIS STATE LAW REQUIRES A 48-HOUR NOTICE BE GIVEN TO ALL UTILITIES WITHIN THE PROJECT AREA BEFORE DIGGING. FIELD MARKING OF FACILITIES MAY BE OBTAINED BY CONTACTING J.U.L.I.E. OR FOR NON-MEMBERS, THE UTILITY COMPANY DIRECTLY. AGENCIES KNOWN TO HAVE FACILITIES WITHIN THE PROJECT AREA ARE AS FOLLOWS:

UTILITY	ABOVE GROUND	BELOW GROUND
•AMEREN ILLINOIS	X	X
•AT&T ILLINOIS	X	X
•BP PIPELINES (NORTH AMERICA) INC.		X
•CHARTER COMMUNICATIONS, INC.	X	X
•ENABLE MIDSTREAM PARTNERS		X
•LEVEL (3) COMMUNICATIONS, LLC		X
•LINDE NORTH AMERICA, INC.		X
•MogAS PIPELINE LLC		X
•SPRINT/NEXTEL		X
•CITY OF WOOD RIVER		X
•ZAYO GROUP LLC		X

MEMBERS OF J.U.L.I.E. CALL TOLL FREE (800) 892-0123 OR 811 AND ARE INDICATED BY *. NON-J.U.L.I.E. MEMBERS MUST BE NOTIFIED INDIVIDUALLY.

- ② THE DEPARTMENT STRONGLY ENCOURAGES THE PRIME CONTRACTOR AND THEIR APPROVED SUB-CONTRACTORS TO HIRE MINORITY, WOMEN AND DISADVANTAGED INDIVIDUALS FROM ITS FEDERALLY FUNDED HIGHWAY CONSTRUCTION CAREERS TRAINING PROGRAM (HCCTP) TO HELP MEET WORKFORCE AND TRAINEE GOALS. THIS PROGRAM IS TRAINING MINORITIES, WOMEN AND DISADVANTAGED INDIVIDUALS IN HIGHWAY CONSTRUCTION-RELATED SKILLS, E.G., MATH FOR THE TRADES, JOB READINESS, TECHNICAL SKILLS COURSEWORK (CARPENTRY, CONCRETE FLATWORK, BLUEPRINT READING, SITE PLANS, SITE WORK, TOOLS USE, ETC.) AND OSHA 10 HOUR CERTIFICATION, TO PREPARE THEM FOR A CAREER IN THE HIGHWAY CONSTRUCTION TRADES. GRADUATES ARE WELL-TRAINED AND READY TO BECOME PRODUCTIVE ENTRY-LEVEL CONSTRUCTION WORKERS. CONTACT THE DISTRICT 8 EEO OFFICE AT 618-346-3360 AND/OR THE HCCTP COORDINATOR AT 618-874-6528 TO LEARN MORE ABOUT THE PROGRAM AND FOR ASSISTANCE IN MEETING WORKFORCE AND TRAINEE GOALS.
- ③ REVISE STANDARD SPECIFICATIONS ARTICLE 107.12, PARAGRAPH 5, LAST SENTENCE TO READ: "ALL OTHER RAILROAD FLAGGER COSTS WILL BE INCURRED BY THE DEPARTMENT ACCORDING TO ARTICLE 109.05."

- ④ A CONTRACTOR'S RIGHT-OF-ENTRY PERMIT IS REQUIRED BEFORE ANY WORK CAN COMMENCE ON RAILROAD PROPERTY. THE COST TO OBTAIN THIS PERMIT SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.
- ⑤ ALL AREAS DISTURBED FOR ANY REASON SHALL BE PERMANENTLY SEEDED AS DIRECTED BY THE ENGINEER. ALL AREAS DISTURBED BY THE CONTRACTOR OUTSIDE THE PROPOSED CONSTRUCTION LIMITS SHALL BE SEEDED AT THE CONTRACTOR'S EXPENSE.
- ⑥ THE CONTRACTOR AND THE ENGINEER SHALL BE AWARE THAT NO SURVEY WAS PERFORMED FOR THIS PROJECT. THE STATIONING, TOPOGRAPHY, AND QUANTITIES SHOWN IN THE PLANS WERE CREATED USING MICROFILM AND FIELD MEASUREMENTS. ALL SHALL BE ASSUMED TO BE APPROXIMATE. THE CONTRACTOR SHALL VERIFY DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
- ⑦ CHANGEABLE MESSAGE SIGNS SHALL BE PLACED ALONG IL ROUTE 143 AND IL ROUTE 3 PRIOR TO THE PROJECT LIMITS. THE LOCATIONS SHALL BE DETERMINED BY THE ENGINEER.
- ⑧ THE LOCATIONS OF THE REPAIR AREAS AS SHOWN IN THE PLANS ARE APPROXIMATE LOCATIONS. THE EXACT LOCATIONS SHALL BE DETERMINED BY THE ENGINEER.
- ⑨ THE COMBINATION CURB AND GUTTER SHALL BE CONSTRUCTED PRIOR TO BRIDGE DECK STAGING AND REPAIR.
- ⑩ EXCAVATION REQUIRED FOR THE CONSTRUCTION OF COMBINATION CURB AND GUTTER SHALL BE INCLUDED IN THE COST OF COMBINATION CURB AND GUTTER, TYPE B-6.24.
- ⑪ REMOVED GUARDRAIL THAT IS NOT REPLACED ON THE SAME DAY MUST BE DELINEATED WITH LIGHTED BARRICADES. NO LOCATIONS WILL BE LEFT WITHOUT EITHER LIGHTED BARRICADES OR RESTORED GUARDRAIL AT ANY TIME.
- ⑫ A QUANTITY OF 3400 FEET OF TEMPORARY PAVEMENT MARKING LINE - 6" HAS BEEN INCLUDED IN THE PLANS FOR PAINTING THE BOTTOM 6" OF THE TEMPORARY CONCRETE BARRIER.
- ⑬ THE PROPOSED PAVEMENT MARKING SHALL MATCH THE LOCATIONS OF THE EXISTING PAVEMENT MARKING, AS DIRECTED BY THE ENGINEER.

COMMITMENTS

NONE

THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT:

ROUTE	FAP 789
SECTION	1-VB-R-1
COUNTY	MADISON
CONTRACT	76J77

DESCRIPTION:	Bridge Deck Waterproofing, Joint & Bridge Repair on IL 143 at N&W ICG & Conrail Railroad, 0.3 E of IL 3 - SN 060-0212
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MIXTURE USE	BRIDGE DECK	BRIDGE APPROACH	SHOULDERS ≥ 2.25"	SHOULDERS < 2.25"
AC/PG	SBS PG 76-22	SBS PG 76-22	SBS PG 64-22	PG 64-22
RAP % (MAX)	SEE SPECIAL PROVISION	SEE SPECIAL PROVISION	SEE SPECIAL PROVISION	SEE SPECIAL PROVISION
DESIGN AIR VOIDS	4.0% @ Ndes=70	4.0% @ Ndes=70	4.0% @ Ndes=30	4.0% @ Ndes=30
MIX COMPOSITION (Gradation)	IL 9.5	IL 9.5	IL 19.0L	IL 9.5L
FRICTION AGG	MIXTURE "D"	MIXTURE "D"		
QUALITY MGMT PROGRAM	QC/QA	QC/QA	QC/QA	QC/QA

Plan quantities for Bituminous Surface Course items are calculated using a unit weight of 112 lb/sq yd/in (59.8 kg/sq m/25 mm thickness)

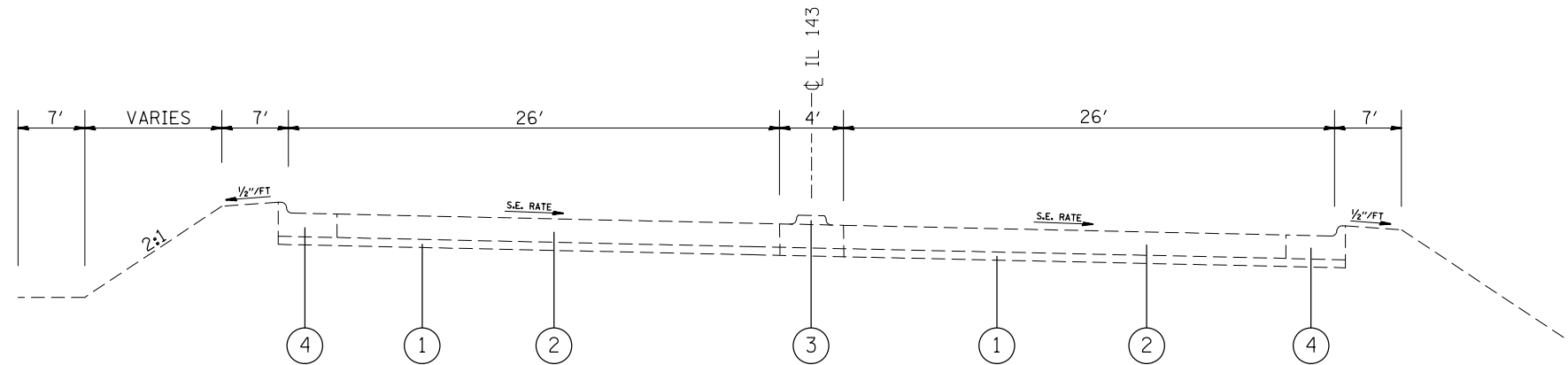
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE
				100 % STATE
				URBAN
				BRIDGE
				0014 ✓
				S.N. 060-0212
31100300	SUBBASE GRANULAR MATERIAL, TYPE A 4"	SQ YD	106	106
35400500	PORTLAND CEMENT CONCRETE BASE COURSE WIDENING 10"	SQ YD	56	56
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	755	755
40600985	PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT	SQ YD	427	427
40603540	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	385	385
44000300	CURB REMOVAL	FOOT	14	14
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	250	250
44000600	SIDEWALK REMOVAL	SO FT	247	247
50102400	CONCRETE REMOVAL	CU YD	23.8	23.8
50300255	CONCRETE SUPERSTRUCTURE	CU YD	39.1	39.1
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	7840	7840
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	8680	8680
50800515	BAR SPLICERS	EACH	48	48
52000110	PREFORMED JOINT STRIP SEAL	FOOT	138	138

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

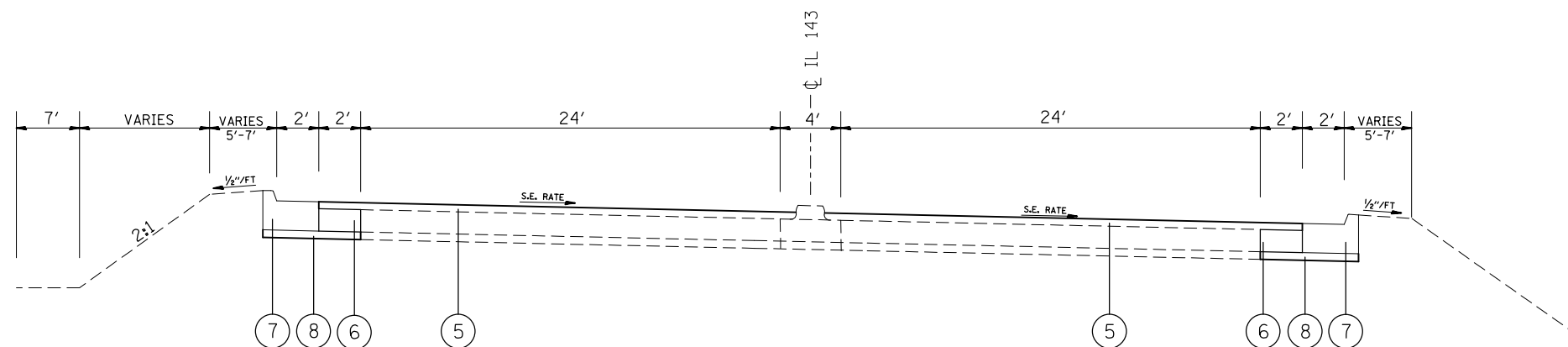
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Default	\\L004EIDINTEG.illinois.gov\PI00T\Documents\DOT Offices\District 8\Projects\0076\DRAWING\DATA\CAD\sheets\0876J77-sht-plan.dwg	CHECKED -	REVISED -								789	1-V8-R-1	MADISON	31	3
	PLOT SCALE = 1/8" = 100.0000' / in.	DATE -	REVISED -												
	PLOT DATE = 2/3/2017														
											CONTRACT NO. 76J77		ILLINOIS FED. AID PROJECT		

REV



EXISTING TYPICAL SECTION

STA 12+76 TO STA. 13+16
STA 18+92 TO STA. 19+32



PROPOSED TYPICAL SECTION

STA 12+76 TO STA. 13+16
STA 18+92 TO STA. 19+32

LEGEND

- ① EXISTING SUB-BASE GRANULAR MATERIAL, TYPE A 4"
- ② EXISTING REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT 10"
- ③ EXISTING CONCRETE MEDIAN
- ④ EXISTING COMBINATION CONCRETE CURB & GUTTER TYPE B-6.24
- ⑤ PROPOSED POLYMERIZED HMA SURFACE COURSE, MIX D, N70
- ⑥ PROPOSED PCC BASE COURSE WIDENING, 10"
- ⑦ PROPOSED COMBINATION CONCRETE CURB & GUTTER TYPE B-6.24
- ⑧ PROPOSED SUBBASE GRANULAR MATERIAL, TYPE A 4"

FILE NAME =	USER NAME = durosier.j	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL SECTIONS			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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Default	PLOT SCALE = 100.0000' / 1in.	DATE -	REVISED -		SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.			CONTRACT NO. 76J77				
	PLOT DATE = 2/3/2017							ILLINOIS FED. AID PROJECT				

STAGING SCHEDULE							
LOCATION	STRUCTURE NUMBER	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	TEMPORARY PAVEMENT MARKING - LINE 6"
		FOOT	FOOT	EACH	EACH	EACH	
IL 143 over RR	060-0212						
STAGE I		1700.0		21.3	2		1700.0
STAGE II			1700.0	21.3		2	1700.0
TOTAL		1700.0	1700.0	42.6	2	2	3400.0

CURB AND GUTTER SCHEDULE								
LOCATION			EB/WB	COMBINATION CURB AND GUTTER REMOVAL	SUBBASE GRANULAR MATERIAL, TYPE A 4"	PCC BASE COURSE WIDENING, 10"	COMBINATION CURB AND GUTTER, TYPE B-6.24	CURB REMOVAL
				FOOT	SQ YD	SQ YD	FOOT	FOOT
12+76	TO	14+01	EB	125	52.8	27.8	125	
14+01	TO	14+15	EB					14
18+07	TO	19+32	WB	125	52.8	27.8	125	
TOTAL:				250	105.6	55.6	250	14

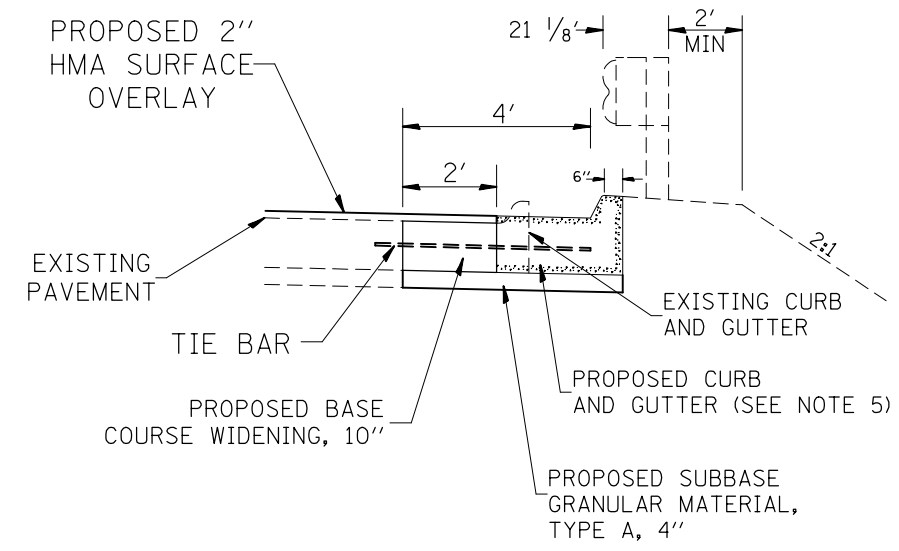
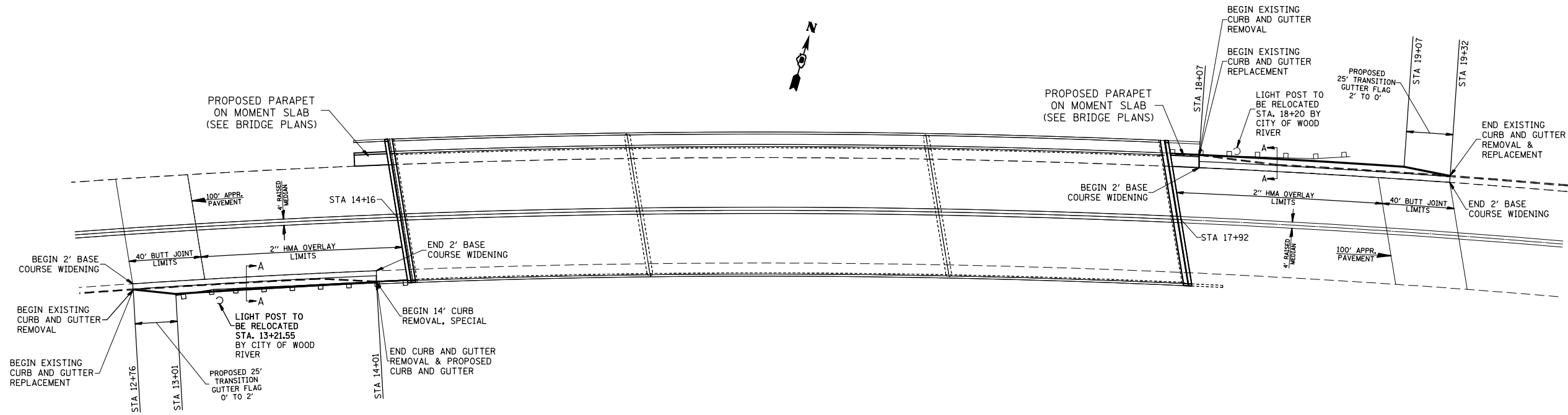
GUARDRAIL/BARRIER SCHEDULE											
LOCATION			LENGTH	GUARDRAIL REMOVAL	TRAFFIC BARRIER TERMINAL, TYPE 6	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	SPBGR, TYPE A, 6 FOOT POSTS	REMOVE AND REERECT TBT, TYPE 6	TERMINAL MARKER DIRECT APPLIED	GUARDRAIL REFLECTORS, TYPE A	BARRIER WALL REFLECTORS, TYPE C
STA	TO	STA		FOOT	EACH	EACH	FOOT	EACH	EACH	EACH	EACH
IL 143 EASTBOUND											
13+00	TO	14+16	116	116	1	1	25.0		1	4	
14+16	TO	17+92	376								5
17+92	TO	18+30	38					1			
IL 143 WESTBOUND											
13+00	TO	14+16	116	75	1	1	25.0		1	4	
14+16	TO	17+92	376	30							5
17+92	TO	18+92	100	85	1	1	25.0		1	4	
TOTAL:				306	3	3	75.0	1	3	12	10

PAVEMENT MARKING SCHEDULE																		
LOCATION			PAVEMENT MARKING REMOVAL - WATER BLASTING		THERMOPLASTIC PAVEMENT MARKING						RAISED REFLECTIVE PAVEMENT MARKER				CURB REFLECTORS			
					LINE - 4"						REMOVAL		NEW					
					SQ FT		SKIP-DASH (WHITE)		SOLID (WHITE)		SOLID (YELLOW)		1-WAY		1-WAY		AMBER	
					EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
12+76	TO	14+16	105	105	35	35	140	140	140	140	2	2	2	2	3.5	3.5		
14+16	TO	17+92	282	282	94	94	376	376	376	376	5	5	5	5	9.4	9.4		
17+92	TO	19+32	105	105	35	35	140	140	140	140	2	2	2	2	3.5	3.5		
SUB-TOTAL			492	492	164	164	656	656	656	656	9	9	9	9	16.4	16.4		
TOTAL			984		2952						18		18		32.8			

RESURFACING SCHEDULE					
LOCATION			BITUMINOUS MATERIALS (TACK COAT)	POLYMERIZED HMA SURFACE COURSE, MIX "D", N70	PCC SURFACE REMOVAL - BUTT JOINT
STA	TO	STA	POUND	TON	SQ YD
IL 143 EASTBOUND					
12+76	TO	14+01	166	41	106.7
14+01	TO	14+16	21	5	
17+92	TO	18+92	138	34	
18+92	TO	19+32	53	13	106.7
IL 143 WESTBOUND					
12+76	TO	13+16	53	13	106.7
13+16	TO	14+16	138	34	
17+92	TO	18+07	21	5	
18+07	TO	19+32	166	41	106.7
TOTAL:			755	188	426.7

TEMPORARY PAVEMENT MARKING SCHEDULE										
LOCATION			SHORT TERM PAVEMENT MARKING		SHORT TERM PAVEMENT MARKING REMOVAL		TEMPORARY PAVEMENT MARKING LINE - 4"		TEMPORARY PAVEMENT MARKING REMOVAL	
			FOOT		SQ FT		FOOT		SQ FT	
			EB	WB	EB	WB	EB	WB	EB	WB
12+76	TO	14+01	12.5	12.5	4.2	4.2	281.3	281.3	93.8	93.8
14+01	TO	18+07	56.8	56.8	18.9	18.9	913.5	913.5	304.5	304.5
18+07	TO	19+32	17.5	17.5	5.8	5.8	281.3	281.3	93.8	93.8
SUBTOTAL			87	87	29	29	1476	1476	492	492
TOTAL			174		58		2952		984	

(NOT TO SCALE)



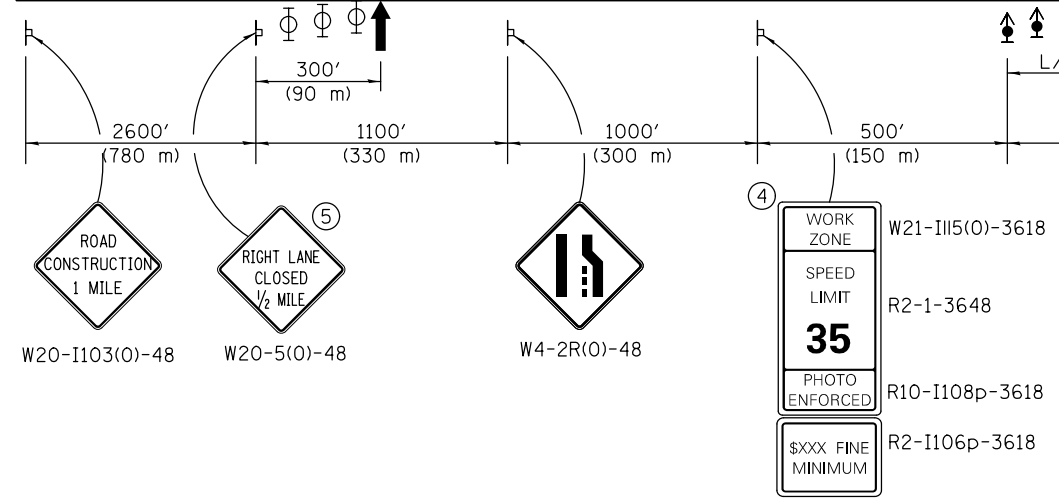
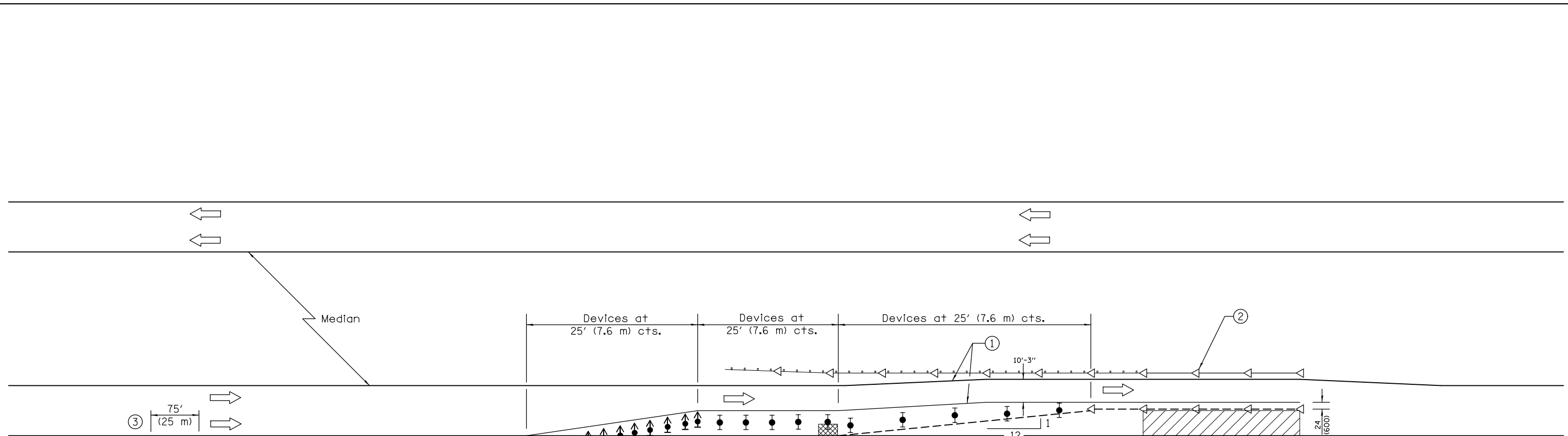
SECTION A-A

CURB AND GUTTER DETAIL

GENERAL NOTES

1. THE REMOVAL OF EXISTING CURB AND GUTTER SHALL BE PAID FOR AS COMBINATION CURB AND GUTTER REMOVAL. A SAW CUT SHALL BE MADE AT THE SHOULDER-PAVEMENT JOINT TO SUFFICIENTLY SEVER THE EXISTING TIE BARS. THE COST OF THE SAW CUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR COMBINATION CURB AND GUTTER REMOVAL .
2. WHEN CURB & GUTTER IS ADJACENT TO THE APPROACH PAVEMENT, NO. 6 LONGITUDINAL TIE BARS SHALL BE PLACE AT 24" CENTERS IN ACCORDANCE WITH DETAILS FOR LONGITUDINAL CONSTRUCTION JOINTS SHOWN ON HIGHWAY STANDARD 420001. THE COST OF TIE BARS SHALL BE INCLUDED IN CONTRACT UNIT PRICE FOR COMBINATION CURB AND GUTTER, TYPE B-6.24.
3. THE TRANSITION FOR CURB AND GUTTER SHALL BE MADE IN 40 FEET AND WILL BE PAID FOR AS COMBINATION CURB AND GUTTER, TYPE B-6.24.
4. A MINIMUM CLEARANCE OF 2" BETWEEN THE END OF THE TIE BAR AND THE BACK OF THE CURB SHALL BE MAINTAINED.
5. CONSTRUCT THE PROPOSED CURB AND GUTTER TO MATCH THE FINAL GRADE OF THE HMA SURFACE AND THE EXISTING CURB AND GUTTER.
6. SEE GUARDRAIL SCHEDULE FOR LOCATIONS OF EXISTING GUARDRAIL REMOVAL AND REPLACEMENT.

FILE NAME =	USER NAME = durosier.j	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CURB AND GUTTER DETAIL			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw:\11\084EBIDINTEG.illinois.gov\PIWIDOT\Documents\IDOT Offices\District 8\Projects\0876\DRAWING\DATA\EA0\Sheets\0876J77-sht-plan.dwg	PLotted SCALE = 100.0000' / 1in.	CHECKED -	REVISED -					789	1-VB-R-1	MADISON	31	10
Default	PLOT DATE = 2/3/2017	DATE -	REVISED -		CONTRACT NO. 76J77			ILLINOIS FED. AID PROJECT				
					SCALE:	SHEET 1	OF 1	SHEETS	STA.	TO STA.		



SYMBOLS

- Arrow board
- Work area
- Sign
- Direction indicator barricade with steady burn monidirectional light
- Type II barricade, drum, or vertical barricade with steady burn monidirectional light
- Temporary concrete barrier
- Monidirectional guardrail/barrier wall reflector
- Impact attenuator
- Type II barricade, drum, or vertical barricade with monidirectional flashing light

- ① Temporary pavement marking tape shall be placed throughout the taper and along-side the work area. The right edge line shall be white and the left edge line shall be yellow.
- ② Guardrail/barrier wall reflectors at 25' (7.6 m). Markers on right shall be crystal and markers on left shall be amber. See Standards 704001 and 782006.
- ③ Three Type II barricades, drums, or vertical barricades at 25' (8 m) centers.
- ④ Work zone speed limit signs shall placed along sidersoads, as directed by the Engineer.
- ⑤ "Right/Left Lane Closed 1/2 Mile" signs shall also be placed along IL Route 3, as directed by the Engineer.
- ⑥ "Road Construction Ahead" signs with appropriate arrows will be required on IL 3, both directions.

GENERAL NOTES

This standard is used where at any time any vehicle, equipment, workers or their activities will encroach on the pavement or on the shoulder within 24 (600) of the edge of pavement for daylight operation exceeding one day and where temporary concrete barrier is utilized.

When work is being performed in the left lane, the set up would be a mirror image to what is shown.

Calculate L as follows:

NORMAL POSTED SPEED	FORMULAS	
	English	(Metric)
40 mph (70 km/h) or less	$L = \frac{WS^2}{60}$	$L = \frac{WS^2}{150}$

W = Width of offset in feet (meters).

S = Normal posted speed in mph (km/h).

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

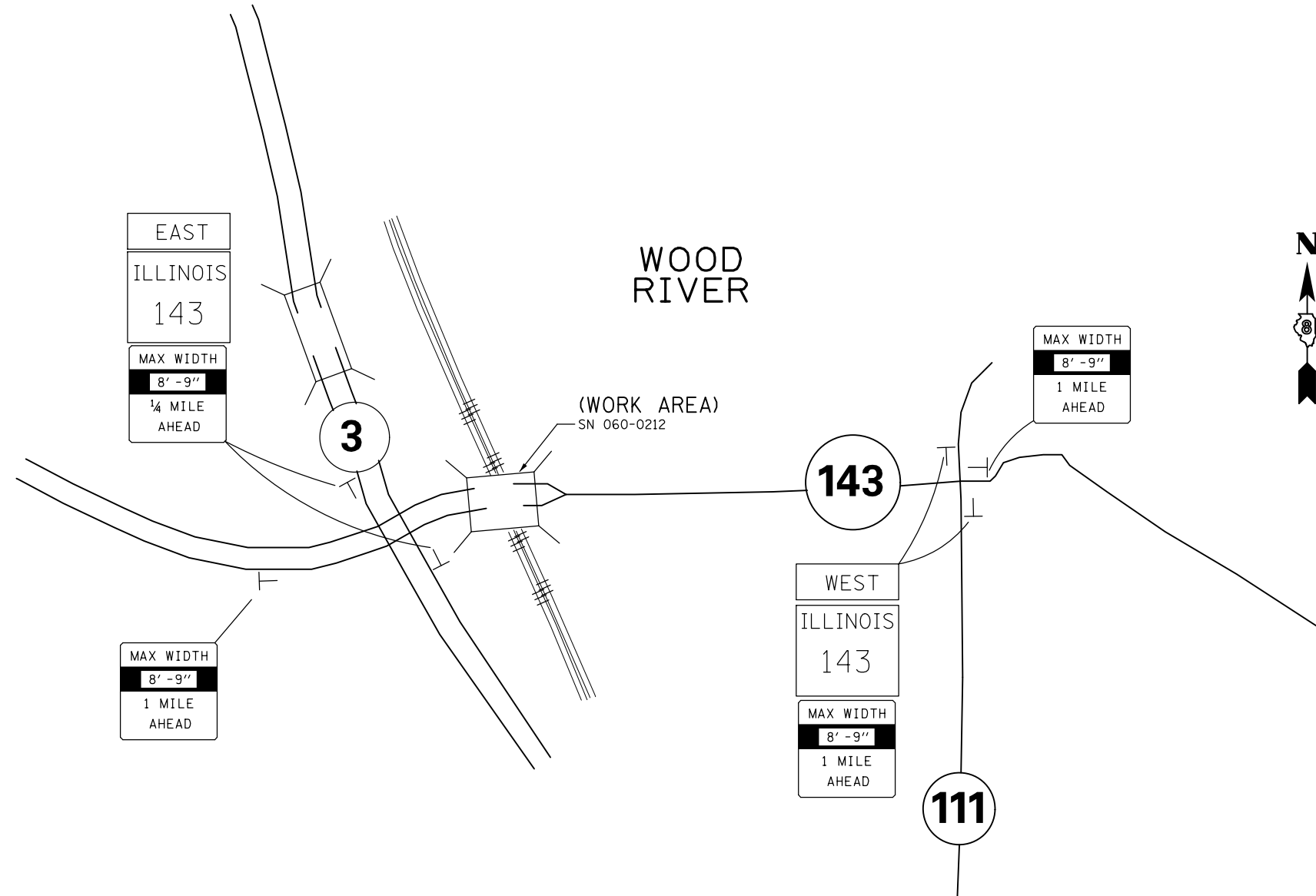
NOTES:

1. ALL SIGNS REQUIRED WILL BE SUPPLIED TO THE CONTRACTOR BY I.D.O.T.
2. THE CONTRACTOR SHALL FURNISH THE POSTS AND ERECT SIGNS AT THE LOCATIONS SHOWN ON THIS SHEET, AS DIRECTED BY THE R.E./R.T. THE POSTS SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.
3. THE CONTRACTOR SHALL GIVE THE ILLINOIS DEPARTMENT OF TRANSPORTATION TWO WEEKS NOTICE FOR SIGNS. THE CONTRACTOR SHALL PICK UP THE SIGNS AT THE T.M. BUILDING IN FAIRVIEW HEIGHTS., AND RETURN THEM UPON COMPLETION OF THE CONTRACT. CONTACT JEAN SLAPE - 618-394-2189.
4. THE ABOVE NOTED WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE, LUMP SUM, FOR WIDE LOAD SIGNING AND NO OTHER COMPENSATION WILL BE ALLOWED.
5. SIGN SPACING FROM INTERSECTIONS SHALL BE 400' OR TO FIT FIELD CONDITIONS.
6. THE HEIGHT TO THE BOTTOM OF THE LOWEST SIGN SHALL NOT BE LESS THAN 6'.

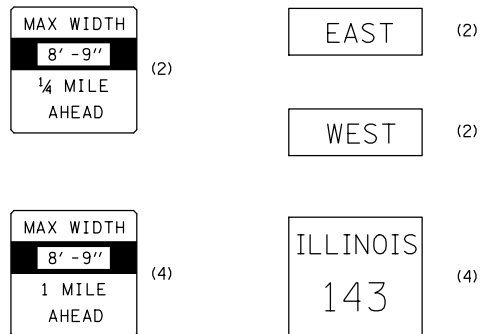
IL 143 BRIDGE DECK REPAIR

SN 060-0212 (EB/WB) OVER RAILROAD

STAGE I/II WIDE LOAD SIGNING



SIGNS REQUIRED



FILE NAME =	USER NAME = duroserj	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WIDE LOAD SIGNING			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
p:\11084EBIDINTEG\illinois.gov\PWIDOT\Documents\IDOT Offices\District 8\Projects\0876\DRAWING\DATA\EA\Sheets\0876J77-sht-plan.dwg		DRAWN -	REVISED -		789	1-VB-R-1	MADISON	31	13			
Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -		CONTRACT NO. 76J77							
	PLOT DATE = 2/3/2017	DATE -	REVISED -		SCALE:	SHEET 1 OF 1 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT			

GENERAL NOTES

Reinforcement bars designated (E) shall be epoxy coated.

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

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.

Joint opening 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.

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

Bridge deck concrete sealer shall be placed on top/inside faces of parapets (full length) and wingwalls. In addition, place sealer on median (full length), on top of new concrete at joints and on sidewalk & curb adjacent to wingwall.

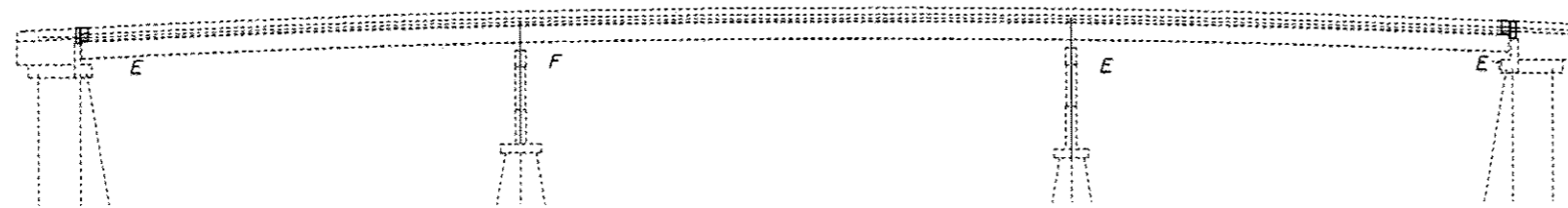
Existing structural steel that will be in contact with new structural steel shall be cleaned and painted prior to erection as required by the GBSP "Cleaning and Painting Contact Surface Areas of Existing Steel Structures".

All structural steel shall conform to AASHTO Classification M270 Grade 36, unless otherwise noted.

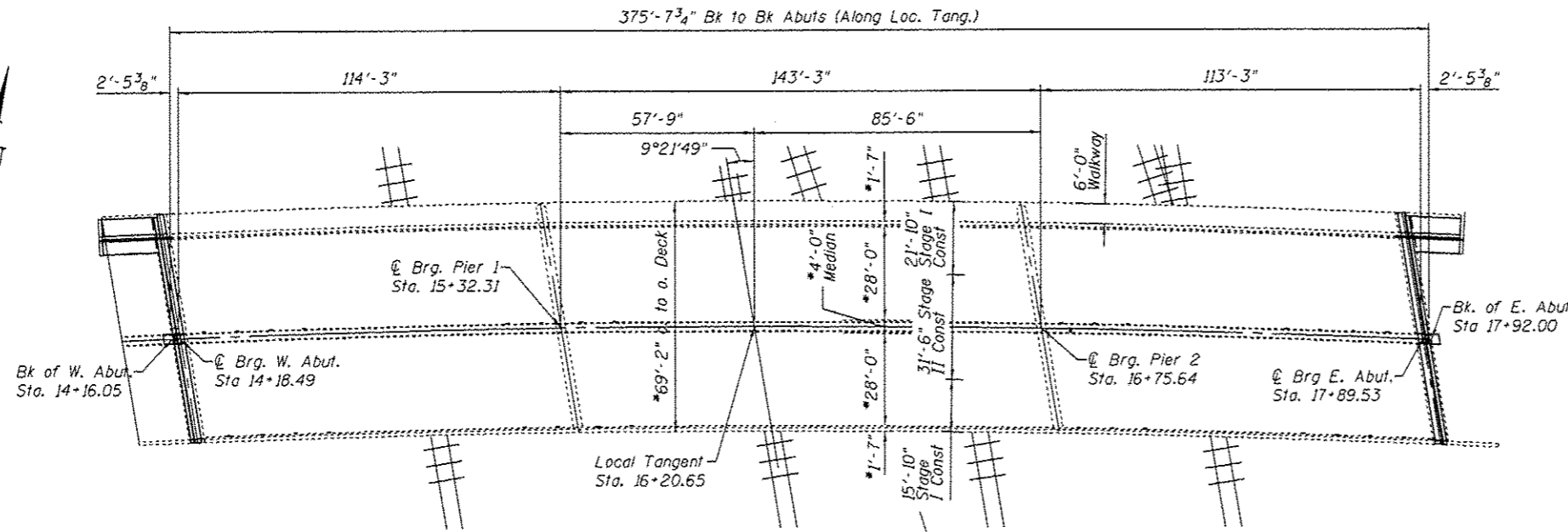
Fasteners shall be high strength bolts, Bolt 3/4"φ, open holes 5/16"φ, unless otherwise noted.

All structural steel, bolts, nuts, and washers shall be galvanized according to AASHTO M111 or M232 as applicable. Cost included with Furnishing and Erecting Structural Steel.

The concrete deck surface at joints shall have its final finish lined according to Article 420.09(e)(1) of the Standard Specifications. Cost included with Concrete Superstructure.



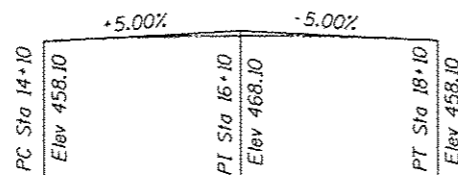
ELEVATION



PLAN

CURVE DATA

P.I. Sta. 16+10.83
 Δ = 18°-53'-44" Rt.
 D = 1°-15'
 R = 4583.66'
 T = 762.75'
 L = 1511.64'
 E = 63.03'
 S.E. = 0.01561/1'



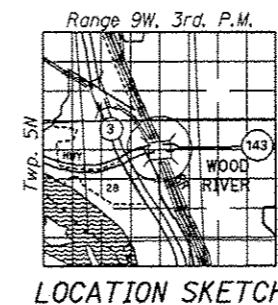
EXISTING PROFILE GRADE

SCOPE OF WORK

- Replace deck ends & hatchblocks
- Install Preformed Joint Strip Seals
- HMA overlay with WMS on deck
- Deck Slab Repair (Partial)
- Sidewalk Removal & Replacement
- Replace diaphragms & cross frames at abutments with new galvanized diaphragms & crossframes.
- Replace the approach sidewalk, adjacent curb & gutter, bridge approach shoulder & guardrail with bridge approach pavement with parapet to the limits shown on the plans
- Beam end repair (Galvanized)

INDEX OF SHEETS

1. General Plan & Elevation
2. Deck Cross Section & Waterproofing Staging
3. Joint Removal
4. Joint Replacement (W. Abut.)
5. Joint Replacement (E. Abut.)
6. Joint Details
7. Approach Details
8. Median Cross Section
9. Approach Parapet
10. Structural Steel
11. Structural Steel Details (W. Abut)
12. Structural Steel Details (E. Abut)
13. Beam End Repair (W. Abut.-Bm B)
14. Strip Seal Details
15. Temporary Concrete Barrier
16. Bar Splicers
17. Fence Anchorage Details
18. For Information Only (F.I.O.) - Existing Fence



LOCATION SKETCH

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Polymerized HMA Surface Course, Mix "D" N70	Ton	197
Sidewalk Removal	Sq. Ft.	247
Concrete Removal	Cu. Yd.	23.8
Concrete Superstructure	Cu. Yd.	39.1
Reinforcement Bars, Epoxy Coated	Pound	8680
Furnishing & Erecting Structural Steel	Pound	7840
Bar Splicers	Each	48
Preformed Joint Strip Seal	Foot	138
Waterproofing Membrane System	Sq. Yd.	2386
Bridge Deck Concrete Sealer	Sq. Ft.	8253
Structural Steel Removal	Pound	7730
**Deck Slab Repair (Partial)	Sq. Yd.	20

**The quantity of deck slab repair is estimated. The engineer in the field shall determine the actual quantity and locations.



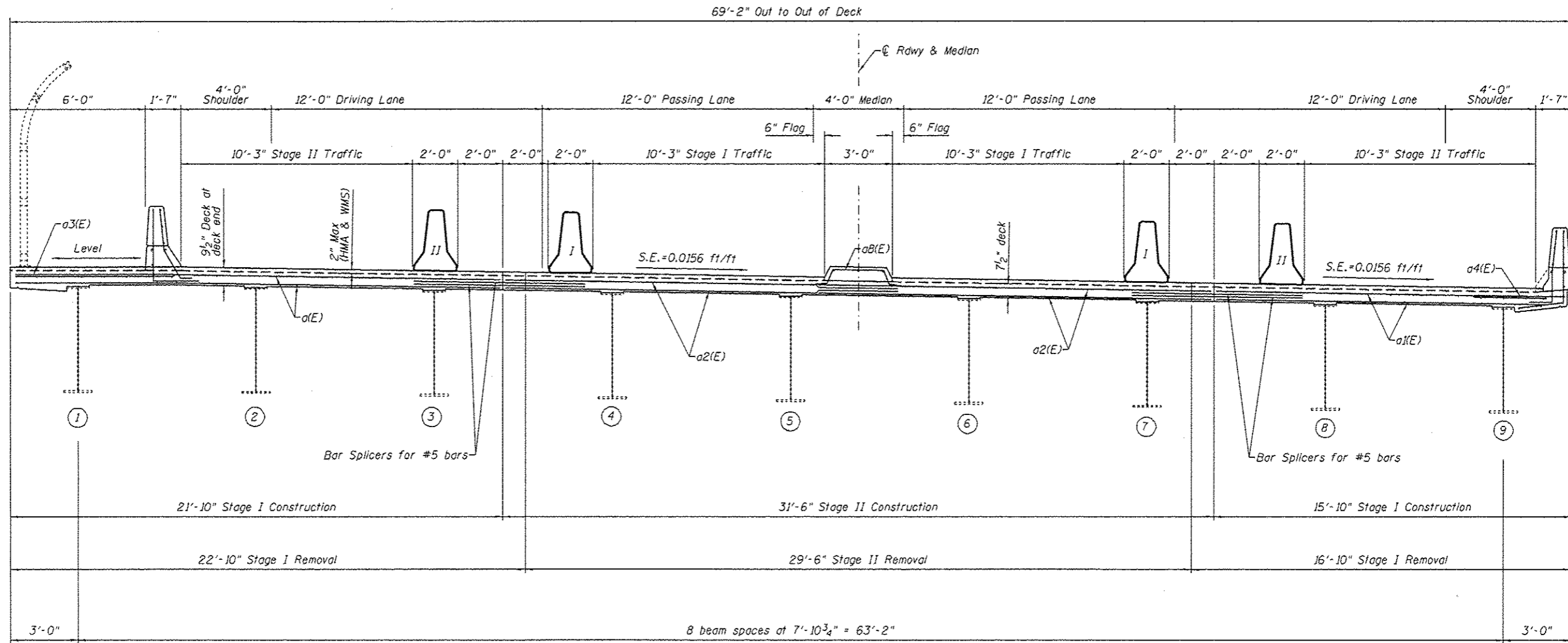
David Carl Puzey 3/20/17
 Expires 11/30/18

DESIGNED - AYW	DATE - APRIL 28, 2017
CHECKED - ATH	REVISED
DRAWN - AYW	REVISED
CHECKED - ATH	

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

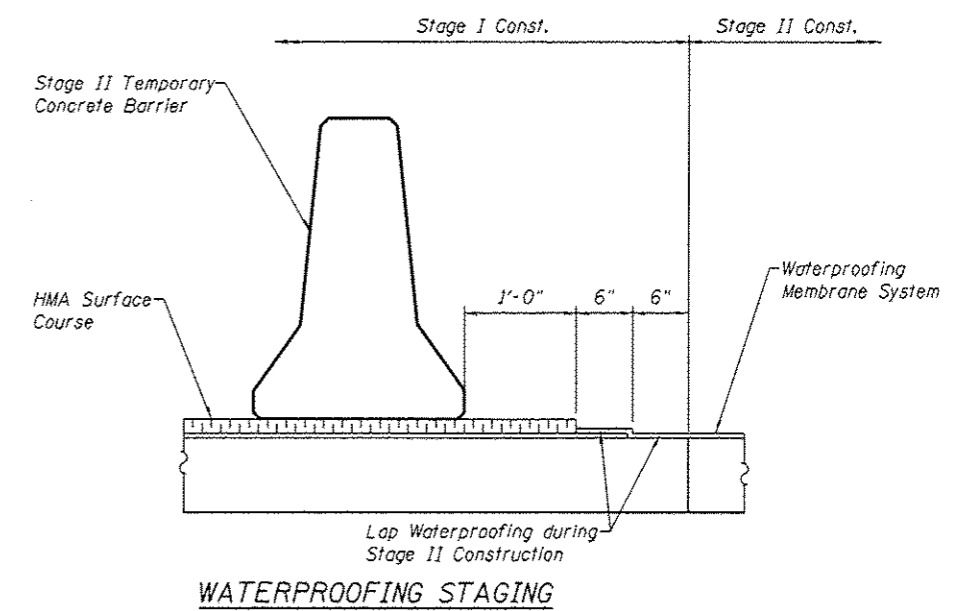
GENERAL PLAN & ELEVATION (IL 143 over RR - Phoebe Goldberg Bridge)
 SN 060-0212
 SHEET NO. 1 OF 18 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
789	1-VB-R-1	MADISON	31	14
CONTRACT NO. T6J77			ILLINOIS FED. AID PROJECT	



DECK CROSS SECTION

Looking East @ Joint Location
All horizontal dimensions in Deck Cross Section are radial.



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CHECKED - ATH

DATE - APRIL 28, 2017
REVISED
REVISED

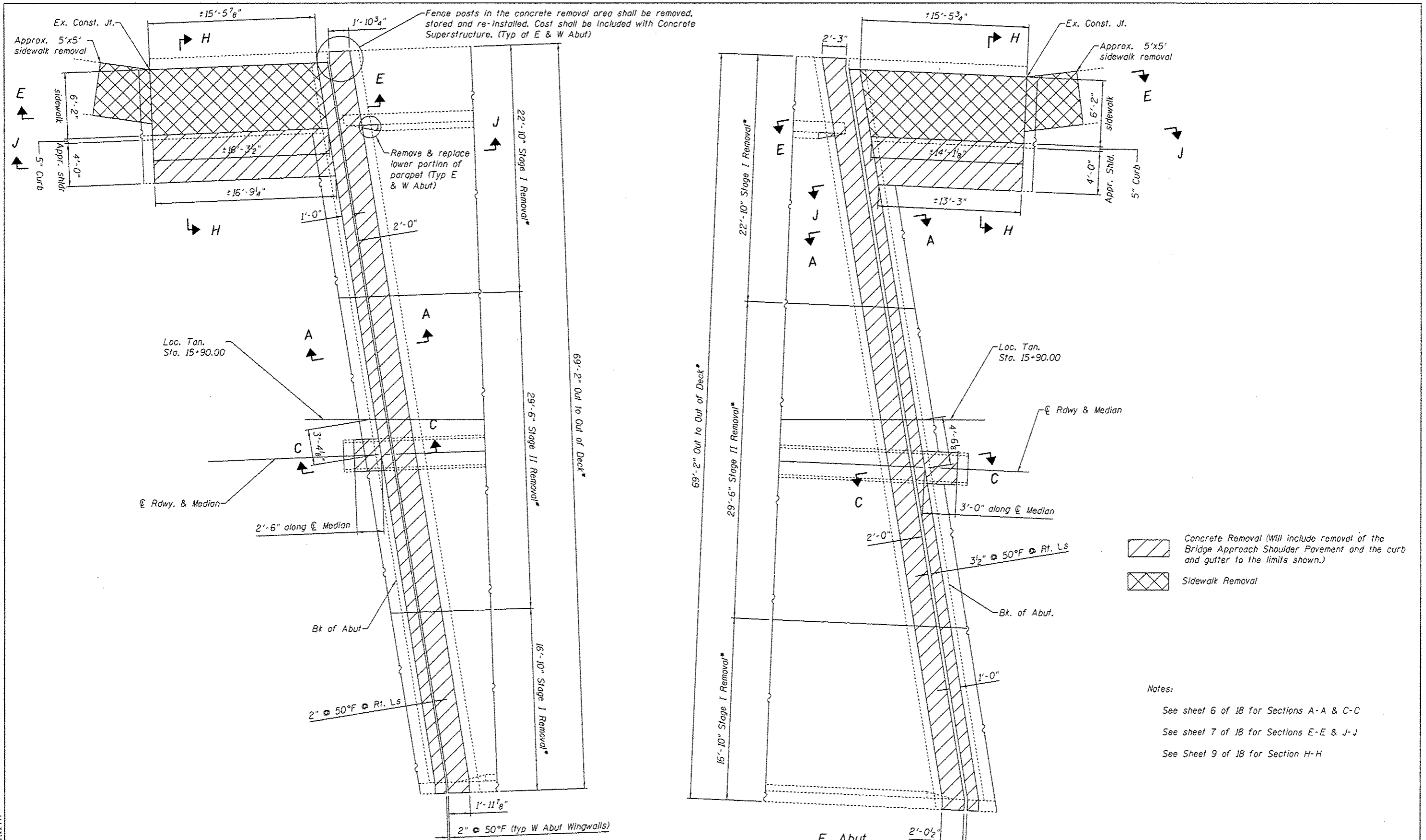
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**



**DECK CROSS SECTION & WATERPROOFING STAGING
SN 060-0212**

SHEET NO. 2 OF 18 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
789	1-VB-R-1	MADISON	31	15
CONTRACT NO. 76J77				

ILLINOIS FED. AID PROJECT



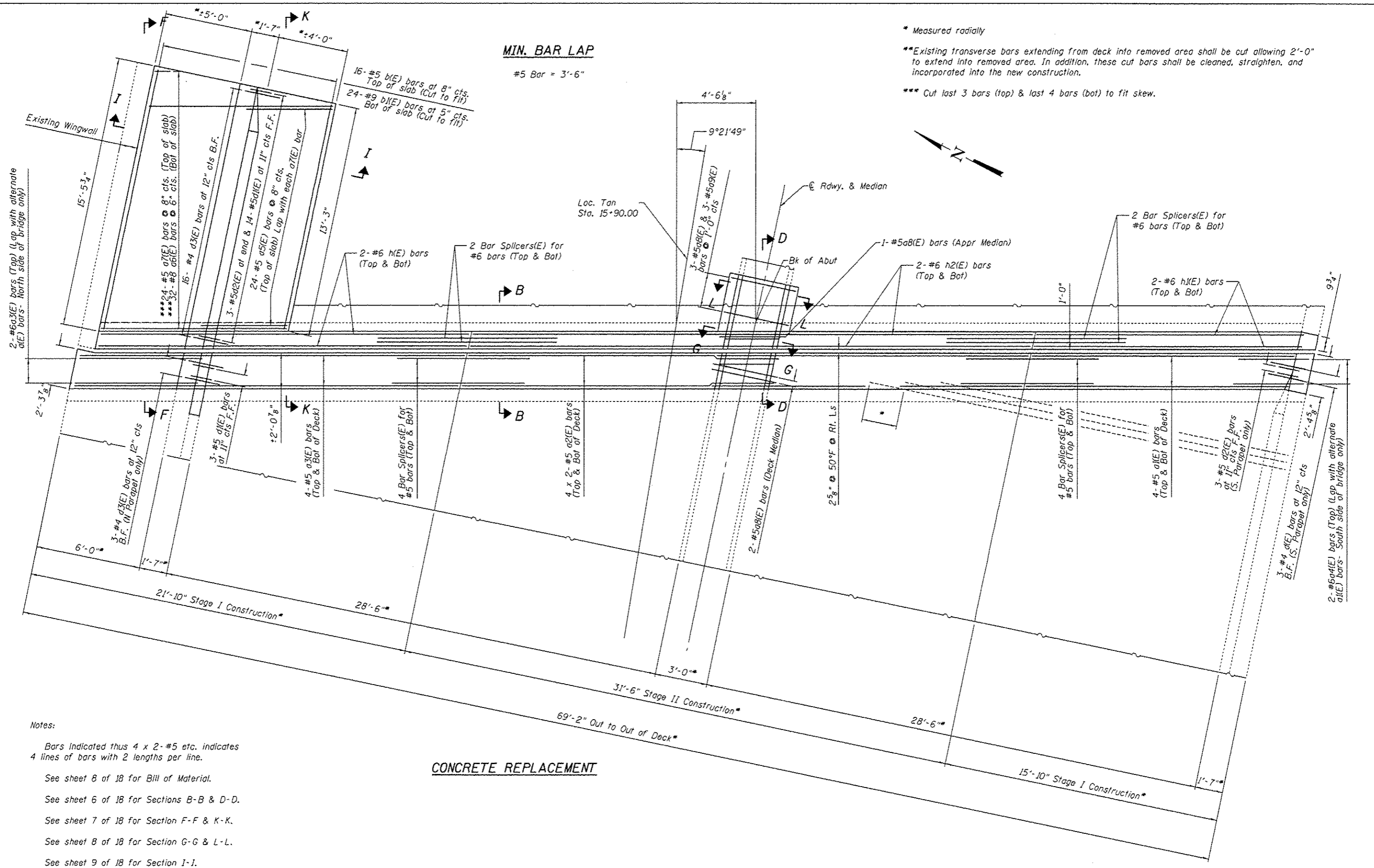
 Concrete Removal (Will include removal of the Bridge Approach Shoulder Pavement and the curb and gutter to the limits shown.)
 Sidewalk Removal

Notes:
 See sheet 6 of 18 for Sections A-A & C-C
 See sheet 7 of 18 for Sections E-E & J-J
 See Sheet 9 of 18 for Section H-H

CONCRETE REMOVAL
* Measured Radially

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DESIGNED - AYW	DATE - APRIL 28, 2017	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	JOINT REMOVAL SN 060-0212		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED - ATH	REVISED		789	J-VB-R-1	MADISON	31	16		
DRAWN - AYW	REVISED		SHEET NO. 3 OF 18 SHEETS			CONTRACT NO. 76J77			
CHECKED - ATH			ILLINOIS FED. AID PROJECT						



MIN. BAR LAP
#5 Bar = 3'-6"

* Measured radially
 ** Existing transverse bars extending from deck into removed area shall be cut allowing 2'-0" to extend into removed area. In addition, these cut bars shall be cleaned, straightened, and incorporated into the new construction.
 *** Cut last 3 bars (top) & last 4 bars (bot) to fit skew.

2-#6a3(E) bars (Top) (Lap with alternate a1(E) bars - North side of bridge only)

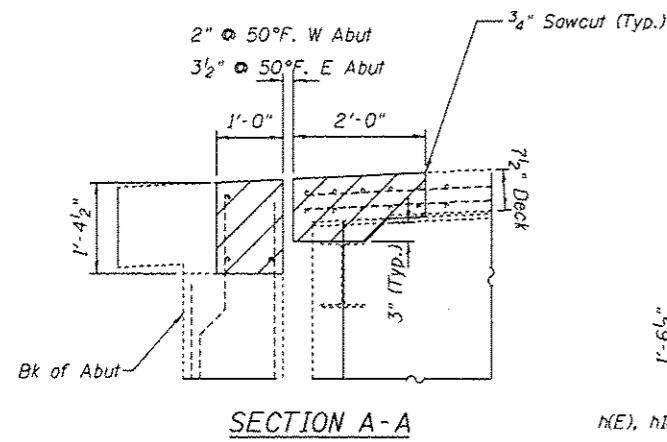
2-#6a4(E) bars (Top) (Lap with alternate a1(E) bars - South side of bridge only)

Notes:
 Bars indicated thus 4 x 2-#5 etc. indicates 4 lines of bars with 2 lengths per line.
 See sheet 8 of 18 for Bill of Material.
 See sheet 6 of 18 for Sections B-B & D-D.
 See sheet 7 of 18 for Section F-F & K-K.
 See sheet 8 of 18 for Section G-G & L-L.
 See sheet 9 of 18 for Section I-I.

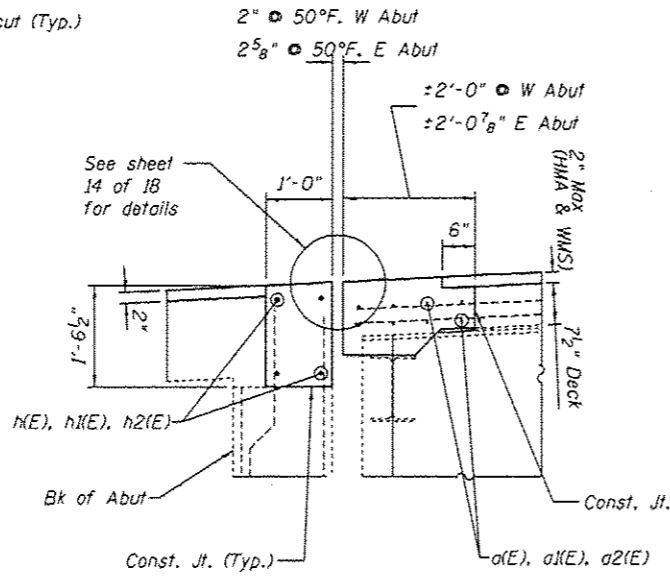
CONCRETE REPLACEMENT

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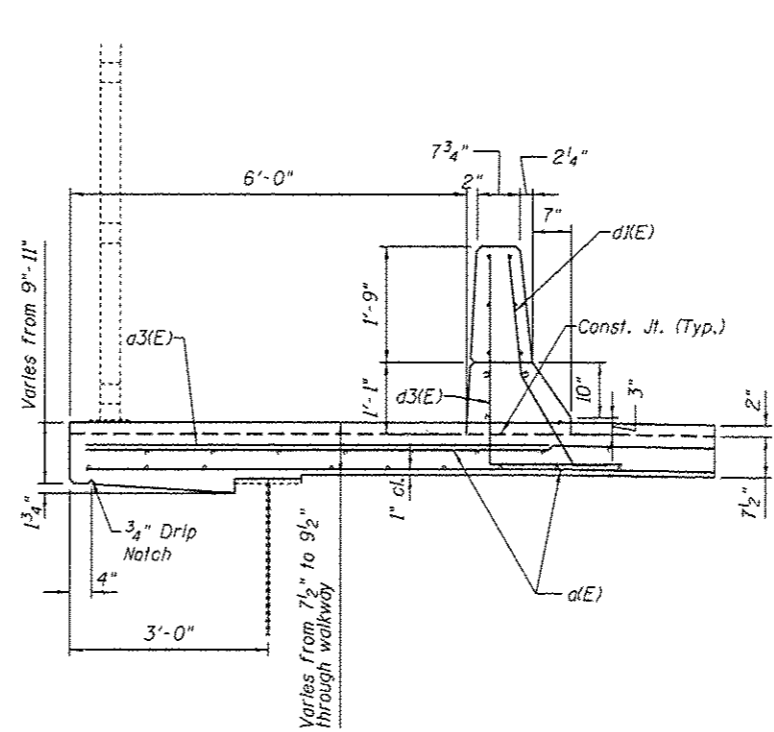
DESIGNED - AYW	DATE - APRIL 28, 2017	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	JOINT REPLACEMENT (E. ABUT.) SN 060-0212		F.A.P. RTE. 789	SECTION 1-VB-R-1	COUNTY MADISON	TOTAL SHEETS 31	SHEET NO. 18
CHECKED - ATH	REVISED		SHEET NO. 5 OF 18 SHEETS		CONTRACT NO. 76J77		ILLINOIS FED. AID PROJECT		



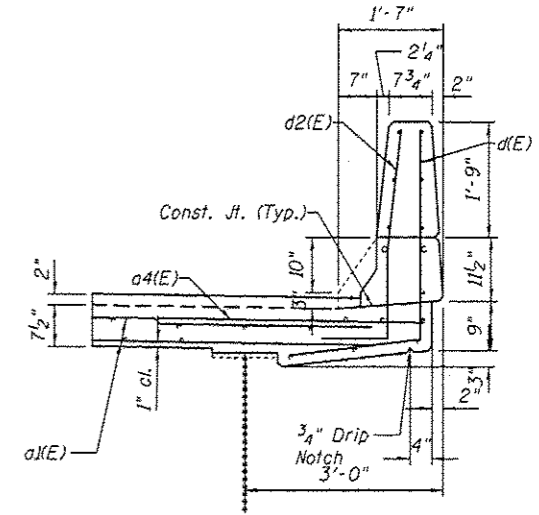
SECTION A-A



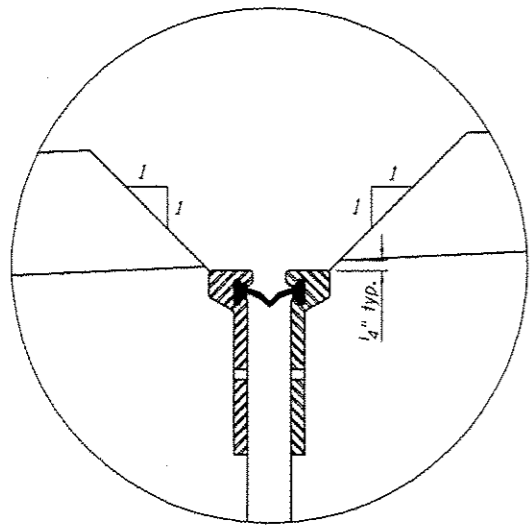
SECTION B-B



N. PARAPET & WALKWAY SECTION

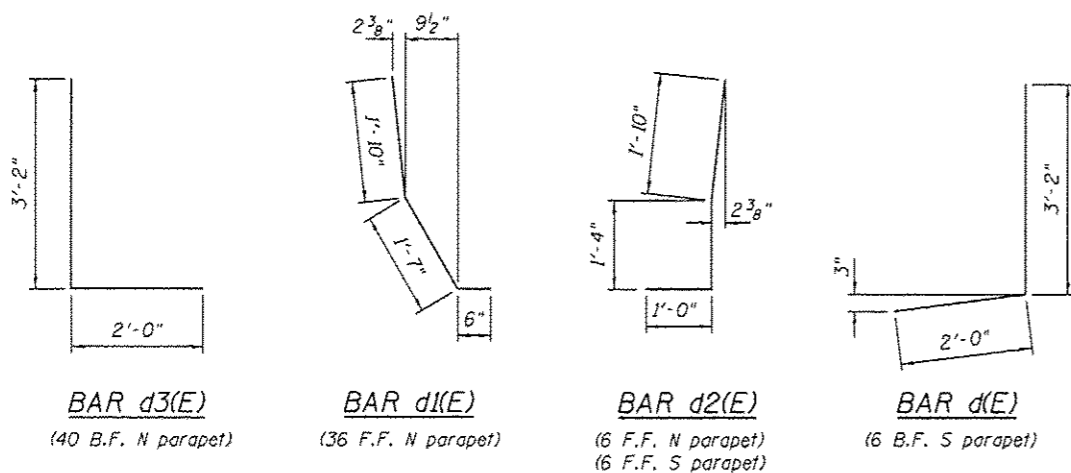


S. PARAPET SECTION



DETAIL "A"

- Concrete Removal (Will include removal of the approach median to the limits shown in Section C-C.)
- Sidewalk Removal

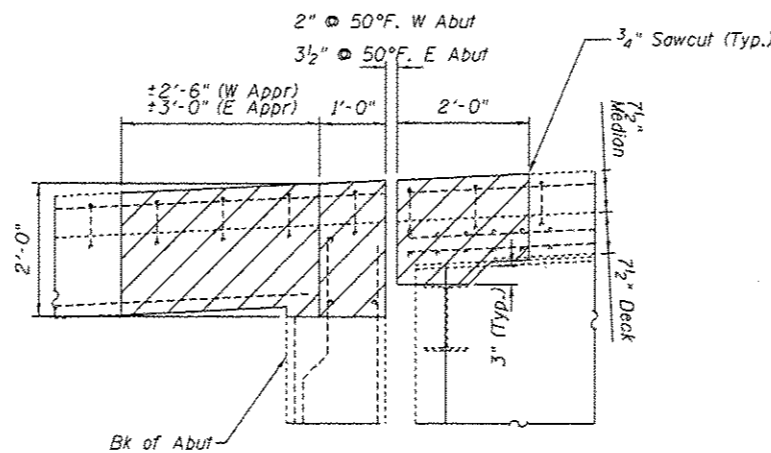


BAR d3(E)
(40 B.F. N parapet)

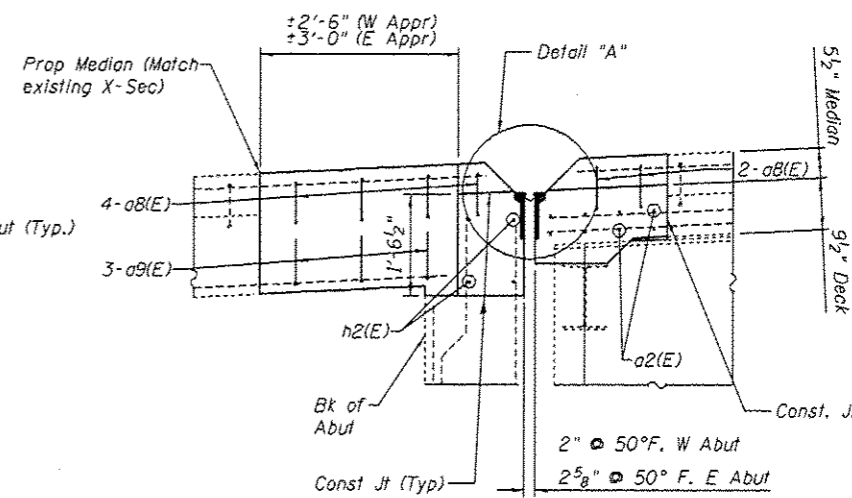
BAR d1(E)
(36 F.F. N parapet)

BAR d2(E)
(6 F.F. N parapet)
(6 F.F. S parapet)

BAR d(E)
(6 B.F. S parapet)



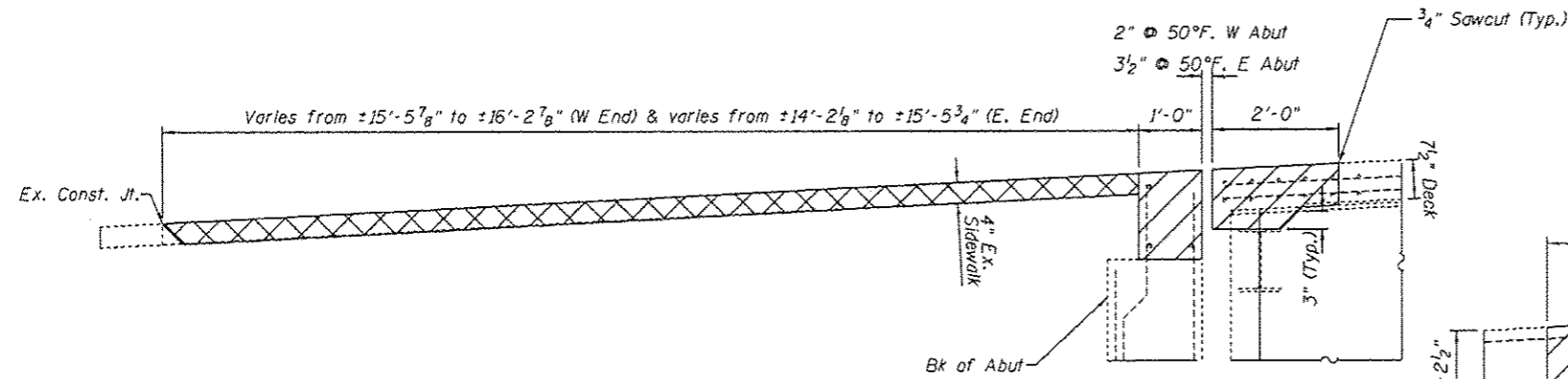
SECTION C-C



SECTION D-D

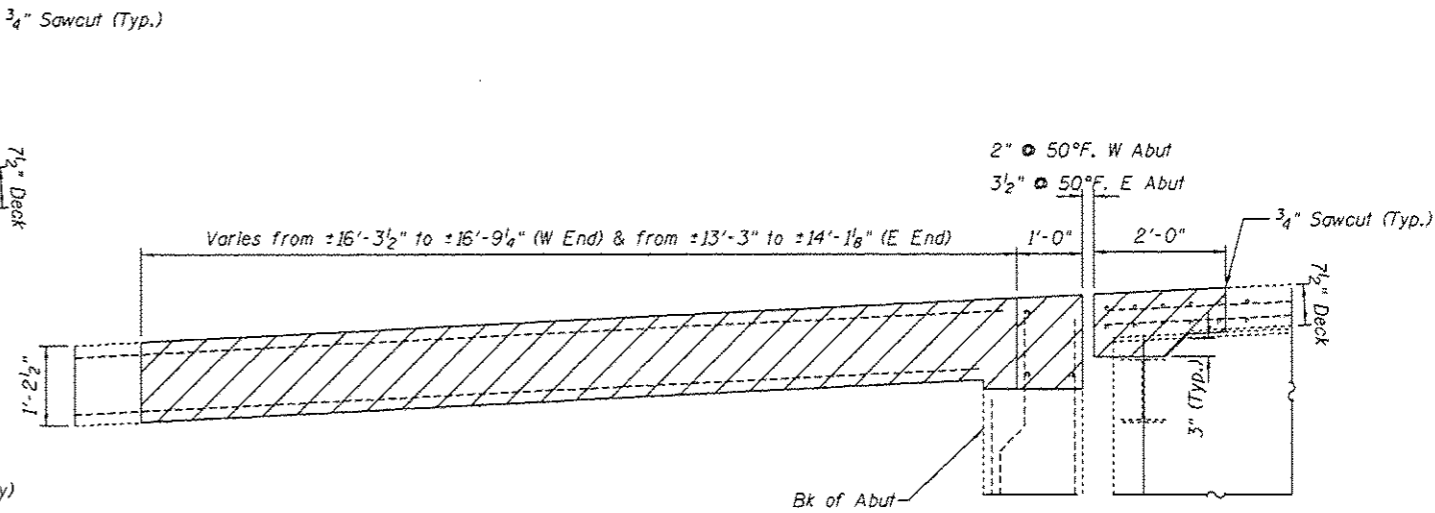
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DESIGNED - AYY	DATE - APRIL 28, 2017	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	JOINT DETAILS SN 060-0212	F.A.P. RTE. 789	SECTION 1-VB-R-1	COUNTY MADISON	TOTAL SHEETS 31	SHEET NO. 19	
CHECKED - ATH	REVISED		SHEET NO. 6 OF 18 SHEETS	CONTRACT NO. T6J77					
DRAWN - AYY	REVISED		ILLINOIS FED. AID PROJECT						
CHECKED - ATH									

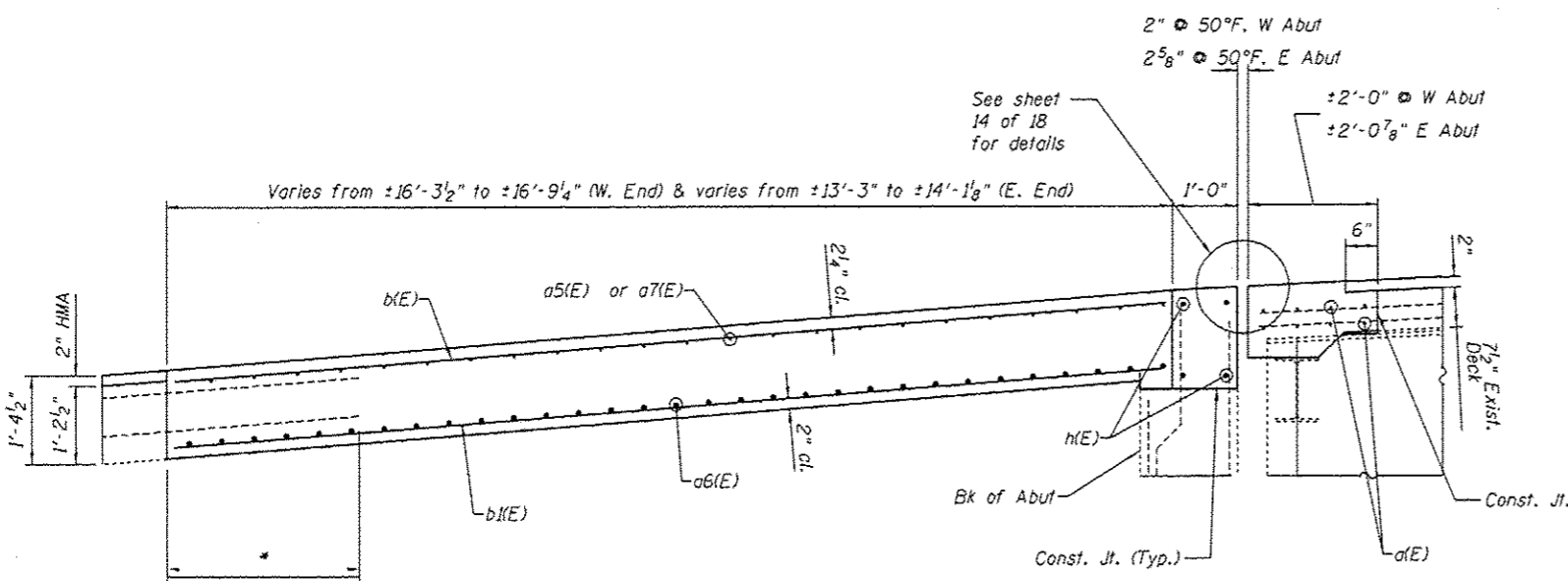


SECTION E-E

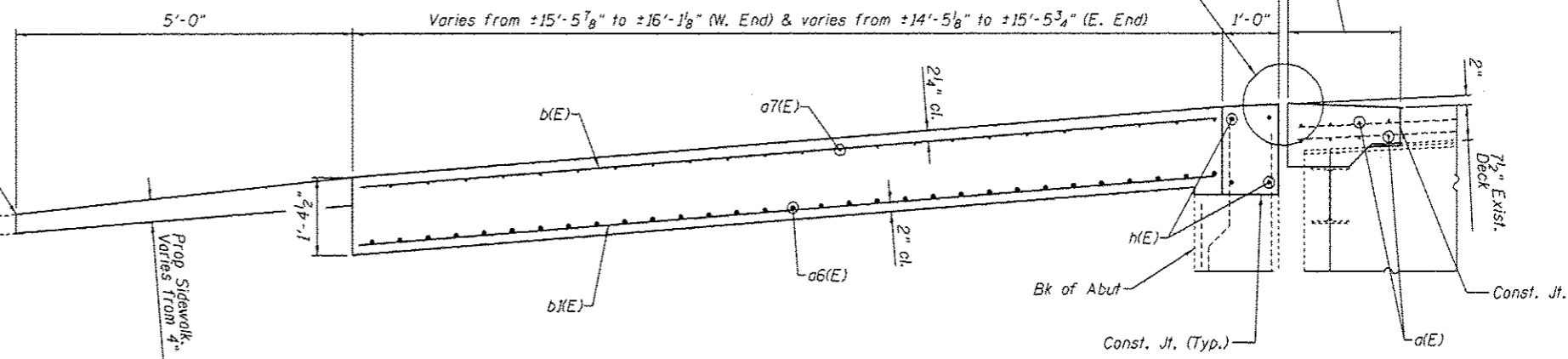
(This section is thru walkway/sidewalk only)



SECTION J-J



SECTION K-K



SECTION F-F

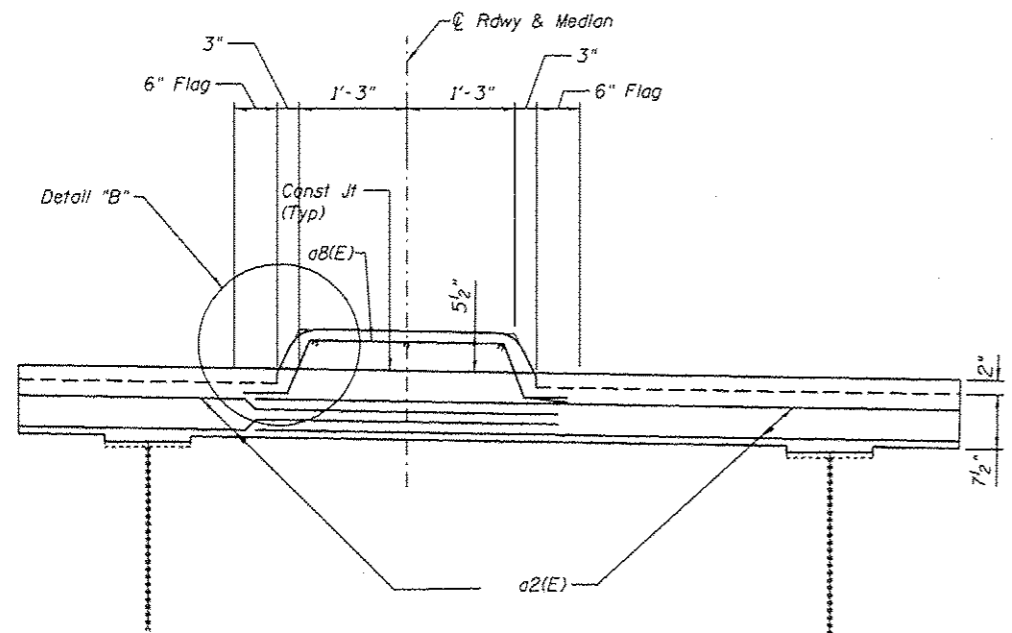
(This section is thru walkway/sidewalk only)

* Existing longitudinal bars extending from approach shoulder pavement into removed area shall be cut allowing 3'-0" to extend into removed area. In addition, these cut bars shall be cleaned, straighten, and incorporated into the new construction.

- Concrete Removal (Will include removal of the Bridge Approach Shoulder Pavement and the curb and gutter to the limits shown.)
- Sidewalk Removal

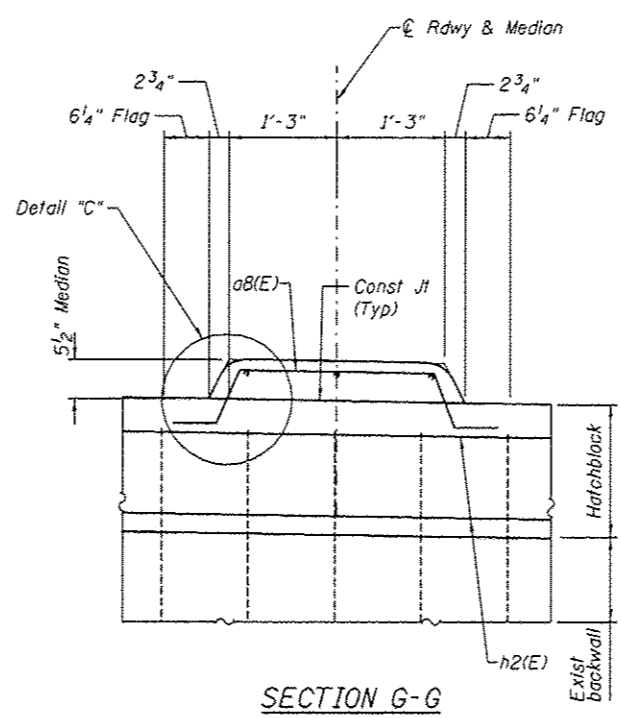
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DESIGNED - AYY	DATE - APRIL 28, 2017	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	APPROACH DETAILS SN 060-0212	F.A.P. RTE. 789	SECTION 1-VB-R-1	COUNTY MADISON	TOTAL SHEETS 31	SHEET NO. 20
CHECKED - ATH	REVISOR			CONTRACT NO. 76J77				
DRAWN - AYY	REVISOR			ILLINOIS FED. AID PROJECT				
CHECKED - ATH				SHEET NO. 7 OF 18 SHEETS				

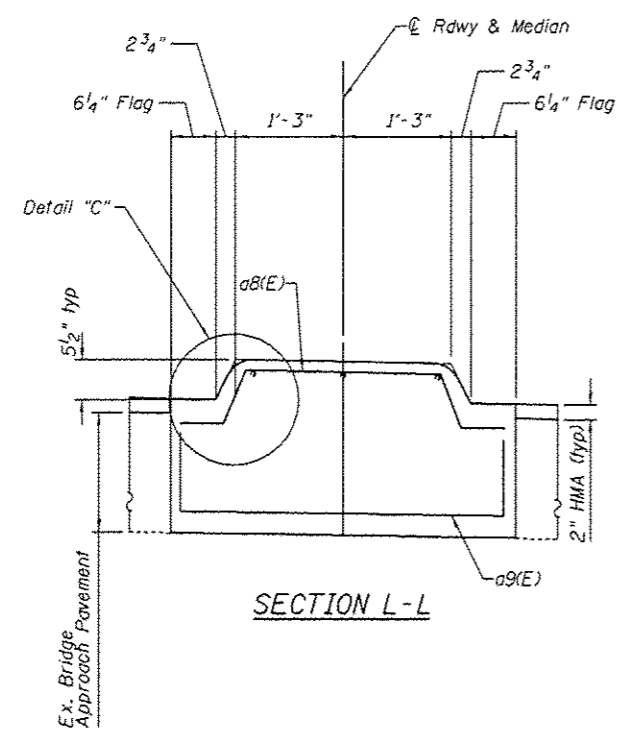


SECTION BRIDGE MEDIAN

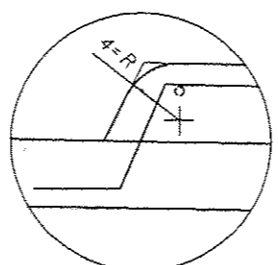
Looking East



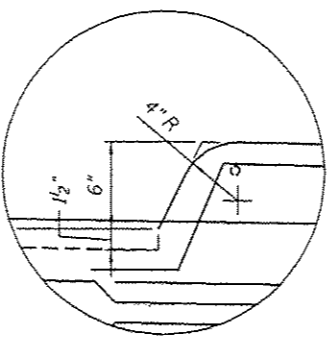
SECTION G-G



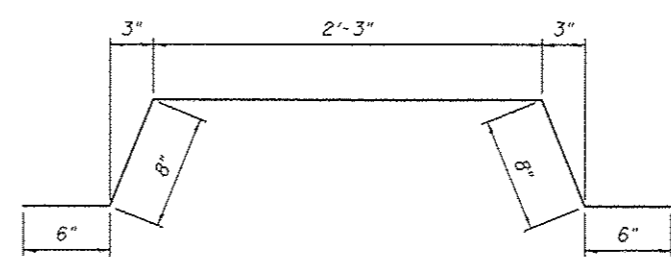
SECTION L-L



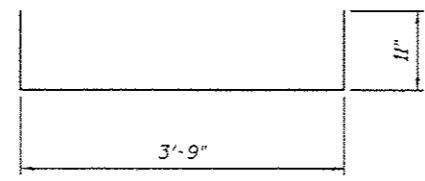
DETAIL "C"



DETAIL "B"



BAR a8(E)



BAR a9(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a1(E)	16	#5	21'-7"	—
a1(E)	16	#5	14'-9"	—
a2(E)	32	#5	17'-9"	—
a3(E)	4	#6	7'-0"	—
a4(E)	4	#6	4'-0"	—
a5(E)	48	#5	5'-3"	—
a6(E)	64	#8	10'-5"	—
a7(E)	48	#5	10'-5"	—
a8(E)	12	#5	4'-7"	—
a9(E)	6	#5	5'-7"	—
b(E)	32	#5	16'-5"	—
b(E)	48	#9	16'-5"	—
d(E)	6	#4	5'-2"	J
d(E)	36	#5	3'-11"	L
d2(E)	12	#5	4'-2"	J
d3(E)	40	#4	5'-2"	L
e(E)	6	#4	16'-9"	—
e(E)	2	#8	16'-9"	—
e2(E)	2	#5	16'-9"	—
e3(E)	6	#4	14'-9"	—
e4(E)	2	#8	14'-9"	—
e5(E)	2	#5	14'-9"	—
h(E)	8	#6	20'-8"	—
h(E)	8	#6	15'-7"	—
h2(E)	8	#6	31'-6"	—
Concrete Removal		Cu. Yd.	23.8	
Concrete Structures		Cu. Yd.	39.1	
Reinforcement Bars, Epoxy Coated		Lbs.	8680	

Reinforcement bars designated (E) shall be epoxy coated.

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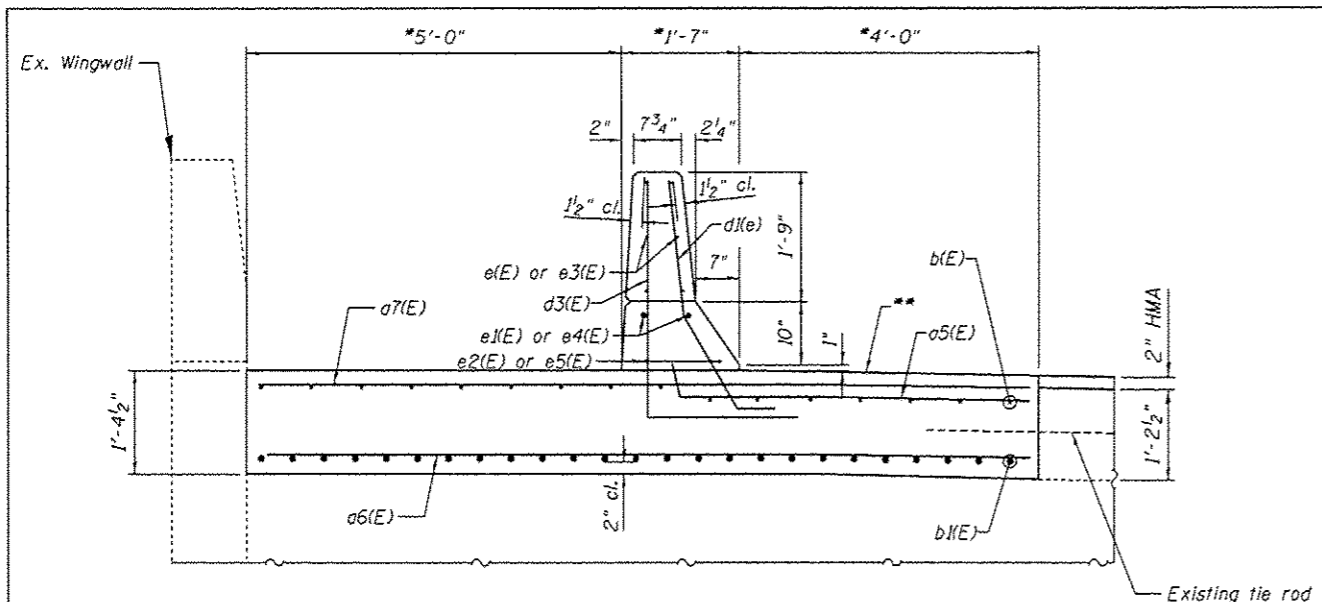
DESIGNED - AYY
CHECKED - ATH
DRAWN - AYY
CHECKED - ATH

DATE - APRIL 28, 2017
REVISED
REVISED

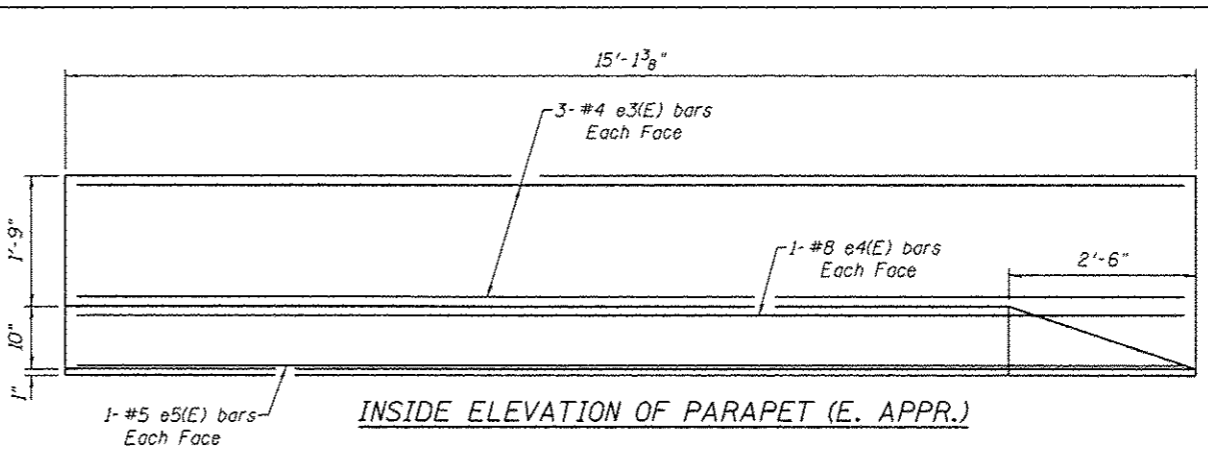
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MEDIAN CROSS SECTION
SN 060-0212
SHEET NO. 8 OF 18 SHEETS

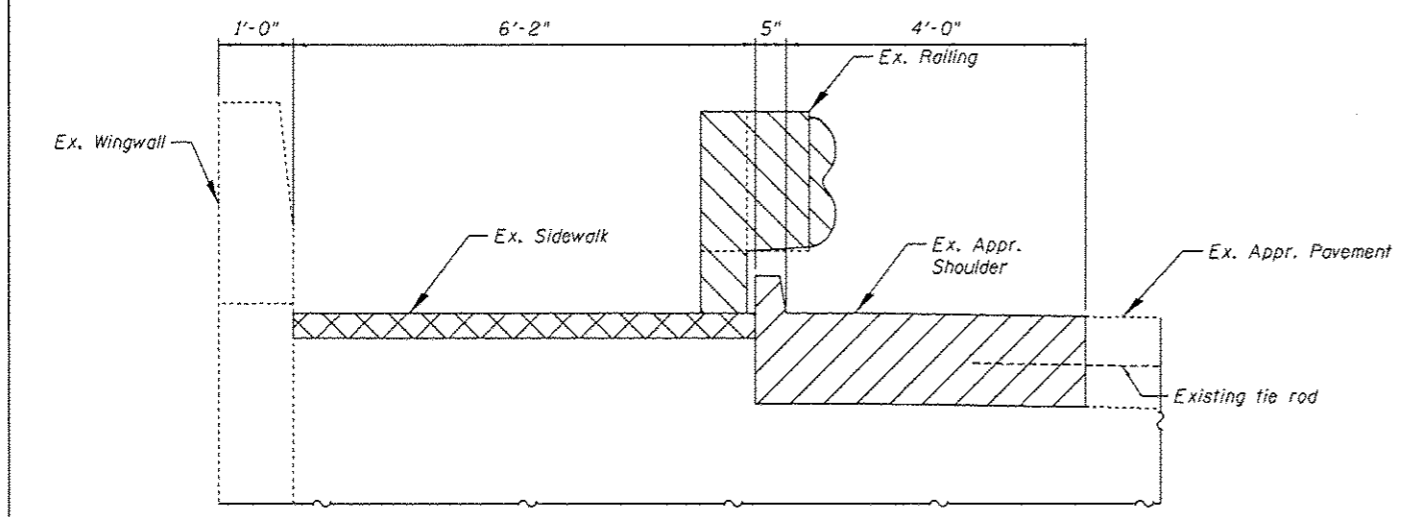
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
789	1-VB-R-1	MADISON	31	21
				CONTRACT NO. 76J77
ILLINOIS FED. AID PROJECT				



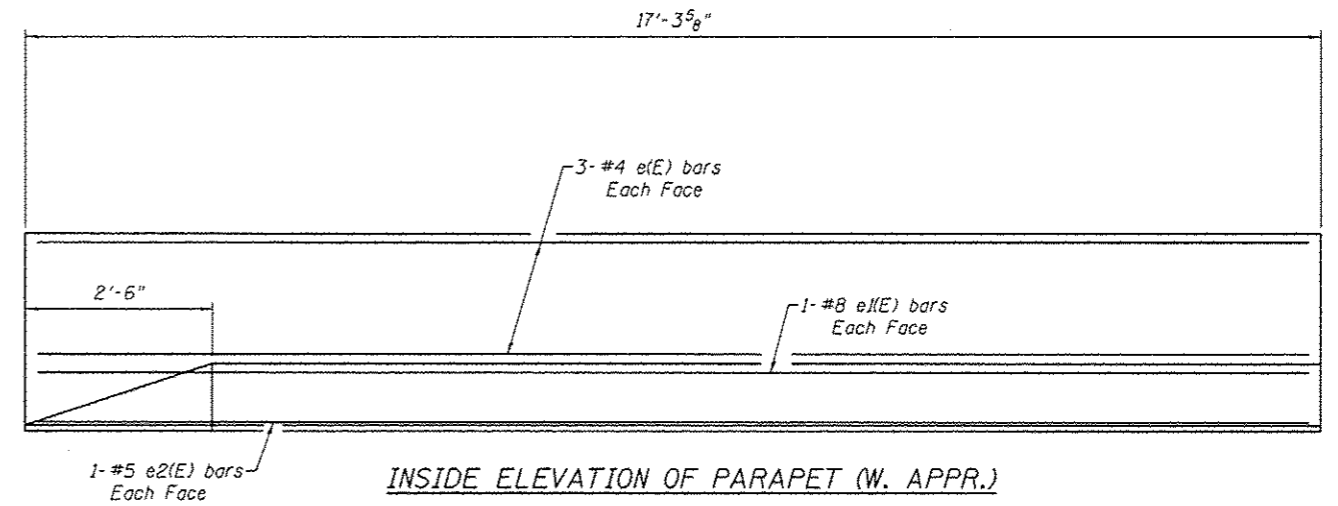
SECTION I-I



INSIDE ELEVATION OF PARAPET (E. APPR.)

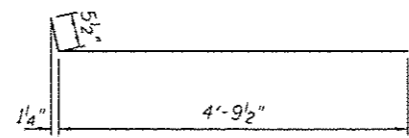


SECTION H-H



INSIDE ELEVATION OF PARAPET (W. APPR.)

*Measured radially
 ** Contractor has option of pouring 4'-0" x 2" blockout and extending HMA to face of parapet.

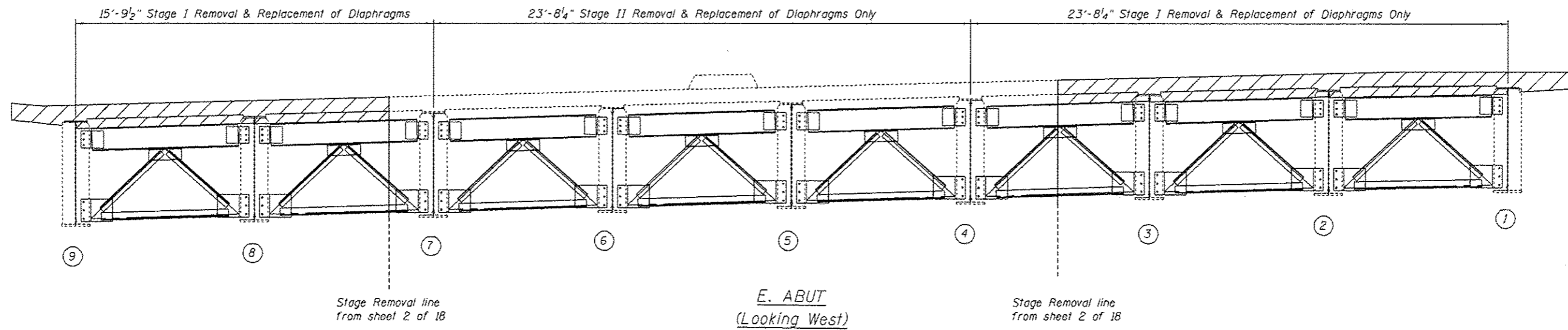
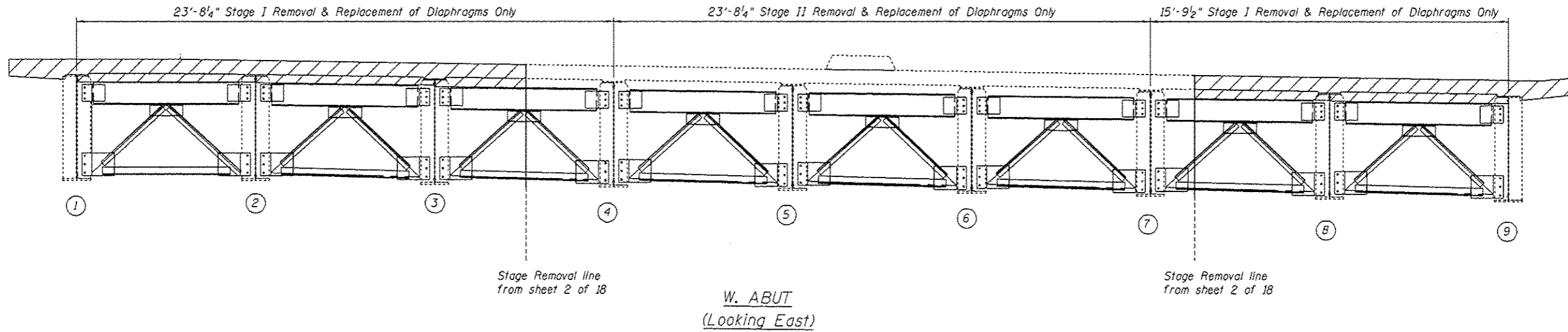


BAR a5(E)

- Concrete Removal (Will include removal of the Bridge Approach Pavement and curb to the limits shown.)
- Sidewalk Removal
- Guardrail Removal

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DESIGNED - AYW	DATE - APRIL 28, 2017	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	APPROACH PARAPET SN 060-0212	F.A.P. RTE. 789	SECTION 1-B-R-1	COUNTY MADISON	TOTAL SHEETS 31	SHEET NO. 22
CHECKED - ATH	REVISED		SHEET NO. 9 OF 18 SHEETS	CONTRACT NO. 76J77 ILLINOIS FED. AID PROJECT				
DRAWN - AYW	REVISED							
CHECKED - ATH								



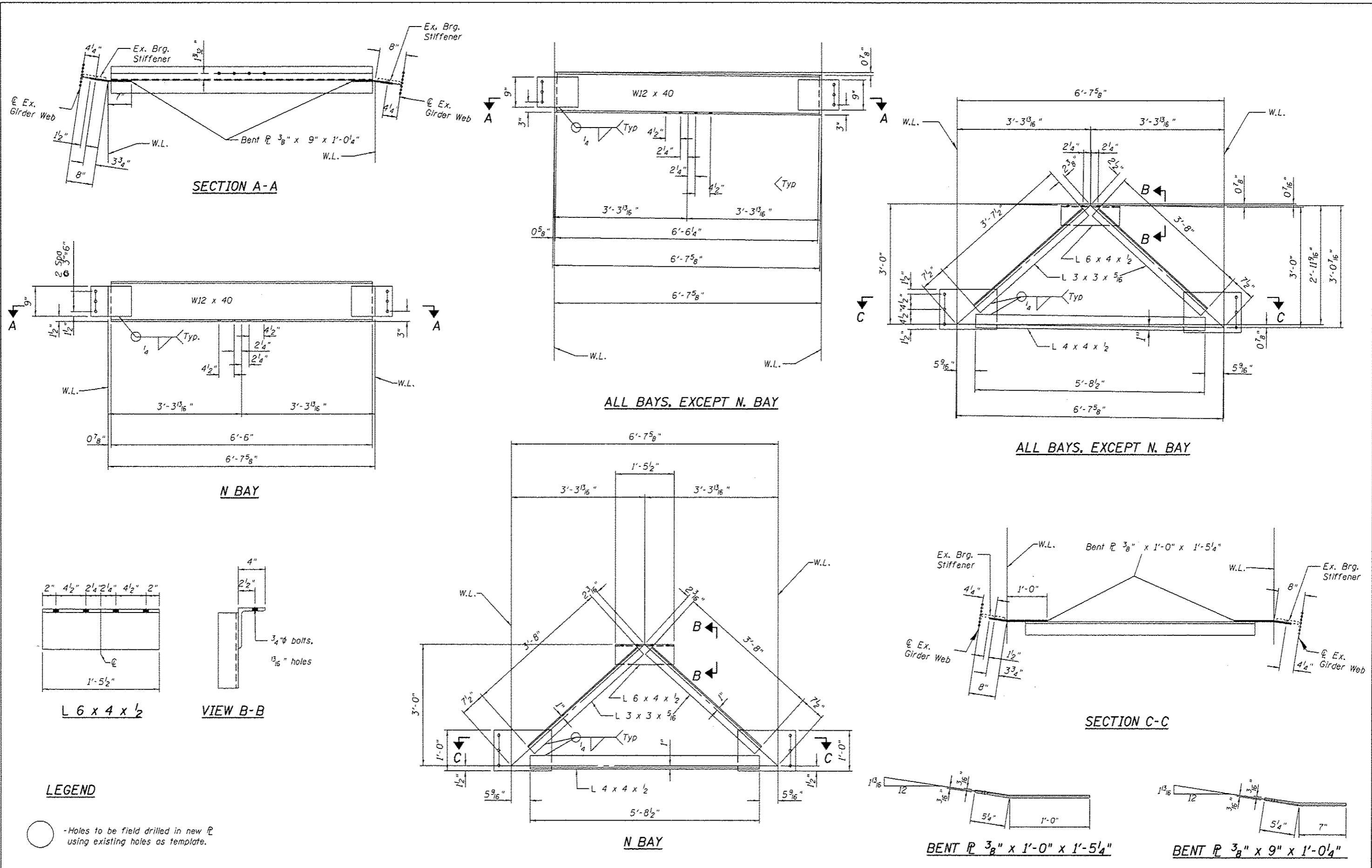
Note: Galvanize new diaphragms, angles & plates

BILL OF MATERIAL

Item	Unit	Total
Structural Steel Removal	Pound	7730
F & E Structural Steel	Pound	7840

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DESIGNED - AYY	DATE - APRIL 28, 2017	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STRUCTURAL STEEL SN 060-0212	F.A.P. RTE. 789	SECTION 1-VB-R-1	COUNTY MADISON	TOTAL SHEETS 31	SHEET NO. 23
CHECKED - ATH	REVISED			CONTRACT NO. 76J77				
DRAWN - AYY	REVISED			ILLINOIS FED. AID PROJECT				
CHECKED - ATH				SHEET NO. 10 OF 18 SHEETS				



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DESIGNED -	AYY
CHECKED -	ATH
DRAWN -	AYY
CHECKED -	ATH

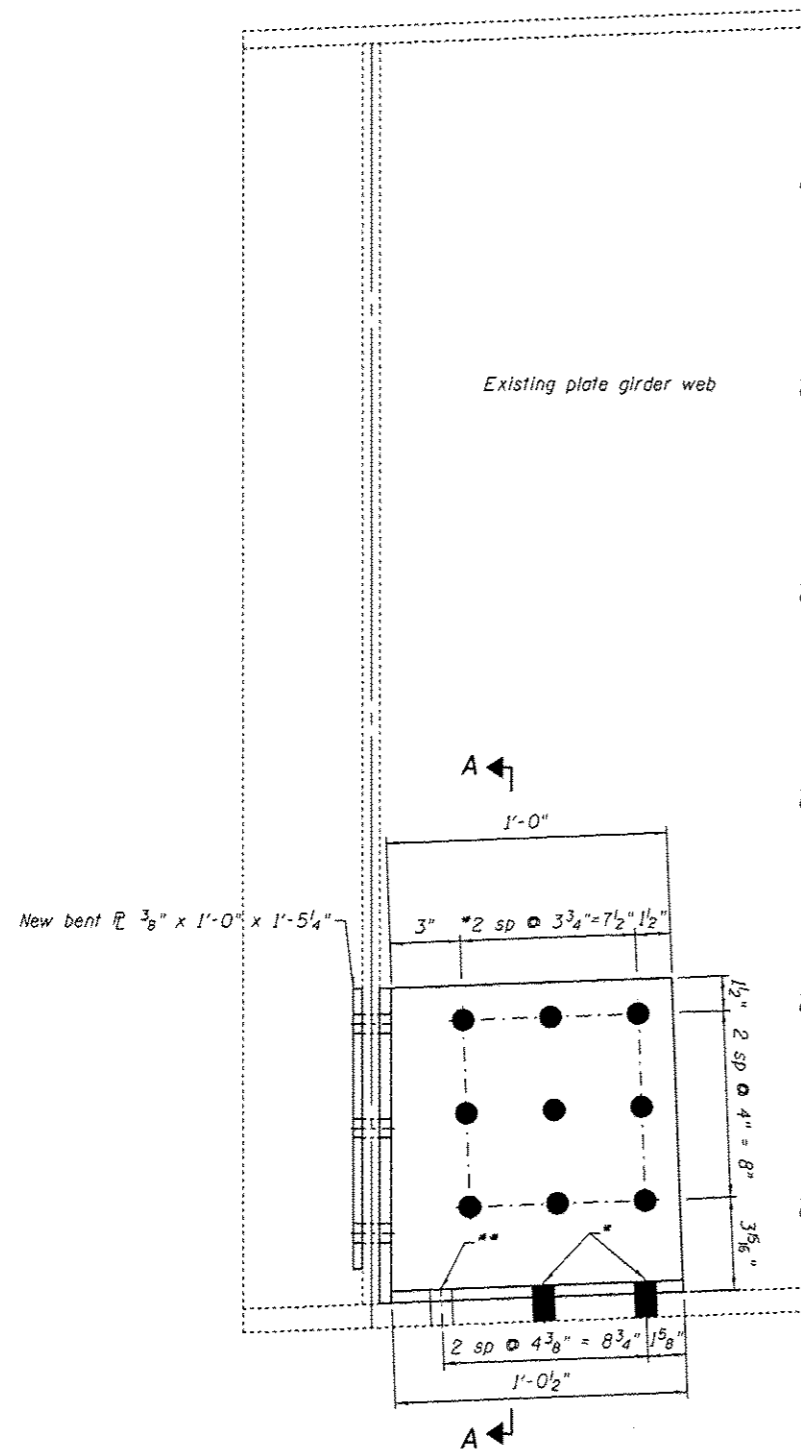
DATE -	APRIL 28, 2017
REVISED	
REVISED	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STRUCTURAL STEEL DETAILS (W. ABUT-LOOKING E.)
SN 060-0212**

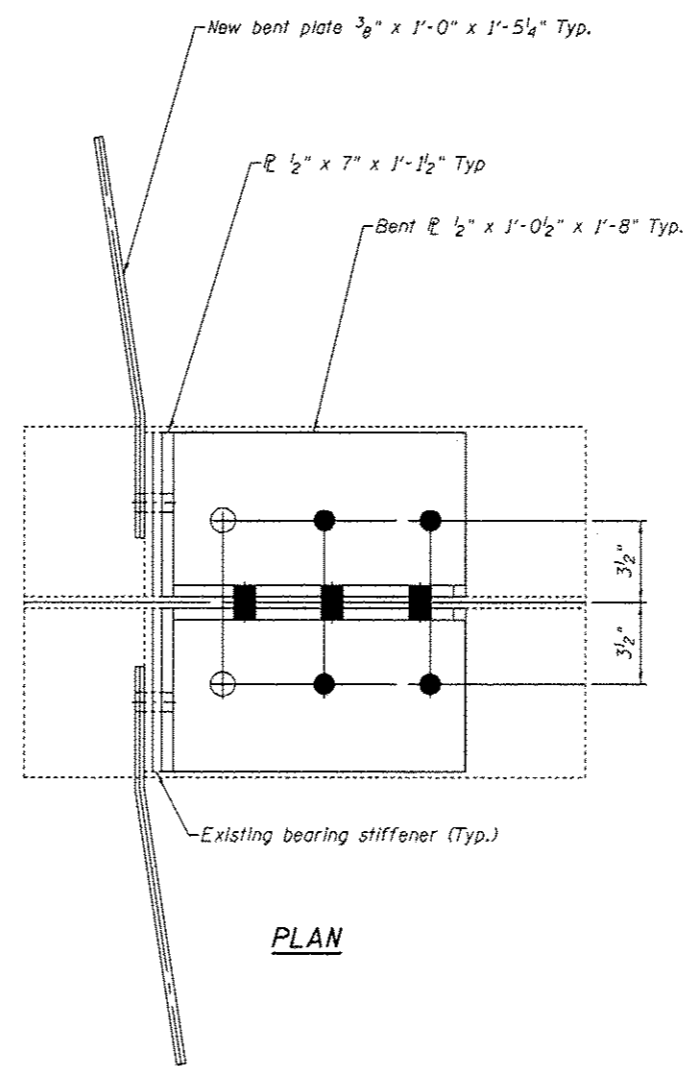
SHEET NO. 11 OF 18 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T89	1-VB-R-1	MADISON	31	24
CONTRACT NO. T6J77			ILLINOIS FED. AID PROJECT	



END ELEVATION

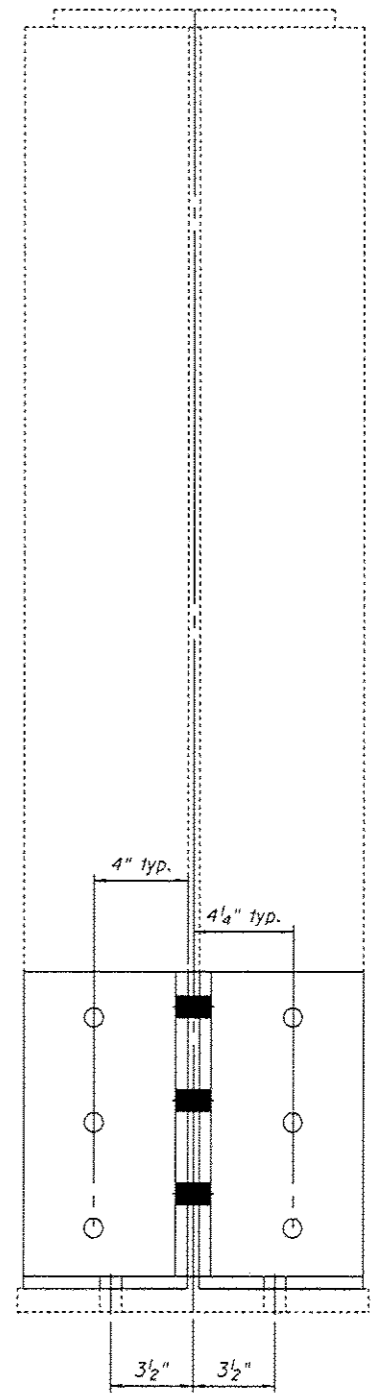
* Use 7/8" ϕ bolts & 15/16" ϕ holes.
 ** Use 1" ϕ bolts & 1/16" ϕ holes.



PLAN

LEGEND

- - Holes to be field drilled in existing PL using new PL as template.
- - Holes to be field drilled in new PL using existing holes as template.



SECTION A-A

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DESIGNED	-	AYY
CHECKED	-	ATH
DRAWN	-	AYY
CHECKED	-	ATH

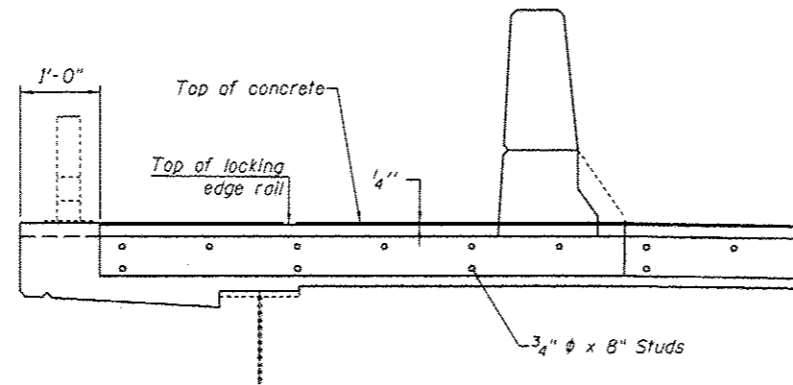
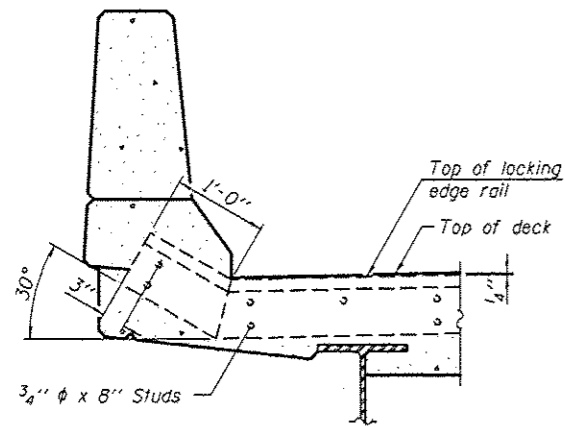
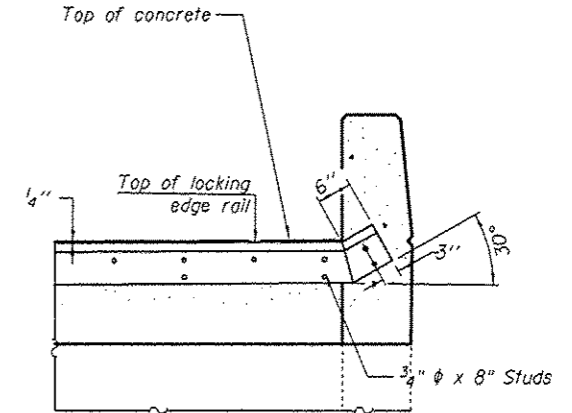
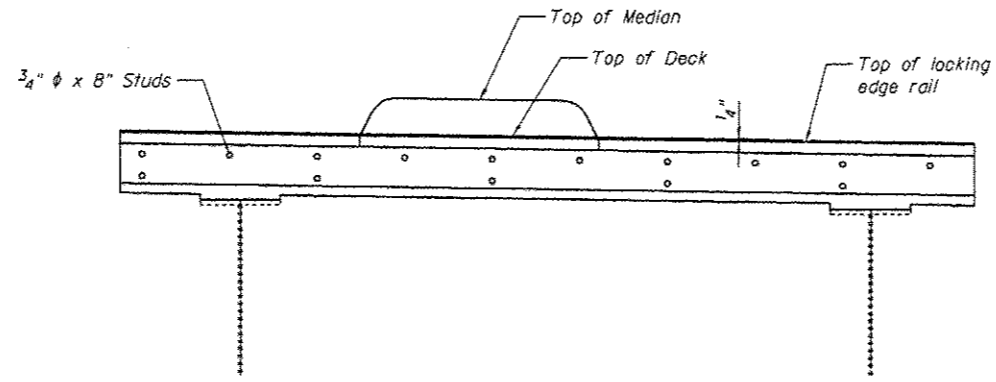
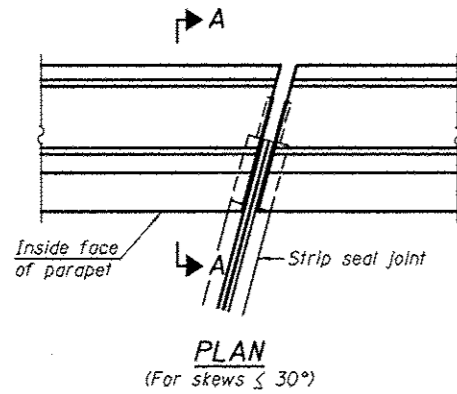
DATE	-	APRIL 28, 2017
REVISED		
REVISED		

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BEAM END REPAIR (W. ABUT - BM 8)
SN 060-0212**

SHEET NO. 13 OF 18 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
789	I-VB-R-1	MADISON	31	26
CONTRACT NO. 76J77			ILLINOIS FED. AID PROJECT	



TYPICAL END TREATMENT AT SOUTH SIDE

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

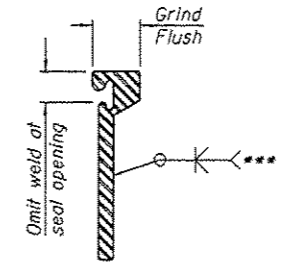
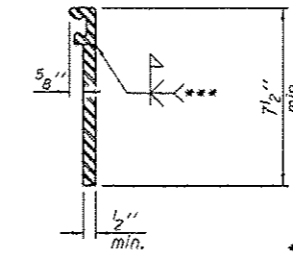
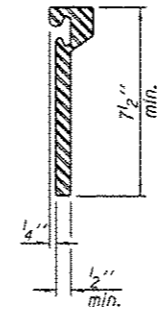
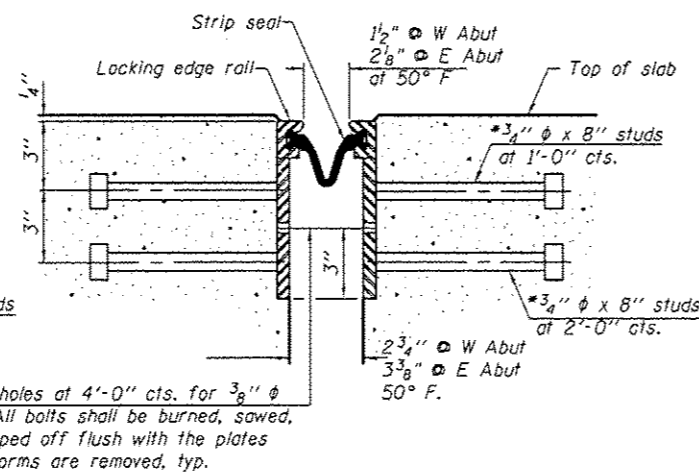
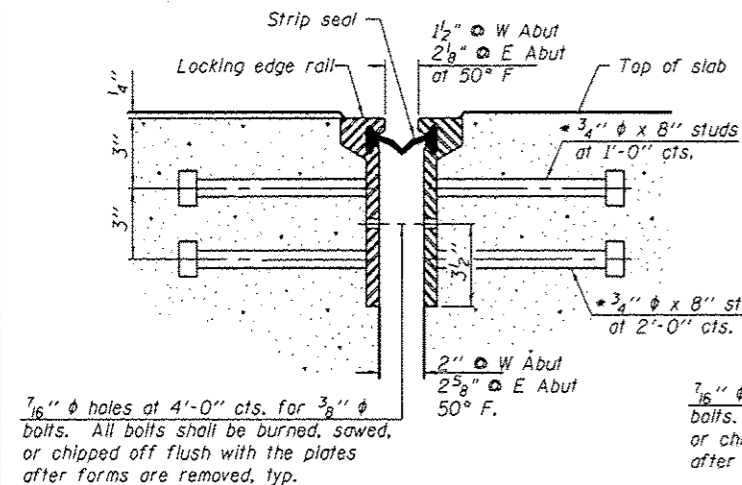
The Locking Edge Rails depicted are conceptual only, except for the minimum dimensions shown. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities.

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

All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications. Maximum space between rail segments shall be 3/16", sealed with a suitable sealant. Joints in rails within 10 ft. of curbs shall be welded. Parapet plates and anchorage studs for skews > 30° included in the cost of Preformed Joint Strip Seal.

SECTION A-A

TYPICAL END TREATMENT AT N. PARAPET & WALKWAY SECTION



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

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.

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

SECTION THRU WELDED RAIL JOINT

ROLLED EXTRUDED RAIL WELDED RAIL

LOCKING EDGE RAIL SPLICE

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

LOCKING EDGE RAILS

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	136

* Granular or solid flux filled headed studs conforming to Article J006.32 of the Std. Specs., automatically end welded.

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DESIGNED - AYY
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DRAWN - AYY
CHECKED - ATH

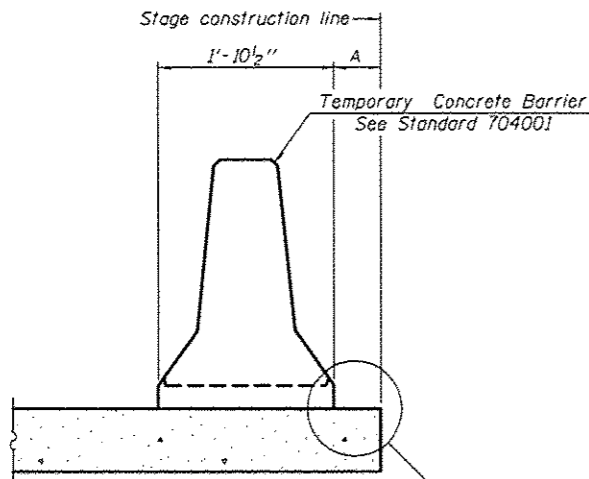
DATE - APRIL 28, 2017
REVISED
REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL
SN 060-0212

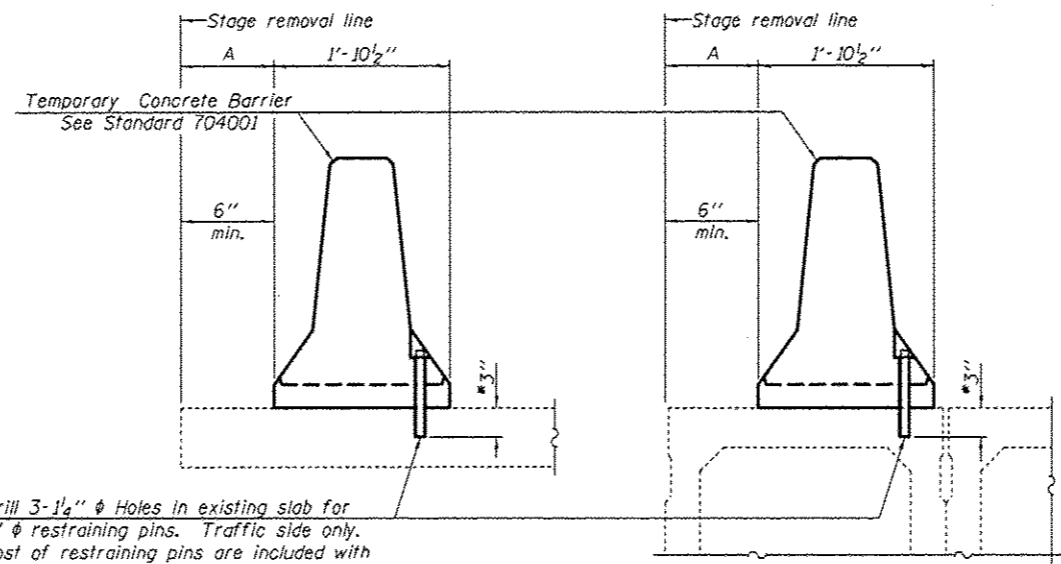
SHEET NO. 14 OF 18 SHEETS

F.A.P. RTE. 789	SECTION 1-VB-R-1	COUNTY MADISON	TOTAL SHEETS 31	SHEET NO. 27
[ILLINOIS] FED. AID PROJECT			CONTRACT NO. T6J77	



When "A" is 3'-1" or less, the temporary concrete barrier shall be restrained to the new slab according to Detail I, II or III. No restraint is required when "A" is greater than 3'-1".

NEW SLAB OR NEW DECK BEAM



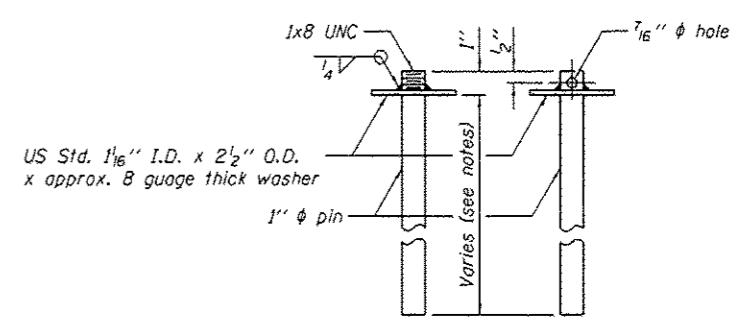
Drill 3-1/4" ϕ Holes in existing slab for 1" ϕ restraining pins. Traffic side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint is required when "A" is greater than 3'-1".

* When hot-mix asphalt wearing surface is present, embedment shall be 3" plus the wearing surface depth.

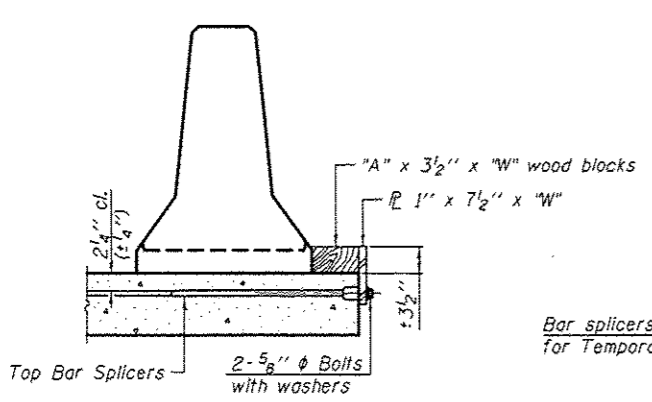
EXISTING SLAB

EXISTING DECK BEAM

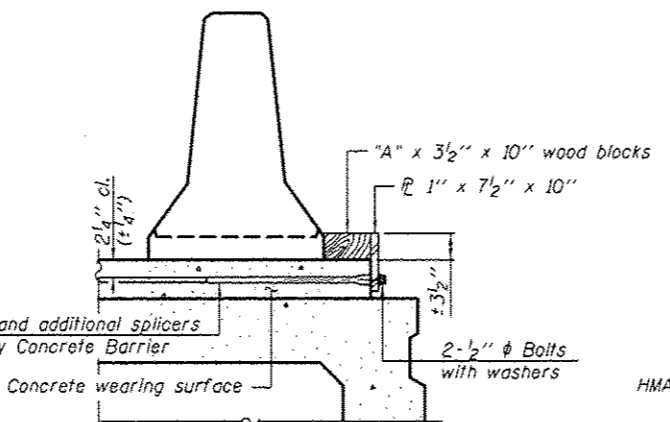
SECTIONS THRU SLAB OR DECK BEAM



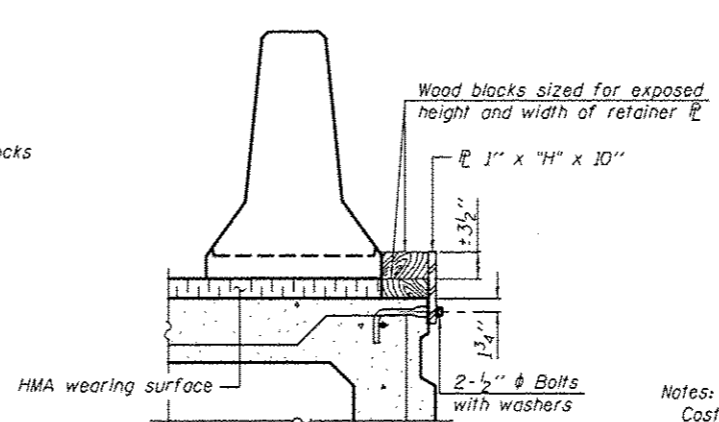
RESTRAINING PIN



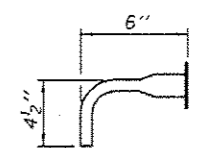
DETAIL I



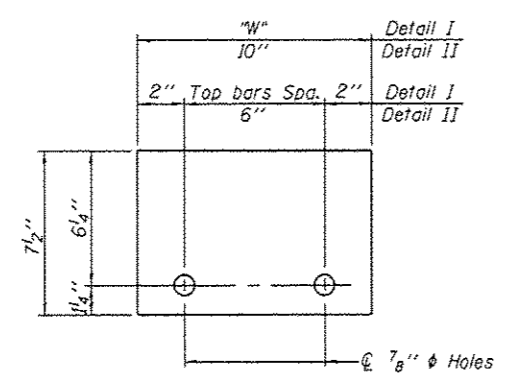
DETAIL II



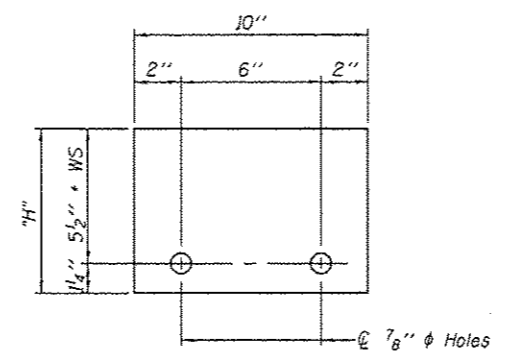
DETAIL III



BAR SPLICER FOR #4 BAR - DETAIL III



STEEL RETAINER \mathbb{R} 1" x 7 1/2" x "W" (Detail I and II)



STEEL RETAINER \mathbb{R} 1" x "H" x 10" (Detail III)

Notes:
 Cost of retainer assembly is included with Temporary Concrete Barrier.
 A retainer assembly shall be located at the approximate \mathbb{R} of each temporary concrete barrier.
 The retainer plate shall not be removed until the concrete on the adjacent stage is ready to be poured. For Detail II applications the retainer plate shall not be removed until just prior to placing the adjacent beam.
 When the "A" dimension is less than 1 1/2", the wood block shall be omitted and the barrier shall be placed in direct contact with the steel retainer plate.
 For deck beam applications the minimum required "A" distance is 6" to accommodate the shear key clamping device.

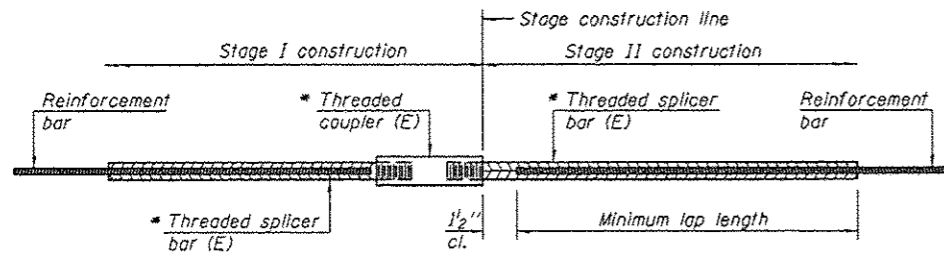
Detail I - Installation for a new bridge deck or bridge slab.
 Detail II - Installation for a new deck beam with an initial concrete wearing surface. Additional bar splicers shall be provided at 6'-0" centers and paired with the bar splicers of the concrete wearing surface reinforcement to accommodate the installation of the retainer assemblies. The cost of the additional bar splicers is included with the concrete wearing surface.
 Detail III - Installation for a new deck beam with no initial wearing surface or with an initial hot-mix asphalt (HMA) wearing surface present. The deck beam directly beneath the temporary concrete barrier shall be fabricated with bar splicer inserts in the side of the beam, as detailed, to accommodate the installation of the retainer assemblies. A pair of bar splicers, 6" apart, shall be placed at 6'-0" centers along the length of the beam. The cost of the bar splicers is included with the deck beam.

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R-27

07-22-16

DESIGNED - AYV	DATE - APRIL 28, 2017	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED - ATH	REVISED		SN 060-0212		789	1-VB-R-1	MADISON	31	28
DRAWN - AYV	REVISED		SHEET NO. 15 OF 18 SHEETS		CONTRACT NO. T6J77				
CHECKED - ATH	REVISED		ILLINOIS FED. AID PROJECT						

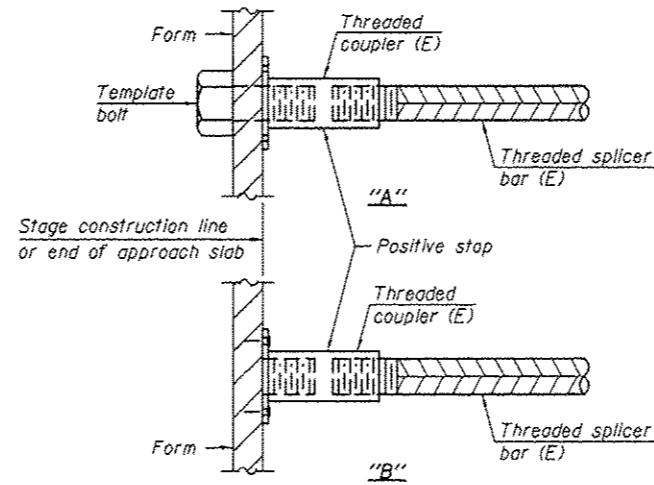


STANDARD BAR SPLICER ASSEMBLY

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

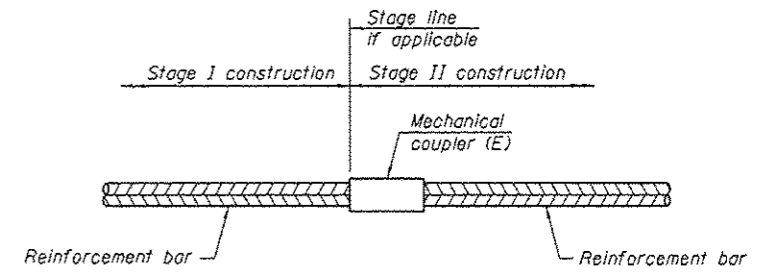
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
W. Abut. Hatch	#6	8	4'-0"
W. Abut. Deck	#5	16	3'-6"
E. Abut. Deck	#5	16	3'-6"
E. Abut. Hatch	#6	8	4'-0"



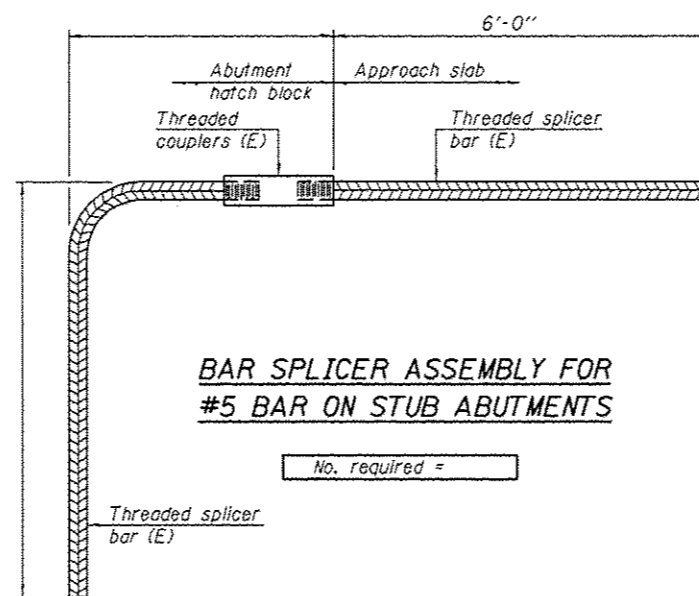
INSTALLATION AND SETTING METHODS

"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.

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BSD-1

6-8-15

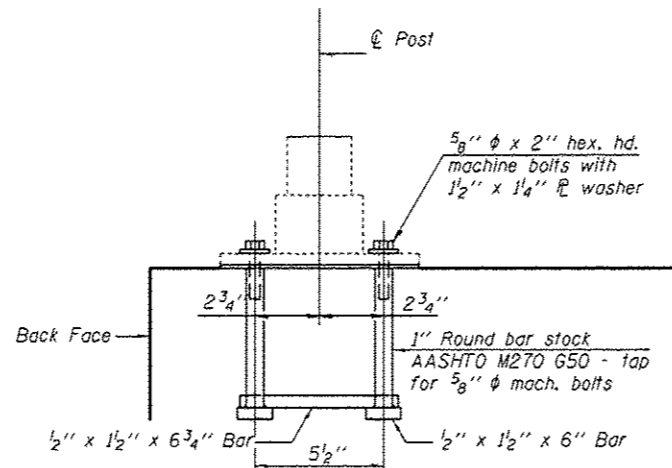
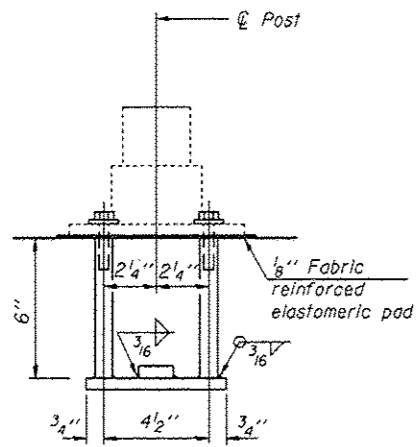
DESIGNED - AYW	DATE - APRIL 28, 2017
CHECKED - ATH	REVISED
DRAWN - AYW	REVISED
CHECKED - ATH	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
SN 060-0212

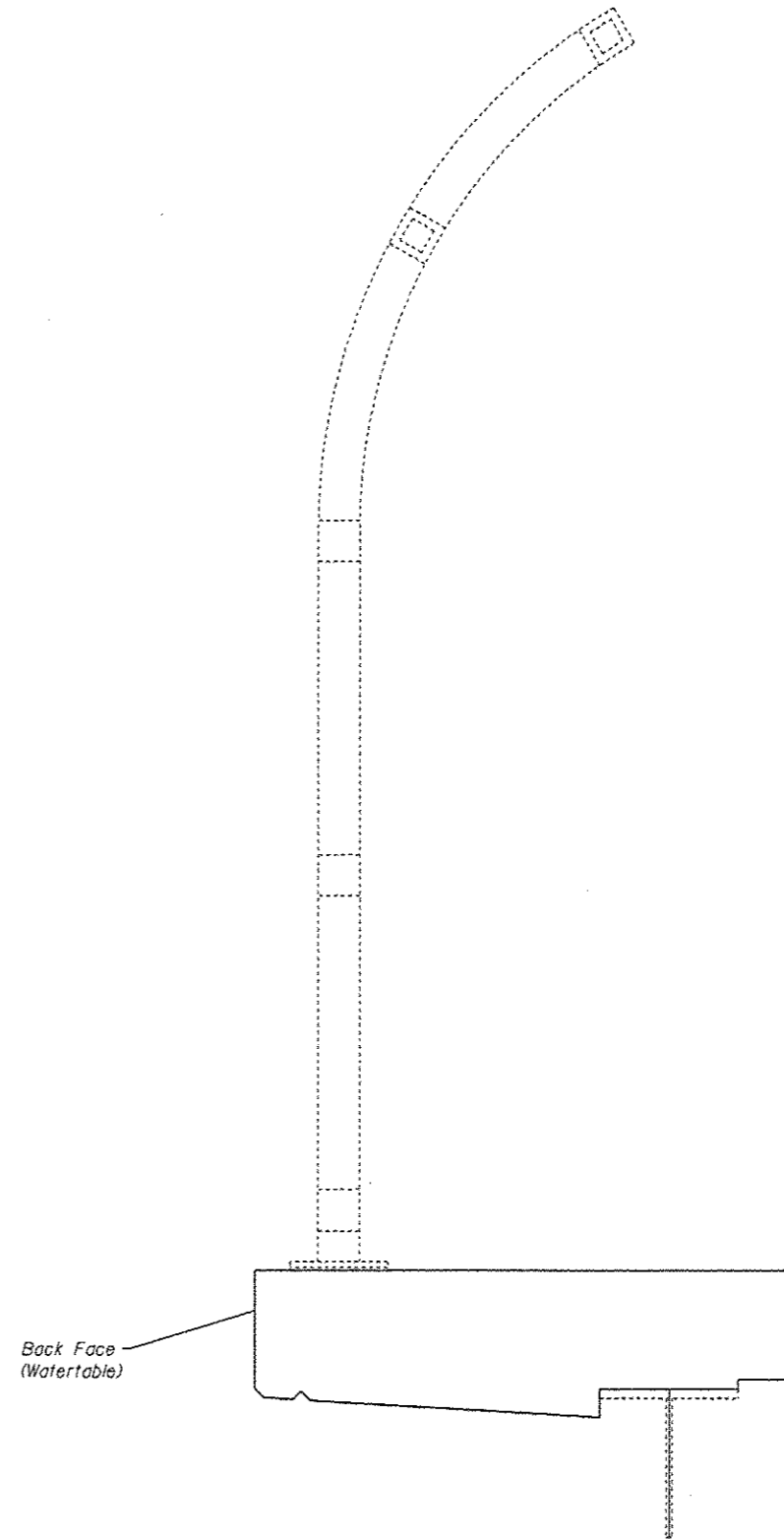
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
789	1-VB-R-1	MADISON	31	29
CONTRACT NO. 76J77			ILLINOIS FED. AID PROJECT	

SHEET NO. 16 OF 18 SHEETS



ANCHOR BOLT DETAILS

In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting 5/8" diameter anchor rods according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications. Cost of providing anchorages is included with Concrete Superstructure.



SECTION THRU DECK

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DESIGNED -	AYV
CHECKED -	ATH
DRAWN -	AYV
CHECKED -	ATH

DATE -	APRIL 28, 2017
REVISED	
REVISED	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

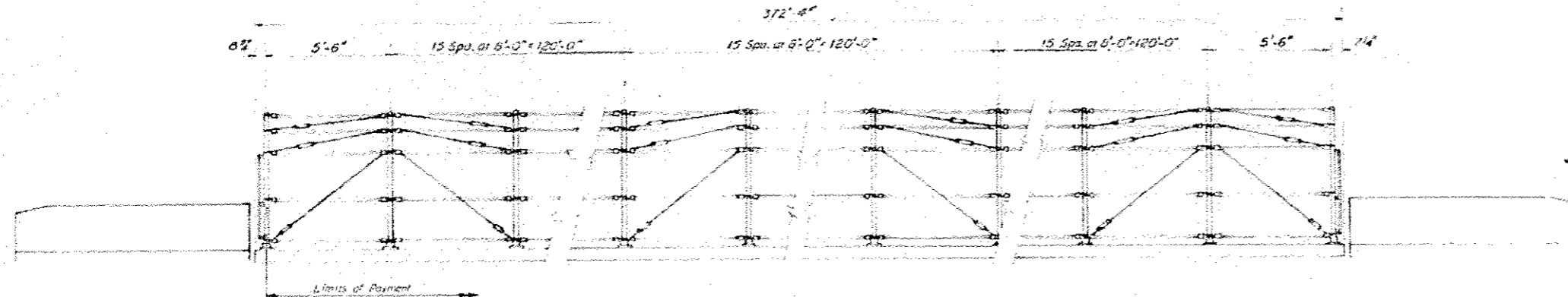
**FENCE ANCHORAGE DETAILS
SN 060-0212**

SHEET NO. 17 OF 18 SHEETS

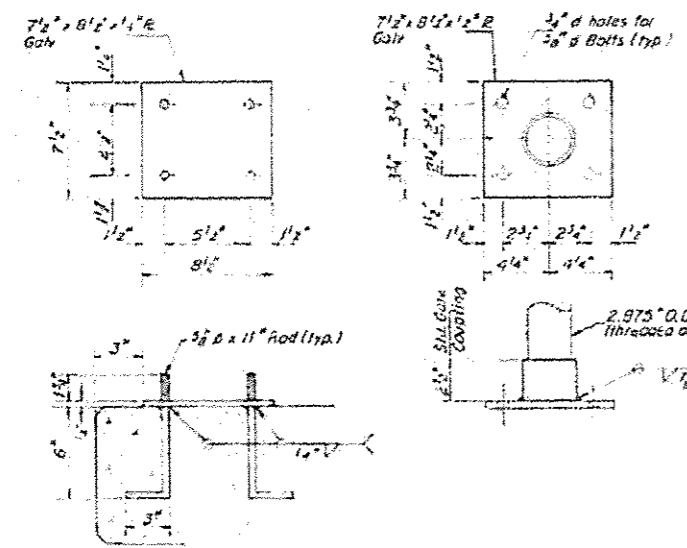
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
789	1-VB-R-1	MADISON	31	30
CONTRACT NO. 76J77			[ILLINOIS] FED. AID PROJECT	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

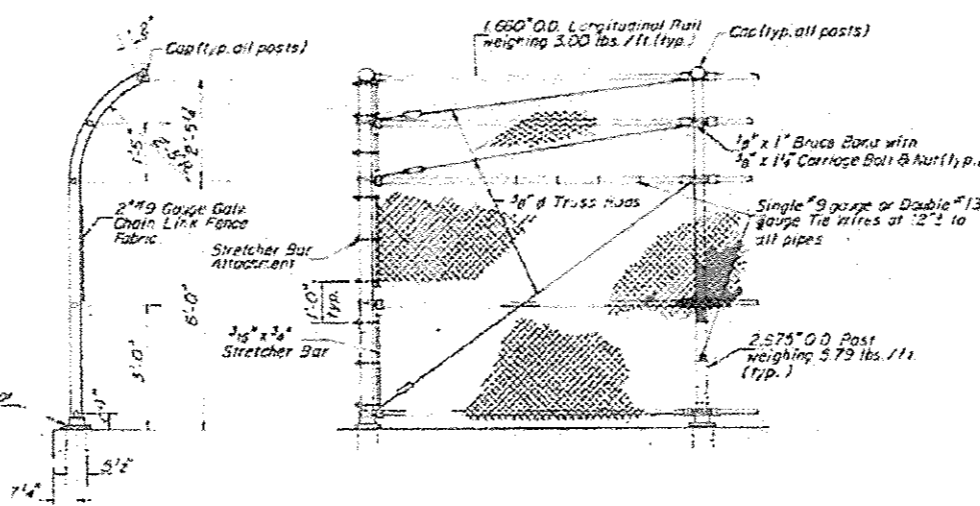
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1-18	MADISON	2/17	EFV	ATH	31



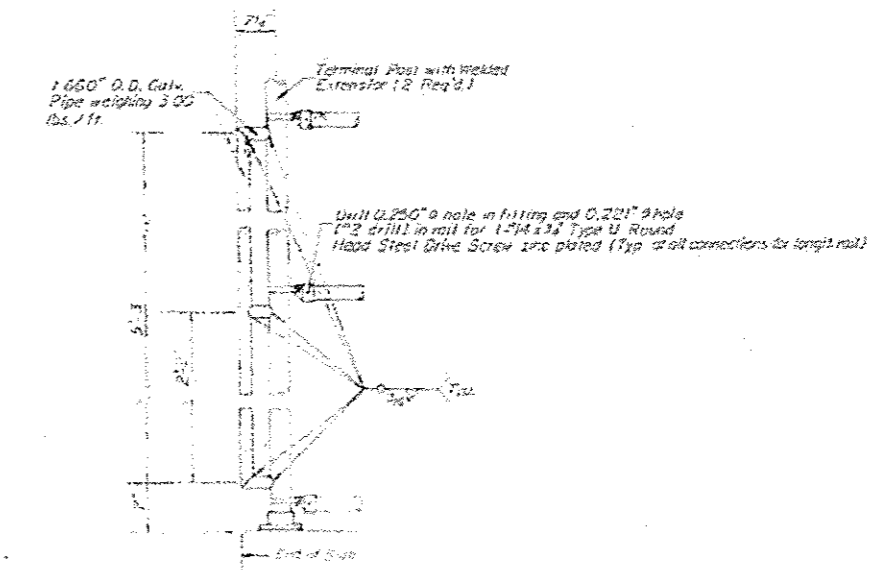
ELEVATION



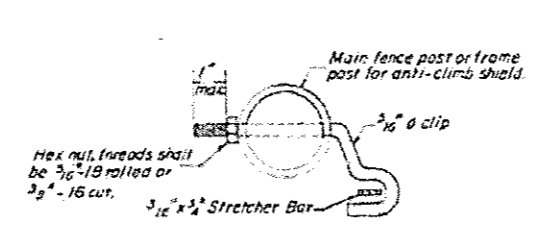
DETAILS OF POST ANCHORS



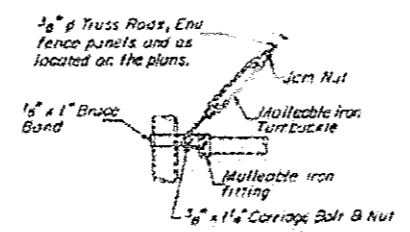
FENCE DETAILS



SAFETY EXTENSION DETAIL



STRETCHER BAR ATTACHMENT



TRUSS ROD ATTACHMENT

Notes: Furnish and install all Chain Link Fencing in accordance with current Standard Specifications For Road and Bridges, Sections 710.33 and 629, unless indicated otherwise on this drawing.
All posts, longitudinal rails, truss rods and turnbuckles, connecting hardware, and fencing fabric shall be galvanized.

DESIGNED	EFV
CHECKED	CEP
DRAWN	HES
CHECKED	EFV

FOR INFORMATION ONLY

PROTECTIVE BARRIER
F.A.P. RTE. 789 (ILL. 143)
OVER I.T.R.R., I.C.G.R.R.,
CONRAIL, & I.T.R.R.
MADISON COUNTY
SECTION 1-VB
STA. 15+90.00 (F.A.P. RTE. 789)

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DESIGNED - AYY	DATE - APRIL 28, 2017	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FOR INFORMATION ONLY - EXISTING PROTECTIVE BARRIER SN 060-0212	F.A.P. RTE. 789	SECTION 1-VB-R-1	COUNTY MADISON	TOTAL SHEETS 31	SHEET NO. 31
CHECKED - ATH	REVISED			SHEET NO. 18 OF 18 SHEETS	CONTRACT NO. 76J77		ILLINOIS FED. AID PROJECT	