

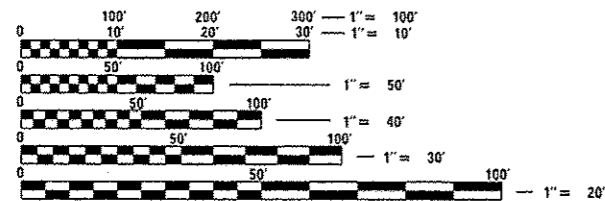
1. COVER SHEET
2. GENERAL NOTES
- 3 - 5. SUMMARY OF QUANTITIES
6. TYPICAL SECTIONS
7. SCHEDULES
- 8 - 9. STANDARD 701321 (SPECIAL) FOR STAGE CONSTRUCTION
10. MISCELLANEOUS TRAFFIC CONTROL DETAILS
11. HOT-MIX ASPHALT RECONSTRUCTION DETAILS
- 12 - 19. STRUCTURE PLANS

STANDARDS

000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
482006-03	HMA SHOULDER ADJACENT TO RIGID PAVEMENT
701001-02	OFF-ROAD OPERATIONS 2L, 2W, MORE THAN 15' (4.5 m) AWAY
701006-05	OFF-ROAD OPERATIONS 2L, 2W, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
701201-04	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS **e** 45 MPH
701206-03	LANE CLOSURE, 2L, 2W, NIGHT ONLY, FOR SPEEDS **e** 45 MPH
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
701321-14	LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
701901-04	TRAFFIC CONTROL DEVICES
704001-07	TEMPORARY CONCRETE BARRIER

PROJECT LOCATION

**STRUCTURE NO. 006-0114
CARRYING FAS 248 (TISKILWA SPUR)
OVER BIG BUREAU CREEK
0.30 MI NORTH OF TISKILWA**



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

DISTRICT NO. 815-434-6131
PROJECT ENGINEER JOE KANNEL P.E.
UNIT CHIEF RON WOODSHANK

CONTRACT NO. 66E44

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

FAS ROUTE 248 (TISKILWA SPUR)
SECTION (117B)I-2
MINOR STRUCTURE REPAIRS
BUREAU COUNTY

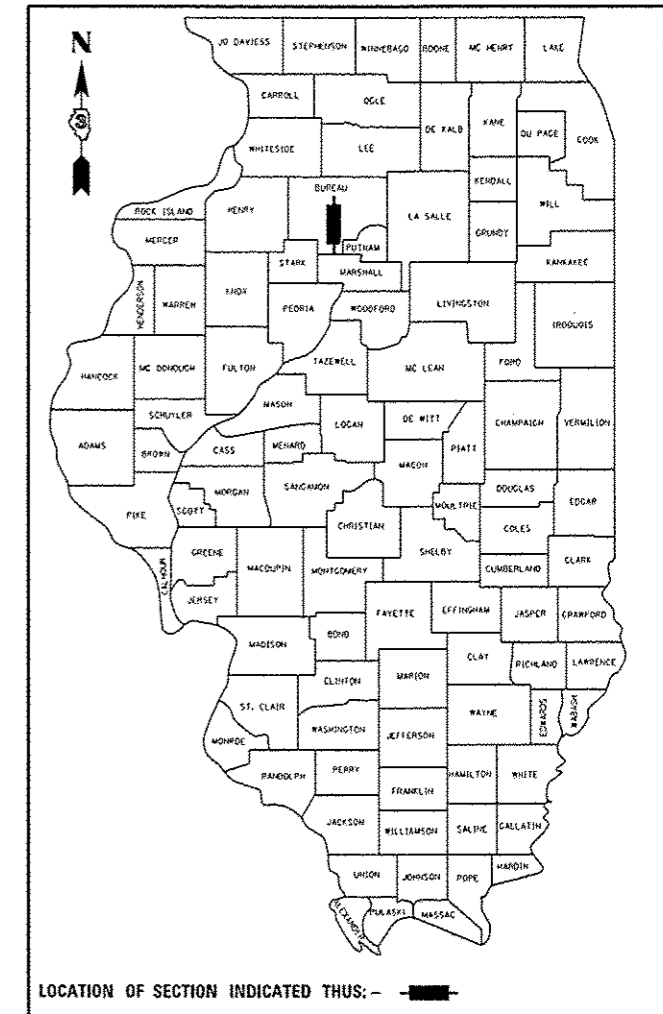
C-93-034-15



POINT LOCATION

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
248	(117B)I-2	BUREAU	19	1
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 66E44		

D-93-002-15



LOCATION OF SECTION INDICATED THUS: - [thick black line] -

RURAL	
MAJOR COLLECTOR	
FAS 248	
2012	
ADT	1750
P.V.	91.43%
S.U.	8.57%
M.U.	0.00%

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED July 16th 2015
Paul C. [Signature]
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

Aug 14 2015
John D. Baranzelli P.E.
ENGINEER OF DESIGN AND ENVIRONMENT

Aug 14 2015
Orin Osman P.E.
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

GENERAL NOTES

FOR STABILIZATION, ALL TYPE III BARRICADES WILL REQUIRE A MINIMUM OF FOUR SAND BAGS PER BARRICADE.

ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUBNUMBER SHOWN IN THE LIST OF STANDARDS OR THE COPY INCLUDED IN THESE PLANS.

GRANULAR MATERIALS	2.05	TONS / CU YD
HMA RESURFACING	112	LBS / SQ YD / IN
MIX FOR CRACKS, JTS & FLGWYS	0.0003	TONS / SQ YD
LEVEL BINDER (HAND METHOD)	0.0005	TONS / SQ YD

ALL EXCAVATED MATERIAL, WHICH INCLUDES DIGGING OR GRADING OF ANY SOIL OR FILL MATERIAL, WITH THE EXCEPTION OF AGGREGATE FILLS, MUST BE INCORPORATED WITHIN THE IDOT RIGHT OF WAY DUE TO ENVIRONMENTAL DOCUMENTATION REQUIREMENTS.

COMMITMENTS

HMA MIXTURE REQUIREMENT TABLE			
LOCATION(S):	ENTIRE PROJECT	ENTIRE PROJECT	ENTIRE PROJECT
MIXTURE USE(S):	SURFACE	LEVELING BINDER	HMA SHOULDERS
BINDER GRADE (PG):	PG 64-22	PG 64-22	PG 64-22
DESIGN AIR VOIDS:	4% @ N50	4% @ N50	4% @ N50
MIXTURE COMPOSITION: (MIXTURE GRADATION)	IL 9.5	IL 9.5FG	IL 19.0
FRICITION AGGREGATE:	MIXTURE C		
MIXTURE WEIGHT:	112.0 LB/SY/IN	112.0 LB/SY/IN	112.0 LB/SY/IN
QUALITY MANAGEMENT PROGRAM:	QC/OA	QC/OA	QC/OA
SUBLOT SIZE:	N/A	N/A	N/A
DENSITY TEST METHOD:	CORES	SATISFACTION OF ENGINEER	CORES

DATE: July 16, 2015

PREPARED BY: David E. Brundage
DISTRICT STUDIES & PLANS ENGINEER

EXAMINED BY: [Signature]
DISTRICT CONSTRUCTION ENGINEER

[Signature]
DISTRICT MATERIALS ENGINEER

[Signature]
DISTRICT OPERATIONS ENGINEER

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				CONTRACT MAINTENANCE 100% STATE	
				BRIDGE 0014 006-0114	ROADWAY 0005 RURAL
20200100	EARTH EXCAVATION	CU YD	254		254
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	2309		2309
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	0.04		0.04
40600525	LEVELING BINDER (HAND METHOD), N50	TON	0.07		0.07
40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	113		113
44000155	HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"	SQ YD	1342		1342
48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SQ YD	690		690
50102400	CONCRETE REMOVAL	CU YD	9.8	9.8	
50300255	CONCRETE SUPERSTRUCTURE	CU YD	9.8	9.8	
50300260	BRIDGE DECK GROOVING	SQ YD	1545	1545	
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	1820	1820	
50800515	BAR SPLICERS	EACH	20	20	
52000110	PREFORMED JOINT STRIP SEAL	FOOT	109	109	
67100100	MOBILIZATION	LSUM	1	1	

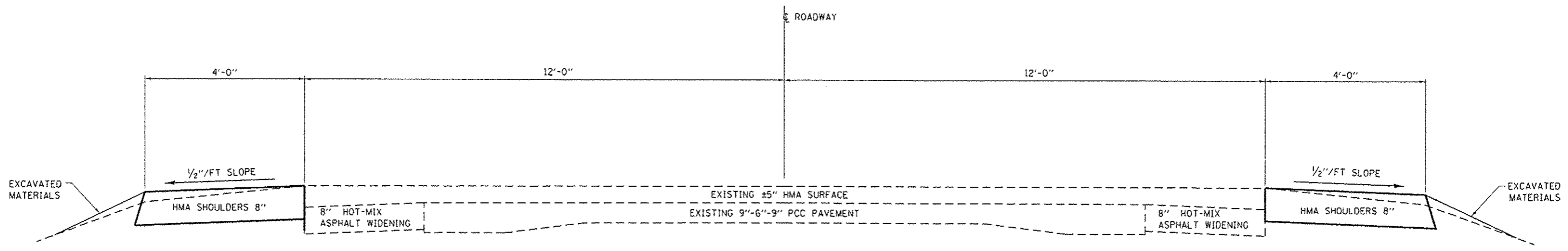
14

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				CONTRACT MAINTENANCE 100% STATE	
				BRIDGE 0014 006-0114	ROADWAY 0005 RURAL
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1	1	
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	LSUM	1	0.5	0.5
70100455	TRAFFIC CONTROL AND PROTECTION, STANDARD 701206	LSUM	1	0.5	0.5
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1	
70300100	SHORT TERM PAVEMENT MARKING	FOOT	100	50	50
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	50 FT	1309	655	654
70400100	TEMPORARY CONCRETE BARRIER	FOOT	650	650	
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	650	650	
70600250	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2	2	
70600350	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2	2	
* 78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	4532	2796	1736
* 78009006	MODIFIED URETHANE PAVEMENT MARKING - LINE 6"	FOOT	240	109	131
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	7		7
* 78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	6	6	

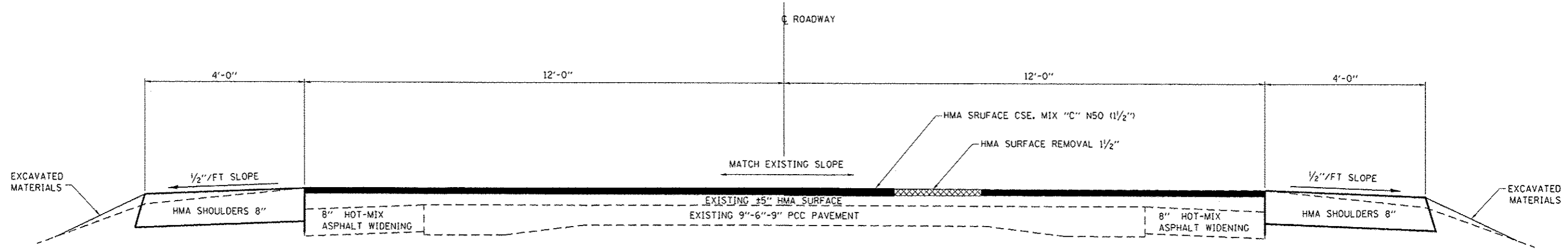
* SPECIALTY ITEM

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				CONTRACT MAINTENANCE 100% STATE	
				BRIDGE 0014 006-0114	ROADWAY 0005 RURAL
78300100	PAVEMENT MARKING REMOVAL	SQ FT	1496	573	923
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	13	6	7
X0326443	SILANE SURFACE SEALER	SQ YD	1894	1894	
Z0006012	BRIDGE DECK LATEX CONCRETE OVERLAY, 2 1/4 INCHES	SQ YD	1545	1545	
Z0012142	BRIDGE DECK SCARIFICATION 2 1/4"	SQ YD	1545	1545	
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	42	42	

6



TYPICAL SECTION NO. 1
STA. 251+10 TO STA. 253+83



TYPICAL SECTION NO. 2
STA. 258+17 TO 263+20

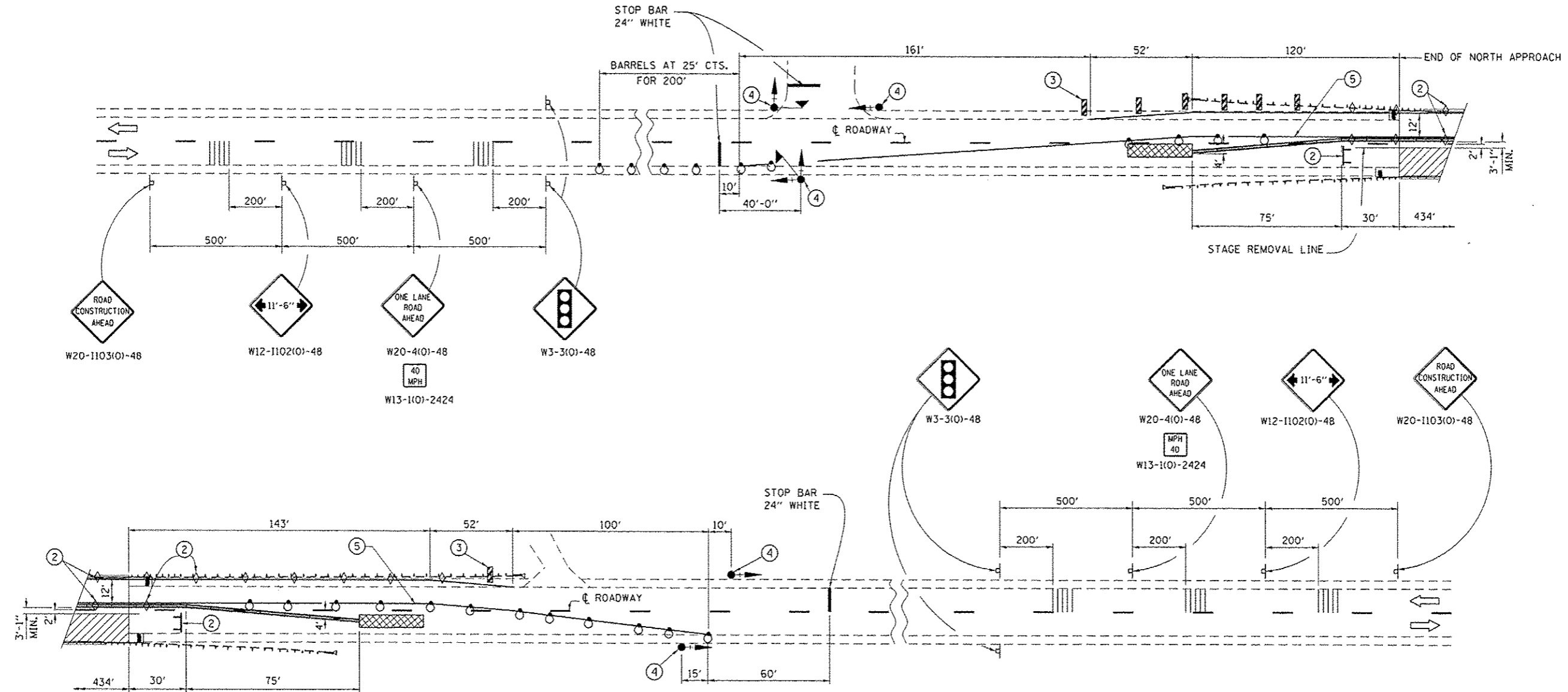
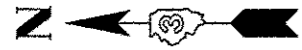
FILE NAME :	USER NAME = woodhank1	DESIGNED - RW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL SECTIONS	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Documents\DOT Offices\District 3\Projects\036\DRAWNData\03RW44-sht-details.dgn	DRAWN	REVISED -	24B			(117B)-2	BUREAU	19	6	
PLOT SCALE = 100,0000 / in.	CHECKED - EP	REVISED -	CONTRACT NO. 66E44							
Default	DATE - 12/10/2014	REVISED -	ILLINOIS FED. AID PROJECT							
				SCALE:	SHEET 1 OF 1 SHEETS	STA. _____ TO STA. _____				

HOT-MIX ASPHALT CONSTRUCTION SCHEDULES

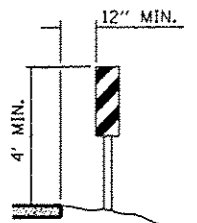
LOCATION					EARTH EXCAVATION (WIDENING)	BITUMINOUS MATERIALS (PRIME COAT)	HOT-MIX ASPHALT SHOULDERS 8"	HOT-MIX ASPHALT SURFACE REMOVAL 1 1/2"	MIXTURE FOR CRACKS JOINTS AND FLANGEWAYS	LEVELING BINDER (HM) N50	HOT-MIX ASPHALT SURFACE CSE. MIX "C" N50
					CU YD	POUND	SQ YD	SQ YD	TON	TON	TON
STA. 251+10	STA. 253+78	RT			45	302	119				
STA. 251+10	STA. 253+71	LT			44	294	116				
STA. 258+17	STA. 263+20					604		1342	0.4	0.7	113
STA. 258+25	STA. 263+20	RT			83	557	220				
STA. 258+29	STA. 263+20	LT			82	552	218				
TOTAL					254	2309	673	1342	0.4	0.7	113

PAVEMENT MARKING SCHEDULES

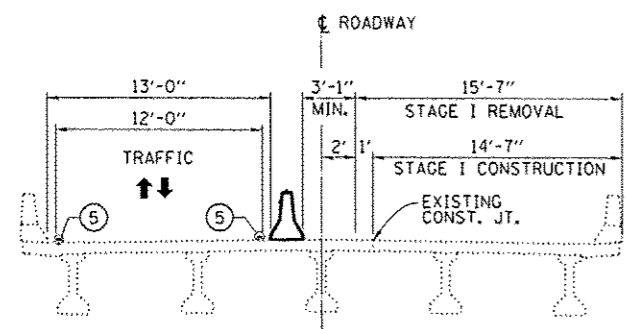
LOCATION					PAVEMENT MARKING REMOVAL	WORK-ZONE PAVEMENT MARKING REMOVAL	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	MODIFIED URETHANE PAVEMENT MARKING LINE 4"	MODIFIED URETHANE PAVEMENT MARKING LINE 6"	RAISED REFLECTIVE PAVEMENT MARKER	
					SQ FT	SQ FT	EACH	FOOT		EACH	
								YELLOW	WHITE	YELLOW	
STA. 250+40	STA. 253+83			453	302		686	686	100		
STA. 253+83	STA. 258+17			573	573		868	868			
STA. 258+17	STA. 261+73			470	434	5	712	712	100	5	
STA. 261+73	STA. 263+20					2	294	294	40	2	
TOTAL					1496	1309	7	4532		240	7



- ① TYPE III BARRICADE TO BE PLACED WHEN NO WORK IS BEING PERFORMED.
- ② BARRIER WALL/GUARDRAIL MARKERS AT 25' (7.6 M) CTS. SEE STANDARDS 704001 & 635011.
- ③ THESE VERTICAL PANELS AT 25' (7.6 M) CTS. MAY BE OMITTED WHEN THE GUARDRAIL, W/MARKERS, EXTENDS TO AT LEAST THIS POINT ON THE TAPER.
- ④ THE EDGE OF THE POST MOUNTED SIGNAL HEAD SHALL BE BETWEEN 24' (610) AND 6' (1.8 M) FROM EDGE OF SHOULDER.
- ⑤ EXISTING OR TEMPORARY PAVEMENT MARKINGS SHALL BE ON BOTH SIDES OF OPEN LANE FROM STOP BAR TO STOP BAR.



VERTICAL PANELS
(POST MOUNTED, ONE EACH SIDE)



STAGE I REMOVAL/CONSTRUCTION
LOOKING SOUTH

SYMBOLS

- WORK AREA
- SIGN
- TYPE III BARRICADE
- TRAFFIC SIGNAL WITH BACKPLATE
- IMPACT ATTENUATOR
- MICROWAVE DETECTOR
- DRUM WITH STEADY BURNING BI-DIRECTIONAL LIGHT
- TEMPORARY CONCRETE BARRIER
- TEMPORARY RUMBLE STRIP (REQUIRED)
- DOUBLE VERTICAL PANEL (SEE DETAIL)
- YELLOW PRISMATIC BARRIER REFLECTOR @ 50' CENTERS

GENERAL NOTES

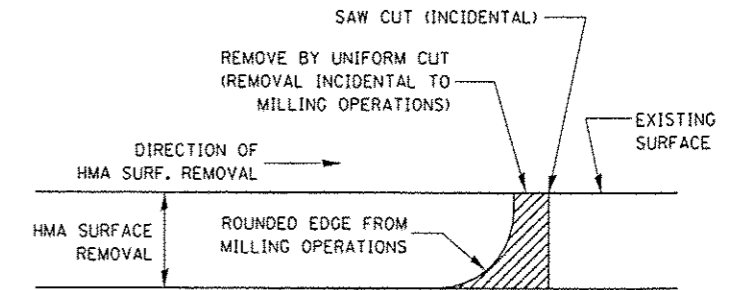
THIS STANDARD IS USED WHERE, AT ANY TIME, ANY VEHICLE, EQUIPMENT, WORKERS, OR THEIR ACTIVITIES WILL ENCROACH ON ONE LANE OF A BRIDGE, TRAFFIC SIGNALS AND A POSITIVE BARRIER ARE REQUIRED.

TRAFFIC SIGNALS SHALL BE OPERATIONAL ONLY WHEN ALL TRAFFIC CONTROLS ARE IN PLACE. WHEN TRAFFIC SIGNALS ARE NOT IN OPERATION, FLAGGERS SHALL BE USED AND TRAFFIC CONTROL SHALL CONFORM TO STANDARD 701201 OR 701206.

TEMPORARY CONCRETE BARRIER SHALL BE ACCORDING TO STANDARD 704001.

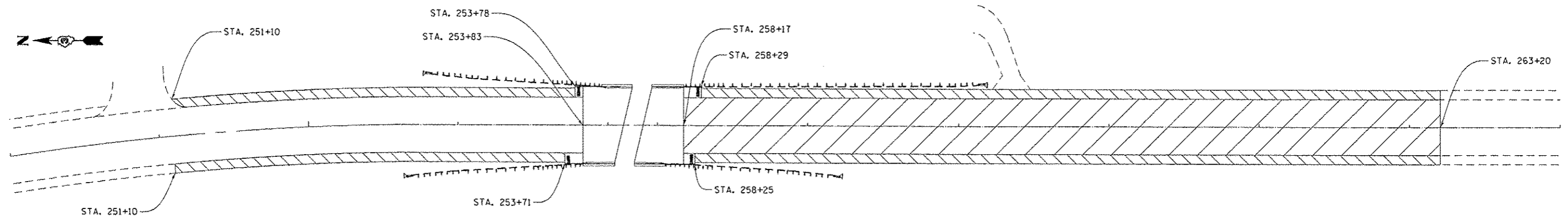
TEMPORARY RUMBLE STRIPS SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THIS STANDARD.

FILE NAME =	USER NAME = woodshankr1	DESIGNED - RW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC CONTROL AND PROTECTION STANDARD 701321 FOR STAGE I CONSTRUCTION	F.A.S. RTE. 248	SECTION (117B)-2	COUNTY BUREAU	TOTAL SHEETS 19	SHEET NO. 8
CONTRACT NO. 66E44	CONTRACT NO. 66E44	CONTRACT NO. 66E44	CONTRACT NO. 66E44			ILLINOIS FED. AID PROJECT				
SCALE: _____	SHEET 1 OF 1 SHEETS	STA. _____ TO STA. _____								



NOTE:
 WHEN MILLING OPERATIONS PRODUCE A ROUNDED EDGE,
 THEN A SAW CUT SHALL BE USED TO MANUFACTURE
 A PERPENDICULAR EDGE AS SHOWN IN THE DETAIL.
 THE ENGINEER SHALL BE THE SOLE JUDGE
 CONCERNING THE USE OF THIS DETAIL

HMA DETAIL AT BUTT JOINTS



- HOT-MIX ASPHALT SURFACE REMOVAL AND REPLACEMENT (1 1/2")
- HOT-MIX ASPHALT SHOULDERS 8"

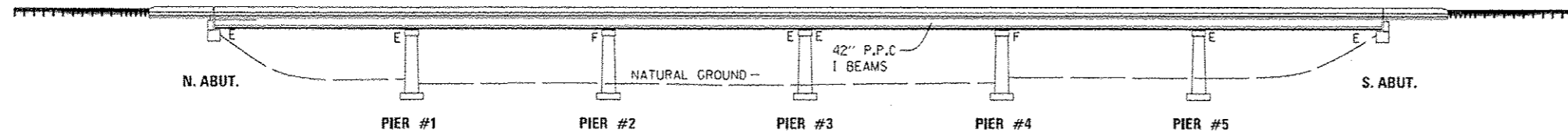
GENERAL NOTES

ALL HMA SHOULDER CONSTRUCTION SHALL BE COMPLETED PRIOR TO THE INSTALLATION OF TRAFFIC CONTROL FOR STRUCTURE WORK.

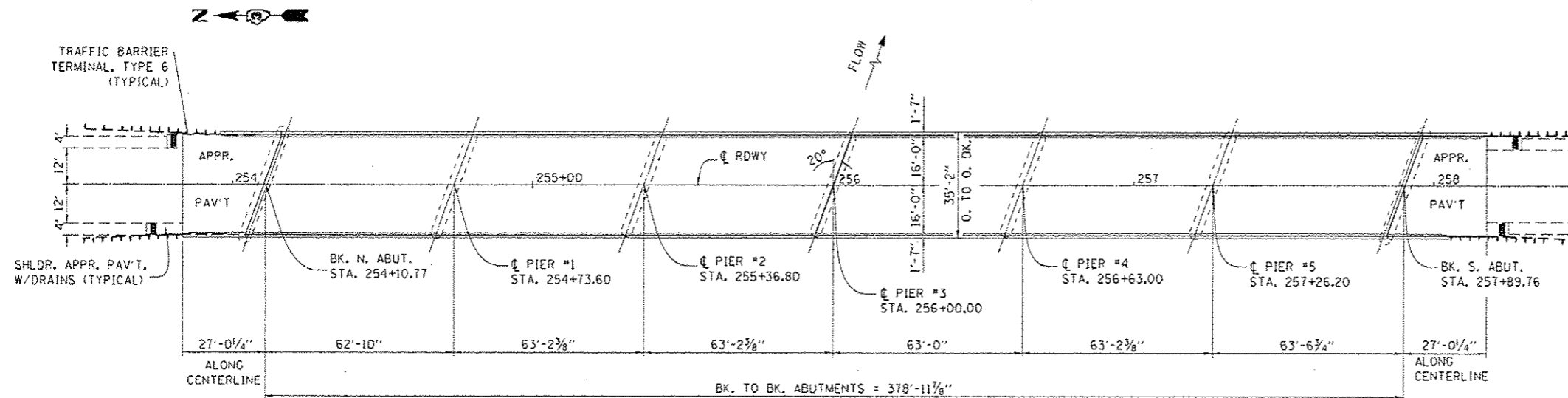
HMA SHOULDER CONSTRUCTION SHALL BE ACCORDING TO STANDARD 482006

HMA SURFACE REMOVAL AND REPLACEMENT SHALL BE ACCORDING TO APPLICABLE PORTIONS OF SECTIONS 440 AND 406 OF THE STANDARD SPECIFICATIONS.

FILE NAME :	USER NAME : woodshank1	DESIGNED - RW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	HOT-MIX ASPHALT RECONSTRUCTION DETAILS	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
p:\116,004EBID\INTEG\Illinois.gov\PWIDOT\De	umants\IDOT Offices\District 3\Projects\036	DRAWN Data\03RW44-shr-details.dgn	REVISED -			248	(117B)-2	BUREAU	19	11	
Default	PLOT SCALE = 100.0000' / in	CHECKED - EP	REVISED -			CONTRACT NO. 66E44					
	PLOT DATE = 7/16/2015	DATE - 12/10/2014	REVISED -			ILLINOIS FED. AID PROJECT					
					SCALE:	SHEET 1 OF 1 SHEETS		STA. 251+10 TO STA. 263+20			



ELEVATION



PLAN

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 WORK; HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE BID FOR THE WORK.

STRUCTURAL STEEL FOR EXPANSION JOINTS SHALL BE AASHTO M 270 GRADE 36.

REINFORCEMENT BARS DESIGNATED (E) SHALL BE EPOXY COATED.

ALL STRUCTURAL STEEL SHALL CONFORM TO AASHTO CLASSIFICATION M-270 GR 36, UNLESS OTHERWISE NOTED.

JOINT PLATES AND ATTACHED BARS SHALL BE SHOP PAINTED WITH THE INORGANIC ZINC RICH PRIMER. NO FIELD PAINT REQUIRED.

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.

THE CONTRACTOR SHALL USE EXTREME CARE DURING CONCRETE REMOVAL SO AS NOT TO DAMAGE THE PPC I-BEAM.

AREAS OF DECK REPAIRS SHOWN ARE ESTIMATED. THE ENGINEER SHALL SHOW ACTUAL LOCATIONS OF DECK REPAIRS ON AS-BUILT PLANS.

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 DEGREES F.

STATION 256+00.00
 BUILT 1983 BY
 STATE OF ILLINOIS
 S.B.I. RT. 89 SEC. 117 BR
 PROJECT BR-OS-011(19)
 LOADING HS20
 STR. NO. 006-0114

EXISTING NAME PLATE

EXISTING LOADING HS-20
 ALLOW 25*/SQ. FT. FOR FUTURE WEARING SURFACE.

EXISTING DESIGN SPECIFICATIONS
 DESIGN SPECIFICATIONS: AASHTO (1977) AND APPLICABLE INTERIMS (1978 THRU 1982 INTERIM SPECIFICATIONS).

EXISTING DESIGN STRESSES
 FIELD UNITS
 $f'_c = 3,500$ PSI $f'_s = 20,000$ PSI
 $f_y = 60,000$ PSI (REINFORCEMENT)
 $f_y = 50,000$ PSI (STRUCTURE)

EXISTING PRECAST UNITS
 $f'_c = 4,500$ PSI
 $f'_c = 1,800$ PSI
 $f'_s = 20,000$ PSI

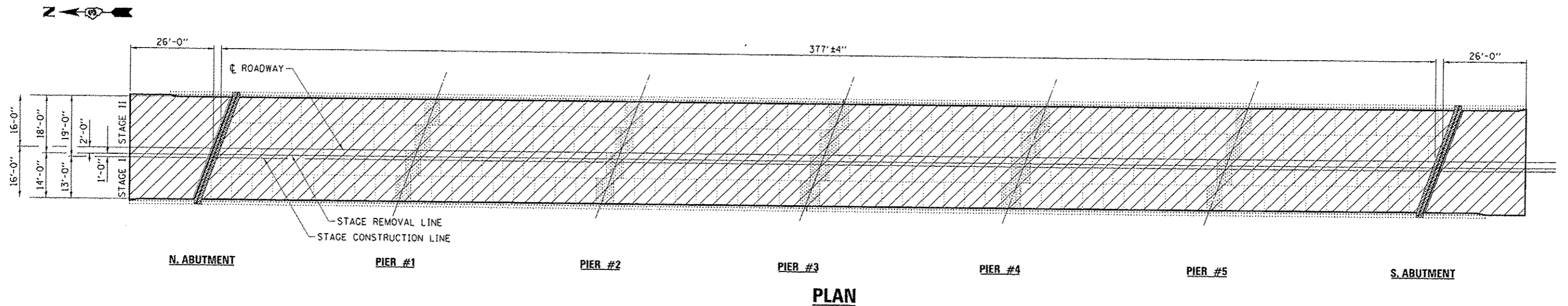
EXISTING PRECAST PRESTRESSED UNITS
 $f'_c = 5,000$ PSI
 $f'_{ci} = 4,000$ PSI
 $f'_s = 27,000$ PSI (1/2" Ø STRANDS)
 $f_{si} = 189,000$ PSI (1/2" Ø STRANDS)

TOTAL BILL OF MATERIALS

ITEM	UNIT	SUPER	SUB	TOTAL
CONCRETE REMOVAL	CU YD	9.8		9.8
CONCRETE SUPERSTRUCTURE	CU YD	9.8		9.8
REINFORCEMENT BARS, EPOXY COATED	POUND	1820		1820
BAR SPLICERS	EACH	20		20
SILANE SURFACE SEALER	SO YD	1894		1894
PREFORMED JOINT STRIP SEAL	FOOT	109		109
BRIDGE DECK SCARIFICATION 2 1/4"	SO YD	1545		1545
BRIDGE DECK LATEX CONCRETE OVERLAY 2 1/4"	SO YD	1545		1545
BRIDGE DECK GROOVING	SO YD	1545		1545



David Carl Puzey 8/10/15
 Expires 11/30/16



NOTES:

HATCHED AREA REPRESENTS BRIDGE DECK SCARIFICATION 2 1/4" AND BRIDGE DECK LATEX CONCRETE OVERLAY 2 1/4"

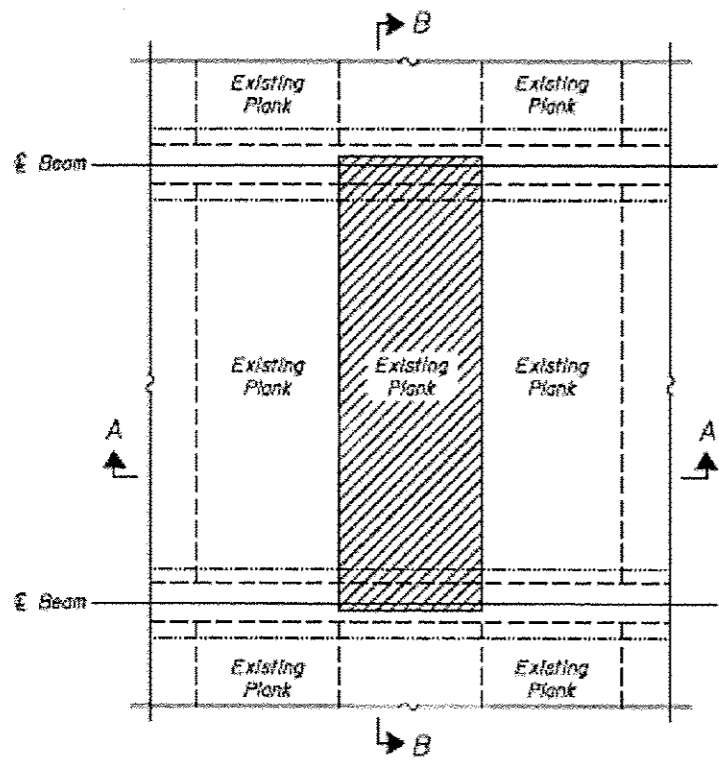
CROSS HATCHED AREAS REPRESENTS CONCRETE REMOVAL AND REPLACEMENT.

SEE SHEETS 16 AND 17 FOR CONCRETE REMOVAL AND REPLACEMENT DETAILS.

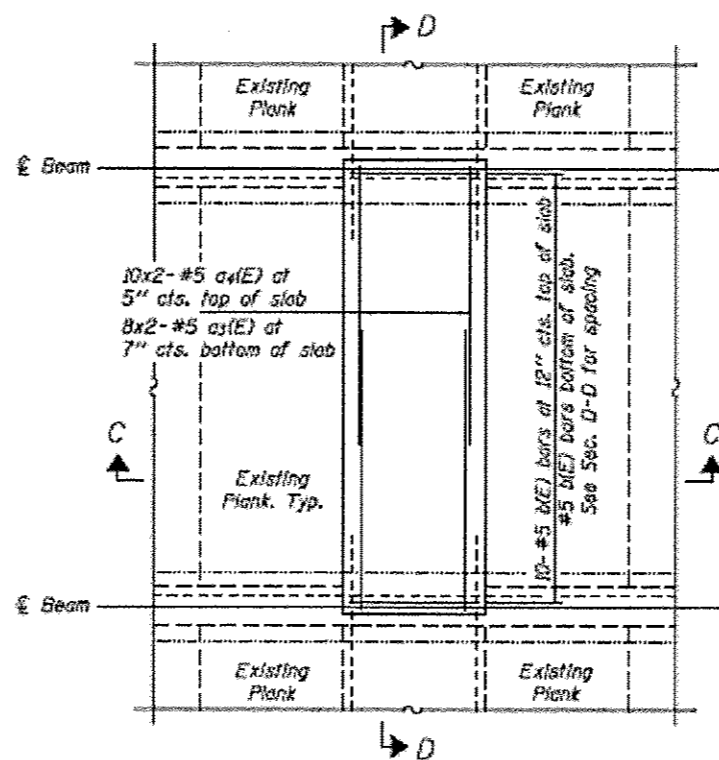
BILL OF MATERIAL

ITEM	UNIT	TOTAL
BRIDGE DECK SCARIFICATION 2 1/4"	SO YD	1545
BRIDGE DECK LATEX CONCRETE OVERLAY 2 1/4"	SO YD	1545
BRIDGE DECK GROOVING	SO YD	1545

FILE NAME :	USER NAME : woodshankr1	DESIGNED - RW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUPERSTRUCTURE DETAILS	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
Default	Documents\DOT Offices\District 3\Projects\0306\Drawings\03RW44-shc-details.dgn	CHECKED - EP	REVISED -			248	(117B)-2	BUREAU	19	13	
	PLOT SCALE : 100.0000 / in.	DATE - 12/10/2014	REVISED -			SCALE: _____ SHEET 1 OF 1 SHEETS STA. 254+10.77 TO STA. 257+89.76			CONTRACT NO. 66E44		
	PLOT DATE : 7/16/2015								ILLINOIS FED. AID PROJECT		



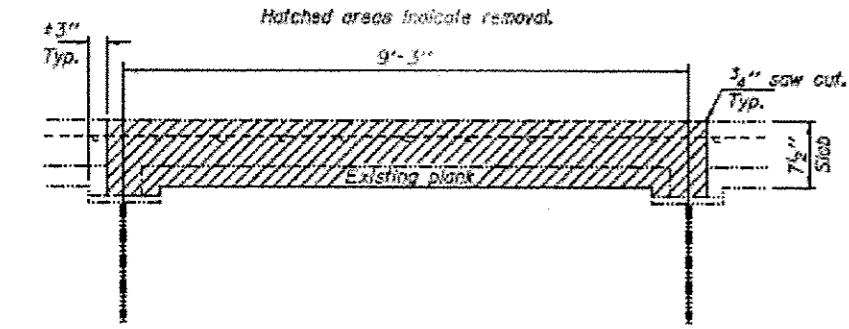
PLAN



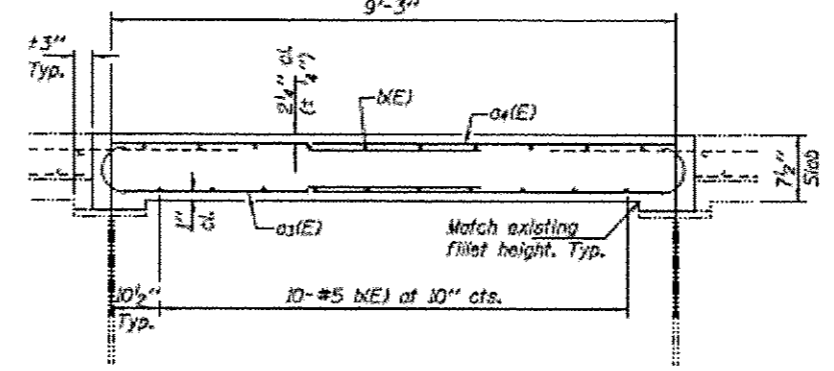
PLAN

NOTES

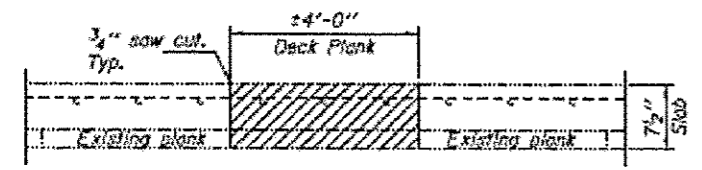
Reinforcement bars designated (E) shall be epoxy coated.
 Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to 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.
 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.
 The Contractor shall locate and verify the exact location of the boundaries of the existing PCC plank being removed prior to saw cutting and removal.



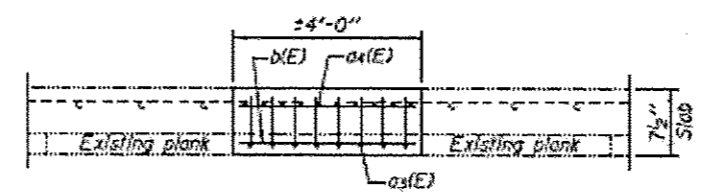
SECTION B-B



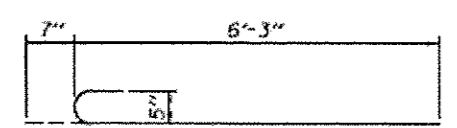
SECTION D-D



SECTION A-A



SECTION C-C



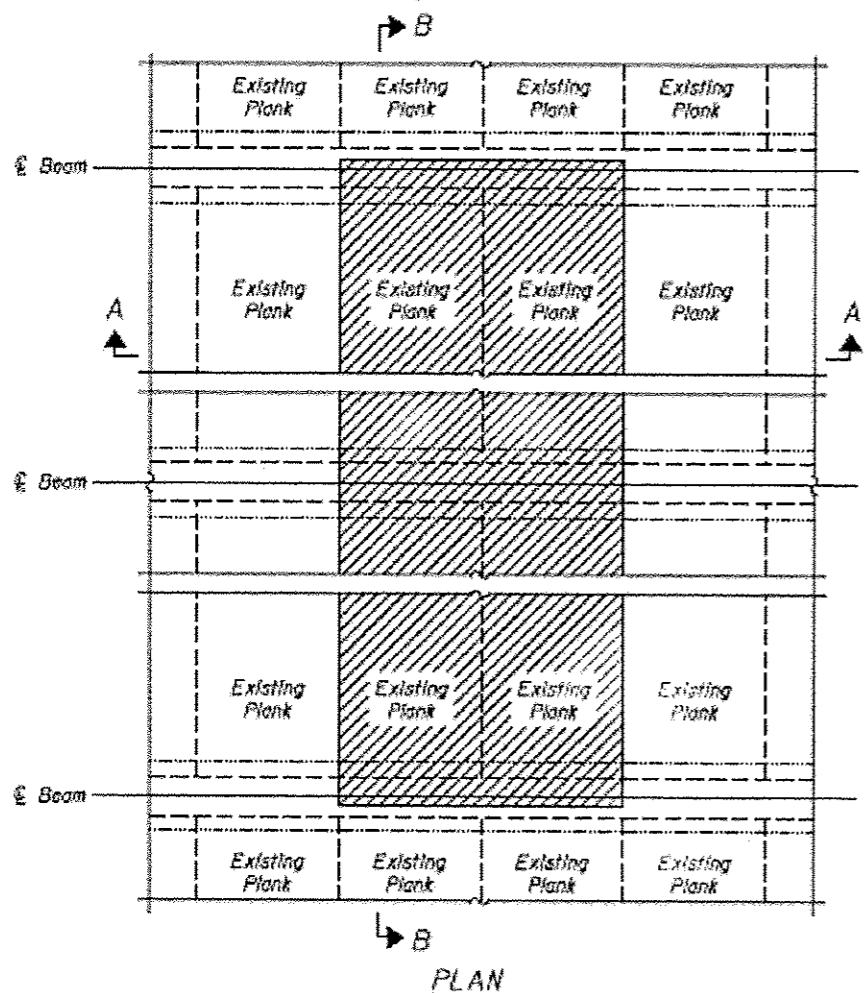
BAR a3(E)

MINIMUM BAR LAP
 #5 bar - 2'-6"

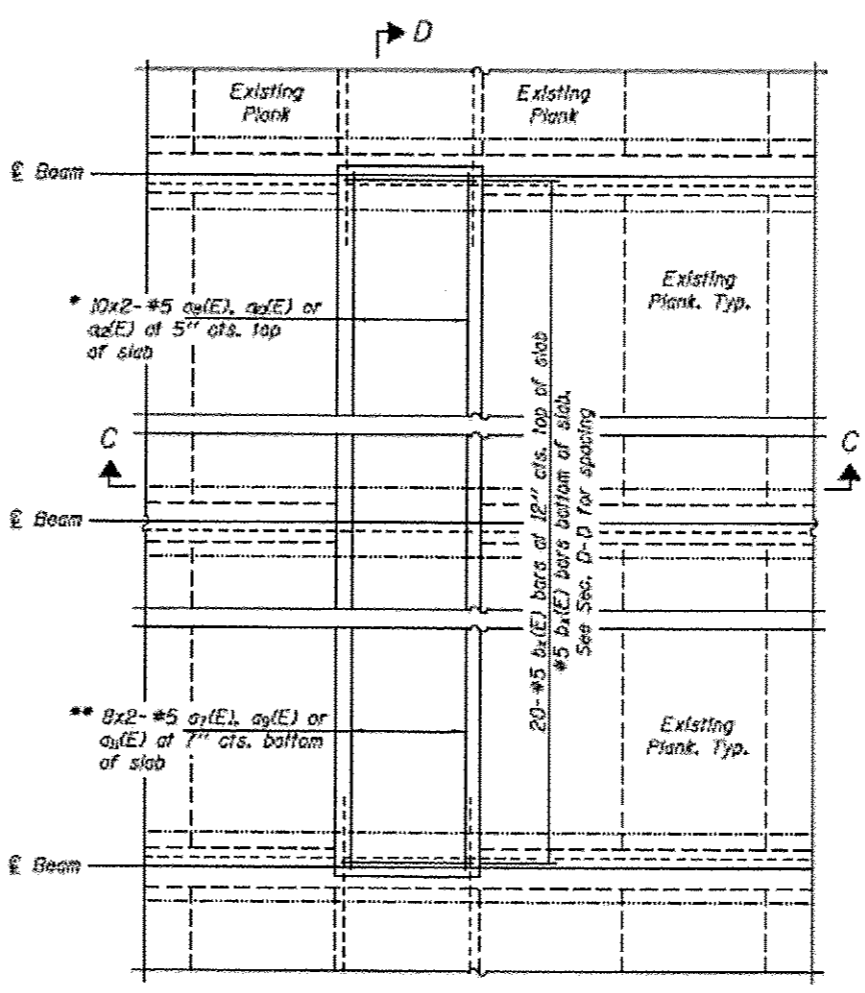
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a3(E)	16	#5	6'-10"	C
a4(E)	20	#5	6'-3"	
b(E)	20	#5	3'-8"	

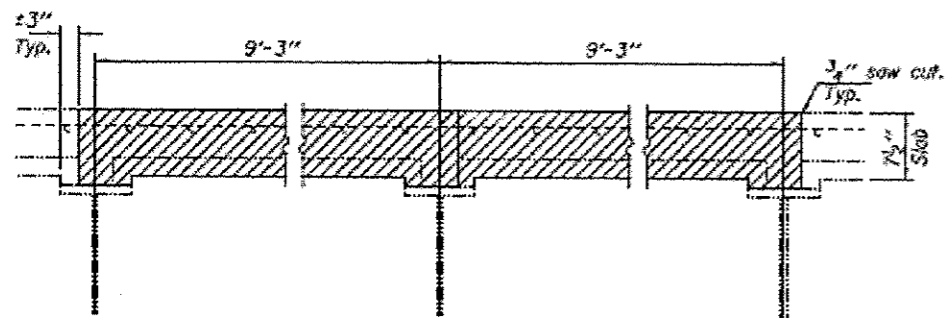
Bars indicated thus 10 x 2-#5 etc. indicates 8 lines of bars with 2 lengths per line.



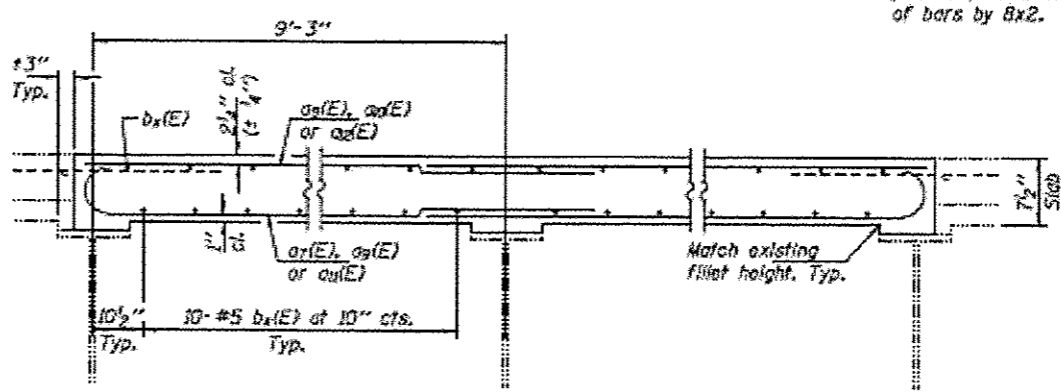
PLAN
Hatched areas indicate removal.



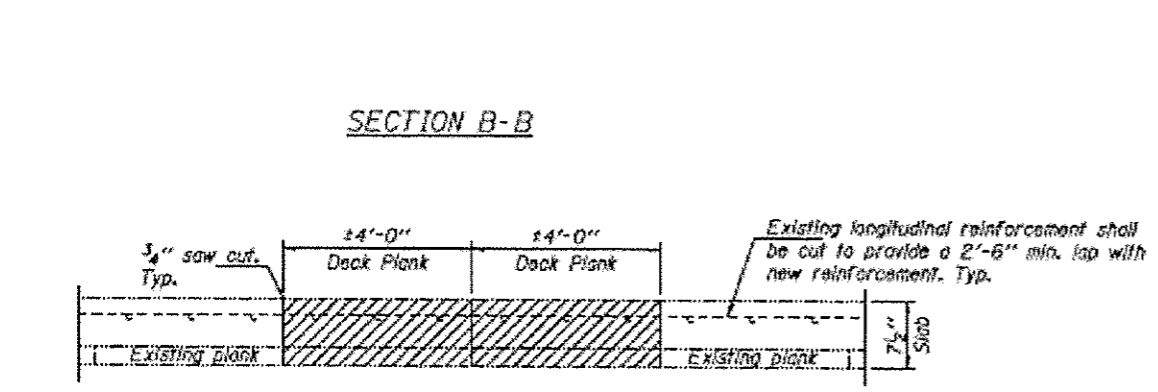
PLAN



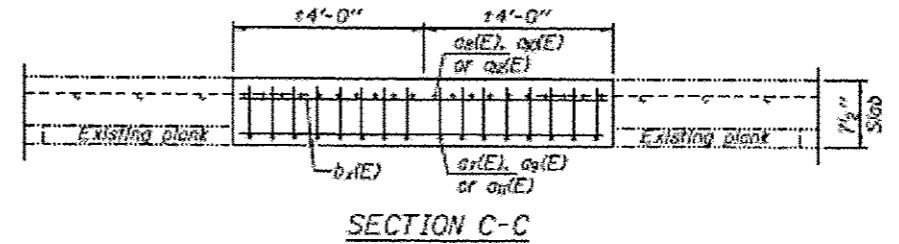
SECTION B-B



SECTION D-D



SECTION A-A



SECTION C-C



BARS a7(E), a9(E) & a11(E)

Bar	A
a7(E)	5'-9"
a9(E)	10'-4"
a11(E)	15'-4"

MINIMUM BAR LAP
#5 bar = 2'-6"

No. Planks	x
1	1
2	2
3	3

No. of planks to be replaced along the length of the bridge

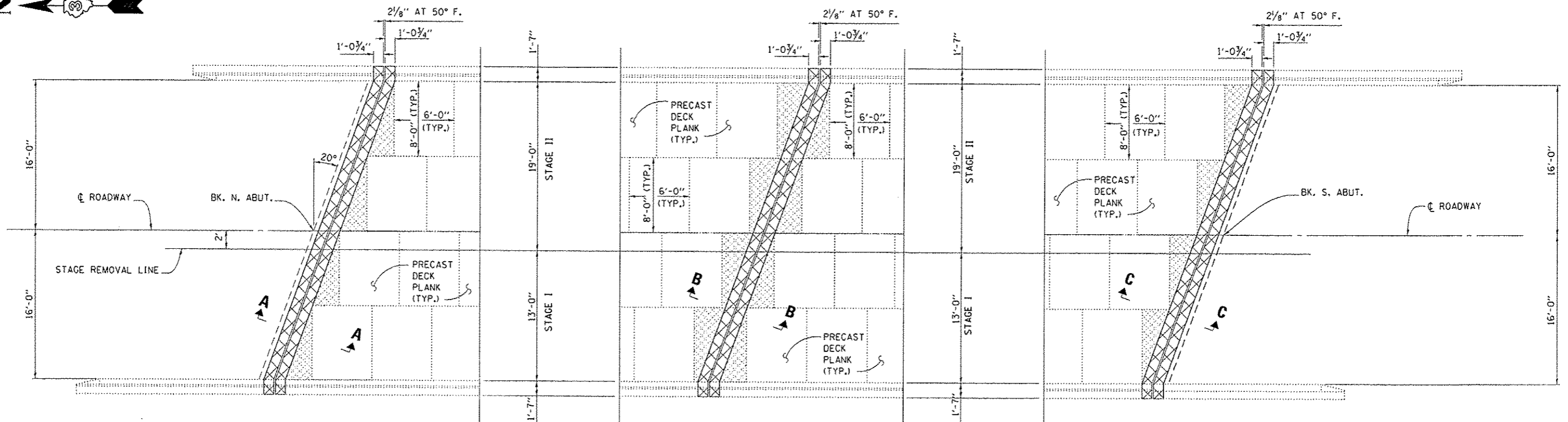
- * The number of a8(E), a10(E) & a12(E) bars shown is for one 4'-0" plank replacement. For each consecutive plank replaced, increase the number of bars by 10x2.
- ** The number of a7(E), a9(E) & a11(E) bars shown is for one 4'-0" plank replacement. For each consecutive plank replaced, increase the number of bars by 8x2.

For notes, see sheet XX of B.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a7(E)	15	#5	8'-4"	C
a8(E)	20	#5	5'-9"	—
a9(E)	15	#5	10'-11"	C
a10(E)	20	#5	10'-4"	—
a11(E)	15	#5	15'-7"	C
a12(E)	20	#5	15'-0"	—
b1(E)	40	#5	3'-8"	—
b2(E)	40	#5	7'-8"	—
b3(E)	40	#5	11'-8"	—

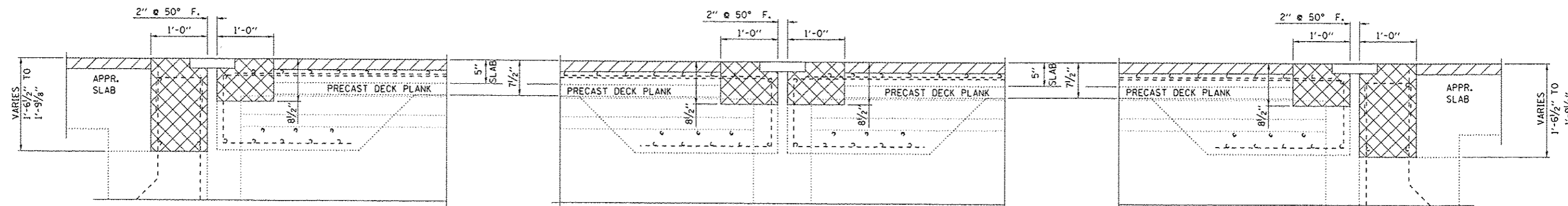
Bars indicated thus 10 x 2-#5 etc. indicates 8 lines of bars with 2 lengths per line.



PLAN
N. ABUTMENT

PLAN
PIER #3

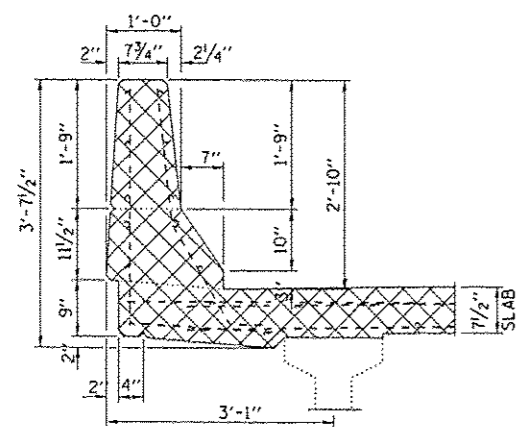
PLAN
S. ABUTMENT



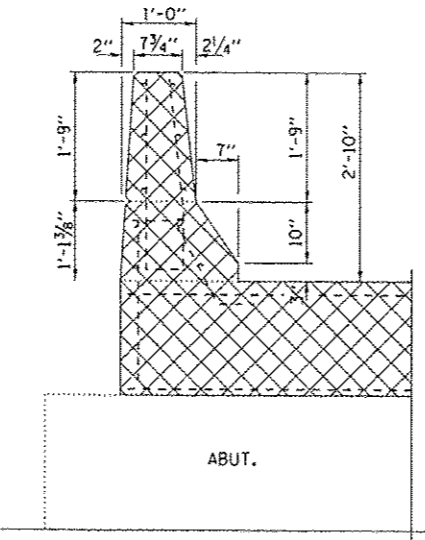
SECTION A-A
DIMENSION AT RT. L's TO JOINT

SECTION B-B
DIMENSION AT RT. L's TO JOINT

SECTION C-C
DIMENSION AT RT. L's TO JOINT



SECTION THRU PARAPET (DECK)

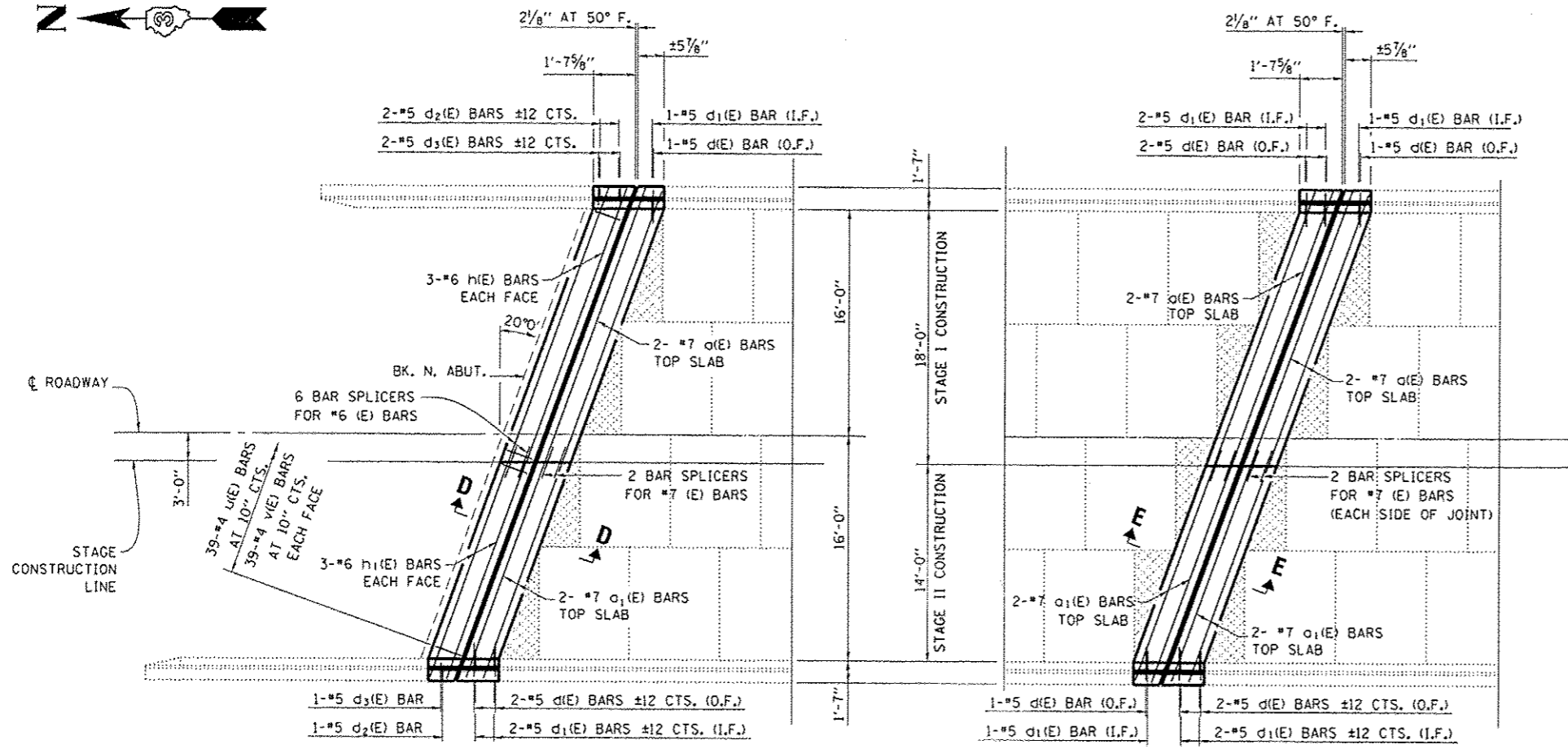


SECTION THRU PARAPET (HATCH BLOCK)

EXISTING FULL DEPTH CONCRETE

NOTES:
 HATCHED AREA REPRESENTS BRIDGE DECK SCARIFICATION 2 1/4" AND BRIDGE DECK LATEX CONCRETE OVERLAY 2 1/4"
 CROSS HATCHED AREA REPRESENTS CONCRETE REMOVAL AREAS.
 THE CONTRACTOR IS HEREBY ADVISED TO THE PRESENCE OF PRECAST CONCRETE DECK PLANKS. THE CONTRACTOR SHALL EXERCISE CARE DURING CONCRETE REMOVAL OPERATIONS SO THAT DAMAGE TO EXISTING PLANKS DOES NOT OCCUR. IF THE PLANKS ARE DAMAGED DUE TO THE CONTRACTOR'S OPERATIONS, THE PLANKS SHALL BE REPAIRED TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
 EXISTING REINFORCEMENT WITHIN CONCRETE REMOVAL AREAS SHALL BE REMOVED.
 DECK: EXISTING REINFORCEMENT EXTENDING INTO CONCRETE REMOVAL AREA SHALL BE STRAIGHTENED, CLEANED AND INCORPORATED INTO THE NEW CONCRETE.
 HATCH BLOCK: EXISTING REINFORCEMENT EXTENDING INTO CONCRETE REMOVAL AREA SHALL BE CUT OFF FLUSH WITH CONCRETE REMOVAL LINE.
 EXISTING NEOPRENE EXPANSION JOINT SHALL BE REMOVED. COST INCLUDED WITH CONCRETE REMOVAL.

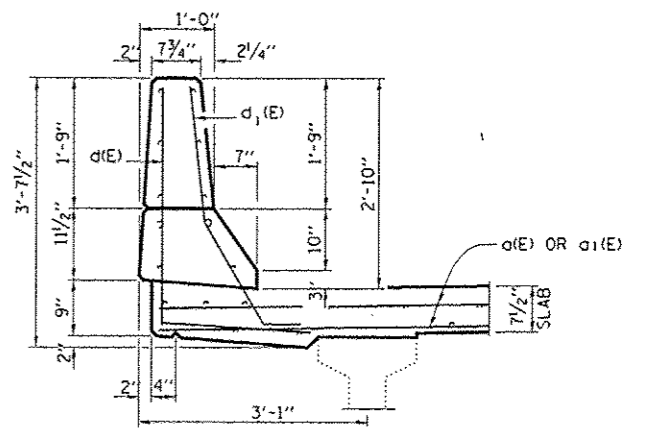
FILE NAME: p:\1\094E810NTEG\Illinois.gov\PI00T\Documents\DOT Offices\District 3\Projects\0368\DRAWING\03RW44-shr-details.dgn	USER NAME: woodshankr1	DESIGNED - RW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STAGE REMOVAL DETAILS	F.A.S. RTE. 248	SECTION (117B)-2	COUNTY BUREAU	TOTAL SHEETS 19	SHEET NO. 16	
PLOT SCALE: 1/8" = 1'-0"	CHECKED - EP	REVISIONS:	DATE - 12/10/2014			SCALE: _____	SHEET 1 OF 1 SHEETS	STA. 254+10.77 TO STA. 257+89.76	CONTRACT NO. 66E44		
PLOT DATE: 7/16/2015	DATE:					ILLINOIS FED. AID PROJECT					



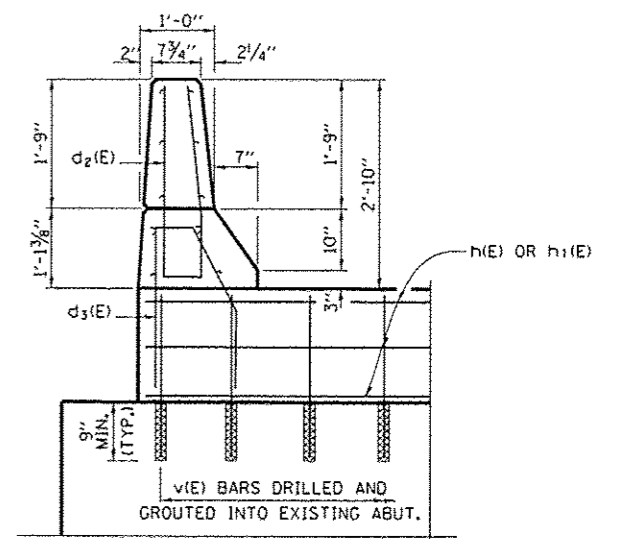
ABUTMENTS
NORTH ABUTEMENT SHOWN,
SOUTH ABUTEMENT SIMILAR

PIER #3

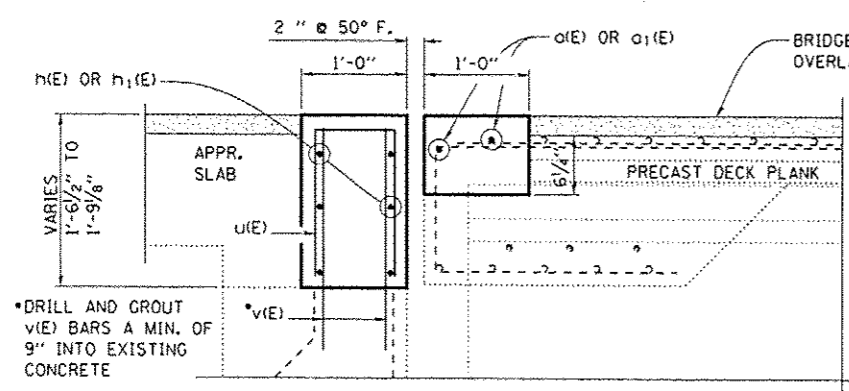
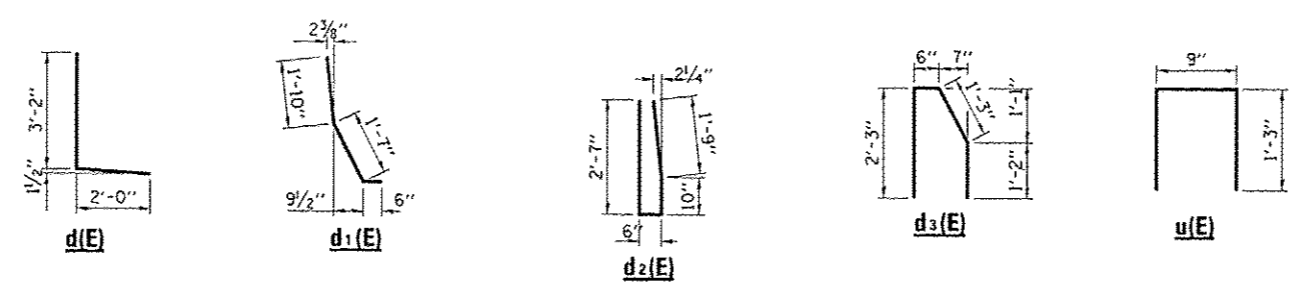
PLAN



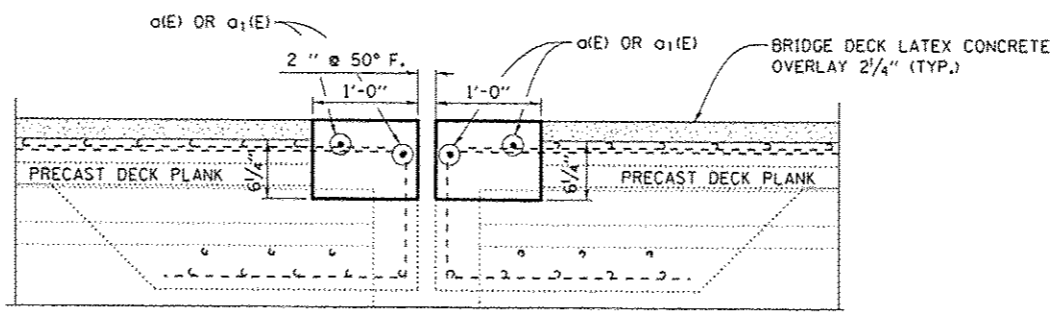
SECTION THRU PARAPET (DECK)



SECTION THRU PARAPET (HATCH BLOCK)



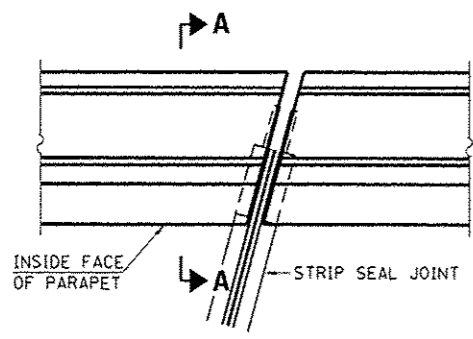
SECTION D-D
DIMENSION AT RT. L's TO JOINT



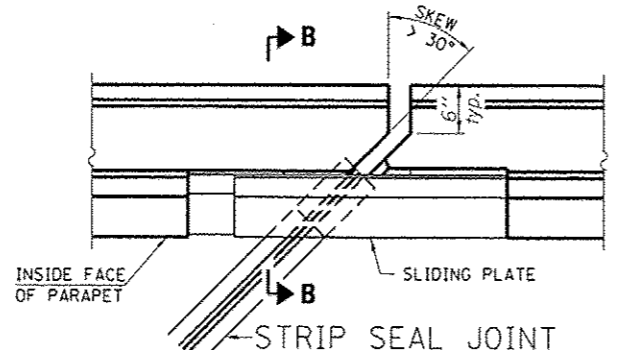
SECTION E-E
DIMENSION AT RT. L's TO JOINT

BILL OF MATERIALS

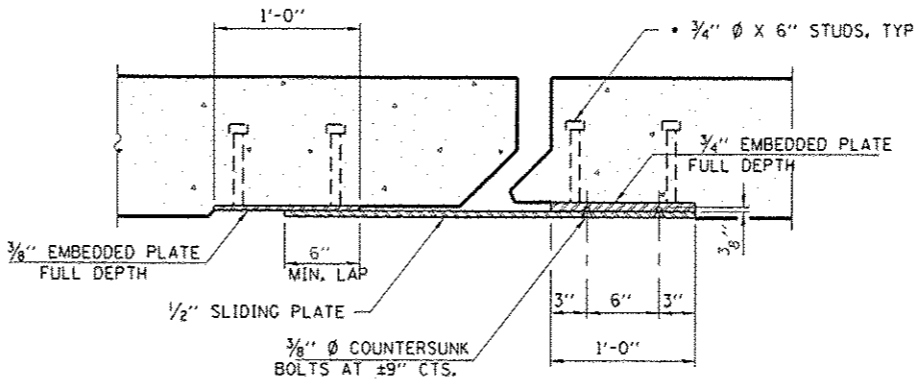
BAR	NO.	SIZE	LENGTH	SHAPE
a	8	#7	20'-7"	
a1	8	#7	16'-4"	
d	12	#4	5'-2"	
d1	12	#5	3'-11"	
d2	6	#5	5'-8"	
d3	6	#5	5'-2"	
h	12	#6	20'-7"	
h1	12	#6	16'-4"	
u	78	#4	3'-3"	U
v	156	#4	2'-2"	
CONCRETE REMOVAL			CU YD	9.8
CONCRETE SUPERSTRUCTURE			CU YD	9.8
REINFORCEMENT BARS			POUND	1820
EPOXY COATED				
BAR SPLICERS			EACH	20
SILANE SURFACE SEALER			SO YD	1894



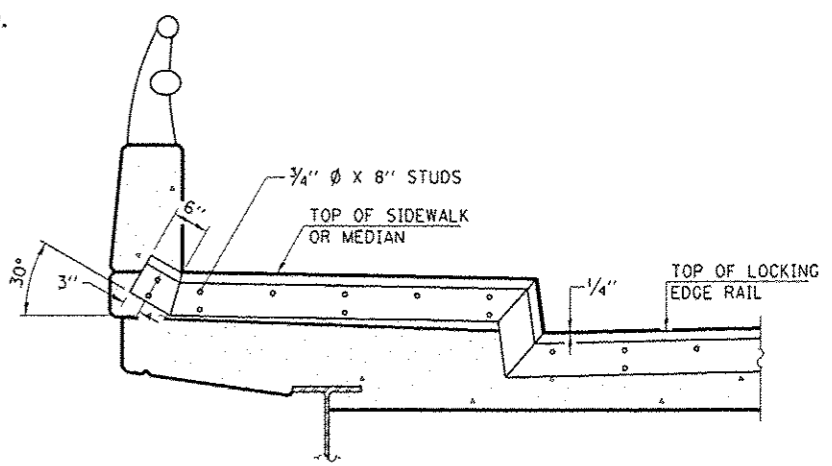
PLAN
(FOR SKEWS $\leq 30^\circ$)



PLAN
(FOR SKEWS $> 30^\circ$)
SHOWING POINT BLOCK

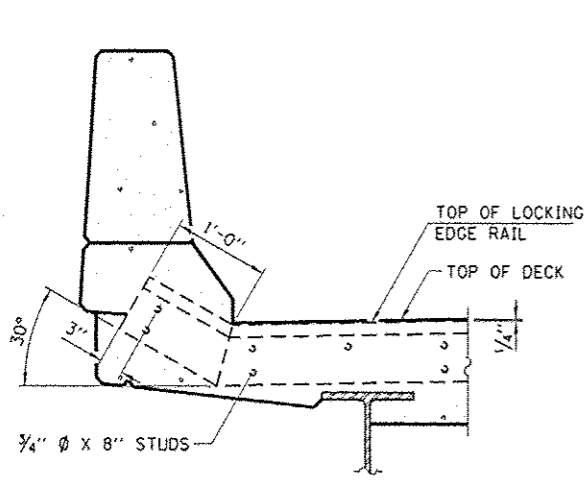


SECTION C-C

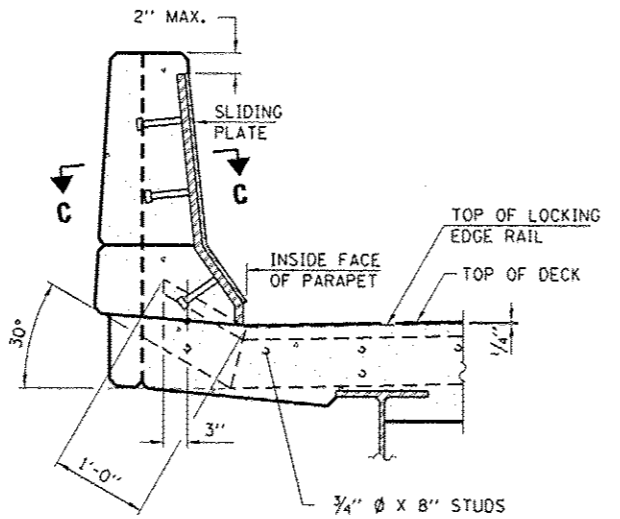


TYPICAL END TREATMENT
AT SIDEWALK OR MEDIAN

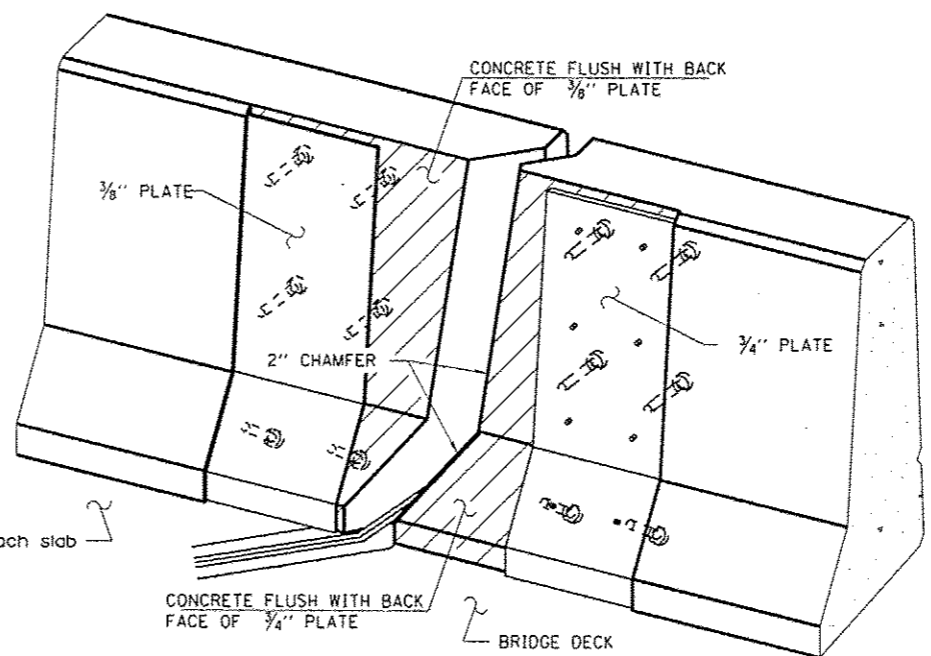
SHORTER PLATES WITH A SINGLE ROW OF STUDS AT 12" CTS. MAY BE NECESSARY ON MEDIANS WHICH ARE SHALLOWER THAN 9". SEE MANUFACTURER'S RECOMMENDATION.



SECTION A-A

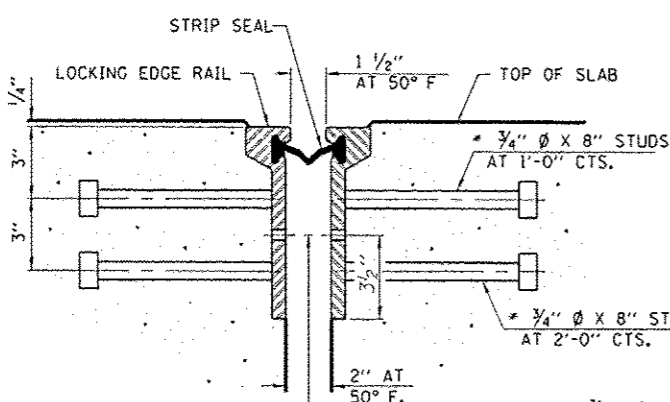


SECTION B-B



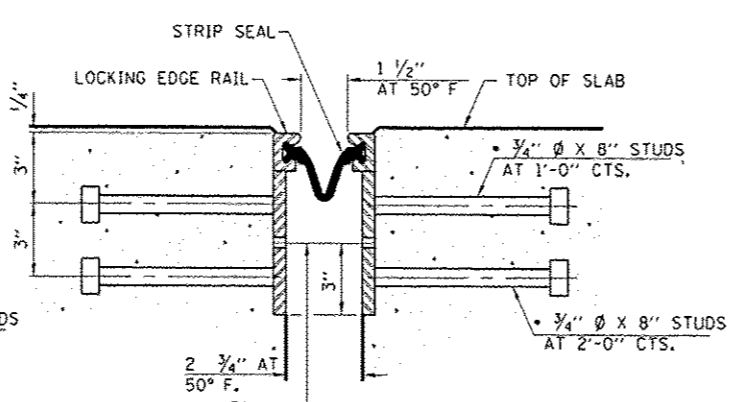
TRIMETRIC VIEW
(SHOWING BACK PLATES ONLY)

NOTES:
THE STRIP SEAL SHALL BE MADE CONTINUOUS AND SHALL HAVE A MINIMUM THICKNESS OF 1/4". THE CONFIGURATION OF THE STRIP SEAL SHALL MATCH THE CONFIGURATION OF THE LOCKING EDGE RAILS. OPEN OR "WEBBED" STRIP SEAL GLAND CONFIGURATIONS ARE NOT PERMITTED. THE GLAND SHALL BE SIZED FOR A MAXIMUM RATED MOVEMENT OF 4 INCHES.
THE LOCKING EDGE RAILS DEPICTED ARE CONCEPTUAL ONLY, EXCEPT FOR THE MINIMUM DIMENSIONS SHOWN. THE ACTUAL CONFIGURATION OF THE LOCKING EDGE RAILS AND MATCHING STRIP SEAL MAY VARY FROM MANUFACTURER TO MANUFACTURER. FLANGED EDGE RAILS WILL NOT BE ALLOWED. LOCKING EDGE RAILS MAY BE SPLICED AT SLOPE DISCONTINUITIES.
THE MANUFACTURER'S RECOMMENDED INSTALLATION METHODS SHALL BE FOLLOWED.
THE JOINT OPENING AND DECK DIMENSIONS DETAILED ON THE SUPERSTRUCTURE ARE BASED ON A ROLLED RAIL EXPANSION JOINT. IF THE CONTRACTOR ELECTS TO USE THE WELDED RAIL EXPANSION JOINT, THE OPENING AND DECK DIMENSIONS SHALL BE MODIFIED ACCORDING TO THE DIMENSIONS DETAILED ON THIS SHEET. REQUIRED MODIFICATIONS SHALL BE MADE AT NO ADDITIONAL COST TO THE STATE.
ALL STEEL COMPONENTS SHALL BE GALVANIZED AFTER FABRICATION ACCORDING TO ARTICLE 520.03 OF THE STANDARD SPECIFICATIONS. MAXIMUM SPACE BETWEEN RAIL SEGMENTS SHALL BE 1/16". SEALED WITH A SUITABLE SEALANT. JOINTS IN RAILS WITHIN 10 FT. OF CURBS SHALL BE WELDED.
PARAPET PLATES AND ANCHORAGE STUDS FOR SKEWS $> 30^\circ$ INCLUDED IN THE COST OF PREFORMED JOINT STRIP SEAL.



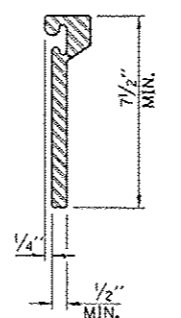
SECTION THRU
ROLLED RAIL JOINT

1/16" ϕ HOLES AT 4'-0" CTS. FOR 3/8" ϕ BOLTS. ALL BOLTS SHALL BE BURNED, SAWED, OR CHIPPED OFF FLUSH WITH THE PLATES AFTER FORMS ARE REMOVED, TYP.

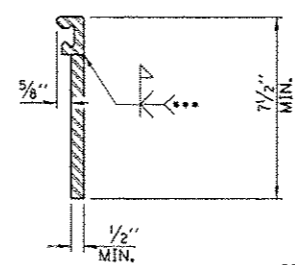


SECTION THRU
WELDED RAIL JOINT

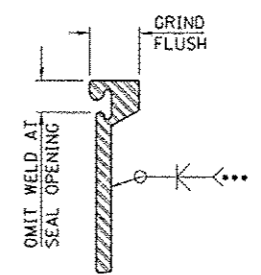
1/16" ϕ HOLES AT 4'-0" CTS. FOR 3/8" ϕ BOLTS. ALL BOLTS SHALL BE BURNED, SAWED, OR CHIPPED OFF FLUSH WITH THE PLATES AFTER FORMS ARE REMOVED, TYP.



ROLLED
EXTRUDED RAIL



WELDED RAIL



LOCKING EDGE
RAIL SPLICE

GRIND FLUSH
OMIT WELD AT SEAL OPENING
... BACK GOUGE NOT REQUIRED IF COMPLETE JOINT PENETRATION IS VERIFIED BY MOCK-UP.

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	109

LOCKING EDGE RAILS

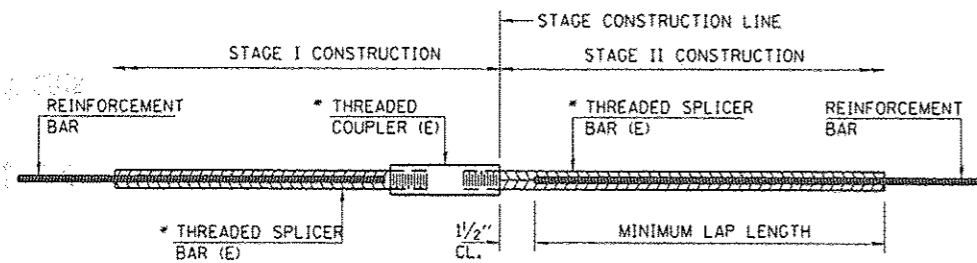
PREFORMED JOINT STRIP SEAL DETAILS

SCALE: SHEET 1 OF 1 SHEETS STA. 254+10.77 TO STA. 257+89.76

F.A.S. RTE. 24B	SECTION (117B)1-2	COUNTY	TOTAL SHEETS 19	SHEET NO. 18
			CONTRACT NO. 66E44	
ILLINOIS FED. AID PROJECT				

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FILE NAME: p:\11094EBID\INTEG\Illinois.gov\PI\DOT\Documents\DOT Offices\District 3\Projects\0303\Drawings\0303RW44-sh-tr-details.dgn	DESIGNED - RW	REVISED -
PLOT SCALE = 100.0000 / in.	CHECKED - EP	REVISED -
PLOT DATE = 7/16/2015	DATE = 12/10/2014	REVISED -



STANDARD BAR SPLICER ASSEMBLY

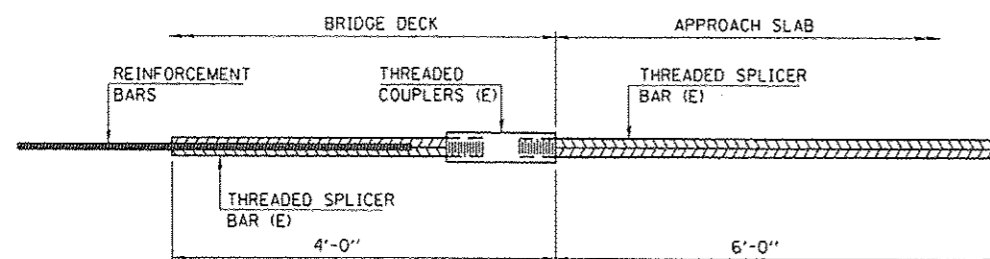
BAR SIZE TO BE SPLICED	MINIMUM LAP LENGTHS					
	TABLE 1	TABLE 2	TABLE 3	TABLE 4	TABLE 5	TABLE 6
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-7"	2'-11"
5	1'-9"	2'-5"	2'-7"	2'-11"	3'-3"	3'-8"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-10"	4'-5"
7	2'-9"	3'-10"	4'-2"	4'-8"	5'-2"	5'-10"
8	3'-8"	5'-1"	5'-5"	6'-2"	6'-9"	7'-8"
9	4'-7"	6'-5"	6'-10"	7'-9"	8'-7"	9'-8"

- TABLE 1: BLACK BAR, 0.8 CLASS C
- TABLE 2: BLACK BAR, TOP BAR LAP, 0.8 CLASS C
- TABLE 3: EPOXY BAR, 0.8 CLASS C
- TABLE 4: EPOXY BAR, TOP BAR LAP, 0.8 CLASS C
- TABLE 5: EPOXY BAR, CLASS C
- TABLE 6: EPOXY BAR, TOP BAR TOP, CLASS C

THREADED SPLICER BAR LENGTH = MIN. LAP LENGTH + 1 1/2" + THREAD LENGTH

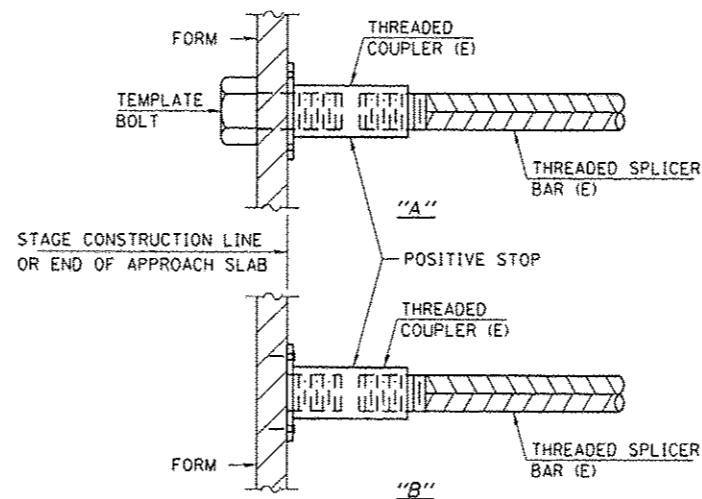
- EPOXY NOT REQUIRED ON BAR SPLICER ASSEMBLY COMPONENTS USED IN CONJUNCTION WITH BLACK BARS.

LOCATION	BAR SIZE	NO. ASSEMBLIES REQUIRED	TABLE FOR MINIMUM LAP LENGTH
N. ABUT - DECK	#7	2	TABLE 3
N. ABUT - HATCH BLOCK	#6	6	TABLE 3
PIER #3 - NORTH	#7	2	TABLE 3
PIER #3 - SOUTH	#7	2	TABLE 3
S. ABUT - DECK	#7	2	TABLE 3
S. ABUT - HATCH BLOCK	#6	6	TABLE 3



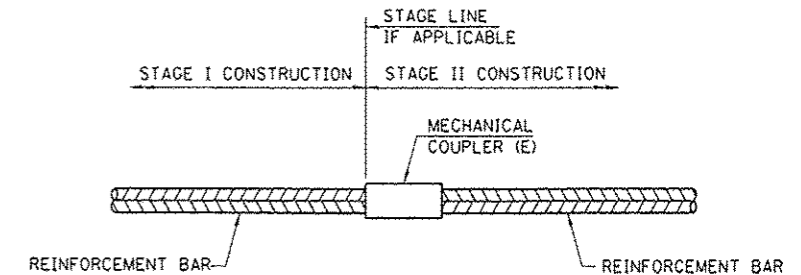
BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

NO. REQUIRED =



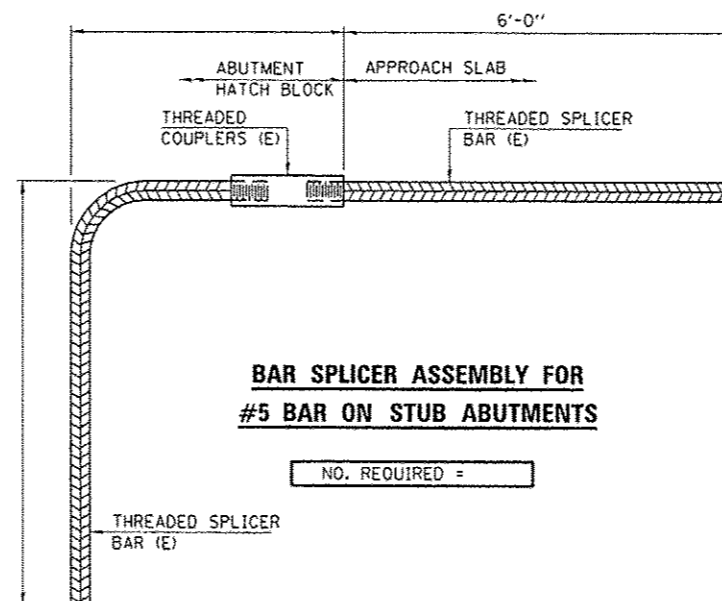
INSTALLATION AND SETTING METHODS

- "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.