

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2370	(78-1HB-1)I	PUTNAM	18	1
		ILLINOIS	CONTRACT NO. 66A27	

INDEX OF SHEETS

1. COVER SHEET
2. GENERAL NOTES
3. SUMMARY OF QUANTITIES
4. TYPICAL SECTION
5. SCHEDULES
6. STAGING DETAILS
- 7-18. STRUCTURE REPAIR PLANS.

STANDARDS

000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
606001-04	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
606301-04	PC CONCRETE ISLANDS AND MEDIANS
701001-02	OFF-ROAD OPERATIONS 2L, 2W, MORE THAN 15' (4.5 m) AWAY
701006-03	OFF-ROAD OPERATIONS 2L, 2W, 15' (4.5 m) TO (600 mm) FROM PAVEMENT EDGE
701101-02	OFF-ROAD OPERATIONS MULTILANE, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
701106-02	OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' (4.5 m) AWAY
701422-03	LANE CLOSURE, MULTILANE, FOR SPEEDS ≥ 45 MPH TO 55 MPH
701426-04	LANE CLOSURE, MULTILANE INTERMITTENT OR MOVING OPERATION, FOR SPEEDS ≥ 45 MPH
701901-01	TRAFFIC CONTROL DEVICES

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

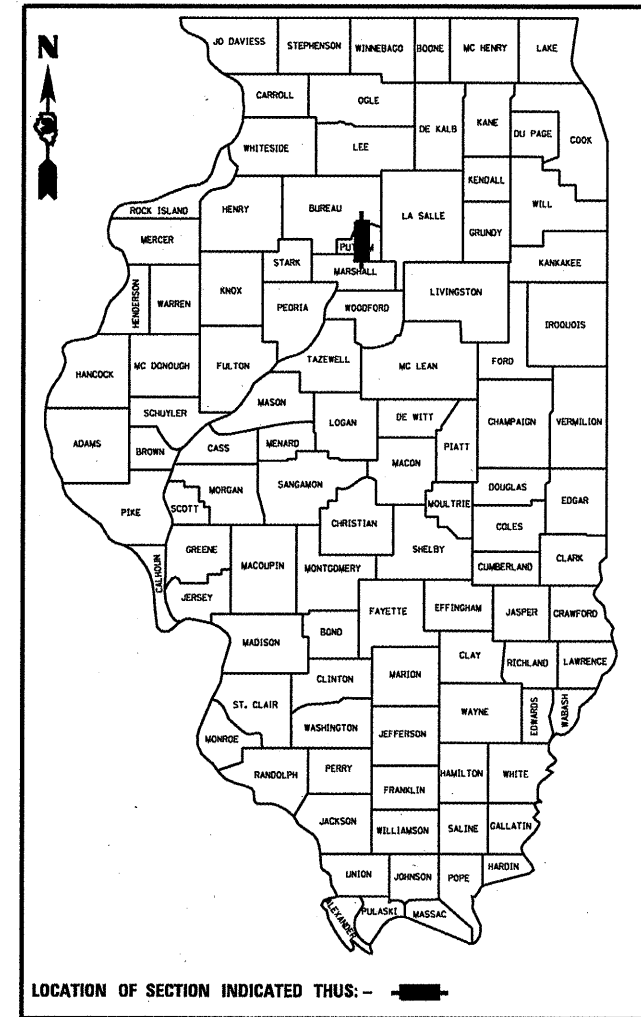
PROPOSED
HIGHWAY PLANS

FAS 2370 (IL 26) & O.R. 26
SECTION (78-1HB-1)I

BRIDGE REPAIRS
PUTNAM COUNTY

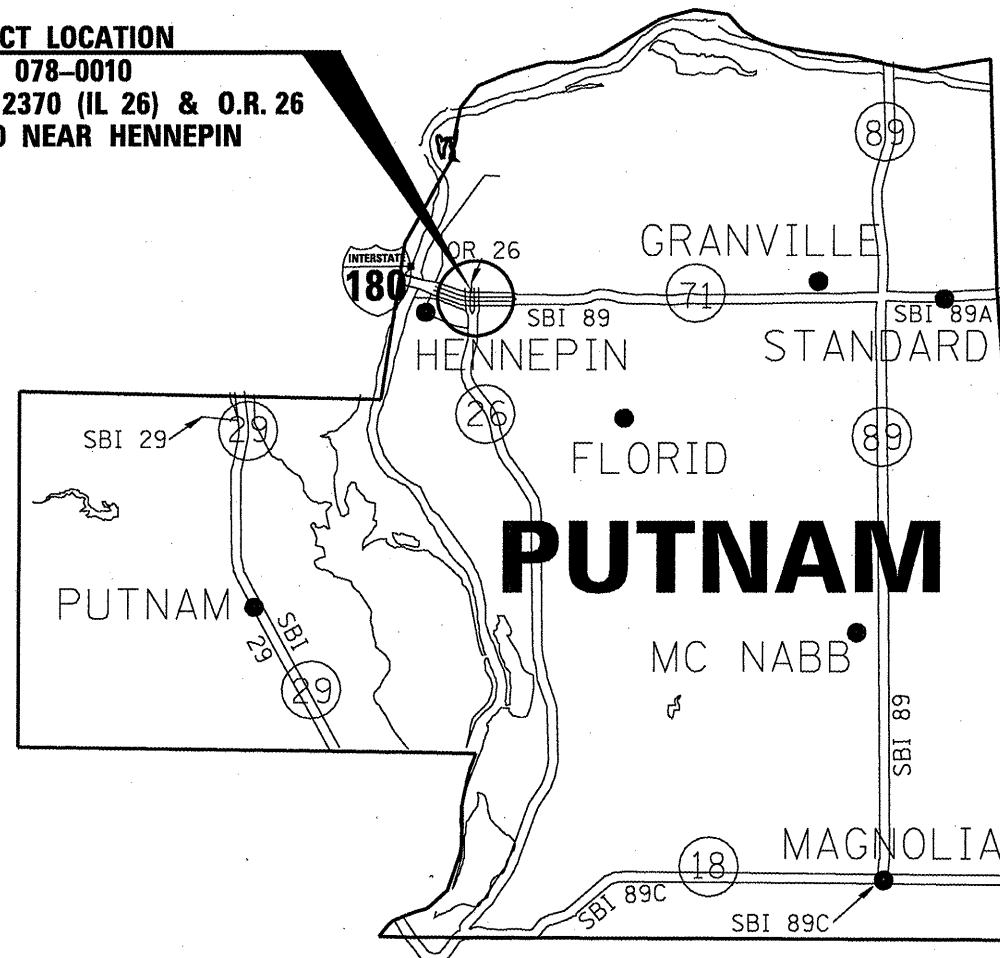
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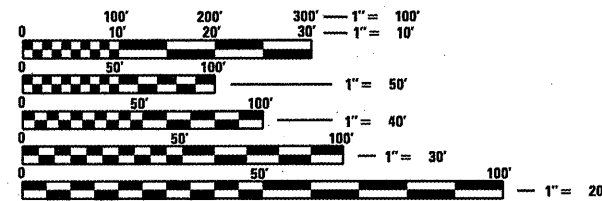


FUNCTIONAL CLASSIFICATION
RURAL MAJOR COLLECTOR
2009 ADT = 1850
P.V. = 87.6%
S.U. = 8.1%
M.U. = 4.3%

PROJECT LOCATION
SN 078-0010
CARRYING FAS 2370 (IL 26) & O.R. 26
OVER I-180 NEAR HENNEPIN



POINT LOCATION



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: JOE KANNEL
UNIT CHIEF: RON WOODSHANK
TOWNSHIP: HENNEPIN

CONTRACT NO. 66A27

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED DECEMBER 21 20 10
George F. P... DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
Feb 4 20 11
Scott E. St... P.E. acting ENGINEER OF DESIGN AND ENVIRONMENT
Feb 4 20 11
Christina M. Reed... DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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OF THE STATE OF ILLINOIS

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.

FOR STABILIZATION, ALL TYPE III BARRICADES SHALL 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.

EXISTING SIGNS INSTALLED IN THE AREAS OF CONCRETE MEDIAN SURFACE REMOVAL OPERATIONS SHALL BE REMOVED AND STORED AT LOCATIONS APPROVED BY THE ENGINEER SO THAT THE EXISTING SIGNS ARE NOT DAMAGED DURING THE MEDIAN REMOVAL AND REPLACEMENT OPERATIONS. WHEN THE CONCRETE MEDIAN IS RECONSTRUCTED, THE CONTRACTOR SHALL INSTALL BLOCKOUTS AT EXISTING SIGN LOCATIONS TO AID IN THE RE-INSTALLATION OF EXISTING SIGNS. COST SHALL BE INCLUDED IN THE "CONCRETE MEDIAN SURFACE" WORK.

COMMITMENTS

NONE 10/26/2010

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DISTRICT THREE

PREPARED BY: *David Broviak*
DISTRICT STUDIES & PLANS ENGINEER

DATE: 12-21-10

EXAMINED BY: *Herbert Long*
DISTRICT CONSTRUCTION ENGINEER

Ray J. Carter
DISTRICT MATERIALS ENGINEER

Benjamin A. Hatcher
DISTRICT OPERATIONS ENGINEER

FILE NAME *	USER NAME = woodshankr1	DESIGNED - RLW	REVISED - -----
c:\pw_work\pwsdot\woodshankr1\d0143184\	MAIN1-0366A27-details.dgn	DRAWN - RLW	REVISED - -----
	PLOT SCALE = 1/8" = 1/8" / IN.	CHECKED - ---	REVISED - -----
	PLOT DATE = Dec 15, 2010 - 11:05:49 AM	DATE - -----	REVISED - -----

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

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

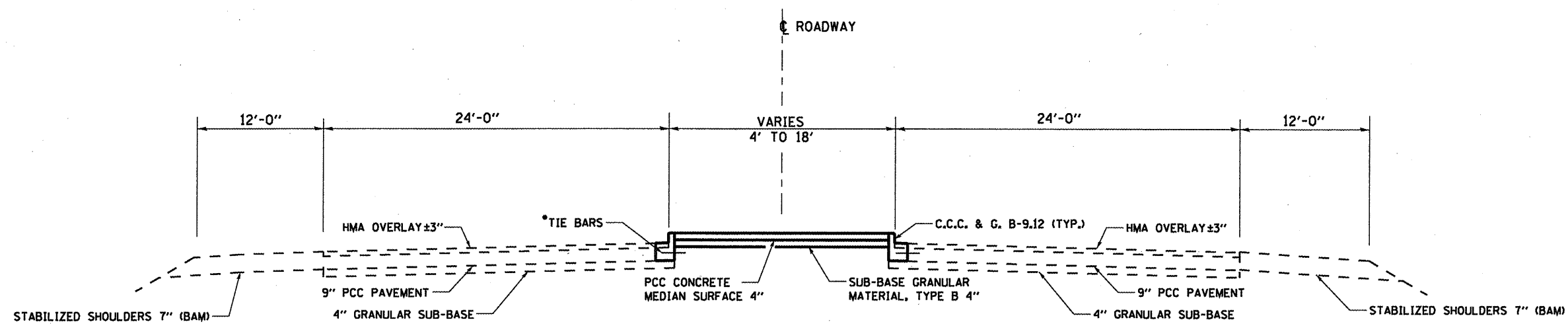
F.A.S. RTE. 2370	SECTION (7B-1HB-1)	COUNTY PUTNAM	TOTAL SHEETS 18	SHEET NO. 2
CONTRACT NO. 66A27				ILLINOIS FED. AID PROJECT

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				STATE FUNDS	100% STATE
				STRUCTURE	
				0014	
				RURAL	
31101200	SUB BASE GRANULAR MATERIAL, TYPE B 4"	SO YD	104	104	
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	348	348	
50102400	CONCRETE REMOVAL	CU YD	17.4	17.4	
50157300	PROTECTIVE SHIELD	SO YD	1075	1075	
50300255	CONCRETE SUPERSTRUCTURE	CU YD	17.4	17.4	
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	4010	4010	
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	3970	3970	
50800515	BAR SPLICERS	EACH	56	56	
52000110	PREFORMED JOINT STRIP SEAL	FOOT	156	156	
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	22	22	
52100520	ANCHOR BOLTS, 1"	EACH	44	44	
58700300	CONCRETE SEALER	SO FT	22 212	22 212	
60605900	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-9.12	FOOT	348	348	
60618300	CONCRETE MEDIAN SURFACE, 4 INCH	SO FT	940	940	
67100100	MOBILIZATION	L SUM	1	1	
70100320	TRAFFIC CONTROL AND PROTECTION, STANDARD 701422	L SUM	1	1	
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	20	20	
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	4271	4271	
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SO FT	1392	1392	
78300100	PAVEMENT MARKING REMOVAL	SO FT	680	680	
X4402020	CONCRETE MEDIAN SURFACE REMOVAL	SO FT	940	940	
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1	
X7800610	URETHANE PAVEMENT MARKING - LINE 4"	FOOT	1492	1492	
X7800630	URETHANE PAVEMENT MARKING - LINE 6"	FOOT	373	373	
Z0001899	JACK AND REMOVE EXISTING BEARINGS	EACH	22	22	
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SO FT	152	152	
Z0016200	DECK SLAB REPAIR (PARTIAL)	SO YD	93	93	

• SPECIALITY ITEMS

FILE NAME =	USER NAME = woodshankr1	DESIGNED - RLW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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	PLOT SCALE = 100.0000' / IN.	CHECKED -	REVISED -			CONTRACT NO. 66A27					
	PLOT DATE = Dec 15, 2010 - 11:05:00 AM	DATE -	REVISED -			ILLINOIS FED. AID PROJECT					

Rev.



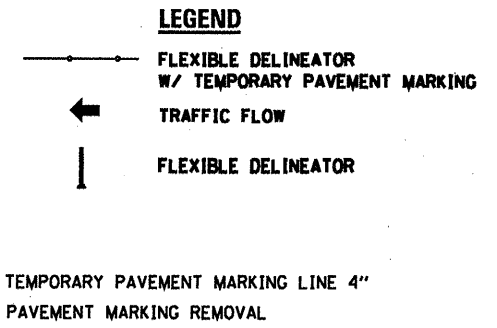
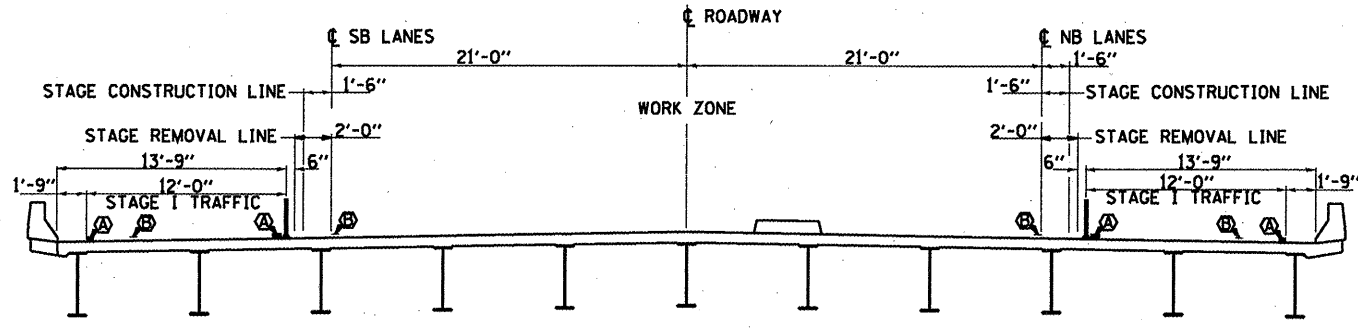
TYPICAL SECTION

*NEW #6 EPOXY COATED TIE BARS SHALL BE INSTALLED WHENEVER EXISTING TIE BARS ARE DETERIORATED OR DAMAGED DUE TO REMOVAL OPERATIONS. COST INCLUDED WITH THE RELATED CONCRETE WORK.

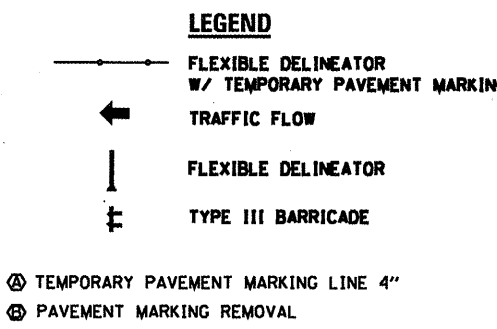
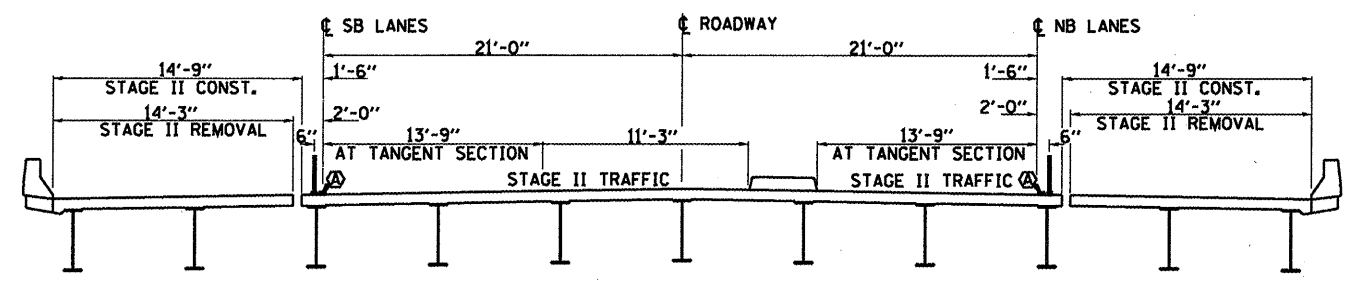
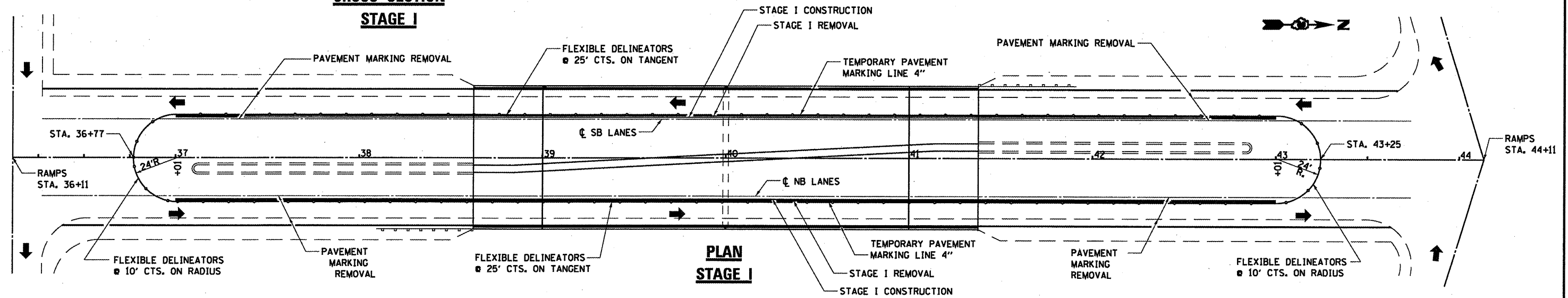
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PLOT SCALE = 1/8" = 1' IN.	CHECKED -	DATE -	REVISED -		SCALE: _____	SHEET NO. 1 OF 1 SHEETS		STA. _____ TO STA. _____		CONTRACT NO. 66A27
PLOT DATE = Dec 15, 2010 - 11:06:17 AM						ILLINOIS FED. AID PROJECT				

SCHEDULE FOR MEDIAN REPAIR

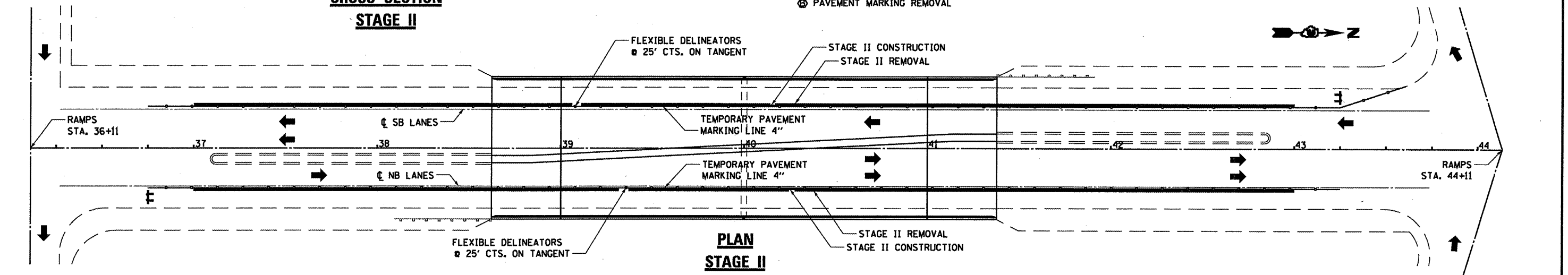
LOCATION				COMBINATION CONCRETE CURB AND GUTTER REMOVAL	CONCRETE MEDIAN SURFACE REMOVAL	SUB-BASE GRANULAR MATERIAL TYPE B 4"	COMBINATION CONCRETE CURB AND GUTTER TYPE B-9.12	CONCRETE MEDIAN SURFACE 4"
STATION	TO	STATION	NB/SB	FEET	SO FT	SO YD	FOOT	SO FT
STA. 37+19	TO	STA. 37+47	SB	28	80	9	28	80
STA. 37+41	TO	STA. 37+47	NB	6			6	
STA. 38+23	TO	STA. 38+34	SB	11	31	3	11	31
STA. 38+23	TO	STA. 38+34	NB	11			11	
STA. 38+58	TO	STA. 38+64	SB	6	17	2	6	17
STA. 41+02	TO	STA. 41+06		4	11	1	4	11
STA. 41+35	TO	STA. 41+39		4	11	1	4	11
STA. 41+39	TO	STA. 42+78	SB	139	395	44	139	395
STA. 41+39	TO	STA. 42+78	NB	139	395	44	139	395
TOTAL				348	940	104	348	940



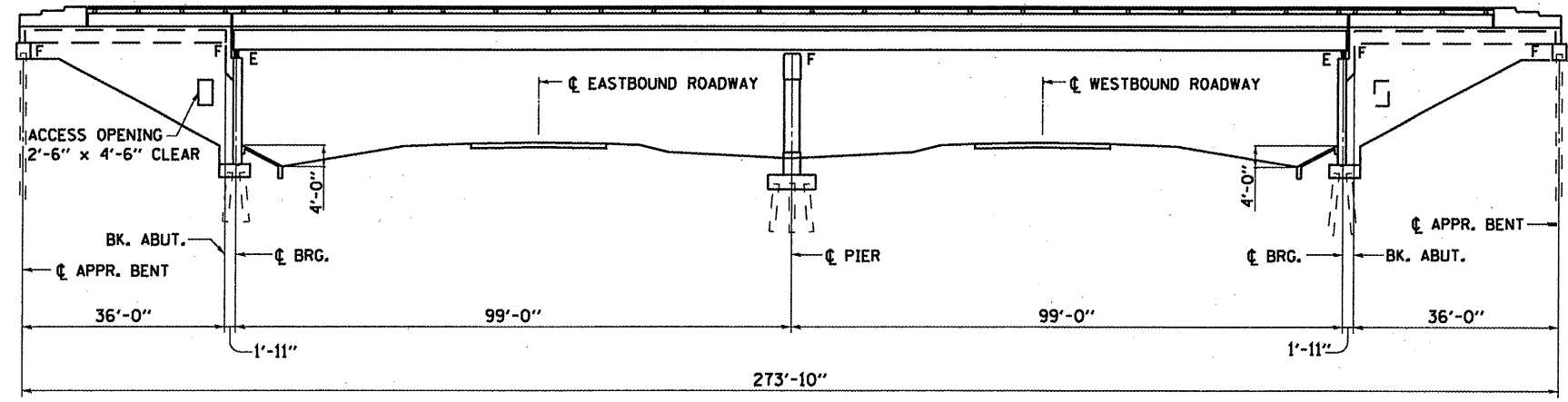
NOTE:
 TRAFFIC CONTROL AND PROTECTION STANDARD 701422, SHALL BE USED IN CONJUNCTION WITH THIS DETAIL SHEET ON THE NORTHBOUND LANES.
 TRAFFIC CONTROL AND PROTECTION STANDARD 701101, SHALL BE USED IN CONJUNCTION WITH THIS DETAIL SHEET ON THE SOUTHBOUND LANES.



NOTE:
 TRAFFIC CONTROL AND PROTECTION STANDARD 701422, SHALL BE USED IN CONJUNCTION WITH THIS DETAIL SHEET ON THE NORTHBOUND LANES.
 TRAFFIC CONTROL AND PROTECTION STANDARD 701101, SHALL BE USED IN CONJUNCTION WITH THIS DETAIL SHEET ON THE SOUTHBOUND LANES.



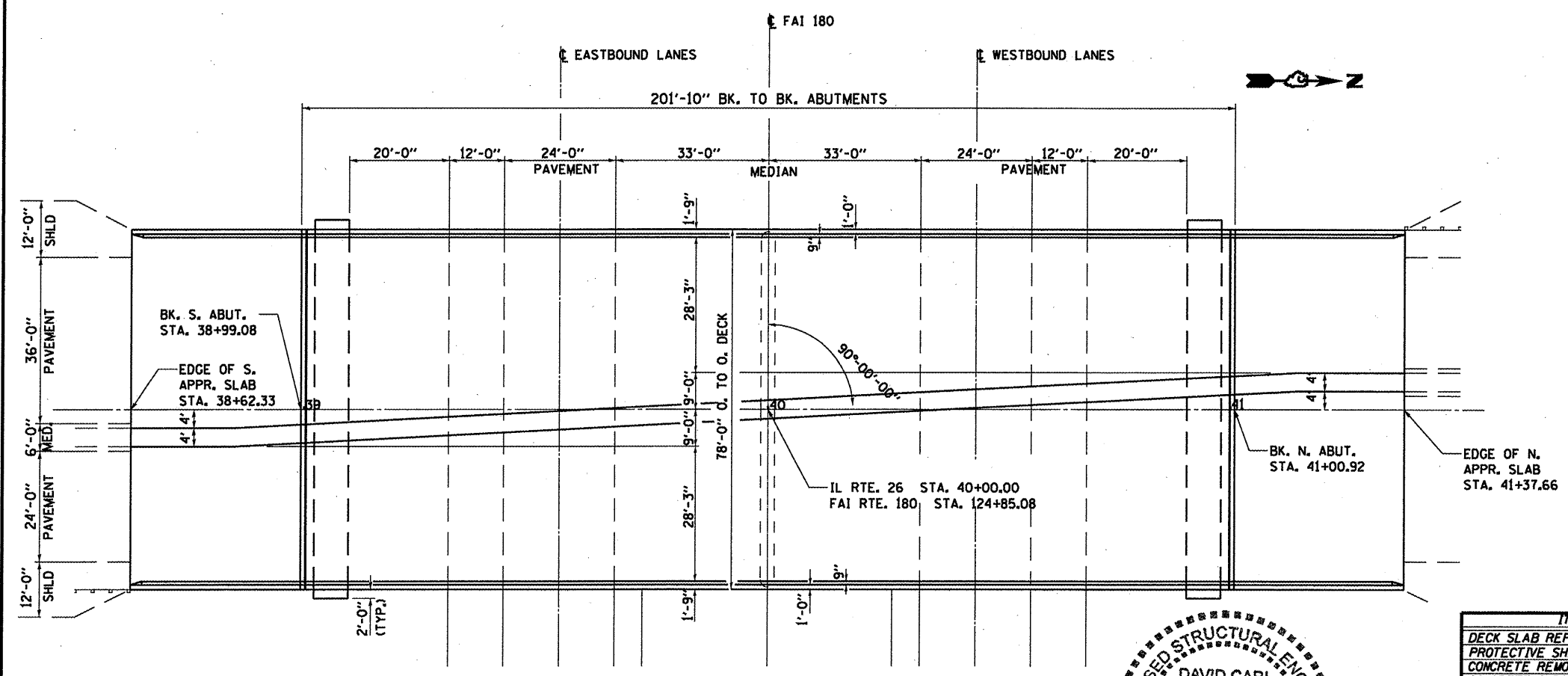
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CONTRACT NO. 66A27	ILLINOIS FED. AID PROJECT	PLOT SCALE = 100,0000' / IN.	CHECKED -			SCALE: _____	SHEET NO. 1 OF 1 SHEETS	STA. _____ TO STA. _____				
		DATE -	REVISED -									



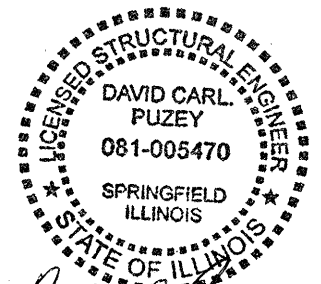
SOUTH ABUTMENT

ELEVATION

NORTH ABUTMENT



PLAN



David Carl Puzey 2/7/11
Expires 11/30/2012

GENERAL NOTES

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.

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.

CONCRETE SEALER SHALL BE APPLIED TO THE DESIGNATED AREAS OF THE ENTIRE DECK SURFACE INCLUDING APPROACH SPANS, THE VERTICAL FACE OF THE MEDIAN CURB, MEDIAN SURFACE, TOP AND VERTICAL FACES OF PARAPETS.

AS DIRECTED BY THE ENGINEER, EXISTING CONSTRUCTION ACCESSORIES WELDED TO THE TOP FLANGE OF BEAMS AND GIRDERS SHALL BE REMOVED. THE WELD AREAS SHALL BE GROUND FLUSH AND INSPECTED FOR CRACKS USING MAGNETIC PARTICLE TESTING (MT) OR DYE PENETRANT TESTING (PT) BY QUALIFIED PERSONNEL APPROVED BY THE ENGINEER. ANY CRACKS THAT CANNOT BE REMOVED BY GRINDING 1/4" DEEP SHALL BE IDENTIFIED AND REPORTED TO THE BUREAU OF BRIDGES AND STRUCTURES FOR FURTHER DISPOSITION. THE COST OF REMOVING WELDED ACCESSORIES, GRINDING AND INSPECTING WELD AREAS AND GRINDING CRACKS WILL BE PAID FOR ACCORDING TO ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

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

THE EXISTING STRUCTURAL STEEL COATING CONTAINS LEAD. THE CONTRACTOR SHALL TAKE APPROPRIATE PRECAUTIONS TO DEAL WITH THE PRESENCE OF LEAD ON THIS PROJECT.

EXISTING STRUCTURAL STEEL THAT WILL BE IN CONTACT WITH NEW STRUCTURAL STEEL SHALL BE CLEANED AND PAINTED PRIOR TO ERECTION AS REQUIRED BY THE SPECIAL PROVISION, "CLEANING AND PAINTING CONTACT SURFACE AREAS OF EXISTING STEEL STRUCTURES".

ALL STRUCTURAL STEEL SHALL BE SHOP PAINTED WITH THE INORGANIC ZINC RICH PRIMER PER AASHTO M300, TYPE 1. COST INCLUDED WITH FURNISHING AND ERECTING STRUCTURAL STEEL.

THE DECK SURFACE SHALL HAVE ITS FINAL FINISH TINED ACCORDING TO ARTICLE 420.09(a)(1) OF THE STANDARD SPECIFICATIONS. COST INCLUDED WITH CONCRETE SUPERSTRUCTURES.

IF THE ANALYSIS SUBMITTED TO THE CONTRACTOR FOR THE JACKING/TEMPORARY SUPPORT SYSTEM TO BE USED SHOWS TEMPORARY STIFFENERS ARE REQUIRED TO PREVENT WEB CRIPPLING OR BUCKLING, THE STIFFENERS SHALL BE STEEL AND BOLTED TO THE WEB. IF STIFFENERS ARE NOT REQUIRED, THE HARDWOOD TIMBERS SHALL BE INSTALLED TIGHTLY BETWEEN THE TOP AND BOTTOM FLANGE TO PREVENT FLANGE ROTATION.

REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A 705 GR. 60.

REINFORCEMENT BARS DESIGNATED (E) SHALL BE EPOXY COATED.

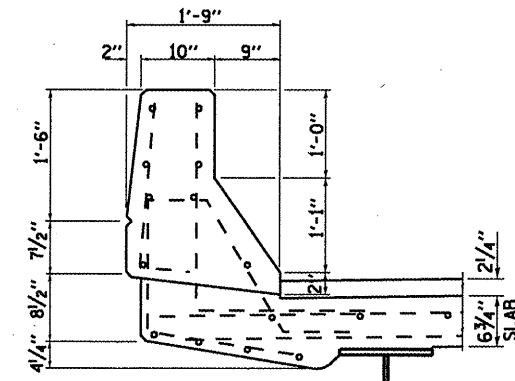
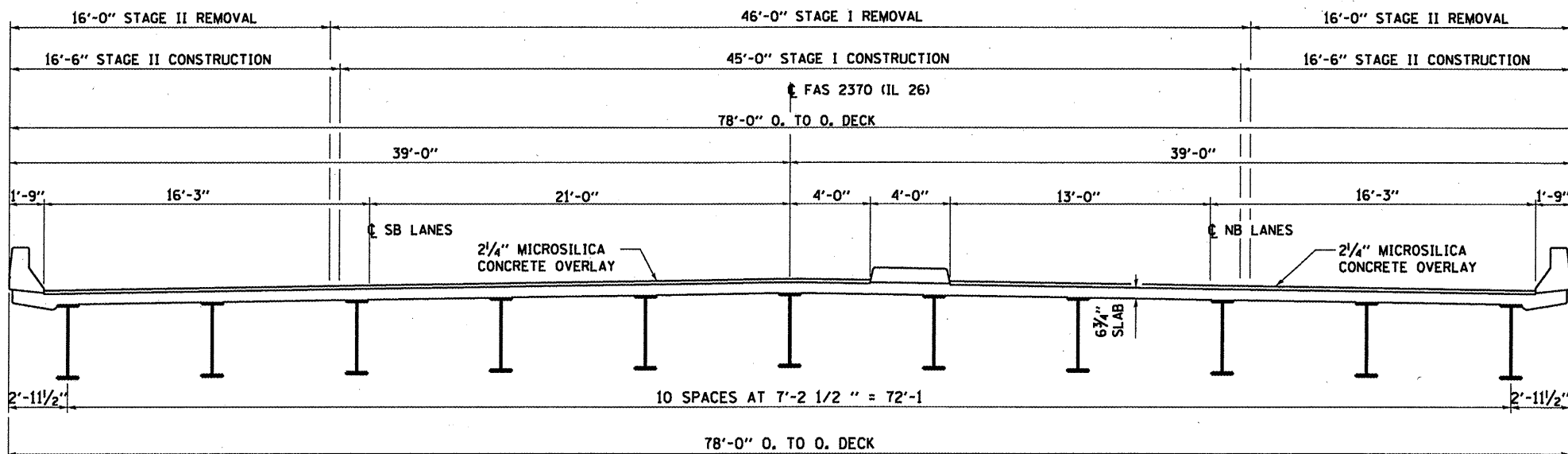
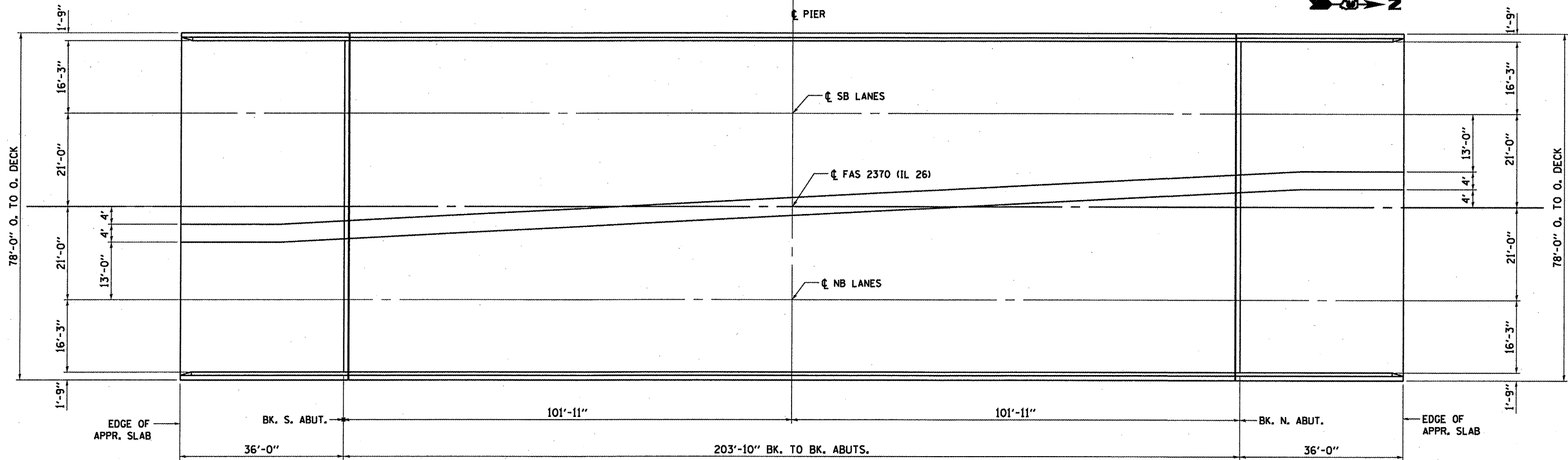
JOINT OPENING SHALL BE ADJUSTED ACCORDING TO ARTICLE 520.04 OF THE STANDARD SPECIFICATIONS WHEN THE DECK IS POURED AT AN AMBIENT TEMPERATURE OTHER THAN 50 DEGREES F.

NO FIELD WELDING IS PERMITTED EXCEPT AS SPECIFIED IN CONTRACT DOCUMENTS.

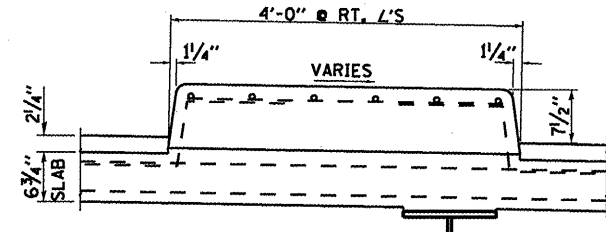
TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
DECK SLAB REPAIR (PARTIAL)	SQ YD	32		32
PROTECTIVE SHIELD	SQ YD	1075		1075
CONCRETE REMOVAL	CU YD	14.4		14.4
CONCRETE SUPERSTRUCTURE	CU YD	14.4		14.4
REINFORCEMENT BARS	POUNDS	3090		3090
EPOXY COATED BAR SPLICER	EACH	24		24
PREFORMED JOINT STRIP SEAL	FOOT	156		156
ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	22		22
JACK AND REMOVE EXISTING BEARINGS	EACH	22		22
FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	4010		4010
ANCHOR BOLTS 1" #	EACH		44	44
STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5")	SQ FT		124	124
CONCRETE SEALER	SQ FT	22,212		22,212

GENERAL PLAN AND ELEVATION
FAS 2370 (IL 26) SECTION (78-1HB-11)
PUTNAM COUNTY
STA. 40+00.00
S.N. 078-0010



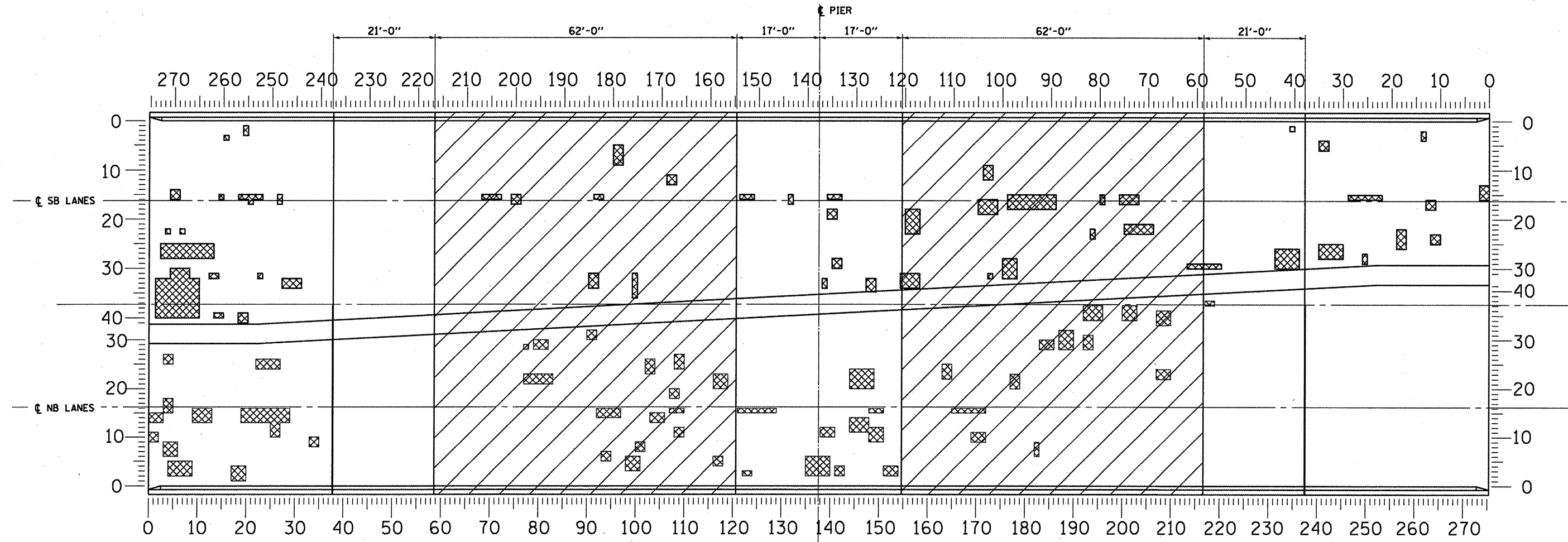
CURB SECTION



MEDIAN SECTION

SUPERSTRUCTURE
FAS 2370 (IL 26) SECTION (78-1HB-1)
PUTNAM COUNTY
STA. 40+00.00
S.N. 078-0010

FILE NAME *	USER NAME = woodshankr1	DESIGNED - RLW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUPERSTRUCTURE	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
ca:\pw_work\pwidot\woodshankr1\d0143184\	MAIN1-0366A27-details.dgn	DRAWN - RLW	REVISED -			2370	(78-1HB-1)	PUTNAM	18	8	
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	PLOT DATE = Dec 15, 2010 - 11:07:28 AM	DATE -	REVISED -			ILLINOIS FED. AID PROJECT CONTRACT NO. 66A27					



NOTES

AREAS OF DECK REPAIRS ARE ESTIMATED. THE ENGINEER SHALL SOUND THE ENTIRE DECK AREA AT TIME OF CONSTRUCTION AND SHOW ACTUAL LOCATIONS OF DECK REPAIRS ON "AS-BUILT" SET OF PLANS.

DECK SLAB REPAIR SURVEY WAS TAKEN ON 10/26/2010.

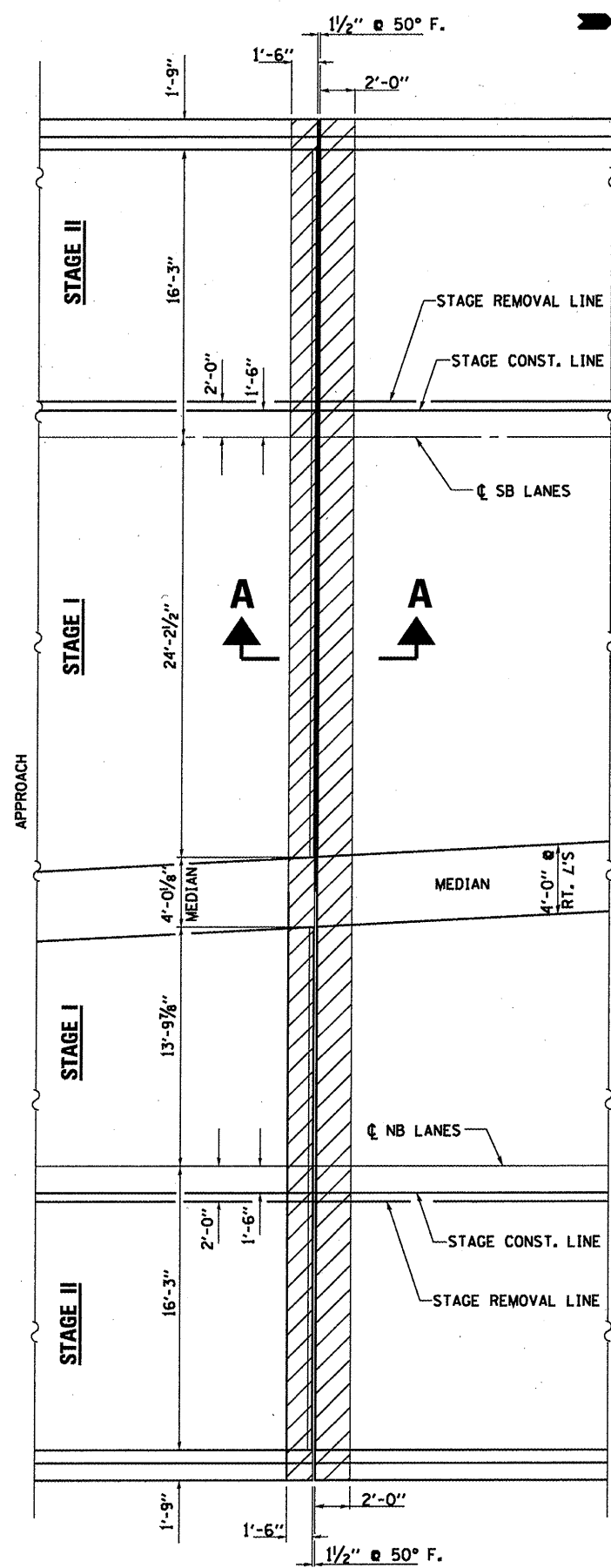
HATCHED AREA REPRESENTS "PROTECTIVE SHIELD" LIMITS.

BILL OF MATERIAL

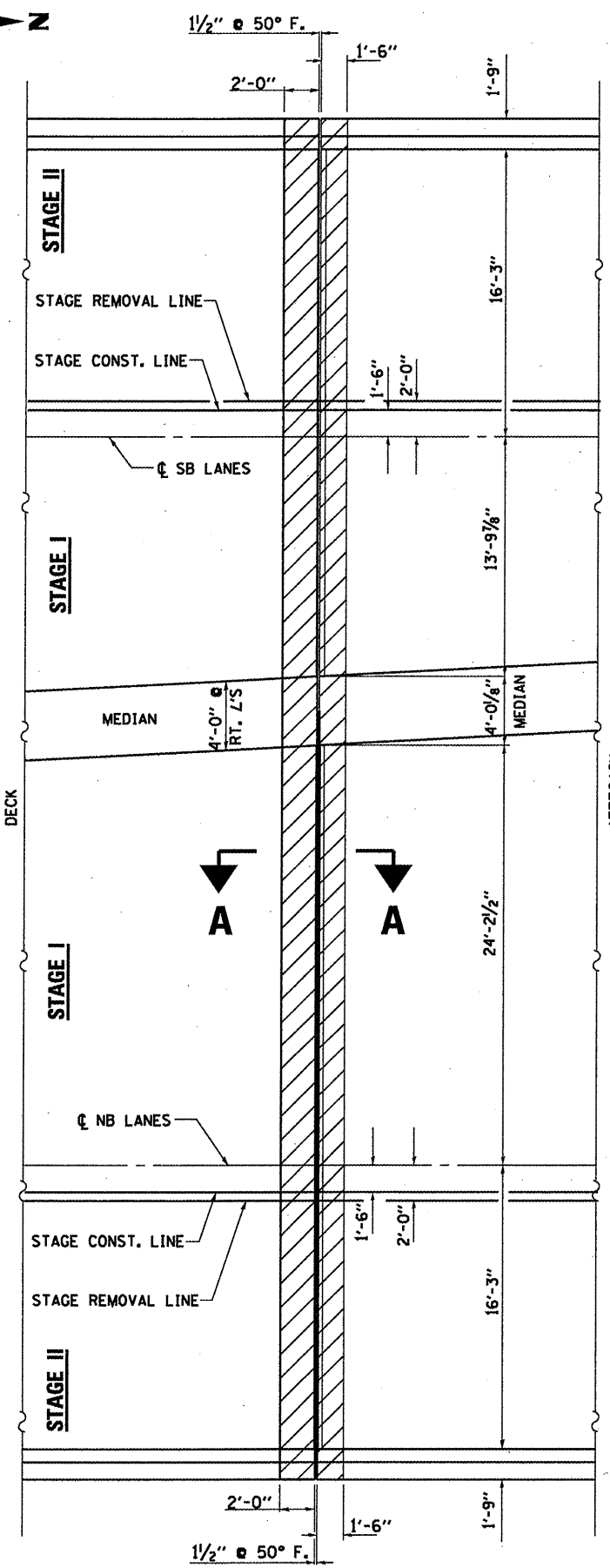
Item	Unit	Total
DECK SLAB REPAIR (PARTIAL)	SQ YD	93
PROTECTIVE SHIELD	SQ YD	1075

DECK SLAB REPAIR DETAILS
FAS 2370 (IL 26) SECTION (78-1HB-1)
PUTNAM COUNTY
STA. 40+00.00
S.N. 078-0010

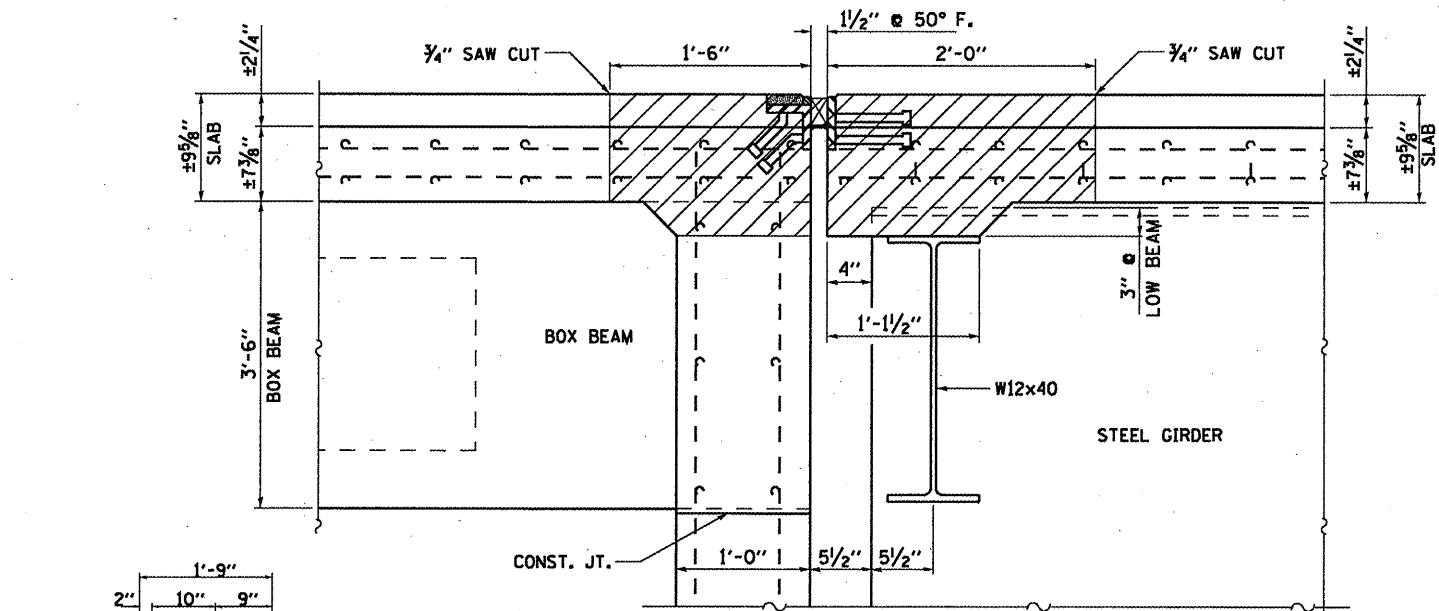
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c:\pwwork\pwwork\woodshankr1\d0143184\MAIN1-0366A27-details.dgn	DRAWN - RLW	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION	SCALE: SHEET NO. 3 OF 12 SHEETS STA. TO STA.	CONTRACT NO. 66A27		ILLINOIS FED. AID PROJECT		
PLOT SCALE = 100.0000' / IN.	DATE -	REVISED -	REVISED -							
PLOT DATE = Dec 15, 2010 - 11:07:41 AM										



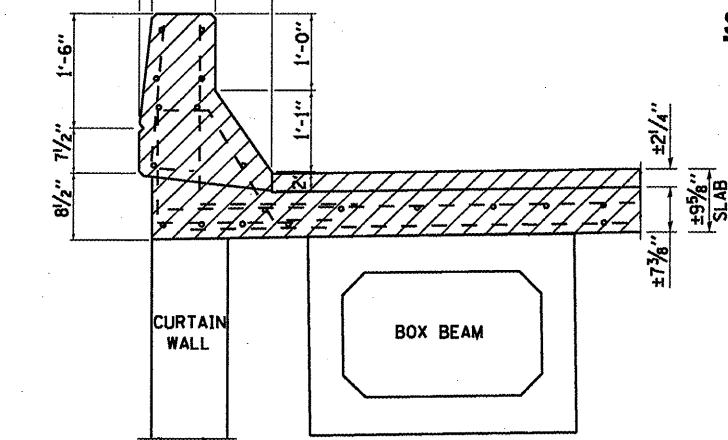
SOUTH ABUTMENT



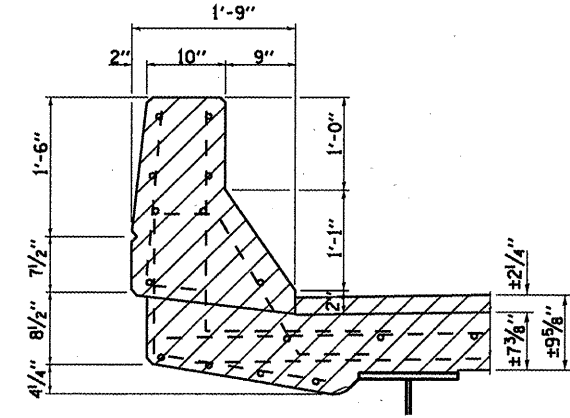
NORTH ABUTMENT



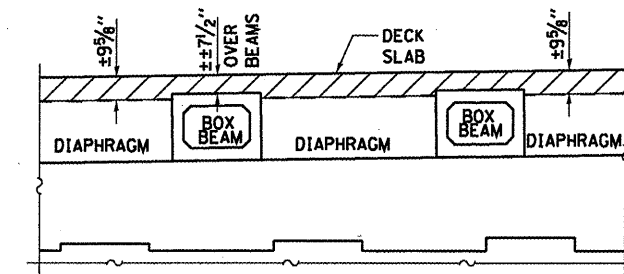
SECTION A-A



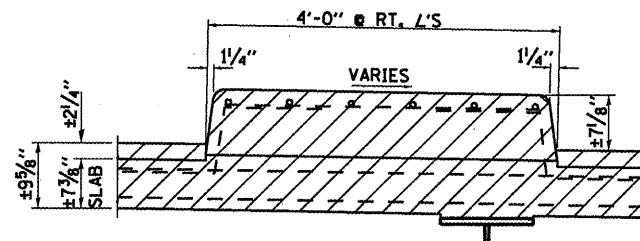
SECTION AT PARAPET (APPROACH)



SECTION AT PARAPET (DECK)



PARTIAL SECTION ACROSS DECK



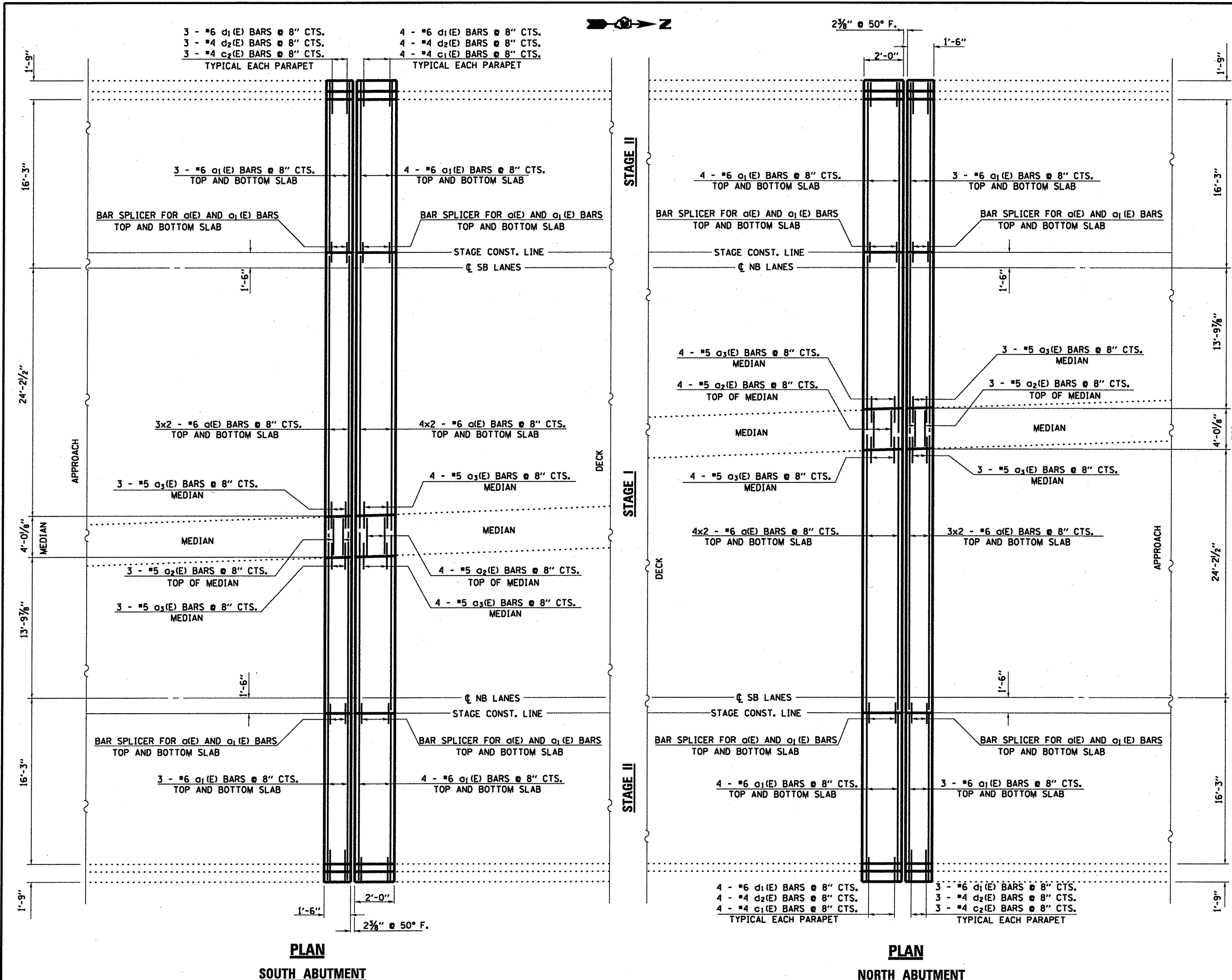
SECTION AT MEDIAN

NOTES

- HATCHED AREA REPRESENTS CONCRETE REMOVAL LIMITS.
- 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 BOX BEAM.

EXPANSION JOINT DETAILS - REMOVAL
FAS 2370 (IL 26) SECTION (78-1HB-1)
PUTNAM COUNTY
STA. 40+00.00
S.N. 078-0010

FILE NAME =	USER NAME = woodshankr1	DESIGNED - RLW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXPANSION JOINT DETAILS - REMOVAL	F.A.S. RTE. 2370	SECTION (78-1HB-1)	COUNTY PUTNAM	TOTAL SHEETS 18	SHEET NO. 10		
MAIN1-0366A27-details.dgn	DRAWN - RLW	CHECKED -	REVISED -			SCALE: _____	SHEET NO. 4 OF 12 SHEETS	STA. _____ TO STA. _____	CONTRACT NO. 66A27			
PLOT SCALE = 100.0000 / IN.	DATE -	REVISD -	REVISD -			ILLINOIS FED. AID PROJECT						
PLOT DATE = Dec 15, 2010 - 11:07:56 AM	DATE -	REVISD -	REVISD -									



Min. Bar Lap
#6 = 3'-10"

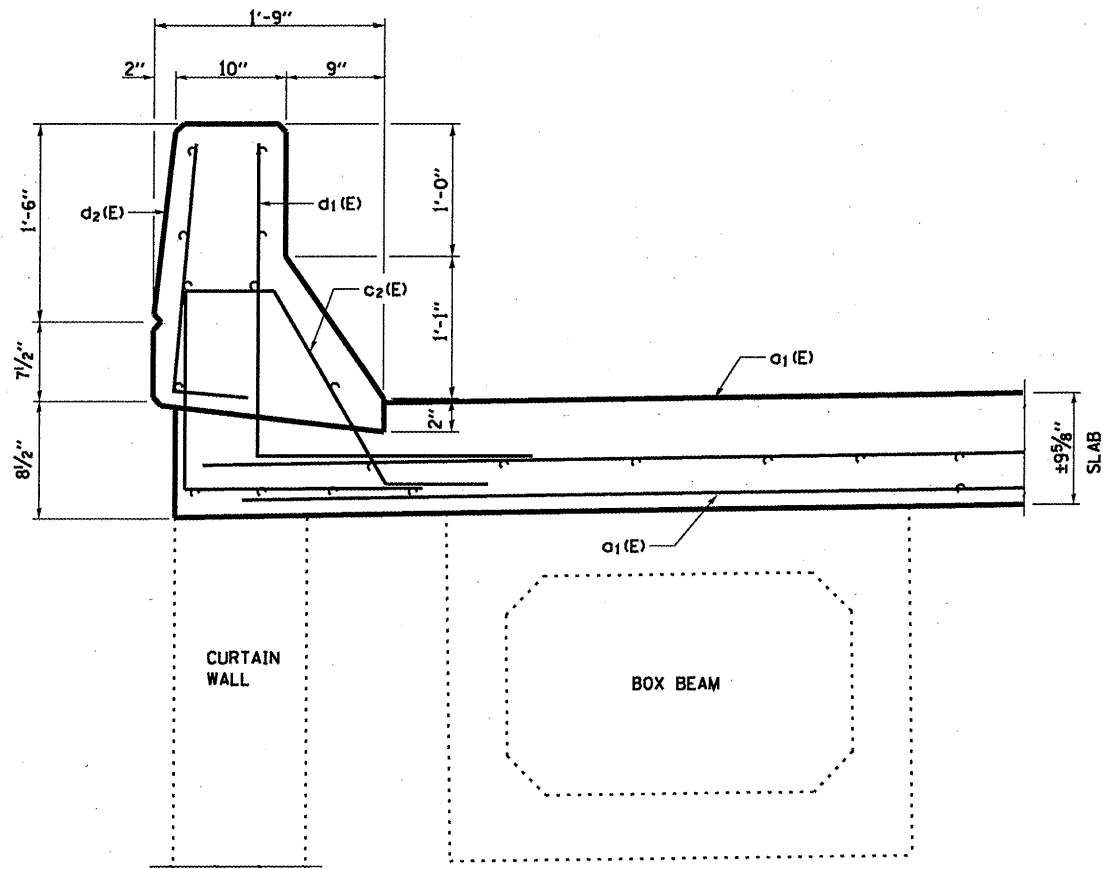
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a ₁ (E)	56	6	24'-4"	—
a ₂ (E)	14	5	3'-7"	—
a ₃ (E)	28	5	3'-3"	—
c ₁ (E)	16	4	6'-6"	⌒
c ₂ (E)	12	4	7'-6"	⌒
d ₁ (E)	28	6	5'-6"	—
d ₂ (E)	28	4	2'-6"	—

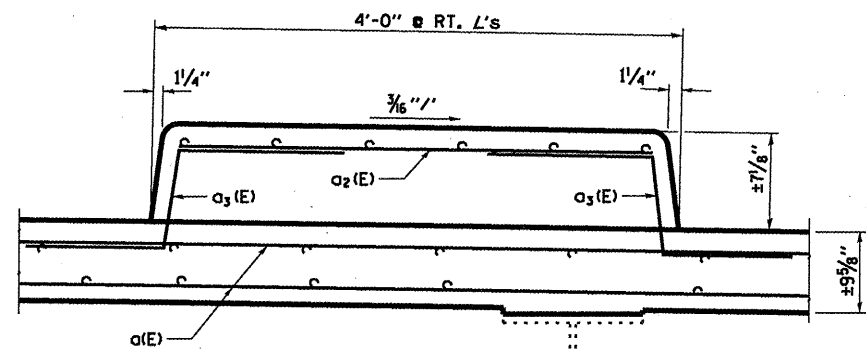
Concrete Removal	Cu. Yd.	17.4
Concrete Superstructure	Cu. Yd.	17.4
Reinforcement Bars, Epoxy Coated	Lbs.	3970

Bars indicated thus 1 x 2-#5 etc. indicates 1 line of bars with 2 lengths per line.

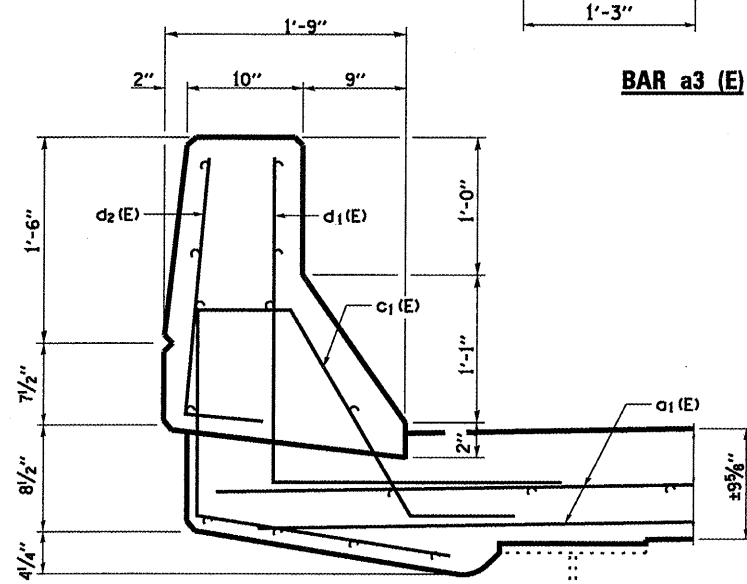
EXPANSION JOINT DETAILS - REPLACEMENT
 FAS 2370 (IL 26) SECTION (78-1HB-1)
 PUTNAM COUNTY
 STA. 40+00.00
 S.N. 078-0010



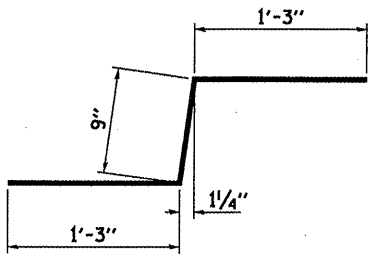
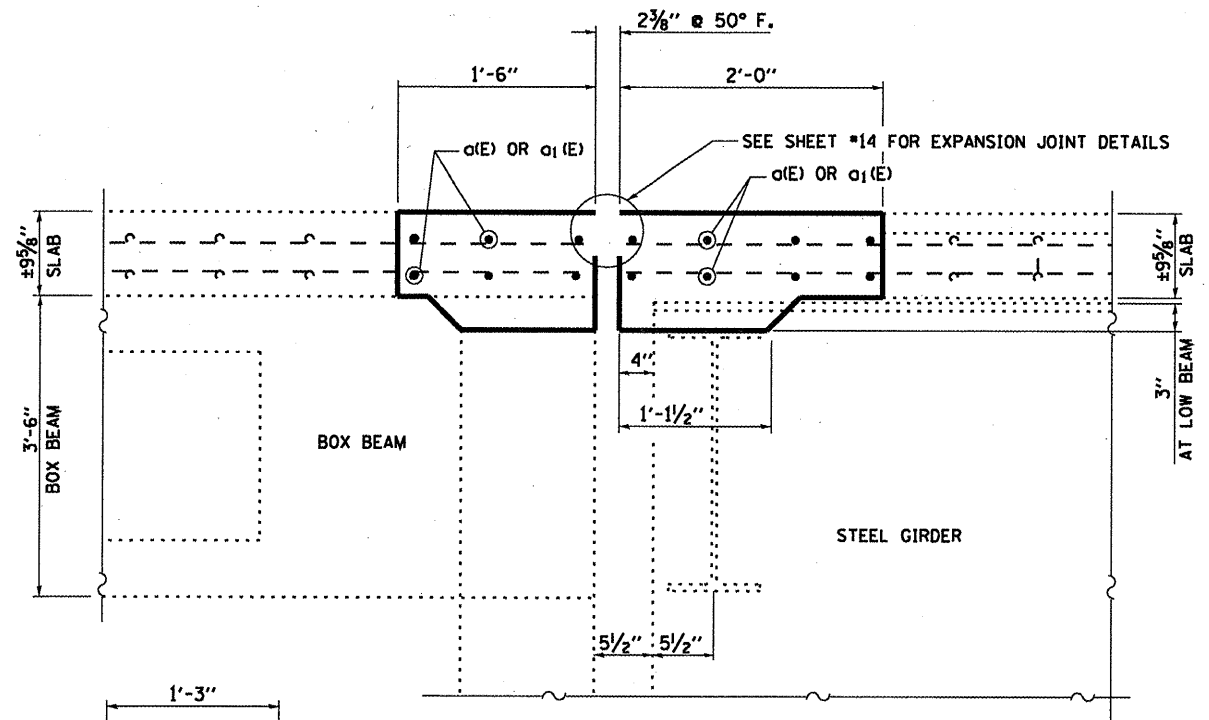
**SECTION AT PARAPET
(APPROACH)**



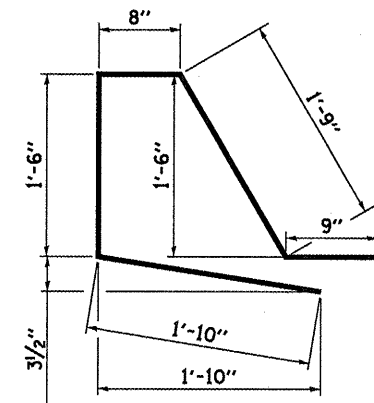
SECTION AT MEDIAN



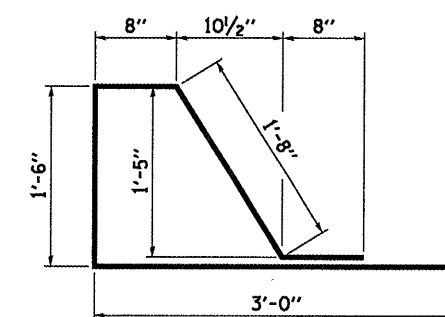
**SECTION AT PARAPET
(DECK)**



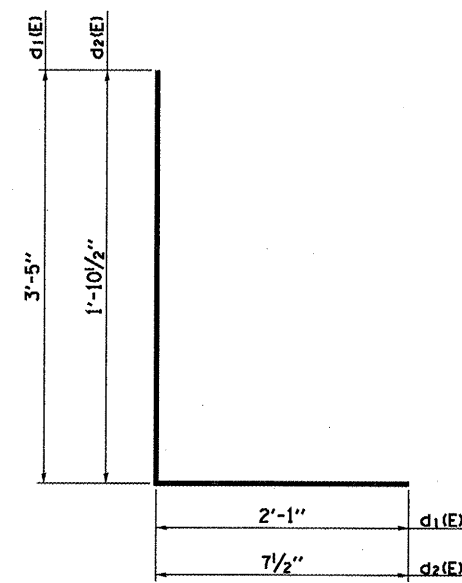
BAR a3 (E)



BAR c1 (E)



BAR c2 (E)



BARS d1 (E) & d2 (E)

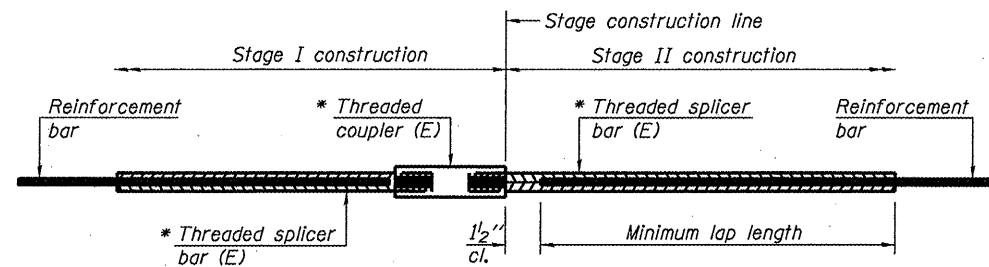
EXPANSION JOINT DETAILS
FAS 2370 (IL 26) SECTION (78-1HB-1)
PUTNAM COUNTY
STA. 40+00.00
S.N. 078-0010

FILE NAME =	USER NAME = woodshankr1	DESIGNED - RLW	REVISED -
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PLOT DATE = Dec 15, 2010 - 11:00:26 AM		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXPANSION JOINT DETAILS
 SCALE: _____ SHEET NO. 6 OF 12 SHEETS STA. _____ TO STA. _____

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2370	(78-1HB-1)	PUTNAM	18	12
CONTRACT NO. 66A27				
ILLINOIS FED. AID PROJECT				



STANDARD BAR SPLICER ASSEMBLY

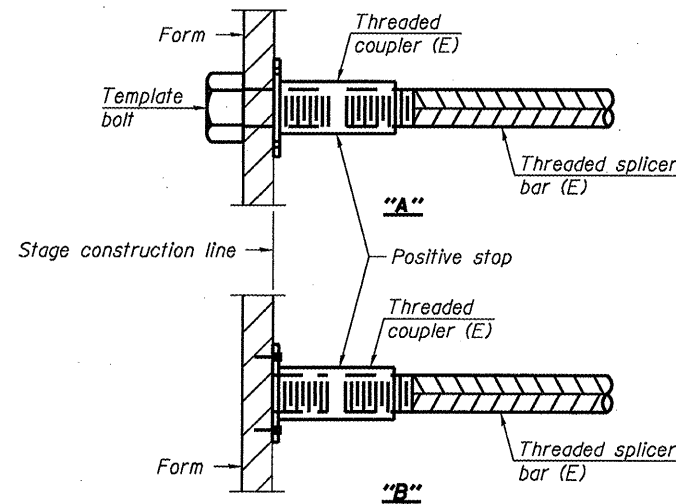
Minimum Lap Lengths					
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-3"
5	1'-9"	2'-5"	2'-7"	2'-11"	2'-10"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-4"
7	2'-9"	3'-10"	4'-2"	4'-8"	4'-6"
8	3'-8"	5'-1"	5'-5"	6'-2"	5'-10"
9	4'-7"	6'-5"	6'-10"	7'-9"	7'-5"

- 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, Top bar lap, Class B

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

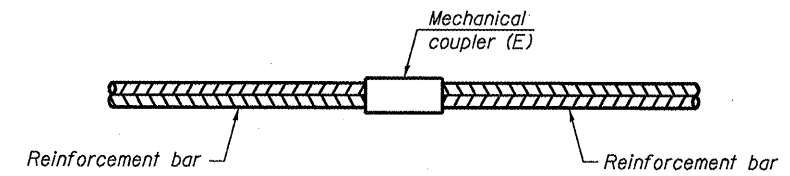
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length
N. ABUT. - DECK	*6	16	3
N. ABUT. - APPR.	*6	12	3
S. ABUT. - DECK	*6	16	3
S. ABUT. APPR.	*6	12	3



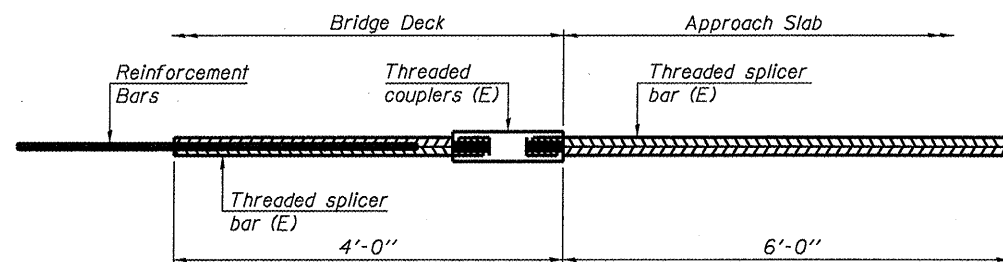
INSTALLATION AND SETTING METHODS

"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.



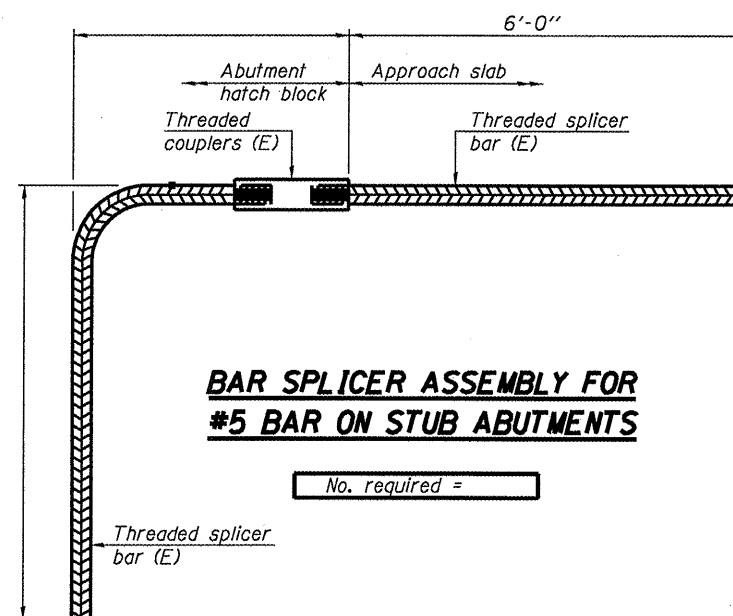
STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



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

No. 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 special provision for Mechanical Splicers.
 See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BSD-1 7-1-10

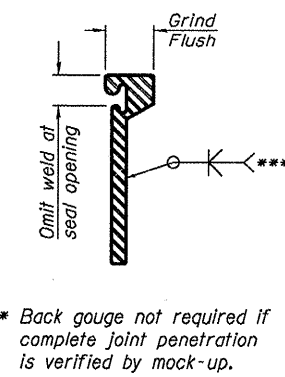
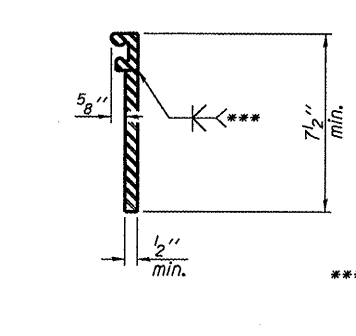
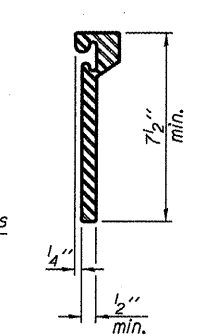
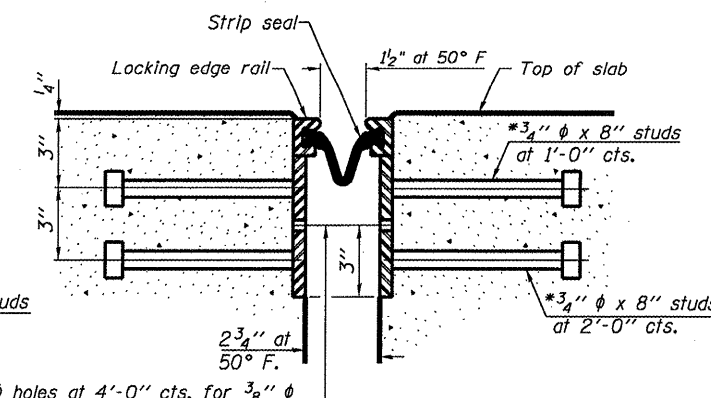
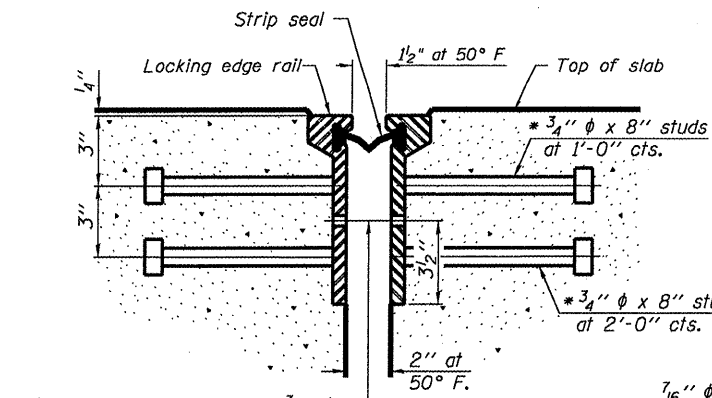
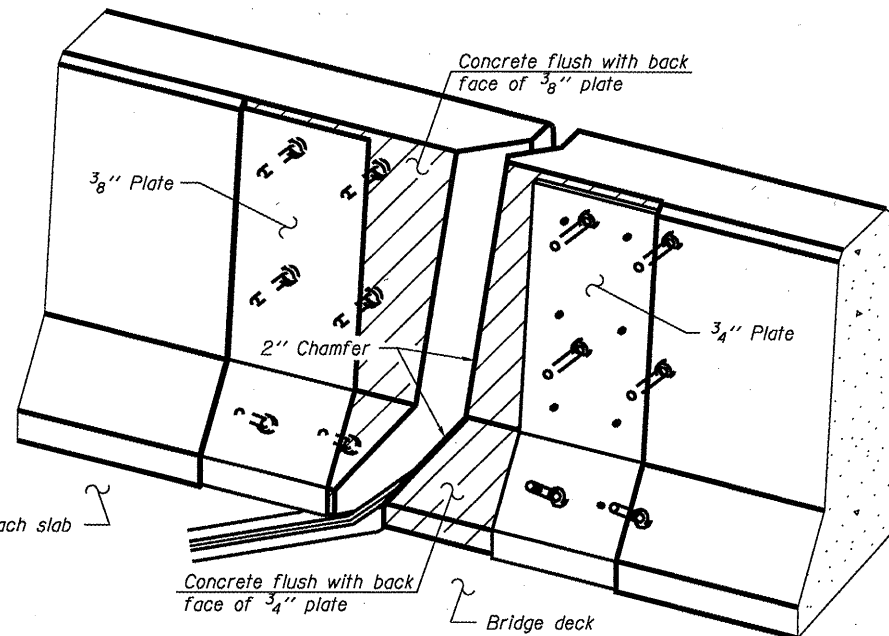
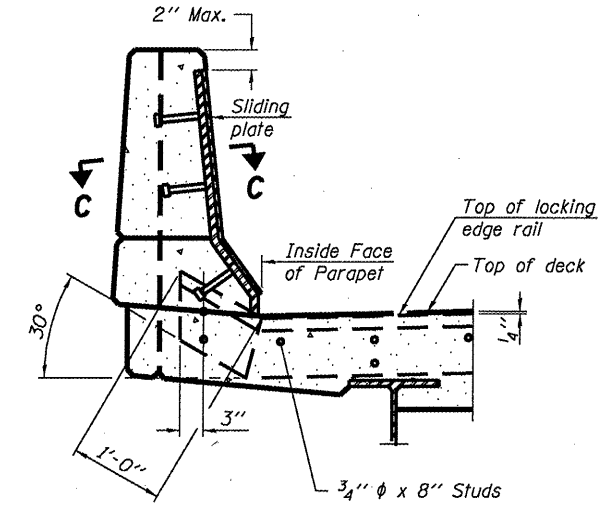
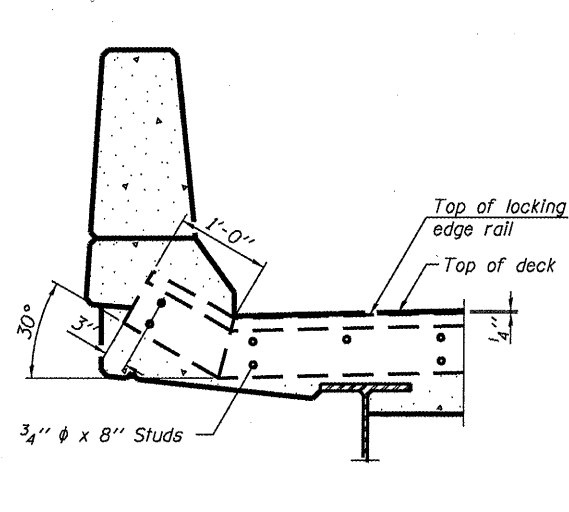
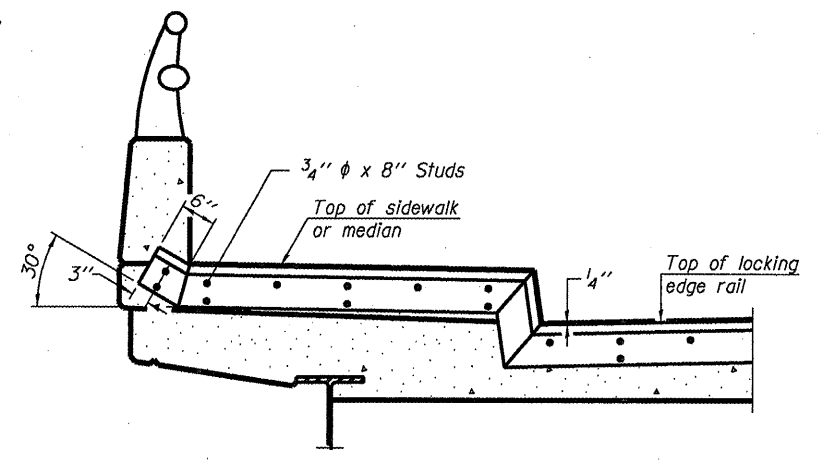
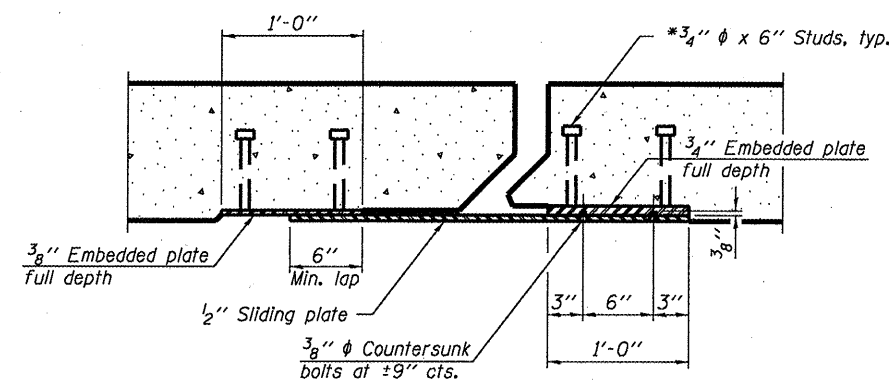
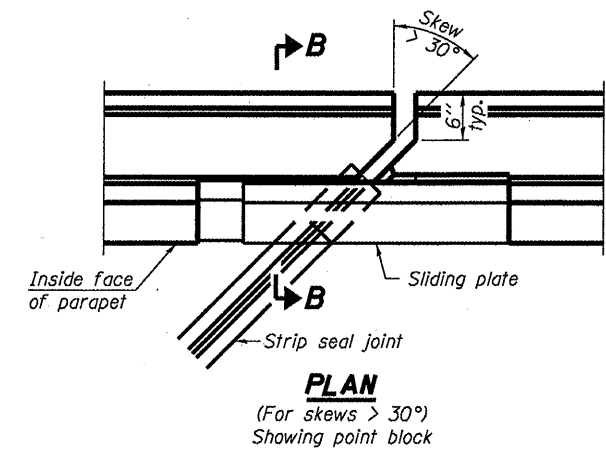
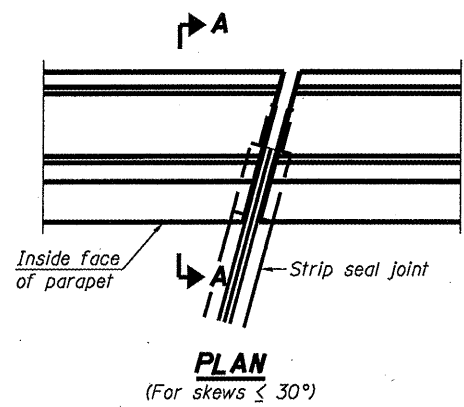
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BAR SPLICER AND MECHANICAL SPLICER DETAILS

SCALE: SHEET NO. 7 OF 12 SHEETS STA. TO STA.

F.A.S. RTE. 2370	SECTION (78-1HB-1)	COUNTY PUTNAM	TOTAL SHEETS 18	SHEET NO. 13
CONTRACT NO. 66A27				
ILLINOIS FED. AID PROJECT				



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.

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

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 at stage lines shall be 3/16", sealed with a suitable sealant.
Parapet plates and anchorage studs for skews $> 30^\circ$ included in the cost of Prefabricated Joint Strip Seal.

BILL OF MATERIAL

Item	Unit	Total
Prefabricated Joint Strip Seal	Foot	156

EXPANSION JOINT DETAILS

FAS 2370 (IL 26) SECTION (78-1HB-1)
PUTNAM COUNTY
STA. 40+00.00
S.N. 078-0010

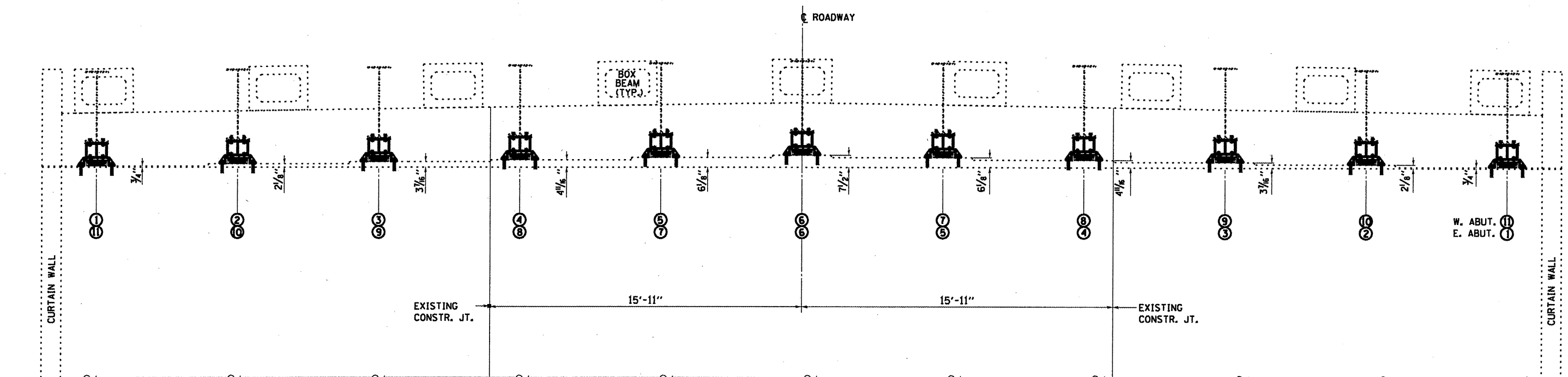
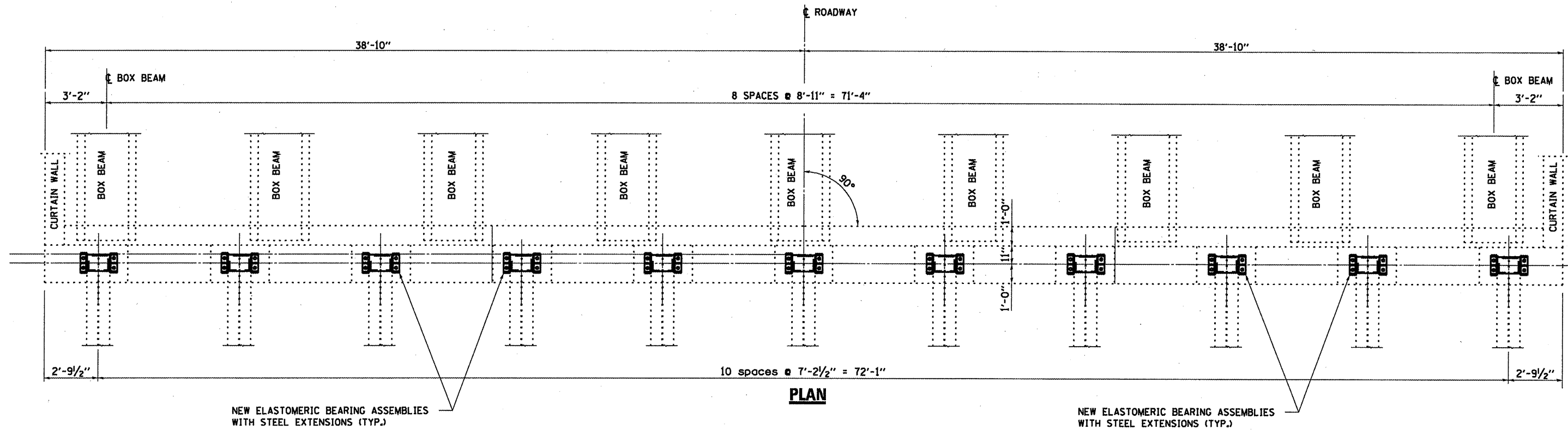
EJ-SSJ 7-1-10

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

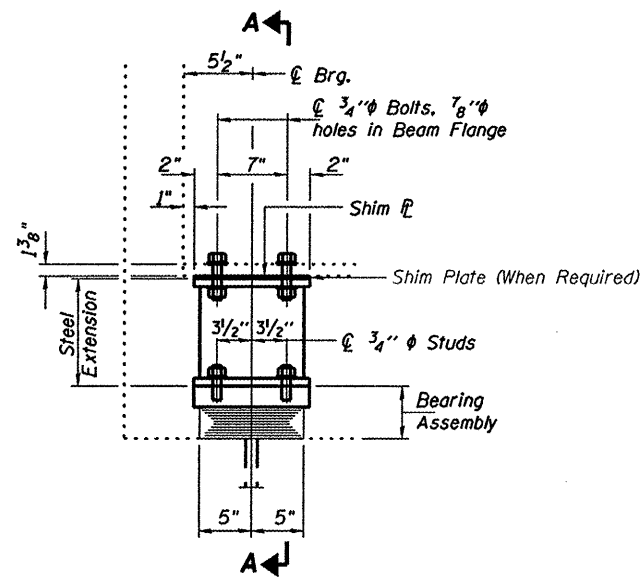
EXPANSION JOINT DETAILS

FILE NAME =	USER NAME = woodshankr1	DESIGNED - RLW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXPANSION JOINT DETAILS	F.A.S. RTE. 2370	SECTION (78-1HB-1)	COUNTY PUTNAM	TOTAL SHEETS 18	SHEET NO. 14
CONTRACT NO. 66A27	SCALE: SHEET NO. 8 OF 12 SHEETS	DATE	REVISED			STA. TO STA.	ILLINOIS FED. AID PROJECT			

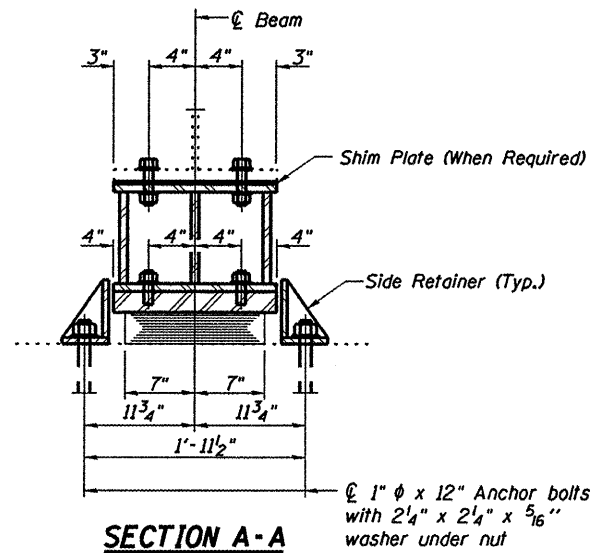


BEARING REPLACEMENT DETAILS
 FAS 2370 (IL 26) SECTION (78-1HB-1)
 PUTNAM COUNTY
 STA. 40+00.00
 S.N. 078-0010

FILE NAME =	USER NAME = woodshankr1	DESIGNED - RLW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BEARING REPLACEMENT DETAILS	F.A.S. RTE. 2370	SECTION (78-1HB-1)	COUNTY PUTNAM	TOTAL SHEETS 18	SHEET NO. 15	
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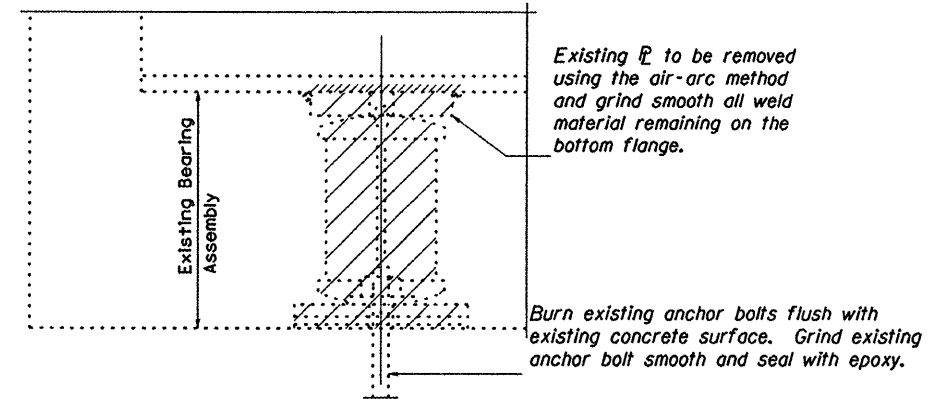
ELEVATION AT ABUTMENT



SECTION A-A

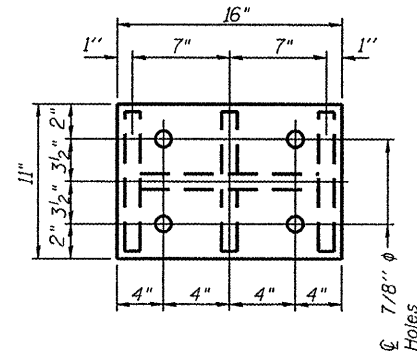
BEAM REACTIONS

R _D	(K)	46.7
R _L	(K)	41.8
Imp.	(K)	9.3
R (Total)	(K)	97.8



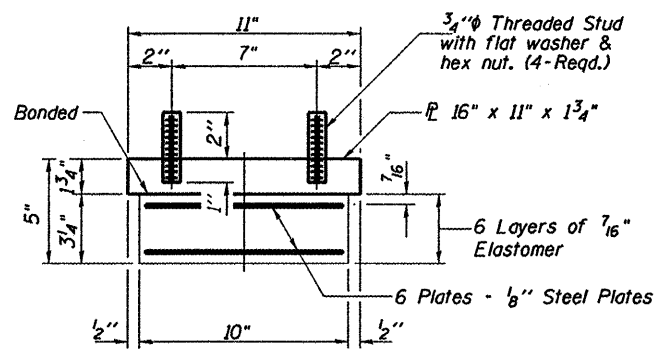
EXISTING BEARING REMOVAL DETAIL

Cost included with Jack and Remove Existing Bearings.



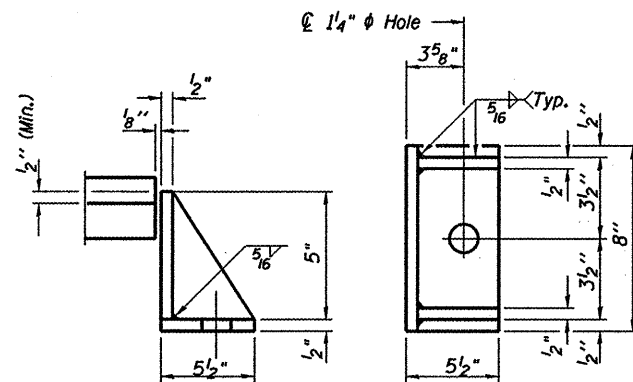
PLAN TOP AND BOTTOM PLATE

TYPE I ELASTOMERIC EXP. BRG.



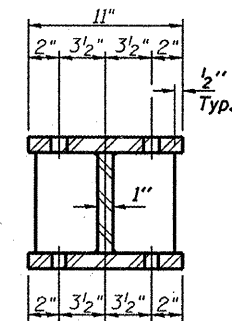
BEARING ASSEMBLY

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

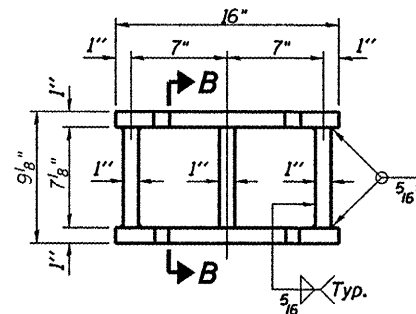


Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

SIDE RETAINER

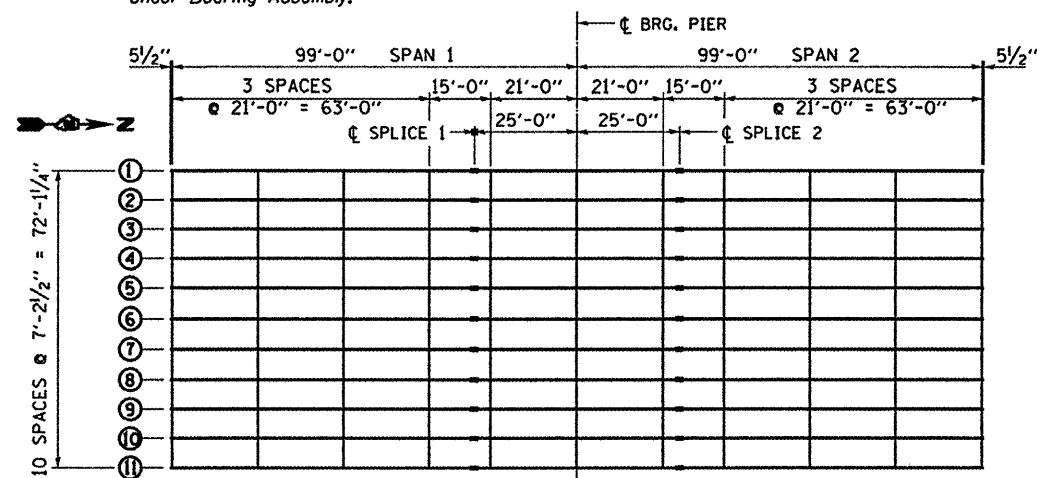


SECTION B-B



STEEL EXTENSION DETAIL

Notes:
 Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.
 New steel extensions, shim plates and connection bolts are included with Furnishing and Erecting Structural Steel.
 Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions.
 Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (F_y=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
 Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.
 Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
 Side retainers shall be included in the cost of Elastomeric Bearing Assembly, Type I.
 The structural steel plates of the bearing assembly shall conform to the requirements of AASHTO M 270 grade 60.
 Two adjusting shims shall be provided for each bearing in addition to all other plates or shims as shown on bearing details.
 All (embedded and separate) bearing plates, side retainers, anchor bolts, nuts and washers shall be galvanized according to AASHTO M111 or M232 as applicable.
 H.S. bolts in bearing assembly shall be galvanized according to AASHTO M298 Class 50.



FRAMING PLAN

NORTH ABUTMENT	
BEAM NO.	NO. 1/8" SHIMS
1	
2	1/2"
3	3/8"
4	3/8"
5	1/2"
6	3/8"
7	1/4"
8	1/2"
9	3/4"
10	3/4"
11	3/8"

SOUTH ABUTMENT	
BEAM NO.	NO. 1/8" SHIMS
1	
2	1/4"
3	1/2"
4	3/8"
5	1/2"
6	3/4"
7	3/4"
8	1"
9	3/8"
10	1/2"
11	

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly, Type I	Each	22
Jack and Remove Existing Bearings	Each	22
Furnishing and Erecting Structural Steel	Pound	4010
Anchor Bolts 1"φ	Each	44

BEARING REPLACEMENT DETAILS
 FAS 2370 (IL 26) SECTION (78-1HB-1)
 PUTNAM COUNTY
 STA. 40+00.00
 S.N. 078-0010

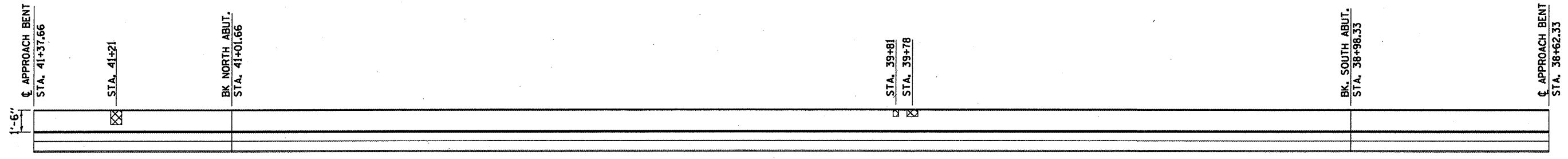
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

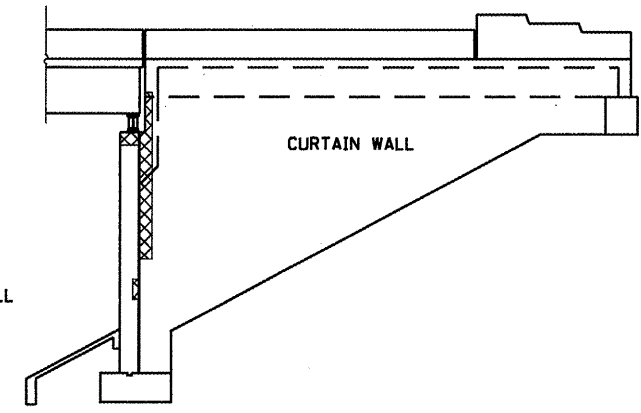
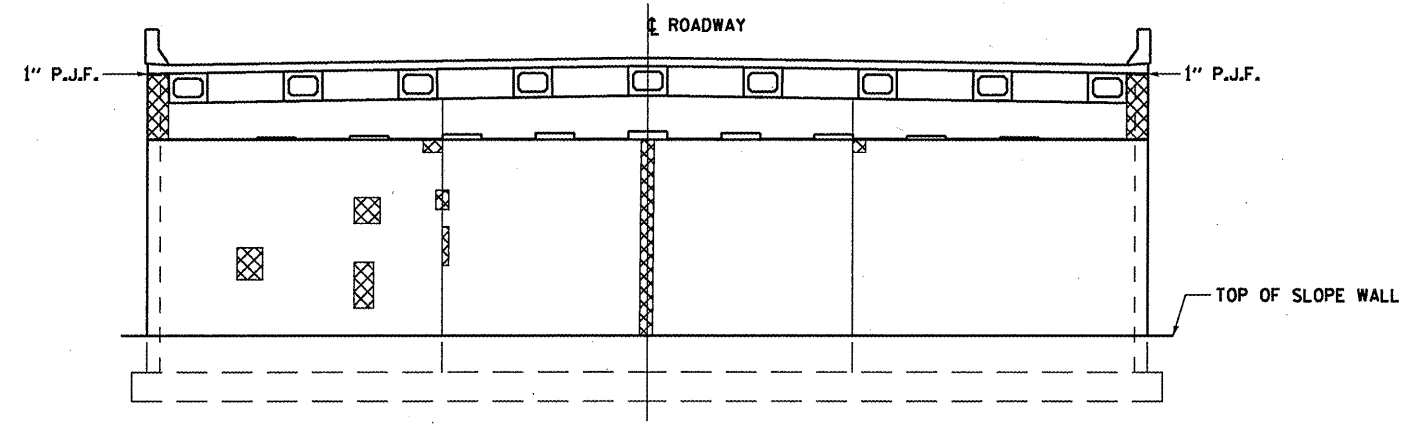
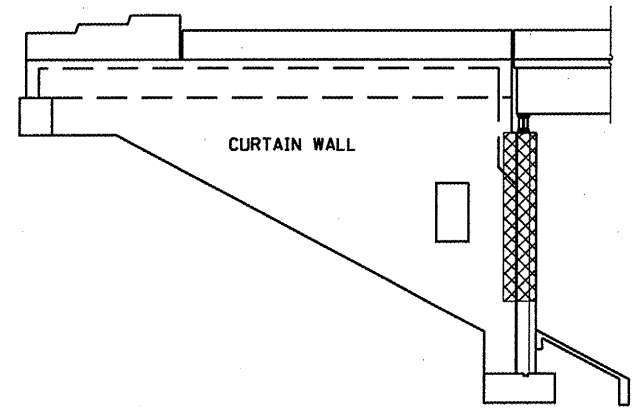
BEARING REPLACEMENT DETAILS

SCALE: SHEET NO. 10 OF 12 SHEETS STA. TO STA.

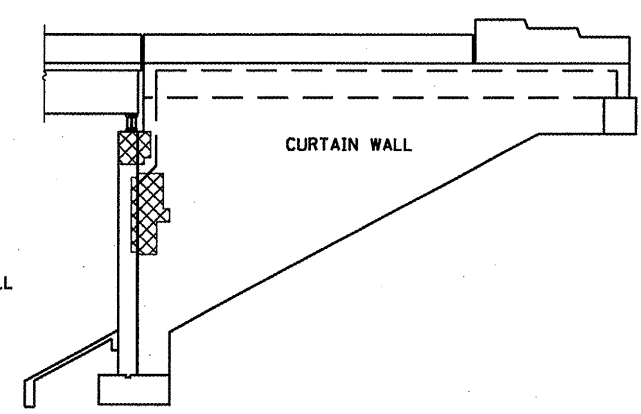
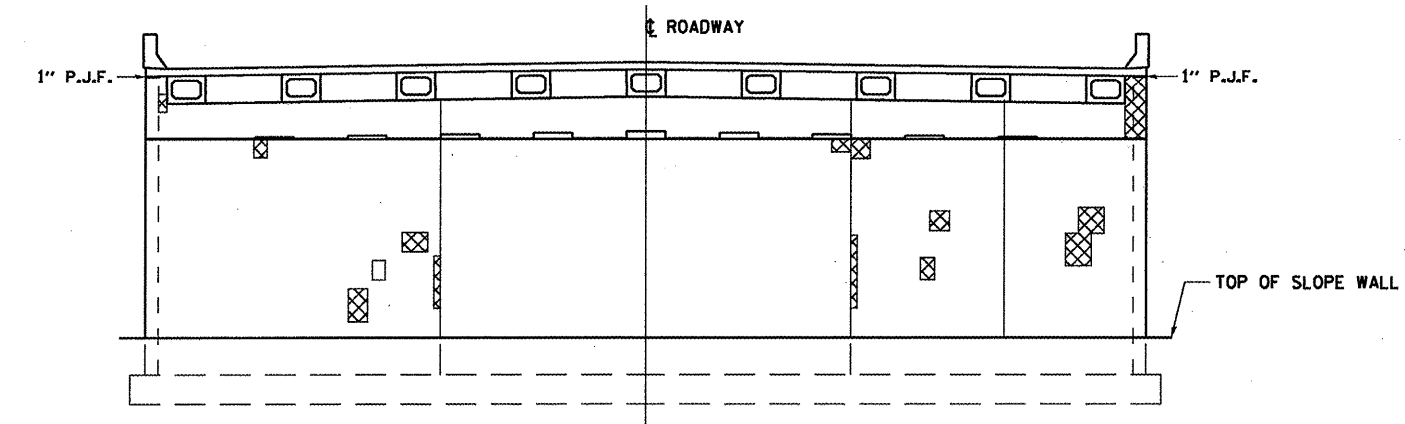
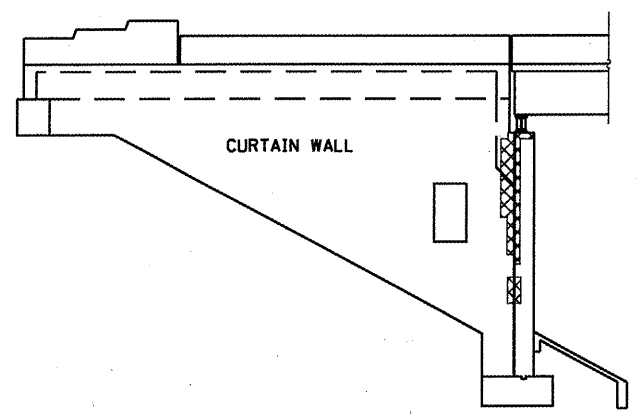
F.A.S. RTE. 2370	SECTION (78-1HB-1)	COUNTY PUTNAM	TOTAL SHEETS 18	SHEET NO. 16
CONTRACT NO. 66A27			ILLINOIS FED. AID PROJECT	



**OUTSIDE FACE
SOUTHBOUND PARAPET**



**NORTH ABUTMENT
LOOKING NORTH**



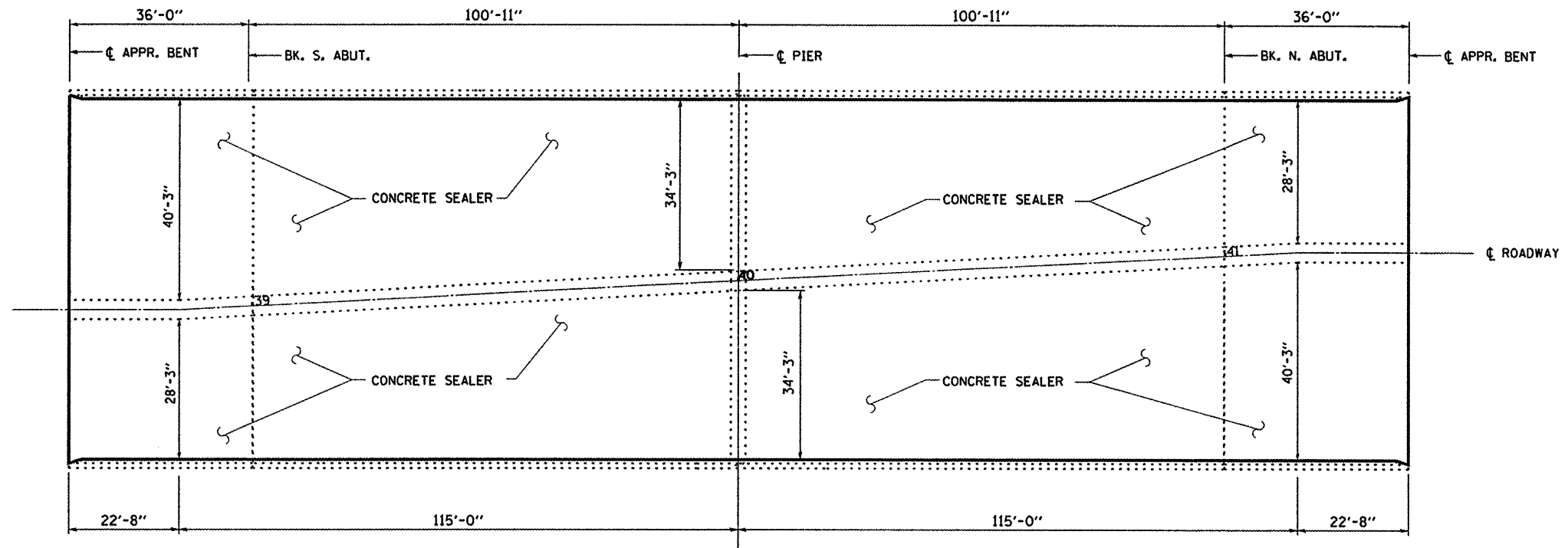
**SOUTH ABUTMENT
LOOKING SOUTH**

THE ENGINEER SHALL SOUND THE DESIGNATED AREAS FOR EXACT LOCATIONS AND REPAIR AREAS PRIOR TO BEGINNING REMOVAL OPERATIONS.

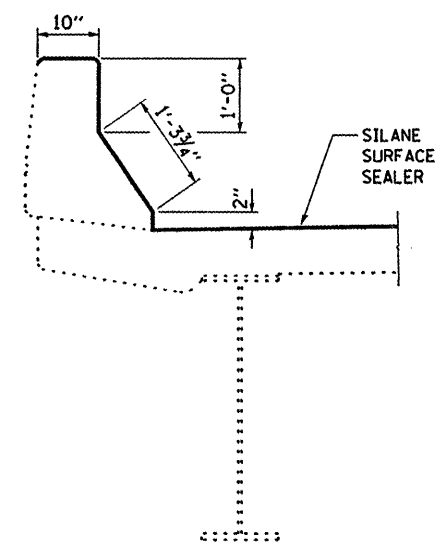
BILL OF MATERIAL

Item	Unit	Total
STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5")	SQ FT	152

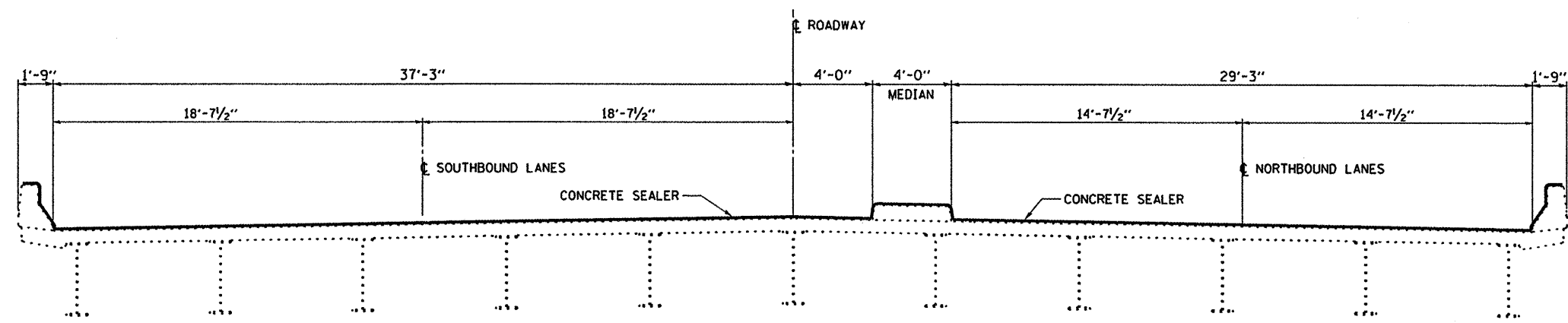
**STRUCTURAL REPAIR OF CONCRETE
FAS 2370 (IL 26) SECTION (78-1HB-11)
PUTNAM COUNTY
STA. 40+00.00
S.N. 078-0010**



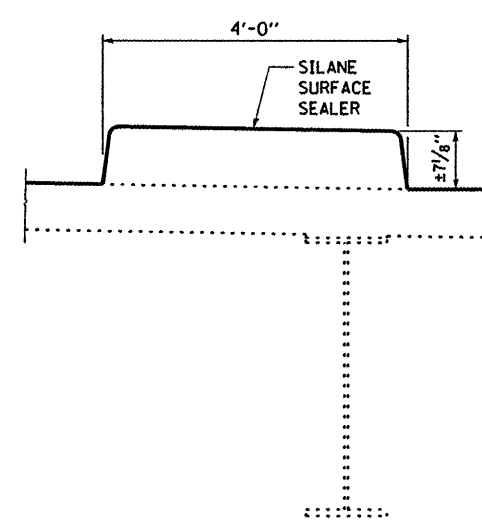
PLAN



SECTION AT PARAPET



CROSS SECTION



SECTION AT MEDIAN

NOTES

Concrete sealer shall be applied according to the manufacturer's recommendations to inside face of the parapets, vertical and horizontal surfaces of the median and the entire deck area as shown including approach spans.

Existing pavement markings shall be temporarily covered prior to the application of the deck surface treatment to prevent the material from being applied to the markings. The temporary covering shall be removed after application of the deck surface treatment and prior to opening to traffic. Cost included with concrete sealer.

BILL OF MATERIAL

Item	Unit	Total
CONCRETE SEALER	50 FT	22.212

CONCRETE SEALER DETAILS
FAS 2370 (IL 26) SECTION (78-1HB-1)
PUTNAM COUNTY
STA. 40+00.00
S.N. 078-0010

FILE NAME *	USER NAME = woodshankr1	DESIGNED - RLW	REVISED -
c:\pwork\pedit\woodshankr1\d0257413\366A27-details.dgn		DRAWN - RLW	REVISED -
	PLOT SCALE = 100.0000' / IN.	CHECKED -	REVISED -
	PLOT DATE = Feb 04, 2011 - 11:34:22 AM	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONCRETE SEALER DETAILS
 SCALE: SHEET NO. 12 OF 12 SHEETS STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2370	(78-1HB-1)	PUTNAM	18	18
CONTRACT NO. 66A27				
ILLINOIS FED. AID PROJECT				