

INDEX OF SHEETS 03-09-12 LETTING ITEM 034

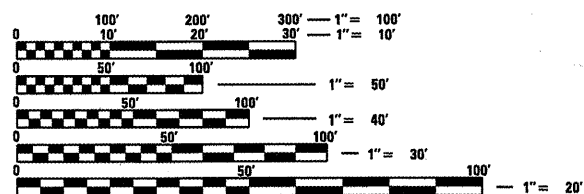
1. COVER SHEET
2. GENERAL NOTES
3. SUMMARY OF QUANTITIES
4. TYPICAL SECTIONS
- 5-7. TRAFFIC CONTROL DETAILS
8. TYPICAL PAVEMENT MARKING DETAILS
- 9-16. STRUCTURE DETAILS

STANDARDS

- | | |
|-----------|---|
| 000001-06 | STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS |
| 001001-02 | AREAS OF REINFORCEMENT BARS |
| 001006 | DECIMAL OF AN INCH AND OF A FOOT |
| 635011-02 | REFLECTOR MARKER AND MOUNTING DETAILS |
| 665001-02 | WOVEN WIRE FENCE |
| 701101-02 | OFF-ROAD OPERATIONS MULTILANE, 15' (4.5 m) TO 24' (600 mm) FROM PAVEMENT EDGE |
| 701426-04 | LANE CLOSURE, MULTILANE INTERMITTENT OR MOVING OPERATION, FOR SPEEDS ≥ 45 MPH |
| 701901-02 | TRAFFIC CONTROL DEVICES |
| 704001-07 | TEMPORARY CONCRETE BARRIER |

PROJECT LOCATION

SN 053-0128 SB & SN 053-0129 NB
 CARRYING FAI 55 (I-55)
 OVER THE VERMILION RIVER
 1.5 MI. NORTH OF IL ROUTE 116



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 3 NO. (815) 434-6131
 PROJECT ENGINEER: JOE KANNEL P.E.
 UNIT CHIEF: RON WOODSHANK
 TOWNSHIP: PONTIAC
 CONTRACT NO. 66B48

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

**PROPOSED
 HIGHWAY PLANS**

FAI ROUTE 55 (I-55)
 SECTION (53-5B-1)I-2

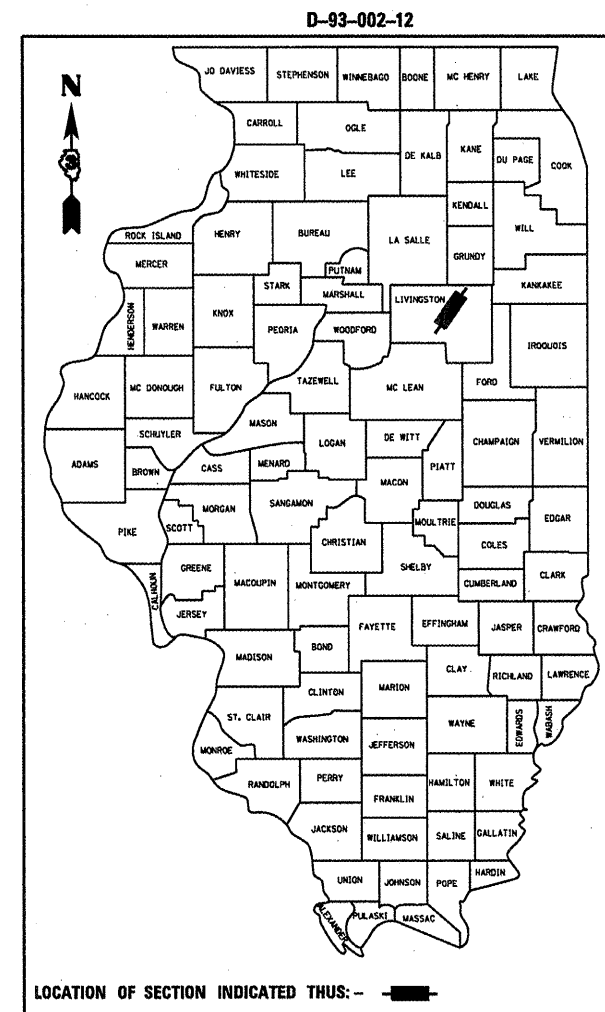
BRIDGE REPAIR
 LIVINGSTON COUNTY

C-93-129-11



POINT LOCATION

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(53-5B-1)I-2	LIVINGSTON	16	1
ILLINOIS			CONTRACT NO. 66B48	



LOCATION OF SECTION INDICATED THUS: -

INTERSTATE - RURAL

FAI RTE. 55 (I-55)

2009

ADT	18800
P.V.	73.67%
S.U.	6.12%
M.U.	20.21%

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

SUBMITTED 12/28 20 11
Eric S. Therkelsen
 DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
Feb 3 20 12
John D. Baranzelli P.E.
 acting ENGINEER OF DESIGN AND ENVIRONMENT
Feb 3 20 12
William B. Frey Jr.
 acting 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.

ABANDONED UNDERGROUND UTILITIES THAT CONFLICT WITH CONSTRUCTION SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT OF WAY ACCORDING TO ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF THE RELATED CONSTRUCTION ITEMS.

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.

REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A 706 GR 60. SEE SPECIAL PROVISIONS.

REINFORCEMENT BARS DESIGNATED (E) SHALL BE EPOXY COATED.

PRIOR TO POURING THE NEW CONCRETE DECK, ALL HEAVY OR LOOSE RUST, LOOSE MILL SCALE, AND OTHER LOOSE OR POTENTIALLY DETRIMENTAL FOREIGN MATERIAL SHALL BE REMOVED FROM THE SURFACES IN CONTACT WITH CONCRETE. TIGHTLY ADHERED PAINT MAY REMAIN UNLESS OTHERWISE NOTED. REMOVAL SHALL BE ACCOMPLISHED BY METHODS THAT WILL NOT DAMAGE THE STEEL AND THE COST WILL BE INCLUDED IN THE PAY ITEM COVERING REMOVAL OF THE EXISTING CONCRETE.

AS DIRECTED BY THE ENGINEER, EXISTING CONSTRUCTION ACCESSORIES WELDED TO THE TOP FLANGE OF BEAMS AND GIRDERS SHALL BE REMOVED. THE WELD AREAS SHALL BE GROUND FLUSH AND INSPECTED FOR CRACKS USING MAGNETIC PARTICLE TESTING (MT) OR DYE PENETRANT TESTING (PT) BY QUALIFIED PERSONNEL APPROVED BY THE ENGINEER.

ANY CRACKS THAT CANNOT BE REMOVED BY GRINDING 1/4 INCH DEEP SHALL BE IDENTIFIED AND REPORTED TO THE BUREAU OF BRIDGES AND STRUCTURES FOR FURTHER DISPOSITION. THE COST OF REMOVING WELDED ACCESSORIES, GRINDING AND INSPECTING WELD AREAS AND GRINDING CRACKS WILL BE PAID FOR ACCORDING TO ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

IF THE CONTRACTOR ELECTS TO USE CANTILEVER FORMING BRACKETS ON THE EXTERIOR BEAMS OR GIRDERS, THE BRACKETS SHALL BE PLACED AT THE SAME LOCATIONS AS REQUIRED FOR THE HARDWOOD BLOCKS IN ARTICLE 503.06(B) OF THE STANDARD SPECIFICATIONS. IF ADDITIONAL CANTILEVER FORMING BRACKETS ARE REQUIRED, HARDWOOD BLOCKING SHALL BE WEDGED BETWEEN THE EXTERIOR AND FIRST INTERIOR BEAM AT EACH OF THESE ADDITIONAL BRACKET LOCATIONS.

COST OF REMOVAL AND RE-INSTALLATION OF ALL MEMBERS NECESSARY TO COMPLETE THE WORK AS DETAILED ON THE PLANS AND AS SPECIFIED IN THE SPECIAL PROVISIONS SHALL BE INCLUDED WITH THE PAY ITEM REQUIRING THIS WORK.

JOINT PLATES AND ATTACHEAD 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.

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.

COMMITMENTS

DATE: 12-27-11

PREPARED BY: Tom Brown
DISTRICT STUDIES & PLANS ENGINEER

EXAMINED BY: Herb Jurgas
DISTRICT CONSTRUCTION ENGINEER

Wayne Phillips
DISTRICT MATERIALS ENGINEER

Bruce A. Fischer
DISTRICT OPERATIONS ENGINEER

FILE NAME =	USER NAME = potelij	DESIGNED - RON WOODSHANK	REVISED -
c:\pwwork\p\idat\potelij\02689336\036848-shr-details.dgn		DRAWN - RON WOODSHANK	REVISED -
PLOT SCALE = 100.0000' / in.		CHECKED -	REVISED -
PLOT DATE = 12/22/2011		DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

GENERAL NOTES

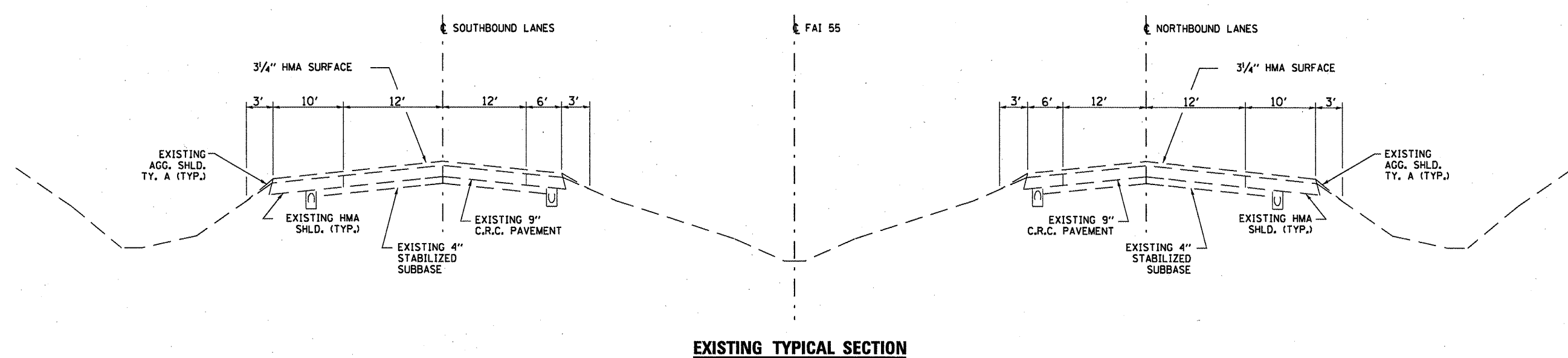
SCALE: _____ SHEET NO. 1 OF 1 SHEETS STA. _____ TO STA. _____

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(53-55-1)I-2	LIVINGSTON	16	2
CONTRACT NO. 66B48			ILLINOIS FED. AID PROJECT	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE
				STATE FUNDS 100% STATE STRUCTURE 0014 RURAL
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	142	142
40603545	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N90	TON	150	150
44000155	HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"	SQ YD	1780	1780
50102400	CONCRETE REMOVAL	CU YD	23.6	23.6
50300225	CONCRETE STRUCTURES	CU YD	9.6	9.6
50300255	CONCRETE SUPERSTRUCTURE	CU YD	14	14
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	3320	3320
50800515	BAR SPLICERS	EACH	48	48
52000110	PREFORMED JOINT STRIP SEAL	FOOT	172	172
58700300	CONCRETE SEALER	SQ FT	35138	35138
67100100	MOBILIZATION	L SUM	1	1
70400100	TEMPORARY CONCRETE BARRIER	FOOT	1300	1300
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	1300	1300
78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	43	43
78300100	PAVEMENT MARKING REMOVAL	SQ FT	1346	1346
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	43	43
X0326880	MESSAGE BOARD VEHICLE DRIVER	HOURL	280	280
X0326907	PORTABLE, VEHICLE MOUNTED CHANGEABLE MESSAGE SIGN	CAL MO	2	2
X6650208	WOVEN WIRE FENCE REMOVAL AND REPLACEMENT	FOOT	100	100
X7010208	TRAFFIC CONTROL AND PROTECTION, STANDARD 701402 (SPECIAL)	EACH	2	2
X7800610	URETHANE PAVEMENT MARKING - LINE 4"	FOOT	3430	3430
X7800630	URETHANE PAVEMENT MARKING - LINE 6"	FOOT	430	430
Z0030250	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE) TEST LEVEL 3	EACH	2	2
Z0030350	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE) TEST LEVEL 3	EACH	2	2
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	120	120

• SPECIALTY ITEMS

FILE NAME =	USER NAME = peteluj	DESIGNED - RON WOODSHANK	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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PLOT SCALE = 100.0000' / in.		CHECKED -	REVISED -			CONTRACT NO. 66B48				
PLOT DATE = 12/22/2011		DATE -	REVISED -			ILLINOIS FED. AID PROJECT				
						SCALE: _____	SHEET NO. 1 OF 1 SHEETS		STA. _____ TO STA. _____	



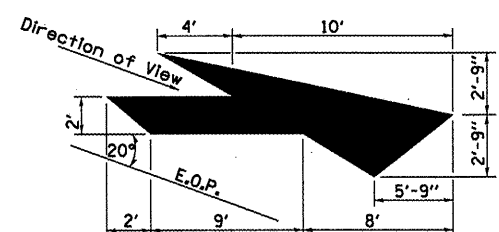
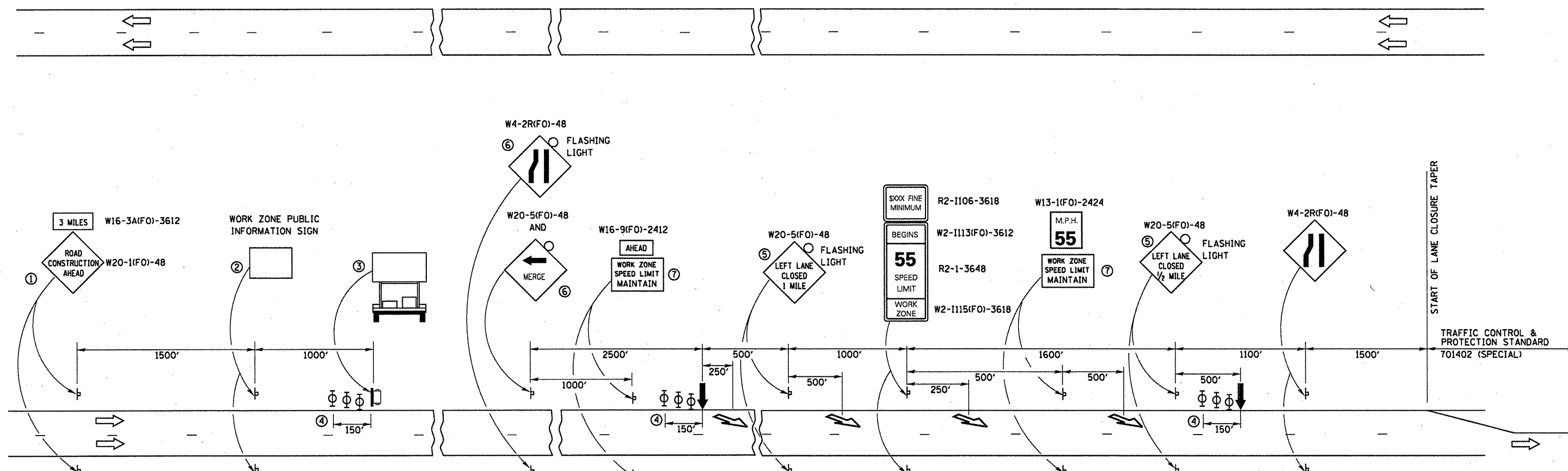
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PLOT SCALE = 100.0000' / 1" =		CHECKED -	REVISED -
PLOT DATE = 12/22/2011		DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

TYPICAL SECTION

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(53-5B-1)1-2	LIVINGSTON	16	4
CONTRACT NO. 66B48				
ILLINOIS FED. AID PROJECT				



LANE DROP ARROW
LEFT LANE DROP ARROW SHOWN
USE MIRROR IMAGE FOR RIGHT LANE.

- ① THE ROAD CONSTRUCTION AHEAD SIGN SHALL BE LOCATED 3 MILES IN ADVANCE OF THE PROJECT LIMITS.
- ② THE MESSAGE AND SIZE OF THE WORK ZONE PUBLIC INFORMATION SIGN SHALL BE AS SPECIFIED BY THE DEPARTMENT.
- ③ TO BE PLACED IN THE MEDIAN WHEN FEASIBLE. THE MESSAGE BOARD SHALL BE USED TO DISPLAY STATUS OF LANES WITHIN THE PROJECT. THE PRIMARY MESSAGES SHALL BE:
"RIGHT LANE CLOSED" / " x MILES AHEAD"
"LEFT LANE CLOSED" / " x MILES AHEAD"
"ALL LANES OPEN"
- ④ THREE, TYPE II BARRICADES, DRUMS, OR VERTICAL BARRICADES AT 50' CENTERS.
- ⑤ THIS SIGN SHALL BE USED WHEN 2 LANES ARE CLOSED.
- ⑥ WHEN THE LEFT LANE IS CLOSED, SWITCH THESE TWO SIGNS AND THE DIRECTION OF THE MERGE ARROW.
- ⑦ 48"x36" FLUORESCENT ORANGE SIGN WITH BLACK LETTERS.

48"	MAINTAIN	8"
36"	WORK ZONE	6"
	SPEED LIMIT	6"

SYMBOLS

- ↑ ARROW BOARD
- PORTABLE CHANGEABLE MESSAGE SIGN
- ⊥ SIGN
- ⊕ TYPE II BARRICADE, DRUM, OR VERTICAL BARRICADE WITH MONODIRECTIONAL FLASHING LIGHT
- ↘ LANE DROP ARROW - SEE STANDARD 780001

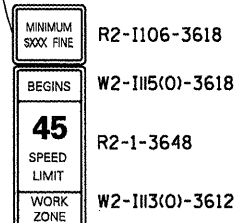
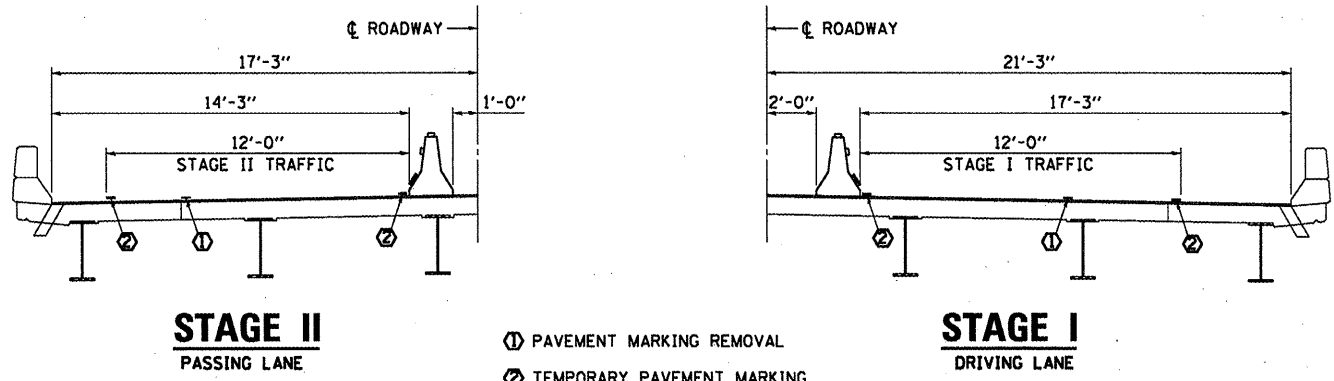
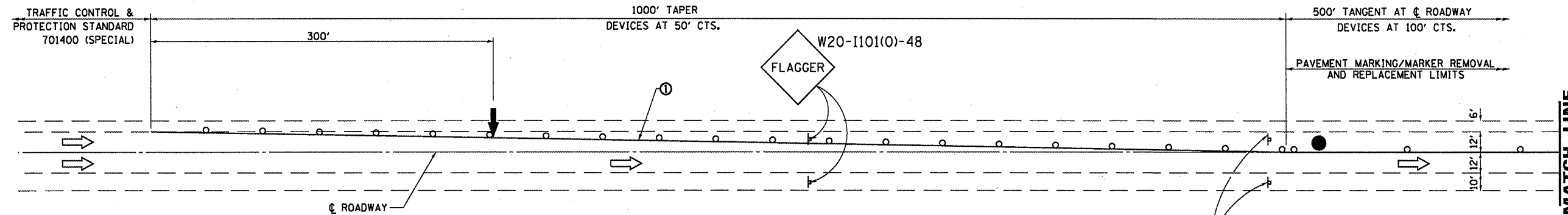
GENERAL NOTE:

THIS STANDARD IS USED WHERE AT ANY TIME A LANE IS CLOSED ON A FREEWAY/EXPRESSWAY.

WHEN THE LEFT LANE IS CLOSED, LEFT LANE CLOSED SIGNS SHALL BE SUBSTITUTED FOR THE RIGHT LANE CLOSED SIGNS.

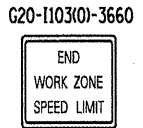
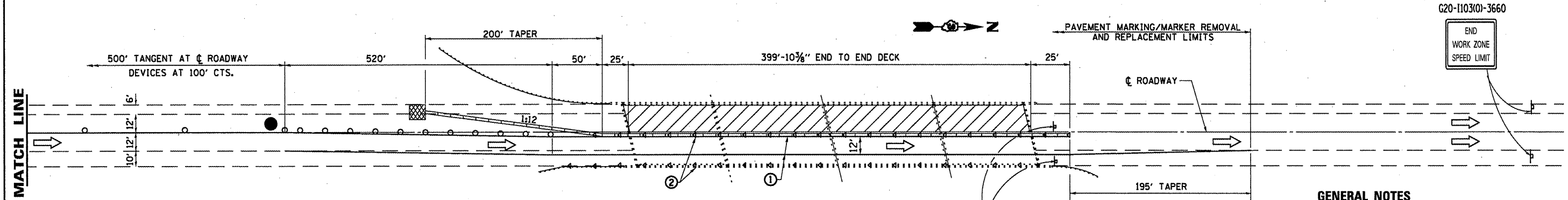
THE FIRST TWO SIGNS AND THE MESSAGE BOARD ARE STATIONARY. THE OTHER SIGNS AND ARROWBOARDS SHALL BE MOVED AS NECESSARY TO MAINTAIN THE REQUIRED DISTANCE FROM THE START OF THE LANE CLOSURE TAPER(S).

SEE SPECIAL PROVISIONS.

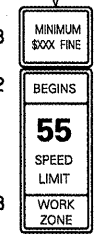


R2-1106-3618
 W2-1115(O)-3618
 R2-1-3648
 W2-1113(O)-3612

① PAVEMENT MARKING REMOVAL
 ② TEMPORARY PAVEMENT MARKING



R2-1106-3618
 W2-1113(O)-3612
 R2-1-3648
 W2-1115(O)-3618



SYMBOLS

- ↑ Arrow board
- ▨ Work area
- ⊥ Sign
- ⬆ Direction indicator barricade with steady burn monodirectional light
- ⬇ Type II barricade, drum, or vertical barricade with steady burn monodirectional light
- ▬ Temporary concrete barrier
- ◁ Monodirectional barrier wall/guardrail marker
- ▣ Impact attenuator
- Flagger

- 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 Barrier wall/guardrail markers at 25' (7.6 m). Markers on right shall be shall be crystal and markers on left shall be amber.
- ③ Vertical barricades shall not be used in lane shift taper.

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.

This Standard must always be used in combination with Standard 701400 (Special).

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

Temporary concrete barrier shall be according to Standard 704001.

Flaggers and Flagger signs shall be required whenever temporary concrete barrier is not in place. The flaggers shall be in constant communication and supplied with two-way radios or other approved devices.

SEQUENCE OF OPERATIONS

PASSING LANE SHALL BE CLOSED FOR STAGE I REMOVAL/CONSTRUCTION OPERATIONS.

DRIVING LANE SHALL BE CLOSED FOR STAGE II REMOVAL/CONSTRUCTION OPERATIONS.

FILE NAME =	USER NAME = patelij	DESIGNED - RON WOODSHANK	REVISED -
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PLOT SCALE = 180,0000 / in.		CHECKED -	REVISED -
PLOT DATE = 12/22/2011		DATE -	REVISED -

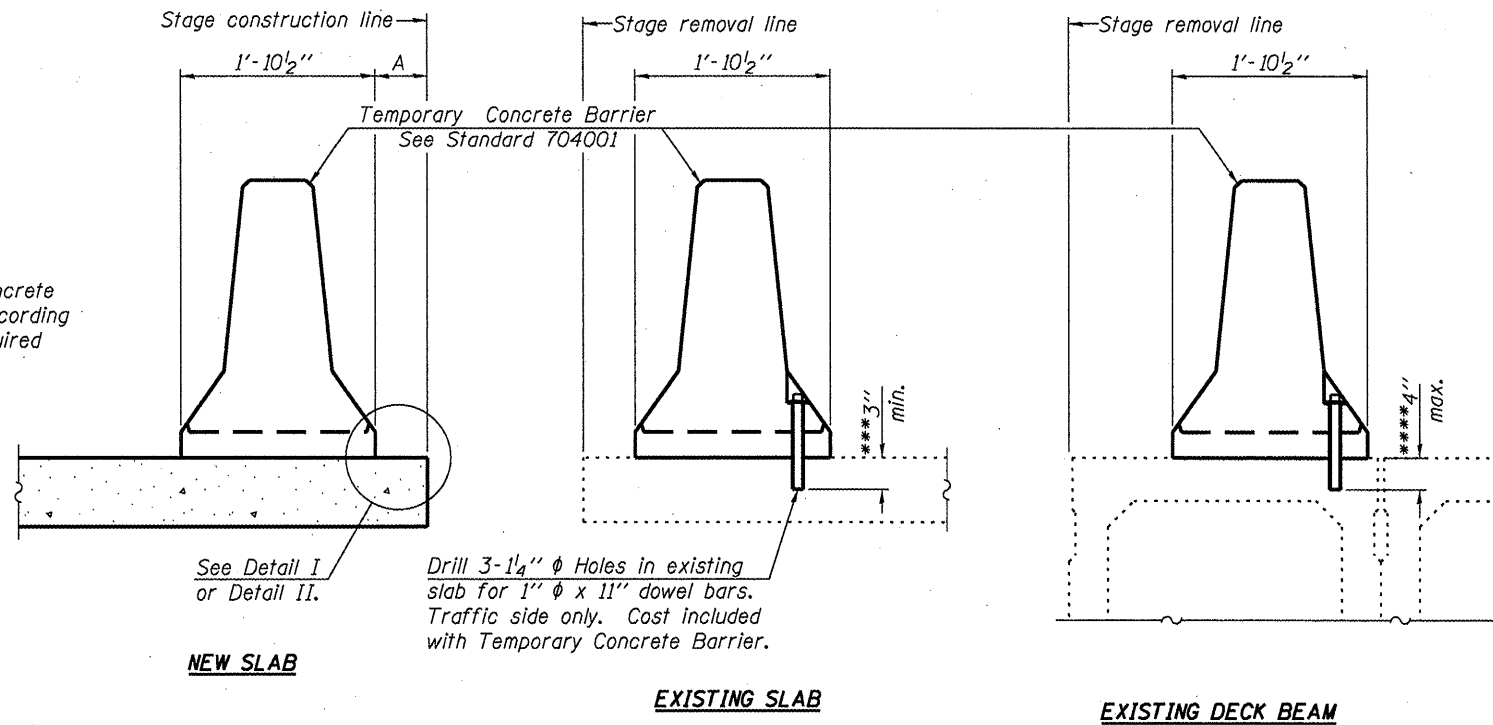
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND PROTECTION,
 STANDARD 701402 (SPECIAL)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
95	(53-5B-1)I-2	LIVINGSTON	16	6
CONTRACT NO. 66B48				
ILLINOIS FED. AID PROJECT				

SCALE: SHEET NO. 2 OF 3 SHEETS STA. TO STA.

When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".



SECTIONS THRU SLAB OR DECK BEAM

NOTES

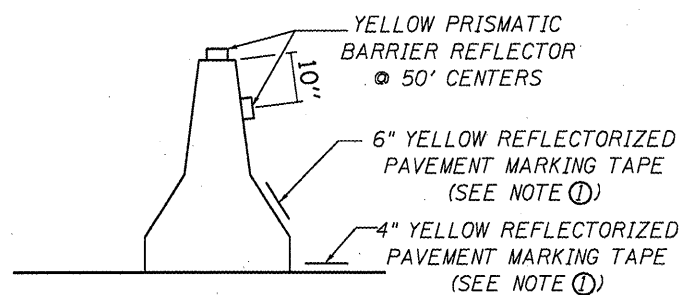
Detail I - With Bar Splicer or Couplers:
Connect one (1) 1" x 7" x "W" steel PL to the top layer of couplers with 2-5/8" φ bolts screwed to coupler at approximate C of each barrier panel.

Detail II - With Extended Reinforcement Bars:
Connect one (1) 1" x 7" x "W" steel PL to the concrete slab or concrete wearing surface with 2-5/8" φ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate C of each barrier panel.

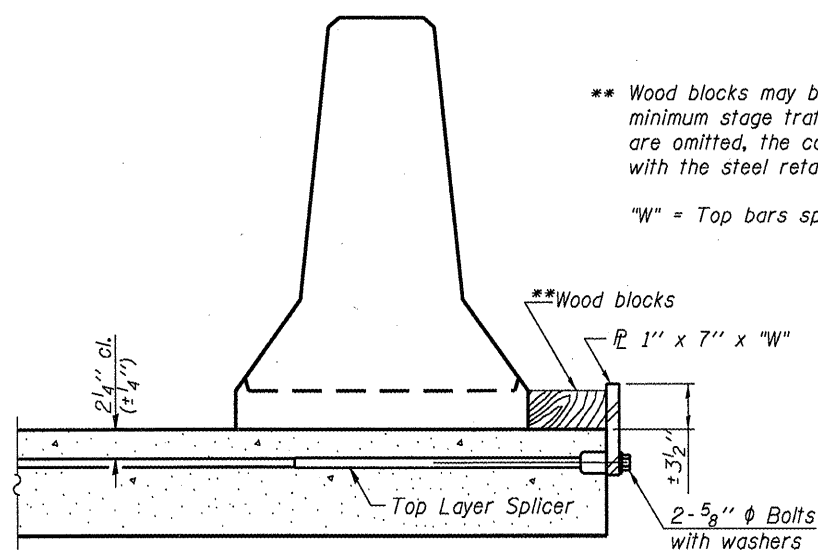
Cost of anchorage is included with Temporary Concrete Barrier. The 1" x 7" x "W" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

*** Dimension shown is minimum required embedment into concrete. If hot-mix asphalt wearing surface is present, minimum embedment shall be in addition to wearing surface depth.

**** If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



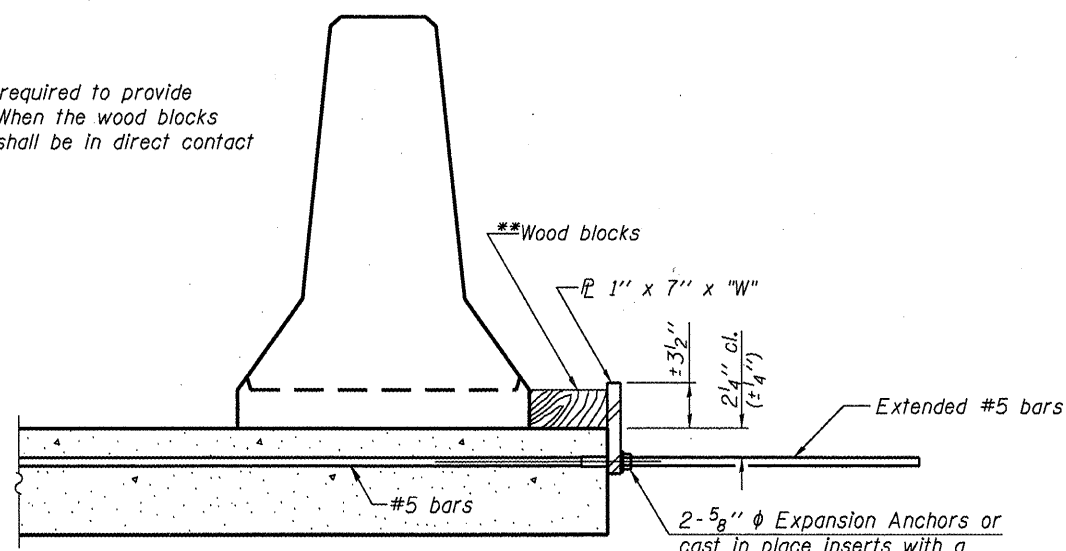
TEMPORARY CONCRETE BARRIER WALL DETAILS



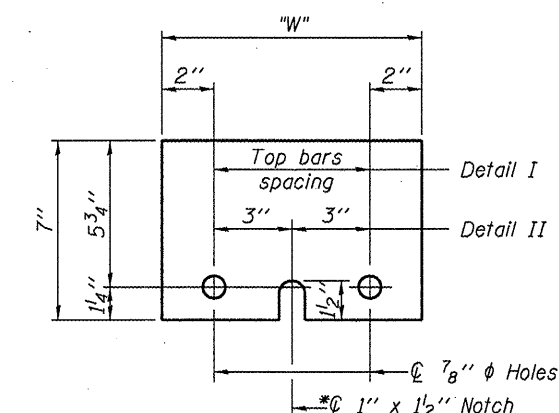
DETAIL I

** Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.

"W" = Top bars spacing + 4"



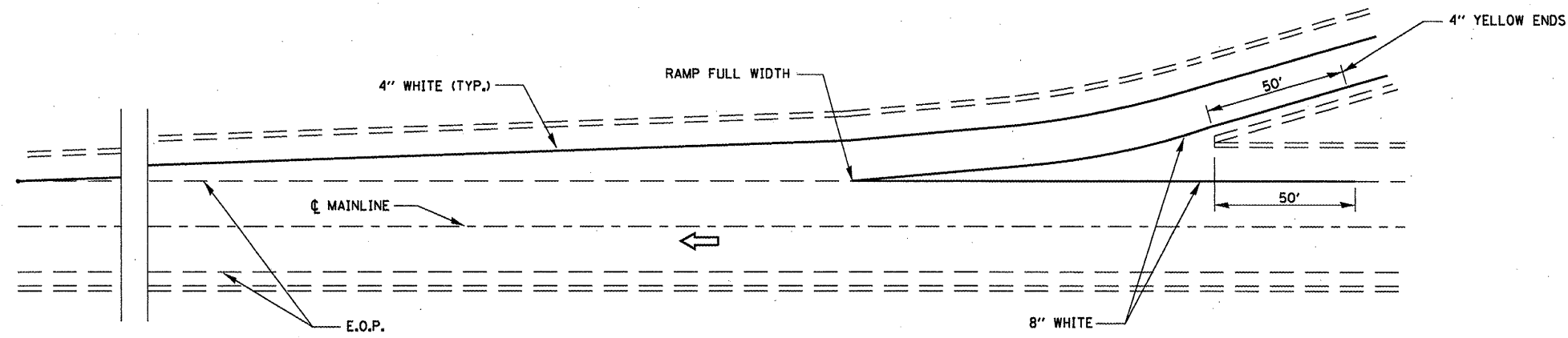
DETAIL II



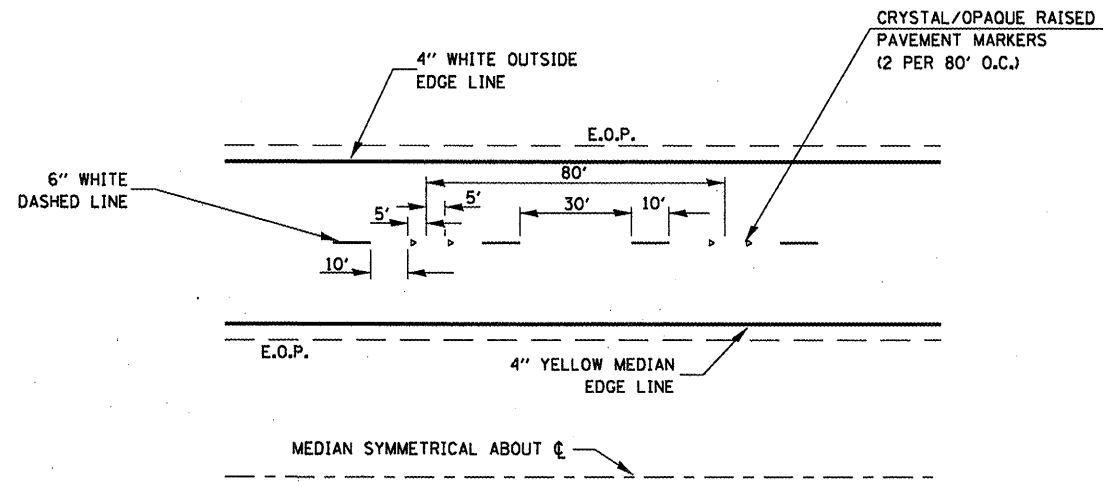
STEEL RETAINER PL 1" x 7" x "W"

* Required only with Detail II

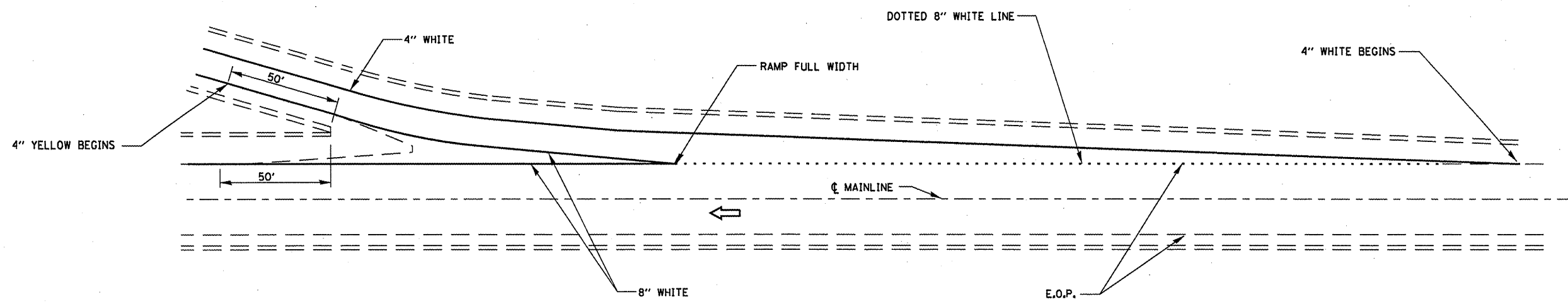
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os:\pe_work\pwsid\petaluj\d0268336\036648-shr-details.dgn	DRAWN - RON WOODSHANK	REVISED -	65			(53-5B-1)I-2	LIVINGSTON	16	7	
PLOT SCALE = 100.0000 / in.	CHECKED -	REVISED -	CONTRACT NO. 66B48							
PLOT DATE = 12/22/2011	DATE -	REVISED -	ILLINOIS FED. AID PROJECT							



TYPICAL PAVEMENT MARKING FOR ENTRANCE RAMP TERMINALS



TYPICAL PAVEMENT MARKINGS



TYPICAL PAVEMENT MARKINGS FOR EXIT RAMP TERMINALS

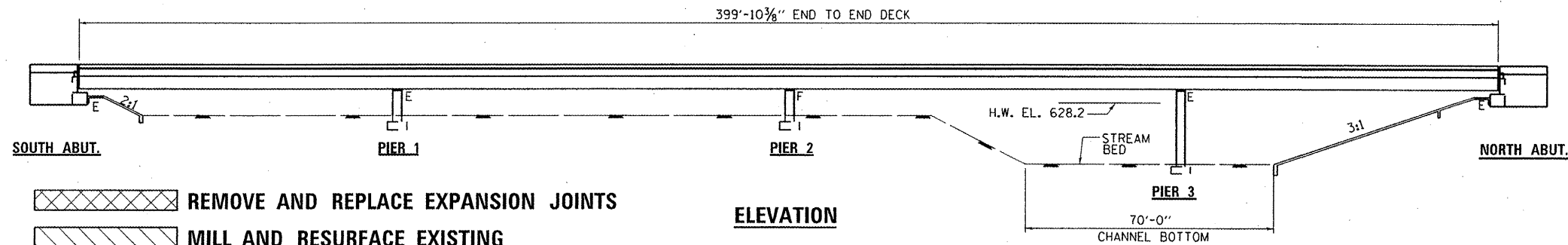
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PLOT SCALE = 100.0000' / in.	CHECKED -	REVISOR -	REVISED -
PLOT DATE = 12/22/2011	DATE -	REVISOR -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

TYPICAL PAVEMENT MARKINGS

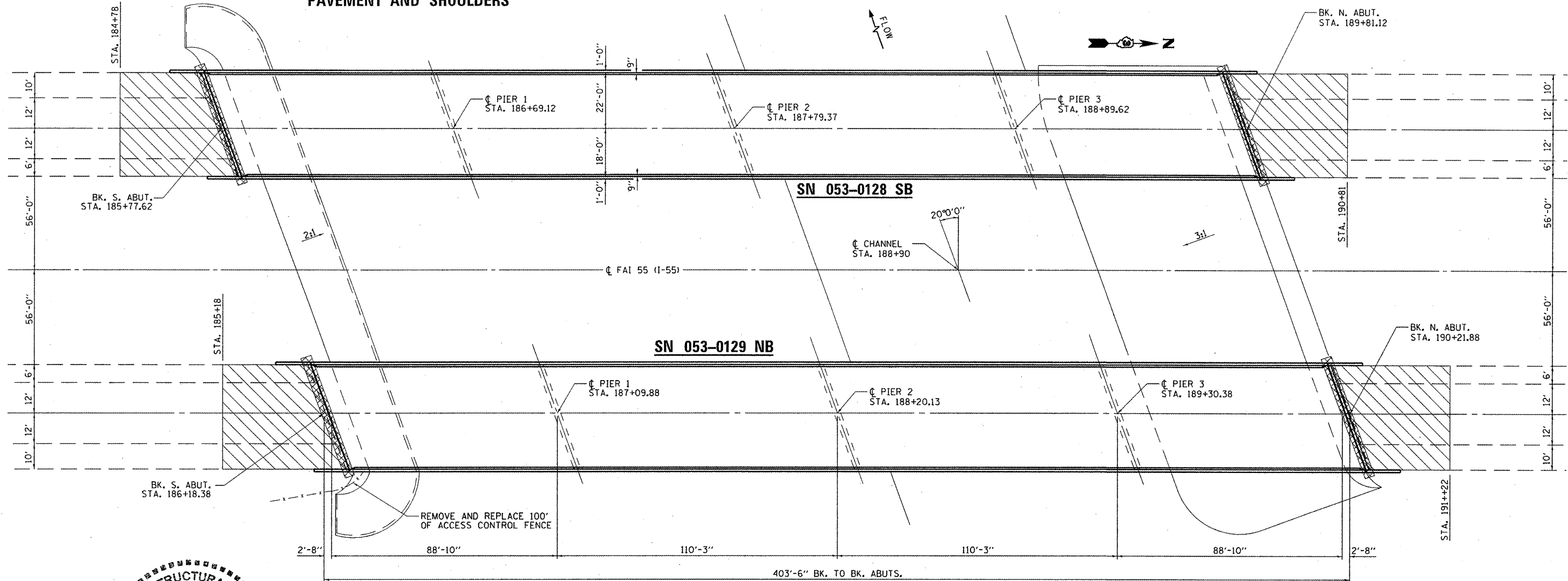
SCALE: _____ SHEET NO. 1 OF 1 SHEETS STA. _____ TO STA. _____

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(53-5B-1)I-2	LIVINGSTON	16	8
CONTRACT NO. 66B48				
ILLINOIS FED. AID PROJECT				

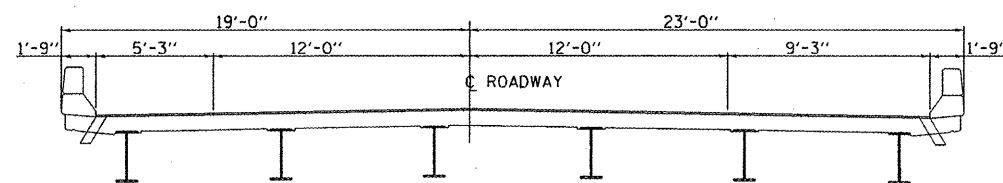


REMOVE AND REPLACE EXPANSION JOINTS
 MILL AND RESURFACE EXISTING PAVEMENT AND SHOULDERS

ELEVATION



David Carl Puze 1/30/12
 Expires 1/30/12



CROSS SECTION

NB LANE SHOWN
SB LANE SIMILAR THRU 180° ROTATION

**TOTAL BILL OF MATERIAL
FOR SN 053-0128 (SB) & SN 053-0129 (NB)**

ITEM	UNIT	SUPER	SUB	TOTAL
CONCRETE REMOVAL	CU YD	14	9.6	23.6
CONCRETE STRUCTURE	CU YD		9.6	9.6
CONCRETE SUPERSTRUCTURE	CU YD	14		14
REINFORCEMENT BARS, EPOXY COATED	POUND	2320	1000	3320
PREFORMED JOINT STRIP SEAL	FOOT	172		172
BAR SPLICERS	EACH	32	16	48
CONCRETE SEALER	SO FT	34844	294	35138
STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5")	SO FT		120	120

FILE NAME =	USER NAME = woodshankr1	DESIGNED - RON WOODSHANK	REVISED -
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	PLOT DATE = 1/30/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

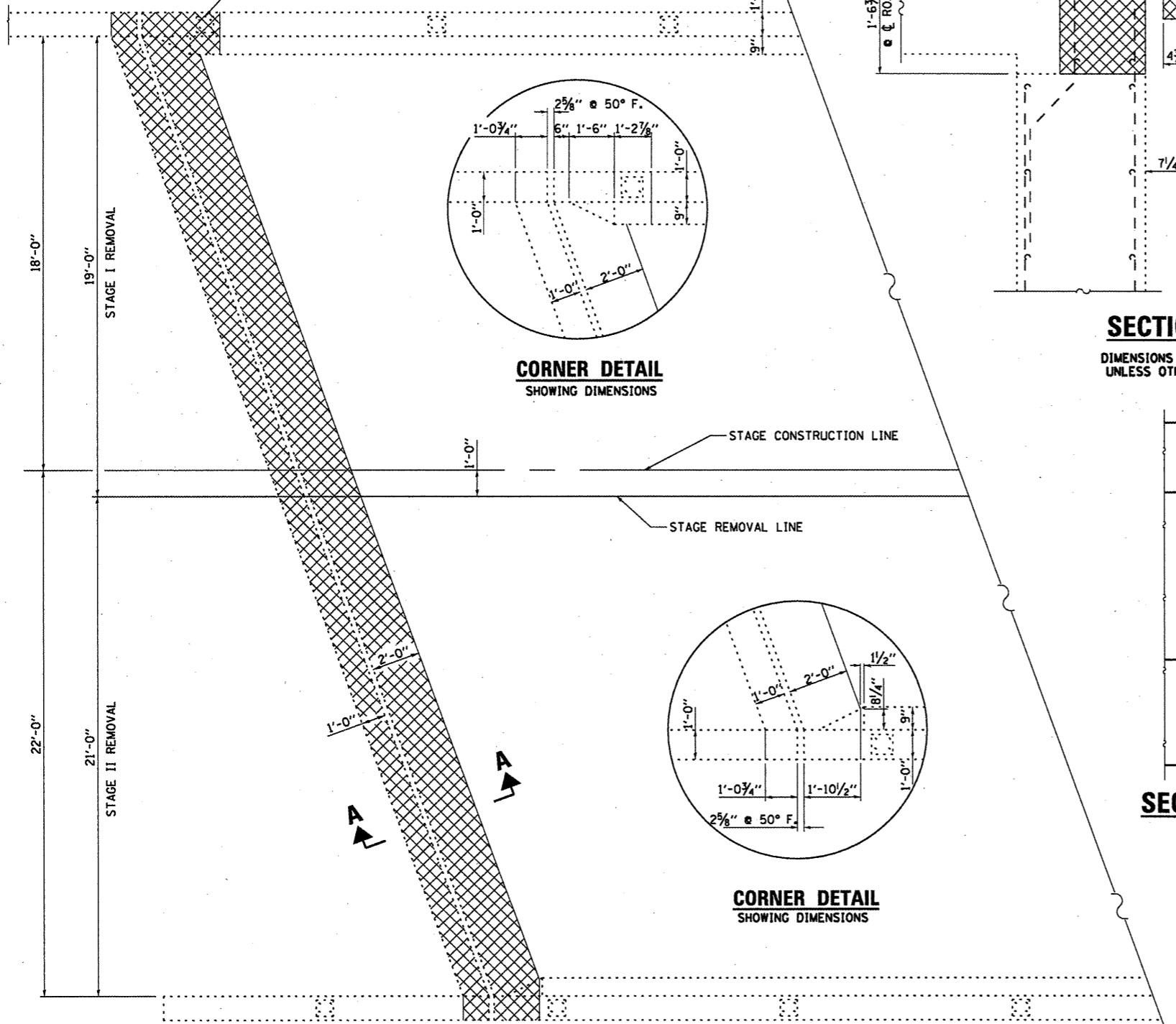
**GENERAL PLAN AND ELEVATION
FOR SN 053-128 & SN 053-0129**

SCALE: _____ SHEET NO. 1 OF 8 SHEETS STA. _____ TO STA. _____

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(53-5B-1)1-2	LIVINGSTON	16	9
CONTRACT NO. 66B48			ILLINOIS FED. AID PROJECT	

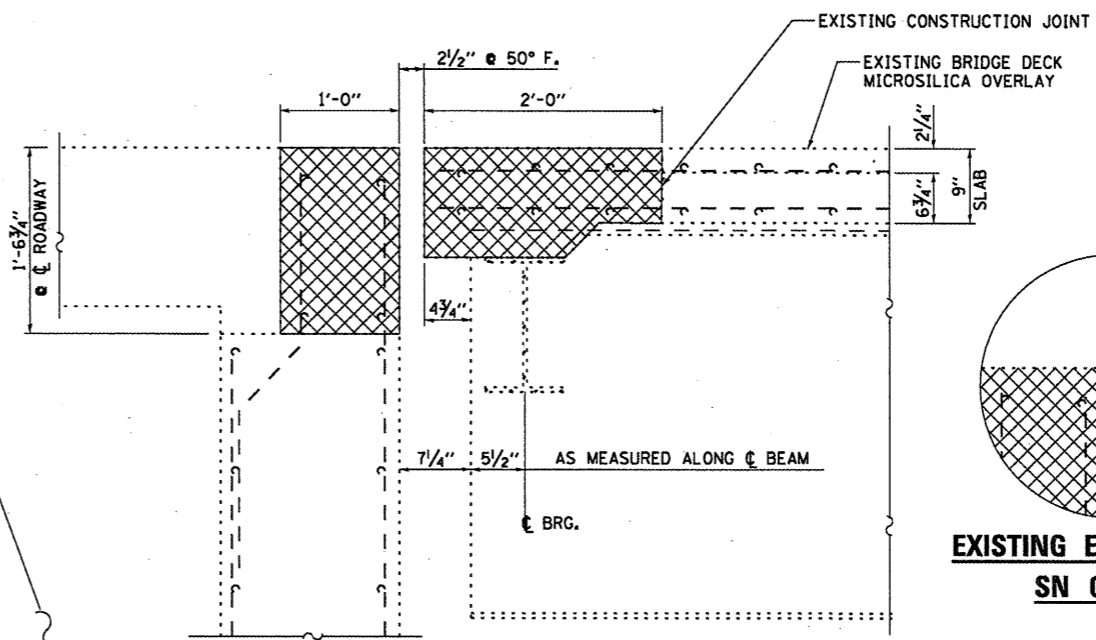


REMOVE AND RE-INSTALL
EXISTING RAIL POST



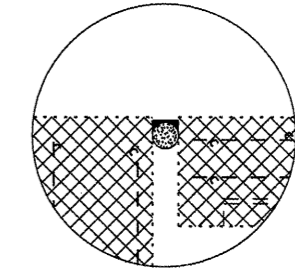
PARTIAL PLAN

SOUTH END SHOWN
NORTH END SIMILAR THRU 180° ROTATION

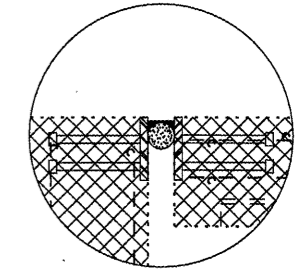


SECTION A-A

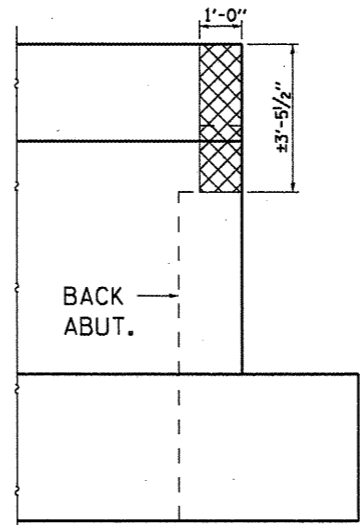
DIMENSIONS AT RT. ANGLES
UNLESS OTHERWISE NOTED



**EXISTING EXPANSION JT.
SN 053-0128**

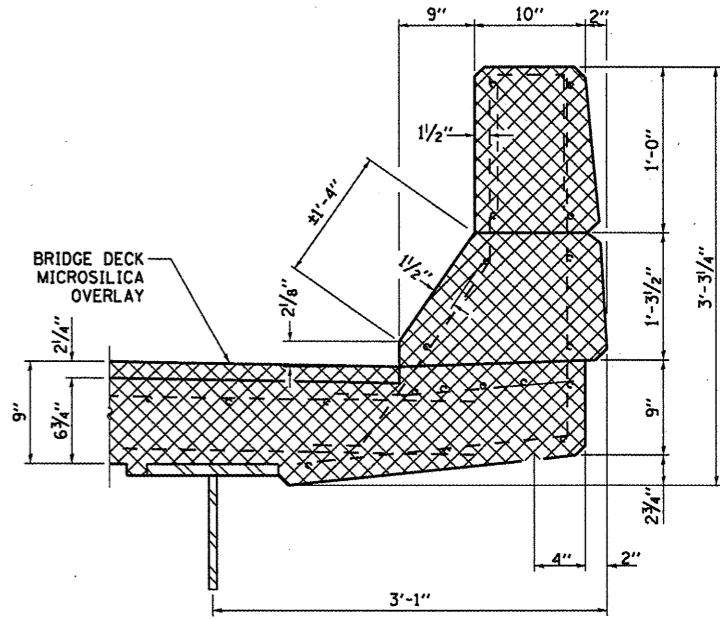


**EXISTING EXPANSION JT.
SN 053-0129**



SECTION AT WING WALL

OUTSIDE FACE



SECTION AT CURB

AT EXPANSION JOINT

NOTES

- CROSSED HATCHED AREA REPRESENTS CONCRETE REMOVAL LIMITS.
- EXISTING REINFORCEMENT BARS EXTENDING INTO CONCRETE REMOVAL AREA SHALL BE STRAIGHTENED, CLEANED AND INCORPORATED IN THE NEW CONCRETE.
- EXISTING TRANSVERSE REINFORCEMENT BARS SHALL BE REMOVED AND REPLACED WITH EPOXY COATED REINFORCEMENT BARS.
- REMOVAL OF EXISTING EXPANSION JOINT MATERIALS SHALL BE INCLUDED IN THE COST OF "CONCRETE REMOVAL".

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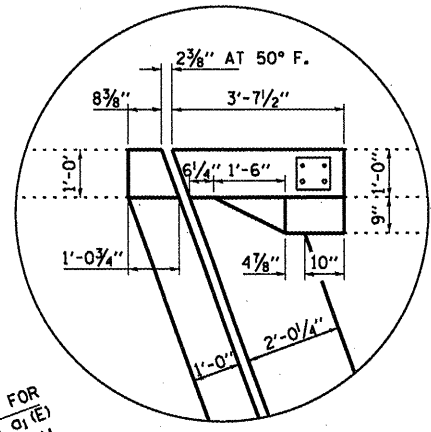
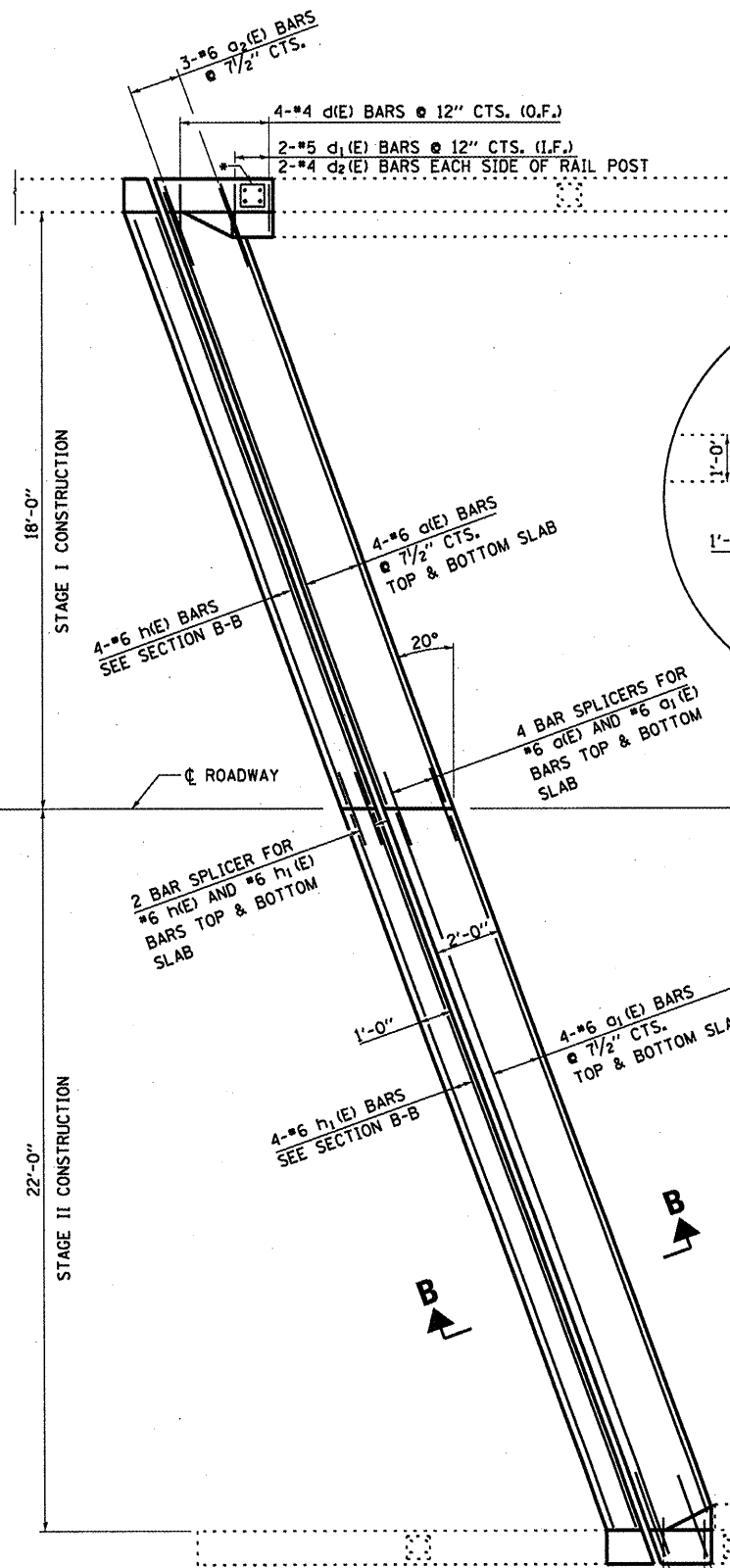
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

**EXPANSION JOINT DETAILS - REMOVAL
FOR SN 053-0128 & SN 053-0129**

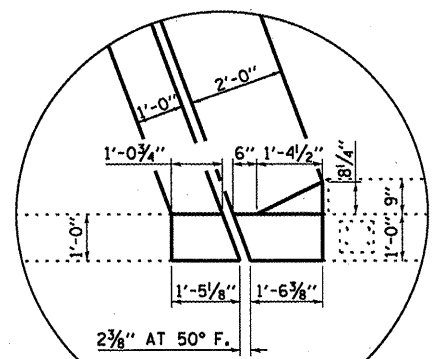
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 66B48				
ILLINOIS FED. AID PROJECT				

*SEE SHEET 4 OF 8 FOR RAIL POST DETAILS

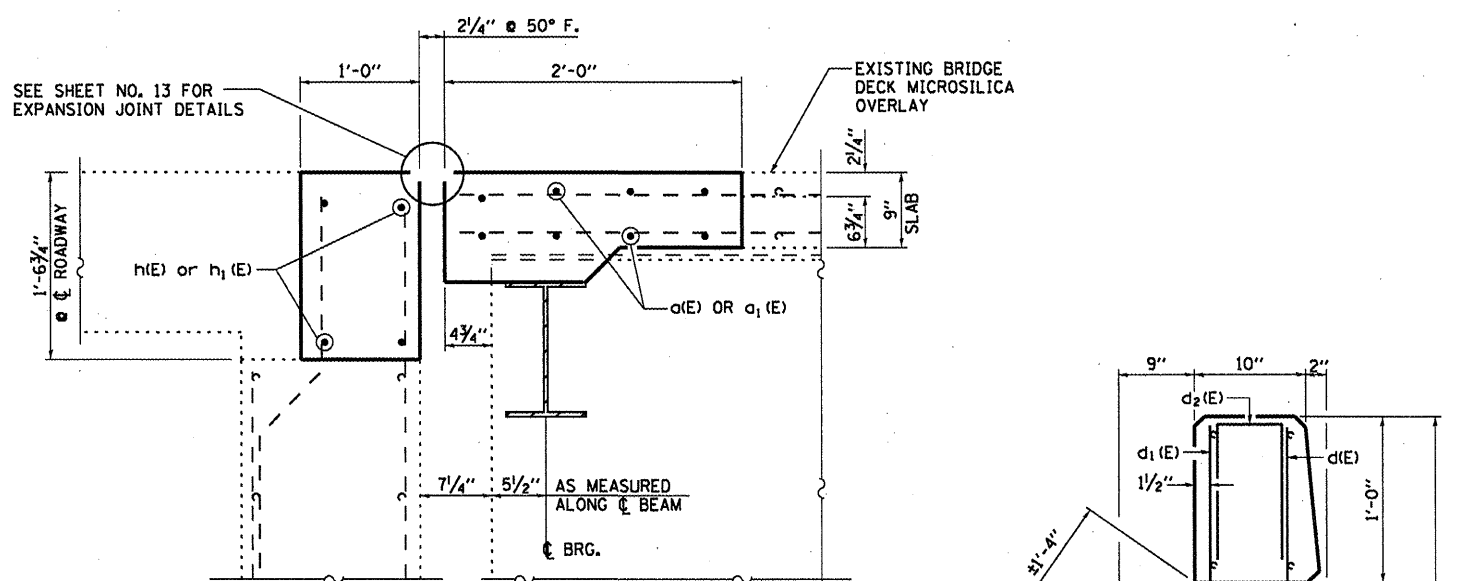


CORNER DETAIL
SHOWING DIMENSIONS

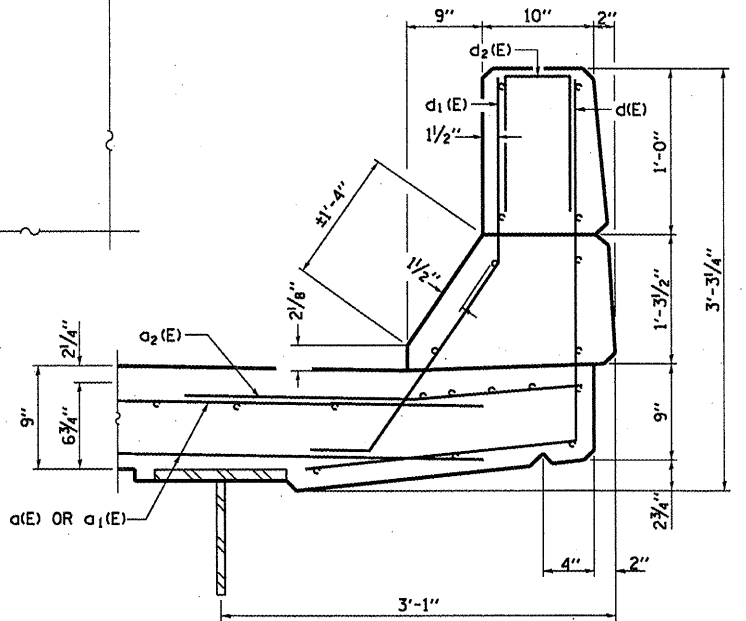


CORNER DETAIL
SHOWING DIMENSIONS

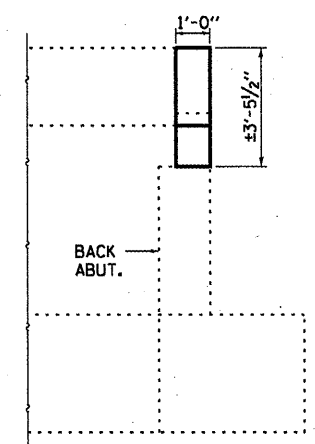
PARTIAL PLAN
SOUTH END SHOWN
NORTH END SIMILAR THRU 180° ROTATION



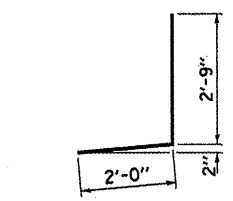
SECTION B-B
DIMENSIONS AT RT. ANGLES
UNLESS OTHERWISE NOTED



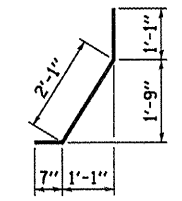
SECTION AT CURB
AT EXPANSION JOINT



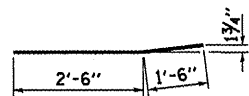
SECTION AT WING WALL
OUTSIDE FACE



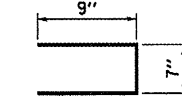
d(E) BAR



d1(E) BAR



a2(E) BAR



d2(E) BAR

BILL OF MATERIAL
FOR "ONE" EXPANSION JOINT

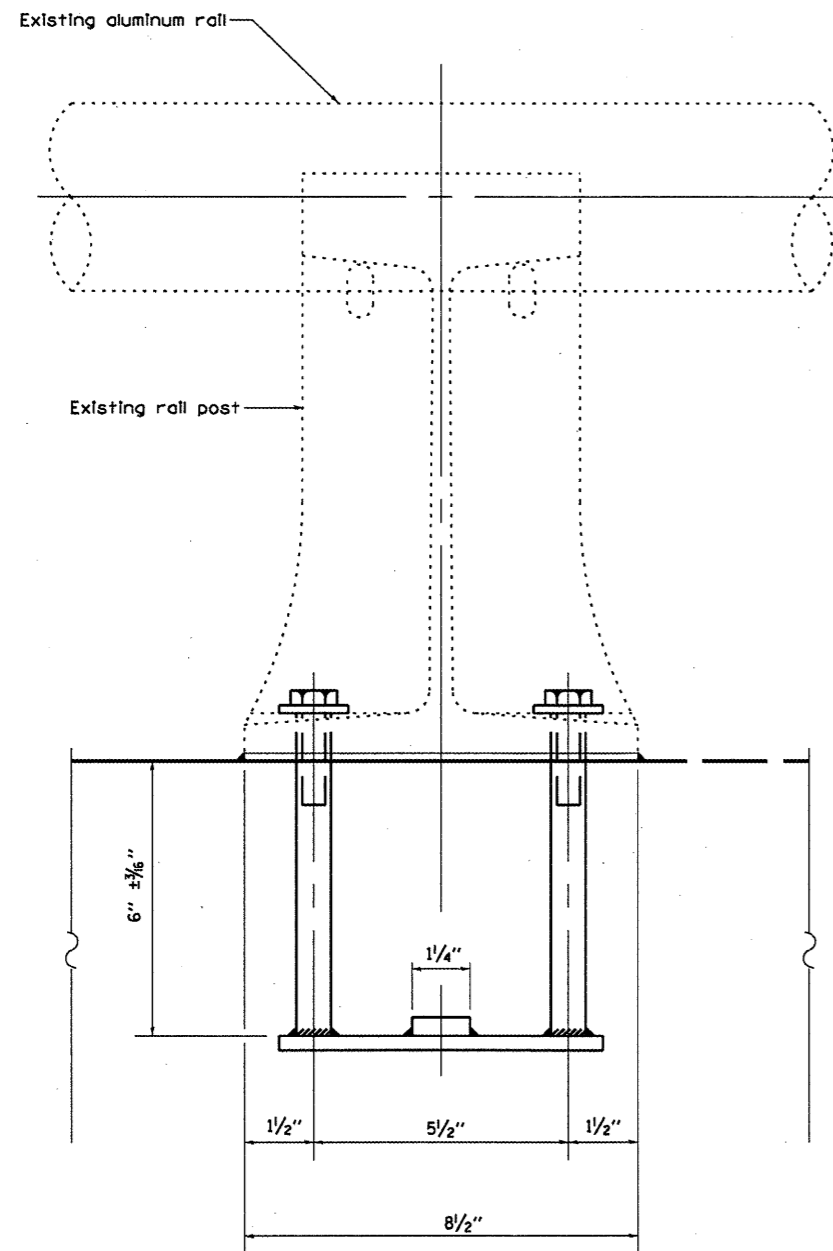
Bar	No.	Size	Length	Shape
d(E)	8	#6	19'-3"	—
a1(E)	8	#6	23'-6"	—
a2(E)	5	#6	4'-0"	—
d(E)	7	#4	4'-9"	—
d1(E)	2	#5	3'-9"	—
d2(E)	2	#4	2'-1"	—
h(E)	4	#6	18'-11"	—
h1(E)	4	#6	23'-2"	—
Reinforcement Bars, Epoxy Coated		Pound	830	
Concrete Removal		Cu. Yds.	5.9	
Concrete Structure		Cu. Yds.	2.4	
Concrete Superstructure		Cu. Yds.	3.5	

FILE NAME =	USER NAME = petelij	DESIGNED - RON WOODSHANK	REVISED -
ct\pwwork\pwwork\petelij\02689336\0368	48-sht-details.dgn	DRAWN - RON WOODSHANK	REVISED -
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	PLOT DATE = 12/22/2011	DATE -	REVISED -

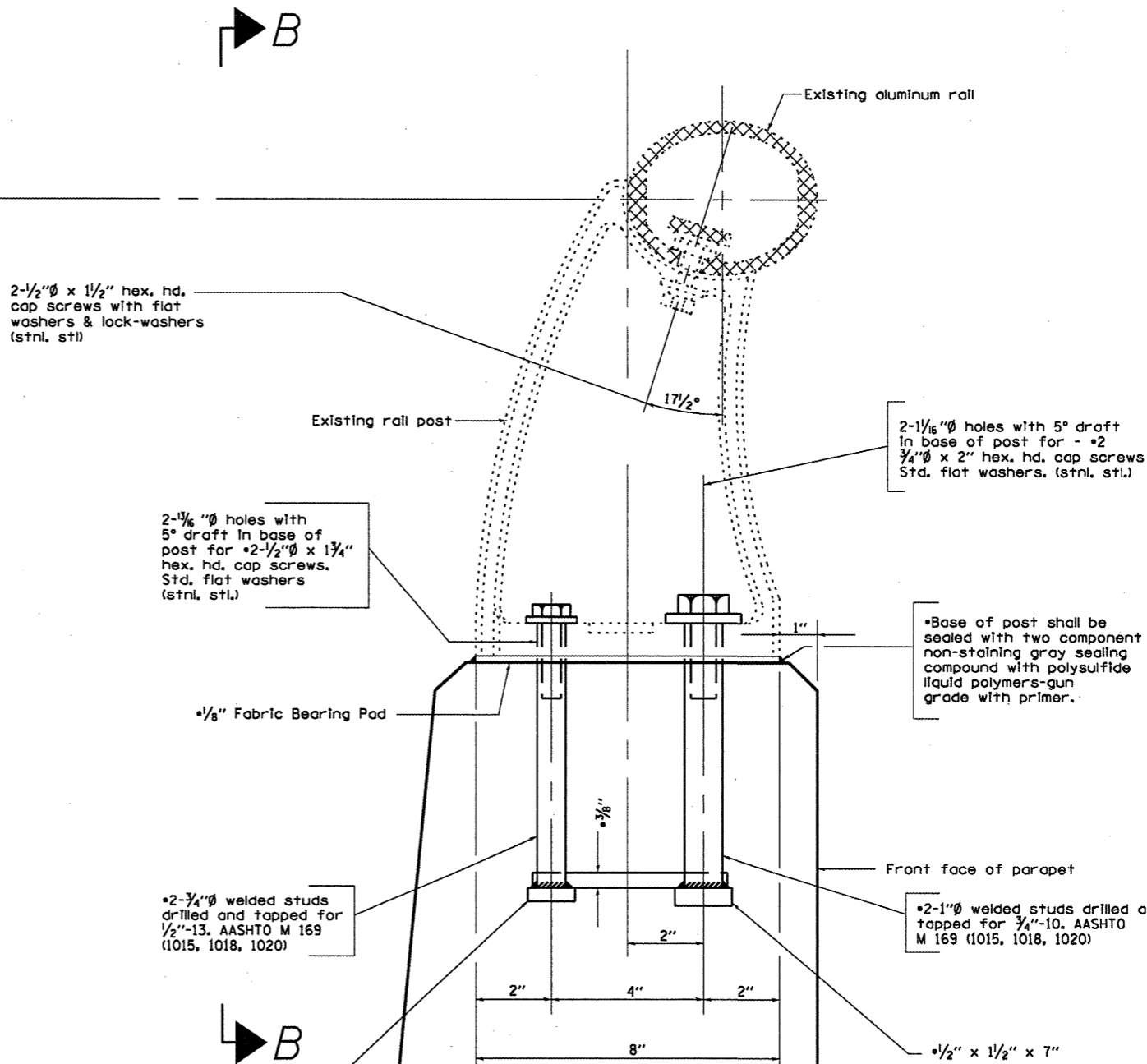
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXPANSION JOINT DETAILS - CONSTRUCTION
FOR SN 053-0128 & SN 053-0129

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(53-5B-1)-2	LIVINGSTON	16	11
CONTRACT NO. 66B48			ILLINOIS FED. AID PROJECT	



VIEW B-B



SECTION A-A

RAIL POST DETAILS

2-1/2"Ø x 1/2" hex. hd. cap screws with flat washers & lock-washers (stnl. stl.)

2-1 1/6"Ø holes with 5° draft in base of post for 2-1/2"Ø x 1 3/4" hex. hd. cap screws. Std. flat washers (stnl. stl.)

2-1 1/6"Ø holes with 5° draft in base of post for 2-1/2"Ø x 2" hex. hd. cap screws. Std. flat washers. (stnl. stl.)

•Base of post shall be sealed with two component non-staining gray sealing compound with polysulfide liquid polymers-gun grade with primer.

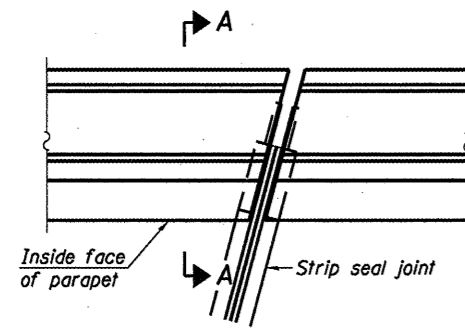
•2-3/4"Ø welded studs drilled and tapped for 1/2"-13. AASHTO M 169 (1015, 1018, 1020)

•2-1"Ø welded studs drilled and tapped for 3/4"-10. AASHTO M 169 (1015, 1018, 1020)

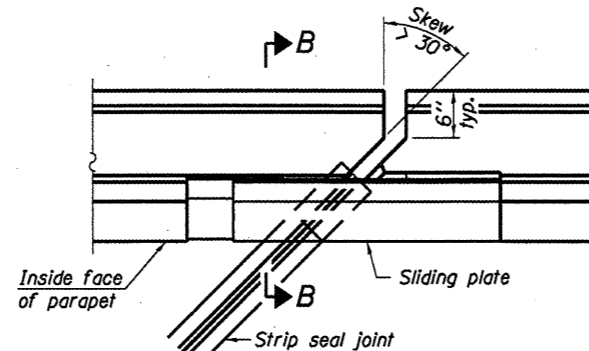
Notes:
 All Posts shall be normal to parapet.
 All joints in rail shall be spliced per detail.
 Provide 1-1/8" and 2-1/16" Aluminum Shims for 25% of the Posts.
 Rail elements shall be parallel to Grade-high spots will be ground and low spots shimmed.
 Horizontal rail element & rail posts shown are for information only.

• New Rail Post anchorage devices will be required at each location where posts are connected to new construction. Cost shall be included with "Concrete Superstructure".

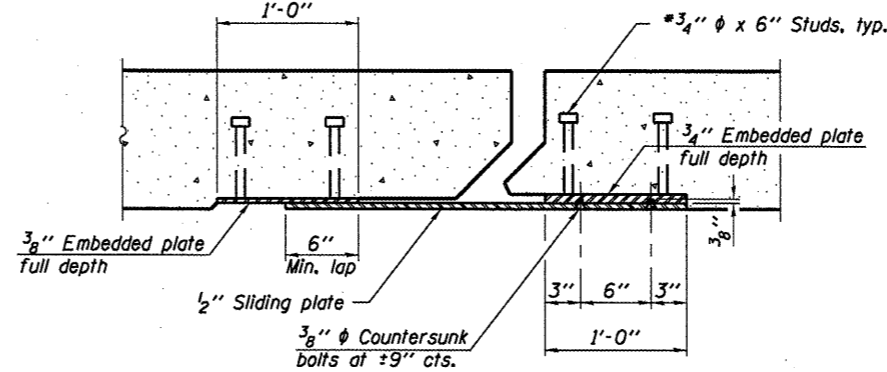
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ca\pwork\pvidot\petelyj\0268336\0368	48-sht-details.dgn	DRAWN - RON WOODSHANK	REVISED -		55	(53-5B-1)I-2	LIVINGSTON	16	12		
	PLOT SCALE = 100.0000' / 1"	CHECKED - ADY	REVISED -		SCALE: _____ SHEET NO. 4 OF 8 SHEETS STA. _____ TO STA. _____		CONTRACT NO. 66B48				
	PLOT DATE = 12/22/2011	DATE -	REVISED -		ILLINOIS FED. AID PROJECT						



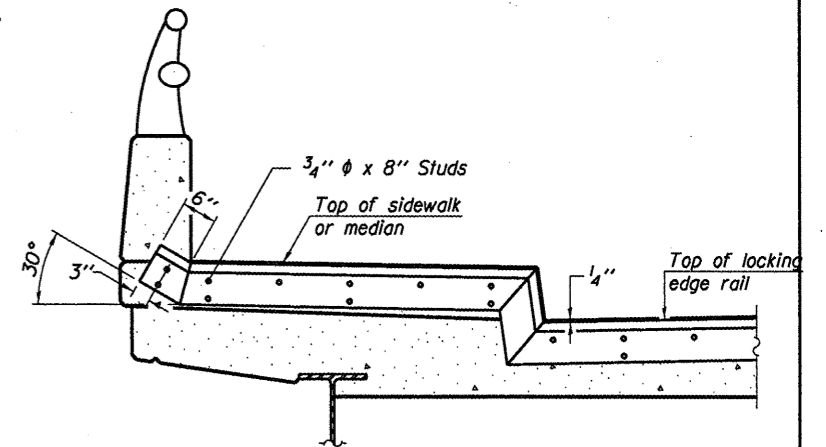
PLAN
(For skews $\leq 30^\circ$)



PLAN
(For skews $> 30^\circ$)
Showing point block

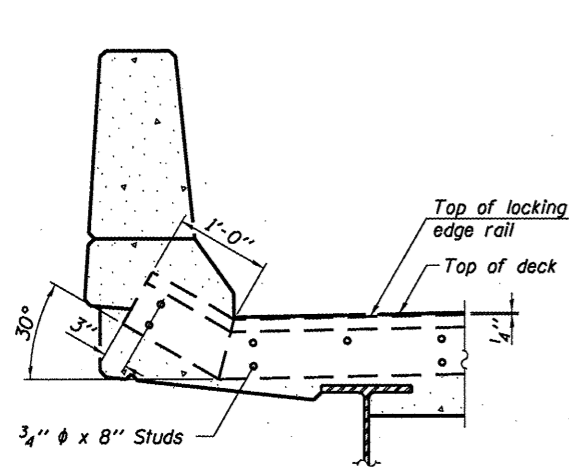


SECTION C-C

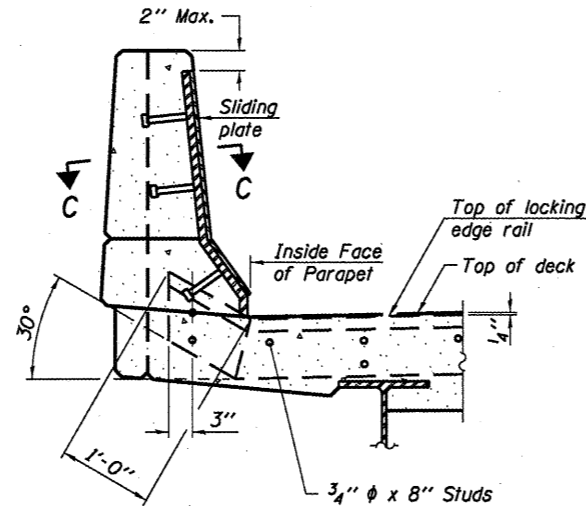


**TYPICAL END TREATMENT
AT SIDEWALK OR MEDIAN**

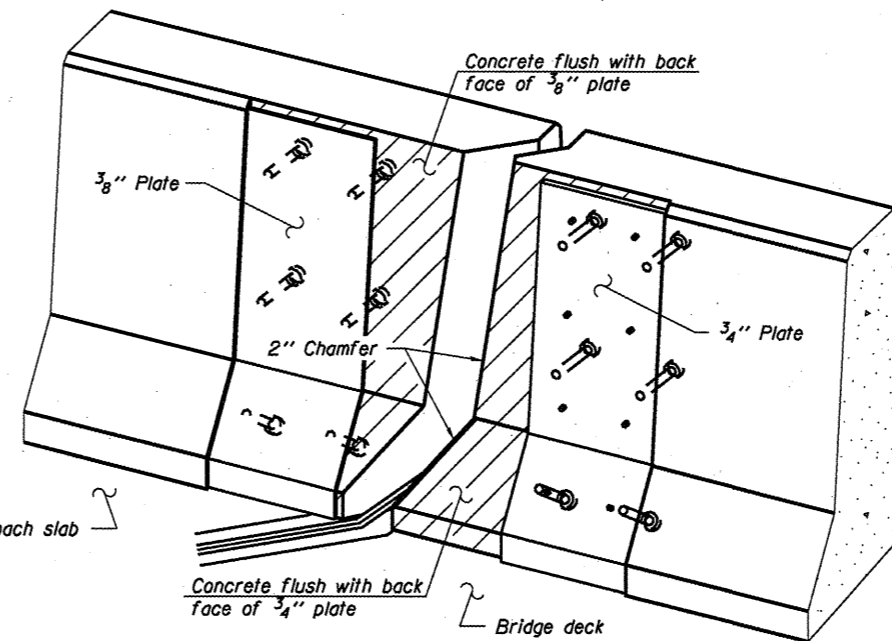
Shorter plates with a single row of studs at 12" cts. may be necessary on medians which are shallower than 9". See manufacturer's recommendation.



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.

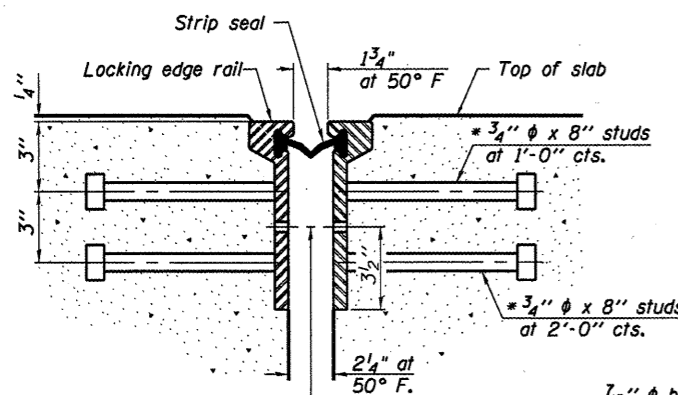
The manufacturer's recommended installation methods shall be followed.

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.

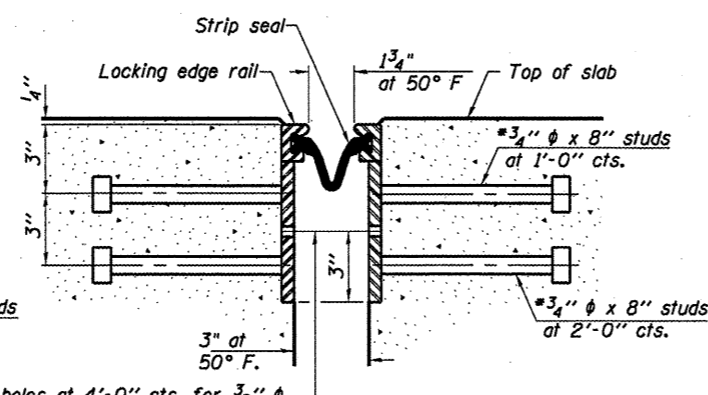
Maximum space between rail segments at stage lines shall be 3/16", sealed with a suitable sealant.

Parapet plates and anchorage studs for skews $> 30^\circ$ included in the cost of Preformed Joint Strip Seal.



**SECTION THRU
ROLLED RAIL JOINT**

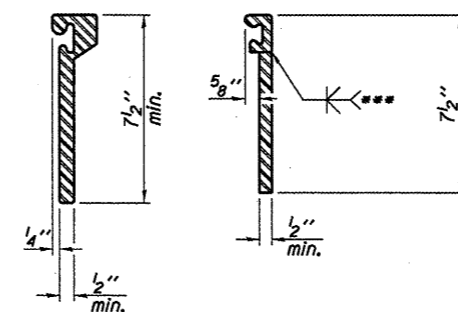
7/16" ϕ holes at 4'-0" cts. for 3/8" ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.



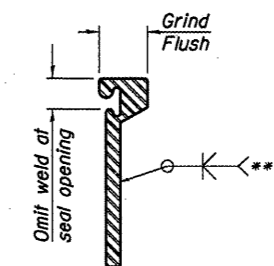
**SECTION THRU
WELDED RAIL JOINT**

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.

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



**ROLLED
EXTRUDED RAIL** **WELDED RAIL**



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

**LOCKING EDGE
RAIL SPLICE**

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

BILL OF MATERIAL

FOR "ONE" EXPANSION JOINT

Item	Unit	Total
Preformed Joint Strip Seal	Foot	43

EJ-SSJ

7-1-10

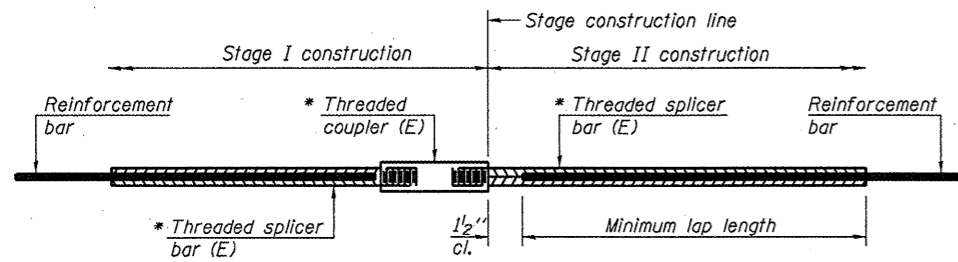
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PLOT DATE = 12/22/2011		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL DETAILS
DETAILS FOR SN 053-128 & SN 053-0129

SCALE: SHEET NO. 5 OF 8 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(53-5B-11-2	LIVINGSTON	16	13
CONTRACT NO. 66B48				
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"

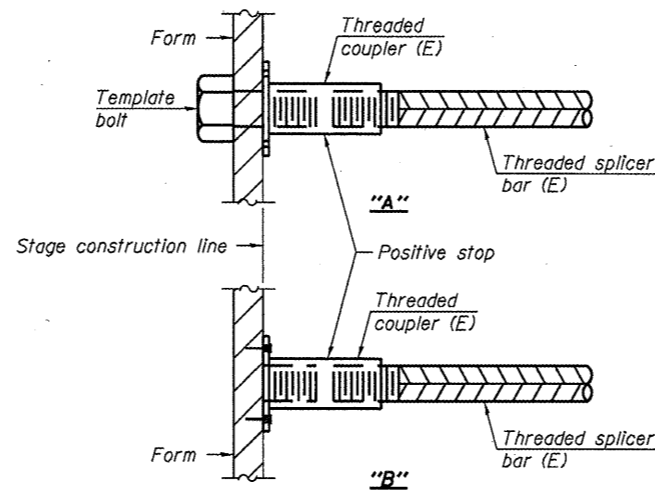
- Table 1: Black bar, 0.8 Class C
- Table 2: Black bar, Top bar lap, 0.8 Class C
- Table 3: Epoxy bar, 0.8 Class C
- Table 4: Epoxy bar, Top bar lap, 0.8 Class C
- Table 5: Epoxy bar, Top bar lap, Class B

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.

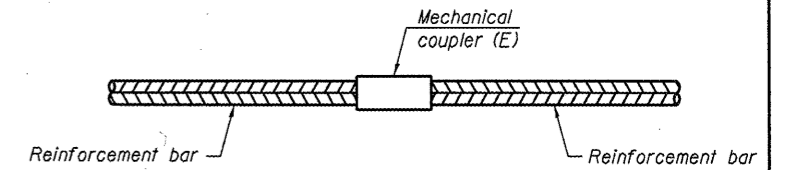
BILL OF MATERIAL FOR "ONE" EXPANSION JOINT

Location	Bar size	No. assemblies required	Table for minimum lap length
DECK	#6	8	TABLE 3
HATCH BLOCK	#6	4	TABLE 3



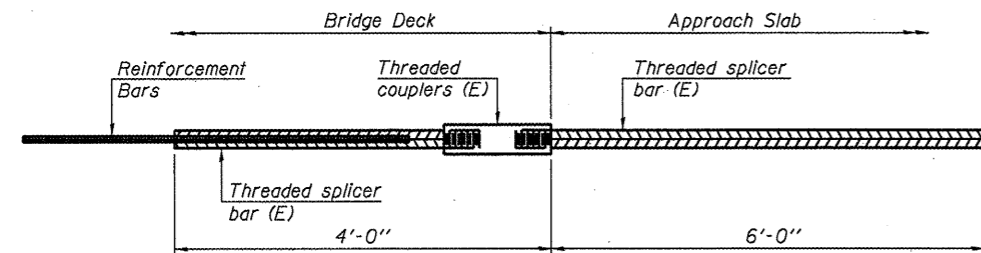
INSTALLATION AND SETTING METHODS

"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.



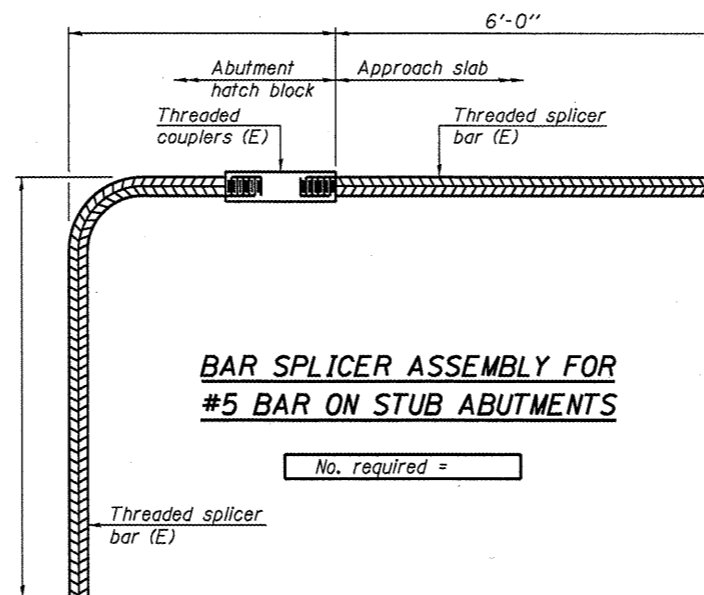
STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



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

No. required =



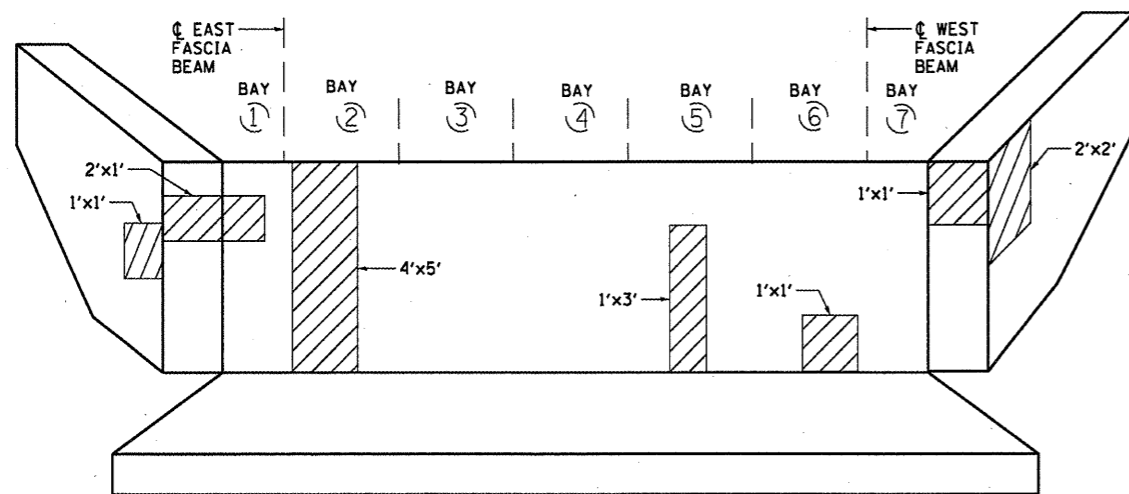
BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required =

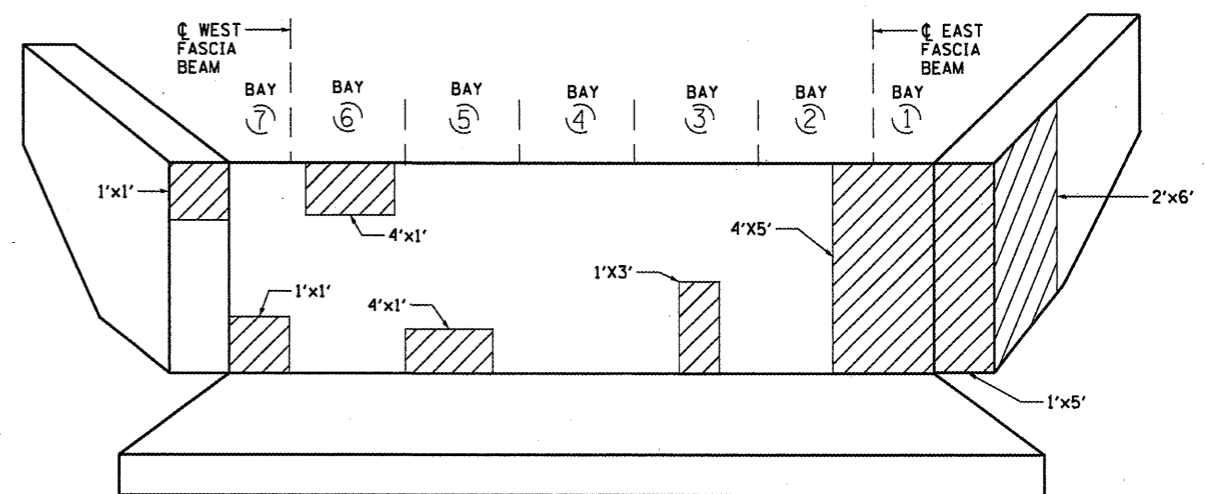
NOTES

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

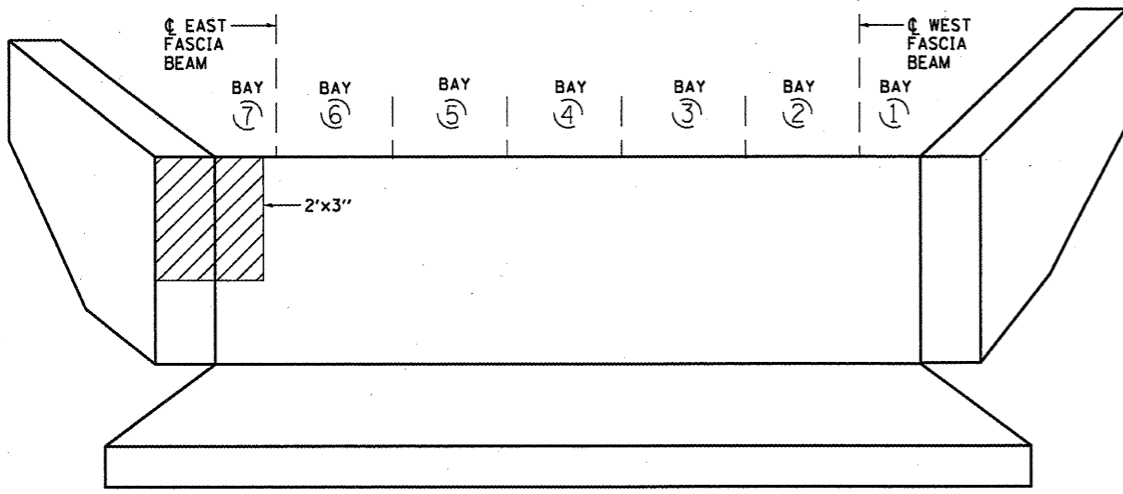


SOUTH ABUTMENT

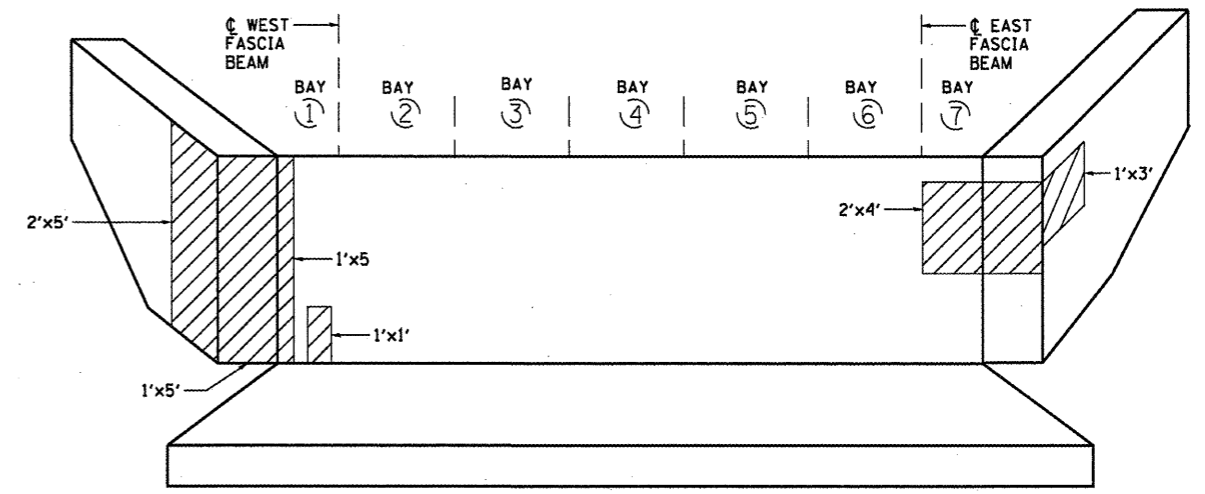


NORTH ABUTMENT

S.N. 053-0128 (SB)



SOUTH ABUTMENT



NORTH ABUTMENT

S.N. 053-0129 (NB)

**BILL OF MATERIAL
SN 053-0128**

Item	Unit	Total
STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5")	SO FT	82

**BILL OF MATERIAL
SN 053-0129**

Item	Unit	Total
STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5")	SO FT	38

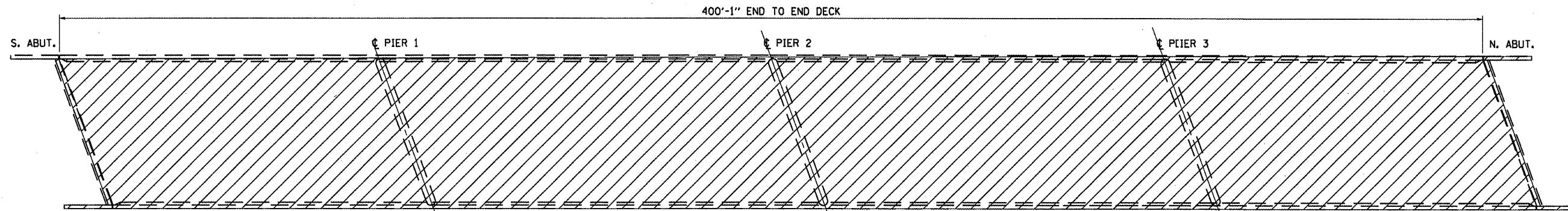
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PLOT SCALE = 100.0000' / 1"		CHECKED - ADY	REVISED -
PLOT DATE = 12/22/2011		DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

REPAIR OF CONCRETE DETAILS

SCALE: _____ SHEET NO. 7 OF 8 SHEETS STA. _____ TO STA. _____

F.A.L. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(53-5B-1)1-2	LIVINGSTON	16	15
CONTRACT NO. 66B48				
ILLINOIS FED. AID PROJECT				



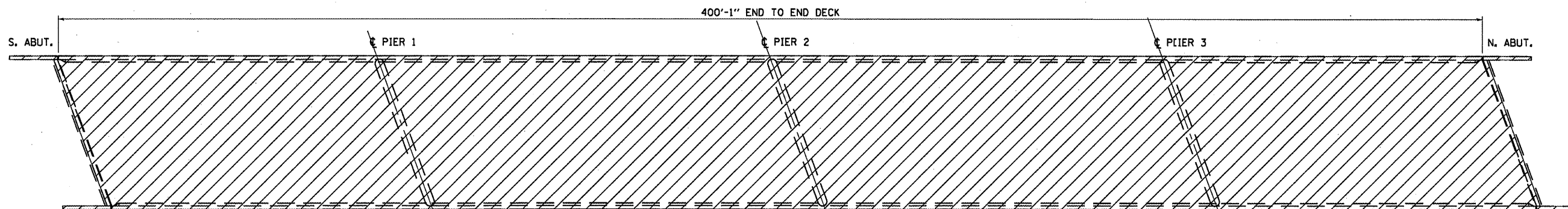
PLAN
SN 053-0128 SB



CONCRETE SEALER APPLICATION

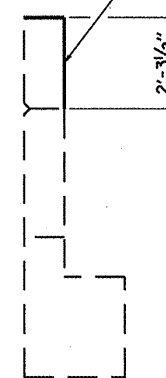


CL FAI 55 (I-55)

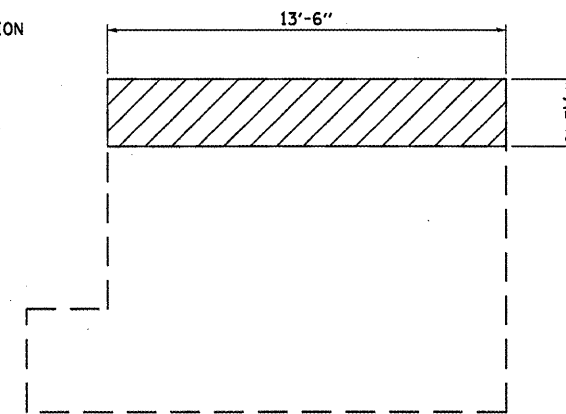


PLAN
SN 053-0129 NB

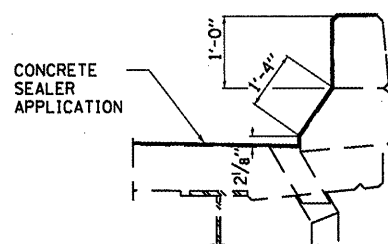
CONCRETE SEALER APPLICATION



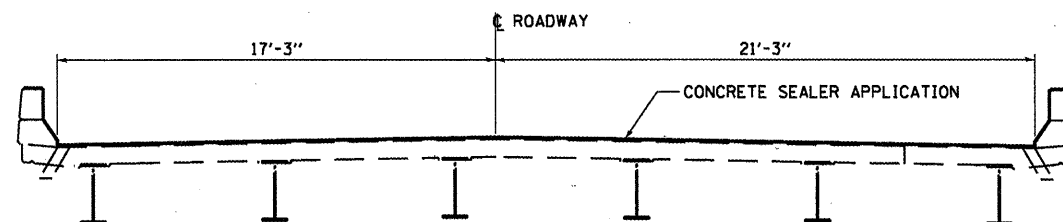
WING WALL SECTION



WING WALL ELEVATION
INSIDE FACE



CURB SECTION



SUPERSTRUCTURE CROSS SECTION

BILL OF MATERIAL
SN 053-0128

Item	Unit	Total
CONCRETE SEALER	SO FT	17569

BILL OF MATERIAL
SN 053-0129

Item	Unit	Total
CONCRETE SEALER	SO FT	17569

FILE NAME =	USER NAME = petelyj	DESIGNED - RON WOODSHANK	REVISED -
c:\pwork\pedit\petelyj\0268336\036648-shd-details.dgn		DRAWN - RON WOODSHANK	REVISED -
PLOT SCALE = 100.0000' / in.		CHECKED - ADY	REVISED -
PLOT DATE = 12/22/2011		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONCRETE SEALER DETAILS		
FOR SN 053-128 & SN 053-0129		
SCALE: _____	SHEET NO. 8 OF 8 SHEETS	STA. _____ TO STA. _____

F.A.I. RTE. 55	SECTION (53-5B-1)I-2	COUNTY LIVINGSTON	TOTAL SHEETS 16	SHEET NO. 16
CONTRACT NO. 66B48				
ILLINOIS FED. AID PROJECT				