

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
681	(117BR)	IROQUOIS	13	1
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO.66817		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

FAP ROUTE 681 (IL 116)
SECTION (117BR)

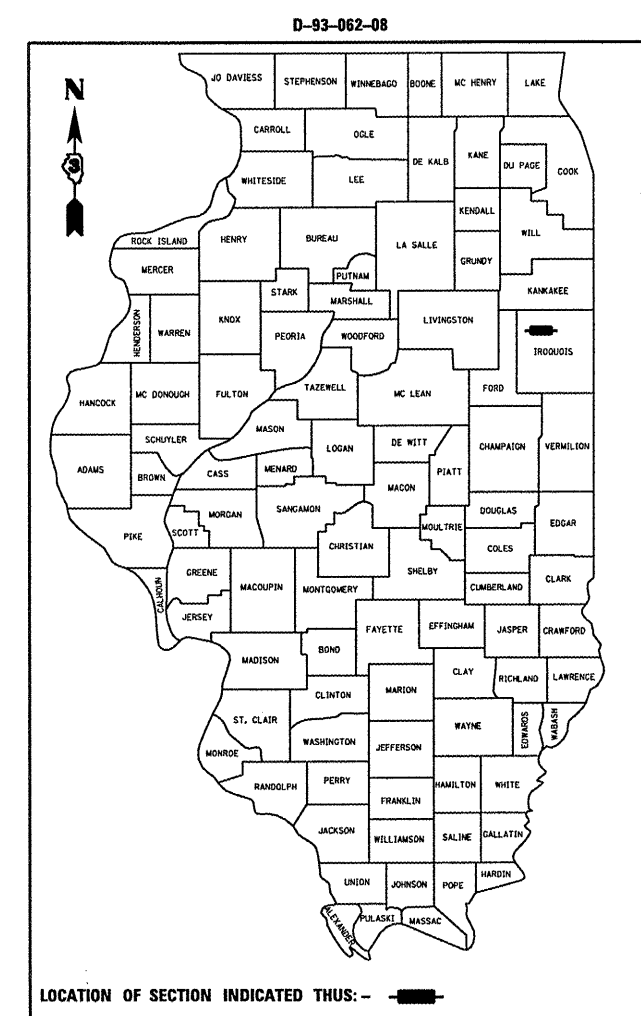
C-93-095-08
IROQUOIS COUNTY
DECK BEAM REPLACEMENT

INDEX OF SHEETS

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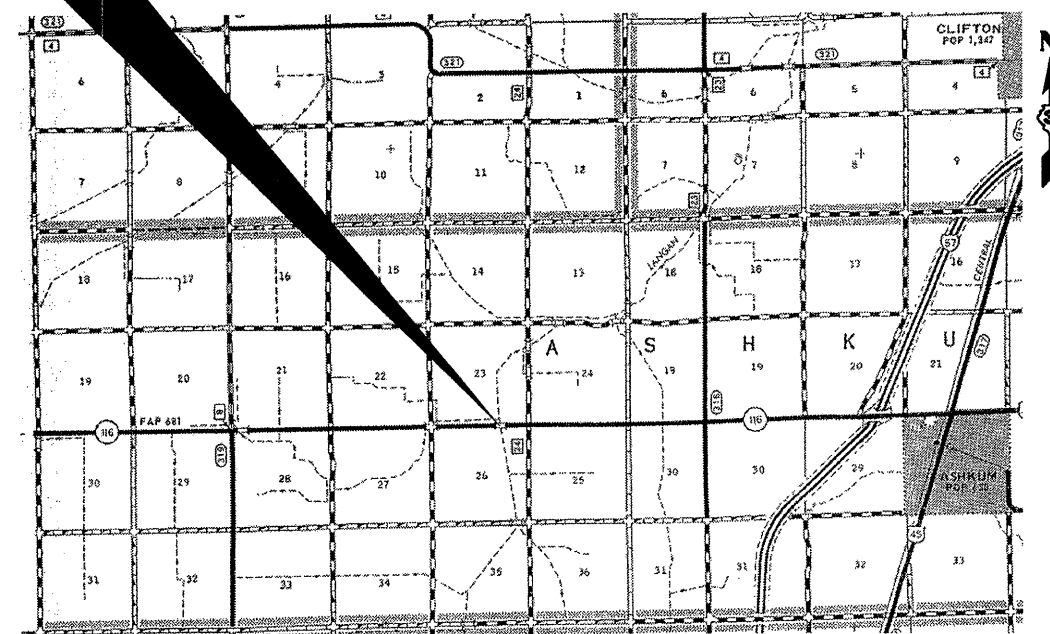
STANDARDS

- | | |
|-----------|--|
| 000001-05 | STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS |
| 001006 | DECIMAL OF AN INCH AND OF A FOOT |
| 482011-03 | HMA SHOULDER STRIPS/SHOULDERS WITH RS OR WIDENING & RS PROJECTS |
| 701001-01 | OFF-ROAD OPERATIONS 2L, 2W, MORE THAN 4.5 m (15') AWAY |
| 701006-02 | OFF-ROAD OPERATIONS 2L, 2W, 4.5 m (15') TO 600 mm (24") FROM PAVEMENT EDGE |
| 701011-01 | OFF-ROAD MOVING OPERATIONS 2L, 2W, DAY ONLY |
| 701201-02 | LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS ≥ 45 MPH |
| 701206-01 | LANE CLOSURE, 2L, 2W, NIGHT ONLY, FOR SPEEDS ≥ 45 MPH |
| 701301-02 | LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS |
| 701311-02 | LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY |
| 701321-09 | LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER |
| 701326-02 | LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS ≥ 45 MPH |
| 701901 | TRAFFIC CONTROL DEVICES |
| 704001-04 | TEMPORARY CONCRETE BARRIER |



LOCATION OF SECTION INDICATED THIS: -

PROJECT LOCATION
SN 038-0122
FAP 681 (IL 116)
3.81 MILES WEST OF I-57



LOCATION MAP
NOT TO SCALE
POINT LOCATION

FUNCTIONAL CLASSIFICATION
RURAL - MINOR ARTERIAL
F.A.P. ROUTE 681 (IL I16)
2007 ADT = 1050
P.V = 71.4% M.U. = 19.1% S.U. = 9.5%

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED 3/25 20 08

Henry F. Ryan
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

May 9, 20 08
Eric E. Haral
INTERIM ENGINEER OF DESIGN AND ENVIRONMENT

May 9, 20 08
Christine M. Reed
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

**PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS**

MICROFILMED _____
REEL NUMBER _____
AWARDED _____
RESIDENT ENGINEER _____
AS BUILT CHANGES WERE MADE
ON THE FOLLOWING SHEETS _____

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

DISTRICT 3 NO. (815) 434-6131
PROJECT ENGINEER: JOE KANNEL
UNIT CHIEF: RON WOODSHANK

CONTRACT NO. 66817

GENERAL NOTES

PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING PLANS ARE SUBJECT TO ROUTINE 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 THE SCOPE OF THE WORK. HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY FURNISHED BASED UPON THE UNIT BID PRICE FOR THE WORK.

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

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITY PROPERTY FROM CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.31 OF THE STANDARD SPECIFICATIONS. THE "JULIE" NUMBER IS 1-800-892-0123. A MINIMUM OF FORTY-EIGHT (48) HOURS ADVANCE NOTICE IS REQUIRED.

THE COST OF ANY SAW CUTS MADE TO COMPLETE THE WORK AS DESCRIBED IN PLAN DETAILS, UNLESS OTHERWISE NOTED, SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED WITH THE VARIOUS REMOVAL PAY ITEMS INVOLVED.

WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL MONUMENTS UNTIL AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING AN AUTHORIZED SURVEYOR REESTABLISH ANY SECTION OR SUBSECTION MONUMENTS DESTROYED BY HIS OPERATIONS.

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 EARTH EXCAVATION.

THE THICKNESS OF HMA SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE HMA IS PLACED.

ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUBNUMBER LISTED ON THE INDEX OF SHEETS OR THE COPY OF THE STANDARD INCLUDED IN THESE PLANS.

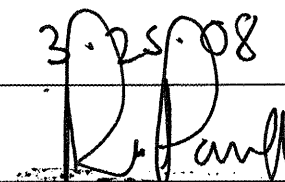
ON EXISTING PAVEMENT WHICH MAY BE SUPERELEVATED, THE NEW BITUMINOUS PAVEMENT SHALL BE BUILT WITH THE SAME SUPERELEVATION UNLESS NEW SUPERELEVATION RATES ARE GIVEN ON THE PLANS.

ALL ELEVATIONS REFERRING TO U.S.G.S. MEAN SEA LEVEL DATUM.

	HMA SURFACE	HMA WIDENING
PG GRADE	PG64-22	PG64-22
MAX % RAP ALLOWABLE	15%**	25%**
DESIGN AIR	4.0%	4.0%
VOIDS	• N50	• N50
MIXTURE COMPOSITION	IL 12.5 or IL 9.5	IL 19.0
FRICTION		
AGGREGATE	MIXTURE D	
DENSITY CONTROL METHOD	NUCLEAR	NUCLEAR

**IF RAP OPTION IS SELECTED, THE ASPHALT CEMENT GRADE MAY NEED TO BE ADJUSTED. THIS WILL BE DETERMINED BY THE ENGINEER.

DATE:

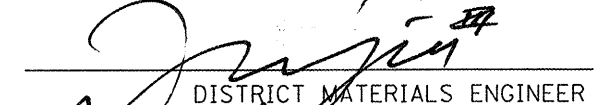
3-25-08


PREPARED BY:

DISTRICT STUDIES & PLANS ENGINEER

EXAMINED BY:


 DISTRICT CONSTRUCTION ENGINEER


 DISTRICT MATERIALS ENGINEER


 DISTRICT OPERATIONS ENGINEER

FILE NAME =	USER NAME = woodshenr1	DESIGNED - RLW	REVISED - ---	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL NOTES	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
a:\projects\deck beam repl 038-012.dgn	DRAWN - RLW	REVISED - ---	681			(117B)I	IROUOIS	13	2	
PLOT SCALE = 103.5775' / IN.	CHECKED - ---	REVISED - ---	CONTRACT NO. 66817							
PLOT DATE = Mar 24, 2008 - 10:33:58 AM	DATE - ---	REVISED - ---	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT							
SCALE: _____ SHEET NO. 1 OF 1 SHEETS STA. _____ TO STA. _____										

SUMMARY OF QUANTITIES

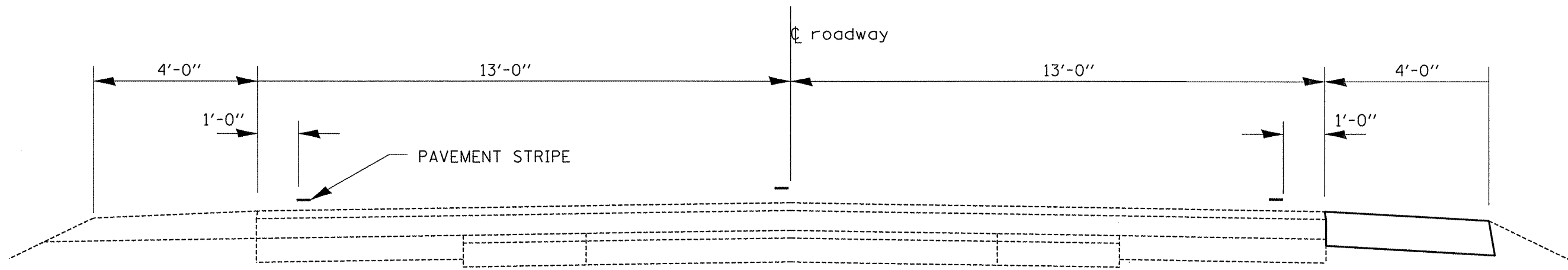
CONSTRUCTION CODE TYPE: SFTY-2A

RURAL
100% STATE
TOTAL
QUANTITY

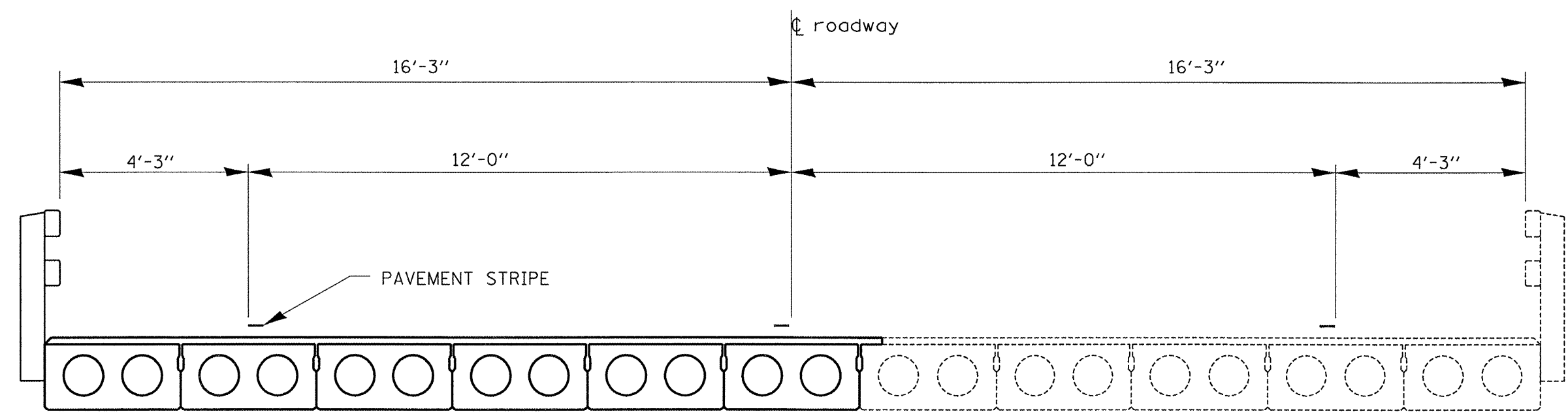
CODE NO.	ITEM	UNIT	TOTAL QUANTITY
20200500	EARTH EXCAVATION (WIDENING)	CU YD	68
35600716	HOT-MIX ASPHALT BASE COURSE WIDENING, 10"	SQ YD	246
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	23.9
44001005	HOT-MIX ASPHALT SURFACE REMOVAL	SQ YD	4.3
50400305	PRECAST PRESTRESSED CONCRETE DECK BEAMS (17" DEPTH)	SQ FT	600
58100200	WATERPROOFING MEMBRANE SYSTEM	SQ YD	70.9
58300100	PORTLAND CEMENT MORTAR FAIRING COURSE	FOOT	200
67100100	MOBILIZATION	L SUM	1
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1
70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1
70400100	TEMPORARY CONCRETE BARRIER	FOOT	263
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	87
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	134
78300100	PAVEMENT MARKING REMOVAL	SQ FT	154
X0320047	REMOVAL OF EXISTING PRECAST PRESTRESSED CONCRETE DECK BEAMS	SQ FT	600
50900905	REMOVING AND RE-ERECTING EXISTING RAILING	FOOT	34
* X7200201	WIDTH RESTRICTION SIGNING	L SUM	1
Z0030250	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2

* SPECIALTY ITEM

FILE NAME : c:\projects\deck beam repl 08\en 038-012.dgn	USER NAME : woodshankr1	DESIGNED - RLW	REVISED - ----	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES	F.A.P. RTE. 681	SECTION (1178R)I	COUNTY IROQUOIS	TOTAL SHEETS 13	SHEET NO. 3	
PLOT SCALE : 1/8" = 1' IN.	CHECKED - ----	REVISED - ----	SCALE: _____			SHEET NO. 1 OF 1 SHEETS	STA. _____ TO STA. _____	FED. ROAD DIST. NO. _____ ILLINOIS FED. AID PROJECT			
PLOT DATE : Mar 27, 2008 - 10:27:03 AM	DATE - ----	REVISED - ----	CONTRACT NO. 66817								



TYPICAL SECTION
 STA. 456+45 TO STA. 459+23
 STA. 456+56 TO STA. 462+31



TYPICAL SECTION
 STA. 459+23 TO STA. 459+56

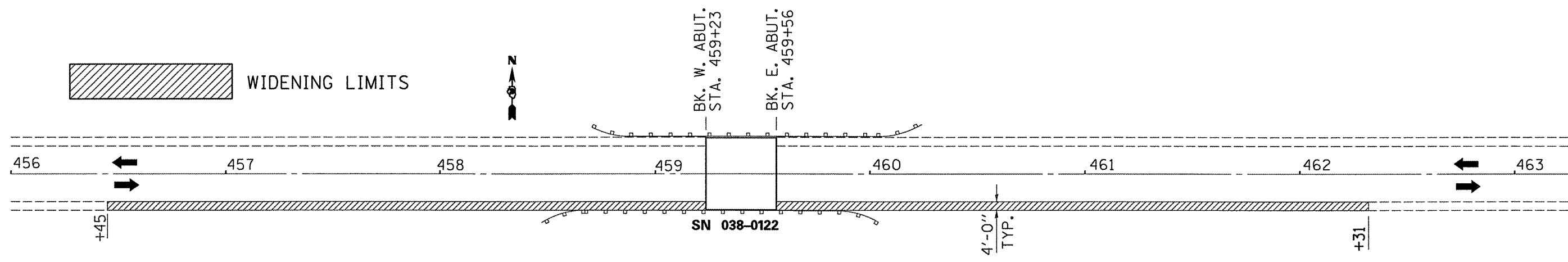
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c:\projects\deck beam repl 08\van 030-012.dgn		DRAWN - RLW	REVISED - ---
	PLOT SCALE = 103.5775' / 1IN.	CHECKED - ---	REVISED - ---
	PLOT DATE = Mar 21, 2008 - 02:05:54 PM	DATE - ---	REVISED - ---

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

TYPICAL SECTIONS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
681	(117BR)	IRROUOIS	13	4
CONTRACT NO. 66817				
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT				



BILL OF MATERIALS

EARTH EXCAVATION WIDENING	CU YD	68
HOT-MIX ASPHALT BASE	SO YD	246
COURSE WIDENING		

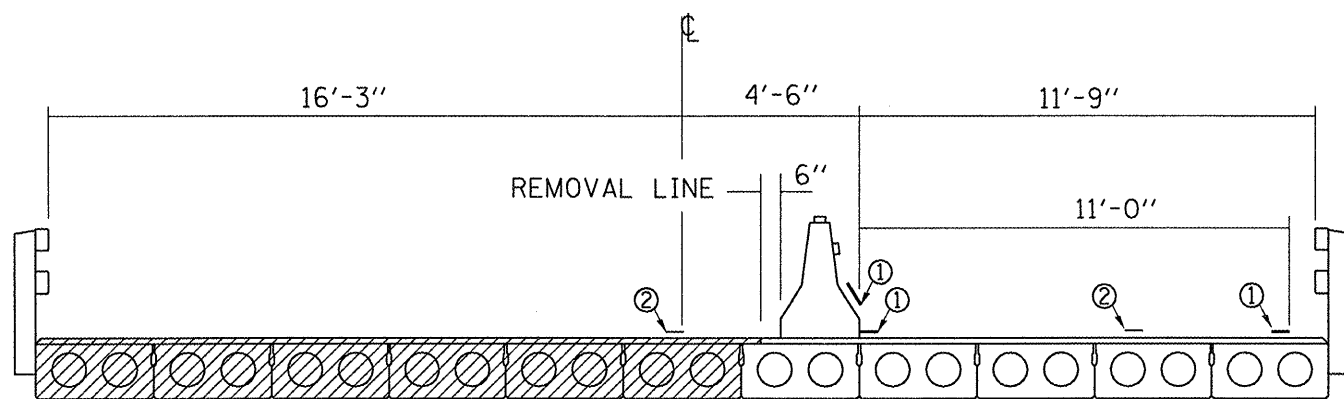
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ca:\projects\deck beam repl 08\sn 038-012.dgn		DRAWN - RLW	REVISED - ---
		CHECKED - ---	REVISED - ---
		DATE - ---	REVISED - ---

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

STAGING DETAILS - STAGE I

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

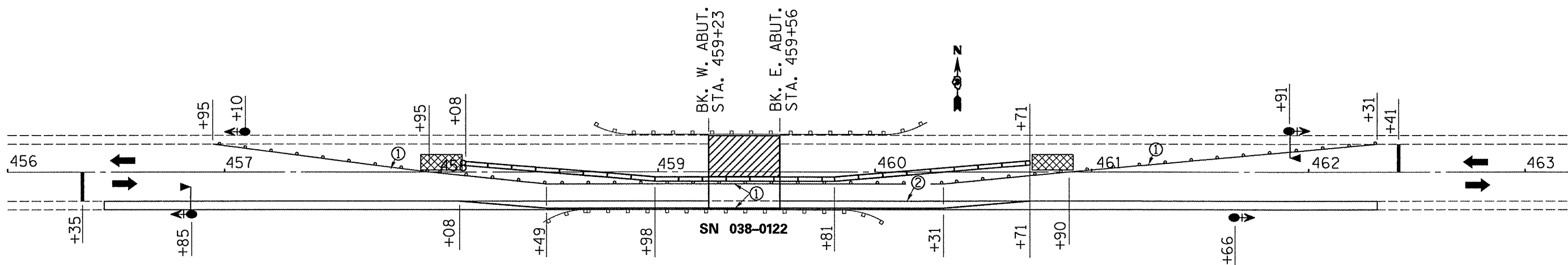
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
681	(117BR)	IRROUOIS	13	5
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT			CONTRACT NO. 66817	



CROSS SECTION
LOOKING EAST

NOTES:

1. THE CONTRACTOR HAS THE OPTION OF USING EITHER THE LINE ON THE TEMPORARY CONCRETE BARRIER OR ON THE PAVEMENT.
2. THE COST OF THE REFLECTORS AND THE BARRIER/PAVEMENT MARKING LINE IS INCLUDED IN THE COST OF THE TEMPORARY CONCRETE BARRIER.
3. THE COST OF THE TEMPORARY PAVEMENT MARKING IS INCLUDED IN THE COST OF STANDARD 701321



- ① TEMPORARY PAVEMENT MARKING LINE 4"
- ② PAVEMENT MARKING REMOVAL

BILL OF MATERIAL

PAVEMENT MARKING REMOVAL	SQ FT	154
TEMPORARY CONCRETE BARRIER	FOOT	263
IMPACT ATTENUATOR, TEMPORARY (NON-REDIRECTIVE, TEST LEVEL 3)	EACH	2
THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	87
THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	134

SYMBOLS

Work area

Sign

Type III barricade

Microwave detector

Traffic signal with backplate

Impact attenuator

Drum with steady burning light at 25' cts.

Temporary concrete barrier

Double vertical panel at 25' cts.

Crystal, bidirectional barrier wall/guardrail marker at 25' cts.

SEE STANDARD 701321 FOR DETAILS NOT SHOWN

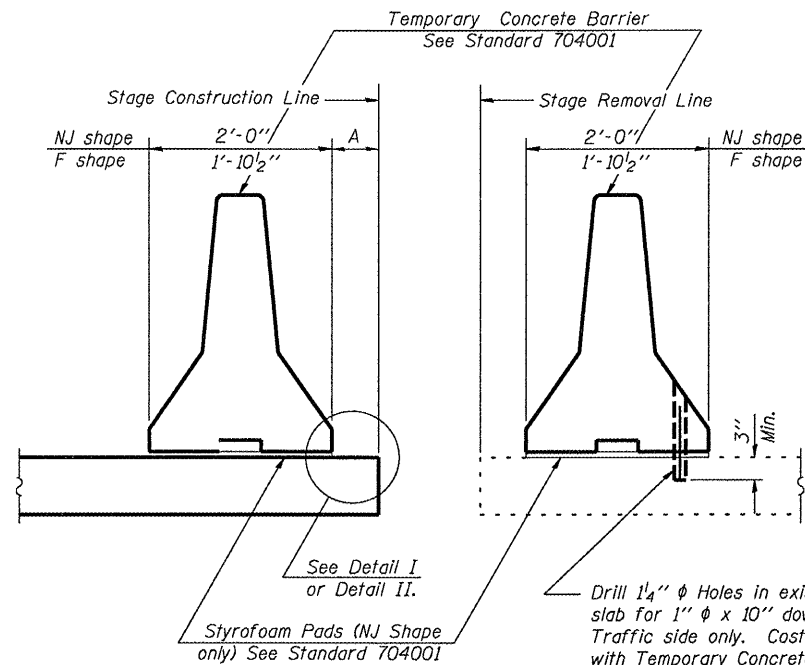
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PLOT DATE = Mar 21, 2008 - 02:06:05 PM	DATE - ---	REVISED - ---	REVISED - ---

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGING DETAILS - STAGE II

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

F.A.P. RTE. 681	SECTION (117BR)	COUNTY IROUOIS	TOTAL SHEETS 13	SHEET NO. 6
FED. ROAD DIST. NO. - ILLINOIS		FED. AID PROJECT		
CONTRACT NO. 66817				



NEW SLAB

EXISTING SLAB

SECTIONS THRU SLAB

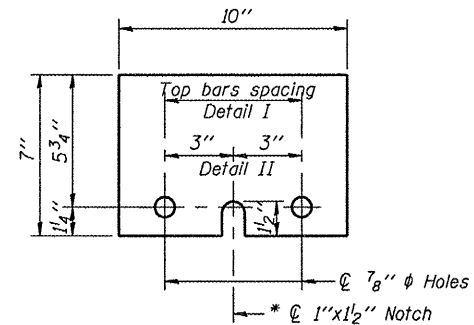
NOTES

Detail I - With Bar Splicer or Couplers:
Connect one (1) 1"x7"x10" steel \bar{P} to the top layer of couplers with 2-5/8" ϕ bolts screwed to coupler at approximate \bar{C} of each barrier panel.

Detail II - With Extended Reinforcement Bars:
Connect one (1) 1"x7"x10" steel \bar{P} to the concrete slab with 2-5/8" ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate \bar{C} of each barrier panel.

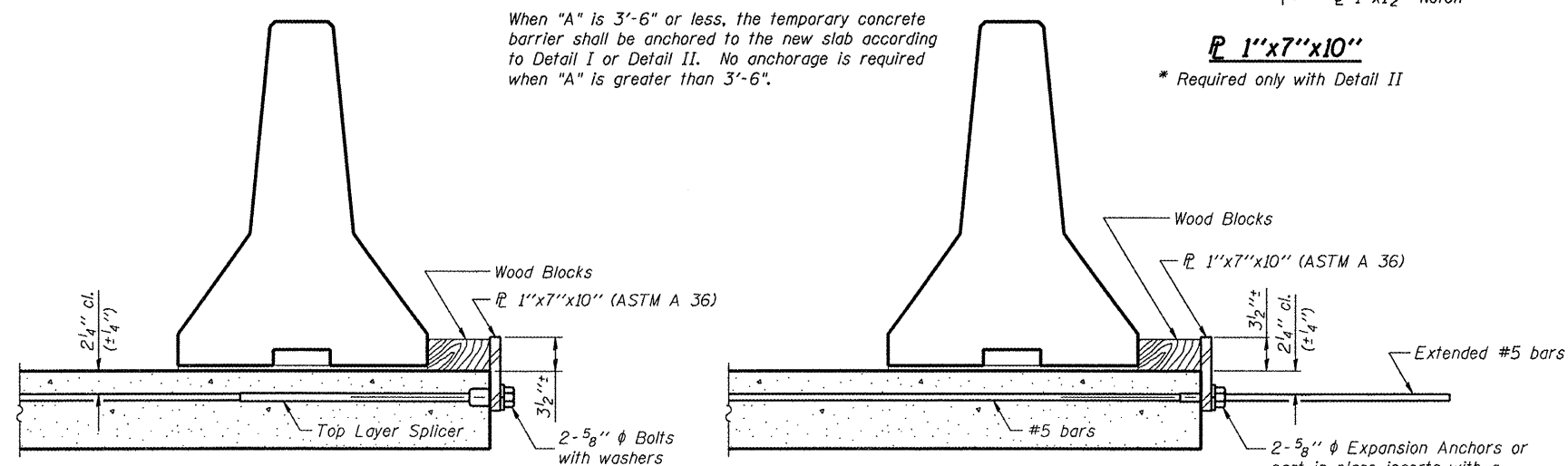
Cost of anchorage is included with Temporary Concrete Barrier.

Drill 1/4" ϕ Holes in existing slab for 1" ϕ x 10" dowel bars. Traffic side only. Cost included with Temporary Concrete Barrier.



1" x 7" x 10"

* Required only with Detail II

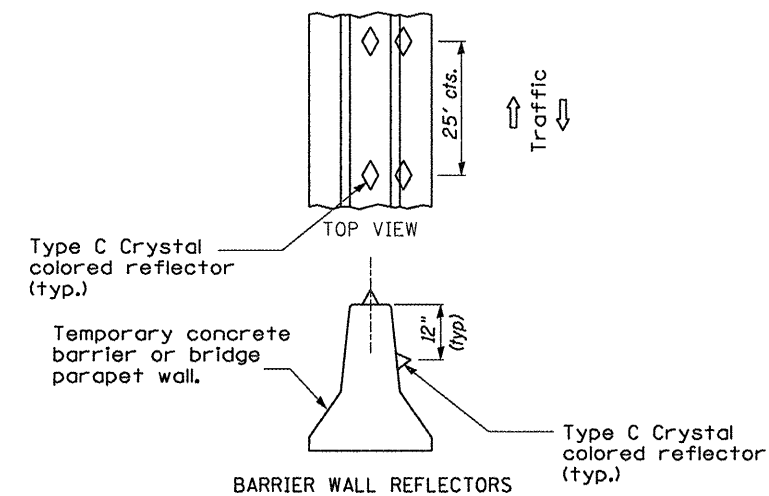


DETAIL I

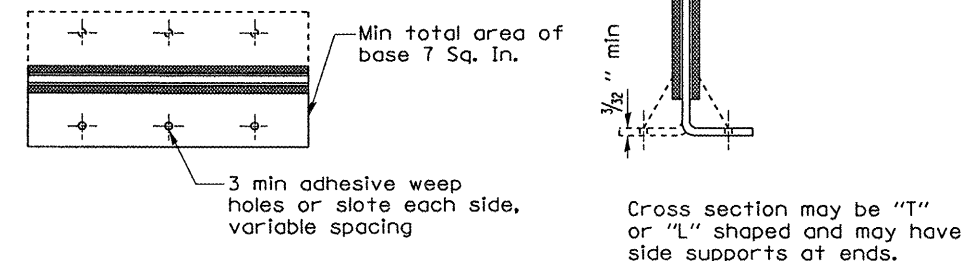
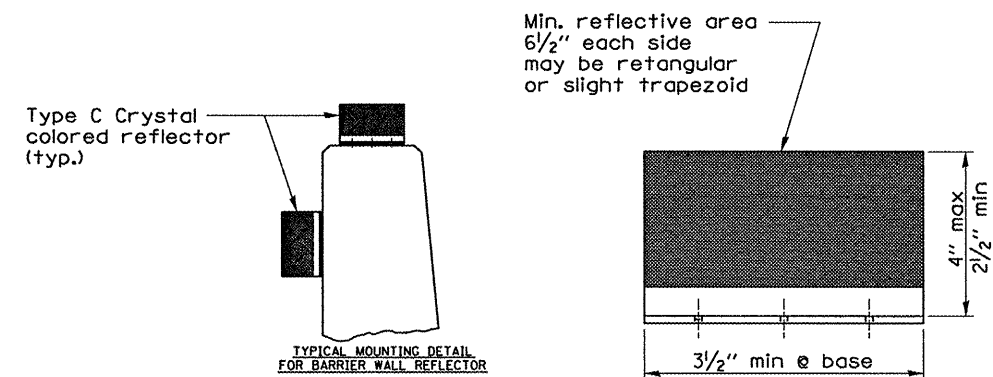
The 1"x7"x10" Plate shall not be removed until Stage II Construction forms and reinforcement bars are in place.

DETAIL II

The 1"x7"x10" 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.



DETAIL A



TYPE C REFLECTOR

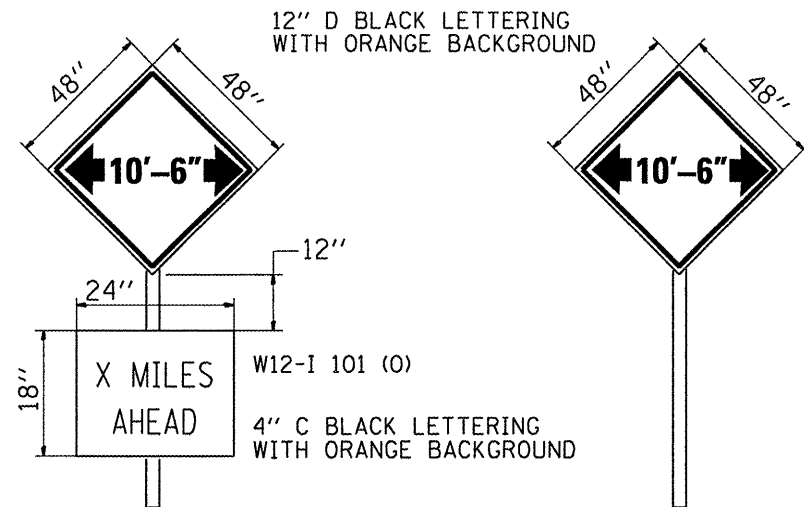
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CONCRETE BARRIER

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

F.A.P. RTE. 681	SECTION 0117BR1	COUNTY IROQUOIS	TOTAL SHEETS 13	SHEET NO. 7
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				CONTRACT NO. 66817



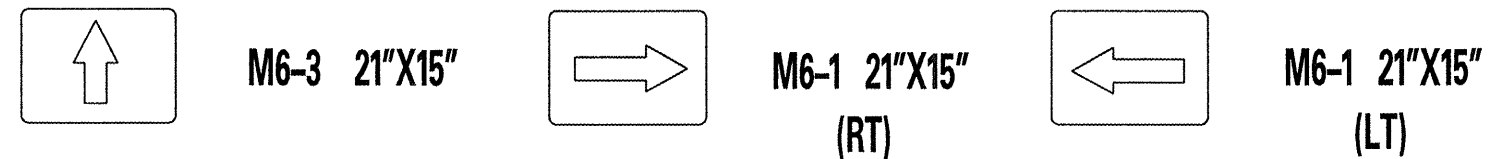
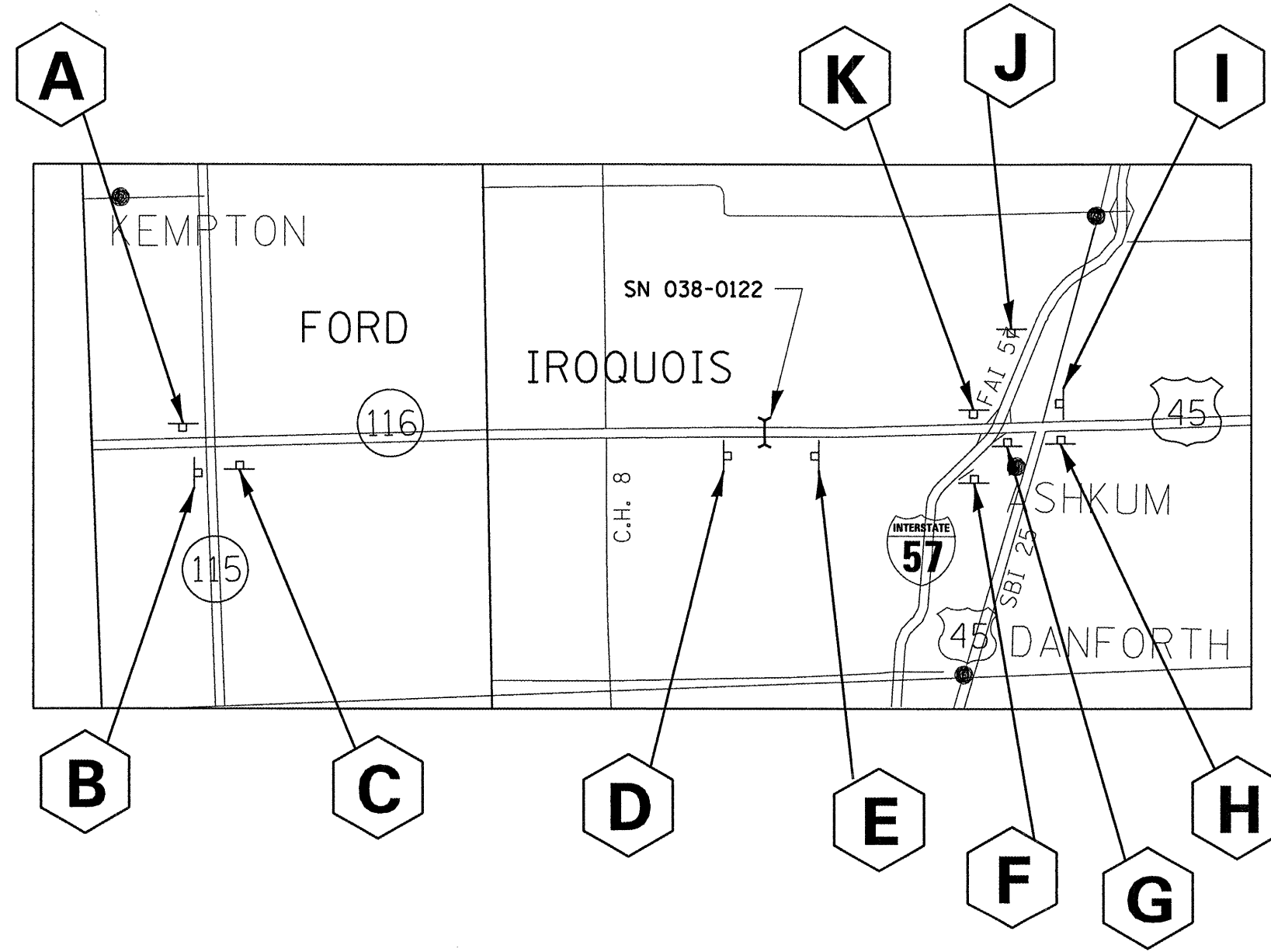
TO BE POST MOUNTED AS SHOWN ELSEWHERE IN THE PLANS.

THE CONTRACTOR SHALL NOTIFY THE ENGINEER A MINIMUM OF 21 CALENDAR DAYS PRIOR TO INSTALLING ANY TRAFFIC CONTROL DEVICES THAT WILL RESTRICT THE PAVEMENT WIDTH.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE ENGINEER TO MEET THIS REQUIREMENT.

WIDTH RESTRICTION SIGNING DETAILS

TABLE OF WIDTH RESTRICTION SIGNS				
NO. OF SIGNS	TYPE OF SIGN	SIGN	LOCATION	WIDTH RESTRICTION & MILES AHEAD
1	WIDTH RESTRICTION with W12-1101(O) & M6-1 (LT)	A	SOUTHBOUND LANE IL 115 NW CORNER IL 115 & IL 116	9'-6" 8.7 MILES AHEAD
1	WIDTH RESTRICTION with W12-1101(O) & M6-3	B	EASTBOUND LANE IL 116 SW CORNER IL 115 & IL 116	9'-6" 8.7 MILES AHEAD
1	WIDTH RESTRICTION with W12-1101(O) & M6-1 (RT)	C	NORTHBOUND LANE IL 115 SE CORNER IL 115 & IL 116	9'-6" 8.7 MILES AHEAD
1	WIDTH RESTRICTION	D	WITHIN TRAFFIC CONTROL AND PROTECTION STANDARD 701321	9'-6" AHEAD
1	WIDTH RESTRICTION	E	WITHIN TRAFFIC CONTROL AND PROTECTION STANDARD 701321	9'-6" AHEAD
1	PORTABLE CHANGEABLE MESSAGE SIGN	F	SOUTHBOUND LANE I-57 1.0 MILE NE OF IL 116	9'-6" WIDTH RESTRICTION IL 116 WESTBOUND
1	WIDTH RESTRICTION with W12-1101(O) & M6-1 (LT)	G	NORTHBOUND LANE I-57 AT TOP OF OFF RAMP	9'-6" 3.8 MILES AHEAD
1	WIDTH RESTRICTION with W12-1101(O) & M6-1 (LT)	H	NORTHBOUND LANE US 45 SE CORNER US 45 & IL 116	9'-6" 4.5 MILES AHEAD
1	WIDTH RESTRICTION with W12-1101(O) & M6-3	I	ERSTBOUND LANE IL 116 NE CORNER US 45 & IL 116	9'-6" 4.5 MILES AHEAD
1	PORTABLE CHANGEABLE MESSAGE SIGN	J	NORTHBOUND LANE I-57 1.0 MILE SW OF IL 116	9'-6" WIDTH RESTRICTION IL 116 WESTBOUND
1	WIDTH RESTRICTION with W12-1101(O) & M6-1 (RT)	K	SOUTHBOUND LANE I-57 AT TOP OF OFF RAMP	9'-6" 3.8 MILES AHEAD



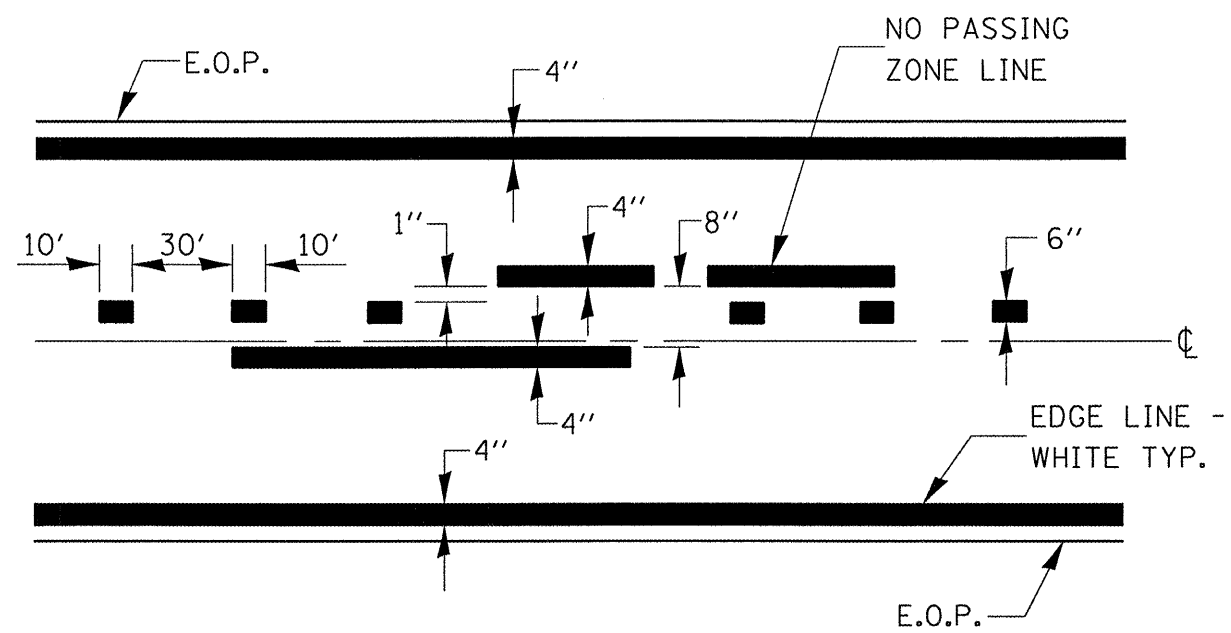
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PLOT DATE = Mar 21, 2008 - 02:06:18 PM		DATE - ---	REVISED - ---

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WIDTH RESTRICTION SIGNING

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

F.A.P. RTE. 681	SECTION (117BR)	COUNTY IROQUOIS	TOTAL SHEETS 13	SHEET NO. 8
FED. ROAD DIST. NO. _____ (ILLINOIS) FED. AID PROJECT			CONTRACT NO. 66817	



CENTERLINE & NO PASSING
ZONE LINES - YELLOW

(SEE TYPICAL SECTIONS)

PAVEMENT MARKING

FILE NAME =	USER NAME = woodshenr1	DESIGNED - RLW	REVISED - ---
c:\projects\deck beam repl 08\sn 030-01	2.dgn	DRAWN - RLW	REVISED - ---
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	PLOT DATE = Mar 21, 2008 - 02:06:23 PM	DATE - ---	REVISED - ---

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL PAVEMENT MARKING

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
681	(117BR)	IROQUOIS	13	9
CONTRACT NO. 66817				
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT				

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 681	(117BR)	IRROQUOIS	13	10
FED. ROAD DIST. NO. 7	ILL. PROJ. NO.	FED. AID PROJECT-		

SHEET NO. 1
4 SHEETS

Contract Number: 66817

GENERAL NOTES

The contractor is advised that the existing PPC deck beams are in a deteriorated condition with reduced load carrying capacity. It is the contractor's responsibility to account for the condition of the beams when developing construction procedures.

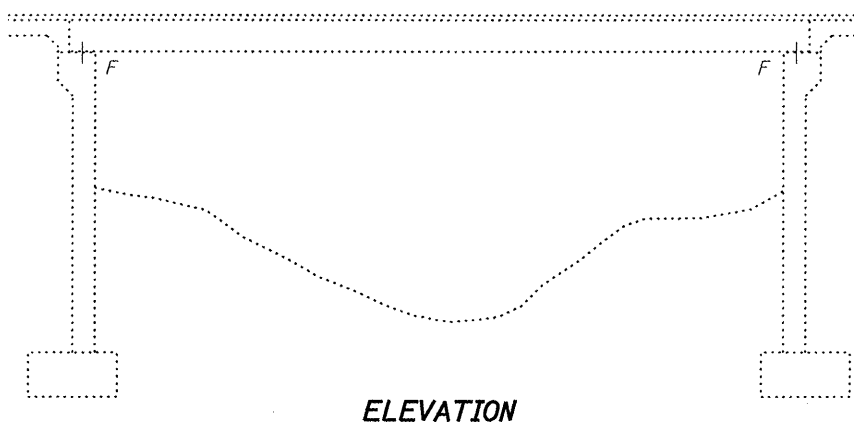
If the contractor's procedure for existing beam removal or placement of new beams involves placement of cranes or other heavy equipment on the bridge, a detailed procedure shall be submitted to the Engineer for approval. The procedure shall include calculations, prepared and sealed by an Illinois Licensed Structural Engineer, verifying that the equipment and procedure used will not overstress the new or existing beams. To distribute load to multiple beams and protect the existing surface, in all cases a double layer mat of heavy timbers shall be used at all times under crane tracks or wheels and any outriggers in the down position. If necessary, shims shall be used under the crane mat to ensure uniform contact with the underlying beams. If heavy equipment will be placed on new PPC deck beams, the following shall be done prior to placement of the timber mats: placement and tightening of transverse tie assemblies, grouting and curing the dowel rods 24 hours minimum and grouting and curing the shear keys.

The top surface of the beams shall be finished according to the IDOT Manual for Fabrication of Precast Prestressed Concrete Products.

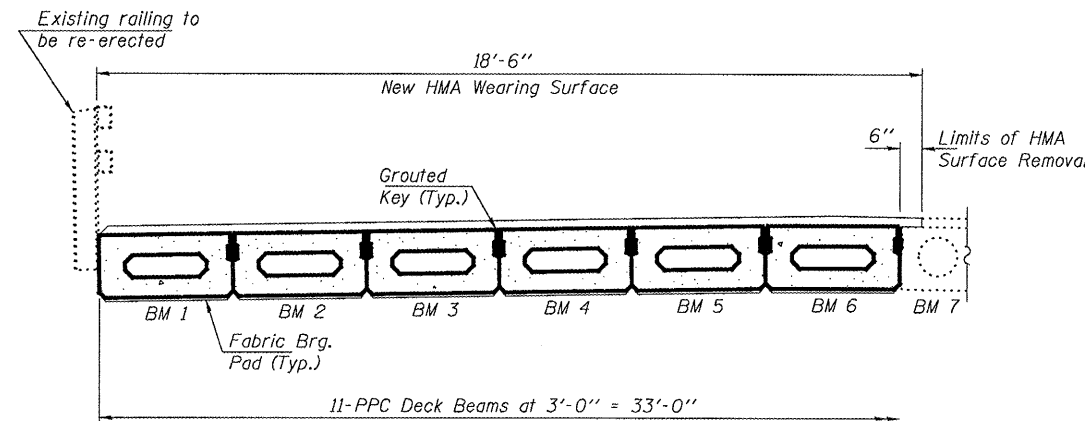
Plan dimensions and details relative to existing plans are subject to routine variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished based upon the unit price bid for the work.

Temporary concrete barrier shall only be anchored into the overlay and not into the PPC deck beams.

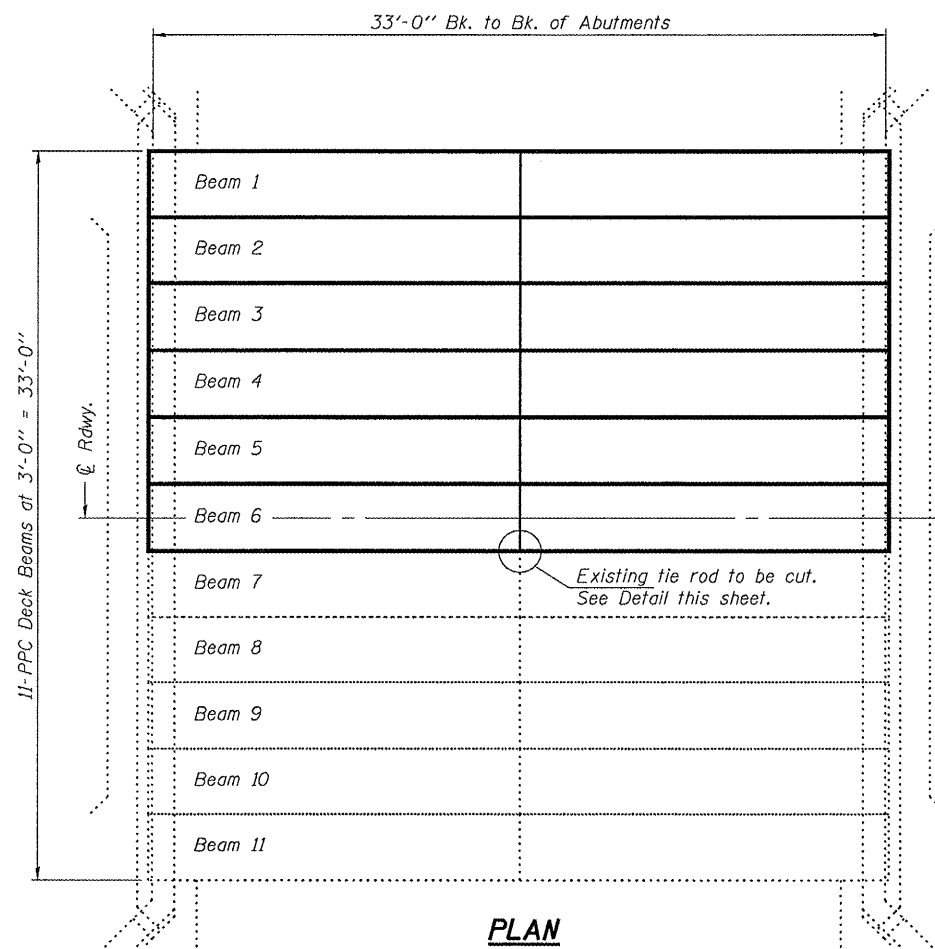
Any damage done to the bridge during beam removal shall be repaired by the contractor. Cost to be included in the cost of Removal of Existing PPC Deck Beams.



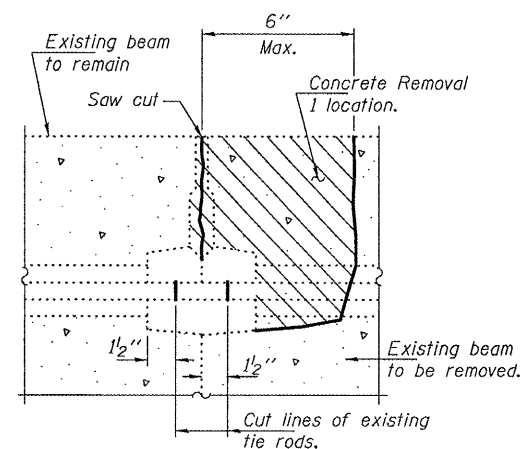
ELEVATION



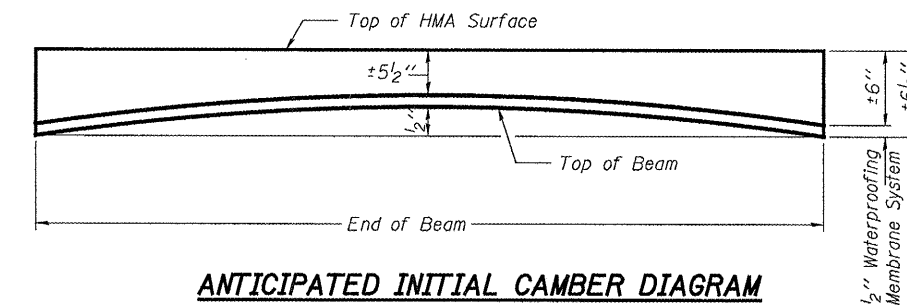
PARTIAL CROSS SECTION



PLAN



BEAM REMOVAL DETAIL AT TRANSVERSE TIES



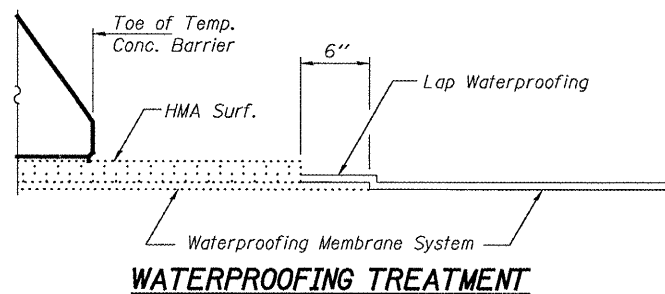
ANTICIPATED INITIAL CAMBER DIAGRAM

DESIGN STRESSES

PRECAST PRESTRESSED UNITS
 $f'_c = 6,000$ psi
 $f'_{ci} = 5,000$ psi
 $f'_s = 270,000$ psi ($1/2$ " ϕ low lax strands)
 $f'_{si} = 201,960$ psi ($1/2$ " ϕ low lax strands)

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Removal of Existing PPC Deck Beams	Sq. Ft.	600
Precast Prestressed Concrete Deck Beams (17" Depth)	Sq. Ft.	600
Hot-Mix Asphalt Surface Removal	Sq. Yd.	4.3
HMA Surface Course Mix "D" N50	Tons	23.9
PC Mortar Fairing Course	Foot	200
Removing & Re-erecting Existing Railing	Foot	34
Waterproofing Membrane System	Sq. Yd.	70.9



WATERPROOFING TREATMENT



DESIGNED	Adrian I. Halley
CHECKED	Steffen
DRAWN	Steffen
CHECKED	ATH AJB

MAY 8, 2008
 EXAMINED
 PASSED
 ENGINEER OF BRIDGES AND STRUCTURES

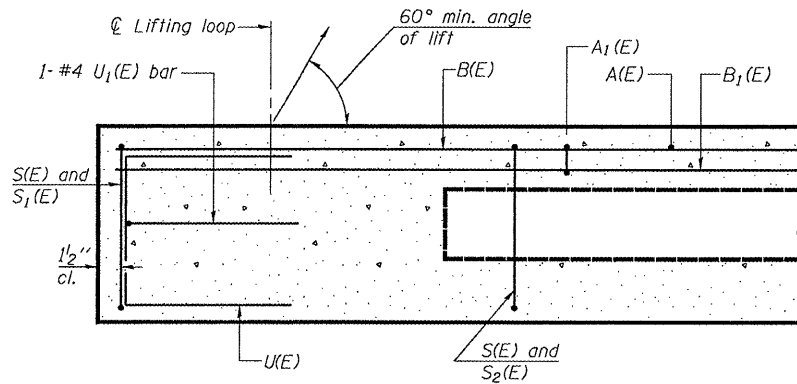
Expires: November 30, 2008

PLAN AND ELEVATION
FAP 681
IRROQUOIS COUNTY
SN 038-0122

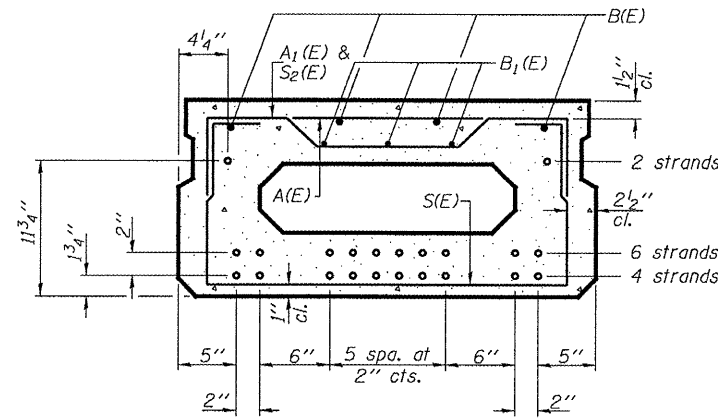
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 2 4 SHEETS
FAP 681	(117BR)	IROQUOIS	13	11	
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT		

Contract Number: 66817



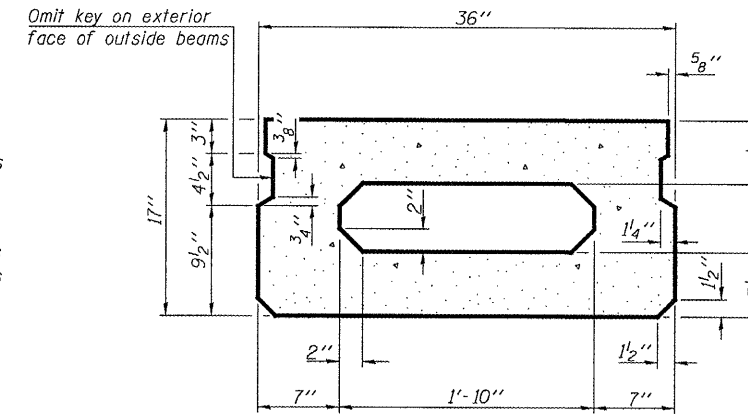
SECTION C-C



SECTION A-A

(Showing reinforcement and permissible strand locations)

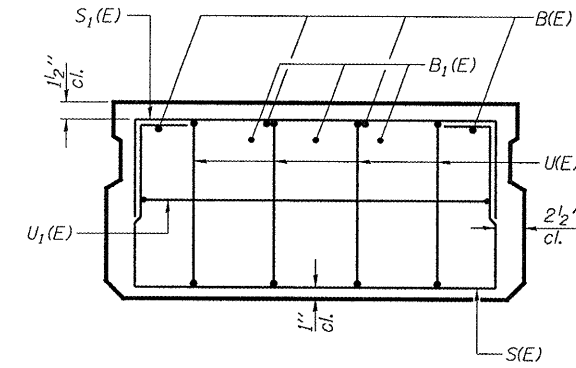
Note: Place the number of strands specified in each row symmetrically about the centerline of beam in the permissible strand locations shown.



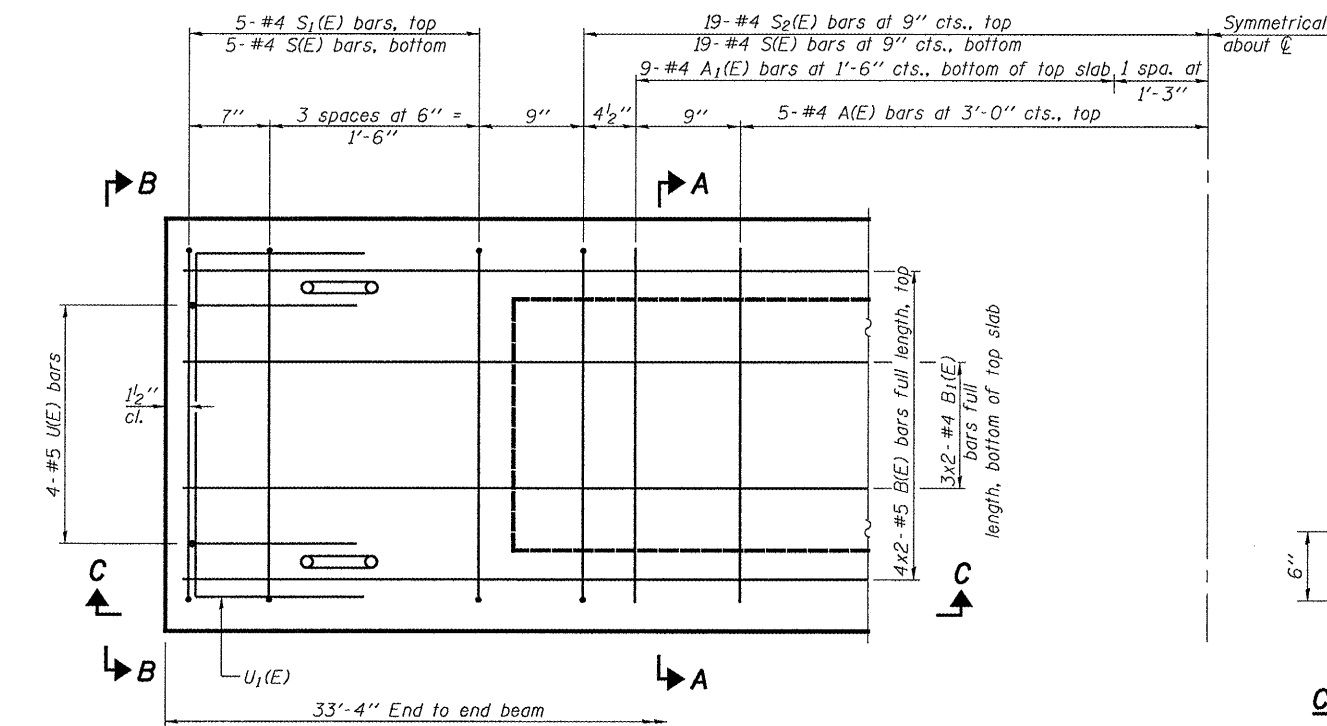
SECTION A-A

(Showing dimensions)

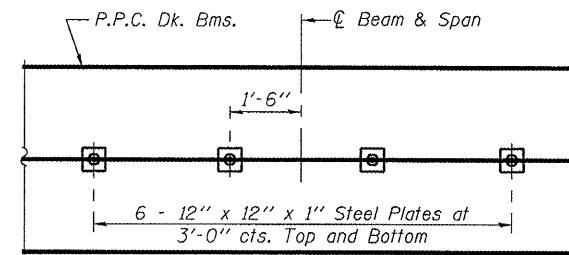
Limits of HMA surface removal and replacement. Existing water-proofing to remain. Lap new W.P.M.S. with exist. W.P.M.S.



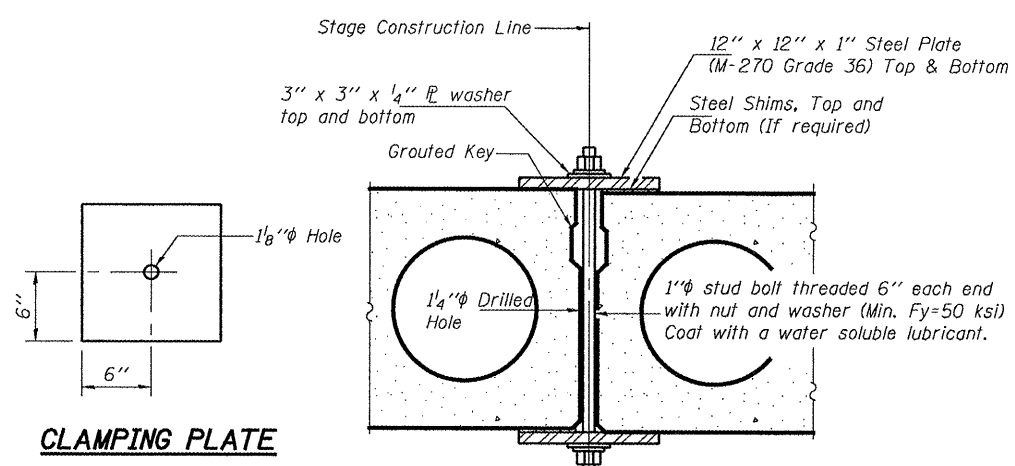
VIEW B-B



PLAN VIEW



PLAN



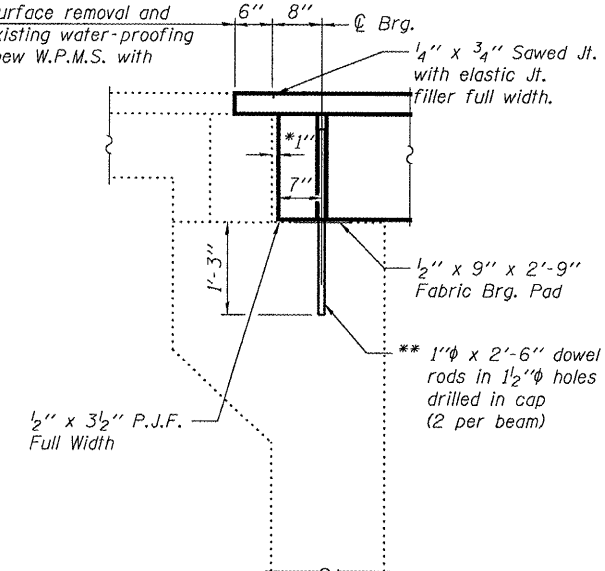
CLAMPING PLATE

SECTION

Notes:
See Special Provisions for Stage Construction Precast Prestressed Concrete Deck Beams.
See Stage Construction Detail for traffic lane. Cost is included with Precast Prestressed Concrete Deck Beams.

* 1" Joint shall be filled with non-shrink grout. Dimension may vary to accommodate tolerance in beam lengths.

** Existing dowel rods are to be burned off, ground flush, and sealed with epoxy prior to placement of new beams. Cost included in Removal of Existing PPC Deck Beams. After beams have been erected holes shall be drilled into cap and dowel rods placed. Dowel holes shall be filled with non-shrink grout to top of beam and allowed to cure a minimum of 24 hours prior to grouting the shear keys.



TYPICAL SECTION AT ABUTMENTS

BAR LIST
ONE BEAM ONLY
(For information only)

Bar	No.	Size	Length	Shape
A(E)	10	#4	2'-7"	—
A1(E)	19	#4	2'-10"	~
B(E)	8	#5	17'-8"	—
B1(E)	6	#4	17'-5"	—
S(E)	48	#4	5'-9"	U
S1(E)	10	#4	4'-3"	U
S2(E)	38	#4	4'-6"	U
U(E)	8	#5	3'-8"	U
U1(E)	2	#4	5'-0"	U

Bars indicated thus 4 x 2-#5 etc. indicates 4 lines of bars with 2 lengths per line.
Note: See sheet 3 of 4 for additional details and Bill of Material.

REPAIR DETAILS
FAP 681
IROQUOIS COUNTY
SN 038-0122

DESIGNED	ATH
CHECKED	AJB
DRAWN	Steffen
CHECKED	ATH AJB

MAY 8, 2008
EXAMINED *Carl Hansen*
ENGINEER OF STRUCTURAL SERVICES
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

Note: Spacing of S(E) and S2(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.

