03-06-2015 LETTING ITEM 178

STATE OF ILLINOIS

**DEPARTMENT OF TRANSPORTATION** 

**DIVISION OF HIGHWAYS** 

FOR INDEX OF SHEETS, SEE SHEET NO. 2 FOR STATE STANDARDS, SEE SHEET NO. 2

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## PROPOSED HIGHWAY PLANS

FAP ROUTE 553 (IL 72)
SECTION D2 DECK REPAIR 2015-1
TYPE of IMPROVEMENT: BRIDGE REPAIR
OGLE COUNTY

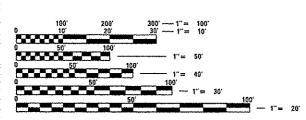
SN 071-0067

R.1E C-92-083-14

SCOTT RD

NOTE OF THE PROPERTY OF THE PROPER

OGLE COUNTY - SCOTT TOWNSHIP - SECTION 21



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

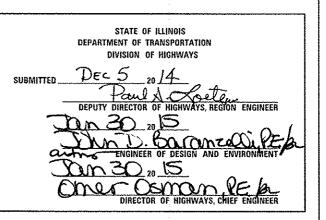
PROJECT ENGINEER: DAVID DOSS (815) 284–5416
PROJECT MANAGER: MAHMOUD ETEMADI (815) 284–5393

CONTRACT NO. 64K41

| F.A.P. | SECTION | COUNTY | TOTAL SHEET | NO. | SHEET | SHEETS | SHEETS | NO. | SHEET | SHEETS |

D-92-061-14





PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

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20	BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS SN 071-0067

## STATE STANDARDS

000001 - 06	STANDARD	SYMBOLS.	ABBREVIATIONS.	AND	PATTERNS

001006 DECIMAL EQUIVALENTS OF AN INCH AND FOOT

701006 - 05 OFF ROAD OPERATIONS, 2L, 2W, 15'(4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE

701011 - 04 OFF ROAD MOVING OPERATIONS, 2L, 2W, DAY ONLY

701201 - 04 LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS > 45 MPH

701301 - 04 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS

701311 - 03 LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY

701321 - 14 LANE CLOSURE, 2L. 2W. BRIDGE REPAIR WITH BARRIER

701326 - 04 LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS 2 45 MPH

701901 - 04 TRAFFIC CONTROL DEVICES

704001 - 07 TEMPORARY CONCRETE BARRIER

720011 - 01 METAL POSTS FOR SIGNS, MARKERS & DELINEATORS

728001 - 01 TELESCOPING STEEL SIGN SUPPORT

729001 ~ 01 APPLICATIONS OF TYPES A & B METAL POSTS (FOR SIGNS & MARKERS)

## **GENERAL NOTES**

All Borrow/Waste/Use sites must be approved by the Department prior to removing any material from the project or initiating any earthmoving activities, including temporary stockpiling outside the limits of construction.

The Contractor shall be responsible for protecting utility property during construction operations as outlined in Article 107.31 of the Standard Specifications. A minimum of 48 hours advance notice is required for non-emergency work. The JULIE number is 800-892-0123. The following listed utilities located within the project limits or immediately adjacent to the project construction limits are members of JULIE:

#### **ELECTRIC:**

COMMONWEALTH EDISON COMPANY ATTN: NORA FERNANDEZ (815) 490-2869 123 ENERGY AVENUE ROCKFORD, IL 61109

#### GAS:

NICOR GAS CO. ATTN: BRUCE KOPPANG (630) 388-3046 1844 FERRY ROAD NAPERVILLE. IL 60563

#### TELEPHONE:

ATTN: DONALD BELMORE (815) 544-6171 2239 NEWBURG ROAD BELVIDERE, IL 61008

#### COMMUNICATIONS:

IFIBER ATTN: LANCE SANDY (815) 753-6075 3100 SYCAMORE ROAD DEKALB. IL 60115

IDOT is not a member of JULIE. If you are near any overhead lighting, intersection lighting or traffic signals, contact the IDOT Traffic Office at 815/284-5469 at least 48 hours prior to work.

Hazards behind Temporary Concrete Barrier Wall No materials, equipment, vehicles or other hazards shall be within 3'-6" of the temporary concrete barrier wall, measured from the closest point of the barrier wall perpendicular to the hazard. Equipment that is actively working with 3'-6" of the barrier wall may be allowed for a short duration, if approved by the engineer, required for the work activity, and there is not another method to complete the work.

TOTAL SHEE SHEETS NO.

00LE 20 Z

CONTRACT NO. 64K41

ILLINOIS FED. AID PROJECT

FILE NAME :	USER NAME = dosadd	DESIGNED -	REVISED -
0;\8R\Doss\0gle\64K41	Repairs SN 971-9067\C400\02-sht-cover.dgn	DRAWN -	REVISED -
	PLOT SCALE : 48,8888 1/ in.	CHECKED -	REVISEO -
Default	PLOT DATE = The Dec 04 13:45:13 2	2814 DATE -	REVISEO -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

	INDEX OF SHEETS, STATE STANDARDS	F.A.P. RTÉ.	SECTION	
	GENERAL NOTES	553	D2 DECK REPAIR 2015-1	I
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1	SCALE: SHEET OF SHEETS STA TO STA		ILLINOIS FEO. A	ij

## SUMMARY OF QUANTITIES

	SUMMANT OF GUAIN		0014 100% State Funds	
CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY	
20200500	EARTH EXCAVATION (WIDENING)	CU YD	93	
30300112	AGGREGATE SUBGRADE IMPROVEMENT, 12"	SQ YD	239	
40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	3	
12001300	PROTECTIVE COAT	SQ 40	35	
50102400	CONCRETE REMOVAL	CU YD	13.8	
50300255	CONCRETE SUPERSTRUCTURE	CU YD	13.0	
50300260		5Q YO	67/	
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	1,280	
50800515	BAR SPLICERS	EACH	20	
52000110	PREFORMED JOINT STRIP SEAL	FOOT	88	
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	3	
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 SÜM	1	
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	

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FILE NAME :	USER NAME = dosadd	DESIGNED -		REVISED -			F.A.P.	SECTION	COUNTY	SHEETS NO.
GIVER/Doss/Ogle/64K41 Repairs SN 871-806	7\CADD\02-eht-opvar.dgn	DRAWN -		REVISED -	 STATE OF ILLINOIS	SUMMARY OF QUANTITIES	553	DZ DECK REPAIR 2015-1	OCLE	20 3
	PLOT SCALE * 40.0000 '/ in.	CHECKED -	<del></del>	REVISED -	 DEPARTMENT OF TRANSPORTATION	70.574		<u> </u>	CONTRACT	T NO. 64K41
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## SUMMARY OF QUANTITIES

	SUMMANT OF QUANTITIES		0014 100% State Funds	
CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY	
70300220	TEMPORARY PAVEMENT MARKING LINE, 4"	FOOT	2,300	
70300280	TEMPORARY PAVEMENT MARKING LINE, 24"	FOOT	24	
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	815	
70400100	TEMPORARY CONCRETE BARRIER	FOOT	493	
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	455	
70600250	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	EACH	11	
70000241	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE, NARROW), TEST LEVEL 2	EACH	1	
70600350	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3	EACH	1	
70600341	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE, NARROW), TEST LEVEL 2	EACH	1	
78300100	PAVEMENT MARKING REMOVAL	SQ FT	173	
Z0006012	BRIDGE DECK LATEX CONCRETE OVERLAY, 2 1/4"	SQ YD	676	
Z0012130	BRIDGE DECK SCARIFICATION 3/4"	SQ. YD	676	
Z0016001	DECK SLAB REPAIR (FULL DEPTH, TYPE I)	SQ YD	10	
Z0016002	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ YD	10	
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	

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## STAGINIG TYPICALS

PRE-STAGE SHOULDER WIDENING

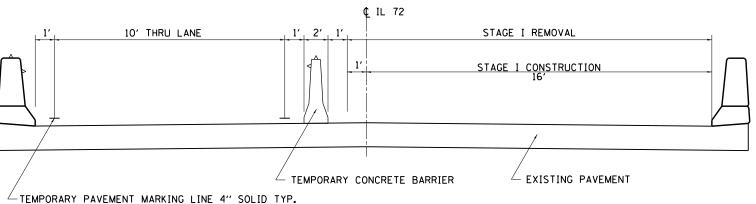
STA 1670+61 - 1671+86 WB STA 1673+80 - 1675+32 WB STA 1670+61 - 1672+08 EB STA 1674+02 - 1675+50 EB

AGGREGATE SUBGRADE IMPROVEMENT, 12"

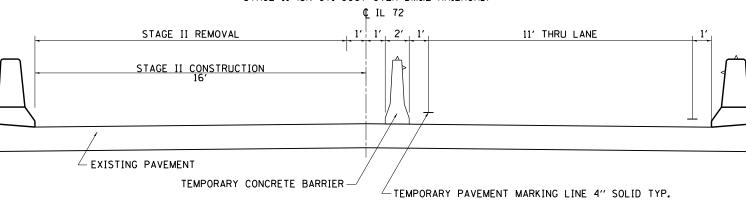
HOT-MIX ASPHALT BINDER COURSE

HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50

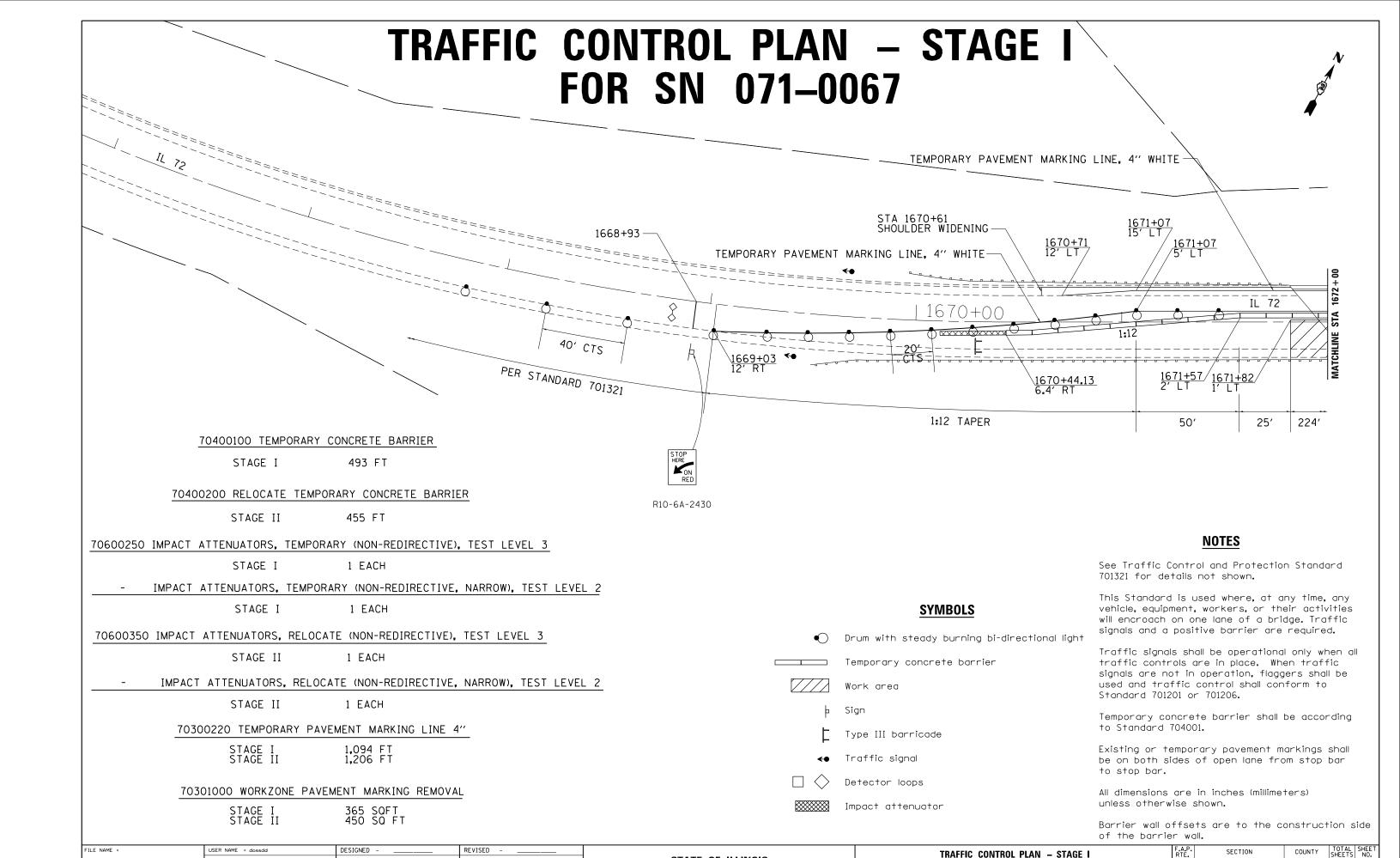
#### STAGE I (SN 071-0067 OVER DM&E RAILROAD)



### STAGE II (SN 071-0067 OVER DM&E RAILROAD)



FILE NAME =	USER NAME = dossdd	DESIGNED	REVISED -			F.A.P. SECTION	COUNTY TOTAL SHEET
O:\BR\Doss\Ogle\64K41 Repairs SN 071-0	67\CADD\D2-sht-cover.dgn	DRAWN	REVISED	STATE OF ILLINOIS	STAGING TYPICALS	553 D2 DECK REPAIR 20	015-1 OGLE 20 5
	PLOT SCALE = 40.0000 ' / in.	CHECKED	REVISED	DEPARTMENT OF TRANSPORTATION		'	CONTRACT NO. 64K41
Default	PLOT DATE = Thu Dec 04 13:45:43 2014	DATE	REVISED		SCALE: SHEET OF SHEETS STA TO STA	ILLINOIS	FED. AID PROJECT



STATE OF ILLINOIS

**DEPARTMENT OF TRANSPORTATION** 

553 D2 DECK REPAIR 2015-1

FOR SN 071-0067

OF \_\_\_ SHEETS STA.

TO STA.

OGLE

CONTRACT NO. 64K41

NCADDND2-sht-cover.dan

PLOT DATE = Thu Dec 04 13:45:49 2014

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DATE

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## TRAFFIC CONTROL PLAN - STAGE I FOR SN 071-0067 1675+22 12′ LT / TEMPORARY PAVEMENT MARKING LINE, 4" WHITE 1674+85.7 /15′ LT -STA 1675+32 SHOULDER WIDENING R10-6A-2430 -TEMPORARY PAVEMENT MARKING LINE, 4" WHITE <u> 1674+85.7</u> 1674+06 1′LT 1675+45.7 1677+06 SN 071-0067 1:12 ==<u>=</u>=<del>2</del>0=: CIS 224' 25′ 50′ 1:12 TAPER 100' 60' PER STANDARD 701321 **NOTES** See Traffic Control and Protection Standard 701321 for details not shown. This Standard is used where, at any time, any **SYMBOLS** vehicle, equipment, workers, or their activities will encroach on one lane of a bridge. Traffic signals and a positive barrier are required. • Drum with steady burning bi-directional light

Drum with steady burning bi-directional light

Temporary concrete barrier

//// Work area

þ Sign

Type III barricade

Traffic signal

Detector loops

Impact attenuator

Traffic signals shall be operational only when all traffic controls are in place. When traffic signals are not in operation, flaggers shall be used and traffic control shall conform to Standard 701201 or 701206.

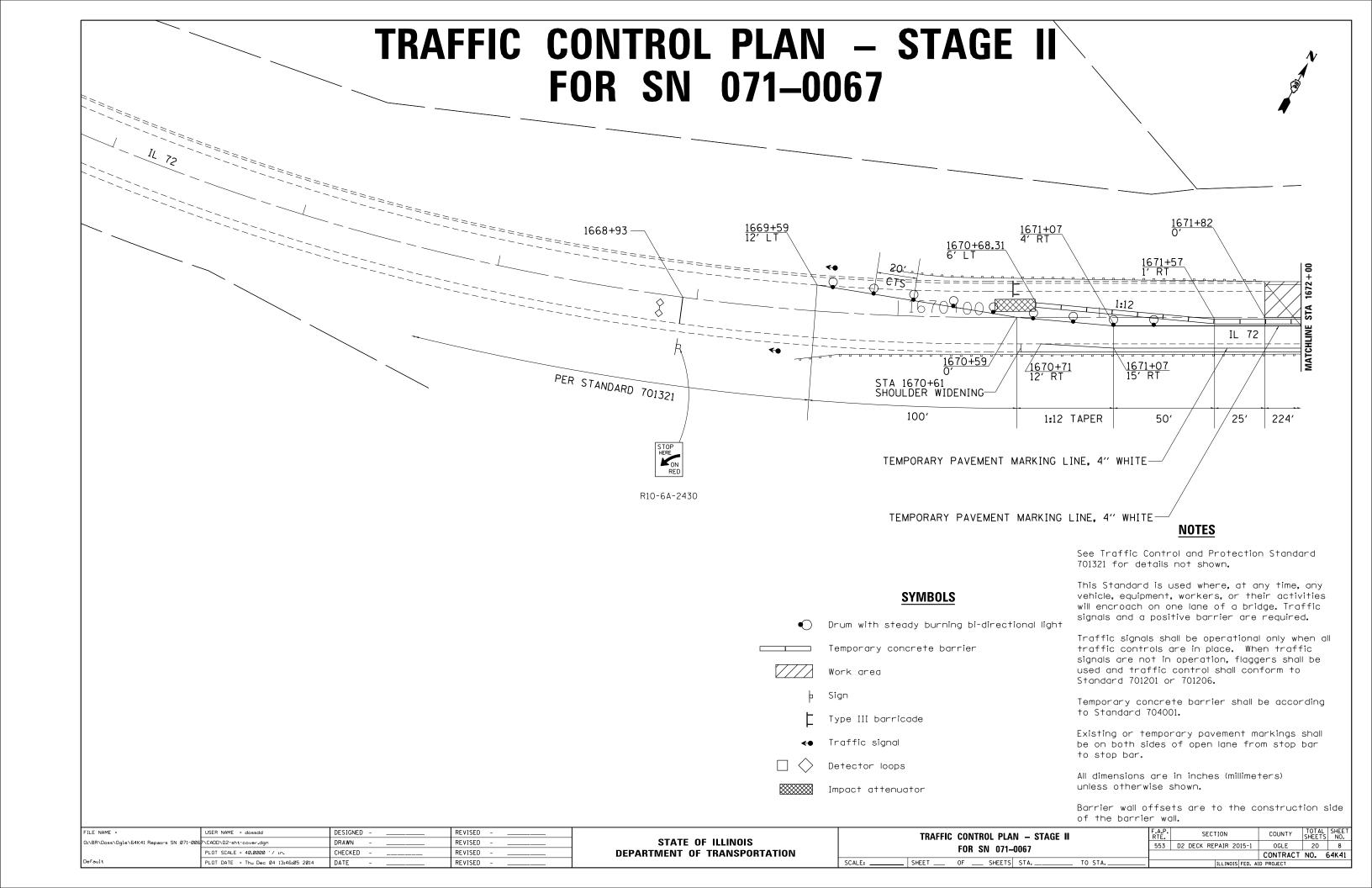
Temporary concrete barrier shall be according to Standard 704001.

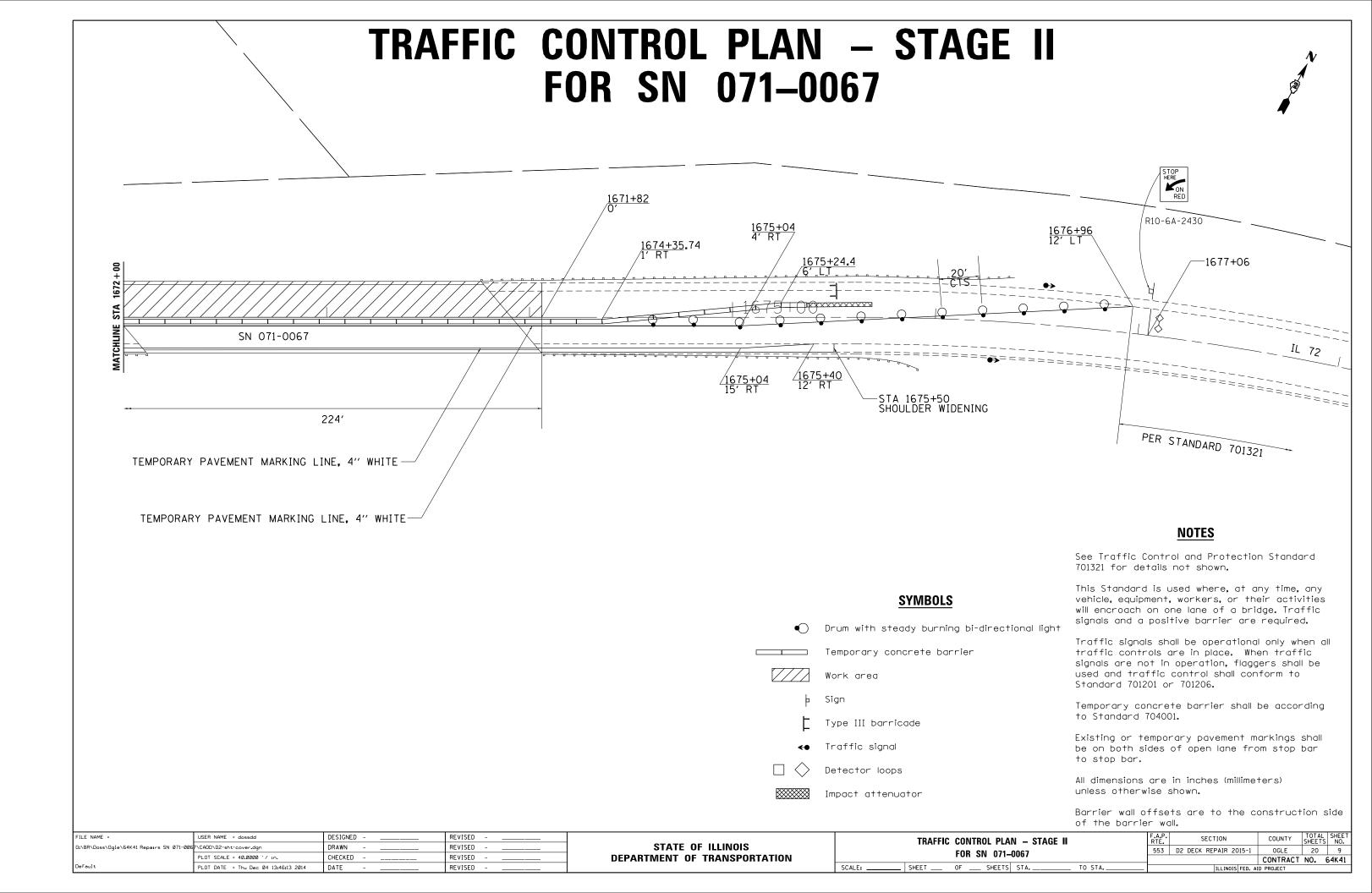
Existing or temporary pavement markings shall be on both sides of open lane from stop bar to stop bar.

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

Barrier wall offsets are to the construction side of the barrier wall.

FILE NAME =	USER NAME = dossdd	DESIGNED	REVISED		TRAFFIC CONTROL PLAN - STAGE I	RTF. SECTION	COUNTY SHEETS NO.
0:\BR\Doss\0gle\64K41 Repairs SN 071-006	7\CADD\D2-sht-cover.dgn	DRAWN	REVISED	STATE OF ILLINOIS		553 D2 DECK REPAIR 2015-1	0GLE 20 7
	PLOT SCALE = 40.0000 '/ in.	CHECKED	REVISED	DEPARTMENT OF TRANSPORTATION	FOR SN 071-0067		CONTRACT NO. 64K41
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## HOT-MIX ASPHALT SHOULDER

## 

#### GENERAL NOTES

THE HOT-MIX ASPHALT SHOULDER SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 482 EXCEPT THE TOP LIFT SHALL BE HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 #40603310. THE WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON FOR HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 #40603310 AND SQUARE YARD FOR HOT-MIX ASPHALT SHOULDERS OF THE THICKNESS SPECIFIED.

USE HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 #40603310. WHEN RESURFACING EXISTING HOT-MIX ASPHALT SHOULDERS. THE THICKNESS IS SHOWN ON THE TYPICAL SECTIONS. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON FOR HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 #40603310.

REMOVAL OF MATERIAL FOR PLACEMENT OF THE HOT-MIX ASPHALT SHOULDER TO BE PAID FOR IN UNITS FOR EXCAVATING AND GRADING EXISTING SHOULDERS OR IN CUBIC YARDS FOR EARTH EXCAVATION OR EARTH EXCAVATION WIDENING.

\* 4% WHEN MAINLINE IS ON TANGENT. FOR CROSS SLOPE ON SUPERELEVATION SECTION, SEE HIGHWAY STANDARD 482001 OR 482006.

REVISED - 3-13-13

REVISED - 10-11-11

### **HOT-MIX ASPHALT SHOULDER**

23.4a

# STOP LINE SIGN FOR TEMPORARY SIGNALS



SIZE: 24 × 24

4 CAPITAL LETTERS - BLACK

1/2 BORDER - BLACK

WHITE REFLECTIVE - TYPE AP
HIGH INTENSITY PRISMATIC SHEETING

### GENERAL NOTE:

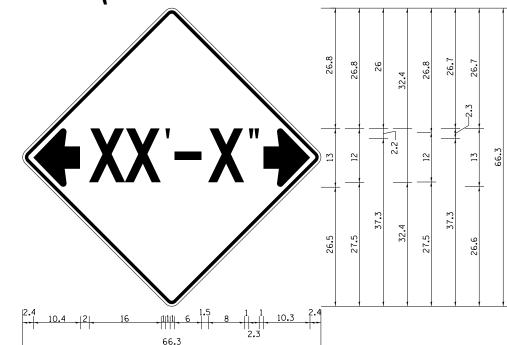
THIS SIGN SHALL BE INSTALLED AT THE STOP LINE AS DIRECTED BY ENGINEER.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

STOP LINE SIGN FOR TEMPORARY SIGNALS

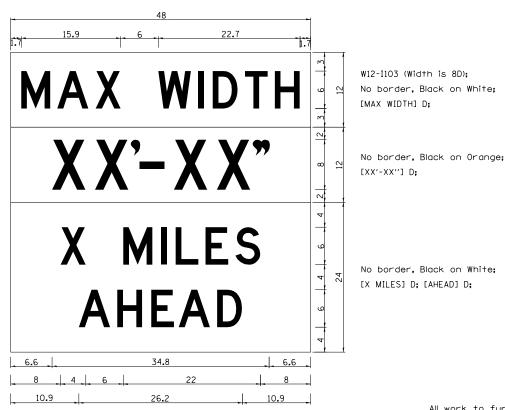
## 99.4

# INFORMATIONAL WARNING SIGN (FOR NARROW TRAVEL LANES)



#### NOTES

W12-2 - Horizontal Clearance Sign 48.0" across sides, 1.9" Radius, 0.8" Border, 0.5" Indent, Black on Orange; Standard Arrow Custom 10.4" X 8.1" 180° Black 11 Inch D Series Lettering; Standard Arrow Custom 10.4" X 8.1" 0°



All work to furnish and install these signs shall be included in the cost of the Traffic Control Standards and shall not be paid for separately.

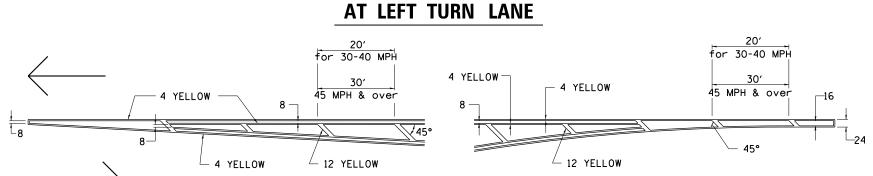
ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

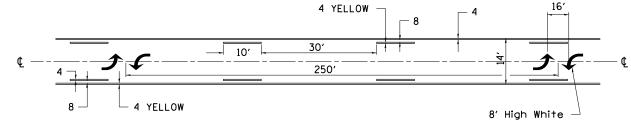
					011	12111112	L NOTED.			
REVISED - <u>5-15</u> -09						F.A.P. RTE.	SECTION	COUNTY	TOTAL	
REVISED		REGION	2 / DISTRICT	2 STANDARD		553	D2 DECK REPAIR 2015-1	OGLE	20	10
REVISED								CONTRACT	NO.	64K41
REVISED	SCALE: 40.0000 '/ in	SHEET NO	OF SHEETS	TO STA	FED. RC	DAD DIST. NO ILLINOIS FED.	AID PROJECT			

## **TYPICAL PAVEMENT MARKINGS**

## **MEDIAN PAVEMENT MARKING**

## TYPICAL PAVEMENT MARKING FOR FLUSH MEDIAN





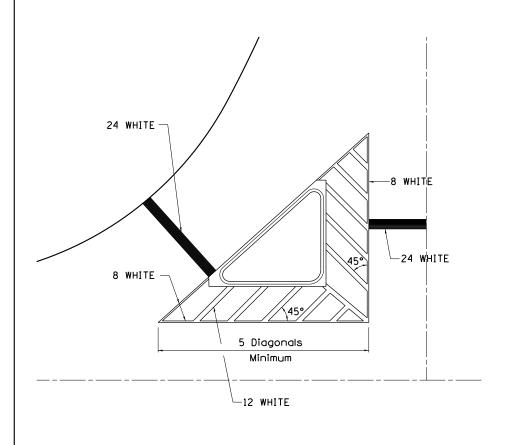
## TYPICAL ISLAND OFFSET SHOULDER WIDTH

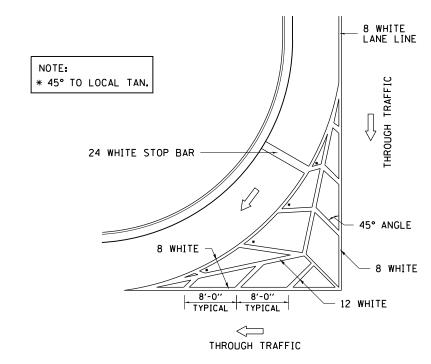
## TYPICAL MARKING FOR PAINTED ISLANDS

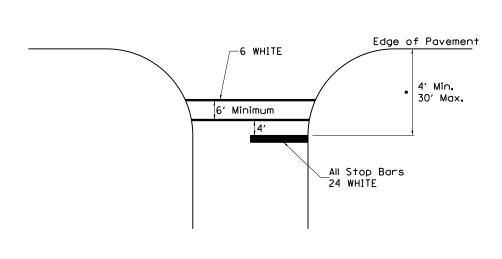
## STANDARD CROSSWALK MARKING

.. ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

See Schedules for Locations







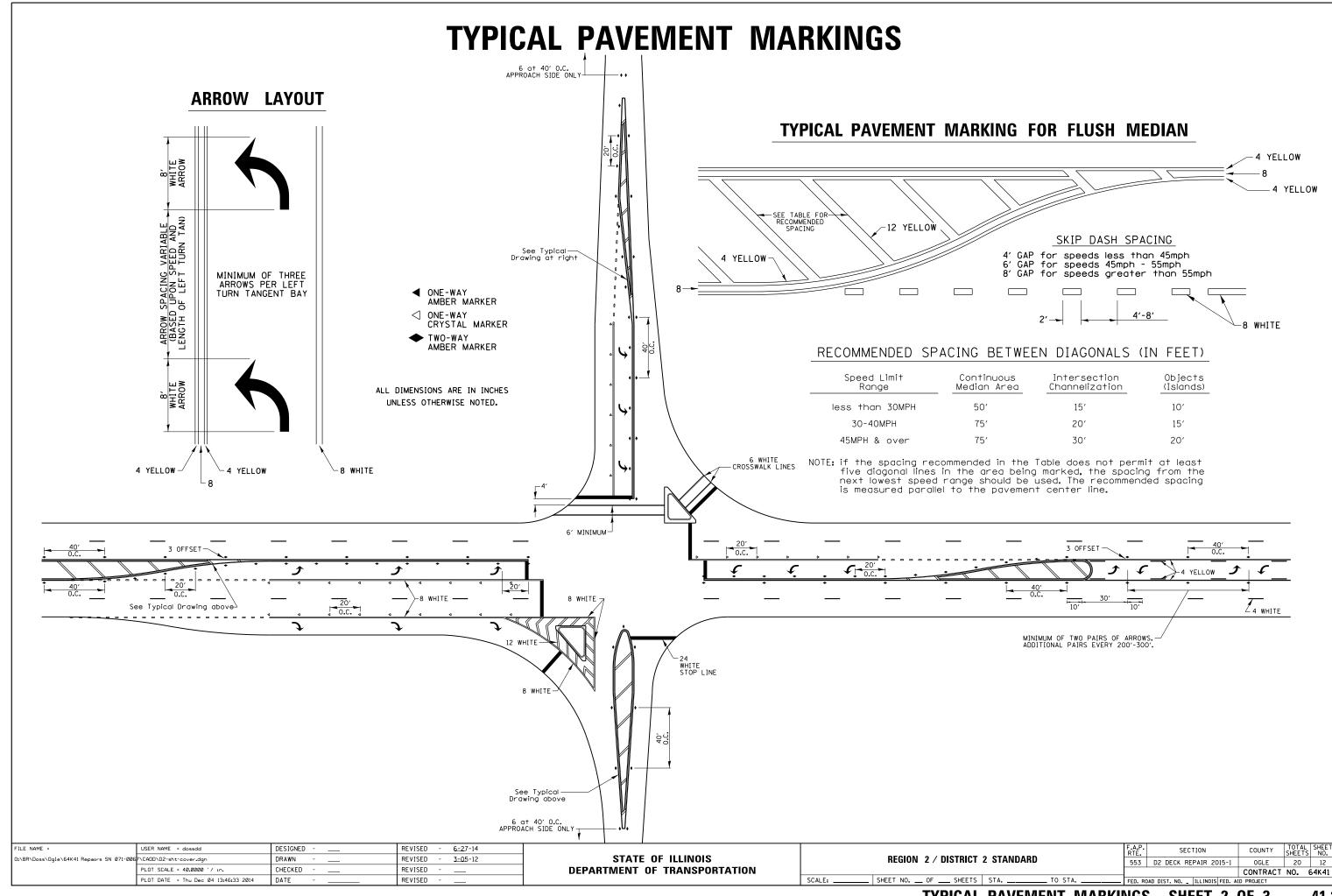
 Distance to the nearest edge of the intersecting roadway in the absence of a marked crosswalk.

FILE NAME -	USER NAME - dossdd	DESIGNED	KEVISED - 0-21-14
0:\BR\Doss\0gle\64K41 Repairs SN 071-006	7\CADD\D2-sht-cover.dgn	DRAWN	REVISED - <u>3-0</u> 5-12
	PLOT SCALE = 40.0000 '/ in.	CHECKED	REVISED
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

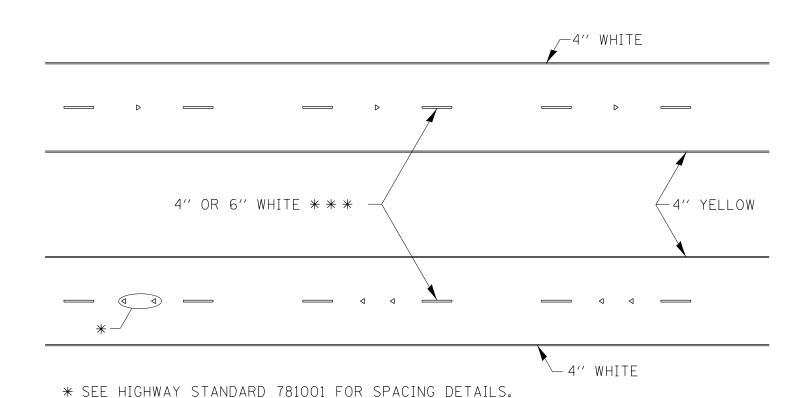
	REGION	2 /	DISTRICT	2 S	STANDARD		
CALE	CHEET NO	05	CHEETC	_ C.T		Τ.	CTA

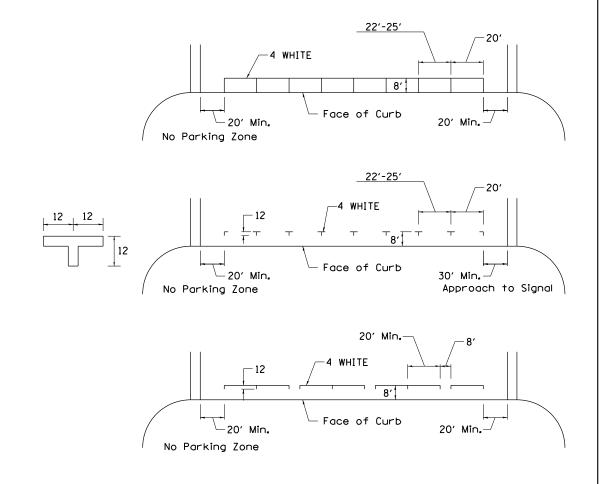
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553	D2 DECK RE	PAIR 20	15-1	OGLE	20	
				CONTRACT	NO. 6	54K
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## **TYPICAL PAVEMENT MARKINGS**

## TYPICAL PARKING SPACING

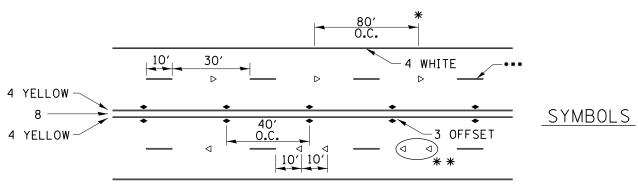




TYPICAL PAVEMENT MARKING FOR TWO LANE SECTION - NO PASSING ZONES

## USE DOUBLE MARKERS \_WHEN ADT > 20,000.

MULTI-LANE / DIVIDED



- \* REDUCE TO 40' O.C. ON CURVES WHERE ADVISORY SPEEDS ARE
- \*\* USE DOUBLE MARKERS WHEN ADT > 20,000
- \*\*\* CENTERLINE SKIP DASH PAVEMENT MARKING SPEED LIMIT LESS THAN 40 MPH USE 4" LINE. SPEED LIMIT 40 MPH AND OVER USE 6" LINE.

## MULTI-LANE / UNDIVIDED & ONE WAY

(FOR MULTI-LANE UNDIVIDED HIGHWAYS USE THIS DETAIL NOT HIGHWAY STANDARD 781001)

## YELLOW 10 MPH LOWER THAN POSTED SPEEDS. WHITE-

30′

FILE NAME =	USER NAME = dossdd	DESIGNED	REVISED - <u>6-2</u> 7-14	
0:\BR\Doss\Ogle\64K41 Repairs SN 071-006	7\CADD\D2-sht-cover.dgn	DRAWN	REVISED - <u>8-2</u> 7-13	
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	PLOT DATE = Thu Dec 04 13:46:41 2014	DATE	REVISED	

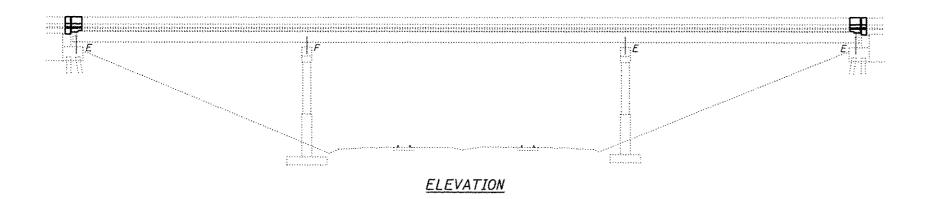
### STATE OF ILLINOIS RTMENT OF TRANSPORTATION

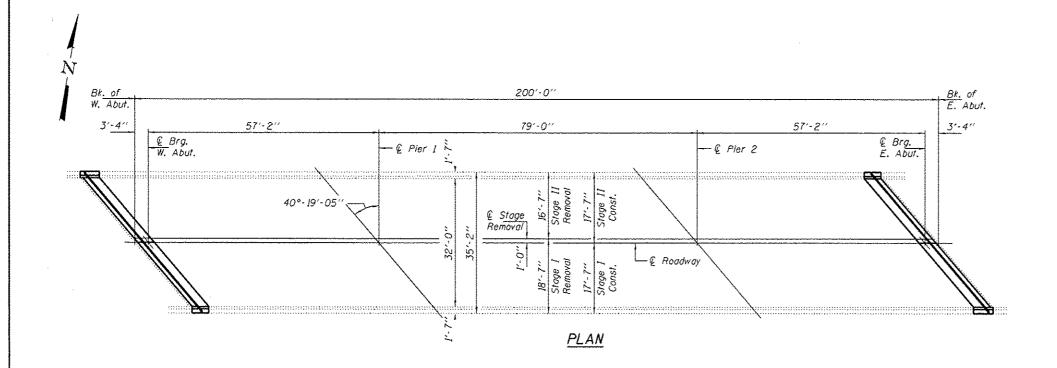
	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	
REGION 2 / DISTRICT 2 STANDARD	553	D2 DECK REPAIR 2015-1	OGLE	20	13
			CONTRAC	T NO.	64K41
SCALE:   SHEET NO OF SHEETS   STA TO STA	FED. R	DAD DIST. NO ILLINOIS FED. A	D PROJECT		

EDGE OF PAVEMENT

WHITE

### **PAINTING DETAILS** EXIT RAMP NOTE: GORE HATCHING PLACED ONLY EOP-4 YELLOW WHEN SCHEDULED IN THE PLANS -4 OR 6 WHITE 12 WHITE 30' CENTERS 4 WHITE7 CENTERLINE SKIP DASH PAVEMENT MARKING WIDTH SHALL BE 4" WHEN THE POSTED SPEED LIMIT IS UNDER 40 MPH AND 6" WHEN THE POSTED SPEED LIMIT IS 40 MPH AND OVER. 10' SHOULDER ∕-4' SHOULDER 8' SHOULDER 4 YELLOW EOP · 4 YELLOW ∠ OPTIONAL METHOD FOR HIGH VOLUME OFF RAMPS ENTRANCE RAMP 4 OR 6 WHITE 4 WHITE— EOP : 10' SHOULDER 30' 10′ 8 WHITE 8' SHOULDER ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED. 4 YELLOW 4 YELLOW CLOVERLEAF 10' SHOULDER 10' SHOULDER 4 WHITE-10' SHOULDER 8 WHITE 8 WHITE EOP 4 WHITE 4 YELLOW 4 YELLOW EOP -200' (TYP.) (TAPER LENGTH AS DIRECTED BY THE ENGINEER) COUNTY TOTAL SHEET NO. OGLE 20 14 CONTRACT NO. 64K41 DESIGNED REVISED - <u>8-2</u>7-13 SECTION STATE OF ILLINOIS REGION 2 / DISTRICT 2 STANDARD 0:\BR\Doss\Ogle\64K41 Repairs SN 071-0067\CADD\D2-sht-cover.dgn DRAWN REVISED - <u>10-1</u>8-11 553 D2 DECK REPAIR 2015-1 CHECKED REVISED **DEPARTMENT OF TRANSPORTATION** PLOT DATE = Thu Dec 04 13:46:50 2014 DATE REVISED \_\_\_ SHEET NO. \_\_\_ OF \_\_\_ SHEETS | STA. \_\_\_\_\_ TO STA. \_







EXPIRES 11-30-2016

EXAMINED	Twok A Ald	DATE	JANUARY 15, 2015
<u>*</u>	ACTING SHELMEER/OF STRUCTURAL SERVICES		
PASSED	Mr. Can Program	REVISED	
1	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED	
	34	PASSED LA CALL MALLS ERVICES	PASSED LA CALL PROPERTY SPRINT URAL SERVICES  REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
F.A. ROUTE 553 (IL 72) OVER DM & E RR
SN 071-0067

SHEET NO. 1 OF 6 SHEETS

A. SECTION COUNTY TOTAL SHEETS NO.

53 D2 DECK REPAIR 2015-1 OGLE 20 15

CONTRACT NO. 64K41

[ILLINOIS] FEO. AID PROJECT

#### TOTAL BILL OF MATERIAL

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 the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar

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 point 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

of the Standard Specifications. Cost included with Concrete Superstructure.

Joint openings shall be adjusted according to Article 520,04 of the Standard Specifications when the deck is poured at an ambient temperature other than

Synthetic fibers shall be added to the Bridge Deck Microsilica Overlay Concrete.

The new deck surface shall have its final finish tined according to Article 420,09(e)(1)

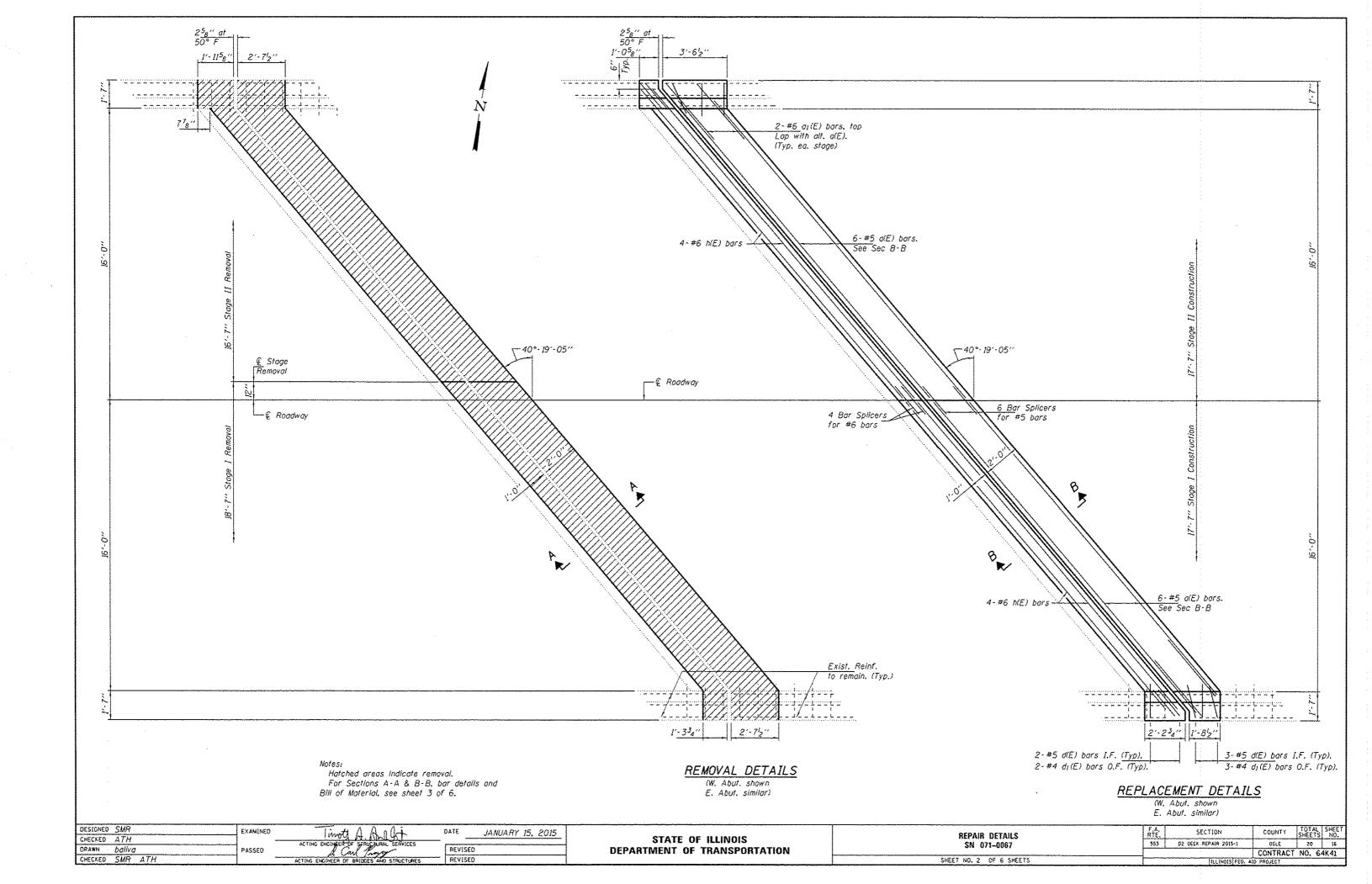
Reinforcement bars designated (E) shall be epoxy coated.

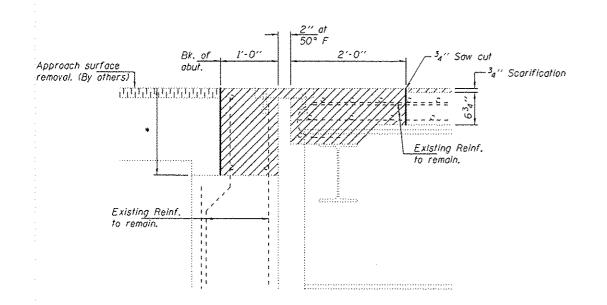
existing concrete.

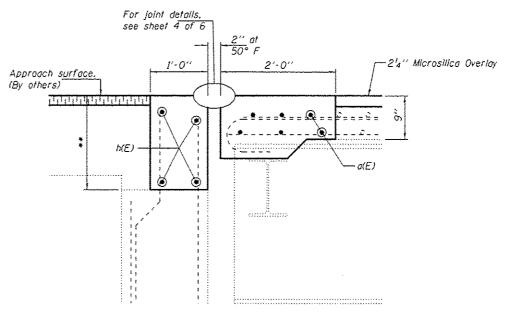
See Special Provisions

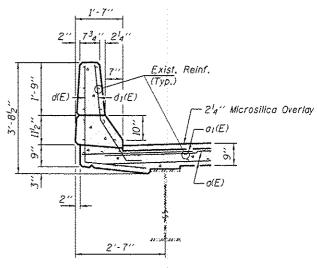
splicer or anchorage system. Cost included with Concrete Removal.

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ITEM	UNIT	<b>OUANTITY</b>
Concrete Removal	Cu, Yd.	13.8
Concrete Superstructure	Cu. Yd.	13.8
Preformed Joint Strip Seal	Foot	88
Reinforcement Bars, Epoxy Coated	Pound	1280
Bar Splicers	Each	20
Bridge Deck Scarification 34''	Sq. Yd.	676
Bridge Deck Microsilica Concrete Overlay 214''	Sq. Yd.	676
Bridge Deck Grooving	Sq. Yd.	671
Protective Coat	Sq. Yd.	35
On new concrete only		









TYPICAL PARAPET SECTION

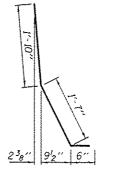
## SECTION A-A

(Near € Roadway)
(Dimensions are at RT L's to end of deck)

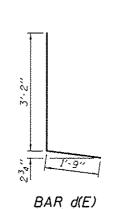
## SECTION B-B

(Near € Roadway) (Dimensions are at RT L's to end of deck)

- \* Varies from 1'-4½" to 1'-9½" at West Abut. Varies from 1'-4½" to 2'-4½" at East Abut. \*\* Varies from 1'-6" to 1'-11" at West Abut. Varies from 1'-5½" to 2'-6¼" at East Abut.



BAR d1(E)



BILL OF MATERIAL

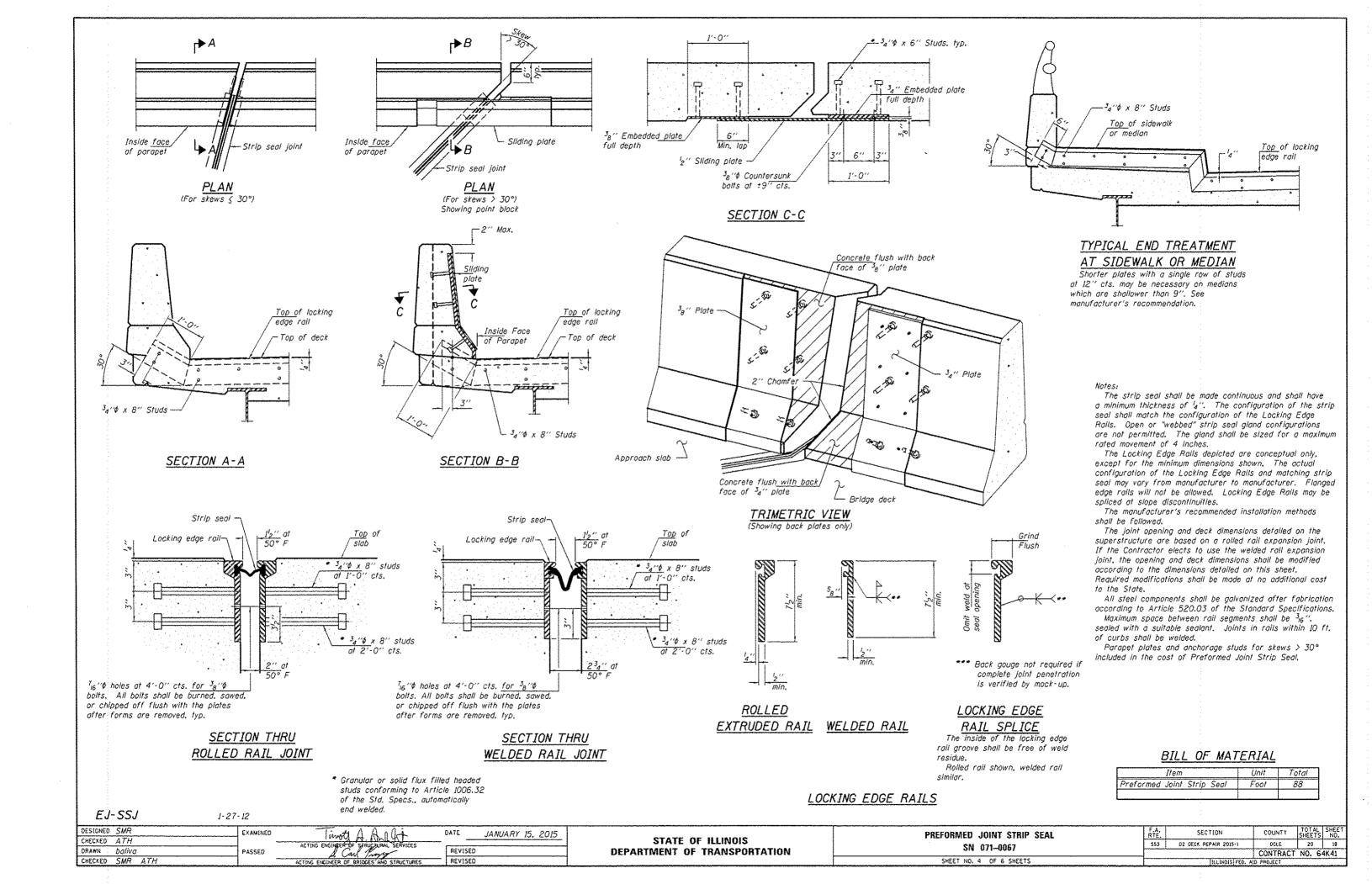
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Bar	No.	Size	Length	Shope
a(E)	24	#5	21'-6"	
ai(E)	8	#6	4'-0"	
d(E)	20	#4	4'-11"	L,
d1(E)	20	#5	3'-11"	
<del> </del>				
h(É)	16	#6	22'-8''	
	Removal	Си. Yd.	13.8	
Concrete	Superstru	Cu. Yd.	13.8	
	ement Bar	Lbs.	1280	
Ероху С	pated			

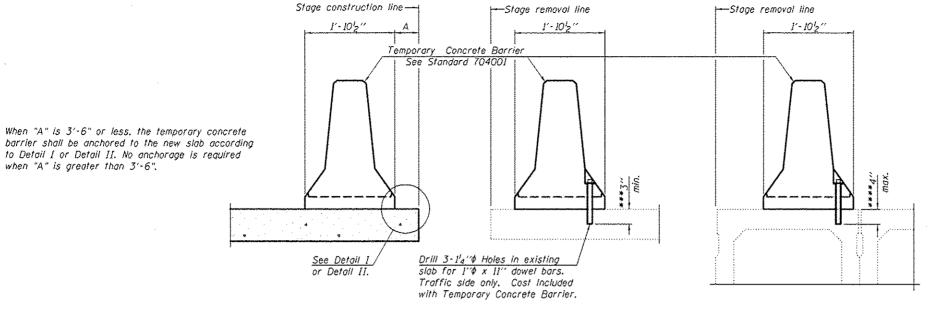
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DRAWN <i>baliva</i>	PASSED	A Carl France	REVISED	
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REPAIR DETAILS SN 071-0067 SHEET NO. 3 OF 6 SHEETS

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		CONTRACT	NO. 6	4K41
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NEW SLAB

### NOTES

Detail I - With Bar Splicer or Couplers:

Connect one (I) 1" x 7" 'x "W" steel \( \mathbb{P}\) to the top layer of couplers with 2-5\( \mathbb{S}\) \( \phi\) bolts screwed to coupler at approximate \( \mathbb{Q}\) of each barrier panel.

Detail II - With Extended Reinforcement Bars:

Connect one (1) I'' x 7'' x "W" steel £ to the concrete slab or concrete wearing surface with 2-5g" \$\phi\$

Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate £ 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.

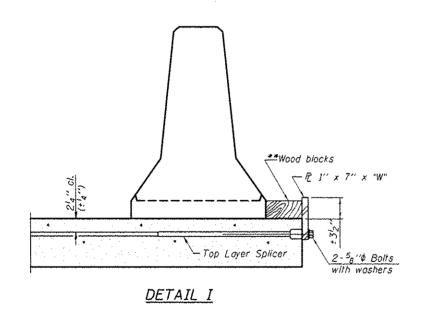
### SECTIONS THRU SLAB OR DECK BEAM

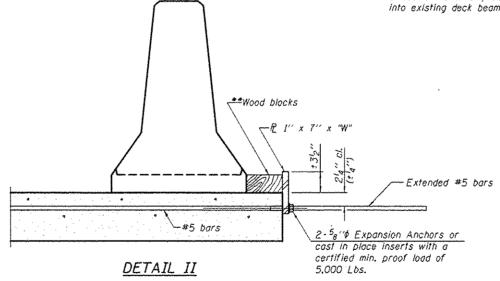
EXISTING SLAB

\*\*\* 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.





EXISTING DECK BEAM

Top bars
Spacing

3" 3" Detail II

E 1" x 15" Notch

STEEL RETAINER P 1" x 7" x "W"

\* Required only with Detail II

\*\* 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"

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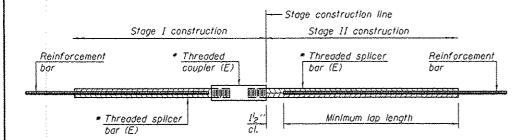
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CHECKED	SMR ATH		ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED

DATE JANUARY 15, 2015 REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPOR	ARY	C	ONC	RI	TE BAR	RIER
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A. E.	SECTION	COUNTY	TOTAL	SHEET
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		CONTRACT	NO. 6	4K41
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### STANDARD BAR SPLICER ASSEMBLY

		Minin	num Lap Len	gths		
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5	Table 6
3. 4	I'-5''	I'-1I''	2'-1"	2'-4"	2'-7"	2'-11"
5	1'-9"	2'-5"	2'-7"	2'-11''	3'-3''	3'-8"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-10''	4'-5"
7	2'-9"	3'-10''	4'-2"	4'-8"	5'-2"	5'-10''
8	31.8"	5'-1"	5'-5"	6'-2''	6'-9''	7'-8"
9	4'-7"	6'-5"	6'-10''	7'-9"	8'-7"	9'-8"

Table 1: Black bar, 0.8 Class C

Table 2: Black bar, Top bar lap, 0.8 Class C

Table 3: Epoxy bar, 0.8 Class C Table 4: Epoxy bar. Top bar lap, 0.8 Class C

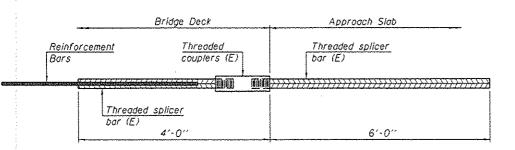
Table 5: Epoxy bar, Class C

Table 6: Epoxy bar, Top bar top. Class C

Threaded splicer bar length = min, lap length +  $l_2^{i}$ " + thread length

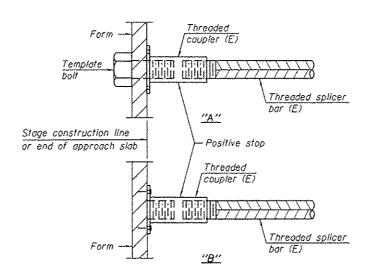
\* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

size	required	Table for minimum lap length
#6	4	3
#5	6	3
#6	4	3
#5	6	3
	#6 #5 #6	#6 4 #5 6 #6 4



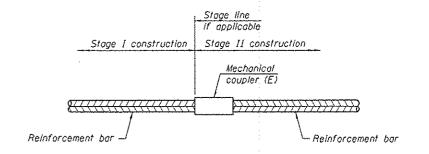
## BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

No. required =



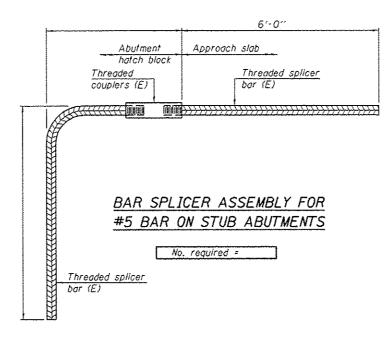
### INSTALLATION AND SETTING METHODS

"A": Set bor 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



#### NOTES

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.

All reinforcement shall be lapped and tied to the splicer bars.

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications. See approved list of bar splicer assemblies and mechanical splicers for alternatives.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS

SN 071-0067

SHEET NO. 6 OF 6 SHEETS