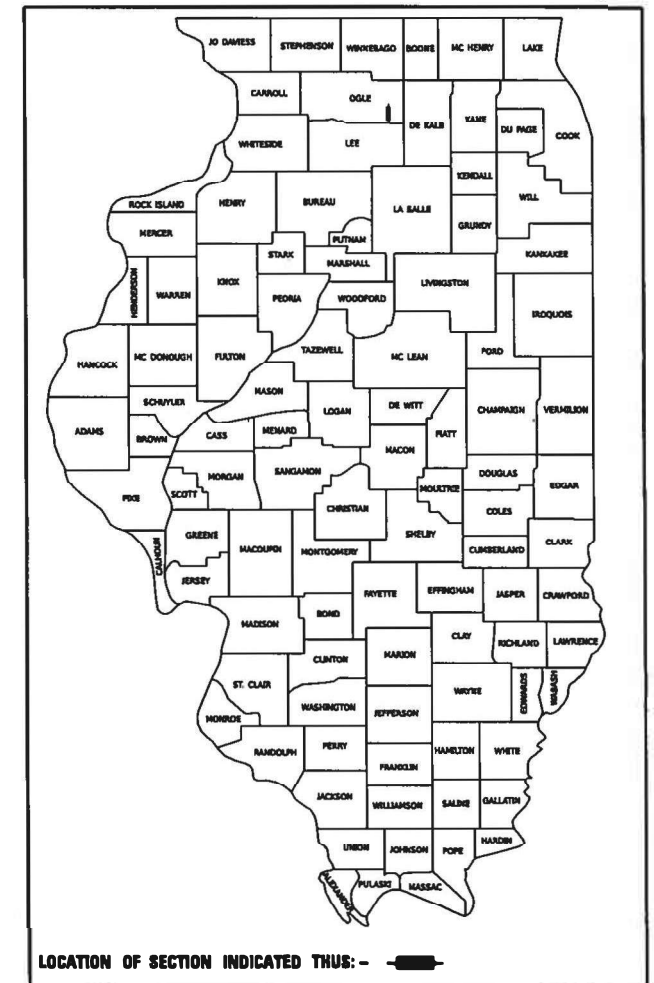


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5454	D2 BJR 2020-2	OGLE	23	1
CONTRACT NO. 64P35				
ILLINOIS FED. AID PROJECT				

D-92-038-20



**FUNCTIONAL CLASSIFICATION**  
MINOR ARTERIAL  
2019 AADT = 8700  
P.V. = 93% EST. TRUCK 7%  
FLAGG TOWNSHIP

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
REV. 4/21/20  
SUBMITTED *March 23, 2020*  
*[Signature]*  
REGIONAL ENGINEER  
May 8, 2020  
*[Signature]*  
ENGINEER OF DESIGN AND ENVIRONMENT  
May 8, 2020  
*[Signature]*  
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

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

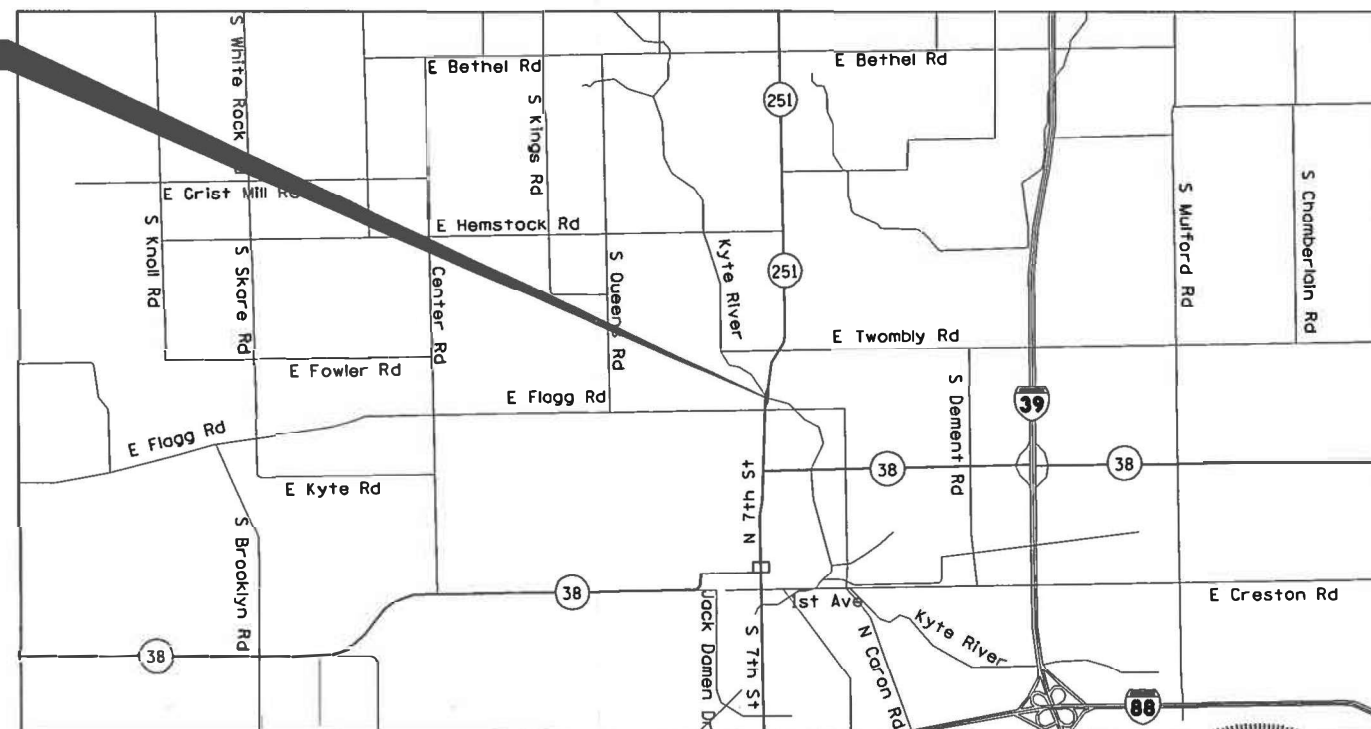
**PROPOSED  
HIGHWAY PLANS**

F.A.U. ROUTE 5454 (IL RTE 251)  
SECTION D2 BJR 2020-2  
PROJECT  
BRIDGE REHABILITATION  
OGLE COUNTY

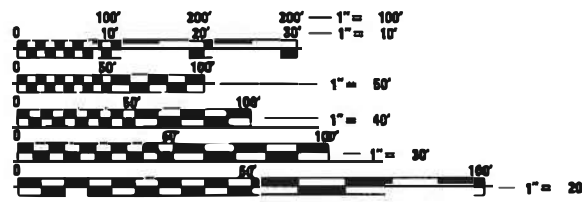
FOR INDEX OF SHEETS, SEE SHEET NO. 2

BEGIN IMPROVEMENT  
STA 195+64.48  
END IMPROVEMENT  
STA 196+35.48  
BRIDGE REHABILITATION  
SN 071-0085  
CENTER STA 195+99.98

CITY OF ROCHELLE



**LOCATION MAP**  
(NOT TO SCALE)  
GROSS LENGTH = 73.5 FT. (0.014 MILE)  
NET LENGTH = 73.5 FT. (0.014 MILE)



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 OLUFEMI OLADEINDE, P.E., S.E. (312) 551-9780  
PROJECT MANAGER MAHMOUD ETEMADI, P.E. (815) 284-5359

CONTRACT NO. 64P35



Signed: *[Signature]* 03-22-2020  
OLUFEMI A. OLADEINDE Date  
LICENSE EXPIRES 11-30-2021

**INDEX OF SHEETS**

SHEET NO.	DESCRIPTION
01	COVER SHEET
02	GENERAL NOTES AND HIGHWAY STANDARDS
03	SUMMARY OF QUANTITIES
04	STAGING NOTES & CROSS SECTIONS
05-8	MAINTENANCE OF TRAFFIC
09-16	BRIDGE PLANS
17-23	STANDARDS

**GENERAL NOTES**

- IN ADDITION TO THE REQUIREMENTS OF ARTICLE 107.16, THE CONTRACTOR SHALL PROTECT THE SURFACE OF ALL BRIDGE DECKS AND BRIDGE APPROACH PAVEMENTS IN A MANNER SATISFACTORY TO THE ENGINEER BEFORE ANY EQUIPMENT IS ALLOWED TO CROSS THE STRUCTURE. PROTECTION SHALL BE PROVIDED FOR ALL EQUIPMENT, AS DEFINED IN ARTICLE 101.17 IF TRACK MOUNTED OR WHEELED.
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH THE UTILITY COMPANIES, AND THE CITY OF ROCHELLE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING UTILITY PROPERTY DURING CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.39 OF THE STANDARD SPECIFICATIONS. A MINIMUM OF 48 HOURS ADVANCE NOTICE IS REQUIRED FOR NON-EMERGENCY WORK. THE JULIE NUMBER IS 800-892-0123.  
  
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.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE MUNICIPALITY TO DETERMINE APPROVED METHODS OF UTILITY STRUCTURE ADJUSTMENT. UTILITY STRUCTURES MAY INCLUDE, BUT ARE NOT LIMITED TO, MANHOLES, WATER VALVES, HANDHOLES, ETC. ALL MATERIALS AND WORK NECESSARY TO COMPLETE ADJUSTMENTS PER MUNICIPALITY REQUIREMENTS SHALL BE CONSIDERED INCLUDED IN THE COST OF THE ASSOCIATED ADJUSTMENT PAY ITEM.
- ALL DAMAGE TO EXISTING PAVEMENT MARKING OR RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT THE CONTRACTORS EXPENSE. NO ADDITIONAL COST TO THE DEPARTMENT.
- BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCES, ALL EXISTING PAVEMENT MARKING LINES AND RAISED REFLECTIVE PAVEMENT MARKERS IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL STRIPING SHALL BE AS DIRECTED BY THE ENGINEER.
- PAVEMENT MARKING SHALL BE DONE ACCORDING TO STANDARD 780001, EXCEPT AS FOLLOWS:
  - ALL WORDS, SUCH AS ONLY, SHALL BE 8 FEET HIGH.
  - ALL NON-FREEWAY ARROWS SHALL BE THE LARGE SIZE.
  - THE DISTANCE BETWEEN YELLOW NO-PASSING LINES SHALL BE 8 INCHES, NOT 7 INCHES, AS SHOWN IN THE DETAIL OF TYPICAL LANE AND EDGE LINES.
  - CENTERLINE SKIP DASH PAVEMENT MARKING ON MULTI-LANE DIVIDED, MULTI-LANE UNDIVIDED, AND ONE-WAY ROADWAY SHALL BE ACCORDING TO DISTRICT STANDARD 41.1.
- FRAMES AND GRATES ADJUSTMENT OF PRIVATE UTILITIES WITHIN THE LIMITS OF THE IMPROVEMENTS SHALL BE DONE BY THEIR RESPECTIVE OWNERS AND ARE NOT PART OF THIS CONTRACT.
- DRAINAGE ADJUSTMENT OR RECONSTRUCTION LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING MATERIALS.
- THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
- DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
- THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- THE FINAL TOP FOUR INCHES OF SOIL IN ANY RIGHT-OF-WAY AREA DISTURBED BY THE CONTRACTOR MUST BE CAPABLE OF SUPPORTING VEGETATION. THE SOIL MUST BE FROM A HORIZON (ZERO TO 2' DEEP) OF SOIL PROFILES OF LOCAL SOILS. THE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT PRICES BID AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL LOGS, SHRUBS, BUSHES, SAPLINGS, UNDERBRUSH OR DEBRIS ACCORDING TO SECTION 201 OF THE STANDARD SPECIFICATIONS AT LOCATIONS REQUIRING ACCESS TO THE SUBSTRUCTURE. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT THE COST SHALL BE CONSIDERED AS INCLUDED IN THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- WHEN RELOCATE TEMPORARY CONCRETE BARRIER IS SPECIFIED, THE WALL SHALL BE REMOVED, STORED AND TRANSPORTED TO AND FROM STORAGE, WHEN THE WALL IS NOT NEEDED FOR A TIME AS SHOWN ON THE STAGING PLANS, AND RELOCATED AND REINSTATED AT THE NEW LOCATION. THE REINSTALLATION REQUIREMENTS SHALL BE THE SAME AS THOSE FOR A NEW INSTALLATION. THIS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR RELOCATE TEMPORARY CONCRETE BARRIER.
- RELOCATE TEMPORARY IMPACT ATTENUATORS SHALL INCLUDE STORAGE AND TRANSPORTATION TO AND FROM STORAGE, WHEN THE DEVICE IS NOT NEEDED FOR A TIME, AS SHOWN ON THE STAGING PLANS. THIS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE PER EACH FOR IMPACT ATTENUATORS, RELOCATE OF THE TYPE SPECIFIED.

**HIGHWAY STANDARDS**

000001-07	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
701101-05	OFF-ROAD OPERATIONS, MULTILANE, 15' (4.5 M) TO 24" (600 MM) FROM PAVEMENT EDGE
701321-18	LANE CLOSURE, MULTILANE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
701423-10	LANE CLOSURE, MULTILANE, WITH BARRIER, FOR SPEEDS ≥ 45 MPH TO 55 MPH
701426-09	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATION, FOR SPEEDS ≥ 45 MPH
701901-08	TRAFFIC CONTROL DEVICES
704001-08	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 SIGN & MARKERS)
780001-05	TYPICAL PAVEMENT MARKINGS
782006-01	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS

**UTILITY NOTES**

NONE.

FILE NAME = #FILEL#

 <b>SDI ENGINEERING CORP.</b> www.sdiengr.com	USER NAME = #USER*	DESIGNED - AA	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>GENERAL NOTES AND HIGHWAY STANDARDS</b>			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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SUMMARY OF QUANTITIES				CONSTRUCTION CODE	
				100% STATE	
				BRIDGE	
				0047	
				071-0085	
CODE NO.	* * ITEM	UNIT	TOTAL QUANTITY		
50102400	CONCRETE REMOVAL	CU YD	28.4	28.4	
50300255	CONCRETE SUPERSTRUCTURE	CU YD	28.1	28.1	
50300300	PROTECTIVE COAT	SQ YD	79	79	
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	3430	3430	
50800515	BAR SPLICERS	EACH	32	32	
52000110	PREFORMED JOINT STRIP SEAL	FOOT	228	228	
63302700	REMOVE AND REERECTING TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	1	1	
67100100	MOBILIZATION	L SUM	1	1	
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	1	1	
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1	1	
70300904	PAVEMENT MARKING TAPE, TYPE IV 4"	FOOT	6,591	6591	
70400100	TEMPORARY CONCRETE BARRIER	FOOT	808	808	
70400200	RELOCATION TEMPORARY CONCRETE BARRIER	FOOT	808	808	
70600250	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2	2	
70600350	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2	2	
78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	3,182	3182	
78001150	PAINT PAVEMENT MARKING - LINE 12"	FOOT	458	458	
X0327980	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	1,519	1519	
X7030005	TEMPORARY PAVEMENT MARKING REMOVAL	SQ FT	2,197	2197	
Z0007114	CONTAINMENT AND DISPOSAL OF NON-LEAD PAINT CLEANING RESIDUES	L SUM	1	1	
Z0010501	CLEANING AND PAINTING STEEL BRIDGE NO. 1	L SUM	1	1	

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DESIGNED - AA  
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 CHECKED - OAO  
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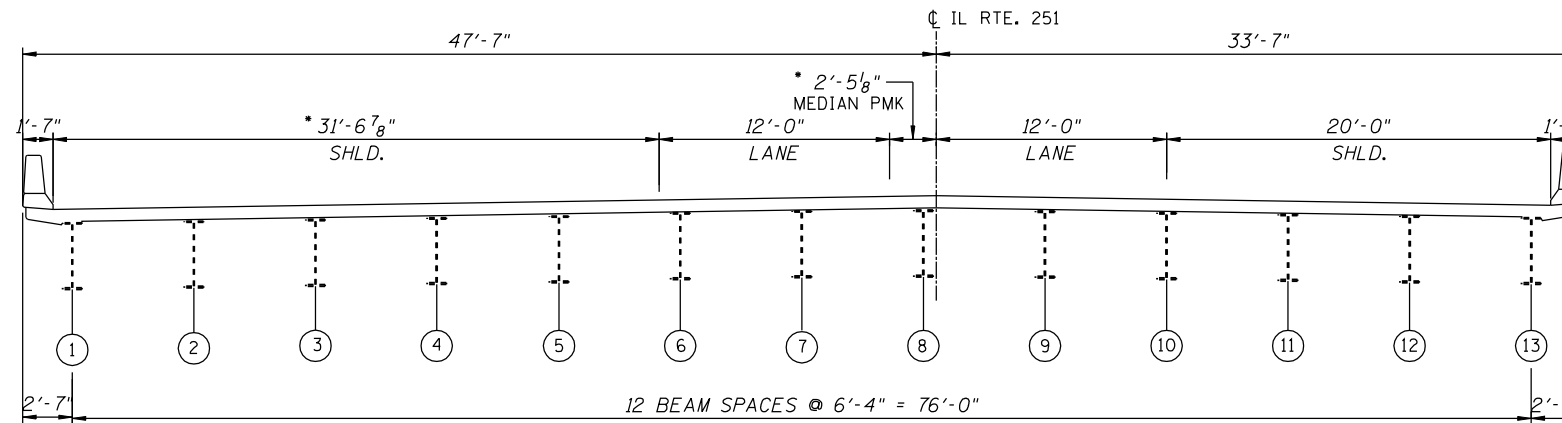
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES  
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 64P35				
ILLINOIS FED. AID PROJECT				

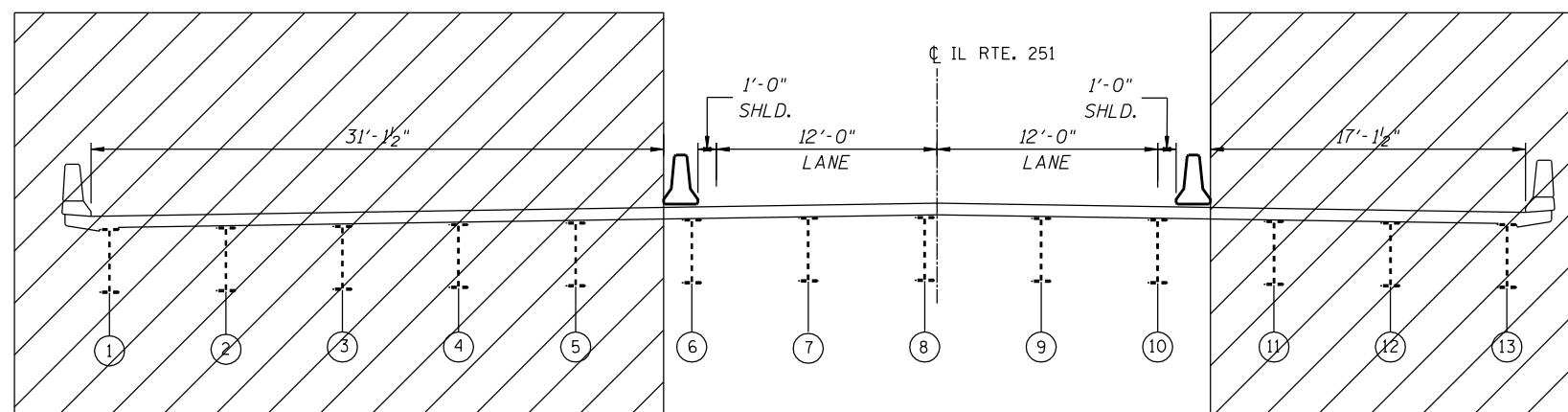
**CONSTRUCTION STAGING GENERAL NOTES**

- ALL SIGNING MUST BE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE STATE OF ILLINOIS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED APRIL 1 2016. THE DETAILS IN THESE PLANS, THE LATEST EDITION OF THE IDOT BUREAU OF DESIGN AND ENVIRONMENT HIGHWAY STANDARDS AND THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".
- LONGITUDINAL DIMENSIONS SHOWN ON THESE PLANS MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.
- THE CONTRACTOR MUST BE RESPONSIBLE FOR ENSURING THAT ALL BARRICADES, SIGNS, LIGHTS AND OTHER DEVICES INSTALLED ARE IN PLACE AND OPERATING 24 HOURS EACH DAY INCLUDING SUNDAYS AND HOLIDAYS DURING THE TIME THIS CONSTRUCTION IS IN EFFECT.
- ALL EXISTING SIGNING THAT IS NOT APPLICABLE WHILE THE CONSTRUCTION IS IN EFFECT MUST BE COMPLETELY COVERED BY THE CONTRACTOR.
- THE SIZES OF ALL SIGNS NOT SPECIFIED IN THESE PLANS MUST BE AS REQUIRED BY THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- AS A MINIMUM, ALL AMBER FLASHING LIGHTS THAT ARE REQUIRED MUST MEET THE REQUIREMENTS FOR TYPE A - LOW INTENSITY FLASHING LIGHTS IN ARTICLE 702.04 OF THE STANDARD SPECIFICATIONS. ALL LIGHTS SHALL OPERATE DURING HOURS OF DARKNESS. ONLY LIGHTS THAT HAVE BEEN APPROVED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION MUST BE USED.
- PROPOSED MAINTENANCE OF TRAFFIC SIGNING MUST BE COVERED OR REMOVED WHEN NOT REQUIRED DURING A SPECIFIC STAGE OF CONSTRUCTION.
- SEE SUGGESTED MAINTENANCE OF TRAFFIC PLAN FOR ADDITIONAL SIGNING.
- THE CONTRACTOR MUST CONDUCT HIS WORK IN SUCH A MANNER THAT EMERGENCY VEHICLES WILL HAVE ACCESS TO THE AREA AT ALL TIMES.
- THE CONTRACTOR MUST NOTIFY THE IDOT BUREAU OF TRAFFIC AS REQUIRED 72 HOURS IN ADVANCE OF BEGINNING WORK (815) 284-5474.
- SIGN SPACING SHALL BE PER IDOT STANDARDS 701423.
- THE CONTRACTOR SHALL PROVIDE ADEQUATE TEMPORARY DRAINAGE DURING ALL PHASES OF CONSTRUCTION.
- THE CONTRACTOR SHALL PROVIDE, INSTALL, MAINTAIN AND REMOVE ALL SIGNS AND SIGN SUPPORTS REQUIRED FOR TRAFFIC CONTROL AND PROTECTION.
- ALL TEMPORARY CONCRETE BARRIER WALL AND TEMPORARY IMPACT ATTENUATORS MUST BE SEATED ON BARE, CLEAN PAVEMENT OR PAVED SHOULDER.



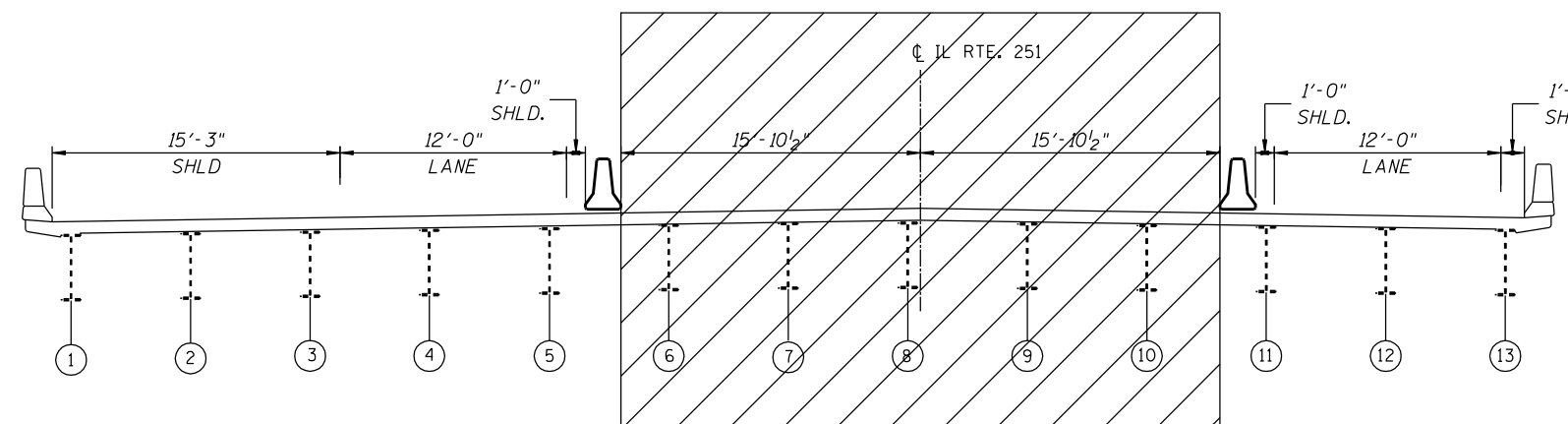
**EXISTING CROSS SECTION**

(LOOKING SOUTH)  
\*(MEASURED AT CENTER OF BRIDGE)



**STAGE 1 MAINTENANCE OF TRAFFIC**

(LOOKING SOUTH)  
(MEASURED AT CENTER OF BRIDGE)



**STAGE 2 MAINTENANCE OF TRAFFIC**

(LOOKING SOUTH)  
(MEASURED AT CENTER OF BRIDGE)

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









**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

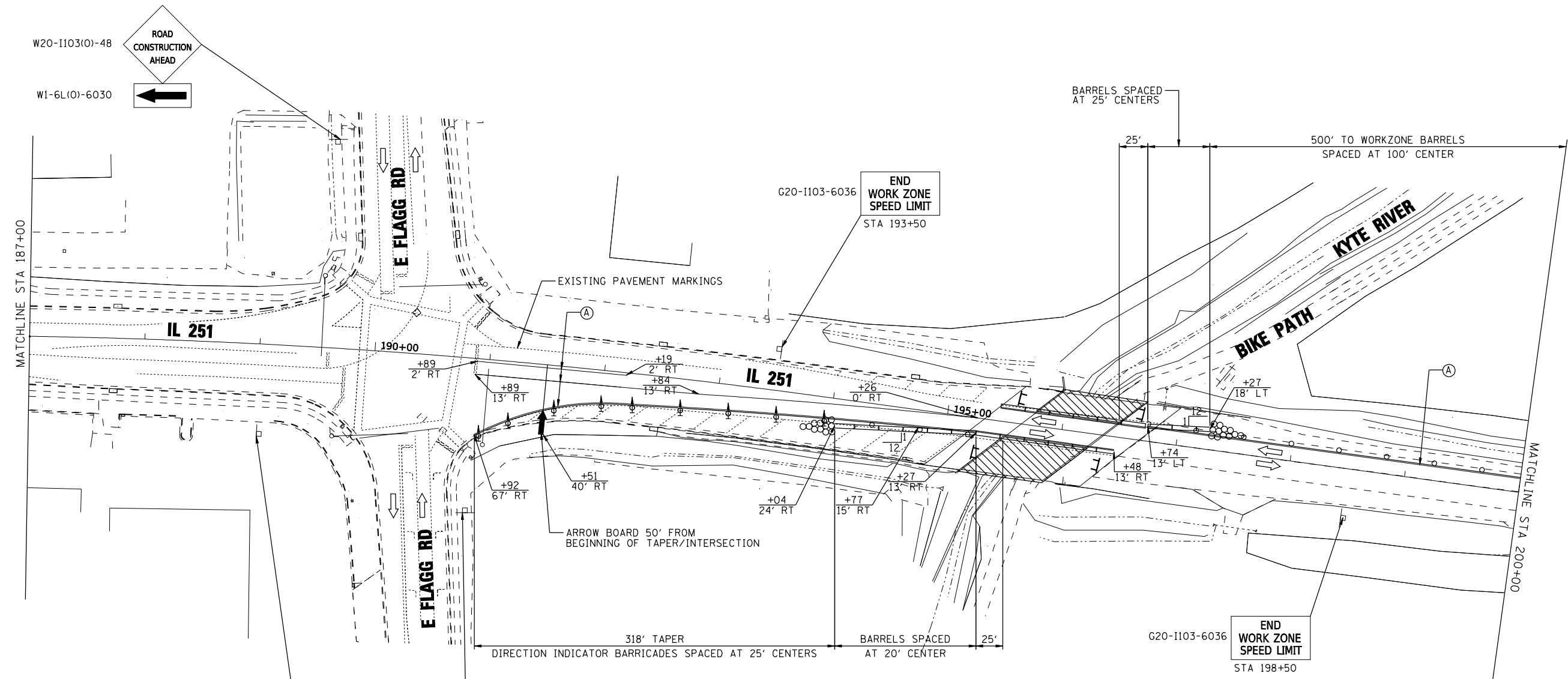
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SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5454	D2 BUR 2020-2	OGLE	23	04
CONTRACT NO. 64P35				
ILLINOIS FED. AID PROJECT				

**LEGEND**

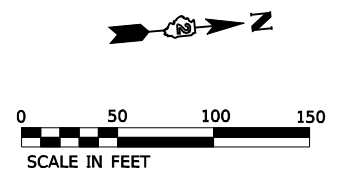
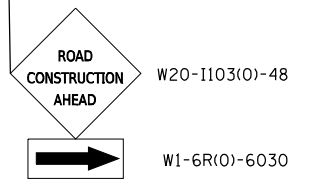
-  WORK ZONE
-  IMPACT ATTENUATOR TEST LEVEL 3
-  TEMPORARY CONCRETE BARRIER WALL
-  TEMPORARY PAVEMENT MARKING
-  DRUM WITH STEADY BURNING BI-DIRECTIONAL LIGHT
-  DIRECTION INDICATOR BARRICADE WITH STEADY BURNING BI-DIRECTIONAL LIGHT
-  TYPE III BARRICADE
-  ARROW BOARD
-  TEMPORARY TRAFFIC SIGN
-  PAVEMENT MARKING TAPE, TYPE IV 4"



**NOTE**  
 1. EXISTING PAVEMENT MARKINGS CONFLICTING WITH MOT CONFIGURATION SHALL BE REMOVED BY WATER BLASTING AS DIRECTED BY THE ENGINEER.



WORK ZONE W20-1103(O)-48  
 SPEED LIMIT 45 R2-1-3648  
 PHOTO ENFORCED R10-1108P-3618  
 \$XXX FINE MINIMUM R2-1106P-3618



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DRAWN - SD	REVISOR -	
CHECKED - OAO	REVISOR -	
DATE - 03-19-2020	REVISOR -	

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**MAINTENANCE OF TRAFFIC  
 STAGE 1 - STA 187+00 TO STA 200+00**











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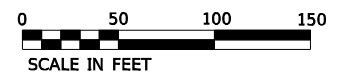
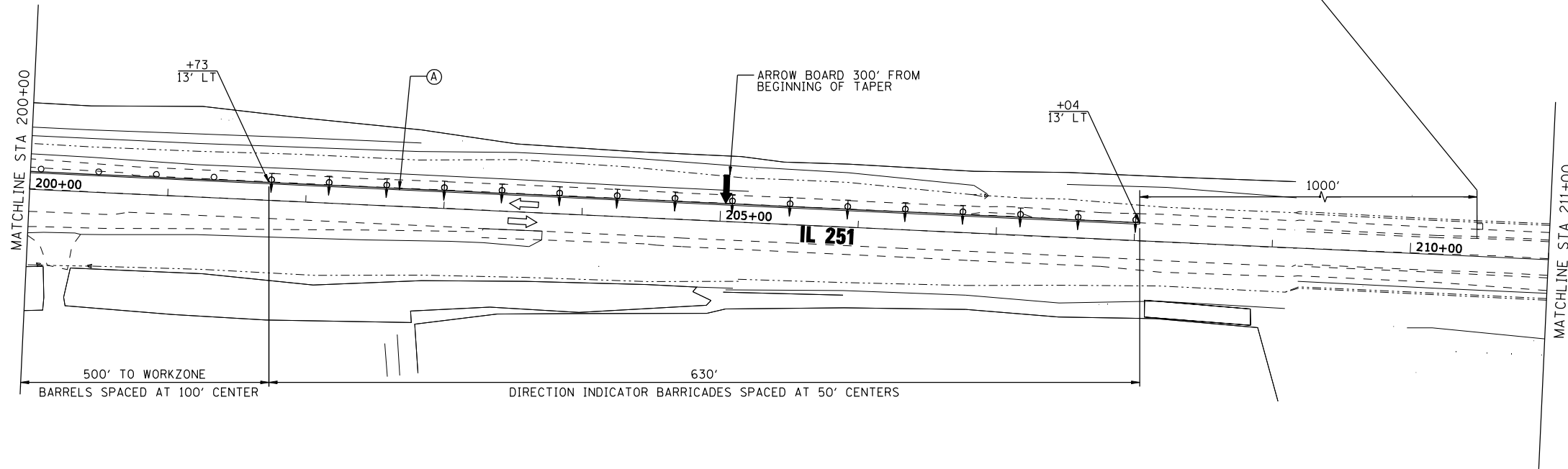
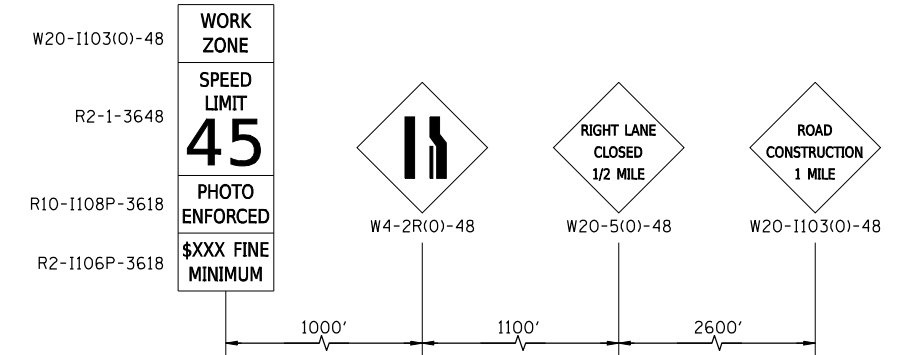
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5454	D2 BUR 2020-2	OGLE	23	05

CONTRACT NO. 64P35

ILLINOIS FED. AID PROJECT

**LEGEND**

-  WORK ZONE
-  IMPACT ATTENUATOR TEST LEVEL 3
-  TEMPORARY CONCRETE BARRIER WALL
-  TEMPORARY PAVEMENT MARKING
-  DRUM WITH STEADY BURNING BI-DIRECTIONAL LIGHT
-  DIRECTION INDICATOR BARRICADE WITH STEADY BURNING BI-DIRECTIONAL LIGHT
-  TYPE III BARRICADE
-  ARROW BOARD
-  TEMPORARY TRAFFIC SIGN
-  PAVEMENT MARKING TAPE, TYPE IV 4"



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DRAWN - SD	REVISIONS -	
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**











**MAINTENANCE OF TRAFFIC  
STAGE 1 - STA 200+00 TO STA 211+00**

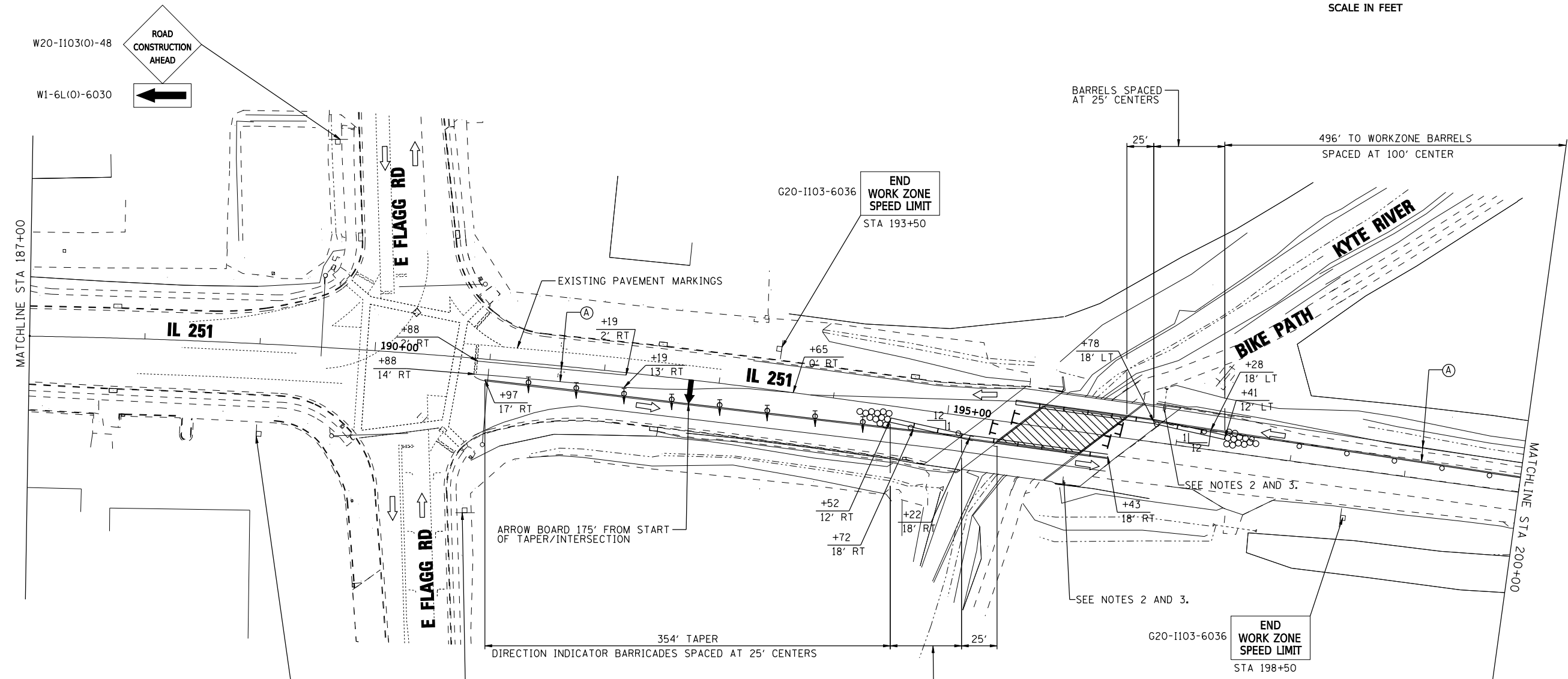
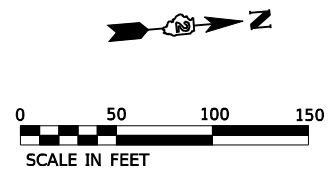
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 64P35				

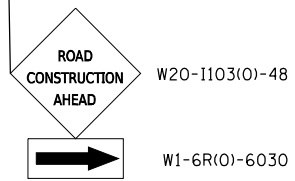
ILLINOIS FED. AID PROJECT

**LEGEND**

-  WORK ZONE
-  IMPACT ATTENUATOR TEST LEVEL 3
-  TEMPORARY CONCRETE BARRIER WALL
-  TEMPORARY PAVEMENT MARKING
-  DRUM WITH STEADY BURNING BI-DIRECTIONAL LIGHT
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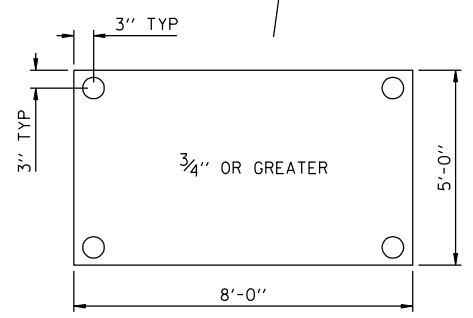


WORK ZONE W20-1103(O)-48  
SPEED LIMIT 45 R2-1-3648  
PHOTO ENFORCED R10-1108P-3618  
\$XXX FINE MINIMUM R2-1106P-3618



**NOTES**

1. EXISTING PAVEMENT MARKINGS CONFLICTING WITH MOT CONFIGURATION SHALL BE REMOVED BY WATER BLASTING AS DIRECTED BY THE ENGINEER.
2. DURING MOT STAGE 2, THE APPROACH DRAINS AT THE NORTHWEST AND NORTHEAST CORNERS OF THE BRIDGE NEEDS TO BE PROTECTED WITH 3/4" (MIN.) STEEL PLATE ANCHORED WITH 4 ANCHOR BOLTS INTO THE PAVEMENT.
3. THE EDGES OF THE STEEL PLATE SHALL BE TAPERED WITH HMA TO AVOID BUMP FOR TRAFFIC.



**STEEL PLATE DETAIL**  
N.T.S.

FILE NAME = \$FILEL\$



USER NAME = \$USER\$	DESIGNED - AA	REVISED -
DRAWN - SD	REVISOR -	
CHECKED - OAO	REVISOR -	
DATE - 03-19-2020	REVISOR -	

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**











**MAINTENANCE OF TRAFFIC**  
**STAGE 2 - STA 187+00 TO STA 200+00**

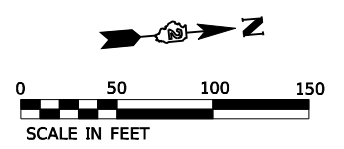
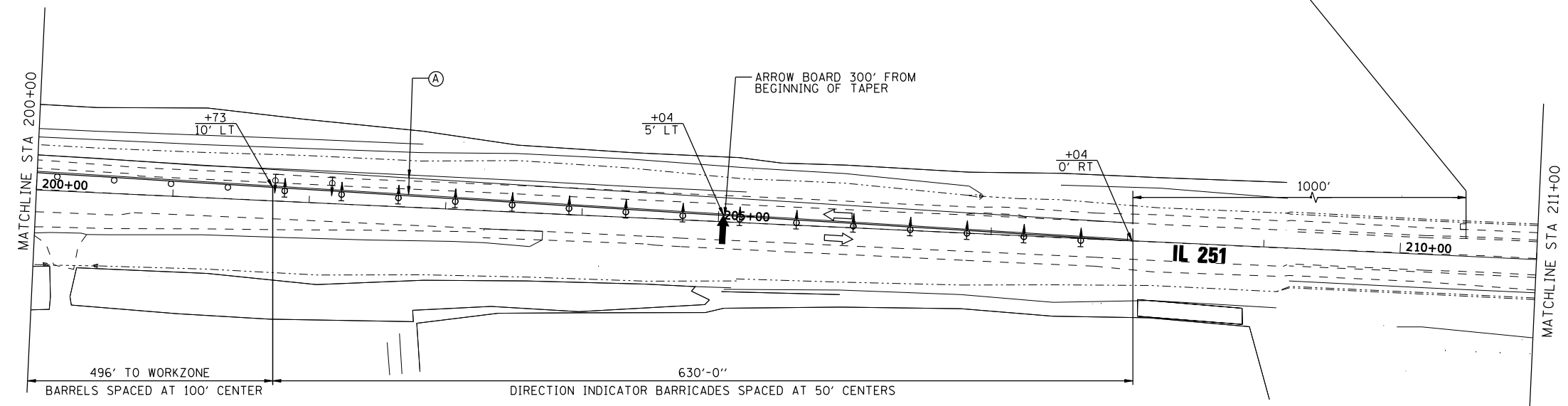
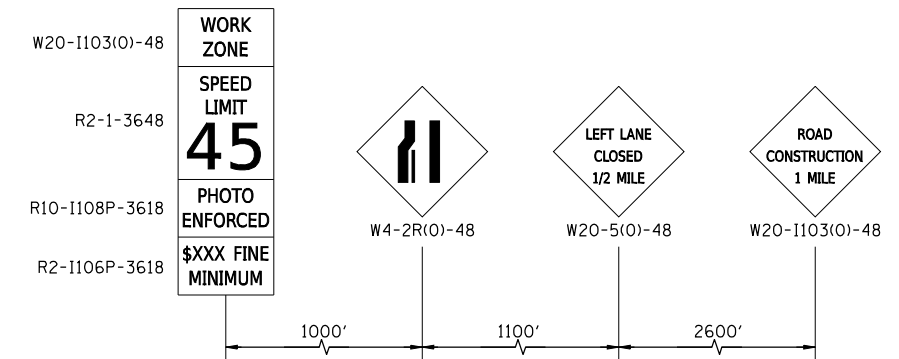
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE. 5454	SECTION D2 BUR 2020-2	COUNTY OGLE	TOTAL SHEETS 23	SHEET NO. 07
CONTRACT NO. 64P35				

ILLINOIS FED. AID PROJECT

**LEGEND**

-  WORK ZONE
-  IMPACT ATTENUATOR TEST LEVEL 3
-  TEMPORARY CONCRETE BARRIER WALL
-  TEMPORARY PAVEMENT MARKING
-  DRUM WITH STEADY BURNING BI-DIRECTIONAL LIGHT
-  DIRECTION INDICATOR BARRICADE WITH STEADY BURNING BI-DIRECTIONAL LIGHT
-  TYPE III BARRICADE
-  ARROW BOARD
-  TEMPORARY TRAFFIC SIGN
-  PAVEMENT MARKING TAPE, TYPE IV 4"



FILE NAME = \$FILEL\$



USER NAME = \$USER\$	DESIGNED - AA	REVISED -
DRAWN - SD	REVISIONS -	
CHECKED - OAO	REVISIONS -	
DATE - 03-19-2020	REVISIONS -	

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**MAINTENANCE OF TRAFFIC  
STAGE 1 - STA 200+00 TO STA 211+00**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5454	D2 BJR 2020-2	OGLE	23	08
CONTRACT NO. 64P35				

ILLINOIS FED. AID PROJECT

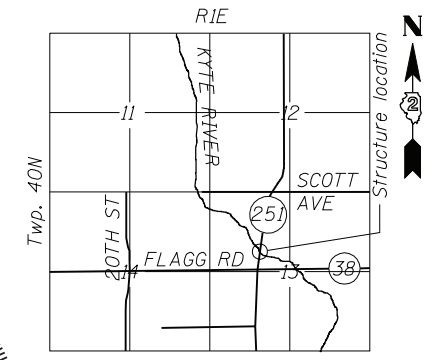
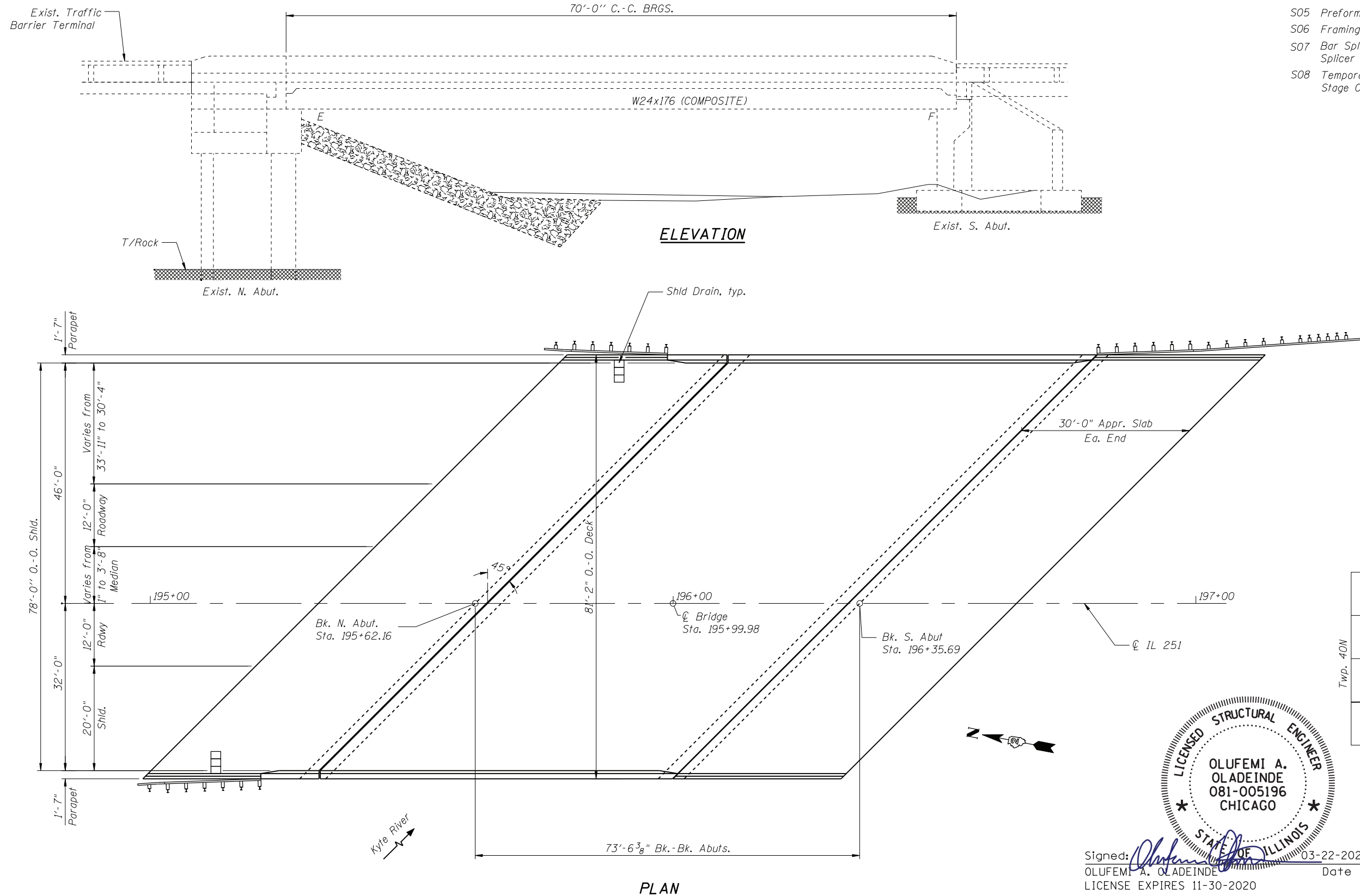


Existing Structure: Existing Structure is a single span steel Wide Flange Bridge with a 7½" concrete deck, skewed at 45° LT ahead. SN 071-0085.

Benchmark: Set Chiseled "+" on S.E. bolt of light pole at Sta. 199+38.58, El. 817.02

**INDEX OF SHEETS**

- S01 General Plan & Elevation
- S02 General Data
- S03 N. & S. Abut. Joint Removal & Replacement
- S04 N. & S. Abut. Joint Removal & Replacement Details
- S05 Preformed Joint Strip Seal
- S06 Framing Plan & Painting Details
- S07 Bar Splicer Assembly and Mechanical Splicer Detail
- S08 Temporary Concrete Barrier for Stage Construction



Signed: *Olufemi A. Oladeinde* 03-22-2020  
 OLUFEMI A. OLADEINDE Date  
 LICENSE EXPIRES 11-30-2020



USER NAME = *USER*	DESIGNED - AA	REVISED -
PLOT SCALE = *SCALE*	DRAWN - SD	REVISED -
PLOT DATE = *DATE*	CHECKED - OAO	REVISED -
	DATE - 03-19-2020	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**GENERAL PLAN & ELEVATION  
 STRUCTURE NO. 071-0085**

F.A.U. RIE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5454	D2 BJR 2020-2	OGLE	23	09
CONTRACT NO. 64P35				

SHEET 001 OF 008 SHEETS

ILLINOIS FED. AID PROJECT

GENERAL NOTES

1. 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.
2. Reinforcement bars designated (E) shall be epoxy coated.
3. All structural steel shall conform to AASHTO Classification M-270 Gr 36, unless otherwise noted.
4. All exposed concrete edges shall have a  $\frac{3}{4}$ " x 45° chamfer, except where shown.
5. 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".
6. Joint openings shall be adjusted according to Article 520.04 of the Std. Specs. when the deck is poured at an ambient temperature other than 50°F.
7. Containment of cleaning residue is required to control nuisance dust. See Special Provisions.
8. The deck surface shall have its final finish tined according to Article 420.09(e)(1) of the Standard Specifications. Cost included with Concrete Superstructures.

SCOPE OF WORK

1. Remove and replace transverse expansion joints at the abutments with preformed joint strip seals.
2. Apply protective coat on the reconstructed transverse joint areas.
3. Clean and repaint all steel elements located under the expansion joints at Abutments as indicated in plans.
4. Blast and paint expansion bearings at Abutments.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	Cu Yd	28.4	-	28.4
Concrete Superstructure	Cu Yd	28.1	-	28.1
Protective Coat	Sq Yd	79.0	-	79.0
Cleaning and Painting Steel Bridge No. 1	L Sum	1	-	1
Reinforcement Bars, Epoxy Coated	Pound	3430	-	3430
Bar Splicers	Each	32	-	32
Preformed Joint Strip Seal	Foot	228	-	228
Containment and Disposal of Non-lead Paint Cleaning Residues No. 1	L Sum	1	-	1



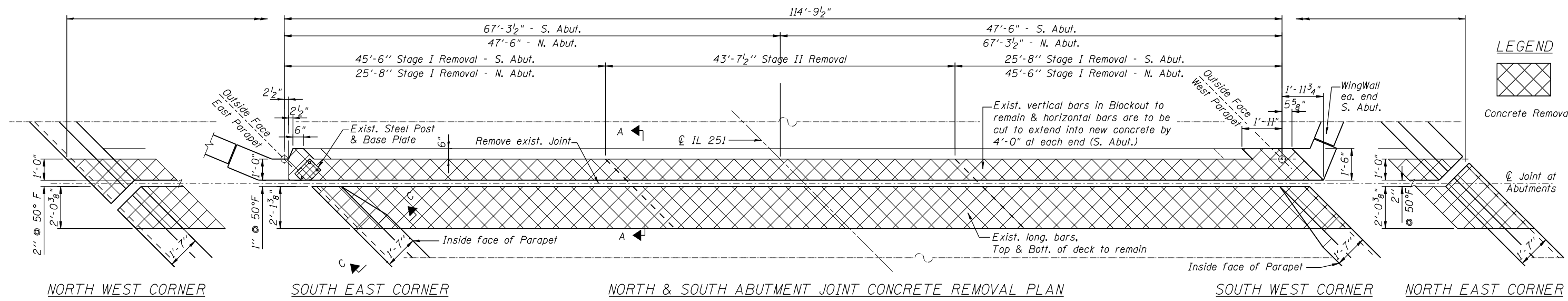
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

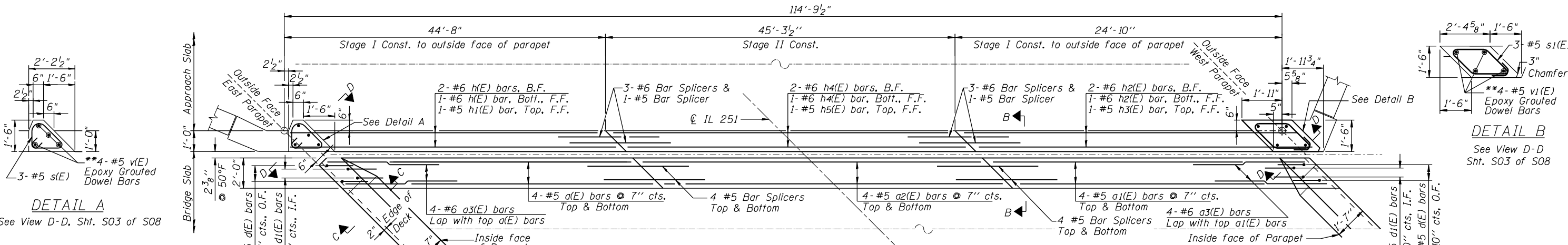
**GENERAL DATA  
STRUCTURE NO. 071-0085**

SHEET S02 OF S08 SHEETS

F.A.U. RIE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5454	D2 BJR 2020-2	OGLE	23	10
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64P35	

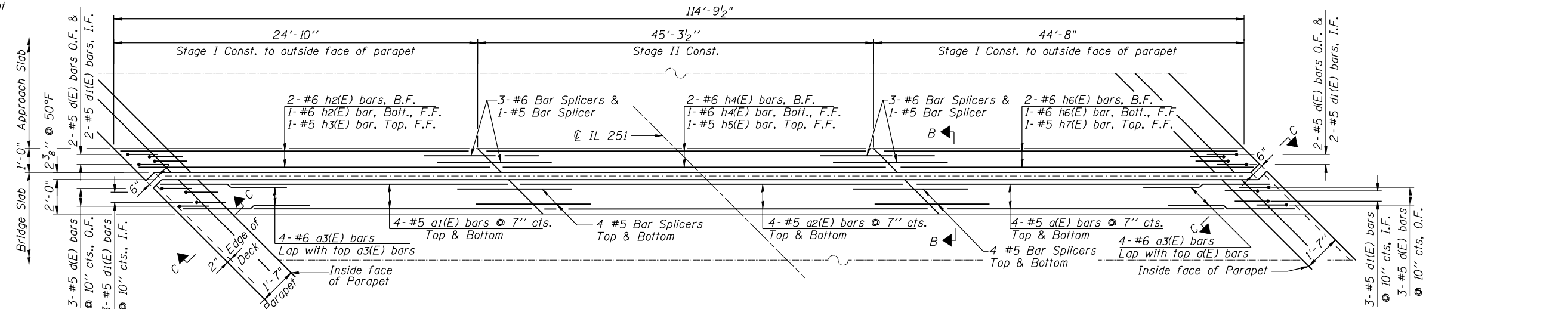


NORTH & SOUTH ABUTMENT JOINT CONCRETE REMOVAL PLAN



SOUTH ABUTMENT JOINT CONCRETE CONSTRUCTION PLAN

\* Cut top of d(E) bars to fit tapered top of parapet  
 \*\* Cost incidental to Reinforcement Bars, Epoxy Coated



NORTH ABUTMENT JOINT CONCRETE CONSTRUCTION PLAN



USER NAME = #USER#	DESIGNED - AA	REVISED -
PLOT SCALE = #SCALE#	DRAWN - SD	REVISED -
PLOT DATE = #DATE#	CHECKED - OAO	REVISED -
	DATE - 03-19-2020	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

N. & S. ABUT. JOINT REMOVAL & REPLACEMENT  
 STRUCTURE NO. 071-0085

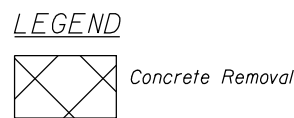
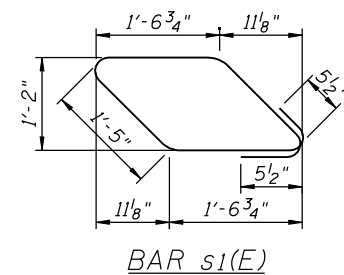
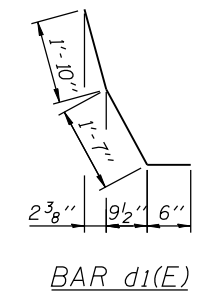
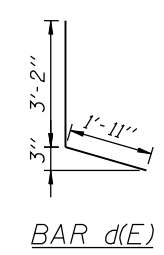
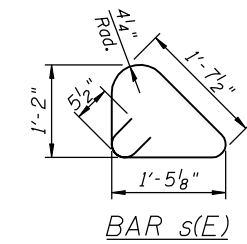
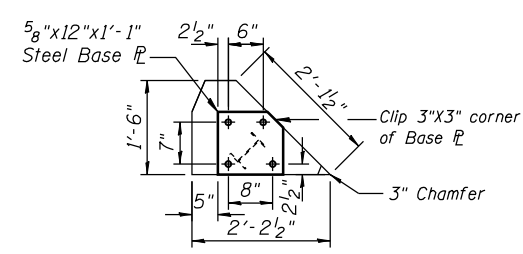
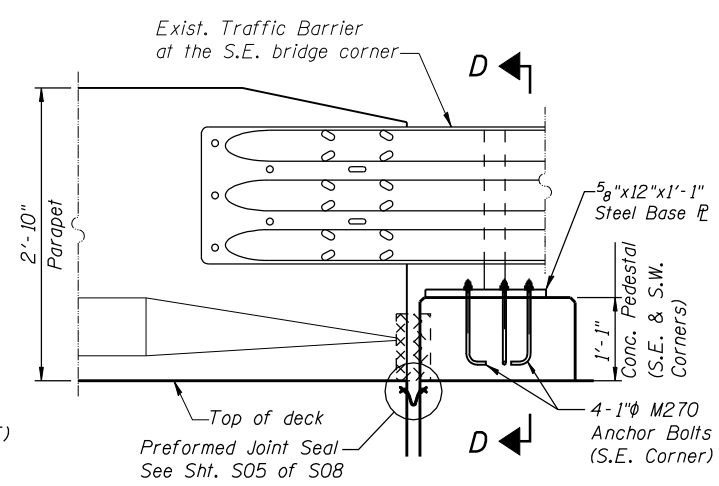
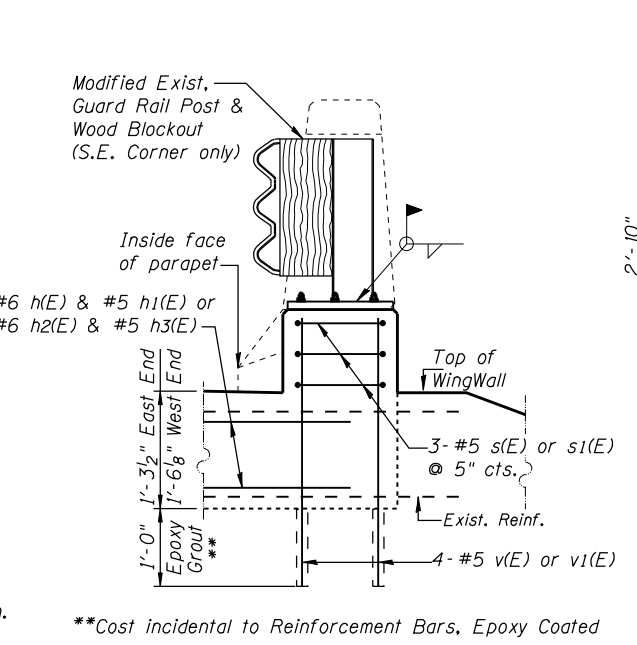
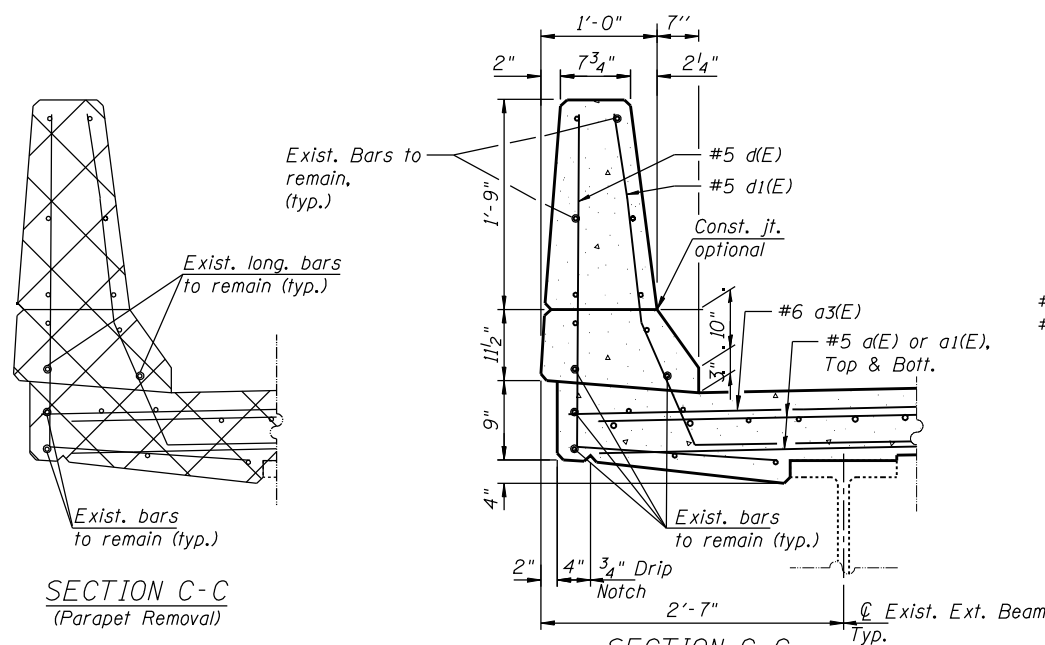
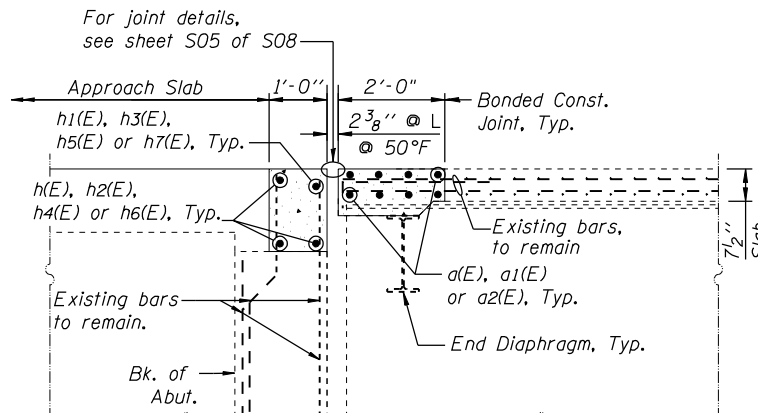
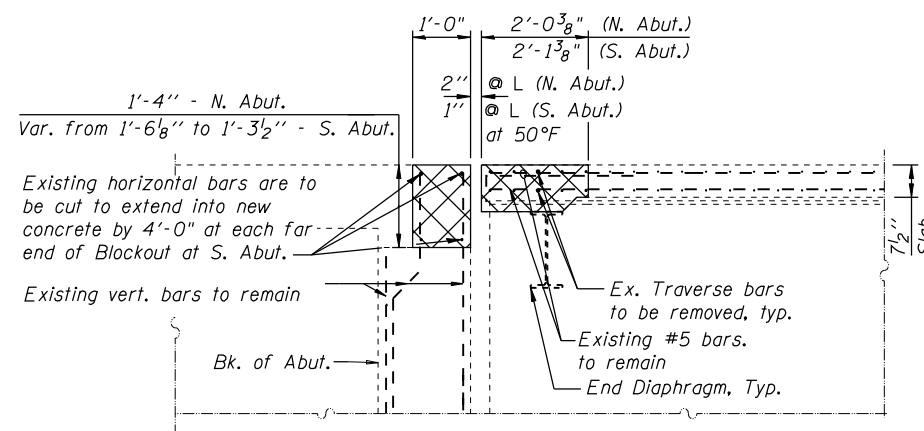
SHEET S03 OF S08 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5454	D2 BUR 2020-2	OGLE	23	11
CONTRACT NO. 64P35				

ILLINOIS FED. AID PROJECT

**BILL OF MATERIAL**  
(Both Abutments)

Bar	No.	Size	Length	Shape
a(E)	16	#5	42'-5"	—
a1(E)	16	#5	22'-9"	—
a2(E)	16	#5	44'-10"	—
a3(E)	16	#6	6'-6"	—
d(E)	16	#5	5'-1"	L
d1(E)	16	#5	3'-11"	L
h(E)	3	#6	43'-4"	—
h1(E)	1	#5	43'-11"	—
h2(E)	6	#6	23'-4"	—
h3(E)	2	#5	23'-4"	—
h4(E)	6	#6	44'-10"	—
h5(E)	2	#5	44'-10"	—
h6(E)	3	#6	41'-6"	—
h7(E)	1	#5	41'-6"	—
s(E)	3	#4	5'-6"	U
s1(E)	3	#4	7'-8"	U
v(E)	4	#5	3'-3"	—
v1(E)	4	#5	3'-5"	—
Concrete Removal			Cu. Yd.	28.4
Concrete Superstructure			Cu. Yd.	28.1
Reinforcement Bars, Epoxy Coated			Pound	3430

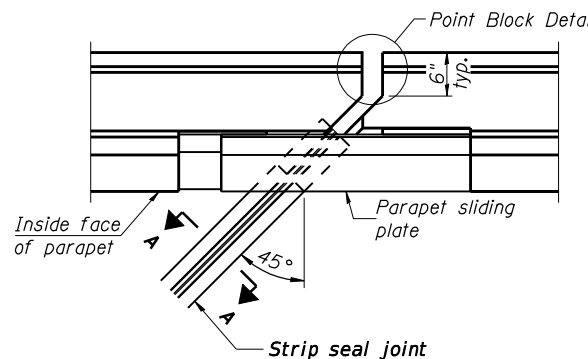


Lap #6 a3(E) bars with each #5 a(E) or a1(E) top bars, ea. side.

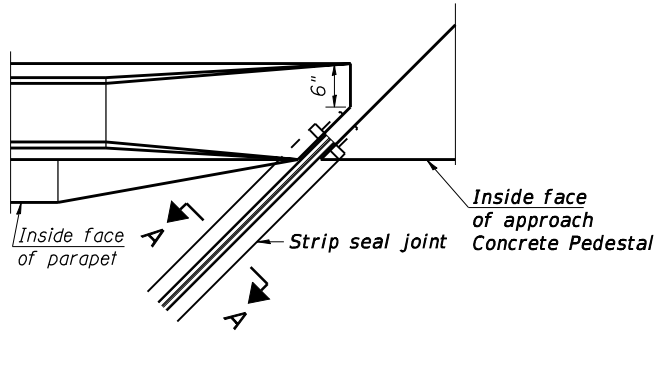
\*\*Cost incidental to Reinforcement Bars, Epoxy Coated

**REMOVE AND REERECT TRAFFIC BARRIER TERMINAL (S.E. CORNER ONLY)**

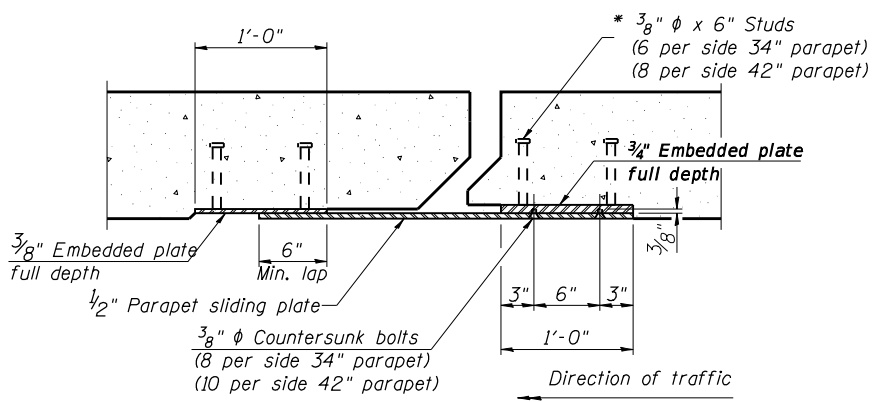
- The existing Guardrail and Post with a base plate connected to the S.E. corner of the bridge is to be carefully detached without damage during Concrete Removal.
- The height of the W6 steel post and an attached wood block-out is reduced by cutting and discarding the lower 13<sup>5</sup>/<sub>8</sub>" of the post including the base plate.
- A new 5<sup>8</sup>" Base Plate is to be anchored into position on the new concrete pedestal as detailed on this sheet.
- After all new concrete is cured and completed in the S.E. corner, the modified post and guardrail are re-attached back into position.
- Note that the new Base Plate has sufficient surface to adjust the W6 post's location before field welding to plate.
- Cost of steel plate and anchor bolts and setting Steel Base Plate into concrete pedestal incidental to CONCRETE SUPERSTRUCTURE.
- Cost of cutting steel post and welding to base plate and reconnecting of guardrail to parapet and posts shall be paid for as under REMOVE AND REERECT TRAFFIC BARRIER TERMINALS, TYPE 6, Each.



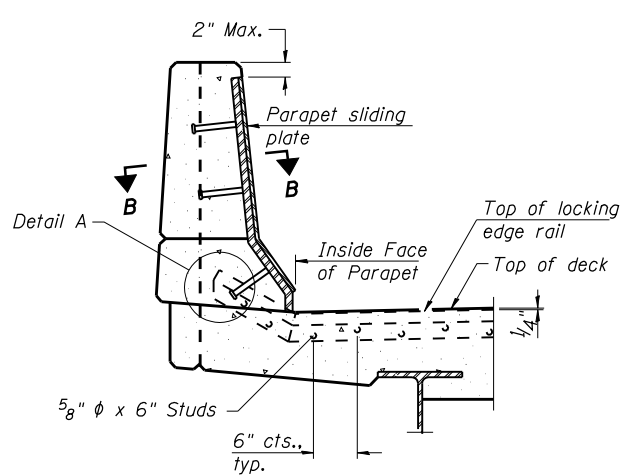
**PARAPET PLAN AT N. ABUT.**



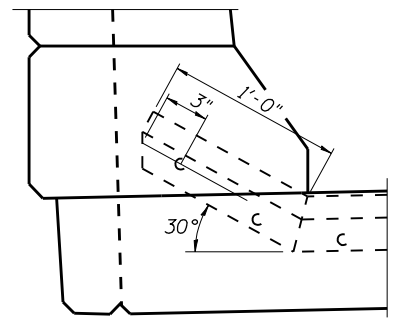
**PARAPET PLAN AT S. ABUT.  
(S.E. Corner shown)**



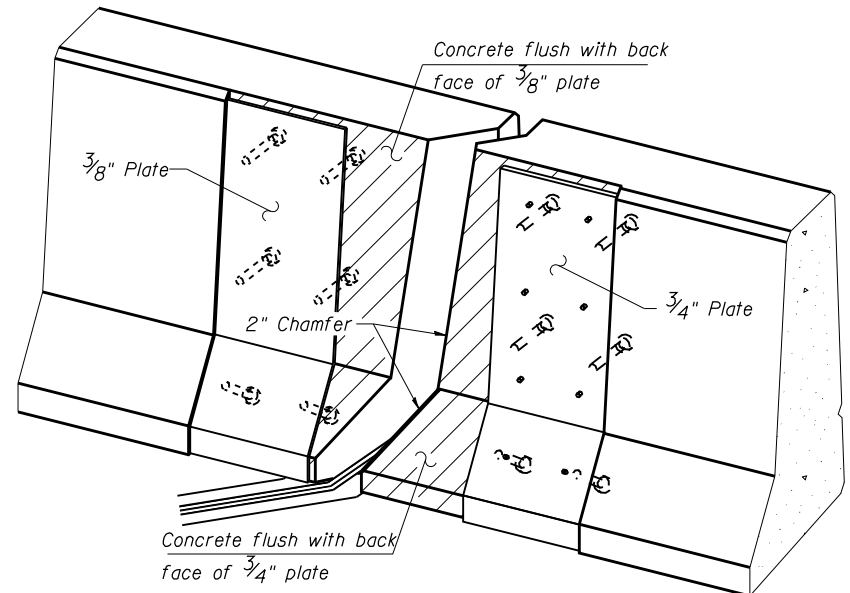
**SECTION B-B**



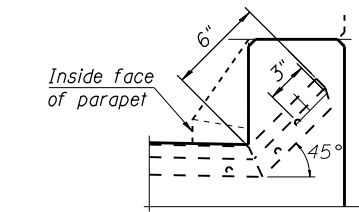
**ELEVATION AT PARAPET  
(N. ABUTMENT)  
(Skews > 30° shown.)**



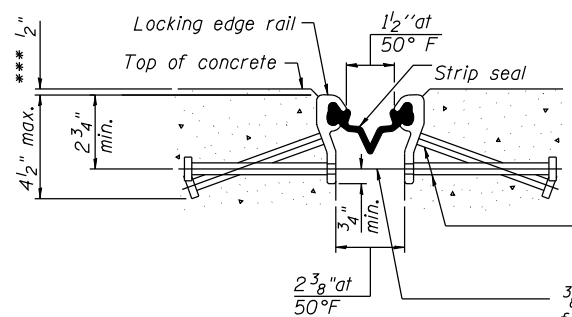
**DETAIL A**



**TRIMETRIC VIEW  
(Showing embedded plates only)**

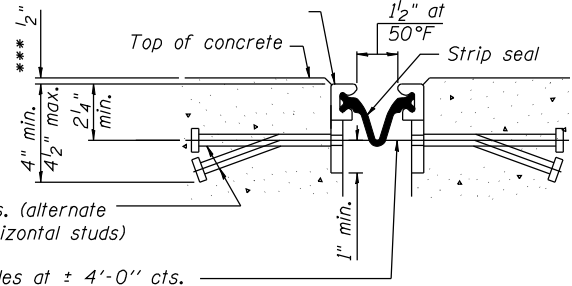


**JOINT TREATMENT AT S. ABUT.**

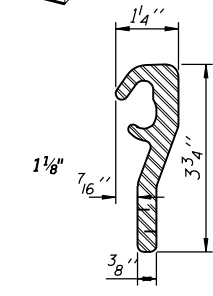


**SHOWING ROLLED RAIL JOINT**

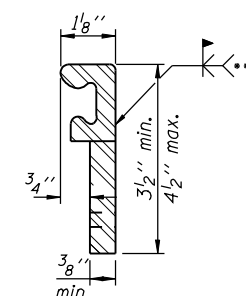
\* 5/8" φ x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)  
3/8" φ threaded rods in 7/16" φ holes at ± 4'-0" cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.



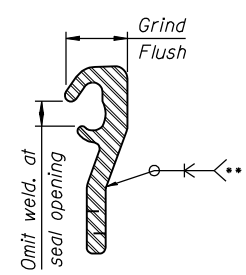
**SHOWING WELDED RAIL JOINT**



**ROLLED  
(EXTRUDED) RAIL**



**WELDED RAIL**



**LOCKING EDGE RAIL SPLICE**

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

**LOCKING EDGE RAILS**

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

**NOTES:**

The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the locking edge rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

The locking edge rails depicted are configured for typical applications and are conceptual only. The actual configuration of the locking edge rails and matching strip seal may vary from manufacturer to manufacturer provided they fit the application and meet the minimum anchorage shown. Flanged edge rails, however, will not be allowed. Locking edge rails may exceed the 4 1/2" maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.

The manufacturer's recommended installation methods shall be followed.

All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

The Maximum space between locking edge rail segments shall be 3/16" and sealed with a suitable sealant; however, any rail joint within 10' measured perpendicular to the face of the curb or parapet shall be welded as shown in the locking edge rail splice detail.

Cost of parapet sliding plates, embedded plates, and anchorage studs included with Preformed Joint Strip Seal.

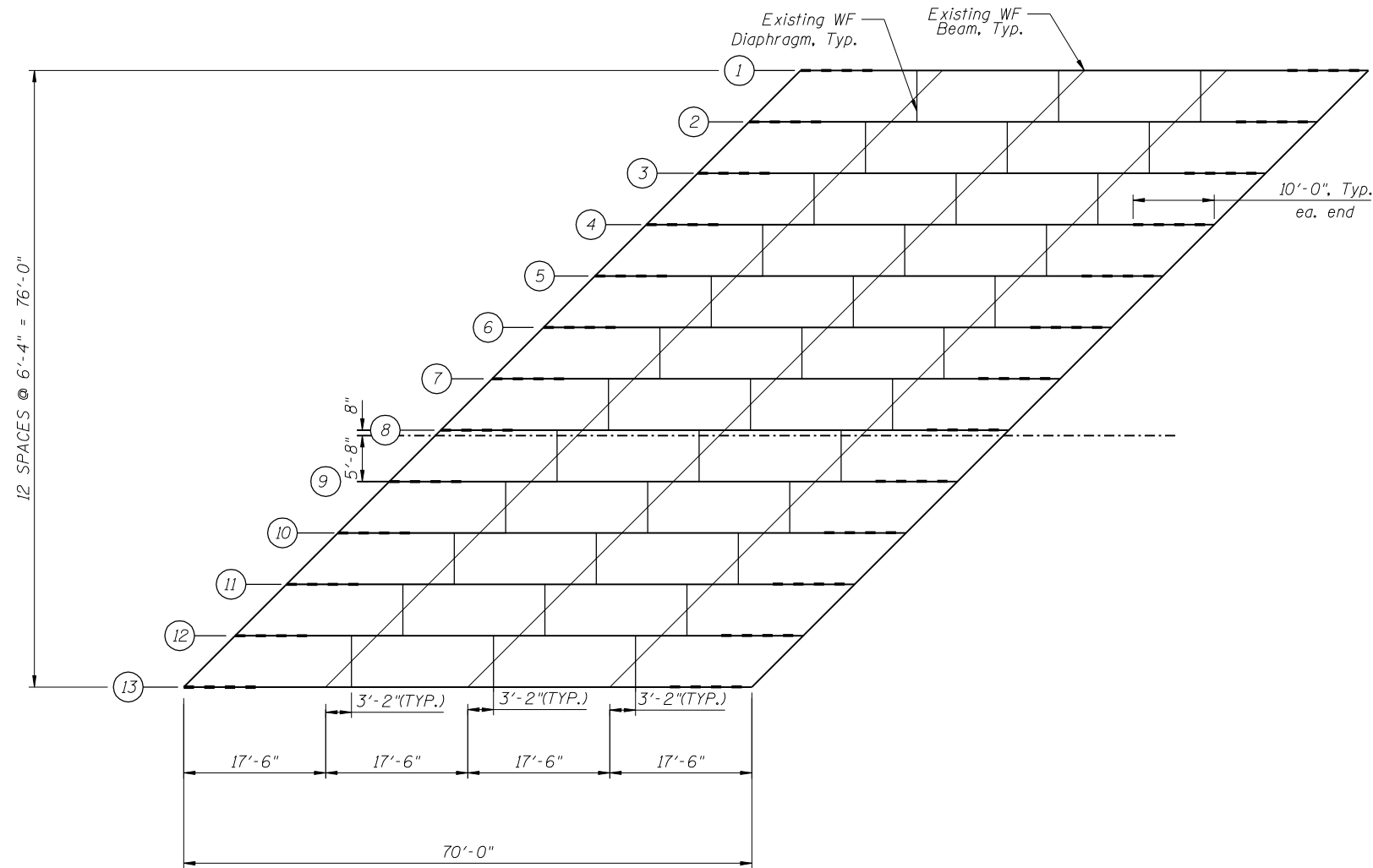
The concrete opening below the strip seal will vary based on the locking edge rail chosen by the Contractor. Deck and parapet lengths shown elsewhere in the plans are dimensioned to the concrete opening, not the joint opening, and are based on the rolled locking edge rail. If the Contractor elects to use a different locking edge rail, dimensional adjustments may be required. One exception to this would be the strip seal joint at the end of the precast bridge approach slab. For these cases the pavement connector length shall be adjusted, not the length of the bridge approach slab.

**SECTION A-A**

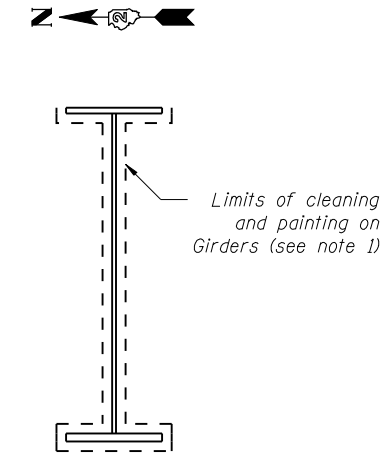
\* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.

**BILL OF MATERIAL**

Item	Unit	Total
Preformed Joint Strip Seal	Foot	228



**PARTIAL FRAMING PLAN**



**TYP. INTERIOR AND EXTERIOR W24 BEAMS**

**NOTES:**

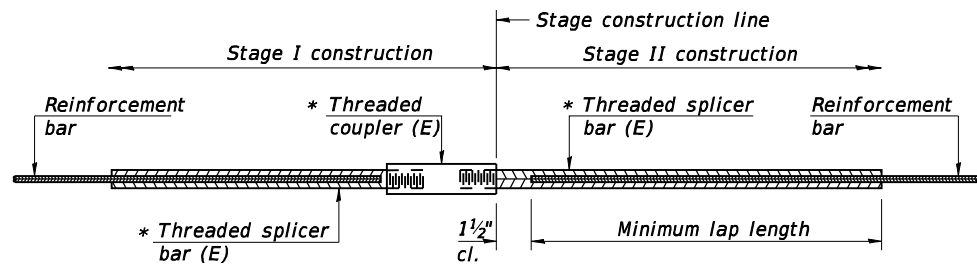
1. Structural steel within the 10'-0" limits near bearings, including splices, end diaphragms and beam extensions behind bearings, shall be cleaned according to SSPC-SP10.
2. The Designated areas cleaned per Near White Blast Cleaning -SSPC-SP10 and per Commercial Grade Power Tool Cleaning -SSPC-SP15 shall be painted according to the requirement of Paint System 1-OZ/E/U. The color of the final finish coat shall be Interstate Green. Munsell No.7.5G 4/8.

**LEGEND:**

--- Cleaning and Painting Structural Steel

**BILL OF MATERIAL**

ITEMS	UNIT	QUANTITY
Cleaning and Painting Structural Steel, Location 1	L Sum	1
Containment and Disposal of Non-Lead Paint Cleaning Residues, Location 1	L Sum	1

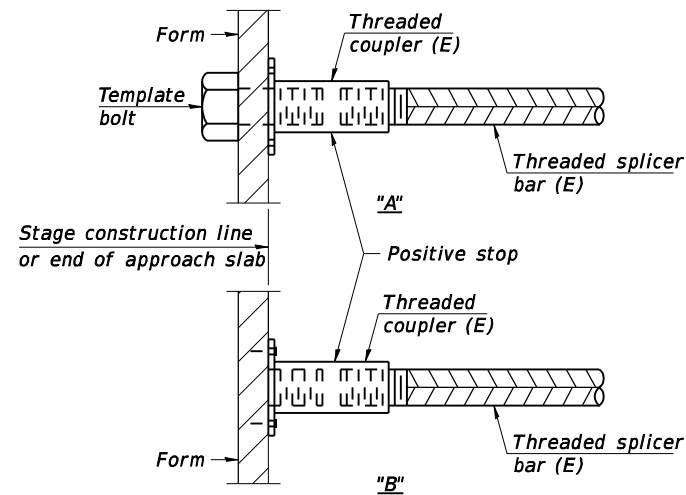


**STANDARD BAR SPLICER ASSEMBLY**

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

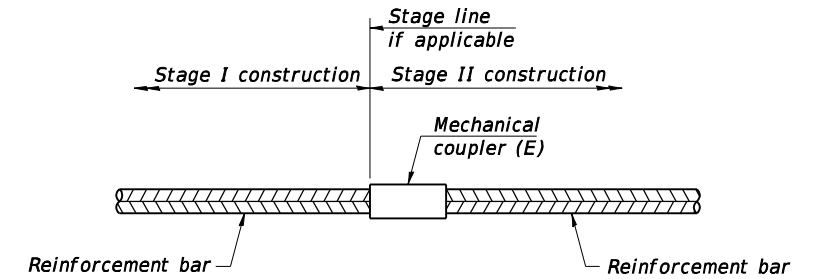
\* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
Abutment Hatch Block	#5	4	3'-4"
Abutment Hatch Block	#6	12	4'-0"
End of Deck at Abutments	#5	16	3'-6"



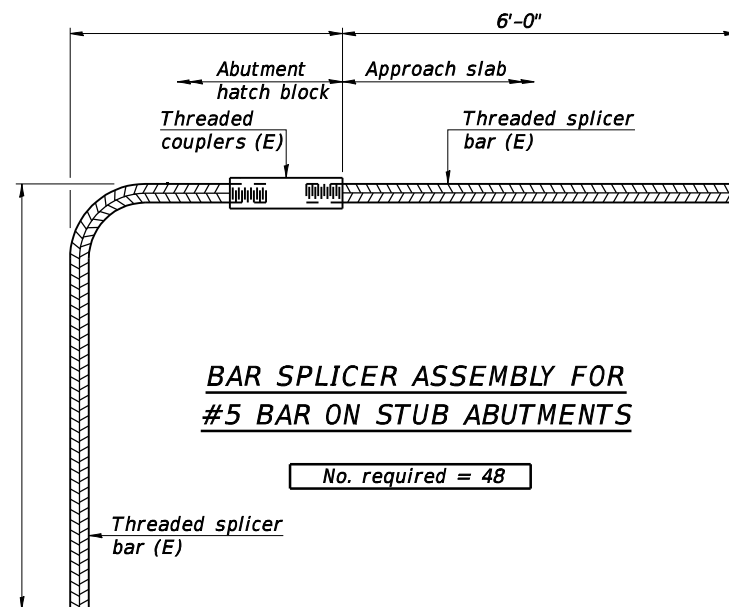
**INSTALLATION AND SETTING METHODS**

"A" : Set bar splicer assembly by means of a template bolt.  
 "B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.  
 (E) : Indicates epoxy coating.



**STANDARD MECHANICAL SPLICER**

Location	Bar size	No. assemblies required

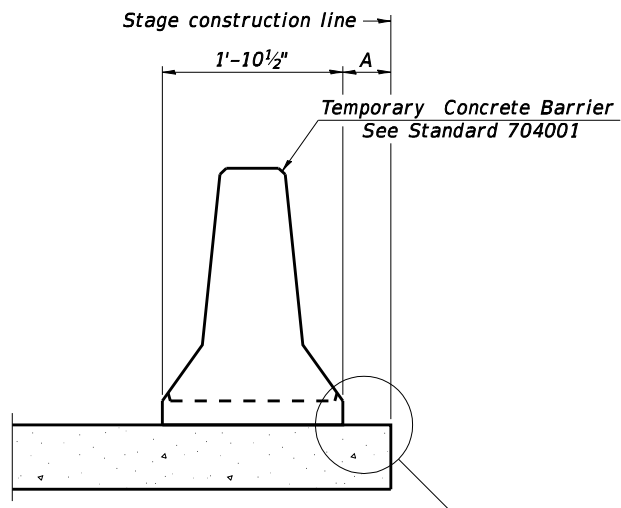


**BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS**

No. required = 48

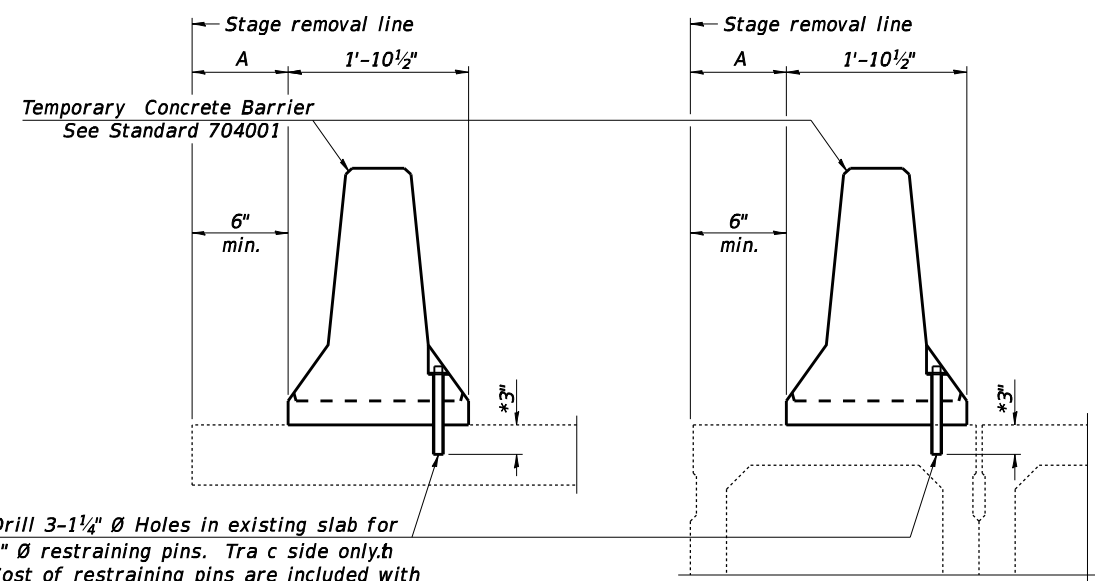
**NOTES**

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.



When "A" is 3'-1" or less, the temporary concrete barrier shall be restrained to the new slab according to Detail I, II or III. No restraint is required when "A" is greater than 3'-1".

NEW SLAB OR NEW DECK BEAM

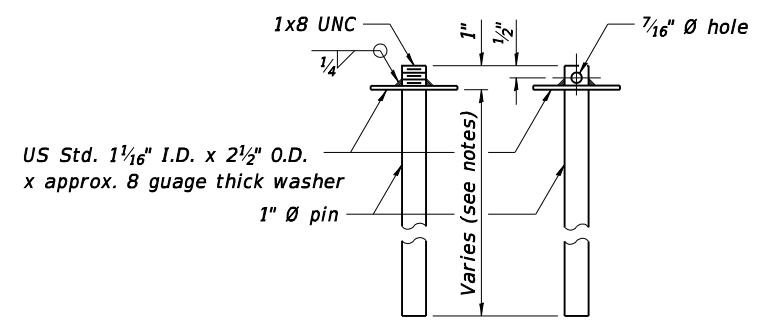


Drill 3-1 1/4" Ø Holes in existing slab for 1" Ø restraining pins. Tra c side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint is required when "A" is greater than 3'-1".

EXISTING SLAB

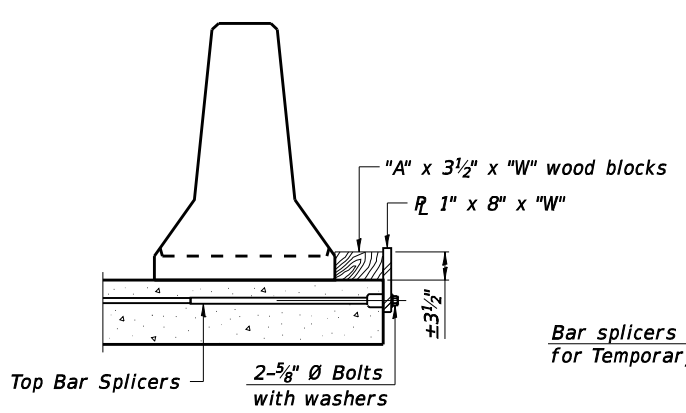
EXISTING DECK BEAM

SECTIONS THRU SLAB OR DECK BEAM

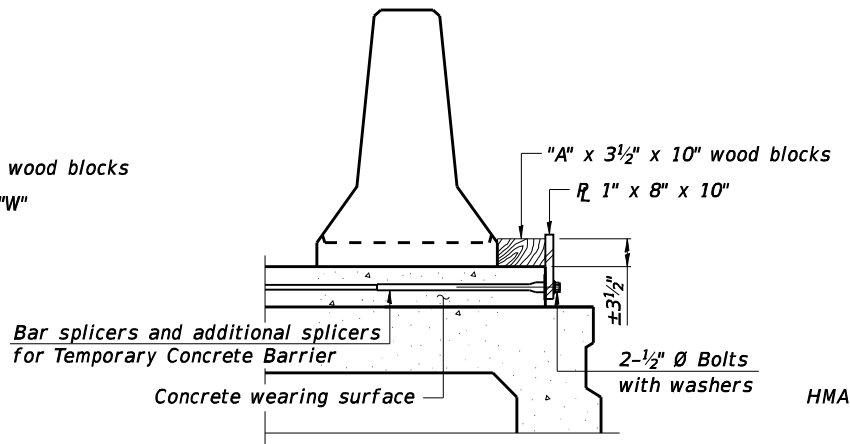


RESTRAINING PIN

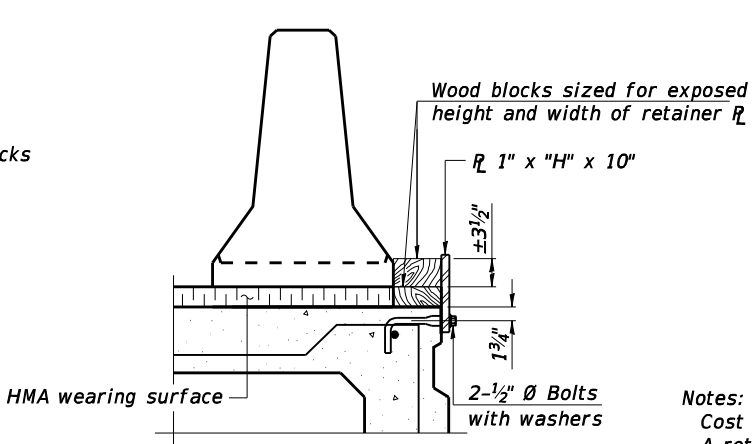
\* When hot-mix asphalt wearing surface is present, embedment shall be 3" plus the wearing surface depth.



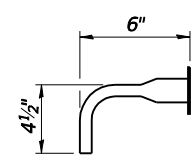
DETAIL I



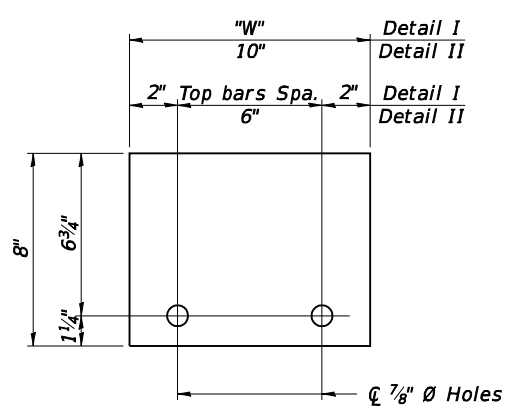
DETAIL II



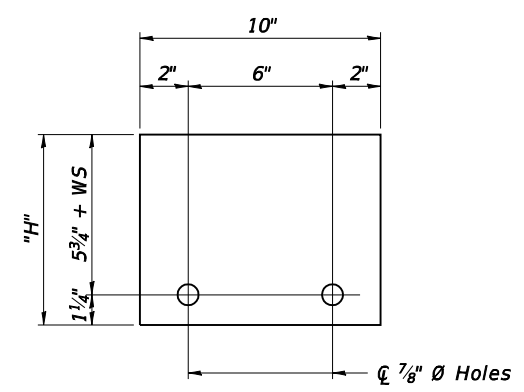
DETAIL III



BAR SPLICER FOR #4 BAR - DETAIL III



STEEL RETAINER 1" x 8" x "W"  
(Detail I and II)

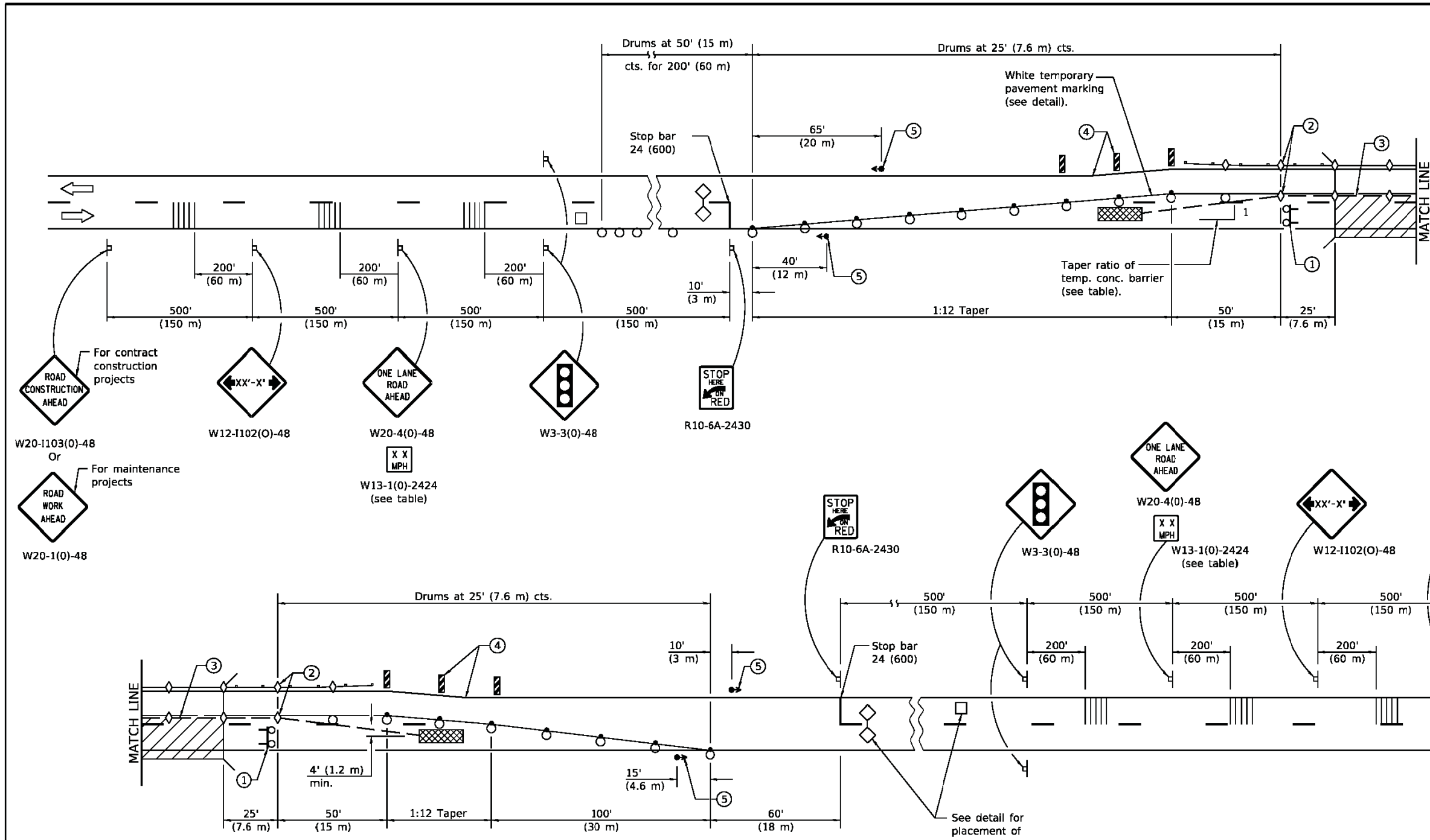


STEEL RETAINER 1" x "H" x 10"  
(Detail III)

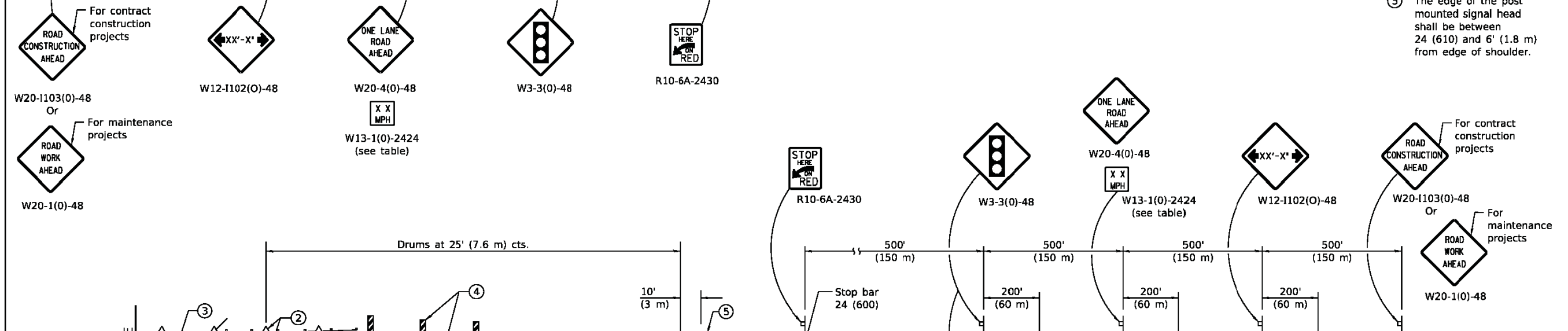
Notes:  
 Cost of retainer assembly is included with Temporary Concrete Barrier.  
 A retainer assembly shall be located at the approximate C of each temporary concrete barrier.  
 The retainer plate shall not be removed until the concrete on the adjacent stage is ready to be poured. For Detail III applications the retainer plate shall not be removed until just prior to placing the adjacent beam.  
 When the 'A' dimension is less than 1 1/2", the wood block shall be omitted and the barrier shall be placed in direct contact with the steel retainer plate.  
 For deck beam applications the minimum required 'A' distance is 6" to accommodate the shear key clamping device.

- Detail I - Installation for a new bridge deck or bridge slab.
- Detail II - Installation for a new deck beam with an initial concrete wearing surface. Additional bar splicers shall be provided at 6'-0" centers and paired with the bar splicers of the concrete wearing surface reinforcement to accommodate the installation of the retainer assemblies. The cost of the additional bar splicers is included with the concrete wearing surface.
- Detail III - Installation for a new deck beam with no initial wearing surface or with an initial hot-mix asphalt (HMA) wearing surface present. The deck beam directly beneath the temporary concrete barrier shall be fabricated with bar splicer inserts in the side of the beam, as detailed, to accommodate the installation of the retainer assemblies. A pair of bar splicers, 6" apart, shall be placed at 6'-0" centers along the length of the beam. The cost of the bar splicers is included with the deck beam.





- ① Type III barricade to be placed when no work is being performed.
- ② Guardrail/barrier wall reflectors at 25' (7.6 m) cts. See Standards 704001 & 782006.
- ③ When temp. bridge rail is specified, it shall be connected to the temp. conc. barrier using a traffic barrier terminal Type 11.
- ④ Vertical panels at 25' (7.6 m) cts. throughout lane shift. These devices may be omitted when the guardrail, w/markers, extends to at least this point on the taper.
- ⑤ The edge of the post mounted signal head shall be between 24 (610) and 6' (1.8 m) from edge of shoulder.



**SYMBOLS**

- Work area
- Sign
- Type III barricade with flashing lights
- Traffic signal
- Detector loops
- Impact attenuator
- Drum with steady burning bi-directional light
- Temporary concrete barrier
- Temporary rumble strip (when specified)
- Double vertical panel (see detail)
- Crystal, bidirectional guardrail/barrier wall reflector
- Drum

Illinois Department of Transportation

PASSED January 1, 2020  
 ENGINEER OF SAFETY PROG. AND ENGINEERING

APPROVED January 1, 2020  
 ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-20

DATE	REVISIONS
1-1-20	Revised from F-shape to constant slope parapet.
1-1-18	Omitted lights in tangents.
1-1-17	Added flashing lights to Type III barricades. Revised note ④.

See Sheet 2 for GENERAL NOTES

**LANE CLOSURE, 2L, 2W,  
BRIDGE REPAIR WITH BARRIER**

(Sheet 1 of 2)

**STANDARD 701321-18**

FILE NAME = \$FILEL\$

**S D I** ENGINEERING CORP.  
www.sdiengr.com

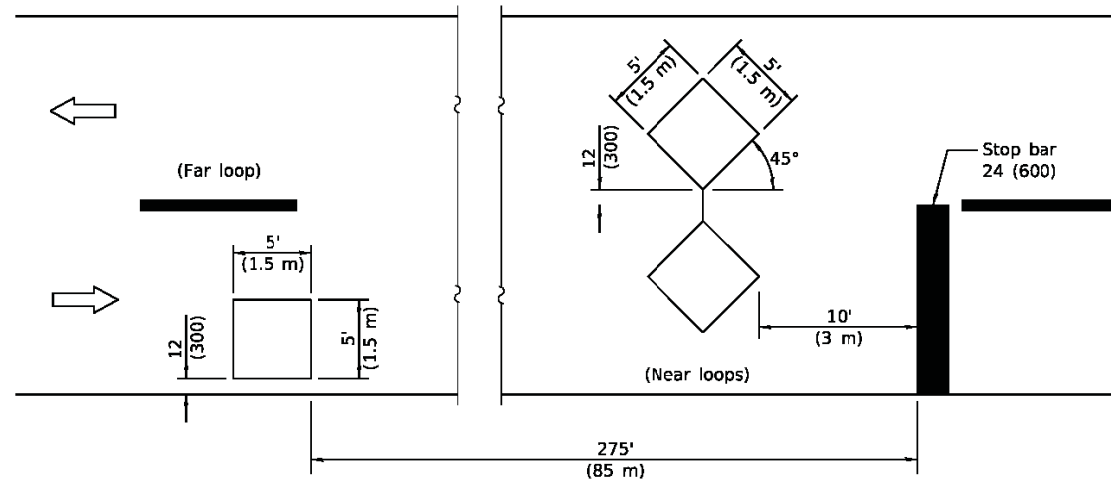
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	DATE - 03-19-2020	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

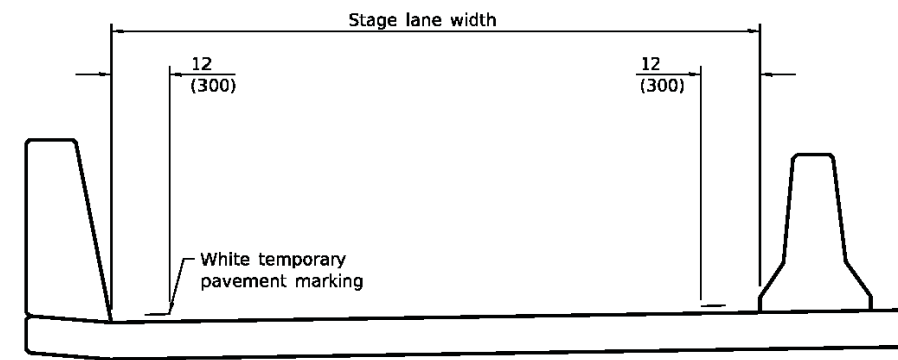
**STANDARD 701321-18**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5454	D2 BUR 2020-2	OGLE	23	17
CONTRACT NO. 64P35				
ILLINOIS FED. AID PROJECT				



**DETECTOR LOOPS**

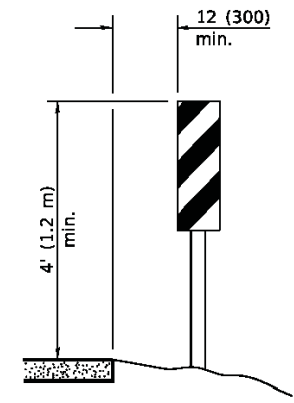


**TEMPORARY PAVEMENT MARKING**

TRAFFIC SIGNAL SEQUENCE						
PHASE	A			B		
INTERVAL	1	2	3	4	5	6
NORTHBOUND OR EASTBOUND	G	Y	R	R	R	R
SOUTHBOUND OR WESTBOUND	R	R	R	G	Y	R

TEMPORARY CONCRETE BARRIER	
NORMAL POSTED SPEED	TAPER RATIO
40 mph AND ABOVE	12:1
BELOW 40 mph	8:1

ADVISORY SPEED LIMIT	
NORMAL POSTED SPEED	ADVISORY SPEED
55 - 45 mph	40 mph
40 mph	35 mph
35 - 30 mph	30 mph



**VERTICAL PANELS**  
(Post mounted, one each side)

**GENERAL NOTES**

This Standard is used where, at any time, any vehicle, equipment, workers, or their activities will encroach on one lane of a bridge. Traffic signals and a positive barrier are required.

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

Temporary concrete barrier shall be according to Standard 704001.

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.

**LANE CLOSURE, 2L, 2W,  
BRIDGE REPAIR WITH BARRIER**

(Sheet 2 of 2)

**STANDARD 701321-18**

Illinois Department of Transportation

PASSED January 1, 2020  
*Amber Datt*  
ENGINEER OF SAFETY PROG. AND ENGINEERING

APPROVED January 1, 2020  
*S. J. [Signature]*  
ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-97

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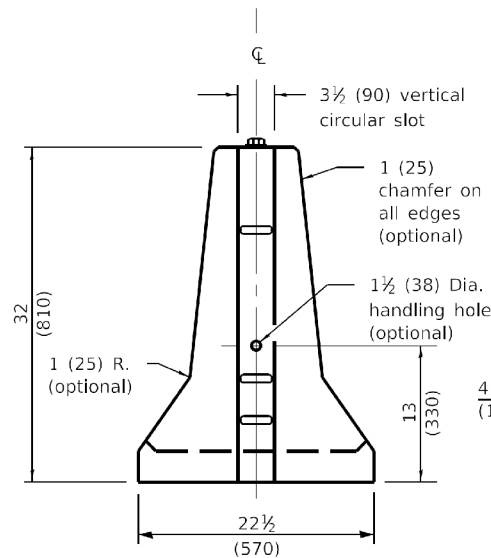
**SDI ENGINEERING CORP.**  
www.sdiengr.com

USER NAME = \$USER\$	DESIGNED - AA	REVISED -
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	DATE - 03-19-2020	REVISED -

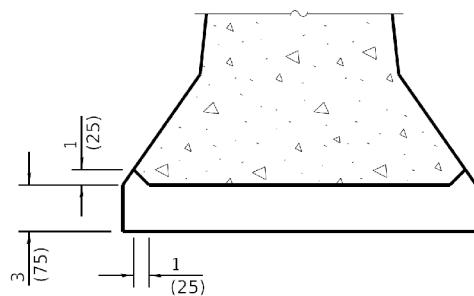
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>STANDARD 701321-18</b>	
SCALE:	SHEET OF SHEETS STA. TO STA.

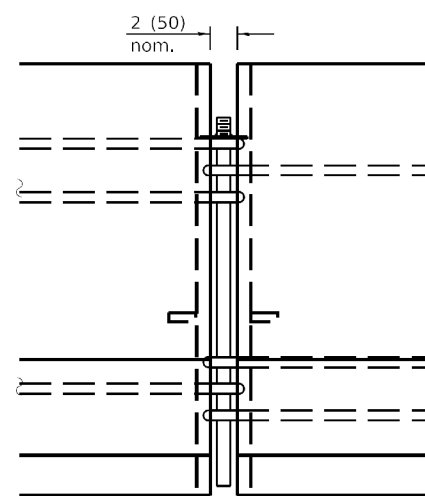
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5454	D2 BJR 2020-2	OGLE	23	18
CONTRACT NO. 64P35				
ILLINOIS FED. AID PROJECT				



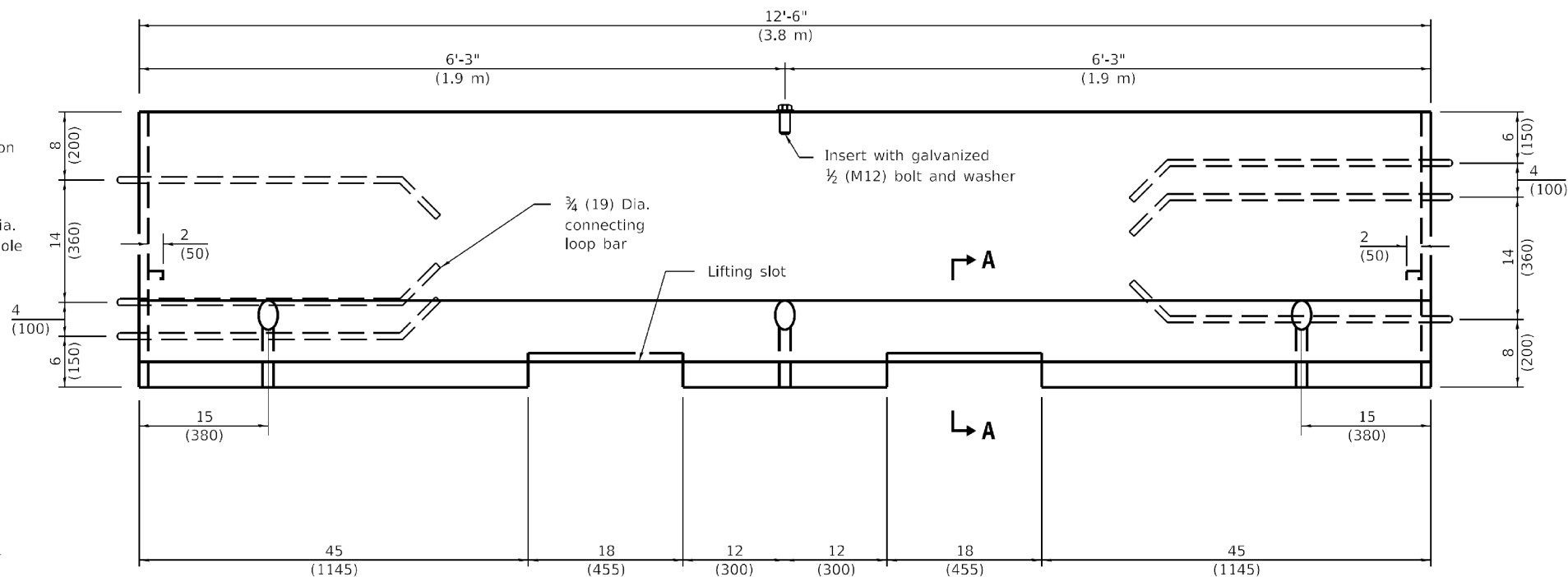
**END VIEW**  
(Showing lifting slot)



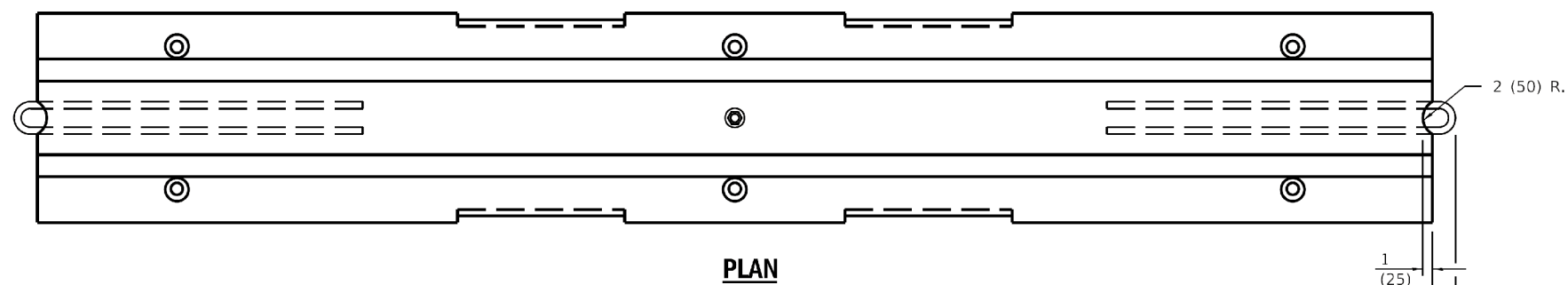
**SECTION A-A**  
**LIFTING SLOT**



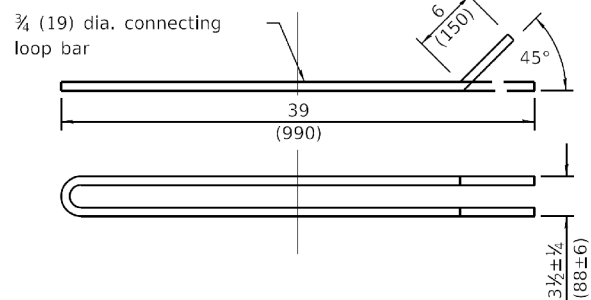
**CONNECTING DETAIL**



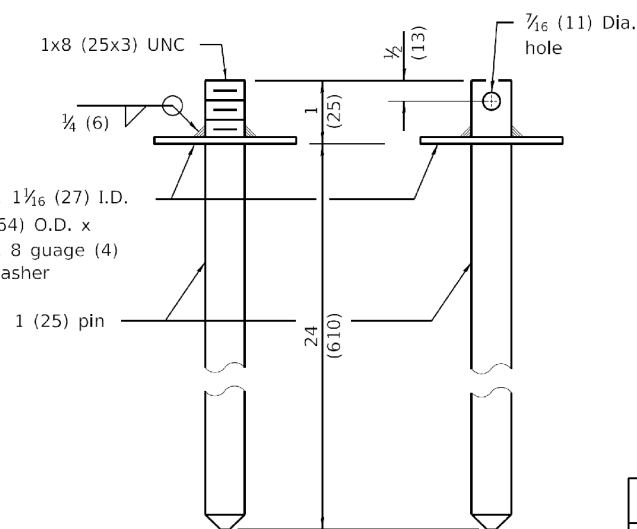
**ELEVATION**  
(Showing connecting loop bars and vertical panel bolt/insert)



**PLAN**

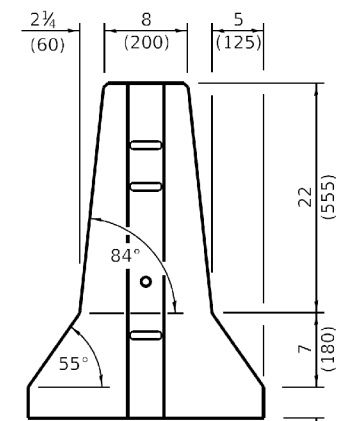


**CONNECTING LOOP BAR**

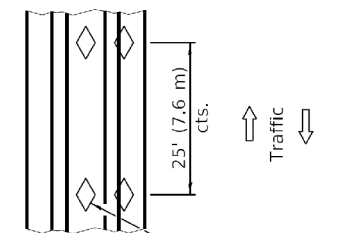


**CONNECTING AND ANCHOR PINS**  
(End may be beveled 1/4 (6) max.)

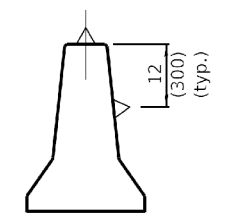
**F SHAPE DESIGN**



**END VIEW**



**TOP VIEW**



**BARRIER WALL REFLECTORS**

**GENERAL NOTES**

Each F shape barrier shall be clearly marked with "ILLINOIS F SHAPE", the Producer's mark and the date of manufacture. The markings shall be indented on the barrier or painted thereon with waterproof paint/ink.

The insert for the 1/2 (M12) bolt shall be capable of 3,000 lb (13 kN) pull-out strength.

When barrier separates opposing flows of traffic markers shall be on both sides of barrier.

See Standard 782006 for dimensions of Type C reflector.

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

DATE	REVISIONS
4-1-16	Rev. opt. chamfer on all edges to 1 (25). Reference to Std. 635011 now 782006.
1-1-12	Omitted 'ALTERNATE' from connecting and anchoring pins detail.

**TEMPORARY CONCRETE BARRIER**

(Sheet 1 of 2)

**STANDARD 704001-08**

Illinois Department of Transportation  
 PASSED April 1, 2016  
 ENGINEER OF POLICY AND PROCEDURES  
 APPROVED April 1, 2016  
 ENGINEER OF DESIGN AND ENVIRONMENT

USER NAME = #USER#	DESIGNED - AA	REVISED -
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	DATE - 03-19-2020	REVISED -

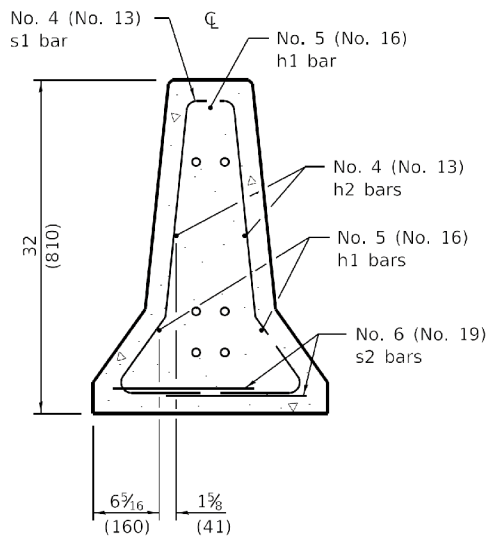
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

STANDARD 704001-08

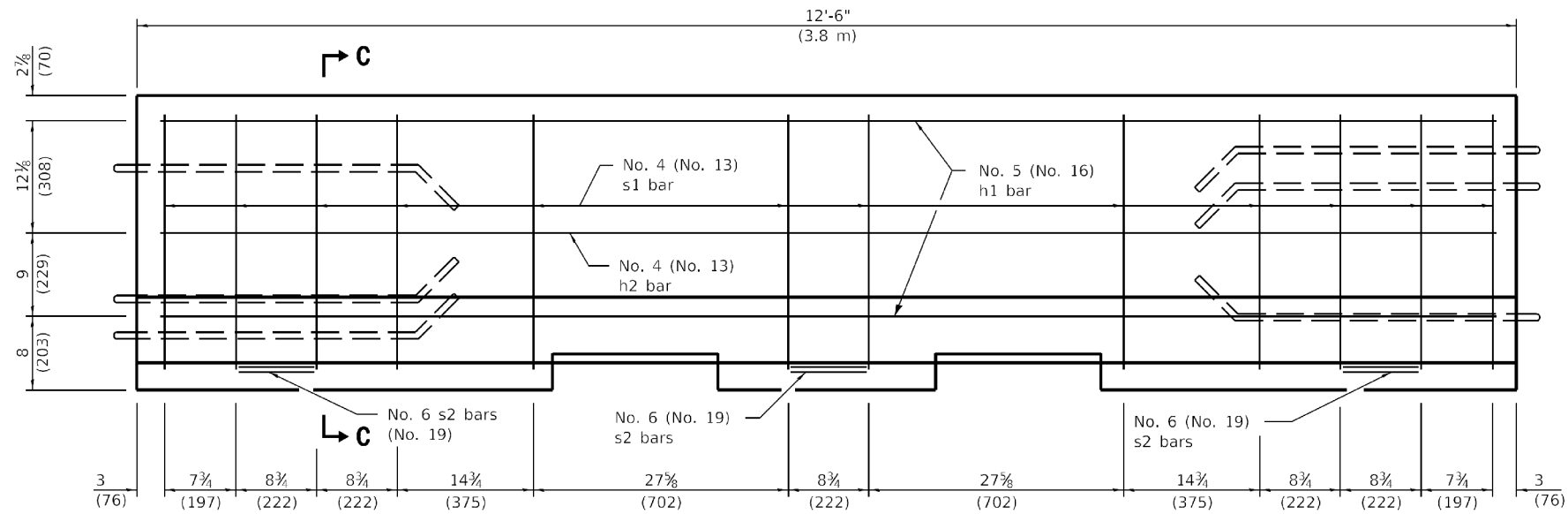
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5454	D2 BUR 2020-2	OGLE	23	19
CONTRACT NO. 64P35				
ILLINOIS FED. AID PROJECT				

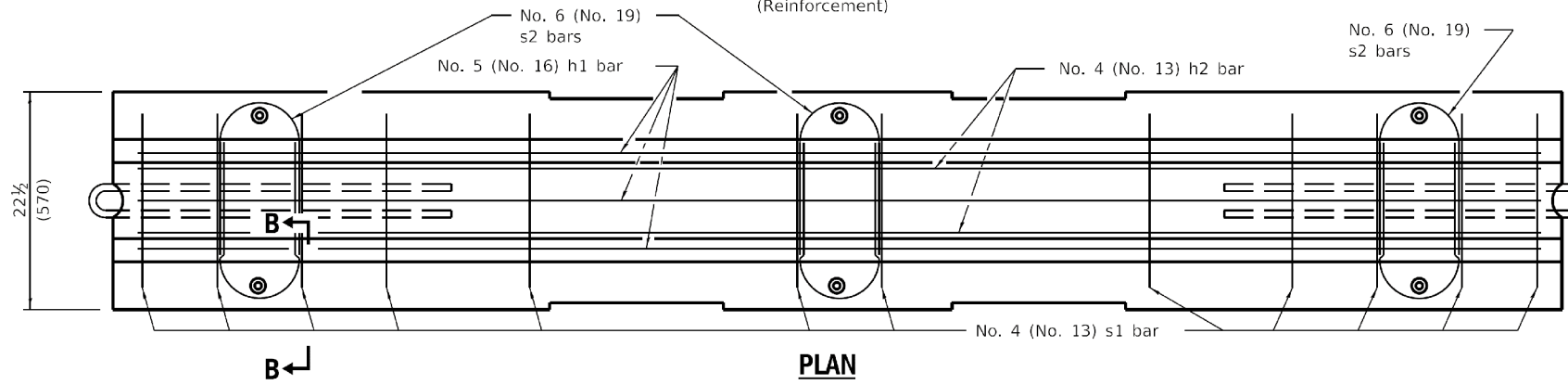
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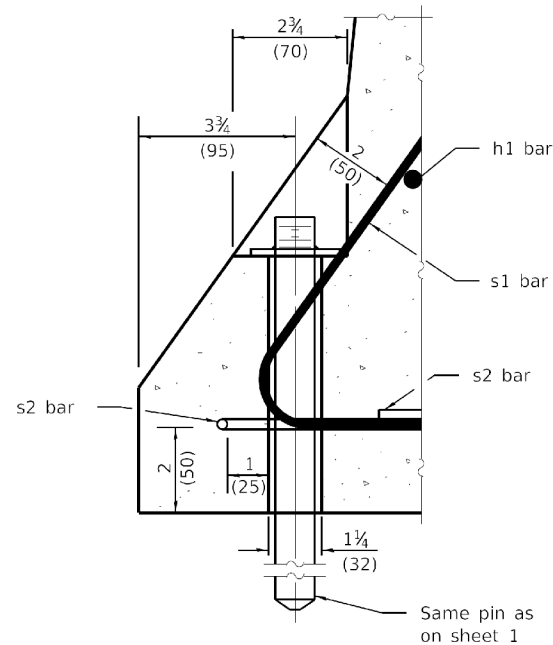
**SECTION C-C**



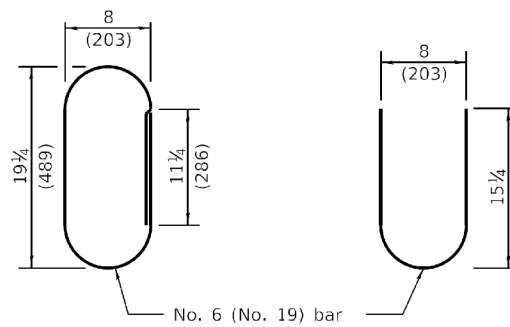
**ELEVATION**  
(Reinforcement)



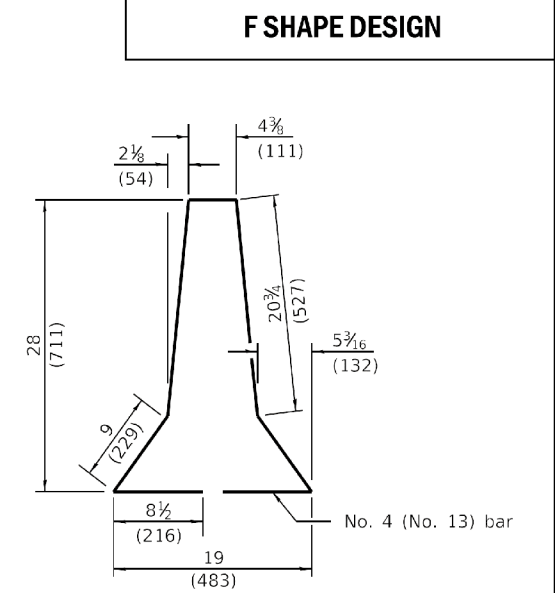
**PLAN**



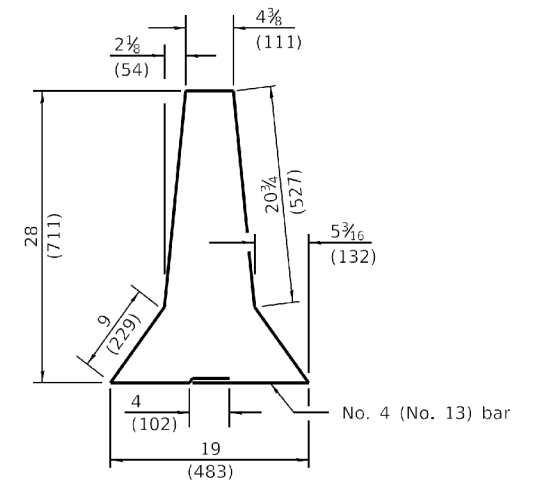
**SECTION B-B**  
**ANCHORING DETAIL**



**ALTERNATE s2 BARS**



**s1 BAR**



**ALTERNATE s1 BAR**

**TEMPORARY CONCRETE BARRIER**

(Sheet 2 of 2)

**STANDARD 704001-08**

Illinois Department of Transportation  
 PASSED April 1, 2016  
 Michael Brand  
 ENGINEER OF POLICY AND PROCEDURES  
 APPROVED April 1, 2016  
 ENGINEER OF DESIGN AND ENVIRONMENT

USER NAME = *USER*	DESIGNED - AA	REVISED -
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	DATE - 03-19-2020	REVISED -

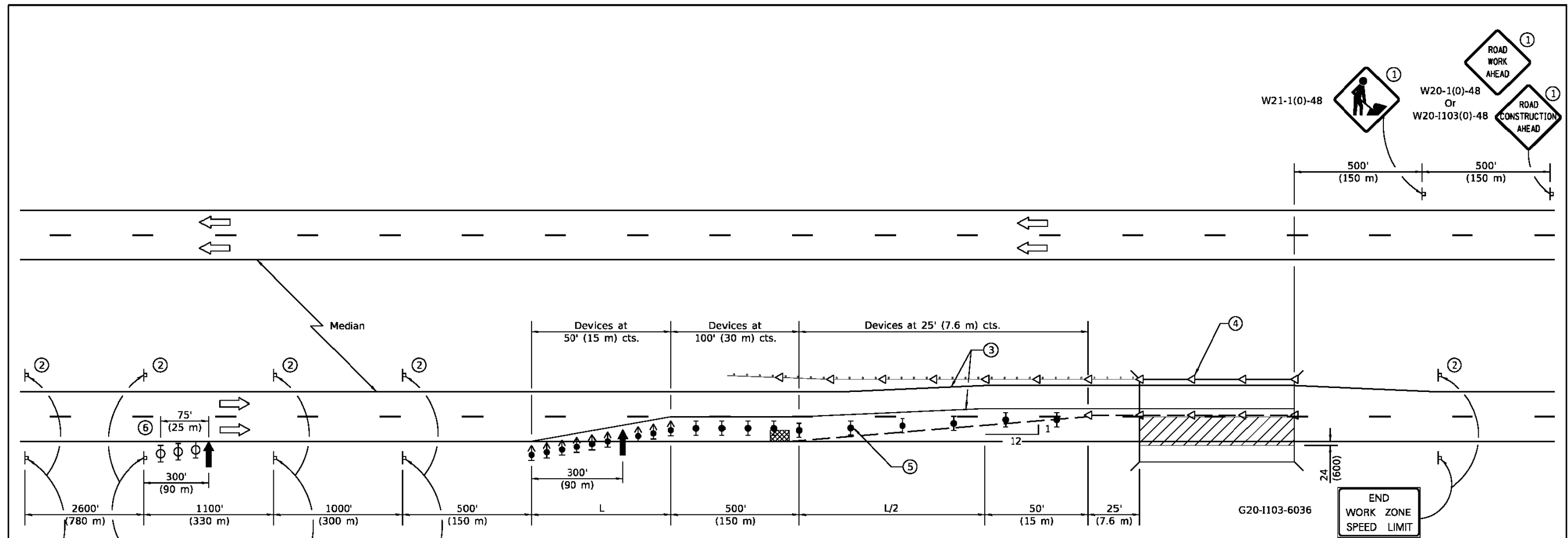
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**STANDARD 704001-08**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 64P35				
ILLINOIS FED. AID PROJECT				

FILE NAME = \*FILEL\*



W20-1103(0)-48  
 W20-5(0)-48  
 W4-2R(0)-48

For contract construction projects



W20-1(0)-48

For maintenance and utility projects

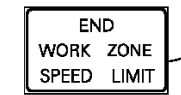
WORK ZONE W21-III5(0)-3618  
 SPEED LIMIT R2-1-3648  
**45**  
 PHOTO ENFORCED R10-1108p-3618  
 XXXX FINE MINIMUM R2-1106p-3618

**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 guardrail/barrier wall reflector
- ▣ Impact attenuator
- ⦿ Type II barricade, drum, or vertical barricade with monodirectional flashing light

- ① Undivided roadway only with left lane closure in opposite direction.
- ② Sign in median may be omitted when median is less than 10' (3 m).
- ③ 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.
- ④ Guardrail/barrier wall reflectors at 25' (7.6 m). Markers on right shall be crystal and markers on left shall be amber. See Standards 704001 and 782006.
- ⑤ Verticle barricades shall not be used in lane shift taper.
- ⑥ Three Type II barricades, drums, or vertical barricades at 25' (8 m) centers.

G20-1103-6036



**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.

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

Calculate L as follows:

NORMAL POSTED SPEED	FORMULAS
45 mph (80 km/h) or more	English (Metric) L=(W)(S) L=0.65(W)(S)

W = Width of offset in feet (meters).

S = Normal posted speed in mph (km/h).

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

DATE	REVISIONS
1-1-17	Revised END WORK ZONE SPEED LIMIT sign. Changed device spacing at first arr. brd.
4-1-16	Corrected reference to standard in note ④.

**LANE CLOSURE, MULTILANE, WITH BARRIER, FOR SPEEDS ≥ 45 MPH TO 55 MPH**

**STANDARD 701423-10**

Illinois Department of Transportation

PASSED January 1, 2017  
 ENGINEER OF SAFETY PROG. AND ENGINEERING

APPROVED January 1, 2017  
 ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-00

FILE NAME = \$FILEL\$



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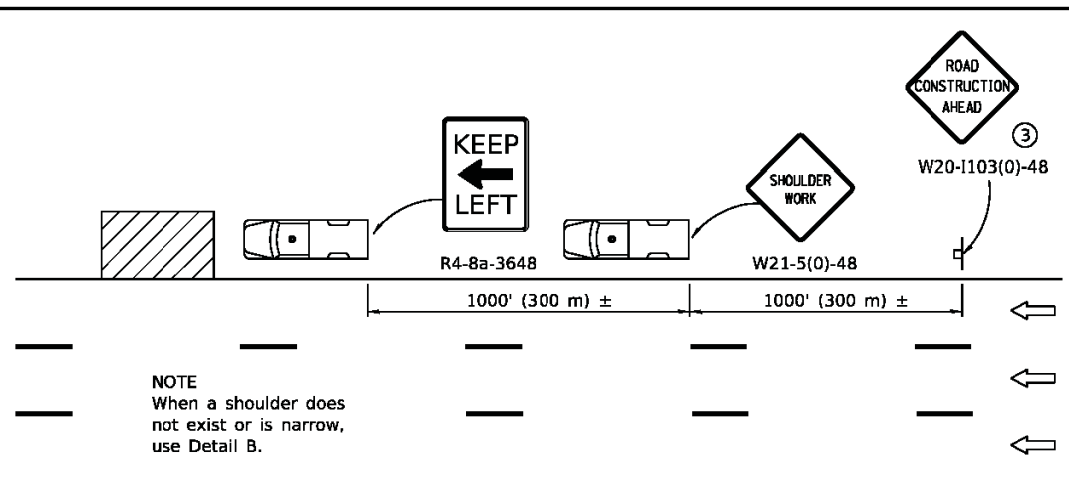
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**STANDARD 701423-10**

SCALE: SHEET OF SHEETS STA. TO STA.

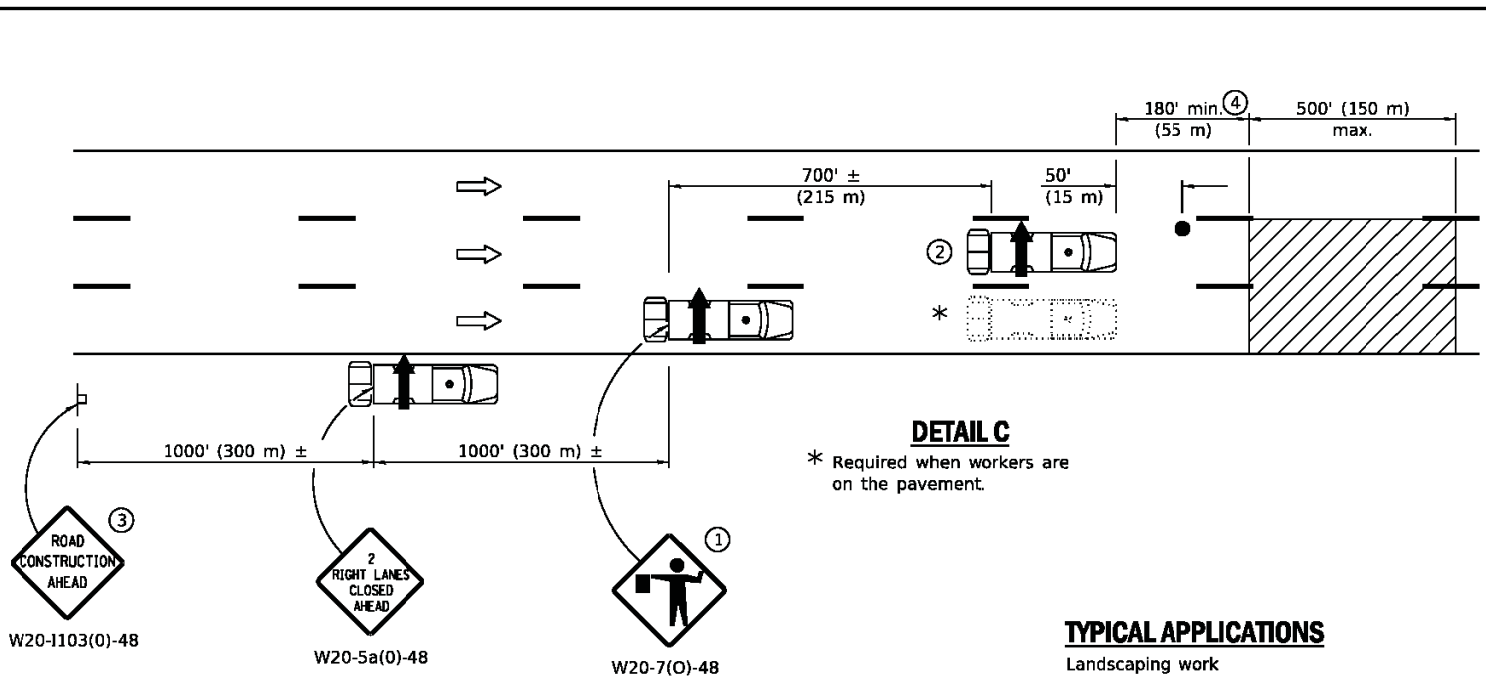
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5454	D2 BUR 2020-2	OGLE	23	21
CONTRACT NO. 64P35				

ILLINOIS FED. AID PROJECT



NOTE  
When a shoulder does not exist or is narrow, use Detail B.

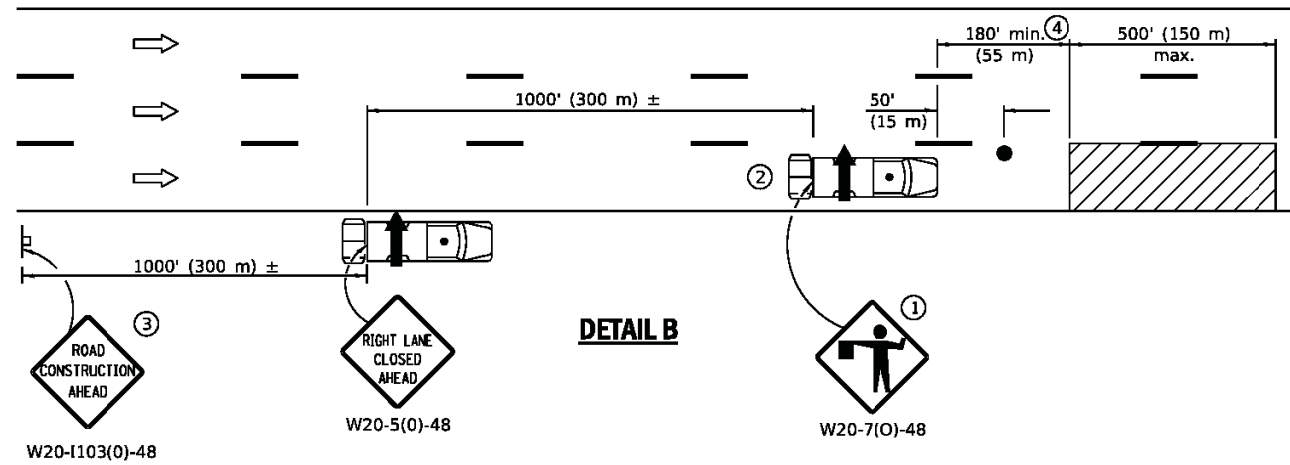
**DETAIL A**



**DETAIL C**  
\* Required when workers are on the pavement.

**TYPICAL APPLICATIONS**

- Landscaping work
- Utility work
- Pavement marking
- Weed spraying
- Roadometer measurements
- Debris cleanup
- Crack pouring



**DETAIL B**

- ① Flaggers are required when workers are on the pavement.
- ② For striping operations only. See sign arrow detail on this standard.
- ③ For stationary operations which are on the roadway or shoulder, greater than 15 minutes and up to 1 hour.
- ④ The distance between the work and the lead truck may vary according to terrain or paint/crack sealing drying time.



G20-1101-2430  
(appropriate arrow)  
② (when striping only)

**GENERAL NOTES**

This Standard is used where any vehicle, equipment, workers or their activities will require:  
1) stationary operations up to 1 hour, or 2) a continuous or intermittent moving operation where the average speed of movement is greater than 1 mph (2 km/h).

This Standard is also applicable when work is being performed in the left lane(s) or on the median shoulder. Under these conditions, KEEP RIGHT signs shall be substituted for KEEP LEFT signs and arrow board indications shall be directed to the right.

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

**SYMBOLS**

- Arrow board
- Work area
- Truck with flashing amber light
- Truck/Trailer mounted attenuator
- Flagger with traffic control sign
- Sign

Illinois Department of Transportation

PASSED January 1, 2017  
ENGINEER OF SAFETY PROG. AND ENGINEERING

APPROVED January 1, 2017  
ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-97

DATE	REVISIONS
1-1-17	Revised 'NOTE' on DETAIL A to use DETAIL B in lieu of DETAIL C.
4-1-16	Added trailer option for attenuator symbol. Added note ④. Revised gen. notes.

**LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS ≥ 45 MPH**

**STANDARD 701426-09**

FILE NAME = #FILE#



USER NAME = #USER#	DESIGNED - AA	REVISED -
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	DATE - 03-19-2020	REVISED -

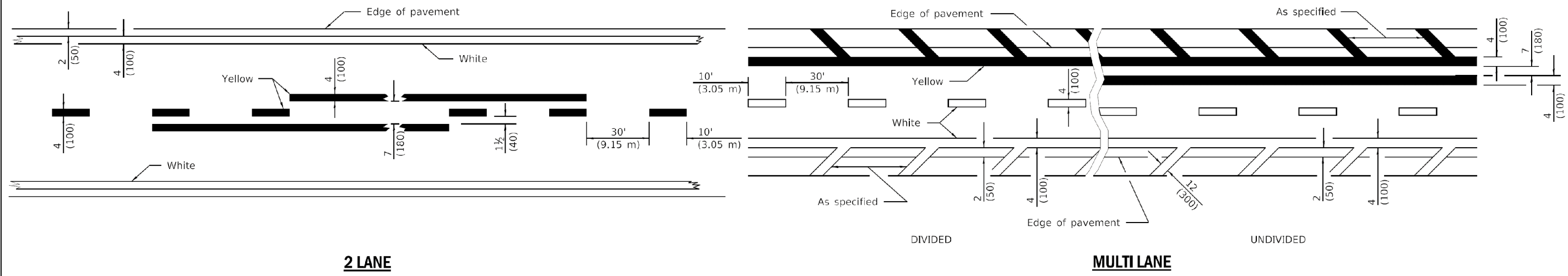
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

STANDARD 701426-09

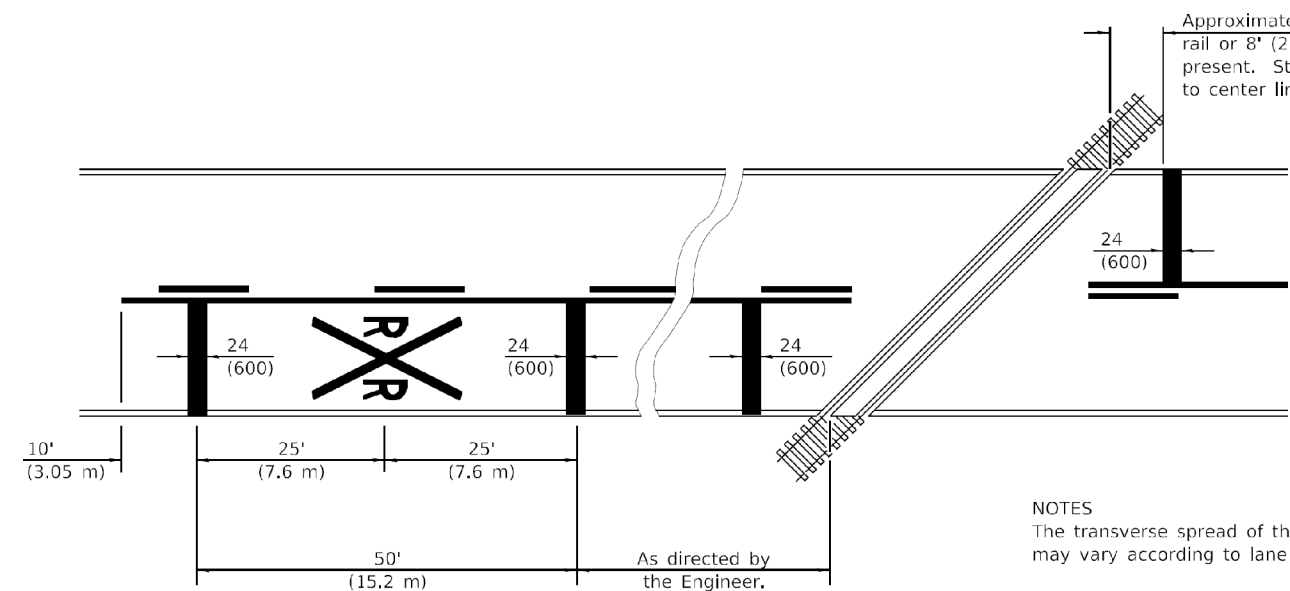
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 64P35				
ILLINOIS FED. AID PROJECT				

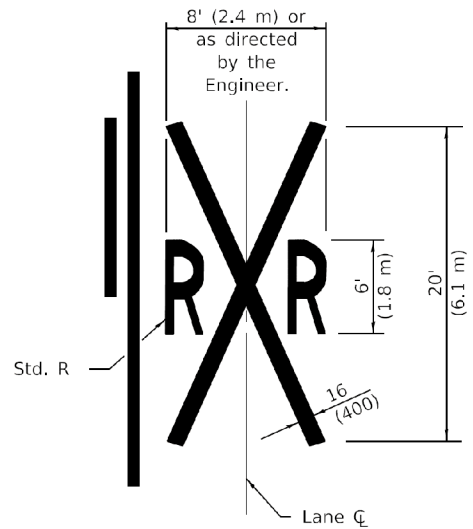




**LANE AND EDGE LINES**



Approximately 15' (4.5 m) from nearest rail or 8' (2.4 m) back from gate, if present. Stop line placed perpendicular to center line.



**NOTES**  
 The transverse spread of the "X" may vary according to lane width.  
 On multi-lane roads, the stop lines shall extend across all approach lanes and separate RXR symbols shall be placed adjacent to each other in each lane.  
 When the pavement marking symbol is used, a portion of the symbol should be located directly adjacent to the Advance Warning Sign (W10-1) as placed by Table 2C-4, Condition B of the MUTCD.

**PAVEMENT MARKINGS AT RAILROAD-HIGHWAY GRADE CROSSING**

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

Illinois Department of Transportation

PASSED January 1, 2015  
 ENGINEER OF OPERATIONS  
 APPROVED January 1, 2015  
 ENGINEER OF DESIGN AND ENVIRONMENT

DATE	REVISIONS
1-1-15	Added symbols. Revised bike symbol. Revised note for stop line at RR crossing.
1-1-14	Added bike symbol. Renamed 'LANE DROP ARROW' detail to 'LANE-REDUCTION ARROW'.

**TYPICAL PAVEMENT MARKINGS**  
 (Sheet 1 of 3)  
**STANDARD 780001-05**

FILE NAME = #FILE#

**S D I ENGINEERING CORP.**  
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USER NAME = #USER#	DESIGNED - AA	REVISED -
PLOT SCALE = #SCALE#	DRAWN - SD	REVISED -
PLOT DATE = #DATE#	CHECKED - OAO	REVISED -
	DATE - 03-19-2020	REVISED -

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

**STANDARD 780001-05**

SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5454	D2 BUR 2020-2	OGLE	23	23
CONTRACT NO. 64P35				
ILLINOIS FED. AID PROJECT				