

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

**PROPOSED
HIGHWAY PLANS**

FAU ROUTE 1467: 31ST STREET

OVER DES PLAINES RIVER

SECTION 2020-149-BR

PROJECT NUMBER STP-G21G(034)

BRIDGE DECK OVERLAY AND JOINT REPAIR

COOK COUNTY

C-91-343-20

FAU RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1467	2020-149-BR	COOK	37	9
		ILLINOIS	CONTRACT NO. 62M22	

D-91-545-20

FOR INDEX OF SHEETS, SEE SHEET NO. 2

DESIGN DESIGNATION:

ARTERIAL

FAU ROUTE 1467: 31ST STREET

2018 ADT=13,200 (WEST OF 1ST AVE)

2018 ADT=12,300 (EAST OF 1ST AVE)

SPEED LIMIT 35 MPH



LOCATION OF SECTION INDICATED THUS: -

IMPROVEMENT LOCATED IN THE VILLAGE OF RIVERSIDE

IMPROVEMENT LOCATION
31ST STREET
AT DES PLAINES RIVER
STRUCTURE NO. 016-0870

RIVERSIDE TOWNSHIP R12E - 3rd PM



LOCATION MAP (NOT TO SCALE)

GROSS LENGTH = 428.28 FT = 0.081 MILE

NET LENGTH = 428.28 FT = 0.081 MILE



DATE SIGNED: 8/3/2020
EXP. DATE: 11/30/2020
SHEETS: 13-30



DATE SIGNED: 8/3/20
EXP. DATE: 11/30/24
SHEETS: 1-12, 31-37



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 EXCAVATORS
1-800-892-0123
OR 811

PROJECT ENGINEER: MR. PRAVEEN KAINI, PE (847) 705-4237
PROJECT MANAGER: MR. J. ALAIN MIDY, PE (847) 221-3056

CONTRACT NO. 62M22

Accurate
GROUP, INC.

WWW.ACCGI.COM
101 SCHELTER RD., SUITE B-200
LINCOLNSHIRE, ILLINOIS 60069
T (847) 613-1100 F (847) 613-1105
ILLINOIS PROFESSIONAL DESIGN FPM NO. 194.00003

HBM
ENGINEERING GROUP, LLC

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED *October 6, 2020*

Andy J. Dwyer REGIONAL ENGINEER
December 4, 2020

Gemma J. Guerin ENGINEER OF DESIGN AND ENVIRONMENT
December 4, 2020

Gemma J. Guerin DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION 13

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STATE OF ILLINOIS HIGHWAY STANDARDS

STANDARD NO.	DESCRIPTION
000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
420001-09	PAVEMENT JOINTS
643001-02	SAND MODULE IMPACT ATTENUATORS
701101-05	OFF-RD OPERATIONS, MULTILANE, 15' (4.5M) TO 24" (600MM) FROM PAVEMENT EDGE
701427-05	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATION FOR SPEEDS ≤ 40 MPH
701501-06	URBAN LANE CLOSURE, 2L, 2W UNDIVIDED
701611-01	URBAN HALF ROAD CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701901-08	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
780001-05	TYPICAL PAVEMENT MARKINGS
781001-04	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
782006-01	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS

GENERAL NOTES

- BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, AND GAS FACILITIES. (48 HOURS NOTIFICATION REQUIRED)
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE VILLAGE OF RIVERSIDE.
- THESE PLANS HAVE BEEN PREPARED FROM NOTES RECEIVED FROM IDOT FIELD MAINTENANCE ENGINEERS. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
- 10 FOOT TRANSITIONS SHALL BE USED TO MATCH PROPOSED ITEMS OF WORK TO EXISTING ITEMS IN THE FIELD, UNLESS OTHERWISE SHOWN. THE TRANSITIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEM OF WORK SPECIFIED.
- THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- DOUBLE LANE MARKERS ARE TO BE USED AS SHOWN ON THE DISTRICT ONE DETAIL "TYPICAL APPLICATIONS - RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)" SHOWN IN THE PLANS. RAISED REFLECTIVE PAVEMENT MARKERS ARE NOT ALLOWED TO BE PLACED ON THE BRIDGE DECK.
- THE CONTRACTOR MUST CONTACT THE ARTERIAL TRAFFIC CONTROL SUPERVISOR AT KALPANA.KANNAN-HOSADURGA@ILLINOIS.GOV A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
- THE RESIDENT ENGINEER SHALL CONTACT EMAD ALHUSSEINI, ARTERIAL TRAFFIC FIELD ENGINEER AT EMAD.ALHUSSEINI@ILLINOIS.GOV AT LEAST TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
- THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
- PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING PLANS ARE SUBJECT TO ROUTINE VARIATIONS. THE CONTRACTOR SHALL FIELD VERIFY EXISTING DIMENSIONS AND DETAILS AFFECTING NEW CONSTRUCTION AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN SCOPE OF THE WORK. HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED BASED UPON THE UNIT PRICE BID FOR THE WORK.
- ANY SIGNAGE, PAVEMENT MARKINGS AND REFLECTORS DAMAGED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- THE APPROACH SLABS SHALL HAVE THE GUTTER OVERLAID WITH HMA TO THE FACE OF THE CURB.
- THE DEPARTMENT HAS DETERMINED THAT IN STREAM WORK IS NOT REQUIRED FOR THE WORK SPECIFIED IN THIS CONTRACT. THE DEPARTMENT HAS NOT OBTAINED A 404 PERMIT. IF THE CONTRACTOR CHOOSES TO USE ACTIVITIES REQUIRING AN USACE 404 PERMIT IT IS THE CONTRACTOR'S RESPONSIBILITY TO SECURE THE PROPER USACE PERMITS.
- BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKING LINES, LETTERS AND SYMBOLS AND RAISED REFLECTIVE MARKERS IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS AND RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE AS DIRECTED BY THE ENGINEER.
- THE CONTRACTOR SHALL COORDINATE WITH METROPOLITAN SANITARY DISTRICT PRIOR TO START OF CONSTRUCTION TO REMOVE AND RELOCATE THEIR MONUMENT MARKER.
- MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION AT THE 31ST STREET AND 1ST AVENUE INTERSECTION.

COMMITMENTS

NONE

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REV-SEP



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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**INDEX OF SHEETS, STATE HIGHWAY STANDARDS, AND GENERAL NOTES
31ST STREET OVER DES PLAINES RIVER**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1467	2020-149-BR	COOK	37	2
CONTRACT NO.			62M22	
ILLINOIS FEDERAL PROJECT				

CODE NO.	ITEM	UNIT	URBAN TOTAL QUANTITY	CONSTR. CODE
				80% FED 20% STATE BRIDGE 0059 S.N. 016-0870
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	340	340
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	116	116
40602985	HOT-MIX ASPHALT BINDER COURSE, IL-9.5, N70	TON	66	66
40604062	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70	TON	80	80
44000156	HOT-MIX ASPHALT SURFACE REMOVAL, 1 3/4"	SQ YD	869	869
50102400	CONCRETE REMOVAL	CU YD	7.3	7.3
50104000	BRIDGE RAIL REMOVAL	FOOT	187	187
50300255	CONCRETE SUPERSTRUCTURE	CU YD	8.4	8.4
50300260	BRIDGE DECK GROOVING	SQ YD	1295	1295
50300300	PROTECTIVE COAT	SQ YD	1582	1582
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	1180	1180
50800515	BAR SPLICERS	EACH	8	8
50900105	ALUMINUM RAILING, TYPE L	FOOT	187	187
52000110	PREFORMED JOINT STRIP SEAL	FOOT	139	139

* SPECIALTY ITEMS

CODE NO.	ITEM	UNIT	URBAN TOTAL QUANTITY	CONSTR. CODE
				80% FED 20% STATE BRIDGE 0059 S.N. 016-0870
* 63301210	REMOVE AND REERECT STEEL PLATE BEAM GUARDRAIL, TYPE A	FOOT	50	50
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	12	12
67100100	MOBILIZATION	L SUM	1	1
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	56	56
70300900	PAVEMENT MARKING TAPE, TYPE IV - LETTERS AND SYMBOLS	SQ FT	110	110
70300904	PAVEMENT MARKING TAPE, TYPE IV 4"	FOOT	9005	9005
70300906	PAVEMENT MARKING TAPE, TYPE IV 6"	FOOT	1879	1879
70400100	TEMPORARY CONCRETE BARRIER	FOOT	1037.5	1037.5
70600240	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 2	EACH	2	2
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	73	73
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	2606	2606
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	266	266
* 78008210	POLYUREA PAVEMENT MARKING TYPE I - LINE 4"	FOOT	1146	1146
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	25	25

* SPECIALTY ITEMS

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES - I
31ST STREET OVER DES PLAINES RIVER

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1467	2020-149-BR	COOK	37	3
CONTRACT NO. 62M22			ILLINOIS FED. AID PROJECT	

REV-SEP

CODE NO.	ITEM	UNIT	URBAN TOTAL QUANTITY	CONSTR. CODE
				80% FED 20% STATE BRIDGE 0059 S.N. 016-0870
78100200	TEMPORARY RAISED REFLECTIVE PAVEMENT MARKER	EACH	42	42
* 78100300	REPLACEMENT REFLECTOR	EACH	90	90
* 78200011	BARRIER WALL REFLECTORS, TYPE C	EACH	105	105
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	43	43
X0320050	CONSTRUCTION LAYOUT (SPECIAL)	L SUM	1	1
* X0326766	CLEAN & RESEAL RELIEF JOINT	FOOT	89	89
* X0327638	STREAM GAUGE	EACH	1	1
X0327980	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	631	631
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1
X7030005	TEMPORARY PAVEMENT MARKING REMOVAL	SQ FT	3753	3753
X7830050	RAISED REFLECTIVE PAVEMENT MARKER, REFLECTOR REMOVAL	EACH	90	90
Z0006014	BRIDGE DECK LATEX CONCRETE OVERLAY, 2 1/2 INCHES	SQ YD	1341	1341
Z0012130	BRIDGE DECK SCARIFICATION 3/4"	SQ YD	1341	1341
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	140	140

* SPECIALTY ITEMS

CODE NO.	ITEM	UNIT	URBAN TOTAL QUANTITY	CONSTR. CODE
				80% FED 20% STATE BRIDGE 0059 S.N. 016-0870
Z0012755	STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 INCHES)	SQ FT	13	13
Z0015550	DEBRIS REMOVAL	CU YD	20	20
Z0016002	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ YD	1	1
Z0018051	DRAINAGE SCUPPERS TO BE ADJUSTED	EACH	4	4
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	51.4	51.4
Z0073200	TEMPORARY SHORING AND CRIBBING	EACH	9	9
Z0073510	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1	1
Z0076600	TRAINEES	HOUR	0	

* SPECIALTY ITEMS

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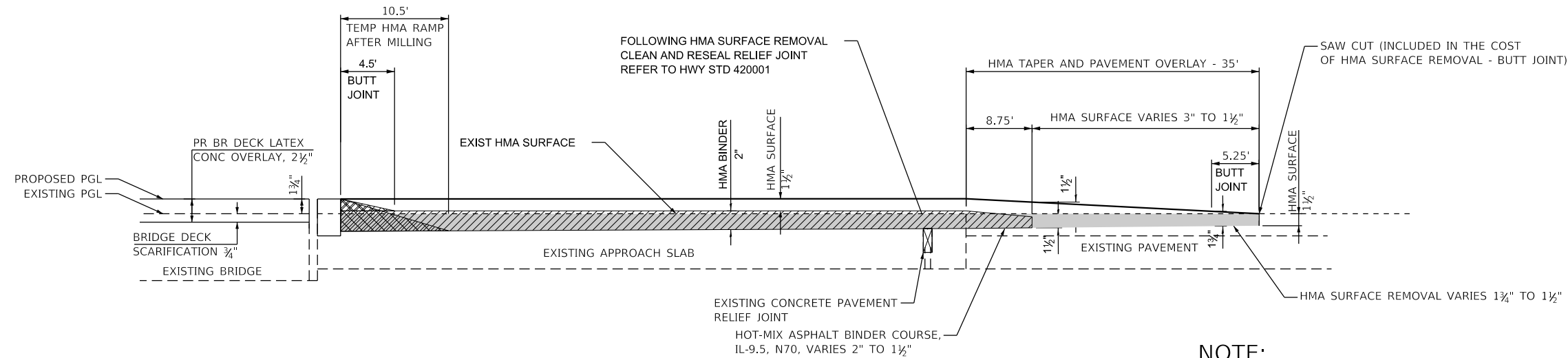
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES - II
31ST STREET OVER DES PLAINES RIVER

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1467	2020-149-BR	COOK	37	4
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62M22	

REV-SEP



APPROACH PAVEMENT HMA OVERLAY DETAIL

STA 25+79.40 TO STA 26+64.40 (AT \mathcal{C})
 STA 29+20.69 TO STA 30+05.66 (AT \mathcal{C})

NOTE:

CONTRACTOR SHALL EXPOSE THE RELIEF JOINT TO CLEAN AND RESEAL. HMA REMOVAL DEPTH GREATER THAN 1 3/4", IF REQUIRED, TO EXPOSE THE RELIEF JOINT SHALL BE INCLUDED IN THE COST OF HMA SURFACE REMOVAL, 1 3/4".

LEGEND

HMA SURFACE REMOVAL, 1 3/4"

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

OPERATION	MIXTURE TYPE	AIR VOIDS @ Ndes	QUALITY MANAGEMENT PROGRAM (QMP)
APPROACH PAVEMENT RESURFACING	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", IL-9.5, N70, 1 1/2" MIN. HOT-MIX ASPHALT BINDER COURSE, IL-9.5, N70, 1 1/2" MIN.	4% @ 70 GYR. 4% @ 70 GYR.	QC/QA QC/QA
TEMPORARY HMA RAMP	HOT-MIX ASPHALT BINDER COURSE, IL-9.5, N70	4% @ 70 GYR.	QC/QA

QMP DESIGNATIONS: QUALITY CONTROL/QUALITY ASSURANCE (QC/QA); QUALITY CONTROL FOR PERFORMANCE (QFP); PAY FOR PERFORMANCE (PFP)

NOTES:

- THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN
- THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA MIXES THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY SPECIAL PROVISIONS.
- FOR USE OF RECYCLED MATERIALS, SEE SPECIAL PROVISIONS.
- QUALITY MANAGEMENT PROGRAM (QMP) IDENTIFIES THE PARTICULAR QUALITY CONTROL SPECIFICATION THAT APPLIES TO THE HMA MIXTURE.

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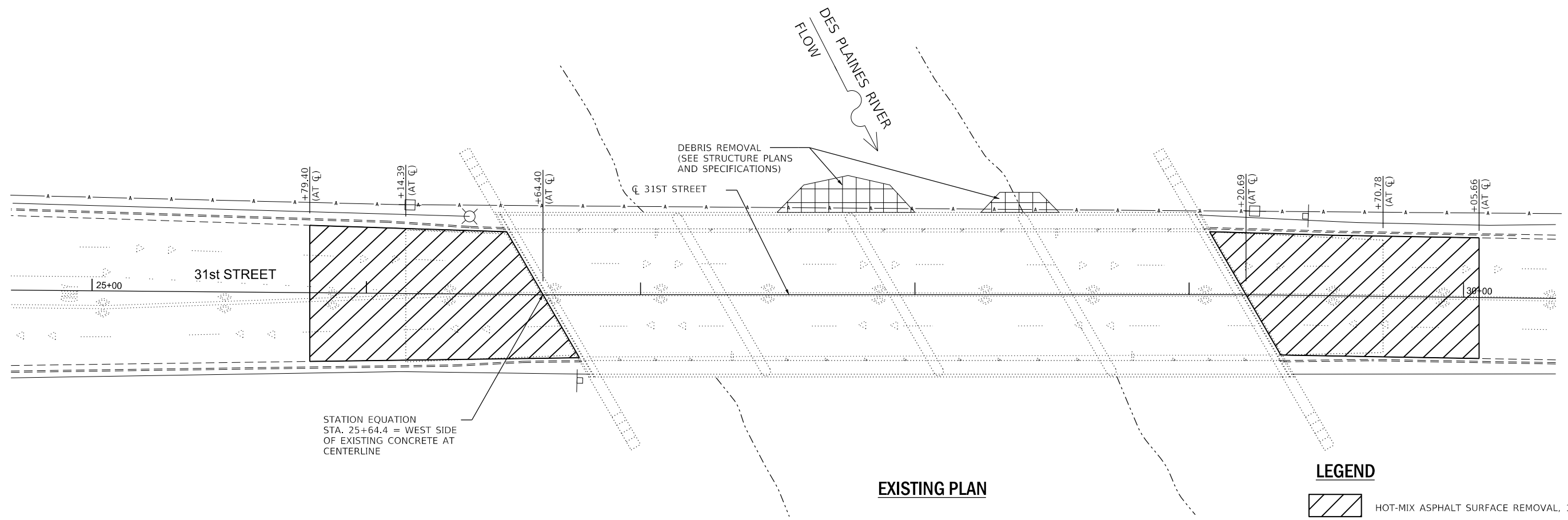
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	DATE - 05/29/2020	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

TYPICAL SECTIONS AND DETAILS	
31ST STREET OVER DES PLAINES RIVER	
SCALE:	SHEET OF SHEETS STA. TO STA.

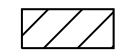
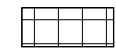
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1467	2020-149-BR	COOK	37	5
CONTRACT NO.				62M22
ILLINOIS FED. AID PROJECT				

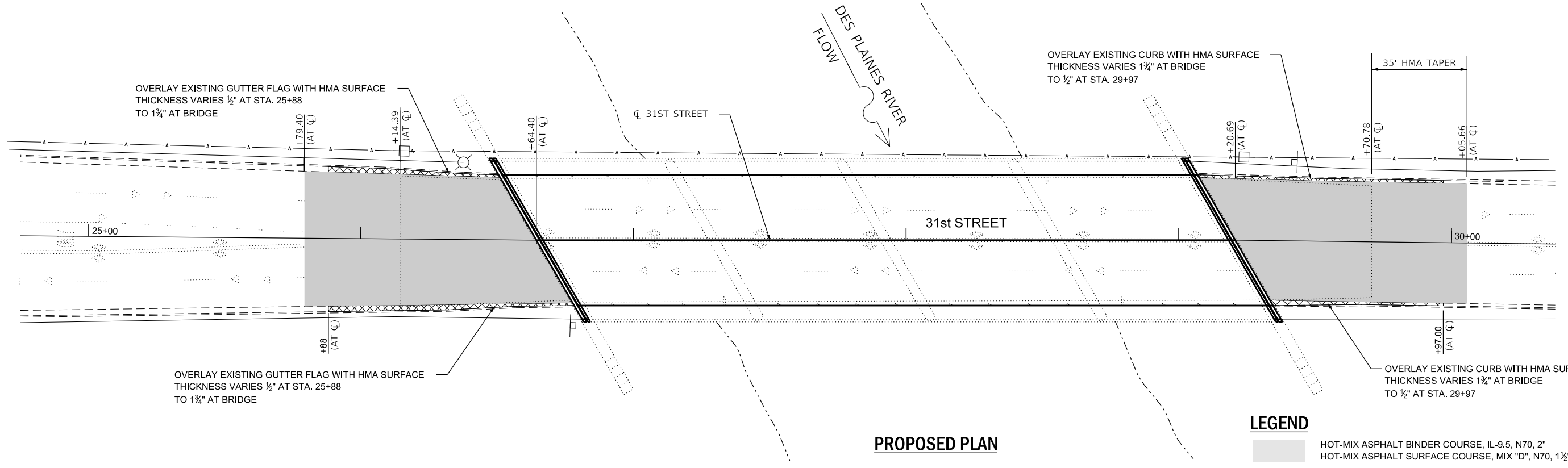
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EXISTING PLAN

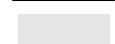
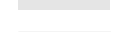

LEGEND

-  HOT-MIX ASPHALT SURFACE REMOVAL, 1 3/4"
-  DEBRIS REMOVAL



PROPOSED PLAN

LEGEND

-  HOT-MIX ASPHALT BINDER COURSE, IL-9.5, N70, 2"
-  HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1 1/2"
-  HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, VARIES 1/2" TO 1 1/2" ON EXISTING GUTTER FLAG



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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**EXISTING AND PROPOSED PLAN
31ST STREET OVER DES PLAINES RIVER**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1467	2020-149-BR	COOK	37	6
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62M22	

TRAFFIC CONTROL GENERAL NOTES

1. THE TRAFFIC CONTROL DEPICTED HEREIN IS THE MINIMUM REQUIREMENT. ADDITIONAL TRAFFIC CONTROL DEVICES AS SPECIFIED IN THE HIGHWAY STANDARDS SHOWN IN THE INDEX OF SHEETS AND THE SPECIAL PROVISIONS SHALL BE PLACED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER. ALL TRAFFIC CONTROL DEVICES SHALL BE CONSIDERED INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION (SPECIAL), UNLESS OTHERWISE INDICATED WITHIN THESE GENERAL NOTES, PLANS OR SPECIAL PROVISIONS.
2. TRAFFIC CONDITIONS, ACCIDENTS, AND OTHER UNFORESEEN EMERGENCY CONDITIONS MAY REQUIRE THE ENGINEER TO RESTRICT, MODIFY OR REMOVE LANE CLOSURES OR CHANNELIZATION SHOWN IN THE PLANS. THE CONTRACTOR SHALL PROMPTLY RESPOND AT THE TIME OF NOTIFICATION BY THE ENGINEER FOR THE MAINTENANCE OF TRAFFIC CONTROL DEVICES.
3. THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE ALL SIGNS AND SIGN SUPPORTS REQUIRED FOR TRAFFIC CONTROL AND PROTECTION.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING LABOR, SIGNS AND TRAFFIC CONTROL DEVICES NECESSARY FOR THE MAINTENANCE OF TRAFFIC UNLESS NOTED OTHERWISE IN THE SPECIAL PROVISIONS.
5. ALL TRAFFIC CONTROL DEVICES SHALL BE REMOVED, COVERED OR TURNED AWAY FROM THE TRAFFIC IMMEDIATELY WHEN THEY ARE NO LONGER NECESSARY. WHEN A SIGN IS COVERED, ITS POST SHALL HAVE A REFLECTIVE 3" x 6" DELINEATOR INSTALLED. COST OF THE DELINEATOR IS INCLUDED IN TRAFFIC CONTROL AND PROTECTION (SPECIAL).
6. THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN TRAFFIC IN ACCORDANCE WITH THE TRAFFIC CONTROL PLANS, SPECIAL PROVISIONS, APPLICABLE STATE STANDARDS, AND AS DIRECTED BY THE ENGINEER. ANY CHANGES TO THE TRAFFIC CONTROL SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO IMPLEMENTING ANY CHANGES.
7. THE ENGINEER SHALL BE INFORMED 48 HOURS IN ADVANCE OF ANY PROPOSED CHANGE TO THE SUGGESTED STAGE OF CONSTRUCTION AND TRAFFIC CONTROL PLAN.
8. THE CONTRACTOR SHALL CONTACT THE ARTERIAL TRAFFIC CONTROL SUPERVISOR AT KALPANA.KANNAN-HOSADURGA@ILLINOIS.GOV A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
9. ALL TEMPORARY PAVEMENT MARKINGS SHALL BE PAVEMENT MARKING TAPE, TYPE IV, UNLESS OTHERWISE NOTED.
10. THE CONTRACTOR SHALL MAINTAIN SATISFACTORY INGRESS AND EGRESS TO ADJACENT PROPERTIES THROUGHOUT CONSTRUCTION.
11. THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND TRAFFIC CONTROL DEVICES MAY BE ADJUSTED TO FIT FIELD CONDITIONS BY THE ENGINEER.
12. THE CONTRACTOR SHALL PLACE ONE (1) CHANGEABLE MESSAGE SIGN ON EASTBOUND 31ST STREET AT APPROXIMATELY STA 13+00 AND WESTBOUND ON 31ST STREET AT APPROXIMATELY STA 36+20 AND/OR AS DIRECTED BY THE ENGINEER TO INFORM MOTORISTS OF UPCOMING CONSTRUCTION ACTIVITIES. THE MESSAGE SIGNS WITH APPROPRIATE INFORMATION SHALL BE PLACED TWO WEEKS BEFORE START OF CONSTRUCTION ACTIVITY.

SEQUENCE OF CONSTRUCTION

STAGE I (31st STREET)

UTILIZE HIGHWAY STANDARDS 701101 AND 701427 TO REMOVE CONFLICTING PERMANENT PAVEMENT MARKINGS AND RAISED REFLECTIVE PAVEMENT MARKER REFLECTORS, INSTALL TEMPORARY PAVEMENT MARKING TAPE AND ESTABLISH TRAFFIC CONTROL DEVICES PER HIGHWAY STANDARD 701611 AND AS DETAILED IN THE TRAFFIC CONTROL PLAN TO CLOSE THE EASTBOUND LANES ON THE BRIDGE DECK.

1. INSTALL TEMPORARY CONCRETE BARRIER WALL AS SHOWN IN THE MAINTENANCE OF TRAFFIC STAGE I PLAN.
2. PERFORM DECK, JOINT AND DECK SCARIFICATION AND OVERLAY REPAIRS ON THE EASTBOUND LANES OF THE BRIDGE DECK.
3. COMPLETE ALL SUBSTRUCTURE REPAIRS.
4. UPON COMPLETION OF ALL DECK REPAIRS, THE CONTRACTOR SHALL REMOVE THE TEMPORARY CONCRETE BARRIER WALL AND IMPLEMENT HWY STD 701501 TO CLOSE THE STAGE I EASTBOUND LANE AND REDUCE TRAFFIC TO ONE-WAY FLAGGER CONNTROLLED ON A DAILY BASIS DURING THE HAM REMOVAL AND REPLACEMENT ACTIVITIES IN ACCORDANCE WITH MOT TYPICAL SECTION STAGE IA.

STAGE II (31st STREET)

REMOVE CONFLICTING PERMANENT PAVEMENT MARKINGS, RAISED REFLECTIVE PAVEMENT MARKER REFLECTORS AND TEMPORARY PAVEMENT STRIPING FROM STAGE I. INSTALL TEMPORARY PAVEMENT MARKING TAPE AND ESTABLISH TEMPORARY TRAFFIC CONTROL PER HIGHWAY STANDARD 701611 AND AS DETAILED IN THE TRAFFIC CONTROL PLAN TO CLOSE THE WESTBOUND LANES ON THE BRIDGE DECK.

1. INSTALL TEMPORARY CONCRETE BARRIER WALL AS SHOWN IN THE MAINTENANCE OF TRAFFIC STAGE II PLAN.
2. PERFORM DEBRIS REMOVAL, DECK, JOINT, RAILING, DECK SCARIFICATION AND OVERY REPAIRS ON THE WESTBOUND LANES OF THE BRIDGE DECK.
3. UPON COMPLETION OF ALL DECK REPAIRS, THE CONTRACTOR SHALL REMOVE THE TEMPORARY CONCRETE BARRIER WALL AND IMPLEMENT HWY STD 701501 TO CLOSE THE STAGE II WESTBOUND LANE AND REDUCE TRAFFIC TO ONE-WAY FLAGGER CONTROLLED ON A DAILY BASIS DURING THE HMA REMOVAL AND REPLACEMENT ACTIVITIES IN ACCORDANCEWITH MOT TYPICAL SECTION STAGE IIA.
4. COMPLETE ANY REMAINING ROADWAY REPAIRS UTILIZING HIGHWAY STANDARD 701501.
5. REMOVE ALL TEMPORARY PAVEMENT MARKINGS, RESTORE PERMANENT PAVEMENT MARKINGS, INSTALL RAISED PAVEMENT MARKER REPLACEMENT REFLECTORS AND FULLY RESTORE TRAFFIC TO PRE-EXISTING CONDITION UTILIZING HIGHWAY STANDARDS 701101 AND 701427. REMOVE ALL TRAFFIC CONTROL DEVICES.

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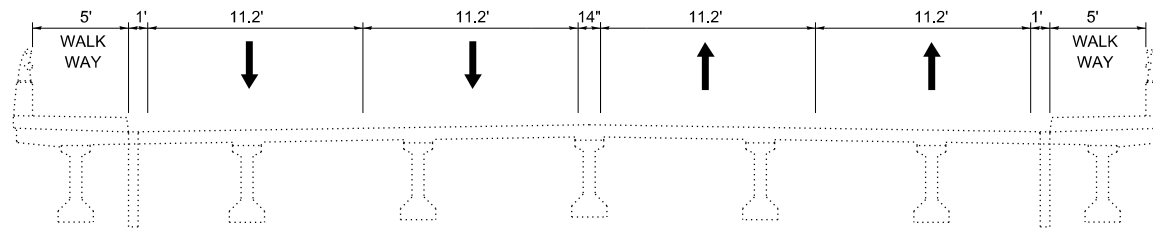
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUGGESTED TRAFFIC CONTROL AND PROTECTION - GENERAL NOTES
31ST STREET OVER DES PLAINES RIVER**

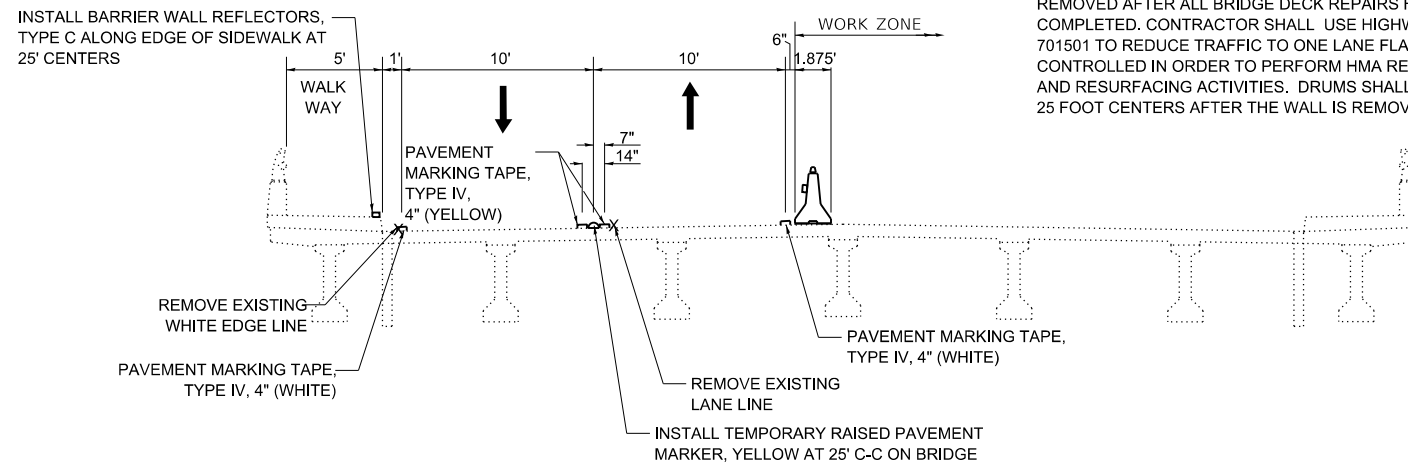
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1467	2020-149-BR	COOK	37	7
CONTRACT NO.				62M22
ILLINOIS FED. AID PROJECT				



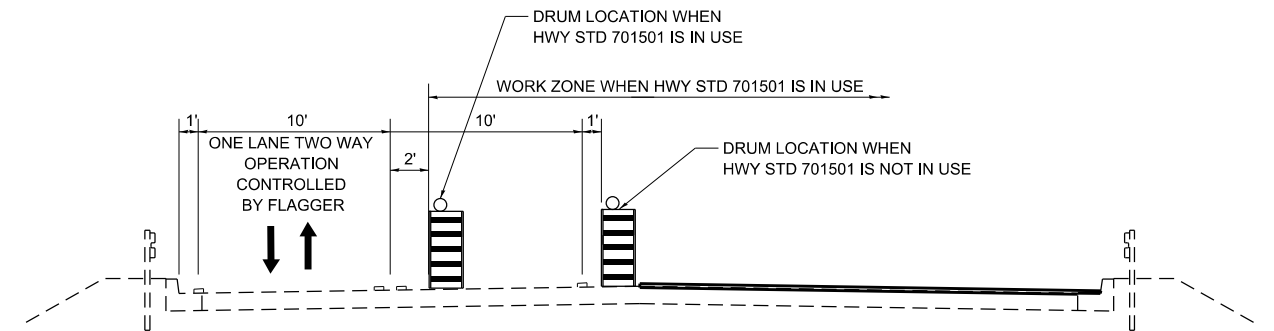
**EXISTING TYPICAL SECTION
31ST STREET BRIDGE
STRUCTURE NO. 016-0870**

- LEGEND**
- PAVEMENT MARKING
 - TEMPORARY CONCRETE BARRIER WITH BARRIER WALL REFLECTOR, TYPE C
 - DIRECTION OF TRAFFIC
 - DRUM OR TYPE II BARRICADES AT 20' C-C SPACING IN TANGENTS, AND ON BRIDGE. 50' C-C SPACING IN TANGENTS. 10' C-C ON CURVES



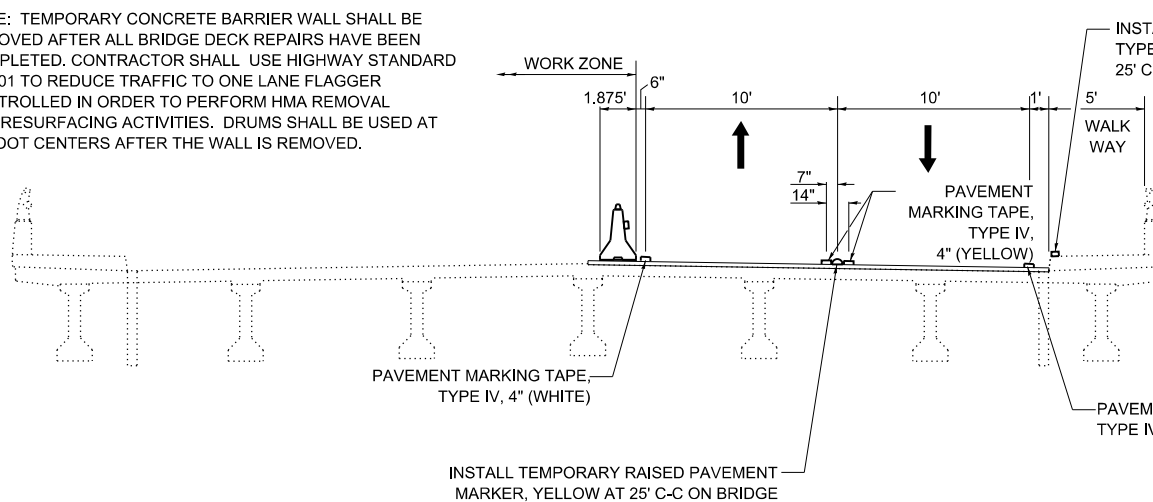
**STAGE I - TYPICAL SECTION
31ST STREET BRIDGE
STRUCTURE NO. 016-0870**

NOTE: TEMPORARY CONCRETE BARRIER WALL SHALL BE REMOVED AFTER ALL BRIDGE DECK REPAIRS HAVE BEEN COMPLETED. CONTRACTOR SHALL USE HIGHWAY STANDARD 701501 TO REDUCE TRAFFIC TO ONE LANE FLAGGER CONTROLLED IN ORDER TO PERFORM HMA REMOVAL AND RESURFACING ACTIVITIES. DRUMS SHALL BE USED AT 25 FOOT CENTERS AFTER THE WALL IS REMOVED.

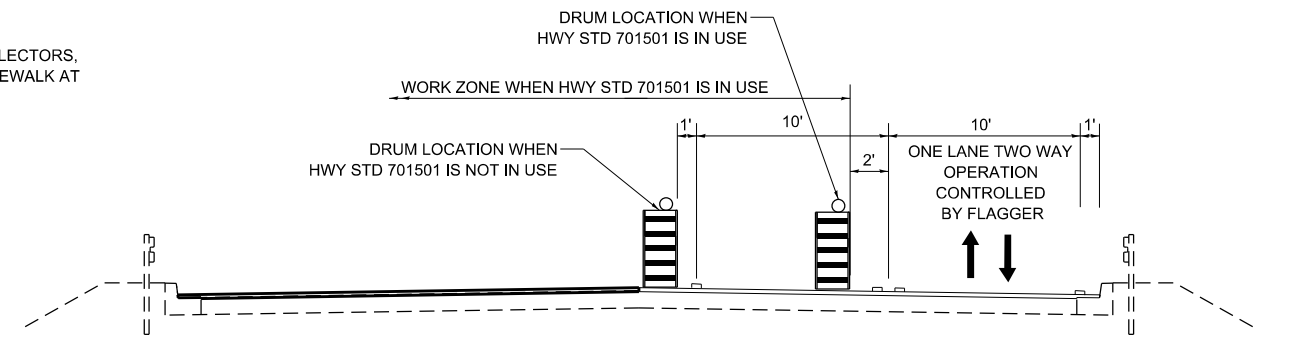


**STAGE IA - TYPICAL SECTION
DURING HMA REMOVAL AND REPLACEMENT**

NOTE: TEMPORARY CONCRETE BARRIER WALL SHALL BE REMOVED AFTER ALL BRIDGE DECK REPAIRS HAVE BEEN COMPLETED. CONTRACTOR SHALL USE HIGHWAY STANDARD 701501 TO REDUCE TRAFFIC TO ONE LANE FLAGGER CONTROLLED IN ORDER TO PERFORM HMA REMOVAL AND RESURFACING ACTIVITIES. DRUMS SHALL BE USED AT 25 FOOT CENTERS AFTER THE WALL IS REMOVED.



**STAGE II - TYPICAL SECTION
31ST STREET BRIDGE
STRUCTURE NO. 016-0870**



**STAGE IIA - TYPICAL SECTION
DURING HMA REMOVAL AND REPLACEMENT**

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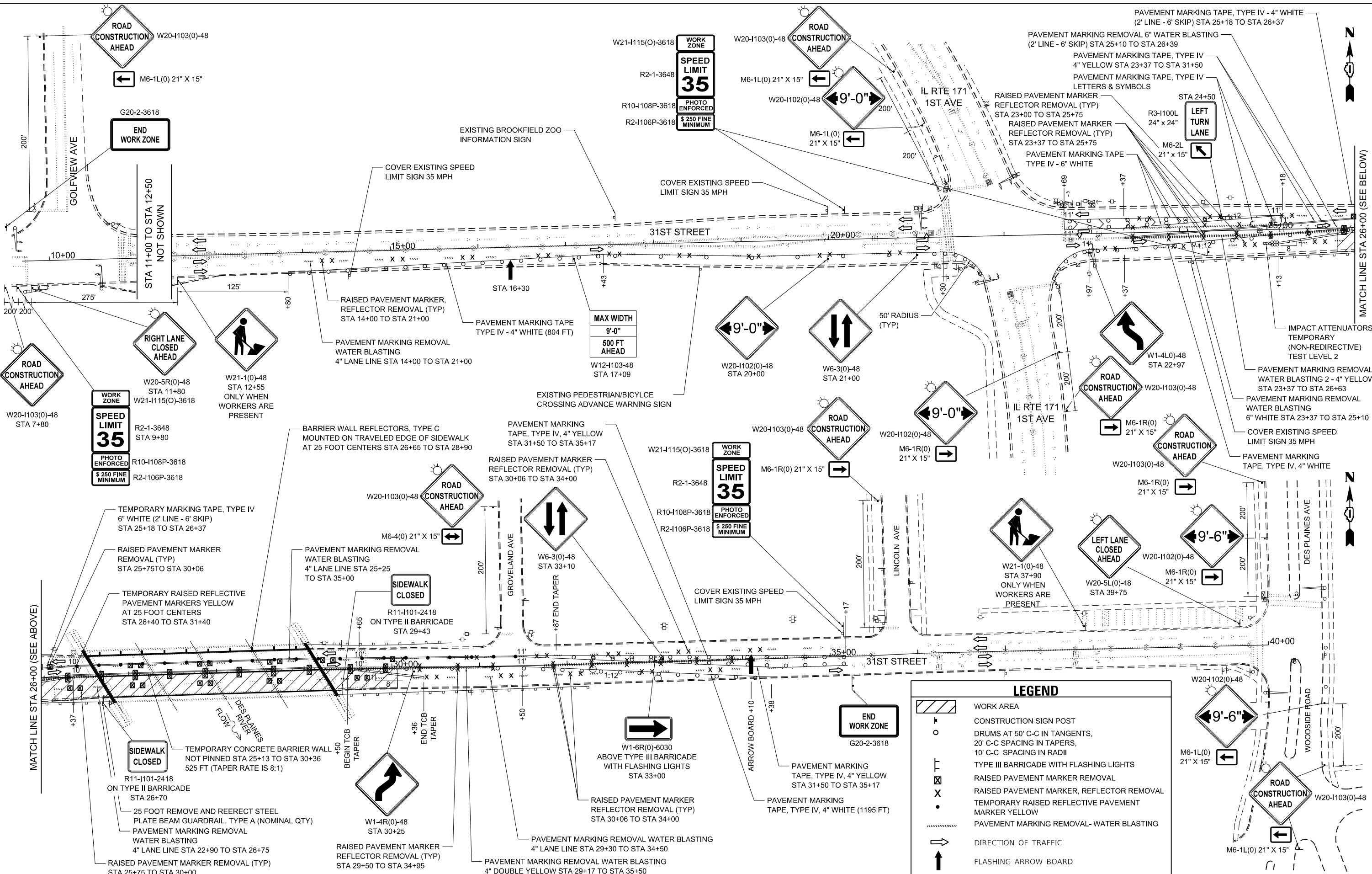
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**MAINTENANCE OF TRAFFIC - TYPICAL SECTIONS
31ST STREET OVER DES PLAINES RIVER**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1467	2020-149-BR	COOK	37	8
CONTRACT NO.			62M22	
ILLINOIS FED. AID PROJECT				

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DEPARTMENT OF TRANSPORTATION**

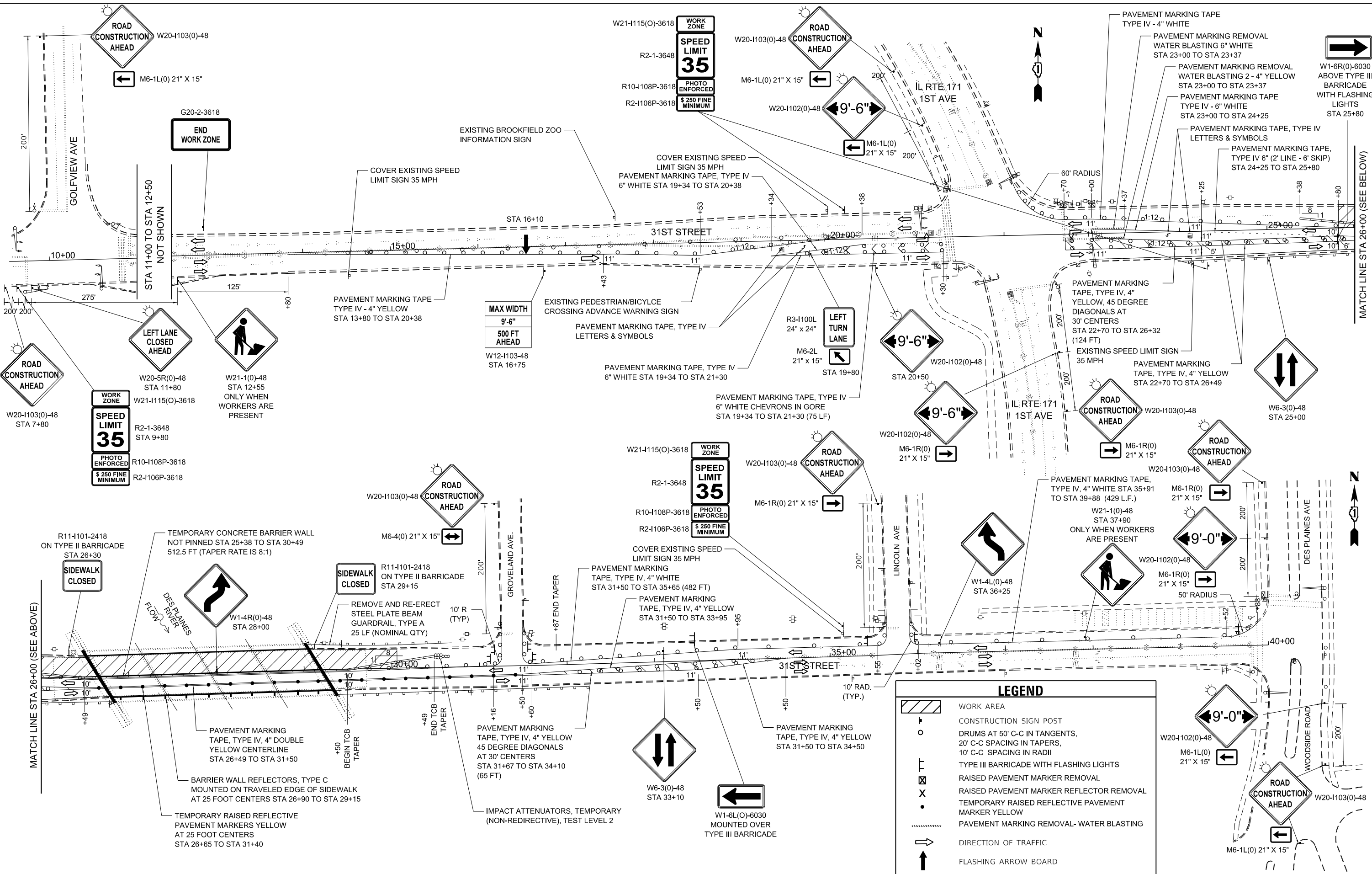
**MAINTENANCE OF TRAFFIC - STAGE I
31ST STREET OVER DES PLAINES RIVER**

SCALE: SHEET OF SHEETS STA. TO STA.

LEGEND	
	WORK AREA
	CONSTRUCTION SIGN POST
	DRUMS AT 50' C-C IN TANGENTS, 20' C-C SPACING IN TAPERS, 10' C-C SPACING IN RADII
	TYPE III BARRICADE WITH FLASHING LIGHTS
	RAISED PAVEMENT MARKER REMOVAL
	RAISED PAVEMENT MARKER, REFLECTOR REMOVAL
	TEMPORARY RAISED REFLECTIVE PAVEMENT MARKER YELLOW
	PAVEMENT MARKING REMOVAL - WATER BLASTING
	DIRECTION OF TRAFFIC
	FLASHING ARROW BOARD

F.A.U. RTE. 1467	SECTION 2020-149-BR	COUNTY COOK	TOTAL SHEETS 37	SHEET NO. 9
CONTRACT NO. 62M22				ILLINOIS FED. AID PROJECT

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

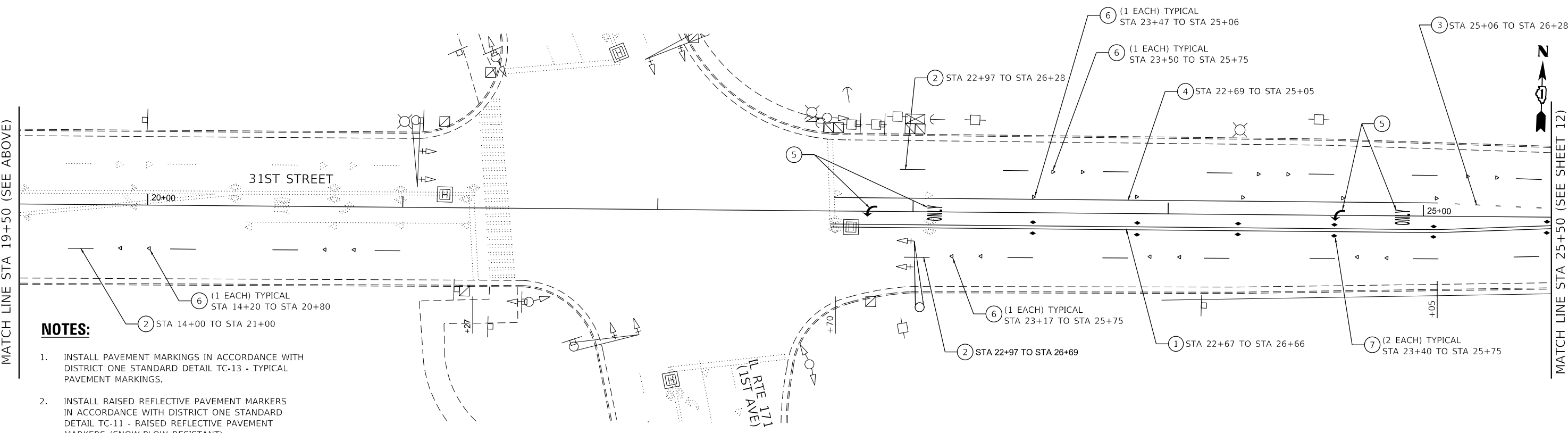
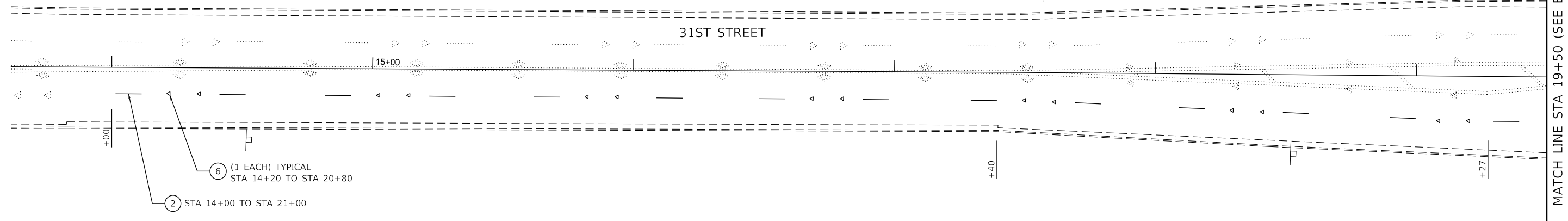
**MAINTENANCE OF TRAFFIC - STAGE II
31ST STREET OVER DES PLAINES RIVER**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE. 1467	SECTION 2020-149-BR	COUNTY COOK	TOTAL SHEETS 37	SHEET NO. 10
CONTRACT NO. 62M22				ILLINOIS FED. AID PROJECT

PAVEMENT MARKING LEGEND

- ① PROP. THERMOPLASTIC PAVEMENT MARKING - LINE 4", (DOUBLE YELLOW)
- ② PROP. THERMOPLASTIC PAVEMENT MARKING - LINE 4", (WHITE SKIP DASH, 10' LINE, 30' SKIP)
- ③ PROP. THERMOPLASTIC PAVEMENT MARKING - LINE 6", (WHITE SKIP DASH, 2' LINE, 6' SKIP)
- ④ PROP. THERMOPLASTIC PAVEMENT MARKING - LINE 6", (SOLID WHITE)
- ⑤ PROP. THERMOPLASTIC PAVEMENT MARKING - LETTERS & SYMBOLS, (WHITE)
- ⑥ PROP. REPLACEMENT REFLECTOR, CRYSTAL
- ⑦ PROP. RAISED REFLECTIVE PAVEMENT MARKER, CRYSTAL
- ⑧ PROP. REPLACEMENT REFLECTOR (AMBER, 2 EACH)
- ⑨ PROP. RAISED REFLECTIVE PAVEMENT MARKER BI-DIRECTIONAL, AMBER
- ⑩ EXIST. RAISED REFLECTIVE PAVEMENT MARKER, CRYSTAL
- ⑪ EXIST. RAISED REFLECTIVE PAVEMENT MARKER BI-DIRECTIONAL (AMBER, 2 EACH)
- ⑫ PROP. POLYUREA PAVEMENT MARKING, TYPE 1 - EDGE LINE 4", (SOLID WHITE)
- ⑬ PROP. POLYUREA PAVEMENT MARKING, TYPE 1 - LINE 4" (DOUBLE YELLOW)
- ⑭ PROP. POLYUREA PAVEMENT MARKING, TYPE 1 - LINE 4" (WHITE SKIP DASH, 10' LINE, 30' SKIP)



NOTES:

1. INSTALL PAVEMENT MARKINGS IN ACCORDANCE WITH DISTRICT ONE STANDARD DETAIL TC-13 - TYPICAL PAVEMENT MARKINGS.
2. INSTALL RAISED REFLECTIVE PAVEMENT MARKERS IN ACCORDANCE WITH DISTRICT ONE STANDARD DETAIL TC-11 - RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)

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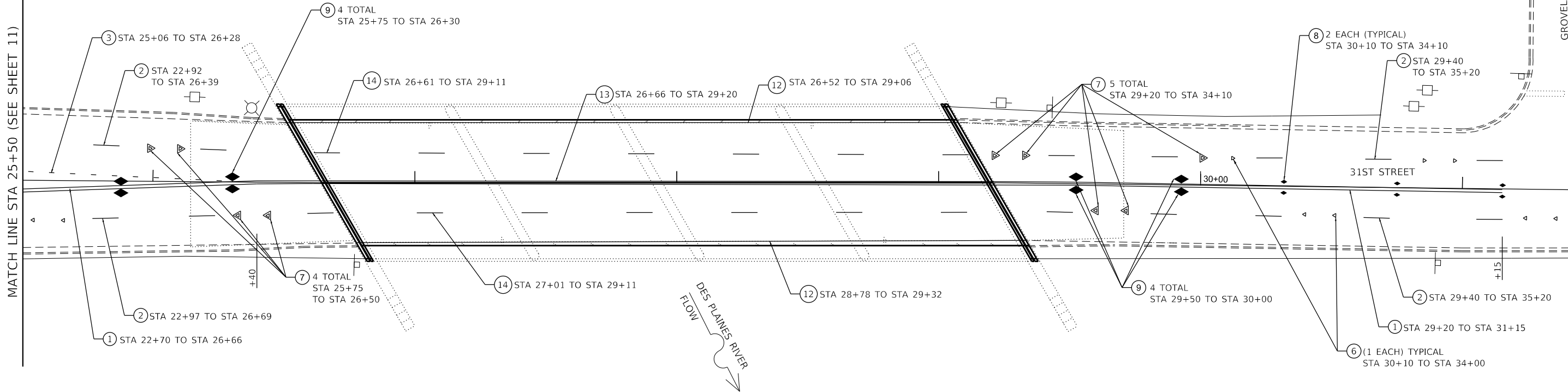
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

PAVEMENT MARKING PLAN - I 31ST STREET OVER DES PLAINES RIVER			
SCALE:	SHEET	OF	SHEETS
	STA.	TO	STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1467	2020-149-BR	COOK	37	11
CONTRACT NO.				62M22
ILLINOIS FED. AID PROJECT				

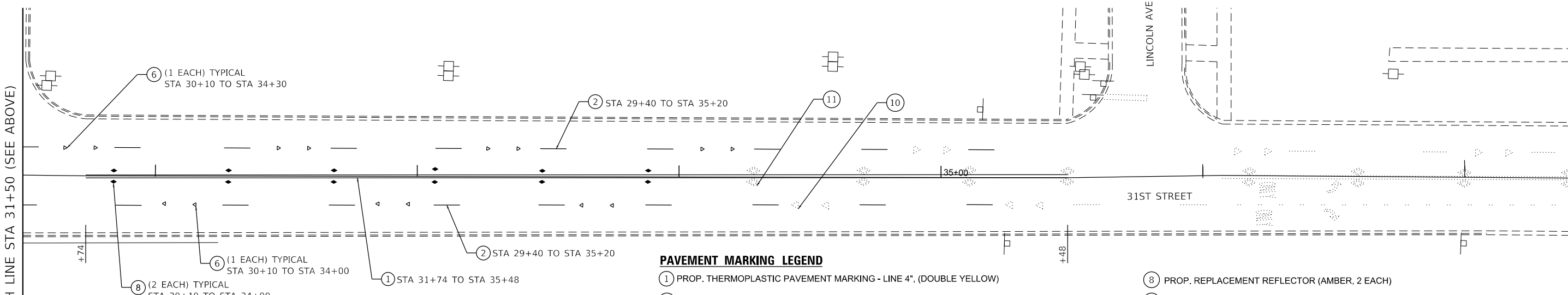
MATCH LINE STA 25+50 (SEE SHEET 11)

MATCH LINE STA 31+50 (SEE BELOW)



MATCH LINE STA 31+50 (SEE ABOVE)

MATCH LINE STA 31+50 (SEE ABOVE)



NOTES:

- INSTALL PAVEMENT MARKINGS IN ACCORDANCE WITH DISTRICT ONE STANDARD DETAIL TC-13 - TYPICAL PAVEMENT MARKINGS.
- INSTALL RAISED REFLECTIVE PAVEMENT MARKERS IN ACCORDANCE WITH DISTRICT ONE STANDARD DETAIL TC-11 - RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)

PAVEMENT MARKING LEGEND

- ① PROP. THERMOPLASTIC PAVEMENT MARKING - LINE 4", (DOUBLE YELLOW)
- ② PROP. THERMOPLASTIC PAVEMENT MARKING - LINE 4", (WHITE SKIP DASH, 10' LINE, 30' SKIP)
- ③ PROP. THERMOPLASTIC PAVEMENT MARKING - LINE 4", (WHITE SKIP DASH, 2' LINE, 6' SKIP)
- ④ PROP. THERMOPLASTIC PAVEMENT MARKING - LINE 6", (SOLID WHITE)
- ⑤ PROP. THERMOPLASTIC PAVEMENT MARKING - LETTERS & SYMBOLS, (WHITE)
- ⑥ PROP. REPLACEMENT REFLECTOR, CRYSTAL
- ⑦ PROP. RAISED REFLECTIVE PAVEMENT MARKER, CRYSTAL
- ⑧ PROP. REPLACEMENT REFLECTOR (AMBER, 2 EACH)
- ⑨ PROP. RAISED REFLECTIVE PAVEMENT MARKER BI-DIRECTIONAL, AMBER
- ⑩ EXIST. RAISED REFLECTIVE PAVEMENT MARKER, CRYSTAL
- ⑪ EXIST. RAISED REFLECTIVE PAVEMENT MARKER BI-DIRECTIONAL (AMBER, 2 EACH)
- ⑫ PROP. POLYUREA PAVEMENT MARKING, TYPE 1 - EDGE LINE 4", (SOLID WHITE)
- ⑬ PROP. POLYUREA PAVEMENT MARKING, TYPE 1 - LINE 4" (DOUBLE YELLOW)
- ⑭ PROP. POLYUREA PAVEMENT MARKING, TYPE 1 - LINE 4" (WHITE SKIP DASH, 10' LINE, 30' SKIP)

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PAVEMENT MARKING PLAN - II
31ST STREET OVER DES PLAINES RIVER**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1467	2020-149-BR	COOK	37	12
CONTRACT NO. 62M22			ILLINOIS FED. AID PROJECT	

Existing Structure: The existing Structure No. 016-0870 was originally built in 1928 as the 31st Street Des Plaines River Bridge Project (Cook County Department of Highways) Section 1314-15D. In 1985, the concrete deck and superstructure was replaced with a 7½" thick deck and 48" Precast Prestressed Concrete I-Beams. The caps for the piers and abutments were replaced and the substructure was repaired. In 2019, the deck was sealed as part of Project STP-B48R(938) Section 2018-140-BR. The structure is a 4-span 48" PPC I-Beam with a 7½" concrete deck, 60'-0" out to out of structure and 257'-5¼" Back-to-Back Abutments.

Traffic will be maintained utilizing staged construction.

No salvage.

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications for Highway Bridges (17th Edition)

DESIGN STRESSES

NEW CONSTRUCTION (FIELD UNITS)

$f_y = 60,000$ psi (Reinforcement)

EXISTING CONSTRUCTION (1985 - SUPERSTRUCTURE REPLACEMENT)

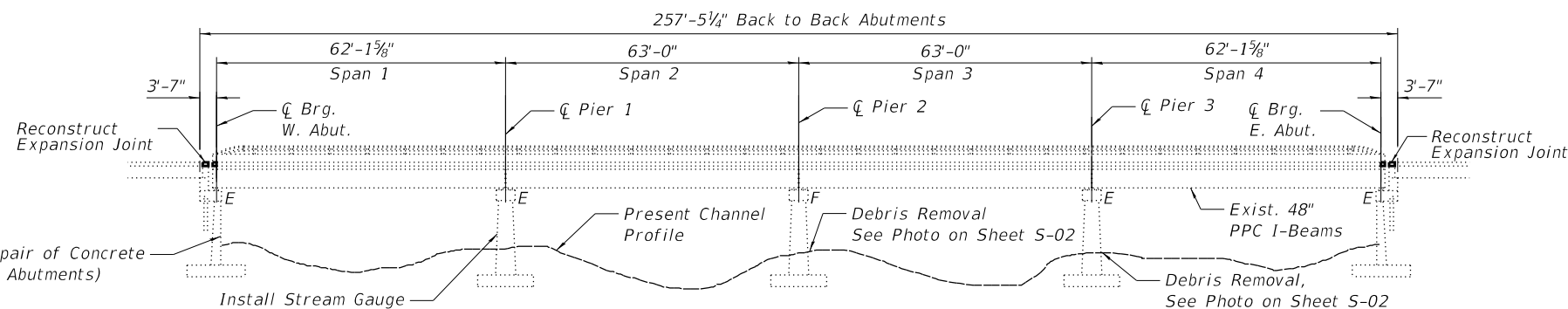
$f_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcing Steel)
 $f_s = 20,000$ psi (Struct - AASHTO M-183)
 $f'_c = 5,000$ psi (Precast Concrete)
 $f'_ci = 4,600$ psi (Precast Concrete)
 $f_s = 70,000$ psi (Precast ½" Ø Strands)
 $f_{si} = 183,000$ psi (Precast ½" Ø Strands)

EXISTING CONSTRUCTION (1928 - ORIGINAL)

$f_s = 20,000$ psi (Structural Steel)
 $f_s = 20,000$ psi (Reinforcing Steel)
 $f_c = 1400$ psi (Concrete Substructure)

LOADING HS20-44

Allow 25 psf for Future Wearing Surface

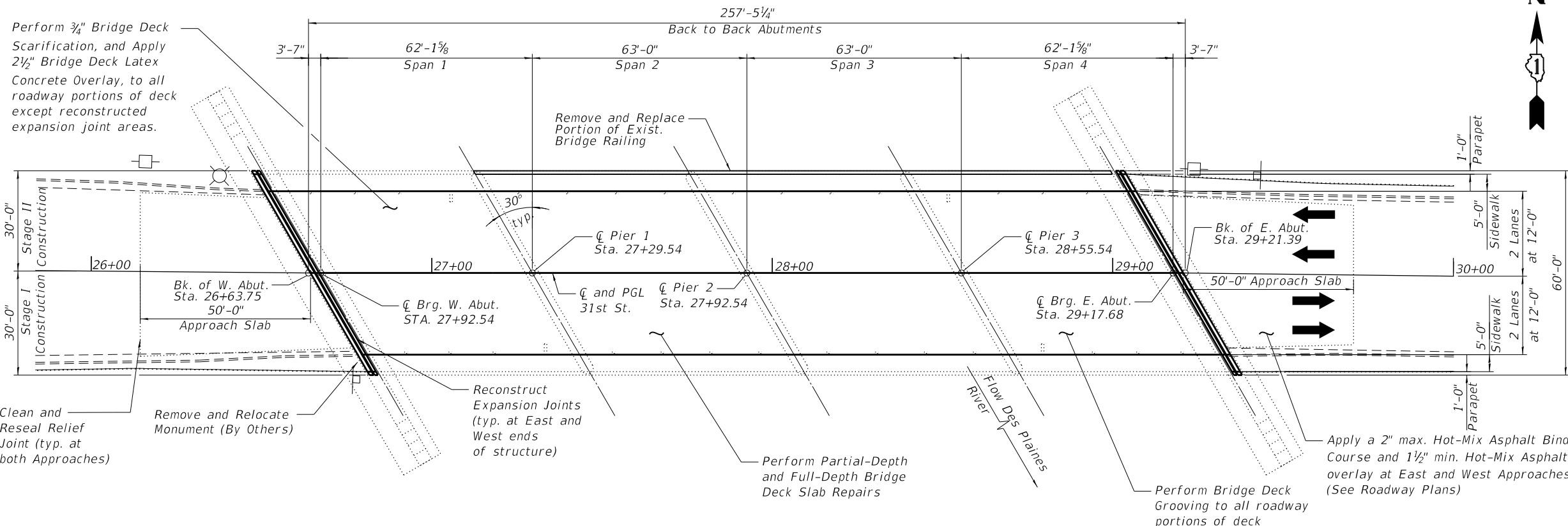


ELEVATION

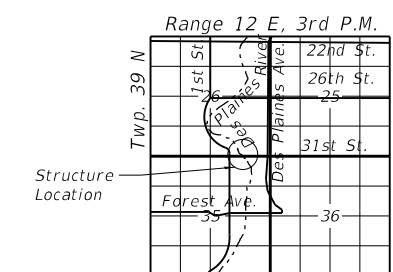


DATE SIGNED: 09/09/2020
 EXP. DATE: 11/30/2020
 (Page Range: 13-30 of 37)

Perform ¾" Bridge Deck Scarification, and Apply 2½" Bridge Deck Latex Concrete Overlay, to all roadway portions of deck except reconstructed expansion joint areas.



PLAN



LOCATION SKETCH

GENERAL PLAN AND ELEVATION

**31ST STREET OVER
 DES PLAINES RIVER
 F.A.U. 1467 SEC 2020-149-BR
 COOK COUNTY
 STATION: 27+92.54
 STRUCTURE NO. 016-0870**

MODEL: Default
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

SHEET S-01 OF S-18 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1467	2020-149-BR	COOK	37	13
CONTRACT NO. 62M22				
ILLINOIS FED. AID PROJECT				

INDEX OF SHEETS

S-01 General Plan and Elevation
 S-02 General Notes, Index of Sheets, & Total Bill of Material
 S-03 Stage Construction (Sheet 1 of 2)
 S-04 Stage Construction (Sheet 2 of 2)
 S-05 Temporary Concrete Barrier for Stage Construction
 S-06 Deck Repair Plan
 S-07 Drainage Scuppers and Floor Drains Details
 S-08 Parapet and Railing Repairs
 S-09 Aluminum Railing, Type L
 S-10 W. Abut. Expansion Joint Removal & Reconstruction
 S-11 E. Abut. Expansion Joint Removal & Reconstruction
 S-12 Abut. Expansion Joint Details
 S-13 Preformed Joint Strip Seal - Sidewalk (Sheet 1 of 3)
 S-14 Preformed Joint Strip Seal - Sidewalk (Sheet 2 of 3)
 S-15 Preformed Joint Strip Seal - Sidewalk (Sheet 3 of 3)
 S-16 West and East Abutment Repairs
 S-17 Pier 1 Stream Gauge
 S-18 Bar Splicer Assembly and Mechanical Splicer Details

SCOPE OF WORK:

1. Perform 3/4" Bridge Deck Scarification.
2. Perform deck slab and Approach slab repairs as required.
3. Remove and Reconstruct bridge deck expansion joints at West and East Abutments and install new preformed joint strip seals.
4. Perform Parapet Repairs and Removal/Replacement of Railing as required.
5. Apply a 2 1/2" Bridge Deck Latex Concrete Overlay on Bridge Deck, 2" max. Hot-Mix Asphalt (HMA) Binder Course on Approach Slabs, and 1 1/2" min. Hot-Mix Asphalt (HMA) Overlay on Approach Slabs.
6. Perform Bridge Deck Grooving.
7. Apply Protective Coat to new surfaces of the top and inside faces of parapets, sidewalks, reconstructed transverse expansion joints, and overlay.
8. Clean and reseal relief joints.
9. Remove debris.
10. Install Stream Gauge on Pier 1.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	Cu Yd	7.3		7.3
Bridge Rail Removal	Foot	187		187
Concrete Superstructure	Cu Yd	8.4		8.4
Bridge Deck Grooving	Sq Yd	1295		1295
Protective Coat	Sq Yd	1582		1582
Reinforcement Bars, Epoxy Coated	Pound	1180		1180
Bar Splicers	Each	8		8
Aluminum Railing, Type L	Foot	187		187
Preformed Joint Strip Seal	Foot	139		139
Clean & Reseal Relief Joint	Foot	89		89
Bridge Deck Latex Concrete Overlay, 2 1/2 Inches	Sq Yd	1341		1341
Bridge Deck Scarification, 3/4"	Sq Yd	1341		1341
Structural Repair of Concrete (Depth Equal to or Less than 5 Inches)	Sq Ft		140	140
Structural Repair of Concrete (Depth Greater than 5 Inches)	Sq Ft		13	13
Deck Slab Repair (Full Depth, Type II)	Sq Yd	1		1
Temporary Shoring and Cribbing	Each		9	9
Drainage Scuppers to be Adjusted	Each	4		4
Debris Removal	Cu Yd		20	20
Stream Gauge	Each		1	1

GENERAL NOTES:

1. Reinforcement bars designated (E) shall be epoxy coated.
2. 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.
3. 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 50°F.
4. Bars noted thus, 3x2-#5, indicated 3 lines of #5 bars with 2 lengths of bars per line.
5. All exposed concrete edges shall have a 3/4"x45° chamfer except where shown otherwise.
6. Debris shall be removed from within the channel as specified by the Engineer and shall be included in the cost of Debris Removal. Quantities are estimated and actual quantities and locations will be determined in the field, at the time of construction, by the Engineer.
7. Debris Removal shall be performed by lifting the materials to be removed onto the bridge deck then disposing. The Contractor shall not be permitted to access the debris from entering the stream and therefore as in stream work plan is not required for this work. This work shall be performed in Stage II while the north half of the deck is closed to traffic.
8. During repair operations, the Contractor shall locate and protect all utilities or facilities in the vicinity of the work including, but not limited to, fiber optic and/or electrical conduits, conduits under the bridge deck, under-deck lighting, traffic signals or signs attached to the structure. This work shall be performed to the satisfaction of the Engineer and will not be paid for separately, but shall be included with the contract. It shall be the Contractor's responsibility to restore and replace any damaged utilities or facilities to the satisfaction of the Engineer at no cost to the Department.



DEBRIS REMOVAL NEAR PIER 2



DEBRIS REMOVAL NEAR PIER 3

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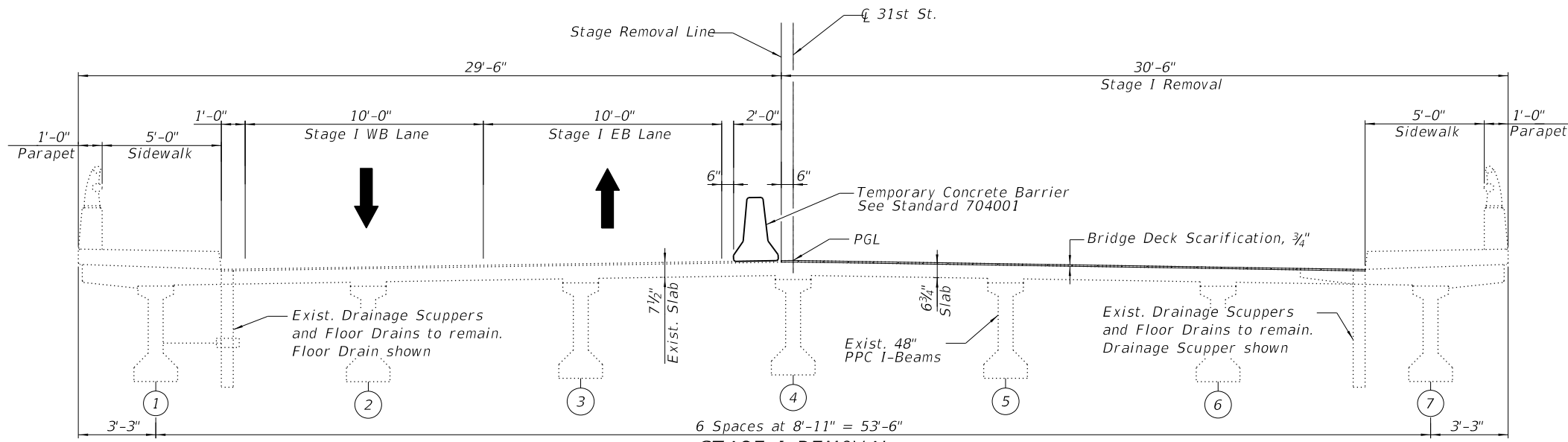
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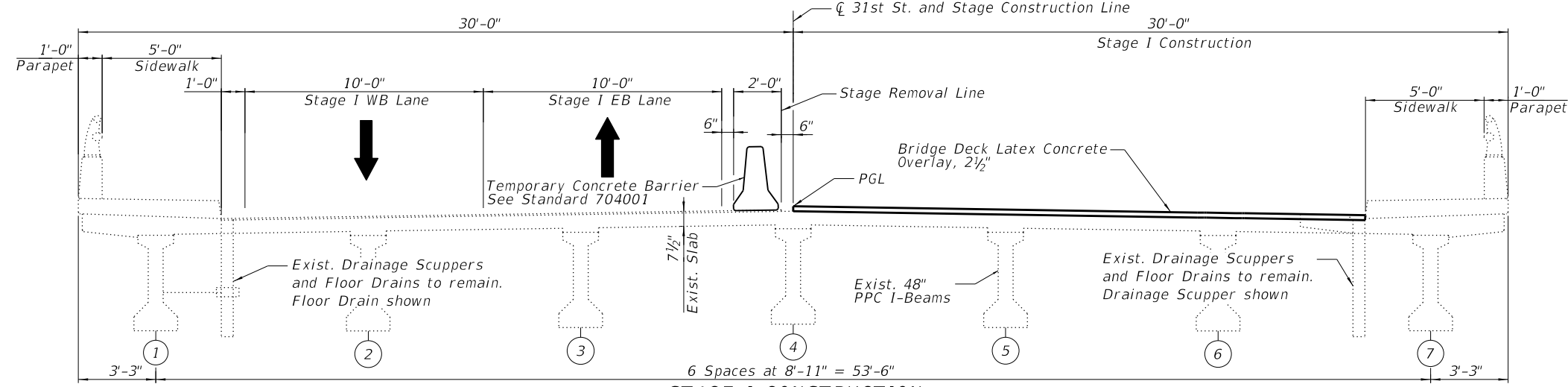
**GEN. NOTES, INDEX OF SHEETS & TOTAL BILL OF MATERIAL
 STRUCTURE NO. 016-0870**

SHEET S-02 OF S-18 SHEETS

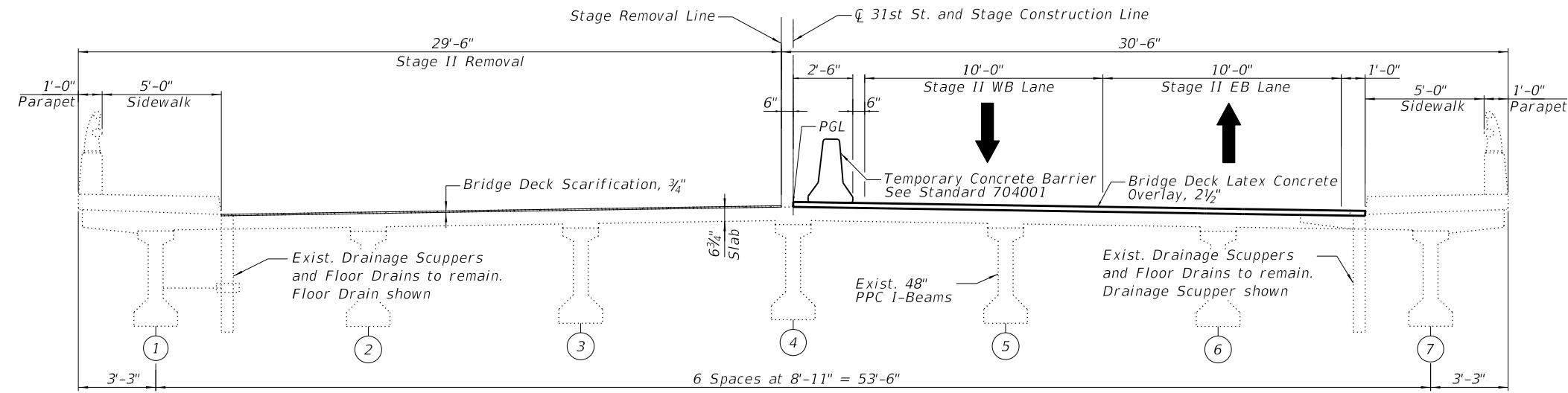
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1467	2020-149-BR	COOK	37	14
CONTRACT NO. 62M22				
ILLINOIS FED. AID PROJECT				



STAGE I REMOVAL
(Looking East)



STAGE I CONSTRUCTION
(Looking East)



STAGE II REMOVAL
(Looking East)

STAGE I REMOVAL

1. Install temporary concrete barrier as shown to locate traffic on the north side of the existing structure.
2. Scarify 3/4" from the top of deck slab.
3. Remove portions of bridge deck/abutment backwall adjacent to abutment joints, as shown in the plans.

STAGE I CONSTRUCTION

1. Perform full-depth deck slab repairs at locations as shown in the plans.
2. Install preformed joint strip seal at east and west abutments and replace associated reinforcement and concrete adjacent to the joint.
3. Perform structural repair of concrete for the abutments.
4. Apply 2 1/2" bridge deck latex concrete overlay to bridge deck slab.
5. Perform bridge deck grooving for the 2 1/2" bridge deck latex concrete overlay.
6. Apply a 2" max. Hot-Mix Asphalt Binder Course and 1 1/2" min. Hot-Mix Asphalt (HMA) overlay at East and West Approaches (See Roadway Plans).
7. Apply protective coat to the top of reconstructed transverse joint areas and the top and inside faces of Reconstructed Parapets and to Latex Overlay.

STAGE II REMOVAL

1. Install temporary concrete barrier as shown to locate traffic on the south side of the existing structure.
2. Scarify 3/4" from the top of deck slab.
3. Remove portions of bridge deck/abutment backwall adjacent to abutment joints, as shown in the plans.

LEGEND



MODEL: Default
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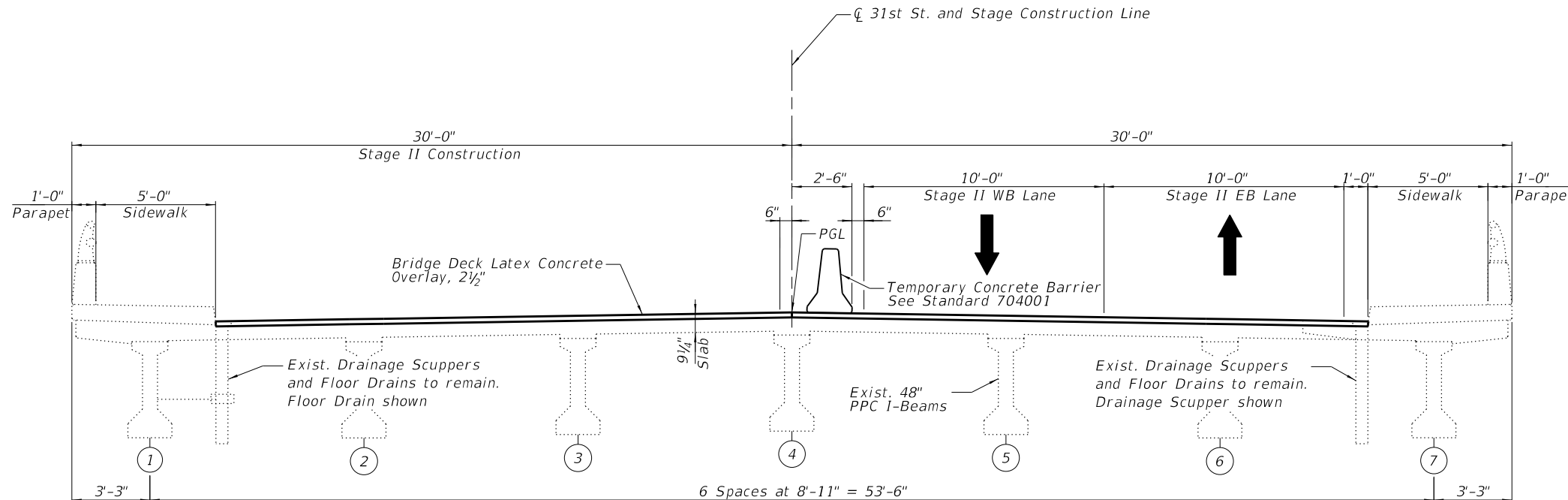
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DEPARTMENT OF TRANSPORTATION**

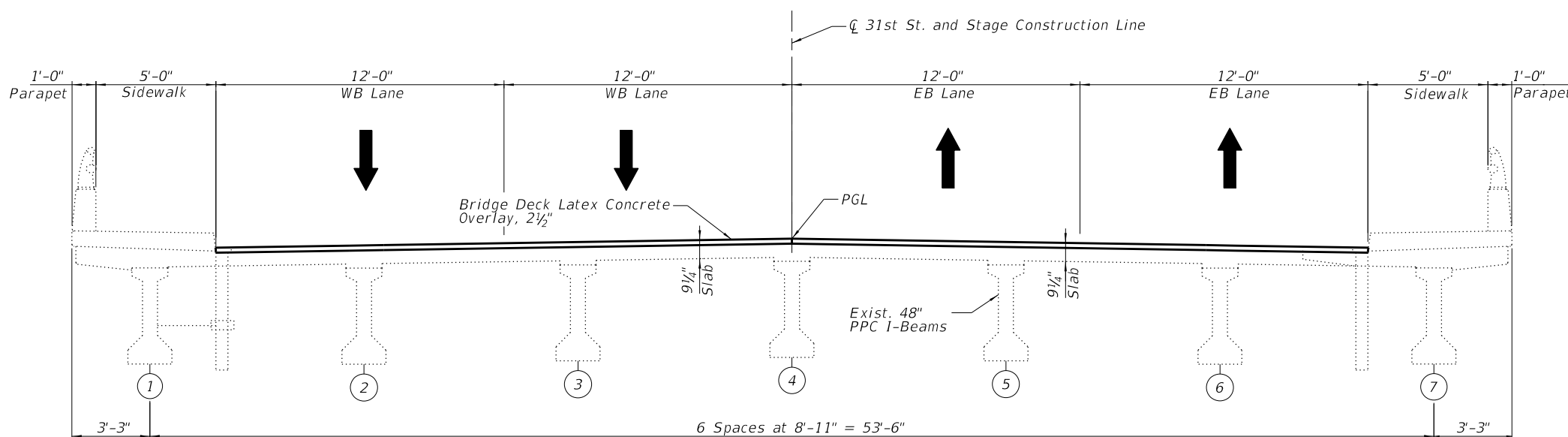
**STAGE CONSTRUCTION (SHEET 1 OF 2)
STRUCTURE NO. 016-0870**

SHEET S-03 OF S-18 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1467	2020-149-BR	COOK	37	15
CONTRACT NO. 62M22				
ILLINOIS FED. AID PROJECT				



STAGE II CONSTRUCTION
(Looking East)



FINAL DECK CROSS SECTION
(Looking East)

STAGE II CONSTRUCTION

1. Perform full-depth deck slab repairs at locations as shown in the plans.
2. Install preformed joint strip seal at east and west abutments and replace associated reinforcement and concrete adjacent to the joint.
3. Perform structural repair of concrete for the abutments.
4. Apply 2 1/2" bridge deck latex concrete overlay to bridge deck slab.
5. Perform bridge deck grooving for the 2 1/2" bridge deck latex concrete overlay.
6. Apply a 2" max. Hot-Mix Asphalt Binder Course and 1 1/2" min. Hot-Mix Asphalt (HMA) overlay at East and West Approaches (See Roadway Plans).
7. Apply protective coat to the top of reconstructed transverse joint areas and the top and inside faces of Reconstructed Parapets and Latex Overlay.
8. Apply permanent pavement markings on top of deck and approach slabs.

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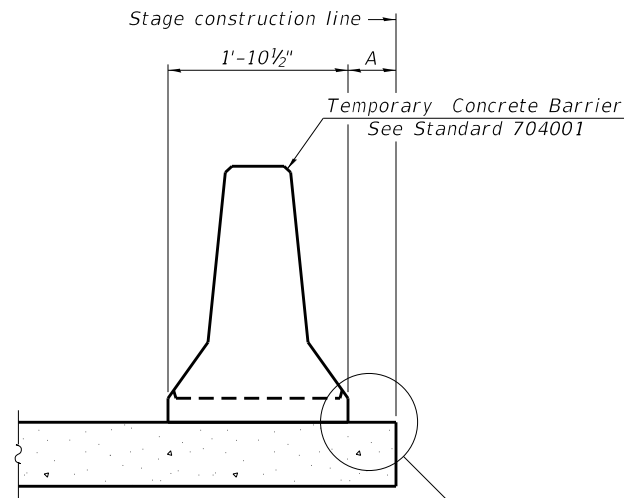
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**STATE OF ILLINOIS
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**STAGE CONSTRUCTION (SHEET 2 OF 2)
STRUCTURE NO. 016-0870**

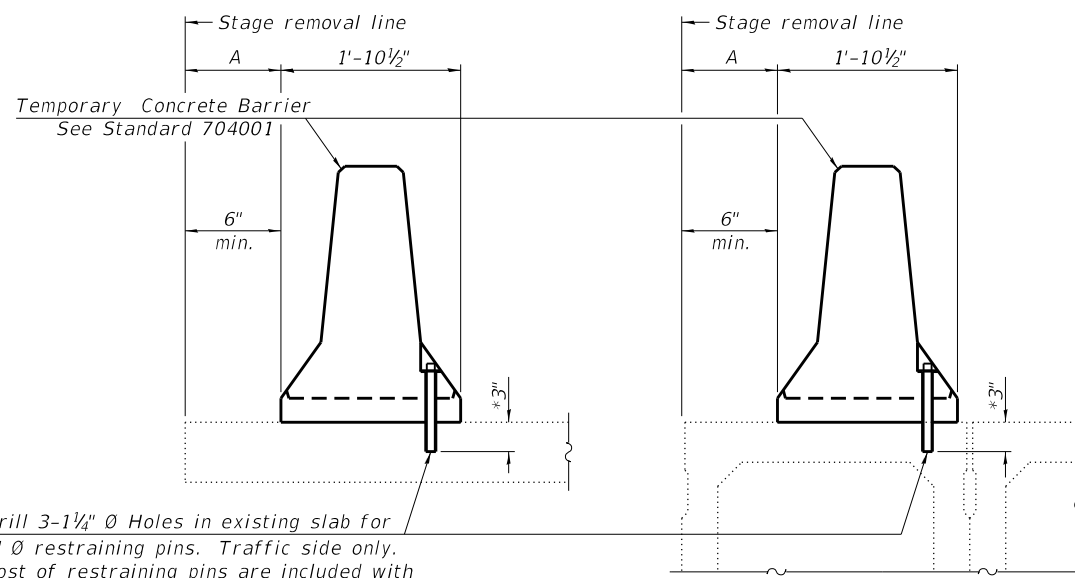
SHEET S-04 OF S-18 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1467	2020-149-BR	COOK	37	16
CONTRACT NO. 62M22				
ILLINOIS FED. AID PROJECT				



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

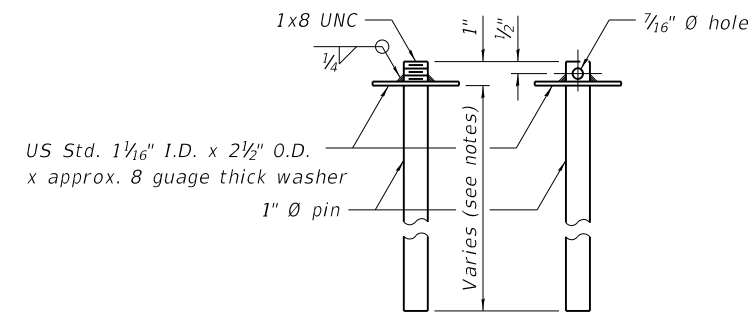


Drill 3-1/4" Ø Holes in existing slab for 1" Ø restraining pins. Traffic side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint is required when "A" is greater than 3'-1".

EXISTING SLAB

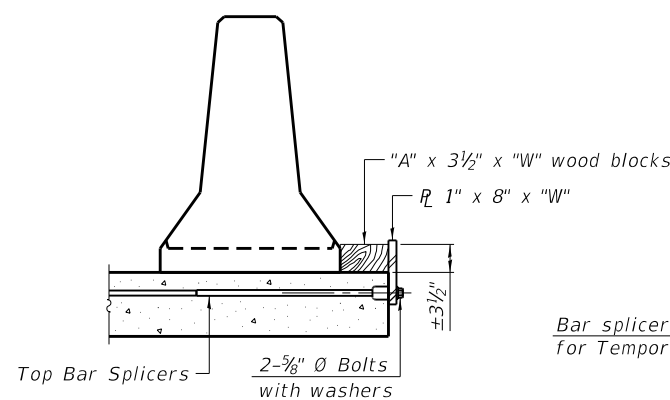
* When hot-mix asphalt wearing surface is present, embedment shall be 3" plus the wearing surface depth.

EXISTING DECK BEAM

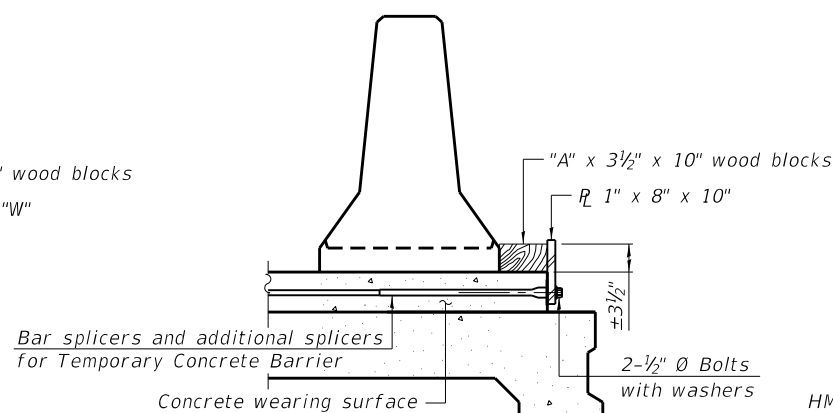


RESTRAINING PIN

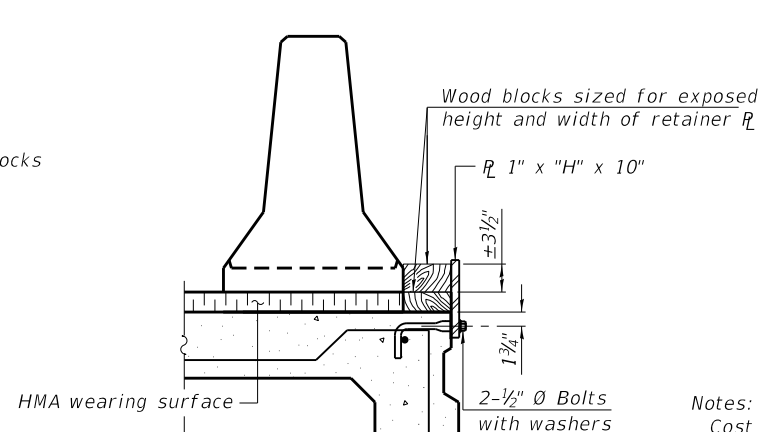
SECTIONS THRU SLAB OR DECK BEAM



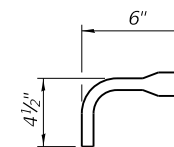
DETAIL I



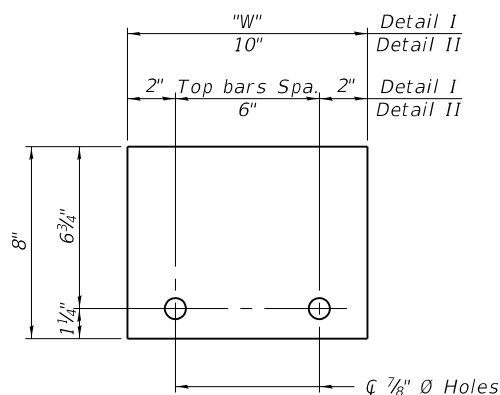
DETAIL II



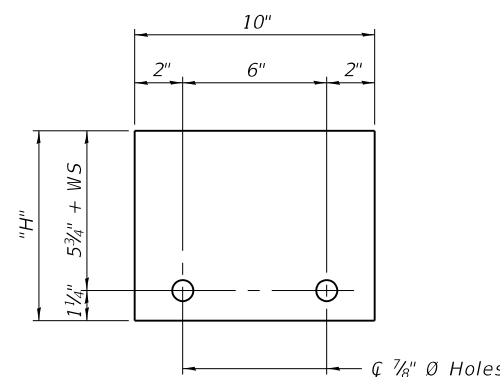
DETAIL III



BAR SPLICER FOR #4 BAR - DETAIL III



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



STEEL RETAINER R 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 \bar{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.

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R-27

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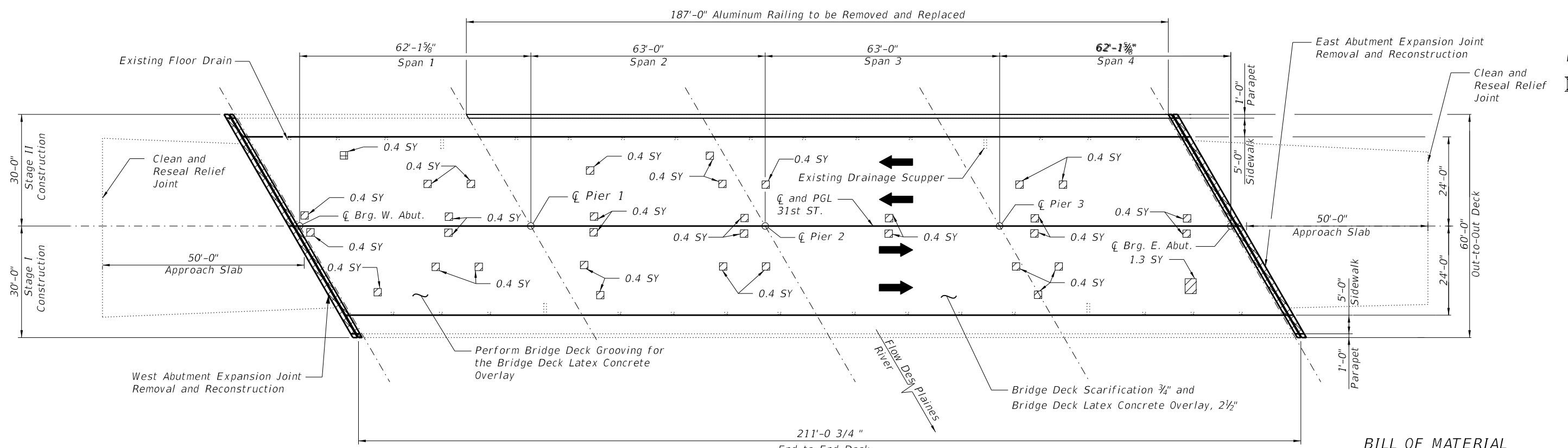
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
 STRUCTURE NO. 016-0870

SHEET S-05 OF S-18 SHEETS

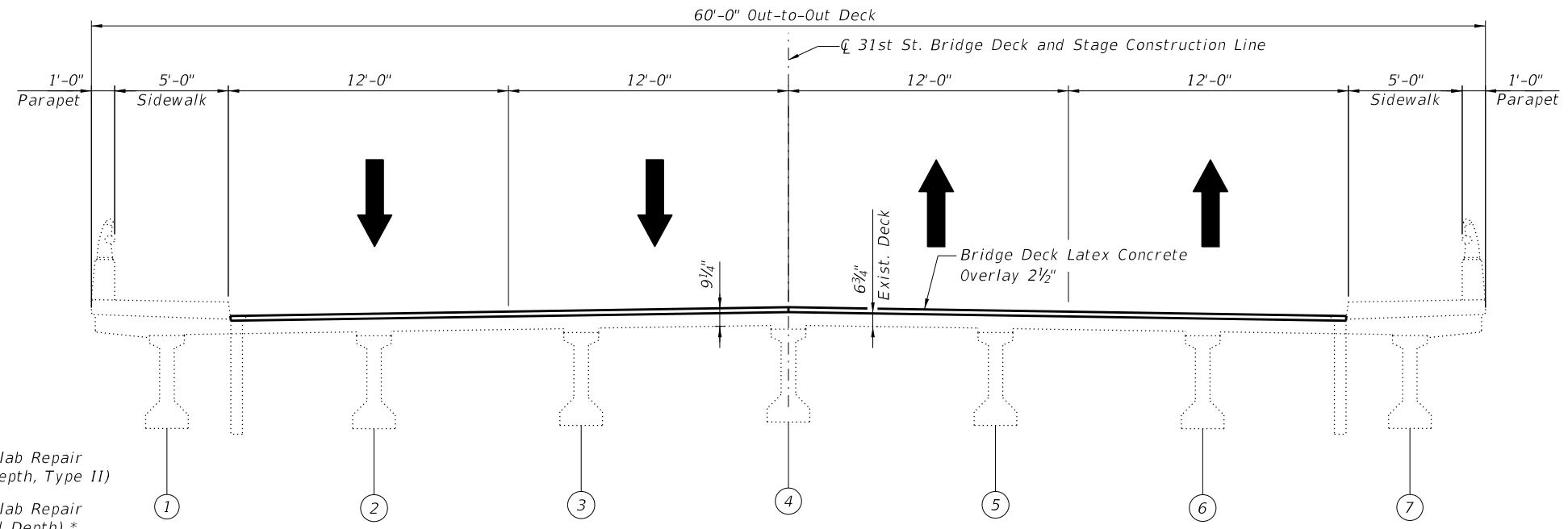
F.A.U. RTE. 1467	SECTION 2020-149-BR	COUNTY COOK	TOTAL SHEETS 37	SHEET NO. 17
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62M22	



DECK PLAN

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Deck Slab Repair (Full Depth, Type II)	Sq Yd	1
Protective Coat	Sq Yd	1582
Bridge Deck Grooving	Sq Yd	1295
Bridge Deck Latex Concrete Overlay, 2 1/2"	Sq Yd	1341
Bridge Deck Scarification, 3/4"	Sq Yd	1341
Clean and Reseal Relief Joint	Foot	89



CROSS SECTION

(Looking East)
(All dimensions are perpendicular to \bar{C} 31st Street Bridge Deck)

LEGEND

- Deck Slab Repair (Full Depth, Type II)
- Deck Slab Repair (Partial Depth) *
- Concrete Removal
- SY Square Yards

* Areas of Deck Slab Repair (Partial) are provided for information only and shall be included in the cost of Bridge Deck Latex Concrete Overlay, 2 1/2"

NOTES:

1. Areas of Deck repair shown are estimated. The Engineer shall show actual locations of deck repairs at the time of construction.
2. For West and East Abutments Expansion Joint removal and reconstruction, see sheets S-10 thru S-12.
3. Protective Coat shall be applied to top and inside face of parapets, sidewalks, reconstructed transverse joint areas and the surface of the new Latex Concrete Overlay.
4. Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost included with the cost of Concrete Removal.
5. The Contractor shall exercise extreme caution during Concrete Removal to avoid damaging the PPC I-Beams. Any damage to the existing PPC I-beams to remain caused by the Contractor in the performance of his/her work shall be repaired by the Contractor, to the satisfaction of the Engineer, at no cost to the Department.
6. For Drainage Scupper Adjustment and Floor Drain Details, see sheet S-07

MODEL: Default
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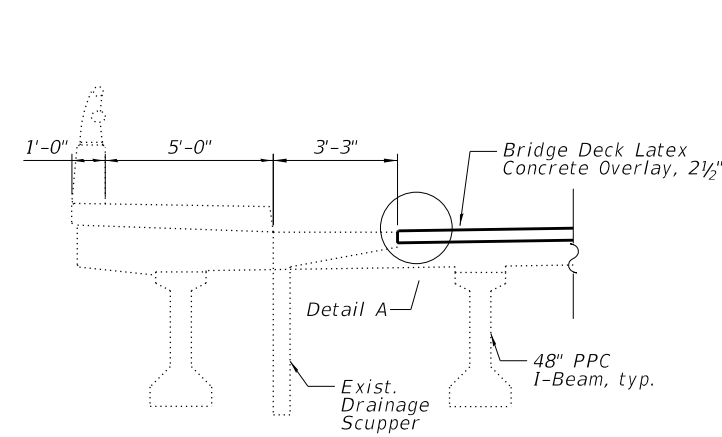
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

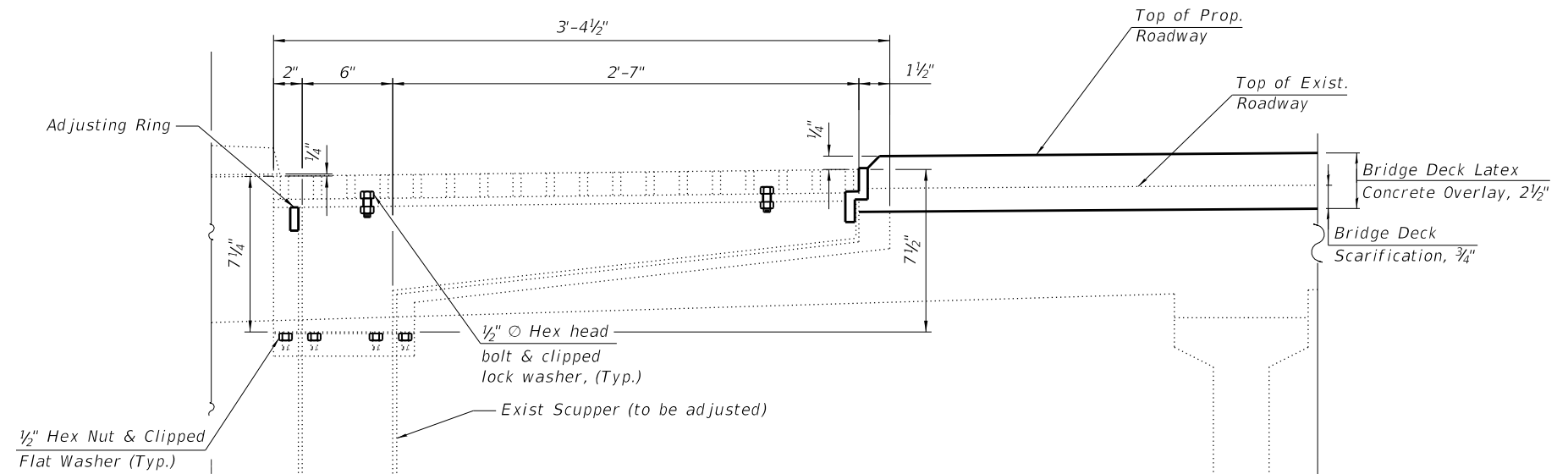
**DECK REPAIR PLAN
STRUCTURE NO. 016-0870**

SHEET S-06 OF S-18 SHEETS

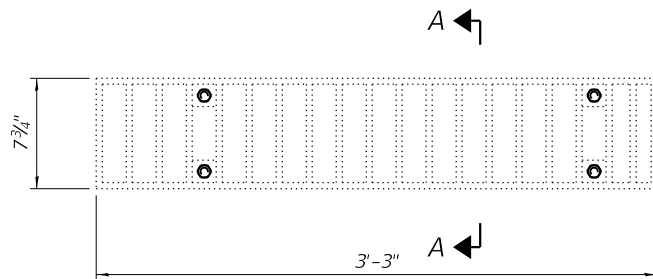
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1467	2020-149-BR	COOK	37	18
CONTRACT NO. 62M22				
ILLINOIS FED. AID PROJECT				



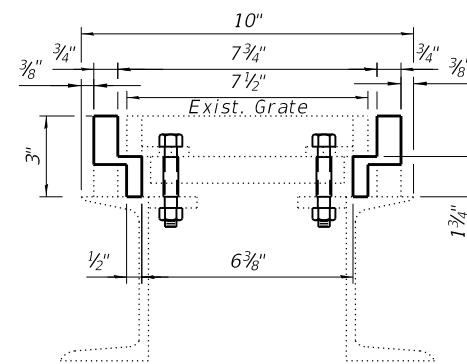
SECTION AT DRAINAGE SCUPPERS



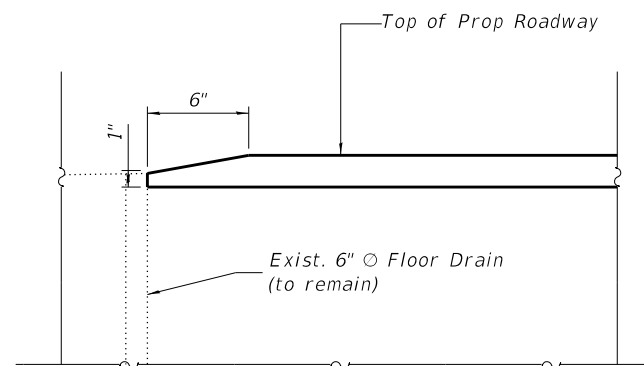
DETAIL A



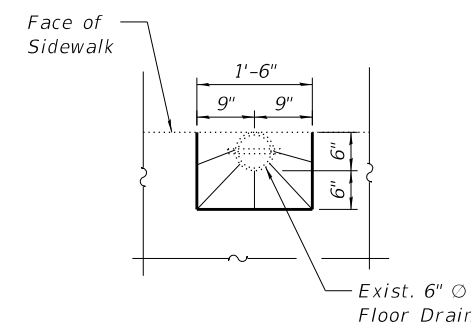
DRAINAGE SCUPPER TYPICAL PLAN



SECTION A-A



FLOOR DRAIN DETAIL



6" O FLOOR DRAIN TOP PLAN

DRAINAGE SCUPPER NOTES:

1. The Contractor shall field verify Existing Dimensions and Details of the Existing Scuppers and make necessary adjustments prior to the construction of New Adjusting Ring or ordering of material for Drainage Scuppers to be Adjusted.
2. Bolts, Anchor Studs, Washers and Nuts shall conform to the requirements of ASTM A 307 and shall be Galvanized according to the requirements of AASHTO M 111 & ASTM A 385.
3. Adjusting Ring shall be from Neenah and approved equal. Structural Steel weldments or equal sections and of the same configuration may be submitted for Cast Iron. Fillet or full Penetration Welds may be used for weldments. Details shall be submitted to the Engineer for approval.
4. Provide a 1/8" Fillet Weld around perimeter of new Adjusting Ring to secure to existing Scupper. Electrode shall be compatible with cast Iron.
5. Cost of all labor and materials necessary to clean all existing floor drains and scuppers, install adjusting scupper rings, remove and re-install grates is included in the cost for Drainage Scupper to be Adjusted.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage Scuppers to be Adjusted	Each	4

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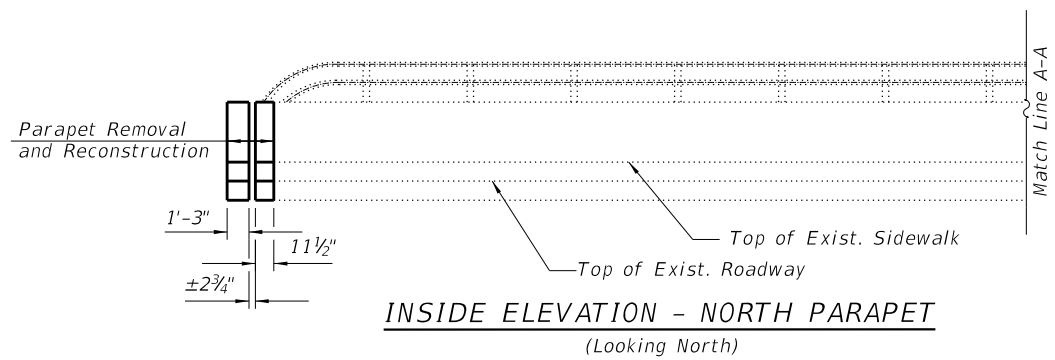
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DRAINAGE SCUPPERS AND FLOOR DRAINS DETAILS
STRUCTURE NO. 016-0870**

SHEET S-07 OF S-18 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1467	2020-149-BR	COOK	37	19
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ILLINOIS FED. AID PROJECT				

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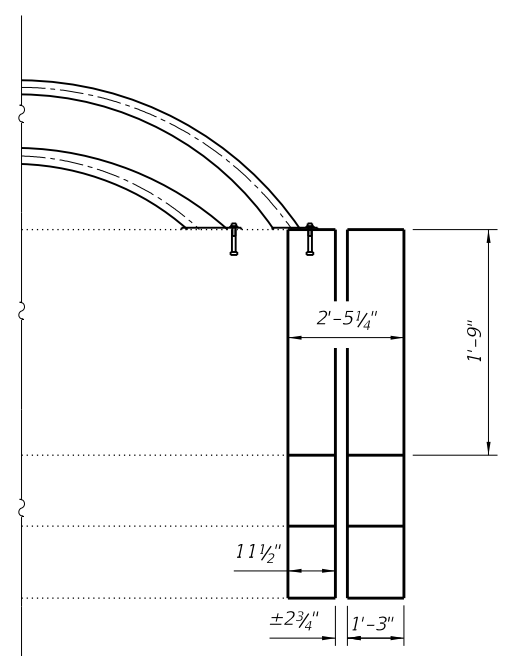
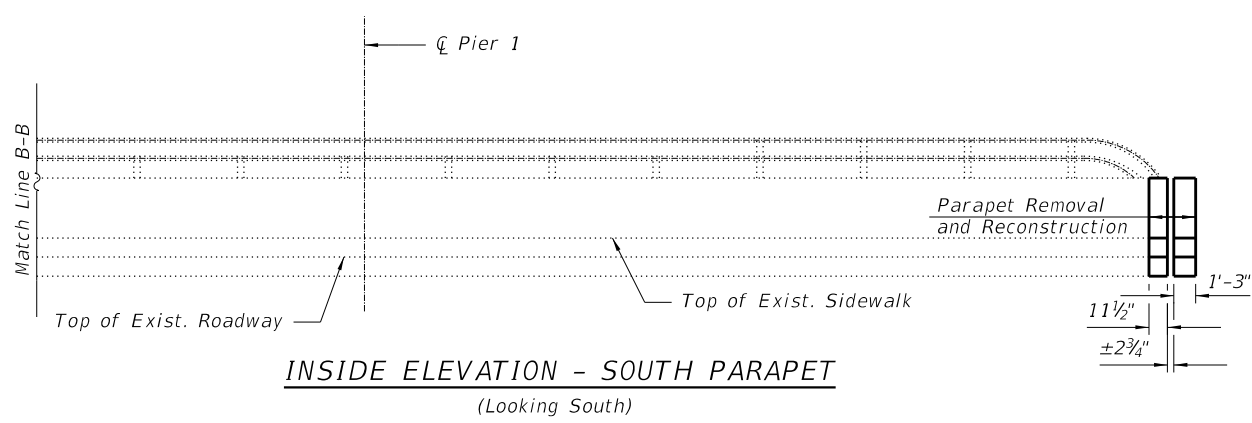
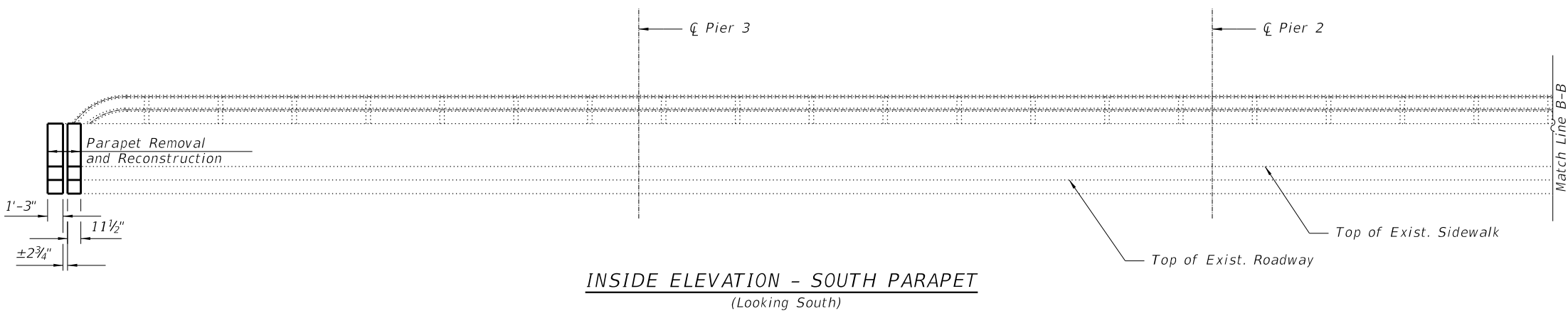
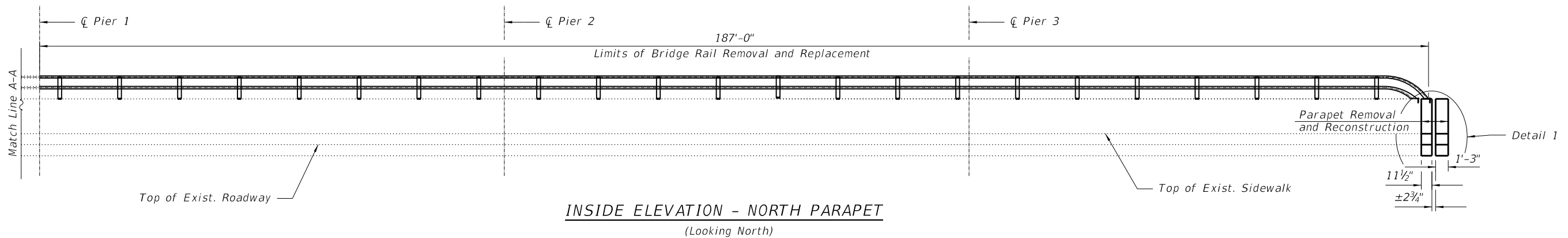


NOTES:

1. For Aluminum Railing details, see Sheet S-09.
2. Quantities and limits shown are estimated for bidding purposes only. The actual railing length to be replaced will be determined by the Engineer in the field at the time of construction.

BILL OF MATERIAL

Item	Unit	Quantity
Bridge Rail Removal	Foot	187



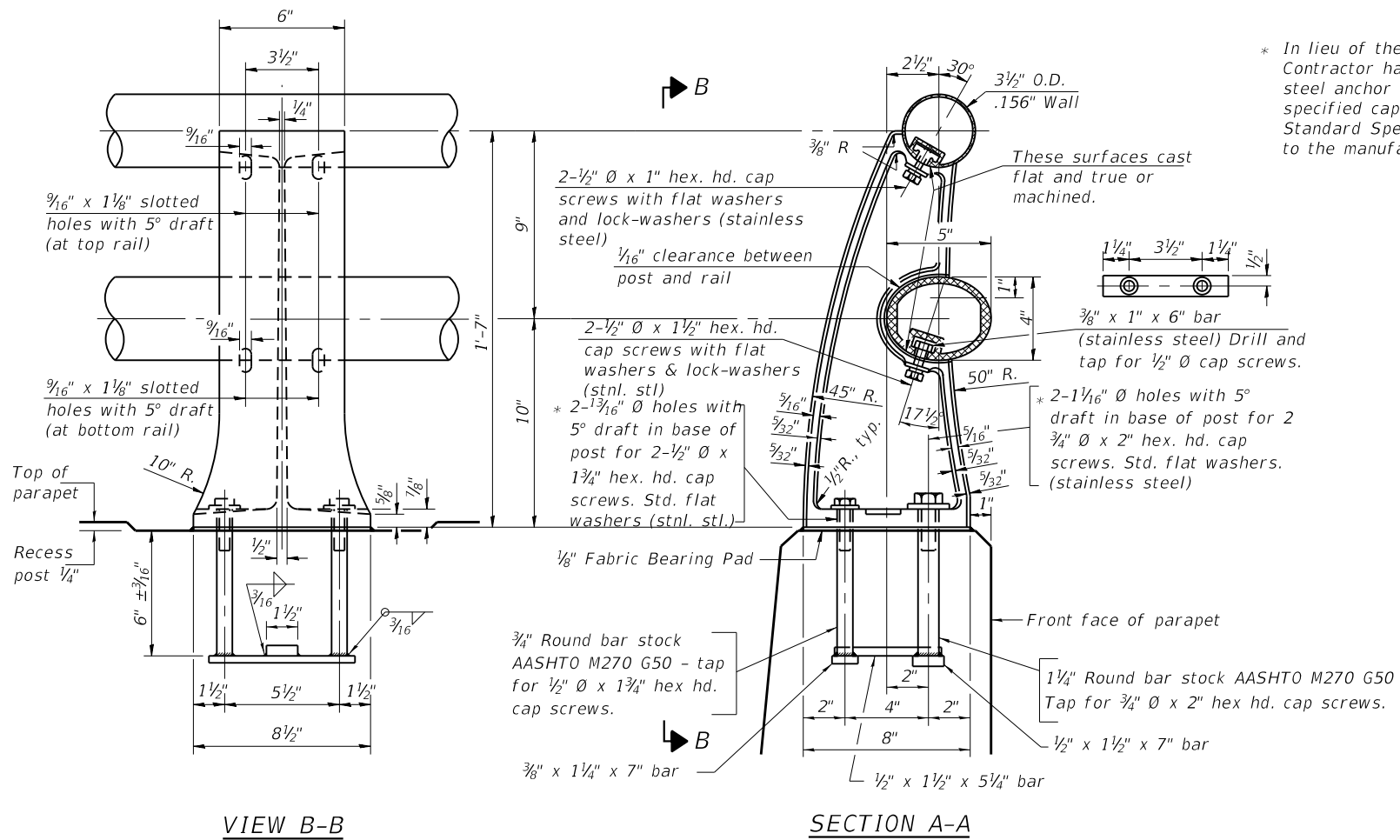
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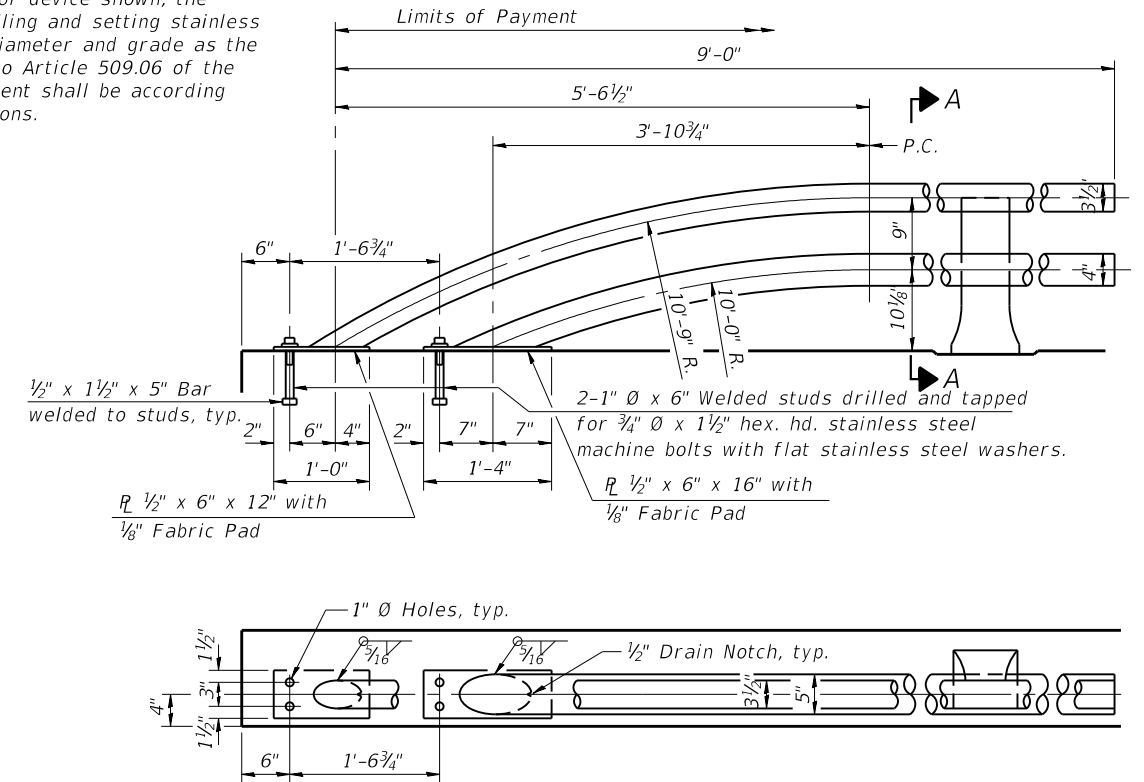
**PARAPET AND RAILING REPAIRS
 STRUCTURE NO. 016-0870**

SHEET S-08 OF S-18 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1467	2020-149-BR	COOK	37	20
CONTRACT NO. 62M22				
ILLINOIS FED. AID PROJECT				

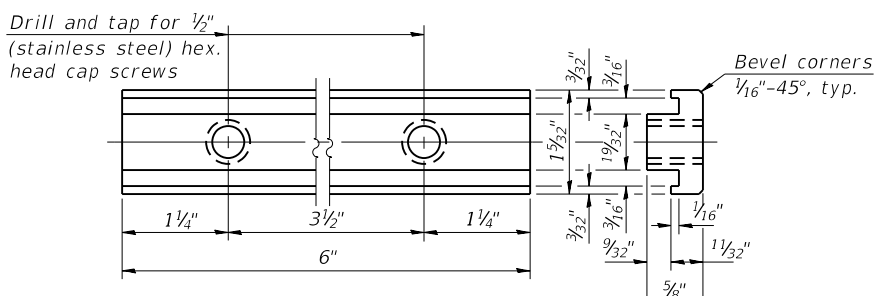


* In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting stainless steel anchor rods of the same diameter and grade as the specified cap screws according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.

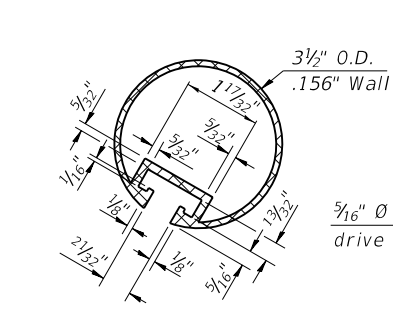


RAIL TERMINAL SECTION

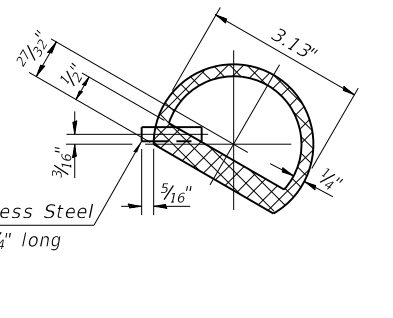
Note: The end rail post shall be set back as required for the terminal rail section.



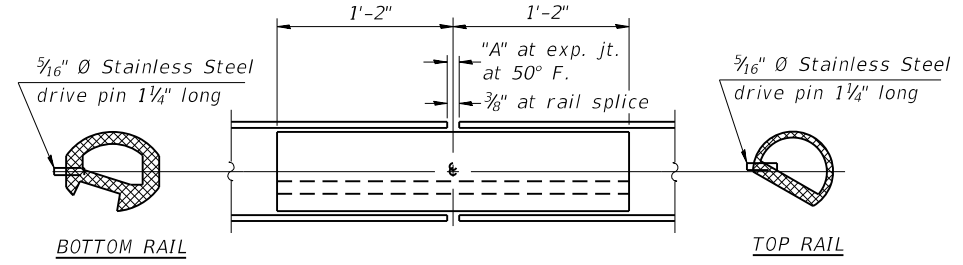
RAIL POST CLAMP BAR



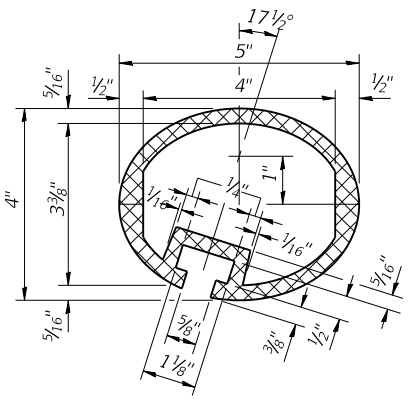
SECTION THRU TOP RAIL



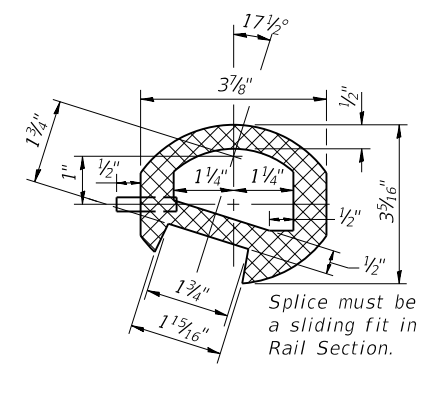
SECTION THRU SPLICE



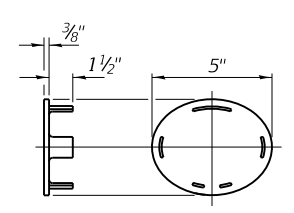
RAIL SPLICE



SEC. THRU ELLIPTICAL RAIL SECTION

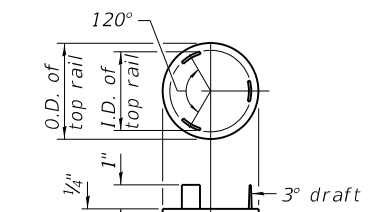


SEC. THRU SPLICE



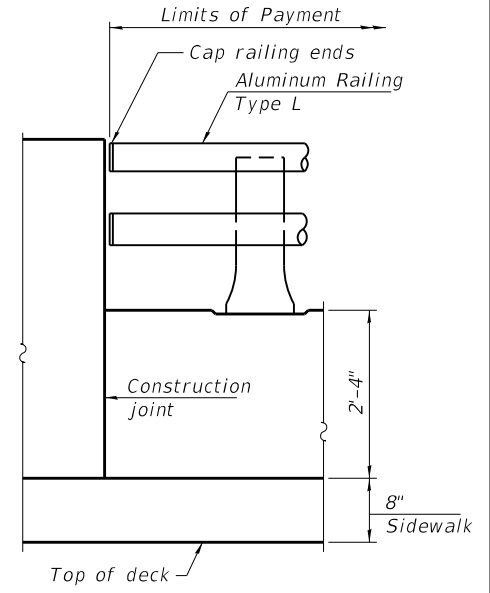
CAST END CAP

For bottom rail DRIVE FIT TYPE



CAST END CAP

For top rail



RAIL END TREATMENT FOR TYPE 5 AND 6 TERMINAL

BILL OF MATERIAL

Item	Unit	Quantity
Aluminum Railing, Type L	Foot	187

Notes:
 All Posts shall be normal to parapet.
 All joints in rail shall be spliced per detail.
 All exposed rail ends shall be capped per detail.
 Provide 1-1/8" and 2-1/16" Aluminum Shims for 25% of the Posts. Rail elements shall be parallel to Grade-high spots will be ground and low spots shimmed.
 See sheet of for rail post spacing.

T	"A"
≤ 4"	2 1/2"
> 4" ≤ 6 1/2"	3 3/4"
> 6 1/2" ≤ 9"	5"
> 9" ≤ 13"	7"

T = Total movement at expansion joint as shown on the design plans.

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R-20 8-11-2017 (7'-0" to 10'-0" Post spacing)



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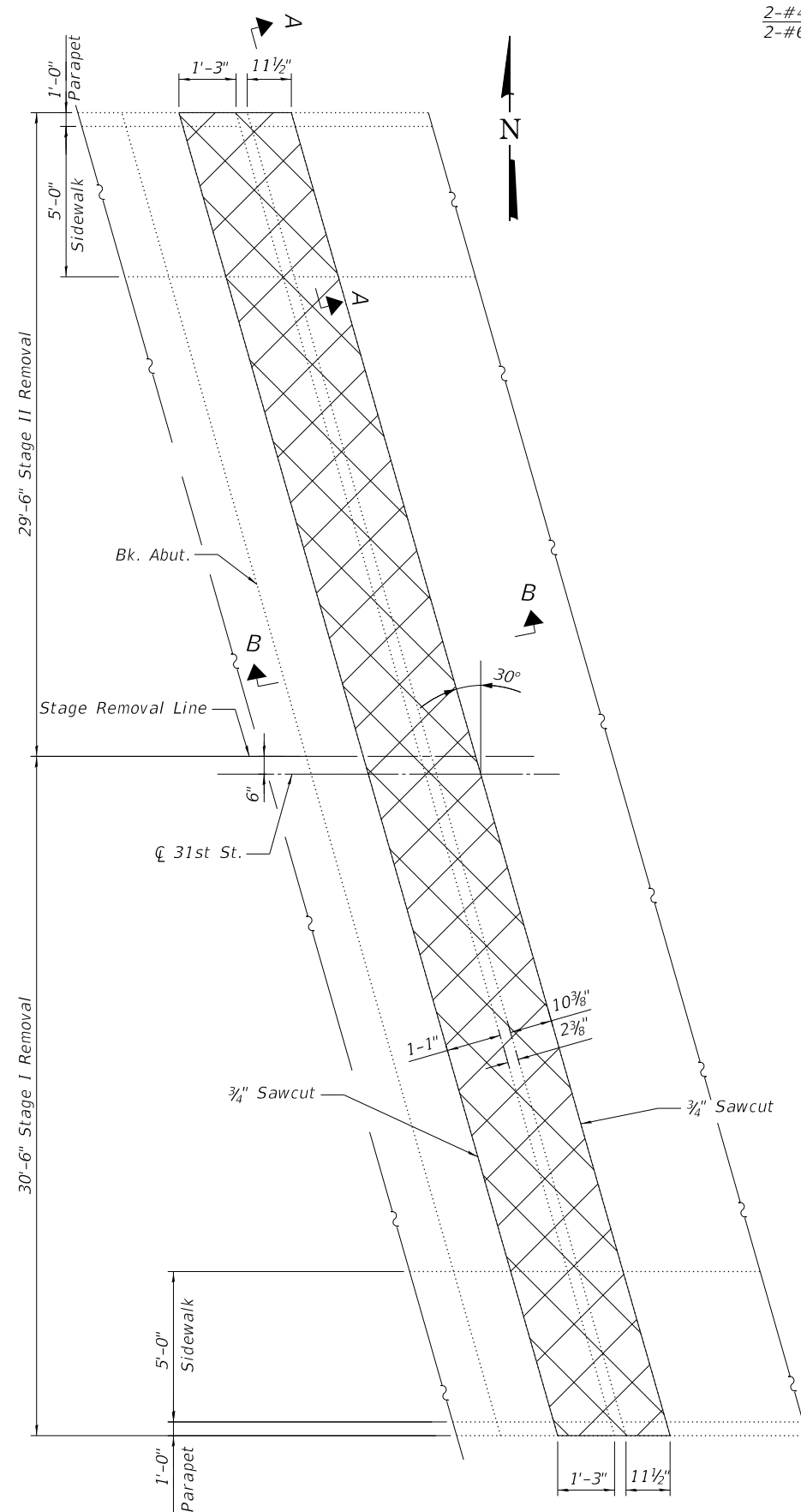
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

ALUMINUM RAILING, TYPE L
 STRUCTURE NO. 016-0870

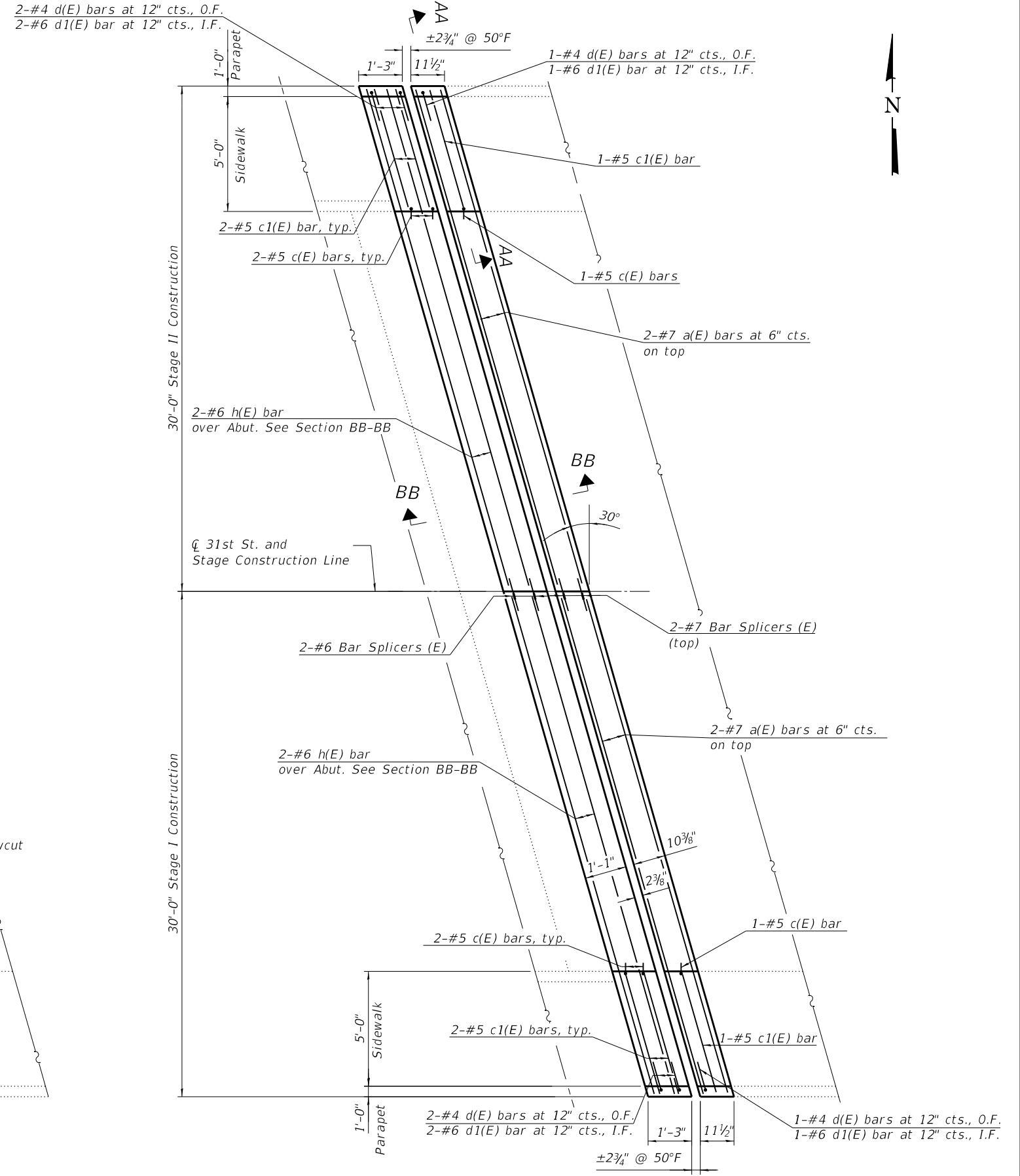
SHEET S-09 OF S-18 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1467	2020-149-BR	COOK	37	21
CONTRACT NO. 62M22				
ILLINOIS FED. AID PROJECT				

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WEST ABUTMENT JOINT REMOVAL PLAN



WEST ABUTMENT JOINT RECONSTRUCTION PLAN

LEGEND

Concrete Removal

NOTES:

- Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.
- The Contractor shall exercise extreme caution during Concrete Removal to avoid damaging the existing PPC I-beams, threaded dowel rods, and other existing structural or roadway elements to remain. Any damage to the existing PPC I-beams, threaded dowel rods, and/or other existing structural or roadway elements to remain caused by the Contractor in the performance of his/her work shall be repaired by the Contractor, to the satisfaction of the Engineer, at no cost to the Department.
- Section Details and Bill of Material displayed on sheet S-12.



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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

WEST ABUT. EXPANSION JOINT REMOVAL AND RECONSTRUCTION
 STRUCTURE NO. 016-0870

SHEET S-10 OF S-18 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 62M22				
ILLINOIS FED. AID PROJECT				

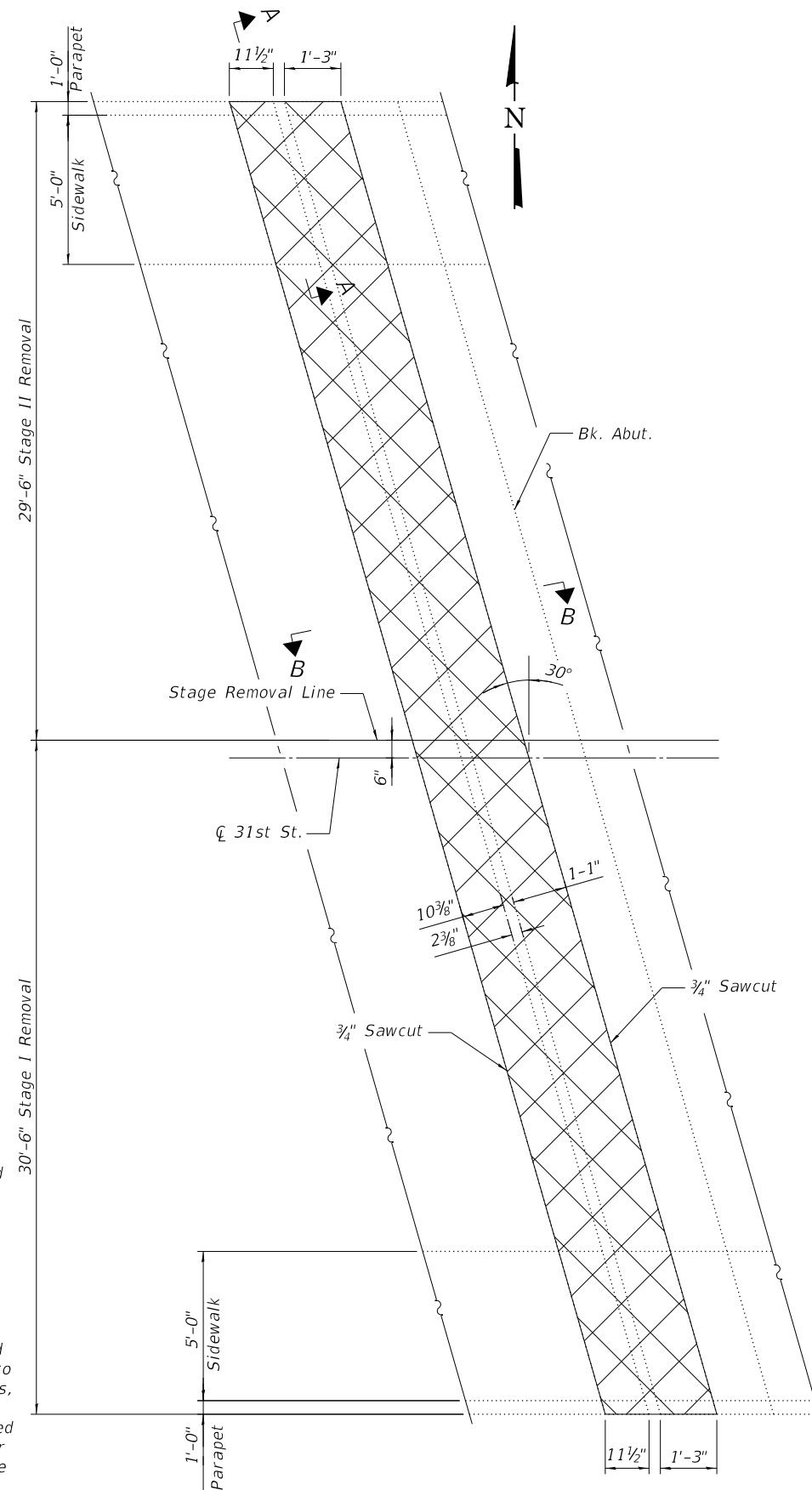
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LEGEND

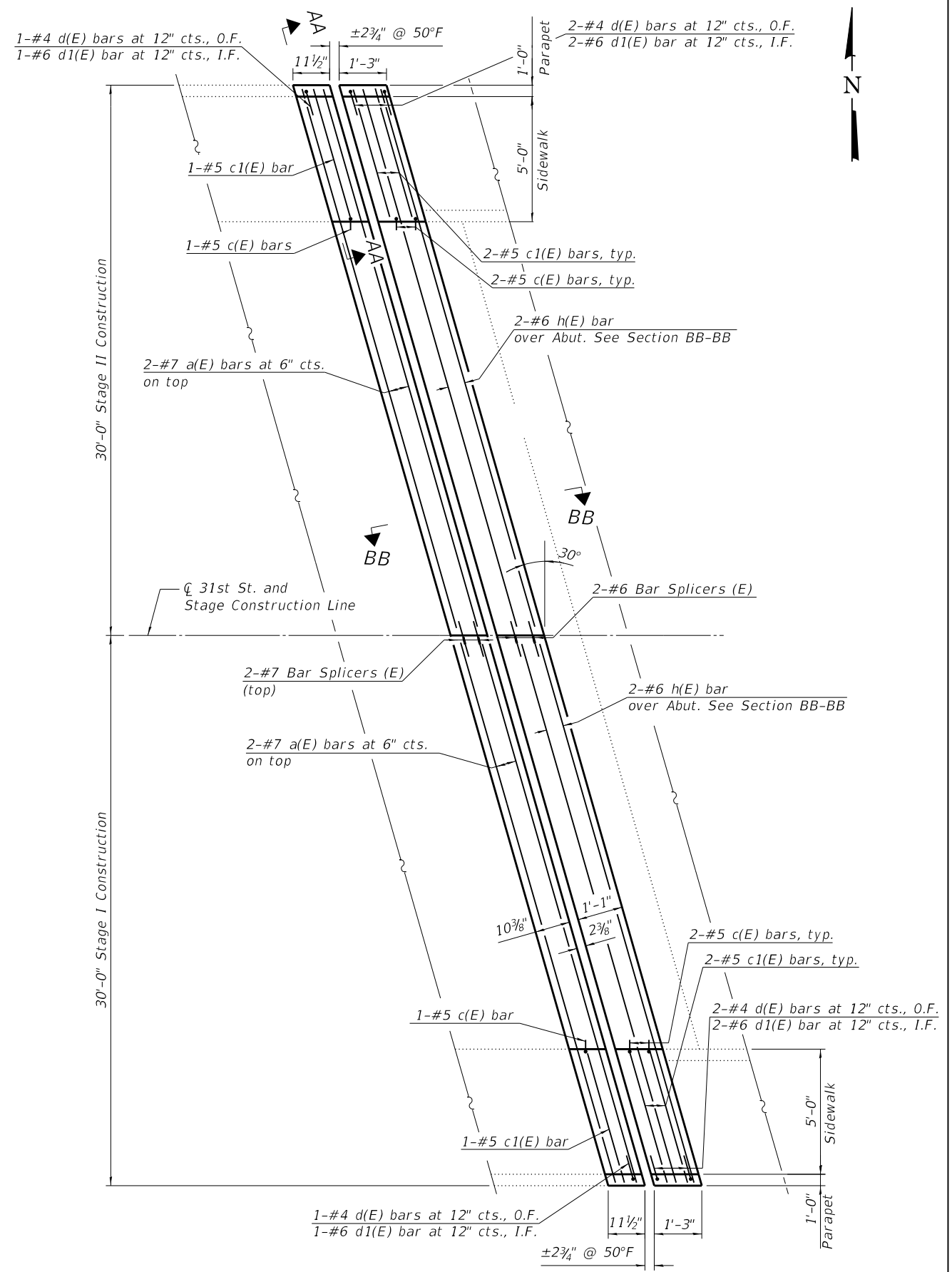
 Concrete Removal

NOTES:

- Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.
- The Contractor shall exercise extreme caution during Concrete Removal to avoid damaging the existing PPC I-beams, threaded dowel rods, and other existing structural or roadway elements to remain. Any damage to the existing PPC I-beams, threaded dowel rods, and/or other existing structural or roadway elements to remain caused by the Contractor in the performance of his/her work shall be repaired by the Contractor, to the satisfaction of the Engineer, at no cost to the Department.
- Section Details and Bill of Material displayed on sheet S-12.



EAST ABUTMENT JOINT REMOVAL PLAN



EAST ABUTMENT JOINT RECONSTRUCTION PLAN



USER NAME = JENT
 DESIGNED - IH
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 PLOT SCALE =
 DRAWN - IH
 PLOT DATE = 9/25/2020
 CHECKED - JMT

DESIGNED - IH
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 DRAWN - IH
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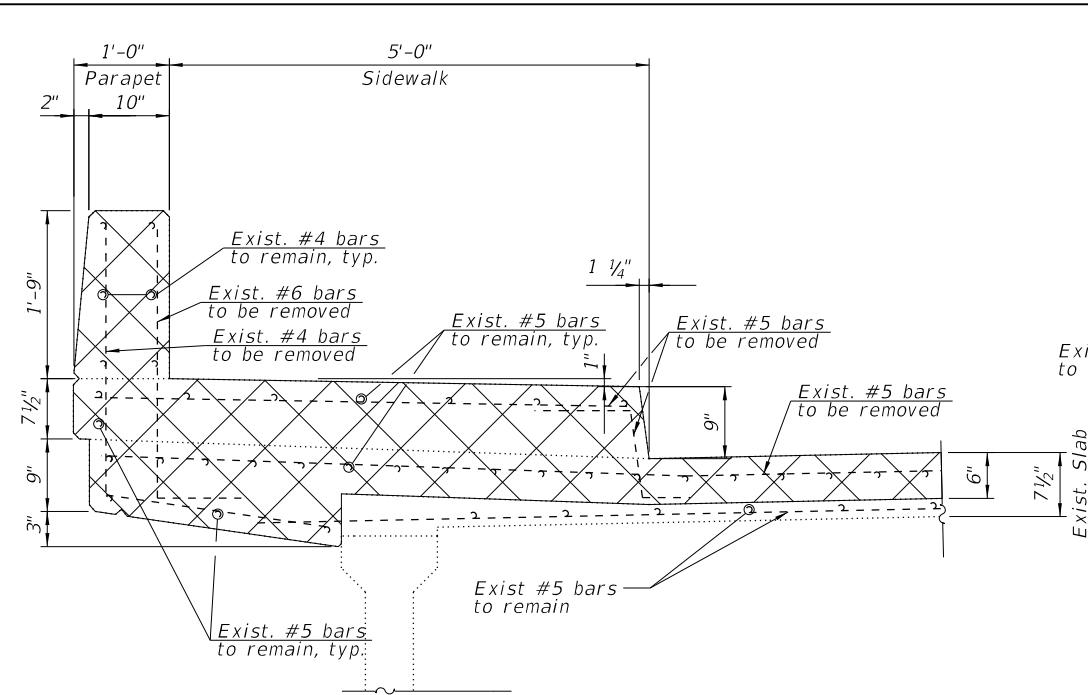
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**EAST ABUT. EXPANSION JOINT REMOVAL AND RECONSTRUCTION
 STRUCTURE NO. 016-0870**

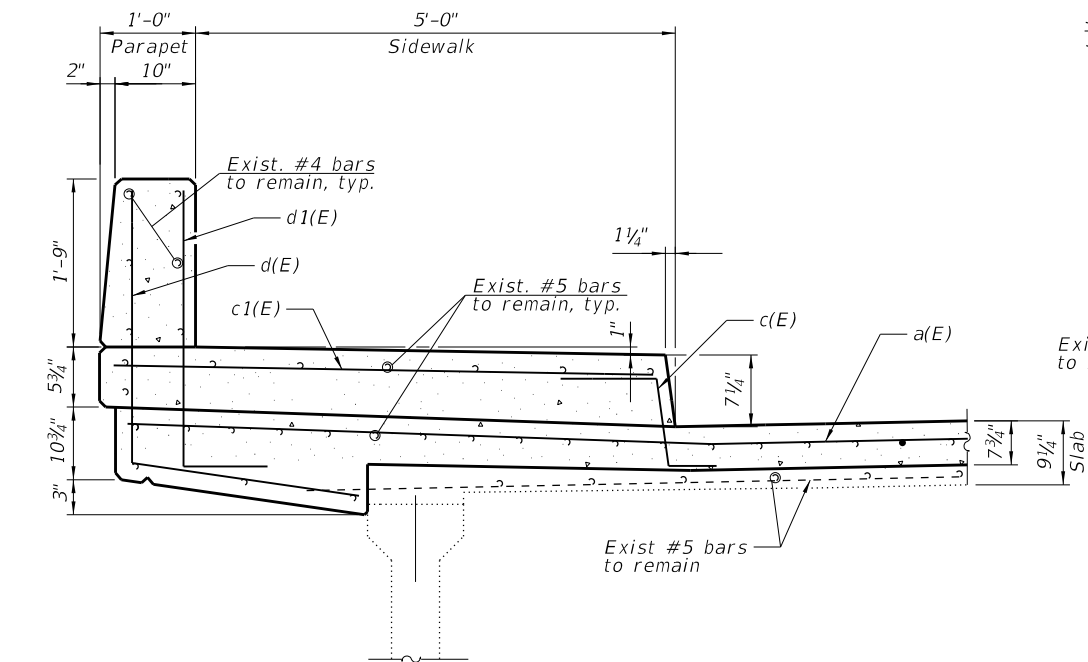
SHEET S-11 OF S-18 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1467	2020-149-BR	COOK	37	23
CONTRACT NO. 62M22				
ILLINOIS FED. AID PROJECT				

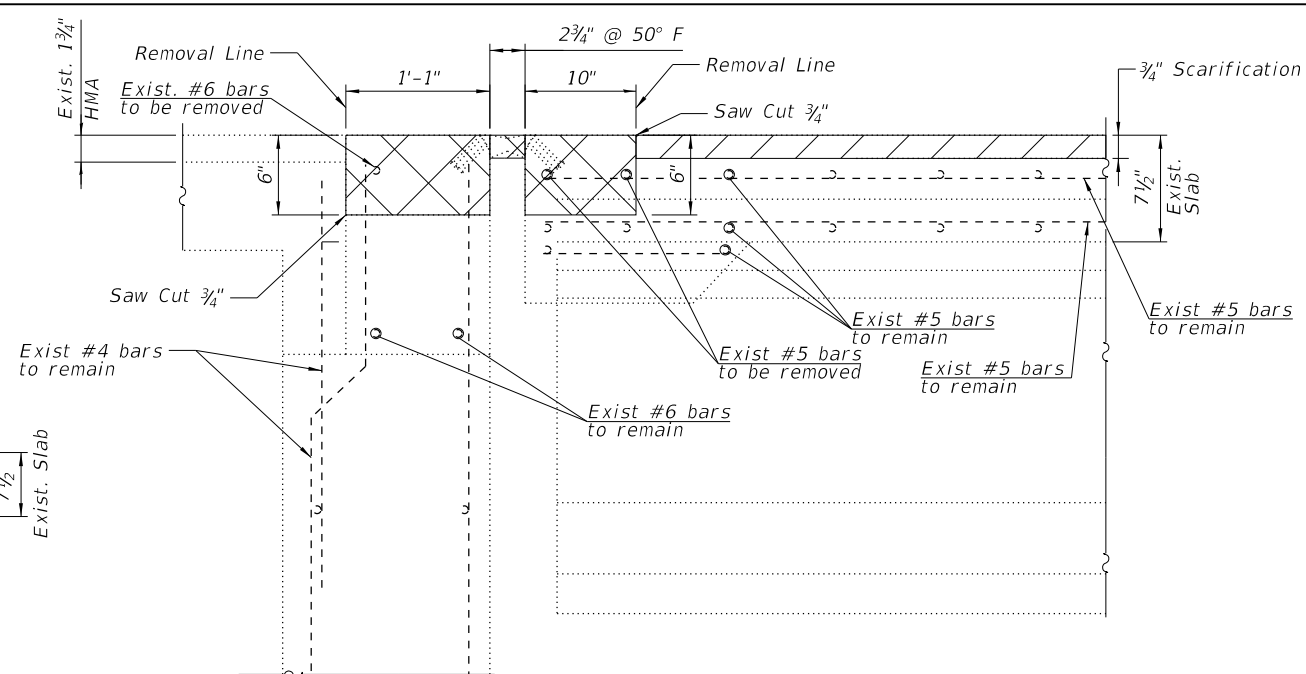
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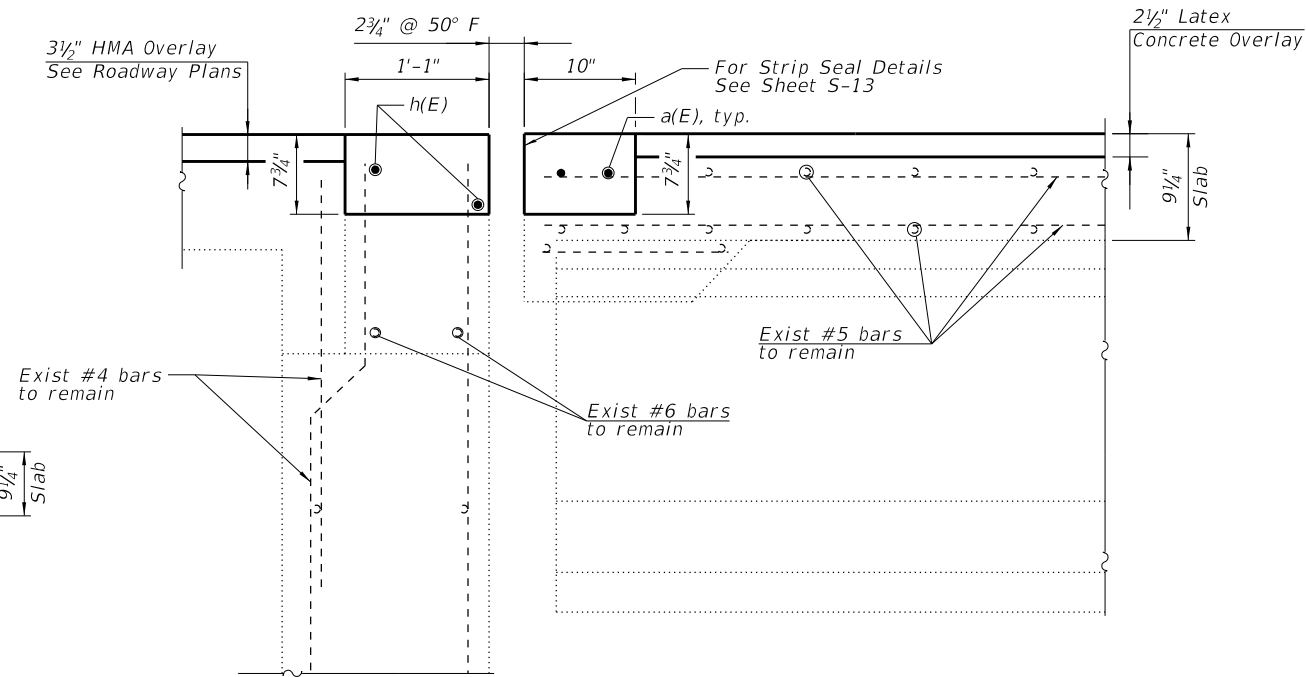
SECTION A-A
 (Dimensions 1 to Q)



SECTION AA-AA
 (Dimensions 1 to Q)



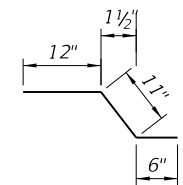
SECTION B-B
 (Dimensions 1 to Q)



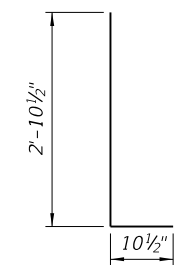
SECTION BB-BB
 (Dimensions 1 to Q)

BILL OF MATERIAL
BOTH ABUTMENTS

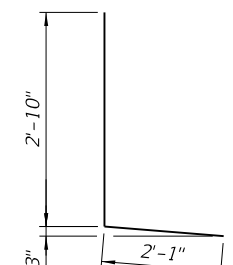
Bar	No.	Size	Length	Shape
a(E)	8	#7	34'-3"	—
c(E)	12	#5	2'-5"	⌒
c1(E)	12	#5	5'-8"	—
d(E)	12	#4	4'-11"	⌒
d1(E)	12	#6	3'-9"	⌒
h(E)	8	#6	34'-3"	—
Concrete Removal			Cu. Yd.	7.3
Reinforcement Bars, Epoxy Coated			Pound	1180
Concrete Superstructure			Cu. Yd.	8.4



BAR c(E)

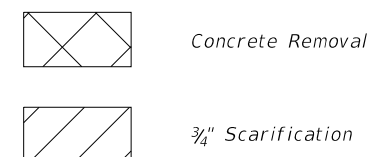


BAR d1(E)



BAR d(E)

LEGEND:



NOTES:

- For preformed joint strip seal details, see sheets S-13 thru S-15.
- For Bar Splicer Assembly details, see sheet S-18.
- 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.
- Removal of Exist. Expansion Joint will not be paid for separately but will be included in the cost of Concrete Removal.
- Studs in existing Preformed Joint Seal may need to be cut when concrete is removed. The cost will be included in the cost of Concrete Removal.



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PLOT SCALE =	CHECKED - SPS	REVISED -
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	CHECKED - JMT	REVISED -

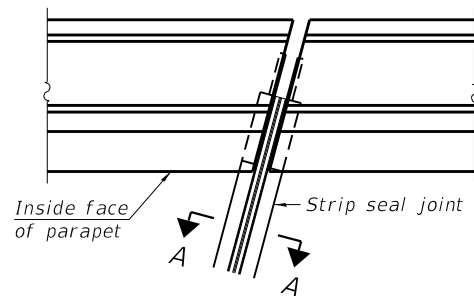
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ABUT. EXPANSION JOINT DETAILS
STRUCTURE NO. 016-0870

SHEET S-12 OF S-18 SHEETS

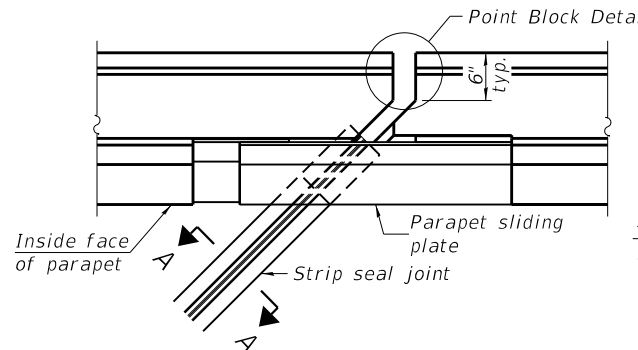
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1467	2020-149-BR	COOK	37	24
CONTRACT NO. 62M22				
ILLINOIS FED. AID PROJECT				

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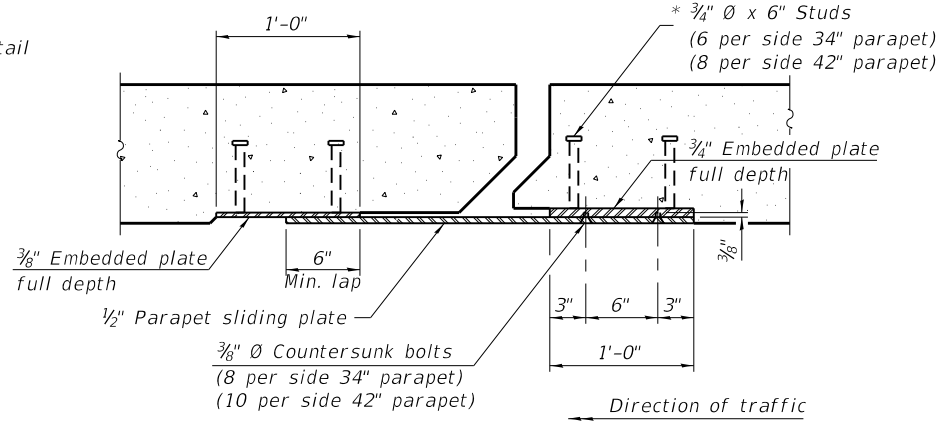


FOR SKEWS $\leq 30^\circ$

PLAN AT PARAPET

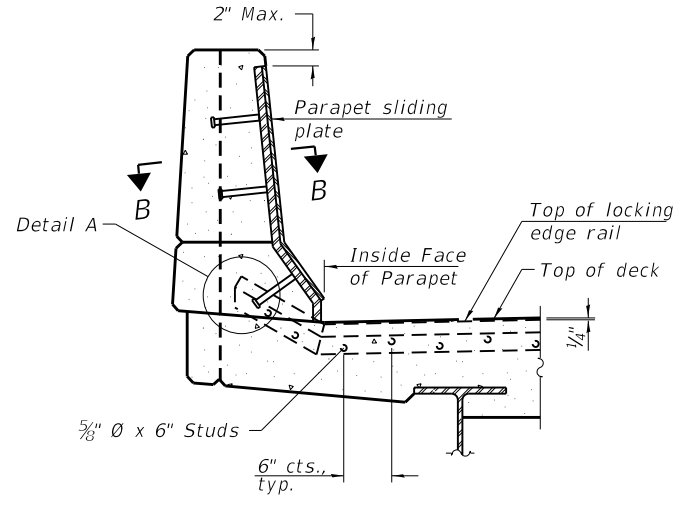


FOR SKEWS $> 30^\circ$



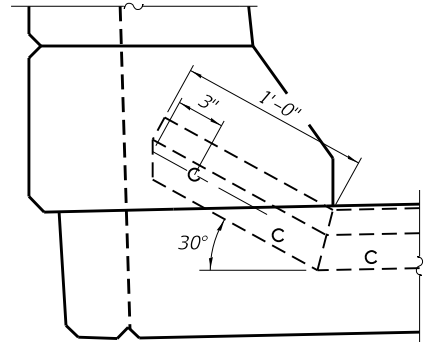
SECTION B-B

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.
 The top surface of sidewalk sliding plates shall have a raised pattern according to ASTM A786.
 Cost of parapet sliding plates, sidewalk sliding plates, embedded plates, anchorage studs, and expansion anchors included with Preformed Joint Strip Seal.
 34" F-shape barrier shown, 42" F-shape similar as noted.
 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.

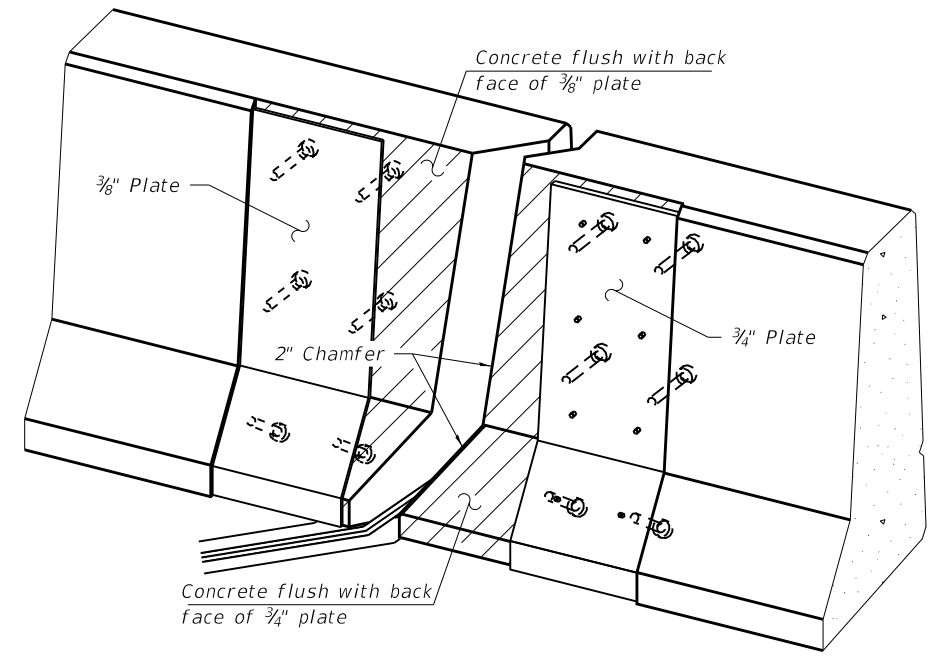


ELEVATION AT PARAPET

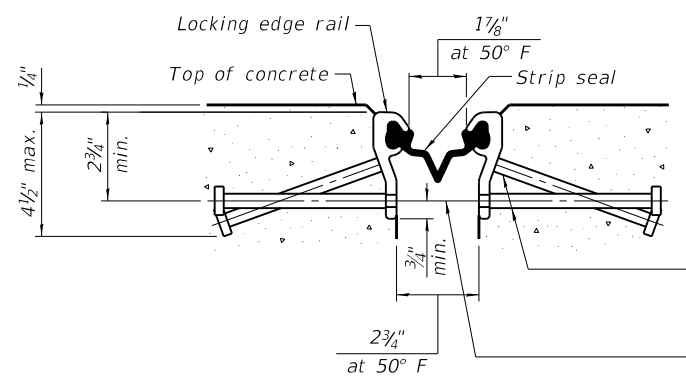
(Skews $> 30^\circ$ shown. Skews $\leq 30^\circ$ similar except as shown in plan view.)



DETAIL A



TRIMETRIC VIEW
 (Showing embedded plates only)

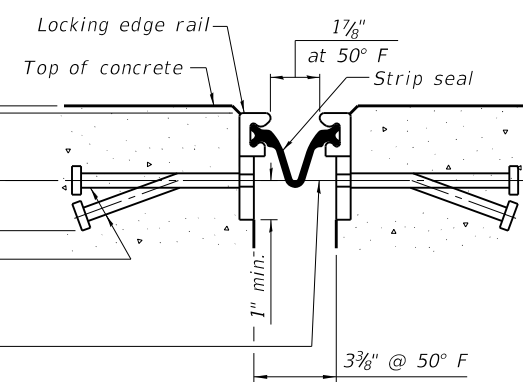


SHOWING ROLLED RAIL JOINT

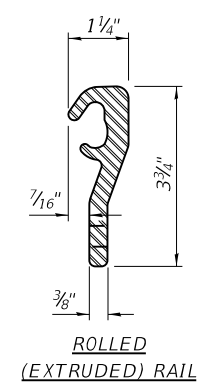
* 5/8" ϕ x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)
 3/8" ϕ threaded rods in 7/16" ϕ holes at ± 4 -0" cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates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

SECTION A-A

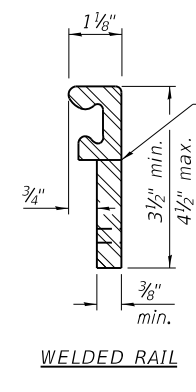
* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.



SHOWING WELDED RAIL JOINT



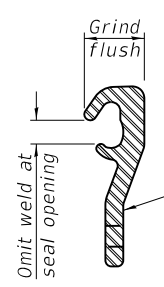
ROLLED (EXTRUDED) RAIL



WELDED RAIL

LOCKING EDGE RAILS

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



LOCKING EDGE RAIL SPLICE

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

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	139

EJ-SS-S

8-11-17

(Sheet 1 of 3)



USER NAME =	JENT
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PLOT DATE =	9/25/2020

DESIGNED -	IH
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DRAWN -	IH
CHECKED -	JMT

REVISED -	
REVISED -	
REVISED -	
REVISED -	

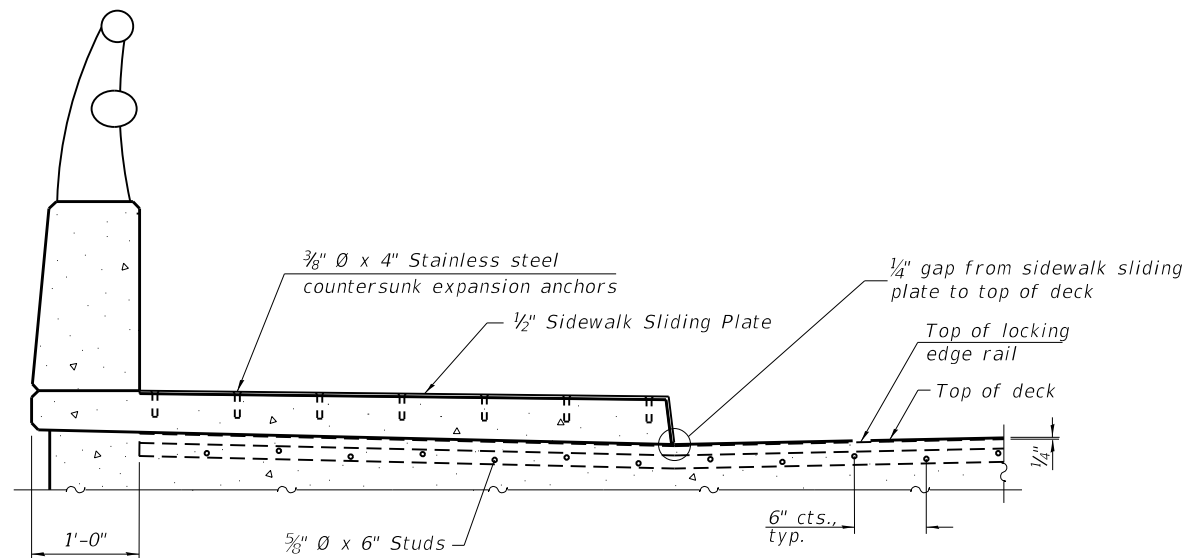
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL - SIDEWALK
 STRUCTURE NO. 016-0870

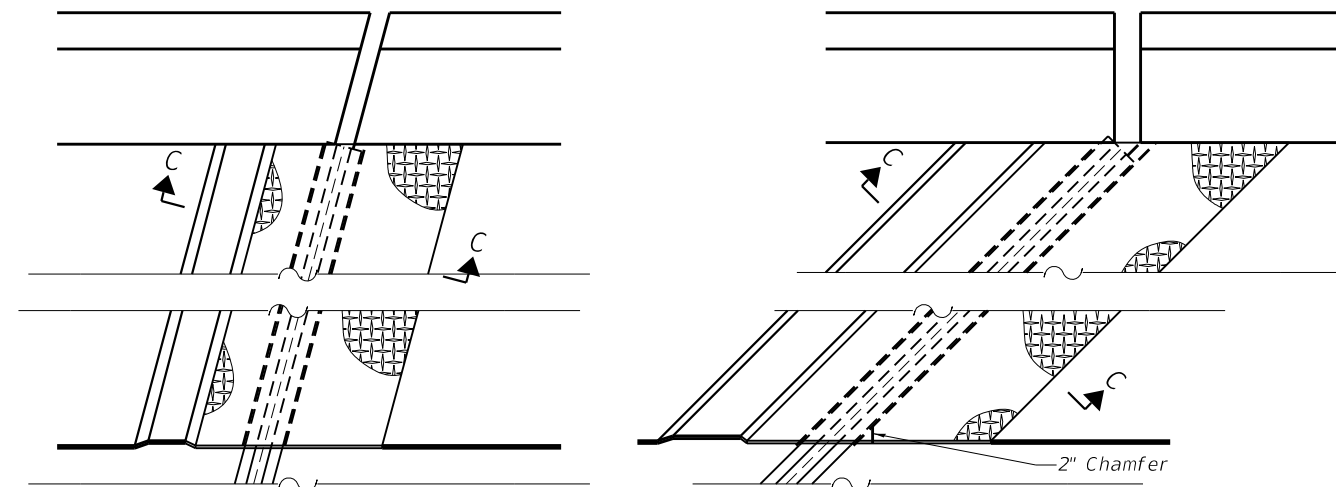
SHEET S-13 OF S-18 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1467	2020-149-BR	COOK	37	25
CONTRACT NO. 62M22				

ILLINOIS FED. AID PROJECT



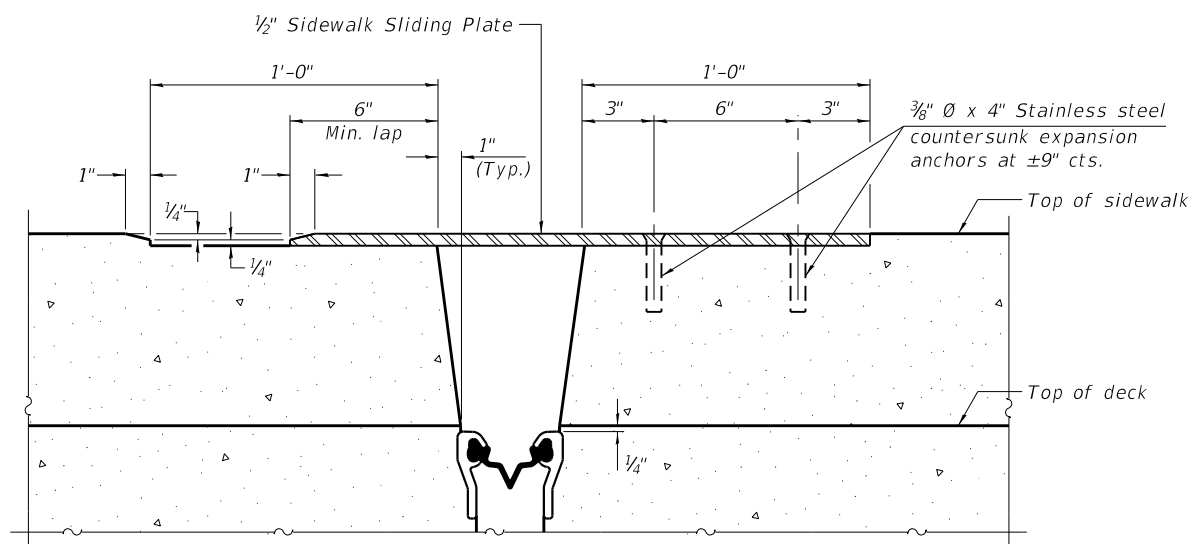
ELEVATION AT RAISED SIDEWALK



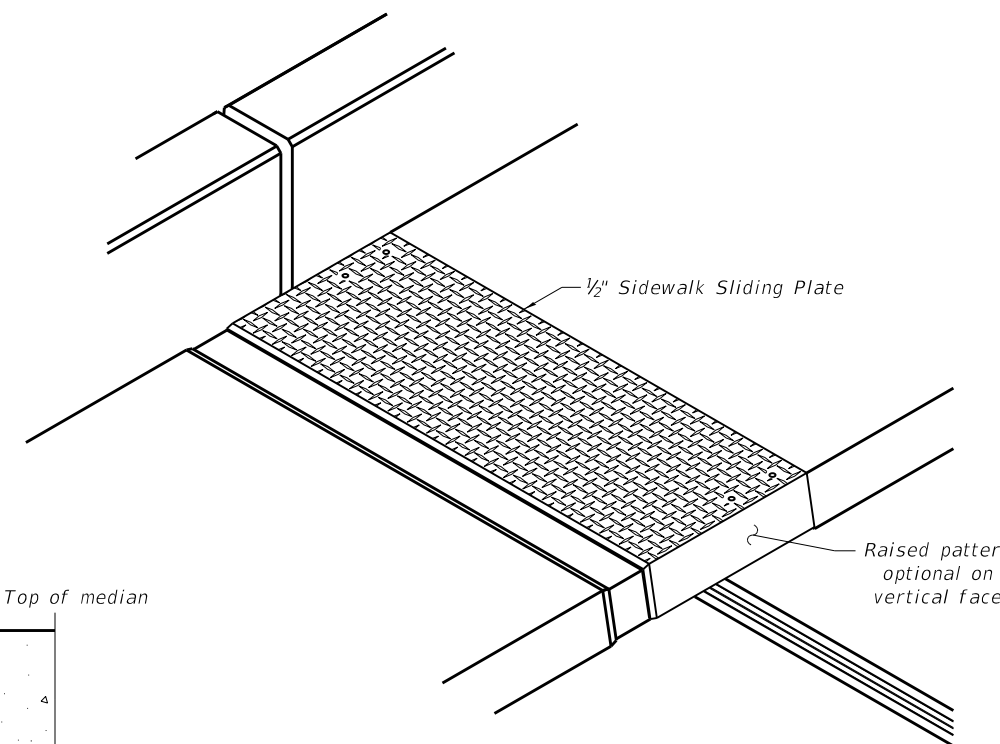
(FOR SKEWS $\leq 30^\circ$)

(FOR SKEWS $> 30^\circ$)

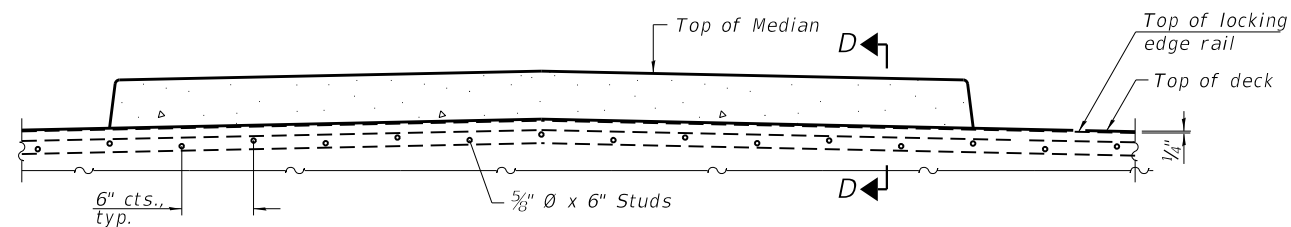
PLAN AT RAISED SIDEWALK



SECTION C-C

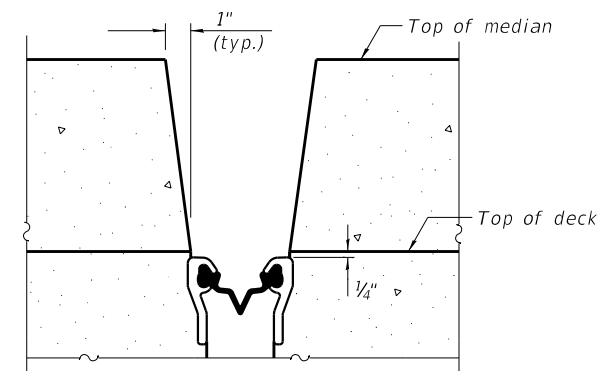


TRIMETRIC VIEW



ELEVATION AT MEDIAN

For skews $> 30^\circ$, chamfer acute corners 2" similar to sidewalk.



SECTION D-D
(at Rt. L's)

(Sheet 2 of 3)

MODEL: Default
FILE NAME: Q:\Engineering\Live\Projects\13040_IDOT DUR HB\Work Order 29\CADD\CADD Sheets\Structural\0160870-02M22-014-joint - 2.dgn

EJ-SS-S

8-11-17



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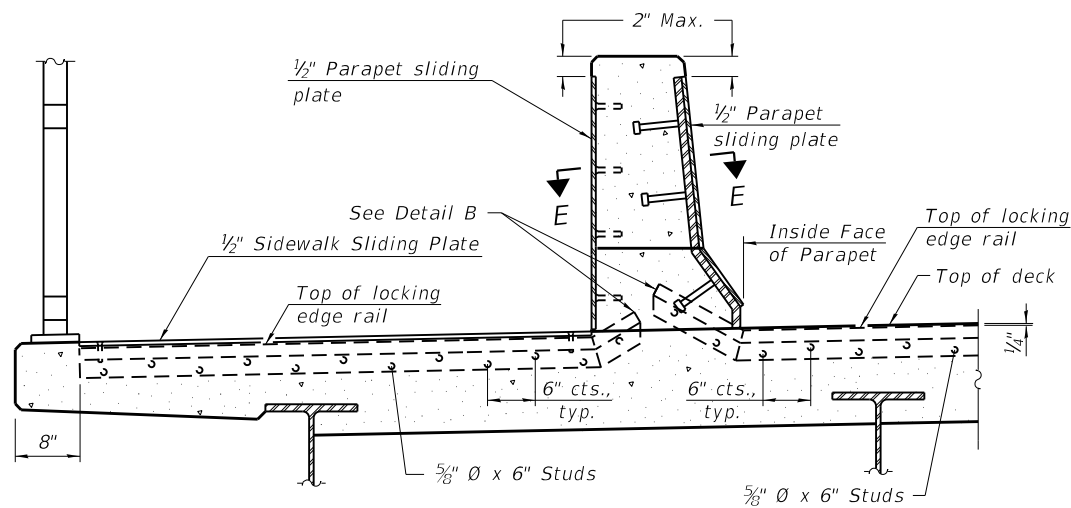
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PREFORMED JOINT STRIP SEAL - SIDEWALK
STRUCTURE NO. 016-0870**

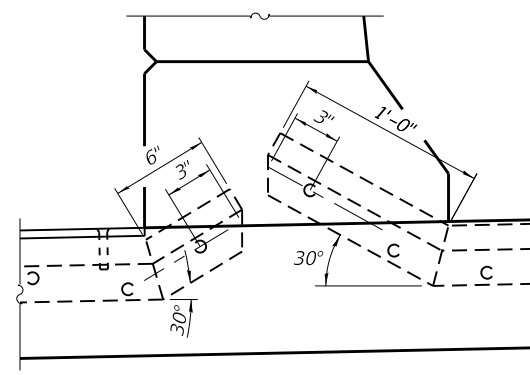
SHEET S-14 OF S-18 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 62M22				
ILLINOIS FED. AID PROJECT				

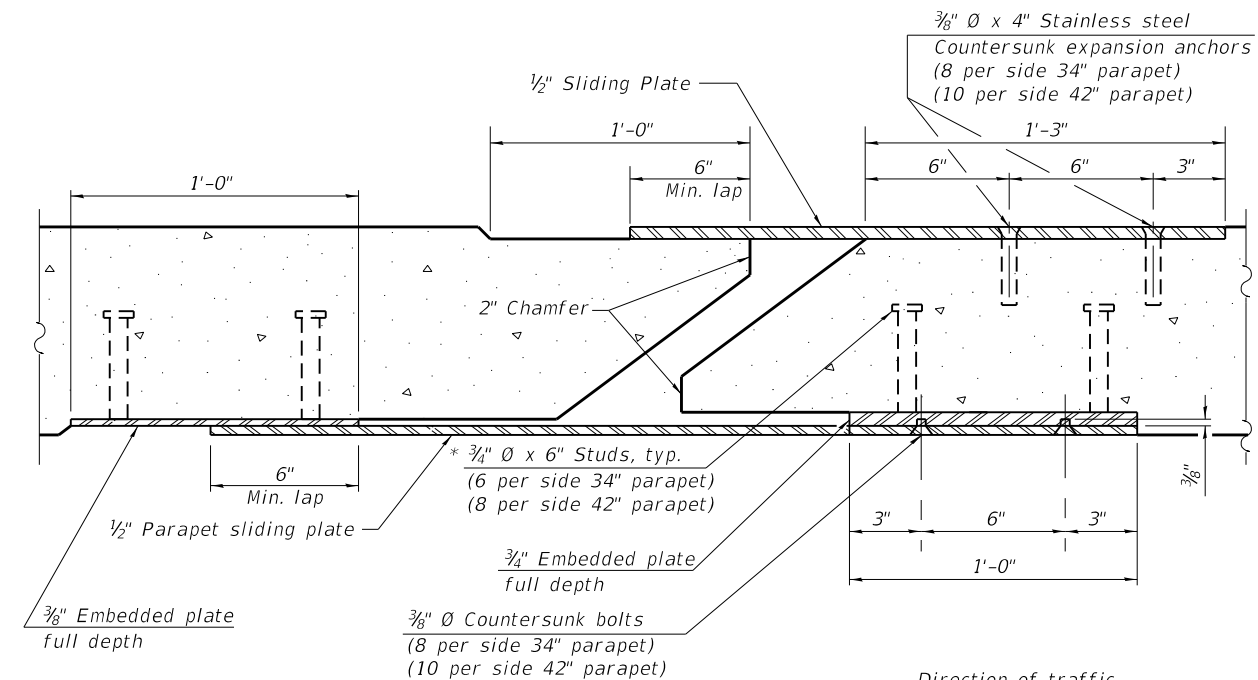
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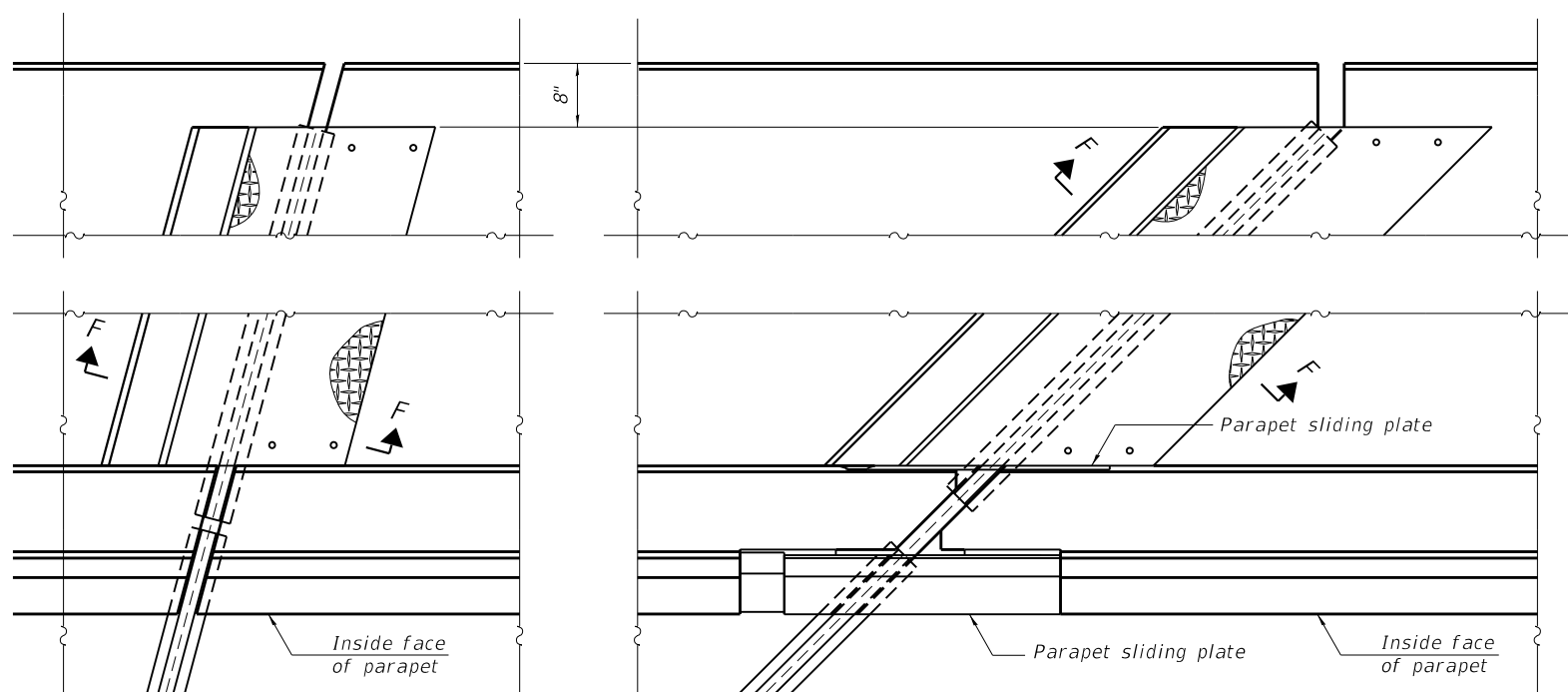
ELEVATION AT DECK LEVEL SIDEWALK
 (Skews > 30° shown. Skews ≤ 30° similar except as shown in plan view.)



DETAIL B



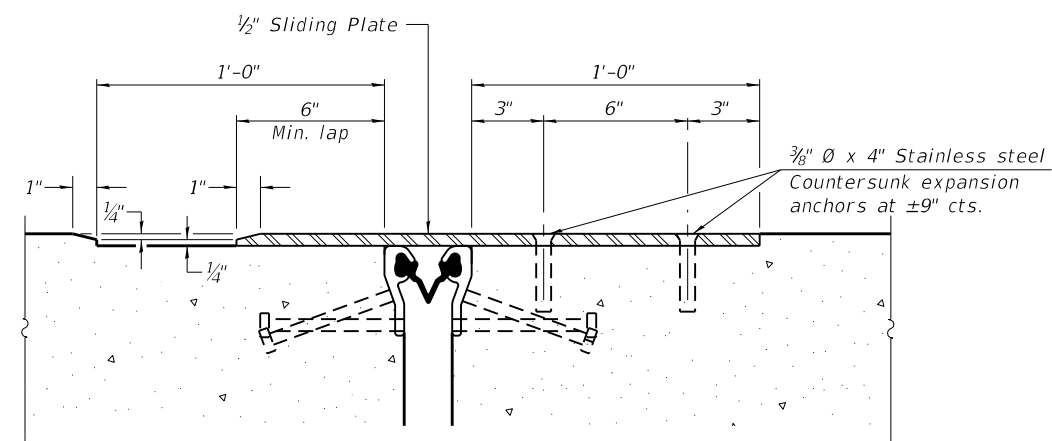
SECTION E-E



(FOR SKEWS ≤ 30°)

(FOR SKEWS > 30°)

PLAN AT DECK LEVEL SIDEWALK



SECTION F-F

EJ-SS-S

8-11-17

(Sheet 3 of 3)

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

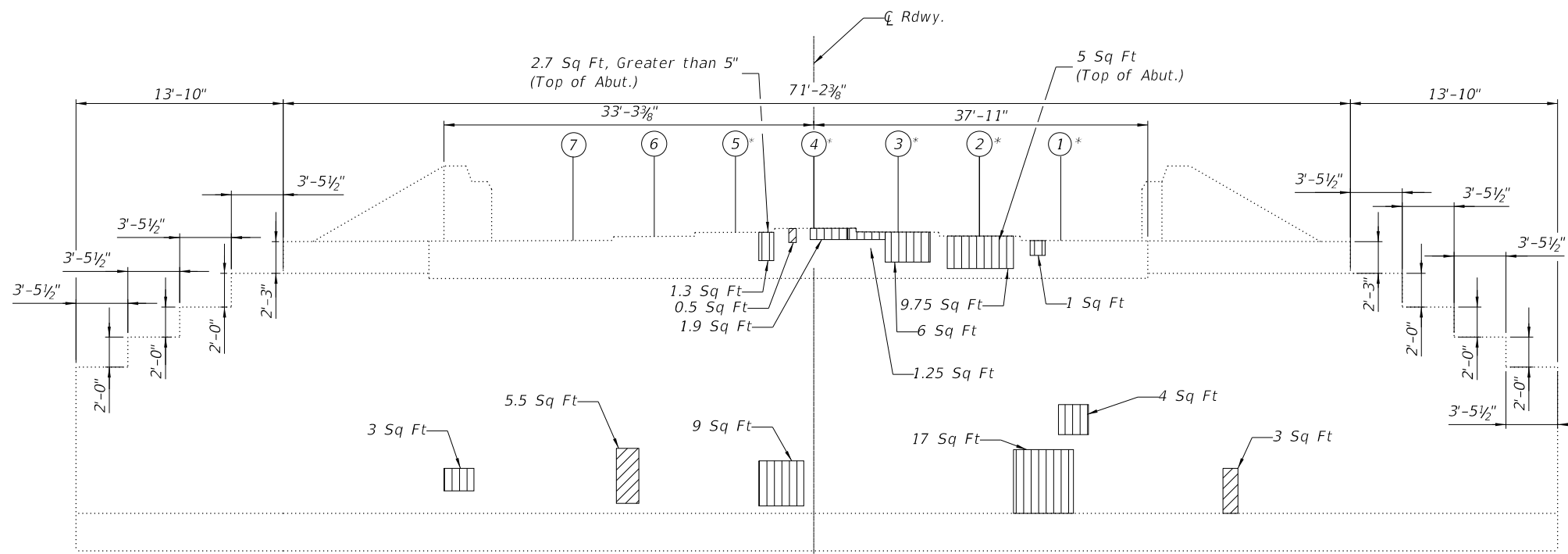
PREFORMED JOINT STRIP SEAL - SIDEWALK
 STRUCTURE NO. 016-0870

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 62M22				

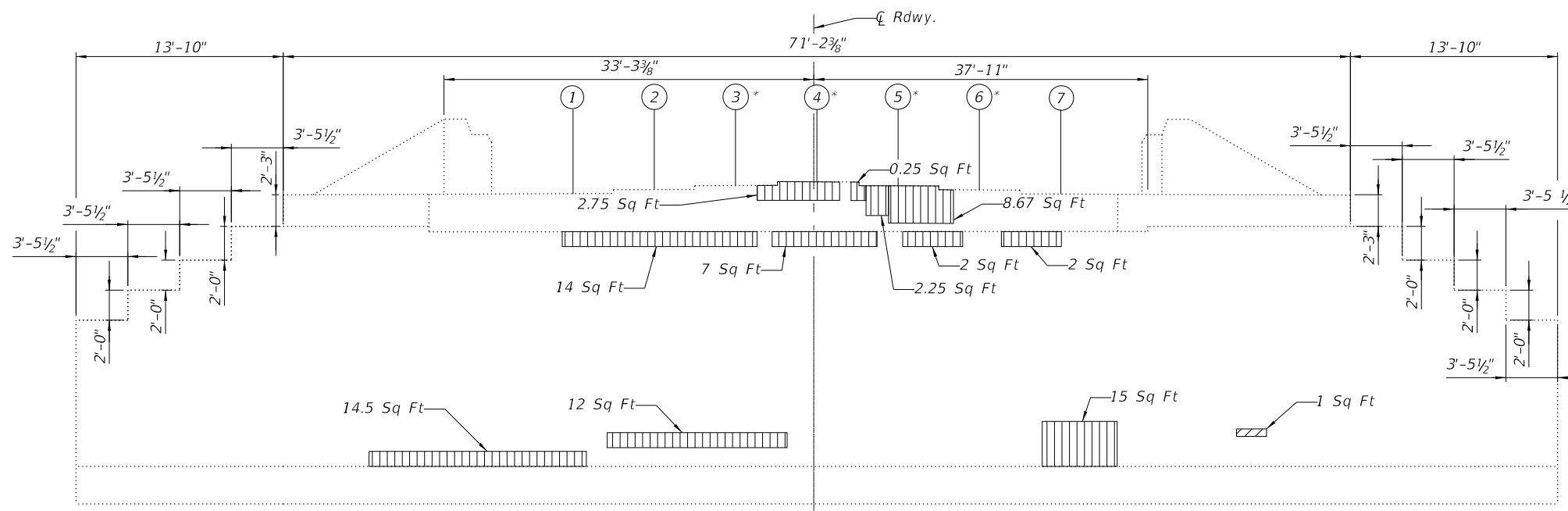
SHEET S-15 OF S-18 SHEETS

ILLINOIS FED. AID PROJECT





ELEVATION - WEST ABUTMENT



ELEVATION - EAST ABUTMENT

BEAM REACTION TABLE

Abuts.	Load (kips)
DL	60.2
LL	46.1
IM	12.3
Total	118.6

Reactions shown in table are per girder and are Service Loads.

* Temporary Shoring and Cribbing shall be performed at this bearing location

NOTES:

- Quantities and limits shown are estimated for bidding purposes only. The actual areas to be repaired, and the type(s) of repairs to be used, will be determined by the Engineer in the field at the time of construction.
- Prior to removal of concrete, the existing beams over the repair area shall be temporarily supported (See Beam Reaction Table on this sheet and Special Provision for Temporary Shoring and Cribbing).

LEGEND

- Structural Repair of Concrete (Depth Equal to or Less Than 5")
- Structural Repair of Concrete (Depth Greater Than 5")

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Temporary Shoring and Cribbing	Each	9
Structural Repair of Concrete (Depth Equal to or Less Than 5")	Sq Ft	140
Structural Repair of Concrete (Depth Greater Than 5")	Sq Ft	13

MODEL: Default
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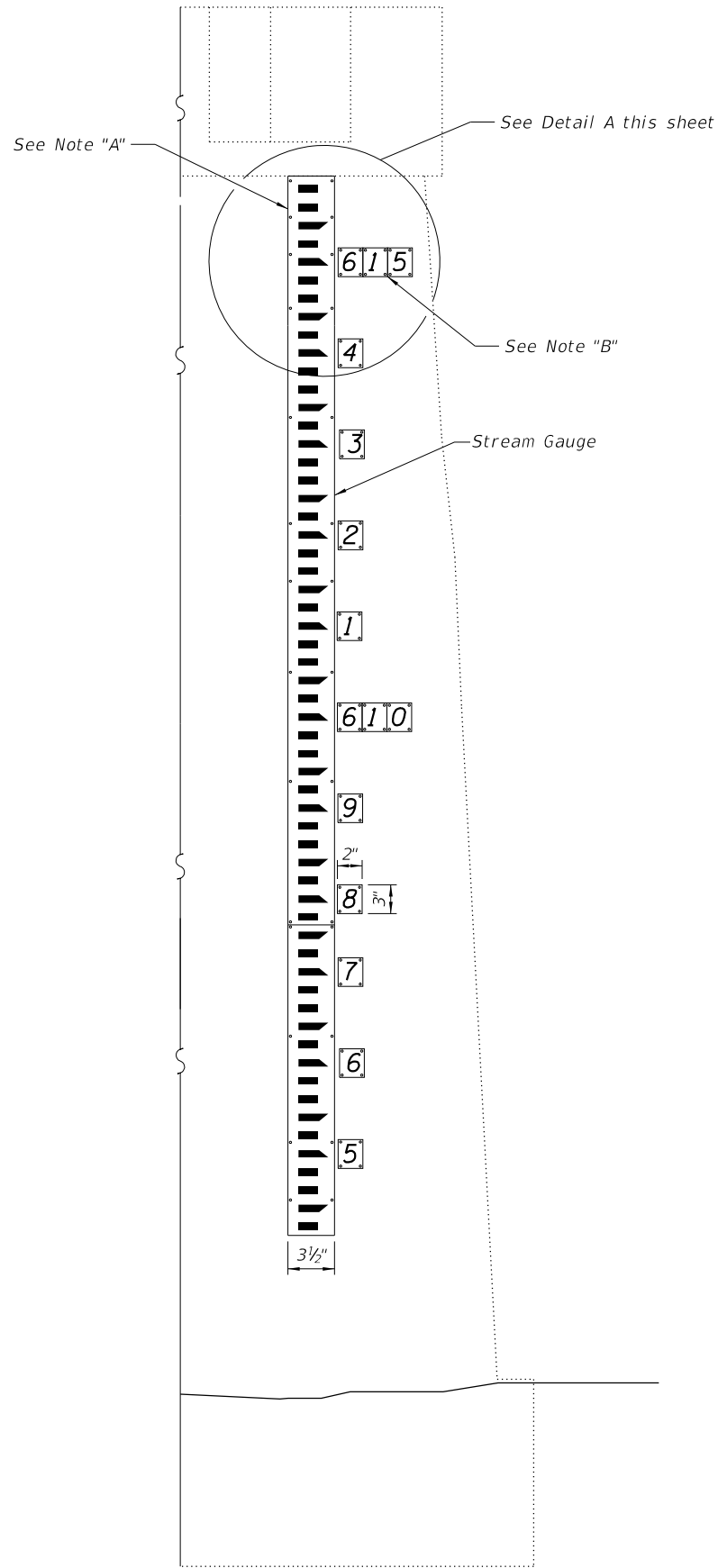
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WEST AND EAST ABUTMENT REPAIRS
STRUCTURE NO. 016-0870

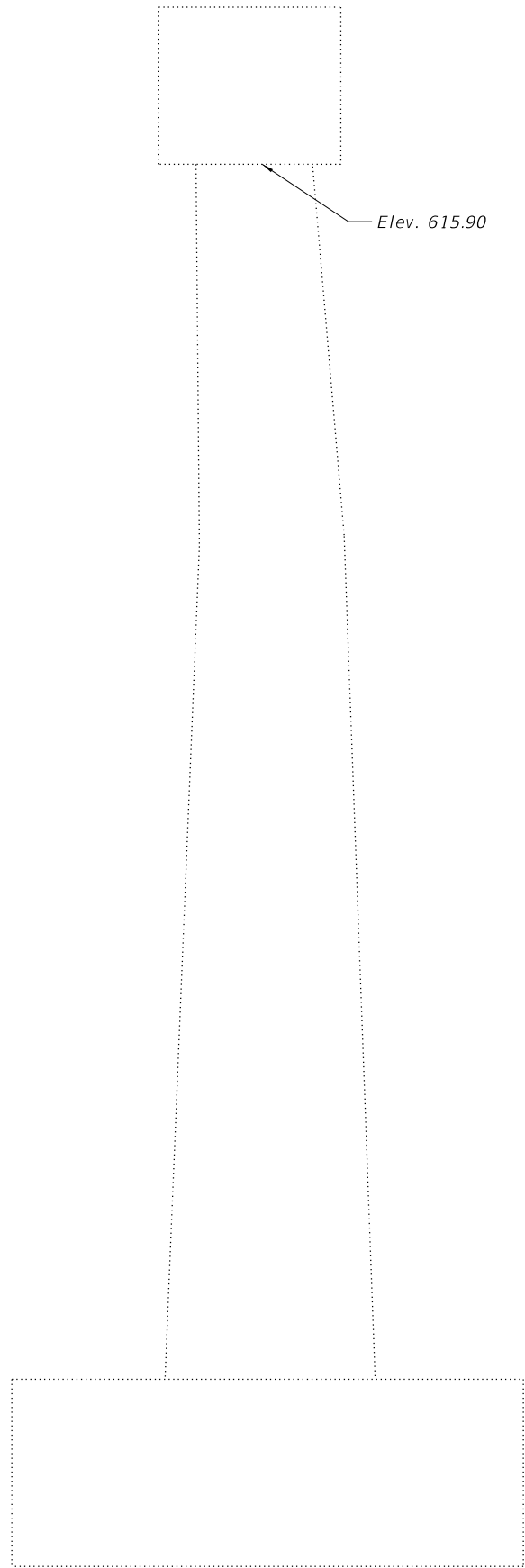
SHEET S-16 OF S-18 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1467	2020-149-BR	COOK	37	28
CONTRACT NO. 62M22				
ILLINOIS FED. AID PROJECT				

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PIER 1 ELEVATION
 (Looking East)



PIER 1 END ELEVATION

Note "A":

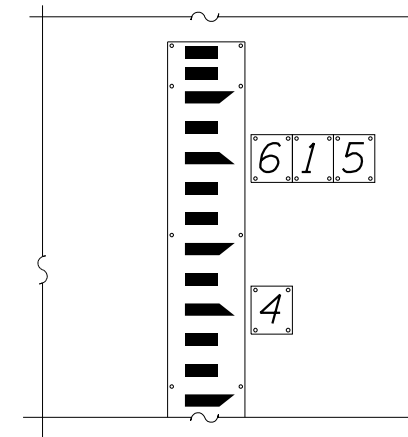
The gauge plates shall be porcelain enameled iron plate graduated in feet and tenths, unnumbered and 3 1/2" wide. Gauge plates shall be "WaterMark" Style "E" or approved equivalent.

Note "B":

Each individual number plate shall be a black numeral on a 2"x3" white porcelain enameled iron plate. Number plates shall be "Watermark" Style "E" or approved equivalent. Elevations shall be installed as shown.

Notes:

All plates shall be fastened directly to the pier with a 1/4" diameter, 1 1/2" long masonry screw with a hex washer head at every hole on every plate.
 The Contractor must determine exact elevation of the Gauge Plates in the field and install Gauge Plates within a tolerance of 1/4".
 Three digit elevations to be installed at the top of the gauge and at every elevation ending with 0. At all of the other whole elevations, place the last digit as shown in the example to the left.
 See Special Provisions.



DETAIL A

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Stream Gauge	Each	1



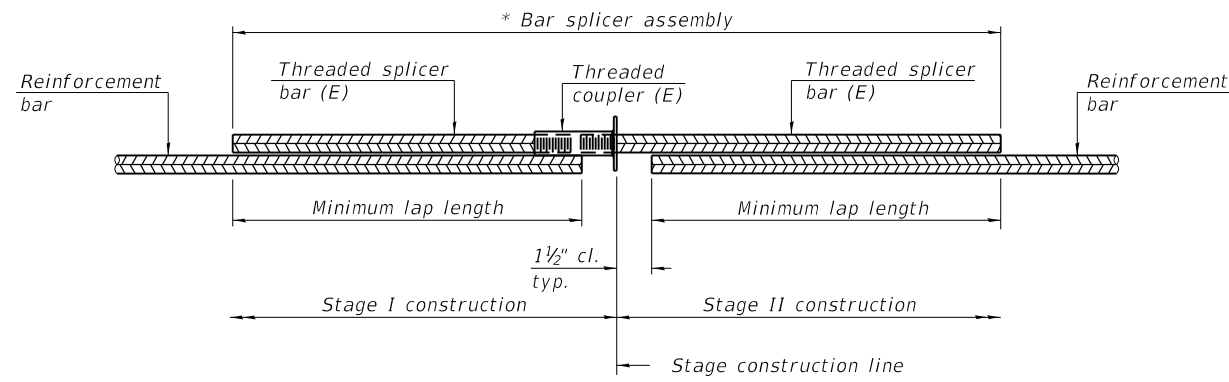
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PLOT DATE =	9/25/2020	CHECKED -	JMT	REVISED -	

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**PIER 1 STREAM GAUGE
 STRUCTURE NO. 016-0870**

SHEET S-17 OF S-18 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1467	2020-149-BR	COOK	37	29
CONTRACT NO. 62M22				
ILLINOIS FED. AID PROJECT				

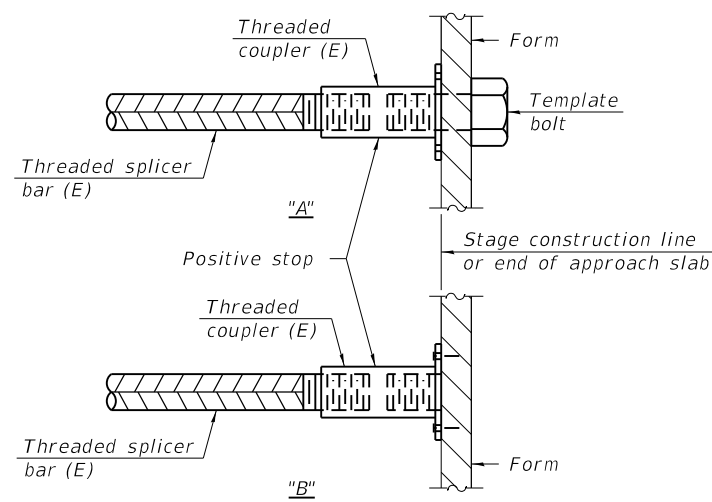


STANDARD BAR SPLICER ASSEMBLY PLAN
 (All components shall be provided from one supplier)

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

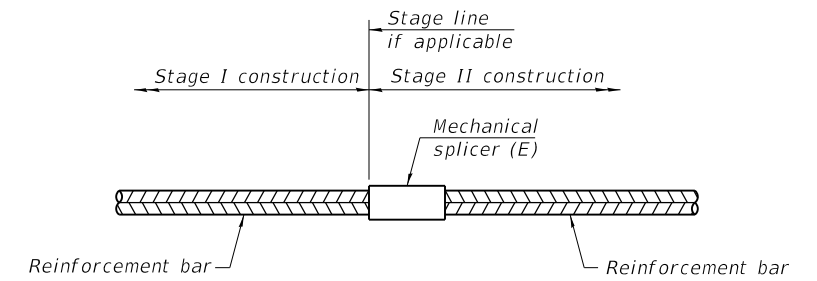
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
W. Abut.	#7	2	4'-5"
W. Abut.	#6	2	3'-10"
E. Abut.	#7	2	4'-5"
E. Abut.	#6	2	3'-10"



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

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.

MODEL: Default
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BSD-1

1-1-2020



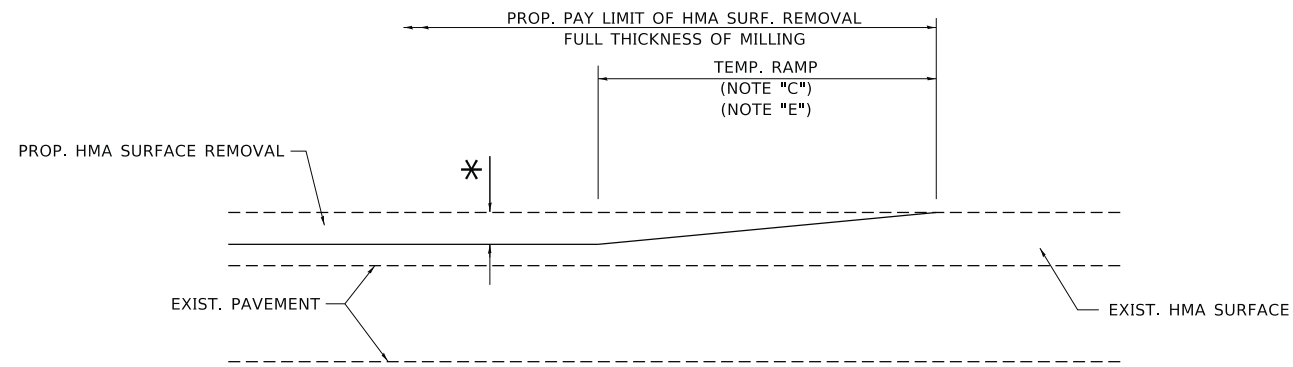
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PLOT DATE = 9/25/2020	CHECKED - JMT	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
 STRUCTURE NO. 016-0870

SHEET S-18 OF S-18 SHEETS

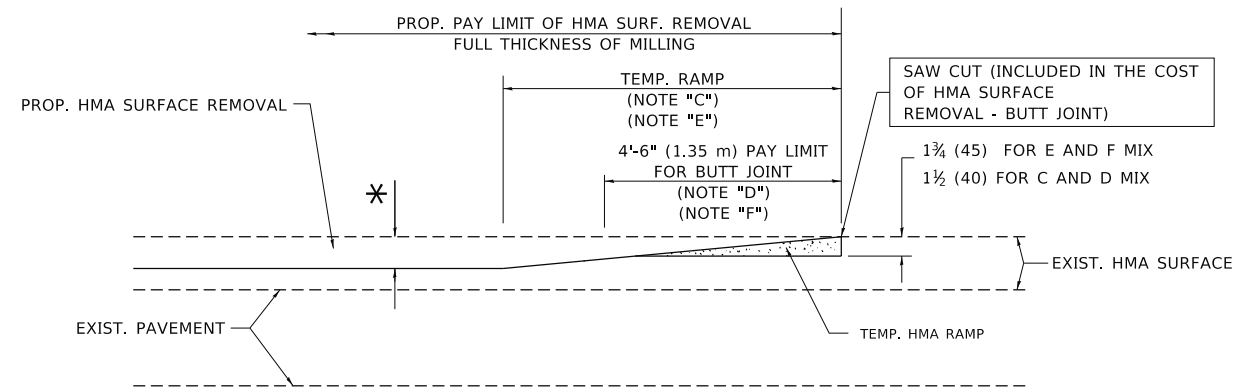
FAU. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1467	2020-149-BR	COOK	37	30
CONTRACT NO. 62M22				
ILLINOIS FED. AID PROJECT				



MILLED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 1

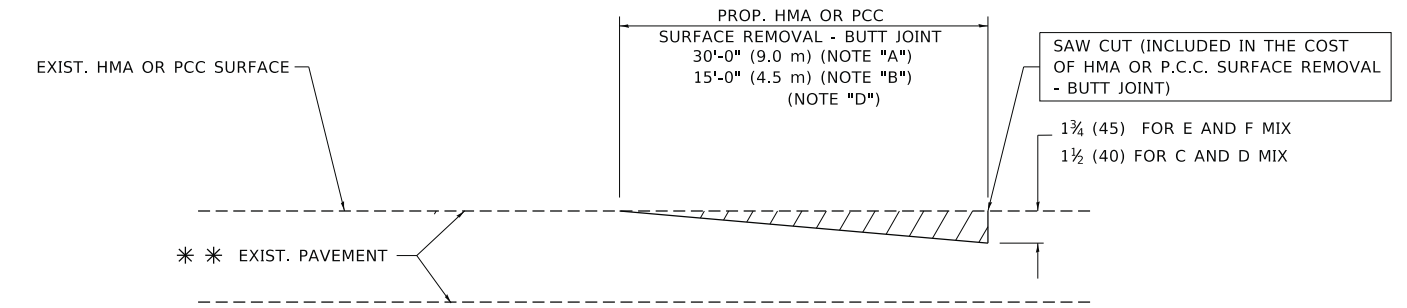


HMA CONSTRUCTED TEMPORARY RAMP

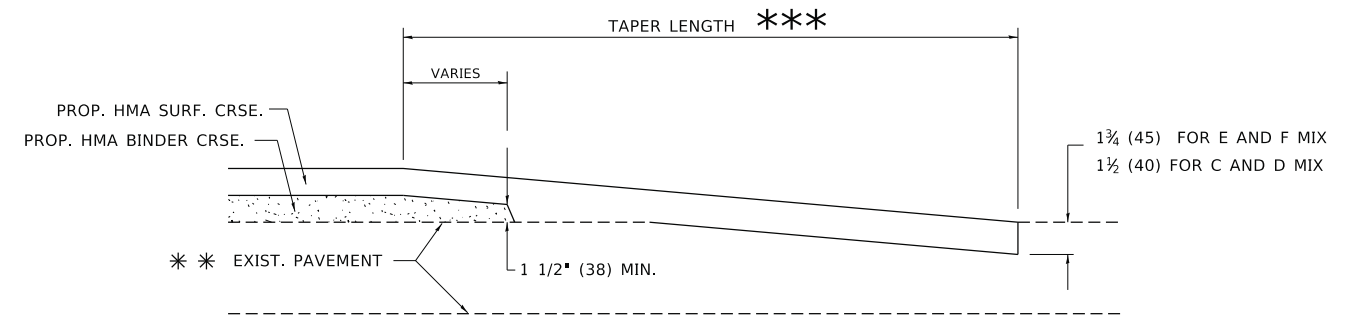
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 2

TYPICAL TEMPORARY RAMP



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

* * PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

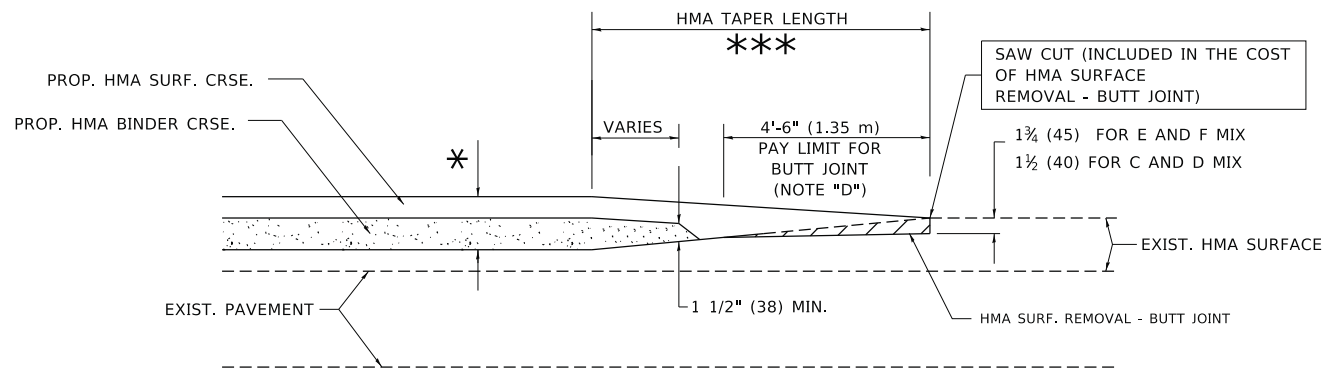
NOTES

- A. MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
- B. MINOR SIDE ROADS.
- C. THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
- D. THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
- E. TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
- F. INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT.
 * SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- G. SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
 *** 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")
 10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

BASIS OF PAYMENT

THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT".

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.



BUTT JOINT AND HMA TAPER

TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

USER NAME = footemj	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94
	DRAWN -	REVISED - A. ABBAS 03-21-97
PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED - M. GOMEZ 04-06-01
PLOT DATE = 3/27/2019	DATE - 06-13-90	REVISED - R.BORO 01-01-07

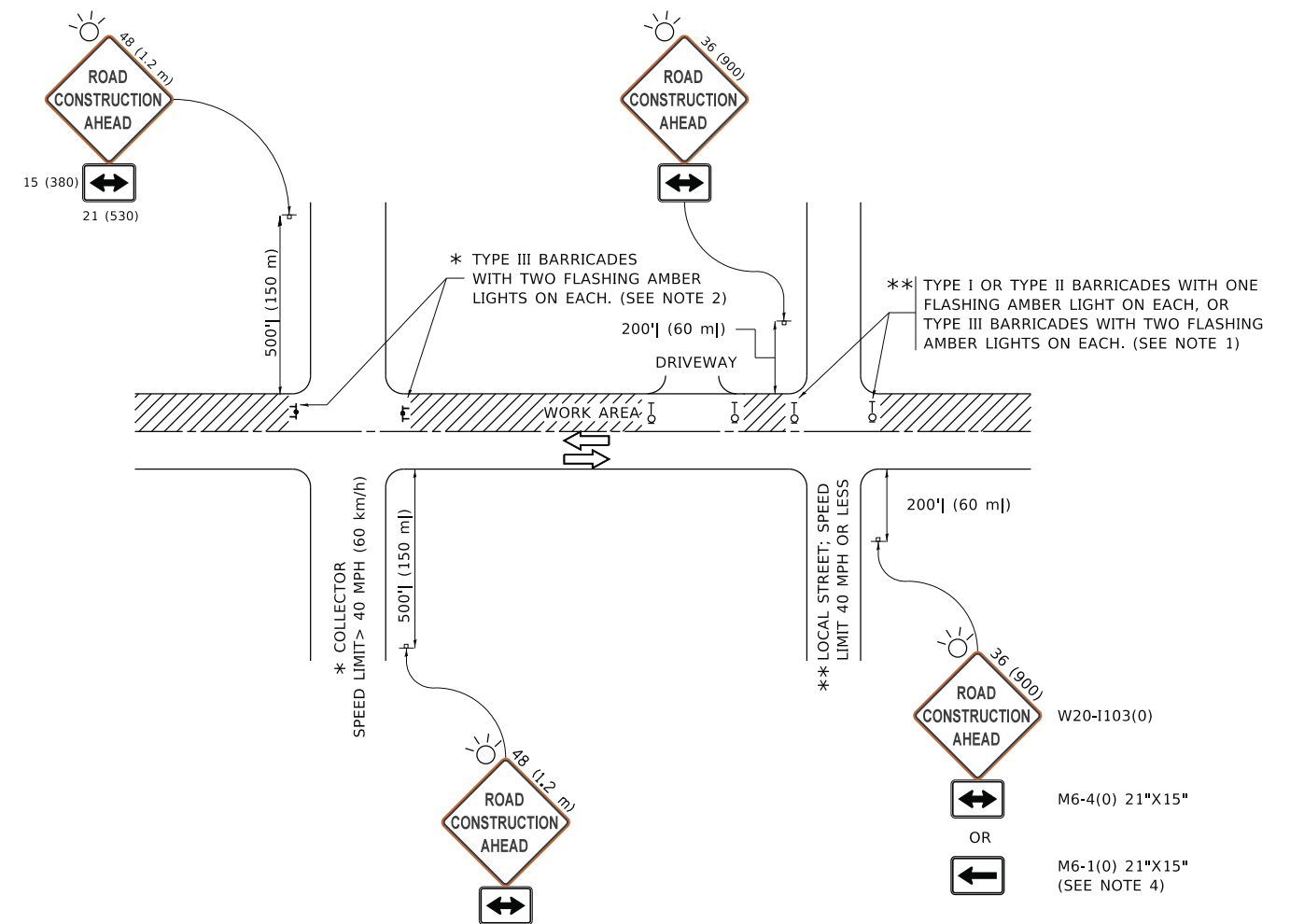
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**BUTT JOINT AND
 HMA TAPER DETAILS**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1467	2020-149-BR	COOK	37	31
BD400-05 BD32			CONTRACT NO. 62M22	
ILLINOIS FED. AID PROJECT				

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NOTES:

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
3. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
4. SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

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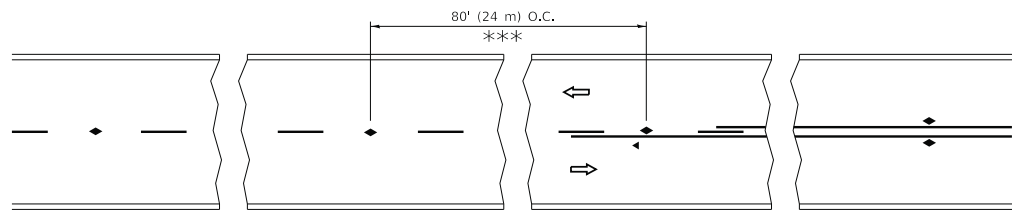
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PLOT DATE = 3/4/2019	DATE - 06-89	REVISED - A. SCHUETZE 07-01-13
		REVISED - A. SCHUETZE 09-15-16

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC CONTROL AND PROTECTION FOR
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS**

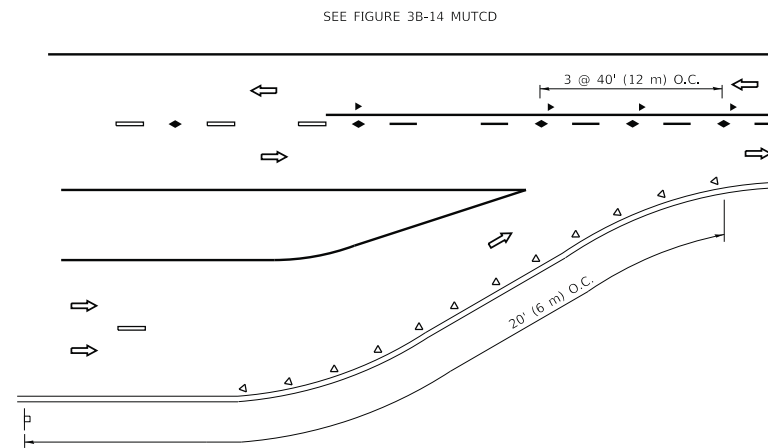
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TC-10			CONTRACT NO. 62M22	
ILLINOIS FED. AID PROJECT				

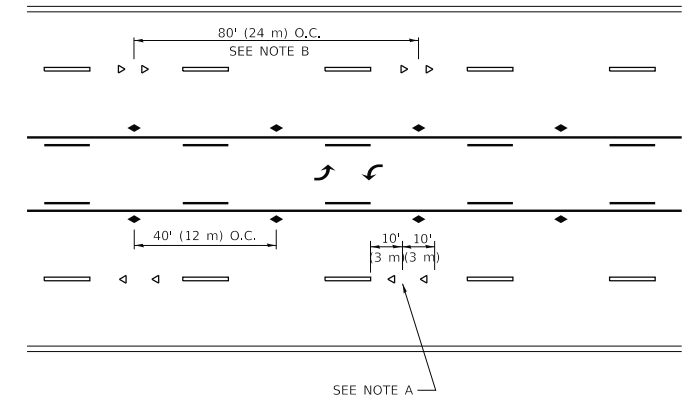


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

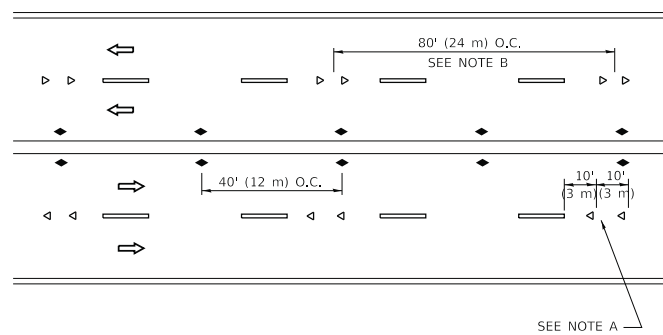
TWO-LANE/TWO-WAY



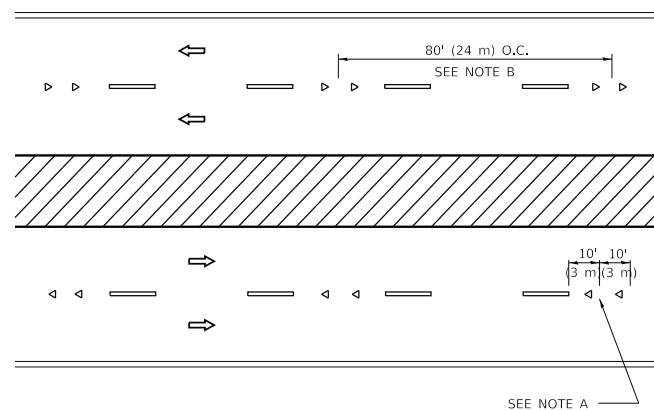
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.
4. MARKERS ARE TO BE USED ADJACENT TO BOTH SOLID WHITE LINES IN DUAL LEFT TURN LANES

SYMBOLS

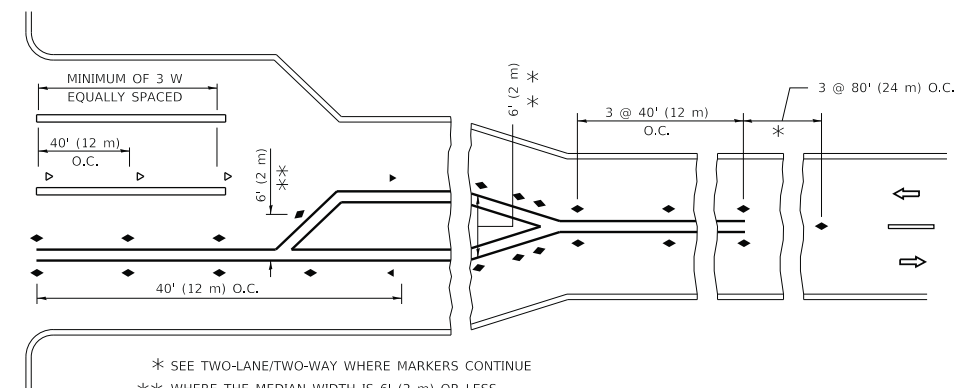
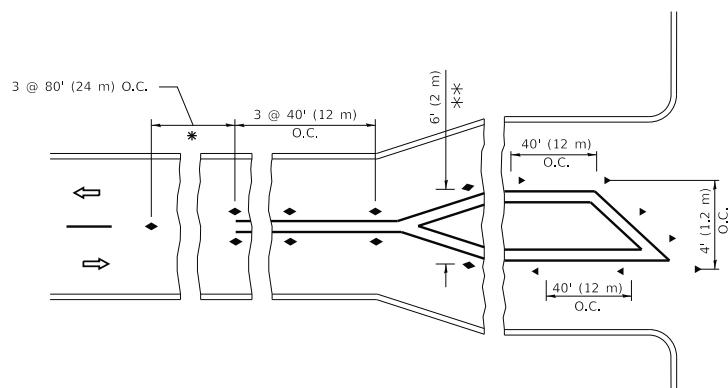
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◀ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.
- B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H. (20 km/h) LOWER THAN POSTED SPEEDS.

DESIGN NOTES

1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHALL BE INCLUDED IN THE PLANS WHEN STANDARD SPECIFICATIONS ARE NOT BEING USED.
4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.



TURN LANES

* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE
 ** WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS USE TWO-WAY MARKERS.

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

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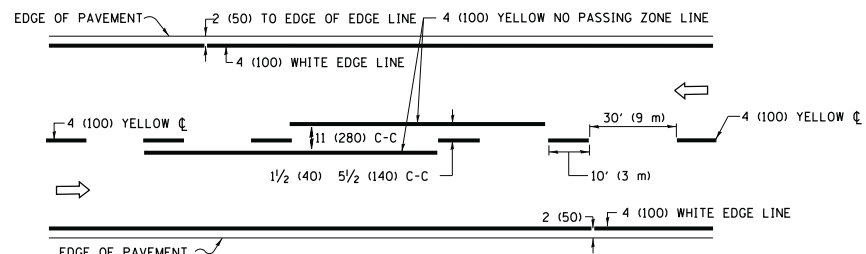
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PLOT DATE = 3/4/2019	CHECKED -	REVISED - C. JUCIUS 09-09-09
	DATE -	REVISED - C. JUCIUS 07-01-13

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

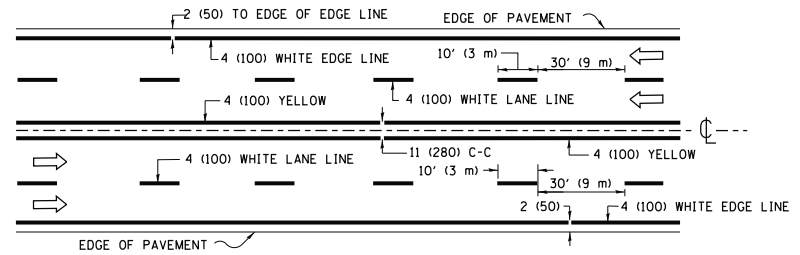
**TYPICAL APPLICATIONS
 RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

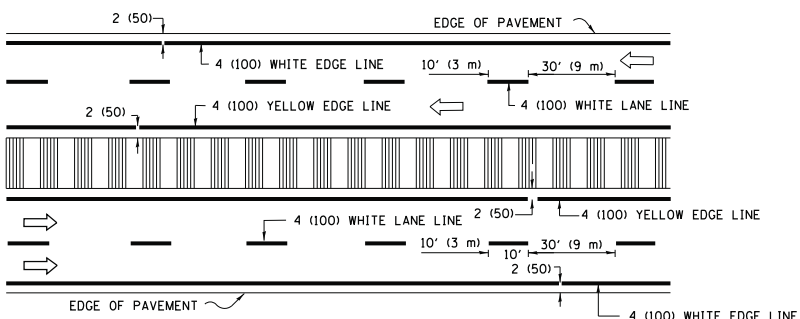
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1467	2020-149-BR	COOK	37	33
TC-11			CONTRACT NO. 62M22	
ILLINOIS FED. AID PROJECT				



2-LANE ROADWAY

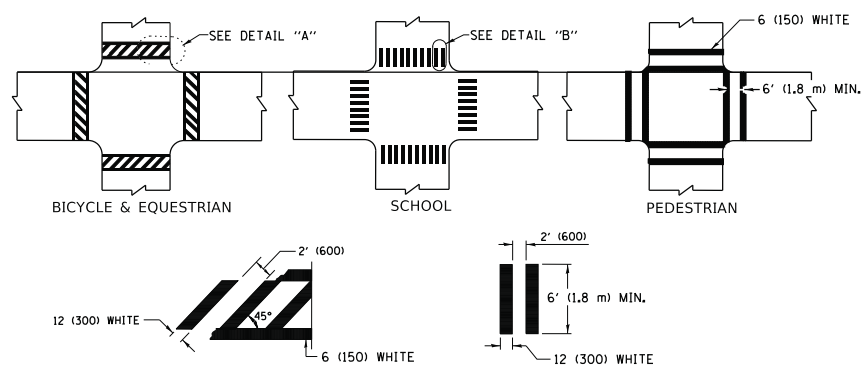


MULTI-LANE UNDIVIDED



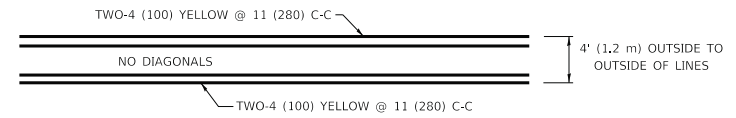
MULTI-LANE DIVIDED WITH MEDIAN

TYPICAL LANE AND EDGE LINE MARKING

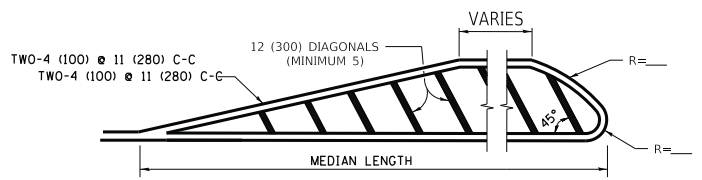


TYPICAL CROSSWALK MARKING

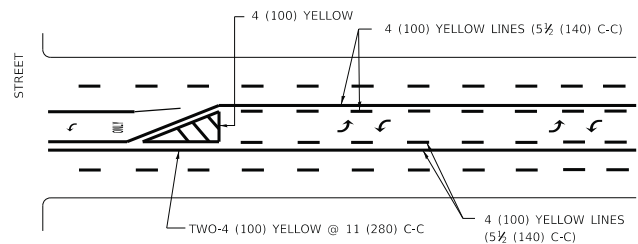
* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES



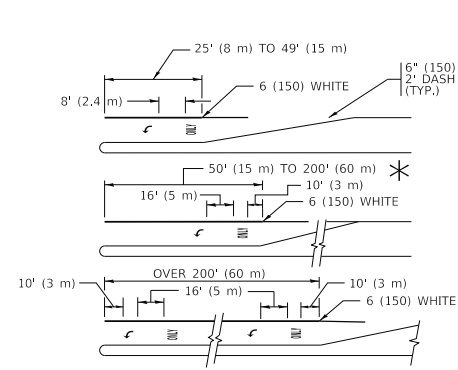
4' (1.2 m) WIDE MEDIANS ONLY



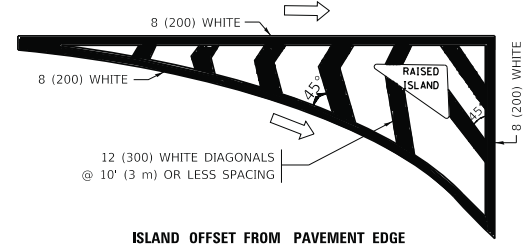
MEDIANS OVER 4' (1.2 m) WIDE



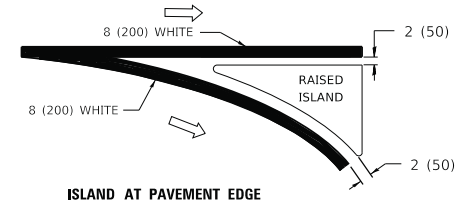
MEDIAN WITH TWO-WAY LEFT TURN LANE TYPICAL PAINTED MEDIAN MARKING



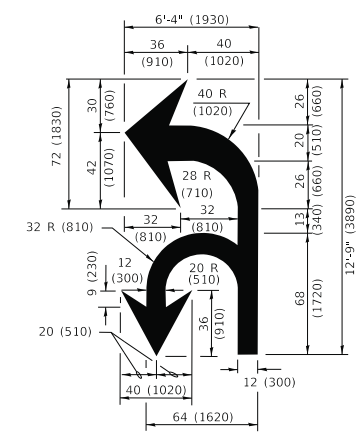
TYPICAL LEFT (OR RIGHT) TURN LANE TYPICAL TURN LANE MARKING



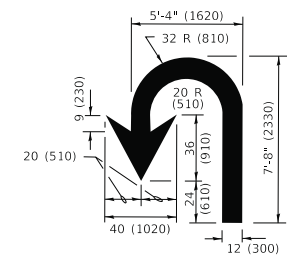
ISLAND OFFSET FROM PAVEMENT EDGE



ISLAND AT PAVEMENT EDGE TYPICAL ISLAND MARKING



COMBINATION LEFT AND U-TURN



U-TURN

LANE REDUCTION TRANSITION

* LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS.

D(FT)	SPEED LIMIT
345	30
425	35
500	40
580	45
665	50
750	55

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5 1/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MEDIANS IN YELLOW
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5 1/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES "RR" IS 6' (1.8 m) LETTERS: 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m ²) EACH "X"=54.0 SQ. FT. (5.0 m ²)
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8')	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16.3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

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

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PLOT DATE = 3/4/2019	DATE - 03-19-90	REVISED - C. JUCIUS 04-12-16

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DISTRICT ONE			
TYPICAL PAVEMENT MARKINGS			
SCALE: NONE	SHEET 1 OF 2 SHEETS	STA. TO STA.	

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1467	2020-149-BR	COOK	37	34
TC-13		CONTRACT NO.	62M22	
ILLINOIS		FED. AID PROJECT		

TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER

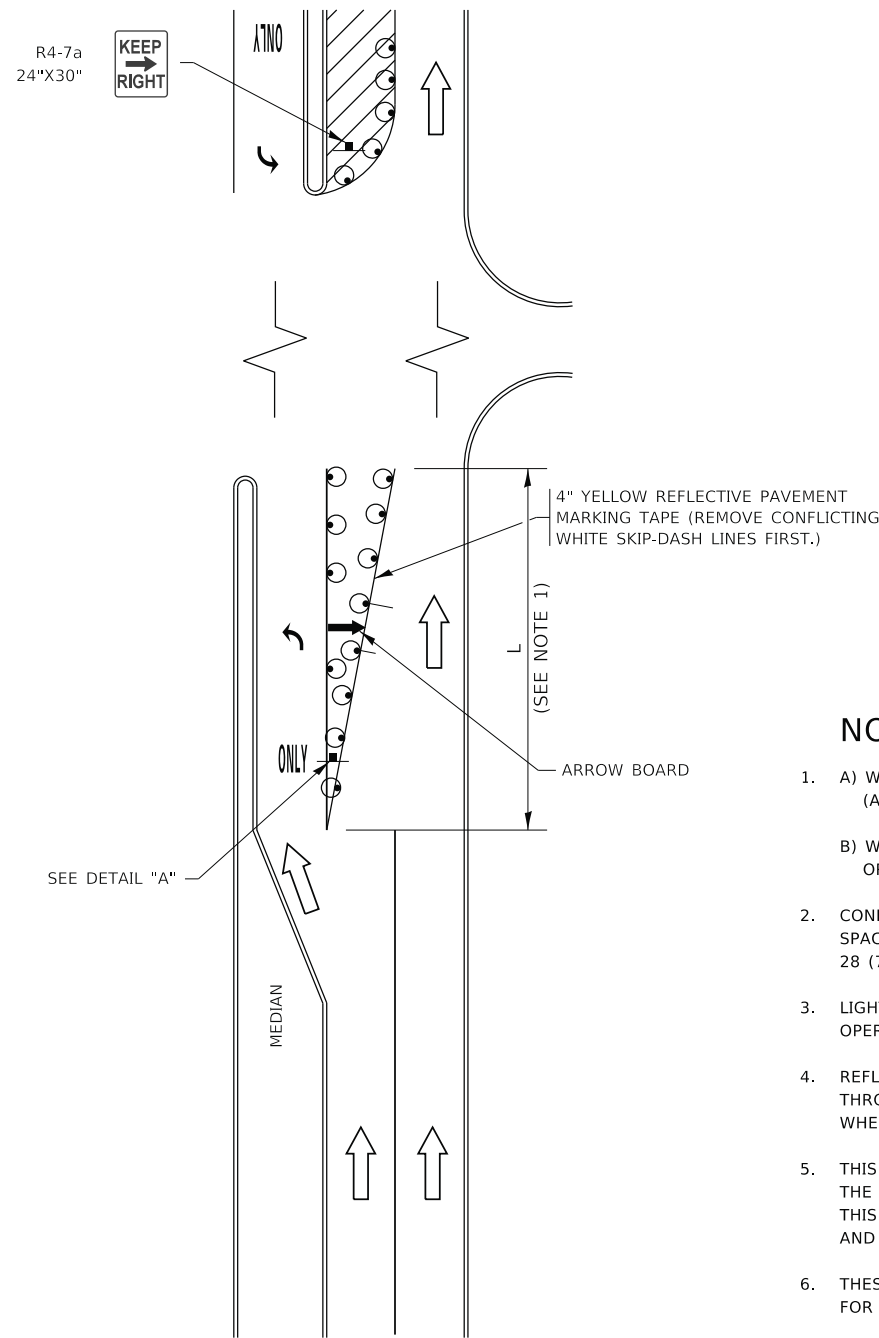


FIGURE 1

TURN BAY ENTRANCE WITHIN A LANE CLOSURE

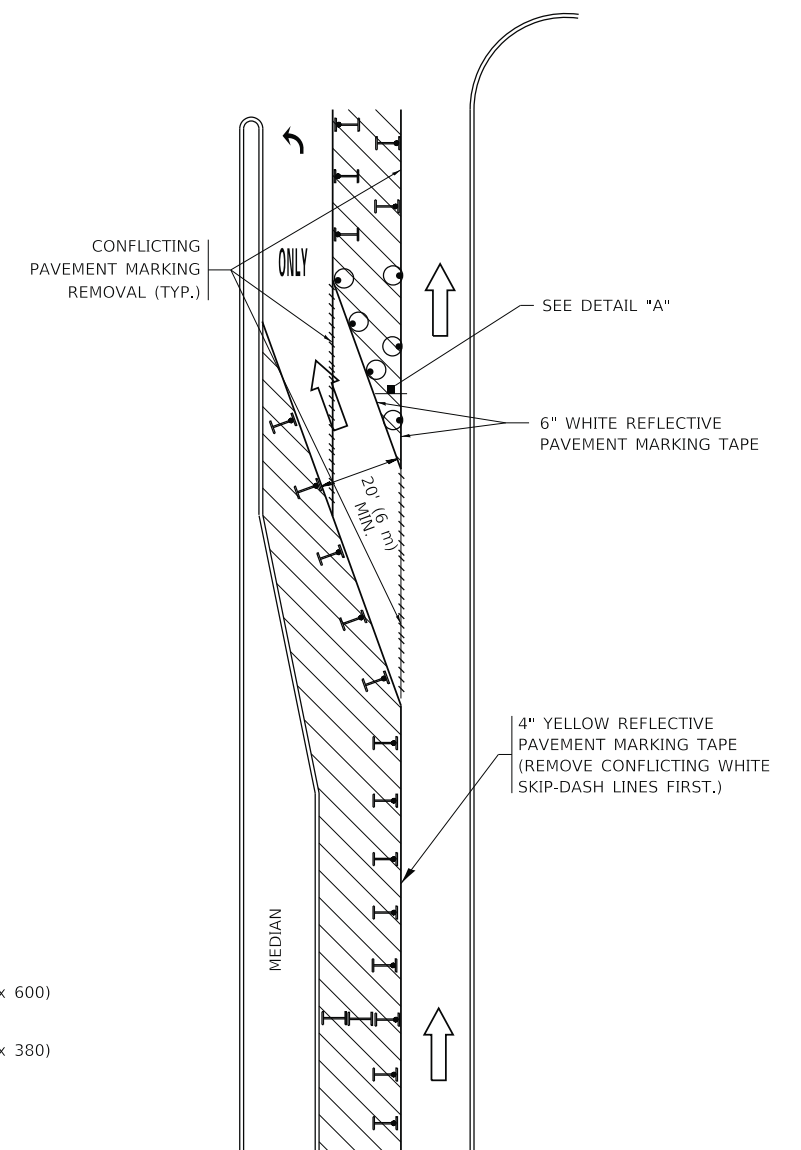
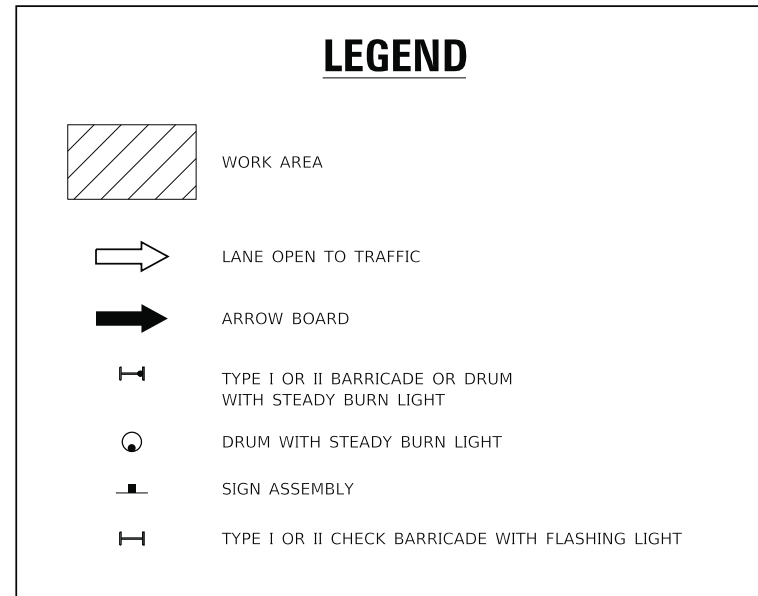
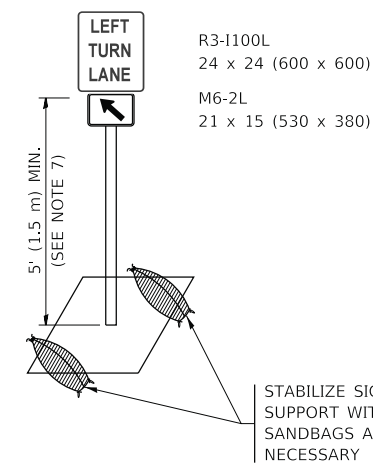


FIGURE 2



NOTES:

1. A) WHEN "L" IS \leq THE STORAGE LENGTH OF THE TURN LANE (AS SHOWN IN FIG. 1), USE FIGURE 1.
B) WHEN "L" IS $>$ THE STORAGE LENGTH OF THE TURN LANE OR THE TURN LANE IS WITHIN THE LANE CLOSURE, USE FIGURE 2.
2. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
3. LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
4. REFLECTIVE TEMPORARY PAVEMENT MARKINGS SHALL BE PLACED THROUGHOUT THE BARRICADED AREAS OF EACH TURN BAY AS SHOWN WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN (14) DAYS.
5. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-1100R 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
6. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
7. THE SIGNS SHALL BE MOUNTED ABOVE THE BARRICADES/DRUMS ON SEPARATE SIGN SUPPORTS THAT MEET NCHRP 350 OR MASH REQUIREMENTS.
8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.



DETAIL A

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

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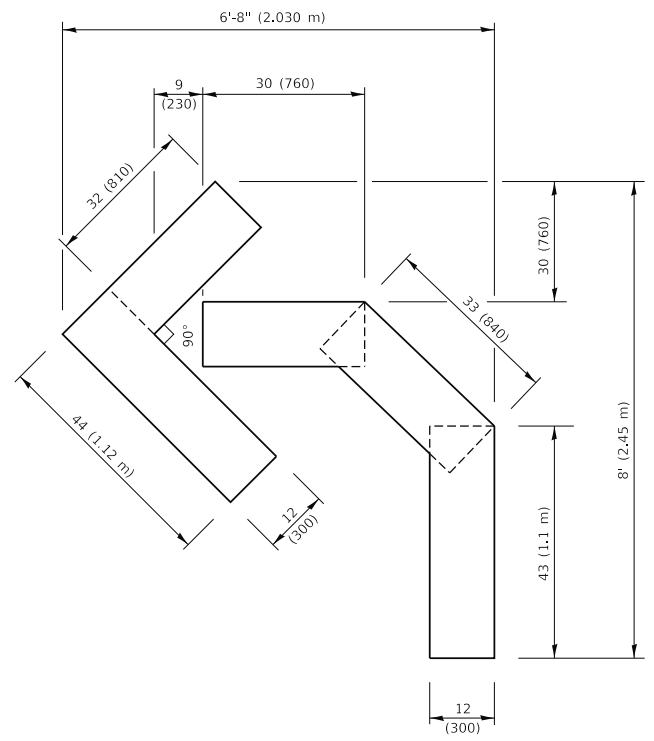
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PLOT SCALE = 50.0000 ' / in.	CHECKED - A. HOUSEH 10-12-96	REVISED - A. SCHUETZE 09-15-16
PLOT DATE = 3/4/2019	DATE - T. RAMMACHER 01-06-00	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

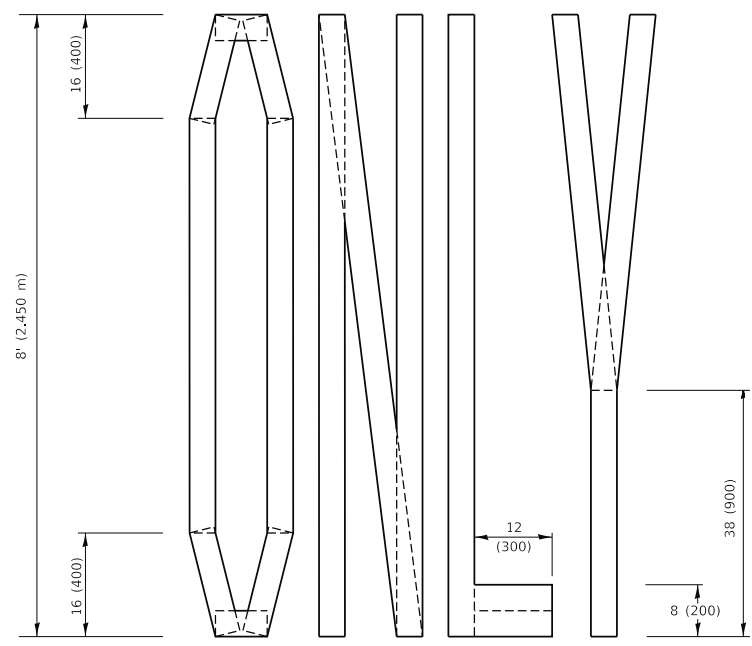
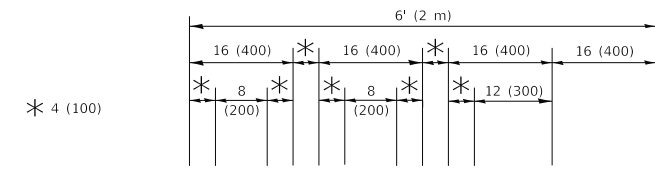
TRAFFIC CONTROL AND PROTECTION AT TURN BAYS
(TO REMAIN OPEN TO TRAFFIC)

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

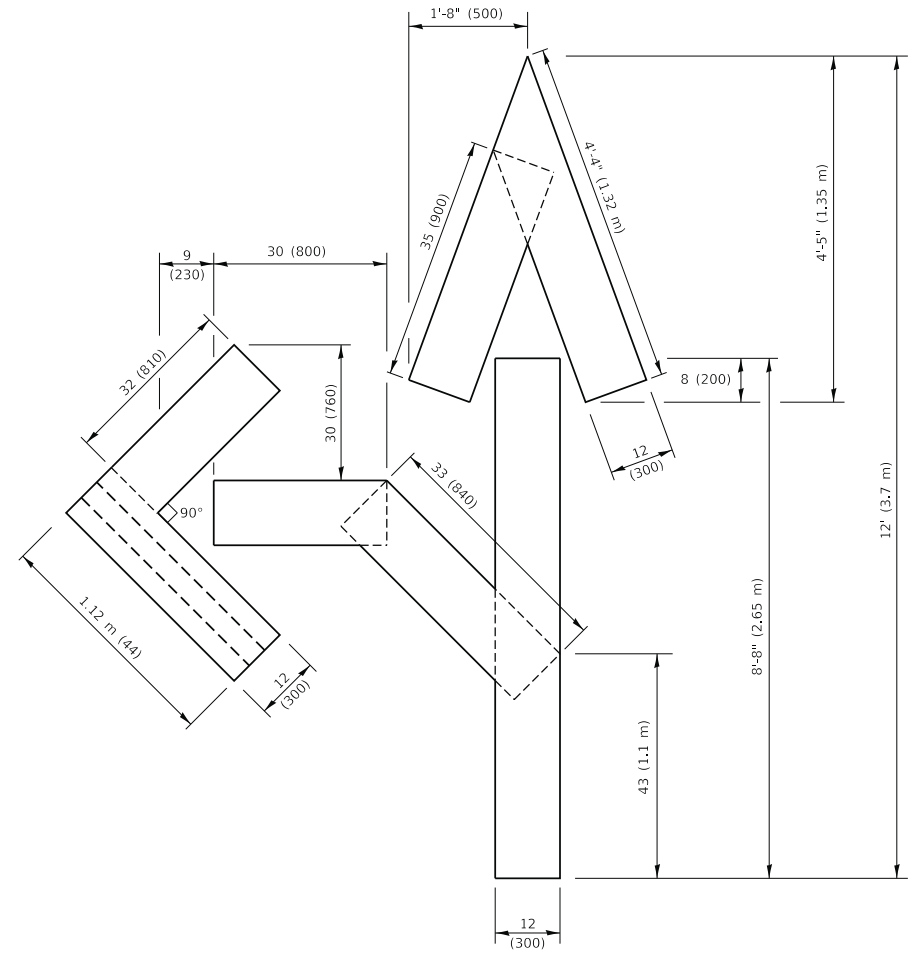
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1467	2020-149-BR	COOK	37	35
TC-14		CONTRACT NO. 62M22		
ILLINOIS FED. AID PROJECT				



QUANTITY
 4 (100) LINE = 45.5 ft. (13.9 m)
 15.2 sq. ft. (1.41 sq. m)

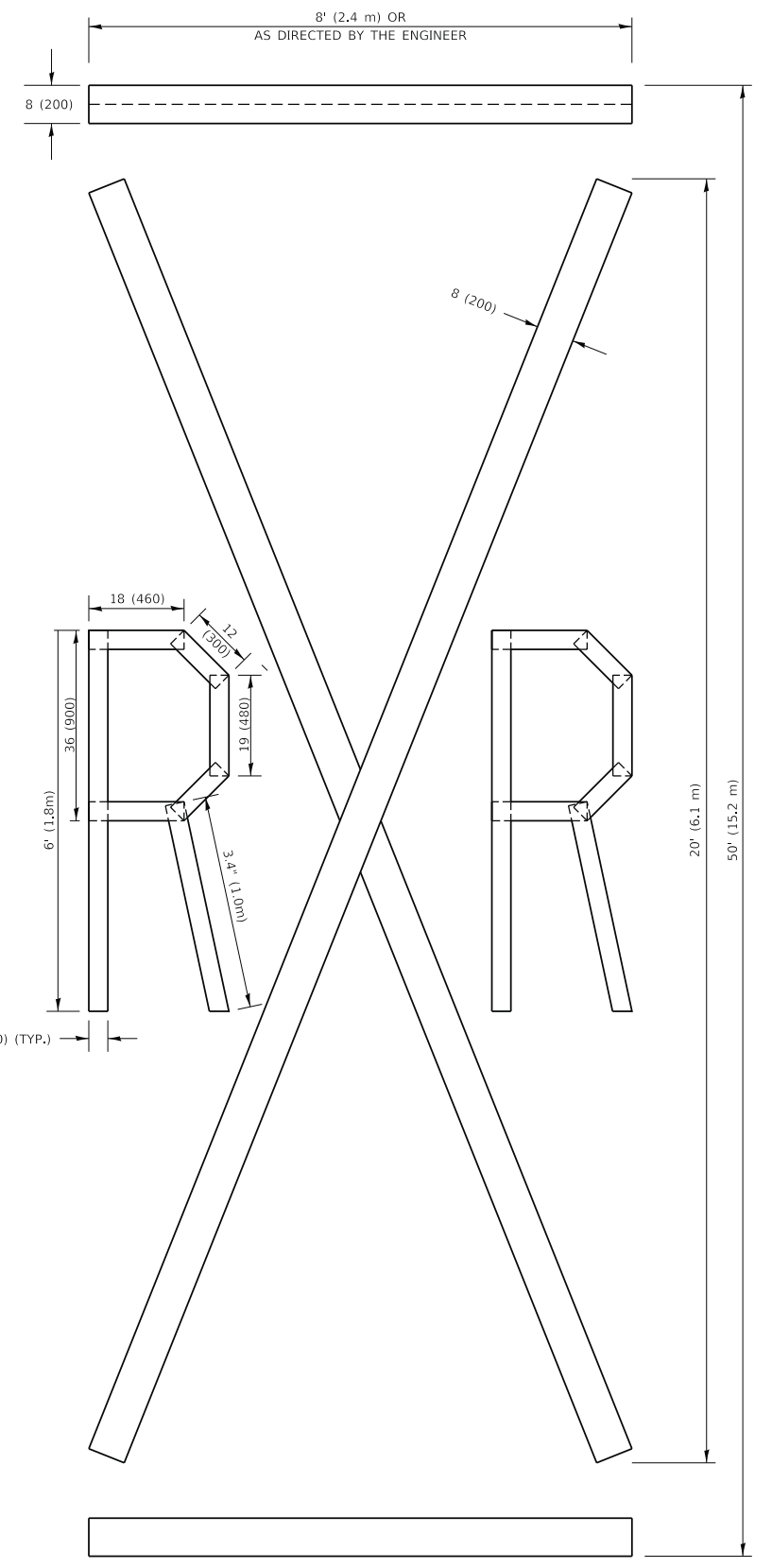


QUANTITY
 4 (100) LINE = 64.1 ft. (19.5 m)
 21.4 sq. ft. (1.99 sq. m)



QUANTITY
 4 (100) LINE = 82.5 ft. (25.1 m)
 27.5 sq. ft. (2.53 sq. m)

NOTE:
 ALL QUANTITIES OF PLACEMENT ARE REPRESENTED IN LINEAR FEET OF 4" LINES TO MATCH THE 4" TEMPORARY TAPE PAY ITEM AND REPRESENTS THE TOTAL QUANTITY OF 4" TAPE REQUIRED.



QUANTITY
 4 (100) LINE = 225.9 ft. (68.9 m)
 75.3 sq. ft. (6.99 sq. m)

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

MODEL: Default
 FILE NAME: P:\PROJECTS\2019\2019-10-17-11 AM User: f62m22

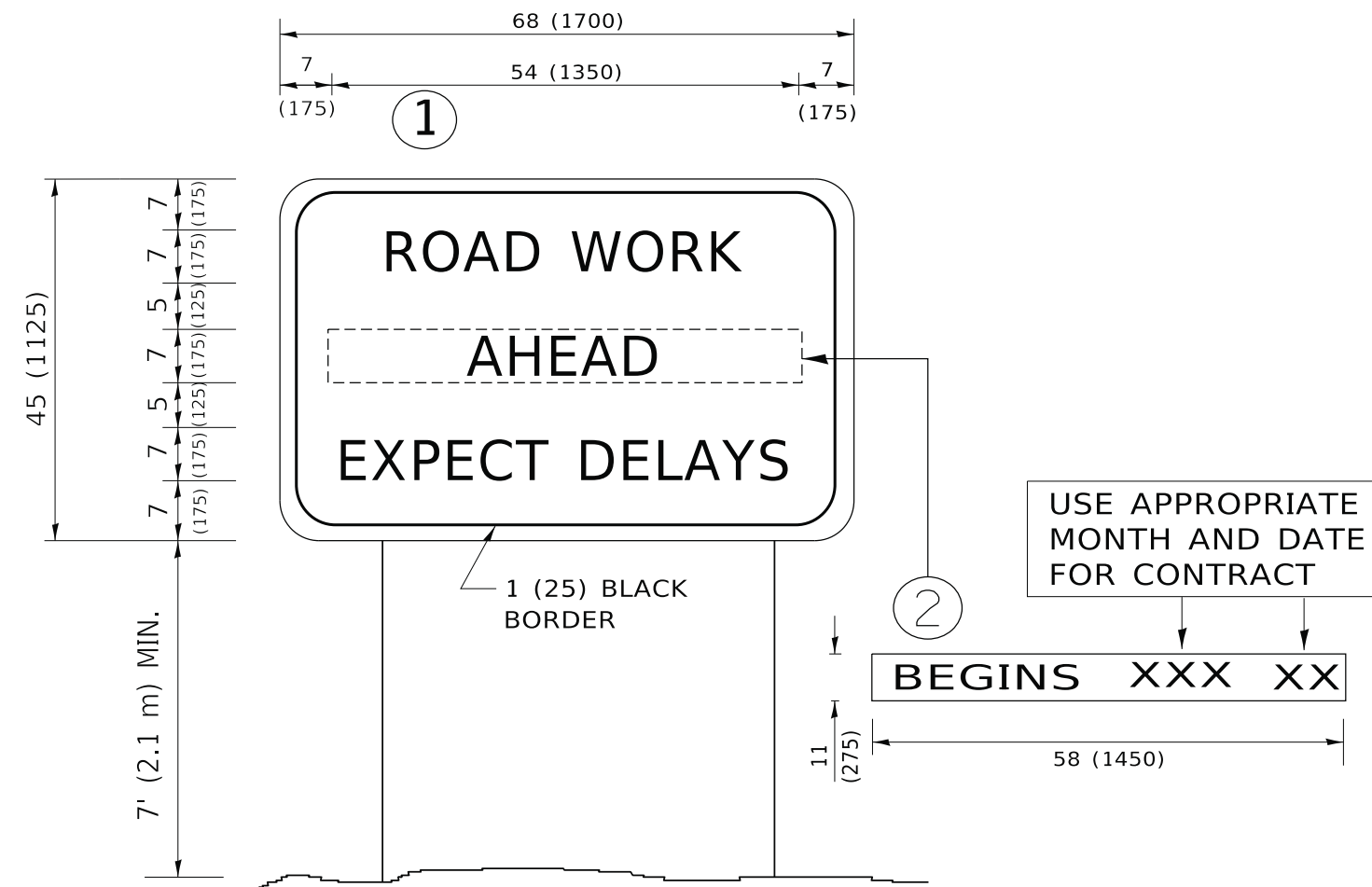
USER NAME = footemj	DESIGNED -	REVISED - T. RAMMACHER 03-02-98
PLOT SCALE = 50.0068 ' / in.	DRAWN -	REVISED - E. GOMEZ 08-28-00
PLOT DATE = 3/4/2019	CHECKED -	REVISED - E. GOMEZ 08-28-00
	DATE - 09-18-94	REVISED - A. SCHUETZE 09-15-16

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1467	2020-149-BR	COOK	37	36
TC-16		CONTRACT NO. 62M22		
ILLINOIS FED. AID PROJECT				



NOTES:

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

MODEL: D:\draft
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USER NAME = footemj	DESIGNED -	REVISED - R. MIRS 09-15-97
	DRAWN -	REVISED - R. MIRS 12-11-97
PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED - T. RAMMACHER 02-02-99
PLOT DATE = 3/4/2019	DATE -	REVISED - C. JUCIUS 01-31-07

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ARTERIAL ROAD
INFORMATION SIGN**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1467	2020-149-BR	COOK	37	37
TC-22			CONTRACT NO. 62M22	
ILLINOIS FED. AID PROJECT				