

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

SBI ROUTE 3578: IL 7 (SOUTHWEST HIGHWAY)
86TH AVE OVER IL 7
SECTION: 2020-173-BR
PROJECT: STP-M815(490)
BRIDGE DECK OVERLAY AND BRIDGE REPAIRS
COOK COUNTY

C-91-362-20

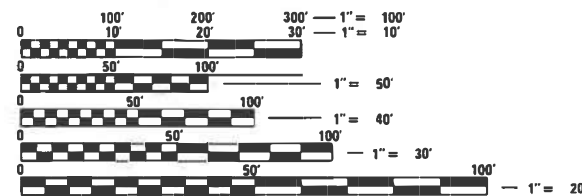
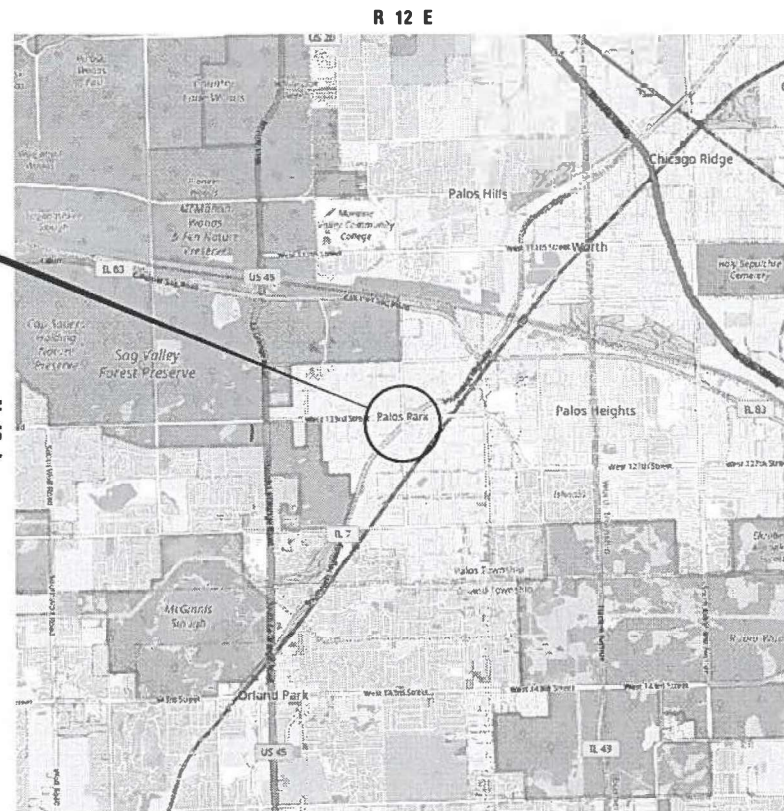
FOR INDEX OF SHEETS AND HIGHWAY
STANDARDS, SEE SHEET NO. 2

THIS PROJECT IS LOCATED
IN THE VILLAGE OF PALOS PARK

TRAFFIC DATA

2018 ADT = 2,750 VPD
POSTED SPEED LIMIT = 35 MPH

PROJECT LOCATION
86TH AVE OVER IL 7
STRUCTURE NO. 016-2635



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD
ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT
CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS
ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

PROJECT ENGINEER: DANIEL WILGREEN (847) 705-4240
PROJECT MANAGER: FAWAD AQUEEL (847) 705-4247

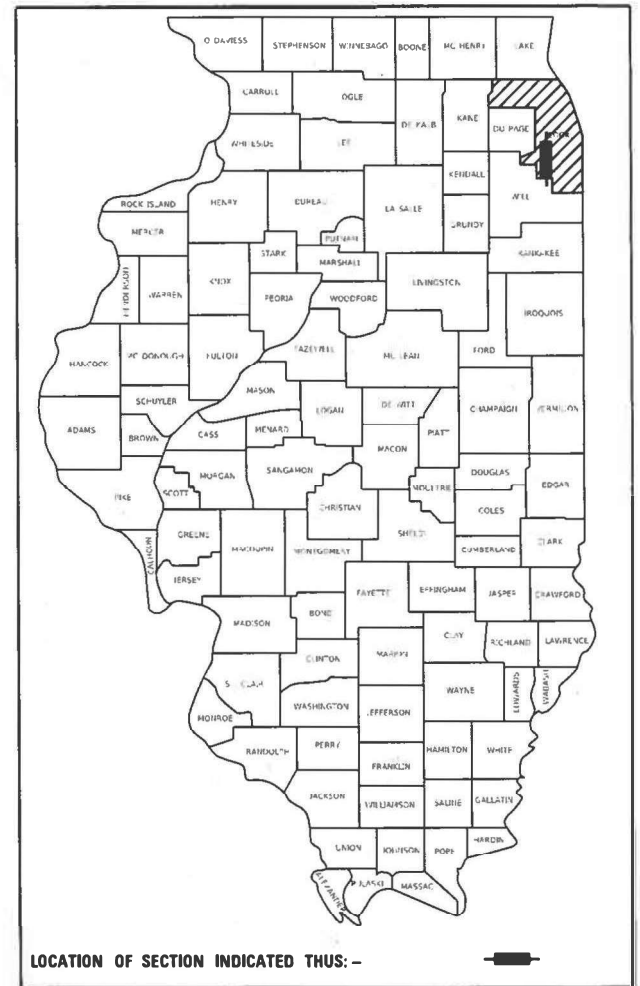
CONTRACT NO. 62M31

GROSS LENGTH = 227 FT. = 0.04 MILES
NET LENGTH = 227 FT. = 0.04 MILES

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CONTACT: ALEXANDER LANE (312) 477-0620

S.B.I. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3578	2020-173-BR	COOK	18	1
		ILLINOIS	CONTRACT NO. 62M31	

D-91-563-20



Alex Lane
ALEXANDER CARL LANE, P.E.
IL LIC. NO. 062-063261
EXP: 11/30/2021
DATE: 1/20/2020

THIS SEAL AND SIGNATURE
PERTAINS TO
SHEETS 1 TO 6, 13 TO 17

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED March 4, 2021
Jose Rios
REGION 1 ENGINEER

March 19, 2021
Scott A. Etk
ENGINEER OF DESIGN AND ENVIRONMENT

March 19, 2021
Osman, Jim
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

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

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STATE STANDARDS

STANDARD NO.	DRAWING NAME
000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
701901-08	TRAFFIC CONTROL DEVICES

HOT-MIX ASPHALT MIXTURE REQUIRMENTS		AIR VOIDS @ Ndes	QUALITY MANAGEMENT PROGRAM (QMP)
MIXTURE TYPE APPROACH PAVEMENT OVERLAY			
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", IL-9.5, N70, 1-1/2"		4% @ 70 Gyr	QC/QA
QMP DESIGNATION: QUALITY CONTROL/ QUALITY ASSURANCE (QC/QA): QUALITY CONTROL FOR PERFORMANCE (QCP): PAY FOR PERFORMANCE (PFP)			

MIXTURE REQUIREMENT 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 THE "AC TYPE" SHALL BE "PG 64 -22" UNLESS MODIFIED BY DISTRICT ONE 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

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 UTILITIES. 48 HOUR NOTIFICATION IS REQUIRED.
- THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE ORDERING ANY MATERIALS AND STARTING ANY WORK. FOR LOCATIONS OF UTILITIES, LOCALLY OWNED EQUIPMENT, LEASED ENFORCEMENT CAMERA SYSTEM FACILITIES AND IDOT UNDERGROUND FACILITIES, CONTACT THE LOCAL COUNTIES, MUNICIPALITIES AND IDOT FOR LOCATES.
- MEADE ELECTRIC COMPANY, THE IDOT DISTRICT ONE ELECTRICAL MAINTENANCE CONTRACTOR, LOCATES IDOT ELECTRICAL EQUIPMENT AND UNDERGROUND CABLES. CALL 773-287-7672 FOR THE INITIAL LOCATE. REQUEST FOR LOCATES OF PREVIOUSLY MARKED FACILITIES MAY BE AT THE CONTRACTOR'S EXPENSE.
- IN ADDITION TO FIELD REVIEW AND AERIAL DATA, PLAN DIMENSIONS AND DETAILS RELATIVE TO THE EXISTING FACILITIES HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO CONSTRUCTION VARIATIONS. PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING PLANS ARE SUBJECT TO ROUTINE VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO 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 THE SCOPE OF WORK. HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE BID PRICE FOR THE WORK.
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, USGS, THE VILLAGE OF PALOS PARK, OTHER LOCAL GOVERNMENT AGENCIES, AND IDOT.
- THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO BEGINNING CONSTRUCTION AND ORDERING MATERIALS.
- DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
- THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE PROTECTION OF EXISTING PLANT MATERIAL FOR WHICH THE CONTRACT DOES NOT PROVIDE REMOVAL. THE PROTECTION OF EXISTING PLANT MATERIAL AND THE REPAIR OR REPLACEMENT OF EXISTING PLANT MATERIAL DAMAGED BY THE CONTRACTOR SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 201 OF THE STANDARD SPECIFICATIONS.
- THE DEPARTMENT HAS NOT OBTAINED ANY PERMITS FOR OFFSITE BORROW, WASTE, USE (BWU) AREAS. PRIOR TO WORKING IN BWU AREAS, IF THE CONTRACTOR CHOOSES TO USE ACTIVITIES REQUIRING PERMITS IT IS THE CONTRACTOR'S RESPONSIBILITY TO SECURE THE PROPER PERMITS. IN ADDITION TO THE BORROW REVIEW (BDE 2289) AND USE/WASTE REVIEW (BDE 2290) SUBMITTALS, THE CONTRACTOR SHALL SUBMIT AN EROSION AND SEDIMENT CONTROL (ESC) PLAN FOR EVERY BWU SITE TO THE DEPARTMENT FOR ACCEPTANCE. GUIDELINES FOR ACCEPTABLE BWU PRACTICES CAN BE FOUND IN SECTION 11.G.1. THE COST OF ALL MATERIALS AND LABOR NECESSARY TO COMPLY WITH THE ABOVE PROVISIONS TO PREPARE AND IMPLEMENT ESC PLANS WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE CONTRACT UNIT PRICES AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- PRIOR TO BEGINNING ANY WORK, THE CONTRACTOR SHALL RECORD AND RETAIN FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKINGS (AND RAISED REFLECTIVE PAVEMENT MARKERS) IN ORDER THAT THE MARKINGS CAN BE RE-ESTABLISHED. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER.
- THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847)-705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
- THE RESIDENT ENGINEER SHALL CONTACT PATRICE HARRIS, AREA TRAFFIC FIELD TECHNICIAN, AT PATRICE.HARRIS@ILLINOIS.GOV A MINIMUM OF TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
- THE DEPARTMENT HAS DETERMINED THAT IN STREAM WORK IS NOT REQUIRED FOR THE WORK SPECIFIED IN THIS CONTRACT. THE DEPARTMENT HAS NOT OBTAINED A USACE PERMIT. IF THE CONTRACTOR CHOOSES TO USE ACTIVITIES REQUIRING AN USACE PERMIT, IT IS THE CONTRACTOR'S RESPONSIBILITY TO SECURE THE PROPER USACE PERMITS. THE COST OF ALL MATERIALS AND LABOR NECESSARY TO SECURE AND COMPLY WITH A USACE PERMIT FOR CONTRACTOR'S ACTIVITIES WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- THESE PLANS HAVE BEEN PREPARED FROM NOTES RECEIVED FROM I.D.O.T. FIELD MAINTENANCE ENGINEERS.
- THE CONTRACTOR SHALL USE CARE IN REMOVING OR EXCAVATING NEAR ALL EXISTING ITEMS WHICH WILL REMAIN. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- SAW CUTTING PRIOR TO ANY REMOVAL ITEMS NOTED ON THE PLANS OR DIRECTED BY THE ENGINEER SHALL BE CONSIDERED INCLUDED IN THE COST OF THE ITEMS BEING REMOVED.
- ANY SIGNAGE, PAVEMENT MARKINGS AND REFLECTORS DAMAGED DURING CONSTRUCTION OUTSIDE THE REMOVAL LINES SHOWN ON THE PLANS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- FOR WORK OUTSIDE THE LIMITS OF BRIDGE APPROACH PAVEMENT, ALL REFERENCES IN THE HIGHWAY STANDARDS AND STANDARD SPECIFICATIONS FOR REINFORCEMENT, DOWEL BARS AND TIE BARS IN PAVEMENT SHALL BE EPOXY COATED UNLESS NOTED ON THE PLANS.
- 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 PLANS.
- THE CENTERLINE IS FOR INFORMATION ONLY.

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	DATE - 01/20/2020	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

GENERAL NOTES	
SCALE:	SHEET OF SHEETS STA. TO STA.

S.B.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3578	2020-173-BR	COOK	18	2
CONTRACT NO. 62M31				
ILLINOIS FED. AID PROJECT				

PAY ITEM NUMBER	DESIGNATION	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				BRIDGE	
				URBAN	0047
				80% FEDERAL	20% STATE
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	196	196	
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	0.7	0.7	
40600902	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	106	106	
40604062	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70	TON	37	37	
42001300	PROTECTIVE COAT	SQ YD	407	407	
50102400	CONCRETE REMOVAL	CU YD	16.9	16.9	
50157300	PROTECTIVE SHIELD	SQ YD	285	285	
50300255	CONCRETE SUPERSTRUCTURE	CU YD	16.9	16.9	
50300260	BRIDGE DECK GROOVING	SQ YD	314	314	
50000205	REINFORCEMENT BARS, EPOXY COATED	POUND	1,470	1,470	
52000110	PREFORMED JOINT STRIP SEAL	FOOT	101	101	
60600300	COMBINATION CONCRETE CURB AND GUTTER, TYPE M-2.12	FOOT	2.0	2.0	
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6	
67100100	MOBILIZATION	L SUM	1	1	
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	56	56	
* 7000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	577	577	
70009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	330	330	
* 70100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	4	4	
X7011006	TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR	EACH	1	1	
Z0001800	APPROACH SLAB REPAIR (PARTIAL DEPTH)	SQ YD	11	11	
Z0006012	BRIDGE DECK LATEX CONCRETE OVERLAY, 2 1/4 INCHES	SQ YD	293	293	
Z0007122	REMOVING AND RE-ERECTING EXISTING RAILING	FOOT	194	194	
Z0012130	BRIDGE DECK SCARIFICATION 3/4"	SQ YD	293	293	

* SPECIALTY ITEM

PAY ITEM NUMBER	DESIGNATION	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				BRIDGE	
				URBAN	0047
				80% FEDERAL	20% STATE
Z0016001	DECK SLAB REPAIR (FULL DEPTH, TYPE I)	SQ YD	0.5		
Z0016002	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ YD	3		

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES






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S.B.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3578	2020-173-BR	COOK	18	3
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62M31	

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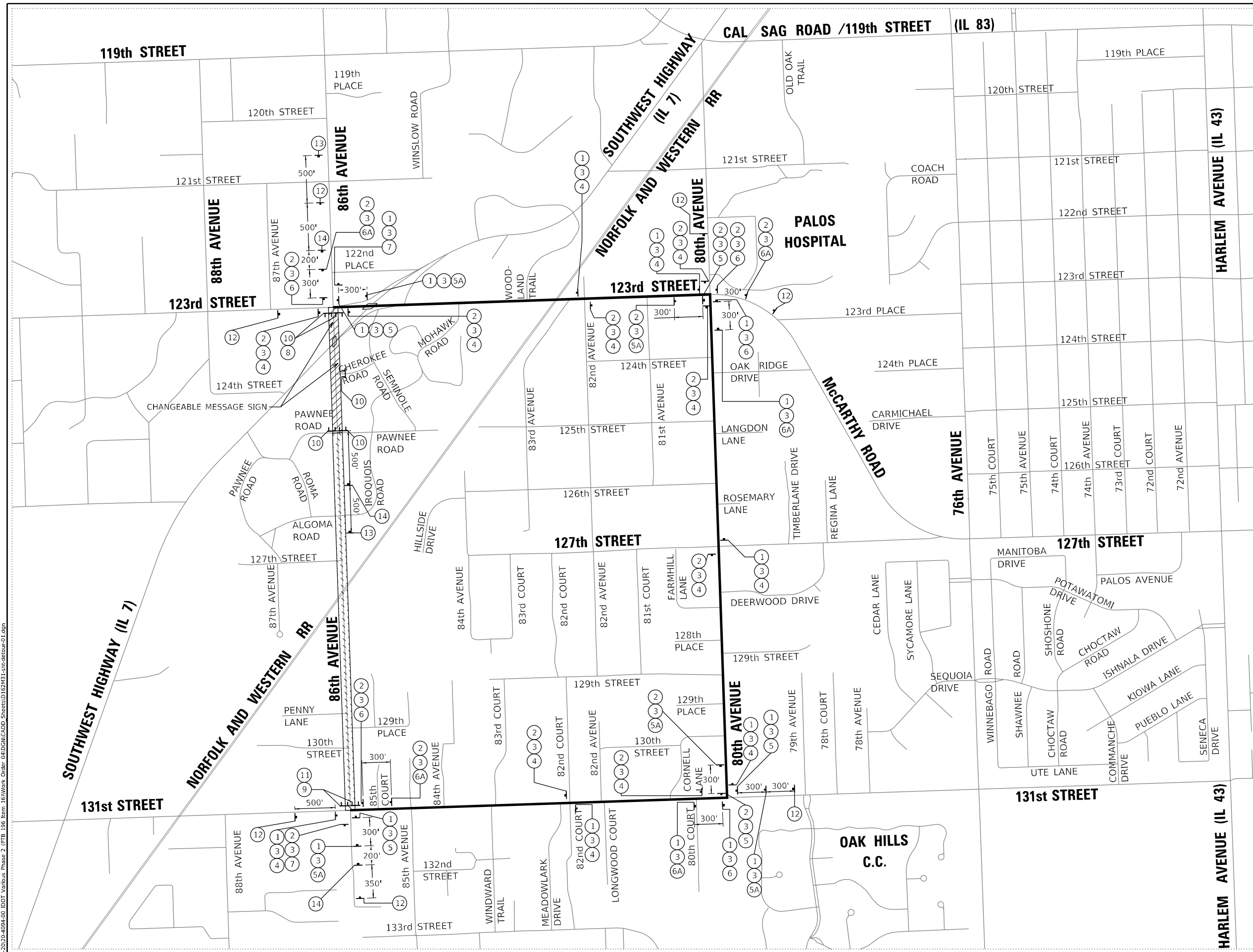


LEGEND:

-  - FULL CLOSURE
-  - PARTIAL CLOSURE
-  - DETOUR ROUTE
-  - TYPE III BARRICADE
-  - DETOUR / CLOSURE SIGNAGE

DETOUR PLAN NOTES:

1. SEE SHEET 6 FOR SIGN SIZING AND DETAILS.
2. ALL SIGNING SHALL BE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE STATE OF ILLINOIS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED APRIL 1, 2016, THE DETAILS IN THIS PLAN, THE LATEST EDITION OF THE IDOT HIGHWAY STANDARDS AND THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".
3. DIMENSIONS SHOWN ON THESE PLANS MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.
4. ENSURE THAT ALL BARRICADES, SIGNS, LIGHTS AND OTHER DEVICES INSTALLED ARE IN PLACE AND OPERATING 24 HOURS EACH DAY, INCLUDING SUNDAYS AND HOLIDAYS, DURING THE TIME THIS DETOUR IS IN EFFECT.
5. ALL EXISTING SIGNING THAT IS NOT APPLICABLE WHILE THE DETOUR IS IN EFFECT SHALL BE COMPLETELY COVERED.
6. THE SIZES OF ALL SIGNS NOT SPECIFIED IN THIS PLAN SHALL BE AS REQUIRED BY THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".
7. PROPOSED DETOUR SIGNING SHALL BE COVERED OR REMOVED WHEN NOT REQUIRED DURING CONSTRUCTION.



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PLOT SCALE = 1000.0000' / in.	DRAWN - MPK	REVISED -
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	DATE - 01/20/2020	REVISED -

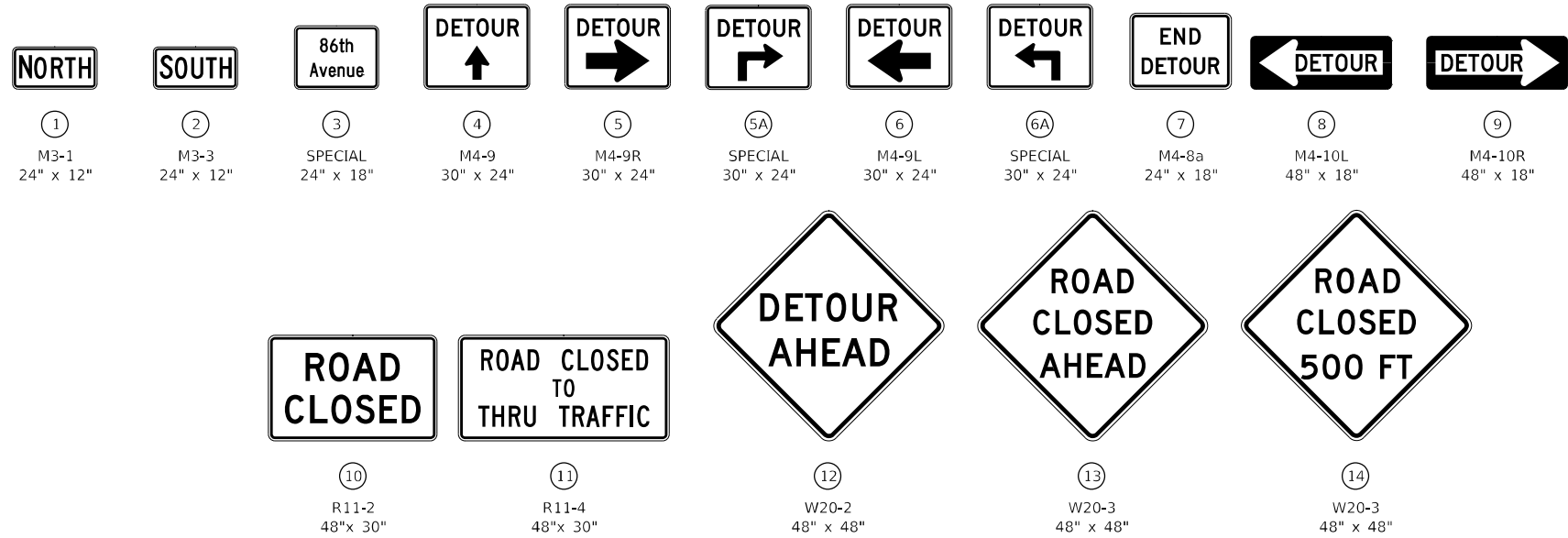
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DETOUR PLAN
86TH AVENUE**

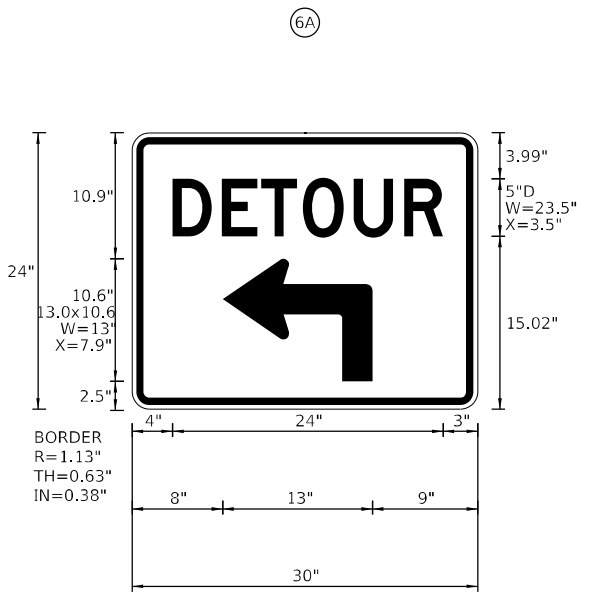
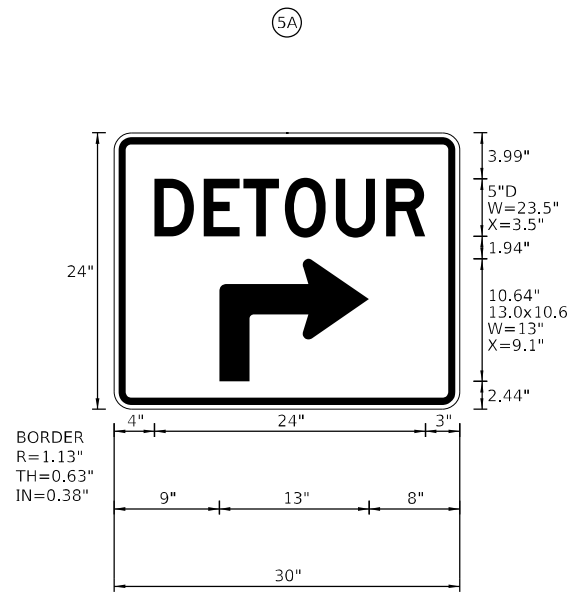
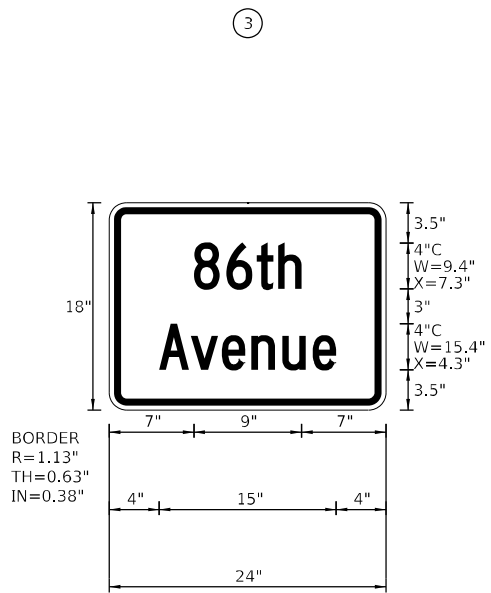
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S.B.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3578	2020-173-BR	COOK	18	4
CONTRACT NO. 62M31				
ILLINOIS FED. AID PROJECT				

**DETOUR SIGNAGE LEGEND
86th AVENUE**



**DETOUR SIGNAGE LEGEND
86th AVENUE**

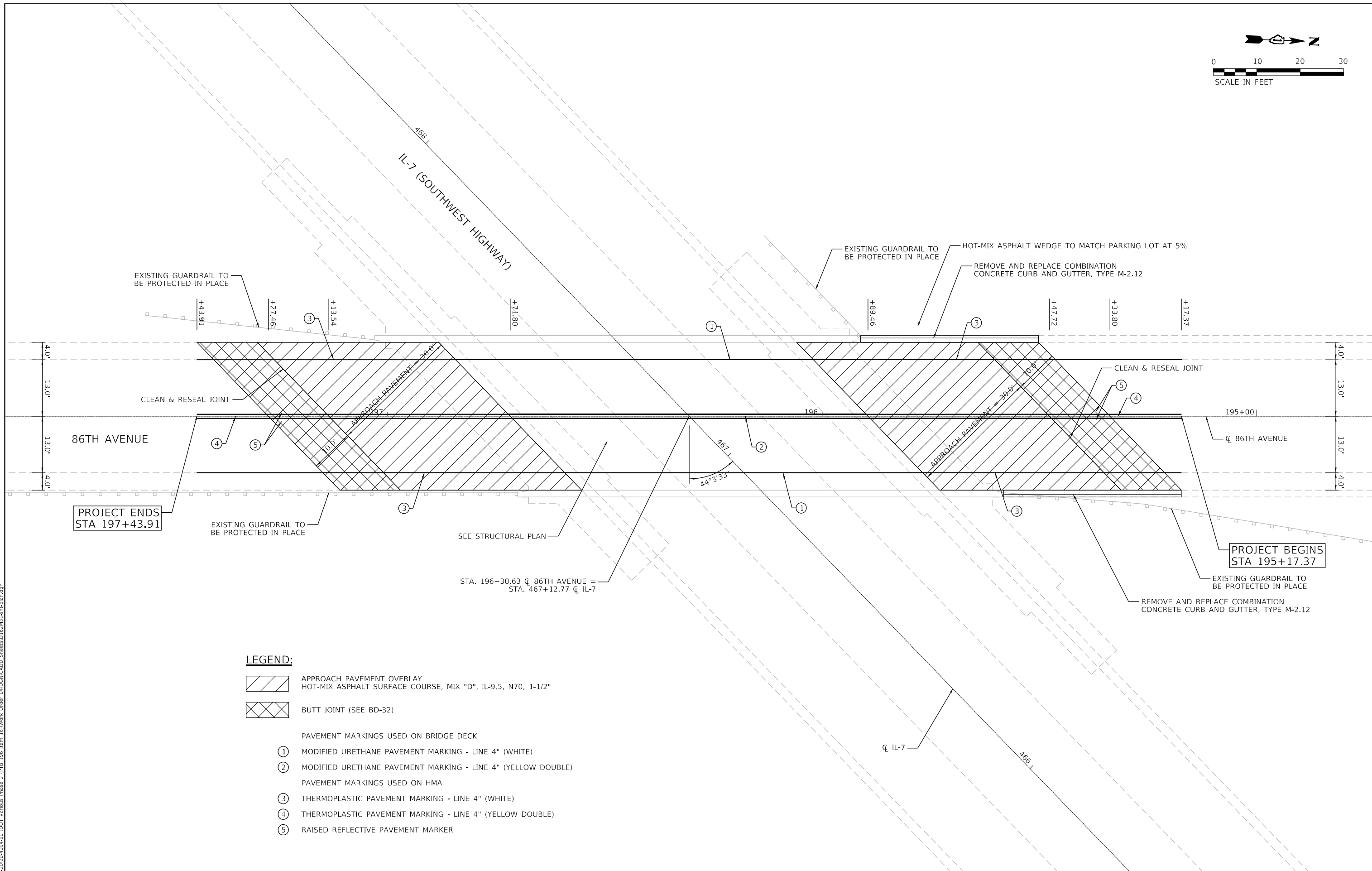
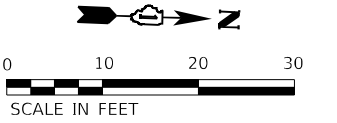


DETOUR PLAN GENERAL NOTES:

- ALL SIGNING SHALL BE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE STATE OF ILLINOIS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED APRIL 1, 2016, THE DETAILS IN THIS PLAN, THE LATEST EDITION OF THE IDOT HIGHWAY STANDARDS AND THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".
- SIGNS 1-9 AND 12-14 SHALL HAVE BLACK LEGEND ON A FLUORESCENT ORANGE (RETROREFLECTIVE) BACKGROUND.
- SIGNS 10 AND 11 SHALL HAVE BLACK LEGEND ON A WHITE (RETROREFLECTIVE) BACKGROUND.

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<p>INFRASTRUCTURE ENGINEERING INCORPORATED 1 South Wacker Suite 2650 Chicago, IL 60606 P 312.452.9558 F 312.451.5164 www.infrastructure-eng.com</p>	USER NAME = Alanc DESIGNED - MPK DRAWN - MPK CHECKED - ACL DATE - 01/20/2020	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETOUR SIGN DETAILS AND NOTES 86TH AVENUE	S.B.I. RTE. 3578 SECTION 2020-173-BR COUNTY COOK TOTAL SHEETS 18 SHEET NO. 5 CONTRACT NO. 62M31	ILLINOIS FED. AID PROJECT
	PLOT SCALE = 1000.0000' / in. PLOT DATE = 2/18/2021	SCALE: SHEET OF SHEETS STA. TO STA.				



PROJECT ENDS
STA 197+43.91

PROJECT BEGINS
STA 195+17.37

LEGEND:

- APPROACH PAVEMENT OVERLAY
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", IL-9.5, N70, 1-1/2"
- BUTT JOINT (SEE BD-32)
- PAVEMENT MARKINGS USED ON BRIDGE DECK
- ① MODIFIED URETHANE PAVEMENT MARKING - LINE 4" (WHITE)
- ② MODIFIED URETHANE PAVEMENT MARKING - LINE 4" (YELLOW DOUBLE)
- PAVEMENT MARKINGS USED ON HMA
- ③ THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE)
- ④ THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW DOUBLE)
- ⑤ RAISED REFLECTIVE PAVEMENT MARKER

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PLOT DATE = 2/18/2021	CHECKED - LM	REVISED -
	DATE - 01/20/2020	REVISED -

DESIGNED - ACL	REVISED -
DRAWN - ACL	REVISED -
CHECKED - LM	REVISED -
DATE - 01/20/2020	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

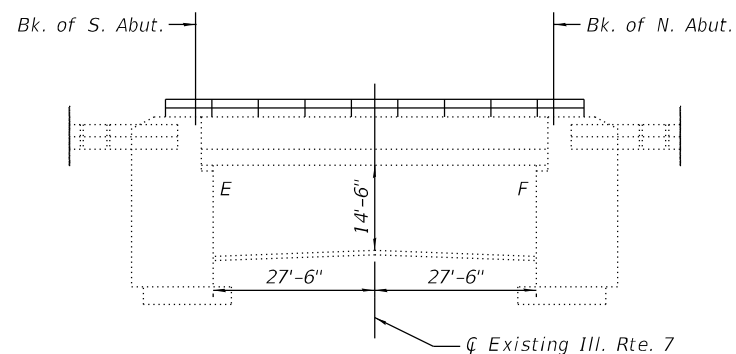
ROADWAY PLAN 86TH AVENUE	
SCALE:	SHEET OF SHEETS STA. TO STA.

S.B.I. RTE. 3578	SECTION 2020-173-BR	COUNTY COOK	TOTAL SHEETS 18	SHEET NO. 6
CONTRACT NO. 62M31				
ILLINOIS FED. AID PROJECT				

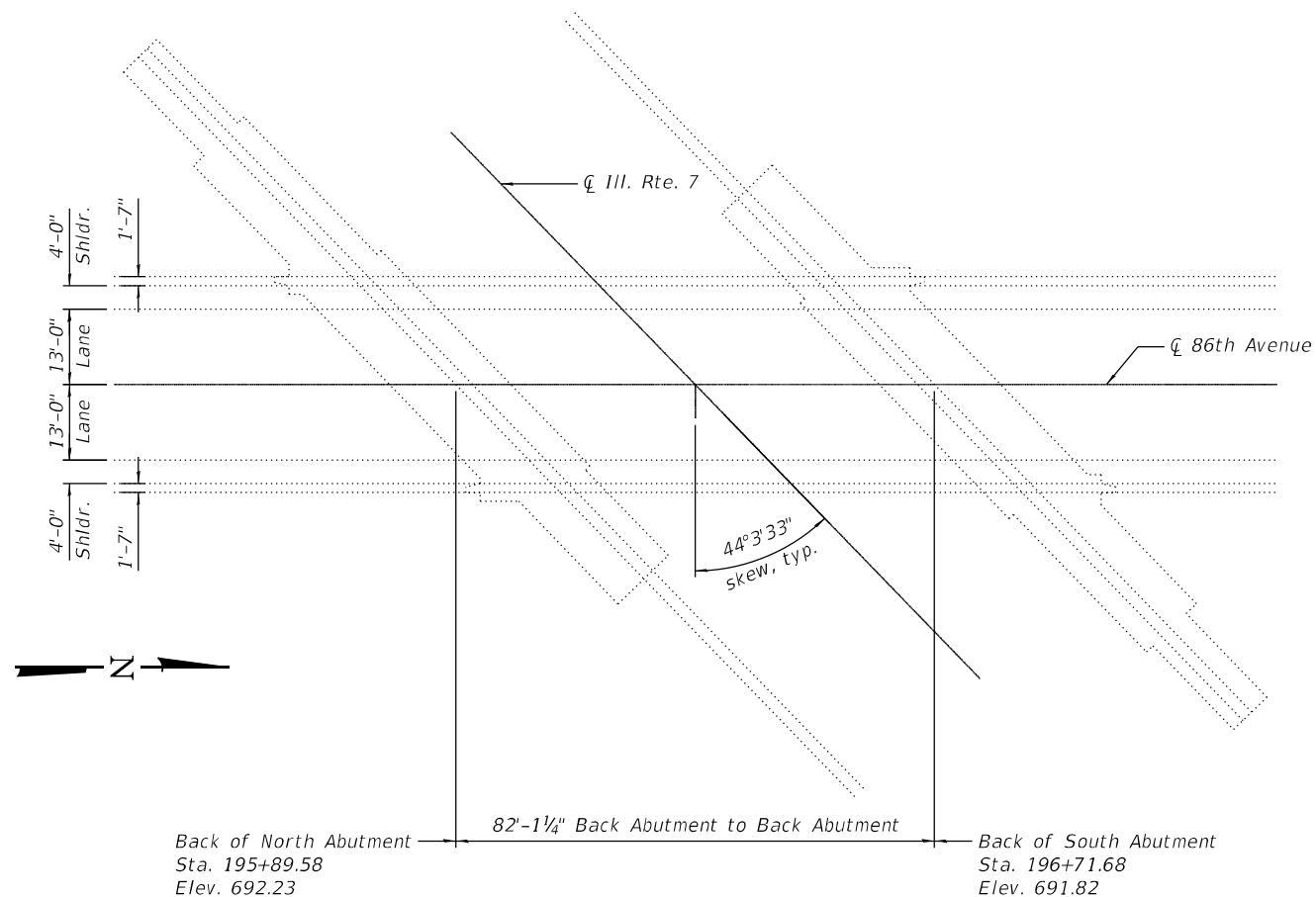
Existing structure: Sta. 196+30.63, 86th Ave. Constructed in 1994, Structure No. 016-2635. Superstructure is a reinforced concrete deck on steel girders (37'-2" by 82'-1¼"). Bridge substructure is footing supported reinforced concrete abutment and wingwalls. Existing superstructure and substructure to remain.

Traffic Control: Bridge will be closed to traffic on 86th Ave. during construction. Ill. Rte. 7 will remain open to traffic.

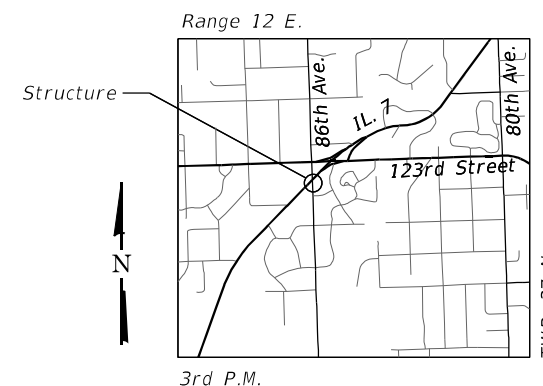
No salvage.



ELEVATION
(For Information Only)



PLAN
(For Information Only)



LOCATION SKETCH

SCOPE OF WORK

1. Hydroscarify bridge deck.
2. Perform deck slab repairs and approach slab repairs.
3. Reconstruct joints.
4. Construct bridge deck latex overlay.
5. Construct approach pavement HMA overlay.
6. Apply concrete sealer to deck overlay and bridge parapets.
7. Remove and re-erect steel railings.

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1. General Plan and Elevation
2. General Data
3. Deck Repair Details
4. Joint Reconstruction Details (1 of 2)
5. Joint Reconstruction Details (2 of 2)
6. Preformed Joint Strip Seal
7. Parapet Railing

DESIGN SPECIFICATIONS (EXIST.)

1992 AASHTO

DESIGN STRESSES (EXIST.)

$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinf. Steel)
 $f_y = 50,000$ psi (Steel Beams) (AASHTO M-270, Gr 50)
 36,000 psi (Steel Diaph., Stiffeners, etc.) (AASHTO M-270 Gr. 36)

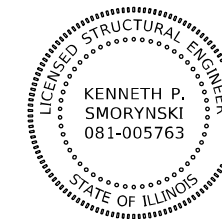
LOADING HS 20-44 (EXIST.)

Allows 25 lbs / sq. ft. for future wearing surface.

SEISMIC DATA (EXIST.)

S.P.C. "A"
 $A = 0.04$
 $S = 1.0$

NOTE: Work is to be completed under road closure.



Kenneth P. Smorynski
 KENNETH P. SMORYNSKI, S.E.
 NO. 081-005763
 EXP. DATE: 11/30/2022

GENERAL PLAN & ELEVATION
86TH AVE. OVER ILL. RTE. 7
SECTION: 3178B-RS
COOK COUNTY
STATION 467+12.77
STR. NO. 016-2635

MODEL: D:\p\proj\1611\work\order\CADD\CHCADD_Sheets\1611\1611-1-11-11.dwg
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USER NAME	= ALane
PLOT SCALE	= 0.1667' / in.
PLOT DATE	= 2/18/2021

DESIGNED	- MD
DRAWN	- MD
CHECKED	- KPS
DATE	- 02/18/2021

REVISED	-
REVISED	-
REVISED	-
REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
STRUCTURE NO. 016-2635

SCALE: SHEET 1 OF 7 SHEETS STA. TO STA.

S.B.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3578	2020-173-BR	COOK	18	7
CONTRACT NO. 62M31				

ILLINOIS FED. AID PROJECT

TOTAL BILL OF MATERIAL

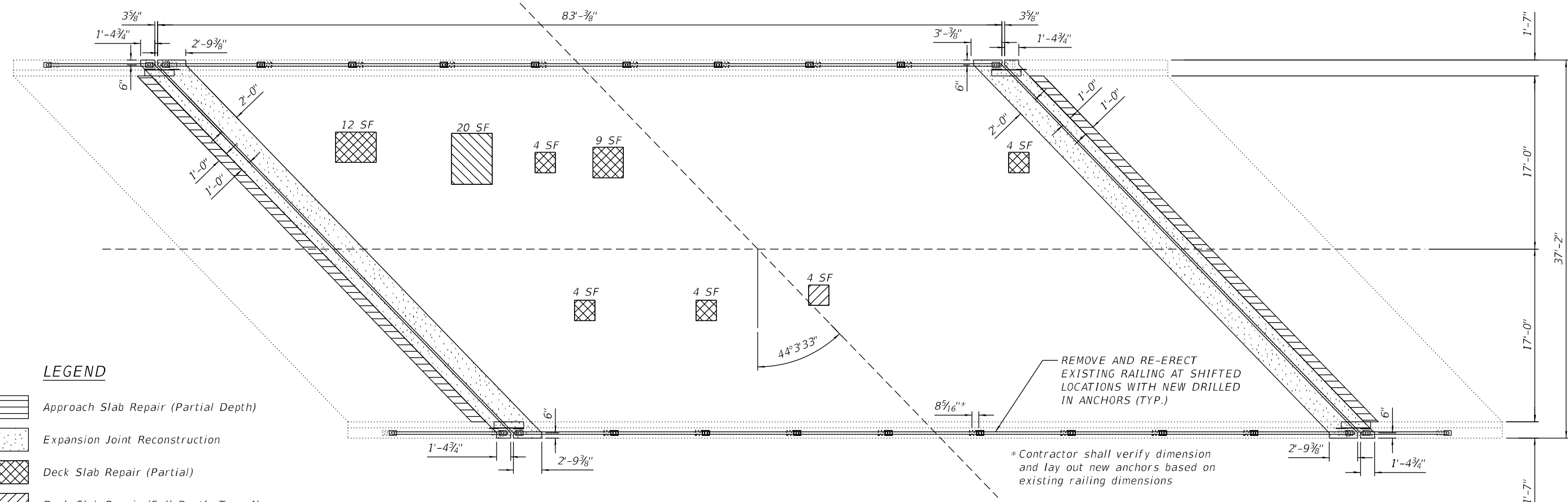
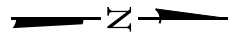
ITEM	UNIT	TOTAL
PROTECTIVE COAT	SQ YD	407
CONCRETE REMOVAL	CU YD	16.9
PROTECTIVE SHIELD	SQ YD	285
CONCRETE SUPERSTRUCTURE	CU YD	16.9
BRIDGE DECK GROOVING	SQ YD	314
REINFORCEMENT BARS, EPOXY COATED	POUND	1,470
PREFORMED JOINT STRIP SEAL	FOOT	101
APPROACH SLAB REPAIR (PARTIAL DEPTH)	SQ YD	11
BRIDGE DECK LATEX CONCRETE OVERLAY, 2¼"	SQ YD	293
BRIDGE DECK SCARIFICATION, ¾"	SQ YD	293
DECK SLAB REPAIR (FULL DEPTH, TYPE I)	SQ YD	0.5
DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ YD	3
REMOVING AND RE-ERECTING EXISTING RAILING	FOOT	194

GENERAL NOTES

1. These plans have been prepared based on field notes provided by the District.
2. Reinforcement bars designated (E) shall be epoxy coated.
3. 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.
4. Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included in Concrete Removal.
5. Areas of deck repairs are estimated. Actual type, location and dimensions are to be determined by the Engineer during construction and documented on as-built plans.
6. The original bridge drawings for S.N. 016-2635 are dated 1993 and will be made available to the Contractor upon request.
7. Joint opening shall be adjusted according to Article 520.04 of the Standard Specifications at an ambient temperature other than 50 degrees F.

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	PLOT DATE = 3/17/2021	DATE - 02/18/2021	REVISED -		CONTRACT NO. 62M31						
					SCALE:	SHEET 2 OF 7 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT		



PLAN

LEGEND

- Approach Slab Repair (Partial Depth)
- Expansion Joint Reconstruction
- Deck Slab Repair (Partial)
- Deck Slab Repair (Full Depth, Type I)
- Deck Slab Repair (Full Depth, Type II)

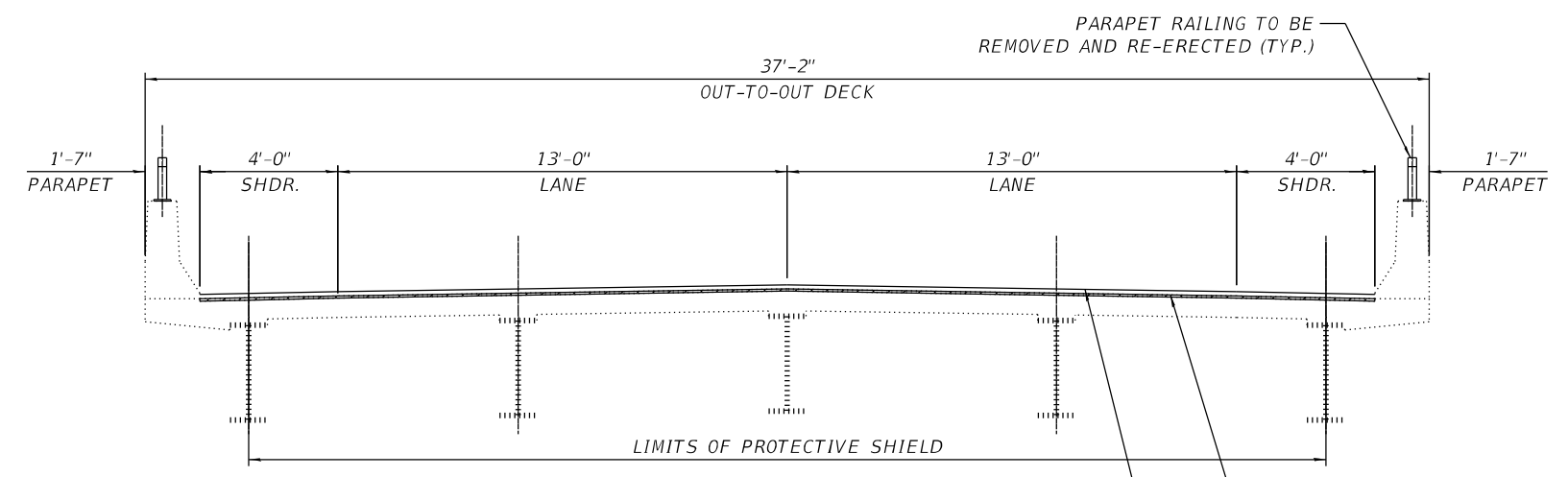
*Contractor shall verify dimension and lay out new anchors based on existing railing dimensions

NOTES

1. Quantities and limits of Deck Slab Repairs shown herein are estimated from a survey completed by the District. Actual limits shall be determined in the field by the Engineer and noted in the As-Built Plans.
2. Deck Slab Repair (Partial) locations and quantities shown herein are for information only and will not be measured for payment but shall be included in the cost of Bridge Deck Latex Concrete Overlay.
3. Protective Coat shall be applied to the top and inside face of the bridge parapets and new concrete overlay areas.
4. Install new drilled in anchor bolts for existing railings. Cut existing anchor bolts flush with concrete and paint with epoxy. Cost of this work is included in "Removing and Re-erecting Existing Railing".
5. For Expansion Joint Reconstruction Details, see Sheets 10 and 11.
6. For railing details see Sheet 13.

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Approach Slab Repair (Partial Depth)	SQ YD	11
Preformed Joint Strip Seal	FOOT	101
Deck Slab Repair (Full Depth, Type I)	SQ YD	0.5
Deck Slab Repair (Full Depth, Type I)	SQ YD	3
Protective Coat	SQ YD	407
Removing and Re-erecting Existing Railing	FOOT	194
Protective Shield	SQ YD	285



CROSS SECTION

(Looking North)

MODEL Path: \\p161w001\p161w001\DOT_Various_Phase_2\ITB_106\Item_16\Work_Order_04\DCM\CADD_Sheets\1623M31-1-16-2021.dwg

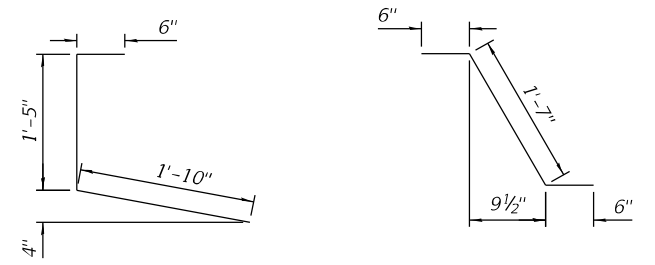
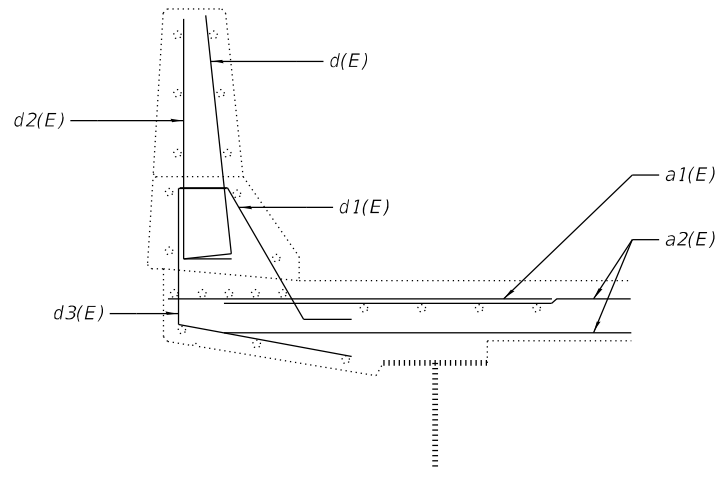
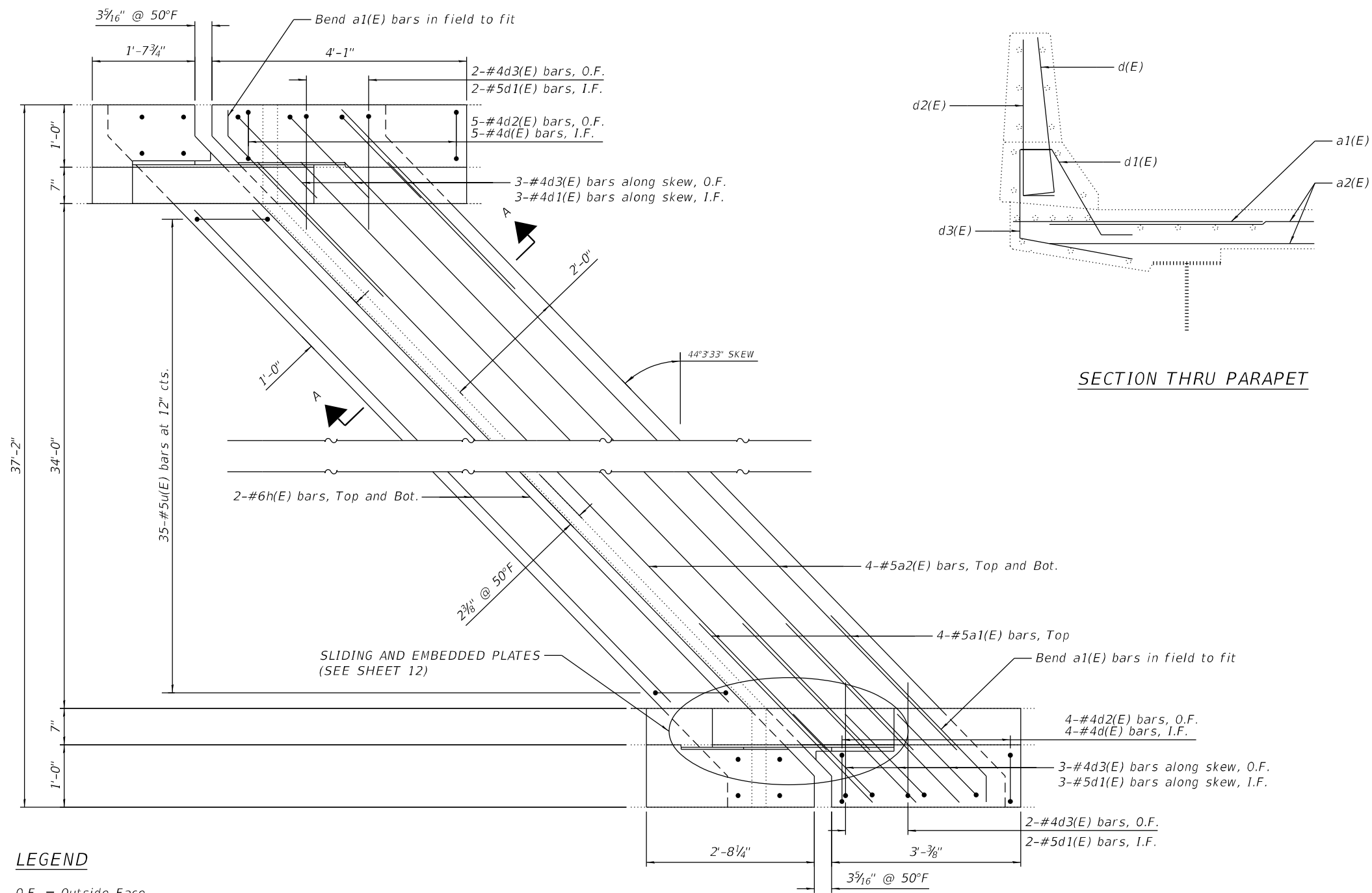
INFRASTRUCTURE ENGINEERING INCORPORATED
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USER NAME = midaz	DESIGNED - MD	REVISED -
PLOT SCALE = 0.1667' / in.	DRAWN - MD	REVISED -
PLOT DATE = 3/17/2021	CHECKED - KPS	REVISED -
	DATE - 02/18/2021	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

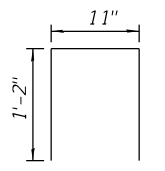
DECK REPAIR		S.B.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STRUCTURE NO. 016-2635		3578	2020-173-BR	COOK	18	9
SCALE:		SHEET 3 OF 7 SHEETS		STA.	TO STA.	

CONTRACT NO. 62M31		ILLINOIS FED. AID PROJECT	
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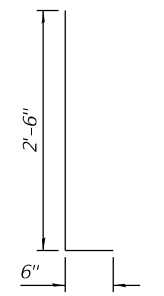


BAR d3(E)

BAR d1(E)



BAR u(E)



BAR d(E)

SECTION THRU PARAPET

**BILL OF MATERIAL
FOR TWO ABUTMENTS**

Bar	No.	Size	Length	Shape
a1(E)	16	#6	4'-0"	—
a2(E)	16	#5	34'-3"	—
d(E)	18	#5	3'-0"	┌
d1(E)	10	#5	2'-7"	└
d2(E)	18	#4	3'-0"	┌
d3(E)	10	#4	3'-9"	└
h(E)	8	#6	34'-3"	—
u(E)	70	#5	3'-3"	└
Concrete Removal			Cu Yd	16.9
Concrete Superstructure			Cu Yd	16.9
Bridge Deck Grooving			Sq Yd	21
Protective Coat			Sq Yd	406
Reinforcement Bars, Epoxy Coated			Pound	1,470

LEGEND

O.F. = Outside Face
I.F. = Inside Face

Notes:

- Dimensions are based on a Rolled Strip Seal Joint. If the Contractor elects to use a Welded Rail Strip Seal Joint, deck dimensions may require adjustments to satisfy the details on Sheet 12.
- Removal off existing joint system is included with Concrete Removal.
- See Sheets 12 for Preformed Joint Strip Seal Details.
- See Sheet 11 for Section A-A.

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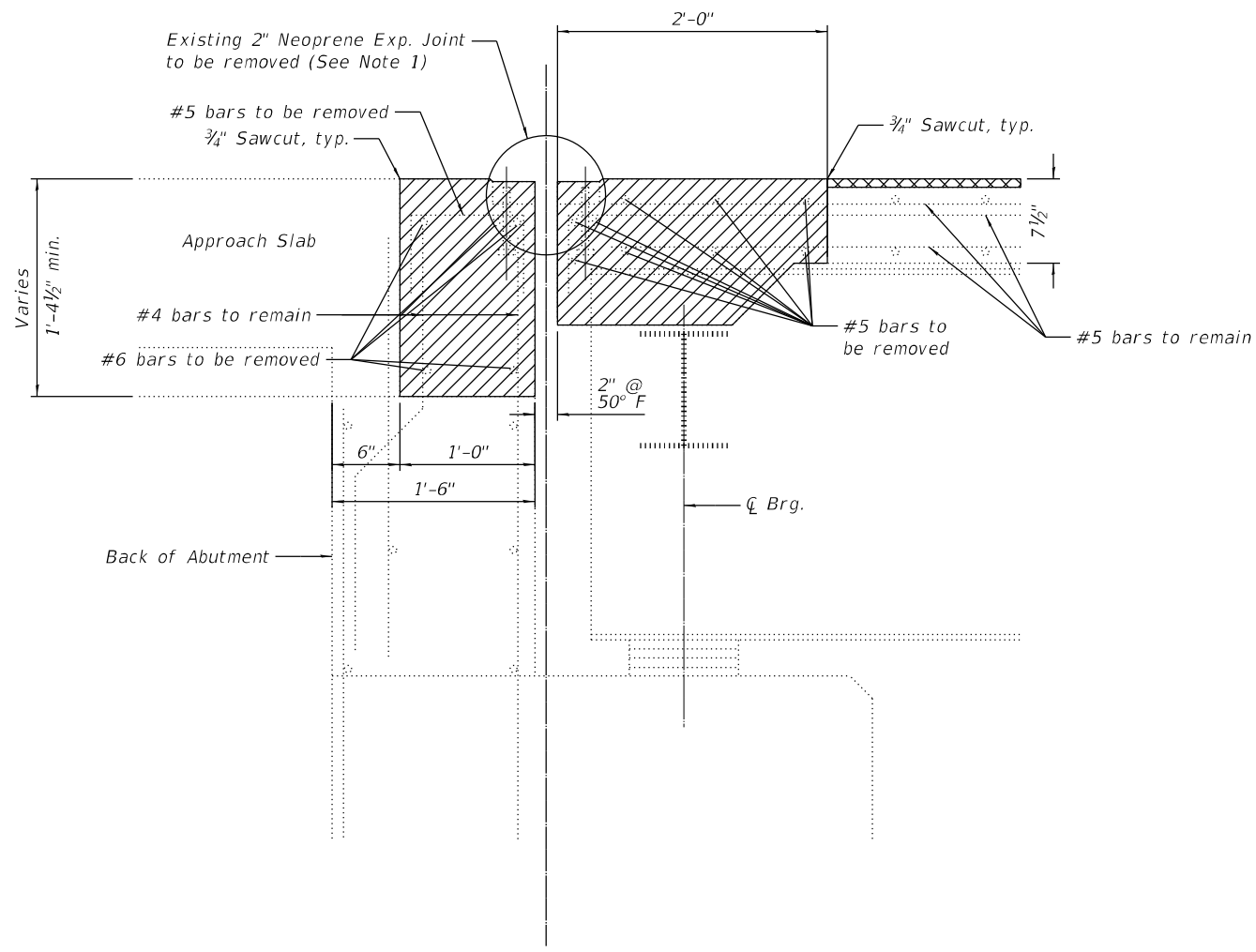
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

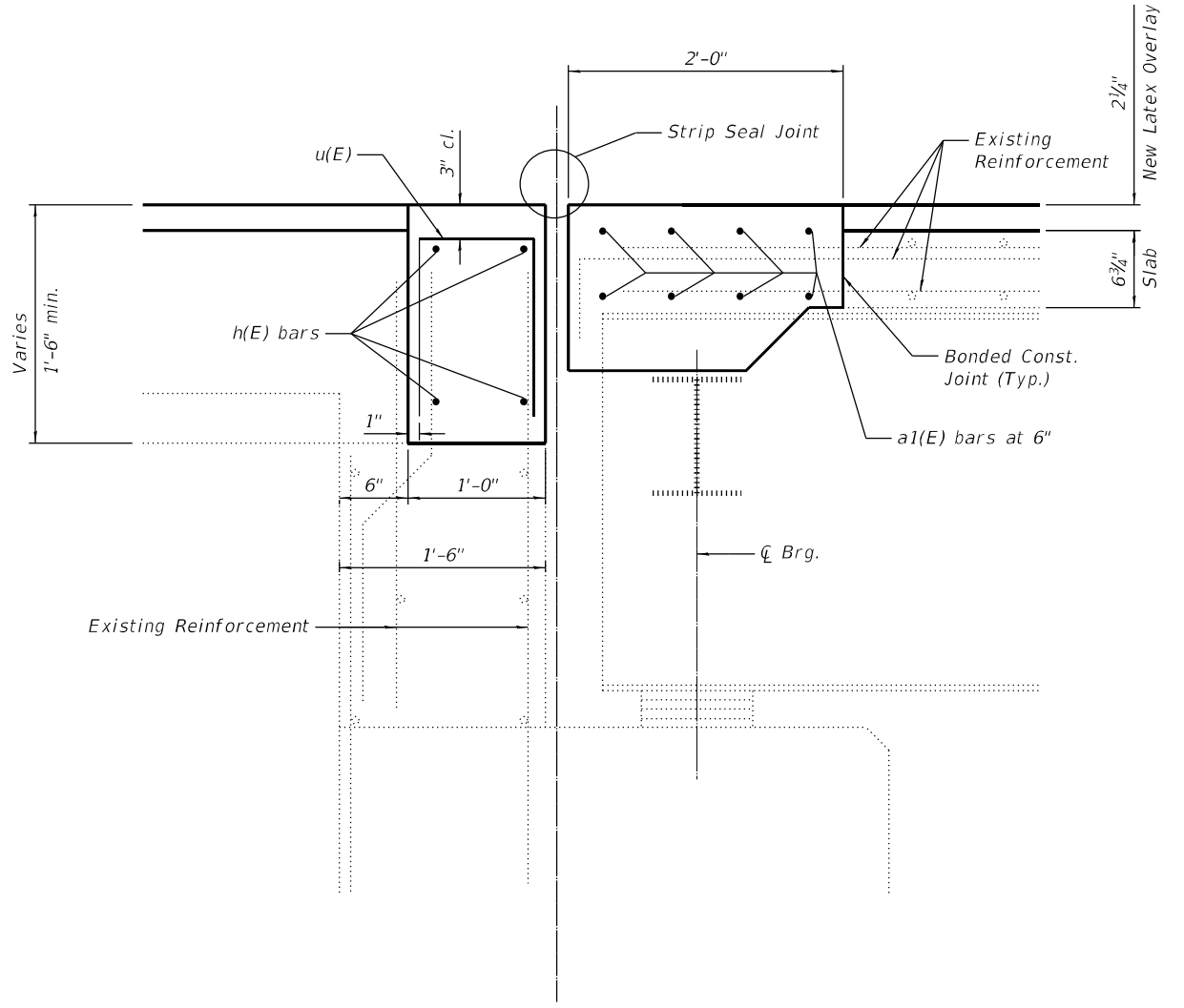
**JOINT RECONSTRUCTION DETAILS (1 OF 2)
STRUCTURE NO. 016-2635**

SCALE: SHEET 4 OF 7 SHEETS STA. TO STA.

S.B.I. RTE. 3578	SECTION 2020-173-BR	COUNTY COOK	TOTAL SHEETS 18	SHEET NO. 10
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62M31	



SECTION A-A
(Showing Removal)



SECTION A-A
(Showing Reconstruction)

LEGEND

- Concrete Removal Limits
- Proposed Hydroscarification

Notes:

1. Removal and disposal of the existing expansion joint will not be paid for separately, but shall be included with the cost of Concrete Removal.
2. All existing reinforcement to remain shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.

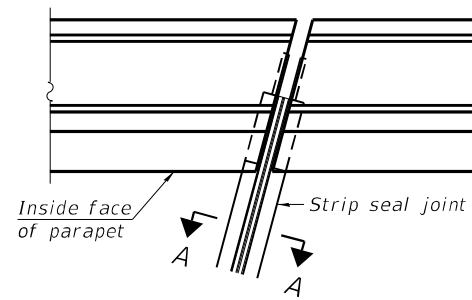
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	PLOT SCALE = 0.1667' / in.	DRAWN - MD	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

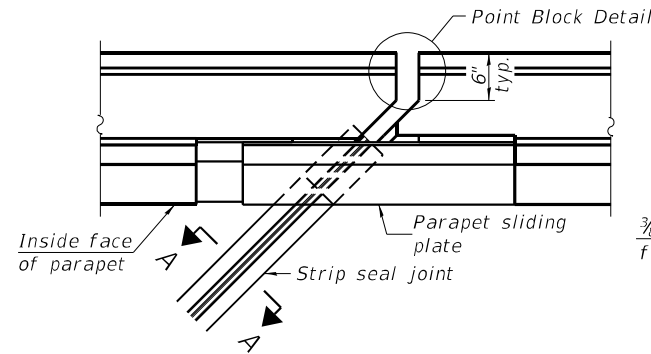
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SCALE:	SHEET 5 OF 7 SHEETS	STA.	TO STA.

S.B.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3578	2020-173-BR	COOK	18	11
CONTRACT NO. 62M31				
ILLINOIS FED. AID PROJECT				

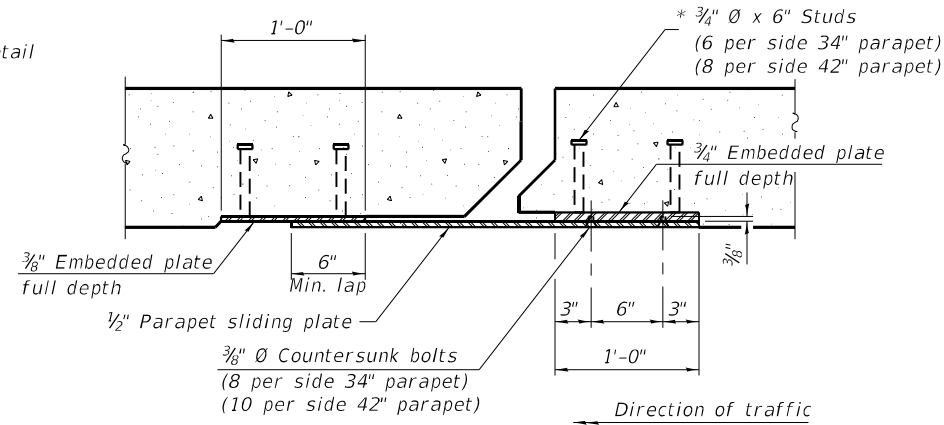


FOR SKEWS $\leq 30^\circ$

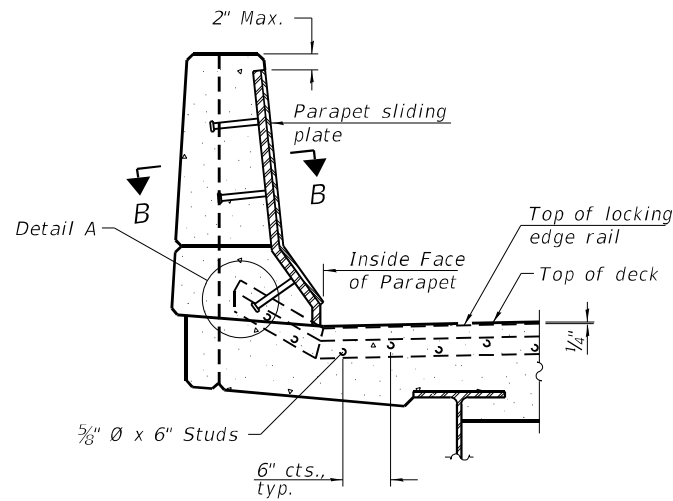
PLAN AT PARAPET



FOR SKEWS $> 30^\circ$

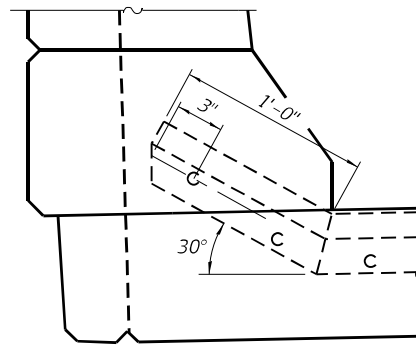


SECTION B-B

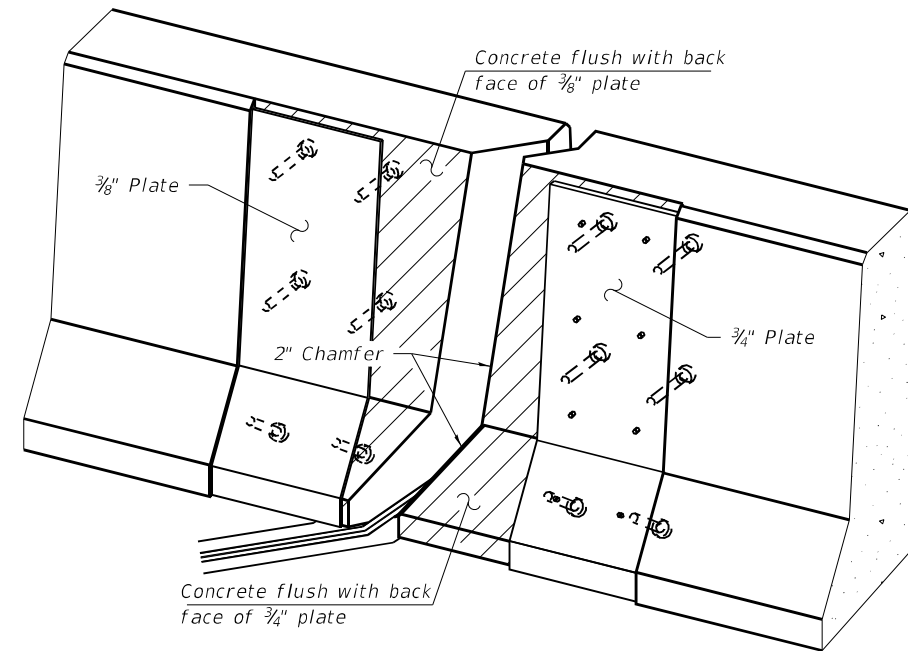


ELEVATION AT PARAPET

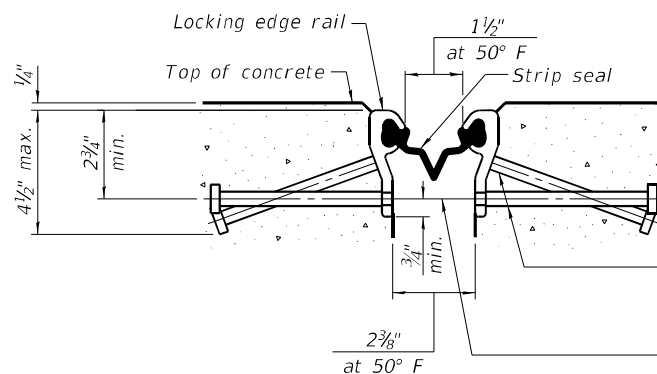
(Skews $> 30^\circ$ shown. Skews $\leq 30^\circ$ similar except as shown in plan view.)



DETAIL A



TRIMETRIC VIEW
(Showing embedded plates only)



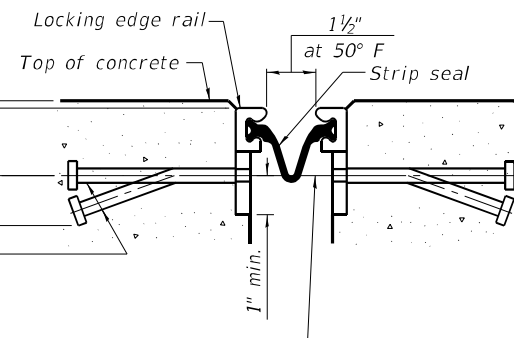
SHOWING ROLLED RAIL JOINT

* $3/8$ " ϕ x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)

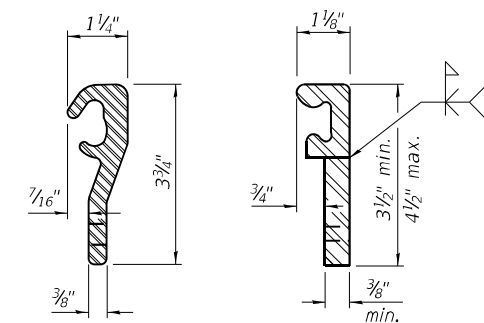
$3/8$ " ϕ threaded rods in $1/16$ " ϕ holes at ± 4 "-0" cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

SECTION A-A

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

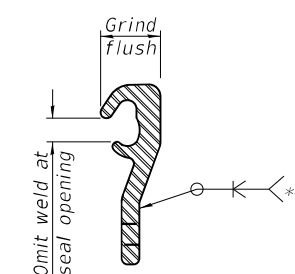


SHOWING WELDED RAIL JOINT



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.

Notes:

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

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

The manufacturer's recommended installation methods shall be followed.

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

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

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

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.

MODEL Path: \\... INFRASTRUCTURE ENGINEERING INCORPORATED 1 South Wacker | Suite 2650 | Chicago, IL 60606 P 312.425.9598 | F 312.425.9594 | www.infrastructure-eng.com

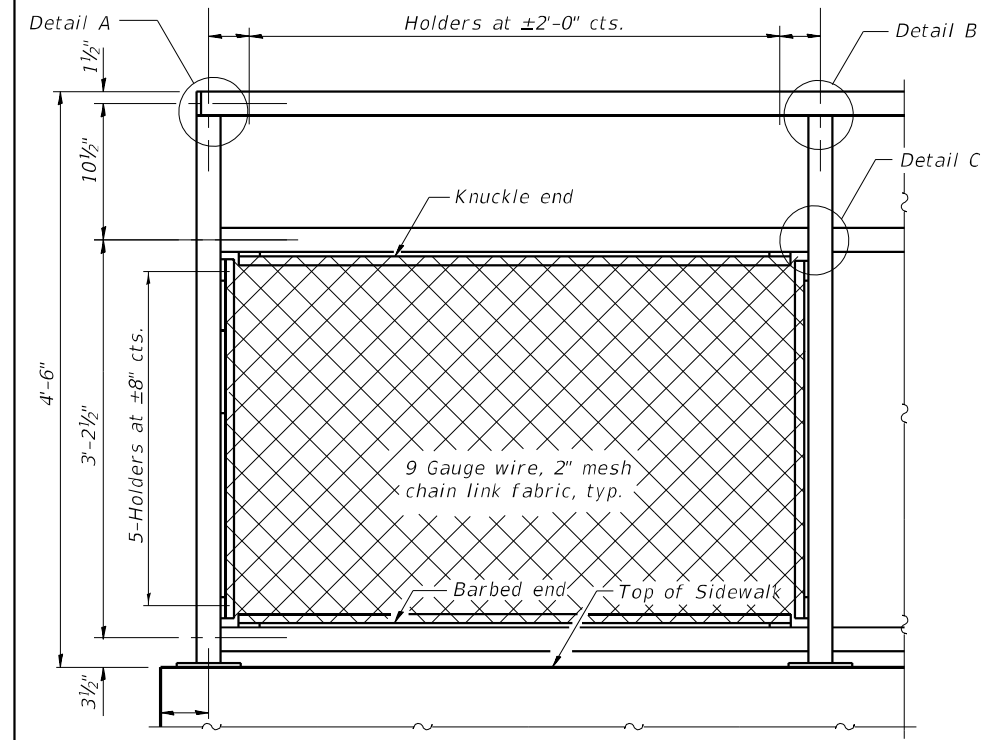
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8-11-17

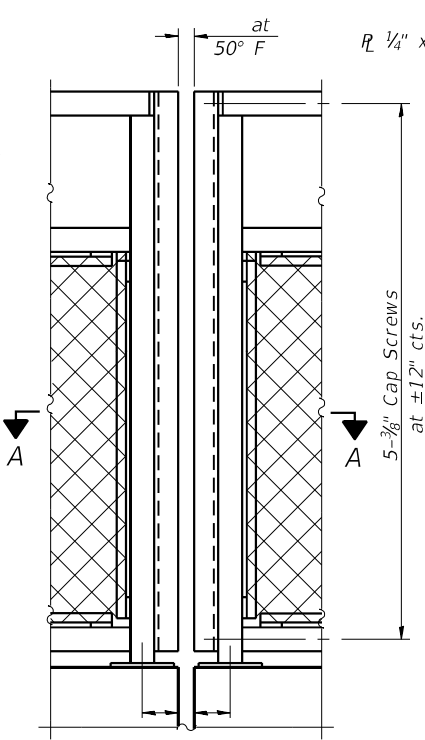
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	PLOT SCALE = 0.1667' / in.	DRAWN - MD	REVISED -			3578	2020-173-BR	COOK	18	12
PLOT DATE = 2/18/2021	CHECKED - KPS	REVISED -		SCALE:	SHEET 6 OF 7 SHEETS	STA.	TO STA.	CONTRACT NO. 62M31		
	DATE - 02/18/2021	REVISED -		ILLINOIS FED. AID PROJECT						

FOR INFORMATION ONLY

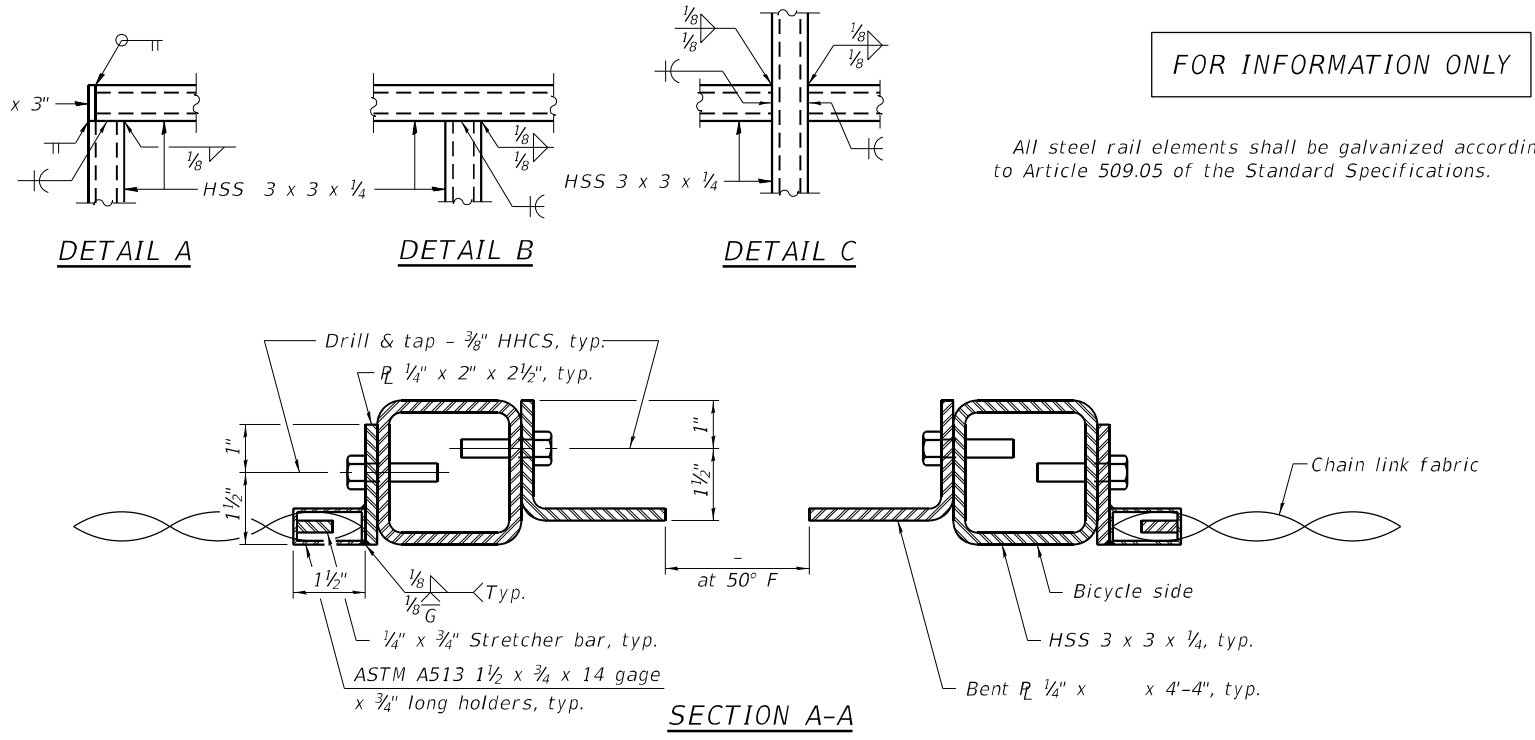
All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.



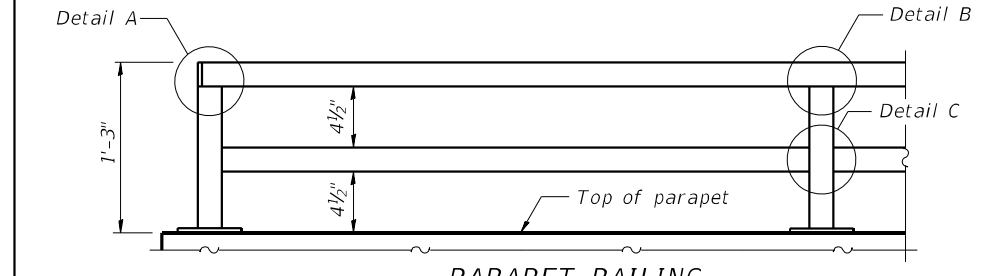
BICYCLE RAILING



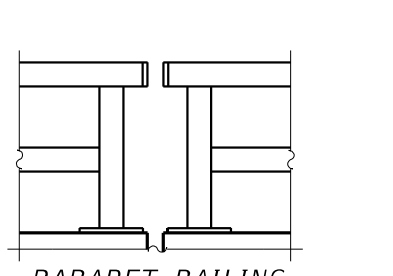
BICYCLE RAILING



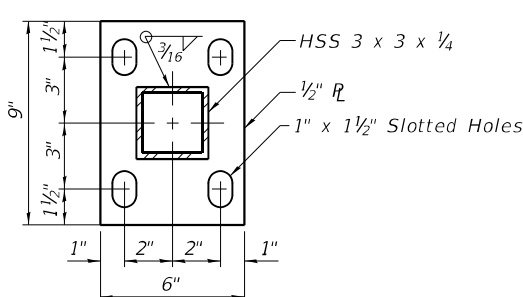
SECTION A-A



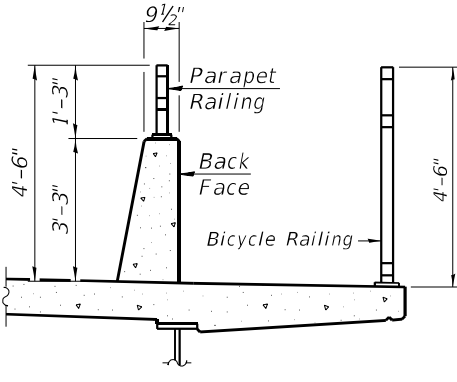
**PARAPET RAILING
ELEVATION
(Inside Face of Two Element Rail)**



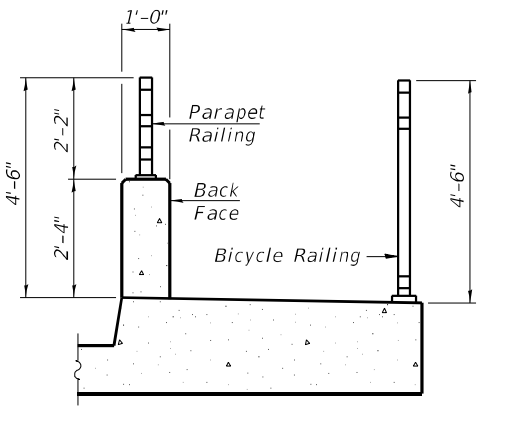
**PARAPET RAILING
ELEVATION AT EXPANSION JOINT
(Two Element Rail Shown - Three Element Rail Similar)**



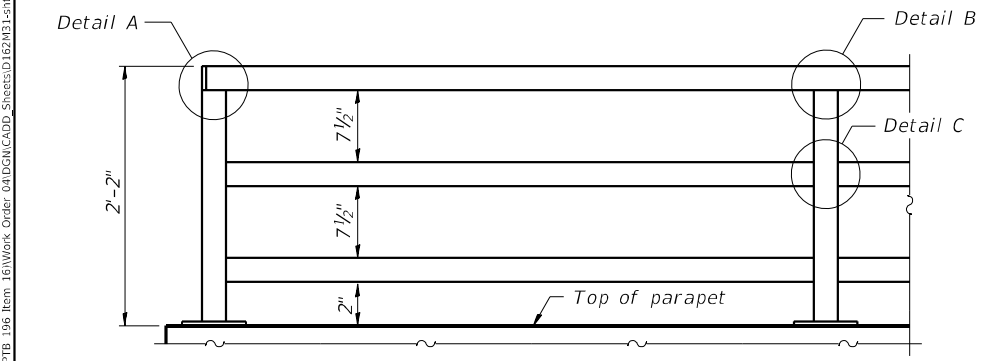
BASE R



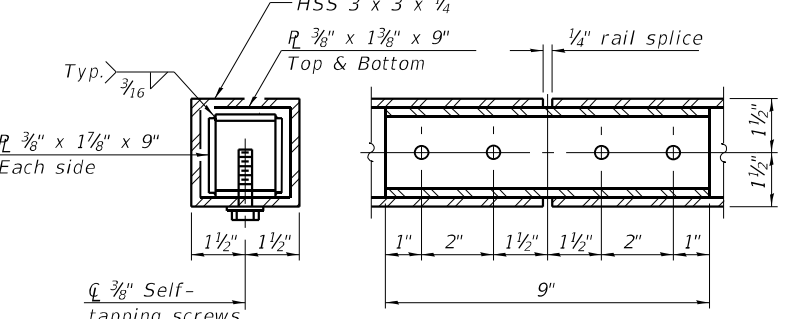
SECTION THRU DECK



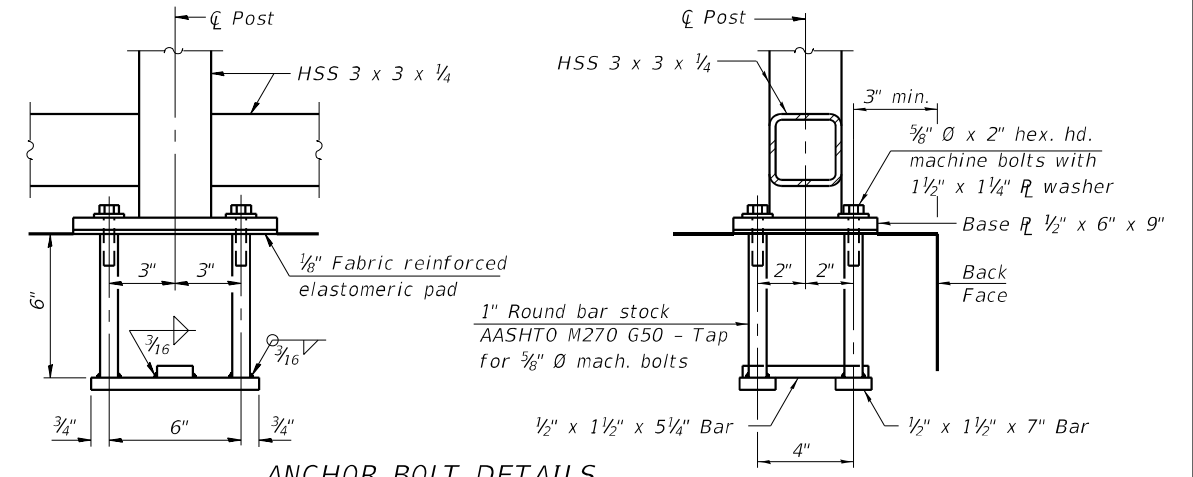
SECTION THRU SIDEWALK



**PARAPET RAILING
ELEVATION
(Inside Face of Three Element Rail)**



RAIL SPLICE



ANCHOR BOLT DETAILS

In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting 5/8 inch diameter anchor rods according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.

Notes:
 All structural steel tubing, post and railing, for parapet railing shall be CVN tested according to 1006.34(b) of the Standard Specifications.
 CVN testing may be omitted for the Bicycle Railing.

R-29 1-14-2019 (10'-0" Maximum Post Spacing)

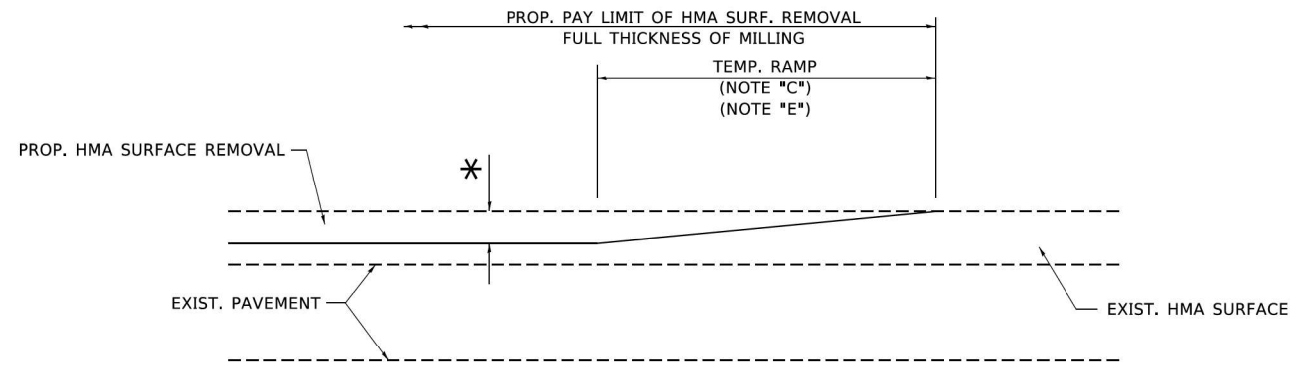
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	PLOT SCALE = 0.1667' / in.	DRAWN - MD	REVISED -
	PLOT DATE = 2/18/2021	CHECKED - KPS	REVISED -
	DATE - 02/18/2021		REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PARAPET RAILING
STRUCTURE NO. 016-2635**

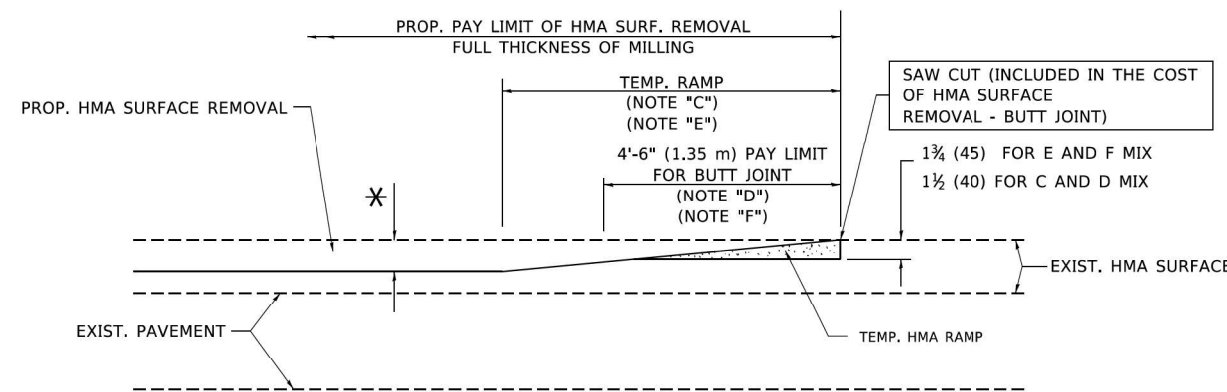
SCALE: SHEET 7 OF 7 SHEETS STA. TO STA.

S.B.I. RTE. 3578	SECTION 2020-173-BR	COUNTY COOK	TOTAL SHEETS 18	SHEET NO. 13
CONTRACT NO. 62M31			ILLINOIS FED. AID PROJECT	



MILLED TEMPORARY RAMP
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

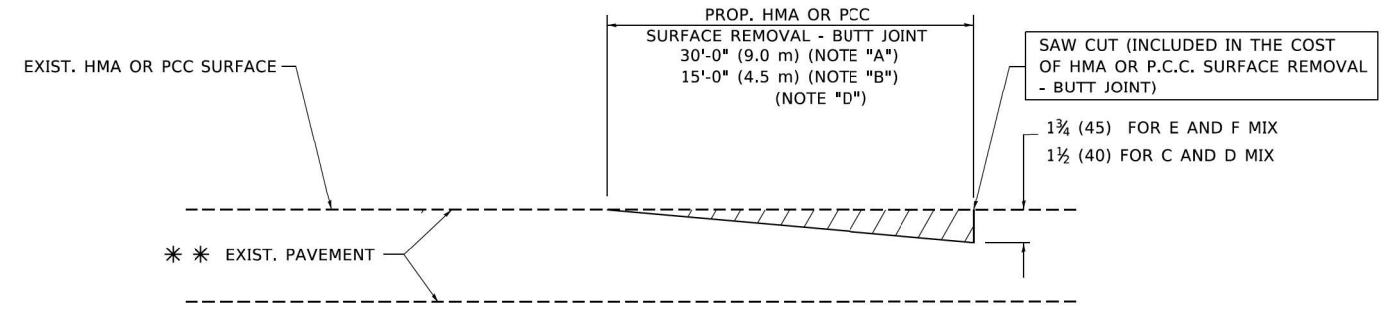
OPTION 1



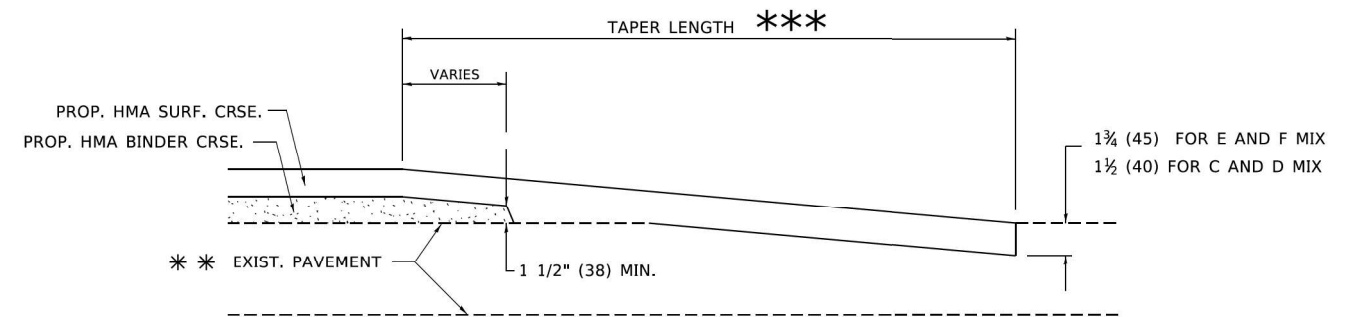
HMA CONSTRUCTED TEMPORARY RAMP
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

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.

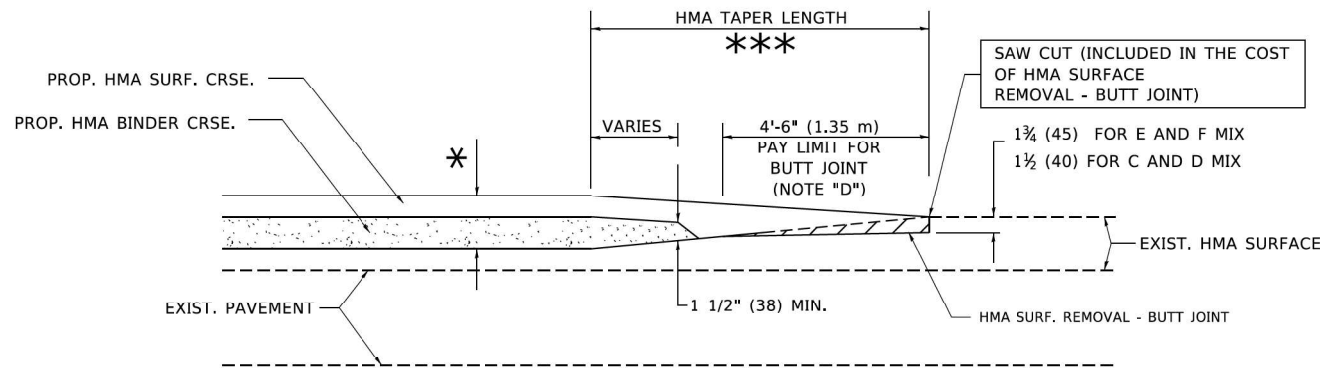
NOTES

- 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.

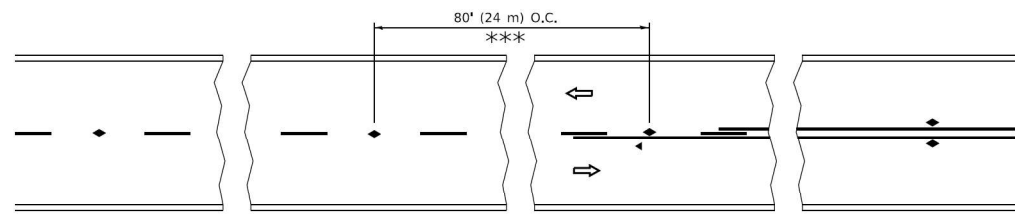


BUTT JOINT AND HMA TAPER

TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

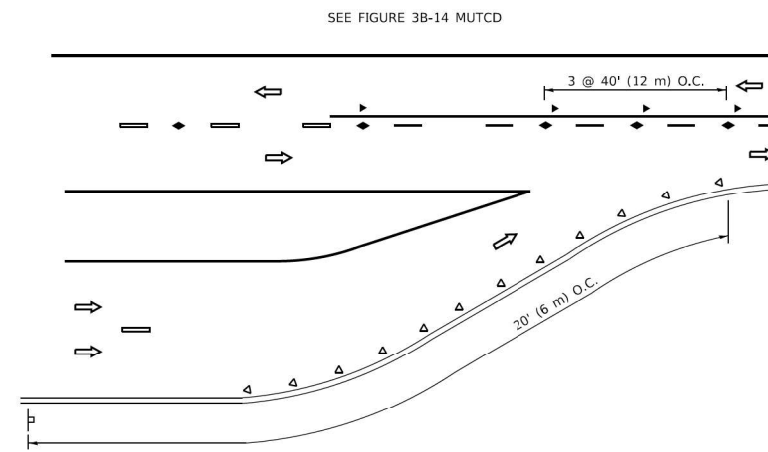
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 INFRASTRUCTURE ENGINEERING INCORPORATED 1 South Wacker Suite 2650 Chicago, IL 60606 P 312.425.8500 F 312.425.8594 www.infrastructure-eng.com	USER NAME = ALane DESIGNED - ACL DRAWN - ACL CHECKED - LM DATE - 01/20/2020	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE - BUTT JOINT AND HMA TAPER DETAILS (BD-32)	S.B.I. RTE. = 3578 SECTION = 2020-173-BR COUNTY = COOK TOTAL SHEETS = 18 SHEET NO. = 14 CONTRACT NO. = 62M31
	PLOT SCALE = 20,0018 * / in. PLOT DATE = 2/18/2021	SCALE: _____ SHEET OF SHEETS STA. TO STA.			ILLINOIS FED. AID PROJECT

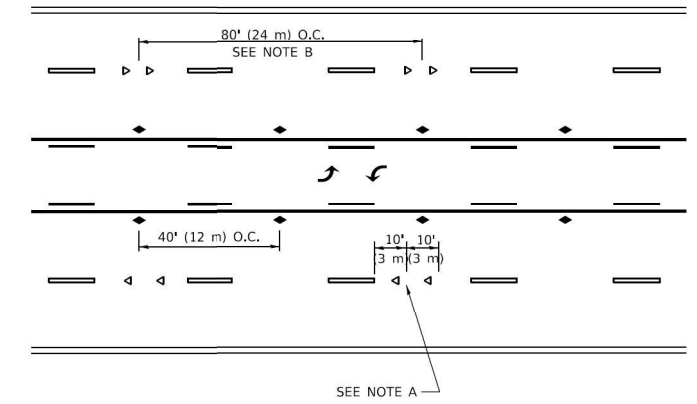


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

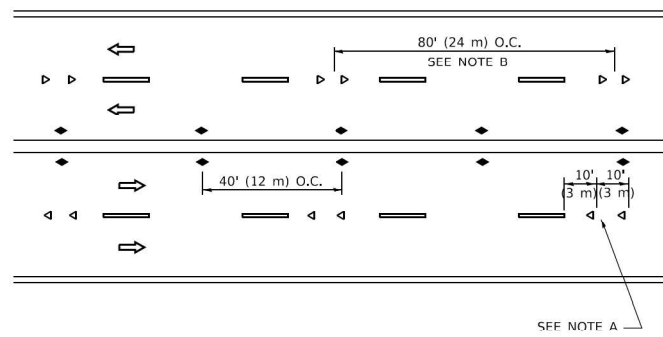
TWO-LANE/TWO-WAY



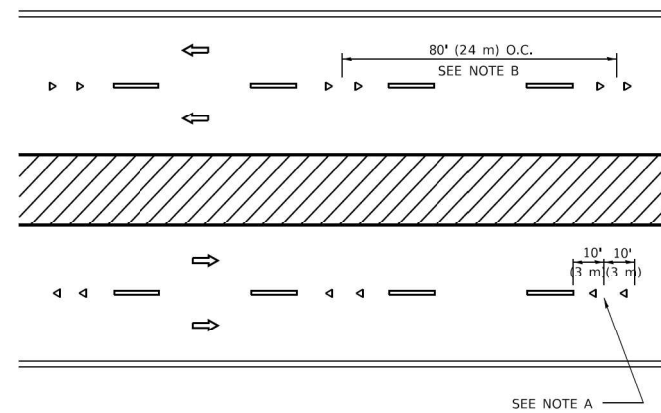
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

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

SYMBOLS

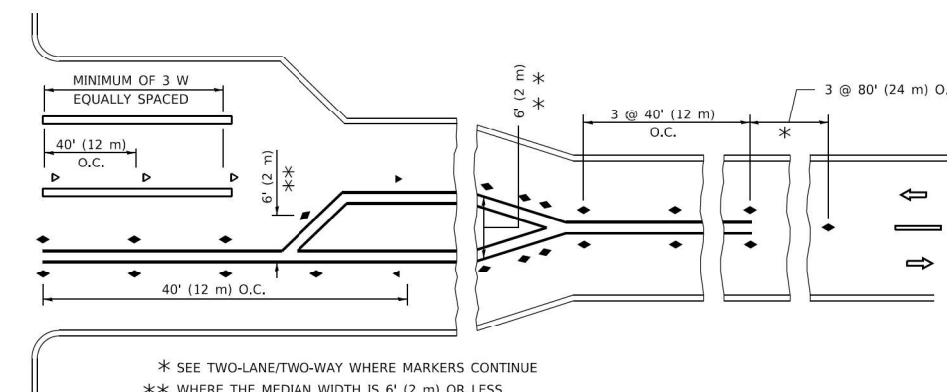
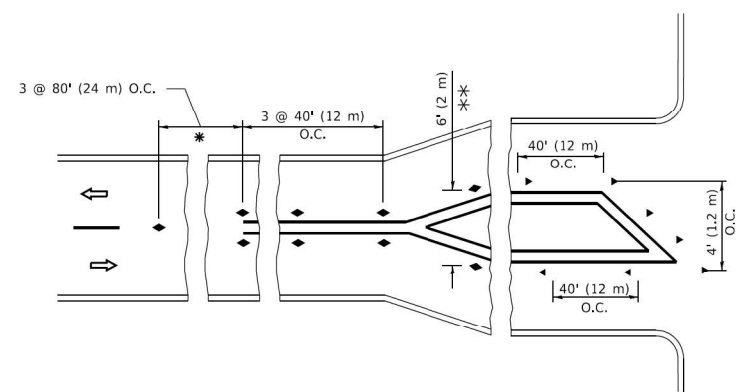
- YELLOW STRIPE
- ▬ WHITE STRIPE
- ◄ ONE-WAY AMBER MARKER
- ◄ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

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 (16 km/h) LOWER THAN POSTED SPEEDS.

DESIGN NOTES

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

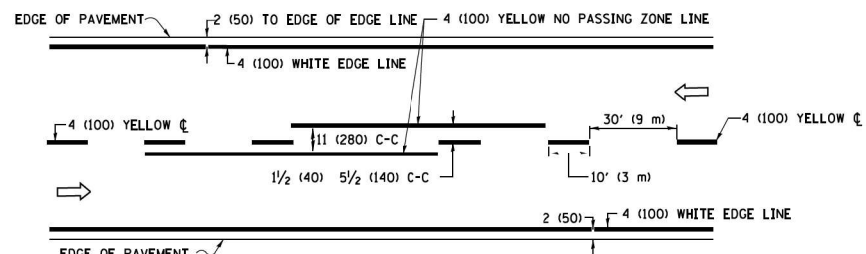


* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE
 ** WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS USE TWO-WAY MARKERS.

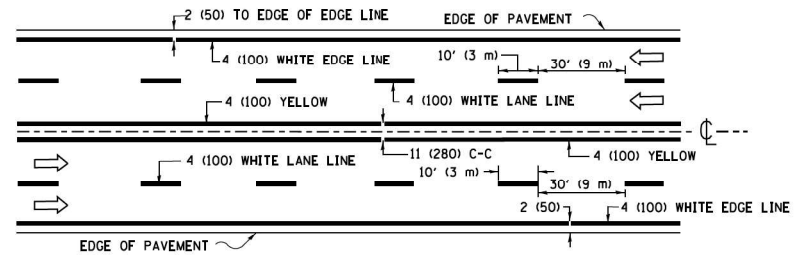
TURN LANES

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

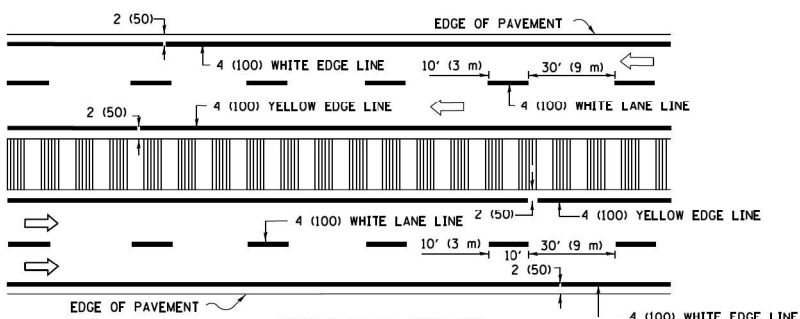
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2-LANE ROADWAY

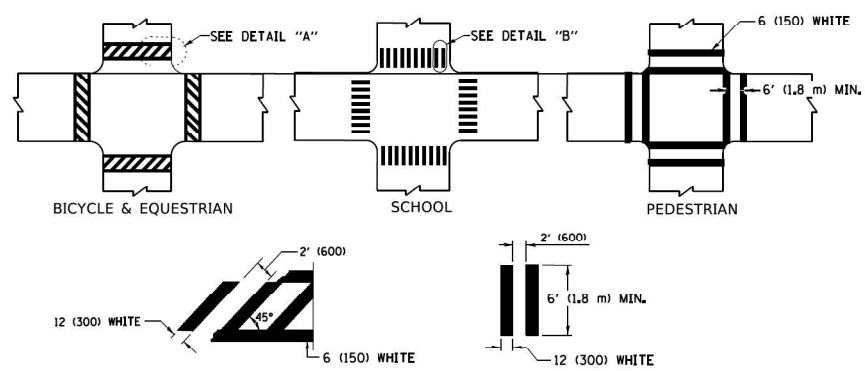


MULTI-LANE UNDIVIDED



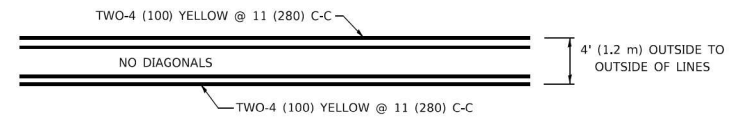
MULTI-LANE DIVIDED WITH MEDIAN

TYPICAL LANE AND EDGE LINE MARKING

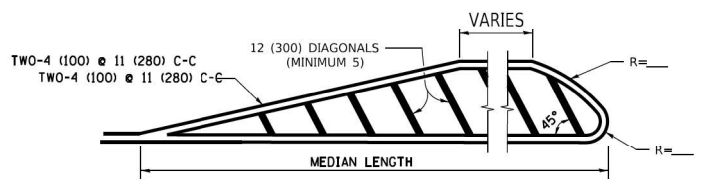


TYPICAL CROSSWALK MARKING

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

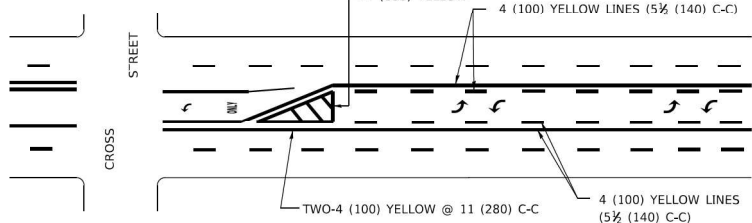


4' (1.2 m) WIDE MEDIANS ONLY



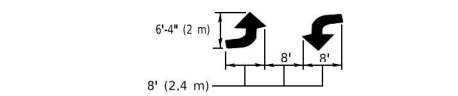
MEDIANS OVER 4' (1.2 m) WIDE

DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

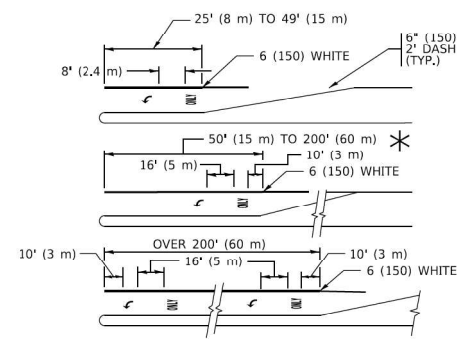


**MEDIAN WITH TWO-WAY LEFT TURN LANE
TYPICAL PAINTED MEDIAN MARKING**

A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.

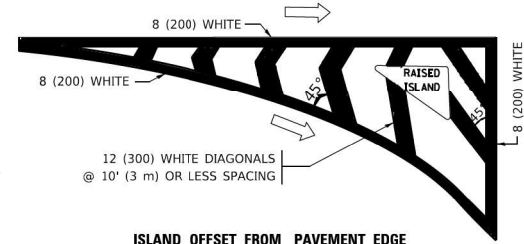


TYPICAL LEFT (OR RIGHT) TURN LANE MARKING

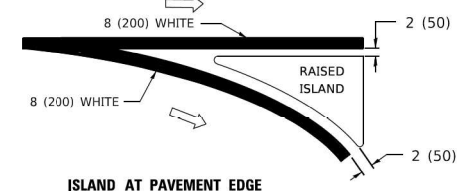


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)

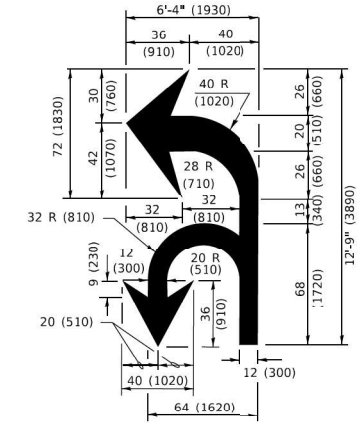
TYPICAL TURN LANE MARKING



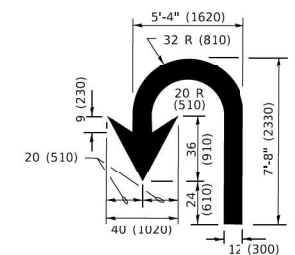
ISLAND OFFSET FROM PAVEMENT EDGE



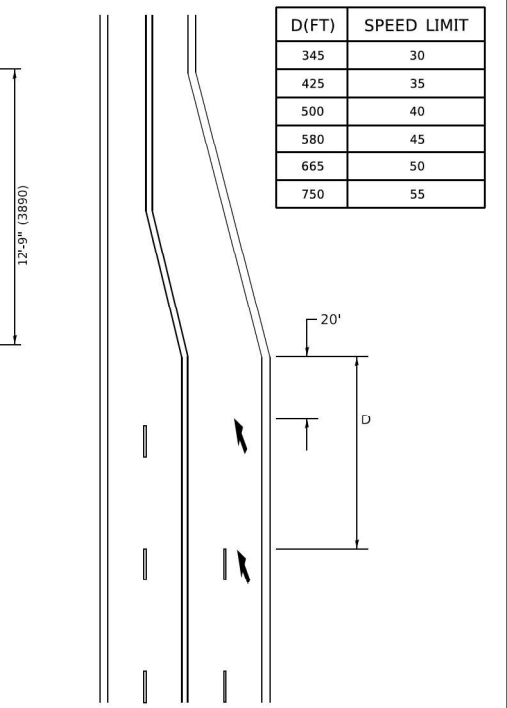
**ISLAND AT PAVEMENT EDGE
TYPICAL ISLAND MARKING**



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.

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	7 @ 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 30MPH (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* 15' 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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1 South Wacker | Suite 2650 | Chicago, IL 60606
P: 312.425.9500 | F: 312.425.9594 | www.infrastructure-eng.com

USER NAME = ALane	DESIGNED - ACL	REVISED -
PLOT SCALE = 20,0018 * / in.	DRAWN - ACL	REVISED -
PLOT DATE = 2/18/2021	CHECKED - LM	REVISED -
	DATE - 01/20/2020	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DISTRICT ONE - TYPICAL PAVEMENT MARKINGS (TC-13)

SCALE: SHEET OF SHEETS STA. TO STA.

S.B.I. RTE. 3578	SECTION 2020-173-BR	COUNTY COOK	TOTAL SHEETS 18	SHEET NO. 16
CONTRACT NO. 62M31				
ILLINOIS FED. AID PROJECT				

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ROUTE MARKERS

FOR U.S. ROUTES
M1-40-2424

FOR ILLINOIS ROUTES
M1-50-2424

R.R. UNMARKED ROUTES
SPECIAL 24" x 18" VARIABLE
4" BLACK LETTERS ON WHITE
REFLECTIVE BACKGROUND

ARROWS SIGNS

M5-1L-2115

M5-1R-2115

M6-1-2115

M6-3-2115

CARDINAL DIRECTION & DETOUR SIGNS

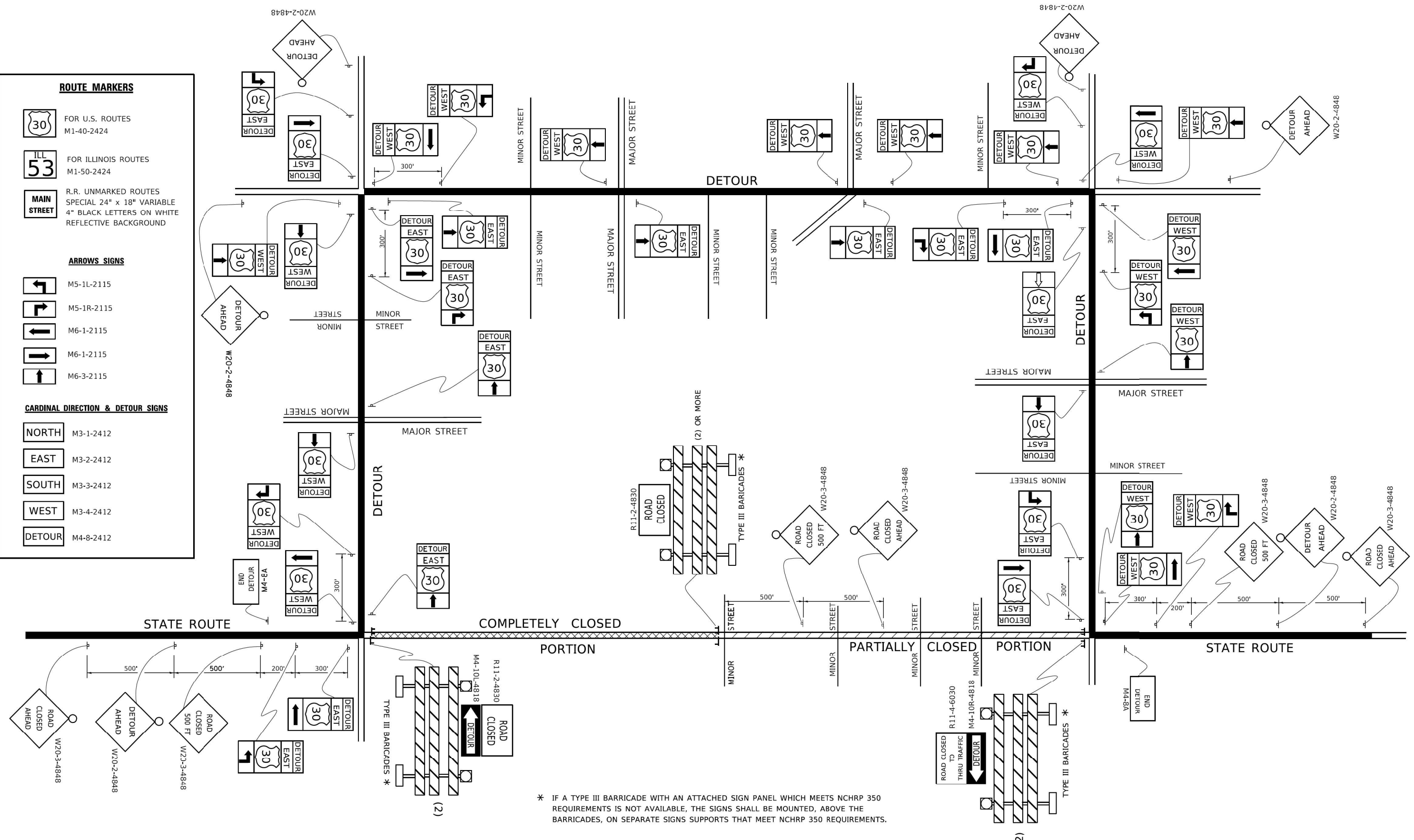
NORTH M3-1-2412

EAST M3-2-2412

SOUTH M3-3-2412

WEST M3-4-2412

DETOUR M4-8-2412



* IF A TYPE III BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 REQUIREMENTS IS NOT AVAILABLE, THE SIGNS SHALL BE MOUNTED, ABOVE THE BARRICADES, ON SEPARATE SIGNS SUPPORTS THAT MEET NCHRP 350 REQUIREMENTS.

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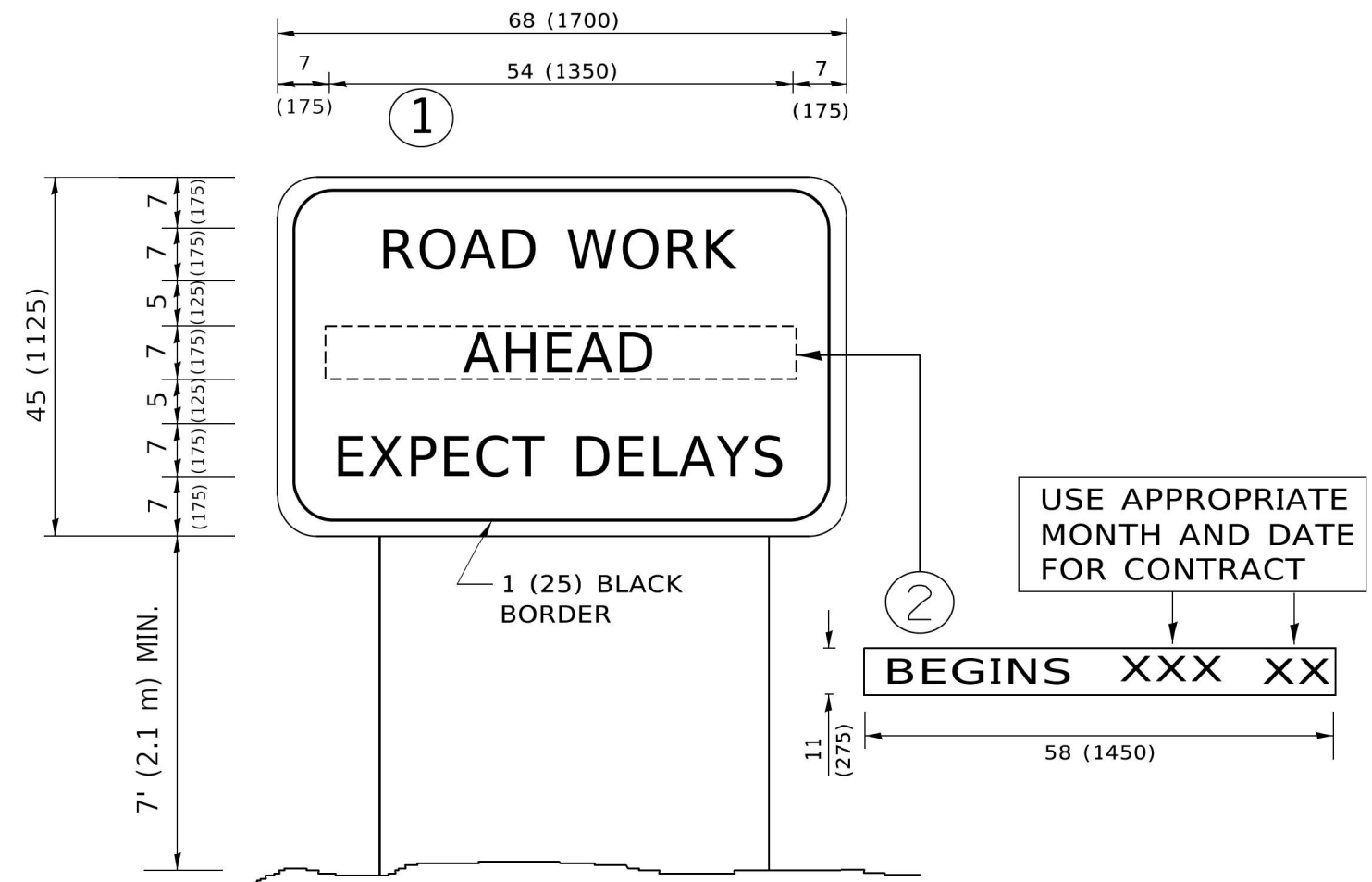
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	DATE - 01/20/2020	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE - DETOUR SIGNING
 FOR CLOSING STATE HIGHWAYS (TC-21)**

SCALE: SHEET OF SHEETS STA. TO STA.

S.B.I. RTE. 3578	SECTION 2020-173-BR	COUNTY COOK	TOTAL SHEETS 18	SHEET NO. 17
CONTRACT NO. 62M31				
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.

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PLOT DATE = 2/18/2021	CHECKED - LM	REVISED -
	DATE - 01/20/2020	REVISED -

DESIGNED - ACL	REVISED -
DRAWN - ACL	REVISED -
CHECKED - LM	REVISED -
DATE - 01/20/2020	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE - ARTERIAL ROAD
INFORMATION SIGN (TC-22)**

SCALE: SHEET OF SHEETS STA. TO STA.

S.B.I. RTE. 3578	SECTION 2020-173-BR	COUNTY COOK	TOTAL SHEETS 18	SHEET NO. 18
CONTRACT NO. 62M31				
ILLINOIS FED. AID PROJECT				