06-14-2024 LETTING ITEM 005

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS *	SHEET NO.
374	FAP 0374 22 BJ	COOK	~~63~~	1
FED. ROAD DIST. NO. 1	ILLINOIS	CONTRACT NO. 62T24		

* 63 + 1 = 64 TOTAL SHEETS

D–91–272–22

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED
HIGHWAY PLANS

FAP ROUTE 374 IL 21 (MILWAUKEE AVENUE)
AT US 14 (DEMPSTER STREET)
SECTION: FAP 0374 22 BJ
PROJECT NO.: NHPP–WE2D(791)
BRIDGE DECK OVERLAY,
BRIDGE JOINT REPLACE / REPAIR,
ADA IMPROVEMENTS
COOK COUNTY
C–91–326–22

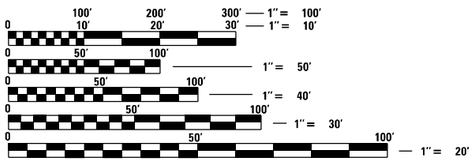
FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROJECT LOCATED IN VILLAGE OF NILES

TRAFFIC DATA (IL 21):
ADT 2021: 27,800 VPD
SPEED LIMIT: 35 MPH

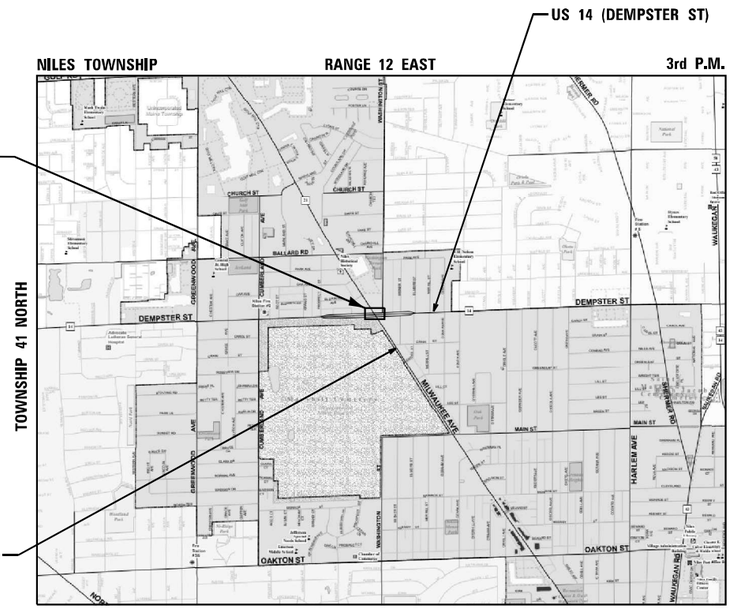
TRAFFIC DATA (US 14):
ADT 2021: 39,500 VPD
SPEED LIMIT: 35 MPH

PROJECT LOCATION
MILWAUKEE AVE
OVER DEMPSTER ST
BRIDGE
STRUCTURE NO:
016–2572



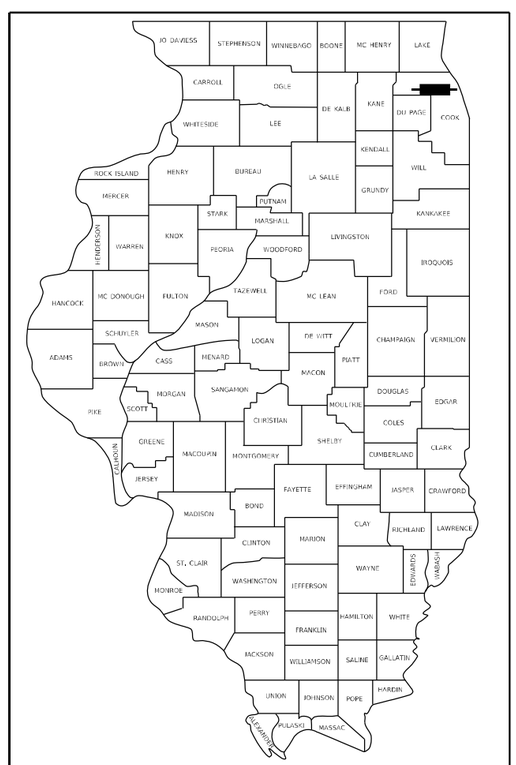
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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



LOCATION MAP
(NOT TO SCALE)

GROSS & NET LENGTH = 550 FT. = 0.10 MILE



LOCATION OF SECTION INDICATED THUS: –

ARDMORE RODERICK
YUN S. KIM, P.E.
* 062-059992

DATE: 11/30/2025
SIGNATURE AND SEAL
APPLIES TO DRAWINGS:
1-22, 47-56

YUN S. KIM
062-059992
REGISTERED PROFESSIONAL ENGINEER
OF
ILLINOIS

SINGH & ASSOCIATES, INC.
GREGORY GEDEMER, P.E.
* 062-062156

DATE: 11/30/2025
SIGNATURE AND SEAL
APPLIES TO DRAWINGS:
23-31, 57-63

GREGORY GEDEMER
062-062156
REGISTERED PROFESSIONAL ENGINEER
OF
ILLINOIS

GARZA KARHOFF ENGINEERING, LLC
LUKE C. MARTIN, S.E.
* 081-007429

DATE: 11/30/2024
SIGNATURE AND SEAL
APPLIES TO DRAWINGS:
32-46 (S-01 TO S-15)

STATE OF ILLINOIS
LUKE C MARTIN
081-007429
YORKVILLE, IL
LICENSED STRUCTURAL ENGINEER

Ardmore Roderick

SINGH
SINGH + ASSOCIATES, INC.
CONSULTING ENGINEERS

GARZA KARHOFF ENGINEERING, LLC

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED March 18 2024
Jose Rodrigo Ledezma
REGIONAL ENGINEER

May 10, 2024
ENGINEER OF DESIGN AND ENVIRONMENT

May 10, 2024
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

PROJECT ENGINEER RODRIGO LEDEZMA, P.E. (847) 705–4580
PROJECT MANAGER J. ALAIN MIDY, P.E. (847) 221–3056

CONTRACT NO. 62T24

INDEX OF SHEETS

LIST OF 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
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
424006-05	DIAGONAL CURB RAMPS FOR SIDEWALKS
701427-05	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS LESS/EQUAL TO 40 MPH
701601-09	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NON TRAVERSABLE MEDIAN
701602-10	URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE
701606-10	URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701611-01	URBAN HALF ROAD CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-06	SIDEWALK, CORNER, OR CROSSWALK CLOSURE
701901-09	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
780001-05	TYPICAL PAVEMENT MARKINGS
781001-04	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
805001-01	ELECTRICAL SERVICE INSTALLATION DETAILS
857001-01	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
880001-01	SPAN WIRE MOUNTED SIGNALS AND FLASHING BEACON INSTALLATION

COMMITMENTS

THERE ARE NO COMMITMENTS FOR THIS PROJECT.

GENERAL NOTES

1. 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 IS REQUIRED).
2. THE CONTRACTOR SHALL CONTACT THE DISTRICT TRAFFIC CONTROL SUPERVISOR AT KALPANA.KANNAN-HOSADURGA@ILLINOIS.GOV A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
3. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, THE VILLAGE OF NILES, AND COOK COUNTY.
4. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
5. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
6. THE CONTRACTOR SHALL TAKE 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 CONTRACTORS EXPENSE.
7. THE COST OF SAW CUTTING SHALL BE INCLUDED IN THE UNIT PRICES FOR THE VARIOUS REMOVAL PAY ITEMS.
8. THE CONTRACTOR IS TO REFER TO THE SPECIAL PROVISION FOR SAW CUTTING CONTRACTION JOINTS IN P.C.C. SIDEWALKS, NO TOOLED JOINTS WILL BE ALLOWED.
9. BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT) ACCORDING TO THE "BUTT JOINT AND HOT-MIX ASPHALT TAPER DETAILS" SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.
10. WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC, THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1 1/2 INCHES (40 MM) WHERE THE SPEED LIMIT IS 40 MPH (80 KM/H) OR LESS AND 1 INCH (25 MM) WHERE THE SPEED LIMIT IS GREATER THAN 40 MPH (80 KM/H). WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES (75 MM) MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H) OR A NOTCHED LONGITUDINAL WEDGE IS USED.
11. BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKING LINES (AND RAISED REFLECTIVE PAVEMENT MARKERS) IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER.
12. THE RESIDENT ENGINEER SHALL CONTACT FADI SULTAN, AREA TRAFFIC FIELD ENGINEER, AT FADI.SULTAN@ILLINOIS.GOV, A MINIMUM OF TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
13. ANY DAMAGE TO EXISTING PAVEMENT MARKINGS OR RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
14. ALL PAVEMENT MARKINGS SHALL BE PLACED THROUGHOUT THE IMPROVEMENT ACCORDING TO THE "DISTRICT 1 TYPICAL PAVEMENT MARKING" SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.
15. THE RESIDENT ENGINEER AND CONTRACTOR SHALL VERIFY ALL EXISTING PAVEMENT MARKING PRIOR TO THE PROJECT STARTING. IF A DISCREPANCIES OCCURS BETWEEN EXISTING PAVEMENT MARKINGS AND THE PROPOSED PAVEMENT MARKINGS, THE RESIDENT ENGINEER SHALL CONTACT THE BUREAU OF TRAFFIC OPERATIONS.
16. THE RESIDENT ENGINEER SHALL CONTACT THE DEPARTMENT'S ELECTRICAL MAINTENANCE CONTRACTOR, MEADE ELECTRIC COMPANY, AT (773) 287-7672 PRIOR TO THE START OF CONSTRUCTION TO LOCATE ALL IDOT ELECTRICAL EQUIPMENT AND UNDERGROUND CABLES.
17. IF THIS CONTRACT REQUIRES THE SERVICES OF AN ELECTRICAL CONTRACTOR, THE CONTRACTOR SHALL BE RESPONSIBLE AT HIS/HER OWN EXPENSE FOR LOCATING EXISTING IDOT ELECTRICAL FACILITIES PRIOR TO PERFORMING ANY WORK. IF THIS CONTRACT DOES NOT REQUIRE THE SERVICES OF AN ELECTRICAL CONTRACTOR, THE CONTRACTOR MAY REQUEST ONE FREE LOCATE FOR EXISTING IDOT ELECTRICAL FACILITIES FROM THE DISTRICT ONE ELECTRICAL MAINTENANCE CONTRACTOR PRIOR TO THE START OF ANY WORK. ADDITIONAL REQUESTS MAY BE AT THE EXPENSE OF THE CONTRACTOR. THE LOCATION OF UNDERGROUND TRAFFIC FACILITIES DOES NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY TO REPAIR ANY FACILITIES DAMAGED DURING CONSTRUCTION AT THEIR EXPENSE.
18. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
19. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING MATERIALS.

GENERAL NOTES CONTINUED

20. FRAMES AND GRATES ADJUSTMENT OF PRIVATE UTILITIES WITHIN THE LIMITS OF THE IMPROVEMENTS SHALL BE DONE BY THEIR RESPECTIVE OWNERS AND ARE NOT PART OF THIS CONTRACT.
21. THE CONTRACTOR SHALL PROVIDE ADEQUATE DRAINAGE AND EROSION CONTROL PROTECTION DURING ALL STAGES OF CONSTRUCTION.
22. POLLUTION CONTROL: THE CONTRACTOR SHALL BE REQUIRED TO COMPLY WITH THE STATE REGULATIONS REGARDING AIR, WATER, AND NOISE POLLUTION. THIS WORK IS NOT TO BE PAID SEPARATELY AND SHALL BE INCLUDED IN THE COST OF THE CONTRACT.
23. DURING CONSTRUCTION OPERATION, IF ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF DRAINAGE STRUCTURES SUCH THAT THE NATURAL FLOW OF WATER IS OBSTRUCTED THE MATERIAL SHALL BE REMOVED A THE CLOSE OF EACH WORKDAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL UTILITY STRUCTURES SHALL BE FREE OF DUST AND DEBRIS. THE WORK SPECIFIED ABOVE WILL NOT BE PAID SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF CONTRACT.
24. THE CONTRACTOR SHALL REFER TO THE SPECIAL PROVISION FOR STRUCTURE ASSESSMENT REPORTS FOR CONTRACTOR'S MEANS AND METOHDS WHILE FORMULATING A WORK PLAN THAT INVOLVES LOADS ON THE DECK.
25. THE "ROAD CONSTRUCTION AHEAD" SIGNS SHALL REMAIN INSTALLED UNTIL THE COMPLETION OF THE PROJECT OR WHEN NO ROADWAY HAZARDS REMAIN WITHIN THE WORK ZONE.
26. CHANGEABLE MESSAGE SIGNS SHALL BE INSTALLED TWO WEEKS PRIOR TO ALL TRAFFIC STAGE CHANGES ON EACH APPROACH OF THE EFFECTED ROADWAY TO WARN MOTORISTS OF THE UPCOMING EVENT. THE SIGN MESSAGES SHALL BE REVISED TWO WEEKS THEREAFTER WITH MESSAGES WARNING TRAFFIC OF POTENTIAL TRAFFIC DELAYS, QUEUING, AND/OR WITH MESSAGES NOTIFYING TRAFFIC TO USE ALTERNATE ROUTES. THE SIGN LOCATIONS AND MESSAGES SHALL BE DETERMINED BY THE ENGINEER.
27. EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR ACCORDING TO ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.
28. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE NOTIFICATION OF ALL EMERGENCY SERVICES, SCHOOL DISTRICTS, I.D.O.T.'S COMMUNICATIONS CENTER, SPRINGFIELD TRUCK PERMIT SECTION, AND OTHER AGENCIES AFFECTED BY THE CLOSURE. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR POSTING SIGNS THAT WILL INDICATE THE DATES THE CLOSURE WILL BE IN PLACE.
29. PAVEMENT MARKING TAPE, TYPE IV SHALL BE USED FOR SHORT TERM PAVEMENT MARKINGS ON ALL FINAL SURFACES.
30. ALL TEMPORARY TRAFFIC SIGNALS WILL BE INSTALLED PRIOR TO BEGINNING WORK IN THE MAINTENANCE OF TRAFFIC PRE-STAGE. TEMPORARY TRAFFIC SIGNALS SHALL NOT BE REMOVED UNTIL THE COMPLETION OF STAGE 2, ENSURING THAT THE EXISTING TRAFFIC SIGNAL SYSTEM IS FULLY OPERATIONAL.

FILE NAME = $FILE$
PLOT SCALE = 2.0000 ' / in.
USER NAME = rileywhite

Ardmore Roderick

USER NAME = rileywhite	DESIGNED - RW	REVISED -
	DRAWN - RW	REVISED -
PLOT SCALE = 2.0000 ' / in.	CHECKED - YK	REVISED -
PLOT DATE = 4/22/2024	DATE - 03/25/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 21 (MILWAUKEE AVE) OVER US 14 (DEMPSTER ST)
INDEX OF SHEETS, STANDARDS, COMMITMENTS, & GENERAL NOTES

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	2
		CONTRACT NO. 62T24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

REV-SEP

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE 80% FED 20% STATE BRIDGE 0021 S.N. 16-2572	CONSTRUCTION CODE 80% FED 20% STATE BRIDGE 0059 S.N. 16-2572
28000500	INLET AND PIPE PROTECTION	EACH	4		4
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	448		448
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	996		996
40604172	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "E", N70	TON	98		98
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	171		171
42400800	DETECTABLE WARNINGS	SQ FT	84		84
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	43		43
44000600	SIDEWALK REMOVAL	SQ FT	171		171
50102400	CONCRETE REMOVAL	CU YD	58.5		58.5
50157300	PROTECTIVE SHIELD	SQ YD	762		762
50300255	CONCRETE SUPERSTRUCTURE	CU YD	62.4		62.4
50300300	PROTECTIVE COAT	SQ YD	816		816
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	7,590		7,590
50800515	BAR SPLICERS	EACH	52		52

* SPECIALTY ITEM

Δ NON-PARTICIPATING, 100% STATE FUNDED

FILE NAME = $FILES
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USER NAME = rileywhite

Ardmore Roderick

USER NAME = rileywhite	DESIGNED - RW	REVISED -
	DRAWN - RW	REVISED -
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PLOT DATE = 3/26/2024	DATE - 03/25/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 21 (MILWAUKEE AVE) OVER US 14 (DEMPSTER ST)
SUMMARY OF QUANTITIES

SCALE: | SHEET NO. 1 OF 7 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	3
		CONTRACT NO. 62T24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

REV-SEP

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE 80% FED 20% STATE BRIDGE 0021 S.N. 16-2572	CONSTRUCTION CODE 80% FED 20% STATE BRIDGE 0059 S.N. 16-2572
	52000110	PREFORMED JOINT STRIP SEAL	FOOT	350		350
	58700300	CONCRETE SEALER	SQ FT	1,224		1,224
	60300305	FRAMES AND LIDS TO BE ADJUSTED	EACH	5		5
	60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	43		43
	67100100	MOBILIZATION	L SUM	1		1
*	70107025	CHANGEABLE MESSAGE SIGN	CAL DA	776		776
	70300100	SHORT TERM PAVEMENT MARKING	FOOT	10,277		10,277
	70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	7,942		7,942
	70307100	TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS - TYPE IV TAPE	SQ FT	250		250
	70307120	TEMPORARY PAVEMENT MARKING - LINE 4" - TYPE IV TAPE	FOOT	7,403		7,403
	70307130	TEMPORARY PAVEMENT MARKING - LINE 6" - TYPE IV TAPE	FOOT	408		408
	70307210	TEMPORARY PAVEMENT MARKING - LINE 24"- TYPE IV TAPE	FOOT	120		120
	70400100	TEMPORARY CONCRETE BARRIER	FOOT	300		300
	70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	250		250

* SPECIALTY ITEM

Δ NON-PARTICIPATING, 100% STATE FUNDED

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Ardmore Roderick

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PLOT DATE = 3/26/2024	DATE - 03/25/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 21 (MILWAUKEE AVE) OVER US 14 (DEMPSTER ST)
SUMMARY OF QUANTITIES

SCALE: | SHEET NO. 2 OF 7 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	4
		CONTRACT NO. 62T24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE: 80% FED 20% STATE BRIDGE 0021 S.N. 16-2572	CONSTRUCTION CODE: 80% FED 20% STATE BRIDGE 0059 S.N. 16-2572
	70600241	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE, NARROW), TEST LEVEL 2	EACH	2		2
	70600341	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE, NARROW), TEST LEVEL 2	EACH	2		2
*	72000100	SIGN PANEL - TYPE 1	SQ FT	9		9
*	72400310	REMOVE SIGN PANEL - TYPE 1	SQ FT	9		9
*	72400735	REMOVE AND RELOCATE SIGN PANEL - TYPE 1	SQ FT	9		9
*	72400740	REMOVE AND RELOCATE SIGN PANEL - TYPE 2	SQ FT	13		13
*	78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	428		428
*	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	5,365		5,365
*	78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	1,193		1,193
*	78000500	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	681		681
*	78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	801		801
*	78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	194		194
*	78004635	PREFORMED PLASTIC PAVEMENT MARKING, TYPE D - STANDARD LINE 7"	FOOT	551		551
*	78009012	MODIFIED URETHANE PAVEMENT MARKING - LINE 12"	FOOT	150		150

* SPECIALTY ITEM

Δ NON-PARTICIPATING, 100% STATE FUNDED

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PLOT SCALE = =
USER NAME = =

Ardmore Roderick

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PLOT DATE = 3/26/2024	DATE - 03/25/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 21 (MILWAUKEE AVE) OVER US 14 (DEMPSTER ST)
SUMMARY OF QUANTITIES

SCALE: | SHEET NO. 3 OF 7 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	5
		CONTRACT NO. 62T24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE 80% FED 20% STATE BRIDGE 0021 S.N. 16-2572	CONSTRUCTION CODE 80% FED 20% STATE BRIDGE 0059 S.N. 16-2572
*	78009024	MODIFIED URETHANE PAVEMENT MARKING - LINE 24"	FOOT	24		24
*	78011040	GROOVING FOR RECESSED PAVEMENT MARKING 8"	FOOT	551		551
*	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	5		5
*	78100300	REPLACEMENT REFLECTOR	EACH	93		93
*	78200011	BARRIER WALL REFLECTORS, TYPE C	EACH	24		24
	78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	5		5
	78300202	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	4,841		4,841
*	81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	160	160	
*	81028240	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	80	80	
*	81100605	CONDUIT ATTACHED TO STRUCTURE, 2" DIA., PVC COATED GALVANIZED STEEL	FOOT	85	85	
*	81101005	CONDUIT ATTACHED TO STRUCTURE, 4" DIA., PVC COATED GALVANIZED STEEL	FOOT	70	70	
*	81300220	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 6" X 6" X 4"	EACH	6	6	
*	81300830	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 18"X 18"X 8"	EACH	4	4	
*	85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1	1	
*	87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	3,820	3,820	

* SPECIALTY ITEM

Δ NON-PARTICIPATING, 100% STATE FUNDED

FILE NAME = $FILES
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Ardmore Roderick

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PLOT SCALE = 2.0000 ' / in.	CHECKED - YK	REVISED -
PLOT DATE = 3/26/2024	DATE - 03/25/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 21 (MILWAUKEE AVE) OVER US 14 (DEMPSTER ST)
SUMMARY OF QUANTITIES

SCALE: | SHEET NO. 4 OF 7 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	6
		CONTRACT NO. 62T24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

REV-SEP

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE: 80% FED 20% STATE BRIDGE 0021 S.N. 16-2572	CONSTRUCTION CODE: 80% FED 20% STATE BRIDGE 0059 S.N. 16-2572
*	87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1,290	1,290	
*	87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	191	191	
*	87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	233	233	
*	87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	940	940	
*	87700150	STEEL MAST ARM ASSEMBLY AND POLE, 22 FT.	EACH	1	1	
	87900200	DRILL EXISTING HANDHOLE	EACH	13		13
*	88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4	4	
*	89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1	1	
*	89500100	RELOCATE EXISTING SIGNAL HEAD	EACH	4	4	
*	89500200	RELOCATE EXISTING PEDESTRIAN SIGNAL HEAD	EACH	3	3	
*	89501400	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	1	1	
*	89501410	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1	1	
*	89502200	MODIFY EXISTING CONTROLLER	EACH	1	1	
*	89502300	REMOVE ELECTRIC CABLE FROM CCNDUIT	FOOT	1,998	1,998	

* SPECIALTY ITEM

Δ NON-PARTICIPATING, 100% STATE FUNDED

FILES
RED LINES = 2.0000 ' / in.
USER NAME = rileywhite

FILE NAME = =
RED LINES = =
USER NAME = =

Ardmore Roderick

USER NAME = rileywhite	DESIGNED - RW	REVISED -
	DRAWN - RW	REVISED -
PLOT SCALE = 2.0000 ' / in.	CHECKED - YK	REVISED -
PLOT DATE = 3/26/2024	DATE - 03/25/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 21 (MILWAUKEE AVE) OVER US 14 (DEMPSTER ST)
SUMMARY OF QUANTITIES

SCALE: | SHEET NO. 5 OF 7 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	7
		CONTRACT NO. 62T24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

					CONSTRUCTION CODE	
					80% FED 20% STATE	80% FED 20% STATE
					BRIDGE	BRIDGE
	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0021 S.N. 16-2572	0059 S.N. 16-2572
	Z0006014	BRIDGE DECK LATEX CONCRETE OVERLAY, 2 1/2 INCHES	SQ YD	688		688
	Z0012130	BRIDGE DECK SCARIFICATION 3/4"	SQ YD	688		688
	Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	225		225
	Z0012755	STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 INCHES)	SQ FT	24		24
	Z0013798	CONSTRUCTION LAYOUT	L SUM	1		1
	Z0016001	DECK SLAB REPAIR (FULL DEPTH, TYPE I)	SQ YD	2		2
Δ	Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	9		9
	Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	172		172
*	Z0073510	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1	1	
*	X0324085	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	118	118	
*	X0324599	ROD AND CLEAN EXISTING CONDUIT	FOOT	365	365	
*	X1400023	CONDUIT, FLEXIBLE, LIQUID TIGHT, METALLIC, 2" DIAMETER	FOOT	40	40	
*	X1400319	TRAFFIC SIGNAL POST, 10 FOOT, (SPECIAL)	EACH	4	4	
*	X1400378	PEDESTRIAN SIGNAL POST, 5 FT.	EACH	9	9	

* SPECIALTY ITEM

Δ NON-PARTICIPATING, 100% STATE FUNDED

FILE NAME = STILES
PLOT SCALE = 2.0000 ' / in.
USER NAME = rileywhite

Ardmore Roderick

USER NAME = rileywhite	DESIGNED - RW	REVISED -
	DRAWN - RW	REVISED -
PLOT SCALE = 2.0000 ' / in.	CHECKED - YK	REVISED -
PLOT DATE = 3/26/2024	DATE - 03/25/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 21 (MILWAUKEE AVE) OVER US 14 (DEMPSTER ST)
SUMMARY OF QUANTITIES

SCALE: | SHEET NO. 6 OF 7 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	8
		CONTRACT NO. 62T24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

					CONSTRUCTION CODE	
					80% FED 20% STATE	80% FED 20% STATE
					BRIDGE	BRIDGE
	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0021 S.N. 16-2572	0059 S.N. 16-2572
*	X5051200	FURNISHING AND ERECTING STRUCTURAL STEEL (SPECIAL)	L SUM	1		1
	X6700407	ENGINEER'S FIELD OFFICE, TYPE A (D1)	CAL MO	12		12
	X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1		1
	X7830050	RAISED REFLECTIVE PAVEMENT MARKER, REFLECTOR REMOVAL	EACH	93		93
*	X8760200	ACCESSIBLE PEDESTRIAN SIGNALS	EACH	16	16	
*	X8780012	CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER	FOOT	64		64
*	X8860105	DETECTOR LOOP REPLACEMENT	FOOT	405	405	
Ø	Z0076600	TRAINEES	HOURS	500	500	
Ø	Z0076604	TRAINEES - TRAINING PROGRAM GRADUATE	HOURS	500	500	

Ø 0042

* SPECIALTY ITEM

Δ NON-PARTICIPATING, 100% STATE FUNDED

FILE NAME = $FILES
PLOT SCALE = 2.0000 ' / in.
USER NAME = rileywhite

Ardmore Roderick

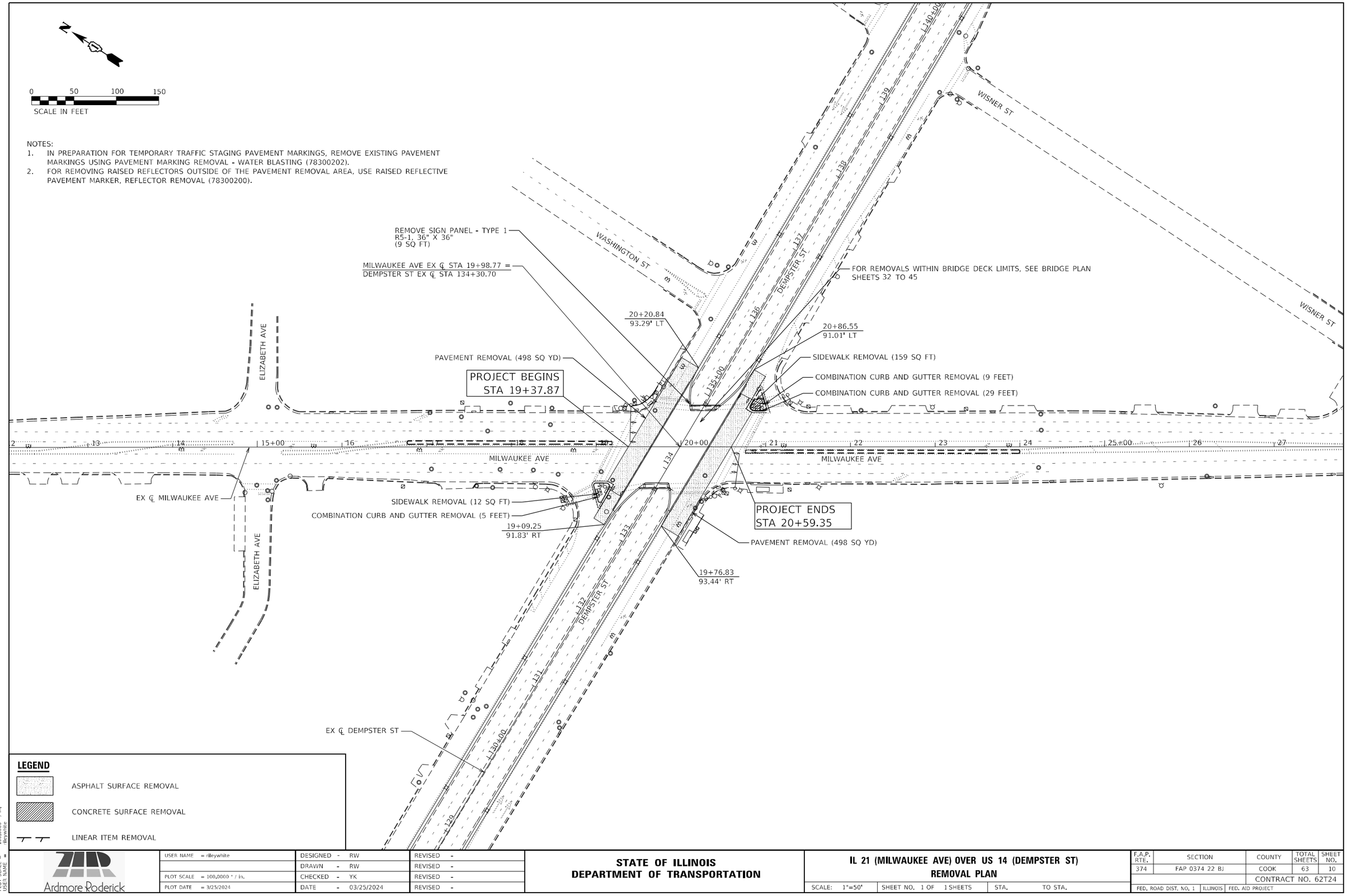
USER NAME = rileywhite	DESIGNED - RW	REVISED -	
	DRAWN - RW	REVISED -	
PLOT SCALE = 2.0000 ' / in.	CHECKED - YK	REVISED -	
PLOT DATE = 3/26/2024	DATE - 03/25/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 21 (MILWAUKEE AVE) OVER US 14 (DEMPSTER ST)
SUMMARY OF QUANTITIES

SCALE: | SHEET NO. 7 OF 7 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	9
		CONTRACT NO. 62T24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



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Ardmore Roderick

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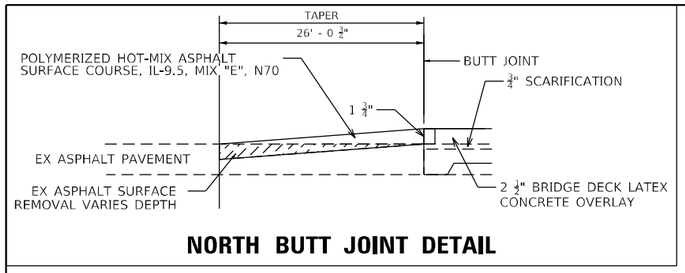
	DRAWN - RW	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED - YK	REVISED -
PLOT DATE = 3/25/2024	DATE - 03/25/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

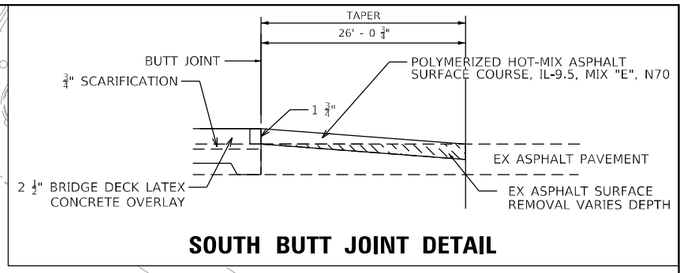
IL 21 (MILWAUKEE AVE) OVER US 14 (DEMPSTER ST)
REMOVAL PLAN

SCALE: 1"=50' | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	10
		CONTRACT NO. 62T24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



NORTH BUTT JOINT DETAIL



SOUTH BUTT JOINT DETAIL

BENCHMARKS

BM#1 FLAGGED BOLT ON FIRE HYDRANT
ELEV. 663.80
MILWAUKEE AVE. STA. 18+60.65 OFF. 72.29' RT.
DEMPSTER ST. STA. 132+97.43 OFF. 81.59' LT.

BM#2 FLAGGED BOLT ON FIRE HYDRANT
ELEV. 662.68
MILWAUKEE AVE. STA. 20+50.04 OFF. 51.38' RT.
DEMPSTER ST. STA. 134+12.67 OFF. 70.31' RT.

HOT-MIX ASPHALT MIXTURE REQUIREMENTS		
MIXTURE TYPE	AIR VOIDS @Ndes	QMP
HOT-MIX ASPHALT BUTT-JOINT		
POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "E", N70 (1.75")	4% @ 70 Gyr.	QC/QA
QMP Designation: Quality Control/Quality Assurance (QC/QA); Quality Control for Performance (QCP); Pay for Perfromance (PFP)		

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 RECLAIMED MATERIALS SPECIFICATIONS.

FILE NAME = $FILES
PLOT SCALE = 100.0000 ' / in.
USER NAME = rileywhite

Ardmore Roderick

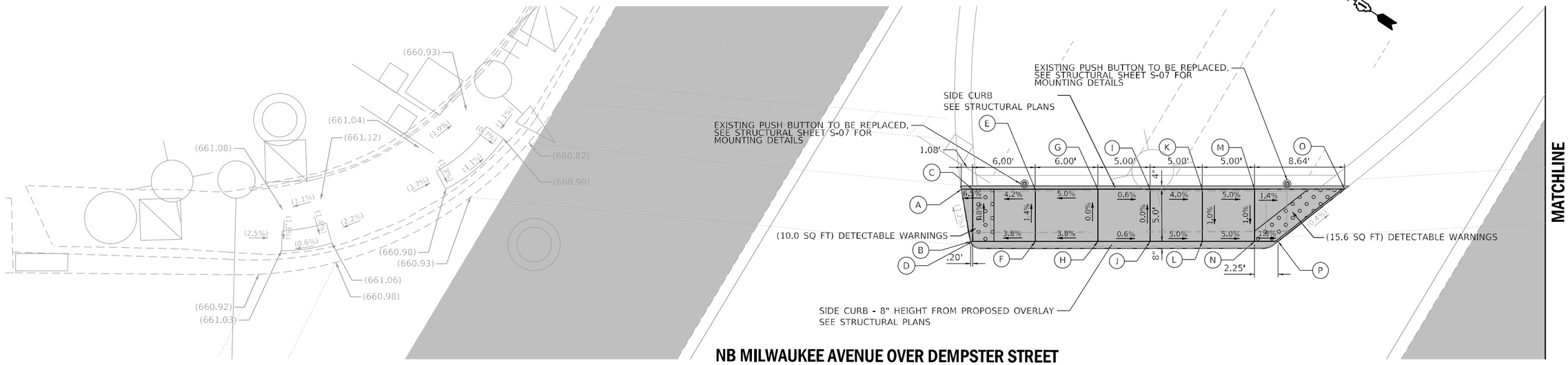
USER NAME = rileywhite	DESIGNED - MRT	REVISED -
	DRAWN - MRT	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED - YK	REVISED -
PLOT DATE = 3/25/2024	DATE - 03/25/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

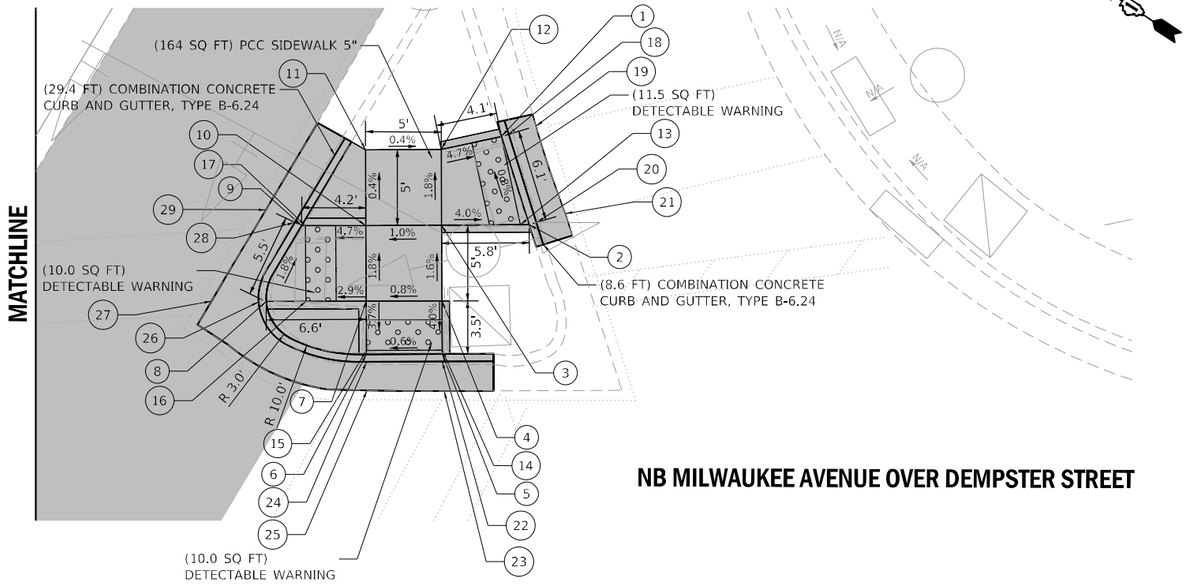
IL 21 (MILWAUKEE AVE) OVER US 14 (DEMPSTER ST)
PROPOSED ROADWAY PLAN

SCALE: 1"=50' | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	11
		CONTRACT NO. 62T24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



NB MILWAUKEE AVENUE OVER DEMPSTER STREET



NB MILWAUKEE AVENUE OVER DEMPSTER STREET

SE Island			
Point	Station	Offset	Elevation
1	20+96.99	57.28 LT	(660.77)
2	20+98.83	51.45' LT	(660.82)
3	20+93.04	51.43' LT	661.05
4	20+93.06	46.43' LT	661.13
5	20+93.08	42.93' LT	(660.99)
6	20+88.08	42.90' LT	660.96
7	20+88.06	46.40' LT	661.09
8	20+81.47	46.38' LT	660.90
9	20+83.81	51.39' LT	660.80
10	20+88.04	51.40' LT	661.00
11	20+88.02	56.40' LT	660.98
12	20+93.02	56.43' LT	660.96
13	20+98.24	51.45' LT	660.87
14	20+93.08	43.18' LT	661.00
15	20+88.08	43.15' LT	660.97
16	20+84.08	46.39' LT	660.98
17	20+84.06	51.39' LT	660.81
18	20+97.48	57.40' LT	(660.74)
19	20+99.32	57.80' LT	(660.75)
20	20+99.32	51.56' LT	(660.77)
21	21+01.16	52.31' LT	(660.82)
22	20+93.08	42.43' LT	(660.96)
23	20+93.18	40.47' LT	(660.94)
24	20+88.19	42.40' LT	(660.92)
25	20+88.11	40.51' LT	(660.92)

SE Island			
Point	Station	Offset	Elevation
26	20+80.96	46.38' LT	660.88
27	20+77.86	46.41' LT	660.92
28	20+83.36	51.61' LT	660.81
29	20+81.59	52.69' LT	660.83

NB Median			
Point	Station	Offset	Elevation
A	20+10.32	48.19' LT	661.22
B	20+11.20	43.19' LT	661.38
C	20+11.40	48.19' LT	661.29
D	20+11.40	43.19' LT	661.38
E	20+17.40	48.19' LT	661.54
F	20+17.40	43.19' LT	661.61
G	20+23.40	48.20' LT	661.84
H	20+23.40	43.20' LT	661.84
I	20+28.40	48.20' LT	661.81
J	20+28.40	43.20' LT	661.81
K	20+33.40	48.20' LT	661.61
L	20+33.40	43.20' LT	661.56
M	20+38.40	48.21' LT	661.36
N	20+38.40	43.21' LT	661.31
O	20+47.03	48.22' LT	661.24
P	20+40.65	43.21' LT	661.27

REFERENCE BENCHMARK ELEV: 663.80

BENCHMARK : FLAGGED BOLT ON FIRE HYDRANT

LOCATION : NORTHWESTERLY CORNER OF MILWAUKEE AVE AND DEMPSTER ST

LEGEND

- XX.XX' — EXISTING LENGTH
- PROPOSED SIDE CURB
- ( ) — EXISTING ELEVATION/SLOPE
- PROPOSED SIDEWALK
- DETECTABLE WARNINGS

REFERENCE BENCHMARK ELEV: 662.68

BENCHMARK : FLAGGED BOLT ON FIRE HYDRANT

LOCATION : SOUTHWESTERLY CORNER OF MILWAUKEE AVE AND DEMPSTER ST

FILE NAME = STILES
PLOT SCALE = 10.0000 ' / in.
USER NAME = rileywhite

USER NAME = rileywhite	DESIGNED - MRT	REVISED -
	DRAWN - MRT	REVISED -
PLOT SCALE = 10.0000 ' / in.	CHECKED - YK	REVISED -
PLOT DATE = 4/22/2024	DATE - 03/25/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

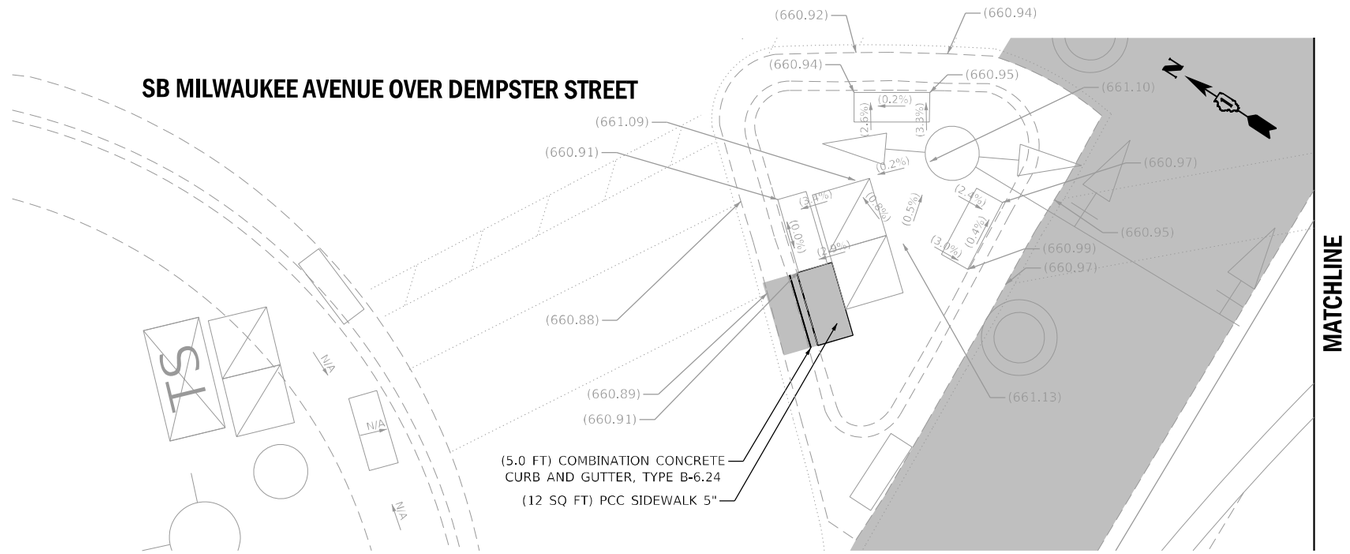
IL 21 (MILWAUKEE AVE) OVER US 14 (DEMPSTER ST)
ADA SIDEWALK DETAIL PLAN

SCALE: 1"=5' | SHEET NO. 1 OF 2 SHEETS | STA. | TO STA.

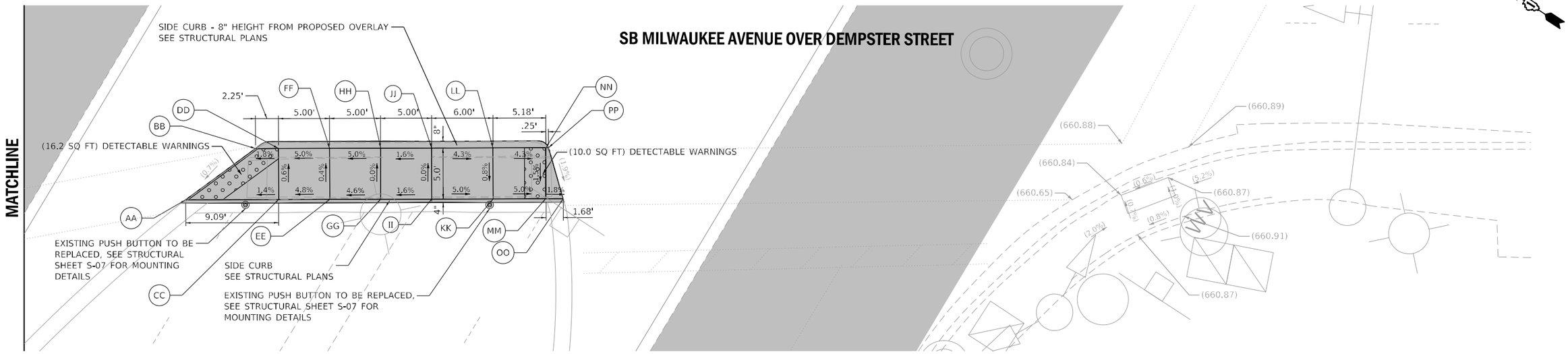
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	12
		CONTRACT NO. 62T24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

SB Median			
Point	Station	Offset	Elevation
AA	19+50.00	48.27' RT	661.30
BB	19+56.83	43.25' RT	661.36
CC	19+59.10	48.24' RT	661.43
DD	19+59.08	43.24' RT	661.40
EE	19+64.10	48.23' RT	661.67
FF	19+64.08	43.23' RT	661.65
GG	19+69.10	48.21' RT	661.90
HH	19+69.08	43.21' RT	661.90
II	19+74.10	48.20' RT	661.98
JJ	19+74.08	43.20' RT	661.98
KK	19+80.10	48.18' RT	661.68
LL	19+80.08	43.18' RT	661.72
MM	19+85.27	48.17' RT	661.42
NN	19+85.26	43.17' RT	661.50
OO	19+86.95	48.17' RT	661.39
PP	19+85.51	43.17' RT	661.49

SB MILWAUKEE AVENUE OVER DEMPSTER STREET



SB MILWAUKEE AVENUE OVER DEMPSTER STREET



REFERENCE BENCHMARK ELEV: 663.80

BENCHMARK : FLAGGED BOLT ON FIRE HYDRANT

LOCATION : NORTHWESTERLY CORNER OF MILWAUKEE AVE AND DEMPSTER ST

LEGEND

- XX.XX' — EXISTING LENGTH
- PROPOSED SIDE CURB
- ( ) — EXISTING ELEVATION/SLOPE
- PROPOSED SIDEWALK
- DETECTABLE WARNINGS

REFERENCE BENCHMARK ELEV: 662.68

BENCHMARK : FLAGGED BOLT ON FIRE HYDRANT

LOCATION : SOUTHWESTERLY CORNER OF MILWAUKEE AVE AND DEMPSTER ST

FILE NAME = STILES
PLOT SCALE = 10.0000 ' / in.
PLOT STYLE = rileywhite
USER NAME = rileywhite

USER NAME = rileywhite	DESIGNED - MRT	REVISED -	
	DRAWN - MRT	REVISED -	
PLOT SCALE = 10.0000 ' / in.	CHECKED - YK	REVISED -	
PLOT DATE = 4/22/2024	DATE - 03/25/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 21 (MILWAUKEE AVE) OVER US 14 (DEMPSTER ST)
ADA SIDEWALK DETAIL PLAN

SCALE: 1"=5' | SHEET NO. 2 OF 2 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	13
		CONTRACT NO. 62T24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

MAINTENANCE OF TRAFFIC GENERAL NOTES

1. THE TRAFFIC CONTROL MEASURES DEPICTED IN THE PLANS ARE THE MINIMUM REQUIREMENT. ADDITIONAL TRAFFIC CONTROL DEVICES, AS SPECIFIED IN THE HIGHWAY AND DISTRICT STANDARDS, AS SHOWN IN THE INDEX OF SHEETS, AND 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, 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.

3. ALL EXISTING SIGNS THAT CONFLICT WITH THE TRAFFIC CONTROL PLAN SHALL BE COVERED OR REMOVED IN ACCORDANCE WITH ARTICLE 107.25 OF THE STANDARD SPECIFICATIONS.

4. THE CONTRACTOR SHALL FURNISH, MAINTAIN, AND REMOVE ALL SIGNS AND SIGN SUPPORTS REQUIRED FOR TRAFFIC CONTROL AND PROTECTION.

5. THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN TRAFFIC IN ACCORDANCE WITH THE TRAFFIC CONTROL GENERAL NOTES, PLANS, SPECIAL PROVISIONS, APPLICABLE HIGHWAY & DISTRICT STANDARDS, AND AS DIRECTED BY THE ENGINEER. ANY CHANGES TO THE TRAFFIC CONTROL SHALL BE SUBMITTED TO THE ENGINEER 72 HOURS IN ADVANCE OF ANY PROPOSED CHANGE TO THE SUGGESTED STAGES OF CONSTRUCTION AND TRAFFIC CONTROL PLAN.

6. IMMEDIATELY AFTER THE COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL RESTORE ALL PERMANENT PAVEMENT MARKINGS, LANDSCAPING, SIGNS, AND OTHER TRAFFIC CONTROL DEVICES THAT WERE COVERED. IF THEY WERE REMOVED, DAMAGED, OR OTHERWISE AFFECTED BY CONSTRUCTION ACTIVITIES, THE COST TO REPAIR ANY DAMAGES WILL BE BORNE BY THE CONTRACTOR AND NOT THE RESPONSIBILITY OF THE DEPARTMENT.

7. NO WORK SHALL COMMENCE UNTILL TRAFFIC CONTROL REQUIREMENTS ARE MET.

8. THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR, KALPANA KANNAN-HOSADURGA, AT KALPANA.KANNAN-HOSADURGA@ILLINOIS.GOV A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

9. ALL EXISTING PAVEMENT MARKINGS IN CONFLICT WITH THE PAVEMENT MARKING TAPE, TYPE IV (AND/OR MODIFIED URETHANE) USED FOR STAGING SHALL BE REMOVED. THIS WORK SHALL BE PAID FOR AS PAVEMENT MARKING REMOVAL-WATER BLASTING.

10. ALL EXISTING RAISED REFLECTIVE PAVEMENT MARKERS LOCATED WITHIN TEMPORARY LANE CLOSURE TAPERS, LANE SHIFT TAPERS, OR IN LOCATIONS THAT CONFLICT WITH THE TEMPORARY PAVEMENT MARKING TAPE USED FOR STAGING SHALL BE REMOVED IF THE STAGING WILL REMAIN IN PLACE FOR MORE THAN 14 DAYS.

11. PAVEMENT MARKING TAPE, TYPE IV (AND/OR TYPE III) SHOWN ON THE PLANS FOR ANY CONSTRUCTION STAGE THAT THE CONTRACTOR PROPOSES TO EXTEND OVER THE WINTER PERIOD SHALL MEAN MODIFIED URETHANE PAVEMENT MARKING AND WILL BE PAID FOR THEIR RESPECTIVE CONTRACT UNIT PRICE.

12. TEMPORARY INFORMATION SIGNS ON TEMPORARY SUPPORTS SHALL BE PROVIDED FOR ALL COMMERCIAL DRIVEWAYS THAT ARE LOCATED WITHIN THE WORK AREA. THIS WORK SHALL BE PAID FOR PER DISTRICT 1 DETAIL TC-26. THESE SIGNS SHALL BE RELOCATED AS REQUIRED FOR EACH CONSTRUCTION STAGE AND SHALL BE PLACED AS DIRECTED BY THE ENGINEER. THIS SIGN RELOCATION WORK WILL NOT BE PAID FOR SEPARATELY AND SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE PER SQUARE FOOT FOR TEMPORARY INFORMATION SIGNING.

13. THE "ROAD CONSTRUCTION AHEAD" SIGNS SHALL REMAIN INSTALLED UNTIL THE COMPLETION OF THE PROJECT OR WHEN NO ROADWAY HAZARDS REMAIN WITHIN THE WORK ZONE.

14. CHANGEABLE MESSAGE SIGNS SHALL BE INSTALLED TWO WEEKS PRIOR TO ALL TRAFFIC STAGE CHANGES ON EACH APPROACH OF THE EFFECTED ROADWAY TO WARN MOTORISTS OF THE UPCOMING EVENT. THE SIGN MESSAGES SHALL BE REVISED TWO WEEKS THEREAFTER WITH MESSAGES WARNING MOTORISTS OF POTENTIAL TRAFFIC DELAYS, QUEUING, AND/OR WITH MESSAGES NOTIFYING TRAFFIC TO USE ALTERNATE ROUTES. THE SIGN LOCATIONS AND MESSAGES SHALL BE DETERMINED BY THE ENGINEER. THE CHANGEBALE MESSAGE SIGNS ARE TO REMAIN IN PLACE FOR THE DURATION OF STAGES 1 & 2. THIS WORK IS TO BE PAID FOR AT THE CONTRACT UNIT PRICE PER CALENDAR DAY "CHANGEABLE MESSAGE SIGN".

15. THE CONTRACTOR SHALL PROVIDE ADEQUATE TEMPORARY DRAINAGE DURING ALL PHASES OF CONSTRUCTION.

16. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL ACTIVITIES THAT POTENTIALLY AFFECT EXISTING PACE BUS STOPS AND/OR ROUTES DIRECTLY WITH PACE AND MUST BE IN CONTACT WITH PACE A MINIMUM OF 14 CALENDER DAYS PRIOR TO BEGINNING CONSTRUCTION.

17. ALL TEMPORARY IMPACT ATTENUATORS MUST BE LOCATED, INSTALLED, AND SIZED IN ACCORDANCE WITH NCHRP REPORT 350.

MAINTENANCE OF TRAFFIC PEDESTRIAN NOTES

1. THE CONTRACTOR MUST MAINTAIN A CONTINUOUS MINIMUM 5-FOOT ADA COMPLIANT PEDESTRIAN ZONE ALONG IL 21 (MILWAUKEE AVENUE). THE SIDEWALK DETOUR MUST BE CLEARLY MARKED USING SIGNS AND BARRICADES NOTIFYING PEDESTRIANS OF THE CLOSURE.

2. THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN ACCESS (MIN 5') TO ADJACENT PROPERTIES (WHERE APPLICABLE) BY INSTALLING ADA COMPLIANT PLYWOOD WALKWAYS. PEDESTRIAN ACCESS TO ADJACENT PROPERTIES SHALL BE UNINTERRUPTED UNTIL THE WALKWAY IS FULLY RESTORED. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF SIGNAGE AND OTHER ITEMS TO ENSURE SAFE PEDESTRIAN ACCESS.

3. USE ONE "PEDESTRIAN WALKWAY (ARROW)" (BLACK LEGEND ON WHITE REFLECTORIZED BACKGROUND) SIGN AT EACH END OF EACH SIDEWALK SECTION BEING RECONSTRUCTED.

4. AT EACH POINT OF CLOSURE, SUFFICIENT NUMBERS OF BARRICADES MUST BE USED TO COMPLETELY CLOSE THE PATHWAY.

5. PEDESTRIAN WALKWAYS MUST BE MAINTAINED FREE OF ANY OBSTRUCTIONS AND HAZARDS SUCH AS HOLES, DEBRIS, MUD, CONSTRUCTION EQUIPMENT, STORED MATERIALS, ETC. AND MUST BE BROOM SWEPT DAILY OR AS DIRECTED BY THE ENGINEER.

6. ALL HAZARDS NEAR OR ADJACENT TO WALKWAYS MUST BE CLEARLY DELINEATED.

7. THE CONTRACTOR MUST MAINTAIN DISABLED PERSON PEDESTRIAN ACCESS TO CROSSWALKS ACROSS US 14 (DEMPSTER STREET) AND SIDE STREETS AT ALL TIMES VIA ADA COMPLIANT WOOD FRAME CONSTRUCTED WALKWAYS AND RAMPS THROUGH THE WORK ZONES. THESE ACCESS POINTS MUST BE OBSERVED AND PROTECTED BY THE CONTRACTOR AT ALL TIMES.

8. THE CONTRACTOR SHALL MAINTAIN ACCESS TO AND FROM ALL ACTIVE PACE BUS STOPS AT ALL TIMES DURING CONSTRUCTION.

PROPOSED MAINTENANCE OF TRAFFIC MILWAUKEE AVENUE

PRE-STAGE MILWAUKEE AVENUE WORK

CONSTRUCTION:
INSTALL TEMPORARY TRAFFIC SIGNALS AS SHOWN IN THE PLANS.

STAGE 1 MILWAUKEE AVENUE WORK

CONSTRUCTION:
BRIDGE DECK OVERLAY, PARTIAL FULL-DEPTH DECK SLAB REPAIR, CONCRETE REPAIRS TO THE ABUTMENTS AND PARAPETS FOR THE CENTRAL PORTION OF THE MILWAUKEE AVENUE BRIDGE.

TRAFFIC:
BOTH NORTHBOUND AND SOUTHBOUND LANES WILL MERGE FROM 2 LANES TO 1 BEFORE ENTERING THE WORKZONE AREA.
NORTHBOUND TRAFFIC WILL BE SHIFTED TO THE EAST AND SOUTHBOUND TRAFFIC TO THE WEST.
ALL LEFT-TURN AND THROUGH MOVEMENTS FROM THE DEMPSTER STREET OFF RAMPS WILL BE DETOURED DURING THIS STAGE.
SEE SHEETS 16-19 FOR DETOUR ROUTE DETAILS.

STAGE 2A MILWAUKEE AVENUE WORK

CONSTRUCTION:
BRIDGE DECK OVERLAY, PARTIAL FULL-DEPTH DECK SLAB REPAIR, CONCRETE REPAIRS TO THE ABUTMENTS AND PARAPETS FOR THE OUTSIDE PORTION OF THE MILWAUKEE AVENUE BRIDGE. PERMANENT BUTT JOINT INSTALLATION ON ALL FOUR CORNERS IMMEDIATELY ADJACENT TO THE BRIDGE DECK. ADA RAMP REPLACEMENTS WILL ALSO BE CONSTRUCTED IN THIS STAGE.

TRAFFIC:
NORTHBOUND AND SOUTHBOUND LANES WILL FOLLOW A WORK ZONE SPEED LIMIT OF 30 MPH. NORTHBOUND TRAFFIC WILL SHIFT TO THE WEST AND SOUTHBOUND TRAFFIC WILL SHIFT TO THE EAST.
ALL LEFT-TURN AND THROUGH MOVEMENTS FROM THE DEMPSTER STREET OFF RAMPS WILL BE DETOURED DURING THIS STAGE.
SEE SHEETS 16-19 FOR DETOUR ROUTE DETAILS.

STAGE 2B MILWAUKEE AVENUE WORK

CONSTRUCTION:
PERMANENT BUTT JOINT INSTALLATION ON THE NORTHEAST AND SOUTHWEST CORNERS OF THE MILWAUKEE AVENUE BRIDGE.

TRAFFIC:
BOTH NORTHBOUND AND SOUTHBOUND TRAFFIC WILL REMAIN THE SAME FROM STAGE 2A.
ALL LEFT-TURN AND THROUGH MOVEMENTS FROM THE DEMPSTER STREET OFF RAMPS WILL BE DETOURED DURING THIS STAGE.
SEE SHEETS 16-19 FOR DETOUR ROUTE DETAILS.

PROPOSED MAINTENANCE OF TRAFFIC DEMPSTER STREET

EASTBOUND DEMPSTER STREET WORK

CONSTRUCTION:
SOUTH ABUTMENT REPAIRS ALONG DEMPSTER STREET.

TRAFFIC:
WORK ZONE SPEED LIMIT IS 35 MPH ON DEMPSTER STREET. UTILIZE IDOT STANDARD 701427-05 FOR STRUCTURAL WORK.

WESTBOUND DEMPSTER STREET WORK

CONSTRUCTION:
NORTH ABUTMENT REPAIRS ALONG DEMPSTER STREET.

TRAFFIC:
WORK ZONE SPEED LIMIT IS 35 MPH ON DEMPSTER STREET. UTILIZE IDOT STANDARD 701427-05 FOR STRUCTURAL WORK.

FILE NAME = $FILES
PLOT SCALE = 2.0000 ' / in.
USER NAME = rileywhite

Ardmore Roderick

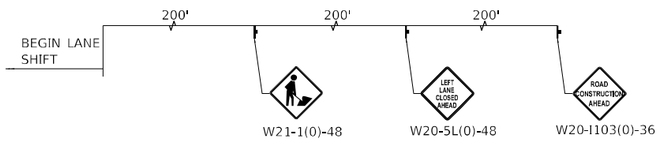
USER NAME = rileywhite	DESIGNED - RW	REVISED -
	DRAWN - RW	REVISED -
PLOT SCALE = 2.0000 ' / in.	CHECKED - YK	REVISED -
PLOT DATE = 4/22/2024	DATE - 03/25/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 21 (MILWAUKEE AVE) OVER US 14 (DEMPSTER ST)
MAINTENANCE OF TRAFFIC GENERAL NOTES

SCALE: | SHEET NO. 1 OF 8 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	14
		CONTRACT NO. 62T24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



ADVANCED SIGNING DETAIL

MOT LEGEND

- FLASHING ARROW BOARD
- CONSTRUCTION DRUMS
- TEMPORARY CONCRETE BARRIER
- IMPACT ATTENUATOR
- WORK ZONE AREA
- DIRECTION OF TRAFFIC
- SIGN
- TYPE III BARRICADE

- (A) TEMPORARY 4" SOLID WHITE LINE TYPE IV TAPE
- (B) TEMPORARY 4" SOLID YELLOW LINE TYPE IV TAPE
- (C) TEMPORARY DOUBLE YELLOW 4" SOLID LINES TYPE IV TAPE
- (D) TEMPORARY 24" SOLID WHITE LINE (STOP BAR) TYPE IV TAPE
- (E) TEMPORARY 6" WHITE DOTTED LINE (2' DASH - 6' SKIP) TYPE IV TAPE
- (F) TEMPORARY 4" WHITE DOTTED LINE (10' DASH - 30' SKIP) TYPE IV TAPE
- (G) TEMPORARY LETTERS AND SYMBOLS TYPE IV TAPE

MILWAUKEE AVE STAGE 1 (LOOKING NORTHWEST)

FILES
FILE NAME = 100.0000 ' / in.
PLOT SCALE = rileywhite
USER NAME =

Ardmore Roderick

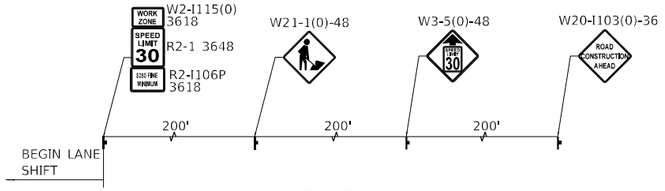
USER NAME = rileywhite	DESIGNED - AJB	REVISED -	
	DRAWN - AJB	REVISED -	
PLOT SCALE = 100.0000 ' / in.	CHECKED - YK	REVISED -	
PLOT DATE = 4/22/2024	DATE - 03/25/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 21 (MILWAUKEE AVE) OVER US 14 (DEMPSTER ST)
MAINTENANCE OF TRAFFIC STAGE 1 PLAN

SCALE: 1"=50' | SHEET NO. 2 OF 8 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	15
		CONTRACT NO. 62T24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



ADVANCED SIGNING DETAIL

MOT LEGEND

- FLASHING ARROW BOARD
- CONSTRUCTION DRUMS
- TEMPORARY CONCRETE BARRIER
- IMPACT ATTENUATOR
- WORK ZONE AREA
- DIRECTION OF TRAFFIC
- SIGN
- TYPE III BARRICADE

- (A) TEMPORARY 4" SOLID WHITE LINE TYPE IV TAPE
- (B) TEMPORARY 4" SOLID YELLOW LINE TYPE IV TAPE
- (C) TEMPORARY DOUBLE YELLOW 4" SOLID LINES TYPE IV TAPE
- (D) TEMPORARY 24" SOLID WHITE LINE (STOP BAR) TYPE IV TAPE
- (E) TEMPORARY 6" WHITE DOTTED LINE (2' DASH - 6' SKIP) TYPE IV TAPE
- (F) TEMPORARY 4" WHITE DOTTED LINE (10' DASH - 30' SKIP) TYPE IV TAPE
- (G) TEMPORARY LETTERS AND SYMBOLS TYPE IV TAPE

MILWAUKEE AVE STAGE 2 (LOOKING NORTHWEST)

FILE NAME = $FILE$
PLOT SCALE = $PLOTSCALE$ ' / in.
USER NAME = $USER$

Ardmore Roderick

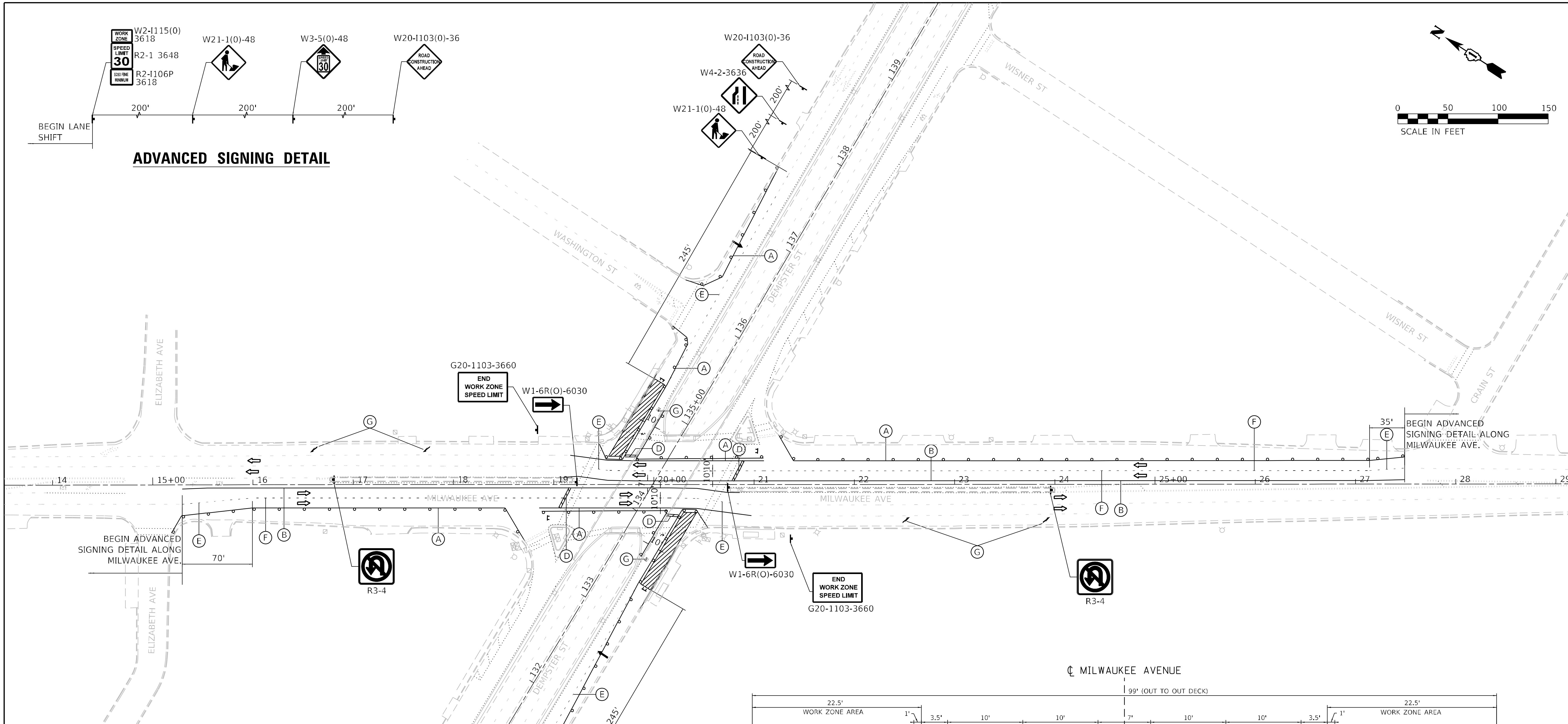
USER NAME = rileywhite	DESIGNED - AJB	REVISED -
	DRAWN - AJB	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED - YK	REVISED -
PLOT DATE = 4/22/2024	DATE - 03/25/2024	REVISED -

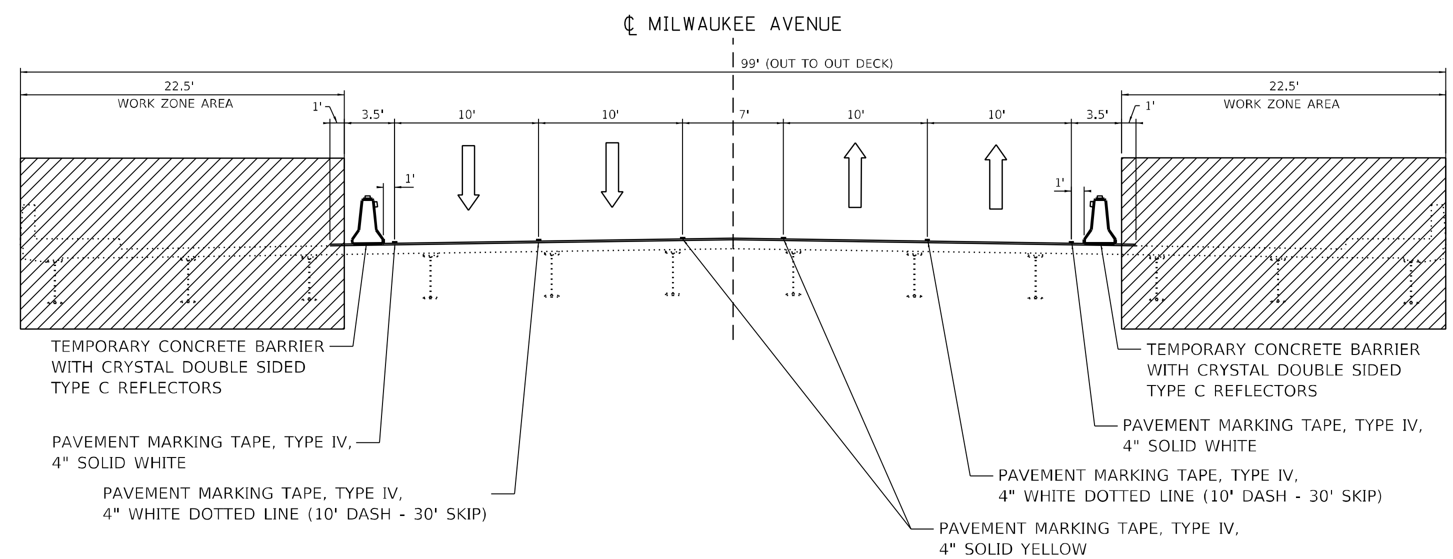
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 21 (MILWAUKEE AVE) OVER US 14 (DEMPSTER ST)
MAINTENANCE OF TRAFFIC STAGE 2A PLAN

SCALE: 1"=50' | SHEET NO. 3 OF 8 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	16
		CONTRACT NO. 62T24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		





MILWAUKEE AVE STAGE 2 (LOOKING NORTHWEST)

MOT LEGEND

- FLASHING ARROW BOARD
- CONSTRUCTION DRUMS
- TEMPORARY CONCRETE BARRIER
- IMPACT ATTENUATOR
- WORK ZONE AREA
- DIRECTION OF TRAFFIC
- SIGN
- TYPE III BARRICADE

- (A) TEMPORARY 4" SOLID WHITE LINE TYPE IV TAPE
- (B) TEMPORARY 4" SOLID YELLOW LINE TYPE IV TAPE
- (C) TEMPORARY DOUBLE YELLOW 4" SOLID LINES TYPE IV TAPE
- (D) TEMPORARY 24" SOLID WHITE LINE (STOP BAR) TYPE IV TAPE
- (E) TEMPORARY 6" WHITE DOTTED LINE (2' DASH - 6' SKIP) TYPE IV TAPE
- (F) TEMPORARY 4" WHITE DOTTED LINE (10' DASH - 30' SKIP) TYPE IV TAPE
- (G) TEMPORARY LETTERS AND SYMBOLS TYPE IV TAPE

FILE NAME = $FILE$
PLOT SCALE = 100.0000 ' / in.
USER NAME = rileywhite

Ardmore Roderick

USER NAME = rileywhite	DESIGNED - AJB	REVISED -	
	DRAWN - AJB	REVISED -	
PLOT SCALE = 100.0000 ' / in.	CHECKED - YK	REVISED -	
PLOT DATE = 4/22/2024	DATE - 03/25/2024	REVISED -	

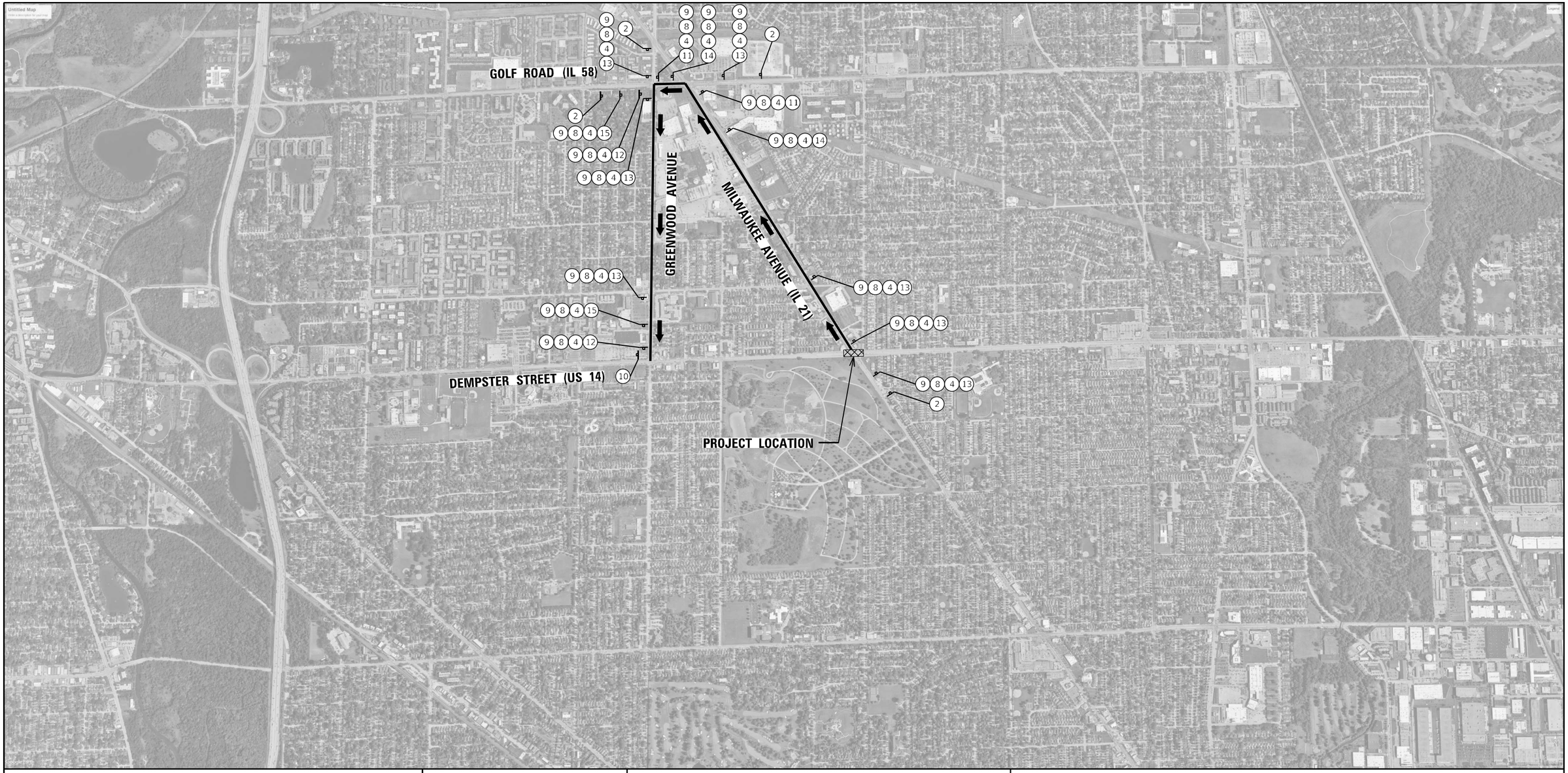
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 21 (MILWAUKEE AVE) OVER US 14 (DEMPSTER ST)
MAINTENANCE OF TRAFFIC STAGE 2B PLAN

SCALE: 1"=50' | SHEET NO. 4 OF 8 SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	17
		CONTRACT NO. 62T24		

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT



SIGNAGE LEGEND

(1) ROAD CONSTRUCTION AHEAD — W20-I103(0)-48
(2) DETOUR AHEAD — W20-2-48X48
(3) ILL 21 — M1-50-2424
(4) 14 — M1-40-2424
(5) NORTH — M3-1-2412
(6) SOUTH — M3-3-2412
(7) EAST — M3-2-2412
(8) WEST — M3-4-2412
(9) DETOUR — M4-8-2412
(10) END DETOUR — M4-8a-30X24
(11) M6-1-2115
(12) M6-1-2115
(13) M6-3-2115
(14) M5-1L-2115
(15) M5-1R-2115

☼ FLASHING MONO-DIRECTIONAL LIGHT

DETOUR ROUTE INFORMATION

MILWAUKEE AVENUE (IL 21)
JURISDICTION: STATE
ADT: 27,800
4-LANE 2-WAY
MAXIMUM TRAVEL DISTANCE: 1.15 MILES
POSTED SPEED: 35 MPH

GOLF ROAD (IL 58)
JURISDICTION: STATE
ADT: 30,900
6-LANE 2-WAY
MAXIMUM TRAVEL DISTANCE: 0.11 MILES
POSTED SPEED: 35 MPH

GREENWOOD AVENUE
JURISDICTION: NILES
ADT: 18,000
4-LANE 2-WAY
MAXIMUM TRAVEL DISTANCE: 1.00 MILES
POSTED SPEED: 35 MPH

DETOUR DESCRIPTION

MILWAUKEE AVE (NB) TO DEMPSTER ST (WB)

1. NORTHBOUND MILWAUKEE AVENUE (IL 21) TRAFFIC WILL CONTINUE ON THE SAME ROUTE UNTIL GOLF ROAD (IL 58).
2. DRIVERS WILL TURN LEFT ONTO WESTBOUND GOLF ROAD (IL 58) UNTIL GREENWOOD AVENUE.
3. DRIVERS WILL TURN LEFT ONTO SOUTHBOUND GREENWOOD AVENUE UNTIL DEMPSTER STREET (US 14).
4. DRIVERS WILL TURN RIGHT TO CONTINUE ALONG WESTBOUND DEMPSTER STREET (US 14) AND COMPLETE THE DETOUR.

DETOUR PLAN LEGEND

(X) DETOUR SIGN TYPE
DETOUR SIGN
DIRECTION OF REROUTED TRAFFIC
WORK ZONE
DETOUR ROUTE

DETOUR PLAN GENERAL NOTES

1. LOCATIONS SHOWN ARE APPROXIMATE. LOCATIONS ARE TO BE DETERMINED BY THE ENGINEER TO BE BASED UPON FIELD CONDITIONS.
2. ALL SIGNING MUST BE IN ACCORDANCE WITH APPLICABLE PROVISIONS OF THE STATE OF ILLINOIS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED JANUARY 1, 2022. THE DETAILS IN THESE PLANS, THE LATEST EDITION OF THE IDOT BUREAU OF DESIGN AND ENVIRONMENT HIGHWAY STANDARDS, AND THE LATEST EDITION OF THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES".
3. DETOUR SIGNAGE SHALL BE CONSIDERED INCLUDED IN THE COST FOR TEMPORARY TRAFFIC CONTROL AND PROTECTION, (SPECIAL) EXCEPT AS OTHERWISE NOTED.
4. THE CONTRACTOR SHALL NOT OBSTRUCT ANY EXISTING SIGNS WITH THE PLACEMENT OF DETOUR SIGNAGE.
5. SEE DETAIL TC-21 FOR TYPICAL SIGN SPACING.
6. A MINIMUM OF FOURTEEN (14) DAYS IN ADVANCE OF THE CONSTRUCTION, THE CONTRACTOR SHALL PLACE ONE (1) PORTABLE CHANGEABLE MESSAGE SIGN AT EACH END OF THE PROJECT ALONG MILWAUKEE AVE AND DEMPSTER ST AS DIRECTED AND AT A LOCATION DESIGNATED BY THE ENGINEER TO INFORM MOTORISTS OF THE UPCOMING CONSTRUCTION. THE MESSAGE SHALL BE APPROVED BY THE ENGINEER. THIS WORK IS TO BE PAID FOR AT THE CONTRACT UNIT PRICE PER CALENDAR DAY FOR CHANGEABLE MESSAGE SIGN.
7. LOCAL ACCESS SHALL BE PROVIDED AT ALL TIMES TO RESIDENTS AND BUSINESSES.

FILE NAME = SFILES
PLOT SCALE = 2.0000 ' / in.
USER NAME = rileywhite

Ardmore Roderick

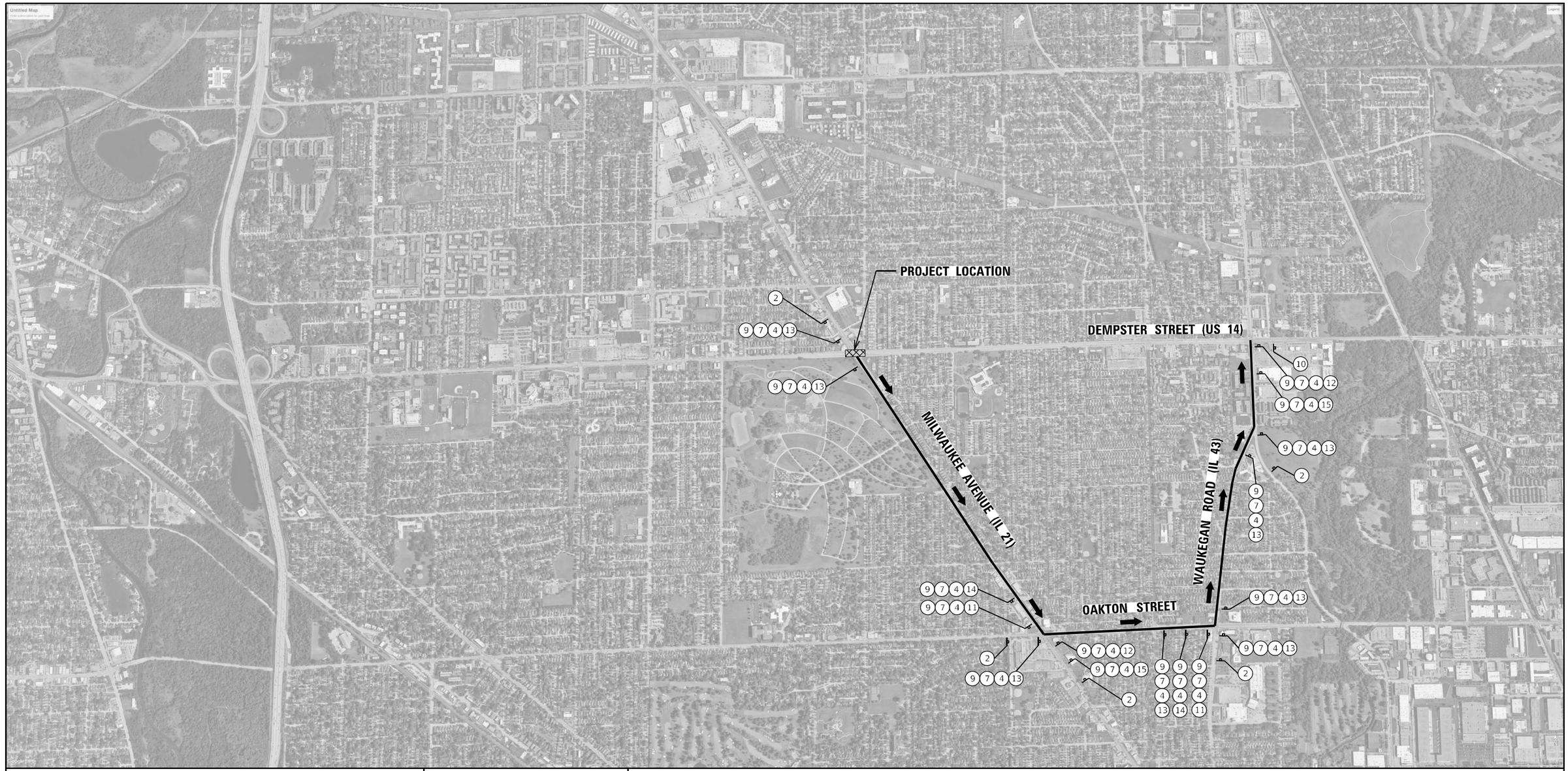
USER NAME = rileywhite	DESIGNED - RW	REVISED -
	DRAWN - RW	REVISED -
PLOT SCALE = 2.0000 ' / in.	CHECKED - YK	REVISED -
PLOT DATE = 3/25/2024	DATE - 03/25/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 21 (MILWAUKEE AVE) OVER US 14 (DEMPSTER ST)
DETOUR ROUTE MILWAUKEE AVE (NB) TO DEMPSTER ST (WB)

SCALE: N.T.S. | SHEET NO. 5 OF 8 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	18
		CONTRACT NO. 62T24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



SIGNAGE LEGEND

1. ROAD CONSTRUCTION AHEAD — W20-1103(0)-48
2. DETOUR AHEAD — W20-2-48X48
3. ILL 21 — M1-50-2424
4. 14 — M1-40-2424
5. NORTH — M3-1-2412
6. SOUTH — M3-3-2412
7. EAST — M3-2-2412
8. WEST — M3-4-2412
9. DETOUR — M4-8-2412
10. END DETOUR — M4-8a-30X24
11. M6-1-2115
12. M6-1-2115
13. M6-3-2115
14. M5-1L-2115
15. M5-1R-2115

☼ FLASHING MONO-DIRECTIONAL LIGHT

DETOUR ROUTE INFORMATION

MILWAUKEE AVENUE (IL 21)
JURISDICTION: STATE
ADT: 26,400
4-LANE 2-WAY
MAXIMUM TRAVEL DISTANCE: 1.17 MILES
POSTED SPEED: 35 MPH

OAKTON STREET
JURISDICTION: NILES
ADT: 24,400
4-LANE 2-WAY
MAXIMUM TRAVEL DISTANCE: 0.60 MILES
POSTED SPEED: 35 MPH

WAUKEGAN ROAD (IL 43)
JURISDICTION: STATE
ADT: 12,000
4-LANE 2-WAY
MAXIMUM TRAVEL DISTANCE: 1.02 MILES
POSTED SPEED: 35 MPH

DETOUR DESCRIPTION

MILWAUKEE AVE (SB) TO DEMPSTER ST (EB)

1. SOUTHBOUND MILWAUKEE AVENUE (IL 21) TRAFFIC WILL CONTINUE ON THE SAME ROUTE UNTIL OAKTON STREET.
2. DRIVERS WILL TURN LEFT ONTO EASTBOUND OAKTON STREET UNTIL WAUKEGAN ROAD (IL 43).
3. DRIVERS WILL TURN LEFT ONTO NORTHBOUND WAUKEGAN ROAD (IL 43) UNTIL DEMPSTER STREET (US 14).
4. DRIVERS WILL TURN RIGHT TO CONTINUE ALONG EASTBOUND DEMPSTER STREET (US 14) AND COMPLETE THE DETOUR.

DETOUR PLAN LEGEND

- (X) DETOUR SIGN TYPE
- DETOUR SIGN
- DIRECTION OF REROUTED TRAFFIC
- WORK ZONE
- DETOUR ROUTE

FILE NAME = STILES
PLOT SCALE = 2.0000 ' / in.
USER NAME = rileywhite

Ardmore Roderick

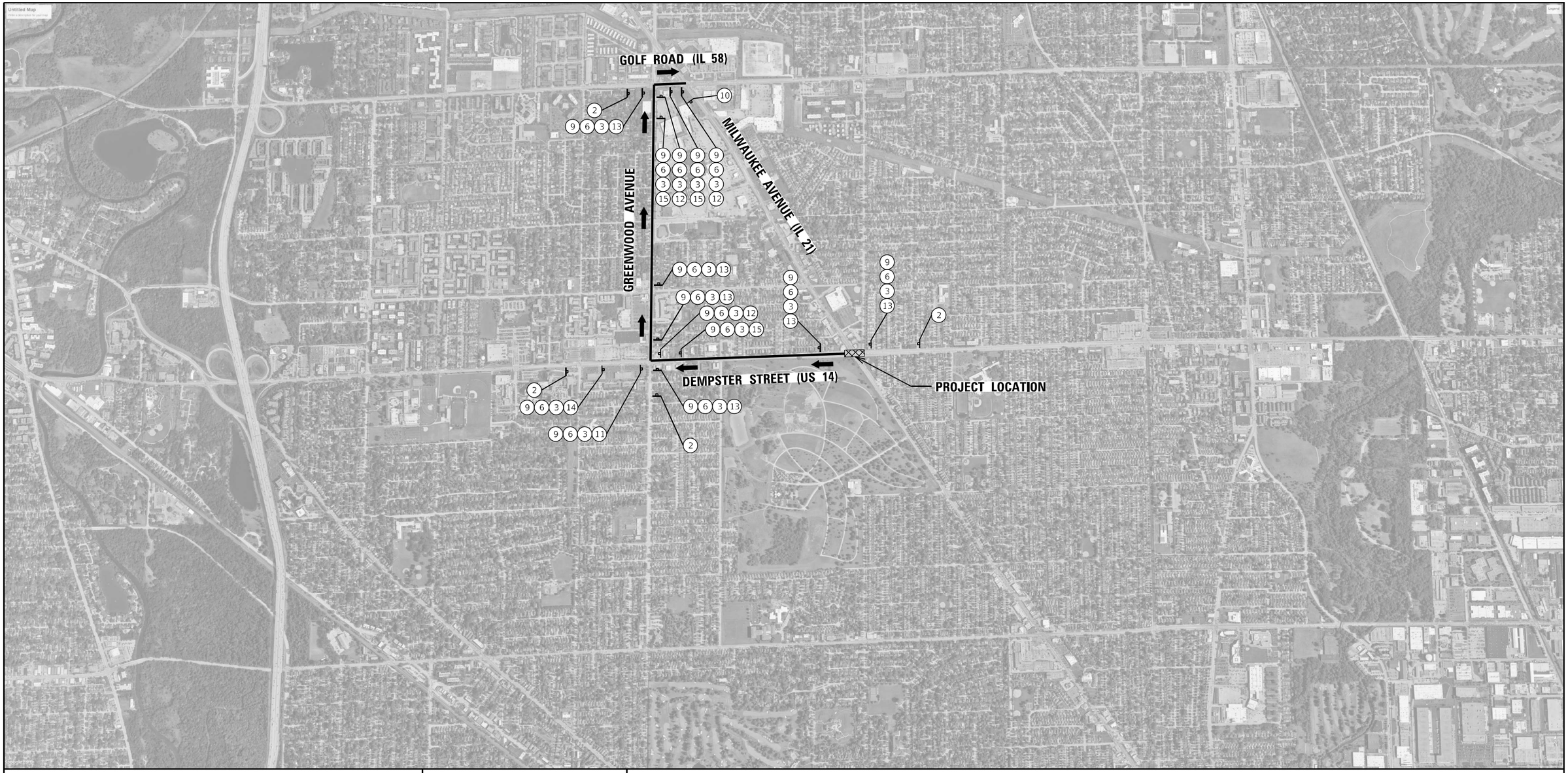
USER NAME = rileywhite	DESIGNED - RW	REVISED -
	DRAWN - RW	REVISED -
PLOT SCALE = 2.0000 ' / in.	CHECKED - YK	REVISED -
PLOT DATE = 3/25/2024	DATE - 03/25/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 21 (MILWAUKEE AVE) OVER US 14 (DEMPSTER ST)
DETOUR ROUTE MILWAUKEE (SB) AVE TO DEMPSTER ST (EB)

SCALE: N.T.S. | SHEET NO. 6 OF 8 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	19
		CONTRACT NO. 62T24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



SIGNAGE LEGEND

1. ROAD CONSTRUCTION AHEAD — W20-I103(0)-48
2. DETOUR AHEAD — W20-2-48X48
3. ILL 21 — M1-50-2424
4. 14 — M1-40-2424
5. NORTH — M3-1-2412
6. SOUTH — M3-3-2412
7. EAST — M3-2-2412
8. WEST — M3-4-2412
9. DETOUR — M4-8-2412
10. END DETOUR — M4-8a-30X24
11. M6-1-2115
12. M6-1-2115
13. M6-3-2115
14. M5-1L-2115
15. M5-1R-2115

☼ FLASHING MONO-DIRECTIONAL LIGHT

DETOUR ROUTE INFORMATION

DEMPSTER STREET (US 14)
JURISDICTION: FEDERAL
ADT: 35,000
4-LANE 2-WAY
MAXIMUM TRAVEL DISTANCE: 0.72 MILES
POSTED SPEED: 35 MPH

GREENWOOD AVENUE
JURISDICTION: NILES
ADT: 18,000
4-LANE 2-WAY
MAXIMUM TRAVEL DISTANCE: 1.00 MILES
POSTED SPEED: 35 MPH

GOLF ROAD (IL 58)
JURISDICTION: STATE
ADT: 30,900
6-LANE 2-WAY
MAXIMUM TRAVEL DISTANCE: 0.11 MILES
POSTED SPEED: 35 MPH

DETOUR DESCRIPTION

DEMPSTER ST (WB) TO MILWAUKEE AVE (SB)

1. WESTBOUND DEMPSTER STREET (US 14) TRAFFIC WILL CONTINUE ON THE SAME ROUTE UNTIL GREENWOOD AVENUE.
2. DRIVERS WILL TURN RIGHT ONTO NORTHBOUND GREENWOOD AVENUE UNTIL GOLF ROAD (IL 58).
3. DRIVERS WILL TURN RIGHT ONTO EASTBOUND GOLF ROAD (IL 58) UNTIL MILWAUKEE AVENUE (IL 21).
4. DRIVERS WILL TURN RIGHT TO CONTINUE ALONG SOUTHBOUND MILWAUKEE AVENUE (IL 21) AND COMPLETE THE DETOUR.

DETOUR PLAN LEGEND

- (X) DETOUR SIGN TYPE
- DETOUR SIGN
- DIRECTION OF REROUTED TRAFFIC
- WORK ZONE
- DETOUR ROUTE

FILE NAME = S:\FILES
PLOT SCALE = 2.0000 ' / in.
USER NAME = rileywhite

Ardmore Roderick

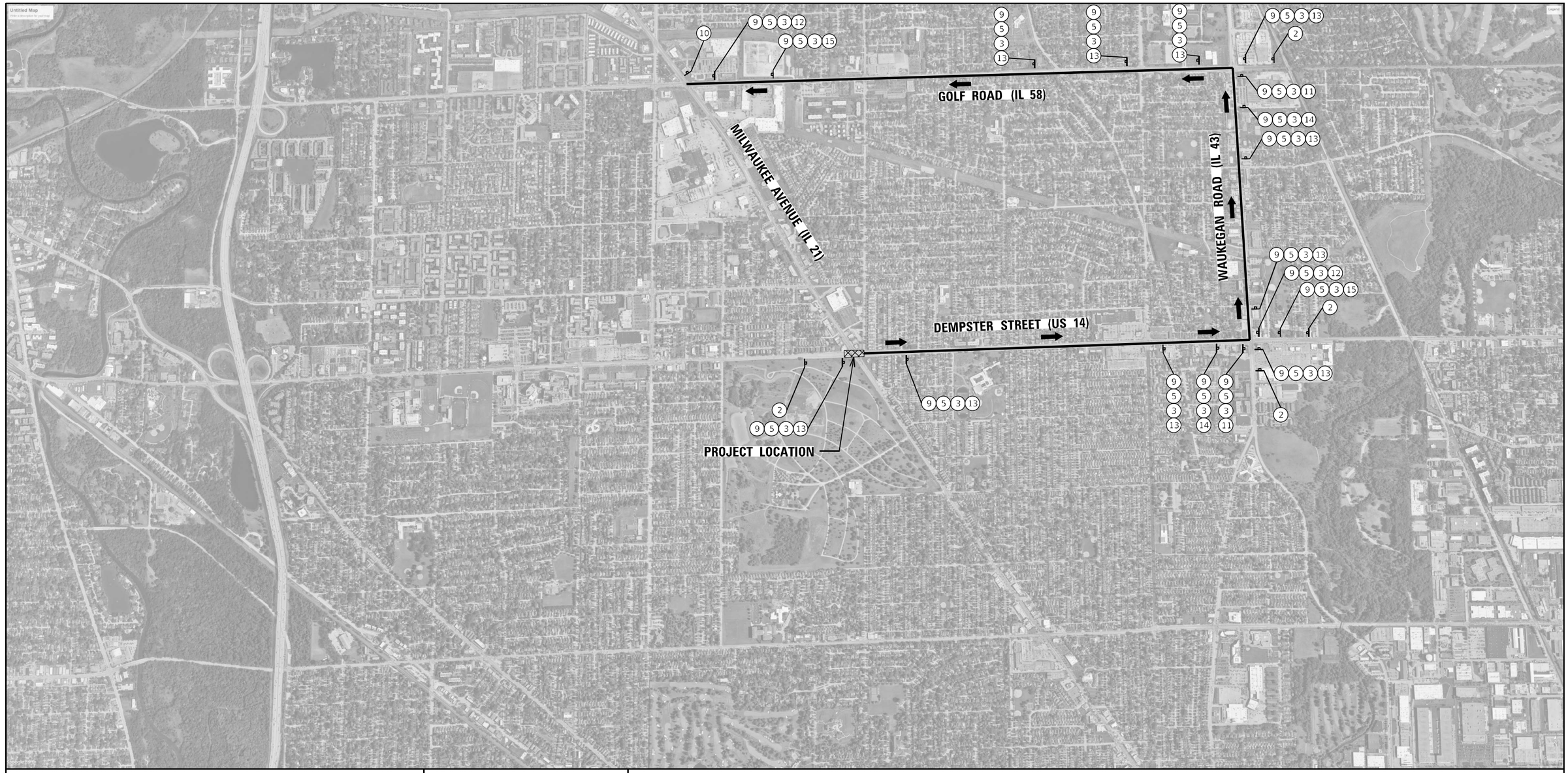
USER NAME = rileywhite	DESIGNED - RW	REVISED -
	DRAWN - RW	REVISED -
PLOT SCALE = 2.0000 ' / in.	CHECKED - YK	REVISED -
PLOT DATE = 3/25/2024	DATE - 03/25/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 21 (MILWAUKEE AVE) OVER US 14 (DEMPSTER ST)
DETOUR ROUTE DEMPSTER ST (WB) TO MILWAUKEE AVE (SB)

SCALE: N.T.S. | SHEET NO. 7 OF 8 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	20
		CONTRACT NO. 62T24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



SIGNAGE LEGEND

1 ROAD CONSTRUCTION AHEAD	W20-I103(0)-48	2 DETOUR AHEAD	W20-2-48X48
3 ILL 21	M1-50-2424	4 14	M1-40-2424
5 NORTH	M3-1-2412	6 SOUTH	M3-3-2412
7 EAST	M3-2-2412	8 WEST	M3-4-2412
9 DETOUR	M4-8-2412	10 END DETOUR	M4-8a-30X24
11	M6-1-2115	12	M6-1-2115
13	M6-3-2115	14	M5-1L-2115
15	M5-1R-2115		

☼ FLASHING MONO-DIRECTIONAL LIGHT

DETOUR ROUTE INFORMATION

DEMPSTER STREET (US 14)
JURISDICTION: FEDERAL
ADT: 39,500
6-LANE 2-WAY
MAXIMUM TRAVEL DISTANCE: 1.41 MILES
POSTED SPEED: 35 MPH

WAUKEGAN ROAD (IL 43)
JURISDICTION: STATE
ADT: 23,200
4-LANE 2-WAY
MAXIMUM TRAVEL DISTANCE: 0.99 MILES
POSTED SPEED: 35 MPH

GOLF ROAD (IL 58)
JURISDICTION: STATE
ADT: 35,000
4-LANE 2-WAY
MAXIMUM TRAVEL DISTANCE: 1.98 MILES
POSTED SPEED: 40 MPH

DETOUR DESCRIPTION

DEMPSTER ST (EB) TO MILWAUKEE AVE (NB)

1. EASTBOUND DEMPSTER STREET (US 14) TRAFFIC WILL CONTINUE ON THE SAME ROUTE UNTIL WAUKEGAN ROAD (IL 43).
2. DRIVERS WILL TURN LEFT ONTO NORTHBOUND WAUKEGAN ROAD (IL 43) UNTIL GOLF ROAD (IL 58).
3. DRIVERS WILL TURN LEFT ONTO WESTBOUND GOLF ROAD (IL 58) UNTIL MILWAUKEE AVENUE (IL 21).
4. DRIVERS WILL TURN RIGHT TO CONTINUE ALONG NORTHBOUND MILWAUKEE AVENUE (IL 21) AND COMPLETE THE DETOUR.

DETOUR PLAN LEGEND

- (X) DETOUR SIGN TYPE
- DETOUR SIGN
- DIRECTION OF REROUTED TRAFFIC
- WORK ZONE
- DETOUR ROUTE

FILE NAME = S:\FILES\
PLOT SCALE = 2.0000 ' / in.
USER NAME = rileywhite

Ardmore Roderick

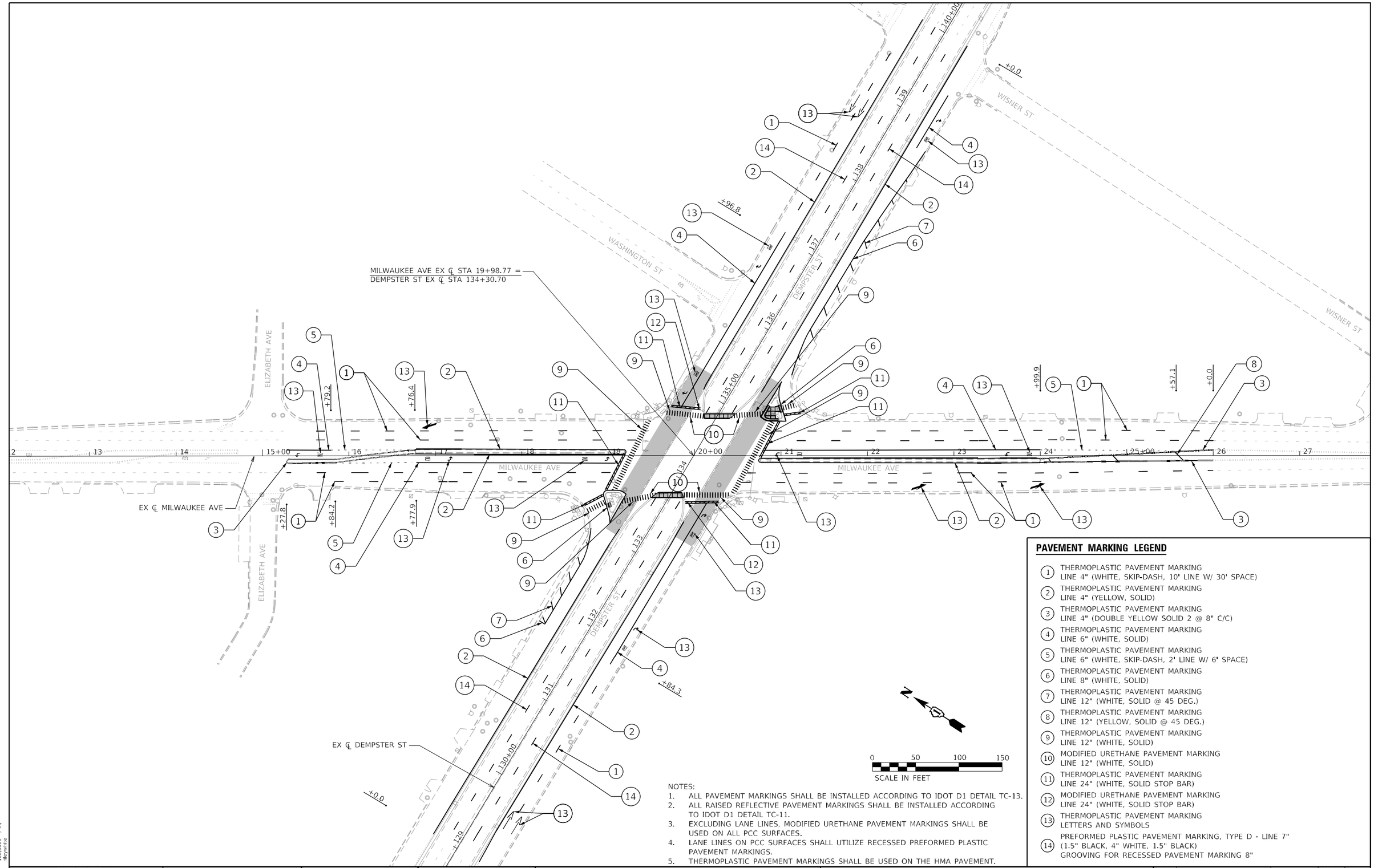
USER NAME = rileywhite	DESIGNED - RW	REVISED -
	DRAWN - RW	REVISED -
PLOT SCALE = 2.0000 ' / in.	CHECKED - YK	REVISED -
PLOT DATE = 3/25/2024	DATE - 03/25/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 21 (MILWAUKEE AVE) OVER US 14 (DEMPSTER ST)
DETOUR ROUTE DEMPSTER ST (EB) TO MILWAUKEE AVE (NB)

SCALE: N.T.S. | SHEET NO. 8 OF 8 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	21
		CONTRACT NO. 62T24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



NOTES:
1. ALL PAVEMENT MARKINGS SHALL BE INSTALLED ACCORDING TO IDOT D1 DETAIL TC-13.
2. ALL RAISED REFLECTIVE PAVEMENT MARKINGS SHALL BE INSTALLED ACCORDING TO IDOT D1 DETAIL TC-11.
3. EXCLUDING LANE LINES, MODIFIED URETHANE PAVEMENT MARKINGS SHALL BE USED ON ALL PCC SURFACES.
4. LANE LINES ON PCC SURFACES SHALL UTILIZE RECESSED PREFORMED PLASTIC PAVEMENT MARKINGS.
5. THERMOPLASTIC PAVEMENT MARKINGS SHALL BE USED ON THE HMA PAVEMENT.

PAVEMENT MARKING LEGEND

1. THERMOPLASTIC PAVEMENT MARKING LINE 4" (WHITE, SKIP-DASH, 10' LINE W/ 30' SPACE)
2. THERMOPLASTIC PAVEMENT MARKING LINE 4" (YELLOW, SOLID)
3. THERMOPLASTIC PAVEMENT MARKING LINE 4" (DOUBLE YELLOW SOLID 2 @ 8" C/C)
4. THERMOPLASTIC PAVEMENT MARKING LINE 6" (WHITE, SOLID)
5. THERMOPLASTIC PAVEMENT MARKING LINE 6" (WHITE, SKIP-DASH, 2' LINE W/ 6' SPACE)
6. THERMOPLASTIC PAVEMENT MARKING LINE 8" (WHITE, SOLID)
7. THERMOPLASTIC PAVEMENT MARKING LINE 12" (WHITE, SOLID @ 45 DEG.)
8. THERMOPLASTIC PAVEMENT MARKING LINE 12" (YELLOW, SOLID @ 45 DEG.)
9. THERMOPLASTIC PAVEMENT MARKING LINE 12" (WHITE, SOLID)
10. MODIFIED URETHANE PAVEMENT MARKING LINE 12" (WHITE, SOLID)
11. THERMOPLASTIC PAVEMENT MARKING LINE 24" (WHITE, SOLID STOP BAR)
12. MODIFIED URETHANE PAVEMENT MARKING LINE 24" (WHITE, SOLID STOP BAR)
13. THERMOPLASTIC PAVEMENT MARKING LETTERS AND SYMBOLS
14. PREFORMED PLASTIC PAVEMENT MARKING, TYPE D - LINE 7" (1.5" BLACK, 4" WHITE, 1.5" BLACK) GROOVING FOR RECESSED PAVEMENT MARKING 8"

FILE NAME = STILES
PLOT SCALE = 100.0000 ' / in.
USER NAME = rileywhite

Ardmore Roderick

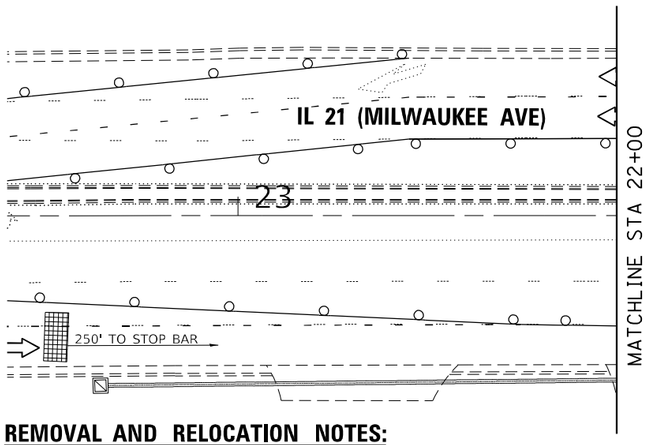
USER NAME = rileywhite	DESIGNED - RW	REVISED -	
	DRAWN - RW	REVISED -	
PLOT SCALE = 100.0000 ' / in.	CHECKED - YK	REVISED -	
PLOT DATE = 3/25/2024	DATE - 03/25/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 21 (MILWAUKEE AVE) OVER US 14 (DEMPSTER ST)
PAVEMENT MARKING PLAN

SCALE: 1"=50' | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	22
		CONTRACT NO. 62T24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



REMOVAL AND RELOCATION NOTES:

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

1	EACH	STEEL MAST ARM ASSEMBLY AND POST
10	EACH	PEDESTRIAN PUSH-BUTTON

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SAFELY STORED AND RELOCATED TO THE PROPOSED MAST ARM AND POLE:

1	EACH	CONFIRMATION BEACON
1	EACH	LIGHT DETECTOR
1	EACH	WIFI RADIO FOR PACE TRANSIT SIGNAL PRIORITY
2	EACH	3-SECTION SIGNAL HEAD
1	EACH	4-SECTION SIGNAL HEAD
1	EACH	5-SECTION SIGNAL HEAD
3	EACH	PEDESTRIAN SIGNAL HEAD
2	EACH	TRAFFIC SIGNAL BACKPLATE

CONSTRUCTION NOTES:

1. ALL EXISTING SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS, AND PUSH BUTTONS MUST BE BAGGED WHILE THE TEMPORARY SIGNAL IS OPERATIONAL DURING CONSTRUCTION
2. THE TEMPORARY SIGNAL MUST BE TURNED ON IN STAGE. CONSTRUCTION STAGE CHANGES AND SIGNAL HEAD RELOCATIONS MUST OCCUR ON THE SAME DAY.
3. EXISTING PACE TSP EQUIPMENT WILL NOT BE OPERATIONAL DURING TEMPORARY SIGNAL OPERATION.

TS SHT NO. 1

TS 326
ECON 11

MODEL: Default
FILE NAME: j:\22203.00\04_CADD\CADD_Sheets\D162724-sht-ts-01_Temp Signal Plan Stg 1.dgn

SINGH + ASSOCIATES, INC.
CONSULTING ENGINEERS

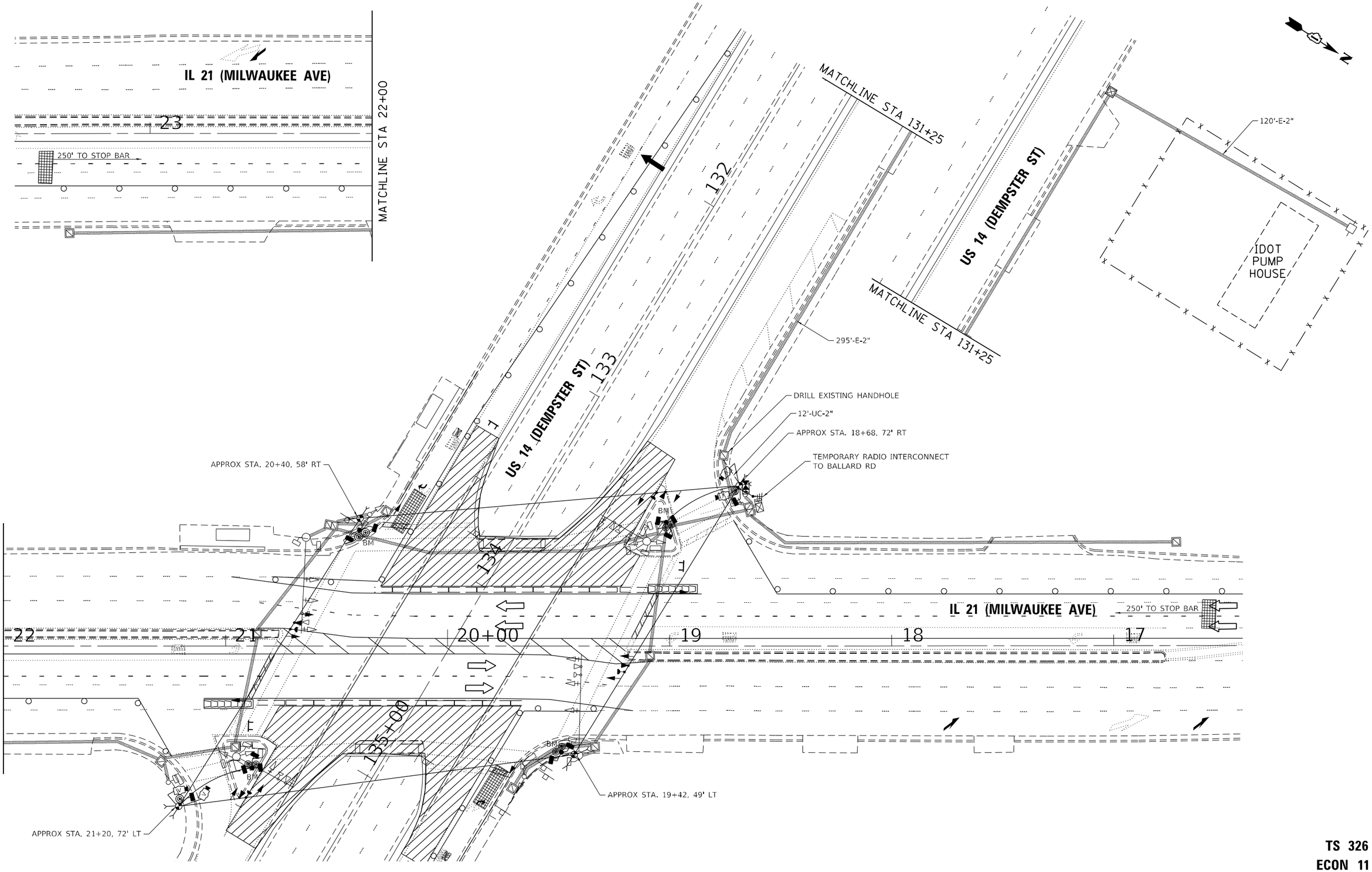
USER NAME = ggedemer	DESIGNED - GJG	REVISED -
	DRAWN - GJG	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - MG	REVISED -
PLOT DATE = 4/22/2024	DATE - 03/25/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 21 (MILWAUKEE AVE) OVER US 14 (DEMPSTER ST)
TEMPORARY SIGNAL INSTALLATION (STAGE 1) AND EXISTING SIGNAL REMOVAL PLAN

SCALE: 1"=20' | SHEET 01 OF 03 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	23
		CONTRACT NO. 62T24		
	ILLINOIS	FED. AID PROJECT		



TS SHT NO. 2

TS 326
ECON 11

SINGH + ASSOCIATES, INC. CONSULTING ENGINEERS	USER NAME = ggedemer	DESIGNED - GJG	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	IL 21 (MILWAUKEE AVE) OVER US 14 (DEMPSTER ST) TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN (STAGE 2A)
		DRAWN - GJG	REVISED -		
	PLOT SCALE = 40.0000 ' / in.	CHECKED - MG	REVISED -		SCALE: 1"=20' SHEET 02 OF 03 SHEETS STA. TO STA.
	PLOT DATE = 4/22/2024	DATE - 03/25/2024	REVISED -		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	24
		CONTRACT NO. 62T24		
	ILLINOIS FED. AID PROJECT			

MODEL: Default
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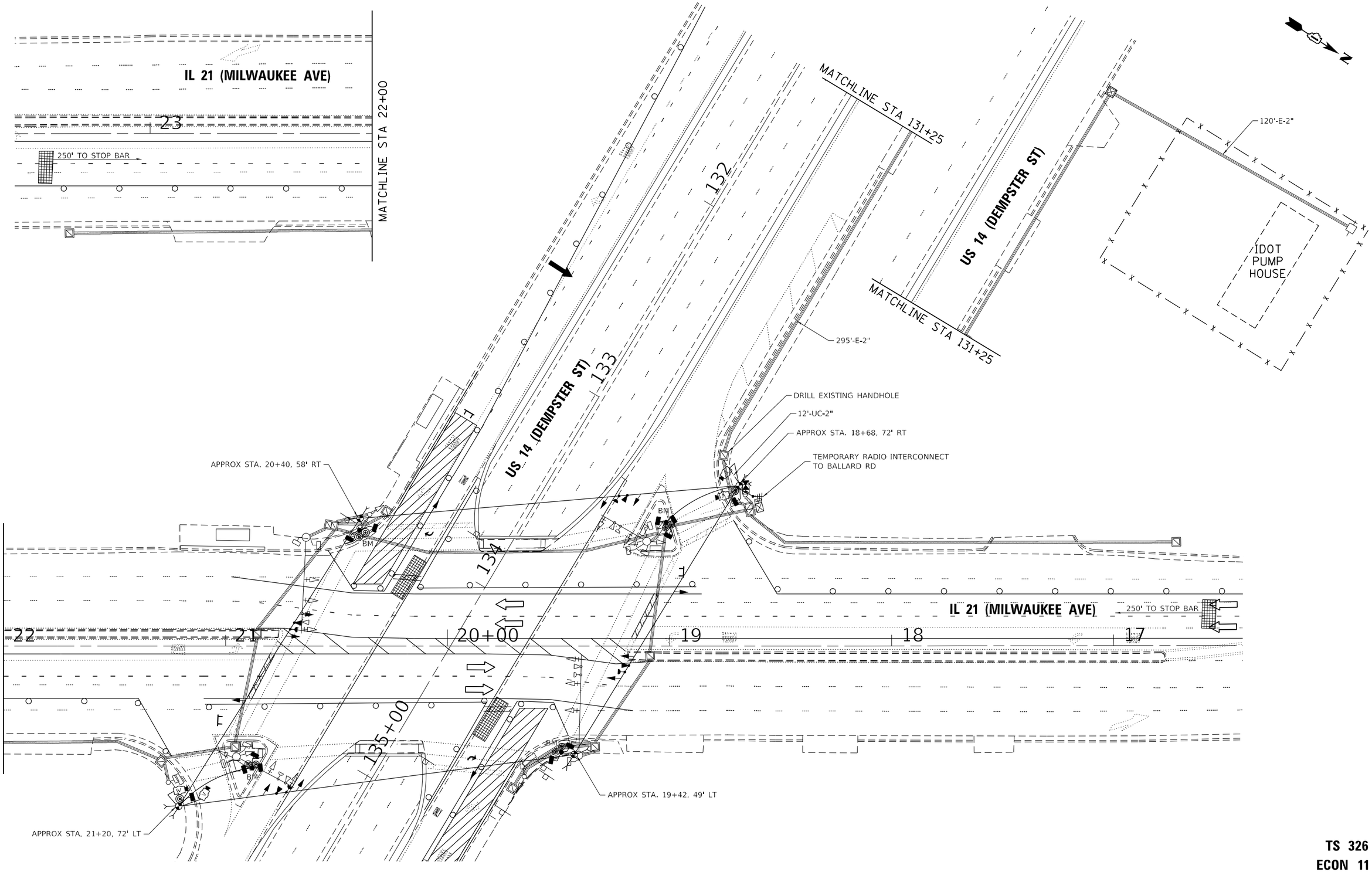


TS SHT NO. 3

TS 326
ECON 11

MODEL: Default
FILE NAME: i:\22203.02\04_CADD\CADD_Sheets\D162724-sht-ts-03_Temp Signal Plan Stg 2b.dgn

SINGH + ASSOCIATES, INC. CONSULTING ENGINEERS	USER NAME = ggedemer	DESIGNED - GJG	REVISED -
		DRAWN - GJG	REVISED -
	PLOT SCALE = 40.0000 ' / in.	CHECKED - MG	REVISED -
	PLOT DATE = 4/22/2024	DATE - 03/25/2024	REVISED -

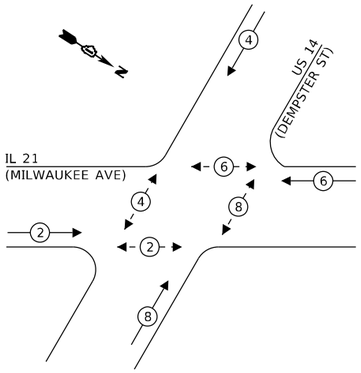
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 21 (MILWAUKEE AVE) OVER US 14 (DEMPSTER ST)
TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN (STAGE 2B)

SCALE: 1"=20' | SHEET 03 OF 03 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	25
		CONTRACT NO. 62T24		
	ILLINOIS FED. AID PROJECT			

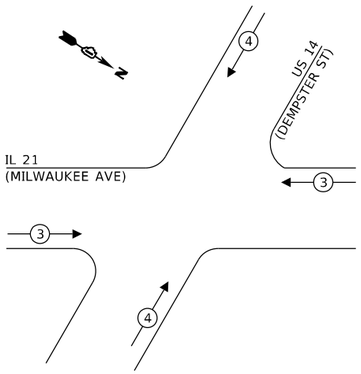
TEMPORARY CONTROLLER SEQUENCE

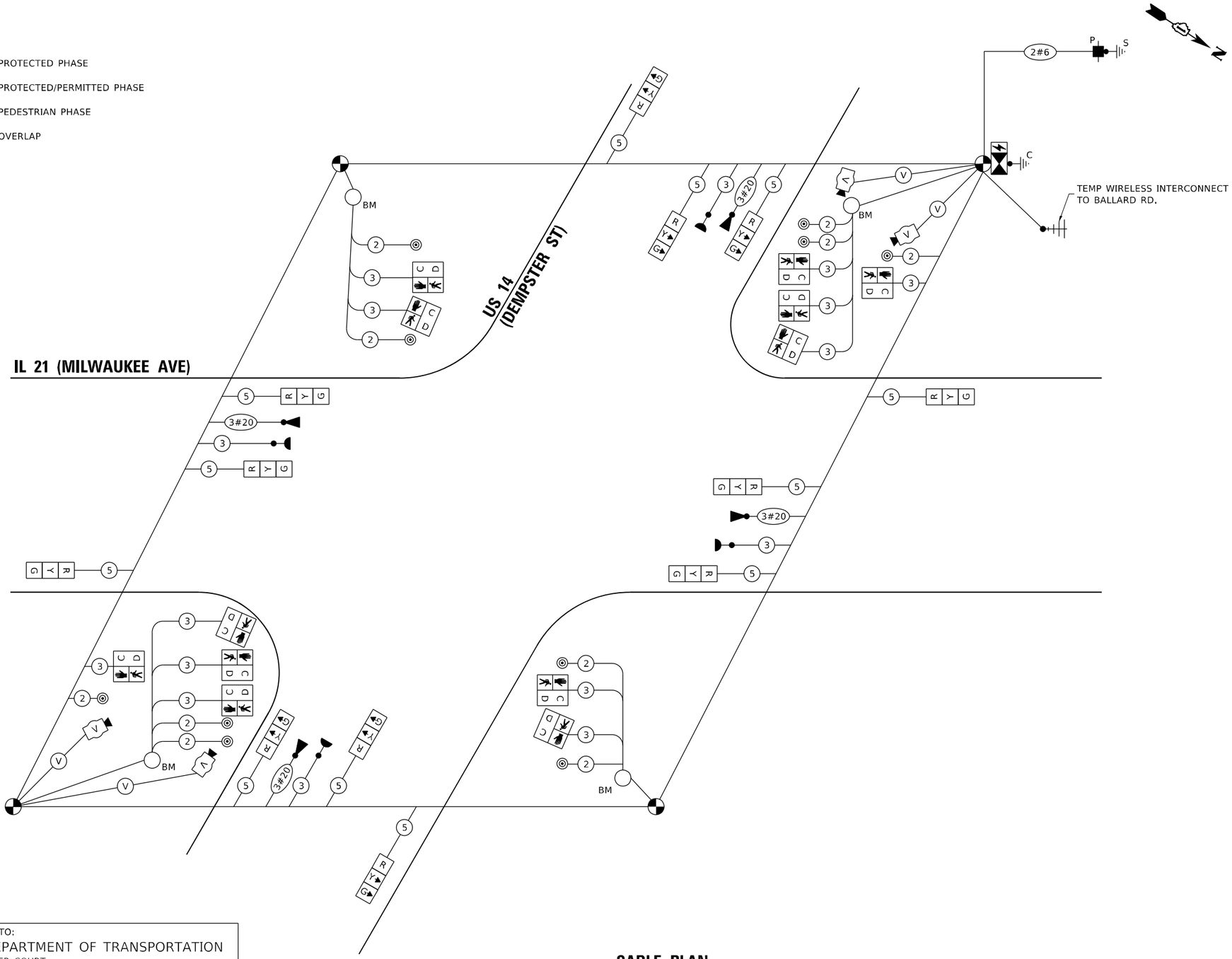


LEGEND:

- PROTECTED PHASE
- PROTECTED/PERMITTED PHASE
- PEDESTRIAN PHASE
- OL OVERLAP

TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE





CABLE PLAN
(NOT TO SCALE)

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	12	11	132
4-SECTION	-	14	-
5-SECTION	-	13	-
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL	8	15	120
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR OR VIDEO	4	20	80
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	-	35	-
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING			507
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING			1,112

ENERGY COSTS TO:
ILLINOIS DEPARTMENT OF TRANSPORTATION
202 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196-1096
ENERGY SUPPLY: CONTACT: NEW BUSINESS DEPT.
PHONE: (866) 639-3532
COMPANY: COMED
ACCOUNT NUMBER: 23020-25272
METER NUMBER: ---

TS 326
ECON 11

TS SHT NO. 4

MODEL: Default
FILE NAME: J:\22703.07\04 CADD\CADD Sheets\D1627T4-sht-ts-04 Temp Signal Cable Plan.dgn

SINGH + ASSOCIATES, INC.
CONSULTING ENGINEERS

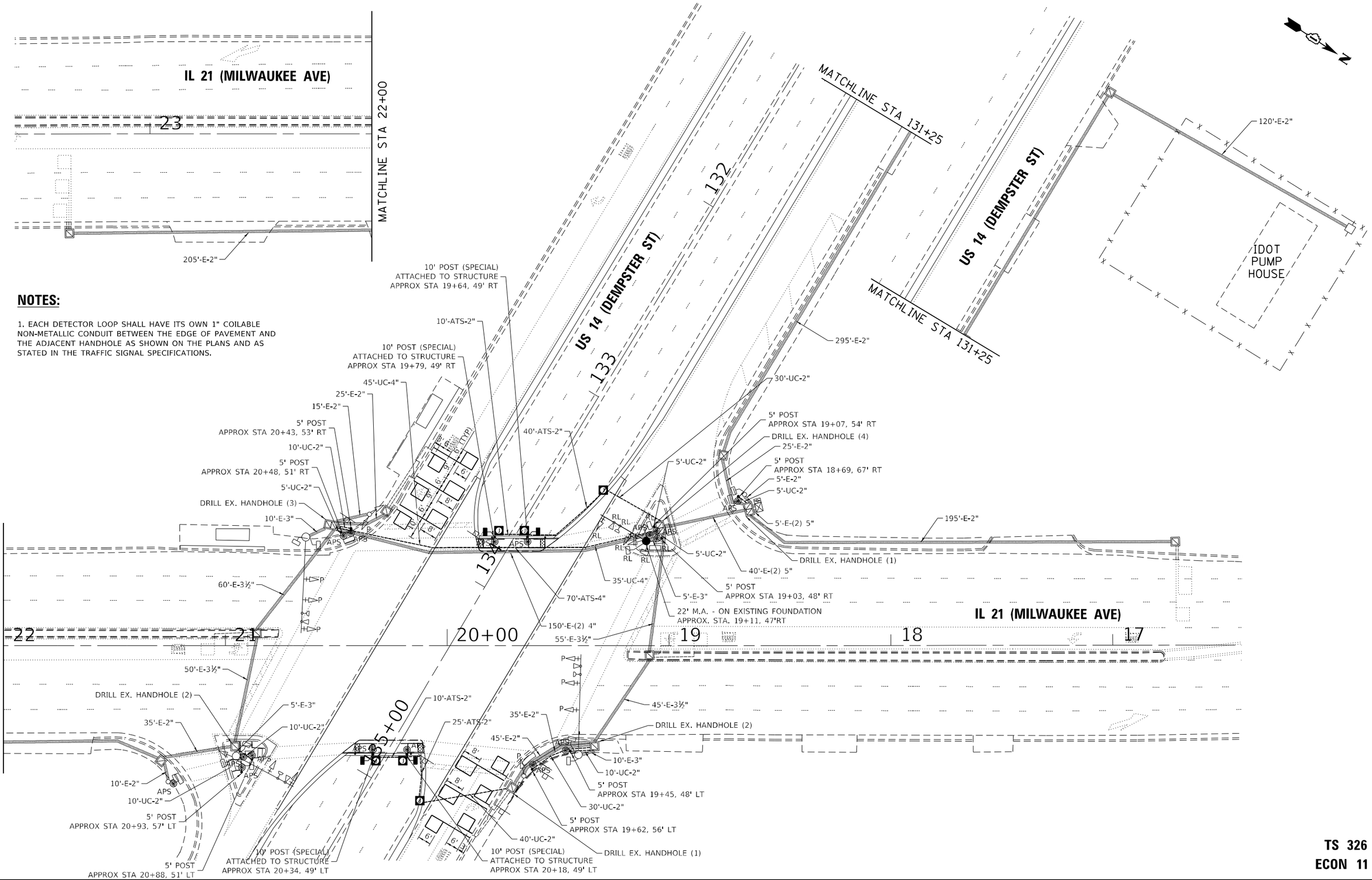
USER NAME = ggedemer	DESIGNED - GJG	REVISED -	
	DRAWN - GJG	REVISED -	
PLOT SCALE = 2.0000 ' / in.	CHECKED - MG	REVISED -	
PLOT DATE = 4/22/2024	DATE - 03/25/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 21 (MILWAUKEE AVE) OVER US 14 (DEMPSTER ST)
TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION DIAGRAM, AND TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE

SCALE: N/A | SHEET OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	26
		CONTRACT NO. 62T24		
		ILLINOIS	FED. AID PROJECT	



NOTES:

1. EACH DETECTOR LOOP SHALL HAVE ITS OWN 1" COILABLE NON-METALLIC CONDUIT BETWEEN THE EDGE OF PAVEMENT AND THE ADJACENT HANDHOLE AS SHOWN ON THE PLANS AND AS STATED IN THE TRAFFIC SIGNAL SPECIFICATIONS.

TS SHT NO. 5

TS 326
ECON 11

MODEL: Default
FILE NAME: J:\22203.02\04_CADD\CADD_Sheets\D1627T24-sht-ts-05_APS Signal Plan.dgn

USER NAME = ggedemer	DESIGNED - GJG	REVISED -	
	DRAWN - GJG	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - MG	REVISED -	
PLOT DATE = 4/22/2024	DATE - 03/25/2024	REVISED -	

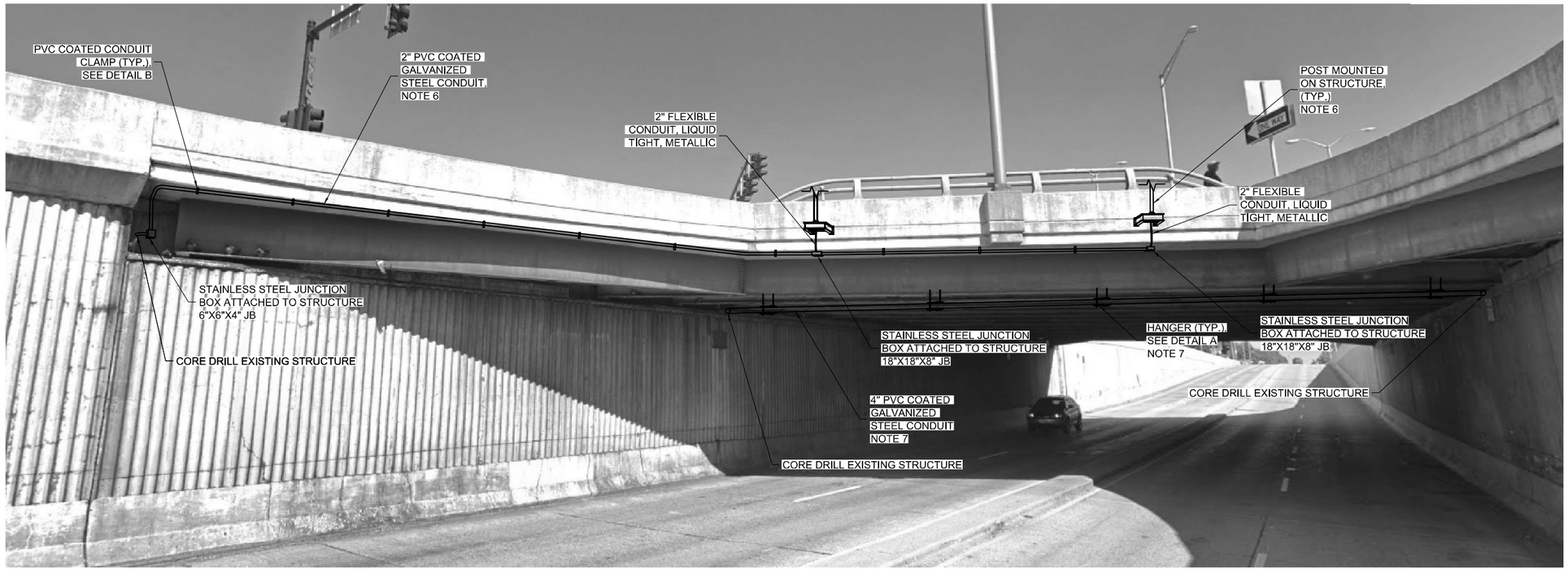
SINGH + ASSOCIATES, INC. CONSULTING ENGINEERS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

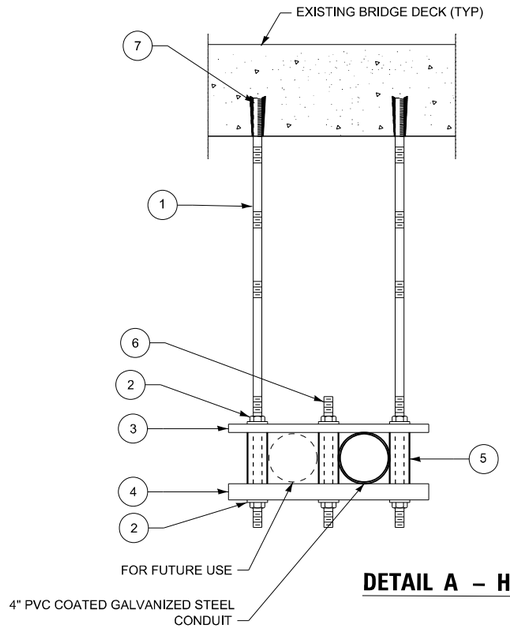
IL 21 (MILWAUKEE AVE) OVER US 14 (DEMPSTER ST)
TRAFFIC SIGNAL MODIFICATION PLAN

SCALE: 1"=20' | SHEET OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	27
		CONTRACT NO. 62T24		
	ILLINOIS	FED. AID PROJECT		



DEMPSTER STREET (FACING EAST)

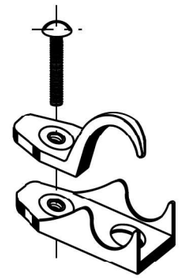


DETAIL A – HANGER DETAIL

CONDUIT HANGER LEGEND

1. STAINLESS STEEL STUD BOLT, ¾" DIA. THREADED BOTH ENDS, LENGTH AS REQUIRED (TYP.)
2. ¾" STAINLESS STEEL HEX NUT, STAINLESS STEEL FLAT WASHER AND STAINLESS STEEL LOCK WASHER, TYP.
3. ½" X 2" X 1'-2¾" FIBERGLASS FLAT BAR (LEVEL)
4. ¼" X 2" X 1'-2¾" FIBERGLASS SQUARE TUBE (LEVEL)
5. 1" FIBERGLASS ROUND TUBE 4⅞" LONG
6. ¾" STAINLESS STEEL THREADED ROD 9⅜" LONG
7. EXPANSION ANCHOR, HEAVY DUTY AS APPROVED BY THE ENGINEER

NOTE: ABOVE SIZES/LENGTHS SHALL BE VERIFIED BY CONTRACTOR TO ENSURE PROPER CONDUIT FIT BEFORE ORDERING MATERIAL.



DETAIL B – PVC COATED CONDUIT CLAMP

NOTES:

1. CONDUIT SHALL BE SUPPORTED AT A MAXIMUM INTERVAL OF 5' AND WITHIN 2'-6" OF ANY JUNCTION BOX, COUPLING/FITTING OR CHANGE IN DIRECTION.
2. ALL HARDWARE SHALL BE STAINLESS STEEL IN ACCORDANCE WITH ARTICLE 1006.31 OF THE STANDARD SPECIFICATIONS.
3. CONDUIT SHALL NOT COME INTO CONTACT WITH ANY BRACING OR OTHER STRUCTURAL MEMBERS.
4. PROVIDE 1" MINIMUM CLEARANCE TO ALL STRUCTURAL MEMBERS.
5. SECURE THE CONDUIT WITH PVC COATED CONDUIT CLAMPS AS SHOWN AT 5'-0" INTERVALS FOR LATERALS AND WITHIN 2'-0" MAXIMUM FROM ANY JUNCTION BOX, FLEXIBLE CONDUIT, OR CHANGE IN DIRECTION. ALL PVC COATED CONDUIT CLAMPS OR BEAM CLAMPS SHALL BE INCLUDED WITH THE COST OF THE "CONDUIT ATTACHED TO STRUCTURE, OF THE CORRESPONDING DIA., GALVANIZED STEEL, PVC COATED" PAY ITEM.
6. REFER TO STRUCTURAL DRAWINGS FOR DETAILS
7. IN NO INSTANCE SHALL ANY ELECTRICAL EQUIPMENT BE INSTALLED BELOW THE ELEVATION OF THE BOTTOM OF THE BRIDGE BEAM WHEN OVER ANY PAVEMENT (ROADWAY OR SHOULDER).

TS 326
ECON 11

TS SHT NO. 6

MODEL: Default
FILE NAME: J:\22203.02\04_CADD\CADD_Sheets\D162T24-IN-ts-06_APS Signal Details.dgn

SINGH
SINGH + ASSOCIATES, INC.
CONSULTING ENGINEERS

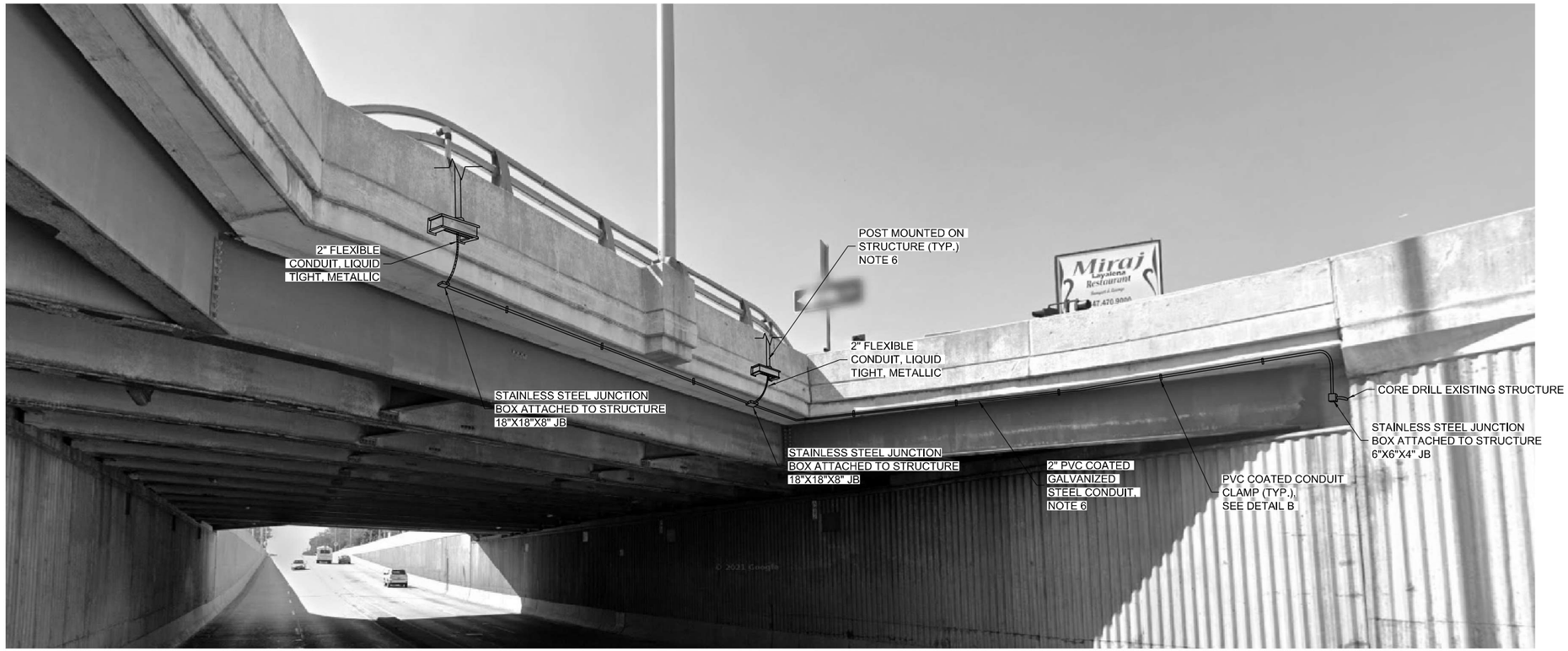
USER NAME = ggedemer	DESIGNED - GJG	REVISED -	
	DRAWN - GJG	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - MG	REVISED -	
PLOT DATE = 4/22/2024	DATE - 03/25/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 21 (MILWAUKEE AVE) OVER US 14 (DEMPSTER ST)
TRAFFIC SIGNAL SECTIONS AND DETAILS

SCALE: NTS | SHEET 01 OF 03 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	28
		CONTRACT NO. 62T24		
	ILLINOIS	FED. AID PROJECT		



DEMPSTER STREET (FACING WEST)

NOTES:

1. CONDUIT SHALL BE SUPPORTED AT A MAXIMUM INTERVAL OF 5' AND WITHIN 2'-6" OF ANY JUNCTION BOX, COUPLING/FITTING OR CHANGE IN DIRECTION.
2. ALL HARDWARE SHALL BE STAINLESS STEEL IN ACCORDANCE WITH ARTICLE 1006.31 OF THE STANDARD SPECIFICATIONS.
3. CONDUIT SHALL NOT COME INTO CONTACT WITH ANY BRACING OR OTHER STRUCTURAL MEMBERS.
4. PROVIDE 1" MINIMUM CLEARANCE TO ALL STRUCTURAL MEMBERS.
5. SECURE THE CONDUIT WITH PVC COATED CONDUIT CLAMPS AS SHOWN AT 5'-0" INTERVALS FOR LATERALS AND WITHIN 2'-0" MAXIMUM FROM ANY JUNCTION BOX, FLEXIBLE CONDUIT, OR CHANGE IN DIRECTION. ALL PVC COATED CONDUIT CLAMPS OR BEAM CLAMPS SHALL BE INCLUDED WITH THE COST OF THE "CONDUIT ATTACHED TO STRUCTURE, OF THE CORRESPONDING DIA., GALVANIZED STEEL, PVC COATED" PAY ITEM.
6. REFER TO STRUCTURAL DRAWINGS FOR DETAILS
7. IN NO INSTANCE SHALL ANY ELECTRICAL EQUIPMENT BE INSTALLED BELOW THE ELEVATION OF THE BOTTOM OF THE BRIDGE BEAM WHEN OVER ANY PAVEMENT (ROADWAY OR SHOULDER).

TS 326
ECON 11

TS SHT NO. 7

MODEL: Default
FILE NAME: I:\22203.02\04 CADD\CADD Sheets\D162T24-int-ts-07 APS Signal Details 2.dgn

SINGH
SINGH + ASSOCIATES, INC.
CONSULTING ENGINEERS

USER NAME = ggedemer	DESIGNED - GJG	REVISED -	
	DRAWN - GJG	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - MG	REVISED -	
PLOT DATE = 4/22/2024	DATE - 03/25/2024	REVISED -	

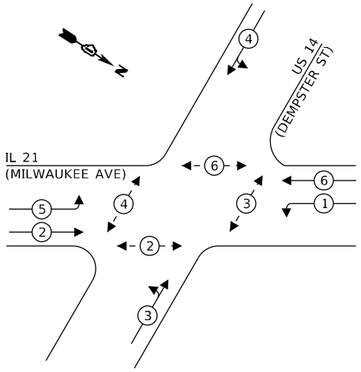
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 21 (MILWAUKEE AVE) OVER US 14 (DEMPSTER ST)
TRAFFIC SIGNAL SECTIONS AND DETAILS

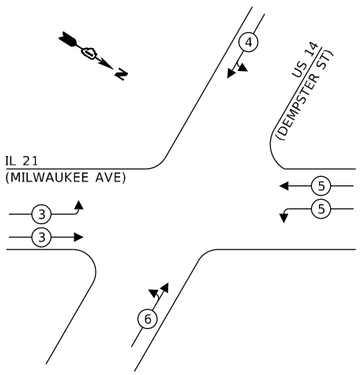
SCALE: NTS | SHEET 01 OF 03 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	29
		CONTRACT NO. 62T24		
	ILLINOIS	FED. AID PROJECT		

CONTROLLER SEQUENCE

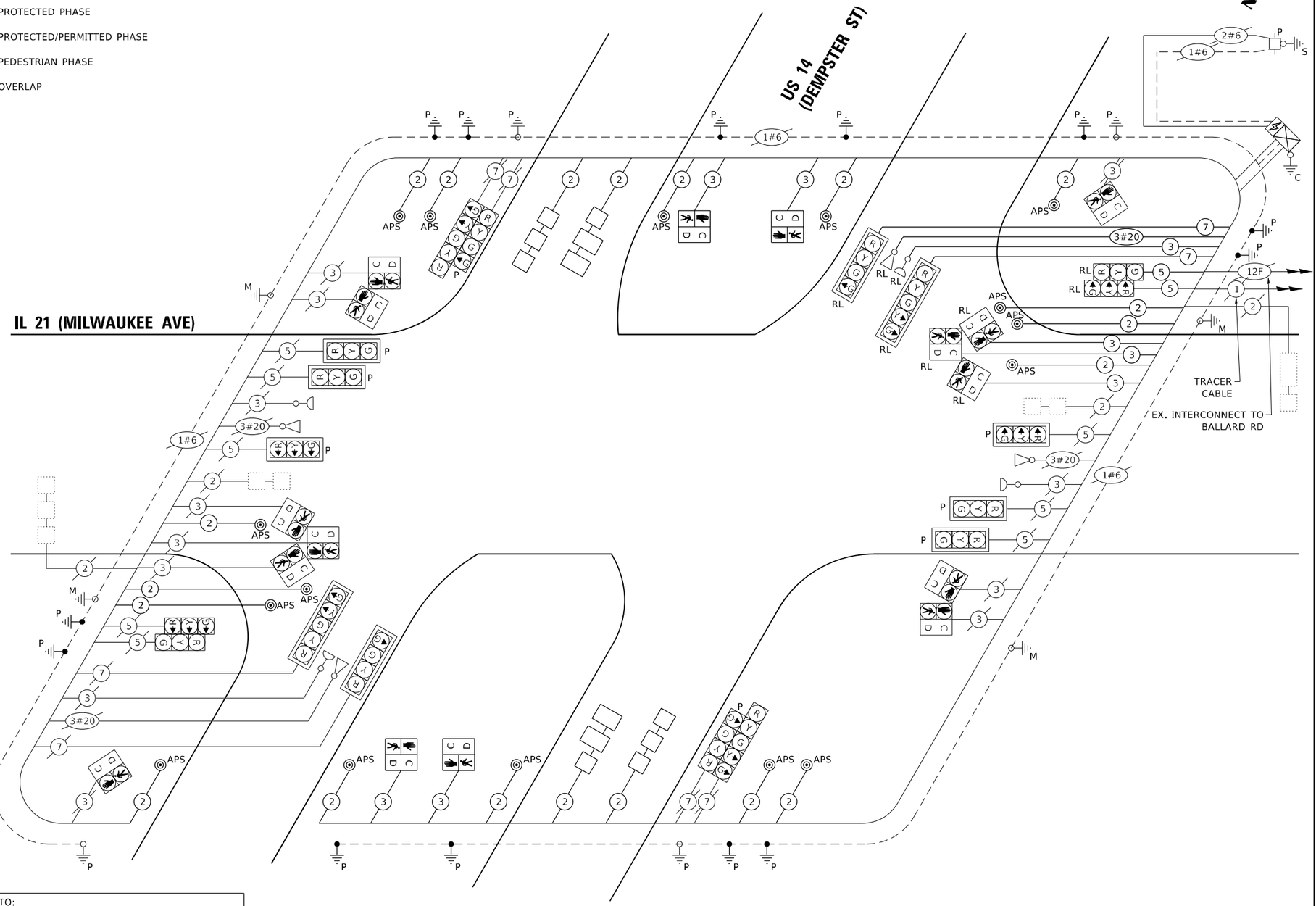


EMERGENCY VEHICLE PREEMPTION SEQUENCE



LEGEND:

- PROTECTED PHASE
- PROTECTED/PERMITTED PHASE
- PEDESTRIAN PHASE
- OL OVERLAP



CABLE PLAN
(NOT TO SCALE)

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	4	11	44
4-SECTION	2	14	28
5-SECTION	4	13	52
PROGRAMMABLE 3-SECTION	6	22	132
4-SECTION	2	32	64
5-SECTION	-	28	-
PEDESTRIAN SIGNAL	16	15	240
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR OR VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	-	35	-
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING			735
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING			1,340

ENERGY COSTS TO:
ILLINOIS DEPARTMENT OF TRANSPORTATION
202 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196-1096

ENERGY SUPPLY: CONTACT: NEW BUSINESS DEPT.
PHONE: (866) 639-3532
COMPANY: COMED
ACCOUNT NUMBER: 23020-25272
METER NUMBER: ---

TS SHT NO. 8

TS 326
ECON 11

MODEL: Default
FILE NAME: J:\22703\02\04 CADD\CADD Sheets\D16272-sht-ts-08 APS Signal Cable Plan.dgn

SINGH
SINGH + ASSOCIATES, INC.
CONSULTING ENGINEERS

USER NAME = ggedemer	DESIGNED - GJG	REVISED -	
	DRAWN - GJG	REVISED -	
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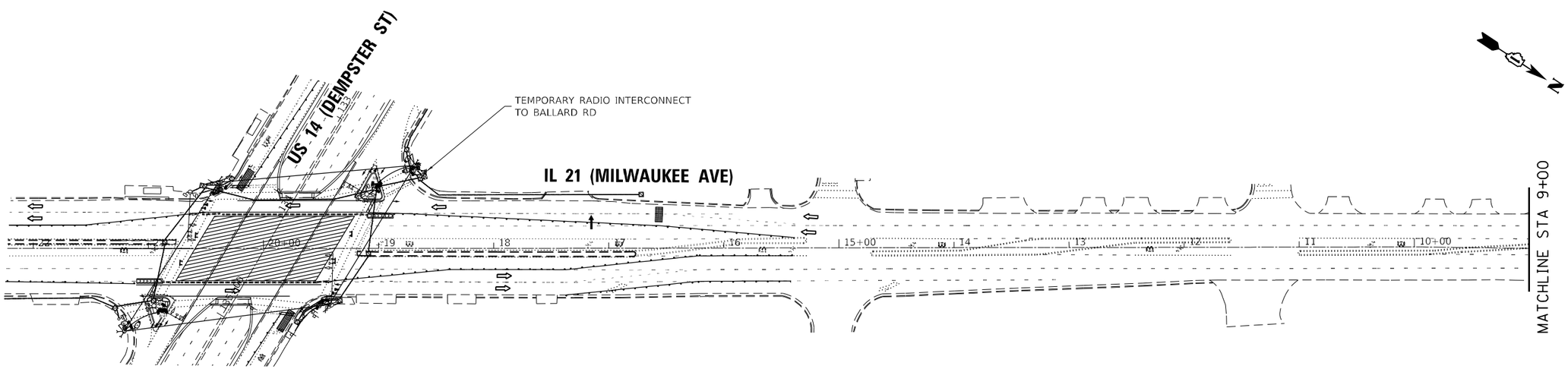
PLOT DATE = 4/22/2024	DATE - 03/25/2024	REVISED -	

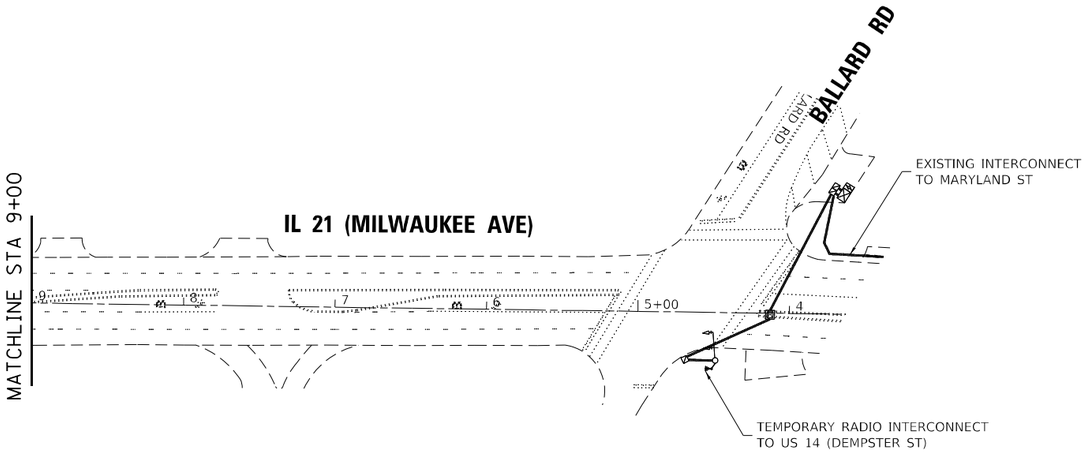
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 21 (MILWAUKEE AVE) OVER US 14 (DEMPSTER ST)
CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE

SCALE: N/A | SHEET OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	30
		CONTRACT NO. 62T24		
		ILLINOIS	FED. AID PROJECT	





TRAFFIC SIGNAL SCHEDULE OF QUANTITIES

	ITEM DESCRIPTION	UNITS	TOTAL QTY
	REMOVE AND RELOCATE SIGN PANEL - TYPE 1	SQ FT	9
	REMOVE AND RELOCATE SIGN PANEL - TYPE 2	SQ FT	13
	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	160
	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	80
	CONDUIT ATTACHED TO STRUCTURE, 2" DIA., PVC COATED GALVANIZED STEEL	FOOT	85
	CONDUIT ATTACHED TO STRUCTURE, 4" DIA., PVC COATED GALVANIZED STEEL	FOOT	70
	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 6" X 6" X 4"	EACH	2
	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 18" X 18" X 8"	EACH	4
	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	3,820
	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1,290
	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	191
	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	233
	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	940
	STEEL MAST ARM ASSEMBLY AND POLE, 22 FT.	EACH	1
	DRILL EXISTING HANDHOLE	EACH	13
	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
	RELOCATE EXISTING SIGNAL HEAD	EACH	4
	RELOCATE EXISTING PEDESTRIAN SIGNAL HEAD	EACH	3
*	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	1
*	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
	MODIFY EXISTING CONTROLLER	EACH	1
	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1,998
*	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	118
	ROD AND CLEAN EXISTING CONDUIT	FOOT	365
	CONDUIT, FLEXIBLE, LIQUID TIGHT, METALLIC, 2" DIAMETER	FOOT	40
	TRAFFIC SIGNAL POST, 10 FOOT, (SPECIAL)	EACH	4
	PEDESTRIAN SIGNAL POST, 5 FT.	EACH	9
	ACCESSIBLE PEDESTRIAN SIGNALS	EACH	16
	CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER	FOOT	64
	DETECTOR LOOP REPLACEMENT	FOOT	405
	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1

* 100% COST TO THE VILLAGE OF NILES

TS SHT NO. 9

TS 326

ECON 11

MODEL: Default
FILE NAME: J:\22203.02\04_CADD\CADD_Sheets\D16274-sht-ts-09_Temp Interconnect Plan.dgn

SINGH + ASSOCIATES, INC.
CONSULTING ENGINEERS

USER NAME = ggedemer	DESIGNED - GJG	REVISED -	
	DRAWN - GJG	REVISED -	
PLOT SCALE = 100.0000 ' / in.	CHECKED - MG	REVISED -	
PLOT DATE = 4/22/2024	DATE - 03/25/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 21 (MILWAUKEE AVE) OVER US 14 (DEMPSTER ST)
TEMPORARY TRAFFIC SIGNAL INTERCONNECT PLAN

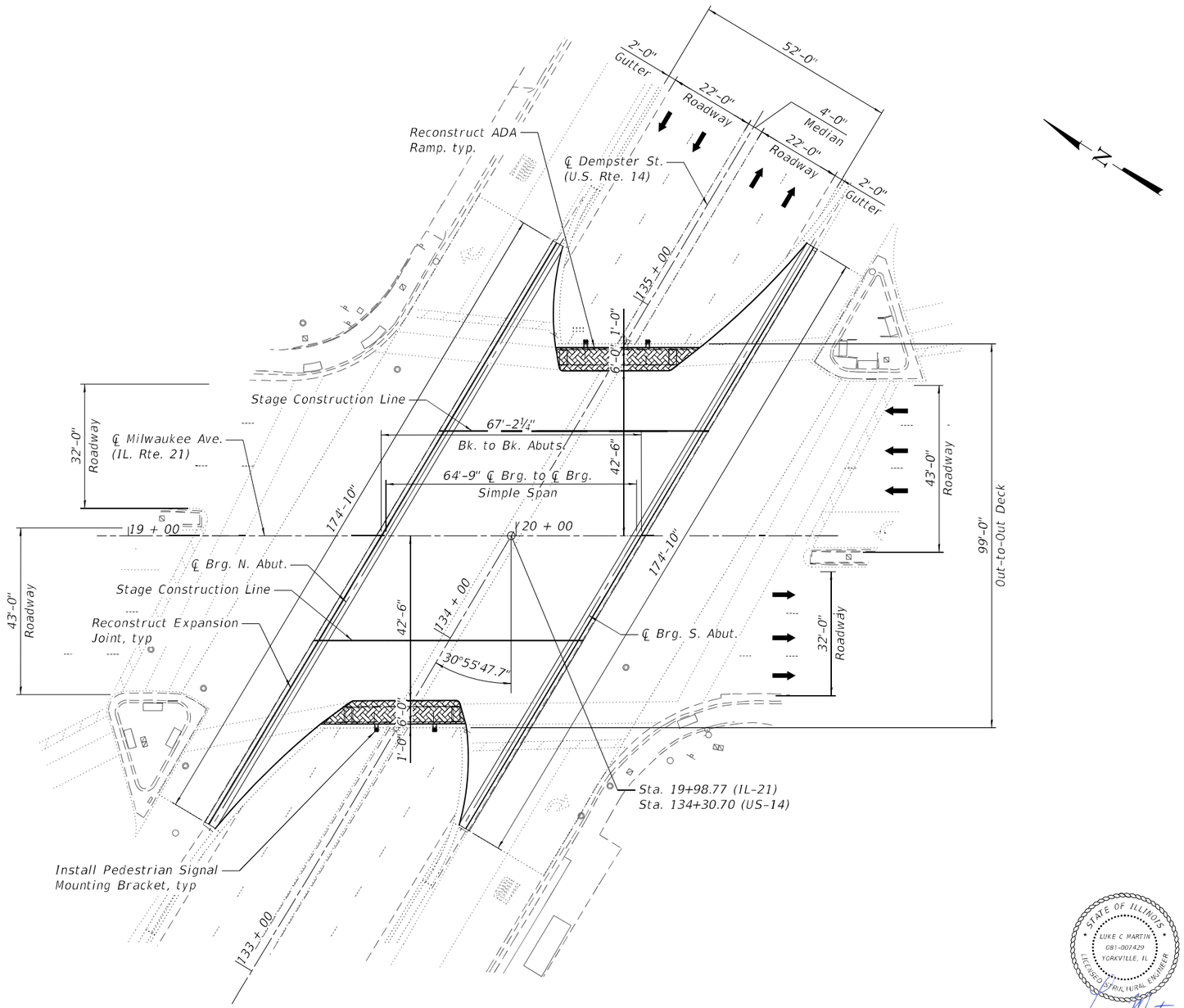
SCALE: 1"=50' | SHEET OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	31
		CONTRACT NO. 62T24		
	ILLINOIS FED. AID PROJECT			

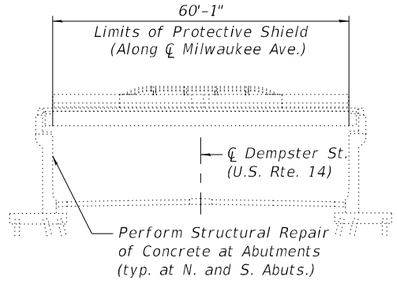
Benchmark: 1. Flagged bolt on fire hydrant at the northwesterly corner of Milwaukee Ave. and Dempster St. Elev. 663.80.
2. Flagged bolt on fire hydrant at the southwesterly corner of Milwaukee Ave. and Dempster St. Elev. 662.68.

Existing Structure: SN 016-2572 on Milwaukee Ave. (IL Rt. 21) over Depster St. (U.S. Route 14) in the village of Niles was originally built in 1990. The existing structure consists of a single span structure with reinforced concrete slab and steel beams supported on closed abutments with concrete piles. The back to back abutments is 67'-2¼" and the out-to-out width varies from 101'-0" to 174'-10". Traffic to be maintained utilizing stage construction.

Salvage: No salvage.



PLAN



ELEVATION

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications

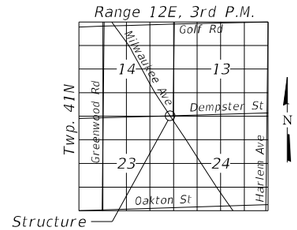
DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi (Substructure)
f'c = 4,000 psi (Superstructure)
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50)

SCOPE OF WORK

1. Install Protective Shield.
2. Repair and Overlay bridge deck.
3. Reconstruct the ADA ramps on the bridge sidewalk.
4. Reconstruct the expansion joints at each abutment.
5. Repair parapets and railings.
6. Repair Substructure elements.
7. Install Pedestrian Signal Mounting Brackets



LOCATION SKETCH

STATE OF ILLINOIS
LUKE C MARTIN
081-007429
YORKVILLE, IL
ILLINOIS STRUCTURAL ENGINEER

Signed: 4/22/2024
Expires: 11/30/2024

GENERAL PLAN & ELEVATION
F.A.P. ROUTE 374
MILWAUKEE AVE (IL. RTE. 21) OVER
DEMPSTER ST (U.S. RTE. 14)
SECTION 0374 22 BJ
STA. 19 + 98.77 (IL. RTE. 21)
STRUCTURE NO. 016-2572

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GARZA KARHOFF ENGINEERING, LLC

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	DRAWN - EG	REVISED -
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PLOT DATE = 4/22/2024	DATE - 03/25/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
STRUCTURE NO. 016-2572
SHEET S-01 OF S-15 SHEETS

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	32
		CONTRACT NO. 62T24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

GENERAL NOTES

1. Reinforcement bars designated (E) shall be epoxy coated.

2. Plan dimensions and details relative to existing structure have been taken from 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. Concrete Sealer shall be applied to each abutment backwall. All surfaces to be sealed shall be cleaned thoroughly prior to sealer application.

4. Stage construction shall be utilized to maintain traffic during construction.

5. The Contractor shall exercise care during removal of existing joints to ensure that the slab, beams and diaphragms' integrity will not be detrimentally impacted. The Contractor shall repair any damage(s) to the slab, beams and diaphragms caused by his operation as directed by the Engineer at no additional cost to the Department.

6. Prior to pouring the new concrete deck for expansion joint replacement and deck slab repairs, all heavy or loose rust, loose mill scale, and other loose detrimental foreign meterial shall be removed from the surfaces in contact with concrete (SSPC – SP3 standards). Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be paid for according to Article 109.04 of the Standard Specifications.

7. Protective Coat shall be applied to the top surface of the deck repairs, sidewalks, reconstructed joint area, and new concrete overlay areas, per Section 503.19 of the Standard Specifications.

8. Joint openings shall be adjusted according to Article 520.04 of the Std. Specs. when the deck is poured at an ambient temperature other than 50°F.

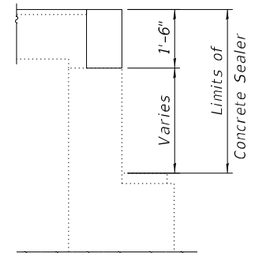
9. Bars indicated thus, 3x2-#5, indicates 3 lines of #5 bars with 2 lengths of bar per line.

10. Structural Repair of concrete on the abutment faces shall use the same architectural finish as shown on the existing plans. See sheet S-14.

INDEX OF SHEETS

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	Cu Yd	58.5		58.5
Protective Shield	Sq Yd	762		762
Concrete Superstructure	Cu Yd	62.4		62.4
Protective Coat	Sq Yd	816		816
Reinforcement Bars, Epoxy Coated	Pound	7,590		7,590
Bar Splicers	Each	52		52
Preformed Joint Strip Seal	Foot	350		350
Concrete Sealer	Sq Ft	1,224		1,224
Bridge Deck Latex Concrete Overlay, 2 1/2 Inches	Sq Yd	688		688
Bridge Deck Scarification 3/4"	Sq Yd	688		688
Structural Repair Of Concrete (Depth Equal To Or Less Than 5 Inches)	Sq Ft	55	170	225
Structural Repair Of Concrete (Depth Greater Than 5 Inches)	Sq Ft		24	24
Deck Slab Repair (Full Depth, Type 1)	Sq Yd	2		2
Furnishing and Erecting Structural Steel, Special	L Sum	1		1



LIMITS OF CONCRETE SEALER

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GARZA KARHOFF ENGINEERING, LLC

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PLOT DATE = 4/22/2024	DATE - 03/25/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL DATA
STRUCTURE NO. 016-2572
SHEET S-02 OF S-15 SHEETS

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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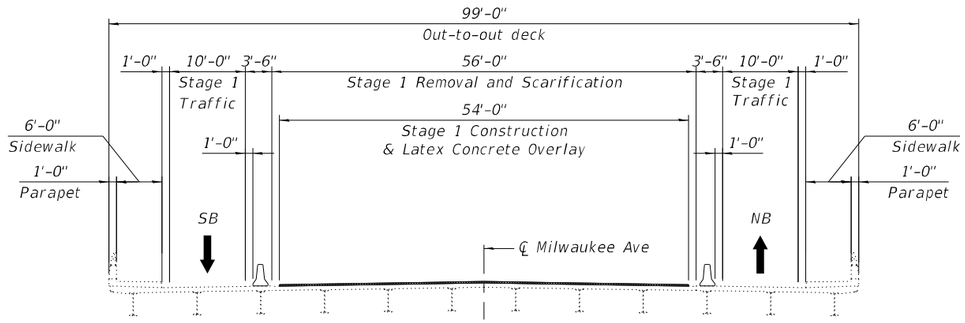
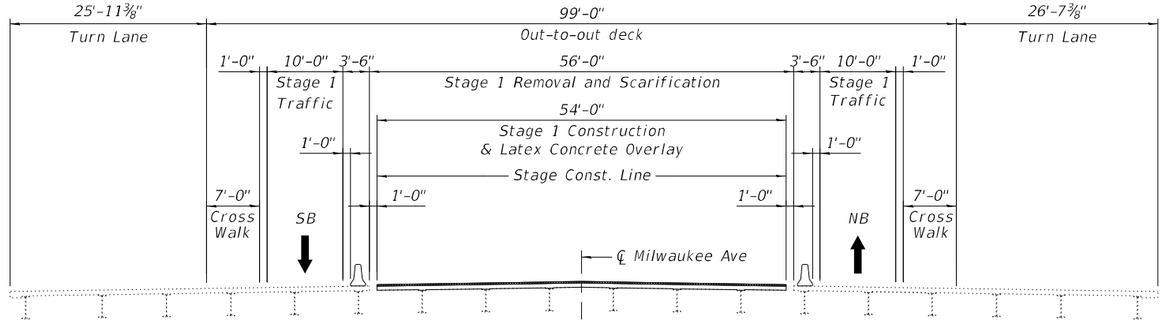
		CONTRACT NO. 62T24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



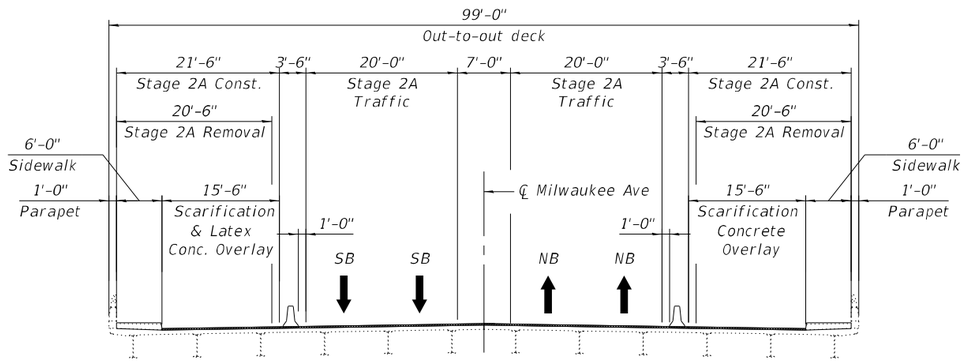
STAGE 1 AT MIDSPAN

(Looking Northeast)



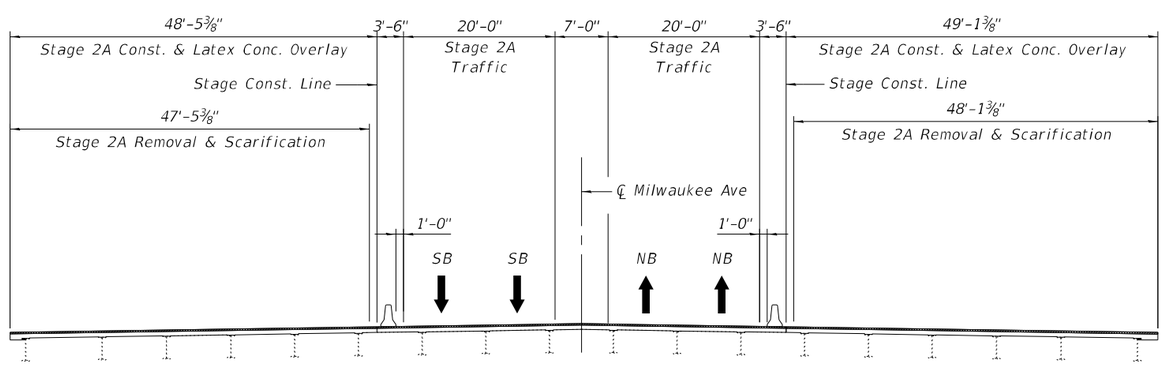
STAGE 1 AT EXP. JOINT

(Looking Northeast)



STAGE 2A AT MIDSPAN

(Looking Northeast)



STAGE 2A AT EXP. JOINT

(Looking Northeast)

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GARZA KARHOFF ENGINEERING, LLC

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PLOT DATE = 3/22/2024	DATE - 03/25/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION STAGING
STRUCTURE NO. 016-2572
SHEET S-03 OF S-15 SHEETS

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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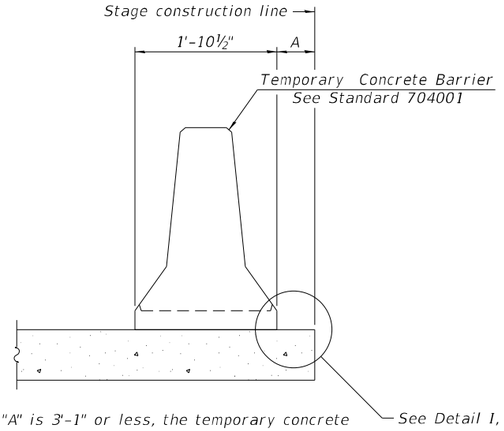
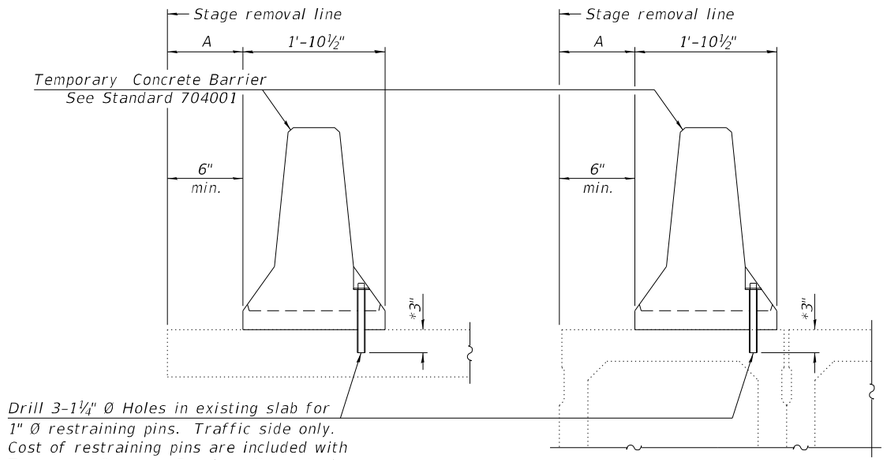
		CONTRACT NO. 62T24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



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

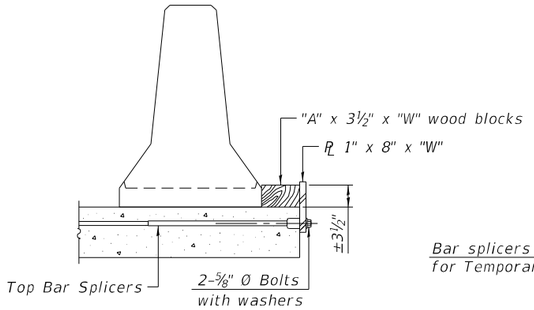


EXISTING SLAB

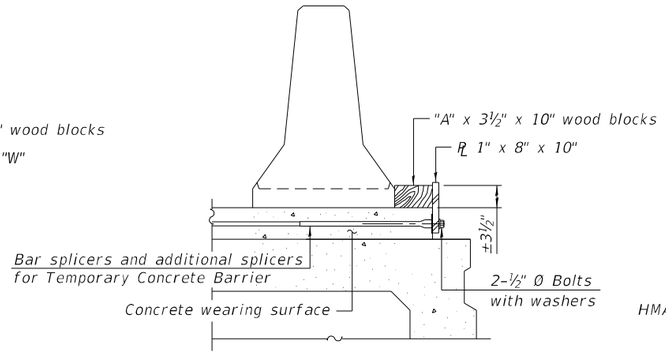
* When hot-mix asphalt wearing surface is present, embedment shall be 3" plus the wearing surface depth.

EXISTING DECK BEAM

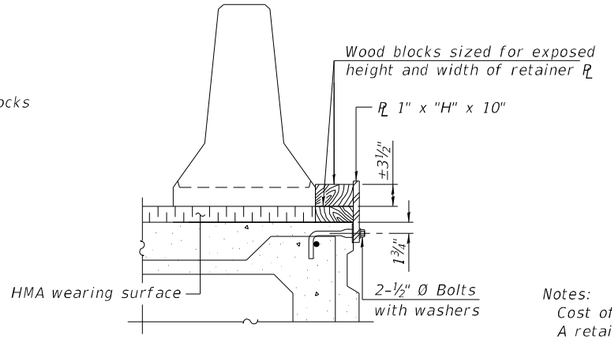
SECTIONS THRU SLAB OR DECK BEAM



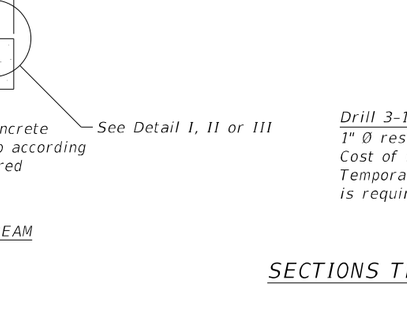
DETAIL I



DETAIL II



DETAIL III

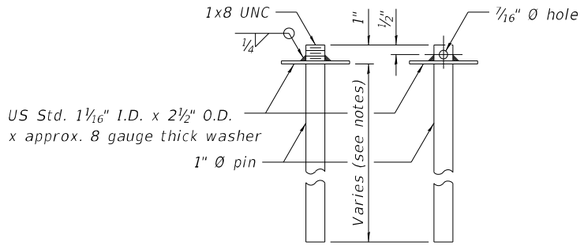


STEEL RETAINER PL 1" x 8" x "W"

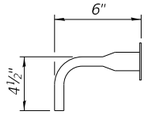
(Detail I and II)

STEEL RETAINER PL 1" x "H" x 10"

(Detail III)



RESTRAINING PIN



BAR SPLICER FOR #4 BAR - DETAIL III

Notes:

Cost of retainer assembly is included with Temporary Concrete Barrier.

A retainer assembly shall be located at the approximate ℄ 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 1½", 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.

RAILING CRITERIA

NCHRP 350 Test Level	3
Railing Weight (plf)	440

R-27

5-15-2023

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USER NAME = Elisa.Godinez

GARZA KARHOFF ENGINEERING, LLC

USER NAME = Elisa.Godinez	DESIGNED - EG	REVISED -
	DRAWN - EG	REVISED -
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PLOT DATE = 3/22/2024	DATE - 03/25/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CONCRETE BARRIER
STRUCTURE NO. 016-2572
SHEET S-04 OF S-15 SHEETS

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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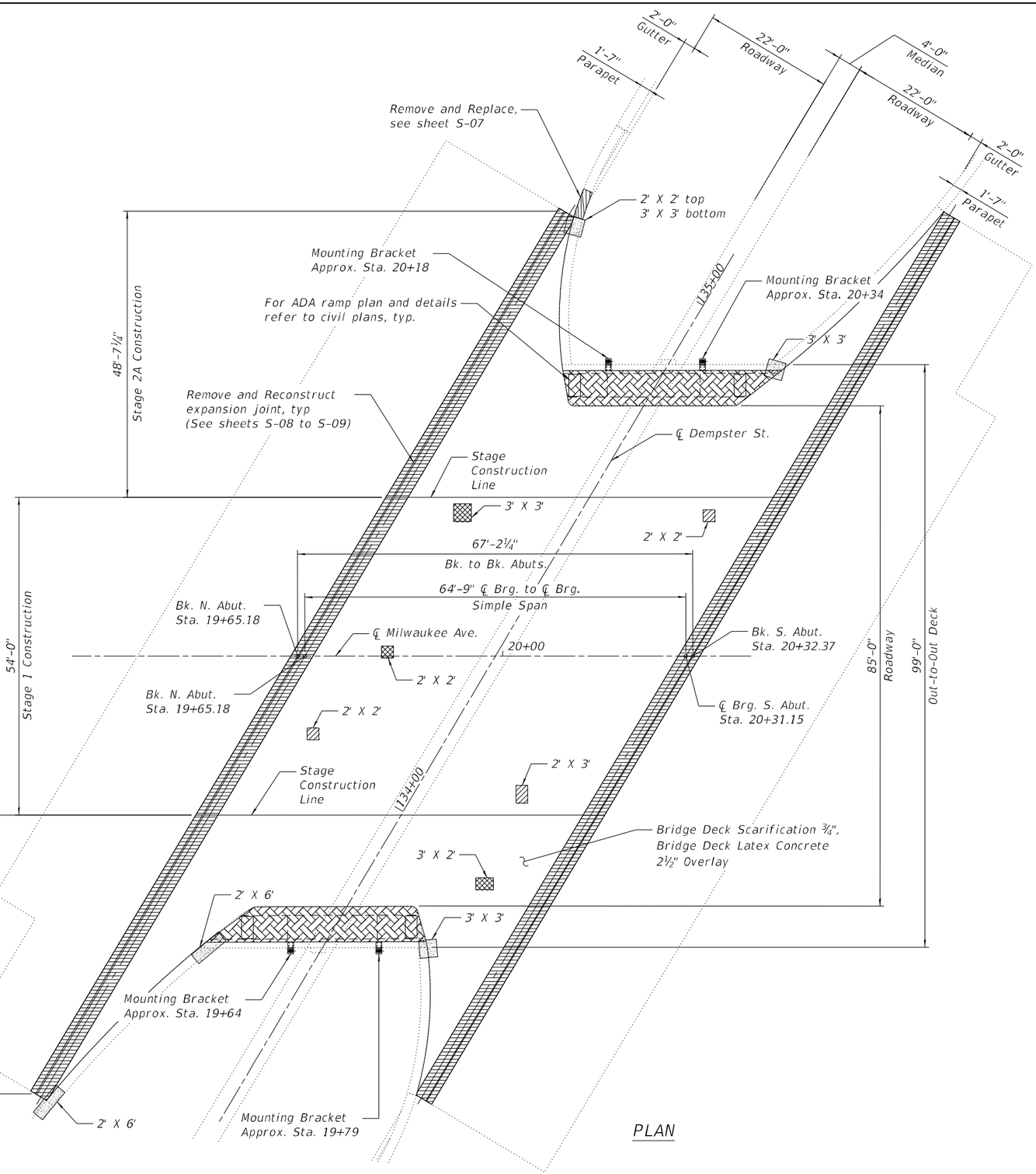
		CONTRACT NO. 62T24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



PLAN

LEGEND

- Deck Slab Repair (Full Depth)
- Deck Slab Repair (Partial Depth)
- Expansion Joint Reconstruction
- Structural Repair of Concrete <5" (at IF of parapet)
- Parapet Removal and Replacement
- Sidewalk Reconstruction

NOTES

1. Deck slab repair areas are estimated. Actual repair areas and locations shall be determined in the field by the Engineer and noted in the As-Built Plans.
2. Areas of Partial Depth Deck Repair will not be measured for payment and shall be included with the cost of Bridge Deck Scarification ¾".
3. For Details on Expansion Joint Removal and Replacement, see sheet S-08 and S-09.
4. For Details on Sidewalk Reconstruction, see sheet S-06.
5. For Details on Parapet Removal and Replacement see sheet S-07.

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Bridge Deck Latex Concrete Overlay, 2½"	Sq Yd	688
Bridge Deck Scarification ¾"	Sq Yd	688
Structural Repair of Concrete (Depth < 5 in)	Sq Ft	55
Deck Slab Repair (Full Depth, Type 1)	Sq Yd	2

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GARZA KARHOFF ENGINEERING, LLC

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PLOT DATE = 3/22/2024	DATE - 03/25/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DECK REPAIR AND OVERLAY PLAN
STRUCTURE NO. 016-2572
SHEET S-05 OF S-15 SHEETS

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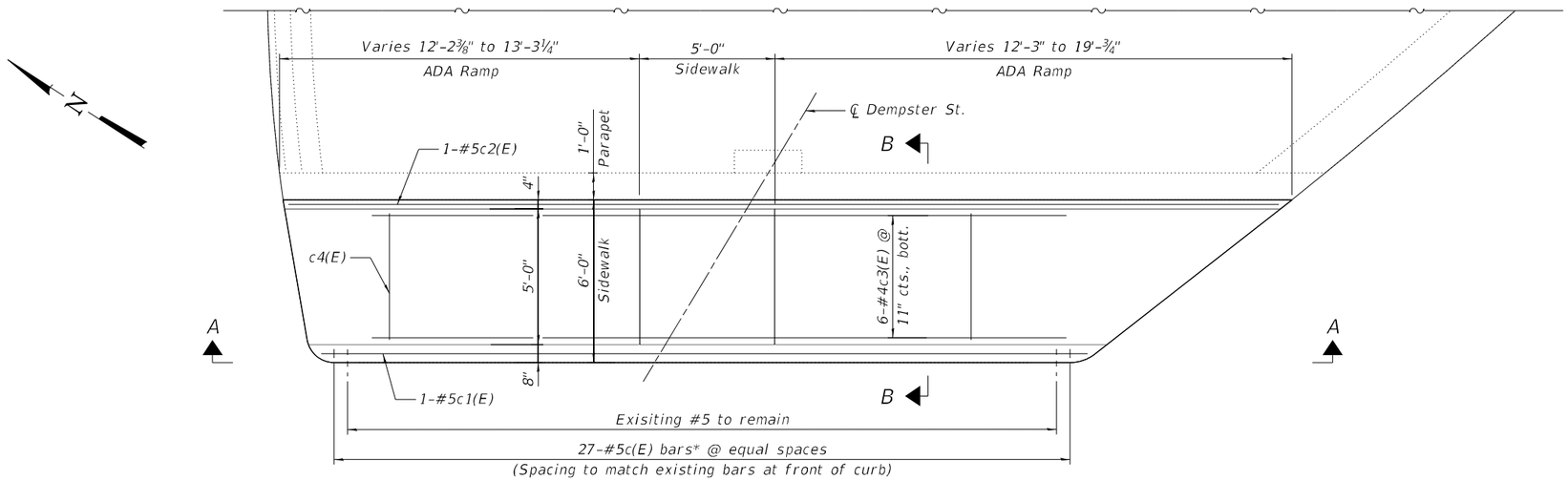
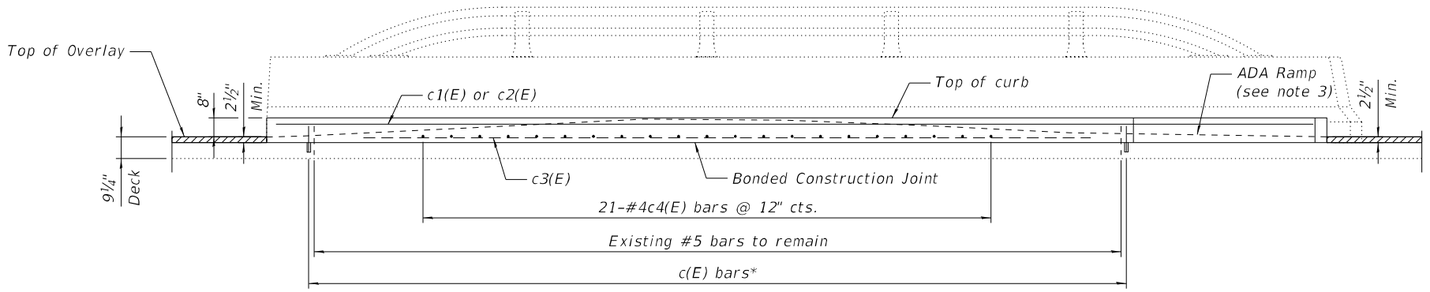


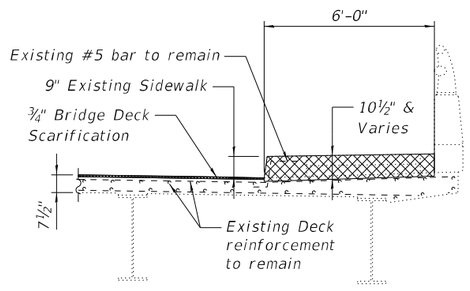
SIDEWALK RECONSTRUCTION PLAN

(NB shown, SB similar)



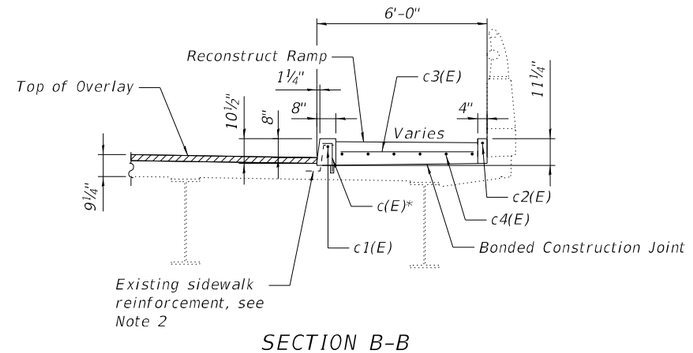
SECTION A-A

(NB shown, SB similar)



SECTION B-B

(Showing Removal)



SECTION B-B

(Showing Reconstruction)

BILL OF MATERIAL

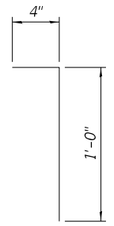
Bar	No.	Size	Length	Shape
c(E)	54	#5	1'-4"	⌐
c1(E)	2	#5	28'-3"	———
c2(E)	2	#5	36'-6"	———
c3(E)	12	#4	25'-6"	———
c4(E)	42	#4	4'-8"	———

Item	Unit	Total
Concrete Removal	Cu. Yd.	8.5
Reinforcement Bars, Epoxy Coated	Pound	550
Concrete Superstructure	Cu. Yd.	8

LEGEND

Concrete Removal

Bridge Deck Latex Concrete Overlay, 2½"



BAR c(E)

* Drill and set #5 c(E) bar according to Article 509.06 of the Standard Specifications. Drilled holes shall be roughened or scored per manufacturer's recommendations. Maximum depth of hole shall not exceed 4". Contractor shall take all necessary precautions to prevent drilled hole interference with deck reinforcement bars. Locate longitudinal bars to miss drilled locations. Located drilled holes to miss transverse bars in deck.

NOTES

1. For sidewalk stations, offsets, elevations and slopes, see roadway plans.
2. Existing reinforcement extending into the removal area shall be cleaned, straightened, and incorporated into the new construction. Any existing reinforcement bars intended for reuse and damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system to the satisfaction of the Engineer. Cost included with Concrete Removal.
3. ADA Ramp shall be paid as Concrete Superstructure. The concrete shall be Class BS with a Coarse Aggregate Gradation of CA 13, CA 14, or CA 16. See ADA Plans in Roadway plans for additional details.

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GARZA KARHOFF ENGINEERING, LLC

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	DRAWN - EG	REVISED -	
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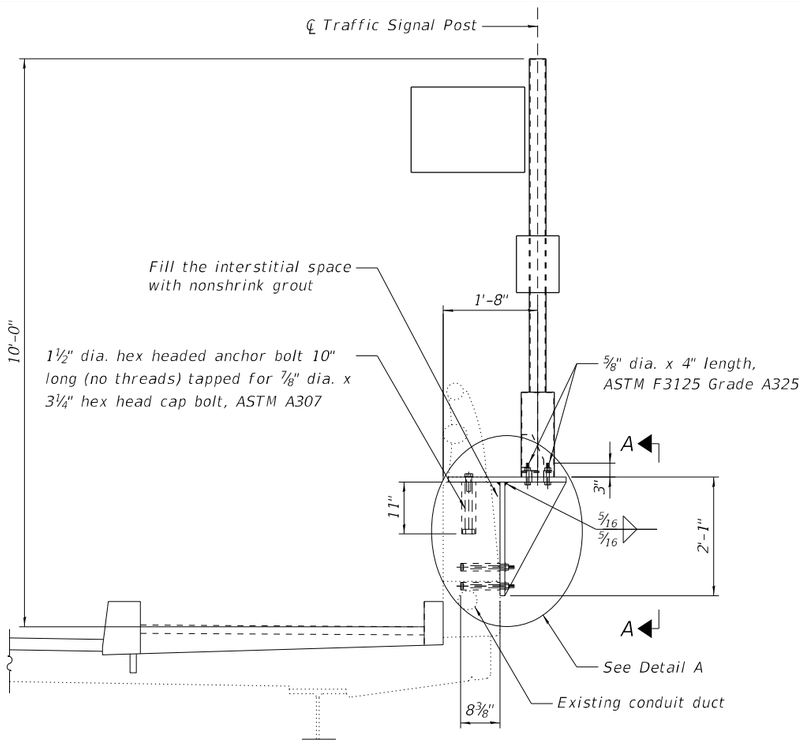
PLOT DATE = 4/22/2024	DATE - 03/25/2024	REVISED -	

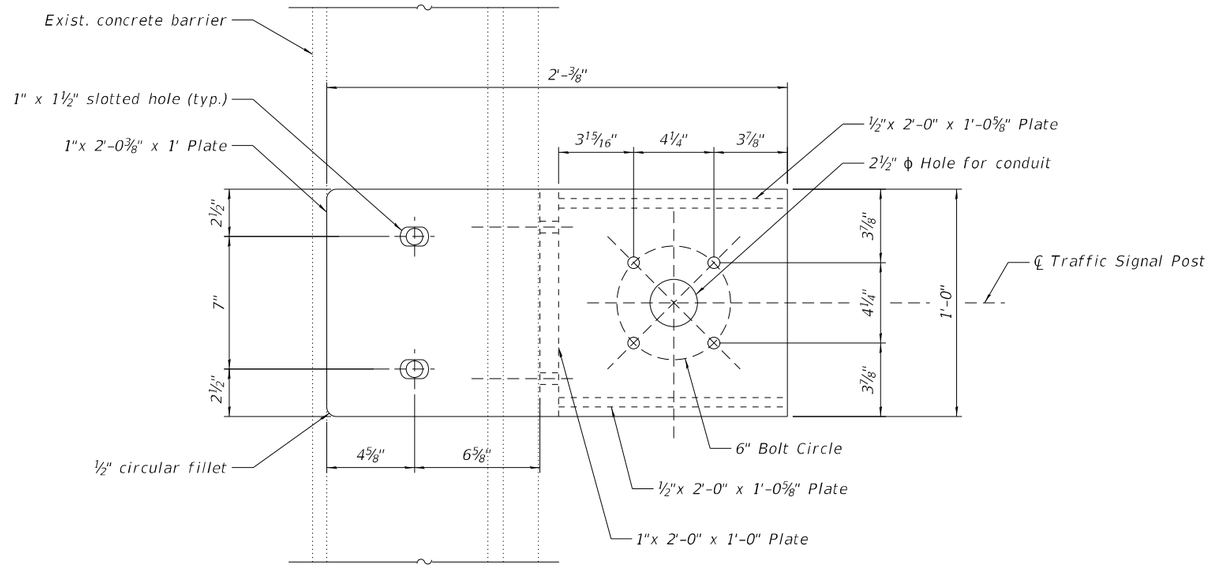
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIDEWALK RECONSTRUCTION DETAILS
STRUCTURE NO. 016-2572
SHEET S-06 OF S-15 SHEETS

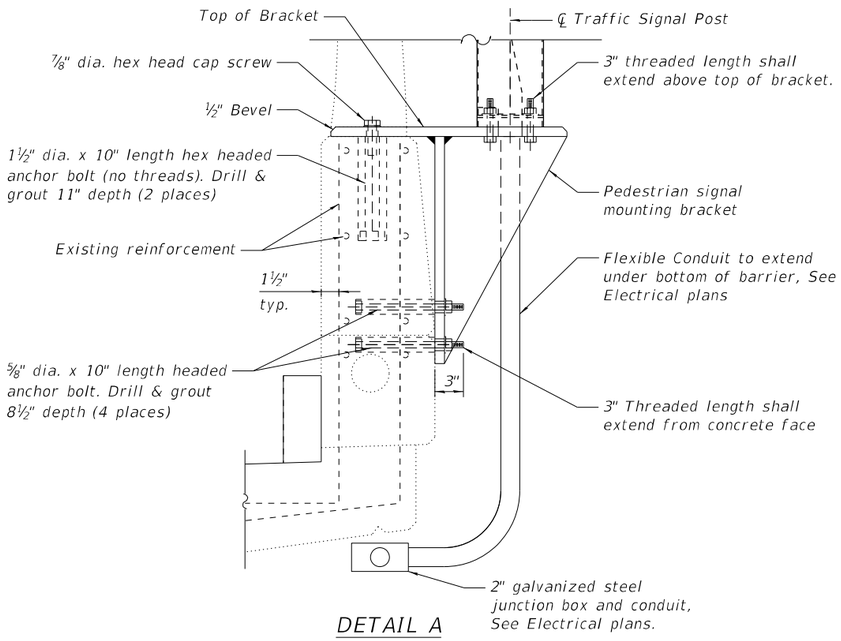
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	37
		CONTRACT NO. 62T24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



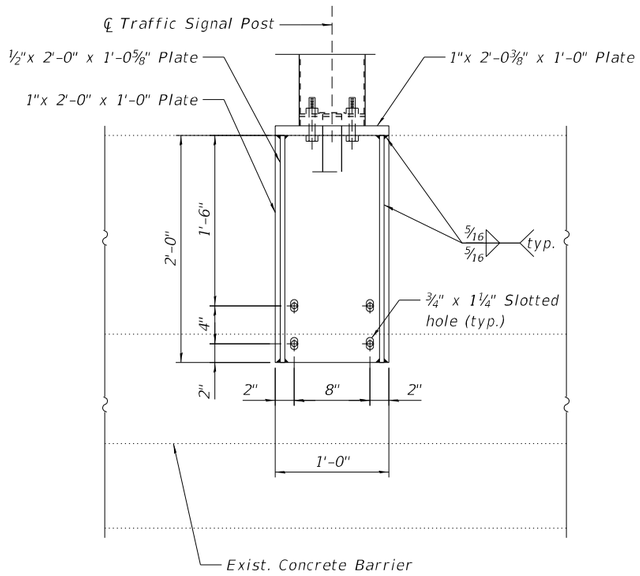
SECTION THRU PEDESTRIAN SIGNAL MOUNTING BRACKET



PLAN



DETAIL A



SECTION A-A

NOTES:

1. See Std. TS05 District 1 Standard Traffic Signal Details for Sign Details and Post Details.
2. See Electrical Plans for installation of conduit and junction boxes.
3. Signal post bracket installation notes:
   a) Drill holes for the 1½" dia. vertical and ⅝" dia. horizontal headed anchor bolts and grout per Section 584 of the Standard Specifications.
   b) Tap the 1½" dia. vertical anchor bolts for the ⅞" dia. x 3¼" hex head bolts.
   c) Locate bracket over the anchor bolts and hand tighten all of the washers, nuts, and bolts.
   d) Fill the interstitial space between the bracket and the existing parapet with nonshrink grout.
   e) While the nonshrink grout is still workable, level the bracket and snug tighten the nuts and bolts.
4. All steel plates are AASHTO M270, Grade 50.
5. Fasteners shall be ASTM F 3125 Grade A325 Type 1. Fasteners shall be hot dip galvanized. See Special Provision for "Hot Dip Galvanizing for Structural Steel." Anchor bolts, nuts, and washers shall be according to Section 1006.09 of the Standard Specifications and shall be Hot-Dipped Galvanized.
6. All structural steel shall be AASHTO M270 Grade 50 and shall be galvanized. See Special Provision for "Hot Dip Galvanizing for Structural Steel."
7. The furnishing and installation of all Structural Steel, Anchor Bolts, bolts, nuts, washers, and nonshrink grout for the Pedestrian Signal Mounting Brackets shall be included in the Lump Sum cost of Furnishing and Erecting Structural Steel, Special.

BILL OF MATERIAL

Item	Unit	Quantity
Furnishing and Erecting Structural Steel, Special	L Sum	1

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	DRAWN - EG	REVISED -
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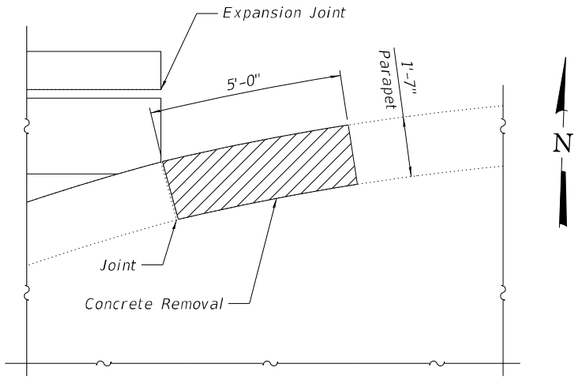
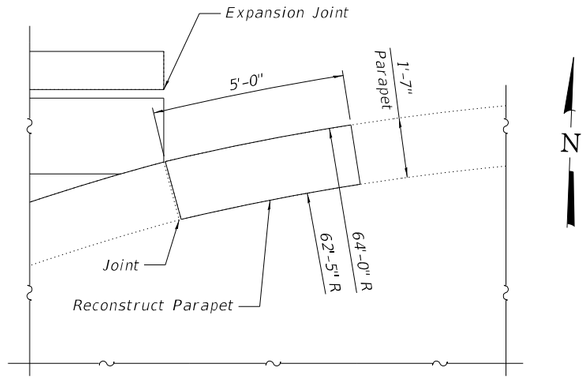
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PEDESTRIAN SIGNAL MOUNTING BRACKET DETAILS
STRUCTURE NO. 016-2572
SHEET S-OT OF S-15 SHEETS

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	38
		CONTRACT NO. 62T24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



REMOVAL PLAN
(NE quadrant)

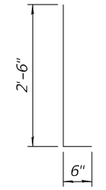


RECONSTRUCTION PLAN
(NE quadrant)

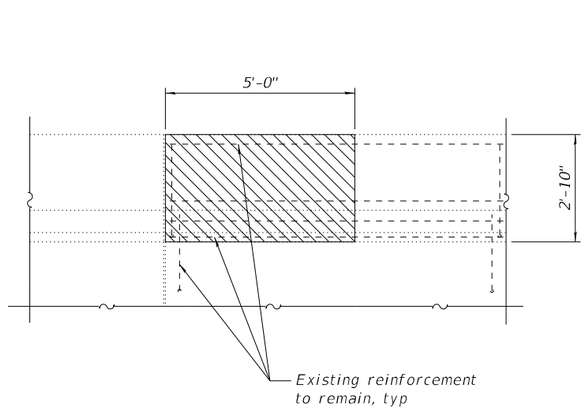
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d(E)	5	#4	3'-0"	
d1(E)	5	#5	3'-0"	

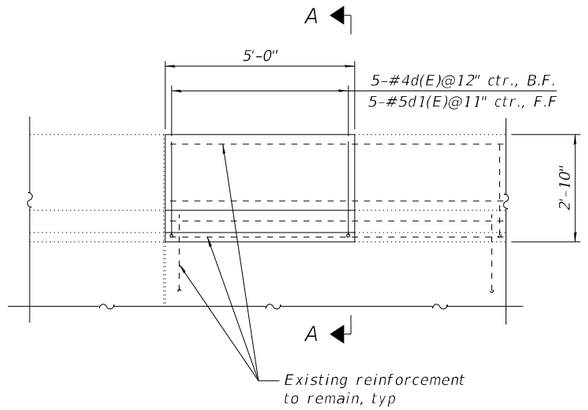
Item	Unit	Total
Concrete Removal	Cu. Yd.	0.5
Concrete Superstructure	Cu. Yd.	0.5
Reinforcement Bars, Epoxy Coated	Pound	30



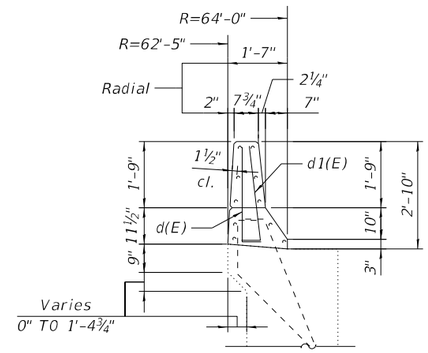
d(E) or d1(E)



REMOVAL ELEVATION
(Looking South)



RECONSTRUCTION ELEVATION
(Looking South)



SECTION A-A

NOTES

1. Existing reinforcement extending into the removal area shall be cleaned, straightened, and incorporated into the new construction. Any existing reinforcement bars intended for reuse and damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system to the satisfaction of the Engineer. Cost included with Concrete Removal.

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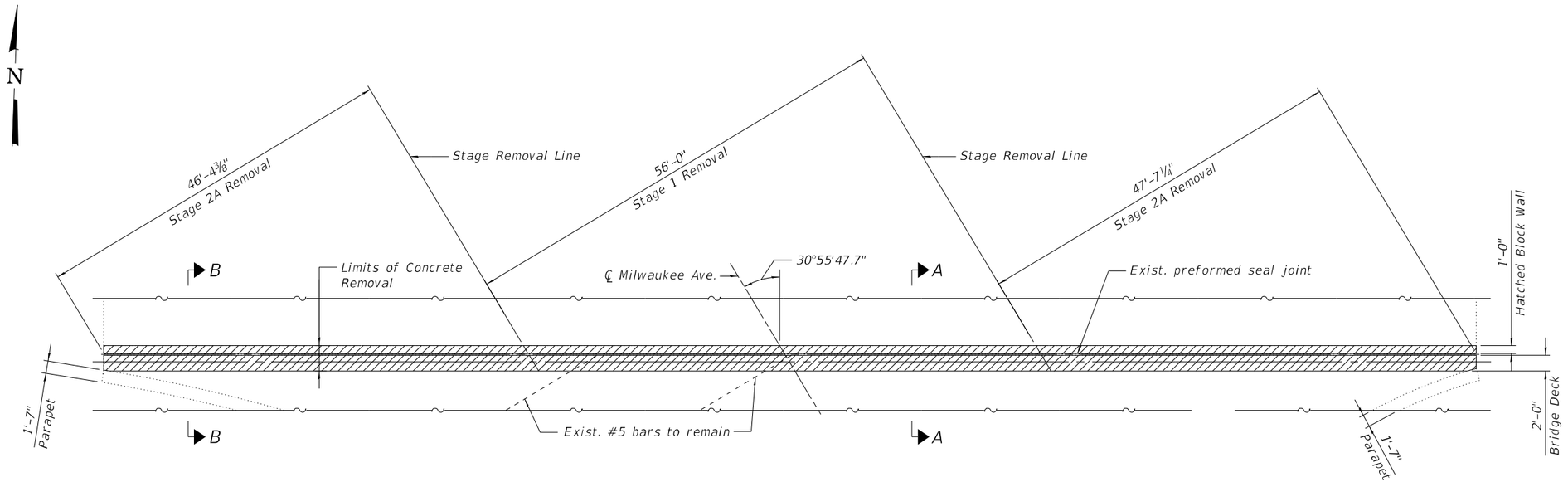
PLOT DATE = 3/22/2024	DATE - 03/25/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PARAPET REMOVAL AND REPLACEMENT
STRUCTURE NO. 016-2572
SHEET S-08 OF S-15 SHEETS

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	39
		CONTRACT NO. 62T24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



JOINT REMOVAL PLAN

(North Abutment shown, South Abutment similar)

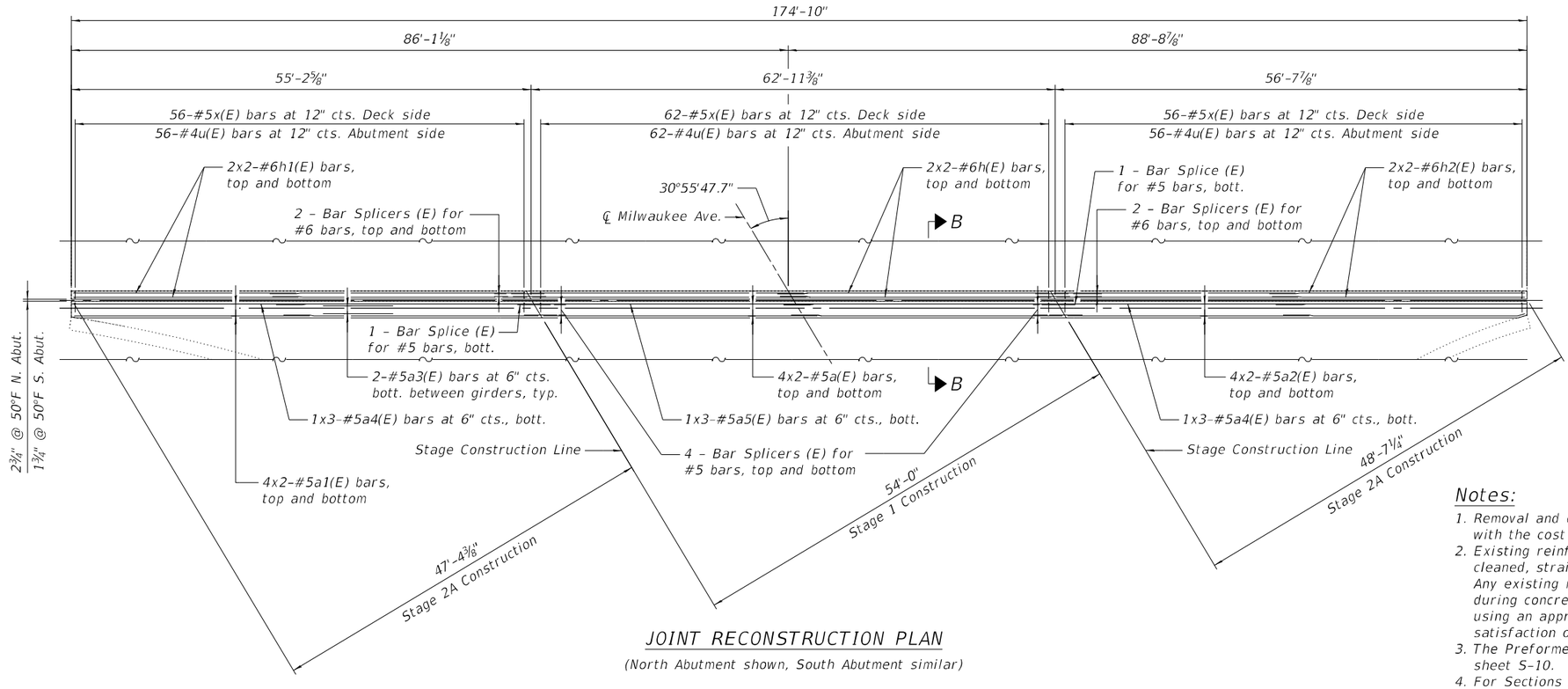
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	32	#5	32'-11"	———
a1(E)	32	#5	29'-8"	———
a2(E)	32	#5	30'-1"	———
a3(E)	68	#5	8'-5"	———
a4(E)	12	#5	20'-9"	———
a5(E)	6	#5	22'-11"	———
h(E)	16	#6	33'-7"	———
h1(E)	16	#6	30'-4"	———
h2(E)	16	#6	30'-9"	———
u(E)	174	#4	2'-2"	⊓
x(E)	174	#5	2'-2"	∟

Item	Unit	Total
Concrete Removal	Cu. Yd.	49.5
Reinforcement Bars, Epoxy Coated	Pound	7,010
Concrete Superstructure	Cu. Yd.	53.9

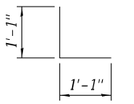
MINIMUM BAR LAP

#5 bar = 3'-1"
#6 bar = 4'-5"

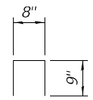


JOINT RECONSTRUCTION PLAN

(North Abutment shown, South Abutment similar)



Bar x(E)



Bar u(E)

Notes:

1. Removal and disposal of existing expansion joint shall be included with the cost of Concrete Removal.
2. Existing reinforcement extending into the removal area shall be cleaned, straightened, and incorporated into the new construction. Any existing reinforcement bars intended for reuse and damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system to the satisfaction of the Engineer. Cost included with Concrete Removal.
3. The Preformed Joint Strip Seal shall be per the details labeled on sheet S-10.
4. For Sections A-A and B-B see sheet S-09.

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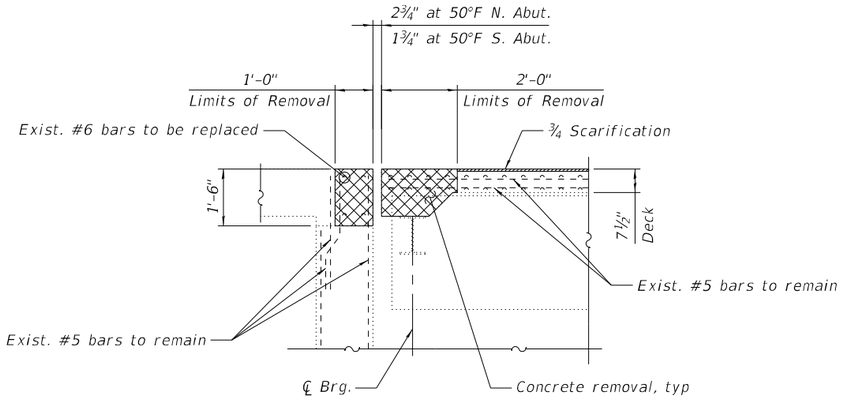
PLOT DATE = 4/22/2024	DATE - 03/25/2024	REVISED -

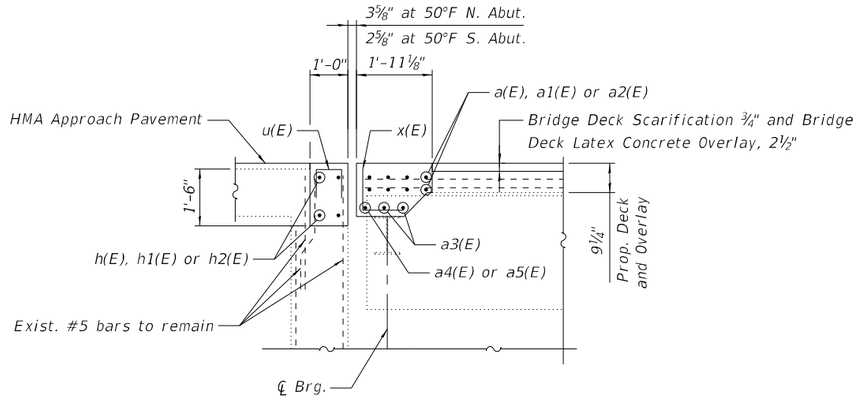
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXPANSION JOINT REMOVAL & REPLACEMENT PLAN
STRUCTURE NO. 016-2572
SHEET S-09 OF S-15 SHEETS

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	40
		CONTRACT NO. 62T24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



SECTION A-A



SECTION B-B

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GARZA KARHOFF ENGINEERING, LLC

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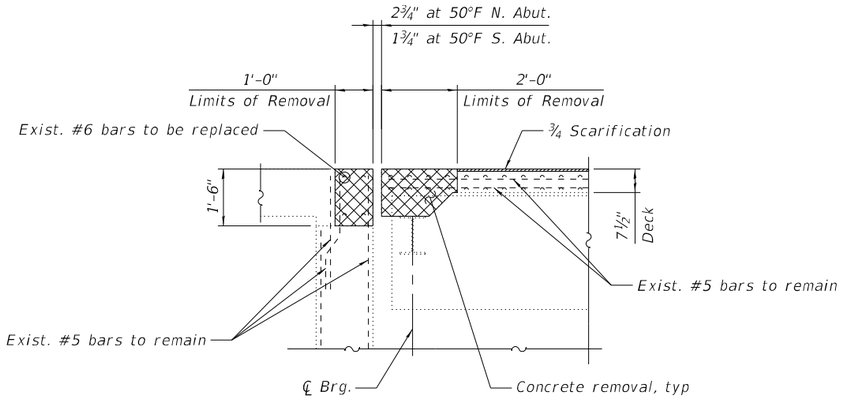
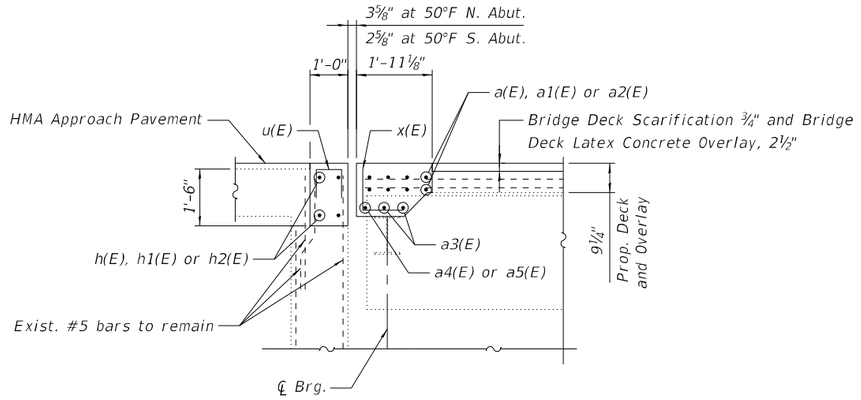
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXPANSION JOINT DETAILS
STRUCTURE NO. 016-2572
SHEET S-10 OF S-15 SHEETS

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	41
		CONTRACT NO. 62T24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



SECTION A-A



SECTION B-B

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXPANSION JOINT DETAILS
STRUCTURE NO. 016-2572
SHEET S-10 OF S-15 SHEETS

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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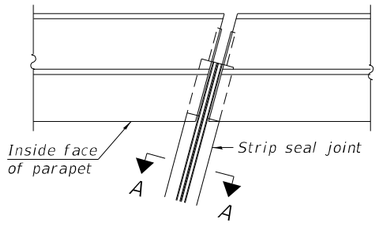
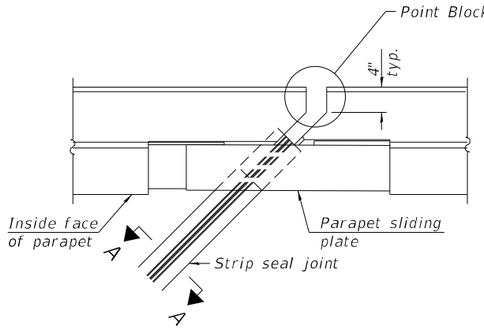
		CONTRACT NO. 62T24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

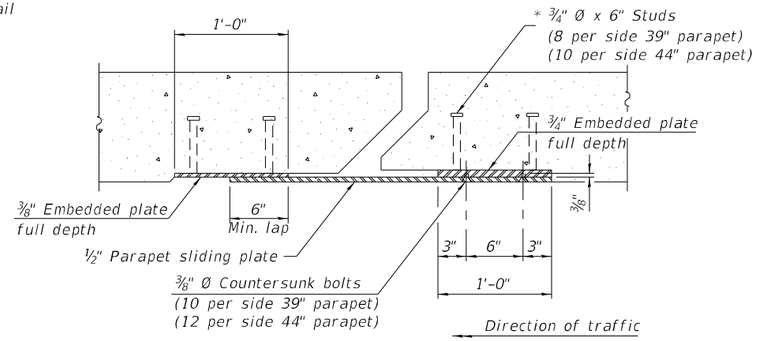


FOR SKEWS ≤ 30°



FOR SKEWS > 30°

PLAN AT PARAPET



SECTION B-B

Notes:

The strip seal shall be made continuous and shall have a minimum thickness of ¼". 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 4½" maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.

The manufacturer's recommended installation methods shall be followed.

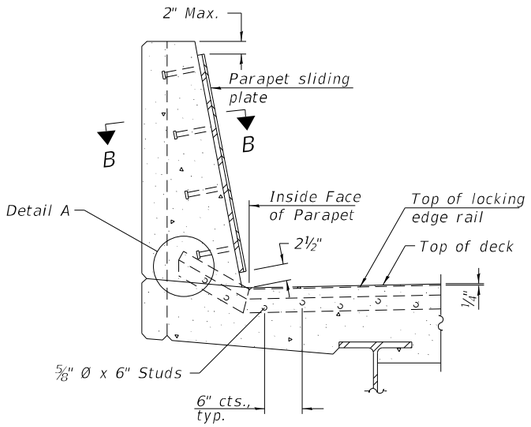
All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

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.

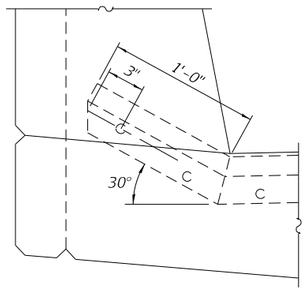
39" constant slope barrier shown, 44" constant slope barrier similar as noted.

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.

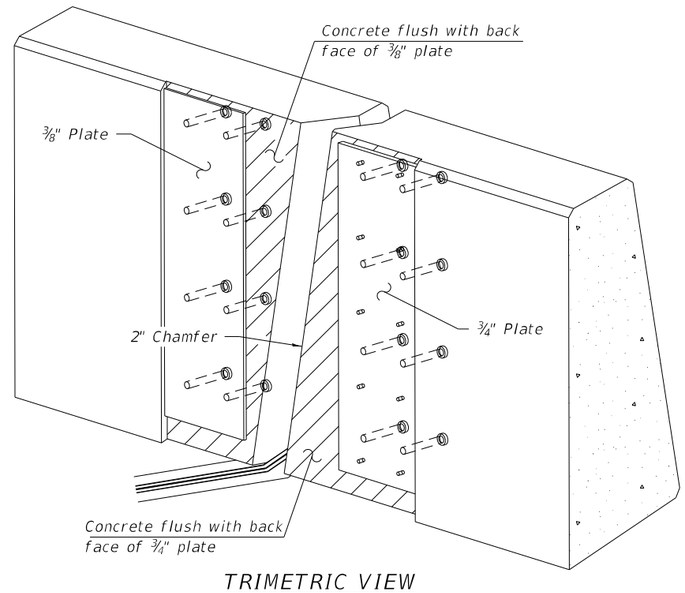


SECTION AT PARAPET

(Skews > 30° shown. Skews ≤ 30° similar except as shown in plan view.)

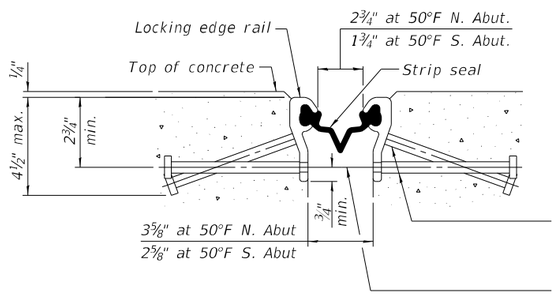


DETAIL A

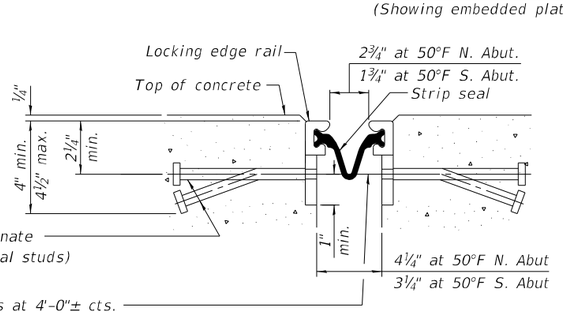


TRIMETRIC VIEW

(Showing embedded plates only)



SHOWING ROLLED RAIL JOINT



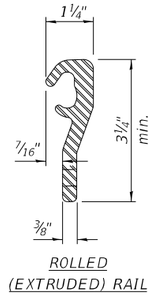
SHOWING WELDED RAIL JOINT

* ⅝" Ø x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)

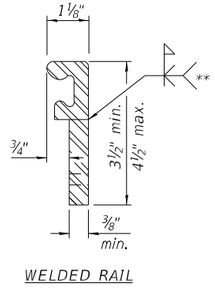
⅜" Ø threaded rods in 7/16" Ø holes at 4'-0"± cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

SECTION A-A

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



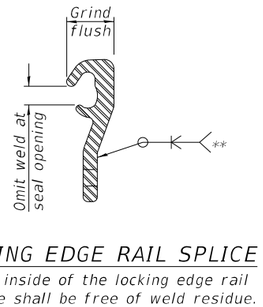
ROLLED
(EXTRUDED) RAIL



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	350

EJ-SS

5-15-2023

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PLOT SCALE = 2.0000 ' / in.
USER NAME = Elisa.Godinez

GARZA KARHOFF ENGINEERING, LLC

USER NAME = Elisa.Godinez	DESIGNED - EG	REVISED -
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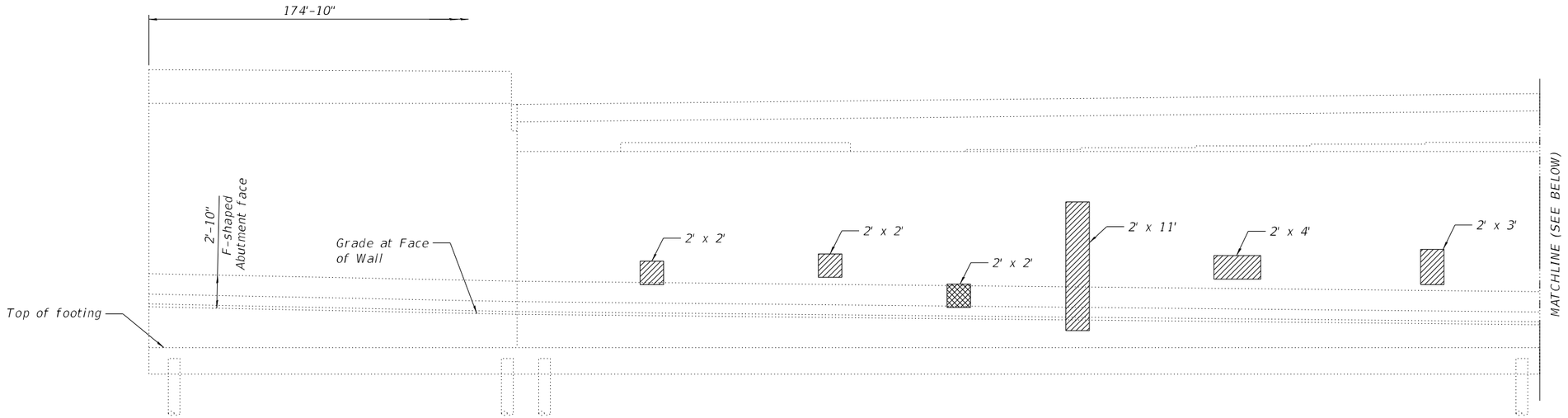
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

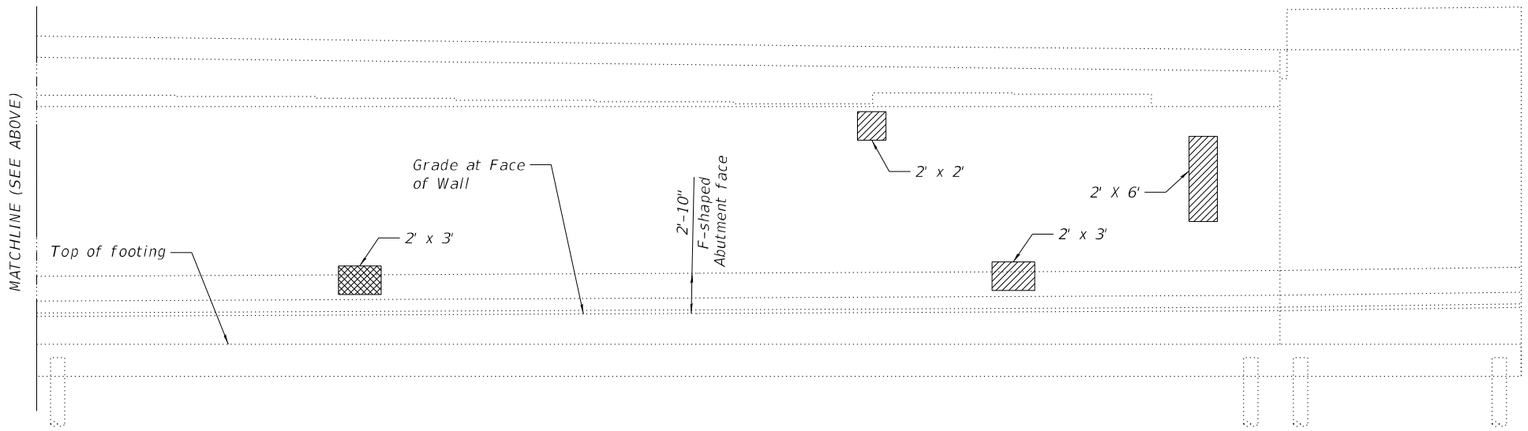
PREFORMED JOINT STRIP SEAL
STRUCTURE NO. 016-2572
SHEET S-11 OF S-15 SHEETS

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	42
		CONTRACT NO. 62T24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



ELEVATION

(Looking North)



ELEVATION

(Looking North)

LEGEND

Structural Repair of Concrete <5"

Structural Repair of Concrete >5"

NOTES:

Structural Repair of concrete on the abutment faces shall use the same architectural finish as shown on the existing plans. See sheet S-13.

BILL OF MATERIAL

Item	Unit	Total
Structural Repair of Concrete <5"	Sq Ft	66
Structural Repair of Concrete >5"	Sq Ft	10

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USER NAME = Elisa.Godinez

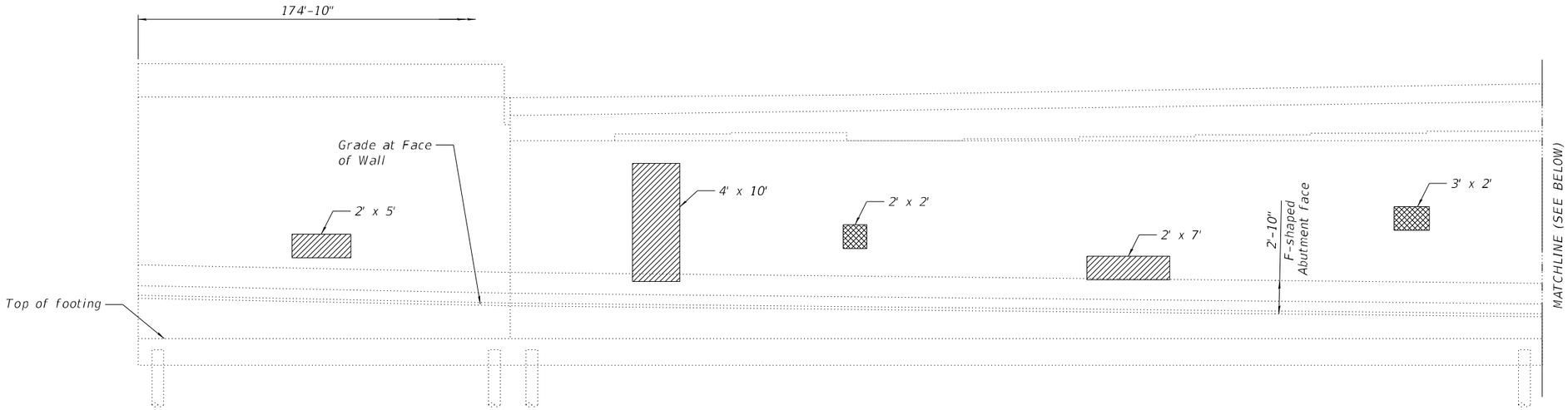
GARZA KARHOFF ENGINEERING, LLC

USER NAME = Elisa.Godinez	DESIGNED - EG	REVISED -
	DRAWN - EG	REVISED -
PLOT SCALE = 10.6667 ' / in.	CHECKED - LM	REVISED -
PLOT DATE = 3/22/2024	DATE - 03/25/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

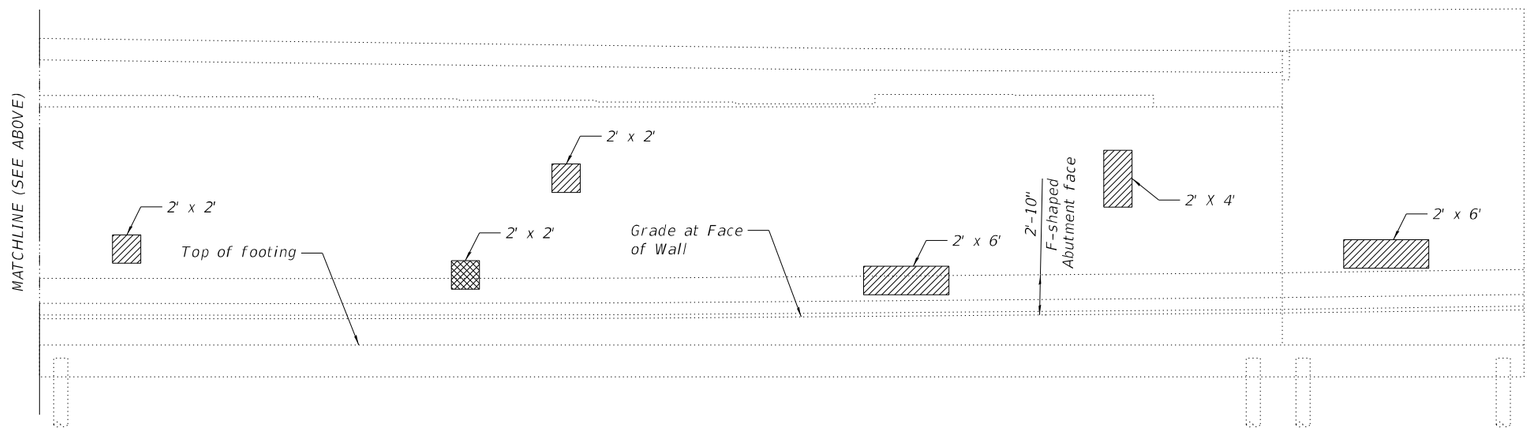
NORTH ABUTMENT REPAIRS
STRUCTURE NO. 016-2572
SHEET S-12 OF S-15 SHEETS

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	43
		CONTRACT NO. 62T24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



ELEVATION

(Looking South)



ELEVATION

(Looking South)

LEGEND

Structural Repair of Concrete <5"

Structural Repair of Concrete >5"

NOTES:

Structural Repair of concrete on the abutment faces shall use the same architectural finish as shown on the existing plans. See sheet S-13.

BILL OF MATERIAL

Item	Unit	Total
Structural Repair of Concrete <5"	Sq Ft	104
Structural Repair of Concrete >5"	Sq Ft	14

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USER NAME = Elisa.Godinez

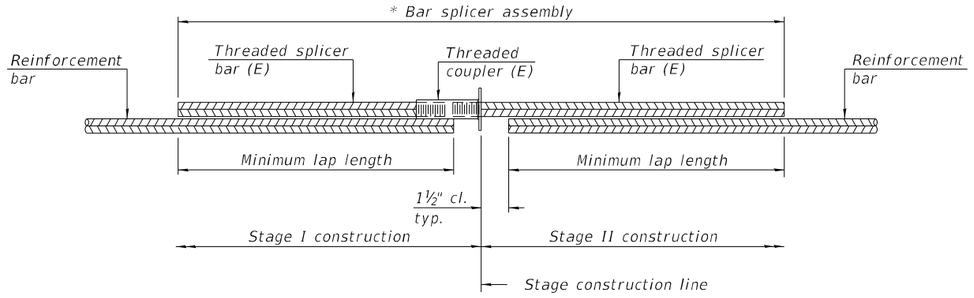
GARZA KARHOFF ENGINEERING, LLC

USER NAME = Elisa.Godinez	DESIGNED - EG	REVISED -
	DRAWN - EG	REVISED -
PLOT SCALE = 10.6667 ' / in.	CHECKED - LM	REVISED -
PLOT DATE = 3/22/2024	DATE - 03/25/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOUTH ABUTMENT REPAIRS
STRUCTURE NO. 016-2572
SHEET S-13 OF S-15 SHEETS

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	44
		CONTRACT NO. 62T24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



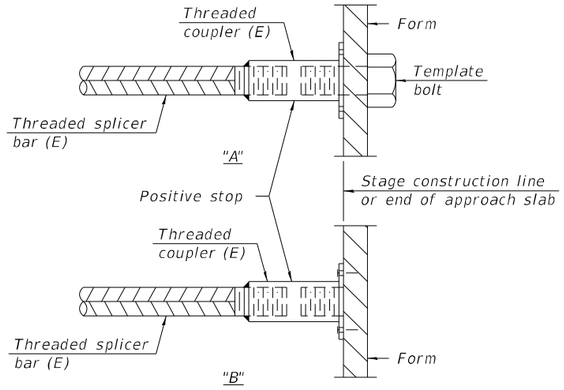
STANDARD BAR SPLICER ASSEMBLY PLAN

Only bar splicer assemblies as presented on the approved QPL list may be used.

Threaded splicer bar length = min. lap length + 1½" + thread length

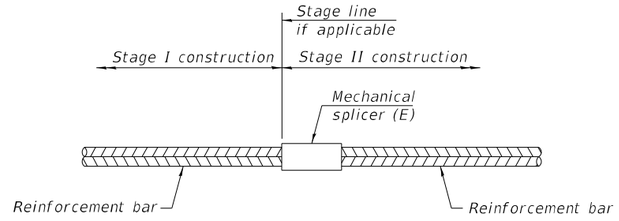
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
North Exp. Jt.	#5	18	3'-1"
South Exp. Jt.	#5	18	3'-1"
North Exp. Jt.	#6	8	4'-5"
South Exp. Jt.	#6	8	4'-5"



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.

BSD-1

5-15-2023

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GARZA KARHOFF ENGINEERING, LLC

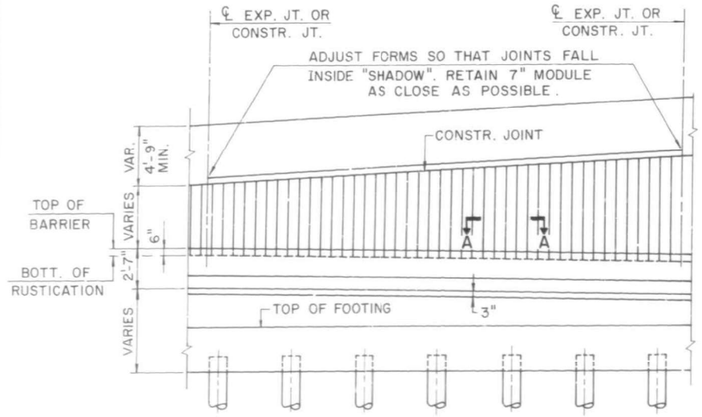
USER NAME = Elisa.Godinez	DESIGNED - EG	REVISED -
	DRAWN - EG	REVISED -
PLOT SCALE = 2.0000 ' / in.	CHECKED - LM	REVISED -
PLOT DATE = 3/22/2024	DATE - 03/25/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

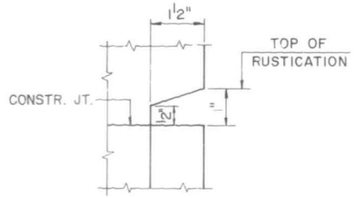
BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 016-2572
SHEET S-14 OF S-15 SHEETS

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	45
		CONTRACT NO. 62T24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

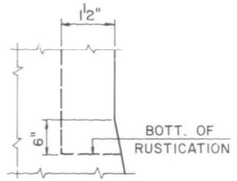
FAU RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3513	(280-HB-K(83))	COOK	183	81
FED. ROAD DIST NO. ILLINOIS		FED. AID PROJECT		



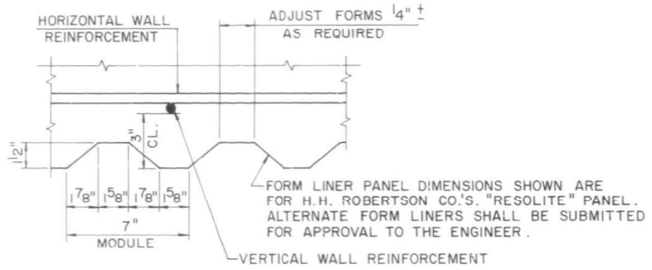
ELEVATION
(TYPICAL ARCHITECTURAL FINISH)



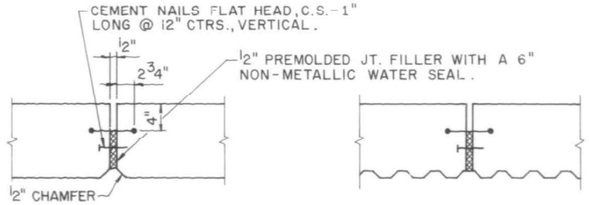
DETAIL "A"



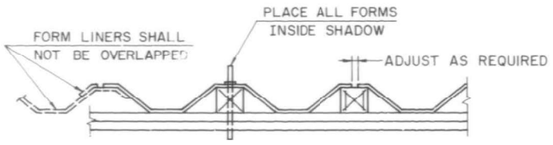
DETAIL "B"



SECTION A-A

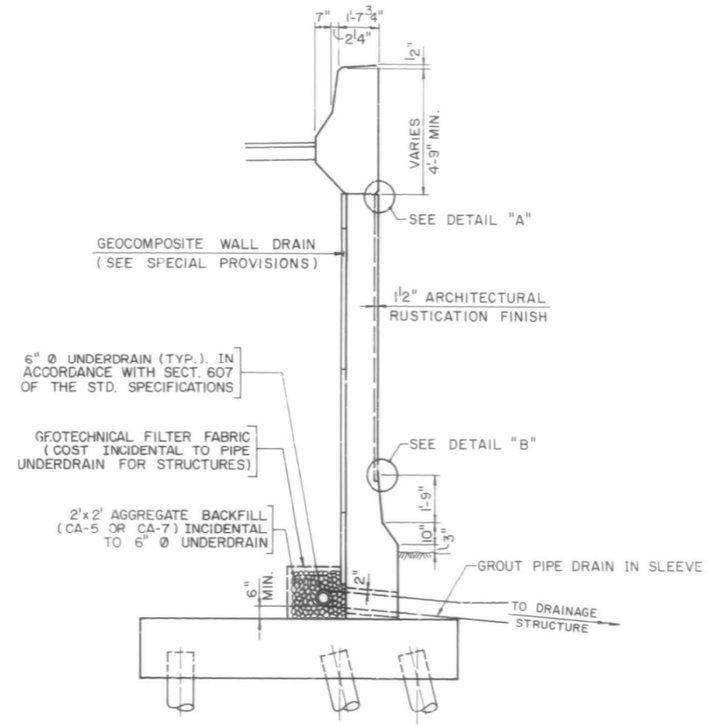


EXPANSION JOINT DETAIL



SUGGESTED FORMWORK DETAIL

CONSTRUCTION JOINT DETAIL



TYPICAL SECTION THRU RETAINING WALLS
(ABUTMENTS SIMILAR)

NOTES:

NOTE 1: PRIOR TO THE PLACEMENT OF THE PIPE UNDERDRAIN SLEEVE, THE ENGINEER SHALL DETERMINE THE SLOPE REQUIRED FOR THE PIPE UNDERDRAIN.

NOTE 2: THE PIPE DRAIN SHALL TERMINATE AT A DRAINAGE STRUCTURE.

NOTE 3: THE COST OF THE SLEEVE AND GROUT SHALL BE INCIDENTAL TO THE PIPE DRAINS.

REVISIONS	
NAME	DATE

FOR INFORMATION ONLY

ILLINOIS DEPARTMENT OF TRANSPORTATION

RUSTICATION FINISH FOR ABUTMENTS AND RETAINING WALLS ON DEMPSTER STREET (U.S. RTE. 14) STA. 134+30.70

SCALE:
DATE:
DRAWN BY: F. MUNIR
CHECKED BY: B. SHAH

CHRISTIAN-ROGE & ASSOC.
CHICAGO ILLINOIS

FILE NAME = $FILE$
PLOT SCALE = 2.0000 ' / in.
USER NAME = Elisa.Godinez

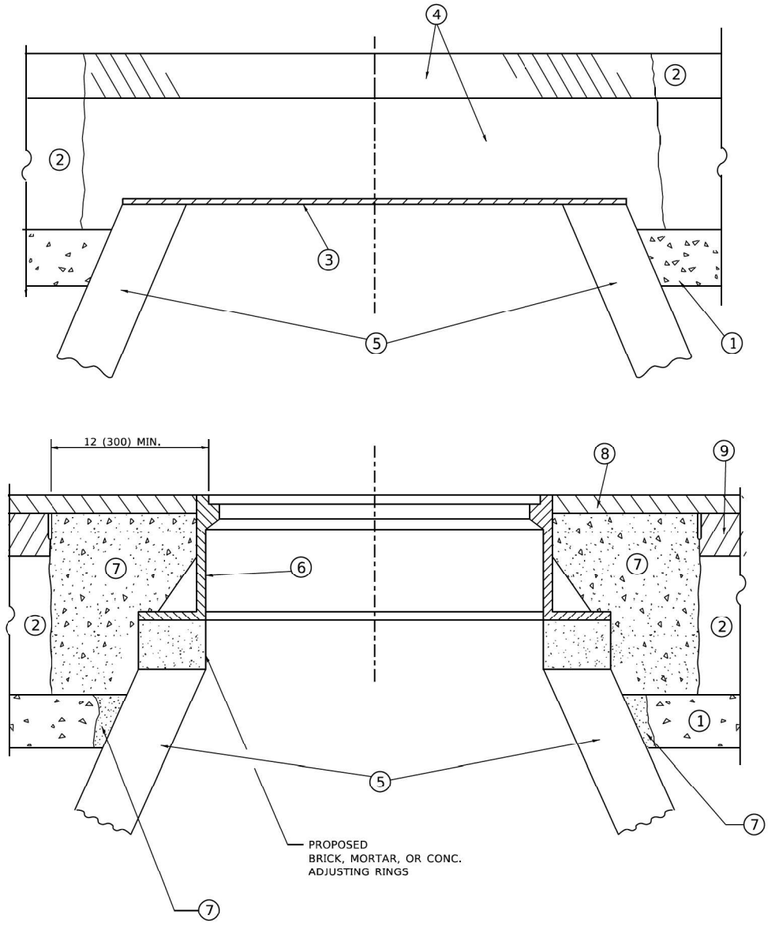
GARZA KARHOFF ENGINEERING, LLC

USER NAME = Elisa.Godinez	DESIGNED - EG	REVISED -
	DRAWN - EG	REVISED -
PLOT SCALE = 2.0000 ' / in.	CHECKED - LM	REVISED -
PLOT DATE = 3/22/2024	DATE - 03/25/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
STRUCTURE NO. 016-2572
SHEET S-15 OF S-15 SHEETS

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	46
		CONTRACT NO. 62T24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

NOTES

1. EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.
2. IF THE EXISTING LIDS ARE OPEN, THE FRAME WILL BE ADJUSTED TO THE ELEVATION OF THE MILLED PAVEMENT SURFACE PRIOR TO THE MILLING OPERATION. THE FRAME WILL NOT BE REMOVED AND COVERED BY THE METAL PLATE.
3. CITY OF CHICAGO CASTINGS ARE THE PROPERTY OF THE CITY AND THE CONTRACTOR SHALL NOTIFY THE CITY FOR REMOVAL AND DISPOSITION OF THE CASTINGS.
4. THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.
5. THE CONTRACTOR SHALL REMOVE ALL TRAFFIC CONTROL DEVICES BY THE END OF EACH WORK SHIFT.

CONSTRUCTION PROCEDURES

STAGE 1 (BEFORE PAVEMENT MILLING)

A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.
B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.
D) BACKFILL WITH CRUSHED STONE AND HMA SURFACE MIX APPROVED BY THE ENGINEER. (MIN. 3 (80) HMA TO REMAIN AFTER MILLING).

STAGE 2 (AFTER PAVEMENT MILLING)

A) REMOVE THE HMA SURFACE MIX AND CRUSHED STONE.
B) INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.
C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS PP-2* CONCRETE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

*UNLESS OTHERWISE SPECIFIED IN THE PLANS.

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS EXCEPT THAT "THE CONTRACTOR SHALL ADJUST THE STRUCTURES TO THE FINISHED PAVEMENT ELEVATION NO MORE THAN 5 CALENDAR DAYS PRIOR TO PLACEMENT OF THE FINAL LIFT OF SURFACE UNLESS APPROVED BY THE ENGINEER."

LEGEND

1. SUB-BASE GRANULAR MATERIAL
2. EXISTING PAVEMENT
3. 36 (900) DIAMETER METAL PLATE
4. PROPOSED CRUSHED STONE AND HMA SURFACE MIX
5. EXISTING STRUCTURE
6. FRAME AND LID (SEE NOTES)
7. CLASS PP-2* CONCRETE
8. PROPOSED HMA SURFACE COURSE
9. PROPOSED HMA BINDER COURSE

LOCATION OF STRUCTURES

THE CONTRACTOR WILL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF THE BURIED STRUCTURES ACCORDING TO THE STATION AND DISTANCE LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT. UPON COMPLETION OF THE WORK, THE CONTRACTOR WILL DELIVER THE RECORD TO THE ENGINEER.

BASIS OF PAYMENT

1. REMOVING FRAMES AND LIDS ON DRAINAGE AND UTILITY STRUCTURES IN THE PAVEMENT PRIOR TO MILLING, AND ADJUSTING TO FINAL GRADE PRIOR TO PLACING THE SURFACE COURSE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR "FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)."
2. THIS WORK WILL NOT BE PAID FOR WHEN DRAINAGE AND UTILITY STRUCTURES ARE SPECIFIED FOR PAYMENT AS STRUCTURE RECONSTRUCTION.
3. NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.
4. WHEN STRUCTURES ARE TO BE ADJUSTED OR RECONSTRUCTED, THE LOWERING AND RAISING OF THE FRAMES AND LIDS WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE CORRESPONDING PAY ITEM.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

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Ardmore Roderick

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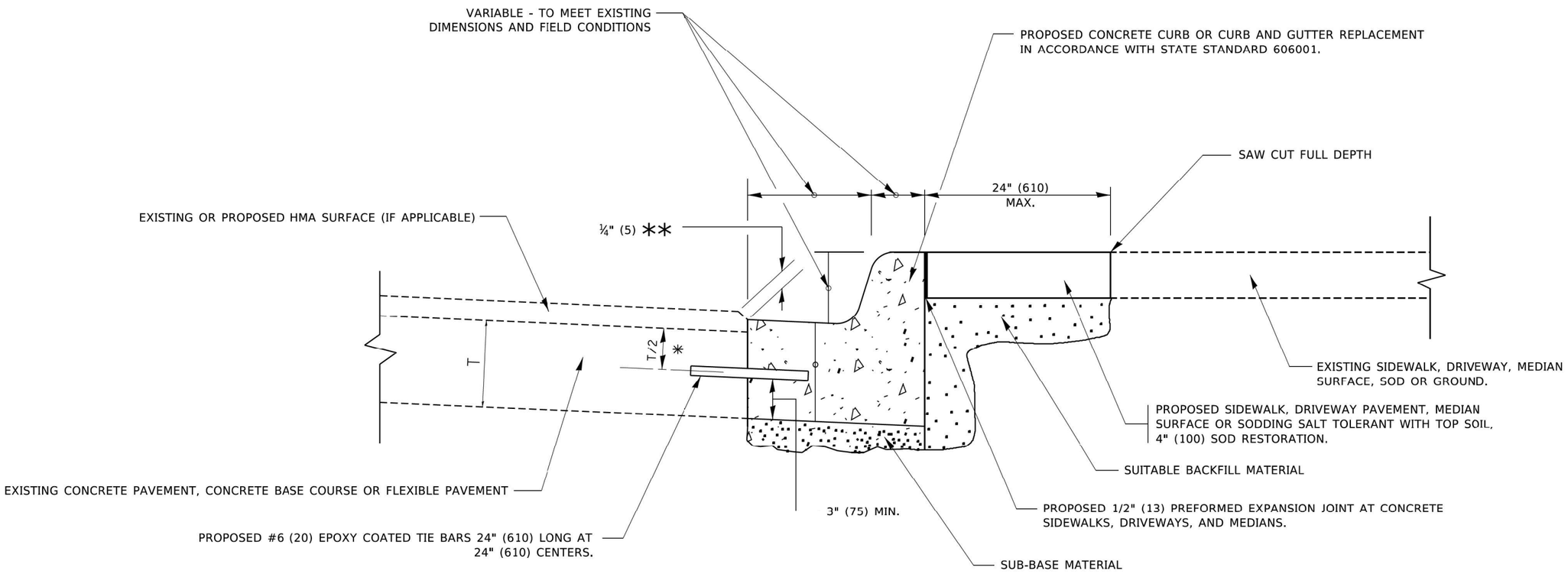
PLOT DATE = 3/25/2024	DATE - 03/25/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

SCALE: | SHEET NO. 1 OF 17SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	47
	BD600-03 (BD-08)	CONTRACT NO. 62T24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



* 3" (75) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.

** IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH WITH THE PAVEMENT.

CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

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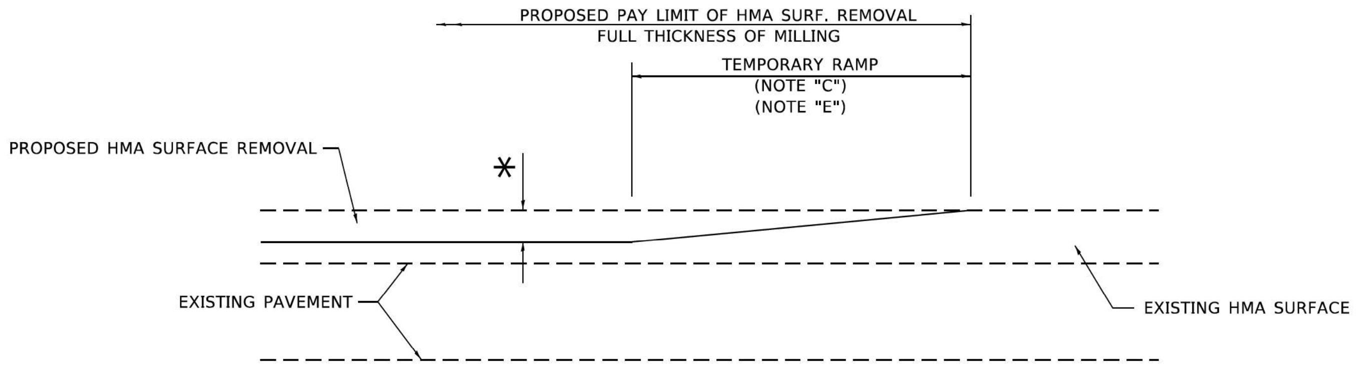
PLOT DATE = 3/25/2024	DATE - 03/25/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

SCALE: | SHEET NO. 2 OF 17SHEETS | STA. | TO STA.

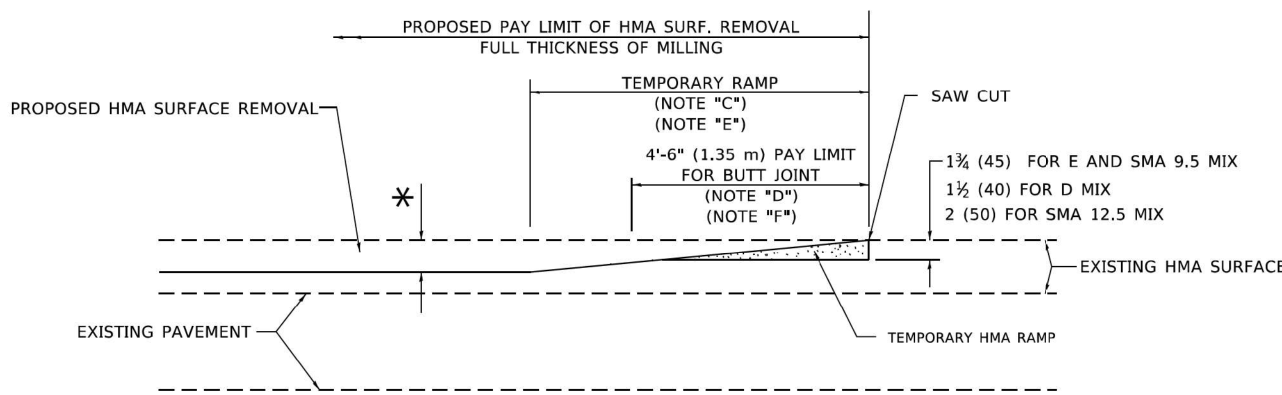
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	48
	BD600-06 (BD-24)	CONTRACT NO. 62T24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



MILLED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 1

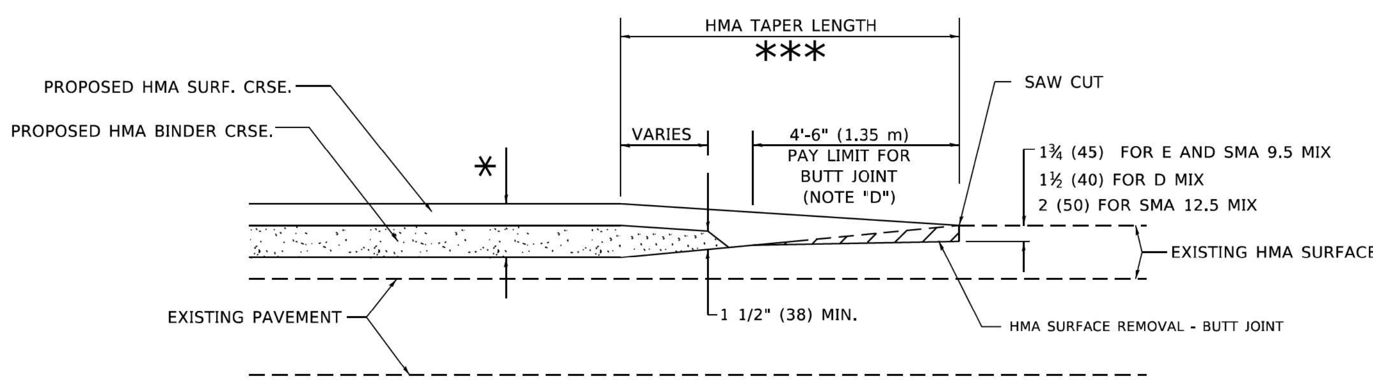


HMA CONSTRUCTED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

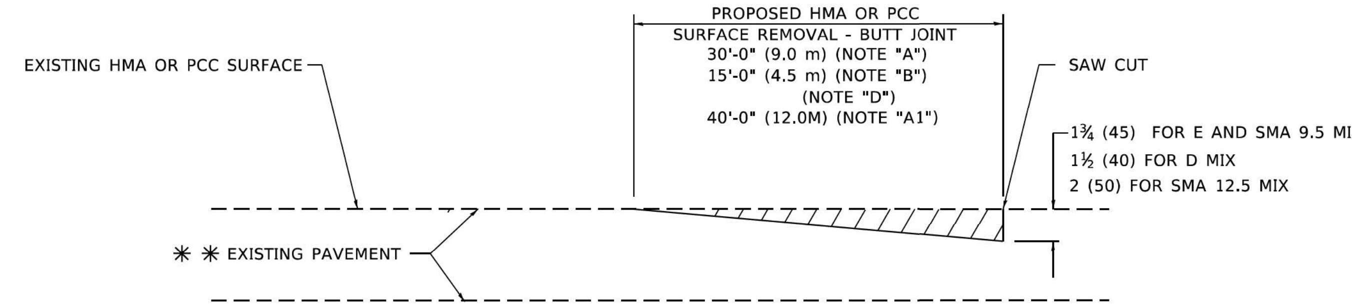
OPTION 2

TYPICAL TEMPORARY RAMP

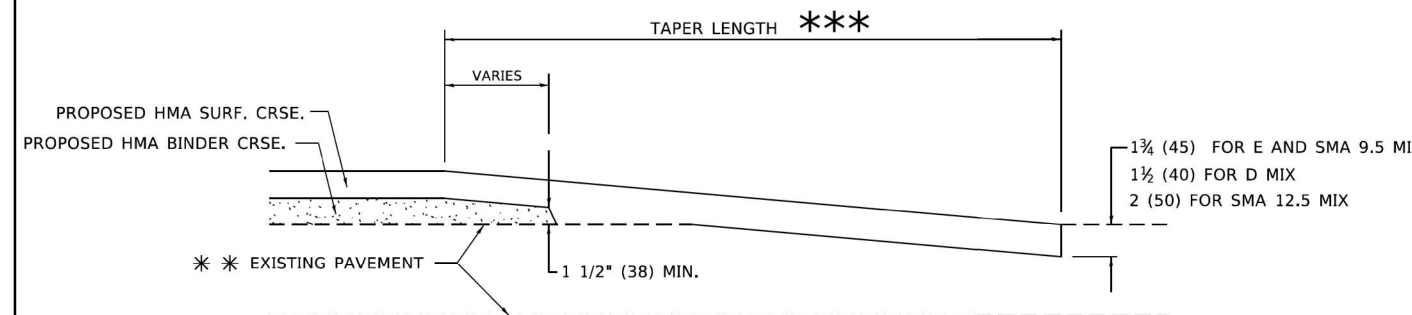


BUTT JOINT AND HMA TAPER

TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

** PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

GENERAL NOTES

A. MAINLINE ARTERIAL ROADWAYS AND MAJOR SIDE ROADS.

A1. INTERSTATES

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' - 4" (1.02m) PER 1 INCH (25 mm) OF MILLING THICKNESS.

* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.

F. 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

1. 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".
2. THE TEMPORARY RAMP AND SAW CUT SHALL BE INCLUDED IN THE UNIT COST FOR HMA OR PCC SURFACE REMOVAL-BUTT JOINT.

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

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Ardmore Roderick

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PLOT DATE = 3/25/2024	DATE - 03/25/2024	REVISED -	

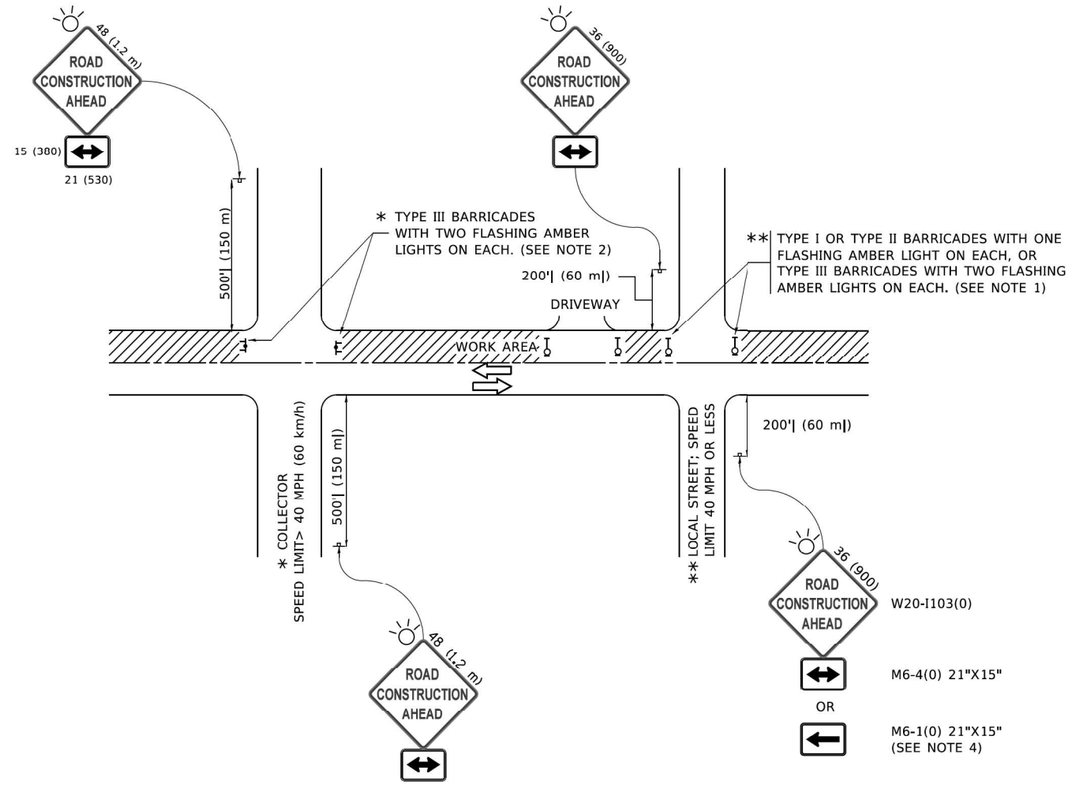
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BUTT JOINT AND HMA TAPER DETAILS

SCALE: | SHEET NO. 3 OF 17SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	49
	BD400-05 (BD-32)	CONTRACT NO. 62T24		

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT



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) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY 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. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE 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.

FILE NAME = SFILES
PLOT SCALE = 2.0000 ' / in.
USER NAME = rileywhite

Ardmore Roderick

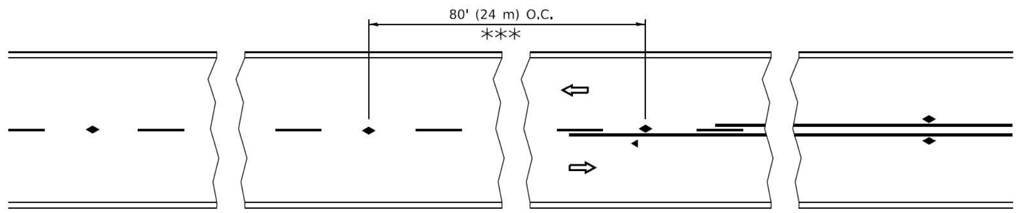
USER NAME = rileywhite	DESIGNED - RW	REVISED -
	DRAWN - RW	REVISED -
PLOT SCALE = 2.0000 ' / in.	CHECKED - YK	REVISED -
PLOT DATE = 3/25/2024	DATE - 03/25/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

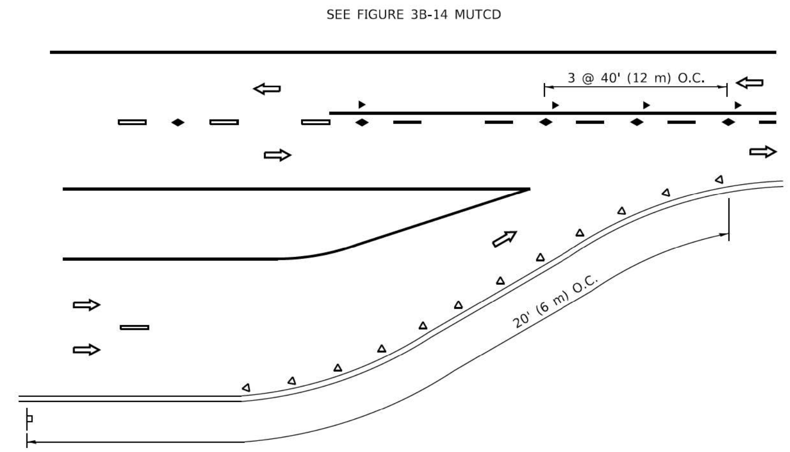
SCALE: | SHEET NO. 4 OF 17SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	50
	TC-10	CONTRACT NO. 62T24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

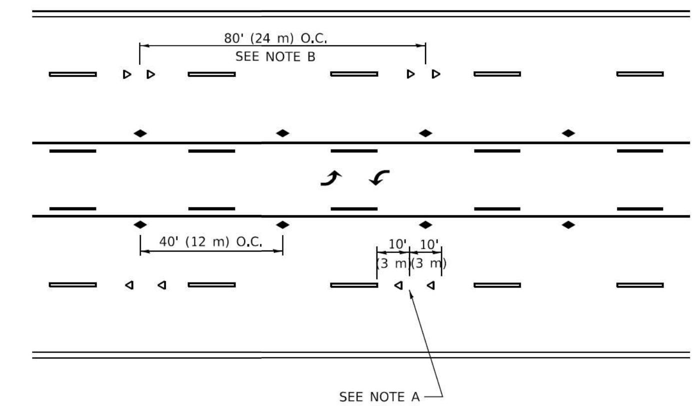


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

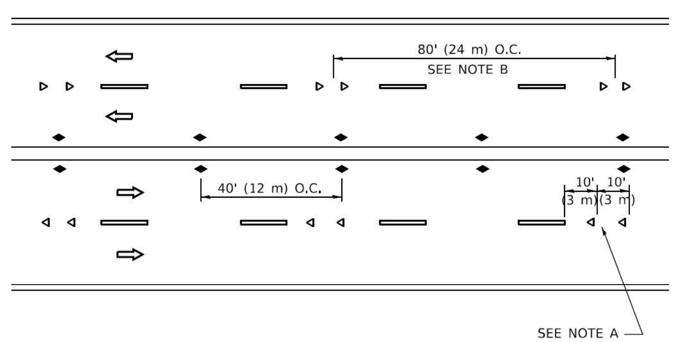
TWO-LANE/TWO-WAY



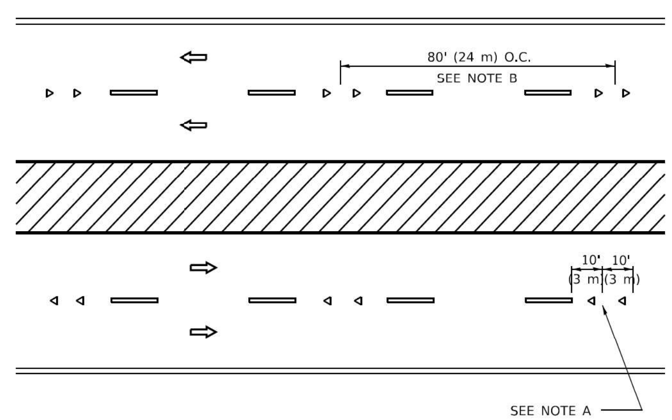
LANE REDUCTION TRANSITION



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

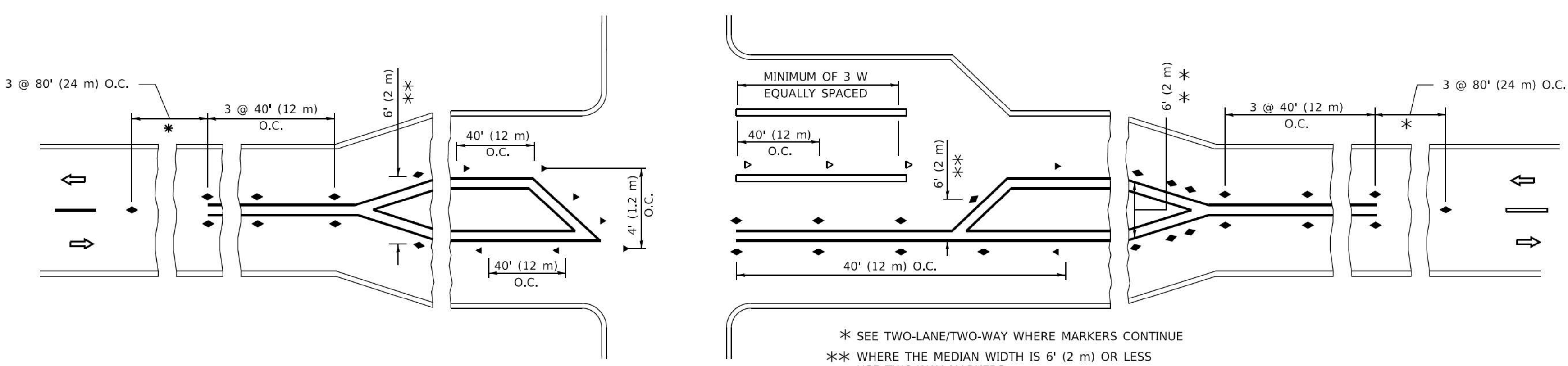
LANE MARKER NOTES

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.



* 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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USER NAME = rileywhite

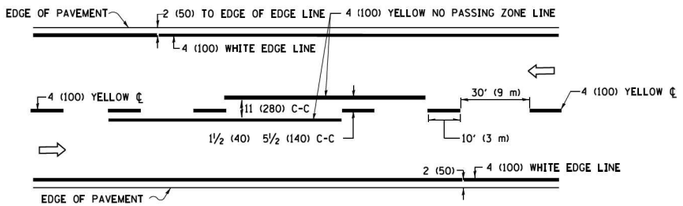
Ardmore Roderick

USER NAME = rileywhite	DESIGNED - RW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN - RW	REVISED -	
PLOT SCALE = 2.0000 ' / in.	CHECKED - YK	REVISED -	
PLOT DATE = 3/25/2024	DATE - 03/25/2024	REVISED -	

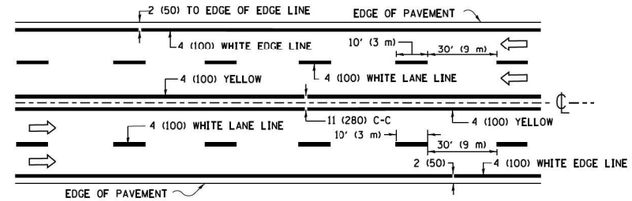
TYPICAL APPLICATIONS
RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)

SCALE: | SHEET NO. 5 OF 17SHEETS | STA. TO STA.

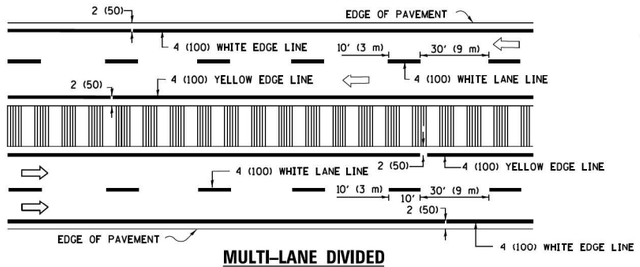
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	51
	TC-11	CONTRACT NO. 62T24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



2–LANE ROADWAY

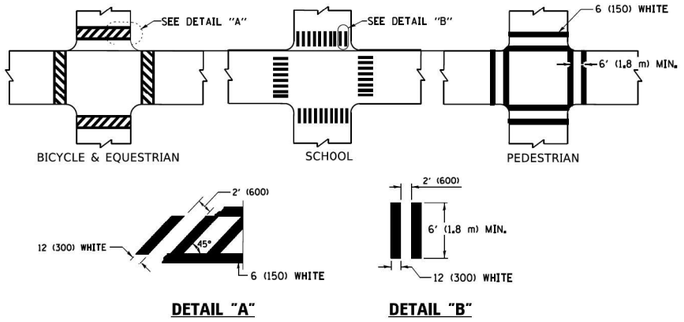


MULTI–LANE UNDIVIDED



MULTI–LANE DIVIDED
WITH MEDIAN

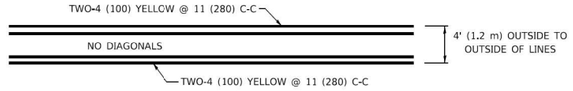
TYPICAL LANE AND EDGE LINE MARKING



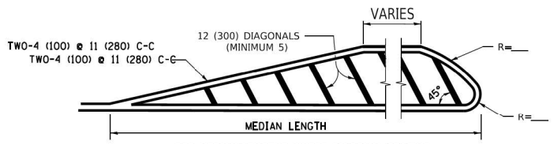
DETAIL "A" **DETAIL "B"**

TYPICAL CROSSWALK MARKING

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



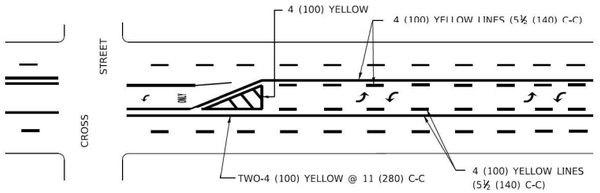
4' (1.2 m) WIDE MEDIANS ONLY



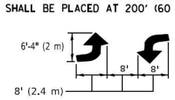
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

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))

MEDIANS OVER 4' (1.2 m) WIDE

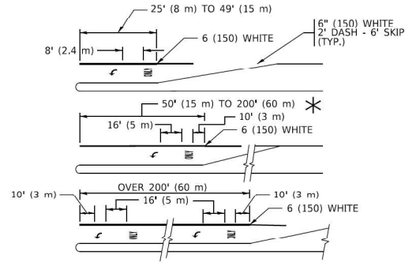


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO–WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

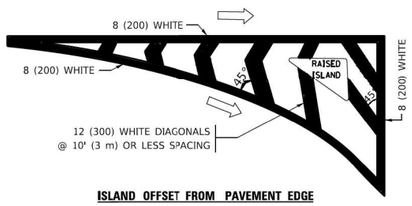


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
↰ AREA = 15.6 SQ. FT. (1.5 m²) **ONLY** AREA = 20.8 SQ. FT. (1.9 m²

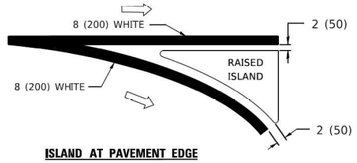
✱ TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

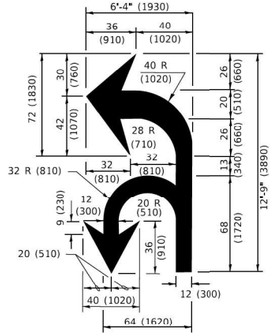


ISLAND OFFSET FROM PAVEMENT EDGE

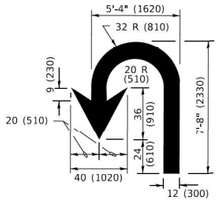


ISLAND AT PAVEMENT EDGE

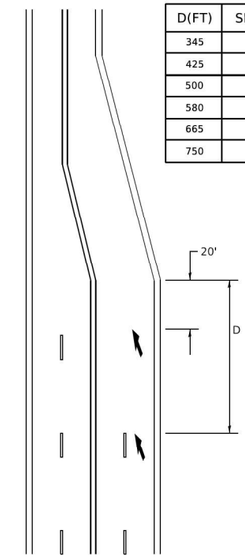
TYPICAL ISLAND MARKING



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	5½ (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; 5½ (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" 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 m² EACH "X"=54.0 SQ. FT. (5.0 m²
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.

FILE NAME = S:\FILES\PLOT SCALE = 2.0000 ' / in.\USER NAME = rileywhite

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USER NAME = rileywhite	DESIGNED - RW	REVISED -
	DRAWN - RW	REVISED -
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PLOT DATE = 3/25/2024	DATE - 03/25/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
TYPICAL PAVEMENT MARKINGS

SCALE: | SHEET NO. 6 OF 17SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	52
	TC-13	CONTRACT NO. 62T24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER

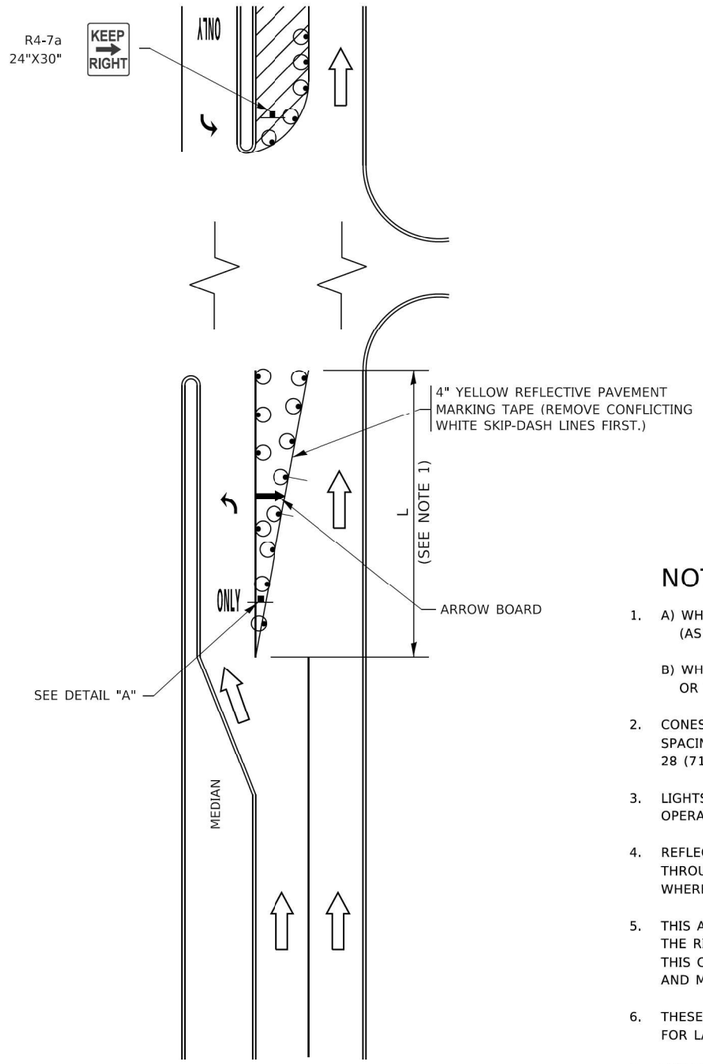


FIGURE 1

LEGEND

- WORK AREA
- LANE OPEN TO TRAFFIC
- ARROW BOARD
- TYPE I OR II BARRICADE OR DRUM WITH STEADY BURN LIGHT
- DRUM WITH STEADY BURN LIGHT
- SIGN ASSEMBLY
- TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

NOTES:

1. A) WHEN "L" IS ≤ 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-I100R 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 PREQUIREMENTS.
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.

TURN BAY ENTRANCE WITHIN A LANE CLOSURE

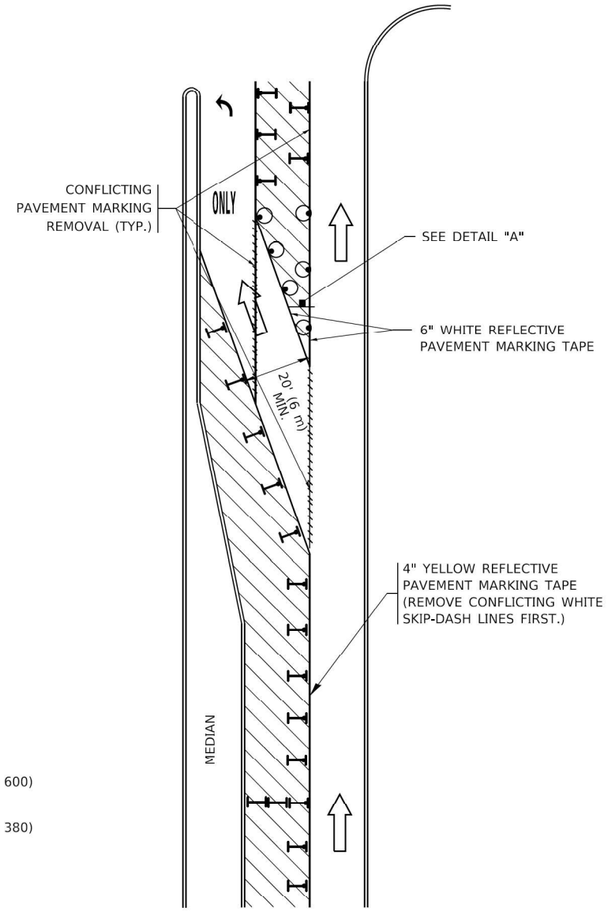
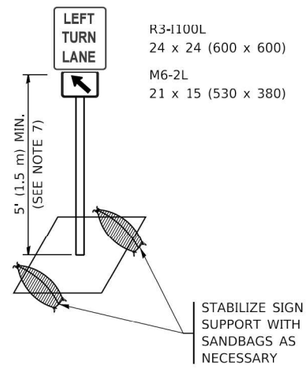


FIGURE 2



DETAIL A

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

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Ardmore Roderick

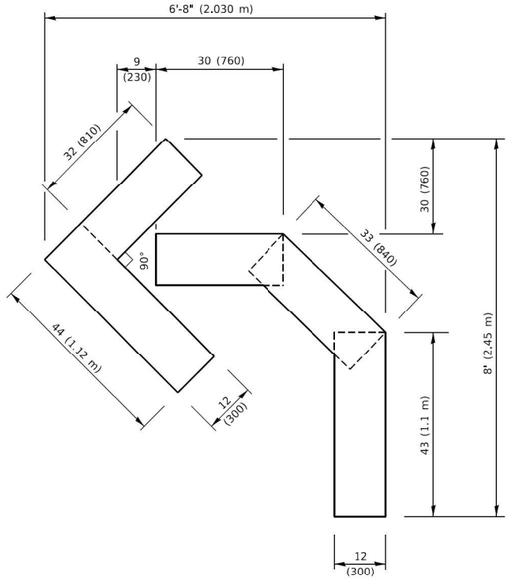
USER NAME = rileywhite	DESIGNED - RW	REVISED -
	DRAWN - RW	REVISED -
PLOT SCALE = 2.0000 ' / in.	CHECKED - YK	REVISED -
PLOT DATE = 3/25/2024	DATE - 03/25/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

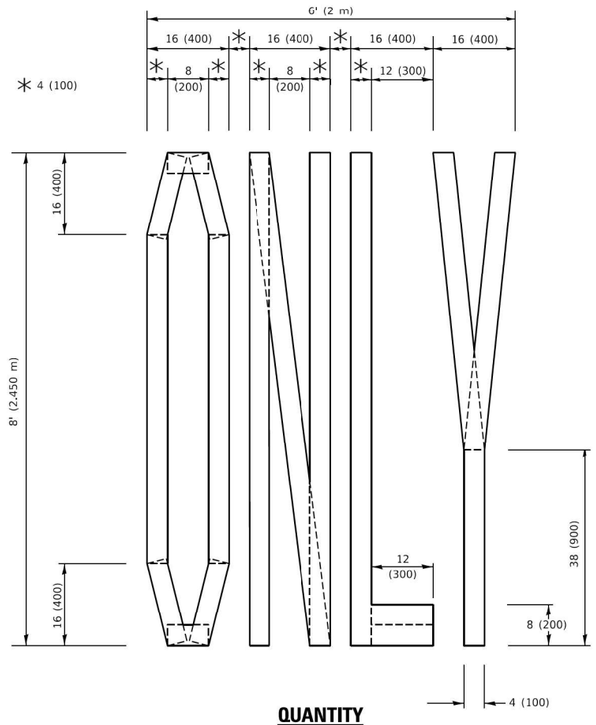
SCALE: | SHEET NO. 7 OF 17SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	53
	TC-14	CONTRACT NO. 62T24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



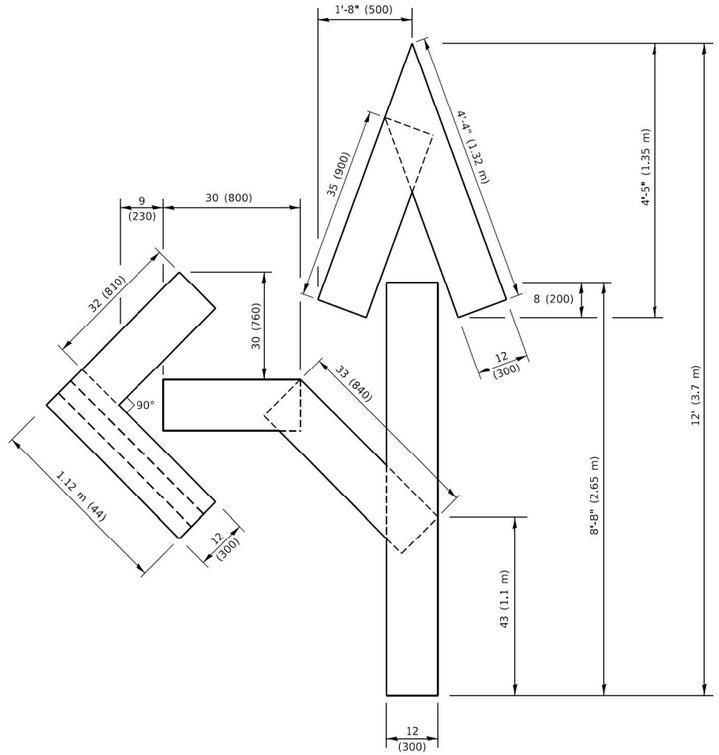
QUANTITY

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)

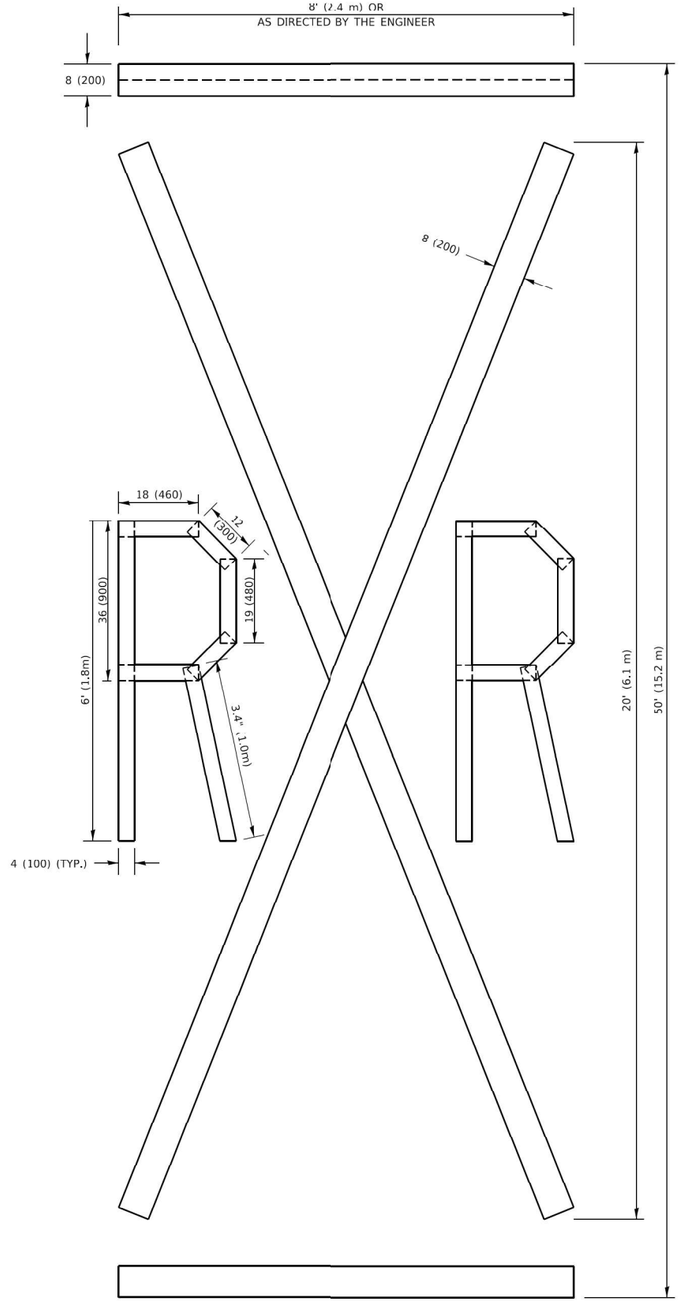


QUANTITY

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.

FILE NAME = STILES
PLOT SCALE = 2.0000 ' / in.
USER NAME = rileywhite

Ardmore Roderick

USER NAME = rileywhite	DESIGNED - RW	REVISED -
	DRAWN - RW	REVISED -
PLOT SCALE = 2.0000 ' / in.	CHECKED - YK	REVISED -
PLOT DATE = 3/25/2024	DATE - 03/25/2024	REVISED -

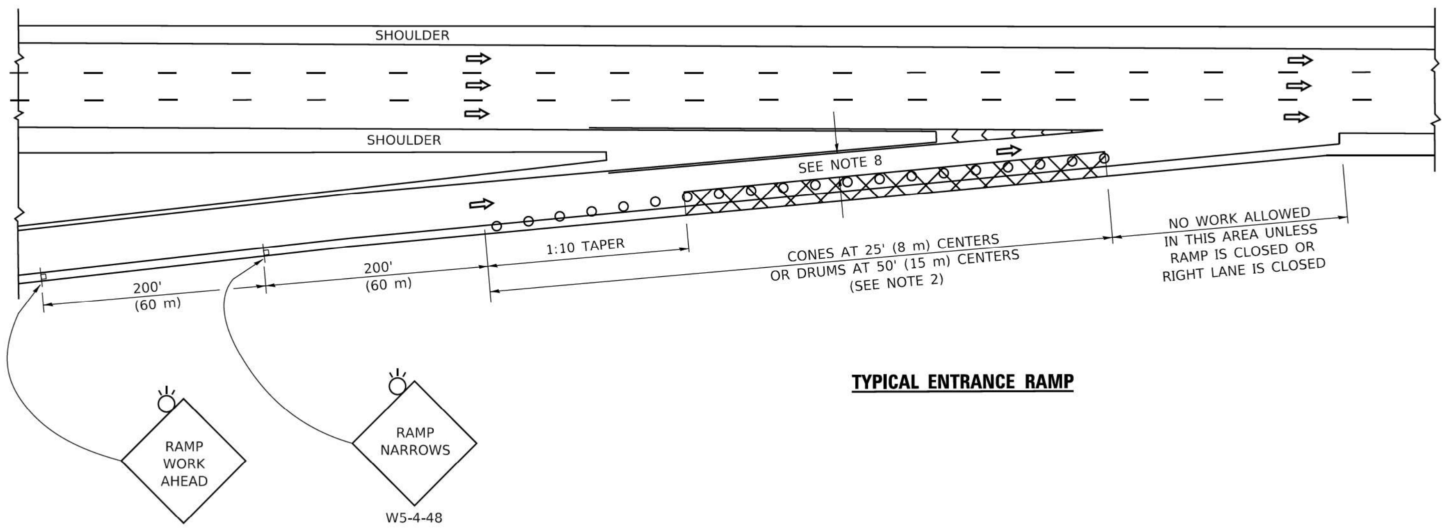
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS

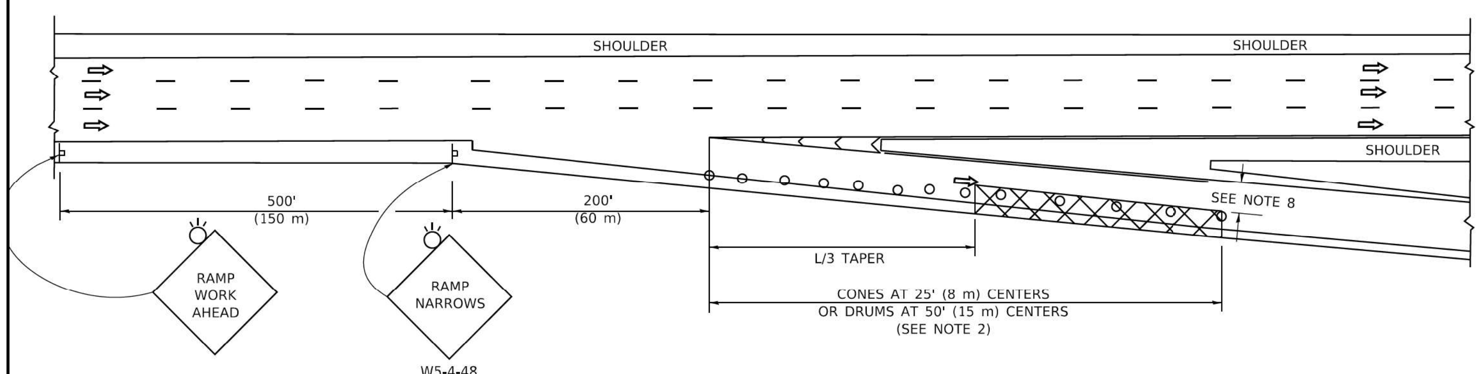
SCALE: | SHEET NO. 8 OF 17SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	54
	TC-16	CONTRACT NO. 62T24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

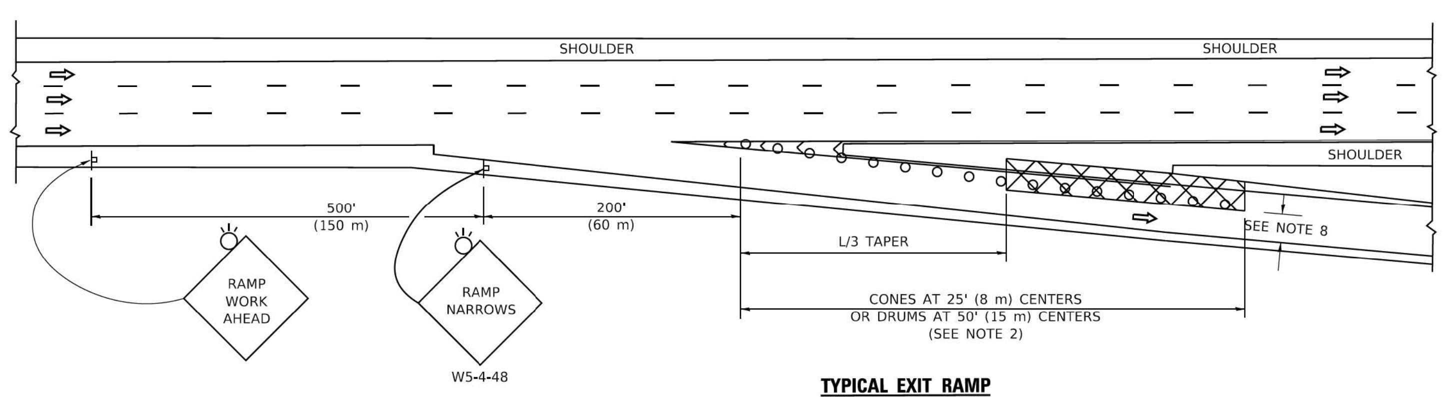
PARTIAL RAMP CLOSURE DETAILS



TYPICAL ENTRANCE RAMP

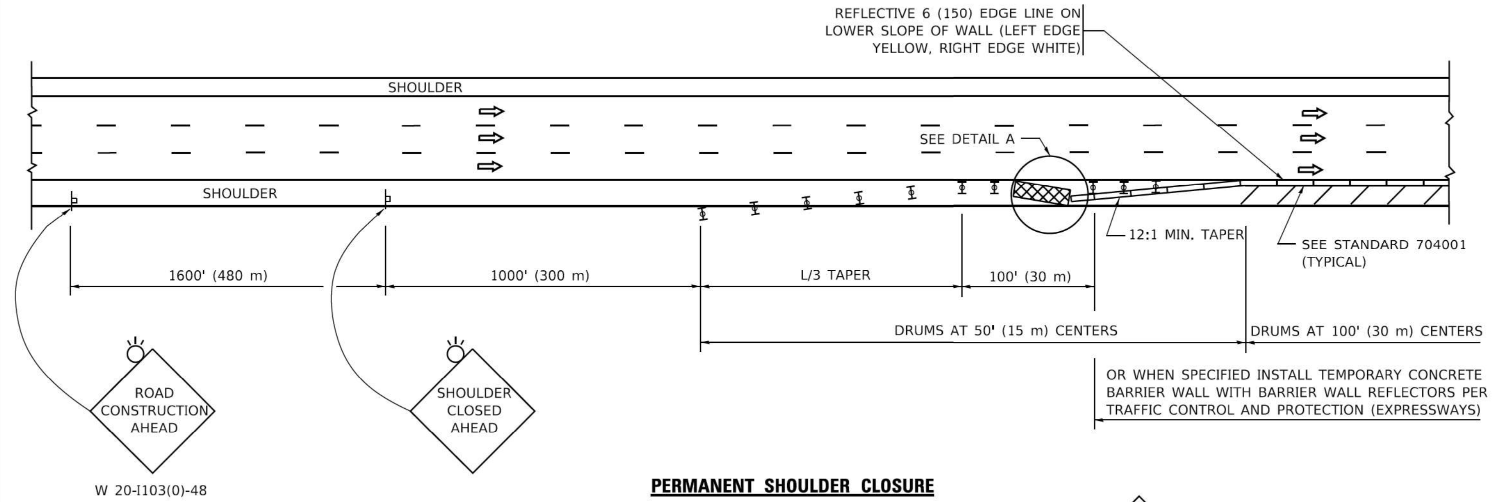


TYPICAL EXIT RAMP

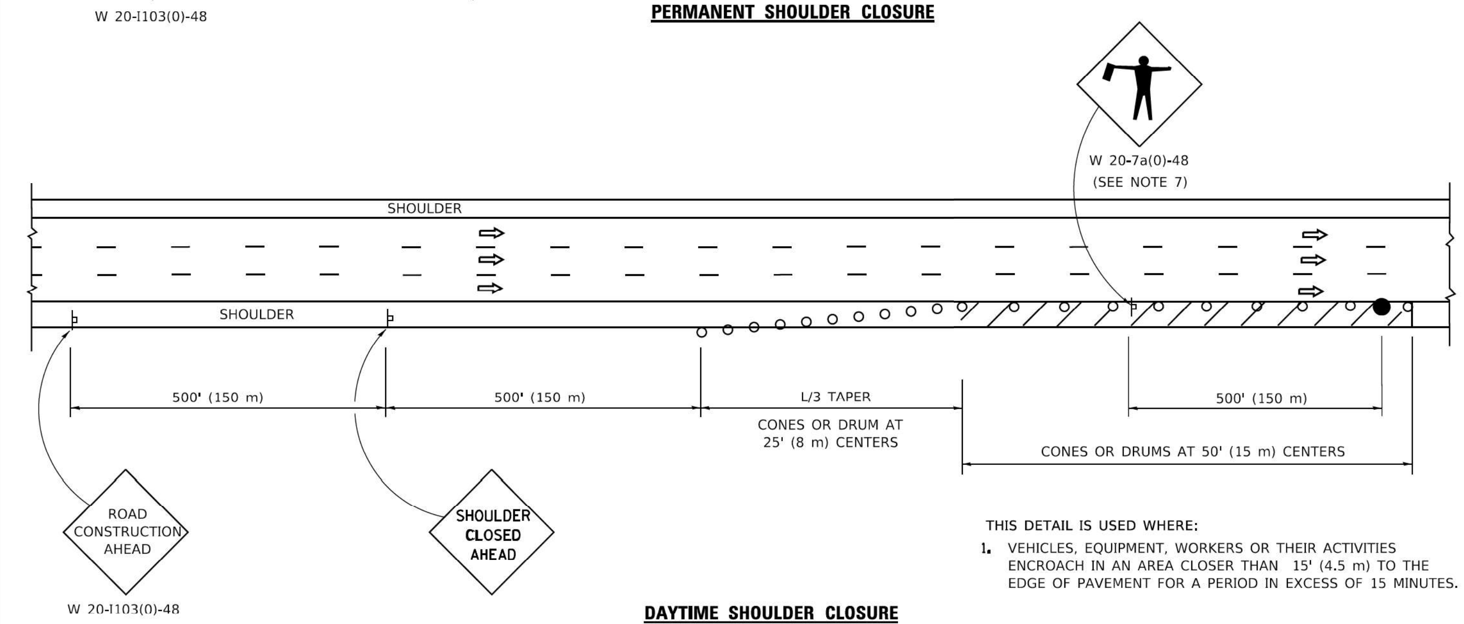


TYPICAL EXIT RAMP

SHOULDER CLOSURE DETAILS



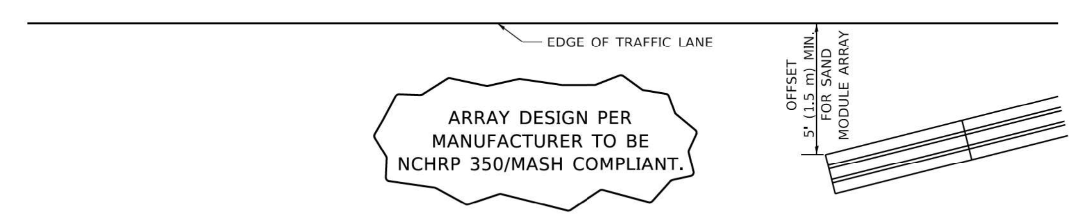
PERMANENT SHOULDER CLOSURE



THIS DETAIL IS USED WHERE:

1. VEHICLES, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCROACH IN AN AREA CLOSER THAN 15' (4.5 m) TO THE EDGE OF PAVEMENT FOR A PERIOD IN EXCESS OF 15 MINUTES.

DAYTIME SHOULDER CLOSURE



DETAIL "A"
IMPACT ATTENTUATOR, TEMPORARY
(SEE NOTE 5)

SYMBOLS

- ACTIVE WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH CONTROL SIGN
- TYPE II BARRICADE OR DRUM
- CONE, DRUM OR BARRICADE
- IMPACT ATTENUATOR OF TYPE AND TEST LEVEL SPECIFIED

GENERAL NOTES:

1. THE "L" DISTANCE EQUALS:

SPEED LIMIT	FORMULAS METRIC	FORMULAS ENGLISH
45 mph (80 km/h) OR GREATER:	L=0.65(W)(S)	L=(W)(S)

W = WIDTH OF OFFSET IN FEET (METERS)
S = NORMAL POSTED SPEED MPH (KM/H)

2. TYPE II BARRICADES OR DRUMS ARE REQUIRED FOR ALL NIGHTIME CLOSURES. TYPE II BARRICADES OR DRUMS WITH MONODIRECTIONAL STEADY BURN LIGHTS ARE REQUIRED FOR DELINEATING OBSTICLES, EXCAVATIONS, OR HAZARDS EXCEEDING 100 FT (30m) IN LENGTH AT NIGHT.
3. ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
4. FLASHING LIGHTS SHALL BE USED DURING THE HOURS OF DARKNESS AND SHALL BE INSTALLED ABOVE THE FIRST TWO SETS OF SIGNS.
5. THE IMPACT ATTENUATOR, TEMPORARY IS NOT REQUIRED WHEN THE TEMPORARY CONCRETE BARRIER WALL IS PROTECTED BY OR IS TIED INTO THE EXISTING GUARDRAIL. IF OFFSET IS LESS THAN 5 FEET USE NARROW USE TYPE DEVICE TO MEET NCHRP350/MASH.
6. AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL FREEWAY CLOSURES.
7. THE FLAGGER AND FLAGGER SIGN ARE REQUIRED AT THE ABOVE WORK SITES WHEN:
   a. FOUR OR MORE WORK VEHICLES ENTER THE TRAFFIC LANES IN A ONE HOUR PERIOD.
   b. THE WORK AVTIVITY REQUIRES FREQUENT ENCROACHMENT INTO THE LANE OPEN TO TRAFFIC.

   THE FLAGGER SHALL BE STATIONED APPROXIMATELY 100' (30 m) TO 200' (60 m) IN ADVANCE OF THE WORKERS.
8. 12' MIN. WIDTH TANGENT SECTION
   16' MIN. WIDTH CURVE SECTION.

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

FILE NAME = $FILES
PLOT SCALE = 2.0000 ' / in.
USER NAME = rileywhite

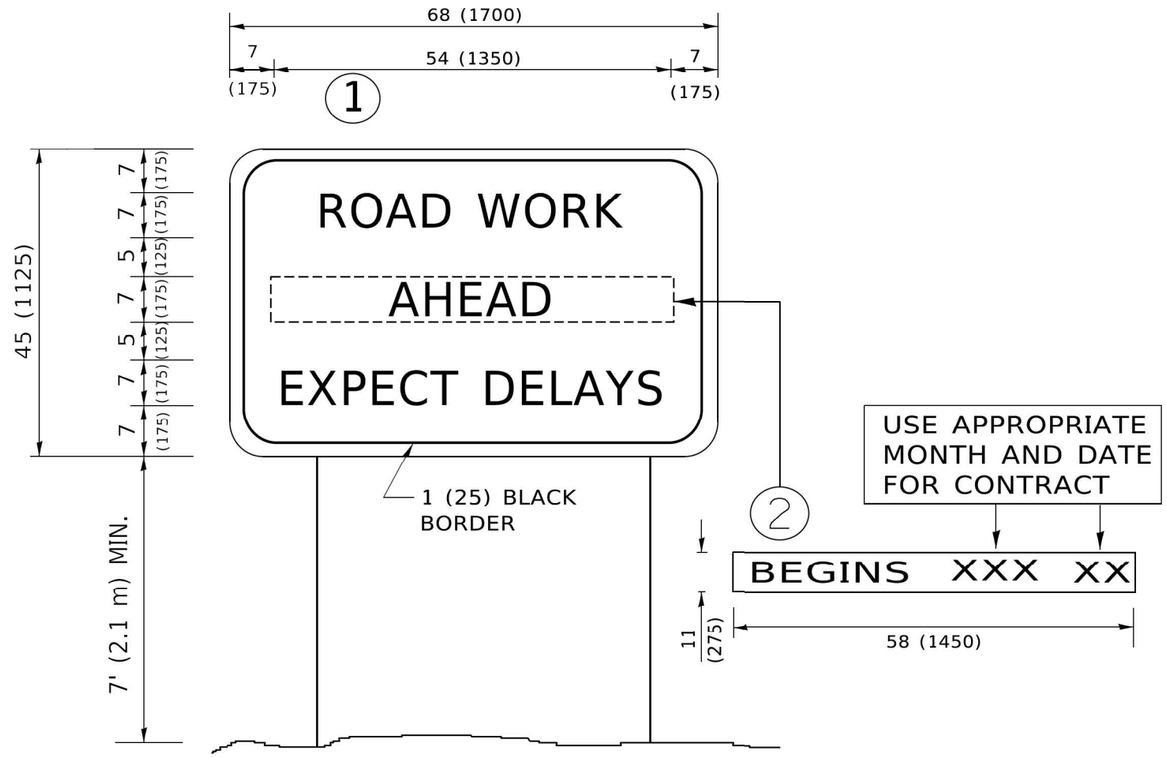
Ardmore Roderick

USER NAME = rileywhite	DESIGNED - RW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN - RW	REVISED -	
PLOT SCALE = 2.0000 ' / in.	CHECKED - YK	REVISED -	
PLOT DATE = 3/25/2024	DATE - 03/25/2024	REVISED -	

TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES

SCALE: | SHEET NO. 9 OF 17SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	55
	TC-17	CONTRACT NO. 62T24		
FED. ROAD DIST. NO. 1	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.

FILE NAME = S:\FILES
PLOT SCALE = 2.0000 ' / in.
USER NAME = rileywhite

Ardmore Roderick

USER NAME = rileywhite	DESIGNED - RW	REVISED -
	DRAWN - RW	REVISED -
PLOT SCALE = 2.0000 ' / in.	CHECKED - YK	REVISED -
PLOT DATE = 3/25/2024	DATE - 03/25/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ARTERIAL ROAD
INFORMATION SIGN

SCALE: | SHEET NO. 10OF 17SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	56
	TC-22	CONTRACT NO. 62T24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

TRAFFIC SIGNAL LEGEND

(NOT TO SCALE)

ITEM	EXISTING	PROPOSED
CONTROLLER CABINET		
COMMUNICATION CABINET	CC	CC
MASTER CONTROLLER	MC	MC
MASTER MASTER CONTROLLER	MMC	MMC
UNINTERRUPTABLE POWER SUPPLY		
SERVICE INSTALLATION -(P) POLE MOUNTED	P	P
SERVICE INSTALLATION -(G) GROUND MOUNTED -(GM) GROUND MOUNTED METERED	G GM	G GM
TELEPHONE CONNECTION	T	T
STEEL MAST ARM ASSEMBLY AND POLE		
ALUMINUM MAST ARM ASSEMBLY AND POLE		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE		
SIGNAL POST -(BM) BARREL MOUNTED - TEMPORARY		BM
WOOD POLE		
GUY WIRE		
SIGNAL HEAD		
SIGNAL HEAD WITH BACKPLATE		
SIGNAL HEAD OPTICALLY PROGRAMMED	P P	P P
FLASHER INSTALLATION -(FS) SOLAR POWERED	F FS F FS	F FS F FS
PEDESTRIAN SIGNAL HEAD		
PEDESTRIAN PUSH BUTTON -(APS) ACCESSIBLE PEDESTRIAN PUSH BUTTON	APS	APS
RADAR DETECTION SENSOR	R	R
VIDEO DETECTION CAMERA	V	V
RADAR/VIDEO DETECTION ZONE		
PAN, TILT, ZOOM (PTZ) CAMERA	PTZ	PTZ
EMERGENCY VEHICLE LIGHT DETECTOR		
CONFIMATION BEACON		
WIRELESS INTERCONNECT		
WIRELESS INTERCONNECT RADIO REPEATER	ERR	RR

ITEM	EXISTING	PROPOSED
HANDHOLE -SQUARE -ROUND		
HEAVY DUTY HANDHOLE -SQUARE -ROUND	H	H
DOUBLE HANDHOLE		
JUNCTION BOX		
RAILROAD CANTILEVER MAST ARM		
RAILROAD FLASHING SIGNAL		
RAILROAD CROSSING GATE		
RAILROAD CROSSBUCK		
RAILROAD CONTROLLER CABINET		
UNDERGROUND CONDUIT (UC), GALVANIZED STEEL		
TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE		
SYSTEM ITEM	S	SP
INTERSECTION ITEM	I	IP
REMOVE ITEM		R
RELOCATE ITEM		RL
ABANDON ITEM		A
CONTROLLER CABINET AND FOUNDATION TO BE REMOVED		RCF
MAST ARM POLE AND FOUNDATION TO BE REMOVED		RMF
SIGNAL POST AND FOUNDATION TO BE REMOVED		RPF
DETECTOR LOOP, TYPE I		
PREFORMED DETECTOR LOOP	P P	P P
SAMPLING (SYSTEM) DETECTOR	S S	S S
INTERSECTION AND SAMPLING (SYSTEM) DETECTOR	IS IS	IS IS
QUEUE AND SAMPLING (SYSTEM) DETECTOR	QS QS	QS QS
WIRELESS DETECTOR SENSOR	W	W
WIRELESS ACCESS POINT		

ITEM	EXISTING	PROPOSED
SIGNAL HEAD -(P) PROGRAMMABLE SIGNAL HEAD	P	P
SIGNAL HEAD WITH BACKPLATE -(P) PROGRAMMABLE SIGNAL HEAD -(RB) RETROREFLECTIVE BACKPLATE	P RB	P RB
PEDESTRIAN SIGNAL HEAD AT RAILROAD INTERSECTIONS		
PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER	C D	C D
ILLUMINATED SIGN "NO LEFT TURN"/"NO RIGHT TURN"		
NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE. ALL DETECTOR LOOP CABLE TO BE SHIELDED	5	5
GROUND CABLE IN CONDUIT, NO. 6 SOLID COPPER (GREEN)	1#6	1#6
ELECTRIC CABLE IN CONDUIT, TRACER NO. 14 1/C	1	1
COAXIAL CABLE	C	C
VENDOR CABLE	V	V
COPPER INTERCONNECT CABLE, NO. 18, 3 PAIR TWISTED, SHIELDED	6#18	6#18
FIBER OPTIC CABLE -NO. 62.5/125, MM12F -NO. 62.5/125, MM12F SM12F -NO. 62.5/125, MM12F SM24F	12F 24F 36F	12F 24F 36F
GROUND ROD -(C) CONTROLLER -(M) MAST ARM -(P) POST -(S) SERVICE	C M P S	C M P S

FILE NAME = $FILES
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Ardmore Roderick

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PLOT DATE = 3/25/2024	DATE - 03/25/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: | SHEET NO. 11OF 17SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	57
	TS-05	CONTRACT NO. 62T24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

LOOP DETECTOR NOTES

1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.

2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.

3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.

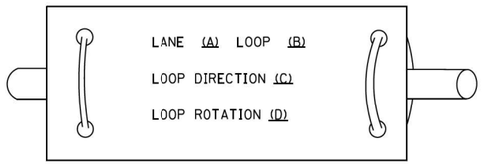
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.

5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.

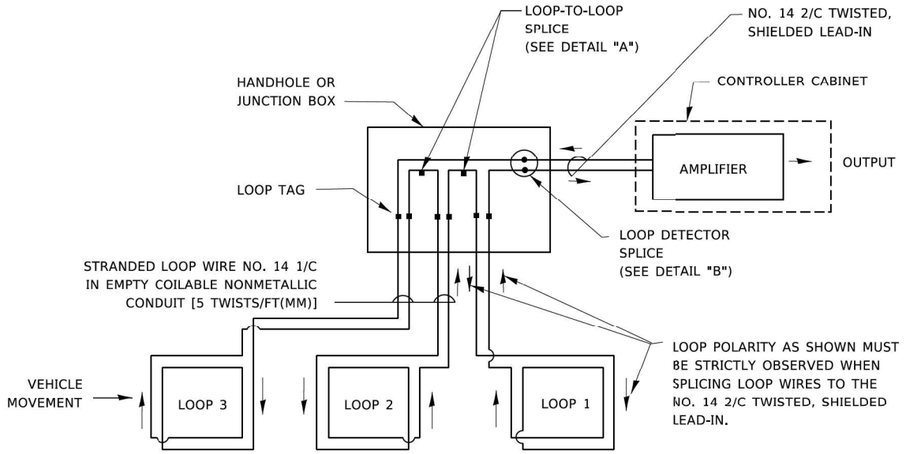
6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.

7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

LOOP LEAD-IN CABLE TAG

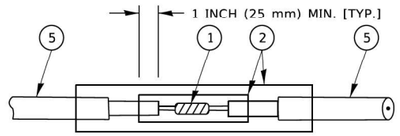


A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

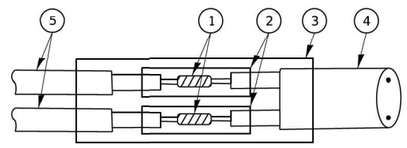


DETECTOR LOOP WIRING SCHEMATIC

- LOOPS SHALL BE SPLICED IN SERIES. SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm). IF IN CONCRETE,
- THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.

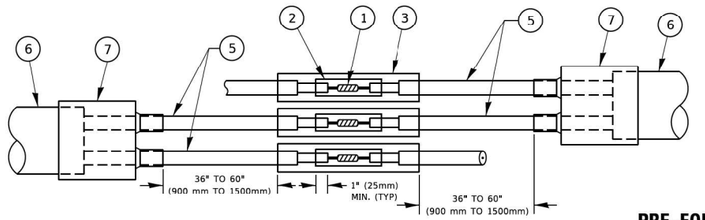


DETAIL "A"
LOOP-TO-LOOP SPLICE

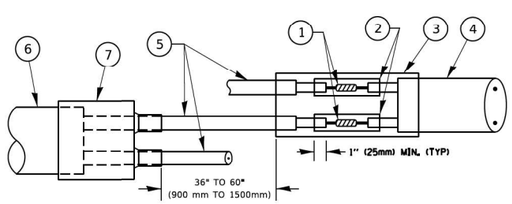


DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A"
LOOP-TO-LOOP SPLICE



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

PRE-FORMED LOOP

LOOP DETECTOR SPLICE

(1) WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH. THE WESTERN UNION SPLICES SHALL BE STAGGERED.

(2) WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.

(3) WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGHT 6" (150 mm), UNDERWATER GRADE.

(4) NO. 14 2/C TWISTED, SHIELDED CABLE.

(5) LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE. PRE-FORMED LOOP

(6) XL POLYOLEFIN 2 CONDUCTOR

(7) BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

FILE NAME = STILES
PLOT SCALE = 2.0000 ' / in.
USER NAME = rileywhite

Ardmore Roderick

USER NAME = rileywhite	DESIGNED - RW	REVISED -
	DRAWN - RW	REVISED -
PLOT SCALE = 2.0000 ' / in.	CHECKED - YK	REVISED -
PLOT DATE = 3/25/2024	DATE - 03/25/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

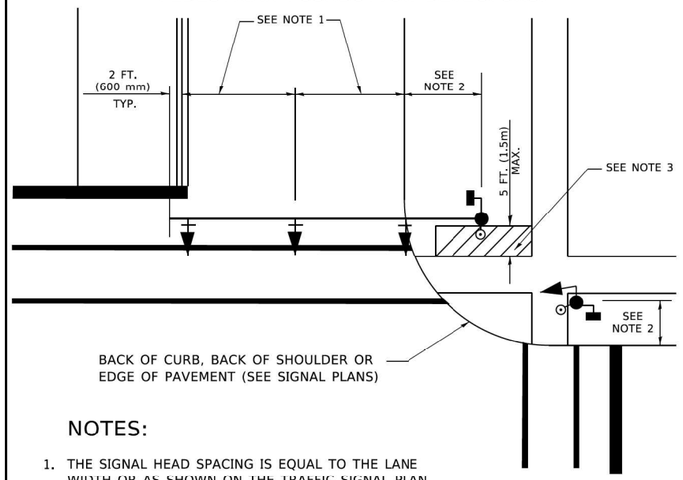
DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: | SHEET NO. 12 OF 17 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	58
	TS-05	CONTRACT NO. 62T24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

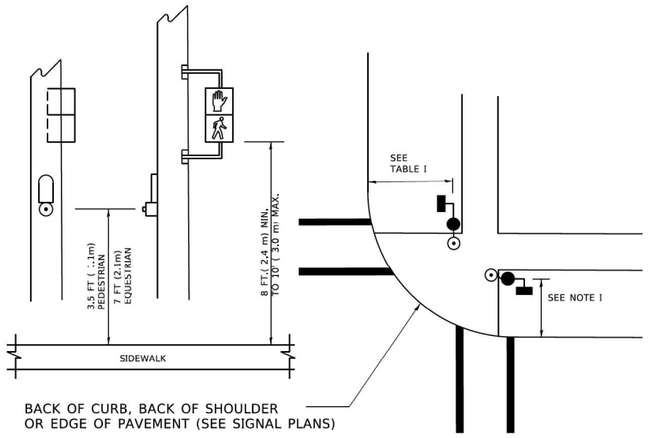
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



NOTES:

1. THE SIGNAL HEAD SPACING IS EQUAL TO THE LANE WIDTH OR AS SHOWN ON THE TRAFFIC SIGNAL PLAN.
2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
3. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST.
4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
5. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

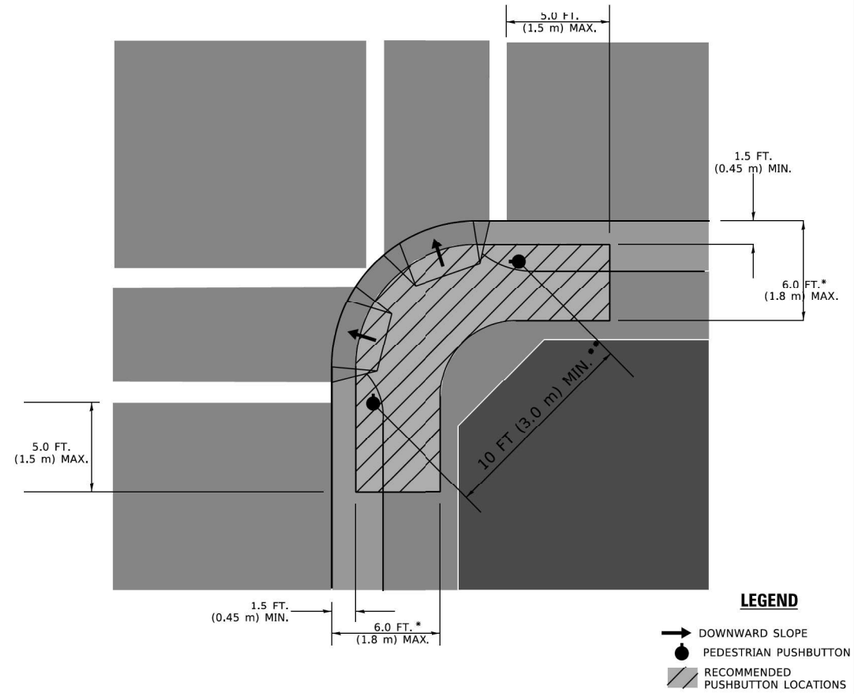
PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST



NOTES:

1. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
2. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE PEDESTRIAN SIGNAL POST OR THE PEDESTRIAN PUSH BUTTON POST.
3. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
4. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

RECOMMENDED PUSHBUTTON LOCATIONS



* WHERE THERE ARE CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5 FT (0.45 m) AND 6 FT (1.8 m) FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT, IT SHOULD NOT BE FURTHER THAN 10 FT (3 m) FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.

** WHERE THERE ARE CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT IMPRACTICAL TO PROVIDE THE 10 FT (3 m) SEPERATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

NOTES:

1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) OF A VEHICULAR SIGNAL FACE THAT IS NOT LOCATED OVER A HIGHWAY SHALL BE AT LEAST 8 FT (2.4 m) BUT NOT MORE THAN 19 FT (5.8 m) ABOVE THE SIDEWALK OR, IF THERE IS NO SIDEWALK, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY.
3. THE BOTTOM OF THE SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001, 877002, 877006, 877011 AND 877012 WITH A MINIMUM OF 16 FT (5.0 m) AND A MAXIMUM OF 18 FT. (5.5 m) FROM THE HIGHEST POINT OF PAVEMENT.
4. THE BOTTOM OF THE TEMPORARY SPAN WIRE MOUNTED SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARD 880001 WITH A MINIMUM OF 17 FT (5.18 m) FROM THE HIGHEST POINT OF PAVEMENT.
5. THE TOP OF THE SIGNAL HOUSING OF A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL NOT BE MORE THAN 25.6 FT (7.8 m) ABOVE THE PAVEMENT.

TRAFFIC SIGNAL EQUIPMENT OFFSET

TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN PUSHBUTTON POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TEMPORARY WOOD POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
CONTROLLER CABINET	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.
SERVICE INSTALLATION, GROUND MOUNT	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.

NOTES:

1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TOTHE ROADWAY SIDE OF THE FOUNDATION.
4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS, FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" CHART AND THE TRAFFIC SIGNAL INSTALLATION PLAN, COULD EFFECT THE PLACEMENT OF THE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS AND THE PEDESTRIAN PUSHBUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL INSTALLATION PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE. THE PROPOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THE ABOVE REQUIREMENTS. THE PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS MUST MEET THE REQUIREMENTS UNDER THE DETAILS ON THIS SHEET.

FILE NAME = $FILES
PLOT SCALE = 2.0000 ' / in.
USER NAME = rileywhite

Ardmore Roderick

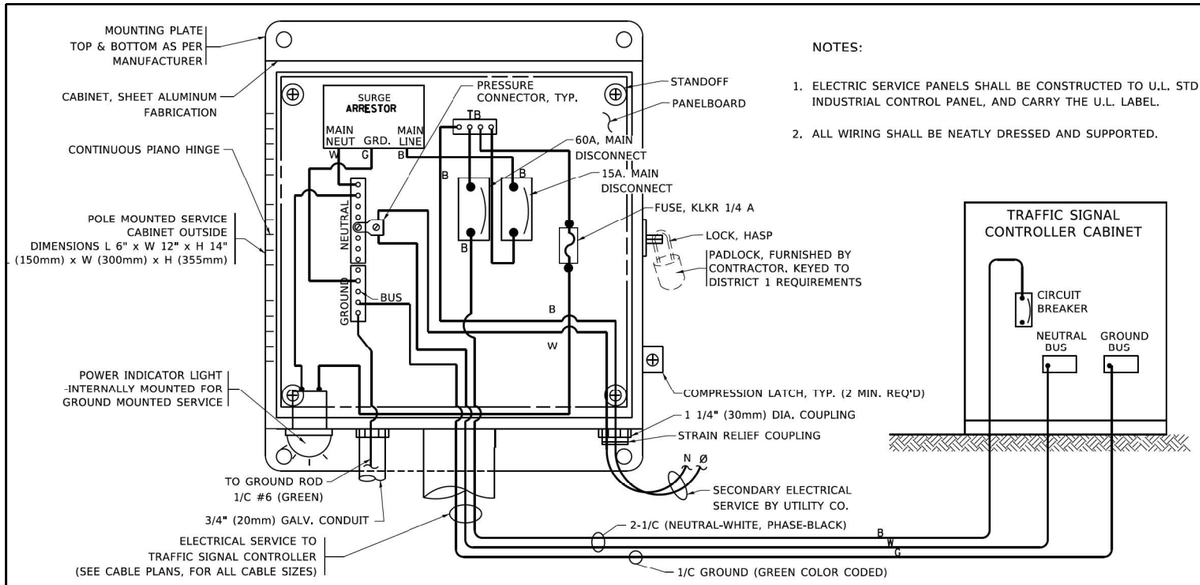
USER NAME = rileywhite	DESIGNED - RW	REVISED -	
	DRAWN - RW	REVISED -	
PLOT SCALE = 2.0000 ' / in.	CHECKED - YK	REVISED -	
PLOT DATE = 3/25/2024	DATE - 03/25/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: | SHEET NO. 13 OF 17 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	59
	TS-05	CONTRACT NO. 62T24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



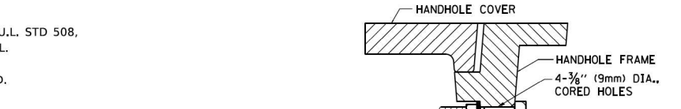
NOTES:

1. ELECTRIC SERVICE PANELS SHALL BE CONSTRUCTED TO U.L. STD 508, INDUSTRIAL CONTROL PANEL, AND CARRY THE U.L. LABEL.
2. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.

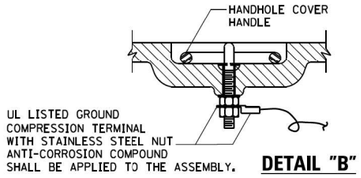
ELECTRICAL SERVICE – PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)

SERVICE INSTALLATION POLE MOUNT (SHOWN)

(NOT TO SCALE)



DETAIL "A"

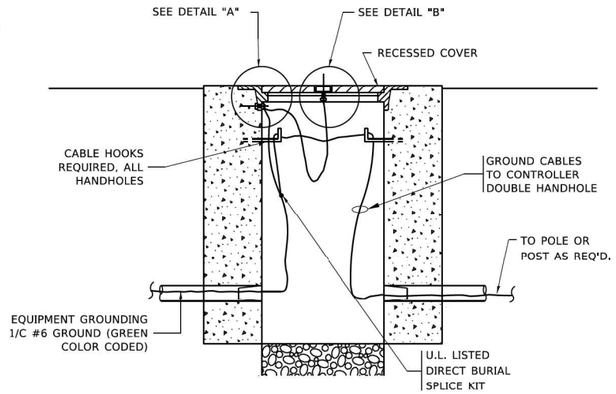


DETAIL "B"

NOTES:

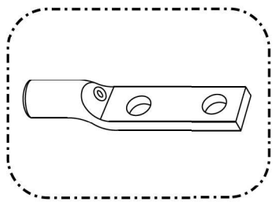
GROUNDING SYSTEM

1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC,), GROUND ROD SHALL BE 3/4" DIA. x 10'-0" (20mm x 3.0m) LONG, COPPER CLAD. ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.
2. THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
3. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
4. THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.

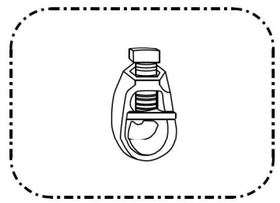


HANDHOLE COVER & FRAME – GROUNDING DETAIL

(NOT TO SCALE)



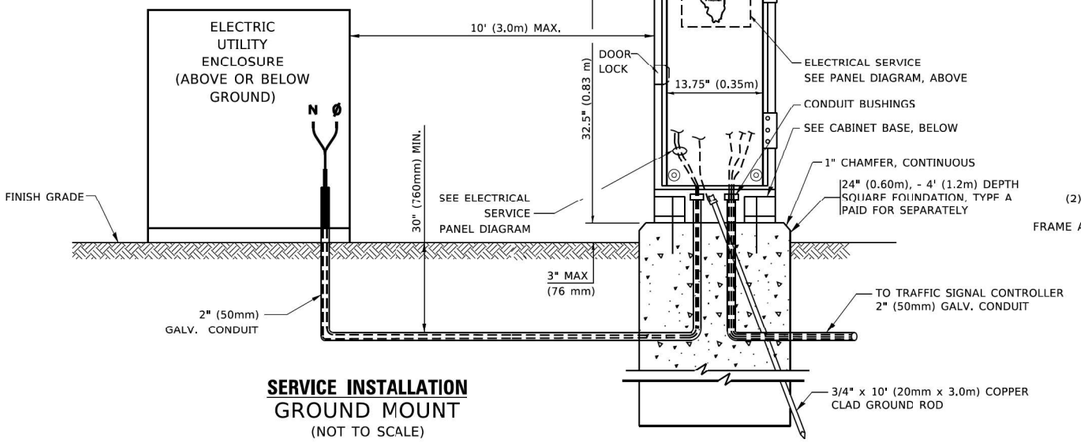
HEAVY-DUTY COMPRESSION TERMINAL (BURNDY TYPE YGHA OR APPROVED EQUAL)



¾" (20mm) HEAVY-DUTY GROUND ROD CLAMP (BURNDY TYPE GRC OR APPROVED EQUAL)

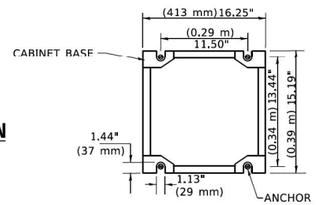
NOTES:

- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
- GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



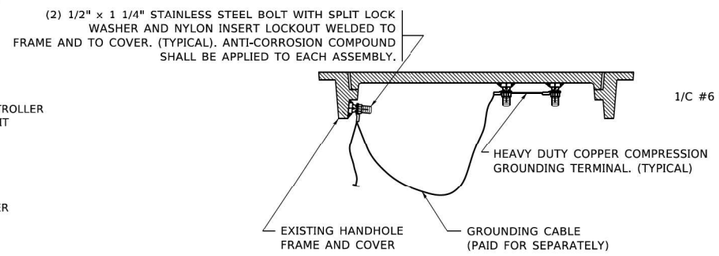
SERVICE INSTALLATION GROUND MOUNT

(NOT TO SCALE)



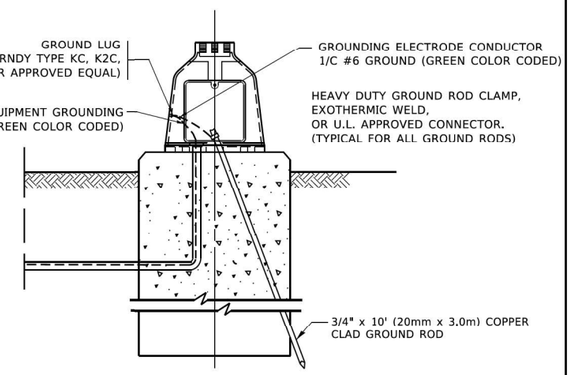
CABINET – BASE BOLT PATTERN

(NOT TO SCALE)



EXISTING HANDHOLE COVER & FRAME – GROUNDING DETAIL

(NOT TO SCALE)



MAST ARM POLE /POST–GROUNDING DETAIL

(NOT TO SCALE)

FILE NAME = STILES
PLOT SCALE = 2.0000 ' / in.
USER NAME = rileywhite

Ardmore Roderick

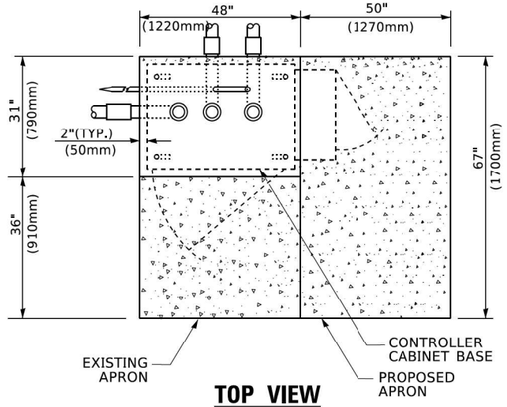
USER NAME = rileywhite	DESIGNED - RW	REVISED -
	DRAWN - RW	REVISED -
PLOT SCALE = 2.0000 ' / in.	CHECKED - YK	REVISED -
PLOT DATE = 3/25/2024	DATE - 03/25/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

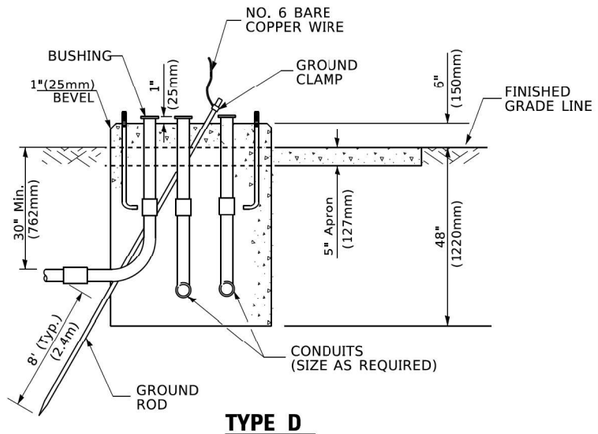
DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: | SHEET NO. 14 OF 17SHEETS | STA. | TO STA.

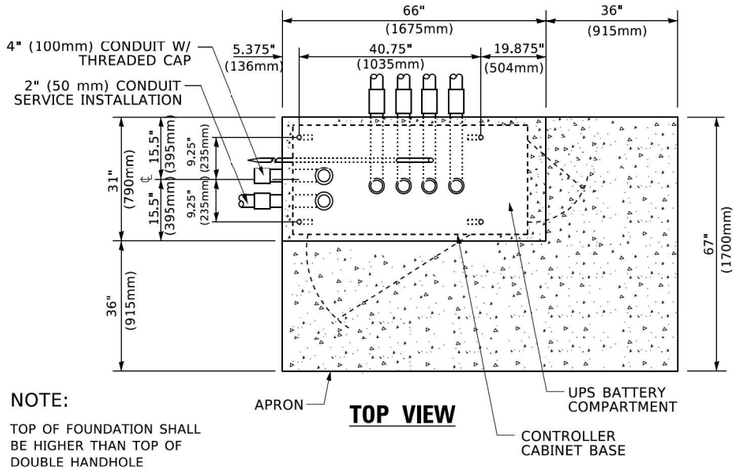
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	60
	TS-05	CONTRACT NO. 62T24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



TOP VIEW



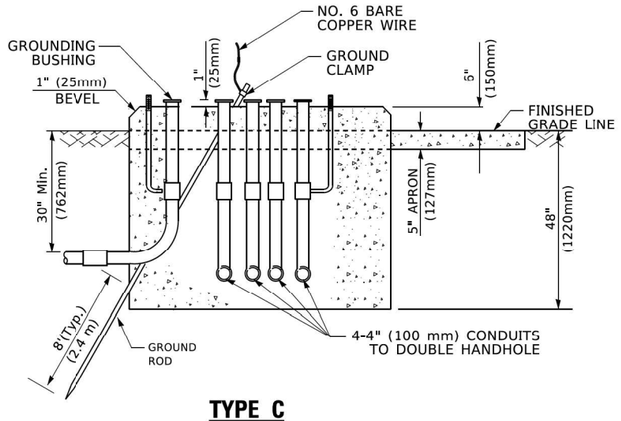
TYPE D
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET



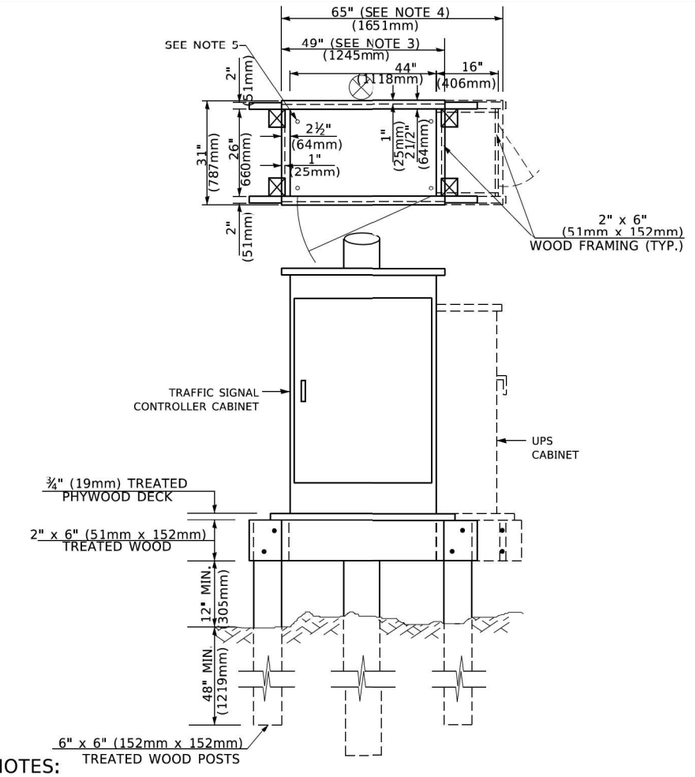
NOTE:

TOP OF FOUNDATION SHALL BE HIGHER THAN TOP OF DOUBLE HANDHOLE

TOP VIEW



TYPE C
FOR GROUND MOUNTED
SUPER P (TYPE IV) AND SUPER R (TYPE V)
CONTROLLER CABINETS



NOTES:

1. BASED ON CONTROLLER CABINET TYPE IV WITH BASE DIMENSIONS OF 26" x 44" (660mm x 1118mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED
2. BASED ON UNINTERRUPTIBLE POWER SUPPLY CABINET WITH BASE DIMENSIONS OF 16" x 25" (406mm x 635mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
3. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.
4. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET.
5. DRILLED HOLES THROUGH THE PLATFORM BASE TO MATCH THE CONTROLLER CABINET BOLT TEMPLATE. FASTEN THE CONTROLLER CABINET TO THE PLATFORM WITH CARRIAGE BOLTS, WASHERS AND NUTS.
6. FASTEN ALL SUPPORT WOOD FRAMING TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION..

TEMPORARY SIGNAL CONTROLLER
WOOD SUPPORT PLATFORM

CABLE SLACK LENGTH	FEET	METER
HANDHOLE	6.5	2.0
DOUBLE HANDHOLE	13.0	4.0
SIGNAL POST	2.0	0.6
MAST ARM	2.0	0.6
CONTROLLER CABINET	1.5	0.5
FIBER OPTIC AT CABINET	13.0	4.0
ELECTRIC SERVICE AT (CABINET OR SERVICE LOCATION)	1.5	0.5
GROUND CABLE (SIGNAL POST, MAST ARM, CABINET)	1.5	0.5
GROUND CABLE (BETWEEN FRAME AND COVER)	5.0	1.6

CABLE SLACK

VERTICAL CABLE LENGTH	FEET	METER
MAST ARM POLE (MAST ARM MOUNTED SIGNAL HEAD) (L = MAST ARM LENGTH - DISTANCE TO SIGNAL HEAD FROM END OF ARM)	20.0+L	6.0+L
BRACKET MOUNTED (MAST ARM POLE OR SIGNAL POLE)	13.0	4.0
PEDESTRIAN PUSH BUTTON	6.0	2.0
SERVICE INSTALLATION POLE MOUNT TO SERVICE DROP	13.5	4.1
SERVICE INSTALLATION POLE MOUNT TO GROUND	13.5	4.1
SERVICE INSTALLATION GROUND MOUNT	6.0	2.0
FOUNDATION (SIGNAL POST, MAST ARM POLE, CONTROLLER CABINET, SERVICE-GROUND MOUNT)	3.0	1.0

VERTICAL CABLE LENGTH

FOUNDATION	DEPTH
TYPE A - Signal Post	4'-0" (1.2m)
TYPE C - CONTROLLER W/ UPS	4'-0" (1.2m)
TYPE D - CONTROLLER	4'-0" (1.2m)
SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SQUARE	4'-0" (1.2m)

DEPTH OF FOUNDATION

Mast Arm Length	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

NOTES:

1. These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average Unconfined Compressive Strength (Qu) > 1.0 tsf (100 kpa). This strength shall be verified by boring data prior to construction or with testing by the Engineer during foundation drilling. The Bureau of Bridges & structures should be contacted for a revised design if other conditions are encountered.
2. Combination mast arm assemblies under 55 feet (15.8 m) shall use 36" (900 mm) diameter foundations.
3. Combination mast arm assemblies under 56 feet (15.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm) diameter foundations
4. For mast arm assemblies with dual arms refer to state standard 878001..

DEPTH OF MAST ARM FOUNDATIONS, TYPE E

FILE NAME = SFILES
PLOT SCALE = 2.0000 ' / in.
USER NAME = rileywhite

Ardmore Roderick

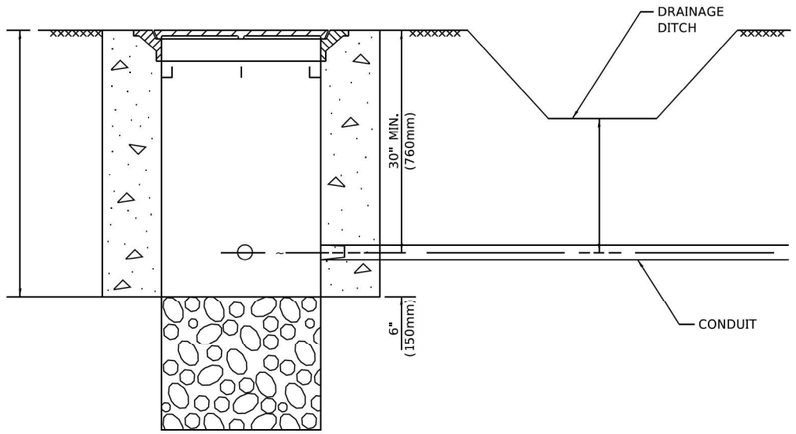
USER NAME = rileywhite	DESIGNED - RW	REVISED -
	DRAWN - RW	REVISED -
PLOT SCALE = 2.0000 ' / in.	CHECKED - YK	REVISED -
PLOT DATE = 3/25/2024	DATE - 03/25/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: | SHEET NO. 15OF 17SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	61
	TS-05	CONTRACT NO. 62T24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

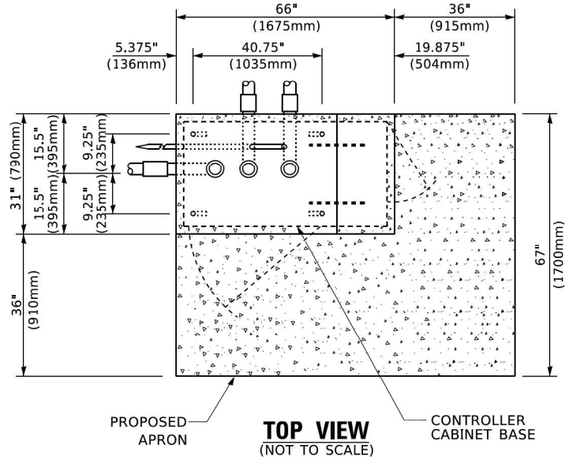


NOTES:

1. CONDUIT DEPTH SHALL BE A MINIMUM OF 30" (760mm) BELOW THE BOTTOM OF THE DRAINAGE DITCH OR ANY SLOPING GROUND
2. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL CONDUIT PLACED UNDER ROADWAY PAVEMENT, MULTI-USE PATHS, SIDEWALKS AND SOIL SURFACES.
3. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL HANDHOLES, HEAVY DUTY HANDHOLES AND DOUBLE HANDHOLES.

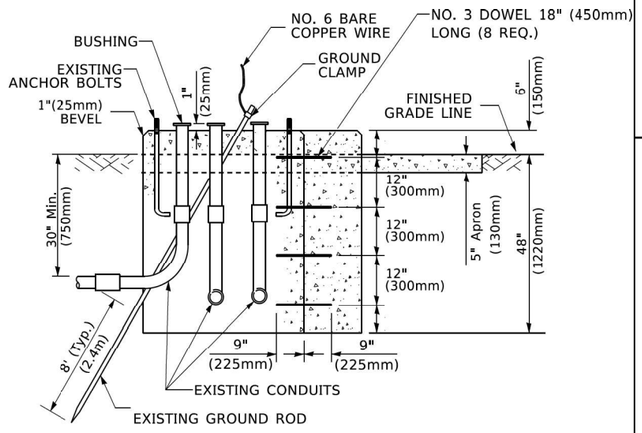
HANDHOLE WITH MINIMUM CONDUIT DEPTH

(NOT TO SCALE)



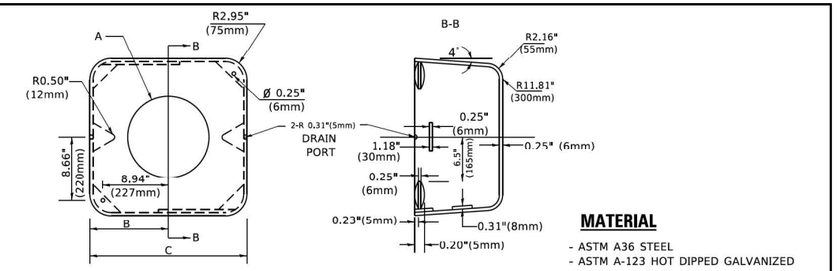
TOP VIEW

(NOT TO SCALE)



MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION

(NOT TO SCALE)



MATERIAL

- ASTM A36 STEEL
- ASTM A-123 HOT DIPPED GALVANIZED

A	B	C	HEIGHT	WEIGHT
VARIES	9.5"(241mm)	19"(483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)
VARIES	10.75"(273mm)	21.5"(546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 kg)
VARIES	13.0"(330mm)	26"(660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)
VARIES	18.5"(470mm)	37"(940mm)	7" (178mm) - 12" (300mm)	126 lbs (57 kg)

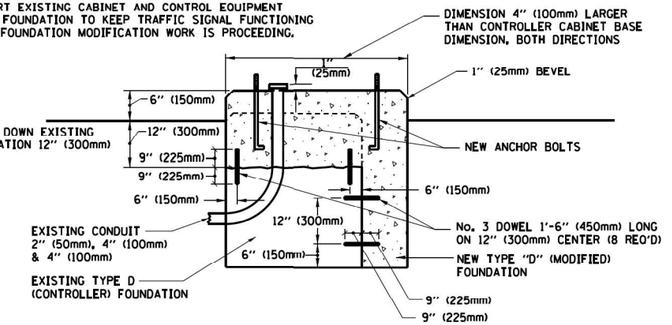
SHROUD

NOTES:

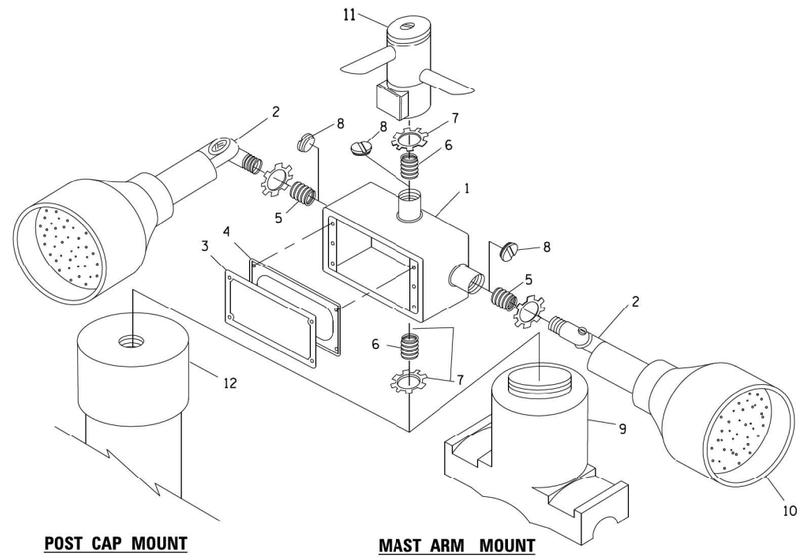
1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
2. THE SUPPLIER SHALL VERIFIED THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.

NOTE:

SUPPORT EXISTING CABINET AND CONTROL EQUIPMENT ABOVE FOUNDATION TO KEEP TRAFFIC SIGNAL FUNCTIONING WHILE FOUNDATION MODIFICATION WORK IS PROCEEDING.



MODIFY EXISTING TYPE "D" FOUNDATION



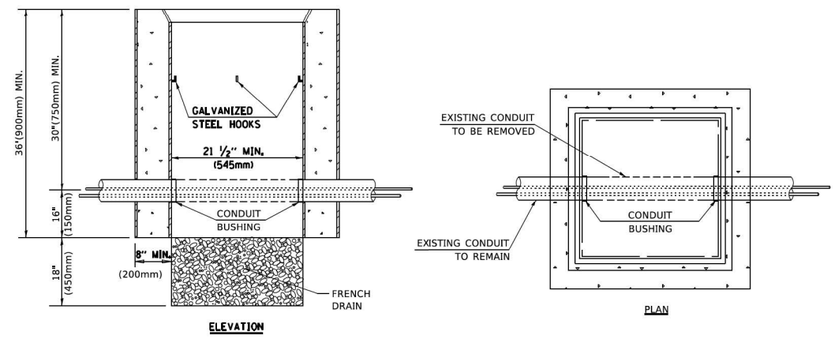
POST CAP MOUNT **MAST ARM MOUNT**

EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL

ITEM NO.	IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU.IN. (0.000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	¾"(19 mm) CLOSE NIPPLE
7	¾"(19 mm) LOCKNUT
8	¾"(19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

NOTES:

1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
2. ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT
   ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT
   ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
3. WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4 "(19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.



NOTES:

1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
2. REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCLUDED WITH THE COST OF THE HANDHOLE.

HANDHOLE TO INTERCEPT EXISTING CONDUIT

FILE NAME = STILES
PLOT SCALE = 2.0000 ' / in.
USER NAME = rileywhite

Ardmore Roderick

USER NAME = rileywhite	DESIGNED - RW	REVISED -
	DRAWN - RW	REVISED -
PLOT SCALE = 2.0000 ' / in.	CHECKED - YK	REVISED -
PLOT DATE = 3/25/2024	DATE - 03/25/2024	REVISED -

STATE OF ILLINOIS
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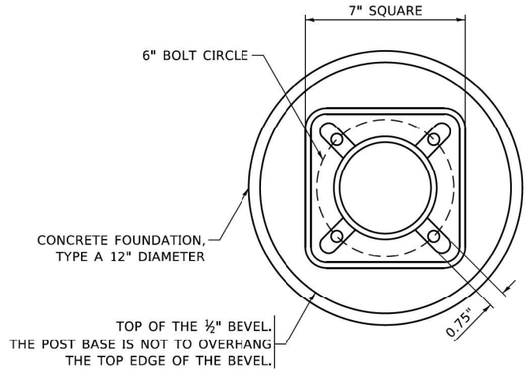
DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: | SHEET NO. 16OF 17SHEETS | STA. | TO STA.

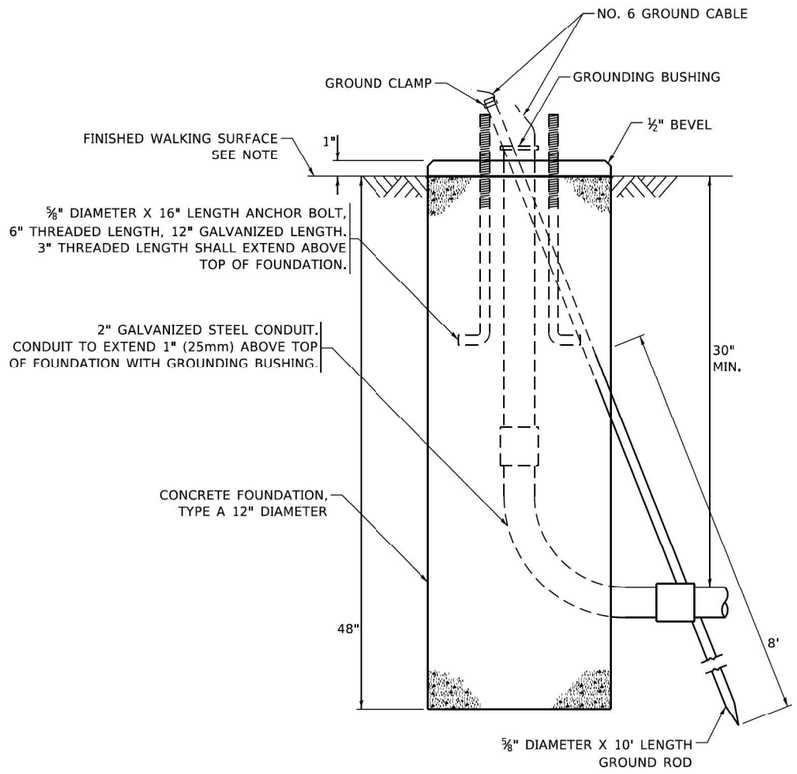
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	62
	TS-05	CONTRACT NO. 62T24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



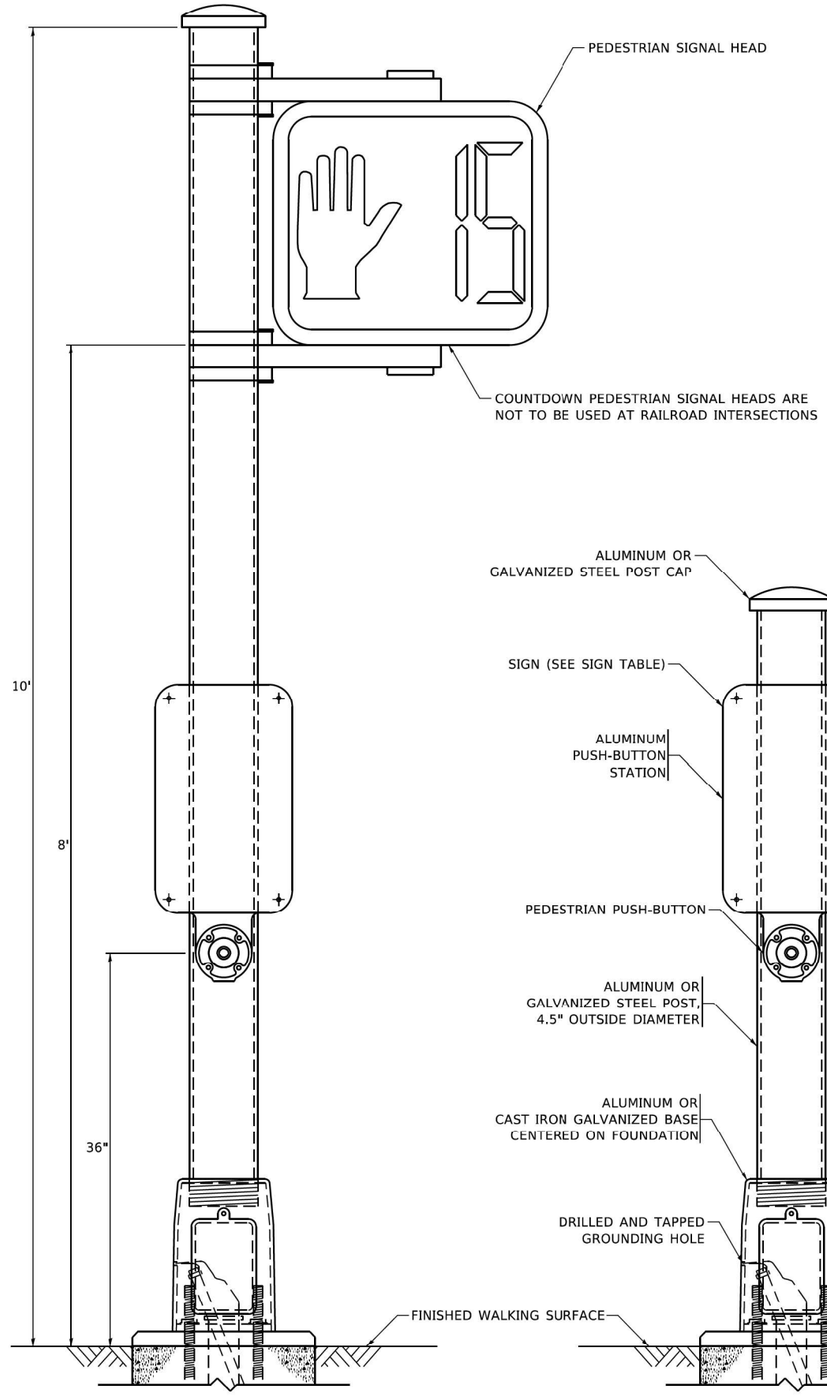
BOLT PATTERN

NOTE:

1. IF THE PEDESTRIAN SIGNAL POST FOUNDATION IS INSTALLED WITHIN OR BEHIND A BARRIER CURB, THE TOP OF THE FOUNDATION SHALL BE INSTALLED FLUSH WITH THE TOP OF THE BARRIER CURB.



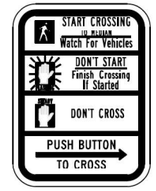
CONCRETE FOUNDATION, TYPE A 12–INCH DIAMETER



PEDESTRIAN SIGNAL POST, 10 FT.

PEDESTRIAN SIGNAL POST, 5 FT.

R10–3b



R10–3d

R10–3e

SIGN TABLE

SIGN	DIMENSIONS
R10-3b (RAILROAD ONLY)	9" X 12"
R10-3d (RAILROAD ONLY)	9" X 12"
R10-3e	9" X 12"

NOTES:

1. THE SIGN PANELS SHALL BE TYPE AP SHEETING.
2. THE ARROW ON SIGNS FOR PUSH-BUTTONS SERVING TWO DIRECTIONS ON THE SAME PHASE SHALL BE BI-DIRECTIONAL.
3. THE SIGN FOR DUAL-CALL PUSH-BUTTONS SHALL HAVE NO ARROW.

FILE NAME = STILES
PLOT SCALE = 2.0000 ' / in.
USER NAME = rileywhite

Ardmore Roderick

USER NAME = rileywhite	DESIGNED - RW	REVISED -
	DRAWN - RW	REVISED -
PLOT SCALE = 2.0000 ' / in.	CHECKED - YK	REVISED -
PLOT DATE = 3/25/2024	DATE - 03/25/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: | SHEET NO. 17OF 17SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	FAP 0374 22 BJ	COOK	63	63
	TS-05	CONTRACT NO. 62T24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		