03-08-2024 LETTING ITEM 019

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

* 14 + 1 = 15 TOTAL SHEETS

D-91-081-24

JO DAVIESS STEPHENSON WINNESAN CARRIQUE OCCLE WHITESIDE: LEE ROCK IBLAND MERCER STARK MOSCINGE WHOSCINGE NAMOSCINGE NAMOSCINCE NAMOSCINGE NAMOSCINGE NAMOSCINGE NAMOSCINGE NAMOSCINGE

FOR INDEX OF SHEETS, SEE SHEET NO. 2

THE PROJECT IS LOCATED IN THE CITY OF CHICAGO

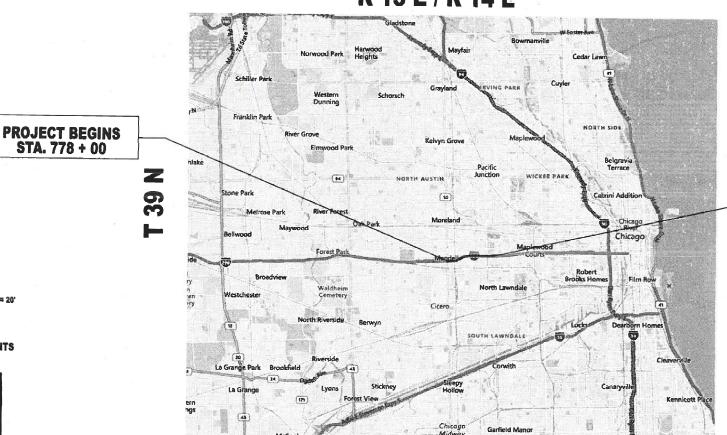
TRAFFIC DATA
2022 ADT = 185,600
POSTED SPEED = 55 MPH

PROPOSED HIGHWAY PLANS

FAI 290: I-290 (EISENHOWER EXPWY)
CICERO AVENUE TO CENTRAL PARK AVENUE
SECTION: FAI 290 23 PATCH
INTERMITTENT RESURFACING
COOK COUNTY

C-91-090-24

R 13 E / R 14 E



PROJECT ENDS STA. 842 + 00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED NOVEMBER 2120 23

LOCATION OF SECTION INDICATED THUS: -

CELLETO (OB REGIONAL EN

Sove A.C

ENGINEER OF DESIGN AND ENVIRONMENT

February 2, 2024

DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

PROJECT ENGINEER: RODRIGO LEDEZMA PROJECT MANAGER: J. ALAIN MIDY

ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION

(847) 705-4580 (847) 221-3056 WEST CHICAGO TOWNSHIP

GROSS LENGTH = 6,400.00 FT. = 1.21 MILE NET LENGTH = 3.958 FT. = 0.75 MILE

CONTRACT NO. 62W04

1-800-892-0123

0

OR 811 C.U.A.N: 312-744-7000 DESCRIPTION

DETECTOR LOOP INSTALLATION DETAILS FOR RAODWAY RESURFACING (TS-07)

SHEET NO.

14

STATE STANDARDS

DESCRIPTION

GENERAL NOTES

1	COVER SHEET	000001-08	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
2	INDEX OF SHEETS, STATE STANDARDS, AND GENERAL NOTES	604001-05	FRAME AND LIDS TYPE 1
3	SUMMARY OF QUANTITIES	701400-12	APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
4	INTERMITTENT RESURFACING SCHEDULE	701401-13	LANE CLOSURE, FREEWAY/EXPRESSWAY
5-7	PLAN SHEETS	701411-09	LANE CLOSURE, MULTILANE, AT ENTRANCE OR EXIT RAMP, FOR SPEEDS > 45 MPH
8	ENTRANCE AND EXIT RAMP CLOSURE DETAILS (TC-08)	701428-01	TRAFFIC CONTROL, SETUP AND REMOVAL, FREEWAY/EXPRESSWAY
9	TRAFFIC CONTROL DETAILS FOR FREEWAY SINGLE AND MULTILANE WEAVE (TC-09)	701446-11	TWO LANE CLOSURE, FREEWAY/EXPRESSWAY
10	TYPICAL APPLICATION FOR RAISED REFLECTIVE PAVEMENT MARKERS	701901-09	TRAFFIC CONTOL DEVICES
	(SNOW-PLOW RESISTANT) (TC-11)	886001-01	DETECTOR LOOP INSTALLATIONS
11A, 11B	MULTILANE FREEWAY PAVEMENT MARKING DETAILS (TC-12)		
12	TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES (TC-17)		
13	FREEWAY/EXPRESSWAY SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS ON FREEWAYS/EXPRESSWAYS (TC-18)		

STANDARD NO.

2.	THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILI COMPANIES AND THE CITY OF CHICAGO.
3	THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A VARD OR FIELD OFFICE

1. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "CUAN" AT 312-744-7000 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE

AND GAS FACILITIES, (48 HOURS NOTIFICATION IS REQUIRED).

- ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- 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.
- THE RESIDENT ENGINEER SHALL CONTACT EMAD ALHUSSEINI AREA TRAFFIC FIELD TECHNICIAN, AT EMAD.ALHUSSEINI@ILLINOIS.GOV, A MINIMUM OF TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
- 6. 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.
- ALL PAVEMENT MARKINGS SHALL BE PLACED THROUGHOUT THE IMPROVEMENT ACCORDING TO DISTRICT 1 TYPICAL PAVEMENT MARKING.
- 8. FRAMES AND GRATES ADJUSTMENT OF PRIVATE UTILITIES WITHIN THE PROJECT LIMITS SHALL BE DONE BY THEIR RESPECTIVE OWNERS AND ARE NOT PART OF THIS CONTRACT.
- 9. THE CONTRACTOR SHALL CONTACT THE DISTRICT TRAFFIC CONTROL SUPERVISOR FOR EXPRESSWAYS AT (847) 705-4151 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
- 10. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION. THIS SHALL INCLUDE LOCATING THE MAST ARM AND FOUNDATIONS AND VERIFYING THE MAST ARM LENGHTS.
- 11. RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED THROUGHOUT THE IMPROVEMENT ACCORDING TO THE DISTRICT STANDARDS AS NOTED
- 12. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
- 13. ALL INTERMITTENT RESURFACING LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- 14. OVERNIGHT LANE CLOSURES SHALL NOT BE ALLOWED FOR REHABILITATION PROJECTS INVOLVING DAYTIME MILLING AND RESURFACING OPERATIONS UNLESS OTHER CONDITIONS WARRANT EXTENDED LANE CLOSURE AS DETERMINED AND APPROVED IN WRITTING BY THE ENGINEER OR AS PROVIDED FOR IN THE CONTRACT SPECIFICATIONS.

HOT-MIX ASPHALT MIXTURE REQUIREMENTS						
MIXTURE TYPE	AIR VOIDS @ Ndes	PROGRAM (QMP)				
PARTIAL DEPTH PATCHING						
POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, MIX "F", N80, 2"	3.5% AT 80 GYR.	QC/QA				
QMP DESIGNATION: QUALITY CONTROL/QUALITY ASSURANCE (QC/QA); QUALITY CONTROL FOR PERFORMANCE (QCP)						

NOTE 1: THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN.

NOTE 2: 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 SPECIAL PROVISIONS.

USER NAME = Fritz.Guillaume	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -
PLOT DATE = 12/22/2023	DATE -	REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

INDEX OF SHEETS, STATE STANDARDS AND GENERAL NOTES	F. A.I R.TE.	SE CTION	COUNTY	TOTAL SHEETS	SHEET NO.
	290	FAI 290 23 PATCH	соок	14	2
	_		CONTRAC	FNO. 62V	N04
SCALE: NONE SHEET 000 OF 4 SHEETS STA. TO STA.		ILLINOIS FED. AID PROJECT			

	SUMMARY OF QUANTITIES	CONSTR. CODE 0005 100% STATE				
Code No.	ltem	Unit	Total Quantity			
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	2400	2400	0	0
60300305	FRAMES AND LIDS TO BE ADJUSTED	EACH	3	3	0	0
67100100	MOBILIZATION	LSUM	1	1	0	0
78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	26000	26000	0	0
78009005	MODIFIED URETHANE PAVEMENT MARKING - LINE 5"	FOOT	10000	10000	0	0
78009008	MODIFIED URETHANE PAVEMENT MARKING - LINE 8"	FOOT	5000	5000	0	0
78009012	MODIFIED URETHANE PAVEMENT MARKING - LINE 12"	FOOT	2600	2600	0	0
78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	120	120	0	0
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	112	112	0	0
88600100	DETECTOR LOOP, TYPE I	FOOT	60	60	0	0
X4406220	PARTIAL DEPTH REMOVAL, TYPE II, 2"	SQ YD	303.7	303.7	0	0
X4406420	PARTIAL DEPTH REMOVAL, TYPE III, 2"	SQ YD	140	140	0	0
X4406620	PARTIAL DEPTH REMOVAL, TYPE IV, 2"	SQ YD	4848	4848	0	0
X4421000	PARTIAL DEPTH PATCHING	TON	595	595	0	0
X6700407	ENGINEER'S FIELD OFFICE, TYPE A (D1)	CAL MO	12	12	0	0
X7011015	TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS)	L SUM	1	1	0	0

E: pw://ildot-pw.bentley.com.PWIDOT/Documents/IDOT Offices/District 1/ORD Projects/D108124/C

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

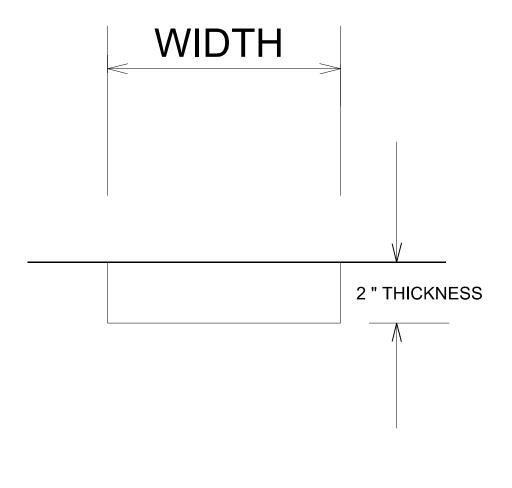
SUMMARY OF QUANTITIES
SHEETTITLE 2

SHEET 000 OF 4 SHEETS STA. TO STA.

SCALE: 1"=50'

Patch #	Lane #	Direction	Width (Feet)	Length (Feet)	Square Feet	Square Yard	Patch Type
1	1	Eastbound	12	6	72	8	2
2	3	Eastbound	12	6	72	8	2
3	2	Eastbound	12	40	480	53.3	4
4	1	Eastbound	12	6	72	8	2
5	1	Eastbound	12	15	180	20	3
6	1	Eastbound	12	40	480	53.3	4
7	2	Eastbound	12	15	180	20	3
8	2	Eastbound	12	50	600	66,7	4
9	1	Eastbound	12	6	72	8	2
10	4	Eastbound	12	40	480	53.3	4
11	2	Eastbound	12	15	180	20	3
12	4	Eastbound	12	10	120	13.3	2
13	3	Eastbound	12	6	72	8	2
14	2	Eastbound	12	50	600	66.7	4
15	2	Eastbound	12	45	540	60	4
16	4	Eastbound	12	20	240	26,7	4
17	2	Eastbound	12	90	1080	120	4
18		Eastbound	20	6	120	13.3	2
19	Ramp Joint	Eastbound	12	25		33,3	4
	1				300		
20	3	Eastbound	12	6	72	8	2
21	1	Eastbound	12	25	300	33.3	4
22	3	Eastbound	12	15	180	20	3
23	Ramp Joint	Eastbound	20	6	120	13.3	2
24	3	Eastbound	12	10	120	13.3	2
25	4	Eastbound	12	10	120	13.3	2
26	2	Eastbound	12	6	72	8	2
27	3	Eastbound	12	6	72	8	2
28	4	Eastbound	12	6	72	8	2
29	Ramp Joint	Eastbound	20	6	120	13.3	2
30	4	Eastbound	12	6	72	8	2
31	3	Eastbound	12	30	360	40	4
32	2	Westbound	12	6	72	8	2
33	4	Westbound	12	15	180	20	3
34	3	Westbound	12	50	600	66.7	4
35	3	Westbound	12	8	96	10.7	2
36	4	Westbound	12	15	180	20	3
37	Ramp Joint	Westbound	20	6	120	13.3	2
38	4	Westbound	12	20	240	26.7	4
39	4	Westbound	12	10	120	13.3	2
40	Ramp	Westbound	30	15	450	50	4
41	Ramp	Westbound	12	40	480	53.3	4
42	4	Westbound	12	6	72	8	2
43	Ramp	Westbound	8	20	160	17.8	3
44	Ramp	Westbound	6	50	300	33.3	4
45	2	Westbound	12	6	72	8	2
46	4	Westbound	12	6	72	8	2
47	3	Westbound	12	10	120	13.3	2
48	2	Westbound	12	50	600	66.7	4
49	Ramp Joint	Westbound	20	6	120	13.3	2
50	4		12	6	72	8	2
	4	Westbound					
51		Westbound	12	6	72	8	2
52	4	Westbound	12	6	72	8	2
53	3	Westbound	12	6	72	8	2
54	2	Westbound	12	6	72	8	2
55	1 Longitudinal	Westbound	12	6	72	8	2
174		Westbound	12	2960	35595	3955	4

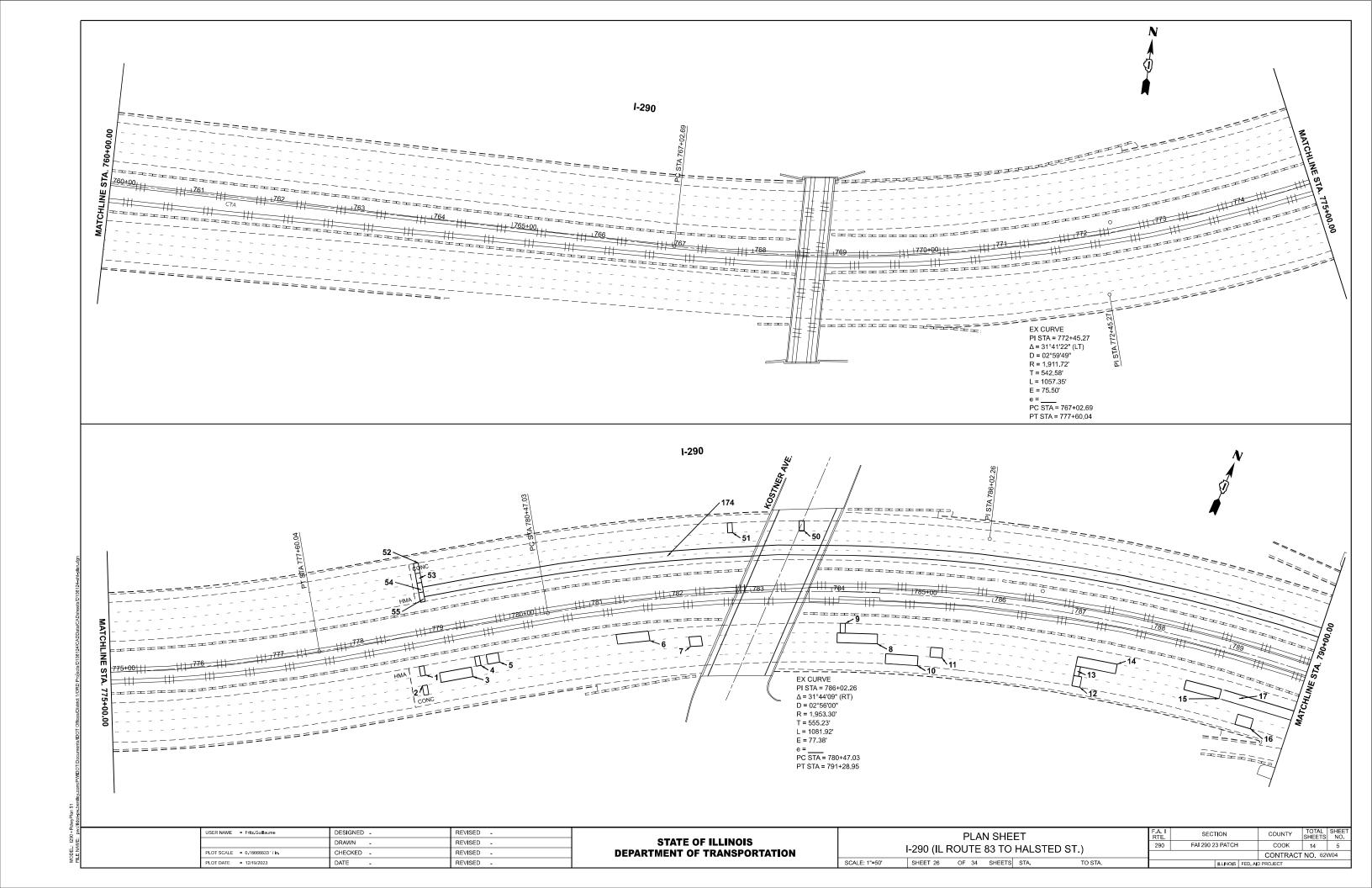
Summary of Quantities for Cicero to Homan (EB and V						
Total # of Patches	56					
Total Square Yard	5283.4					
Total Type 1 Patches	0					
Total Type 2 Patches	31 (303.7 SY)					
Total Type 3 Patches	7 (140 SY)					
Total Type 4 Patches	18 (4839.7 SY)					

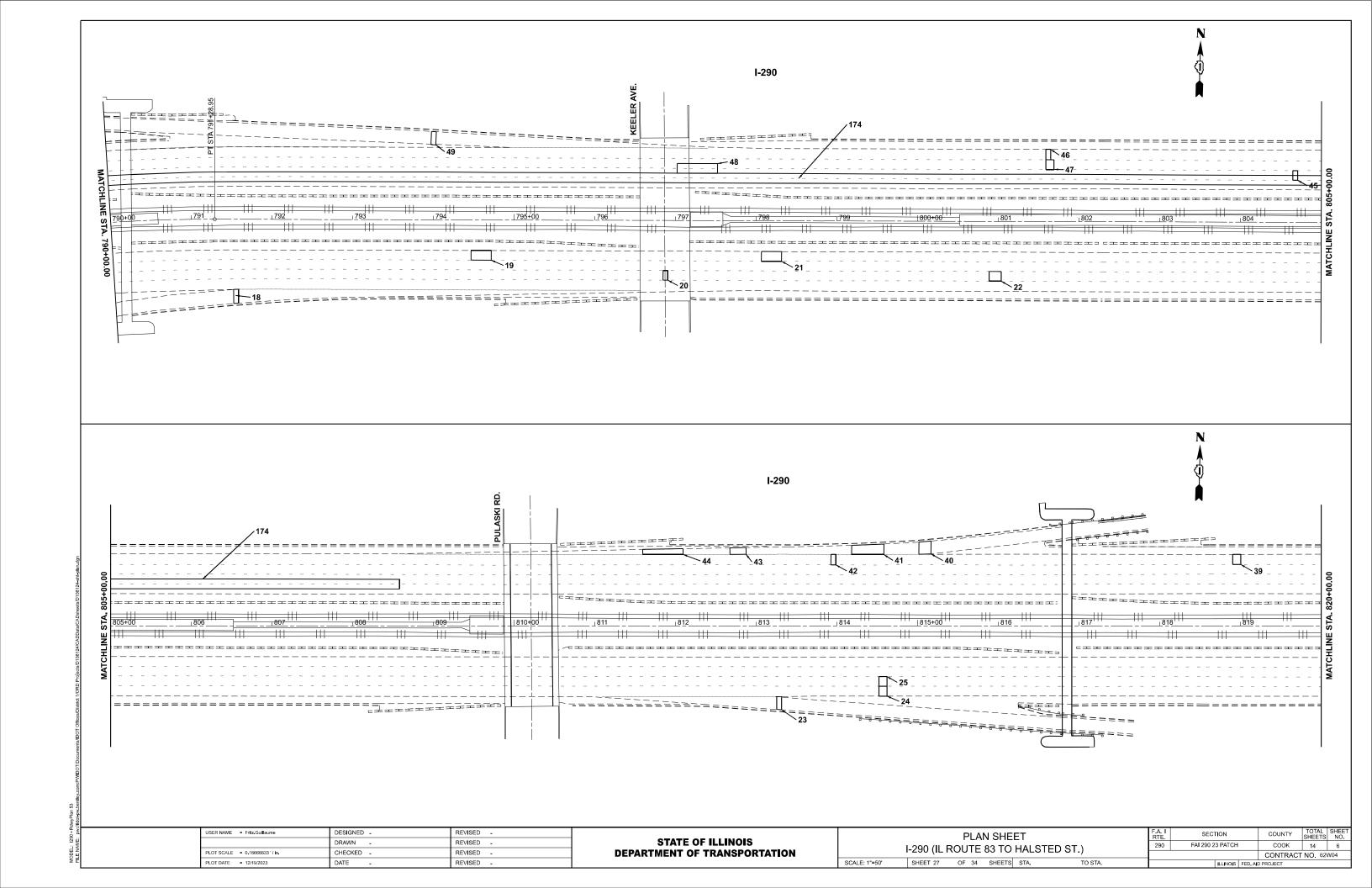


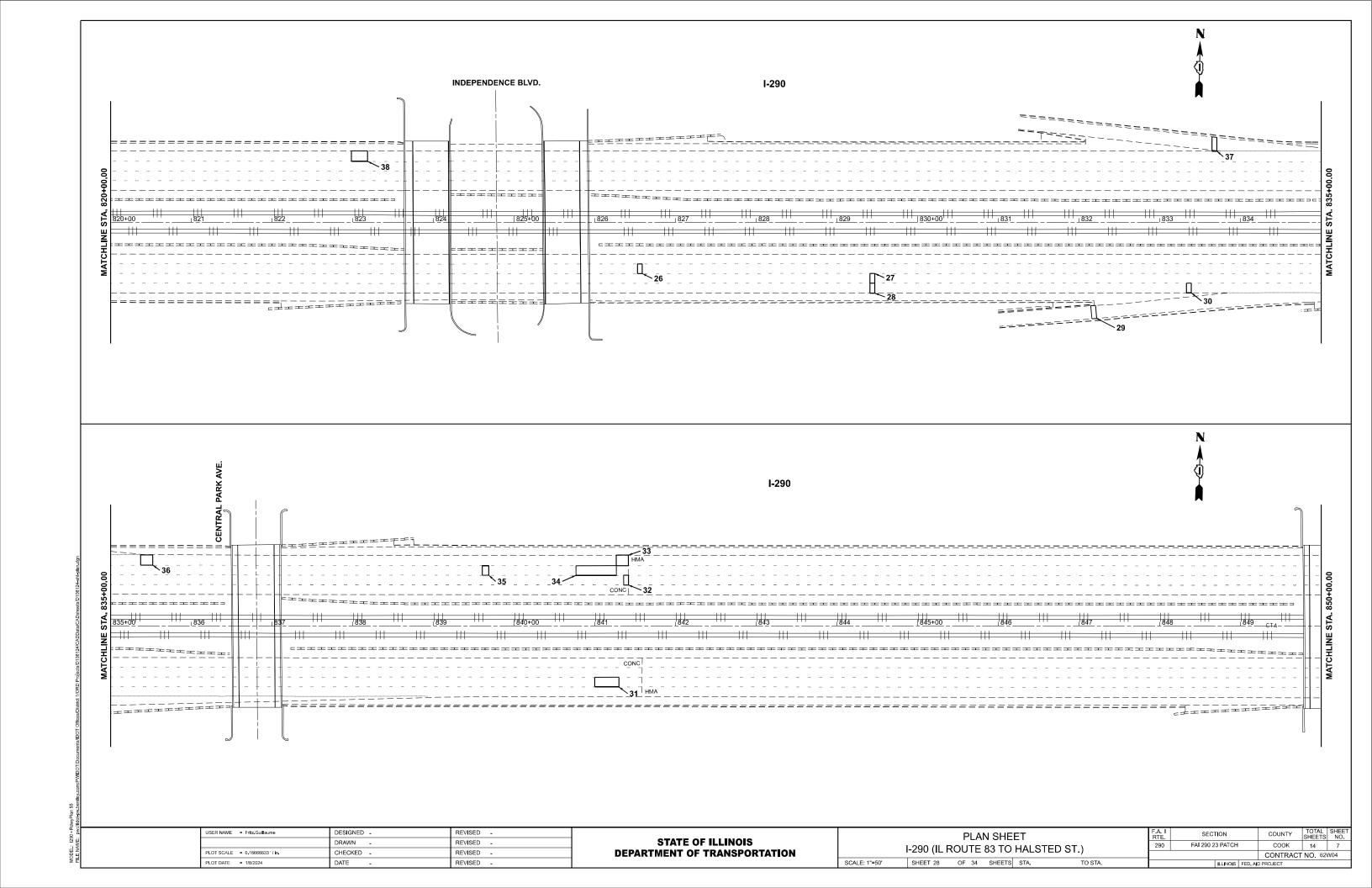
USER NAME = Fritz.Guillaume	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -
PLOT DATE = 12/20/2023	DATE -	REVISED -

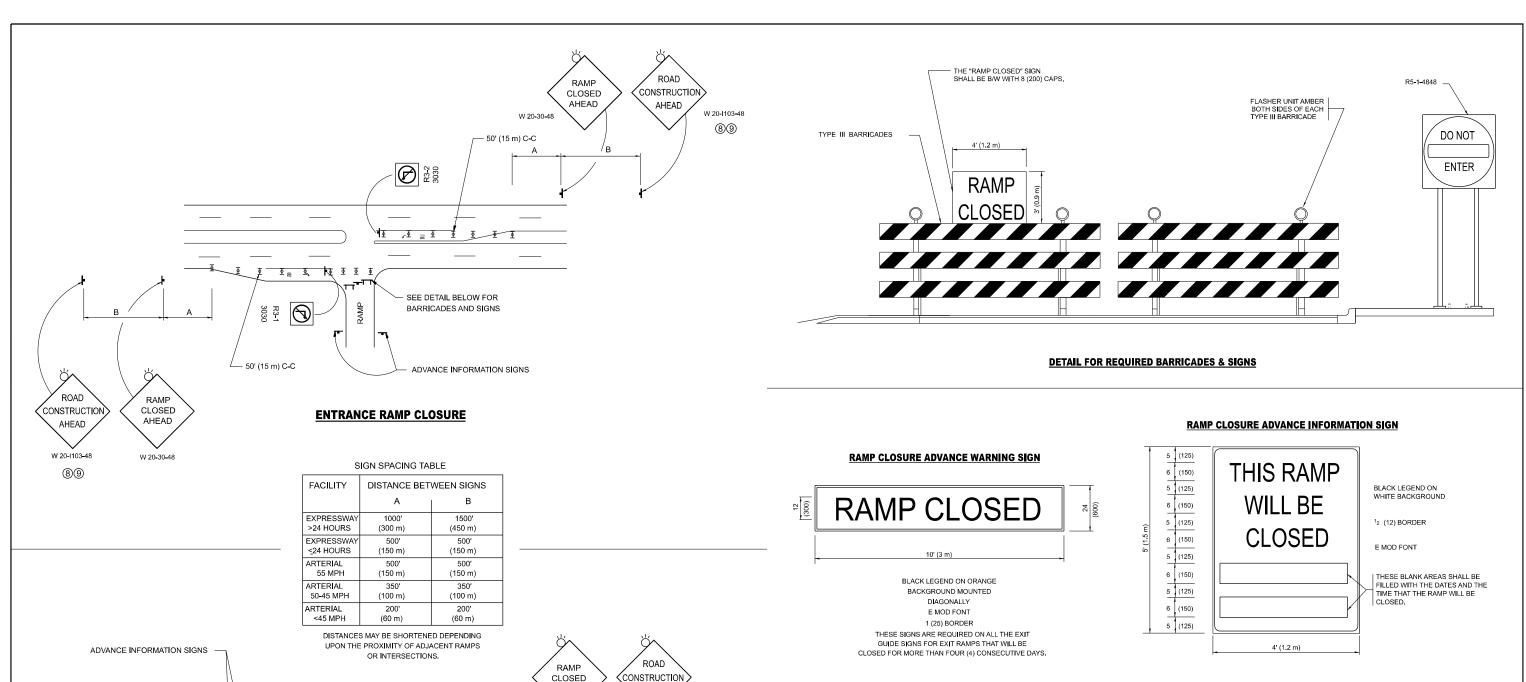
SCALE:

pw.bentley.com:PWILDO I/Documents/IDO I Offices/District 1/ORD Projects/D108124/CADData/CADsheets/D108124-shr-









SEE DETAIL BELOW FOR BARRICADES AND SIGNS

AHEAD

W 20-30-48

W 20-1103-48

®

EXIT RAMP CLOSURE

10' (3 m) C-C

SYMBOLS

- TYPE II BARRICADE OR DRUM
- TYPE III BARRICADE WITH 2 FLASHING LIGHTS

THESE SIGNS ARE REQUIRED ON BOTH SIDES OF THE RAMP, MINIMUM OF 1 WEEK IN ADVANCE OF THE CLOSURE.

THESE SIGNS SHALL BE FABRICATED AND PAID FOR ACCORDING TO THE TEMPORARY INFORMATION SIGNING SPECIAL PROVISION

GENERAL NOTES:

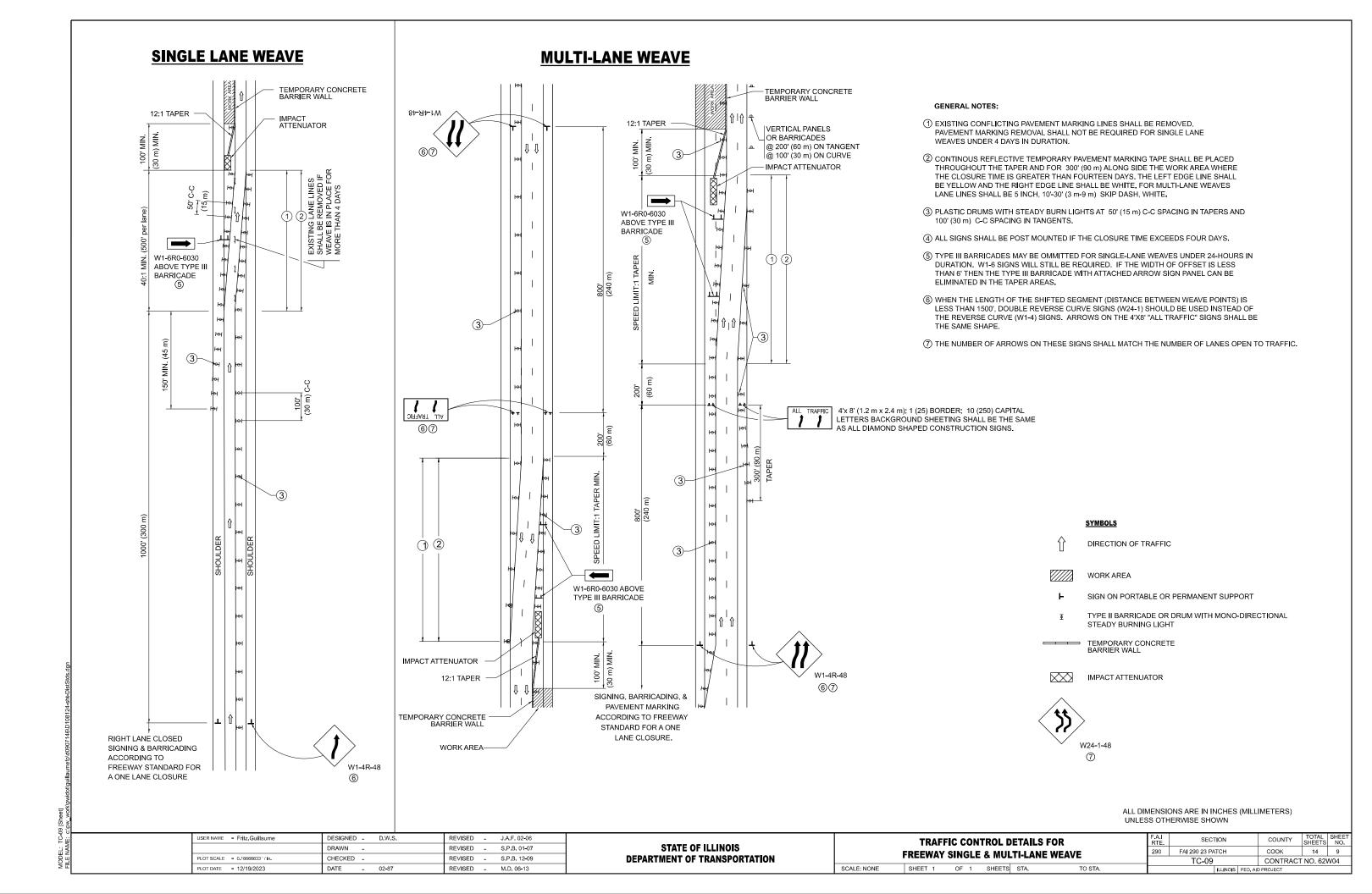
- ONES MAY BE SUBSTITUTED FOR DRUMS OR TYPE II
 BARRICADES DURING DAY OPERATIONS. CONES SHALL BE
 A MINIMUM OF 28 (700) HIGH.
- ② VERTICAL BARRICADES SHALL NOT BE USED FOR RAMP CLOSURES.
- (3) A FLAGGER SHALL BE POSITIONED AT EACH CLOSED RAMP THAT IS OPEN TO CONSTRUCTION VEHICLES, PRECEEDED BY A W20-7 FLAGGER WARNING SIGN.
- ALL ROUTE MARKERS AND TRAILBLAZER ASSEMBLIES WHICH
 DIRECT MOTORISTS TO A CLOSED FOR BUTTANNCE RAMP SHALL BE
 COVERED WHEN THE RAMP IS CLOSED FOR MORE THAN FOUR (4) DAYS.
- (5) THE SIGNING AND BARRICADING WHICH IS REQUIRED BY THIS DETAIL SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS).

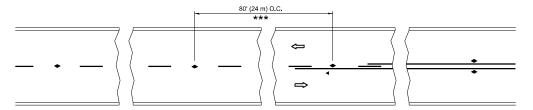
- 6 AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL RAMP CLOSURES.
- THE RAMP CLOSURE ADVANCE INFORMATION SIGNS SHALL BE ERECTED IF THE CLOSURE TIME EXCEEDS TWENTY-FOUR (24) HOURS. ADDITIONAL ADVANCE WARNING SIGNS ON EXIT GUIDE SIGNING WILL BE REQUIRED FOR EXIT RAMP CLOSURES THAT EXCEED FOUR (4) DAYS IN LENGTH
- (8) ROAD CONSTRUCTION AHEAD SIGNS MAY BE OMITTED WHEN THIS DETAIL IS USED IN CONJUNCTION WITH OTHER TRAFFIC CONTROL THAT ALREADY INCLUDES A ROAD CONSTRUCTION AHEAD SIGN.
- (9) ARTERIAL ROAD CONSTRUCTION AHEAD SIGNS SHALL BE INSTALLED ON THE LEFT SIDE OF TRAFFIC IF THE MEDIAN IS MORE THAN 10 FT WIDE.

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

USER NAME = Fritz.Guillaume	DESIGNED - D.W.S.	REVISED - S.P.B01-07			ENTRANCE AND EXIT RAMP		F.A.I RTE.	SECTION	COUNTY	TOTAL	SHEET NO.		
	DRAWN -	REVISED - S.P.B12-09	STATE OF ILLINOIS	CLOSURE DETAILS			290	FAI 290 23 PATCH	соок	14	8		
PLOT SCALE = 0.16666633 '/in.	CHECKED -	REVISED - M.D06-13	DEPARTMENT OF TRANSPORTATION		CLOSORE DETAILS			TC-08	CONTRACT NO 62W04		W04		
PLOT DATE = 11/15/2023	DATE - 02-83	REVISED - M.D01-18		SCALE: NONE	SHEET 1	OF 1	SHEETS STA.	TO STA.			PROJECT		

MODEL: TC-08 [Sheet]



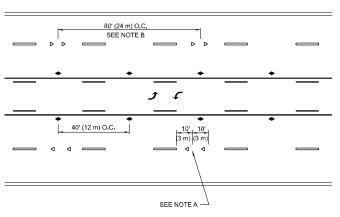


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

3 @ 40' (12 m) O.C. \Rightarrow

SEE FIGURE 3B-14 MUTCO

LANE REDUCTION TRANSITION

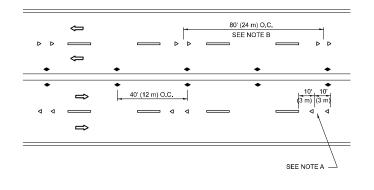


TWO-WAY LEFT TURN

TWO-LANE/TWO-WAY

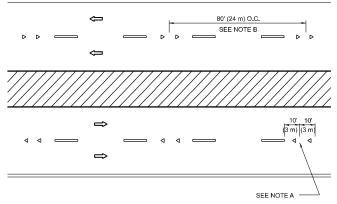
O.C.

_40' (12 m)

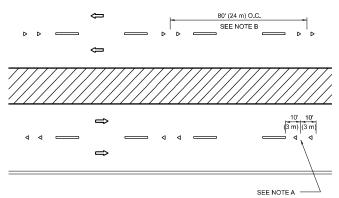


MULTI-LANE/UNDIVIDED

3 @ 40' (12 m)



MULTI-LANE/DIVIDED



MINIMUM OF 3 W 3 @ 80' (24 m) O.C. EQUALLY SPACED 3 @ 40' (12 m) 40' (12 m) O.C. \Rightarrow 40' (12 m) O.C. * SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE ** WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS

TURN LANES

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

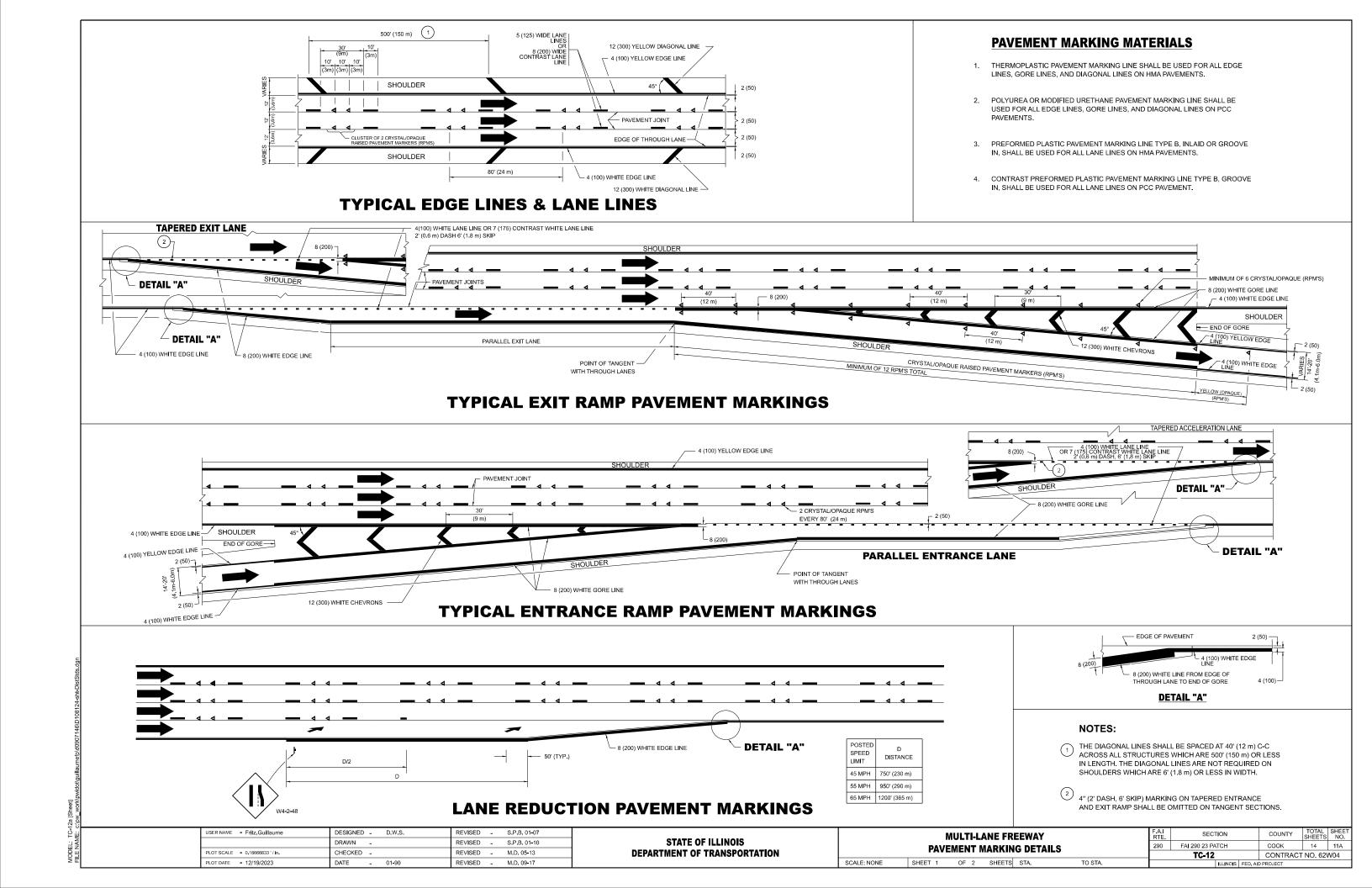
- 1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
- 2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
- 3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHALL BE INCLUDED IN THE PLANS WHEN STANDARD 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.

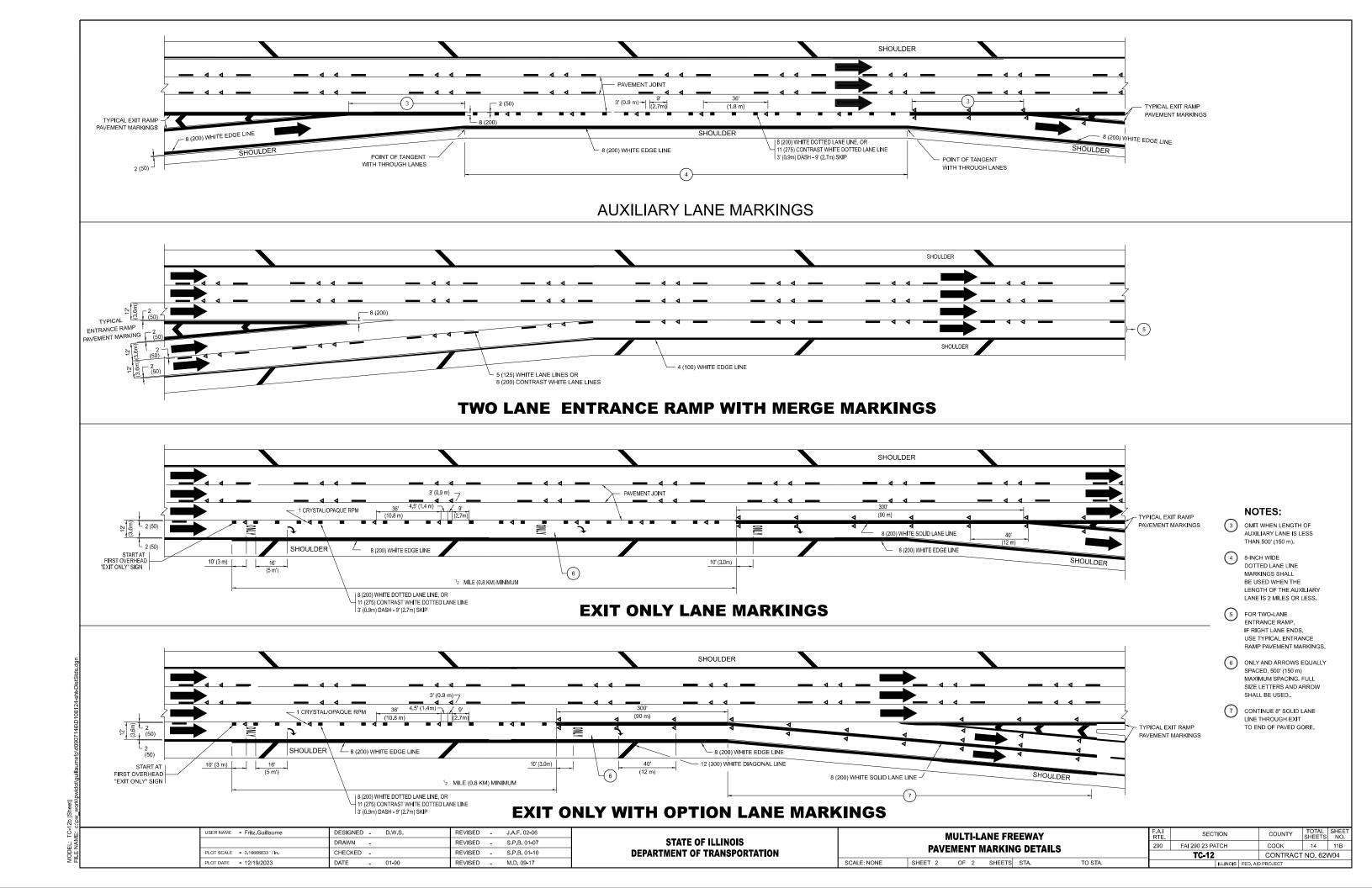
All dimensions are in inches (millimeters) unless otherwise shown.

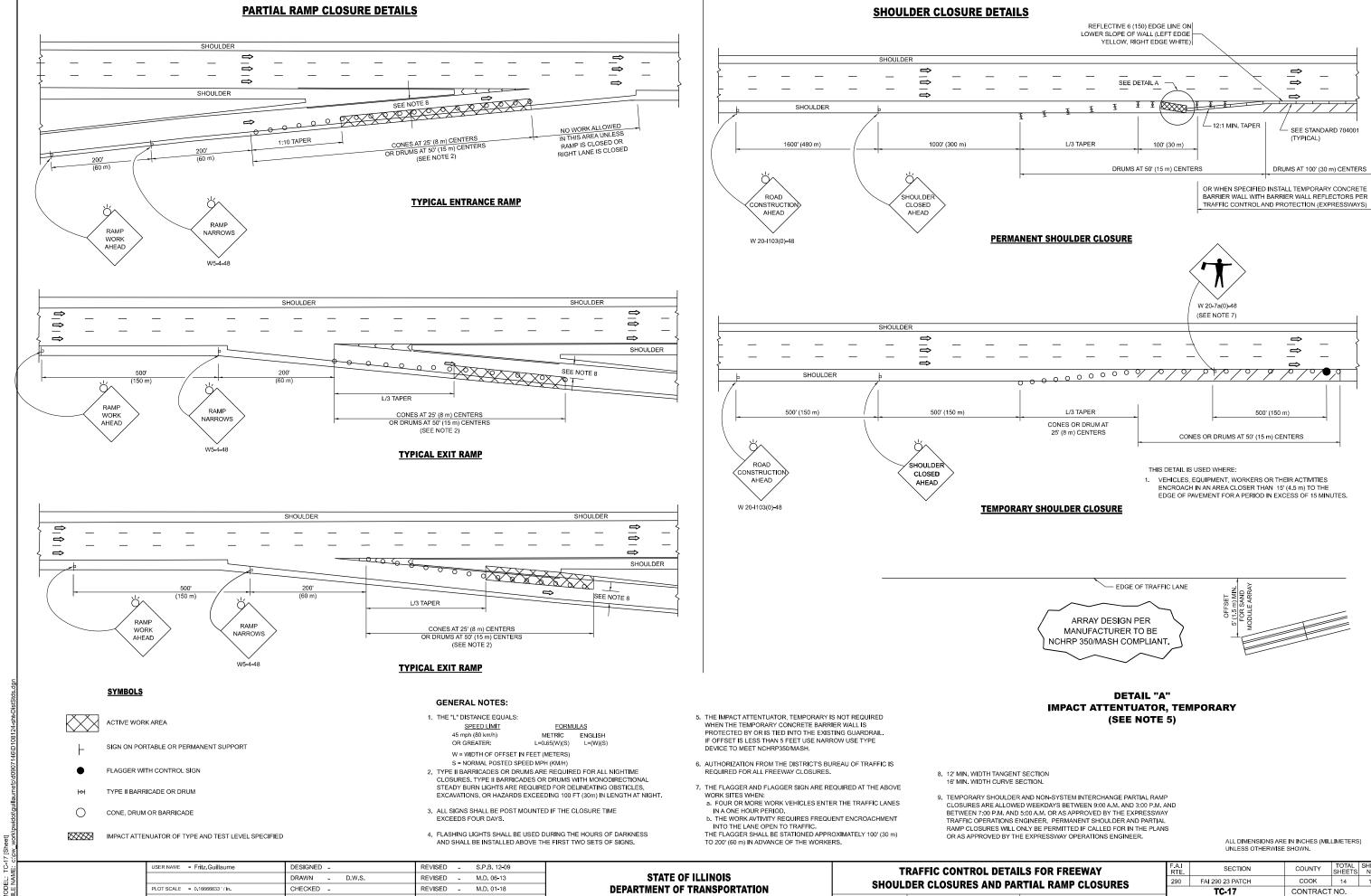
JSER NAME = Fritz.Guillaume DESIGNED -REVISED - T. RAMMACHER 03-12-99 SECTION COUNTY **TYPICAL APPLICATIONS** STATE OF ILLINOIS REVISED - T. RAMMACHER 01-06-00 DRAWN FAI 290 23 PATCH соок 14 10 RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) CHECKED . **DEPARTMENT OF TRANSPORTATION** TC-11 CONTRACT NO. 62W04 SHEET 1 OF 1 SHEETS STA. PLOT DATE = 12/19/2023 DATE REVISED - C. JUCIUS 07-01-13

3 @ 80' (24 m) O.C.

 \Rightarrow







SHEET 1 OF 1 SHEETS STA.

LOT DATE = 12/19/2023

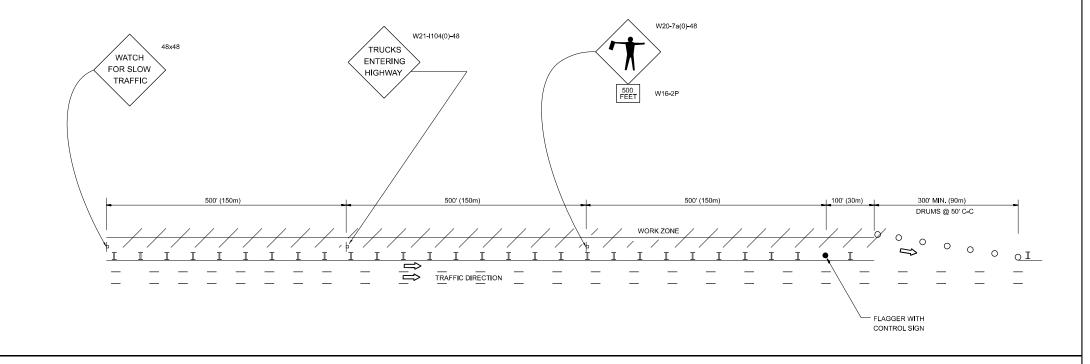
DATE

REVISED -

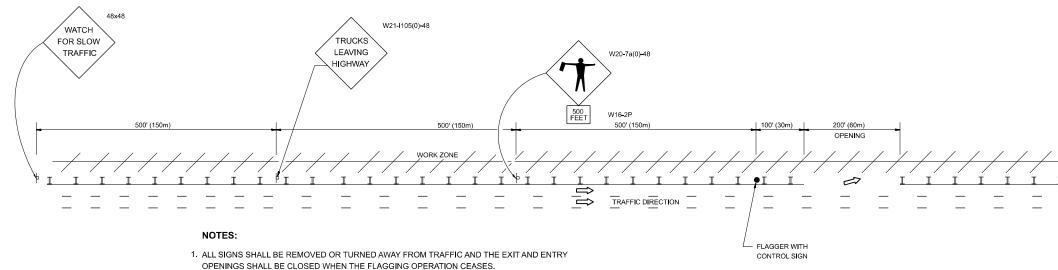
M.D. 10-20

SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS

WORK ZONE EXIT OPENING



WORK ZONE ENTRY OPENING



- OPENINGS SHALL BE CLOSED WHEN THE FLAGGING OPERATION CEASES. NON OPERATING EQUIPMENT SHALL COMPLY WITH ARTICLE 701.11
- 2. WORK ZONE OPENINGS SHALL BE A MINIMUM OF ONE HALF MILE APART AND A MINIMUM OF ONE QUARTER MILE FROM ALL ENTRANCE AND EXIT RAMPS.
- 3. EXITING THE WORK ZONE AT ANY PLACE OTHER THAN AT A WORK ZONE EXIT OPENING WILL BE PROHIBITED.
- 4. ALL VEHICLES SHALL ENTER THE WORK ZONE AT ENTRY OPENINGS, USING THEIR TURN SIGNALS TO WARN MOTORISTS
- 5. FLAGGERS SHALL NOT STOP TRAFFIC OR DIRECT TRAFFIC INTO AN ADJACENT LANE.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

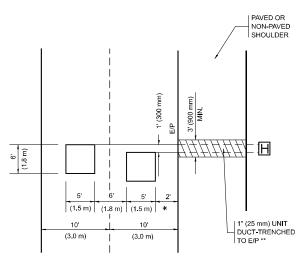
USER NAME = Fritz.Guillaume	DESIGNED -	REVISED	-	J.A.F. 02-06
	DRAWN -	REVISED	-	S.P.B. 01-07
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED	-	S.P.B. 12-09
PLOT DATE = 12/19/2023	DATE -	REVISED	_	M.D.06-13

					GGING OPERATIONS 5 / EXPRESSWAYS	ŀ
SCALE: NONE	SHEET 1	OF 1	SHEETS	STA.	TO STA.	1

RTE.	SECTION			COUNTY	SHEETS	NO.
290	FAI 290 23 PATCH			соок	14	13
TC-18				CONTRACT NO. 62W04		
ILLINOIS FED. AIL				D PROJECT		

LOOPS NEXT TO SHOULDERS

PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' (900 mm) X WIDTH OF PAVED SHOULDER.



* * UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS
BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

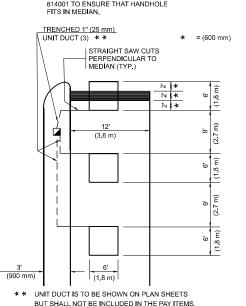
* = (600 mm)

LEFT TURN LANES WITH MEDIANS

VOLUME DENSITY ("FAR OUT" DETECTION)
ON SAME APPROACH

(PROTECTED / PERMITTED LEFT TURN PHASING)

HANDHOLE LOCATION MAY VARY DEPENDING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS. HEAVY-DUTY HANDHOLES TO BE USED WHEN THE MEDIAN IS MOUNTABLE. REFER TO STANDARD 814001 TO ENSURE THAT HANDHOLE



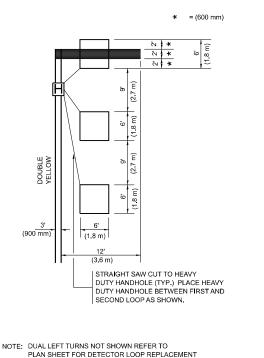
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO

PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

LEFT TURN LANES WITHOUT MEDIANS

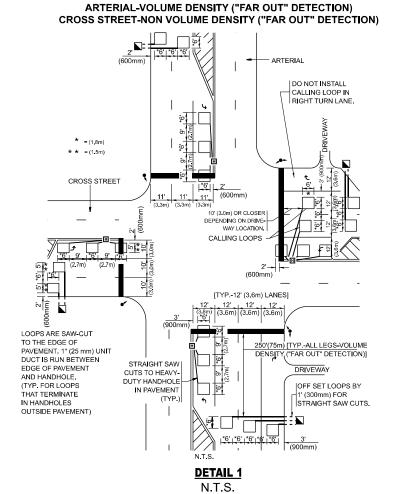
VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH

(PROTECTED / PERMITTED LEFT TURN PHASING)



SCALE: NONE

ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION)
CROSS STREET-NON VOLUME DENSITY ("UPTIGHT" PRESENCE DETECTION)



DESIGNED -

HECKED -

R.K.F

DRAWN

DATE

REVISED

REVISED

REVISED

REVISED

SER NAME = Fritz.Guillaume

PLOT DATE = 12/19/2023

OFFSET LOOPS BY 1' (300mm) FOR STRAIGHT SAW CUTS ARTERIAL THIS DIMENSION MAY BE ADJUSTED FOR DRIVEWAY OR OTHER OBSTRUCTIONS. WHEN ADJUSTMENT IS REQUIRED, DETECTORS WILL NORMALLY BE MOVED CLOSER 3'(900mm |1" (25 mm UNIT DUC (TYP.) CROSS STREET 6' 12' 🚓 10'(3.0m) PREFERRED 15'(4.5m) MAXIMUM *6' 9' |*6' 9' |*6' (2.7m) (2.7m) + - THESE DIMENSIONS DRIVEWAY WILL BE VARIABLE [6' (1,8m) MINIMUM. 25' (7.6 m) MAXIMUM] 4 - THESE DIMENSIONS SHALL BE 5' (1.5m) FOR IF "FAR OUT" LOOPS 10' (3.0m) LANE WIDTHS ARE LOCATED IN TAPER OF A RIGHT TURN LANE, DIMENSION THIS LOOP TO COVER TAPER AREA. DO NOT COVER THE LEFT TURN LANE OR LEFT TURN LANE TAPER. **DETAIL 2** N.T.S.

NOTES:

VEHICLES LOOP DETECTORS

- * ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED, SHIELDED
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE PAVEMENT
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN ONE INCH (25 mm) UNIT DUCT BETWEEN THE EDGE OF PAVEMENT AND THE FIRST HANDHOLE OR JUNCTION BOX. EACH UNIT DUCT RUN SHALL BE SHOWN ON THE PLANS BY THE DESIGNER, BUT SHALL NOT BE PAID FOR SEPARATLY. THIS ITEM IS INCIDENTAL TO THE PAY ITEM FOR DETECTOR LOOPS.
- * ONE DIMENSION OF <u>ALL</u> DETECTOR LOOPS SHALL BE SIX FEET (1.8 m)
- * EACH LANE OF NON-LOCKING, PRESENCE DETECTION AND EACH LANE OF A DOUBLE LEFT TURN LANE REQUIRES A SEPARATE INDUCTIVE LOOP DETECTOR AND LEAD IN CABLE.
- * WHEN NON-LOCKING, PRESENCE DETECTION IS USED, MORE
 THAN ONE LOOP PER LANE IS REQUIRED BEHIND THE STOP BAR
 (i.e. 1-1/2, 1-3/4, 2).
- * WHEN SYSTEM LOOPS ARE REQUIRED ON AN APPROACH OF AN INTERSECTION, THE LOOPS USED FOR VOLUME DENSITY AND INTERSECTION TIMING SHALL ALSO BE USED AS SYSTEM DETECTORS. EACH ONE OF THESE TYPE OF LOOPS REQUIRES A SEPARATE TWO CONDUCTOR NO. 14 TWISTED SHIELDED CABLE AND A SEPARATE INDUCTIVE LOOP DETECTOR WHEN NEW CONTROLLERS ARE UTILIZED. THE DESIGNER SHALL LABEL THESE TYPES OF LOOPS AS "INTERSECTION AND SAMPLING (SYSTEM) DETECTORS" ON THE SIGNAL LAYOUT, THE INTERCONNECT PLAN AND THE SYSTEM CABLE PLAN. WHEN AN EXISTING CONTROLLER IS UTILIZED FOR THIS TYPE OF DETECTION, THE PAY ITEM "INDUCTIVE LOOP DETECTOR WITH SYSTEM OUTPUT" SHOULD BE USED.

PLACEMENT OF DETECTORS

THE FOLLOWING FIGURES REPRESENT THE MOST COMMON DETECTOR LOOP LOCATIONS AND SIZES. ADJUSTMENTS WILL BE NECESSARY FOR SPECIFIC GEOMETRIC CONSIDERATIONS.

LOCATIONS AND DEMENSIONS OF DETECTOR LOOPS ARE REQUIRED ON ALL SIGNAL LAYOUT PLAN SHEETS.

"FAR OUT" DETECTION REFERS TO LOCKING, PRESENCE TYPE DETECTION LOCATED IN THRU LANES, RIGHT TURN LANES, AND RIGHT TURN LANE TAPER AREAS (IF APPLICABLE), USUALLY 250' (75 m) IN ADVANCE OF STOP BARS. "UPTIGHT" DETECTION REFERS TO NON-LOCKING PRESENCE TYPE DETECTION LOCATED IN ALL LANES AND 10'-15' (3.0 m-4.5 m) BEHIND THE CROSSING STREET'S EDGE OF PAVEMENT EXTENDED.

NOTE:

ALL DETAILS AND NOTES SHOWN ARE FROM THE I.D.O.T. DISTRICT 1 TRAFFIC SIGNAL DESIGN GUIDELINES DATED JANUARY 1995

THIS DRAWING HAS BEEN PREPARED TO ASSIST THE RESIDENT ENGINEER FOR ALL ROADWAY RESURFACING OR S.M.A.R.T. PROJECTS WHERE THE DIMENSIONS ARE NOT SHOWN ON THE PLANS AND THE FINAL LOCATIONS FOR CROSSWALKS OR STOP BARS ARE NOT DETERMINED.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 1 - DETECTOR LOOP INSTALLATION
DETAILS FOR ROADWAY RESURFACING

SHEET 1 OF 1 SHEETS STA. TO STA.