01-16-2026 LETTING ITEM 199

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	2025-1099-RS	WILL	32	1
	ILLINOIS	CONTRACT NO. 80B11		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

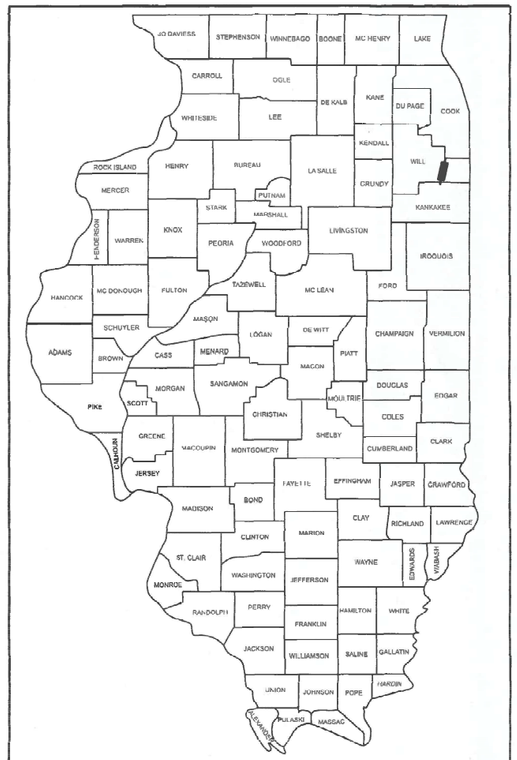
PROPOSED
HIGHWAY PLANS

FAP ROUTE 840: IL 50 (GOVERNORS HWY)
TUCKER RD / WILMINGTON RD TO BEECHER RD
SECTION 2025-1099-RS
PROJECT NHPP-GID8(959)
STANDARD OVERLAY, ADA IMPROVEMENTS, SHOULDER WIDENING
WILL COUNTY
C-91-244-25

FOR INDEX OF SHEETS, SEE SHEET NO. 2

THIS PROJECT IS LOCATED IN THE VILLAGE OF PEOTONE

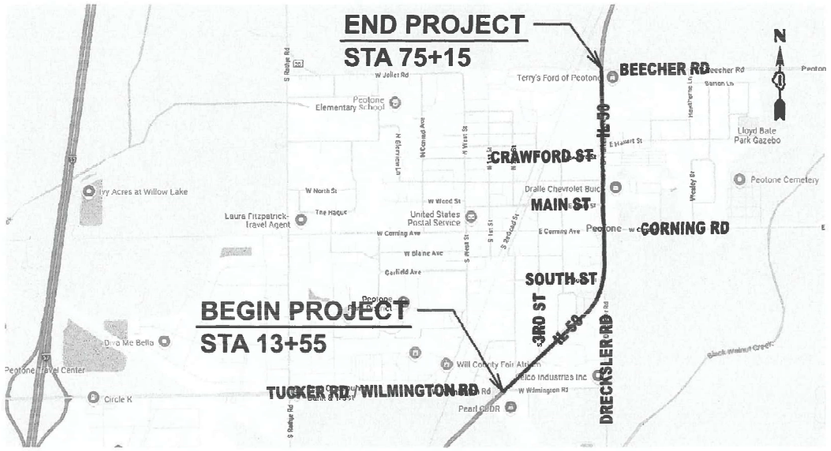
D-91-165-25



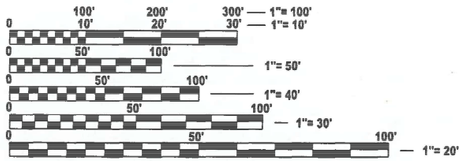
LOCATION OF SECTION INDICATED THUS: -

TRAFFIC DATA

2023 ADT = 8,350 VPD
POSTED SPEED LIMIT = 40 MPH
OTHER PRINCIPAL ARTERIAL



GROSS LENGTH = 6,160 FT. = 1.17 MILE
NET LENGTH = 6,160 FT. = 1.17 MILE



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

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

PROJECT ENGINEER: VESELIN VELICHKOV, 847-705-4432
PROJECT MANAGER: FAWAD AQUEEL

CONTRACT NO. 80B11

COLIN C. COAD
062-063250
LICENSED PROFESSIONAL ENGINEER
STATE OF ILLINOIS

COLIN C. COAD, P.E.
IL. LIC. NO. 062-063250
EXP: 11/30/2025
DATE: 8/15/2025
SIGNATURE AND SEAL APPLIES TO SHEETS 11-20

MATTHEW T. HEIBERGER
062-075354
LICENSED PROFESSIONAL ENGINEER
STATE OF ILLINOIS

MATTHEW T. HEIBERGER, P.E.
IL. LIC. NO. 062-075354
EXP: 11/30/2025
DATE: 8/15/2025
SIGNATURE AND SEAL APPLIES TO SHEETS 1-10 AND 21-32

TERRA ENGINEERING LTD.
CONTACT: DAN KAVANAUGH (312) 467-0123

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED Aug 13th 20 25
REGIONAL ENGINEER

October 3 20 25
ENGINEER OF DESIGN AND ENVIRONMENT

October 3 20 25
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

REV-SEP

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	COVER
2	INDEX OF SHEETS, STATE STANDARDS, AND GENERAL NOTES
3-4	SUMMARY OF QUANTITIES
5-6	TYPICAL SECTIONS
7-9	ROADWAY AND PAVEMENT MARKING PLANS
10	SIDEWALK RAMP DETAILS
11-17	TS-05: DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS
18	TS-07 DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING
19	TRAFFIC SIGNAL PLAN
20	CABLE PLAN, PHASE DIAGRAM, & EMERG. VEH. PREEMPTION
21	BD-08: DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING
22	BD-22: PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT
23	BD-24: CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT
24	BD-32: BUTT JOINT AND HMA TAPER DETAILS
25	BM-20: PRUNING FOR SAFETY AND EQUIPMENT CLEARANCE
26	TC-10: TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS
27	TC-11: TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)
28	TC-13: TYPICAL PAVEMENT MARKINGS
29	TC-14: TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)
30	TC-16: SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS
31	TC-22: ARTERIAL ROAD INFORMATION SIGN
32	TC-26: DRIVEWAY ENTRANCE SIGNING

HIGHWAY STANDARDS

STANDARD NO.	DRAWING NAME
000001-09	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
424001-12	PERPENDICULAR CURB RAMPS FOR SIDEWALKS
442201-04	CLASS C AND D PATCHES
482001-02	HMA SHOULDER ADJACENT TO FLEXIBLE PAVEMENT
701101-05	OFF-RD OPERATIONS, MULTILANE 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
701106-02	OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15 FT (4.5 m) AWAY
701427-05	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATIONS, FOR SPEEDS ≤ 40 MPH
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
701901-11	TRAFFIC CONTROL DEVICES
886001-01	DETECTOR LOOP INSTALLATIONS
886006-01	TYPICAL LAYOUTS FOR DETECTION LOOPS

GENERAL NOTES

1. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO BEGINNING CONSTRUCTION AND ORDERING MATERIALS.
3. THE CONTRACTOR SHALL CONTACT KALPANA KANNAN-HOSADURGA, THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT KALPANA.KANNAN-HOSADURGA@ILLINOIS.GOV A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
4. TEN (10) FOOT TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER ITEMS OF WORK TO EXISTING CURBS AND GUTTER IN THE FIELD, UNLESS OTHERWISE SHOWN.
5. ALL PAVEMENT PATCHING LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
6. LOCATION OF COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
7. DRAINAGE ADJUSTMENT OR RECONSTRUCTION LOCATIONS MAY BE ADJUSTED IN THE FIELD BY THE ENGINEER.
8. 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.
9. THE CONTRACTOR SHALL 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 SHALL DELIVER THE RECORD TO THE ENGINEER.
10. 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.
11. PAVEMENT MARKING TAPE, TYPE IV SHALL BE USED FOR SHORT TERM PAVEMENT MARKINGS ON ALL FINAL SURFACES.
12. THE RESIDENT ENGINEER SHALL CONTACT ERIC CAMPOS, AREA TRAFFIC FIELD ENGINEER, VIA EMAIL AT ERIC.CAMPOS@ILLINOIS.GOV A MINIMUM OF TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
13. BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERNCE, 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 SHOWN ON THE PLANS OR AS DIRECTED BY THE RESIDENT ENGINEER.
14. OVERNIGHT LANE CLOSURES SHALL NOT BE ALLOWED FOR REHABILITATION PROJECTS INVOLVING DAYTIME MILLING AND RESURFACING OPERATIONS AND CLASS D PATCHING UNLESS OTHER CONDITIONS WARRANT EXTENDED LANE CLOSURES AS DETERMINED AND APPROVED IN WRITING BY THE RESIDENT ENGINEER OR AS PROVIDED IN THE CONTRACT SPECIFICATIONS.
15. ALL MILLED SURFACES SHALL BE A UNIFORM CROSS SLOPE PER LANE AND FREE OF RIDGES BETWEEN PASSES. ANY DEVIATIONS SHALL BE CORRECTED AT NO COST TO THE DEPARTMENT.
16. THE "ROAD CONSTRUCTION AHEAD" SIGNS SHALL REMAIN INSTALLED UNTIL THE COMPLETION OF THE PROJECT OR WHEN NO ROADWAY HAZARDS REMAIN WITHIN THE WORK ZONE.
17. WHEN WORKING ADJACENT TO THE ROAD AND UTILIZING DAILY LANE CLOSURES, DROP-OFFS ADJACENT TO THE TRAVEL LANES SHALL BE KEPT TO A MINIMUM. PROTECTION OF THE DROP-OFF SHALL BE ACCORDING TO THE IDOT BUREAU OF SAFETY PROGRAMS AND ENGINEERING, SAFETY ENGINEERING POLICY MEMORANDUM 4-21. DROP-OFFS GREATER THAN THE SPECIFIED MAXIMUM DROP-OFF DEPTH SHOWN IN TABLE 2, CONDITION II OF THE SAFETY 4-21 POLICY WILL NOT BE ALLOWED AT LOCATIONS WHERE THE DROP-OFF IS LOCATED WITHIN 8 FT OF THE EDGE OF THE NEAREST OPEN TRAFFIC LANE. THE CONTRACTOR WILL BE REQUIRED TO PERFORM THE EXCAVATION REQUIRED FOR THE CONSTRUCTION DURING THE TIME THAT THE ADJACENT LANE IS CLOSED. AS NOTED ABOVE, PRIOR TO REOPENING THE LANE TO TRAFFIC, THE CONTRACTOR SHALL PLACE SUFFICIENT MATERIAL TO REDUCE THE DROP-OFF TO LESS THAN THE SPECIFIED MAXIMUM DROP-OFF DEPTH SHOWN IN TABLE 2, CONDITION II OF THE SAFETY 4-21 POLICY AND ENSURE THAT THE DROP-OFF AREAS MEET THE OFFSET, HEIGHT, AND DURATION REQUIREMENTS TO USE BARRICADES/DRUMS AT THE END OF EACH WORKDAY. THE CONTRACTOR SHALL BE RESPONSIBLE TO DETERMINE THE AMOUNT OF WORK THAT CAN BE COMPLETED WITHIN THE TIME OF THE DAILY LANE CLOSURE. IF THE ABOVE REQUIREMENTS CAN'T BE MET, AND IT IS DETERMINED THAT OVERNIGHT LANE CLOSURES AND/OR TEMPORARY CONCRETE BARRIER WALL INSTALLATION WILL BE NECESSARY, THEN IDOT WRITTEN APPROVAL WILL BE REQUIRED PRIOR TO THE INSTALLATION OF THESE ITEMS. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED TO COMPLY WITH THIS REQUIREMENT. WHERE POSITIVE PROTECTION (TEMPORARY CONCRETE BARRIER PER STD. 704001) IS PROVIDED, THIS REQUIREMENT IS NULLIFIED.
18. TEMPORARY PAVEMENT MARKINGS OR SHORT TERM PAVEMENT MARKINGS ON INTERMEDIATE SURFACES SHALL NOT BE REMOVED, UNLESS DIRECTED BY THE ENGINEER.

GEOTECHNICAL NOTES

1. GEOTECHNICAL FABRIC FOR GROUND STABILIZATION AND/OR AGGREGATE SUBGRADE IMPROVEMENT (CU YD) HAVE BEEN PROVIDED FOR USE AT THE LOCATIONS INDICATED FOR SOILS THAT TEND TO BE UNSTABLE AND/OR UNSUITABLE. THE ACTUAL NEED FOR REMOVAL AND REPLACEMENT WITH THE ABOVE ITEM WILL BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION BY THE GEOTECHNICAL ENGINEER. ALL POTENTIALLY UNSTABLE SOILS SHOULD BE TESTED WITH A STATIC OR DYNAMIC CONE PENETROMETER AND TREATED IN ACCORDANCE WITH ARTICLE 301.04 OF THE SSRBC AND IDOT SUBGRADE STABILITY MANUAL. IF UNSTABLE AND/OR UNSUITABLE SOILS ARE NOT ENCOUNTERED, THEN THE QUANTITY SHALL BE DEDUCTED AND NO ADDITIONAL COMPENSATION WILL BE DUE TO THE CONTRACTOR.
2. ANY AGGREGATE SUBGRADE IMPROVEMENT CONTAMINATED AND/OR DAMAGED BY THE CONTRACTOR'S VEHICLES AND/OR EQUIPMENT IS TO BE REMOVED AND REPLACED AS DIRECTED BY THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
3. THE AGGREGATE GRADATION FOR THE AGGREGATE SUBGRADE IMPROVEMENT 12" LOWER LIFT SHALL BE CS 1 OR RR1.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS, STATE STANDARDS, AND GENERAL NOTES
IL 50 (GOVERNOR'S HIGHWAY) - WILMINGTON RD TO BEECHER RD

SCALE: NTS | SHEET 2 OF 32 SHEETS | STA. | TO ST. A.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SH NO
840	2025-1099-RS	WILL	32	2
		CONTRACT NO. 80B11		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

REV-SEP

SPECIALITY ITEM	PAY ITEM NUMBER	DESIGNATION	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE 0005 ROADWAY 80% FED 20% STATE	CONSTRUCTION CODE 0005 ROADWAY 100% STATE	CONSTRUCTION CODE 0021 TRAFFIC SIGNAL 80% FED 20% STATE
	20101400	NITROGEN FERTILIZER NUTRIENT	POUND	49	49		
	20101500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	49	49		
	20101600	POTASSIUM FERTILIZER NUTRIENT	POUND	49	49		
	20200100	EARTH EXCAVATION	CU YD	1,475	1,475		
	21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	3,878	3,878		
	21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	1,067	1,067		
	25000210	SEEDING, CLASS 2A	ACRE	0.25	0.25		
	25200200	SUPPLEMENTAL WATERING	UNIT	5	5		
	28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	23	23		
	28000400	PERIMETER EROSION BARRIER	FOOT	249	249		
	28000510	INLET FILTERS	EACH	10	10		
	30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	83	83		
	30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"	SQ YD	2,514	2,514		
	40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	5,666	5,666		
	40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	27,497	27,497		
	40600370	LONGITUDINAL JOINT SEALANT	FOOT	19,315	19,315		
	40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	5	5		
	40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	323	323		
	40603200	POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-4.75, N50	TON	1,392	1,392		
	40604062	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70	TON	3,366	3,366		
	42001300	PROTECTIVE COAT	SQ YD	52	52		
	42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	53	53		
	42400800	DETECTABLE WARNINGS	SQ FT	11	11		
	44000100	PAVEMENT REMOVAL	SQ YD	6	6		
	44000155	HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"	SQ YD	6,337	6,337		
	44000158	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"	SQ YD	33,734	33,734		
	44000600	SIDEWALK REMOVAL	SQ FT	80	80		
	44201785	CLASS D PATCHES, TYPE I, 12 INCH	SQ YD	340	340		
	44201789	CLASS D PATCHES, TYPE II, 12 INCH	SQ YD	340	340		
	44201794	CLASS D PATCHES, TYPE III, 12 INCH	SQ YD	340	340		
	44201796	CLASS D PATCHES, TYPE IV, 12 INCH	SQ YD	340	340		

SPECIALITY ITEM	PAY ITEM NUMBER	DESIGNATION	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE 0005 ROADWAY 80% FED 20% STATE	CONSTRUCTION CODE 0005 ROADWAY 100% STATE	CONSTRUCTION CODE 0021 TRAFFIC SIGNAL 80% FED 20% STATE
	48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	285	285		
	48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SQ YD	2,518	2,518		
	56109210	WATER VALVES TO BE ADJUSTED	EACH	7	7		
	60250200	CATCH BASINS TO BE ADJUSTED	EACH	1	1		
	60300305	FRAMES AND LIDS TO BE ADJUSTED	EACH	9	9		
	60406001	FRAMES AND LIDS, TYPE 1,ADA COMPLIANT, OPEN LID	EACH	1	1		
	60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	58	58		
	60905305	BOX CULVERTS TO BE CLEANED	FOOT	56	56		
*	66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	1,475	1,475		
*	66900530	SOIL DISPOSAL ANALYSIS	EACH	4	4		
*	66901001	REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN	L SUM	1	1		
*	66901003	REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT	L SUM	1	1		
*	66901006	REGULATED SUBSTANCES MONITORING	CAL DA	10	10		
	67100100	MOBILIZATION	L SUM	1	1		
	70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1	1		
	70102634	TRAFFIC CONTROL AND PROTECTION, STANDARD 701611	L SUM	1	1		
	70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1		
	70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	1		
	70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	45	45		
	70300100	SHORT TERM PAVEMENT MARKING	FOOT	6,669	6,669		
	70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	8,932	8,932		
	70300211	TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS - PAINT	SQ FT	356	356		
	70300221	TEMPORARY PAVEMENT MARKING - LINE 4"- PAINT	FOOT	108,260	108,260		
	70300241	TEMPORARY PAVEMENT MARKING - LINE 6"- PAINT	FOOT	1,940	1,940		
	70300251	TEMPORARY PAVEMENT MARKING - LINE 8"- PAINT	FOOT	580	580		
	70300261	TEMPORARY PAVEMENT MARKING - LINE 12"- PAINT	FOOT	4,456	4,456		
	70300281	TEMPORARY PAVEMENT MARKING - LINE 24"- PAINT	FOOT	1,528	1,528		
	70307120	TEMPORARY PAVEMENT MARKING - LINE 4"- TYPE IV TAPE	FOOT	27,065	27,065		
*	78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	89	89		
*	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	27,065	27,065		
*	78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	483	483		
*	78000500	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	145	145		
*	78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	1,114	1,114		
*	78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	382	382		

* SPECIALTY ITEM

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
IL 50 (GOVERNOR'S HIGHWAY) - WILMINGTON RD TO BEECHER RD

SCALE: NTS | SHEET 3 OF 32 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	2025-1099-RS	WILL	32	3
		CONTRACT NO. 80B11		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

REV-SEP

SPECIALITY ITEM	PAY ITEM NUMBER	DESIGNATION	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE 0005 ROADWAY 80% FED 20% STATE	CONSTRUCTION CODE 0005 ROADWAY 100% STATE	CONSTRUCTION CODE 0021 TRAFFIC SIGNAL 80% FED 20% STATE
*	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	622	622		
	78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	622	622		
*	85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1			1
	88600100	DETECTOR LOOP, TYPE I	FOOT	1,063			1,063
	89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1			1
	K1004595	PRUNING FOR SAFETY AND EQUIPMENT CLEARANCE	L SUM	1	1		
	X0320050	CONSTRUCTION LAYOUT (SPECIAL)	L SUM	1	1		
	X4400501	COMBINATION CURB AND GUTTER REMOVAL AND REPLACEMENT LESS THAN OR EQUAL TO 10 FEET	FOOT	100	100		
	X4400503	COMBINATION CURB AND GUTTER REMOVAL AND REPLACEMENT GREATER THAN 10 FEET	FOOT	100	100		
	X5537800	STORM SEWERS TO BE CLEANED 12"	FOOT	150		150	
	X6030310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	23	23		
	X6700407	ENGINEER'S FIELD OFFICE, TYPE A (D1)	CAL MO	12	12		
	X7200061	TEMPORARY INFORMATION SIGNING	SQ FT	104	104		
*	X8760200	ACCESSIBLE PEDESTRIAN SIGNALS	EACH	8			8
	Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	10		10	
	Z0033044	RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 1	EACH	1			1

SPECIALITY ITEM	PAY ITEM NUMBER	DESIGNATION	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE 0005 ROADWAY 80% FED 20% STATE	CONSTRUCTION CODE 0005 ROADWAY 100% STATE	CONSTRUCTION CODE 0021 TRAFFIC SIGNAL 80% FED 20% STATE

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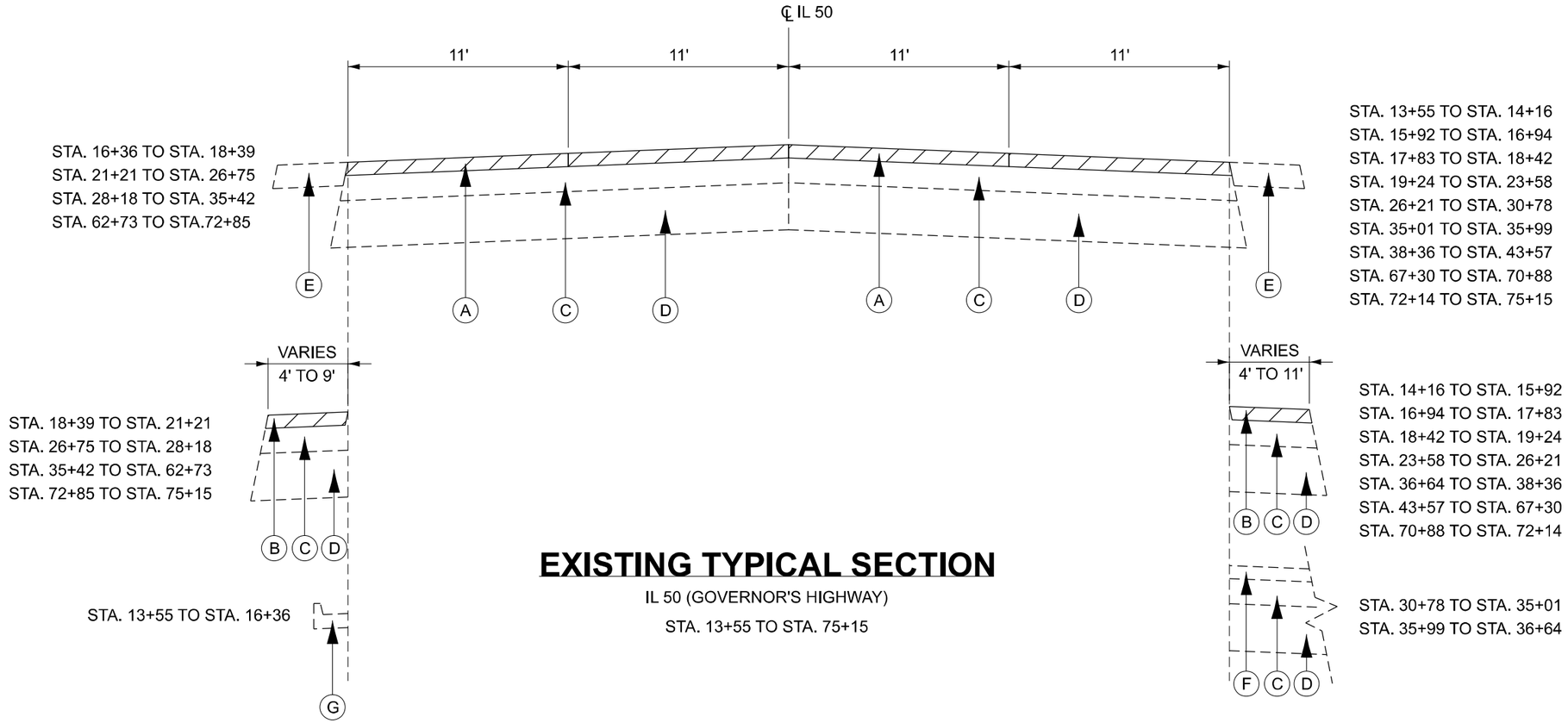
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
IL 50 (GOVERNOR'S HIGHWAY) - WILMINGTON RD TO BEECHER RD

SCALE: NTS | SHEET 4 OF 32 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	2025-1099-RS	WILL	32	4
		CONTRACT NO. 80B11		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



EXISTING TYPICAL SECTION

IL 50 (GOVERNOR'S HIGHWAY)

STA. 13+55 TO STA. 75+15

EXISTING LEGEND

- (A) HOT-MIX ASPHALT SURFACE REMOVAL, 2-1/4" (44000158)
- (B) HOT-MIX ASPHALT SURFACE REMOVAL, 1-1/2" (44000155)
- (C) EXISTING HMA SURFACE AFTER MILLING, ± 4"
- (D) EXISTING PCC BASE COURSE, ± 8"
- (E) EXISTING AGGREGATE SHOULDERS
- (F) EXISTING HMA SHOULDERS
- (G) EXISTING CURB AND GUTTER

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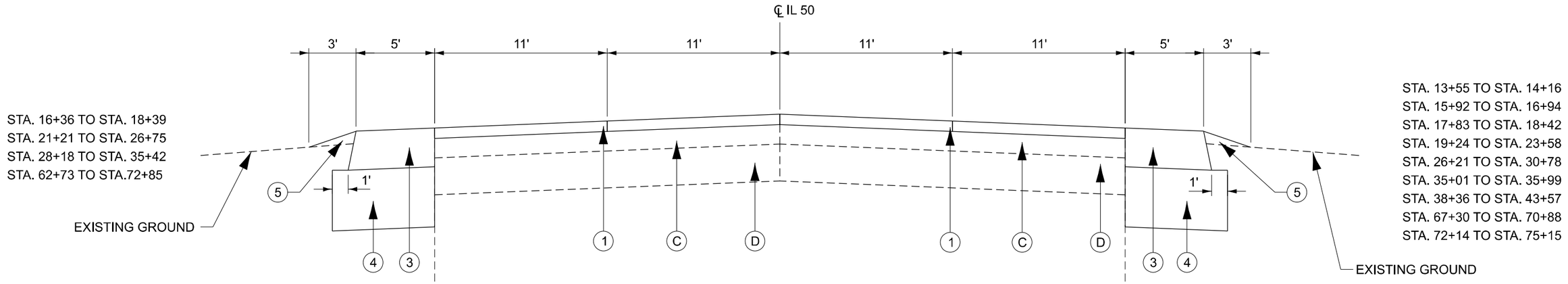
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS
IL 50 (GOVERNOR'S HIGHWAY) - WILMINGTON RD TO BEECHER RD

SCALE: NTS | SHEET 5 OF 32 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	2025-1099-RS	WILL	32	5
		CONTRACT NO. 80B11		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



PROPOSED TYPICAL SECTION

IL 50 (GOVERNOR'S HIGHWAY)

STA. 13+55 TO STA. 75+15

NOTES:

1. THE CONTRACTOR SHALL DO PAVEMENT MILLING FIRST, THEN PATCHING THE ROADWAY PER BD-22 DETAIL.
2. THE LONGITUDINAL JOINT SEALANT SHALL BE PLACED OVER THE HMA BINDER COURSE, IL-4.75, N50.

PROPOSED LEGEND

1. HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70, 1-1/2" POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-4.75, N50, 3/4"
2. HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70, 1-1/2"
3. HOT-MIX ASPHALT SHOULDER, 8"
4. AGGREGATE SUBGRADE IMPROVEMENT, 12"
5. AGGREGATE WEDGE SHOULDER, TYPE B
6. COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12

EXISTING LEGEND

A. HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4" (44000158)

B. HOT-MIX ASPHALT SURFACE REMOVAL, 1-1/2" (44000155)

C. EXISTING HMA SURFACE AFTER MILLING, ± 4"

D. EXISTING PCC BASE COURSE, ± 8"

E. EXISTING AGGREGATE SHOULDERS

F. EXISTING HMA SHOULDERS

G. EXISTING CURB AND GUTTER

MIXTURE REQUIREMENT NOTES:

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

HOT-MIX ASPHALT MIXTURE REQUIREMENTS		QUALITY MANAGEMENT PROGRAM (QMP)
MIXTURE TYPE	AIR VOIDS @ Ndes	
STANDARD OVERLAY (MAINLINE) (ONLY HMA SURFACE FOR SHOULDER & SIDE STREETS)		
HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70, 1-1/2"	4.0% @ 70 GYR	QCP
POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-4.75, N50, 3/4"	3.5% @ 50 GYR	QC/QA
HMA SHOULDER 8"		
HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70, 1-1/2"	4.0% @ 70 GYR	QC/QA
HOT-MIX ASPHALT BINDER COURSE, IL-19, N70, 6-1/2"	4.0% @ 70 GYR	QC/QA
PATCHING		
CLASS D PATCHES (HMA BINDER IL-19 mm)	4.0% @ 70 GYR	QC/QA

QMP DESIGNATION: QUALITY CONTROL/QUALITY ASSURANCE (QC/QA); QUALITY CONTROL FOR PERFORMANCE (QCP)

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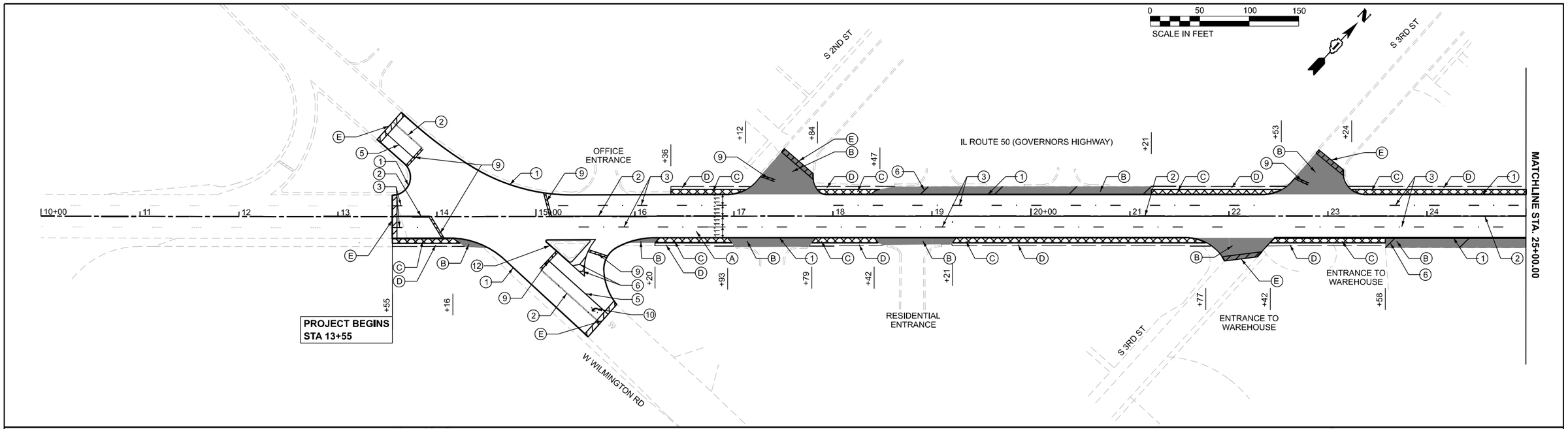
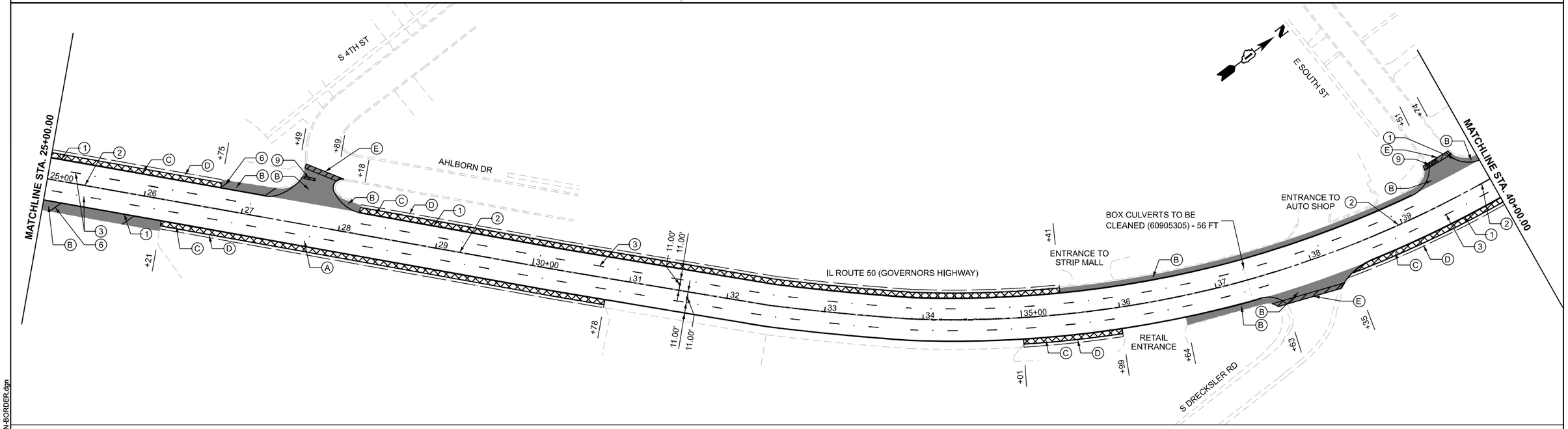
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS
IL 50 (GOVERNOR'S HIGHWAY) - WILMINGTON RD TO BEECHER RD

SCALE: NTS | SHEET 6 OF 32 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	2025-1099-RS	WILL	32	6
		CONTRACT NO. 80B11		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		





LEGEND

HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4" (44000158)

(A) HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70, 1 1/2" (40604062)
POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-4.75, N50, 3/4" (40603200)

(B) HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2" (44000155)
HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70, 1 1/2" (40604062)

(C) HOT-MIX ASPHALT SHOULDERS, 8" (48203029)
AGGREGATE SUBGRADE IMPROVEMENT 12" (30300112)

(D) AGGREGATE WEDGE SHOULDER, TYPE B (48102100)

(E) HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT (40600982)

(1) LINE 4", SOLID, WHITE, EDGE LINE

(2) LINE 4", DOUBLE SOLID, YELLOW, 2 @ 11" C-C

(3) LINE 4", SKIP DASH, WHITE, 10' LINE - 30' SPACE

(4) LINE 6", DOTTED, WHITE, 2' LINE - 6' SPACE

(5) LINE 6", SOLID, WHITE, TURN LANE MARKING

(6) LINE 12", SOLID, WHITE, DIAGONAL @ 45 DEG.

(7) LINE 12", SOLID, YELLOW, DIAGONAL @ 45 DEG. @ 40' C-C

(8) LINE 12", SOLID, WHITE, CROSSWALK

(9) LINE 24", SOLID, WHITE, STOP LINE

(10) LETTERS & SYMBOLS, SOLID WHITE

(11) LINE 4", SKIP DASH, YELLOW, 10' LINE - 30' SPACE

(12) LINE 8", SOLID, WHITE, GORE PERIMETER LINE

NOTES:

1. LIMIT OF RESURFACING ON THE SIDE STREETS THROUGHOUT THE PROEJCT SHALL MATCH EXISTING PAVEMENT JOINTS, UNLESS OTHERWISE SHOWN ON THE PLANS OR AS DIRECTED BY THE RESIDENT ENGINEER/TECHNICIAN.
2. ALL FINAL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC PAVEMENT MARKINGS (OF THE EXTRUDED TYPE) ON HMA PAVEMENT.
3. ALL FINAL PAVEMENT MARKINGS SHALL BE PLACED IN ACCORDANCE WITH TC-13 "DISTRICT ONE TYPICAL PAVEMENT MARKINGS" STANDARD DETAIL.
4. ALL RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED IN ACCORDANCE WITH TC-11 "TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)" STANDARD DETAIL.

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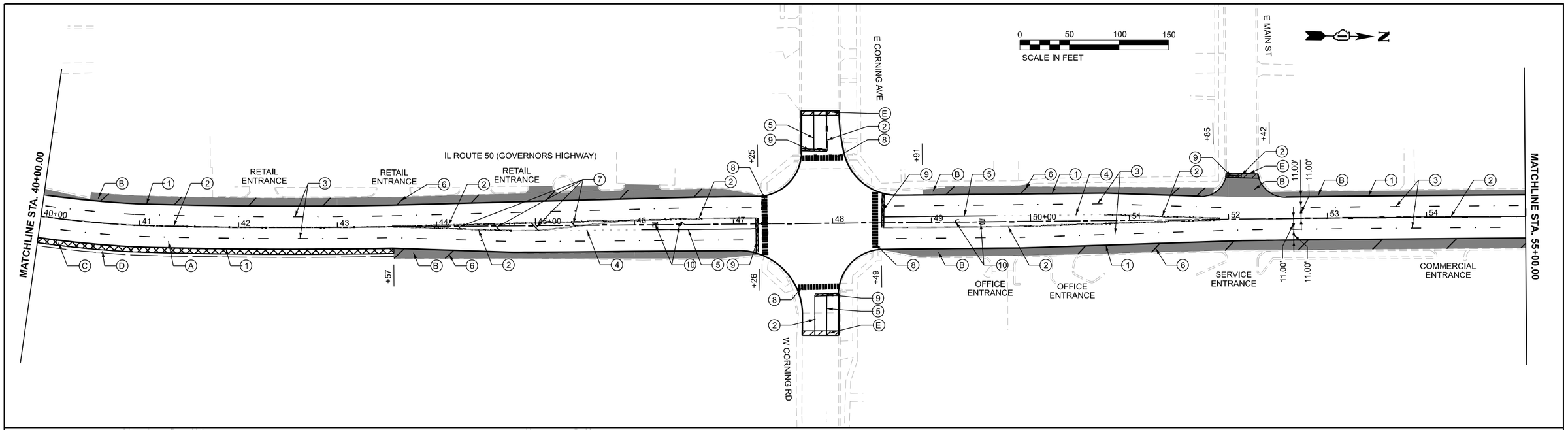
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY AND PAVEMENT MARKING PLANS
IL 50 (GOVERNOR'S HIGHWAY) - WILMINGTON RD TO BEECHER RD

SCALE: 1=50 | SHEET 7 OF 32 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	2025-1099-RS	WILL	32	7
		CONTRACT NO. 80B11		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



LEGEND

- HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4" (44000158)
- (A) HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70, 1 1/2" (40604062)
  POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-4.75, N50, 3/4" (40603200)
- (B) HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2" (44000155)
  HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70, 1 1/2" (40604062)
- (C) HOT-MIX ASPHALT SHOULDERS, 8" (48203029)
  AGGREGATE SUBGRADE IMPROVEMENT 12" (30300112)
- (D) AGGREGATE WEDGE SHOULDER, TYPE B (48102100)
- (E) HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT (40600982)
- (1) LINE 4", SOLID, WHITE, EDGE LINE
- (2) LINE 4", DOUBLE SOLID, YELLOW, 2 @ 11" C-C
- (3) LINE 4", SKIP DASH, WHITE, 10' LINE - 30' SPACE
- (4) LINE 6", DOTTED, WHITE, 2' LINE - 6' SPACE
- (5) LINE 6", SOLID, WHITE, TURN LANE MARKING
- (6) LINE 12", SOLID, WHITE, DIAGONAL @ 45 DEG.
- (7) LINE 12", SOLID, YELLOW, DIAGONAL @ 45 DEG. @ 40' C-C
- (8) LINE 12", SOLID, WHITE, CROSSWALK
- (9) LINE 24", SOLID, WHITE, STOP LINE
- (10) LETTERS & SYMBOLS, SOLID WHITE
- (11) LINE 4", SKIP DASH, YELLOW, 10' LINE - 30' SPACE
- (12) LINE 8", SOLID, WHITE, GORE PERIMETER LINE

NOTES:

1. LIMIT OF RESURFACING ON THE SIDE STREETS THROUGHOUT THE PROEJCT SHALL MATCH EXISTING PAVEMENT JOINTS, UNLESS OTHERWISE SHOWN ON THE PLANS OR AS DIRECTED BY THE RESIDENT ENGINEER/TECHNICIAN.
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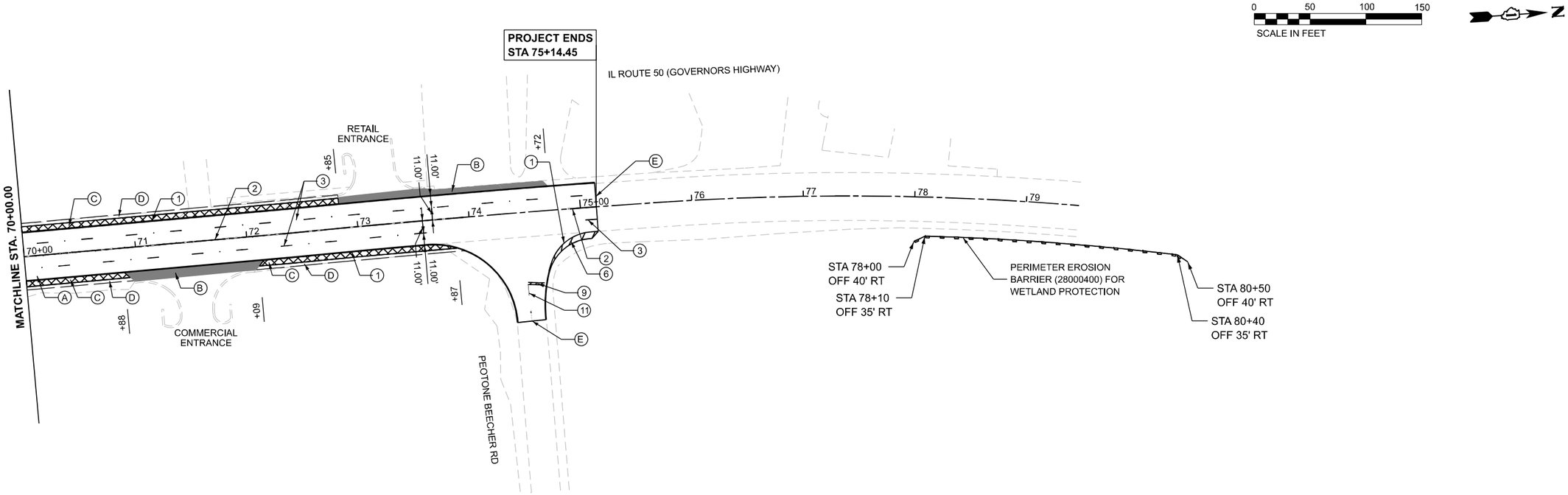
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY AND PAVEMENT MARKING PLANS
IL 50 (GOVERNOR'S HIGHWAY) - WILMINGTON RD TO BEECHER RD

SCALE: 1=50 | SHEET 8 OF 32 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	2025-1099-RS	WILL	32	8
		CONTRACT NO. 80B11		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



LEGEND

- (A) HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4" (44000158)
  HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70, 1 1/2" (40604062)
  POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-4.75, N50, 3/4" (40603200)
- (B) HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2" (44000155)
  HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70, 1 1/2" (40604062)
- (C) HOT-MIX ASPHALT SHOULDERS, 8" (48203029)
  AGGREGATE SUBGRADE IMPROVEMENT 12" (30300112)
- (D) AGGREGATE WEDGE SHOULDER, TYPE B (48102100)
- (E) HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT (40600982)
- (1) LINE 4", SOLID, WHITE, EDGE LINE
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- (3) LINE 4", SKIP DASH, WHITE, 10' LINE - 30' SPACE
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- (5) LINE 6", SOLID, WHITE, TURN LANE MARKING
- (6) LINE 12", SOLID, WHITE, DIAGONAL @ 45 DEG.
- (7) LINE 12", SOLID, YELLOW, DIAGONAL @ 45 DEG. @ 40' C-C
- (8) LINE 12", SOLID, WHITE, CROSSWALK
- (9) LINE 24", SOLID, WHITE, STOP LINE
- (10) LETTERS & SYMBOLS, SOLID WHITE
- (11) LINE 4", SKIP DASH, YELLOW, 10' LINE - 30' SPACE
- (12) LINE 8", SOLID, WHITE, GORE PERIMETER LINE

NOTES:

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

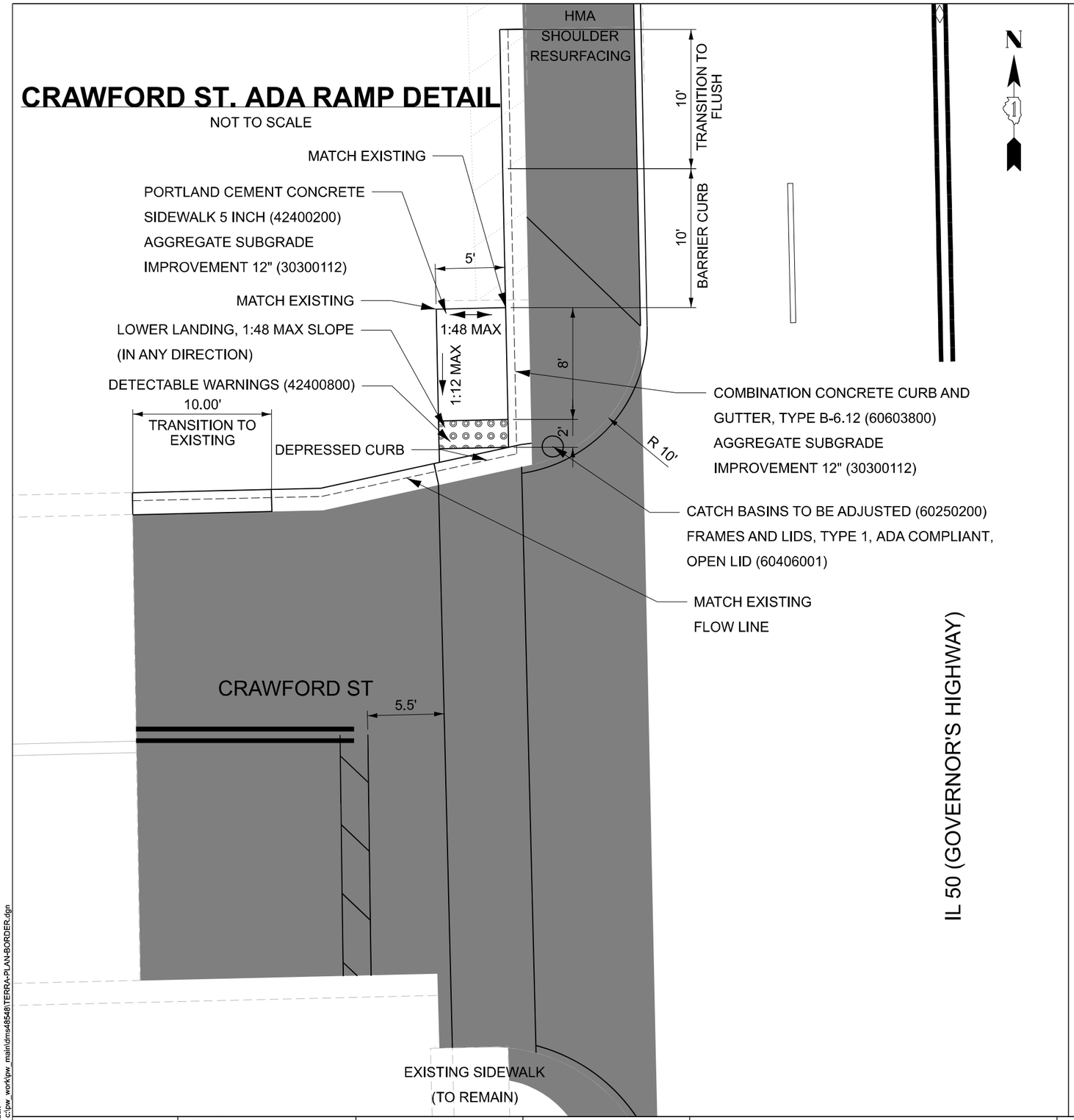
ROADWAY AND PAVEMENT MARKING PLANS
IL 50 (GOVERNOR'S HIGHWAY) - WILMINGTON RD TO BEECHER RD

SCALE: 1=50 | SHEET 9 OF 32 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	2025-1099-RS	WILL	32	9
		CONTRACT NO. 80B11		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CRAWFORD ST. ADA RAMP DETAIL

NOT TO SCALE



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIDEWALK RAMP DETAILS
IL 50 (GOVERNOR'S HIGHWAY) - WILMINGTON RD TO BEECHER RD

SCALE: NTS | SHEET 10 OF 32 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	2025-1099-RS	WILL	32	10
		CONTRACT NO. 80B11		
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	ET	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	J	J
RAILROAD CANTILEVER MAST ARM		
RAILROAD FLASHING SIGNAL		
RAILROAD CROSSING GATE		
RAILROAD CROSSBUCK		
RAILROAD CONTROLLER CABINET	RR	RR
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	R	W
WIRELESS ACCESS POINT		

ITEM	EXISTING	PROPOSED
SIGNAL HEAD -(P) PROGRAMMABLE SIGNAL HEAD	R Y G ◄Y ◄G (P)	R Y G ◄Y ◄G (P)
SIGNAL HEAD WITH BACKPLATE -(P) PROGRAMMABLE SIGNAL HEAD -(RB) RETROREFLECTIVE BACKPLATE	R Y G ◄Y ◄G (P) (RB)	R Y G ◄Y ◄G (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

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET 11 OF 32 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	2025-1099-RS	WILL	32	11
	TS-05	CONTRACT NO. 80B11		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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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.

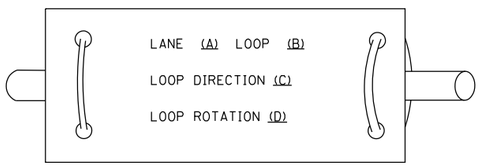
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.

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

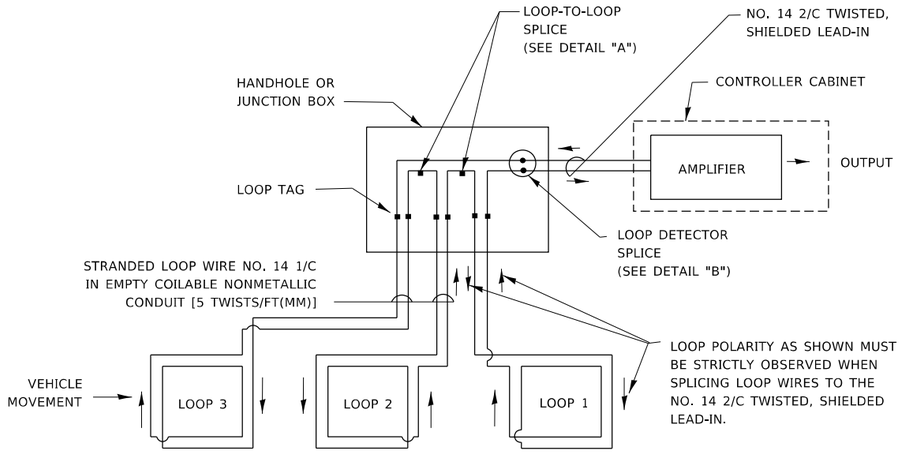


A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY

B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.

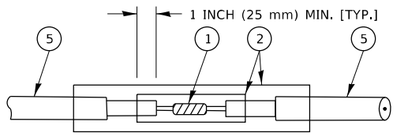
C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".

D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

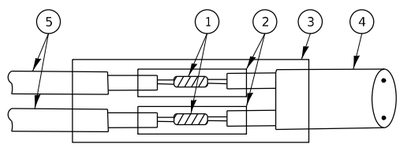


DETECTOR LOOP WIRING SCHEMATIC

- 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.

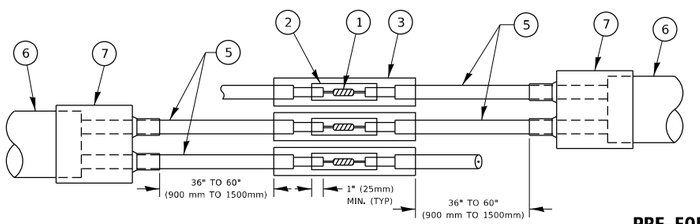


DETAIL "A"
LOOP-TO-LOOP SPLICE



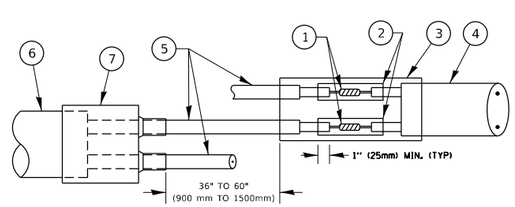
DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A"
LOOP-TO-LOOP SPLICE

PRE-FORMED LOOP



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

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

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PLOT DATE = 3/4/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET 12 OF 32 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	2025-1099-RS	WILL	32	12
	TS-05	CONTRACT NO. 80B11		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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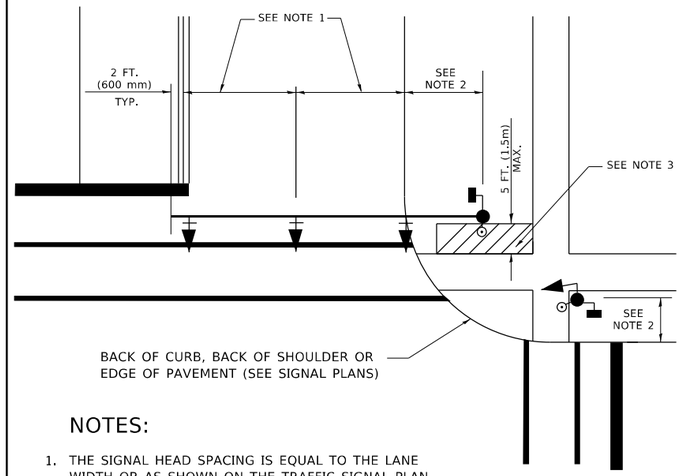
TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

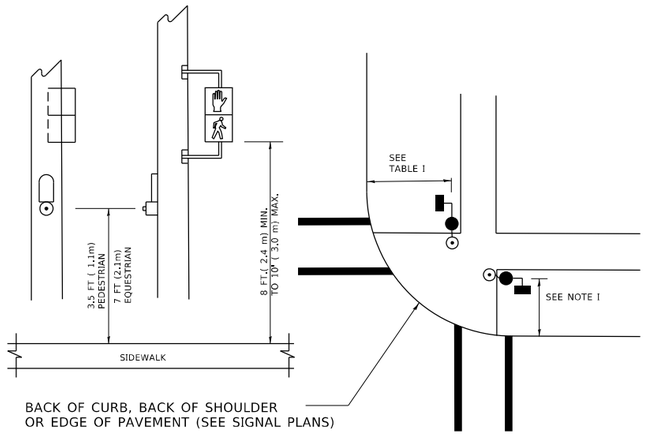
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



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."

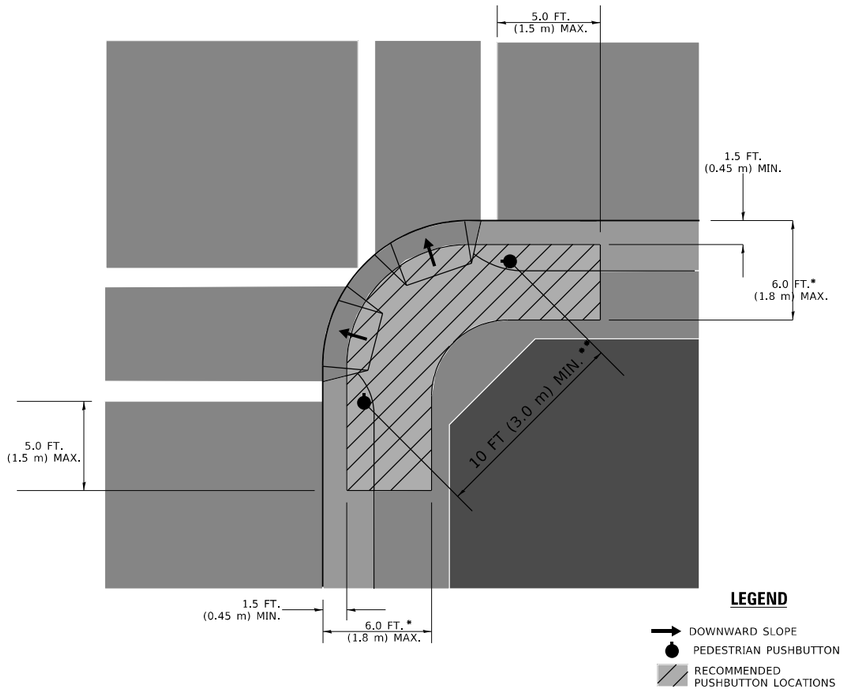
PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST



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.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET 13 OF 32 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	2025-1099-RS	WILL	32	13
	TS-05	CONTRACT NO. 80B11		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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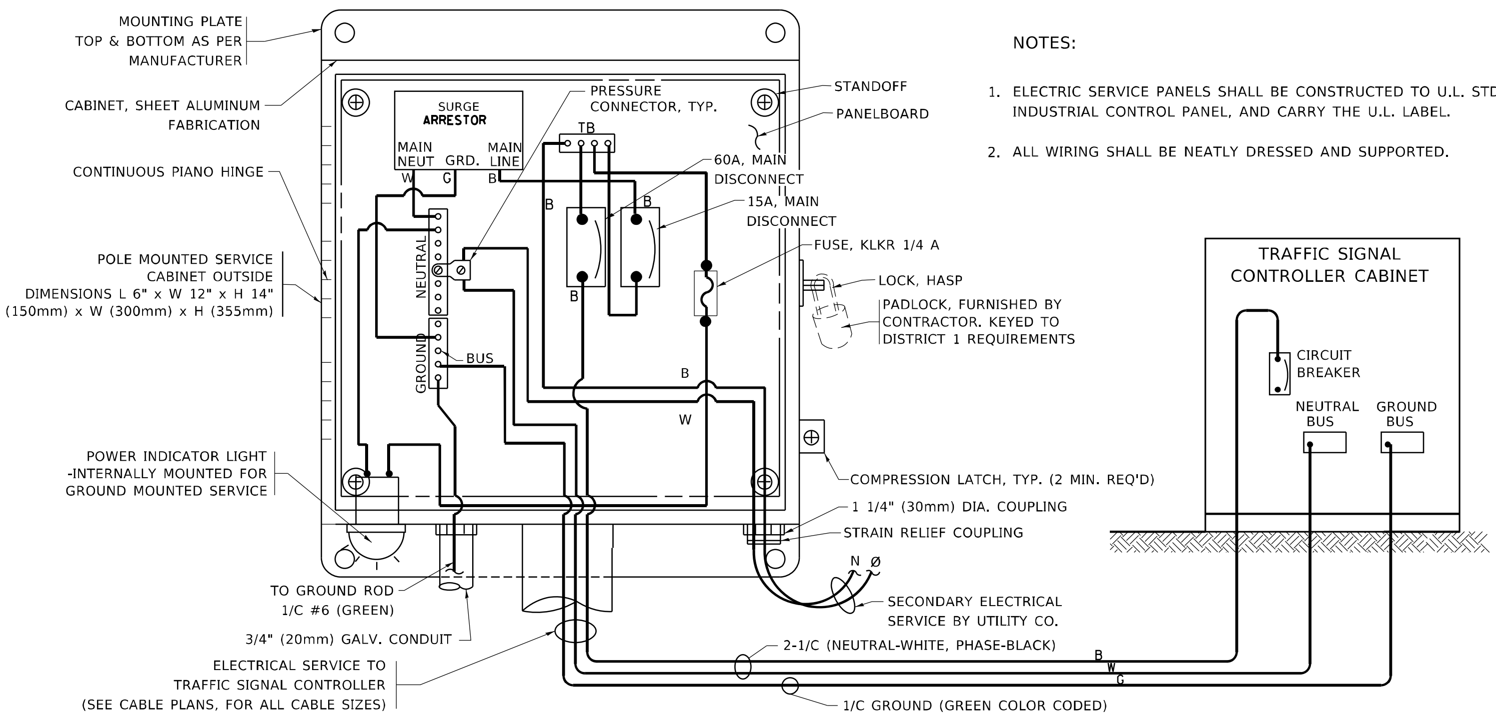


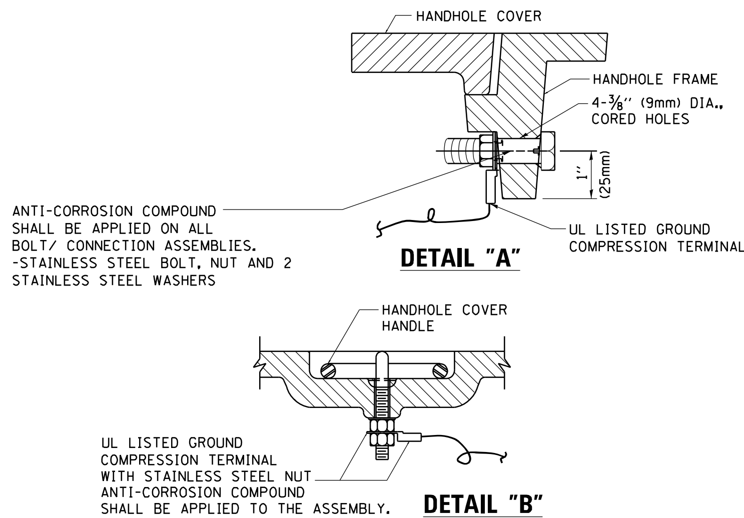
ELECTRICAL SERVICE – PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)

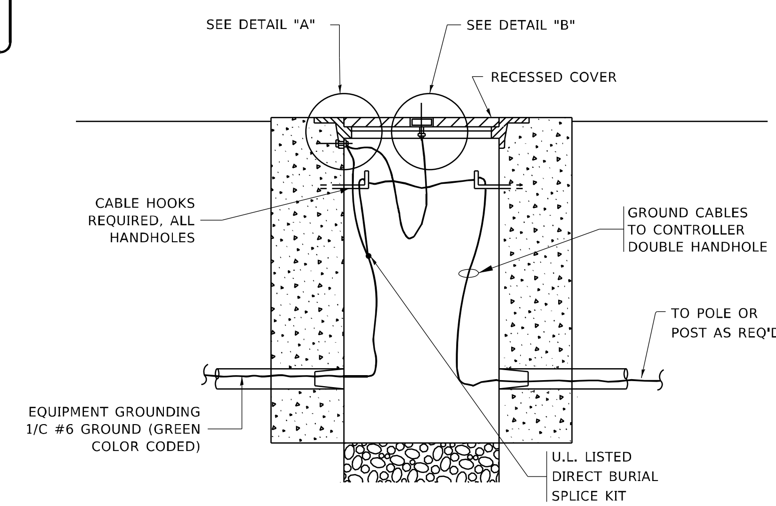
SERVICE INSTALLATION POLE MOUNT (SHOWN)

(NOT TO SCALE)

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.





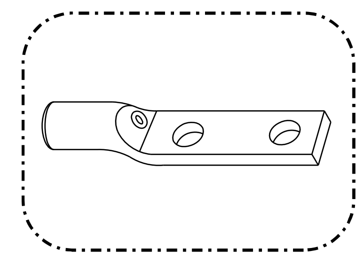
HANDHOLE COVER & FRAME – GROUNDING DETAIL

(NOT TO SCALE)

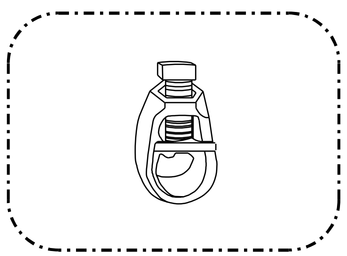
NOTES:

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.



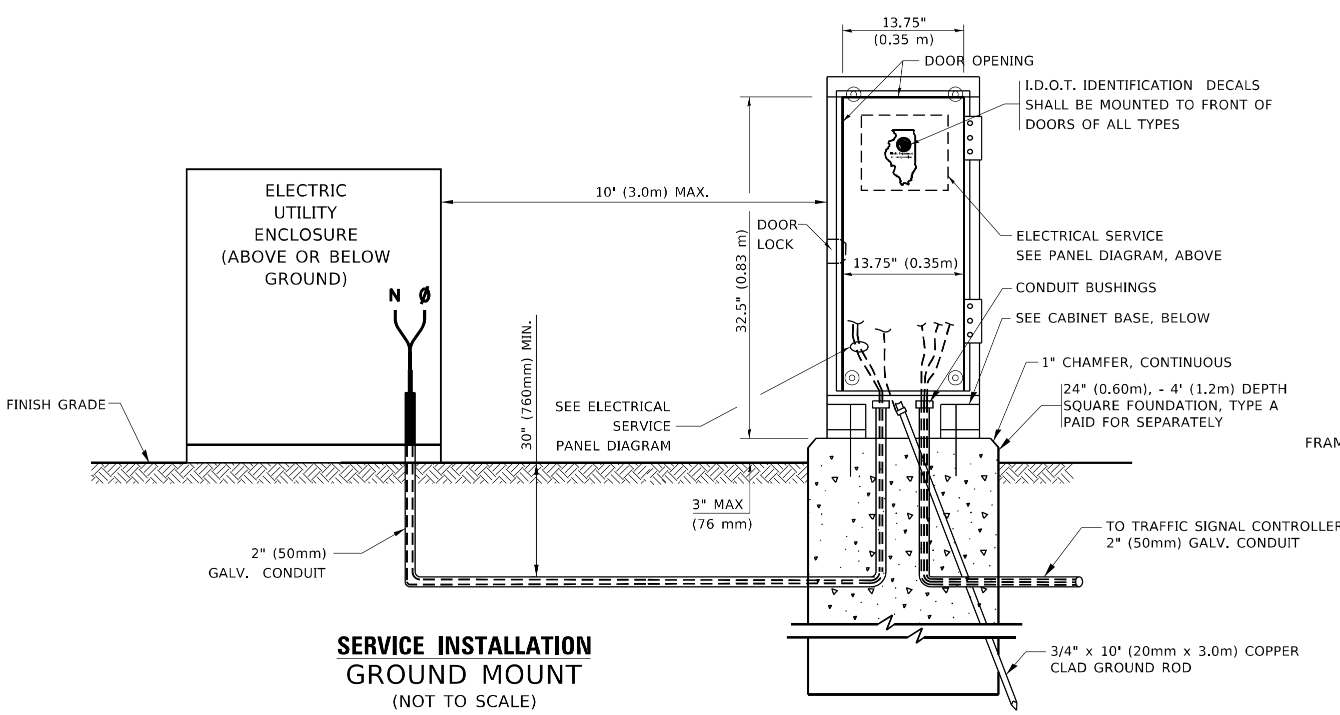
HEAVY-DUTY COMPRESSION TERMINAL (BURNDY TYPE YGHA OR APPROVED EQUAL)



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

NOTES:

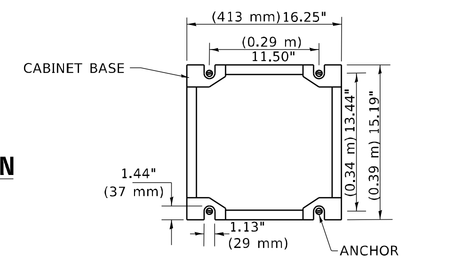
- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
- GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



SERVICE INSTALLATION

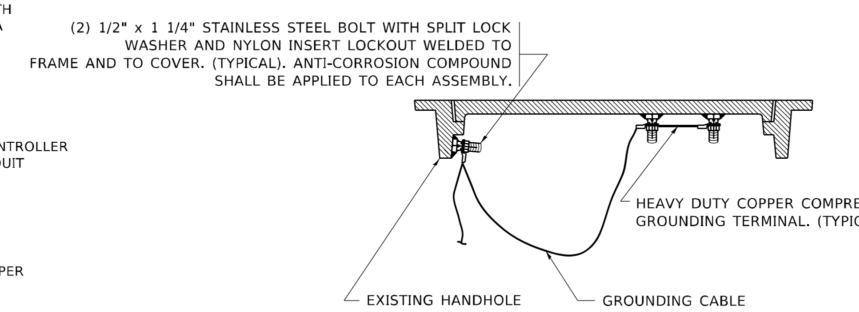
GROUND MOUNT

(NOT TO SCALE)



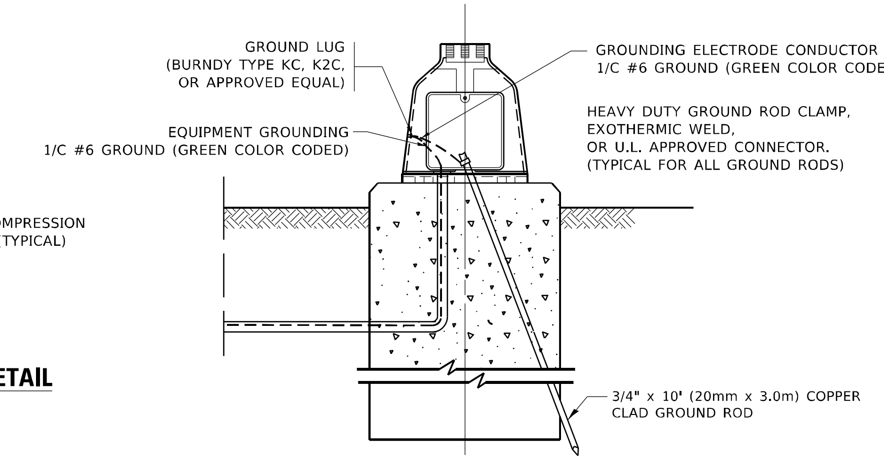
CABINET – BASE BOLT PATTERN

(NOT TO SCALE)



EXISTING HANDHOLE COVER & FRAME – GROUNDING DETAIL

(NOT TO SCALE)



MAST ARM POLE /POST–GROUNDING DETAIL

(NOT TO SCALE)

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PLOT DATE = 3/4/2019	DATE -	REVISED -	

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS
SCALE: NONE | SHEET 14 OF 32 SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	2025-1099-RS	WILL	32	14
TS–05		CONTRACT NO. 80B11		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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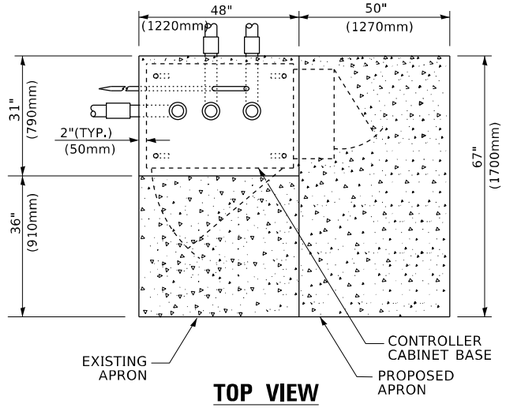
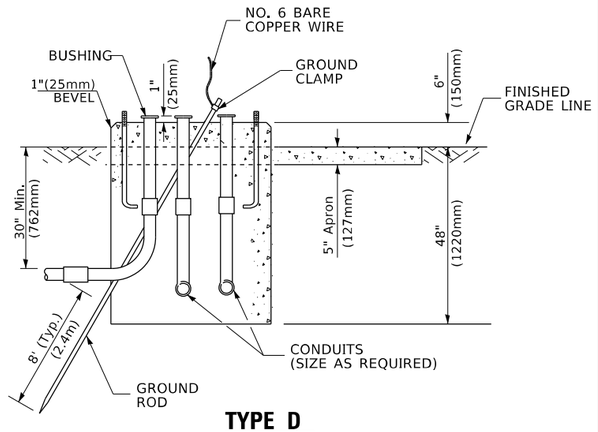
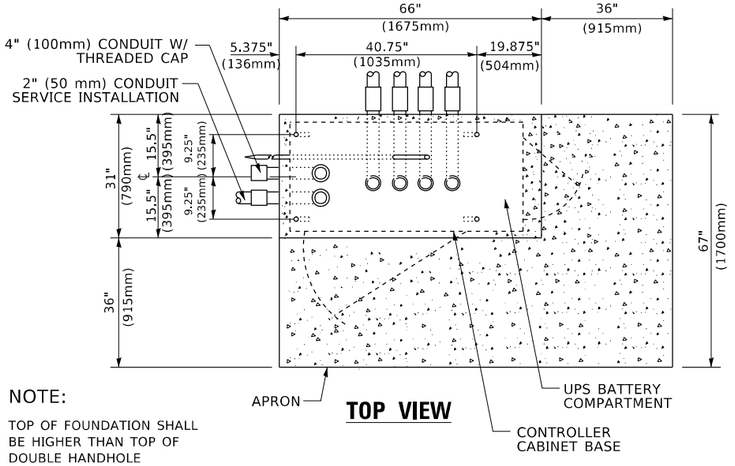


TOP VIEW



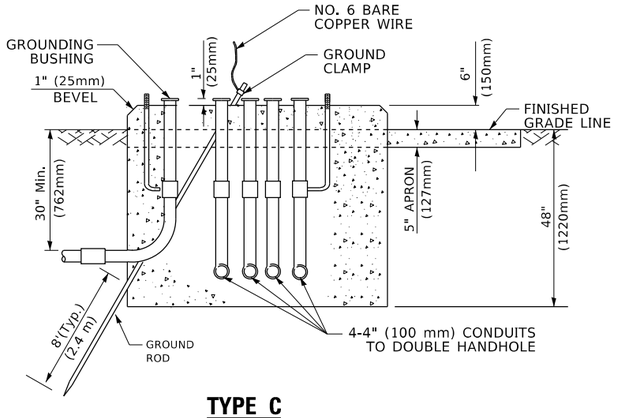
TYPE D
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET



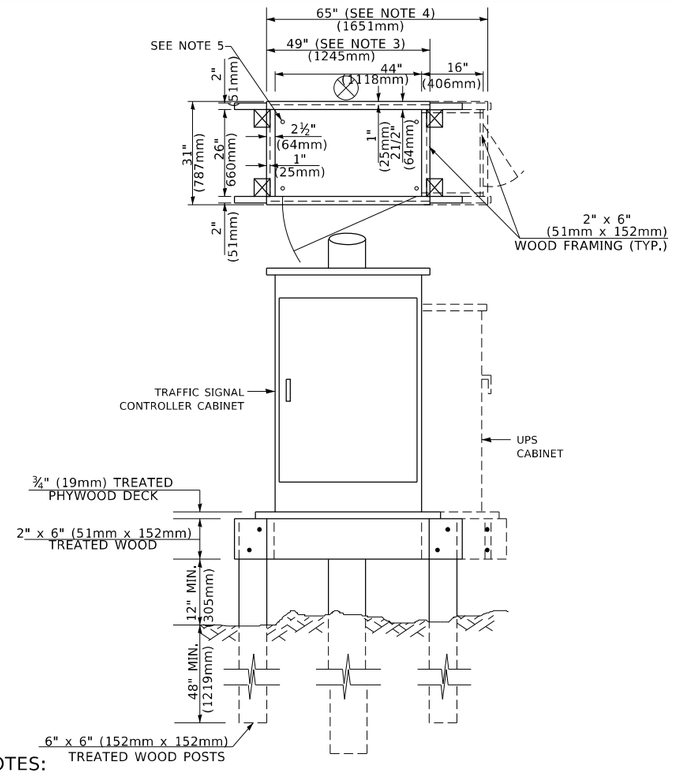
NOTE:

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 (16.8 m) shall use 36" (900 mm) diameter foundations.
3. Combination mast arm assemblies under 56 feet (16.8 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

USER NAME = footemj	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 3/4/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET 15 OF 32 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	2025-1099-RS	WILL	32	15
	TS-05	CONTRACT NO. 80B11		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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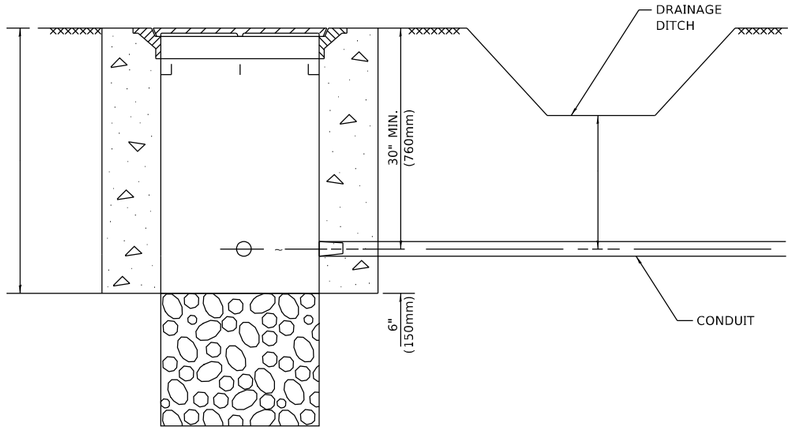
ts05.dgn 3/4/2019 11:23:29 AM User=footemj

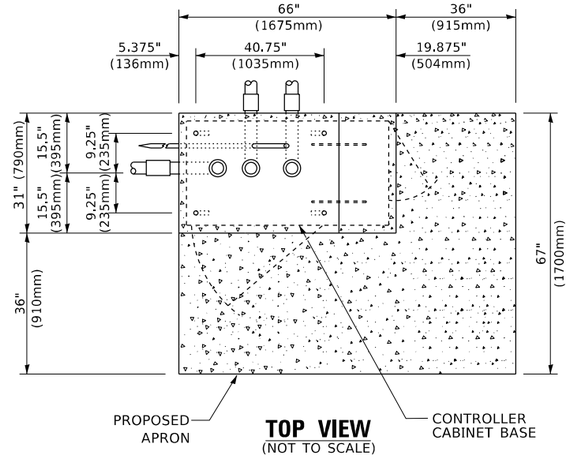


NOTES:

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.

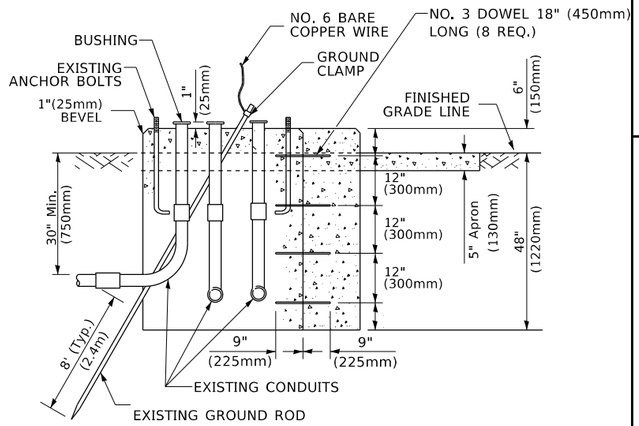
HANDHOLE WITH MINIMUM CONDUIT DEPTH

(NOT TO SCALE)



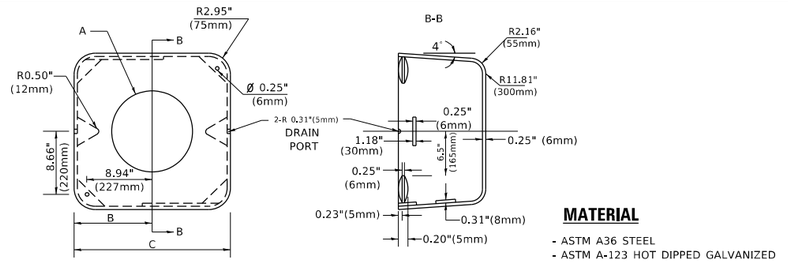
TOP VIEW

(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)

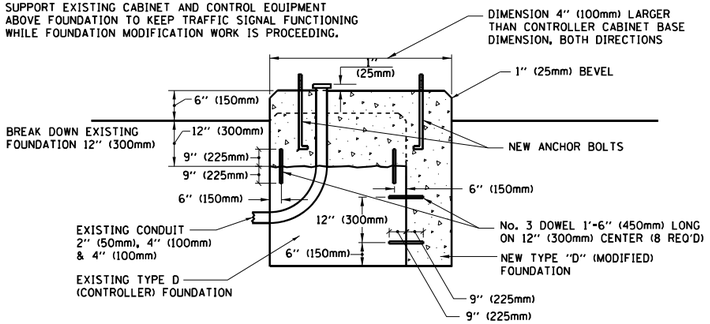
SHROUD

NOTES:

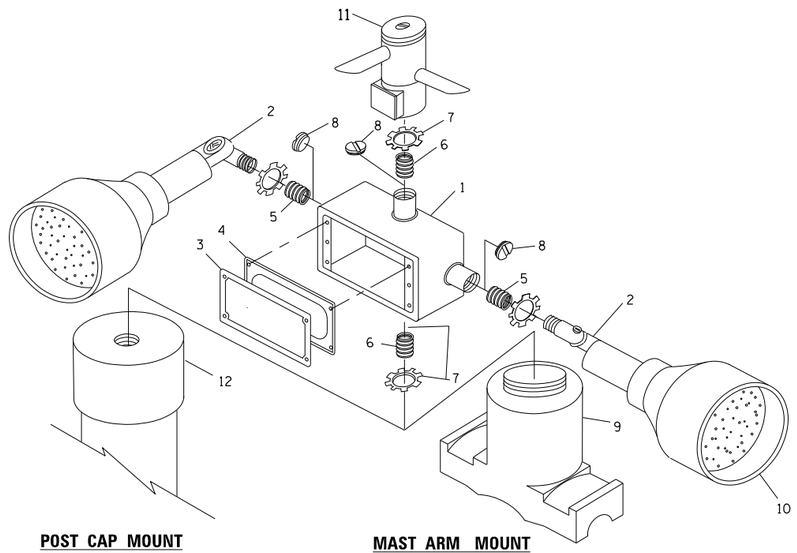
1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
2. THE SUPPLIER SHALL VERIFIED THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE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



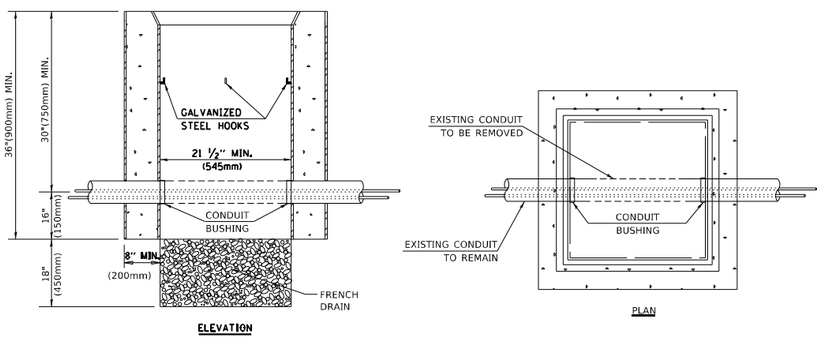
POST CAP MOUNT **MAST ARM MOUNT**

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.



ELEVATION PLAN

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

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	DRAWN -	REVISED -
PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 3/4/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET 16 OF 32 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	2025-1099-RS	WILL	32	16
	TS-05	CONTRACT NO. 80B11		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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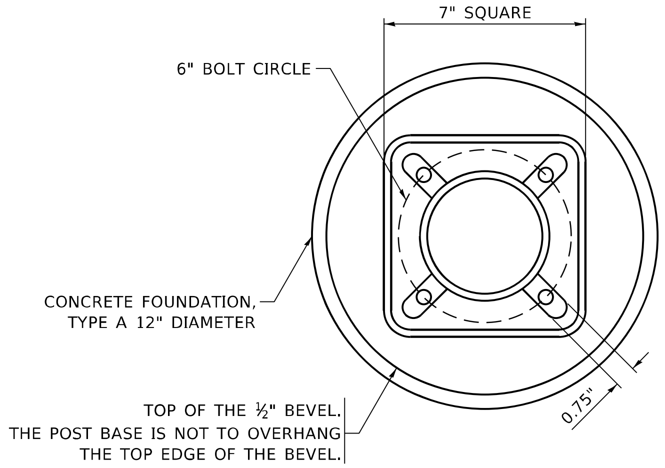
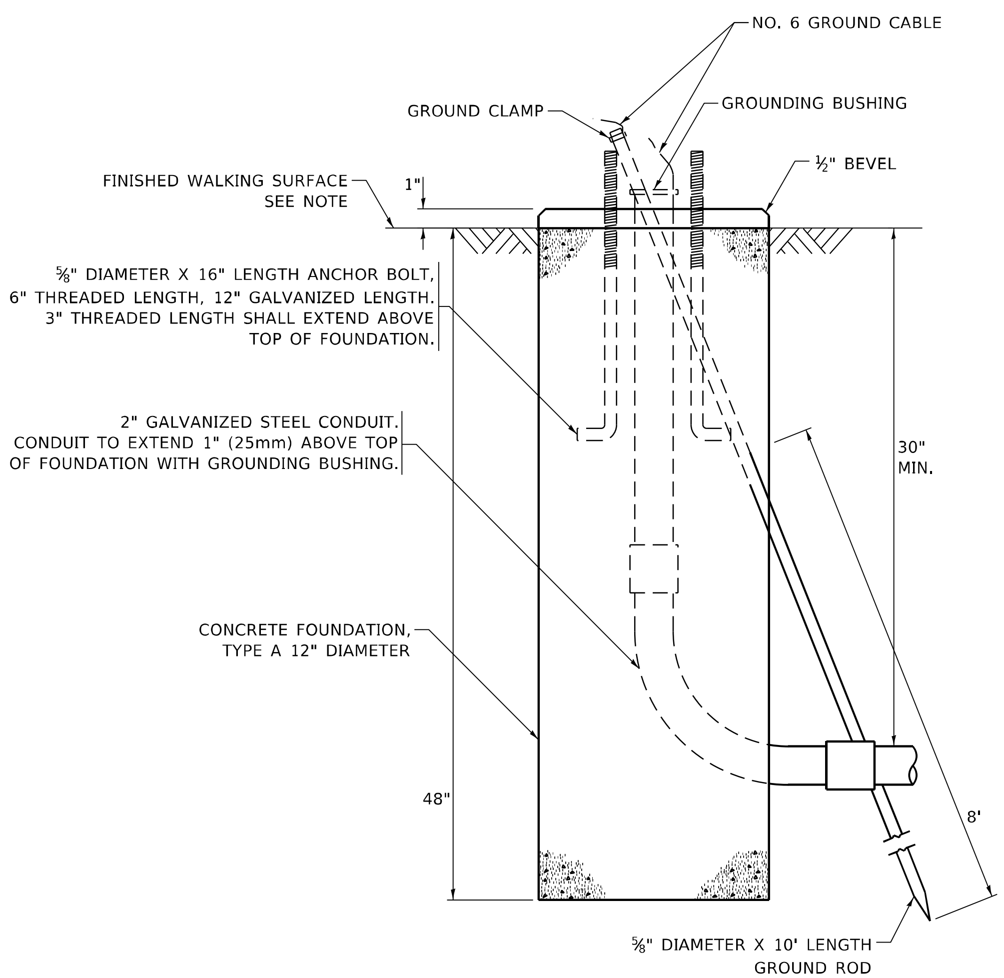


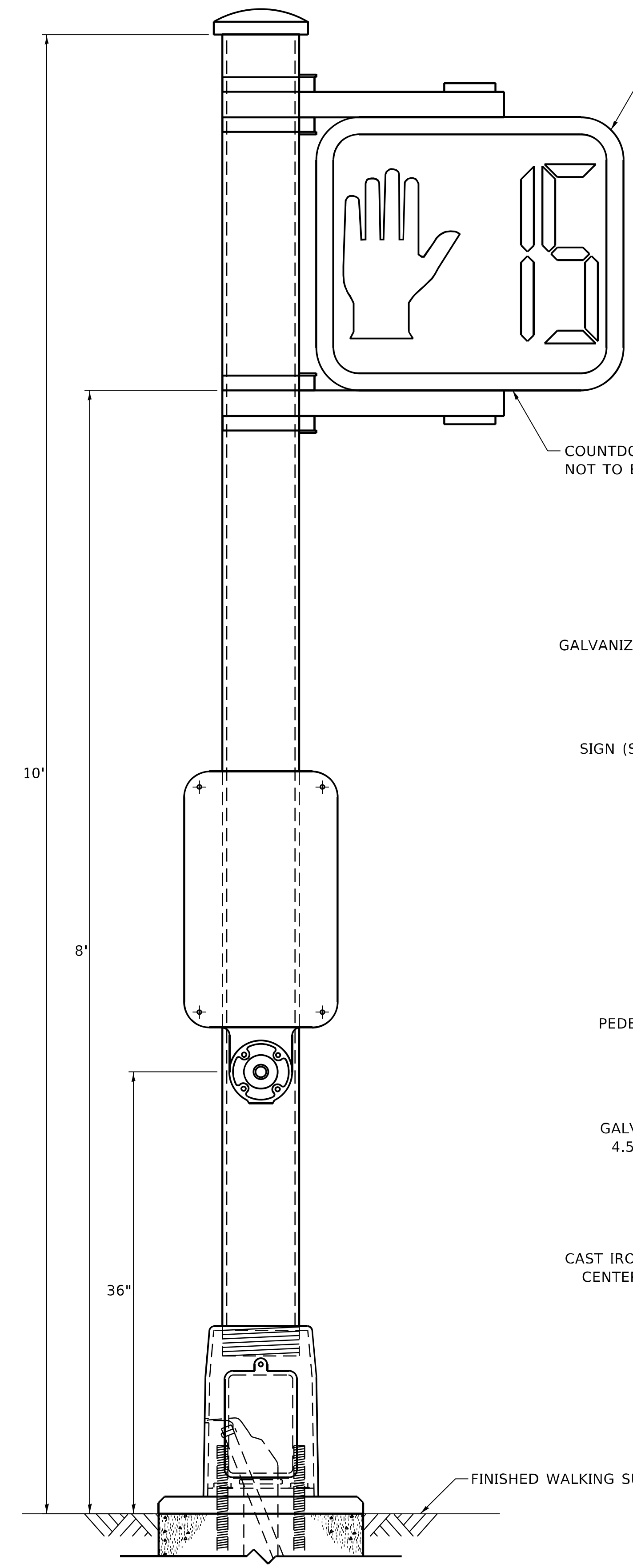
BOLT PATTERN

NOTE:

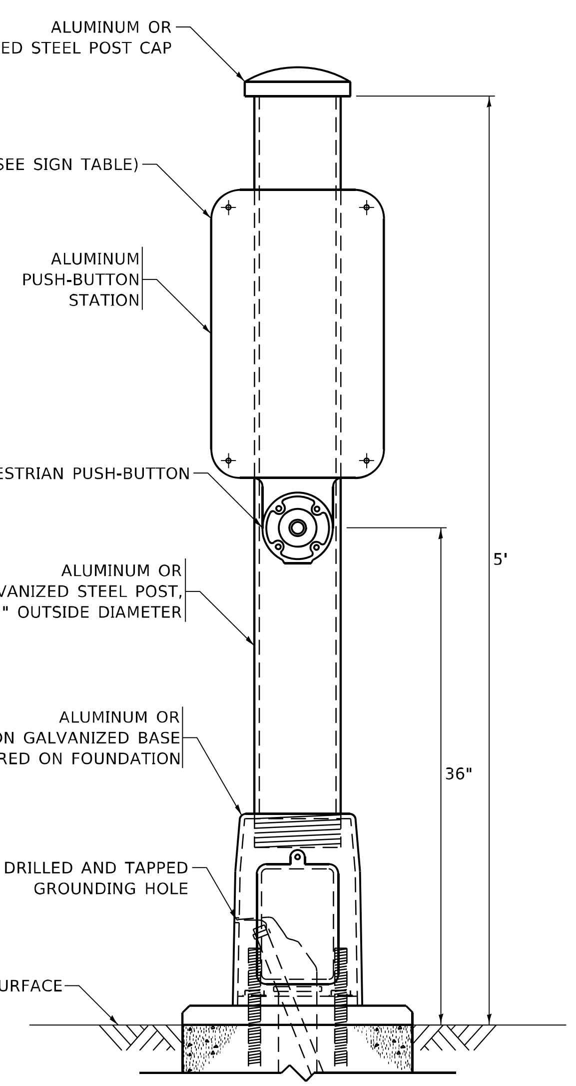
1. IF THE PEDESTRIAN SIGNAL POST FOUNDATION IS INSTALLED WITHIN OR BEHIND A BARRIER CURB, THE TOP OF THE FOUNDATION SHALL BE INSTALLED FLUSH WITH THE TOP OF THE BARRIER CURB.



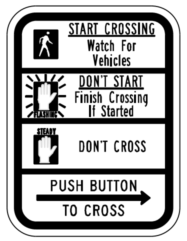
CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER



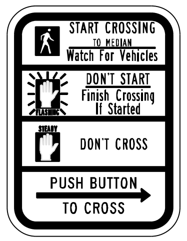
PEDESTRIAN SIGNAL POST, 10 FT.



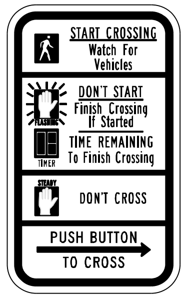
PEDESTRIAN SIGNAL POST, 5 FT.



R10-3b



R10-3d



R10-3e

SIGN TABLE

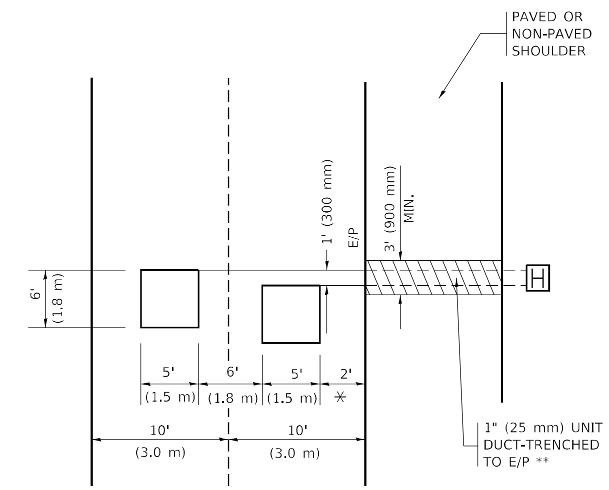
SIGN	DIMENSIONS
R10-3b (RAILROAD ONLY)	9" X 12"
R10-3d (RAILROAD ONLY)	9" X 12"
R10-3e	9" X 12"

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.

LOOPS NEXT TO SHOULDERS

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



* = (600 mm)

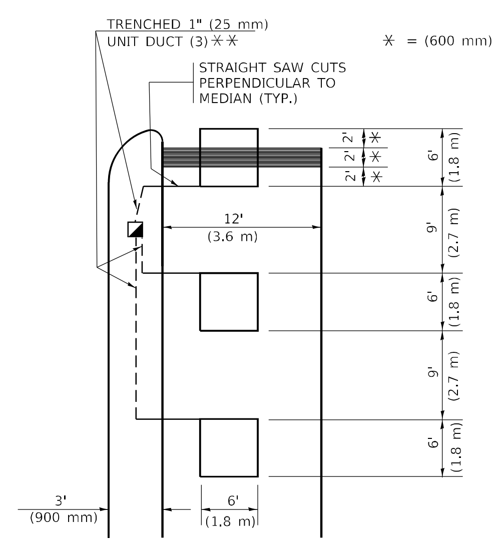
** UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

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 FITS IN MEDIAN.



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

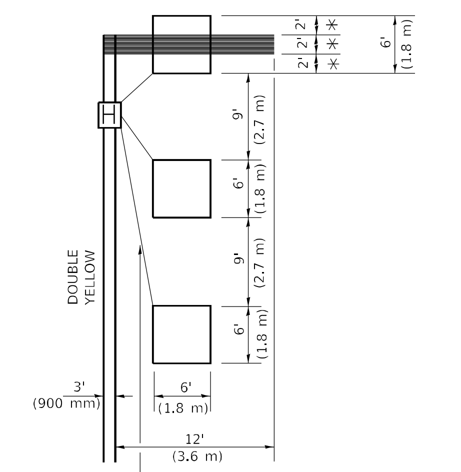
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

LEFT TURN LANES WITHOUT MEDIANS

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

(PROTECTED / PERMITTED LEFT TURN PHASING)

* = (600 mm)



STRAIGHT SAW CUT TO HEAVY DUTY HANDHOLE (TYP.) PLACE HEAVY DUTY HANDHOLE BETWEEN FIRST AND SECOND LOOP AS SHOWN.

NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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 ALL 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 DIMENSIONS OF DETECTOR LOOPS ARE REQUIRED ON ALL SIGNAL LAYOUT PLAN SHEETS.

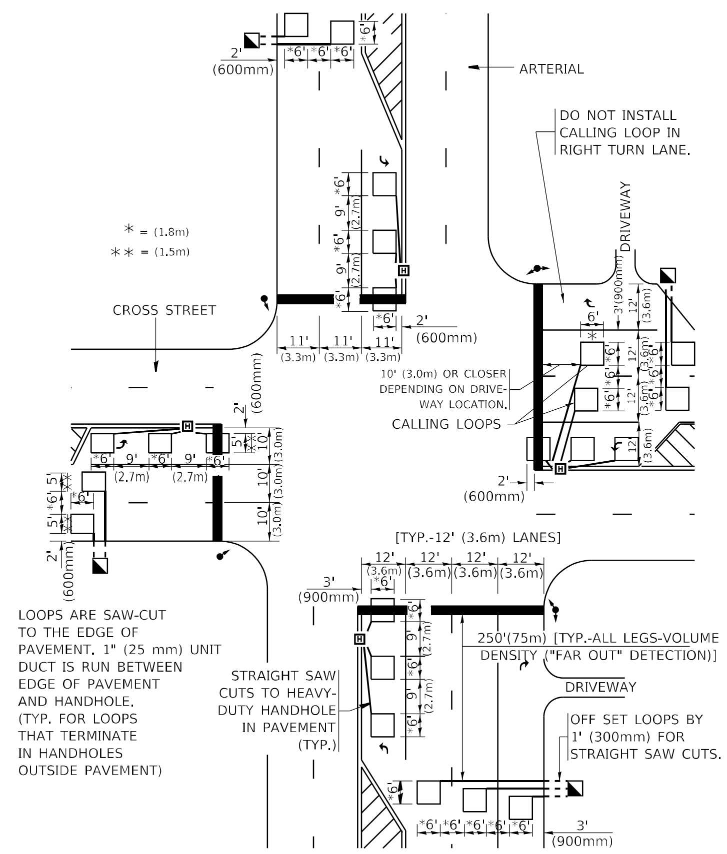
"FAR OUT" DETECTION REFERS TO LOCKING, PRESENCE TYPE DETECTION LOCATED IN THRU LANES, RIGHT TURN LANES, AND RIGHT TURN LANE TAPER AREAS (IF APPLICABLE), USUALLY 250' (75 m) IN ADVANCE OF STOP BARS. "UPTIGHT" DETECTION REFERS TO NON-LOCKING PRESENCE TYPE DETECTION LOCATED IN ALL LANES AND 10'-15' (3.0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

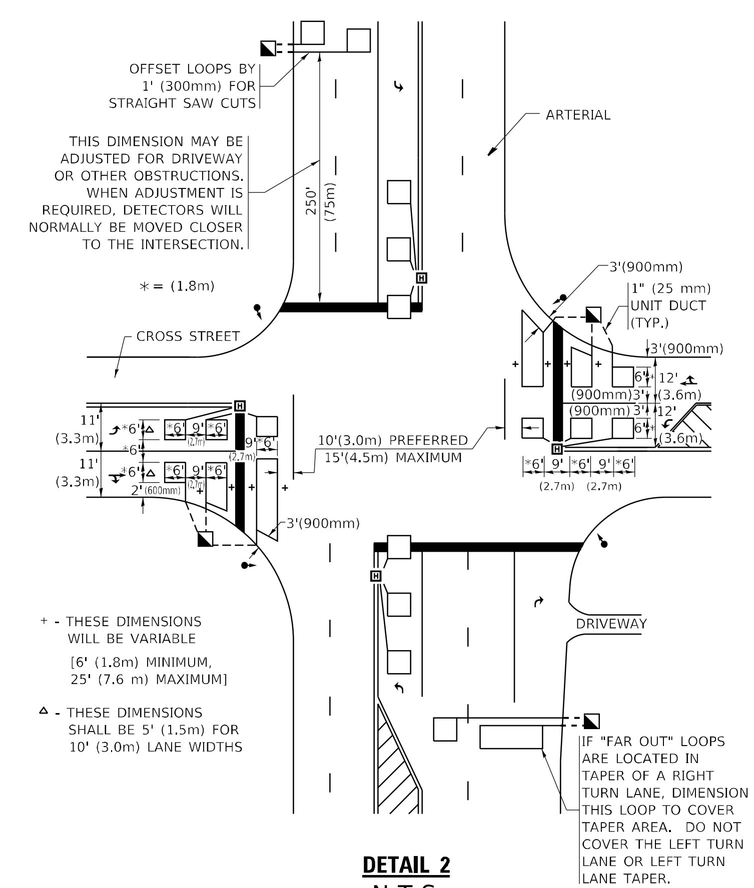
THIS DRAWING HAS BEEN PREPARED TO ASSIST THE RESIDENT ENGINEER FOR ALL ROADWAY RESURFACING OR S.M.A.R.T. PROJECTS WHERE THE DIMENSIONS ARE NOT SHOWN ON THE PLANS AND THE FINAL LOCATIONS FOR CROSSWALKS OR STOP BARS ARE NOT DETERMINED.

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



DETAIL 1
N.T.S.

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



DETAIL 2
N.T.S.

USER NAME = footemj	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT 1 – DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING	F.A.P. RTE. 840	SECTION 2025-1099-RS	COUNTY WILL	TOTAL SHEETS 32	SHEET NO. 18
	DRAWN -	REVISED -			TS-07		CONTRACT NO. 80B11		
PLOT SCALE = 50.0000 ' / in.	CHECKED - R.K.F.	REVISED -			FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
PLOT DATE = 3/4/2019	DATE -	REVISED -		SCALE: NONE SHEET 18 OF 32 SHEETS STA. TO STA.					

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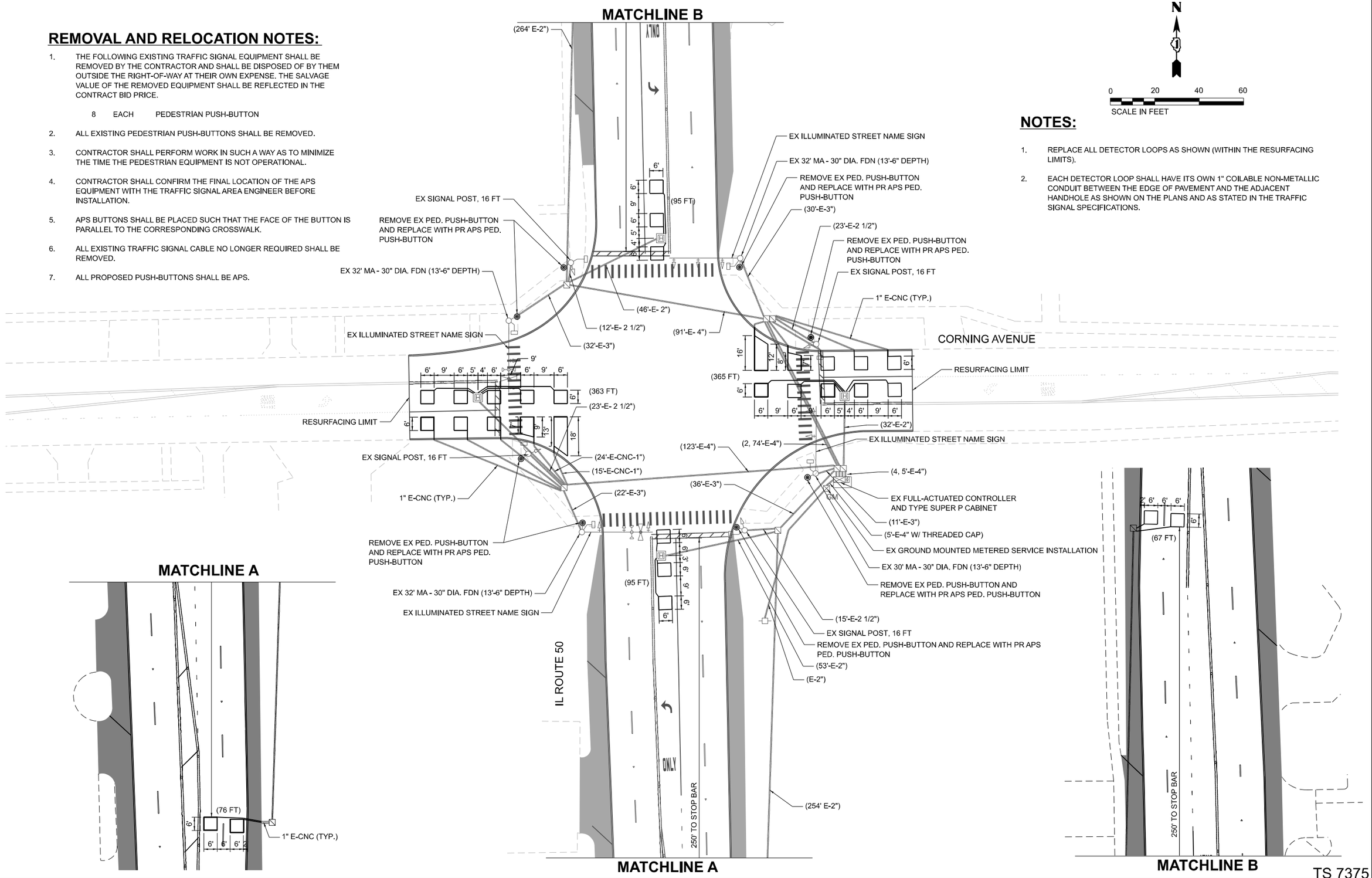
REMOVAL AND RELOCATION NOTES:

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

   8 EACH PEDESTRIAN PUSH-BUTTON

2. ALL EXISTING PEDESTRIAN PUSH-BUTTONS SHALL BE REMOVED.
3. CONTRACTOR SHALL PERFORM WORK IN SUCH A WAY AS TO MINIMIZE THE TIME THE PEDESTRIAN EQUIPMENT IS NOT OPERATIONAL.
4. CONTRACTOR SHALL CONFIRM THE FINAL LOCATION OF THE APS EQUIPMENT WITH THE TRAFFIC SIGNAL AREA ENGINEER BEFORE INSTALLATION.
5. APS BUTTONS SHALL BE PLACED SUCH THAT THE FACE OF THE BUTTON IS PARALLEL TO THE CORRESPONDING CROSSWALK.
6. ALL EXISTING TRAFFIC SIGNAL CABLE NO LONGER REQUIRED SHALL BE REMOVED.
7. ALL PROPOSED PUSH-BUTTONS SHALL BE APS.



NOTES:

1. REPLACE ALL DETECTOR LOOPS AS SHOWN (WITHIN THE RESURFACING LIMITS).
2. 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 7375

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TERRA ENGINEERING LTD.

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	DRAWN - AF	REVISED -	
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PLOT DATE =	DATE - 9/26/2025	REVISED -	

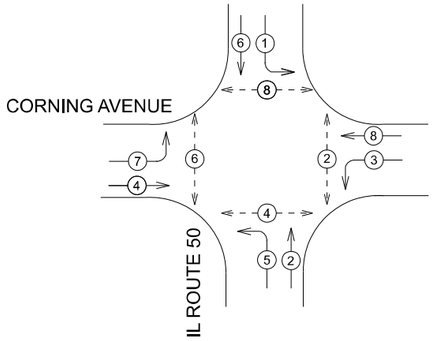
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL PLAN
IL 50 (GOVERNOR'S HIGHWAY) AT CORNING AVENUE

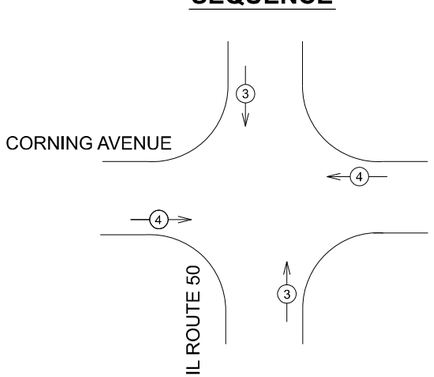
SCALE: 1"=20' | SHEET 19 OF 32 SHEETS | STA. 0+00.00 | TO STA. 6+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	2025-1099-RS	WILL	32	19
		CONTRACT NO. 80B11		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

EXISTING AND PROPOSED PHASE DESIGNATION DIAGRAM



EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



LEGEND

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

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE		QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD	1 OR 3-SECTION	6	11	66
	4 SECTION	-	14	-
	5-SECTION	8	13	104
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	-	20	-
BLANK-OUT SIGN		-	25	-
NETWORK SWITCH	II OR III	-	35	-
CELLULAR MODEM		-	15	-
	TOTAL UPS SIZING			465
UPS CHARGING		-	225	-
BATTERY HEATER MAT		-	180	-
CABINET HEATER		-	200	-
FLASHER		-	15	-
LED STREET NAME SIGN		4	120	480
LUMINAIRE		-	240	-
	TOTAL SERVICE WIRE SIZING			945

ENERGY COSTS TO:

ILLINOIS DEPARTMENT OF TRANSPORTATION

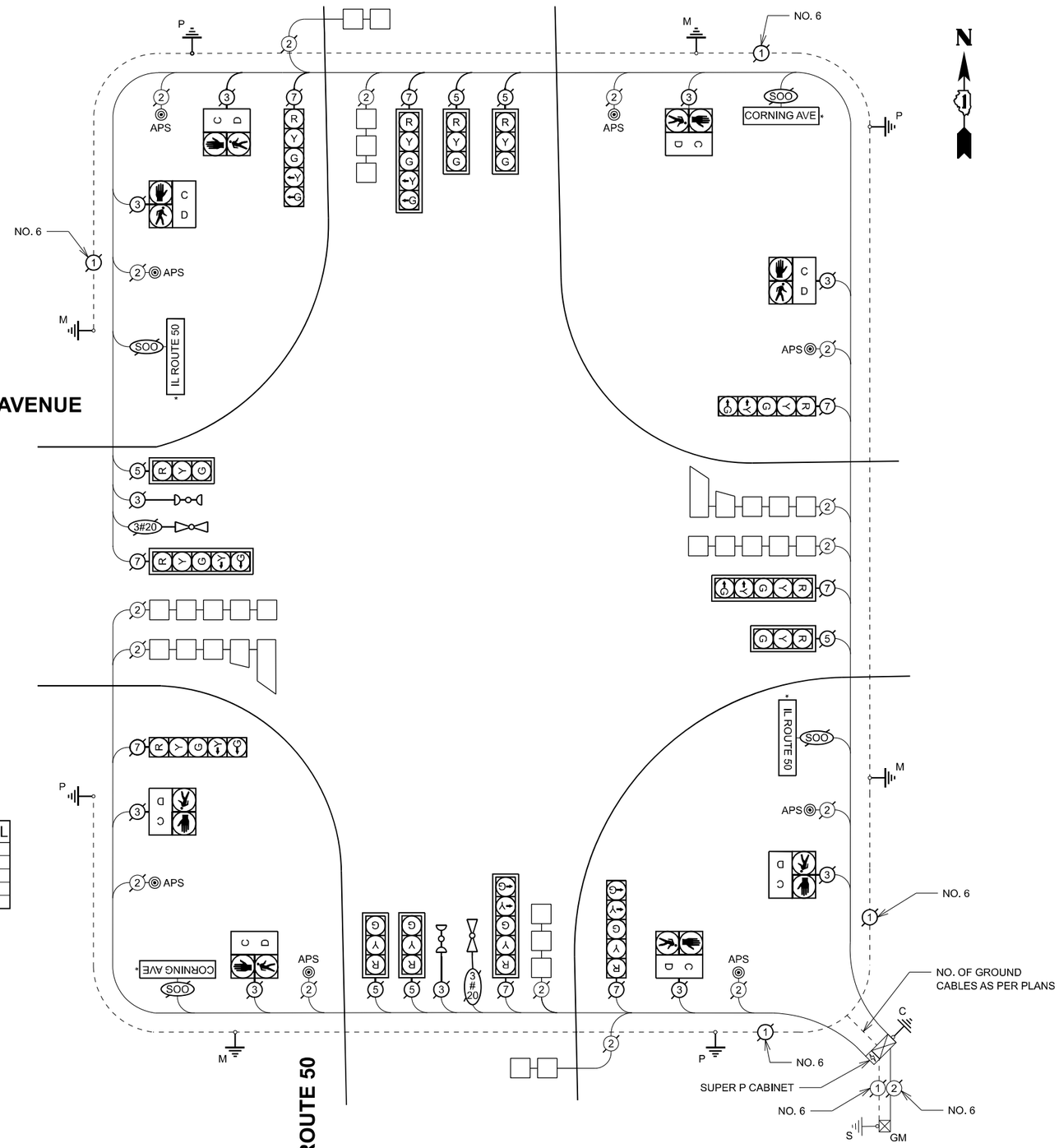
DIVISION OF HIGHWAYS/DISTRICT 1
201 WEST CENTER CT
SCHAUMBURG, IL 60169-1096

ENERGY SUPPLY:

CONTACT: BRAD SHINABARGAR
PHONE: (708) 235-2692
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: 9907462222
METER NUMBER:

SCHEDULE OF QUANTITIES

DESCRIPTION	UNIT	TOTAL
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
DETECTOR LOOP TYPE I	FOOT	1,063
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	8
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL I	EACH	1



CABLE PLAN
(NOT TO SCALE)

NOTE:
1. AN ASTERISK INDICATES ILLUMINATED STREET NAME SIGN.

TS 7375

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TERRA ENGINEERING LTD.

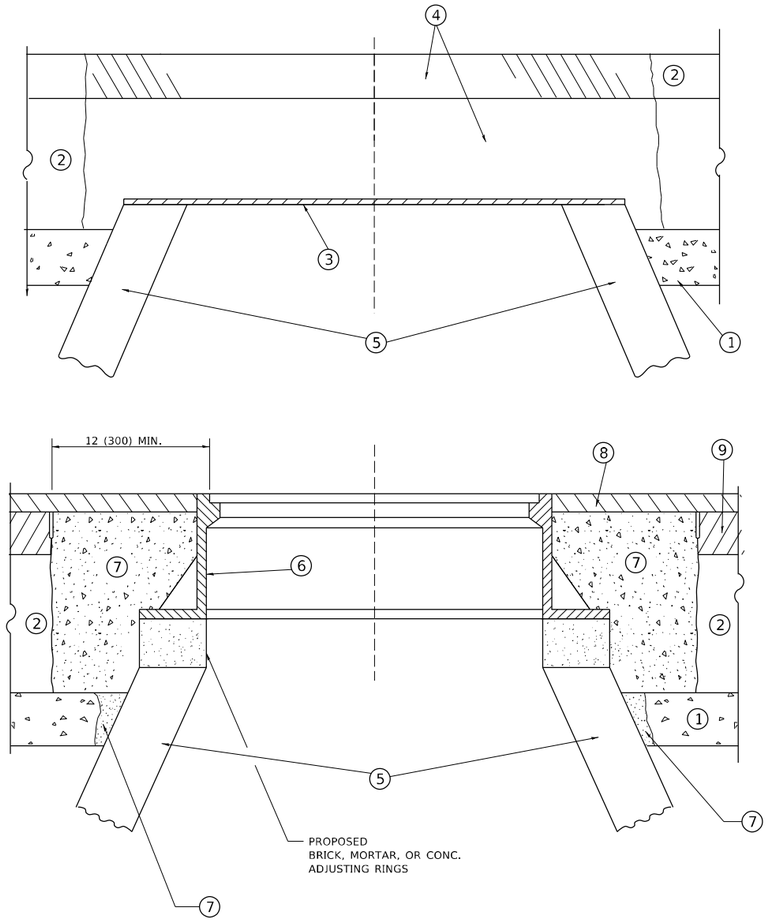
USER NAME =	DESIGNED - CC	REVISED -	
	DRAWN - AF	REVISED -	
PLOT SCALE = 0.167 ' / in.	CHECKED - CC	REVISED -	
PLOT DATE =	DATE - 9/26/2025	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DIAGRAM, EMERG. VEH. PREEMPTION
IL 50 (GOVERNOR'S HIGHWAY) AT CORNING AVENUE

SCALE: NTS | SHEET 20 OF 32 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	2025-1099-RS	WILL	32	20
		CONTRACT NO. 80B11		
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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USER NAME = Lawrence.DeManche	DESIGNED - R. SHAH	REVISED - R. BORO 03-09-11	
	DRAWN -	REVISED - R. BORO 12-06-11	
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED - K. SMITH 11-18-22	
PLOT DATE = 9/15/2023	DATE - 10-25-94	REVISED - K. SMITH 09-15-23	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

SCALE: NTS | SHEET 21 OF 32 SHEETS | STA. | TO STA.

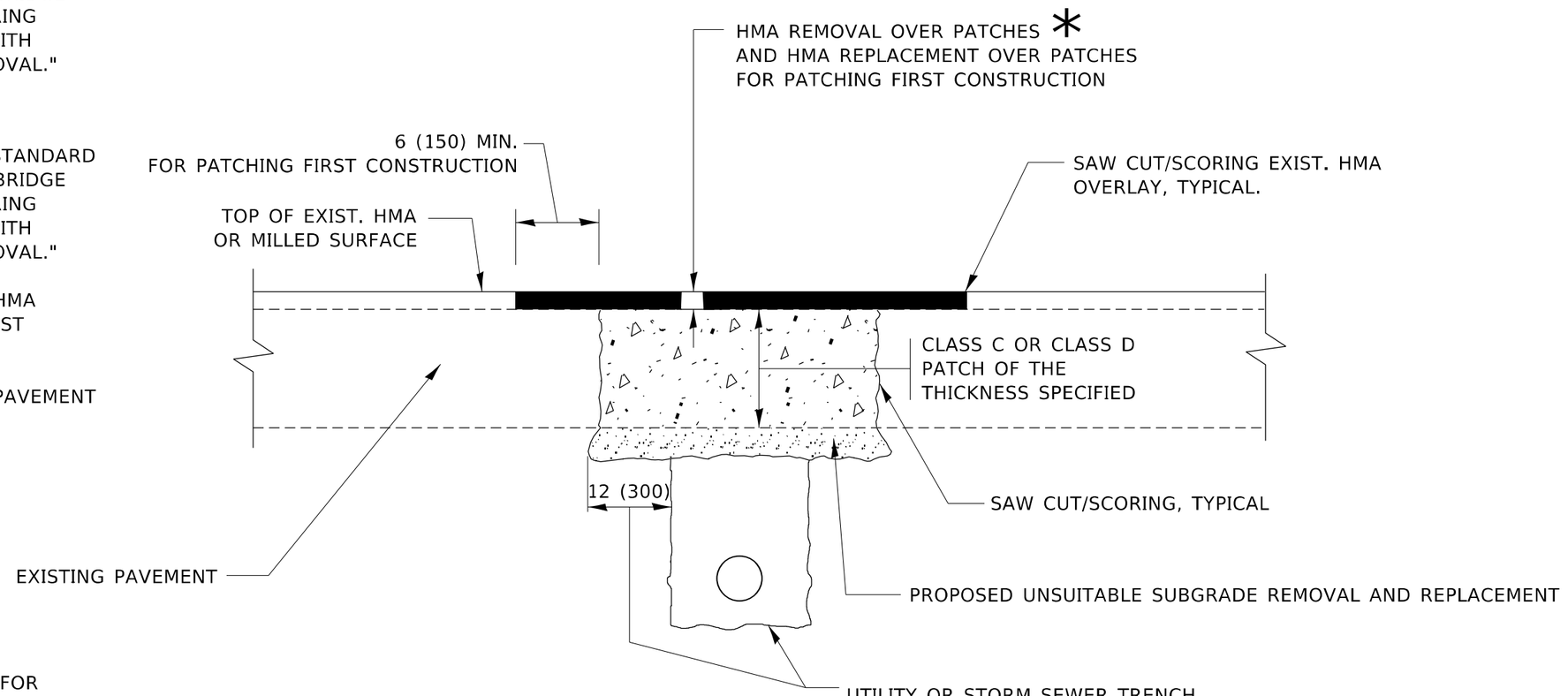
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	2025-1099-RS	WILL	32	21
	BD600–03 (BD–08)	CONTRACT NO. 80B11		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

METHOD OF MEASUREMENT

REFER TO SECTION 442 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND THE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL."

BASIS OF PAYMENT

1. REFER TO SECTION 442 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND THE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL."
2. SAW CUT/SCORING OF EXISTING HMA OVERLAY IS INCLUDED IN THE COST OF PAVEMENT PATCHING.
3. SAW CUT/SCORING OF EXISTING PAVEMENT IS INCLUDED IN THE COST OF PAVEMENT PATCHING.



* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

SEQUENCE OF CONSTRUCTION (MILLING FIRST)

1. MILL HMA FIRST IF THERE IS AT LEAST 4½ INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

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

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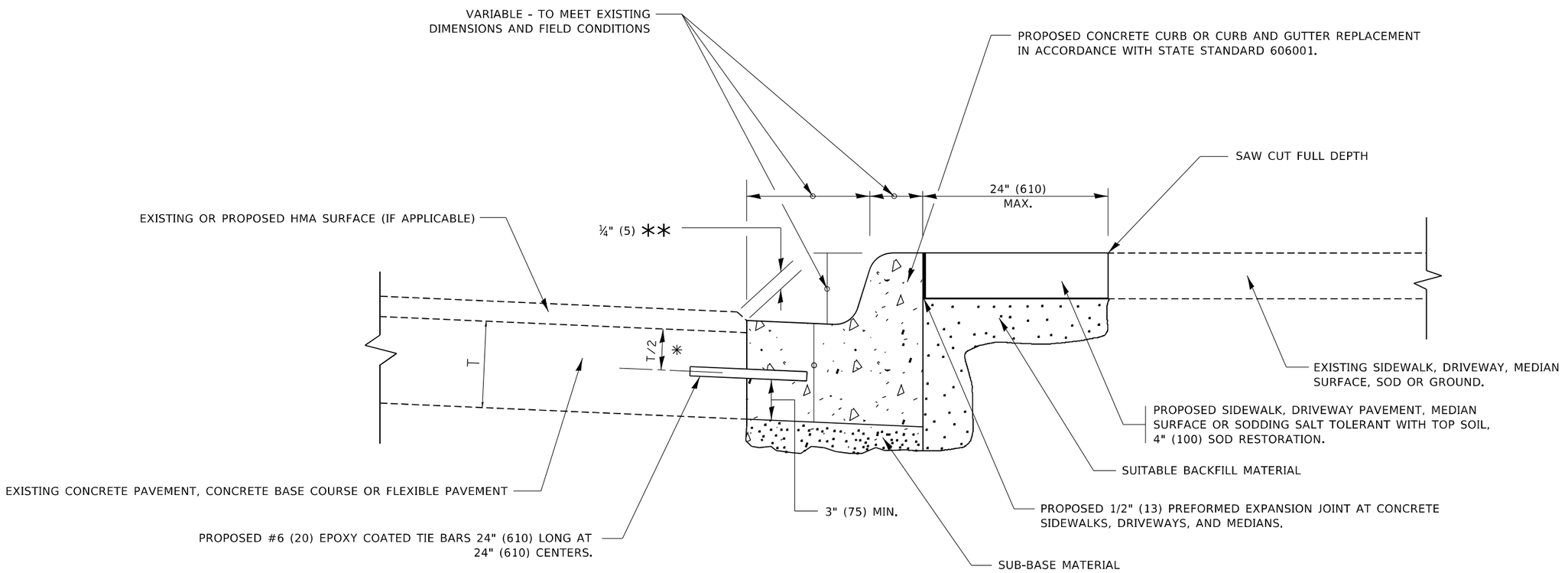
USER NAME = Lawrence.DeManche	DESIGNED - R. SHAH	REVISED - R. BORO 01-01-07	**STATE OF ILLINOIS**	**PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT**	
	DRAWN -	REVISED - R. BORO 09-04-07	**DEPARTMENT OF TRANSPORTATION**		
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED - K. ENG 10-27-08			
PLOT DATE = 11/18/2022	DATE - 10-25-94	REVISED - K. SMITH 11-18-22		SCALE: NTS	SHEET 22 OF 32 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	2025-1099-RS	WILL	32	22
	BD400-04 (BD-22)	CONTRACT NO. 80B11		
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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	DRAWN -	REVISED - M. GOMEZ 01-22-01	
PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED - R. BORO 12-15-09	
PLOT DATE = 7/11/2019	DATE - 03-11-94	REVISED - K. SMITH 07-11-19	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

SCALE: NTS | SHEET 23 OF 32 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	2025-1099-RS	WILL	32	23
	BD600-06 (BD-24)	CONTRACT NO. 80B11		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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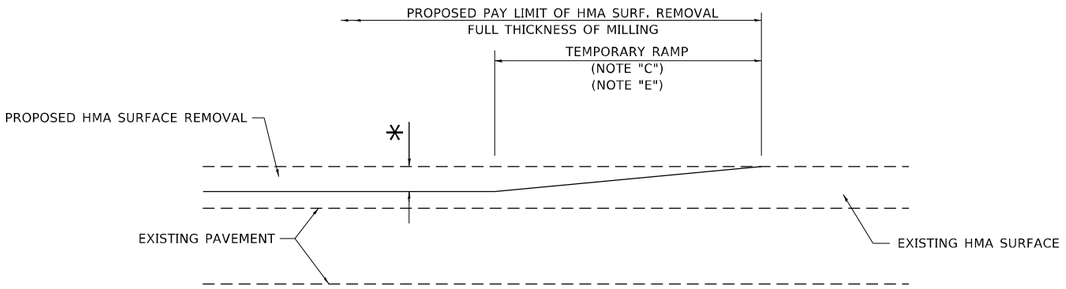
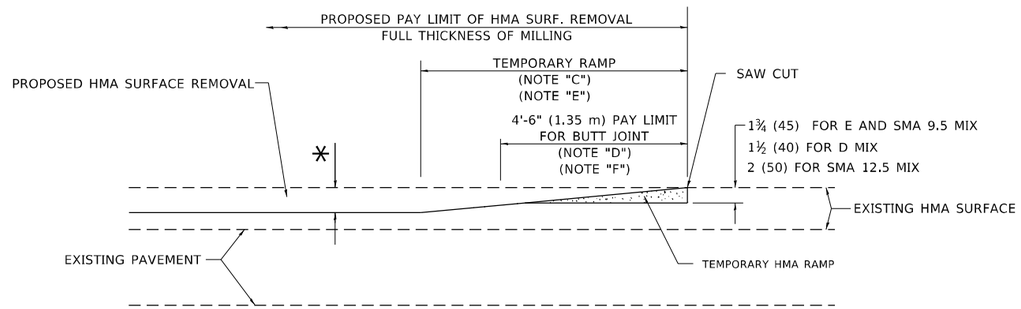


MILLED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 1

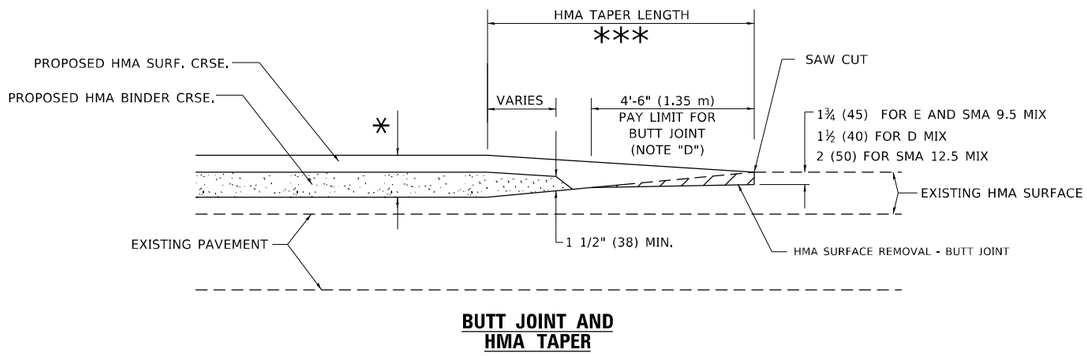


HMA CONSTRUCTED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

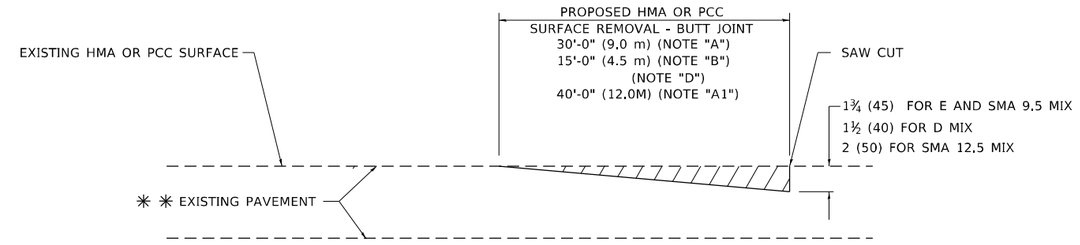
OPTION 2

TYPICAL TEMPORARY RAMP

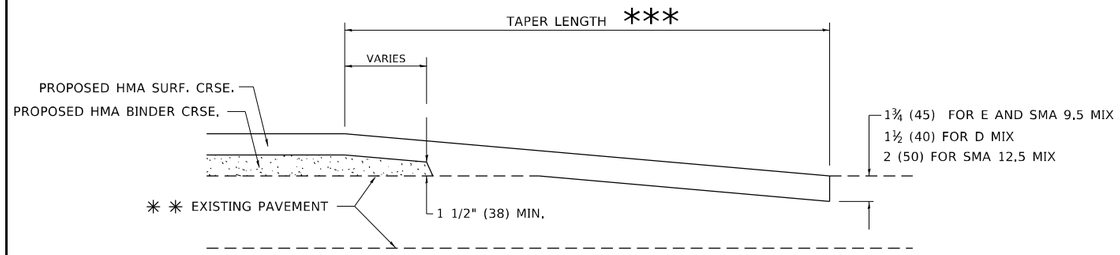


BUTT JOINT AND HMA TAPER

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.

USER NAME = Lawrence.DeManche	DESIGNED - M. DE YONG	REVISED - A. ABBAS 03-21-97	
	DRAWN -	REVISED - M. GOMEZ 04-06-01	
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED - R. BORO 01-01-07	
PLOT DATE = 11/18/2022	DATE - 06-13-90	REVISED - K. SMITH 11-18-22	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BUTT JOINT AND HMA TAPER DETAILS

SCALE: NTS | SHEET 24 OF 32 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	2025-1099-RS	WILL	32	24
	BD400–05 BD–32	CONTRACT NO.80B11		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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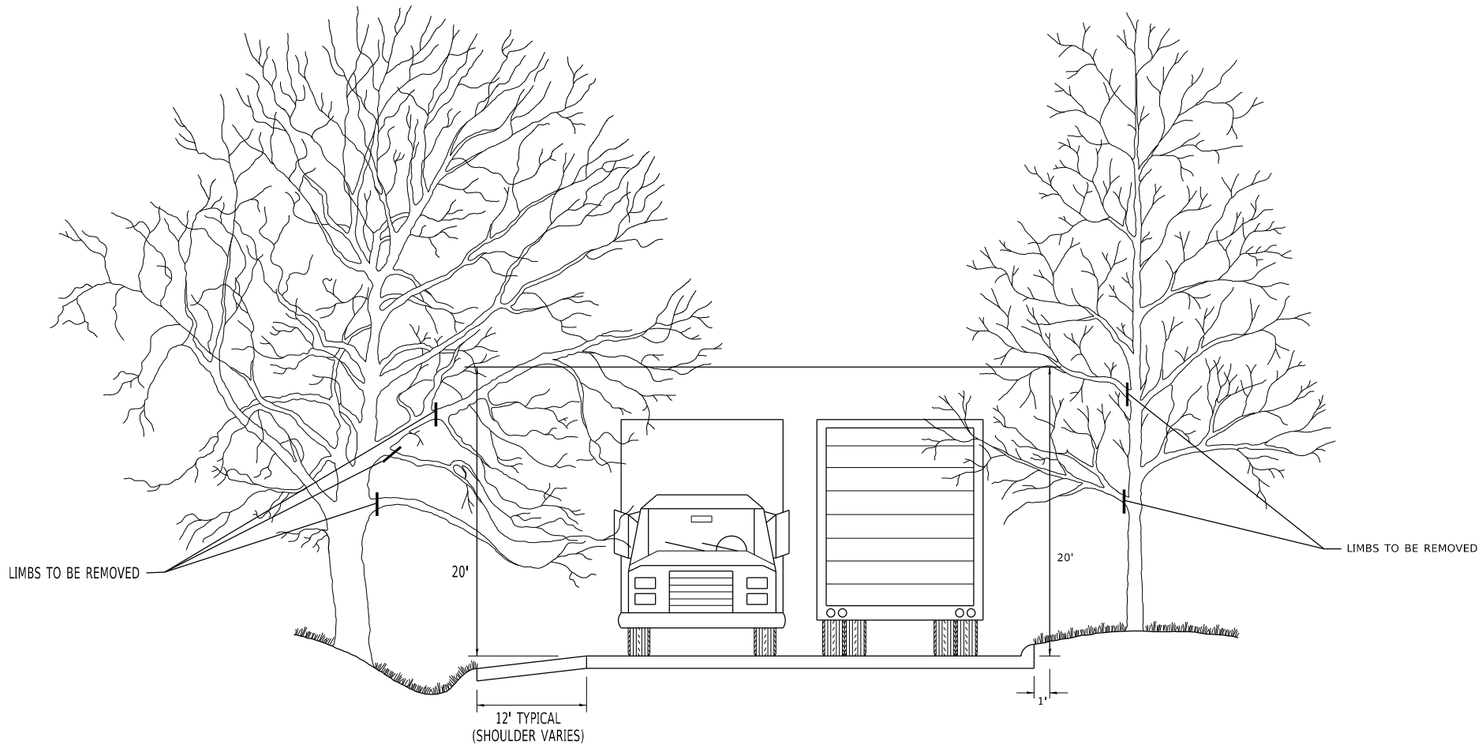

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PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 3/11/2019	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PRUNING FOR SAFETY AND EQUIPMENT CLEARANCE

SCALE: NTS | SHEET 25 OF 32 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	2025-1099-RS	WILL	32	25
	BM–20	CONTRACT NO. 80B11		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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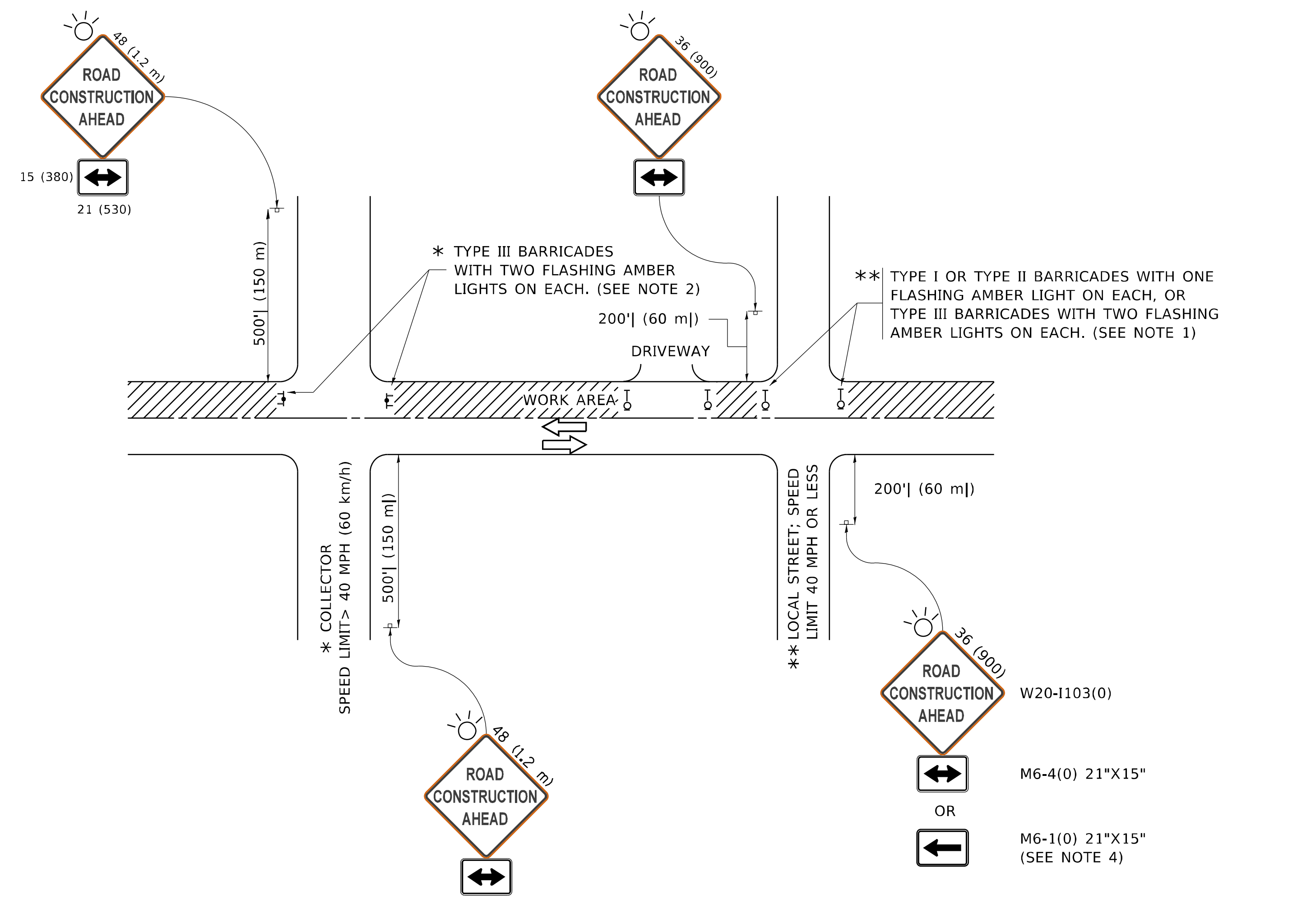

NOTES:

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:

   a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.

   b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.

2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:

   a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.

   b) 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.

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USER NAME = footemj	DESIGNED - L.H.A.	REVISED - A. HOUSEH 10-15-96	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN -	REVISED - T. RAMMACHER 01-06-00	
PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED - A. SCHUETZE 07-01-13	
PLOT DATE = 3/4/2019	DATE - 06-89	REVISED - A. SCHUETZE 09-15-16	

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

SCALE: NTS | SHEET 26 OF 32 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	2025-1099-RS	WILL	32	26
	TC-10	CONTRACT NO. 80B11		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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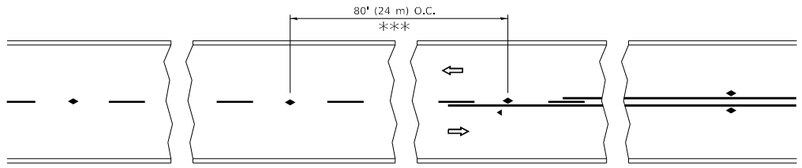
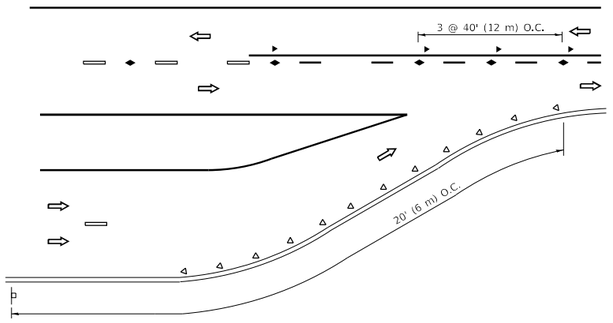


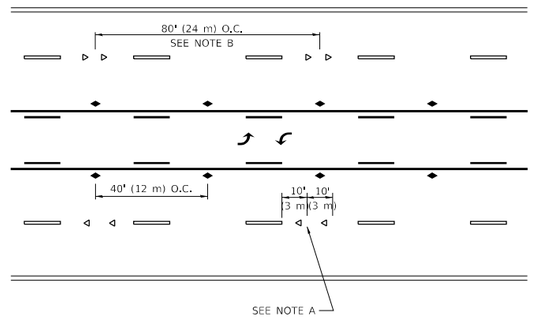
*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

TWO–LANE/TWO–WAY

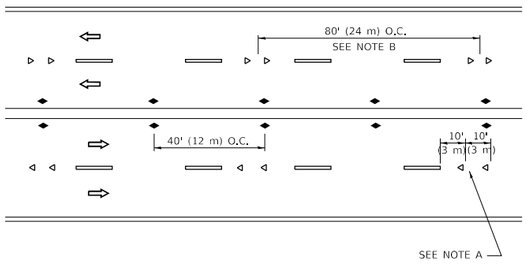
SEE FIGURE 3B-14 MUTCD



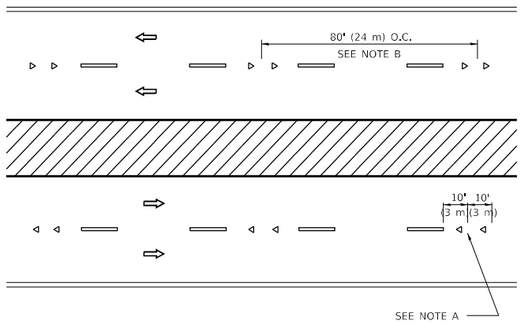
LANE REDUCTION TRANSITION



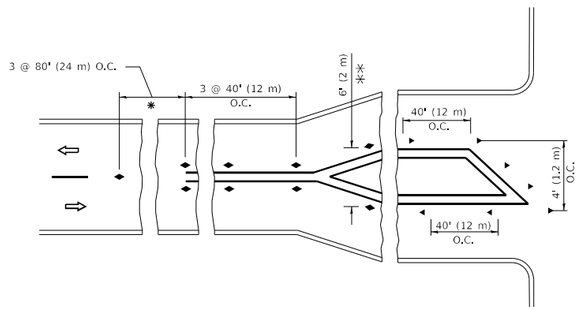
TWO–WAY LEFT TURN

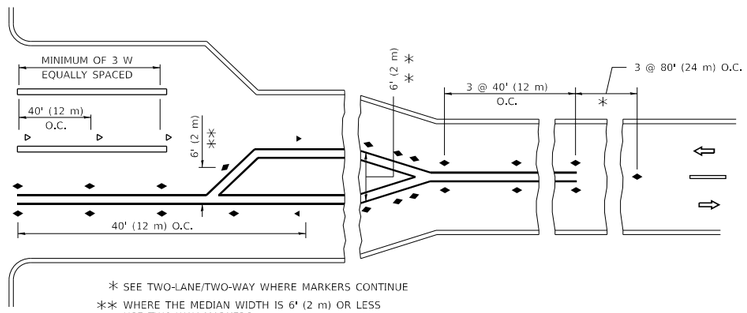


MULTI–LANE/UNDIVIDED



MULTI–LANE/DIVIDED





* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE

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

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.

USER NAME = footemj	DESIGNED -	REVISED - T. RAMMACHER 03-12-99
	DRAWN -	REVISED - T. RAMMACHER 01-06-00
PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED - C. JUCIUS 09-09-09
PLOT DATE = 3/4/2019	DATE -	REVISED - C. JUCIUS 07-01-13

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

SCALE: NTS | SHEET 27 OF 32 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	2025-1099-RS	WILL	32	27
	TC-11	CONTRACT NO. 80B11		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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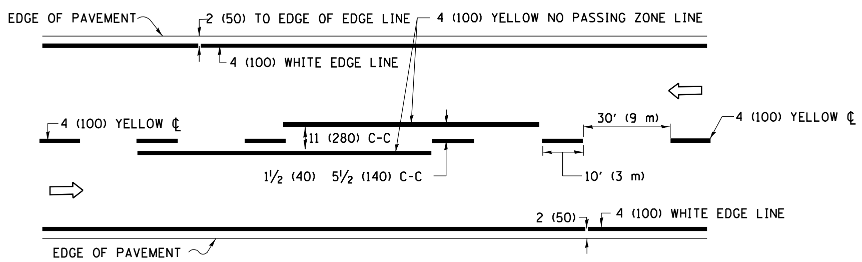
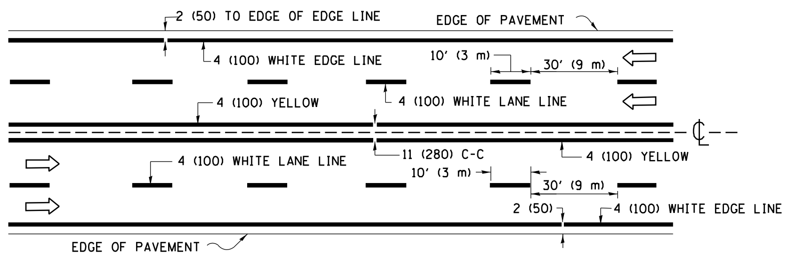
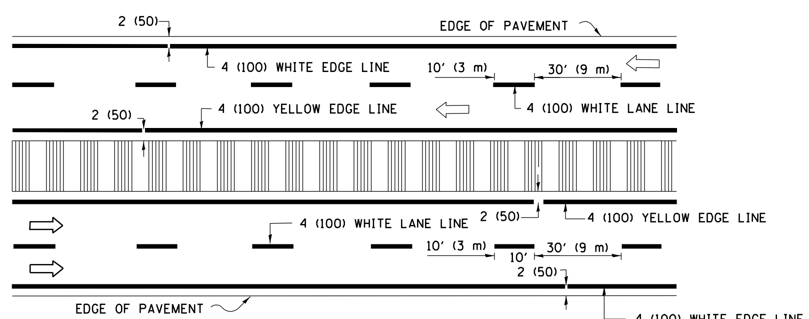
tc11.dgn 3/4/2019 10:29:08 AM User:footemj



2–LANE ROADWAY

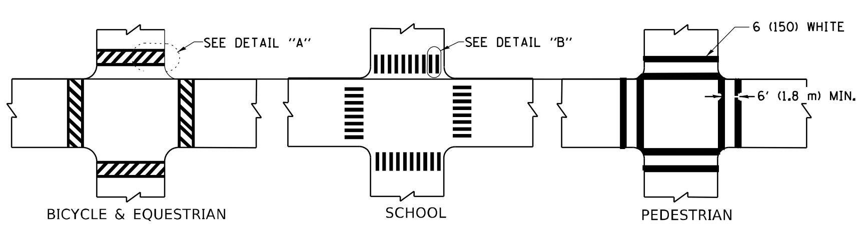


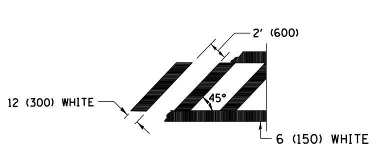
MULTI–LANE UNDIVIDED



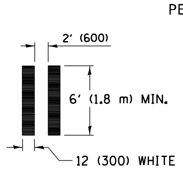
MULTI–LANE DIVIDED
WITH MEDIAN

TYPICAL LANE AND EDGE LINE MARKING





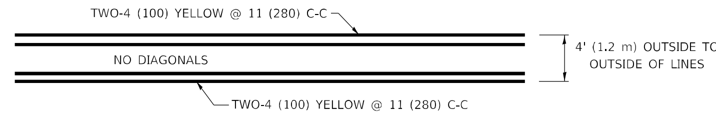
DETAIL "A"



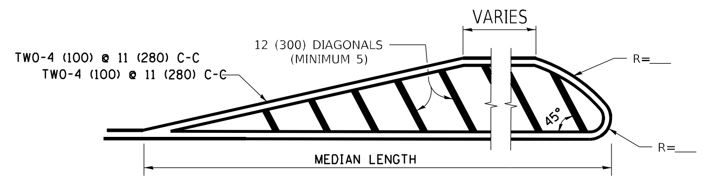
DETAIL "B"

TYPICAL CROSSWALK MARKING

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



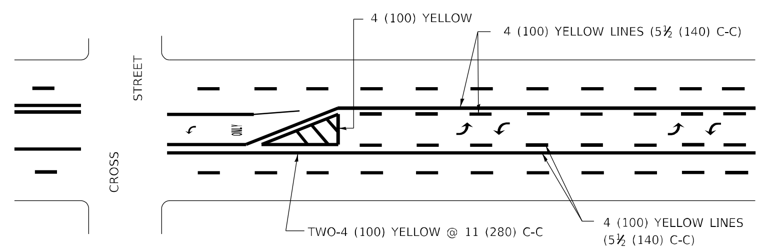
4' (1.2 m) WIDE MEDIANS ONLY



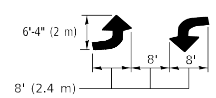
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

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

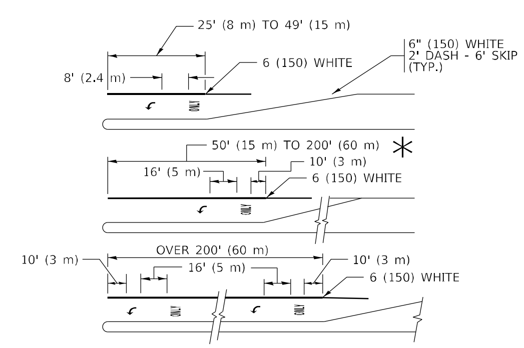


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO–WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

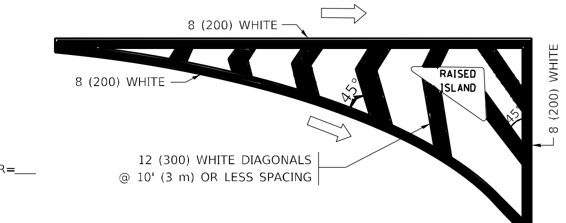


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
↰ AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)

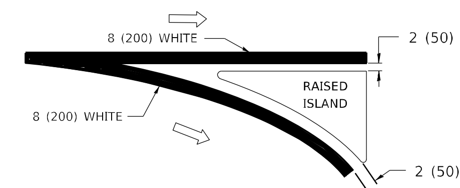
* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

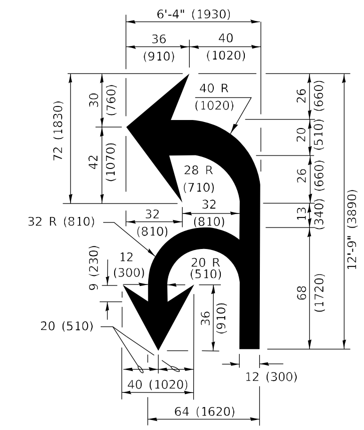


ISLAND OFFSET FROM PAVEMENT EDGE

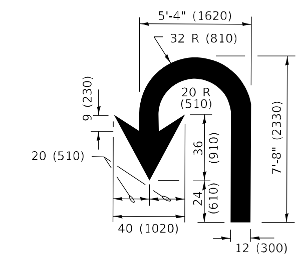


ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING

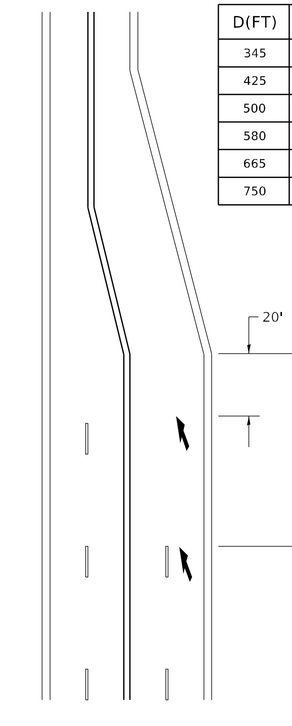


COMBINATION LEFT AND U–TURN



U–TURN

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



LANE REDUCTION TRANSITION

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

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	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.

USER NAME = footemj	DESIGNED - EVERS	REVISED - C. JUCIUS 09-09-09	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN -	REVISED - C. JUCIUS 07-01-13	
PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED - C. JUCIUS 12-21-15	
PLOT DATE = 3/4/2019	DATE - 03-19-90	REVISED - C. JUCIUS 04-12-16	

DISTRICT ONE
TYPICAL PAVEMENT MARKINGS

SCALE: NTS | SHEET 28 OF 32 SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	2025-1099-RS	WILL	32	28
	TC-13	CONTRACT NO. 80B11		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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tc13.dgn 3/4/2019 10:34:37 AM User=footemj

TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER

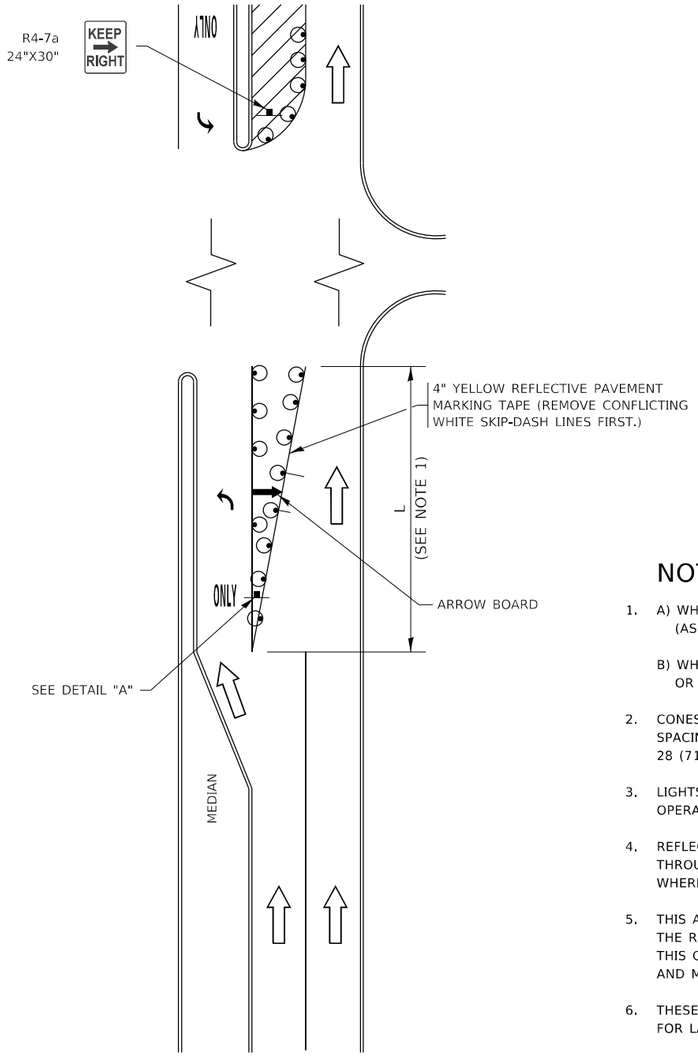


FIGURE 1

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

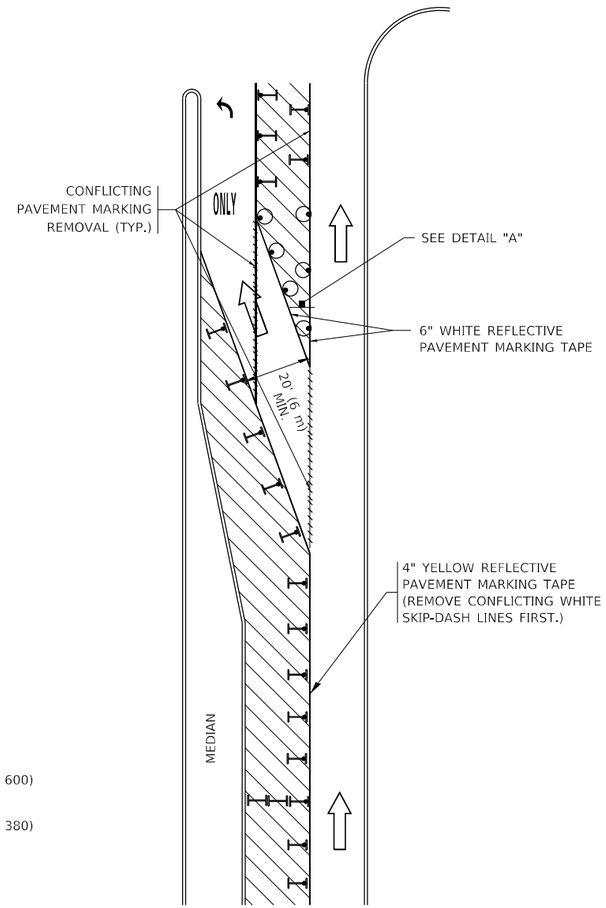
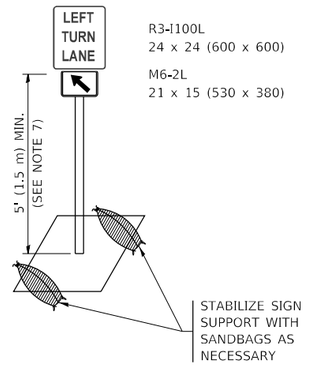


FIGURE 2



DETAIL A

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

USER NAME = {ootem}	DESIGNED - T. RAMMACHER 09-08-94	REVISED - R. BORO 09-14-09	
	DRAWN - A. HOUSEH 11-07-95	REVISED - A. SCHUETZE 07-01-13	
PLOT SCALE = 50.0000 ' / in.	CHECKED - A. HOUSEH 10-12-96	REVISED - A. SCHUETZE 09-15-16	
PLOT DATE = 3/4/2019	DATE - T. RAMMACHER 01-06-00	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

SCALE: NTS | SHEET 29 OF 32 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	2025-1099-RS	WILL	32	29
	TC-14	CONTRACT NO. 80B11		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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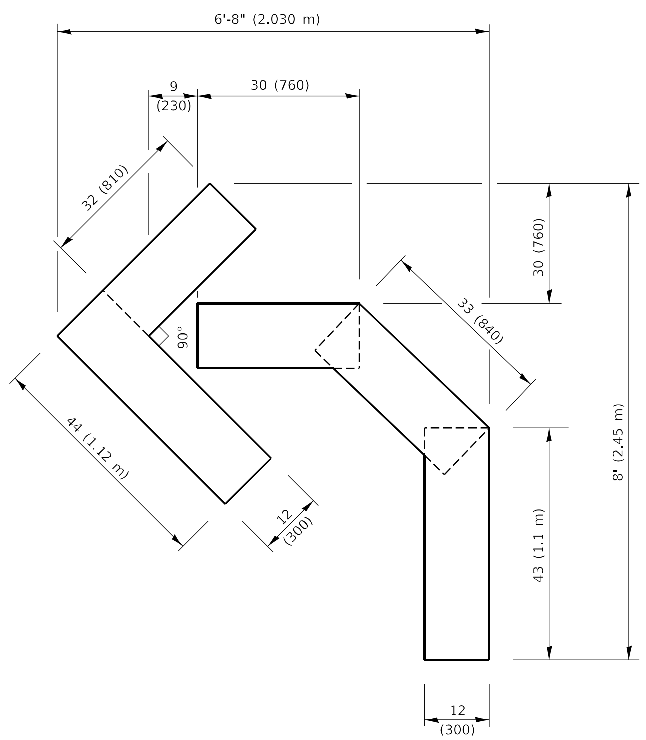
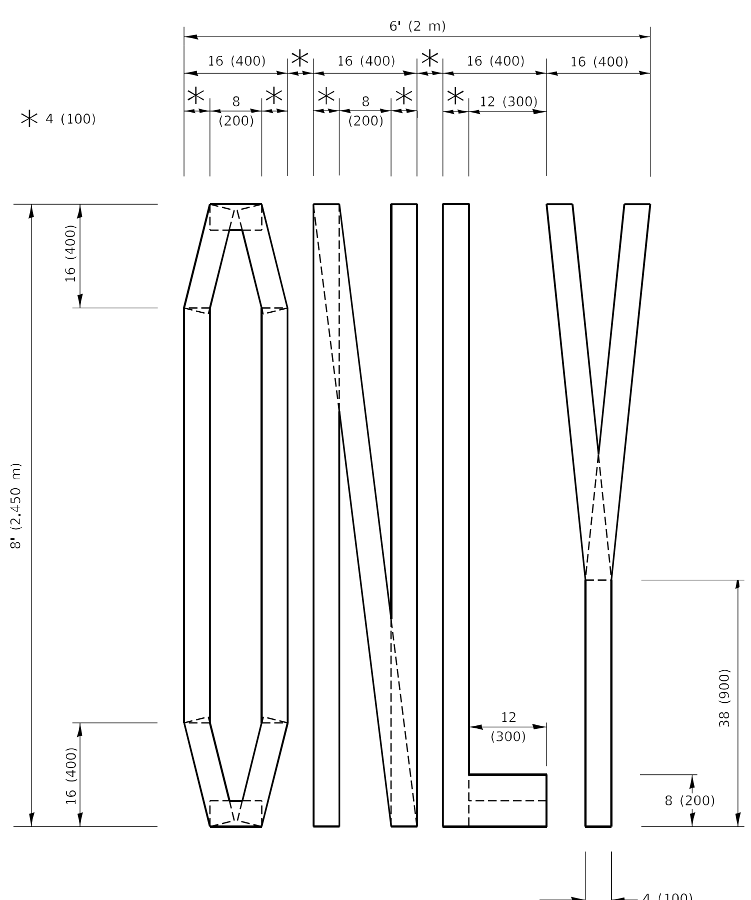
tc14.dgn 3/4/2019 10:36:01 AM User=ootemi



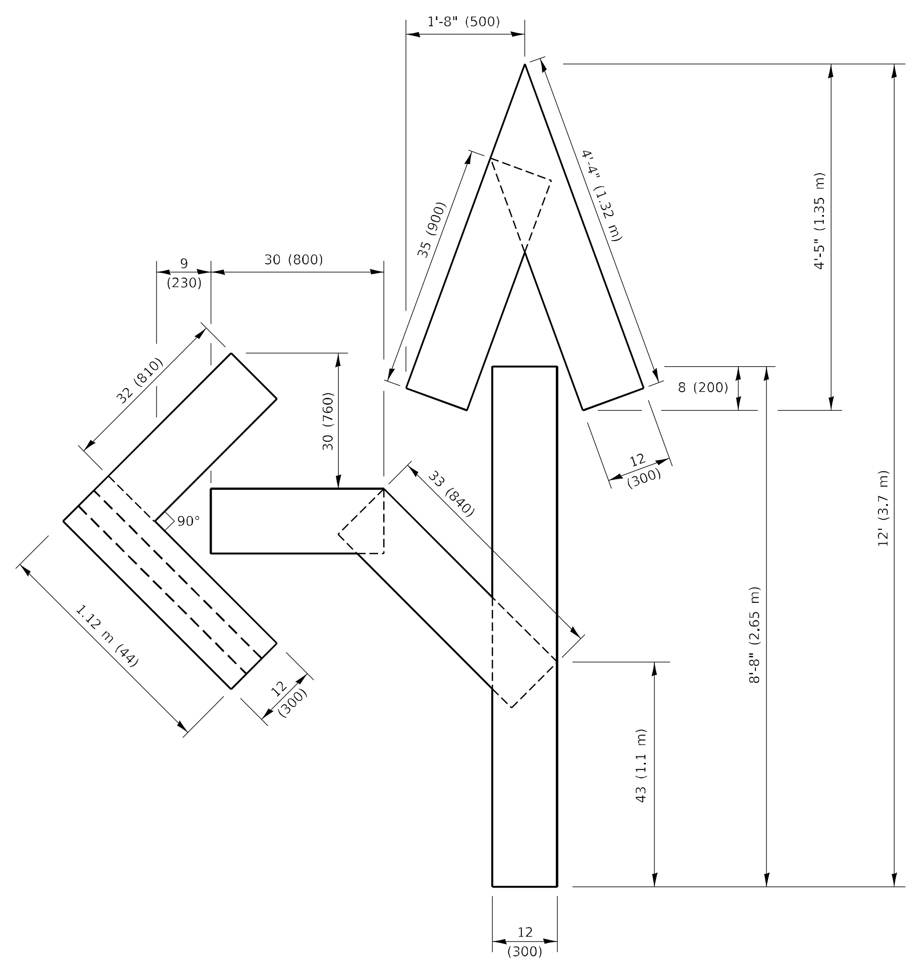
QUANTITY

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)

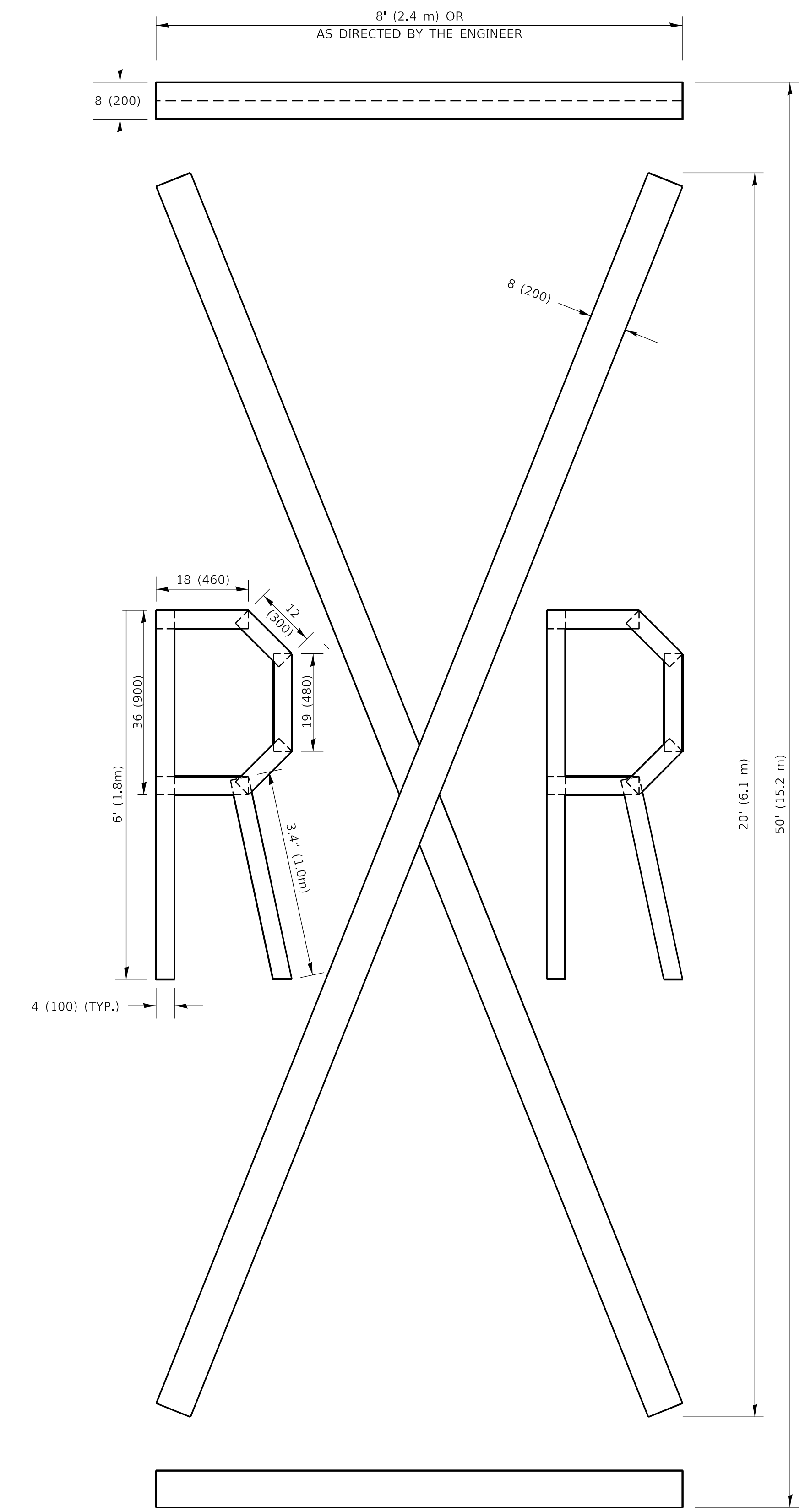


QUANTITY

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.

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	DRAWN -	REVISED - E. GOMEZ 08-28-00	
PLOT SCALE = 50.0068 ' / in.	CHECKED -	REVISED - E. GOMEZ 08-28-00	
PLOT DATE = 3/4/2019	DATE - 09-18-94	REVISED - A. SCHUETZE 09-15-16	

SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS

SCALE: NTS | SHEET 30 OF 32 SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	2025-1099-RS	WILL	32	30
	TC-16	CONTRACT NO. 80B11		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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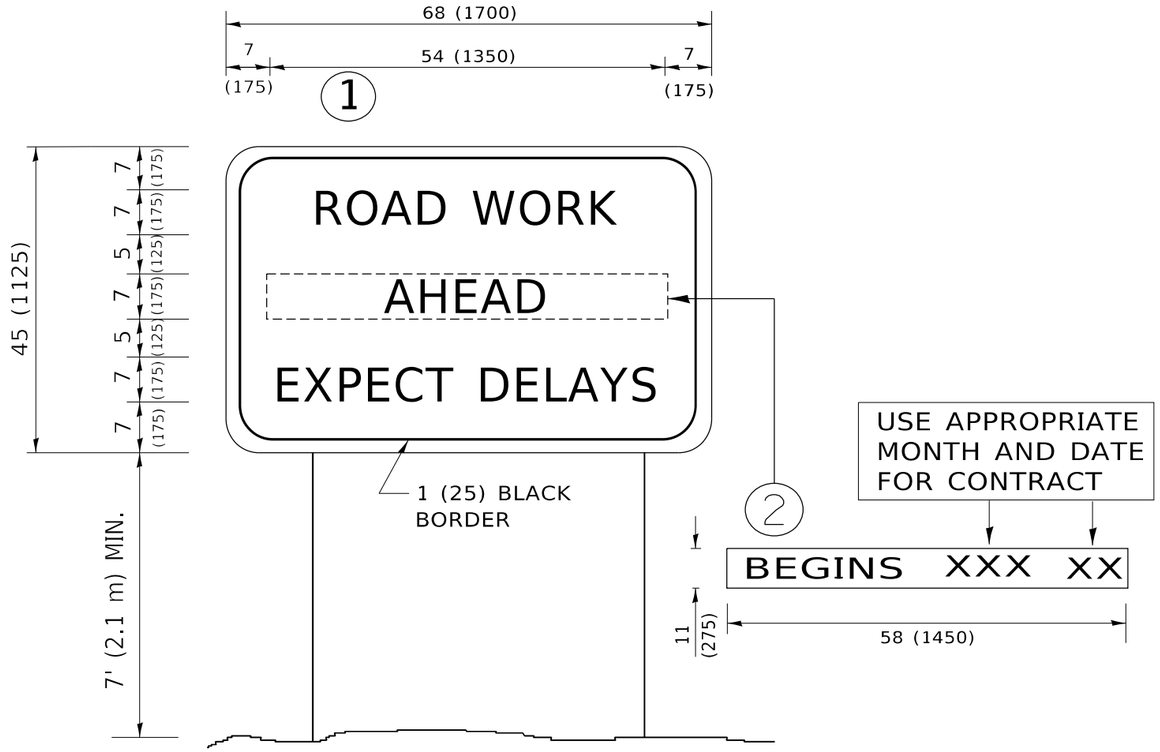

NOTES:

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

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

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	DRAWN -	REVISED -	R. MIRS 12-11-97
PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED -	T. RAMMACHER 02-02-99
PLOT DATE = 3/4/2019	DATE -	REVISED -	C. JUCIUS 01-31-07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ARTERIAL ROAD INFORMATION SIGN

SCALE: NTS | SHEET 31 OF 32 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	2025-1099-RS	WILL	32	31
	TC-22	CONTRACT NO. 80B11		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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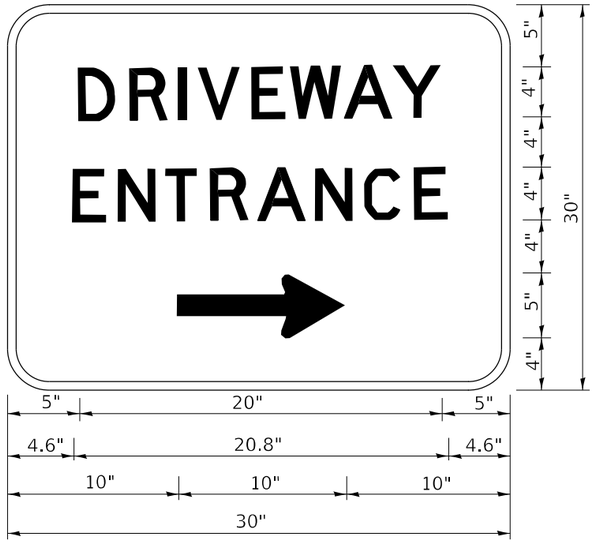

3.0" RADIUS, 0.5" BORDER, WHITE ON GREEN; REFLECTORIZED
"DRIVEWAY" D; "ENTRANCE" D; STANDARD ARROW CUSTOM 12.0" x 5.0"

NOTES:

1. HALF OF THE SIGNS WILL REQUIRE A LEFT HAND FACING ARROW.
2. TWO SIGNS SHALL BE USED AT EACH COMMERCIAL ENTRANCE PLACED BACK-TO-BACK: ONE WITH A RIGHT HAND ARROW (SHOWN) SHALL BE PLACED ON THE NEAR RIGHT SIDE THE DRIVEWAY AND ONE WITH A LEFT HAND ARROW SHALL BE PLACED ON THE FAR LEFT SIDE OF THE DRIVEWAY.
3. SIGNS TO BE PAID FOR AS ITEM "TEMPORARY INFORMATION SIGNING".

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USER NAME = leysa	DESIGNED -	REVISED - C. JUCIUS 02-15-07	
	DRAWN -	REVISED -	
PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 8/6/2021	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRIVEWAY ENTRANCE SIGNING

SCALE: NTS | SHEET 32 OF 32 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	2025-1099-RS	WILL	32	32
	TC-26	CONTRACT NO. 80B11		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

tc26.dgn 8/6/2021 8:37:02 AM User=leysa