

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	FAP 0303 22 RS3	McHENRY	40	1
		ILLINOIS	CONTRACT NO. 62T63	

FOR INDEX OF SHEETS, SEE SHEET NO. 2

THIS PROJECT IS LOCATED IN THE CITY OF HARVARD.

TRAFFIC DATA:

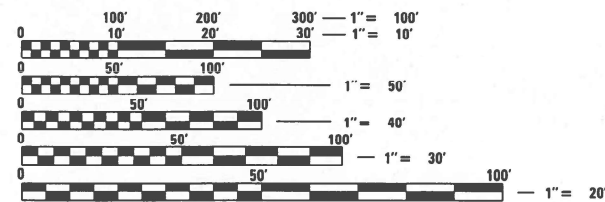
US 14 (DIVISION STREET):

BRINKS STREET TO DIGGINS STREET:
ADT (2021) = 12,600
SPEED LIMIT = 30 MPH

OTHER PRINCIPAL ARTERIAL

IL ROUTE 173 (DIGGINS STREET):

US 14 (DIVISION STREET) TO GARFIELD STREET
ADT (2021) = 4,900
SPEED LIMIT = 30 - 35 MPH



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

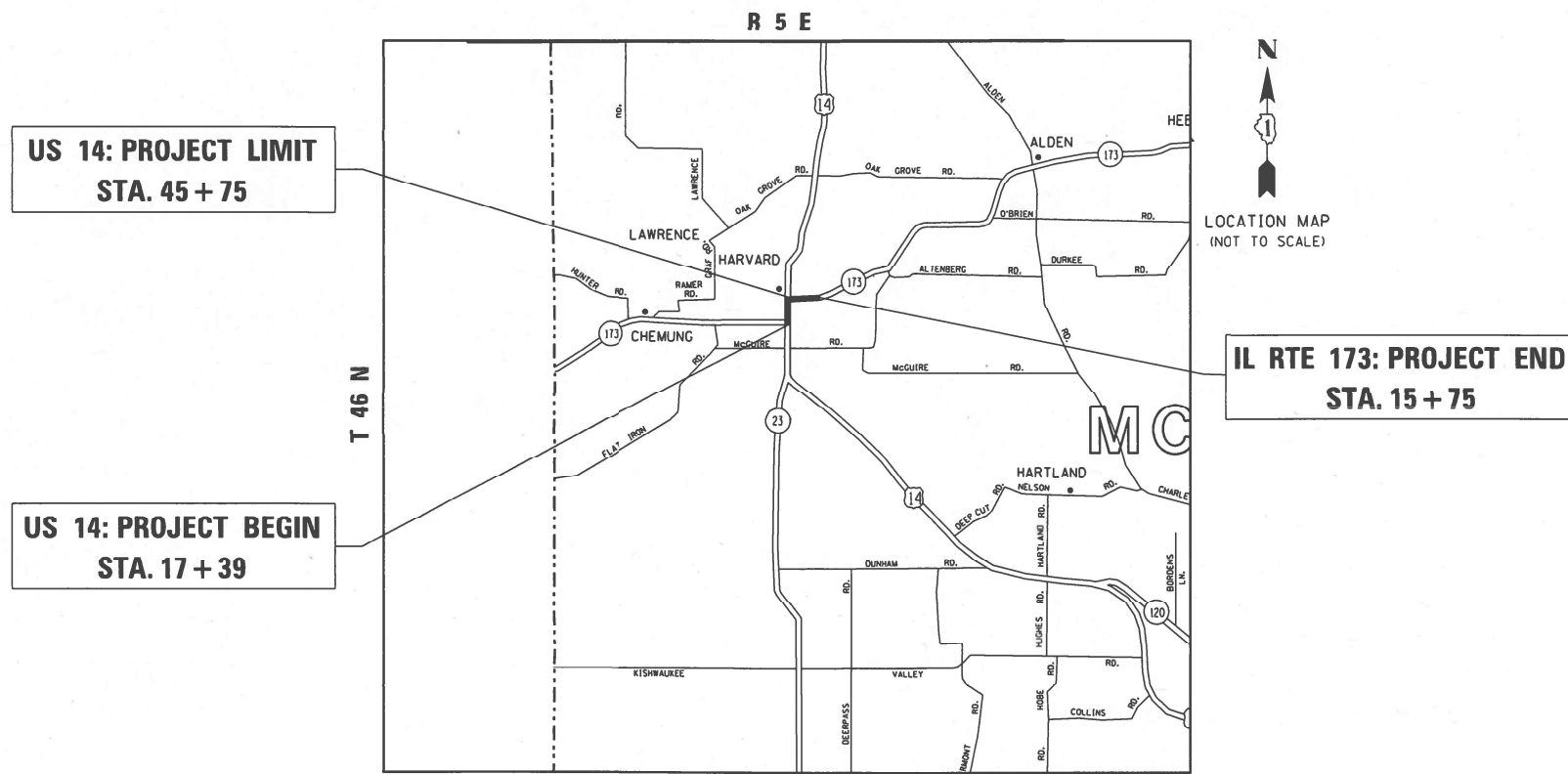
J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATORS
1-800-892-0123
OR 811

PROJECT ENGINEER: VESELIN VELICHKOV (847) 705-4432
PROJECT MANAGER: FAWAD AQUEEL
CONTRACT NO. 62T63

PROPOSED
HIGHWAY PLANS

FAP ROUTE 303:US 14 (DIVISION STREET), IL 173 (DIGGINS STREET)
US 14 /IL 173 (DIVISION ST): BRINK ST TO DIGGINS ST &
IL 173 (DIGGINS ST): DIVISION ST TO E OF GARFIELD RD
SECTION: FAP 0303 22 RS3
PROJECT: NHPP-XGRD(728)
SMART OVERLAY, ADA IMPROVEMENTS
McHENRY COUNTY

C-91-269-22



US 14: PROJECT LIMIT
STA. 45 + 75

US 14: PROJECT BEGIN
STA. 17 + 39

IL RTE 173: PROJECT END
STA. 15 + 75

CHEMUNG TOWNSHIP

GROSS LENGTH = 4,411 FT. = 0.83 MILE
NET LENGTH = 3,765 FT. = 0.71 MILE

D-91-216-22



LOCATION OF SECTION INDICATED THUS: - [black bar] -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
SUBMITTED DECEMBER 12 20 23
Opal Piro/CRS REGIONAL ENGINEER
February 2, 2024
Scott A. Etk
ENGINEER OF DESIGN AND ENVIRONMENT
February 2, 2024
Stephen M. Smith
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

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OF THE STATE OF ILLINOIS

INDEX OF SHEETS

STATE STANDARDS

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39	PROJECT DETAIL FOR SINGLE PERPENDICULAR CURB RAMPS (PD-01)
40	PROJECT DETAIL FOR DOUBLE PERPENDICULAR CURB RAMPS (PD-03)

STANDARD NO.	DESCRIPTION
000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
442201-03	CLASS C AND D PATCHES
701001-02	OFF-RD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5m) AWAY
701006-05	OFF-RD OPERATIONS, 2L, 2W, 15' (4.5m) TO 24" (600mm) FROM PAVEMENT EDGE
701011-04	OFF-RD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE, 2L, 2W MOVING OPERATIONS - DAY ONLY
701501-06	URBAN CLOSURE, 2L, 2W, UNDIVIDED
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-09	TRAFFIC CONTROL DEVICES
720001-01	SIGN PANEL MOUNTING DETAILS
720006-04	SIGN PANEL ERECTION DETAILS
728001-01	TELESCOPING STEEL SIGN SUPPORT
814001-03	HANDHOLES
886001-01	DETECTOR LOOP INSTALLATIONS
886006-01	TYPICAL LAYOUT FOR DETECTOR LOOPS

- BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKING LINES (AND RAISED REFLECTIVE PAVEMENT MARKERS) IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE ASSHOWN ON THE PLANS OR DIRECTED BY THE RESIDENT ENGINEER.
- WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC, THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1½ INCHES WHERE THE SPEED LIMIT IS 45 MPH OR LESS, AND 1 INCH WHERE THE SPEED LIMIT IS OVER 45 MPH. WITH WRITTEN APPROVAL FROM THE RESIDENT ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM OF 1V:3H.
- 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.
- THE CONTRACTOR SHALL USE CARE IN GRADING OR EXCAVATING NEAR ANY AND ALL EXISTING ITEMS THAT WILL NOT BE REMOVED INCLUDING PREVIOUSLY SEEDED AREAS. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED AT THE CONTRACTOR'S OWN EXPENSE TO THE SATISFACTION OF THE ENGINEER.
- BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT) IN ACCORDANCE WITH THE "BUTT JOINT AND HMA TAPER DETAILS" SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.
- THE RESIDENT ENGINEER SHALL CONTACT WALTER CZARNY, AREA TRAFFIC FIELD ENGINEER, VIA E-MAIL AT WALTER.CZARNY@ILLINOIS.GOV, A MINIMUM OF 2 WEEKS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
- ALL SIGNS MUST BE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE STATE OF ILLINOIS "STANDARD SOECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED JANUARY 1, 2022, THE DETAILS IN THESE PLANS, THE LATEST EDITION OF THE IDOT BUREAU OF DESIGN AND ENVIRONMENT HIGHWAY STANDARDS AND LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".
- THE "ROAD CONSTRUCTION AHEAD" SIGNS SHALL REMAIN INSTALLED UNTIL THE COMPLETION OF THE PROJECT OR WHEN NO ROADWAY HAZARDS REMAIN WITHIN THE WORK ZONE.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
- ALL PAVEMENT PATCHING LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER. AREAS OF SEVERE RUTTING SHALL BE DETERMINED BY ENGINEER BEFORE MILLING.
- ANY PAVEMENT MARKINGS AND RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE REMOVAL LINE SHOWN ON PLANS SHALL BE PLACED AT NO ADDITIONAL COST TO THE DEPARTMENT.
- PAVEMENT MARKING TAPE, TYPE III SHALL BE USED FOR SHORT TERM PAVEMENT MARKINGS ON ALL FINAL SURFACES.
- THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
- 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.
- DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.

GENERAL NOTES

- BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, AND GAS FACILITIES. (48 HOUR NOTIFICATION REQUIRED)
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, CITY OF HARVARD.
- 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.
- 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.
- THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT THE WRITTEN PERMISSION OF THE DEPARTMENT.
- UNLESS OTHER CONDITIONS WARRANT EXTENDED LANE CLOSURE ARE DETERMINED AND APPROVED IN WRITING BY THE RESIDENT ENGINEER OR AS PROVIDED FOR IN THE CONTRACT SPECIFICATIONS, OVERNIGHT CLOSURES SHALL NOT BE ALLOWED FOR REHABILITATION PROJECTS INVOLVING DAYTIME MILLING AND RESURFACING OPERATIONS AND CLASS D PATCHING.

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USER NAME = Nedal.Qarut	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	US 14 (DIVISION ST) BRINK ST. TO EAST OF GARFIELD ROAD INDEX OF SHEETS, STATE STANDARDS & GENERAL NOTES	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DRAWN -	REVISED -	303			FAP 0303 22 R53	McHENRY	40	2	
PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -			CONTRACT NO. 62T63				
PLOT DATE = 12/15/2023	DATE -	REVISED -			ILLINOIS FED. AID PROJECT				
				SCALE:	SHEET 1	OF 1	SHEETS	STA.	TO STA.

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT		SMART 80% FED 20% STATE 0005	100% STATE 0005			
20200100	EARTH EXCAVATION	CU YD	18	18				
21101615	TOPSOIL FURNISH AND PLACE, 4"	SO YD	206	206				
21400100	GRADING AND SHAPING DITCHES	FOOT	20	20				
25200110	SODDING, SALT TOLERANT	SO YD	206	206				
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	8700	8700				
40600370	LONGITUDINAL JOINT SEALANT	FOOT	9560	9560				
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	30	30				
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SO YD	345	345				
40601005	HOT-MIX ASPHALT REPLACEMENT OVER PATCHES	TON	480	480				
40604062	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70	TON	1625	1625				
42001300	PROTECTIVE COAT	SO YD	327	327				
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SO FT	1625	1625				
42400800	DETECTABLE WARNINGS	SO FT	195	195				

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT		SMART 80% FED 20% STATE 0005	100% STATE 0005			
44000155	HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"	SO YD	19330	19330				
44000600	SIDEWALK REMOVAL	SO FT	1625	1625				
44002215	HOT-MIX ASPHALT REMOVAL OVER PATCHES, 3 3/4"	SO YD	2280	2280				
44201765	CLASS D PATCHES, TYPE II, 10 INCH	SO YD	1320	1320				
44201769	CLASS D PATCHES, TYPE III, 10 INCH	SO YD	600	600				
44201771	CLASS D PATCHES, TYPE IV, 10 INCH	SO YD	360	360				
60252800	CATCH BASINS TO BE RECONSTRUCTED	EACH	1	1				
60255800	MANHOLES TO BE ADJUSTED WITH NEW TYPE 1 FRAME, CLOSED LID	EACH	1	1				
60257900	MANHOLES TO BE RECONSTRUCTED	EACH	2	2				
60260100	INLETS TO BE ADJUSTED	EACH	5	5				
60266600	VALVE BOXES TO BE ADJUSTED	EACH	2	2				
60300105	FRAMES AND GRATES TO BE ADJUSTED	EACH	15	15				
60406000	FRAMES AND LIDS, TYPE 1, OPEN LID	EACH	5	5				
60406100	FRAMES AND LIDS, TYPE 1, CLOSED LID	EACH	30	30				

* = SPECIALTY ITEMS
△ = NON-PARTICIPATING WORK (100% STATE)

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT		SMART 80% FED 20% STATE 0005	100% STATE 0005			
60920012	PIPE CULVERTS TO BE CLEANED 12"	FOOT	250	250				
* 66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	18	18				
* 66900530	SOIL DISPOSAL ANALYSIS	EACH	3	3				
* 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	6	6				
67100100	MOBILIZATION	L SUM	1	1				
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1	1				
70102622	TRAFFIC CONTROL AND PROTECTION, STANDARD 701502	L SUM	1	1				
70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	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				

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT		SMART 80% FED 20% STATE 0005	100% STATE 0005			
70300100	SHORT TERM PAVEMENT MARKING	FOOT	16450	16450				
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SO FT	5485	5485				
70300211	TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS - PAINT	SO FT	550	550				
70300221	TEMPORARY PAVEMENT MARKING - LINE 4"- PAINT	FOOT	8910	8910				
70300241	TEMPORARY PAVEMENT MARKING - LINE 6"- PAINT	FOOT	3225	3225				
70300261	TEMPORARY PAVEMENT MARKING - LINE 12"- PAINT	FOOT	4650	4650				
70300281	TEMPORARY PAVEMENT MARKING - LINE 24"- PAINT	FOOT	440	440				
70306120	TEMPORARY PAVEMENT MARKING - LINE 4" - TYPE III TAPE	FOOT	4200	4200				
* 72000100	SIGN PANEL - TYPE 1	SO FT	50	50				
* 72800100	TELESCOPING STEEL SIGN SUPPORT	FOOT	87	87				
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SO FT	550	550				
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	8910	8910				

* = SPECIALTY ITEMS
 △ = NON-PARTICIPATING WORK (100% STATE)

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	PLOT DATE = 12/15/2023	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

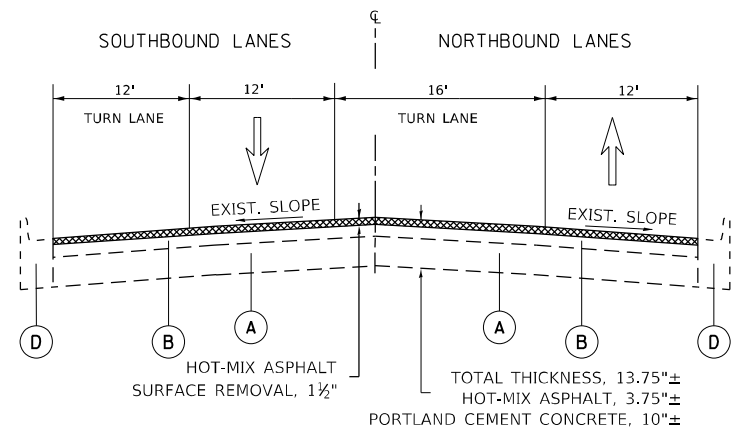
**US 14 (DIVISION ST) BRINK ST. TO EAST OF GARFIELD ROAD
SUMMARY OF QUANTITIES**

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

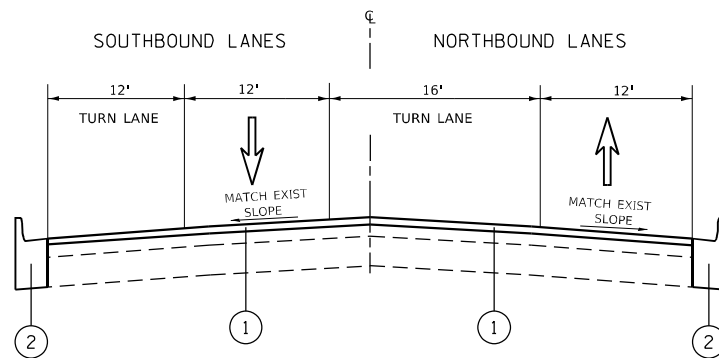
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	FAP 0303 22 R53	McHENRY	40	4
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 62T63	

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE				SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE						
CODE NO	ITEM	UNIT		SMART 80% FED 20% STATE 0005	100% STATE 0005					CODE NO		ITEM	UNIT	SMART 80% FED 20% STATE 0005	100% STATE 0005			
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE	FOOT	3225	3225					* 87800415	CONCRETE FOUNDATION, TYPE E 36-INCH	FOOT	15	15					
	6"									DIAMETER								
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE	FOOT	4650	4650					* 87900200	DRILL EXISTING HANDHOLE	EACH	6	6					
	12"																	
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE	FOOT	440	440					* 88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE,	EACH	2	2					
	24"									BRACKET MOUNTED WITH COUNTDOWN TIMER								
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	220	220					* 88200410	TRAFFIC SIGNAL BACKPLATE, LOUVERED,	EACH	1	1					
										FORMED PLASTIC								
78300200	RAISED REFLECTIVE PAVEMENT MARKER	EACH	220	220					* 88600100	DETECTOR LOOP, TYPE I	FOOT	1591	1591					
	REMOVAL																	
* 81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL,	FOOT	89	89					* 89502375	REMOVE EXISTING TRAFFIC SIGNAL	EACH	1	1					
	2" DIA.									EQUIPMENT								
* 81028220	UNDERGROUND CONDUIT, GALVANIZED STEEL,	FOOT	48	48					* 89502376	REBUILD EXISTING HANDHOLE	EACH	7	7					
	3" DIA.																	
* 85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL	EACH	1	1					X0320050	CONSTRUCTION LAYOUT (SPECIAL)	L SUM	1	1					
	INSTALLATION																	
* 87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO.	FOOT	1272	1272					X0327611	REMOVE AND REINSTALL BRICK PAVER	SO FT	160	160					
	14 2C																	
* 87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO.	FOOT	766	766					X0540000	BRICK PAVERS	SO FT	100	100					
	14 3C																	
* 87700300	STEEL MAST ARM ASSEMBLY AND POLE, 52 FT.	EACH	1	1					* X1400367	PEDESTRIAN SIGNAL POST, 10 FT.	EACH	2	2					
									* X1400378	PEDESTRIAN SIGNAL POST, 5 FT.	EACH	4	4					
									X4400501	COMBINATION CURB AND GUTTER REMOVAL AND	FOOT	125	125					
										REPLACEMENT LESS THAN OR EQUAL TO 10								
										FEET								

* = SPECIALTY ITEMS
 △ = NON-PARTICIPATING WORK (100% STATE)



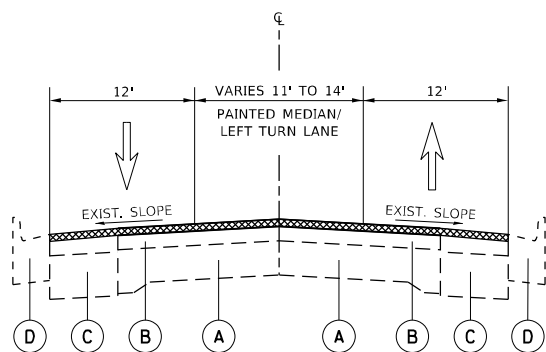
US 14 (DIVISION ST.)
EXISTING TYPICAL
STA. 17+39 TO 23+86



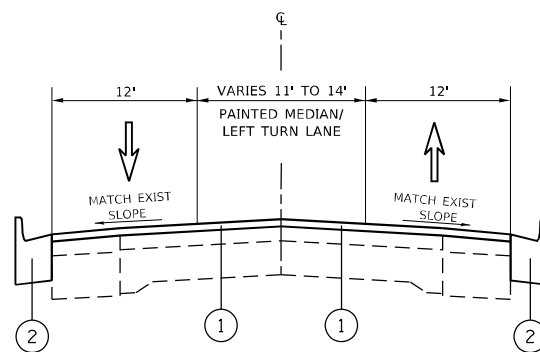
US 14 (DIVISION ST.)
PROPOSED TYPICAL
STA. 17+39 TO 23+86

LEGEND - EXISTING:

- (A) PORTLAND CEMENT CONCRETE PAVEMENT 10"±
- (B) HOT-MIX ASPHALT PAVEMENT 3.75"±
- (C) HOT-MIX ASPHALT BASE WIDENING 9"±
- (D) PORTLAND CEMENT CONCRETE COMBINATION CURB AND GUTTER B6.24



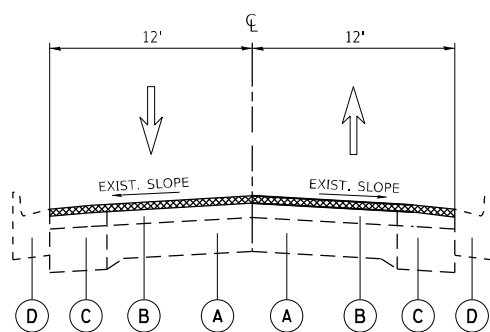
US 14 (DIVISION ST.)
EXISTING TYPICAL
STA. 30+32 TO STA. 45+75



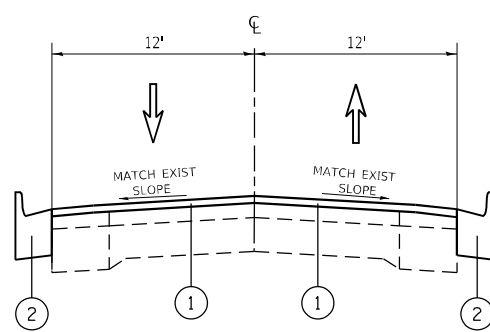
US 14 (DIVISION ST.)
PROPOSED TYPICAL
STA. 30+32 TO STA. 45+75

LEGEND - PROPOSED

- (1) HOT-MIX ASPHALT SURFACE COURSE, MIX "D", IL-9.5, N70, 1½"
- (2) PORTLAND CEMENT CONCRETE COMBINATION CURB AND GUTTER



IL 173 (DIGGINS ST)
EXISTING TYPICAL
STA. 0+00 TO STA. 15+75



IL 173 (DIGGINS ST)
PROPOSED TYPICAL
STA. 0+00 TO STA. 15+75

HOT-MIX ASPHALT MIXTURE REQUIREMENTS		QUALITY MANAGEMENT PROGRAM (QMP)
MIXTURE TYPE	AIR VOIDS(%) @ Ndes	
PAVEMENT		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", IL-9.5, N70	4.0% @ 70 GYR.	OCP
PATCHING		
CLASS D PATCHES (HMA BINDER IL-19 MM)	4% @ 70 GYR.	OC/OA
HOT-MIX ASPHALT REPLACEMENT OVER PATCHES (HMA BINDER IL-19 MM)	4% @ 70 GYR.	OC/OA
QMP DESIGNATION: QUALITY CONTROL/QUALITY ASSURANCE (OC/OA); QUALITY CONTROL FOR PERFORMANCE (OCP); PAY FOR PERFORMANCE (PFP)		

NOTES

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

NOTE 2: THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76 -22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64 -22" UNLESS MODIFIED BY RECLAIMED MATERIALS SPECIFICATIONS.

NOTE 3: THE CONTRACTOR SHALL PATCH FIRST BEFORE MILLING.

NOTE 4: LONGITUDINAL JOINT SEALANT SHALL BE PLACED OVER THE MILLED SURFACE.

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PLOT SCALE = 100,0000' / in.	CHECKED -	REVISED -
PLOT DATE = 12/15/2023	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US 14 - DIVISION STREET /BRINK STREET TO EAST OF GARFIELD STREET
TYPICAL SECTION

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE. 303	SECTION FAP 0303 22 R53	COUNTY MCHENRY	TOTAL SHEETS 40	SHEET NO. 8
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62T63	

CURB RAMPS IMPROVEMENT SCHEDULE

ID	LOCATION	CORNER	20200100	21101615	25200110	42001300	42400200	42400800	44000600	60260100	60255800	60266600	89500400	85000200	89502376	X4400503
			EARTH EXCAVATION	TOPSOIL FURNISH AND PLACE, 4"	SODDING, SALT TOLERANT	PROTECTIVE COAT	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	DETECTABLE WARNINGS	SIDEWALK REMOVAL	INLETS TO BE ADJUSTED	MANHOLE TO BE ADJUSTED WITH NEW TYPE 1 FRAME, CLOSEDLID	VALVE BOXES TO BE ADJUSTED	RELOCATE EXISTING PEDESTRIAN PUSH-BUTTON	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	REBUILD EXISTING HANDHOLE	COMBINATION CURB AND GUTTER REMOVAL AND REPLACEMENT GREATER THAN 10 FEET
			CU YD	SQ YD	SQ YD	SQ YD	SQ FT	SQ FT	SQ FT	EACH	EACH	EACH	EACH	EACH	EACH	FOOT
1	US 14 (Division Street) at Diggins Street	NE	3.6	24.0	24.0	40.0	360	34	360	2.0		1.0	1.0	1.0	1.0	52.0
2	US 14 (Division Street) at Diggins Street	NW	2.9	19.1	19.1	31.8	286	24	286	1.0		1.0	1.0		1.0	22.0
3	US 14 (Division Street) at Diggins Street	SE	4.4	29.6	29.6	49.3	444	22	444	2.0			1.0			61.5
4	US 14 (Division Street) at Diggins Street (School)	SE	0.3	2.1	2.1	3.6	32	16	32				1.0			0.0
5	US 14 (Division Street) at Ayer Street	SW	1.0	6.7	6.7	11.1	100	42	100		1.0					26.0
6	US 14 (Division Street) at Ayer Street	SE	1.0	6.7	6.7	11.1	100	37	100							24.0
7	IL 173 (Diggins Street) at Garfield Road	SW	3.0	20.0	20.0	33.3	300	20	300							16.0
SUB-TOTAL =			16	108	108	180	1625	195	1625	5	1	2	4	1	2	205

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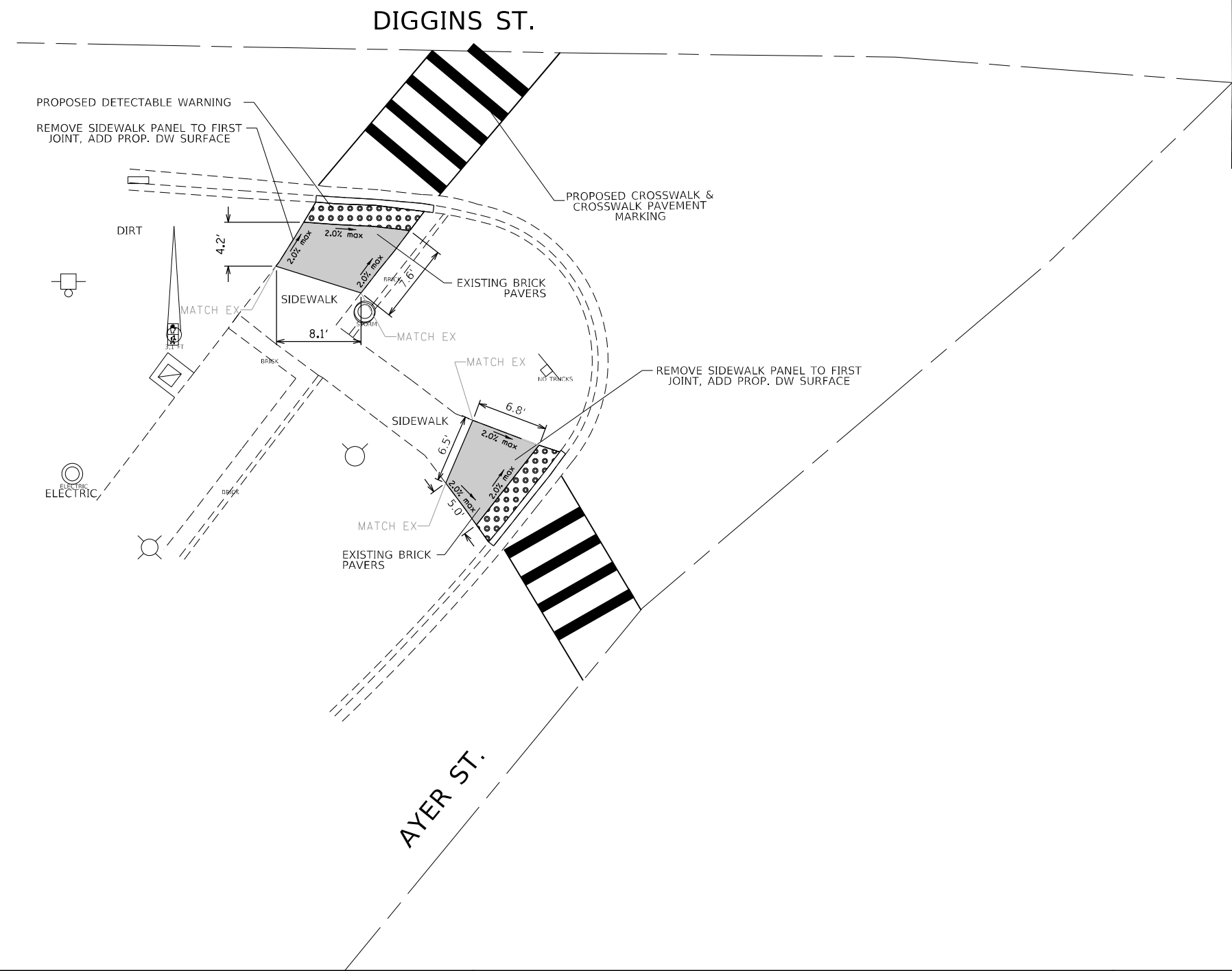
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**US 14 (DIVISION ST) BRINK ST. TO EAST OF GARFIELD ROAD
CURB RAMPS IMPROVEMENT SCHEDULE**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	FAP 0303 22 R53	McHENRY	40	15
CONTRACT NO. 62T63				
ILLINOIS		FED. AID PROJECT		



U.S. ROUTE 14
(DIVISION ST.)

DESIGNER NOTES

- 1) ALL CROSS SLOPES ARE PREFERRED 1.6% (1:64), MAXIMUM 2% (1:50).
- 2) SIDEWALK REALIGNMENT WILL REQUIRE DETAILED DESIGN.
- 3) AREAS SURROUNDED BY PCC/ASPHALT, BUILDINGS, OR ARE NEAR TO DRIVEWAYS, REALIGNED SIDEWALK, UTILITY AND SIGNAL POLES, OR WHEN PRIVATE SIDEWALK TIES IN, WILL REQUIRE DETAILED SURVEY AND DESIGN.
- 4) ALL BRICK CORNERS WILL REQUIRE SUPERVISOR APPROVAL BEFORE USING PROJECT DETAILS

BENCHMARK: "□" IN EAST CONCRETE BASE OF T.S. WITH ARM IN THE SW CORNER OF DIGGINS & US 14 & AYERS ST.

ELEVATION 061.63

LEGEND

- EXIST. GRASS
- PROPOSED SIDEWALK
- DETECTABLE WARNINGS
- PROPOSED SIDE CURB

CONSTRUCTION NOTES:

- 1) ALL CROSS SLOPES ARE PREFERRED 1.6% (1:64), MAXIMUM 2% (1:50) EXCEPT WHEN TRANSITIONING TO EXISTING SIDEWALK
- * MATCH EXISTING SIDEWALK WIDTH
- * NORTHWEST CORNER AT US 14 (DIVISION STREET) & AYER STREET

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PLOT DATE = 12/15/2023		

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

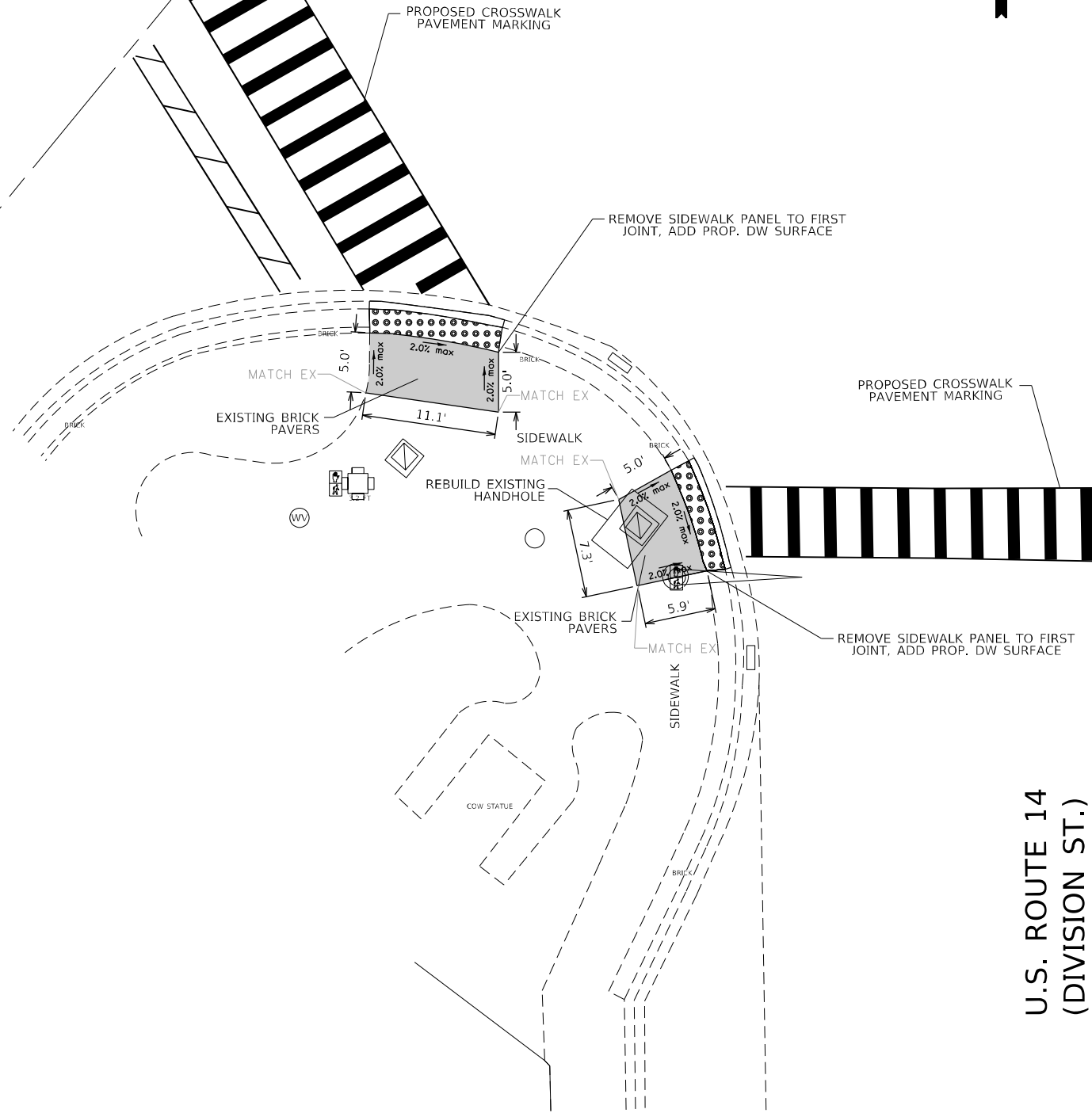
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			US 14 (DIVISION ST) BRINK ST. TO EAST OF GARFIELD ROAD
			CURB RAMP IMPROVEMENT PLAN CONCEPT

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	P.			
			CONTRACT NO.	
	303	FAIRBURG	PROJECT MCHENRY	40

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AYER ST.

DIGGINS ST.



U.S. ROUTE 14
(DIVISION ST.)

DESIGNER NOTES

- 1) ALL CROSS SLOPES ARE PREFERRED 1.6% (1:64), MAXIMUM 2% (1:50).
- 2) SIDEWALK REALIGNMENT WILL REQUIRE DETAILED DESIGN.
- 3) AREAS SURROUNDED BY PCC/ASPHALT, BUILDINGS, OR ARE NEAR TO DRIVEWAYS, REALIGNED SIDEWALK, UTILITY AND SIGNAL POLES, OR WHEN PRIVATE SIDEWALK TIES IN, WILL REQUIRE DETAILED SURVEY AND DESIGN.
- 4) ALL BRICK CORNERS WILL REQUIRE SUPERVISOR APPROVAL BEFORE USING PROJECT DETAILS

BENCHMARK: "□" IN EAST CONCRETE BASE OF T.S. WITH ARM IN THE SW CORNER OF DIGGINS & US 14 & AYERS ST.
ELEVATION 961.63

LEGEND

- PROPOSED SIDE CURB
- EXIST. GRASS
- PROPOSED SIDEWALK
- DETECTABLE WARNINGS

CONSTRUCTION NOTES:

- 1) ALL CROSS SLOPES ARE PREFERRED 1.6% (1:64), MAXIMUM 2% (1:50) EXCEPT WHEN TRANSITIONING TO EXISTING SIDEWALK
- * MATCH EXISTING SIDEWALK WIDTH
- * SOUTHWEST CORNER AT US 14 (DIVISION STREET) & AYER STREET

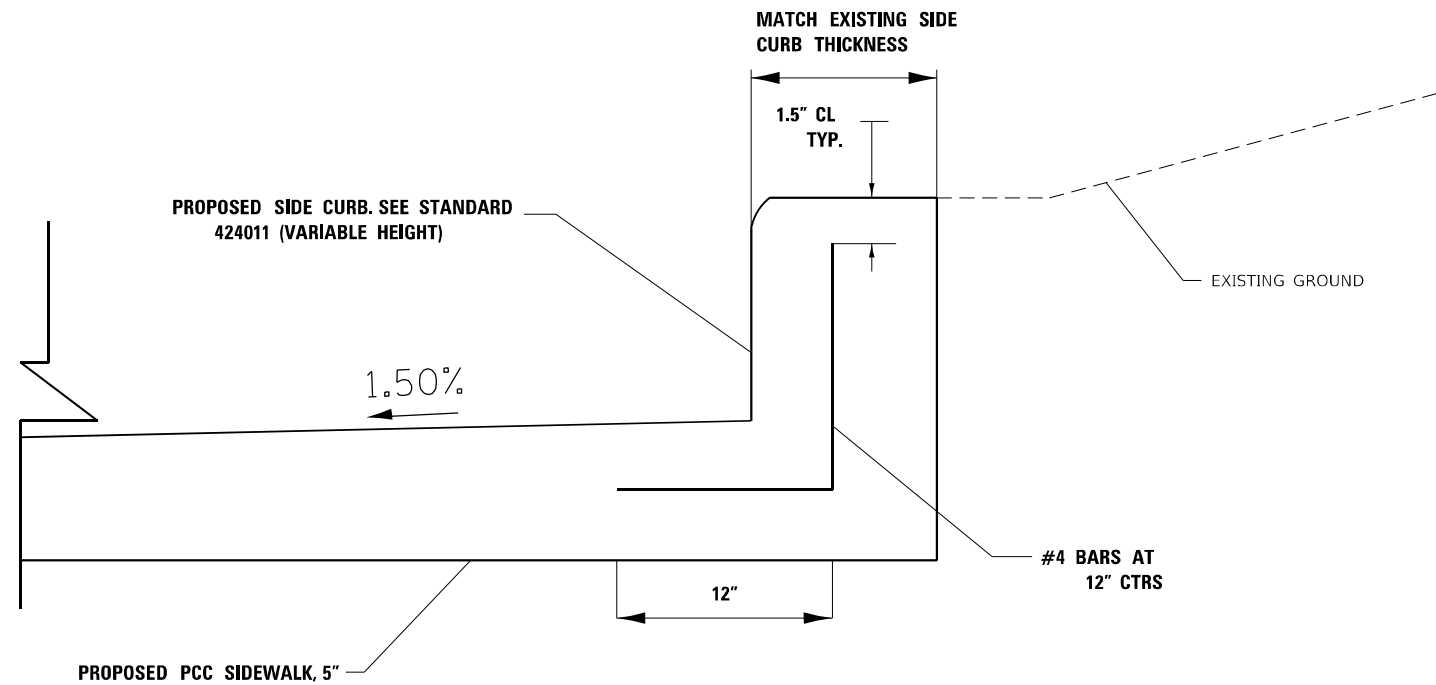
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

US 14 (DIVISION ST) BRINK ST. TO EAST OF GARFIELD ROAD
CURB RAMP IMPROVEMENT PLAN CONCEPT
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE. 303	SECTION FAP 0303 22 R53	COUNTY McHENRY	TOTAL SHEETS 40	SHEET NO. 17
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62T63	



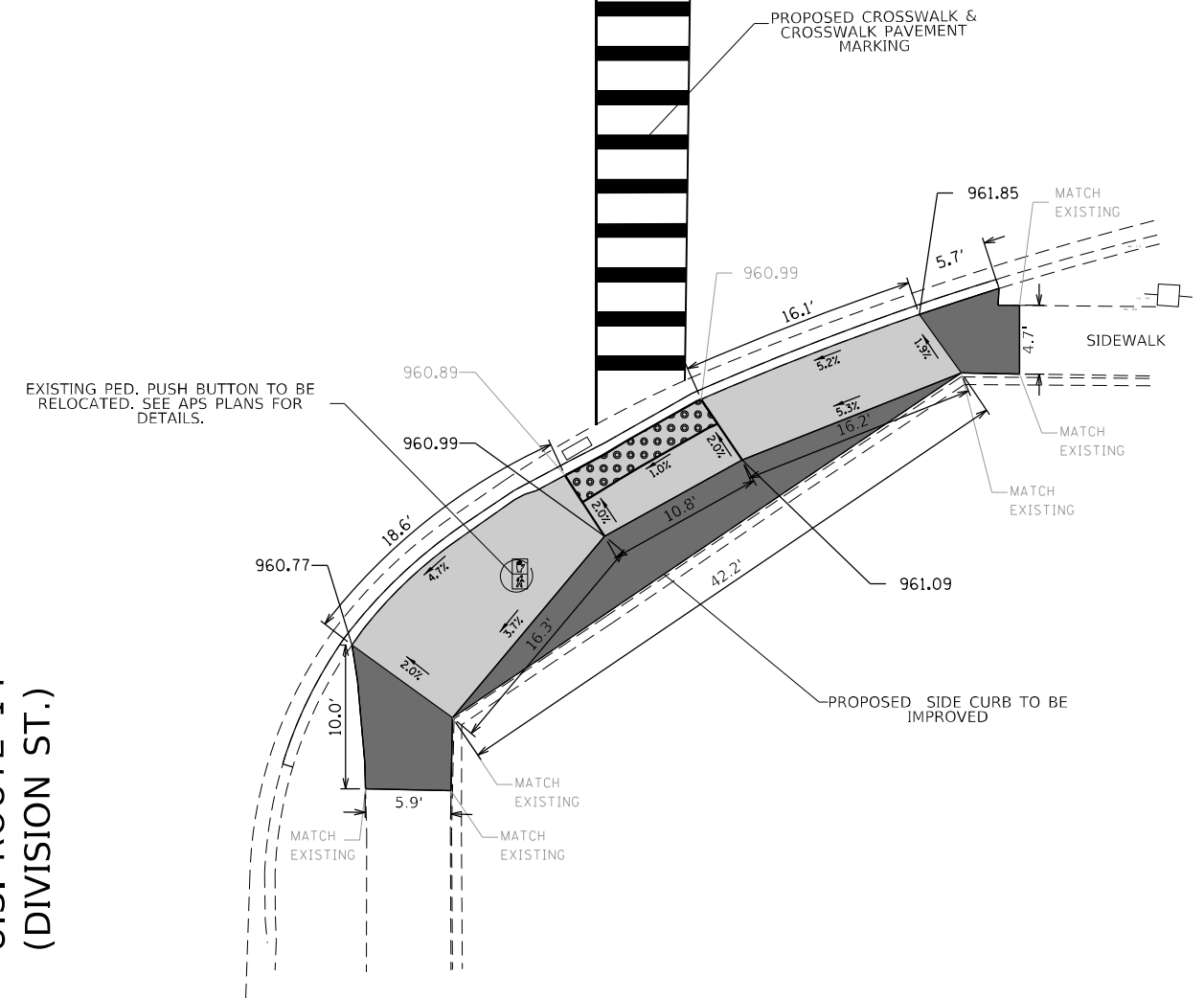
NOTES:

- 1) PROPOSED SIDE CURB IS TO BE TIED INTO EXISTING SIDE CURB WITH TWO #5 BARS ON EACH SIDE.
- 2) ALL PROPOSED SIDEWALK SIDE CURB AND REINFORCEMENT TO BE INCLUDED IN THE COST OF PCC SIDEWALK, 5"

SIDEWALK SIDE CURB DETAIL (US 14 /IL 173 SE QUADRANT ONLY)

U.S. ROUTE 14
(DIVISION ST.)

DIGGINS ST.



DESIGNER NOTES

- 1) ALL CROSS SLOPES ARE PREFERRED 1.6% (1:64), MAXIMUM 2% (1:50).
- 2) SIDEWALK REALIGNMENT WILL REQUIRE DETAILED DESIGN.
- 3) AREAS SURROUNDED BY PCC/ASPHALT, BUILDINGS, OR ARE NEAR TO DRIVEWAYS, REALIGNED SIDEWALK, UTILITY AND SIGNAL POLES, OR WHEN PRIVATE SIDEWALK TIES IN, WILL REQUIRE DETAILED SURVEY AND DESIGN.
- 4) ALL BRICK CORNERS WILL REQUIRE SUPERVISOR APPROVAL BEFORE USING PROJECT DETAILS

BENCHMARK: " " IN EAST CONCRETE BASE OF T.S. WITH ARM IN THE SW CORNER OF DIGGINS & US 14 & AYERS ST.
ELEVATION 961.63

LEGEND

- EXIST. GRASS
- PROPOSED SIDEWALK
- DETECTABLE WARNINGS
- PROPOSED SIDE CURB

CONSTRUCTION NOTES:

- 1) ALL CROSS SLOPES ARE PREFERRED 1.6% (1:64), MAXIMUM 2% (1:50) EXCEPT WHEN TRANSITIONING TO EXISTING SIDEWALK
- * MATCH EXISTING SIDEWALK WIDTH
- * SOUTHEAST CORNER AT US 14 (DIVISION STREET) & IL 173 (DIGGINS STREET)

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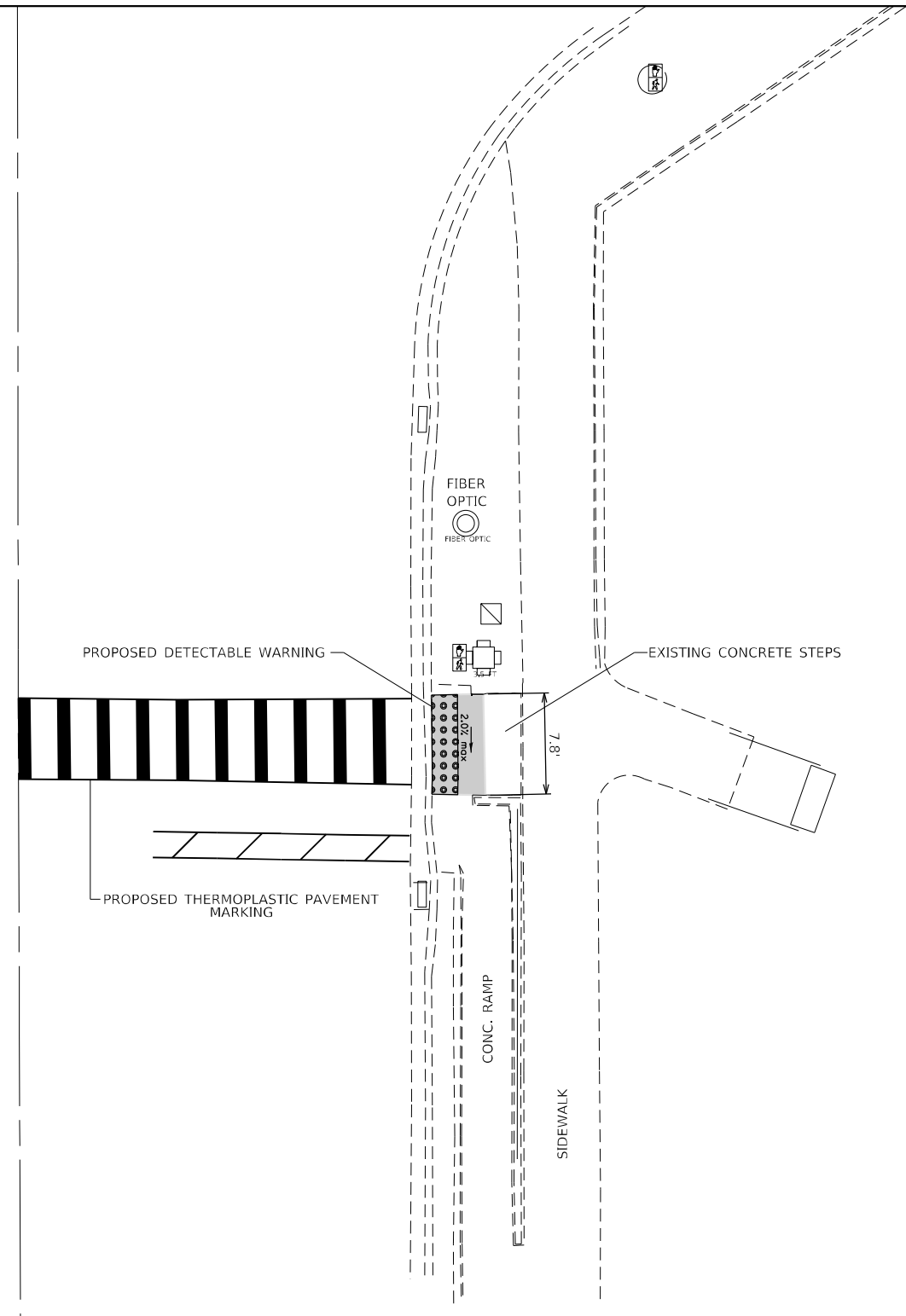
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

US 14 (DIVISION ST) BRINK ST. TO EAST OF GARFIELD ROAD
CURB RAMP IMPROVEMENT PLAN CONCEPT

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	FAP 0303 22 RS3	MCHENRY	40	18
CONTRACT NO. 62T63			ILLINOIS FED. AID PROJECT	







U.S. ROUTE 14
(DIVISION ST.)

DESIGNER NOTES

- 1) ALL CROSS SLOPES ARE PREFERRED 1.6% (1:64), MAXIMUM 2% (1:50).
- 2) SIDEWALK REALIGNMENT WILL REQUIRE DETAILED DESIGN.
- 3) AREAS SURROUNDED BY PCC/ASPHALT, BUILDINGS, OR ARE NEAR TO DRIVEWAYS, REALIGNED SIDEWALK, UTILITY AND SIGNAL POLES, OR WHEN PRIVATE SIDEWALK TIES IN, WILL REQUIRE DETAILED SURVEY AND DESIGN.
- 4) ALL BRICK CORNERS WILL REQUIRE SUPERVISOR APPROVAL BEFORE USING PROJECT DETAILS

BENCHMARK: "□" IN EAST CONCRETE BASE OF T.S. WITH ARM IN THE SW CORNER OF DIGGINS & US 14 & AYERS ST.
ELEVATION 961.63

LEGEND

-  PROPOSED SIDE CURB
-  EXIST. GRASS
-  PROPOSED SIDEWALK
-  DETECTABLE WARNINGS

CONSTRUCTION NOTES:

- 1) ALL CROSS SLOPES ARE PREFERRED 1.6% (1:64), MAXIMUM 2% (1:50) EXCEPT WHEN TRANSITIONING TO EXISTING SIDEWALK
- * MATCH EXISTING SIDEWALK WIDTH
- * SOUTHEAST CORNER AT US 14 (DIVISION STREET) & IL 173 (DIGGINS STREET) BY WASHINGTON ELEMENTARY SCHOOL

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

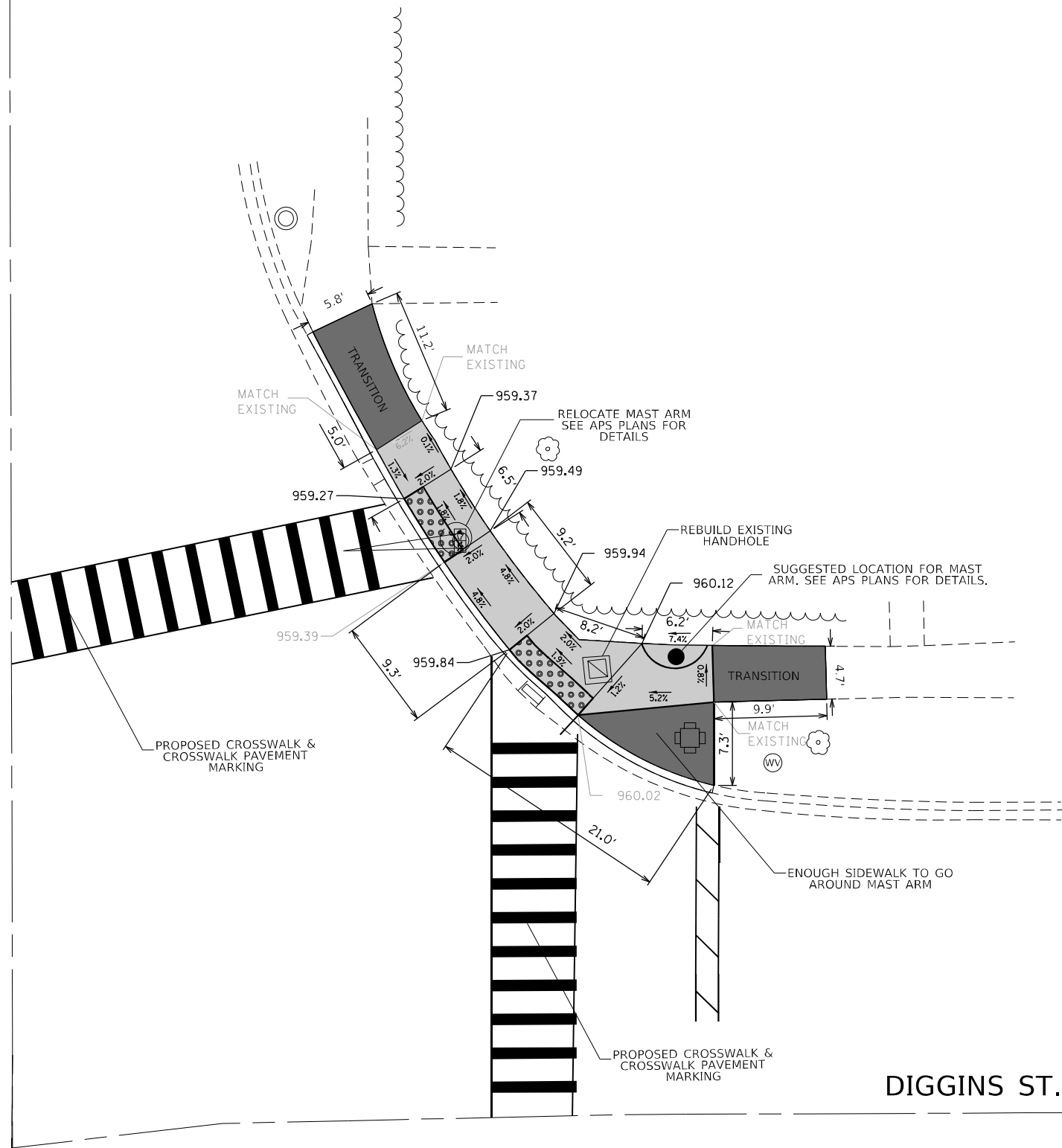
US 14 (DIVISION ST) BRINK ST. TO EAST OF GARFIELD ROAD
CURB RAMP IMPROVEMENT PLAN CONCEPT

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE. 303	SECTION FAP 0303 22 R53	COUNTY McHENRY	TOTAL SHEETS 40	SHEET NO. 19
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62T63	



U.S. ROUTE 14
(DIVISION ST.)



DIGGINS ST.

DESIGNER NOTES

- 1) ALL CROSS SLOPES ARE PREFERRED 1.6% (1:64), MAXIMUM 2% (1:50).
- 2) SIDEWALK REALIGNMENT WILL REQUIRE DETAILED DESIGN.
- 3) AREAS SURROUNDED BY PCC/ASPHALT, BUILDINGS, OR ARE NEAR TO DRIVEWAYS, REALIGNED SIDEWALK, UTILITY AND SIGNAL POLES, OR WHEN PRIVATE SIDEWALK TIES IN, WILL REQUIRE DETAILED SURVEY AND DESIGN.
- 4) ALL BRICK CORNERS WILL REQUIRE SUPERVISOR APPROVAL BEFORE USING PROJECT DETAILS

BENCHMARK: " " IN EAST CONCRETE BASE OF T.S. WITH ARM IN THE SW CORNER OF DIGGINS & US 14 & AYERS ST.
ELEVATION 961.63

LEGEND

- PROPOSED SIDE CURB
- EXIST. GRASS
- PROPOSED SIDEWALK
- DETECTABLE WARNINGS

CONSTRUCTION NOTES:

- 1) ALL CROSS SLOPES ARE PREFERRED 1.6% (1:64), MAXIMUM 2% (1:50) EXCEPT WHEN TRANSITIONING TO EXISTING SIDEWALK
- * MATCH EXISTING SIDEWALK WIDTH
- * NORTHEAST CORNER AT US 14 (DIVISION STREET) & IL 173 (DIGGINS STREET)

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

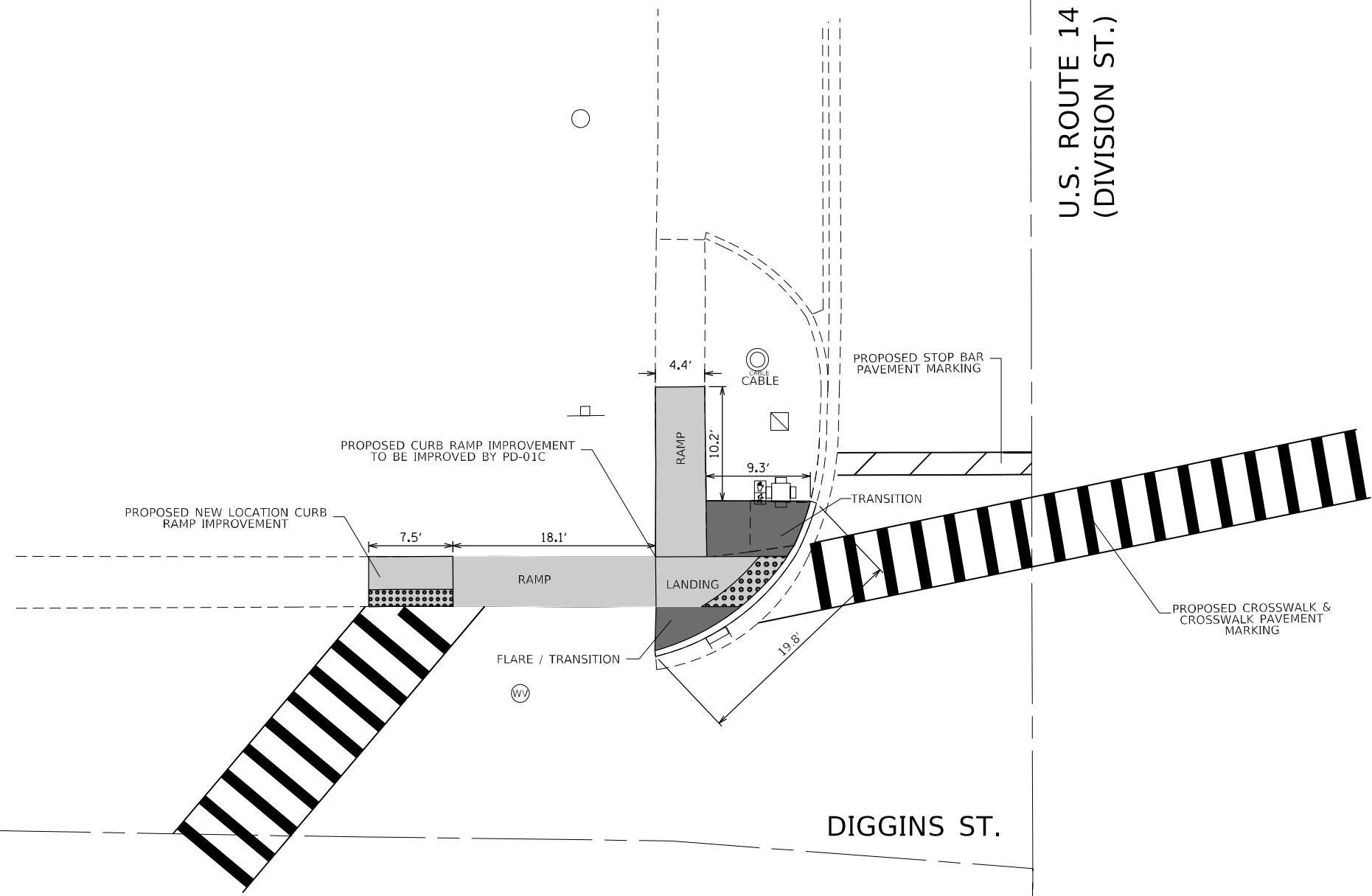
US 14 (DIVISION ST) BRINK ST. TO EAST OF GARFIELD ROAD
CURB RAMP IMPROVEMENT PLAN CONCEPT

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	FAP 0303 22 RS3	McHENRY	40	20
CONTRACT NO. 62T63				
ILLINOIS		FED. AID PROJECT		



U.S. ROUTE 14
(DIVISION ST.)



DIGGINS ST.

DESIGNER NOTES

- 1) ALL CROSS SLOPES ARE PREFERRED 1.6% (1:64), MAXIMUM 2% (1:50).
- 2) SIDEWALK REALIGNMENT WILL REQUIRE DETAILED DESIGN.
- 3) AREAS SURROUNDED BY PCC/ASPHALT, BUILDINGS, OR ARE NEAR TO DRIVEWAYS, REALIGNED SIDEWALK, UTILITY AND SIGNAL POLES, OR WHEN PRIVATE SIDEWALK TIES IN, WILL REQUIRE DETAILED SURVEY AND DESIGN.
- 4) ALL BRICK CORNERS WILL REQUIRE SUPERVISOR APPROVAL BEFORE USING PROJECT DETAILS

BENCHMARK: "□" IN EAST CONCRETE BASE OF T.S. WITH ARM IN THE SW CORNER OF DIGGINS & US 14 & AYERS ST.
ELEVATION 961.63

LEGEND

- EXIST. GRASS
- PROPOSED SIDEWALK
- DETECTABLE WARNINGS
- PROPOSED SIDE CURB

CONSTRUCTION NOTES:

- 1) ALL CROSS SLOPES ARE PREFERRED 1.6% (1:64), MAXIMUM 2% (1:50) EXCEPT WHEN TRANSITIONING TO EXISTING SIDEWALK
- * MATCH EXISTING SIDEWALK WIDTH
- * NORTHWEST CORNER AT US 14 (DIVISION STREET) & IL 173 (DIGGINS STREET)

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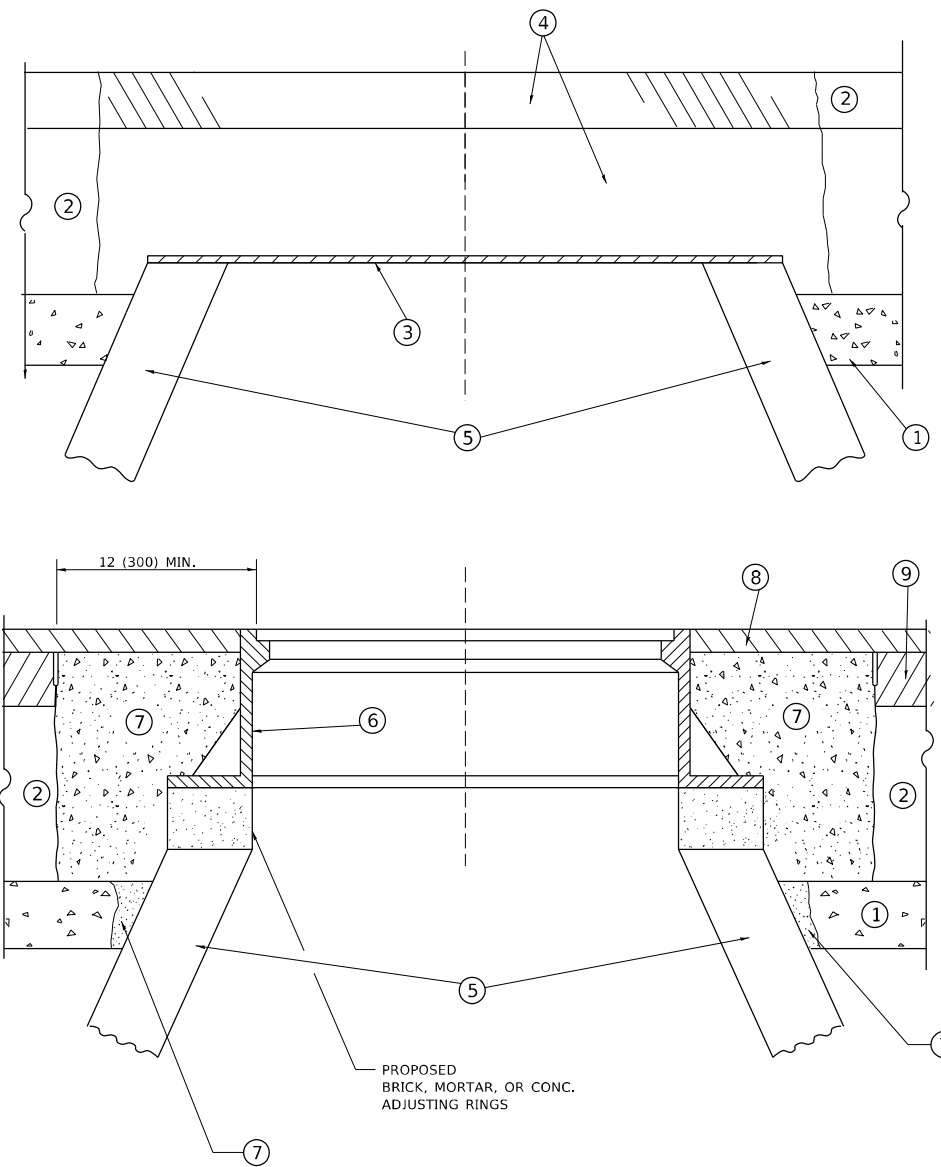
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

US 14 (DIVISION ST) BRINK ST. TO EAST OF GARFIELD ROAD
CURB RAMP IMPROVEMENT PLAN CONCEPT

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE. 303	SECTION FAP 0303 22 R53	COUNTY McHENRY	TOTAL SHEETS 40	SHEET NO. 21
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62T63	



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

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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PLOT DATE = 12/15/2023	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: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

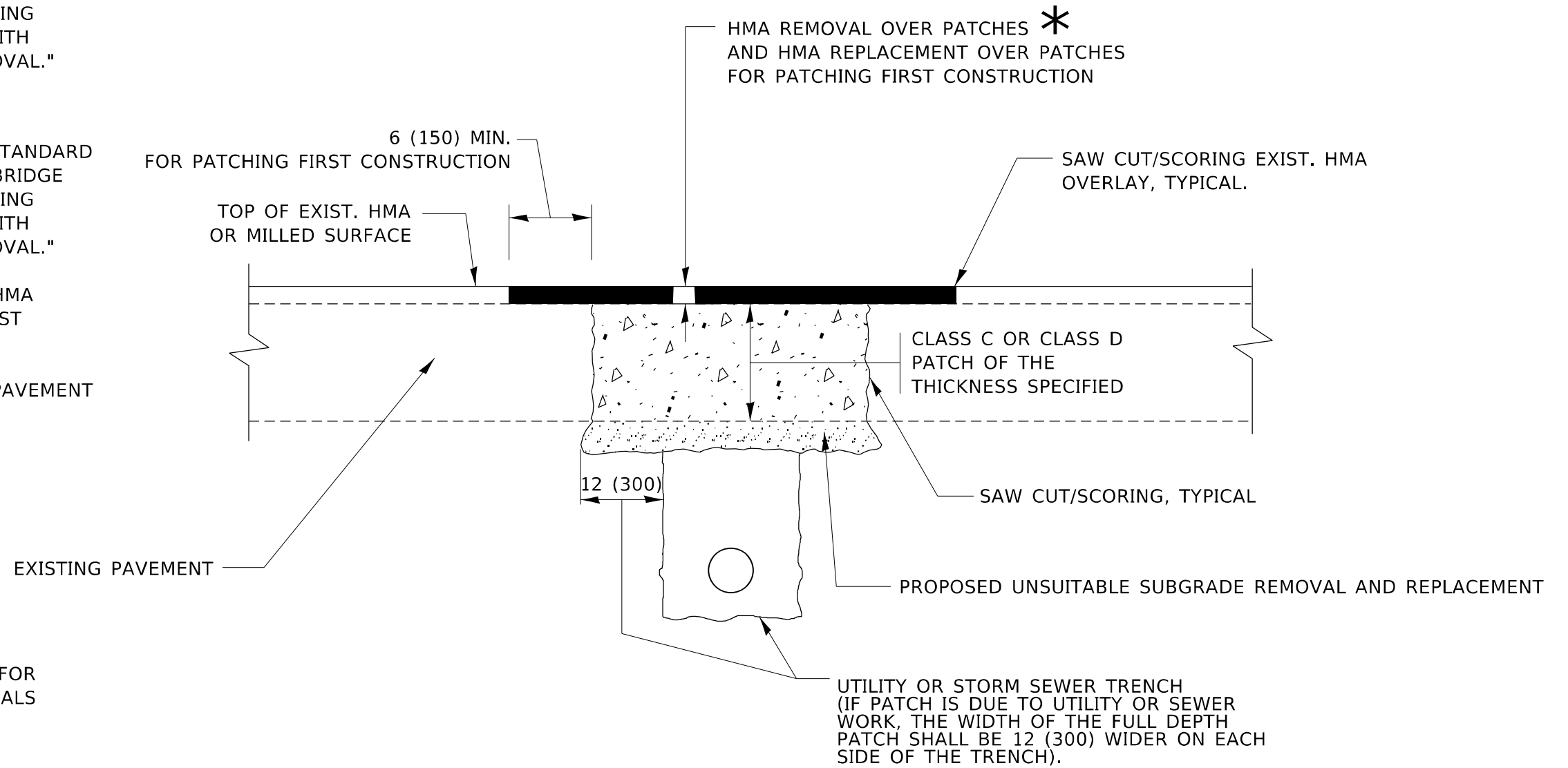
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	FAP 0303 22 R53	McHENRY	40	22
BD600-03 (BD-08)			CONTRACT NO. 62T63	
ILLINOIS		FED. AID PROJECT		

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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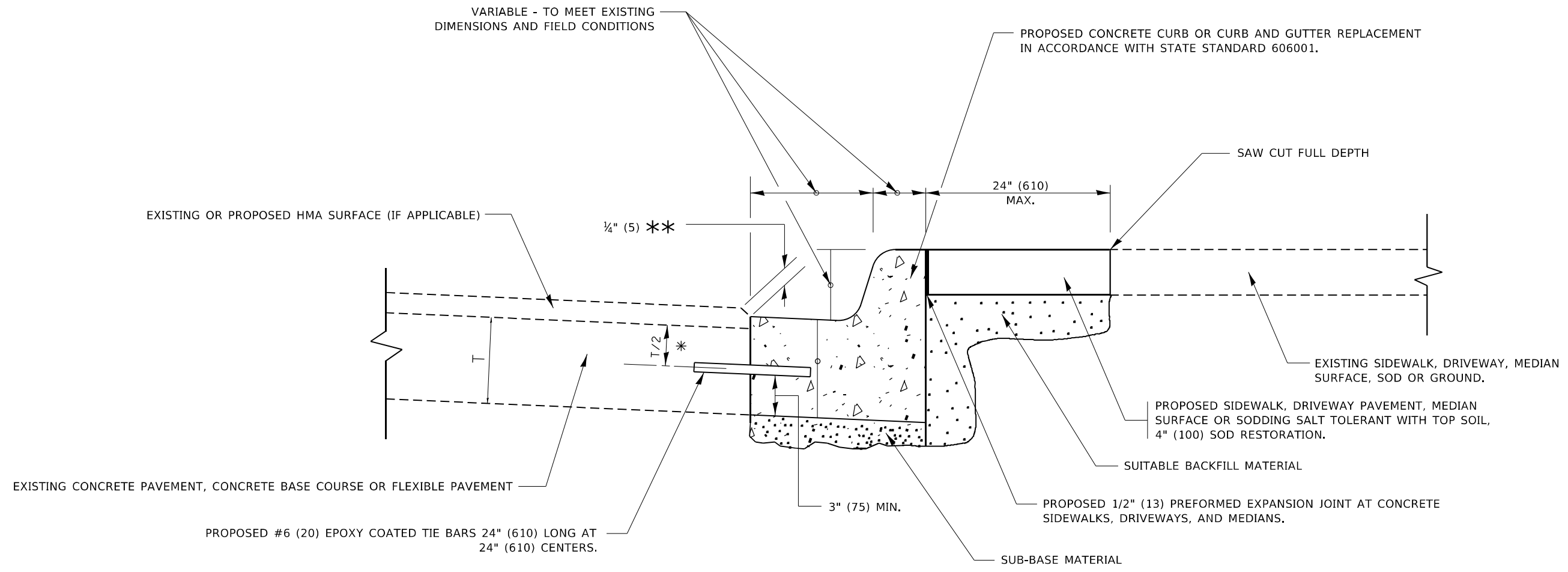
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PLOT DATE = 12/15/2023	DATE - 10-25-94	REVISED - K. SMITH 11-18-22

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PAVEMENT PATCHING FOR
HMA SURFACED PAVEMENT**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	FAP 0303 22 R53	McHENRY	40	23
BD400-04 (BD-22)			CONTRACT NO. 62T63	
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.

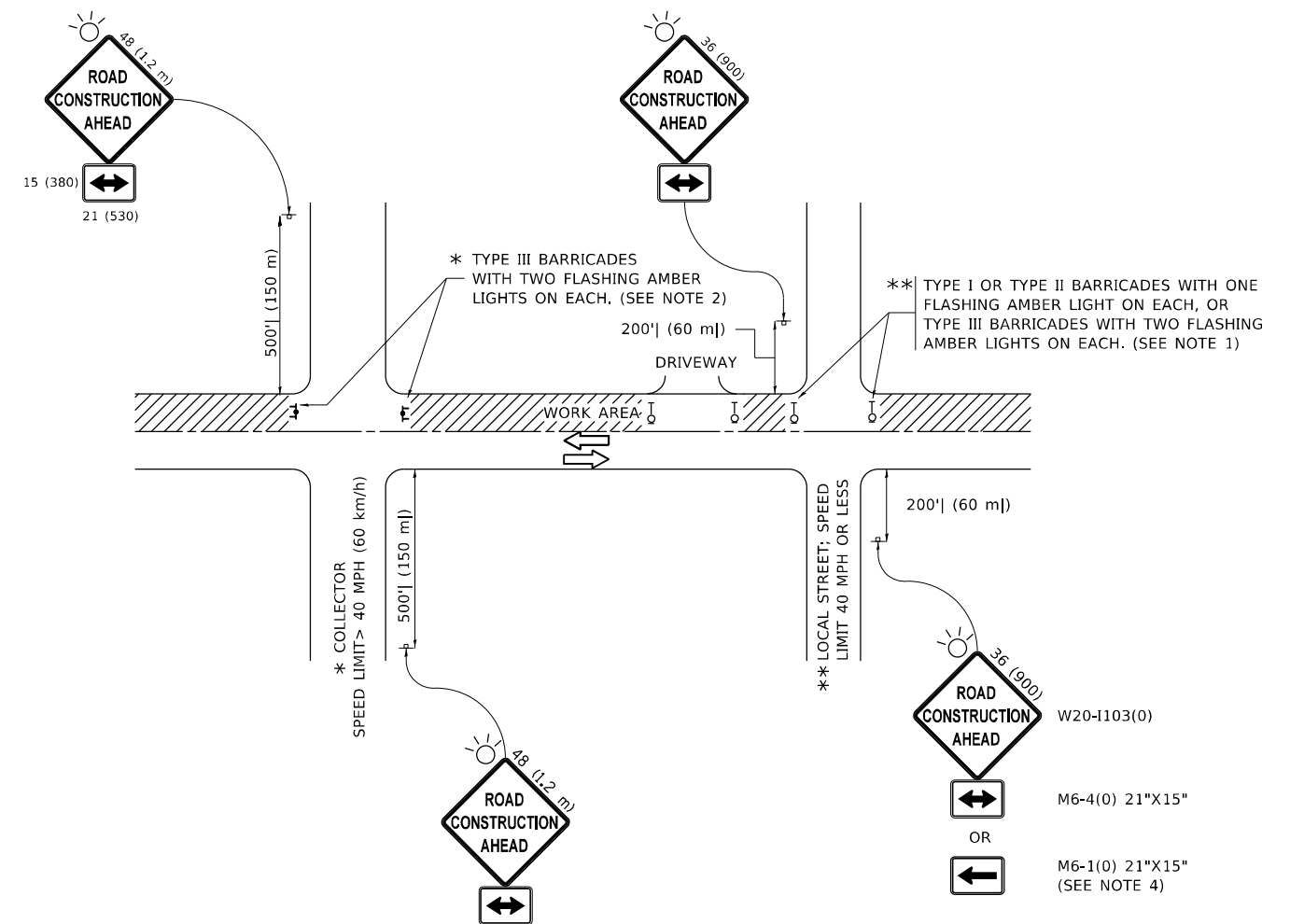
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USER NAME = Nedal.Qanit	DESIGNED - A. HOUSEH	REVISED - A. ABBAS 03-21-97
	DRAWN -	REVISED - M. GOMEZ 01-22-01
PLOT SCALE = 100,0000 ' / in.	CHECKED -	REVISED - R. BORO 12-15-09
PLOT DATE = 12/15/2023	DATE - 03-11-94	REVISED - K. SMITH 07-11-19

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT			
SCALE: NONE	SHEET 1	OF 1 SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	FAP 0303 22 R53	McHENRY	40	24
BD600-06 (BD-24)		CONTRACT NO. 62T63		
ILLINOIS FED. AID PROJECT				



NOTES:

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

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

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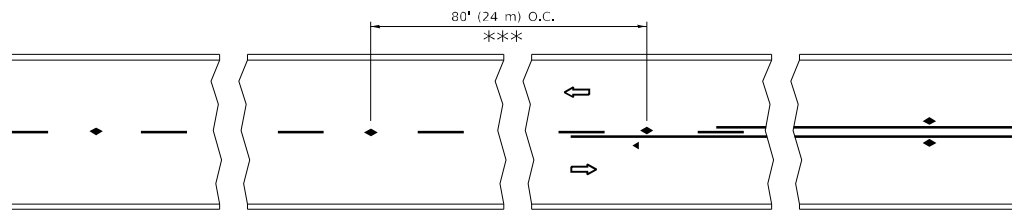
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PLOT DATE = 12/15/2023	DATE - 06-89	REVISED - A. SCHUETZE 07-01-13
		REVISED - A. SCHUETZE 09-15-16

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

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

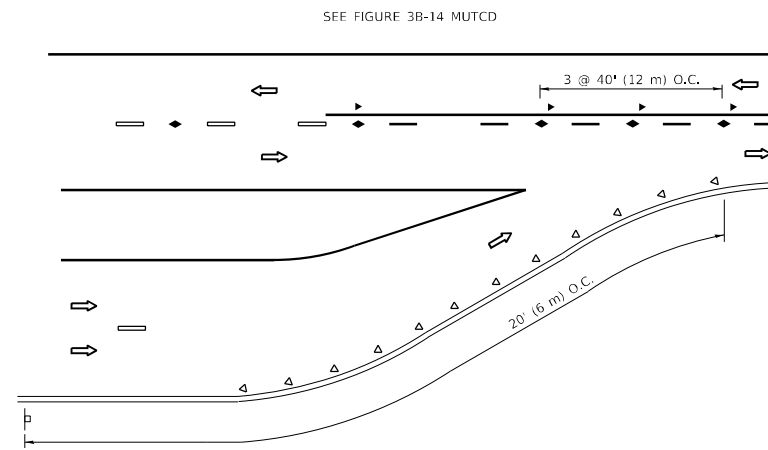
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TC-10			CONTRACT NO. 62T63	
ILLINOIS FED. AID PROJECT				

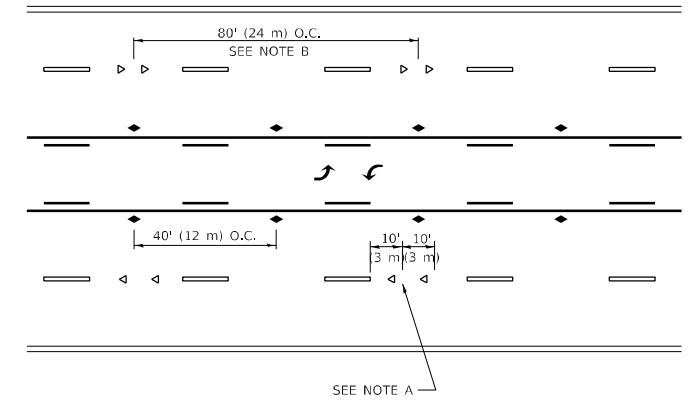


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

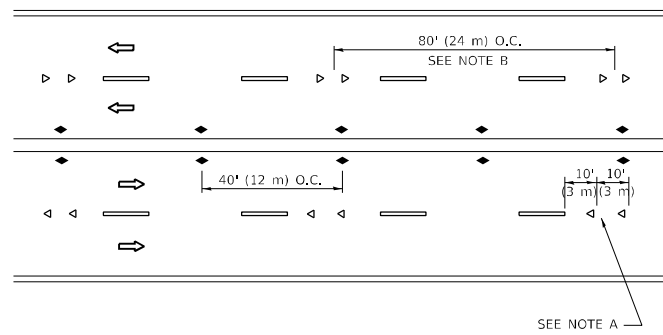
TWO-LANE/TWO-WAY



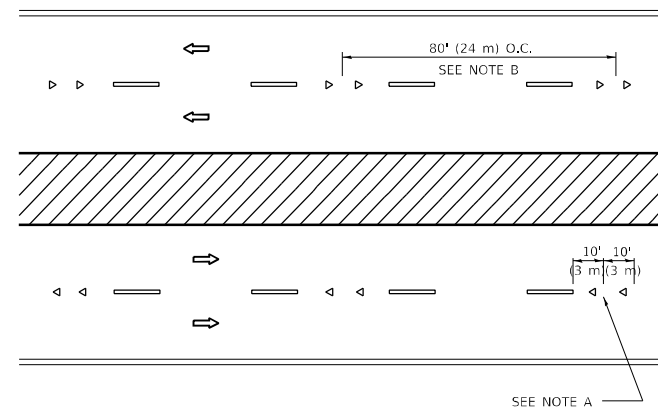
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

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

SYMBOLS

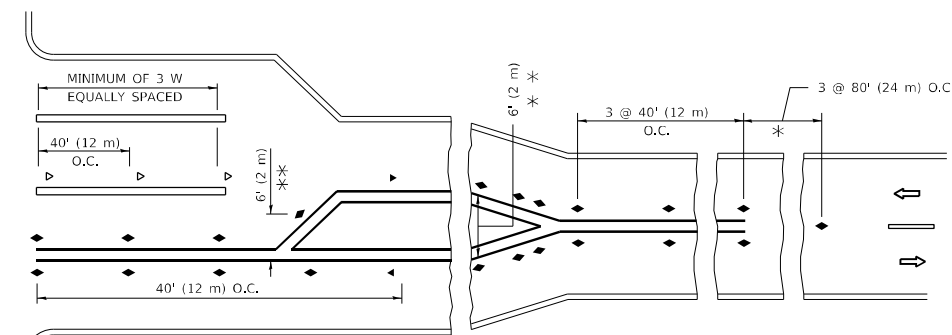
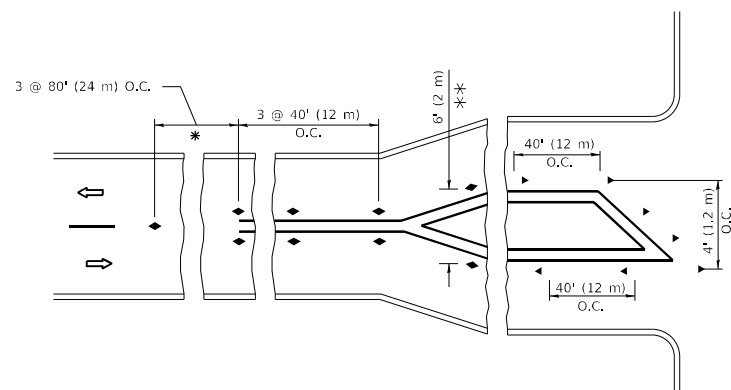
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◀ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

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

DESIGN NOTES

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



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

TURN LANES

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

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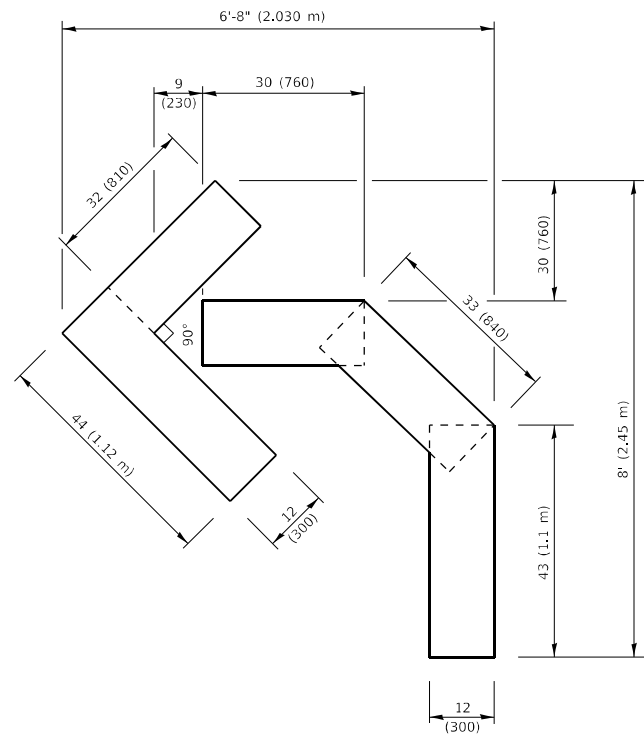
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	DRAWN -	REVISED - T. RAMMACHER 01-06-00
PLOT SCALE = 100,0000 ' / in.	CHECKED -	REVISED - C. JUCIUS 09-09-09
PLOT DATE = 12/15/2023	DATE -	REVISED - C. JUCIUS 07-01-13

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

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

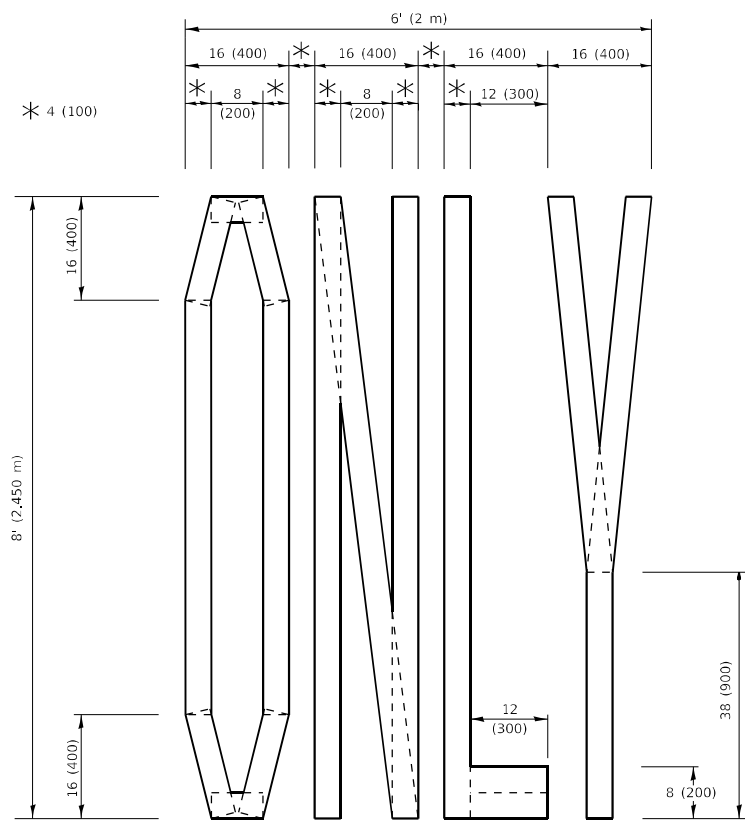
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	FAP 0303 22 R53	McHENRY	40	27
TC-11		CONTRACT NO. 62T63		
ILLINOIS FED. AID PROJECT				



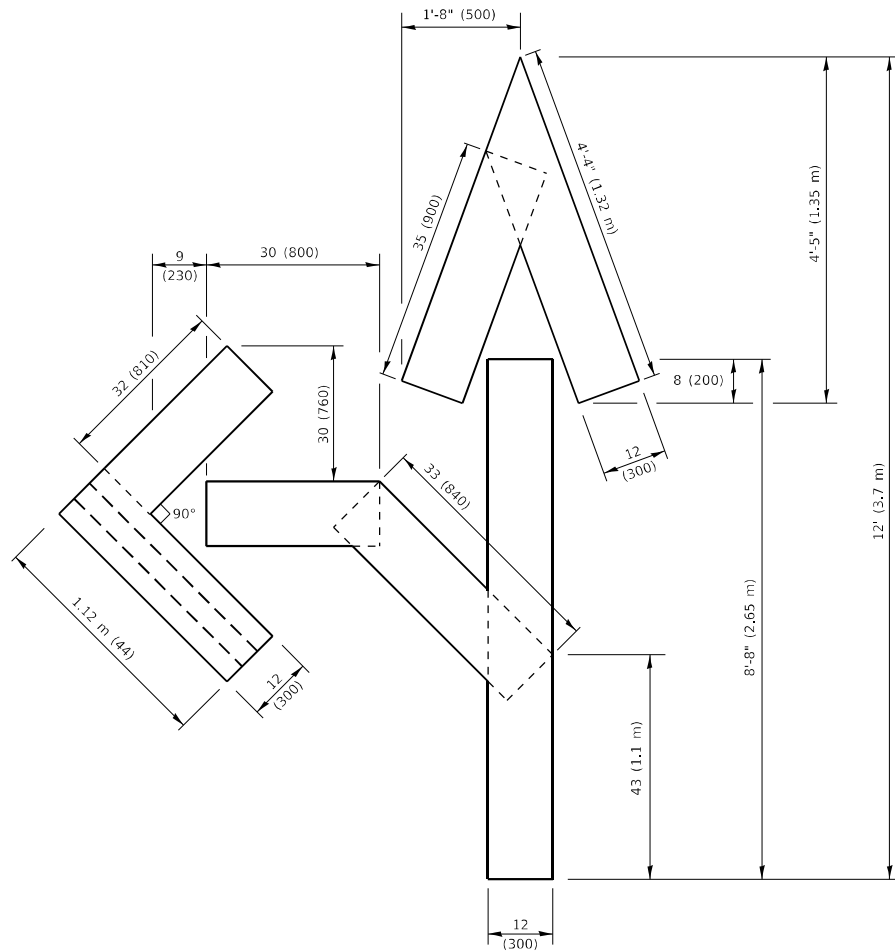
QUANTITY

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



QUANTITY

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

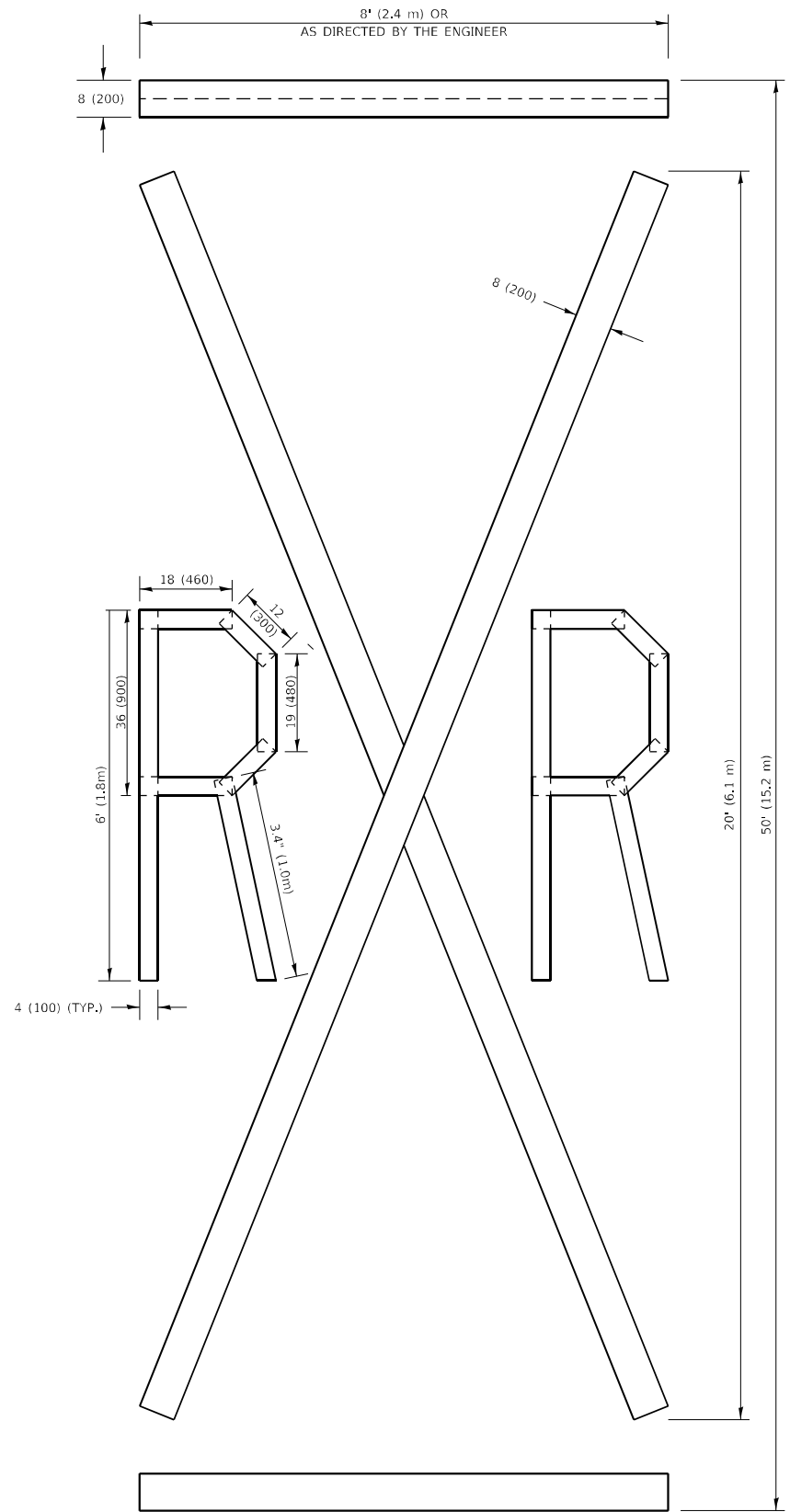


QUANTITY

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

NOTE:

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



QUANTITY

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

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

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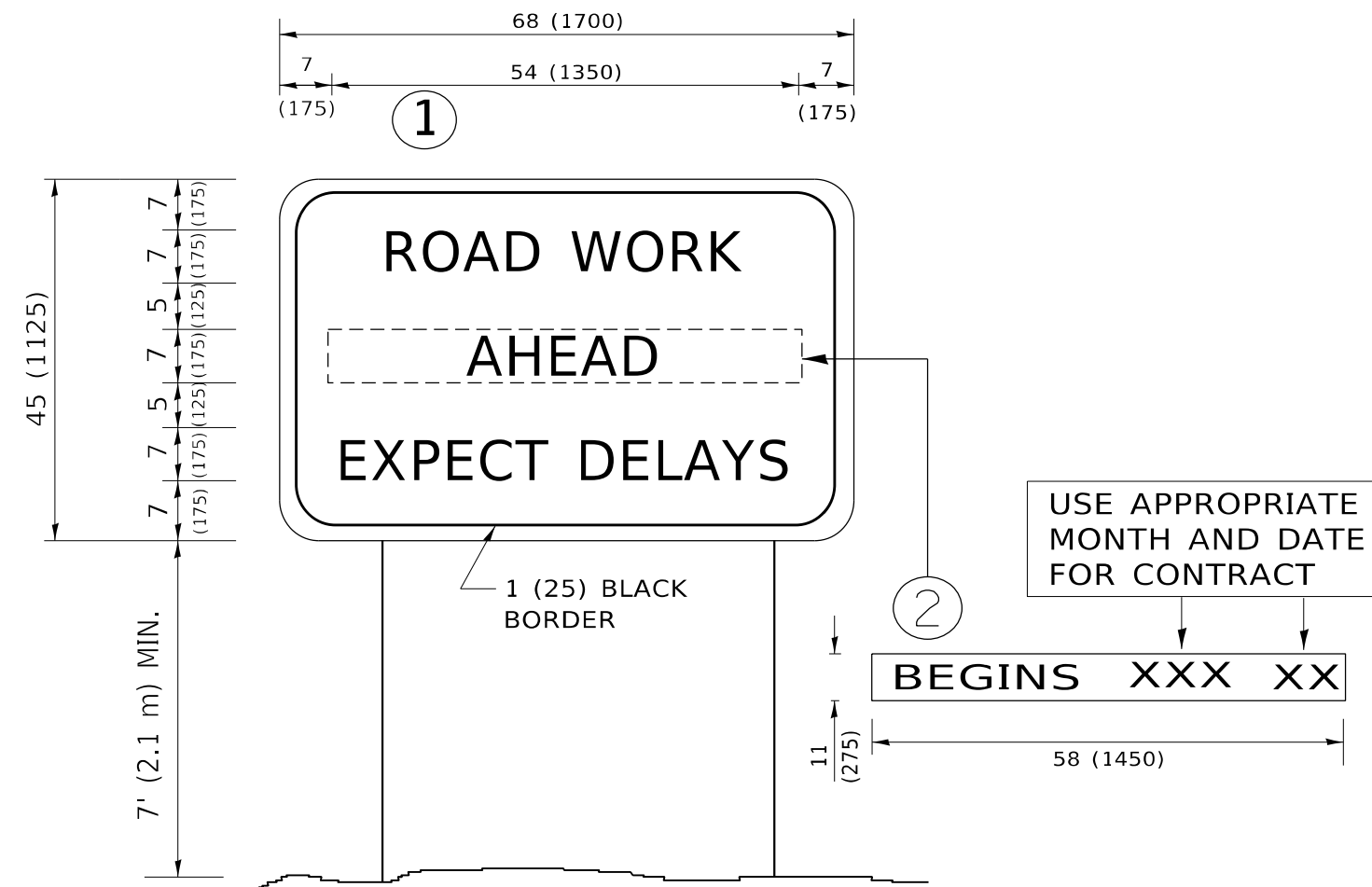
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	DRAWN -	REVISED - E. GOMEZ 08-28-00
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PLOT DATE = 12/15/2023	DATE - 09-18-94	REVISED - A. SCHUETZE 09-15-16

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	FAP 0303 22 R53	McHENRY	40	29
TC-16			CONTRACT NO. 62T63	
ILLINOIS FED. AID PROJECT				



NOTES:

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

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

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	DRAWN -	REVISED - R. MIRS 12-11-97
PLOT SCALE = 100,0000 ' / in.	CHECKED -	REVISED - T. RAMMACHER 02-02-99
PLOT DATE = 12/15/2023	DATE -	REVISED - C. JUCIUS 01-31-07

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ARTERIAL ROAD
INFORMATION SIGN**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	FAP 0303 22 R53	McHENRY	40	30
TC-22			CONTRACT NO. 62T63	
ILLINOIS FED. AID PROJECT				

TRAFFIC SIGNAL LEGEND

(NOT TO SCALE)

ITEM	EXISTING	PROPOSED	ITEM	EXISTING	PROPOSED	ITEM	EXISTING	PROPOSED
CONTROLLER CABINET			HANDHOLE -SQUARE -ROUND	 	 	SIGNAL HEAD -(P) PROGRAMMABLE SIGNAL HEAD		
COMMUNICATION CABINET			HEAVY DUTY HANDHOLE -SQUARE -ROUND	 	 	SIGNAL HEAD WITH BACKPLATE -(P) PROGRAMMABLE SIGNAL HEAD -(RB) RETROREFLECTIVE BACKPLATE		
MASTER CONTROLLER			DOUBLE HANDHOLE			PEDESTRIAN SIGNAL HEAD AT RAILROAD INTERSECTIONS		
MASTER MASTER CONTROLLER			JUNCTION BOX			PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER		
UNINTERRUPTABLE POWER SUPPLY			RAILROAD CANTILEVER MAST ARM			ILLUMINATED SIGN "NO LEFT TURN"/"NO RIGHT TURN"		
SERVICE INSTALLATION -(P) POLE MOUNTED			RAILROAD FLASHING SIGNAL			NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE. ALL DETECTOR LOOP CABLE TO BE SHIELDED		
SERVICE INSTALLATION -(G) GROUND MOUNTED -(GM) GROUND MOUNTED METERED	 	 	RAILROAD CROSSING GATE			GROUND CABLE IN CONDUIT, NO. 6 SOLID COPPER (GREEN)		
TELEPHONE CONNECTION			RAILROAD CROSSBUCK			ELECTRIC CABLE IN CONDUIT, TRACER NO. 14 1/C		
STEEL MAST ARM ASSEMBLY AND POLE			RAILROAD CONTROLLER CABINET			COAXIAL CABLE		
ALUMINUM MAST ARM ASSEMBLY AND POLE			UNDERGROUND CONDUIT (UC), GALVANIZED STEEL			VENDOR CABLE		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE			TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE			COPPER INTERCONNECT CABLE, NO. 18, 3 PAIR TWISTED, SHIELDED		
SIGNAL POST -(BM) BARREL MOUNTED - TEMPORARY			SYSTEM ITEM			FIBER OPTIC CABLE -NO. 62.5/125, MM12F -NO. 62.5/125, MM12F SM12F -NO. 62.5/125, MM12F SM24F		
WOOD POLE			INTERSECTION ITEM			GROUND ROD -(C) CONTROLLER -(M) MAST ARM -(P) POST -(S) SERVICE		
GUY WIRE			REMOVE ITEM					
SIGNAL HEAD			RELOCATE ITEM					
SIGNAL HEAD WITH BACKPLATE			ABANDON ITEM					
SIGNAL HEAD OPTICALLY PROGRAMMED			CONTROLLER CABINET AND FOUNDATION TO BE REMOVED					
FLASHER INSTALLATION -(FS) SOLAR POWERED	 	 	MAST ARM POLE AND FOUNDATION TO BE REMOVED					
PEDESTRIAN SIGNAL HEAD			SIGNAL POST AND FOUNDATION TO BE REMOVED					
PEDESTRIAN PUSH BUTTON -(APS) ACCESSIBLE PEDESTRIAN PUSH BUTTON			DETECTOR LOOP, TYPE I					
RADAR DETECTION SENSOR			PREFORMED DETECTOR LOOP					
VIDEO DETECTION CAMERA			SAMPLING (SYSTEM) DETECTOR					
RADAR/VIDEO DETECTION ZONE			INTERSECTION AND SAMPLING (SYSTEM) DETECTOR					
PAN, TILT, ZOOM (PTZ) CAMERA			QUEUE AND SAMPLING (SYSTEM) DETECTOR					
EMERGENCY VEHICLE LIGHT DETECTOR			WIRELESS DETECTOR SENSOR					
CONFIRMATION BEACON			WIRELESS ACCESS POINT					
WIRELESS INTERCONNECT								
WIRELESS INTERCONNECT RADIO REPEATER								

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PLOT DATE = 12/15/2023	DATE - 9/29/2016	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

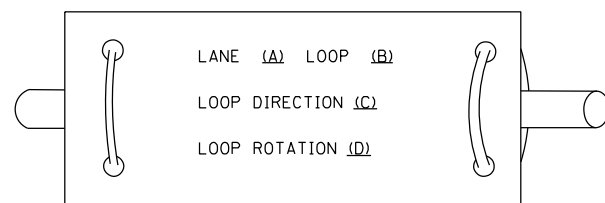
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	FAP 0303 22 R53	McHENRY	40	31
TS-05		CONTRACT NO. 62T63		
ILLINOIS FED. AID PROJECT				

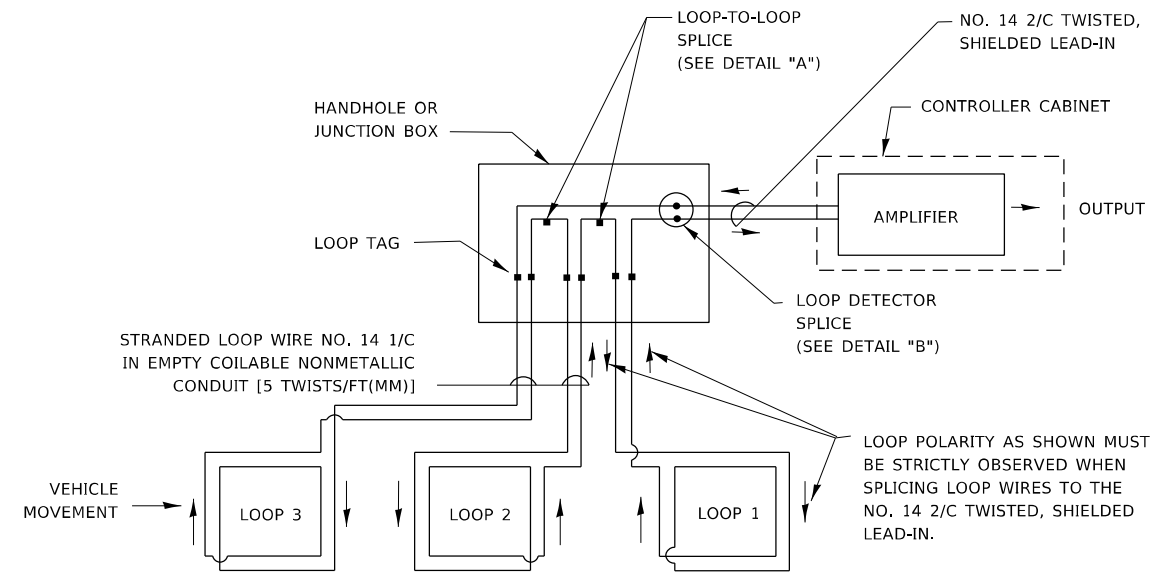
LOOP DETECTOR NOTES

1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

LOOP LEAD-IN CABLE TAG

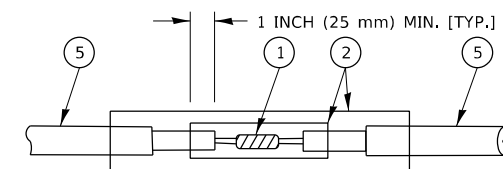


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

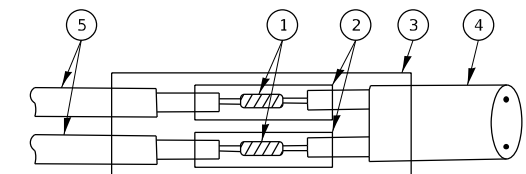


DETECTOR LOOP WIRING SCHEMATIC

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

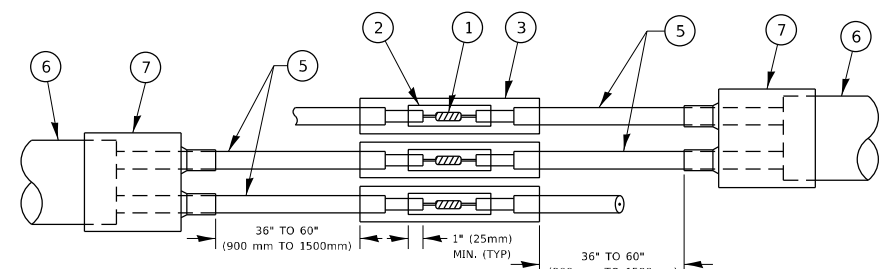


DETAIL "A"
LOOP-TO-LOOP SPLICE

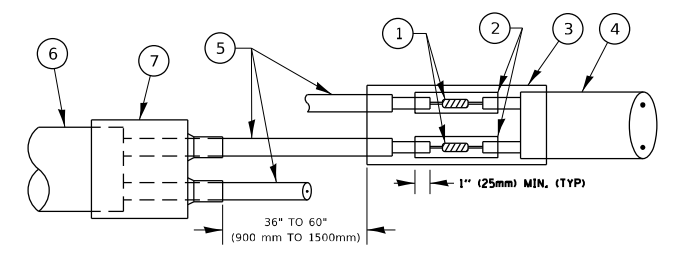


DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A"
LOOP-TO-LOOP SPLICE



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

PREFORMED LOOP

LOOP DETECTOR SPLICE

- 1 WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH. THE WESTERN UNION SPLICES SHALL BE STAGGERED.
- 2 WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- 3 WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGTH 6" (150 mm), UNDERWATER GRADE.
- 4 NO. 14 2/C TWISTED, SHIELDED CABLE.
- 5 LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE. PREFORMED LOOP
- 6 XL POLYOLEFIN 2 CONDUCTOR
- 7 BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE SHEET 2 OF 7 SHEETS STA. TO STA.

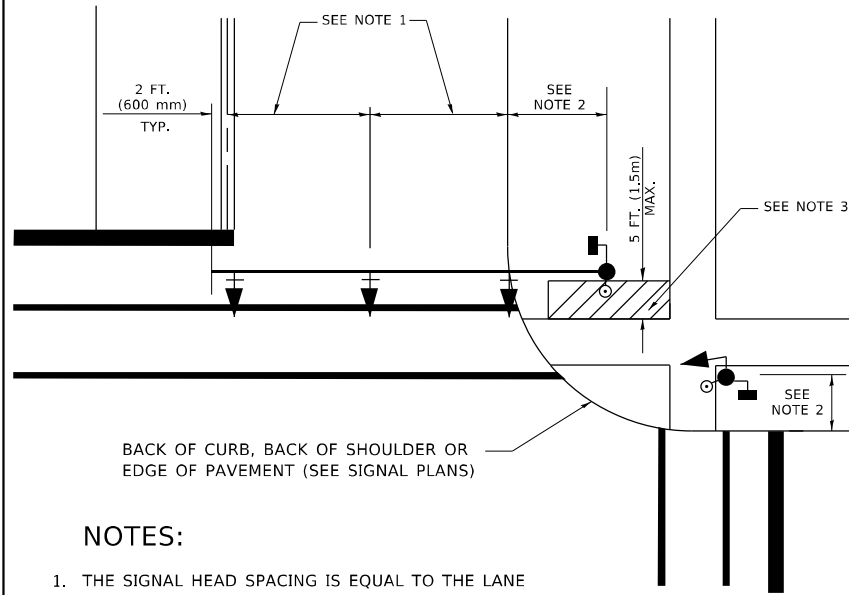
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	FAP 0303 22 R53	McHENRY	40	32
TS-05			CONTRACT NO. 62T63	
ILLINOIS		FED. AID PROJECT		

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PLOT DATE = 12/15/2023	CHECKED -	REVISED -
	DATE -	REVISED -

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.

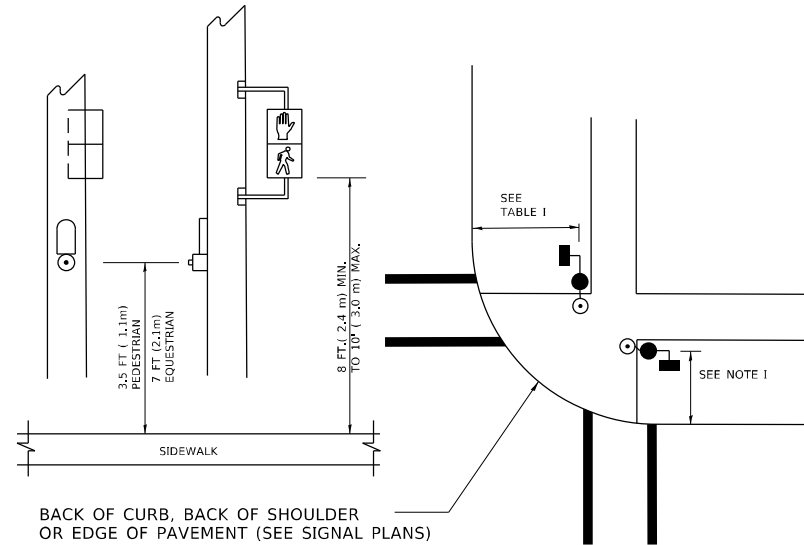


BACK OF CURB, BACK OF SHOULDER OR EDGE OF PAVEMENT (SEE SIGNAL PLANS)

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

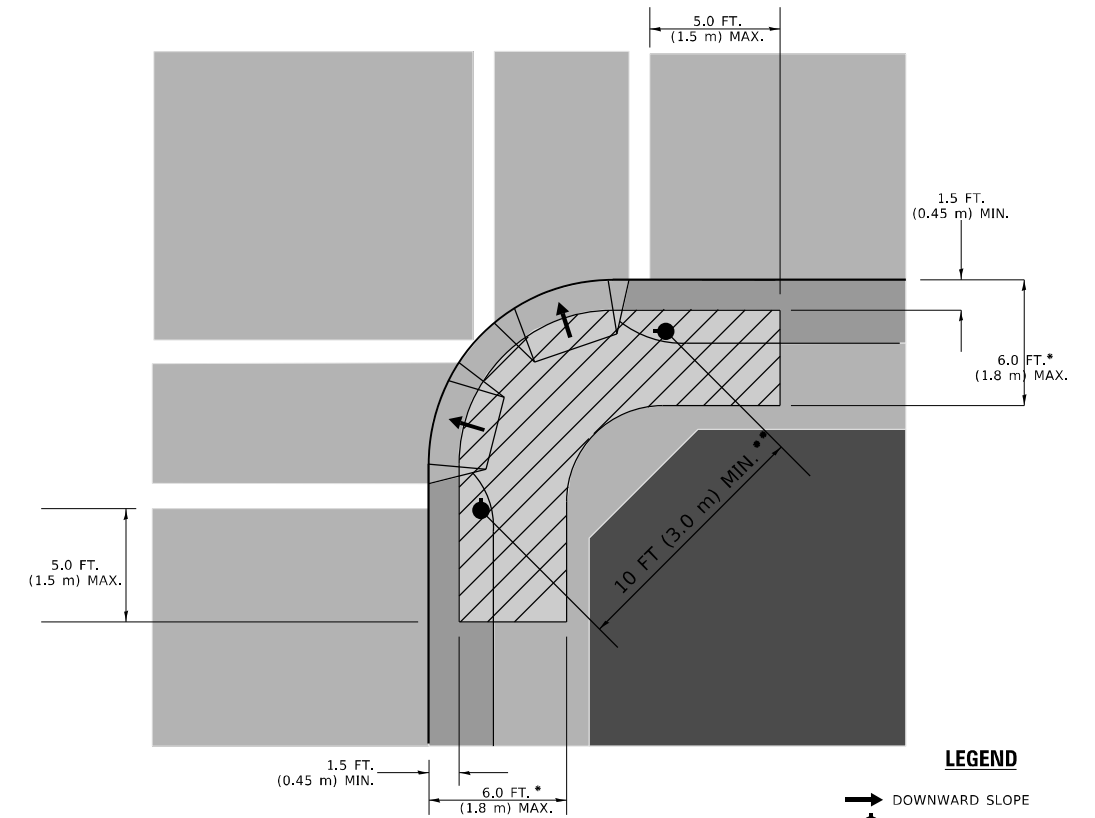


BACK OF CURB, BACK OF SHOULDER OR EDGE OF PAVEMENT (SEE SIGNAL PLANS)

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



LEGEND

- DOWNWARD SLOPE
- PEDESTRIAN PUSHBUTTON
- ▨ 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 TO THE 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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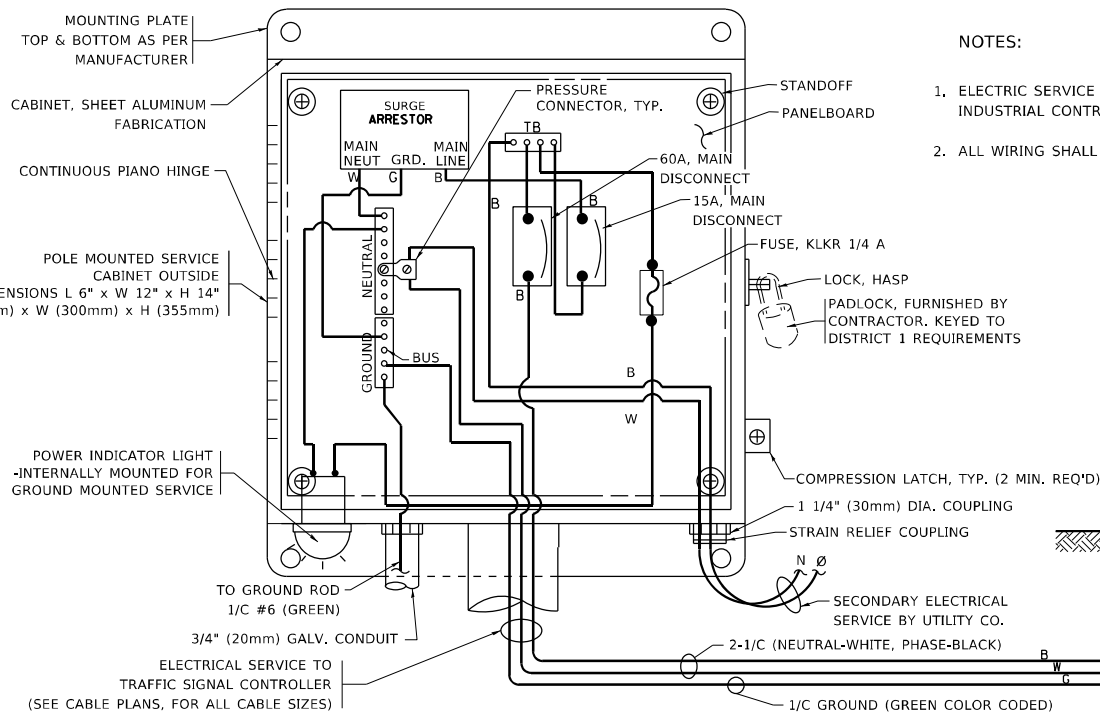
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

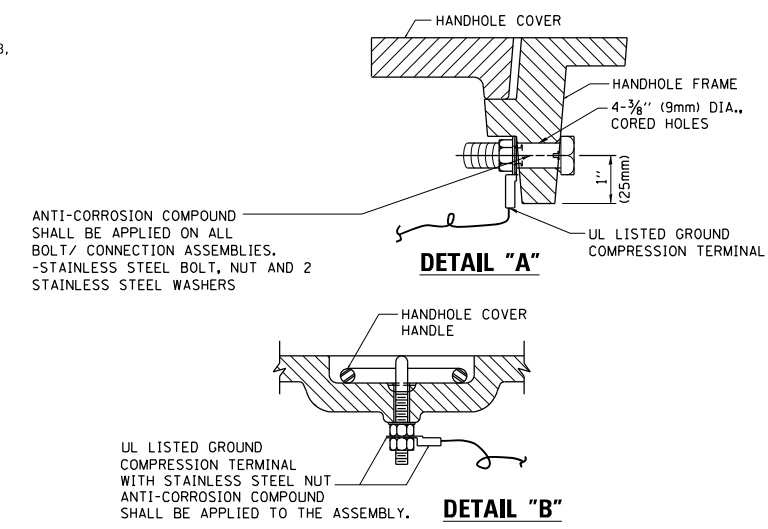
**DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: NONE SHEET 3 OF 7 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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TS-05		CONTRACT NO. 62T63		
ILLINOIS FED. AID PROJECT				

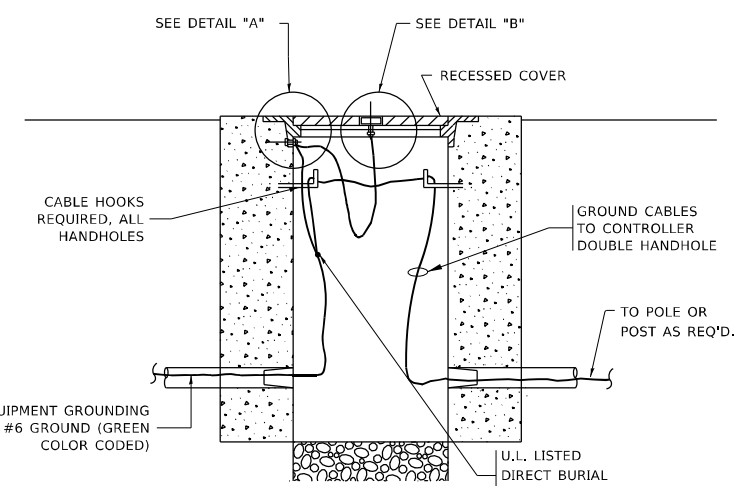


ELECTRICAL SERVICE – PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)
SERVICE INSTALLATION POLE MOUNT (SHOWN)
 (NOT TO SCALE)

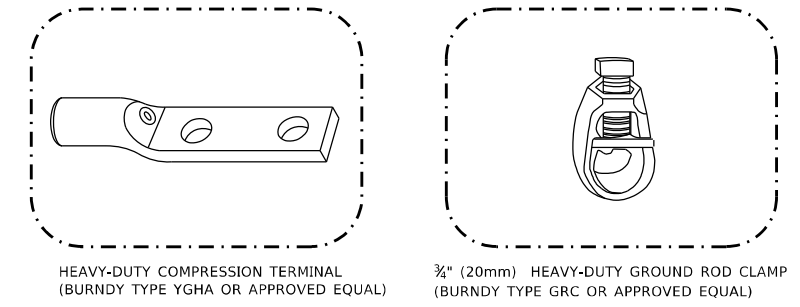


NOTES:
GROUNDING SYSTEM

- 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.
- 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.
- ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
- THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.

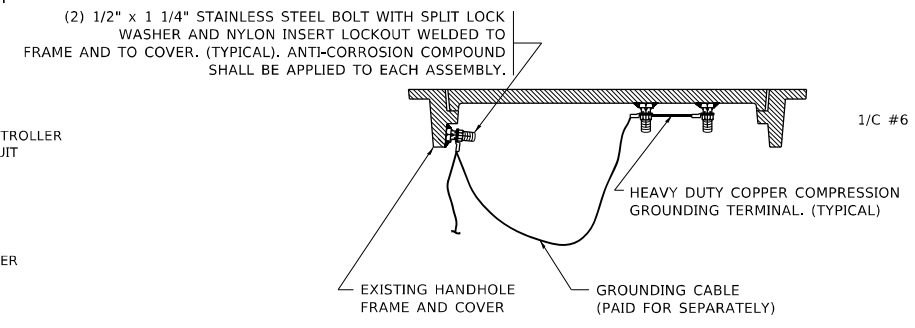


HANDHOLE COVER & FRAME – GROUNDING DETAIL
 (NOT TO SCALE)

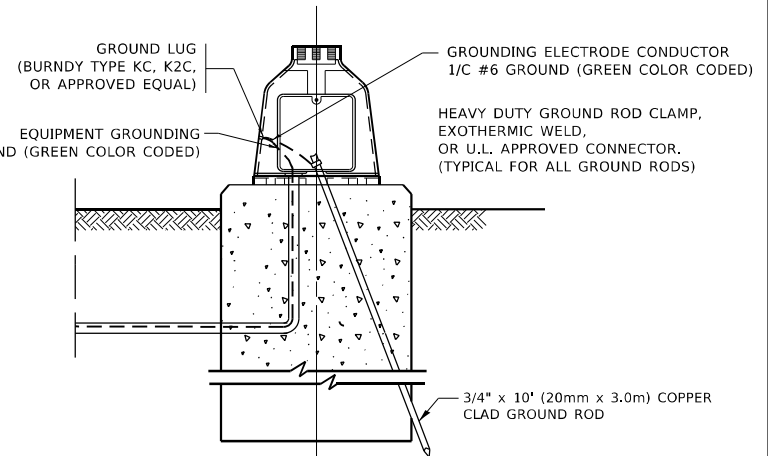


NOTES:

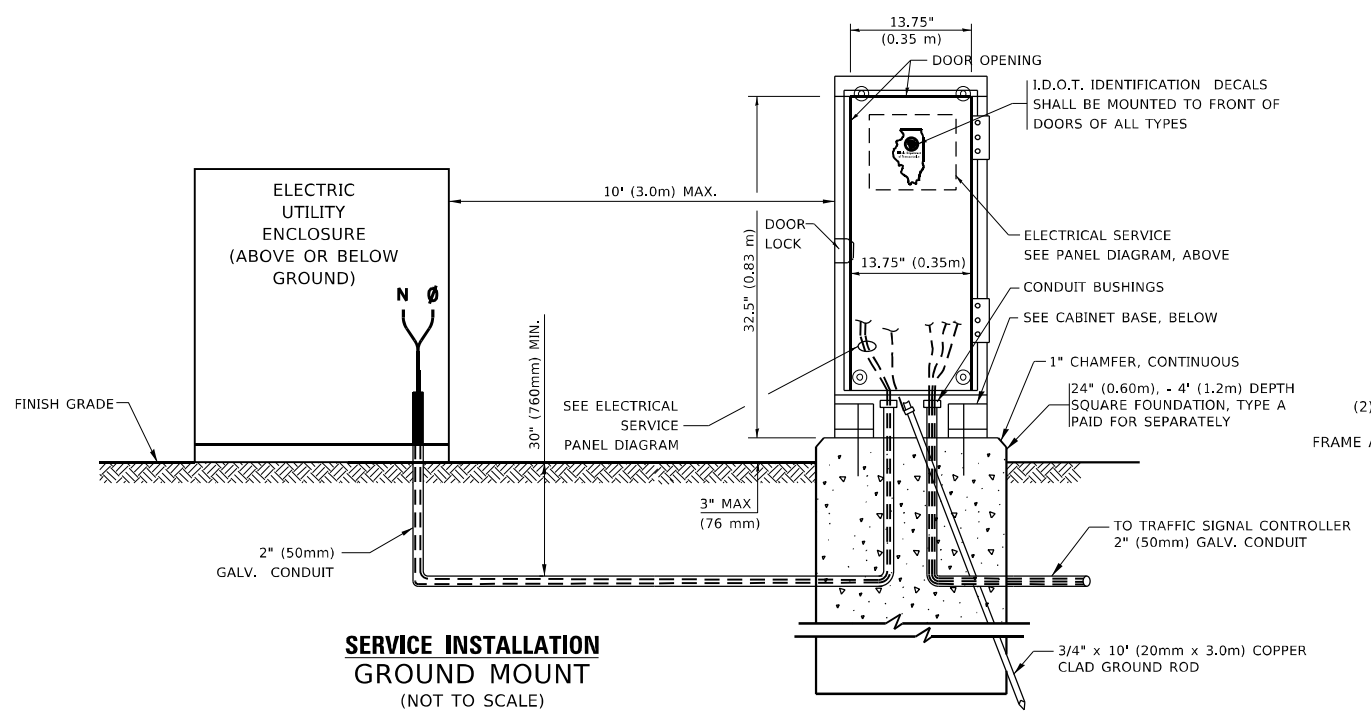
- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
- GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES
 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES
 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES.
 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



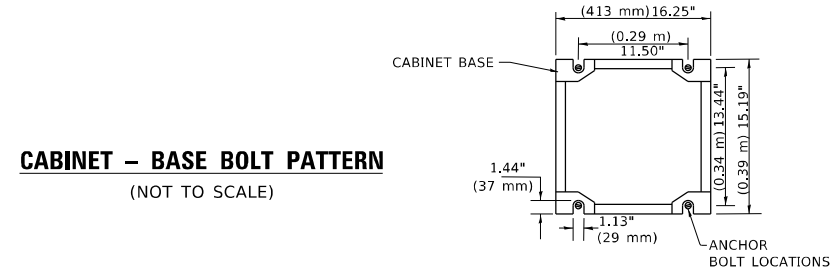
EXISTING HANDHOLE COVER & FRAME – GROUNDING DETAIL
 (NOT TO SCALE)



MAST ARM POLE /POST-GROUNDING DETAIL
 (NOT TO SCALE)



SERVICE INSTALLATION GROUND MOUNT
 (NOT TO SCALE)



CABINET – BASE BOLT PATTERN
 (NOT TO SCALE)

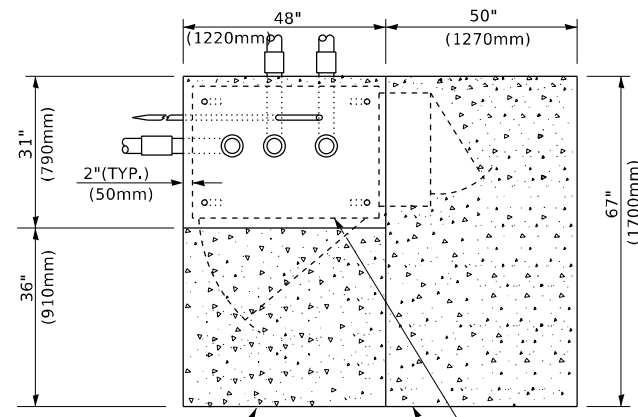
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE
 STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

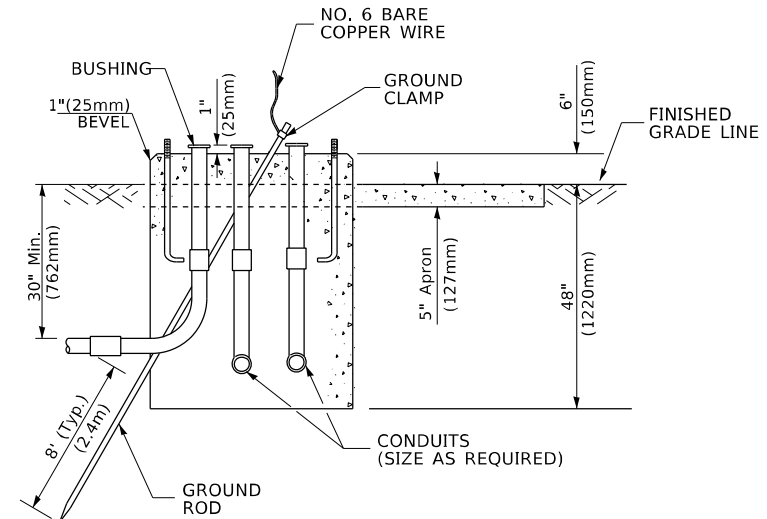
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TS-05		CONTRACT NO. 62T63		
ILLINOIS FED. AID PROJECT				

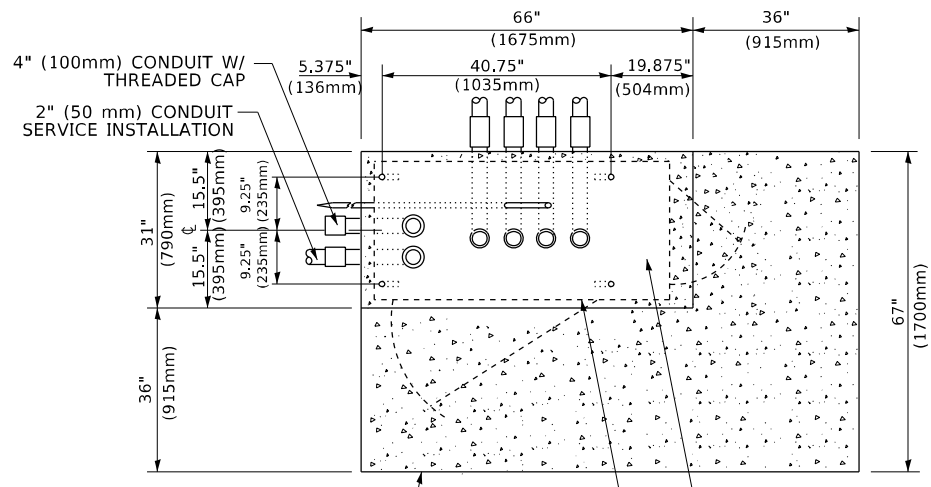
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TOP VIEW

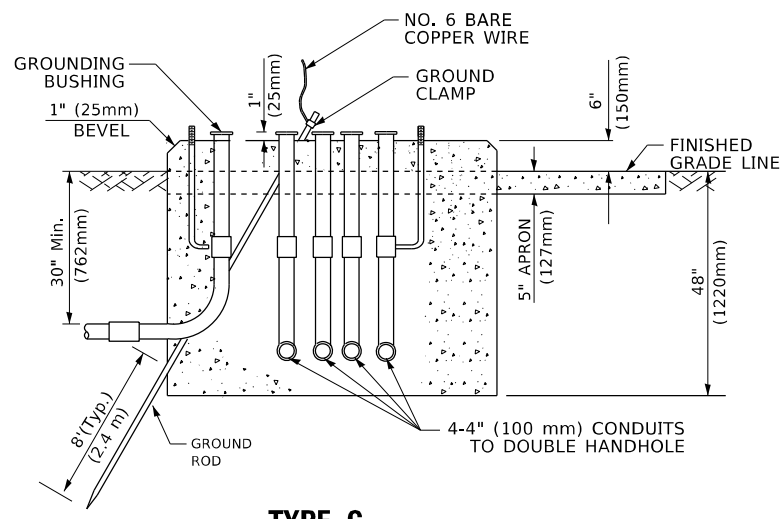


**TYPE D
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET**

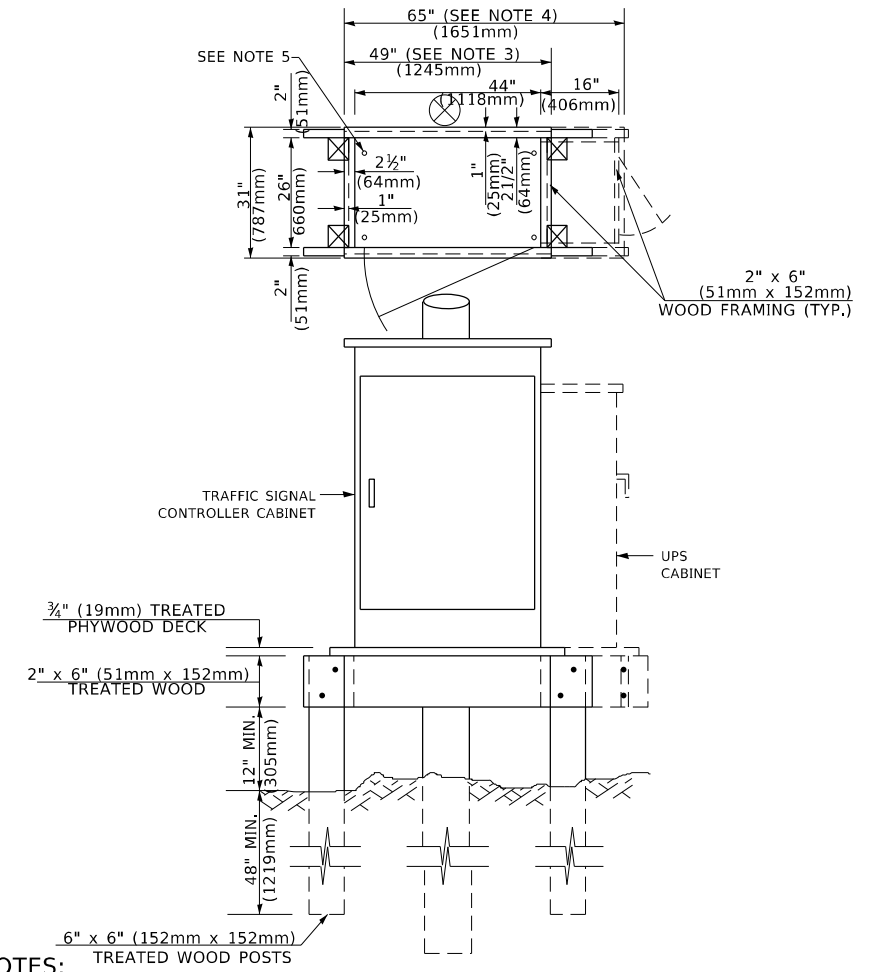


TOP VIEW

NOTE:
TOP OF FOUNDATION SHALL
BE HIGHER THAN TOP OF
DOUBLE HANDHOLE



**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)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 55' (16.8 m) and less than 65' (19.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 75' (22.9 m) and up to 85' (25.9 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

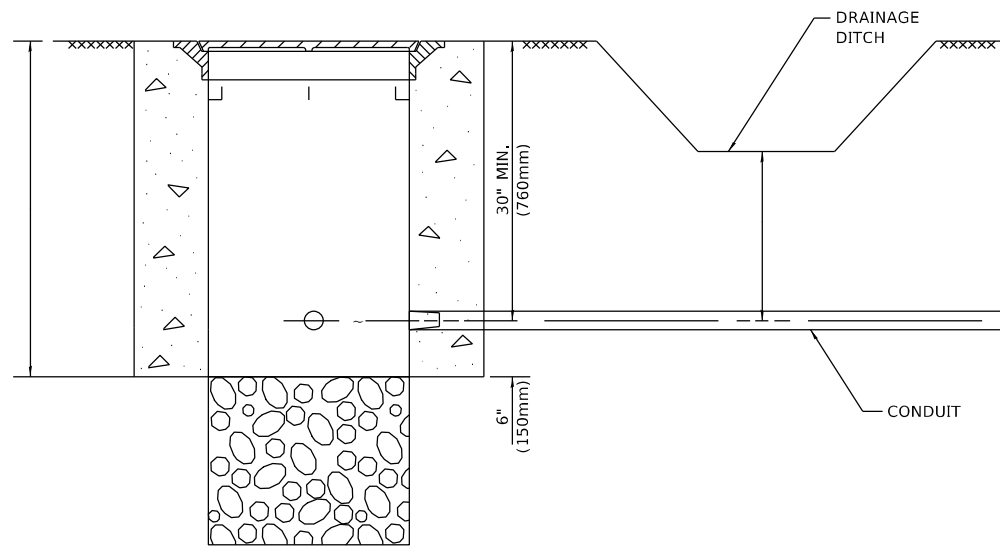
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PLOT DATE = 12/15/2023	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DISTRICT ONE			
STANDARD TRAFFIC SIGNAL DESIGN DETAILS			
SCALE: NONE	SHEET 5	OF 7 SHEETS	STA. TO STA.

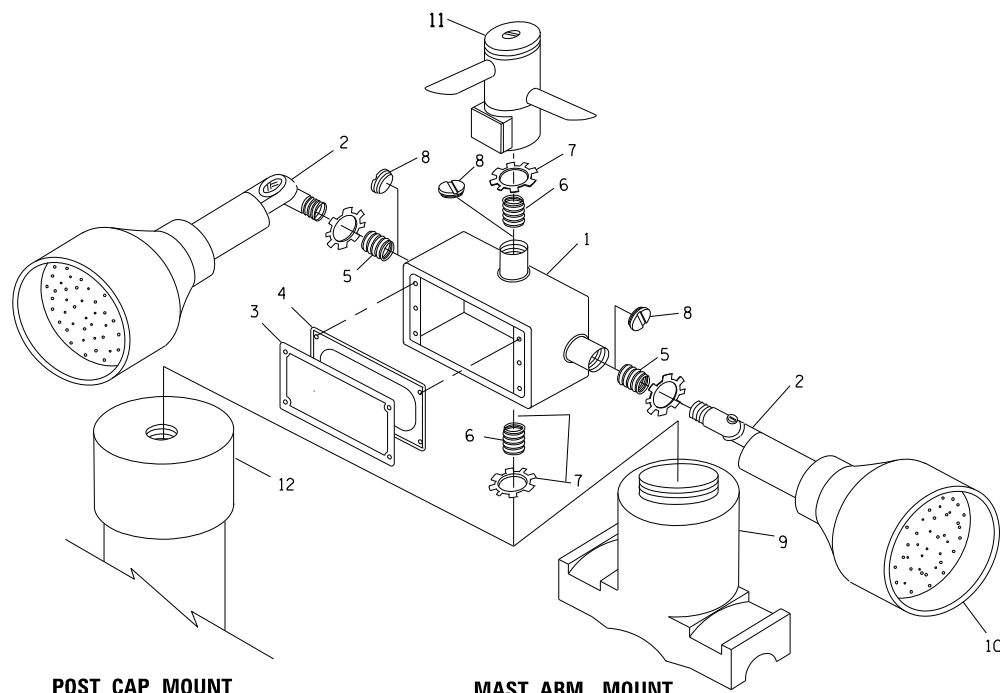
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TS-05		CONTRACT NO. 62T63		
ILLINOIS FED. AID PROJECT				



NOTES:

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

HANDHOLE WITH MINIMUM CONDUIT DEPTH
(NOT TO SCALE)

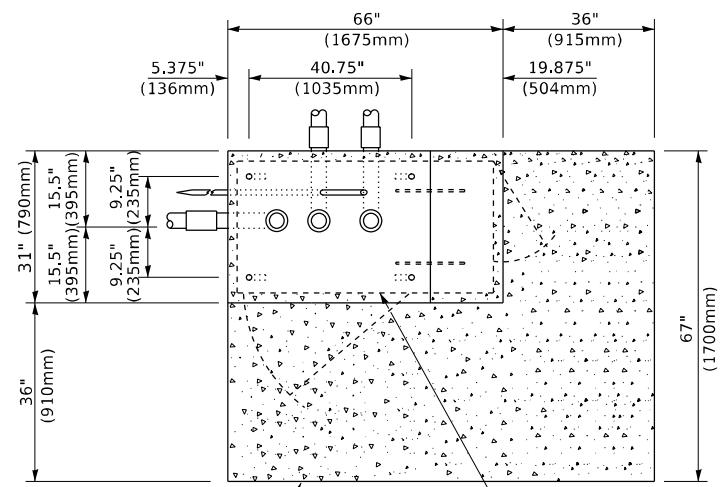


POST CAP MOUNT **MAST ARM MOUNT**
EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION
BEACON MOUNTING DETAIL

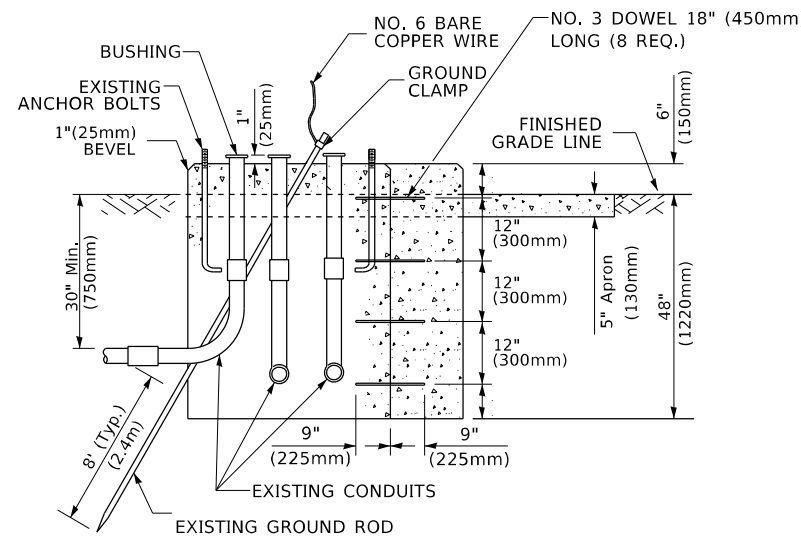
ITEM NO.	IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU.IN. (0,000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4" (19 mm) CLOSE NIPPLE
7	3/4" (19 mm) LOCKNUT
8	3/4" (19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

NOTES:

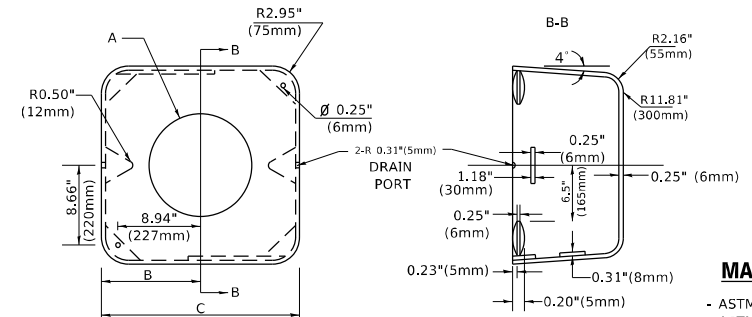
1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
2. ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT
ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT
ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
3. WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE 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.



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)

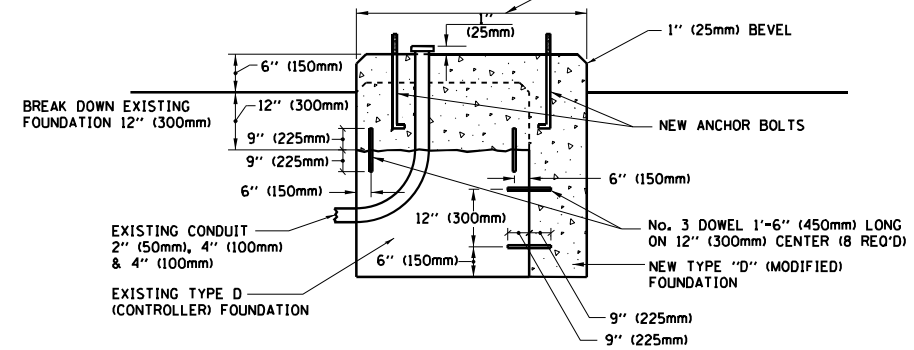
SHROUD

NOTES:

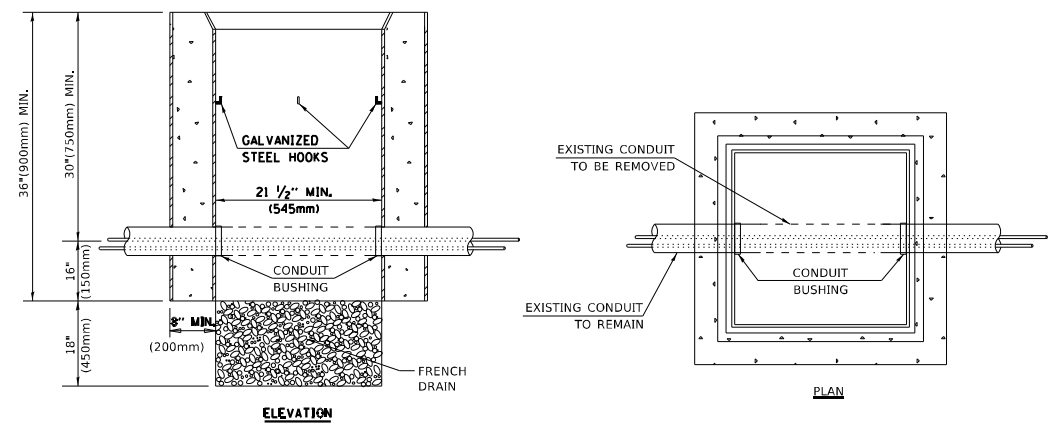
1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
2. THE SUPPLIER SHALL VERIFIED THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE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



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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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

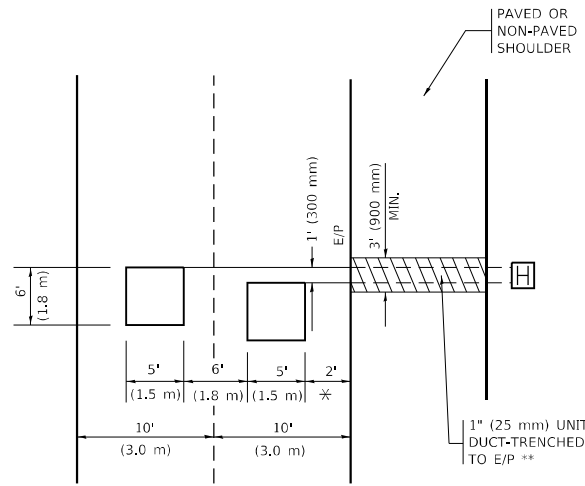
DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE SHEET 6 OF 7 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	FAP 0303 22 RS3	MCHEMRY	40	36
TS-05		CONTRACT NO. 62T63		
ILLINOIS FED. AID PROJECT				

LOOPS NEXT TO SHOULDERS

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

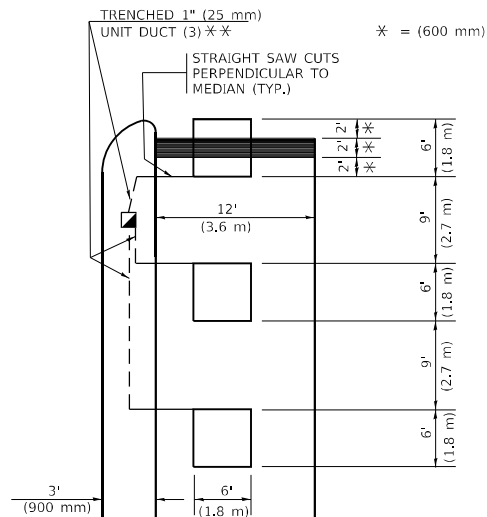


* = (600 mm)

** 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)

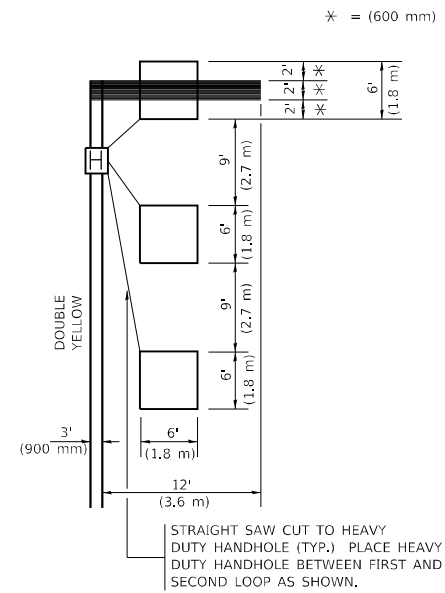
HANDHOLE LOCATION MAY VARY DEPENDING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS. HEAVY-DUTY HANDHOLES TO BE USED WHEN THE MEDIAN IS MOUNTABLE. REFER TO STANDARD 814001 TO ENSURE THAT HANDHOLE FITS IN MEDIAN.



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

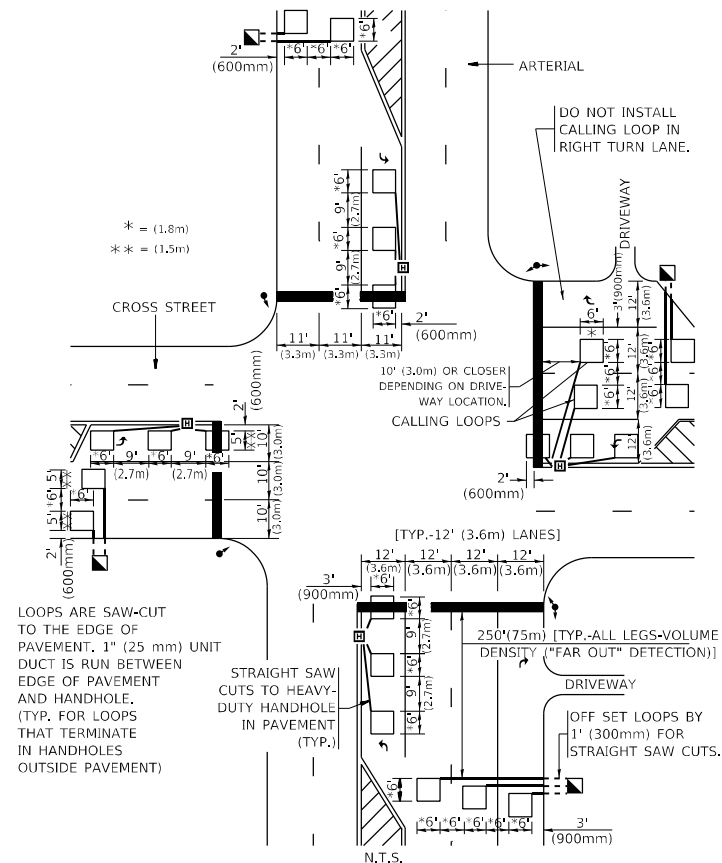
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

LEFT TURN LANES WITHOUT MEDIANS
VOLUME DENSITY ("FAR OUT" DETECTION)
ON SAME APPROACH
(PROTECTED / PERMITTED LEFT TURN PHASING)



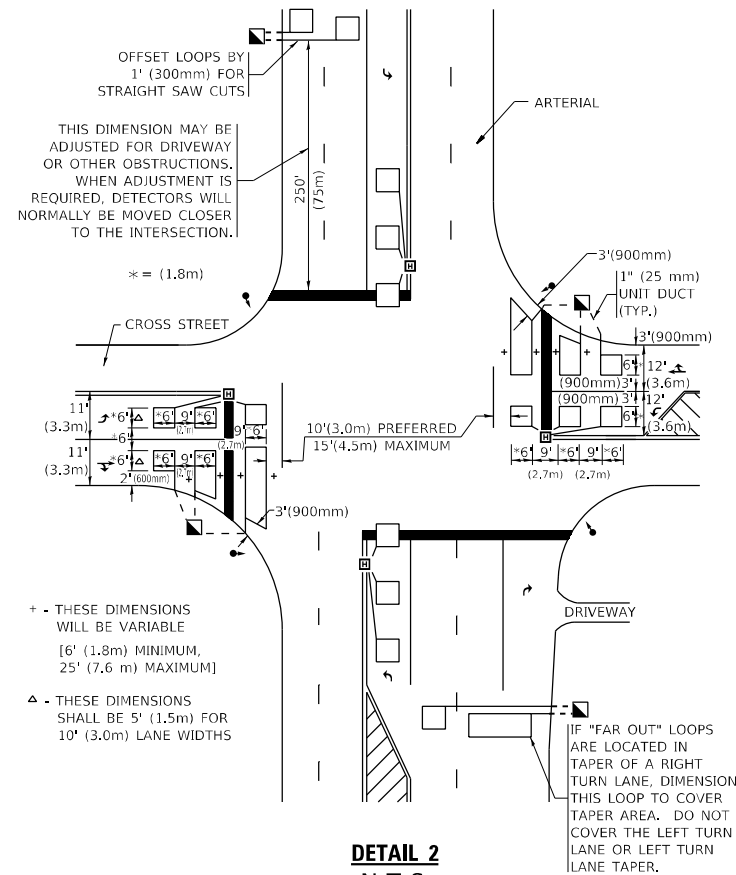
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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.

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

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

NOTE:

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

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

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PLOT DATE = 12/15/2023	DATE -	REVISED -

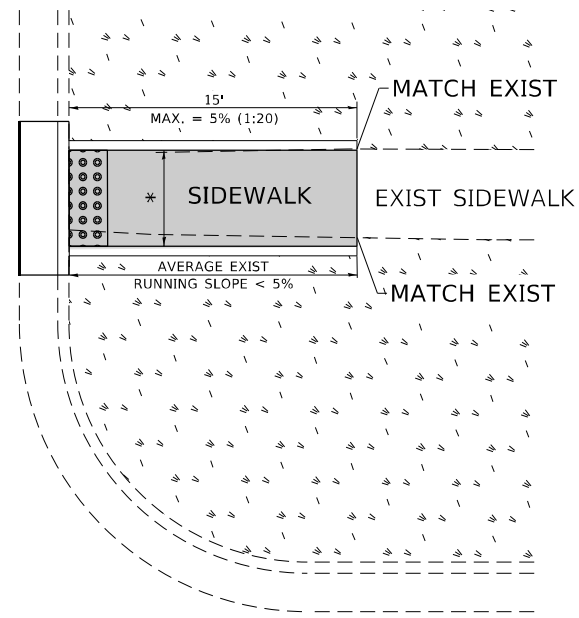
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 1 - DETECTOR LOOP INSTALLATION			
DETAILS FOR ROADWAY RESURFACING			
SCALE: NONE	SHEET 1	OF 1 SHEETS	STA. TO STA.

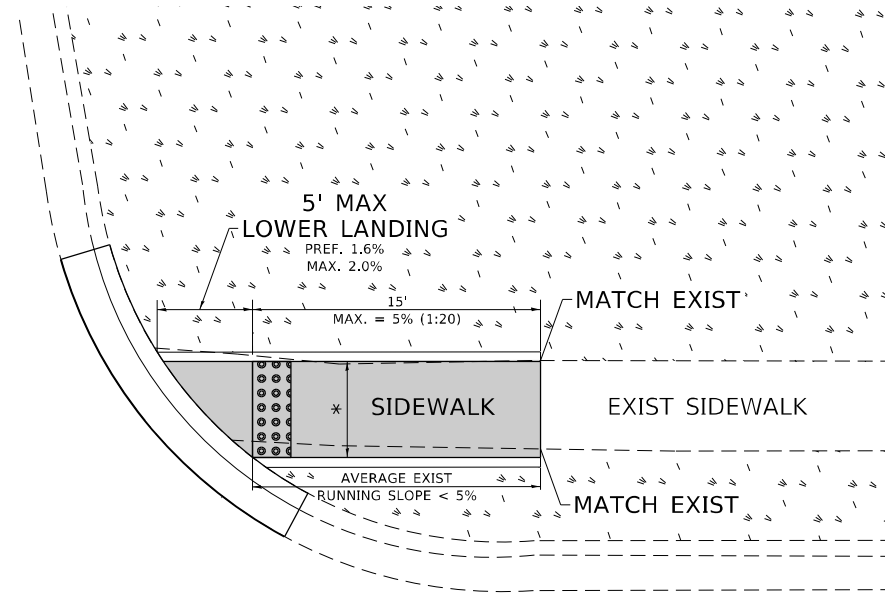
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	FAP 0303 22 R53	McHENRY	40	38
TS-07			CONTRACT NO. 62T63	
ILLINOIS FED. AID PROJECT				

ADA DETAIL FOR SINGLE PERPENDICULAR CURB RAMPS W/ EXIST. 5% OR LESS RUN. SLOPE

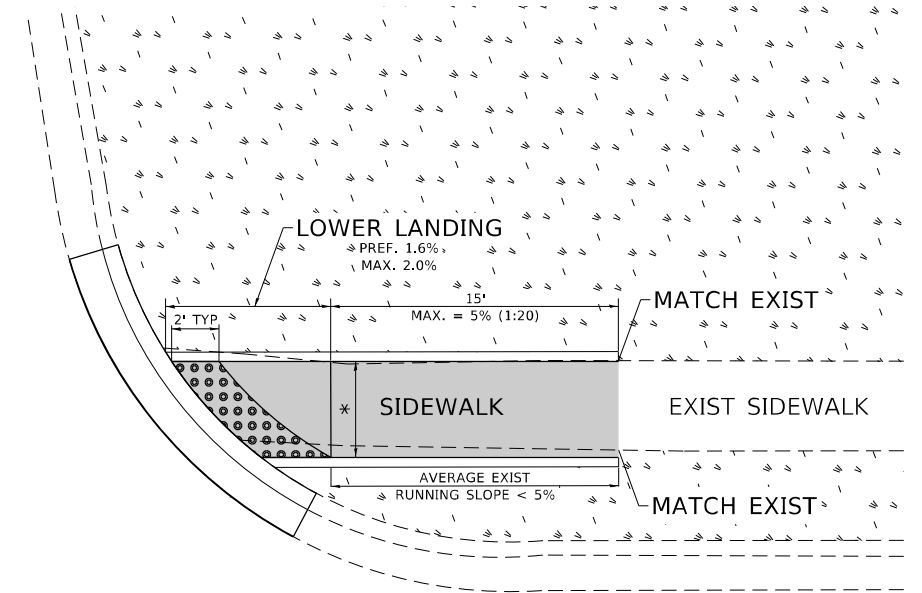
PD-01A



PD-01B



PD-01C



LEGEND

- EXIST. GRASS
- PROPOSED SIDEWALK
- DETECTABLE WARNINGS
- PROPOSED SIDE CURB

CONSTRUCTION NOTES:

- 1) ALL CROSS SLOPES ARE PREFERRED 1.6% (1:64), MAXIMUM 2% (1:50) EXCEPT WHEN TRANSITIONING TO EXISTING SIDEWALK
- * MATCH EXISTING SIDEWALK WIDTH

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PLOT DATE = 12/15/2023	DATE - 10/02/2019	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

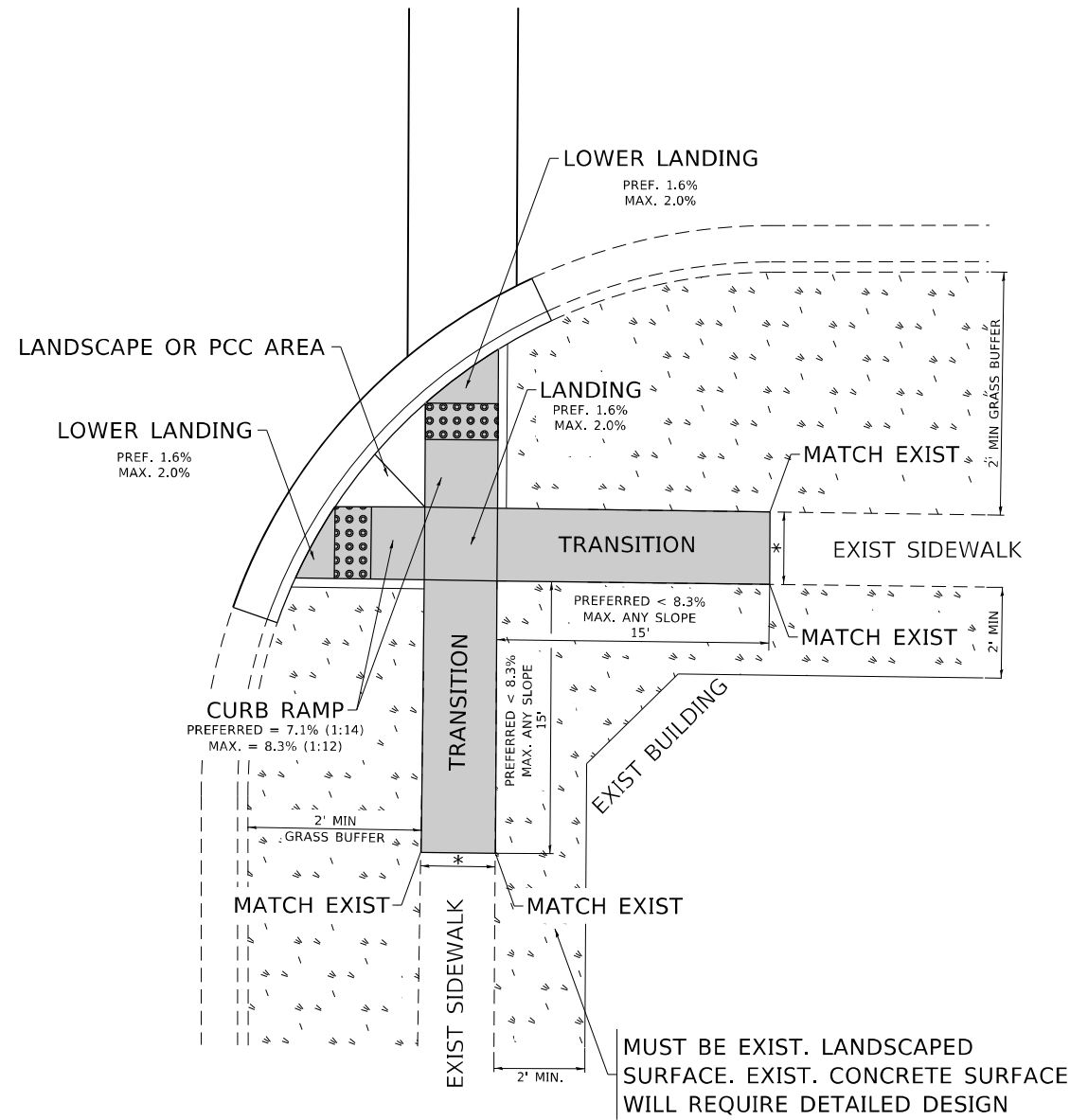
**PROJECT DETAIL FOR SINGLE PERPENDICULAR CURB RAMPS
(PD-01)**

SCALE: NONE SHEET OF SHEETS STA. TO STA.

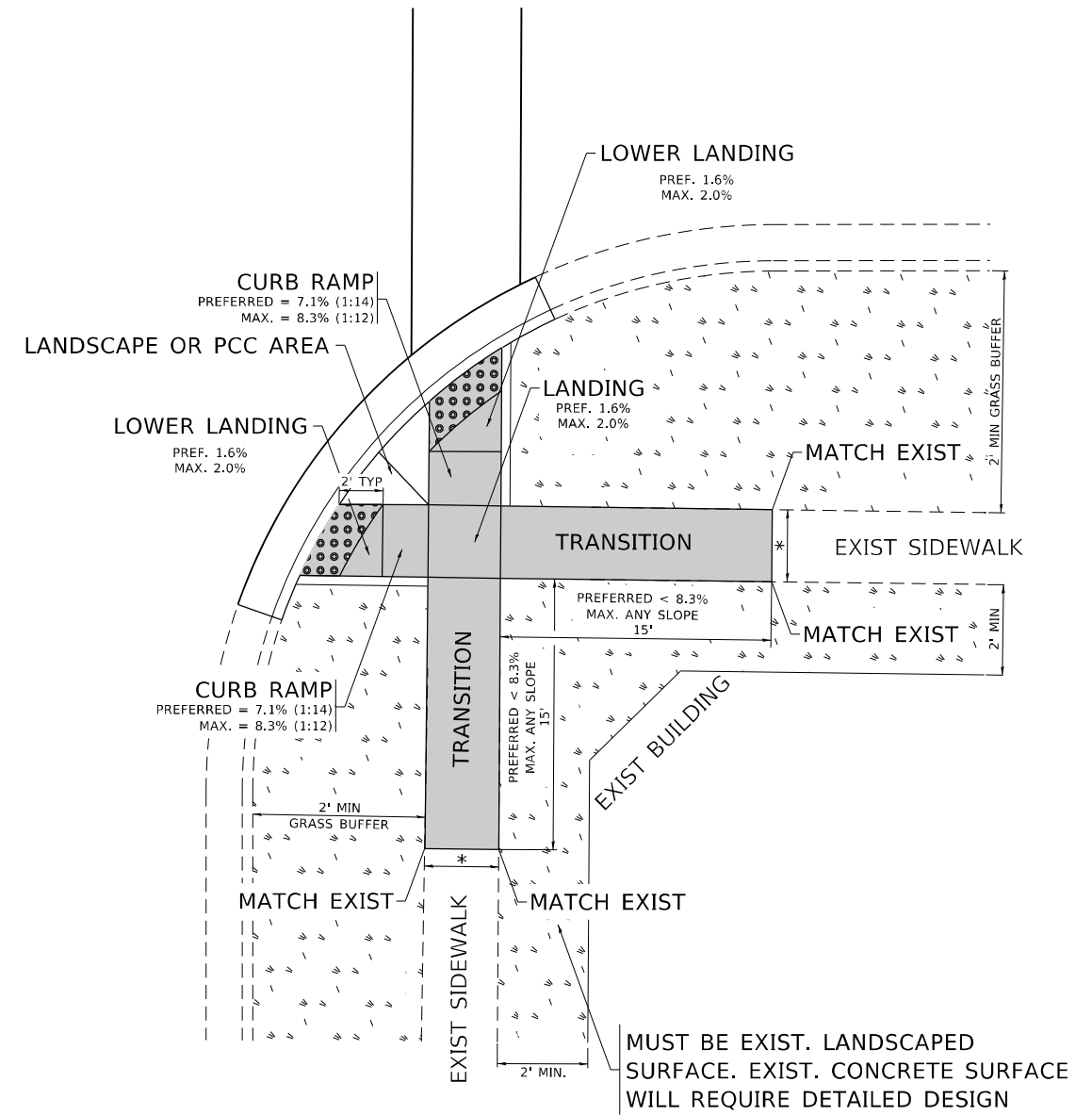
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	FAP 0303 22 R53	McHENRY	40	39
PD-01		CONTRACT NO. 62T63		
ILLINOIS FED. AID PROJECT				

ADA DETAIL FOR DOUBLE PERPENDICULAR CURB RAMPS

PD-03A



PD-03B



LEGEND

- EXIST. GRASS
- PROPOSED SIDEWALK
- DETECTABLE WARNINGS
- PROPOSED SIDE CURB

CONSTRUCTION NOTES:

- 1) ALL CROSS SLOPES ARE PREFERRED 1.6% (1:64), MAXIMUM 2% (1:50) EXCEPT WHEN TRANSITIONING TO EXISTING SIDEWALK
- * MATCH EXISTING SIDEWALK WIDTH

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PLOT DATE = 12/15/2023	DATE - 10/02/2019	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PROJECT DETAIL FOR DOUBLE PERPENDICULAR CURB RAMPS
(PD-03)**

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	FAP 0303 22 R53	McHENRY	40	40
PD-03		CONTRACT NO. 62T63		
ILLINOIS FED. AID PROJECT				