

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3902	2019-021-RS	KANE	32	1
		ILLINOIS	CONTRACT NO. 62H98	

FOR INDEX OF SHEETS, SEE SHEET NO. 2

THIS PROJECT IS LOCATED IN THE CITY OF AURORA AND THE VILLAGE OF MONTGOMERY

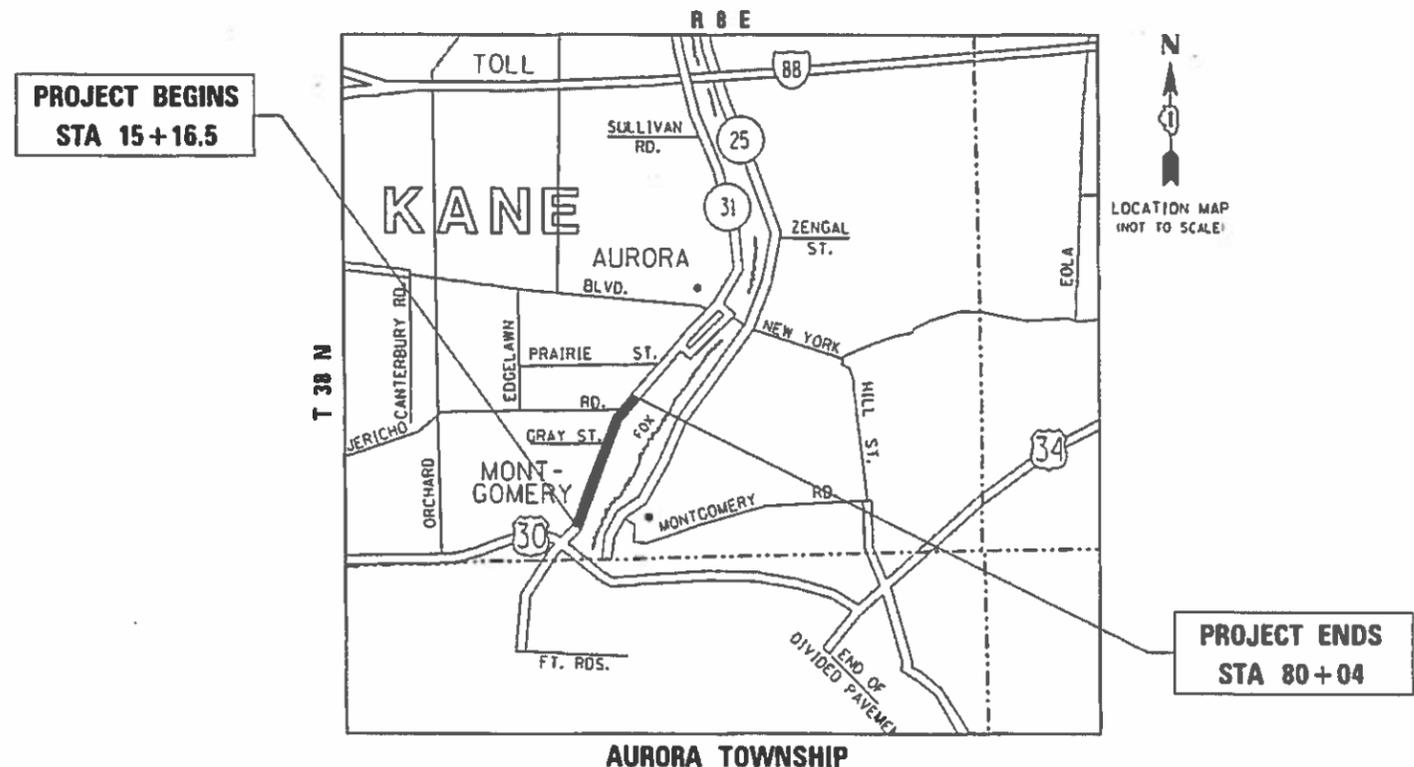
**PROPOSED
HIGHWAY PLANS**

FAU ROUTE 3902: IL 31
RATHBONE AVE. TO WEBSTER ST./AUCUTT RD.
SECTION: 2019-021-RS
PROJECT: STP-W275(970)
DESIGNED OVERLAY, ADA IMPROVEMENTS
KANE COUNTY

C-91-346-19

TRAFFIC DATA:

IL 31:
PROJECT BEGIN TO PROJECT END:
ADT (2017) = 16,200 VPD
SPEED LIMIT = 45 MPH



LOCATION MAP (NOT TO SCALE)



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 (847) 705-4247

GROSS LENGTH = 6,488 FT. = 1.23 MILES
NET LENGTH = 6,416 FT. = 1.21 MILES

CONTRACT NO. 62H98

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED March 18 2019
Anthony J. Quigley REGIONAL ENGINEER
June 14 2019
So E.A. Etk ENGINEER OF DESIGN AND ENVIRONMENT
June 14 2019
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

GENERAL NOTES (CONTINUED)

16. ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OR RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT NO ADDITIONAL COST TO THE DEPARTMENT.
17. ANY PAVEMENT MARKINGS AND RAISED REFLECTIVE PAVEMENT MARKERS OBLITERATED BY MILLING AND RESURFACING OPERATIONS ON SIDE STREETS AND ENTRANCES SHALL BE REPLACED AND PAID FOR IN KIND.
18. THE GENERAL CONTRACTOR IS REQUIRED TO HIRE AN ENVIRONMENT FIRM TO CONTINUOUSLY MONITOR FOR WORKER SAFETY AND SOIL CONTAMINATION AT SEVERAL LOCATIONS. SEE SPECIAL PROVISION AND SUPPLEMENTAL SPECIFICATIONS FOR DETAILS.
19. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
20. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
21. ALL CAST OPEN LIDS FOR FRAMES, TYPE 1, WITHIN CURB RAMPS FOR SIDEWALK, SHALL BE "ADA COMPLIANT" CAST OPEN LIDS PER HIGHWAY STANDARD 604001.
22. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPLACEMENT OF ANY DETECTOR LOOPS DAMAGED DURING CONSTRUCTION.
23. PAVEMENT PATCHING LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE RESIDENT ENGINEER / TECHNICIAN.
24. WHEN EXISTING SIDEWALK IS TO BE REMOVED WITHOUT PROPOSED SIDEWALK REPLACEMENT, IT SHALL BE REPLACED WITH TOPSOIL AND SOD.
25. PAVEMENT MARKING TAPE, TYPE III SHALL BE USED FOR SHORT TERM PAVEMENT MARKINGS ON ALL FINAL SURFACES.
26. THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN ACCESS AT ALL TIMES DURING CONSTRUCTION.
27. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.

MODEL: Default
 FILE: \\blm1c1-pub\blm1room\data\illinois.gov\PWIDOT\Documents\DOT_Offices\District_1\Projects\114219\CADD\Drawings\114219-shl-generat.dgn

USER NAME = qarutnn	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 5/31/2019	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**IL 31 (WEBSTER ST./AUCUTT RD. TO RATHBONE AVE.)
INDEX OF SHEETS, STATE STANDARDS & GENERAL NOTES**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3902	2019-021-R5	KANE	32	3
CONTRACT NO. 62H98			ILLINOIS FED. AID PROJECT	

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT		0005 80% FED 20% STATE				
20200100	EARTH EXCAVATION	CU YD	4	4				
20200600	EXCAVATING AND GRADING EXISTING SHOULDER	UNIT	1	1				
21101615	TOPSOIL FURNISH AND PLACE, 4"	SO YD	30	30				
25200110	SODDING, SALT TOLERANT	SO YD	30	30				
25200200	SUPPLEMENTAL WATERING	UNIT	1	1				
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	33500	33500				
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGWAYS	TON	75	75				
40600635	LEVELING BINDER (MACHINE METHOD), N70	TON	5420	5420				
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SO YD	400	400				
42001300	PROTECTIVE COAT	SO YD	105	105				
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SO FT	220	220				
42400800	DETECTABLE WARNINGS	SO FT	25	25				
44000164	HOT-MIX ASPHALT SURFACE REMOVAL, 3 3/4"	SO YD	48300	48300				

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT		0005 80% FED 20% STATE				
44000600	SIDEWALK REMOVAL	SO FT	220	220				
44201789	CLASS D PATCHES, TYPE II, 12 INCH	SO YD	160	160				
44201794	CLASS D PATCHES, TYPE III, 12 INCH	SO YD	120	120				
44201796	CLASS D PATCHES, TYPE IV, 12 INCH	SO YD	100	100				
48101498	AGGREGATE SHOULDERS, TYPE B 4"	SO YD	50	50				
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	100	100				
60250200	CATCH BASINS TO BE ADJUSTED	EACH	5	5				
60253000	CATCH BASINS TO BE RECONSTRUCTED WITH NEW TYPE 1 FRAME, OPEN LID	EACH	1	1				
60300105	FRAMES AND GRATES TO BE ADJUSTED	EACH	5	5				
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	1	1				
63200310	GUARDRAIL REMOVAL	FOOT	50	50				
* 66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	4	4				
* 66900530	SOIL DISPOSAL ANALYSIS	EACH	1	1				
* 66901001	REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN	LSUM	1	1				

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

FILE NAME =	USER NAME = qqr/tn	DESIGNED -	REVISED -
pw:\planroom\dtd\111\mof.gov\PI001\Documents\DOT\0\files\dist\ct\Projects\DI14219\CADD\Design\DI14219-sh-		DRAWN -	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**IL 31 (WEBSTER ST./AUCUTT RD. TO RATHBONE AVE.)
SUMMARY OF QUANTITIES**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3902	2019-021-R5	KANE	32	4
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 62H98	

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

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT		0005 80% FED 20% STATE				
* 66901002	ON-SITE MONITORING OF REGULATED SUBSTANCES	CAL DA	1	1				
* 66901003	REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT	LSUM	1	1				
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6				
67100100	MOBILIZATION	L SUM	1	1				
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1	1				
70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1	1				
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	1				
70102632	TRAFFIC CONTROL AND PROTECTION, STANDARD 701602	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				
70300100	SHORT TERM PAVEMENT MARKING	FOOT	25700	25700				
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SO FT	8600	8600				

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT		0005 80% FED 20% STATE				
70300210	TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS	SO FT	1520	1520				
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	20820	20820				
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	2000	2000				
70300250	TEMPORARY PAVEMENT MARKING - LINE 8"	FOOT	250	250				
70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	1460	1460				
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	1060	1060				
70300520	PAVEMENT MARKING TAPE, TYPE III 4"	FOOT	6450	6450				
* 72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	1	1				
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SO FT	1520	1520				
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	20820	20820				
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	2000	2000				
* 78000500	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	250	250				
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	1460	1460				

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

FILE NAME =	USER NAME = qqrutn	DESIGNED -	REVISED -
p:\planroom\dtd\illinois\gov\PI\DOT Documents\DOT	Offices\District N\Projects\DI42\9\CADData\Design\DI42\9-sh-	DRAWN -	REVISED -
	PLOT SCALE = 100,0000' / 1in.	CHECKED -	REVISED -
	PLOT DATE = 5/31/2019	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**IL 31 (WEBSTER ST./AUCUTT RD. TO RATHBONE AVE.)
SUMMARY OF QUANTITIES**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3902	2019-021-R5	KANE	32	5
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 62H98	

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE					
CODE NO	ITEM	UNIT		0005 80% FED 20% STATE					
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	1060	1060					
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	595	595					
* 78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	2	2					
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	595	595					
* 85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1	1					
* 88600600	DETECTOR LOOP REPLACEMENT	FOOT	2430	2430					
* 89502376	REBUILD EXISTING HANDHOLE	EACH	1	1					
X0320050	CONSTRUCTION LAYOUT (SPECIAL)	L SUM	1	1					
X2020110	GRADING AND SHAPING SHOULDERS	UNIT	50	50					
X4060004	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, N80	TON	4750	4750					
△ X5537800	STORM SEWERS TO BE CLEANED 12"	FOOT	100	100					
X6030310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	6	6					
X7030005	TEMPORARY PAVEMENT MARKING REMOVAL	SO FT	15600	15600					

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE					
CODE NO	ITEM	UNIT							
Z0004562	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	340	340					
△ Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	5	5					
Z0030850	TEMPORARY INFORMATION SIGNING	SO FT	55	55					
Z0033700	LONGITUDINAL JOINT SEALANT	FOOT	25800	25800					
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	1					

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

FILE NAME =	USER NAME = qpr/tn	DESIGNED -	REVISED -
pw:\planroom\dtd\111\mof.gov\PI001\Documents\DOT Office\District\Projects\DI14219\CADD\Design\DI14219-sh-		DRAWN -	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**IL 31 (WEBSTER ST./AUCUTT RD. TO RATHBONE AVE.)
SUMMARY OF QUANTITIES**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3902	2019-021-R5	KANE	32	6
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 62H98	

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

LEGEND - EXISTING:

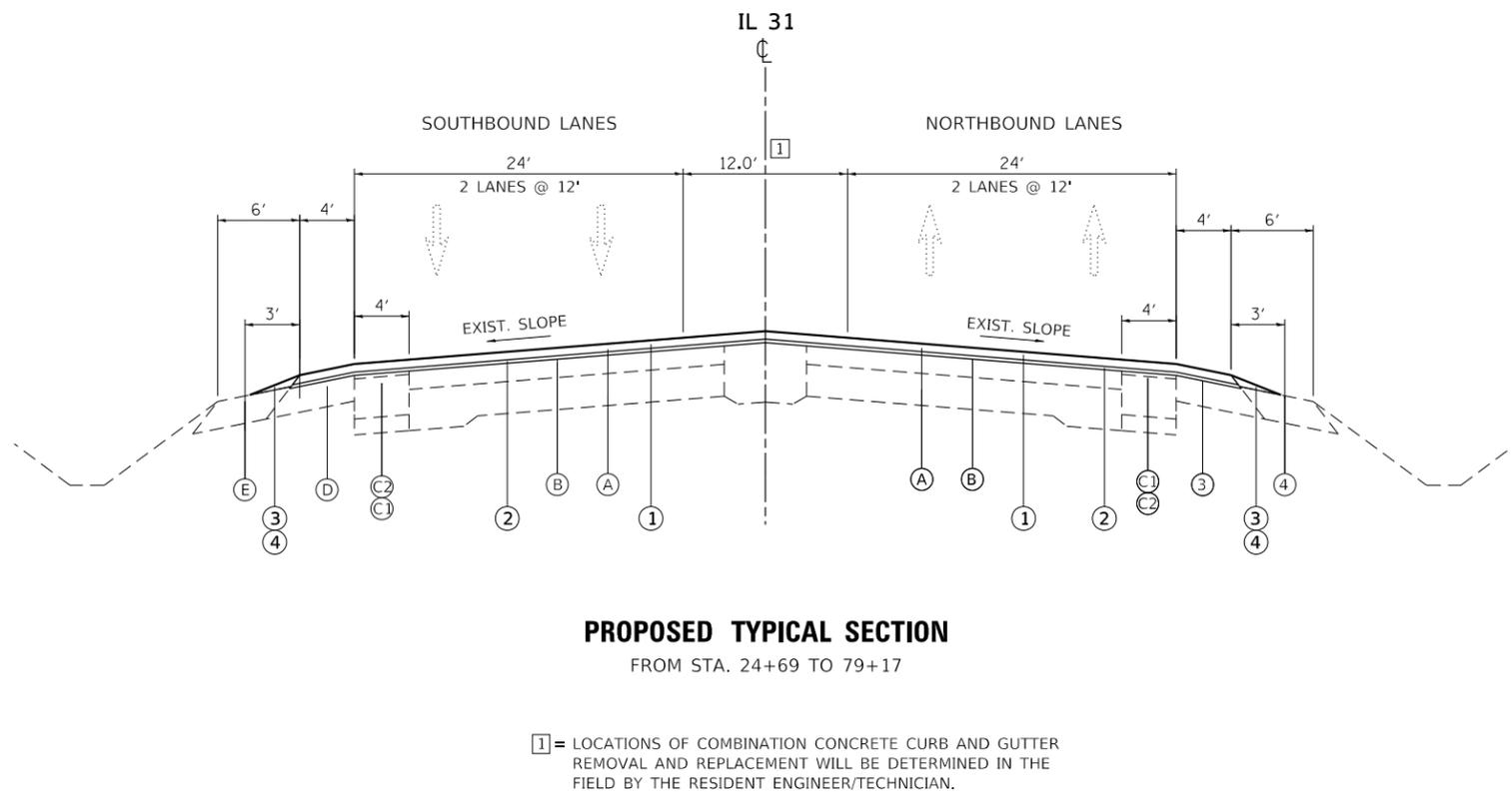
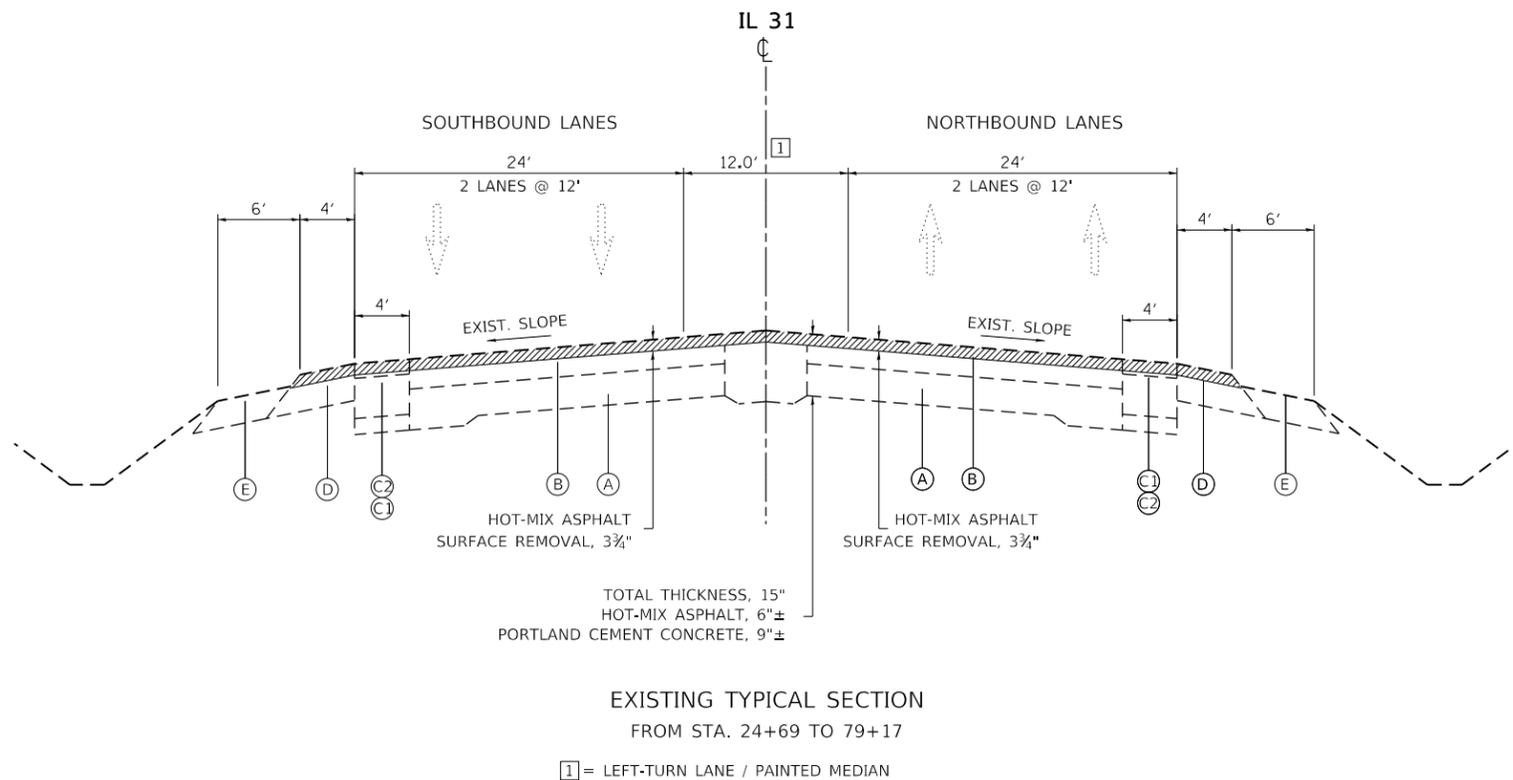
- (A) PCC PAVEMENT
- (B) HMA PAVEMENT
- (C) COMBINATION CONCRETE CURB AND GUTTER
- (C1) HMA BASE COURSE WIDENING 10 1/4"
- (C2) HMA SURFACE COURSE 3 3/4"
- (D) HMA SHOULDER
- (E) AGGREGATE SHOULDER

NOTES:

- 1.) THE CONTRACTOR SHALL MILL FIRST BEFORE PATCHING.
- 2.) THE LONGITUDINAL JOINT SEALANT SHALL BE PLACED OVER THE LEVELING BINDER.

LEGEND - PROPOSED

- (1) POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT 9.5 N80, 1 3/4"
- (2) LEVELING BINDER (MACHINE METHOD), N70, 2"
- (3) GRADING AND SHAPING SHOULDERS
- (4) AGGREGATE WEDGE SHOULDER, TYPE B
- (5) COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT



HOT-MIX ASPHALT MIXTURE REQUIREMENTS		QUALITY MANAGEMENT PROGRAM (QMP)
MIXTURE TYPE	AIR VOIDS @ Ndes	
PAVEMENT RESURFACING		
POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, SMA 9.5 N80	3.5% AT 80 GYR.	QCP
LEVELING BINDER (MACHINE METHOD), (IL-9.5 mm) N70	4.0% AT 70 GYR.	QCP
PATCHING		
CLASS D PATCHES (HMA BINDER IL-19 mm)	4.0% AT 70 GYR.	QC/QA
QMP DESIGNATION: QUALITY CONTROL/QUALITY ASSURANCE (QC/QA); QUALITY CONTROL FOR PERFORMANCE (QCP)		

- NOTE 1: THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN.
- NOTE 2: THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR USE OF RECYCLED MATERIALS SEE SPECIAL PROVISIONS.
- NOTE 3: QUALITY MANAGEMENT PROGRAM (QMP) IDENTIFIES THE PARTICULAR QUALITY CONTROL SPECIFICATION THAT APPLIES TO THE HMA MIXTURE.

MODEL: Default
FILE: Model: Project: 114219\CADD\Drawings\DOT_Offices\Drawings\114219-Sub-CY-PAV.dgn

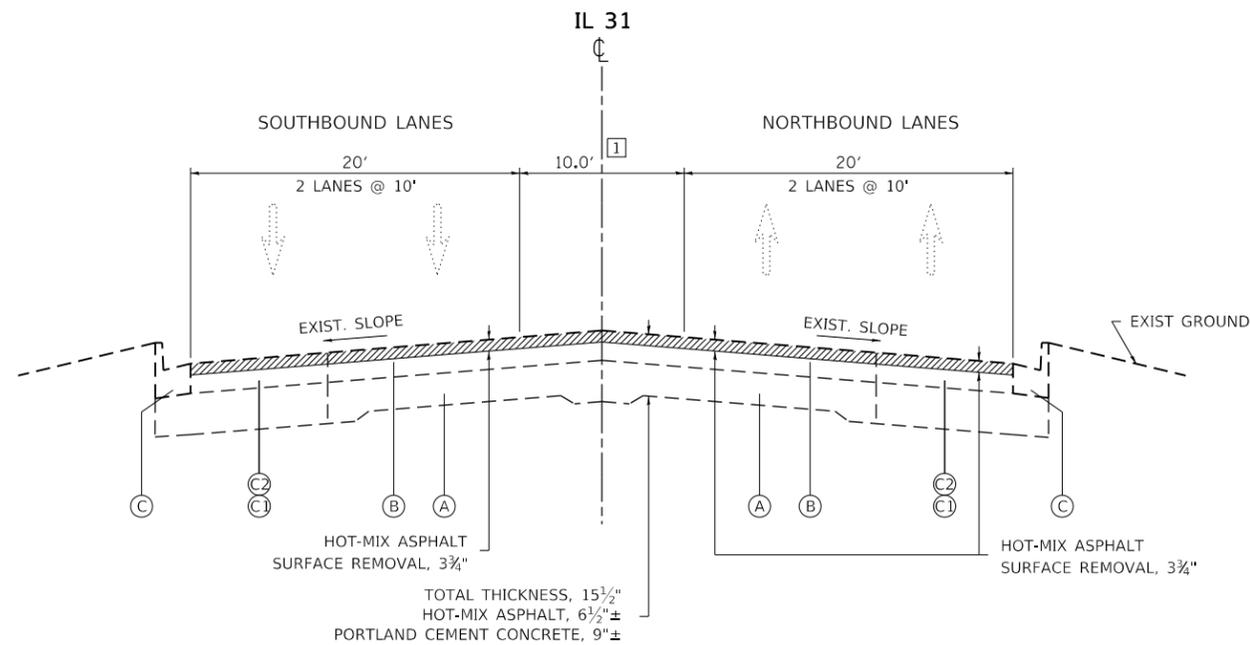
USER NAME = Velichkovv	DESIGNED -	REVISED -
PLOT SCALE = 100.0000' / in.	DRAWN -	REVISED -
PLOT DATE = 5/31/2019	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**IL 31 (WEBSTER ST./AUCUTT RD. TO RATHBONE AVE.)
TYPICAL SECTIONS**

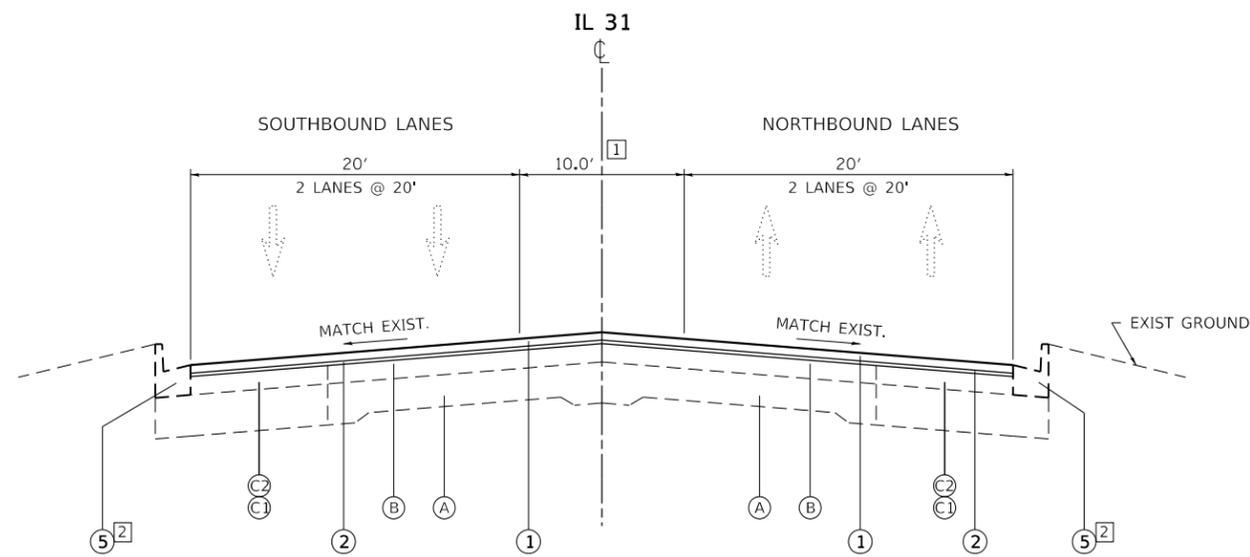
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3902	2019-021-R5	KANE	32	7
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62H98	



EXISTING TYPICAL SECTION
GREY AVE. TO STA. 79+50

1 = LEFT-TURN LANE / PAINTED MEDIAN



PROPOSED TYPICAL SECTION
GREY AVE. TO STA. 79+50

2 = LOCATIONS OF COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT WILL BE DETERMINED IN THE FIELD BY THE RESIDENT ENGINEER/TECHNICIAN.

LEGEND - EXISTING:

- (A) PCC PAVEMENT
- (B) HMA PAVEMENT
- (C) COMBINATION CONCRETE CURB AND GUTTER
- (C1) HMA BASE COURSE WIDENING 10 1/4"
- (C2) HMA SURFACE COURSE 3 3/4"
- (D) HMA SHOULLDER
- (E) AGGREGATE SHOULLDER

NOTES:

- 1.) THE CONTRACTOR SHALL MILL FIRST BEFORE PATCHING.
- 2.) THE LONGITUDAL JOINT SEALANT SHALL BE PLACED OVER THE LEVELING BINDER.

LEGEND - PROPOSED

- (1) POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT 9.5 N80, 1 3/4"
- (2) LEVELING BINDER (MACHINE METHOD), N70, 2"
- (3) GRADING AND SHAPING SHOULDERS
- (4) AGGREGATE WEDGE SHOULLDER, TYPE B
- (5) COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT

MODEL: Default
 FILE: Model - Prop - Update room.dwg
 PROJECT: 114219\CADD\Drawings\DOT - Office\Drawings\114219-Sub-City-CAL.dwg

USER NAME = Vetchkovvv	DESIGNED -	REVISED -
PLOT SCALE = 100.0000' / in.	DRAWN -	REVISED -
PLOT DATE = 5/31/2019	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**IL 31 (WEBSTER ST./AUCUTT RD. TO RATHBONE AVE.)
TYPICAL SECTIONS**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3902	2019-021-R5	KANE	32	8
CONTRACT NO. 62H98				
ILLINOIS FED. AID PROJECT				

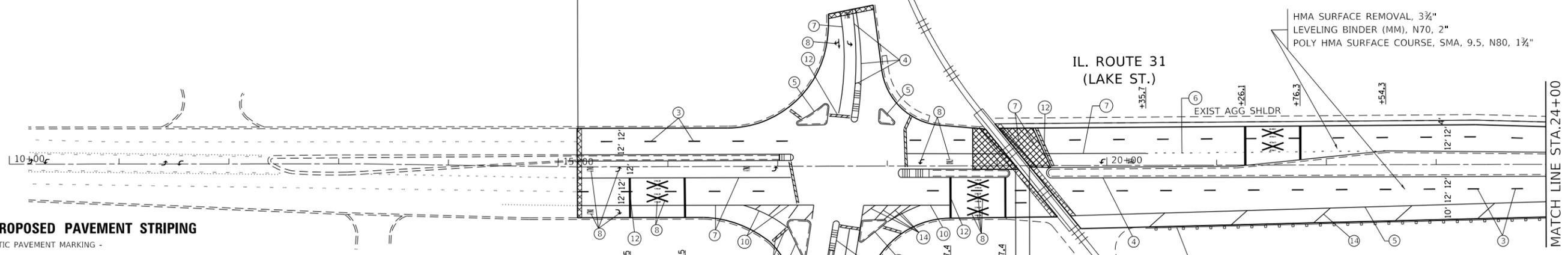


PROJECT BEGINS
STA. 15+16.5

AUCUTT RD.

IL. ROUTE 31
(LAKE ST.)

HMA SURFACE REMOVAL, 3 3/4"
LEVELING BINDER (MM), N70, 2"
POLY HMA SURFACE COURSE, SMA, 9.5, N80, 1 3/4"



LEGEND: PROPOSED PAVEMENT STRIPING

- * = THERMOPLASTIC PAVEMENT MARKING -
- ① * LINE 4", SKIP-DASH, YELLOW (10' LINE - 30' SPACE) - CENTERLINE (TYP)
- ② * LINE 2 @ 4", SOLID, YELLOW, 11" C-C - CENTERLINE (TYP)
- ③ * LINE 4", SKIP-DASH, WHITE (10' LINE - 30' SPACE) - LANE LINES (TYP)
- ④ * LINE 4", SOLID, YELLOW - EDGE LINE (TYP)
- ⑤ * LINE 4", SOLID, WHITE - EDGE LINE (TYP)
- ⑥ * LINE 6", SKIP-DASH, WHITE (2' LINE - 6' SPACE) - DOTTED LINES (TYP)
- ⑦ * LINE 6", SOLID, WHITE - TURN LANE MARKINGS (TYP)
- ⑧ * LETTERS & SYMBOLS, 8", SOLID, WHITE - TURN LANE MARKINGS (TYP)
- ⑨ * LINE 2 @ 6", SOLID, WHITE - CROSSWALK LINES (PEDESTRIAN) (TYP)
- ⑩ * LINE 8", SOLID, WHITE - GORE MARKING AND CHANNELIZING LINES (TYP)
- ⑪ * LINE 12", SOLID, WHITE - CROSSWALK LINES, LONGITUDINAL BARS (SCHOOL), (TYP). (SEE DISTRICT DETAIL TC-13 FOR SPACING)
- ⑫ * LINE 24", SOLID, WHITE - STOP LINES (TYP)
- ⑬ * LINE 12", SOLID, YELLOW - PAINTED MEDIANS DIAGONALS (TYP) (SEE DISTRICT DETAIL TC-13 FOR SPACING)
- ⑭ * LINE 12", SOLID, WHITE - DIAGONALS (BIKE & EQUESTRIAN) @ 45° (TYP) - SHOULDER DIAGONALS @ 45° (TYP) (SEE DISTRICT DETAIL TC-13 FOR SPACING)

EXISTING TERMINAL TO BE REMOVED AND REPLACED, PAID AS:
 GUARDRAIL REMOVAL = 50 LF
 TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT = 1 EA
 TERMINAL MARKER - DIRECT APPLIED = 1 EA
 GUARDRAIL REFLECTORS, TYPE A = 2 EA

SHOULDER WIDENING FOR TYPE 1 (SPECIAL)
 GUARDRAIL TERMINALS PAID AS:
 -AGGREGATE SHOULDERS, TYPE B 4"
 -EXCAVATING AND GRADING EXISTING SHOULDER

RESURFACING OMISSION

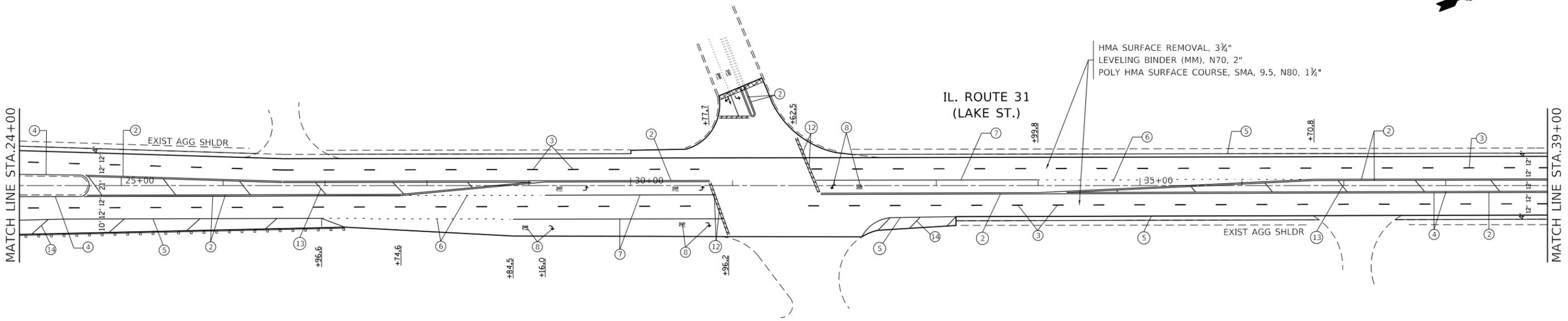
MATCH LINE STA. 24+00



KNELL RD.

IL. ROUTE 31
(LAKE ST.)

HMA SURFACE REMOVAL, 3 3/4"
LEVELING BINDER (MM), N70, 2"
POLY HMA SURFACE COURSE, SMA, 9.5, N80, 1 3/4"



MATCH LINE STA. 24+00

MATCH LINE STA. 39+00

NOTES:

- 1) LIMIT OF RESURFACING ON THE SIDE- STREETS THROUGHOUT THE PROJECT SHALL BE TO THE RADIUS RETURN, 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).
- 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.

ROADWAY LEGEND

☒ HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT

MODEL: Default
FILE: Model_Plan_PlanRoom.dwg
PROJECT: 114219.CADDData\Design\114219-sh-c-lb.dwg
OFFICE: 114219.CADDData\Design\114219-sh-c-lb.dwg

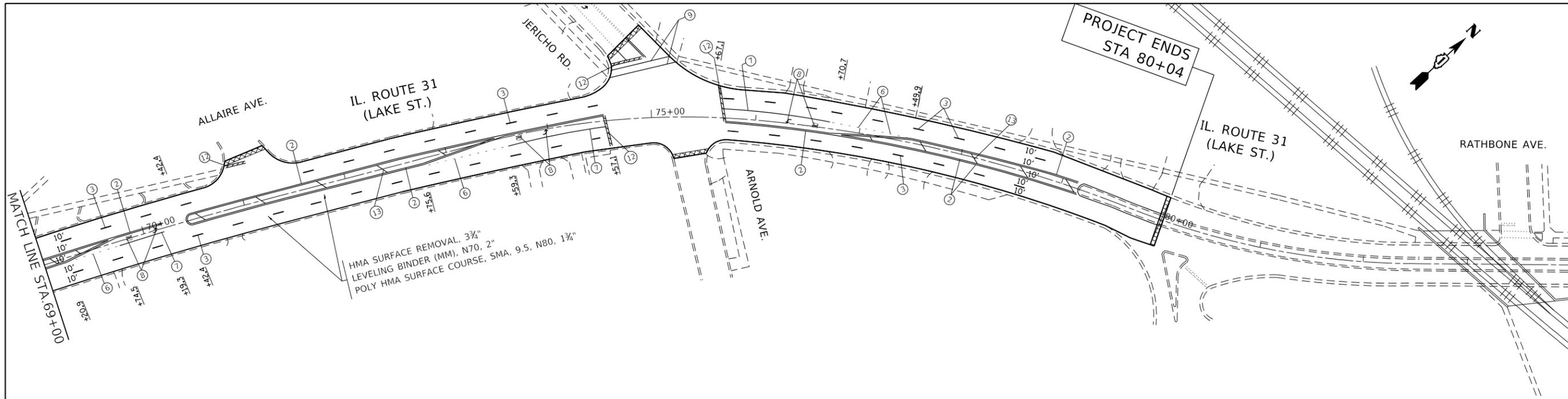
USER NAME = qarutnn	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 5/31/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 31 (WEBSTER ST./AUCUTT RD. TO RATHBONE AVE.)
ROADWAY PLAN

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

F.A.U. RTE. 3902	SECTION 2019-021-R5	COUNTY KANE	TOTAL SHEETS 32	SHEET NO. 9
CONTRACT NO. 62H98				
ILLINOIS FED. AID PROJECT				



LEGEND: PROPOSED PAVEMENT STRIPING

* = THERMOPLASTIC PAVEMENT MARKING -

- ① * LINE 4", SKIP-DASH, YELLOW (10' LINE - 30' SPACE) - CENTERLINE (TYP)
- ② * LINE 2 @ 4", SOLID, YELLOW, 11" C-C - CENTERLINE (TYP)
- ③ * LINE 4", SKIP-DASH, WHITE (10' LINE - 30' SPACE) - LANE LINES (TYP)
- ④ * LINE 4", SOLID, YELLOW - EDGE LINE (TYP)
- ⑤ * LINE 4", SOLID, WHITE - EDGE LINE (TYP)
- ⑥ * LINE 6", SKIP-DASH, WHITE (2' LINE - 6' SPACE) - DOTTED LINES (TYP)
- ⑦ * LINE 6", SOLID, WHITE - TURN LANE MARKINGS (TYP)
- ⑧ * LETTERS & SYMBOLS, 8", SOLID, WHITE - TURN LANE MARKINGS (TYP)
- ⑨ * LINE 2 @ 6", SOLID, WHITE - CROSSWALK LINES (PEDESTRIAN) (TYP)
- ⑩ * LINE 8", SOLID, WHITE - GORE MARKING AND CHANNELIZING LINES (TYP)
- ⑪ * LINE 12", SOLID, WHITE - CROSSWALK LINES, LONGITUDINAL BARS (SCHOOL), (TYP), (SEE DISTRICT DETAIL TC-13 FOR SPACING)
- ⑫ * LINE 24", SOLID, WHITE - STOP LINES (TYP)
- ⑬ * LINE 12", SOLID, YELLOW - PAINTED MEDIANS DIAGONALS (TYP) (SEE DISTRICT DETAIL TC-13 FOR SPACING)
- ⑭ * LINE 12", SOLID, WHITE
 - DIAGONALS (BIKE & EQUESTRIAN) @ 45° (TYP)
 - SHOULDER DIAGONALS @ 45° (TYP)
 (SEE DISTRICT DETAIL TC-13 FOR SPACING)

NOTES:

- 1) LIMIT OF RESURFACING ON THE SIDE- STREETS THROUGHOUT THE PROJECT SHALL BE TO THE RADIUS RETURN, 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).
- 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.

ROADWAY LEGEND

HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT

MODEL: Default
 FILE: \\hpc-pw\pub\hpcroom\dat\illinois.gov\pww\DOT\Documents\DOT_Offices\District_1\Projects\114219\CADD\Drawings\114219-sh-eb-lb-01.dwg

USER NAME = qarutnn	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100,0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 5/31/2019	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

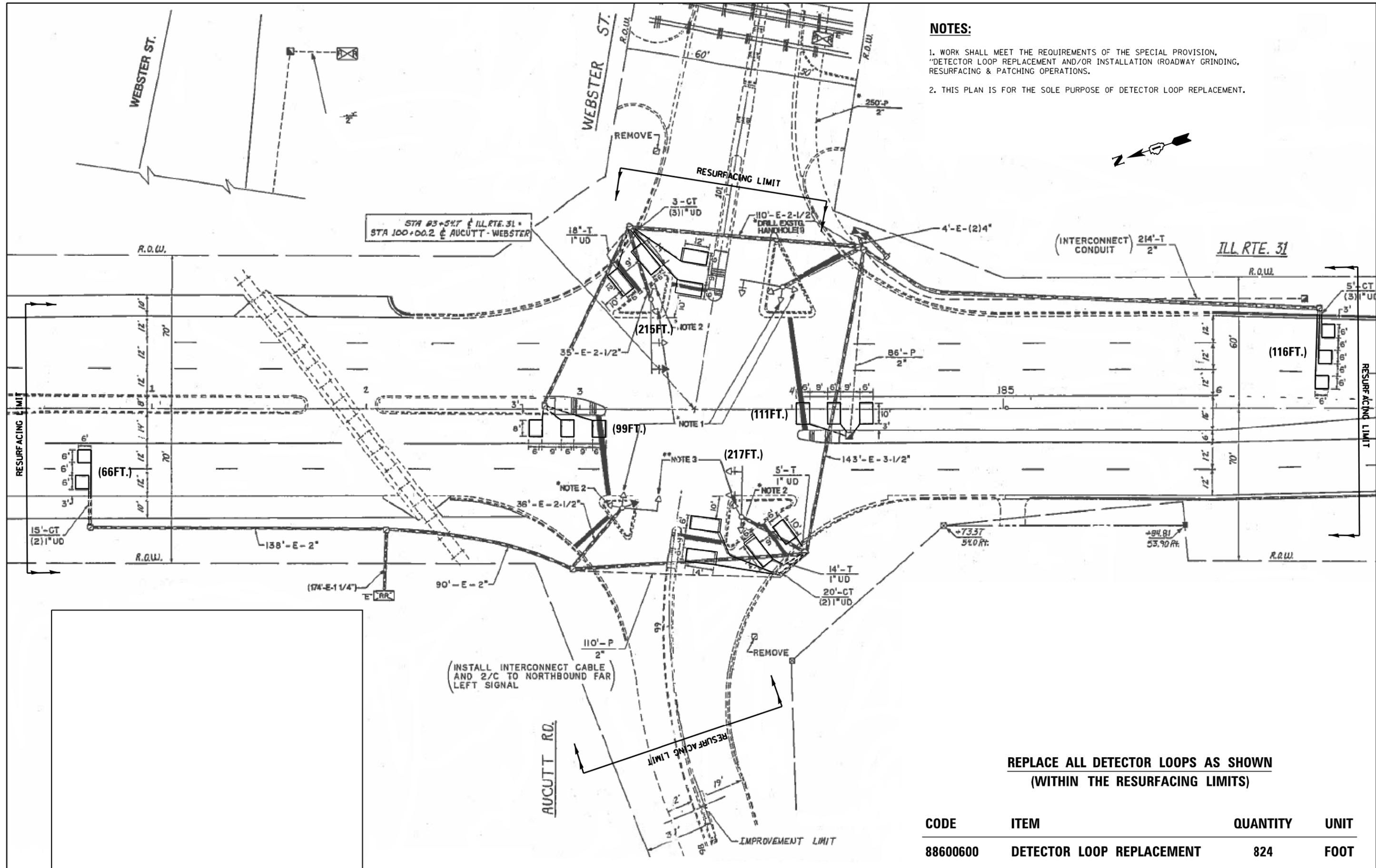
**IL 31 (WEBSTER ST./AUCUTT RD. TO RATHBONE AVE.)
ROADWAY PLAN**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3902	2019-021-R5	KANE	32	11
CONTRACT NO. 62H98				
ILLINOIS FED. AID PROJECT				

NOTES:

1. WORK SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISION, "DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION (ROADWAY GRINDING, RESURFACING & PATCHING OPERATIONS).
2. THIS PLAN IS FOR THE SOLE PURPOSE OF DETECTOR LOOP REPLACEMENT.



**REPLACE ALL DETECTOR LOOPS AS SHOWN
(WITHIN THE RESURFACING LIMITS)**

CODE	ITEM	QUANTITY	UNIT
88600600	DETECTOR LOOP REPLACEMENT	824	FOOT

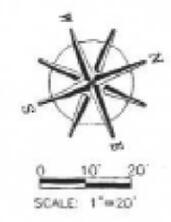
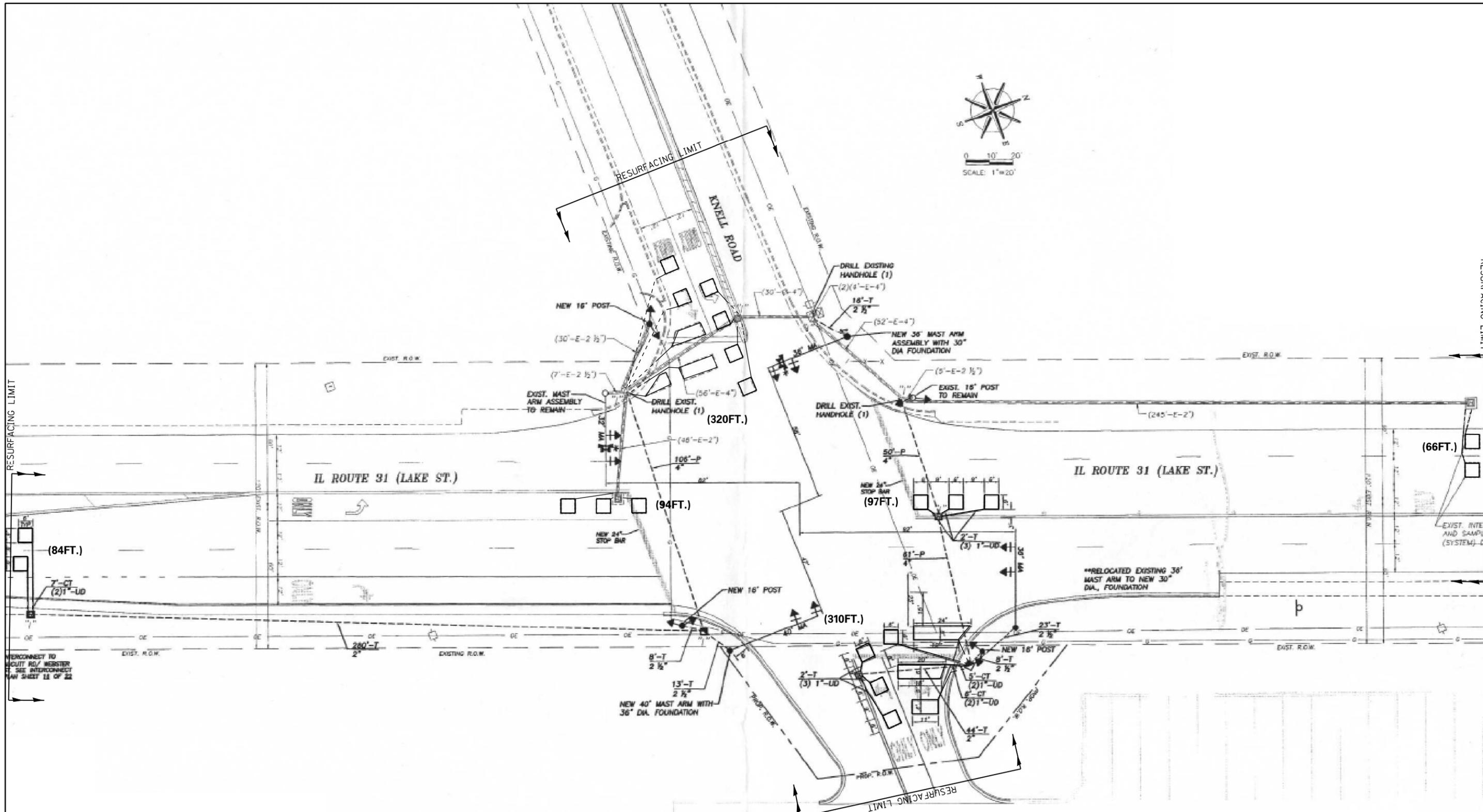
FILE NAME =	USER NAME = mezag	DESIGNED -	REVISED -
P:\Detector Loops\2019\62H98\CA00\TS 9	00 - IL 31 @ Aucutt Rd.dgn	DRAWN - G.M.	REVISED -
Default	PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 2/22/2019	DATE - 02/21/2019	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DETECTOR LOOP REPLACEMENT PLAN
ILL 31 AT AUCUTT RD/WEBSTER ST.**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2019-021-RS	KANE	32	13
CONTRACT NO. 62H98				
ILLINOIS FED. AID PROJECT				



NOTES:

1. WORK SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISION, "DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION (ROADWAY GRINDING, RESURFACING & PATCHING OPERATIONS).
2. THIS PLAN IS FOR THE SOLE PURPOSE OF DETECTOR LOOP REPLACEMENT.

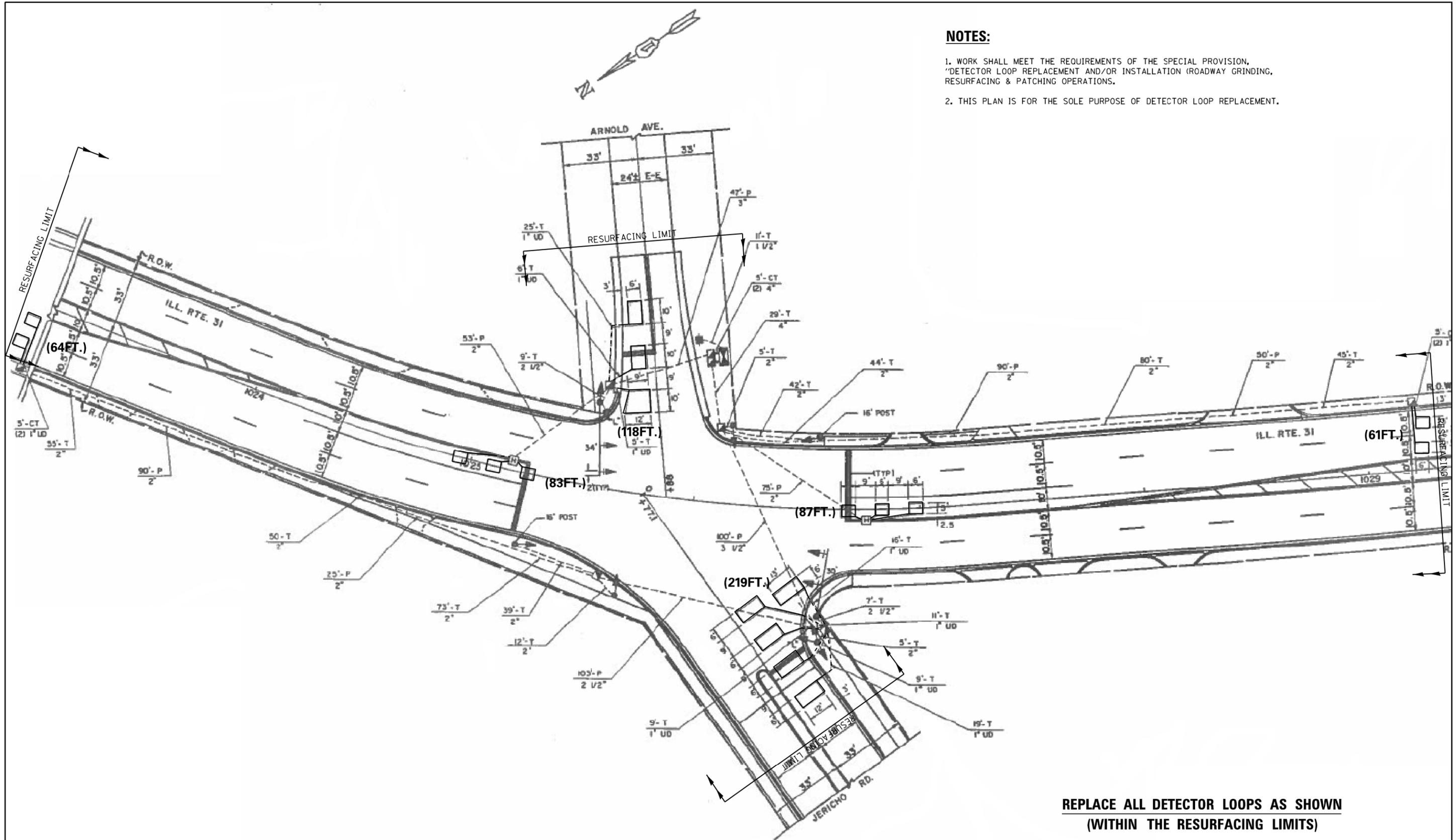
**REPLACE ALL DETECTOR LOOPS AS SHOWN
(WITHIN THE RESURFACING LIMITS)**

CODE	ITEM	QUANTITY	UNIT
88600600	DETECTOR LOOP REPLACEMENT	971	FOOT

FILE NAME =	USER NAME = mezag	DESIGNED - SN	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETECTOR LOOP REPLACEMENT PLAN IL 31 AT KNELL RD				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Pa\Detector Loops\2019\62H98\CADD\TS 9	00 - IL 31 @ Knell Rd.dgn	DRAWN - G.M.	REVISED -						2019-021-RS	KANE	32	14	
Default	PLOT SCALE = 40,0000 ' / in.	CHECKED - SN	REVISED -		CONTRACT NO. 62H98				ILLINOIS FED. AID PROJECT				
	PLOT DATE = 2/22/2019	DATE - 02/22/2019	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.		

NOTES:

1. WORK SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISION, "DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION (ROADWAY GRINDING, RESURFACING & PATCHING OPERATIONS).
2. THIS PLAN IS FOR THE SOLE PURPOSE OF DETECTOR LOOP REPLACEMENT.



**REPLACE ALL DETECTOR LOOPS AS SHOWN
(WITHIN THE RESURFACING LIMITS)**

CODE	ITEM	QUANTITY	UNIT
88600600	DETECTOR LOOP REPLACEMENT	632	FOOT

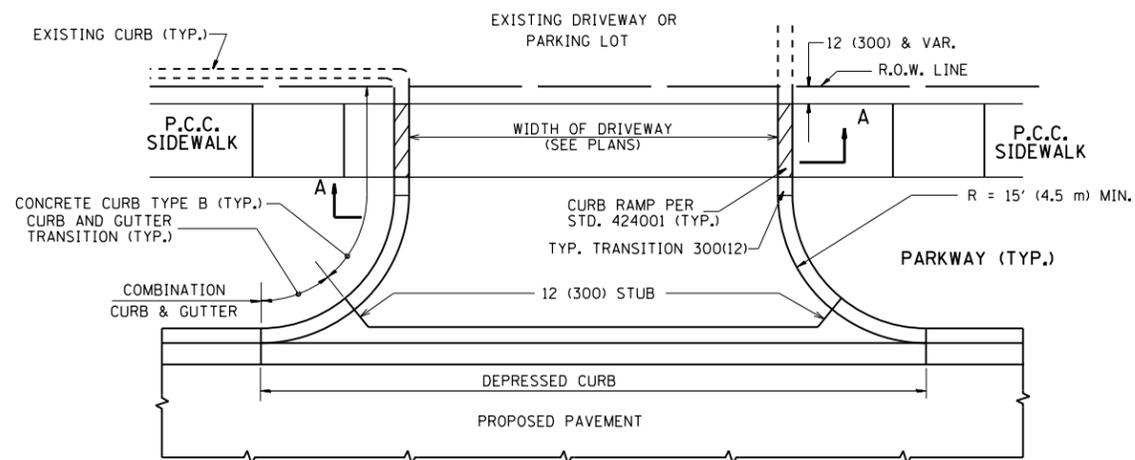
FILE NAME =	USER NAME = mezag	DESIGNED - SN	REVISED -
P:\Detector Loops\2019\62H98\CA00\TS 9	00 - IL 31 @ Jericho.dgn	DRAWN - G.M.	REVISED -
Default	PLOT SCALE = 40,0000' / in.	CHECKED - SN	REVISED -
	PLOT DATE = 2/22/2019	DATE - 02/21/2019	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

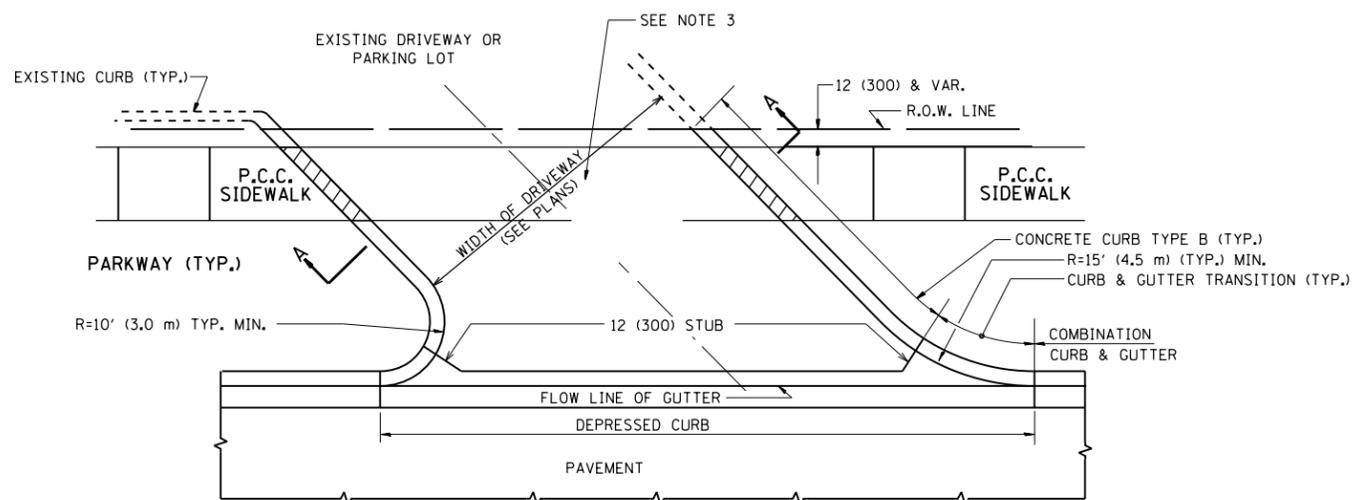
**DETECTOR LOOP REPLACEMENT PLAN
IL 31 AT JERICHO RD.**

SCALE: SHEET OF SHEETS STA. TO STA.

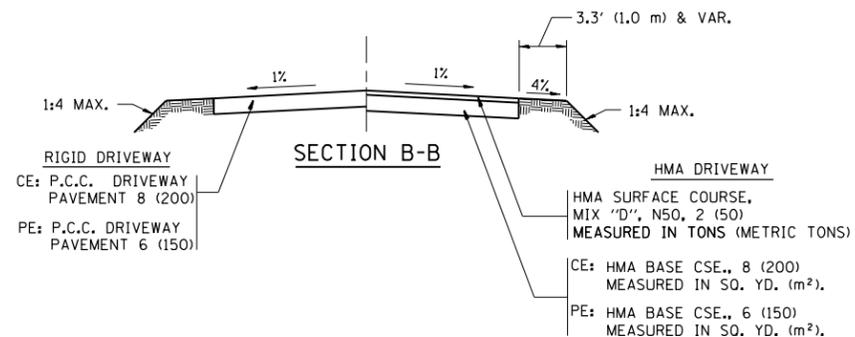
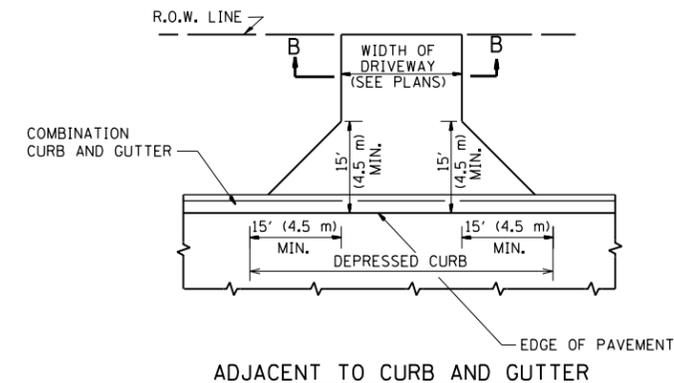
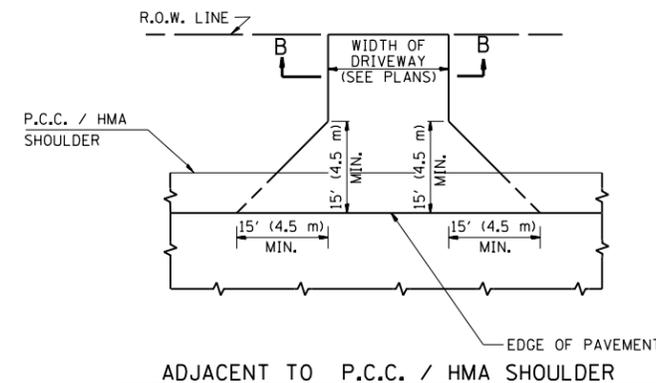
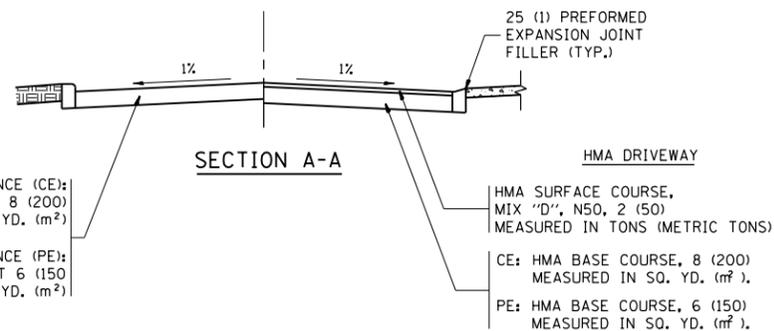
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2019-021-RS	KANE	32	15
			CONTRACT NO. 62H98	
ILLINOIS FED. AID PROJECT				



WITH CONCRETE CURB, TYPE B



WITH CONCRETE CURB, TYPE B



GENERAL NOTES:

DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATIONS IN THE PERMIT HANDBOOK. DRIVEWAYS SHALL BE REPLACED IN KIND, UNLESS OTHERWISE NOTED ON THE PLANS.

COMMERCIAL DRIVEWAYS SHALL BE CONSTRUCTED WITH CONCRETE CURB, TYPE B RETURNS EXCEPT WHEN THE SIDEWALK EDGE IS 4 FEET (1.2 METERS) OR LESS FROM THE BACK OF CURB, CONSTRUCT A FLARE DRIVEWAY WITHOUT CURB.

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC PERMIT OFFICE AT 847/ 705-4131 FOR ANY QUESTIONS ON DRIVEWAYS SHOWN IN THE PLANS; SPECIFICALLY IN REFERENCE TO ADDITIONAL AND/OR RELOCATION/REMOVAL OF A DRIVEWAY.

COMBINATION CONCRETE CURB & GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CURB & GUTTER TRANSITION.

1 (25) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK.

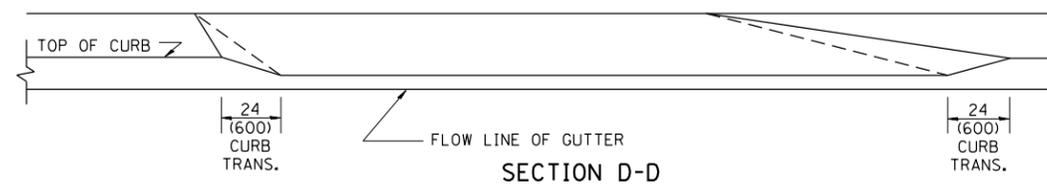
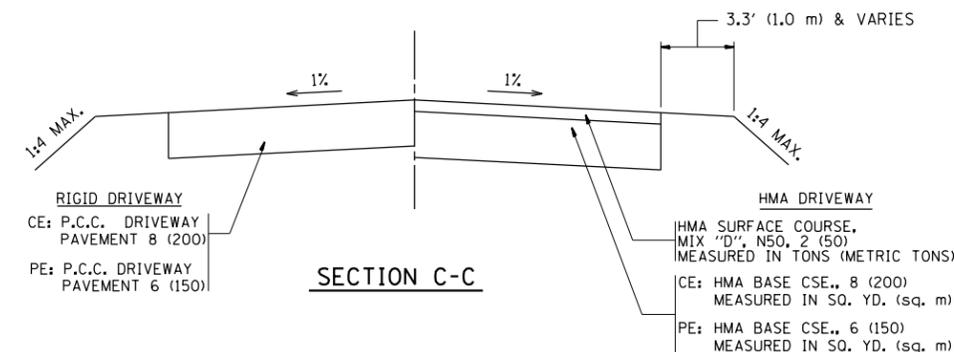
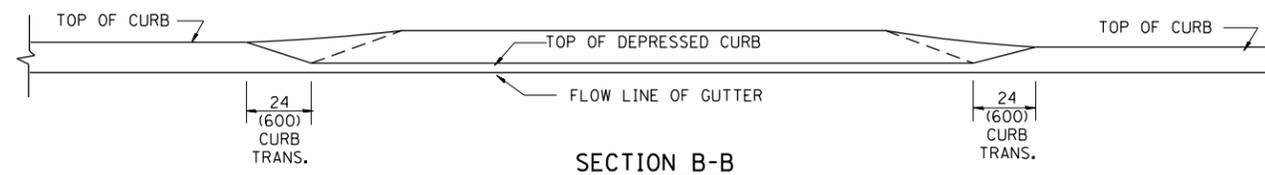
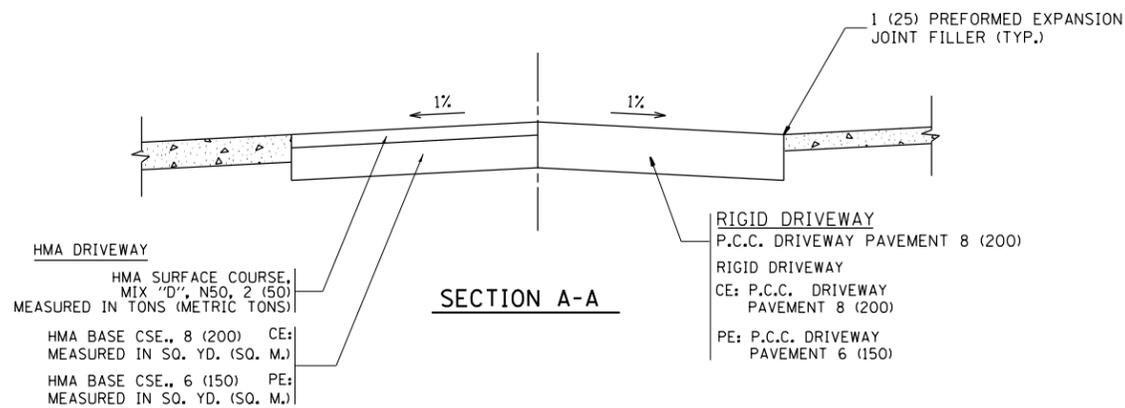
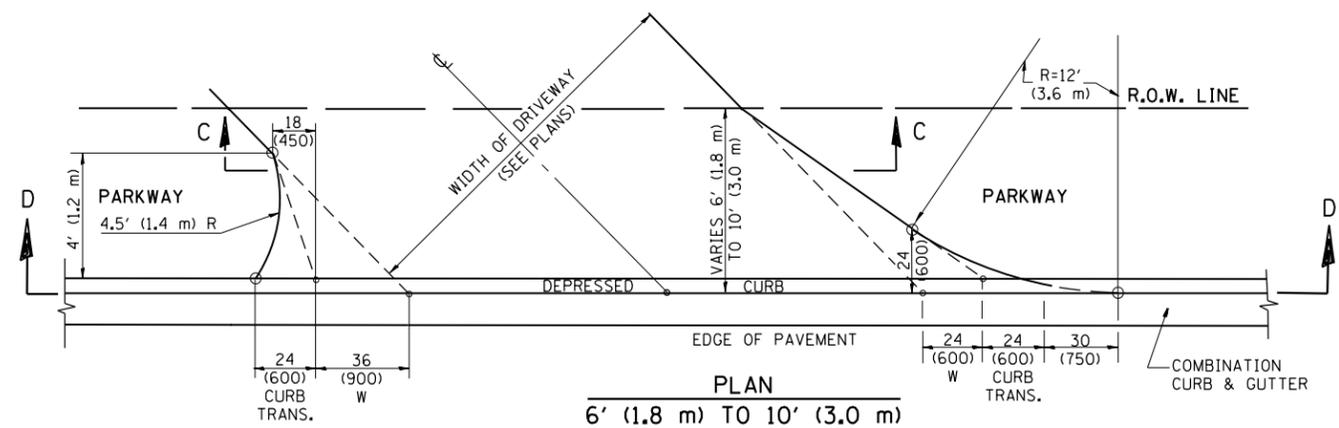
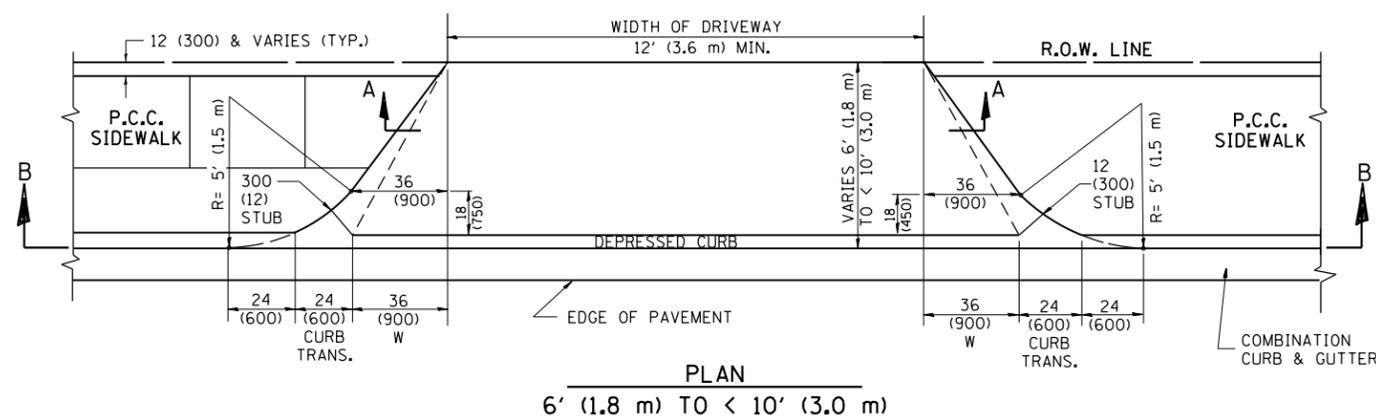
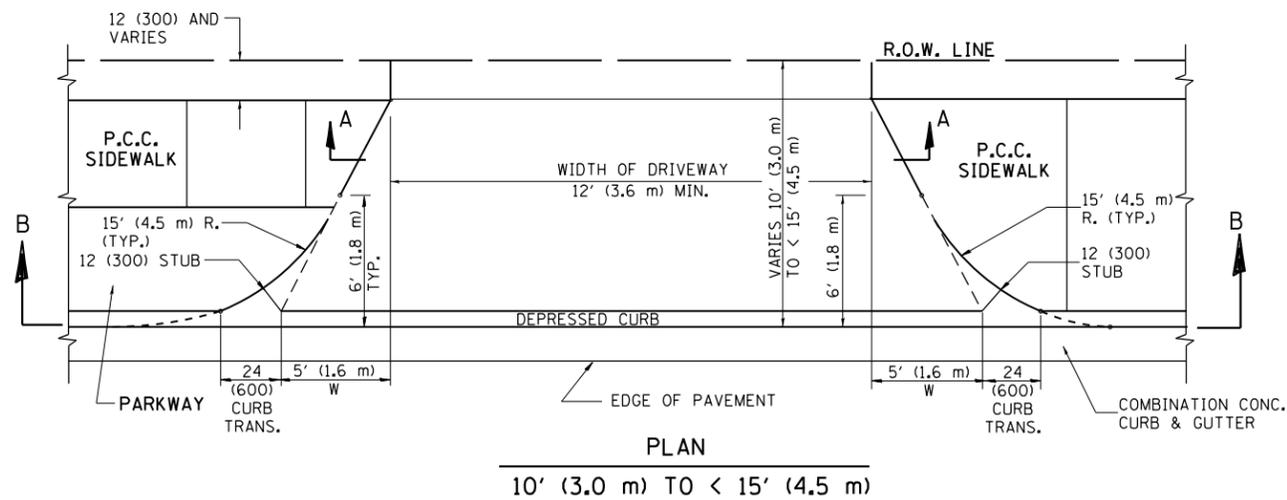
WHEN THE P.C.C. SIDEWALK EXTENDS THROUGH THE DRIVEWAY, THE THICKNESS OF THE SIDEWALK IN THE DRIVEWAY AREA SHALL BE THE SAME AS THE DRIVEWAY THICKNESS. SIDEWALK WILL BE PAID FOR AS P.C.C. SIDEWALK OF THE THICKNESS SPECIFIED. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.

FILE NAME =	USER NAME = qarutn	DESIGNED - R. SHAH	REVISED - P. LaFLUER 04-15-03
pw:\planroom.dot.illinois.gov\PWIDOT\Documents\IDOT Offices\District 1\Projects\011421\DRAWING\Design\DistStd.dgn		CHECKED -	REVISED - R. BORO 01-01-07
PLOT SCALE = 100.0000' / in.		DATE - 11-04-95	REVISED - R. BORO 06-11-08
PLOT DATE = 5/31/2019			REVISED - R. BORO 09-06-11

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DRIVEWAY DETAILS - DISTANCE BETWEEN R.O.W. AND FACE OF CURB & EDGE OF SHOULDER >= 15' (4.5 m)			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3902	2019-021-R5	KANE	32	16
BD0156-07 (BD-01)		CONTRACT NO. 62H98		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



GENERAL NOTES

DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATION 10 IN THE PERMIT HANDBOOK. WHERE SIDEWALKS EXIST, DRIVEWAYS SHALL BE REPLACED WITH RIGID PAVEMENT. WHERE NO SIDEWALKS EXIST, DRIVEWAYS SHALL BE REPLACED IN KIND. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.

WHEN THE DISTANCE BETWEEN R.O.W. AND THE BACK OF CURB IS EQUAL TO OR LESS THAN 8' (2.4 m), THE P.C.C. SIDEWALK SHALL EXTEND TO THE BACK OF CURB.

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC PERMIT OFFICE AT 847/ 705-4131 FOR ANY QUESTIONS ON DRIVEWAYS SHOWN IN THE PLANS; SPECIFICALLY IN REFERENCE TO ADDITIONAL AND/OR RELOCATION/REMOVAL OF A DRIVEWAY.

COMBINATION CONCRETE CURB & GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CURB & GUTTER TRANSITION.

THE 1 (25) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK.

"W" VARIES FROM 36 (900) TO 5' (1.5 m) PROPORTIONAL TO THE LENGTH (L), FROM 6' (1.8 m) TO 10' (3 m).

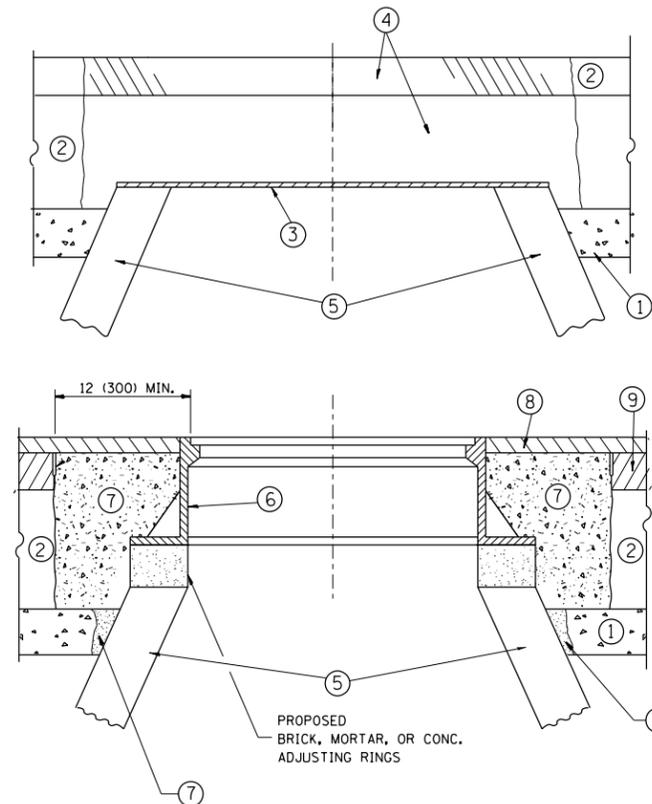
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE NOTED.

FILE NAME =	USER NAME = qarutn	DESIGNED - R. SHAH	REVISED - M. GOMEZ 04-06-01
pw:\planroom.dot.illinois.gov\PIDOT\Documents\IDOT Offices\District 1\Projects\011421\Drawings\Design\DistStd.dgn		CHECKED -	REVISED - P. LaFLEUR 04-15-03
		DATE - 11-06-95	REVISED - R. BORO 01-01-07
			REVISED - R. BORO 01-01-07

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DRIVEWAY DETAILS	
DISTANCE BETWEEN ROW AND FACE OF CURB < 15' (4.5 m)	
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3902	2019-021-R5	KANE	32	17
BD400-02 (BD-02)		CONTRACT NO. 62H98		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



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 A MINIMUM 1/2 (40) THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

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-1* 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-1* 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:

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)."

THIS WORK WILL NOT BE PAID FOR WHEN DRAINAGE AND UTILITY STRUCTURES ARE SPECIFIED FOR PAYMENT AS STRUCTURE RECONSTRUCTION.

NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.

NOTES:

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.

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.

CITY OF CHICAGO CASTINGS ARE THE PROPERTY OF THE CITY AND THE CONTRACTOR SHALL NOTIFY THE CITY FOR REMOVAL AND DISPOSITION OF THE CASTINGS.

THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

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.

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

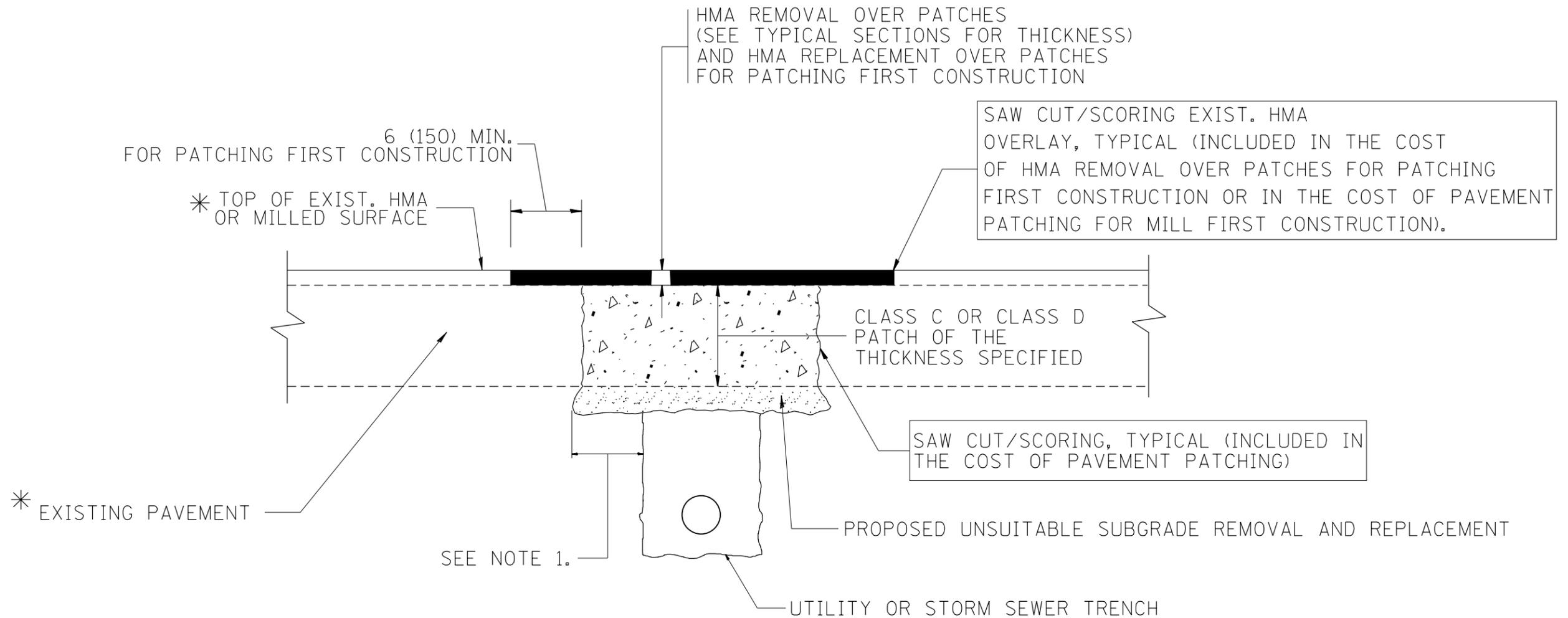
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME =	USER NAME = qarutn	DESIGNED - R. SHAH	REVISED - R. WIEDEMAN 05-14-04
pw:\planroom.dot.illinois.gov\PIDOT\Documents\IDOT Offices\District 1\Projects\011421\DRAWING\Design\DistStd.dgn			REVISED - R. BORO 01-01-07
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED - R. BORO 03-09-11
	PLOT DATE = 5/31/2019	DATE - 10-25-94	REVISED - R. BORO 12-06-11

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3902	2019-021-R5	KANE	32	18
BD600-03 (BD-8)		CONTRACT NO. 62H98		
<small>FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT</small>				



* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

NOTES:

1. THE WIDTH OF THE FULL DEPTH PATCH OVER A TRENCH SHALL BE 12 (300) WIDER ON EACH SIDE OF THE TRENCH.
2. FOR METHOD OF MEASUREMENT AND BASIS OF PAYMENT, SEE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL".

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 4 1/2 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.

FILE NAME =	USER NAME = qarutn	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT			F.A.U. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
p:\planroom.dot.illinois.gov\PWIDOT\Documents\IDOT Offices\District 1\Projects\011421\DRAWING\Design\DistStd.dgn		CHECKED -	REVISED - R. BORO 01-01-07					3902	2019-021-R5	KANE	32	19
PLOT SCALE = 100.0000' / 1in.		DATE - 10-25-94	REVISED - R. BORO 09-04-07		BD400-04 (BD-22)		CONTRACT NO. 62H98					
PLOT DATE = 5/31/2019			REVISED - K. ENG 10-27-08		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			

VARIABLE - TO MEET EXISTING DIMENSIONS AND FIELD CONDITIONS (SEE NOTE ②)

PROP. CONC. CURB OR CURB AND GUTTER REPLACEMENT IN ACCORDANCE WITH STATE STANDARD 606001. (SEE NOTE ②)

SAW CUT FULL DEPTH - INCLUDED IN THE COST OF SIDEWALK, DRIVEWAY OR MEDIAN SURFACE REMOVAL PAY ITEM.

SEE STATE STANDARD 606001
EXISTING OR PROPOSED HMA SURFACE (IF APPLICABLE)

18" (450) MAX.

1/4" (5) **

EXISTING SIDEWALK, DRIVEWAY, MEDIAN SURFACE, SOD OR GROUND.

PROPOSED SIDEWALK, DRIVEWAY PAVEMENT, MEDIAN SURFACE OR SODDING SALT TOLERANT WITH TOP SOIL, 4" (100) SOD RESTORATION (SEE NOTE ①).

EXISTING CONCRETE PAVEMENT, CONCRETE BASE COURSE OR FLEXIBLE PAVEMENT

3" (75) MIN.

SUITABLE BACKFILL MATERIAL (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT)

PROPOSED 3/4" (20) PREFORMED EXPANSION JOINT AT CONCRETE SIDEWALKS, DRIVEWAYS, AND MEDIANS. (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.)

* 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.

NOTE: ① SIDEWALK, DRIVEWAY PAVEMENT OR MEDIAN SURFACE SHALL BE SIMILAR TO THE MATERIAL BEING REMOVED AND WILL BE PAID FOR SEPARATELY.

SODDING, SALT TOLERANT AND TOP SOIL, FURNISH AND PLACE 4" WILL BE PAID FOR SEPARATELY.

② FERTILIZER FOR THE PLACEMENT OF THE SOD IS NOT REQUIRED

③ CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED.

④ FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE PAVEMENT DELETE EPOXY COATED TIE BARS.

⑤ LONGITUDINAL BARS, IF ENCOUNTERED IN THE EXISTING CURB OR CURB AND GUTTER, ARE NOT TO BE REPLACED. CUTTING AND REMOVING LONGITUDINAL BARS SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

⑥ THE COST OF HMA SURFACE REMOVAL IN THE EXISTING GUTTER FLAG SHALL BE INCLUDED IN THE COST OF THE CURB AND GUTTER REMOVAL AND REPLACEMENT.

⑦ THE REMOVAL AND REPLACEMENT OF THE EXISTING CURB OR CURB AND GUTTER SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 440 AND 606 OF THE STANDARD SPECIFICATIONS.

⑧ THE LOCATIONS OF REMOVAL AND REPLACEMENT OF EXISTING CURB OR CURB AND GUTTER SHALL BE DETERMINED BY THE RESIDENT ENGINEER AT THE TIME OF CONSTRUCTION.

UNSUITABLE SUB-BASE MATERIAL TO BE REMOVED, IF DIRECTED BY THE ENGINEER, SHALL BE REPLACED WITH EITHER SUB-BASE GRANULAR MATERIAL, TYPE B OR ADDITIONAL THICKNESS OF CONCRETE.

REMOVAL AND REPLACEMENT 4" (100) OR LESS IS INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

REMOVAL AND REPLACEMENT IN EXCESS OF 4" (100) WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

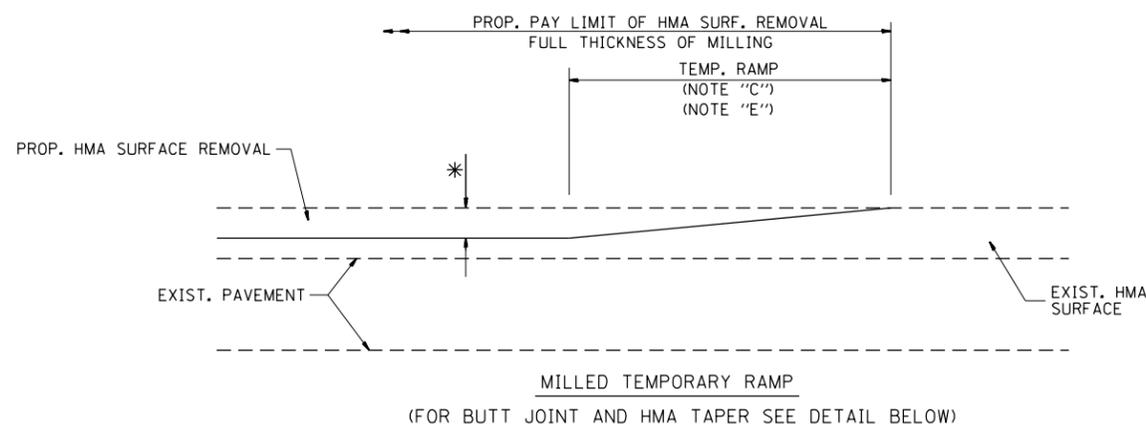
PROPOSED #6 (20) EPOXY COATED TIE BARS 24" (600) LONG AT 24" (600) CENTERS WILL NOT BE PAID FOR SEPARATELY. DELETE EPOXY COATED TIE BARS IF EXISTING TIE BARS ARE USUABLE AS DETERMINED BY THE ENGINEER. (SEE NOTE ③).

BASIS OF PAYMENT:
THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT (METER) FOR "CURB REMOVAL AND REPLACEMENT" OR "COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT".

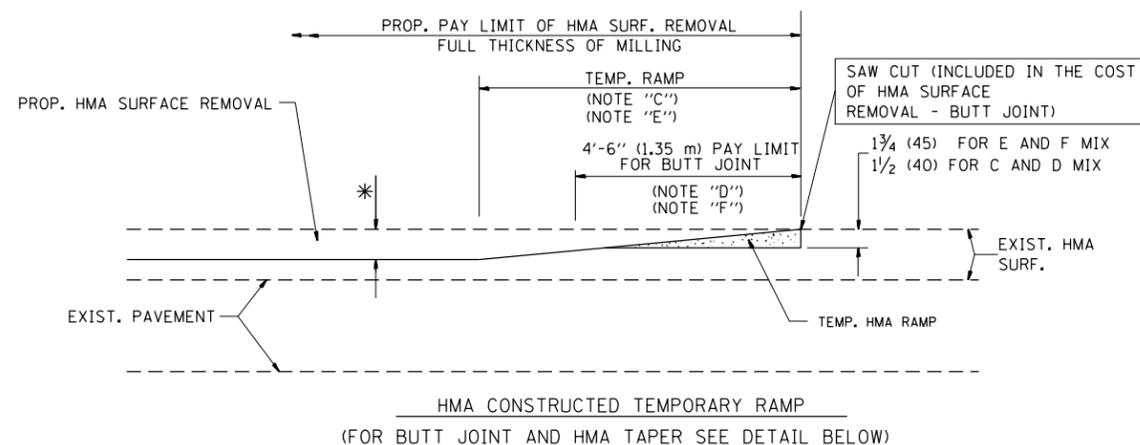
CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

FILE NAME =	USER NAME = qarutn	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT	F.A.U. RE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw\planroom.dot.illinois.gov\PIDOT\Documents\IDOT Offices\District 1\Projects\0114219\DRAWING\Design\DistStd.dgn		REVISION	REVISED - A. ABBAS 03-21-97			3902	2019-021-R5	KANE	32	20
PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED - M. GOMEZ 01-22-01				BD600-06 (BD-24)		CONTRACT NO. 62H98		
PLOT DATE = 5/31/2019	DATE - 03-11-94	REVISED - R. BORO 12-15-09				SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

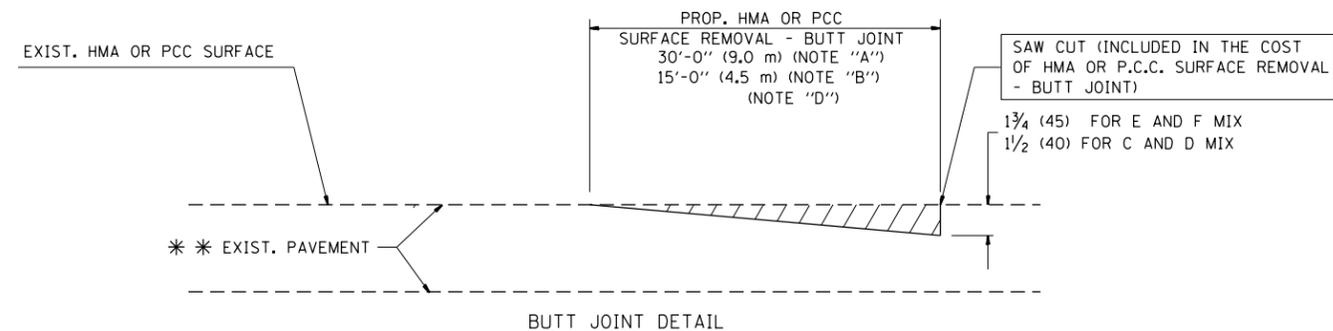


OPTION 1

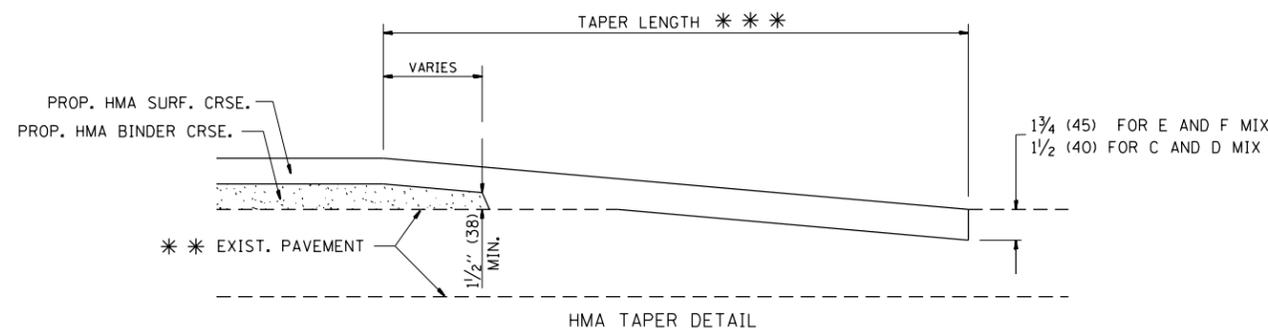


OPTION 2

TYPICAL TEMPORARY RAMP



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

** PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

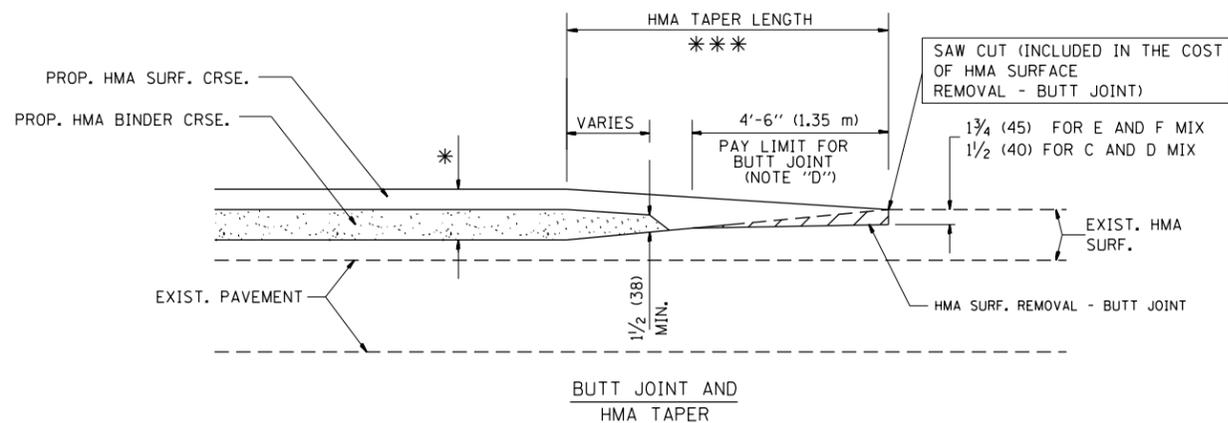
NOTES

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
 - B: MINOR SIDE ROADS.
 - C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
 - D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
 - E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
 - F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT
 - G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
- * SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- *** 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

BASIS OF PAYMENT:

THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT".

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



TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

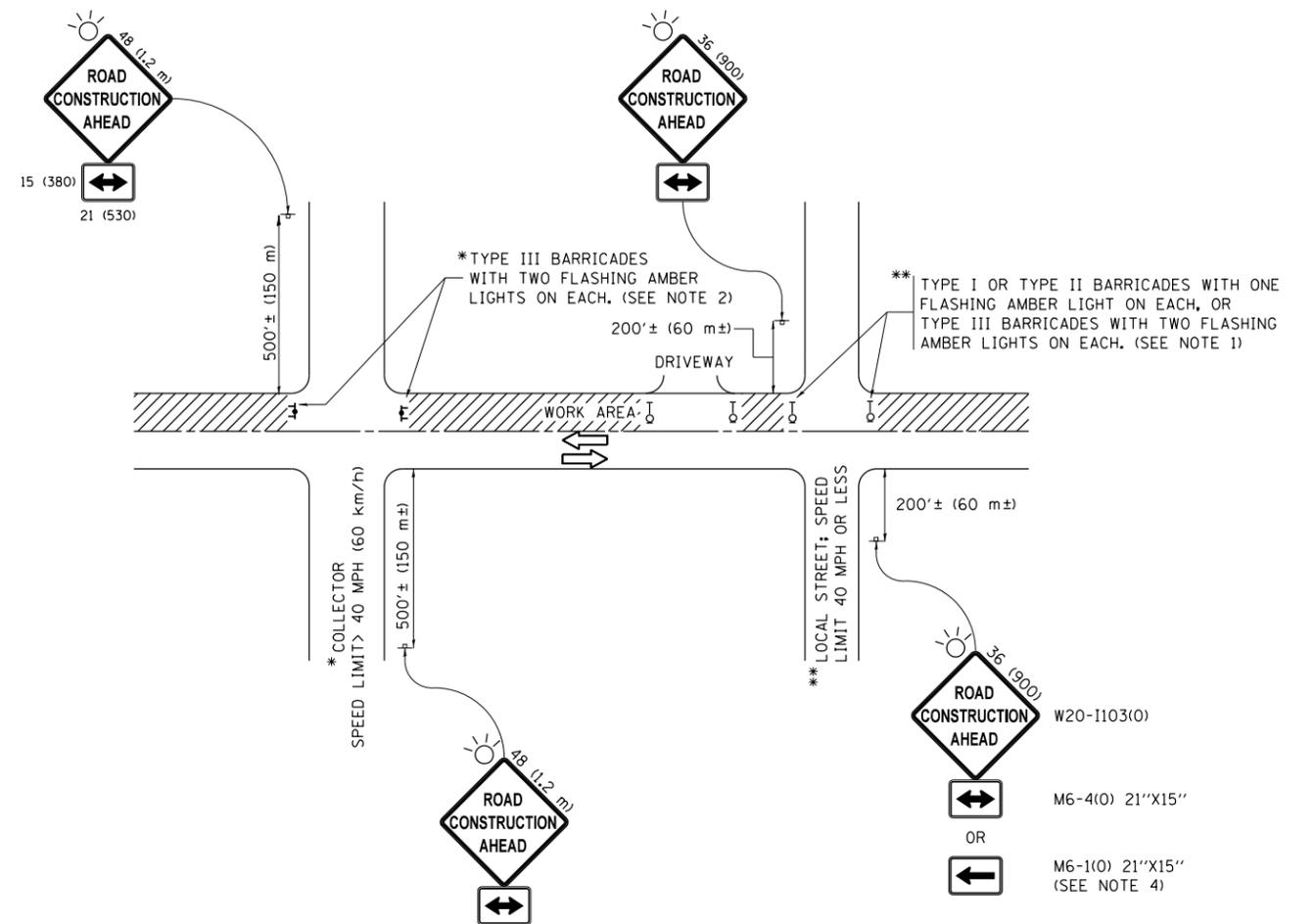
FILE NAME =	USER NAME = qarutn	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94
pw:\planroom.dot.illinois.gov\PIDOT\Documents\IDOT Offices\District 1\Projects\0114219\DRAWING\Design\DistStd.dgn			REVISED - A. ABBAS 03-21-97
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED - M. GOMEZ 04-06-01
	PLOT DATE = 5/31/2019	DATE - 06-13-90	REVISED - R. BORO 01-01-07

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BUTT JOINT AND
HMA TAPER DETAILS**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3902	2019-021-R5	KANE	32	21
BD400-05 BD32		CONTRACT NO. 62H98		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



NOTES:

- 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:
 - 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.
 - 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.
- SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - 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.
 - 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.
- 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.
- 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).
- 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.
- ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
- THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

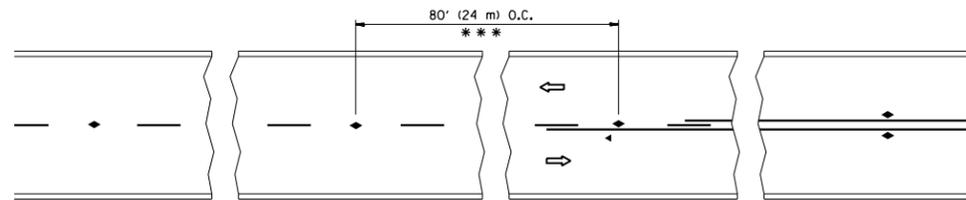
FILE NAME =	USER NAME = qarutn	DESIGNED - L.H.A.	REVISED - A. HOUSEH 10-15-96
p:\planroom.dot.illinois.gov\PIDOT\Documents\IDOT Offices\District 1\Projects\011421\DRAWING\Design\DistStd.dgn			REVISED - T. RAMMACHER 01-06-00
Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED - A. SCHUETZE 07-01-13
	PLOT DATE = 5/31/2019	DATE - 06-89	REVISED - A. SCHUETZE 09-15-16

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

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

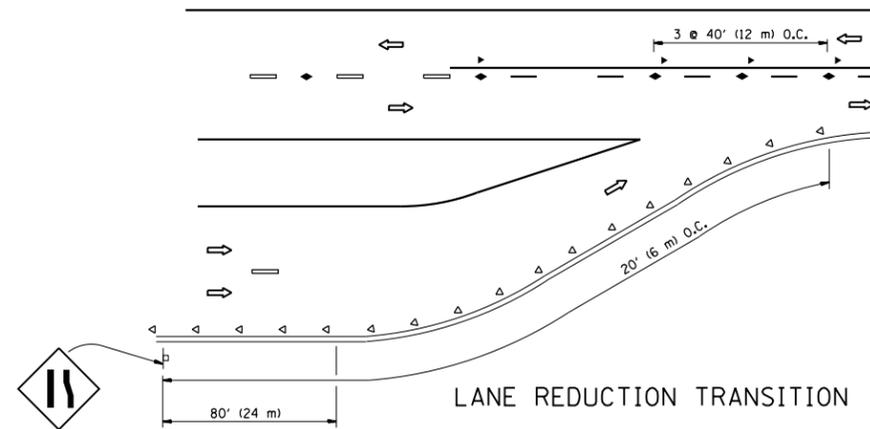
SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3902	2019-021-R5	KANE	32	22
TC-10			CONTRACT NO. 62H98	
ILLINOIS FED. AID PROJECT				

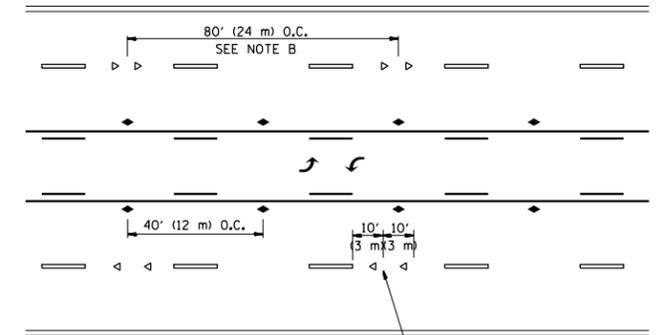


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

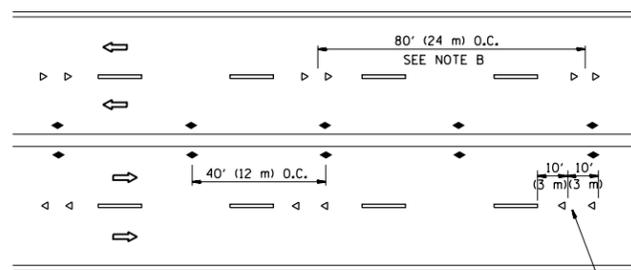
TWO-LANE/TWO-WAY



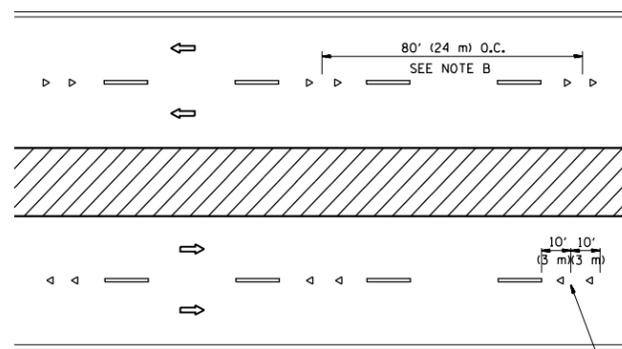
LANE REDUCTION TRANSITION



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.

SYMBOLS

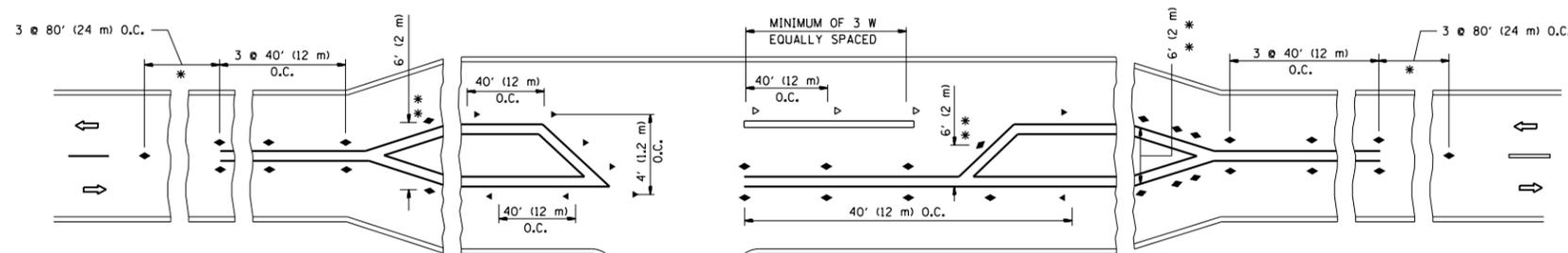
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

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.



LEFT TURN

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

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

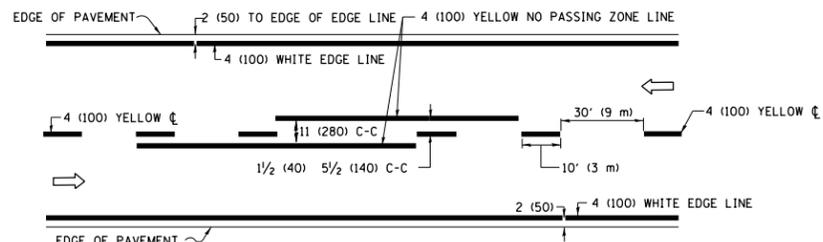
FILE NAME =	USER NAME = qarutn	DESIGNED -	REVISED - T. RAMMACHER 09-19-94
pw:\planroom.dot\illinois.gov\PIDOT\Documents\IDOT Offices\District 1\Projects\0114219\DRAWING\Design\DistStd.dgn		CHECKED -	REVISED - T. RAMMACHER 03-12-99
	PLOT SCALE = 100.0000' / in.	DATE -	REVISED - T. RAMMACHER 01-06-00
	PLOT DATE = 5/31/2019		REVISED - C. JUCIUS 09-09-09

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

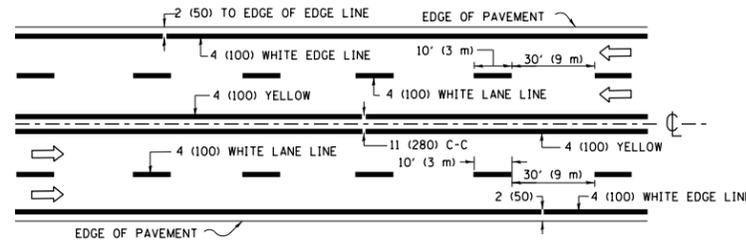
TYPICAL APPLICATIONS
 RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

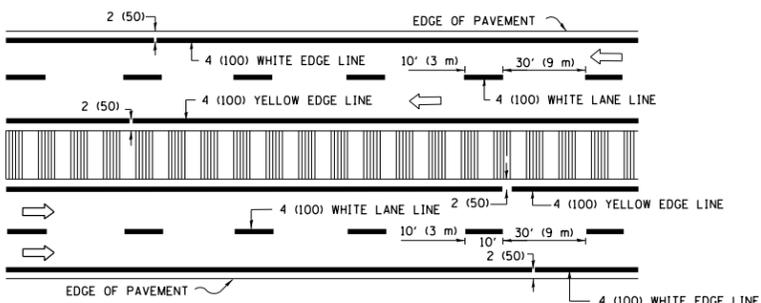
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3902	2019-021-R5	KANE	32	23
TC-11		CONTRACT NO. 62H98		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



2-LANE ROADWAY

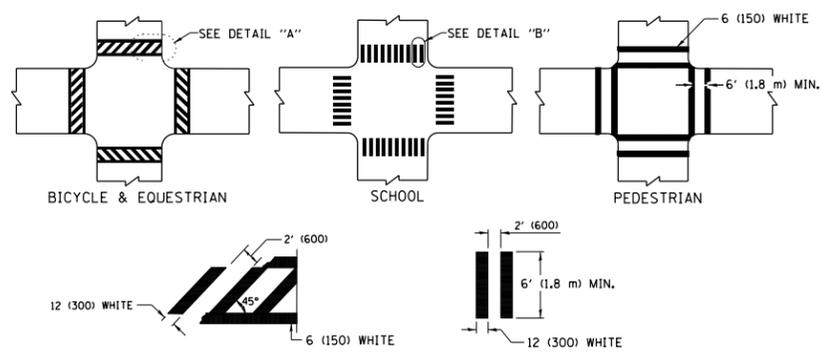


MULTI-LANE UNDIVIDED



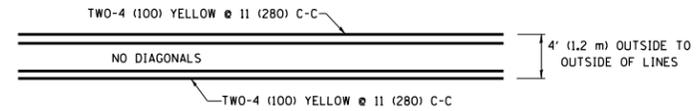
MULTI-LANE DIVIDED WITH MEDIAN

TYPICAL LANE AND EDGE LINE MARKING

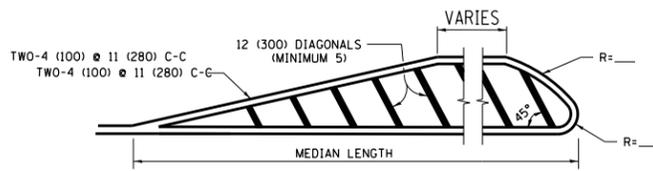


TYPICAL CROSSWALK MARKING

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

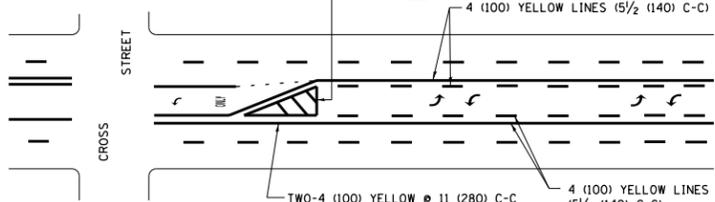


4' (1.2 m) WIDE MEDIANS ONLY



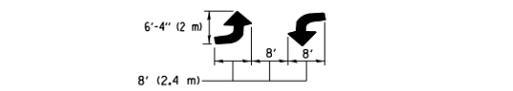
MEDIANS OVER 4' (1.2 m) WIDE

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



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

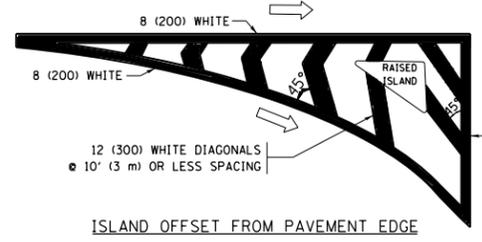
A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



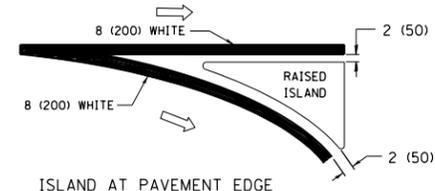
TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

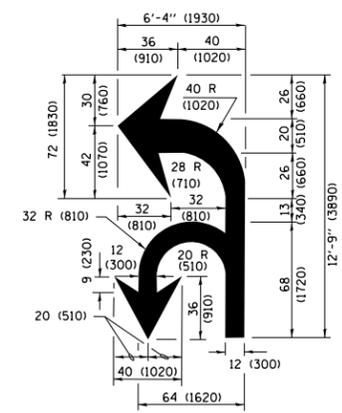
FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)
* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".



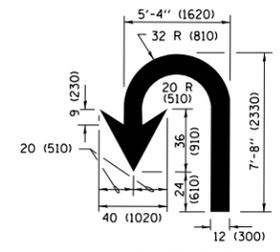
ISLAND OFFSET FROM PAVEMENT EDGE



**ISLAND AT PAVEMENT EDGE
TYPICAL ISLAND MARKING**



COMBINATION LEFT AND U-TURN



U-TURN

LANE REDUCTION TRANSITION

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

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

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING /REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MEDIANS IN YELLOW
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	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; 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT, OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE.
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" 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 m ²) EACH "X"=54.0 SQ. FT. (5.0 m ²)
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8')	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16.3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

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

FILE NAME =	USER NAME = qarutn	DESIGNED - EVERS	REVISED - C. JUCIUS 09-09-09
pw\planroom.dot\illinois.gov\PWIDOT\Documents\DOT Offices\District 1\Projects\011421\DRAWING\Design\DistStd.dgn		CHECKED -	REVISED - C. JUCIUS 07-01-13
Default	PLOT SCALE = 100.0000' / in.	DATE - 03-19-90	REVISED - C. JUCIUS 12-21-15
	PLOT DATE = 5/31/2019		REVISED - C. JUCIUS 04-12-16

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE
TYPICAL PAVEMENT MARKINGS**

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

F.A.U R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3902	2019-021-R5	KANE	32	24
TC-13		CONTRACT NO.	62H98	
ILLINOIS FED. AID PROJECT				

TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER

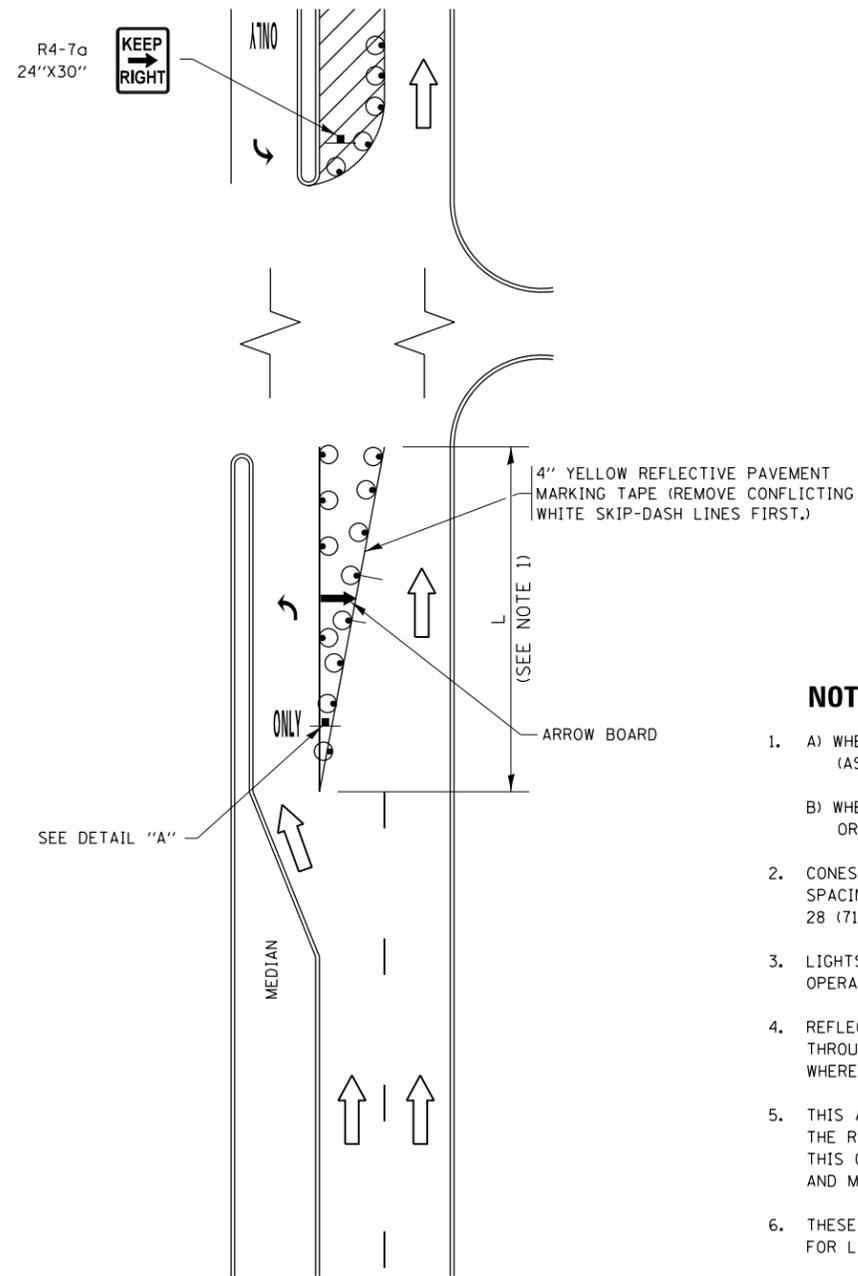


FIGURE 1

TURN BAY ENTRANCE WITHIN A LANE CLOSURE

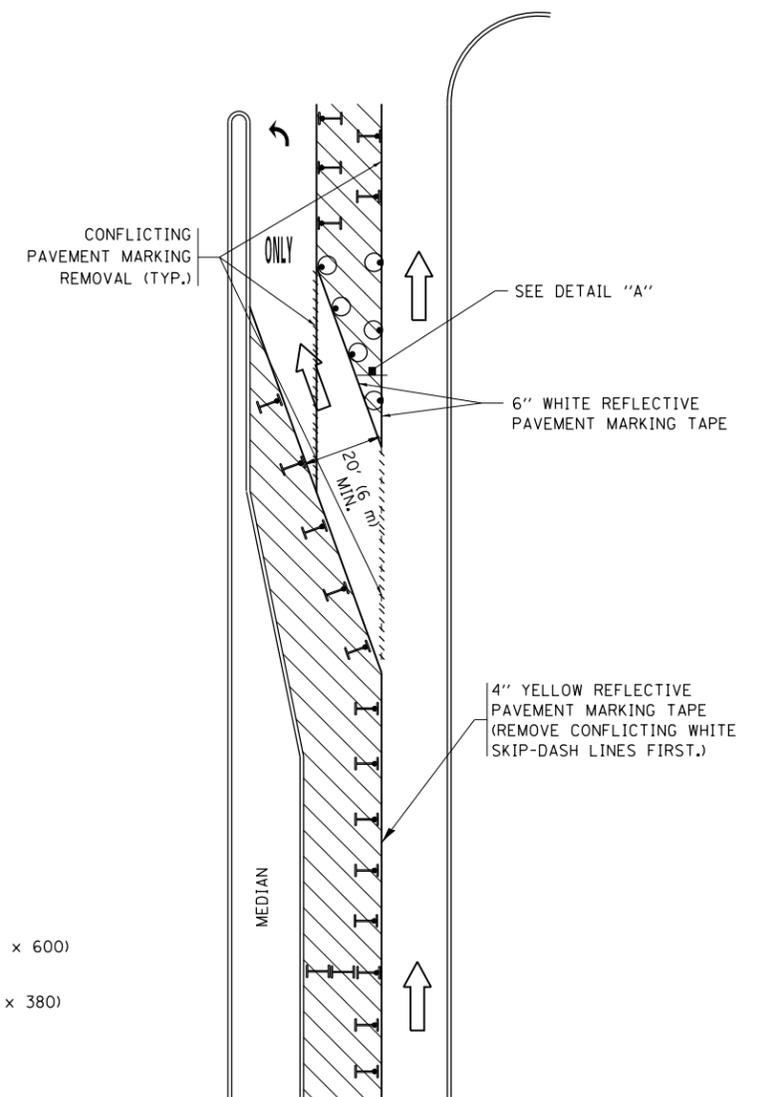


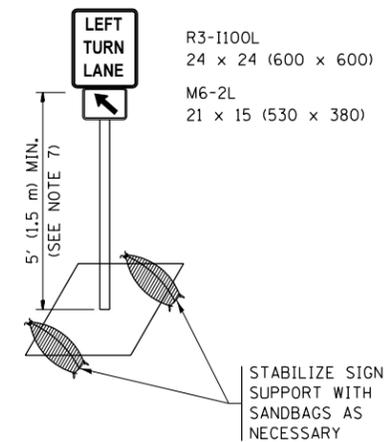
FIGURE 2

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 \leq 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" R3-1100R 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.

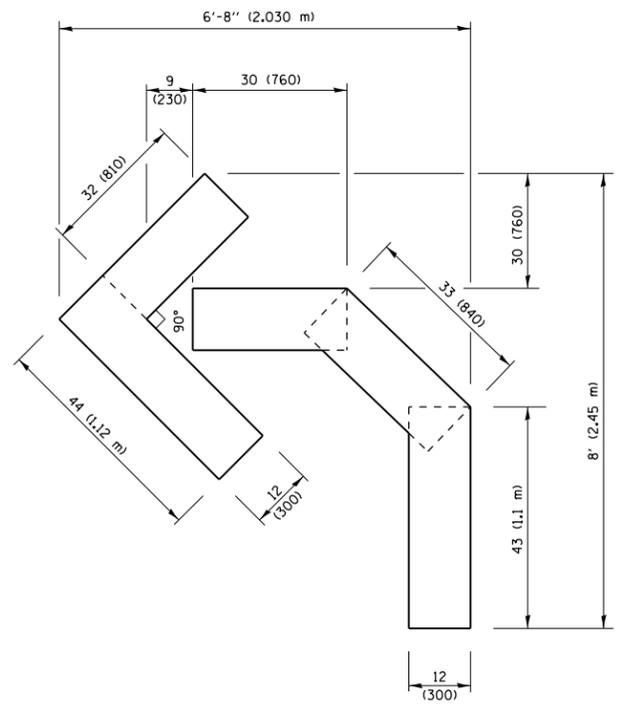


DETAIL A

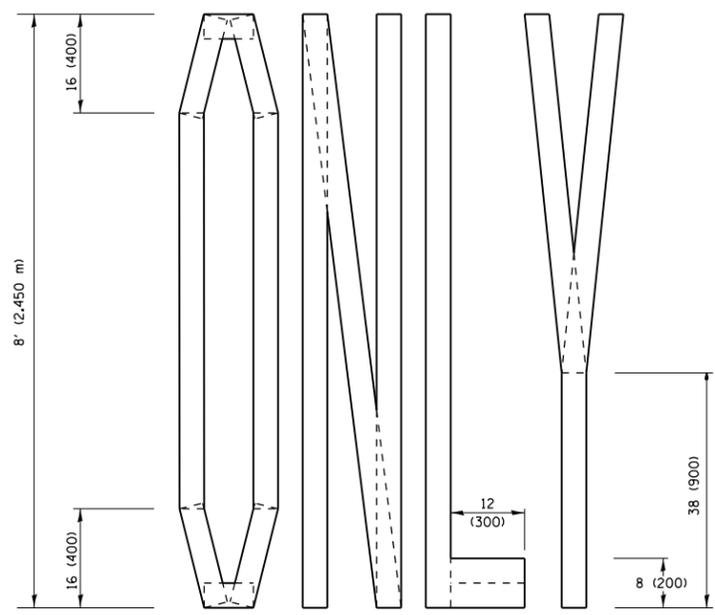
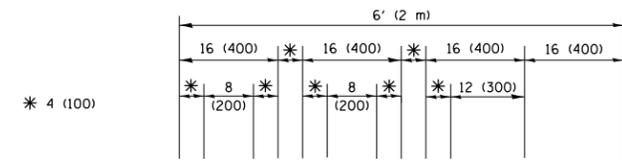
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = qarutn	REVISED - T. RAMMACHER 09-08-94	REVISED - R. BORO 09-14-09	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)	F.A.U. R.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw:\planroom.dot.illinois.gov\PIDOT\Documents\IDOT Offices\District 1\Projects\0114219\REVISED Design\Drawings\11-07-95	REVISED - A. HOUSEH 11-07-95	REVISED - A. SCHUETZE 07-01-13	REVISED - A. SCHUETZE 07-01-13			3902	2019-021-R5	KANE	32	25
Default	PLOT SCALE = 100.0000' / in.	REVISED - A. HOUSEH 10-12-96	REVISED - A. SCHUETZE 09-15-16			TC-14		CONTRACT NO. 62H98		
	PLOT DATE = 5/31/2019	REVISED - T. RAMMACHER 01-06-00	REVISED -			SCALE: NONE		SHEET 1 OF 1 SHEETS		STA. TO STA.

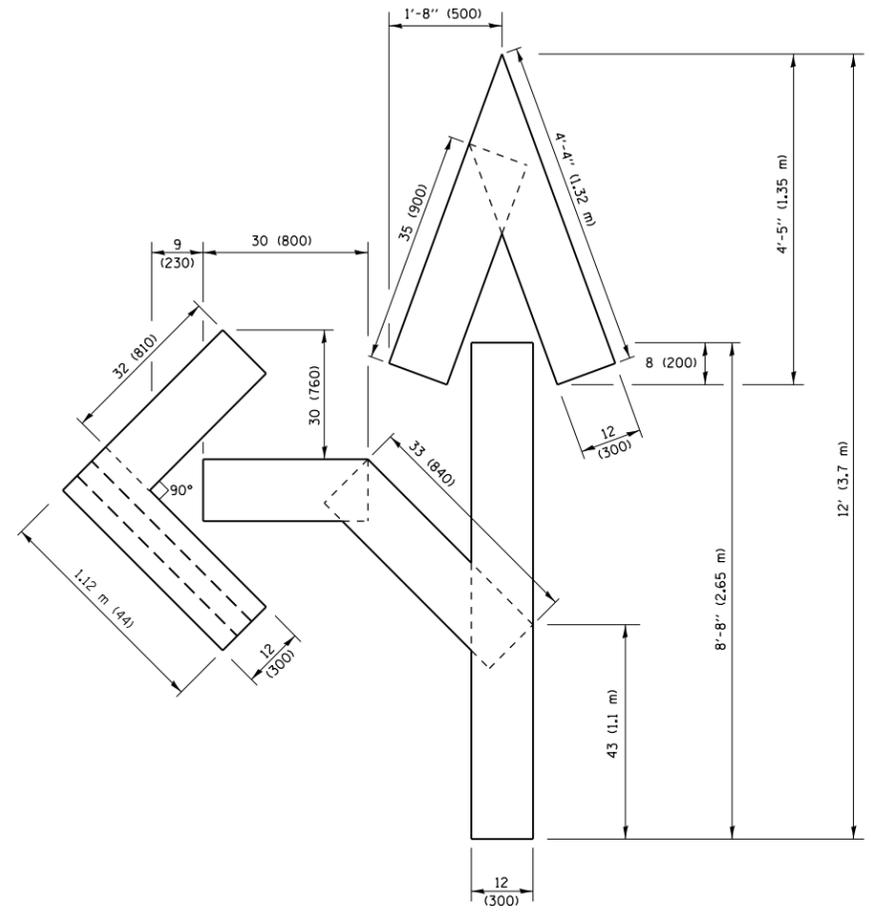
ILLINOIS FED. AID PROJECT



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

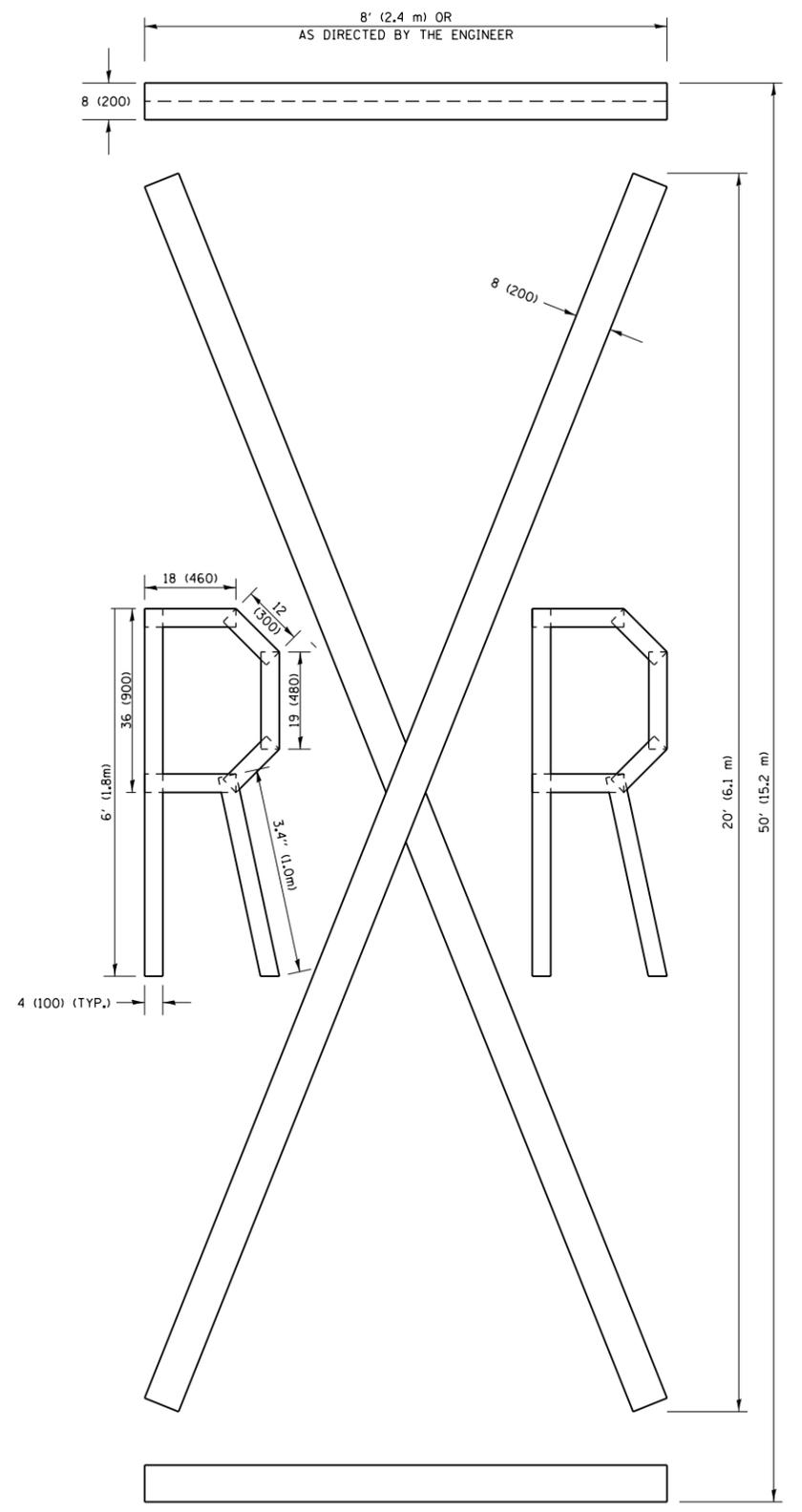


QUANTITY
 4 (100) LINE = 64.1 ft. (19.5 m)
 21.4 sq. ft. (1.99 sq. m)



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

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



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

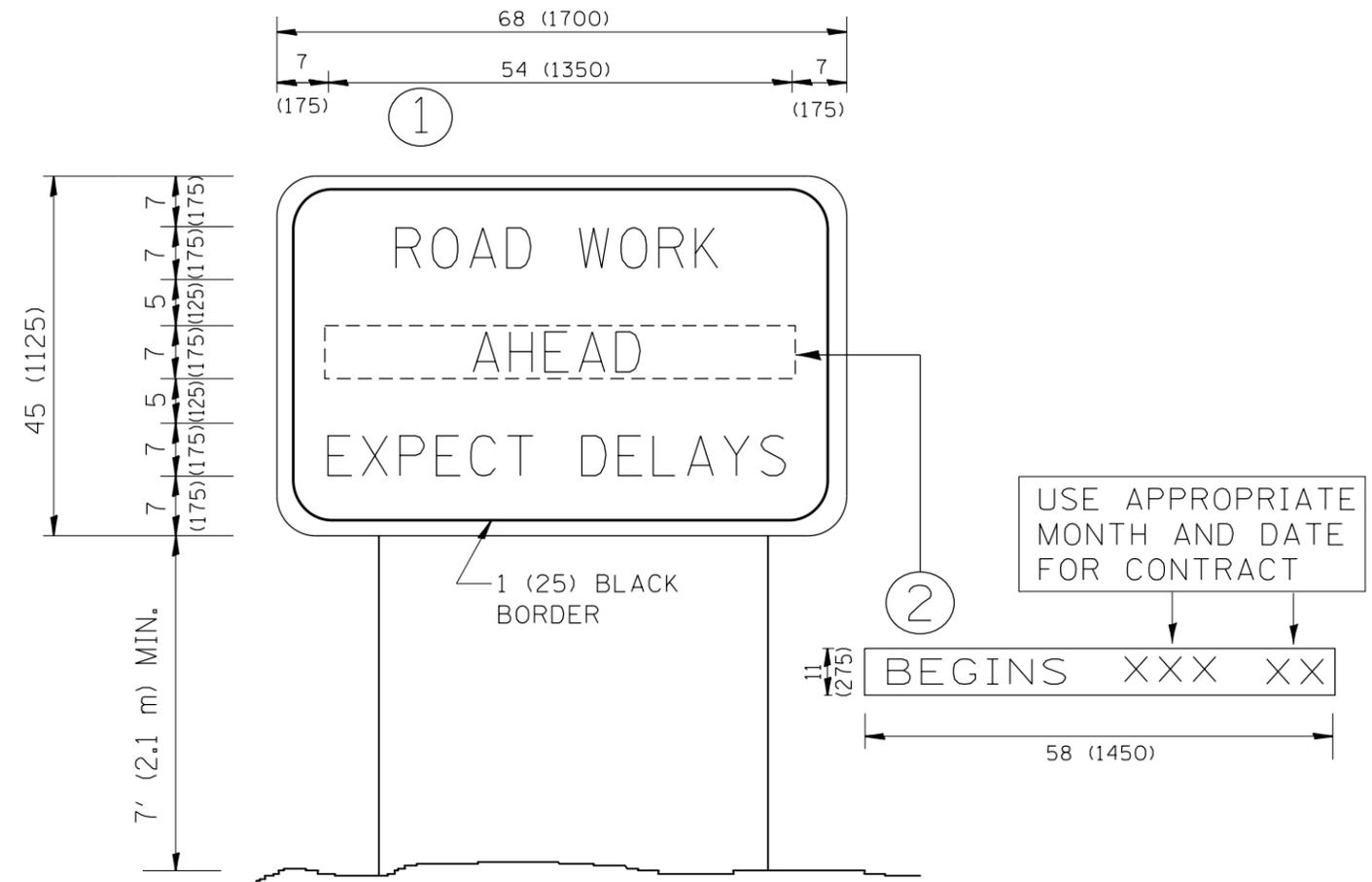
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = qarutn	DESIGNED -	REVISED -T. RAMMACHER 03-02-98
p:\planroom.dot\illinois.gov\PWIDOT\Documents\DOT Offices\District 1\Projects\011421\DRAWING\Design\DistStd.dgn		CHECKED -	REVISED -E. GOMEZ 08-28-00
		DATE -	REVISED -E. GOMEZ 08-28-00
			REVISED -A. SCHUETZE 09-15-16

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3902	2019-021-R5	KANE	32	26
TC-16		CONTRACT NO. 62H98		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

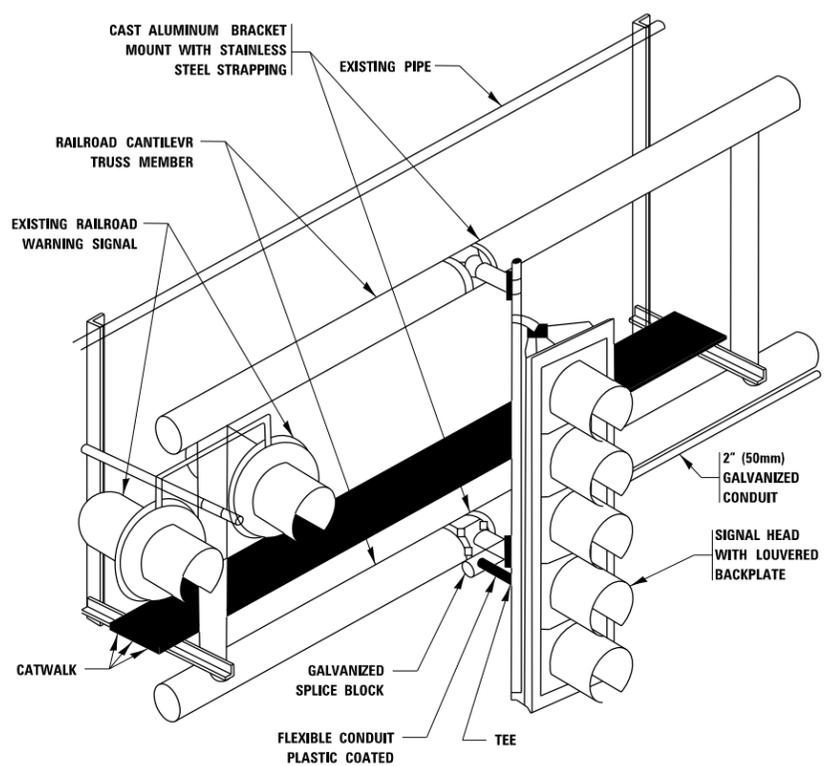


NOTES:

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

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

FILE NAME =	USER NAME = qarutn	DESIGNED -	REVISED - R. MIRS 09-15-97	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ARTERIAL ROAD INFORMATION SIGN	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
p:\planroom.dot.illinois.gov\PIDOT\Documents\IDOT Offices\District 1\Projects\0114219\DRAWING\Design\DistStd.dgn	DRAWN	REVISED - R. MIRS 12-11-97	3902			2019-021-R5	KANE	32	27	
PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED - T. RAMMACHER 02-02-99	TC-22			CONTRACT NO. 62H98				
PLOT DATE = 5/31/2019	DATE -	REVISED - C. JUCIUS 01-31-07	SCALE: NONE			SHEET NO. 1 OF 1 SHEETS		STA. TO STA.		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT



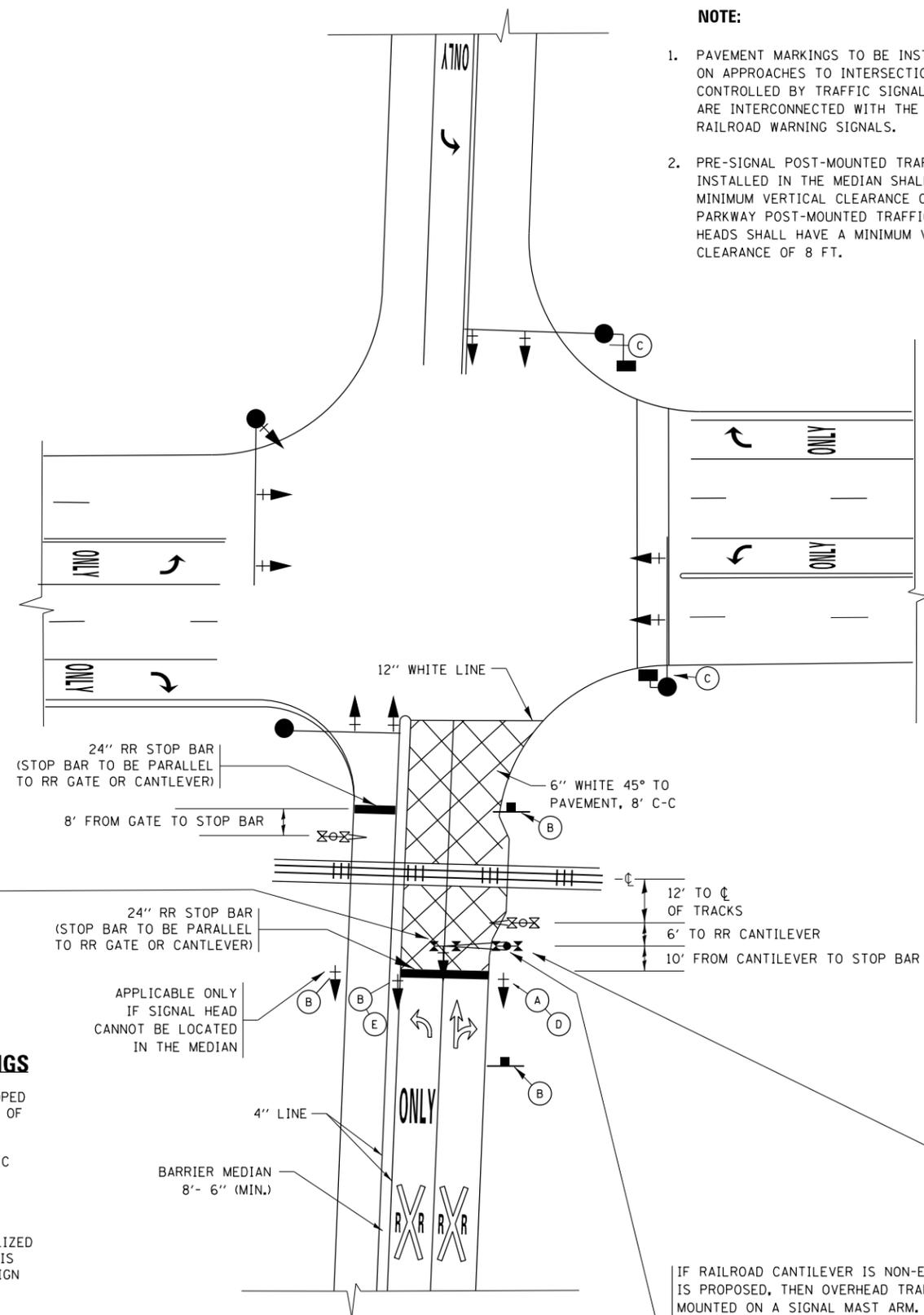
RAILROAD CANTILEVER SIGNAL HEAD MOUNTING
 USE NON-CONDUCTIVE SPACERS BETWEEN THE TRAFFIC SIGNAL EQUIPMENT AND THE RAILROAD CANTILEVER TO PREVENT DISSIMILAR METAL CORROSION
 N.T.S.

SIGNING AND PAVEMENT MARKING AT RAILROAD CROSSINGS

SIGNING AND PAVEMENT MARKING TRAFFIC CONTROL STANDARD (TC-23) HAS BEEN DEVELOPED IN CONSULTATION WITH THE ILLINOIS COMMERCE COMMISSION AND THE U.S. DEPARTMENT OF TRANSPORTATION'S GRADE CROSSING SAFETY TASK FORCE. THIS STANDARD PROVIDES INFORMATION ON UPDATES TO THE PAVEMENT MARKING AND SIGNING DETAILS IN ORDER TO INCORPORATE CHANGES ADOPTED IN THE 2009 NATIONAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICE (MUTCD). THESE NEW DETAILS HAVE BEEN STUDIED AND TESTED BY THE DEPARTMENT AND ACCEPTED BY THE ILLINOIS COMMERCE COMMISSION.

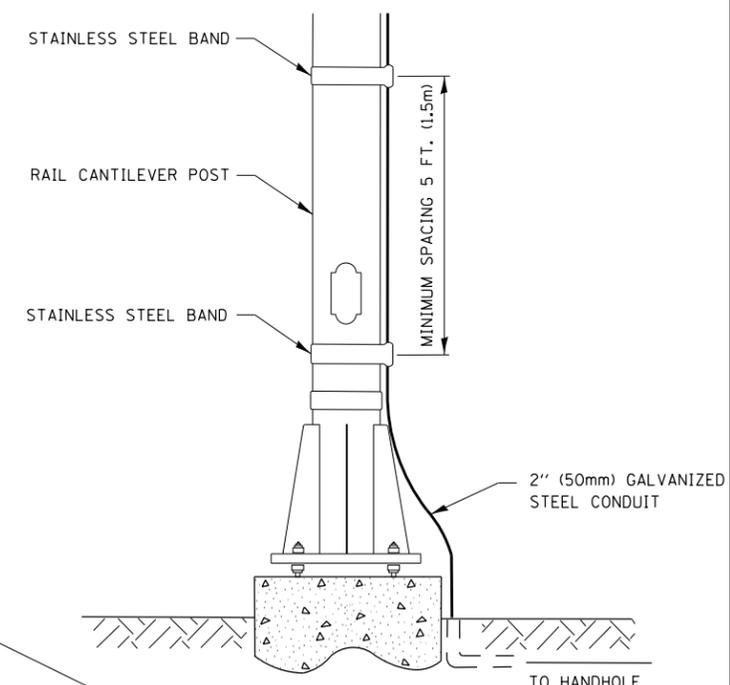
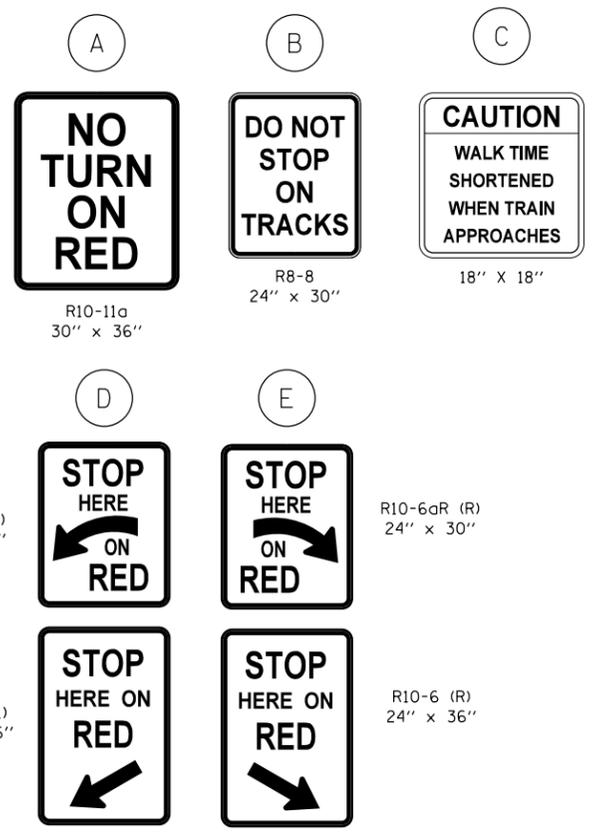
THIS APPLIES TO PROJECTS WHICH INCLUDE RAILROAD INTERCONNECTED TRAFFIC SIGNALS, WITH OR WITHOUT PRE-SIGNALS. THIS STANDARD ALSO APPLIES TO NON-SIGNALIZED INTERSECTIONS THAT ARE WITHIN 81 FEET OF A RAILROAD GRADE CROSSING. THE ILLINOIS SUPPLEMENT TO THE MUTCD SHOULD BE CONSULTED FOR ADDITIONAL INFORMATION ON SIGN REQUIREMENTS AT NON-SIGNALIZED INTERSECTIONS NEAR RAILROAD GRADE CROSSINGS.

THESE DETAILS WILL BE INCLUDED IN A FUTURE UPDATE TO THE BUREAU OF OPERATIONS TRAFFIC POLICIES AND PROCEDURES MANUAL.



SIGNALIZED INTERSECTION WITH NEAR-SIDE TRAFFIC SIGNAL

- NOTE:**
- PAVEMENT MARKINGS TO BE INSTALLED ONLY ON APPROACHES TO INTERSECTIONS CONTROLLED BY TRAFFIC SIGNALS WHICH ARE INTERCONNECTED WITH THE RAILROAD WARNING SIGNALS.
 - PRE-SIGNAL POST-MOUNTED TRAFFIC SIGNAL HEADS INSTALLED IN THE MEDIAN SHALL HAVE A MINIMUM VERTICAL CLEARANCE OF 4.5 FT. PARKWAY POST-MOUNTED TRAFFIC SIGNAL HEADS SHALL HAVE A MINIMUM VERTICAL CLEARANCE OF 8 FT.



SIGNAL CONDUIT CONNECTION TO RAIL CANTILEVER DETAIL

USE NON-CONDUCTIVE SPACERS BETWEEN THE TRAFFIC SIGNAL EQUIPMENT AND THE RAILROAD CANTILEVER TO PREVENT DISSIMILAR METAL CORROSION.

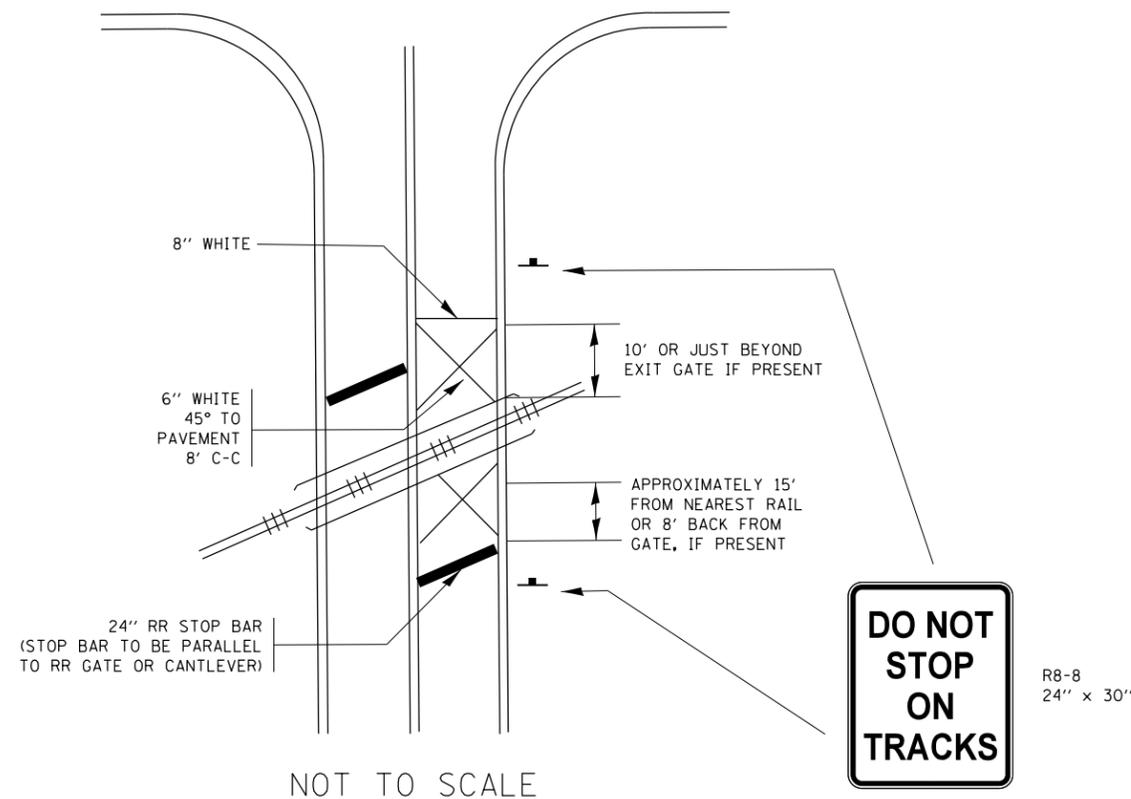
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

IF RAILROAD CANTILEVER IS NON-EXISTANT AND NONE IS PROPOSED, THEN OVERHEAD TRAFFIC SIGNAL TO BE MOUNTED ON A SIGNAL MAST ARM. SIGNAL MAST ARM AND SIGNAL HEADS SHALL BE INSTALLED AS CLOSE AS PRACTICABLE TO THE RAILROAD TRACKS WITHOUT OBSTRUCTING ANY RAILROAD WARNING DEVICES. SIGNAL MAST ARM SHALL BE AT LEAST 12 FT. FROM NEAREST RAIL.

FILE NAME =	USER NAME = qautn	DESIGNED -	REVISED - 02-25-11	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL SUPPLEMENTAL SIGNING AND PAVEMENT MARKING TREATMENT FOR RAILROAD CROSSINGS				F.A.U. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw\planroom.dot.illinois.gov\PIDOT\Documents\IDOT Offices\District 1\Projects\0114219\DRAWING\Design\DistStd.dgn		CHECKED -	REVISED - 04-26-12		3902	2019-021-R5	KANE	32	28				
Default	PLOT SCALE = 100.0000' / 1in.	DATE -	REVISED - A.R. 07-11-16		TC-23				CONTRACT NO. 62H98				
	PLOT DATE = 5/31/2019				ILLINOIS FED. AID PROJECT								

TYPICAL SUPPLEMENTAL SIGNING AND PAVEMENT MARKING TREATMENT FOR RAILROAD CROSSINGS

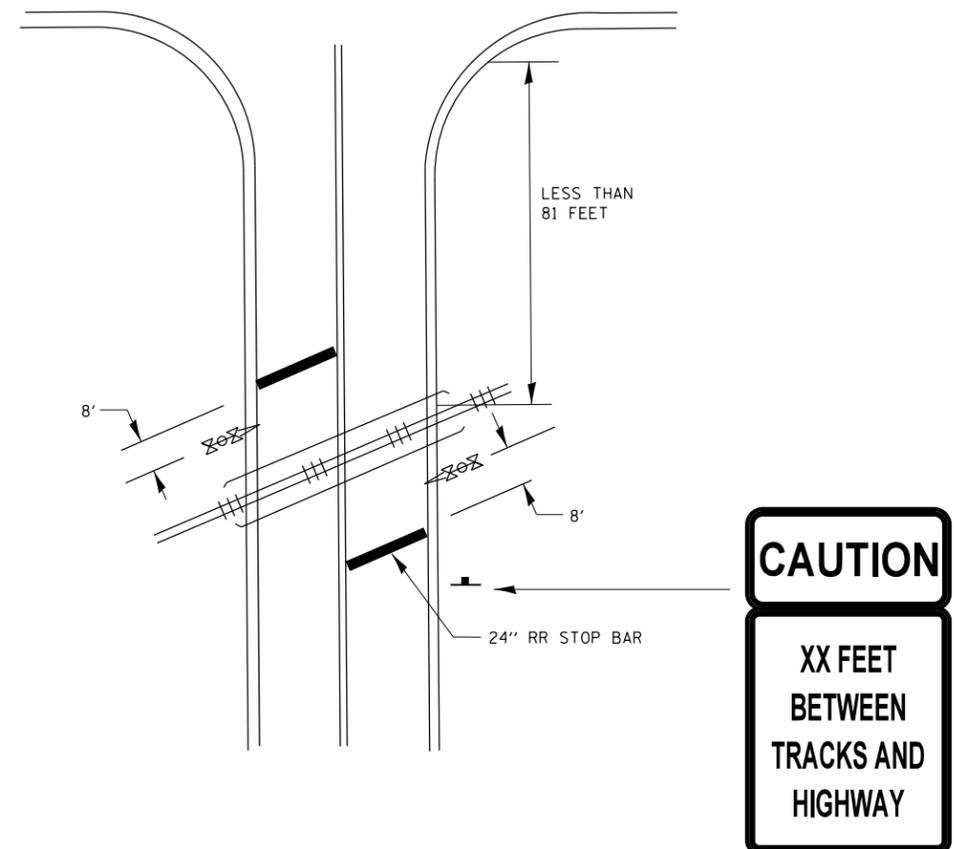
WITH SIGNALIZED INTERSECTION



NOTE:

1. PAVEMENT MARKINGS TO BE INSTALLED ONLY ON APPROACHES TO INTERSECTIONS CONTROLLED BY TRAFFIC SIGNALS WHICH ARE INTERCONNECTED WITH THE RAILROAD WARNING SIGNALS.
2. WHERE NEAR-SIDE TRAFFIC SIGNALS ARE USED THE PAVEMENT MARKINGS EXTEND TO THE INTERSECTION. (SEE DETAIL FOR PRE-SIGNALS).

WITH NON-SIGNALIZED INTERSECTION 81' OR LESS TO CLOSEST RAIL



NOTE:

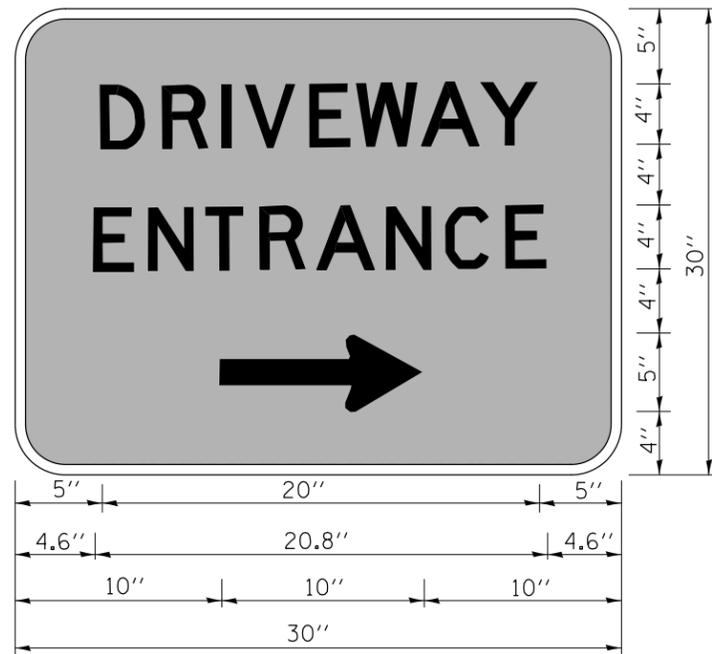
1. DISTANCE TO BE SHOWN ON SIGN MEASURED FROM A POINT 6 FEET FROM THE RAIL CLOSEST TO THE INTERSECTION OR FROM THE CLOSEST POINT ALONG THE EXIT GATE IF PRESENT OVER THE ROADWAY WHEN IN THE LOWERED POSITION TO THE STOP BAR OR CROSSWALK, WHICHEVER IS CLOSEST, ROUNDED DOWN TO THE NEAREST 5 FEET. WHERE THERE IS NO STOP LINE, MEASURE TO POINT WHERE DRIVER HAS A VIEW OF APPROACHING TRAFFIC.
2. THE CLEARANCE SIGN IS ALSO TO BE USED AS AN INTERIM MEASURE AT LOCATIONS WITH INTERCONNECTED INTERSECTION TRAFFIC SIGNALS WHERE IT IS PLANNED TO CHANGE THEM TO NEAR-SIDE SIGNALS AT A FUTURE TIME. IN THIS CASE, THE DISTANCE TO BE SHOWN ON THE SIGN IS MEASURED FROM THE EDGE OF THE STRIPED-OUT AREA INSTEAD OF 6 FEET FROM THE RAIL. THE SIGN IS TO BE REMOVED WHEN THE NEAR-SIDE SIGNALS ARE INSTALLED AND THE PAVEMENT MARKING EXTEND TO THE INTERSECTION.

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

FILE NAME =	USER NAME = qarutnn	DESIGNED -	REVISED - 02-25-11	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL SUPPLEMENTAL SIGNING AND PAVEMENT MARKING TREATMENT FOR RAILROAD CROSSINGS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw:\planroom.dot.illinois.gov\PIDOT\Documents\IDOT Offices\District 1\Projects\0114219\DRAWING\Design\DistStd.dgn		REVISION	REVISED - 04-26-12			3902	2019-021-R5	KANE	32	29
Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED - A.R. 07-11-16			TC-23		CONTRACT NO. 62H98		
	PLOT DATE = 5/31/2019	DATE -	REVISED -			SCALE: NONE		SHEET 2 OF 2 SHEETS		STA. TO STA.

W10-I100
30" x 36"

R8-8
24" x 30"



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".

FILE NAME =	USER NAME = qarutnn	DESIGNED -	REVISED - C. JUCIUS 02-15-07
p:\planroom.dot\illinois.gov\PIDOT\Documents\IDOT Offices\District 1\Projects\0114219\DRAWING\Design\DistStd.dgn		DRAWN	REVISED -
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 5/31/2019	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

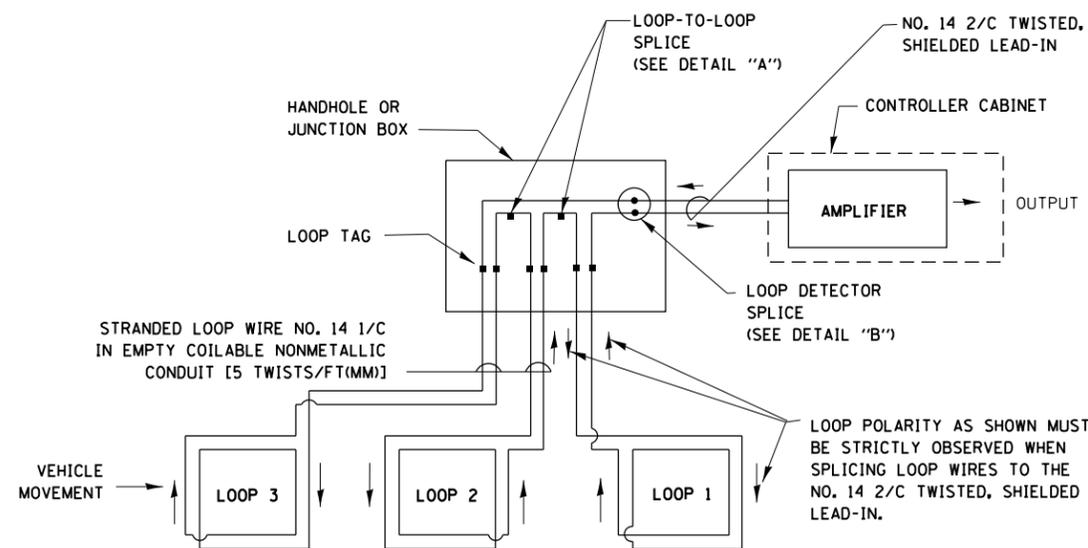
DRIVEWAY ENTRANCE SIGNING

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3902	2019-021-R5	KANE	32	30
TC-26			CONTRACT NO. 62H98	
<small>FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT</small>				

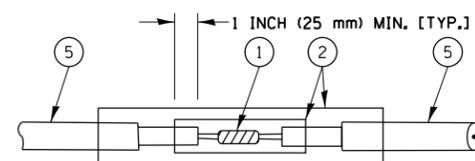
LOOP DETECTOR NOTES

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.

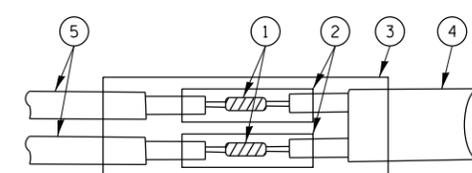


DETECTOR LOOP WIRING SCHEMATIC

- 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.



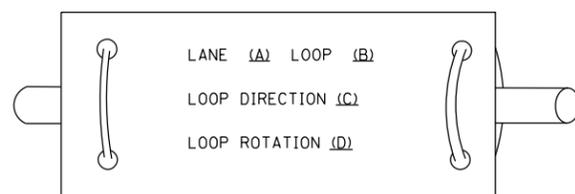
DETAIL "A"
LOOP-TO-LOOP SPLICE



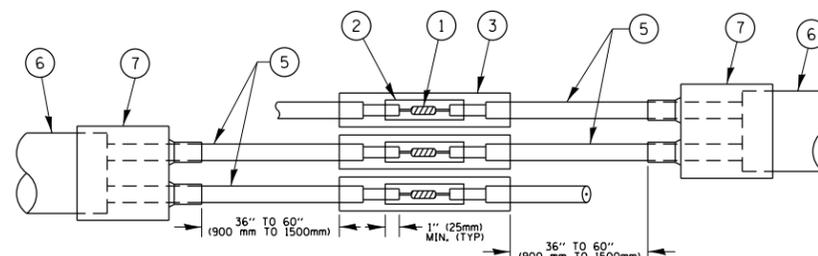
DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP

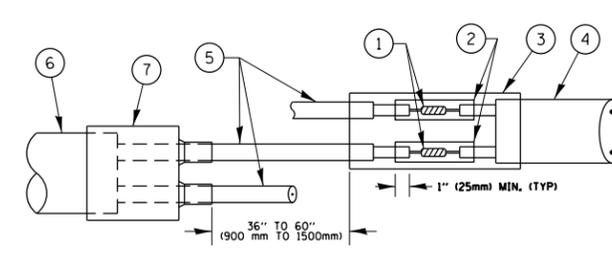
LOOP LEAD-IN CABLE TAG



- 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.



DETAIL "A"
LOOP-TO-LOOP SPLICE



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 LENGTH 6" (150 mm), UNDERWATER GRADE.
- ④ NO. 14 2/C TWISTED, SHIELDED CABLE.
- ⑤ LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
- ⑥ PRE-FORMED LOOP
- ⑦ XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS, TYCO CBR-2 OR APPROVED EQUAL

FILE NAME =	USER NAME = qarutn	DESIGNED -	REVISED -
p:\planroom.dot\illinois.gov\PWIDOT\Documents\DOT Offices\District 1\Projects\0114219\DRAWING\Design\DistStd.dgn		CHECKED -	REVISED -
Default	PLOT DATE = 5/31/2019	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

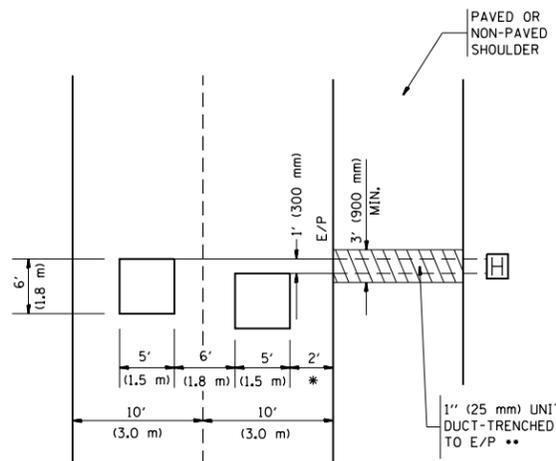
**DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3902	2019-021-R5	KANE	32	31
TS-05		CONTRACT NO.	62H98	
ILLINOIS FED. AID PROJECT				

LOOPS NEXT TO SHOULDERS

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



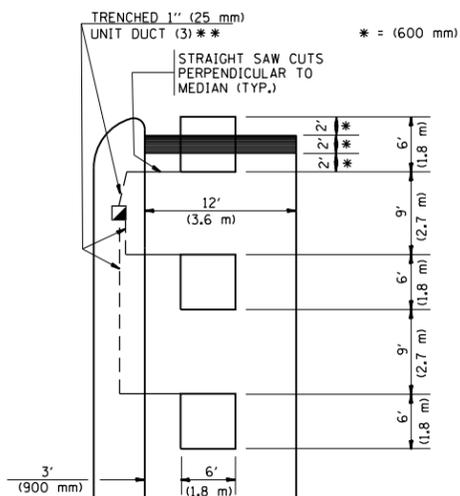
* = (600 mm)

** 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.

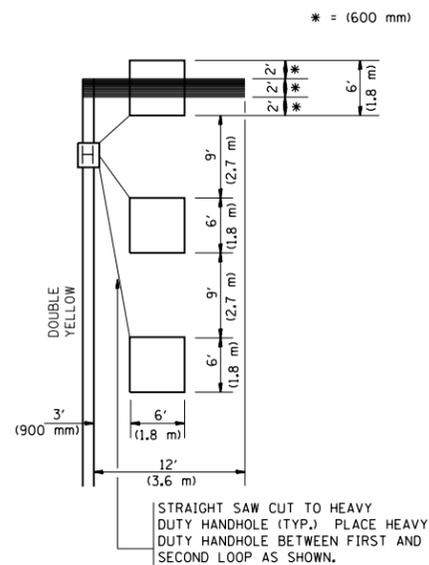


** UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

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

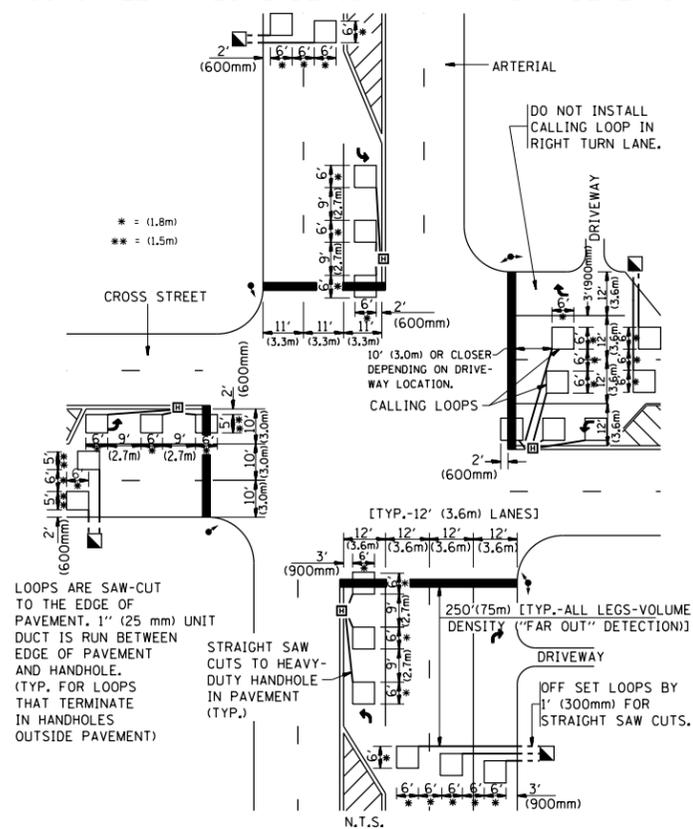
LEFT TURN LANES WITHOUT MEDIANS
VOLUME DENSITY ("FAR OUT" DETECTION)
ON SAME APPROACH

(PROTECTED / PERMITTED LEFT TURN PHASING)



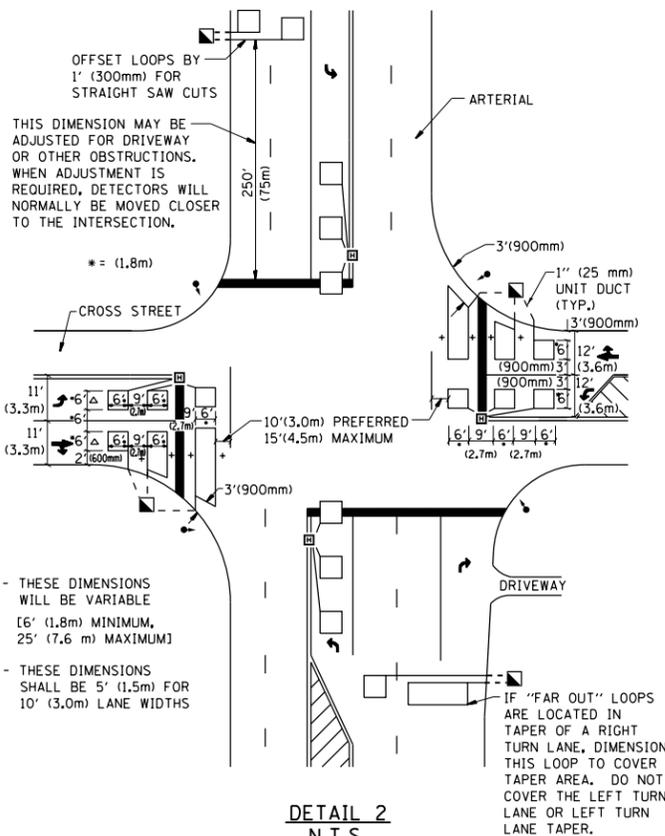
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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

FILE NAME =	USER NAME = qarutn	DESIGNED -	REVISED -
p:\planroom.dot.illinois.gov\PIDOT\Documents\IDOT Offices\District 1\Projects\0114219\Drawings\Design\DistStd.dgn		DRAWN -	REVISED -
PLOT SCALE = 100.0000' / 1"		CHECKED - R.K.F.	REVISED -
PLOT DATE = 5/31/2019		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 1 - DETECTOR LOOP INSTALLATION
DETAILS FOR ROADWAY RESURFACING

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3902	2019-021-R5	KANE	32	32
TS-07		CONTRACT NO. 62H98		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				