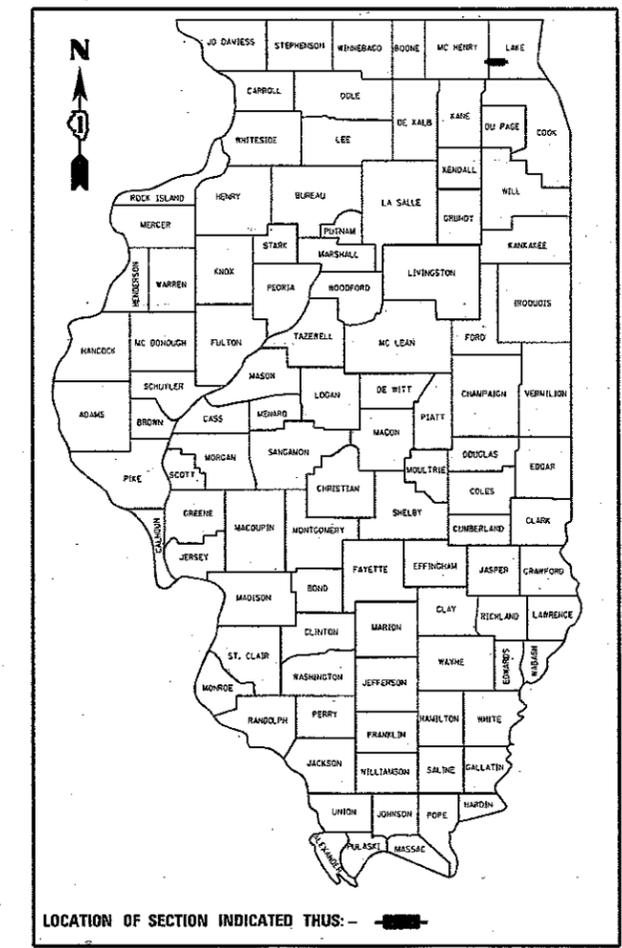


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	145RS&T-4	LAKE	42	1
		ILLINOIS	CONTRACT NO. 60Y83	

D-91-027-15



# PROPOSED HIGHWAY PLANS

F.A.P. 335: IL ROUTE 176  
**LOCATION 1: ROBERTS ROAD TO WEST OF US ROUTE 12**  
**LOCATION 2: AT RIDGE STREET**  
 SECTION: 145RS&T-4  
 PROJECT: NHPP-2AVR(084)  
**RESURFACING (3P) AND PEDESTRIAN RAMPS, DRAINAGE**  
**LAKE COUNTY**  
 C-91-027-15

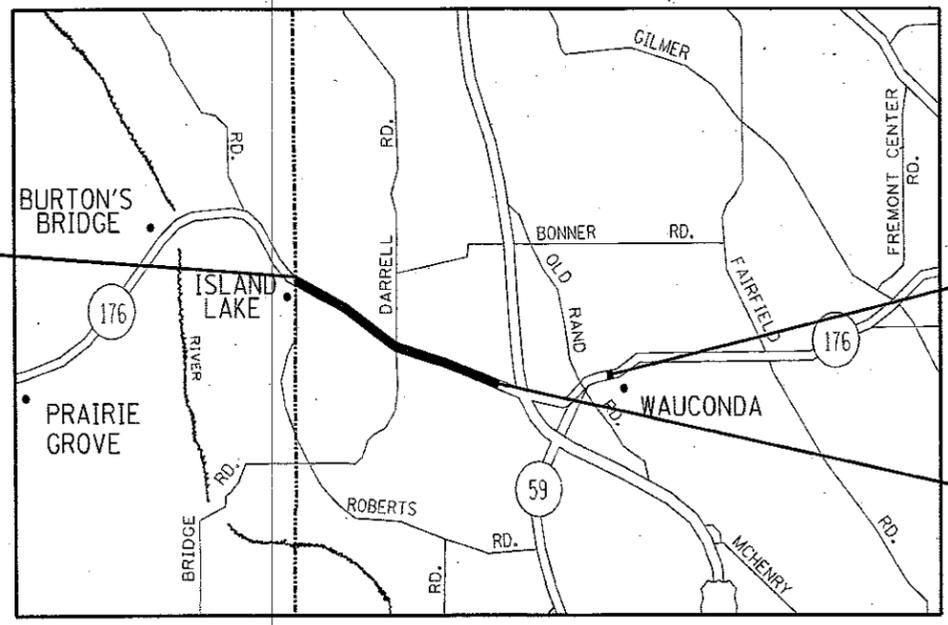
FOR INDEX OF SHEETS, SEE SHEET NO. 2

THIS PROJECT IS LOCATED IN THE  
VILLAGES OF WAUCONDA AND ISLAND LAKE

TRAFFIC DATA:  
 2017 ADT = 16,600  
 SPEED LIMIT  
 = 30 TO 45 MPH

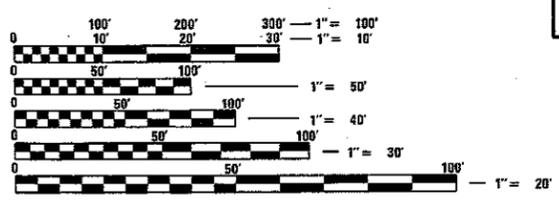
OMISSION:  
STA. 88+25 TO  
STA 111+61

LOCATION 1:  
PROJECT BEGINS  
STA 16+65



LOCATION 2:  
AT RIDGE STREET

LOCATION 1:  
PROJECT ENDS  
STA 139+96



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: DAN WILGREEN (847) 705-4240  
 PROJECT MANAGER: FAWAD AQUEEL (847) 705-4247

CONTRACT NO. 60Y83

## WAUCONDA TOWNSHIP

GROSS LENGTH = 12331 FT. = 2.335 MILE  
 NET LENGTH = 9995 FT. = 1.893 MILE

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

SUBMITTED *February 1, 2018*

*Anthony J. Quigley* / REGIONAL ENGINEER  
*Mar 23 2018*

*Chris* / ENGINEER OF DESIGN AND ENVIRONMENT  
*Mar 23 2018*

*David P. [Signature]*  
 DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS

**INDEX OF SHEETS**

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	INDEX OF SHEETS, STANDARDS AND GENERAL NOTES
3 - 6	SUMMARY OF QUANTITIES
7 - 9	TYPICAL SECTIONS
10 - 14	ROADWAY AND PAVEMENT MARKING PLANS
15 - 18	DRAINAGE PLAN (AT RIDGE ST)
19 - 23	SIDEWALK DETAIL PLAN
24 - 28	DETECTOR LOOP REPLACEMENT PLANS
29	DRIVEAWAY DETAILS - DISTANCE BETWEEN R.O.W AND FACE OF CURB & EDGE OF SHOULDER ≥ 15' (BD-01)
30	DRIVEAWAY DETAILS - DISTANCE BETWEEN R.O.W AND FACE OF CURB & EDGE OF SHOULDER < 15' (BD-02)
31	DETAILS FOR FRAMES AND LIDS ADJACENT WITH MILLING (BD-08)
32	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT (BD-22)
33	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT (BD-24)
34	BUTT-JOINT AND HMA TAPER DETAILS (BD-32)
35	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROAD, INTERSECTIONS AND DRIVEWAYS (TC-10)
36	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) (TC-11)
37	DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13)
38	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) (TC-14)
39	SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS (TC-16)
40	ARTERIAL ROAD INFORMATION SIGN (TC-22)
41	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS (TS-05, SHEET 2 OF 7)
42	DISTRICT ONE DETECTOR LOOP INTALLATION DETAILS FOR ROADWAY RESURFACING (TS-07)

**STATE STANDARDS**

000001-06	STANDARD SYMBOLS, ABBREVIATIONS & PATTERNS
424001-10	PERPENDICULAR CURB RAMPS FOR SIDEWALKS
424011-03	CORNER PARALLEL CURB RAMPS FOR SIDEWALKS
424016-04	MID BLOCK CURB RAMPS FOR SIDEWALKS
424031-01	MEDIAN PEDESTRIAN CROSSINGS
442201-03	CLASS C & D PATCHES
602401-04	PRECAST MANHOLE TYPE A 4' (1.22 M) DIAMETER
602601-05	PRECAST REINFORCED CONCRETE FLAT SLAB TOP
604001-04	FRAME AND LIDS, TYPE 1
606001-07	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
606301-04	PC CONCRETE ISLANDS AND MEDIANS
630001-12	STEEL PLATE BEAM GUARDRAIL
630301-08	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
701011-04	OFF-RD MOVING OPERATIONS 2L, 2W, DAY ONLY
701301-04	LANE CLOSURE 2L, 2W, SHORT TIME OPERATIONS
701306-04	LANE CLOSURE 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS ≥ 45 MPH
701311-03	LANE CLOSURE 2L, 2W, MOVING OPERATIONS DAY ONLY
701336-06	LANE CLOSURE, 2L, 2W, WORK AREAS IN SERIES FOR SPEEDS ≥ 45 MPH
701501-06	URBAN LANE CLOSURE 2L, 2W, UNDIVIDED
701502-08	URBAN LANE CLOSURE 2L, 2W, W/ BIDIRECTIONAL LEFT TURN LANE
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-07	TRAFFIC CONTROL DEVICES
725001-01	OBJECT AND TERMINAL MARKERS
780001-05	TYPICAL PAVEMENT MARKINGS
782006	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS
886001-01	DETECTOR LOOP INSTALLATIONS

**GENERAL NOTES**

- BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, AND GAS FACILITIES. (48 HOUR NOTIFICATION IS REQUIRED).
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, AND THE VILLAGES OF WAUCONDA AND ISLAND LAKE.
- THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE (OR TOLLWAY) PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT (OR ISTHA).
- BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKING LINES (AND RAISED REFLECTIVE PAVEMENT MARKERS) IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER.
- 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 DAMAGE TO EXISTING PAVEMENT MARKINGS OR RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- ALL PAVEMENT PATCHING, CURB AND GUTTER REMOVAL AND REPLACEMENT, DRAINAGE ADJUSTMENT LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- 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 BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
- DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
- TEN (10) FOOT TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER AND MEDIAN ITEMS OF WORK TO EXISTING CURBS AND GUTTER AND MEDIANS IN THE FIELD, UNLESS OTHERWISE SHOWN. THE TRANSITIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEMS OF WORK SPECIFIED.
- WHEN THE MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1 INCH WHERE THE SPEED LIMIT IS 40 MPH OR LESS AND 1 INCH WHERE THE SPEED LIMIT IS GREATER THAN 40 MPH. WITH WRITTEN APPROVAL OF THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H) OR A NOTCHED LONGITUDINAL WEDGE IS USED.
- THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847)705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
- THE RESIDENT ENGINEER SHALL CONTACT WALTER CZARNY, ARTERIAL TRAFFIC FIELD ENGINEER AT WALTER.CZARNY@ILLINOIS.GOV A MINIMUM OF TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
- DOUBLE LANE MARKERS ARE TO BE USED AS SHOWN ON THE DISTRICT ONE DETAIL "TYPICAL APPLICATIONS - RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)" SHOWN IN THE PLANS.
- PAVEMENT MARKING TAPE, TYPE III SHALL BE USED FOR SHORT TERM PAVEMENT MARKINGS ON ALL FINAL SURFACES. THE COST OF THE PAVEMENT MARKING TAPE, TYPE III REMOVAL SHALL BE INCLUDED IN THE COST OF SHORT TERM PAVEMENT MARKING REMOVAL.
- BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT) ACCORDING TO THE "BUTT JOINT AND HOT-MIX ASPHALT TAPER DETAILS" SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.
- 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 UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.
- OVERNIGHT LANE CLOSURES SHALL NOT BE ALLOWED FOR REHABILITATION PROJECTS INVOLVING DAYTIME MILLING AND RESURFACING OPERATIONS AND CLASS D PATCHING UNLESS OTHER CONDITIONS WARRANT EXTENDED LANE CLOSURES AS DETERMINED AND APPROVED IN WRITING BY THE ENGINEER OR AS PROVIDED FOR IN THE CONTRACT SPECIFICATIONS.
- PROPOSED SIDEWALK RAMPS SHALL CONFORM TO CURRENT ADA REQUIREMENTS AND APPLICABLE STATE HIGHWAY STANDARDS OR AS DETERMINED BY THE ENGINEER.
- THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN ACCESS AT ALL TIMES DURING CONSTRUCTION.
- ALL NEW PCC SIDEWALK SHALL BE 5".
- SALT TOLERANT SOD SHALL BE USED IN LIEU OF CLASS 2A SEEDING SHOWN ON THE DRAINAGE PLAN.
- CONTACT THE IDOT ROADSIDE DEVELOPMENT UNIT AT 847-705-4171 AT LEAST 2 WEEKS PRIOR TO BEGINNING FORESTRY WORK FOR LAYOUT.

FILE NAME =	USER NAME = pncopl	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>IL ROUTE 176 (ROBERTS RD. TO W/O US 12) AND AT RIDGE ST. INDEX OF SHEETS &amp; GENERAL NOTES</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
Default	Default	CHECKED -	REVISED -			335	145RS&T-4	LAKE	42	2	
		DATE -	REVISED -			SCALE: SHEET OF SHEETS STA. TO STA.		CONTRACT NO. 60Y83			
								ILLINOIS FED. AID PROJECT			

URBAN

URBAN

SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE						
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	80% FED 20% STATE 0005 LOCATION 1	80% FED 20% STATE 0004 LOCATION 2				
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	60	60					
20101350	TREE PRUNING (OVER 10 INCH DIAMETER)	EACH	6	6					
20200100	EARTH EXCAVATION	CU YD	108	33	75				
20800150	TRENCH BACKFILL	CU YD	62		62				
21101615	TOPSOIL FURNISH AND PLACE, 4"	SO YD	75	37	38				
25000210	SEEDING, CLASS 2A	ACRE	0.1	0.1					
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	55	55					
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	55	55					
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	55	55					
25100115	MULCH, METHOD 2	ACRE	0.5	0.5					
25200110	SODDING, SALT TOLERANT	SO YD	75	37	38				
25200200	SUPPLEMENTAL WATERING	UNIT	0.75	0.75					
28001100	TEMPORARY EROSION CONTROL BLANKET	SO YD	484	484					
35501316	HOT-MIX ASPHALT BASE COURSE, 8"	SO YD	3	3					
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	31012	31012					

SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE						
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	80% FED 20% STATE 0005 LOCATION 1	80% FED 20% STATE 0004 LOCATION 2				
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	68.9	68.9					
40600827	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4, 75, N50	TON	1895	1895					
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SO YD	379	379					
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	1	1					
40603565	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "E", N70	TON	4503	4503					
40800029	BITUMINOUS MATERIALS (TACK COAT)	POUND	2	2					
42001300	PROTECTIVE COAT	SO YD	448	448					
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SO FT	1537	1092	445				
42400800	DETECTABLE WARNINGS	SO FT	179	162	17				
44000159	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"	SO YD	45944	45944					
44000200	DRIVEWAY PAVEMENT REMOVAL	SO YD	3	3					
44000600	SIDEWALK REMOVAL	SO FT	1545	1092	453				

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FILE NAME =	USER NAME = darcopl	DESIGNED -	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

IL. ROUTE 176 (ROBERTS RD. TO W/O US 12) AND AT RIDGE ST. SUMMARY OF QUANTITIES

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

F.A.P. RTE. 335	SECTION 145RS&T-4	COUNTY LAKE	TOTAL SHEETS 42	SHEET NO. 3
CONTRACT NO. 60Y83				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

URBAN

URBAN

SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE					
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	80% FED 20% STATE 0005 LOCATION 1	80% FED 20% STATE 0004 LOCATION 2				
44201811	CLASS D PATCHES, TYPE I, 14 INCH	SO YD	47	47					
44201815	CLASS D PATCHES, TYPE II, 14 INCH	SO YD	1030	988	42				
44201819	CLASS D PATCHES, TYPE III, 14 INCH	SO YD	180	180					
44201821	CLASS D PATCHES, TYPE IV, 14 INCH	SO YD	85	85					
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	223	223					
550A0360	STORM SEWERS, CLASS A, TYPE 2 15"	FOOT	83		83				
550B0050	STORM SEWERS, CLASS B, TYPE 1 12"	FOOT	6		6				
55100500	STORM SEWER REMOVAL 12"	FOOT	8		8				
55100700	STORM SEWER REMOVAL 15"	FOOT	84		84				
60218300	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, OPEN LID	EACH	1		1				
60218400	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	3		3				
60255500	MANHOLES TO BE ADJUSTED	EACH	1	1					
60300105	FRAMES AND GRATES TO BE ADJUSTED	EACH	22	22					
60300305	FRAMES AND LIDS TO BE ADJUSTED	EACH	2	2					

SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE					
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	80% FED 20% STATE 0005 LOCATION 1	80% FED 20% STATE 0004 LOCATION 2				
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4	4					
63200310	GUARDRAIL REMOVAL	FOOT	200	200					
* 63301210	REMOVE AND REERECT STEEL PLATE BEAM GUARDRAIL, TYPE A	FOOT	50	50					
* 66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	115	33	82				
* 66900450	SPECIAL WASTE PLANS AND REPORTS	L SUM	1	0.5	0.5				
* 66900530	SOIL DISPOSAL ANALYSIS	EACH	2	1	1				
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6					
67100100	MOBILIZATION	L SUM	1	1					
70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1	1					
70100600	TRAFFIC CONTROL AND PROTECTION, STANDARD 701336	LSUM	1	1					
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	LSUM	1	1					
70102622	TRAFFIC CONTROL AND PROTECTION, STANDARD 701502	L SUM	1	1					

\* SPECIALTY ITEMS

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URBAN

URBAN

SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	80% FED 20% STATE 0005 LOCATION 1	80% FED 20% STATE 0004 LOCATION 2		
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	26881	26881			
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SO FT	12860	12860			
70300210	TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS	SO FT	744	744			
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	39299	39299			
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	2728	2728			
70300250	TEMPORARY PAVEMENT MARKING - LINE 8"	FOOT	345	345			
70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	679	679			
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	557	557			
70300520	PAVEMENT MARKING TAPE, TYPE III 4"	FOOT	6721	6721			
* 72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4			
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SO FT	744	744			

SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	80% FED 20% STATE 0005 LOCATION 1	80% FED 20% STATE 0004 LOCATION 2		
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	39303	39299	4		
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	2728	2728			
* 78000500	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	345	345			
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	679	679			
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	557	557			
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	574	574			
* 78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	5	5			
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	490	490			
* 85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1	1			
* 88600600	DETECTOR LOOP REPLACEMENT	FOOT	2631	2631			
* 89502376	REBUILD EXISTING HANDHOLE	EACH	1	1			
* 89502378	REBUILD EXISTING HANDHOLE TO HEAVY-DUTY HANDHOLE	EACH	1	1			

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\* SPECIALTY ITEMS

FILE NAME =	USER NAME = pncpnt	DESIGNED -	REVISED -
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	PLOT SCALE = 100,0000 1/16"	CHECKED -	REVISED -
	PLOT DATE = 2/5/2018	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

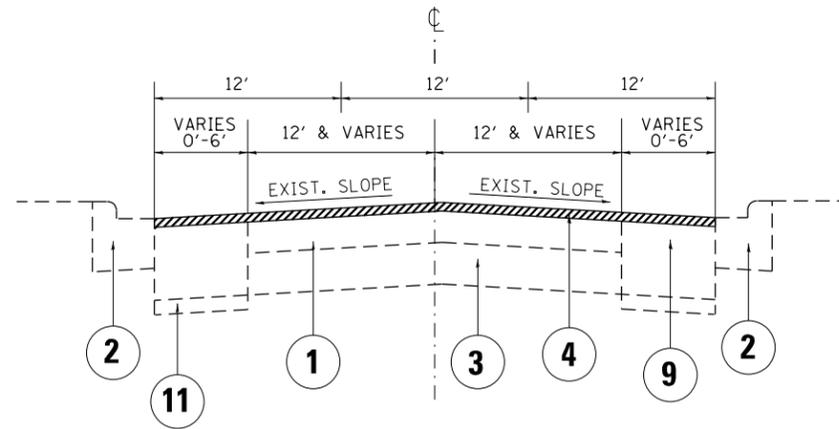
IL. ROUTE 176 (ROBERTS RD. TO WO US 12) AND AT RIDGE ST.  
SUMMARY OF QUANTITIES

F.A.P. RTE. 335	SECTION 145RS&T-4	COUNTY LAKE	TOTAL SHEETS 42	SHEET NO. 5
CONTRACT NO. 60Y83				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

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



IL. ROUTE 176



EXIST. TYPICAL SECTION  
STA. 16+65 TO STA. 37+00

**LEGEND:**

- ① EXISTING HMA SURFACE COURSE ±6 1/2"
- ② EXISTING COMB. CURB AND GUTTER
- ③ EXISTING P.C.C. PAVEMENT ±10"
- ④ PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"
- ⑤ PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "E", N70, 1 3/4"
- ⑥ PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"
- ⑦ EXISTING AGGREGATE SHOULDER
- ⑧ PROPOSED AGGREGATE WEDGE SHOULDER, TYPE B
- ⑨ EXISTING HMA WIDENING, 11" - 12"
- ⑩ EXISTING AGGREGATE SUBGRADE, 12"
- ⑪ EXISTING SUBBASE GRANULAR MATERIAL, 4"
- ⑫ EXISTING HMA SHOULDER ±7"

**NOTES:**

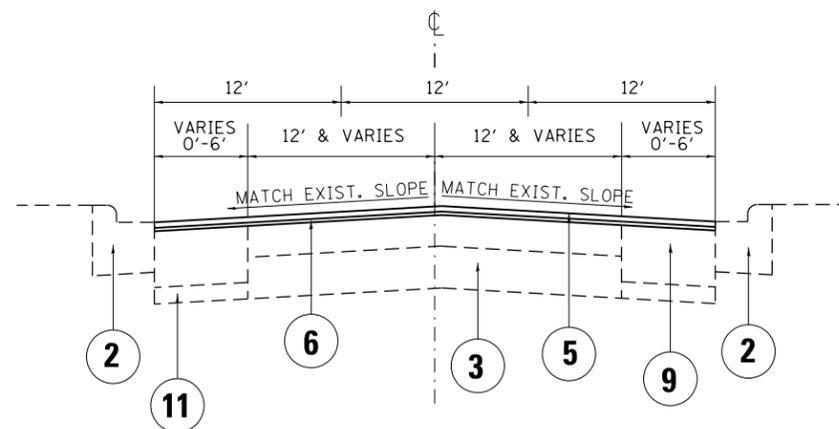
FOR THE EXISTING HMA SURFACE, THE CONTRACTOR SHALL MILL FIRST BEFORE PATCHING PER BD-22 DETAIL.

**HOT-MIX ASPHALT MIXTURE REQUIREMENTS**

MIXTURE USES	MIXTURE TYPE	AIR VOIDS @ Ndes	QMP
PAVEMENT RESURFACING	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "E", N70, (IL-9.5 mm); 1 3/4"	4% @ 70 GYR.	QCP
	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50; 3/4"	3.5% @ 50 GYR.	QCP
DRIVEWAYS	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, (IL 9.5 mm), 2"	4% @ 50 GYR	QC/QA
	HMA BASE COURSE, (HMA BINDER IL-19 mm), C.E. - 8"	4% @ 50 GYR	QC/QA
PATCHING	CLASS D PATCH (HMA BINDER IL-19 mm), 14"	4% @ 70 GYR.	QC/QA

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

IL. ROUTE 176



PROP. TYPICAL SECTION  
STA. 16+65 TO STA. 37+00

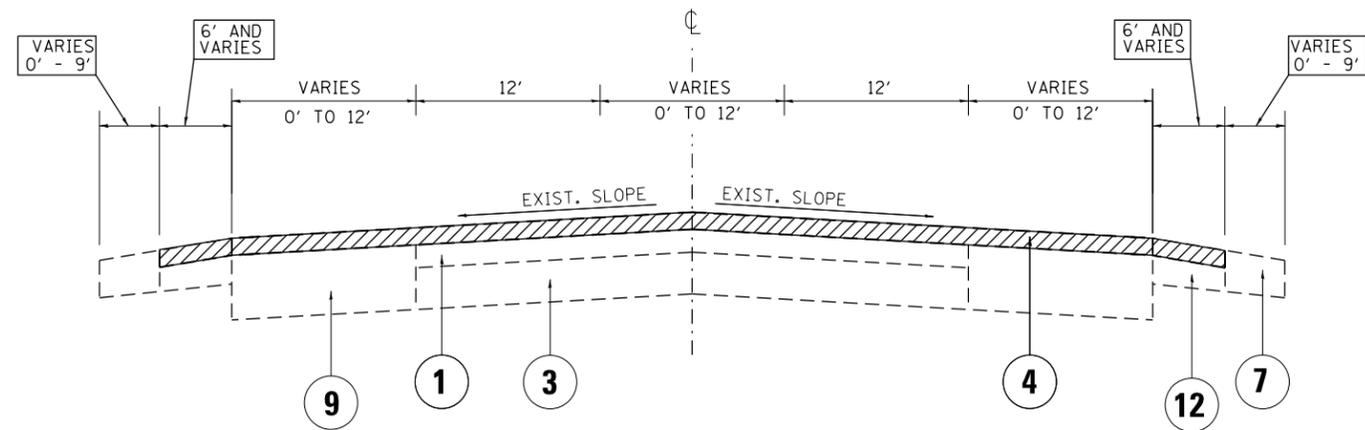
NOTE 1: THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN.

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.

NOTE 3: FOR USE OF RECYCLED MATERIALS SEE DISTRICT ONE SPECIAL PROVISIONS.

NOTE 4: QUALITY MANAGEMENT PROGRAM (QMP) IDENTIFIES THE PARTICULAR QUALITY CONTROL SPECIFICATION THAT APPLIES TO THE HMA MIXTURE.

IL. ROUTE 176

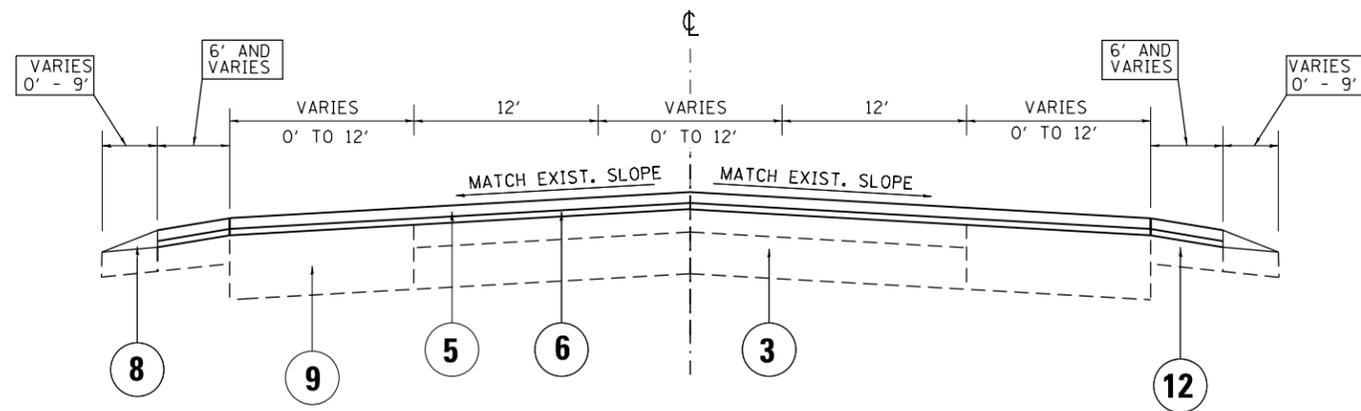


EXIST. TYPICAL SECTION  
 STA. 37+00 TO STA. 88+25  
 STA. 111+61 TO STA. 129+43

**LEGEND:**

- ① EXISTING HMA SURFACE COURSE ±6½"
- ② EXISTING COMB. CURB AND GUTTER
- ③ EXISTING. P.C.C. PAVEMENT ±10"
- ④ PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 2½"
- ⑤ PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "E", N70, 1¾"
- ⑥ PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, ¾"
- ⑦ EXISTING AGGREGATE SHOULDER
- ⑧ PROPOSED AGGREGATE WEDGE SHOULDER, TYPE B
- ⑨ EXISTING HMA WIDENING, 11" - 12"
- ⑩ EXISTING AGGREGATE SUBGRADE, 12"
- ⑪ EXISTING SUBBASE GRANULAR MATERIAL, 4"
- ⑫ EXISTING HMA SHOULDER ±7"

IL. ROUTE 176



PROP. TYPICAL SECTION  
 STA. 37+00 TO STA. 88+25  
 STA. 111+61 TO STA. 129+43

FILE NAME =	USER NAME = pencepl	DESIGNED -	REVISED -
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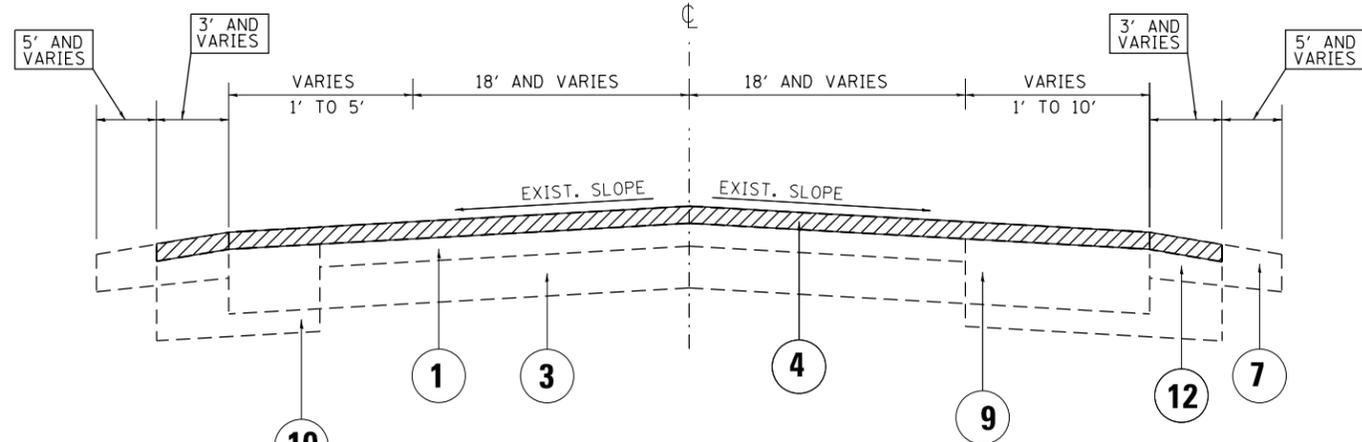
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

IL. ROUTE 176 (ROBERTS RD. TO WO US 12) AND AT RIDGE ST.  
 TYPICAL SECTIONS

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	145RS&T-4	LAKE	42	8
CONTRACT NO. 60Y83			ILLINOIS FED. AID PROJECT	

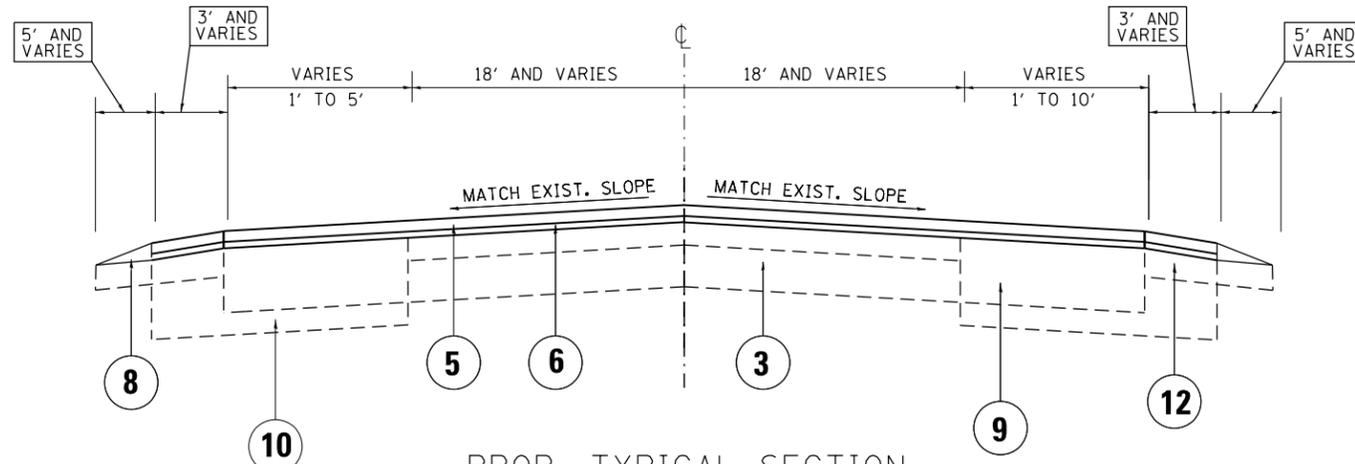
IL. ROUTE 176



**LEGEND:**

- ① EXISTING HMA SURFACE COURSE ±6½"
- ② EXISTING COMB. CURB AND GUTTER
- ③ EXISTING P.C.C. PAVEMENT ±10"
- ④ PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 2½"
- ⑤ PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "E", N70, 1¾"
- ⑥ PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, ¾"
- ⑦ EXISTING AGGREGATE SHOULDER
- ⑧ PROPOSED AGGREGATE WEDGE SHOULDER, TYPE B
- ⑨ EXISTING HMA WIDENING, 11" - 12"
- ⑩ EXISTING AGGREGATE SUBGRADE, 12"
- ⑪ EXISTING SUBBASE GRANULAR MATERIAL, 4"
- ⑫ EXISTING HMA SHOULDER ±7"

IL. ROUTE 176



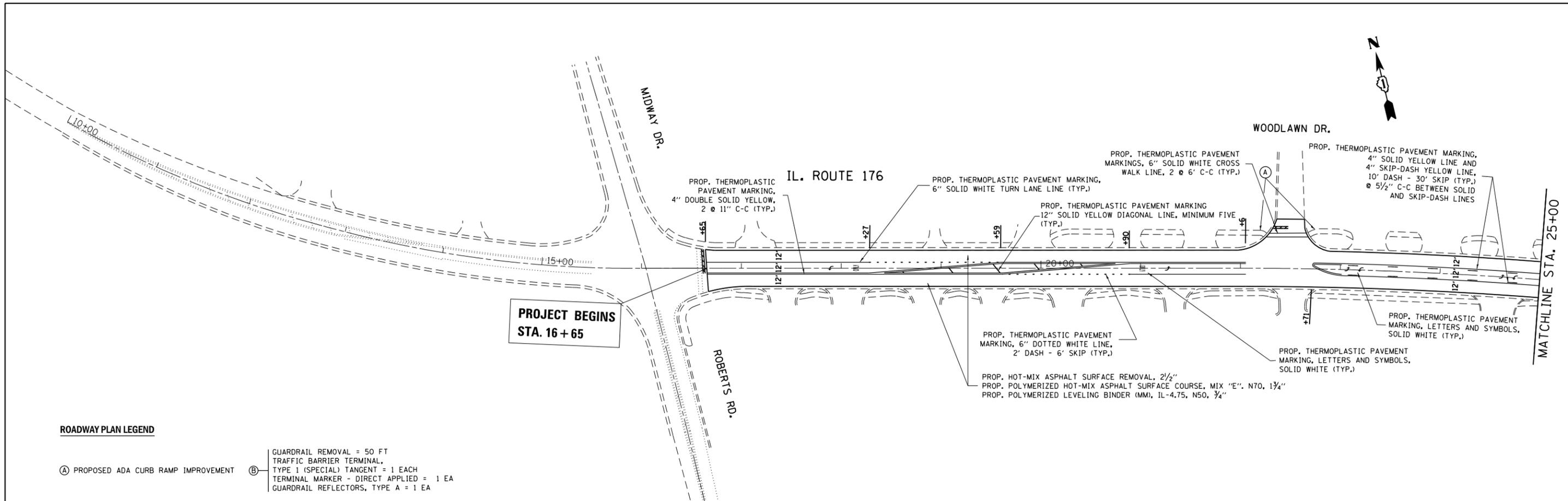
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	PLOT DATE = 2/1/2018	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**IL. ROUTE 176 (ROBERTS RD. TO WO US 12) AND AT RIDGE ST.  
TYPICAL SECTIONS**

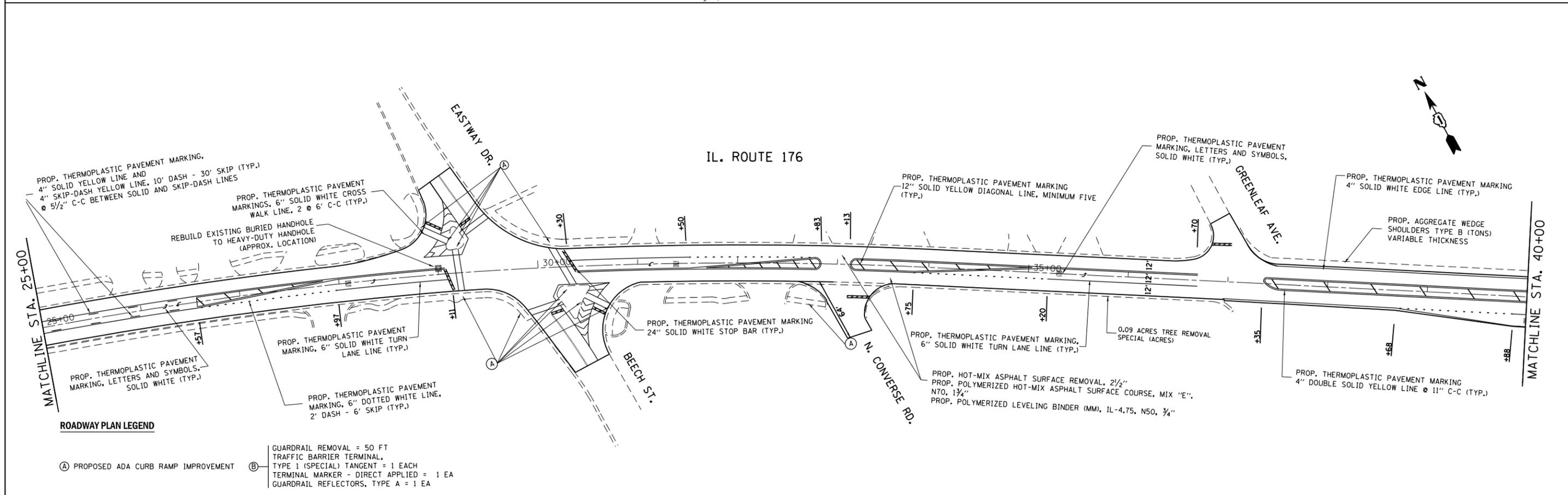
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	145RS&T-4	LAKE	42	9
CONTRACT NO. 60Y83				
ILLINOIS FED. AID PROJECT				



**ROADWAY PLAN LEGEND**

- (A) PROPOSED ADA CURB RAMP IMPROVEMENT
- (B) GUARDRAIL REMOVAL = 50 FT  
TRAFFIC BARRIER TERMINAL,  
TYPE 1 (SPECIAL) TANGENT = 1 EACH  
TERMINAL MARKER - DIRECT APPLIED = 1 EA  
GUARDRAIL REFLECTORS, TYPE A = 1 EA



**ROADWAY PLAN LEGEND**

- (A) PROPOSED ADA CURB RAMP IMPROVEMENT
- (B) GUARDRAIL REMOVAL = 50 FT  
TRAFFIC BARRIER TERMINAL,  
TYPE 1 (SPECIAL) TANGENT = 1 EACH  
TERMINAL MARKER - DIRECT APPLIED = 1 EA  
GUARDRAIL REFLECTORS, TYPE A = 1 EA

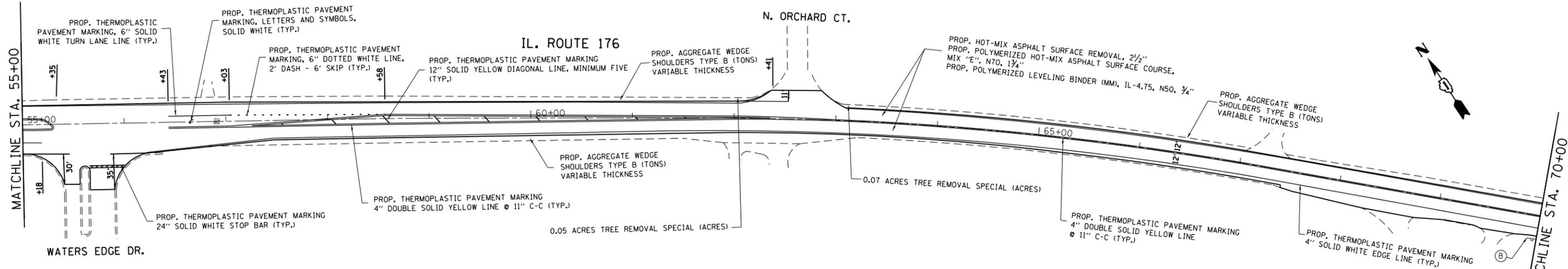
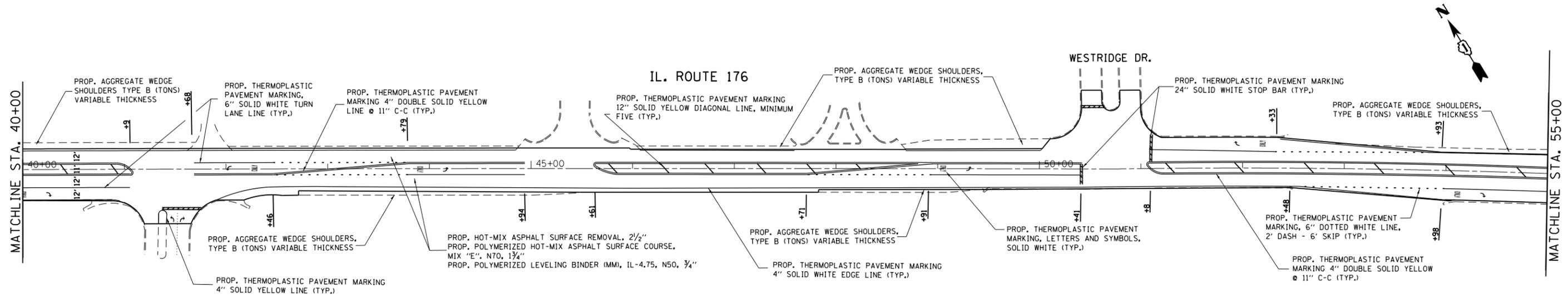
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	PLOT DATE = 2/1/2018	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**IL. ROUTE 176 (ROBERTS RD. TO WO US 12) AND AT RIDGE ST.  
ROADWAY AND PAVEMENT MARKING PLAN**

SCALE: 1"=50'    SHEET 1 OF 5 SHEETS    STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	145RS&T-4	LAKE	42	10
CONTRACT NO. 60Y83				
ILLINOIS FED. AID PROJECT				



**ROADWAY PLAN LEGEND**

- (A) PROPOSED ADA CURB RAMP IMPROVEMENT
- (B) GUARDRAIL REMOVAL = 50 FT TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT = 1 EACH TERMINAL MARKER - DIRECT APPLIED = 1 EA GUARDRAIL REFLECTORS, TYPE A = 1 EA

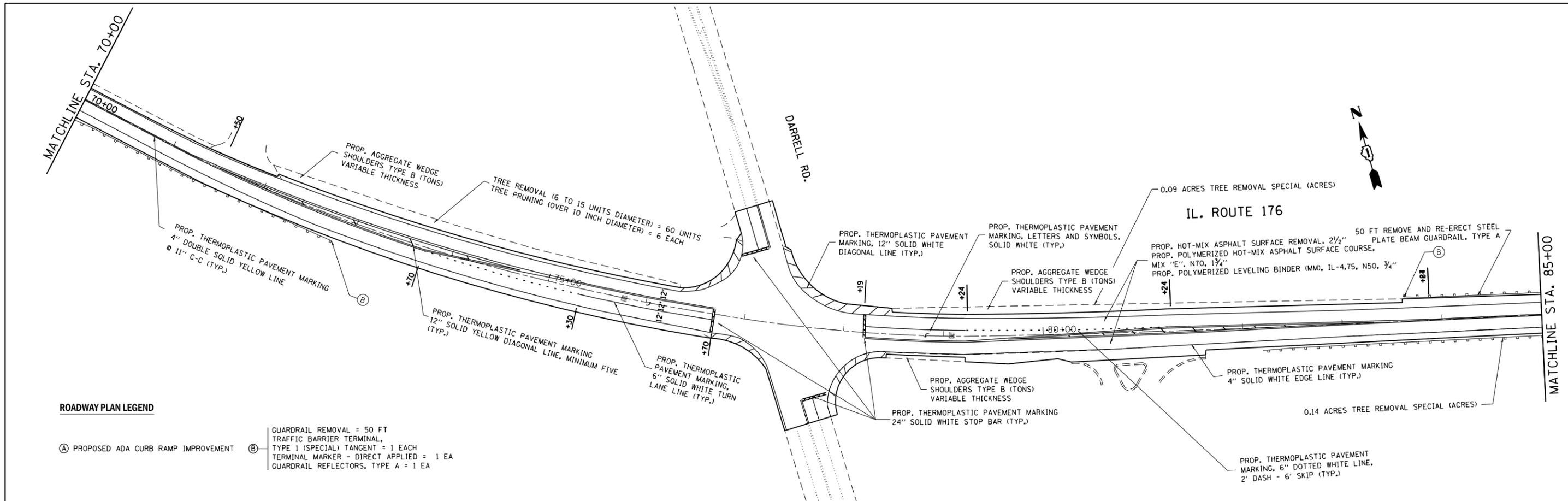
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		CHECKED -	REVISED -
Default	PLOT DATE = 2/1/2018	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**IL. ROUTE 176 (ROBERTS RD. TO WO US 12) AND AT RIDGE ST.  
ROADWAY AND PAVEMENT MARKING PLAN**

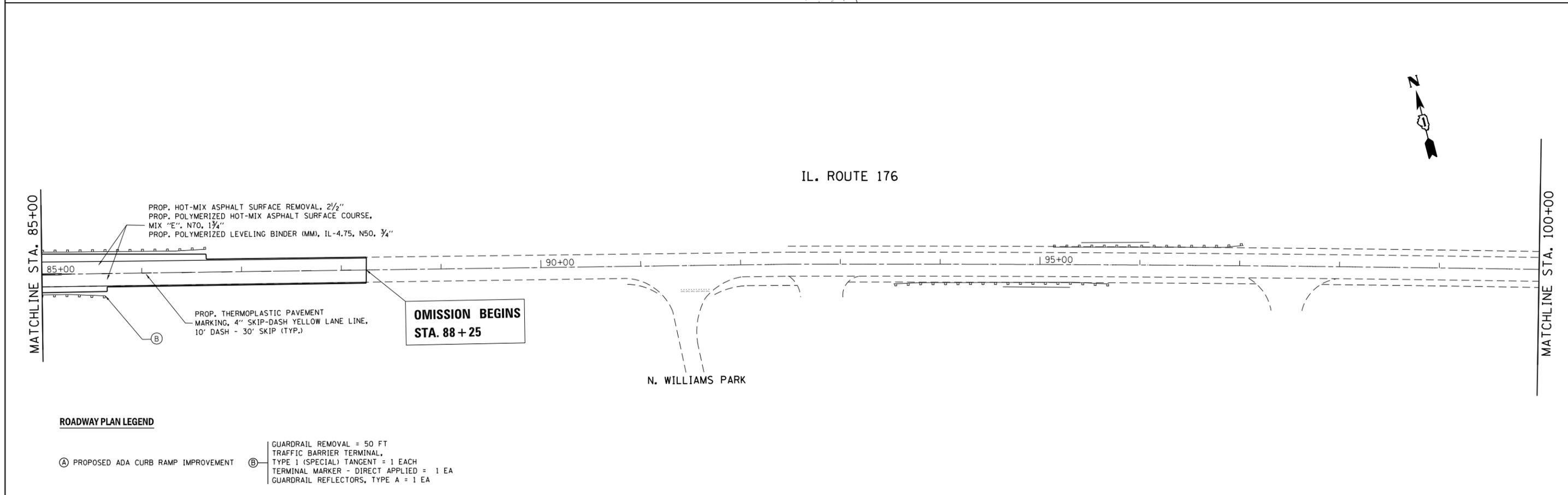
SCALE: 1"=50'    SHEET 2 OF 5 SHEETS    STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	145RS&T-4	LAKE	42	11
CONTRACT NO. 60Y83				
ILLINOIS FED. AID PROJECT				



**ROADWAY PLAN LEGEND**

- (A) PROPOSED ADA CURB RAMP IMPROVEMENT
- (B) GUARDRAIL REMOVAL = 50 FT  
TRAFFIC BARRIER TERMINAL,  
TYPE 1 (SPECIAL) TANGENT = 1 EACH  
TERMINAL MARKER - DIRECT APPLIED = 1 EA  
GUARDRAIL REFLECTORS, TYPE A = 1 EA



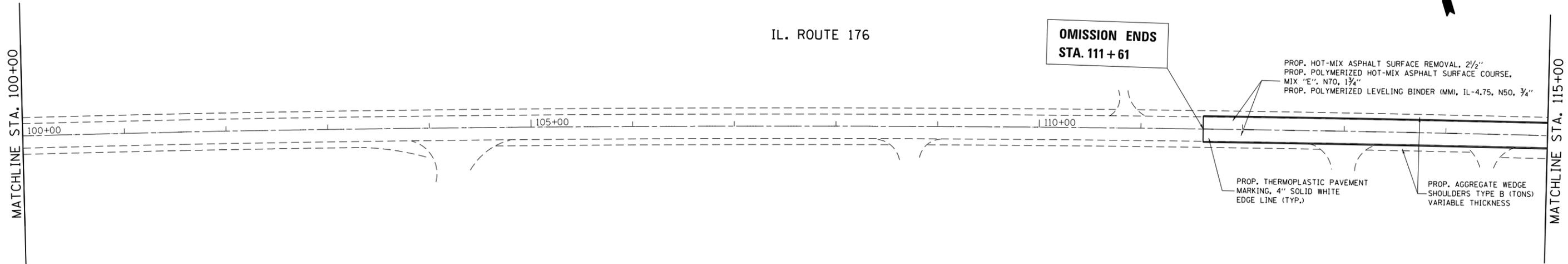
**ROADWAY PLAN LEGEND**

- (A) PROPOSED ADA CURB RAMP IMPROVEMENT
- (B) GUARDRAIL REMOVAL = 50 FT  
TRAFFIC BARRIER TERMINAL,  
TYPE 1 (SPECIAL) TANGENT = 1 EACH  
TERMINAL MARKER - DIRECT APPLIED = 1 EA  
GUARDRAIL REFLECTORS, TYPE A = 1 EA

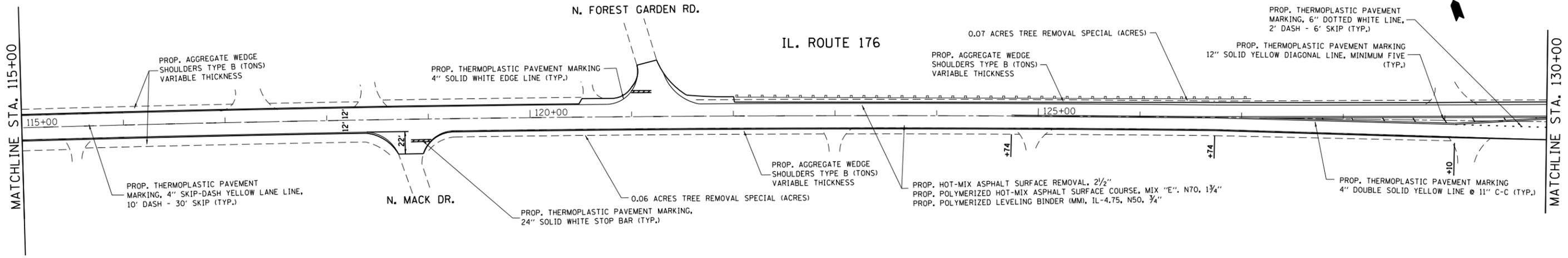
FILE NAME =	USER NAME = pencepl	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>IL. ROUTE 176 (ROBERTS RD. TO W/O US 12) AND AT RIDGE ST. ROADWAY AND PAVEMENT MARKING PLAN</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		DATE -	REVISED -			CONTRACT NO. 60Y83			ILLINOIS FED. AID PROJECT	

IL. ROUTE 176

OMISSION ENDS  
STA. 111+61



IL. ROUTE 176



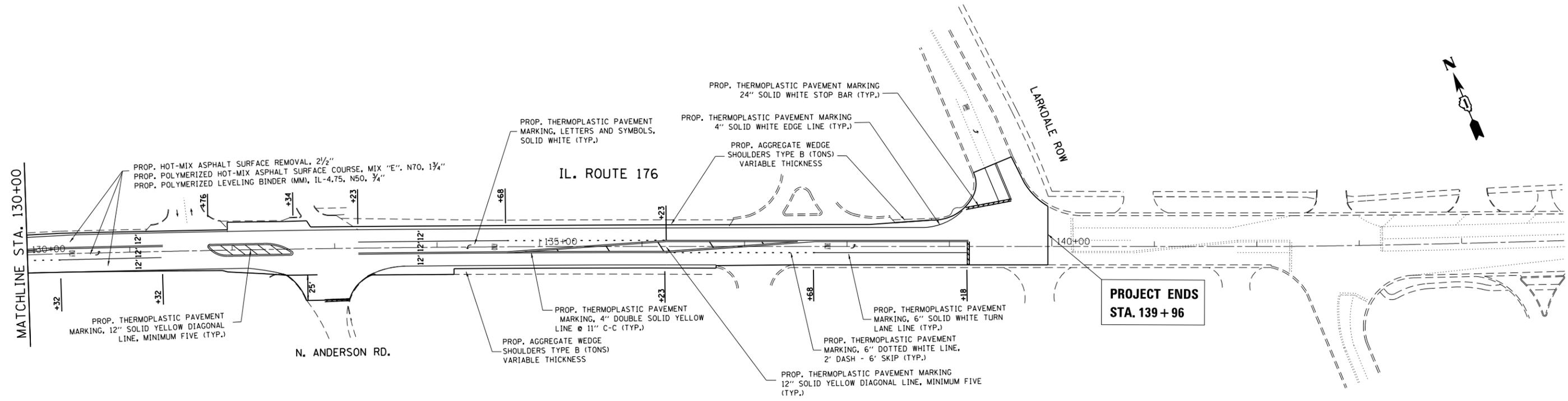
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Default	PLOT DATE = 2/1/2018	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

IL. ROUTE 176 (ROBERTS RD. TO WO US 12) AND AT RIDGE ST.  
ROADWAY AND PAVEMENT MARKING PLAN

SCALE: 1"=50' SHEET 4 OF 5 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	145RS&T-4	LAKE	42	13
CONTRACT NO. 60Y83				
ILLINOIS FED. AID PROJECT				



FILE NAME =	USER NAME = pencepl	DESIGNED -	REVISED -
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Default	PLOT DATE = 2/1/2018	DATE -	REVISED -

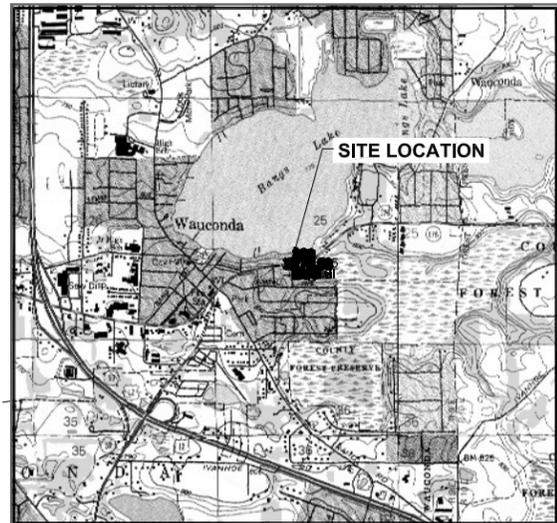
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**IL. ROUTE 176 (ROBERTS RD. TO W/O US 12) AND AT RIDGE ST.  
ROADWAY AND PAVEMENT MARKING PLAN**

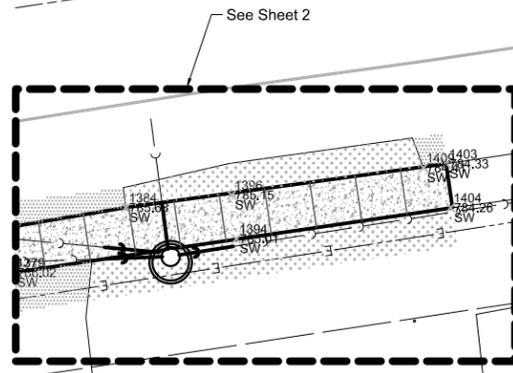
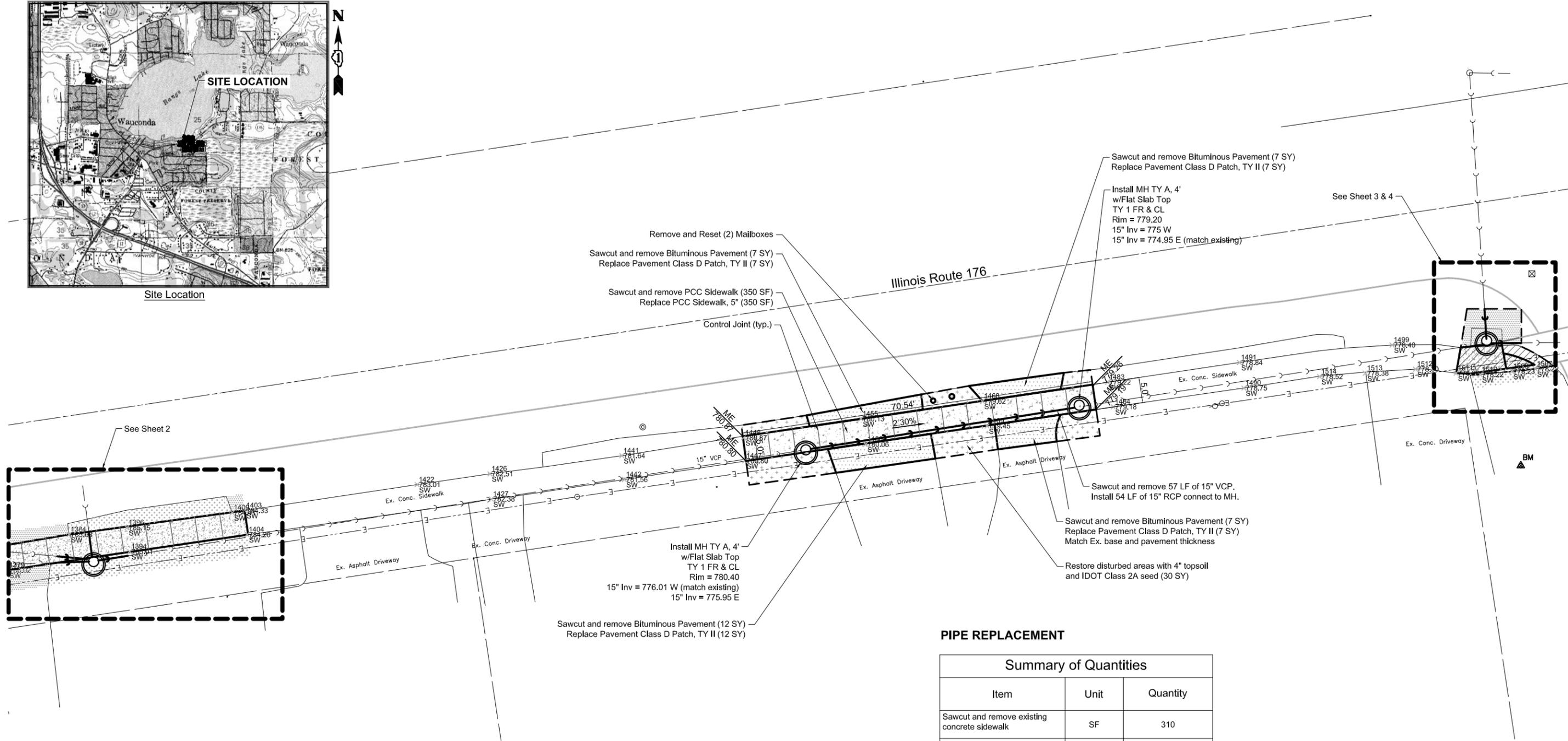
SCALE: 1"=50'    SHEET 5 OF 5 SHEETS    STA.    TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	145RS&T-4	LAKE	42	14
CONTRACT NO. 60Y83				
ILLINOIS FED. AID PROJECT				

I:\030004\09103 IDOT PFB152 No. 18 - Various-Various - District 1\09103AD Rte 176\_Ridge St. Cleaning Wauconda\09103AE Rte 176\_Ridge St. Wauconda\_2017-06-21.dwg, Plan Pipe Replacement, 8/30/2017 11:48:41 AM



Site Location



See Sheet 2

See Sheet 3 & 4

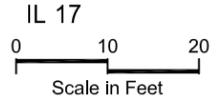
- Base Survey Information provided by:
- Hey and Associates, Inc.
  - IDOT District 1, Bureau of Programming provided ROW survey.
  - Benchmark: top of bolt located on sw corner of IL 176 & Ridge Street. Elevation 780.27 NAVD 88

- IDOT ROW
- E— Existing Overhead Electrical Wires
- >->- Existing Storm Sewer
- Proposed Storm Sewer
- ⊙ Sanitary
- ⊠ Water Valve
- ⚠ Site Benchmark

**PIPE REPLACEMENT**

Summary of Quantities		
Item	Unit	Quantity
Sawcut and remove existing concrete sidewalk	SF	310
Sawcut and remove existing bituminous pavement	SY	33
Sawcut and remove 15" VCP Storm Sewer	LF	57
Trench Backfill	CY	23
Roadway Pavement, Class D Patch, TY II	SY	33
PCC Sidewalk, 5"	SF	310
15" RCP Storm Sewer	LF	54
MH TY A, 4' w/Flat Slab Top, TY 1 FR & CL	EA	2
Landscape Restoration	SY	30

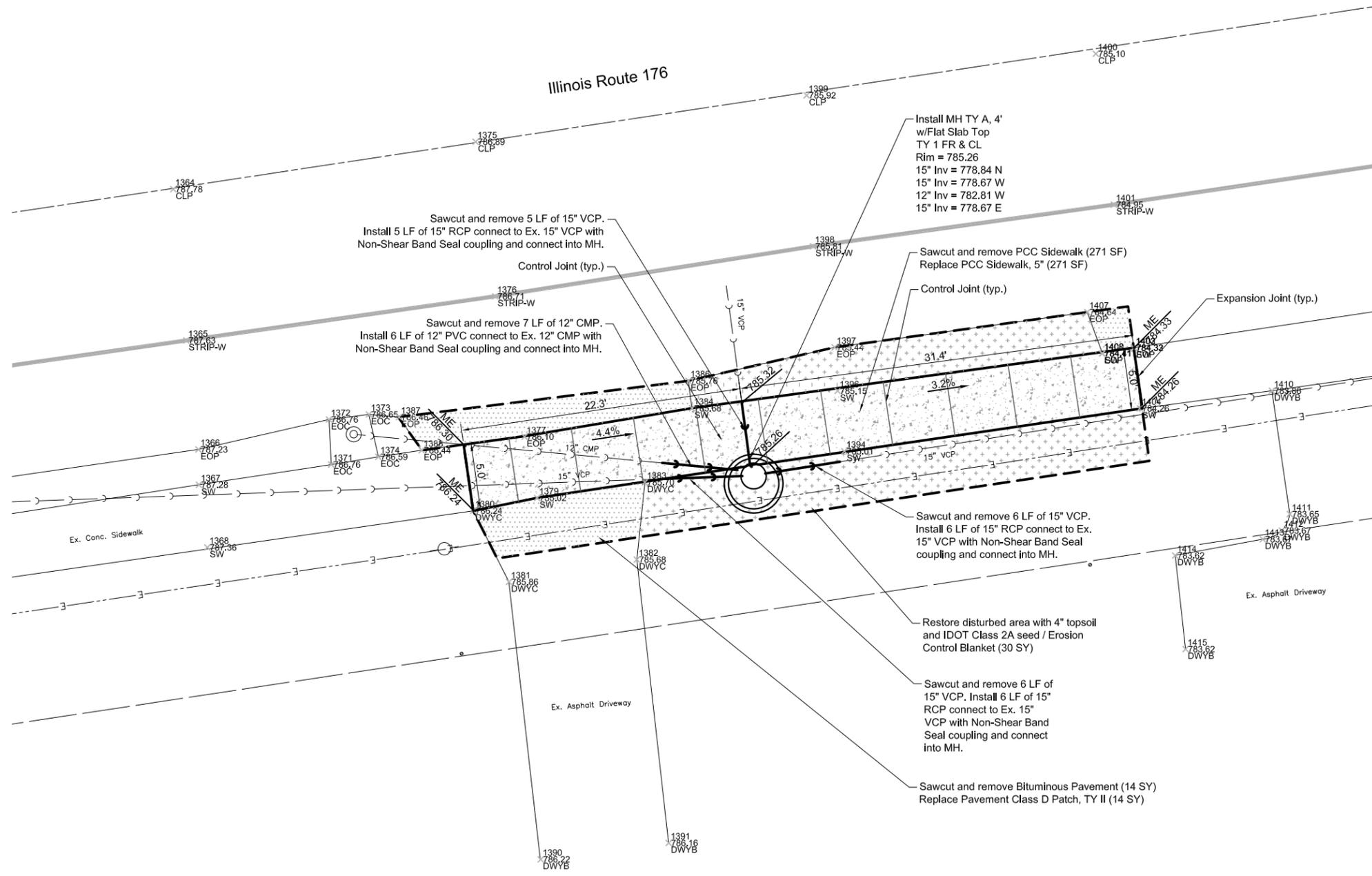
Note: Contractor shall verify all elevations prior to commencing construction



CALL J.U.L.I.E. 1-800-892-0123  
WITH THE FOLLOWING:  
COUNTY Lake  
CITY OR TOWNSHIP Wauconda  
TIER, RANGE, & SECTION T44N R9E Sec 25  
48 Hours Before Start of Construction

THE INFORMATION SHOWN ON THIS DRAWING CONCERNING TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATIONS AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.

Hey and Associates, Inc. Engineering Ecology and Landscape Architecture 26575 WEST COMMERCE DRIVE, SUITE 601 Volo, ILLINOIS 60073 OFFICE (847) 740-0888 FAX (847) 740-2888 VOLO@HEYASSOC.COM	USER NAME =	DESIGNED - NAJ/NRS	REVISED - 11-30-2016	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>IL. ROUTE 176 AT RIDGE ST DRAINAGE IMPROVEMENT PLAN</b>	F.A.P. RTE. = 335	SECTION = 145RS&T-4	COUNTY = LAKE	TOTAL SHEETS = 42	SHEET NO. = 15
	PLOT SCALE =	DRAWN - CFR/NAJ/NRS	REVISED - 01-25-2017			SCALE: 1"=10'	SHEET NO. 1 OF 6 SHEETS	STA. TO STA.	CONTRACT NO. 60Y83	
	PLOT DATE =	DATE - 11-21-2013	REVISED - 04-07-2017 / 06-21-2017							



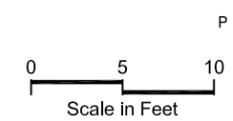
**UPSTREAM MANHOLE**

Summary of Quantities		
Item	Unit	Quantity
Sawcut and remove existing concrete sidewalk	SF	271
Sawcut and remove existing bituminous pavement	SY	14
Sawcut and remove 15" VCP Storm Sewer	LF	17
Sawcut and Remove 12" CMP Storm Sewer	LF	7
Trench Backfill	CY	24
Landscape Restoration	SY	30
PCC Sidewalk, 5"	SF	271
Roadway Pavement, Class D Patch, TY II	SY	14
15" RCP Storm Sewer (Includes Band Seal Coupling)	LF	17
12" PVC Storm Sewer (Includes Band Seal Coupling)	LF	6
MH TY A, 4' w/Flat Slab Top, TY 1 FR & CL	EA	1

Note: Contractor shall verify all elevations prior to commencing construction

- IDOT ROW
- - - - Existing Overhead Electrical Wires
- - - - Existing Storm Sewer
- → → Proposed Storm Sewer
- ⊙ Sanitary
- ⊠ Water Valve

- Base Survey Information provided by:
- Hey and Associates, Inc.
  - IDOT District 1, Bureau of Programming provided ROW survey.
  - Benchmark: top of bolt located on sw corner of IL 176 & Ridge Street. Elevation 780.27 NAVD 88



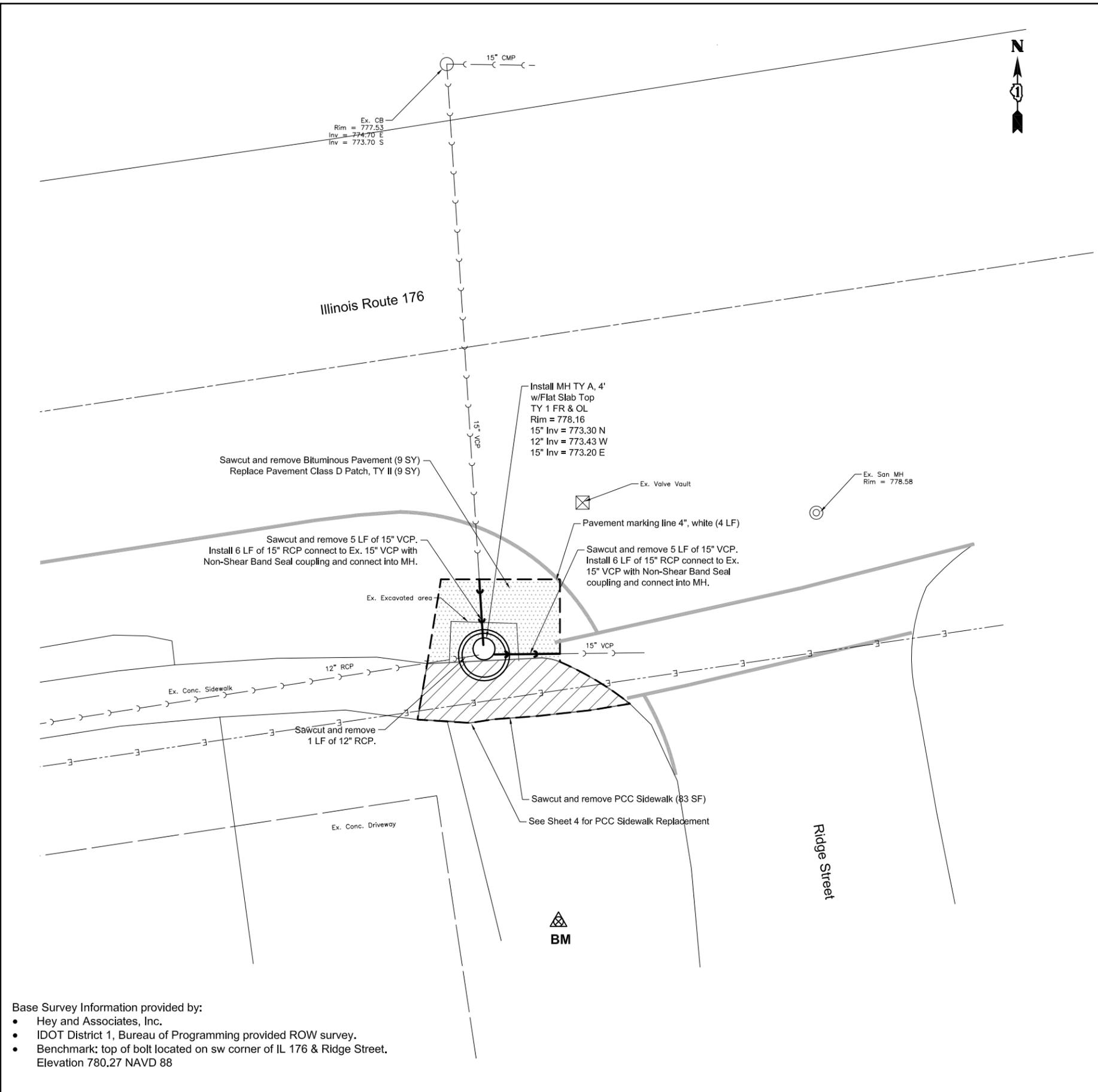
CALL J.U.L.I.E. 1-800-892-0123  
 WITH THE FOLLOWING:  
 COUNTY \_\_\_\_\_  
 CITY OR TOWNSHIP \_\_\_\_\_  
 TIER, RANGE, & SECTION \_\_\_\_\_  
 48 Hours Before Start of Construction

THE INFORMATION SHOWN ON THIS DRAWING CONCERNING TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATIONS AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.

I:\030004\09103 IDOT PFB152 No. 18 - Various-Variou - District 1\09103AD Rte 176\_Ridge St\_Cleaning Wauconda\09103AE Rte 176\_Ridge St\_Wauconda\_2017-06-21.dwg\_Plan Upstream\_8/30/2017 11:50:51 AM

Hey and Associates, Inc. Engineering Ecology and Landscape Architecture 26575 WEST COMMERCE DRIVE, SUITE 601 Volo, ILLINOIS 60073 OFFICE (847) 740-0888 FAX (847) 740-2888 VOL@HEYASSOC.COM	USER NAME =	DESIGNED - NAJ/NRS	REVISED - 11-30-2016	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>IL. ROUTE 176 AT RIDGE ST</b> <b>DRAINAGE IMPROVEMENT PLAN</b>	F.A.P. RTE. =	SECTION =	COUNTY =	TOTAL SHEETS =	SHEET NO. =
	PLOT SCALE =	DRAWN - CFR/NAJ/NRS	REVISED - 12-28-2016			335	145RS&T-4	LAKE	42	16
PLOT DATE =	DATE - 11-21-2013	REVISED - 01-25-2017	REVISED - 04-07-2017 / 06-21-2017	SCALE: 1"=5'		SHEET NO. 2 OF 6 SHEETS		STA. TO STA.		CONTRACT NO. 60Y83
ILLINOIS FED. AID PROJECT										

I:\030004\09103 IDOT PFB152 No. 18 - Various-Variou - District 1\09103AD Rte 176\_Ridge St\_Cleaning Wauconda\09103AE Rte 176\_Ridge St\_Wauconda\_2017-06-21.dwg, Plan Downstream, 8/30/2017 11:51:35 AM

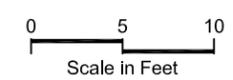


**DOWNSTREAM MANHOLE**

Summary of Quantities		
Item	Unit	Quantity
Sawcut and remove existing concrete sidewalk	SF	83
Sawcut and remove existing roadway pavement	SY	9
Sawcut and remove 15" VCP Storm Sewer	LF	10
Sawcut and Remove 12" RCP Storm Sewer	LF	1
Trench Backfill	CY	15
Roadway Pavement, Class D Patch, TY II	SY	9
15" RCP Storm Sewer (Includes Band Seal Coupling)	LF	12
Paint Pavement Marking - Line 4", white	LF	4
MH TY A, 4' w/Flat Slab Top, TY 1 FR & OL	EA	1

Note: Contractor shall verify all elevations prior to commencing construction

- IDOT ROW
- - - - Existing Overhead Electrical Wires
- - - - Existing Storm Sewer
- → → Proposed Storm Sewer
- ⊙ Sanitary
- ⊠ Water Valve
- ▲ Site Benchmark



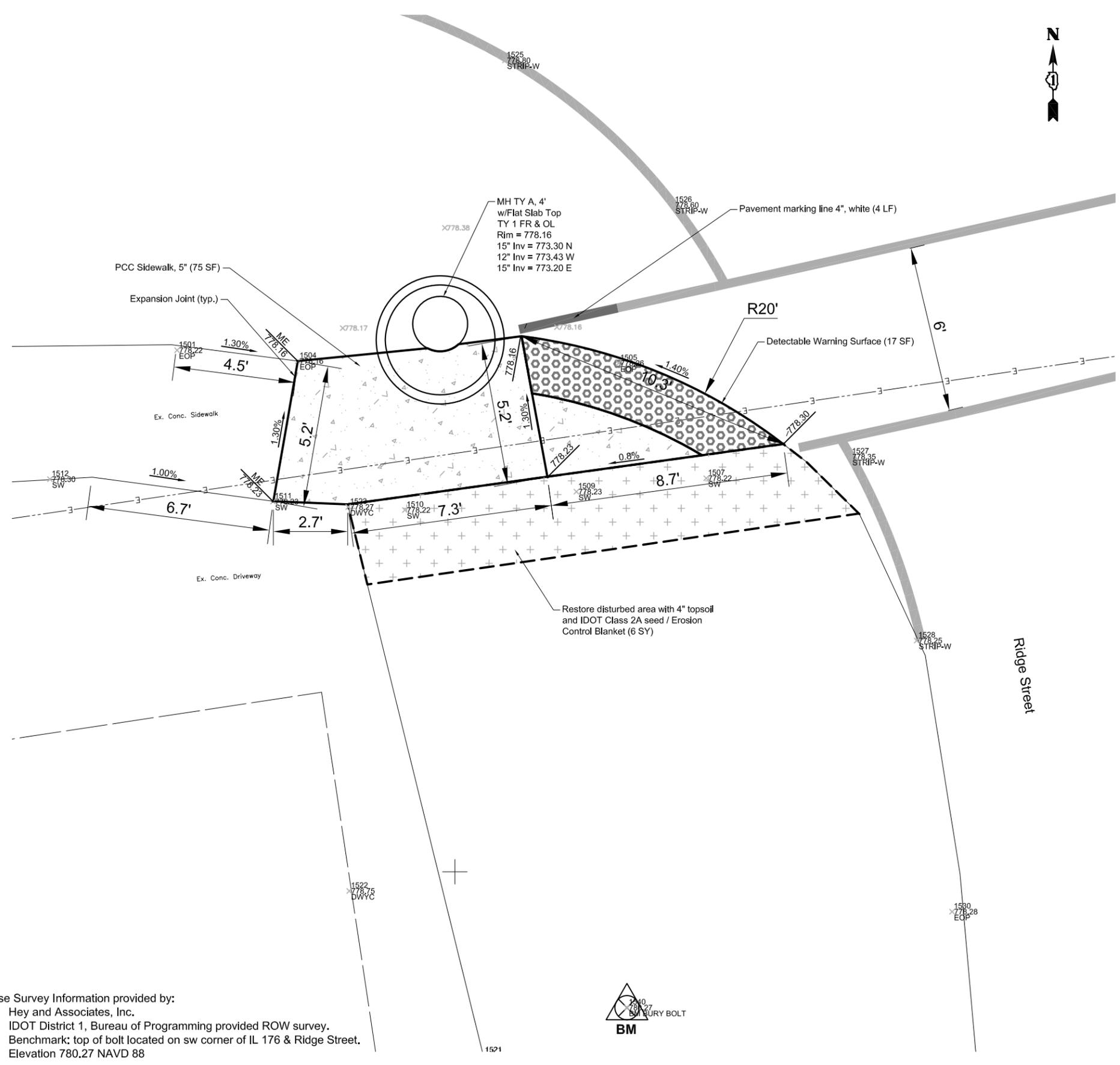
CALL J.U.L.I.E. 1-800-892-0123  
 WITH THE FOLLOWING:  
 COUNTY \_\_\_\_\_  
 CITY OR TOWNSHIP \_\_\_\_\_  
 TIER, RANGE, & SECTION \_\_\_\_\_  
 48 Hours Before Start of Construction

THE INFORMATION SHOWN ON THIS DRAWING CONCERNING TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATIONS AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.

- Base Survey Information provided by:
- Hey and Associates, Inc.
  - IDOT District 1, Bureau of Programming provided ROW survey.
  - Benchmark: top of bolt located on sw corner of IL 176 & Ridge Street. Elevation 780.27 NAVD 88

Hey and Associates, Inc. <small>Engineering, Ecology and Landscape Architecture          26575 WEST COMMERCE DRIVE, SUITE 601          VOLVO, ILLINOIS 60073          OFFICE (847) 740-1888          FAX (847) 740-2888          VOL@HEYASSOC.COM</small>	USER NAME =	DESIGNED - NAJ/NRS	REVISED - 11-30-2016	<b>STATE OF ILLINOIS          DEPARTMENT OF TRANSPORTATION</b>	<b>IL. ROUTE 176 AT RIDGE ST          DRAINAGE IMPROVEMENT PLAN</b>	F.A.P. RTE. =	SECTION =	COUNTY =	TOTAL SHEETS =	SHEET NO. =
		CHECKED -	REVISED - 12-28-2016				335	145RS&T-4	LAKE	42
	PLOT SCALE =	DRAWN - CFR/NAJ/NRS	REVISED - 01-25-2017	SCALE: 1"=5'		SHEET NO. 3 OF 6 SHEETS		STA. TO STA.		CONTRACT NO. 60Y83
	PLOT DATE =	DATE - 11-21-2013	REVISED - 04-07-2017 / 06-21-2017	ILLINOIS FED. AID PROJECT						

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**SIDEWALK REPLACEMENT**

Summary of Quantities		
Item	Unit	Quantity
PCC Sidewalk, 5"	SF	75
Paint Pavement Marking - Line 4", white	LF	4
Detectable Warning Surface	SF	17
Landscape Restoration	SY	6

Note: Contractor shall verify all elevations prior to commencing construction

- IDOT ROW
- Existing Overhead Electrical Wires
- ⊙ Sanitary
- ⊠ Water Valve
- ▲ Site Benchmark

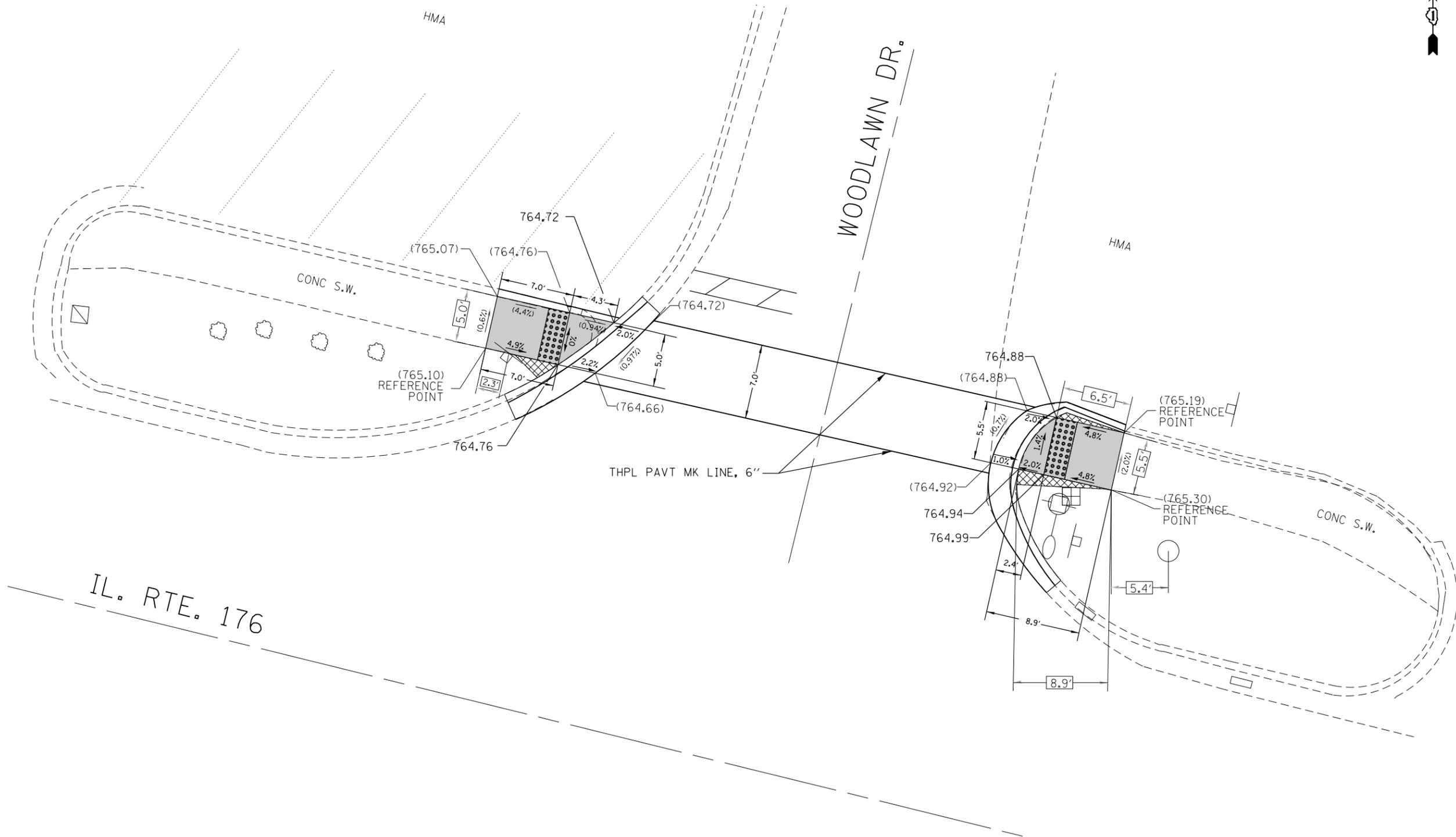
- Base Survey Information provided by:
- Hey and Associates, Inc.
  - IDOT District 1, Bureau of Programming provided ROW survey.
  - Benchmark: top of bolt located on sw corner of IL 176 & Ridge Street. Elevation 780.27 NAVD 88



CALL J.U.L.I.E. 1-800-892-0123  
 WITH THE FOLLOWING:  
 COUNTY Lake  
 CITY OR TOWNSHIP Wauconda  
 TIER, RANGE, & SECTION T44N R9E Sec 25  
**48 Hours Before Start of Construction**

THE INFORMATION SHOWN ON THIS DRAWING CONCERNING TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATIONS AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.

Hey and Associates, Inc. Engineering Ecology and Landscape Architects 26575 WEST COMMERCE DRIVE, SUITE 601 Volo, Illinois 60073 OFFICE (847) 740-1888 FAX (847) 740-2888 VOL@HEYASSOC.COM	USER NAME =	DESIGNED - NAJ/NRS	REVISED - 11-30-2016	<b>STATE OF ILLINOIS                  DEPARTMENT OF TRANSPORTATION</b>	<b>IL. ROUTE 176 AT RIDGE ST                  DRAINAGE IMPROVEMENT PLAN</b>	F.A.P. RTE. = 335	SECTION = 145RS&T-4	COUNTY = LAKE	TOTAL SHEETS = 42	SHEET NO. = 18
	PLOT SCALE =	CHECKED -	REVISED - 12-28-2016			SCALE: 1"=2'	SHEET NO. 4 OF 6 SHEETS	STA. TO STA.	CONTRACT NO. 60Y83	
	PLOT DATE =	DRAWN - CFR/NAJ/NRS	REVISED - 01-25-2017							
		DATE - 11-21-2013	REVISED - 04-07-2017 / 06-21-2017							



REFERENCE BENCHMARK ELEV 766.92  
 BENCHMARK : TOP OF THE FIRE HYDRANT  
 LOCATION : 190 FT WEST OF WOODLAWN DR, SOUTH SIDE OF IL 176

LEGEND	
xx.xx'	EXISTING LENGTH
====	PROPOSED SIDE CURB
( )	EXISTING ELEVATION/SLOPE
■	PROPOSED SIDEWALK
□	DETECTABLE WARNINGS
▣	SIDEWALK REMOVAL REPLACE W/TOPSOIL & SOD

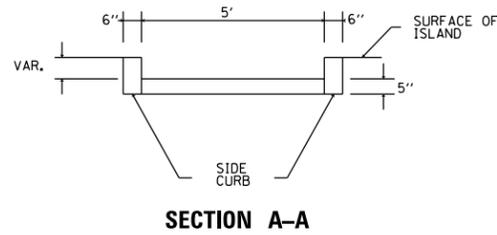
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p:\IL\084EBIDINTEG\illinois.gov\PIWIDOT\Documents\IDOT Offices\District 1\Projects\DI02715\Design\DI02715-sht-details.dgn		REVISED -	REVISED -
Default	PLOT SCALE = 10.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 2/1/2018	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

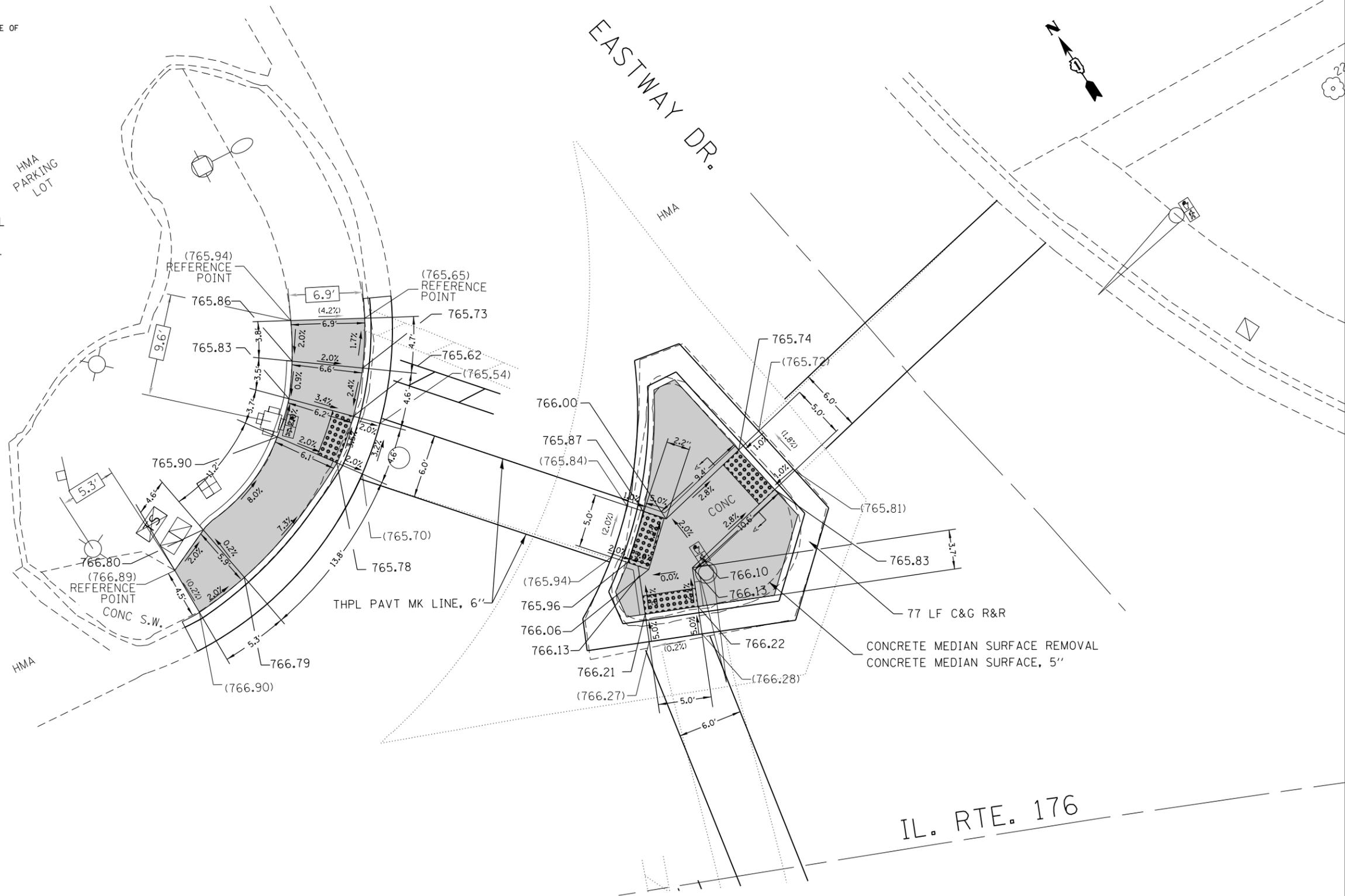
**IL. ROUTE 176 (ROBERTS RD TO W/O US 12) AND AT RIDGE ST.  
 SIDEWALK DETAIL PLAN**

SCALE:      SHEET      OF      SHEETS      STA.      TO      STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	145RS&T-4	LAKE	42	19
CONTRACT NO. 60Y83				
ILLINOIS FED. AID PROJECT				



NOTE: EXISTING CONCRETE MEDIAN SURFACE SHALL BE COMPLETELY REMOVED AND REPLACED WITH CONCRETE MEDIAN SURFACE, 5". SIDE CURB SHALL BE INCLUDED IN THE COST OF CONCRETE MEDIAN SURFACE, 5".



REFERENCE BENCHMARK ELEV 766.87  
 BENCHMARK : SOUTHWEST BOLT OF FIRE HYDRANT  
 LOCATION : SOUTHEAST CORNER OF IL 176 AND EASTWAY DR

LEGEND	
xx.xx'	EXISTING LENGTH
==	PROPOSED SIDE CURB
( )	EXISTING ELEVATION/SLOPE
[Shaded Box]	PROPOSED SIDEWALK
[Dotted Box]	DETECTABLE WARNINGS
[Cross-hatched Box]	SIDEWALK REMOVAL REPLACE W/TOPSOIL & SOD

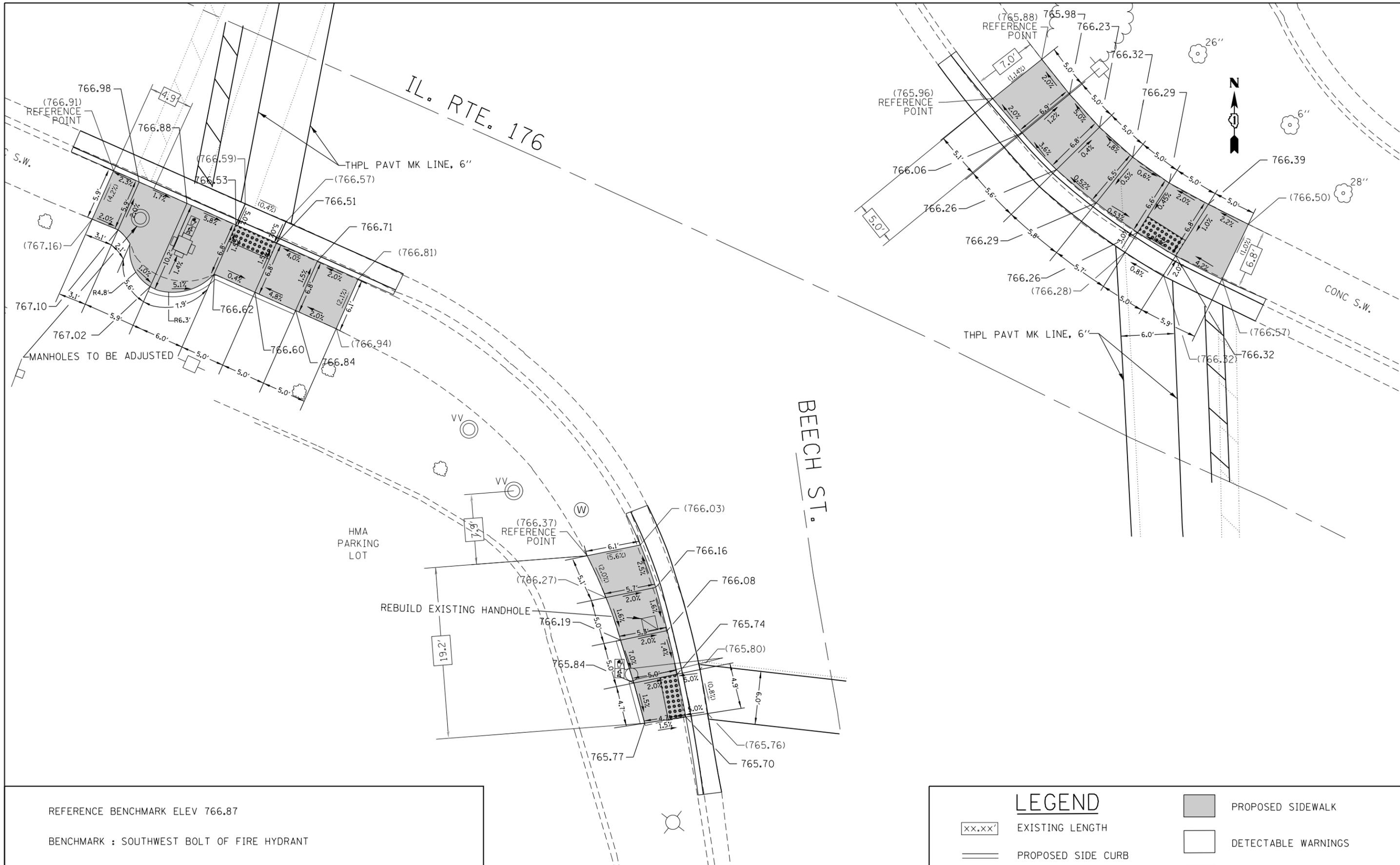
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Default	PLOT SCALE = 10.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 2/1/2018	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**IL. ROUTE 176 (ROBERTS RD TO W/O US 12) AND AT RIDGE ST.  
 SIDEWALK DETAIL PLAN**

SCALE:      SHEET      OF      SHEETS      STA.      TO      STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	145RS&T-4	LAKE	42	20
CONTRACT NO. 60Y83				
ILLINOIS FED. AID PROJECT				



REFERENCE BENCHMARK ELEV 766.87  
 BENCHMARK : SOUTHWEST BOLT OF FIRE HYDRANT  
 LOCATION : SOUTHEAST CORNER OF IL 176 AND EASTWAY DR

**LEGEND**

<span style="border: 1px solid black; padding: 2px;">xx.xx'</span>	EXISTING LENGTH	<span style="display: inline-block; width: 20px; height: 10px; background-color: #cccccc; border: 1px solid black;"></span>	PROPOSED SIDEWALK
<span style="border-bottom: 2px solid black; width: 20px; display: inline-block;"></span>	PROPOSED SIDE CURB	<span style="display: inline-block; width: 20px; height: 10px; border: 1px solid black;"></span>	DETECTABLE WARNINGS
( )	EXISTING ELEVATION/SLOPE	<span style="display: inline-block; width: 20px; height: 10px; border: 1px solid black; background-image: linear-gradient(to right, transparent 49%, black 49% 51%, black 51% 53%, transparent 53%); background-size: 4px 4px;"></span>	SIDEWALK REMOVAL REPLACE W/TOPSOIL & SOD

FILE NAME =	USER NAME = pencepl	DESIGNED -	REVISED -
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	PLOT DATE = 2/1/2018	DATE -	REVISED -

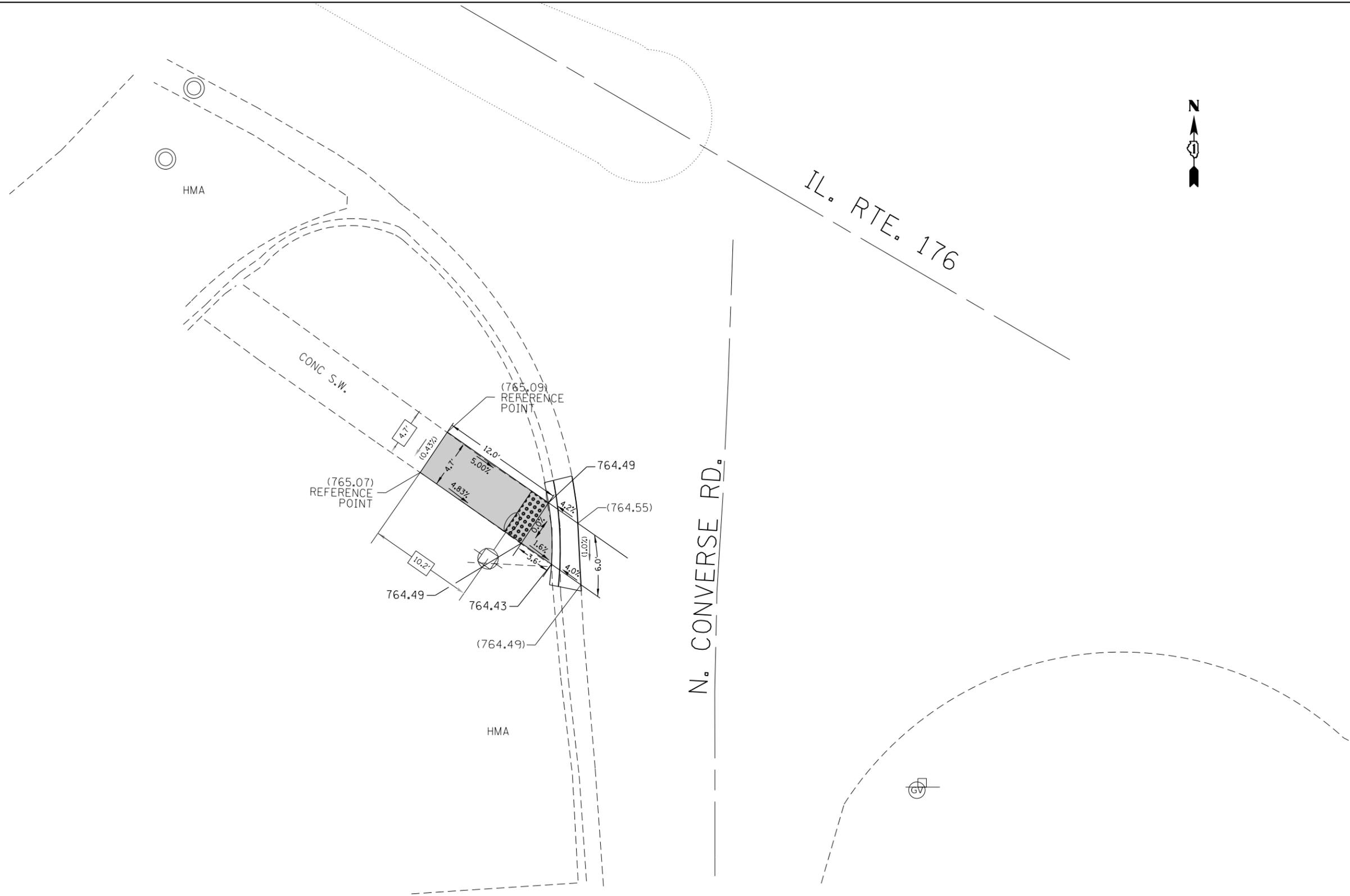
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**IL. ROUTE 176 (ROBERTS RD TO W/O US 12) AND AT RIDGE ST.  
 SIDEWALK DETAIL PLAN**

SCALE:      SHEET      OF      SHEETS      STA.      TO      STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	145RS&T-4	LAKE	42	21
CONTRACT NO. 60Y83				
ILLINOIS FED. AID PROJECT				





REFERENCE BENCHMARK ELEV 766.87  
 BENCHMARK : SOUTHWEST BOLT OF FIRE HYDRANT  
 LOCATION : SOUTHEAST CORNER OF IL 176 AND EASTWAY DR

**LEGEND**

- xx.xx' EXISTING LENGTH
- PROPOSED SIDE CURB
- ( ) EXISTING ELEVATION/SLOPE
- PROPOSED SIDEWALK
- DETECTABLE WARNINGS
- SIDEWALK REMOVAL  
REPLACE W/TOPSOIL & SOD

FILE NAME =	USER NAME = pencepl	DESIGNED -	REVISED -
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Default	PLOT SCALE = 10.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 2/1/2018	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

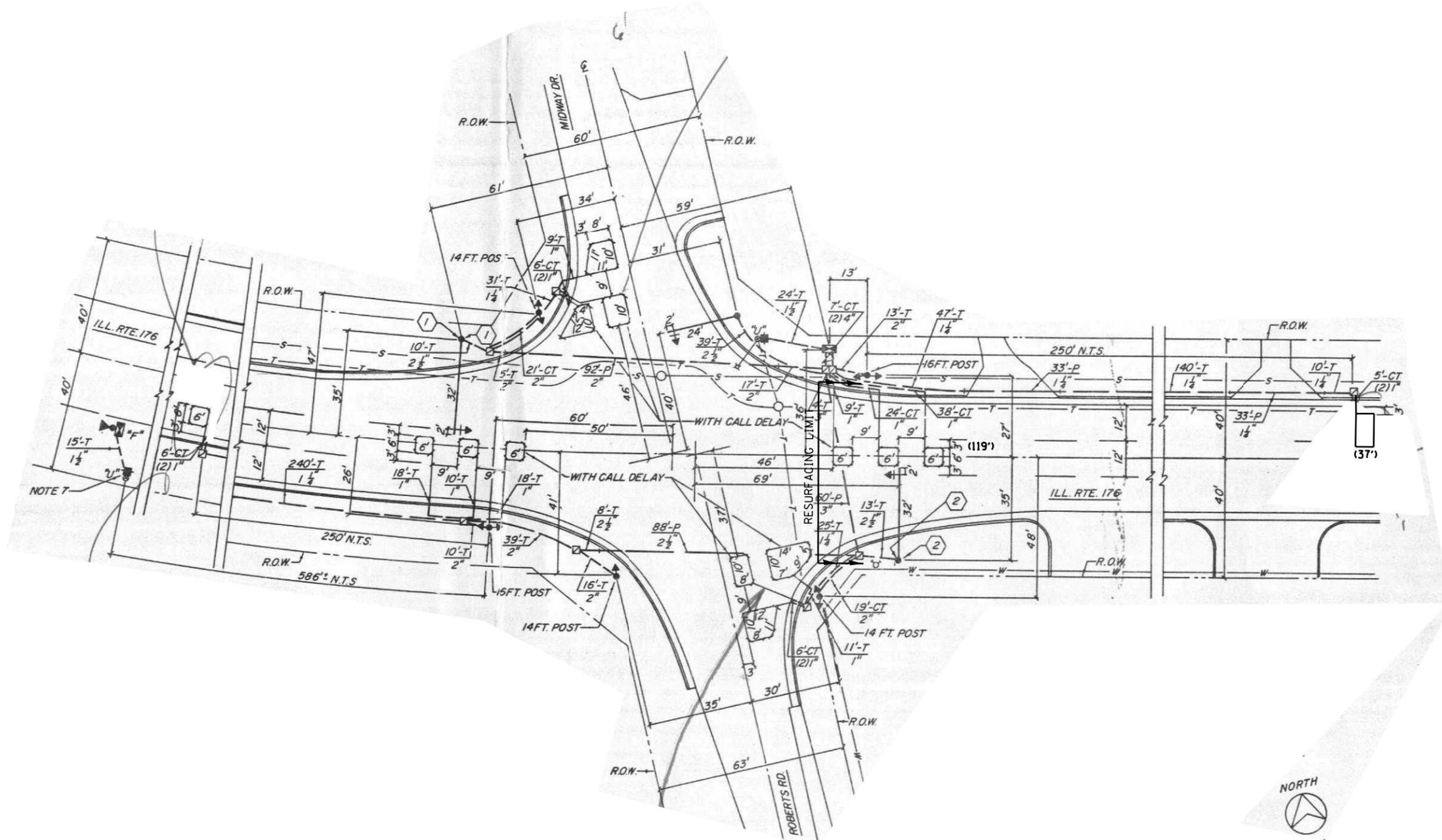
**IL. ROUTE 176 (ROBERTS RD TO W/O US 12) AND AT RIDGE ST.  
SIDEWALK DETAIL PLAN**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	145RS&T-4	LAKE	42	23
CONTRACT NO. 60Y83				
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.



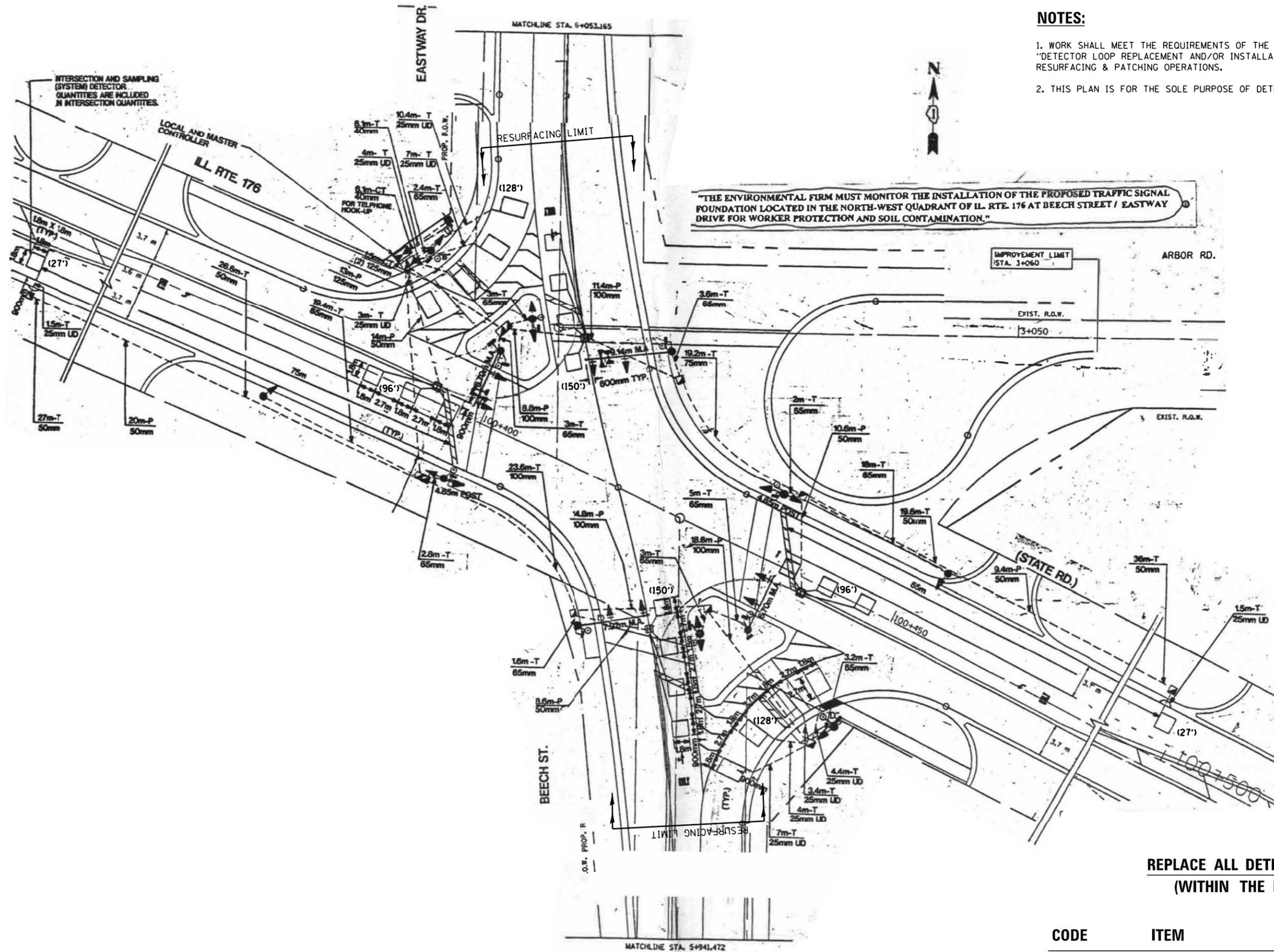
**REPLACE ALL DETECTOR LOOPS AS SHOWN  
(WITHIN THE RESURFACING LIMITS)**

CODE	ITEM	QUANTITY	UNIT
88600600	DETECTOR LOOP REPLACEMENT	156	FOOT

FILE NAME =	USER NAME = nguyensm	DESIGNED - SN	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DETECTOR LOOP REPLACEMENT PLAN IL ROUTE 176 AT ROBERTS RD/MIDWAY DR.</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
S:\WP\Design\SN\B. of Design - Detector	Loops Replacement - Resurfacing project -	DRAWN - ADA	REVISIONS - IL-176 @ Roberts Rd.dgn			335	145RS&T-4	LAKE	42	24	
Default	PLOT SCALE = 40.0000' / in.	CHECKED - SN	REVISED -			<b>CONTRACT NO. 60Y83</b>					
	PLOT DATE = 7/28/2017	DATE - 07/17/2017	REVISED -			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	802	FOOT

FILE NAME =	USER NAME = nguyensm	DESIGNED - SN	REVISED -
S:\WP\Design\SN\B.of Design - Detector	Loops Replacement - Resurfacing project -	DRAWN - ADA\DA\DA\DA\2017\60Y83\CADD	REVISED IL 176 @ Beech St-Eastway Dr-chn
Default	PLOT SCALE = 40.0000' / in.	CHECKED - SN	REVISED -
	PLOT DATE = 7/17/2017	DATE - 07/17/2017	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DETECTOR LOOP REPLACEMENT PLAN  
IL ROUTE 176 AT EASTWAY DR/BEECH ST.**

SCALE: \_\_\_\_\_ SHEET \_\_\_\_\_ OF \_\_\_\_\_ SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

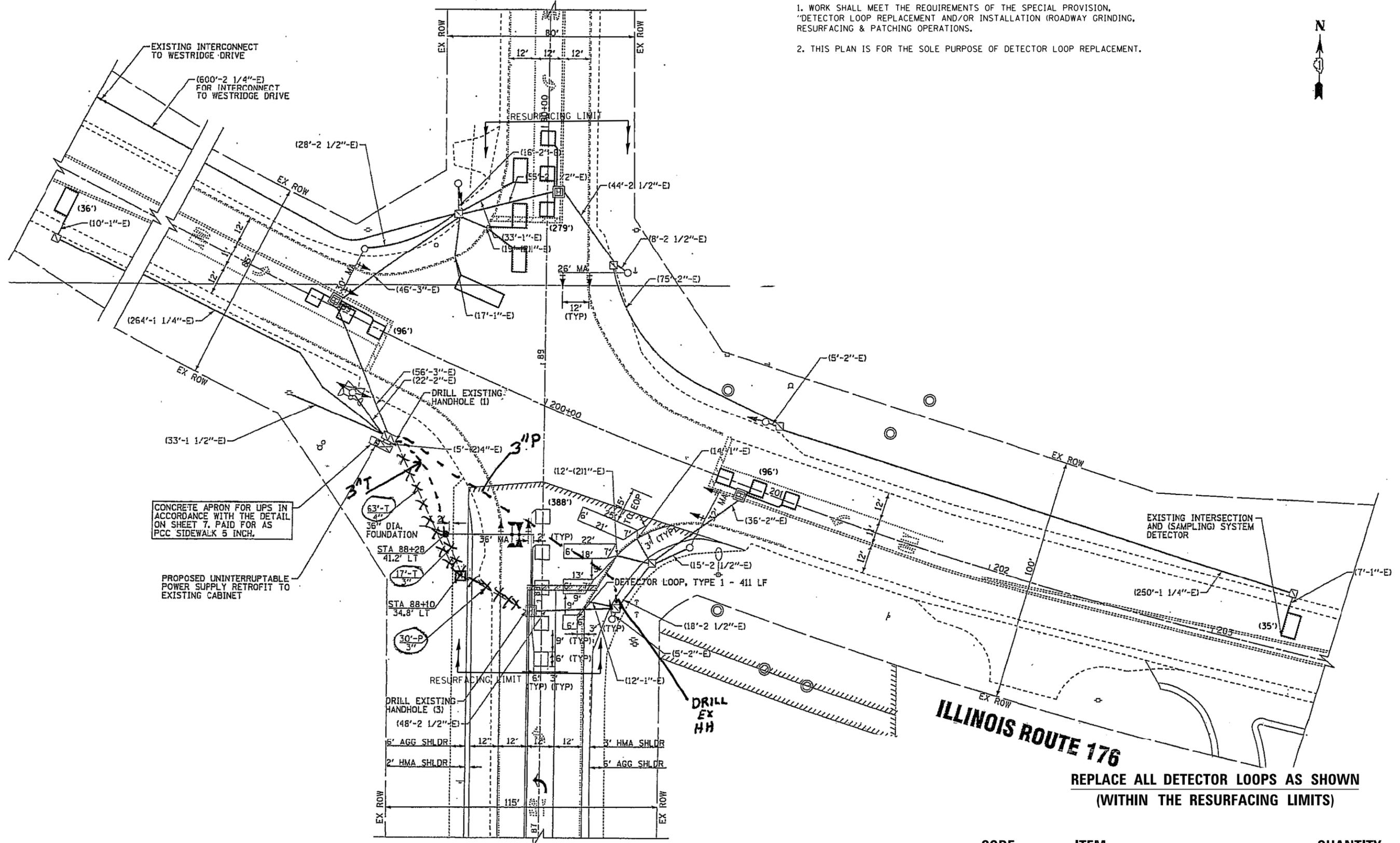
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	145RS&T-4	LAKE	42	25
CONTRACT NO. 60Y83				
ILLINOIS FED. AID PROJECT				



# DARRELL ROAD

## 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.



CONCRETE APRON FOR UPS IN ACCORDANCE WITH THE DETAIL ON SHEET 7, PAID FOR AS PCC SIDEWALK 5 INCH.

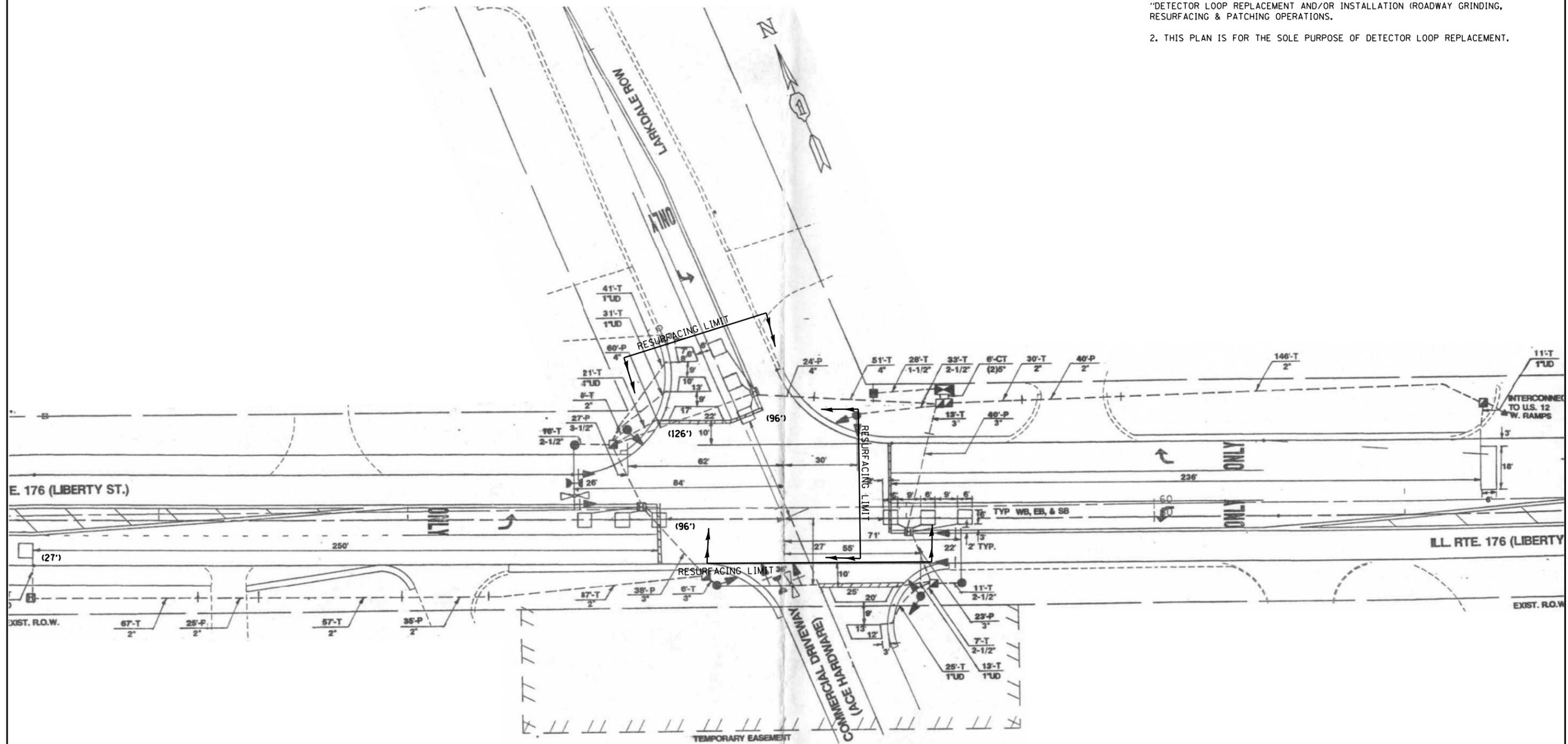
PROPOSED UNINTERRUPTIBLE POWER SUPPLY RETROFIT TO EXISTING CABINET

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

CODE	ITEM	QUANTITY	UNIT
88600600	DETECTOR LOOP REPLACEMENT	930	FOOT

**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	345	FOOT

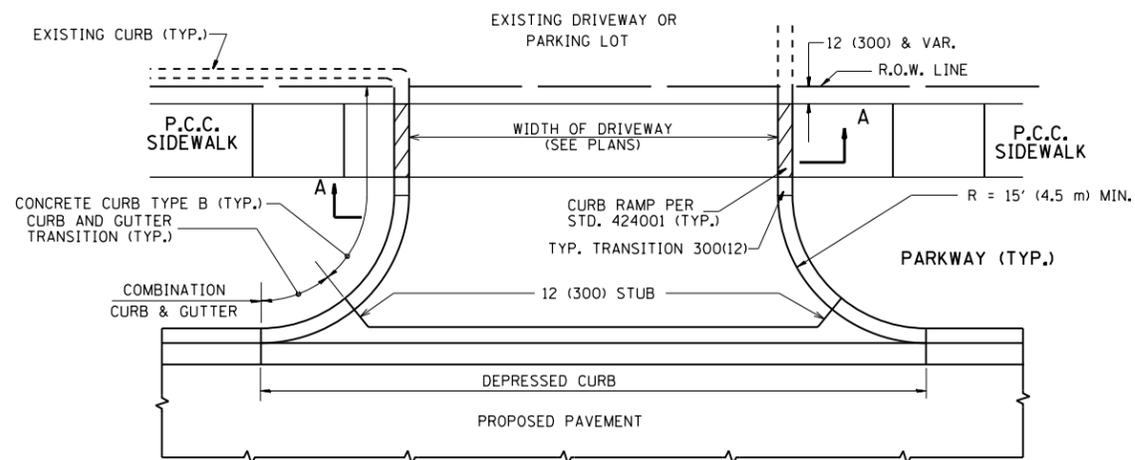
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S:\WP\Design\SN\B. of Design - Detector	Loops Replacement - Resurfacing project -	DRAWN - ADA\DA\DA\2017\60Y83\CADD	REVISED IL 176 @ Larkdale.dgn
Default	PLOT SCALE = 40.0000' / in.	CHECKED - SN	REVISED -
	PLOT DATE = 7/28/2017	DATE - 07/17/2017	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

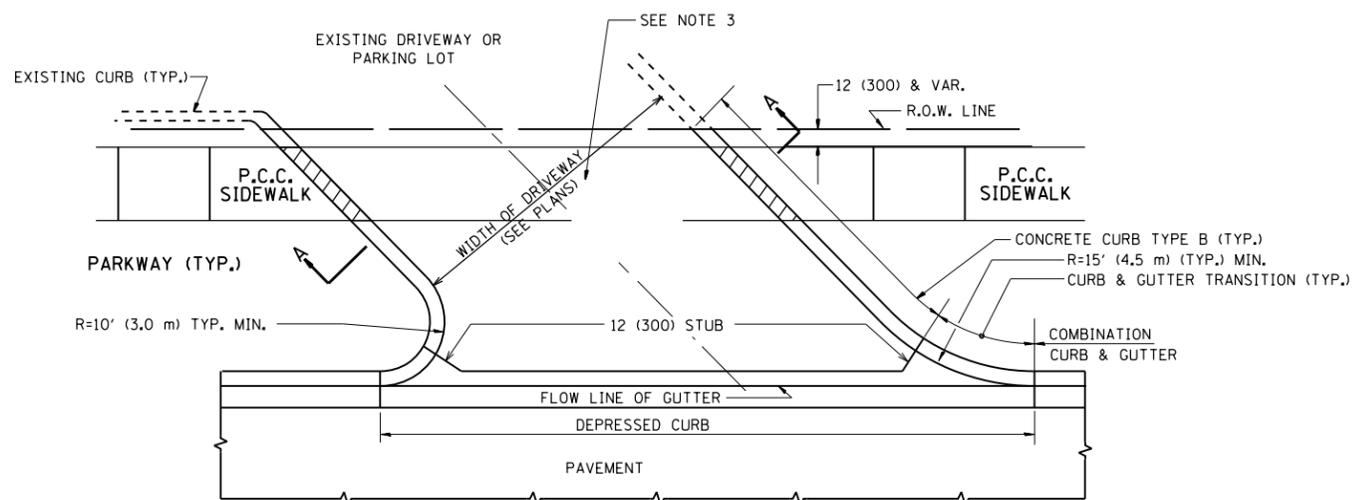
**DETECTOR LOOP REPLACEMENT PLAN  
IL ROUTE 176 AT LARKDALE ROW**

SCALE: SHEET OF SHEETS STA. TO STA.

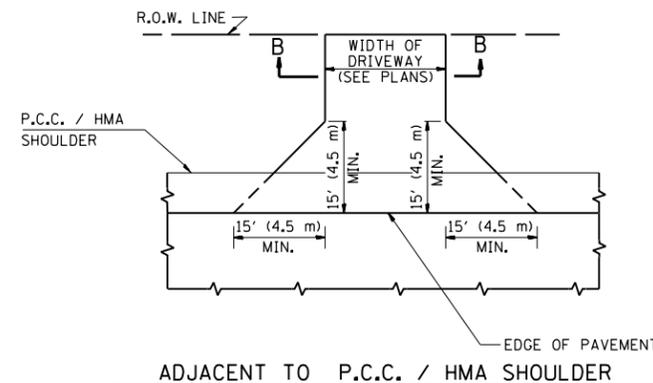
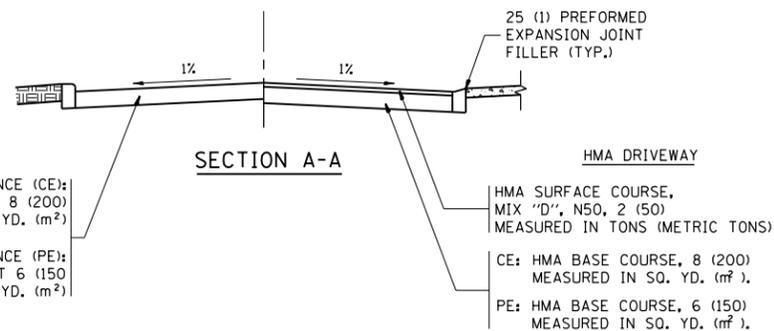
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	145RS&T-4	LAKE	42	28
CONTRACT NO. 60Y83				
ILLINOIS FED. AID PROJECT				



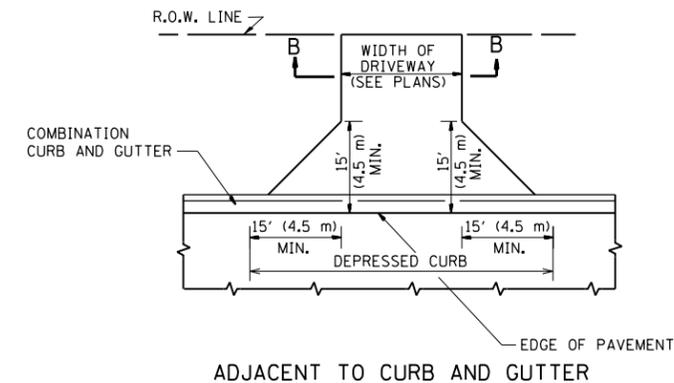
WITH CONCRETE CURB, TYPE B



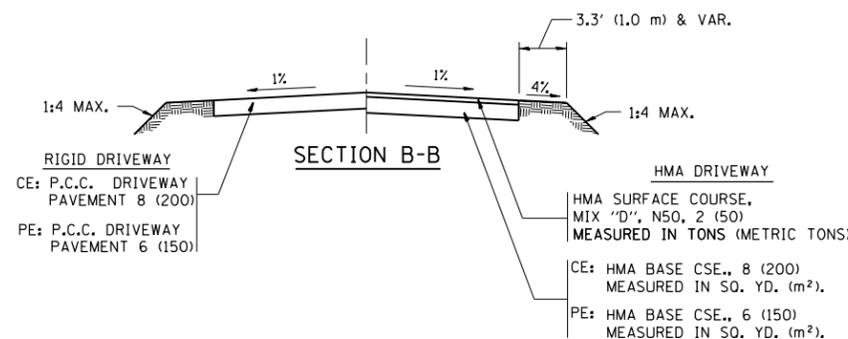
WITH CONCRETE CURB, TYPE B



ADJACENT TO P.C.C. / HMA SHOULDER



ADJACENT TO CURB AND GUTTER



RURAL FIELD ENTRANCE (FE)

HMA SURFACE COURSE, MIX "D", N50, 2 (50) MEASURED IN TONS (METRIC TONS)

AGGREGATE BASE CSE., TYPE B, 8 (200) MEASURED IN SQ. YD. (m²).

**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.

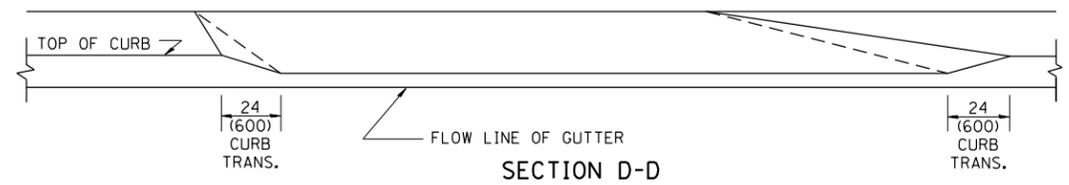
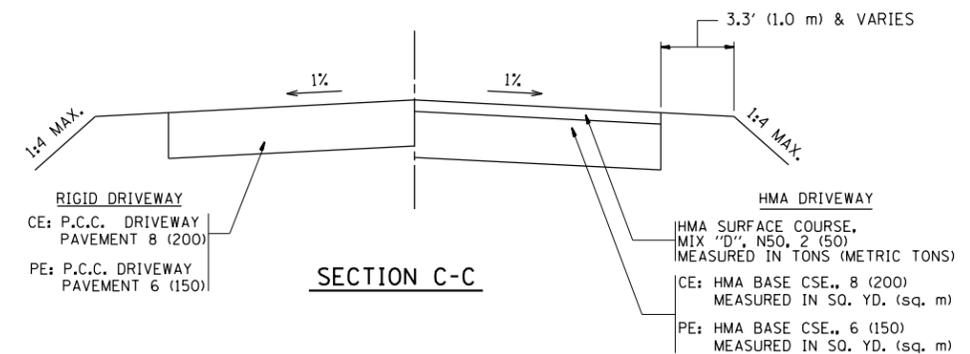
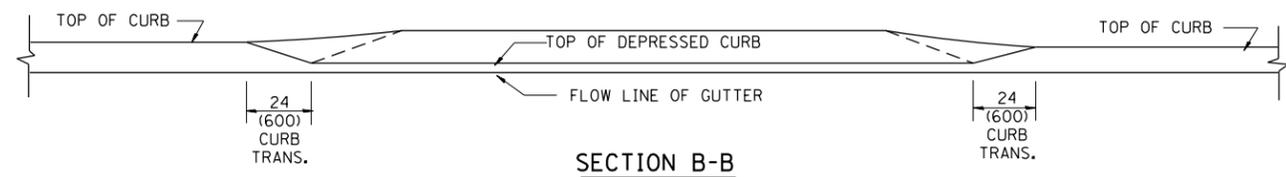
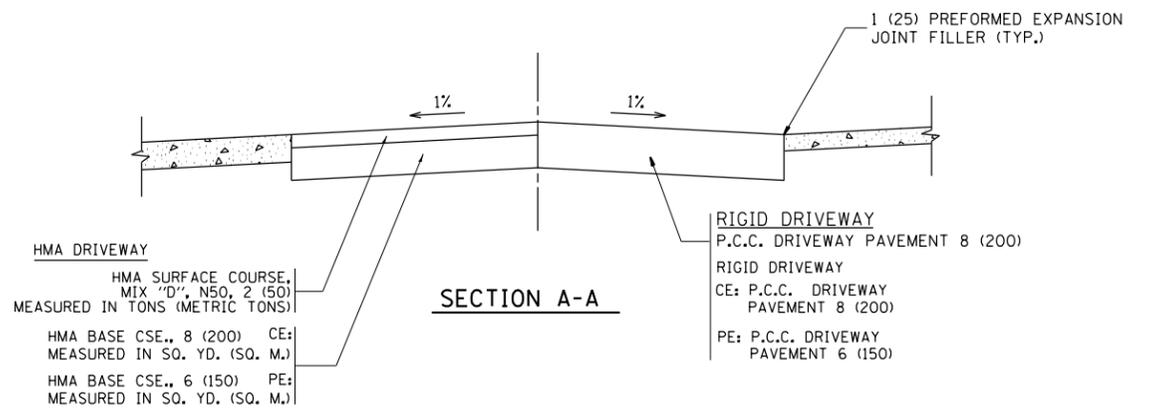
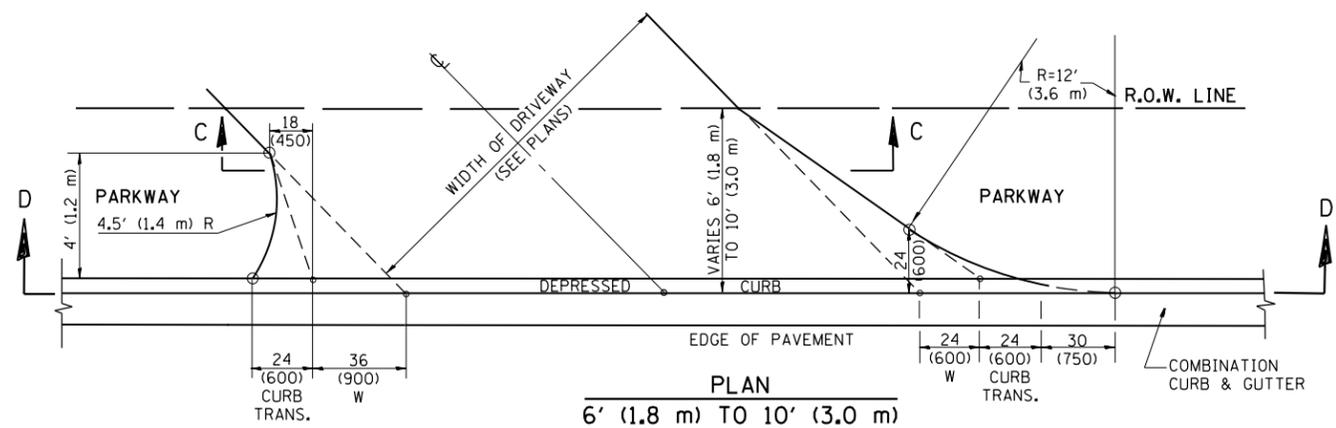
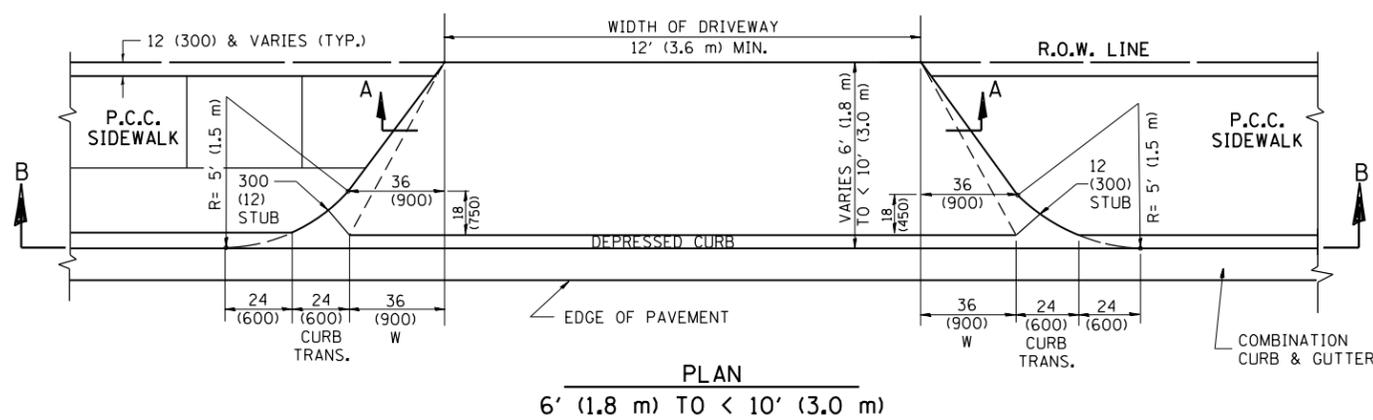
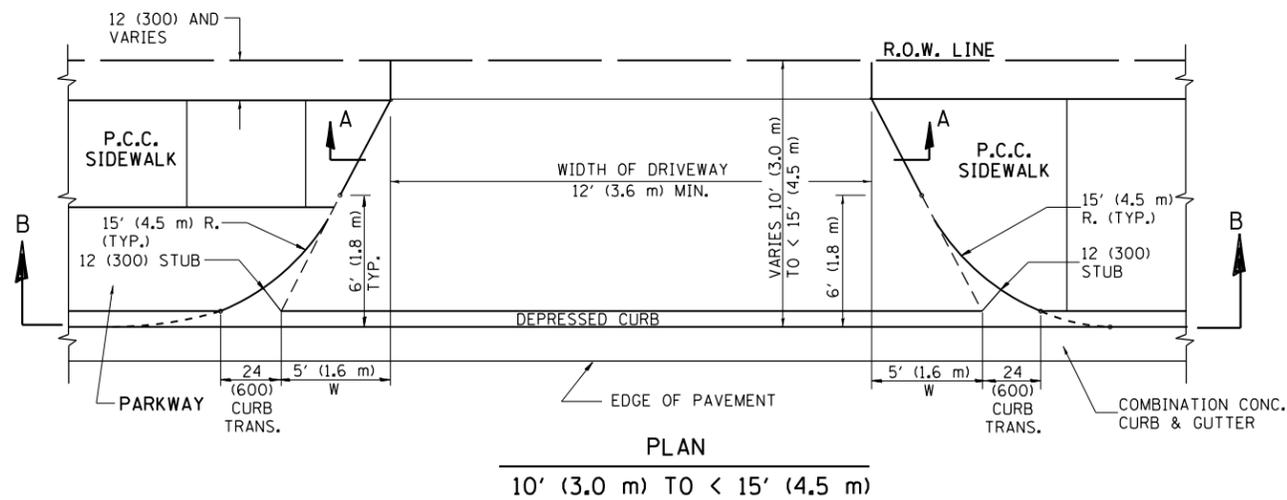
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		DATE - 11-04-95	REVISED - R. BORO 06-11-08
			REVISED - R. BORO 09-06-11

**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.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	145RS&T-4	LAKE	42	29
BD0156-07 (BD-01)		CONTRACT NO. 60Y83		
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).

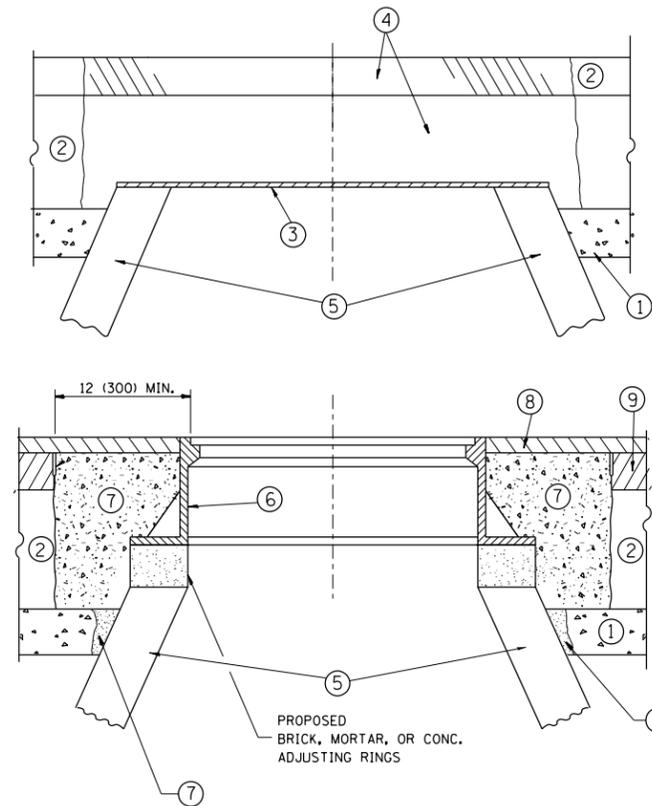
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE NOTED.

FILE NAME =	USER NAME = pencepl	DESIGNED - R. SHAH	REVISED - M. GOMEZ 04-06-01
pw\11\084EBIDINTEG.illinois.gov\PIWIDOT\Documents\IDOT Offices\District 1\Projects\1027\Drawings\Design\DistStd.dgn		REVISIONS	REVISED - P. LaFLEUR 04-15-03
	PLOT SCALE = 100.0002' / 1"	CHECKED -	REVISED - R. BORO 01-01-07
	PLOT DATE = 2/1/2018	DATE - 11-06-95	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.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	145RS&T-4	LAKE	42	30
BD400-02 (BD-02)			CONTRACT NO. 60Y83	
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**

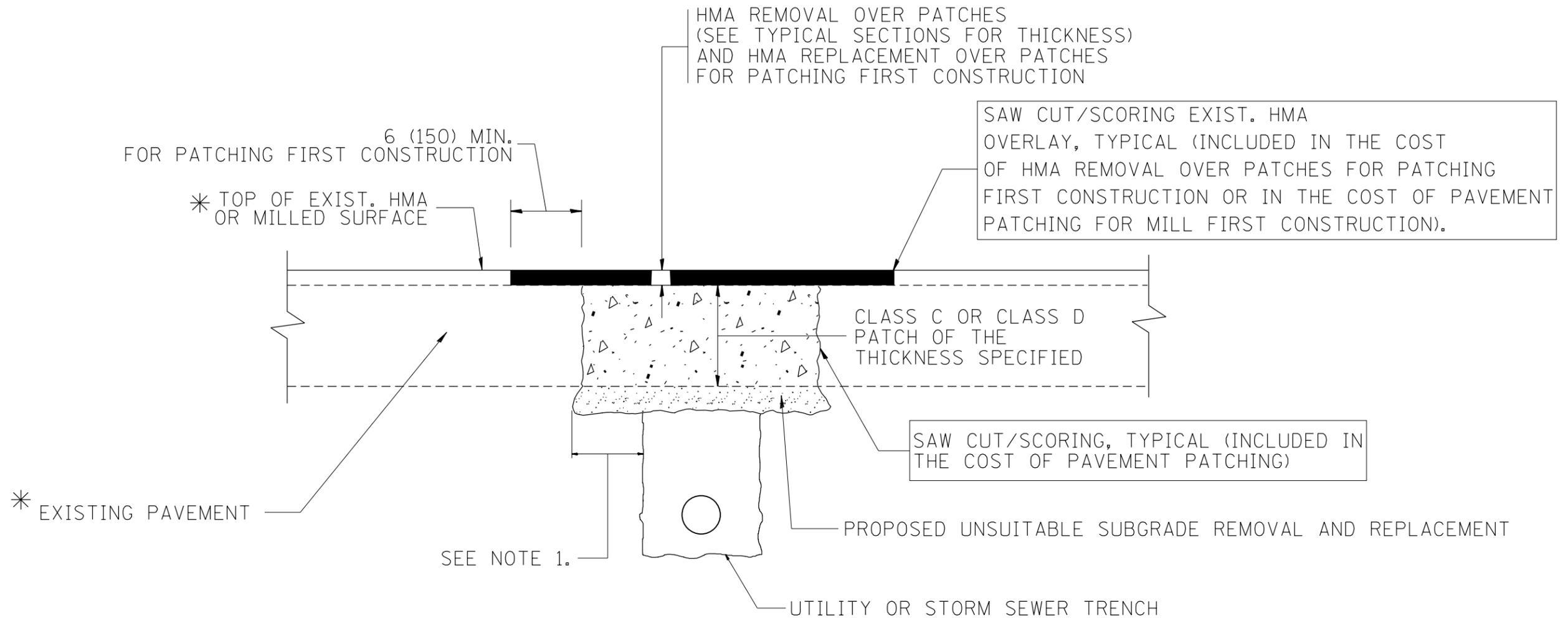
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME =	USER NAME = pencepl	DESIGNED - R. SHAH	REVISED - R. WIEDEMAN 05-14-04
pw\1\084EBIDINTEG\illinois.gov\PIWIDOT\Documents\IDOT Offices\District 1\Projects\DI027\Drawings\Design\DistStd.dgn			REVISED - R. BORO 01-01-07
		CHECKED -	REVISED - R. BORO 03-09-11
		DATE - 10-25-94	REVISED - R. BORO 12-06-11

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	145RS&T-4	LAKE	42	31
<b>BD600-03 (BD-8)</b>		<b>CONTRACT NO. 60Y83</b>		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



\* 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 = pencepl	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw\11084EBIDINTEG.illinois.gov\PIWIDOT\Documents\DOT Offices\District 1\Projects\1027\Drawings\Design\DistStd.dgn	PLOT SCALE = 100.0000' / 1in.	CHECKED -	REVISED - R. BORO 01-01-07					335	145RS&T-4	LAKE	42	32
	PLOT DATE = 2/1/2018	DATE - 10-25-94	REVISED - R. BORO 09-04-07		BD400-04 (BD-22)		CONTRACT NO. 60Y83					
			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.

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.

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.

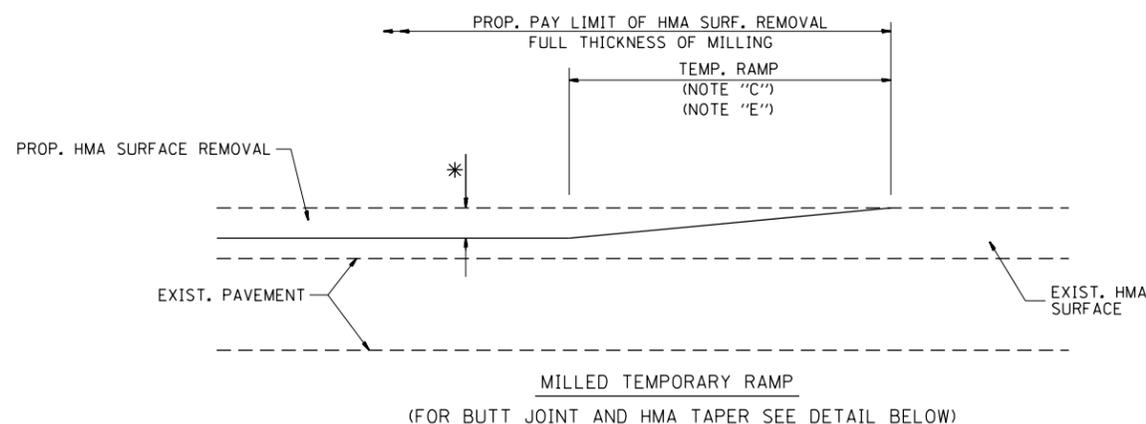
PROPOSED #6 (20) EPOXY COATED TIE BARS 24" (600) LONG AT 24" (600) CENTERS WILL NOT BE PAID FOR SEPARATELY. DELETE EPOXY COATED TIE BARS IF EXISTING TIE BARS ARE USABLE AS DETERMINED BY THE ENGINEER. (SEE NOTE ③).

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".

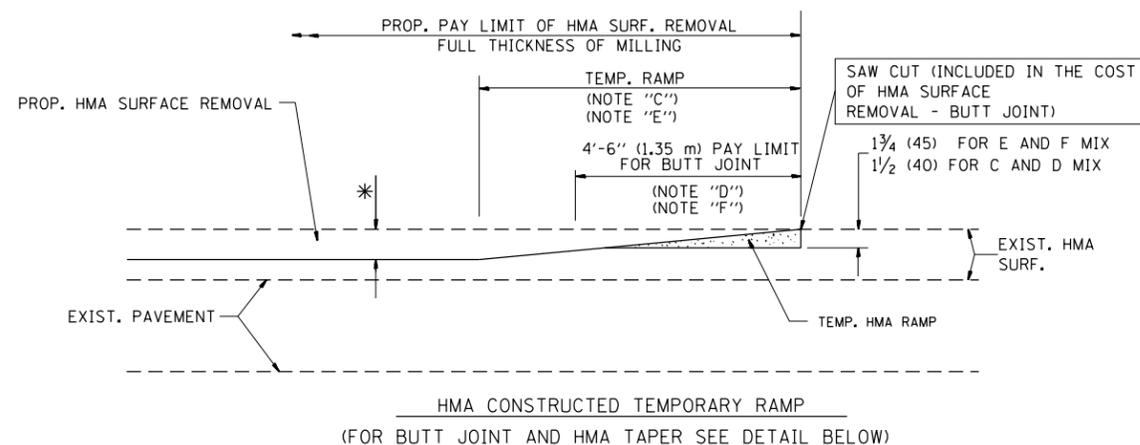
# CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

FILE NAME =	USER NAME = pencepl	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw\1\084EBIDINTEG.illinois.gov\PIWIDOT\Documents\DOT Offices\District 1\Projects\DI027\Drawings\Design\DistStd.dgn	PLOT SCALE = 100.0000' / 1in.	CHECKED -	REVISED - A. ABBAS 03-21-97					335	145RS&T-4	LAKE	42	33
PLOT DATE = 2/1/2018	DATE - 03-11-94	REVISED - M. GOMEZ 01-22-01	REVISED - R. BORO 12-15-09		BD600-06 (BD-24)			CONTRACT NO. 60Y83				
					SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

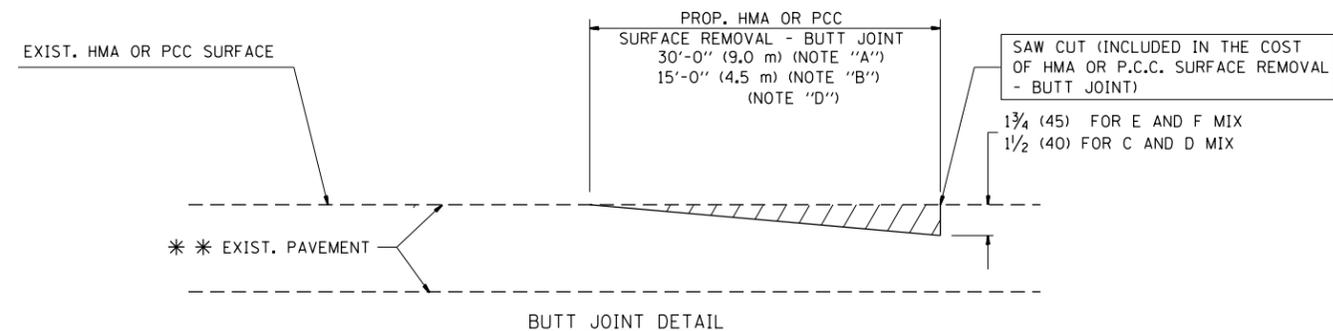


**OPTION 1**

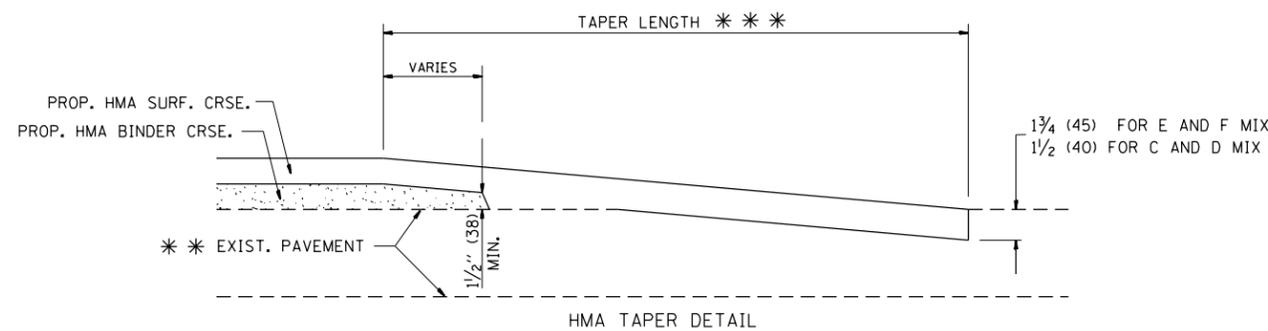


**OPTION 2**

**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.

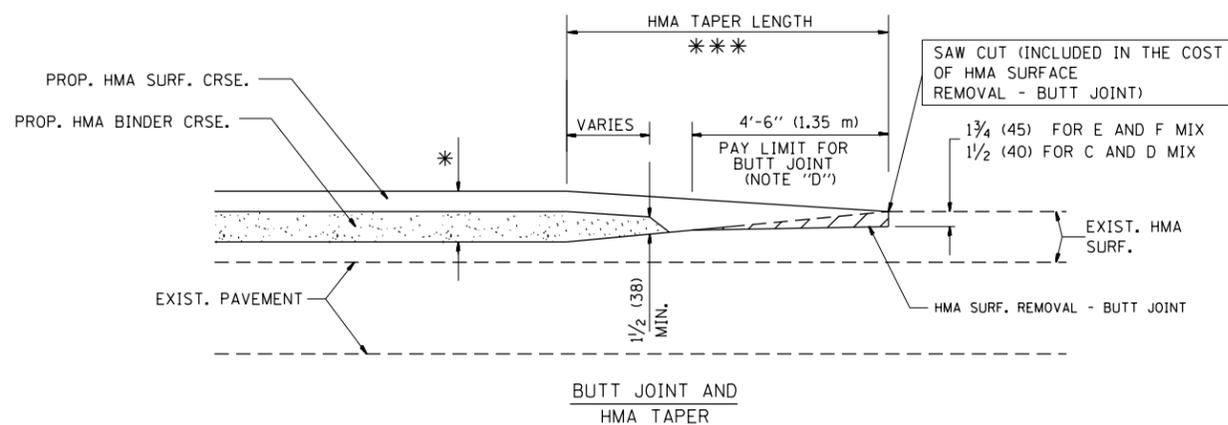
**NOTES**

- 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**

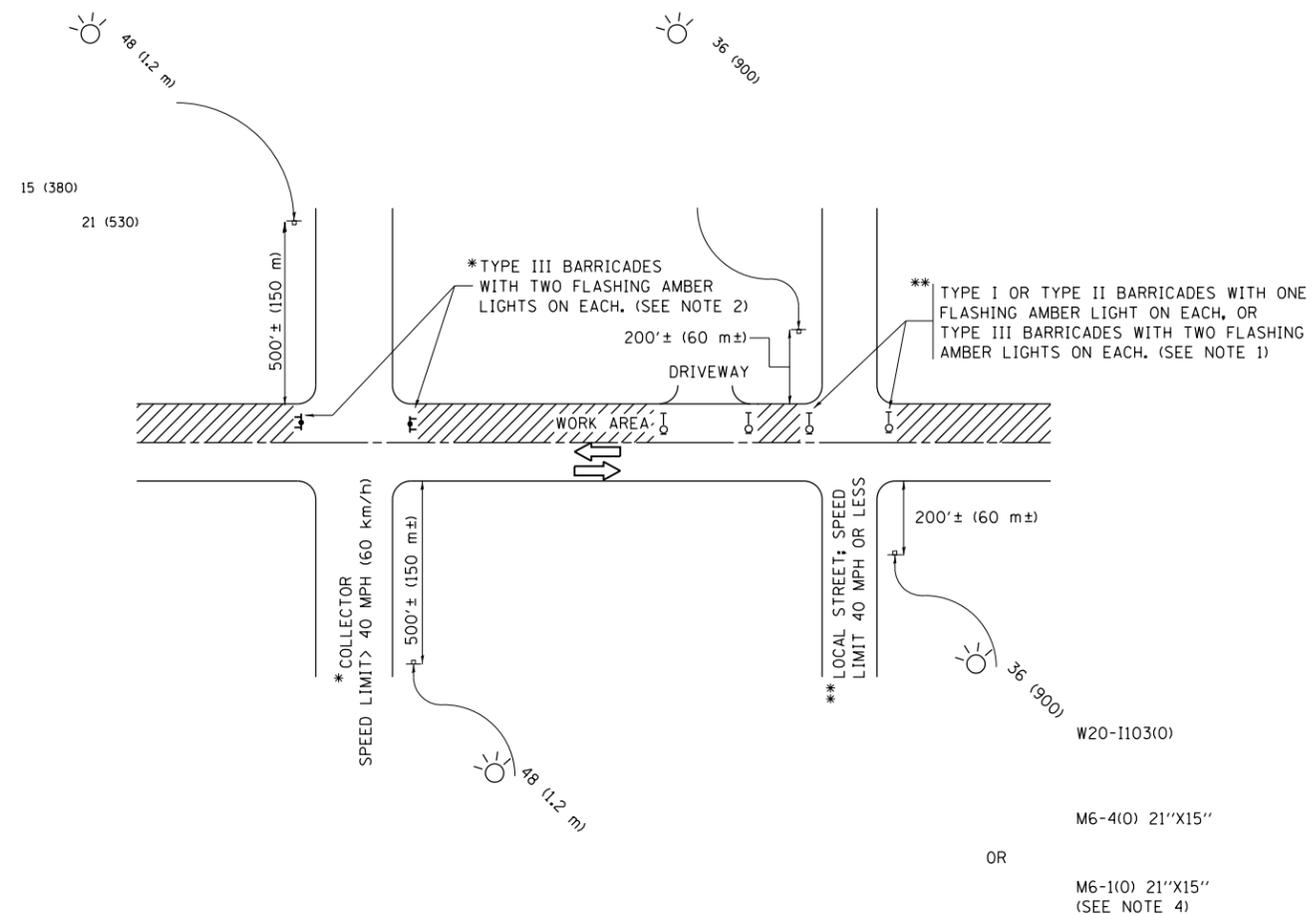
FILE NAME =	USER NAME = pencepl	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94
p:\1\084EBIDINTEG.illinois.gov\PIWDDT\Documents\DOT Offices\District 1\Projects\DI027\Drawings\Design\DistStd.dgn		REVISION	REVISED - A. ABBAS 03-21-97
	PLOT SCALE = 100.0000' / 1in.	CHECKED -	REVISED - M. GOMEZ 04-06-01
	PLOT DATE = 2/1/2018	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.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	145RS&T-4	LAKE	42	34
BD400-05 BD32		CONTRACT NO. 60Y83		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



**NOTES:**

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

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

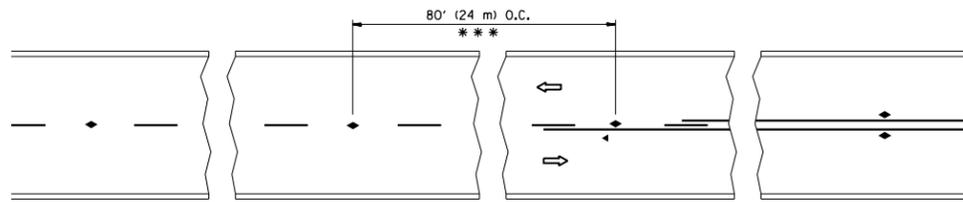
FILE NAME =	USER NAME = pencepl	DESIGNED - L.H.A.	REVISED - A. HOUSEH 10-15-96
pw:\IL\084EBIDINTEG\illinois.gov\PIWIDOT\Documents\IDOT Offices\District 1\Projects\DI027\Drawings\Design\DistStd.dgn			REVISED - T. RAMMACHER 01-06-00
Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED - A. SCHUETZE 07-01-13
	PLOT DATE = 2/1/2018	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**

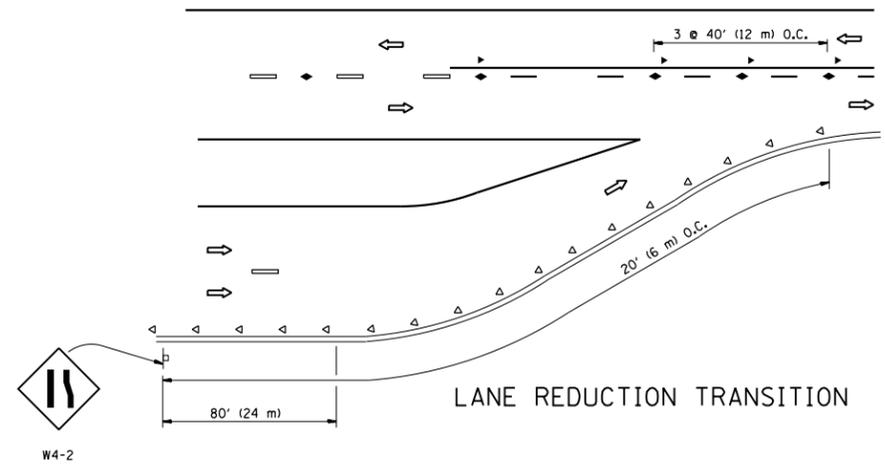
SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	145RS&T-4	LAKE	42	35
<b>TC-10</b>			<b>CONTRACT NO. 60Y83</b>	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

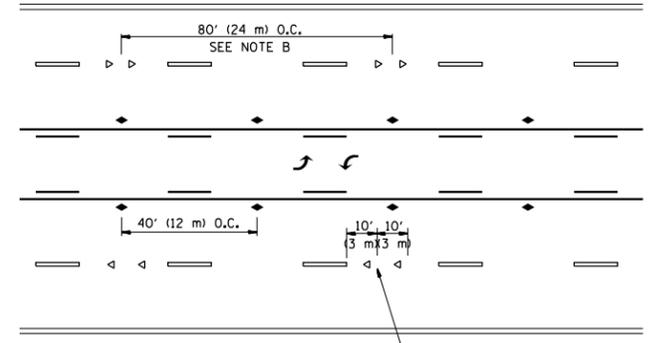


\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

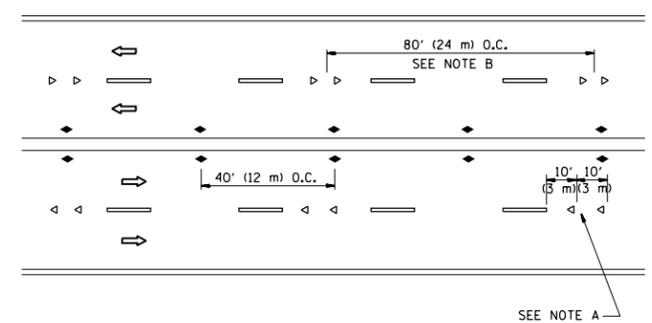
TWO-LANE/TWO-WAY



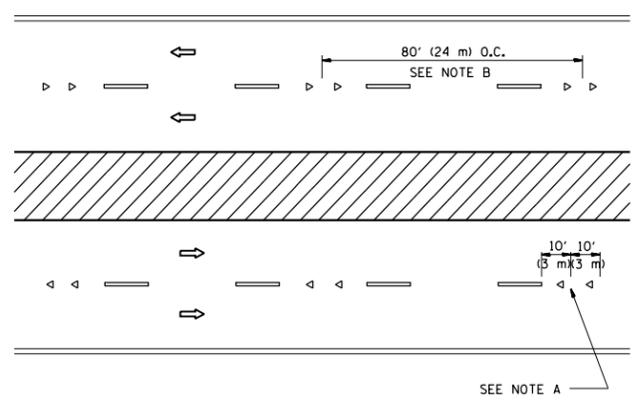
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

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

SYMBOLS

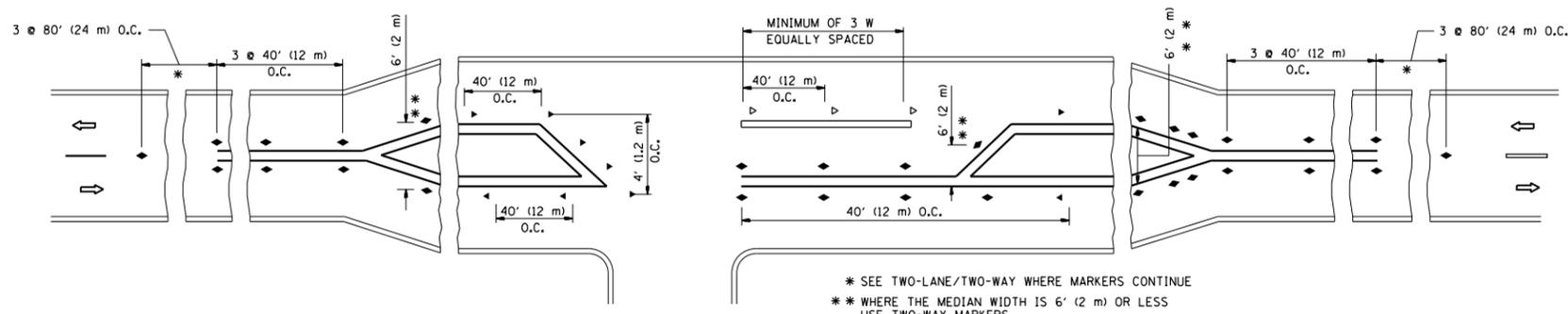
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

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.

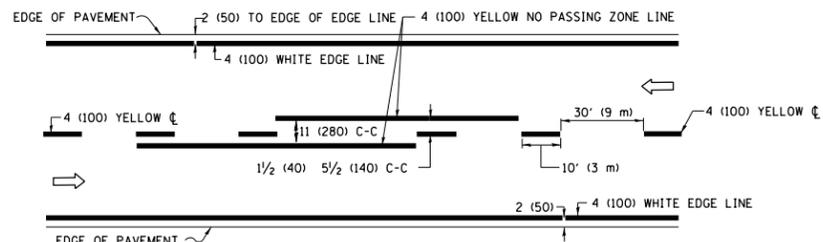


LEFT TURN

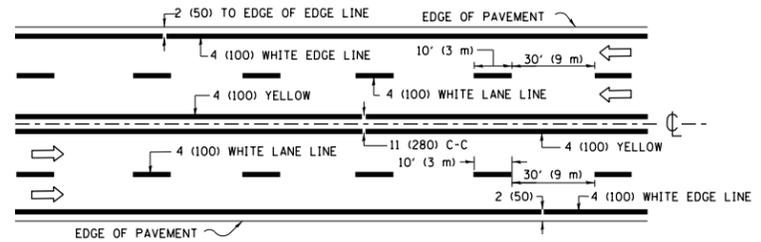
\* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE  
 \*\* WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS USE TWO-WAY MARKERS.

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

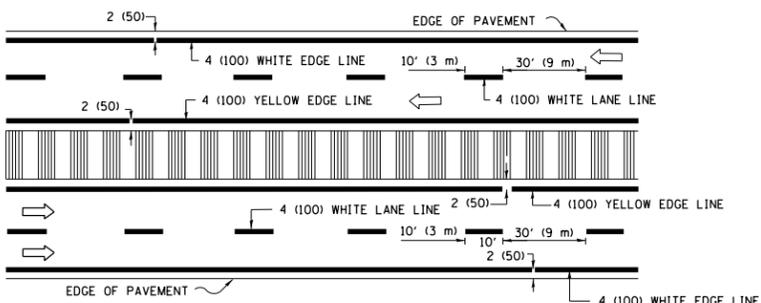
FILE NAME =	USER NAME = pencepl	DESIGNED -	REVISED - T. RAMMACHER 09-19-94	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw\1\084EBIDINTEG.illinois.gov\PIWIDOT\Documents\IDOT Offices\District 1\Projects\DI027\Drawings\Design\DistStd.dgn	PLOT SCALE = 100.0000' / 1".	CHECKED -	REVISED - T. RAMMACHER 03-12-99					335	145RS&T-4	LAKE	42	36
PLOT DATE = 2/1/2018	DATE -	REVISED - T. RAMMACHER 01-06-00	REVISED - C. JUCIUS 09-09-09		<b>TC-11</b>		<b>CONTRACT NO. 60Y83</b>					
					SCALE: NONE		SHEET NO. 1 OF 1 SHEETS		STA. TO STA.		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	



**2-LANE ROADWAY**

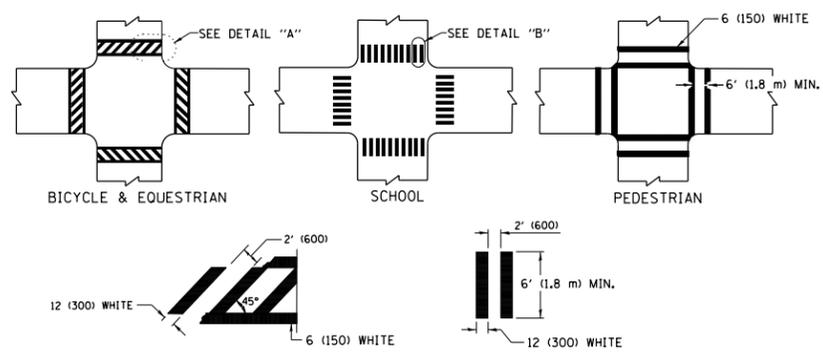


**MULTI-LANE UNDIVIDED**



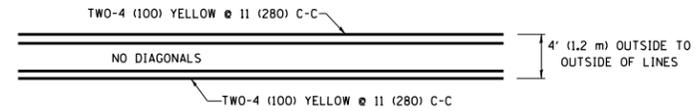
**MULTI-LANE DIVIDED WITH MEDIAN**

**TYPICAL LANE AND EDGE LINE MARKING**

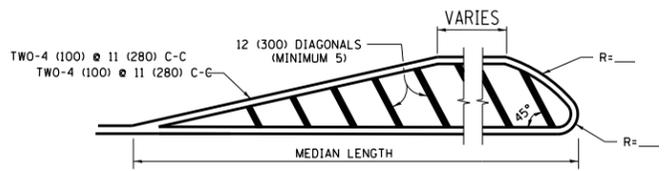


**TYPICAL CROSSWALK MARKING**

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

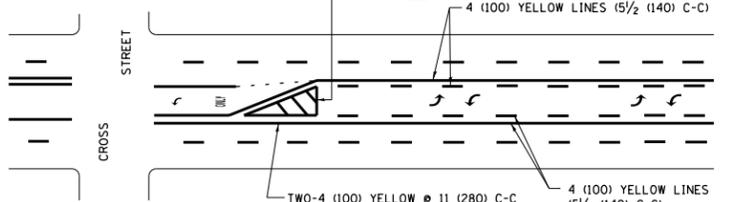


**4' (1.2 m) WIDE MEDIANS ONLY**



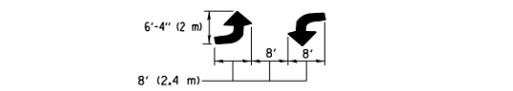
**MEDIANS OVER 4' (1.2 m) WIDE**

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**

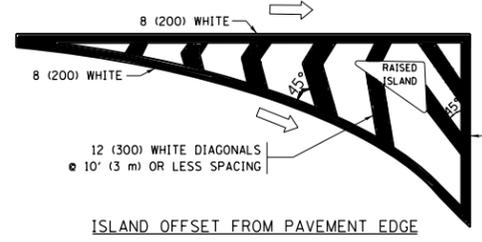
A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



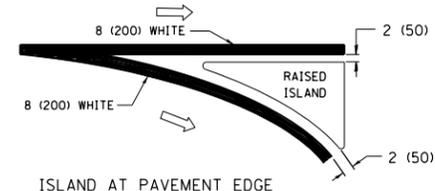
**TYPICAL LEFT (OR RIGHT) TURN LANE**

**TYPICAL TURN LANE MARKING**

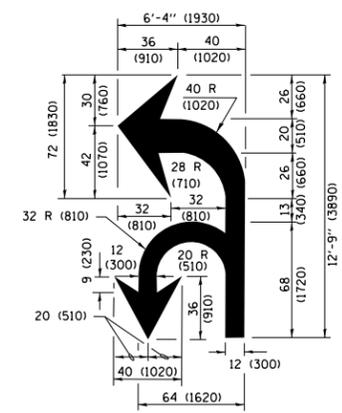
FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  
AREA = 15.6 SQ. FT. (1.5 m<sup>2</sup>) ONLY AREA = 20.8 SQ. FT. (1.9 m<sup>2</sup>)  
\* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".



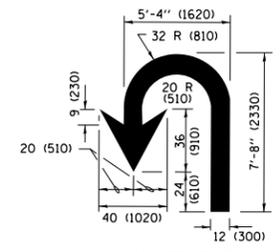
**ISLAND OFFSET FROM PAVEMENT EDGE**



**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 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 <sup>2</sup> ) EACH "X"=54.0 SQ. FT. (5.0 m <sup>2</sup> )
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.

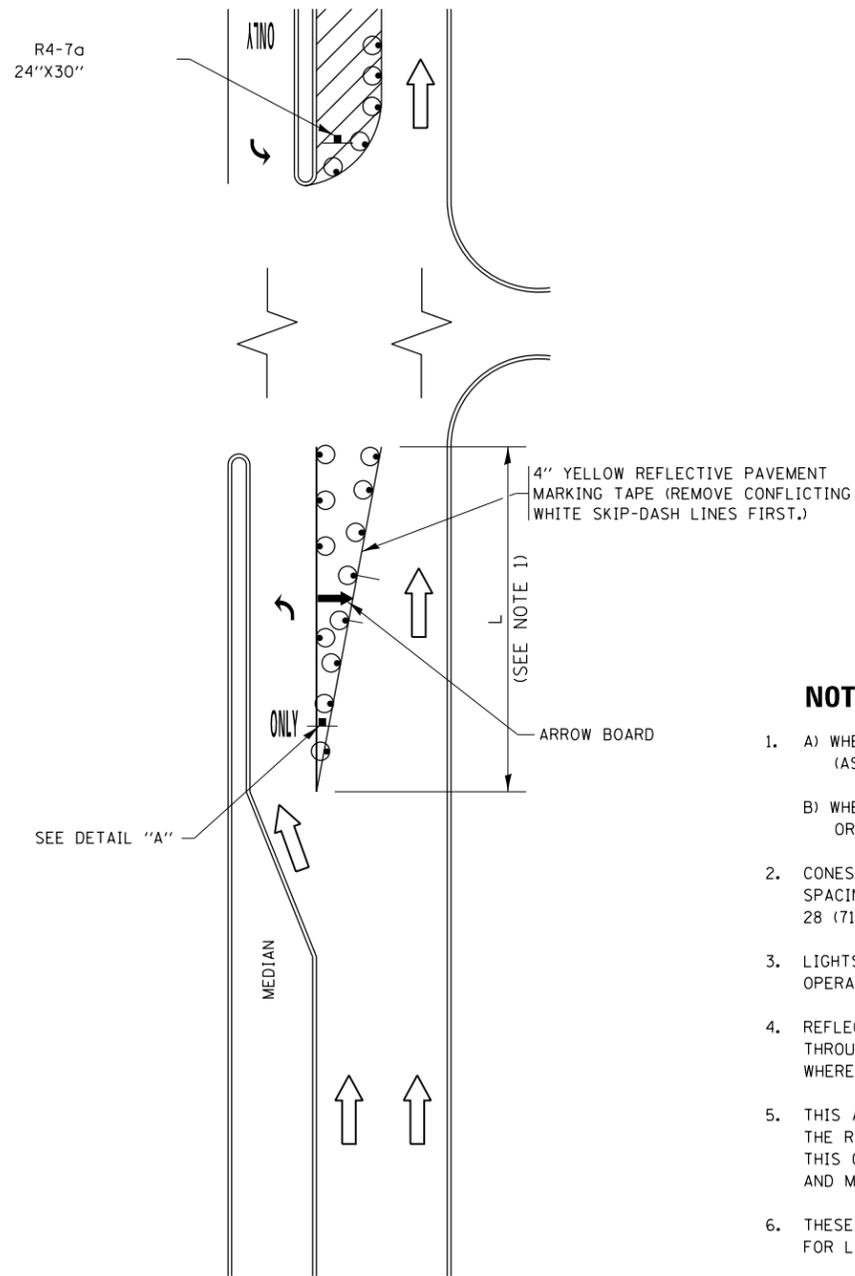
FILE NAME =	USER NAME = pencepl	DESIGNED - EVERS	REVISED - C. JUCIUS 09-09-09
pw\1\084EBIDINTEG\illinois.gov\PIWIDOT\Documents\DOT Offices\District 1\Projects\01027\Drawings\Design\DistStd.dgn		CHECKED -	REVISED - C. JUCIUS 07-01-13
Default	PLOT SCALE = 100.0000' / in.	DATE - 03-19-90	REVISED - C. JUCIUS 12-21-15
	PLOT DATE = 2/1/2018		REVISED - C. JUCIUS 04-12-16

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

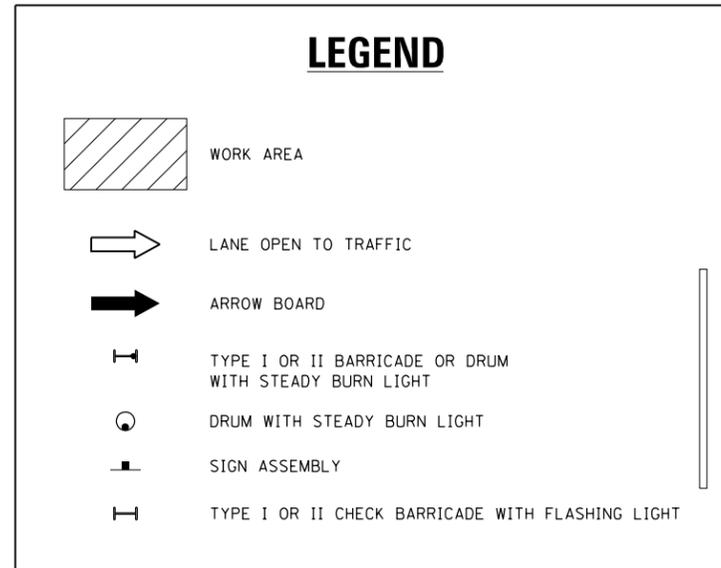
<b>DISTRICT ONE</b>			
<b>TYPICAL PAVEMENT MARKINGS</b>			
SCALE: NONE	SHEET 1	OF 1 SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	145RS&T-4	LAKE	42	37
<b>TC-13</b>		<b>CONTRACT NO.</b>	60Y83	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

# TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER



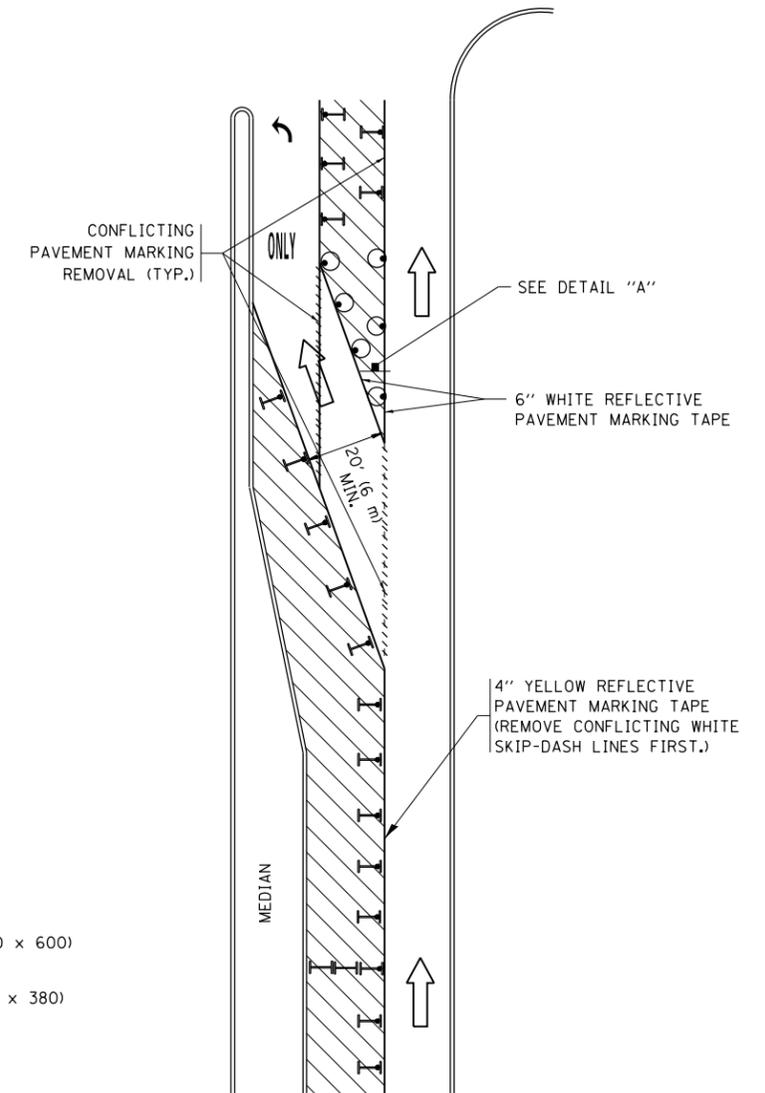
**FIGURE 1**



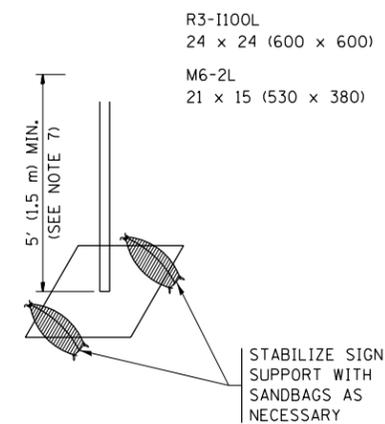
### NOTES:

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-I100R 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
6. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
7. THE SIGNS SHALL BE MOUNTED ABOVE THE BARRICADES/DRUMS ON SEPARATE SIGN SUPPORTS THAT MEET NCHRP 350 OR MASH PREQUIREMENTS.
8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

# TURN BAY ENTRANCE WITHIN A LANE CLOSURE



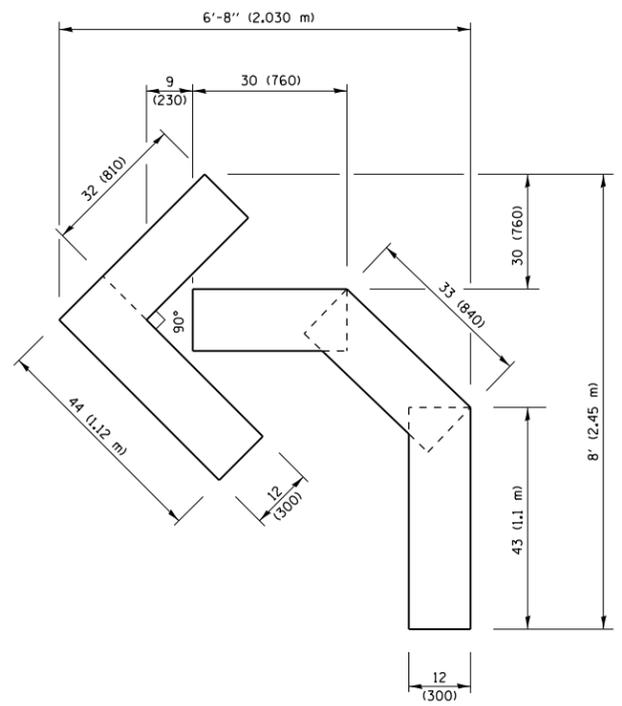
**FIGURE 2**



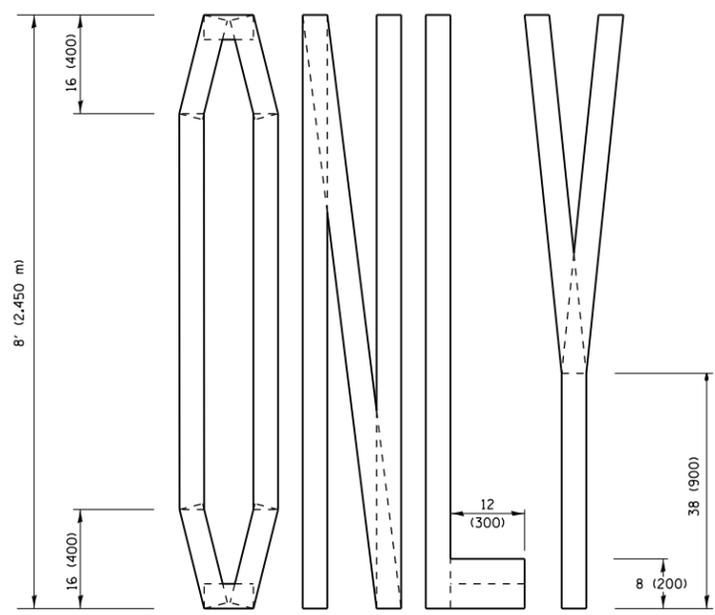
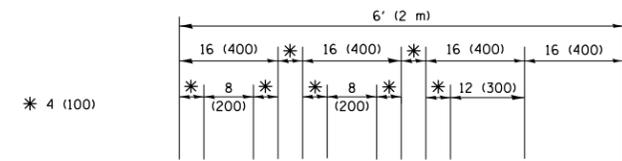
**DETAIL A**

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

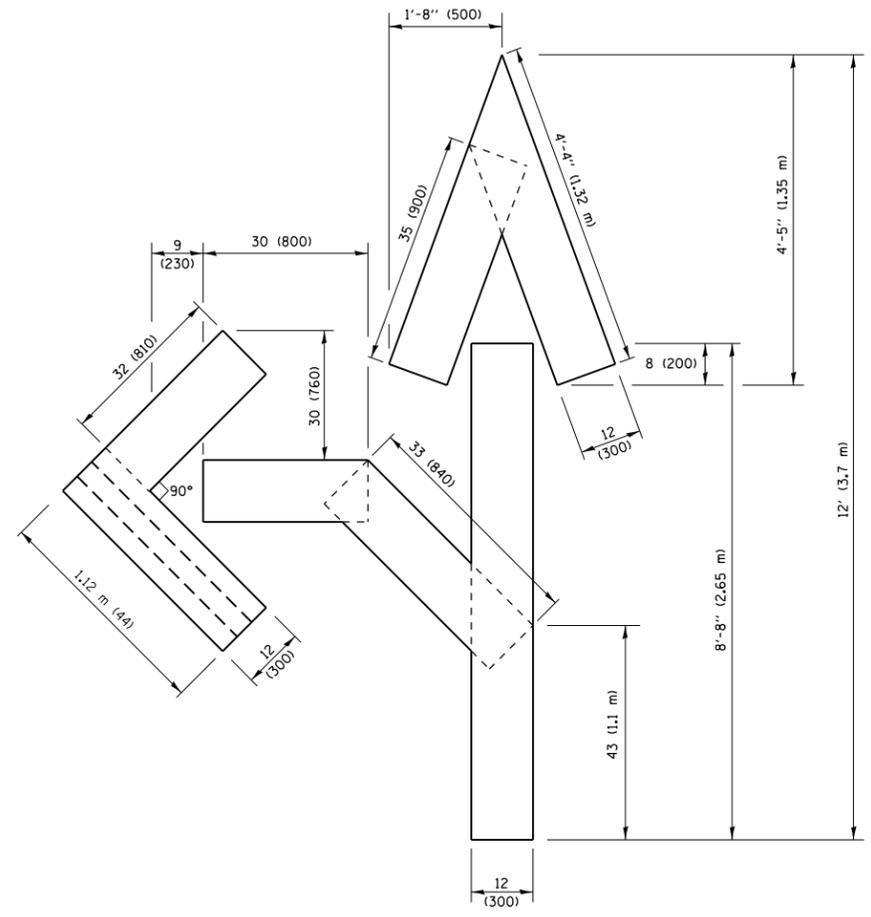
FILE NAME =	USER NAME = pencepl	REVISED - T. RAMMACHER 09-08-94	REVISED - R. BORO 09-14-09	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)</b>			F.A.P. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Default		REVISED - A. HOUSEH 11-07-95	REVISED - A. SCHUETZE 07-01-13					335	145RS&T-4	LAKE	42	38
	PLOT SCALE = 100.0000' / 1in.	REVISED - A. HOUSEH 10-12-96	REVISED - A. SCHUETZE 09-15-16		<b>TC-14</b>			<b>CONTRACT NO. 60Y83</b>				
	PLOT DATE = 2/1/2018	REVISED - T. RAMMACHER 01-06-00	REVISED -		SCALE: NONE			SHEET 1 OF 1 SHEETS		STA. TO STA.		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT



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

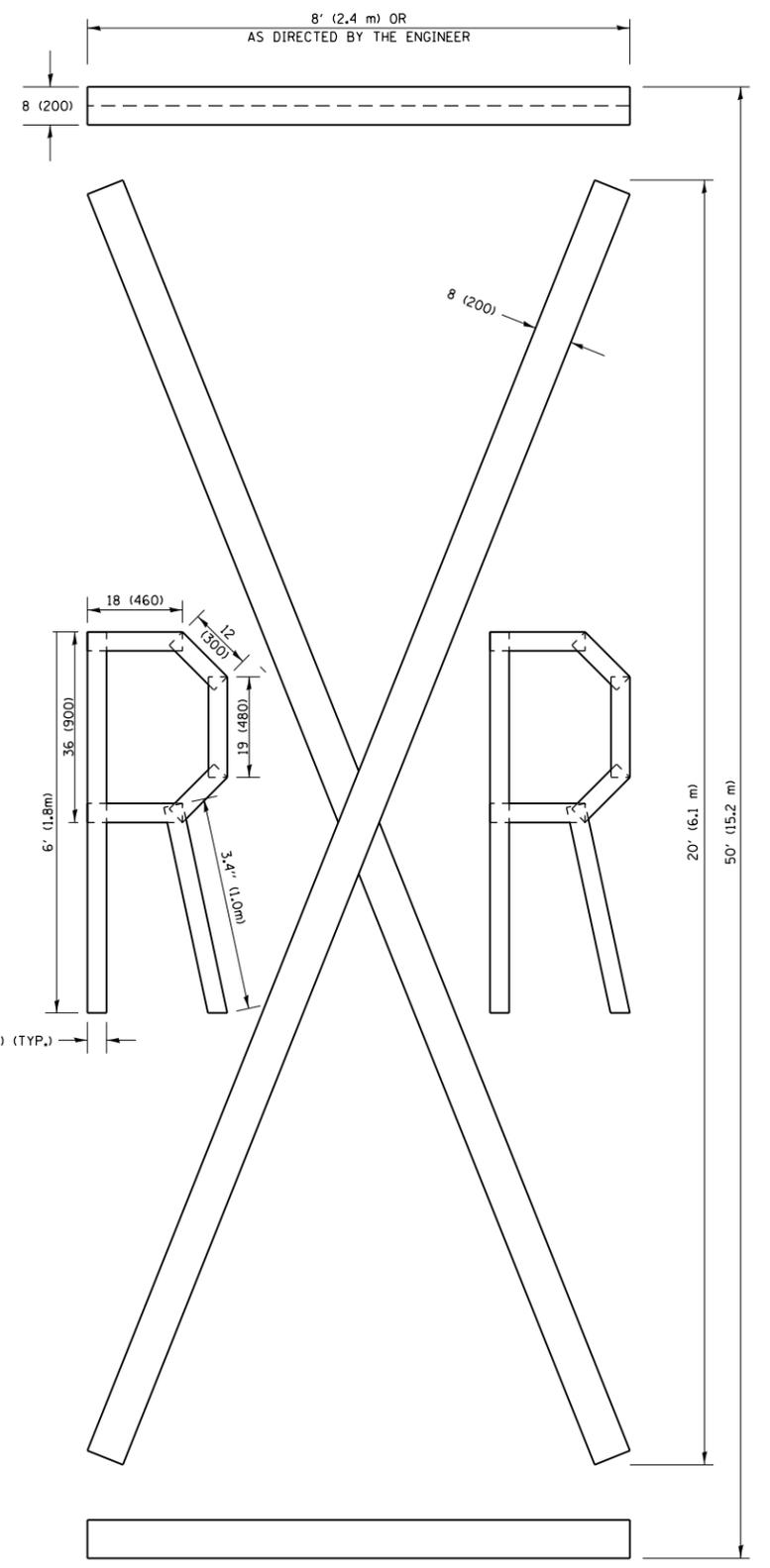


**QUANTITY**  
 4 (100) LINE = 64.1 ft. (19.5 m)  
 21.4 sq. ft. (1.99 sq. m)



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

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



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

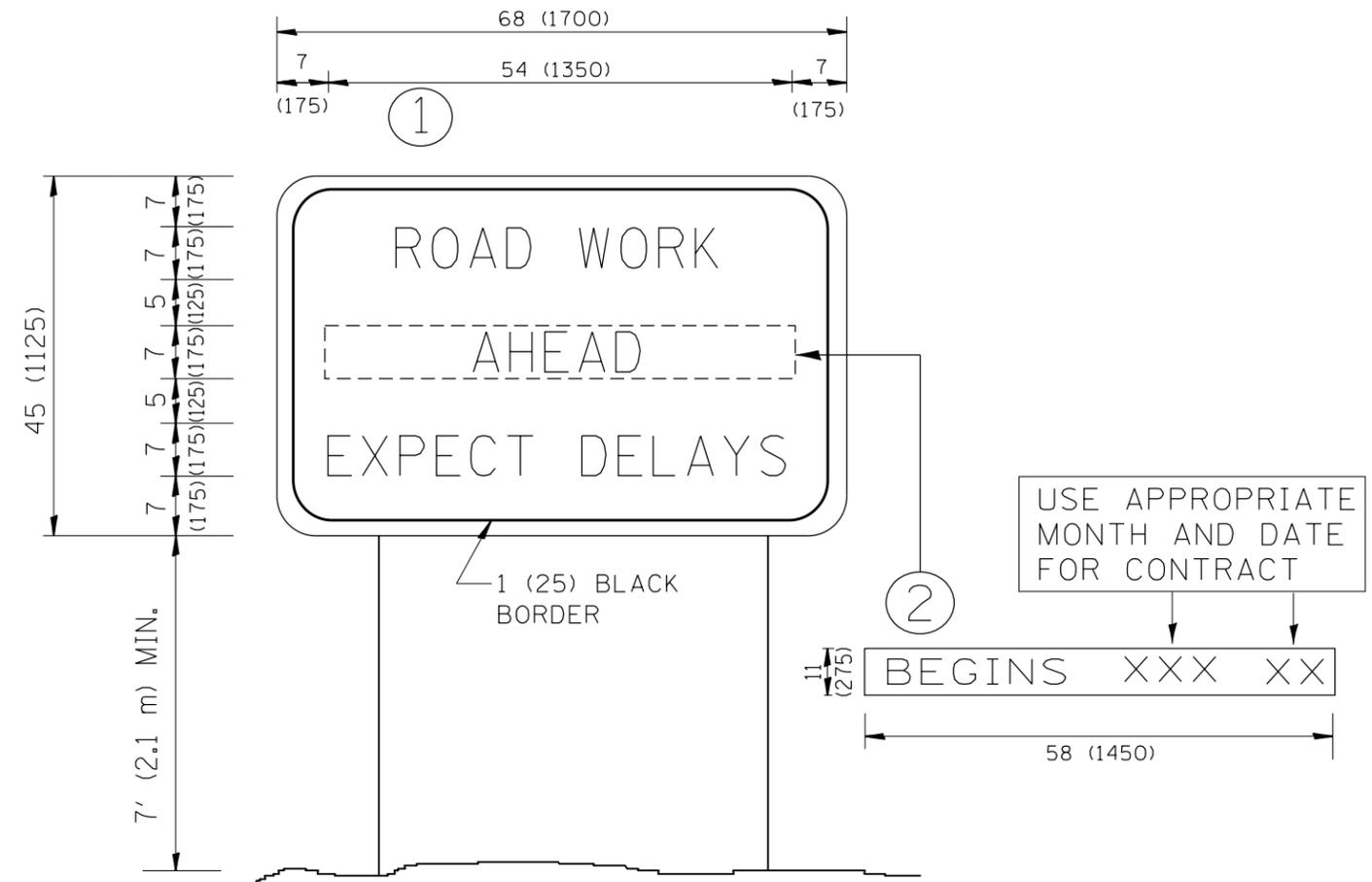
All dimensions are in inches (millimeters) unless otherwise shown.

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p:\1\084EBIDINTEG\illinois.gov\PIWIDOT\Documents\IDOT Offices\District 1\Projects\01827\BROWNS\Browns\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**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	145RS&T-4	LAKE	42	39
<b>TC-16</b>		<b>CONTRACT NO. 60Y83</b>		
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 = pencepl	DESIGNED -	REVISED - R. MIRS 09-15-97
p:\11\084EBIDINTEG.illinois.gov\PIWIDOT\Documents\DOT Offices\District 1\Projects\DI027\Drawings\Design\DistStd.dgn		CHECKED -	REVISED - R. MIRS 12-11-97
		DATE -	REVISED - T. RAMMACHER 02-02-99
			REVISED - C. JUCIUS 01-31-07

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

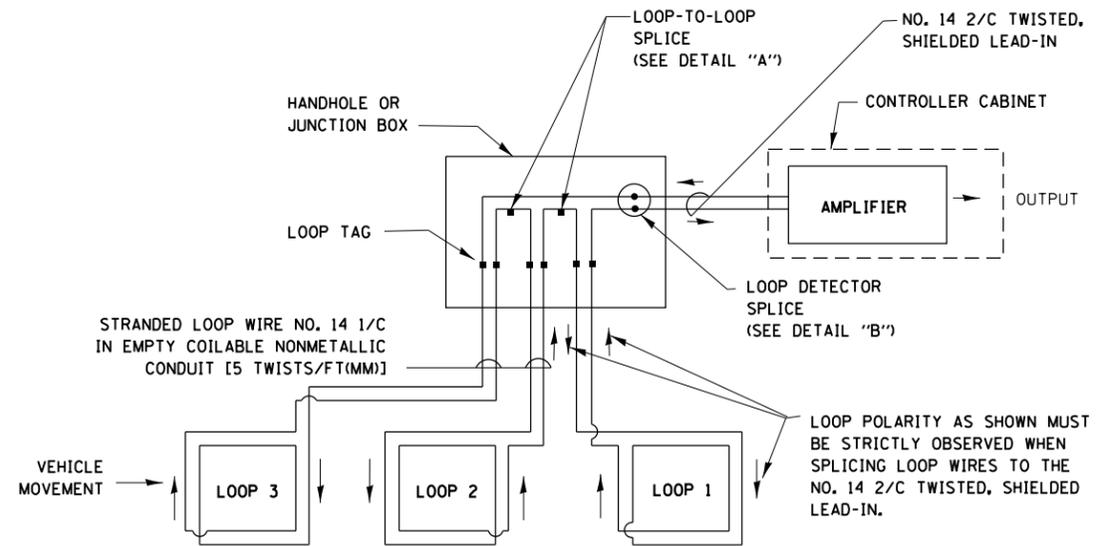
**ARTERIAL ROAD  
INFORMATION SIGN**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	145RS&T-4	LAKE	42	40
TC-22			CONTRACT NO. 60Y83	
FED. ROAD DIST. NO. 1   ILLINOIS FED. AID PROJECT				

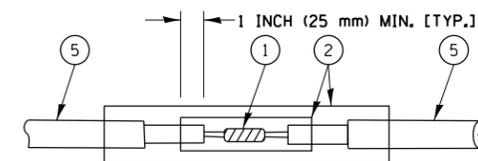
**LOOP DETECTOR NOTES**

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

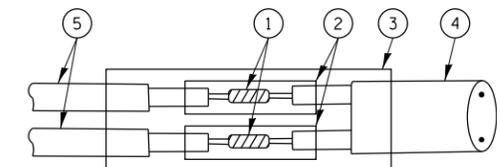


**DETECTOR LOOP WIRING SCHEMATIC**

- 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.



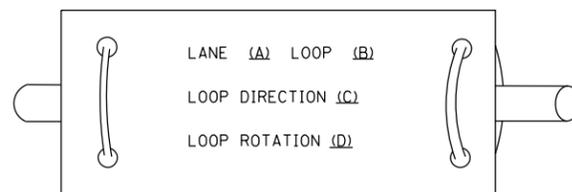
**DETAIL "A"  
LOOP-TO-LOOP SPLICE**



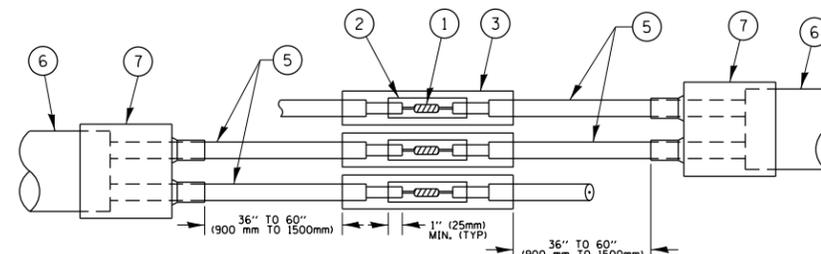
**DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE**

**TYPE I LOOP**

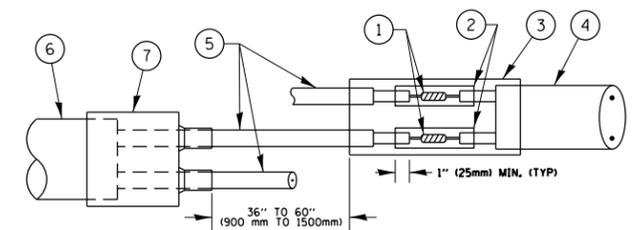
**LOOP LEAD-IN CABLE TAG**



- 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**

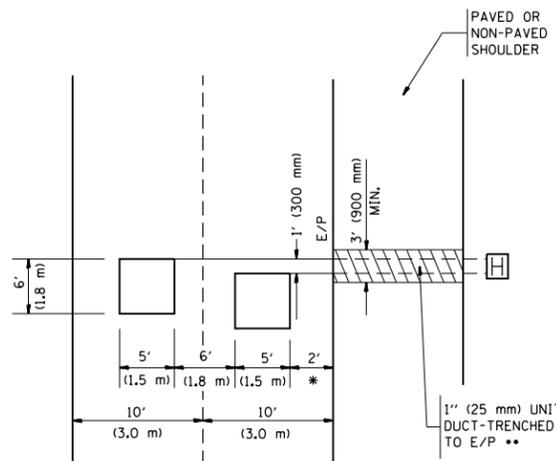
**PRE-FORMED LOOP**

**LOOP DETECTOR SPLICE**

- ① WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH, THE WESTERN UNION SPLICES SHALL BE STAGGERED.
- ② WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- ③ WCS 200/750 HEAT SHRINK TUBE, MINIMUM 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

LOOPS NEXT TO SHOULDERS

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



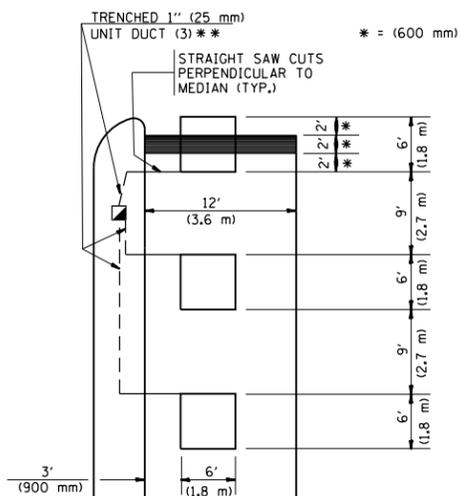
\* = (600 mm)

\*\* 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.

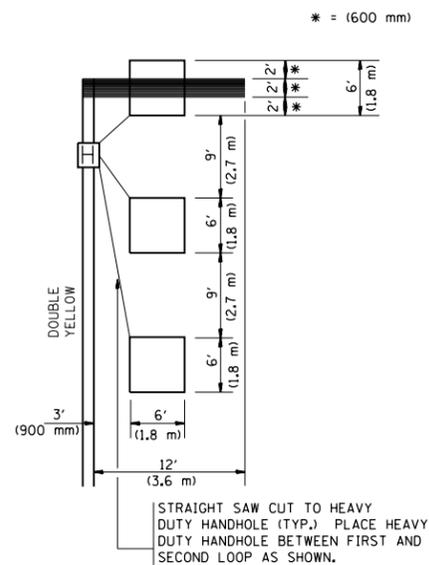


\*\* UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

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

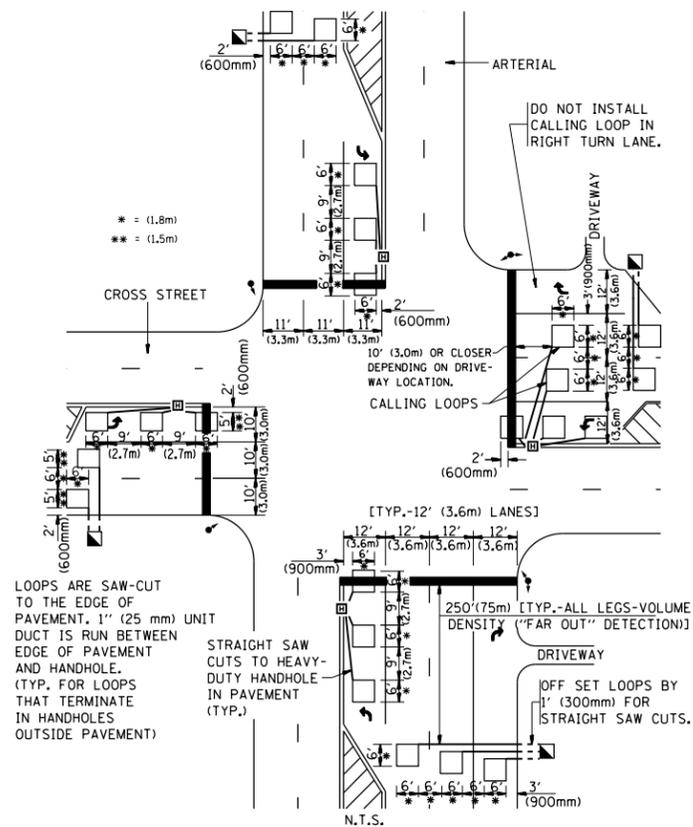
LEFT TURN LANES WITHOUT MEDIANS  
VOLUME DENSITY ("FAR OUT" DETECTION)  
ON SAME APPROACH

(PROTECTED / PERMITTED LEFT TURN PHASING)



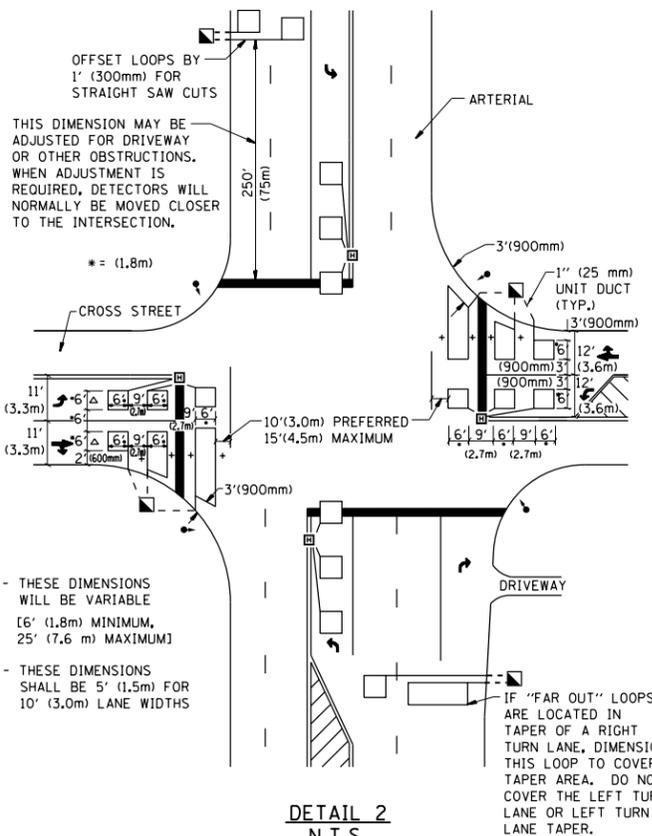
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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 = pencepl	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DISTRICT 1 - DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw:\IL\084EBIDINTEG\illinois.gov\PIWIDOT\Documents\IDOT Offices\District 1\Projects\DI027\Drawings\Design\DistStd.dgn		CHECKED - R.K.F.	REVISED -			335	145RS&T-4	LAKE	42	42
PLOT SCALE = 100.0000' / 1".		DATE -	REVISED -			<b>TS-07</b>		<b>CONTRACT NO. 60Y83</b>		
PLOT DATE = 2/1/2018						SCALE: NONE		SHEET NO. 1 OF 1 SHEETS		STA. TO STA.
						FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				