

04-27-12 LETTING ITEM 016

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2812	4040.1RS-1	COOK	22	1
		ILLINOIS	CONTRACT NO. 60R98	

FOR INDEX OF SHEETS, SEE SHEET NO. 2

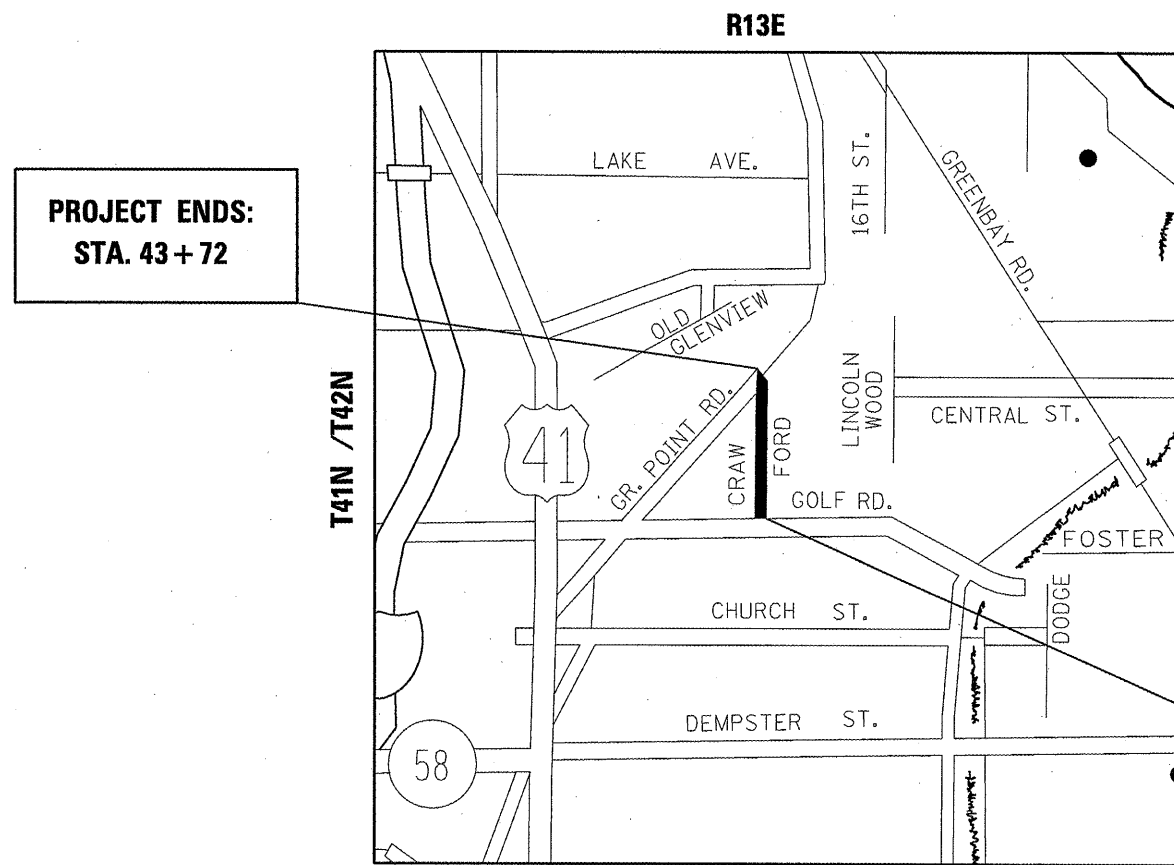
PROJECT IS LOCATED
IN THE VILLAGE OF SKOKIE
AND CITY OF EVANSTON

**PROPOSED
HIGHWAY PLANS**
FAU ROUTE 2812: CRAWFORD AVENUE
GOLF ROAD TO GROSS POINT ROAD
SECTION: 4040.1RS-1

RESURFACING (3P)
COOK COUNTY
C-91-272-12



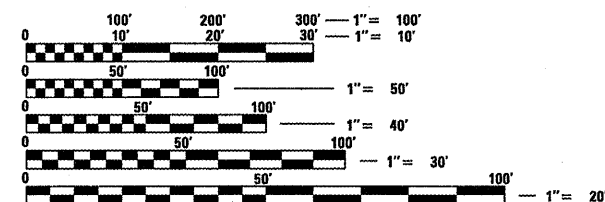
LOCATION OF SECTION INDICATED THUS: - [black rectangle] -



PROJECT ENDS:
STA. 43 + 72

TRAFFIC DATA:
SPEED LIMIT = 35 MPH
2012 ADT = 17,100

PROJECT STARTS:
STA. 7 + 45



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: KEN ENG

CONTRACT NO. 60R98

NILES & EVANSTON TOWNSHIP

GROSS LENGTH = 3627 FT. = 0.69 MILE
NET LENGTH = 3627 FT. = 0.69 MILE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
SUBMITTED FEBRUARY 9, 2012
Diana M. O'Keefe
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
March 23, 2012
John D. Baranzelli, P.E.
ENGINEER OF DESIGN AND ENVIRONMENT
March 23, 2012
William R. Fresco
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

INDEX OF SHEETS

STATE STANDARDS

GENERAL NOTES

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	INDEX OF SHEETS, STATE STANDARDS, GENERAL NOTES
3	SUMMARY OF QUANTITIES
4-5	EXISTING AND PROPOSED TYPICAL SECTIONS
6-7	ROADWAY AND PAVEMENT MARKING PLANS
8-11	DETECTOR LOOP REPLACEMENT
12	DETAILS FOR FRAME AND LIDS ADJUSTMENT WITH MILLING
13	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT
14	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT
15	BUTT JOINT AND HMA TAPER DETAILS
16	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS
17	TYPICAL APPLICATIONS: RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)
18	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
19	PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING
20	ARTERIAL ROAD INFORMATION SIGNING
21	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS
22	DISTRICT ONE DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING

STANDARD NO.	DESCRIPTION
000001-06	TYPICAL SYMBOLS, ABBREVIATIONS, AND PATTERNS
442201-03	CLASS C AND D PATCHES
604001-03	FRAME AND LIDS TYPE 1
604086-02	FRAME AND GRATE TYPE 23
606001-04	CONCRETE CURB AND COMBINATION CONCRETE CURB AND GUTTER
701427	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATION, FOR SPEEDS < 40MPH
701601-07	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
701701-08	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-05	SIDEWALK, CORNER, OR CROSSWALK CLOSURE
701901-02	TRAFFIC CONTROL DEVICES

BEFORE STARTING AND 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 UTILITIES. 48 HOUR NOTIFICATION IS REQUIRED.

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, THE VILLAGE OF SKOKIE, AND THE CITY OF EVANSTON.

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.

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.

ALL PAVEMENT PATCHING LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.

LOCATION OF COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.

DRAINAGE ADJUSTMENT OR RECONSTRUCTION LOCATIONS WILL BE DETERMINED IN THE FIELD 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.

FRAMES AND GRATES ADJUSTMENT OF PRIVATE UTILITIES WITHIN THE LIMITS OF THE IMPROVEMENTS SHALL BE DONE BY THEIR RESPECTIVE OWNERS AND ARE NOT PART OF THIS CONTRACT.

THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470, A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING OF WORK.

THE RESIDENT ENGINEER SHALL CONTACT WALLY CZARNY, AREA TRAFFIC FIELD ENGINEER, AT (847) 715-8419 A MINIMUM OF TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.

THE THICKNESS OF THE HMA MIXTURE SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE HMA MIXTURE IS PLACED.

THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.

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 THE ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.

DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.

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 AND ITS REMOVAL SHALL BE INCLUDED IN THE COST OF SHORT TERM PAVEMENT MARKING.

WHEN THE MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1 1/2 INCHES (40 mm) WHERE THE SPEED LIMIT IS 40 MPH (80 km/h) OR LESS AND 1 INCH (25 mm) WHERE THE SPEED LIMIT IS GREATER THAN 40 MPH (80 km/h). WITH WRITTEN APPROVAL OF THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES (75 mm) MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H).

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.

GENERAL NOTES

THE CONTRACTOR'S ATTENTION IS CALLED TO THE FACT THAT THE PRESERVATION OF EXISTING TREES IS OF UTMOST IMPORTANCE TO THE VILLAGE OF SKOKIE AND THE CITY OF EVANSTON. ALL TREE PROTECTION, TREE REMOVAL, PRUNING AND ROOT PRUNING SHALL BE COMPLETED BEFORE CONSTRUCTION OPERATIONS COMMENCE IN ANY AREA. AT NO TIME SHALL THE CONTRACTOR PRUNE OR REMOVE ANY TREES UNLESS SPECIFICALLY DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL TAKE CARE IN REMOVING OR EXCAVATING NEAR ALL EXISTING ITEMS WHICH WILL REMAIN. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

FILE NAME =	USER NAME = saundersm	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CRAWFORD AVE. (GOLF RD. TO GROSS POINT RD.) INDEX OF SHEETS, STATE STANDARDS, AND GENERAL NOTES	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pwwork\pwwork\saundersm\d0293372\0	27212-shr-plan.dgn	DRAWN -	REVISED -			2812	4040.IRS-1	COOK	22	2	
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -			CONTRACT NO. 60R98					
	PLOT DATE = 2/15/2012	DATE -	REVISED -			ILLINOIS FED. AID PROJECT					
				SCALE: SHEET NO. OF SHEETS STA. 7+45 TO STA. 43+72							

URBAN 100% STATE

SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE					SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE						
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	0005						CODE NO	ITEM	UNIT	TOTAL QUANTITIES	0005					
20101200	TREE ROOT PRUNING	EACH	10	10						70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	2349	2349					
20101300	TREE PRUNING (1 TO 10 INCH DIAMETER)	EACH	10	10						70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	2982	2982					
20101350	TREE PRUNING (OVER 10 INCH DIAMETER)	EACH	10	10						70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	54	54					
20101400	NITROGEN FERTILIZER NUTRIENT	POUND	5	5						70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	167	167					
20101600	POTASSIUM FERTILIZER NUTRIENT	POUND	5	5						70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SO FT	204	204					
21101615	TOPSOIL FURNISH AND PLACE, 4"	SO YD	484	484						* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SO FT	244	244					
25200110	SODDING, SALT TOLERANT	SO YD	484	484						* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	2349	2349					
25200200	SUPPLEMENTAL WATERING	UNIT	40	40						* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	2982	2982					
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	17	17						* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	54	54					
40600300	AGGREGATE (PRIME COAT)	TON	85	85						* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	167	167					
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	32	32						* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	185	185					
40600827	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	870	870						78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	150	150					
40600895	CONSTRUCTING TEST STRIP	EACH	2	2						* 88600600	DETECTOR LOOP REPLACEMENT	FOOT	1644	1644					
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SO YD	409	409															
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	1772	1772						X4402020	CONCRETE MEDIAN SURFACE REMOVAL	SO FT	100	100					
42001300	PROTECTIVE COAT	SO YD	656	656						X5537800	STORM SEWERS TO BE CLEANED 12"	FOOT	100	100					
44000158	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"	SO YD	21087	21087						X6030310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	57	57					
44201765	CLASS D PATCHES, TYPE II, 10 INCH	SO YD	254	254						Z0004562	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	2900	2900					
44201769	CLASS D PATCHES, TYPE III, 10 INCH	SO YD	64	64						Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	20	20					
44201771	CLASS D PATCHES, TYPE IV, 10 INCH	SO YD	106	106						Z0030850	TEMPORARY INFORMATION SIGNING	SO FT	51.4	51.4					
60300105	FRAMES AND GRATES TO BE ADJUSTED	EACH	18	18						44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	100	100					
60404940	FRAMES AND GRATES, TYPE 23	EACH	2	2						42300200	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT	SQ YD	100	100					
60406000	FRAMES AND LIDS, TYPE 1, OPEN LID	EACH	5	5															
60406100	FRAMES AND LIDS, TYPE 1, CLOSED LID	EACH	4	4															
60618300	CONCRETE MEDIAN SURFACE, 4 INCH	SO FT	100	100															
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6															
67100100	MOBILIZATION	L SUM	1	1															
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	1															
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1															
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	1															
70300100	SHORT TERM PAVEMENT MARKING	FOOT	1866	1866															
70300210	TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS	SO FT	244	244															

* SPECIALTY ITEMS

FILE NAME =	USER NAME = saunders/stm	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pwwork\pwwork\saunders\stm\0293372\01272012-stm.dgn		DRAWN -	REVISED -			2812	4040,IRS-1	COOK	22	3
PLOT SCALE = 100,0000' / 1"		CHECKED -	REVISED -			CONTRACT NO. 60R98				
PLOT DATE = 2/15/2012		DATE -	REVISED -			SCALE:	SHEET NO. OF SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT		

REV.

LEGEND

- ① EXIST. PCC BASE COURSE, ± 8"
- ② EXIST. HOT-MIX ASPHALT SURFACE COURSE (BEFORE MILLING), ± 4 1/4"
- ③ EXIST. CONCRETE CURB AND GUTTER
- ④ EXIST. LANDSCAPED MEDIAN
- ⑤ PROP. HOT-MIX ASPHALT SURFACE REMOVAL - 2 1/4"
- ⑥ PROP. HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, (IL-9.5MM), 1 1/2"
- ⑦ PROP. POLYMERIZED LEVELING BINDER (MM), IL-4.75, N50, 3/4"

NOTES:

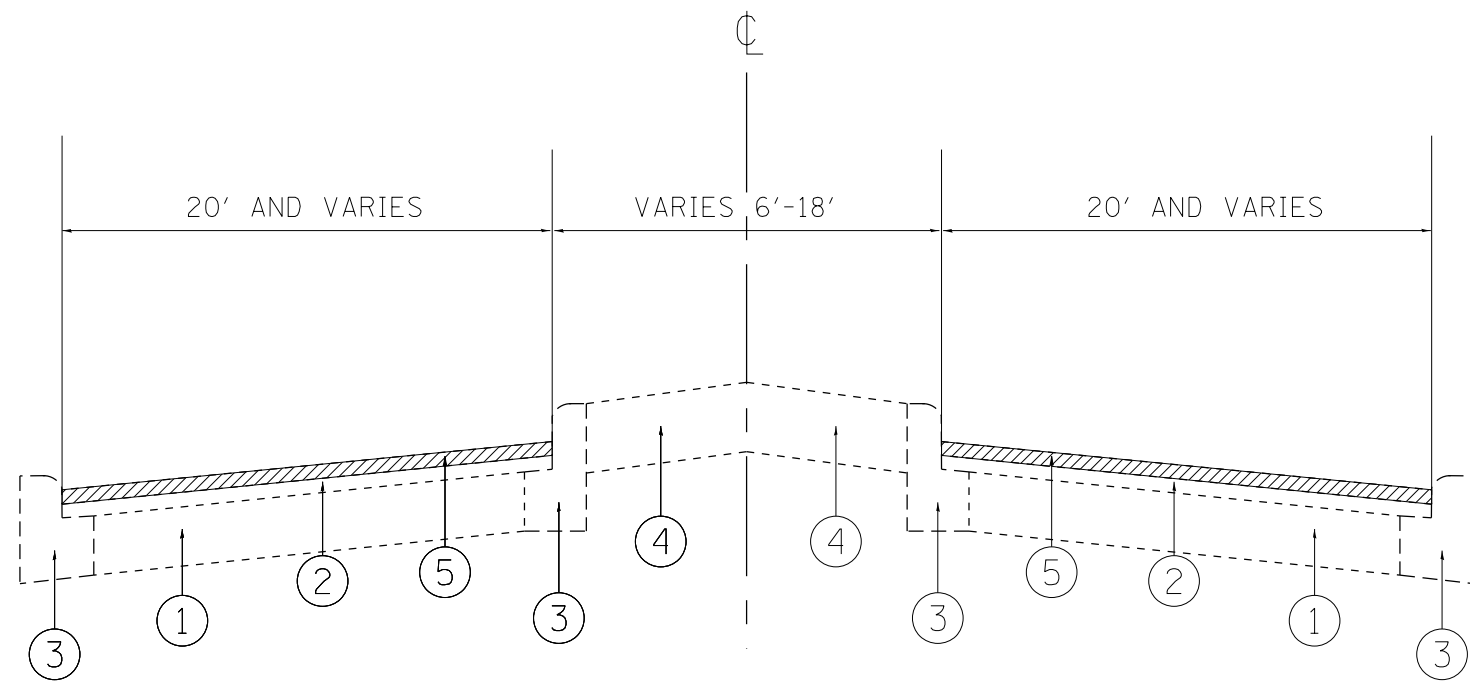
1. SEE ROADWAY AND PAVEMENT MARKING PLAN SHEETS FOR LOCATIONS OF LEFT TURN LANES.
2. MILLING OF THE ROADWAY SHALL BE DONE PRIOR TO PAVEMENT PATCHING.

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

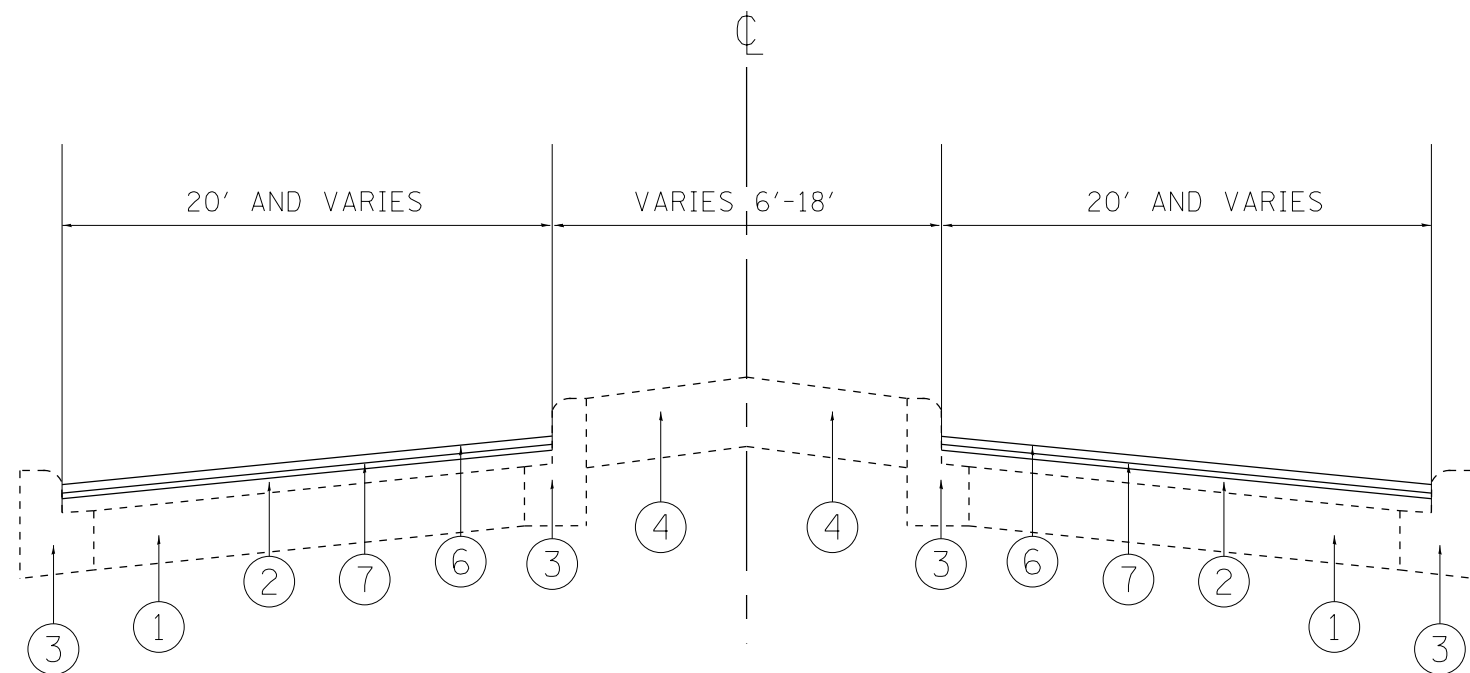
	MIXTURE TYPE	AIR VOIDS (%)
ROADWAY	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, (IL-9.5MM), 1 1/2"	4% @ 70 GYR
	POLYMERIZED LEVELING BINDER (MM), IL-4.75, N50, 3/4"	3.5% @ 50 GYR
PATCHES	CLASS D PATCH (HMA BINDER IL-19 mm), 10"	4% @ 70 GYR

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

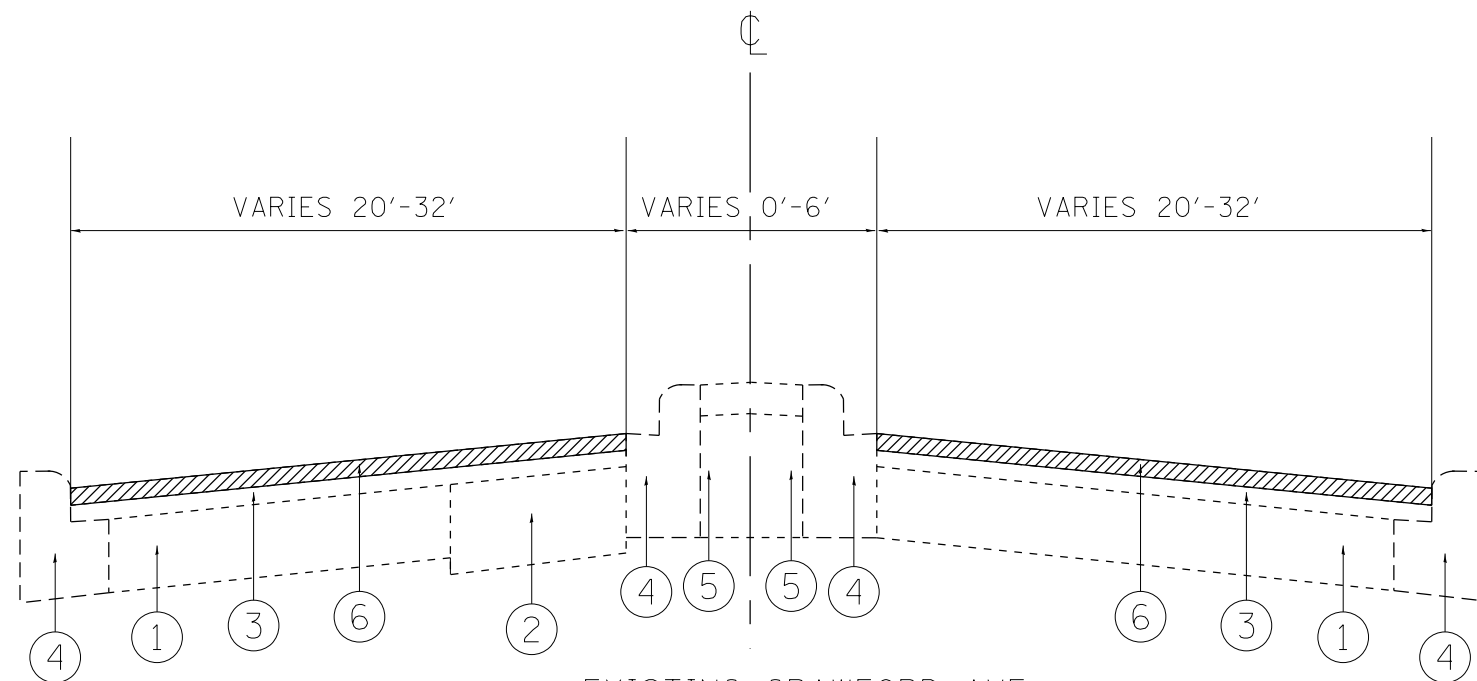
THE "AC TYPE" FOR ALL POLYMERIZED HMA MIXES SHALL BE SBS/SBR PG 76-22 AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE PG 64-22 UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR "PERCENT OF RAP" SEE DISTRICT ONE SPECIAL PROVISIONS.



EXISTING CRAWFORD AVE
STA. 9+45 TO 31+64
STA. 33+84 TO 39+98



PROPOSED CRAWFORD AVE
STA. 9+45 TO 31+64
STA. 33+84 TO 39+98



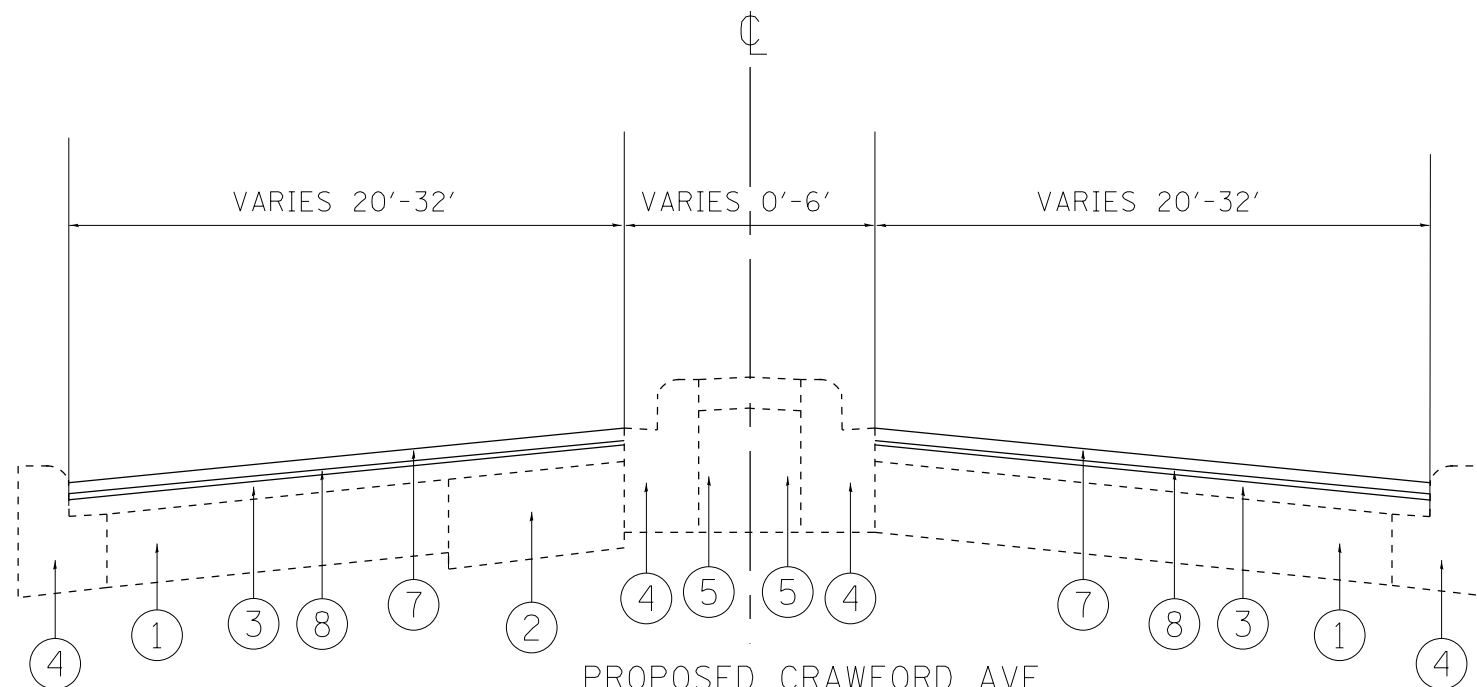
EXISTING CRAWFORD AVE
 STA. 7+45 TO STA. 9+45
 STA. 31+64 TO STA. 33+84
 STA. 39+98 TO STA. 43+72

LEGEND

- ① EXIST. PCC BASE COURSE, ± 8"
- ② EXIST. PCC BASE COURSE, ± 10"
- ③ EXIST. HOT-MIX ASPHALT SURFACE COURSE (BEFORE MILLING), ± 4 1/4"
- ④ EXIST. CONCRETE CURB AND GUTTER
- ⑤ EXIST. CONCRETE MEDIAN
- ⑥ PROP. HOT-MIX ASPHALT SURFACE REMOVAL - 2 1/4"
- ⑦ PROP. HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, (IL-9.5MM), 1 1/2"
- ⑧ PROP. POLYMERIZED LEVELING BINDER (MM), IL-4.75, N50, 3/4"

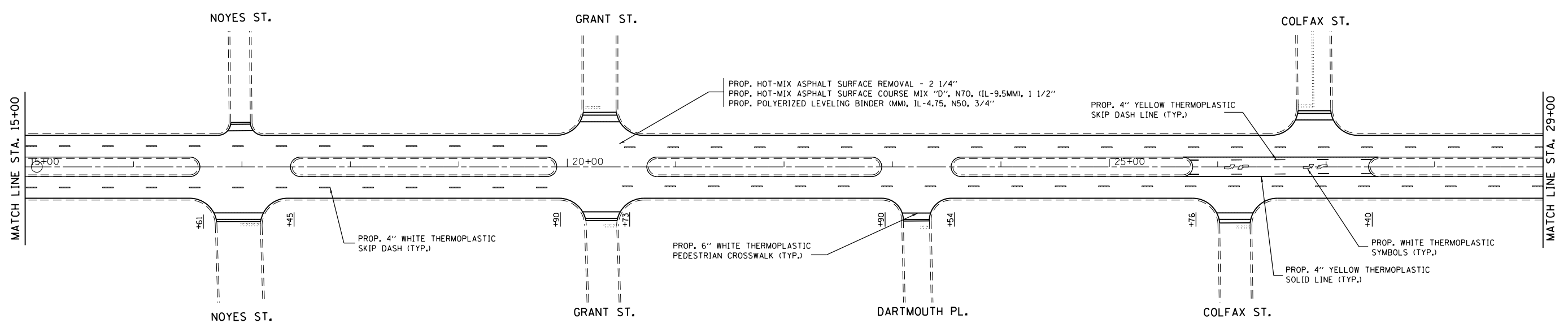
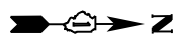
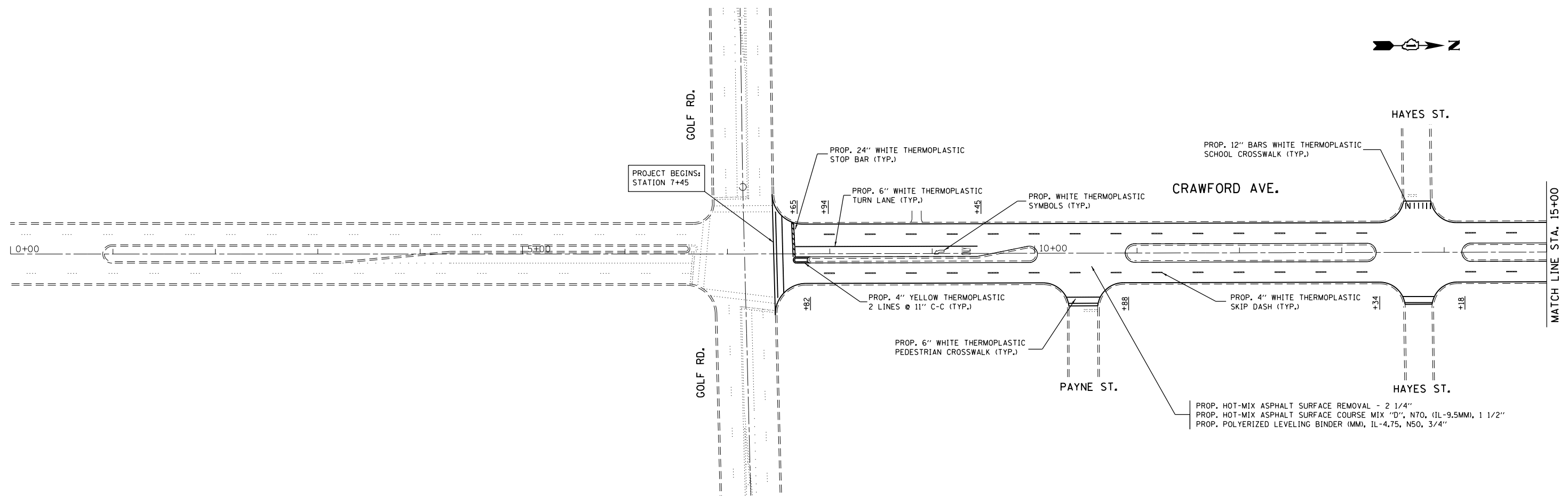
NOTES:

1. SEE ROADWAY AND PAVEMENT MARKING PLAN SHEETS FOR LOCATIONS OF LEFT AND RIGHT TURN LANES.
2. MILLING OF THE ROADWAY SHALL BE DONE PRIOR TO PAVEMENT PATCHING.
3. EXISTING CORRUGATED MEDIAN FROM STA. 32+90 TO STA. 33+02

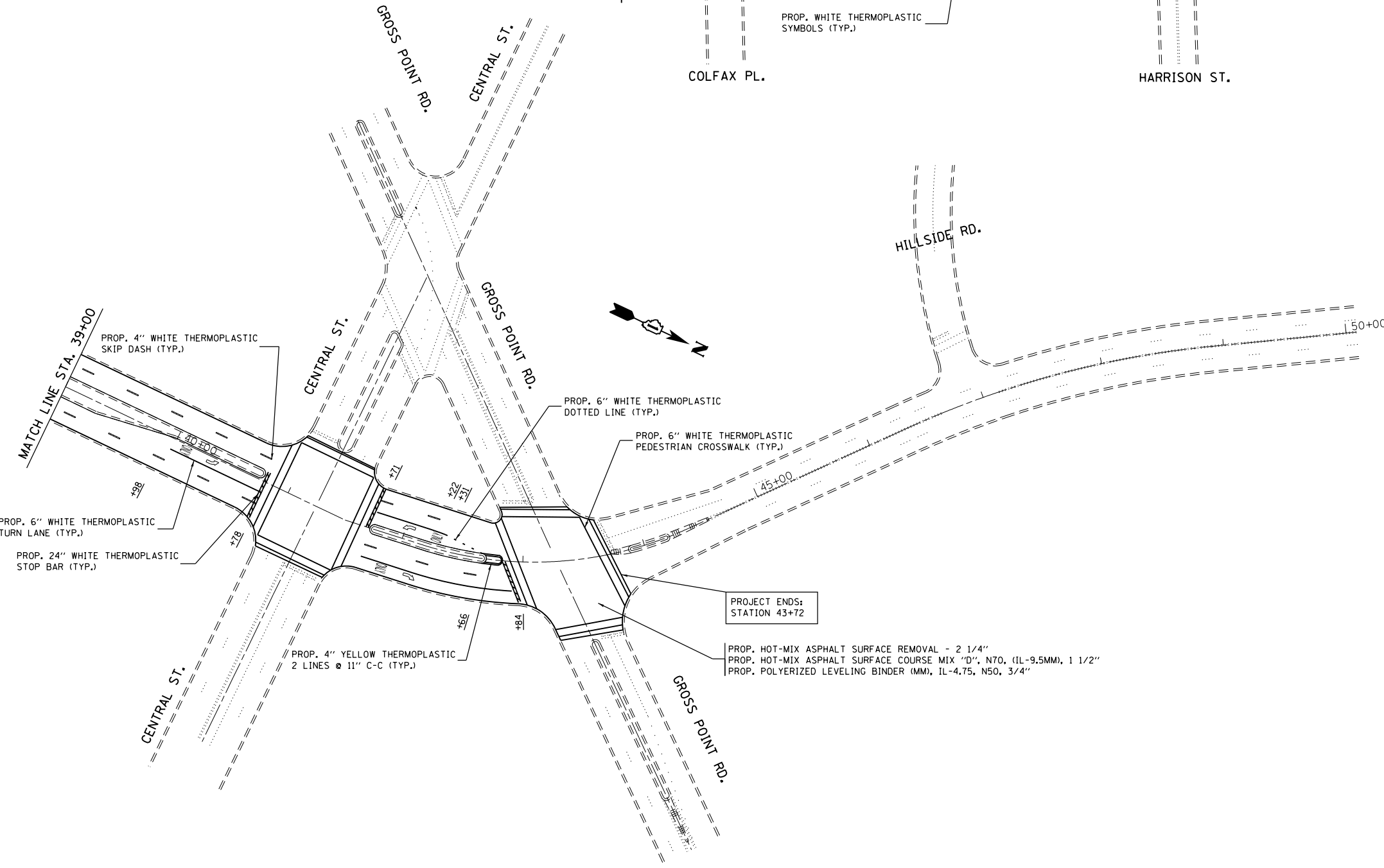
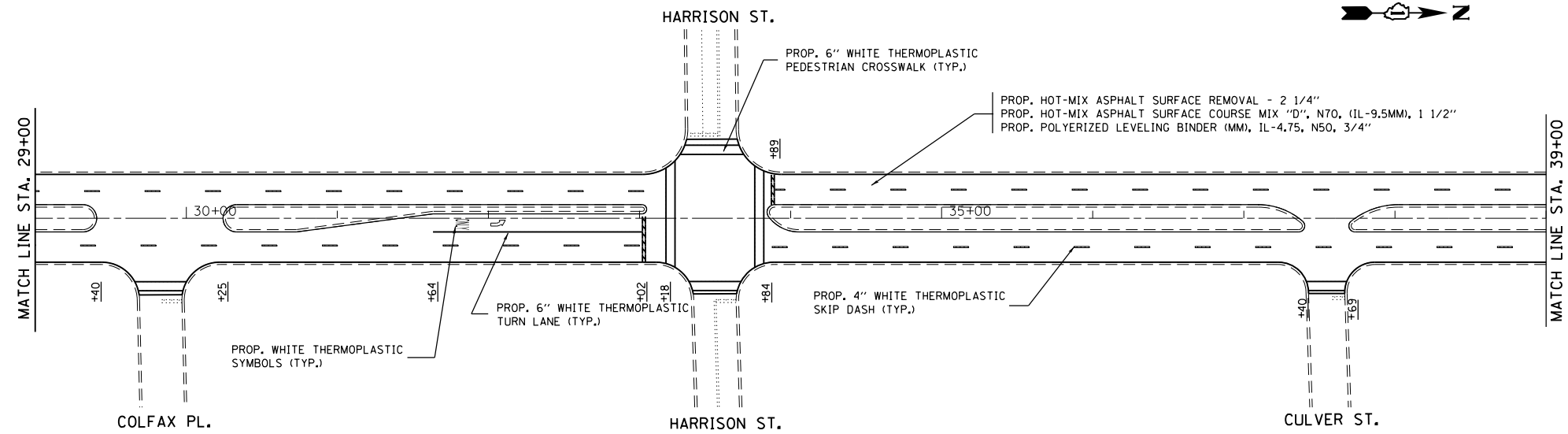


PROPOSED CRAWFORD AVE
 STA. 7+45 TO STA. 9+45
 STA. 31+64 TO STA. 33+84
 STA. 39+98 TO STA. 43+72

FILE NAME =	USER NAME = saunderstm	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CRAWFORD AVE. (GOLF RD. TO GROSS POINT RD.) EXISTING AND PROPOSED TYPICAL SECTIONS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
ci:\pw\work\p\idot\saunderstm\d0293372\0	27212-sht-plan.dgn	DRAWN -	REVISED -			2812	4040.IRS-1	COOK	22	5	
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -			CONTRACT NO. 60R98					
	PLOT DATE = 2/15/2012	DATE -	REVISED -			SCALE:	SHEET	OF	SHEETS	STA. 7+45	TO STA. 43+72



FILE NAME = c:\pw\work\p1dot\saundersm\d0293372\0	USER NAME = saundersm	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CRAWFORD AVE. (GOLF RD. TO GROSS POINT RD.) ROADWAY AND PAVEMENT MARKING PLANS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	27212-sht-plan.dgn	DRAWN -	REVISED -			2812	4040.IRS-1	COOK	22	6
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -	SCALE: SHEET OF SHEETS STA. 7+45 TO STA. 43+72		CONTRACT NO. 60R98				
	PLOT DATE = 2/15/2012	DATE -	REVISED -	ILLINOIS FED. AID PROJECT						



FILE NAME =	USER NAME = saunderstm	DESIGNED -	REVISED -
c:\pwork\pwork\saunderstm\d0293372\0	27212-sht-plan.dgn	DRAWN -	REVISED -
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 2/15/2012	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

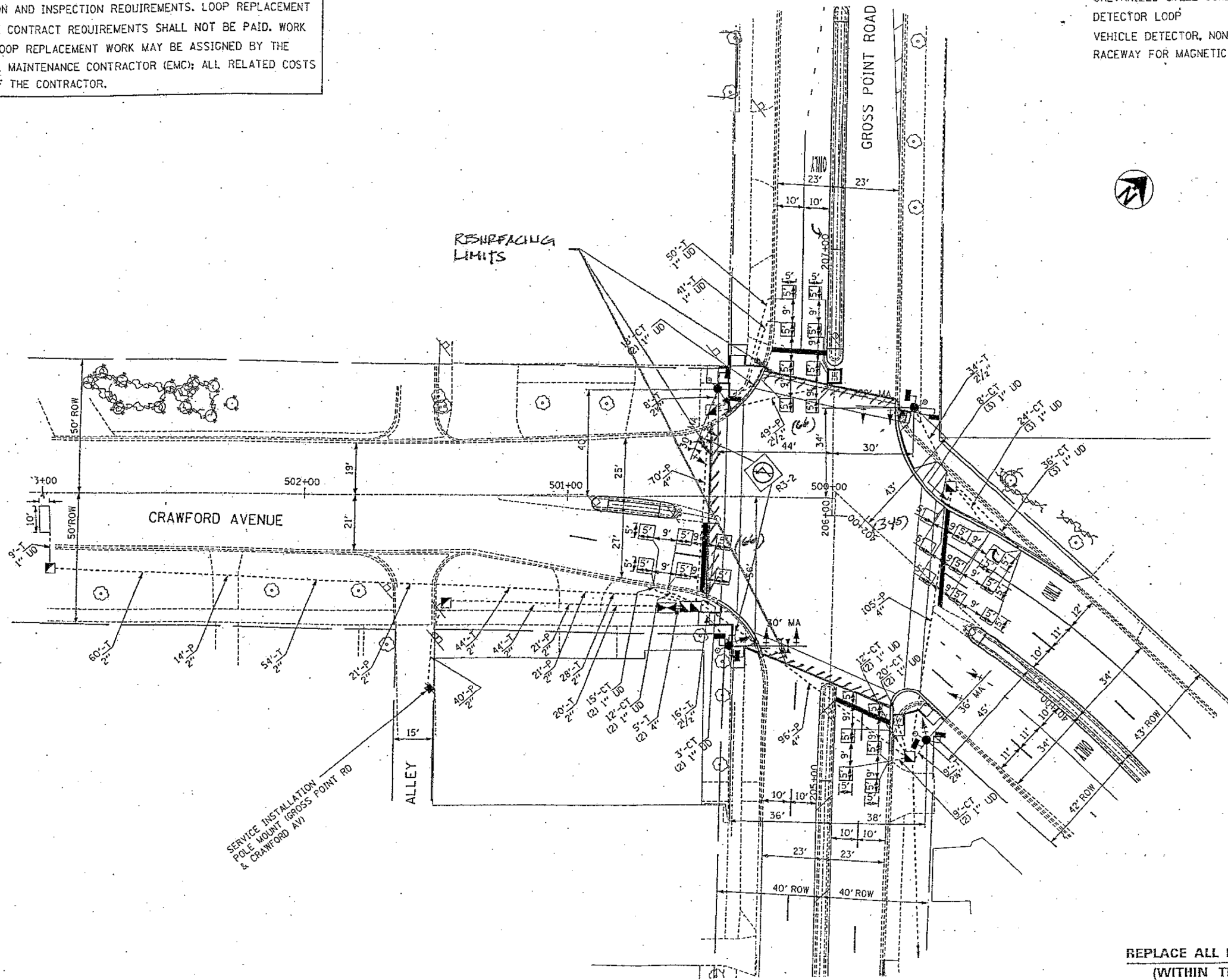
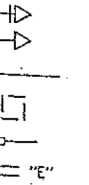
**CRAWFORD AVE. (GOLF RD. TO GROSS POINT RD.)
ROADWAY AND PAVEMENT MARKING PLANS**

SCALE: SHEET OF SHEETS STA. 7+45 TO STA. 43+72

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2812	4040.IRS-1	COOK	22	7
CONTRACT NO. 60R98				
ILLINOIS FED. AID PROJECT				

SPECIFICATIONS FOR DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION ON ROADWAY GRINDING, RESURFACING AND PATCHING OPERATIONS". SPECIAL ATTENTION MUST BE MADE TO THE SECTIONS "INSPECTION OF CONSTRUCTION" AND "DETECTOR LOOP REPLACEMENT" FOR INSTALLATION AND INSPECTION REQUIREMENTS. LOOP REPLACEMENT WORK THAT DOES NOT MEET THE CONTRACT REQUIREMENTS SHALL NOT BE PAID. WORK NECESSARY TO COMPLETE THE LOOP REPLACEMENT WORK MAY BE ASSIGNED BY THE ENGINEER TO IDOT'S ELECTRICAL MAINTENANCE CONTRACTOR (EMC); ALL RELATED COSTS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.

SIGNAL HEAD WITH BACKPLATE
SIGNAL HEAD
GALVANIZED STEEL CONDUIT IN TRENCH OR PUSHED
DETECTOR LOOP
VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE
RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II



THIS PLAN IS FOR THE SOLE PURPOSE OF DETECTOR LOOP REPLACEMENTS ONLY

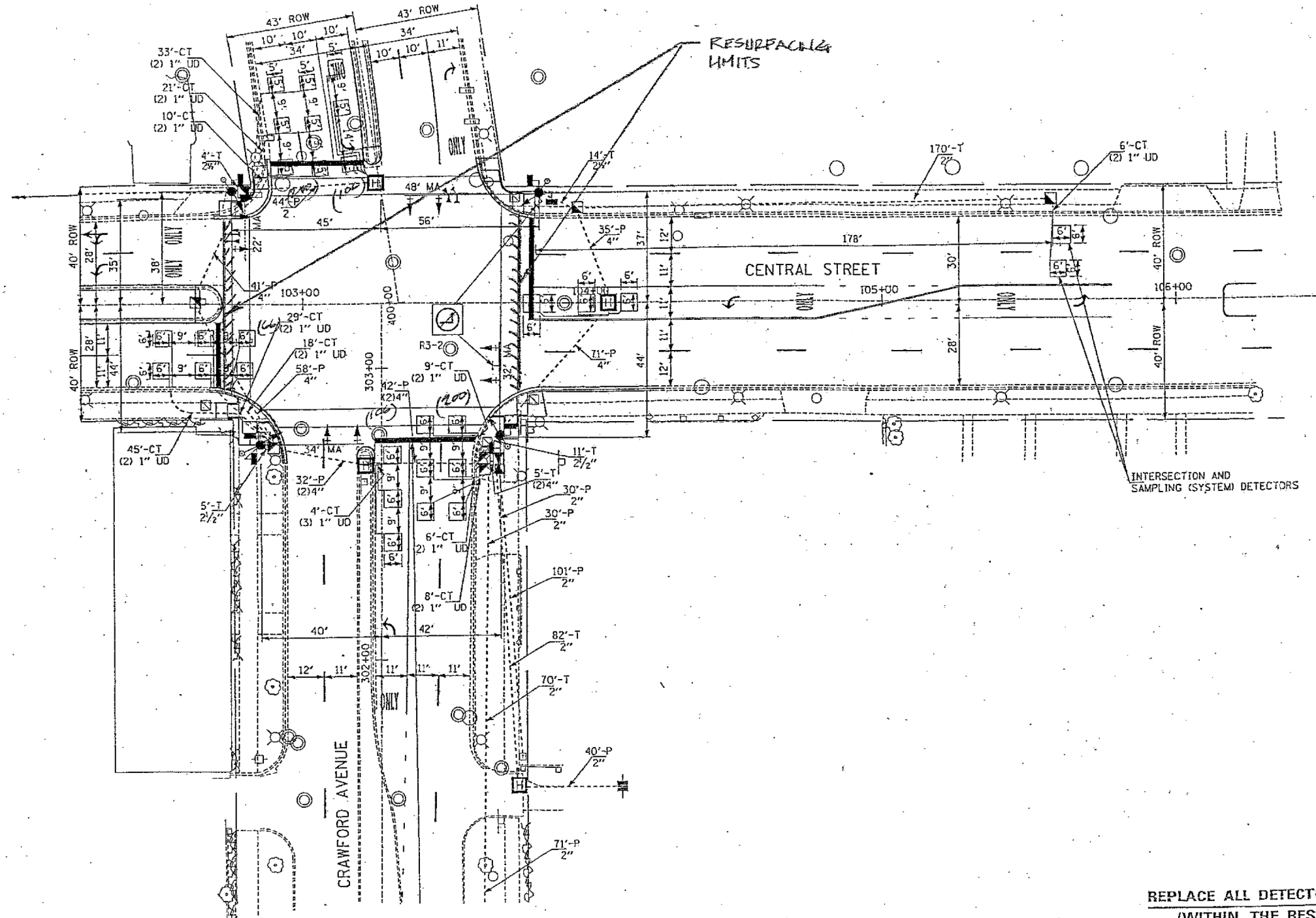
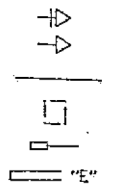
REPLACE ALL DETECTOR LOOPS AS SHOWN (WITHIN THE RESURFACING LIMITS)

CODE	QUANTITY	UNIT	ITEM
88600600	477	FOOT	DETECTOR LOOP, REPLACEMENT

FILE NAME =	USER NAME = plescencia	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE - DETECTOR LOOP REPLACEMENT CRAWFORD AV. @ GROSS POINT RD.	F.A. RTE.	SECTION	COUNTY	TOTAL SHEET		
cc:\pwork\ploadot\plescencia\48112618\1\1.dgn	DESIGNED -	REVISED -	NO.								
PLOT SCALE = 1/80.0000 7' = 1"	CHECKED -	REVISED -	LOOK 22 8								
PLOT DATE = 6/22/2011	DATE -	REVISED -		CONTRACT NO. 609A2	SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT

SPECIFICATIONS FOR DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION ON ROADWAY GRINDING, RESURFACING AND PATCHING OPERATIONS". SPECIAL ATTENTION MUST BE MADE TO THE SECTIONS "INSPECTION OF CONSTRUCTION" AND "DETECTOR LOOP REPLACEMENT" FOR INSTALLATION AND INSPECTION REQUIREMENTS. LOOP REPLACEMENT WORK THAT DOES NOT MEET THE CONTRACT REQUIREMENTS SHALL NOT BE PAID. WORK NECESSARY TO COMPLETE THE LOOP REPLACEMENT WORK MAY BE ASSIGNED BY THE ENGINEER TO IDOT'S ELECTRICAL MAINTENANCE CONTRACTOR (EMC); ALL RELATED COSTS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.

SIGNAL HEAD WITH BACKPLATE
 SIGNAL HEAD
 GALVANIZED STEEL CONDUIT IN TRENCH OR PUSHED
 DETECTOR LOOP
 VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE
 RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II



INTERSECTION AND SAMPLING (SYSTEM) DETECTORS

THIS PLAN IS FOR THE SOLE PURPOSE OF DETECTOR LOOP REPLACEMENTS ONLY

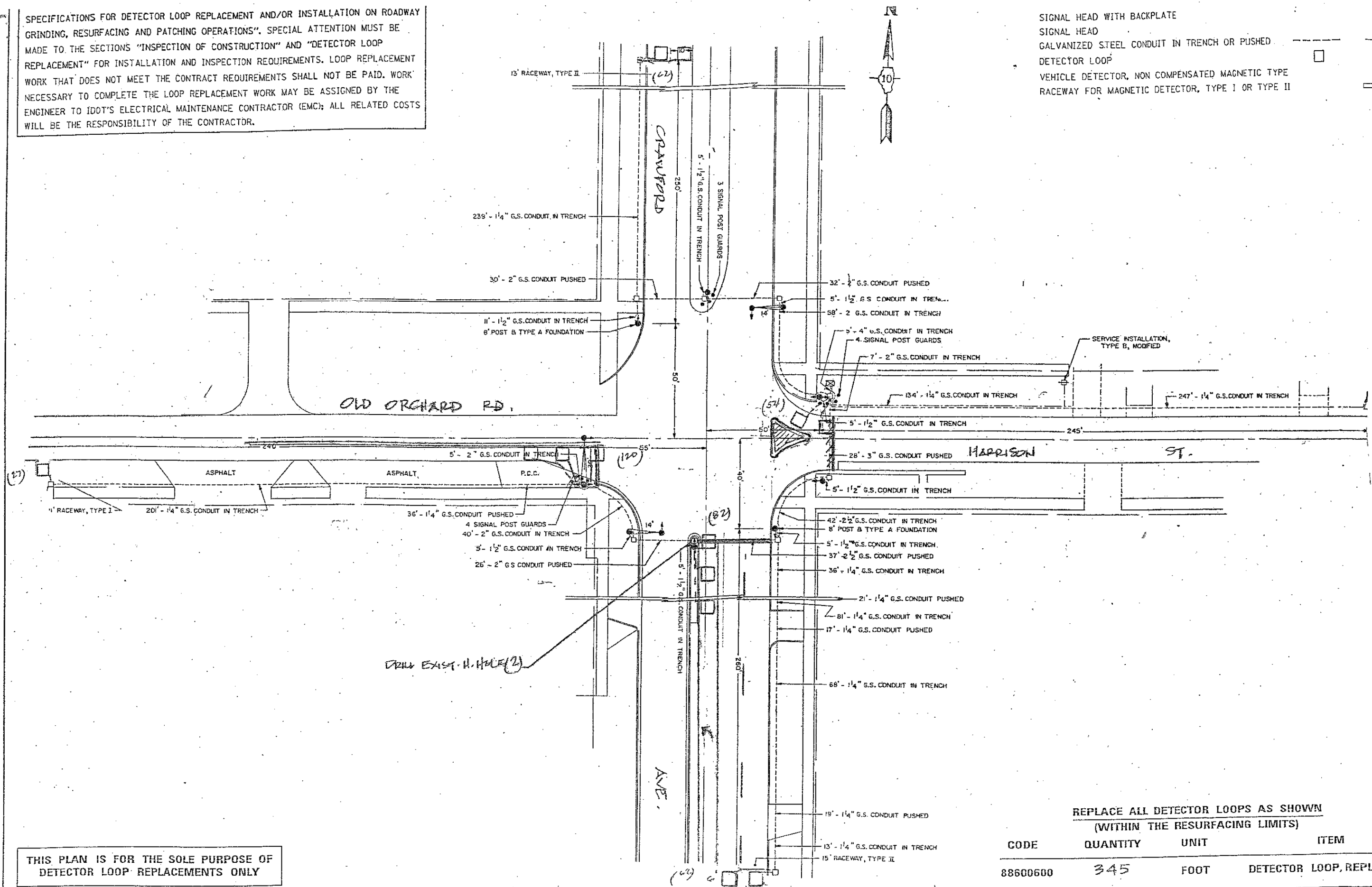
REPLACE ALL DETECTOR LOOPS AS SHOWN (WITHIN THE RESURFACING LIMITS)

CODE	QUANTITY	UNIT	ITEM
88600600	478	FOOT	DETECTOR LOOP REPLACEMENT

FILE NAME =	USER NAME = plascencia	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE - DETECTOR LOOP REPLACEMENT CRAWFORD AV. @ CENTRAL ST.	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
ct:\pw_work\pwide\plascencia\10112615\1	plascencia.dgn	DRAWN -	REVISED -			2012	4040-1AS-1	COOK	22	9	
PLOT SCALE = 1/8" = 1'-0"		CHECKED -	REVISED -			CONTRACT NO. 60R90					
PLOT DATE = 6/22/2011		DATE -	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					
				SCALE:	SHEET NO. OF SHEETS	STA. TO STA.					

SPECIFICATIONS FOR DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION ON ROADWAY GRINDING, RESURFACING AND PATCHING OPERATIONS". SPECIAL ATTENTION MUST BE MADE TO THE SECTIONS "INSPECTION OF CONSTRUCTION" AND "DETECTOR LOOP REPLACEMENT" FOR INSTALLATION AND INSPECTION REQUIREMENTS. LOOP REPLACEMENT WORK THAT DOES NOT MEET THE CONTRACT REQUIREMENTS SHALL NOT BE PAID. WORK NECESSARY TO COMPLETE THE LOOP REPLACEMENT WORK MAY BE ASSIGNED BY THE ENGINEER TO IDOT'S ELECTRICAL MAINTENANCE CONTRACTOR (EMC); ALL RELATED COSTS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.

SIGNAL HEAD WITH BACKPLATE
 SIGNAL HEAD
 GALVANIZED STEEL CONDUIT IN TRENCH OR PUSHED
 DETECTOR LOOP
 VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE
 RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II



THIS PLAN IS FOR THE SOLE PURPOSE OF DETECTOR LOOP REPLACEMENTS ONLY

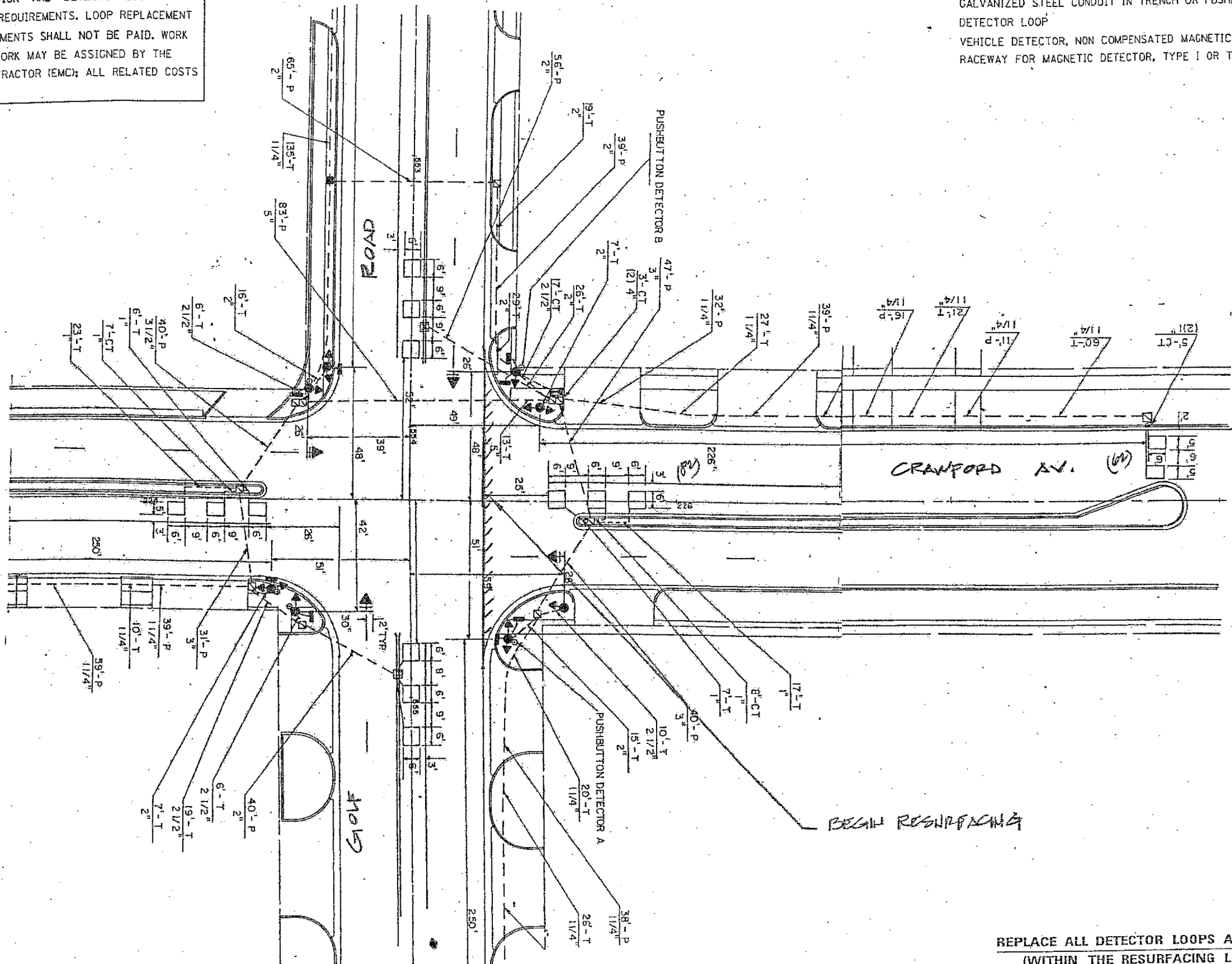
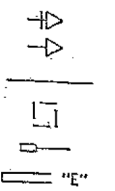
REPLACE ALL DETECTOR LOOPS AS SHOWN (WITHIN THE RESURFACING LIMITS)

CODE	QUANTITY	UNIT	ITEM
88600600	345	FOOT	DETECTOR LOOP, REPLACEMENT

FILE NAME =	USER NAME = plascencia	DESIGNED -	REVISOR -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE - DETECTOR LOOP REPLACEMENT CRAWFORD RD. @ HARRISON ST.	SCALE:	SHEET NO. OF SHEETS STA. TO STA.	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\p\work\p\dot\plascencia\112618\1	baher.dgn	DRAWN -	REVISOR -						4090-185-1	COOK	22	10
		CHECKED -	REVISOR -					CONTRACT NO. 6097E		FED. ROAD DIST. NO. (ILLINOIS) FED. AID PROJECT		
		DATE -	REVISOR -									

SPECIFICATIONS FOR DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION ON ROADWAY GRINDING, RESURFACING AND PATCHING OPERATIONS". SPECIAL ATTENTION MUST BE MADE TO THE SECTIONS "INSPECTION OF CONSTRUCTION" AND "DETECTOR LOOP REPLACEMENT" FOR INSTALLATION AND INSPECTION REQUIREMENTS. LOOP REPLACEMENT WORK THAT DOES NOT MEET THE CONTRACT REQUIREMENTS SHALL NOT BE PAID. WORK NECESSARY TO COMPLETE THE LOOP REPLACEMENT WORK MAY BE ASSIGNED BY THE ENGINEER TO IDOT'S ELECTRICAL MAINTENANCE CONTRACTOR (EMC); ALL RELATED COSTS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.

- SIGNAL HEAD WITH BACKPLATE
- SIGNAL HEAD
- GALVANIZED STEEL CONDUIT IN TRENCH OR PUSHED
- DETECTOR LOOP
- VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE
- RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II

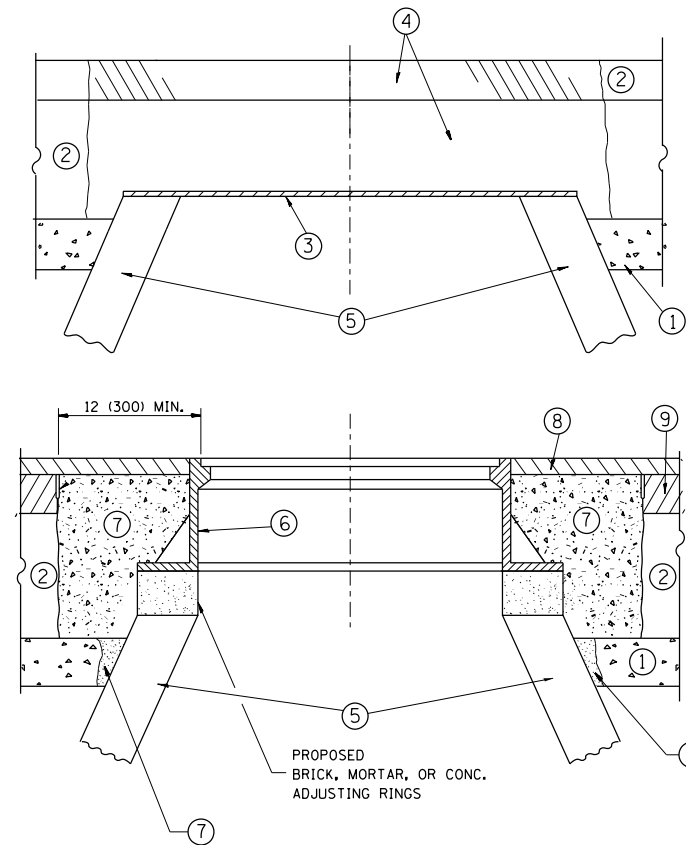


THIS PLAN IS FOR THE SOLE PURPOSE OF DETECTOR LOOP REPLACEMENTS ONLY

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

CODE	QUANTITY	UNIT	ITEM
88600600	144	FOOT	DETECTOR LOOP, REPLACEMENT

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c:\p\work\p\dot\p\encas\108112618\1\p\dot\p\encas.dgn		DRAWN -	REVISED -			2012	4040.105-1	Cook	22	88
PLOT SCALE = 100.0000 / in.		CHECKED -	REVISED -			CONTRACT NO. 60R95				
PLOT DATE = 6/22/2011		DATE -	REVISED -			FED. ROAD DIST. NO. 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

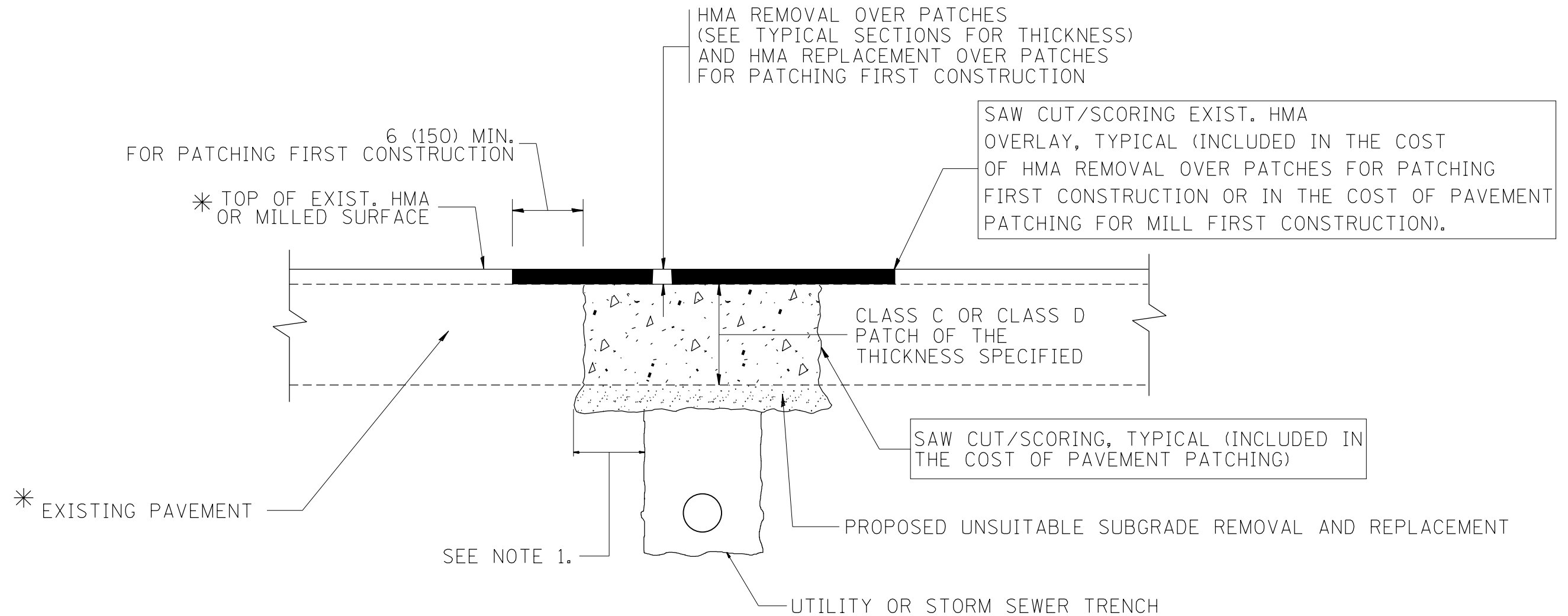
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME =	USER NAME = saunderstm	DESIGNED - R. SHAH	REVISED - R. WIEDEMAN 05-14-04
c:\pwork\pwork\saunderstm\d0293372\0	stStd.dgn	DRAWN -	REVISED - R. BORO 01-01-07
	PLOT SCALE = 100.0000' / 1in.	CHECKED -	REVISED - R. BORO 03-09-11
	PLOT DATE = 2/15/2012	DATE - 10-25-94	REVISED - R. BORO 12-06-11

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2812	4040.IRS-1	COOK	22	12
BD600-03 (BD-8)		CONTRACT NO.	60R98	
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.

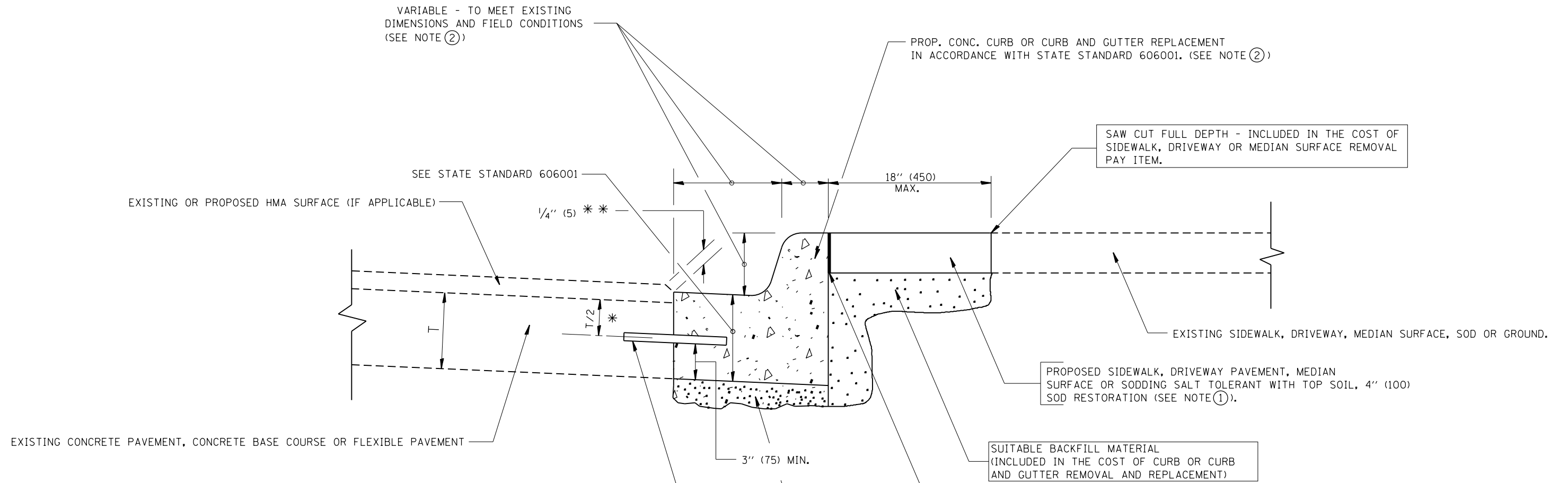
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME =	USER NAME = saunderstm	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98
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	PLOT SCALE = 100.0000' / 1in.	CHECKED -	REVISED - R. BORO 09-04-07
	PLOT DATE = 2/15/2012	DATE - 10-25-94	REVISED - K. ENG 10-27-08

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2812	4040.IRS-1	COOK	22	13
BD400-04 (BD-22)			CONTRACT NO. 60R98	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



- * 3" (75) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.
 - ** IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH WITH THE PAVEMENT.
- 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.

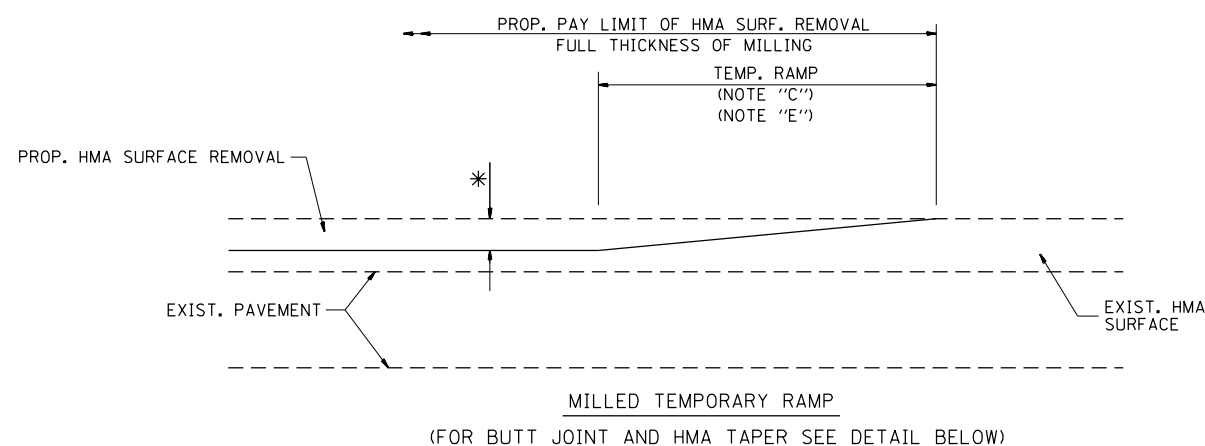
- PROPOSED 3/4" (20) PREFORMED EXPANSION JOINT AT CONCRETE SIDEWALKS, DRIVEWAYS, AND MEDIANS. (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.)
- UNSUITABLE SUB-BASE MATERIAL TO BE REMOVED, IF DIRECTED BY THE ENGINEER, SHALL BE REPLACED WITH EITHER SUB-BASE GRANULAR MATERIAL, TYPE B OR ADDITIONAL THICKNESS OF CONCRETE.
- REMOVAL AND REPLACEMENT 4" (100) OR LESS IS INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.
- REMOVAL AND REPLACEMENT IN EXCESS OF 4" (100) WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.
- PROPOSED #6 (20) EPOXY COATED TIE BARS 24" (600) LONG AT 24" (600) CENTERS WILL NOT BE PAID FOR SEPARATELY. DELETE EPOXY COATED TIE BARS IF EXISTING TIE BARS ARE USUABLE AS DETERMINED BY THE ENGINEER. (SEE NOTE ③).

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

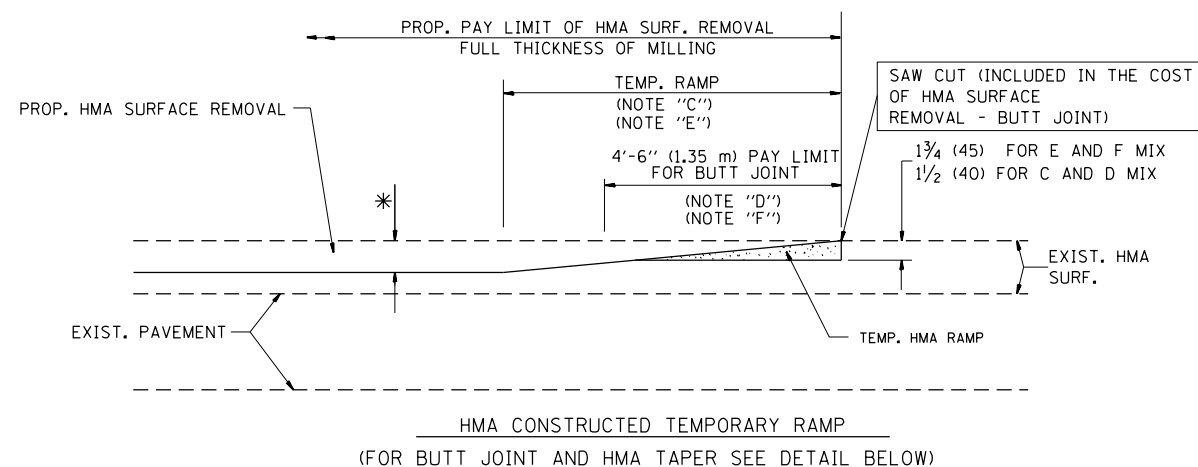
CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

FILE NAME =	USER NAME = saunderstm	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT	F.A.U. RE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	et:\pw\work\p\idot\saunderstm\d0293372\01.stStd.dgn	DRAWN -	REVISED - A. ABBAS 03-21-97			2812	4040.IRS-1	COOK	22	14
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	PLOT DATE = 2/15/2012	DATE - 03-11-94	REVISED - R. BORO 12-15-09			SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

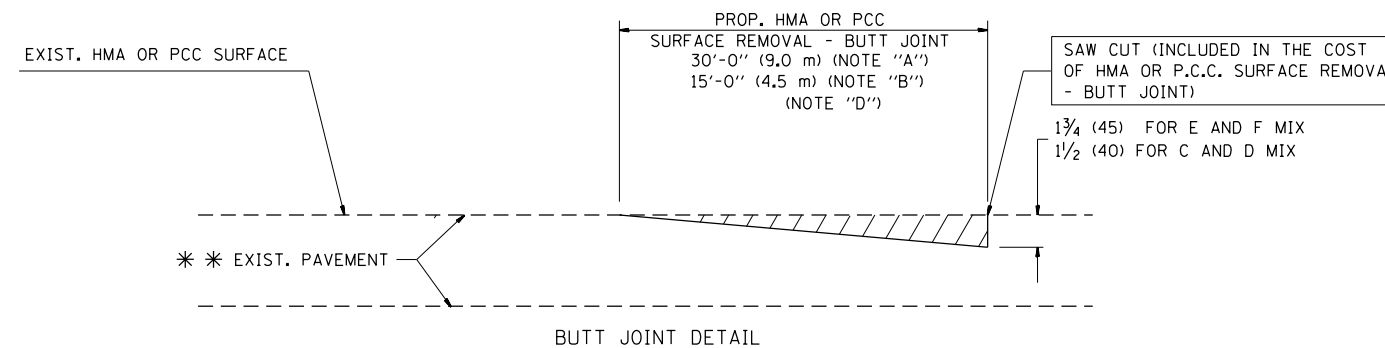


OPTION 1

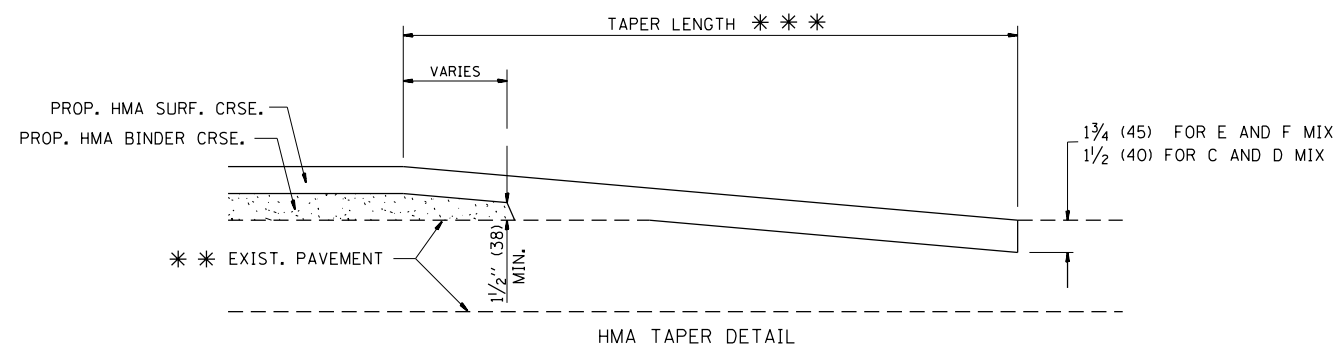


OPTION 2

TYPICAL TEMPORARY RAMP



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

*** PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

NOTES

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

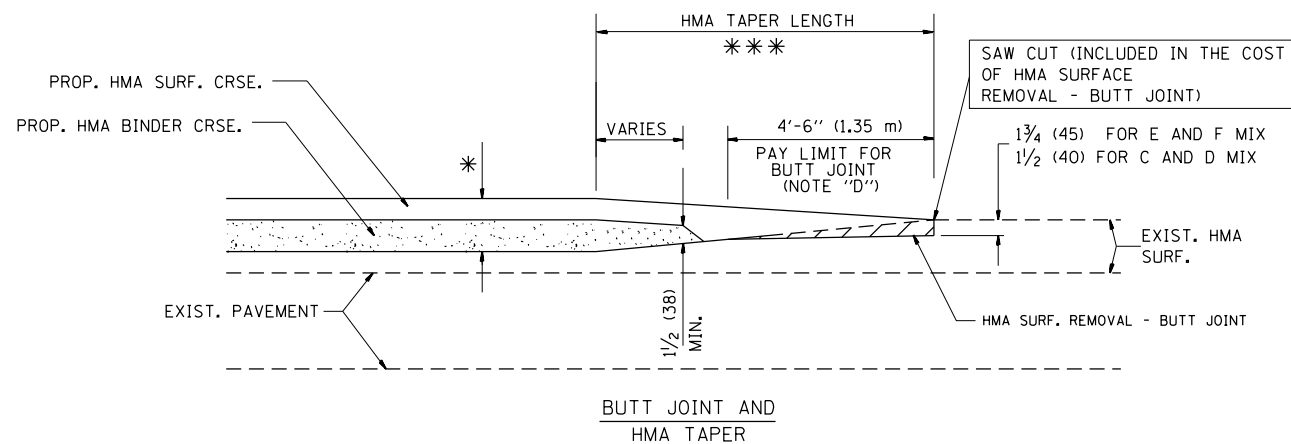
* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.

*** 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

BASIS OF PAYMENT:

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

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



TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

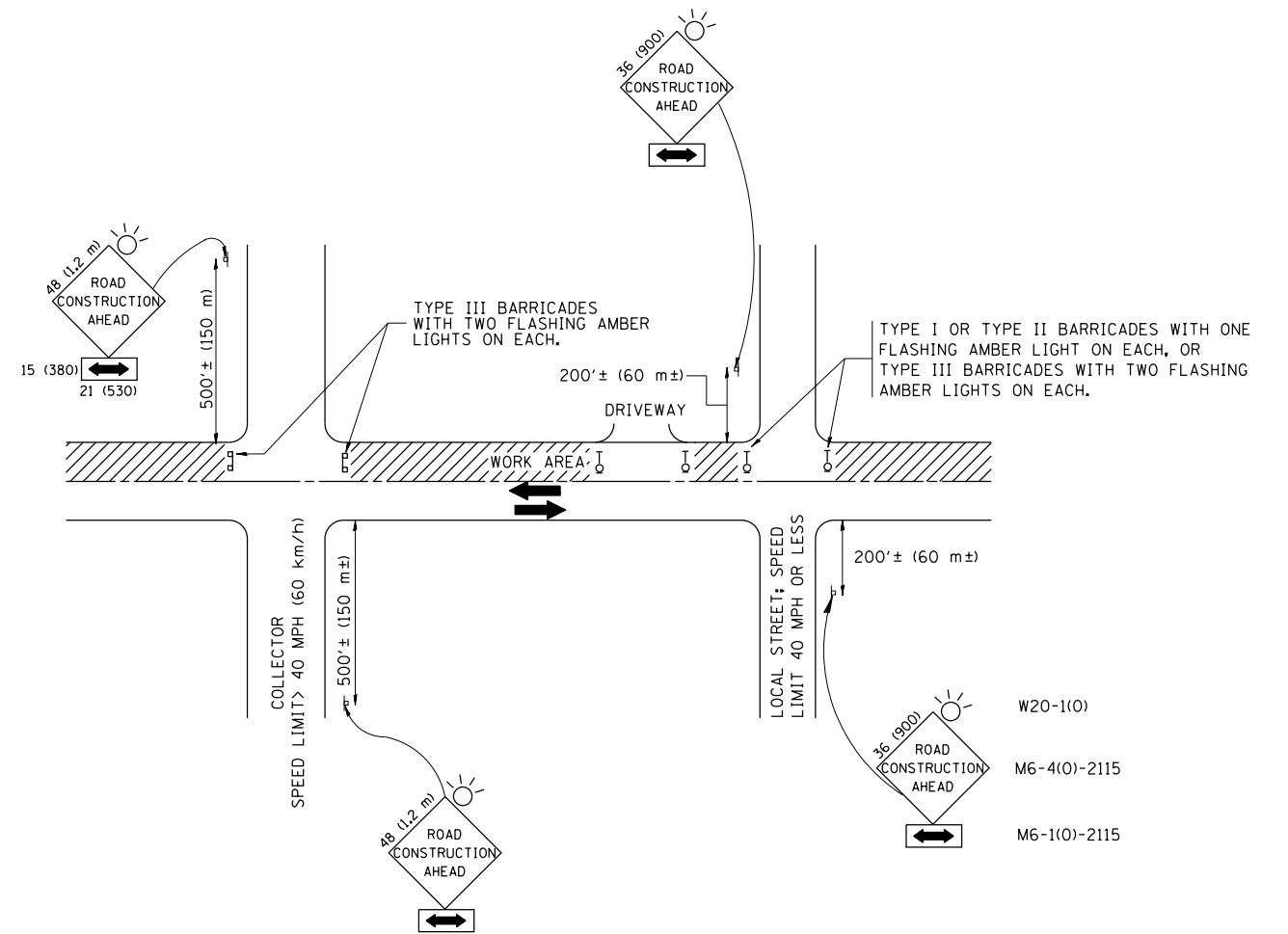
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	PLOT DATE = 2/15/2012	DATE - 06-13-90	REVISED - R. BORO 01-01-07

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BUTT JOINT AND
HMA TAPER DETAILS**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2812	4040.IRS-1	COOK	22	15
BD400-05 BD32		CONTRACT NO. 60R98		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



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

NOTES:

A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS

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 AND FLAG 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. 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).

B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.

C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.

D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

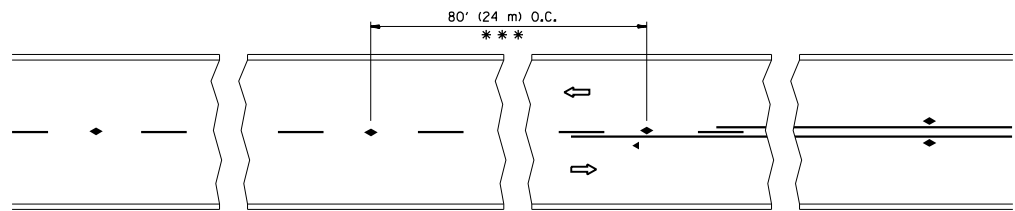
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	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 2/15/2012	DATE - 06-89	REVISED - T. RAMMACH 01-06-00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

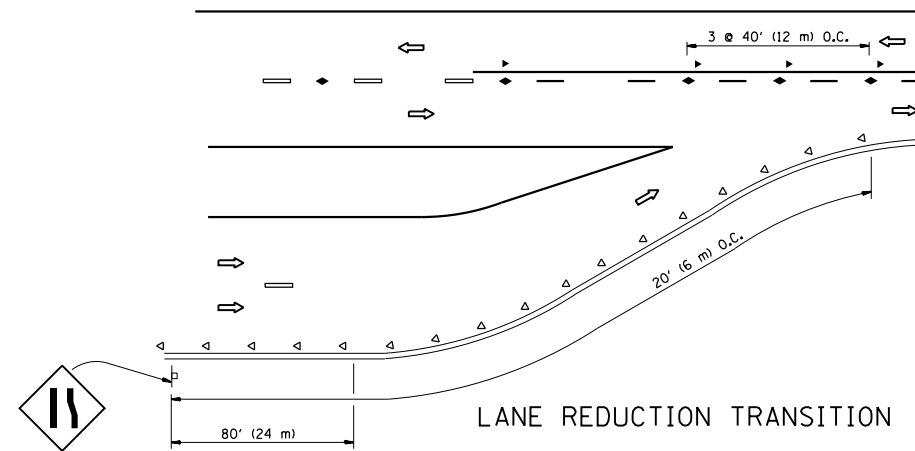
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2812	4040.IRS-1	COOK	22	16
TC-10			CONTRACT NO. 60R98	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

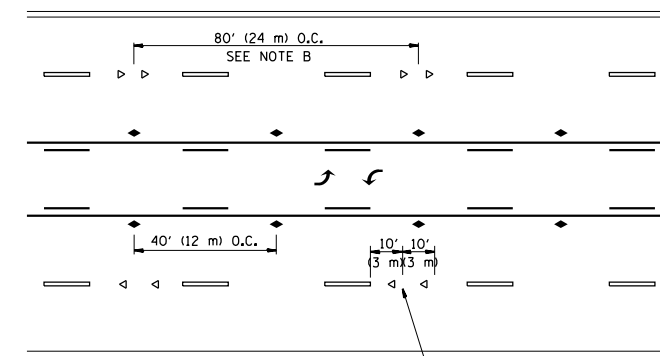


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

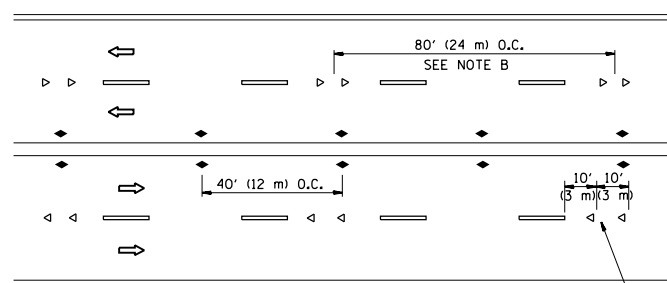
TWO-LANE/TWO-WAY



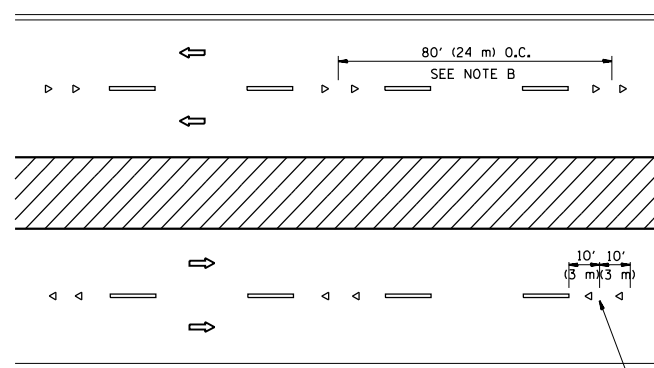
LANE REDUCTION TRANSITION



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.

LANE MARKER NOTES

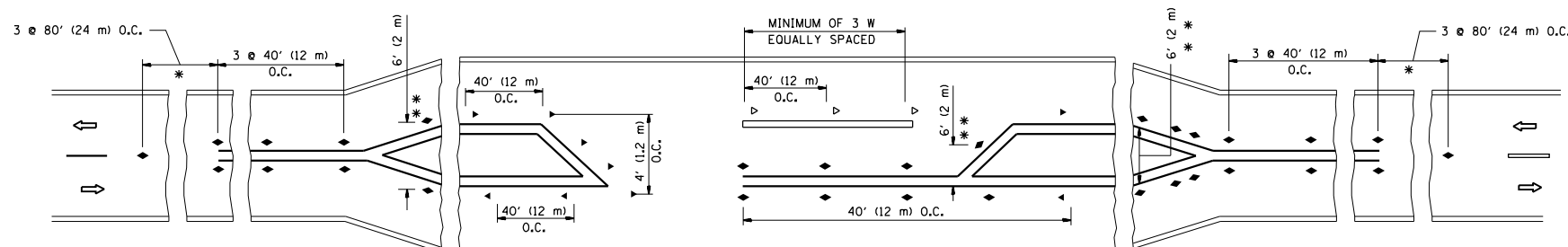
- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.
- B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.

SYMBOLS

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

DESIGN NOTES

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



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

LEFT TURN

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

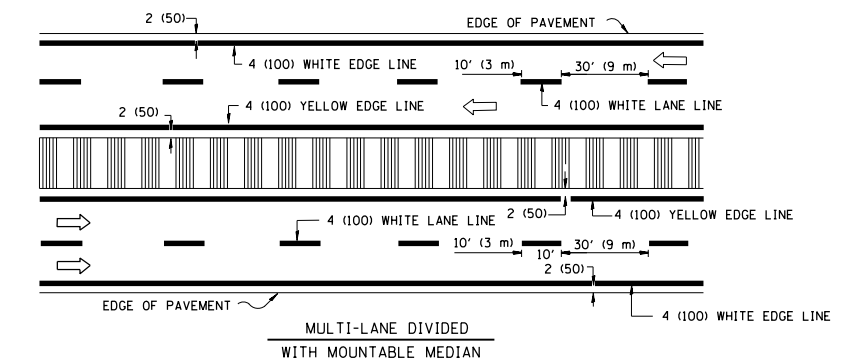
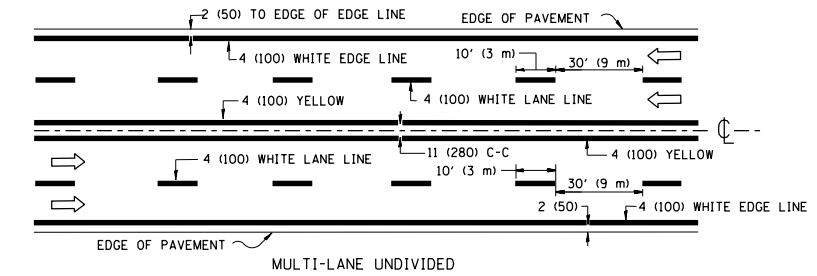
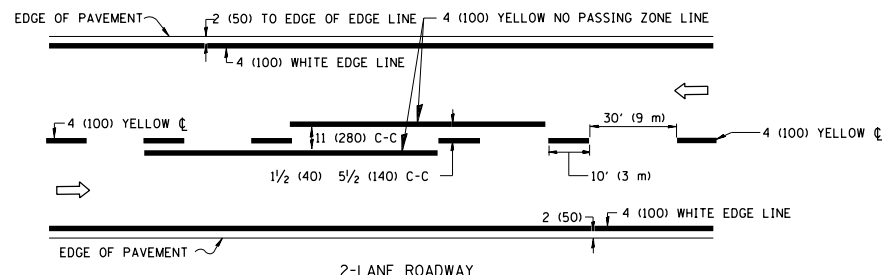
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et:\pw\work\p\idot\saunderstm\d0293372\0	stStd.dgn	DRAWN -	REVISED - T. RAMMACHER 03-12-99
	PLOT SCALE = 100.0000' / 1"	CHECKED -	REVISED - T. RAMMACHER 01-06-00
	PLOT DATE = 2/15/2012	DATE -	REVISED - C. JUCIUS 09-09-09

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

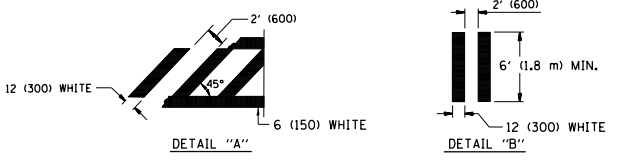
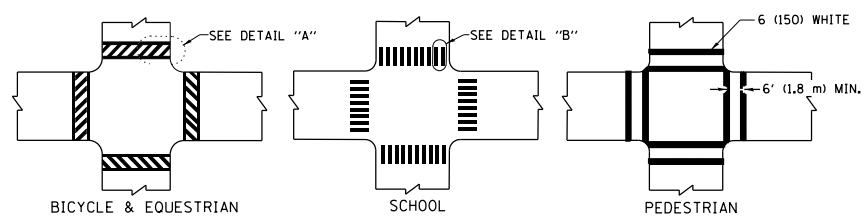
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2812	4040.IRS-1	COOK	22	17
TC-11		CONTRACT NO. 60R98		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

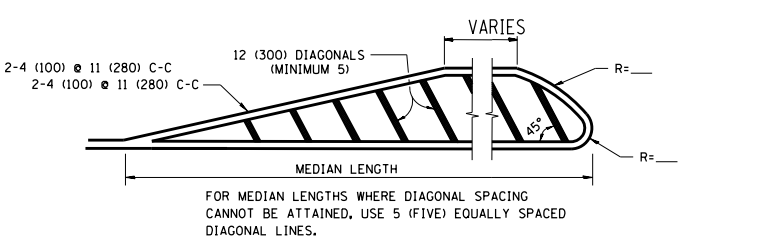
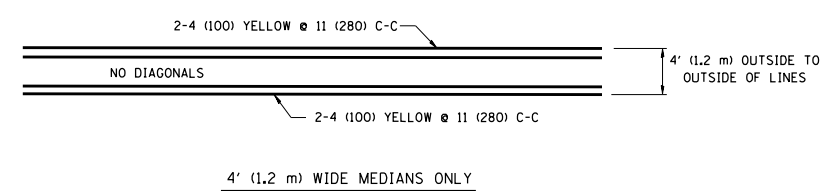


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

TYPICAL LANE AND EDGE LINE MARKING

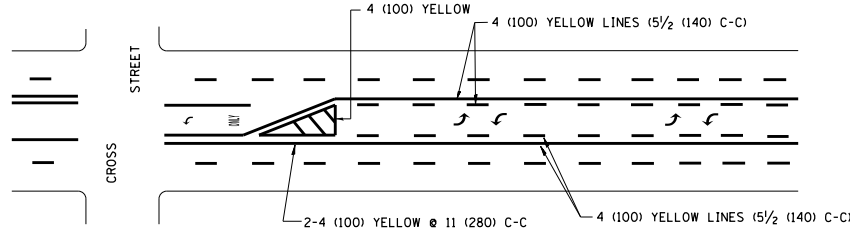


TYPICAL CROSSWALK MARKING

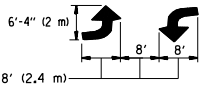


DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE

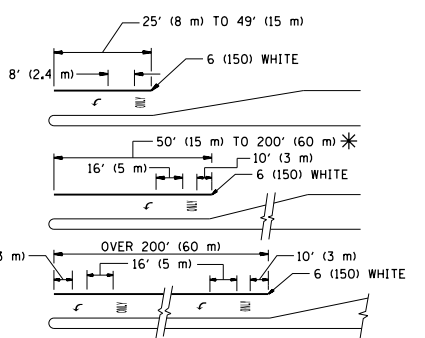


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

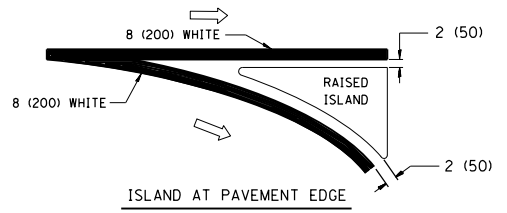
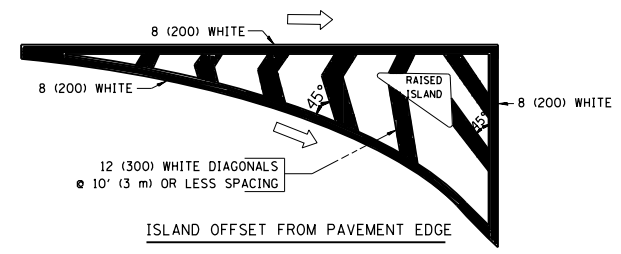


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)

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

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



TYPICAL ISLAND MARKING

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	4 (100)	SOLID	YELLOW	5/2 (140) C-C FROM SKIP-DASH CENTERLINE
NO PASSING ZONE LINES: FOR BOTH DIRECTIONS	2 @ 4 (100)	SOLID	YELLOW	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 MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE. SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE. SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" 15 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R": 3.6 SQ. FT. (0.33 m ²) EACH "X": 54.0 SQ. FT. (5.0 m ²) EACH
SHOULDER DIAGONALS	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))

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

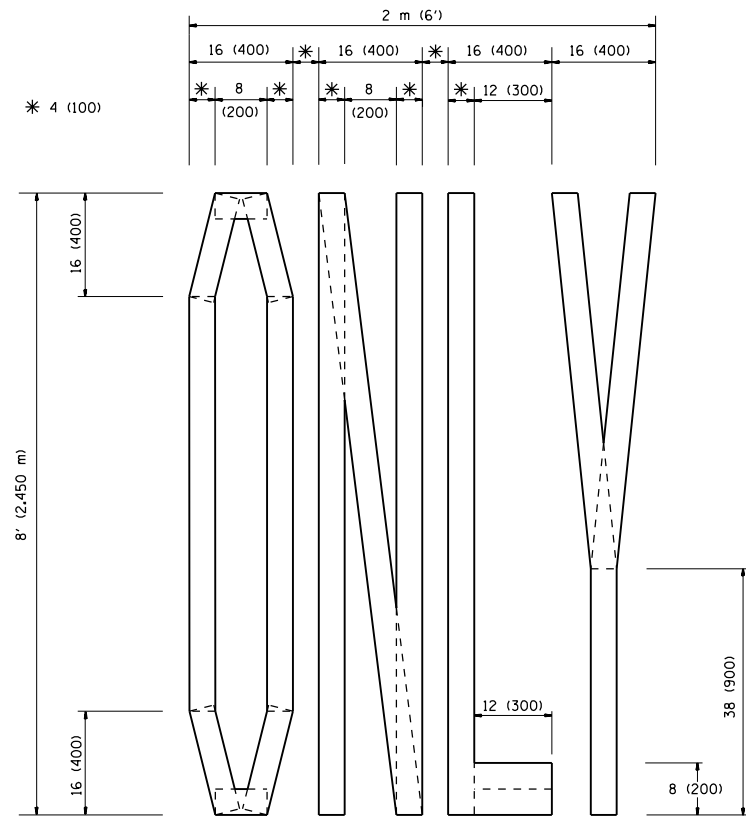
All dimensions are in inches (millimeters) unless otherwise shown.

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	PLOT DATE = 2/15/2012	DATE - 03-19-90	REVISED -

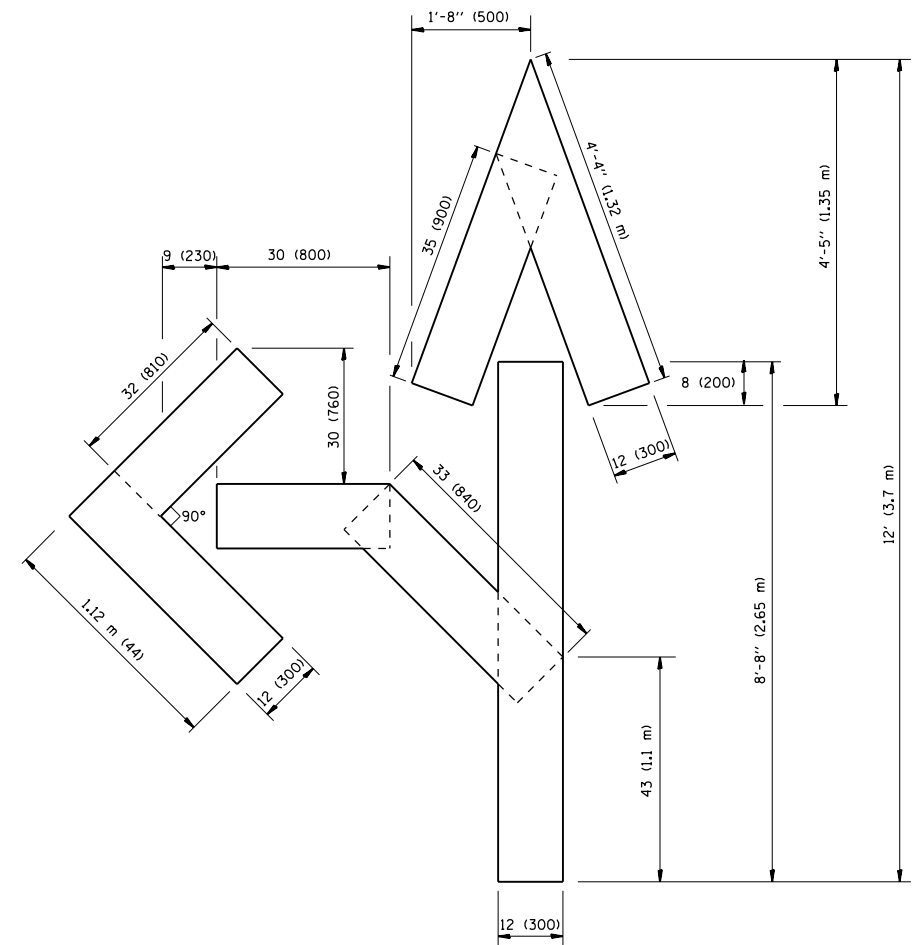
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DISTRICT ONE			
TYPICAL PAVEMENT MARKINGS			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

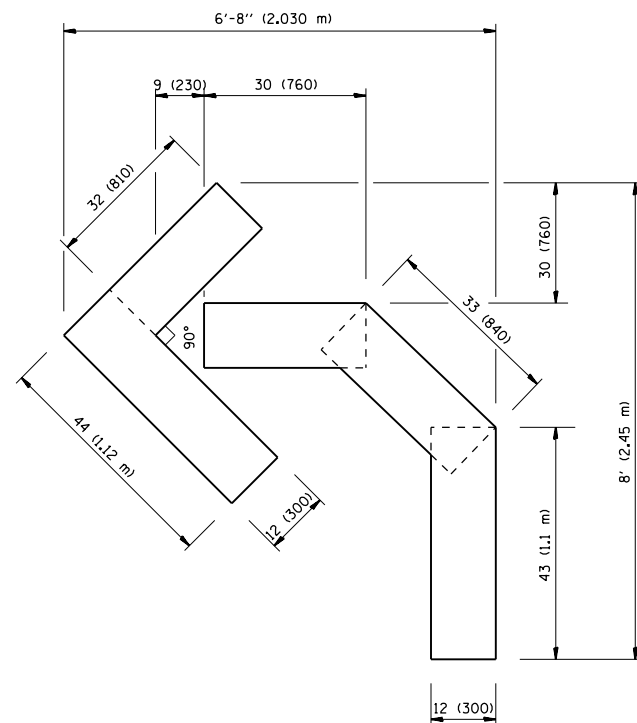
F.A.U. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2812	4040.IRS-1	COOK	22	18
TC-13		CONTRACT NO.	60R98	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



QUANTITY
 4 (100) LINE = 64.1 ft. (19.7 m)
 21.1 sq. ft. (1.97 sq. m)



QUANTITY
 4 (100) LINE = 82.5 ft. (25.3 m)
 27.5 sq. ft. (2.53 sq. m)



QUANTITY
 4 (100) LINE = 45.5 ft. (13.9 m)
 15.2 sq. ft. (1.39 sq. m)

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

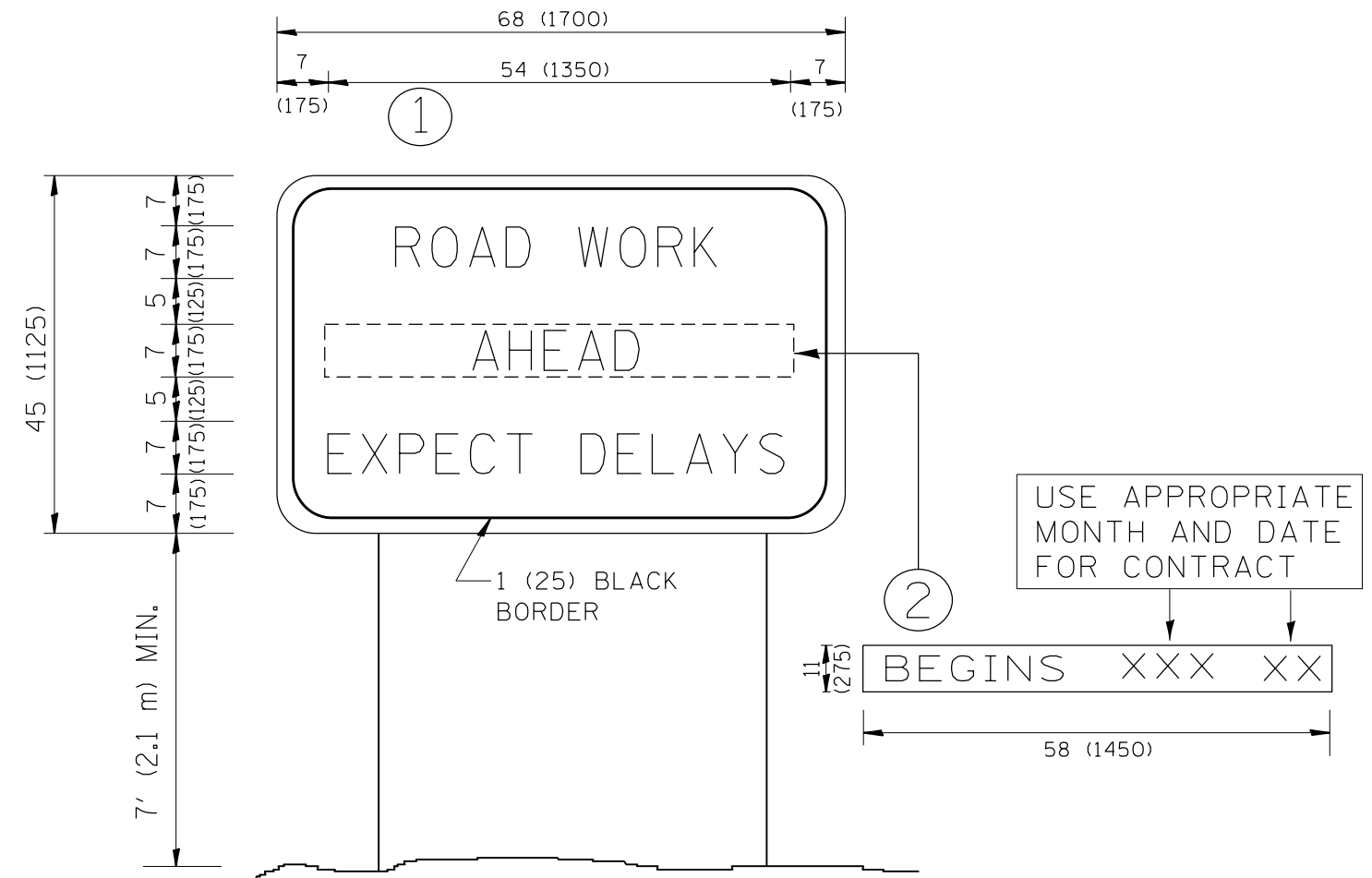
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	PLOT SCALE = 100.0000' / 1in.	CHECKED -	REVISED -T. RAMMACHER 03-02-98
	PLOT DATE = 2/15/2012	DATE - 09-18-94	REVISED -E. GOMEZ 08-28-00

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING LETTERS AND SYMBOLS
 FOR TRAFFIC STAGING

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2812	4040.IRS-1	COOK	22	19
TC-16			CONTRACT NO. 60R98	
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.

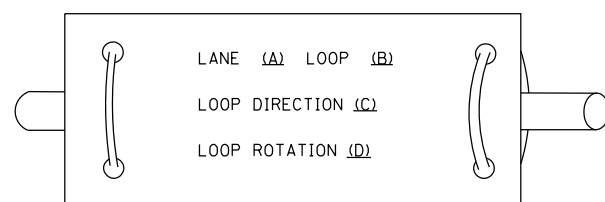
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME =	USER NAME = saunderstm	DESIGNED -	REVISED - R. MIRS 09-15-97	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ARTERIAL ROAD INFORMATION SIGN	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ct:\pw\work\p\dot\saunderstm\d0293372\0	stStd.dgn	DRAWN -	REVISED - R. MIRS 12-11-97			2812	4040.IRS-1	COOK	22	20
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED - T. RAMMACHER 02-02-99			TC-22		CONTRACT NO. 60R98		
	PLOT DATE = 2/15/2012	DATE -	REVISED - C. JUCIUS 01-31-07			SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

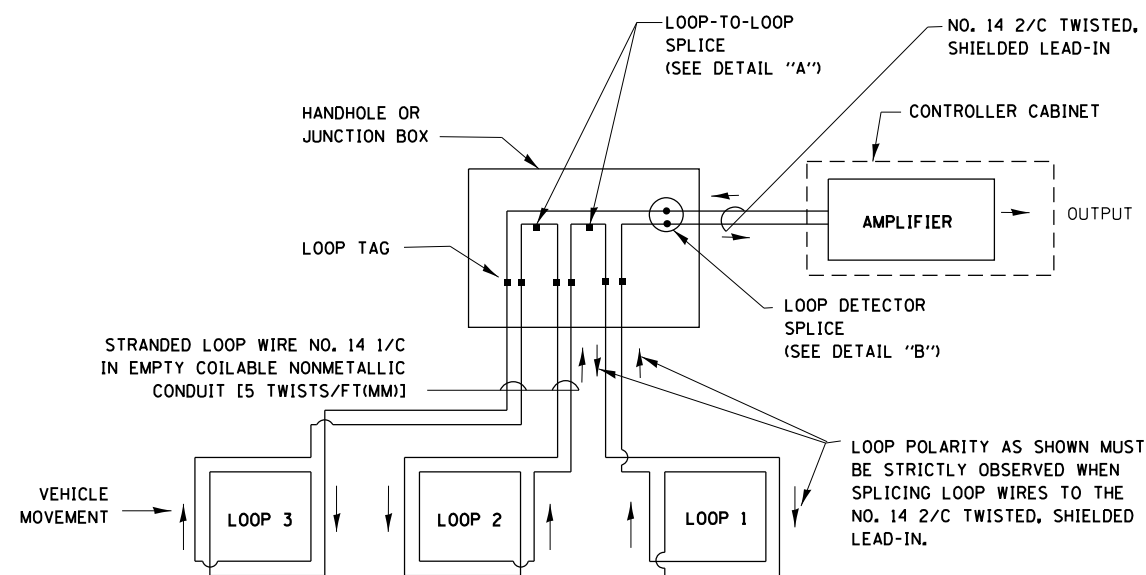
LOOP DETECTOR NOTES

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

LOOP LEAD-IN CABLE TAG

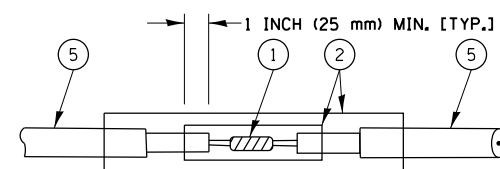


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

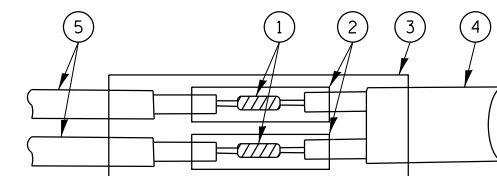


DETECTOR LOOP WIRING SCHEMATIC

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

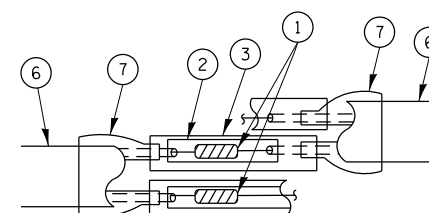


DETAIL "A"
LOOP-TO-LOOP SPLICE

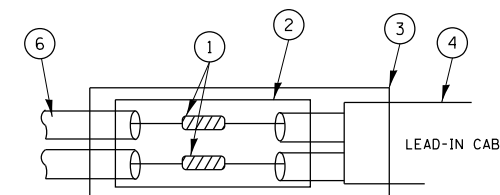


DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A"
LOOP-TO-LOOP SPLICE



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

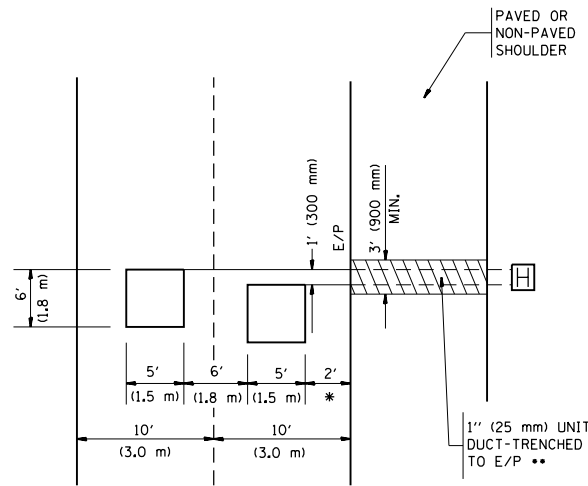
LOOP DETECTOR SPLICE

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

FILE NAME =	USER NAME = saundersm	DESIGNED - DAD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ct:\pw\work\p\idot\saundersm\d0293372\0	stStd.dgn	DRAWN - BCK	REVISED -			2812	4040.IRS-1	COOK	22	21
	PLOT SCALE = 100.0000' / in.	CHECKED - DAD	REVISED -			TS-05		CONTRACT NO. 60R98		
	PLOT DATE = 2/15/2012	DATE - 10-28-09	REVISED -			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
				SCALE: NONE	SHEET NO. 1 OF 6 SHEETS	STA.	TO STA.			

LOOPS NEXT TO SHOULDERS

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



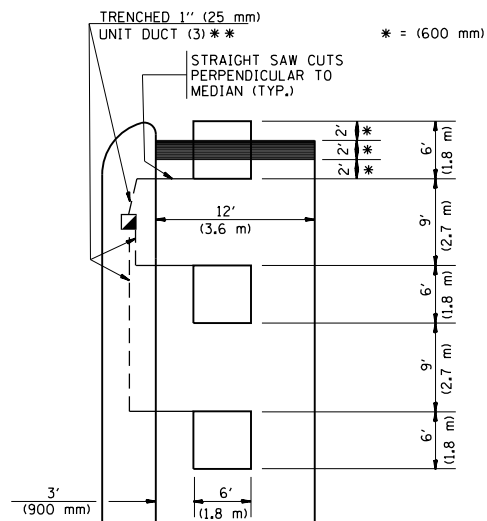
* = (600 mm)

** 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.

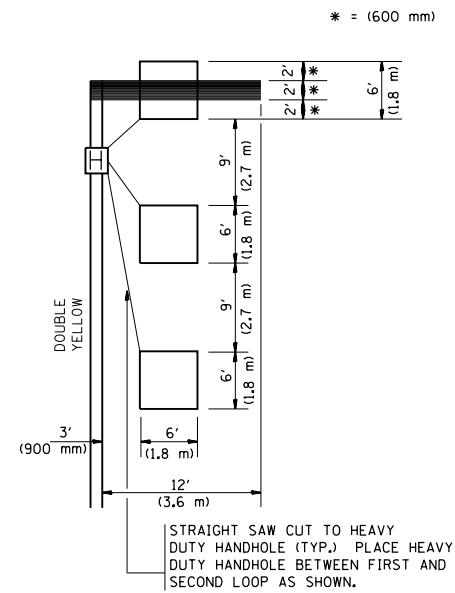


** UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

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

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.

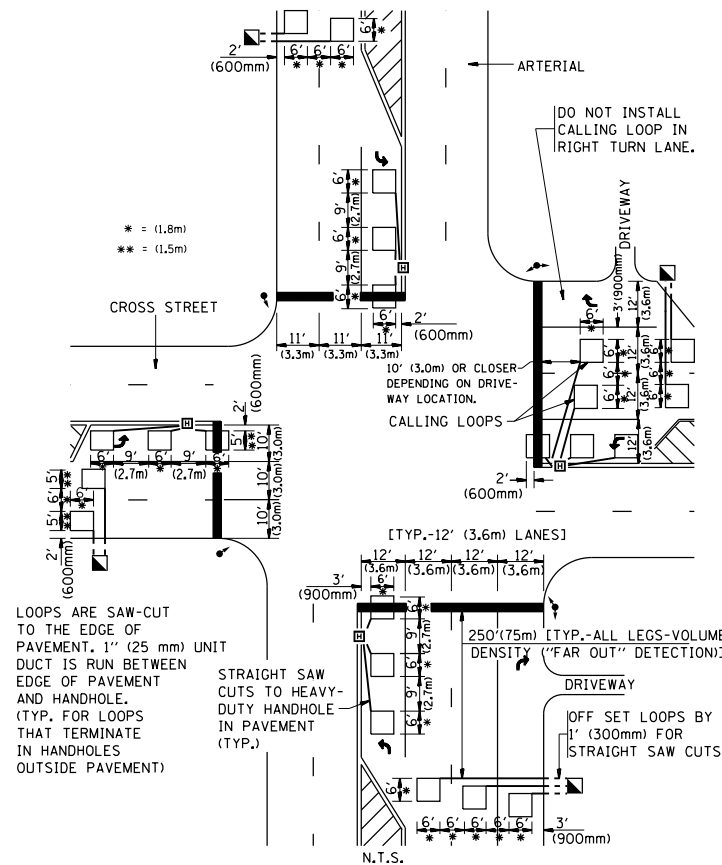
"FAR OUT" DETECTION REFERS TO LOCKING, PRESENCE TYPE DETECTION LOCATED IN THRU LANES, RIGHT TURN LANES, AND RIGHT TURN LANE TAPER AREAS (IF APPLICABLE), USUALLY 250' (75 m) IN ADVANCE OF STOP BARS. "UPTIGHT" DETECTION REFERS TO NON-LOCKING PRESENCE TYPE DETECTION LOCATED IN ALL LANES AND 10'-15' (3.0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

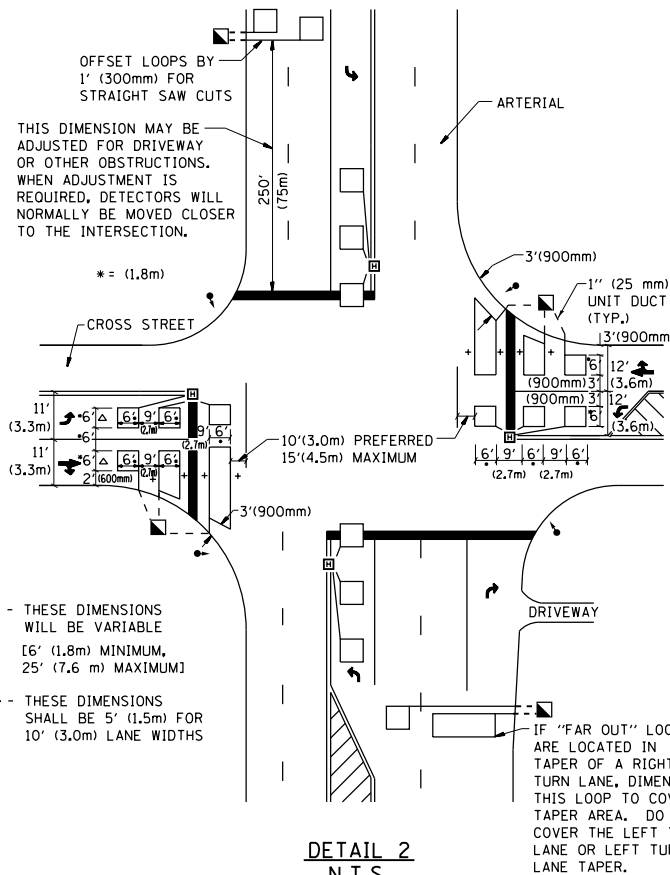
THIS DRAWING HAS BEEN PREPARED TO ASSIST THE RESIDENT ENGINEER FOR ALL ROADWAY RESURFACING OR S.M.A.R.T. PROJECTS WHERE THE DIMENSIONS ARE NOT SHOWN ON THE PLANS AND THE FINAL LOCATIONS FOR CROSSWALKS OR STOP BARS ARE NOT DETERMINED.

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.

FILE NAME =	USER NAME = saunderstm	DESIGNED -	REVISED -
et:\pw_work\p1dot\saunderstm\d0293372\0	stStd.dgn	DRAWN -	REVISED -
	PLOT SCALE = 100.0000' / 1in.	CHECKED - R.K.F.	REVISED -
	PLOT DATE = 2/15/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 1 - DETECTOR LOOP INSTALLATION
DETAILS FOR ROADWAY RESURFACING

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2812	4040.IRS-1	COOK	22	22
TS-07		CONTRACT NO.	60R98	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				