

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
377	2008-003 RS	COOK	27	1
FED. ROAD DIST. NO. 1		ILLINOIS	CONTRACT NO. 60E22	

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**  
**DIVISION OF HIGHWAYS**

FOR INDEX OF SHEETS, SEE SHEET NO. 2

**DESIGN DESIGNATION: OTHER PRINCIPAL ARTERIAL**  
**POSTED SPEED : 30-35 M.P.H.**  
**2005 ADT = 30,000**  
**2006 ADT = 12,200 (CHICAGO AVE. TO JUDSON AVE.)**

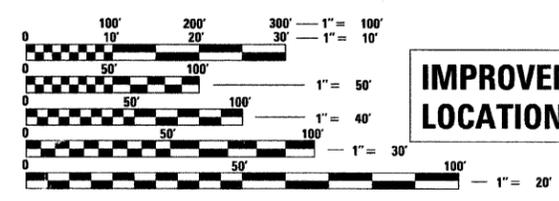
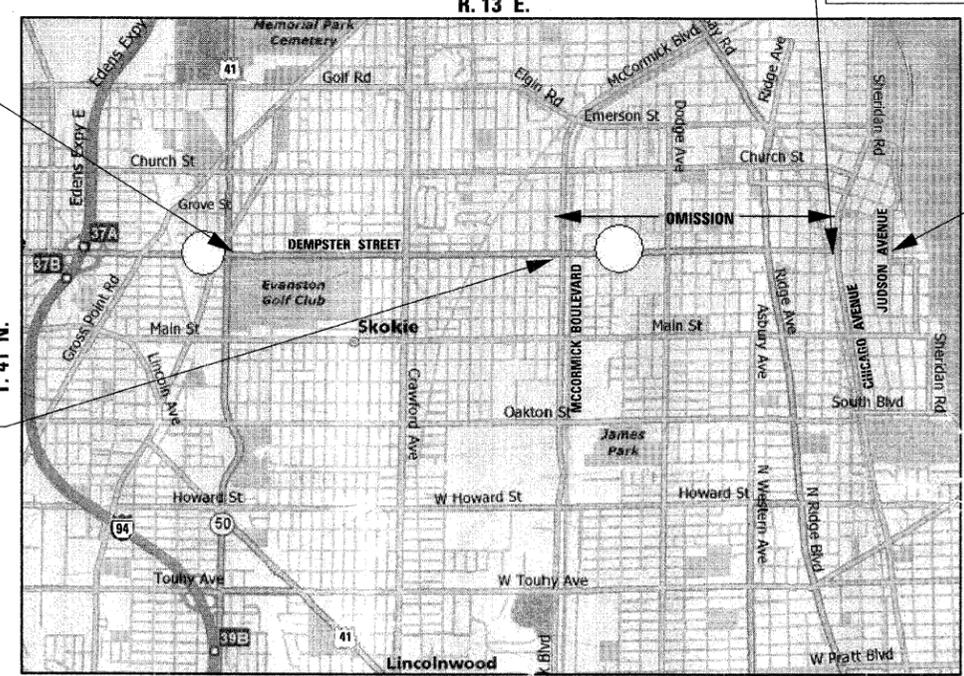
**IMPROVEMENT LOCATED  
 IN THE VILLAGE OF SKOKIE  
 AND CITY OF EVANSTON**

**PROPOSED  
 HIGHWAY PLANS**  
**F.A.P. 377 / F.A.U. 3727 / DEMPSTER ST.**  
**SECTION: 2008-003 RS**  
**1) U.S. RTE. 41 TO MCCORMICK BLVD.**  
**2) CHICAGO AVE. TO JUDSON AVE.**  
**RESURFACING (3P)**  
**PROJECT: ESP-000S(660)**  
**COUNTY: COOK**  
**C-91-343-08**  
**NILES TOWNSHIP & EVANSTON TOWNSHIP**  
**R. 13 E.**

**IMPROVEMENT BEGINS  
 LOCATION 2: STA. 4 + 05**  
**IMPROVEMENT ENDS  
 LOCATION 2: STA. 13 + 90**

**IMPROVEMENT BEGINS  
 LOCATION 1: STA. 14 + 95**

**IMPROVEMENT ENDS  
 LOCATION 1: STA. 111 + 20**



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**

**LOCATION 1: GROSS LENGTH OF PROJECT = 9,625.00 FEET = 1.823 MILES**  
**NET LENGTH OF PROJECT = 9,625.00 FEET = 1.823 MILES**  
**LOCATION 2: GROSS LENGTH OF PROJECT = 985 FEET = 0.187 MILES**  
**NET LENGTH OF PROJECT = 985 FEET = 0.187 MILES**

**DISTRICT ONE - DESIGN**  
**PROJECT MANAGER : ISAAC KWARTENG (847) 705-4230**  
**PROJECT ENGINEER : RON ZENAROSA (847) 705-4212**  
**CONTRACT NO. 60E22**

**DESIGN SECTION ENGINEER :**  
**CHRISTIAN ROGE & ASSOCIATES, INC.**  
**ENGINEERS - PLANNERS - SURVEYORS**  
**211 W. WACKER DRIVE CHICAGO, IL 60606**  
**TELEPHONE: 312-372-2023**



**Birinder S. Sachdeva**  
**BIRINDER S. SACHDEVA, P.E.**  
**EXPIRES: 11-30-2009**  
**January 23, 2009**  
**DATE**

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**  
**DIVISION OF HIGHWAYS**

**SUBMITTED JANUARY 23, 2009**  
*Diana M. O'Keefe*  
 DEPUTY DIRECTOR OF HIGHWAYS, REGION ONE ENGINEER  
 March 27, 2009  
*Charles J. Ingersoll*  
 ENGINEER OF DESIGN AND ENVIRONMENT  
 March 27, 2009  
*Christie M. Reed*  
 DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

**PRINTED BY THE AUTHORITY  
 OF THE STATE OF ILLINOIS**

**INDEX OF SHEETS**

1	COVER SHEET
2	INDEX OF SHEETS, LIST OF STATE STANDARDS AND GENERAL NOTES DEMPSTER ST.
3	SUMMARY OF QUANTITIES DEMPSTER ST.
4	TYPICAL SECTIONS DEMPSTER ST.
5 - 9	ROADWAY AND PAVEMENT MARKING PLAN DEMPSTER ST.
10 - 16	DETECTOR LOOP REPLACEMENT PLANS DEMPSTER ST.
17	DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING
18	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT
19	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT
20	BUTT JOINT AND HMA TAPER DETAILS
21	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS
22	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW PLOW RESISTANT)
23	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
24	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)
25	PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING
26	ARTERIAL ROAD INFORMATION SIGN
27	DISTRICT 1 DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING

**LIST OF STATE STANDARDS**

STANDARD NO.	DESCRIPTION
000001-05	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
424001-05	CURB RAMPS FOR SIDEWALKS
442201-03	CLASS C AND D PATCHES
604001-03	FRAME AND LIDS, TYPE 1
606001-04	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
701602-04	URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE
701606-06	URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701701-06	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701901-01	TRAFFIC CONTROL DEVICES

**GENERAL NOTES**

1. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 800-892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES. (48 HOUR NOTIFICATION IS REQUIRED)
2. 10 FEET TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER MEDIAN ITEMS OF WORK TO EXISTING CURBS AND GUTTERS 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.
3. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH THE UTILITY COMPANIES, THE VILLAGE OF SKOKIE AND THE CITY OF EVANSTON.
4. WHEN ARTIFICIAL LIGHTING IS USED IN NIGHT OPERATIONS, THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AND ADJOINING RESIDENTIAL AREAS.
5. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
6. SAW CUTTING PRIOR TO ANY REMOVAL ITEMS NOTED ON THE PLANS OR DIRECTED BY THE ENGINEER SHALL BE CONSIDERED INCLUDED IN THE COST OF THE ITEMS BEING REMOVED.
7. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
8. THE CONTRACTOR SHALL USE 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.
9. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS, AS REQUIRED, PRIOR TO COMMENCING WITH CONSTRUCTION.
10. THE CONTRACTOR SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS PRIOR TO THE PLACEMENT OF ANY TEMPORARY TRAFFIC CONTROL DEVICES.
11. THE CONTRACTOR SHALL CONTACT WALTER CZARNY, THE AREA TRAFFIC FIELD ENGINEER, AT (773) 685-8386 AT LEAST TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
12. WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 40 MM (1 1/2 INCHES) WHERE THE SPEED LIMIT IS 80 KM/H (45 MPH). WITH WRITTEN APPROVAL FROM THE ENGINEER. A MAXIMUM GRADE DIFFERENTIAL OF 75 MM (3 INCHES) MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H).
13. BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT), IN ACCORDANCE WITH THE "BUTT JOINT AND HMA TAPER DETAILS" INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED. TEMPORARY RAMPS AT BUTT JOINTS SHALL BE INCLUDED IN THE COST OF THE BUTT JOINT AS SHOWN ON THE BUTT JOINT DETAIL SHEET.
14. REFER TO THE DISTRICT ONE TYPICAL PAVEMENT MARKINGS FOR DETAILS NOT SHOWN.
15. MATCH EXISTING PAVEMENT MARKINGS AT THE PROJECT AND OMISSION LIMITS.
16. ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

FILE NAME = 0160E22-sht-gennotes.dgn  
PLOT DATE = 1/29/2009



DESIGNED - K.R.K.	REVISED -
DRAWN - A.C.S.	REVISED -
CHECKED - S.J.P.	REVISED -
DATE - JANUARY 27, 2009	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**INDEX OF SHEETS, LIST OF STATE STANDARDS AND GENERAL NOTES  
DEMPSTER ST.**

SCALE: NONE SHEET NO. 1 OF 2 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
377	2008-003 RS	COOK	27	2
CONTRACT NO. 60E22				

FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

SUMMARY OF QUANTITIES			URBAN	100% FED
CODE NO	ITEM	UNIT	TOTAL	CONSTRUCTION
			QUANTITIES	TYPE CODE
			1000-2A	
			URBAN	
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	40	40
40600300	AGGREGATE (PRIME COAT)	TON	270	270
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	20	20
40600895	CONSTRUCTING TEST STRIP	EACH	4	4
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	948	948
40601005	HOT-MIX ASPHALT REPLACEMENT OVER PATCHES	TON	364	364
40603595	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90	TON	6,583	6,583
42001300	PROTECTIVE COAT	SQ YD	618	618
42300400	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH	SQ YD	119	119
42400200	PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH	SQ FT	846	846
44000159	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"	SQ YD	67,171	67,171
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	119	119
44000600	SIDEWALK REMOVAL	SQ FT	846	846
44001700	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	1,475	1,475
44002214	HOT-MIX ASPHALT REMOVAL OVER PATCHES, 3 1/2"	SQ YD	1,814	1,814
44201753	CLASS D PATCHES, TYPE II, 9 INCH	SQ YD	610	610
44201757	CLASS D PATCHES, TYPE III, 9 INCH	SQ YD	214	214
44201759	CLASS D PATCHES, TYPE IV, 9 INCH	SQ YD	750	750
▲ 55039700	STORM SEWERS TO BE CLEANED	FOOT	5,790	5,790
60252800	CATCH BASINS TO BE RECONSTRUCTED	EACH	2	2
60257900	MANHOLES TO BE RECONSTRUCTED	EACH	2	2
60300310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	165	165
60406100	FRAMES AND LIDS, TYPE 1, CLOSED LID	EACH	10	10
○ 20076600	TRAINING	HOOR	500	500

▲ NON-PART. (100% STATE)  
○ Y080

SUMMARY OF QUANTITIES			URBAN	100% FED
CODE NO	ITEM	UNIT	TOTAL	CONSTRUCTION
			QUANTITIES	TYPE CODE
			1000-2A	
			URBAN	
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6
67100100	MOBILIZATION	L SUM	1	1
70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1	1
70102632	TRAFFIC CONTROL AND PROTECTION, STANDARD 701602	L SUM	1	1
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	12,843	12,843
70300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	3,630	3,630
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	53,986	53,986
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	14,340	14,340
70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	932	932
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	1,986	1,986
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	4,281	4,281
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	1,815	1,815
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	26,993	26,993
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	7,170	7,170
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	466	466
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	993	993
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	930	930
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	930	930
* 88600600	DETECTOR LOOP REPLACEMENT	FOOT	2,771	2,771
X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	103	103
X4067107	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	2,821	2,821
▲ Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	193	193

\* SPECIALTY ITEM

FILE NAME = D168E22-sht-S00.dgn  
PLOT DATE = 1/29/2009



DESIGNED - K.R.K.	REVISED -
DRAWN - A.C.S.	REVISED -
CHECKED - S.J.P.	REVISED -
DATE - JANUARY 27, 2009	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES  
DEMPSTER ST.

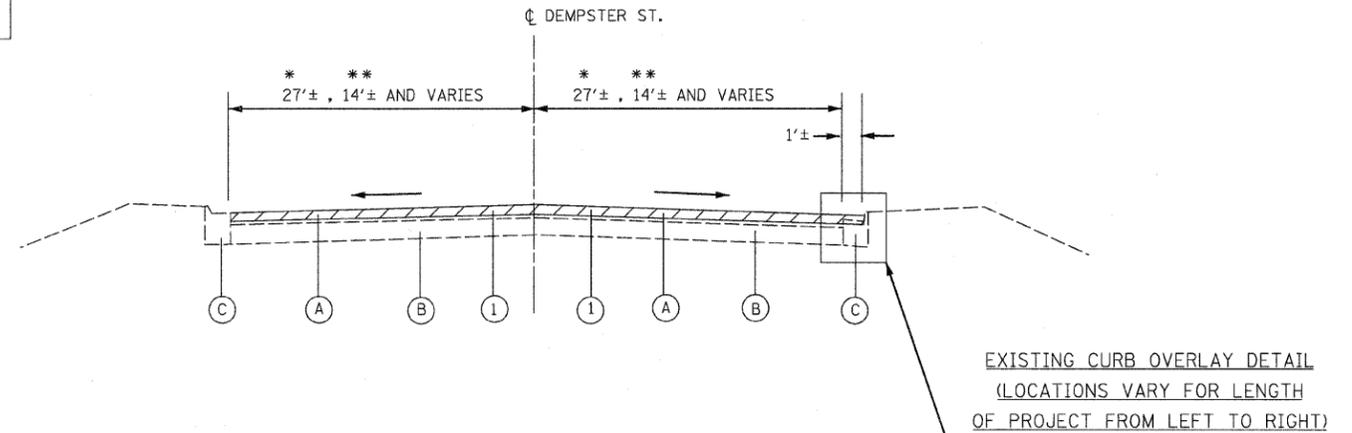
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
377	2008-003 RS	COOK	27	3
CONTRACT NO. 60E22				

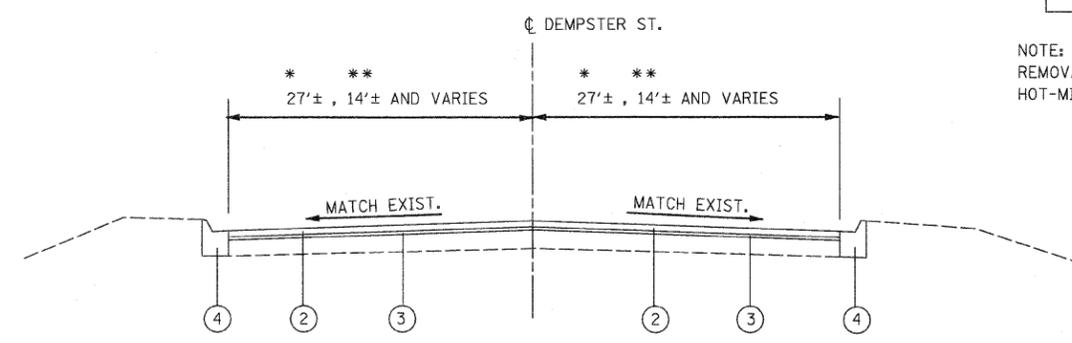
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

HOT-MIX ASPHALT MIXTURE REQUIREMENTS			
ROADWAY NAME	MIXTURE TYPE	AC TYPE	AIR VOIDS
DEMPSTER ST.	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90 (IL-9.5mm)	SBS/SBR PG 70-22	4% @ 90 GYR
	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	SBS/SBR PG 76-28/22	4% @ 50 GYR
	CLASS D PATCHES (HMA BINDER, IL-19)	* PG 64-22	4% @ 70 GYR.
	HMA REPLACEMENT OVER PATCHES (HMA BINDER, IL-19)	* PG 64-22	4% @ 70 GYR.

\* WHEN RAP EXCEEDS 20%, THE NEW ASPHALT BINDER IN THE MIX SHALL BE PG 58-22.  
THE UNIT WEIGHT USED TO CALCULATE ALL HMA MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN.



EXISTING TYPICAL SECTION  
\* STA. 14+95 TO STA. 111+20  
\*\* STA. 4+05 TO STA. 13+90



PROPOSED TYPICAL SECTION  
\* STA. 14+95 TO STA. 111+20  
\*\* STA. 4+05 TO STA. 13+90

NOTE:  
REMOVAL OF ANY CONCRETE IS INCIDENTAL TO  
HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"

EXISTING CONDITIONS:

- (A) HOT-MIX ASPHALT SURFACE AND BINDER COURSE (±3 1/2")
- (B) P.C.C. PAVEMENT
- (C) COMBINATION CONCRETE CURB AND GUTTER

PROPOSED IMPROVEMENTS:

- (1) HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"
- (2) POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 1 3/4"
- (3) POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"
- (4) COMB. CONC. CURB AND GUTTER REMOVAL AND REPLACEMENT (AS DETERMINED BY THE ENGINEER)

PATCHING NOTE:  
THE EXISTING PAVEMENT SHALL BE PATCHED BEFORE MILLING.

FILE NAME = D160E22-sht-typical.dgn  
PLOT DATE = 1/28/2009

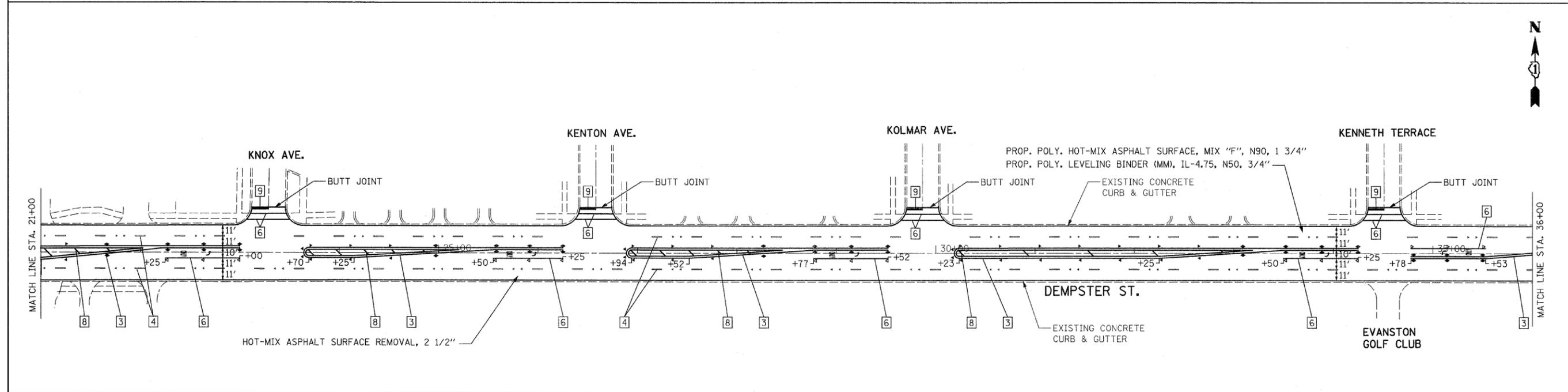
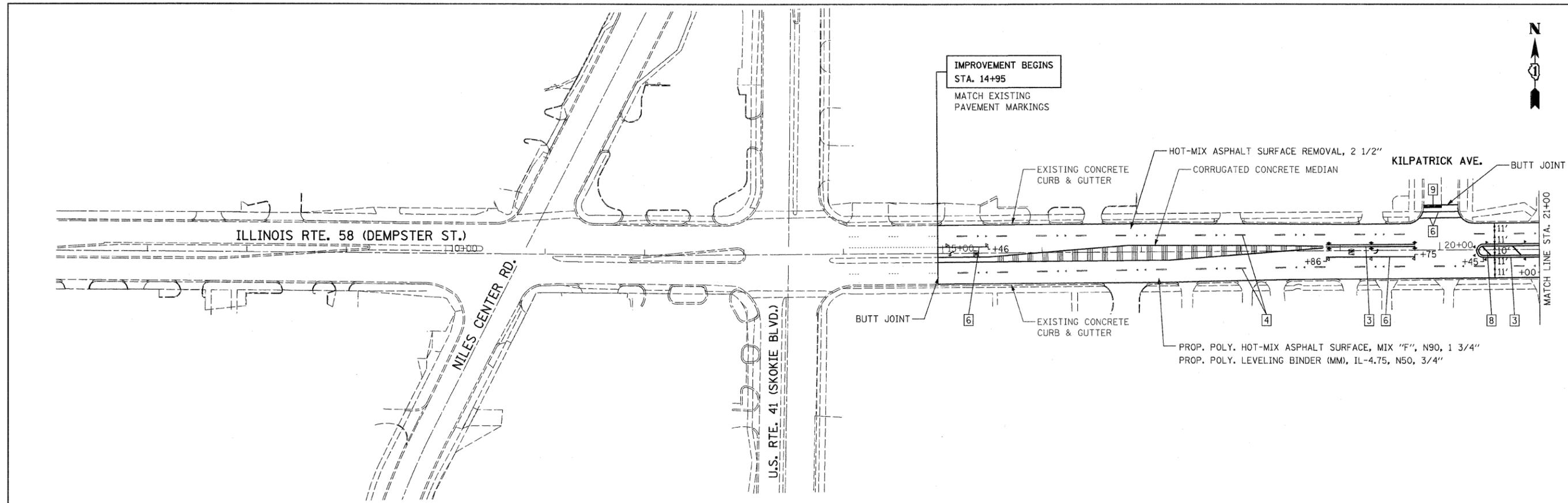
**CHRISTIAN-ROGE & ASSOCIATES, INC.**  
ENGINEERS-PLANNERS-SURVEYORS  
211 WEST WACKER DRIVE  
CHICAGO, ILLINOIS 60606  
PHONE: (312)372-2023 FAX: (312)372-5274

DESIGNED - K.R.K.	REVISED -
DRAWN - A.C.S.	REVISED -
CHECKED - S.J.P.	REVISED -
DATE - JANUARY 27, 2009	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS		DEMPSTER ST.	
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A.P. RTE. 377	SECTION 2008-003 RS	COUNTY COOK	TOTAL SHEETS 27	SHEET NO. 4
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
CONTRACT NO. 60E22				



**LEGEND**

- |  |  |
|--|--|
| 1 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW SOLID LINE)   | 6 THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE SOLID LINE)      |
| 2 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW - 10' DASH, 30' SKIP)                                       | 7 THERMOPLASTIC PAVEMENT MARKING - LINE 8" (WHITE SOLID LINE)      |
| 3 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW SOLID LINE)  | 8 THERMOPLASTIC PAVEMENT MARKING - LINE 12" (YELLOW DIAGONAL LINE) |
| 4 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE LANE LINE - 10' DASH, 30' SKIP W/ 2 CRYSTAL / OPAQUE RRPW'S) | 9 THERMOPLASTIC PAVEMENT MARKING - LINE 24" (WHITE STOP BAR)       |
| 5 THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE LANE LINE - 2' DASH, 6' SKIP)                                | 10 THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS (TYP.)     |

FILE NAME = D160E22-sh1-pmk1.dgn  
 PLOT DATE = 1/28/2009

**CHRISTIAN-ROGE & ASSOCIATES, INC.**  
 ENGINEERS-PLANNERS-SURVEYORS  
 211 WEST WACKER DRIVE  
 CHICAGO, ILLINOIS 60606  
 PHONE: (312)372-2023 FAX: (312)372-5274

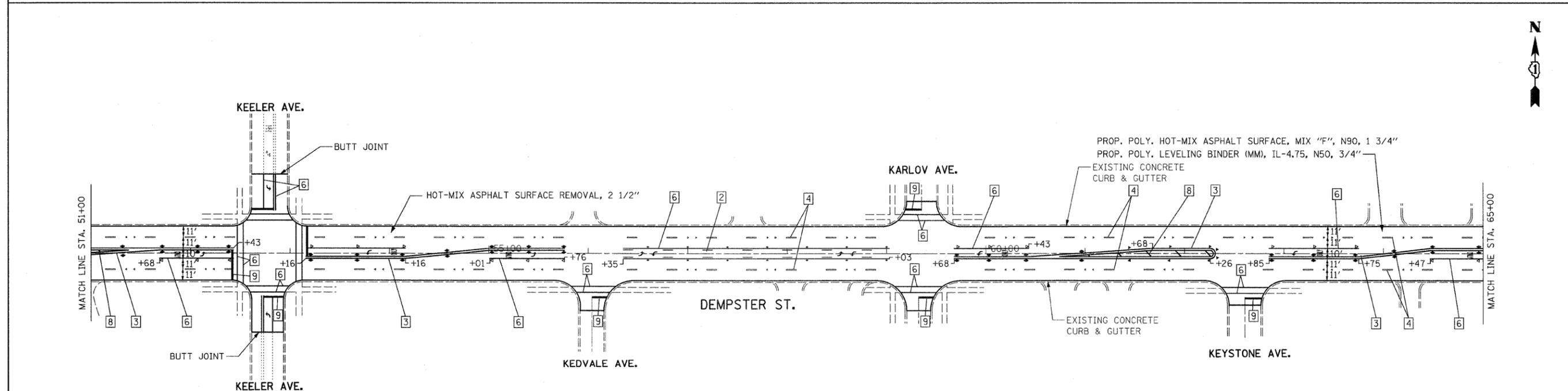
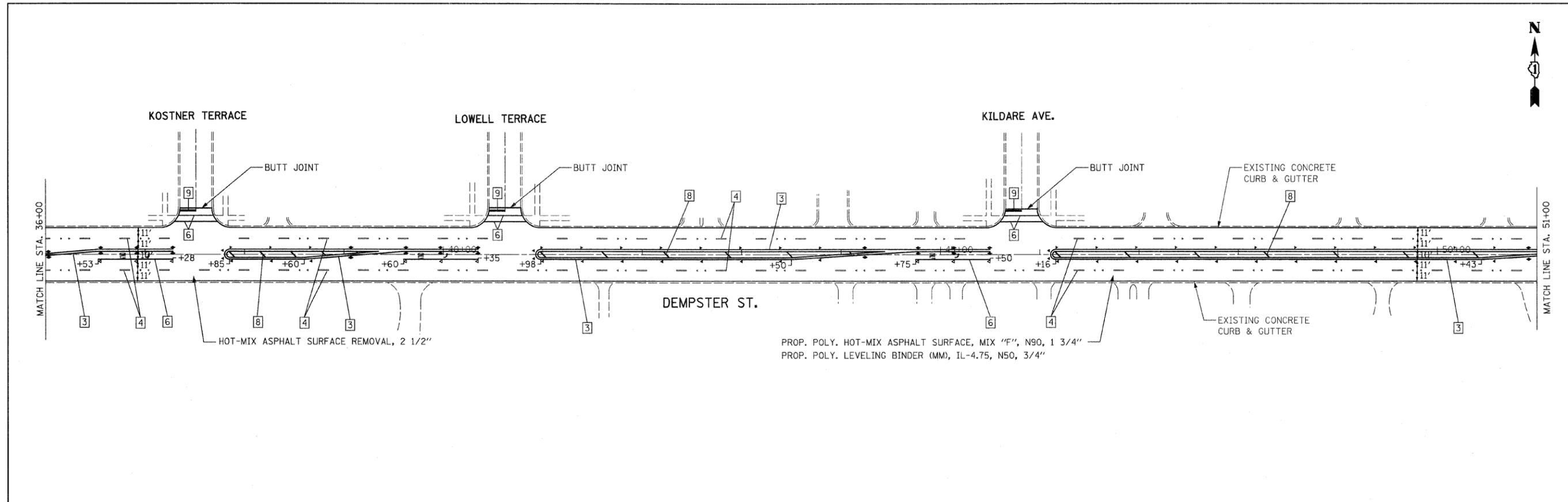
DESIGNED - K.R.K.	REVISED -
DRAWN - A.C.S.	REVISED -
CHECKED - S.J.P.	REVISED -
DATE - JANUARY 27, 2009	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**ROADWAY AND PAVEMENT MARKING PLAN  
 DEMPSTER ST.**

SCALE: 1" = 50' SHEET NO. 1 OF 5 SHEETS STA. 14+95 TO STA. 36+00

F.A.P. RTE. 377	SECTION 2008-003 RS	COUNTY COOK	TOTAL SHEETS 27	SHEET NO. 5
CONTRACT NO. 60E22				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



**LEGEND**

- |   |  |
|---|--|
| 1 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW SOLID LINE)  | 6 THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE SOLID LINE)      |
| 2 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW - 10' DASH, 30' SKIP)  | 7 THERMOPLASTIC PAVEMENT MARKING - LINE 8" (WHITE SOLID LINE)      |
| 3 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW SOLID LINE)   | 8 THERMOPLASTIC PAVEMENT MARKING - LINE 12" (YELLOW DIAGONAL LINE) |
| 4 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE LANE LINE - 10' DASH, 30' SKIP W/ 2 CRYSTAL / OPAQUE RRP/M'S) | 9 THERMOPLASTIC PAVEMENT MARKING - LINE 24" (WHITE STOP BAR)       |
| 5 THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE LANE LINE - 2' DASH, 6' SKIP)                                 | 10 THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS (TYP.)     |

FILE NAME = D160E22-sht-pmk2.dgn  
 PLOT DATE = 1/28/2009

**CHRISTIAN-ROGE & ASSOCIATES, INC.**  
 ENGINEERS-PLANNERS-SURVEYORS  
 211 WEST WACKER DRIVE  
 CHICAGO, ILLINOIS 60606  
 PHONE: (312)372-2023 FAX: (312)372-5274

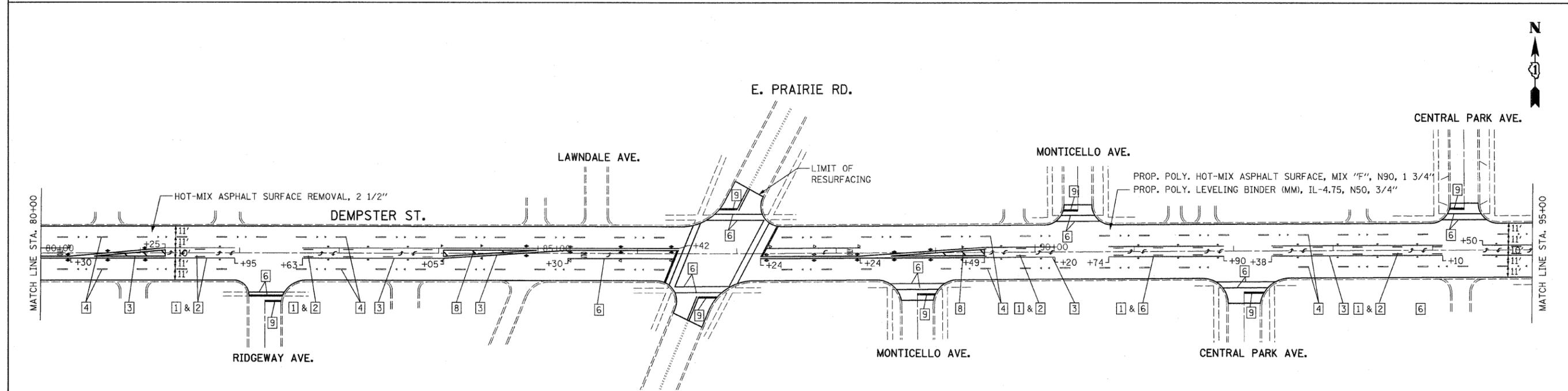
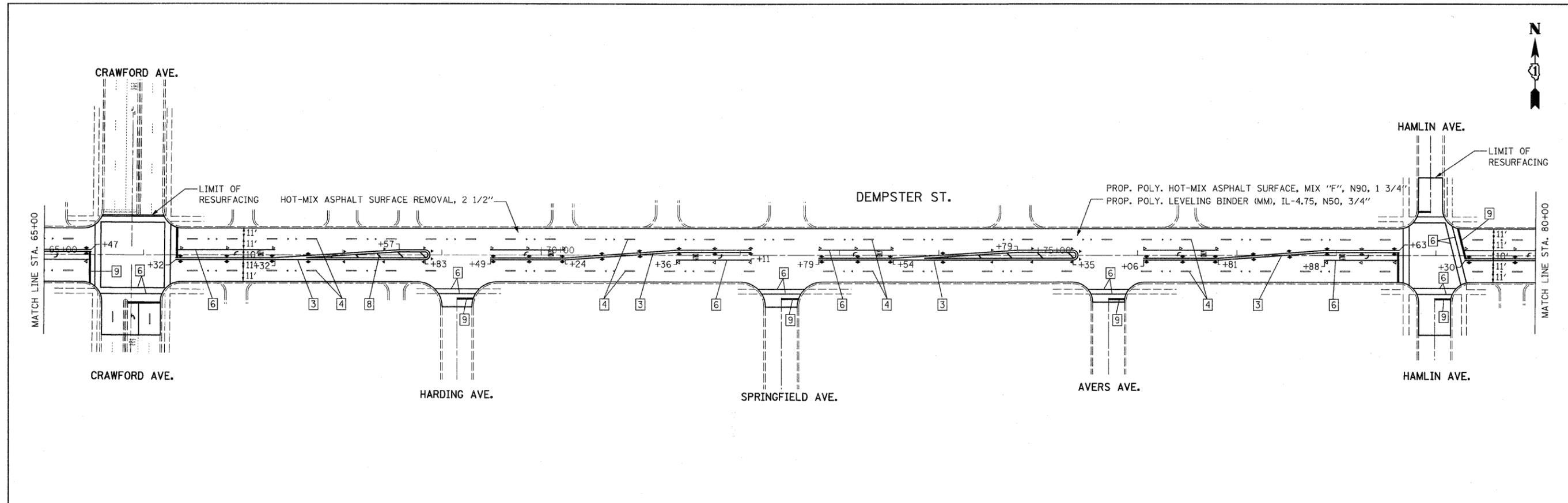
DESIGNED - K.R.K.	REVISED -
DRAWN - A.C.S.	REVISED -
CHECKED - S.J.P.	REVISED -
DATE - JANUARY 27, 2009	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**ROADWAY AND PAVEMENT MARKING PLAN**  
**DEMPSTER ST.**

SCALE: 1" = 50' SHEET NO. 2 OF 5 SHEETS STA. 36+00 TO STA. 65+00

F.A.P. RTE. 377	SECTION 2008-003 RS	COUNTY COOK	TOTAL SHEETS 27	SHEET NO. 6
CONTRACT NO. 60E22				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



**LEGEND**

- |   |  |
|---|--|
| 1 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW SOLID LINE)  | 6 THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE SOLID LINE)      |
| 2 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW - 10' DASH, 30' SKIP)  | 7 THERMOPLASTIC PAVEMENT MARKING - LINE 8" (WHITE SOLID LINE)      |
| 3 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW SOLID LINE)   | 8 THERMOPLASTIC PAVEMENT MARKING - LINE 12" (YELLOW DIAGONAL LINE) |
| 4 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE LANE LINE - 10' DASH, 30' SKIP W/ 2 CRYSTAL / OPAQUE RRP/M'S) | 9 THERMOPLASTIC PAVEMENT MARKING - LINE 24" (WHITE STOP BAR)       |
| 5 THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE LANE LINE - 2' DASH, 6' SKIP)                                 | 10 THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS (TYP.)     |

FILE NAME = D168E22-sh1-pnk3.dgn  
 PLOT DATE = 1/28/2009

**CHRISTIAN-ROGE & ASSOCIATES, INC.**  
 ENGINEERS-PLANNERS-SURVEYORS  
 211 WEST WACKER DRIVE  
 CHICAGO, ILLINOIS 60606  
 PHONE: (312)372-2023 FAX: (312)372-5274

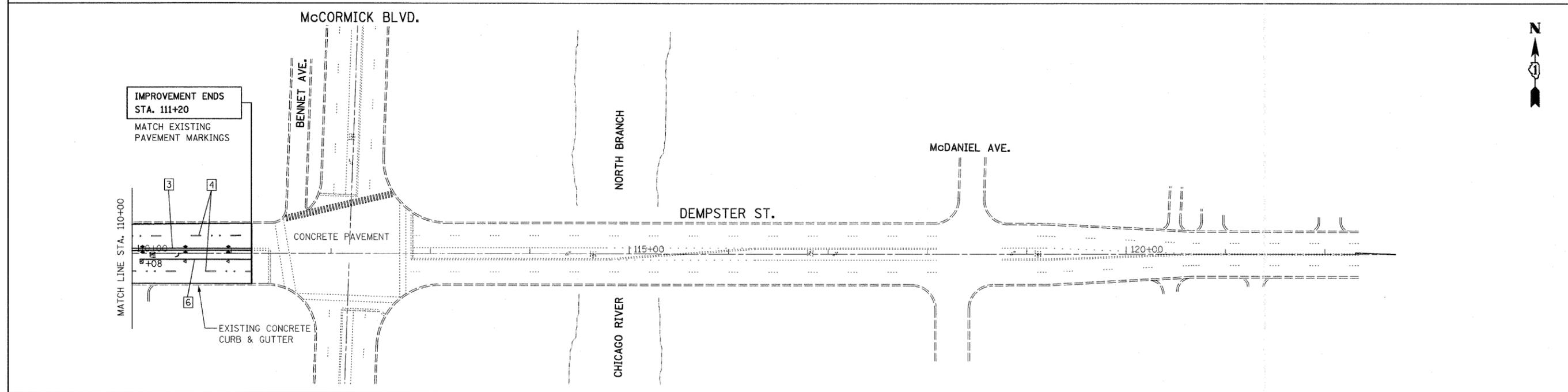
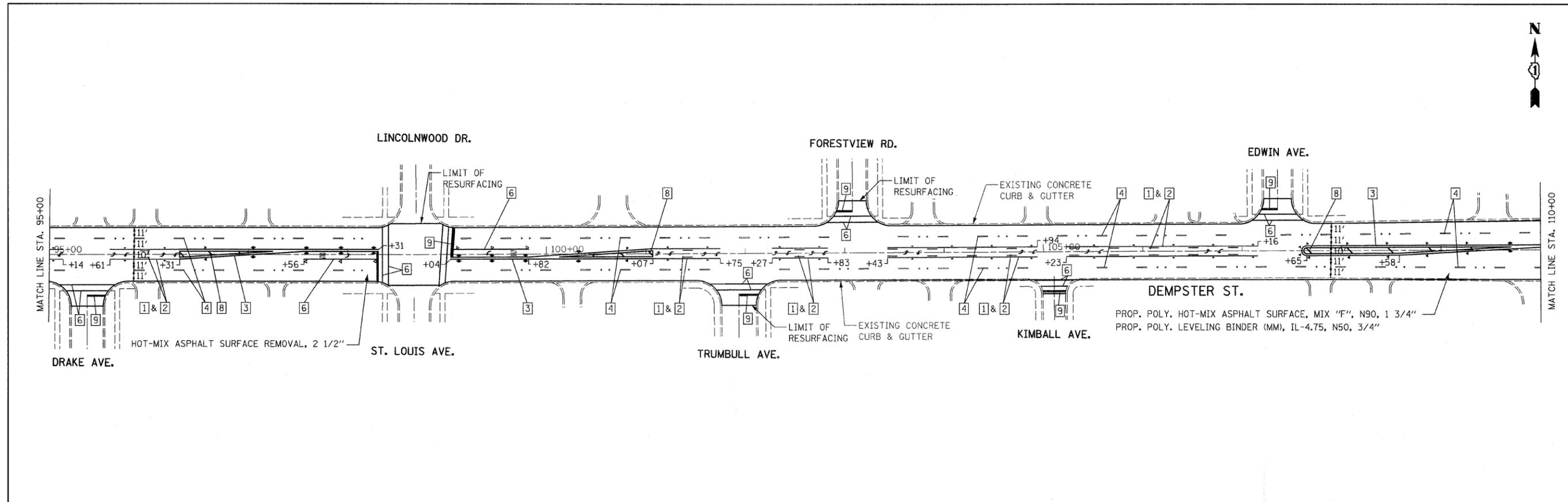
DESIGNED - K.R.K.	REVISED -
DRAWN - A.C.S.	REVISED -
CHECKED - S.J.P.	REVISED -
DATE - JANUARY 27, 2009	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**ROADWAY AND PAVEMENT MARKING PLAN**  
**DEMPSTER ST.**

SCALE: 1" = 50' SHEET NO. 3 OF 5 SHEETS STA. 65+00 TO STA. 95+00

F.A.P. RTE. 377	SECTION 2008-003 RS	COUNTY COOK	TOTAL SHEETS 27	SHEET NO. 7
CONTRACT NO. 60E22				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



**LEGEND**

- |   |  |
|---|--|
| 1 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW SOLID LINE)  | 6 THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE SOLID LINE)      |
| 2 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW - 10' DASH, 30' SKIP)                                      | 7 THERMOPLASTIC PAVEMENT MARKING - LINE 8" (WHITE SOLID LINE)      |
| 3 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW SOLID LINE)   | 8 THERMOPLASTIC PAVEMENT MARKING - LINE 12" (YELLOW DIAGONAL LINE) |
| 4 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE LANE LINE - 10' DASH, 30' SKIP W/ 2 CRYSTAL / OPAQUE RRPMS) | 9 THERMOPLASTIC PAVEMENT MARKING - LINE 24" (WHITE STOP BAR)       |
| 5 THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE LANE LINE - 2' DASH, 6' SKIP)                               | 10 THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS (TYP.)     |

FILE NAME = D160E22-shr-pmk4.dgn  
PLOT DATE = 1/28/2009

**CHRISTIAN-ROGE & ASSOCIATES, INC.**  
ENGINEERS-PLANNERS-SURVEYORS  
211 WEST WACKER DRIVE  
CHICAGO, ILLINOIS 60606  
PHONE: (312)372-2023 FAX: (312)372-5274

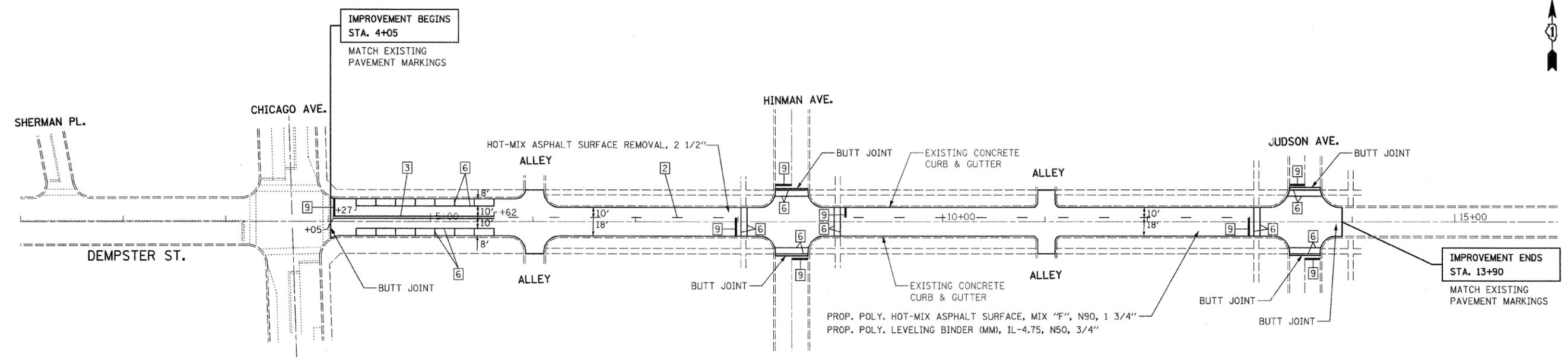
DESIGNED - K.R.K.	REVISED -
DRAWN - A.C.S.	REVISED -
CHECKED - S.J.P.	REVISED -
DATE - JANUARY 27, 2009	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ROADWAY AND PAVEMENT MARKING PLAN  
DEMPSTER ST.**

SCALE: 1" = 50' SHEET NO. 4 OF 5 SHEETS STA. 95+00 TO STA. 111+20

F.A.P. RTE. 377	SECTION 2008-003 RS	COUNTY COOK	TOTAL SHEETS 27	SHEET NO. 8
FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT				
CONTRACT NO. 60E22				



**LEGEND**

- |   |  |
|---|--|
| 1 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW SOLID LINE)  | 6 THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE SOLID LINE)      |
| 2 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW - 10' DASH, 30' SKIP)                                      | 7 THERMOPLASTIC PAVEMENT MARKING - LINE 8" (WHITE SOLID LINE)      |
| 3 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW SOLID LINE)   | 8 THERMOPLASTIC PAVEMENT MARKING - LINE 12" (YELLOW DIAGONAL LINE) |
| 4 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE LANE LINE - 10' DASH, 30' SKIP W/ 2 CRYSTAL / OPAQUE RRPMS) | 9 THERMOPLASTIC PAVEMENT MARKING - LINE 24" (WHITE STOP BAR)       |
| 5 THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE LANE LINE - 2' DASH, 6' SKIP)                               | 10 THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS (TYP.)     |

FILE NAME = D160E22-sht-pmk5.dgn  
 PLOT DATE = 1/28/2009

**CHRISTIAN-ROGE & ASSOCIATES, INC.**  
 ENGINEERS-PLANNERS-SURVEYORS  
 211 WEST WACKER DRIVE  
 CHICAGO, ILLINOIS 60606  
 PHONE: (312)372-2023 FAX: (312)372-5274

DESIGNED - K.R.K.	REVISED -
DRAWN - A.C.S.	REVISED -
CHECKED - S.J.P.	REVISED -
DATE - JANUARY 27, 2009	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**ROADWAY AND PAVEMENT MARKING PLAN  
 DEMPSTER ST.**

SCALE: 1" = 50' SHEET NO. 5 OF 5 SHEETS STA. 4+05 TO STA. 13+90

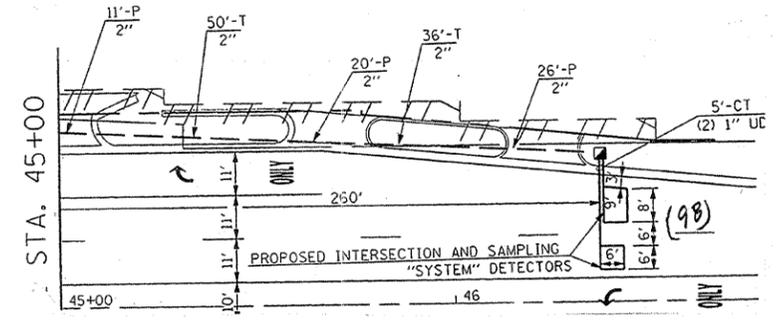
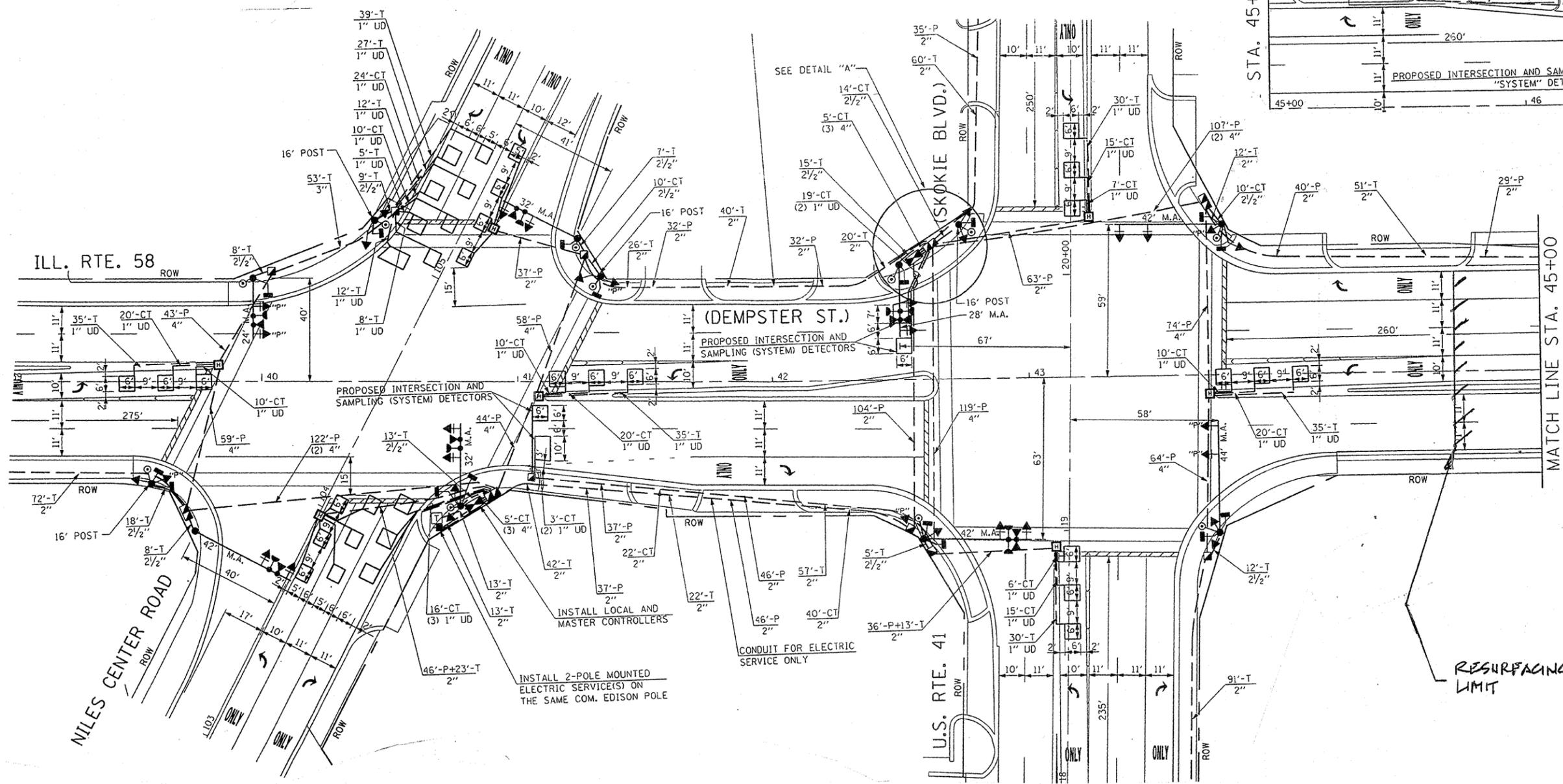
F.A.P. RTE. 377	SECTION 2008-003 RS	COUNTY COOK	TOTAL SHEETS 27	SHEET NO. 9
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
CONTRACT NO. 60E22				

RESURFACING - TRAFFIC SIGNAL SCHEDULE OF QUANTITIES

The "Pay Items" below are paid separately as per the attached "Specification" for MAGNETIC DETECTOR REMOVAL AND DETECTOR LOOP INSTALLATION.

Code No.	Pay Item	Unit	Quantity
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	
87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	
88500100	INDUCTIVE LOOP DETECTOR	EACH	
88600100	DETECTOR LOOP, TYPE 1	FOOT	

**NOTE:**  
THIS PLAN IS FOR THE PURPOSE OF REPLACING THE DETECTOR LOOPS ONLY. ALL OTHER INFORMATION SHOWN IS NOT RELATED AND WILL BE DISREGARDED.



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

CODE NO.	QUANTITY	UNIT	ITEM
86600600	98	FOOT	DETECTOR LOOP REPLACEMENT

FILE NAME :	USER NAME : kanthapixaybc	DESIGNED -	REVISED -
c:\projects\traffic\1070027\us12-20-45.dgn		DRAWN -	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DETECTOR LOOP REPLACEMENT  
DEMPSTER STREET @ U.S. RTE. 41  
SCALE: NONE SHEET NO. 1 OF 7 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
377	2008-003 RS	COOK	27	10
CONTRACT NO. 60522				





RESURFACING - TRAFFIC SIGNAL SCHEDULE OF QUANTITIES

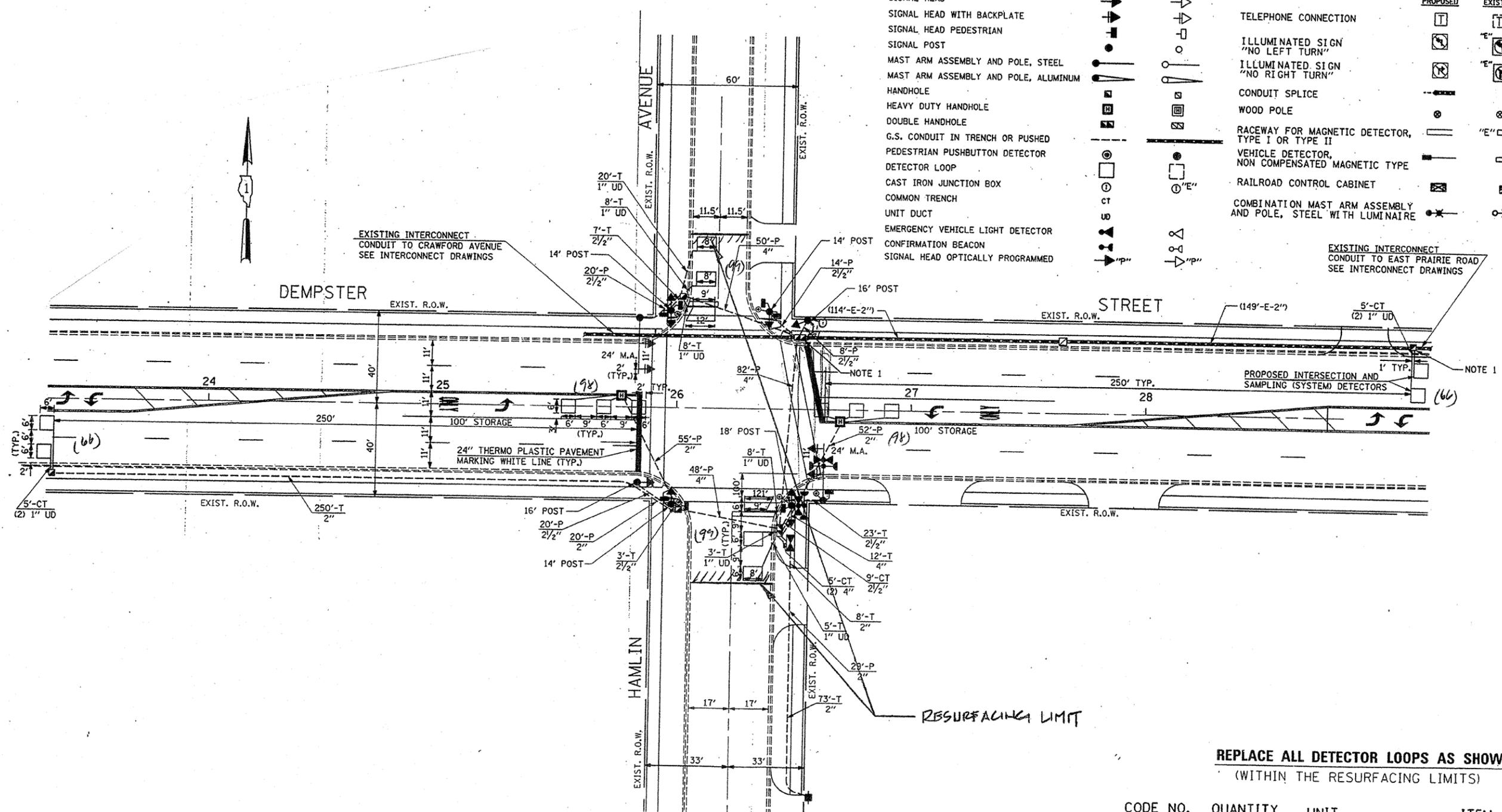
The "Pay Items" below are paid separately as per the attached "Specification" for MAGNETIC DETECTOR REMOVAL AND DETECTOR LOOP INSTALLATION.

Code No.	Pay Item	Unit	Quantity
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	
87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	
88500100	INDUCTIVE LOOP DETECTOR	EACH	
88600100	DETECTOR LOOP, TYPE 1	FOOT	

**NOTE:**  
THIS PLAN IS FOR THE PURPOSE OF REPLACING THE DETECTOR LOOPS ONLY. ALL OTHER INFORMATION SHOWN IS NOT RELATED AND WILL BE DISREGARDED.

TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING
CONTROLLER	[Symbol]	[Symbol]
SERVICE INSTALLATION	[Symbol]	[Symbol]
SIGNAL HEAD	[Symbol]	[Symbol]
SIGNAL HEAD WITH BACKPLATE	[Symbol]	[Symbol]
SIGNAL HEAD PEDESTRIAN	[Symbol]	[Symbol]
SIGNAL POST	[Symbol]	[Symbol]
MAST ARM ASSEMBLY AND POLE, STEEL	[Symbol]	[Symbol]
MAST ARM ASSEMBLY AND POLE, ALUMINUM	[Symbol]	[Symbol]
HANDHOLE	[Symbol]	[Symbol]
HEAVY DUTY HANDHOLE	[Symbol]	[Symbol]
DOUBLE HANDHOLE	[Symbol]	[Symbol]
G.S. CONDUIT IN TRENCH OR PUSHED	[Symbol]	[Symbol]
PEDESTRIAN PUSHBUTTON DETECTOR	[Symbol]	[Symbol]
DETECTOR LOOP	[Symbol]	[Symbol]
CAST IRON JUNCTION BOX	[Symbol]	[Symbol]
COMMON TRENCH	[Symbol]	[Symbol]
UNIT DUCT	[Symbol]	[Symbol]
EMERGENCY VEHICLE LIGHT DETECTOR	[Symbol]	[Symbol]
CONFIRMATION BEACON	[Symbol]	[Symbol]
SIGNAL HEAD OPTICALLY PROGRAMMED	[Symbol]	[Symbol]
TELEPHONE CONNECTION	[Symbol]	[Symbol]
ILLUMINATED SIGN "NO LEFT TURN"	[Symbol]	[Symbol]
ILLUMINATED SIGN "NO RIGHT TURN"	[Symbol]	[Symbol]
CONDUIT SPLICE	[Symbol]	[Symbol]
WOOD POLE	[Symbol]	[Symbol]
RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II	[Symbol]	[Symbol]
VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE	[Symbol]	[Symbol]
RAILROAD CONTROL CABINET	[Symbol]	[Symbol]
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE	[Symbol]	[Symbol]



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

CODE NO.	QUANTITY	UNIT	ITEM
86600600	526	FOOT	DETECTOR LOOP REPLACEMENT

FILE NAME: c:\projects\traffic\870027\us12.20.45.dwg	USER NAME: kenthphaybc	DESIGNED: -	REVISED: -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETECTOR LOOP REPLACEMENT DEMPSTER STREET @ HAMLIN AV.	F.A. RTE.:	SECTION:	COUNTY:	TOTAL SHEETS:	SHEET NO.:
PLOT SCALE: = 0.0000 / IN.	CHECKED: -	REVISED: -	317			2008-003-R5	COOK	27	13	
PLOT DATE: 2/29/2008	DATE: -	REVISED: -	CONTRACT NO. 60E22							
SCALE: NONE SHEET NO. 4 OF 7 SHEETS STA. TO STA.										

RESURFACING - TRAFFIC SIGNAL SCHEDULE OF QUANTITIES

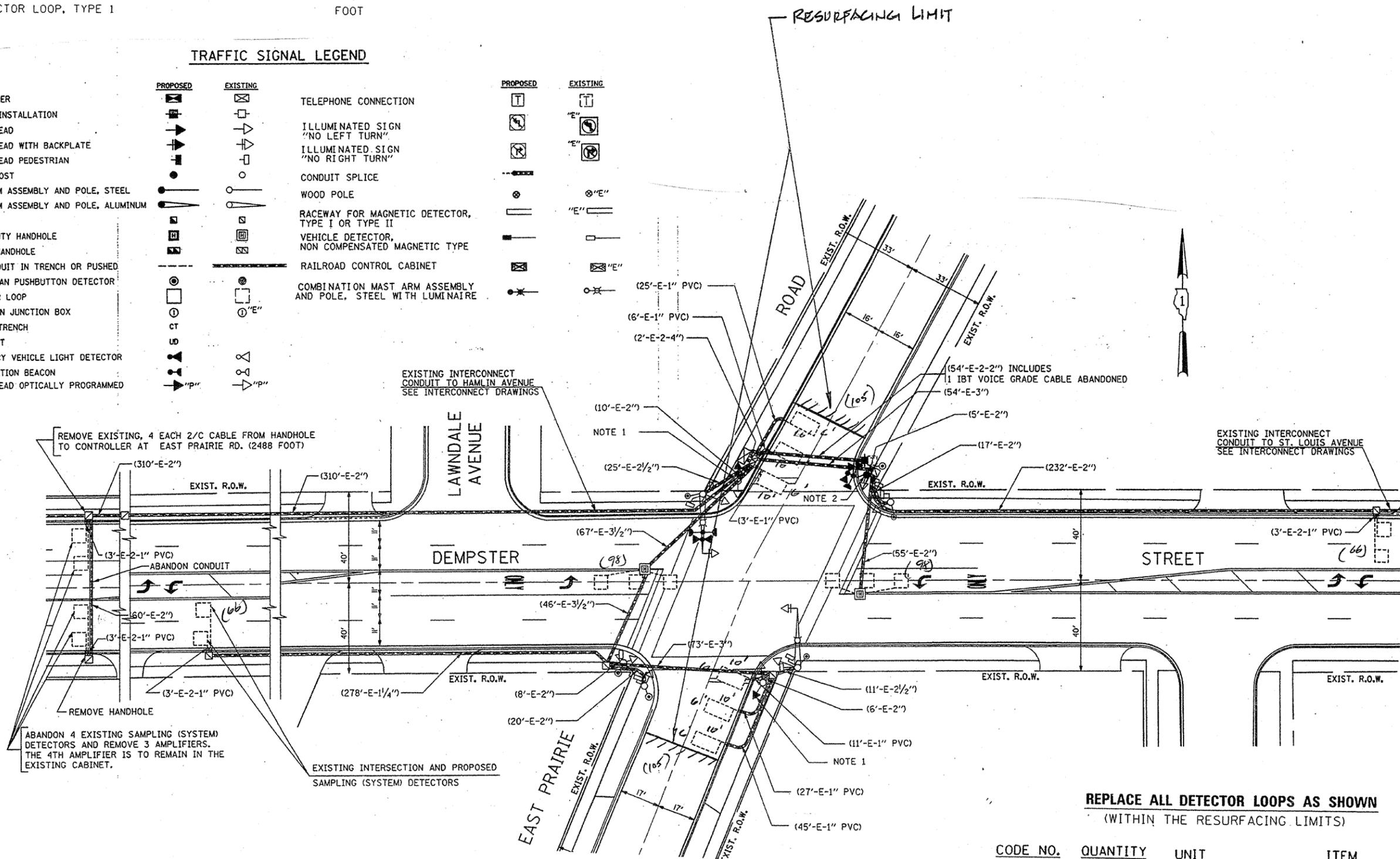
The "Pay Items" below are paid separately as per the attached "Specification" for MAGNETIC DETECTOR REMOVAL AND DETECTOR LOOP INSTALLATION.

**NOTE:**  
THIS PLAN IS FOR THE PURPOSE OF REPLACING THE DETECTOR LOOPS ONLY. ALL OTHER INFORMATION SHOWN IS NOT RELATED AND WILL BE DISREGARDED.

Code No.	Pay Item	Unit	Quantity
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	
87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	
88500100	INDUCTIVE LOOP DETECTOR	EACH	
88600100	DETECTOR LOOP, TYPE 1	FOOT	

TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING		PROPOSED	EXISTING
CONTROLLER	[Symbol]	[Symbol]	TELEPHONE CONNECTION	[Symbol]	[Symbol]
SERVICE INSTALLATION	[Symbol]	[Symbol]	ILLUMINATED SIGN "NO LEFT TURN"	[Symbol]	[Symbol]
SIGNAL HEAD	[Symbol]	[Symbol]	ILLUMINATED SIGN "NO RIGHT TURN"	[Symbol]	[Symbol]
SIGNAL HEAD WITH BACKPLATE	[Symbol]	[Symbol]	CONDUIT SPLICE	[Symbol]	[Symbol]
SIGNAL HEAD PEDESTRIAN	[Symbol]	[Symbol]	WOOD POLE	[Symbol]	[Symbol]
SIGNAL POST	[Symbol]	[Symbol]	RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II	[Symbol]	[Symbol]
MAST ARM ASSEMBLY AND POLE, STEEL	[Symbol]	[Symbol]	VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE	[Symbol]	[Symbol]
MAST ARM ASSEMBLY AND POLE, ALUMINUM	[Symbol]	[Symbol]	RAILROAD CONTROL CABINET	[Symbol]	[Symbol]
HANDHOLE	[Symbol]	[Symbol]	COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE	[Symbol]	[Symbol]
HEAVY DUTY HANDHOLE	[Symbol]	[Symbol]			
DOUBLE HANDHOLE	[Symbol]	[Symbol]			
G.S. CONDUIT IN TRENCH OR PUSHED	[Symbol]	[Symbol]			
PEDESTRIAN PUSHBUTTON DETECTOR	[Symbol]	[Symbol]			
DETECTOR LOOP	[Symbol]	[Symbol]			
CAST IRON JUNCTION BOX	[Symbol]	[Symbol]			
COMMON TRENCH	[Symbol]	[Symbol]			
UNIT DUCT	[Symbol]	[Symbol]			
EMERGENCY VEHICLE LIGHT DETECTOR	[Symbol]	[Symbol]			
CONFIRMATION BEACON	[Symbol]	[Symbol]			
SIGNAL HEAD OPTICALLY PROGRAMMED	[Symbol]	[Symbol]			



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

CODE NO.	QUANTITY	UNIT	ITEM
86600600	538	FOOT	DETECTOR LOOP REPLACEMENT

FILE NAME :	USER NAME : konthphkaybc	DESIGNED -	REVISED -
c:\projects\traffic\1870027\us12.20.45.dwg		DRAWN -	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DETECTOR LOOP REPLACEMENT  
DEMPSTER STREET @ E. PRAIRIE ROAD  
SCALE: NONE SHEET NO. 5 OF 7 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
377	2008-003 RS	COOK	27	14
CONTRACT NO. 60E22				

RESURFACING - TRAFFIC SIGNAL SCHEDULE OF QUANTITIES

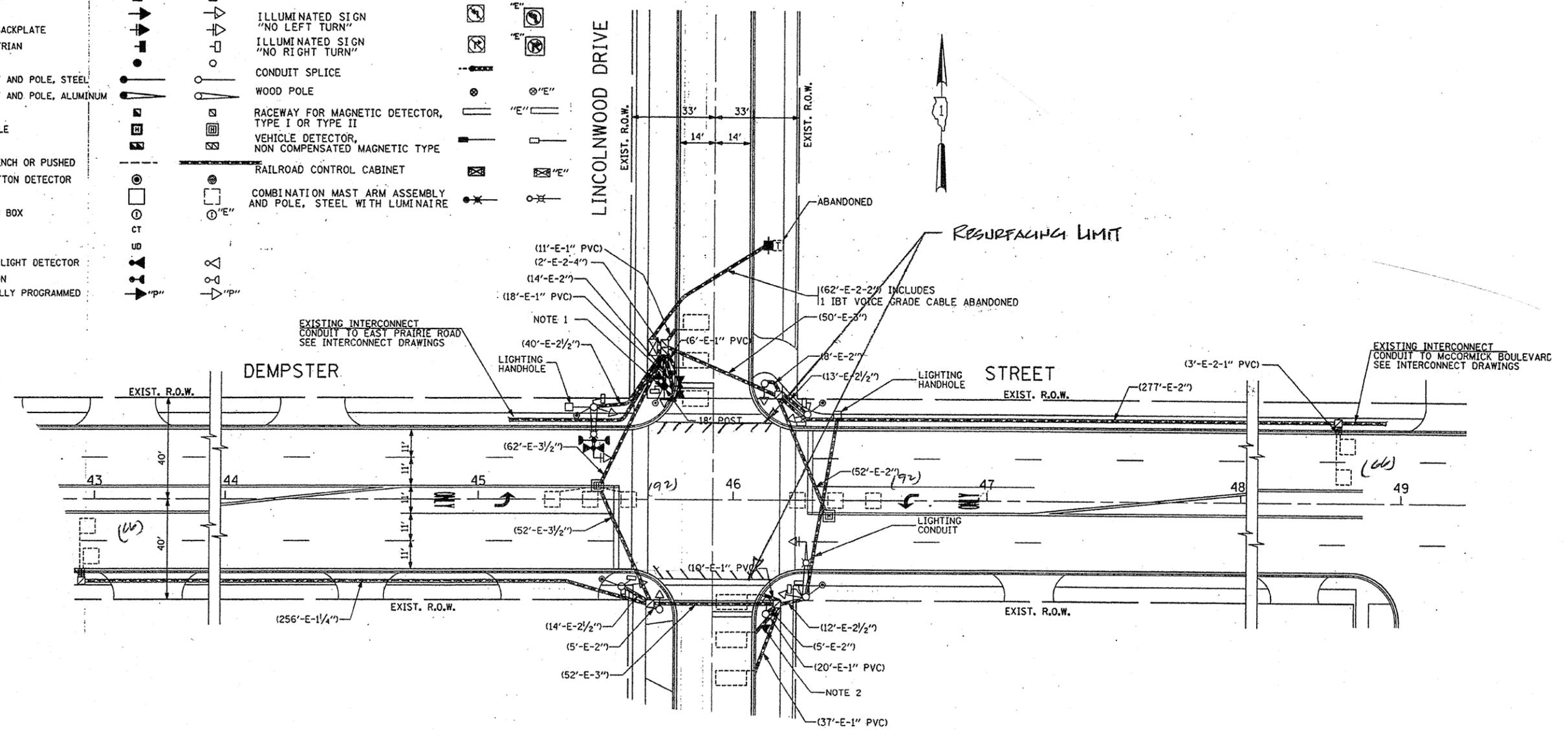
The "Pay Items" below are paid separately as per the attached "Specification" for MAGNETIC DETECTOR REMOVAL AND DETECTOR LOOP INSTALLATION.

**NOTE:**  
THIS PLAN IS FOR THE PURPOSE OF REPLACING THE DETECTOR LOOPS ONLY. ALL OTHER INFORMATION SHOWN IS NOT RELATED AND WILL BE DISREGARDED.

Code No.	Pay Item	Unit	Quantity
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	
87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	
88500100	INDUCTIVE LOOP DETECTOR	EACH	
88600100	DETECTOR LOOP, TYPE 1	FOOT	

TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING		PROPOSED	EXISTING
CONTROLLER	[Symbol]	[Symbol]	TELEPHONE CONNECTION	[Symbol]	[Symbol]
SERVICE INSTALLATION	[Symbol]	[Symbol]	ILLUMINATED SIGN "NO LEFT TURN"	[Symbol]	[Symbol]
SIGNAL HEAD	[Symbol]	[Symbol]	ILLUMINATED SIGN "NO RIGHT TURN"	[Symbol]	[Symbol]
SIGNAL HEAD WITH BACKPLATE	[Symbol]	[Symbol]	CONDUIT SPLICE	[Symbol]	[Symbol]
SIGNAL HEAD PEDESTRIAN	[Symbol]	[Symbol]	WOOD POLE	[Symbol]	[Symbol]
SIGNAL POST	[Symbol]	[Symbol]	RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II	[Symbol]	[Symbol]
MAST ARM ASSEMBLY AND POLE, STEEL	[Symbol]	[Symbol]	VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE	[Symbol]	[Symbol]
MAST ARM ASSEMBLY AND POLE, ALUMINUM	[Symbol]	[Symbol]	RAILROAD CONTROL CABINET	[Symbol]	[Symbol]
HANDHOLE	[Symbol]	[Symbol]	COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE	[Symbol]	[Symbol]
HEAVY DUTY HANDHOLE	[Symbol]	[Symbol]			
DOUBLE HANDHOLE	[Symbol]	[Symbol]			
G.S. CONDUIT IN TRENCH OR PUSHED	[Symbol]	[Symbol]			
PEDESTRIAN PUSHBUTTON DETECTOR	[Symbol]	[Symbol]			
DETECTOR LOOP	[Symbol]	[Symbol]			
CAST IRON JUNCTION BOX	[Symbol]	[Symbol]			
COMMON TRENCH	[Symbol]	[Symbol]			
UNIT DUCT	[Symbol]	[Symbol]			
EMERGENCY VEHICLE LIGHT DETECTOR	[Symbol]	[Symbol]			
CONFIRMATION BEACON	[Symbol]	[Symbol]			
SIGNAL HEAD OPTICALLY PROGRAMMED	[Symbol]	[Symbol]			

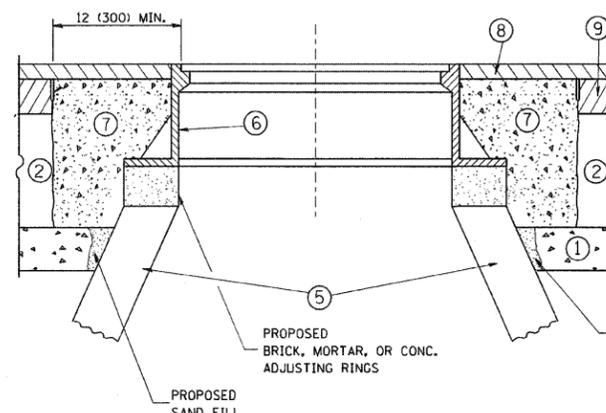
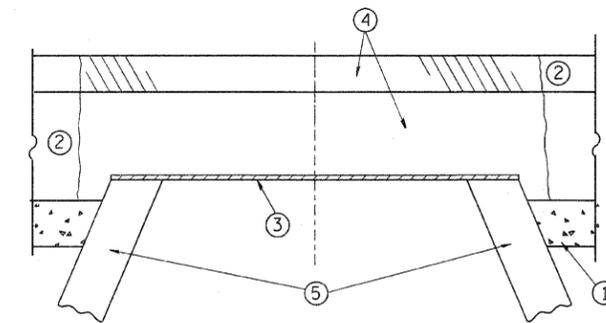


**REPLACE ALL DETECTOR LOOPS AS SHOWN**  
(WITHIN THE RESURFACING LIMITS)

CODE NO.	QUANTITY	UNIT	ITEM
86600600	316	FOOT	DETECTOR LOOP REPLACEMENT

FILE NAME: c:\projects\traffic\070027\us12_20_45.dwg	USER NAME: kenthphaybc	DESIGNED: -	REVISED: -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETECTOR LOOP REPLACEMENT DEMPSTER STREET @ LINCOLNWOOD DR.	F.A. RTE.:	SECTION:	COUNTY:	TOTAL SHEETS:	SHEET NO.:
PLOT SCALE: 1/8" = 1'-0"	CHECKED: -	REVISED: -	377			2008-003-RS	COOK	27	15	
PLOT DATE: 2/24/2008	DATE: -	REVISED: -	CONTRACT NO. 60522							
SCALE: NONE SHEET NO. 6 OF 7 SHEETS STA. TO STA.										





**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 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 SI CONCRETE, OR HMA SURFACE COURSE OR HMA BINDER COURSE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS.

**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 SI CONCRETE, HMA SURFACE COURSE OR HMA BINDER COURSE
- 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:** THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR "FRAMES AND LIDS TO BE ADJUSTED, SPECIAL"  
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.

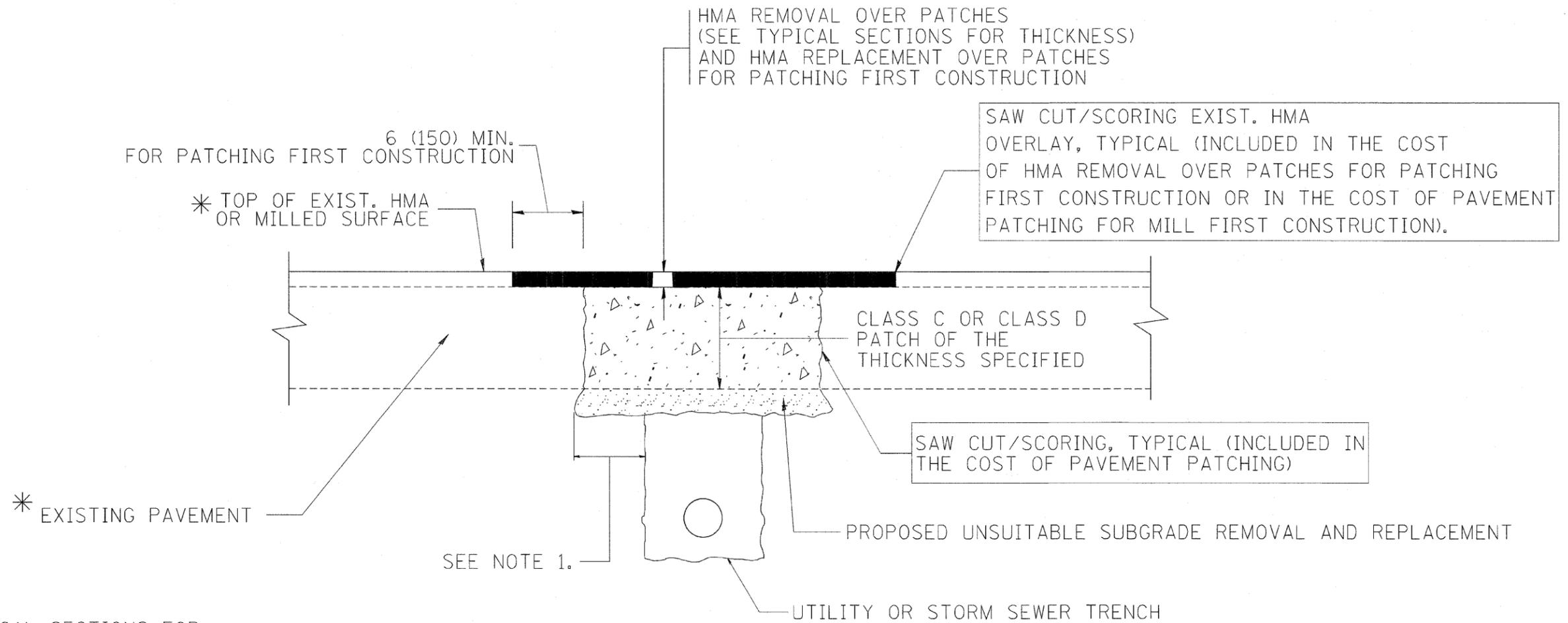
THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

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 = W:\diststd\22x34\bd08.dgn	USER NAME = gajlionobt	DESIGNED - R. SHAH	REVISED - R. SHAH 03-10-95	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING</b>			F.A.P. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED - A. ABBAS 03-21-97		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	377	2008-003 RS	COOK	27	17
		CHECKED -	REVISED - R. WIEDEMAN 05-14-04					<b>BD600-03 (BD-8)</b>		CONTRACT NO. 60E22		
		DATE - 10-25-94	REVISED - R. BORO 01-01-07					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)**

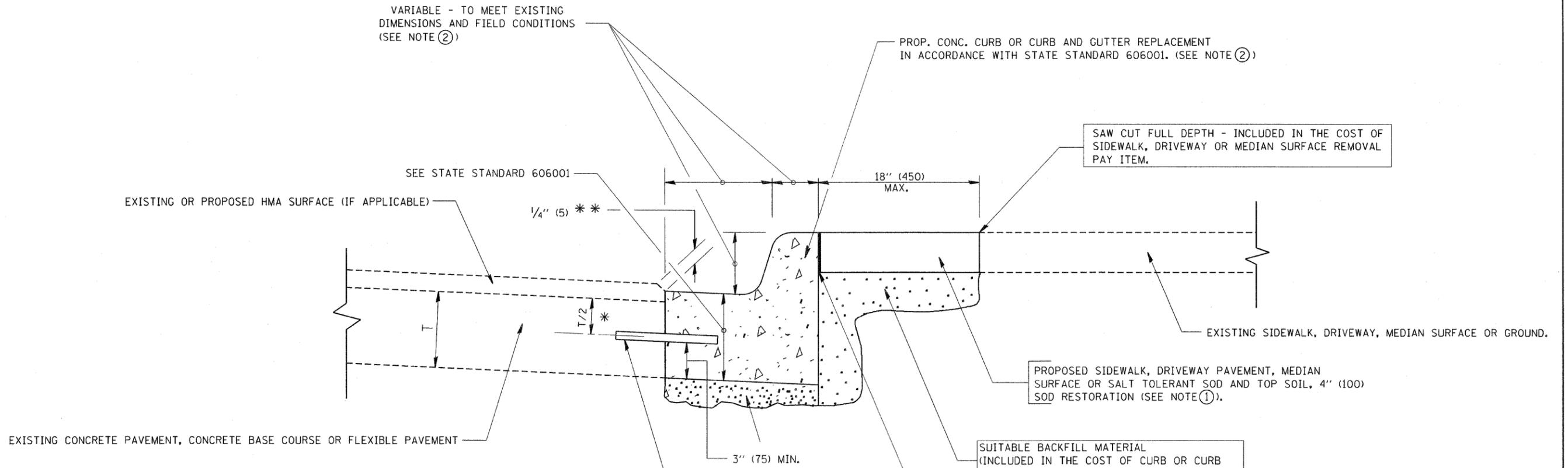
1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

**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 = c:\projects\diststd22x34\bd22.dgn	USER NAME = bauerdl	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. 377	SECTION 2008-003 RS	COUNTY COOK	TOTAL SHEETS 27	SHEET NO. 18
	PLOT SCALE = 50.000' / IN.	DRAWN -	REVISED - R. BORO 01-01-07		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	<b>BD400-04 (BD-22)</b> CONTRACT NO. 60E22			
	PLOT DATE = 10/27/2008	CHECKED -	REVISED - R. BORO 09-04-07		FED. ROAD DIST. NO. 1   ILLINOIS FED. AID PROJECT							
		DATE - 10-25-94	REVISED - K. ENG 10-27-08									



- \* 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.

SALT TOLERANT SOD AND TOP SOIL, 4" (100) RESTORATION WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

② CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED.

③ FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE PAVEMENT DELETE EPOXY COATED TIE BARS.

④ 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.

⑤ 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.

⑥ 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.

⑦ 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.

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.)

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).

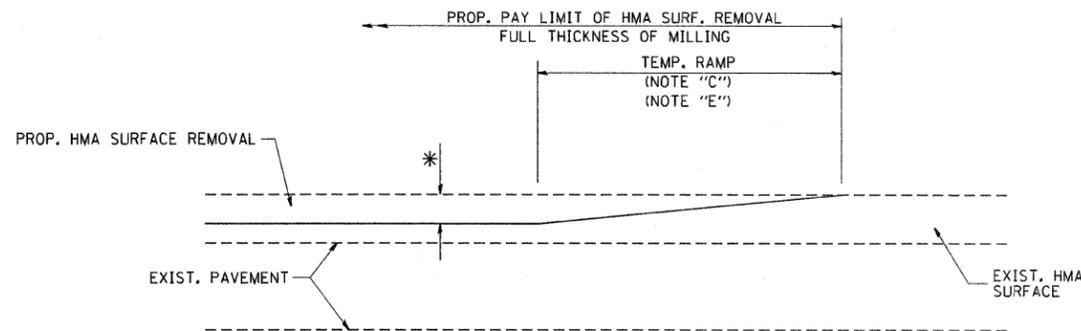
**BASIS OF PAYMENT:**

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

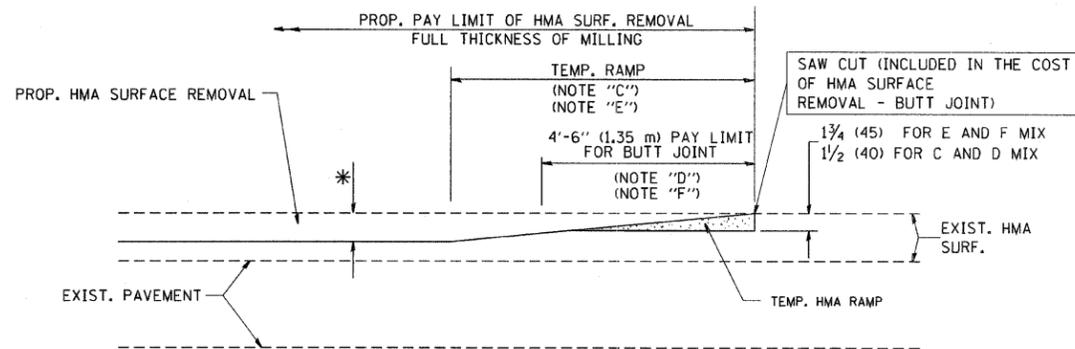
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME = W:\diststd\22x34\bd24.dgn	USER NAME = gaglianob	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.	
		DRAWN -	REVISED - A. ABBAS 03-21-97			377	2008-003 RS	COOK	27	19	
		CHECKED -	REVISED - M. GOMEZ 01-22-01			<b>BD600-06 (BD-24)</b>		CONTRACT NO. 60E22			
		DATE - 03-11-94	REVISED - R. BORO 01-01-07			SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.		FED. ROAD DIST. NO. 1 (ILLINOIS) FED. AID PROJECT			



MILLED TEMPORARY RAMP  
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

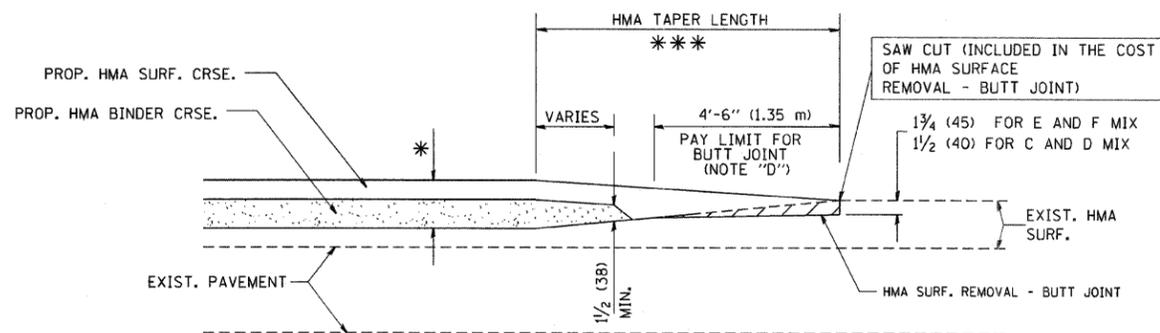
OPTION 1



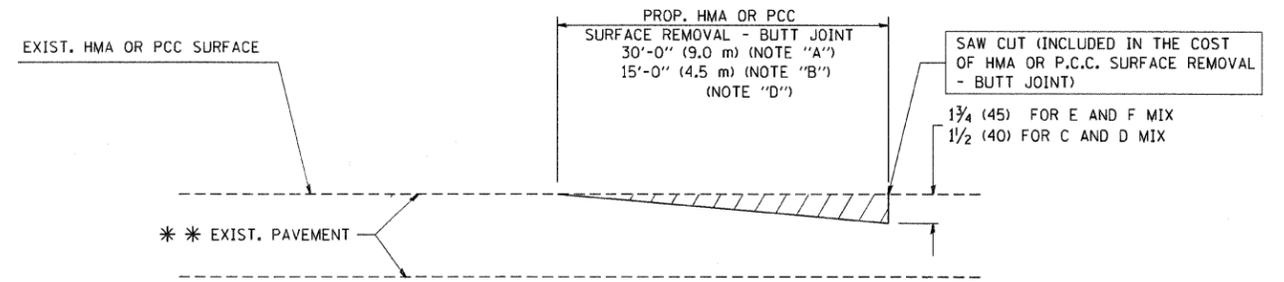
HMA CONSTRUCTED TEMPORARY RAMP  
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 2

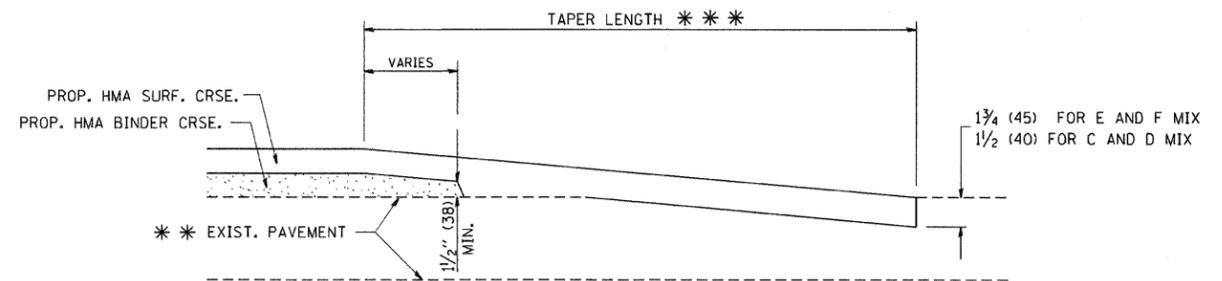
TYPICAL TEMPORARY RAMP



BUTT JOINT AND HMA TAPER  
TYPICAL BUTT JOINT AND HMA TAPER  
FOR MILLING AND RESURFACING



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER  
FOR RESURFACING ONLY

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

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.

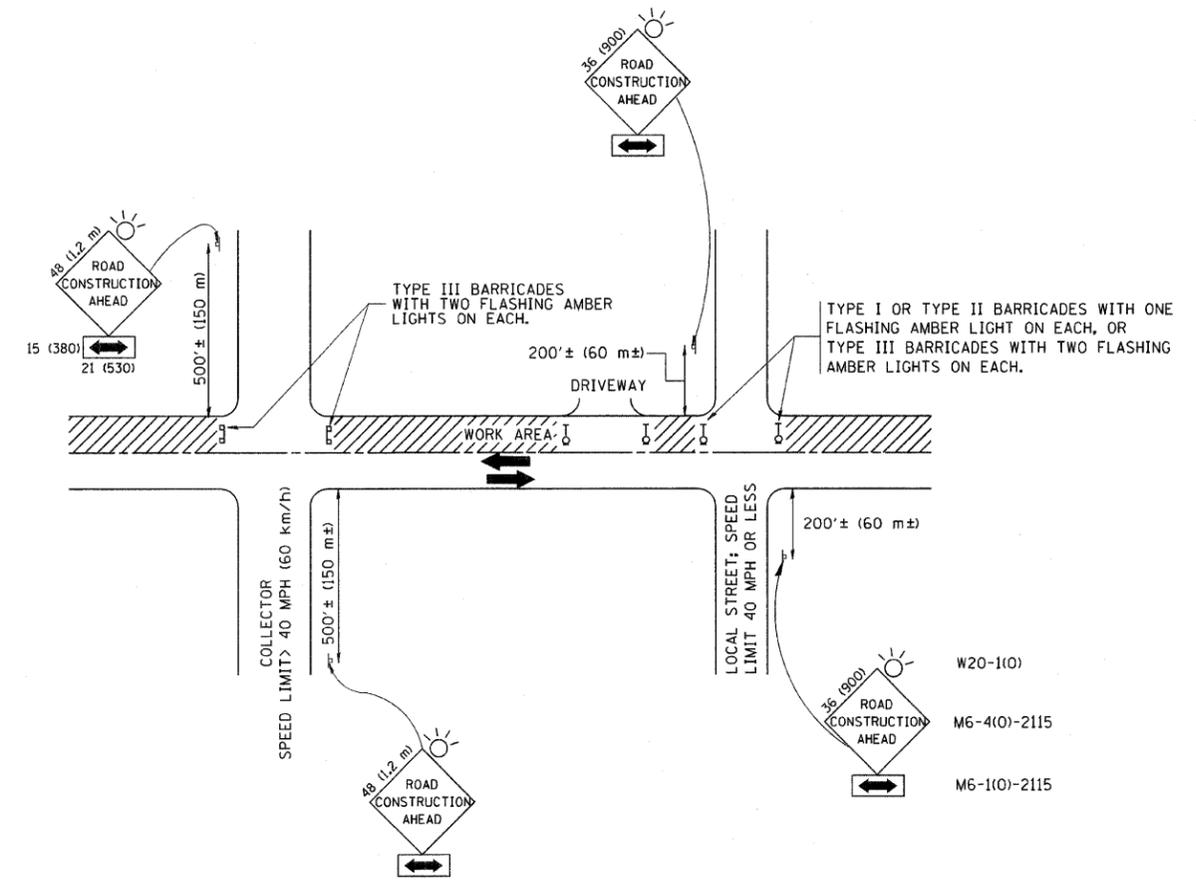
FILE NAME = W:\dststd\22x34\bd32.dgn	USER NAME = gaglianobt	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94
		DRAWN -	REVISED - A. ABBAS 03-21-97
	PLOT SCALE = 50.0000 "/>		

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

BUTT JOINT AND  
HMA TAPER DETAILS

P.A.P. RTE. 377	SECTION 2008-003 RS	COUNTY COOK	TOTAL SHEETS 27	SHEET NO. 20
BD400-05 BD32			CONTRACT NO. 60E22	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

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



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.
- 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.

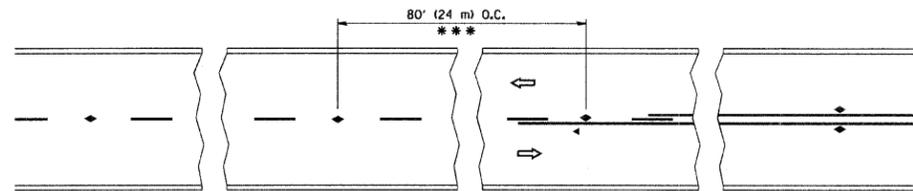
FILE NAME =	USER NAME = goglianobt	DESIGNED - LHA	REVISED - J. OBERLE 10-18-95
W:\diststd\22x34\to10.dgn		DRAWN -	REVISED - A. HOUSEH 03-06-96
	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 1/4/2008	DATE - 06-89	REVISED - T. RAMMACHER 01-06-00

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

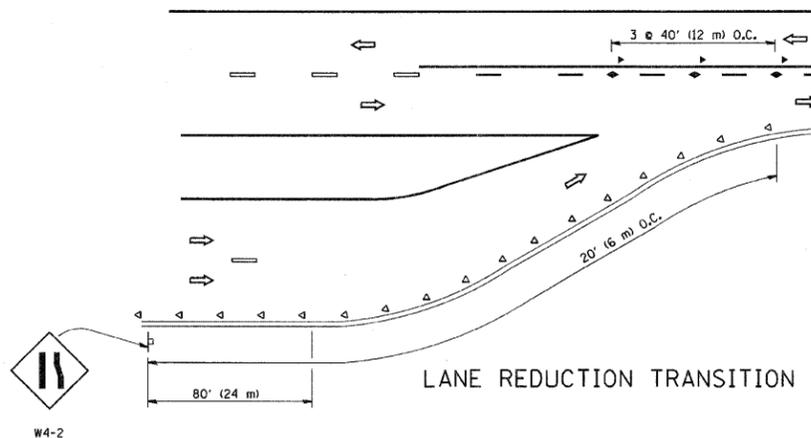
TRAFFIC CONTROL AND PROTECTION FOR  
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

F.A.P. RTD.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
377	2008-003 RS	COOK	27	21
TC-10			CONTRACT NO. 60E22	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

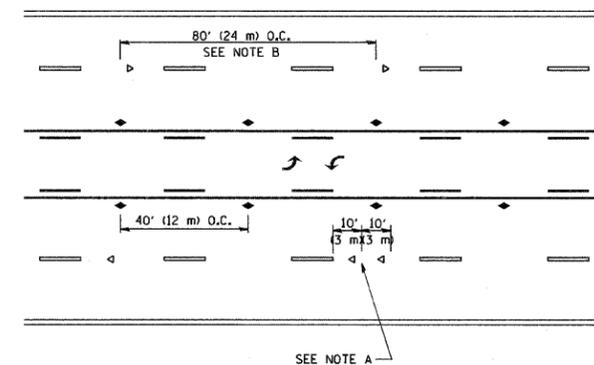
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.



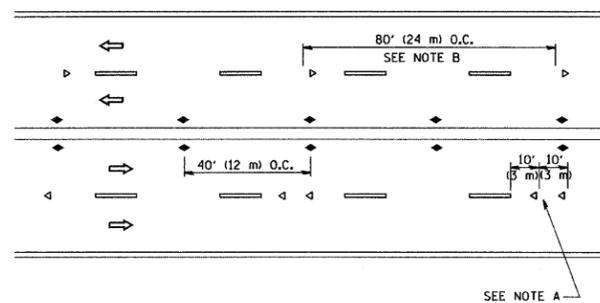
TWO-LANE/TWO-WAY



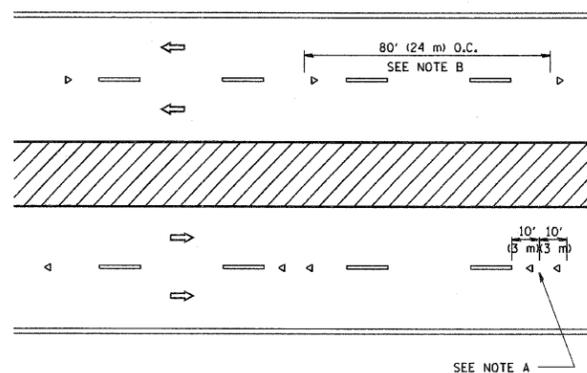
LANE REDUCTION TRANSITION



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

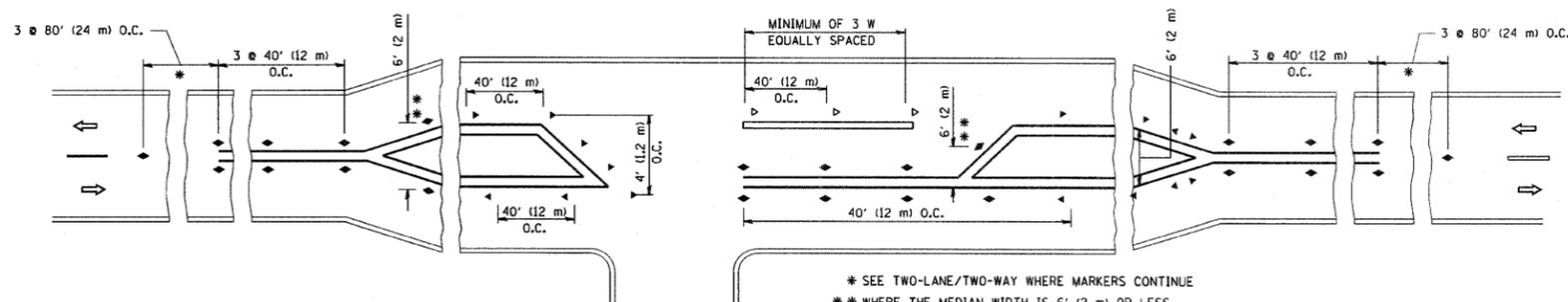
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

- 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.
- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.

DESIGN NOTES

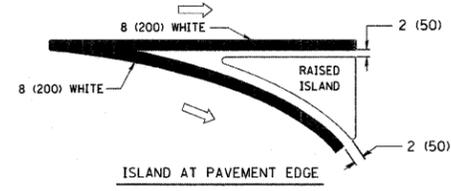
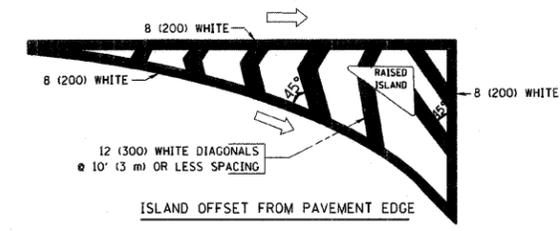
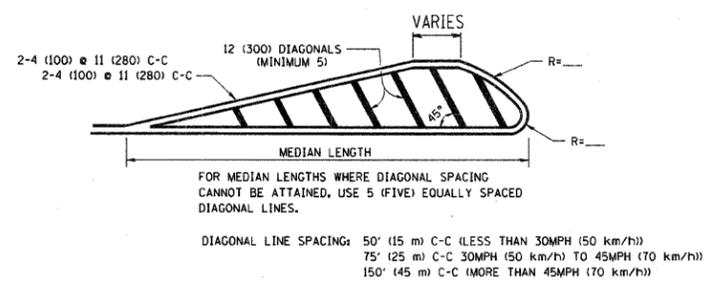
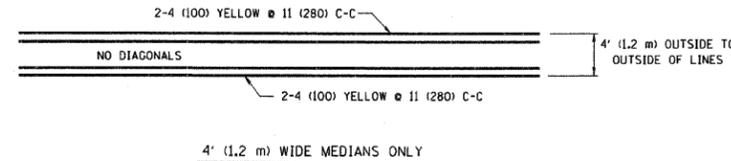
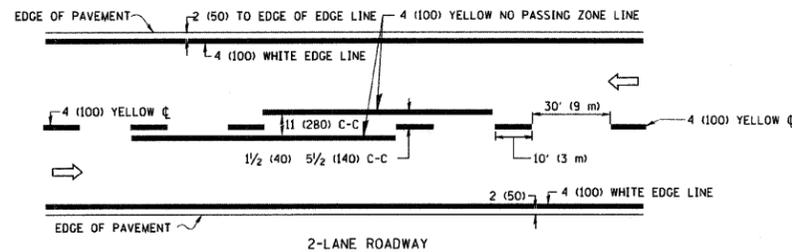
1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHOULD BE INCLUDED IN THE PLANS.
4. MARKERS SHOULD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



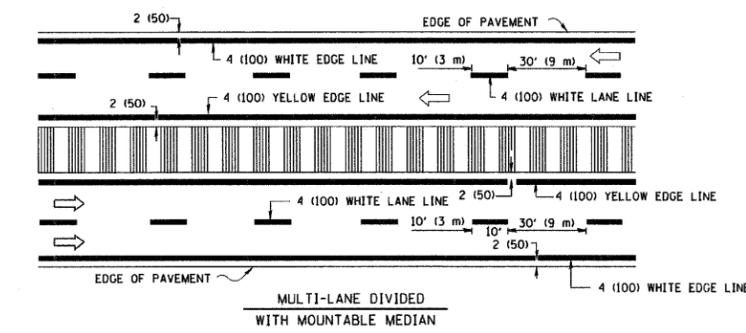
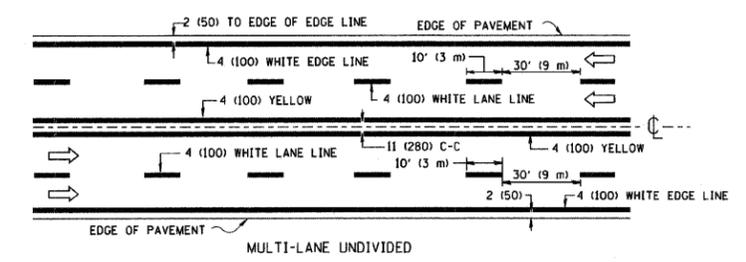
LEFT TURN

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

FILE NAME = W:\dststd\22x34\to11.dgn	USER NAME = gaglionobt	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.P.P. -	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 50,000' / IN.	DRAWN -	REVISED - T. RAMMACHER 03-12-99					377	2008-003 RS	COOK	27	22
	PLOT DATE = 1/4/2008	CHECKED -	REVISED - T. RAMMACHER 01-06-00		SCALE: NONE    SHEET NO. 1 OF 1 SHEETS    STA.    TO STA.			<b>TC-11</b>		CONTRACT NO. 60E22		
		DATE -	REVISED -		FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT							

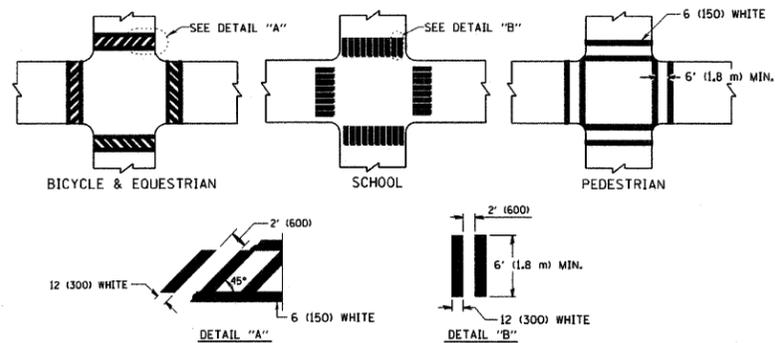


TYPICAL ISLAND MARKING

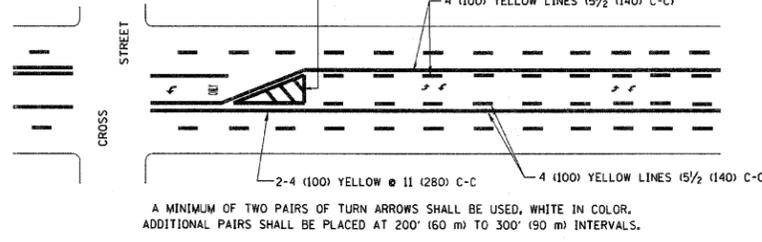


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

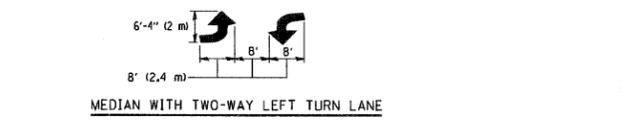
TYPICAL LANE AND EDGE LINE MARKING



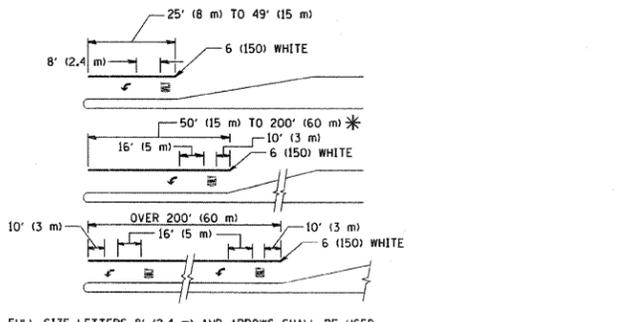
TYPICAL CROSSWALK MARKING



TYPICAL PAINTED MEDIAN MARKING



TYPICAL LEFT (OR RIGHT) TURN LANE



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>)

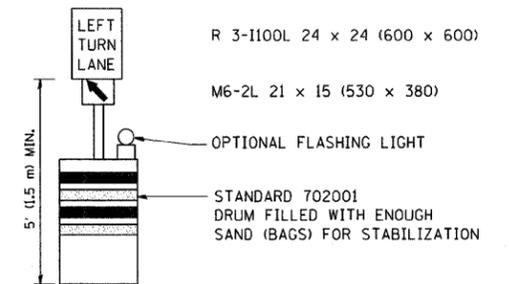
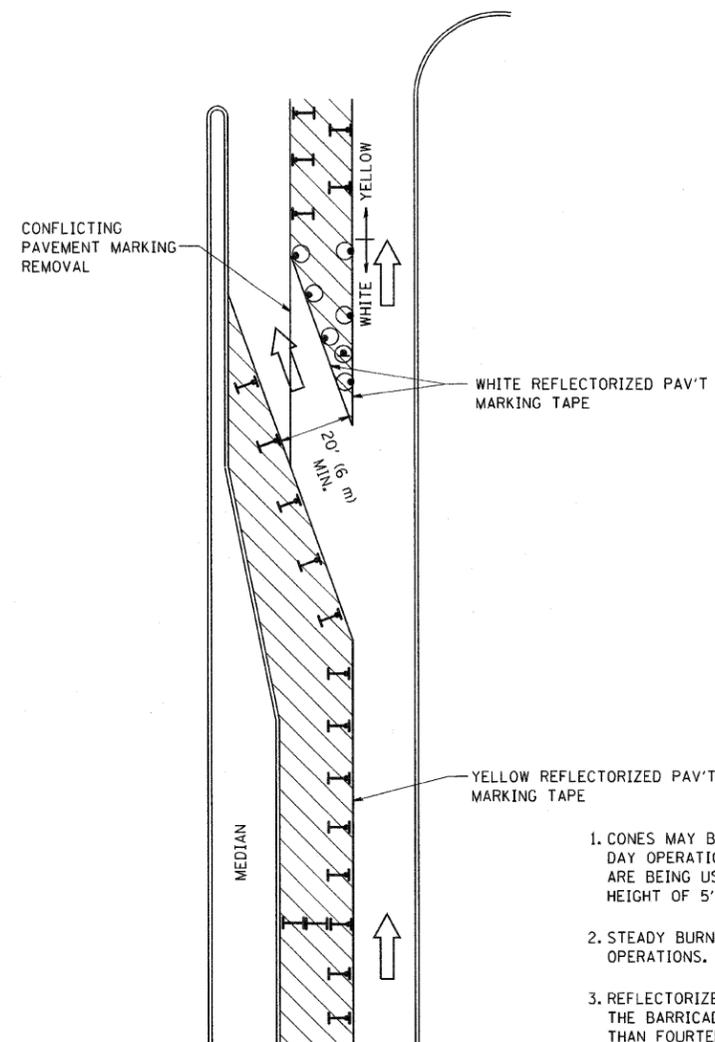
\* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL TURN LANE 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 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 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' (4.5 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	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.



**GENERAL NOTES**

1. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT. WHEN CONES ARE BEING USED, THE "LEFT TURN LANE" SIGN MAY BE SKID MOUNTED AT A MINIMUM HEIGHT OF 5' (1.5 m).
2. STEADY BURNING LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
3. REFLECTORIZED TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE BARRICADED AREA OF EACH TURN BAY WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS.
4. 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" R3-100 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
5. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
6. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS.
7. FORM BT 725 IS REQUIRED.
8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

**LEGEND**

-  WORK AREA
-  LANE OPEN TO TRAFFIC
-  TYPE I OR II BARRICADE WITH STEADY BURN LIGHT
-  DRUM WITH STEADY BURN LIGHT
-  DRUM WITH SIGN (WITH OPTIONAL FLASHING LIGHT) SEE DETAIL
-  TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

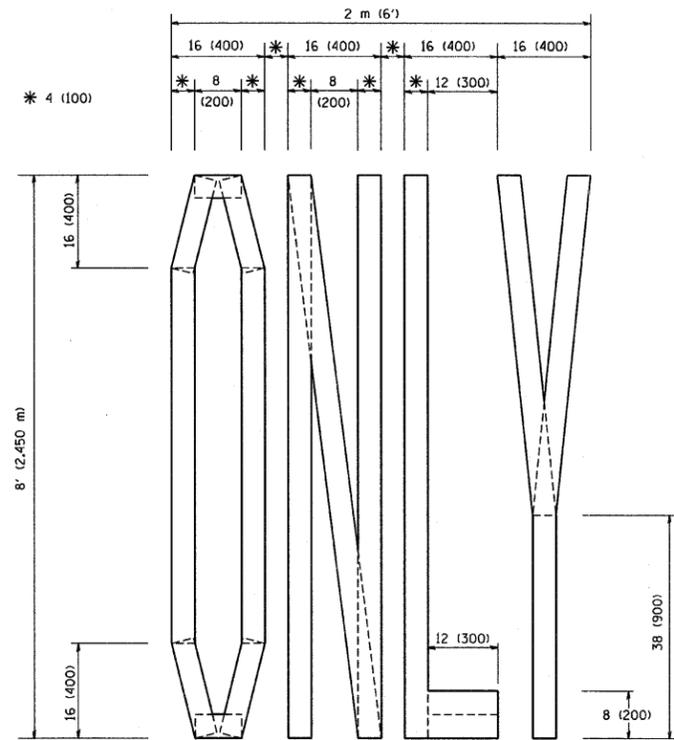
FILE NAME = W:\diststd\22x34\tc14.dgn	USER NAME = gegljenobt	DESIGNED -	REVISED -T. RAMMACHER 09-08-94
		DRAWN -	REVISED - A. HOUSEH 11-07-95
	PLOT SCALE = 50.0000 / IN.	CHECKED -	REVISED - A. HOUSEH 10-12-96
	PLOT DATE = 1/4/2008	DATE -	REVISED -T. RAMMACHER 01-06-00

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

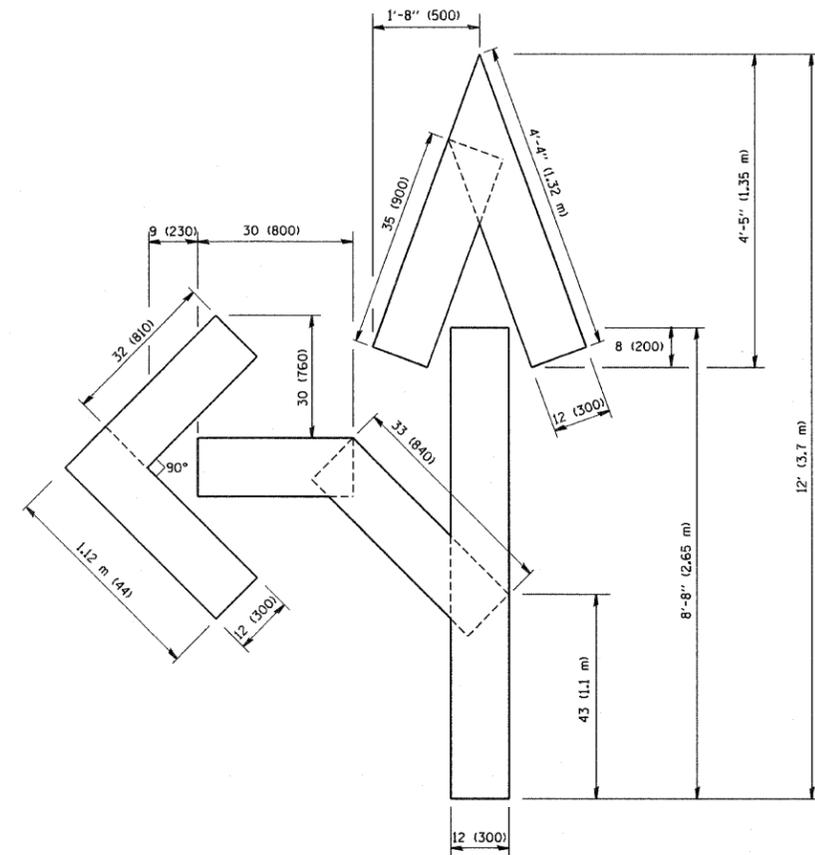
**TRAFFIC CONTROL AND PROTECTION AT TURN BAYS  
(TO REMAIN OPEN TO TRAFFIC)**

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

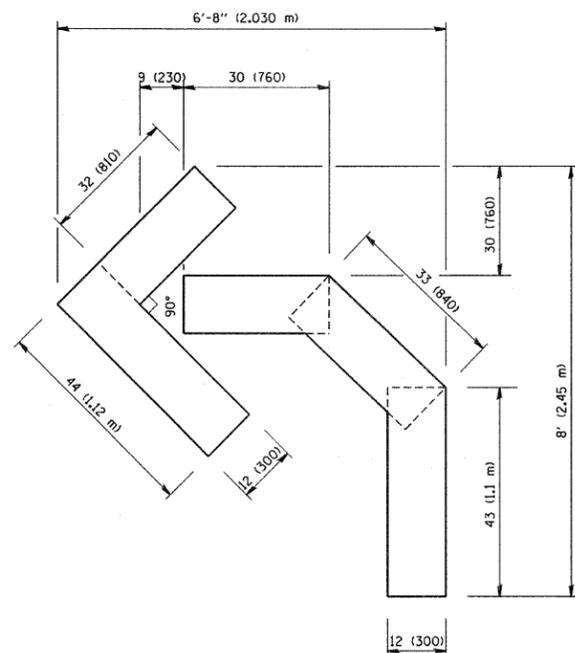
F.A.P. RTE. 377	SECTION 2008-003 RS	COUNTY COOK	TOTAL SHEETS 27	SHEET NO. 24
<b>TC-14</b>		CONTRACT NO. 60E22		
FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT				



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.

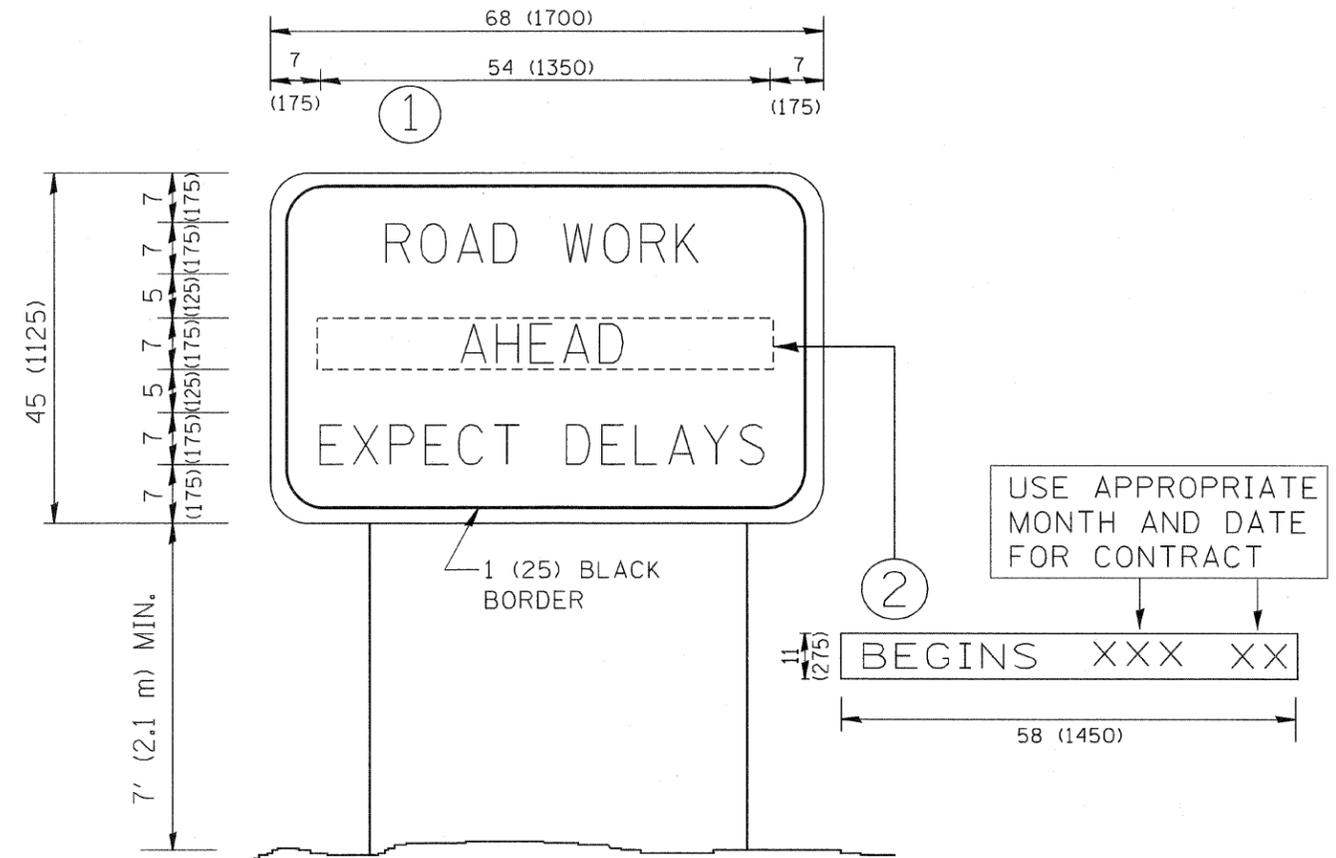
FILE NAME = W:\distd\22x34\to16.dgn	USER NAME = gogliobt	DESIGNED -	REVISED -T. RAMMACHER 06-05-96
		DRAWN -	REVISED -T. RAMMACHER 11-04-97
	PLOT SCALE = 50.0000 "/ IN.	CHECKED -	REVISED -T. RAMMACHER 03-02-98
	PLOT DATE = 1/4/2008	DATE - 09-18-94	REVISED -E. GOMEZ 08-28-00

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING LETTERS AND SYMBOLS  
 FOR TRAFFIC STAGING

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
377	2008-003 RS	COOK	27	25
TC-16			CONTRACT NO. 60E22	
FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT				

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



**NOTES:**

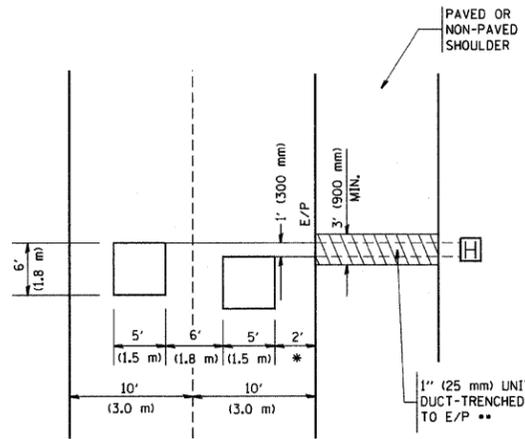
1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
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 = W:\diststd\22x34\to22.dgn	USER NAME = gagliano	DESIGNED -	REVISED - R. MIRS 09-15-97	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>ARTERIAL ROAD INFORMATION SIGN</b>	F.A.P. -	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	PLOT SCALE = 50.000' / IN.	DRAWN -	REVISED - R. MIRS 12-11-97			377	2008-003 RS	COOK	27	26	
	PLOT DATE = 1/4/2008	CHECKED -	REVISED - T. RAMMACHER 02-02-99			<b>TC-22</b>		CONTRACT NO. 60E22			
		DATE -	REVISED - C. JUCIUS 01-31-07			SCALE: NONE		SHEET NO. 1 OF 1 SHEETS		STA. TO STA.	

**LOOPS NEXT TO SHOULDERS**

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

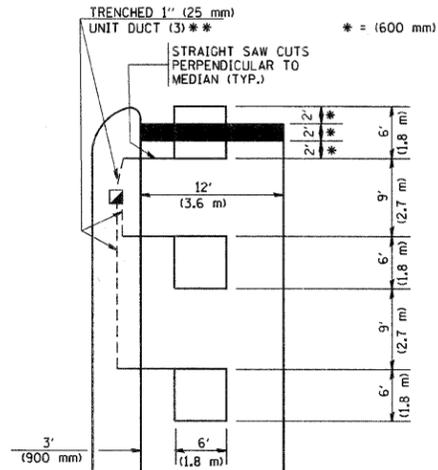


\* = (600 mm)

\*\* 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)**

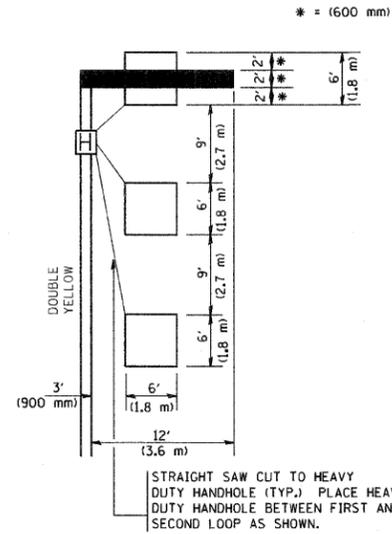
HANDHOLE LOCATION MAY  
VARY DEPENDING ON GEOMETRICS  
AND DESIGN OF TRAFFIC SIGNALS.  
HEAVY-DUTY HANDHOLES TO BE  
USED WHEN THE MEDIAN IS  
MOUNTABLE. REFER TO STANDARD  
814001 TO ENSURE THAT HANDHOLE  
FITS IN MEDIAN.



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

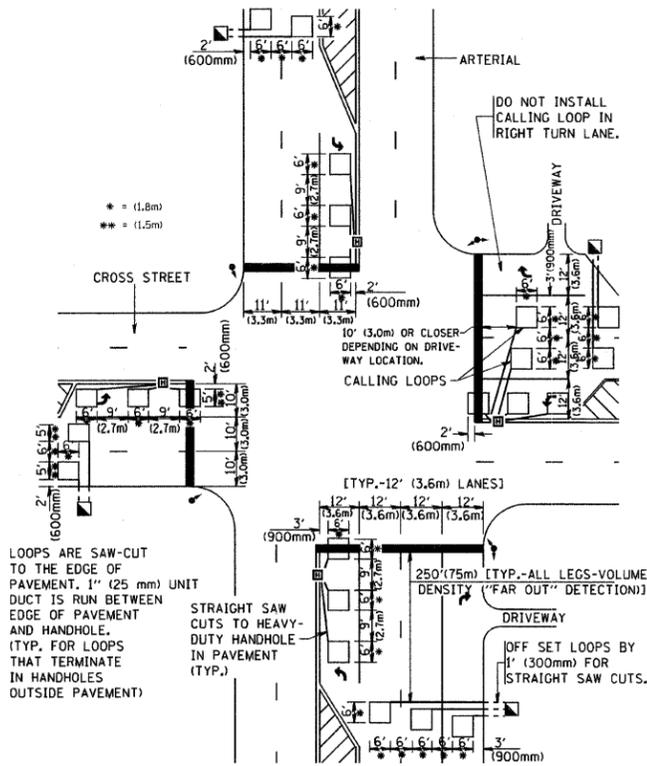
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO  
PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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



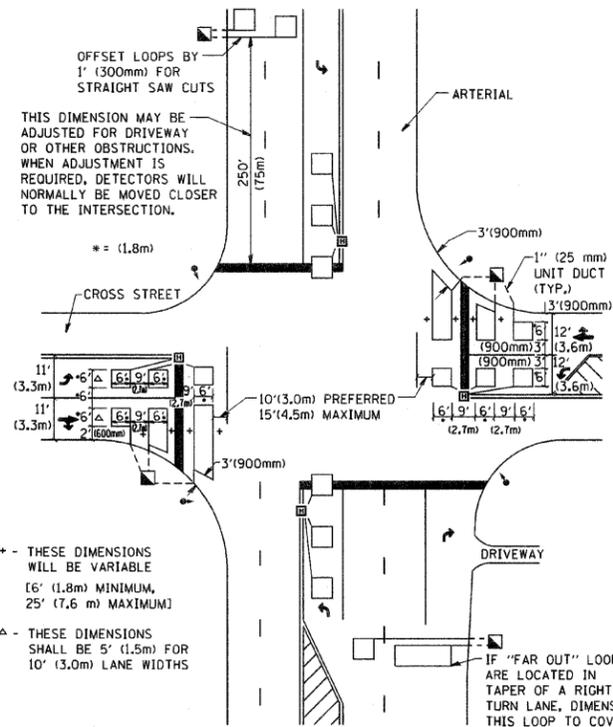
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO  
PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

**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 = W:\distdtd\22x34\ts07.dgn	USER NAME = gagianobt	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.
PLOT SCALE = 50.0000 "/>										