

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
PROPOSED HIGHWAY PLANS

FOR INDEX OF SHEETS, SEE SHEET NO. 2

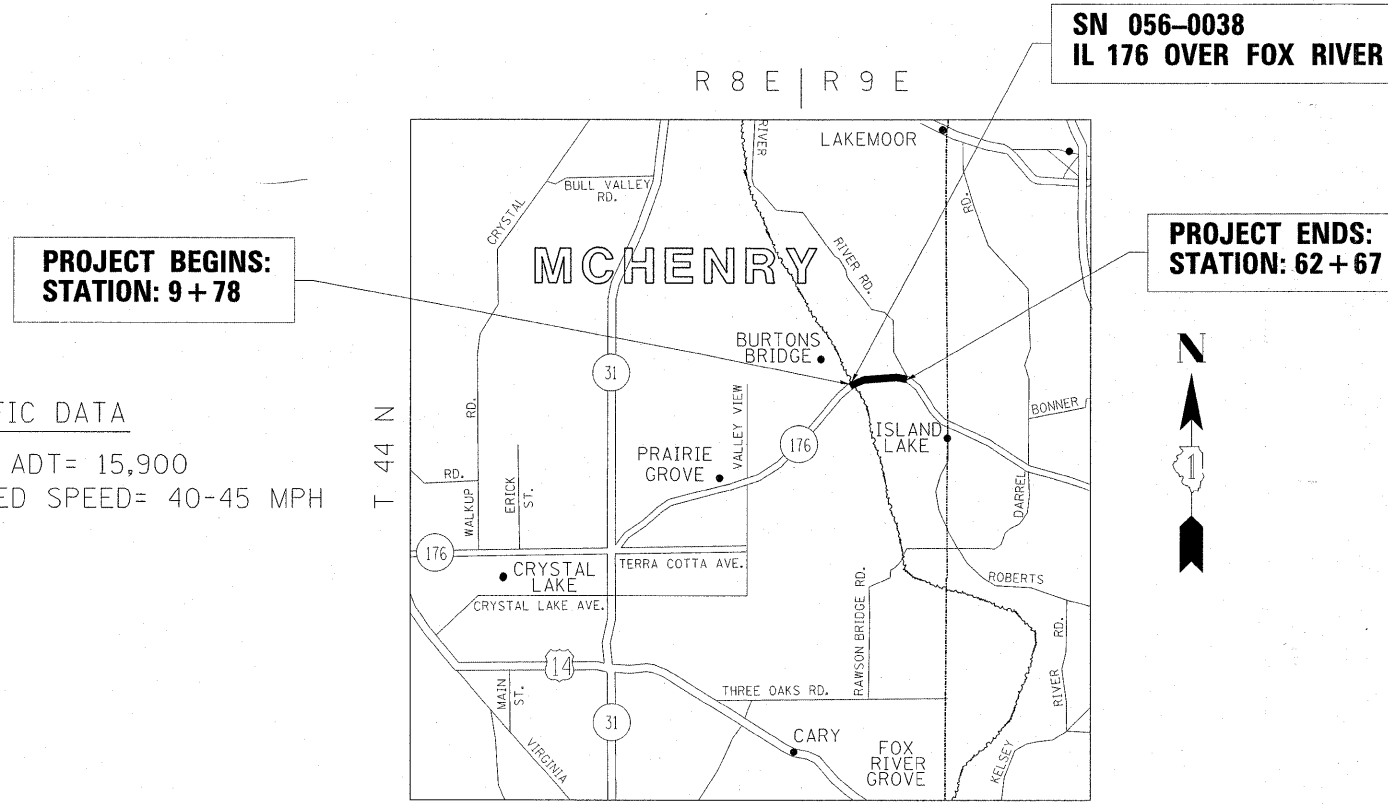
PROJECT LOCATED IN THE VILLAGE OF ISLAND LAKE.

F.A.P. ROUTE 335 : IL 176
FOX RIVER TO RIVER ROAD
SECTION: 145 RS-8
RESURFACING

MCHENRY COUNTY
C-91-530-10

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	145 RS-8	MCHENRY	19*	1
FED. ROAD DIST. NO. 1	ILLINOIS	CONTRACT NO. 60K61		

* 19 + 1 = 20



TRAFFIC DATA
 2009 ADT= 15,900
 POSTED SPEED= 40-45 MPH

GROSS AND NET LENGTH OF PROJECT = 5289 FEET (1.00 MILES)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED FEBRUARY 4, 20 11
Diane M. O'Keefe DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
March 25, 20 11
Scott E. Stitt, P.E. acting ENGINEER OF DESIGN AND ENVIRONMENT
March 25, 20 11
Christine M. Reed DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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

PROJECT MANAGER: ISSAM RAYYAN
PROJECT ENGINEER: ROBERT BORO (847) 705-4178

CONTRACT NO. 60K61

INDEX OF SHEETS:

SHEET:	DESCRIPTION:
1	TITLE SHEET
2	INDEX OF SHEETS, STATE STANDARDS AND GENERAL NOTES
3	SUMMARY OF QUANTITIES
4	TYPICAL ROADWAY CROSS-SECTIONS
5-7	ROADWAY & PAVEMENT MARKING PLANS
8	BRIDGE PLANS (SN 056-0038)
9	DETECTOR LOOP REPLACEMENT PLANS
10	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT (BD-22)
11	BUTT JOINT AND HMA TAPER DETAILS (BD-32)
12	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS (TC-10)
13	RAISED REFLECTIVE PAVEMENT MARKERS (SNOW PLOW RESISTANT) (TC-11)
14	DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13)
15	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TC-14)
16	PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING (TC-16)
17	TEMPORARY INFORMATION SIGNING (TC-22)
18	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS (TS-05)
19	DISTRICT 1 - DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING (TS-07)
19A.	<i>PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING (TC-16)</i>

STATE STANDARDS:

- 442201-03 CLASS C AND D PATCHES
- 701011-02 OFF-RD MOVING OPERATIONS, 2L, 2W, DAY ONLY
- ~~701201-04 LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS > 45MPH~~
- 701301-04 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
- 701311-03 LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
- 701901-01 TRAFFIC CONTROL DEVICES
- 701306-03
- 701336-06
- 701502-04

GENERAL NOTES:

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 800-892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES. (48 HOUR NOTIFICATION IS REQUIRED).

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES.

THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.

ANY PAVEMENT MARKINGS AND RAISED REFLECTIVE PAVEMENT MARKERS OBLITERATED BY MILLING AND RESURFACING OPERATIONS ON SIDE STREETS AND ENTRANCES SHALL BE REPLACED AND PAID FOR IN KIND.

ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OR RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT NO ADDITIONAL COST TO THE DEPARTMENT.

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.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.

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

THE ENGINEER SHALL CONTACT DEBBIE HANLON, AREA TRAFFIC FIELD ENGINEER, AT (847) 438-2300 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.

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).

OVERNIGHT LANE CLOSURES SHALL NOT BE ALLOWED FOR REHABILITATION PROJECTS INVOLVING DAYTIME MILLING AND RESURFACING OPERATIONS AND CLASS D PATCHING UNLESS OTHER CONDITIONS WARRANT EXTENDED LANE CLOSURES AS DETERMINED AND APPROVED IN WRITING BY THE ENGINEER OR AS PROVIDED FOR IN THE CONTRACT SPECIFICATIONS.

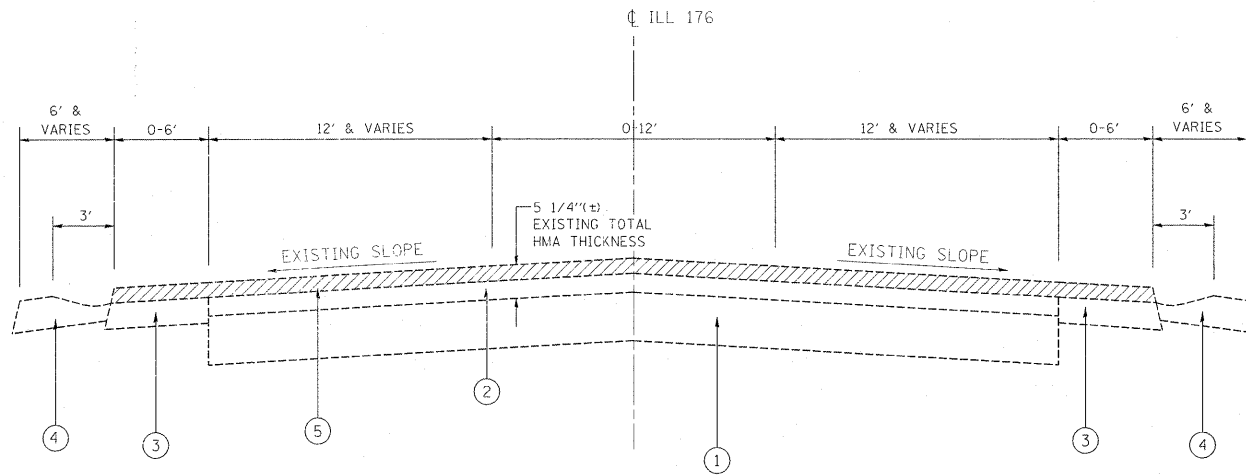
EXISTING PAVEMENT MARKINGS SHALL BE TEMPORARILY COVERED PRIOR TO THE APPLICATION OF THE DECK SURFACE TREATMENT, TO PREVENT THE MATERIAL FROM BEING APPLIED TO THE MARKINGS. THE TEMPORARY COVERING SHALL BE REMOVED AFTER APPLICATION OF THE DECK SURFACE TREATMENT AND PRIOR TO OPENING TO TRAFFIC. COST IS INCLUDED WITH THE DECK SURFACE TREATMENT SPECIFIED.

FILE NAME =	USER NAME = nathanbc	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	IL 176 (IL 31 TO FOX RIVER) INDEX OF SHEETS, STATE STANDARDS AND GENERAL NOTES			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pw_work\pwidot\nathanbc\d0206500\DIS0010-shr-plan.dgn		DRAWN -	REVISED -		335	145 RS-8	MCHENRY	19	2			
PLOT SCALE = 50,0000 / IN.		CHECKED -	REVISED -		CONTRACT NO. 60K61							
PLOT DATE = 2/4/2011		DATE -	REVISED -		SCALE:	SHEET NO. 2 OF 31 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT				

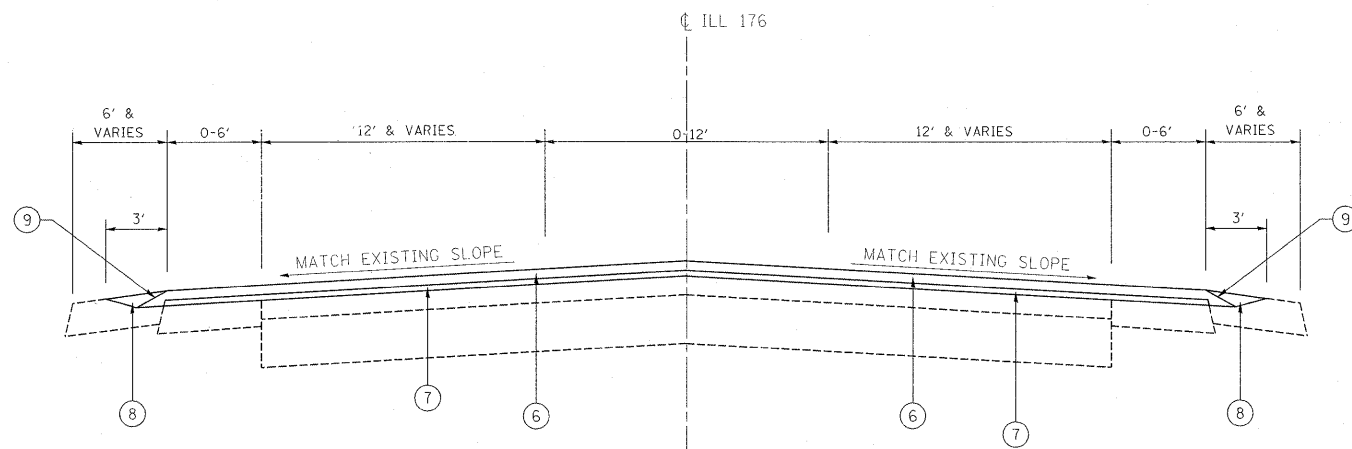
Rev.

SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE: 0005				SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE: 0005			
CODE NO	ITEM	UNIT	TOTAL QUANTITIES					CODE NO	ITEM	UNIT	TOTAL QUANTITIES				
				0005	0014							0005			
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	15	15				88600600	DETECTOR LOOP REPLACEMENT	FOOT	162	162			
40600300	AGGREGATE (PRIME COAT)	TON	73	73				X2020110	GRADING AND SHAPING SHOULDERS	UNIT	73	73			
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	28	28				X4060826	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	755	755			
40600895	CONSTRUCTING TEST STRIP	EACH	1	1				Z0030850	TEMPORARY INFORMATION SIGNING	SO FT	51.4	51.4			
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	75	75				70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1	1			
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	1551	1551				70100600	TRAFFIC CONTROL AND PROTECTION, STANDARD 701336	L SUM	1	1			
44000158	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"	SQ YD	10,288	10,288				70102622	TRAFFIC CONTROL AND PROTECTION, STANDARD 701502	L SUM	1	1			
44201789	CLASS D PATCHES, TYPE II, 12 INCH	SQ YD	275	275											
44201794	CLASS D PATCHES, TYPE III, 12 INCH	SQ YD	275	275											
44201796	CLASS D PATCHES, TYPE IV, 12 INCH	SQ YD	366	366											
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	263	263											
58700300	CONCRETE SEALER	SQ FT	20057		20,057										
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	4	4											
67100100	MOBILIZATION	L SUM	1	1											
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1											
70300100	SHORT TERM PAVEMENT MARKING	FOOT	4946	4946											
70300210	TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS	SO FT	255	255											
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	21852	21852											
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	877	877											
70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	206	206											
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	23	23											
78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	255	255											
78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	21852	21852											
78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	877	877											
78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	206	206											
78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	23	23											
78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	182	182											
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	160	160											

Rev.



EXISTING TYPICAL SECTION
ILL RTE. 176
STA. 14+20.57 TO STA. 62+67



PROPOSED TYPICAL SECTION
ILL RTE. 176
STA. 14+20.57 TO STA. 62+67

LEGEND

- ① EXISTING PCC BASE COURSE, 9''(±)
- ② EXISTING HOT-MIX ASPHALT SURFACE COURSE (AFTER MILLING), 3''(±)
- ③ EXISTING HOT-MIX ASPHALT SHOULDER
- ④ EXISTING AGGREGATE SHOULDER, 6''
- ⑤ PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL - 2-1/4''
- ⑥ PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1-1/2''
- ⑦ PROPOSED POLYMERIZED LEVELING BINDER (MM), IL-4.75, N50, 3/4''
- ⑧ PROPOSED AGGREGATE WEDGE SHOULDER, TYPE B
- ⑨ SAFETY EDGE WHEN HMA SHOULDER < 3FT

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

	MIXTURE TYPE	AIR VOIDS @ Ndes
ROADWAY	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL 9.5 mm)	4% @ 70 GYR
	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	4% @ 50 GYR
PATCHES	CLASS D PATCHES (HMA BINDER IL-19 mm)	4% @ 70 GYR

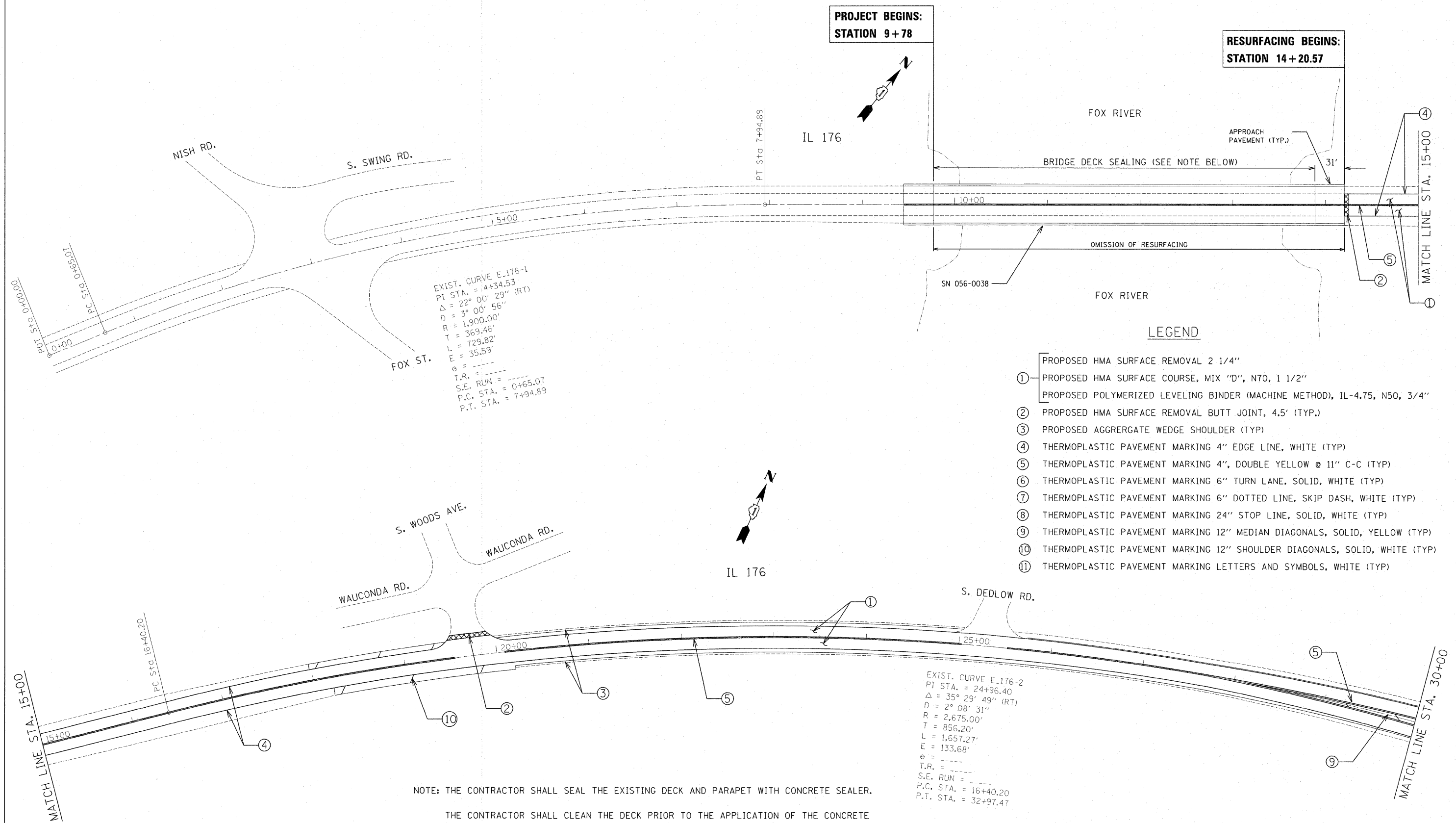
- THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SY/IN.
- THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 70-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR "PERCENT OF RAP" SEE DISTRICT ONE SPECIAL PROVISIONS.

NOTE: CONTRACTOR SHALL MILL BEFORE PATCHING

Rev.

**PROJECT BEGINS:
STATION 9+78**

**RESURFACING BEGINS:
STATION 14+20.57**

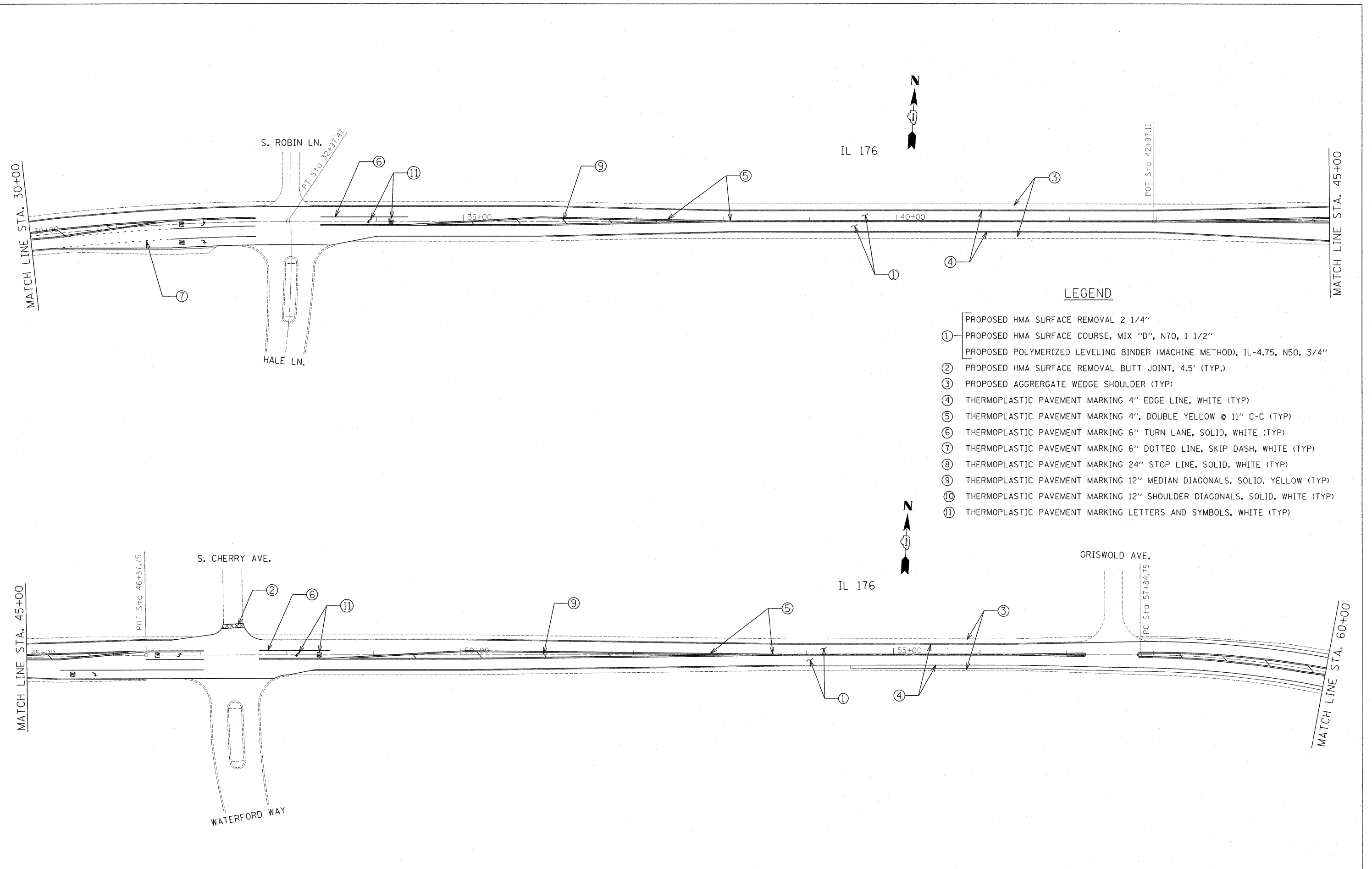


LEGEND

- ① PROPOSED HMA SURFACE REMOVAL 2 1/4"
- ② PROPOSED HMA SURFACE COURSE, MIX "D", N70, 1 1/2"
- ③ PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"
- ④ PROPOSED HMA SURFACE REMOVAL BUTT JOINT, 4.5' (TYP.)
- ⑤ PROPOSED AGGRERGATE WEDGE SHOULDER (TYP)
- ⑥ THERMOPLASTIC PAVEMENT MARKING 4" EDGE LINE, WHITE (TYP)
- ⑦ THERMOPLASTIC PAVEMENT MARKING 4", DOUBLE YELLOW @ 11" C-C (TYP)
- ⑧ THERMOPLASTIC PAVEMENT MARKING 6" TURN LANE, SOLID, WHITE (TYP)
- ⑨ THERMOPLASTIC PAVEMENT MARKING 6" DOTTED LINE, SKIP DASH, WHITE (TYP)
- ⑩ THERMOPLASTIC PAVEMENT MARKING 24" STOP LINE, SOLID, WHITE (TYP)
- ⑪ THERMOPLASTIC PAVEMENT MARKING 12" MEDIAN DIAGONALS, SOLID, YELLOW (TYP)
- ⑫ THERMOPLASTIC PAVEMENT MARKING 12" SHOULDER DIAGONALS, SOLID, WHITE (TYP)
- ⑬ THERMOPLASTIC PAVEMENT MARKING LETTERS AND SYMBOLS, WHITE (TYP)

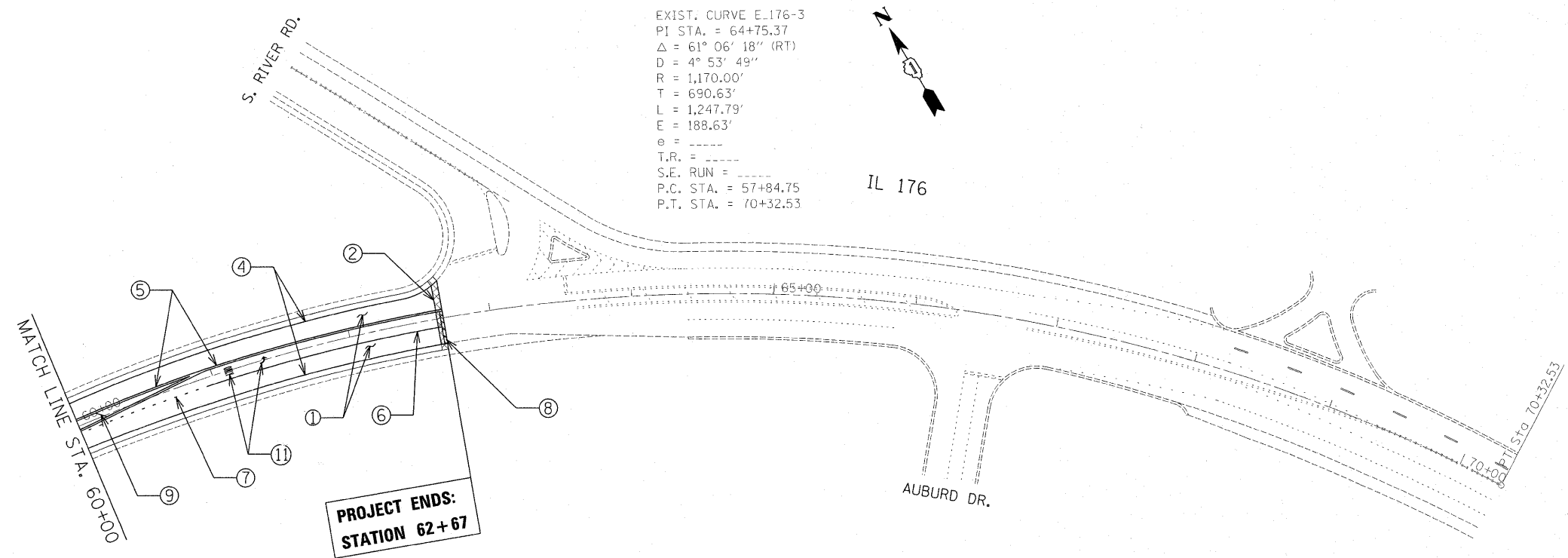
NOTE: THE CONTRACTOR SHALL SEAL THE EXISTING DECK AND PARAPET WITH CONCRETE SEALER.
 THE CONTRACTOR SHALL CLEAN THE DECK PRIOR TO THE APPLICATION OF THE CONCRETE SEALER TO THE SATISFACTION OF THE ENGINEER.
 COST OF CLEANING IS INCLUDED IN THE COST OF CONCRETE SEALER.
 SEE BRIDGE PLANS SHEET #8.

FILE NAME =	USER NAME = nathanbo	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	IL 176 (FOX RIVER TO RIVER RD) ROADWAY AND PAVEMENT MARKING PLAN			F.A.P. RTE. = 335	SECTION = 145 RS-8	COUNTY = MCHENRY	TOTAL SHEETS = 19	SHEET NO. = 5
ct:\pw_work\pwrdot\nathanbo\d0206520\DI50010-shit-plan.dgn		DRAWN -	REVISED -		SCALE:	SHEET NO. 1 OF 3 SHEETS	STA. 0+00 TO STA. 30+00	CONTRACT NO. 60K61				
PLOT SCALE = 50.0000' / IN.		CHECKED -	REVISED -		ILLINOIS FED. AID PROJECT							
PLOT DATE = 2/16/2011		DATE -	REVISED -									



- LEGEND**
- PROPOSED HMA SURFACE REMOVAL 2 1/4"
 - ① PROPOSED HMA SURFACE COURSE, MIX "D", N70, 1 1/2"
 - PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"
 - ② PROPOSED HMA SURFACE REMOVAL BUTT JOINT, 4.5' (TYP.)
 - ③ PROPOSED AGGRERGATE WEDGE SHOULDER (TYP)
 - ④ THERMOPLASTIC PAVEMENT MARKING 4" EDGE LINE, WHITE (TYP)
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 - ⑩ THERMOPLASTIC PAVEMENT MARKING 12" SHOULDER DIAGONALS, SOLID, WHITE (TYP)
 - ⑪ THERMOPLASTIC PAVEMENT MARKING LETTERS AND SYMBOLS, WHITE (TYP)

FILE NAME =	USER NAME = nathanbc	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	IL 176 (FOX RIVER TO RIVER RD) ROADWAY AND PAVEMENT MARKING PLAN			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
et:\pw\work\p\idot\nathanbc\d\206500\DI50010-shr-plan.dgn		DRAWN -	REVISED -		335	145 RS-8	MCHENRY	19	6			
PLOT SCALE = 50.0000' / IN.		CHECKED -	REVISED -		SCALE: SHEET NO. 2 OF 3 SHEETS STA. 30+00 TO STA. 60+00			CONTRACT NO. 60K61				
PLOT DATE = 3/14/2011		DATE -	REVISED -		ILLINOIS FED. AID PROJECT							



EXIST. CURVE E.176-3
 PI STA. = 64+75.37
 $\Delta = 61^\circ 06' 18''$ (RT)
 $D = 4^\circ 53' 49''$
 $R = 1,170.00'$
 $T = 690.63'$
 $L = 1,247.79'$
 $E = 188.63'$
 $e =$
 $T.R. =$
 $S.E. RUN =$
 $P.C. STA. = 57+84.75$
 $P.T. STA. = 70+32.53$

LEGEND

- ① PROPOSED HMA SURFACE REMOVAL 2 1/4"
- ① PROPOSED HMA SURFACE COURSE, MIX "D", N70, 1 1/2"
- PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"
- ② PROPOSED HMA SURFACE REMOVAL BUTT JOINT, 4.5' (TYP.)
- ③ PROPOSED AGGREGATE WEDGE SHOULDER (TYP)
- ④ THERMOPLASTIC PAVEMENT MARKING 4" EDGE LINE, WHITE (TYP)
- ⑤ THERMOPLASTIC PAVEMENT MARKING 4", DOUBLE YELLOW @ 11" C-C (TYP)
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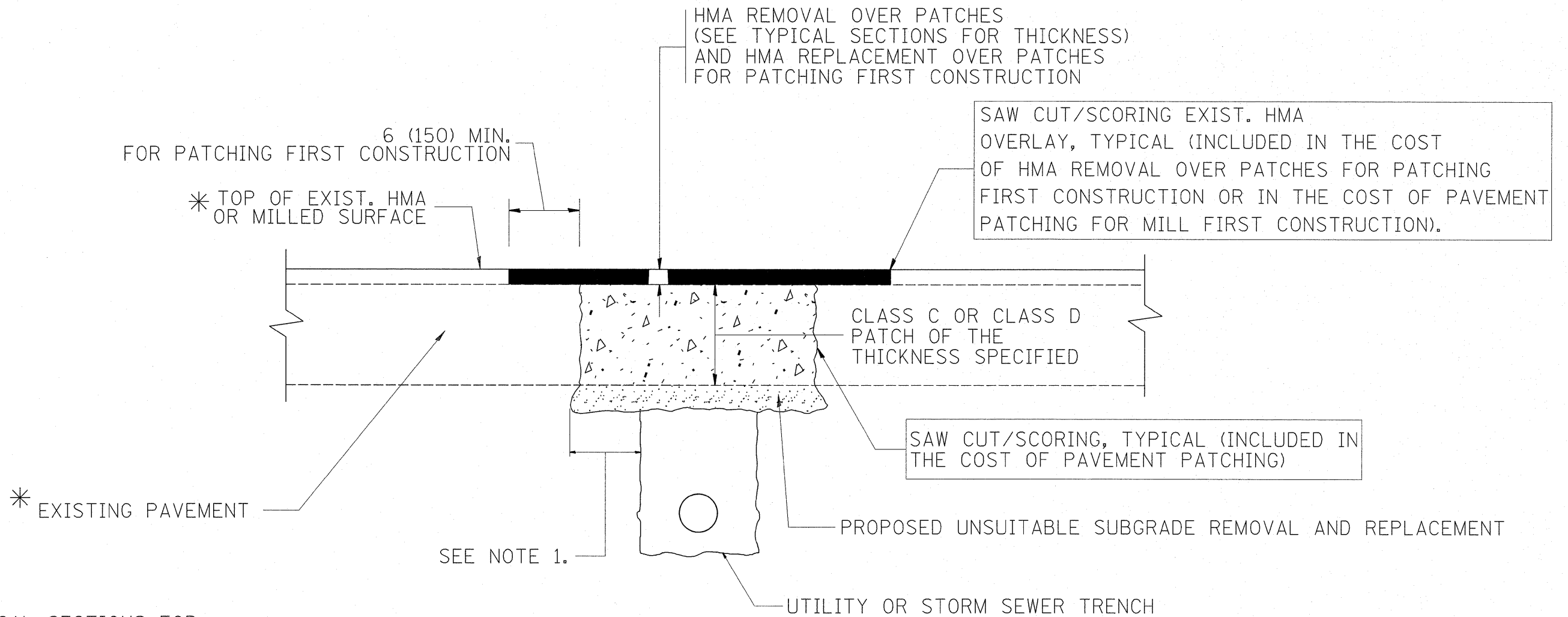
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		CHECKED -	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**IL 176 (FOX RIVER TO RIVER RD)
 ROADWAY AND PAVEMENT MARKING PLAN**

SCALE: SHEET NO. 3 OF 3 SHEETS STA. 60+00 TO STA. 70+32.53

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	145 RS-8	MCHENRY	19	7
CONTRACT NO. 60K61				
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)

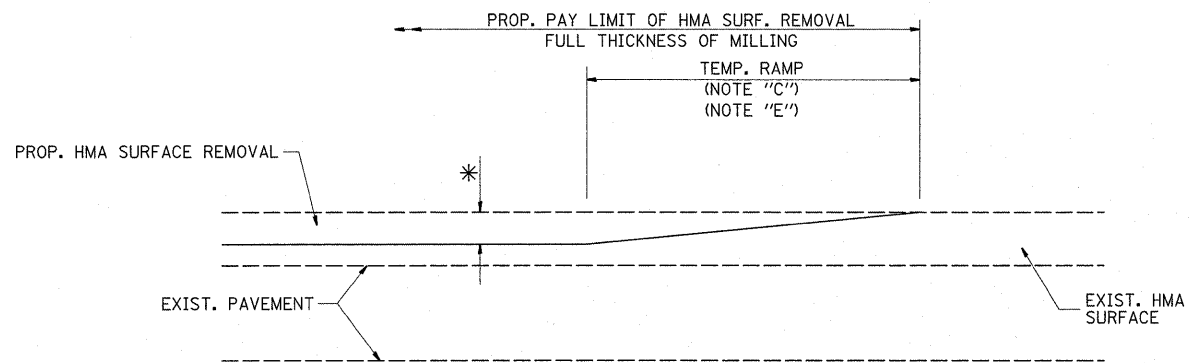
1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

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.

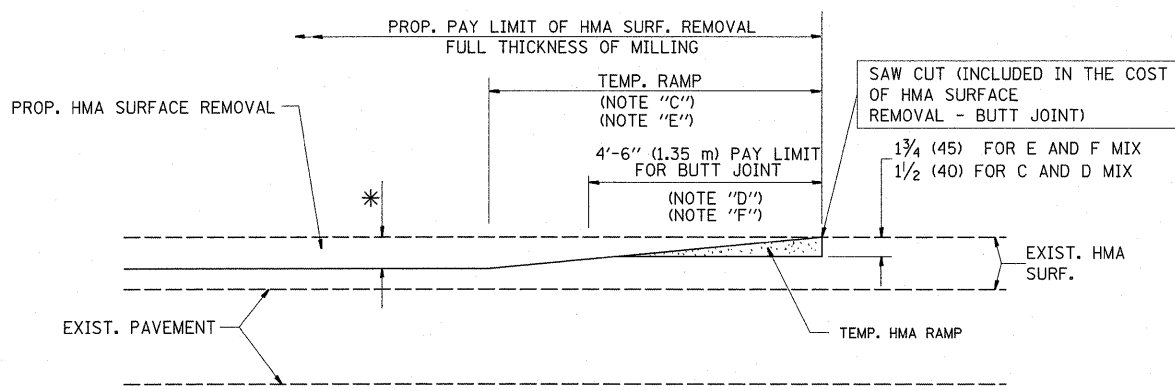
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME =	USER NAME = nathanbo	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
at:\pw_work\pwidat\nathanbo\d0206500\015	010-shr-plan.dgn	DRAWN -	REVISED - R. BORO 01-01-07		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	145 RS-8	MCHENRY	19	10
	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED - R. BORO 09-04-07		BD400-04 (BD-22)			CONTRACT NO. 60K61				
	PLOT DATE = 2/4/2011	DATE - 10-25-94	REVISED - K. ENG 10-27-08		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT							



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

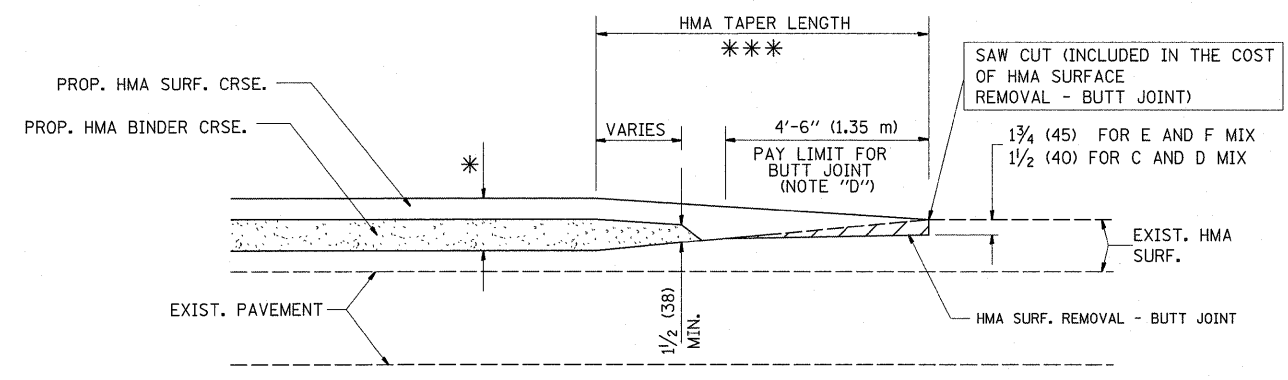
OPTION 1



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

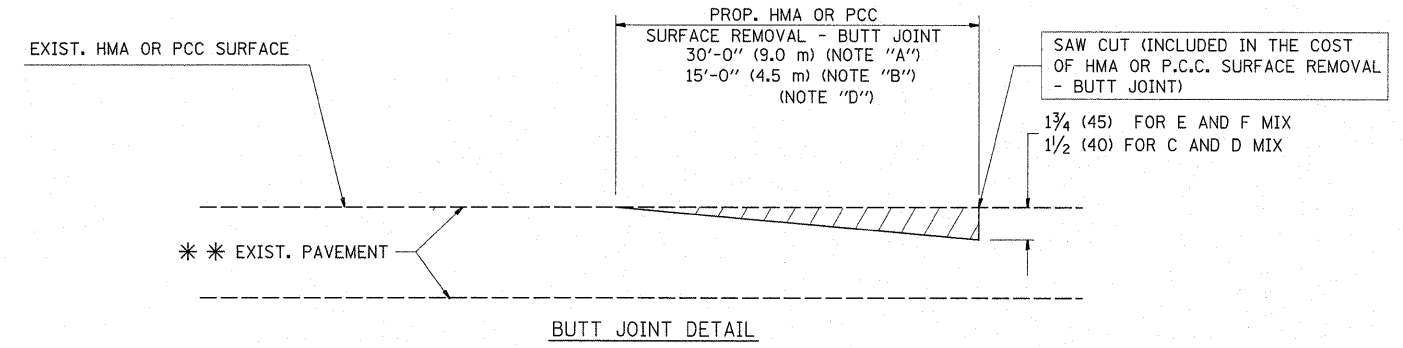
OPTION 2

TYPICAL TEMPORARY RAMP

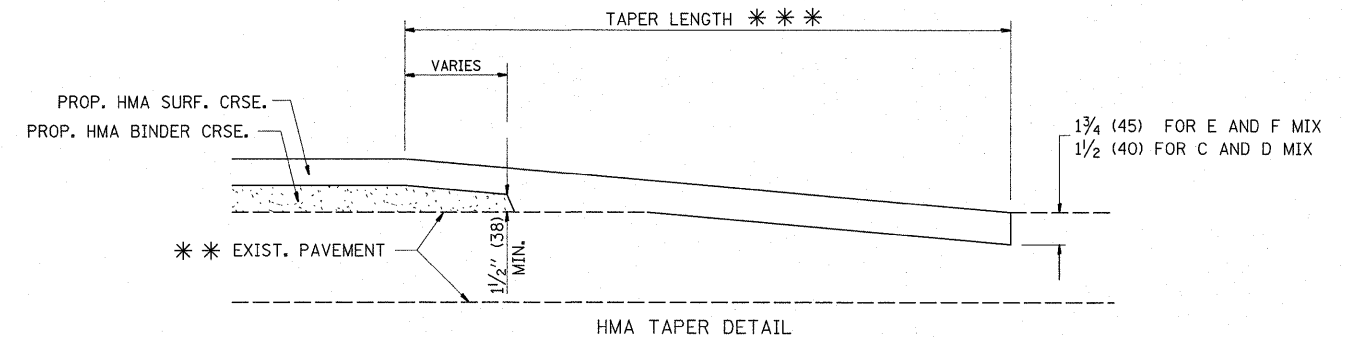


BUTT JOINT AND
HMA TAPER

**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.

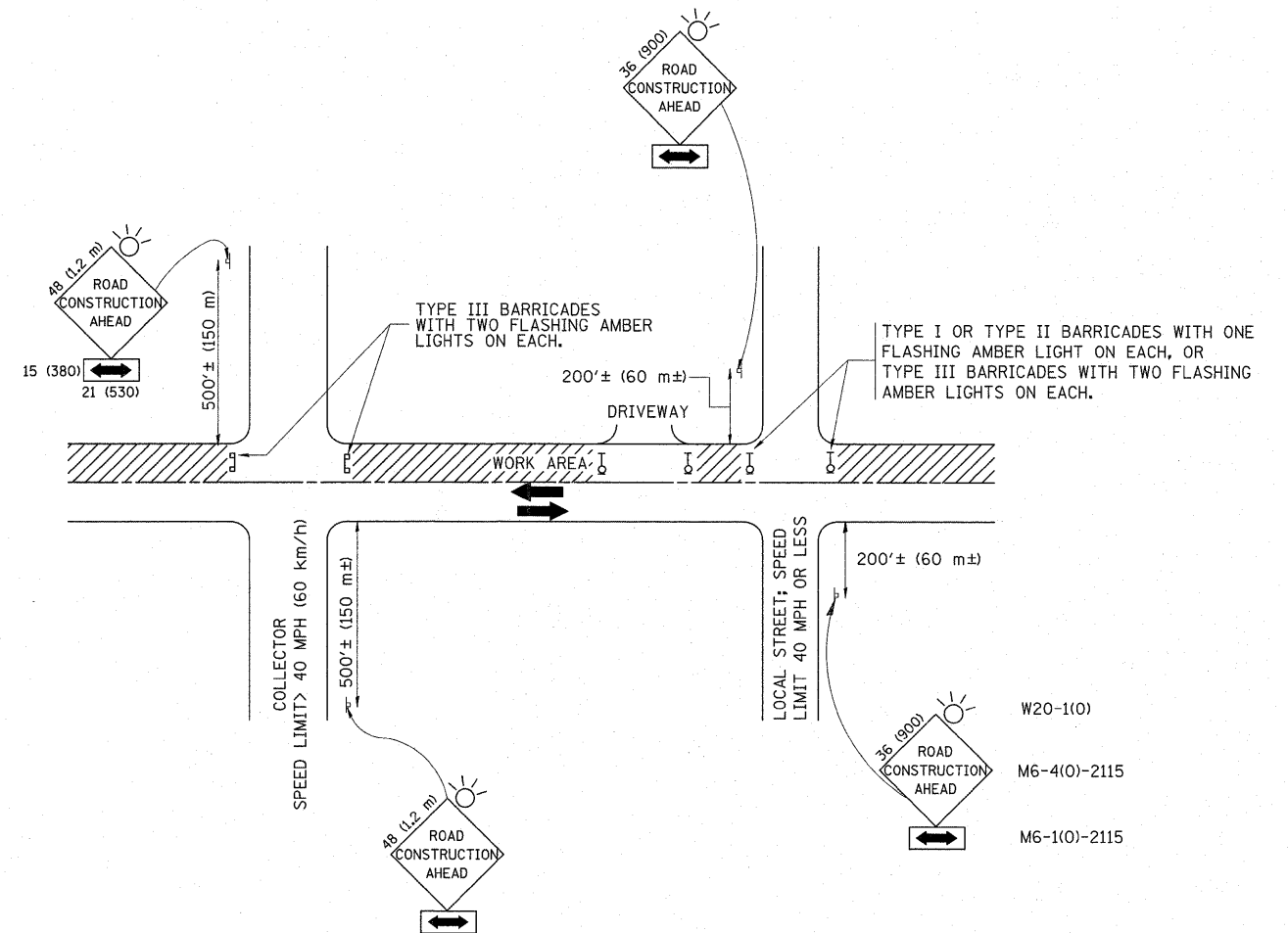
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PLOT SCALE = 50.0000' / IN.		CHECKED -	REVISED - M. GOMEZ 04-06-01
PLOT DATE = 2/4/2011		DATE - 06-13-90	REVISED - R. BORO 01-01-07

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BUTT JOINT AND
HMA TAPER DETAILS**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	145 RS-8	MCHENRY	19	11
BD400-05 BD32			CONTRACT NO. 60K61	
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

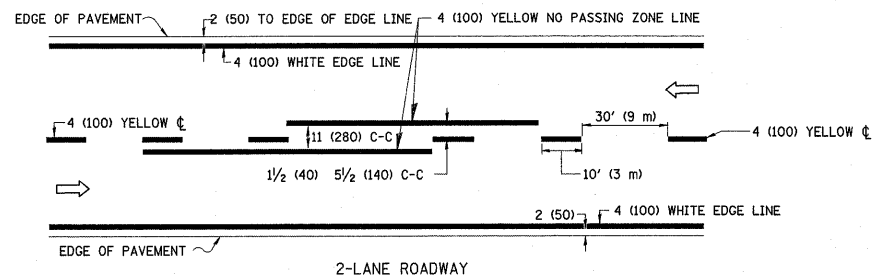
- SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - ONE **ROAD CONSTRUCTION AHEAD** SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
 - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - ONE **ROAD CONSTRUCTION AHEAD** SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
 - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 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 DRIVEWAYS:

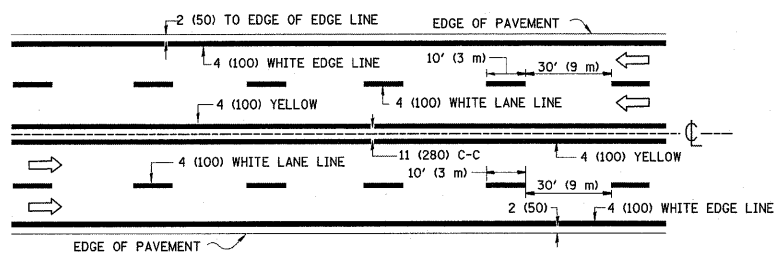
- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER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

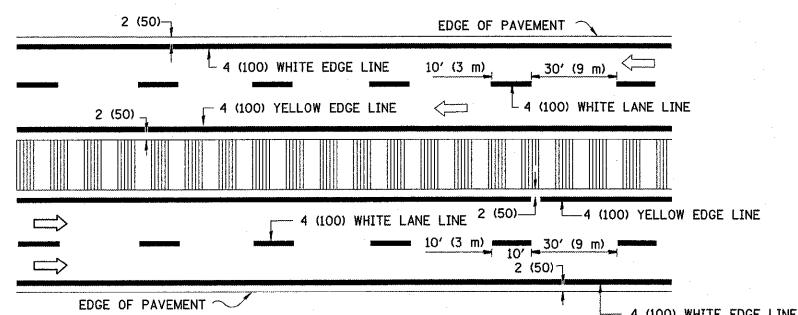
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er\pw_work\pwsdot\nathanbo\d0206500\015010-sh-t-pln.dgn		DRAWN -	REVISED - A. HOUSEH 03-06-96		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	335	145 RS-8	MCHENRY	19	12
PLOT SCALE = 50,0000' / IN.		CHECKED -	REVISED - A. HOUSEH 10-15-96					TC-10			CONTRACT NO. 60K61	
PLOT DATE = 2/4/2011		DATE - 06-89	REVISED - T. RAMMACHER 01-06-00					FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



2-LANE ROADWAY



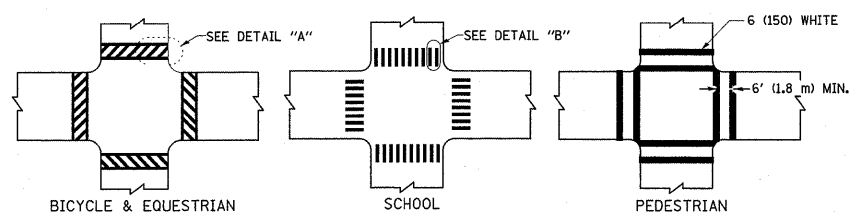
MULTI-LANE UNDIVIDED



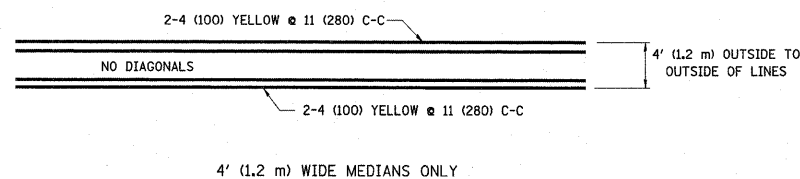
MULTI-LANE DIVIDED WITH MOUNTABLE MEDIAN

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

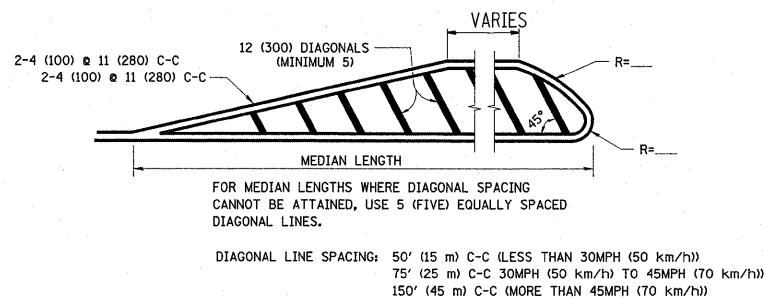
TYPICAL LANE AND EDGE LINE MARKING



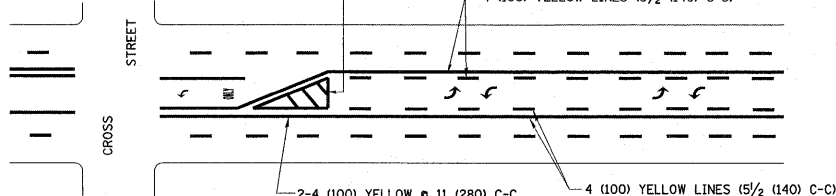
TYPICAL CROSSWALK MARKING



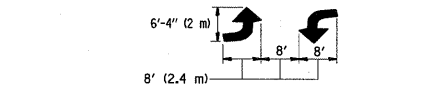
4' (1.2 m) WIDE MEDIANS ONLY



MEDIANS OVER 4' (1.2 m) WIDE

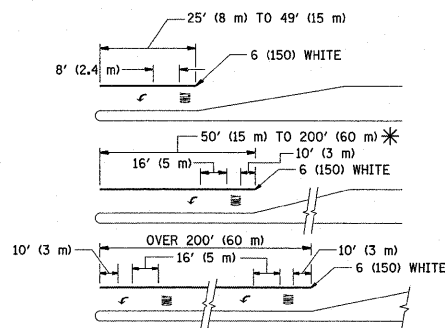


TYPICAL PAINTED MEDIAN MARKING



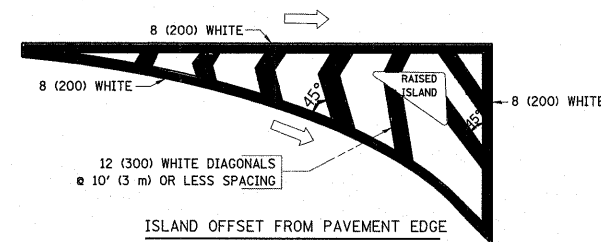
MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL LEFT (OR RIGHT) TURN LANE

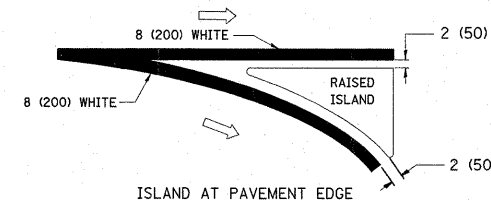


TYPICAL TURN LANE MARKING

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



ISLAND OFFSET FROM PAVEMENT EDGE



ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING

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)	SKIP-DASH	WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
LANE LINES	5 (125)	SKIP-DASH	WHITE	ON FREEWAYS
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	SKIP-DASH AND SOLID IN PAIRS	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE
TWO WAY LEFT TURN MARKING	8' (2.4m) LEFT ARROW	SOLID	WHITE	SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN)	2 @ 6 (150)	SOLID	WHITE	NOT LESS THAN 6' (1.8 m) APART
CROSSWALK LINES (BIKE & EQUESTRIAN)	12 (300) @ 45°	SOLID	WHITE	2' (600) APART
CROSSWALK LINES (LONGITUDINAL BARS (SCHOOL))	12 (300) @ 90°	SOLID	WHITE	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°	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS
PAINTED MEDIANS	11 (280) C-C FOR THE DOUBLE LINE	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m ²) EACH "X"=54.0 SQ. FT. (5.0 m ²)
SHOULDER DIAGONALS	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.

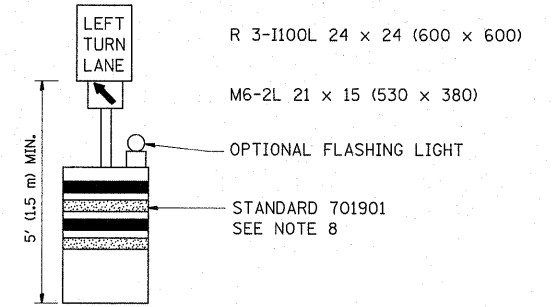
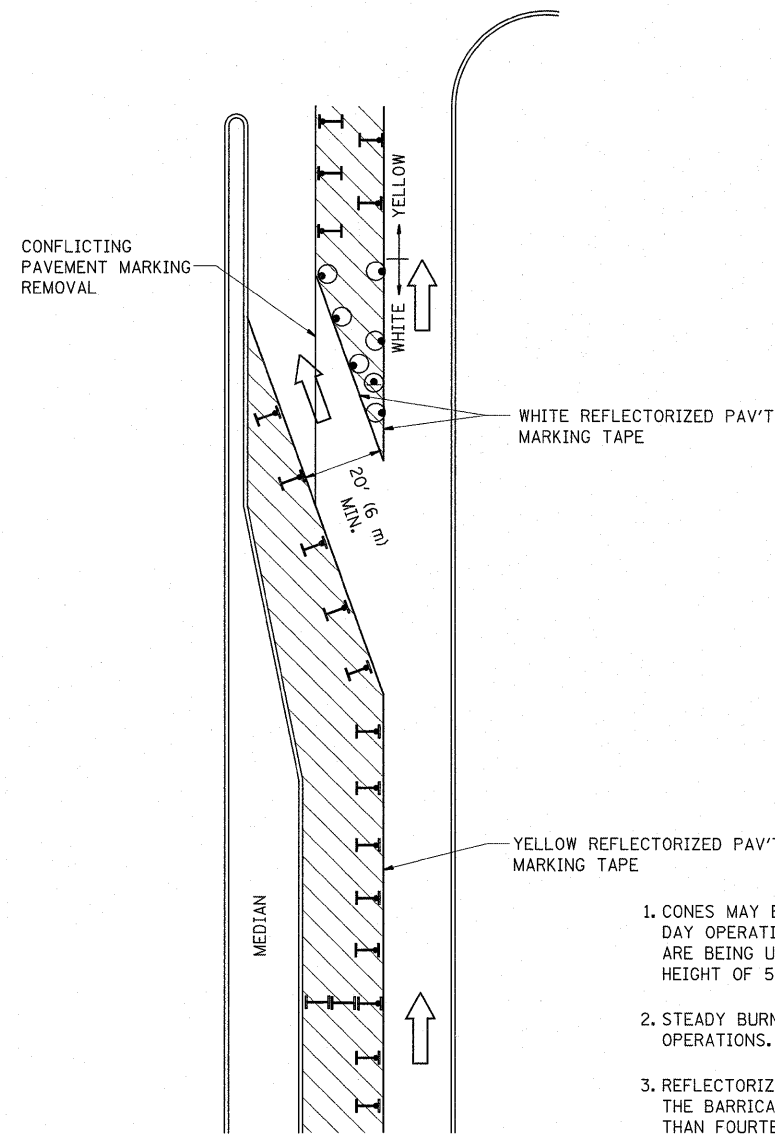
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PLOT DATE = 2/4/2011		DATE - 03-19-90	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
TYPICAL PAVEMENT MARKINGS

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

F.A.P. RTE. 335	SECTION 145 RS-8	COUNTY MCHENRY	TOTAL SHEETS 19	SHEET NO. 14
TC-13		CONTRACT NO. 60K61		
FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT				

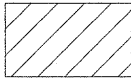







GENERAL NOTES

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 OPER 725 IS REQUIRED.
8. IF A DRUM OR TYPE II BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 REQUIREMENTS IS NOT AVAILABLE, THE SIGNS SHALL BE MOUNTED, ABOVE THE BARRICADES, ON SEPARATE SIGNS SUPPORTS THAT MEET NCHR 350 PREQUIREMENTS.
9. 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

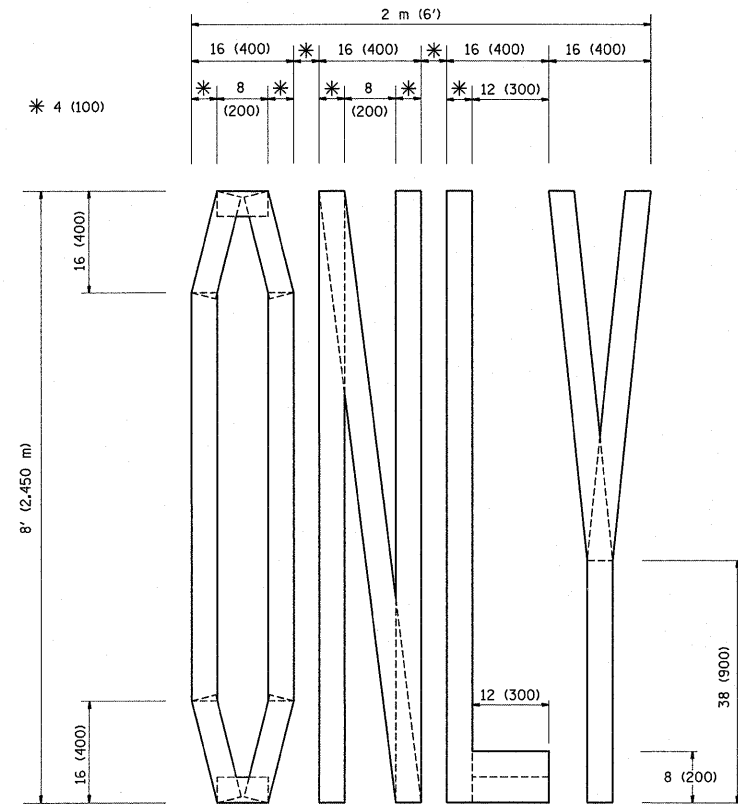
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	PLOT DATE = 2/4/2011	REVISED -T. RAMMACHER 01-06-00	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

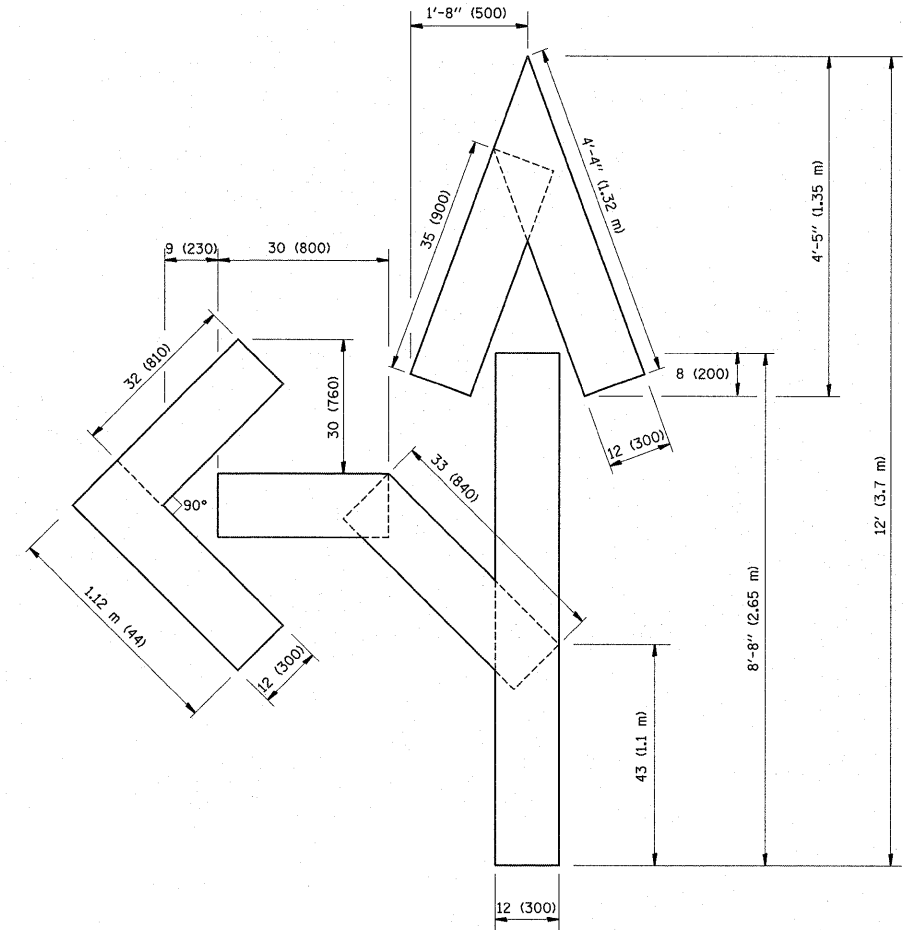
**TRAFFIC CONTROL AND PROTECTION AT TURN BAYS
(TO REMAIN OPEN TO TRAFFIC)**

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

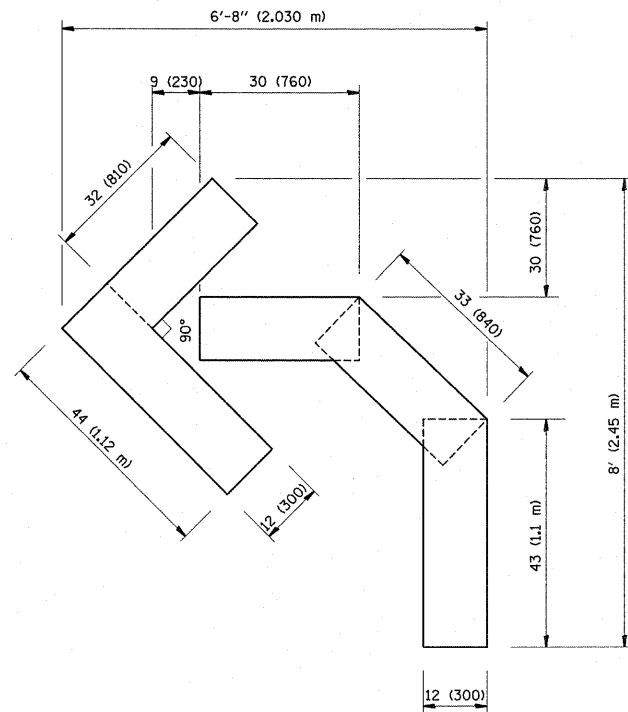
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	145 RS-8	MCHENRY	19	15
TC-14			CONTRACT NO. 60K61	
<small>FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT</small>				



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.

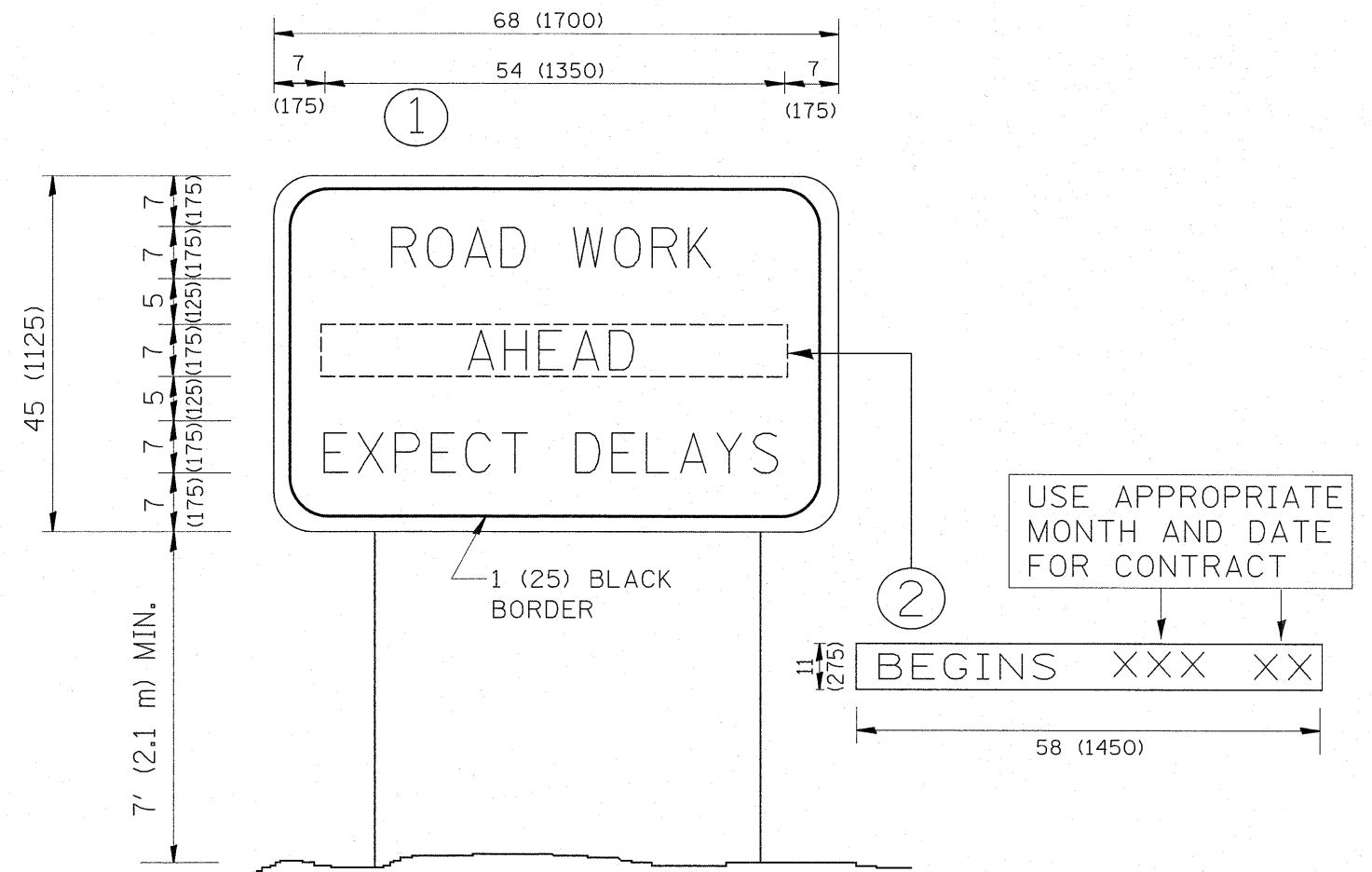
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	PLOT DATE = 2/4/2011	DATE - 09-18-94	REVISED -E. GOMEZ 08-28-00

**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.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	145 RS-8	MCHENRY	19	16
TC-16			CONTRACT NO. 60K61	
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 = nathanbo	DESIGNED -	REVISED - R. MIRS 09-15-97
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PLOT DATE = 2/4/2011	DATE -	REVISED - C. JUCIUS 01-31-07	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ARTERIAL ROAD
INFORMATION SIGN**

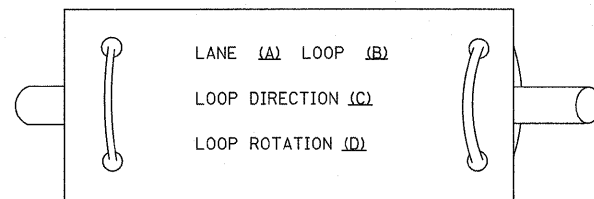
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TC-22			CONTRACT NO. 60K61	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

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

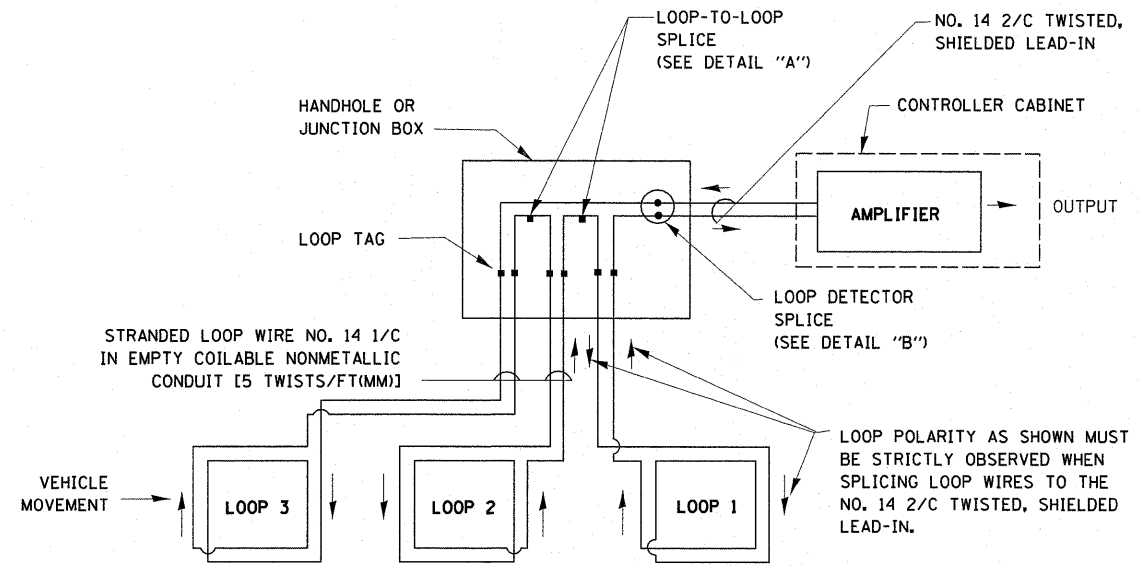
LOOP DETECTOR NOTES

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

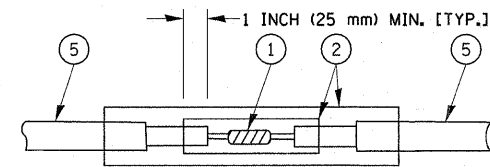


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

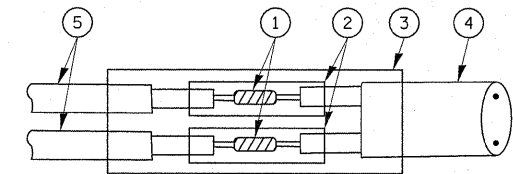


DETECTOR LOOP WIRING SCHEMATIC

- 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.

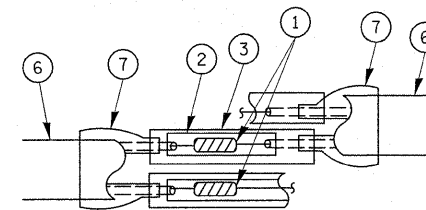


**DETAIL "A"
LOOP-TO-LOOP SPLICE**

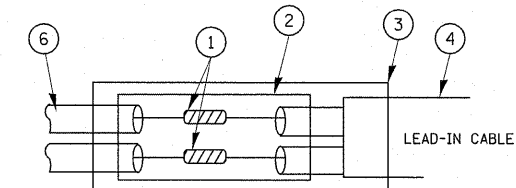


**DETAIL "B"
LOOP-TO-CONTROLLER SPLICE**

TYPE I LOOP



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

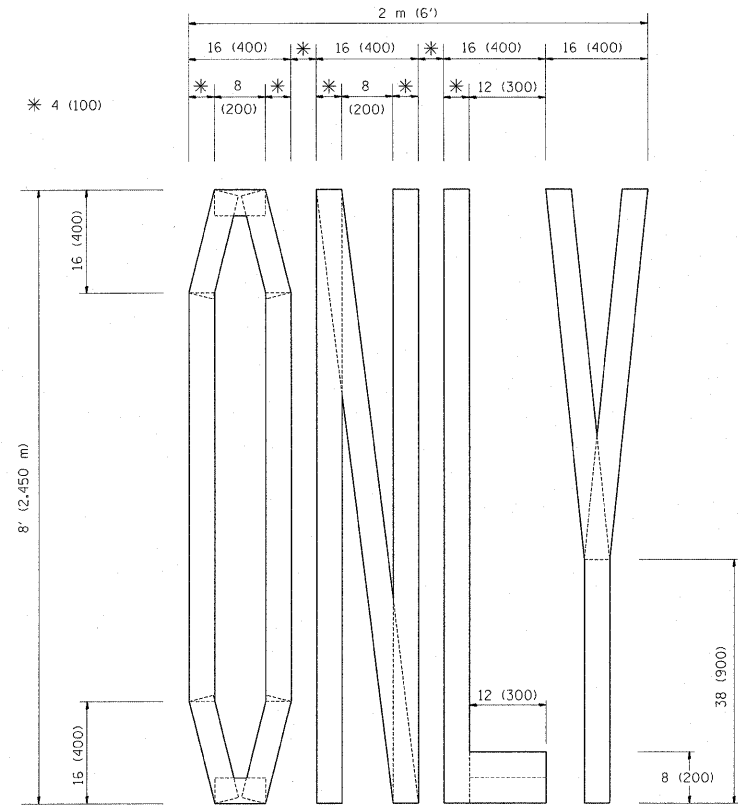


**DETAIL "B"
LOOP-TO-CONTROLLER SPLICE**

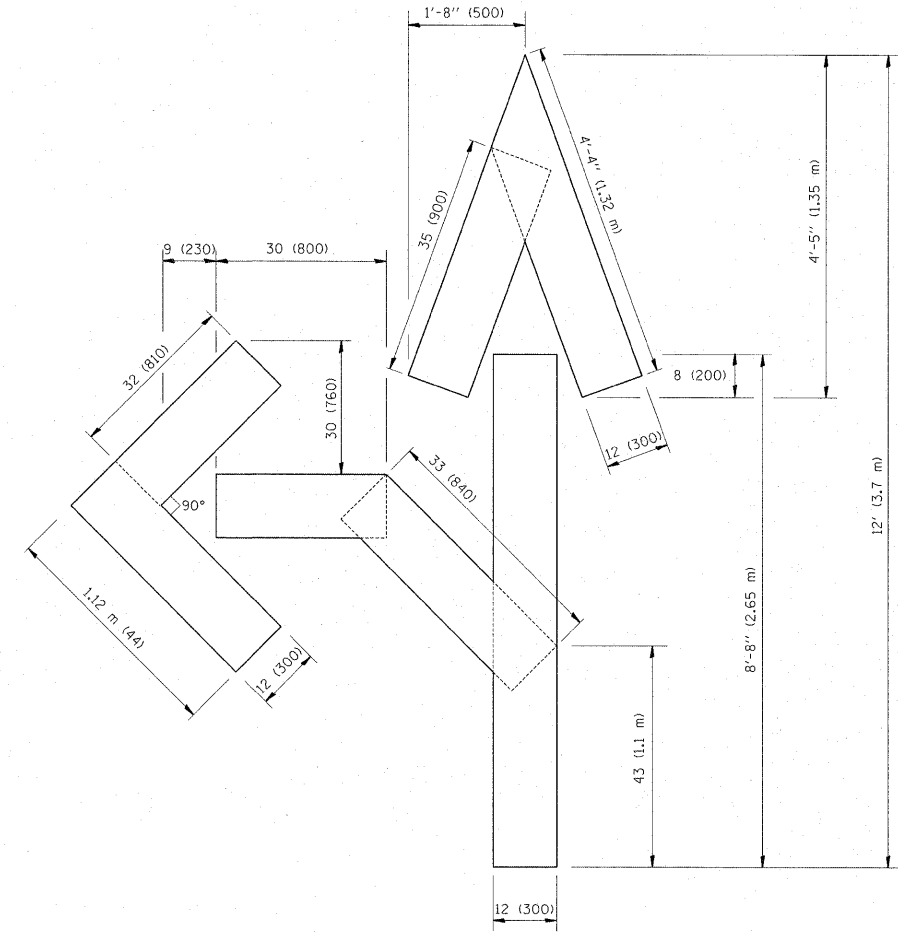
LOOP DETECTOR SPLICE

- 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

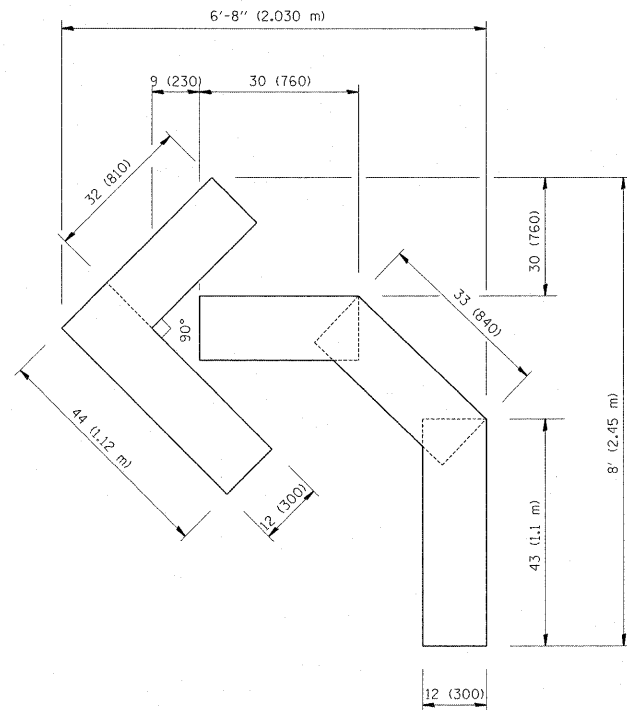
FILE NAME =	USER NAME = nathanbc	DESIGNED - DAD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS			F.A.P. RTE. 335	SECTION 145 RS-8	COUNTY MCHENRY	TOTAL SHEETS 19	SHEET NO. 18
est\pw_work\pwsdot\nathanbc\d0286500\0150010-shr-plan.dgn		DRAWN - BCK	REVISED -		SCALE: NONE	SHEET NO. 1 OF 6 SHEETS	STA.	TO STA.	TS-05		CONTRACT NO. 60K61	
PLOT SCALE = 50.0000' / IN.		CHECKED - DAD	REVISED -		FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT							
PLOT DATE = 2/4/2011		DATE - 10-28-09	REVISED -									



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 =	USER NAME = nathanbc	DESIGNED -	REVISED - T. RAMMACHER 06-05-96
os:\pw_work\p\dot\nathanbc\d0206500\01s	Std.dgn	DRAWN -	REVISED - T. RAMMACHER 11-04-97
PLOT SCALE = 50,0000 / IN.	CHECKED -	REVISED - T. RAMMACHER 03-02-98	
PLOT DATE = 3/18/2011	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.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	145 RS-8	MCHENRY	19	19c
TC-16		CONTRACT NO. 60K61		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				