STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

PROPOSED HIGHWAY PLANS

OTHER ROUTE 297 (HOFF ROAD) IL ROUTE 53 TO OLD CHICAGO ROAD

SECTION: 1-G-RS-1

RESURFACING (3P)

WILL COUNTY

C-91-550-09

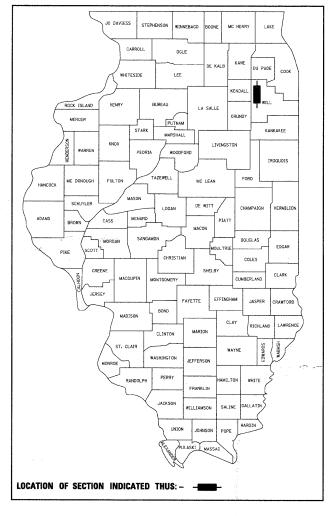
R 10 E STA. 43+00 BEGIN PROJECT WALTER STRAWN RD. STA. 173+00 BEGIN PROJECT NATIONAL CEMETERY

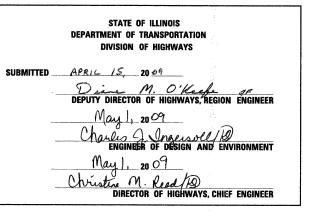
LOCATION SKETCH

NET AND GROSS LENGTH OF PROJECT = 9,000' = 1.705 MI

WILL

D-91-550-09





PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS





IMPROVEMENT IS LOCATED IN THE VILLAGE OF ELMWOOD

FOR INDEX OF SHEETS, SEE SHEET NO. 2

ADT 5000 (2009)

0

0

SPEED LIMIT 50 MPH

ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-0123 OR 811

PROJECT ENGINEER: REJENDRA C. SHAH (847) 705-4555 PROJECT MANAGER: CATHERINE KIBBLE (847) 705-4269

CONTRACT NO. 60G94

INDEX OF SHEETS

SHEET NO.	<u>DESCRIPTION</u>
1	TITLE SHEET
2	INDEX OF SHEETS, STATE STANDARDS, AND GENERAL NOTES
3	SUMMARY OF QUANTITIES
4	EXISTING AND PROPOSED TYPICAL SECTIONS
5-9	ROADWAY AND PAVEMENT MARKING PLANS
10	DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING
11	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT
12	BUTT JOINT AND HMA TAPER DETAILS
13	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS
<u>1</u> 4	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)
15	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
16	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)
17	PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING
18	ARTERIAL ROAD INFORMATION SIGN (TC-22)

STATE STANDARDS

STANDARD I	NO. <u>DESCRIPTION</u>
000001 -05	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
442201 -03	CLASS C AND D PATCHES
701101 - 02	OFF-RD OPERATION, MULTILANE, 15' (4.5M) TO 24" (600 MM) FROM PAVEMENT EDGE
701201 -03	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS > 45 MPH
701306 - 02	LANE CLOSURE , 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY FOR SPEEDS >> 45 MPH.
701336 -05	LANE CLOSURE , 2L, 2W, WORK AREAS IN SERIES FOR SPEEDS > 45 MPH.
701901 -01	TRAFFIC CONTROL DEVICES

PLAN NOTES

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

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES WITHIN THE VILLAGE OF ELWOOD,

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

BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT). IN ACCORDANCE WITH THE "BUTT JOINT AND HOT-MIX ASPHALT TAPER DETAILS" SHEETS INCLUDED ON THE PLANS. UNLESS OTHERWISE SPECIFIED.

THE RESIDENT ENGINEER SHALL CONTACT MS. PATRICE HARRIS AREA TRAFFIC FIELD ENGINEER AT (708) 597-9800 A MINIMUM OF 2 WEEKS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKING.

THE RESIDENT ENGINEER SHALL CONTACT THE DISTRICT ONE ARTERIAL TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS PRIOR TO START WORK.

IO FEET (3 METERS) TRANSITION SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER TO EXISTING CURB AND GUTTERS IN THE FIELD, UNLESS OTHERWISE SHOWN. THE TRANSITION SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEMS OR WORK SPECIFIED.

WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1½ INCHES (40MM) WHERE THE SPEED LIMIT IS 45 MPH (80 KM/H) OR LESS AND I INCH (25MM) WHERE THE SPEED LIMIT IS GREATER THAN 45 MPH (80 KM/H). WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERNTIAL OF 3 INCHES (75MM) MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H).

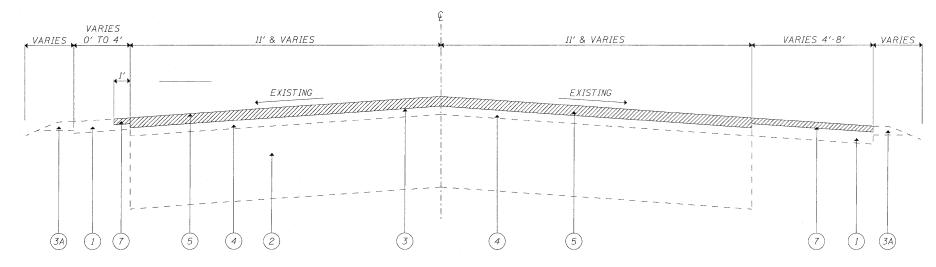
	USER NAME = \$USER\$	DESIGNED - MJY	REVISED -
		DRAWN - ZDA	REVISED -
CONSULTING ENGINEERS 1979 N. MILL ST. SUITE 210	PLOT SCALE = \$SCALE\$	CHECKED - MJY	REVISED -
NAPERVILLE, ILLINOIS 60563 PH; (630) 577-9100	PLOT DATE = \$DATE\$	DATE - 06/27/2008	REVISED ~

	SUMMARY OF QUANTITIES			CONSTRUCTIO	N TYPE CODE			SUMMARY OF QUANTITIES			CONSTRUCTIO	ON TYPE CODE
CODE NO.	ITEM	UNIT	URBAN TOTAL QUANTITIES	1000 100% STATE			CODE NO.	ITEM	UNIT	TOTAL QUANTITIES	I000 100% STATE	
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	15	15			70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	56	56	
40600300	AGGREGATE (PRIME COAT)	TON	72	72			70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SO FT	9766	9766	
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	·_ <i>II</i> _:	Ш		×	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	28960	28960	
-40600635-	LEVELING BINDER (MACHINE N70	- 70N -	-1214	- 1214		*	78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	56	56	
40600895	CONSTRUCTING TEST STRIP	EACH	1	1		*	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	131	131	
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	1270	1210			18300200 X0322256	RAISEO REFLECTIVE PAVEMENT MARKER REMOVAL TEMPORARY INFORMATIONAL SIGNING	EACH SQ FT	1 31 155	/ 3/ 155	
40601005	HOT-MIX ASPHALT REPLACEMENT OVER PATCHES	TON	11	17			X0656100	DRIVEWAY PAVEMENT REMOVAL AND REPLACEMENT	SQ YD	25	25	
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	2912	2912			-20018500 -	DRAINAGE STRUCTURESTO DE CLEANED	EACH	-35-	- 35-	
44000155	HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"	SQ YD	2889	2889			X4067107	POLYMERIZEO LEVELING BINDER (MACHINE METHOD) IL-4.75, N50	TON	1303	1303	
44000158	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"	SQ YD	31778	31778			20201006	GRADING AND SHAPING SHOULDERS	UNIT	130	130	
44002216	HOT-MIX ASPHALT REMOVAL OVER PATCHES, 4"	SQ YD	347	347								
44201761	CLASS D PATCHES, TYPE 1, 10 INCH	SQ YD	4	4								
44201765	CLASS D PATCHES, TYPE II, 10 INCH	SQ YD	230	230								
44201769	CLASS D PATCHES, TYPE III, 10 INCH	SQ YD	17	17	ŧ							
44201771	CLASS D PATCHES, TYPE IV. 10 INCH	SQ YD	100	100								
-55039700-	STORM SEWERS TO BE CLEANED	-F00T	-1300 -	-1300								
-60250200-	-CATCH BASINS TO BE ADJUSTED	-EACH-	-25 -	-25-								
-60255500	MANHOLES TO BE ADJUSTED	-EACH-	-25-	-25-								
-60260100-	INLETS TO BE ADJUSTED	-EACH-	-25- -	-25-								
-60300310-	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EAGH	-65-	-65-								
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	5.	5				# Specially Hems				
67100100	MOBILIZATION	L SUM	1	1								
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1	1								
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	· 1	1								
70300100	SHORT - TERM PAVEMENT MARKING	FOOT	8705	8105								
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	28960	28960								

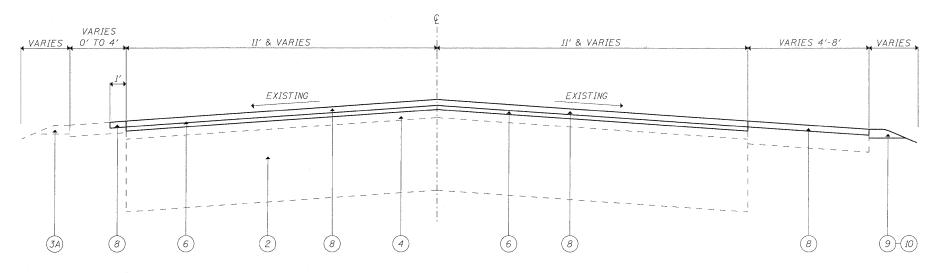
	USER NAME = \$USER\$	DESIGNED - MJY		
		DRAWN - RJG & ST	REVISED -	
CONSULTING ENGINEERS 1560 WALL ST, SUITE 222	PLOT SCALE = \$SCALE\$	CHECKED - MJY	REVISED -	
NAPERVILLE, ILLINOIS 60563 PH: (630) 577-9100	PLOT DATE = \$DATE\$	DATE - 04/15/2009	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE: NONE SHEET NO. 3 OF 18 SHEETS STA. 43+00 TO STA. 173+00



EXISTING TYPICAL SECTION STA. 43+00 TO STA. 173+00



PROPOSED TYPICAL SECTION STA. 43+00 TO STA. 173+00

LEGEND

- (1) EXISTING BITUMINOUS SHOULDER
- 2) EXISTING P.C. CONCRETE PAVEMENT +/- 9"
- 3) EXISTING HMA SURFACE COURSE +/- 4"
- (3A) EXISTING AGGREGATE SHOULDER
- 4) HMA MATERIAL AFTER MILLING, +/- 2"
- 5) PROPOSED HMA SURFACE REMOVAL (21/4")
- 6 PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD) IL-4.75, N50 (3/4")
- 7) PROPOSED HMA SURFACE REMOVAL (11/2")
- (8) PROPOSED HMA SURFACE COURSE, MIX "D", N70 (12")
- 9 PROPOSED AGGREGATE WEDGE SHOULDER
- 10) PROPOSED GRADING AND SHAPING SHOULDERS

HOT-MIX ASPHALT MIXTURE REQUIREMENTS								
MIXTURE TYPE	AC/PG	DESIGN AIR VOIDS						
HMA SURFACE COURSE, MIX D. N7O. (IL-9.5 mm)	PG 64-22	4% @ 70 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 mm)	PG 64-22*	4% © 70 GYR						
HMA REPLACEMENT OVER PATCHES (HMA BINDER IL 19 mm)	PG 64-22*	4% @ 70 GYR						
DRIVEWAY PAVEMENT REMOVAL AND REPLACEMENT	PG 64-22	4% @ 50 GYR						

NOTES:

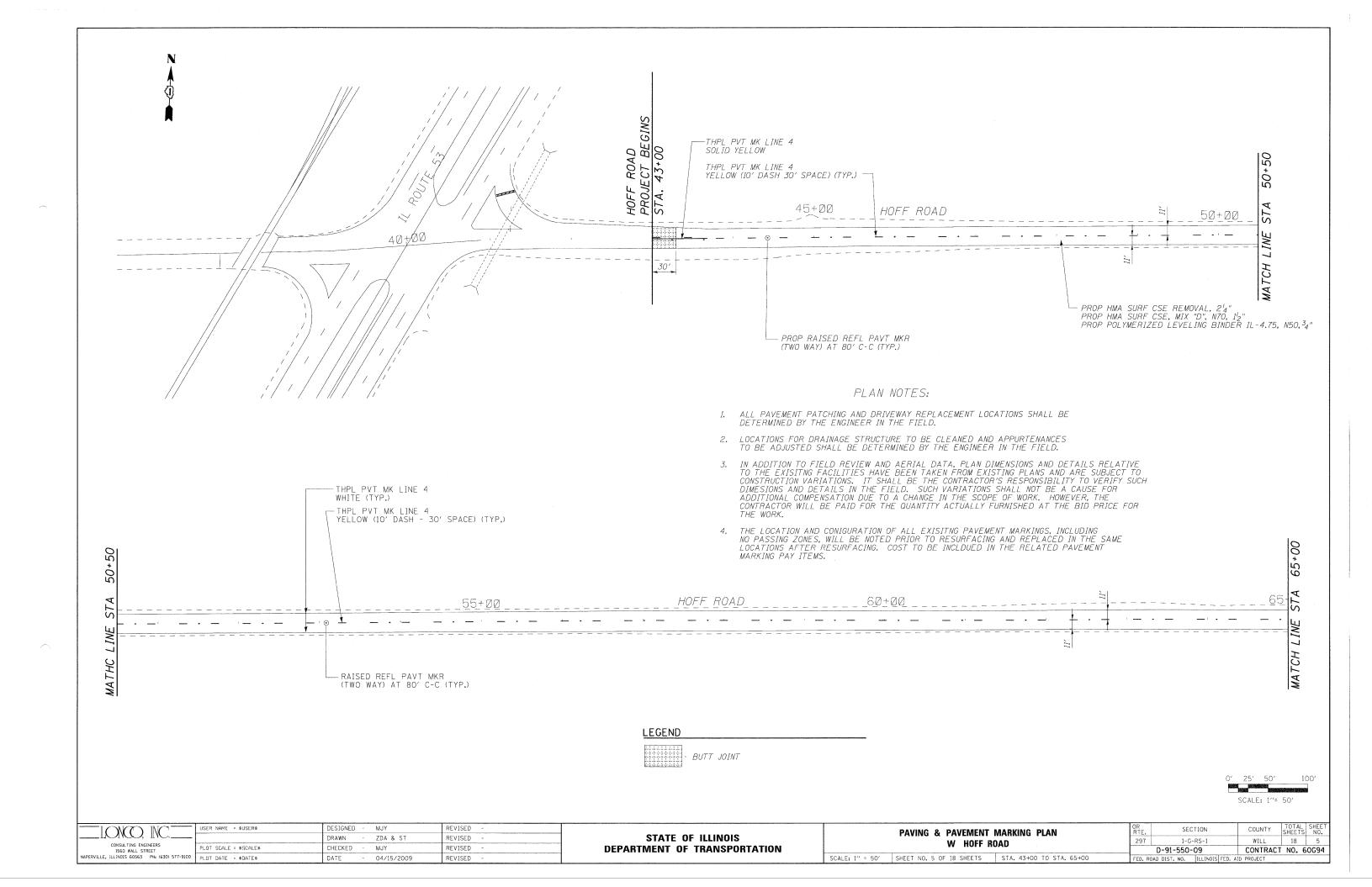
THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE COURSE MIXTURES IS 112 LSB/SOYD/IN.

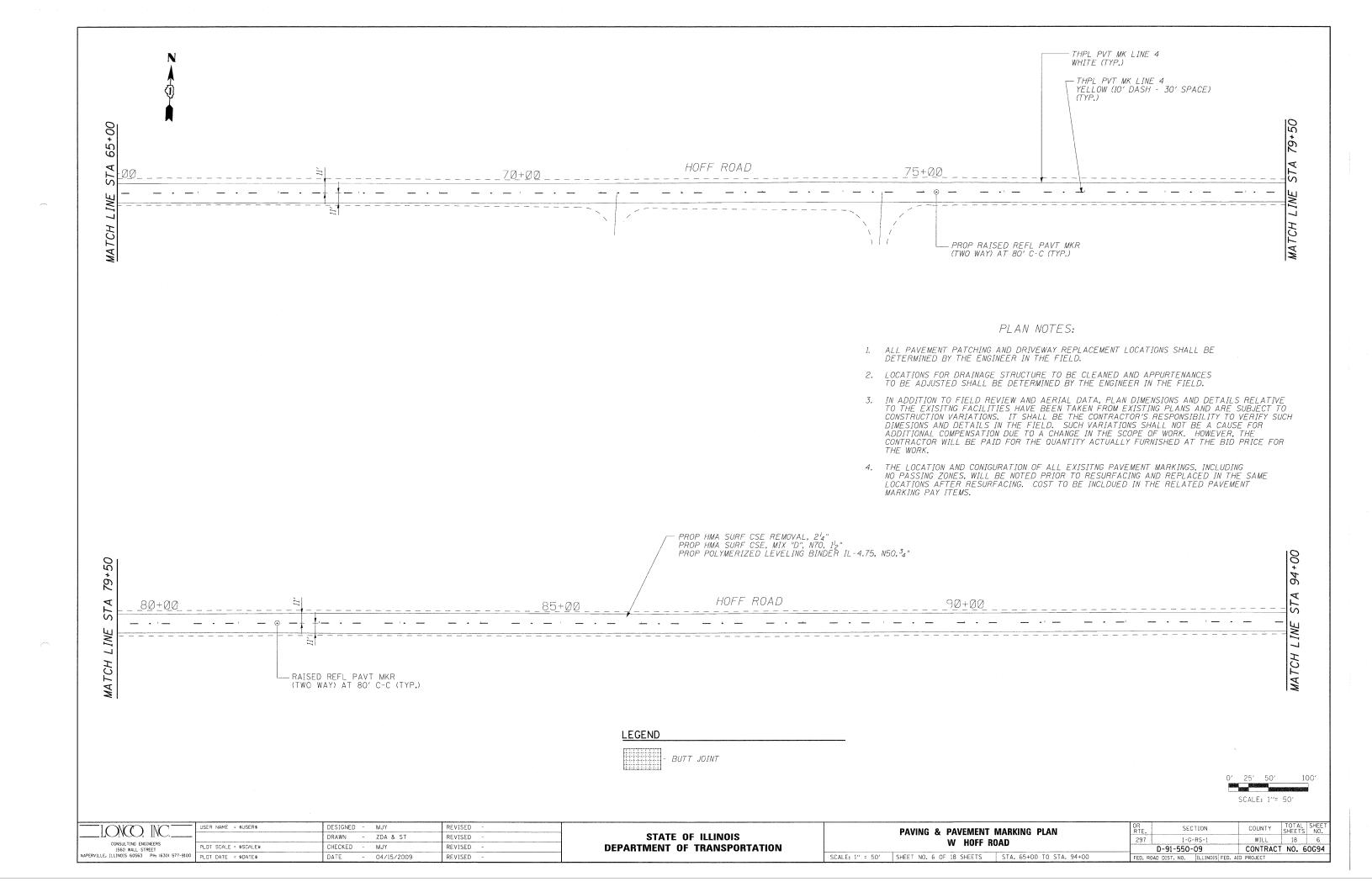
*WHEN RAP EXCEEDS 20%. THE NEW ASPHALT BINDER IN THE MIX SHALL BE PG 58-22

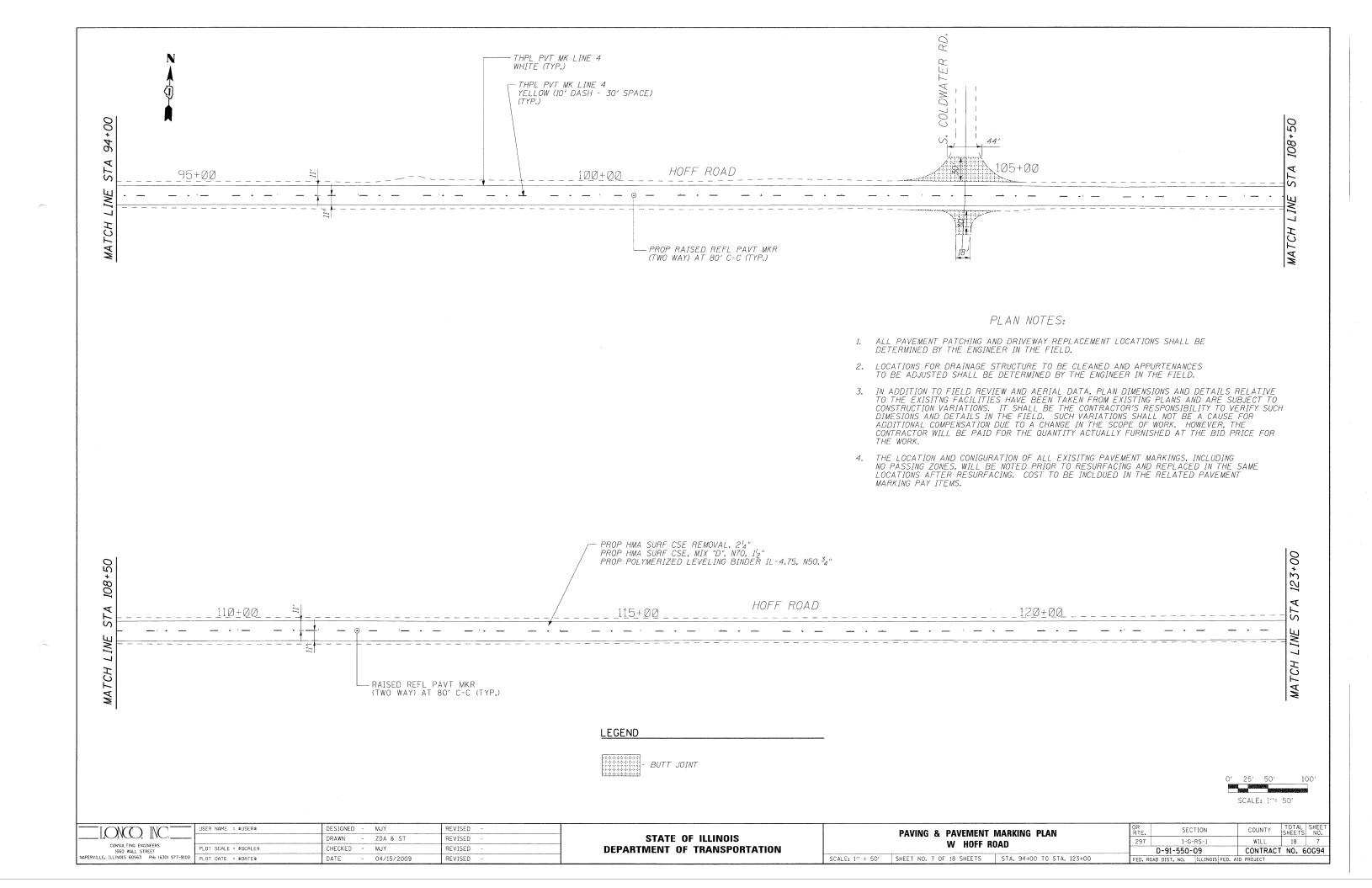
THE CONTRACTOR SHALL PATCH FIRST BEFORE MILLING

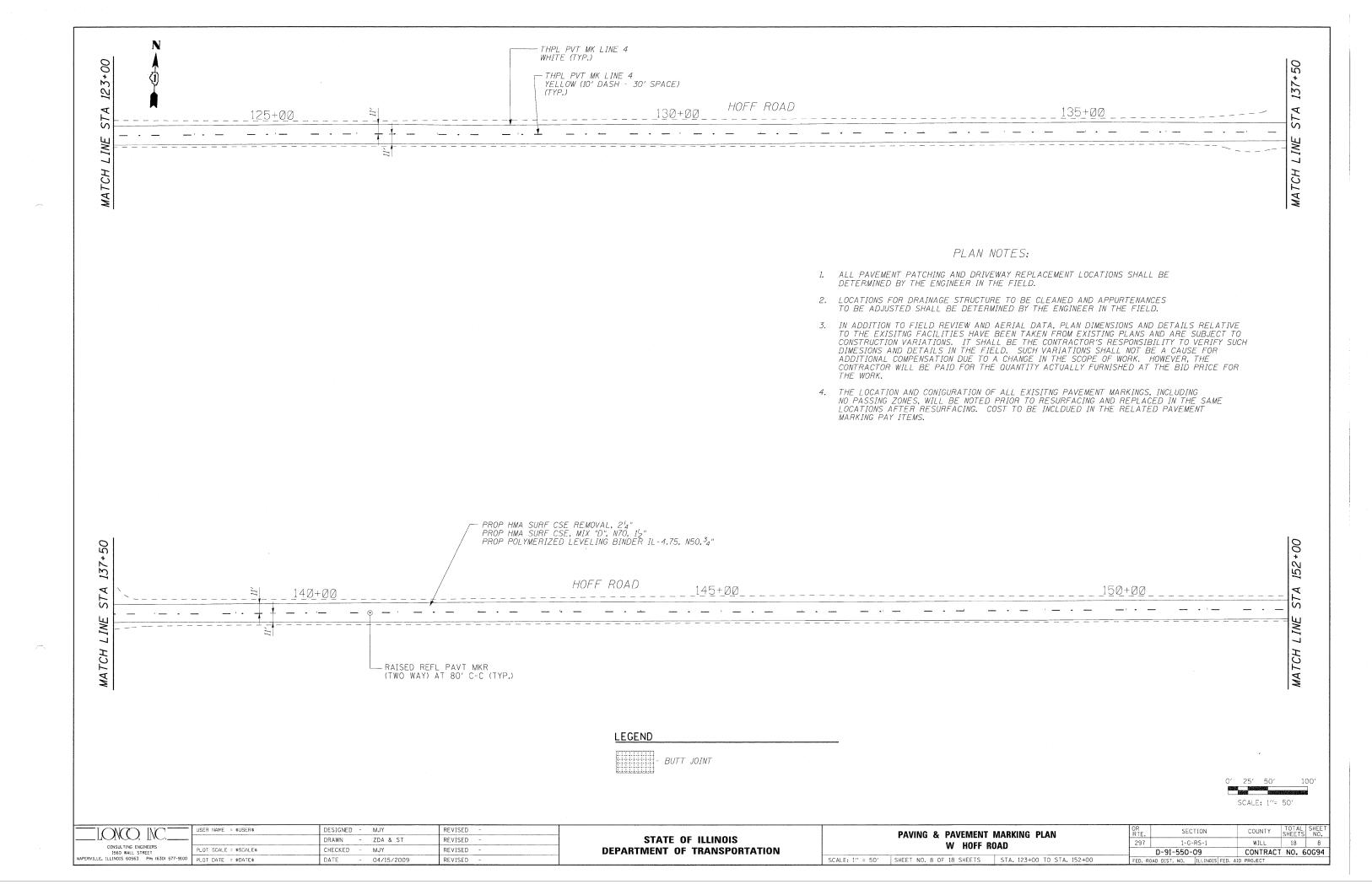
SHOULDER WIDENING GREATER THAN 4' AT VARIOUS LOCATIONS WITHIN THE LIMITS OF IMPROVEMENT

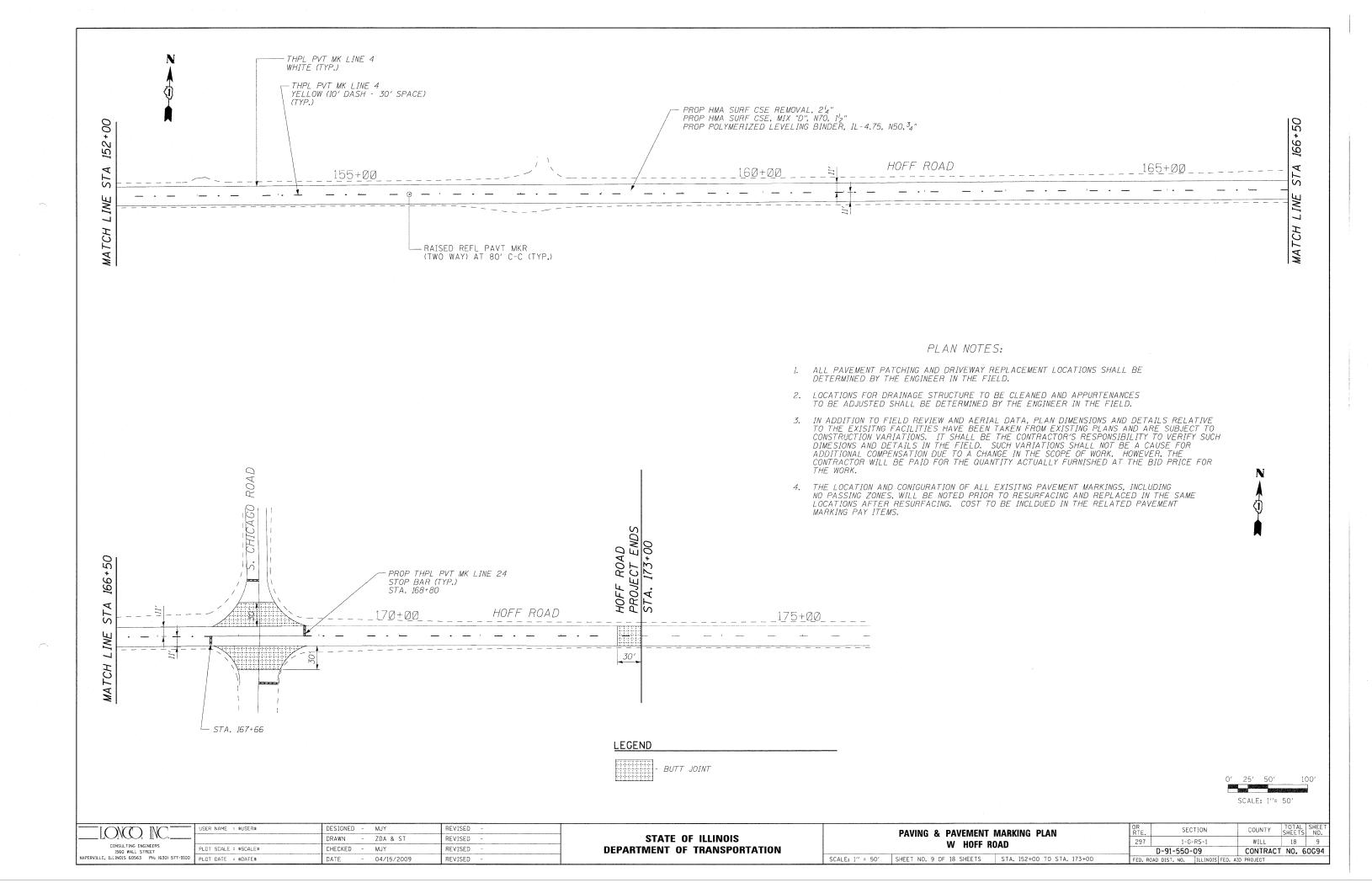
	DESIGNED - MJY			TYPICAL SECTIONS	OR SECTION	COUNTY TOTAL SHEET SHEETS NO.
	DRAWN - ZDA	REVISED -	STATE OF ILLINOIS	W. HOFF ROAD	297 1-G-RS-1	WILL 18 4
CONSULTING ENGINEERS 1560 WALL ST. SUITE 222	CHECKED - MJY	REVISED -	DEPARTMENT OF TRANSPORTATION	VV. HOFF NUAD	D-91-550-09	CONTRACT NO. 60G94
NAPERVILLE, ILLINOIS 60563 PH: (630) 577-9100	DATE - 04/15/2009	REVISED -		SCALE: NONE SHEET NO. 4 OF 18 SHEETS STA. 43+00 TO STA. 173+00	FED. ROAD DIST. NO. ILLINOIS FED.	. AID PROJECT

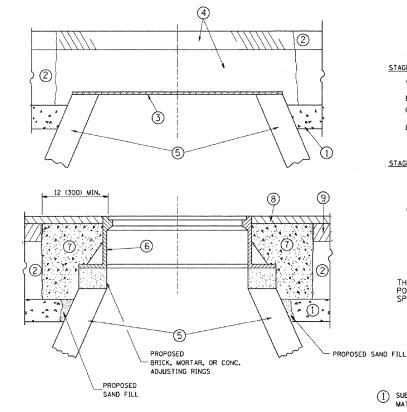












NOTES:

EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS 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.

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 11/2 (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
- 6 FRAME AND LID (SEE NOTES)
- 2 EXISTING PAVEMENT
- CLASS SI CONCRETE, HMA SURFACE COURSE OR HMA BINDER COURSE
- 3 36 (900) DIAMETER METAL PLATE PROPOSED CRUSHED STONE AND HMA SURFACE MIX
- 8 PROPOSED HMA SURFACE COURSE
- 5 EXISTING STRUCTURE
- 9 PROPOSED HMA BINDER COURSE

LOCATION OF STRUCTURES:

THE CONTRACTOR WILL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF THE CONTRACTION WILL BE MEDUINED TO REEP A RECORD OF THE COCKIDING OF THE BURGED 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.

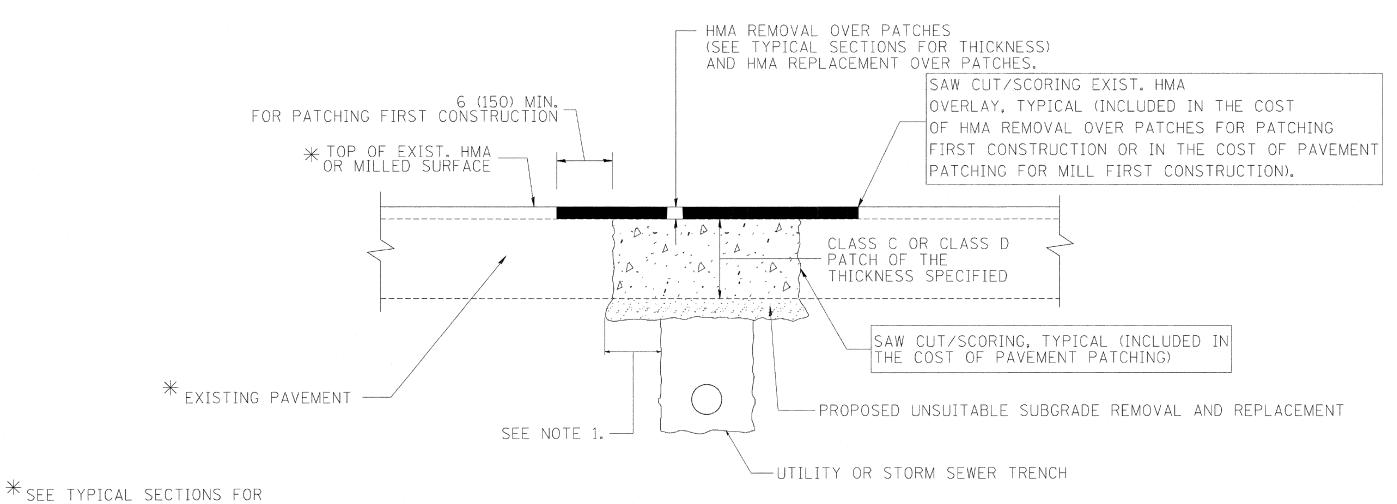
BASIS OF PAYMENT: THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR "FRAMES AND LIDS TO BE ADJUSTED. SPECIAL"

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

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

	USER NAME = \$USER\$	DESIGNED - MJY DRAWN - ST	REVISED -	STATE OF ILLINOIS	DISTRICT ONE DETAIL SHEETS	OR RTE. 297	SECTION 1-G-RS-1	COUNTY	TOTAL SHEET SHEETS NO.
CONSULTING ENGINEERS 1560 WALL ST, SUITE 222	PLOT SCALE = \$SCALE\$	CHECKED - MJY	REVISED -	DEPARTMENT OF TRANSPORTATION	W HOFF ROAD		D-91-550-09	CONTRACT	T NO. 60G94
NAPERVILLE, ILLINOIS 60563 PH: (630) 577-9100	PLOT DATE = \$DATE\$	DATE - 04/15/2009	REVISED -		SCALE: NONE SHEET NO. 10 OF 18 SHEETS STA. 43+00 TO STA. 173+00	FED. ROAD	DIST. NO. ILLINOIS F	ED. AID PROJECT	



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.

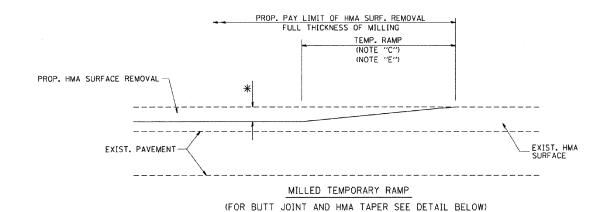
SEQUENCE OF CONSTRUCTION (MILLING FIRST)

- 1. MILL HMA FIRST IF THERE IS AT LEAST 41/2 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.

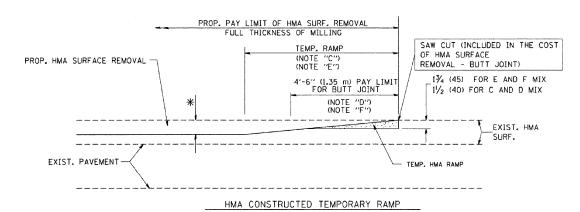
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT

	USER NAME = \$USER\$	DESIGNED - MJY			DISTRICT ONE DETAIL SHEETS	OR RTE. SECTION	COUNTY TOTAL SHEET NO.
		DRAWN - ST	REVISED -	STATE OF ILLINOIS	W HOFF ROAD	297 1-G-RS-1	WILL 18 11
CONSULTING ENGINEERS 1560 WALL ST, SUITE 222	PLOT SCALE = \$SCALE\$	CHECKED - MJY	REVISED -	DEPARTMENT OF TRANSPORTATION		D-91-550-09	CONTRACT NO. 60G94
NAPERVILLE, ILLINOIS 60563 PH: (630) 577-9100	PLOT DATE = \$DATE\$	DATE - 04/15/2009	REVISED -	· · · · · · · · · · · · · · · · · · ·	SCALE: NONE SHEET NO. 11 OF 18 SHEETS STA, 43+00 TO STA, 173+00	FED. ROAD DIST. NO. ILLINOIS FED.	AID PROJECT

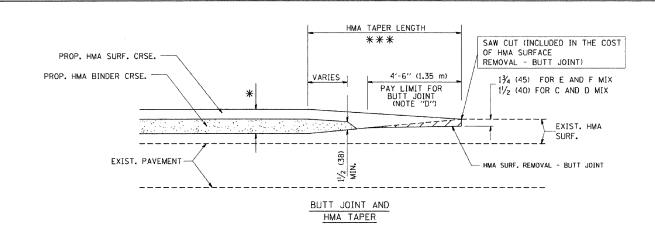


OPTION 1



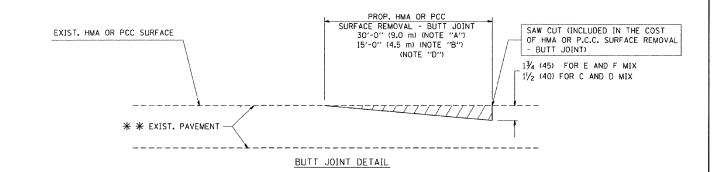
OPTION 2 TYPICAL TEMPORARY RAMP

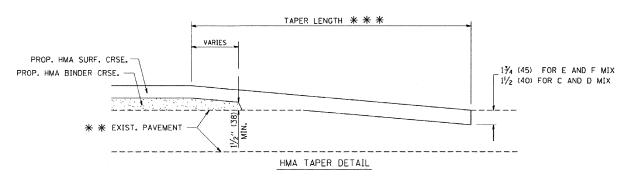
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)



TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

BUTT JOINT AND HMA TAPER DETAILS





TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

st 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.

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

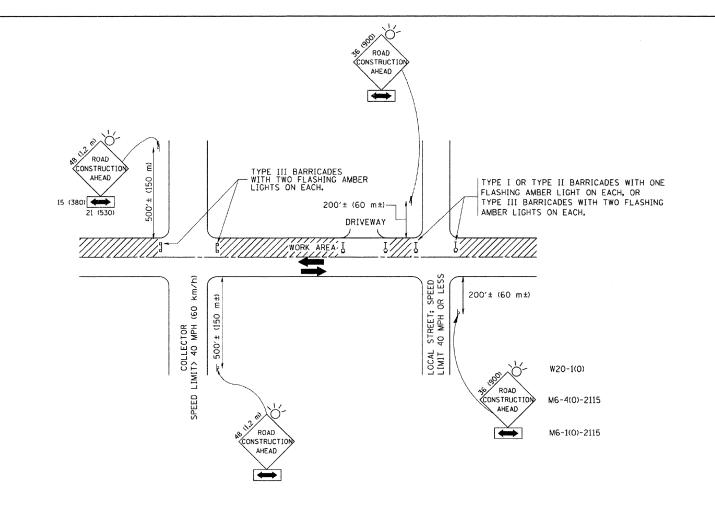
BASIS OF PAYMENT:

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".

		USER NAME = \$USER\$	DESIGNED - MJY		
ı		Parameter Control of C	DRAWN - ST	REVISED -	
ı	CONSULTING ENGINEERS 1560 WALL ST. SUITE 222	PLOT SCALE = \$SCALE\$	CHECKED - MJY	REVISED -	
١		PLOT DATE = \$DATE\$	DATE - 04/15/2009	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

	DISTRICT ONE DETA	AIL SHEETS	OR RTE.	SEC	TION		COUNTY	TOTAL	SHEET NO.
	W HOFF ROAD				RS-1		WILL	18	12
					0-09		CONTRACT	NO.	60G94
SCALE: NONE S	SHEET NO. 12 OF 18 SHEETS	STA. 43+00 TO STA. 173+00	FED. R	OAD DIST. NO.	ILLINOIS FE	ED. AID	PROJECT	-	



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:
- O) 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 ROLLE.
- 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:
- o) ONE ROAD CONSTRUCTION AHEAD SIGN 48 \times 48 (1.2 m \times 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (MG-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (MG-4).

- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:
- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

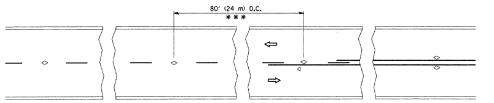
All dimensions are in millimeters (inches) unless otherwise shown.

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

	USER NAME = \$USER\$	DESIGNED - MJY	
		DRAWN - ST	REVISED -
CONSULTING ENGINEERS 1560 WALL ST, SUITE 222	PLOT SCALE = \$SCALE\$	CHECKED - MJY	REVISED -
NAPERVILLE, ILLINOIS 60563 PH: (630) 577-9100	PLOT DATE = \$DATE\$	DATE - 04/15/2009	REVISED -

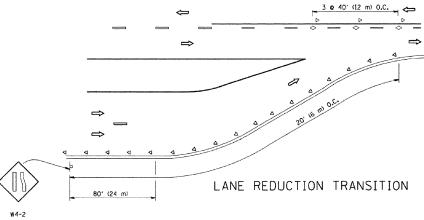
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

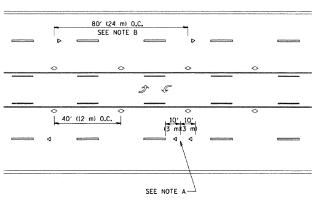
T	DISTI	OR RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
1	W HOFF ROAD				1-G-RS-1	WILL	18	13
1	W HOT HOAD				D-91-550-09	CONTRACT	NO. 6	0G94
ł	SCALE: NONE SHEET NO. 13	OF 18 SHEETS	STA. 43+00 TO STA. 173+00	FED. RO	AD DIST. NO. ILLINOIS FED. A	ID PROJECT		



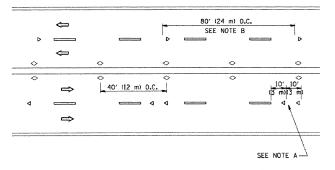
*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

TWO-LANE/TWO-WAY

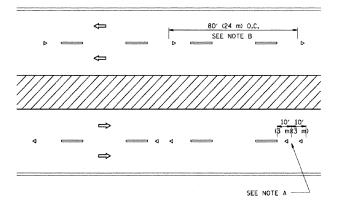




TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

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

LANE MARKER NOTES

- 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.

SYMBOLS

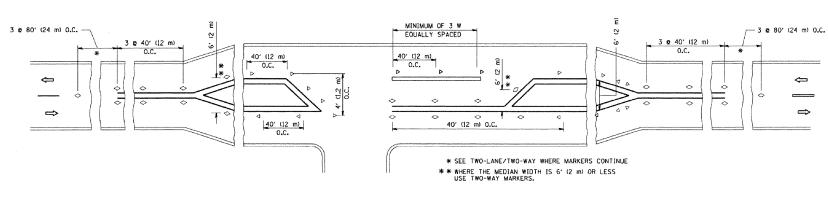
YELLOW STRIPE

WHITE STRIPE

- ⊲ ONE-WAY AMBER MARKER
- ONE-WAY CRYSTAL MARKER (W/O)
- TWO-WAY AMBER MARKER

DESIGN NOTES

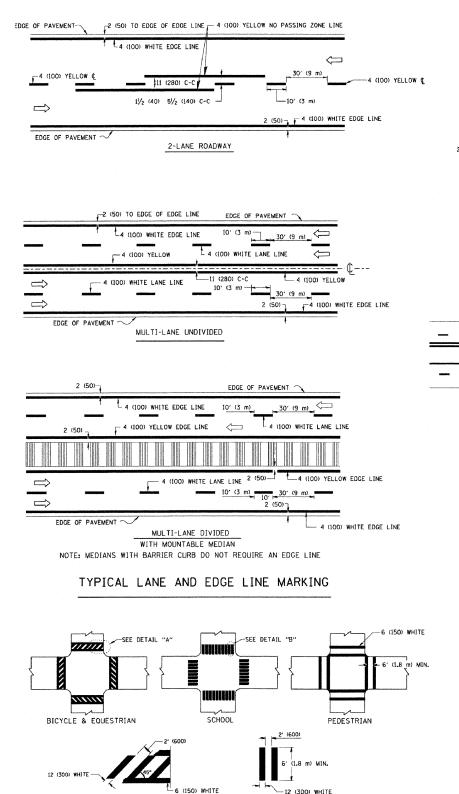
- 1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
- 2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
- 3. THE EXACT MARKER LIMITS. SPACING, AND COLOR SHOULD BE INCLUDED IN THE PLANS.
- MARKERS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



LEFT TURN

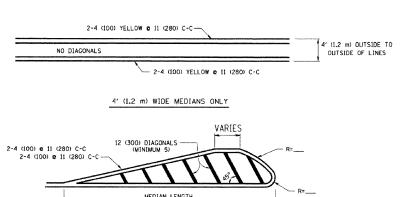
TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)

	USER NAME = \$USER\$	DESIGNED - MJY			DISTRICT ONE DETAIL SHEETS	OR SECTION	COUNTY TOTAL SHEET
		DRAWN - ST	REVISED -	STATE OF ILLINOIS	W HOFF ROAD	297 1-G-RS-1	WILL 18 14
CONSULTING ENGINEERS 1560 WALL ST, SUITE 222	PLOT SCALE = \$SCALE\$	CHECKED - MJY	REVISED -	DEPARTMENT OF TRANSPORTATION	VV TUFF NUAD	D-91-550-09	CONTRACT NO. 60G94
NAPERVILLE, ILLINOIS 60563 PH: (630) 577-9100	PLOT DATE = \$DATES	DATE - 04/15/2009	REVISED -		SCALE: NONE SHEET NO. 14 OF 18 SHEETS STA. 43+00 TO STA. 173+00	FED. ROAD DIST. NO. ILLINOIS FED.	AID PROJECT



TYPICAL CROSSWALK MARKING

DETAIL "A"



DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))

75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h))

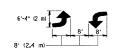
[50' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE 4 (100) YELLOW 4 (100) YELLOW LINES (5½ (140) C-C) 2-4 (100) YELLOW 2 11 (280) C-C 4 (100) YELLOW LINES (5½ (140) C-C)

FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED

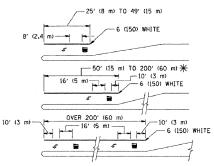
DIAGONAL LINES.

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



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING



FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. \P AREA = 15.6 SO. FT. (1.5 m²) NNY AREA = 20.8 SO. FT. (1.9 m²)

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

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

8 (200) WHITE 12 (300) WHITE DIACONALS 10' (3 m) OR LESS SPACING ISLAND OFFSET FROM PAVEMENT EDGE 8 (200) WHITE 2 (50) RAISED 1 SLAND 1 SLAND 1 SLAND

TYPICAL ISLAND MARKING

ISLAND AT PAVEMENT EDGE

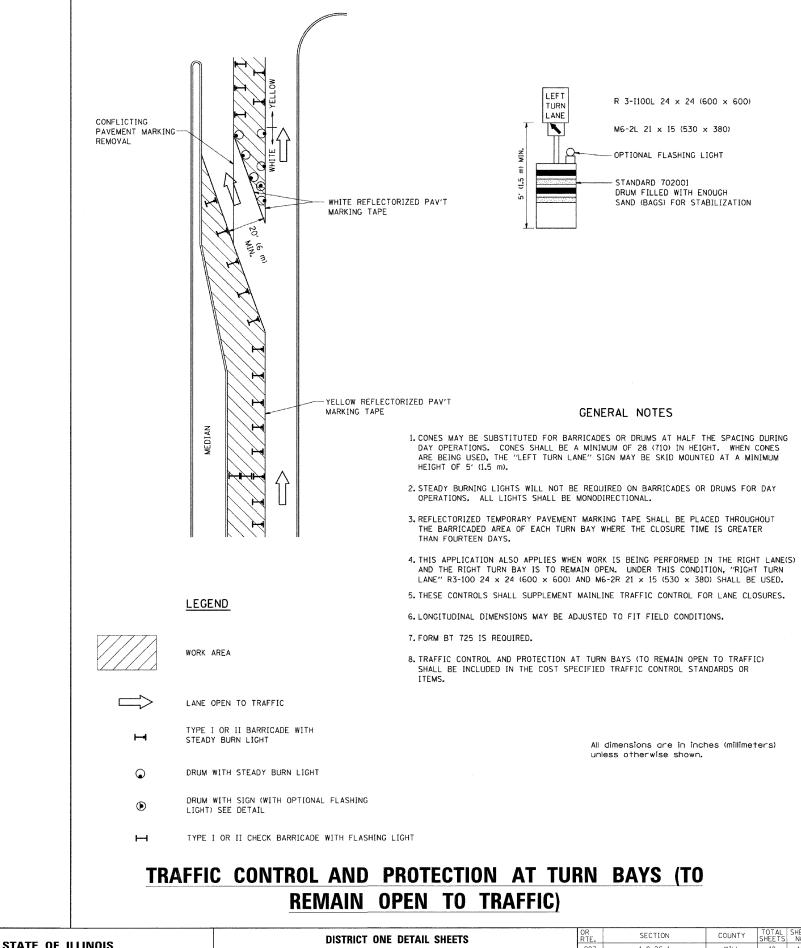
TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVEDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 & 4 (100)	SOLID SOLID	YELLOW YELLOW	5½ (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	SKIP-DASH AND SOLID	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE
	8' (2.4m) LEFT ARROW	IN PAIRS	WHITE	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' (GOO) APART 2' (GOO) 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) T0 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 SO. FT. (0.33 m²) EACH "X"=54.0 SQ. FT. (5.0 m²)
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) T0 45MPH (70 km/h) 150' (45 m) C-C (0VER 45MPH (70 km/h))

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

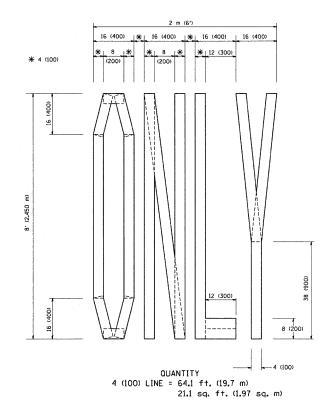
All dimensions are in inches (millimeters) unless otherwise shown.

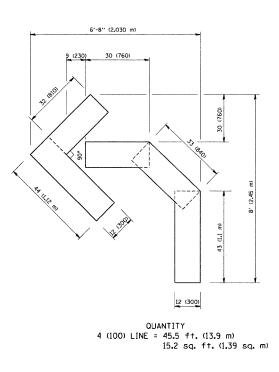
DISTRICT ONE TYPICAL PAVEMENT MARKINGS

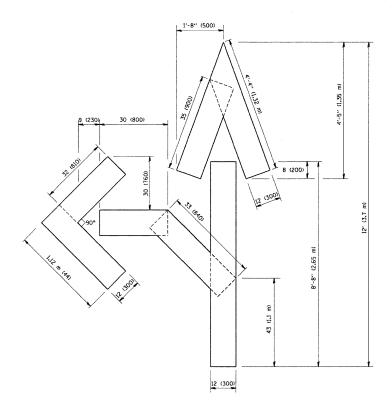
	USER NAME = \$USER\$	DESIGNED - MJY			DISTRICT ONE DETAIL SHEETS		IL SHEETS	OR RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DRAWN - ST REVISED -		STATE OF ILLINOIS		W HOFF ROAD				WILL	18	15	
CONSULTING ENGINEERS 1560 WALL ST, SUITE 222	PLOT SCALE = \$SCALE\$	CHECKED - MJY	REVISED	DEPARTMENT OF TRANSPORTATION	YV HOLL BOAD			_	D-91-550-09	CONTRAC	CT NO. 6	oG94
NAPERVILLE, ILLINOIS 60563 PH: (630) 577-9100	PLOT DATE = \$DATE\$	DATE - 04/15/2009	REVISED -		SCALE: NONE	SHEET NO. 15 OF 18 SHEETS	STA. 43+00 TO STA. 173+00	FED, ROAD	DIST. NO. ILLINOIS	FED. AID PROJECT		



	USER NAME = \$USER\$	DESIGNED - MJY				DISTRICT ONE DETAIL SHEETS				COUNTY	TOTAL SHEET SHEETS NO.
		DRAWN - ST	REVISED -	STATE OF ILLINOIS			297	1-G-RS-1	WILL	18 16	
CONSULTING ENGINEERS 1560 WALL ST, SUITE 222	PLOT SCALE = \$SCALE\$	CHECKED - MJY	REVISED -	DEPARTMENT OF TRANSPORTATION	W HOFF ROAD		JAU	D-9	91-550-09	CONTRAC	T NO. 60G94
NAPERVILLE, ILLINOIS 60563 PH: (630) 577-9100	PLOT DATE = \$DATE\$	DATE - 04/15/2009	REVISED -		SCALE: NONE	SHEET NO. 16 OF 18 SHEETS	STA. 43+00 TO STA. 173+00	FED. ROAD DIST	. NO. ILLINOIS FED.	AID PROJECT	





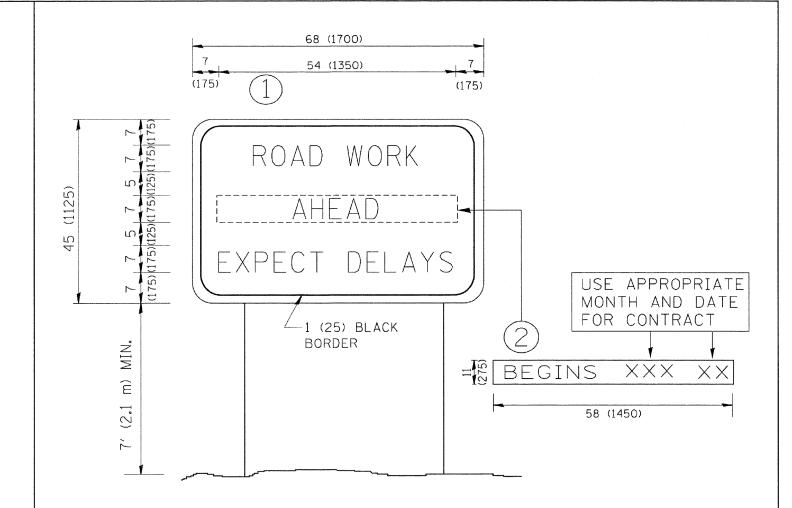


OUANTITY 4 (100) LINE = 82.5 ft. (25.3 m) 27.5 sq. ft. (2.53 sq. m)

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

PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING

	USER NAME = \$USER\$	DESIGNED - MJY			DISTRICT ONE DETAIL SHEETS		OR RTF	SECTION	COUNTY	TOTAL	SHEET NO.
		DRAWN - ST	REVISED -	STATE OF ILLINOIS		297	1-G-RS-1	WILL	18	17	
CONSULTING ENGINEERS 1560 WALL ST, SUITE 222	PLOT SCALE = \$SCALE\$	CHECKED - MJY	REVISED -	DEPARTMENT OF TRANSPORTATION	W HOFF ROAD	D-9	91-550-09	CONTRACT	T NO. 6	50G94	
NAPERVILLE, ILLINOIS 60563 PH: (630) 577-9100	PLOT DATE = \$DATE\$	DATE - 04/15/2009	REVISED -	SCALE:	SCALE: NONE SHEET NO. 17 OF 18	SHEETS STA. 43+00 TO STA. 173+00	FED. ROAD DIST.	NO. 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.

ARTERIAL ROAD INFORMATION SIGN

	USER NAME = \$USER\$	DESIGNED - MJY	DISTRICT ONE DETAIL SHEETS		OR RTF.	SECTION	COUNTY	TOTAL	SHEET NO.		
		DRAWN - ST	REVISED -	STATE OF ILLINOIS		W HOFF ROAD	297	1-G-RS-1	WILL	18	18
CONSULTING ENGINEERS 1560 WALL ST, SUITE 222	PLOT SCALE = \$SCALE\$	CHECKED - MJY	REVISED -	DEPARTMENT OF TRANSPORTATION	VV ROLL ROAD			D-91-550-09	CONTRAC	T NO. 6	0G94
NAPERVILLE, ILLINOIS 60563 PH: (630) 577-9100	PLOT DATE = \$DATE\$	DATE - 04/15/2009	REVISED ~		SCALE: NONE	SHEET NO. 18 OF 18 SHEETS STA. 43+00 TO STA. 173+00	FED. ROA	AD DIST. NO. ILLINOIS FED.	AID PROJECT		