

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6401	(Z0,Z1)RS-3	MCLEAN	12	1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

FAU ROUTE 6401 (US 150)
SECTION (Z0,Z1)RS-3
MCLEAN COUNTY

C-95-015-07

MILLING AND RESURFACING FROM LOCUST STREET TO
EMPIRE STREET IN BLOOMINGTON (US 150)

D-95-015-07



FOR INDEX OF SHEETS, SEE SHEET NO. 2
FOR SUMMARY OF QUANTITIES, SEE SHEET NO. 4

PROJECT ENGINEER: KENSIL A. GARNETT (217)465-4181

SQUAD LEADER: ROBERT M. NELSON

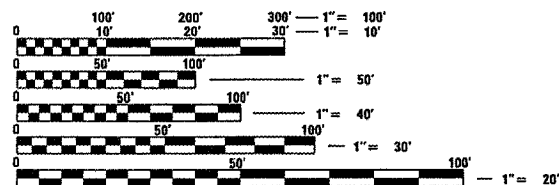
DESIGNER: MATT W. MURPHY

CURRENT TRAFFIC DATA

ADT = 9300

DESIGN DESIGNATION

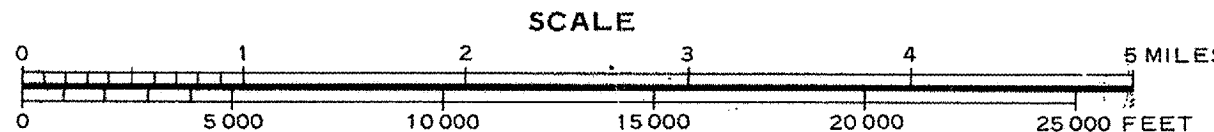
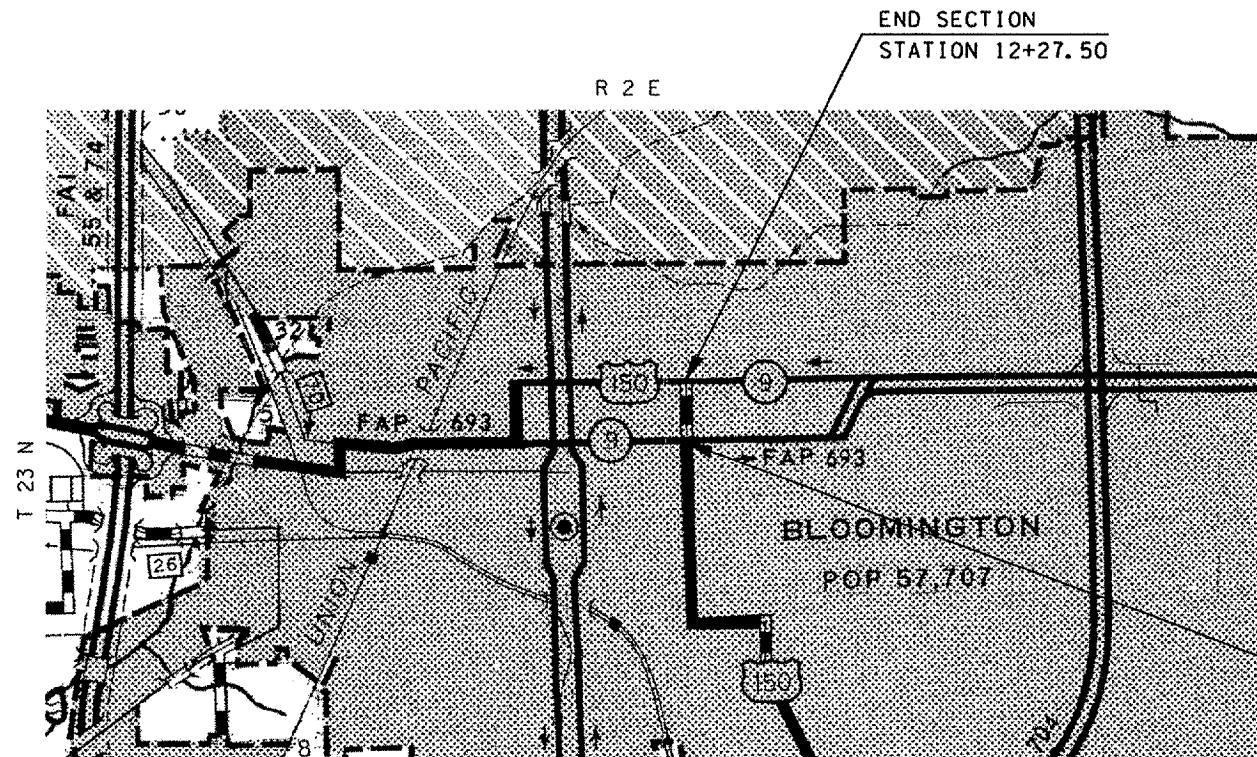
NA



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

CONTRACT NO. 70644



TOTAL LENGTH OF SECTION & PROJECT = 1227.50 FEET = 0.232 MILES
NET LENGTH OF SECTION & PROJECT = 1227.50 FEET = 0.232 MILES

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED *March 30, 2007*
Joseph E. Lane, Inc.
DEPUTY DIRECTOR OF HIGHWAYS, REGION THREE ENGINEER

May 11, 2007
Eric E. Starnik
INTERIM ENGINEER OF DESIGN AND ENVIRONMENT

May 11, 2007
Milton R. Seep, P.E.
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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OF THE STATE OF ILLINOIS**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6401	(20,21)RS-3	MCLEAN	12	2

INDEX OF SHEETS

<u>SHEET</u>	<u>ITEM</u>
1	COVER SHEET
2	INDEX OF SHEETS/LIST OF HIGHWAY STANDARDS
3	GENERAL NOTES
4	SUMMARY OF QUANTITIES
5	EXISTING TYPICAL CROSS SECTION
5	PROPOSED TYPICAL CROSS SECTION
6	SCHEDULES OF QUANTITIES
7-8	PLAN SHEETS
9-12	PAVEMENT MARKING AND MARKERS (RURAL & URBAN APPLICATIONS)

LIST OF STANDARDS

<u>STANDARD NO.</u>	<u>DESCRIPTION</u>
000001-04	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001006	DECIMAL AND INCH AND OF A FOOT
701301-02	LANE CLOSURE 2L, 2W, SHORT TIME OPERATION
701311-02	LANE CLOSURE 2L, 2W MOVING OPERATION-DAY ONLY
701501-03	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701701-04	URBAN LANE CLOSURE, MULTILANE INTERSECTION
702001-06	TRAFFIC CONTROL DEVICES
780001-01	TYPICAL PAVEMENT MARKINGS
781001-02	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6401	(Z0,Z1)RS-3	MCLEAN	12	3

GENERAL NOTES

G. N. -100
 ENGLISH UNITS OF MEASUREMENT SHALL GOVERN OVER AND SUPERSEDE ANY METRIC UNITS SHOWN IN THIS CONTRACT. WHERE INCLUDED, METRIC UNITS ARE FOR INFORMATION ONLY.

G. N. -1004.01
 COARSE AGGREGATE GRADATION CA-10 MAY BE USED WHENEVER COARSE AGGREGATE CA-6 IS SPECIFIED IN THE STANDARD SPECIFICATIONS.

G. N. -406
 THE QUANTITIES INCLUDED IN THE PLANS FOR HOT-MIX ASPHALT RESURFACING ARE INTENDED TO GIVE THE COVERAGE SHOWN ON THE TYPICAL CROSS SECTIONS. IT IS NOT INTENDED TO INCREASE THE THICKNESS OF THE HOT-MIX ASPHALT MIXTURE IN ORDER TO USE ALL OF THE QUANTITIES INCLUDED IN THE CONTRACT. DESIGN THICKNESS CAN BE BACK CALCULATED BY USING THE CONVERSION FACTOR OF 1 INCH THICKNESS = 112 POUNDS / SQUARE YARD.

G. N. -406H

MIXTURE REQUIREMENTS

The following mixture requirements are applicable for this project:

Location(s):	LOCUST TO EMPIRE ON US 150
Mixture Use(s):	SURFACE
AC/PG:	SBS PG 70-22
RAP %: (Max)**	10%
Design Air Voids:	4.0% @ Ndes = 90
Mixture Composition: (Gradation Mixture)	IL 9.5
Friction Aggregate:	MIX "D"

G. N. -703A

SHORT TERM PAVEMENT MARKING SHALL BE APPLIED TO THE PAVEMENT AFTER ANY OF THE FOLLOWING: COLD MILLING AND/OR PLACING BITUMINOUS MATERIALS (PRIME COAT), LEVELING BINDER (MACHINE METHOD), BINDER AND SURFACE COURSES. SHORT TERM PAVEMENT MARKING PLACED ON THE SURFACE, SHALL COINCIDE WITH THE FINAL PAVEMENT STRIPING. SHORT TERM PAVEMENT MARKING PLACED PRIOR TO THE SURFACE SHALL COINCIDE WITH THE EXISTING PAVEMENT MARKINGS. USE 4 FEET PER 40 FEET (OR 10% PER STATION).

G. N. -781

RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED IN ACCORDANCE WITH STANDARD 781001, AND THE DETAILS SHOWN IN THE PLANS. IF THERE IS ANY DISCREPANCY BETWEEN THE STANDARD AND THE DETAILS IN THE PLANS, THE DETAILS IN THE PLANS SHALL GOVERN. THE FINAL PAVEMENT MARKINGS SHALL BE IN PLACE PRIOR TO PLACING THE RAISED REFLECTIVE PAVEMENT MARKERS AND THE RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED MIDWAY IN THE 30 FOOT (9 m) SPACE BETWEEN THE DASHED CENTERLINE STRIPES (WHEN APPLICABLE).

COMMITMENTS: THERE ARE NO COMMITMENTS FOR THIS PROJECT

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6401	(20,ZIRS-3	MCLEAN	12	4

SUMMARY OF QUANTITIES

LOCATION OF WORK:

MCLEAN COUNTY
 URBAN MINOR ARTERIAL
 ROADWAY/STRUCTURE
 IMPROVEMENTS
 FAU 6401 (US 150)
 STA. 0+00
 STA. 12+27.5
 100% STATE

CONSTRUCTION TYPE CODE:

I000-2A
 TOTAL
 QUANTITY

<u>CODE NO</u>	<u>ITEM</u>	<u>UNIT</u>	<u>QUANTITY</u>	<u>QUANTITY</u>
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	479.0	479.0
40600300	AGGREGATE (PRIME COAT)	TON	10.0	10.0
40600990	TEMPORARY RAMP	SQ YD	42.0	42.0
40603545	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N90	TON	402.0	402.0
44000155	HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"	SQ YD	4,782.0	4,782.0
60255500	MANHOLES TO BE ADJUSTED	EACH	1.0	1.0
60266600	VALVE BOXES TO BE ADJUSTED	EACH	2.0	2.0
67100100	MOBILIZATION	L SUM	1.0	1.0
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1.0	1.0
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1.0	1.0
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	264.0	264.0
70300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	63.0	63.0
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	1,475.0	1,475.0
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	148.0	148.0
70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	151.0	151.0
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	50.0	50.0
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	44.0	44.0
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	63.0	63.0
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	1,475.0	1,475.0
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	148.0	148.0
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	151.0	151.0
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	50.0	50.0
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	27.0	27.0
78300100	PAVEMENT MARKING REMOVAL	SQ FT	910.0	910.0
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	27.0	27.0

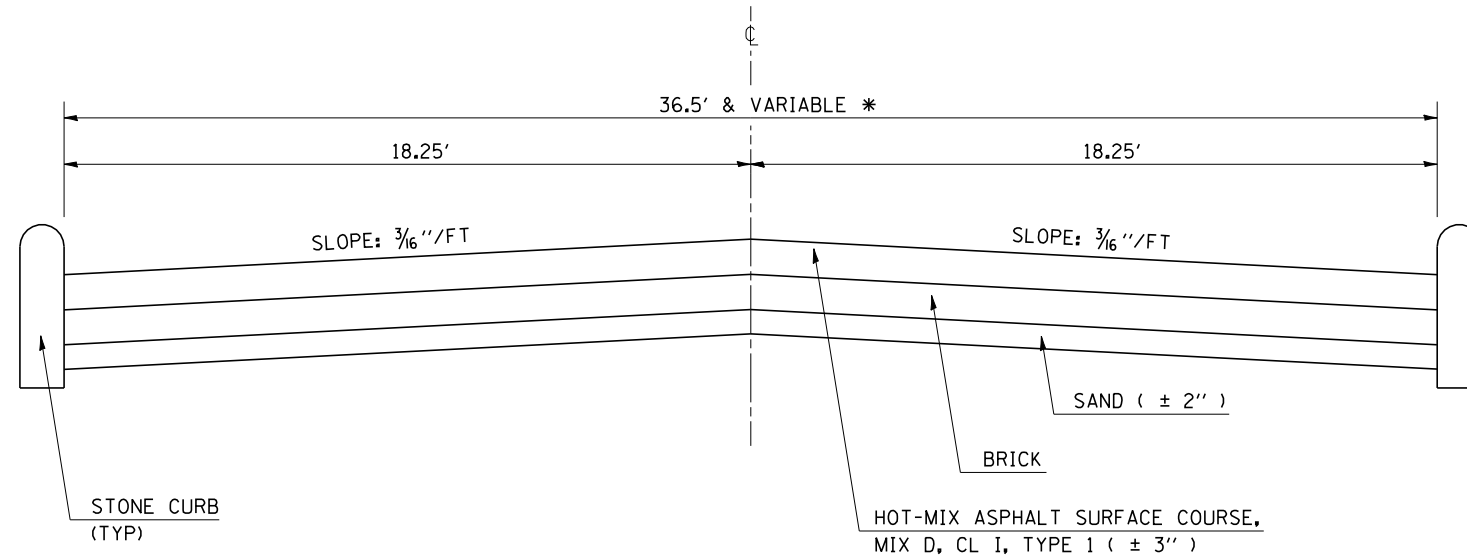
* SPECIALTY ITEM

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6401	(20,21)RS-3	MCLEAN	12	5

EXISTING TYPICAL CROSS SECTION

FAU 6401 (US 150)

STATION 0+00.00 TO STATION 12+27.50

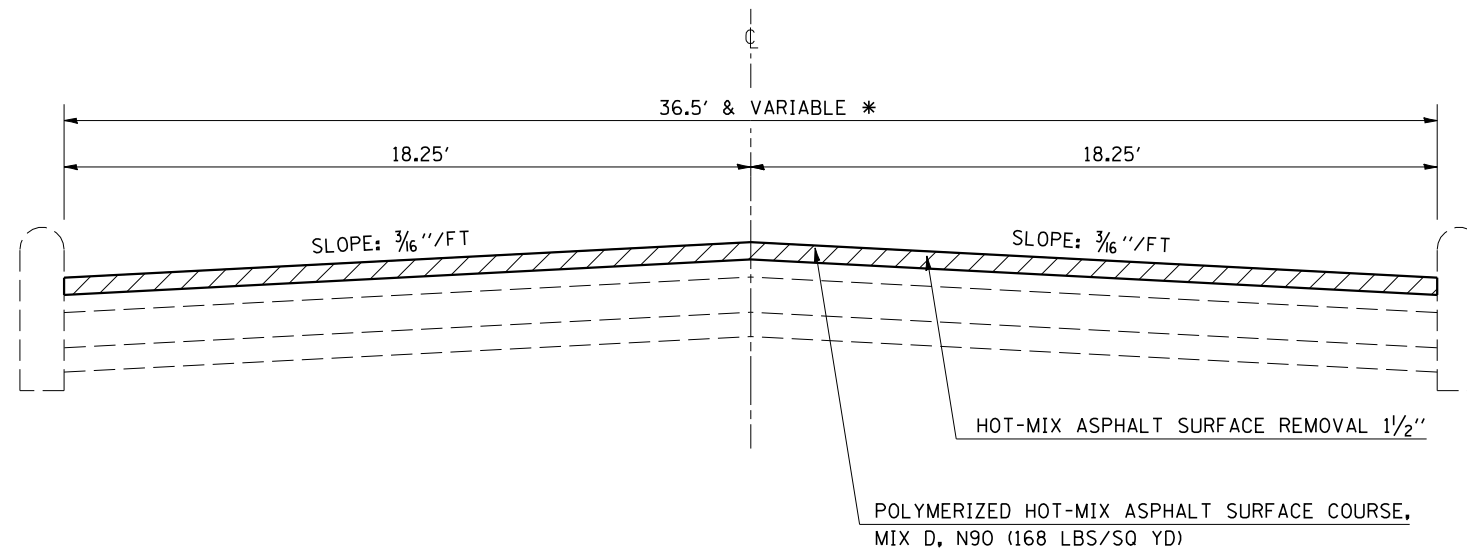


* 7+71.00 TO 12+27.50 VARIABLE 31.0' TO 39.0'

PROPOSED TYPICAL CROSS SECTION

FAU 6401 (US 150)

STATION 0+00.00 TO STATION 12+27.50



* 7+71.00 TO 12+27.50 VARIABLE 31.0' TO 39.0'

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6401	(20,21)RS-3	MCLEAN	12	6

SUMMARY OF QUANTITIES

MANHOLES TO BE ADJUSTED

STATION	OFFSET	QUANTITY
0+412	10.6	1
0+751	1.8	1

TOTAL = 2 *

* AS PER PLAN PREPARATION MEMORANDUM 60-11, ONE MANHOLE WILL BE USED TO ESTABLISH PAY QUANTITY.

PAVEMENT MARKING REMOVAL

STATION	TO	STATION	SO. FT.
0+00		0+06	910.00

TOTAL = 910 SO. FT.

REMOVAL AREA FOR CROSSWALK AT LOCUST ST.

VALVE BOXES TO BE ADJUSTED

STATION	OFFSET	QUANTITY
12+19.2	17.5' Lt.	1
12+20.9	13.1' Rt.	1

TOTAL = 2

PAVEMENT MARKING

US 150

STATION	TO	STATION	LETTERS	4"	4"	6"	12"	24"	RRPM
			SYMBOLS	WHITE	YELLOW	WHITE	WHITE	WHITE	CRYSTAL
			(SQ FT)	(FOOT)	(FOOT)	(FOOT)	(FOOT)	(FOOT)	(EACH)
0+00		12+27.5	63.0	267.0	1208.0	148.0	151.0	50.0	27.0
<u>TOTALS =</u>			<u>63.0</u>	<u>267.0</u>	<u>1208.0</u>	<u>148.0</u>	<u>151.0</u>	<u>50.0</u>	<u>27.0</u>

RAISED REFLECTIVE PAVEMENT MARKER REMOVAL

US 150

STATION	TO	STATION	TYPE	EACH
0+00		12+27.5	CRYSTAL	10
0+00		12+27.5	AMBER	17

TOTAL = 27

TEMPORARY RAMP

US 150

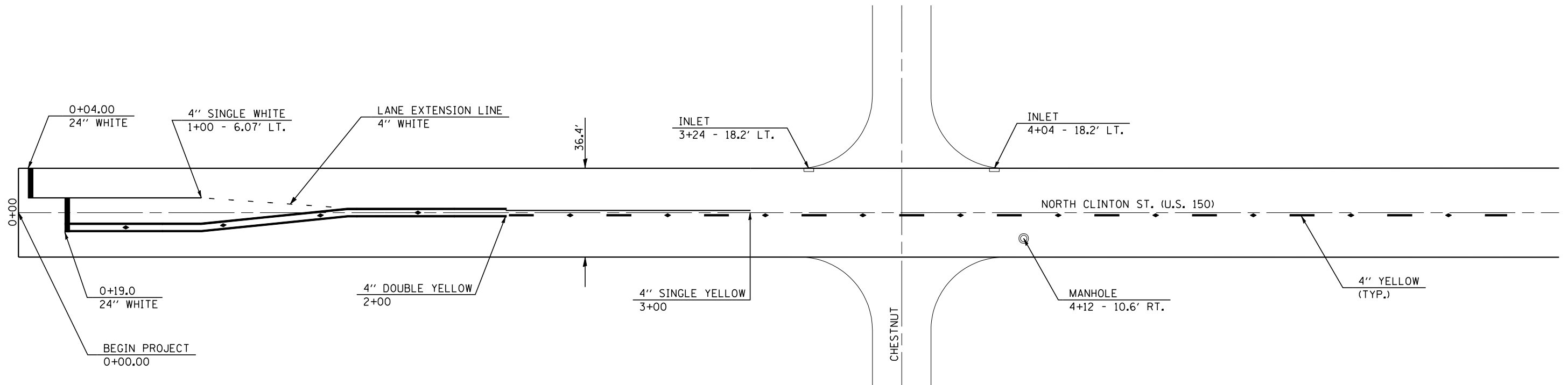
STATION	TO	STATION	SO YD
0+00		0+05	20.27
12+22.50		12+27.50	21.66

USE = 41.93

TOTAL = 42

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6401	(20,21)RS-3	MCLEAN	12	7

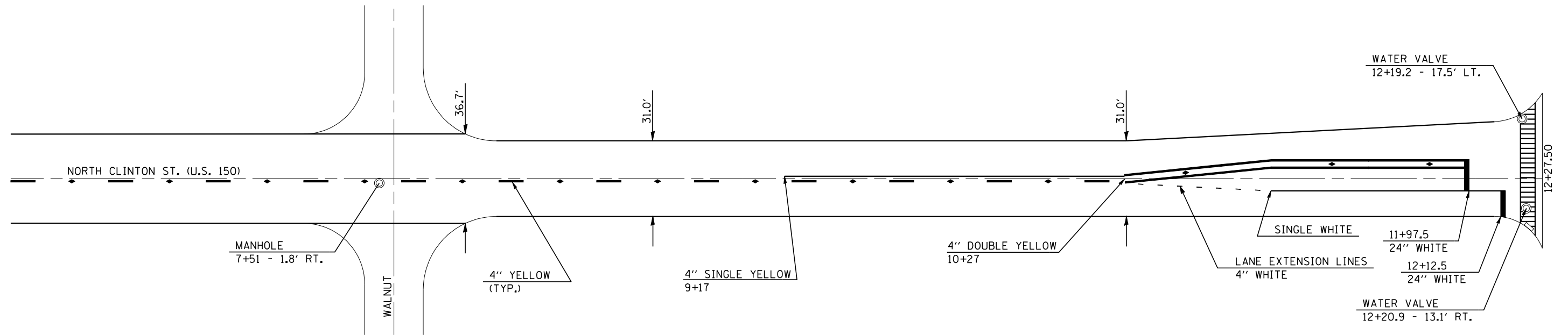
SEC. 4, T. 23 N., R. 2 E., 3RD. P.M.



ALL PAVEMENT MARKING STATIONS SHOULD BE VERIFIED IN THE FIELD BEFORE MILLING.

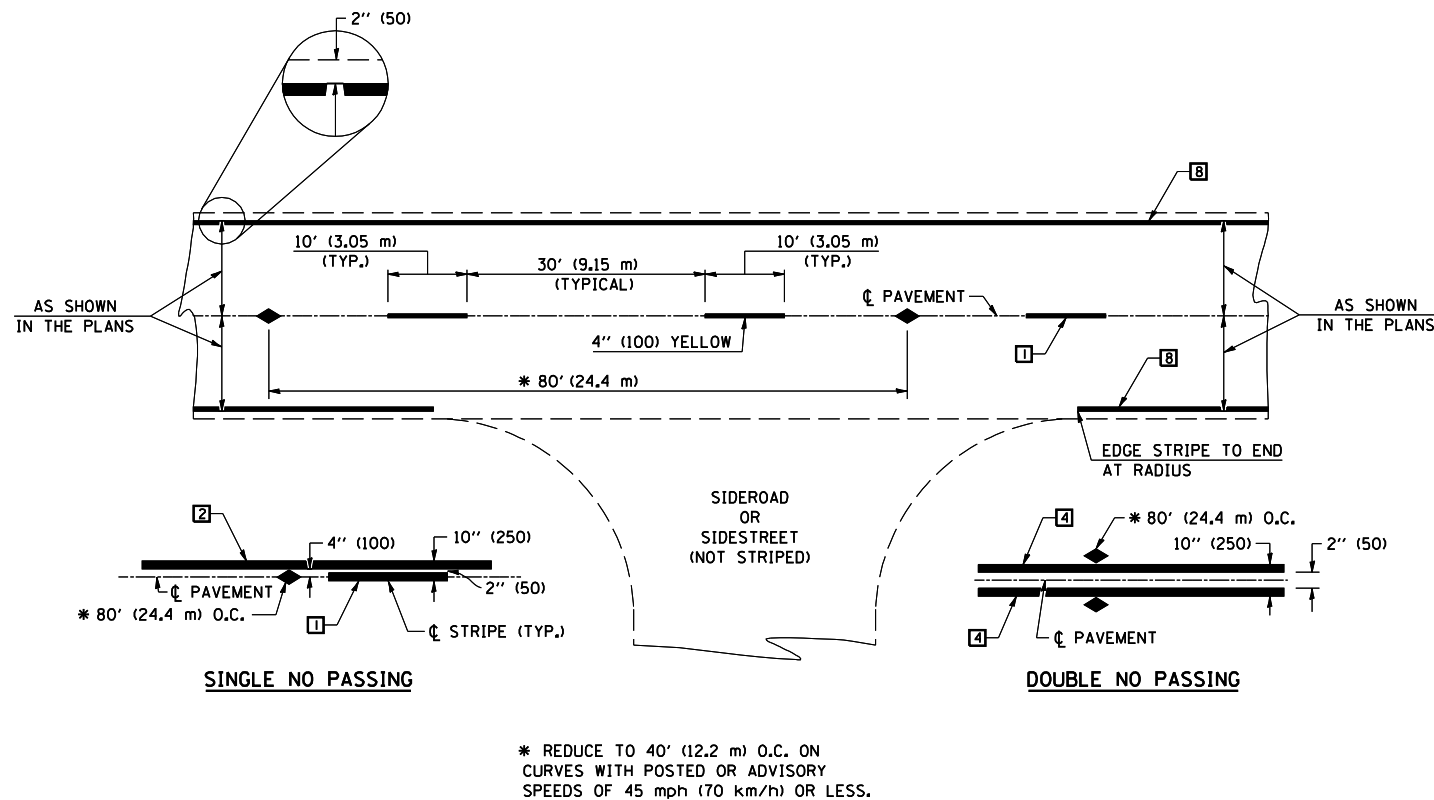
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6401	(20,21)RS-3	MCLEAN	12	8

SEC. 4, T. 23 N., R. 2 E., 3RD. P.M.



ALL PAVEMENT MARKING STATIONS SHOULD BE VERIFIED
IN THE FIELD BEFORE MILLING.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6401	(20,21)RS-3	MCLEAN	12	9



TWO LANE/TWO WAY

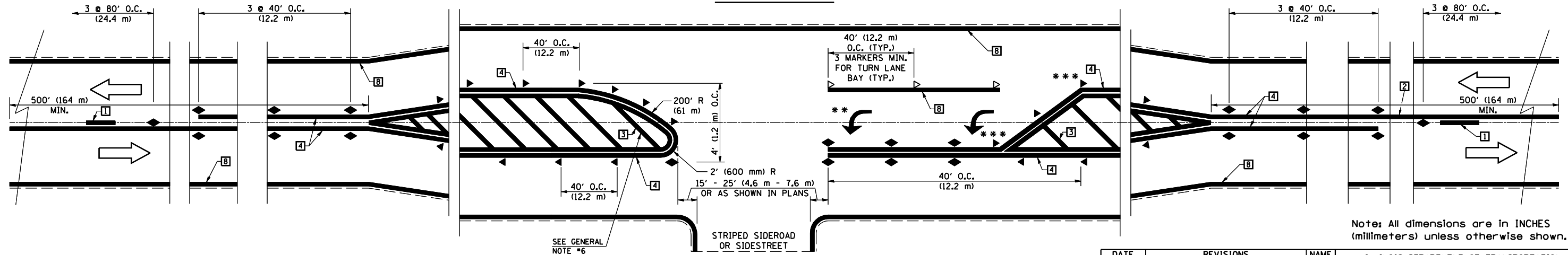
TYPICAL PAVEMENT MARKING LEGEND

- 1 4" (100) SKIP-DASH (YELLOW)
- 2 4" (100) SOLID (YELLOW)
- 3 12" (300) DIAGONAL (YELLOW)
- 4 4" (100) DOUBLE YELLOW (NARROW)
- 5 RESERVED
- 6 RESERVED
- 7 4" (100) SKIP-DASH (WHITE)
- 8 4" (100) SOLID (WHITE)
- 9 12" (300) DIAGONAL (WHITE)
- 10 6" (150) SOLID (WHITE)
- 11 24" (600) STOP BAR (WHITE)
- 12 8" (200) SOLID (WHITE)
- 13 4" (100) LANE LINE EXTENSIONS (WHITE)
- 14 4" (100) PARKING WHITE

TYPICAL PAVEMENT MARKERS LEGEND

- ◆ TWO-WAY AMBER MARKER
- ▶ ONE-WAY AMBER MARKER
- ▷ ONE-WAY CRYSTAL MARKER

RURAL LEFT TURN



Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

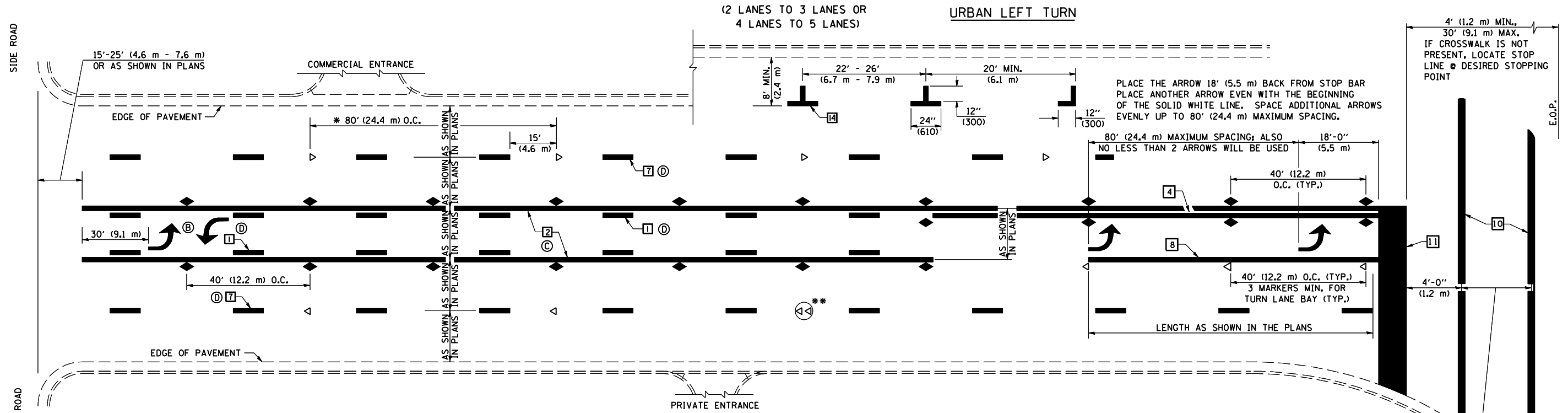
*** REDUCE SPACING IF NECESSARY TO ASSURE MARKERS AT CORNER POINTS.
 ** TURN ARROWS SHALL BE PLACED AS SHOWN ON SHEET #2.

DATE	REVISIONS	NAME
11/06	REPLACED DETAIL F-5.25	TJB

ILLINOIS DEPARTMENT OF TRANSPORTATION
PAVEMENT MARKING AND MARKERS (RURAL & URBAN APPLICATIONS)
DISTRICT 5 DETAIL NO. 7800AAAA

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 USER NAME = crengre

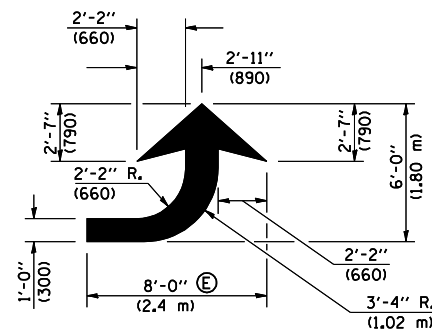
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6401	(20,21)RS-3	MCLEAN	12	10



* REDUCE TO 40 FEET (12.2 METERS) ON CENTER ON CURVES WHERE ADVISORY SPEEDS ARE 10 MPH (15 km/h) LOWER THAN POSTED SPEEDS.

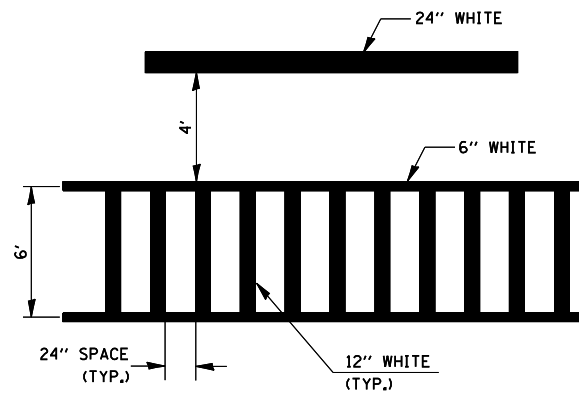
** DOUBLE LANE LINE MARKERS SHALL BE SPECIFIED AND SPACED AS SHOWN IN HIGHWAY STANDARD 781001 FOR MULTI-LANE DIVIDED AND UNDIVIDED HIGHWAYS.

BLOOMINGTON-NORMAL CITY LIMITS ONLY

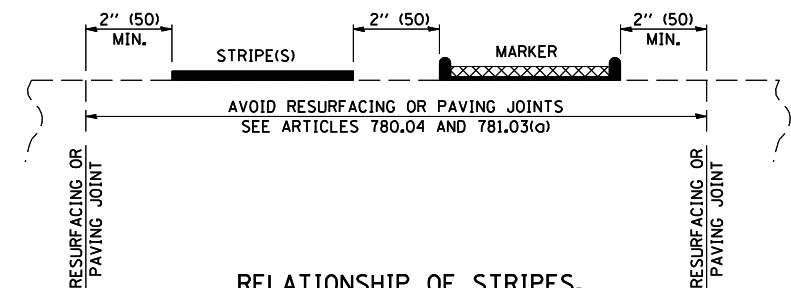


LEFT ARROW

REVERSE FOR RIGHT ARROW
AREA = 15.6 SQ. FT. (1.47 m²)
(WHITE)



TYPICAL SPACING FOR CROSSWALKS & STOP BARS

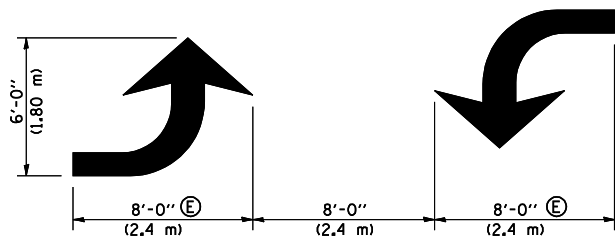


RELATIONSHIP OF STRIPES, MARKERS AND JOINTS

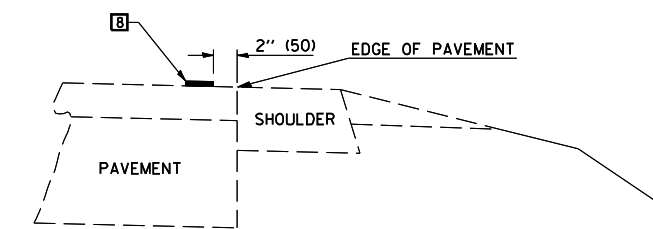
Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

NOTES:

- Ⓑ TURN ARROW PAIRS SHALL BE PLACED AT 250' (75 m) INTERVALS AND SHALL BE EVENLY SPACED BETWEEN BOTH ENDS OF THE BIDIRECTIONAL LEFT TURN LANE.
- Ⓒ THE SOLID YELLOW PAVEMENT MARKINGS [2] SHOULD GENERALLY START OR END NEAR THE RADIUS POINT OF EACH STREET RETURN EXCEPT WHERE ONE OR BOTH ENDS WOULD INCLUDE STOP BARS.
- Ⓓ THE SKIP-DASH PAVEMENT MARKINGS [1] OR [7] SHOULD BE CENTERED BETWEEN BOTH ENDS OF EACH CITY BLOCK AND SHALL BE PLACED SO THEY LINE UP ACROSS FROM EACH OTHER. SEE EXAMPLE ON SHEET 2 OF 3.
- Ⓔ TURN ARROW SIZE DEPENDS ON THE LOCATION. RURAL LOCATION - LARGE ARROW SIZE URBAN LOCATION - SMALL ARROW SIZE



TYPICAL DOUBLE TURN ARROWS (WHITE)



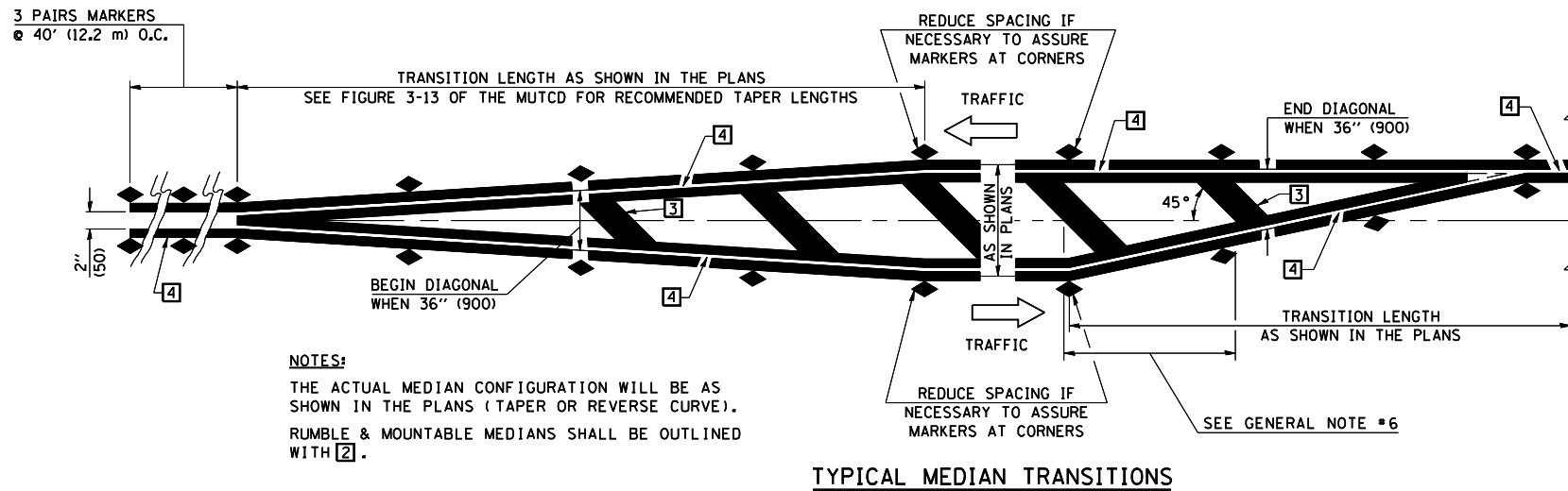
RELATIONSHIP OF EDGE LINE TO EDGE OF PAVEMENT
(SAFETY SHOULDER OR PAVED SURFACE)
SEE ARTICLE 780.04

DATE	REVISIONS	NAME
11/06	REPLACED DETAIL F-5.25	TJB

ILLINOIS DEPARTMENT OF TRANSPORTATION
PAVEMENT MARKING AND MARKERS (RURAL & URBAN APPLICATIONS)
DISTRICT 5 DETAIL NO. 7800AAA

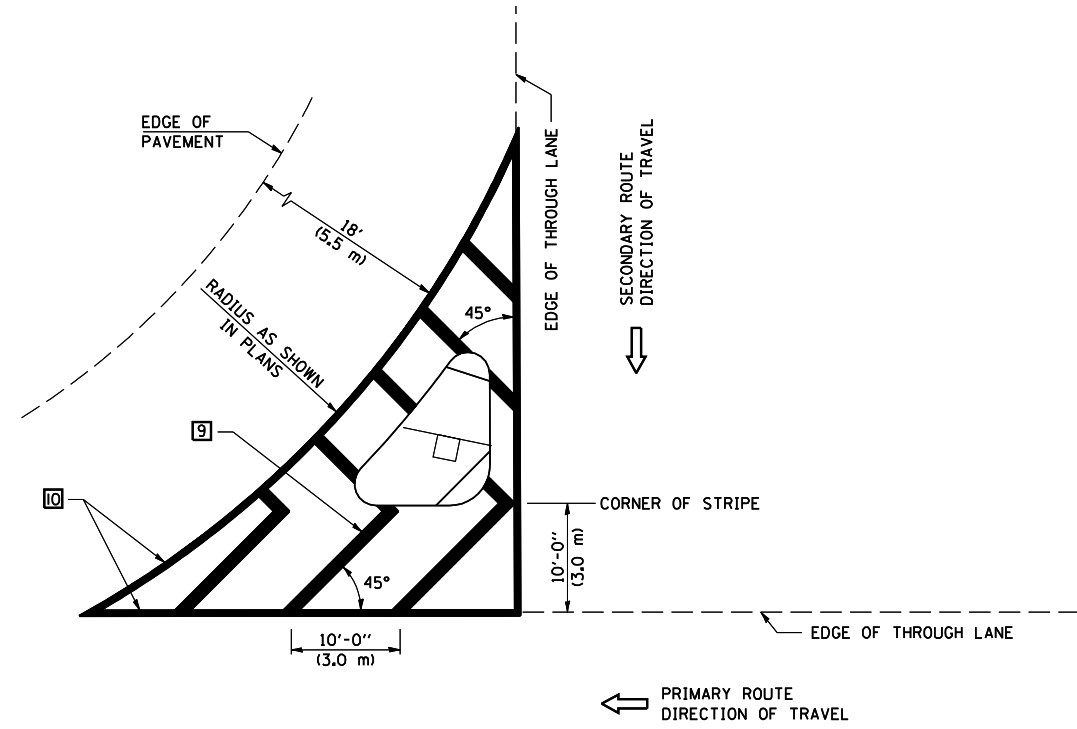
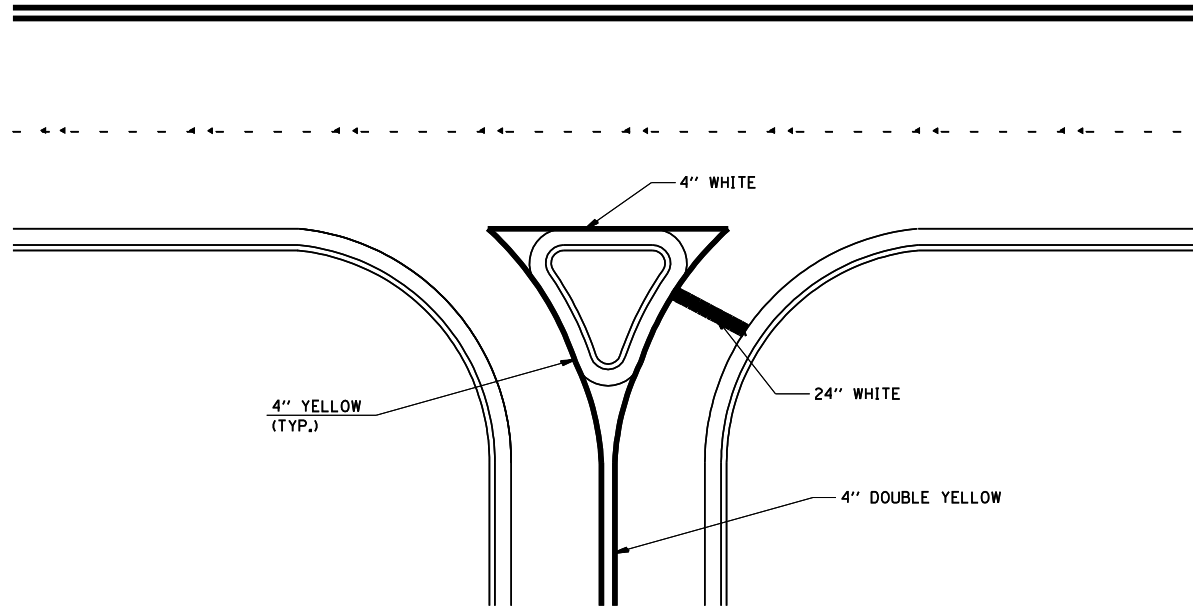
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 USER NAME = creigre

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6401	(20,21)RS-3	MCLEAN	12	11



GENERAL NOTES

1. WHEN MEDIANS ARE PRESENT, PAVEMENT MARKINGS ARE TO BE PLACED ADJACENT TO MEDIANS.
2. SOME OF THE INFORMATION INCLUDED WITH THIS DETAIL MAY NOT BE APPLICABLE TO THIS IMPROVEMENT.
3. PAVEMENT MARKINGS ARE TO BE EXTENDED THROUGH OMISSIONS WHEN APPLICABLE.
4. A STRIPING KEY IS AVAILABLE ELSEWHERE AND SHALL BE SHOWN WHERE THE QUANTITIES ARE LISTED.
5. FINAL PAVEMENT MARKINGS SHALL BE IN PLACE PRIOR TO PLACING ANY RAISED REFLECTIVE PAVEMENT MARKERS.
6. THE FOLLOWING CRITERIA SHALL BE USED FOR SELECTING THE DIAGONAL PAVEMENT MARKING SPACING,
 < 30 MPH USE 15' (< 50 km/h USE 4.5 m)
 30-45 MPH USE 20' (50-75 km/h USE 6.0 m)
 > 45 MPH USE 30' (> 75 km/h USE 9.0 m)



Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

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11/06	REPLACED DETAIL F-5.25	TJB

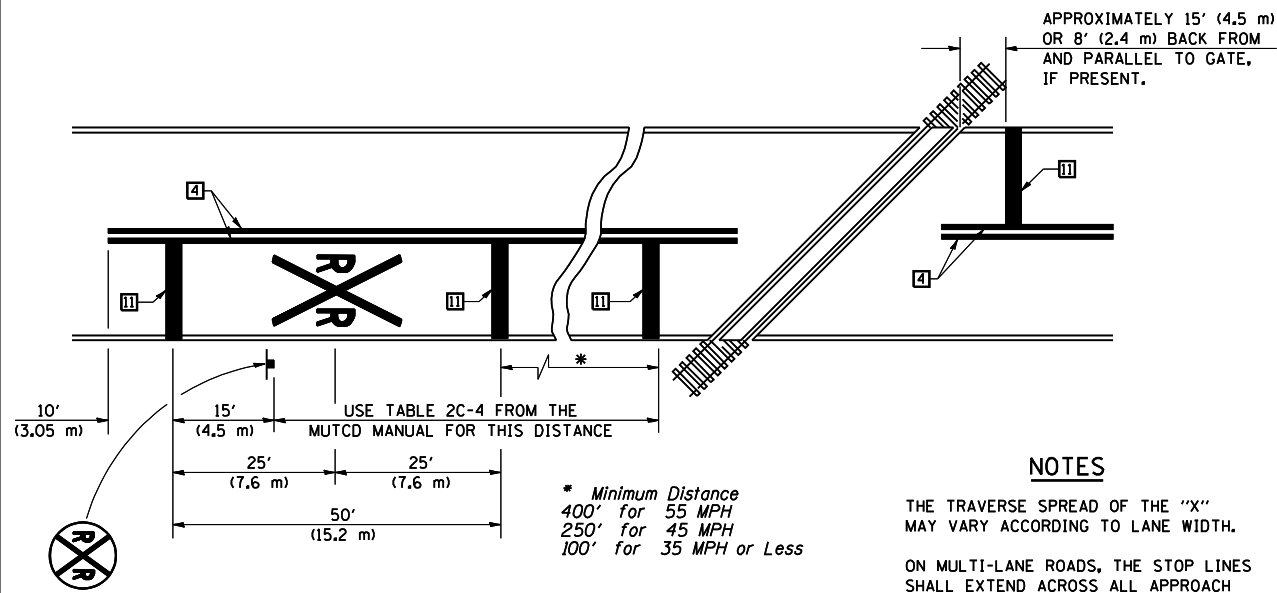
ILLINOIS DEPARTMENT OF TRANSPORTATION
PAVEMENT MARKING AND MARKERS (RURAL & URBAN APPLICATIONS)
DISTRICT 5 DETAIL NO. 7800AAAA

PLOT DATE = 3/30/2007
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 USER NAME = creigre

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RAILROAD CROSSING WITH INTERCONNECT ONLY

RAILROAD CROSSING WITH INTERCONNECT AND PRE-SIGNALS



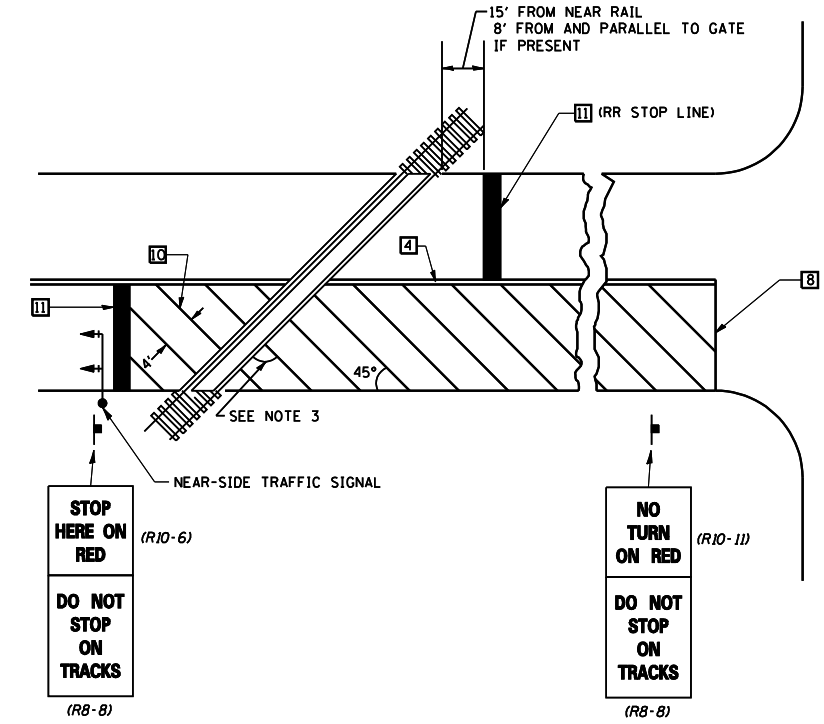
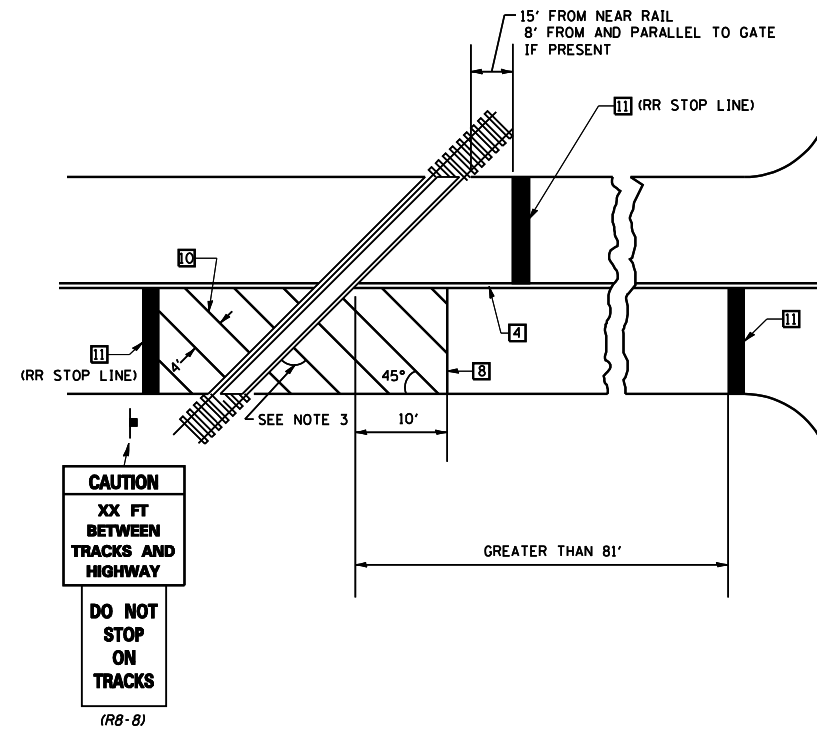
PAVEMENT MARKINGS AT RAILROAD-HIGHWAY GRADE CROSSING

NOTES

THE TRAVERSE SPREAD OF THE "X" MAY VARY ACCORDING TO LANE WIDTH.

ON MULTI-LANE ROADS, THE STOP LINES SHALL EXTEND ACROSS ALL APPROACH LANES AND SEPARATE RXR SYMBOLS SHALL BE PLACED ADJACENT TO EACH OTHER IN EACH LANE.

WHEN THE PAVEMENT MARKING SYMBOL IS USED, A PORTION OF THE SYMBOL SHOULD BE LOCATED DIRECTLY ADJACENT TO THE ADVANCE WARNING SIGN (W10-1) AS PLACED BY TABLE II-1, CONDITION B OF THE MUTCD.



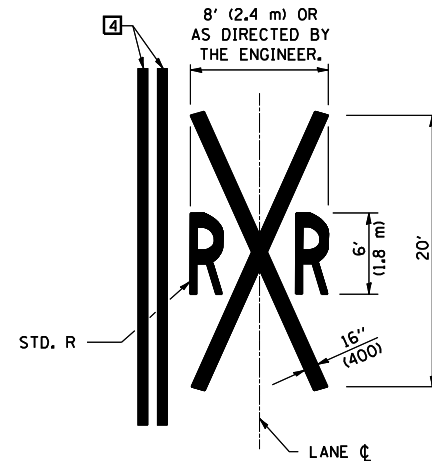
SUPPLEMENTAL PAVEMENT MARKING TREATMENT FOR RAILROAD-HIGHWAY GRADE CROSSING

NOTES

SUPPLEMENTAL PAVEMENT MARKINGS TO BE INSTALLED ONLY ON APPROACHES TO INTERSECTIONS CONTROLLED BY TRAFFIC SIGNALS WHICH ARE INTERCONNECTED WITH THE RAILROAD WARNING SIGNALS.

EXTEND PAVEMENT MARKINGS TO THE INTERSECTION ONLY WHERE NEAR-SIDE TRAFFIC SIGNALS ARE USED.

WHERE THE ANGLE BETWEEN THE DIAGONAL PAVEMENT MARKINGS AND THE TRACK WOULD BE LESS THAN 20°, THE PAVEMENT MARKINGS SHOULD BE PLACED IN THE OPPOSITE DIRECTION FROM THAT SHOWN.



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DATE	REVISIONS	NAME
11/06	REPLACED DETAIL F-5.25	TJB

ILLINOIS DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING AND MARKERS (RURAL & URBAN APPLICATIONS)

DISTRICT 5 DETAIL NO. 7800AAAA