

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
525	#	BOONE	11	1

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

**FAP ROUTE 525 (US 20)  
SECTION (6,14,15)R-TS-1  
PROJECT ACHS-0525 (110)  
BOONE COUNTY**

C92-110-05

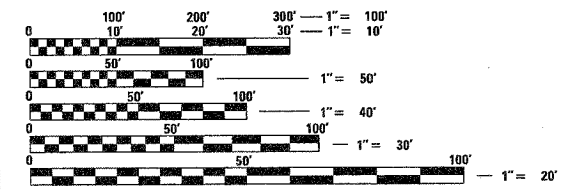
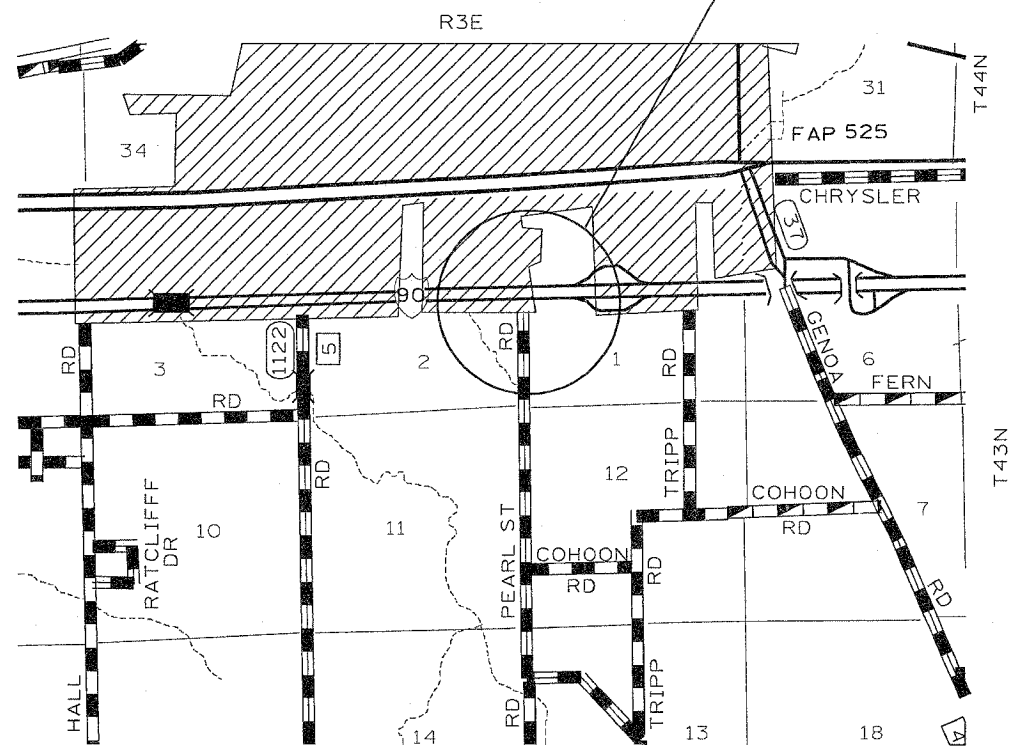


- FOR INDEX OF SHEETS**
- 1 COVER SHEET
  - INDEX OF SHEETS
  - STANDARDS
  - 2 SUMMARY OF QUANTITIES
  - 3 UTILITIES
  - 4 GENERAL NOTES
  - SIGNAL PLANS SHEETS LEGEND
  - 5-6 PLANS SHEETS
  - 7-8 CABLE DETAIL
  - 9 DISTRICT STANDARD 94.2
  - DISTRICT STANDARD 93.4
  - 10-11 DISTRICT STANDARD 41.1

STANDARDS

- 424001-04 CURB RAMPS FOR SIDEWALKS
- 780001-01 TYPICAL PAVEMENT MARKING
- 805001 ELECTRICAL SERVICE INSTALLATION DETAILS
- 880006 TRAFFIC SIGNAL MOUNTING DETAILS
- 701006-02 OFF-ROAD OPERATIONS 2L, 2W 4.5m(15') TO PAVEMENT EDGE FOR SPEEDS > 45 MPH
- 701101-01 OFF-ROAD OPERATIONS, MULTILANE LESS THAN 4.5m (15') AWAY FOR SPEEDS >45 MPH
- 701301-02 LANE CLOSURE , 2L, 2W SHORT TIME OPERATIONS
- 701426-02 LANE CLOSURE, MULTILANE INTERMITTENT OR MOVING MOVING OPERATION, FOR SPEEDS > 45 MPH
- 701501-03 URBAN LANE CLOSURE 2L, 2W UNDIVIDED
- 701701-04 URBAN LANE CLOSURE MULTILANE INTERSECTION
- 701801-03 LANE CLOSURE MULTILANE 1W OR 2W CROSSWALK OR SIDEWALK CLOSURE FOR SPEEDS > 45MPH
- 702001-05 TRAFFIC CONTROL DEVICES
- 857001 STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES

PROJECT LOCATION  
US 20 AT PEARL AND STATE ST



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. 64B32**

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED September 1, 2005

*Sam L. Montague*  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

October 14, 2005  
*Mike Hane*  
ENGINEER OF DESIGN AND ENVIRONMENT

October 14, 2005  
*Eric E. Harn*  
DEPUTY DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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OF THE STATE OF ILLINOIS**

URBAN  
90% FED  
10% STATE  
Y031-1F

SUMMARY OF QUANTITIES

PAY CODE	ITEM	UNIT	PEARL ST	STATE ST	TOTAL
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5"	SQ FT	58		58
42400800	DETECTABLE WARNINGS	SQ FT	6		6
67100100	MOBILIZATION	L SUM			1
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM			1
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM			1
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM			1
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	165		165
* 78000500	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	728		728
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	538		538
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	224		224
80400105	<sup>ELECTRIC</sup> SERVICE INSTALLATION, SPECIAL	EACH	1		1
85000300	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	L SUM			1
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL No. 14 2 C	FOOT	334		334
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL No. 14 3 C	FOOT	334		334
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL No. 14 7 C	FOOT	1001		1001
87301815	ELECTRIC CABLE IN CONDUIT, SERVICE No. 6 3 C	FOOT	50		50
X8801395	SIGNAL HEAD, POLYCARBONATE, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2		2
X8801400	SIGNAL HEAD, POLYCARBONATE, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	2		2
88102200	PEDESTRIAN SIGNAL HEAD, POLYCARBONATE, 1-FACE, BRACKET MOUNTED	EACH	3		3
88200400	TRAFFIC SIGNAL BACKPLATE, FORMED PLASTIC	EACH	2		2
88500500	INDUCTION LOOP DETECTOR AMPLIFIER	EACH	2		2
88800100	PEDESTRIAN PUSH BUTTON	EACH	4		4
89502210	MODIFY EXISTING CONTROLLER CABINET	EACH	1		1
X0322494	CURB CUT	FOOT	6		6
X0962500	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	L SUM			1
X0324264	SIGNAL HEAD, LED, RETROFIT	EACH	16	11	27
XX004444	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BARCKET MOUNTED, RETROFIT	EACH	1		1
X0324942	GROUT REMOVAL AND REPLACEMENT	EACH	4	2	6

\* SPECIALTY ITEM

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REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
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DRAWN BY		CHECKED BY

F.A. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
525	*	BOONE	11	3
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

UTILITIES			
NAME AND ADDRESS OF UTILITY	TYPE	TELEPHONE	JULIE MEMBER#
MR MIKE LENOX COMMONWEALTH EDISON COMPANY 123 ENERGY AVE ROCKFORD, IL 61109	ELECTRIC	815-490-2869	YES 800-892-0123
MR KALIN HINSHAW VERIZON 112 WEST ELM STREET SYCAMORE, IL 60178	TELEPHONE	815-895-1515	YES 800-892-0123
MR SCOTT STOGSDILL NICOR GAS CO 1844 FERRY ROAD NAPERVILLE, IL 60563-9600	GAS	630-983-8676	YES 800-892-0123
MR MIKE OWENS INSIGHT COMMUNICATIONS OF ROCKFORD 811 21ST STREET MOLINE, IL 61265	CATV	815-962-4400	YES 800-892-0123
MR BRENT ANDERSON CITY OF BELVIDERE 210 WHITNEY BELVIDERE, IL 61008	CATV	815-544-9256	YES 800-892-0123
MR DENNIS SCHULTZ IDOT-D2 819 DEPOT AVE DIXON IL 61021	GOVT	815-284-5469	NO 815-284-5469

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REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		SCALE: VERT. DATE:     HORIZ.
DRAWN BY		CHECKED BY



F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
525	*	BOONE	11	5
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

LED - SIGNAL HEAD RETROFIT  
PAINT ISLANDS, CROSSWALKS AND  
STOP BARS AT US 20 AND PEARL ST

INSTALL NEW 5-SECTION HEAD  
GROUT REMOVAL AND REPLACEMENT

REPLACE 3-SECTION HEAD  
WITH 5-SECTION HEAD

GROUT REMOVAL AND REPLACEMENT



PEARL ST

US 20

20+000

8+100

8+150

8+200

8+250

ONLY

NEW PEDESTRIAN HEAD AND PUSH  
BUTTON INSTALLED THROUGH EXISTING CONDUIT

INSTALL NEW 5 SECTION HEAD  
GROUT REMOVAL AND REPLACEMENT  
NEW PEDESTRIAN HEAD AND PUSH  
BUTTON INSTALLED THROUGH EXISTING CONDUIT

SIDEWALK AND DETECTABLE WARNING  
CURB CUT

REPLACE 3-SECTION HEAD  
WITH 5-SECTION HEAD

REVISIONS	
NAME	DATE

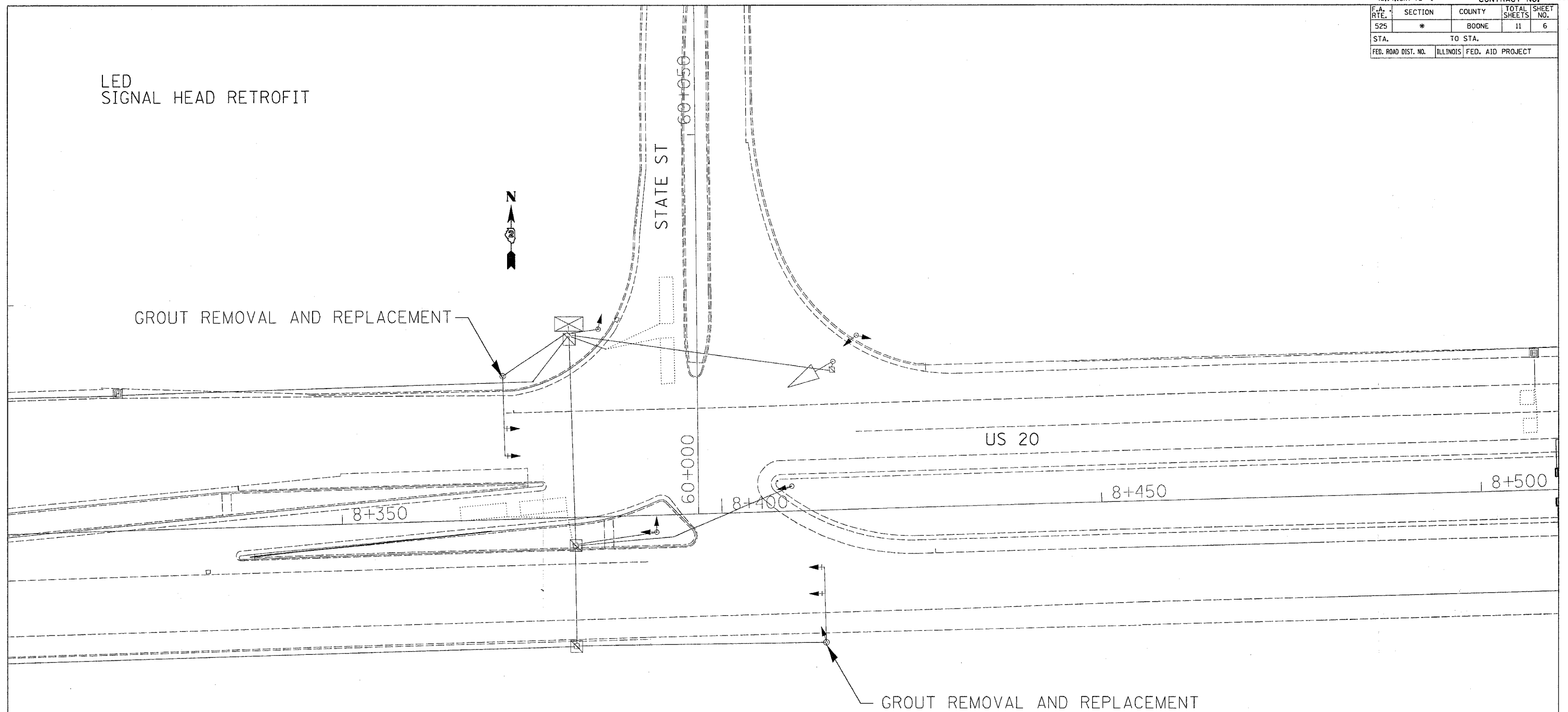
ILLINOIS DEPARTMENT OF TRANSPORTATION

SCALE: VERT.  
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DATE

DRAWN BY  
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LED  
SIGNAL HEAD RETROFIT

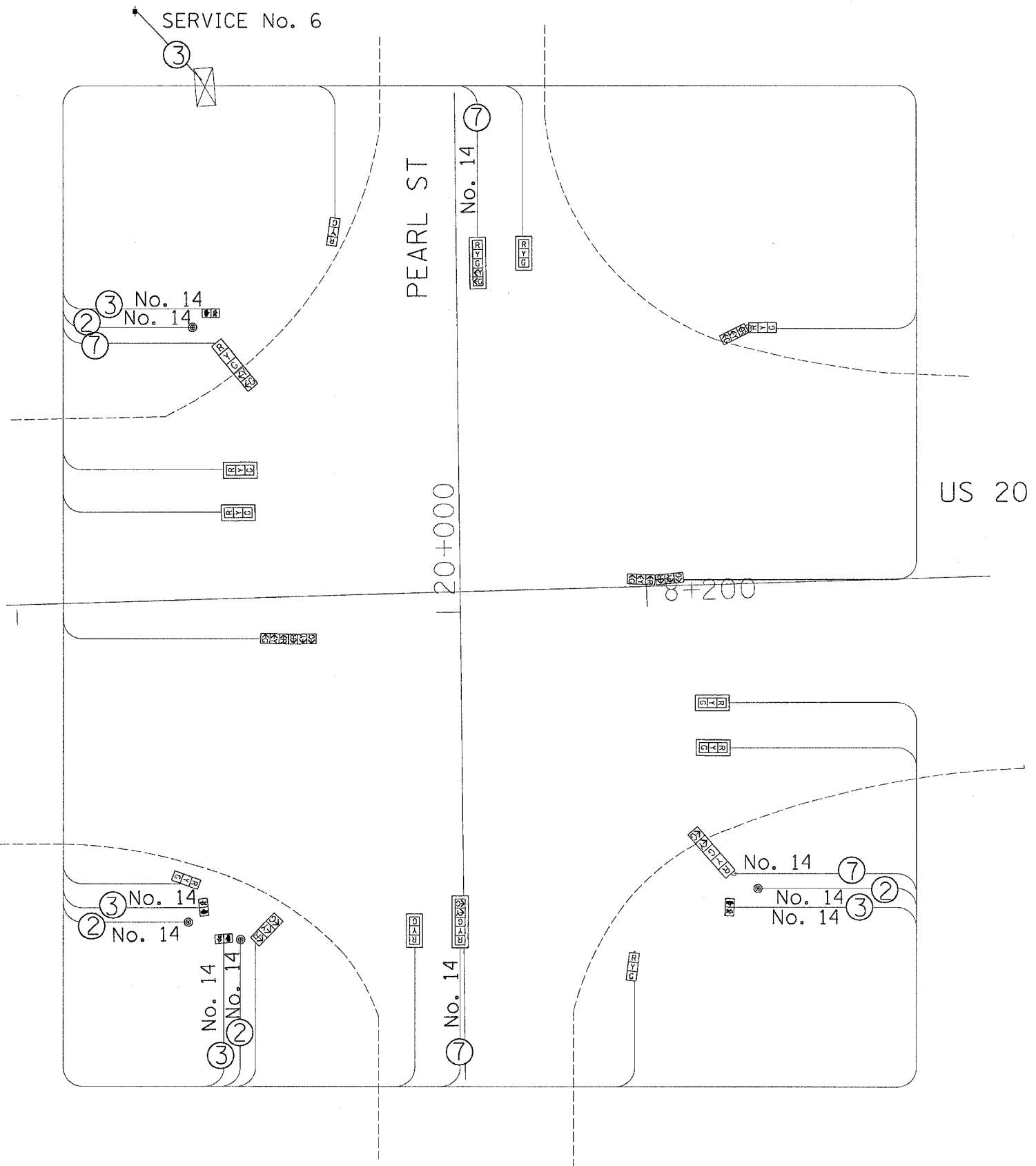


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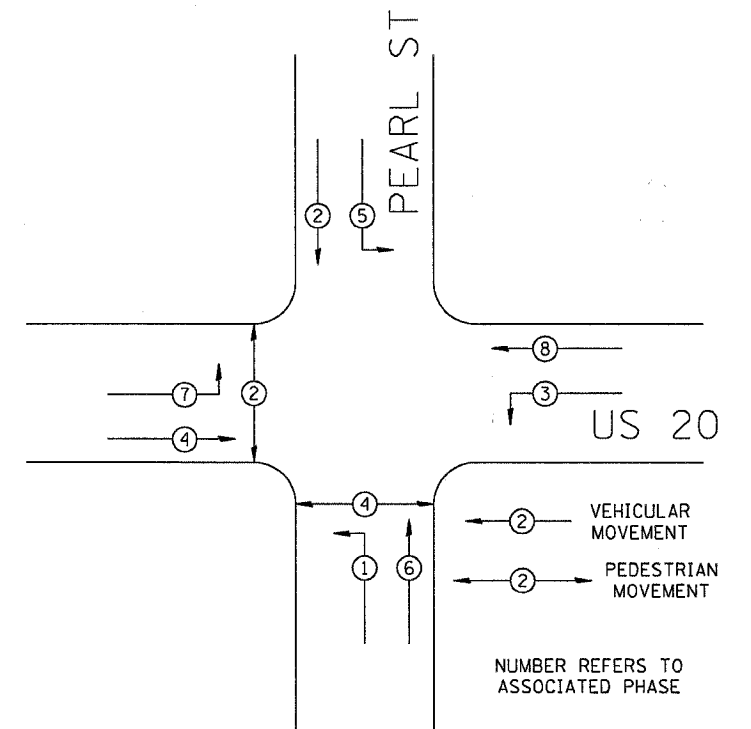
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NAME	DATE	
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F.A. RTE.		SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
525		*	BOONE	11	7
STA.		TO STA.			
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 64B32



**PHASE DESIGNATION DIAGRAM**



NUMBER REFERS TO ASSOCIATED PHASE

REFER TO STANDARD 857001

- LEGEND**
- ② INDICATES NUMBER OF NEW CONDUCTORS. ALL CABLE IS NO. 14 EXCEPT AS INDICATED. "P" INDICATES PAIR CABLE.
  - [SIGNAL HEAD SYMBOL] NEW SIGNAL HEAD WITH OR WITHOUT BACKPLATE.
  - [PEDESTRIAN HEAD SYMBOL] NEW PEDESTRIAN HEAD - LED.
  - ⊙ PEDESTRIAN PUSHBUTTON.

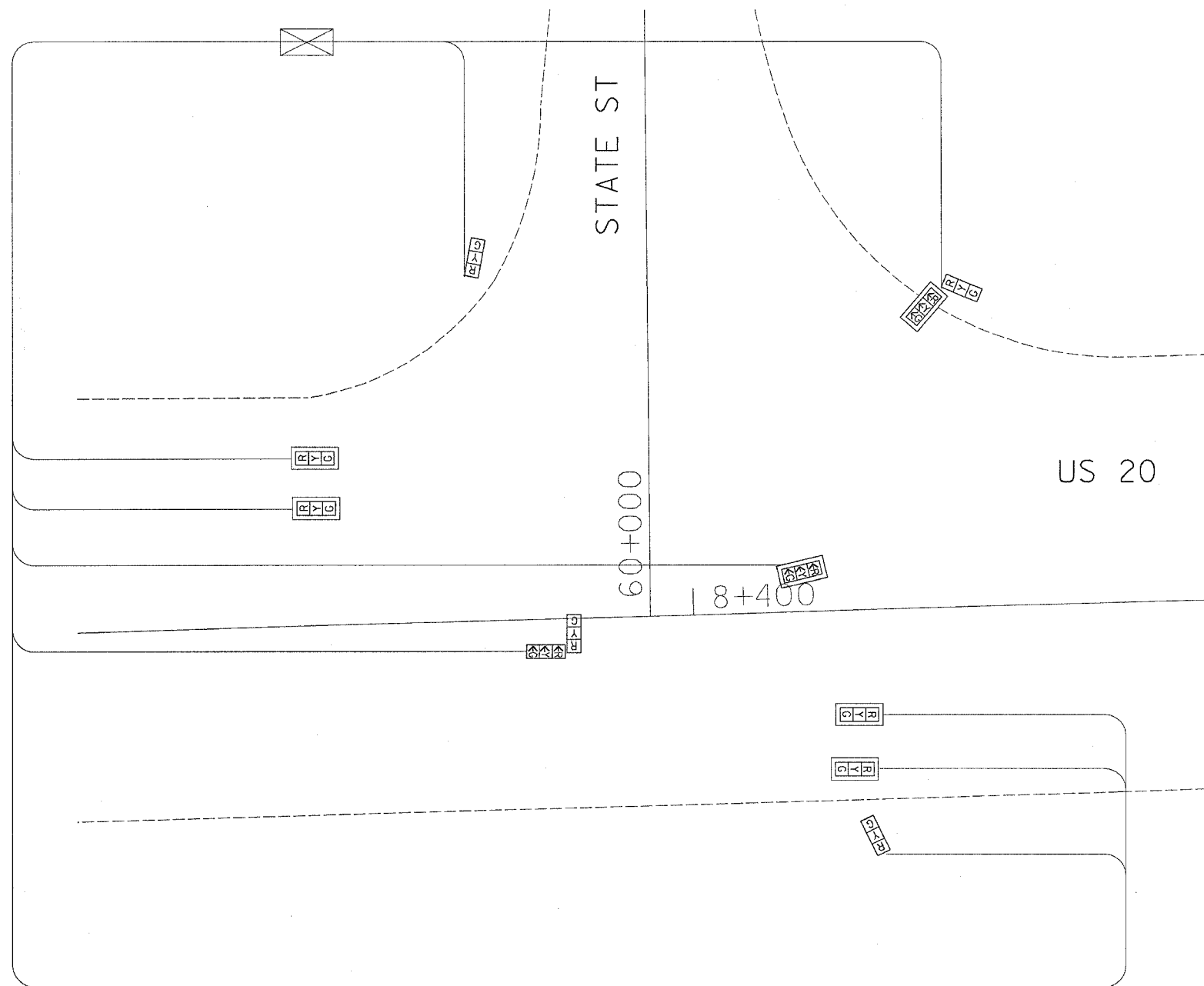
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

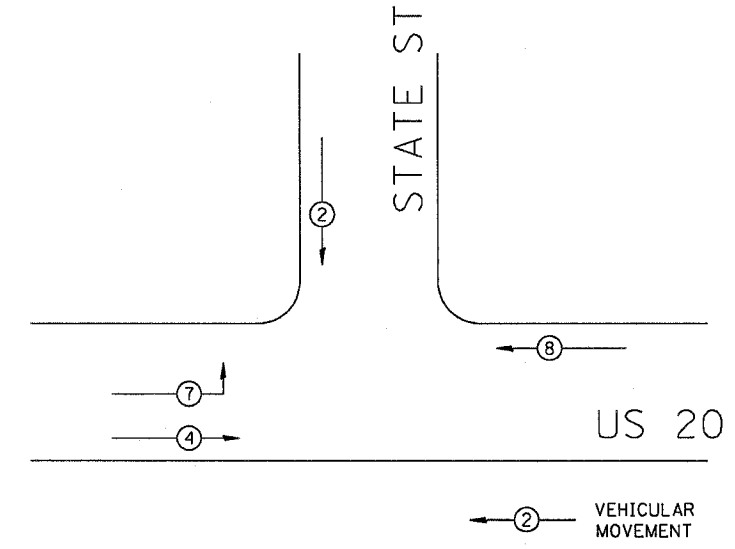
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PHASE DESIGNATION DIAGRAM



NUMBER REFERS TO ASSOCIATED PHASE

REFER TO STANDARD 857001

- LEGEND
- ② INDICATES NUMBER OF NEW CONDUCTORS. ALL CABLE IS NO. 14 EXCEPT AS INDICATED. "P" INDICATES PAIR CABLE.
  - [R][Y][G] NEW SIGNAL HEAD WITH OR WITHOUT SIGNPLATE
  - ⊖ NEW PEDESTRIAN HEAD - LED
  - ⊕ PEDESTRIAN PUSHBUTTON

REVISIONS	
NAME	DATE

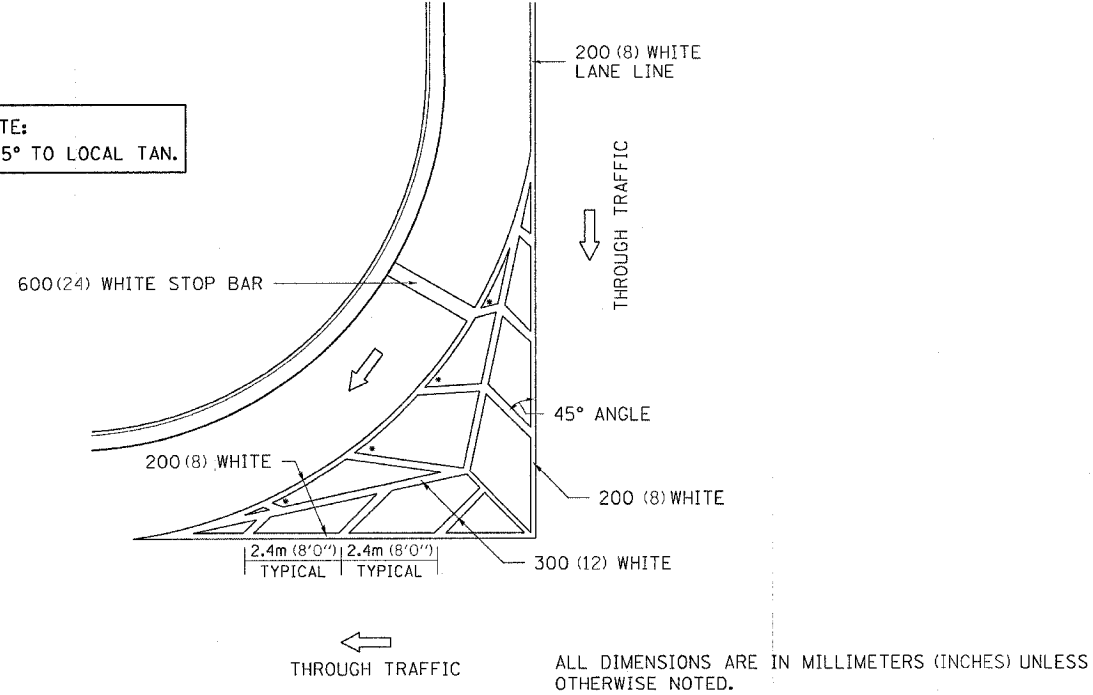
ILLINOIS DEPARTMENT OF TRANSPORTATION

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 DATE



# TYPICAL MARKING FOR PAINTED ISLANDS

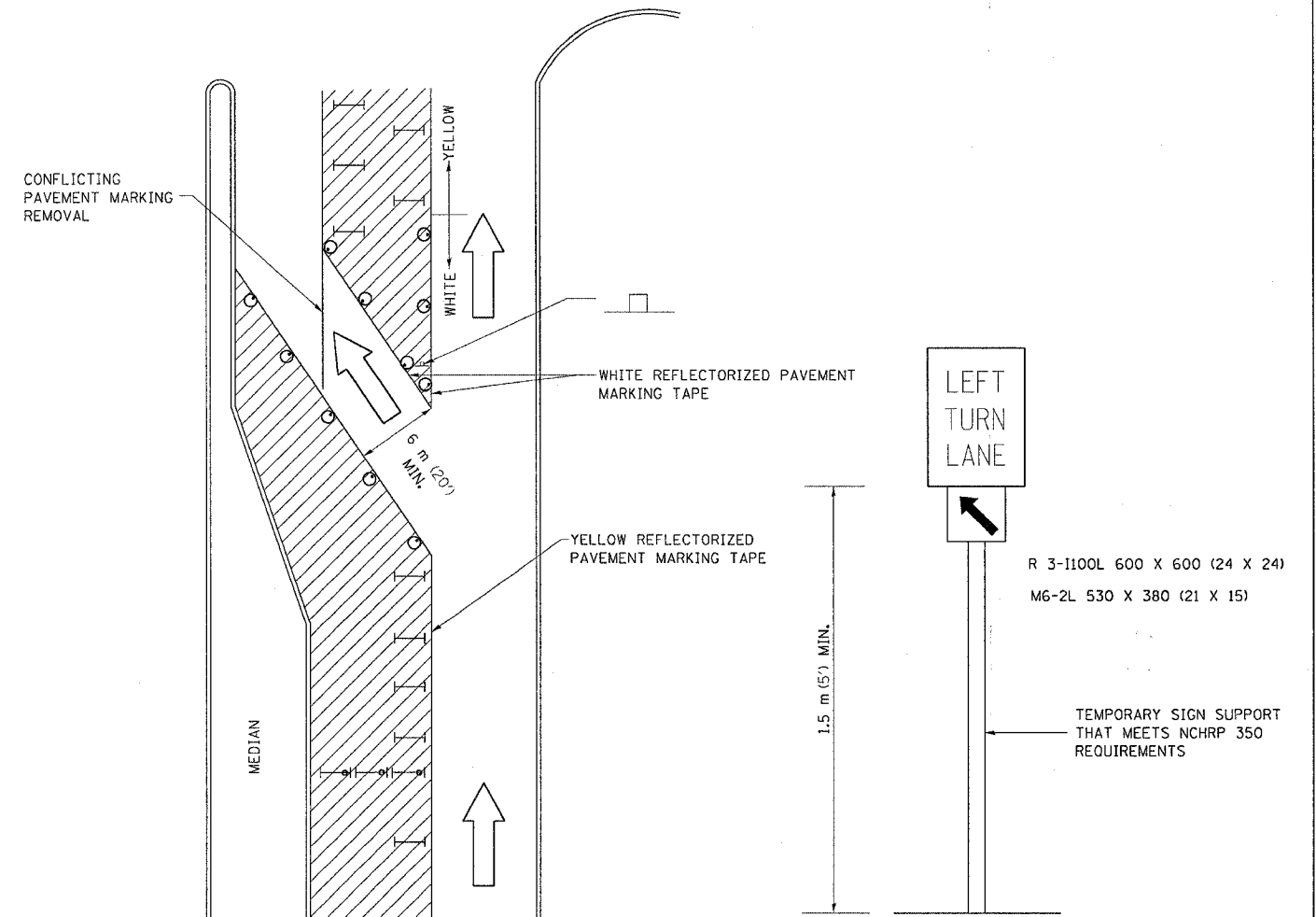
NOTE:  
\* 45° TO LOCAL TAN.



**TYPICAL MARKING FOR PAINTED ISLANDS 93.4**

REVISED 2-7-05

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



## LEGEND

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

## GENERAL NOTES

CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 710 (28) IN HEIGHT.

STEADY BURNING LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS WILL BE MONODIRECTIONAL.

REFLECTORIZED TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE BARRICADED AREA OF EACH BAY WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS.

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" R3-100 600 x 600 (24 X 24) AND M6-2R 530 X 380 (21 X 15) SHALL BE USED.

THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.

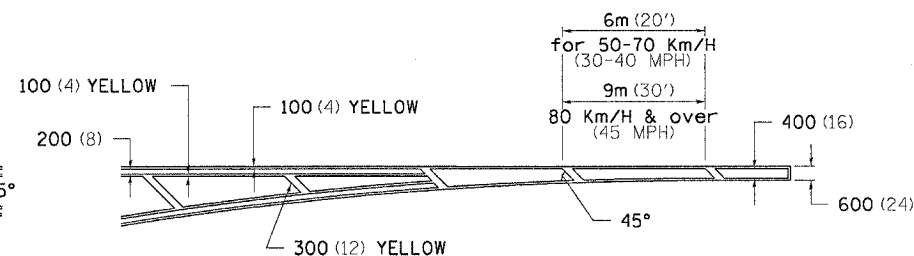
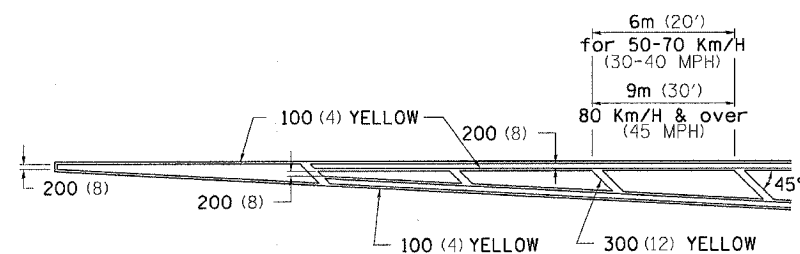
LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS.

TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

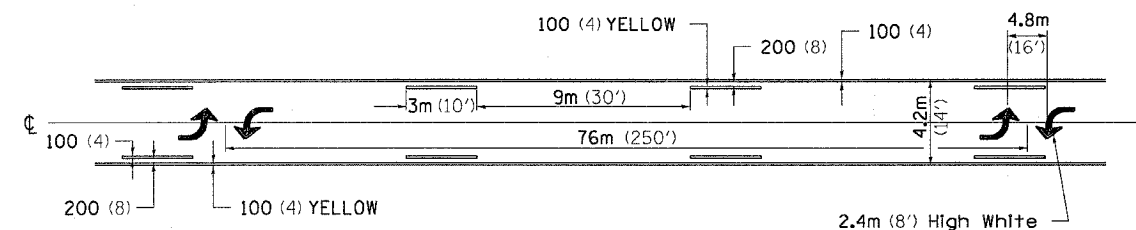
ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

# TYPICAL PAVEMENT MARKINGS

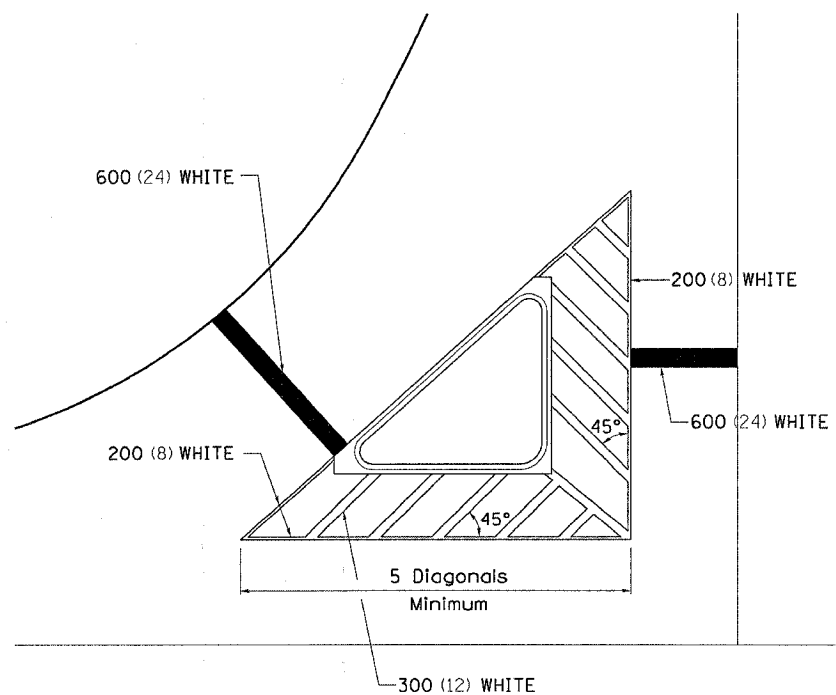
## TYPICAL PAVEMENT MARKING FOR FLUSH MEDIAN



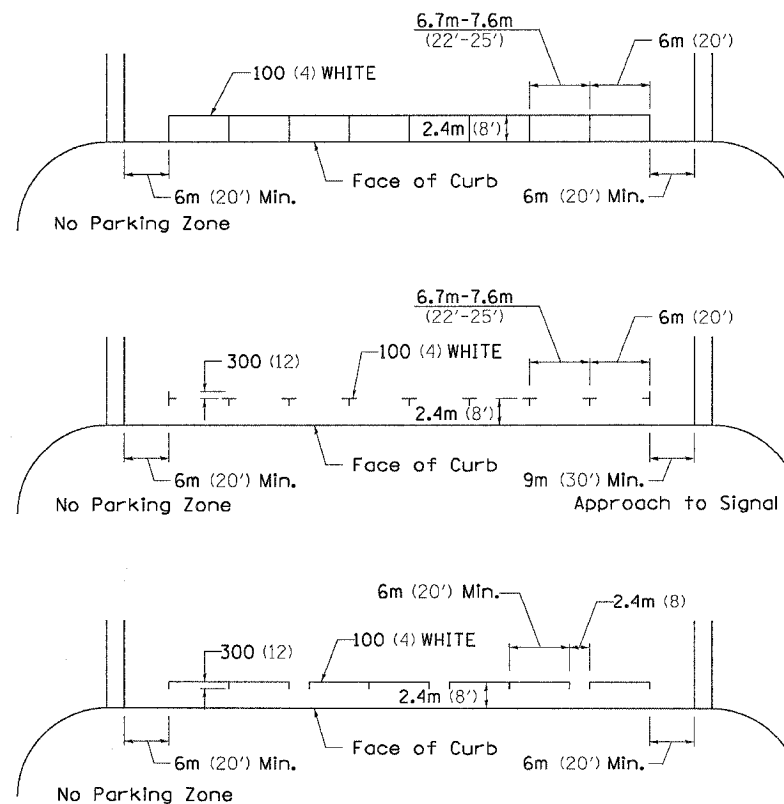
## MEDIAN PAVEMENT MARKING



## TYPICAL ISLAND OFFSET SHOULDER WIDTH



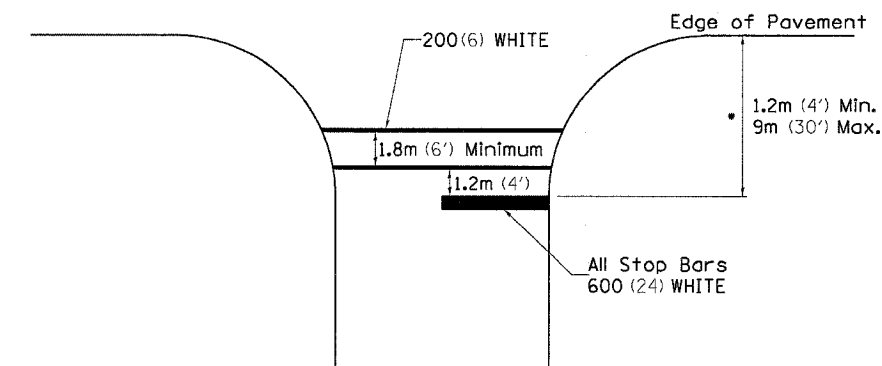
## TYPICAL PARKING SPACING



•• ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

## STANDARD CROSSWALK MARKING

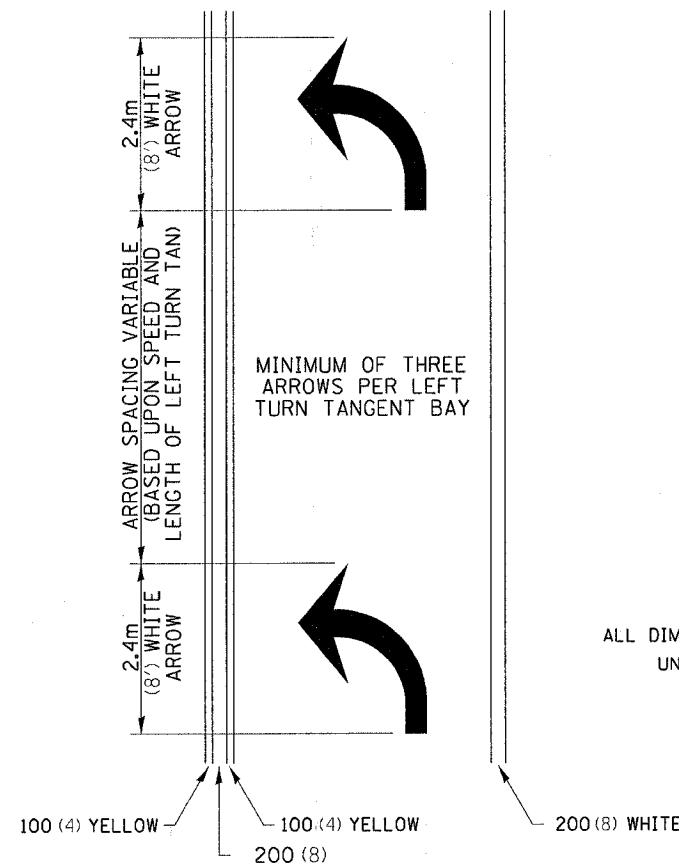
See Schedules for Locations



• Distance to the nearest edge of the intersecting roadway in the absence of a marked crosswalk.

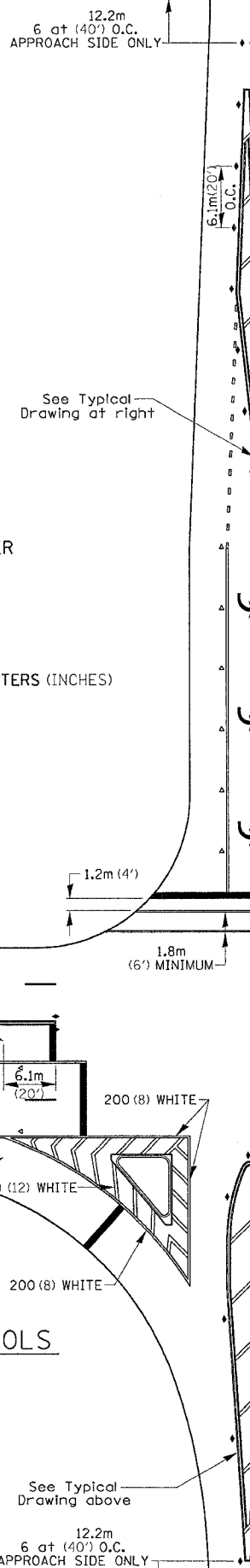
# TYPICAL PAVEMENT MARKINGS

## ARROW LAYOUT

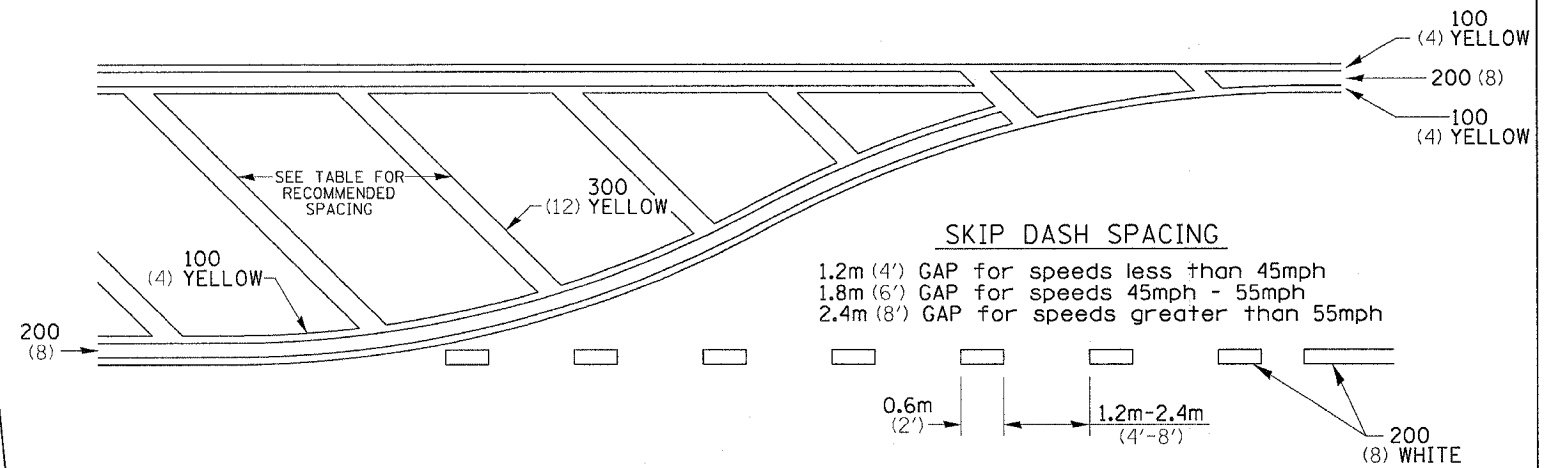


- ▲ ONE-WAY AMBER MARKER
- △ ONE-WAY CRYSTAL MARKER
- ◆ TWO-WAY AMBER MARKER

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



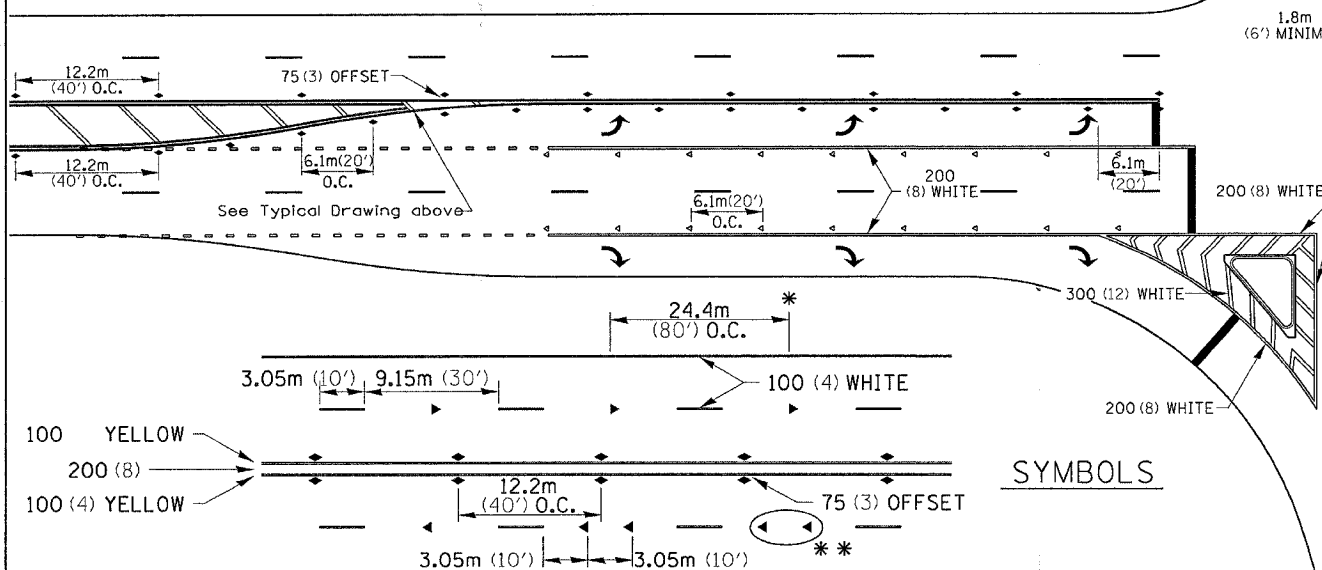
## TYPICAL PAVEMENT MARKING FOR FLUSH MEDIAN



## RECOMMENDED SPACING BETWEEN DIAGONALS (IN FEET)

Speed Limit Range	Continuous Median Area	Intersection Channelization	Objects (Islands)
less than 50Km/H (30MPH)	15.3m (50')	4.53m (15')	3.05m (10')
50-60Km/H (30-40MPH)	22.9m (75')	6.1m (20')	4.53m (15')
70Km/H (45MPH) & over	22.9m (75')	9.05m (30')	6.1m (20')

NOTE: If the spacing recommended in the Table does not permit at least five diagonal lines in the area being marked, the spacing from the next lowest speed range should be used. The recommended spacing is measured parallel to the pavement center line.



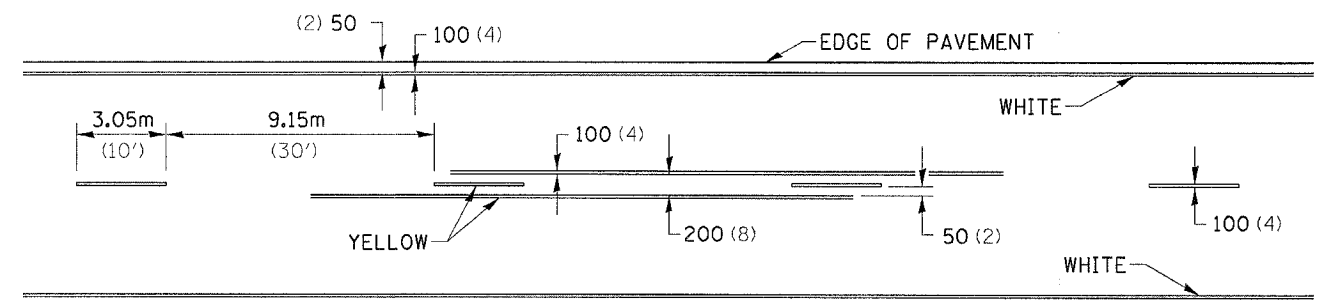
- \* REDUCE TO 12.2m (40') O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 15Km/H (10MPH) LOWER THAN POSTED SPEEDS.
- \*\* USE DOUBLE MARKERS WHEN ADT ≥ 25,000

## MULTI-LANE / UNDIVIDED

## SYMBOLS

See Typical Drawing above  
 12.2m (40') O.C. APPROACH SIDE ONLY

## TYPICAL PAVEMENT MARKING FOR TWO LANE SECTION - NO PASSING ZONES



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