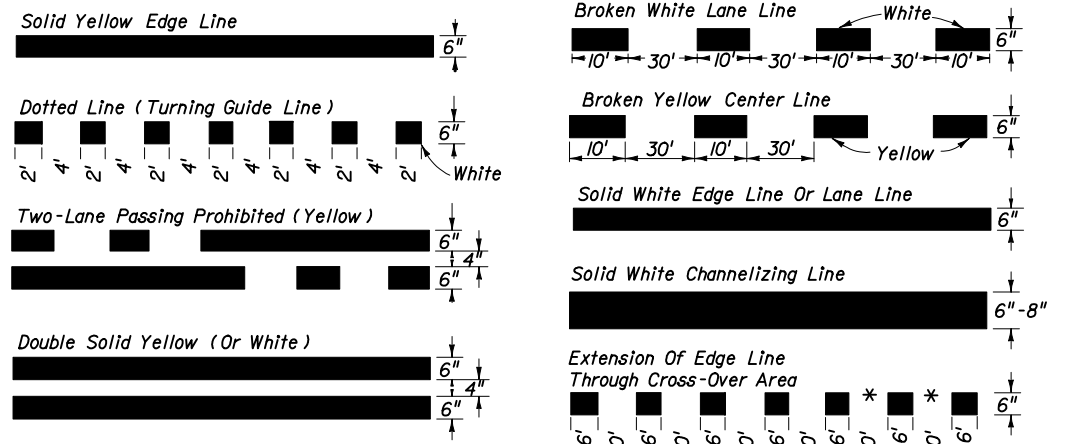


NOTE: When arrow and pavement message are used together, the arrow shall be located down stream of the pavement message and shall be separated from the pavement message by a distance of 25' (Base of the arrow to the base of the message).

DIMENSIONS ARE WITHIN 1" ±

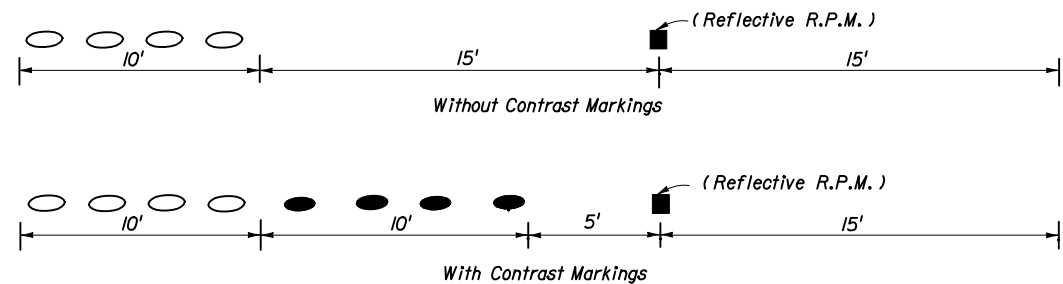
**PAVEMENT ARROW AND MESSAGE DETAILS**



**TYPES OF PERMANENT LONGITUDINAL LINES**

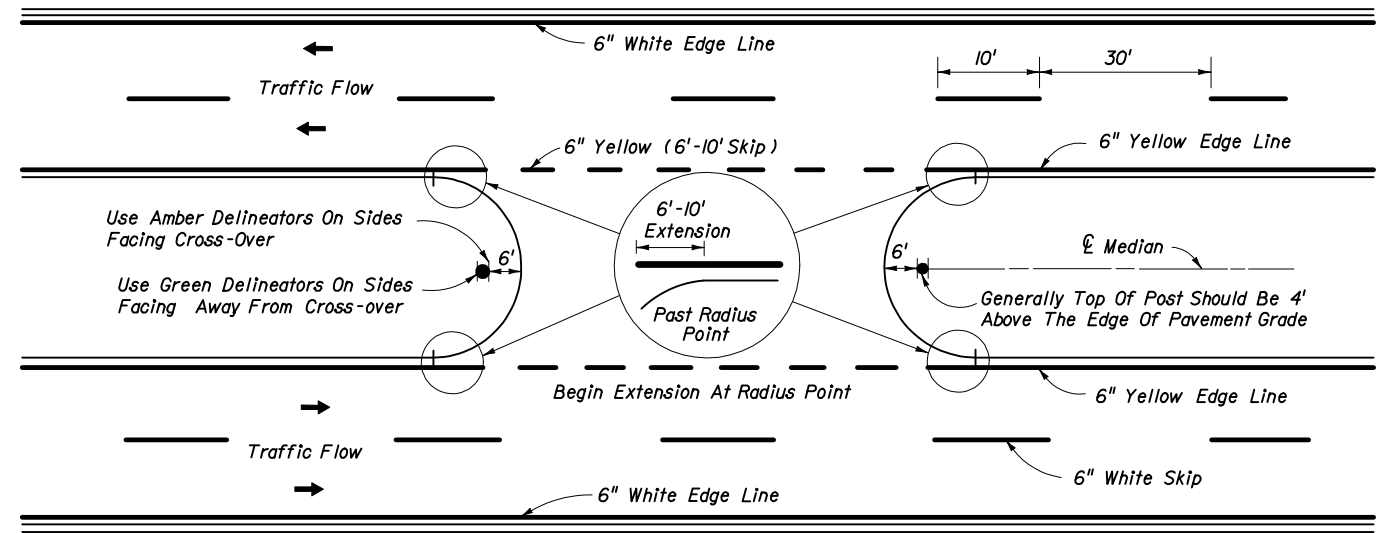
\*White Or Yellow

**BASIC COLOR RULE**  
 White lines separate traffic in the same direction.  
 Yellow lines separate traffic in opposing directions.  
 Yellow dotted lines may be used in special cases.



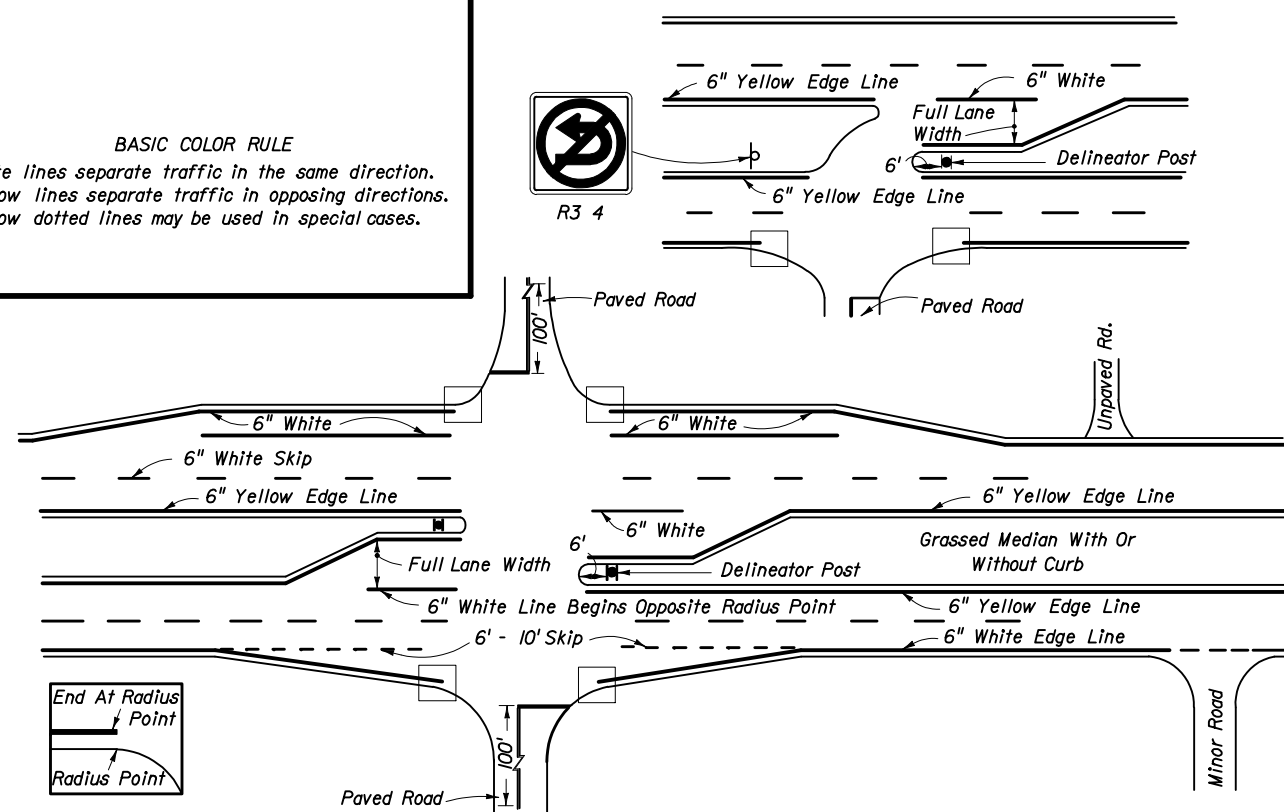
NOTE: Ceramic Markers should not be installed unless specifically called for in the plans. Use is limited to high volume sections with ADT's greater than 50,000 where lane changing is to be discouraged or other areas where channelization is required.

**NON-REFLECTIVE CERAMIC PAVEMENT MARKER PLACEMENT**

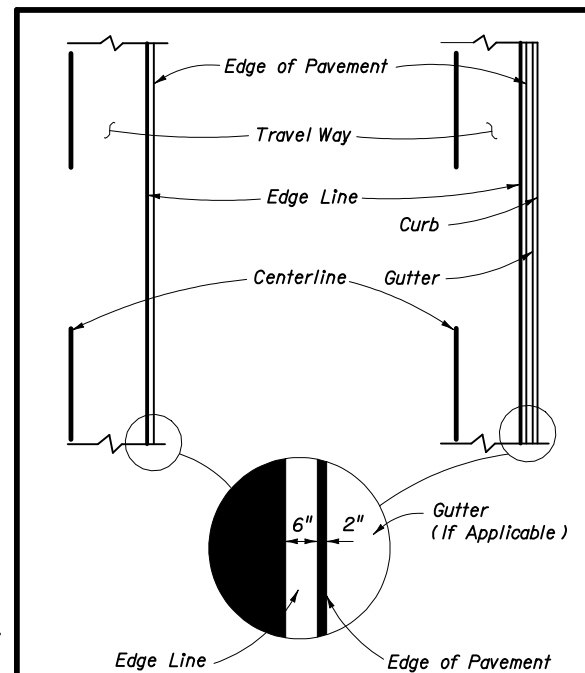


**PAVEMENT MARKINGS AND DELINEATORS FOR MEDIAN CROSS-OVER**

NOTE:  
 Markings applied to median noses shall be yellow in color.



**PAVEMENT MARKINGS FOR INTERSECTIONS WITH MAJOR AND MINOR ROADS**

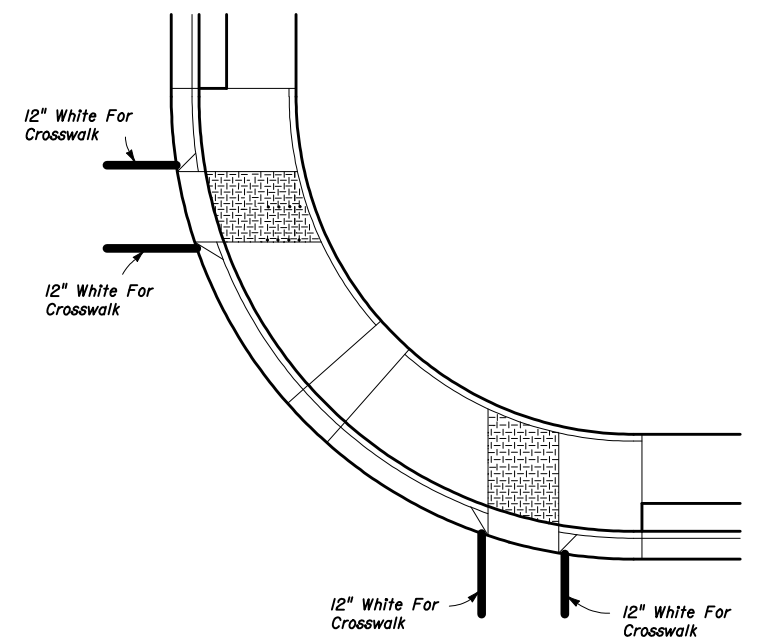
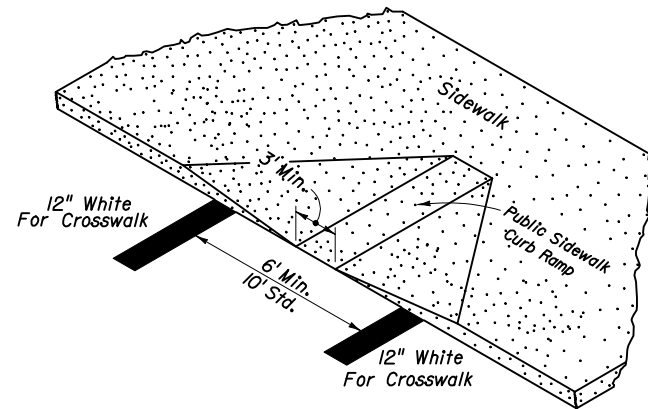
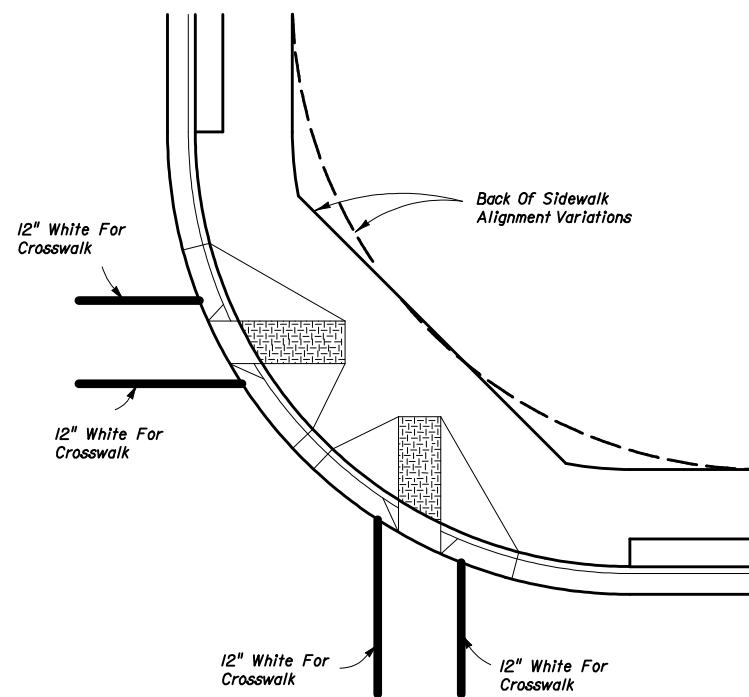


**PLACEMENT OF EDGE LINES**

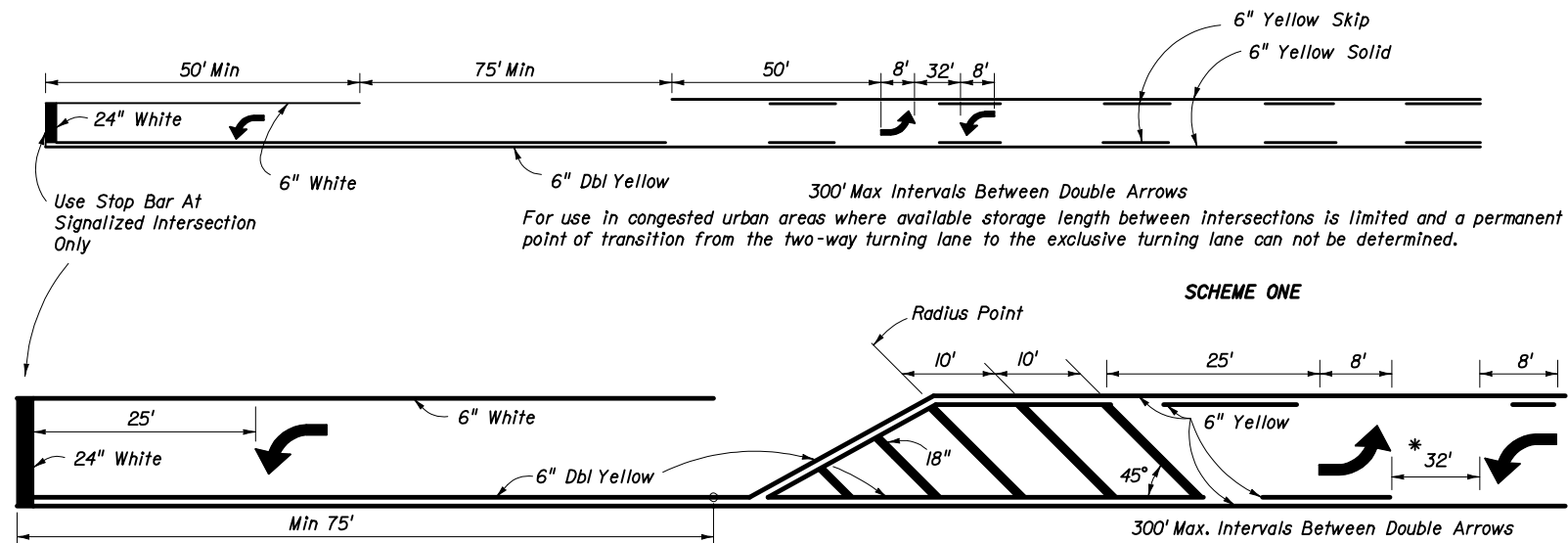
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

**SPECIAL MARKING AREAS**

Names	Dates	Approved By		
Designed By	8-78	C. Clark & Scott		
Drawn By		State Traffic Standards Engineer		
Checked By	8-78	Revision	Sheet No.	Index No.
		00	1 of 13	17346



**TYPICAL CROSSWALK MARKINGS FOR CURB RAMPS**



**SCHEME ONE**

**SCHEME TWO**

**(WITH SINGLE LANE LEFT TURN CHANNELIZATION)  
TWO WAY LEFT TURN LANE**

Use Stop Bar At Signalized Intersection Only

300' Max Intervals Between Double Arrows  
For use in congested urban areas where available storage length between intersections is limited and a permanent point of transition from the two-way turning lane to the exclusive turning lane can not be determined.

Radius Point  
10' 10' 25' 8' 8'

6" Yellow Skip  
6" Yellow Solid

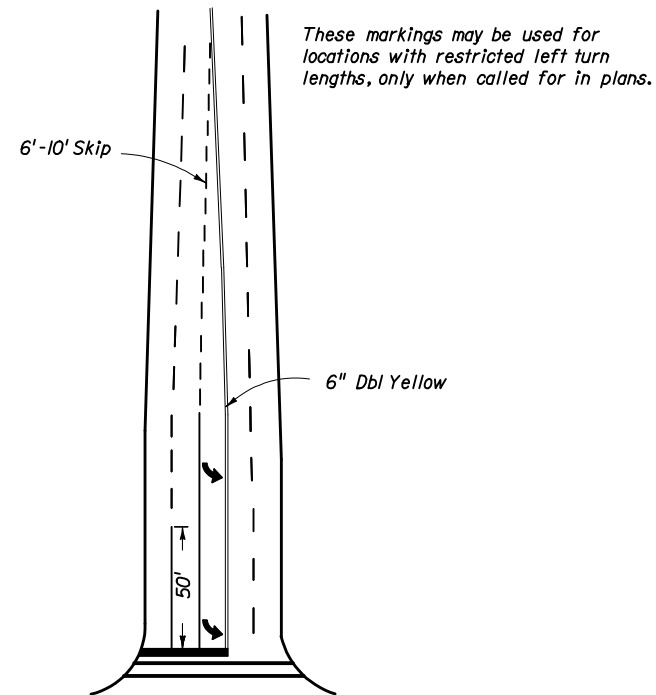
24" White  
6" White  
6" Dbl Yellow  
6" Yellow  
18" 45°  
32'

300' Max. Intervals Between Double Arrows

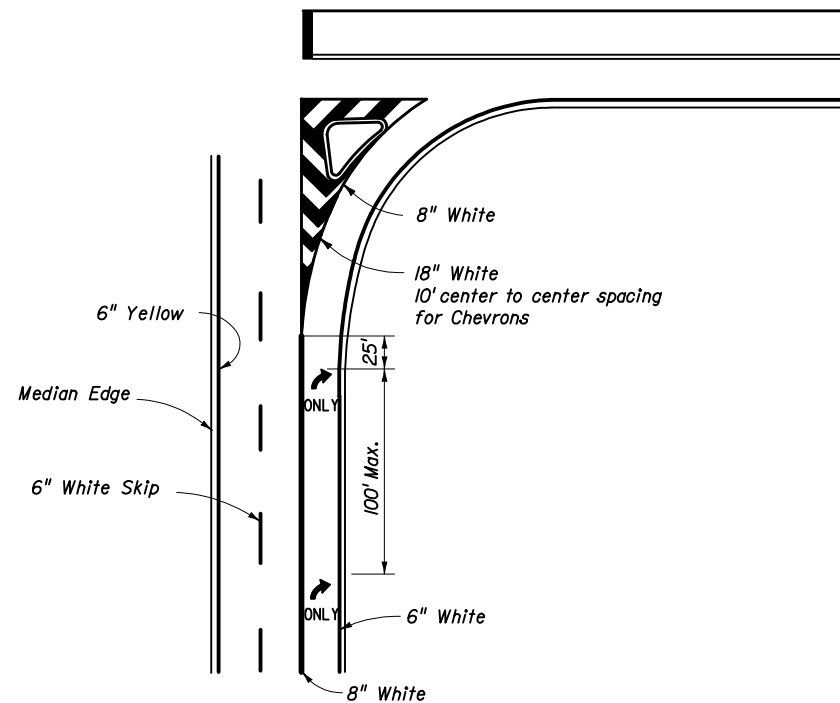
\*Typical spacing reference page 3B-6 in the M.U.T.C.D.

For use in rural & suburban areas where an adequate storage lane length can be specifically determined.

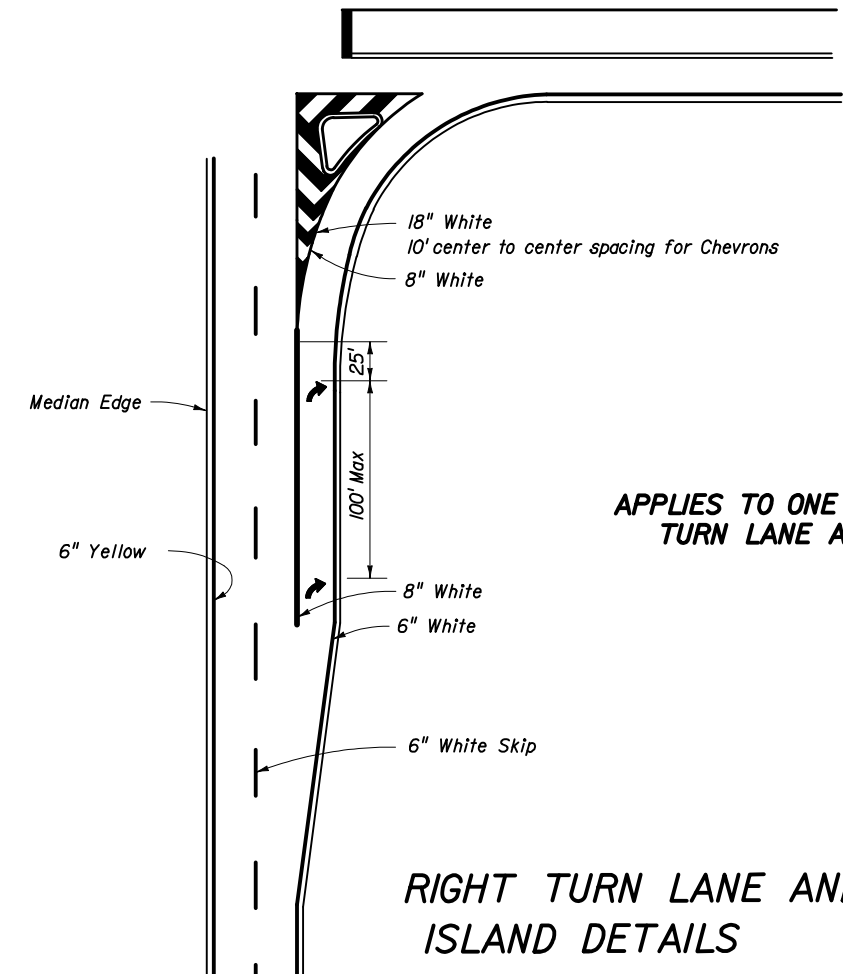
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION				
<b>SPECIAL MARKING AREAS</b>				
Designed By	Names	Dates	Approved By	
Drawn By		9-76	<i>Charles Scott</i> State Traffic Standards Engineer	
Checked By		9-76	Revision	Sheet No. Index No.
			02	2 of 13 17346



RESTRICTED LEFT TURN MARKING



RIGHT TURN LANE DROP AND ISLAND DETAILS  
LEFT TURN LANE DROP IS MIRROR IMAGE

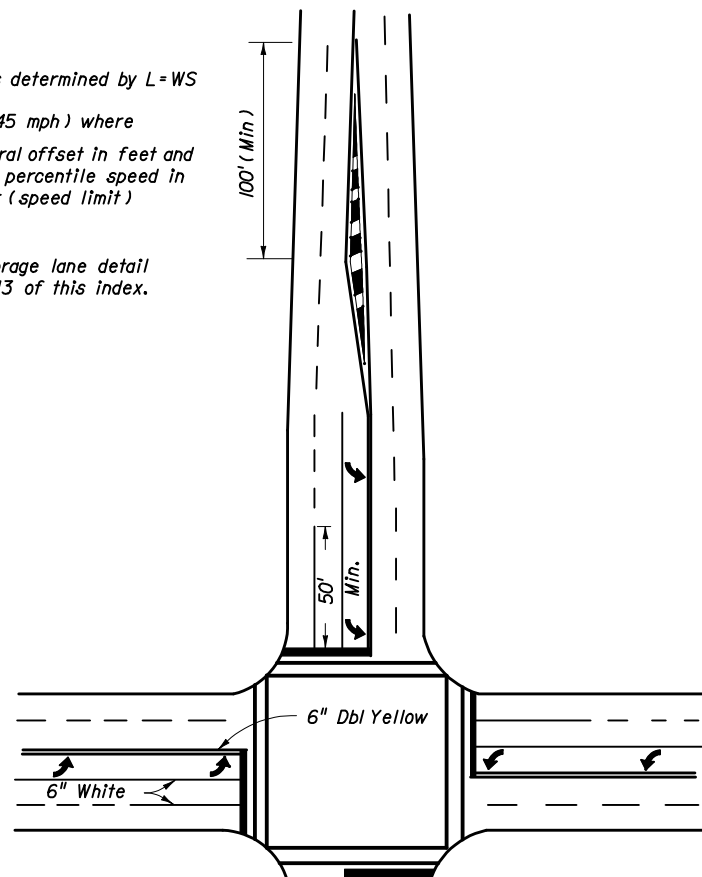


APPLIES TO ONE WAY LEFT TURN LANE ALSO

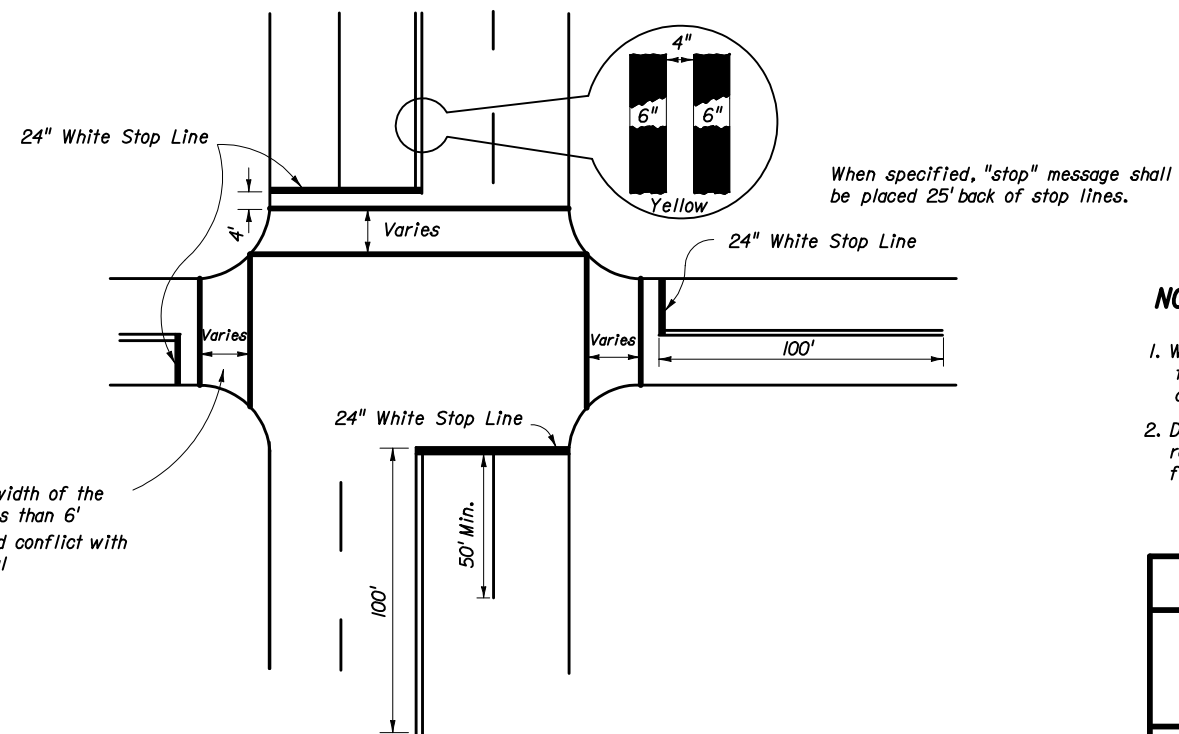
RIGHT TURN LANE AND ISLAND DETAILS

100' Minimum or as determined by  $L = WS$   
( $L = \frac{WS^2}{60} < 45 \text{ mph}$ ) where  
W is the lateral offset in feet and  
S is the 85th percentile speed in miles per hour (speed limit)

For left turn storage lane detail see sheet 2 of 13 of this index.



TYPICAL INTERSECTION 2 THRU LANES PLUS LEFT TURN LANE, WITH CROSSWALK



Width of crosswalk to equal width of the adjacent sidewalk, but not less than 6'  
Crosswalk locations shall avoid conflict with drainage inlets when practical

STOP BARS, CROSSWALKS AND DOUBLE CENTER LINE DETAILS

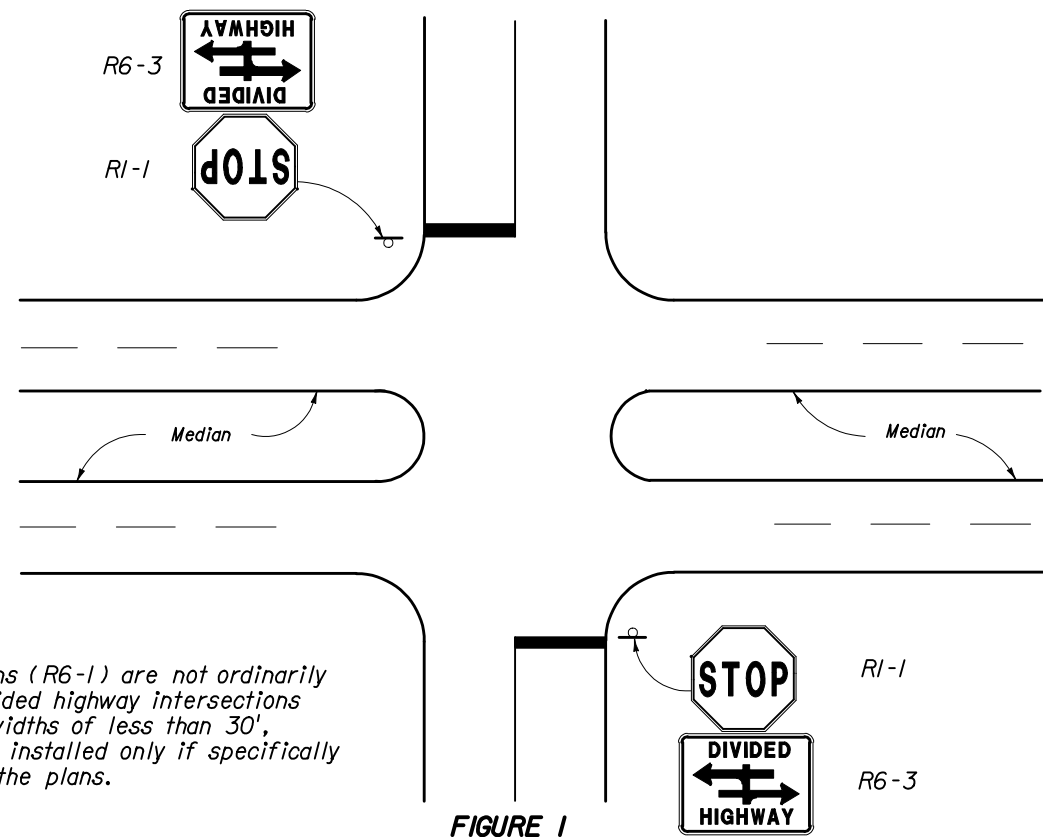
NOTES:

1. When public sidewalk curb ramps are present, refer to sheet 2 of 13 & 7 of 13 of this Index 17346 and Index No. 304 for crosswalk widths.
2. Double yellow longitudinal center lines on all roadway approaches shall be extended back 100' for projects involving intersection improvements only.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

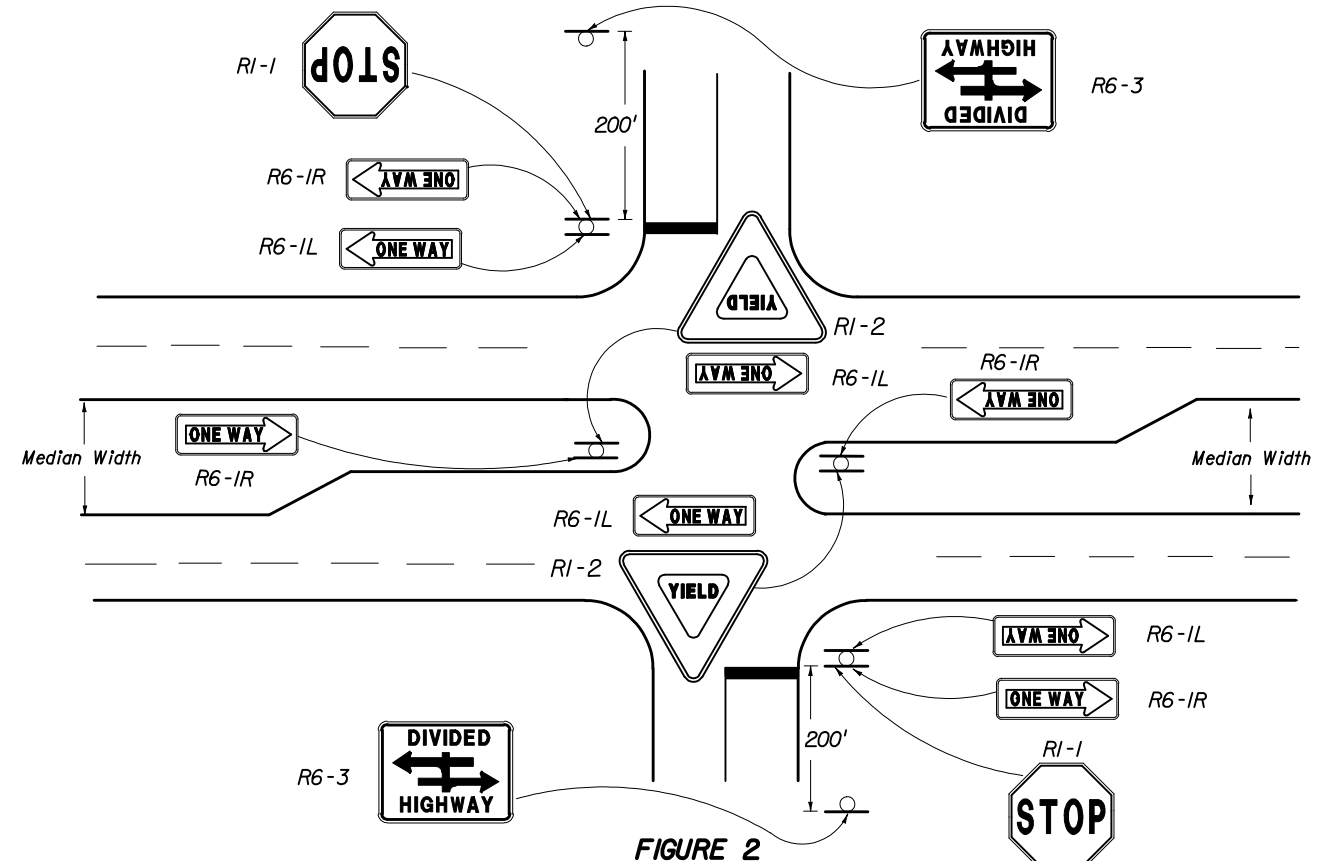
SPECIAL MARKING AREAS

Designed By	Names	Dates	Approved By
Drawn By		9-76	<i>Charles Scott</i> State Traffic Standards Engineer
Checked By		9-76	Revision
			Sheet No. 3 of 13
			Index No. 17346



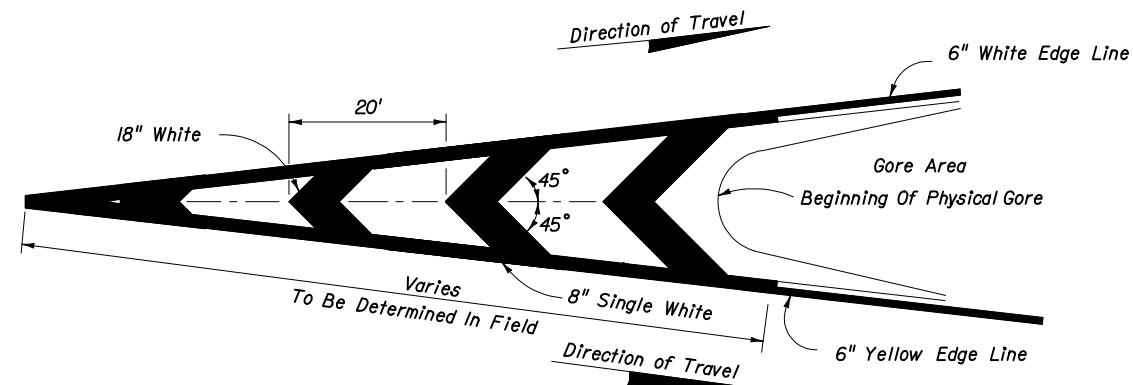
ONE WAY signs (R6-1) are not ordinarily needed at divided highway intersections with median widths of less than 30', and should be installed only if specifically called for in the plans.

FIGURE 1  
MEDIAN WIDTHS UNDER 30'

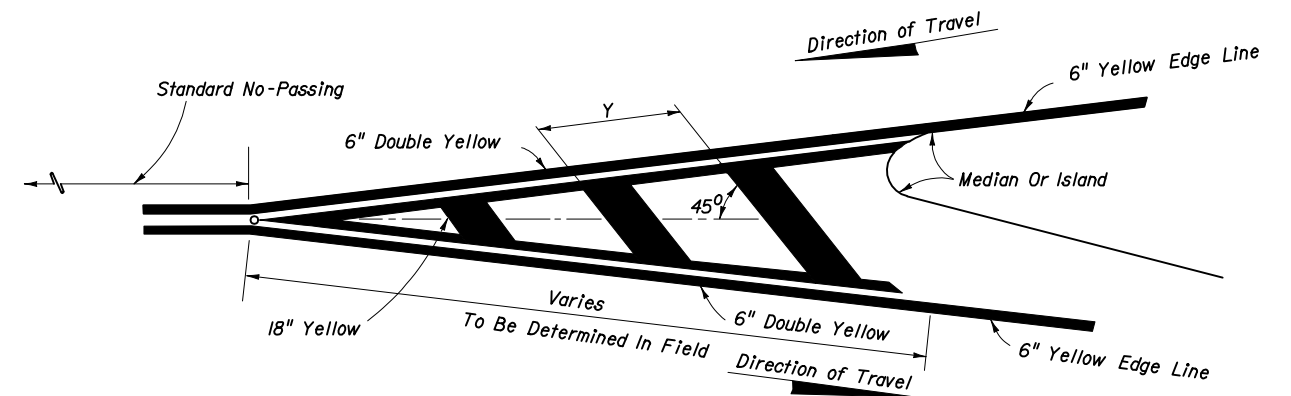


ONE-WAY SIGNS ON DIVIDED HIGHWAY INTERSECTIONS

FIGURE 2  
MEDIAN WIDTHS 30' AND GREATER



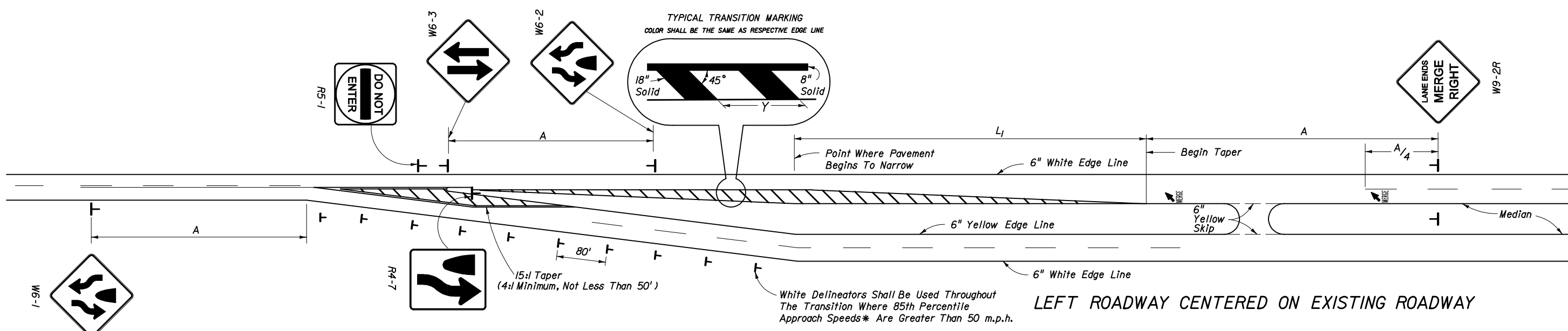
PAVEMENT MARKINGS FOR TRAFFIC CHANNELIZATION AT GORE  
(TRAFFIC FLOWS IN SAME DIRECTION)



PAVEMENT MARKING FOR TRAFFIC SEPARATION  
(TRAFFIC FLOWS IN OPPOSING DIRECTIONS)

POSTED (DAY) SPEED LIMIT M.P.H.	"y" ft
30 OR LESS	10
35	20
40	20
45	30
50 OR MORE	40

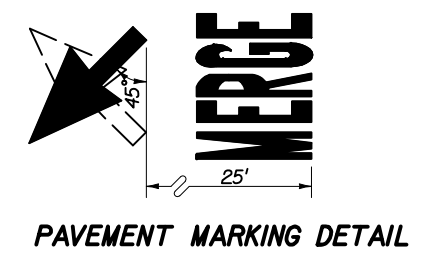
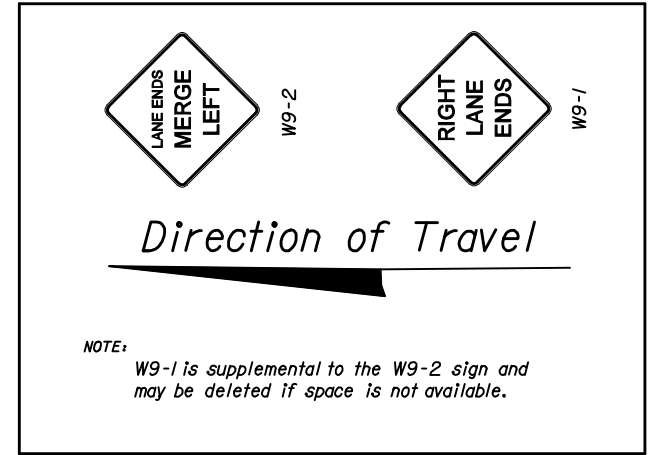
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION				
SPECIAL MARKING AREAS				
Names	Dates	Approved By		
Designed By	8-78	C. Clark A. Scott State Traffic Standards Engineer		
Drawn By		Revision	Sheet No.	Index No.
Checked By	8-78	02	4 of 13	17346



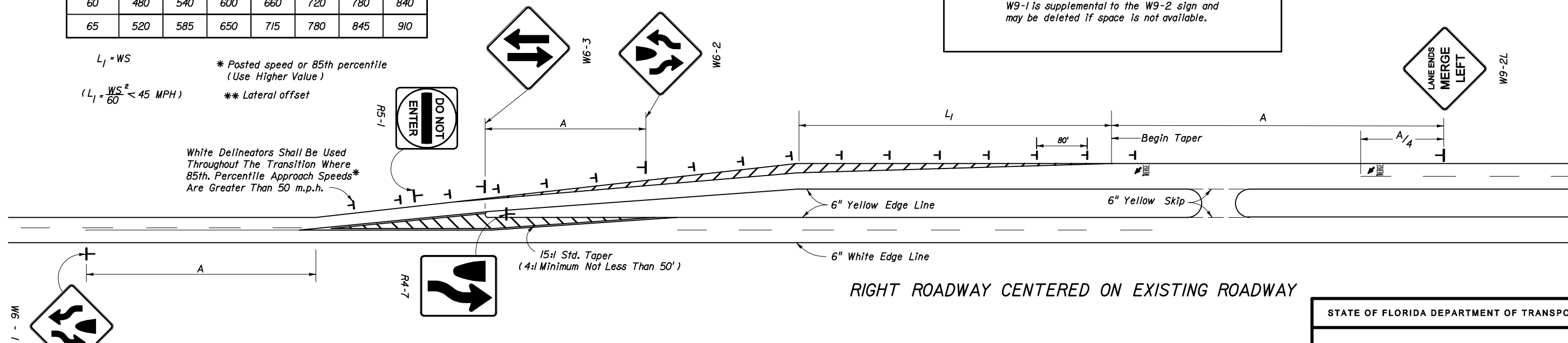
* S	TRANSITION DISTANCE $L_1$ (FEET)							
	** W	8	9	10	11	12	13	14
30	120	135	150	165	180	195	210	
35	165	185	205	225	245	265	285	
40	215	240	270	295	320	350	375	
45	360	405	450	495	540	585	630	
50	400	450	500	550	600	650	700	
55	440	495	550	605	660	715	770	
60	480	540	600	660	720	780	840	
65	520	585	650	715	780	845	910	

SPEED M.P.H.*	"A" (FT.)
55	700
50	625
45	550
40	475
30	325

POSTED (DAY) SPEED LIMIT M.P.H.	"y" (FT.)
30 OR LESS	10
35	20
40	20
45	30
50 OR MORE	40



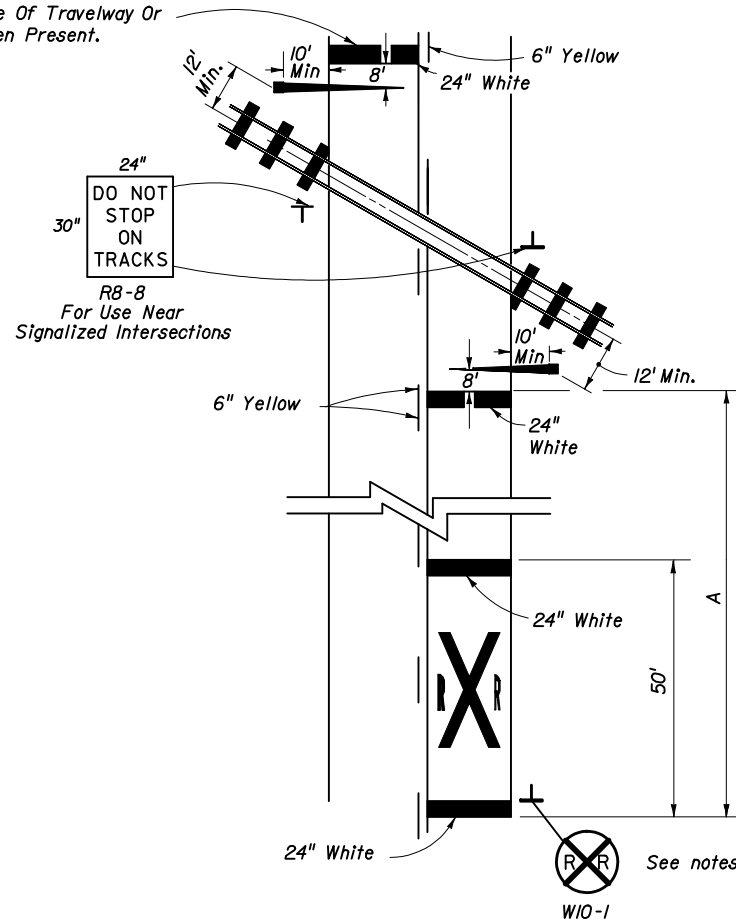
$L_1 = WS$   
 \* Posted speed or 85th percentile (Use Higher Value)  
 (\*\*  $L_1 = \frac{WS^2}{60} < 45 \text{ MPH}$ ) \*\* Lateral offset



SCHMES FOR TRANSITION - 2 LANE / 4 LANE ROADWAY

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION				
<b>SPECIAL MARKING AREAS</b>				
Designed By	Names	Dates	Approved By	
Drawn By			<i>Charles A. Scott</i> State Traffic Standards Engineer	
Checked By	Revision	Sheet No.	Index No.	
	8-78	02	5 of 13	17346

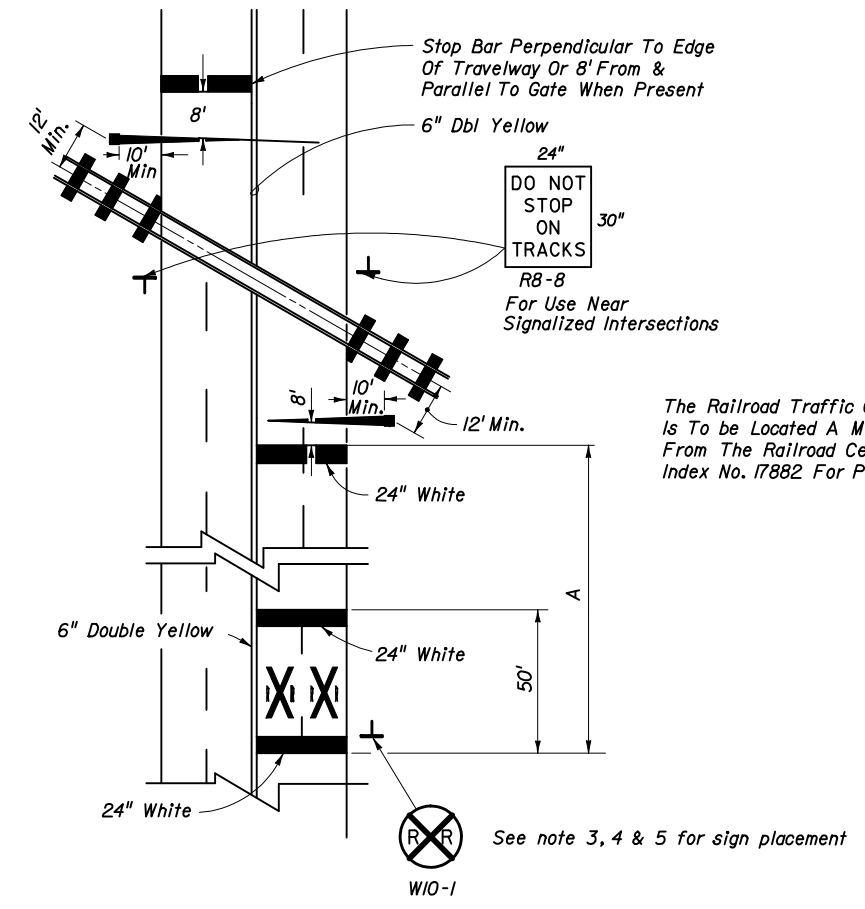
Stop Bar Perpendicular To Edge Of Travelway Or 8' From & Parallel To Gate When Present.



The Railroad Traffic Control Device Is To Be Located A Minimum Of 12' From The Railroad Centerline. See Index No. 17882 For Protection Devices.

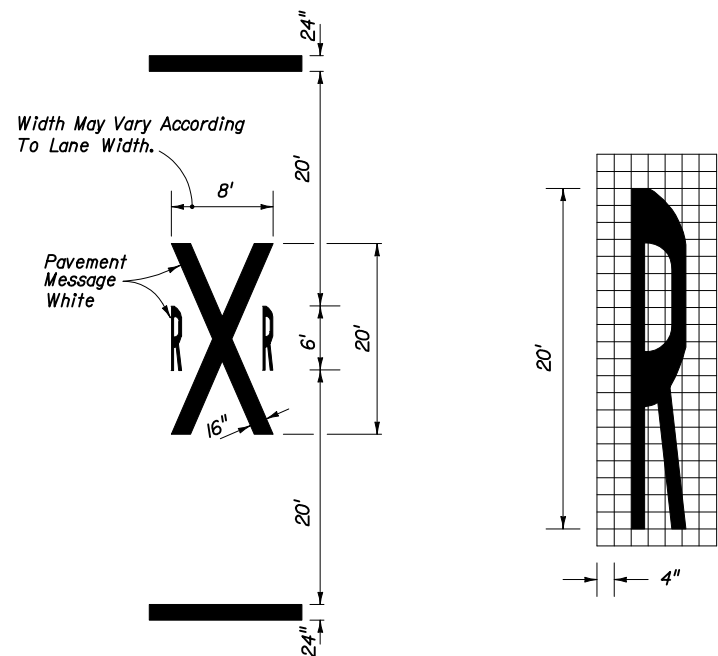
**RAILROAD CROSSING AT 2-LANE ROADWAY**

Stop Bar Perpendicular To Edge Of Travelway Or 8' From & Parallel To Gate When Present



The Railroad Traffic Control Device Is To Be Located A Minimum Of 12' From The Railroad Centerline. See Index No. 17882 For Protection Devices.

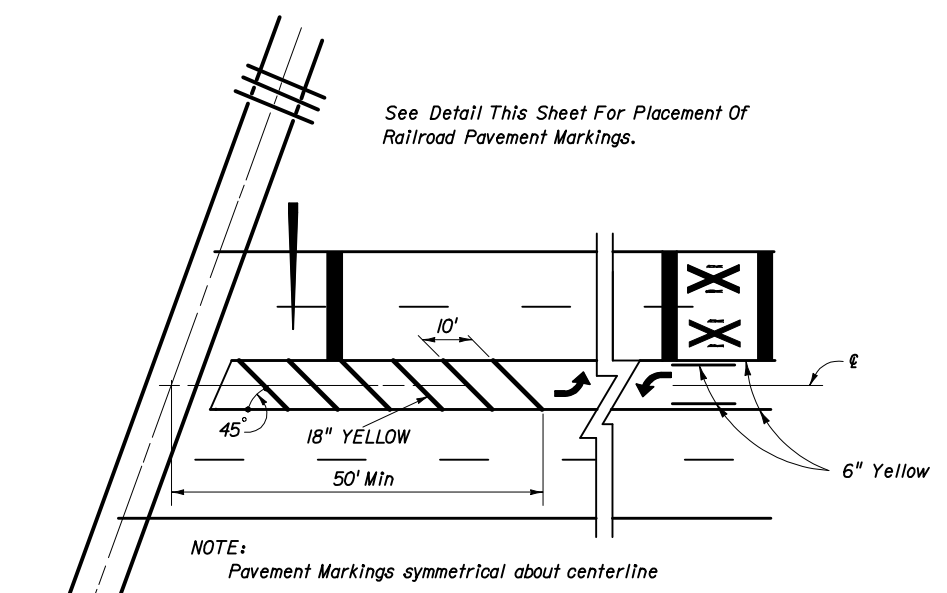
**RAILROAD CROSSING AT 4-LANE ROADWAY**



89 s.f.\*

\*Does not include 24" bars.

**TYPICAL PAVEMENT MARKINGS FOR R/R CROSSING**



**PAVEMENT MARKINGS FOR TERMINATION OF TWO WAY LEFT TURN AT R/R CROSSINGS**

**NOTES:**

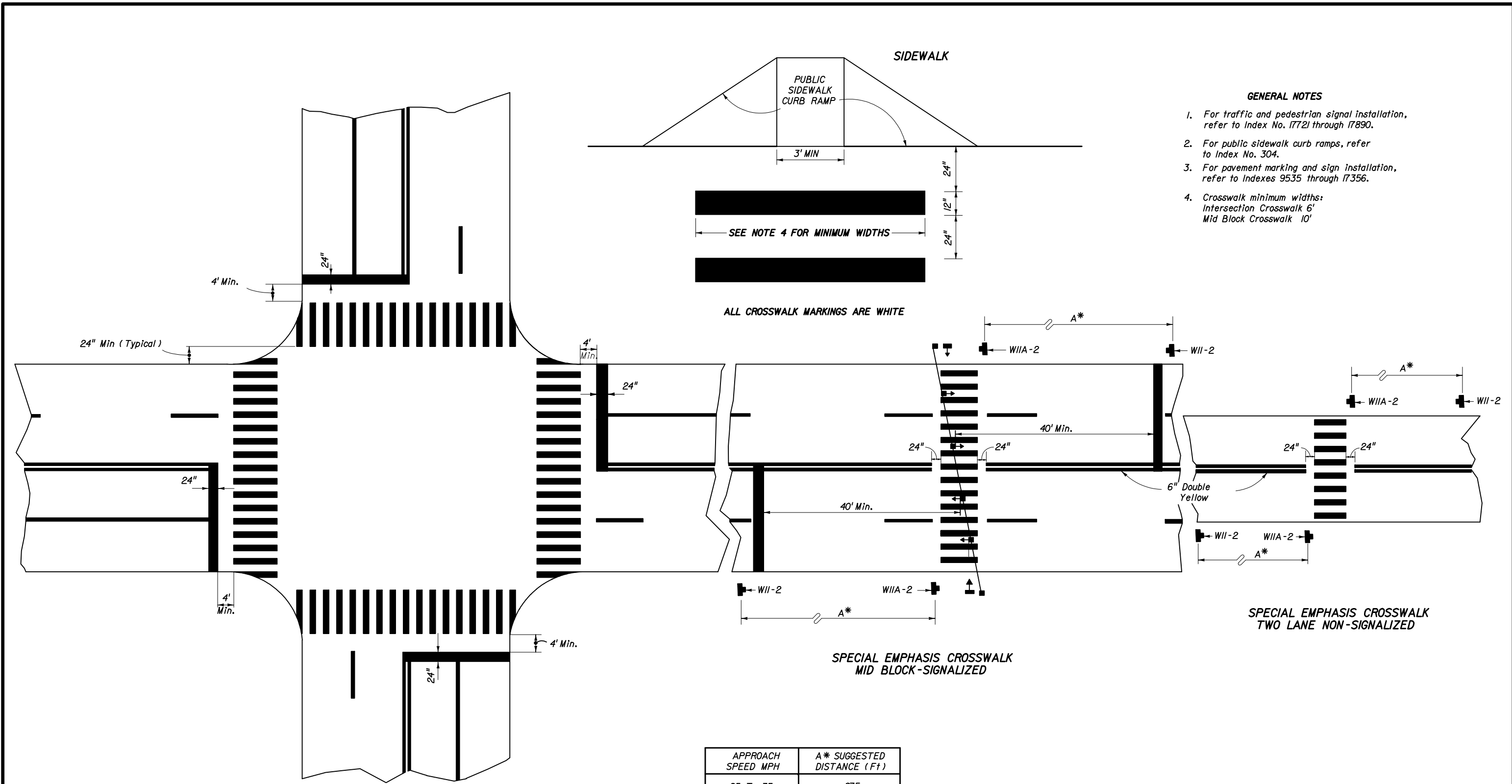
1. When computing pavement messages, quantities do not include transverse lines.
2. When dynamic devices are not present or are to be installed, the crossbuck shall be located at the future location of the RR gate or signal and gate in accordance with Index No. 17882.
3. Placement of sign W10-1 in a residential or business district, where low speeds are prevalent, the W10-1 sign may be placed a minimum distance of 100' from the crossing. Where street intersections occur between the RR pavement message and the tracks an additional W10-1 sign & additional pavement message should be used.
4. Recommended location for FTP-38 or FTP 38B sign, 100' urban & 300' rural in advanced of the crossing.
5. A portion of the pavement marking symbol should be directly opposite the W10-1 sign.

SPEED MPH	A (Ft)
65	650
60	550
55	450
50	375
45	300
40	225
35	150
30	100
Urban	50 Min.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

**SPECIAL MARKING AREAS**

Names	Dates	Approved By		
Designed By	6-76	Clark A. Scott State Traffic Standards Engineer		
Drawn By				
Checked By	6-76	Revision	Sheet No.	Index No.
		00	6 of 13	17346

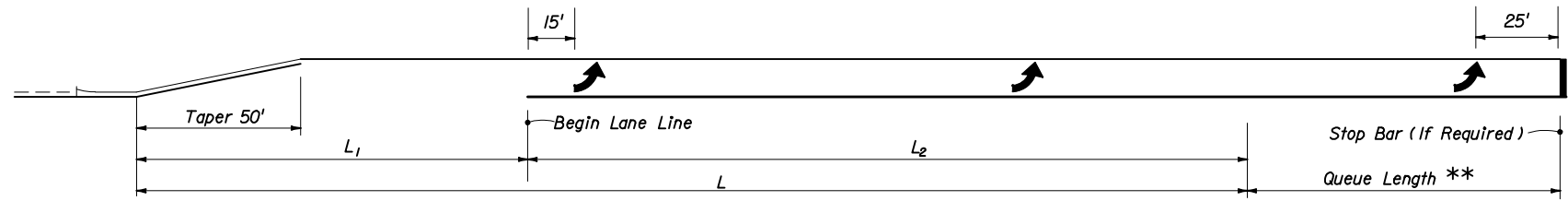


- GENERAL NOTES**
1. For traffic and pedestrian signal installation, refer to Index No. 17721 through 17890.
  2. For public sidewalk curb ramps, refer to Index No. 304.
  3. For pavement marking and sign installation, refer to Indexes 9535 through 17356.
  4. Crosswalk minimum widths:  
Intersection Crosswalk 6'  
Mid Block Crosswalk 10'

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

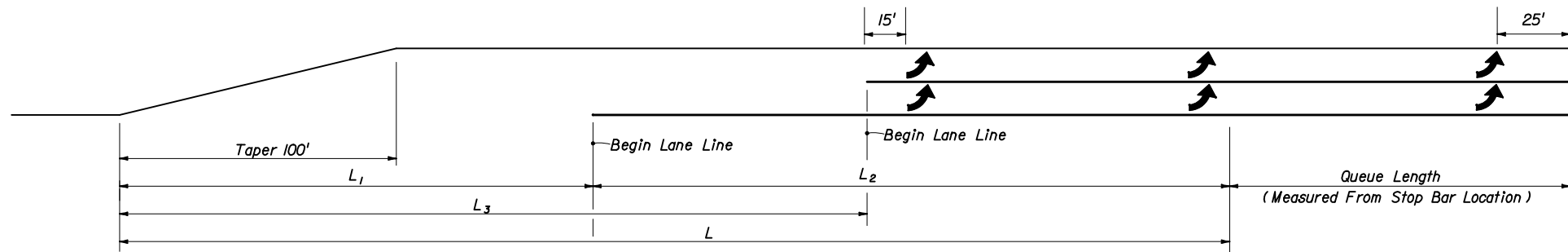
**SPECIAL MARKING AREAS**

Designed By	Names	Dates	Approved By
Drawn By		3-83	<i>Charles Scott</i> State Traffic Standards Engineer
Checked By	Revision	Sheet No.	Index No.
	00	7 of 13	17346

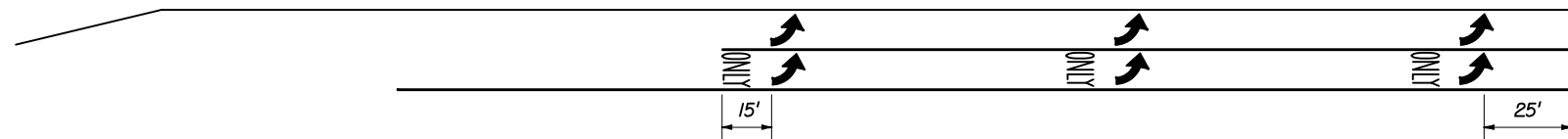


**SINGLE LEFT TURNS**

\*\* Queue Length Is Measured From The Median Nose Radial Point Or, When A Stop Bar Is Required, From The Stop Bar.

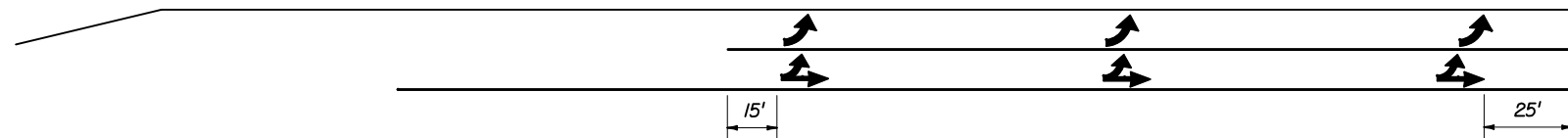


**DOUBLE LEFT TURNS**



Through Lane Becomes Exclusive Left Turn

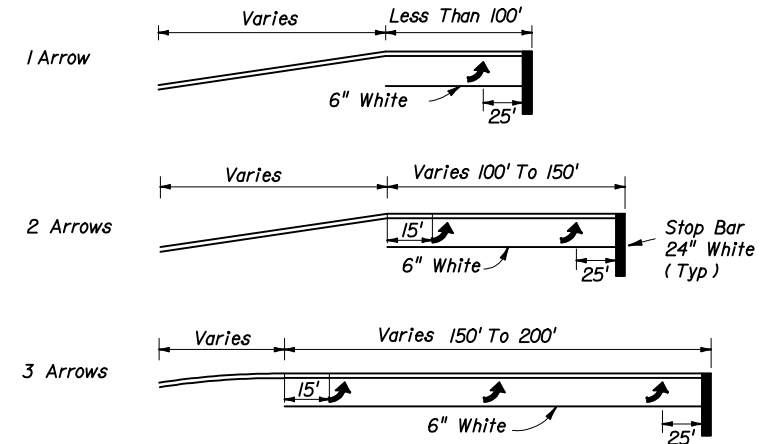
Pavement message ONLY is not required for created (shadowed) turn lanes, single or dual, where the driver must exit the thru lane to enter a turn lane.



Through Lane Becomes Optional Left Turn

**DOUBLE LEFT TURN MARKINGS**

TURN LANES - CURBED AND UNCURBED MEDIANS							
Design Speed (mph)	Clearance Distance L <sub>1</sub>	URBAN CONDITITONS			RURAL CONDITITONS		
		Brake To Stop Distance L <sub>2</sub>	Total Decel. Distance L	Clearance Distance L <sub>3</sub>	Brake To Stop Distance L <sub>2</sub>	Total Decel. Distance L	Clearance Distance L <sub>3</sub>
35	70'	75'	145'	110'	---	---	---
40	80'	75'	155'	120'	---	---	---
45	85'	100'	185'	135'	---	---	---
50	105'	135'	240'	160'	215'	320'	160'
55	125'	---	---	---	260'	385'	195'
60	145'	---	---	---	310'	455'	230'
65	170'	---	---	---	350'	520'	270'



Arrow should be evenly spaced between first and last arrow. Turn lanes longer than 200' add one arrow for each 100' additional length.

**ARROW SPACING**

**NOTES:**

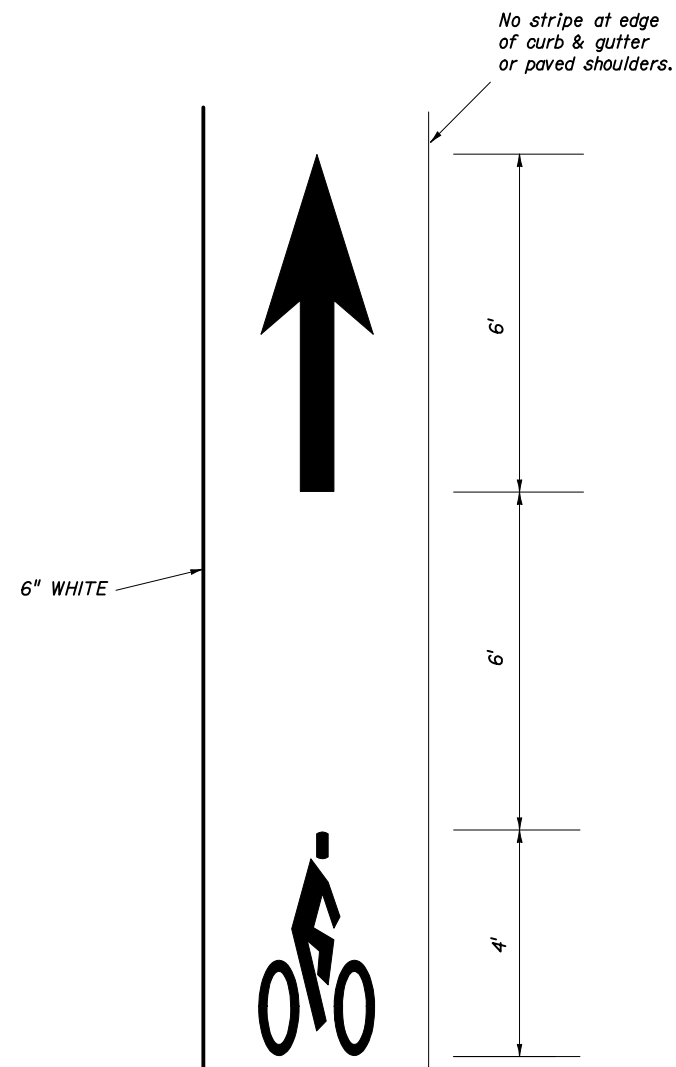
1. The "Begin Lane Line" locations are based on the standard lengths shown in Design Standard 301. These locations must be adjusted on a case by case basis for turn lanes not meeting the standard lengths.
2. Yellow left turn edge marking may be used adjacent to raised curb or grass medians if lane use is not readily apparent to drivers approaching a left turn storage lane.

Refer to Design Standard 301 for Roadway Details.

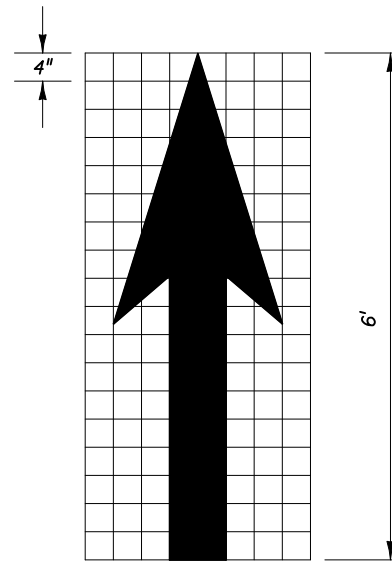
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION					
<b>SPECIAL MARKING AREAS</b>					
Names	Dates	Approved By <i>Charles Scott</i>			
Designed By	CAS	3-02	State Traffic Standards Engineer		
Drawn By	CAS	3-02	Revision	Sheet No.	Index No.
Checked By			02	8 of 13	17346



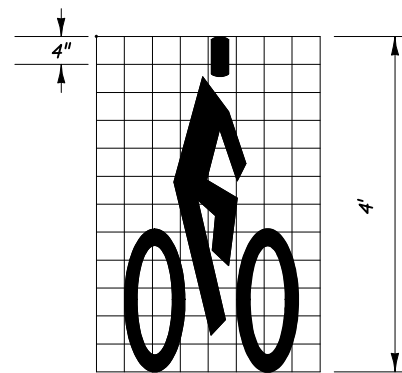
1. Recommended spacing of symbols: Immediately after intersections and major driveways and at a maximum spacing of 600 feet for urban sections and 1320 feet for rural sections.
2. Raised pavement markings and raised barriers can cause steering difficulties and should not be used to delineate bicycle lanes. All pavement markings and pavement messages shall be white.



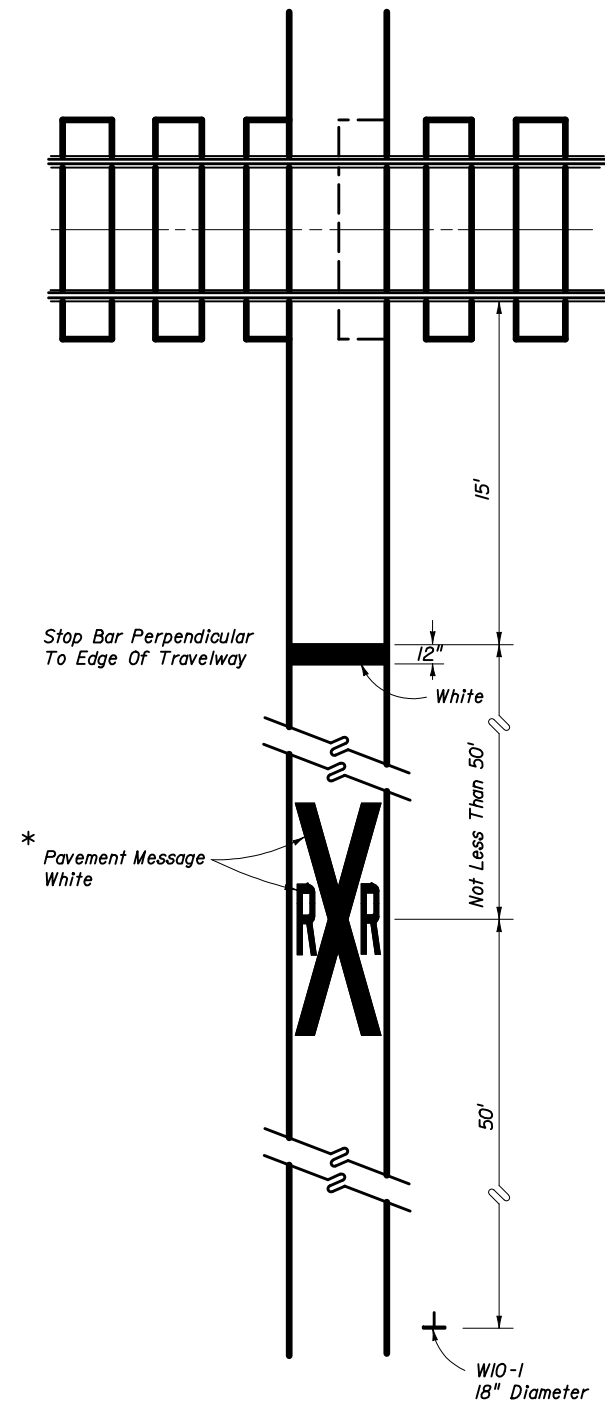
DETAIL OF BIKE LANE MARKINGS



4.2 s.f.

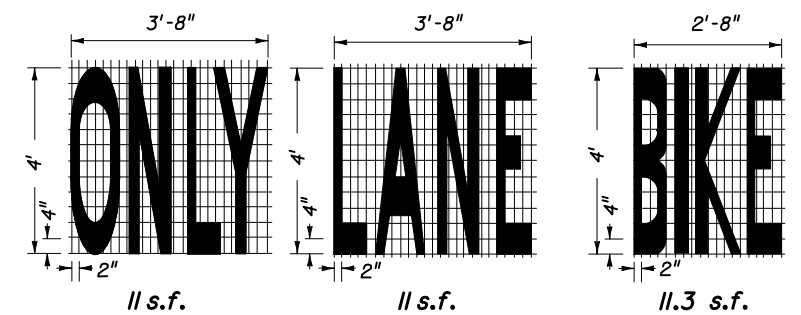
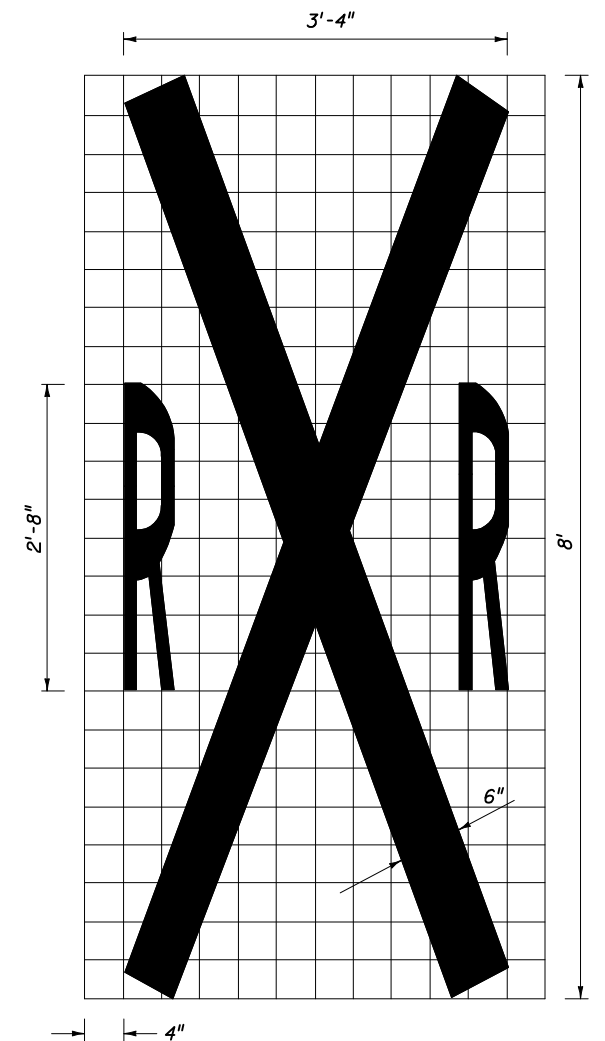


2.3 s.f.



\*NOTE

3. When used on a bike lane (adjacent to vehicle lane) markings shall be placed adjacent to markings for vehicles & W10-1 sign shall be sized and placed for vehicles.

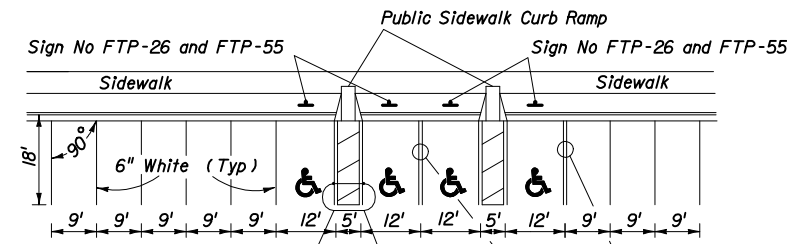
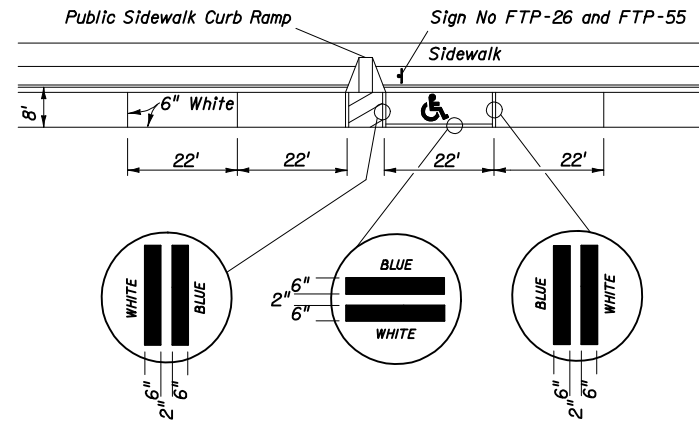


PAVEMENT MESSAGE DETAILS

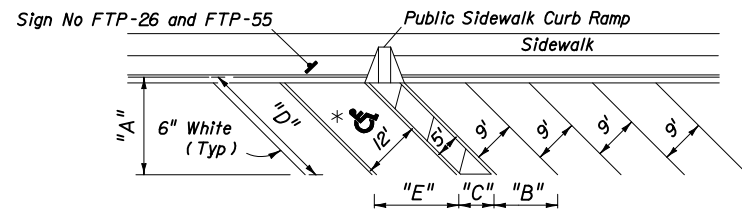
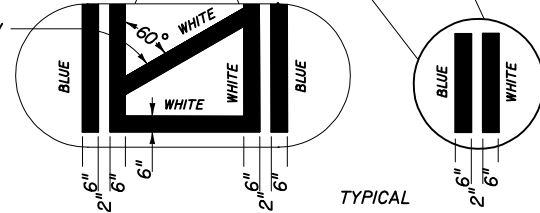
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

**SPECIAL MARKING AREAS  
(BICYCLE)**

Names	Dates	Approved By		
Designed By	8-84	Clark A. Scott State Traffic Standards Engineer		
Drawn By		Revision	Sheet No.	Index No.
Checked By		02	9 of 13	17346



3-6" white chevrons equally spaced per aisle.

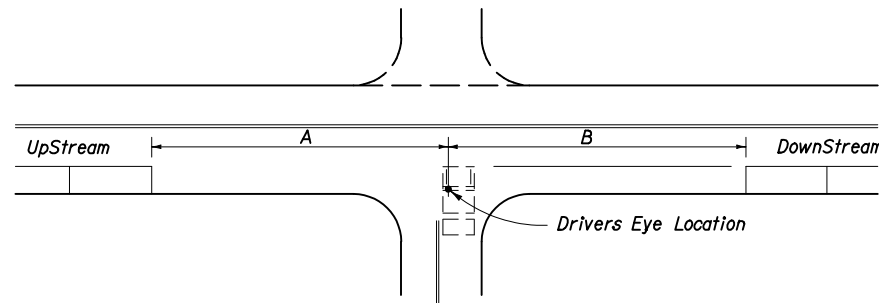


\* FOR ACCESSIBLE MARKINGS - SEE ABOVE

"DIMENSIONS"					
△°	"A"	"B"	"C"	"D"	"E"
45°	19'-1"	12'-9"	7'-0"	27'-0"	17'-0"
60°	20'-1"	10'-5"	5'-9"	23'-2"	13'-10"

- NOTES:
- Dimensions are to the centerline of markings.
  - An Access Aisle is required for each accessible space when angle parking is used.
  - Criteria for pavement markings only, not public sidewalk curb ramp locations. For ramp locations refer to plans.
  - Blue pavement markings shall be tinted to match shade 15180 of Federal Standards 595a.
  - The FTP-55 panel shall be mounted below the FTP-26 sign.

**PAVEMENT MARKING FOR PUBLIC SIDEWALK CURB RAMPS IN REST AREAS**

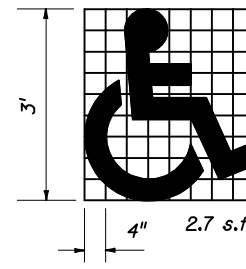
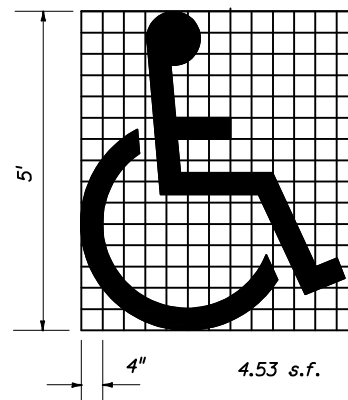


SPEED MPH	UP STREAM (A)	DOWN STREAM (B)	
		2 LANE	4 LANE
0-30	85'	60'	45'
35	100'	70'	50'

NOTES

- Distances measured longitudinally along the street from driver location of entering vehicle to end of parking restriction.
- Distances applicable to intersecting street, major driveways and other driveways to the extent practical.
- For non-signalized intersections, the values above shall be compared with the values for signalized intersections and the maximum restrictions implemented. These restrictions apply to both accessible and non-accessible parking.

**MINIMUM PARKING RESTRICTION FOR NON-SIGNALIZED INTERSECTIONS**

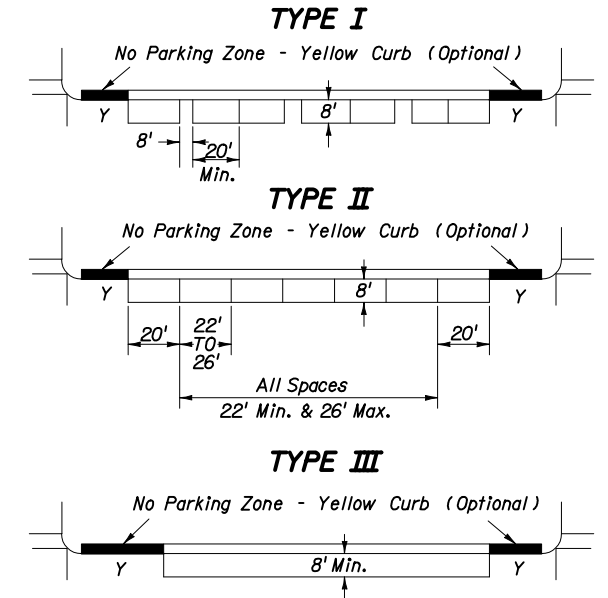


Use of pavement symbol in accessible parking spaces is optional, when used the symbol shall be 3' or 5' high and white in color.

**"UNIVERSAL SYMBOL OF ACCESSIBILITY"**

**GENERAL NOTES (Signalized & Non-signalized)**

- For entrances to a one-way street, the downstream restriction may be reduced to 20'.
- Parking shall not be allowed within 20' of a crosswalk.
- All parking lane markings shall be 6" white.
- Parking lane lines shall be broken at driveways.
- Refer to Chapter 316, Fla. statutes, for laws governing parking spaces.
- Where curb and gutter is used, the gutter pan width may be included as part of the minimum width of parking lane, but desirably the lane width should be in addition to that of the gutter pan.



SPEED LIMIT MPH	SIGNALIZED INTERSECTIONS	DISTANCE FROM CURB RADIUS (Y)
0 - 30	30	
35	50	

**PARKING RESTRICTION (FT.) FOR SIGNALIZED INTERSECTION**

NOTES:

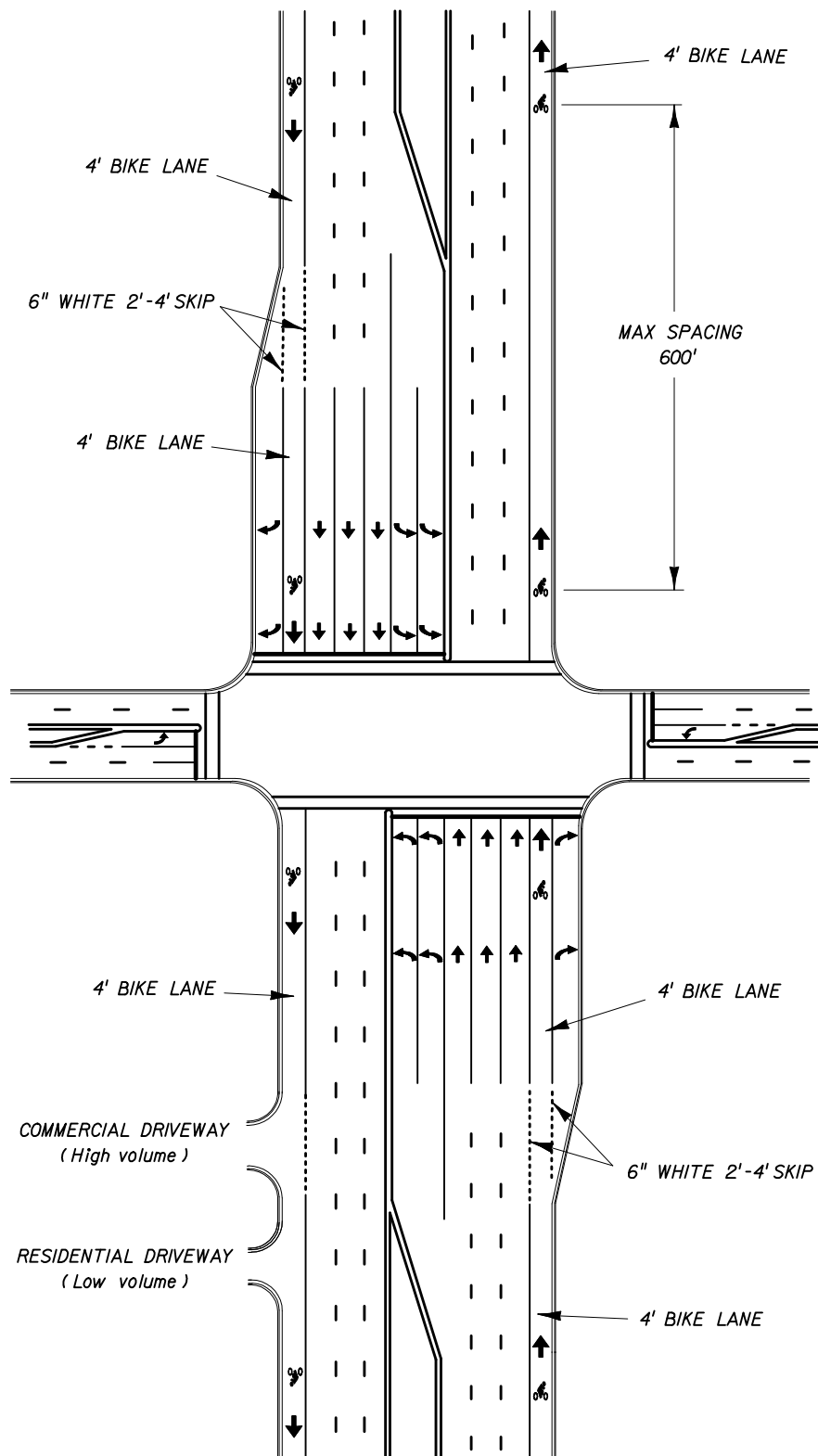
- Parking restrictions measured from curb radius point.
- Restrictions for accessible parking are the same as those applied to non-signalized intersections.

**MINIMUM PARKING RESTRICTION FOR SIGNALIZED INTERSECTION**

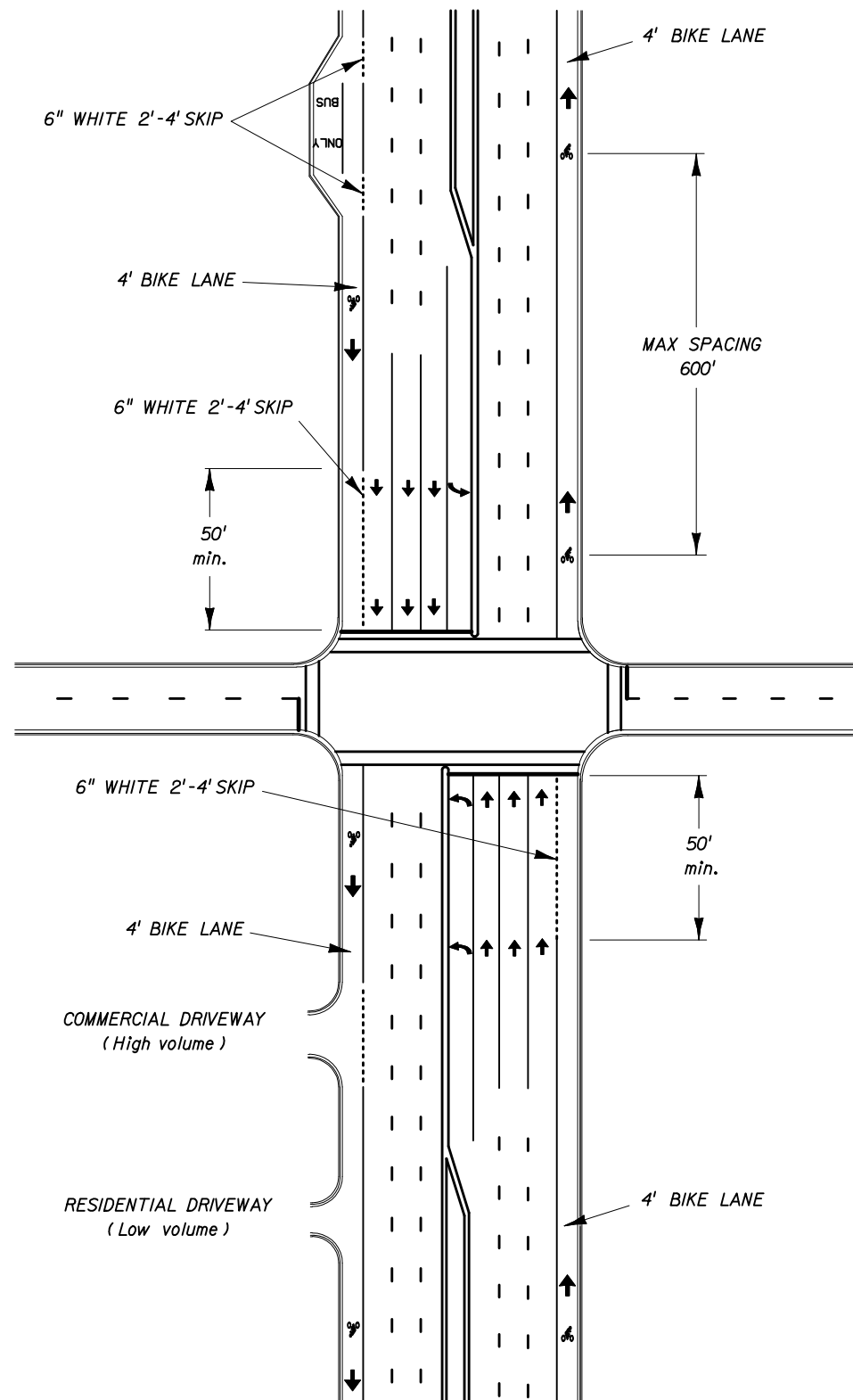
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

**SPECIAL MARKING AREAS (PARKING)**

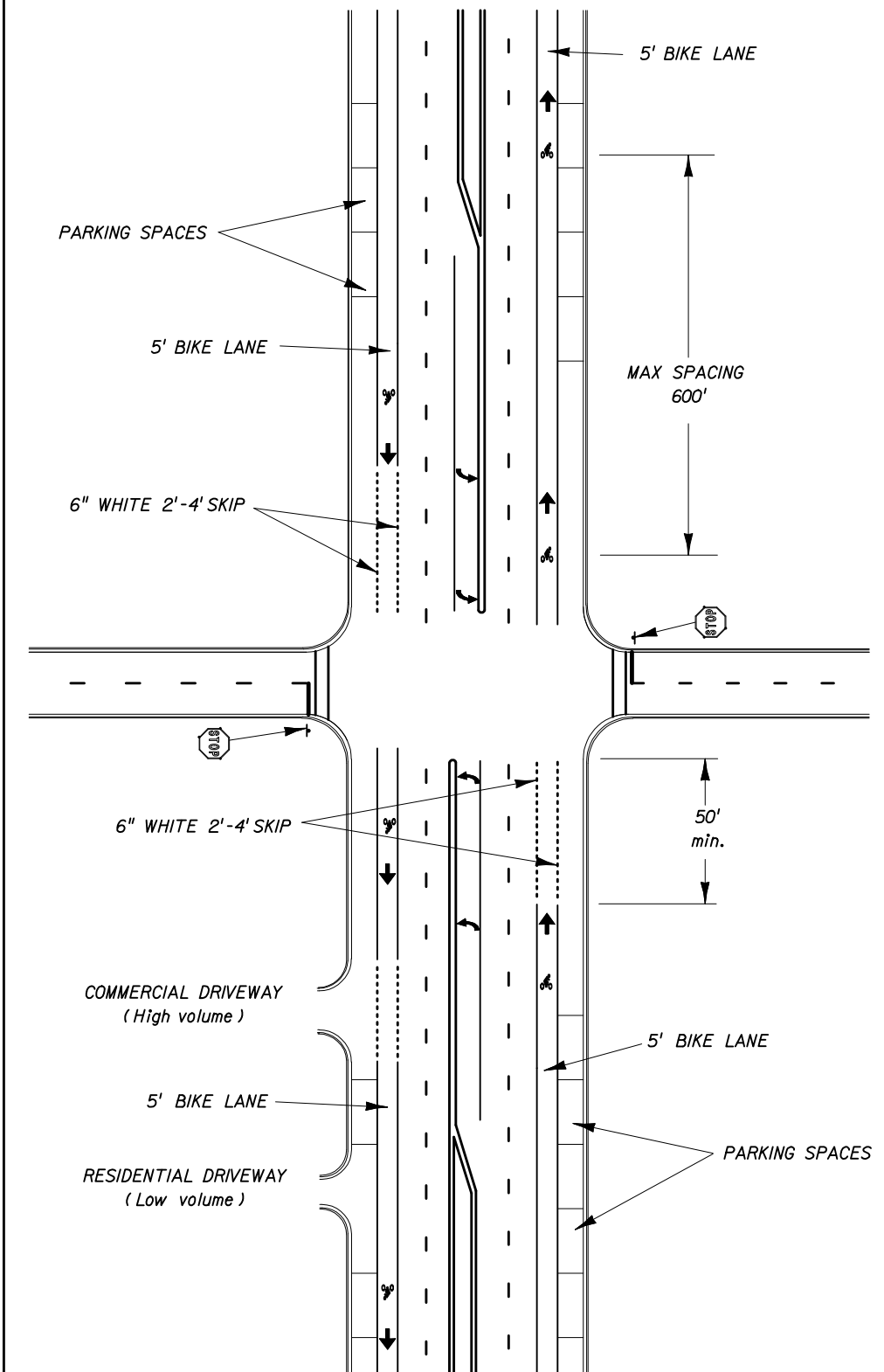
Names	Dates	Approved By		
Designed By	8-86	Charles A. Scott State Traffic Standards Engineer		
Drawn By				
Checked By	8-86	Revision	Sheet No.	Index No.
		02	10 of 13	17346



MAJOR INTERSECTION WITH SEPARATE RIGHT TURN LANE URBAN TYPICAL SECTION ( CURB AND GUTTER )



MAJOR INTERSECTION, NO RIGHT TURN LANE PLUS BUSBAY URBAN TYPICAL SECTION ( CURB AND GUTTER )

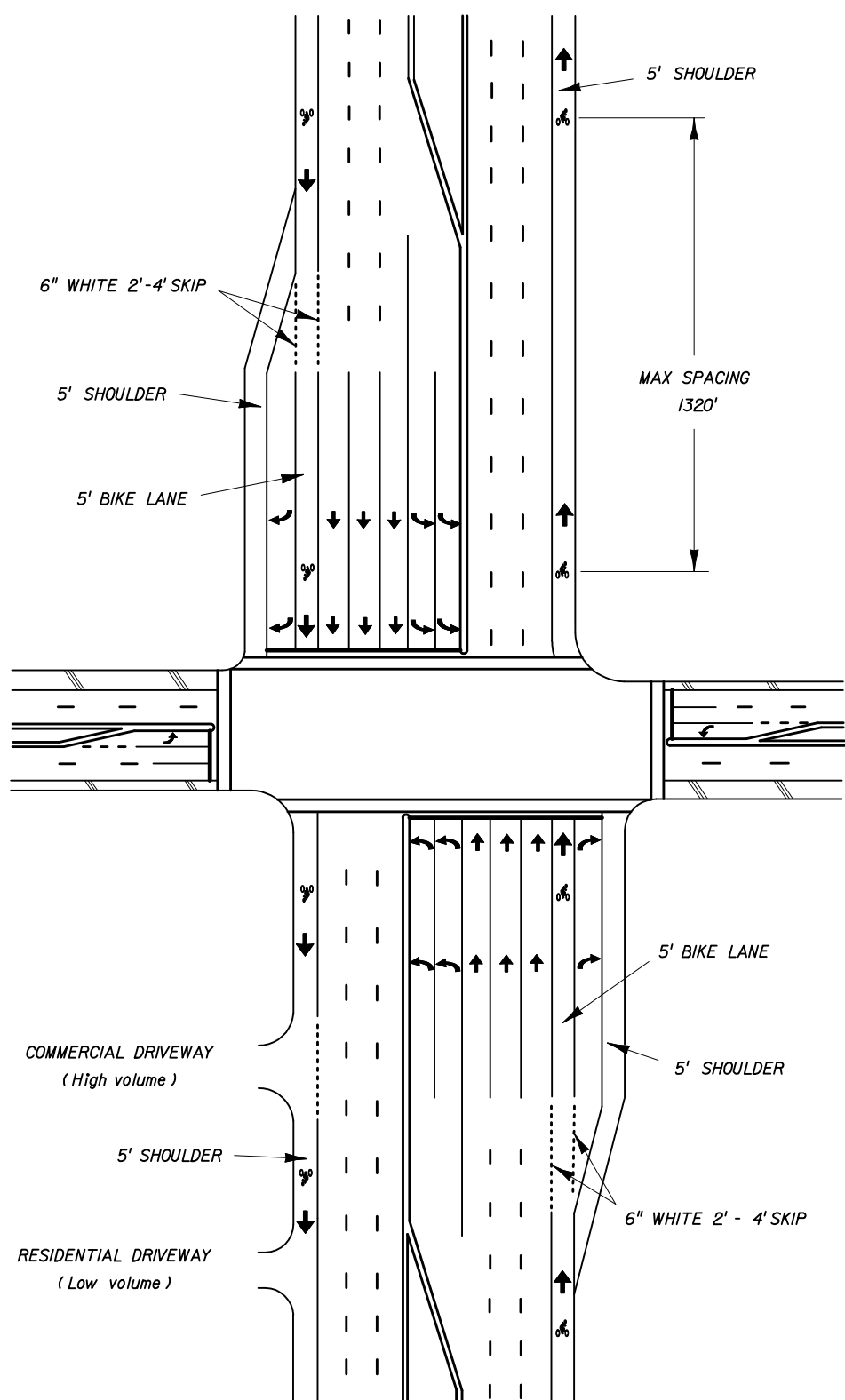


MAJOR WITH LOCAL STREET INTERSECTION, NO RIGHT TURN LANE, ON STREET PARKING URBAN TYPICAL SECTION ( CURB AND GUTTER )

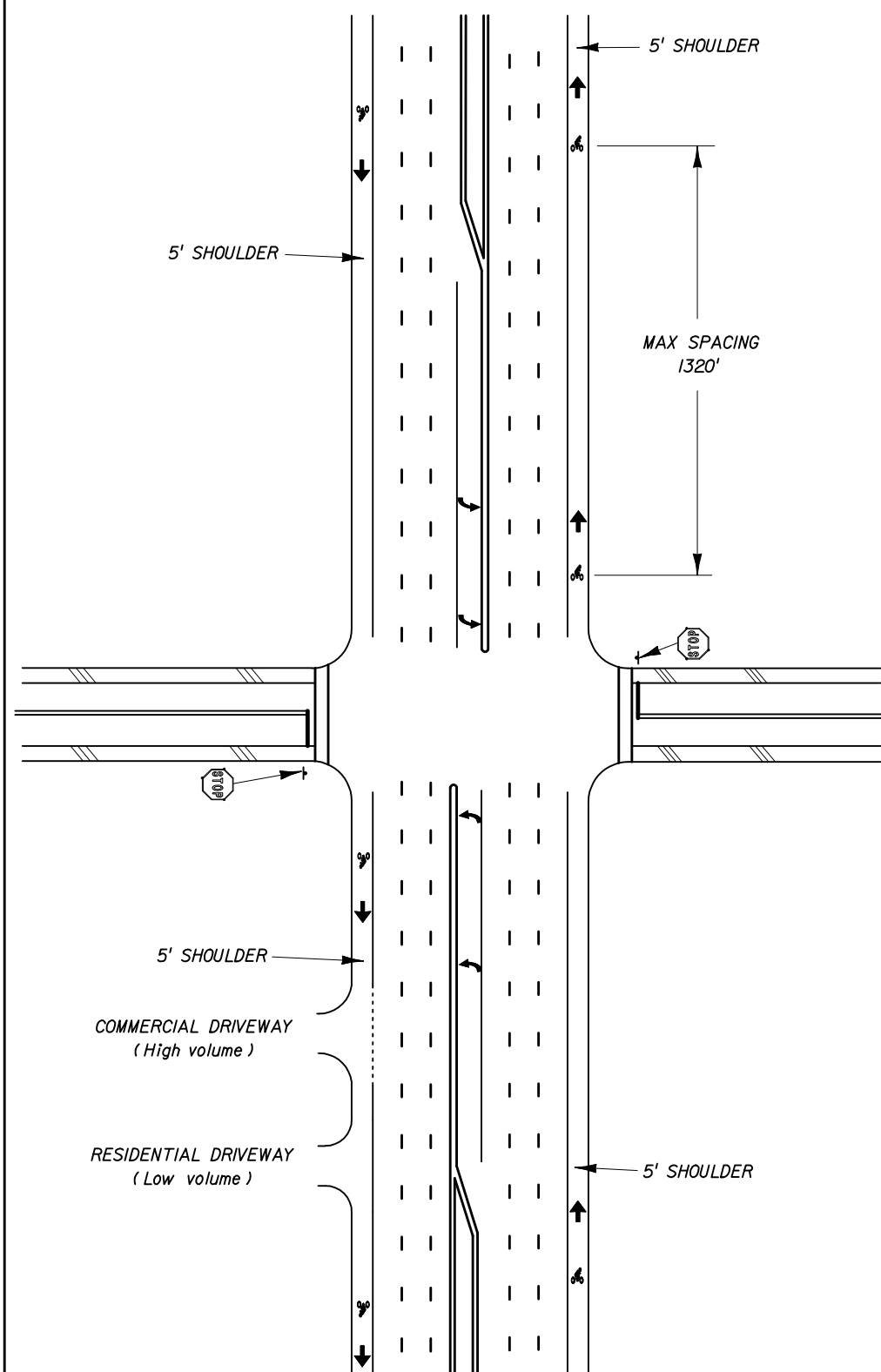
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

**SPECIAL MARKING AREAS ( BICYCLE )**

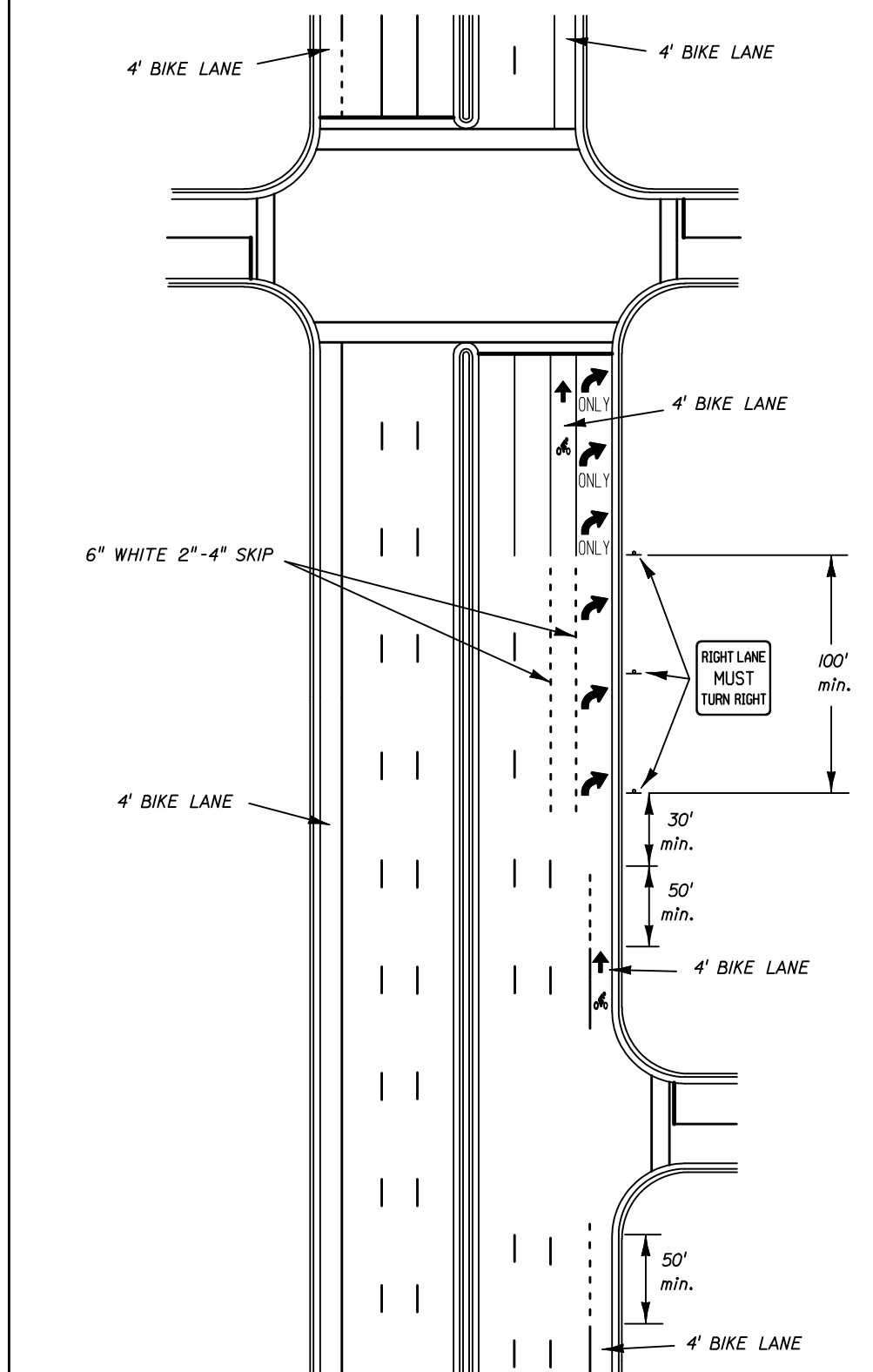
Names	Dates	Approved By		
Designed By		<i>Charles Scott</i>	State Traffic Standards Engineer	
Drawn By		Revision	Sheet No.	Index No.
Checked By		02	11 of 13	17346



MAJOR INTERSECTION WITH DESIGNATED SHOULDER, AND SEPARATE RIGHT TURN LANE RURAL TYPICAL SECTION (PAVED SHOULDER)



MAJOR WITH LOCAL STREET INTERSECTION, DESIGNATED SHOULDER, AND NO RIGHT TURN LANE RURAL TYPICAL SECTION (PAVED SHOULDER)

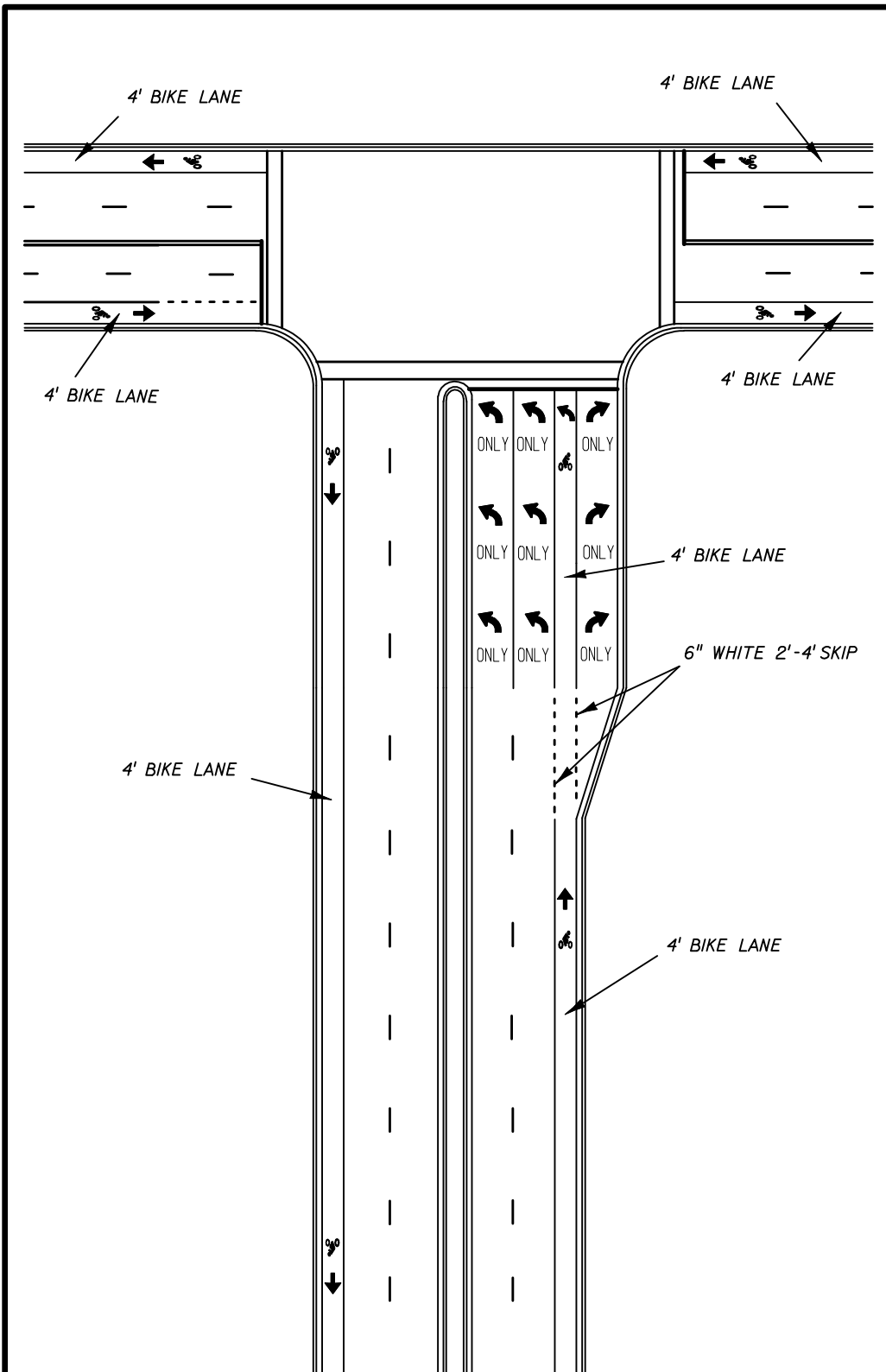


MAJOR INTERSECTION WITH RIGHT TURN DROP LANE AND DESIGNATED OR UNDESIGNATED BIKE LANE URBAN TYPICAL SECTION (CURB AND GUTTER)

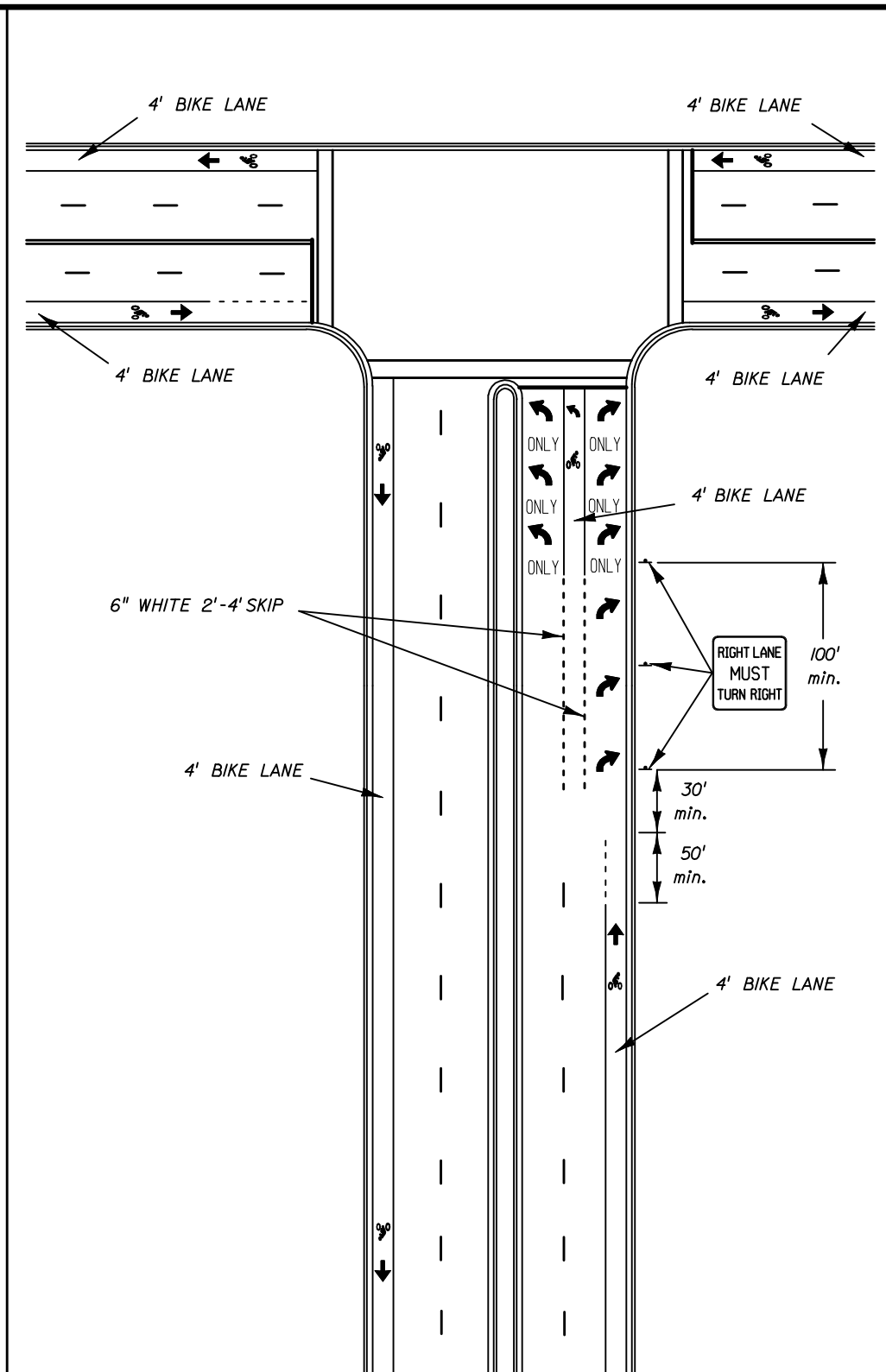
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

**SPECIAL MARKING AREAS (BICYCLE)**

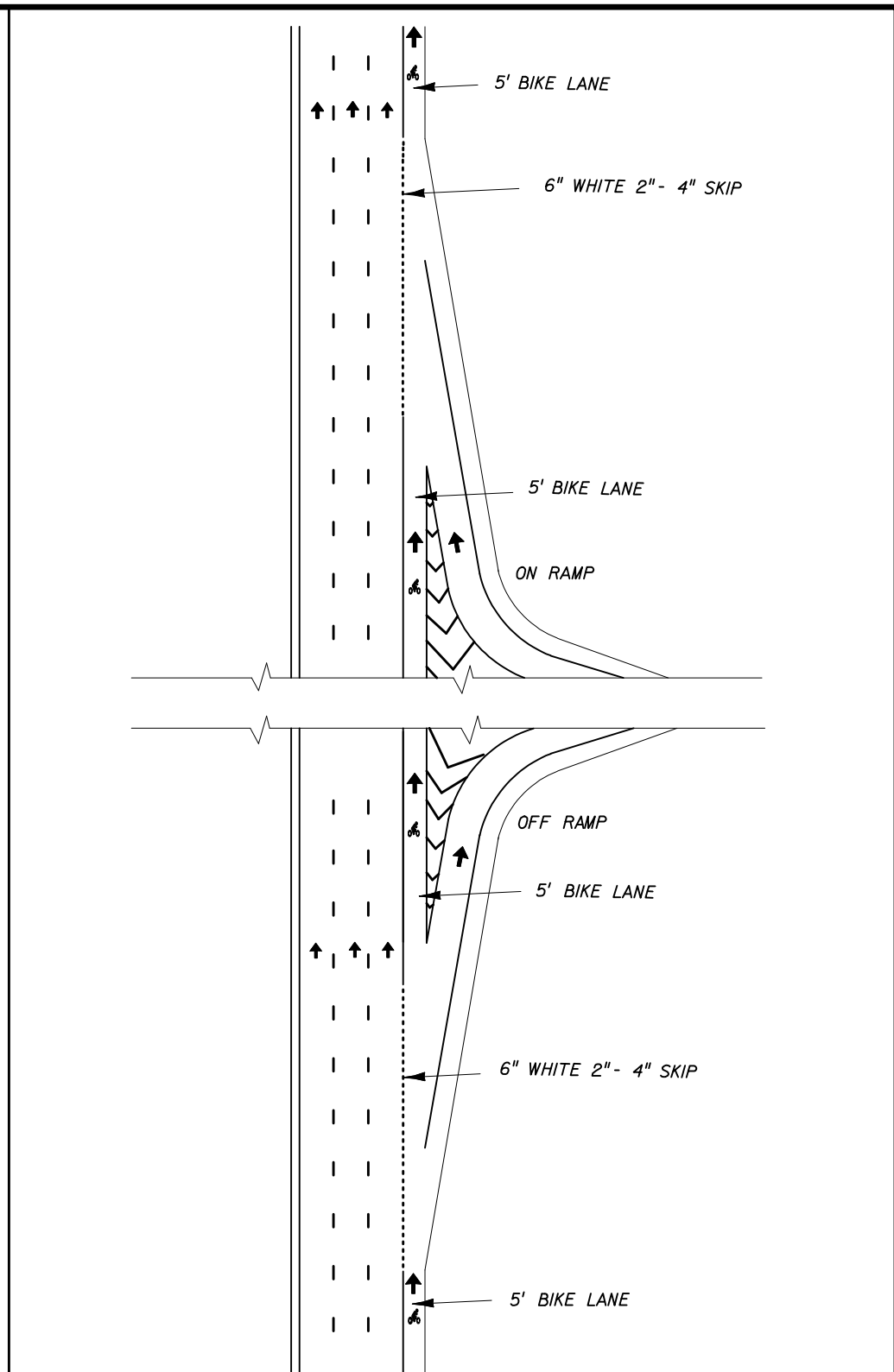
Names	Dates	Approved By		
Designed By		<i>Charles A. Scott</i>	State Traffic Standards Engineer	
Drawn By		Revision	Sheet No.	Index No.
Checked By		02	12 of 13	17346



"TEE" INTERSECTION WITH SEPARATE RIGHT TURN LANE URBAN TYPICAL SECTION (CURB & GUTTER)



"TEE" INTERSECTION WITH RIGHT TURN DROP LANE URBAN TYPICAL SECTION (CURB & GUTTER)



INTERCHANGE RAMPS RURAL TYPICAL SECTION (PAVED SHOULDER)

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

**SPECIAL MARKING AREAS (BICYCLE)**

Names	Dates	Approved By		
Designed By		<i>Clark A. Scott</i>	State Traffic Standards Engineer	
Drawn By		Revision	Sheet No.	Index No.
Checked By		02	13 of 13	17346