**TYPES OF PERMANENT LONGITUDINAL LINES**

**PAVEMENT ARROW AND MESSAGE DETAILS**

**CONTRAST MARKINGS**

White lines separate traffic in the same direction. Yellow lines separate traffic in opposing directions. Yellow dotted lines may be used in special cases. Black may be used in combination with white for skip lines where a light-colored pavement does not provide sufficient contrast with the markings.

**NOTE:** When arrows 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'. The arrow to the base of the message shall be located down stream of the pavement message and shall be 25' from back of stop line.

**BASIC COLOR RULE:**

- **Solid Yellow Edge Line**
- **Z Skip 6 Gap Dotted Line (Turning Guide Line)**
- **Two-Lane Passing Prohibited (Yellow)**
- **Double Solid Yellow (Or White)**
- **Solid White Edge Line or Lane Line**
- **6' Skip 10 Gap Extension of Edge Line Through Cross-Over Area**
- **Solid White Channelizing Line**
- **3' Skip 9 Gap Lane Drop Markings At Interlane Ramp**

**DIMENSIONS ARE WITHIN ± 1”**

**Yield Lines 5-18” X 27” White triangles facing traffic equally spaced within travel lane with 1 additional triangle using same spacing when a bike lane is present:**

---

**REV: 07/01/13**

**DESCRIPTION:**

**FDOT 2014 DESIGN STANDARDS**

**INDEX NO.**

**SHEET NO.**
TYPICAL CROSSWALK MARKINGS FOR CURB RAMPS

SCHEME ONE

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 cannot be determined.

SCHEME TWO

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

6" Yellow Skip
6" Yellow Solid
6" White
6" Dbl Yellow

10' Min
10'
25'
8'
18'
45'
24" White

Max. Intervals Between Double Arrows

"d"
projects/standards/roadway/17300-s/17346-03.dgn

SPECIAL MARKING AREAS

FDOT 2014 DESIGN STANDARDS

DESCRIPTION:

For Crosswalk

10' Standard
6' Minimum

10' Standart
6' Minimum
Restrained Left Turn Marking

These markings may be used for locations with restricted left turn lengths, only when called for in plans.

Right Turn Lane Drop and Island Details

Left Turn Lane Drop is Mirror Image

Typical Intersection 2 Thru Lanes Plus Left Turn Lane, With Crosswalk

Tells the 85th percentile speed in miles per hour (speed limit)

Where

\[ L = \frac{W}{S^2} \leq 45 \text{ mph} \]

NOTES:

1. When public sidewalk curb ramps are present, refer Index No. 17344 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.
3. When specified, "stop" message shall be placed 25' back of stop lines.

Stop Bars, Crosswalks and Double Center Line Details

12" White Crosswalk Lines

24" White Stop Line

6" White

6" Yellow

6" White Skip

6" White

12" White 2'-4' Skip

6" White

24" White Stop Line

6" White

6" White Skip

6" White

24" White Stop Line

6" White

6" White Skip

6" White

24" White Stop Line

6" White

6" White Skip

6" White

24" White Stop Line

6" White

6" White Skip

6" White

24" White Stop Line

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6" White

6" White Skip

6" White

24" White Stop Line

6" White

6" White Skip

6" White

24" White Stop Line

6" White

6" White Skip

6" White
DIVIDED HIGHWAY

SPECIAL MARKING AREAS

07/01/13

REVISION

C:\documents\standard\roadway\17300-s\17346-05.dgn

DESCRIPTION:

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

PAVEMENT MARKING FOR TRAFFIC SEPARATION
(TRAFFIC FLOWS IN OPPOSING DIRECTIONS)
TYPICAL TRANSITION MARKING
COLOR SHALL BE THE SAME AS RESPECTIVE EDGE LINE

LEFT ROADWAY CENTERED ON EXISTING ROADWAY

RIGHT ROADWAY CENTERED ON EXISTING ROADWAY

SCHEMES FOR TRANSITION - 2 LANE / 4 LANE ROADWAY

NOTE:

WP-1 & WP-2 are supplemental to the WP-2 sign and may be deleted if space is not available. The WP-3 should be used if only one supplemental sign is installed.

NOTE:

WP-2 is a supplemental to the WP-2 sign and may be deleted if space is not available. The WP-3 should be used if only one supplemental sign is installed.

NOTE:

WP-1 is a supplemental to the WP-2 sign and may be deleted if space is not available. The WP-3 should be used if only one supplemental sign is installed.

NOTE:

WP-3 is a supplemental to the WP-2 sign and may be deleted if space is not available. The WP-3 should be used if only one supplemental sign is installed.

NOTE:

WP-4 is a supplemental to the WP-2 sign and may be deleted if space is not available. The WP-3 should be used if only one supplemental sign is installed.

NOTE:

WP-5 is a supplemental to the WP-2 sign and may be deleted if space is not available. The WP-3 should be used if only one supplemental sign is installed.

NOTE:

WP-6 is a supplemental to the WP-2 sign and may be deleted if space is not available. The WP-3 should be used if only one supplemental sign is installed.

NOTE:

WP-7 is a supplemental to the WP-2 sign and may be deleted if space is not available. The WP-3 should be used if only one supplemental sign is installed.

NOTE:

WP-8 is a supplemental to the WP-2 sign and may be deleted if space is not available. The WP-3 should be used if only one supplemental sign is installed.

NOTE:

WP-9 is a supplemental to the WP-2 sign and may be deleted if space is not available. The WP-3 should be used if only one supplemental sign is installed.

NOTE:

WP-10 is a supplemental to the WP-2 sign and may be deleted if space is not available. The WP-3 should be used if only one supplemental sign is installed.

NOTE:

WP-11 is a supplemental to the WP-2 sign and may be deleted if space is not available. The WP-3 should be used if only one supplemental sign is installed.

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WP-12 is a supplemental to the WP-2 sign and may be deleted if space is not available. The WP-3 should be used if only one supplemental sign is installed.

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WP-13 is a supplemental to the WP-2 sign and may be deleted if space is not available. The WP-3 should be used if only one supplemental sign is installed.

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WP-14 is a supplemental to the WP-2 sign and may be deleted if space is not available. The WP-3 should be used if only one supplemental sign is installed.

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NOTE:

WP-40 is a supplemental to the WP-2 sign and may be deleted if space is not available. The WP-3 should be used if only one supplemental sign is installed.
**MAT DIMENSIONS**

4" X 4" squares

**MESSAGE SIZE AND SPACING**

4" X 4" squares

**NOTES:**

1. Messages shall meet requirements of Specification Section 911-6 and Section 711.

2. The thickness of the preformed message shall be 125 mils.

3. The message shall consist of white letters and numbers with black contrasting material. The black material shall meet the mat dimensions shown and have a minimum skid resistance value of 50 BPN.

4. The "EXIT NUMBER" position remains the same distance from the beginning of taper regardless of the number of lines of information.
RAILROAD CROSSING AT 2-LANE ROADWAY

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 or additional pavement message should be used.
4. Recommended location for FTP-61-06 or FTP-62-06 sign, 100' urban & 300' rural in advance of the crossing.
5. A portion of the pavement marking symbol should be directly opposite the W10-1 sign.

TYPICAL PAVEMENT MARKINGS FOR R/R CROSSING

See notes 3, 4 & 5 for sign placement.
SPECIAL EMPHASIS AND STANDARD CROSSWALKS
SIGNALIZED OR STOP SIGN CONTROLLED INTERSECTION

GENERAL NOTES
1. For traffic and pedestrian signal installation, refer to Index No. 37721 through 17890.

2. For public sidewalk curb ramps, refer to Index No. 304.

3. For pavement marking and sign installation, refer to Indexes 11200 through 17586.

4. Crosswalk minimum widths: Intersection Crosswalk 6', Midblock Crosswalk 10'.

5. All crosswalk marking shall be white.

6. Longitudinal lines in Special Emphasis Crosswalk shall be 24" wide and spaced to avoid the wheel path of vehicles as shown in detail. The maximum space between markings shall not exceed 60'. A longitudinal marking shall be centered at each lane line. Additional longitudinal markings shall be placed at the center of each lane (1/2W). Where the Crosswalk is viewed to the lane lane lines, the Special Emphasis longitudinal lines should be parallel to the lane line.
Crosswalk Signalized

SCHEME 1
Crosswalk with Warning Signing

SCHEME 2
Crosswalk with Signage

SCHEME 3
Signalized Crosswalk

<table>
<thead>
<tr>
<th>APPROACH SPEED MPH</th>
<th>A-SUGGESTED DISTANCE (Ft.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 or Less</td>
<td>200</td>
</tr>
<tr>
<td>26 To 35</td>
<td>250</td>
</tr>
<tr>
<td>36 To 45</td>
<td>300</td>
</tr>
</tbody>
</table>

SPECIAL MARKING AREAS

1. Plans shall indicate which crosswalk scheme is to be used.
2. The details sheets do not depict the signing and marking for multi-lane roadways with divided medians. For these applications, additional signs shall be installed on the median side. Minimum width of Mid-Block Crosswalks is 10'.
3. All mid-block crosswalks shall use special emphasis crosswalk markings.
4. Crosswalk marking should utilize preformed marking materials.
** 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 **

The ONLY pavement message is required for turn lanes, where the thru lane becomes turn lane.

Through Lane Becomes Exclusive Left Turn

Through Lane Becomes Optional Left Turn

** Double Left Turn Markings **

Turn Lanes - Curbed and Uncurbed Medians

<table>
<thead>
<tr>
<th>Design Speed (mph)</th>
<th>Urban Conditions</th>
<th>Rural Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Clearance Distance</td>
<td>Brake To Stop</td>
</tr>
<tr>
<td>15</td>
<td>L1</td>
<td>L2</td>
</tr>
<tr>
<td>20</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>60</td>
<td>30</td>
<td>20</td>
</tr>
</tbody>
</table>

Notes:

1. The "Begin Lane Line" locations are based on the standard lengths shown in Design Standard 201. 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 their use is not readily apparent to drivers approaching a left turn storage lane.
3. Refer to Design Standard Index 301 for roadway details.
4. This Index also applies to right turn lanes.

Arrow Spacing

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

Notes:

1. The "Begin Lane Line" locations are based on the standard lengths shown in Design Standard 201. 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 their use is not readily apparent to drivers approaching a left turn storage lane.
3. Refer to Design Standard Index 301 for roadway details.
4. This Index also applies to right turn lanes.
MINIMUM PARKING RESTRICTION FOR NONSIGNALIZED INTERSECTIONS

**NOTES:**
1. Distances measured longitudinally along the street from driver location of entering vehicle to end of parking restriction.
2. Distances applicable to intersecting street, major driveways and other driveways to the extent practical.
3. Parking restrictions measured from curb radius point.
4. All parking lane markings shall be 6" white.
5. Parking shall not be allowed within 20' of a crosswalk.
6. Parking lanes may be broken at driveways.
7. 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.

**GENERAL NOTES (Signalized & Nonsignalized):**
1. For entrances to a one-way street, the downstream restriction may be reduced to 20.
2. Restrictions for accessible parking are the same as those applied to nonsignalized intersections.
3. For nonsignalized 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 nonaccessible parking.
4. Parking lane lines shall be broken at driveways.
5. Use of pavement symbol in accessible parking spaces is optional, when used the symbol shall be 3' or 5' high and white in color.
6. Distances measured longitudinally along the street from driver location of entering vehicle to end of parking restriction.
7. Distances applicable to intersecting street, major driveways and other driveways to the extent practical.
8. Parking shall not be allowed within 20' of a crosswalk.
9. Parking lanes may be broken at driveways.
10. 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.

**MINIMUM PARKING RESTRICTION FOR SIGNALIZED INTERSECTIONS**

**NOTES:**
1. Distances measured longitudinally along the street from driver location of entering vehicle to end of parking restriction.
2. Distances applicable to intersecting street, major driveways and other driveways to the extent practical.
3. Parking restrictions measured from curb radius point.
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10. 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.
1. The Contractor Shall Adjust The Maintenance Of Traffic During Installation To Provide Sufficient Time For The Markings To Bear Traffic.

2. The Height Of The Transverse Bar For Markings Shall Be A Minimum Of 0.45 Inches Above The Pavement Surface At The Edge Of The Marking.

3. Transverse Bars Shall Be Evenly Space In The Marking At Intervals Of 30 Inches Center To Center.

4. The Transverse Bar May Have A Drainage Channel On Each Bar. The Width Of The Drainage Channel May Not Exceed 0.25 Inches At The Bottom Of The Channel.

5. Audible And Vibratory Markings Shall Only Be Installed On Centerline Markings Of Two Lane Roads When Shown In The Plans.

6. When Raised Pavement Markers Conflict With The Installation Of The Centerline Markings, The Contractor Shall Be Responsible For Removing And Replacing The Raised Pavement Markings. The Additional Expenses Associated With The Raised Pavement Markings Shall Be Included In The Cost Of The Marking.


8. The Specifications Allow The Audible Markings To Utilize A Flat Base Line Or An Inverted Rib Profile Base Line.