INDIAN RIVER COUNTY
TYPICAL DRAWINGS FOR
PAVEMENT MARKINGS,
SIGNING & GEOMETRICS

SHEET NO.
1. GENERAL NOTES
2. TURN LANE GEOMETRICS
3. PAVEMENT MARKINGS
4. RAISED REFLECTIVE PAVEMENT MARKERS (RPMs)
5. ROAD HUMP
6. EXPANDED INTERSECTION & DROP TURN LANE
7. ROUNDABOUT
8. SIGN PLACEMENT
9. STREET NAME SIGN WITH STOP SIGN
10. FLEXIBLE DELINEATOR POST (FDP)
11. 80' X 80' EXPANDED W/SINGLE LEFT
12. 80' X 80' EXPANDED "T" W/SINGLE LEFT
13. 80' X 80' EXPANDED "T" W/ DUAL LEFTS
14. 120' X 80' EXPANDED "T" W/ DUAL LEFTS
15. 80' X 120' EXPANDED INTERSECTION
16. 110' X 110' EXPANDED INTERSECTION
17. 120' X 120' EXPANDED INTERSECTION
18. 160' X 160' EXPANDED INTERSECTION

REVISED MARCH 2012
GENERAL NOTES:

1. THERMOPLASTIC SHALL CONFORM TO THE REQUIREMENTS OF THE Fla. D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (2015 EDITION). MINIMUM THERMOPLASTIC THICKNESS SHALL BE 150 MILS (ALKYD ONLY, LEADED MATERIAL ONLY, ON ALL COUNTY MAINTAINED ROADWAYS.

2. EXISTING ROAD SURFACE SHALL BE OVERLaid THROUGHOUT THE LIMITS OF CONSTRUCTION, IF THE EXISTING PAINT MARKINGS ARE INCONSISTENT WITH THOSE PROPOSED, UNLESS OTHERWISE APPROVED BY INDIAN RIVER COUNTY TRAFFIC ENGINEERING.


4. ALL EXISTING ABOVE GROUND UTILITIES AND ANY OBJECTS WITHIN THE RIGHT-OF-WAY OR ROADSIDE CLEAR ZONE, WHICHEVER IS GREATER (WITHIN THE LIMITS OF CONSTRUCTION), SHALL BE SHOWN ON THE PAINT MARKINGS PLANS.

5. SPEED LIMITS POSTED SHALL BE IN M.P.H. OR DESIGN SPEED, WHICHER IS GREATER.

6. DIMENSIONS AND GEOMETRIC LAYOUTS INDICATED IN THIS DOCUMENT REPRESENT MINIMUM REQUIREMENTS AND DO NOT SUPERCEDE THE NEED FOR FURTHER ENGINEERING DESIGN TO MEET THE NEEDS OF SPECIFIC PROJECTS.


8. ALL EXISTING ABOVE GROUND UTILITIES AND ANY OBJECTS WITHIN THE RIGHT-OF-WAY OR ROADSIDE CLEAR ZONE, WHICHER IS GREATER (WITHIN THE LIMITS OF CONSTRUCTION), SHALL BE SHOWN ON THE PAINT MARKINGS PLANS.

9. WHEN USING ENCLOSED CHARTS, DESIGN SPEED SHALL BE SHOWN ON THE PLANS.

10. SPEED LIMITS POSTED SHALL BE IN M.P.H. OR DESIGN SPEED, WHICHER IS GREATER.

11. ALL TRANSPORTATION MARKINGS SHALL BE SHOWN TO SCALE ON THE PLANS.

12. TRANSPORTATION MARKINGS SHALL BE SHOWN IN BLACK OR OTHER COLOR APPROVED BY INDIAN RIVER COUNTY TRAFFIC ENGINEERING.

13. THERMOPLASTIC SHALL NOT BE INSTALLED ON ROADWAY UNTIL FIVE (5) CALENDAR DAYS AFTER THE FINAL LIFT OF ASPHALT HAS BEEN COMPLETED, WITH THE EXCEPTION OF FRICTION COURSE #2, WHICH SHALL BE INSTALLED AT THE TIME OF HOT MIXER CONSTRUCTION.

14. THERMOPLASTIC SHALL NOT BE INSTALLED ON ROADWAY UNTIL FIVE (5) CALENDAR DAYS AFTER THE FINAL LIFT OF ASPHALT HAS BEEN COMPLETED, WITH THE EXCEPTION OF FRICTION COURSE #2, WHICH SHALL BE INSTALLED AT THE TIME OF HOT MIXER CONSTRUCTION.

15. THERMOPLASTIC SHALL NOT BE INSTALLED ON ROADWAY UNTIL FIVE (5) CALENDAR DAYS AFTER THE FINAL LIFT OF ASPHALT HAS BEEN COMPLETED, WITH THE EXCEPTION OF FRICTION COURSE #2, WHICH SHALL BE INSTALLED AT THE TIME OF HOT MIXER CONSTRUCTION.

16. THERMOPLASTIC SHALL NOT BE INSTALLED ON ROADWAY UNTIL FIVE (5) CALENDAR DAYS AFTER THE FINAL LIFT OF ASPHALT HAS BEEN COMPLETED, WITH THE EXCEPTION OF FRICTION COURSE #2, WHICH SHALL BE INSTALLED AT THE TIME OF HOT MIXER CONSTRUCTION.

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18. THERMOPLASTIC SHALL NOT BE INSTALLED ON ROADWAY UNTIL FIVE (5) CALENDAR DAYS AFTER THE FINAL LIFT OF ASPHALT HAS BEEN COMPLETED, WITH THE EXCEPTION OF FRICTION COURSE #2, WHICH SHALL BE INSTALLED AT THE TIME OF HOT MIXER CONSTRUCTION.

19. THERMOPLASTIC SHALL NOT BE INSTALLED ON ROADWAY UNTIL FIVE (5) CALENDAR DAYS AFTER THE FINAL LIFT OF ASPHALT HAS BEEN COMPLETED, WITH THE EXCEPTION OF FRICTION COURSE #2, WHICH SHALL BE INSTALLED AT THE TIME OF HOT MIXER CONSTRUCTION.

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22. THERMOPLASTIC SHALL NOT BE INSTALLED ON ROADWAY UNTIL FIVE (5) CALENDAR DAYS AFTER THE FINAL LIFT OF ASPHALT HAS BEEN COMPLETED, WITH THE EXCEPTION OF FRICTION COURSE #2, WHICH SHALL BE INSTALLED AT THE TIME OF HOT MIXER CONSTRUCTION.

23. THERMOPLASTIC SHALL NOT BE INSTALLED ON ROADWAY UNTIL FIVE (5) CALENDAR DAYS AFTER THE FINAL LIFT OF ASPHALT HAS BEEN COMPLETED, WITH THE EXCEPTION OF FRICTION COURSE #2, WHICH SHALL BE INSTALLED AT THE TIME OF HOT MIXER CONSTRUCTION.

24. THERMOPLASTIC SHALL NOT BE INSTALLED ON ROADWAY UNTIL FIVE (5) CALENDAR DAYS AFTER THE FINAL LIFT OF ASPHALT HAS BEEN COMPLETED, WITH THE EXCEPTION OF FRICTION COURSE #2, WHICH SHALL BE INSTALLED AT THE TIME OF HOT MIXER CONSTRUCTION.

25. THERMOPLASTIC SHALL NOT BE INSTALLED ON ROADWAY UNTIL FIVE (5) CALENDAR DAYS AFTER THE FINAL LIFT OF ASPHALT HAS BEEN COMPLETED, WITH THE EXCEPTION OF FRICTION COURSE #2, WHICH SHALL BE INSTALLED AT THE TIME OF HOT MIXER CONSTRUCTION.

26. THERMOPLASTIC SHALL NOT BE INSTALLED ON ROADWAY UNTIL FIVE (5) CALENDAR DAYS AFTER THE FINAL LIFT OF ASPHALT HAS BEEN COMPLETED, WITH THE EXCEPTION OF FRICTION COURSE #2, WHICH SHALL BE INSTALLED AT THE TIME OF HOT MIXER CONSTRUCTION.
# 1 RIGHT TURN LANE

Storage length (see chart 3 & not 4 sheet 3)

For distance "Z" see chart 2 on sheet 2

# 4 LEFT TURN LANE

Storage length (see chart 3 sheet 2)

# 5A DRIVEWAY ON LOCAL, COLLECTOR & ARTERIAL ROADWAYS

# 5B

# 7 U-TURN DETAIL

Storage length (see chart 3 sheet 2)

# 9 TWO WAY LEFT TURN LANE

RPMs in the two way left turn lane section shall be bi-directional amber/amber (see item "F" in the striping key) and shall be installed in accordance with sheet 4 of 18, #3 of this document, but installed on-the-stripe in accordance with Indian River County Standards. Also, see sheet 1 of 18, #34 of this typical.

See foot design standards (2010 edition) index E.2, §4, sheet 3 of 14, scheme only. However, dimensions shall be in accordance with this typical.

A = 6" solid white
B = 4" solid white
C = 12" solid white
D = 26" solid white
E = 6" skip white
F = 6" skip white (10'-30')
G = 6" skip white (6'-10')
H = 6" solid yellow
I = 12" solid yellow
J = 6" double yellow
K = 6" double yellow (12'-20')
L = 6" solid yellow (1'-20')
M = 6" solid yellow (1'-10')
N = 6" solid yellow (2'-10')
P = 6" solid white
Q = 6" solid white (12'-20')
R = 6" solid white (6'-10')
S = 6" solid white (2'-4')
T = 6" solid yellow
U = 6" solid yellow (12'-20')
V = 6" solid yellow (6'-10')
W = 6" solid yellow (2'-4')
X = 6" solid yellow (12'-20')
Y = 6" solid yellow (6'-10')
Z = 6" solid yellow (2'-4')

See Indian River County Traffic Engineering Division Pavement Markings

Christopher R. Mona, P.E.
Public Works Director
March 2012

# 2 MODIFIED EUROPEAN CROSSWALK & STOP BAR PLACEMENT

(Special Emphasis)

# 3 YIELD LINE

See #10 this sheet

See figure 3B-16

Notes:
- Triangle height is equal to 1.5 times the base dimension.
- Yield lines may be smaller than suggested when installed on narrower, slow speed facilities such as shared use paths.

INDIAN RIVER COUNTY, FLORIDA

Traffic Engineering Division

Typical Pavement Markings

Christopher R. Mona, P.E.
Public Works Director
March 2012
COORDINATION WITH STREET GEOMETRY
A THROUGH ON-SITE ANALYSIS OF ROADWAY GEOMETRICS SHOULD
BE PERFORMED TO ENSURE THAT SPEED HUMPS WILL NOT BE INTRODUCED
AT A CRITICAL POINT IN THE ROADWAY SYSTEM, E.G. A COMBINATION
OF HORIZONTAL, VERTICAL CURVATURE AND/OR GRADIENT.

COORDINATION WITH TRAFFIC OPERATIONS
SPEED HUMPS SHOULD NOT BE INSTALLED WITHIN 250 FT. OF A TRAFFIC
SIGNAL OR STOP SIGN OR WITHIN AN INTERSECTION OR DRIVEWAY. Мин.
DISTANCE BETWEEN ROAD HUMPS IS 400' OR AS APPROVED BY THE COUNTY
TRAFFIC ENGINEER.

ONE SIGN EACH REQUIRED AT THE APPROACH TO A SERIES OF ROAD HUMPS

SPEED HUMP (DUTCH DESIGN)

SEMINOLE SPEED HUMP

I.T.E. SPEED HUMP

ROAD HUMP SIGNING

ROAD HUMP PAVEMENT MARKINGS

ROAD HUMP SIGNING

LEGEND:
- CROSSING SPEED
  
  3'

  ROAD HUMP

  6'

  6'

  12'

  6" TYP.

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EXPANDED INTERSECTION
(SHOWING TREATMENTS FOR DIFFERENT CONDITIONS)

APVED SHOULDER RIGHT TURN DROP LANE


A = 6" SOLID WHITE
B = 8" SOLID WHITE
C = 12" SOLID WHITE
D = 18" SOLID WHITE
E = 24" SOLID WHITE
F = 6" SKIP WHITE (10'-30')
G = 6" SKIP WHITE (6'-10')
H = 6" SKIP WHITE (2'-4')
I = 6" SOLID YELLOW
J = 18" SOLID YELLOW
K = 6" DOUBLE YELLOW
L = 6" SKIP YELLOW (10'-30')
M = 6" SKIP YELLOW (6'-10')
N = 6" SKIP YELLOW (2'-4')
P = RPM, MONO-DIRECTIONAL (WHITE/CLEAR)
Q = RPM, BI-DIRECTIONAL (AMBER/AMBER)
R = FOP (WHITE)
S = FOP (YELLOW)
T = RPM, (WHITE/RED)

INDIAN RIVER COUNTY, FLORIDA
TRAFFIC ENGINEERING DIVISION

EXPANDED INTERSECTION
AND
DROP TURN LANE

CHRISTOPHER R. MORA, P.E.
PUBLIC WORKS DIRECTOR
March 2012 SHEET 6 of 19
LANDSCAPING REQUIRES SEPARATE PERMIT

YIELD LINE (SEE SHEET 3 OF 18, R11 OF THIS DOCUMENT) TYP.

SECTION A-A

INDIAN RIVER COUNTY, FLORIDA
TRAFFIC ENGINEERING DIVISION
TYPICAL
ROUNDABOUT

CHRISTOPHER R. MORA, P.E.
PUBLIC WORKS DIRECTOR
March 2012 SHEET 7 of 19
SIGN SPECIFICATIONS:

SIGN FACE - HIGH INTENSITY GRADE REFLECTIVE SHEETING

SIGN SIZE - AS SHOWN

COLOR• IN ACCORDANCE WITH THE M.U.T.C.D.

HEIGHT - 7' MEASURED FROM THE BOTTOM OF THE SIGN TO THE TOP OF THE TRAFFIC SEPARATOR.

THICKNESS (ALUMINUM) : .090 INCHES

BOLTS: 3/8" X 3/4" W/HEX NUTS. 2 MIN. PER SIGN

POSTS: SIGNS 9 SQUARE FEET AND LARGER, SHALL BE DOUBLE POSTED.

DIVIDED HIGHWAY

W1-7

24" X 48"

W1-6

24" X 48"

STOP

R2-1

24" X 30"

SPEED LIMIT XX

R2-2

24" X 30"

DEADFEND

R6-7

30" X 30" (MIN.)

R6-1

30" X 30"

W14-1

W14-2

NO OUTLET

BLACK ON WHITE

BLACK ON WHITE

LOCATION: 200' PAST SIGNALIZED INTERSECTION AND AT 2640' (1/2 MILE) INCREMENTS.

BLACK ON WHITE

LOCATION: ON THE END OF TRAFFIC SEPARATORS AT SIGNALIZED INTERSECTIONS OR THE END OF THE TRAFFIC SEPARATOR WHEN THE CURVATURE OF THE ROAD WARRANTS.

BLACK ON YELLOW

LOCATION: 50' FROM LAST INTERSECTING ROADWAY.

BLACK ON YELLOW

LOCATION: 50' FROM LAST INTERSECTING ROADWAY.

CASE I - TYPE ONE (1) OBJECT MARKERS SHALL CONSIST OF NINE (9) YELLOW REFLECTORS MOUNTED ON A YELLOW REFLECTIVE BACKGROUND OR CONSIST OF A RETROREFLECTIVE PANEL OF THE SAME SIZE.

CASE II - END OF ROAD MARKERS SHALL CONSIST OF NINE (9) RED REFLECTORS MOUNTED ON A RED REFLECTIVE BACKGROUND OR CONSIST OF A RETROREFLECTIVE PANEL OF THE SAME SIZE.

CASE II - END OF ROAD MARKERS SHALL CONSIST OF NINE (9) RED REFLECTORS MOUNTED ON A RED REFLECTIVE BACKGROUND OR CONSIST OF A RETROREFLECTIVE PANEL OF THE SAME SIZE.

CASE I - TYPE ONE (1) OBJECT MARKERS SHALL CONSIST OF NINE (9) YELLOW REFLECTORS MOUNTED ON A YELLOW REFLECTIVE BACKGROUND OR CONSIST OF A RETROREFLECTIVE PANEL OF THE SAME SIZE.

GENERAL SPECIFICATIONS:

FLAT PLATE, ALCOA#86054, 6063-T6 ALLOY, ETCHED, DEGREASED WITH #1200 ALUM FINISH WITH #22n GREEN SCOTCH LITE BACKGROUND OR EQUAL.

DIMENSIONS:

- 40 MPH - 8" H. BLACK W/6" HIGH CAPITAL LETTERS OR 6" HIGH LOWER CASE LETTERS.

WHERE A STREET INTERSECTS WITH A MULTI-LANE ROADWAY OR THE ADJACENT STREET POSTED SPEED LIMIT IS 40 MPH - "8" H. BLACK W/"8" HIGH CAPITAL LETTERS OR 6" HIGH LOWER CASE LETTERS.

THE STREET NAME MUST BE SHOWN ON BOTH SIDES OF THE SIGN PLATE.

CHRISTOPHER R. MORA, P.E.
PUBLIC WORKS DIRECTOR

March 2012 SHEET 8 of 19
Table 2C-4: Guidelines for Advance Placement of Warning Signs

<table>
<thead>
<tr>
<th>Post-Mile (Percentile Speed)</th>
<th>Condition A: Speed Reduction</th>
<th>Condition B: Deceleration to the listed advisory speed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>20 mph</td>
<td>25 mph</td>
</tr>
<tr>
<td></td>
<td>30 mph</td>
<td>35 mph</td>
</tr>
<tr>
<td></td>
<td>40 mph</td>
<td>45 mph</td>
</tr>
<tr>
<td></td>
<td>50 mph</td>
<td>55 mph</td>
</tr>
<tr>
<td></td>
<td>60 mph</td>
<td>65 mph</td>
</tr>
<tr>
<td></td>
<td>70 mph</td>
<td>75 mph</td>
</tr>
</tbody>
</table>

1. The distances are affected by visibility, line of sight, and curvature. The distances for Condition A have been adjusted for a maximum horizontal curve of 20 feet in length. The distances for Condition B have been adjusted for a maximum horizontal curve of 20 feet in length.

Notes:
1. Table 2C-4 for advance sign placement distance guidelines.
2. See Table 2C-5 for the selection of horizontal alignment signs.
3. See Table 2C-6 for spacing of W-8 signs.
4. The 15 MPH advisory speed limit signs shown are for illustrative purposes only. Actual advisory speed shall be determined by an engineering study, i.e. Ball Bank Indicator. See Section 2C.08. 

Table 2C-5: Horizontal Alignment Sign Selection

<table>
<thead>
<tr>
<th>Type of Horizontal Alignment Sign</th>
<th>Difference Between Speed Limit and Advisory Speed</th>
<th>5 mph</th>
<th>10 mph</th>
<th>15 mph</th>
<th>20 mph</th>
<th>25 mph or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turn (W-1), Curve (W-2), Reverse Turn (W-3), Reverse Curve (W-3), and Combination Horizontal Alignment (W-4)</td>
<td>Recommended</td>
<td>Required</td>
<td>Required</td>
<td>Required</td>
<td>Required</td>
<td></td>
</tr>
<tr>
<td>Advisory Speed Route (W-4.3)</td>
<td>Recommended</td>
<td>Required</td>
<td>Required</td>
<td>Required</td>
<td>Required</td>
<td>Required</td>
</tr>
<tr>
<td>Chevron (W-3.8) or See Directional Large Arrow (W-1)</td>
<td>Optional</td>
<td>Recommended</td>
<td>Required</td>
<td>Required</td>
<td>Required</td>
<td>Required</td>
</tr>
<tr>
<td>Exit Speed (W-3.9-2) and Ramp Speed (W-3.9-3) or Exit Ramp (W-3.9-5)</td>
<td>Optional</td>
<td>Optional</td>
<td>Required</td>
<td>Required</td>
<td>Required</td>
<td>Required</td>
</tr>
</tbody>
</table>

Notes: Recommended indicates the sign and/or plaque shall be used, Required indicates the sign and/or plaque must be used, and Optional means that the sign and/or plaque may be used. See Section 2C.07 for the list of allowable warning signs.

Table 2C-6: Typical Spacing of Chevron Alignment Signs on Horizontal Curves

<table>
<thead>
<tr>
<th>Advisory Speed</th>
<th>Curve Radius</th>
<th>Sign Spacing</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 mph or less</td>
<td>Less than 200 feet</td>
<td>40 feet</td>
</tr>
<tr>
<td>20 to 30 mph</td>
<td>200 to 400 feet</td>
<td>60 feet</td>
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<tr>
<td>30 to 45 mph</td>
<td>400 to 700 feet</td>
<td>100 feet</td>
</tr>
<tr>
<td>45 to 60 mph</td>
<td>700 to 1,250 feet</td>
<td>150 feet</td>
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<tr>
<td>60 mph or more</td>
<td>More than 1,250 feet</td>
<td>200 feet</td>
</tr>
</tbody>
</table>

- The minimum advance placement distance listed is 100 feet to provide adequate spacing between signs.
- Required means that the sign and/or plaque shall be used.
- Recommended means that the sign and/or plaque must be used.
- Optional means that the sign and/or plaque may be used.

Legend:
- Legend
- Legend
- Legend

Notes:
1. See Table 2C-4 for advance sign placement distance guidelines.
2. See Table 2C-5 for the selection of horizontal alignment signs.
3. See Table 2C-6 for spacing of W-8 signs.
4. The 15 MPH advisory speed limit signs shown are for illustrative purposes only. Actual advisory speed shall be determined by an engineering study, i.e. Ball Bank Indicator. See Section 2C.08. 

Table 2C-7: Guidelines for Advance Placement of Warning Signs

<table>
<thead>
<tr>
<th>Post-Mile (Percentile Speed)</th>
<th>Condition A: Speed Reduction</th>
<th>Condition B: Deceleration to the listed advisory speed</th>
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<tbody>
<tr>
<td></td>
<td>20 mph</td>
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<td></td>
<td>70 mph</td>
<td>75 mph</td>
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</tbody>
</table>

1. The distances are affected by visibility, line of sight, and curvature. The distances for Condition A have been adjusted for a maximum horizontal curve of 20 feet in length. The distances for Condition B have been adjusted for a maximum horizontal curve of 20 feet in length.

Notes:
1. Table 2C-4 for advance sign placement distance guidelines.
2. See Table 2C-5 for the selection of horizontal alignment signs.
3. See Table 2C-6 for spacing of W-8 signs.
4. The 15 MPH advisory speed limit signs shown are for illustrative purposes only. Actual advisory speed shall be determined by an engineering study, i.e. Ball Bank Indicator. See Section 2C.08. 

Table 2C-8: Horizontal Alignment Sign Selection

<table>
<thead>
<tr>
<th>Type of Horizontal Alignment Sign</th>
<th>Difference Between Speed Limit and Advisory Speed</th>
<th>5 mph</th>
<th>10 mph</th>
<th>15 mph</th>
<th>20 mph</th>
<th>25 mph or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turn (W-1), Curve (W-2), Reverse Turn (W-3), Reverse Curve (W-3), and Combination Horizontal Alignment (W-4)</td>
<td>Recommended</td>
<td>Required</td>
<td>Required</td>
<td>Required</td>
<td>Required</td>
<td>Required</td>
</tr>
<tr>
<td>Advisory Speed Route (W-4.3)</td>
<td>Recommended</td>
<td>Required</td>
<td>Required</td>
<td>Required</td>
<td>Required</td>
<td>Required</td>
</tr>
<tr>
<td>Chevron (W-3.8) or See Directional Large Arrow (W-1)</td>
<td>Optional</td>
<td>Recommended</td>
<td>Required</td>
<td>Required</td>
<td>Required</td>
<td>Required</td>
</tr>
<tr>
<td>Exit Speed (W-3.9-2) and Ramp Speed (W-3.9-3) or Exit Ramp (W-3.9-5)</td>
<td>Optional</td>
<td>Optional</td>
<td>Required</td>
<td>Required</td>
<td>Required</td>
<td>Required</td>
</tr>
</tbody>
</table>

Notes: Recommended indicates the sign and/or plaque shall be used, Required indicates the sign and/or plaque must be used, and Optional means that the sign and/or plaque may be used. See Section 2C.07 for the list of allowable warning signs.

Table 2C-9: Typical Spacing of Chevron Alignment Signs on Horizontal Curves

<table>
<thead>
<tr>
<th>Advisory Speed</th>
<th>Curve Radius</th>
<th>Sign Spacing</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 mph or less</td>
<td>Less than 200 feet</td>
<td>40 feet</td>
</tr>
<tr>
<td>20 to 30 mph</td>
<td>200 to 400 feet</td>
<td>60 feet</td>
</tr>
<tr>
<td>30 to 45 mph</td>
<td>400 to 700 feet</td>
<td>100 feet</td>
</tr>
<tr>
<td>45 to 60 mph</td>
<td>700 to 1,250 feet</td>
<td>150 feet</td>
</tr>
<tr>
<td>60 mph or more</td>
<td>More than 1,250 feet</td>
<td>200 feet</td>
</tr>
</tbody>
</table>

- The minimum advance placement distance listed is 100 feet to provide adequate spacing between signs.
- Required means that the sign and/or plaque shall be used.
- Recommended means that the sign and/or plaque must be used.
- Optional means that the sign and/or plaque may be used.

Legend:
- Legend
- Legend
- Legend
GENERAL SPECIFICATIONS:

FLAT BLADE: ALCOA # 86054, 6063-T6 ALLOY, ETCHED, DEGREASED WITH # 1200 ALODINE FINISH WITH #2277 GREEN SCOTCHLITE BACKGROUND OR EQUAL.

STREET NAME SIGN DIMENSIONS:

< 40 MPH - 8" H, BLANK W/6" HIGH CAPITAL LETTERS OR 4.5" HIGH LOWER CASE LETTERS,

WHEN A STREET INTERSECTS WITH A MULTI-LANE ROADWAY OR THE ADJACENT STREET POSTED SPEED LIMIT IS ≤ 40 MPH - 12" H, BLANK W/ 8" HIGH CAPITAL LETTERS OR 6" HIGH LOWER CASE LETTERS.

(2009 MUTCD SECTION ZD.43)

LETTERS:

ALL LETTERS SHALL BE SCOTCHLITE (SILVER) OR EQUAL.

THE STREET NAME MUST BE SHOWN ON BOTH SIDES OF THE SIGN PLATE.

POST: FHWA APPROVED GALVANIZED SQUARE (1.75" X 1.75" MIN.)

SIGN POST WITH 7/16" DIA. HOLES 1" APART TOP TO BOTTOM.

POST SHALL BE TELSPAR OR EQUAL AND MEET THE SPECIFICATIONS SHOWN ON THIS PAGE.

STOP SIGN: 30" X 30" (MIN.) W/HIGH INTENSITY SHEETING

LOCATION: IN ACCORDANCE WITH THE TYPICAL STOP SIGN PLACEMENT DETAIL ABOVE, FOR ADDITIONAL LATERAL OFFSET CRITERIA SEE SECTION 2A.19 OF THE 2009 MUTCD.

REFLECTIVE POST STRIPS: SHALL BE A MINIMUM OF TWO (2) INCHES IN WIDTH AND SHALL EXTEND THE FULL LENGTH OF THE SIGN POST. THE COLOR SHALL MATCH THE BACKGROUND COLOR OF THE SIGN, EXCEPT THE COLOR FOR THE YIELD (R1-2) SIGN AND DO NOT ENTER (R5-1) SIGN SHALL BE RED.

SEE SECTION 2A.21 OF THE 2009 MUTCD.

INDIAN RIVER COUNTY, FLORIDA
TRAFFIC ENGINEERING DIVISION

TYPICAL

STREET NAME SIGN
WITH STOP SIGN

CHRISTOPHER R. NORA, P.E.
PUBLIC WORKS DIRECTOR

March 2012 SHEET 10 of 19

TYPICAL STOP
SIGN PLACEMENT
(UNCURBED SECTION)
THE FLEXIBLE DELINEATOR POST (FDP) MAY BE USED AT THE FOLLOWING LOCATIONS:

* The first median end of a divided section
* Signalized intersections
* Other major intersections
* Locations where need has been determined by an engineering study

1. It is recommended that both the sign and posts be used only where need has been determined by an engineering study.
2. On medians under 4' wide, install only one FOP at the median nose.
3. The FOP shall match the adjacent edge line color (yellow or white).
4. Each FOP shall have an 8" band of high intensity sheeting installed 1" below the top of the post which must match the post color.
5. FDP should be 36" high.
6. Design should follow the adjacent drawing. Other designs may be approved by I.R.C. Traffic Engineering.
7. When shown on the plans, FOPs shall be identified in a similar manner to that shown on this typical (empty donut shape). Color and number of each must be shown on all summary of quantities sheets.
   Also, color must be specified for each FOP group on the plans.
8. FOP type and installation methods must be approved by I.R.C. Traffic Engineering prior to use.
9. On directional medians the FOPs marked may be used to supplement the existing signing, markings, and RPMs to deter wrong way maneuvers. When used, FOPs should be installed midway between the striped chevrons.

**Note:** FDPs shall be spaced a min. of 3 ft apart. A max. of 4 ft. White shall be used.
* MINIMUM DIMENSIONS MAY BE EXTENDED BY THE PUBLIC WORKS DIRECTOR OR HIS DESIGNEE.

* SEE CHART #3, SHEET 2 FOR SINGLE TURN LANE & CHART #4, SHEET 2 FOR DUAL LEFT TURN LANE MIN. STORAGE DISTANCES

NOTE:
1. IF TRANSITION IS DONE ON ONE SIDE OF THE ROAD, A DOUBLING OF THE RIGHT OF WAY (R/W) TRANSITION WILL BE REQUIRED.
2. R/W REQUIREMENTS SHOWN REFLECT A 90 DEGREE INTERSECTION, FOR OTHER INTERSECTING ANGLES, MODIFY DIMENSIONS ACCORDINGLY.
3. FOR EXACT CROSSWALK PLACEMENT, PLEASE SEE DETAIL #2 ON SHEET 3 OF 18 OF THIS TYPICAL.

NOTE:
ASUMES 90 DEGREE INTERSECTION, ALL OTHERS TO BE MODIFIED ACCORDINGLY (HOLD REQUIRED STORAGE LENGTH).

INDIAN RIVER COUNTY, FLORIDA
TRAFFIC ENGINEERING DIVISION
TYPICAL
80' x 80'
SINGLE LEFT TURN LANE
EXPANDED INTERSECTION
CHRISTOPHER R. MORA, P.E.
PUBLIC WORKS DIRECTOR
March 2012 SHEET 12 of 19
1. IF TRANSITION IS DONE ONLY ON ONE SIDE OF THE ROAD, A DOUBLING OF THE RIGHT OF WAY (R/W) TRANSITION WILL BE REQUIRED.

2. R/W REQUIREMENTS SHOWN REFLECT A 90 DEGREE INTERSECTION. FOR OTHER INTERSECTING ANGLES, MODIFY DIMENSIONS ACCORDINGLY.

3. FOR EXACT CROSSWALK PLACEMENT, PLEASE SEE DETAIL #3, SHEET 3 OF THIS TYPICAL

* MINIMUM DIMENSIONS MAY BE EXTENDED BY THE PUBLIC WORKS DIRECTOR OR HIS DESIGNEE.

* SEE CHART #3, SHEET 2 FOR SINGLE TURN LANE & CHART #4, SHEET 2 FOR DUAL LEFT TURN LANE MIN. STORAGE DISTANCES.
NOTES:

1. IF TRANSITION IS DONE ONLY ON ONE SIDE OF THE ROAD, A DOUBLING OF THE RIGHT OF WAY (R/W) TRANSITION WILL BE REQUIRED.

2. R/W REQUIREMENTS SHOWN REFLECT A 90 DEGREE INTERSECTION. FOR OTHER INTERSECTING ANGLES, MODIFY DIMENSIONS ACCORDINGLY.

3. FOR EXACT CROSS WALK PLACEMENT, PLEASE SEE DETAIL # 2 ON SHEET 3 OF THIS TYPICAL.

* MINIMUM DIMENSIONS MAY BE EXTENDED BY THE PUBLIC WORKS DIRECTOR OR HIS DESIGNEE.

* SEE CHART # 3, SHEET 1 FOR SINGLE TURN LANE & CHART # 4, SHEET 2 FOR DUAL LEFT TURN LANE MIN. STORAGE DISTANCES.
NOTES:

1. If transition is done only on one side of the road, a doubling of the right of way (R/W) transition will be required.

2. R/W requirements shown reflect a 90 degree intersection. For other intersecting angles, modify dimensions accordingly.

3. For exact crosswalk placement, please see detail 2 on sheet 3 of this typical.

* Minimum dimensions may be extended by the public works director or his designee.

** See chart #3, sheet 2 for single turn lane & chart #4, sheet 2 for dual left turn lane min. storage distances.
DIRECTOR OR HIS DESIGNEE shall be extended by the public works as shown.

Minimum dimensions may be extended by the public works as shown.

See Chart #3, Dual Sheet for Single Turn Lane & Chart # 2, Sheet # 3 for Dual Left Turn Lane & C Min. Storage Distances.

NOTE:
1. If transition is done only on one side of the road, a doubling of the right of way (R/W) transition will be required.
2. R/W requirements shown reflect a 10 degree intersection. For other intersecting angles, modify dimensions accordingly.
3. For exact cross walk placement, please see detail # 6 sheets 3 of this typical.

140° 110° 50° 120° 100° 430° 340°

ANGLE S SHOWN REFFLECT MODIFY DIMENSIONS ACCOROG DEGREE OF THIS TYPICAL.

30° RADIUS TYP.

115° 54° 6" 6° 20° 27° 4"

R/W LINE

CROSS SECTION

R/W LINE

CROSS SECTION

NOTES:

- 140° (R/W)
- TRANSITION WILL BE R/4, ADDED SIDE OF THE ROAD
- R/W REQUIREMENTS SHOWN REFLECT A 10 DEGREE INTERSECTION
- FOR OTHER INTERSECTING ANGLES, MODIFY DIMENSIONS ACCORDINGLY
- FOR EXACT CROSS WALK PLACEMENT, PLEASE SEE DETAIL # 6 SHEET 3 OF THIS TYPICAL

Indian River County, Florida
Traffic Engineering Division
Typical
R/W X 120'
Expanded Intersection
Dual Left Turn Lanes

Christopher M. Mosca, P.E.
Public Works Director
March 2012 SHEET 10 of 19
NOTES:

1. If transition is done only on one side of the road, a doubling of the right of way (R/W) transition will be required.

2. R/W requirements shown reflect a 90 degree intersection. For other intersecting angles, modify dimensions accordingly.

3. For exact cross walk placement, please see detail #2 on sheet 3 of this typical.

* Minimum dimensions may be extended by the Public Works Director or his designee.

* See Chart #3, Sheet 2 for single turn lane & Chart #4, Sheet 2 for dual left turn lane min. storage distances.
NOTES:

1. IF TRANSITION IS DONE ONLY ON ONE SIDE OF THE ROAD, A DOWNSIZE OF THE RIGHT-OF-WAY (R/W) TRANSITION WILL BE REQUIRED.

2. R/W REQUIREMENTS SHOWN REFLECT A 90 DEGREE INTERSECTION. FOR OTHER INTERSECTING ANGLES, MODIFY DIMENSIONS ACCORDINGLY.

3. FOR EXACT CROSS WALK PLACEMENT, PLEASE SEE DETAIL # 2 ON SHEET 3 OF THIS TYPICAL.
1. If transition is done only on one side of the road, a doubling of the right of way (R/W) transition will be required.
2. R/W requirements shown reflect a 90-degree intersection. For other intersecting angles, modify dimensions accordingly.
3. For exact cross walk placement, please see detail #2 on Sheet 3 of this typical.

* Minimum dimensions may be extended by the Public Works Director or his designee.
* See Chart #3, Sheet 2 for single turn lane & Chart #4, Sheet 2 for dual left turn lane min. storage distances.