

Chapter 2

SIGNS

Section 2.1

USE OF SLIPPERY WHEN WET SIGNS

2.1.1 CONDITIONS FOR USE

The District Traffic Operations Engineer shall request the District Maintenance Engineer to erect SLIPPERY WHEN WET (W8-5) signs at locations where it has been determined there is a slippery pavement condition. A slippery pavement is defined when a standard friction test at 40 mph has determined the skid numbers are less than 25.

When the posted highway speed is above 45 mph, SLIPPERY WHEN WET signs should be installed when the skid numbers are less than 30, and also one of the following conditions is met:

- When the Safety Ratio (Actual Crash Rate divided by the Critical Crash Rate) is greater than or equal to one.
- Any downgrade greater than 3 percent.
- At intersections with traffic signals.

2.1.2 LOCATION AND PLACEMENT

Additional signs may be needed at locations with the following conditions:

- (1) **Horizontal Curves.** SLIPPERY WHEN WET signs are to be placed prior to the CURVE sign with an advisory speed plate. The ball-bank indicator provides a reasonable speed through the curve; however, a lower speed may be desired if there are known extraordinary hazards such as hydroplaning.
- (2) **Hydroplaning.** Generally, hydroplaning only occurs at speeds above 47 mph; however, excessive runoff across travel lanes may produce hydroplaning at lower speeds. Multi-lane facilities, rutted lanes, built-up shoulders, and downgrades are candidate locations. If excessive water buildup cannot be corrected, then SLIPPERY WHEN WET signs may be appropriate even when skid numbers are greater than 30.
- (3) **Ramp and Bridge Decks.** Interchange exit or entrance ramps on sharp curves and on a downgrade may present a hazardous condition if the pavement is also slippery. Special attention should be given to ramps with compound curves. A pavement friction inventory is normally maintained for interchange ramps; however, special tests, at speeds less than 40 mph can be requested.

SLIPPERY WHEN WET signs should be used with an advisory exit speed sign, RAMP XX MPH (W13-2).

SLIPPERY WHEN WET signs shall be placed in advance of all moveable and non-moveable steel deck bridges. These signs should be placed in accordance with [Table 2C-4. Guidelines for Advance Placement of Warning Signs in the MUTCD](#).

2.1.3 ENHANCEMENT

When roadway surface conditions exist that might adversely affect a motorcyclists' ability to maintain control of their motorcycle under wet conditions, a MOTORCYCLE (**W8-15P**) plaque as shown in **Figure 2.1-1** may be mounted below the warning sign. Additional warnings should be placed at appropriate intervals where the condition exists.

Figure 2.1-1. Motorcycle Plaque



2.1.4 NOTIFICATION

- (1) The District Maintenance Engineers will promptly notify in writing the District Traffic Operations Engineer when SLIPPERY WHEN WET signs have been erected.
- (2) The District Traffic Operations Engineer shall request the District Maintenance Engineer to remove SLIPPERY WHEN WET signs that are no longer warranted under the above provisions.

Section 2.2

OVERHEAD STREET NAME SIGNS

2.2.1 PURPOSE

Street name guide signs for most streets that intersect with a road on the state highway system are normally furnished, installed, and maintained by the appropriate local government. However, at signalized intersections on the state highway system, larger overhead street name signs should be used. These signs may be furnished and installed, by the Department.

2.2.2 STANDARDS

- (1) Street name signs shall only be used to identify cross streets. They are not intended to identify destinations such as cities or facilities.
- (2) The word Street, Boulevard, Avenue, etc., may be abbreviated or deleted to conserve sign panel length. However, if confusion would result due to similar street names in the area, for example Seminole Street and Seminole Avenue, this deletion should not be made.
- (3) When a cross street is known by both route number and a local name, use of the local name is preferred on the overhead street name signs since the route number is identified on route markers along the route.
- (4) When a cross street has dual local street name designations, for example N.W. 31 Avenue and Martin Luther King Jr. Boulevard, both names may be used on the overhead street name signs. However, the Department is responsible for the primary designation (i.e., name shown on the Official Florida Transportation Map). If a secondary designation is approved by local resolution, the local government shall be responsible for the installation of this secondary designation.
- (5) When a cross street has a different name on each side of the intersection, both names shall be shown on the overhead street name sign, two signs should be used with one on the left and one on the right side of the intersection. In some instances, the type of signal span design may dictate the need for the use of a single sign with both names. When used, the names should be separated and accompanied by directional arrows, with the left name displayed over the right.
- (6) The display of block numbers is not required when two street names with arrows are provided on a single panel.

2.2.3 INSTALLATION

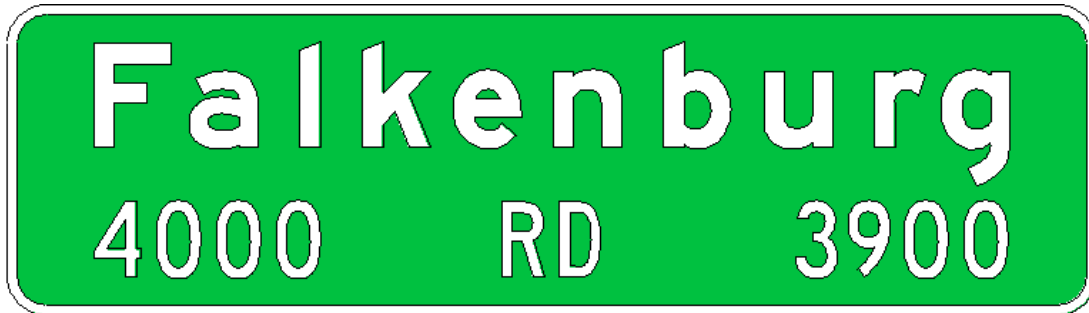
- (1) The location of the overhead street name sign on a signal strain pole and/or mast arm may vary. However, it shall not interfere in any way with the motorist view of the signal heads.
 - (a) For static signs, the preferred installation is shown in the [Department's Standard Plans, Index No. 659-010](#).
 - (b) For internally illuminated signs, the preferred installation is shown in the [Department's Standard Plans, Index No. 700-050](#).
- (2) In the case of separate street names on each side of the street, one sign should be placed to the right of the centerline and signal heads and the other to the left side of the centerline and signal heads.

2.2.4 SIGN DESIGN

- (1) Overhead street name signs shall be designed in accordance with [Section 2D.43 of the MUTCD](#).
- (2) The sign panel used for overhead street name signs shall be 24 inches in height with length determined by legend.
- (3) At a minimum, 8-inch upper and 6-inch lower case lettering for the street name and 6-inch all upper case lettering for the block numbering text on the second line shall be used. The preferred font is Series E-Modified; however, Series E may be used to accommodate the amount of legend. An example of this design is shown in **Figure 2.2-1**.
- (4) When structurally possible, overhead street name signs should be designed in compliance with FHWA recommendations for older drivers ([Section 2D.43 of the MUTCD](#) and [Recommendation I-J-2 of the FHWA Design Handbook for Older Drivers and Pedestrians](#)). When used, the minimum lettering size should be 12-inch upper case with 9-inch lower case.
- (5) Internally-illuminated signs should be used whenever possible to provide better night-time visibility, and to benefit older drivers. When used, the devices shall be on the [Approved Products List \(APL\)](#). They shall be designed using a white message on a green background, and if a border is used it shall be white.
- (6) Overhead street name signs using standard panels shall have a white message and border on a green background. If internally illuminated overhead street name signs are not installed, high intensity sheeting should be used for added visibility at night.

- (7) Sign panels should be two-sided in order to provide for a sign display on both the right and left side of each intersection approach.

Figure 2.2-1. Overhead Street Name Sign



Section 2.3

SIGNS AND MARKINGS AT DIVIDED HIGHWAYS AND CROSSROADS

The Department's standards for this section are shown in the current edition of the [Department's Standard Plans, Index No. 711-001, Sheet 5 of 14](#) and [Index No. 700-109](#).

Section 2.4

SYMBOL SIGNS ON THE STATE HIGHWAY SYSTEM

2.4.1 DEFINITIONS

Symbol Sign. Sign used to inform, advise, regulate, or warn of an impending situation where a symbol depicts the approaching situation or information desired.

Word Message Sign. Sign used as an alternate to a symbol sign describing by word message an approaching situation or information desired.

Educational Plaque. A word message sign used jointly with a new symbol sign to familiarize the motoring public with the meaning of the symbol displayed.

Symbol signs are more easily recognized and better understood by the motoring public. The [MUTCD](#) encourages their use as the primary advisory or warning sign.

With Florida's large tourist population, a broader use of symbol signs is a desirable and important step toward the greater safety and facilitation of traffic. Accordingly, it is appropriate to *require* the use of symbol signs over word message signs.

2.4.2 CONDITIONS FOR USE

- (1) A symbol sign, if available, shall be used where an advisory, regulatory, or warning sign is warranted to depict an approaching situation or provide information. Word message signs as alternates to symbol signs and educational plaques are generally less effective. However, there may be circumstances where a word message sign is more appropriate. In these cases, the District Traffic Operations Engineer should maintain documentation of the exception in district files.
- (2) Any proposed new symbol will require approval as provided in [Section 1A.10 of the MUTCD](#). All requests for a new symbol shall be sent to the State Traffic Operations Engineer for review and processing with the Federal Highway Administration.
- (3) When a new symbol sign is utilized, an educational plaque may be used to explain the new symbol by word message as provided in [Section 2A.12 of the MUTCD](#).

Section 2.5

DESTINATION-DISTANCE SIGNS AT RURAL INTERSTATE AND FREEWAY EXIT RAMP TERMINALS

- (1) Combined DESTINATION-DISTANCE (*D1-1a, D1-2a, and D1-3a*) signs should be used at exit ramp terminals on rural interstates and freeways in lieu of DESTINATION (*D1-1*) signs.
- (2) The combined DESTINATION-DISTANCE sign shall only be used facing exiting traffic from rural interstate and freeway ramps.
- (3) Existing DESTINATION signs at exit ramp terminals should be replaced with the combination DESTINATION-DISTANCE signs during the course of routine sign replacement activities.
- (4) Distances should be determined from the best information available and reflect the distance from the ramp terminal to a control point in the named destination. Control points for all Florida cities that are listed on the official [Florida Distance Chart](#) are maintained by the Transportation Data and Analytics Office.
- (5) In the case of places not on the chart, a control point may be defined by the district, usually as the junction of two main routes within the urban area.
- (6) Distance figures shall be shown just after the destination name. When a sign must accommodate destinations in different directions, a line should divide the destinations as shown in [Figure 2D-7 of the MUTCD](#).
- (7) Signs shall have a white legend on green background. The signs shall be individually detailed in plans and use as a minimum 8-inch numerals and 8/6 upper/lower case lettering.

Section 2.6

BRIDGE SIGNS AND MARKINGS

2.6.1 BRIDGE AND SIGN STRUCTURE LOW CLEARANCE SIGNS

- (1) A LOW CLEARANCE (W12-2) sign shall be placed in advance of every bridge or structure having a minimum vertical clearance of 14 feet 6 inches or less except as noted below.
- (2) In urban areas, where advance signs could be blocked by traffic or where competition with advertising signs make advance signs ineffective, the LOW CLEARANCE sign or marking should be placed on the bridge beam or equivalent.
- (3) A LOW CLEARANCE sign or marking shall also be placed on the bridge beam or equivalent of every bridge or structure having a minimum vertical clearance of 13 feet 6 inches or less.
- (4) LOW CLEARANCE signing and marking shall conform to additional criteria outlined in [Section 2C.27 of the MUTCD](#).

2.6.2 BRIDGE PIER MARKING

- (1) Bridge piers shall be marked only when they are not protected by a guardrail or a barrier and are less than 30 feet from the near edge of pavement.
- (2) The marking used shall be a Type 3 object marker 12 x 36-inch panel with alternating black and yellow stripes sloped down at an angle of 45 degrees toward the side of the pier which traffic is to pass.
- (3) For additional emphasis, a large surface bridge pier may be treated with sheeting having diagonal stripes at least 12 inches wide and similar in design and application to the Type 3 object marker.

2.6.3 CROSS ROAD NAME SIGNS ON OVERPASSES

These signs will no longer be installed, except as requested by law enforcement agencies or emergency rescue organizations. This includes signs mounted on the bridge beam or on posts. When this request is approved, the signs should use 10.67-inch Series E Modified lettering.

2.6.4 NARROW BRIDGE TREATMENT

Signs and markings on narrow bridge approaches shall be as shown in the current edition of the [Department's Standard Plans, Index No. 700-106](#).

2.6.5 GUIDE SIGNS ON OVERPASSES

See *FDOT Modifications To LRFD Specifications For Structural Supports For Highway Signs, Luminaires And Traffic Signals (LRFDLTS-1)*, [Structures Manual Volume 3](#), Section 2.6 for limitations on the use of bridge mounted signs.

Section 2.7

PLACE NAME SIGNS ON THE STATE HIGHWAY SYSTEM

This section has been rescinded since it is now included in [*Rule Chapter 14-51, Part IV of the Florida Administrative Code.*](#)

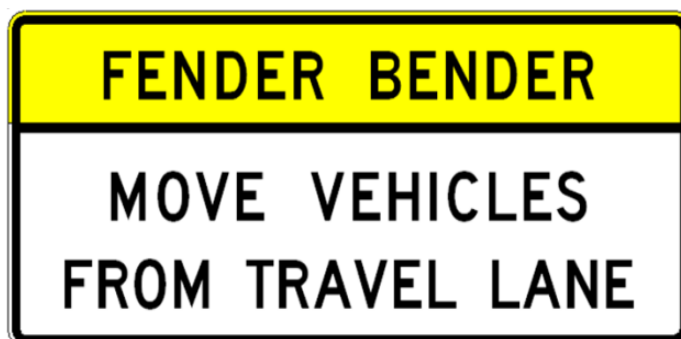
Section 2.8

MOVE VEHICLES FROM TRAVEL LANE SIGN

2.8.1 SIGN DESIGN

MOVE VEHICLES FROM TRAVEL LANE (*R16-4*) signs are found in [Section 2B.65 of the MUTCD](#). These signs are used in support of [Section 316.061\(2\), F.S.](#) and replaces the experimental MOVE ACCIDENT VEHICLES FROM TRAVEL LANE sign (formerly *FTP 27-06 and FTP-28-06*.)

Figure 2.8-1. Move Vehicles from Travel Lane Sign



2.8.2 LOCATION AND PLACEMENT

- (1) On non-limited access highways a MOVE VEHICLES FROM TRAVEL LANE (*R16-4*) sign may be used in urban areas when their use will reduce queue lengths and delays, remove interference with traffic signal vehicle detectors, or enhance intersectional capacity. The 42 x 84 inch standard panel uses 6-inch Series C lettering. The 24 x 52 inch standard sign panel has 4-inch Series C letters.
- (2) On limited access highways, a 54 x 120 inch MOVE VEHICLES FROM TRAVEL LANE (*R16-4*) sign using 8-inch Series D lettering may be placed on the right side of urban freeways downstream from entrance ramps when their use will improve driver behavior concerning unnecessary and unlawful constriction of freeway travel lanes due to traffic crashes.
- (3) The MOVE VEHICLES FROM TRAVEL LANE (*R16-4*) sign details are available in the [Standard Highway Signs and Markings Book – Interim Releases for New and Revised Signs](#).

- (4) For permanent installations, specify yellow retroreflective background for the FENDER BENDER enhancement.
- (5) Mounting heights and lateral clearances should adhere to those specified in the [*Department's Standard Plans, Index No. 700-101*](#) and support systems shall meet or exceed Department standards of frangibility.

Section 2.9

NO PASSING ZONE SIGNS

- (1) The NO PASSING ZONE (*W14-3*) pennant sign, as shown in **Figure 2.9-1** shall **not** be used routinely at the beginning of all no passing zones.
- (2) The NO PASSING ZONE pennant sign may be installed as a supplement to pavement markings that establish a no passing zone under the following circumstances:
 - (a) At locations where pavement markings indicating no passing zones are not visible sufficiently in advance to give the driver adequate warning such as on vertical or horizontal curves.
 - (b) Other locations where such signs are determined desirable for safety as a result of an engineering study.
- (3) Proposed use of NO PASSING ZONE pennant signs at locations meeting the above criteria shall be reviewed and approved by the District Traffic Operations Engineer prior to installation.

Figure 2.9-1. No Passing Zone Pennant Sign.



W14-3
 NO PASSING ZONE

*Reduce spacing 20% for 48" size.
 **Reduce spacing 35% for 48" size.
 ***Use Series 2000 Alphabets for 36" size.

A	B	C	D	E	F	G	H	J	K	L	M	N
36	24	.5	.75	5.75	3 D	3 C	1.75	2.375	1.875	4	15.75	8.313
40	30	.5	.75	7.25	4 D	4 C	1.75	2.5	1.875	6.5	22.563	11.063
48	36	.625	.875	8.5	5 D	5 C	2	3	2.25	8	268.13	12.75
64	48	.75	1.25	12	6 D	6 C	3	4	3	10.75	33.688	16.563

WARNING SIGN COLORS:

LEGEND — BLACK
 BACKGROUND — YELLOW (RETROREFLECTIVE)

TTC SIGN COLORS:

LEGEND — BLACK
 BACKGROUND — ORANGE (RETROREFLECTIVE)

Section 2.10

VENDING MACHINE SIGNS

2.10.1 PHYSICAL CHARACTERISTICS

- (1) The VENDING MACHINES sign (**FTP-73-06**) shall be 66 x 30 inches with two lines of legend in 8-inch Series D lettering. The legend and border shall be white on blue background.
- (2) Sign details are available in the [Department's Standard Plans, Index No. 700-102](#).

2.10.2 LOCATION AND PLACEMENT

- (1) VENDING MACHINES signs will be appended at the bottom and between the supports of REST AREA 1 MILE (**D5-1**) signs. Such placement will not impair the breakaway characteristics of the sign.
- (2) At some rest areas, the VENDING MACHINE message is designed into a sign with flip-up panel which reveals the message SAFETY BREAK / FREE COFFEE (**FTP-74-06, FTP75-06, and FTP-76-06**).
- (3) Normally, the VENDING MACHINES message will be displayed. However, when the safety break is in effect, the sign is to be folded up to read SAFETY BREAK FREE COFFEE.
- (4) The SAFETY BREAK / FREE COFFEE sign detail is available in the [Department's Standard Plans, Index No. 700-102](#).

Section 2.11

GUIDELINES FOR BICYCLE WARNING SIGNS

2.11.1 DEFINITIONS

Bicycle Facilities. A general term denoting improvements and provisions by public agencies, to accommodate or encourage bicycling.

Designated Bicycle Facilities. Bicycle lanes that are always designated or marked with a solid white line, bike lane signs, and bicycle symbols on the pavement.

Designated Bicycle Trails. Any mapped recreational bicycle route.

Share the Road Signs. Signs used to warn motorists that bicycles and vehicles can legally use/share travel lanes.

2.11.2 GENERAL INSTRUCTIONS

- (1) To have maximum effect, these signs are to be used with discretion only at locations that have a problem and only where one or more of the following criteria are met:
 - (a) Safety problems when the roadway cannot be improved for bicycle features.
 - (b) Where there is high bicycle volume.
 - (c) Where there is a conflict or obvious courtesy problem between car and bicycle sharing the road.
- (2) Designated bicycling facilities are not eligible for this sign. As a general rule, corridors where paved shoulders or designated bicycle lanes are present will not be considered unless a special safety or road courtesy problem exists. Then the signs may be placed for added information.
- (3) Prior to approval by the District Traffic Operations Engineer, the District Bicycle Coordinator shall review volumes and crash data and provide recommendations for all signing requests.

2.11.3 WHEN SIGN REQUESTS MAY BE APPROVED

- (1) Roadway sections with a significant history of bicycle crashes will be considered for signing.
- (2) Roadway sections where motorists are likely to pass one or more bicyclists at least every one to three miles during daylight hours should be considered for signing.
- (3) Roadway sections that have special problems should be considered even if a lower volume of bicycling is anticipated. For instance, a roadway section that has the potential to attract bicyclists that has been narrowed from the standard 12-foot width may be considered.
- (4) Where designated bicycle trails are placed on short stretches of a major roadway that has not been improved for bicycling.
- (5) On approaches to bridges or any other section where motorists and bicyclists have reduced sight distance, operating widths or have been compromised due to right of way or actual roadway geometry restrictions.
- (6) Roadway sections adjacent to shared use paths where for the safety of other path users (pedestrians, children) and the cyclists' own safety, SHARE THE ROAD signing may be considered.

2.11.4 SIGN DESIGN

- (1) The SHARE THE ROAD Sign is a combination of the federally approved BICYCLE CROSSING WARNING SIGN (**W11-1**) and the SHARE THE ROAD (**W16-1**) plaque. The use of the **W11-1** sign is shown in [Section 9B.18 of the MUTCD](#). The use of the **W16-1** supplemental plaque is shown in [Section 9B.19 of the MUTCD](#).
- (2) The **W11-1** sign is 30 x 30 inches and yellow and black in color. The **W16-1** sign is an 18 x 24-inch supplemental plaque, with 4-inch Series C lettering, yellow and black in color. These signs can also be used in fluorescent yellow-green and black if it satisfies the criteria shown in **Section 2.29.2.2 of the TEM**. However, it is important that both sign panels be the same color.
- (3) An example of the SHARE THE ROAD sign is shown in **Figure 2.11-1**.

Figure 2.11-1. Share the Road Sign



2.11.5 SIGN PLACEMENT

- (1) The SHARE THE ROAD signs should be installed according to [Section 9B.19 of the MUTCD](#).
- (2) The signs shall be mounted according to height and lateral clearances specified in the [Department's Standard Plans, Index No. 700-101](#).
- (3) The sign shall be installed only at locations reviewed and approved by the District Traffic Operations Engineer to ensure that such signs do not interfere with existing traffic control devices.
- (4) Where a bike lane ends the SHARE THE ROAD sign (**Figure 2.11-1**) may be used instead of the BIKE LANE ENDS sign (**R3-16a**).

Section 2.12

RECYCLING COLLECTION CENTER SIGNS

2.12.1 DEFINITION

Recycling Collection Center. A facility open full time to the general public for the purpose of collecting items to be recycled, e.g., oil, aluminum, batteries, etc. The facility may operate as part of a recycling plant or may be a collection center for the distribution of these items to a recycling center elsewhere.

2.12.2 SIGN DESIGN

- (1) The RECYCLING COLLECTION CENTER (FTP-48-06) sign shall be 42 x 60 inches. Lettering shall be 4-inch, Series C. The legend and border shall be white on green.
- (2) The RECYCLING COLLECTION CENTER W/OPTIONAL MUNICIPALITY NAME (FTP-49-06) sign shall be 42 x 66 inches. Lettering shall be 4-inch, Series C. The legend and border shall be white on green.
- (3) A Directional Arrow (M-Series) may be attached below the sign panel if desired.
- (4) Exact sign details for both the FTP-48-06 and the FTP-49-06 can be found in the [Department's Standard Plans, Index No. 700-102](#), and in the [Department's Sign Library](#).

2.12.3 SIGN INSTALLATION

- (1) Sign requests must be submitted by local government to the appropriate District Traffic Operations Office for review and approval.
- (2) RECYCLING COLLECTION CENTER signs placed on the State Highway System should adhere to the mounting heights and lateral clearances specified in the [Department's Standard Plans, Index No. 700-101](#). Support systems shall meet or exceed the standards shown in [Section 700 of the Department's Standard Specifications](#).
- (3) RECYCLING COLLECTION CENTER signs shall not be permitted in a location where the view of existing traffic control devices may be obscured or where they might otherwise compete for the motorist's attention, for example, next to a stop sign.

Section 2.13

SIGNING FOR SAFETY BELT USE AND CHILD RESTRAINT LAWS

2.13.1 PURPOSE

To help reduce the number of highway deaths and injuries; to encourage compliance of motorists with the state's safety belt use and child restraint laws; and to establish uniform criteria for district implementation of signing for safety belt use and child restraint laws.

2.13.2 BACKGROUND

The Florida Safety Belt Law ([Section 316.614, F.S.](#)), mandates state agencies conduct a continuing safety and public awareness campaign and adopt programs designed to encourage compliance with usage requirements of the safety belt law. It is the intent of this procedure to support the actions of this statute and provide appropriate signing.

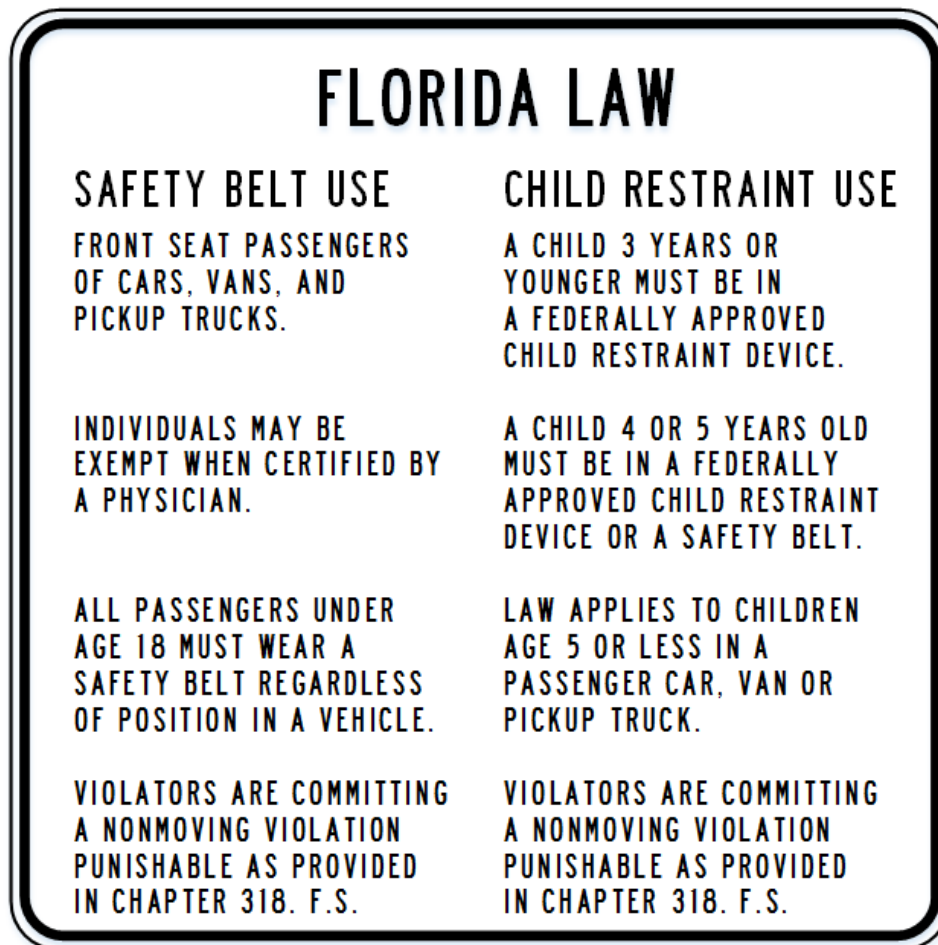
2.13.3 STATE HIGHWAY SYSTEM POINTS OF ENTRY

- (1) Districts Two and Three shall install and maintain signing at all State Highway System points of entry, informing motorists of the statutory requirement for safety belt use in the State of Florida.
- (2) On limited access highways, a FLORIDA SAFETY BELT AND CHILD RESTRAINT LAW sign (**FTP-44-06**) shall be installed downstream of existing "Welcome to Florida" and speed limit signs.
- (3) On non-limited access highways, a FLORIDA SAFETY BELT AND CHILD RESTRAINT LAW sign (**FTP-45-06**) shall be installed downstream of existing "Welcome to Florida" and speed limit signs.

2.13.4 REST AREAS AND INTERSTATE WELCOME CENTERS

- (1) A Rest Area Safety Belt Law sign (**Figure 2.13-1**) shall be installed and maintained in all rest areas and Interstate Welcome Centers informing motorists of the specific requirements of Florida's safety belt and child restraint laws. This sign shall be placed in a prominent location for easy viewing by pedestrians using the facilities.

Figure 2.13-1. Florida Safety Belt Law



- (2) On the exit from these rest areas and Welcome Centers, the existing “Buckle Up” sign shall be replaced with the FLORIDA SAFETY BELT AND CHILD RESTRAINT LAW sign (*FTP-45-06*), as signs need to be replaced.

2.13.5 OTHER LOCATIONS

The FLORIDA SAFETY BELT AND CHILD RESTRAINT LAW sign (*FTP-44-06* and *FTP-45-06*) may be used at other locations on the State Highway System at the discretion of the District Traffic Operations Engineer but should be limited to locations where:

- (1) There is documented evidence of a high crash location; or
- (2) A high percentage of the traffic is composed of tourists or visitors; and

- (3) The sign will not interfere or detract from existing regulatory, guide, or warning signs or other traffic control devices.

2.13.6 STANDARD SAFETY BELT SIGN (FTP-46-06 AND FTP-47-06)

- (1) This sign is to be used for general education purposes.
- (2) The 36 x 48 inch sign (**FTP-46-06**) should be installed on limited access facilities at county lines, based on space available. The District Traffic Operations Engineers may also install this sign where there is a documented need.
- (3) The 24 x 30 inch sign (**FTP-47-06**) is to be installed on non-limited access highways and urban areas, based on space available and where there is a documented need.

2.13.7 SIGN DESIGN

- (1) Specific sign details for all signs referenced in this section are shown in the [Department's Standard Plans, Index Number 700-102](#).
- (2) Electronic details for all the signs in this section are available from the [Department's Sign Library](#).

2.13.8 SIGN AVAILABILITY

Maintenance may obtain new or replacement signs by requisition from the Lake City Sign Shop.

Section 2.14

SIGNING FOR EMERGENCY MANAGEMENT

2.14.1 PURPOSE

To establish a uniform basis for installing and maintaining emergency management signs on the State Highway System.

2.14.2 BACKGROUND

- (1) The Florida Division of Emergency Management (DEM) plans for both natural and man-made disasters, as well as, prepares and implements a statewide Comprehensive Emergency Management Plan (CEMP). The DEM is the state's liaison with federal and local agencies on emergencies of all kinds and works with local governments to provide technical assistance, as they prepare emergency plans and procedures.
- (2) The DEM requested the Department to install and maintain evacuation route signs on those portions of the State Highway System that comprise official evacuation routes to educate motorists as to the available routes and to ensure that signs are in place well in advance of the actual need to guide motorists away from high-risk areas. Evacuation Route and Zone Maps are located on the DEM website.

2.14.3 PROCEDURE

- (1) The District Traffic Operations Engineer shall initiate the actions necessary at the district level to implement these guidelines and to ensure that evacuation routes are properly and promptly signed upon request of the County Emergency Management Director. District Maintenance will ensure that the signs are installed and maintained in the field.
- (2) Information on subsequent signing changes and/or additions shall be provided to the DEM for their records and shall be handled by the District Traffic Operations Engineer upon request of the regional counties and coordinated through the Department's Emergency Coordination Officer.

2.14.4 EVACUATION ROUTE SIGN DESIGN

- (1) The EVACUATION ROUTE sign shall conform to the [Department's Standard Plans, Index No. 700-102 Sheet 9.](#)

- (2) A 24-inch diameter Evacuation Route sign (**FTP-78-06**) should be used by local governments to indicate roads or streets under local jurisdiction as official evacuation routes.
- (3) The 36-inch diameter Evacuation Route sign (FTP-77-06) shall be used on limited access highways and the 24-inch diameter Evacuation Route sign (FTP-78-06) shall be used on non-limited access highways.
- (4) The arrow designs on the FTP-77-06 or FTP-78-07 sign shall include a straight, vertical arrow pointing upward, a straight horizontal arrow pointing to the left or right, or a bent arrow pointing to the left or right for advance warning of a turn.
- (5) Sign details are available at the Department's [Sign Library](#).

2.14.5 EVACUATION ROUTE SIGN USE

- (1) The EVACUATION ROUTE sign shall be used exclusively to sign along regional evacuation routes that have been so designated on the approved statewide regional evacuation route plans recorded by the Florida Division of Emergency Management.
- (2) The EVACUATION ROUTE sign shall be used to guide motorists along the regional evacuation routes and away from potential high-risk areas.
- (3) The sign shall comply with applicable provisions of the [Section 2N.03 of the MUTCD](#).

2.14.6 EVACUATION ROUTE SIGN PLACEMENT

- (1) Signs shall be placed in accordance with existing Department standards and be consistent with the [Section 2N.03 of the MUTCD](#).
- (2) The EVACUATION ROUTE sign shall be erected 150 to 300 feet in advance of, and at, any turn in an approved evacuation route and elsewhere for straight-ahead confirmation, if needed. The signs shall be mounted according to height and lateral clearances specified in the [Department's Standard Plans, Index No. 700-101](#).

2.14.7 SIGN INSTALLATION

- (1) Signs shall be furnished, installed, and maintained by the Department on official evacuation routes that are on the State Highway System.
- (2) Signs shall be installed only at locations reviewed and approved by the District Traffic Operations Engineer to ensure that such signs do not interfere with existing traffic control devices.

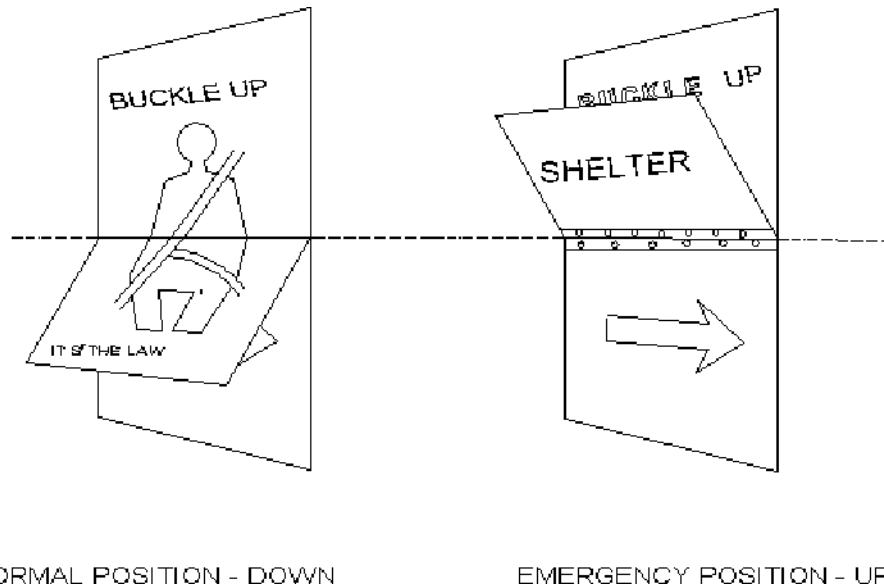
2.14.8 SHELTER AND TRAVELER INFORMATION SIGNING

- (1) The State Traffic Operations Engineer will coordinate, address, and implement operational concerns on evacuation route signing and related operational needs within the Department and with the Florida Division of Emergency Management.
- (2) The District Traffic Operations Engineers will coordinate evacuation shelter signing efforts on a districtwide basis. If signing for shelters or evacuation traveler information is required, the use of the signs must be included in the CEMP area/regional evacuation plan.
- (3) Shelter signing will be installed on highways at key locations. The location determination shall be a joint effort between the District Traffic Operations Engineer and the local agencies.
- (4) Signs will be installed under the following conditions:
 - (a) the shelter location is part of the regional plan;
 - (b) the local agency shall purchase the signs;
 - (c) the local agency shall be responsible to "flip-up" or "flip-down" the signs.

2.14.9 SHELTER SIGN DESIGN AND USE

- (1) Shelter signs shall have a white background in accordance with [Section 2N.09 of the MUTCD](#).
- (2) The type of shelter signing support used on the State Highway System, portable (temporary), or permanent, will be determined by the District Traffic Operations Engineer.
- (3) The sign designs for shelters may be permanent or temporary. The permanent design will use a "flip up" design as shown in **Figure 2.14-1**. This means that the bottom panel will be flipped up to reveal the shelter message. The Safety Belt Symbol Sign shall be used as the default message for shelter signs. The CEMP should assign responsibility for turning up the "flip up" signs (**Figure 2.14-1**) during emergency conditions, and back down when conditions return to normal.

Figure 2.14-1. Flip Up Sign



2.14.10 TRAVELER INFORMATION SIGNING DESIGN AND USE

- (1) The Traveler Information sign shall have a blue background with a white legend in accordance with the MUTCD Standard Signs D12 series and MUTCD Section 2I.09. An example is shown in **Figure 2.14-2**.
- (2) When the local/regional CEMP plan includes the use of traveler information on local shelters and other evacuation information, and a local radio station has a written agreement to be the official traveler information station, the frequency of the station may be signed for on the interstate system. This can be done with Changeable Message Signs, or with permanent flip up signs as shown in **Figure 2.14-1**. A default message for the “flip up” sign shall be the Safety Belt Symbol sign.

Figure 2.14-2. Traveler Information Sign



2.14.11 CONTINUOUS HINGE REQUIREMENTS

The continuous hinge shall be of stainless steel, with minimum .060-inch leaf thickness, 2-inch open width and .120-inch pin diameter. The hinge shall be attached to the aluminum sign panels with 1/8-inch stainless steel pop rivets installed on 4-inch centers for the width of the sign. The pin must be permanently located in place by shortening the pin at each end of the hinge and staking the ends of the two outboard knuckles.

2.14.12 RADIO FREQUENCY INFORMATION SIGNS

The addition of radio frequency information signs along evacuation routes on the State Highway System has been approved by the Department as an important communication link for public safety during evacuation periods. The addition of these signs was made possible when Florida Public Radio Stations volunteered to partner with other state and local agencies in the state's evacuation efforts.

2.14.12.1 Radio Frequency Information Sign Design

The Radio Frequency Information sign shall have a blue background with a white legend in accordance with the MUTCD Standard Signs D12 series and MUTCD Section 2I.09.

2.14.12.2 Radio Frequency Information Sign Placement

- (1) The Radio Frequency Information Sign (**Figure 2.14-3**) will be placed at the following locations:
 - (a) All limited access highways classified as evacuation routes.
 - (b) Principal non-limited access highways in areas where limited access highways are not the main evacuation routes.
 - (c) Principal non-limited access highways that are critical links leading to limited access highways.
- (2) Limited access highways will consist of an Evacuation Route sign (**FTP-77-06**) sign and a 36 x 24-inch Radio Frequency Information sign (**FTP-70-06**). Exact sign details can be found in the [Department's Standard Plans, Index 700-102](#).
- (3) This sign assembly will be positioned near county lines (where radio coverage is present) and where radio frequency coverage changes. When overlap occurs, the frequency motorists would be driving into is the correct frequency to sign.
- (4) Evacuation routes on the State Highway System non-limited access highways are signed with the Evacuation Route sign (**FTP-78-06**). A 24 x 18-inch Radio Frequency Information sign (**Figure 2.14-3**) will be attached to the existing sign assembly in the above mentioned locations erected close to the county lines or

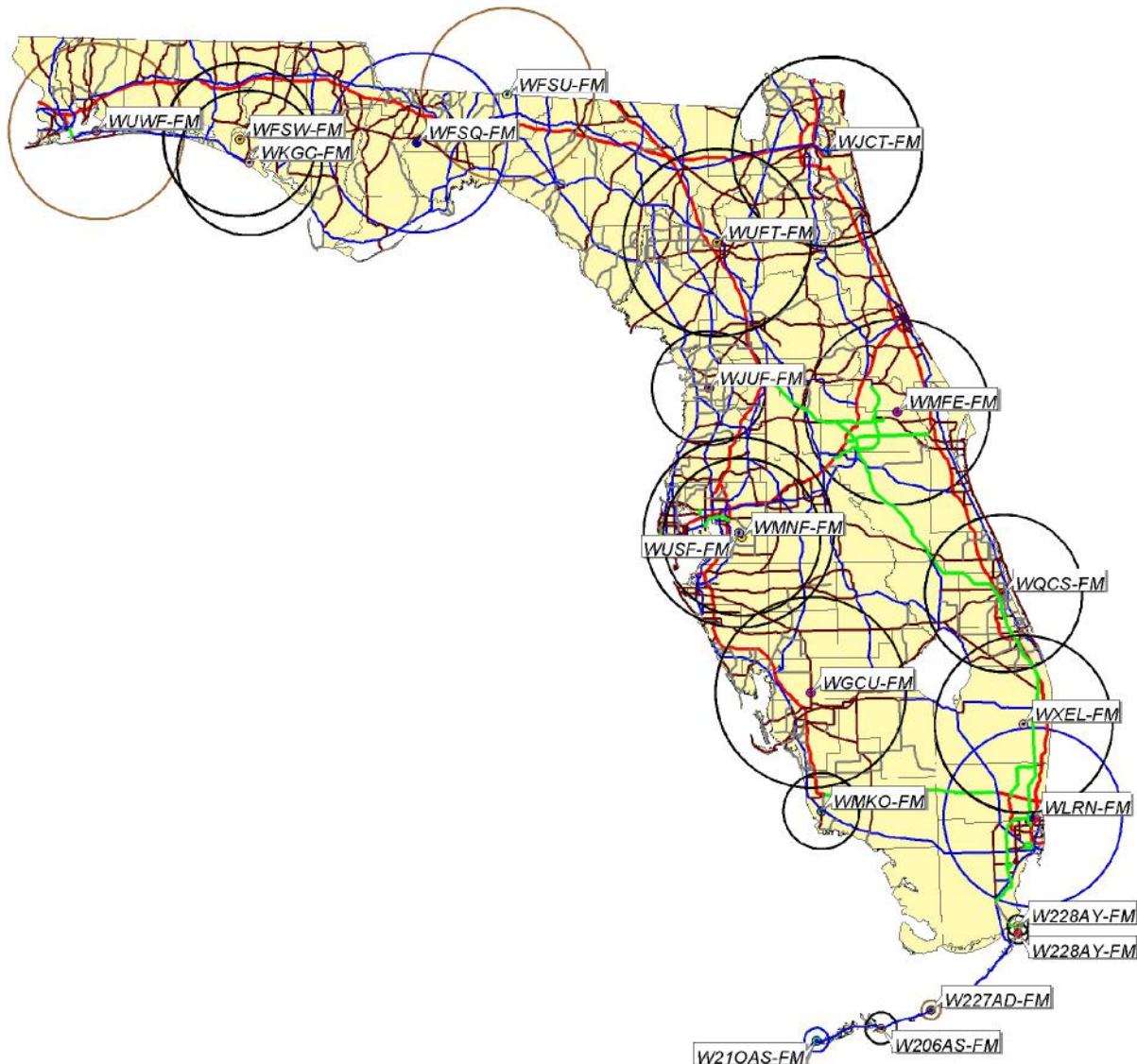
coverage area. Changes are to be modified with the addition of the radio frequency panel. Additional locations to be modified are the beginning and termination points of qualifying links.

- (5) When long segments occur on both limited access and non-limited access highways, confirmation Radio Frequency Information signs should be installed at 10-mile increments.
- (6) **Figure 2.14-4** represents the general statewide radio coverage area for this program.

Figure 2.14-3. Radio Frequency Information Sign



Figure 2.14-4. Radio Coverage Area



Note: WXEL-FM call letters have changed to WPBI-FM
WFIT-FM has been added to the Florida Public Broadcast membership.

2.14.12.3 Radio Frequency Information Sign Installation

- (1) Exact sign locations are to be determined by the [District Traffic Operations Engineer](#). Work orders should be prepared using the usual procedures for installation by Department Maintenance forces.
- (2) The signs shall be mounted according to height and lateral clearances specified in the [Department's Standard Plans, Index No. 700-101](#).

- (3)** In some cases, the mounting height resulting from attaching an additional panel to an existing sign may be less than the required 7 feet. In rural roadside areas, this situation still meets requirements; however, in urban areas where pedestrians are present, the support must be modified to maintain the required height.

Section 2.15

SMOKE ON HIGHWAY SIGNS

2.15.1 GENERAL

- (1) The occurrence of fires in proximity to highways in Florida often creates safety hazards to motorists. These fires can be wildfires or controlled burns under prescribed conditions. In virtually every case, Florida Department of Agriculture and Consumer Services, Division of Forestry (DOF) officials are most knowledgeable about the location and seriousness of the situation.
- (2) A Highway Safety Smoke Management Interagency Agreement has been developed between DOF, FDOT and the Florida Highway Patrol (FHP) to provide a cooperative effort to warn the public about roadway visibility hazards resulting from wildfires and prescribed burns.
- (3) Several years ago portable temporary smoke warning signs were provided by the FDOT for use by DOF officials. These signs are to be used in emergency situations where smoke creates a hazard to motorists. This section of the Traffic Engineering Manual describes this practice and documents the authority of the DOF to erect temporary signs when there is smoke present from either wildfires or prescribed burns on the State Highway System.

2.15.2 TEMPORARY SMOKE ON THE HIGHWAY SIGN

- (1) Each Forest Area Supervisor employed by the DOF is authorized to approve the placement of portable sign assemblies warning motorists of smoke on the State Highway System. These signs should be erected when there is sufficient smoke present to create a safety concern to motorists.
- (2) The signs and support hardware must comply with Department standards and shall consist of a portable wind resistant stand and roll-up 48-inch non-reflective sign with Series C Lettering. The electronic sign detail is available at the [Department's Sign Library](#).

2.15.3 PRESCRIBED BURN SIGN

- (1) Retro-reflective, non-temporary signs are to be used for prescribed burns. These are burns that are pre-planned and approved through the DOF authorization process. The signs will be supplied, erected, and removed by the person planning and executing the burn.
- (2) The person(s) planning and executing the prescribed burn shall provide a decal on the back of the sign which has both the contact information and the date the sign was placed on the State Highway System.
- (3) Person(s) planning and executing a prescribed burn will contact the applicable FDOT Maintenance yard to notify them that signs are being placed on the State Highway System roadways in anticipation of a burn. The information given to the maintenance yard shall include the exact time and location of the signs and contact information for the persons conducting the burn.
- (4) It is the responsibility of the person planning and executing the prescribed burn to contact Call Sunshine (1-800-432-4770) 48 hours prior to installing the signs to insure no conflict with existing utilities.
- (5) The sign used for prescribed burns will contain black lettering on a yellow retro-reflective background with Series C Lettering. Sign materials shall comply with the current edition of the [Section 994 of the Department's Standard Specifications](#).
 - (a) The sign size shall be a 36-inch diamond shape when installed on roadways posted at 50 mph or less.
 - (b) The sign size shall be a 48-inch diamond shape when installed on roadways posted at 55 mph or greater.

Electronic sign details are available at the [Department's Sign Library](#).

- (6) Sign sheeting shall be Type IIIA, IIIB, or IIIC, fastened to an aluminum substrate at least 0.080 thick. Signs shall be mounted in accordance with the current edition of the Department's Standard Plans, Index No. 102-600, Sheet 6 of 13 using round aluminum or steel channel as follows:

Aluminum: 3.5" x 3/16"

Steel channel: two 3.0# at 2'-6" center to center

Using 2-I and 1-II brackets.

- (7) Mounting heights and lateral clearances should adhere to those specified in the current edition of the [Department's Standard Plans, Index No. 700-101](#):

Case II (rural locations)	Sign edge 12' minimum from driving lane edge
Case V (urban locations)	Sign edge 2' minimum from face of curb

2.15.4 SIGN INSTALLATION AND REMOVAL

- (1)** The signs shall be installed 1/2 mile in advance of the hazard area in both directions to allow motorists sufficient time to react to the sign message. Signs shall be double-mounted on divided highways.
- (2)** The appropriate FHP Troop Headquarters shall be notified within the shortest possible time, not to exceed one (1) hour, when the appropriate smoke on highway signs are used so that coordinated efforts can be developed.
- (3)** It is important to note where and when the signs were placed. Due to the fact that smoke moves, frequent monitoring is needed to assure proper placement.
- (4)** Conditions must be monitored and the signs removed when conditions improve to the extent where these signs are not needed. The removal of these signs shall be done by DOF personnel or FDOT Maintenance forces, whoever erected the sign, with coordination with the FHP.

Section 2.16

SUPPLEMENTAL GUIDE AND MOTORIST SERVICES SIGNS ON LIMITED AND NON- LIMITED ACCESS HIGHWAYS

This section has been rescinded since it is now adopted as Florida's Highway Guide Sign Program in [Rule Chapter 14-51, F.A.C.](#)

Section 2.17

EMERGENCY HIGHWAY TRAFFIC PLAN

This section of the TEM has been rescinded and replaced with the [Emergency Management Program \(Topic Number 956-030-001\)](#), which is sponsored by the Emergency Management Office.

Section 2.18

*FHP HIGHWAY ASSISTANCE PROGRAM

2.18.1 PURPOSE

- (1) The *FHP (347) Highway Assistance Program is a statewide program where motorists wishing to report highway related information to the Florida Highway Patrol, or summon roadside assistance in a Road Ranger service area, can do so by using their cellular phone. Signs will be erected to inform motorists of the cellular phone number.
- (2) The signing program will extend to all Interstate, Toll, U.S. Routes, and other major State Highway System roadways throughout the state.

2.18.2 SIGN LOCATION

The location of these signs should correspond to areas where cellular service is available. The service is available in all counties of the state; however, there are areas in some counties which are not covered.

2.18.3 SIGN DESIGN AND INSTALLATION

- (1) The *FHP sign (**FTP-43-06**) is 48 x 48 inches, has a white legend on blue background, and the exact sign detail is shown in the [Department's Standard Plans Index No. 700-102](#).
- (2) The electronic detail for this sign is available from the [Department's Sign Library](#).
- (3) The *FHP sign has been revised to provide motorists the number interpretation of FHP (347), in order to quicken the calling process. This new sign design will be used on all new projects and as signs need to be replaced.
- (4) Mounting heights and lateral clearances should adhere to those specified in the [Department's Standard Plans, Index No. 700-101](#) and support systems shall meet or exceed Department standards of frangibility.
- (5) Specific sign placement details should be developed by District Traffic Operations Offices using the following guidelines.

2.18.13.1 Interstate and Other Limited Access Routes

- (1) At state and county lines

- (2) At approximately 30 mile intervals
- (3) Following major freeway to freeway interchanges

2.18.13.2 Major Arterial Routes

- (1) At state and county lines
- (2) At approximately 30 mile intervals
- (3) Downstream from intersections formed by junctions of U.S./Major State Highway System roadways

2.18.4 SIGN AVAILABILITY

Maintenance may obtain new or replacement signs by requisition from the Lake City Sign Shop.

Section 2.20

CALL BOX/MILE MARKER SIGNS

This section has been rescinded in accordance with the *Department's DME Memo 13-05, Call Box Removal Plan*. Information on the use of reference markers can be found in *Section 2.28 of the TEM*.

Section 2.21

FLORIDA LITTER LAW SIGNS

2.21.1 PURPOSE

In 1988, the Legislature enacted the ***Solid Waste Act*** which provided for a comprehensive solution to Florida's solid waste problems by involving state and local governmental entities and the private sector. ***Section 55 of the Solid Waste Act*** provided that there must be a coordinated effort to a cleaner environment through sustained programs of litter prevention. Subsection 5 provided that the Department of Transportation must place signs discouraging litter at all off-ramps on the interstate highway system.

2.21.2 SIGN DESIGN AND PLACEMENT

- (1) The FLORIDA LITTER LAW sign is to be installed in compliance with [**Section 403.413\(4\), F.S.**](#)
- (2) The Department shall install the FLORIDA LITTER LAW sign (***FTP-41-06***) on interstate off-ramps as required by statute. They should be installed a minimum of 100 feet in advance of the first motorist services sign, or a minimum of 100 feet in advance of directional signs on the off-ramps without motorist service signs.
- (3) The off-ramp sign shall be 30 x 36 inches with a white background and black legend (***FTP-41-06***). The specific sign detail is shown in the [**Department's Standard Plans, Index 700-102.**](#)
- (4) The Department may also install the FLORIDA LITTER LAW sign (***FTP-40-06***) on the interstate where there is excessive littering. This sign shall be 42 x 48 inches with a white background and black legend. The specific sign detail is shown in [**Department's Standard Plans, Index 700-102.**](#)
- (5) Electronic sign details are available at the [**Department's Sign Library.**](#)

2.21.3 SIGN INSTALLATION

- (1) Installation of these signs should be completed through the normal methods of locating the sign positions and notifying District Maintenance. Maintenance will order the signs from the Sign Shop and install them.
- (2) The FLORIDA LITTER LAW sign (***FTP-41-04***) may also be installed on the State Highway System either by the [**District Traffic Operations Engineer**](#) or by local government through the Department's permit process.

- (3) Mounting heights and lateral clearances should adhere to those specified in the [*Department's Standard Plans, Index No. 700-101*](#) and support systems shall meet or exceed Department standards of frangibility.

Section 2.22

TRAFFIC CONTROL FOR TOLL COLLECTION FACILITIES

The Department's standards for this section are now referenced in the [*Turnpike Plans Preparation and Practices Handbook \(TPPPH\)*](#).

Section 2.23

FLORIDA'S TURNPIKE AND TOLL ROAD NUMBERING AND SIGNING PROGRAM

2.23.1 PURPOSE

To establish standards for systematic numbering and signing of Florida's emerging toll road system.

2.23.2 BACKGROUND

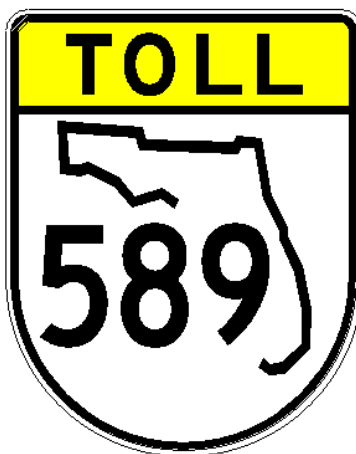
- (1) Florida's toll road system was originally made up of a complex network of locally developed expressways and the Florida Turnpike. The toll roads were developed largely through the efforts of local expressway authorities to serve regional transportation needs, seldom extending into adjacent counties. As locally funded and developed projects, the expressway's authorities developed a sense of community ownership for the toll road and gave it a locally pleasing name. These names have traditionally been used when referring to the roadway even though state road numbers were assigned to each facility.
- (2) [Section 338.01, F.S.](#), which has created an intrastate highway system, changed the local flavor of the toll roads. Now considered a major component of the intrastate system, the toll roads perform a necessary function in transporting the motorist through urban areas in the shortest possible time. Consequently, the Turnpike District of the Department is responsible for the administration and expansion of many of the toll roads. Some of these are already open, others are in the planning stages.
- (3) As toll roads have expanded and developed over time into a statewide toll network, a systems approach has been adopted to include connections to other systems. This includes accessibility to local streets, county roads, state system routes, and connections between other limited access systems. An integral part of this interconnected system is the road numbering and signing program.

2.23.3 ROAD NUMBERING PROGRAM

- (1) Because of the expanding size of the toll system, the convention of identifying toll roads only by local names is not acceptable. The high number of toll roads and their interconnected nature causes navigation problems for tourists and other non-familiar motorists. A worst case can develop where one expressway joins another and the route name suddenly changes without changing roadways. The solution is to use a route numbering system, similar to that used on interstate routes, U.S. routes, and other state highways.

- (2) Local names or logos will be retained for identification and a local sense of ownership only. Local names or logos will continue to be used by resident motorists, but those not familiar with the local system will rely on the numbering system to navigate the statewide system of toll facilities.
- (3) The numbering system will be consistent with the statewide numbering systems for all state and county roads. In most cases the existing state road numbers will be used to refer to the toll roads. For new tollways, a number will be assigned by the Transportation Data and Analytics Office, consistent with the official numbering program. In cases where future facilities will result in the completion of a loop or beltway, connecting a series of shorter toll road segments, a single road number will be retained, often requiring a change of road numbers on older links.
- (4) To express membership in the statewide toll system, and provide a consistent method of identification throughout the State, a sign has been developed (**Figure 2.23-1**) which depicts the toll road number on a unique sign shape. This sign is similar to an interstate shield and is used as a route marker and as part of the trailblaze assembly.

Figure 2.23-1. Toll Route Marker



2.23.4 SIGNING PROGRAM

- (1) The toll route marker (**Figure 2.23-1**) is available in three sizes, depending on application. To identify the facility along the mainline a 48 x 60-inch toll route marker may be used. This sign may be used when leaving the toll plaza to confirm the route and also erected periodically along the mainline.
- (2) To maintain the local identity of the toll road, and provide for local area motorists, the toll road name or logo may be erected on a confirmation guide sign downstream from the mainline toll plazas. If used, the logo panel shall be

furnished by the local expressway authority. These local name or logo signs are for identification purposes only. No attempt shall be made to use only the local toll road name or logo in guide signing, direction signing or trailblazing to the facility. A combination of route number signs and expressway names or logos may be necessary to accommodate local concerns, but the principal identification is the toll route marker.

- (3) To identify a toll facility at a freeway to freeway interchange, both the advance guide sign and exit direction guide sign shall use the 36 x 48-inch toll route shield. This size is available as an overlay, and should also be used in other freeway type guide signs and overhead direction sign applications. The local toll road name or 36-inch logo panel may be used in a guide sign or direction sign application. If used, this logo panel shall be furnished by the local expressway authority.
- (4) To identify a toll facility from a conventional road, (state, county, or local systems), or to provide trailblazing to a toll facility a 24 x 30-inch toll route marker shield shall be used in conjunction with the appropriate cardinal direction information, arrows, junctions, etc. The local toll road name or a 24-inch logo panel may be used in conjunction with the toll route marker. If used, this logo panel shall be furnished by the local expressway authority. Confirmation assemblies should be used in trailblazing beyond intersections of numbered routes.

Electronic sign details for these signs can be found at the [Department's Sign Library](#).

- (5) Although trailblazing to toll facilities is an effective method of advertising for the facility, the intent of signing is to guide the motorist. The [MUTCD](#) is very specific on this issue. General limits on the maximum distance from a toll facility to parallel routes are recommended for rural and urban density development as follows.

2.23.5 RECOMMENDED MAXIMUM TRAILBLAZE DISTANCE

Rural density	5 miles
Urban density	2 miles

Due to the cost of signing and the possibility of overloading the motorist with information, the engineer must use care in locating these signs. Acceptable locations are along major parallel routes, and at the junction of roadways which have exits on the toll road.

2.23.6 LIMITED ACCESS SIGN DESIGNS

- (1) For general issues relating to guide signs and the use of regulatory and warning signs, the toll system shall be interpreted as functioning as a fully access

controlled roadway with corresponding criteria such as clear zone requirements, letter height, sign placement, etc. (See [Section 2E.02 of the MUTCD](#)). The engineer must keep in mind that this level of signing is purposefully kept simple and dignified, using large lettering, and concise messages that can be read, comprehended, and acted upon while traveling at a high rate of speed.

- (2) The procedures used for guide sign sequences shall be as for other limited access facilities. The use of supplemental guide signs for traffic generators shall follow [Rule 14-51.020, F.A.C.](#)

Section 2.24

PLACEMENT OF CRIME WATCH SIGNS ON THE STATE HIGHWAY SYSTEM

2.24.1 PURPOSE

To aid districts in evaluating and responding to requests for erecting Crime Watch Signs within the State Highway System rights-of-way.

2.24.2 DEFINITIONS

Crime Watch Sign. A sign used to identify a neighborhood, community, or other geographical area within which there exists a Crime Watch Program.

2.24.3 BACKGROUND

- (1) Crime prevention is an issue of critical concern to both government and its citizens. With the assistance of law enforcement agencies, local citizens have organized Crime Watch Programs to enhance the safety and security of persons and property within their communities. According to law enforcement officials, the erection of Crime Watch Signs indicative of the adoption of a Crime Watch Program can be a deterrent to crime. Generally, local governments erect these signs along residential streets and in business districts.
- (2) Crime Watch Signs shall not be considered official traffic control devices and accordingly are not governed by the [MUTCD](#). However, they do aid in law enforcement and contribute to public safety.

2.24.4 REQUESTS FOR SIGNING

- (1) Requests for permitting the erection of Crime Watch Signs within State Highway System rights-of-way should be reviewed by the District Traffic Operations Engineer.
- (2) Only requests submitted by local government traffic engineering or law enforcement agencies should be considered. Others should be referred to their local governmental agencies.

2.24.5 SIGN LOCATIONS

- (1) Crime Watch Signs may be permitted along a state highway only in the vicinity of strip residential or commercial development which is directly accessed from the state highway.
- (2) Crime Watch Signs should not be permitted on state highway right-of-way when the area of concern is adequately served by side streets connecting to the state highway. In such cases, the signs should be placed on the side street right-of-way and be readily visible to someone entering the side street from the state highway.
- (3) Excessive posting of Crime Watch Signs along a state highway should not be permitted. Prudent judgment must be exercised in reviewing signing strategies with respect to the spacing of successive signs. For example, on highways passing through isolated small rural or suburban communities, single signs at the limits of the communities may be appropriate. In heavily developed areas, additional signs at moderate spacing may be needed.
- (4) Crime Watch Signs shall not be permitted in a location where the view of existing traffic control devices may be obscured or where they might otherwise compete for the motorists' attention (e.g., next to a STOP Sign).

2.24.6 SIGN DESIGN AND PLACEMENT

- (1) Since Crime Watch Signs are not official traffic control devices, requests for the Department to design or establish standards for these signs should be declined. However, the District Traffic Operations Engineer should review sign designs proposed for use on the State Highway System. Designs which resemble an official traffic control device or which may be confusing to or misconstrued by the motorists should be rejected.
- (2) Sign designs should be simple and dignified, devoid of any advertising. Panel design and quality should be adequate to maintain a high level of appearance and legibility under anticipated environmental conditions, both day and night.
- (3) Mounting heights and lateral clearances should adhere to those specified in the [Department's Standard Plans, Index No. 700-101](#) and support systems shall meet or exceed Department standards of frangibility.
- (4) Crime Watch Signs shall not be affixed to any sign support maintained by the Department.

2.24.7 INSTALLATION AND MAINTENANCE

- (1)** A local governmental agency must agree to assume full responsibility for the installation and maintenance of any Crime Watch Signs permitted by the Department for installation on the State Highway System.

- (2)** The installing agency should be advised that the Department reserves the right to remove any Crime Watch Signs not in conformance with these instructions or which are not properly installed or maintained.

2.24.8 SPECIAL CONSIDERATIONS

Unusual requests or designs, or problems associated with Crime Watch Signs on the State Highway System should be discussed with the State Traffic Operations Engineer prior to permitting.

Section 2.25

DISTANCE SIGNING FOR NON-LIMITED ACCESS HIGHWAYS

2.25.1 PURPOSE

To establish a consistent distance signage system for all non-limited access state roads in conformance with [Sections 2D.41](#) and [2D.42 of the MUTCD](#).

2.25.2 BACKGROUND

- (1) [Section 2D.37 of the MUTCD](#) does address the application of distance signage. However, there is no statewide procedure for distance signage on non-limited access roads. This perpetuates the situation of signing for a destination on a non-limited access state road that may be several hundred miles away. Also, the current distance signage practice does not take into consideration the use of Interstate and Florida's Turnpike System for long distance driving by motorists.
- (2) The Department's current non-limited access distance signs do not provide adequate destination information for motorists who are looking for the variety of tourist attractions which are accessible from non-limited access highways in addition to destinations accessible from the Interstate and Florida's Turnpike System.

2.25.3 PROCEDURE

- (1) Distance signs should have the names of three cities, towns, significant geographical identity, route, or community, and the distance (to the nearest mile) to those places.
- (2) The top name should be the next place on the route having a post office, railroad station, route number (name) of an intersecting highway, or other significant geographical identity.
- (3) The middle name should be used to indicate communities along the route or important route junctions. This name may be varied on successive distance signs to give motorists maximum information concerning communities along the route to the next control city.
- (4) The bottom name must a major destination control city. The control city should remain the same on all successive distance signs throughout the length of the route until that destination qualifies to be the top or middle name on the distance

- sign. Once the control city moves up, the next control city must be shown as the bottom name. There should always be a control city shown as the bottom name.
- (5) Figure 2.25-1, **Figure 2.25-2**, **Figure 2.25-3**, and **Figure 2.25-4** are examples of distance signs for non-limited access highways.
 - (6) Placement of distance signs are specified in [Section 2D.42 of the MUTCD](#).
 - (7) Control cities have populations of 10,000 or more and include county seats. A matrix that includes the centroid defined for each municipality on the list can be found on the [Intercity Mileage Spreadsheet](#), maintained by the Transportation Data and Analytics Office.
 - (8) The implementation of this distance signing program should be through normal construction projects. The District Traffic Operations Engineer must develop corridor distance signage plans for inclusion into existing work program projects. Stand-alone distance signage projects are not required or desired.

Figure 2.25-1

City "A"	5
Town "B"	10
Control City "A"	20

Figure 2.25-2

Town "B"	5
Control City "A"	15
Control City "B"	30

Figure 2.25-3

Town "B"	5
Control City "A"	15

Figure 2.25-4

Control City "A"	5
City "C"	10
Control City "B"	30

Section 2.26

ADVANCE GUIDE SIGNS ON LIMITED ACCESS HIGHWAYS

2.26.1 PURPOSE

To provide uniform statewide advance guide sign applications that ensure motorists are provided advance notification of interchange exits on limited access highways.

2.26.2 BACKGROUND

The Department's *International Signing Practices Study* recognized the need of the international tourist for advance notification of exit direction information. The most frequently cited problem of international visitors navigating in Florida was the lack of information about exits. Since this need is not limited to the international tourist, but to every unfamiliar motorist and also older drivers from both in and out-of-state this section was developed. The application for interchange guide signs is currently addressed in [Section 2E.30 of the MUTCD](#).

2.26.3 DEFINITIONS

The following definitions apply to this section and are in accordance with [Section 2E.32 of the MUTCD](#):

Intermediate Interchange. An interchange with urban and rural routes not in the category of major or minor interchanges.

Major Interchange. Subdivided into two categories: (a) interchanges with other expressways or freeways, or (b) interchanges with high-volume multi-lane highways, principal urban arterials, or major rural routes where the volume of interchanging traffic is heavy or includes many road users unfamiliar with the area

Minor Interchange. An interchange where traffic is local and very light, such as interchanges with land service access roads. Where the sum of the exit volumes is estimated to be lower than 100 vehicles per day in the design year.

2.26.4 PROCEDURE

- (1) For urban areas, two advanced guide signs are required for every major and intermediate interchange on the Interstate, Florida's Turnpike System, and other limited access roadways.
- (2) The two advance guide signs should be placed 1/2 mile and 1 mile upstream of the exit. If interchange spacing prohibits the placement of these two advanced

guide signs, then the interchange sequential series signs ([Section 2E.40 of the MUTCD](#)) should be used. Left hand exit interchanges should utilize diagrammatic signs.

- (3) For major and intermediate interchanges, the two advance guide signs must be mounted overhead in urban areas. For rural interchanges either cantilever or ground mounted signs are adequate.
- (4) For major interchanges in the rural area and freeway-to-freeway interchanges, three (3) advance guide signs must be provided and located approximately 1/2 mile, 1 mile, and 2 miles upstream from the exit. For rural intermediate interchanges, two advance guide signs are to be installed.
- (5) Implementation of this advance guide sign program should be through construction projects scheduled in the work program. The [District Traffic Operations Engineer](#) must develop a list of interchanges for inclusion into the work program projects. Stand-alone advance guide sign projects are not required to comply with this standard.

Section 2.27

COMMUTER ASSISTANCE SIGNS

2.27.1 PURPOSE

To provide statewide sign design consistency for the Department's Commuter Assistance Program, [Topic Number 725-030-008](#).

2.27.2 BACKGROUND

Coordinated use of existing transportation resources can provide a responsive, low cost alternative for alleviating urban highway congestion and improving air quality, thereby reducing the need for costly highway improvements. The Commuter Assistance Program focuses on the single occupant commuter trip which is the greatest cause of peak hour highway congestion. A coordinated effort to provide alternatives to these commuters, using existing or low cost resources, can be beneficial to the development of a transportation demand management program and public transit statewide. The State's Commuter Assistance Program encourages a public/private partnership to provide services to employers and individuals for: carpools, vanpools, express bus service, subscription transit service, group taxi services, heavy and light rail, and other systems which are designed to increase vehicle occupancy.

2.27.3 SIGN DESIGN AND INSTALLATION

- (1) [Section 2I.11 of the MUTCD](#) provides guidance for the installation of a carpool information sign.
- (2) Signing requests received from the Department's Public Transit Office or local transit agencies must be approved by [District Traffic Operations Engineers](#).
- (3) Sign placement will be determined by District Traffic Operations based on field review and space availability.
- (4) The Department's Commuter Assistance Program also includes two additional modes of services (vanpooling and transit) and there are different signs for each of these services.
- (5) There are two different sizes for each sign design. The arterial sign shall be 36 x 24 inches. The interstate sign shall be 78 x 48 inches. All signs shall be blue reflective background with white lettering.
- (6) Exact sign details for the TRY CARPOOLING ([FTP-56-06 and FTP-56A-06](#)) TRY TRANSIT ([FTP-59-06 and FTP-60-06](#)) and TRY VANPOOLING ([FTP-57-06 and FTP-58-06](#)) are available in the [Department's Standard Plans, Index 700-102](#).

- (7) Electronic sign details for the all the signs in this section are available in the [*Department's Sign Library*](#).

- (8) Mounting heights and lateral clearances should adhere to those specified in the [*Department's Standard Plans, Index No. 700-101*](#) and support systems shall meet or exceed Department standards of frangibility.

Section 2.28

REFERENCE LOCATION SIGNS (MILE-MARKERS)

2.28.1 PURPOSE

To establish consistent criteria and signing methods for reference location signs (mile markers) on both limited and non-limited access roadways.

2.28.2 STANDARDS

- (1) Reference location signs shall be as described in [Section 2H.05 and Section 2H.06 of the Manual of Uniform Traffic Control Devices \(MUTCD\)](#). These signs consist of a vertical panel containing the mile-marker number. The sign shall have 6-inch white letters on a green reflective background and be placed on the right side of the roadway at 1-mile or 1/2-mile increments as detailed in [Sections 2.28.3 and 2.28.4](#).
- (2) The zero distance shall be established at the southern or western state line or at junctions where the route begins. [MUTCD](#) standards shall be followed for overlap routes.

2.28.3 CRITERIA FOR LIMITED ACCESS ROADWAYS

Reference Location Signs and Enhanced Reference Location Signs shall be used on limited access facilities. The following criteria shall be used when selecting reference location signs along limited access facilities:

- (1) Reference location signs ([Section 2H.05 of the MUTCD](#)) shall be used every 1.0 mile outside urban boundary facilities.
- (2) Enhanced reference location signs ([Section 2H.06 of the MUTCD](#)) shall be used every half mile inside urban boundary facilities.

2.28.4 CRITERIA FOR NON-LIMITED ACCESS ROADWAYS

- (1) While reference location signs will be helpful on many roadways, those with existing positioning systems, i.e., good building numbers, adequate landmarks, and signed cross streets will not benefit significantly. In addition, there may be many requests from municipalities to provide these signs on qualifying roadways. The following criteria shall be used when selecting roadways to use reference location signs:

-
- (a)** Cross at least two municipalities or two county jurisdictions within three miles.
 - (b)** Relatively devoid of named landmarks, cross streets, or building addresses that would serve as navigation aids for motorists in the area.
 - (c)** Can be identified by local Emergency Medical Services (911) program to assist in address location.
 - (d)** The proposed reference location sign should not interfere in any manner with other traffic control devices.
- (2)** Requests for the reference location signing must be initiated by local jurisdictions. In all cases, requests shall be directed to the District Traffic Operations Engineer and must meet all the criteria listed above.
- (3)** The local jurisdiction must, through the permit process, erect and maintain reference location signs on state system roadways, but the District Traffic Operations Engineer is responsible for the route signing plan.

Section 2.29

USE OF FLUORESCENT YELLOW-GREEN SIGN SHEETING

2.29.1 BACKGROUND

Per [Section 7B.07 of the MUTCD](#) all signs and supplemental plaques used in association with school warning are to have a fluorescent yellow-green background with a black legend. This includes all S-series warning signs and associated plaques.

The other allowable uses for fluorescent yellow-green background are limited to locations where there is a demonstrated need.

2.29.2 CRITERIA

- (1) The following minimum criteria must be met before the [District Traffic Operations Engineer](#) will authorize the use of the fluorescent yellow-green color (FYG).
- (2) If there is a significant aging driver population (65 years and older), that exceeds the statewide average, the criteria below may be considered satisfied.

2.29.2.1 Pedestrian Crossing Signs

Must meet one of the following criteria:

- (1) Where pedestrian crossings occur on a designated home to school route and a specific request is made by local government.
- (2) Where there are two or more documented crashes involving pedestrians with injuries and the application of FYG would provide more awareness to drivers.
- (3) Where there are visibility problems for the subject drivers and the more visible sheeting would better alert drivers of the crossing.
- (4) Where a combination of heavy pedestrian presence and high vehicle speeds are documented. Law enforcement citations are evidence of this condition.

2.29.2.2 Bicycle and Shared Use Path (Trail) Crossing Symbol Signs

Must meet one of the following criteria:

- (1) Where recreational trails cross the State Highway System and there are sufficient numbers of bicyclists to generate a high potential for crashes.
- (2) Where there are two or more documented crashes between bicycles and motor vehicles with injuries where FYG would make drivers more aware of the crossing.

2.29.3 APPLICATION

- (1) The use of FYG signs is not to be considered a retrofit program. Rather they are to be used where the higher visibility color will improve safety (exceeding the use of the standard color), as noted in the above conditions.
- (2) The signs shall be mounted the same as standard yellow warning signs and according to height and lateral clearances specified in the ***Department's Standard Plans Index No. 700-101.***

Section 2.30

SIGNING FOR ONE-STOP CAREER CENTERS

2.30.1 PURPOSE

The intent of this sign is to assist Floridians locate full-service One-Stop Career Centers located statewide. These centers provide a customer service network that offer every Floridian access to re-employment information, job search consulting, training and education referrals, and temporary financial assistance.

2.30.2 BACKGROUND

In 1995, the State of Florida began taking steps toward a new future for workforce development. Florida has committed significant resources to the development and integration of its workforce development system, perhaps most significant is the development of the One-Stop Career Centers. These centers offer universal services to all Floridians, not just those eligible for specific programs.

2.30.3 DEFINITIONS

Full-Service One-Stop Career Center. A physical location designated by the Regional Workforce Development Board which provides access to legislatively mandated partner agencies, and on-site delivery of core services, i.e., job search, placement assistance, skills assessment, and information on supportive services.

2.30.4 SIGN DESIGN AND INSTALLATION

- (1) The One-Stop Career Center sign (**FTP-36-06**) shall be 36 x 36 inches and is white on green in color. The exact detail is shown in the [Department's Standard Plans Index 700-102](#).
- (2) An electronic sign detail can be found at the [Department's Sign Library](#).
- (3) Sign requests must be submitted by a local representative of the [Workforce Regional Development Boards](#) to the appropriate [District Traffic Operations Engineer](#). The Department will only sign for full-service One-Stop Career Centers as defined above.
- (4) One-Stop Career Center signs will only be installed and maintained by the Department on Non-Limited Access Highways.
- (5) Signs will be placed, based on availability of suitable space, at the nearest intersection along the State Highway System to the One-Stop Career Center.

- (6) Mounting heights and lateral clearances shall adhere to those specified in the [*Department's Standard Plans, Index No. 700-101*](#) and support systems shall meet or exceed Department standards for frangibility.

Section 2.31

UNIQUE TRANSPORTATION SYMBOL SIGNS

2.31.1 PURPOSE

To provide standards for the use of FHWA approved transportation symbol signs on the State Highway System.

2.31.2 BACKGROUND

- (1) Florida has a unique traveler composition compared to other states, in that a significant proportion of motorists are not familiar with our roadways. This is mainly due to the very large number of tourists, both domestic and international.
- (2) We have found through research in our International Signing Study that non-familiar motorists respond very well to symbol signs.
- (3) We have enhanced our signing program by implementing the following innovative symbol signs that describe transportation related services or destinations.

2.31.3 SCOPE

The use of the symbol signs in this section must meet the criteria for motorist services signing established in [Rule Chapter 14-51, F.A.C., Florida's Highway Guide Sign Program](#). More specifically, [Rule 14-51.021\(1\)\(f\), F.A.C.](#) for Limited Access Highways and [Rule 14-51.031\(1\)\(f\), F.A.C.](#) for Non-Limited Access Highways.

2.31.4 PASSENGER SHIP SIGN

- (1) The passenger ship transportation mode forms an important destination for both Florida residents and visitors to the state. This symbol sign will be used throughout the state to trailblaze the routes to passenger seaports and cruise ship ports that meet criteria specified in **Section 2.31.3**.
- (2) The PASSENGER SHIP sign (**Figure 2.31-1**) is a white symbol on green background.
- (3) A 30-inch sign panel should be used on limited access highways and a 24-inch panel on non-limited access highways.
- (4) Electronic sign details are available in the [Department's Sign Library](#).

Figure 2.31-1. Passenger Ship Sign



2.31.5 AMTRAK SIGN

- (1) This AMTRAK symbol sign is currently approved for use on guide signs and trailblazing to Amtrak stations.
- (2) Approval to place the AMTRAK sign shall be in accordance with criteria specified in **Section 2.31.3**.
- (3) The AMTRAK sign (**Figure 2.31-2**) is a white symbol on green background.
- (4) A 30-inch sign panel should be used on limited access highways and a 24-inch panel on non-limited access highways.
- (5) Electronic sign details are available in the [Department's Sign Library](#).

Figure 2.31-2. Amtrak Sign



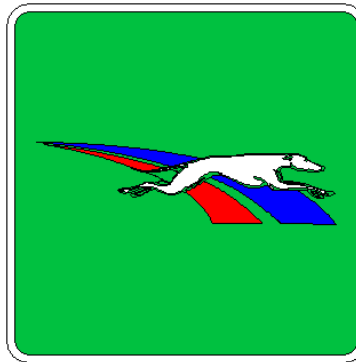
2.31.6 GREYHOUND SIGNING

- (1) This 3-color sign will be used as a motorist service sign and also to trailblaze to intra-city bus stations. Currently, there is no good way to sign for small bus

stations that may be located within a building used for other businesses. The use of this symbol sign will make it easier to trailblaze to these locations.

- (2) Approval to place the GREYHOUND sign shall be in accordance with criteria specified in **Section 2.31.3**.
- (3) The GREYHOUND sign is (**Figure 2.31-3**) a 3-color symbol with a white border on a green background
- (4) A 30-inch panel should be used on limited access highways and a 24-inch panel on non-limited access highways.
- (5) Electronic sign details are available in the [Department's Sign Library](#).

Figure 2.31-3. Greyhound Sign



2.31.7 INSTALLATION AND PLACEMENT

- (1) Where these signs are approved for use as trailblazer signs they shall be installed in accordance with height and lateral clearance requirements shown in the [Department's Standard Plans, Index 700-101](#).
- (2) Where these signs are approved for use as general service signs appended to freeway guide signs, they must conform to the [Department's Standard Plans, Index 700-104](#) except for color scheme.

Section 2.32

511 TELEPHONE SERVICE SIGN

2.32.1 PURPOSE

The 511 Telephone Service is part of a nationwide program where motorists who wish to obtain traffic and transportation information can do so by dialing 511 from either their cell or regular phones in areas where the service is available. Signs will be erected to inform motorists of the phone number for this service.

The signing will extend to all Interstate and major State Highway System roadways throughout the state that have the 511 Telephone Service.

2.32.2 SIGN DESIGN AND PLACEMENT

- (1) The CALL 511 sign (*Figure 2.32-1*), as found in [Section 2I.10 of the MUTCD](#), has two standard sizes. Signs installed on limited access highways shall be 48 x 60 inches (*FTP-66-06*) while signs installed on non-limited access highways shall be 36 x 48 inches (*FTP-67-06*).

Figure 2.32-1. TRAVEL INFO CALL 511 Sign



- (2) The CALL 511 signs (*FTP-66-06 and FTP 67-06*) shall have a white legend on blue background and the exact sign details are shown in the [Department's Standard Plans, Index No. 700-102](#).
- (3) Electronic sign details can be found in the [Department's Sign Library](#).

- (4) When the 511 Telephone Service becomes available, specific sign placement details shall be reviewed by the appropriate [District Traffic Operations](#) office using the guidelines shown in **Sections 2.32.2.1 and 2.32.2.2.**

2.32.2.1 Interstate and Other Limited Access Routes

- (1) At state and county lines
- (2) At approximately 10 mile intervals in urban/metro areas
- (3) At approximately 30 mile intervals in rural areas
- (4) Preceding major freeway to freeway interchanges

2.32.2.2 Major Arterial Routes

- (1) At state and county lines
- (2) At approximately 10 mile intervals in urban/metro areas
- (3) At approximately 30 mile intervals in rural areas
- (4) Recommended locations should be upstream from intersections formed by junctions of U.S./Major State Highway System Roadways at the discretion of the District Traffic Operations Engineer.

Section 2.33

SIGNING FOR NATURE-BASED TOURISM AND HERITAGE TOURISM TRAILS

2.33.1 PURPOSE

The purpose of this section is to identify for prospective sponsors of nature-based and/or heritage trails the type of support the Department can offer and the signs that are appropriate for installing along public roadways.

2.33.2 BACKGROUND

- (1) The concept of nature-based and heritage tourism is best explained as a statewide effort to promote the natural and historic resources of our state. These resources include natural spaces of our State Parks, lakes, rivers, beaches, and woodlands, as well as the rich historical and cultural sites across Florida.
- (2) The Department is an active participant in the effort to promote Florida's natural assets through nature-based tourism and heritage tourism programs. The Department's role is to provide a mechanism for using public right of way for the needed signs and provide engineering guidance to ensure that effective signing plans are developed.
- (3) Some examples of approved trails are the Historic Heritage Trail sponsored by the Department of State, the Birding Trail sponsored by the Fish and Wildlife Conservation Commission, and the Gulf Coast Heritage Trail sponsored by the Sarasota Bay National Estuary Program.

2.33.3 PILOT PROGRAM

- (1) The Gulf Coast Heritage Trail was the first regional nature-based tourism trail program within the state and the Department approved the signing plan as a pilot program. It is a true trail system in that trail-blaze signs identify the route to follow to access the sites, which are also described in the auto tour map and brochure. The program was pioneered and coordinated by the Sarasota Bay National Estuary Program in Sarasota and Manatee Counties.
- (2) The success of this pilot is such that the Department is using the Gulf Coast Heritage Trail as a model for other regional plans to follow.

2.33.4 CRITERIA FOR SIGNING PROGRAM

In developing a trail system, several criteria must be followed by the sponsor of the proposed nature-based or heritage tourism trail.

- (1) The sponsor must develop grassroots support including local input into establishing routes.
- (2) The program must include use of a land-based brochure with auto tour map - the signs are not the primary guidance method.
- (3) Attraction selection should be restricted to public ownership, non-profit, or for those charging admission, a primary educational purpose (this includes museums and art galleries).
- (4) Promotional posters and an Internet website are strongly suggested.

2.33.5 DOT PARTICIPATION

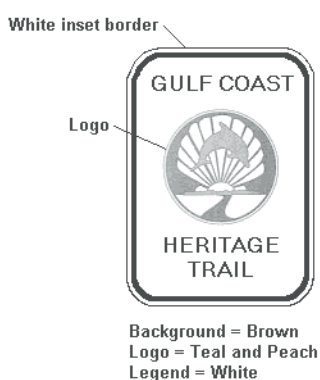
- (1) The Department will participate in the development of nature-based and heritage tourism programs by providing advisory services as the programs are proposed, offer preliminary route recommendations, and approve routes upon which signs may be erected.
- (2) The Department's State Traffic Engineering and Operations Office (850-410-5600) must be contacted early in the process to assure proper coordination with all districts affected by the proposed trail.
- (3) Upon selection of the final route, District Traffic Operations personnel will determine appropriate locations for trail-blaze signs and mark the locations so that a sign contractor can erect the signs. It is the sponsor's responsibility to have the signs manufactured and erected through the Department's general use permitting process. Department staff can provide the names of sign manufacturers and contractors who are experienced in providing these services.

2.33.6 SIGN APPROVAL AND DESIGN

- (1) The State Traffic Operations Engineer in Tallahassee must approve the sign design to be used for this program.
- (2) Logo signs are encouraged for this program, and several criteria apply:
 - (a) Signs installed on non-limited access highways shall be 24-inch panels. The name of the trail should be in white highway sign type, upper case lettering (Helvetica). A sample logo is shown in **Figure 2.33-1**.
 - (b) Signs shall be devoid of advertising.

- (c) Signs logos may use colors, but must contain a brown background of Type III retro-reflective sheeting, per [Section 994 of the Department's Standard Specifications](#). Inks must be transparent highway sign types.
- (d) Signs should be installed along the State Highway System route with an arrow pointing in the appropriate direction where cross streets must be used to access the attraction. Confirmation signs, with straight-ahead arrows, are used at appropriate intervals to let motorists know they are on the right path (usually 3-5 miles depending upon length of the route segments).

Figure 2.33-1. Logo for Gulf Heritage Trail



2.33.7 SIGN MAINTENANCE

- (1) The sponsors of the proposed nature-based and/or heritage trails are responsible for the maintenance of the signs used throughout the trail.
- (2) A contract with a private sign installation contractor should be executed or a maintenance agreement with local government secured for signs on the State Highway System.
- (3) Evidence of the contract or agreement must be presented to the appropriate [District Traffic Operations](#) office prior to installation of the signing program.

Section 2.34

SIGNING FOR THE FLORIDA SCENIC HIGHWAYS PROGRAM AND THE NATIONAL SCENIC BYWAYS PROGRAM

2.34.1 PURPOSE

To establish statewide signing standards for designated Florida Scenic Highways and/or National Scenic Byways.

2.34.2 BACKGROUND

- (1) The intent of both the Florida Scenic Highways Program (FSHP) and the National Scenic Byways Program (NSBP) is to designate paved public roads as scenic corridors to preserve, enhance, and maintain the intrinsic resources for the enjoyment of the traveling public.
- (2) For a roadway to be designated under either or both these programs, the roadway must possess at least one of the following six intrinsic resources:
 - (a) **Cultural Resources.** Include the traditions, values, customs and arts of social groups.
 - (b) **Historical Resources.** Reflect human actions evident in past events, sites or structures.
 - (c) **Archaeological Resources.** Embody the physical evidence or remains of human life, activities, or cultures.
 - (d) **Recreational Resources.** Highlight activities dependent upon the natural elements of the landscape.
 - (e) **Natural Resources.** The natural landscapes showing little or no disruption by humans.
 - (f) **Scenic Resources.** Combinations of natural and manmade features that give the visual landscape remarkable character and significance.
- (3) Benefits of designation as a Florida Scenic Highway and/or a National Scenic Byway include:
 - (a) **Resource Protection.** FSHP/NSBP designation provides the opportunity to preserve and enhance the significant intrinsic resources along public roads.

- (b) **Community Recognition.** The posting of the FSHP/NSBP logo signage along the designated highways will identify the corridors as “special places” with important resources worth noting.
- (c) **Economic Development/Tourism.** Designation provides an opportunity for the millions of tourists traveling by car in Florida to visit these communities along a designated highway corridor.
- (d) **Community Visioning.** The FSHP/NSBP designation can complement and support a community’s vision thereby instilling a sense of pride.
- (e) **Partnering.** This concept comes from public and private cooperation of agencies and corporate sponsorships, which provide support to the community and the overall corridor’s focus.

2.34.3 PROGRAM COORDINATION

- (1) FDOT’s [Environmental Management Office \(EMO\)](#) oversees the Statewide Florida Scenic Highways Program.
- (2) Each FDOT District Office has a designated District Scenic Highways Coordinator that represents the district in all matters pertaining to the FSHP or NSBP. The District Scenic Highways Coordinators are the initial point of contact for questions about the Program and provide the link between the Department and the community.

2.34.4 SIGN CRITERIA

- (1) In signing a designated Florida Scenic Highway (FSH) or National Scenic Byway (NSB), the following criteria must be followed:
 - (a) Signing shall not interfere with or distract from adjacent traffic control devices or from the resources of the area.
 - (b) Signing shall conform to the [MUTCD](#), which is incorporated by reference in [Rule 14-15.010, F.A.C.](#)
 - (c) Highways that lose designation under the FSHP or the NSBP shall have all FSH and NSB signs removed.
- (2) Designated FSH, and NSB (as applicable), shall be signed at entrance points to a route. Signing along a designated highway will be installed approximately every five-miles in both directions. However, during the review by District Traffic Operations, exceptions can be made based on frequency of intersections and/or directional needs.

- (3) Signs shall be installed for both FHS and NSB in accordance with the approved sign standards shown in Sections 2.34.5 *and* 2.34.6.

2.34.5 FLORIDA SCENIC HIGHWAY SIGNS

2.34.5.1 COORDINATION

- (1) The Department of Transportation provides advisory services when highway corridors are proposed for eligibility or designation to the FSHP. Once the highway corridor is designated, the District Scenic Highway Coordinator(s) facilitates the coordination of the sign implementation process.
- (2) The proper sign coordination process for a FSH is detailed below:
 - (a) The District Coordinator(s) will coordinate the preferred location(s) for the FSHP signs with the District Traffic Operations Office, along with the Corridor Management Entity (CME).
 - (b) The District Traffic Operations Office will finalize the location(s) of the signs and send a work request to the appropriate District Maintenance Yard for installation.
 - (c) One additional sign will be ordered along with all the other signs. This sign is to be used as a display at the ceremony and is not to be placed along the corridor.
 - (d) The CME and its partners may host a dedication ceremony to celebrate the designation of the particular corridor as a Florida Scenic Highway.

2.34.5.2 SIGN DETAIL

- (1) The standard sign design to be used to designate a Florida Scenic Highway is shown in Figure 2.34-1. There are two sign sizes available, and they are to be used in the specific applications shown in **Section 2.34.5.3**.
- (2) Exact sign details are shown in the [Department's Sign Library](#).

2.34.5.3 SIGN INSTALLATION

- (1) The 24 x 36 FSH sign (**Figure 2.34-1**) shall be installed at the entrance points to a designated Florida Scenic Highway route along with a supplemental panel with the scenic highway's name.

Figure 2.34-1. Florida Scenic Highway Sign Design



- (2) When appropriate, the Florida Scenic Highway Sign shall be co-located with existing route confirmation signs. The 16 x 24 sign panel should be installed on top of this sign. The exact application is shown in **Figure 2.34-2**.

Figure 2.34-2. Co-Location on Route Confirmation Marker



- (3) When the designated scenic highway intersects with another state road, the 16 x 24 sign panel should be installed on existing route directional signs. The exact application is shown in **Figure 2.34-3**.
- (4) The Department is responsible for the installation of the FSH signs on the State Highway System.
- (5) The local government is responsible for the installation of the FSH signs on their system.

2.34.5.4 MAINTENANCE

- (1) The maintenance of the FSH signs used throughout the scenic highway corridor depends on the government entity that is responsible for the roadway.
 - (a) The Department is responsible for the maintenance of FSH signs on the State Highway System.
 - (b) Local government is responsible for the maintenance of FSH signs on their roads.

Figure 2.34-3. Co-Location on Route Direction Marker



2.34.6 NATIONAL SCENIC BYWAY SIGNS

2.34.6.1 COORDINATION

- (1) The Department provides advisory services when highway corridors are proposed for eligibility or designation to the NSBP. Once the highway corridor is designated, the District Scenic Highway Coordinator(s) facilitates the coordination of the sign implementation process similar to the FSH process outlined in Section 2.34.5.1. The only difference will be no need for an extra NSB sign panel for the dedication ceremony.

- (2) The District Scenic Highways Coordinator(s) will work with the Statewide Scenic Highways Coordinator to submit applications for National Scenic Byway or All-American Road designation to the Federal Highway Administration.
- (3) Once designated as National Scenic Byway or All-American Road, the District Scenic Highway Coordinator(s) will facilitate the following process.
 - (a) The District Scenic Highway Coordinator(s) will coordinate the location of the NSBP signs with the District Traffic Operations Office.
 - (b) District Traffic Operations will locate the signs and send a work request to the appropriate District Maintenance Yard for installation.
 - (c) The District Scenic Highway Coordinator(s) will contact the respective District Maintenance Office or local government to coordinate the installation of the signs along the corridor.

2.34.6.2 SIGN DETAIL

- (1) The FHWA developed and approved the *America's Byways (D6-4 and D6-4a)* sign shown in [Section 2D.55 of the MUTCD](#). This sign is approved for use on National Scenic Byways.
- (2) The exact sign details for the National Scenic Byways Sign can be found in the *FHWA's Standard Highway Signs Manual*.

2.34.6.3 INSTALLATION

- (1) The NSB sign shall be installed at the entrance points to a designated byway. When possible, this sign shall be mounted below the FSH sign on a standard sign pole.
- (2) When an existing designated Florida Scenic Highway becomes a National Scenic Byway, District Traffic Operations will review the existing signing on the designated roadway for possible ways to accommodate both designations on the corridor. If unable, to place both, then the FSH will have the priority on the roadway.
- (3) The Department is responsible for the installation of the NSB signs on the State Highway System.
- (4) The local government is responsible for the installation of the NSB signs on their system.

2.34.6.4 MAINTENANCE

- (1)** The maintenance of the NSB signs used throughout the National Scenic Byway corridor depends on the government entity that is responsible for the roadway.
 - (a)** The Department is responsible for the maintenance of the NSB sign on the State Highway System.
 - (b)** Local government is responsible for the maintenance of the NSB sign on their roads.

Section 2.35

SIGNING FOR MEMORIAL ROADWAY DESIGNATIONS

2.35.1 PURPOSE

The purpose of this section is to provide guidance to the districts on the installation of signs when a roadway has been given a memorial designation by the Florida Legislature.

2.35.2 BACKGROUND

- (1) Over the years, the Florida Legislature has dedicated, named, and otherwise titled roadways in Florida. The designated roads can be under the jurisdiction of either the Department or local government.
- (2) Records kept in the Department's Systems Implementation Office identify the earliest dedicated roadway as the W.W. Clark Memorial Bridge on State Road 580 between Safety Harbor and Oldsmar. This was dedicated by the State Road Board on July 6, 1922. Since that time, every county and most cities have participated in officially naming some roadway feature.

2.35.3 SIGNING PROCESS

- (1) The Florida Legislature designates the roadways based on recommendations from a city or county commission, individual state agencies, or civic groups.
- (2) Upon official designation by the Florida Legislature, it is the responsibility of the legislative sponsors of the designation to obtain local resolutions in accordance with [Section 334.071\(3\), F.S.](#)
- (3) After receiving a copy of the local resolution, the Department shall begin the process to have the signs installed on the State Highway System.
- (4) Within the Department, the process for the installation of these signs involves the following offices:
 - (a) District Public Information Office
 - (b) District Traffic Operations Office
 - (c) District Maintenance Office
 - (d) State Traffic Engineering and Operations Office
 - (e) Transportation Data and Analytics Office

- (5) Each district has their own signing process in place, and it varies as to which of the above district offices initiates the process. However, it is important that all the above district offices are notified and kept informed as to the status of roadway designations within their district after each legislative session.
- (6) Each district will coordinate the installation of the signs with the legislative sponsor of the designation.
- (7) Memorial names may not appear on guide signs or on any other than the standard sign, in accordance with [Section 2M.10 of the MUTCD](#)

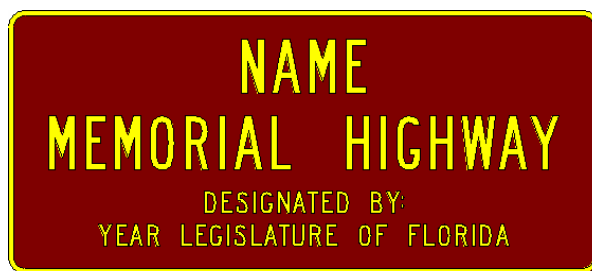
2.35.4 SIGN INSTALLATION AND MAINTENANCE

- (1) Signs shall be installed and maintained by the Department on the State Highway System.
- (2) On non-limited access facilities, one sign per direction shall be installed in accordance with [Section 2M.10 of the MUTCD](#).
- (3) On limited access facilities, one sign per direction shall be installed in accordance with [Section 2M.10 of the MUTCD](#).

2.35.5 SIGN DESIGN

- (1) The signs used for Memorial Roadway Designations shall be a brown panel with yellow lettering. An example of this sign is shown in *Figure 2.35-1*.

Figure 2.35-1. Memorial Roadway Designation Sign



- (2) The exact sign detail for this sign can be found at the [Department's Sign Library](#).

Section 2.36

COMMUNITY WAYFINDING GUIDE SIGNS

2.36.1 PURPOSE

The purpose of this section is to provide guidance to the districts on the process for approving Community Wayfinding Guide Signs on the State Highway System.

2.36.2 BACKGROUND

- (1) The Department, in cooperation with the Florida League of Cities, has developed statewide criteria for Community Wayfinding Guide Signs on our State Highway System. These standards as shown in [Rule 14-51, Part V, F.A.C.](#) (Florida's Highway Guide Sign Program) provide local governments the flexibility to design their own Community Wayfinding Guide Sign System while still maintaining federal and state sign standards to safely guide motorists to their destinations.
- (2) The standards shown in [Rule 14-51, Part V, F.A.C.](#) allow local governments to have a better understanding of what can and cannot be approved for use on the State Highway System based on the requirements of the MUTCD.

2.36.3 STANDARDS

- (1) All Community Wayfinding Guide Signs on the State Highway System must be in conformance with [Rule 14-51, Part V, F.A.C.](#) prior to any installation.
- (2) In conformance with [Rule 14.51.051\(8\), F.A.C.](#), the design, installation, and maintenance of Community Wayfinding Guide Signs on the State Highway System are the responsibility of local government.

2.36.4 REVIEW PROCESS

- (1) A pre-planning meeting between District Traffic Operations and local government is recommended to assist in compliance with [Rule 14-51, Part V, F.A.C.](#)
- (2) After a Community Wayfinding Guide Sign System Plan has been developed, local governments or their representative must provide one set of the Community Wayfinding Guide Sign System Plans to the appropriate [District Traffic Operations Office](#).
- (3) Once received, the Community Wayfinding Guide Sign System Plan shall be reviewed by the District Traffic Operations Office for compliance with [Rule 14-51, F.A.C.](#)

- (4) If compliance is not met, District Traffic Operations staff will contact local government with the changes that need to be made to their Community Wayfinding Guide Sign System Plan in order to meet the criteria shown in the [Rule 14-51, F.A.C.](#)
- (5) Once the Community Wayfinding Guide Sign System Plan is approved, the District Traffic Operations Office shall issue a letter of compliance signed by the District Traffic Operations Engineer to the local government.

Section 2.37

ADVANCE STREET NAME SIGNS

2.37.1 PURPOSE

To provide guidance on the design, placement, and installation criteria for advance street name signs on the State Highway System.

2.37.2 BACKGROUND

- (1) The use of advance street name signs is one of the recommended roadway improvements and safety countermeasures in the Department's Safe Mobility for Life Program. This recommended improvement is based on the [FHWA's Handbook for Designing Roadways for the Aging Population](#) to provide advance notification to drivers to help them in making safer roadway decisions.
- (2) In 2002, FDOT conducted an effectiveness study on the roadway improvements that were implemented in our aging road user program, including advance street name signs. Data from that study showed that advance street name signs with larger lettering were read at a greater distance from the intersection being announced which led to significantly more decision time. The research supports our decision to continue to use advance street name signs as an effective safety countermeasure for FDOT's [Safe Mobility for Life Program](#).

2.37.3 DEFINITIONS

Critical or Significant Cross Street. A signalized or unsignalized intersection or cross street classified as a minor arterial or higher, that provides access to a traffic generator or possesses other comparable physical or traffic characteristics deemed to be critical or significant and having an AADT greater than 2000.

2.37.4 STANDARDS

The standards shown in this section apply to each of the three different types of advance street name sign applications. Specific criteria for the installation of advance street name signs at signalized intersections (NEXT SIGNAL) is shown in **Section 2.37.5**, for non-signalized intersections (NEXT INTERSECTION) in **Section 2.37.6** and for advance street name plaques on intersection warning signs in **Section 2.37.7**.

- (1) Advance street name signs and Advance Street Name plaques shall only be used to identify critical or significant cross streets. They are not intended to identify destinations such as cities, facilities, or residential neighborhoods.

- (2) Whenever possible the word Street, Boulevard, Avenue, etc., should be abbreviated (St, Blvd, Ave) or letter height reduced to conserve sign panel length. In special cases it may be deleted; however, if confusion would result due to similar street names in the area, for example Orange Street and Orange Avenue, this deletion should not be made.

When a subdivision or community in the area also goes by that name these words (Street, Boulevard, Avenue, etc.) or their abbreviations should not be deleted.

- (3) When a cross street is known by both route number and a local name, use of the local name is preferred on the advance street name sign since the route number is identified on route markers along the route.
- (4) When minor cross streets intersect the State Highway between the advance street name and the intersection, additional legend such as NEXT SIGNAL or XX FEET may be added to the advance street name sign.
- (5) The legend used on the advance street name sign or plaque shall be consistent with the legend on either the overhead street name or post mounted street name sign.
- (6) Sign sheeting materials shall comply with the current edition of the [Department's Standard Specifications for Highway and Bridge Construction, Section 994.](#)
- (7) Mounting heights and lateral clearances should adhere to those specified in the [Department's Standard Plans, Index No. 700-101](#) and support systems shall meet or exceed Department standards of frangibility.
- (8) Signs should be installed in advance of the intersection in accordance with the distances shown in ["Condition A" of Table 2C-4 of the MUTCD.](#) These distances are to be considered the minimum for a single lane change maneuver and should be measured from the begin taper point for the longest auxiliary lane designed for the intersection. The degree of traffic congestion and the potential number of lane change maneuvers that may be required should also be considered when determining the advance placement distance.

2.37.5 ADVANCE STREET NAME SIGNS AT SIGNALIZED INTERSECTIONS

- (1) Requests to install advance street name signs (**Figure 2.37-1**) must be initiated by District Traffic Operations or based on a request received from the local agency having jurisdiction over the approaching cross street. The District Traffic Operations Engineer is responsible for the review and approval of these signs.
- (2) Advance street name signs shall be white lettering on green background and designed in accordance with [Sections 2D.05 and 2D.39 of the MUTCD.](#)

Figure 2.37-1. Advance Street Name Sign at Signalized Locations



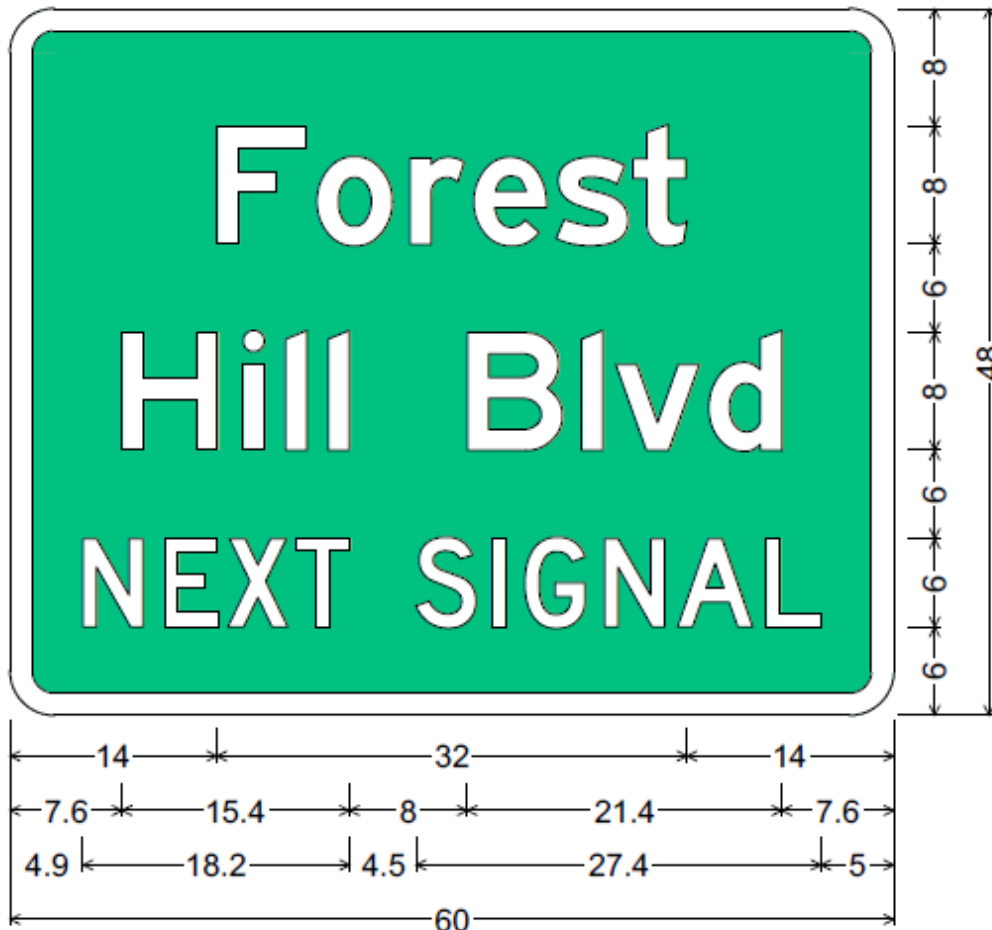
- (3) The use of advance street name signs at signalized intersections as a safety countermeasure are recommended and should be installed if any of the following conditions occur:
- (a) There is a documented history of side-swipe or rear-end crashes or;
 - (b) There are high volume approaches.
 - (c) There is a high 65 and older population.
 - (d) Roadway with 4 lanes or greater.
 - (e) Rural high speed roadways (50 mph or greater).
 - (f) The intersection is located in a [Safe Mobility for Life Coalition Priority County](#).
- (4) At a minimum, letter height (legend) shall conform to *Error! Reference source not found.*, **Design Guidelines for Advance Street Name Signs**. When street name legends are lengthy, or there is limited right-of-way the sign font shall be modified from **Table 2.37-2** using the standard font sizes shown in **Figure 2.37-4**.

Table 2.37-1. Design Guidelines for Advance Street Name Signs

Posted Speed Limit	STREET NAME LEGEND	NEXT SIGNAL or NEXT INTERSECTION
	Letter Size (inches) Upper/Lower Case Letters	Letter Size (inches) Upper Case Letters
35 mph or less	8EM	6D
40 mph or greater	10.67EM	8E

- (5) Roadways posted at 35 mph or less, or when limited right of way is available a single post sign design (**Figure 2.37-2**) shall be installed.

Figure 2.37-2. Advance Street Name Sign Design (Single Post)

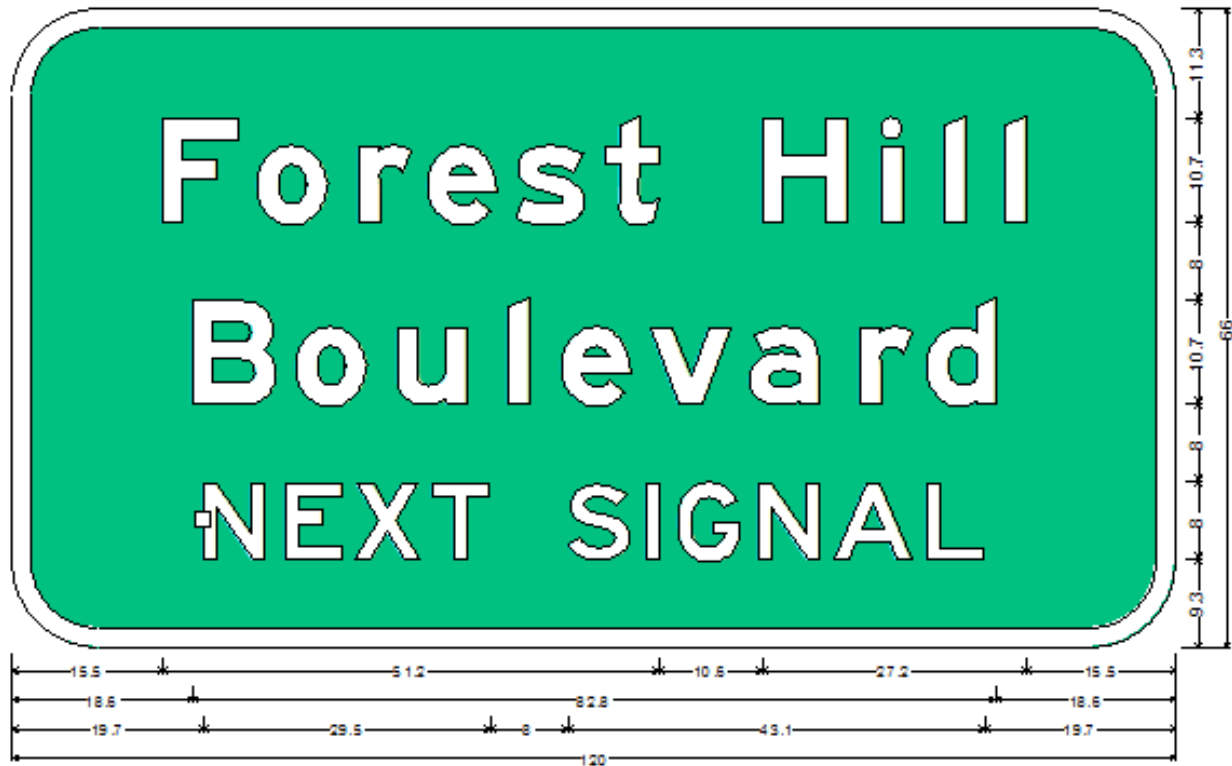


3.0" Radius, 1.5" Border, White on Green;
 "Forest" E 2K; "Hill Blvd" E 2K; "NEXT SIGNAL" D 2K;
 Table of distances between letter and object lefts.

14.0	F	o	r	e	s	t	14.0				
7.6	H	i	i	l	B	i	v	d	7.6		
4.9	N	E	X	T	S	I	G	N	A	L	5.0

- (6) Roadways posted at 40 mph or greater and have no limited right of way, a double post design (**Figure 2.37-3**) shall be installed.

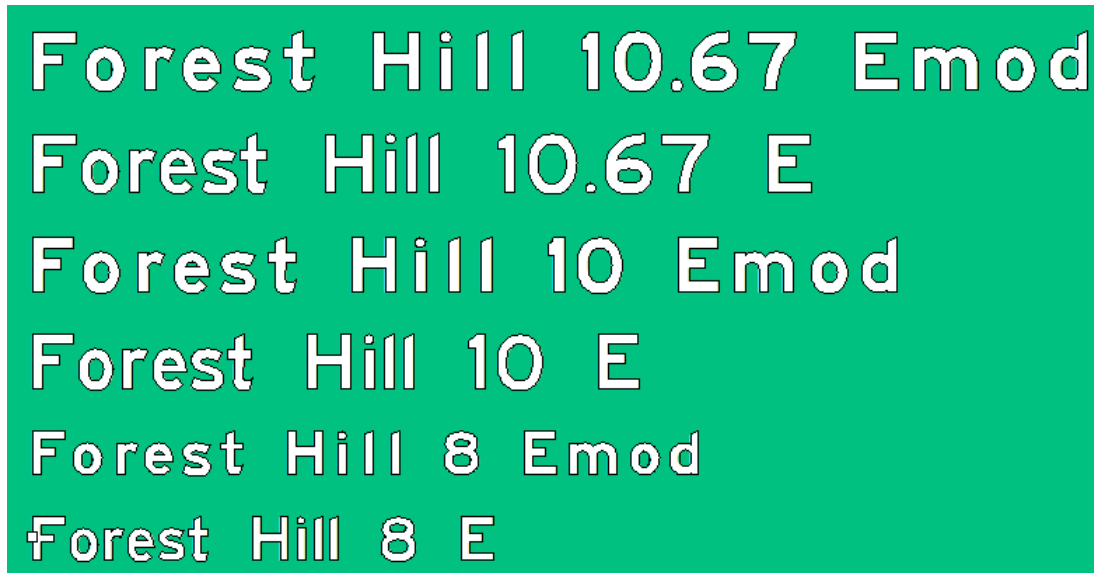
Figure 2.37-3. Advance Street Name Sign Design (Double Post)



9.0" Radius, 2.0" Border, White on Green;
 "Forest Hill" E Mod 2K; "Boulevard" E Mod 2K; "NEXT SIGNAL" E 2K;
 Table of letter and object lifts.

F	o	r	e	x	t	H	l	l	l
15.5	25.3	35.8	42.8	51.9	61.1	77.3	89.8	96.0	102.4
B	o	u	l	e	v	a	r	e	
18.8	29.9	39.8	51.1	59.8	69.8	76.1	87.4	94.3	
N	E	X	T	S	I	G	N	A	L
19.7	28.3	35.4	43.2	57.2	65.3	88.6	76.9	84.8	94.3

Figure 2.37-4. Standard Font Sizes for Advance Street Name Sign Legends



- (7) When a cross street has a different name on each side of the intersection, both names shall be shown on the advance sign with an arrow beside each name to designate direction (**Figure 2.37-5**).

Figure 2.37-5. Advance Street Name Sign Using Different Names

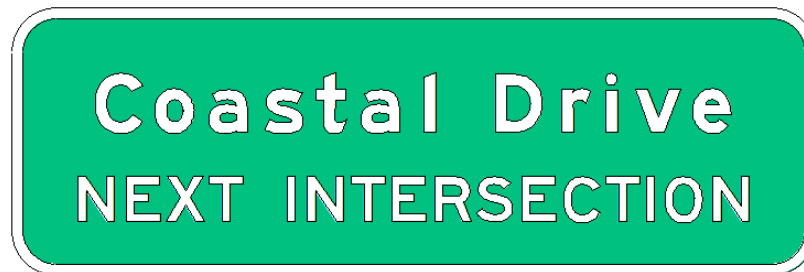


2.37.6 ADVANCE STREET NAME SIGNS AT NON-SIGNALIZED INTERSECTIONS

- (1) Requests to install advance street name signs (**Figure 2.37-6**) at non-signalized intersections must be initiated by District Traffic Operations or based on a request received from the local agency having jurisdiction over the approaching cross

- street. The District Traffic Operations Engineer is responsible for the review and approval of these signs.
- (2) These signs may be installed on multi-lane divided highways that have a dedicated left turn lane, not just a median opening for the approaching critical or significant cross street. The posted speed of the roadway shall not be lower than 45 mph.
 - (3) Advance street name signs shall be designed in accordance with [Sections 2D.05 and 2D.39 of the MUTCD](#) and the [Standard Highway Signs Manual](#).
 - (4) At a minimum, letter height (legend) shall conform to *Error! Reference source not found.*, Design Guidelines for Advance Street Name Signs.

Figure 2.37-6. Advance Street Name Signs at Non-Signalized Locations

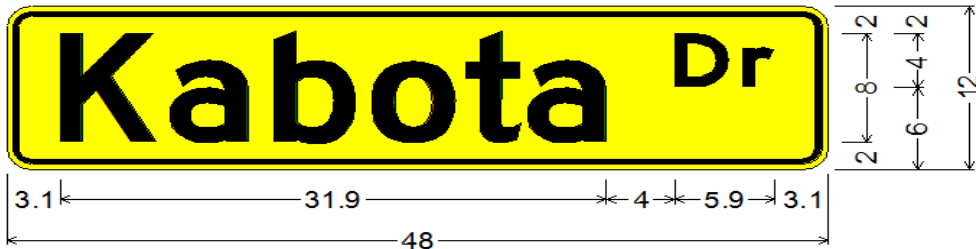


2.37.7 ADVANCE STREET NAME PLAQUES ON INTERSECTION WARNING AND ADVANCE TRAFFIC CONTROL SIGNS

- (1) Intersection Warning Signs (W2 series) ([Figure 2.37-7](#)) and Advance Traffic Control Signs (W3 series) ([Figure 2.37-8](#)) should be installed when there is a documented need based on sight restriction, crash history, or engineering judgment.
- (2) Advance street name plaques ([Section 2C.49 of the MUTCD](#)) should be installed on these warning signs when there is:
 - (a) Minimum of 2000 AADT
 - (b) No street lighting along main arterial
 - (c) Documented history of turning, entering, or side-swipe crashes
 - (d) Limited sight distance due to horizontal or vertical curves
 - (e) A high 65 and older population
 - (f) The intersection is located in a [Safe Mobility for Life Coalition Priority County](#).

- (3) It is recommended that wherever a new or replacement Intersection Warning Sign (W2 series) is installed on a rural roadway it is accompanied by an advance street name plaque designed in accordance with this section.
- (4) Requests must be initiated by District Traffic Operations or may also be received from the local agency having jurisdiction over the approaching cross street.
- (5) Advance street name plaques shall be black lettering on yellow background using an 8-inch D series lettering size mounted below a 48-inch warning sign panel, with upper/lower case lettering in accordance with the [FHWA's Handbook for Designing Roadways for the Aging Population](#). If not structurally possible, lettering size may be decreased to a minimum of 5-inch D series.
- (6) Roads not currently signed with an advance route marker may be considered for an Intersection Warning Sign (W2 series) with an advance street name plaque when they meet the criteria referenced in **Section 2.37.7(1)**.
- (7) Roads with an advanced route marker (JCT shield) (**Figure 2.37-9**) may have the street name plaque placed below to better identify the roadway to unfamiliar travelers. The panel color should match the route marker. If used, the lettering on the street name plaque shall be no less than 4-inch C series.

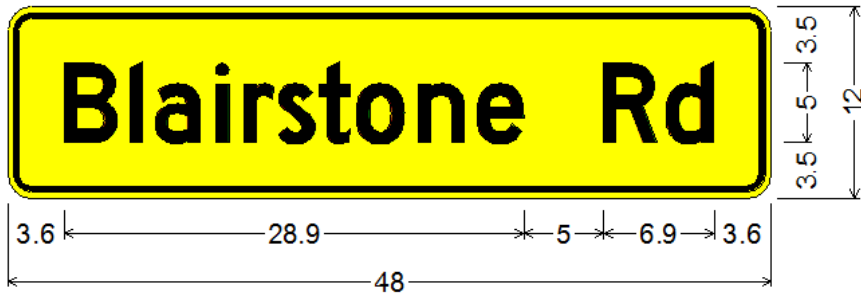
Figure 2.37-7. Advance Street Name Plaque on Intersection Warning Sign



1.5" Radius, 0.4" Border, 0.4" Indent, Black on Yellow;
 "Kabota" D 2K " Dr" E 2K;
 Table of letter and object lefts.

K	a	b	o	t	a	D	r
3.1	9.5	15.6	21.4	26.8	30.5	39.0	43.0

Figure 2.37-8. Advance Street Name Plaque on Advance Traffic Control Warning Sign



1.5" Radius, 0.4" Border, 0.4" Indent, Black on Yellow;

"Blairstone Rd" D 2K;

Table of letter and object lefts.

B	l	a	i	r	s	t	o	n	e
3.6	7.7	9.3	13.1	14.9	17.1	19.6	22.0	25.8	29.5
R	d								
37.5	41.4								

Figure 2.37-9. Advance Street Name Plaque on Advanced Route Marker



3 PANEL ROUTE MARKER;
 M2-1_21x15;
 1.5" Radius, 0.6" Border, 0.4" Indent, Yellow on Blue;
 "JCT" C 2K specified length;
 30" COUNTY SHIELD;
 1.5" Radius, 0.6" Border, 0.4" Indent, Yellow on Blue;
 "Sweetwater" C 2K; "Road" C 2K;

Table of widths and spaces.

9.4	J	4.6	1.9	C	5.0	1.1	T	4.6	9.4																					
2.5	S	2.8	0.4	w	4.7	0.4	e	2.6	0.5	e	2.5	0.3	t	1.8	0.1	w	4.7	0.3	a	2.4	0.5	t	1.8	0.3	e	2.6	0.6	r	1.7	2.5
11.9	R	2.8	0.6	o	2.6	0.5	a	2.4	0.7	d	2.5	12.0																		

Section 2.38

USE OF GENERATORS AND PORTABLE STOP SIGNS AT NON-FUNCTIONING SIGNALIZED INTERSECTIONS

2.38.1 PURPOSE

The purpose of this section is to provide guidance on deploying generators and portable stops signs at non-functioning signalized intersections after an emergency event. The Department's guiding principles on deploying generators and portable or part-time (folding) stop signs shall conform to [Section 316.1235, F.S.](#) and to the [MUTCD](#).

2.38.2 CONDITIONS FOR USE

- (1) The District Traffic Operations Engineer shall request the installation of generators or the placement of portable stop signs after an emergency event at locations where a signalized intersection is not functioning. A non-functioning signalized intersection is defined herein as an intersection that is equipped with traffic signals which are damaged and/or without power after an emergency event.
- (2) When the signalized intersection is without power and restoration of power using a generator is not possible, portable stop signs should be placed as directed by the District Traffic Operations Engineer.
- (3) When portable stop signs are utilized at a signalized intersection that is not functioning due to a power outage, the power shall be disconnected to avoid traffic control conflicts when power is restored.
- (4) When generators are used at a signalized intersection due to a power outage and power is restored, the traffic signals shall continue to function in the same operation. If the traffic signals were in flashing operation, the traffic signals shall continue in flashing operation. If the traffic signals were in normal cycle and phasing operations, the traffic signals shall continue in the normal operation.

2.38.3 LOCATION AND PLACEMENT

- (1) The locations for placement of generators or portable stop signs shall be at the discretion of the District Traffic Operations Engineer. They shall, in coordination with local agencies, develop and maintain a list of critical signalized intersections to establish a priority for generator or portable stop sign installation.

- (2) The placement of the portable stop signs shall be in accordance with Figures 2.38-1 through 2.38-6 of this section. Placement of the portable stop signs for any intersection design not represented in Figures 2.38-1 through 2.38-6 shall be done in accordance with the direction of the District Traffic Operations Engineer, the [Department's Standard Plans](#), and the [MUTCD](#).
- (3) Each critical signalized intersection control cabinet shall be wired with a transfer switch and capable of switching to an alternate generated power source in the event of a power outage and shall conform to [Section 676 of the Department's Standard Specifications](#).

2.38.4 STORAGE AND DISTRIBUTION

- (1) Each District shall have access to and be capable of deploying portable generators to provide an alternate power source to 12 percent of the signalized intersections on the State Highway System in the District. The District Maintenance Office shall determine the deployment locations.
- (2) The District Maintenance Office shall be responsible for maintenance and storage of the generators.
- (3) Each District shall have access to and be capable of deploying portable stop signs to non-functioning signalized intersections on the State Highway System in the District that are not equipped with a generator.

2.38.5 REMOVAL AND RECOVERY

- (1) The generators should be removed upon restoration of power and proper signals operation. The portable stop signs should be removed prior to normal operations of the traffic control signal. The recovery of the generators and portable stop signs should be accomplished using District emergency response teams or emergency contractors by either of the following:
 - (a) Complete removal from each intersection.
 - (b) Stockpiling the portable stop signs in one corner of the intersection for removal later.
- (2) The Districts shall determine the method of recovery and develop a recovery plan for their intersections.

Figure 2.38-1. Temporary Signing for Power Outage – Major Dual Left Intersection

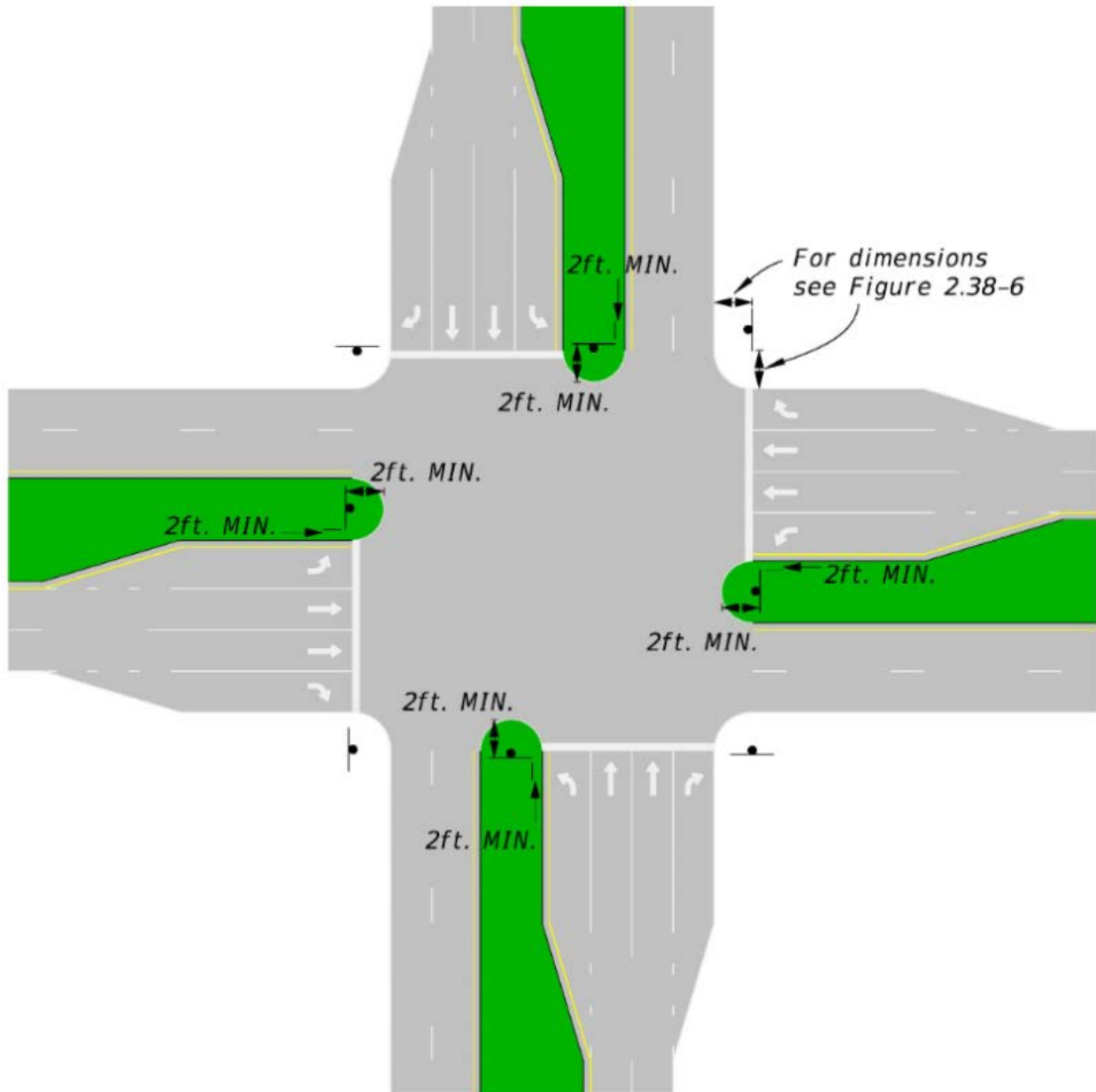


Figure 2.38-2. Temporary Signing for Power Outage – Major Single Left Intersection

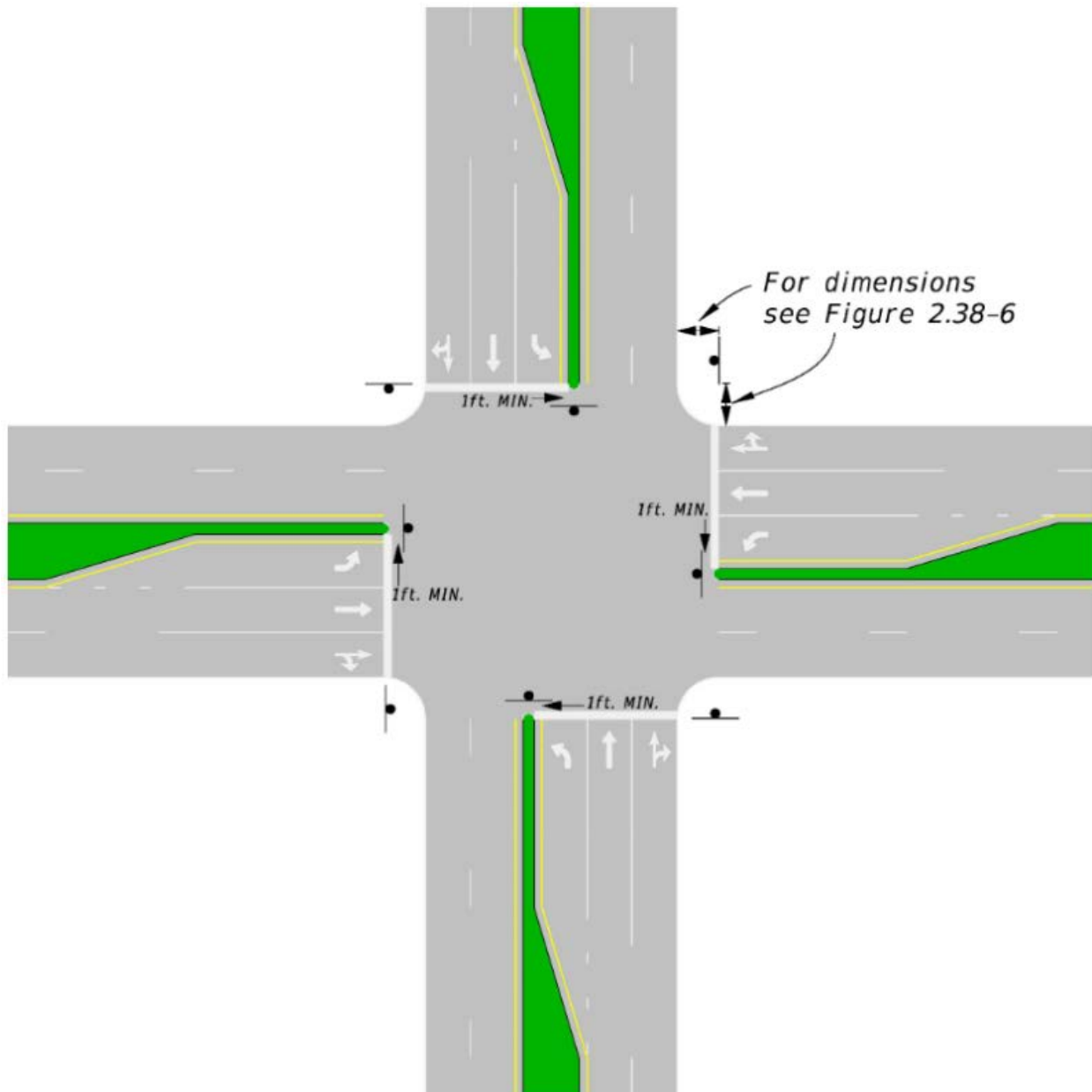


Figure 2.38-3. Temporary Signing for Power Outage – Major Thru Intersection

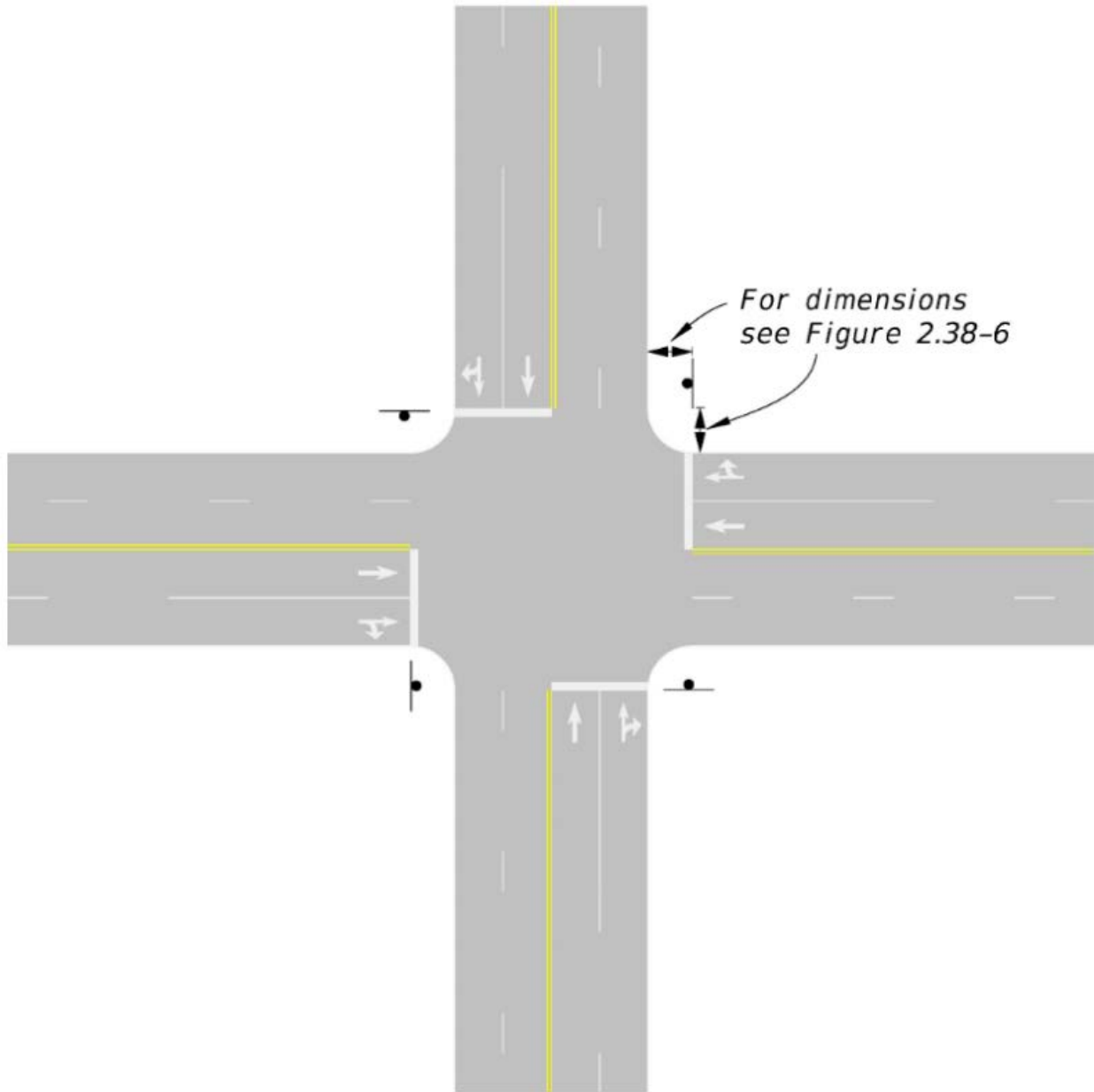


Figure 2.38-4. Temporary Signing for Power Outage – Major to Minor Intersection

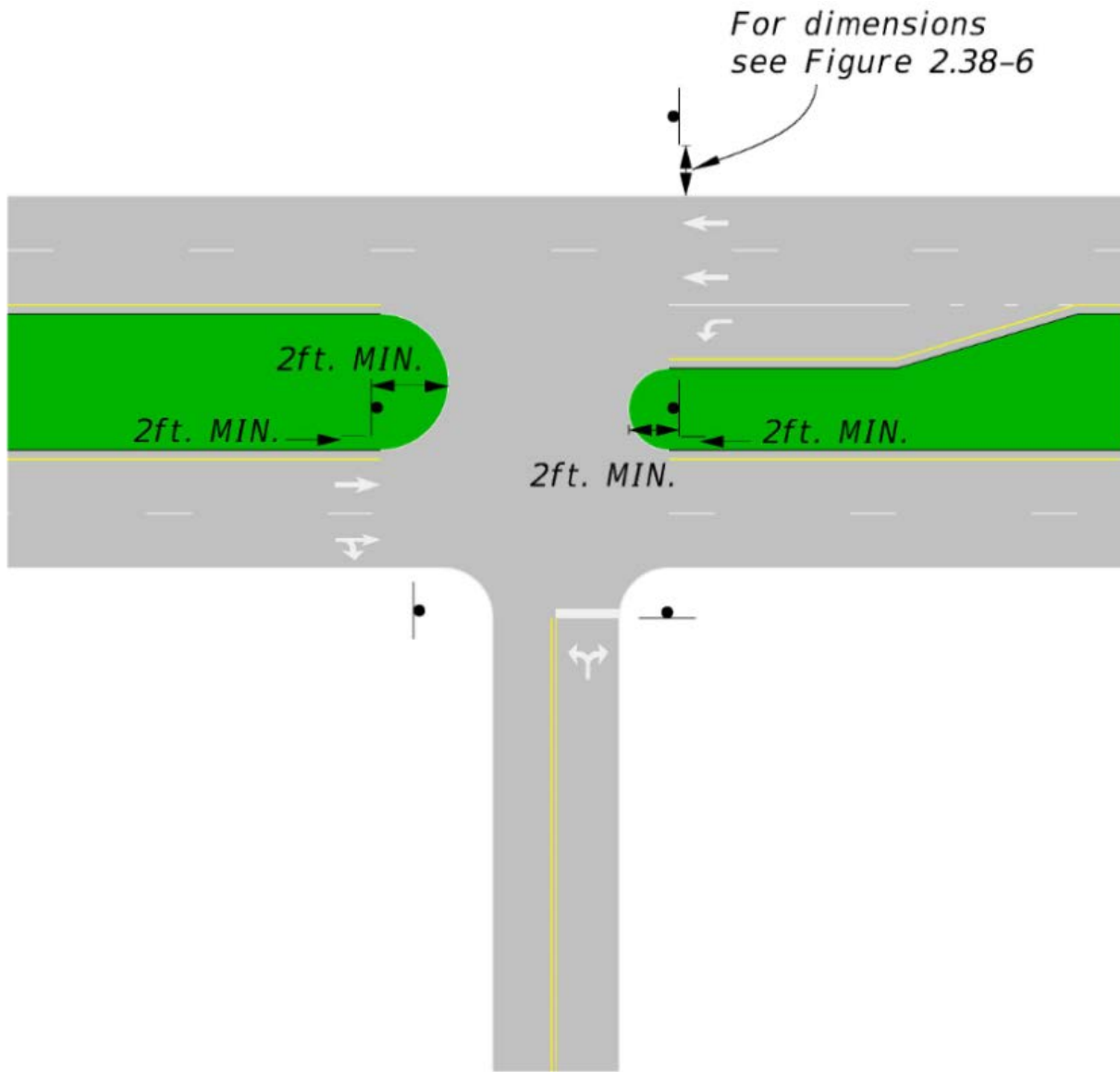


Figure 2.38-5. Temporary Signing for Power Outage – Minor Intersection

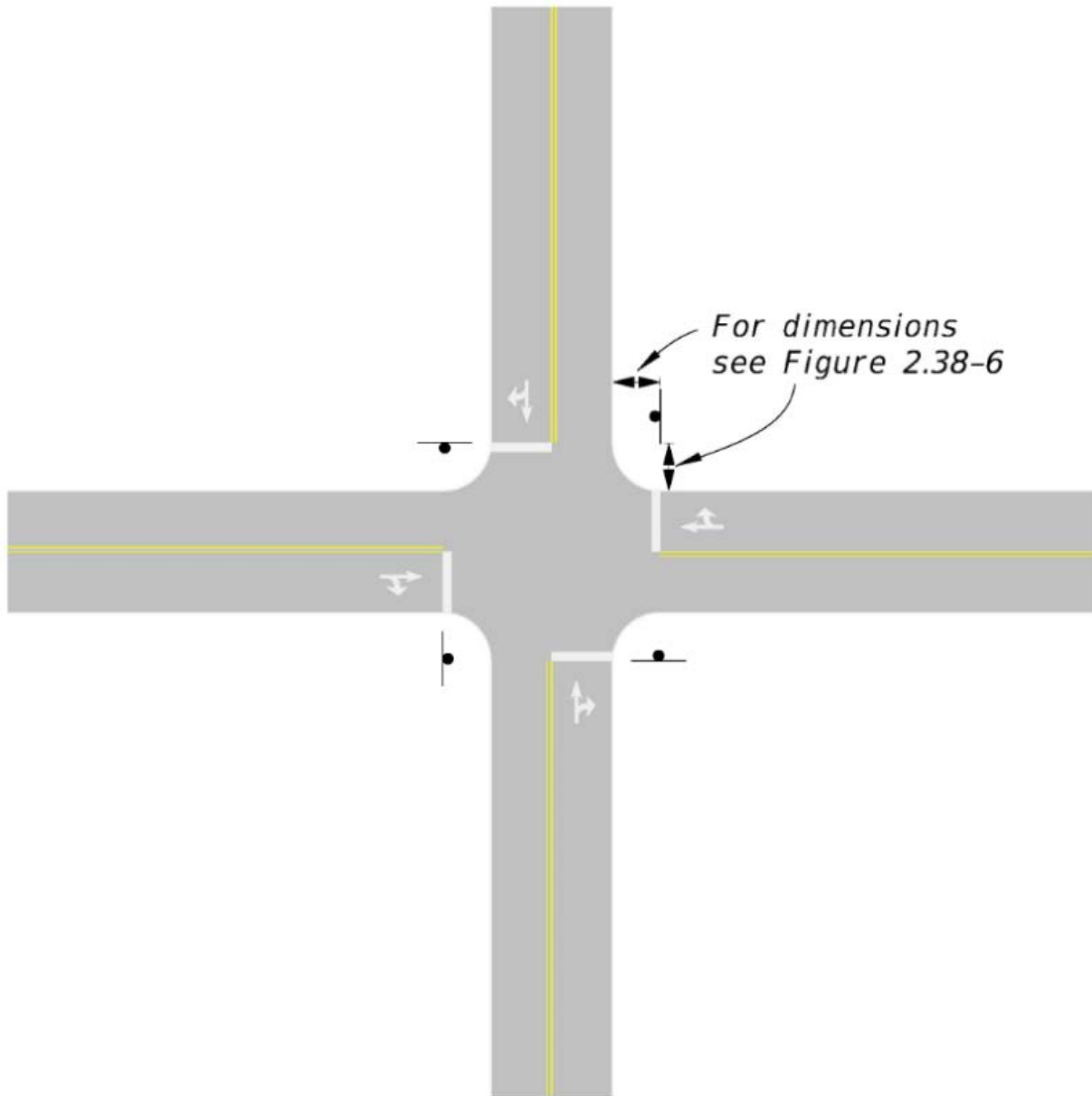
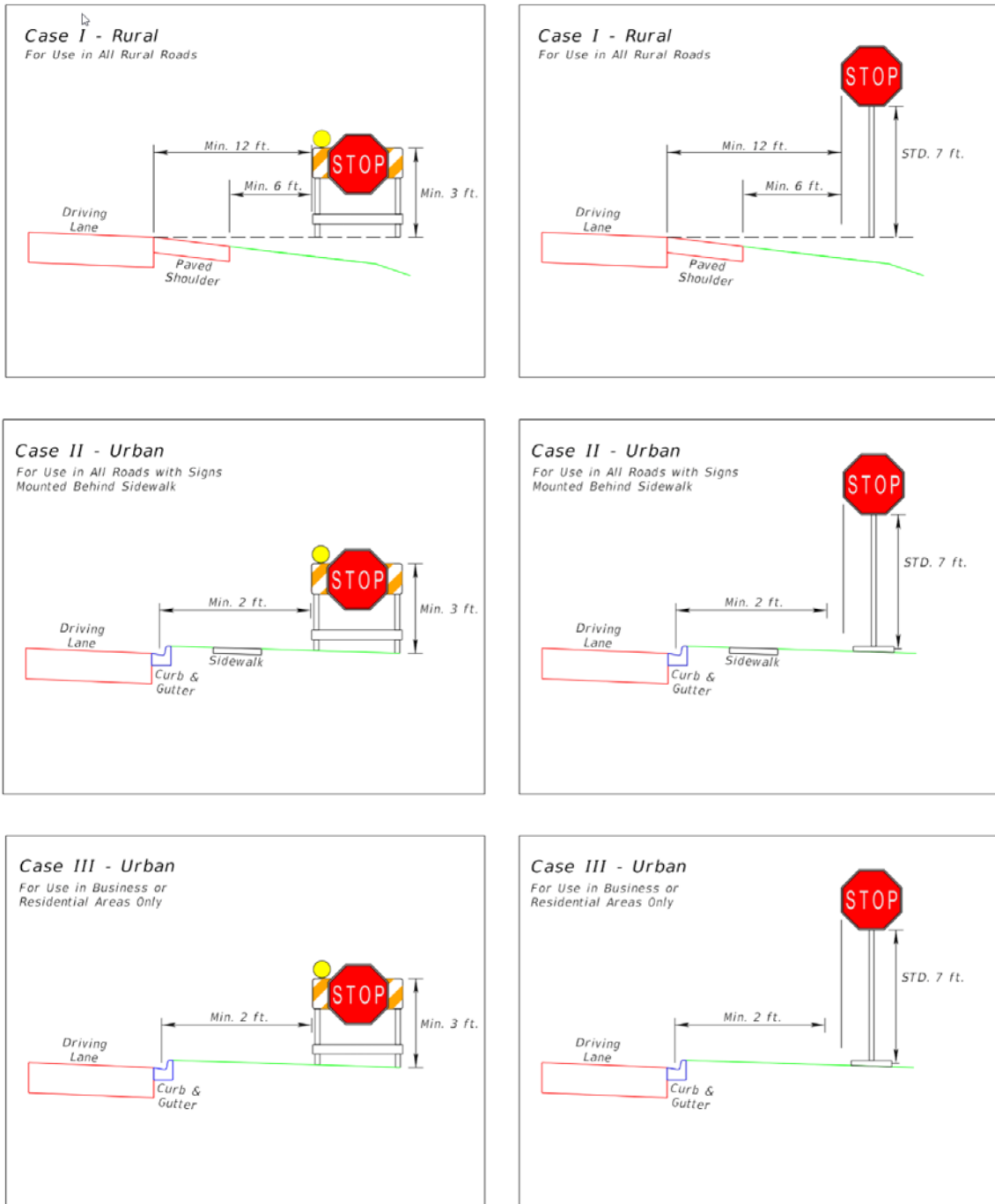


Figure 2.38-6. Temporary Signaling for Power Outage – Sign Dimensions



The above sign offset distances and height measurements are from the MUTCD. During a Governor's emergency declaration, these distances may vary at the discretion of the District Traffic Operations Engineer.

Section 2.39

WARNING, STOP, AND YIELD SIGN SIZES

2.39.1 BACKGROUND

- (1) Drivers (65 years and older) experience visual decline and slower reaction time and reduced visual acuity is associated with crash rates. Warning, STOP, and YIELD signs are critical to the safe operation of motor vehicles by all drivers. In order to determine the appropriate sizes that should be used for these critical signs, the State Traffic Engineering and Operations Office conducted a study.
- (2) The minimum required corrected visual acuity to obtain a driver's license in the State of Florida is 20/70. Therefore, this value was selected as the design visual acuity goal for these critical signs. Based on this design goal, the required sizes of Warning, STOP, and YIELD signs were determined and are presented in this section.
- (3) The minimum sign sizes referenced in this section shall be used on all future projects and as replacements when necessary due to sign damage or expiration of useful sign life.

2.39.2 RECOMMENDED WARNING SIGN SIZES

- (1) The recommended symbol warning sign sizes in *Error! Reference source not found.* meet the design goal for 20/70 visual acuity.

Table 2.39-1. Recommended Symbol Warning Sign Sizes

SIGN CODE	SIGN SIZE (Inches)	SIGN SYMBOL
W3-1	36	Stop Ahead
W3-2	36	Yield Ahead
W3-3	36	Signal Ahead
W3-5	36	Speed Reduction
W11-10	36	Truck Crossing

- (2) The recommended word message warning sign sizes in *Error! Reference source not found.* meet either the minimum design goal of 20/70 visual acuity or the most acuity available by using a 48-inch diamond shape sign.

Table 2.39-2. Recommended Word Message Warning Sign Sizes

SIGN CODE	SIGN SIZE (Inches)	LETTER SERIES	PRIMARY LETTER HEIGHT (Inches)	MINIMUM REQUIRED ACUITY 20/x	SIGN MESSAGE
W5-1	48	D	8	64	Road Narrows
W5-2	48	D	8	64	Narrow Bridge
W5-3	48	C	8	54	One Lane Bridge
W8-1	36	D	10	80	Bump
W8-2	36	E	10	88	Dip
W8-3	48	C	8	54	Pavement Ends
W8-4	48	C	8	54	Soft Shoulder
W8-6	48	C	8	54	Truck Crossing
W8-7	48	D	8	64	Loose Gravel
W8-8	48	D	8	64	Rough Road
W8-9	48	C	8	54	Low Shoulder
W9-1	48	D	8	64	Right Lane Ends
W9-2	48	D	8	64	Lane Ends Merge Left
W13-1	24	E	10	88	35 MPH
W13-2	36 x 48	E	12	106	Exit 25 MPH
W13-3	36 x 48	E	12	106	Ramp 30 MPH
W14-1	48	D	9	72	Dead End

- (3) A No Passing Zone sign (**W14-3**) shall be 36 x 48 inches with 5-inch Series D lettering on the words NO and PASSING and 5-inch Series C lettering on the word ZONE.
- (4) Right-of-way constraints may sometimes limit the size of warning signs. When this occurs, the largest sign that will fit shall be used.
- (5) For any sign that isn't designed for 20/70 visual acuity there will be less legibility distance and therefore less time to perceive and understand the message before passing the sign. However, by adding the following additional distances to the sign placement distances shown in [Table 2C-4. Guidelines for Advance Placement of Warning Signs](#) and referenced in [Section 2C.05 of the MUTCD](#), the same total distance from the point where the sign is just legible to the condition must be maintained. Add 25 feet for 8-inch Series C and 8-inch Series

D letters; 50 feet for 5-inch Series D, 6-inch Series C, and 6-inch Series D letters; and 75 feet for 5-inch Series C letters.

2.39.3 RECOMMENDED STOP SIGN SIZES

- (1) The 48-inch STOP sign provides a minimum required acuity of 20/45. In addition, use of the larger STOP signs, in areas with restricted right-of-way, may present problems. Installation of the STOP AHEAD symbol warning sign will alleviate both of these problems.
- (2) *Error! Reference source not found.* was produced to determine the required size for the STOP and STOP AHEAD sign, and the sign placement distance for the STOP AHEAD sign.

Table 2.39-3. Stop and Stop Ahead Sign Sizes and Placement

POSTED SPEED (mph)	STOPPING SIGHT DISTANCE (feet)	STOP SIGN SIZE ¹ (inches)	STOP SIGN RECOGNITION DISTANCE (20/70) (feet)	STOP AHEAD SYMBOL SIGNS ² (inches)	STOP AHEAD SIGN PLACEMENT DISTANCE (feet)
20	150	24	178	—	—
25	200	30	222	—	—
30	250	36	267	36*	125*
35	300	36	267	36*	175*
45	450	36	267	36	325
50	550	48	356	36	425
55	625	48	356	36	500

*If needed for restricted sight distance locations in urban areas.

¹On state highways, the 48-inch STOP sign should be considered for 45 mph or greater. STOP signs on roads intersecting the state highway are usually replaced in FDOT construction projects. The sizes in this section are recommended for the replacement signs. Motorists traveling on local roads, in urban areas, expect to encounter STOP signs. STOP signs larger than 36-inches should be used when greater emphasis or visibility is needed.

²On state highways, in rural areas, motorists may not expect to encounter a STOP sign. As an enhancement, the STOP AHEAD sign should be used for speeds equal to or greater than 45 mph. On local roads, in rural areas, motorists usually expect to stop as they cross a state highway. Where sight distance restrictions exist, a STOP AHEAD sign should be used.

- (3) The stopping sight distance shown in the table above were calculated using the equation on **Page 113 of AASHTO's A Policy on Geometric Design for**

Highways and Streets (Green Book, 2004 edition), and is for level, wet pavement. The brake reaction time was increased from 2.5 to 3.5 seconds to accommodate drivers aged 65 years and older.

- (4) Both the stopping sight distance and the STOP AHEAD sign placement distance should be increased to compensate for longer stopping sight distance on downgrades.
- (5) The increase due to downgrades as steep as 6 percent does not change the results in *Error! Reference source not found.* for speeds up to and including 35 mph. *Error! Reference source not found.* gives the required additional distance due to downgrade. This increase should be added to both the stopping sight distance and the STOP AHEAD sign placement distance in *Error! Reference source not found.*.
- (6) The STOP AHEAD symbol sign should be placed according to *Error! Reference source not found.*, rather than [Table 2C-4, Guidelines for Advance Placement of Warning Signs](#), referenced in [Section 2C.05 of the MUTCD](#) for Condition B (Stop). The 36-inch size sign has 141 foot legibility for 20/70 visual acuity, which is greater than the required 125 feet.
- (7) If restricted right-of-way requires a STOP sign smaller than shown in this table, the largest possible size should be used and a 36-inch STOP AHEAD symbol sign should be placed according to *Error! Reference source not found.* and *Error! Reference source not found.*.
- (8) If restricted right-of-way demands a STOP AHEAD symbol sign smaller than 36-inch, the 30-inch sign will provide approximately 117 foot legibility. This sign should be placed 10 feet further from the STOP sign than the distance shown in *Error! Reference source not found.* and *Error! Reference source not found.*.

Table 2.39-4. Additional Stopping Sight Distance and Stop Ahead Sign Placement Distance Due to Downgrade

POSTED SPEED (mph)	ADDITIONAL DISTANCE (3% GRADE) (feet)	ADDITIONAL DISTANCE (6% GRADE) (feet)
45	25	50
50	50	75
55	50	100

- (9) When flashing beacons are used on the STOP sign, the STOP AHEAD sign is optional unless required because of restricted sight distance.

2.39.4 RECOMMENDED YIELD SIGN SIZES

The sizes for YIELD signs shall be as shown in [*Table 2B-1 of the MUTCD*](#) with a target compliance date of December 22, 2013.

Section 2.40

APPROVED SAFETY MESSAGES FOR PERMANENTLY MOUNTED DYNAMIC MESSAGE SIGNS

2.40.1 PURPOSE

To provide a listing of approved standard safety messages that can be displayed on permanently mounted Dynamic Message Signs.

2.40.2 DEFINITIONS

DMS — Dynamic Message Sign(s); refers to dynamic, changeable or variable message signs defined as programmable traffic control devices that display messages composed of letters, symbols/graphics or both. DMS are used to convey timely and important en route and roadside information to motorists and travelers about changing highway conditions to improve operations and reduce crashes. DMS may inform drivers to change travel speed, change lanes, divert to a different route, or to be aware of a change in current or future traffic conditions.

2.40.3 APPROVED STANDARD SAFETY MESSAGES FOR DISPLAY ON PERMANENTLY MOUNTED DMS

Approved standard safety messages for display on a permanently mounted DMS can be found on the [Department's Highway Signing Program website](#).

Section 2.41

GUIDELINES FOR USE OF RETROREFLECTIVE STRIPS

2.41.1 PURPOSE

To provide guidance on the use of retroreflective strips on sign posts when the material is required or a documented need exists to draw attention to the sign, especially at night-time. The objective of providing the retroreflective strips is to improve the conspicuity and presence of the signs.

2.41.2 DEFINITIONS

Conspicuity. Easily seen or noticed; readily visible or observable.

2.41.3 CONDITIONS FOR USE

- (1) Retroreflective strips should be used where a documented need exists to enhance sign visibility. The requirement for enhanced conspicuity as referenced in [Section 2A.15 of the MUTCD](#), for standard signs is generally based on the need to make a sign more visible. Retroreflective strips should only be used when there is a need for extra emphasis.
- (2) The following sign types require the use of retroreflective strips:
 - (a) WRONG WAY sign posts
 - (b) Crossbuck sign blades at all rail crossings and posts at all passive rail crossings
- (3) Use retroreflective strips on sign posts where a documented need exists or application has been proven to significantly reduce crashes for a given condition. The following sign types are appropriate based upon engineering judgment:
 - (a) Curve Warning Signs ([Section 2C.06 of the MUTCD](#))
 - (b) Do Not Enter Signs ([Section 2B.37 of the MUTCD](#))
 - (c) Stop, Yield or Other Regulatory Signs ([Section 2B.05 of the MUTCD](#))
- (4) For the more critical signs that happen to be placed in a less desirable location (in curves where headlamps don't align optimally, etc.), engineering evaluations may lead to a sign being upgraded with retroreflective strips. Engineering judgment includes considering high crash locations where the use of retroreflective strips on sign supports could improve sign visibility and provide better guidance to motorists.

2.41.4 SIGN DESIGN

The specifications for retroreflective requirements are referenced in [**Section 700 of the Department's Standard Specifications.**](#)

Section 2.42

EXPRESS LANES SIGNING

2.42.1 PURPOSE

This section establishes a uniform basis for the design of express lanes signing.

2.42.2 BACKGROUND

- (1) Express lanes design criteria are found in the [FDOT Design Manual \(FDM\)](#).
- (2) Express lanes signs shall comply with applicable provisions of [Section 2G of the MUTCD](#). Express lanes are referred to as Priced Managed Lanes in the MUTCD.

2.42.3 CRITERIA

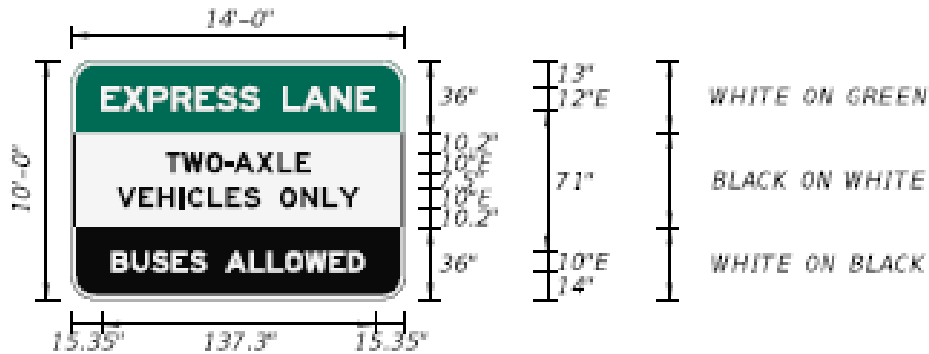
Express lanes signs include the following sign types:

- (1) Regulatory Signs:
 - (a) Vehicle Eligibility Sign
 - (b) Express Lanes Termination Sign
 - (c) Toll Amount Sign
- (2) Advanced Guide Signs:
 - (a) Point of Entry/ Ingress signing
 - (b) Point of Exit/ Egress signing

2.42.3.1 VEHICLE ELIGIBILITY SIGN

The purpose of this sign is to convey the vehicle eligibility criteria established in [Rule 14-100.003, F.A.C.](#) regarding the number of axles and vehicle types permitted to use the express lanes. This sign shall be mounted overhead and over the lane to which it applies. An example of the Vehicle Eligibility Sign is shown in **Figure 2.42-1**.

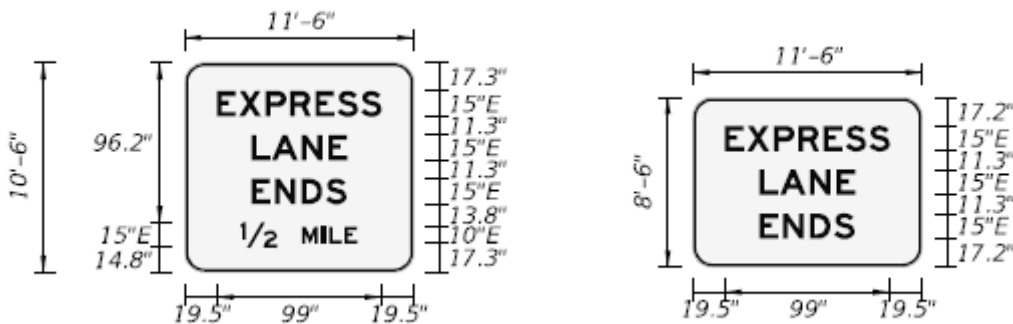
Figure 2.42-1. Vehicle Eligibility Sign



2.42.3.2 EXPRESS LANES TERMINATION SIGN

The purpose of this sign is to inform motorists that the express lanes are ending. This sign shall be mounted overhead and over the express lanes to which it applies. If space permits, three signs are preferred, at sequential spacing. Due to the large number of drivers over the age of 65 in Florida, increased letter height of 15 inches shall be used. Examples of the Express Lanes Termination Sign are shown in **Figure 2.42-2**.

Figure 2.42-2. Express Lane Termination Signs



2.42.3.3 TOLL AMOUNT SIGN (TAS)

- (1) As required by [Rule 14-100.003, F.A.C.](#) the TAS is used to display real-time toll amount information to users by identifying the cost of using the express lanes to a specific destination and the fee for toll violations. Since the TAS posts information that influences driver decisions to use the express lanes, it is important that the sign be clear, legible, and straightforward. Examples of the TAS are shown in Figure 2.42-3 and Figure 2.42-4. Note: the legend "TOLL" is to be used on signs that are for tolled facilities.

- (2) No more than three destinations shall be displayed on the TAS.
- (3) The toll violation message shall be black on white and displayed on the TAS.
- (4) The TAS shall be mounted overhead and over the lane to which it applies. See **Section 2.42.4** for TAS sign placement and sequencing.
- (5) Destinations and toll amounts shall not be repeated on the TAS for users within the express lanes.
- (6) Two TASs, indicating the toll amounts for the next set of toll destinations, shall be installed (space permitting) over the express lanes prior to the last point of egress to the general use or general toll lanes before beginning the new sequence of tolling trips.

Figure 2.42-3. Toll Amount Sign for Non-Tolled Facilities

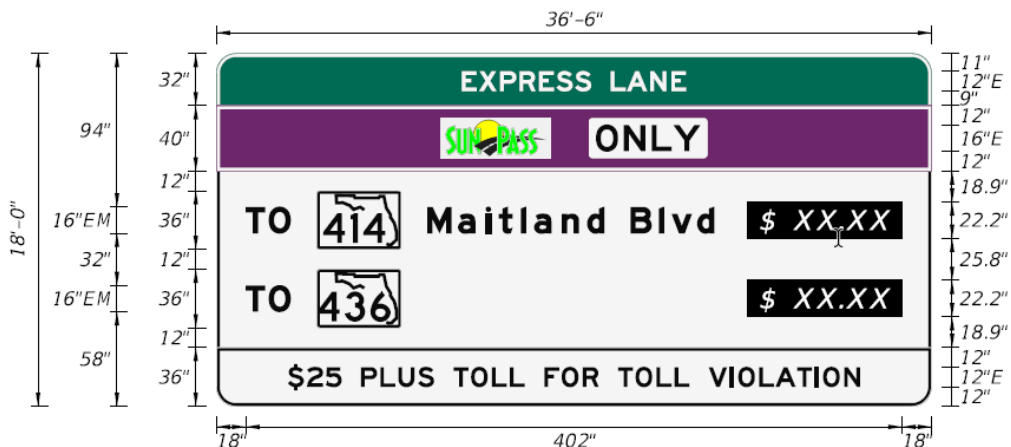
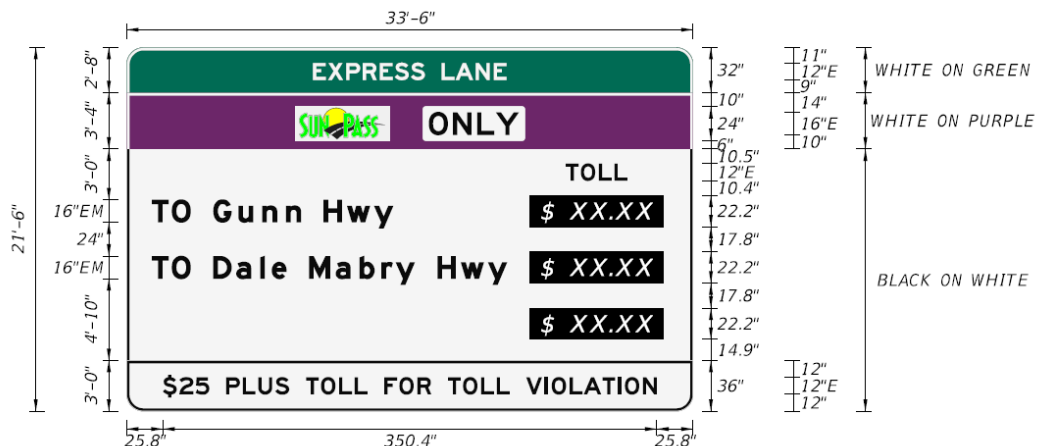


Figure 2.42-4. Toll Amount Sign for Tolled Facilities



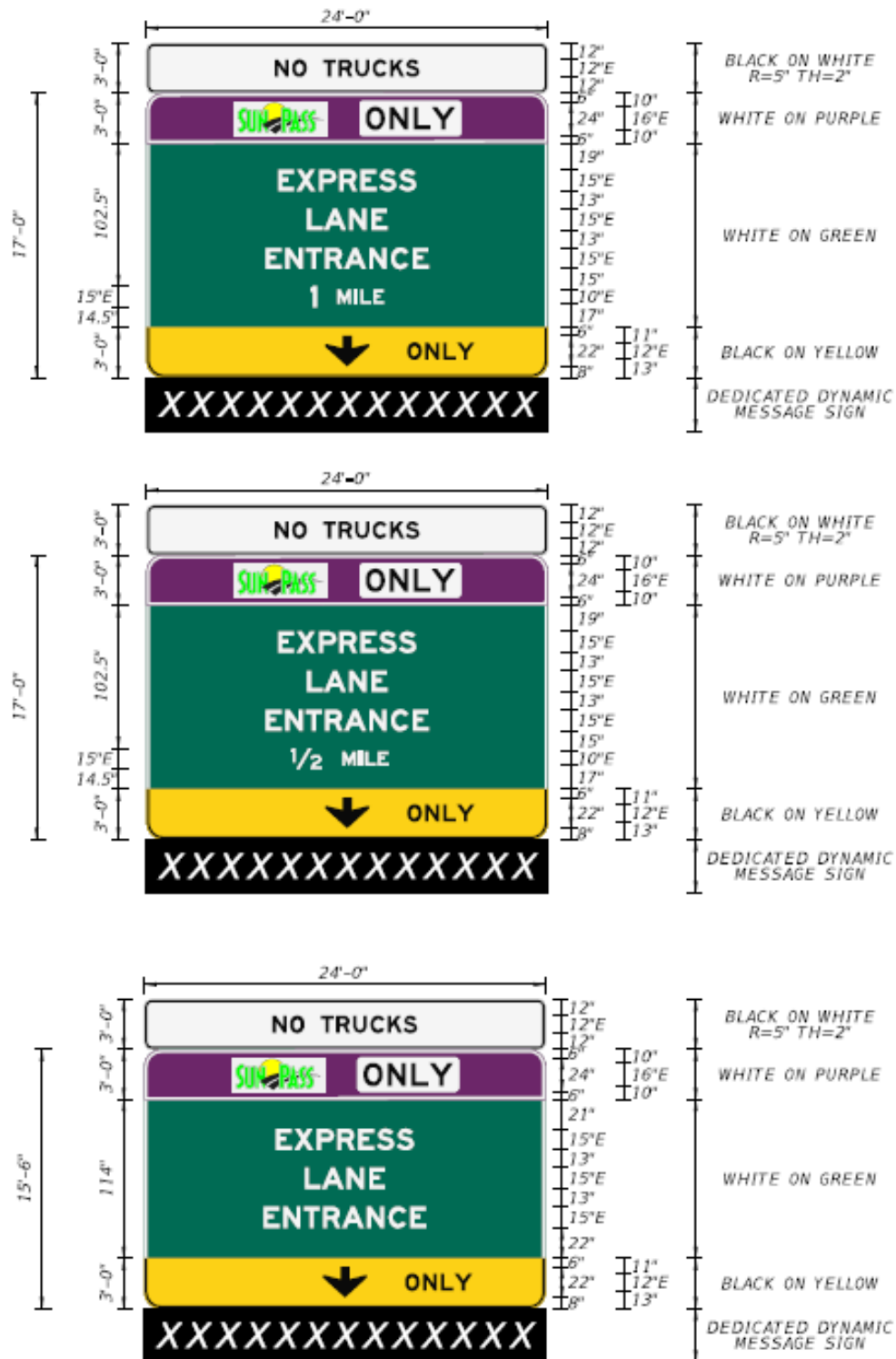
2.42.3.4 ADVANCED GUIDE SIGNS

- (1) Per [Section 2G.10 of the MUTCD](#), if the Entry/Ingress or Exit/Egress is on the left side of the roadway, a LEFT plaque shall be added to the top left edge of the Advance Guide Signs. If the Entry/Ingress or Exit/Egress is a lane drop situation, the ONLY panel with down arrow shall be installed.
- (2) A “NO TRUCKS”, black on white, panel shall be added to the top of the advanced guide signs as shown in [Figure 2.42-5](#).
- (3) SunPass, or other interoperable transponders, is the only form of payment for the express lanes. The “SUNPASS ONLY” panel with purple background shall be included on the Advanced Guide Signs.

2.42.3.5 POINT OF ENTRY/ INGRESS SIGNS

- (1) There are three types of access points for express lanes as defined in the [FDM 211.14](#). The Point of Entry/Ingress Signs shall be installed at each access point. Examples of the Point of Entry/Ingress Signs are shown in [Figure 2.42-5](#).
- (2) When the point of entry is the initial entrance to the express lanes network, the advance overhead signing shall begin two miles prior to the express lanes entrance, space permitting. In addition to the initial entry/ingress express lanes signing, sequential overhead guide signs shall be located at one mile, ½ mile, and at the express lanes point of entry. For intermediate express lanes entry/ingress points the advance signing shall begin one mile prior to the express lanes ingress location and continue with the remaining sequence of signs.

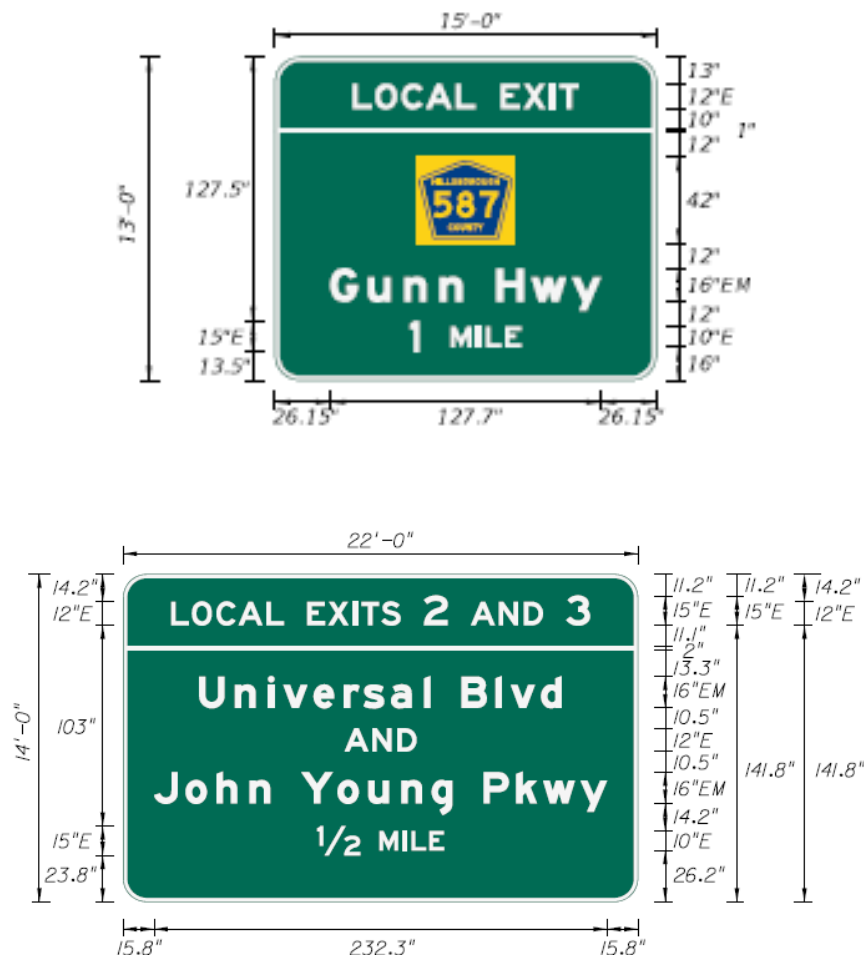
Figure 2.42-5. Ingress Signing (TYP)



2.42.3.6 POINT OF EXIT/ EGRESS SIGNS

- (1) Intermediate point of exit/egress guide signs, or local exit signs, inform express lanes users which express lanes egress ramp serves their destination. Local exit signs shall be mounted overhead and over the lane to which it applies.
- (2) The destinations on the TASs shall be displayed the same way on the corresponding general use or general toll lane exit sign.
- (3) If three or more general use or general toll lane exits occur before the next opportunity to exit the express lanes, the egress signing should reflect this (**Figure 2.42-6**).

Figure 2.42-6. Egress Signing (TYP)

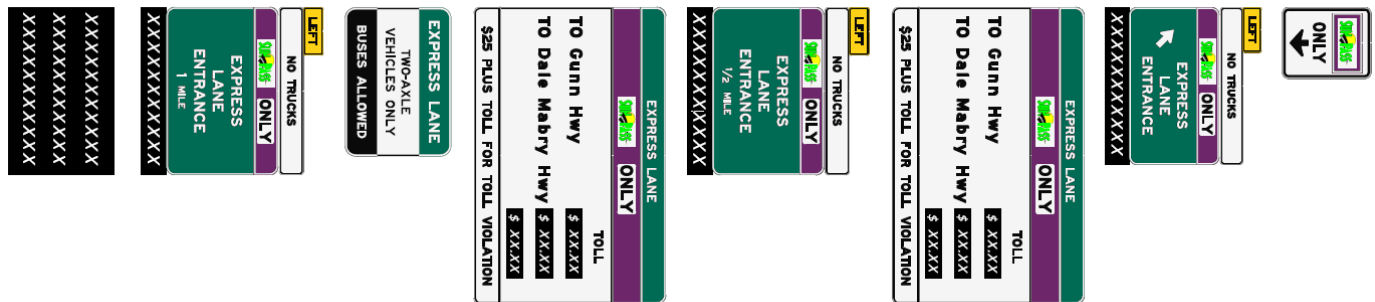




2.42.4 SIGN PLACEMENT

- (1) There shall be seven signs installed for an express lane entrance. Three advanced guide signs, two TASs, one vehicle eligibility sign, and one regulatory R3-44 ([Section 2G.17 of the MUTCD](#)). One 3-line full-matrix Dynamic Message Sign (DMS) shall also be included, if space is available. The order in which the signs shall be installed is shown in **Figure 2.42-7**.

Figure 2.42-7. Express Lanes Entrance Sign Sequence



- (2) A minimum of two TASs shall be installed with the legend showing destination and price, prior to the entrance to the express lanes. The [MUTCD](#) provides minimum spacing requirements for express lanes signs including TASs.
- (3) If the information on the sign is intended for the general use or general toll lanes, the sign shall be installed over the general use or general toll lanes. If the information on the sign is intended for the express lanes, the sign shall be installed over the express lanes.

2.42.5 SIGN INSTALLATION

- (1) The TAS sign structures shall be designed to hold the maximum size panel of three destinations.
- (2) The TAS sign closest to an express lanes ingress shall be installed on a span structure.

2.42.6 SPECIAL CONSIDERATION FOR ARTERIAL ENTRANCE/INGRESS CONNECTIONS WITH EXPRESS LANES

- (1) For direct entrance/ingress access into the express lanes from an arterial road, one (1) TAS for each travel direction is acceptable, provided the sign includes a 1-Line DMS to serve as a backup, with separate power and separate communication.
- (2) The letter height for arterial signs may be reduced per [MUTCD](#).
- (3) If there are Right-Of-Way constraints and the Vehicle Eligibility Sign is unable to be placed on multi-post supports, a single post version of the sign is acceptable.