

A STOP sign should be erected at the point where the vehicle is to stop, or as near thereto as possible, and may be supplemented with a Stop line and/or the word "STOP" on the pavement.

A YIELD sign should be erected in the same manner.

Where only one sign, STOP or YIELD, is used, it shall be on the right—hand side of the traffic lane to which it applies. At the intersection where a wide throat exists on the signed approach, observance of the sign may be improved by the erection of an additional sign on the left side of the approach road, and by the use of a STOP line. Where two lanes of traffic are subject to the STOP sign, a second sign should be placed where it is visible to traffic in the inner lane. At certain channelized intersections, the additional signs may be effectively placed on a channelized island. In no instance shall a STOP or YIELD sign be mounted above on another on the same post.

Where two roads intersect at an acute angle, the STOP or YIELD sign should be positioned at an angle or shielded so that the message is visible from the appropriate approach.

All signs shall be Type III—A, high performance sheeting, which consists of encapsulated spherical lens elements.

TITLE: TRAFFIC CONTROL STANDARD STOP / YIELD SIGNAGE

APPROVED BY: C. G. MIXSON, P.

NO.: V-01

-08

DATE: 10-01-

DEPARTMENT OF PUBLIC WORK ENGINEERING DIVISION 1525 E. JEFFERSON ST. BROOKSVILLE, FLORIDA 34601

STREET NAME SIGNAGE

Street NAMES shall be confirmed by the Hernando County Addressing Department.

Street name signs should be installed at every intersection with a minimum of one sign for each street name. Along multi-lane roadways, street name signs should be placed at least on diagonally opposite corners so they will be on the far right side of the intersection for traffic on the major street.

Street name signs shall be installed on their own separate post, at a height of 7' from the bottom of the sign panel to pavement grade.

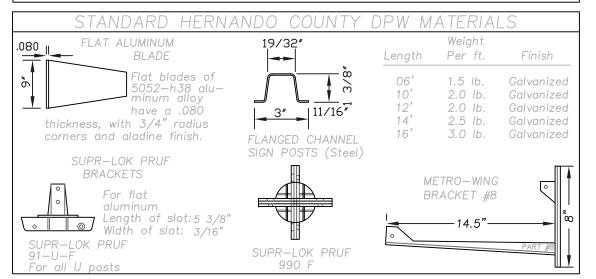
Street name signs should have a white legend on a green background, and the border, if used, should be the same as the legend.

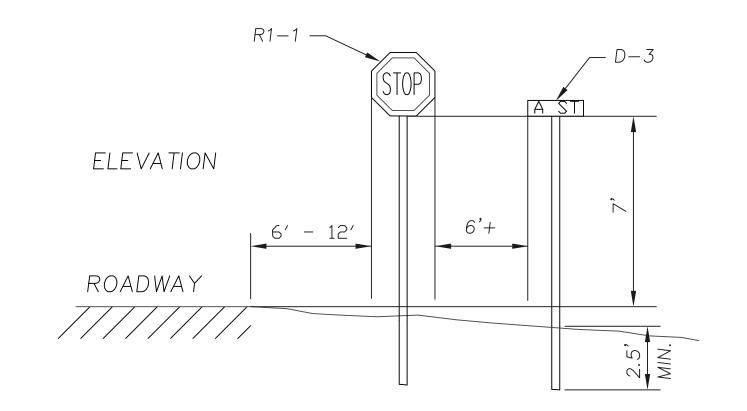
Street name signs shall be Type-IIIA high performance sheeting which consists of encapsulated spherical lens elements.

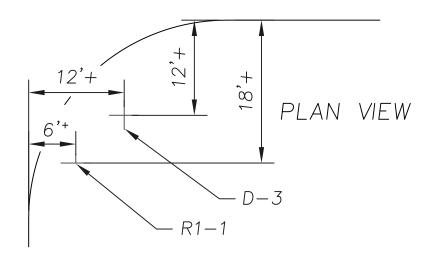
Street name blades should be .080" x 9" x length necessary.

Lettering shall be minimum 6" upper-case with 4.5" lower-case letters, all Series "B".

S	TANDARD ACC	CEPTED ABBREV	IATIONS ARE	-:
Drive-DR	Court-CT	Parkway-PKWY	Loop-LOOP	Place-PL
Road-RD	Junction-JCT	Avenue-AVE	Street-ST	Way-WAY
Circle-CIR	Terrace-TER	Boulevard-BLVD	Lane-LN	Trail—TRL









1" Series "B" all upper case, spaced to fit.

Lettering shall be minimum 6" upper-case with 4.5" lower-case letters, all Series "B".

This sign shall be used on a private road where it meets a public road.



Lettering shall be minimum 6" upper-case with 4.5" lower-case letters, all Series "B".

ROL STANDARD SIGNAGE CONTROL NAME SIGN TRAFFIC STREET

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DATE: 0-01

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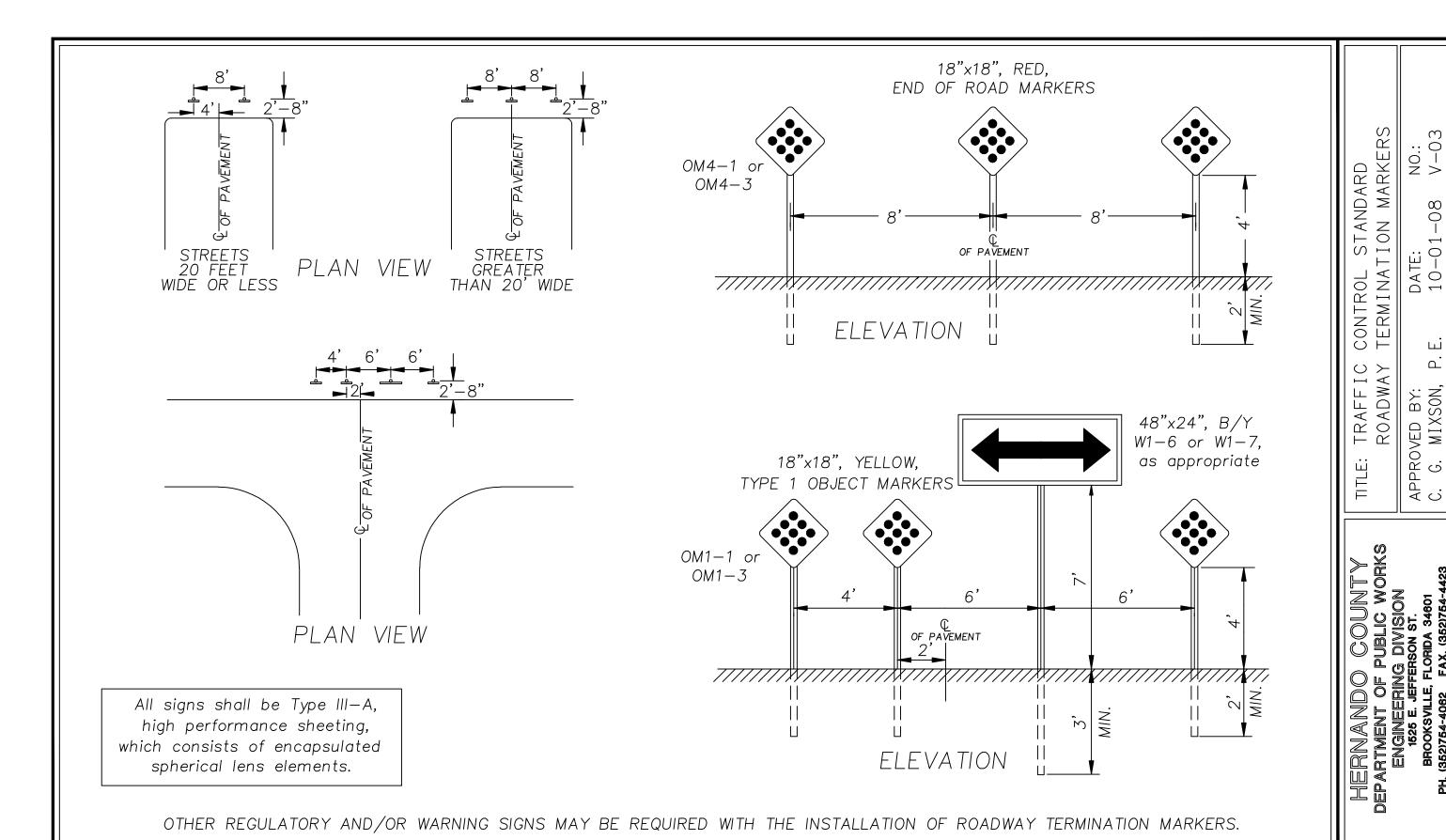
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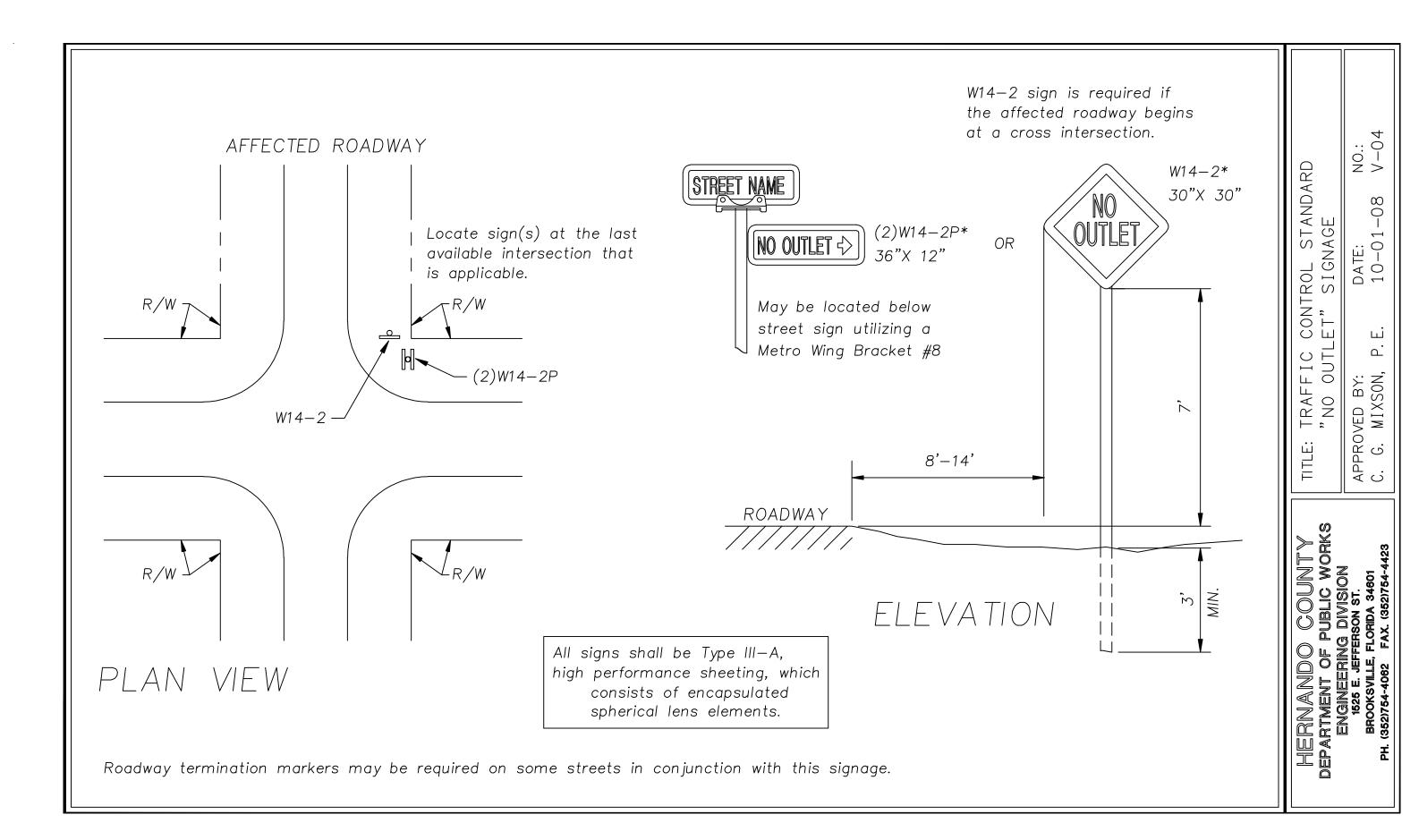
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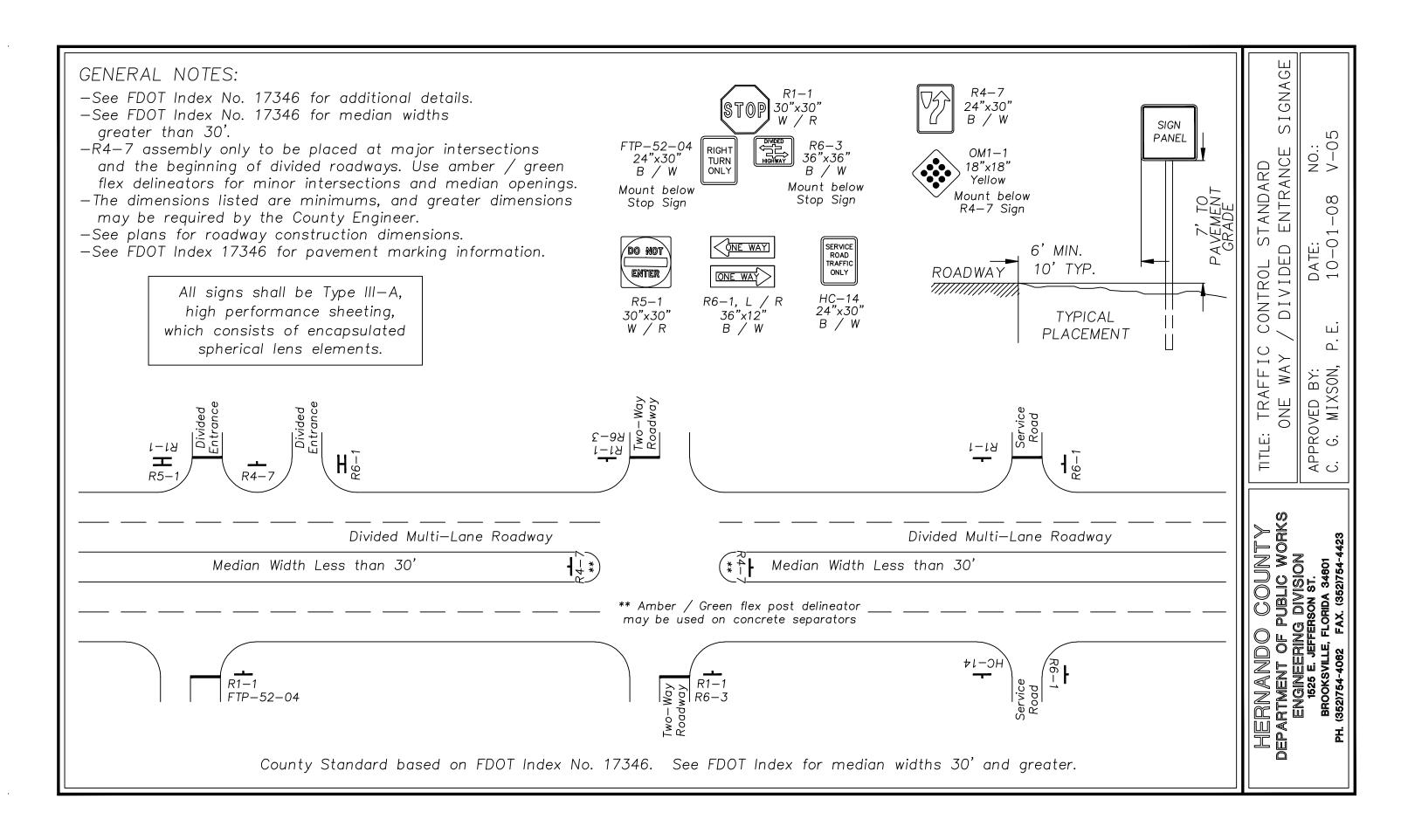
HERNANDO COUNTY Department of Pu ENGINEERING DI 1525 East Jeffersol

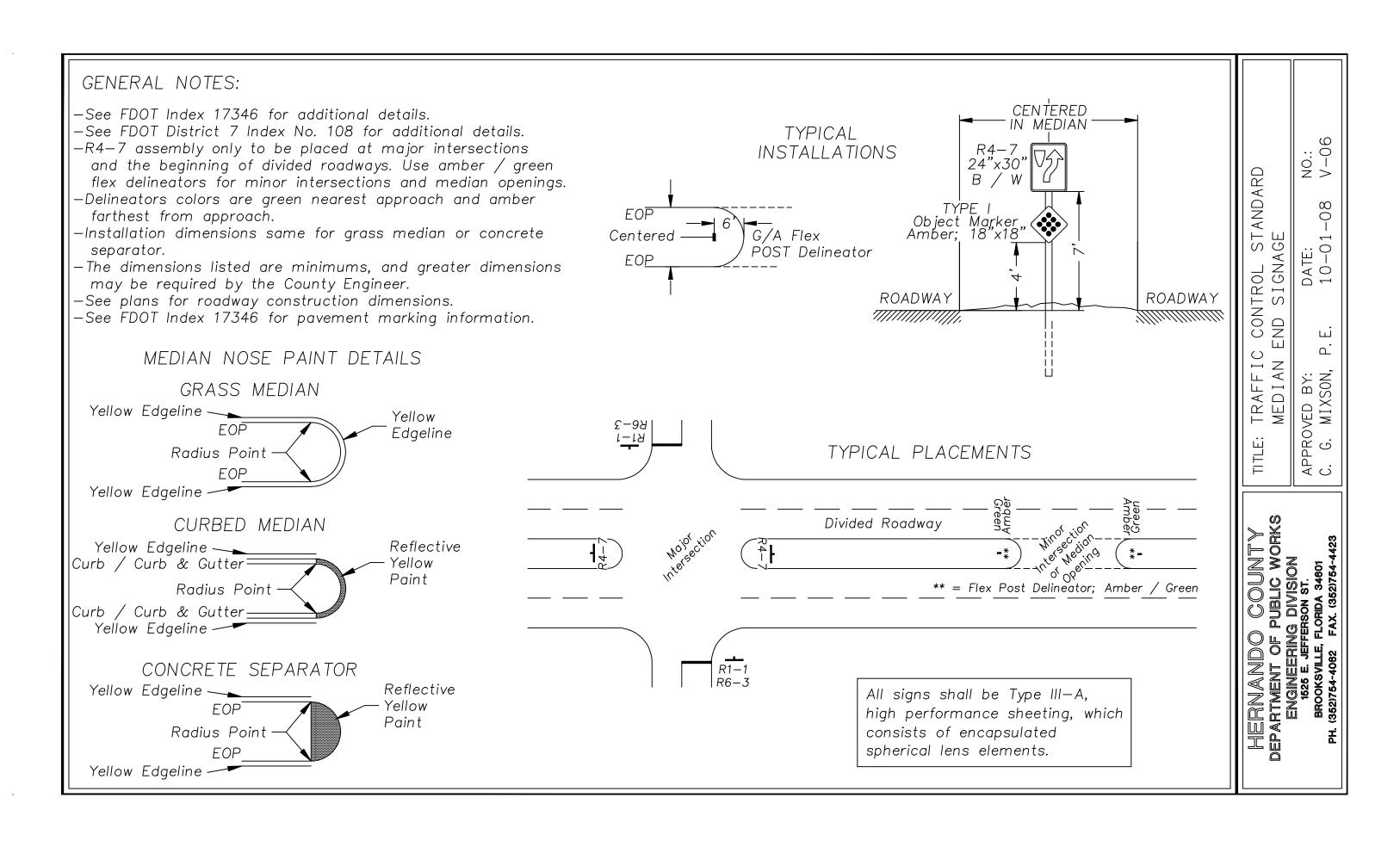


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D	Crossing	Advance		
Design	Sign	Sign		
Speed	W11-2	W11-2		
(MPH)	W16-7p	W//-Z		
STOP	NO	NO		
30	YES	NO		
35	YES	150'		
40	YES	225'		
45	YES	300'		
50	YES	375'		
55	YES	450'		
Distances based on 1988 MUTCD				

Distances based on 1988 MUTCD, Table II-1, Advance Placement of Warning Signs, Condition B — Stop Condition to 10 MPH. Distances to be increased with horizontal and vertical curvature.

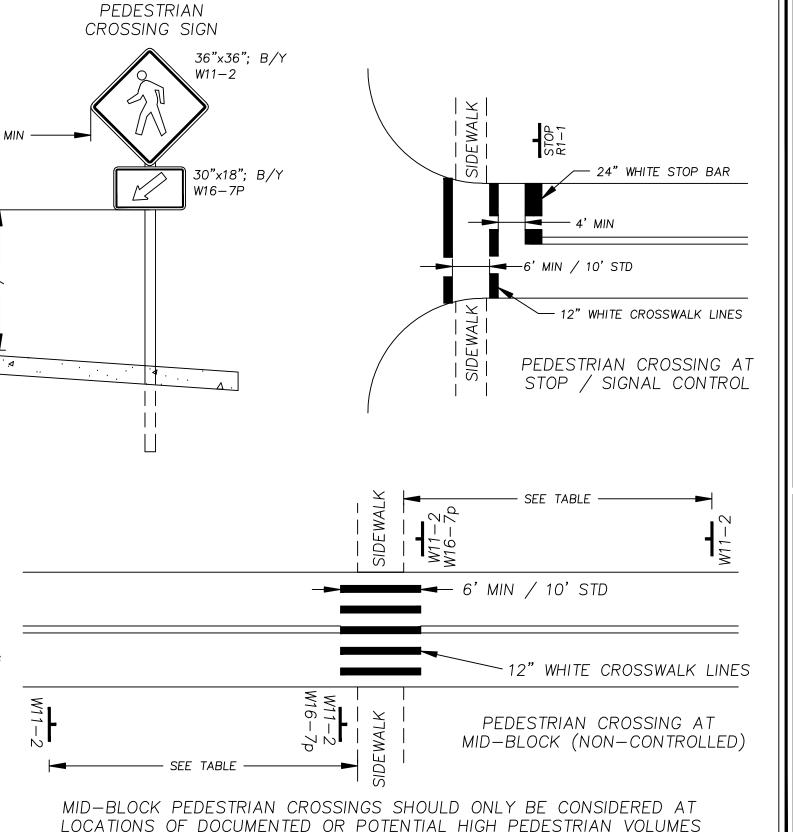
GENERAL NOTES:

-Advance warning signs are not required on 30 MPH streets.

ROADWAY

- -Divided (median) multi-lane roadways require supplemental advance and crossing signs in the median.
- -Advance sign placement distance to be increased for horizontal and vertical curves, or other sight obstructions. Supplemental distance panels may be required.
- -The dimensions listed are minimums, and greater dimensions may be required by the County Engineer.
- -See FDOT Index No. 17346 for pavement marking information.
- -Special Emphasis crosswalks are only to be used at locations not controlled by Stop sign or traffic signals.
- -Clear sight distances for sidewalk and roadway must be maintained at all times.
- -The fluorescent yellow-green background color for sign panels is restricted to school signage only.
- -FDOT Index 304/310 and Spec 527 shall be followed for ADA Ramps

All signs shall be Type III-A, high performance sheeting, which consists of encapsulated spherical lens elements.



-07 NO.: V-0

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DATE: 10-01-

APPROVED BY: C. G. MIXSON,

STANDARD

CROSSING

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PEDE

Design	Crossing	Advance
Speed	Sign	Sign
(MPH)	W11-11/W16-7P	W11—11
30	YES	NO
35	YES	200'
40	YES	275'
45	YES	350'
50	YES	425'
55	YES	500'
60	YES	<i>575</i> '

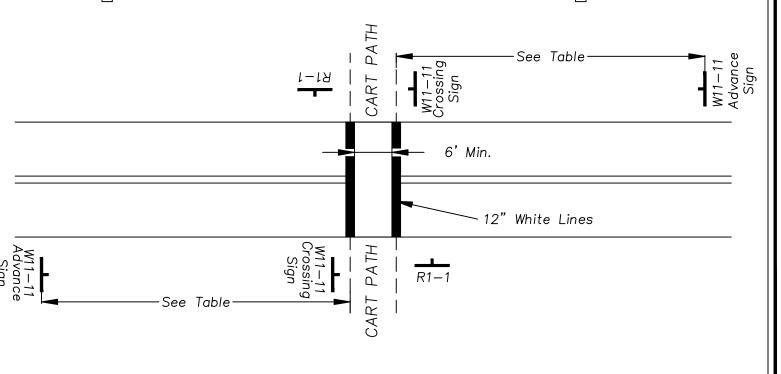
Distances based on 2000 MUTCD, Table 2C-4, Advance Placement of Warning Signs, Condition C — decelerated to 10 MPH. Distances to be increased with horizontal and vertical curvature.

Cart Path Stop Sign 36"x36"; B/Y W11-11 STOP CART PATH ROADWAY ROADWAY

GENERAL NOTES:

- -Advance warning signs are not required on 30 MPH streets.
- -Divided (median) multi-lane roadways require supplemental advance and crossing signs in the median.
- -Advance sign placement distance to be increased for horizontal and vertical curves, or other sight obstructions. Supplemental distance panels may be required.
- —The dimensions listed are minimums, and greater dimensions may be required by the County Engineer.
- -See plans for roadway construction dimensions.
- -See FDOT Index No. 17346 for pavement marking information.
- —Special Emphasis crosswalks shall NOT to be used without written approval from the County Engineer.
- -Clear sight distances for cart path and roadway must be maintained at all times.
- -Cart paths must stop for pedestrian facilities (sidewalks).

All signs shall be Type III—A, high performance sheeting, which consists of encapsulated spherical lens elements.

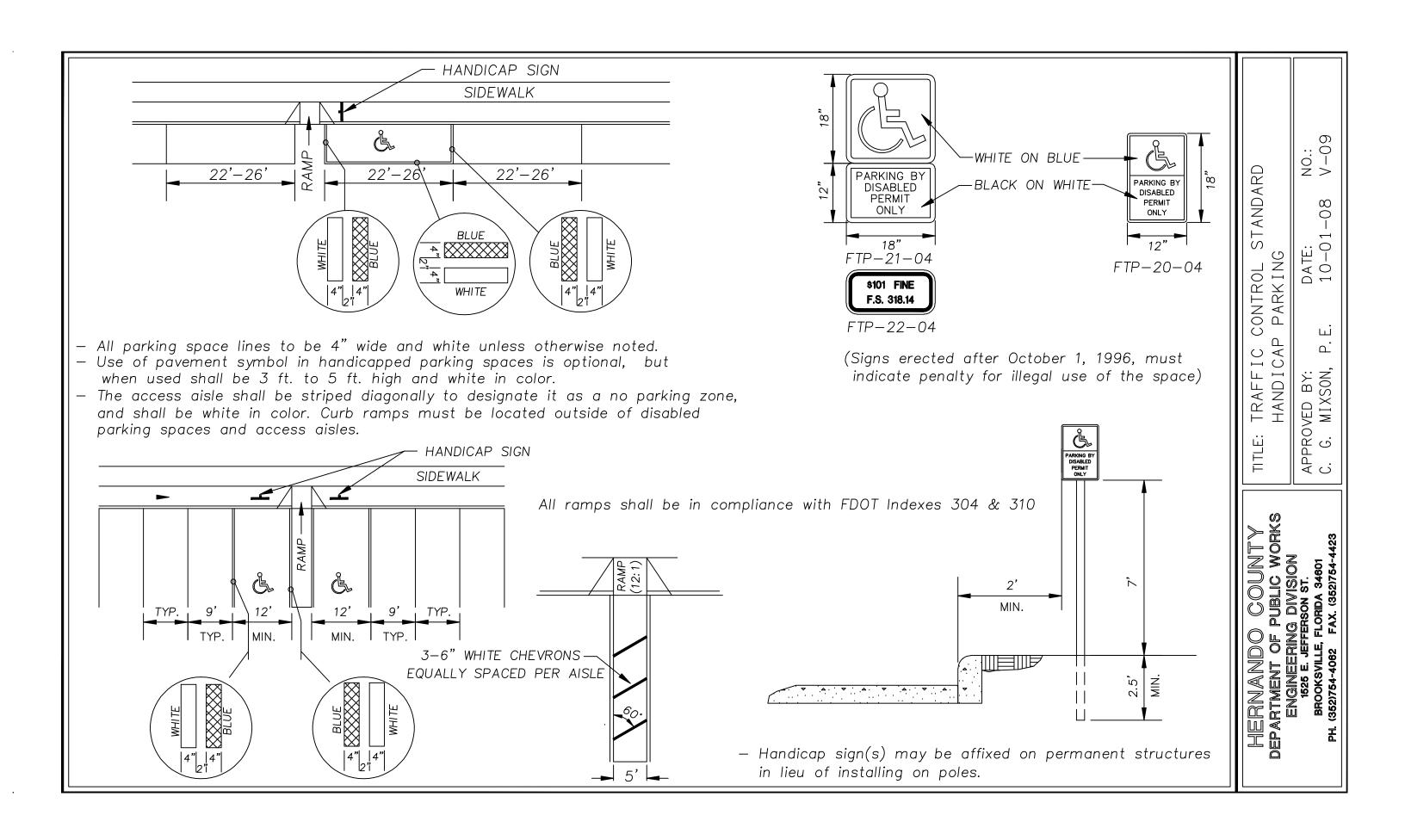


TITLE: TRAFFIC CONTROL STANDARD GOLF CART CROSSING

APPROVED BY: DATE: C. G. MIXSON, P. E. 10-01-

NO.: V-08

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NOTES

- All streets entering the construction
 zone shall receive Road Closure signage
- All Road Closed signs shall be accompanied by an 18"X18" orange flag and a type B hi—intensity flashing light.
- Other work zone traffic control devices may be required for construction. Refer to part VI of the M.U.T.C.D. and the 600 series of the F.D.O.T. Standards for additional details.
- Roadway(s) shall not to be opened to public travel until:
 - A. All permanent traffic control devices are in place;
 - B. Project is inspected and accepted.
- -Type III barricades and road closed sign SHALL not block intersection/driveway sight distance.

All signs shall be Type III—A, high performance sheeting, which consists of encapsulated spherical lens elements.

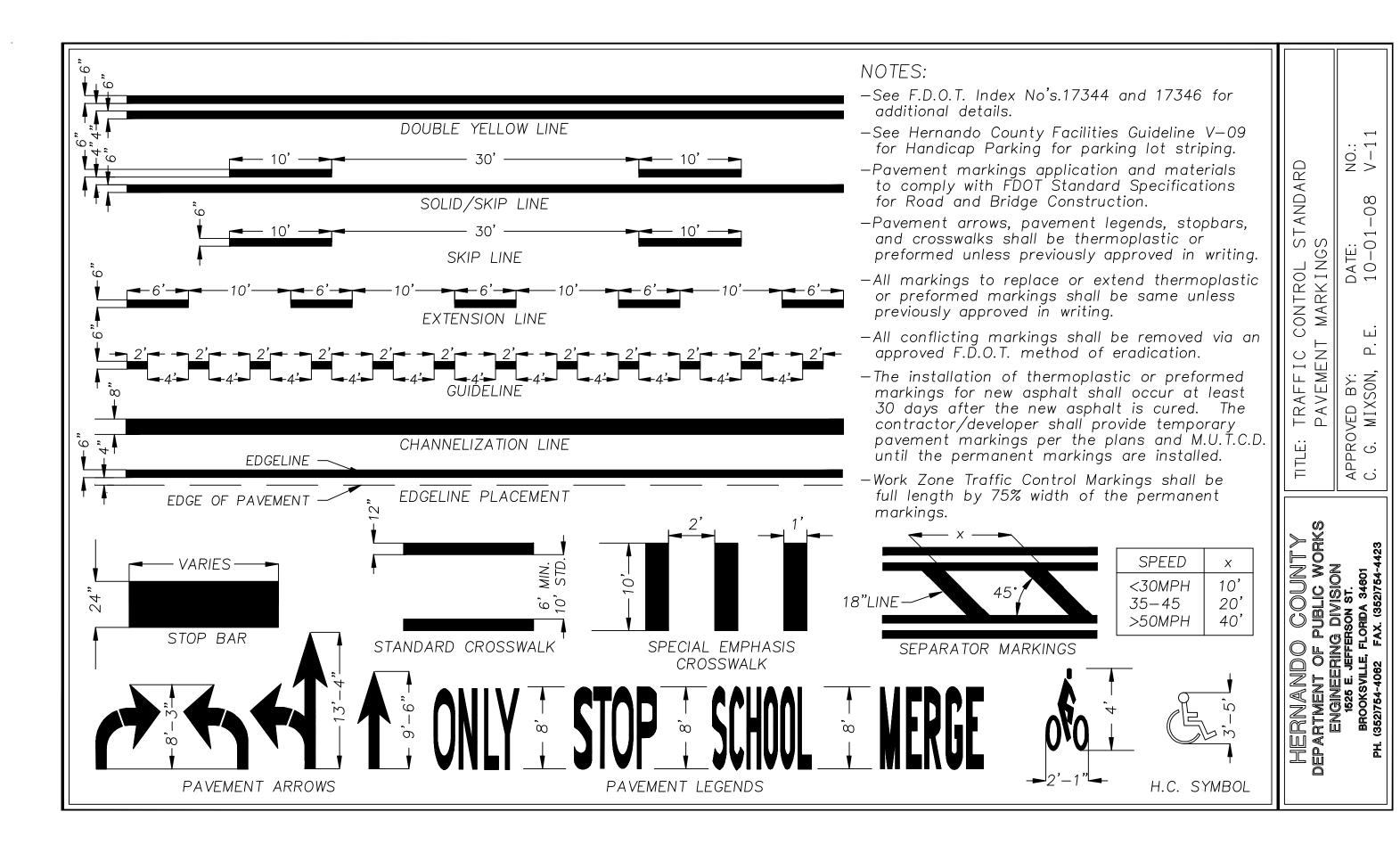
TITLE: TRAFFIC CONTROL STANDARD ROAD CLOSED SIGNAGE

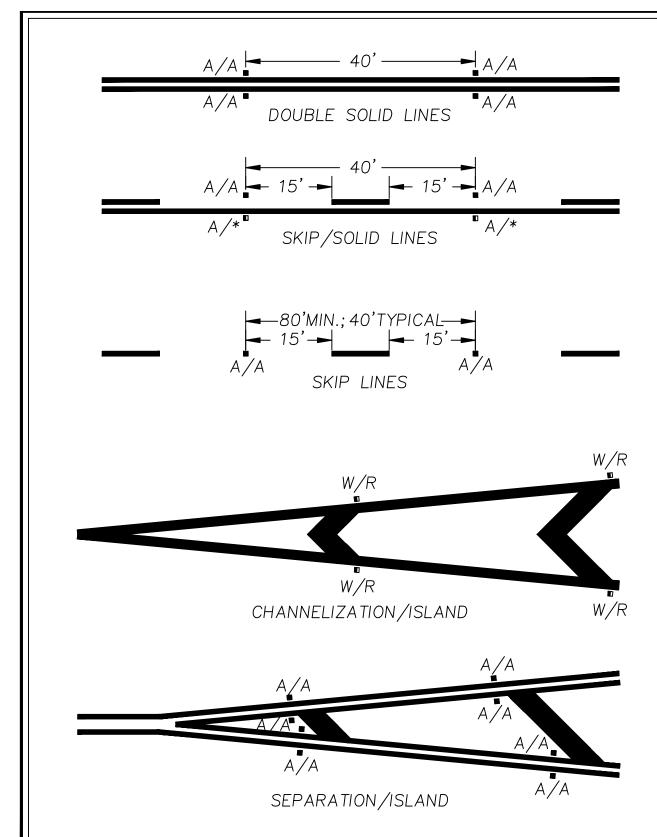
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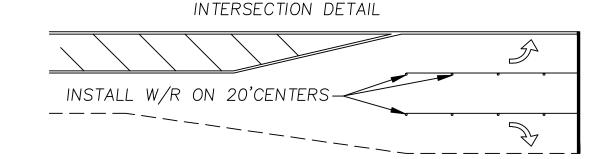
DATE: 10-01-

APPROVED BY: C. G. MIXSON,

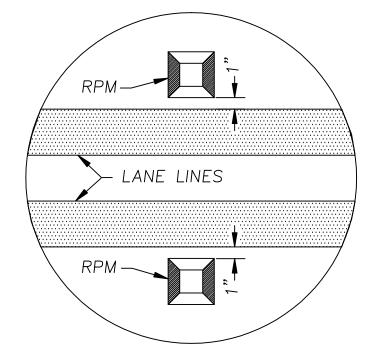
DEPARTMENT OF PUBLIC WORK ENGINEERING DIVISION 1526 E. JEFFERSON ST.







INSTALLATION DETAIL



MARKER TYPES

TYPE 1 ARE AMBER/AMBER

TYPE 2 ARE WHITE/RED

TYPE 3 ARE AMBER/RED

TYPE 4 ARE AMBER/BLANK

TYPE 5 ARE WHITE/BLANK

...*=BLANK

NOTES:

- -See F.D.O.T. Index No. 17352 for additional details.
 -Reflective pavement markers (RPM's) application and materials shall comply with the F.D.O.T. Standard Specifications for Road and Bridge Construction.
- -All markers shall be Class B only per F.D.O.T. standard specifications
- -Markers shall only be installed using bituminous adhesive.
- -All RPM's shall be spaced 1"offset from lines.
- -Longitudinal spacing may be reduced for sharp curves and turns.
 -Any roadway with RPM's existing shall receive new RPM's
- with any improvements.
- -Low Profile RPM's will not be permitted.

MARKERS STANDARD CONTROL STA VE PAVEMENT Ш \Box \bigcirc TRAFF] REFLI TITLE

ND.: V-12

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DATE: 10-01

BY: P.

APPROVED I G. MIXSON,

There are many various ways to accomplish the design of a traffic signal. The information contained on this sheet identifies some of the criteria for the design and construction of traffic signals in Hernando County.

- 1. All design and construction shall comply with the criteria set forth in the following publications:
 - -FDOT Standard Specifications for Road and Bridge Construction, 2007, or latest;
 - -FDOT Minimum Specifications for Traffic Control Signal Devices, 2000, or latest;
 - -FDOT Design Standards (Index), 2008, or latest;
 - -Hernando County Facility Design Guidelines, 2008.
- 2. Any roadway or intersection construction near an existing traffic signal may require reconstruction of parts or all of that signal. Traffic signals that are damaged during construction shall be repaired immediately at the contractor's expense.
- 3. Contact Public Works Engineering for the latest format of traffic signal plans and specifications.
- 4. All new traffic signals shall be designed to FDOT standard mast arm specifications for 110 MPH, unless approved in writing by the County Engineer.
- 5. All new traffic signals shall include countdown pedestrian signals and detectors and ADA ramps unless otherwise approved in writing by the County Engineer.
- 6. All vehicular and pedestrian traffic signal indications shall be LED, with stainless steel hardware.
- 7. All vehicular traffic signal heads shall use tunnel visors.

 All east/west signal heads to have metal backplates.
- 8. Video detection (per County standards) is the preferred method of detection with mast arms. Loops are required for span wire supported signals.

- 9. All loops shall be Type 'F', 6' \times 30', using a wrap pattern of 3-6-3, and the leading edge located 2' beyond the stop bar.
- 10. Signal power cables, detector cables, and fiber optic cables shall be located in separate conduits and pull boxes.
- 11. The controller cabinet assembly shall be FDOT Type V, with an Econolite TS-2-ASC 2s/2120-11 controller with all components as required per Hernando County specifications. Separate UPS cabinet required.
- 12. Street name signs shall be internally illuminated, and installed free swinging using County defined hardware.
- 13. Contractor shall provide 3 sets of "As—Built" plans, along with all documentation and testing, prior to project closeout.
- 14. All equipment shall be compatible with the Hernando County Signal System.
- 15. Any new signal proposed shall include fiber optic interconnect to any adjacent existing or pro—
 —grammed traffic signal within 1.0 mile.
- 16. Splices in fiber optic cable are not permitted between signal cabinets. New continuous cable between controller cabinets is required when the fiber optic is severed for any reason.
- 17. All fiber ends shall be fusion spliced to a "pigtail" with a ST type connector, and have an identification tag stating the buffer color, fiber color, and cable origin. All fibers shall be OTDR tested, with the results provided to the County.

TITLE: TRAFFIC CONTROL STANDARD TRAFFIC SIGNALS

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DATE: 10-01-08

APPROVED BY: C. G. MIXSON,

TITINIAINO COUNTY DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION 1625 E. JEFFERSON ST.

GENERAL INFORMATION:

- 1. The determination to install school beacons shall be based upon an analysis performed by a State of Florida Professional Engineer.
- 2. The design of school beacons is in conjunction with additional traffic signs and pavement markings. Use FDOT Index No.17344 for type and placement in the plans preparation.
- 3. All materials used in the construction of school beacons sh
- all be listed in the current FDOT Approved Products List (APL), or shall have a product specification sheet from the manufacturer submitted for approval of use.
- 4. All work undertaken in the installation of school beacons shall
- be accomplished per FDOT Standard Specifications, and the FDOT Minimum Specifications for Traffic Control Signal 800-782-8721. Devices by qualified technicians.
- 5. The "School Entrance" warning sign / beacon assembly is intended for school sites with higher vehicular congestion and controlled pedestrian access. The regulatory "School Speed Limit" sign is for locations with established school crosswalks.
- 6. The speed limit displayed on school beacons is site specific as approved by the County Engineer.
- 7. All electronic traffic control devices in Hernando County right-of ways are operated by the Department of Public Works.

TECHNICAL INFORMATION:

- A. Each school zone beacon shall be designed as a separate and complete installation.
- B. School warning signs are the only signs in Hernando County to be fluorescent yellow-green background color.
- C. School beacon installations on sidewalks or other concrete areas shall use a frangible transformer base mount, school beacons installed in grassed greas along roadsides to utilize a slip base mount per FDOT Index no. 11864.

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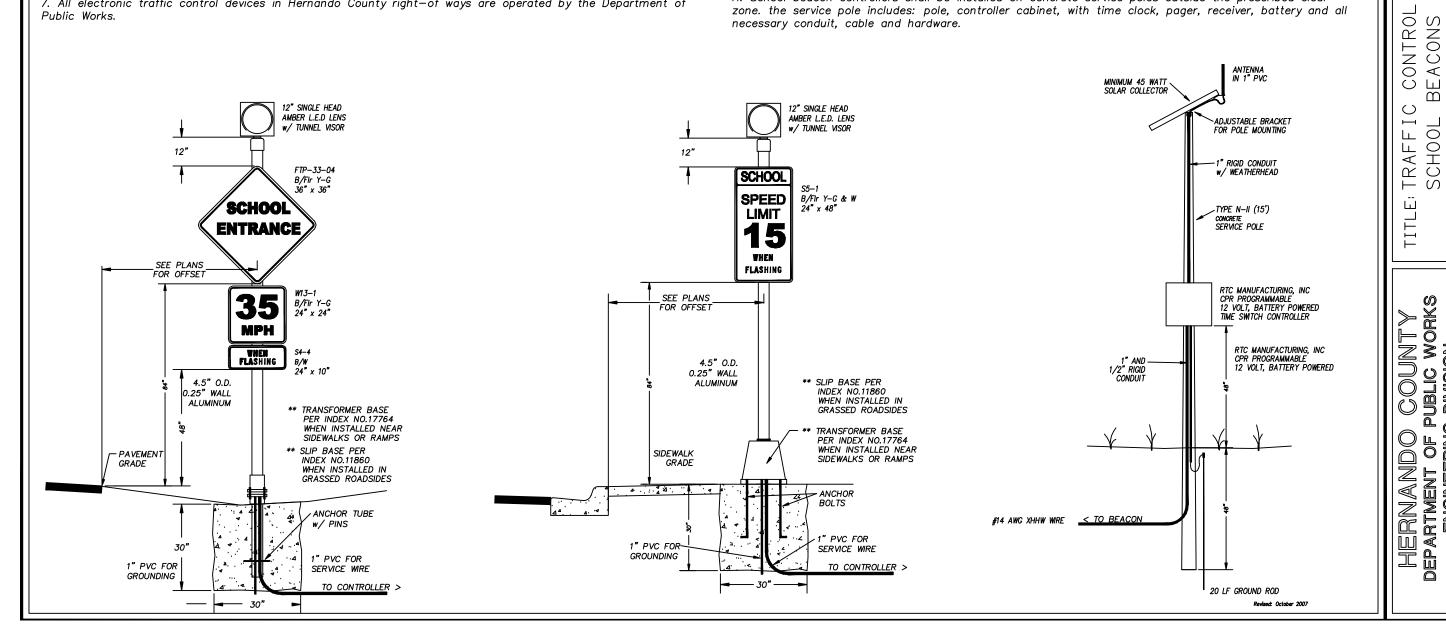
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- D. Hernando County requires all new electronic school zone traffic control beacons to be compatible with its 12 volt solar charged, pager time clock system, manufactured by RTC Manufacturing, Inc.
- E. Contractors shallt contact DPW Traffic Operations at 352-754-4060 to acquire the current CAP Code prior to ordering any RTC system.
- . F. Hernando County will assign all beacon addresses.
- G. The time of operation of school beacons is determined by the County Engineer in accordance with documented conditions, and per Florida Statutes.
- H. School beacon controllers shall be installed on concrete service poles outside the prescribed clear zone, the service pole includes: pole, controller cabinet, with time clock, pager, receiver, battery and all necessary conduit, cable and hardware.



WIRING COLOR CODE FOR
12 CONDUCTOR CABLE / SOP 7
(SOP 10 ADJUSTMENTS ARE IN PARENTHESIS)

PHASE	

	WIRE COLOR	CABLE 'A'	CABLE 'B'	INDICATION
1.	GREEN	MAIN Ø2	MAIN Ø6	GREEN
2.	ORANGE	MAIN Ø2	MAIN Ø6	YELLOW
3.	RED	MAIN Ø2	MAIN Ø6	RED
4.	GREEN/BLACK	MINOR Ø4	MINOR Ø8	GREEN
5.	ORANGE/BLACK	MINOR Ø4	MINOR Ø8	YELLOW
6.	RED/BLACK	MINOR Ø4	MINOR Ø8	RED
7.	BLUE/BLACK	L/T Ø1 (L/T Ø7 IF SOP 10)	L/T Ø5 (L/T Ø3 IF SOP 10)	GREEN
8.	BLACK/WHITE	L/T Ø1 (L/T Ø7 IF SOP 10)	L/T Ø5 (L/T Ø3 IF SOP 10)	YELLOW
9.	WHITE/BLACK	SPARE (L/T ø7 IF SOP 10)	SPARE (L/T ø3 IF SOP 10)	SPARE RED — if 3 section is used
10.	BLUE	L/T ø3	L/T Ø7	GREEN (spare if 3 section only)
11.	BLACK	L/T ø3	L/T ø7	YELLOW (spare if 3 section only)
12.	WHITE	NEUTRAL RETURN	NEUTRAL RETURN	NONE

CABLE "C" TO BE ADDED WHEN PROTECTED LEFT TURNS ARE USED

1.	GREEN	MAIN L/T Ø1	GREEN
2.	ORANGE	MAIN L/T Ø1	YELLOW
3.	RED	MAIN L/T Ø1	RED
4.	GREEN/BLACK	MAIN L/T Ø5	GREEN
5.	ORANGE/BLACK	MAIN L/T Ø5	YELLOW
6.	RED/BLACK	MAIN L/T Ø5	RED
7.	BLUE/BLACK	SPARE	SPARE
8.	BLACK/WHITE	SPARE	SPARE
9.	WHITE/BLACK	SPARE	SPARE
10.	BLUE	SPARE	SPARE
11.	BLACK	SPARE	SPARE
12.	WHITE	NEUTRAL RETURN	NONE

WIRING COLOR CODE FOR 18 CONDUCTOR CABLE / SOP 10

TO PHASE

WIDE COLOR

	WIRE COLOR	CABLE 'A'	CABLE 'B'	INDICATION
1.	GREEN	MAIN Ø2	MAIN Ø6	GREEN
2.	ORANGE	MAIN Ø2	MAIN Ø6	YELLOW
3.	RED	MAIN Ø2	MAIN Ø6	RED
4.	GREEN/BLACK	MINOR Ø4	MINOR Ø8	GREEN
5.	ORANGE/BLACK	MINOR Ø4	MINOR Ø8	YELLOW
6.	RED/BLACK	MINOR Ø4	MINOR Ø8	RED
7.	BLUE/BLACK	L/T Ø1	L/T Ø5	GREEN
8.	BLACK/WHITE	L/T Ø1	L/T ø5	YELLOW
9.	WHITE/BLACK	L/T ø1	L/T ø5	RED — spare if 5 section
10	BLUE	L/T ø3	L/T Ø7	GREEN (spare or 5 section only)
11.	BLACK	L/T ø3	L/T Ø7	YELLOW (spare or 5 section only)
12	WHITE	NEUTRAL RETURN	NEUTRAL RETURN	NONE
13.	GREEN/WHITE	L/T Ø3 (not for 5 section)	L/T Ø7 (not for 5 section)	GREEN (protected)
14.	BLUE/WHITE	L/T ø3 (not for 5 section)	L/T Ø7 (not for 5 section)	ORANGE (protected)
15.	RED/WHITE	L/T Ø3 (not for 5 section)	L/T ø7 (not for 5 section)	RED (protected)
16.	BLACK/RED	SPARE	SPARE	
17.	ORANGE/RED	SPARE	SPARE	
18.	WHITE/RED	SPARE	SPARE	

WIRING COLOR CODE FOR 12 CONDUCTOR CABLE / PEDESTRIAN SIGNAL

	WIRE COLOR	TO PHASE	INDICATION
1.	GREEN	ø2 OR 6	WALK
2.	ORANGE	ø2 OR 6	PEDESTRIAN PUSH BUTTON
3.	RED	ø2 OR 6	DON'T WALK
4.	GREEN/BLACK	ø4 OR 8	WALK
5.	ORANGE/BLACK	ø4 OR 8	PEDESTRIAN PUSH BUTTON
6.	RED/BLACK	ø4 OR 8	DON'T WALK
7.	BLUE/BLACK	SPARE	
8.	BLACK/WHITE	SPARE	
9.	WHITE/BLACK	LOGIC GROUND	
10.	BLUE	SPARE	
11.	BLACK	SPARE	
12.	WHITE	NEUTRAL	
			. 5 4

Note: Cables shall be marked as P-1, P-2, P-3, P-4, etc. to identify them. Permanent indelible cable markers shall be attached to each conductor to identify its connection point. A corresponding sheet shall be included in the cabinet to identify said cables and conductors, and specify what location each cable goes to.

NOTES:

- As per FDOT specifications; all signal head disconnects shall be capable of terminating all wires of the signal cable, this includes all spares, on the terminal block of the disconnect.

INDICATION

- Down sizing of the signal cables (dropping conductors) will not be accepted. There shall be the same amount of wires throughout all disconnects to the end disconnect.
- All cables shall be identified in the cabinet with a corresponding sheet and permanent indelible cable markers shall be attached to each conductor to identify its connection point.
- Any questions concerning the wiring color code to be used at a specific intersection, contact Hernando County DPW Traffic Division (352) 754-4060.
- Contact Hernando County DPW Traffic Engineering (352)754 $-4475\,$ for color codes and terminations of fiber optic cables.

TITLE: TRAFFIC CONTROL STANDARD SIGNAL WIRING COLOR CHART

APPROVED BY: C. G. MIXSON, P. E.

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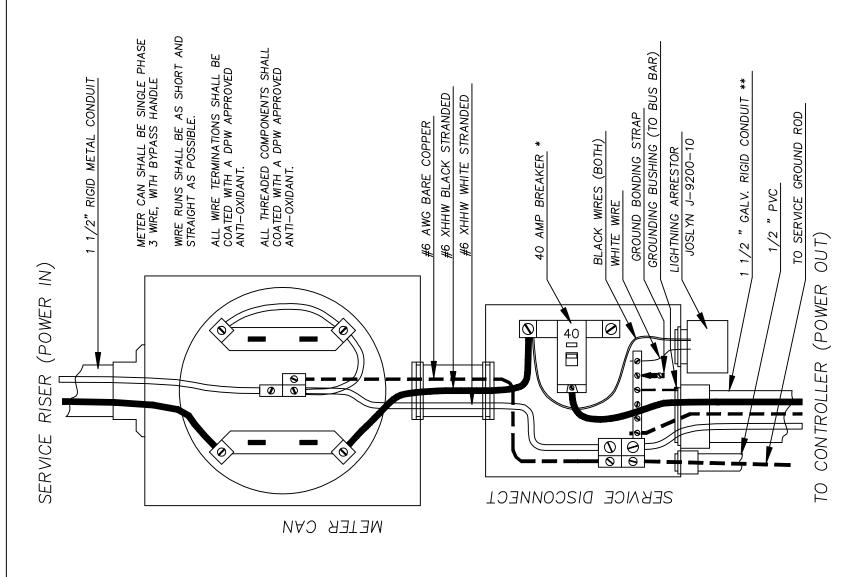
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DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION 1525 E. JEFFERSON ST.

SERVICE



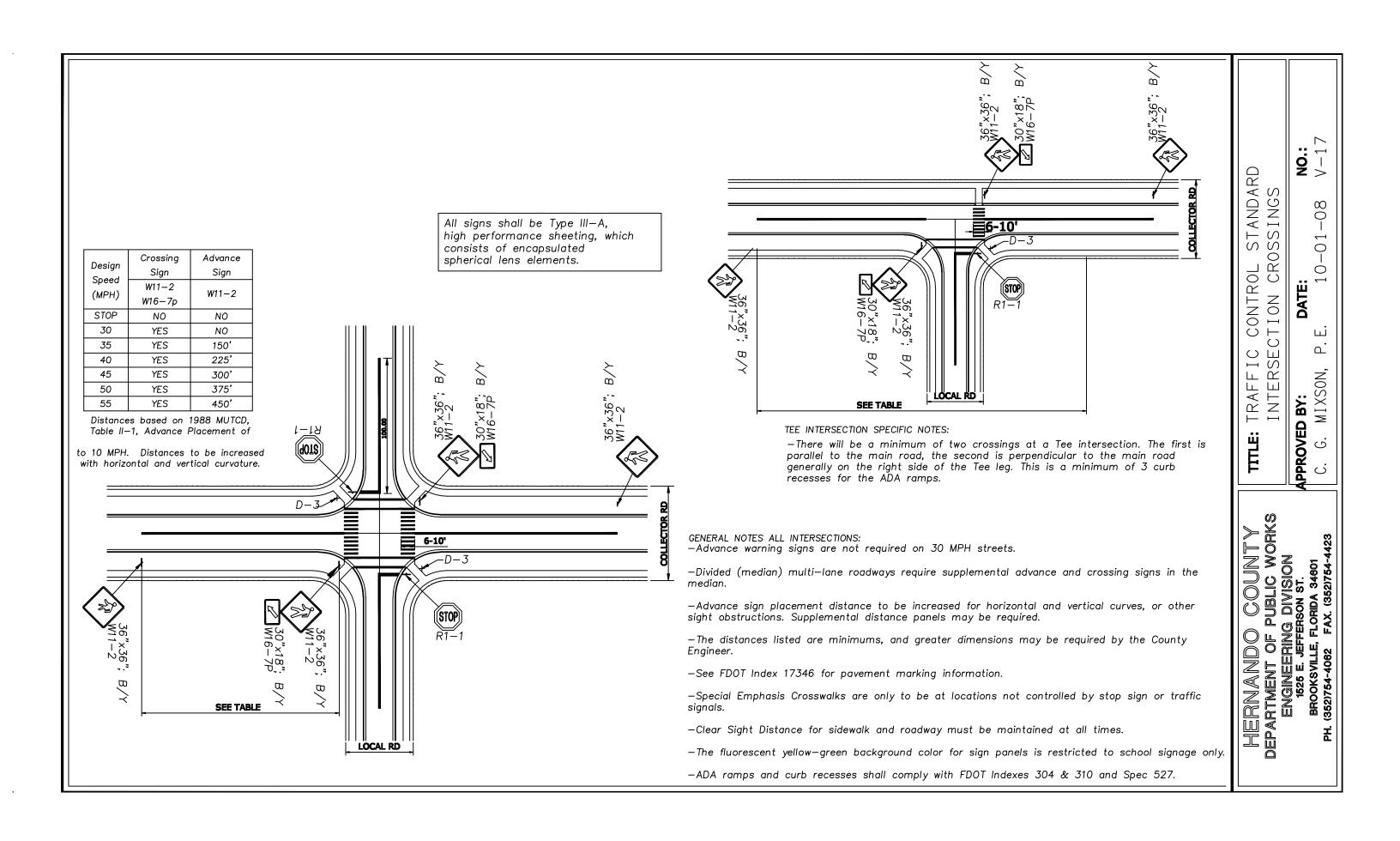
- FOR BEACONS A DOWNSIZED BREAKER OF 20 AMP. MINIMUM MAY BE USED DEPENDENT ON THE LOADING
 - BE USED ON BEACON CABINETS, 1 " NON-ARMOURED FLEX LIQUID TIGHT MAY NEC SHALL BE FOLLOWED FOR SIZING CONDUIT OF OVER 1"

HERNANDO COUNTY DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION 1626 E. JEFFERSON ST. BROOKSVILLE, FLORIDA 34601 PH. (362)754-4062 FAX. (362)754-4423

LE: TRAFFIC CONTROL STANDARD
POWER SERVICE DISCONNECT ASSEMBLY

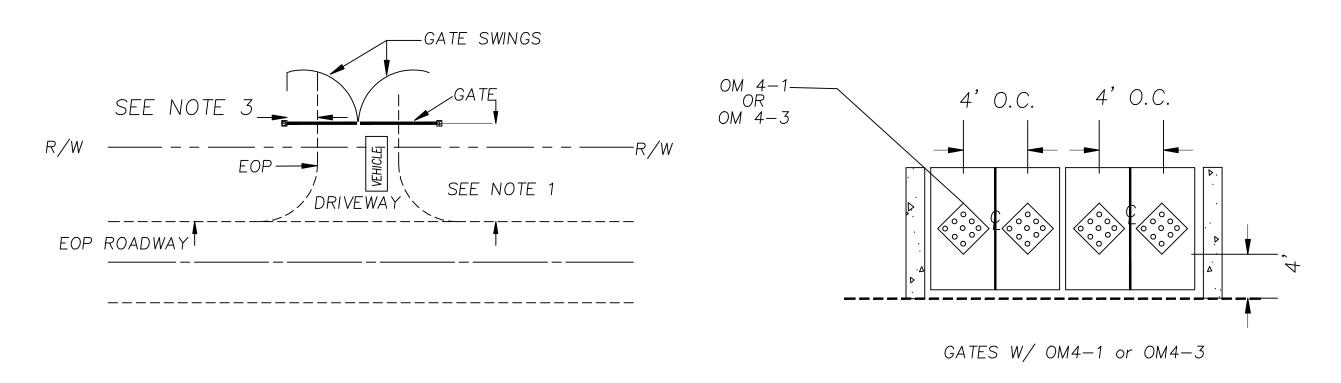
APPROVED BY: DATE: C. G. MIXSON, P. E. 10-01-08

NO.: V-16



NOTES:

- 1. GATES SHALL BE SET BACK FROM THE CLOSEST EDGE OF PAVEMENT 1.5 TIMES THE LENGTH OF THE LONGEST PROPOSED VEHICLE TO REGULARLY USE THE GATE, OR DEPENDENT ON THE TRAFFIC STUDY, IF WAS ONE DONE
- 2. GATES SHALL OPEN INWARD ONTO PRIVATE PROPERTY, NOT TOWARDS THE ROADWAY.
- 3. THE FDOT MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN AND MAINTENANCE FOR STREETS AND HIGHWAYS (THE FLORIDA GREENBOOK), GOVERNS THE GATE FEATURE PHYSICAL LOCATIONS. NO PORTION OF THE GATE SUPPORTS SHALL BE CLOSER THAN 6' FROM THE EDGE OF PAVEMENT, OR 18" FROM THE BACK OF CURB, IF A 6" UPRIGHT CURB. CURBING MUST BE 50' ON ENTRANCE SIDE AND 10' ON EXIT SIDE OF GATE..
- 4. THE CLEAR SITE TRIANGLE IS GOVERNED BY FDOT INDEX 546 FOR ANY OBJECT INSTALLATION.
- 5. THE MINIMUM RADII FOR THE TURN AROUND IN FRONT OF THE GATES SHALL ACCOMMODATE A SU CLASS VEHICLE, IF REQUIRED.
- 6. TWO (2) RED OBJECT MARKERS, OM4-1 OR OM4-3 SHALL BE INSTALLED 4' ON CENTER, 4' ABOVE PAVEMENT GRADE ON THE FRONT AND BACK OF EACH GATE.
- 7. ADDITIONAL SIGNAGE AND PAVEMENT MARKINGS MAY BE REQUIRED.



APPROVED BY: C. G. MIXSON, P. E

No.:

08

DATE: 10-01

PARTMENT OF PUBLIC WORKS
ENGINEERING DIVISION
1626 E. JEFFERSON ST.
BROOKSVILLE, FLORIDA 34801