

# PALM BEACH COUNTY TYPICAL DETAILS FOR PAVEMENT MARKINGS, SIGNING & GEOMETRICS

SEND SUGGESTIONS OR COMMENTS TO:  
ENG-STANDARDDETAILS@PBC.GOV



TRAFFIC DIVISION

PALM BEACH COUNTY  
DEPARTMENT OF ENGINEERING  
AND PUBLIC WORKS

EFFECTIVE: JULY 2024

NOTE:

SEE ROADWAY PRODUCTION PALM BEACH COUNTY THOROUGHFARE ROADS TYPICAL SECTIONS FOR LANE LAYOUT AND RIGHT-OF-WAY REQUIREMENTS ON STANDARD SECTIONS AND EXPANDED INTERSECTIONS.

SEE PALM BEACH COUNTY TRAFFIC SIGNAL INSTALLATION STANDARDS AND DETAILS FOR SIGNAL STANDARDS AND DETAILS.

INDEX OF SHEETS

SHEET NO.

- 1 COVER SHEET
- 2 GENERAL NOTES
- 3 TURN LANE GEOMETRICS & APPROACH STRIPING
- 4 OTHER LANE DETAILS W/ PAVED SHOULDER
- 5 OTHER LANE DETAILS
- 6 R.P.M. PLACEMENT DETAILS
- 7 ROAD SPEED HUMP DETAILS
- 8 EXPANDED SIGNALIZED INTERSECTION
- 9 ROUNDABOUT
- 10 SIGN PLACEMENT
- 11 STREET NAME SIGN WITH STOP SIGN
- 12 F.D.P. PLACEMENT DETAILS & DIRECTIONAL ISLAND



PALM BEACH COUNTY  
ENGINEERING & PUBLIC WORKS  
TRAFFIC DIVISION

NO.	REVISION	BY	DATE

SCALE: NTS  
APPROVED:  
DRAWN: A.K.  
CHECKED:  
DATE: 7/15/24

PROJECT:  
PALM BEACH COUNTY  
TYPICAL DETAILS FOR PAVEMENT MARKINGS,  
SIGNAGE & GEOMETRICS  
KEY SHEET

SHEET: 1  
OF: 12  
NO. T-P-24

**GENERAL NOTES:**

1. EXISTING ROAD SURFACE SHALL BE OVERLAID FOR ONE LANE WIDTH THROUGHOUT THE LIMITS OF CONSTRUCTION IF THE EXISTING PAVEMENT MARKINGS ARE INCONSISTENT WITH THOSE PROPOSED UNLESS OTHERWISE APPROVED BY THE DIRECTOR OF TRAFFIC DIVISION.
2. SPEED EQUALS POSTED SPEED IN M.P.H. OR DESIGN SPEED, WHICHEVER IS GREATER.
3. DIMENSIONS AND GEOMETRIC LAYOUTS INDICATED IN THIS DOCUMENT REPRESENT MINIMUM REQUIREMENTS AND DO NOT SUPERSEDE THE NEED FOR FURTHER ENGINEERING DESIGN TO MEET THE NEEDS OF SPECIFIC PROJECTS.
4. ALL EXISTING ABOVE GROUND UTILITIES AND ANY OBJECTS WITHIN THE RIGHT-OF-WAY OR RECOVERY AREA, WHICHEVER IS GREATER (WITHIN THE LIMITS OF CONSTRUCTION), SHALL BE SHOWN ON THE PAVEMENT MARKING PLANS.
5. ROAD NAME AND DESIGN SPEED SHALL BE SHOWN ON PLANS.
6. TRANSITION FROM PAVED SHOULDER TO EXISTING PAVEMENT EDGE SHALL BE 30:1 MIN.
7. ANY PAVEMENT WIDENING, TURNOUTS AND STREET IMPROVEMENTS WITHIN DISTANCE (X) (SEE TABLE 1, SHEET 3), SHALL BE SHOWN ON PLANS.
8. 2' MIN. PAVED SHOULDERS SHALL BE USED ON NON-PAN COLLECTOR AND NON-THOROUGHFARE ROADWAYS.  
4' MIN. PAVED SHOULDERS SHALL BE USED ON THOROUGHFARE ROADWAYS UNLESS OTHERWISE SHOWN IN ROADWAY PRODUCTION TYPICAL SECTIONS.
9. IF THE PROPOSED TRANSITION FALLS WITHIN DISTANCE (X) (SEE TABLE 1, SHEET 3), OF AN EXISTING TURN LANE TRANSITION, THEN THE AREA BETWEEN TRANSITIONS SHALL BE CONSTRUCTED AS A CONTINUOUS WIDENED SECTION, FOR GEOMETRIC CONTINUITY.
10. VARIATIONS FROM THIS SET OF STANDARD DRAWINGS SHALL BE APPROVED BY THE DIRECTOR OF TRAFFIC DIVISION.
11. DRAWINGS SHALL BE SUBMITTED EITHER IN 1"=20', 1"=30' OR 1"=40' SCALE.
12. THE FOLLOWING SYMBOL "  " ON ANY SHEET IN THIS DOCUMENT, SHOWS TRAFFIC FLOW AND IS NOT A PAVEMENT MARKING.
13. 'O' OR FDP DENOTES FLEXIBLE DELINEATOR POST.
14. ALL REMOVAL OF PAVEMENT MESSAGES AND ARROWS SHALL BE IN BLOCK STYLE SUCH THAT THE MESSAGE IS NO LONGER DISCERNIBLE. METHOD OF REMOVAL SHALL BE APPROVED BY THE DIRECTOR OF TRAFFIC DIVISION.
15. WHEN TRAFFIC EXCEEDS 75 VEHICLES PER HOUR FOR RIGHT TURNS OR 30 VEHICLES PER HOUR FOR LEFT TURNS, THE TURN LANES SHALL BE CONSTRUCTED AS PER TABLES 3 & 4 ON SHEET 3 OF 12.
16. FOR SIGN SIZES REFER TO TABLES 2B-1, 2C-1 & 2C-2 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. ALL SIGNS SHALL BE DIAMOND GRADE REFLECTIVE SHEETING.
17. TEMPORARY PAVEMENT MARKINGS SHALL BE APPLIED TO THE INTERMEDIATE ASPHALT COURSE AND SHALL CONSIST OF FOIL-BACKED TAPE OR PAINT. TEMPORARY PAVEMENT MARKINGS APPLIED TO THE FINAL ASPHALT COURSE SHALL CONSIST OF FOIL-BACKED TAPE.
18. TRANSITION RATES AT THE INTERSECTION APPROACHES SHALL BE:
  - 30:1 FOR < 40 MPH
  - 45:1 FOR 45 MPH
19. ALL PAVEMENT MARKINGS SHALL BE INSTALLED OR REPLACED ON EACH APPROACH WITH THE SAME MATERIAL USED AT THE TRANSITION, CONSTRUCTED FOR A DISTANCE (X), (SEE TABLE 1, SHEET 3) TO CONFORM WITH EXISTING ROADWAY DESIGN AS APPROVED BY THE DIRECTOR OF TRAFFIC DIVISION.
20. PAVEMENT MARKING INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, THE MUTCD & FDOT DESIGN MANUAL + FDOT STANDARD PLANS (LATEST EDITIONS), HOWEVER, WHERE CONFLICTS EXIST, THIS GUIDE (T-P-24) SHALL TAKE PRECEDENT OVER FDOT STANDARD SPECIFICATIONS.
21. IF EXISTING PAVEMENT MARKING MATERIAL IS NOT COMPATIBLE WITH ALKYD THERMOPLASTIC, IT SHALL BE REMOVED PRIOR TO COMMENCEMENT OF WORK.
22. DISTANCE BETWEEN THE STOP BAR AND CROSSWALK SHALL BE (MINIMUM) 4 FEET.
23. ALL PAVEMENT MARKINGS SHALL HAVE REFLECTIVITY OF NOT LESS THAN 300 MILLICANDELAS PER SQUARE METER PER LUX AT INSTALLATION.
24. ALL LONGITUDINAL PAVEMENT MARKINGS SHALL BE 6" WIDE, UNLESS OTHERWISE NOTED, PER FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS.
25. ALL PAVEMENT MARKINGS SHALL BE SHOWN TO SCALE ON THE PLANS.
26. ALL PAVEMENT MARKING MATERIAL SHALL BE ON THE APPROVED FLORIDA DEPARTMENT OF TRANSPORTATION "APPROVED PRODUCTS LIST" (APL).
27. ADDITIONAL REQUIREMENTS FOR PAVEMENT MARKINGS AT SIGNALIZED INTERSECTIONS ARE SHOWN IN THE PALM BEACH COUNTY TRAFFIC SIGNAL INSTALLATION STANDARDS AND DETAILS (LATEST EDITION).

28. THERMOPLASTIC SHALL CONFORM TO THE REQUIREMENTS OF THE FLORIDA DEPT. OF TRANSPORTATION (F.D.O.T.) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. MINIMUM THICKNESS SHALL BE 90 MILS (ALKYD ONLY), EXTRUDED ONLY, ON ALL COUNTY MAINTAINED ROADWAYS.
29. THERMOPLASTIC SHALL BE USED UNLESS OTHERWISE APPROVED BY THE DIRECTOR OF TRAFFIC DIVISION.
30. THERMOPLASTIC SHALL NOT BE INSTALLED ON ROADWAY UNTIL FOURTEEN (14) CALENDAR DAYS AFTER THE FINAL LIFT OF ASPHALT HAS BEEN COMPLETED, UNLESS OTHERWISE SPECIFIED BY THE DIRECTOR OF TRAFFIC DIVISION.
31. ALL REFLECTIVE PAVEMENT MARKERS SHALL BE APPROVED BY THE DIRECTOR OF TRAFFIC DIVISION BEFORE INSTALLATION.
32. ALL MARKERS SHALL BE CLASS "B" AS PER FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE SECTION 706.
33. REFLECTORS SHALL BE PLACED AT EACH CROSS HATCH. SPACING VARIES WITH SPEED AS SHOWN IN THESE DETAILS (SEE SHEET 6)
34. REFLECTORS SHALL BE EQUALLY SPACED BETWEEN POINTS **A** AND **B** BUT NOT MORE THAN 12" APART (SEE SHEET 6).
35. EPOXY OR BITUMINOUS SHALL BE USED WHEN INSTALLING RPM'S ON CONCRETE OR ASPHALT PAVEMENT. THERMOPLASTIC MAY BE USED TO SET RPM'S ON ASPHALT PAVEMENT ONLY.
36. RPM'S SHALL BE PLACED
  - (ONE) 1" TO THE LEFT OR RIGHT OF A SOLID THERMOPLASTIC STRIPE, OR
  - IN LINE WITH STRIPE, IF THERE ARE SKIPS.
37. PAVER STONE SHALL CONFORM WITH PALM BEACH COUNTY LAND DEVELOPMENT DESIGN STANDARDS:
  - THE PAVER STONE SHALL BE PRE-APPROVED BY PALM BEACH COUNTY TRAFFIC ENGINEER PRIOR TO THE INSTALLATION.
  - FOR PRIVATE SUBDIVISIONS THAT ARE EXPECTED TO HAVE A TRAFFIC SIGNAL, NO PAVER STONE SHALL BE CONSTRUCTED 60' FROM RIGHT OF WAY ON OUTGOING LANE(S). INCOMING ROADWAY PAVER STONE MAY START AT THE RIGHT OF WAY LINE. BEFORE INSTALLATION OF THE TRAFFIC SIGNAL THE HOME OWNER ASSOCIATION WILL BE REQUIRED TO REMOVE THE PAVER STONES.
  - NO PAVER STONE SHALL BE CONSTRUCTED WITHIN PALM BEACH COUNTY RIGHT OF WAY UNLESS PERMITTED BY THE DIRECTOR OF TRAFFIC DIVISION AND THE OWNERS ENTER INTO A REMOVAL AGREEMENT WITH THE COUNTY (LAND DEVELOPMENT DIVISION). PAVER STONE WILL NOT BE PERMITTED FOR SIDEWALK CONSTRUCTION.
38. FOR BICYCLE MARKINGS SEE FLORIDA GREEN BOOK CHAPTER 9 AND THIS T-P-24 WITH THE FOLLOWING MODIFICATIONS.
  - BICYCLE MARKINGS SHALL BE PROVIDED AT THE BEGINING OF BIKE LANES AND AT 1/4 MILE INTERVALS.
  - BICYCLE SIGNS SHALL BE INSTALLED AT THE BEGINING AND END OF BIKE LANES ONLY.



- IN LIEU OF R4-4 SIGNS THE COUNTY PREFERS R3-17.
  - FOR STANDARD BUFFERED BIKELANE SEE FIGURE 9-17 OF GREEN BOOK.
  - BICYCLE MARKINGS SHALL BE PROVIDED AT ALL SIGNALIZED INTERSECTIONS PER FLORIDA GREEN BOOK.
39. ALL RAILROAD GRADE CROSSINGS SHALL HAVE DYNAMIC ENVELOPE PAVEMENT MARKINGS PER FDOT INDEX 509-070.
  40. FOR PAVEMENT MARKINGS AT RAILROAD CROSSINGS, FOLLOW THE FLORIDA DESIGN MANUAL CHAPTER 220 WITH THE FOLLOWING EXCEPTIONS:
    - REPLACE ALL SKIP LANE LINES WITH SOLID LINES FOR THE FOLLOWING DISTANCE: FROM STOP BAR TO STOP BAR OF EACH APPROACH, THEN UPSTREAM FOR A DISTANCE "A" PLUS 15 FEET. FOR DISTANCE "A" SEE TABLE IN EXHIBIT 220-1.
    - PLACE RPMs AT 10' MAXIMUM ON CENTER FOR THE FOLLOWING DISTANCE: FROM STOP BAR TO STOP BAR OF EACH APPROACH EXCLUDING THE FOUL AREA, THEN UPSTREAM FOR A DISTANCE "A" PLUS 15 FEET. FOR DISTANCE "A", SEE TABLE IN EXHIBIT 220-1.
  41. DYNAMIC ENVELOPE IS TO FOLLOW INDEX 711-001. PLEASE NOTE THAT THE EDGE LINES ARE TO NOT CONTINUE THROUGH THE DYNAMIC ENVELOPE AS SHOWN IN INDEX 711-001. THEN LANE LINES ARE TO GO THROUGH THE DYNAMIC ENVELOPE MARKING AS SHOWN IN THE FLORIDA DESIGN MANUAL.
  42. WHEN EMPLOYING THE "DO NOT BLOCK" INTERSECTION MARKINGS, THE COUNTY PREFERS THE MUTCD, FIGURE 3B-24 OPTION "B".
  43. BIKE LANES CONSIST OF THE FOLLOWING:
    - MIN OF FIVE (5)FT WIDE ASPHALT,
    - MIN OF FOUR (4)FT WIDE ASPHALT WITH A TWO (2)FT CURB AND GUTTER (I.E. TYPE F OR VALLEY GUTTER), OR
    - MIN OF FOUR (4)FT WIDE ASPHALT WITH A ONE (1)FT SODDED, STABILIZED SHOULDER (6% OR LESS CROSS SLOPE).

PALM BEACH COUNTY  
ENGINEERING & PUBLIC WORKS  
TRAFFIC DIVISION



NO.	DATE	
BY		
REVISION		

SCALE:	NTS
APPROVED:	
DRAWN:	A.K.
CHECKED:	
DATE:	7/15/24

PROJECT: PALM BEACH COUNTY  
TYPICAL DETAILS FOR PAVEMENT MARKINGS,  
SIGNAGE & GEOMETRICS  
GENERAL NOTES

SHEET:	2
OF:	12
NO. T-P-24	

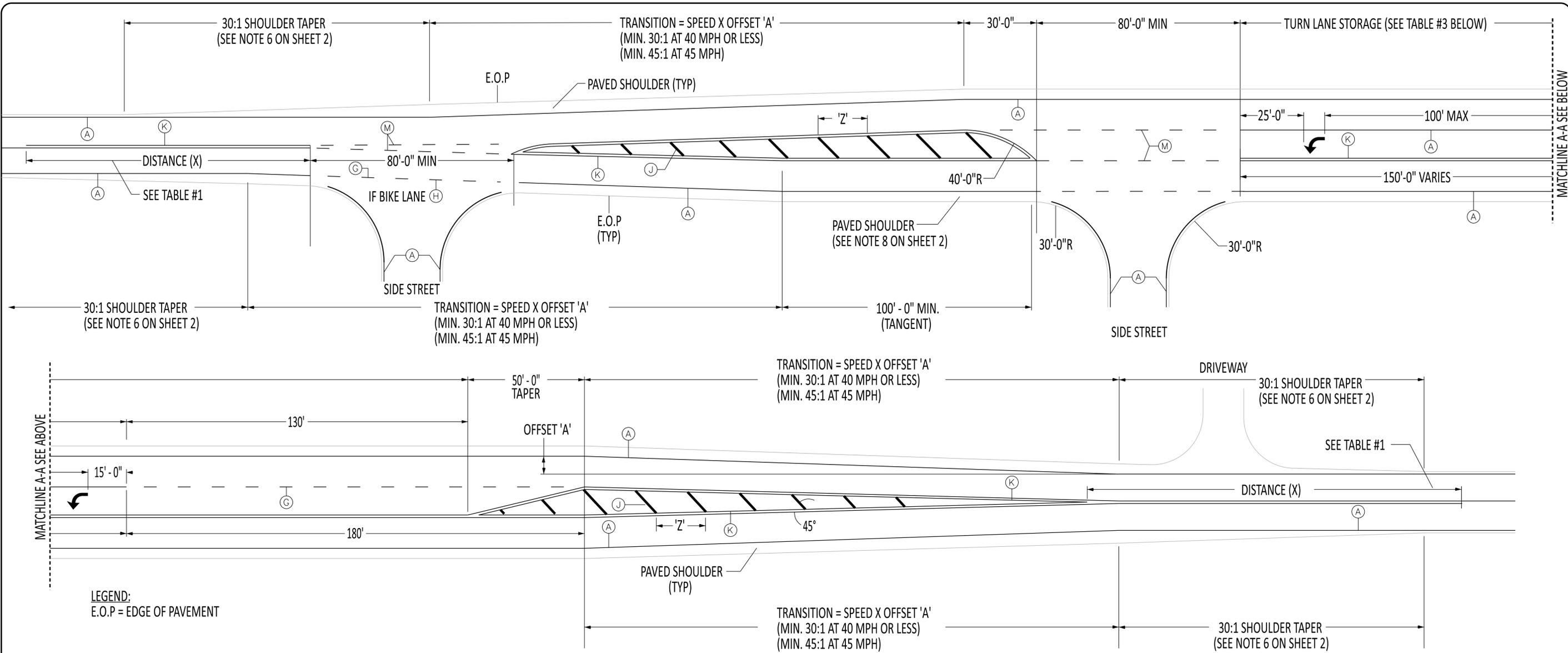


NO.	
REVISION	
BY	DATE

SCALE: NTS  
APPROVED:  
DRAWN: A.K.  
CHECKED:  
DATE: 7/15/24

PROJECT: TURN LANE GEOMETRICS AND APPROACH STRIPING

SHEET: 3  
OF: 12  
T-P-24



LEGEND:  
E.O.P = EDGE OF PAVEMENT

**TABLE #1**

LENGTHS OF APPROACH STRIPING (FT.)

ALL PAVEMENT MARKING & R.P.M.'S SHALL BE REDONE OR BROUGHT UP TO PRESENT STANDARDS.

SPEED	DISTANCE (X) (FT.)
30	500
35	550
40	600
45	700
50	800

**TABLE #2**

DISTANCE BETWEEN CROSS HATCHED LINES

POSTED SPEED LIMIT (M.P.H.)	DISTANCE (Z) (FT.)
≤ 30	10
≤ 40	20
45	30
≥ 50	40

**TABLE #3**

SINGLE TURN LANE STORAGE (MIN. - FT)

MPH	TURNING VEHICLES PER HOUR									
	30-60	61-90	91-120	121-150	151-180	181-210	211-240	241-270	271-300	>301
55	365	390	415	440	465	490	515	540	565	590
50	300	325	350	375	400	425	450	475	500	525
45	280	280	295	320	345	370	395	420	445	470
40	280	280	280	280	285	310	335	360	385	410
35	280	280	280	280	280	290	315	340	365	390

TABLE 3 NOTES:

1. STORAGES SHOWN ARE MINIMUMS IN FEET, EXCLUDING 50' TAPER.
2. APPLIES TO RIGHT OR LEFT TURN LANES, SIGNALIZED OR UNSIGNALIZED.
3. ENTRY SPEED ASSUMED TO BE 5 MPH LESS THAN SPEED LIMIT; STORAGE LENGTHS CALCULATED UTILIZING FLORIDA DESIGN MANUAL SECTION 212.
4. ASSUMES UNIFORM ARRIVALS WITH TOTAL QUEUE DISPERSAL EVERY 2 MINUTES.
5. 6'-10' WHITE SKIP LINE LENGTH - 180'.
6. USE OF SINGLE LEFT TURN LANE FOR VOLUMES IN EXCESS OF 300 REQUIRES APPROVAL FROM THE DIRECTOR OF TRAFFIC DIVISION.

**TABLE #4**

DUAL TURN LANE STORAGE (MIN. - FT)

MPH	TURNING VEHICLES PER HOUR							
	<240	241-300	301-360	361-420	421-480	481-540	<541	
55	490	515	540	565	590	615	665	
50	450	450	475	500	525	550	600	
45	450	450	450	450	470	495	545	
40	450	450	450	450	450	450	485	
35	450	450	450	450	450	450	465	

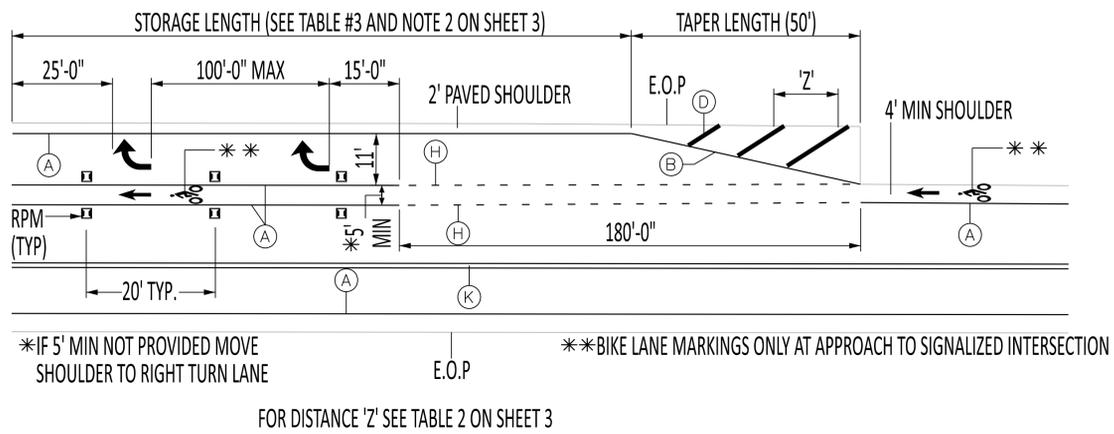
TABLE 4 NOTES:

1. STORAGES SHOWN ARE MINIMUMS IN FEET, EXCLUDING 100' TAPER.
2. APPLIES TO RIGHT OR LEFT TURN LANES.
3. ENTRY SPEED ASSUMED TO BE 5 MPH LESS THAN SPEED LIMIT; STORAGE LENGTHS CALCULATED UTILIZING FLORIDA DESIGN MANUAL SECTION 212.
4. ASSUMES UNIFORM ARRIVALS WITH TOTAL QUEUE DISPERSAL EVERY 2 MINUTES AT 95% LEVEL OF CONFIDENCE.
5. ASSUME 50% - 50% LANE DISTRIBUTION.
6. 6'-10' WHITE SKIP LINE LENGTH - 250'

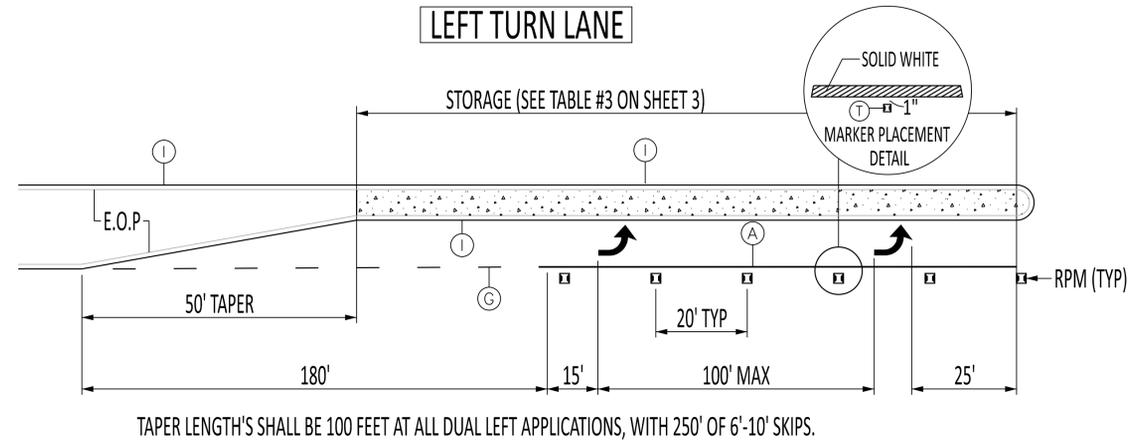
**STRIPING KEY**

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

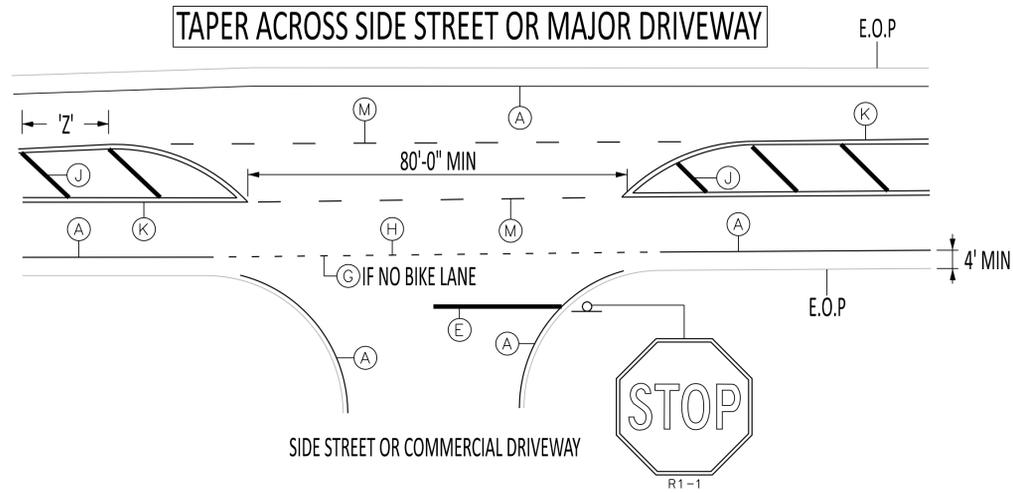
### RIGHT TURN LANE



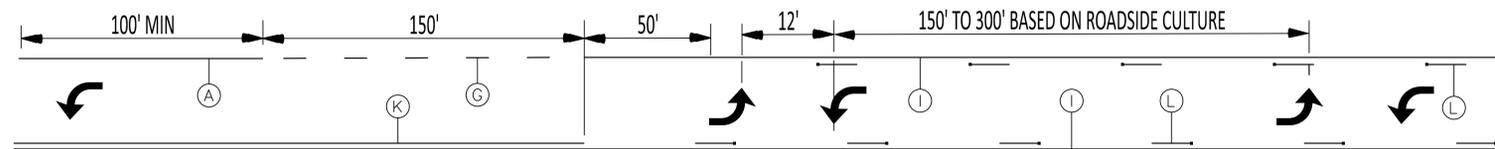
### LEFT TURN LANE



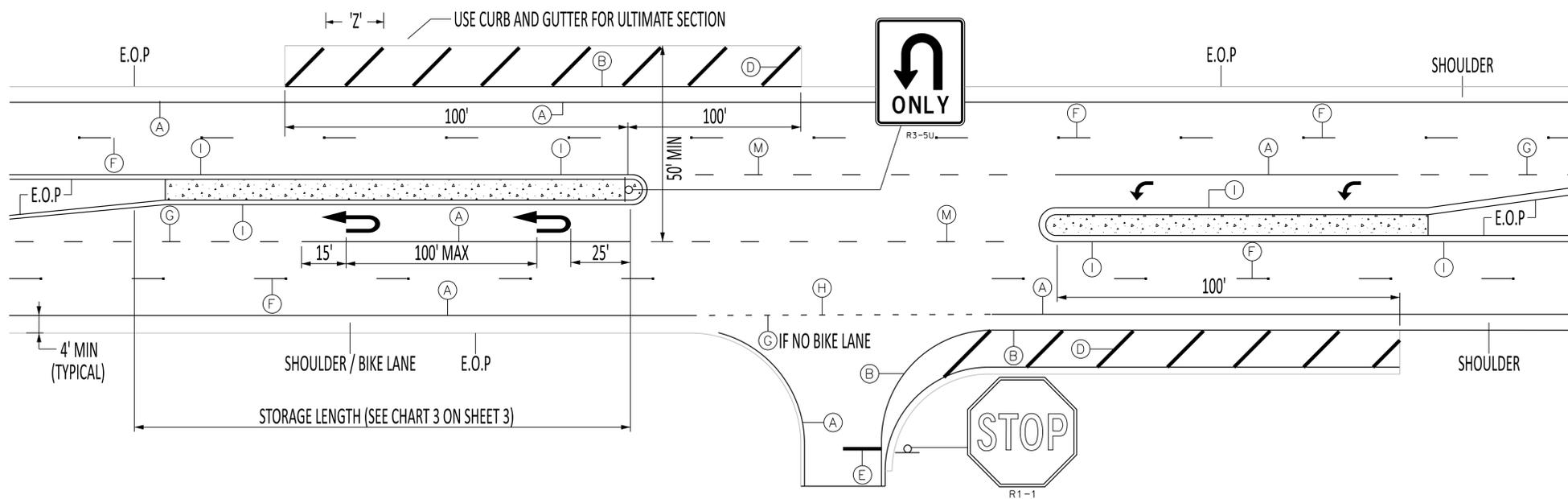
### TAPER ACROSS SIDE STREET OR MAJOR DRIVEWAY



### BI-DIRECTIONAL CENTER TURN LANE



### "U-TURN" TYPICAL DETAIL. FOR U-TURN DIMENSIONS ON ULTIMATE 4 LANE DIVIDED ROADWAY



### STRIPING KEY

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



NO.	DATE
BY	
REVISION	

SCALE:	NTS
APPROVED:	
DRAWN:	A.K.
CHECKED:	
DATE:	7/15/24

PROJECT: OTHER LANE DETAILS WITH PAVED SHOULDER

SHEET:	4
OF:	12
T-P-24	





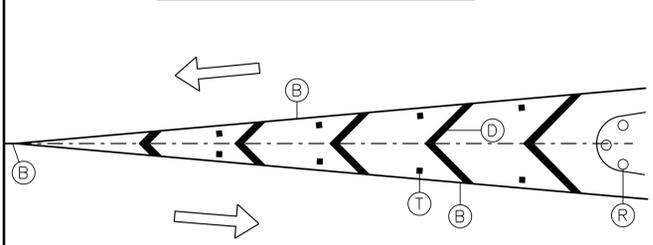
NO.	REVISION	BY	DATE

SCALE:	NTS
APPROVED:	
DRAWN:	A.K.
CHECKED:	
DATE:	7/15/24

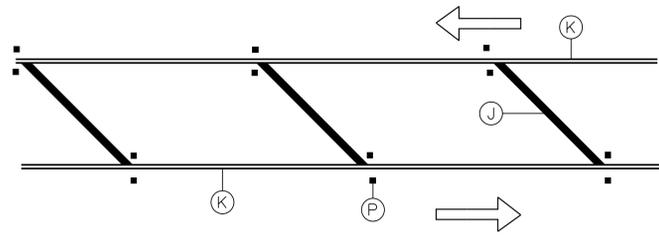
PROJECT: REFLECTIVE PAVEMENT MARKER PLACEMENT DETAILS

SHEET:	6
OF:	12
T-P-24	

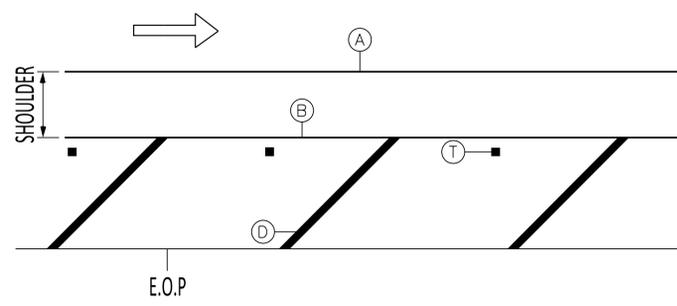
#1 THERMOPLASTIC GORE



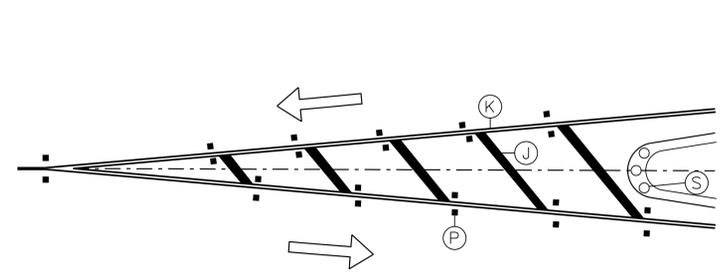
#2 THERMOPLASTIC ISLAND



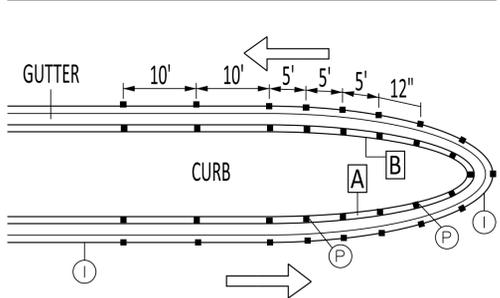
#3 EDGE OF PAVEMENT CROSSHATCH



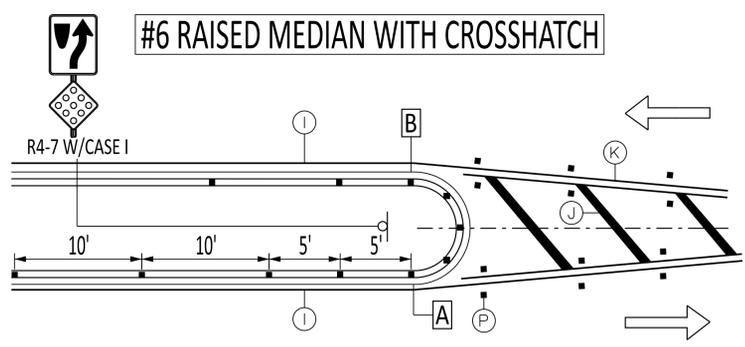
#4 GRASS MEDIAN WITH CROSSHATCH



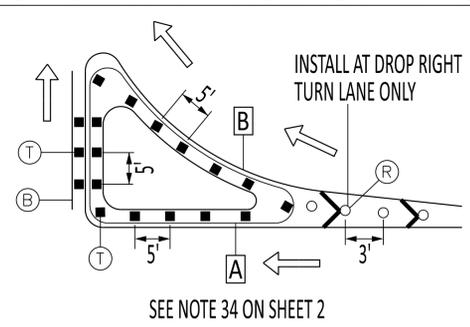
#5 RAISED MEDIAN WITH TAPERED NOSE



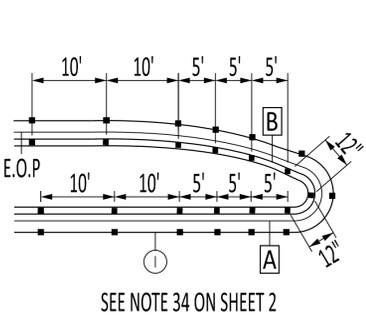
#6 RAISED MEDIAN WITH CROSSHATCH



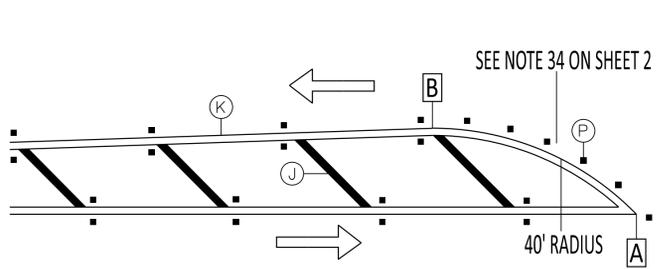
#7 RAISED CHANNELIZED RIGHT TURN LANE ISLAND



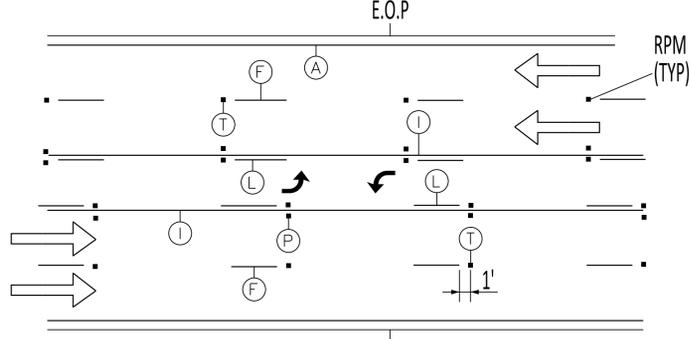
#8 RAISED MEDIAN WITH TAPERED NOSE



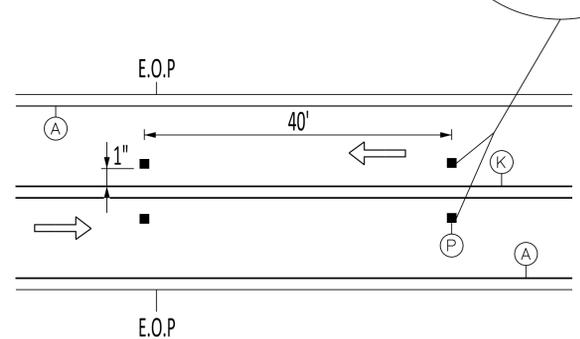
#9 THERMOPLASTIC MEDIAN AT INTERSECTION



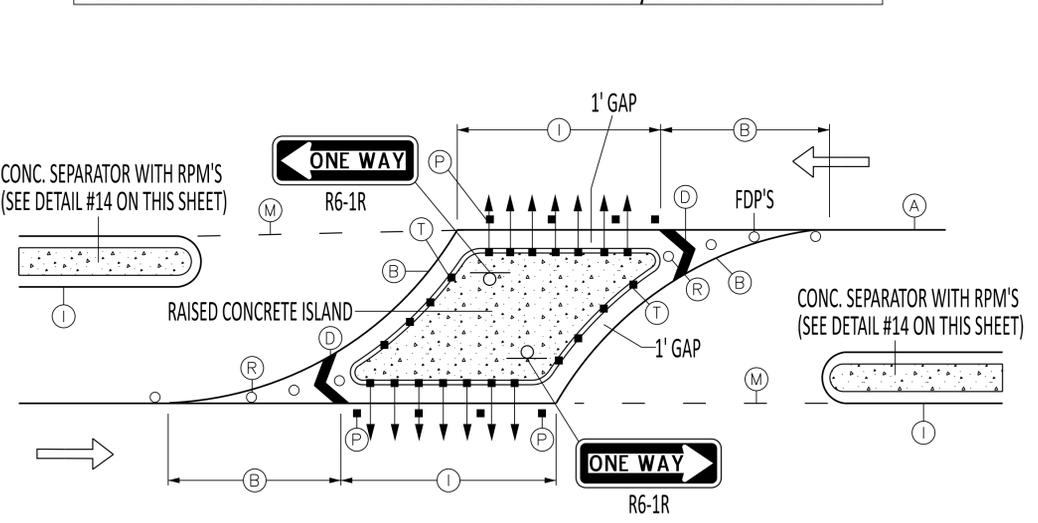
#10 SKIP LINE WITH BI-DIRECTIONAL CENTER TURN



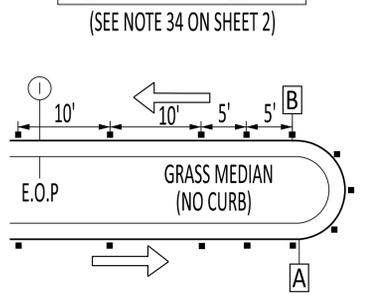
#11 DOUBLE SOLID LINE



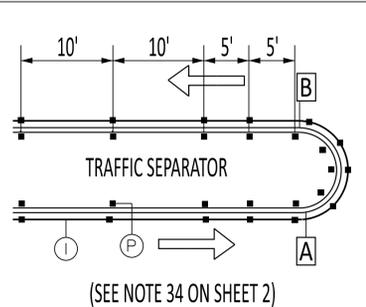
#12 RAISED MEDIAN - CHANNELIZED LEFT TURN/DIVIDED ROADWAY



#13 GRASS MEDIAN



#14 RAISED CONCRETE TRAFFIC SEPARATOR

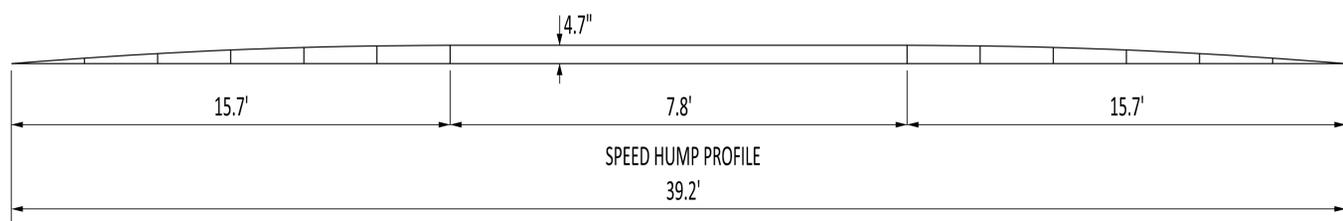


STRIPING KEY

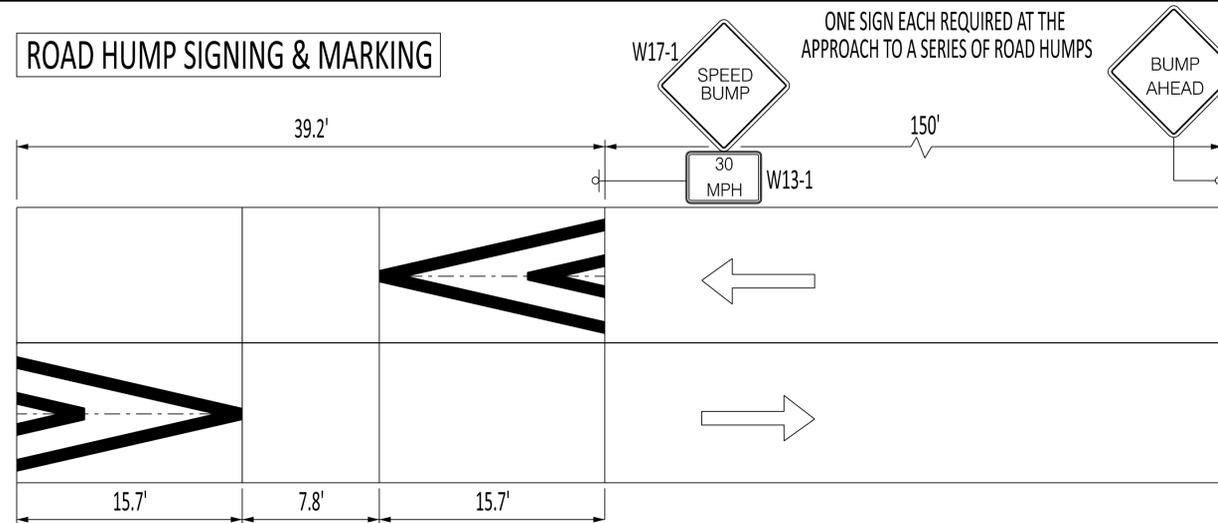
- A = 6" SOLID WHITE
- B = 8" SOLID WHITE
- C = 12" SOLID WHITE
- D = 18" SOLID WHITE
- E = 24" SOLID WHITE
- F = 6" SKIP WHITE TYP (10'-30')
- G = 6" SKIP WHITE TYP (6'-10')
- H = 6" SKIP WHITE TYP (2'-4')
- I = 6" SOLID YELLOW
- J = 18" SOLID YELLOW
- K = 6" DOUBLE YELLOW
- L = 6" SKIP YELLOW TYP (10'-30')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

NOTE:  
 ↑ DENOTES DIRECTION OF FACE OF REFLECTIVE PAVEMENT MARKER.  
 ↓ PAVEMENT MARKERS SHALL BE PLACED ON TOP OF ALL SIDES OF CONCRETE ISLAND 12" APART.  
 R6-1 MAY BE ADJUSTED AS NEEDED FOR ALIGNMENT.

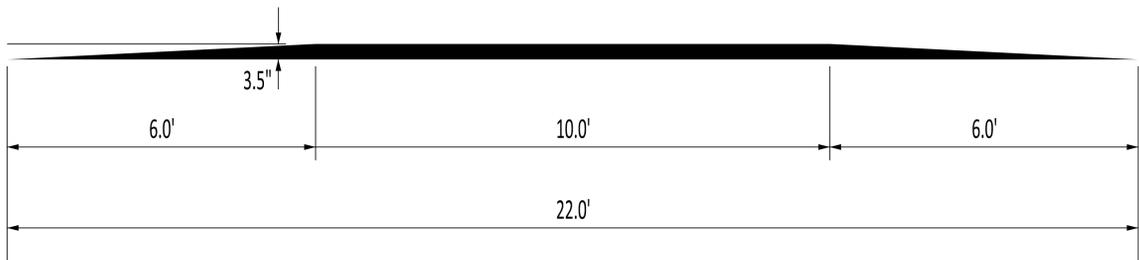
**SPEED HUMP (DUTCH DESIGN)**



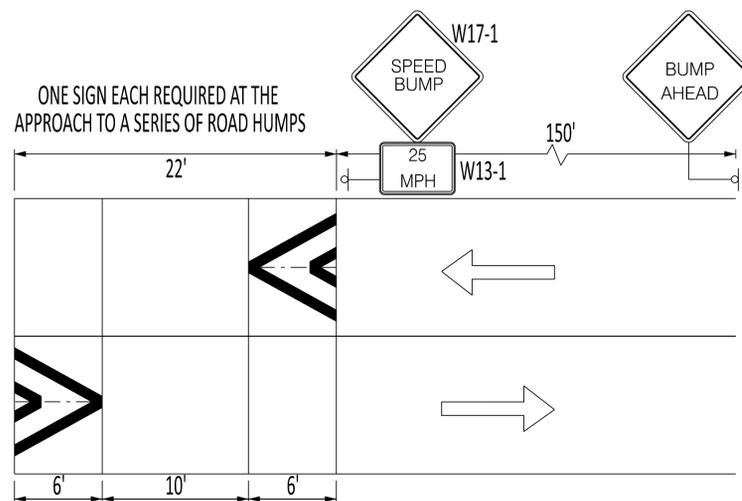
**ROAD HUMP SIGNING & MARKING**



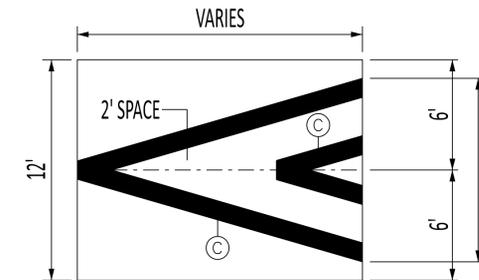
**SEMINOLE SPEED HUMP**



**ROAD HUMP SIGNING & MARKING**



**ROAD HUMP PAVEMENT MARKINGS**



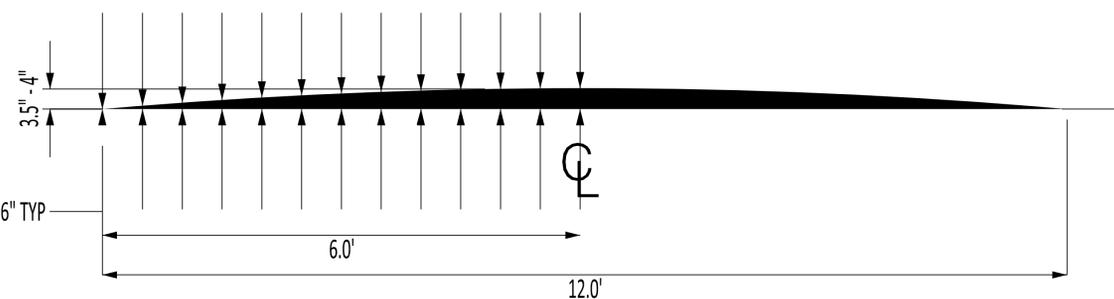
**I.T.E SPEED HUMP**

ONLY APPLICABLE TO PRIVATE ROADS WITHIN UNINCORPORATED PALM BEACH COUNTY

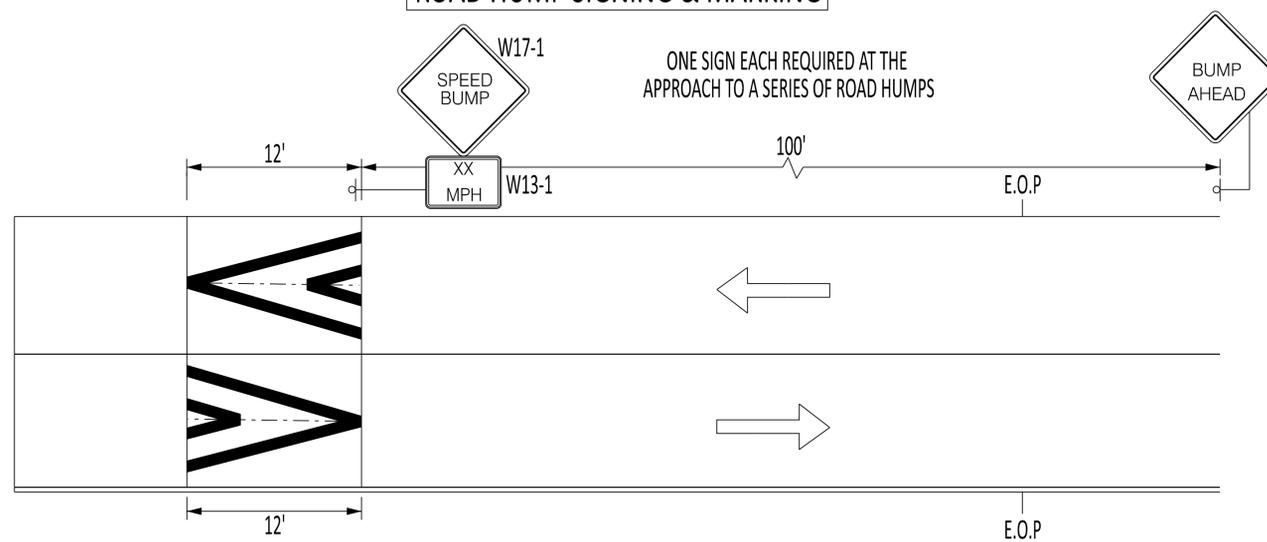
**LEGEND:**

HEIGHT	CROSSING SPEED
3.5"	20 MPH
4"	15 MPH

0 0.64 1.22 1.75 2.22 2.64 3.00 3.31 3.56 3.75 3.89 3.97 4.00"  
 0 0.56 1.07 1.53 1.94 2.31 2.63 2.89 3.11 3.28 3.40 3.48 3.50"



**ROAD HUMP SIGNING & MARKING**



**COORDINATION WITH STREET GEOMETRY:**

A THOROUGH ON-SITE ANALYSIS OF ROADWAY GEOMETRICS SHALL BE PERFORMED TO ENSURE THAT SPEED HUMPS WILL NOT BE INTRODUCED AT A CRITICAL POINT IN THE ROADWAY SYSTEM. E.G. A SEVERE COMBINATION OF HORIZONTAL, VERTICLE CURVATURE AND/OR STREET GRADIENT.

**COORDINATION WITH TRAFFIC OPERATIONS:**

SPEED HUMPS SHOULD NOT BE INSTALLED WITHIN 400' FT OF A TRAFFIC SIGNAL OR WITHIN 150' FROM AN INTERSECTION OR STOP SIGN. MINIMUM DISTANCE BETWEEN SPEED HUMPS IS 400' AND THE MAXIMUM SHOULD BE 800'. TO BE CONSTRUCTED ONLY WHEN APPROVED BY THE DIRECTOR OF THE TRAFFIC DIVISION.

**CONSTRUCTION PROCEDURES:**

IT IS RECOMMENDED THAT A TEMPLATE BE CONSTRUCTED TO VERIFY THE ACCURACY OF THE HUMP PROFILE AND TO ENSURE THAT THE DESIRED VERTICLE DIMENSIONS ARE ATTAINED WITHIN REASONABLE TOLERANCES (NORMALLY ONE-HALF INCH OR LESS, PROVIDED THE HUMP DOES NOT EXCEED 4 INCHES). IF THE PROFILE IS INCORRECT, HUMP CHARACTERISTICS WILL BE CHANGED THAT MIGHT IMPACT TRAFFIC SAFETY OR CREATE INEFFECTIVE SPEED CONTROL. IT IS RECOMMENDED THAT THE ROAD SURFACE BE EXCAVATED AT TAPERING EDGES TO PREVENT SPALLING. HUMPS MAY BE INTSALLED IN TWO LIFTS TO IMPROVE ACCURACY AND SHAPE.

NO.	REVISION	BY	DATE

SCALE: NTS  
 APPROVED: A.K.  
 DRAWN: A.K.  
 CHECKED:  
 DATE: 7/15/24

PROJECT: ROAD SPEED HUMP DETAILS



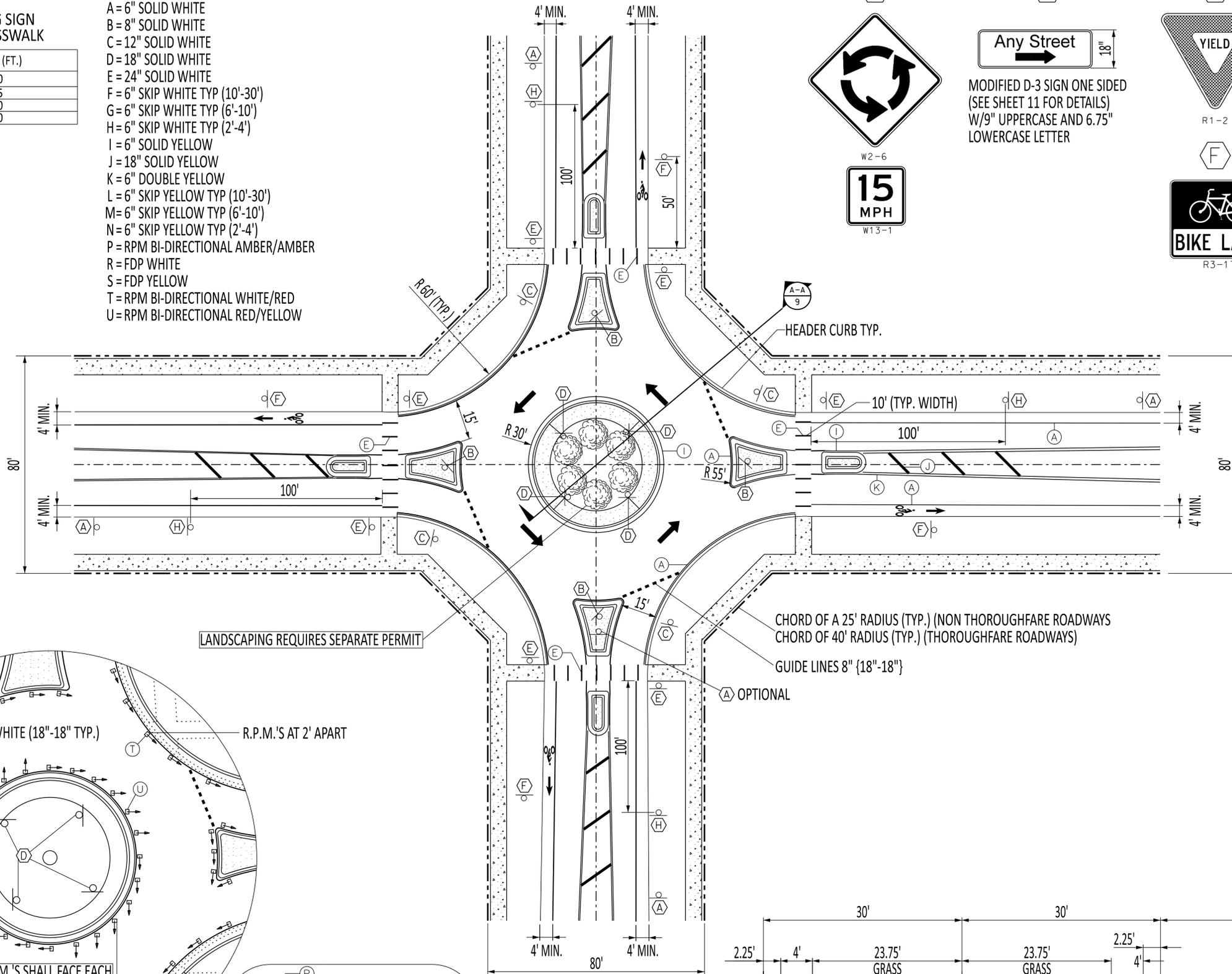
A

ADVANCE WARNING SIGN PLACEMENT TO CROSSWALK

SPEED	DISTANCE (FT.)
30	150
35	175
40	250
45	300

STRIPING KEY

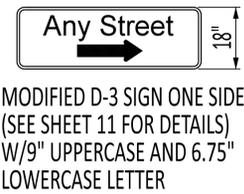
- A = 6" SOLID WHITE
- B = 8" SOLID WHITE
- C = 12" SOLID WHITE
- D = 18" SOLID WHITE
- E = 24" SOLID WHITE
- F = 6" SKIP WHITE TYP (10'-30')
- G = 6" SKIP WHITE TYP (6'-10')
- H = 6" SKIP WHITE TYP (2'-4')
- I = 6" SOLID YELLOW
- J = 18" SOLID YELLOW
- K = 6" DOUBLE YELLOW
- L = 6" SKIP YELLOW TYP (10'-30')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



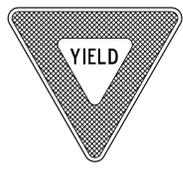
A



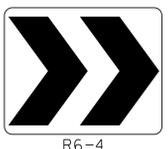
B



C



D



E



F



H

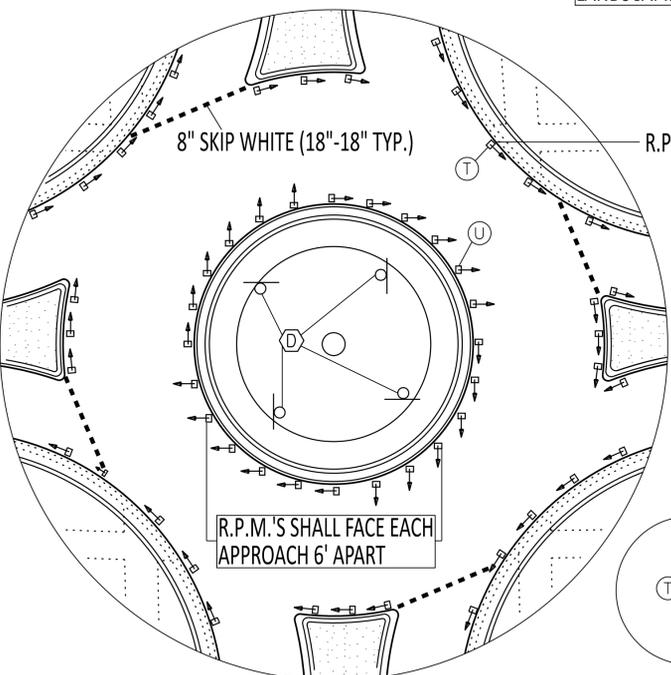


- NOTES:
- ALL PAVEMENT MARKINGS AND REFLECTIVE PAVEMENT MARKERS SHALL BE IN ACCORDANCE WITH PALM BEACH COUNTY TYPICAL DRAWING NO. T-P-24
  - ROUNDBOUT RADII OF LESSER DIMENSIONS MAY BE ACCEPTED INSIDE SUBDIVISIONS AS APPROVED BY THE TRAFFIC DIVISION. ROUNDBOUTS SHALL ACCOMMODATE THE PASSAGE OF EMERGENCY VEHICLES. NO CALL BOXES, CARD READERS, OR GATES SHALL BE INSTALLED ON ROUNDBOUTS.
  - SEE FLORIDA GREEN BOOK FOR LIGHTING GUIDELINES. APPROVAL BY PALM BEACH COUNTY TRAFFIC ENGINEER IS REQUIRED PRIOR TO INSTALLATION. ILLUMINATION SHALL BE IN PLACE PRIOR TO OPENING OF THE ROUNDBOUT TO MOTORISTS.

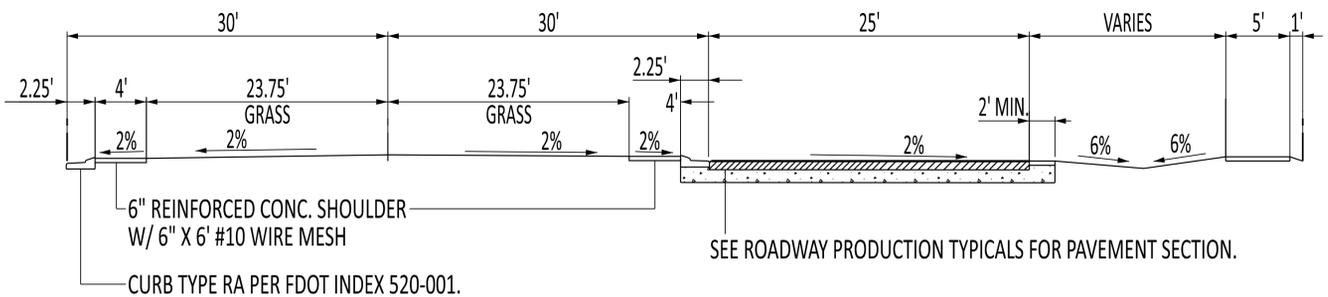
LANDSCAPING REQUIRES SEPARATE PERMIT

CHORD OF A 25' RADIUS (TYP.) (NON THOROUGHFARE ROADWAYS)  
CHORD OF 40' RADIUS (TYP.) (THOROUGHFARE ROADWAYS)

GUIDE LINES 8" {18"-18"}  
OPTIONAL



R.P.M. PLACEMENT DETAILS



SECTION A - A

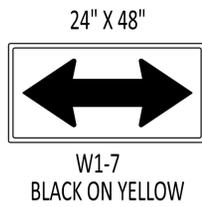
NO.	REVISION	BY	DATE

SCALE: NTS  
 APPROVED: A.K.  
 DRAWN: A.K.  
 CHECKED: A.K.  
 DATE: 7/15/24

PROJECT:  
 ROUND ABOUT  
 INTERSECTION OF TWO 80' RIGHTS-OF-WAY

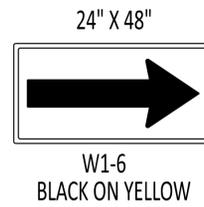
### #1 SIGN SPECIFICATIONS:

SIGN FACE - DIAMOND GRADE REFLECTIVE SHEETING  
 SIZE - AS SHOWN  
 COLOR - AS SHOWN  
 HEIGHT - 7' MEASURED FROM BOTTOM OF THE SIGN TO HEIGHT OF THE NEAR EDGE OF PAVEMENT, OR TO TOP OF THE TRAFFIC SEPARATOR.  
 THICKNESS (ALUMINUM) : .080 MILS  
 THICKNESS (FIBER GLASS OR PLASTIC) : .120 MILS  
 BOLTS: 3/8" X 3/4" W/ HEX NUTS. 2 (MIN.) PER SIGN  
 POSTS: SIGNS 9 SQUARE FEET AND LARGER SHALL BE DOUBLE POSTED.



24" X 48"

W1-7  
BLACK ON YELLOW

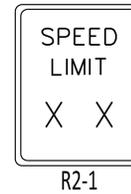


24" X 48"

W1-6  
BLACK ON YELLOW



R1-1  
WHITE ON RED



R2-1  
BLACK ON WHITE:  
LOCATION: 100' TO 200' FROM  
SIGNALIZED INTERSECTION AND  
AT 2640' (1/2 MILE) INCREMENTS.



R4-7  
BLACK ON WHITE LOCATION:  
PER MUTCD



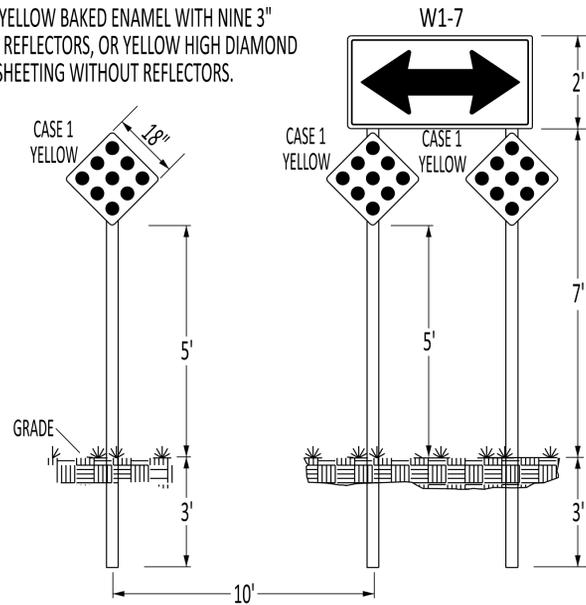
W14-1  
BLACK ON YELLOW LOCATION:  
50' FROM LAST INTERSECTING  
ROADWAY.



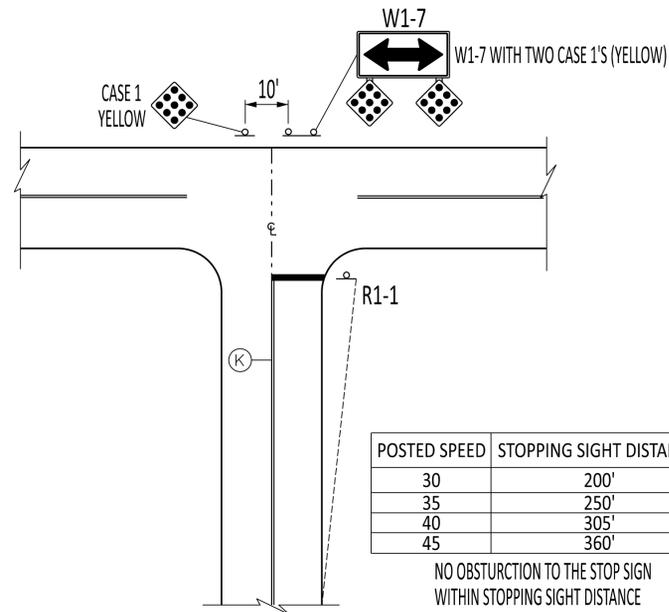
W14-2  
BLACK ON YELLOW LOCATION:  
50' FROM LAST INTERSECTING  
ROADWAY.

### #2 T INTERSECTION

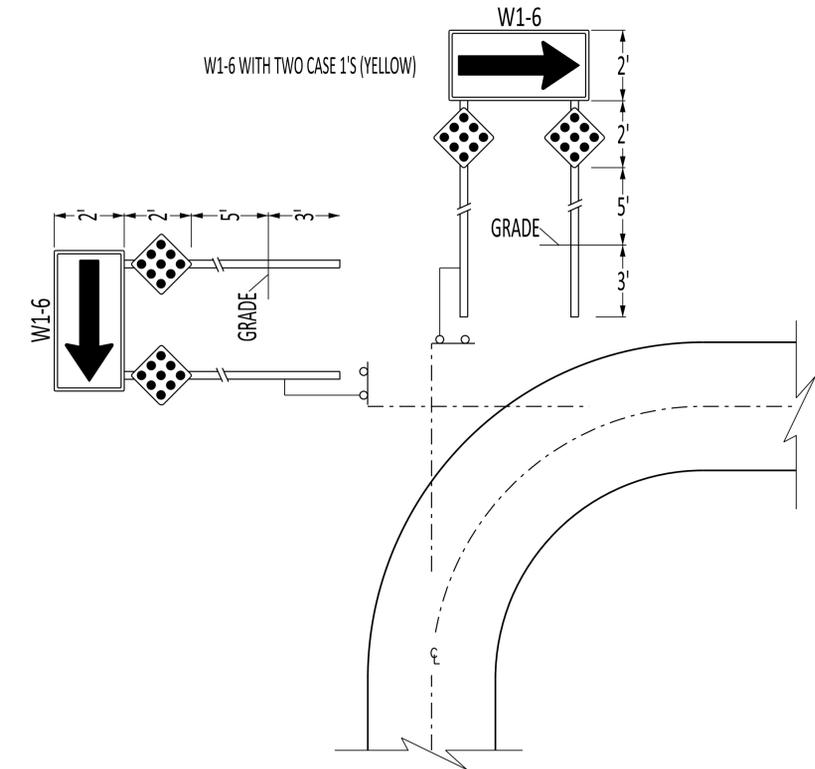
CASE 1: YELLOW BAKED ENAMEL WITH NINE 3" YELLOW REFLECTORS, OR YELLOW HIGH DIAMOND GRADE SHEETING WITHOUT REFLECTORS.



SIGN LOCATION AT "T" INTERSECTION  
 (WITH TWO PUBLIC ROADS OR PER ENGINEERING JUDGEMENT)

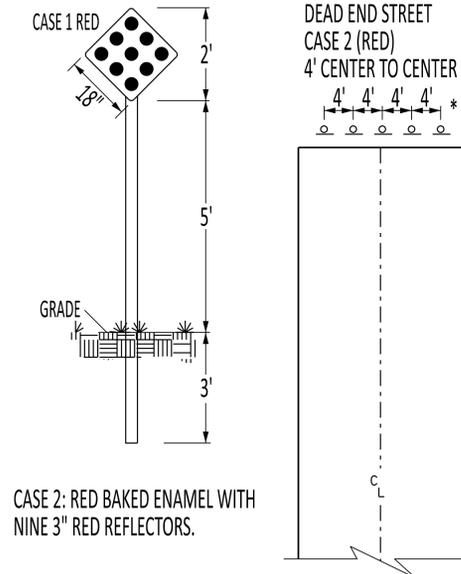


### #3 SIGN LOCATION AT CURVE

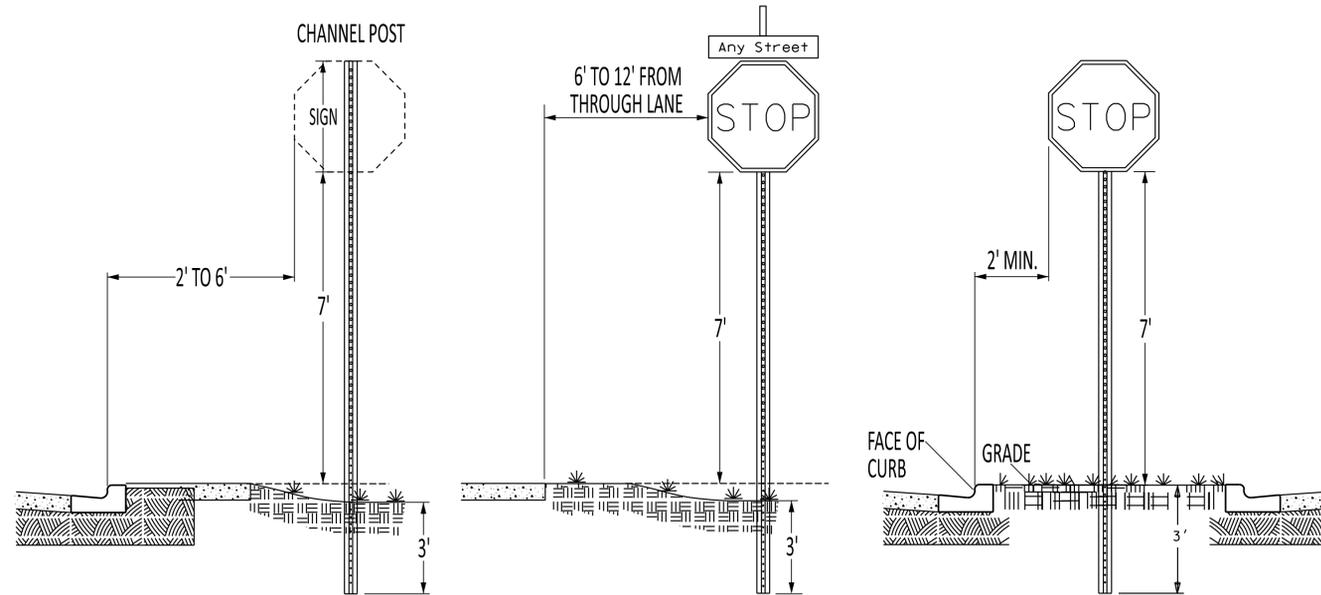


### #4 DEAD ENDS

SIGN LOCATION AT DEAD END STREET  
 CASE 2 (RED)  
 4' CENTER TO CENTER



### #5 STOP SIGN PLACEMENT



POST: STEEL FLANGED CHANNEL POST W/ BAKED GREEN ALKYD OR GALVANIZED FINISH PER A.S.T.M. - A - 123 ;  
 MIN. WEIGHT: 3 LBS. PER FOOT, 7/16" DIA. HOLES, 1" APART TOP TO BOTTOM.

### #6 "NEXT SIGNAL" SIGNS:

TO BE INSTALLED ON THOROUGHFARE ROADWAYS WITH 4 OR MORE LANES, IN MEDIAN (IF POSSIBLE) OR ON THE SIDE NOT TO OBSTRUCT PATHWAY. APPROXIMATELY 600 FEET IN ADVANCE OF INTERSECTION CROSSWALKS.

COLOR: WHITE LETTERS ON GREEN BACKGROUND. WHITE 1" BORDER.

BLANK SIZE: 30" X 60" FOR MEDIANS.

LETTER SIZE: 10" UPPERCASE AND 8" LOWERCASE FOR STREET NAME "NEXT SIGNAL" PHRASE  
 5" UPPERCASE.



NO.	REVISION	BY	DATE

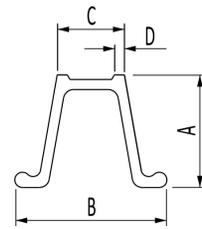
SCALE: NTS  
 APPROVED: A.K.  
 DRAWN: A.K.  
 CHECKED:  
 DATE: 7/15/24

PROJECT: SIGN PLACEMENT

SHEET: 10  
 OF: 12  
 T-P-24

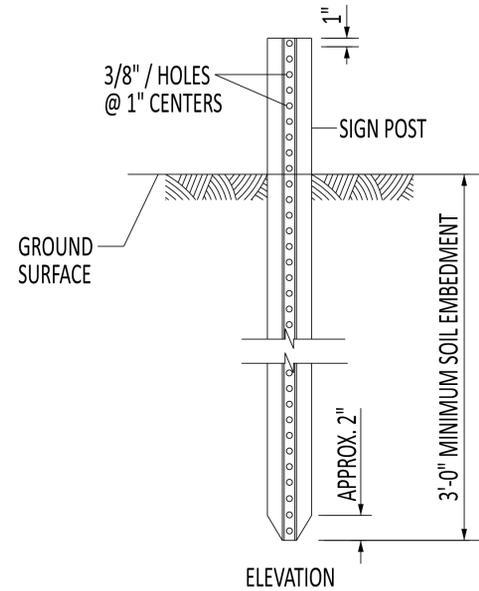


ISOMETRIC VIEW

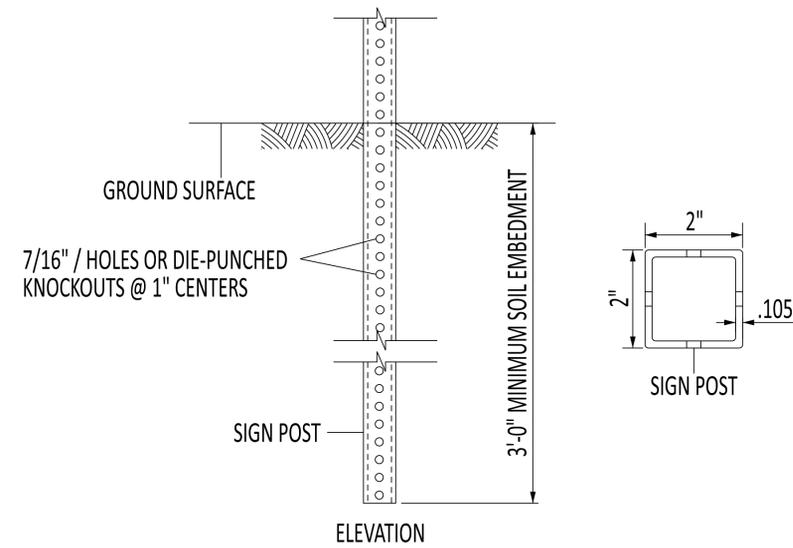
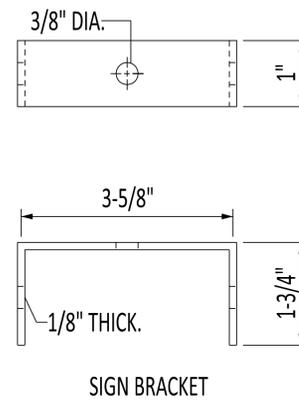


- 'A' 1.875"
- 'B' 3.5"
- 'C' 1.313"
- 'D' 0.22"

CHANNEL POST



STEEL FLANGED CHANNEL POST DETAILS



STEEL SQUARE TUBE POST DETAILS

**GENERAL SPECIFICATIONS:**

FLAT BLADE: ALCOA \*86054.6063-T6 ALLOY, ETCHED, DEGREASED WITH \*1200 ALODINE FINISH WITH \*3877 GREEN DIAMOND GRADE BACKGROUND AND EQUAL DIMENSIONS - 9" & 12" MIN. H, 24", 30", 36" AND 42" L.

LETTERS: NAME - 6" UPPERCASE WITH 4.5" LOWERCASE & 9" UPPERCASE WITH 6.75" LOWERCASE, SERIES 'B' \* 3870 DIAMOND GRADE (SILVER) OR EQUAL - SUFFIX - 4.5".

POST: STEEL FLANGED CHANNEL POST 3 LBS. WEIGHT PER FOOT WITH BAKED GREEN ALKYD OR GALVANIZED FINISH PER A.S.T.M. - A - 123 WITHOUT ANCHOR PLATES. SQUARE POST PER FDOT INDEX 700-010.

BRACKETS SHALL BE ATTACHED FIRMLY ON STANDARD SQUARE TUBE OR U-CHANNEL POSTS BY MEANS OF (2) 5/16" END VIEW DIAMETER HEX HEAD BOLTS.

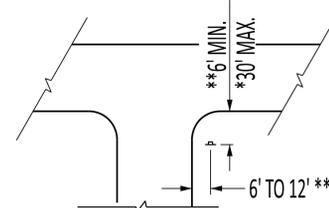
STOP SIGN: R1-1 MUTCD DIAMOND GRADE.

LOCATION: ONE PER INTERSECTION AS INDICATED ON THE PLANS.

POLICY: 9" BLADES WITH 6" UPPERCASE WITH 4.5" LOWERCASE LETTERS FOR TWO LANE ROADS WITH A SPEED LIMIT UNDER 45 MPH.

12" BLADES WITH 9" UPPERCASE WITH 6.75" LOWERCASE LETTERS FOR:

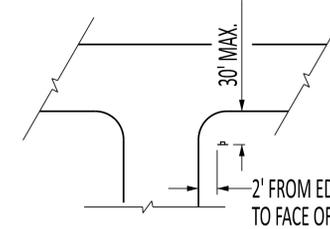
- THOROUGHFARE ROADS FOUR LANES OR WIDER.
- TWO LANE ROADS WITH A POSTED SPEED LIMIT OF 45 MPH OR MORE. ONLY ONE BLADE WILL BE INSTALLED AT INTERSECTION WITH THOROUGHFARE ROAD INDICATING THE SIDE STREET NAME.



\* AT RADIUS WHEN POSSIBLE  
30' MAX FROM THROUGH LANE

UNCURBED SECTION

\*\* FROM THROUGH LANE



2' FROM EDGE OF SIGN  
TO FACE OF CURB

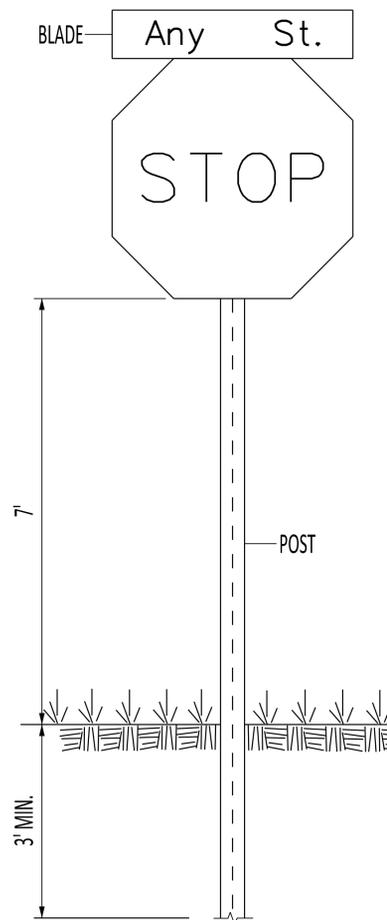
CURBED SECTION

IF STOP BAR IS USED IT SHALL  
BE PLACED AT THE STOP SIGN

**TYPICAL STOP SIGN PLACEMENT**



STREET NAME SIGN  
D3-1



NO.	DATE
BY	
REVISION	

SCALE:	NTS
APPROVED:	
DRAWN:	A.K.
CHECKED:	
DATE:	7/15/24

PROJECT: STREET NAME SIGN WITH STOP SIGN

SHEET:	11
OF:	12
T-P-24	



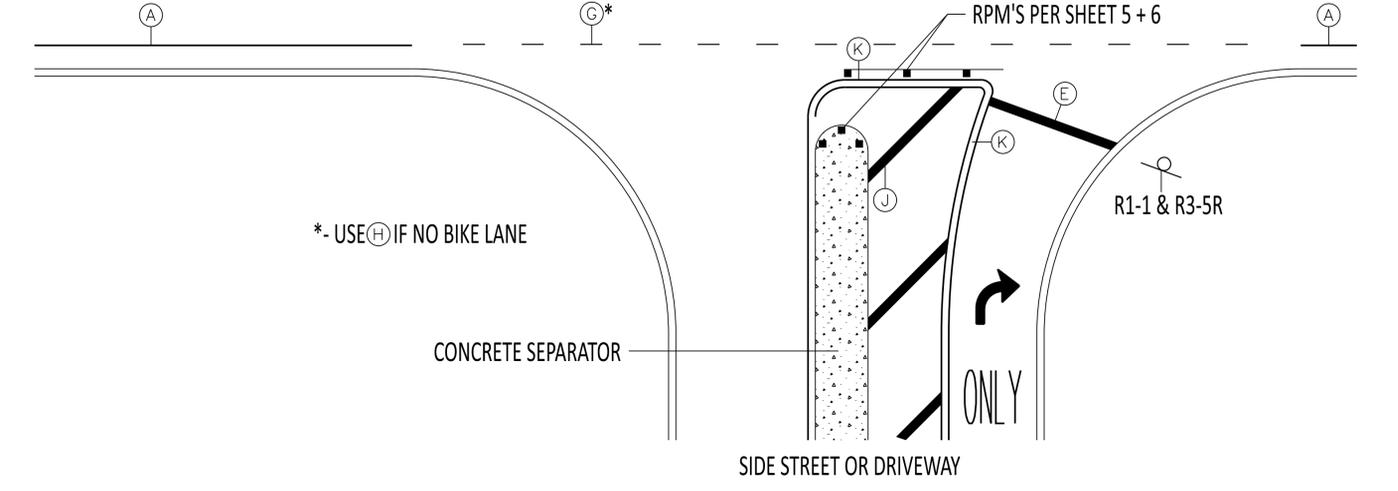
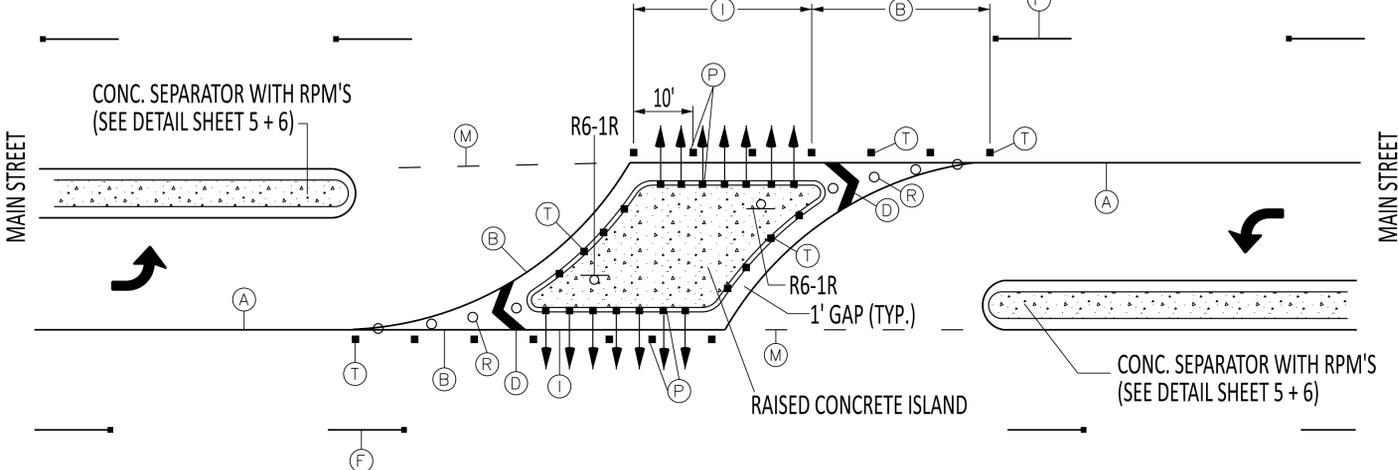
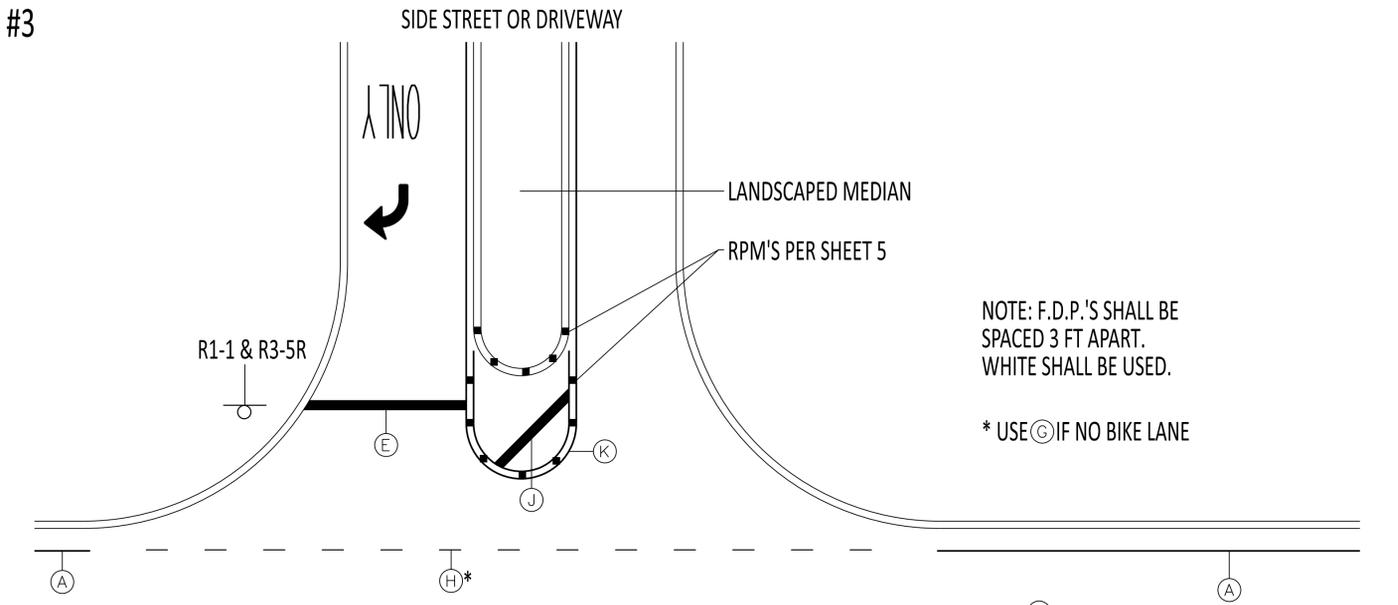
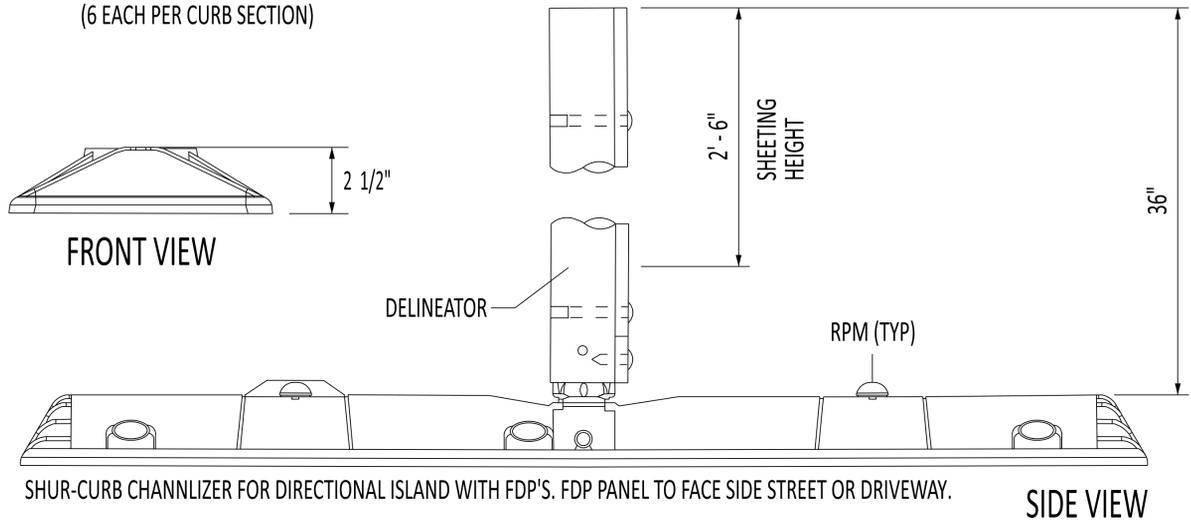
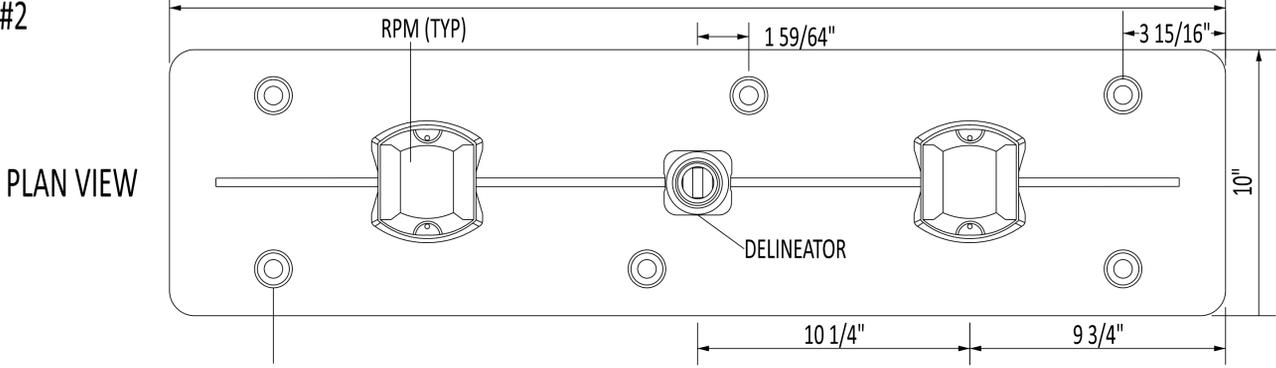
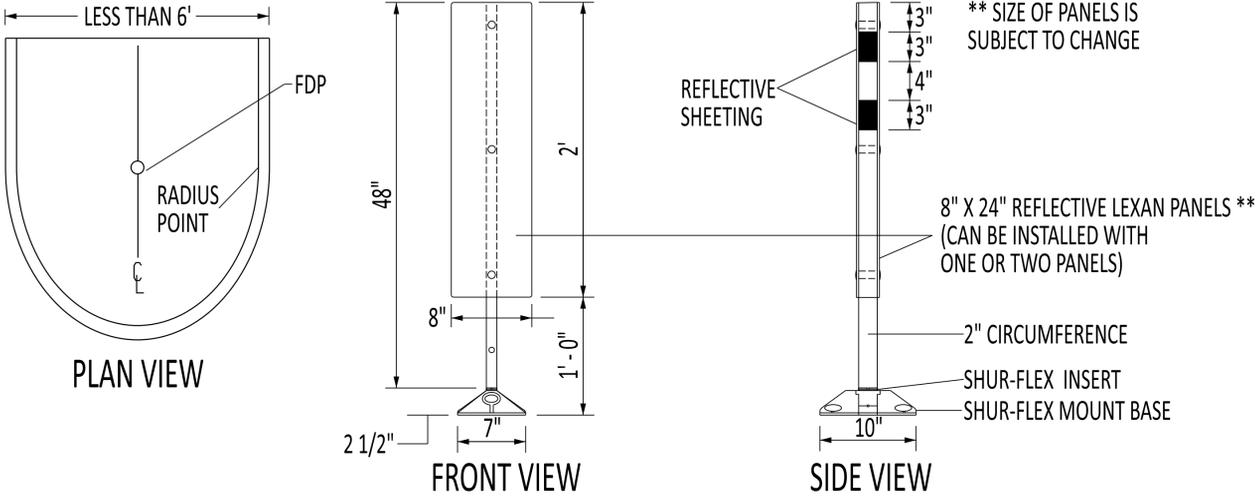
NO.	REVISION
BY	DATE

SCALE:	NTS
APPROVED:	
DRAWN:	A.K.
CHECKED:	
DATE:	7/15/24

PROJECT: FLEXIBLE DELINEATOR POST PLACEMENT DETAIL DIRECTIONAL ISLAND

SHEET:	12
OF:	12
T-P-24	

### #1 FLEXIBLE DELINEATOR POST (FDP) (SHUR-FLEX HIGH VISIBILITY DELINEATOR)



1. THE FDP SHALL MATCH THE ADJCENT EDGELINE COLOR (YELLOW OR WHITE ONLY).
2. WHEN SHOWN ON PLANS, FDP'S SHALL BE IDENTIFIED IN A SIMILAR MANNER TO THAT SHOWN ON THIS TYPICAL. COLORS AND NUMBER OF EACH MUST BE SHOWN ON ALL SUMMARY OF QUANTITIES SHEETS. ALSO, COLOR MUST BE SPECIFIED FOR EACH FDP GROUP ON THE PLANS.
3. ON DIRECTIONAL ISLANDS THE FDP'S ARE REQUIRED TO SUPPLEMENT THE EXISTING SIGNING, MARKINGS, AND RPM'S TO DETER WRONG WAY MANEUVERS. FDP'S SHOULD BE INSTALLED MIDWAY BETWEEN THE STRIPED CHEVRONS.
4. SHUR-FLEX HIGH VISIBILITY FLEXIBLE DELINEATOR (FDP) SHALL BE CONSTRUCTED FOR MEDIANS LESS THAN 6' WIDE. FOR MEDIANS AT LEAST 6' WIDE INSTALL R4-7C SIGN WITH CASE 1 YELLOW REFLECTORS ONLY.
5. SHEETING TYPE: DIAMOND GRADE SERIES 3900 SERIES TYPE 3.