Osceola County Board of County Commissioners

# Road Construction Specifications

Prepared by Osceola County Development Review Department
Adopted August 17, 2015 by Osceola County BCC Resolution #15-058R

# Table of Contents

## Article I: Clearing Construction Site

Clearing and grubbing shall consist of the complete removal and disposal of all buildings, timber, brush, stumps, roots, rubbish and debris and all other obstructions resting or protruding through the surface of excavated areas, and of all other structures and obstructions necessary to be removed as designated on the approved plans. The work shall include disposal of the cleared vegetation, debris or other unsuitable materials in a manner suitable to the Engineer and Osceola County. All clearing and grubbing shall comply with FDOT Standard Specifications for Roadway and Bridge Construction, most current edition.

## Article II: Earthwork and Related Operations

The work covered by this section shall include all excavation, shaping, filling, sloping and finishing necessary for the construction, preparation and completion of all embankments, subgrades, shoulders, ditches, slopes, gutters, intersections, approaches, private entrances and other works in accordance with the required alignment, grade and cross sections shown on the approved plans. All earthwork and related operations shall comply with FDOT Standard Specifications for Roadway and Bridge Construction, most current edition.

## Article III: Subgrade

Subgrade is the portion of the roadbed immediately below the base course or rigid pavement including below the curb section, the limits of which will ordinarily include those portions of the roadbed shown in the approved plans. The limits of the subgrade shall be considered to extend outward to twelve inches beyond the base or six inches beyond the back of curb on roadways where curb is utilized, whichever is more stringent. All subgrade will be tested for Limerock Bearing Ratio (LBR) and shall have an LBR greater or equal to 40. The stabilized subgrade shall be compacted so that the minimum density acceptable at any location will be 98 percent of the maximum density as determined by AASHTO T-180. Tests for subgrade stabilization shall be located no more than 300 feet apart. All subgrade material used and stabilized shall comply with FDOT Standard Specifications for Roadway and Bridge Construction, most current edition.

## Article IV: Base

The base course is the layer of material in the roadbed located directly below the surface layer and above the subgrade. Optional Base Course, as specified in the FDOT Standard Specifications for Roadway and Bridge Construction, most current edition, are allowable as long as they come from an FDOT certified source, and meet all applicable FDOT materials and construction standards. Other alternate base material or sources may be approved by the County Manager.

Alternate sources that are not FDOT certified shall include a laboratory certification to Osceola County specifying that the material in each stockpile meets or exceeds FDOT standards, and a quality assurance/quality control testing program to ensure continued compliance for each stockpile must be in place. The stockpiles shall not exceed 1,000 cubic yards.

Soil cement base may only be used to match existing roadway sections that previously used soil cement base, or in site conditions where high water table conditions, as verified by the geotechnical report, and surrounding grades will preclude the use of one of the optional base courses.

## Article V: Asphalt Pavement

The work specified in this section consists of the application of an asphaltic concrete surface course composed of a mixture of aggregates and, if necessary, mineral filler and asphalt cement to produce the desired stability properly laid upon a prepared base in accordance with these specifications and in conformity with the lines, grades, notes and typical cross sections shown on the approved plans. This work shall include the conditioning of the existing surface or base. Friction courses may be required.

All new asphalt courses shall be superpave asphalt concrete, SP9.5 or SP12.5, specifications. S-I, S-II and S-III asphalt courses may be used when matching existing roadways using these asphalt courses. Friction course will be required when design speed is 45 mph or higher.

Density and depth checks shall be required at 1 test per 300 linear feet of roadway (minimum 2 tests per street). The cores shall be taken from alternating lanes at random locations along the roadway. The County Manager reserves the right to request additional testing. Maximum allowable deviation tolerance for asphalt is ¼ inch under and ½ inch over depth specified on the approved plans.

All asphalt pavement installed shall comply with FDOT Standard Specifications for Roadway and Bridge Construction, most current edition.

## Article VI: Portland Cement Concrete Paving

Rigid pavement consists of constructing a specified portland cement concrete paving on a prepared subgrade. New concrete pavement roadways will not be accepted. Concrete pavement is acceptable for driveways, bridges, and private roads. The work done shall include the furnishing of all supervision, labor, materials, and equipment necessary for the proposed rigid pavement construction in accordance with the approved plans and specifications. The utilities and other items in and beneath the roadway must be properly coordinated with the construction of rigid pavement to avoid all conflicts.

All rigid pavement installed shall comply with FDOT Standard Specifications for Roadway and Bridge Construction, and FDOT Rigid Pavement Design Manual, most current editions.

## Article VII: Brick Paving Surfaces

Brick paving surfaces may be allowed by the County Manager. A maintenance agreement will be required, and a private entity may be required to maintain the brick paving surfaces within public rights of way. Osceola County may, at any time, replace the brick paving surfaces with asphalt paving if adequate maintenance is not performed by the private entity, or if repairs are required to the roadway. The work specified in this section shall govern the installation of brick paving within roadways.

A) Materials

1. Brick

Use new bricks with a minimum thickness of 2-¾". Bricks shall meet the requirements outlined in ASTM C-1272 "Standard Specifications for Heavy Vehicular Paving Brick", Type F. All colors and textures of bricks/pavers shall be approved by the County Manager or Designee for compatibility with pavement markings. The bricks will be assigned a layer coefficient of 0.44 when calculating the required structural number. The overall structural number of the road section shall meet those shown in Article IX, Table IX.1

2. Subgrade

The stabilized subgrade shall comply with the appropriate sections of this manual.

3. Base Course

The base course shall comply with the appropriate sections of this manual.

4. Setting Bed

The setting bed shall be carefully screened, leveled, and compacted prior to receiving the brick. The sand used in the bedding course should be washed, angular sand conforming to Table VI.1. Bedding sand conforming to ASTM C 33 Specifications for Concrete Aggregate is recommended. Limestone screenings should not be used as they do not compact uniformly, are normally too soft, are moisture sensitive, and some may cause staining to the brick pavers.

Table VII.1 Bedding Course Sand

| **Sieve Size** | **Percent Passing** |
|---|---|
| 3/8 in. (9.5 mm) | 100 |
| No. 4 (4.75 mm) | 95 to 100 |
| No. 8 (2.36 mm) | 80 to 100 |
| No. 16 (1.18 mm) | 50 to 85 |
| No. 30 (600 um) | 25 to 60 |
| No. 50 (300 um) | 10 to 30 |
| No. 100 (150 um) | 2 to 10 |

B) Construction

The brick shall be set 1/2 inch higher than the planned final grade. When laying the brick, allow a 1/16 inch joint between the bricks for layout of full and half courses. The brick shall be hand cut and fitted hand tight with joints not to exceed 3/16 inch for cut brick only. Vertical joints shall not exceed 1/4 inch. Compact brick with a dual drum, hand operated, vibratory roller. The surface plane for finished work shall not exceed a tolerance of 1/2 inch in 10 feet when tested with a 10 foot straightedge.

C) Joint Treatment

A dry mixture of jointing sand shall be swept over the paved surface in two directions until all joints are filled. The surface shall then be flooded with water at low pressure. This procedure shall be performed at least twice or until the joints have a smooth full surface. All sand shall be removed from paved area after the joint treatment by thoroughly sweeping the entire work area and removing from the site.

Table VII.2 Jointing Sand

| **Sieve Size** | **Percent Passing Natural Sand** | **Percent Passing Manufactured Sand** |
|---|---|---|
| No. 4 (4.75 mm) | 100 | 100 |
| No. 8 (2.36 mm) | 95 to 100 | 95 to 100 |
| No. 16 (1.18 mm) | 70 to 100 | 70 to 100 |
| No. 30 (600 um) | 40 to 75 | 40 to 75 |
| No. 50 (300 um) | 10 to 35 | 20 to 40 |
| No. 100 (150 um) | 2 to 15 | 10 to 25 |
| No. 200 (75 um) | - | 0 to 10 |

## Article VIII: Patterned Pavement

Patterned pavement may be allowed at the discretion of the County Manager. A maintenance agreement may be required, and a private entity may be required to maintain the patterned pavement sections. Patterned pavement installed on asphalt or concrete pavement areas shall comply with FDOT Standard Specifications for Roadway and Bridge Construction, most current edition.

## Article IX: Alternate Structural Combinations

Any alternate structural combination design shall meet the minimum structural number (SN) value as shown in Table IX.1. The asphalt structural course layer shall be designed to have a minimum SN of 0.66", unless substituted by brick paving surface. The brick paving surface layer, meeting the requirements of Article VII, will be assigned a layer coefficient of 0.44.

Table IX.1 Minimum Structural Numbers

| Road Type | Minimum Structural Number ($SN_R$) |
|---|---|
| Local Streets (Including Alleys) | 2.46" |
| Avenues/Boulevards (Less than 45 mph) | 3.50" |
| Avenues/Boulevards (45 mph or more) | 3.77" |
| Multimodal Corridor (Less than 45 mph) | 4.21" |
| Multimodal Corridor (45 mph or more) | 4.48" |

Elimination of a structural layer, e.g. replacement of the stabilized subgrade with a thicker base layer, may be used on limited basis, such as turn lane construction or limited roadway widening, as long as the overall $SN_R$ value meets or exceeds the values in Table IX.1. Structural number and alternate structural

combinations shall be designed in accordance with the FDOT Flexible Pavement Design Manual, most current edition.

## Article X: Sidewalks, Concrete Curbs and Curb Ramps.

The work specified in this section consists of the construction of curbs, curb and gutters, or sidewalks of portland cement concrete. Such works shall be constructed in accordance with these specifications and in conformity with the lines, grades, dimensions and notes shown on the approved plans. Curb ramps shall be in accordance with FDOT Index 304 and shall include CAST IN PLACE detectable warnings. Concrete curbs shall be in accordance with FDOT Index 300.

Sidewalk shall be Class NS concrete, 4 inches thick, meeting a 28 day compressive strength of 3000 psi. When sidewalk bisects a driveway, the minimum shall be 6 inches of Class I concrete reinforced with 6”x6” wire mesh or fiber mesh.

Architectural pavers or patterned pavement for sidewalks and curb ramps may be allowed by the County Manager. Architectural pavers and patterned pavement shall comply with FDOT Standard Specifications for Road and Bridge Construction, most current edition.

The County Manager may allow alternate materials and specifications for multi-use trails within the right-of-way.

All curbs, curb and gutters, and sidewalks installed shall comply with FDOT Standard Specifications for Road and Bridge Construction, most current edition.

## Article XI: Culverts and Storm Sewers

Reinforced concrete pipe (RCP) shall be the required pipe material for culverts and storm sewers within Osceola County roadways. Alternate materials may be used for private streets.

All pipe joints shall be wrapped in accordance with FDOT Index 280, most current edition. Video inspection and laser profiling and results will be required. All culverts and storm sewer piping material installed shall comply with FDOT Standard Specifications for Road and Bridge Construction, most current edition.

For driveway culverts, RCP, High Density Polyethylene (HDPE), or Corrugated Metal Pipe (CMP) is allowed, and shall include mitered end sections. For HDPE culverts, manufactured end sections shall be used.

Where a culvert pipe will be covered with concrete, a minimum thickness over the pipe shall be 4 inches and gradually increase to a depth of 6 inches at the roadway edge. Concrete driveways shall have a depth of 6 inches that extends from the edge of pavement to the right-of-way line. This area must also have wire mesh or fiber mesh concrete throughout. Forms used shall have the same depth as the intended pour. Cover requirements and other specifications shall otherwise be in accordance with the FDOT Drainage Manual, most current edition.

## Article XII: Inlets and Manholes

The work specified in this section shall consist of constructing inlets and manholes. These structures shall be constructed of portland cement concrete and reinforcing steel or of brick or concrete masonry, with the necessary metal frames and gratings. They shall be in conformity with the approved plans and in accordance with these specifications. Poured inverts will be required for all unsubmerged inlets. Inlets shall not be placed within the travel way of the roadway.

All inlets and manholes shall be in accordance with the FDOT Indexes 200-295, and FDOT Standard Specifications for Road and Bridge Construction, most current edition, as applicable. Type 1, 2, 3 or 4, 5 or 6 curb inlet tops will be required.

## Article XIII: Underdrains

If underdrains are used and if any unsuitable soils are found between the subgrade and SHWT, all unsuitable soils shall be excavated and replaced with suitable soils up to 24-inches below the subgrade. Unsuitable soils are those that contain silts (with permeability rate less than 0.3 feet/day), organic materials, debris, hard pan, or muck (Type D soils). Underdrain pipes shall be corrugated with a nominal minimum inside diameter of 6 inches or equivalent. Underdrain cleanouts shall be placed at all high points, including the beginning and end of the run, and shall not to exceed intervals of 350 feet. Underdrain trenches shall be located a minimum of 2 feet from any underground utility lines. Root barriers will be required adjacent to any street trees to protect the underdrain.

Underdrains installation shall be in accordance with the approved plans and these specifications. Use details shown in appendix and FDOT Index 286. All underdrains shall comply with FDOT Standard Specifications for Road and Bridge Construction, most current edition.

## Article XIV: Erosion Control Materials

The work specified in this section shall consist of sodding, seeding, mulching, fertilizing (as allowed by ordinance), and irrigation (as allowed by ordinance) to establish a stand of grass on road shoulders, ditches, slopes and other areas left barren by construction, and reduce the potential erosion of soil material. All erosion control shall be in accordance with the approved plan and these specifications.

Erosion control materials shall comply with the most current edition of the FDOT Standard Specifications for Road and Bridge Construction and State of Florida Erosion and Sedimentation Designer and Reviewer Manual, whichever is more stringent.

## Article XV: Pavement Markings and Signs

The work under this section consists of placing traffic stripes, markings and signs. All pavement markings and signs shall be high intensity and in accordance with the Manual on Uniform Traffic Control Devices (MUTCD) the approved plans, and these specifications. Thermoplastic compound shall be used. The County Manager may allow the use of pre-formed plastic markings for special circumstances, such as

non-permanent markings. Pedestrian cross walks shall be special emphasis and in accordance with FDOT Index 17346, most current edition.

All pavement markings and signs shall comply with FDOT Standard Specifications for Road and Bridge Construction, most current edition.

## Article XVI: Open Cut, Directional Bore, and Jack and Bore

Crossings under roadways will be made without open cut. The County Manager may allow open cuts under unusual circumstances, if road closures can be avoided, and if the roadway will be milled and overlaid. The minimum depth of cover shall be 42 inches from the top of pipe to the existing and/or proposed surface. Jetting or tunneling is prohibited.

Crossings may be made by Jack and Bore or Directional Bore. Jetting, (except for hydraulic compaction), or tunneling within County rights-of-way is prohibited. Jack and Bore and Directional Bore for crossings shall comply with FDOT Standard Specifications for Road and Bridge Construction, most current edition.

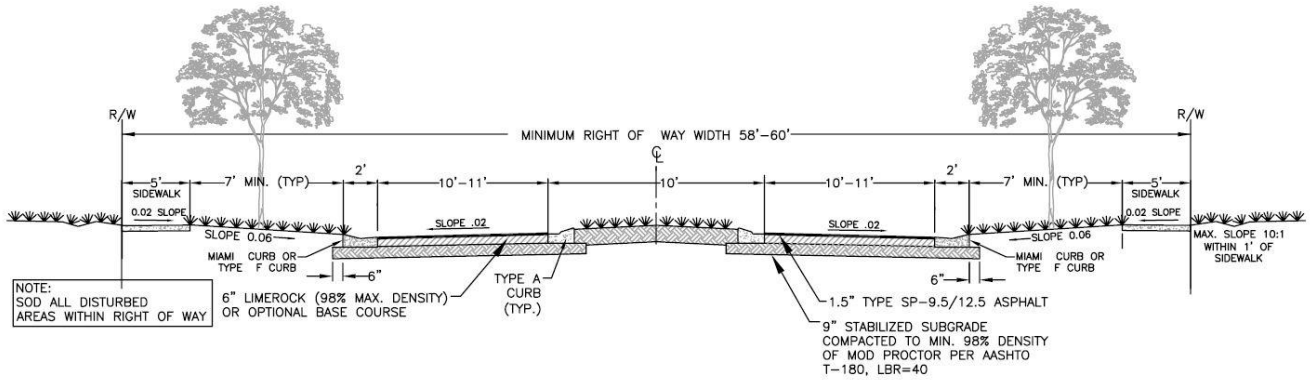
## Article XVII: Maintenance of Traffic

An approved Maintenance of Traffic (MOT) plan shall be required any time work is performed within Osceola County right-of-way. The MOT plan shall conform to the latest edition of the FDOT Design Standards 600 series and the MUTCD. A current FDOT approved certification will be required for the person responsible for the setup and maintenance of the approved MOT. A copy of the approved MOT plan shall be kept on site at all times.

Unless approved by the County Manager, all work within the right-of-way shall be conducted from 7:00 AM to 6:00 PM, Monday through Friday, excluding holidays. Emergency repairs may be conducted outside of these time restrictions.

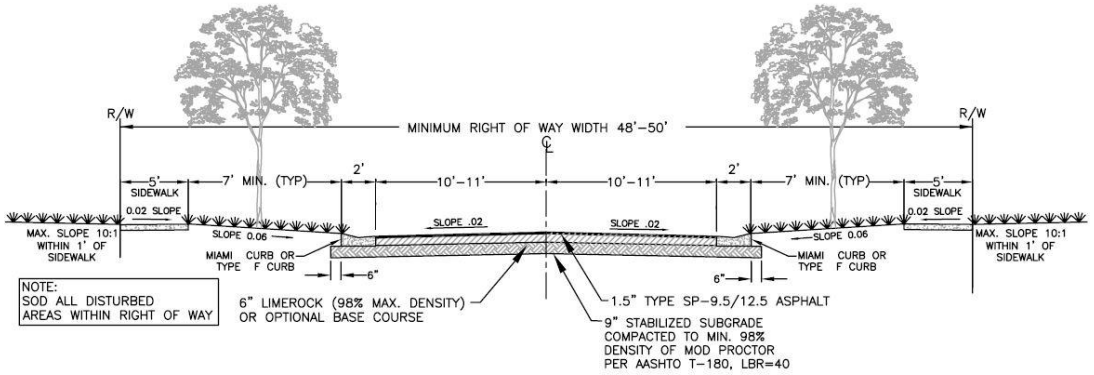
## Appendix: Figures and Drawings

## Figure 1. Local Streets




LOCAL STREET WITH MEDIAN

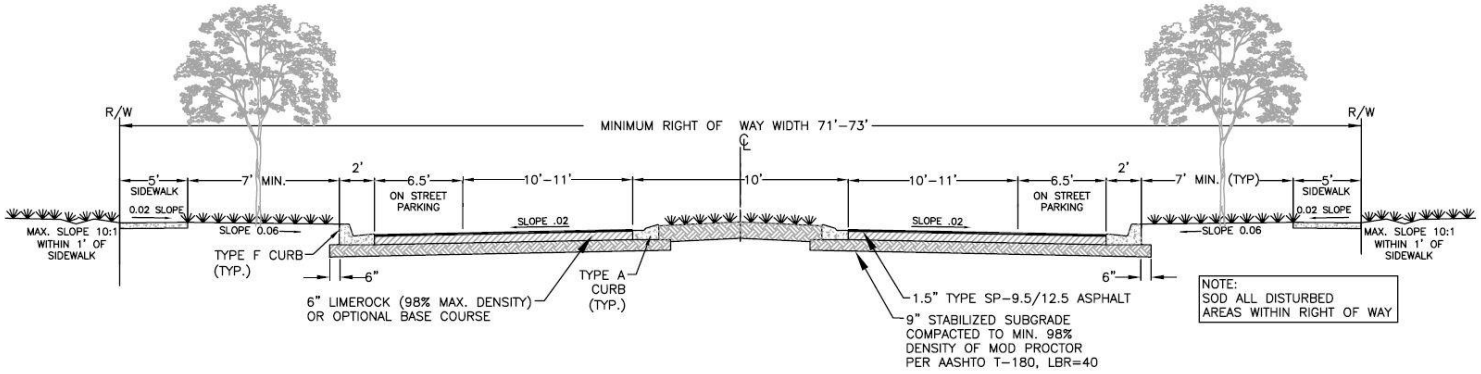
(PER LDC 4.7.1.B.2E)




LOCAL STREET WITHOUT MEDIAN

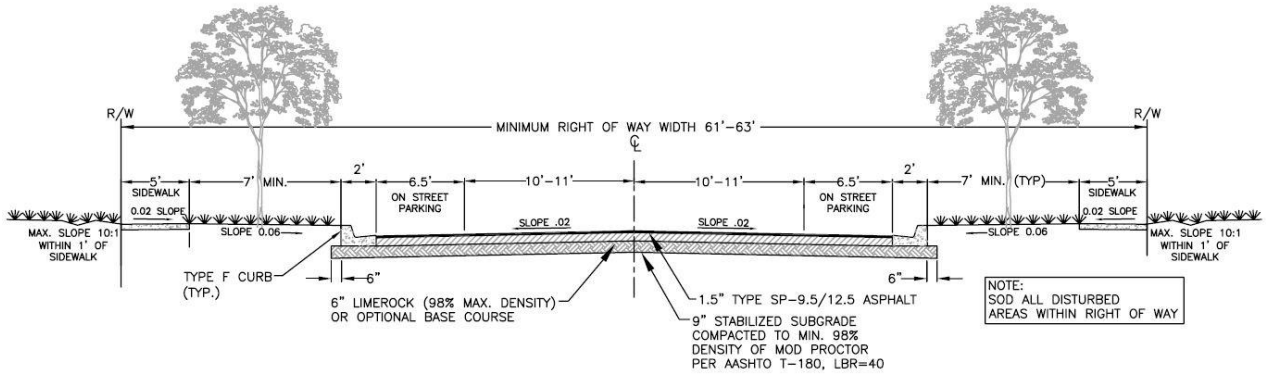
(PER LDC 4.7.1.B.2D)

## Figure 2. Local Streets




LOCAL STREET WITH MEDIAN AND ON-STREET PARKING

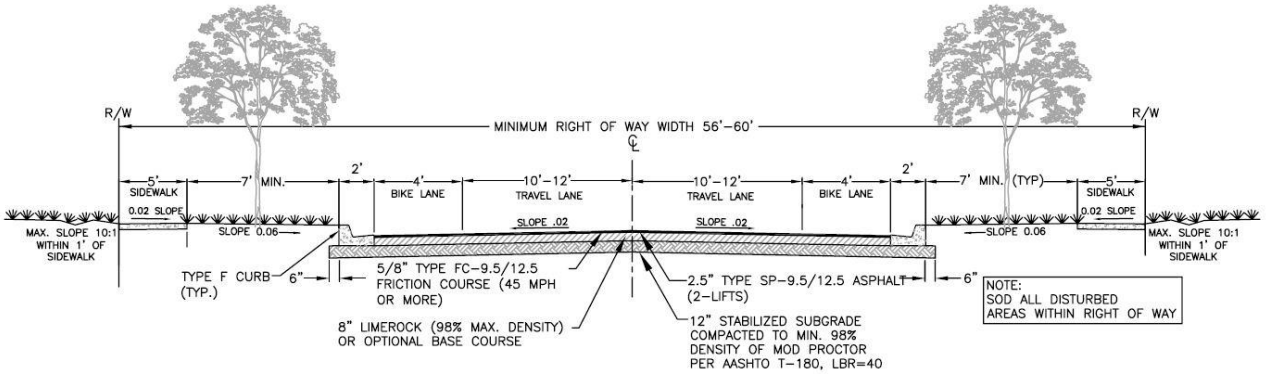
(PER LDC 4.7.1.B.2G)




LOCAL STREET WITH ON-STREET PARKING

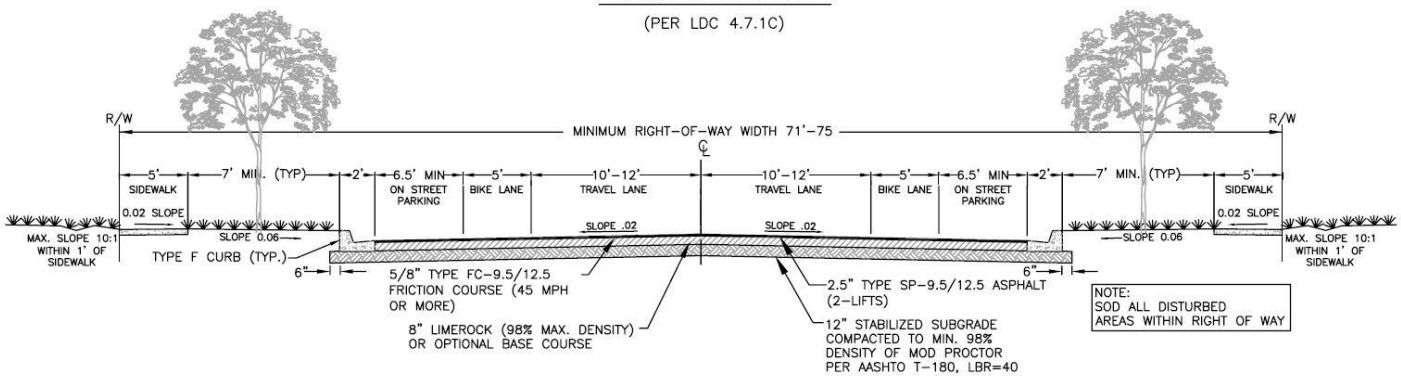
(PER LDC 4.7.1.B.2F)

## Figure 3. Avenues and Boulevards




2-LANE AVENUE

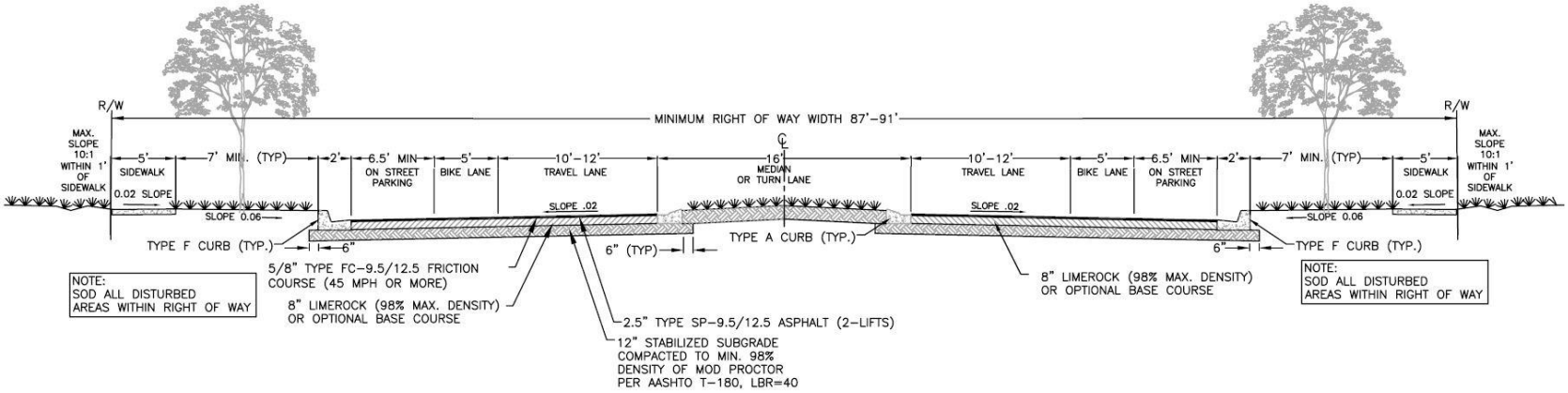
(PER LDC 4.7.1C)




2-LANE AVENUE WITH ON-STREET PARKING

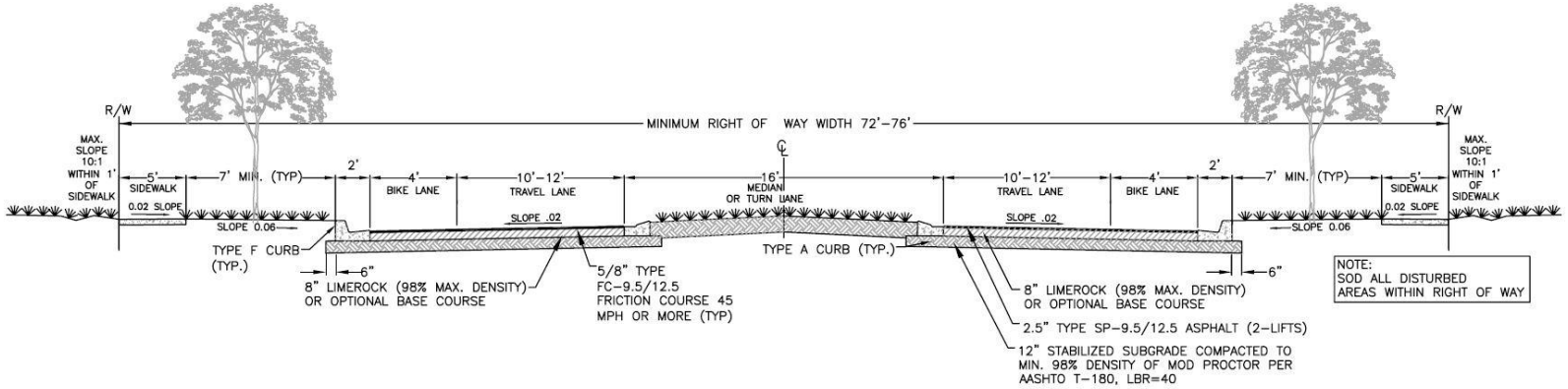
(PER LDC 4.7.1C)

## Figure 4. Avenues and Boulevards




2-LANE AVENUE /BOULEVARD WITH MEDIAN AND ON-STREET PARKING

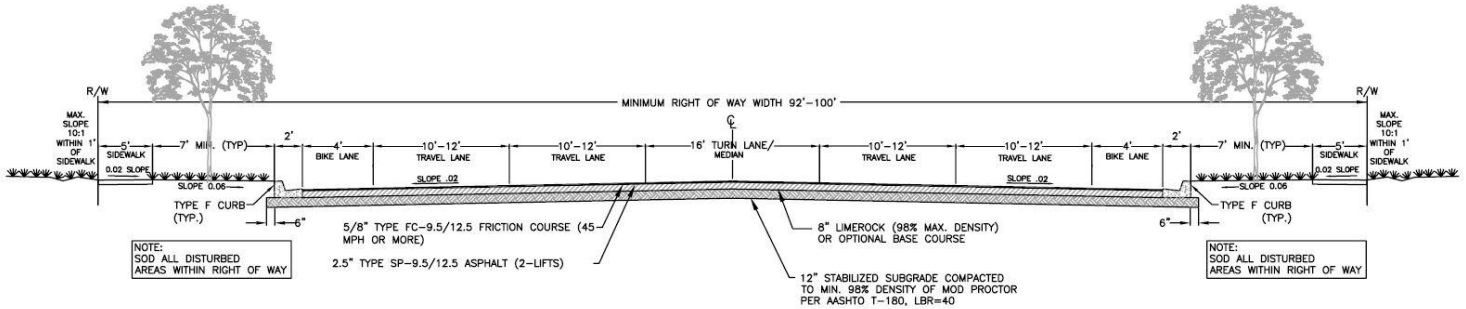
(PER LDC 4.7.1C)




2-LANE AVENUE / BOULEVARD WITH MEDIAN

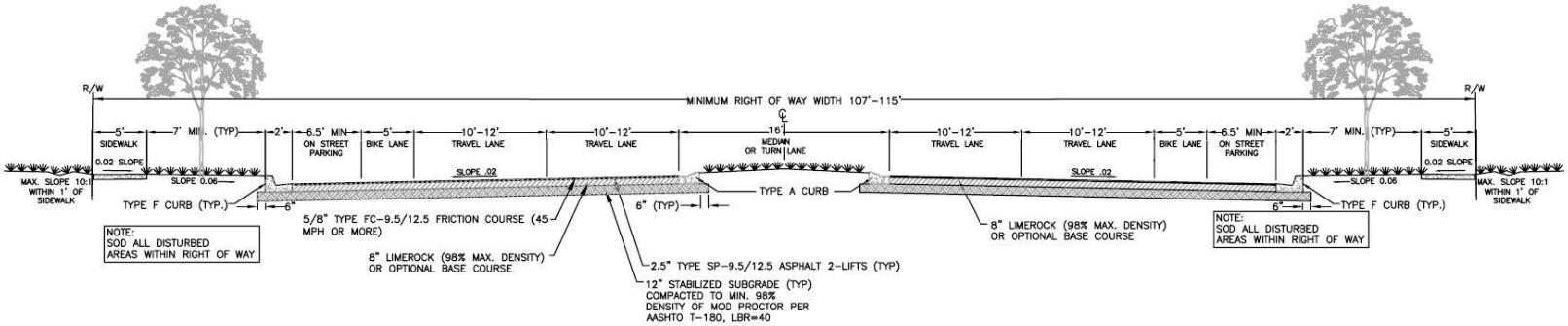
(PER LDC 4.7.1C)

## Figure 5. Avenues and Boulevards




4-LANE AVENUE /BOULEVARD WITH TURNLANE / MEDIAN

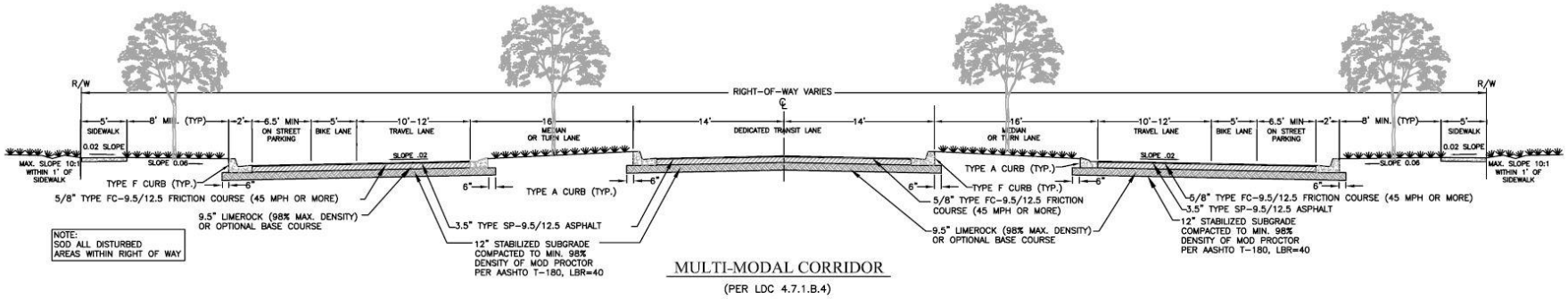
(PER LDC 4.7.1C)



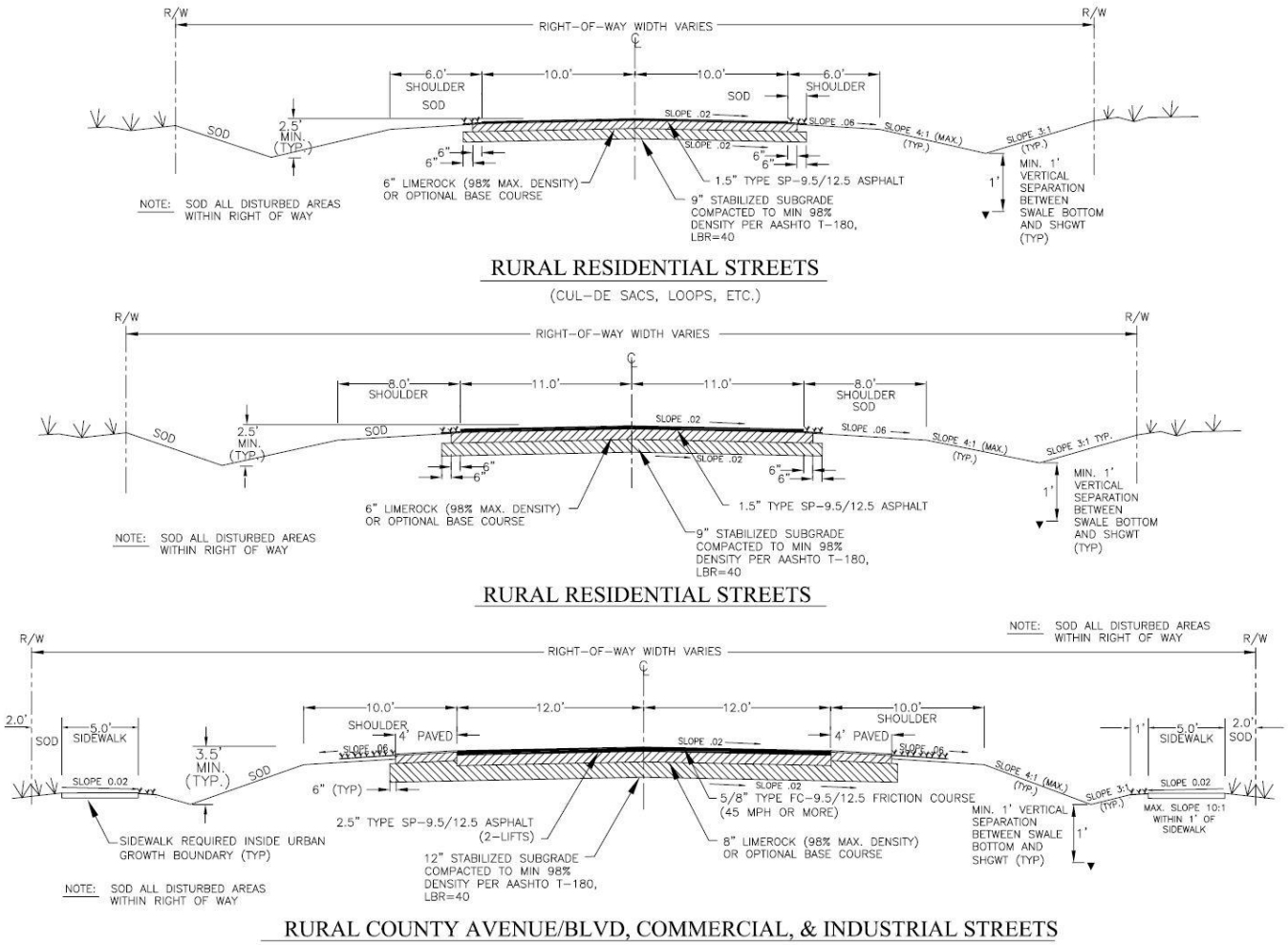

4-LANE AVENUE /BOULEVARD WITH TURNLANE / MEDIAN AND ON-STREET PARKING

(PER LDC 4.7.1C)

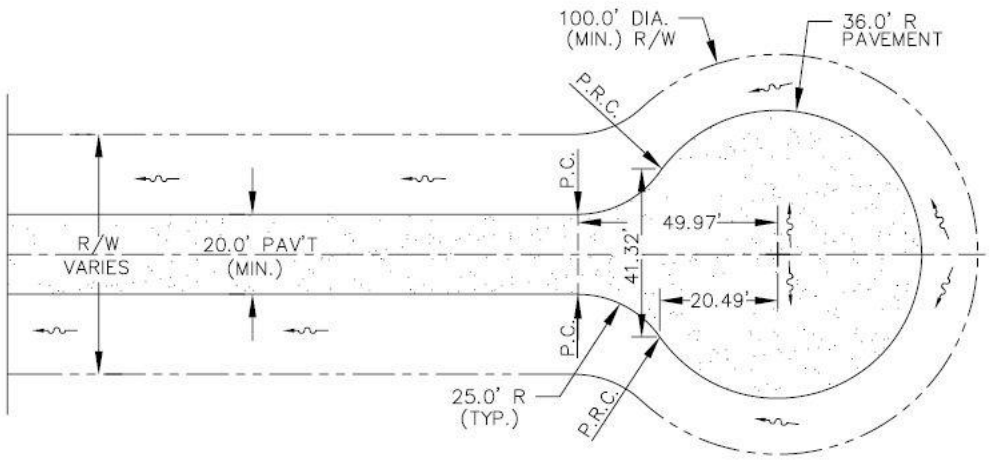
## Figure 6. Multi-modal Corridor



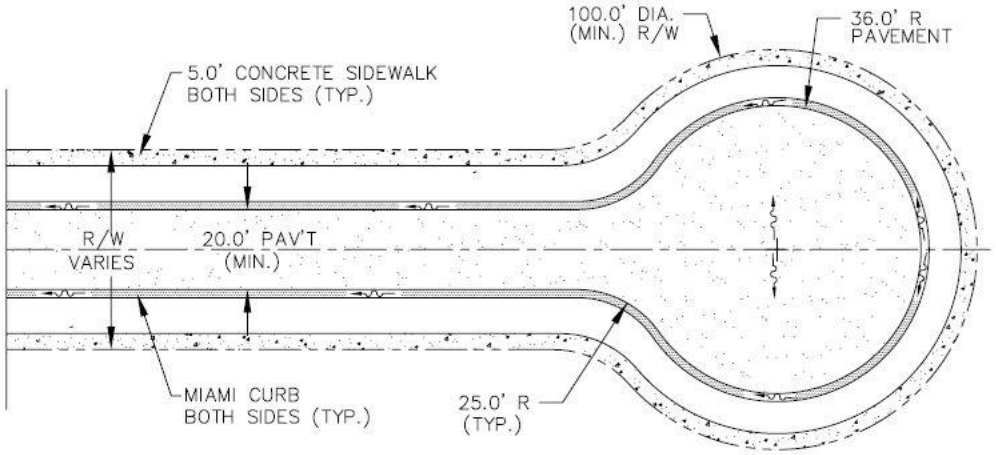
## Figure 7. Rural Roadway Sections



## Figure 8. Cul-de-sac

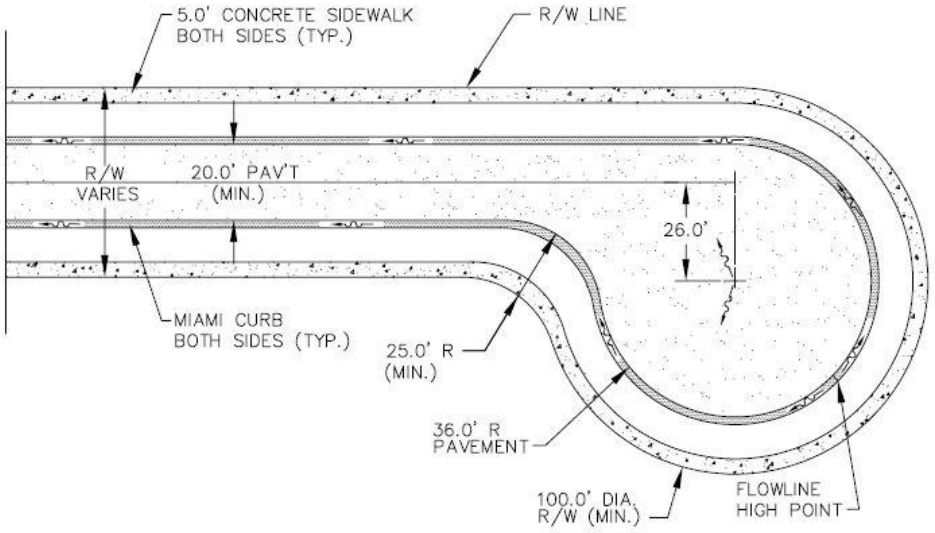



TYPICAL RURAL CUL-DE-SAC GEOMETRY



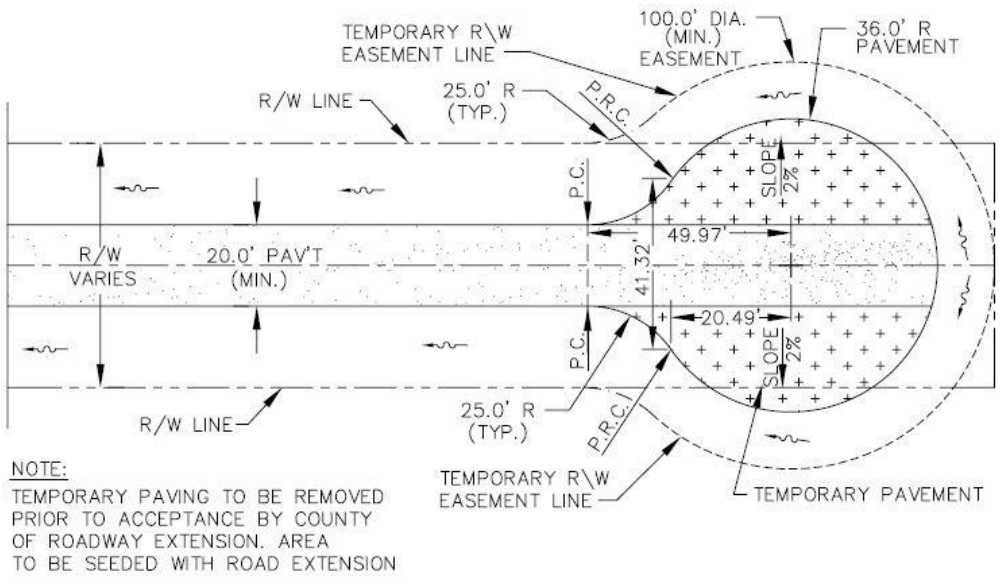

TYPICAL URBAN SECTION CUL-DE-SAC

## Figure 9. Offset Cul-de-sac

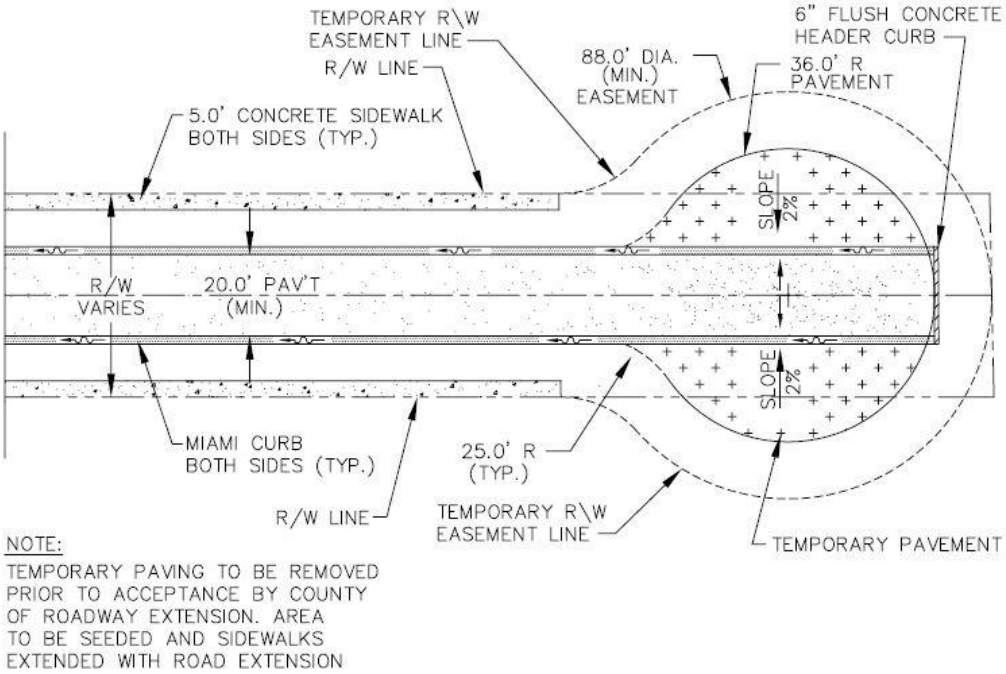



TYPICAL URBAN SECTION OFFSET CUL-DE-SAC

## Figure 10. Temporary Cul-de-sac

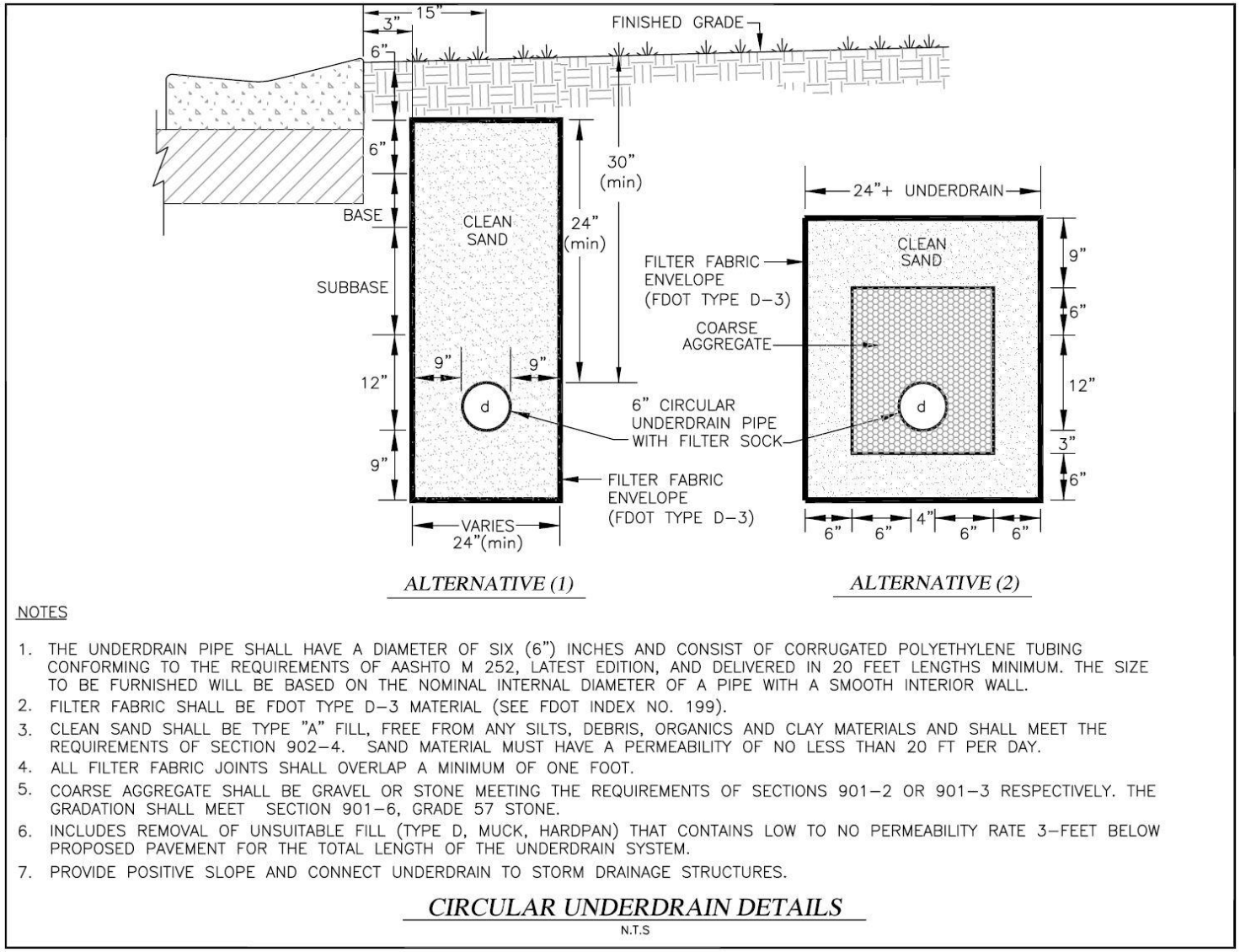



TYPICAL RURAL SECTION TEMPORARY CUL-DE-SAC




TYPICAL URBAN SECTION TEMPORARY CUL-DE-SAC

## Figure 11. Circular Underdrain



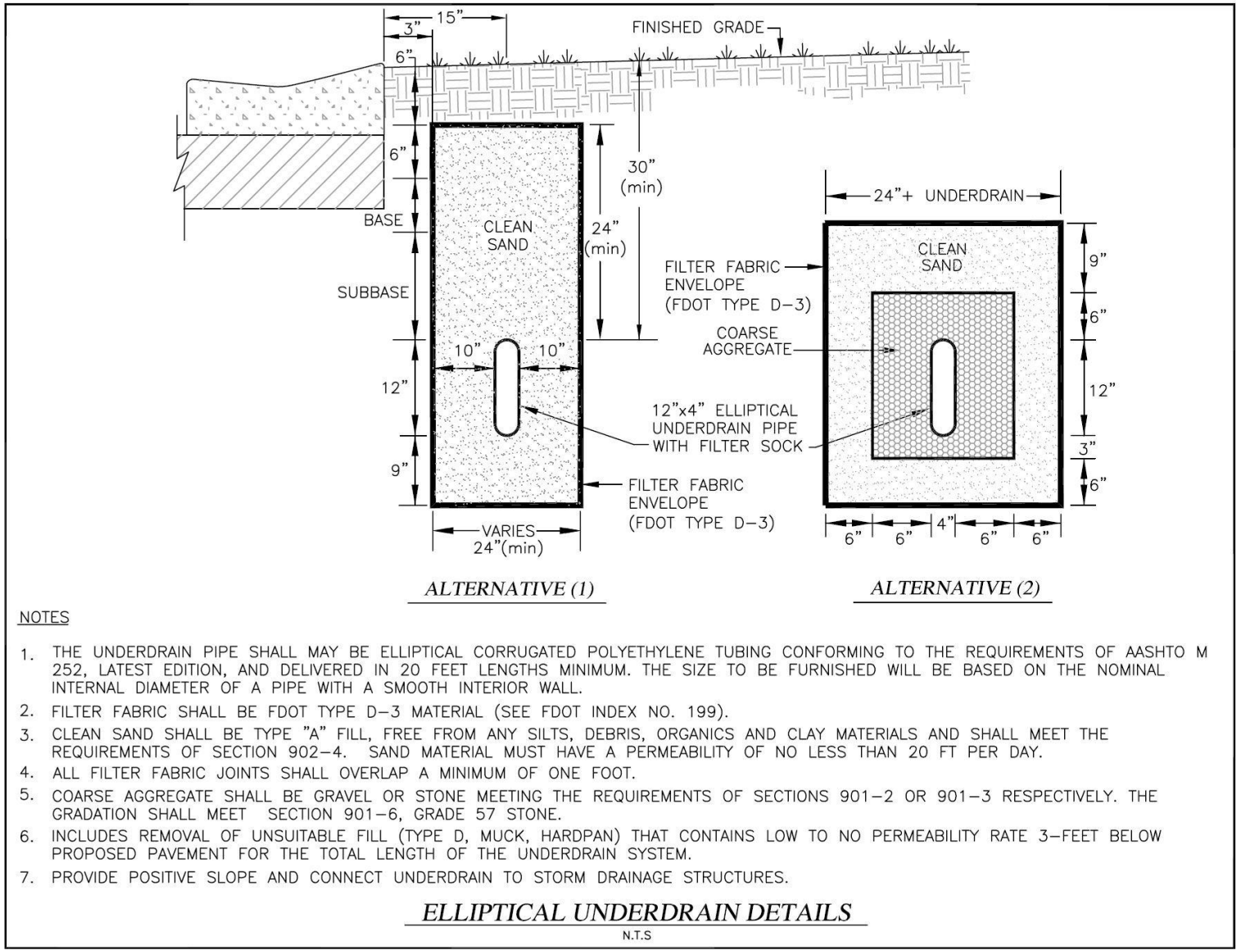

NOTES

1. THE UNDERDRAIN PIPE SHALL HAVE A DIAMETER OF SIX (6") INCHES AND CONSIST OF CORRUGATED POLYETHYLENE TUBING CONFORMING TO THE REQUIREMENTS OF AASHTO M 252, LATEST EDITION, AND DELIVERED IN 20 FEET LENGTHS MINIMUM. THE SIZE TO BE FURNISHED WILL BE BASED ON THE NOMINAL INTERNAL DIAMETER OF A PIPE WITH A SMOOTH INTERIOR WALL.
2. FILTER FABRIC SHALL BE FDOT TYPE D-3 MATERIAL (SEE FDOT INDEX NO. 199).
3. CLEAN SAND SHALL BE TYPE "A" FILL, FREE FROM ANY SILTS, DEBRIS, ORGANICS AND CLAY MATERIALS AND SHALL MEET THE REQUIREMENTS OF SECTION 902-4. SAND MATERIAL MUST HAVE A PERMEABILITY OF NO LESS THAN 20 FT PER DAY.
4. ALL FILTER FABRIC JOINTS SHALL OVERLAP A MINIMUM OF ONE FOOT.
5. COARSE AGGREGATE SHALL BE GRAVEL OR STONE MEETING THE REQUIREMENTS OF SECTIONS 901-2 OR 901-3 RESPECTIVELY. THE GRADATION SHALL MEET SECTION 901-6, GRADE 57 STONE.
6. INCLUDES REMOVAL OF UNSUITABLE FILL (TYPE D, MUCK, HARDPAN) THAT CONTAINS LOW TO NO PERMEABILITY RATE 3-FEET BELOW PROPOSED PAVEMENT FOR THE TOTAL LENGTH OF THE UNDERDRAIN SYSTEM.
7. PROVIDE POSITIVE SLOPE AND CONNECT UNDERDRAIN TO STORM DRAINAGE STRUCTURES.

*CIRCULAR UNDERDRAIN DETAILS*

N.T.S

## Figure 12. Elliptical Underdrain




NOTES

1. THE UNDERDRAIN PIPE SHALL MAY BE ELLIPTICAL CORRUGATED POLYETHYLENE TUBING CONFORMING TO THE REQUIREMENTS OF AASHTO M 252, LATEST EDITION, AND DELIVERED IN 20 FEET LENGTHS MINIMUM. THE SIZE TO BE FURNISHED WILL BE BASED ON THE NOMINAL INTERNAL DIAMETER OF A PIPE WITH A SMOOTH INTERIOR WALL.
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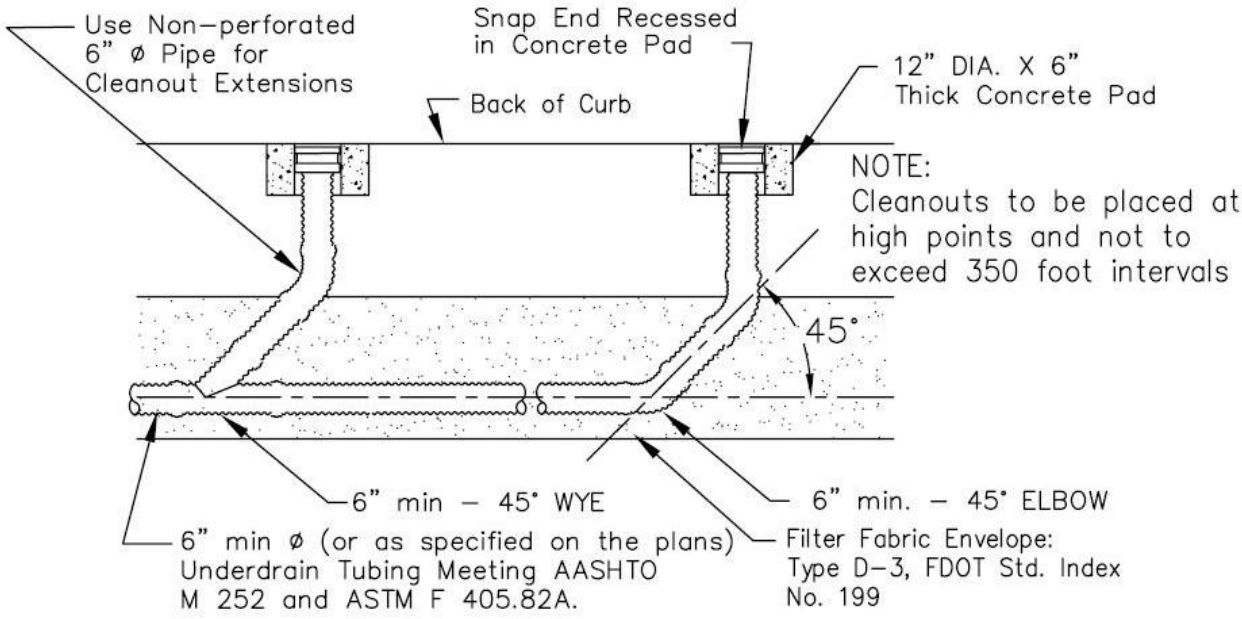
7. PROVIDE POSITIVE SLOPE AND CONNECT UNDERDRAIN TO STORM DRAINAGE STRUCTURES.

*ELLIPTICAL UNDERDRAIN DETAILS*

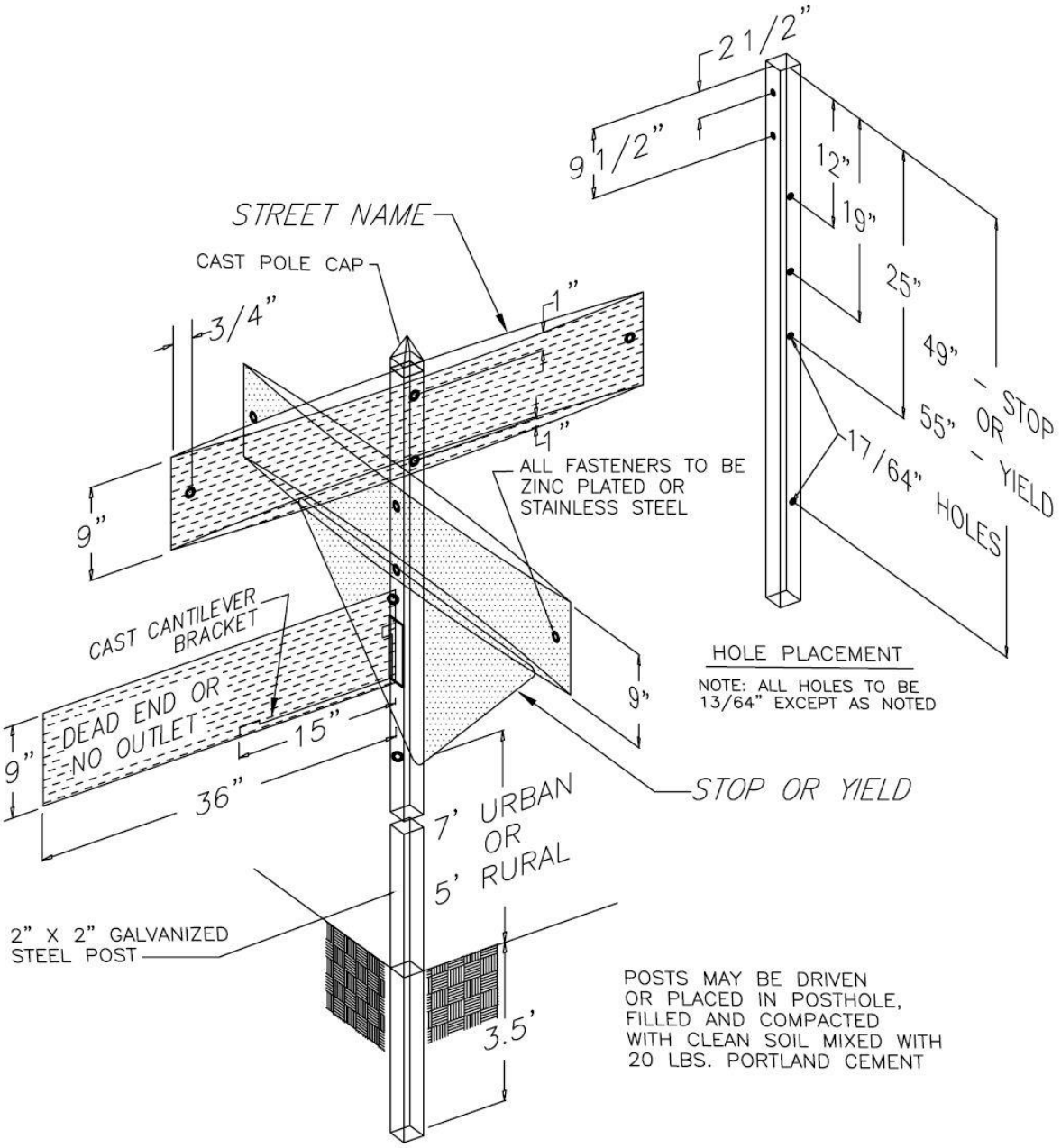
N.T.S

## Figure 13. Underdrain Cleanout




UNDERDRAIN CLEANOUT DETAIL

## Figure 14. Street Signs




STREET NAME SIGN ASSEMBLIES

LOCAL ROADS

SECTION 3. Roadway Sign Assemblies

3.1 This work consists of furnishing and erecting aluminum or fiberglass reinforced plastic reflectorized roadway signs with supporting posts. Fiberglass reinforced plastic sign material shall be approved by the Engineer, and shall be used only for sign panels of 3 square feet or less.

Sign assemblies shall be installed at locations indicated on the plans and in substantial compliance with the Manual on Uniform Traffic Control Devices. They shall be assembled as described on the plans or as follows:

Street name assembly facing arterial or collector roadway: 10" or 12" height single faced aluminum sign with length sufficient to accommodate 6" U.C./ 4.5" L.C. series C lettering per Standard Alphabets for Highway Signs, spaces expanded not more than 25% nor condensed more than 10%, with white border, to be mounted in pairs, back to back. Street name assembly facing local street: Same as above, except 9" height, with 5" U.C./ 3.75" L.C. series C lettering. Street name signs shall be white on green, except signs designating non-county maintained roads shall be white on blue. 30" R1-1 STOP or 36" R 1-2 YIELD mounts immediately below street names, but 7' minimum above ground to bottom of signs (5' rural areas). 36"x 10" or 12" W14-1 DEAD END or NO OUTLET sign where indicated on the plans shall be mountedwith a 14.5" minimum cast aluminum cantilever bracket fabricated for this purpose. Post shall be 2"x 2" square 14 gauge hot dipped galvanized steel with a cast pyramid cap, of sufficient length to embed 36" below grade. See Street Name Assembly figure.

Regulatory and warning signs up to 7.5 square feet shall be mounted 7' minimum above grade in pedestrian areas, 5' minimum in rural areas. per FDOT index 17302, The Florida Department of Transportation Standard Specifications for Road and Bridge Construction.

3.2 Materials: Aluminum sign panels shall meet the requirements of the Aluminum Association Alloy 6061-T6 (ASTM B209, B221, or B308). Panels are to be degreased, etched, neutralized and treated with Alodine 1200, Bonderite 721, Iridite 14-2. Sign panel thickness shall be:

| | |
|---|---|
| 9"- 12" street name signs (up to 6' length) | 0.063" |
| all other signs up to 7.5 square feet | 0.080" |
| signs 7.5 square feet or more | 0.100" |

Sign posts shall be 2"x2" square 14 gauge hot dipped galvanized steel posts, except that for signs other than street name assemblies or other intersection signs, 3 lb./ft. galvanized steel flanged channel posts be used. Hot dip dalvanizing shall be according to ASTM A 123 or A 153.

Bolt, nut and washer materials shall conform to the requirements of ASTM A 325M and shall be zinc plated (Class 50 of ASTM B 695) or stainless steel. 0.50 nom. bolts or rivets shall be used for fastening street name panels to posts or to each other; 0.625" nom. bolts or rivets shall be used for fastening all other signs to posts. Aluminum bolts, washers (2024-T4) and nuts (6061-T6) shall be used to fasten aluminum panels to aluminum members.

Encapsulated lens sheeting shall conform to the requirements of Section 994 of the Florida Department of Transportation Standard Specifications for Road and Bridge Construction. Signs shall have Type III-A (high intensity) sheeting, except that all signs placed over the roadway and stop signs facing collector or arterial roadways shall have Type III-D (prismatic) sheeting.

3.3 Erection: Posts shall be placed at locations shown on the plans. Underground utilities should be located prior to placing. Posts may be driven or placed in post holes. Postholes shall be filled with clean dirt mixed with 20 pounds of portland cement, and uniformly compacted, tamped in 4" layers.

Signs or sign assemblies of 5 feet width or greater OR 7.5 square feet or more shall be assembled and erected as indicated on the plans.

## Figure 15. Jack and Bore

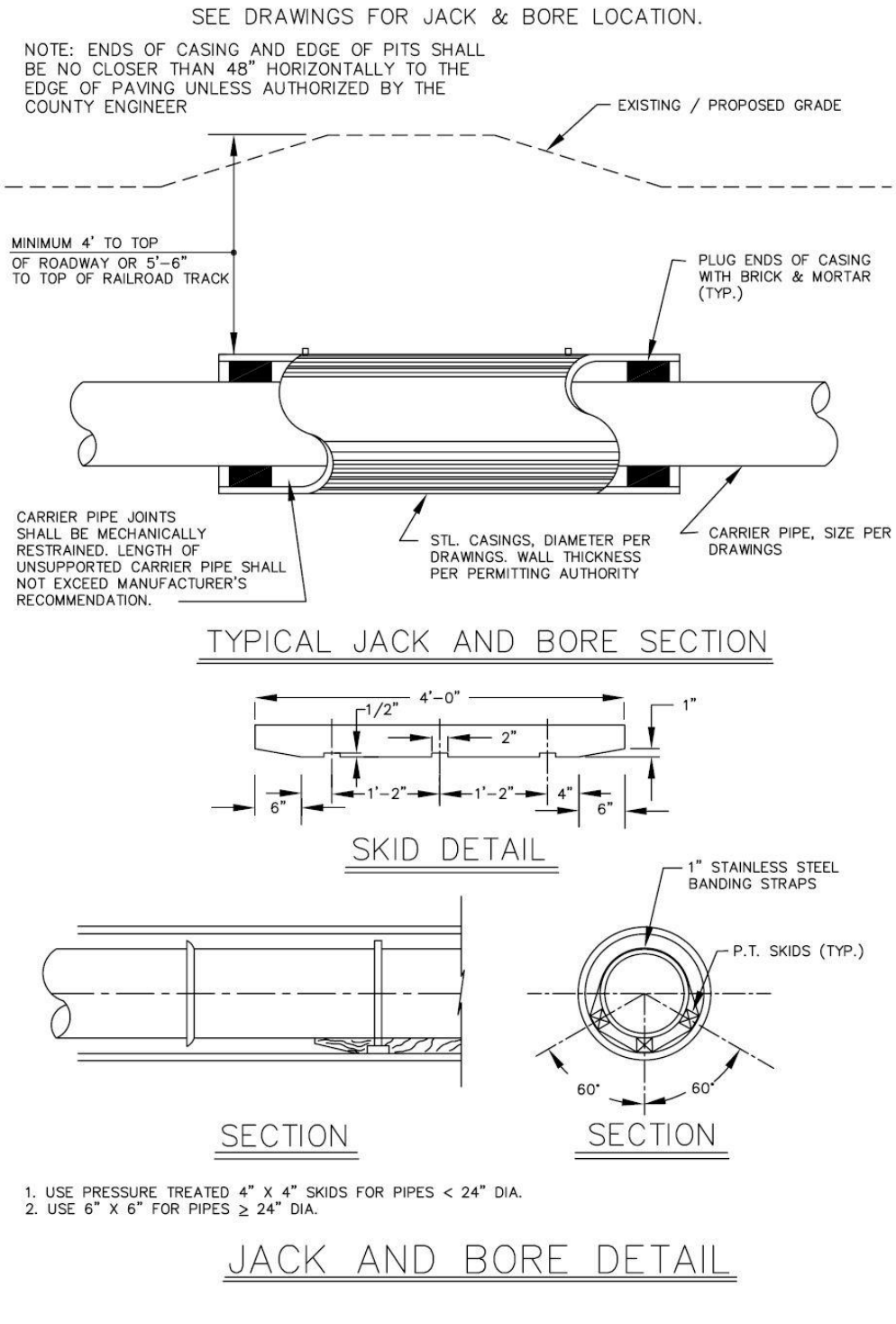
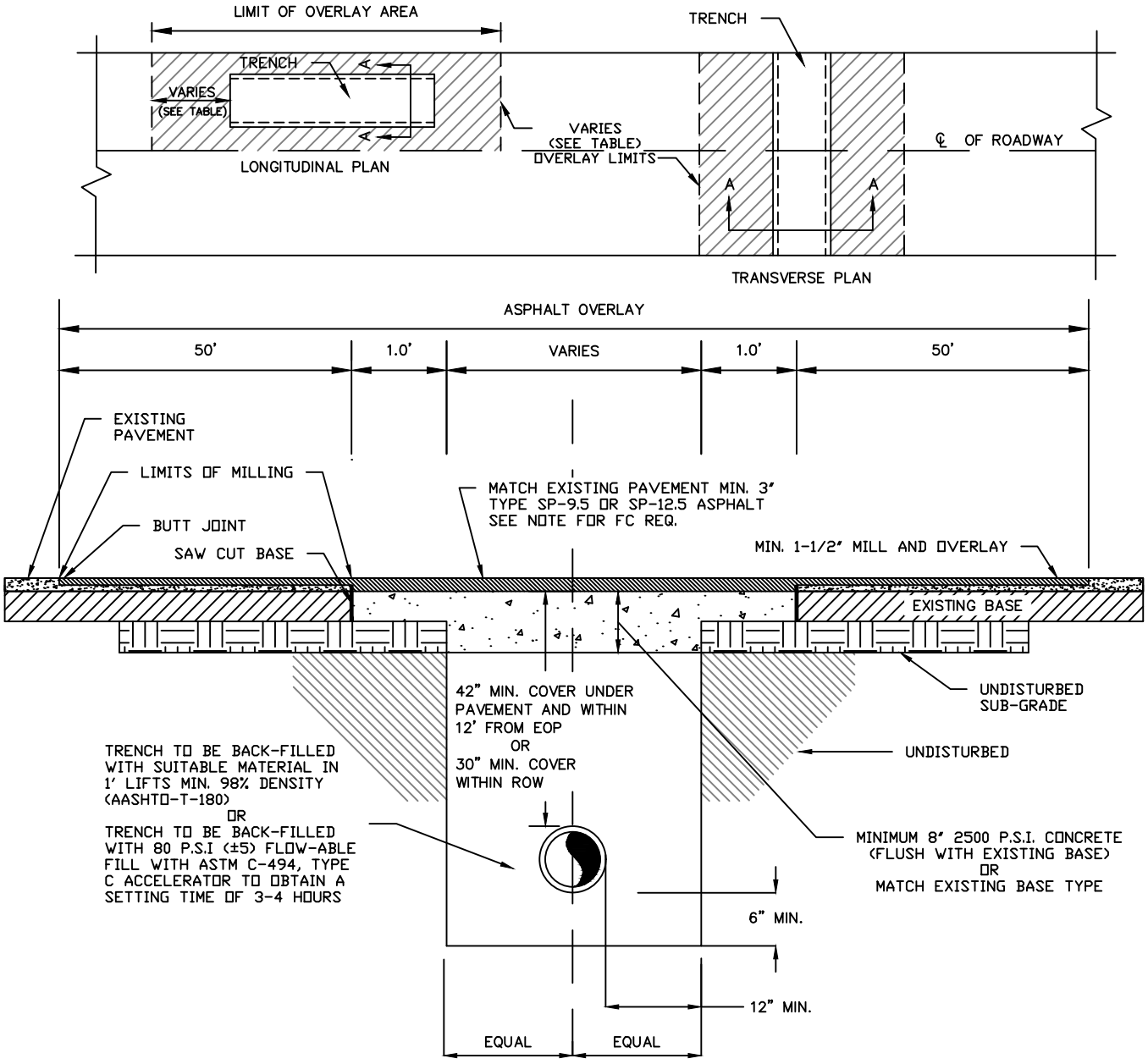


**Figure 16. Open Cut**

# OSCEOLA COUNTY STANDARD OPEN CUT DETAIL

(PAGE 1 OF 2)




## SECTION A-A
## NTS

(SEE NOTES ON PAGE 2 OF DETAIL)



**Revised 02/13/2024**

**Figure 16. Open Cut**

# OSCEOLA COUNTY STANDARD OPEN CUT DETAIL



## GENERAL NOTES:

1. OPEN CUTS ARE NOT PERMISSIBLE FOR ROADS WITH PAVEMENT LESS THAN 5 YEARS OLD WITHIN ARTERIAL AND COLLECTOR ROADWAYS (EXCEPT FOR LOCAL STREETS).
2. EXTENT OF OVERLAY AND RESURFACING SHALL BE ESTABLISHED BY THE COUNTY ENGINEER.
3. A RIGHT OF WAY PERMIT SHALL BE REQUIRED FOR ALL OPEN CUTS WITHIN COUNTY RIGHT-OF-WAY THROUGH THE PUBLIC WORKS DEPARTMENT.
4. FOLLOW THE LATEST EDITION OF THE FDOT STANDARDS FOR ROAD AND BRIDGE CONSTRUCTION.
5. EXCAVATIONS SHALL BE PERFORMED IN ACCORDANCE WITH O.S.H.A. TRENCH SAFETY REQUIREMENTS.
6. IF THE EXISTING PAVEMENT CONTAINS FRICTION COURSE (FC), THEN THE MILLING DEPTH WILL BE INCREASED FOR THE FC THICKNESS.
7. OPEN CUT IN A MEDIAN OPENING REQUIRES MILLING AND RESURFACING FROM TRAVEL LANE TO TRAVEL LANE AND MEDIAN NOSE TO MEDIAN NOSE.
8. QUALITY CONTROL: FURNISH A 15' MANUAL AND 15' ROLLING STRAIGHT EDGE FOR SMOOTHNESS AND TAKE A MINIMUM OF ONE (1) 6" CORE OF THE PAVED AREAS FOR EACH 100 FEET IN LENGTH.
9. THE OPEN CUT TRENCH AREA WILL REQUIRE A MINIMUM OF 3-INCH TYPE SP-9.5 OR TYPE SP-12.5 PAVEMENT.
10. ALL STRIPING, REFLECTORS OR OTHER EXISTING MARKINGS REMOVED BY OVERLAYING SHALL BE RESTORED TO ORIGINAL CONDITIONS PRIOR TO INITIAL ACCEPTANCE BY INSPECTOR.
11. MAINTENANCE OF TRAFFIC (MOT) PLANS MUST BE APPROVED BY OSCEOLA COUNTY PRIOR TO ANY CONSTRUCTION BEGINNING.
12. PAVEMENT MIX DESIGN TO BE SUBMITTED FOR APPROVAL.

## OVERLAY STANDARDS:

LOCAL STREETS: MINIMUM OF 50' ON EITHER SIDE OF OPEN CUT.

INTERSECTIONS: OVERLAY MUST COVER ALL INTERSECTION AREAS UP TO ALL PCs.

COLLECTORS AND ARTERIAL ROADS: NORMAL OVERLAY IS 150' EACH WAY. OVERLAY MAY EXTEND UP TO 750' EACH WAY FOR NEWLY CONSTRUCTED BOULEVARDS THAT ARE CONSIDERED FRAMEWORK ROADS (LESS THAN 5 YEARS OLD).

THE OVERLAY LIMITS MAY BE EXTENDED IN THE FIELD DUE TO SITE CONDITIONS (JOINTS, NEARBY DAMAGED PAVEMENT, ECT).

*ALL OPEN CUTS MUST BE APPROVED BY THE COUNTY ENGINEER OR DESIGNEE.

## COLLECTOR AND ARTERIAL ROADS:

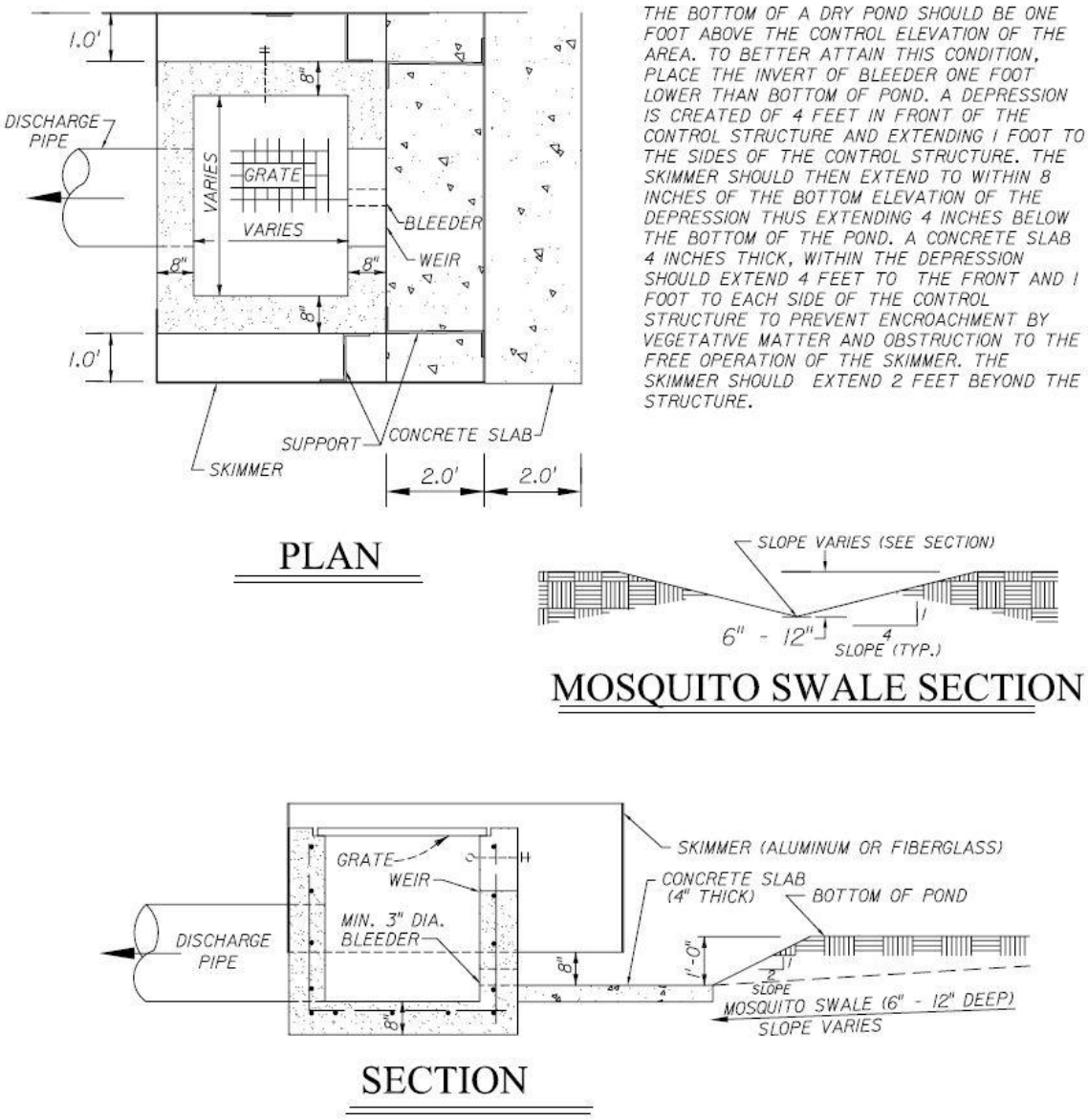
OPEN CUT PERMITTED UNDER THESE CONDITIONS:

* DURING EMERGENCY SITUATIONS:
* LACK OF STAGING AREAS:
* POOR AND DETERIORATING PAVEMENT CONDITIONS:
* ROADWAY IS EARMARKED TO BE RESURFACED OR WIDENED WITHIN THE NEXT TWO (2) YEARS; OR
* ROADWAY IS PART OF AN APPROVED SITE DEVELOPMENT PLAN RECONSTRUCTION WORK.



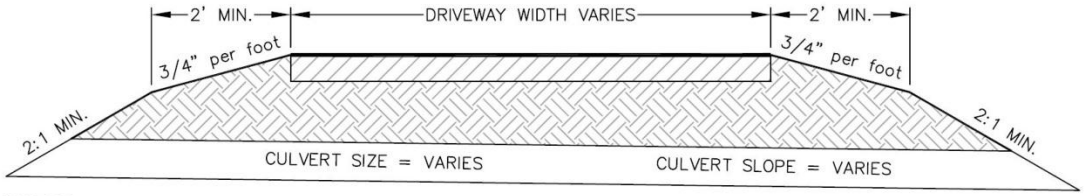
**Revised 02/13/2024**

## Figure 17. Dry Detention Pond Control Structure




TYPICAL DRY POND CONTROL STRUCTURE DETAIL

## Figure 18. Driveway Culvert



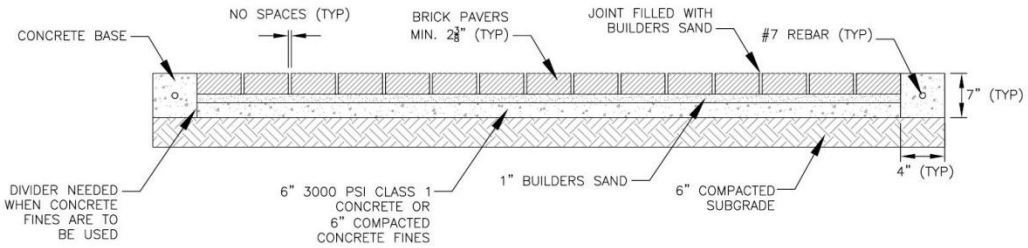

NOTES:

1. PIPES TO BE USED FOR DRIVEWAY CROSSINGS OF OUTFALL PIPES WITHIN COUNTY RIGHT-OF-WAY SHALL BE MINIMUM FIFTEEN (15) INCHES WITH MITERED ENDS LDC 4.5.3.F1.b
2. THE CULVERT LENGTH SHALL BE FORMULATED FROM THE DRIVEWAY WIDTH ALONG WITH THE SLOPE DIMENSIONS AND MITERED END SECTIONS.

DRIVEWAY CULVERT SECTION

SCALE: NTS

## Figure 19. Brick Paver Driveway



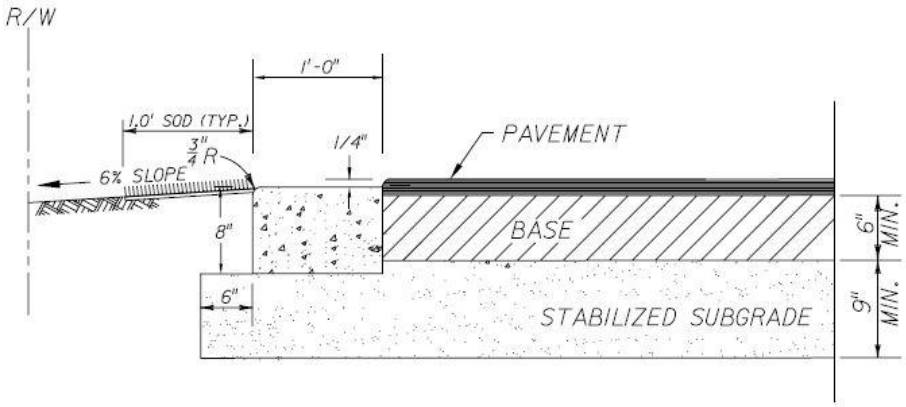

NOTES:

1. OSCEOLA COUNTY WILL NOT MAINTAIN, REPAIR AND REPLACE ANY BRICK PAVERS LOCATED WITHIN THE COUNTY RIGHT-OF-WAY.
2. THE ABOVE DETAIL IS FOR THE PORTION OF BRICK PAVED DRIVEWAYS LOCATED WITHIN THE COUNTY RIGHT-OF-WAY.
3. CRUSHED CONCRETE BASE MAY ONLY BE USED WITH CURB AND GUTTER DRAINAGE SYSTEMS.

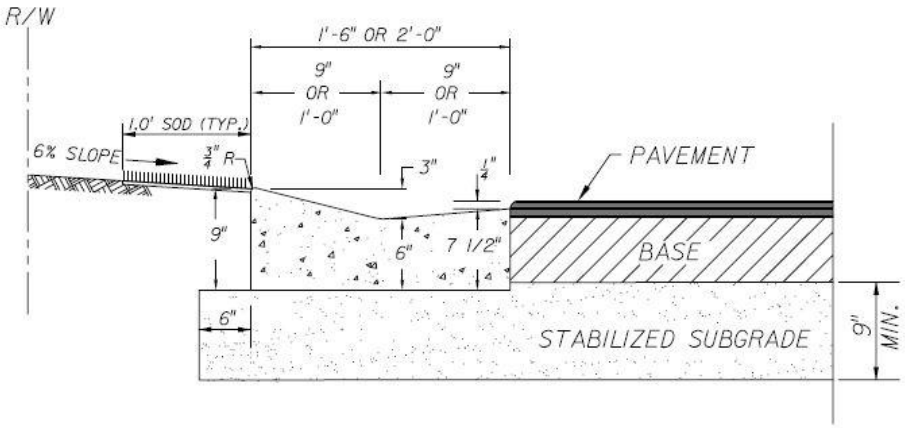
TYPICAL SECTION FOR DRIVEWAY PAVERS

SCALE: NTS

## Figure 20. Miami Curb and Ribbon Curb




STANDARD CONCRETE RIBBON CURB




STANDARD CONCRETE MIAMI CURB