**STANDARD DETAIL INDEX**

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GENERAL NOTES

PUBLICATIONS, CODES AND SPECIFICATIONS, AS HEREINAFTER LISTED AND REFERENCED THROUGHOUT THESE REGULATIONS, ARE A PART OF THIS DIVISION JUST AS IF INCORPORATED THEREIN. REFERENCE IS INTENDED TO REFER TO THE LATEST REVISION OR PUBLICATION WHICH HAS BEEN OFFICIALLY ADOPTED BY THE ISSUING AGENCY UNLESS A DATED ISSUE IS INDICATED. REFERENCE IN F.D.O.T. STANDARD SPECIFICATIONS TO THE STATE SHALL BE INTERPRETED TO MEAN THE COUNTY ENGINEER OR PROJECT ENGINEER, DEPENDING ON THE RESPONSIBILITIES ASSIGNED BY REQUIREMENTS HEREIN. REFERENCE TO TESTING, SAMPLING, JOB MIXTURES AND OTHER QUALITY CONTROL PROVISIONS THEREIN ARE DELETED IN FAVOR OF QUALITY CONTROL PROVISIONS OF THESE REQUIREMENTS.

MINIMUM STANDARDS: THE REQUIREMENTS INCLUDED HEREIN ARE MINIMUM STANDARDS CONSIDERED ONLY AS BASIC REQUIREMENTS FOR PERFORMANCE, STRUCTURAL SUITABILITY AND DURABILITY. ALL PROPOSED CONSTRUCTION MUST BE DESIGNED WITH FULL CONSIDERATION GIVEN TO THE FUNCTIONAL, STRUCTURAL AND AESTHETIC REQUIREMENTS OF THE PARTICULAR INSTALLATION. WHERE STRICT ADHERENCE TO THE STANDARDS IS NOT PRACTICAL, A DEVIATION MAY BE GRANTED BY THE COUNTY ENGINEER.
TRENCH WIDTH + 4'

CONC. PAVEMENT REPLACEMENT (3000 P.S.I. CONCRETE)

EXISTING CONC. PAVEMENT, (T)

VARES

1.5'

2.0'

(T) OR 6" MIN.

TRENCH WIDTH + 4'

ASPHALT PAVEMENT & OVERLAY (SEE NOTE NO. 8)

RIGID PAVEMENT

FLEXIBLE PAVEMENT

SAW CUT JOINT

EXISTING ASPHALT

2.0'

2 x (T) OR

12" MIN.

SHELL BASE REPLACEMENT

EXISTING BASE

(T) = 9" MIN.

BACKFILL TRENCH WITH SUITABLE MATERIAL

IN 6" COMPACTED LAYERS TO 95%


NOTES:

1. APPROVED BASE MATERIAL SHALL BE COMPACTED IN 6" LIFTS MAX. TO 98% DENSITY PER A.A.S.H.T.O. T-180.

2. APPROVED SUB-BASE MATERIAL SHALL BE PLACED IN 6" LIFTS AND COMPACTED TO 95% DENSITY PER A.A.S.H.T.O. T-180.

3. ASPHALT CONCRETE PAVEMENT JOINTS SHALL BE MECHANICALLY SAWED.

4. SURFACE TREATED PAVEMENT JOINTS SHALL BE LAPPED AND FEATHERED.

5. SURFACE MATERIAL SHALL BE CONSISTENT WITH EXISTING SURFACE. ASPHALT SHALL BE TYPE III AND EQUAL TO OR GREATER IN THICKNESS. MINIMUM THICKNESS FOR ASPHALT SHALL BE 1-1/2".

6. CONCRETE PAVEMENT JOINTS SHALL BE MECHANICALLY SAWED COMPLETELY THROUGH.

7. CONCRETE PAVEMENT REPLACEMENT SHALL EXTEND 3" BEYOND THE EDGE OF PAVEMENT.

8. BASE MATERIAL SHALL BE PRIMED AND TACKED IN ACCORDANCE WITH SECTION 300 OF THE F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION).

9. a. IN 30 M.P.H. SPEED ZONES, ROADWAY SHALL BE OVERLayed 20 FEET EACH SIDE OF DISTURBED AREA.

b. IN 45 M.P.H. SPEED ZONES, ROADWAY SHALL BE OVERLayed 50 FEET EACH SIDE OF DISTURBED AREA.

c. IN 55 M.P.H. SPEED ZONES, ROADWAY SHALL BE OVERLayed 100 FEET EACH SIDE OF DISTURBED AREA.

(NOTE: MINIMUM 1" OVERLAY IS REQUIRED.)

10. ROADWAY SURFACE DISTORTION AS A RESULT OF JACK AND BORE (SETTLING OR HUMPING OF ROADWAY) OR ANY OTHER FORM OF DAMAGE WHICH WOULD REQUIRE PATCHING, SHALL BE OVERLayed WITH TYPE III ASPHALTIC CONCRETE AS OUTLINED IN NOTE NO. 9.

11. ALL STRIPPING, REFLECTORS, AND OTHER MARKINGS OBSCURED BY OVERLAY SHALL BE RESTORED IN ACCORDANCE WITH F.D.O.T. STANDARDS AND TO THE SATISFACTION OF DESOTO COUNTY.
NOTE:
SUB-GRADE, STABILIZED SHOULDER, SHELL OR LIMEROCK BASE COURSE, PRIME COAT APPLICATION AND ASPHALTIC CONCRETE SURFACE COURSE ALONG WITH THE STRUCTURAL NUMBER OF THE PAVEMENT SECTION SHALL CONFORM TO DETAILS D-17A THROUGH D-17F.
NOTE:
SUB-GRADE, STABILIZED SHOULDER, SHELL OR LIMEROCK BASE COURSE, PRIME COAT APPLICATION AND ASPHALTIC CONCRETE SURFACE COURSE ALONG WITH THE STRUCTURAL NUMBER OF THE PAVEMENT SECTION SHALL CONFORM TO DETAILS D-17A THROUGH D-17F.
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NOTE:
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FOR RIGHT-OF-WAYS
80' AND GREATER

CONSTRUCTION SHALL CONFORM
TO THE REQUIREMENTS OF THE
U. S. POSTAL SERVICE

FOR RIGHT-OF-WAYS
LESS THAN 80'

CONSTRUCTION SHALL CONFORM
TO THE REQUIREMENTS OF THE
U. S. POSTAL SERVICE
SECTION A-A

MATCH EXIST. GRADE

R/W LINE

NOTE:
RESIDENTIAL
"W"=12' MIN, 24' MAX.
NON-RESIDENTIAL
"W"=24' MIN, 36' MAX.

COMMERCIAL DRIVEWAYS RADIUS
VARIES 25'-50' (TYP.)

OPTIONAL 18' RADIUS
FOR RESIDENTIAL

PLAN VIEW

(A) CONSTRUCT WITH 6" REINFORCED CONCRETE (3,000 psi @ 28 DAYS) WITH 6"x6" #10 MESH FROM EDGE OF PAVEMENT TO THE RIGHT-OF-WAY LINE.

(B) DRIVEWAYS ADJACENT TO A PAVED ROADWAY MUST HAVE THE APRON CONSTRUCTED IN COMPLIANCE WITH THE NOTE (A) ABOVE.

(C) EXISTING DRAINAGE FLOWLINE TO BE MAINTAINED. PIPING MAY BE REQUIRED AT THE COUNTY'S DISCRETION.

(D) 3"x8" FLARED APRON IS MINIMAL, OR 18' RADIUS.

(E) IF THE DRIVEWAY SLOPE IS STEEPER THAN 1:14, A STORM PIPE WITH MITERED ENDS SHALL BE INSTALLED.

(F) NO DRIVEWAY RETURN, AT THE EDGE OF PAVEMENT, SHALL BE CLOSER THAN 50' FROM THE INTERSECTING STREET EDGE OF PAVEMENT.
MITERED END SECTIONS

4:1 SLOPE

MINIMUM WIDTH - BACK OF DRIVE AT RIGHT-OF-WAY LINE

6' CONC 12' WIDTH W/MIN. 6"x6" #10 MESH

MINIMUM OR THE ELLIPTICAL EQUIVALENT

RCP

18" Ø MINIMUM OR THE ELLIPTICAL EQUIVALENT

24' MINIMUM, PLUS MITERED END SECTIONS

TYPICAL DRIVEWAY

VARIABLES: TOTAL OF 1’ OF COVER. HDPE OR CMP PIPE IS ACCEPTABLE IN LIEU OF RCP.
R.C.P. WILL REQUIRE A MINIMUM 6” OF COVER BENEATH BOTTOM OF DRIVEWAY, FOR A

NOTE: 1) GRADES AND LOCATIONS MUST BE REVIEWED AND APPROVED BY THE COUNTY ENGINEERING
STAFF FOR ALL PIPE INSTALLATIONS.

2) ACTUAL REQUIRED PIPE DIAMETER WILL BE BASED ON THE FLOW RATE REQUIRED TO
PASS THROUGH PIPE SO AS NOT TO IMPOUND WATER UPSTREAM.

3) PIPE SIZE TO BE DETERMINED AND APPROVED BY DESOTO COUNTY.
NOTE: ON SIDE DRAIN M.E.S., BARS ONLY
TO BE USED ON ROUND PIPE 30"
IN DIA. & GREATER, ELIPTICAL PIPE
19" X 30" & GREATER, AND ARCH PIPE
35" X 24" OR GREATER. FOR BAR SIZE
SEE F.D.O.T. INDEX NO. 273

PLAN VIEW

SECTION A–A

END VIEW
NOTE: FILTER FABRIC NOT REQUIRED WHEN AN O-RING GASKET IS USED.

NOTE: FILTER FABRIC MATERIAL MUST MEET THE FOLLOWING ASTM REQUIREMENTS:
- ASTM D 4595
- ASTM D 4632
- ASTM D 4533
- ASTM D 4833
- ASTM D 4491

NOTE: FILTER FABRIC WRAP

ISOMETRIC VIEW

OVERLAP 2' MIN

JOINT

12" MIN.

12" MIN.

NOTE: NOT NECESSARY WITH O-RING GASKET

BUTT JOINT

12" MIN.

12" MIN.

BELL JOINT

WOVEN OR NON-WOVEN FILTER FABRIC

VAREYES
BROOM FINISH
SLOPE: PER PLAN (TYP. 2%)  
1/2" R (TYP.)

4" THICK CONCRETE SIDEWALK

THE PROPOSED FILL SHALL BE COMPACTED IN 12" LIFTS TO 95% MAXIMUM DENSITY IN ACCORDANCE WITH AASHTO T-180

SIDEWALK NOTES:

1. CONCRETE SHALL HAVE A COMPRESSION STRENGTH OF 3000 P.S.I. IN 28 DAYS.

2. CONTRACTION JOINTS SHALL BE SAW CUT TO A 1 1/2" DEPTH AT INTERVALS EQUAL TO THE WIDTH OF THE SIDEWALK AND MAXIMUM SPACING OF 5.0'.

3. AN EXPANSION JOINT WILL BE PLACED AT THE END OF ALL RETURNS, AT FIXED OBJECTS (DRIVEWAYS, CURBS ETC.) AND INTERVALS NOT TO EXCEED 20'. EXPANSION JOINTS SHALL BE CONSTRUCTED WITH 1/2" PREMOLDED EXPANSION JOINT MATERIAL.

4. ALL SIDEWALKS AND SIDEWALK CROSSING SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA).

TYPE 'A'

LOCATION
5' 0" CENTER TO CENTER ON SIDEWALKS.

NOTES:

1. ALL ORGANIC MATERIAL & DEBRIS SHALL BE REMOVED & AREA SHALL BE GRADED & COMPACTED PRIOR TO CONCRETE PLACEMENT.

2. THE MINIMUM COMPRESSION STRENGTH OF THE CONCRETE SHALL BE CLASS 1, 3,000 P.S.I. @ 28 DAYS.
CURB NOTES:

1) CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 3,000 P.S.I. IN 28 DAYS.

2) AN EXPANSION JOINT WILL BE PLACED AT THE END OF ALL RETURNS AND AT INTERVALS NOT TO EXCEED 20’. CONSTRUCTION JOINTS AT A MAXIMUM SPACING OF 10’ SHALL BE SAW CUT 1-1/2” DEEP.

3) EXPANSION JOINTS SHALL BE CONSTRUCTED WITH 1/2” BITUMINOUS IMPREGNATED EXPANSION JOINT MATERIAL.
CURB NOTES:

1) CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 3,000 P.S.I. IN 28 DAYS.

2) WHEN USED ON THE HIGH SIDE OF THE ROADWAY THE CROSS SLOPE OF THE GUTTER SHALL MATCH THE CROSS SLOPE OF THE ADJACENT PAVEMENT.

3) AN EXPANSION JOINT WILL BE PLACED AT THE END OF ALL RETURNS AND AT INTERVALS NOT TO EXCEED 20’. CONSTRUCTION JOINTS AT A MAXIMUM SPACING OF 10’ SHALL BE SAW CUT 1-1/2” DEEP.

4) EXPANSION JOINTS SHALL BE CONSTRUCTED WITH 1/2” BITUMINOUS IMPREGNATED EXPANSION JOINT MATERIAL.
CURB NOTES:

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3) EXPANSION JOINTS SHALL BE CONSTRUCTED WITH 1/2" BITUMINOUS IMPREGNATED EXPANSION JOINT MATERIAL.
NOTE:
ON SIDE DRAIN M.E.S. BARS SHALL ONLY BE USED ON ELLIPTICAL PIPE 19*430° ERCP
& GREATER. FOR BAR SIZE SEE F.D.O.T. INDEX NO. 273

ELLiptical concrete pipe

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<td>Rise</td>
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SECTION

FOR NON-RESIDENTIAL USE
NOTE:
ON SIDE DRAIN M.E.S., BARS SHALL ONLY BE USED ON ROUND PIPE 30" IN DIA. & GREATER. FOR BAR SIZE SEE F.O.O.T. INDEX NO. 273

ROUND CONCRETE PIPE

<table>
<thead>
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<th>X</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>Single</th>
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NOTE:
ON SIDE DRAIN M.E.S., BARS SHALL ONLY BE USED ON ROUND PIPE 30" IN DIA. & GREATER. FOR BAR SIZE SEE F.O.O.T. INDEX NO. 273

SECTION

FOR NON-RESIDENTIAL USE

DESOETO COUNTY
ENGINEERING DEPARTMENT
201 EAST OAK STREET, SUITE 201
ARCARA, FLORIDA 34288 OFFICE
863-491-8165 FAX
863-491-6163

MITERED END SECTION ROUND CONCRETE PIPE

REVISION DATE: SCALE: DETAIL
3-24-16 NOT TO SCALE D - 11B
**STRIPING NOTES**

1. STRIPING AND SIGNAGE SHALL CONFORM WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND THE F.D.O.T. STANDARD INDEX DRAWINGS FOR SUCH.

2. ALL STRIPING FOR THE INTERSECTIONS SHALL CONFORM WITH THE F.D.O.T. STANDARD INDEX NO. 17346

3. ALL STRIPING SHALL BE PAINT.
NOTE:
SUB-GRADE, STABILIZED SHOULDER, SHELL OR LIMEROCK BASE COURSE, PRIME COAT APPLICATION AND ASPHALTIC CONCRETE SURFACE COURSE ALONG WITH THE STRUCTURAL NUMBER OF THE PAVEMENT SECTION SHALL CONFORM TO DETAILS D-17A THROUGH D-17F.
PAVEMENT SECTION NO. 1
STRUCTURAL NO. = 2.40

MINIMUM STANDARD FOR STABILIZED GRAVEL ROADWAYS, FIRE ACCESS & PARKING AREAS ALLOWED BY CODE

NOTE:
ALTERNATE PAVEMENT DESIGNS CONFORMING TO A STRUCTURAL NUMBER FOR THAT PAVEMENT SECTION MAY BE APPROVED BY THE COUNTY ENGINEER.
1-1/2" Type S-1 Asphalt w/ Prime/Tack Coat (SN = 0.66)

6" Shell / Limerock Base - LBR 100 Min. Compacted to 98% Density, Modified Proctor (AASHTO T-180) (SN = 1.08)

8" Stabilized Subgrade - LBR 40 Min. Compacted to 98% Density, Modified Proctor (AASHTO T-180) (SN = 0.64)

PAVEMENT SECTION NO. 2
STRUCTURAL NO. = 2.38
LIGHT TRAFFIC - ON-SITE ONLY

NOTE:
ALTernate pavement designs conforming to a structural number for that pavement section may be approved by the county engineer.
1" TYPE S-3 ASPHALT W/ TACK COAT (SN = 0.44)

1-1/2" TYPE S-1 ASPHALT W/ PRIME/TACK COAT (SN = 0.66)

8" SHELL / LIMEROCK BASE - LBR 100 MIN. COMPACTED TO 98% DENSITY, MODIFIED PROCTOR (AASHTO T-180) (SN = 1.44)

12" STABILIZED SUBGRADE - LBR 40 MIN. COMPACTED TO 98% DENSITY, MODIFIED PROCTOR (AASHTO T-180) (SN = 0.96)

PAVEMENT SECTION NO. 3
STRUCTURAL NO. = 3.50
MINIMUM STANDARD FOR PUBLIC ROADWAY & ASPHALT DRIVEWAY WITHIN THE PUBLIC RIGHT-OF-WAY & MODERATE ON-SITE TRAFFIC

NOTE: ALTERNATE PAVEMENT DESIGNS CONFORMING TO A STRUCTURAL NUMBER FOR THAT PAVEMENT SECTION MAY BE APPROVED BY THE COUNTY ENGINEER.
PAVEMENT SECTION NO. 4
STRUCTURAL NO. = 4.52

Minimum standard for large commercial vehicle within the public right-of-way & for heavy on-site truck traffic

NOTE:
Alternate pavement designs conforming to a structural number for that pavement section may be approved by the county engineer.
Pavement Section No. 5

Minimum standard for concrete driveway within the public right-of-way

Notes:

1. Expansion joints (cold joints) shall be 1/2" expansion joint material and are to be spaced at 40' maximum increments and shall be shown on the plans. All expansion joints shall be sealed with "SikaFlex-1C SL" sealant and backer rod bond breaker or engineer approved equal.

2. Contraction joints shall be 1/4" x 1" deep sawcuts made on all concrete pavement. The spacing shall be as follows: the spacing shall be the equivalent to the width of the travel lane.
WORK WITHIN THE PUBLIC RIGHT-OF-WAY

1. All work within the public right-of-way requires a permit. Contact the Desoto County Development Department, Engineering Division at phone: 863-491-7543.

2. If a culvert is required, the culvert size, type and invert shall be determined by the county.

3. Required inspections:
   - At stakeout of culvert and swale
   - After pipe has been placed
   - After compaction / prior to pavement
   - Final

4. Density test:
   - Commercial development requires one test per lane, 12" lifts at 98% density modified proctor (AASHTO T-180) signed and sealed by a Florida Professional Engineer and shall be supplied to the county.

5. The Desoto County Engineering Division shall be notified a minimum of 2 business days prior to inspections / testing.
1. All dimensions shown are minimum.

2. Commercial, industrial and multifamily on-site parking shall have, as a minimum, pavement section No. 2 (Detail D-178).

3. Parking spaces shall comply with typical parking space (Detail D-19) and typical handicap parking space (Detail D-20).
TYPICAL PARKING SPACE

CONCRETE WHEEL STOP (REFER TO LR DETAIL)

6" WHITE HIGH DURABLE PAINT STRIPE OR THERMOPLASTIC STRIPE (TYP)

DESOTO COUNTY
DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION
201 EAST OAK STREET, SUITE 204
ARCADIA, FLORIDA 34266
OFFICE: 853-491-5185
FAX: 853-491-6163

DATE: 3-24-16
SCALE: NOT TO SCALE
DETAIL D-19
SECTION

4000 PSI CONCRETE

1/2" R

3/4" HOLE

1/2" R

(2) NO. 4 BARS (CONT.) TYP.

12"

NO. 4 REBAR 18" LONG SHALL BE DRIVEN AT LEAST 2" BELOW TOP OF THE WHEEL STOP AND GRouted IN WITH HIGH STRENGTH, NON-SHRINK, NON-METALLIC GROUT

ELEVATION

6'-0"

12"

2"

NOTE:

1. REBARS SHALL BE 3" CLEAR AT ENDS

2. EQUIVALENT DESIGNS MAY BE APPROVED AT THE DISCRETION OF THE COUNTY ENGINEER.

3. WHEEL STOPS SHALL BE REQUIRED ON ALL PARKING SPACES EXCEPT PARALLEL PARKING SPACES.
NOTE: PAINT SYMBOL BELOW ONTO PAVED SURFACE WITH 2 COATS OF TRAFFIC WHITE PAINT, PER FDOT SPECIFICATION.

USE OF PAVEMENT SYMBOL IN ACCESSIBLE PARKING SPACES IS OPTIONAL, WHEN USED THE SYMBOL SHALL BE 3' OR 5' HIGH AND WHITE IN COLOR.

SYMBOL FOR HANDICAPPED PARKING

NOTE:
1. WHITE AND BLUE STRIPING SHALL BE HIGH DURABLE PAINT OR THERMOPLASTIC (TYP).
NOTE:

1. An alternate mounting location, subject to ADA requirements, may be approved by the Development Director.
1. ALL CROSSWALKS AND CURB CUT RAMPS SHALL BE IN ACCORDANCE WITH FDOT STANDARDS.

2. ALL CROSSWALKS SHALL BE A MINIMUM OF 1.0' LARGER THAN THE ABUTTING SIDEWALK.
NOTE:
1. SPEED BUMPS SHALL ONLY BE USE IN ON-SITE PARKING LOTS.
2. LAY OUT AND MARK AREA FOR PLACEMENT OF SPEED BUMPS.
3. CLEAN AREA OF ALL DIRT AND DEBRIS.
4. NOTCH EXISTING ASPHALT SURFACE TO ALLEVIATE SPEED BUMP DISPLACEMENT.
5. TACK COAT AREA OF INSTALLATION USING LIQUID ASPHALT.
6. INSTALL HOT MIX SURFACE ASPHALT TO A MAXIMUM HEIGHT OF 3/8" AT THE APEX AND A WIDTH OF 18".
7. APPLY A SEAL OF LIQUID ASPHALT TO THE ADJOINING EDGE OF THE INSTALLATION TO HELP PREVENT MOISTURE PENETRATION.
8. APPLY HEAVY-DUTY REFLECTIVE TRAFFIC PAINT SUFFICIENT TO IDENTIFY THE SPEED BUMP.
9. "SPEED HUMP" WARNING SIGN (W17-1) WITH POSTED SPEED LIMIT SIGN (W13-1P) SHALL BE POSTED 100 FT. FROM THE SPEED BUMP.
10. SPEED BUMPS SHALL BE AT LEAST 25 FT. FROM ANY ROAD INTERSECTION.
11. SPEED BUMPS SHALL BE AT LEAST 80 FT. FROM AN ADJACENT CROSSWALK.
12. THE MINIMUM SPACING FOR SPEED BUMPS SHALL BE: 15 mph SPEED LIMIT THE SPACING IS 120 LF; 20 mph SPEED LIMIT THE SPACING IS 240 LF AND A 25 mph SPEED LIMIT THE SPACING IS 360 LF.
NOTE:
1. "SPEED HUMP AHEAD" WARNING SIGN (W17-1) WITH POSTED SPEED LIMIT SIGN (W13-1P) SHALL BE POSTED 100 FT. FROM THE SPEED TABLE AND A "SPEED HUMP" WARNING SIGN (W17-1) SHALL BE POSTED AT THE BEGINNING OF THE SPEED TABLE.
2. SPEED TABLES SHALL BE AT LEAST 25 FT. FROM ANY ROAD INTERSECTION.
3. SPEED TABLES SHALL BE AT LEAST 90 FT. FROM AN ADJACENT CROSSWALK.
4. THE MINIMUM SPACING FOR SPEED TABLES SHALL BE THE FOLLOWING: 15 mph SPEED LIMIT THE SPACING IS 120 LF; 20 mph SPEED LIMIT THE SPACING IS 240 LF AND A 25 mph SPEED LIMIT THE SPACING IS 360 LF.
NOTES:

1. Construct with 8" reinforced concrete (3,000 psi @ 28 days) with 6"x6" #10 mesh from edge of pavement to the right-of-way line.

2. Driveways adjacent to a paved roadway must have the apron constructed in compliance with the note no. 1 (above).

3. Existing drainage flowline to be maintained. Piping may be required at the county’s discretion.

4. No driveway return, at the edge of pavement, shall be closer than 50' from the intersecting street edge of pavement.

5. All culverts installed within the county right of way shall have mitered end sections which shall comply with the specifications as set forth in the most recent edition of the FDOT design standards manual and the Desoto County Standard Engineering Details. The Development Director, upon the advice of the County Engineer, shall have the authority to make exceptions to meet special or unique site conditions such as speed limit, cross slope of swale, width of the right of way, distance of the culvert off the edge of the pavement, neighborhood characteristics, and culvert material type.

DESOTO COUNTY DEVELOPMENT DEPARTMENT ENGINEERING DIVISION 201 EAST OAK STREET, SUITE 204 ARCADIA, FLORIDA 34266 OFFICE: 863-491-5185 FAX: 863-491-6183
BIKE RACK SHALL BE A 2½" DIA., HARDENED STEEL PIPE "RIBBON" TYPE BICYCLE RACK WITH PAINT FINISH.

4" CONCRETE FIBER MESH SLAB (6'-0"x8'-0")

FINISH GRADE

1/2" EXPANSION JOINT MATERIAL

1.0' DIA. x 2.0' DEEP CONCRETE FOOTING

NOTE:
ALL BICYCLE PARKING SPACES SHALL INCLUDE A STATIONARY PARKING DEVICE ON A CONCRETE SURFACE WHICH ADEQUATELY SUPPORTS THE BICYCLE AND MUST HOLD AT LEAST 180" OF THE WHEEL ARC.
NOTES:

1. THE INTERIOR SLAB SHALL BE 6" CONCRETE (3000 psi) WITH 6"x6"x14G/1.4 OR FIBER MESH EQUIVALENT AND A 12" WIDE X 12" DEEP CONCRETE FOOTING WITH (2) NO. 5 REBAR’S CONTINUOUS ON 12" STABILIZED SUBGRADE (LBR 40). THE INTERIOR CONCRETE SLAB SHALL BE SLOPED TO THE FRONT FOR POSITIVE DRAINAGE, UNLESS A FLOOR DRAIN IS REQUIRED. THE EXTERIOR SLAB SHALL BE 6" CONCRETE (3000 psi) WITH NO. 4 REBAR’S AT 12" O.C.E.W. AND A 12"x12" THICKENED EDGE WITH 2 NO. 5 REBAR’S CONTINUOUS ON 12" STABILIZED SUBGRADE (LBR 40). THE EXTERIOR CONCRETE SLAB SHALL MATCH THE PARKING LOT/ROADWAY DRAINAGE.

2. THE WALLS SHALL BE 8'-0" HIGH AND SHALL BE CONSTRUCTED OF 8" CMU WITH FILLED CELLS AS SHOWN ON THE PLAN. THE TOP COURSE SHALL BE A LINTEL BEAM WITH (1) NO. 5 REBAR CONTINUOUS. THE EXTERIOR FINISH OF THE WALLS SHALL MATCH THE FINISH OF THE PRINCIPLE STRUCTURE.

3. TWO BOLLARDS ARE REQUIRED WITH ONE DUMPSTER AND 5 BOLLARDS ARE REQUIRED WITH TWO DUMPSTERS. SEE TYPICAL BOLLARD DETAIL D-28.

4. THE DUMPSTER ENCLOSURE SHALL HAVE AN OPAQUE DOUBLE GATE HAVING FRAME WORK MADE OF 2"x2"x3/16" STEEL ANGLE IRON AND 18 GA. SHEETING WITH DIAGONAL BRACING. CONTINUOUS WELD ALL JOINTS. EACH GATE SHALL HAVE A 3/8" "L" BOLT TO SECURE THE GATE CLOSED AND OPEN WHEN THE DUMPSTER IS BEING EMMPTED. THE GATE SHALL SWING 90° MINIMUM.

5. WHEN THE DUMPSTER IS USED BY A RESTAURANT A HOSE BIBB SHALL BE INSTALLED AND THE DUMPSITER INTERIOR SLAB SHALL BE SLOPED FROM THE OUTSIDE EDGES TO A POINT CENTERED ON THE DUMPSTER AT A SLOPE OF 36" PER FOOT. A 4" FLOOR DRAIN SHALL BE INSTALL AND SHALL DRAIN TO THE SANITARY SEWER. WHEN DOUBLE DUMPSTERS ARE USED THE DEVELOPER SHALL INSTALL 2 FLOOR DRAINS, ONE AT EACH DUMPSTER.

6. THE DEVELOPER SHALL COORDINATE WITH THE LOCAL WASTE HAULER FRANCHISEE FOR HIS SIZING REQUIREMENTS FOR THE DUMPSTER AND THE ENCLOSURE.
Typical Bollard Detail

- 6" Galvanized Steel Pipe filled with 3000 PSI Concrete
- ½" Expansion Joint Material
- Finish Grade (Slab or Earth)
- 1'-6" Dia Concrete Footing (3000 PSI)
- (1) No. 5 Rebar
- Rounded Concrete Top
MATERIAL STANDARDS

AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS

AASHTO M36-03 (R2011) Zinc Coated (Galvanized) Corrugated Iron or Steel Culverts and Underdrains
AASHTO M171-05 Standard Specifications for Waterproof Paper for Curing Concrete
AASHTO M148-05 Standard Specifications for Liquid Membrane-Forming Compounds for Curb Concrete
AASHTO M171-05 Standard Specifications for White Polyethylene Sheeting (Film) for curing Concrete
AASHTO M190-4 Bituminous Coated Corrugated Metal Culvert Pipe and Pipe Arches
AASHTO M114-10 Building Brick (Made from Clay or Shale)

AMERICAN CONCRETE INSTITUTE (ACI)

ACI STANDARD 301-10 Specifications for Structural Concrete for buildings
ACI STANDARD 318-11 Building code Requirements for Reinforced Concrete

AMERICAN IRON AND STEEL INSTITUTE (AISI) HANDBOOK OF STEEL DRAINAGE AND HIGHWAY CONSTRUCTION PRODUCTS - 2007 EDITION

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM A53/A53M-10 Pipe, Steel, Black and Hot Dipped Zinc-Coated (Galvanized) Welded and Seamless, for Ordinary Uses, Spec. for
ASTM A123/A123M-09 Zinc (Hot Galvanized) Coatings on products Fabricated From Rolled, Pressed and forged Steel Shapes, Plates, Bars and Strip, Spec. for
ASTM B766 Electrodeposited Coatings of Cadmium on Steel, Spec. for
ASTM F1554 (Grade C) Carbon Steel Externally Threaded Standard Fasteners, Spec. for
ASTM A185/A185M-07 Welding Steel Wire Fabric for Concrete Reinforcement, Spec. for
ASTM A615M-0913 Deformed and Plain Billet-Steel Bars for concrete Reinforcement, Spec. for
ASTM B88-09 ASTM B88-09 Seamless Copper Water Tube, Spec. for
ASTM B209-10 ASTM B209-10 Aluminum and Aluminum Alloy sheet and Plate, Spec. for
ASTM F1554 ASTM F1554 (Grade C) Carbon Steel Externally Threaded Standard Fasteners, Spec. for
ASTM A185/A185M-07 ASTM A185/A185M-07 Welding Steel Wire Fabric for Concrete Reinforcement, Spec. for
ASTM A615M-0913 ASTM A615M-0913 Deformed and Plain Billet-Steel Bars for concrete Reinforcement, Spec. for
ASTM B88-09 Seamless Copper Water Tube, Spec. for
ASTM B108/B108M-11 Aluminum-Alloy Permanent Mold Castings, Spec. for
ASTM B209-10 Aluminum and Aluminum Alloy sheet and Plate, Spec. for
ASTM C12-09 Installing Vitrified Clay Sewer Pipe, Rec. Practice for

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ASTM C55-11  Concrete Building Brick, Spec. for,
ASTM C78-11  Reinforced Concrete Culvert, Storm Drain and Sewer Pipe, Spec. for,
ASTM C139-11  Concrete Masonry Units for Construction of Catch Basins and Manholes, Spec. for,
ASTM C172-10  Fresh Concrete, Sampling.
ASTM C270-10  Mortar for Unit Masonry, Spec. for,
ASTM C245-04 (2009)  Compression Joints for Vitrified Clay Bell and Spigot Pipe, Spec. for,
ASTM C700-11  Vitrified Clay Pipe, Extra Strength, Standards Strength, and Perforated, Spec. for,
ASTM D6690-07  Concrete Joint Sealer, Hot Poured Elastic Type, Spec. for,
ASTM D1556-07  Density of Soil in Place by the Sand–Cone Method, Test for,
ASTM D1557-09  Moisture–Density Relations of Soils and Soil–Aggregate Mixtures using 10-lb Rammer and 18-In Drop, Test for,
ASTM D1751-04 (2008)  Preformed Expansion Joint Fillers for Concrete Paving and Structural Construction (Nonextruding and Resilient Bituminous Types), Spec. for,
ASTM D1785-08  Poly Vinyl Chloride (PVC) Plastic Pipe Schedules 40, 80, 120, Spec. for,
ASTM D1858-09  Recovery of Asphalt from Solution by the Abson Method, Test for,
ASTM D2104-74 Withdrawn, No Replacement Polyethylene (PE) Plastic Pipe Schedule, 40, Spec. for,
ASTM D2167-08  Density of Soil in Place by the Rubber–Balloon Method, Test for,
ASTM D2172/2172M-11 Quantitative Extraction of Bitumen from Bituminous Paving Mixtures, Test for,
ASTM D2239-03  Polyethylene (PE) Plastic Pipe (SDR-PR), Spec. for,
ASTM D2241-09  Poly Vinyl Chloride (PVC) Plastic Pipe (SDR-PR), Spec. for,
ASTM D1785-08  Poly Vinyl Chloride (PVC) Plastic Pipe Schedules 40, 80, 120, Spec. for,
ASTM D1858-09  Recovery of Asphalt from Solution by the Abson Method, Test for,
ASTM D2104-74 Withdrawn, No Replacement Polyethylene (PE) Plastic Pipe Schedule, 40, Spec. for,
ASTM D2167-08  Density of Soil in Place by the Rubber–Balloon Method, Test for,
ASTM D2172/2172M-11 Quantitative Extraction of Bitumen from Bituminous Paving Mixtures, Test for,
ASTM D2239-03  Polyethylene (PE) Plastic Pipe (SDR-PR), Spec. for,
ASTM D2241-09  Poly Vinyl Chloride (PVC) Plastic Pipe (SDR-PR), Spec. for,
ASTM D2447-74 Withdrawn, No Replacement Polyethylene (PE) Plastic Pipe, Schedules 40 and 80 Based on Outside Diameter, Spec. for,
ASTM D2321-11 Underground Installation of flexible Thermoplastic Sewer Pipe, Rec. Practice for,
ASTM D2487-11 Classification of Soils for Engineering,
ASTM D2662-78 Withdrawn, No Replacement Polybutylene (PB) Plastic Pipe (SDR-PR), Spec. for,
ASTM D2751-05 Acrylonitrile–Butadiene–Styrene (ABS) Sewer Pipe and Fittings, Spec. for,
AMERICAN WATER WORKS ASSOCIATION

Gate Values for ordinary water works service.
Fire Hydrants for ordinary water works service.

DEPARTMENT OF TRANSPORTATION — STATE OF FLORIDA (F.D.O.T.)

Standard Specifications for Road and Bridge Construction
January 1, (2012) Specifications (Referred to herein as
Bearing Ratio Method

FEDERAL HIGHWAY ADMINISTRATION


AMERICAN NATIONAL STANDARDS INSTITUTE

ANSI/AWWA Thickness Design of Cast-Iron Pipe
C150/A21.50

ANS A21.6 Cast-iron pipe centrifugally cast in metal molds for water and
other liquids.

ANS A21.8 (Cancelled)

ANSI/AWWA Cast-iron pipe centrifugally cast in sand-lined molds, for water
and other liquids.

ANSI/AWWA Grey-iron and ductile-iron fittings 2 in. through 48 in. for water
and Other Liquids.

ANSI/AWWA Rubber gasket joints for cast-iron and ductile-iron pressure pipe
and fittings.

ANSI/A21.51 Ductile-iron pipe, centrifugally cast in metal molds or sand-lined
molds, for water or other liquids.

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MATERIAL STANDARDS

REVISION DATE: 3-24-16 SCALE: NOT TO SCALE DETAIL M - 3