

**APPLICATION FOR
COUNTY ROAD CONNECTION / CULVERT INSTALLATION
(Per Hardee County Ordinance No. 2010-09)**

Date: _____

To: Hardee County Building & Codes Enf. Department
401 West Main Street, Wauchula, FL 33873-2832
Tel. No. (863) 773-3236

From: Hardee County Road and Bridge Department
205 Hanchey Road, Wauchula, FL 33873
Tel. No. (863)773-3272

Name of Applicant Authorized by Property Owner

Applicant Mailing Address

Applicant Phone Number

Property Owner's Name

Property Owner's Mailing Address

Legal Description of Property

Street/Road Location of Property

Signature of Applicant Authorized by Property Owner

Check all that apply:

PRIVATE (RESID / AGR): _____
or

COMMERCIAL: _____

EXISTING Driveway/Culvert: _____
or

NEW Driveway/Culvert: _____

(Driveway/culvert location must be flagged by applicant before an inspection can take place.)

Specific Conditions: Refer to attached sheets for specific conditions and installation instructions.

Permit issued by: _____ Date: _____ * Private Permit expires 6 months after issue date: _____
* Comm'l Permit expires 12 months after issue date. _____

(FOR ROAD & BRIDGE DEPARTMENT USE ONLY)

The Road and Bridge Department has reviewed the proposed development described below and:

Has issued Culvert Permit No: _____

Has determined that a Culvert Permit
is NOT required: _____

Road & Bridge Department Signature

Issue Date: _____

GPS Location: Latitude: _____ Longitude: _____

**HARDEE COUNTY ROAD AND BRIDGE DEPARTMENT
Driveway-Culvert Installation Permit**

The word Applicant shall mean Person or Persons as defined per **Hardee County Ordinance No. 2010-09**, as individuals, firms, associations, joint ventures, partnerships, estates, trusts, business trusts, syndicates, fiduciaries, corporations, governments, their agencies and subdivisions and all other groups or combinations, including a company, corporation, firm or Authorized Agent who applies for permissive use of Hardee County Right-of-Way.

SPECIFIC CONDITIONS:

1. **Safety Requirement:** Applicant shall be responsible for all maintenance of traffic as required according to the Florida Department of Transportation standards, latest edition, for traffic control through work zone and the safety for all work performed in the Hardee County road right-of-way.
2. The granting of the permit is for permissive use only and does not convey any rights, title or interest to the applicant in any way.
3. The applicant shall defend and hold harmless Hardee County, its agents, employees and assigns, for any violation of law, rules, regulations, safety requirement or ordinances that may occur in the performance of and execution of the permitted use of Hardee County road right-of-way.
4. The Applicant shall construct the driveway and culvert in accordance with in accordance with Hardee County Ordinance No. 2010-09, the Installation Instructions, and notification requirements.
5. No final inspection will be approved or Certificate of Occupancy (C.O.) issued by the Hardee County Building Department until a written sign-off has been received by the Building/Codes Department indicating that the driveway and culvert have been inspected and approved by the Road and Bridge (R&B) Department.

I have read and understand the above conditions and agree to comply with same.

Signature: _____ Date: _____

Name of Applicant (Print): _____

Witness: _____ Date: _____

Printed Name: _____

ROAD AND BRIDGE DEPARTMENT

205 Hanchey Road
Wauchula, FL 33873
Tel. No. 863-773-3272

DRIVEWAY-CULVERT INSTALLATION INSTRUCTIONS

The Applicant shall construct the driveway and culvert in accordance with Hardee County Ordinance No. 2010-09 and the Installation Instructions. Please follow these steps when installing a culvert.

1. Upon submittal of your complete driveway-culvert permit application you will be provided with address flag stakes.
2. After you have placed the address flags, on each end where the culvert is to be installed, notify the Road and Bridge Department at least 2 days prior to commencement of driveway construction. An inspector will be scheduled to visit the site and determine the size of culvert required. Once this information has been determined you will be contacted to allow you to start work on the culvert installation.
3. When you have installed the culvert and formed the miter ends and apron, but before concrete has been poured, call the Road and Bridge Dept. for a **first installation inspection**. You will be contacted if the inspection passed or failed. If the inspection passed, you can finish installing the culvert and proceed to step 4. If the inspection failed, you must make the appropriate corrections then repeat step 3.
4. After completing steps 2 and 3 and after the culvert has been fully installed, you must call the Road and Bridge Dept. for a **final inspection**. You will be contacted if the inspection passed or failed. If the inspection failed, you must make the appropriate corrections then call the Road and Bridge Dept. for another final re-inspection.
5. Once you have passed the final inspection you can pick up a signed copy of the Driveway-Culvert Installation Permit-Inspection Report with Final Sign-off, at the Road and Bridge Department or a copy can be faxed to you.

GUIDANCE:

- On Paved Road — The proposed private (residential/agricultural) driveway shall be 6” deep by 5 feet long concrete apron, 3500 psi strength, from the edge of the existing road pavement. If using flexible pavement for apron: use 6” deep oyster shell base material and 1 ½” asphalt surface. {*Ord. No. 2010-09, Sec. 7(B)(3 & 4)*}.
- On Unimproved Road — The proposed private driveway shall be 6” deep by 5 feet long shell apron from the edge of the existing road pavement. {*Ord. No. 2010-09, Sec 7(B)(5)*}.
- Culverts — Private driveway culvert shall be new reinforced concrete (RCP), corrugated aluminum, corrugated steel, minimum 18 inches in diameter, with miter end sections, and constructed per FDOT Index 273. HDPE may be used if cover is at least 12 inches {*Ord. No. 2010-09, Sec. 7(A)(19 & 21)*}. Commercial & industrial driveway culvert shall be RCP with 30 feet minimum length {*Ord. No. 2010-09, Sec. 7(C)(4)*}.
- Road and Bridge Department may be contacted Monday thru Friday, 8:00 A.M. to 5:00 P.M. Installation inspections are performed Monday thru Thursday.

HARDEE COUNTY ROAD AND BRIDGE DEPARTMENT
Driveway Connection to a County Road and
Culvert Installation Permit – Inspection Report

Name of Applicant: _____

Permit No.: _____

Address: _____

Issue Date: _____

Expiration: _____

Telephone No.: _____

Residential & Agricultural Driveway:

Paved Road_____

Construct a 5 feet apron connecting to the existing road. Apron shall connect to existing road, and constructed with 6" shell base and 1½" of asphalt surface, or 6" concrete. {Ord. No. 2010-09, Sec. 7(B)(3&4)}.

Unpaved Road_____

Construct a 5 feet shell base apron connecting to existing road. Apron shall be minimum 6" deep {Ord. No. 2010-09, Sec. 7(B)(5)}.

Commercial Driveway: {Ord. No. 2010-09, Sec. 7(C)(1)}.

Construct a paved driveway from the edge of road pavement to the right-of-way line.

Culvert Size:

Date culvert site inspected:_____

Has driveway been staked or flagged?: Yes____ No ____

Date of **1st** Installation Inspection: _____ Passed:_____ Rejected:_____

Reason: _____

Date of **2nd** Installation Inspection: _____ Passed:_____ Rejected:_____

Reason: _____

Inspection Issued by:

Signature of Culvert Inspector (**Preliminary**)

Date:

Sign-Off by:

Signature of Culvert Inspector (**Final Sign-Off**)

Date:

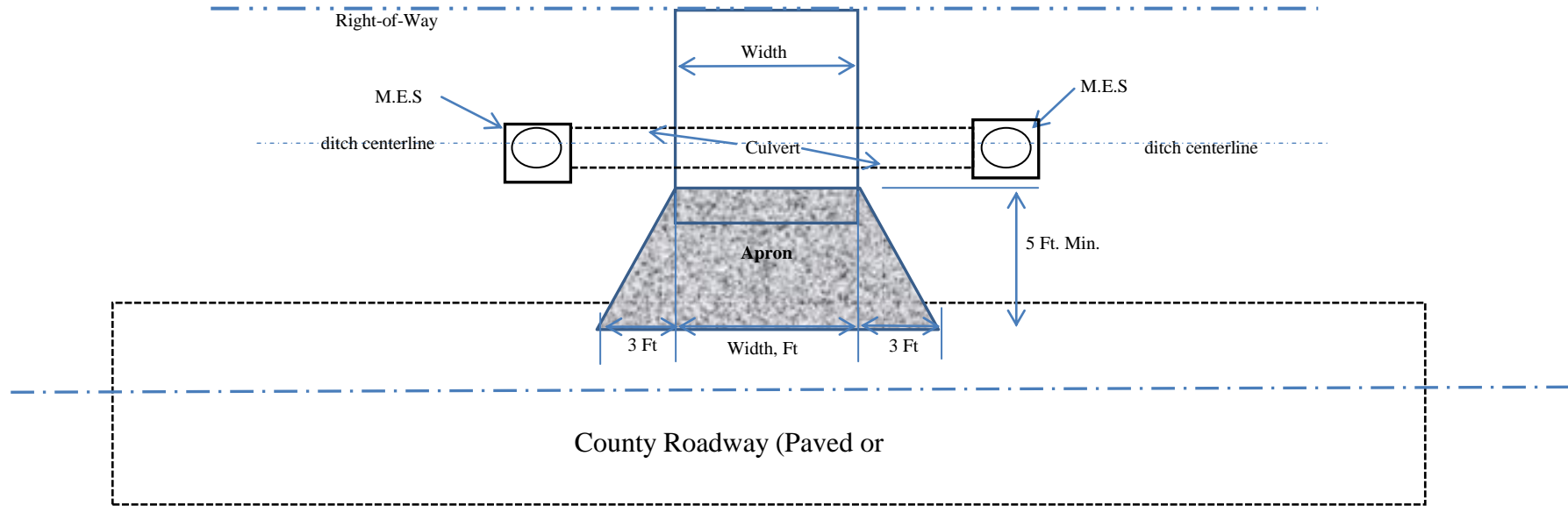
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One Year Re-Inspection: {Ord. No. 2010-09, Sec. 8(A)}.

Signature of Culvert Inspector (**Final Sign-Off**)

Date:

MINIMUM REQUIREMENTS FOR A PRIVATE DRIVEWAY

(Per Hardee County Ordinance No. 2010-09)



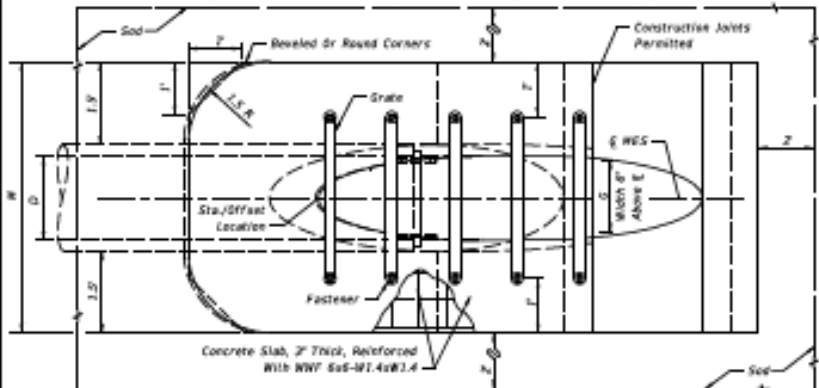
NOTES:

- 1) Private driveway: driveway serving a single family residential, duplex, and agricultural access {ULDC, Sec 4(L)}
- 2) Width: 20 Ft, Min. / 30 Ft. Max. {ULDC, Sec. 3.09.00(A)(02)}
- 3) Culvert, Size: 18" Round, Min. {Ord. No. 2010-09, Sec 7(A)(19)}
- 4) Culvert, Length: 24 ft., Min. {Ord. No. 2010-09, Sec 7(B)(2)} ; To meet 20' min. driveway width, culvert length incl. MES=32 ft. min.
- 5) Culvert, Type: RCP, corrugated steel, corrugated aluminum, HDPE {Ord. No. 2010-09, Sec 7(B)(21)}
- 6) Culvert, Cover: 12 Inches, Min. {Ord. No. 2010-09, Sec 7(A)(21)}
- 7) M.E.S.: Concrete, 3" thick min., 4:1 min. side slope, per FDOT Index 273 {Ord. No. 2010-09, Sec 7(A)(19)}; Grill required on culverts greater than 24 inches diameter.
- 8) Apron on Unpaved Road: 5 feet x 6" oyster shell. {Ord. No. 2010-09, Sec 7(B)(4)}
- 9) Apron on Paved Road: 5 feet x 6" concrete; or 1 1/2" asphalt on 6" shell. {Ord. No. 2010-09, Sec 7(B)(5)}
- 10) Setbacks: Per Land Development Code and Ordinance No. 2010-09.
- 11) Minimum requirements for a commercial driveway: Refer to the Unified Land Development Code (ULDC) and Ordinance No. 2010-09.
- 12) One point of access for a residential lot with frontage of 65 feet or less; resid. lot frontage shall be 125 feet minimum when abutting a principal or minor arterial road {Sec 3.09.00(c)}

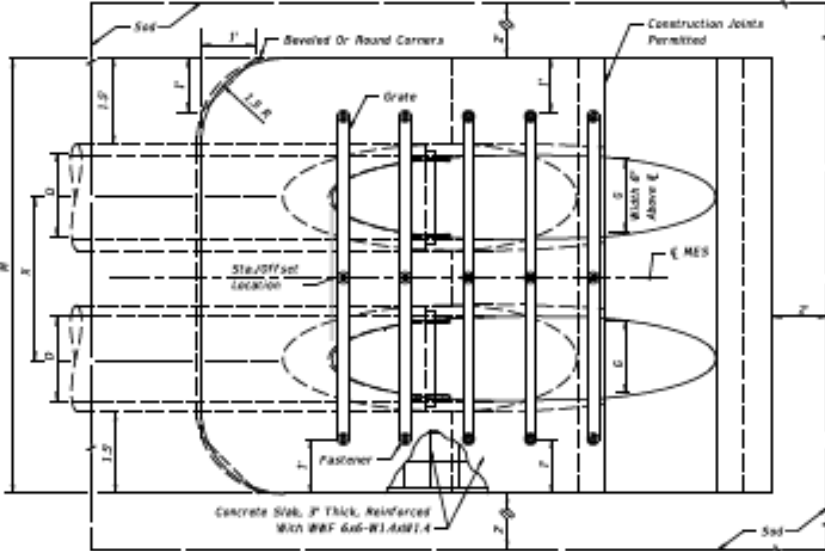
DIMENSIONS & QUANTITIES

D	X	A	B	C	E	F	G	H	M				N	GRATE SIZES		CONCRETE (CY)				SODDING (SP)			
									Single Pipe	Double Pipe	Triple Pipe	Quad Pipe		Standard Weight Pipe	Extra Strong Pipe	Single Pipe	Double Pipe	Triple Pipe	Quad Pipe	Single Pipe	Double Pipe	Triple Pipe	Quad Pipe
12"	2'-7"	2.27	4.09	8.36	4.03	0'	1.22	4.0'	4.63	7.27	8.79	12.37	1.19			0.76	1.16	1.54	1.94	0	10	11	12
18"	2'-10"	2.36	5.12	7.40	5.03	0'	1.47	4.0'	4.82	7.79	10.58	13.42	1.21			0.85	1.28	1.71	2.17	0	10	12	13
24"	3'-0"	2.52	7.18	8.71	7.02	11'	1.73	4.0'	5.50	8.82	12.37	15.79	1.29			1.02	1.58	2.15	2.75	10	12	13	15
30"	4'-0"	2.79	8.25	11.95	9.03	13'	2.00	4.0'	6.08	10.37	14.58	18.89	1.39	20'	3"	1.23	1.98	2.74	3.50	12	14	15	17
36"	5'-2"	2.87	11.31	14.18	11.87	15'	2.24	4.0'	6.87	11.75	16.83	21.92	1.33	20'	3"	1.40	2.30	3.33	4.24	13	15	17	20
42"	6'-0"	3.05	13.37	16.42	13.02	17'	2.45	4.0'	7.25	13.20	19.25	25.25	1.38	20'	30"	1.60	2.82	4.04	5.26	14	17	19	22
48"	6'-6"	3.22	15.43	18.63	15.02	19'	2.65	4.0'	7.83	14.98	21.32	28.06	1.42	20'	30"	1.81	3.26	4.70	6.14	15	18	21	24
54"	7'-8"	3.39	17.49	20.88	17.02	21'	2.83	4.0'	8.42	18.00	23.75	31.42	1.46	3"	4"	2.03	3.78	5.54	7.28	17	20	23	27
60"	8'-8"	3.58	19.55	23.17	19.03	23'	3.00	4.0'	9.00	17.50	26.00	34.50	1.50	3"	4"	2.28	4.36	6.43	8.50	18	22	25	29

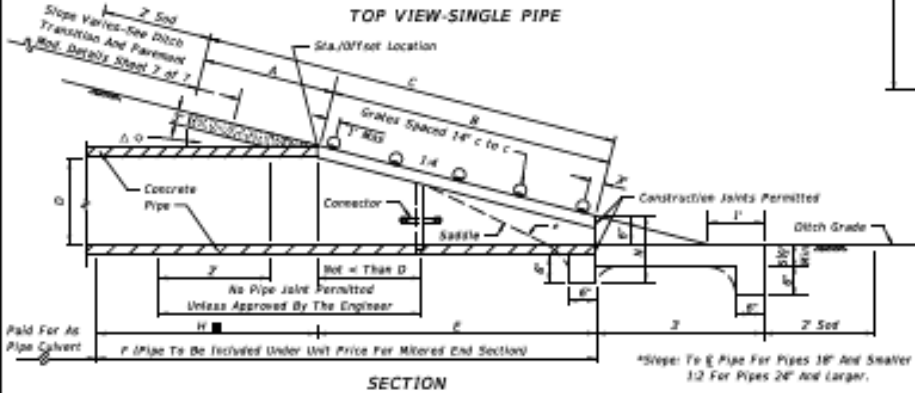
Δ 6.42' Δ 6.25' Dimensions permitted to allow use of 8' standard pipe lengths. ■ Values shown for estimating pipe quantities and are for information only.
 ○ 10.40' ○ 10.10' Dimensions permitted to allow use of 12' standard pipe lengths.
 Δ ○ Concrete slab shall be deepened to form bridge across crown of pipe. See section below.



TOP VIEW-SINGLE PIPE



TOP VIEW-MULTIPLE PIPE



SECTION

*Note: See Sheets 6 and 7 for details and general notes.

SINGLE AND MULTIPLE ROUND CONCRETE PIPE

LAST REVISION
11/01/16

DESCRIPTION:

**FY 2017-18
DESIGN STANDARDS**

SIDE DRAIN MITERED END SECTION

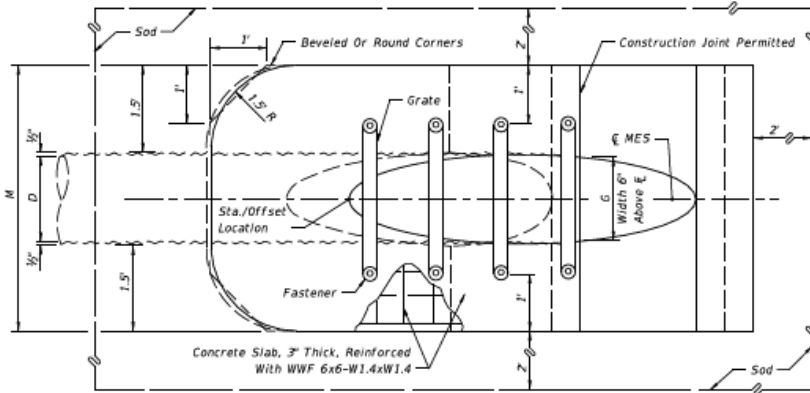
INDEX NO.
273

SHEET NO.
1 of 7

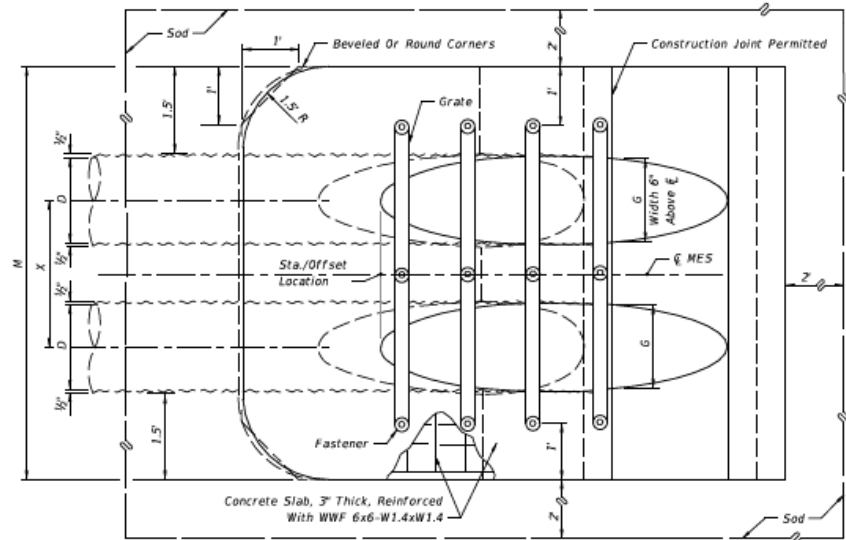
DIMENSIONS & QUANTITIES																				REMARKS			
D	X	A	B	C	E	F	G	H ■	M				GRATE SIZES		CONCRETE (CY)				SODDING (SY)				
									Single Pipe	Double Pipe	Triple Pipe	Quad. Pipe	N	Standard Weight Pipe	Extra Strong Pipe	Single Pipe	Double Pipe	Triple Pipe	Quad. Pipe		Single Pipe	Double Pipe	Triple Pipe
8"	2'-0"	2.5'	0.72'	3.22'	0.7'	4.0'	0.58'	3.3'	3.75'	5.75'	7.75'	9.75'	1.04'			0.52	0.90	1.22	1.54	7	8	8	9
10"	2'-2"	2.5'	1.34'	3.84'	1.3'	5.0'	0.81'	3.7'	3.92'	6.08'	8.25'	10.41'	1.04'			0.64	0.99	1.34	1.70	7	8	9	10
12"	2'-4"	2.5'	2.06'	4.56'	2.0'	6.0'	1.00'	4.0'	4.08'	6.42'	8.75'	11.08'	1.04'			0.68	1.09	1.48	1.88	7	8	10	11
15"	2'-7"	2.5'	3.09'	5.59'	3.0'	7.0'	1.23'	4.0'	4.33'	6.92'	9.50'	12.08'	1.04'			0.64	1.00	1.35	1.71	8	9	10	11
18"	2'-10"	2.5'	4.12'	6.62'	4.0'	8.0'	1.41'	4.0'	4.58'	7.42'	10.25'	13.08'	1.04'			0.69	1.09	1.49	1.89	9	10	11	12
24"	3'-5"	2.5'	6.18'	8.68'	6.0'	10.0'	1.73'	4.0'	5.08'	8.50'	11.92'	15.33'	1.04'			0.83	1.34	1.82	2.34	10	11	13	14
30"	4'-3"	2.5'	8.25'	10.75'	8.0'	12.0'	2.00'	4.0'	5.58'	9.83'	14.08'	18.33'	1.04'	2½"	3"	0.96	1.63	2.32	2.99	11	13	15	17
36"	5'-1"	2.5'	10.31'	12.81'	10.0'	14.0'	2.24'	4.0'	6.08'	11.17'	16.25'	21.33'	1.04'	2½"	3"	1.08	1.92	2.77	3.62	12	14	17	19
42"	6'-0"	2.5'	12.37'	14.87'	12.0'	16.0'	2.45'	4.0'	6.58'	12.58'	18.58'	24.58'	1.04'	2½"	3½"	1.20	2.26	3.34	4.61	13	16	18	21
48"	6'-9"	2.5'	14.43'	16.93'	14.0'	18.0'	2.65'	4.0'	7.08'	13.83'	20.58'	27.33'	1.04'	2½"	3½"	1.60	3.11	4.62	6.12	14	17	20	23
54"	7'-8"	2.5'	16.49'	18.99'	16.0'	20.0'	2.83'	4.0'	7.58'	15.25'	22.92'	30.58'	1.04'	3"	4"	1.76	3.56	5.34	7.14	15	19	22	26
60"	8'-6"	2.5'	18.55'	21.05'	18.0'	22.0'	3.00'	4.0'	8.08'	16.58'	25.08'	33.58'	1.04'	3"	4"	1.94	4.03	6.12	8.20	17	20	24	28

These sizes are restricted to inlet and outlet treatment for water management systems or similar applications.

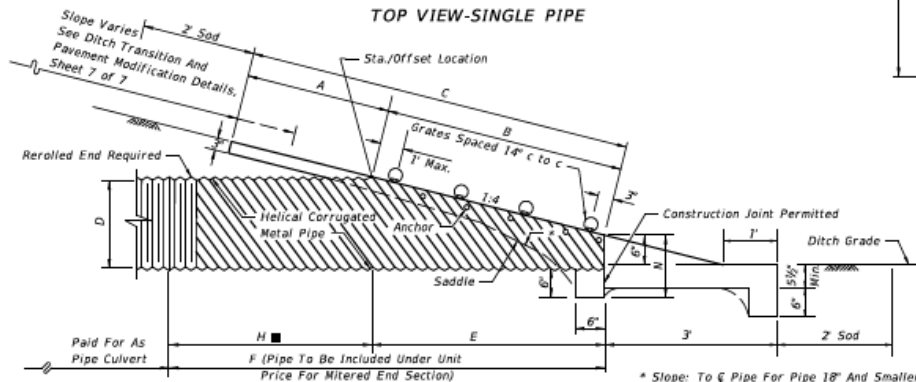
■ Values shown for estimating pipe quantities and are for information only.



TOP VIEW-SINGLE PIPE



TOP VIEW-MULTIPLE PIPE



SECTION

NOTE: See Sheets 6 and 7 for details and general notes.

SINGLE AND MULTIPLE ROUND CORRUGATED METAL PIPE

LAST REVISION 11/01/16

REVISION DESCRIPTION:

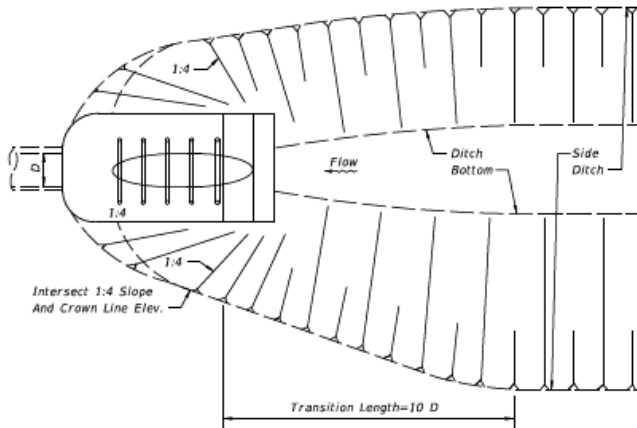


FY 2017-18 DESIGN STANDARDS

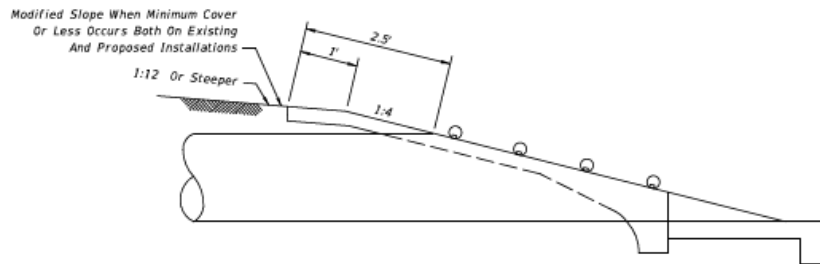
SIDE DRAIN MITERED END SECTION

INDEX NO. 273

SHEET NO. 2 of 7



**PLAN
DITCH TRANSITION**



PERMISSIBLE PAVEMENT MODIFICATION


GENERAL NOTES

1. Unless otherwise designated in the plans, concrete pipe mitered end sections may be used with any type of side drain pipe; corrugated steel pipe mitered end sections may be used with any type of side drain pipe except aluminum pipe; and, corrugated aluminum mitered end sections may be used with any type of side drain pipe except steel pipe. When bituminous coated metal pipe is specified for side drain pipe, construct the mitered end sections with like pipe or concrete pipe. When the mitered end section pipe is dissimilar to the side drain pipe, construct a concrete jacket in accordance with Index 280.
2. Use either corrugated metal or concrete mitered end sections for corrugated polyethylene pipe (HDPE), polyvinyl-chloride pipe (PVC) and polypropylene pipe (PPP). When used in conjunction with corrugated mitered end sections, make connection using either a formed metal band specifically designated to join HDPE or PVC pipe, with metal pipe or other coupler approved by the State Drainage Engineer. When used in conjunction with a concrete mitered end sections, concrete jacket constructed in accordance with Index 280.
3. Select lengths of concrete pipe that avoid excessive connections in the assembly of the mitered end section.
4. Repair corrugated metal pipe galvanizing that is damaged during beveling and perforating.
5. Prior to placing concrete slab apply a bituminous coating to any portion of corrugated metal pipe in direct contact with concrete. Extend the coating 12" beyond the concrete slab.
6. When existing multiple side drain pipes are spaced other than the dimensions shown in this Index, have nonparallel axes, or non-uniform sections, either construct the mitered end sections separately as single pipe or collectively as multiple pipe end sections as directed by the Engineer.
7. Class NS concrete cast-in-place reinforced slabs are required for all sizes of side drain pipes.
8. Install grates on all round pipes 30" or greater, pipe-arches 35"x24" or greater, and elliptical pipe 19"x30" or greater, unless excluded in the Plans. Install grates on smaller size pipes only when called for in the Plans. Omit the lower grate on the downstream end of mitered end sections along divided highways.
9. Use Schedule 80 pipe for the lower grate on all traffic approach ends and Schedule 40 pipe for all remaining grates. Fabricate the grates from ASTM A53, Grade B, black steel pipe and hot dip galvanize after fabrication in accordance with ASTM A123 for all corrosive environments.

DESIGN NOTES

1. Do not use grates until the debris transport potential has been evaluated by the drainage engineer and appropriate adjustments made. Ditch grades in excess of 3% or pipe with less than 1.5' of cover and grades in excess of 1% will require such an evaluation (General Note 10).
2. The design engineer must determine and designate in the plans which alternate types of mitered end section will not be permitted. Restrict use based on corrosive or structural requirements.
3. Contact the District Drainage Engineer for possible alternate treatment of side drain mitered end sections where a minimum spacing of 30' will not result between the toe points of the mitered end sections.
4. Provide ditch transitions on all grades in excess of 3%.

NOTES & INFORMATION

LAST REVISION 11/01/16	REVISION	DESCRIPTION:	 FY 2017-18 DESIGN STANDARDS	SIDE DRAIN MITERED END SECTION	INDEX NO. 273	SHEET NO. 7 of 7
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