



Culverts & Catch Basin Installation Application

*Prior to the installation of any drainage structures in the public right of way, a permit must be obtained from the City of Breaux Bridge in accordance with Section 18-51 through 18-57 of the Code of Ordinances. Culvert size, grade and elevation required for a location must be determined by City's Engineer before work can begin. Materials to be used **MUST** be in compliance with the provided "Materials and Criteria for Storm Drainage Culvert & Catch Basin Installation" data sheet.*

Owner's Name: _____ Owner's Phone Number: _____

Address of installation: _____

Contractor: _____ Contractor's Phone Number: _____

Permit Fees: (check one)

- \$150.00 - Pipe installation (approved drainage culvert table showing culvert size and grade – approved by City Engineer)
- \$300.00 - Driveway culverts
- \$400.00 - Culverts extending more than 75% of property frontage (50-400ft lots)
Extra-long lots TBD

Type of Occupancy: (check one)

- Commercial
- Residential

*****To be determined by City Engineer*****

Size of Culvert: _____

Slope: _____ (_____ ft/ft)

Upstream Invert: _____ **Downstream Invert:** _____

Type of Culverts (check one)

- Concrete _____ Length of culvert
- PVC (Residential Only) _____ Length of culvert
- Distance from existing neighboring culvert

Catch Basin Size _____

Grate: 24"x24" minimal size

Acknowledgement Sheet

- I have received the Materials and Criteria for Storm Drainage Culvert & Catch Basin Installation information and process sheets and will comply with all the required steps: _____ (initials)
- ***HDPE black corrugated culverts are not authorized*** _____ (initials)
- I understand that the size of culverts and catch basins will be determined by the City Engineer _____ (initials)
- I understand that the slope of the culvert will be determined the City Engineer _____ (initials)
- I understand that it is my responsibility to contact a City of Breaux Bridge inspector at **(337) 342-0673** before covering up the culverts _____ (initials)
- I understand that any culverts installed without a City of Breaux Bridge inspector on site are subject to be removed _____ (initials)
- I understand that the Culvert Permit will expire 180 days after I am issued the permit _____ (initials)

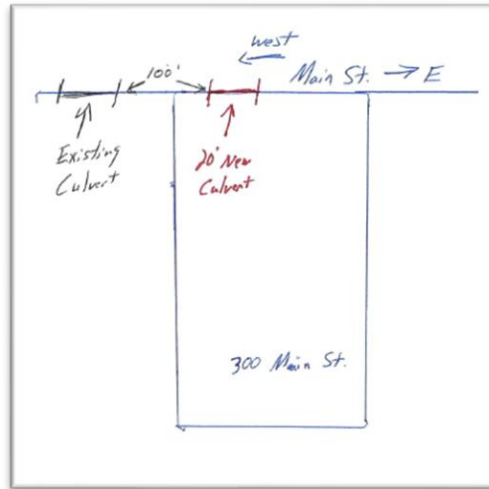
Applicant's Signature: _____ Date: _____

City Official: _____ Date: _____

Please include a drawing with measurements with the application of exactly where you want to install the culverts.
Please see below for examples.

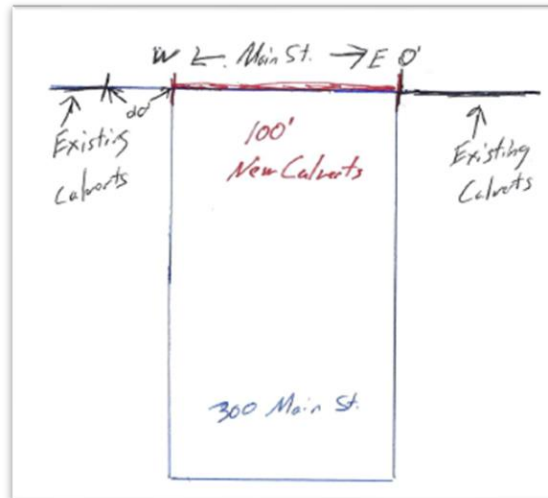
If you are just installing a driveway, we will need the following included in the drawing:

1. Length of the driveway culvert
2. Distance and direction to nearest culvert.
3. Address of your property.

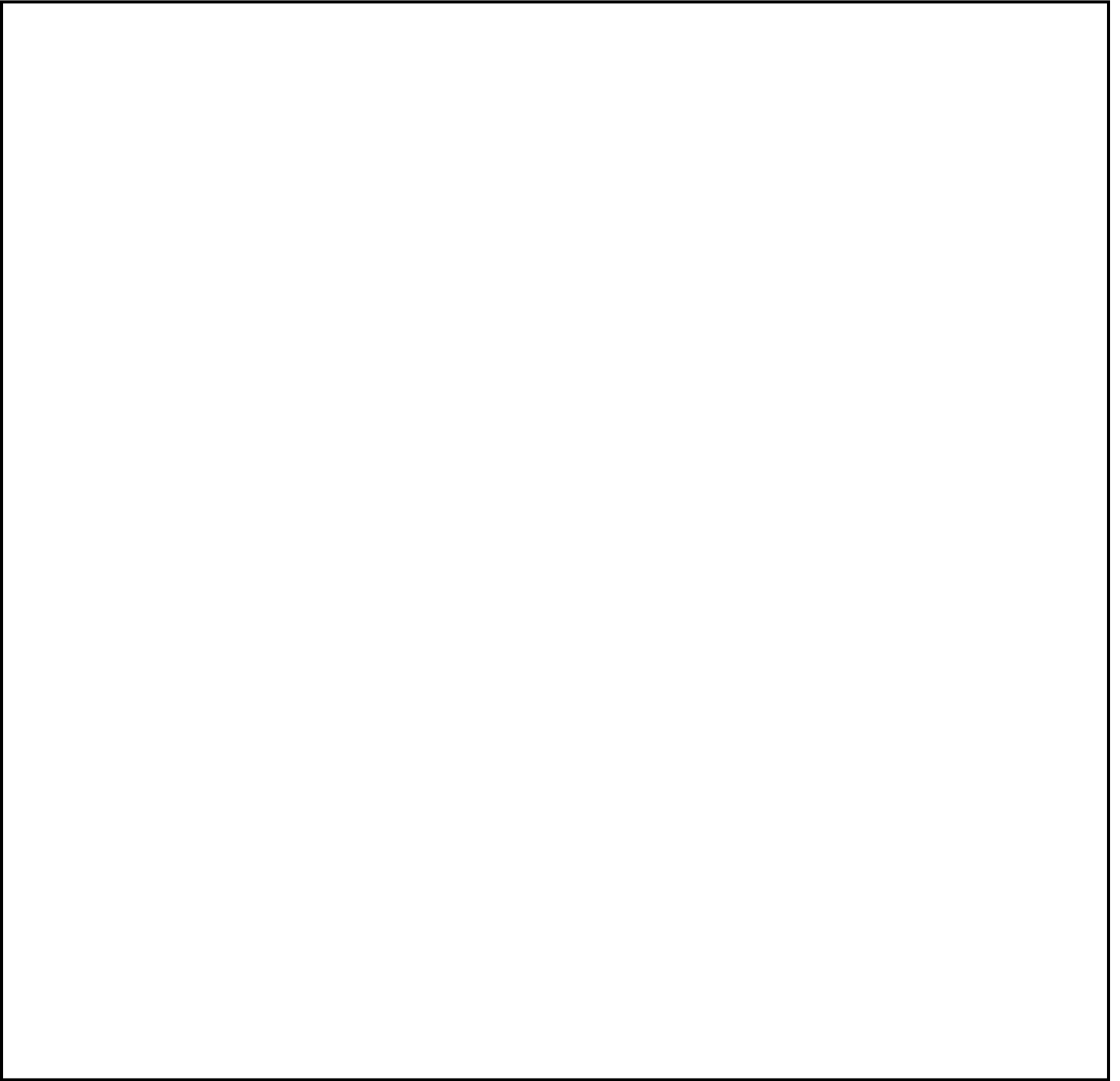


If you are installing culvert across the entire frontage, we will need the following included in the drawing:

1. Total length of the culverts
2. Distance and direction to nearest culvert.
3. Address of your property.



Please Draw sketch in this box



Materials and Criteria for Storm Drainage Culvert & Catch Basin Installations

Closing in a drainage ditch shall be done in such a manner so as not to cause any impediments of the natural flow of storm waters through the drainage systems of the City of Breaux Bridge. Furthermore, such enclosures shall not cause storm waters from the enclosed property to migrate onto adjoining properties.

Prior to the installation of any drainage structures in the public right of way, a permit must be obtained from the City of Breaux Bridge in accordance with [Section 18-51 through 18-57 of the Code of Ordinance](#).

Materials:

Culverts. Culvert size, grade, and elevation required for a location must be determined by the City's Engineer before work can begin. Culverts may be reinforced concrete, steel casing with a minimal ½ inch wall thickness, corrugated pvc, or corrugated polypropylene (PP). PVC and PP pipe shall only be allowed by the City in non-commercial installations and only for installations where greater than one foot (1') of cover can be achieved over the plastic pipe. All pipes shall be new or in an acceptable condition as determined by the Director of Public Works or any person so designated by the City of Breaux Bridge. In no case shall a culvert be less than 15" in diameter.

All materials shall be in accordance with the requirements below:

A. Reinforced Concrete Pipe (RCP): Conform to ASTM C76, Class III, Wall B with bell and spigot joints. Rubber gasket conforming to AASHTO M198, Type A shall be applied to each joint.

B. Polyvinyl Chloride Pipe (PVC) (Solid and Perforated): Conform to ASTM F949 with resin conforming to ASTM D1784, cell Class 12454b PVC compound, 50 PSL stiffness. Joints shall be ball and spigot with gaskets conforming to ASTM F477.

C. Polypropylene piping conforming to ASTM F2881 or AASHTO M330. Pipe shall be bell and spigot and watertight according to the requirements of ASTM D3212. Gaskets shall meet the requirements of ASTM F477, and shall be installed by the pipe manufacturer and covered with a removable, protective wrap to ensure the gasket is free from debris. A joint lubricant available from the manufacturer shall be used on the gasket and bell during assembly.

C. Castings: Gray iron castings conforming to ASTM A48, Class 30. Castings to be free from pouring faults, sponginess, cracks, blow holes and other defects.

D. Gaskets: Rubber gaskets for concrete pipe joints shall conform to AASHTO Designation: M198, Type A. Each pipe manufacturer or supplier shall furnish certificates of analysis certifying that the gaskets conform to the above specifications.

E. Flexible Plastic Gaskets: Flexible plastic gaskets for plugs shall conform to AASHTO Designation: M198, Type B.

F. Filter Fabric: Filter fabric shall be a pervious sheet of plastic yarn. Plastic yarn shall consist of a long-chain synthetic polymer composed of at least 85% of weight of propylene or ethylene fabric and shall be constructed that yarns will retain their relative position with respect to each other. Edges of fabric shall be finished to prevent the outer yarn from pulling away from the fabric. The fabric shall be an approved product from the LA DOTD Qualified Products List. The fabric shall conform to the following requirements:

Weight, oz./sq. yd., min.	3.0	Test Method ASTM D1910
EOS. (U.S. Sieve)	50+	Test Method DOTD TR630
Aug. Grab Tensile lbs./in. min.	90	Test Method ASTM D1682
Grab Tensile (Any Direction) lbs./in. min.	75	Test Method ASTM D1682
Permeability Factor c.m./sec., min.	8	Test Method DOTD TR631

Catch Basins. Catch basins shall be constructed in such a manner to prevent debris from hanging up inside. Catch basins shall be constructed such that the pipe is centered in the box with a minimum clear distance of 12” to the adjoining wall. Catch basin grates shall be 24”x24” minimal size.

For straight runs of pipe of the same material in green spaces (non-traffic areas), the use of “tee” fittings will be allowed to construct round catch basins. “Tee” fittings shall of the same material and have gaskets matching that of the culvert. The upward facing branch of the “tee” fitting shall be a minimum of 15” in diameter, therefore creating a minimum 15” diameter catch basin. Round grates shall be in accordance with the above material requirements.

Installation:

A. Concrete Culverts:

1. Pipe shall be installed to the grades provided by the City Engineer beginning with the downstream end of the line. The pipe shall be in contact with the foundation throughout its length. The pipe sections shall be joined to ensure that the ends are fully entered and the inner surfaces are flush and even. All joint material protruding from the inside of the pipe shall be neatly trimmed to conform with the inside walls of the pipe.
2. The interior of culvert pipe shall be kept clear of debris as the work progresses.
3. All bell and spigot joints shall be laid with the bell up grade.
4. All lifting holes in concrete pipe and plugs at the end of concrete pipes shall be sealed with precast concrete plugs, and joint material conforming to AASHTO M198, Type B shall be used to make the seal watertight.
5. Pipe joints shall be wrapped with plastic filter cloth for a minimum of 12 inches on each side of the joint. Ends of the cloth shall be lapped at least 10 inches and edges of cloth shall be suitably secured.
6. The fabric shall be secured on each end section of each pipe by means of a noncorroding plastic strapping having a minimum breaking strength of 380 lbs., and securing the ends with a self-sealing buckle. .

B. PVC/Polypropylene Culverts:

1. Pipe shall be installed to grades shown on the drawings beginning with the downstream end of the line. PVC pipe shall be installed on a minimum 4" thick compacted 610 gradation limestone bed. Limestone bedding material shall extend to the springline of the pipe. Any over excavation shall be backfilled with compacted limestone.
2. PVC pipe shall be backfilled from the springline to a point 6" or (initial backfill) above the pipe with 610 gradation limestone or a suitable excavated backfill material.

Suitable backfill material shall be defined as a lean clay with a liquid limit of less Than 50 and a plasticity index less than 20. Remaining trench shall be backfilled to grade with suitable excavated fill material.

3. All connections to storm drainage structures shall be made with flexible, watertight boots. Grouting of PVC pipe to structures is prohibited.

4. PVC storm drainage pipe shall be installed in accordance with the manufacturer's recommendations.

DRAINAGE STRUCTURE INSTALLATION :

A. Manholes, junction boxes and catch basins shall be either cast-in-place or precast by an LADOTD certified plant listed on the LADOTD's Qualified Products List. Written certification shall be submitted to the City of Breaux Bridge by the property owner with the permit application if precast structures are intended to be used.

1. Concrete shall have a 28-day compressive strength of 4,000 psi.

2. Reinforced concrete drainage structures for pipes 36" and smaller shall be constructed as per the City's attached standard detail.

3. Requirements for reinforced concrete drainage structures for pipes larger than 36" will be provided by the City on case by case basis.

4. Metal frames shall be set in a full mortar bed. Metal frames and castings shall be installed at the top elevation as shown on the Drawings. Grates shall be removable for maintenance.

5. Pipe sections (new and existing pipe) shall be installed flush to the inside wall of the drainage structure. Pipe sections shall project from drainage structure sufficiently for proper connection with next pipe section. Pipe section attached to drainage structure shall have flexible plastic gasket material conforming to AASHTO M198, Type B. Install non-shrink grout around pipe installed in drainage structure wall to ensure a watertight seal. If any reinforced concrete pipe is cut, gouge reinforcement 3/4 inch into pipe and grout with non-shrink grout.

6. Concrete pipe shall be installed in accordance with applicable provisions of ACPA "Concrete Pipe Installation Manual."

Culverts. Culverts shall be installed in a straight line aligning with the center of the ditch line. Depth and grade will be determined by the City Engineer. The slope (angle of descent) shall be as per the slopes provided by the City Engineer. Compact all material (soil and/or limestone) used for backfill to not less than 90% Modified Proctor (determined in accordance with ASTM D1557), or 95% Standard Proctor (determined in accordance with ASTM D698).

Catch Basins. An inlet or catch basin structure shall be installed a minimum of every eighty (80) feet along a continuous pipe and will be required at each point where pipe intersects or changes in size, shape or type (i.e. concrete to pvc). Catch basins shall also be required where two pipe systems meet at a property line to prevent storm water from migrating from one property to another. The top of the inlet or catch basin structure shall be set at an elevation below the surface of the ground and roadway and above the pipe to allow run-off to enter into the top opening.

Inspections. All culvert installation work must be inspected prior the backfilling the job. Property owners (or their contractors) shall call City Hall to arrange for an inspection prior to closing the job. In the case of installing corrugated plastic culverts, property owners (or their contractors) should make arrangements in advance so these culverts can be backfilled as soon as possible to prevent these culverts

from popping out of place in case of rain.

Who to contact for Permits, Inspections and additional information:

Permits, which are required, are issued through City Hall located at 101 Berard Street, Breaux Bridge, Louisiana. Office hours are 8:00 am to 3:35 pm Monday thru Friday. Permits are issued in the Planning and Zoning Office. Any installations along a state highway shall also be approved and permitted by the LA DOTD. It is the applicant's responsibility to obtain such approvals; the applicant shall provide copies of such approvals/permits to the City.

The permit fee shall be in accordance with the following schedule:

- c. \$150.00 for pipe installation where the development has an approved drainage culvert table showing the culvert size and grade for each lot.
- b. \$300.00 for driveway culverts
- c. \$400.00 for culverts extending more than 75% of the property frontage

For additional information call the inspection number and your call will be transferred to a person who can best assist you.

Please see approved culverts below:



HDPE CORRUGATED CULVERT (BLACK CULVERT) – NOT ALLOWED



A-2000 PVC CORRUGATED (WHITE CULVERT) - ALLOWED



HP STORM CORRUGATED (GREY CULVERT) - ALLOWED