



## FRENCH DRAIN SPECIFICATION

**Purpose:** Here's a sample FRENCH DRAIN SPECIFICATION that some homeowners are using as part of the Town's Residential Rear Yard Flooding Assistance Program to alleviate the occurrence of rear yard flooding. Other alternative designs and other brand products are also acceptable and this should not be regarded as a template solution for every rear yard flooding situation, but used for general guidance.

**Scope of Work:** The project involves installation of a French drain style stormwater collection/drainage system throughout the entire width of the rear yard through its lowest elevation and sloped toward either a center PVC or pre-cast underground junction box (to be connected to the Town's storm sewer main or closest storm sewer manhole) with 2 solid-cover PVC or pre-cast catch basin drain boxes at each end of the trench system (for future maintenance/expandability), covered with geo-textile fabric.

**Connection to a Town storm sewer main/manhole:** from center junction box or end must be made by a Town licensed plumber by either: a) core drill with grout seal, b) insert a tee, or c) tapping saddle.

**Price to be All Inclusive:** Quote should include all material and labor for excavation, temp removal/re-install of any obstructing fences or landscaping, installation of (2) 4" wide 360 degree perforated single-wall 8-slot opening corrugated drainage pipes laid side to side parallel in the bottom of an 18" wide trench, excavated to achieve a minimum 2% slope allowing placement of sod over the entire length, with drainage pipe and surrounding rock covered in 4 oz. non-woven geo-textile fabric surrounded on sides & top by washed silt-free smooth rounded rock of a minimum 2" sized diameter, connection to existing storm sewer (by a Town licensed plumber), re-grading yard to slope toward the new French drain storm system, new soil needed, restoration of all damaged landscaping & new sod over dirt areas.

Note: excavated soil from the trench may be re-used as part of the required re-grading, if appropriate for topsoil...otherwise if not as in the case of rocky soil or predominantly clay, it must be hauled off.

### Specifications of French Drain System Plan:

1) Trench Width / Depth / Slope: 18" wide, as deep as needed to achieve minimum 2% slope to center junction box where outlet pipe connects to Town storm sewer, and deep enough to allow minimum of 3" of topsoil placed on top of geo textile fabric wrap to support new sod. No soil fill allowed in trench.

2) Fabric: to fully line bottom, sides and top of trench with one seamless piece (available in 6'x100' roll). Drainage pipes and surrounding rock are installed within the fabric, which is then folded over the top (like a burrito wrap) and secured with double landscaping pins at the top. Fabric must be a 4 oz. non-woven geo-textile filter fabric to screen weed and soil intrusion.

3) Drainage pipes: Install (2) corrugated 8-slot single wall 4" corrugated drain pipes side by side (i.e. two parallel runs) in the bottom of the trench directly on top of the geotextile fabric liner with no aggregate under the pipe. Use the following drainage pipe made by Baughman Tile in Ohio and distributed by TheFrenchDrainMan company in Michigan:

- French Drain Man 8-Slot 4" High Octane Blue Corrugated Drain Pipe
- Model Number: fdm-8hob-cdp100 (if ordering 100 ft roll)

Equivalent product acceptable only if proven by specs to be same strength, GPM flow rate and inlet size count. Use appropriate FITTINGS from the same manufacturer to assure best fit and quality at all joints, connections and structures. Use 6" SDR35 PVC pipe to connect French drain system from center junction box to storm sewer.

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[www.munster.org](http://www.munster.org)

*Note: The specified drainage pipe is made specifically for yard Drainage, crawl space, interior basement de-watering, and exterior basement waterproofing. Baughman High Octane (blue outside color, yellow inside color) works with the surrounding rock aggregate specified to get the most out of its industry-leading 17 plus square inches of inlet per linear ft. With 8 rows of slots in every valley, the inlets are designed larger than other perforated pipe so sediments wash through the pipe instead of plugging the pipe allowing for an open French drain within the geo-textile wrapped system...virtually sealed and self-contained. This Baughman product takes in water faster than any other drainage pipe on the market and was specially designed for the heavy clay soils of Northwest Ohio, similar to those here in Munster, IN. The 8-slot pipe is manufactured to a higher wall thickness than others to allow for the same strong stiffness as solid schedule 40 PVC pipe.*

Drain Pipe Distributor:

FrenchDrainMan  
4015 Van Dyke  
Almont, MI 48003  
248-505-3065  
<https://frenchdrainman.com/>

Manufacturer:

Baughman Tile  
8516 Road 137  
Paulding, OH 45879  
800-837-3160  
<http://www.baughmantile.com/>

4) Rock: washed silt-free smooth rounded rock of a minimum 2" sized diameter. If two sizes are used, larger rock should be placed on the sides. All aggregate to be placed within the geo-textile fabric on the sides and top of the piping, but not on the bottom of the piping to prevent frost heave & root attraction. Piping is to rest on the floor of the trench with only the geo-textile fabric under it. Trench to be filled with aggregate to within 3" from top of grade surface level of rear yard (i.e. from top edge of trench) with geo-textile fabric folded and pinned on top over it. Rock should fill entire length of trench throughout its East to West linear location in the rear of the yard. Goal is for system to achieve 300 GPM flow rate.

5) Structures / Drain Inlets: There will be no open-grate catch basins in this system nor any "blind inlet" surface drain covers (that sit directly on top of the fabric at grade level). Instead, this is intended as a closed French drain system. The entire trench serves as a collector generating sufficient inlet volume that gravity flows to the center junction box and through to the Town storm sewer. The drain boxes at each end of the trench system are to be installed at grade level (for future maintenance/expandability) but completely enclosed with solid-covers. The center underground junction box will serve as a "T" junction to accept stormwater and drain it to the storm sewer. Chosen product should be compatible with specified drainage pipes and appropriate fittings utilized.

6) Yard Grading: provide and install needed amount of fill and grading as required to facilitate overall positive surface flow to the French drain system along its entire length. Fill area should start as close to the house as required to achieve a gradual gradient throughout yard.

**Award Decision:** Quotes will be reviewed with homeowners. No bid bond, performance or payment bond is required since Town is merely providing funding, not hiring Contractor directly. However, all Town codes are to be complied with including a building permit, but any permit fee will be waived. **Note: decision will be based on several factors of importance to the Homeowners and Town, besides just price...namely quality of the proposal and experience of the contractor with French drain style systems in particular....please include a statement about your experience with such systems and references for those projects and/or other similar ones.**

**Contract:** Contractor's proposal should be detailed with clear scope of work and products specified & once signed by Homeowner should constitute the contract between the two parties. **Include Payment Terms in your proposal.**

**811 Locates:** Responsibility of the awarded Contractor.

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\*\*\* Thank you for your participation \*\*\*