

CALHOUN COUNTY ROAD DEPARTMENT

Hillside Drive French Drain

From W. Sunset Blvd. to Frey Drive

Pennfield Township, Calhoun County

**Invitation for Bids
for Hillside Drive French Drain
From W. Sunset Blvd. to Frey Drive
Pennfield Township, Calhoun County**

Sealed bids will be received by the Calhoun County Road Department at their offices on 13300 15 Mile Road, Marshall, MI until 12:00 p.m. on Friday, January 27, 2017. All bids must be sealed and marked:

“Hillside Drive French Drain”

The right is reserved to reject any or all bids and to make the award in the best interest of Calhoun County and the Calhoun County Road Department.

Please note that this RFP has been revised & all new/updated items are highlighted.

Questions/Additional Information

Questions regarding this project should be directed to:

Kristine Parsons, P.E.
Senior Civil Engineer
Calhoun County Road Department
13300 15 Mile Road
Marshall, MI 49068
(269) 781 0038
kparsons@calhouncountymi.gov

LOG OF PROJECT – Sunset/Hillside French Drain

CCRD: KOP/ANK

1 of 2

1/18/2017

Persons wishing to submit a bid on this project shall be on the Michigan Department of Transportation prequalified bidders list. Bid sheets should be submitted to the Calhoun County Road Department. After the bid opening, a decision will be made to pursue what is in the best interest of the Calhoun County Road Department and the County of Calhoun.

PROJECT LOCATION

This project begins at the intersection of W. Sunset Boulevard and Hillside Avenue and continues south along Hillside Avenue all the way to its intersection with Frey Drive. This project is located in Pennfield Township, Battle Creek, MI.

The Engineer will establish the location for all items of work.

PROJECT DESCRIPTION

Note: All work must be in compliance with MDOT 2012 Standard Specifications for Construction.

The project provides for the construction of a 435-foot French drain from station 0+00 (POB) from station 4+35 (POE) that will be used to store and divert surface water runoff from Hillside Avenue in order to alleviate flooding as a result of ponding surface water. The ground from station 0+00 to station 1+20 will be graded to a gentle swale with 6:1 side slopes across the width of the boulevard. The French drain will initially be constructed at the center of this swale and will transition to a location 2-feet off the edge of pavement between stations 1+20 and 1+75. Based on the elevation of the existing benchmark (a wooden stake), which is set to 99.19 feet, the French drain will have a bottom elevation of 94.00 feet continuously along its length. Extreme care must be taken during construction to avoid damaging the new pavement along Sunset Boulevard, Hillside Avenue, and Frey Drive and the contractor will be held liable for repairs if any pavement damage occurs.

The existing leaching basin, located at approximately station 1+75, is collapsing and needs to be replaced. Under the scope of this project, that leaching basin will be removed and a new 48-inch diameter, 8-foot deep leaching basin will be constructed in its place. The CCRD will be responsible for providing the materials for both this structure and the catch basin at station 4+35, so the pay items *Dr Structure, 48 inch dia, mod; Dr Structure Add Depth of 48 inch dia, 8-foot to 15 foot, mod; & Dr Structure Cover, Type E, mod* will only include labor and equipment to install. These items must be installed per MDOT 2012 Standard Specifications for Construction.

The French drain will be constructed to a uniform width of 3-feet and will be lined with geotextile fabric as noted in the MDOT Standard Detail R-80-E, “Granular Blanket, Underdrains, Outlet Endings for Underdrains, and Sewer Bulkheads” so that enough length remains on both sides to cover the top at the surface. 6-inches of washed, open

graded aggregate (type 34-R) will be placed in the base of the French drain, followed by two side by side 6-inch drain tiles. Once the drain tiles have been placed on the level bed of 34-R aggregate, the remainder of the French drain will be filled with additional 34-R aggregate to within 6-inches of the ground surface. When the French drain has been filled, the geotextile fabric will be carefully wrapped over top with both pieces overlapping each other by 2-feet and then filled with topsoil. **Topsoil will also be required along the edges of pavement to provide support for the roadway. Temporary erosion control matting will be installed along the entire boulevard area after completion of construction, and the contractor will be required to return to the project site to seed the boulevard in the springtime once the snow has fully melted.**

Due to the depth of the French drain at the south end adjacent to Frey Drive and the need to provide for possible future connection to the MDOT drainage system along M-66 (Capital Avenue), a concrete **leaching** basin will be installed so that the dual 6-inch drain tiles can be tied into a structure. This **leaching** basin will be 48-inches in diameter and 10-feet deep, with the drain tiles entering the structure at an elevation of 94.50-feet.

SURFACE & DRAINAGE ITEMS

Items of work are to be placed in accordance with the drawing provided and as directed by the Engineer.

Excavation, Earth	350 CYD
Slope Restoration, Type B	1,500 SYD
Dr Structure, 48 inch dia, mod	2 EA
Dr Structure, Add Depth of 48 inch dia, 8 foot to 15 foot, mod	2 EA
Dr Structure Cover, Type E, mod	2 EA
Dr Structure, Rem	1 EA
Underdrain, Pipe, Open-Graded, 6-inch	900 LF
Mobilization, Max.	1 LS

MAINTENANCE OF TRAFFIC

Maintain traffic in accordance with special provision for traffic control and as directed by the Engineer.

Sign, Type B, Temp, Prismatic, Furn	48 SF
Sign, Type B, Temp, Prismatic, Oper	48 SF
Channelizing Device, 42 inch, Oper	25 EA
Channelizing Device, 42 inch, Furn	25 EA

Schedule of Items (Itemized Bid Sheet)

Letting Date: Friday, January 27, 2017 12:00 PM

Contract ID: French Drain
Location: Hillside Dr., Pennfield Twp.
Description:

Project Number: Pennfield LRP 7	Project Engineer: K. Parsons
Estimate Number: 1	Date Created: 12/13/2016
Project Type: Miscellaneous	Fed/State #:
Location: Pennfield Twp.	Fed Item:
	Control Section:

Description: Hillside Dr. French Drain

Instructions to Bidders: IMPORTANT NOTICE:
If the proposal establishes a maximum price for any of the following work items, and if you bid a price higher than that maximum price, your bid will be considered to have quoted the maximum price and your bid total will be adjusted to reflect that maximum price.

If the proposal provides a specified price for any of the following work items, and if you bid a price higher or lower than that specified price, your bid will be adjusted to reflect that specified price.

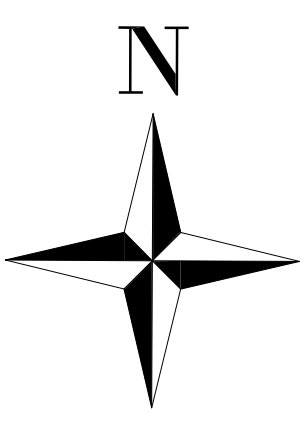
If your bid is the lowest accepted bid, and if you refuse to accept the award of the contract due to the change in what you quoted as a maximum or specified price, you will forfeit your proposal guaranty.

Pay Item	Description	Quantity	Units	Unit Price		Bid Amount		
				Dollars	Cts	Dollars	Cts	
1500001	Mobilization, Max	1	LSUM					
2030011	Dr Structure, Rem	1	Ea					
2050016	Excavation, Earth	350	Cyd					
4030035	Dr Structure Cover, Type E , mod	2	Ea					
4030210	Dr Structure, 48 inch dia , mod	2	Ea					
4030250	Dr Structure, Add Depth of 48 inch dia, 8 foot to 15 foot , mod	2	Ft					
4040043	Underdrain, Pipe, Open-Graded, 6 inch	900	Ft					
8120030	Channelizing Device, 42 inch, Furn	25	Ea					
8120031	Channelizing Device, 42 inch, Oper	25	Ea					
8120350	Sign, Type B, Temp, Prismatic, Furn	48	Sft					
8120351	Sign, Type B, Temp, Prismatic, Oper	48	Sft					
8160101	Slope Restoration, Type B	1,500	Syd					
Total Bid:								

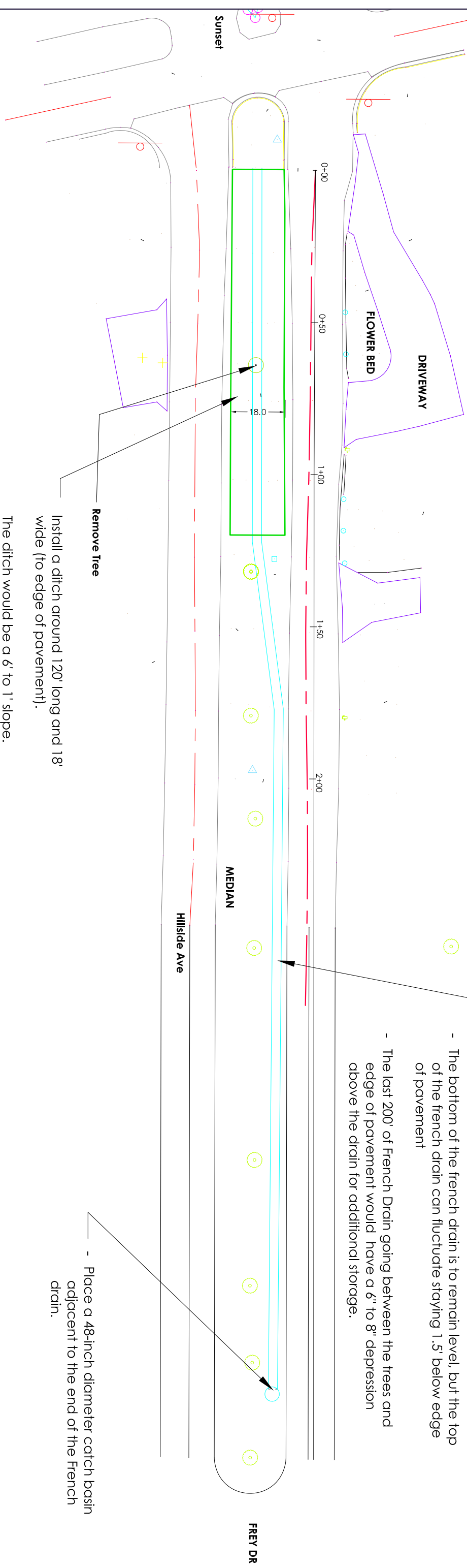
Contractor: _____

(Signature)

(Date)



AREA OF CONCERN



- French Drain**
- French Drain would be around 435' long.
 - The first 125' of the French Drain would be in the bottom center of the 6' to 1' ditch. Then the drain would skew over between the edge of pavement and trees.
 - The bottom of the french drain is to remain level, but the top of the french drain can fluctuate staying 1.5' below edge of pavement
 - The last 200' of French Drain going between the trees and edge of pavement would have a 6" to 8" depression above the drain for additional storage.

Remove Tree

Install a ditch around 120' long and 18' wide (to edge of pavement).
The ditch would be a 6' to 1' slope.

- Place a 48-inch diameter catch basin adjacent to the end of the French drain.

FINAL PLAN REVISIONS (SUBMITTAL DATE: 7-27-2016)		DRAWN BY: CMB		EXISTING		TITLE: PROPOSED SHEET		DRAWING SHEET	
NO.	DATE	AUTH	DESCRIPTION	DESIGN BY:	PROJECT:	HILLSIDE AVE. PROPOSED FRENCH DRAIN	PROPOSED		
				REVIEWED BY:	DATE: 1/8/2017	PENNFIELD 2016 LRP			
Calhoun County Road Department				SCALE 1:40		FILE: HILLSIDE 11-10-16.dwg		SHEET	
						DATE: 1/8/2017		Proposed	