



**HUBBELL, ROTH & CLARK, INC**  
Consulting Engineers

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Robert F. DeFrain  
Marshall J. Grazioli  
Thomas D. LaCross  
Dennis J. Benoit

September 10, 2010

City of Rochester Hills  
1000 Rochester Hills Drive  
Rochester Hills, MI 48309

Attn: Mr. Roger Moore, P.S.

Re: USFWS Great Lakes Basin Fish Habitat Partnership grant  
Proposal for Professional Engineering and Environmental Services  
For the Avon Creek Restoration – Phase II

HRC Job No. 20100491

Dear Mr. Moore:

HRC is pleased to submit the following proposal for professional engineering and environmental services. We thank you for the opportunity to assist with developing the work plan and USFWS grant application. We have prepared cost estimates for engineering design and construction assistance to the City based upon our understanding of the scope of services required. We believe this will provide you with an understanding of our design approach and the estimated costs associated with each task.

HRC is familiar with the City's vision of the entrance way to the City's municipal offices. We prepared plans and technical specifications for the project in 2009 and it was recently advertised for construction bidding. HRC understands the City's desire to enhance the site aesthetics and create a self-sustaining public amenity to reduce long-term maintenance. We also recognize the site constraints and the need to protect existing utilities in the area. HRC's design approach will restore approximately 600 feet of moderately meandering stream. The new stream will be sized for bankfull flows and will be hydraulically connected to the historic floodplain. The Project will also provide an opportunity for public education at the EEC.

**Task A – Preliminary Site Design:** Options for heavy equipment access, utility protection, spoils locations, stream restoration, and enhanced habitat will be outlined on a conceptual site plan for discussion purposes with City staff. HRC assumes that the City will provide existing GIS and site data and will collect additional survey data as necessary. (\$3,000)

**Task B – Design, Plans, Specifications, and Bidding:** HRC will complete plans and technical specifications for the selected improvements. Draft plans, a project schedule, and an estimate of anticipated construction costs will be prepared. HRC may need to perform some additional analysis of Avon Creek to verify the design and satisfy permitting requirements. It is assumed that the City will compile standard specifications, prepare the specification book, and handle advertising for bids. HRC will assist in the evaluation and selection of a contractor and attend the pre-construction meeting. (\$14,000)

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Engineering. Environment. Excellence.



**Task C – Permitting:** HRC will schedule a pre-application meeting with MDNRE staff upon completion of 80% plans. We will prepare applications for the state and county permits. It is assumed that the City will pay any necessary permitting fees. (\$1,000)

**Task D – Construction:** It is understood that the City will handle all construction administration including layout, inspection, pay item tracking, and pay estimate processing. HRC will be available for questions and assistances on a periodic basis. (\$6,500)

**Task E – Monitoring and Reporting:** HRC will assist the Clinton River Watershed Council with site biomonitoring and developing content for an interpretive sign. We will also provide support to the City as they prepare their quarterly reports to the USFWS. (\$1,500)

HRC proposes to begin the preliminary site design upon authorization, complete the final design in 2010, bid the project in March, begin construction in June, and complete the project by June 30, 2012.

The total estimated cost to complete the tasks summarized above is \$26,000 based on a total construction cost of \$105,500. Please note that the above engineering or construction cost estimates do not include drafting, negotiating, or obtaining any needed easements for the work identified as it is assumed available right of way and existing access points are available. It is assumed that the City will provide the above referenced items and day-to-day construction engineering services with minimal HRC support.

This amount will not be exceeded without prior authorization. In accordance with our Consulting Engineering Services Contract, invoicing for this work will be on the basis of direct payroll plus a multiplier of 1.9. Invoices will be submitted on a monthly basis. If the scope needs to be revised, we will report any issues directly to the City so that you may budget accordingly.

If this proposal is deemed acceptable, please sign and return one copy to this office and retain one for your files. Thank you for the opportunity to provide the City with professional consulting services. If you have any questions or require any additional information, please contact me at (248) 454-6370.

Very truly yours,

HUBBELL, ROTH & CLARK, INC.

Accepted by:

Walter H. Alix P.E., P.S.  
Vice President

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Dated: \_\_\_\_\_

pc: HRC; J. Burton, D. Mitchell, R. Myllyoja, B. Knight, File

# STAFF HOUR PROJECTIONS

Avon Creek Restoration - Phase II  
 City of Rochester Hills - September 10, 2010

TASK NO.	TASK DESCRIPTION	ESTIMATED STAFF HOURS					TOTAL HOURS
		Project Manager	Environ. Analyst	CADD Tech	General Support		
A	Preliminary Site Design Site assessment Preliminary site plan and City meeting	2	12	12	2		12 24
B	Design, Plans, Specifications, and Bidding Design, plans and specifications Determine construction schedule and cost estimate	4	36	114			154 8
C	Permitting Prepare MDEQ permit application including one meeting with MDEQ staff		8	1			9
D	Construction Periodic construction observation	2	75				77
E	Monitoring and Reporting Biomonitoring, support City w/ grant reporting		17		1		18
<b>PROJECT TOTALS:</b>		<b>10</b>	<b>162</b>	<b>127</b>	<b>3</b>		<b>302</b>

## ESTIMATED FEE SUMMARY

PERSONNEL	HOURS	RATE	TOTAL
Project Manager	10	\$40.00	\$ 400.00
Environmental Analyst	162	\$29.00	\$ 4,698.00
CADD Tech	127	\$30.00	\$ 3,810.00
General Support	3	\$20.00	\$ 60.00
TOTAL DIRECT PAYROLL			\$ 8,968.00
TOTAL INDIRECT PAYROLL (1.9)			\$ 17,039.00
<b>TOTAL ESTIMATED PROJECT COSTS</b>	<b>302</b>		<b>\$ 26,000.00</b>

Estimate Does Not Include:  
 Topo, general specifications, contract books, permit fees, advertising costs, layout, administration, or as-built drawings.