



CITY of NOVI CITY COUNCIL

Agenda Item D
August 27, 2012

SUBJECT: Approval to award an amendment to the engineering services agreement with URS Corporation for additional construction phase engineering services related to the Meadowbrook Lake Dam Improvement project in the amount of \$16,069.

SUBMITTING DEPARTMENT: Department of Public Services, Engineering Division, ^{AB} _{BTC}

CITY MANAGER APPROVAL: 

EXPENDITURE REQUIRED	\$ 16,069
AMOUNT BUDGETED	\$ 0 for FY12-13
APPROPRIATION REQUIRED	\$ 17,270 (to be included in future budget amendment, includes \$1,200 previously awarded)
LINE ITEM NUMBER	210-211.00-805.685 Drain Fund

BACKGROUND INFORMATION:

An engineering contract was awarded to URS Corporation (URS) in October 2007 for engineering services related to improvements to Meadowbrook Lake Dam that would address the dam's nonconformance issues and implement recommendations from a 2005 study to address downstream streambank erosion issues. The project included increasing spillway capacity to prevent dam failure, improvement to the primary spillway, streambank stabilization and improvements downstream of the dam, and an upgraded pedestrian path designed to allow vehicular access to the dam for continued maintenance.

Staff worked with the Meadowbrook Lake Subdivision Association and affected property owners over the past five years to address their concerns about the project, acquire the easements necessary for project construction, and to minimize the impacts and address concerns during construction. The easements necessary to construct the project were acquired in February 2011, the design was finalized and a revised MDEQ permit for the project was obtained in the spring of 2011. The construction of the project began in September 2011 and was completed in early 2012.

As with other large projects involving existing structures and underground excavation, there were several issues unforeseen until the project was under construction that required additional scope be added to the project. In working with the residents and the Meadowbrook Lake Subdivision Association, there were other scope changes made to accommodate resident concerns. The scope changes increased the construction contact by \$158,789 (see change order and final pay item elsewhere on this agenda for additional information). The additional construction scope resulted in additional effort by the engineering consultant for the project, URS, for contract administration and construction inspection (see attached July 23, 2012 letter from URS).

URS is requesting an additional \$3,000 for contract administration and \$16,069 for an additional 21.25 crew days that were awarded to the contractor through change orders (21.25 crew days times \$615 per day), for a total increase of \$13,069. (URS's letter includes 3.75 crew days previously awarded administratively). The original award for contract administration was 6.0% of the construction cost—this change is only 1.9% of the increase in construction costs. The request for additional crew days is consistent with the number of crew days awarded to the contractor for additional work on the three changes orders for the project. Staff recommends award of the additional fees to URS in the amount of \$16,069.

RECOMMENDED ACTION: Approval to award an amendment to the engineering services agreement with URS Corporation for additional construction phase engineering services related to the Meadowbrook Lake Dam Improvement project in the amount of \$16,069.

	1	2	Y	N
Mayor Gatt				
Mayor Pro Tem Staudt				
Council Member Casey				
Council Member Fischer				

	1	2	Y	N
Council Member Margolis				
Council Member Mutch				
Council Member Wrobel				



July 23, 2012

Mr. Brian Coburn, P.E.
Engineering Manager
Department of Public Works – Engineering Division
26300 Lee BeGole Drive
Novi, MI 48375

Re: Meadowbrook Lake Dam
Request for Additional Engineering Services

Dear Mr. Coburn:

The Meadowbrook Lake Dam Modification project was officially completed on July 2, 2012, and URS would like to close out our Construction Administration Contract for this project. Attached, please find an Authorization for Additional Services (#2) that provides a final reconciliation of the crew days and construction administration.

Crew Days

The total crew days included in the final Payment Application for VIL Construction was 70 based on the total days expended by VIL. Our original contract included 40 crew days, with an additional five (5) days approved in Authorization for Additional Services (AAS) #1. This request (AAS #2) includes 25 additional crew days, for a total of 70. The crew day summary is attached.

Construction Administration

Although the Construction Administration Contract includes a lump sum fee based on the awarded construction cost, the significant increase in both construction duration and final construction cost resulted in additional effort that was not originally planned. As you are aware, the construction duration increased from 4 months to 10 months, due to both seasonal and contractor work schedules. In addition, the final construction cost of the project increased approximately 25%, due to field conditions and additional City-requested work. The construction duration and increased construction cost resulted in additional work by URS staff, including additional payment application processing, meetings and site visits and RFI and Change Order processing and documentation.

Based on the above, we respectfully request your consideration of an increase of \$3,000 to our construction administration fee, as shown on the attached work hour and fee breakdown. The attached AAS #2 brings our total construction administration and crew day fee to \$70,066.



We are available at your convenience to discuss this matter. We appreciate the opportunity to be of continued assistance to the City of Novi. If you should have any questions or desire additional information, please contact me.

Sincerely,
URS CORPORATION

A handwritten signature in blue ink that reads "Jan. M. Hauser".

Jan. M. Hauser, P.E.
Vice President

cc: T. Woodward, P.E. – URS
N. Mehram, P.E. - URS

Authorization for Additional Services #2

Project: **Engineering Services for
Meadowbrook Lake Dam Renovations
Contract Administration and Inspection Services**

Date: 07/19/12

Description of Additional Services

- **Additional Crew Days to observe VIL Contract, as indicated in final Contractor Payment Application (70 crew days total);**
- **Additional Construction Administration – due to extended duration of project and significant increase to final construction costs**

This Request adds \$2,000 and 25 crew days to the project.

Original scope of work (PO #000092966):

- Crew Days – 40 days from bid (\$24,600)
- Construction Administration - 6% of bid price (\$24,016)

Auth. for Add'l Services #1

- Crew Days – 5 days (\$3,075)

Amount authorized to date: **\$51,691**

Proposed scope of work:

- Crew Days – 25 days @ \$615/day through end of construction (\$15,375)
- Construction Administration (\$3,000) (see attached).

Proposed budget amount for new scope: **\$70,066**

Based on the revised scope of services, we request authorization for an increase of **\$18,375** to the amount authorized under the previous scope of services.

Approved By
URS CORPORATION

CITY OF NOVI

Jan M. Hauser, P.E. / Vice President

[Name, Title]

[Date]

City of Novi
Engineering Services for
Meadowbrook Lake Dam - Construction Administration
Estimated Work Hours and Fees

	Project Director	Project Manager/ Dept. Manager	Site/ Civil Engineer	CADD Technician	Clerical	Total Hours	Total Labor
Construction Administration							\$ 2,918
1.1 Additional Payment Application Processing	0	0	4	0	1	5	\$ 446
1.2 Additional Meetings	0	0	4	0	0	4	\$ 371
1.3 RFI and Change Request Processing	0.5	2	16	2	1	21.5	\$ 2,101
Total Hours	0.5	2	24	2	2	30.5	

	CA	Total
Total Project Labor	\$ 2,918	\$ 2,918
Direct Expenses	\$ 82	\$ 82
Total Estimated Project Fee	\$ 3,000	\$ 3,000

Meadowbrook Lake Dam Renovations
City of Novi, Michigan

Project # 13651070
 Date: 7-17-2012 Final

Crew Days

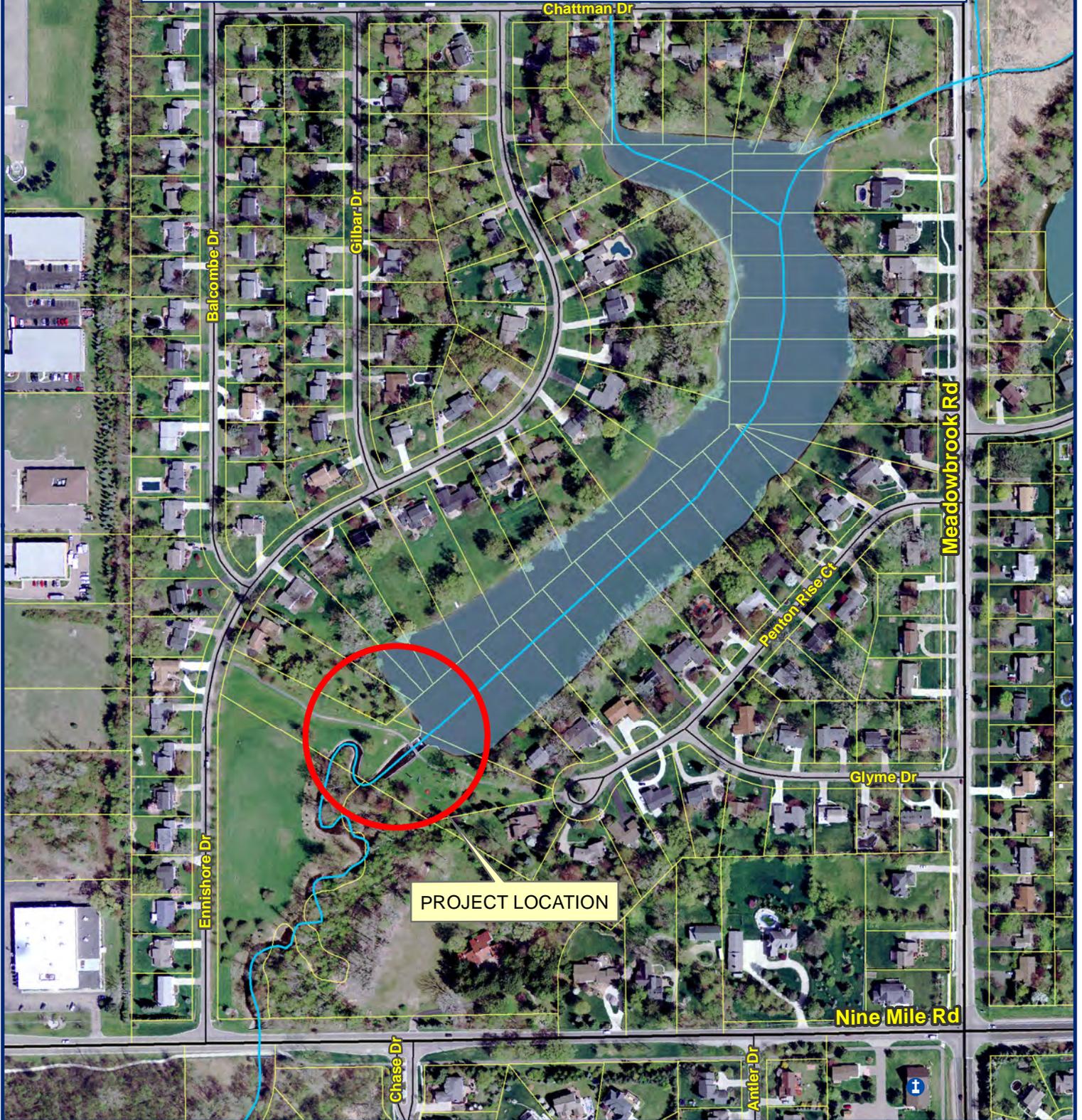
date	crew days		employee
9/15/2011	1 day	1.00	Jim Hess
9/16/2011	1 day	1.00	Jim Hess
9/19/2011	No Work		
9/20/2011	No Work		
9/21/2011	1 day	1.00	Jim Hess
9/22/2011	1 day	1.00	Jim Hess
9/23/2011	NA		Jim Hess
9/26/2011	No Work		
9/27/2011	1/2 day	0.50	Jim Hess
9/28/2011	No Work		
9/29/2011	1 day	1.00	Jim Hess
9/30/2011	No Work		
10/3/2011	1.5 day	1.50	Jim Hess
10/4/2011	0.5 day	0.50	Jim Hess
10/5/2011	1 day	1.00	Jim Hess
10/6/2011	No Work		
10/7/2011	No Work		
10/10/2011	1/4 day	0.25	Jim Hess
10/11/2011	1.5 day	1.50	Jim Hess
10/12/2011	1.5 day	1.50	Jim Hess
10/13/2011	1 day	1.00	Jim Hess
10/14/2011	1 day	1.00	Jim Hess
10/17/2011	1 day	1.00	Jim Hess
10/18/2011	1.5 day	1.50	Jim Hess
10/19/2011	rain		
10/20/2011	rain		
10/21/2011	0.5 day	0.5	Jim Hess
10/22/2011	1 day	1	Jim Hess
10/24/2011	1 day	1.00	Jim Hess
10/25/2011	1.5 day	1.50	Jim Hess
10/26/2011	1.5 day	1.50	Jim Hess

10/27/2011	1.5 day	1.50	Jim Hess
10/28/2011	No Work		
10/31/2011	.25 day	0.25	Jim Hess
11/1/2011	1.5 day	1.50	Jim Hess
11/2/2011	.5 day	0.50	Jim Hess
11/3/2011	1.5 day	1.50	Jim Hess
11/4/2011	1.0 day	1.00	Jim Hess
11/5/2011	1 day	1	Jim Hess
11/7/2011	1.0 day	1.00	Jim Hess
11/8/2011	1.0 day	1.00	Jim Hess
11/9/2011	0.5 day	0.50	Jim Hess
11/10/2011	1.0 day	1.00	Jim Hess
11/11/2011	0.5 day	0.5	Dave Murphy
11/14/2011	1.0 day	1.00	Jim Hess
11/15/2011	No Work		
11/16/2011	1.0 day	1.00	Jim Hess
11/17/2011	1.0 day	1.00	Jim Hess
11/18/2011	1.5 day	1.5	Jim Hess
11/21/2011	1.5 day	1.50	Jim Hess
11/22/2011	1.0 day	1.00	Jim Hess
11/23/2011	No Work		
11/24/2011	Holiday		
11/25/2011	Holiday		
11/28/2011	1.0 day	1.00	Jim Hess
11/29/2011	No Work		
11/30/2011	1.5 day	1.50	Jim Hess
12/1/2011	1.5 day	1.50	Jim Hess
12/2/2011	1.0 day	1.00	Jim Hess
12/3/2011	1.0 day	1	Jim Hess
12/5/2011	0.5 day	0.50	Jim Hess
12/6/2011	1.0 day	1.00	Jim Hess
12/7/2011	1.0 day	1.00	Jim Hess
12/8/2011	1.5 day	1.50	Jim Hess
12/9/2011	No work		
12/12/2011	1.0 day	1.00	Dave Murphy
12/13/2011	1.0 day	1.00	Dave Murphy
2/1/2012	.25 Day	0.25	Jim Hess
2/2/2012	1.0 day	1.00	Jim Hess

2/3/2012	1.0 day	1	Jim Hess
4/2/2012	0.5 day	0.5	Jim Hess
4/4/2012	1.5 day	1.5	Jim Hess
4/5/2012	1.0 day	1	Jim Hess
4/9/2012	1.5 day	1.50	Jim Hess
4/10/2012	0.5 day	0.50	Jim Hess
4/11/2012	1.0 day	1.00	Jim Hess
4/12/2012	1.0 day	1.00	Jim Hess
4/13/2012	No work		
4/16/2012	No work		
4/17/2012	1.0 day	1.00	Jim Hess
4/18/2012	1.5 day	1.50	Jim Hess
4/19/2012	1.0 day	1.00	Jim Hess
4/20/2012	1.0 day	1.00	Jim Hess
5/3/2012	0.5 Day	0.5	Jim Hess
5/15/2012	1.0 Day	1.00	Jim Hess
5/16/2012	0.5 Day	0.50	Jim Hess
6/19/2012	0.5 Day	0.50	Jim Hess
6/20/2012	0.5 Day	0.50	Jim Hess
6/21/2012	0.5 Day	0.50	Jim Hess
7/2/2012	0.5 Day	0.50	Jim Hess
7/17/2012	1/0/1900	0.25	Jim Hess
running total		70.00	

Meadowbrook Lake Dam Improvement Project

Location Map



Map Author: Croy
 Date: 6/28/11
 Project: Meadowbrook Lake Dam
 Version #: V1.0

Amended By: Place Name Here
 Date: Enter Date
 Department: Place here

MAP INTERPRETATION NOTICE

Map information depicted is not intended to replace or substitute for any official or primary source. This map was intended to meet National Map Accuracy Standards and use the most recent, accurate sources available to the people of the City of Novi. Boundary measurements and area calculations are approximate and should not be construed as survey measurements performed by a licensed Michigan Surveyor as defined in Michigan Public Act 132 of 1970 as amended. Please contact the City GIS Manager to confirm source and accuracy information related to this map.

Map Legend



1 inch = 322 feet



City of Novi
 Department Division
 Department Name
 45175 W Ten Mile Rd
 Novi, MI 48375
 cityofnovi.org

Meadowbrook Lake Dam Improvements Project



View from Ennishore Drive looking east



Looking north at the dam



Streambank stabilization along the Rouge River



Looking north at the lake secondary overflow swale