



# CITY of NOVI CITY COUNCIL

**Agenda Item G**  
**March 3, 2008**

**SUBJECT:** Approval to award a contract for design and construction engineering services for the 2008 Sanitary Lift Station Upgrades—Bellagio and Napier project to Orchard Hiltz & McCliment for a not-to-exceed design fee of \$14,400 and a construction engineering fee equal to a fixed 8.8% of the estimated construction cost (estimated to be \$15,496.80) for a total of \$29,896.80

**SUBMITTING DEPARTMENT:** Engineering *KJA*

**CITY MANAGER APPROVAL:** *[Signature]*

<b>EXPENDITURE REQUIRED</b>	<b>\$29,896.80 (From Water &amp; Sewer Fund)</b>
<b>AMOUNT INCLUDED IN CIP</b>	<b>\$194,000</b> <b>(\$146,000 for Bellagio and \$48,000 for Napier)</b>
<b>ADDITIONAL AMOUNT REQUIRED</b>	<b>\$0</b>
<b>LINE ITEM NUMBER</b>	<b>592-592.00-159.805 (Bellagio)</b> <b>592-592.00-159.807 (Napier)</b>

**BACKGROUND INFORMATION:**

The purpose of this project is to upgrade two existing sanitary pump stations: Bellagio Lift Station located on Beck Road south of Nine Mile Road; and Napier Lift Station is located on Island Lake Drive (south of 12 Mile Road and east of Napier Road). The locations are shown on the attached map.

In 2006, the City of Novi and its consultant, Orchard Hiltz & McCliment, reviewed each of the city's 19 sanitary pump station sites as part of the Capacity Management Operations and Maintenance Study Phase II and provided recommendations for future projects. The scope of this project includes the installation of a generator at both sites and several upgrades to Bellagio lift station including new higher capacity pumps to serve the build-out flows, safety improvements and replacement of corroded galvanized equipment with stainless steel. The complete scope is detailed in the attached Request for Proposals (RFP). The Bellagio lift station was accepted by the City in 2001 and the Napier lift station was accepted in 2004.

The attached RFP for engineering services was sent to the six firms that City Council pre-qualified for utility-related projects. Six proposals were received and each was evaluated using *Qualifications Based Selection*. The following table summarizes the results of the proposal review process:

Firm	Not-to-Exceed Design Fee	Estimated Construction Cost	Fixed % of Const	Construction Engineering Fee (% Multiplied by Construction Cost Estimate)	Total Estimated Fee	Staff Review Score	Proposal Rank
<i>Orchard Hiltz &amp; McCliment</i>	<i>\$14,400.00</i>	<i>\$176,100.00</i>	<i>8.80%</i>	<i>\$15,496.80</i>	<i>\$29,896.80</i>	<i>1055</i>	<i>1</i>
Stantec	17,553.00	176,100.00	9.25%	16,289.25	33,842.25	885	2
URS Corporation	16,000.00	176,100.00	7.50%	13,207.50	29,207.50	645	3
Anderson Eckstein & Westrick	15,000.00	176,100.00	10.70%	18,842.70	33,842.70	600	4
Spalding DeDecker	15,400.00	176,100.00	10.75%	18,930.75	34,330.75	550	5
Fishbeck Thompson Carr & Huber	37,843.00	176,100.00	10.30%	18,138.30	55,981.30	465	6

Of the six firms that submitted proposals, Orchard Hiltz & McCliment (OHM) had the second lowest fee, met all requirements listed in the request for proposals and had the most comprehensive proposal (see attached OHM's proposal dated February 21, 2008 and the Engineering Department's scoring summary for reference).

OHM has performed numerous sanitary sewer related projects for the City of Novi in recent years, including the Capacity Management Operations and Maintenance Study Phase 1 and 2 and the Hilton Pump Station Upgrades. OHM is currently assisting the City with the CMOM Phase 3 projects (manhole rehabilitation, cleaning and televising).

The budget for the project, including engineering is \$194,000. The project is scheduled for completion in fall 2008.

**RECOMMENDED ACTION:** Approval to award a contract for design and construction engineering services for the 2008 Sanitary Lift Station Upgrades—Bellagio and Napier project to Orchard Hiltz & McCliment for a not-to-exceed design fee of \$14,400 and a construction engineering fee equal to a fixed 8.8% of the estimated construction cost (estimated to be \$15,496.80) for a total of \$29,896.80.

	1	2	Y	N
Mayor Landry				
Mayor Pro Tem Capello				
Council Member Crawford				
Council Member Gatt				

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

## SCORING SUMMARY

Project Description: 2008 Sanitary Lift Station Upgrades

RANK 1= LOW, x= BEST (x = number of firms repounding)

TOTAL SCORES	<i>Item weight:</i> 10	5	15	10	10	Totals	Rank
	1	2	3	4	5		
Anderson Eckstein & Westrick	12	11	13	10	13	600	4
Fishbeck Thompson Carr & Huber	4	17	10	10	9	465	6
Orchard Hiltz & McCliment	20	19	22	22	21	1055	1
Spalding DeDecker	8	15	13	13	7	550	5
Stantec	16	16	19	18	18	885	2
URS Corporation	24	6	7	11	16	645	3
<b>TOTALS</b>	<b>84</b>	<b>84</b>	<b>84</b>	<b>84</b>	<b>84</b>		

### SCORING CRITERIA

1. Engineering Fee
2. Evaluation of Schedule
3. Evaluation of Approach, Statement of Understanding of Project, and proposed staff
4. Analysis of subjective statements applicable to the project as required on the RFP (Value added items)
5. Evaluation of past performance on City projects

FEE SUMMARY FOR 2008 SANITARY LIFT STATION UPGRADES  
BELLAGIO AND NAPIER

Firm	Design Fee	Eng Cost Estimate	City Cost Estimate	% Const Fee	EngConstruction Fee	Total
Orchard Hiltz & McCliment	14,400.00	190,000.00	176,100.00	8.80%	15,496.80	29,896.80
Stantec	17,553.00	210,650.00	176,100.00	9.25%	16,289.25	33,842.25
URS Corporation	16,000.00	164,000.00	176,100.00	7.50%	13,207.50	29,207.50
Anderson Eckstein & Westrick	15,000.00	160,400.00	176,100.00	10.70%	18,842.70	33,842.70
Spalding DeDecker	15,400.00	157,000.00	176,100.00	10.75%	18,930.75	34,330.75
Fishbeck Thompson Carr & Huber	37,843.00	190,000.00	176,100.00	10.30%	18,138.30	55,981.30

# LOCATION MAP

## Bellagio Lift Station

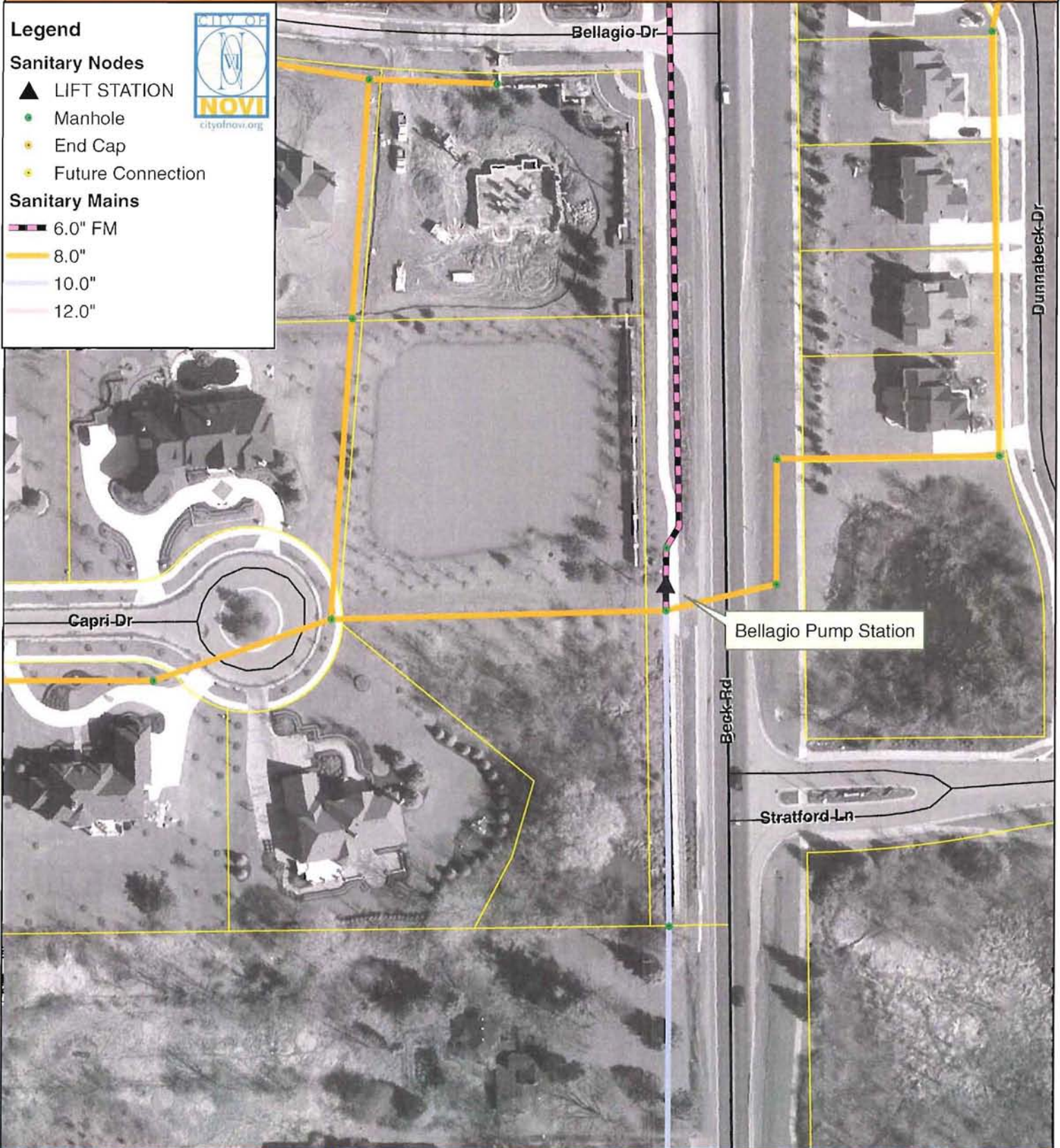
### Legend

#### Sanitary Nodes

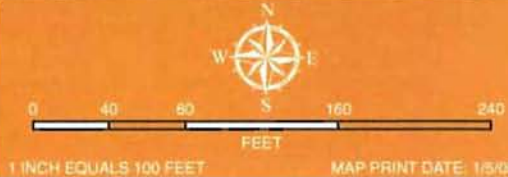
- ▲ LIFT STATION
- Manhole
- End Cap
- Future Connection

#### Sanitary Mains

- 6.0" FM
- 8.0"
- 10.0"
- 12.0"



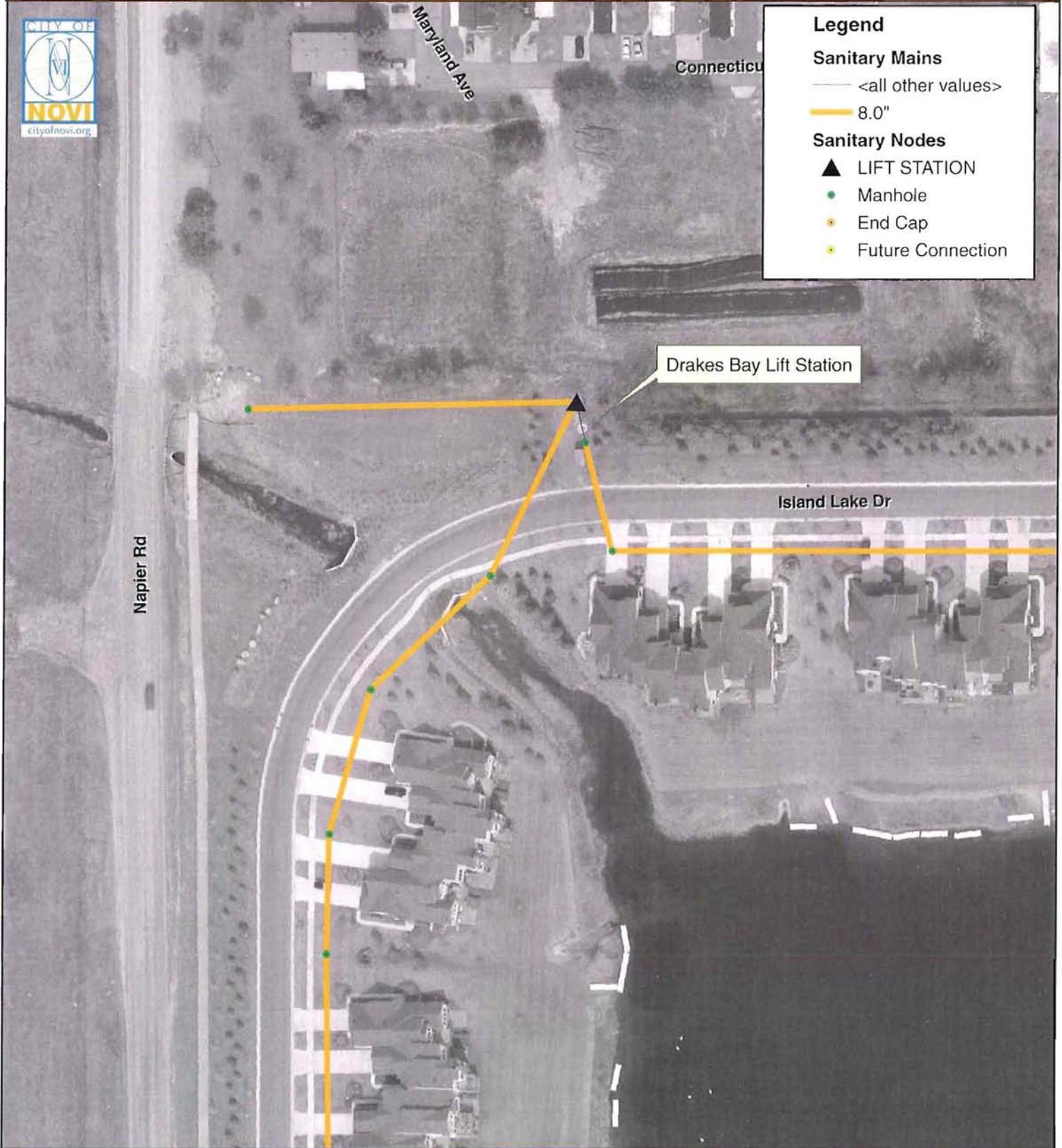
**CITY OF NOVI**  
 ENGINEERING DIVISION  
 45175 W. TEN MILE ROAD  
 NOVI, MI 48375-3024  
 (248) 347-0454  
 Brian Coburn, PE



**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.

# LOCATION MAP

## Napier Lift Station



### Legend

#### Sanitary Mains

- <all other values>
- 8.0"

#### Sanitary Nodes

- ▲ LIFT STATION
- Manhole
- End Cap
- Future Connection

Drakes Bay Lift Station

Island Lake Dr

Napier Rd

Maryland Ave

Connecticut

### CITY OF NOVI

ENGINEERING DIVISION

45175 W. TEN MILE ROAD

NOVI, MI 48375-3024

(248) 347-0454

MAP AUTHOR: FIRST LAST, TITLE



1 INCH EQUALS 100 FEET

MAP PRINT DATE: date

#### MAP INTERPRETATION NOTICE

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**NOTICE - CITY OF NOVI  
REQUEST FOR PROPOSALS**

**Engineering Services for  
2008 Sanitary Lift Station Upgrades –  
Bellagio and Napier**

The City of Novi will receive sealed proposals for **Engineering Services for 2008 Sanitary Lift Station Upgrades – Bellagio & Napier** according to the specifications of the City of Novi.

Sealed proposals will be received until **3:00 P.M.** prevailing Eastern Time, **Thursday, February 21, 2008.** Proposals shall be addressed as follows:

**CITY OF NOVI  
CAROL J. KALINOVIK, PURCHASING DIRECTOR  
45175 W. Ten Mile Rd.  
Novi, MI 48375-3024**

All proposals must be signed by a legally authorized agent of the proposing firm. **ENVELOPES MUST BE PLAINLY MARKED**

**“Engineering Services for  
2008 Sanitary Lift Station Upgrades –  
Bellagio and Napier”**

**AND MUST BEAR THE NAME OF THE PROPOSER.**

The City reserves the right to accept any or all alternative proposals and award the contract to other than the lowest bidder, to waive any irregularities or informalities or both; to reject any or all proposals; and in general to make the award of the contract in any manner deemed by the City, in its sole discretion, to be in the best interest of the City of Novi.

Carol J. Kalinovik  
Purchasing Director  
ckalinovik@cityofnovi.org

Notice dated: February 8, 2008

**REQUEST FOR PROPOSALS  
CITY OF NOVI**

**ENGINEERING SERVICES FOR  
2008 SANITARY LIFT STATION UPGRADES—BELLAGIO AND NAPIER**

**February 8, 2008**

This Request for Proposals (RFP) for **2008 SANITARY LIFT STATION UPGRADES** is being sent to the firms selected in the Utility Qualification Process completed on March 19, 2007.

**Project Description**

The purpose of this project is to upgrade two existing sanitary pump stations; Bellagio Pump Station located at 21687 Beck Road (south of Nine Mile Road) and Napier Pump Station located at 25849 Island Lake Drive (south of 12 Mile Road and east of Napier Road).

In 2006, the City of Novi and its consultant, Orchard Hiltz & McCliment, reviewed each of the city's 19 sanitary pump station sites as part of the Capacity Management Operations and Maintenance Study Phase II and provided recommendations for future projects. The work at the Bellagio and Napier pump stations was included in the Capital Improvement Plan for 2008.

The Bellagio pump station consists of two single phase ABS AF60-4EX submersible pumps with a measured capacity of 271 gpm and 227 gpm, respectively (see Appendix B for more design information). It was constructed in 1994 to serve the southern portions of sections 31 and 32. The anticipated peak flow at build-out based on the current master planned density is 320 gpm, but should density be increased it could be as high as 460 gpm. The recommendations for improvements to the station from the report include:

- Clean the wet well
- Provide an on-site generator (natural gas preferred)
- Replace galvanized guide rails and lift chains with stainless steel
- Replace float system with Multitrode level sensors
- Install new valve chamber top hatch with fall protection
- Replace single phase pumps with three phase pumps
- Replace pump upper guide brackets and support brackets
- Replace panel enclosure (and size for future SCADA equipment that is currently in design)
- Relocate or install junction boxes
- Improve the existing access drive for vector truck access

The Napier pump station consists of two Flygt 3127 submersible pumps with a measured capacity of 697 gpm and 776 gpm, respectively (see appendix B for more information). The station was constructed in the early 1990s as part of the Island Lake development. Since that time, some of the property north of Island Lake has been rezoned and developed into a residential community. The original basis of design calculations for the station should be verified by the consultant as part of this project to make sure that the pumps are sized for build out. The main focus for this site, however is the installation of the on-site natural gas generator.

The budget for the project, including engineering is \$194,000. The project is scheduled for completion in summer 2008.

**SCOPE OF SERVICES**

The selected consultant shall conduct the following activities:

- I.) Upon authorization by the City Council and the City Engineer, the consultant will:
  - Attend scope verification meeting with City staff.



- Visit each site with Engineering and Water and Sewer staff to become familiar with the site.
  - Review available record drawings for the Bellagio Pump Station (record drawings are not available for the Napier pump station).
  - Review the build-out capacity calculations provided in the Sanitary Capacity Report, completed for CMOM phase I and incorporate into basis of design. The consultant will use the number of REUs upstream of the station as stated in the report for use in determining pump sizing (i.e. the detailed analysis of land use and build out has been completed and will not be required in this scope).
  - Provide a topographic survey of the project area (this is necessary for design of the generator location). The survey must include and identify type, size and condition of all trees measuring 6-inch d.b.h. and larger.
  - Prepare plans, specifications, and cost estimates for the project.
  - Contact and coordinate with all utility companies with facilities within the project boundary. This includes contacting and coordinating with the service planners for Detroit Edison and Consumers Energy to coordinate electrical and natural gas needs at each location. This should be completed early enough in the process so as not to impact the construction schedule.
  - Provide preliminary design and project cost estimate at 30% complete for review and comment.
  - Provide final plans and contract documents for the project at the time of 90% review. The front-end documents will be provided by the City of Novi, the specifications shall be prepared by the Consultant, and contract documents shall be prepared, printed, assembled, and distributed by the Consultant.
  - A revised construction cost estimate shall be provided at the time of 90% review by the City.
  - The plans shall be designed in accordance with the City of Novi Design and Construction Standards, Chapter 11, Novi Code of Ordinances, and other commons standards as applicable.
- 2.) The Consultant shall submit five (5) sets of plans and cost estimates for review to the City Engineer at 30% complete. The Consultant shall submit five (5) sets of plans and two (2) sets of specifications at 90% complete for review and comment. The Consultant shall submit five (5) sets of as-bid drawings and specifications to the City at the time of construction bidding, as well as a CD of the digital file converted to AutoCAD format. The Consultant shall also provide all plan sets required for permit application submittal to any agencies as required. All bidding activities shall be coordinated through the Engineering and Purchasing Departments.
  - 3.) The Consultant will complete a soil erosion and sedimentation control plan for the project in compliance with Part 91 of P.A. 451 of 1994, Chapter 29 of the Novi Code of Ordinances and the City of Novi Authorized Public Agency SESC Program Manual.
  - 4.) As a part of the Design Phase, the Consultant shall prepare bid documents and provide assistance to the City Engineering and Purchasing Departments with the bidding of the project, including coordinating and facilitating the pre-bid meeting, preparation of contract addenda, plan revisions, responding to bidder inquiries, review of bids, and recommendation of award to City Engineering.
  - 5.) Contract administration services shall include, but not be limited to: reviewing shop drawings furnished by the contractor at the pre-construction meeting, coordinating and running the pre-construction meeting, ensuring compliance with contract documents, regular consultation with City Engineering, interpretation of plans and specifications, preparation and certification of pay estimates, staking, full-time construction inspection during active construction, and materials testing along with final testing and project review. The Consultant must also promptly attend to resident concerns and complaints as they become known.
  - 6.) Construction phase services shall also include submittal to City Engineering of all project reports and documents, and written recommendation regarding final acceptance of the project. The Consultant, within this phase, shall also prepare record drawings and transmit one (1) digital copy of as-built plan in

.tif format (400 dpi minimum), two (2) plan copies, and a CD containing the digital file of the record drawings in the City standard format (AutoCAD), and provide such information to the Engineering Department within three (3) months following substantial completion of the project.

- 7.) During the construction phase the Consultant shall be responsible for administering and enforcing the soil erosion and sedimentation control plan as an agent for the City under the Authorized Public Agency (APA) program in compliance with the City of Novi *Authorized Public Agency Soil Erosion and Sedimentation Control Program Manual*. The Consultant shall also be responsible for soil erosion and sedimentation control inspections of the project for compliance with the approved soil erosion and sedimentation control plan. The inspections must be completed by an individual who has current certification through the Michigan Department of Environmental Quality under Part 91. The inspections must occur at regular intervals and soil erosion and sedimentation control inspection logs must be maintained and provided to City staff as required. The Consultant shall also be responsible for instituting corrective measures in the field to prevent soil erosion and sedimentation as required, and for overseeing the Contractor's Storm Water Operator.

### **DOCUMENT AND FILE FORMAT**

All documents shall be submitted to the City of Novi in an electronic format as specified by the Engineering Department.

Documents: MS Word

Digital copies of files, maps, or drawings:  
files: ArcView Shape file, AutoCAD,  
maps/drawings: ArcView layouts print file or  
AutoCAD format (.dxf)

All digital data should correspond to:  
Project – State Plane Coordinate System  
Michigan, South Zone – 6401  
Datum – NAD83, NAVD 88  
Spheroid – GRS1980  
Units – International Feet

### **CONSULTANT QUALIFICATIONS**

The Consultant has been pre-qualified to provide engineering consulting services for 2007-2008 Utility Projects.

### **CONSULTANT SELECTION**

As a pre-qualified consultant, the selection for this utility project will be based on an evaluation of the fee proposal, which is labeled as Exhibit A, in addition to the Consultant's project approach, schedule, and value-added concepts that would improve the overall project (i.e., cost savings, time savings, innovation, etc.). **The following scoring will be used to evaluate the proposals:**

<u>Criteria</u>	<u>Weight</u>
Engineering Fee	20%
Evaluation of Schedule	10%
Evaluation of Approach, Statement of Understanding of Project, and Proposed Staff	30%
Analysis of subjective statements applicable to the project as required on the RFP (Value added items)	20%
Evaluation of past performance on City projects	20%

By submitting a proposal, the Consultant agrees that neither the firm, sub-contractors, nor suppliers will discriminate against any person with respect to hiring or employment on the basis of religion, race, color, national origin, age, sex, height, weight, marital status, or a handicap that is unrelated to the individual's ability to perform tasks particular to a job or position.

The selected consultant will enter into an agreement with the City of Novi to perform the services listed in this Request for Proposals. The City's standard Consulting Engineering Agreement is included as Exhibit C.

### **PROPOSAL SUBMITTALS**

To be considered, sealed fee proposals (an UNBOUND original and five copies) must arrive at the Purchasing Department, 45175 W. Ten Mile Road, Novi, Michigan 48375 on or before **3:00 PM** Local Prevailing Time, **Thursday, February 21, 2008** addressed to Carol J. Kalinovik, Purchasing Official, and **clearly labeled 2008 SANITARY LIFT STATION UPGRADES**. There will be no exceptions to this requirement and the City of Novi shall not be held responsible for late, lost, or misdirected proposals. Submitted proposals shall include:

- The completed fee proposal (Exhibit A)
- A proposed schedule for the project including design and construction phase
- A rate sheet or fee schedule depicting the Consultant's hourly rates that could be applied to additional work as may be necessary, for each category of staff that would work on the project.
- A discussion of the proposed approach to the project, in detail (including any value-added concepts that would improve the overall project (i.e., cost savings, time savings, innovation, etc.)).

All proposals must remain valid for one hundred twenty (120) days from due date and cannot be withdrawn during this period.

### **USE OF CITY LOGO IN YOUR PROPOSAL IS PROHIBITED.**

In the hiring of employees for the performance of work under this contract, neither the contractor, subcontractor, nor any person acting in their behalf shall by reason of race, creed, color, age, height, weight, sex, sexual preference or handicap discriminate against any person qualified to perform the work required in the execution of the contract.

Questions regarding this Request for Proposals may be directed to:

City Engineer, Rob Hayes, P.E. (248) 735-5606

-or-

Civil Engineer, Brian Coburn, P.E. (248) 735-5632

The City of Novi reserves the right to accept any or all alternative proposals and to award the project to other than the firm with the lowest fee proposal, waive any irregularities or informalities, or both, to reject any or all proposals, and in general, to make award in any manner deemed by the City, in its sole discretion, to be in the best interests of the City of Novi.

### **Exhibits**

- A - Fee Proposal
- B- Project Background Information & Location Map
- C - Engineering Consultant Agreement