

### CITY of NOVI CITY COUNCIL

Agenda Item N July 23, 2007

SUBJECT: Approval to award a contract for design and construction engineering services for the 2007 Traffic Signal Upgrade project (intersections of Thirteen Mile/Meadowbrook, and Fourteen Mile/Novi) to URS Corporation for a not-to-exceed design fee of \$13,851.26 and a construction engineering fee equal to a fixed 5.61% and 4.44% of the estimated construction cost for Thirteen Mile/Meadowbrook and Fourteen Mile/Novi, respectively, (estimated to be \$8,655.50) for a total of \$22,506.76.

**SUBMITTING DEPARTMENT**: Engineering

CITY MANAGER APPROVAL

EXPENDITURE REQUIRED	\$10,903.38 (13 Mile/Meadowbrook)
	\$11,603.38 (14 Mile/Novi)
AMOUNT BUDGETED	\$75,000 (13 Mile/Meadowbrook)
	\$50,000 (14 Mile/Novi)
APPROPRIATION REQUIRED	N/A
LINE ITEM NUMBER	204-204.00-863.013 (13 Mile/Meadowbrook)
	204-204.00-863.100 (14 Mile/Novi)

#### **BACKGROUND INFORMATION:**

This project includes the upgrade of the existing traffic signals at two intersections 1) Thirteen Mile Road and Meadowbrook Road, and 2) Fourteen Mile Road and Novi Road. While the existing intersections have left turn lanes in place, they lack a left turn signal for the westbound Thirteen Mile to southbound Meadowbrook turning movement, the westbound Fourteen Mile Road to southbound Novi, and the eastbound Fourteen Mile Road to northbound Decker Road turning movements (see enclosed maps and photos).

The Fourteen Mile project is a carryover from the 2006-07 budget and the Thirteen Mile project is included in the 2007-08 budget. The two projects are being combined in anticipation of receiving lower construction bids. The Thirteen Mile intersection is completely within Novi's jurisdiction. The Fourteen Mile project is within the jurisdiction of the City of Novi, City of Walled Lake and the Road Commission for Oakland County. While tri-party funding would typically be used for a project of this type, our tri-party funding has been allocated for other projects within the City which include the Novi Road link and Cabot Drive and 12 Mile Road signal). The City of Walled Lake has not budgeted funds to contribute toward the improvement, however there have been initial discussions requesting their participation. We anticipate a formal response from Walled Lake prior to the construction award. In the event that Walled Lake chooses not to participate, both projects would be funded entirely by the City.

The attached Request for Proposals for design and construction engineering services was sent to the six firms that City Council pre-qualified for roadway-related projects. Two proposals were received and each was evaluated using *Qualifications Based Selection*, with a greater emphasis on the proposed fee because of the relatively straightforward project scope. The following table summarizes the results of the proposal review process:

Firm	Not-to- Exceed Design Fee	Fixed % of Const	Estimate of Construction Cost	Construction Engineering Fee (% Multiplied by Construction Cost Estimate)	Total Estimated Fee	Proposal Rank
PROJECT 1- THIRTEEN MIL	E & MEADO	VBROOK SI	GNAL			
URS Corporation	\$6,693.13	5.61%	\$75,000	\$4,210.25	\$10,903.38	_ 1
Spalding DeDecker	\$7,000.00	6.00%	\$75,000	\$4,500.00	\$11,500.00	_ 2
PROJECT 2- FOURTEEN MI	LE & NOVI SI	GNAL				
URS Corporation	\$7,158.13	4.44%	\$100,000	\$4,445.25	\$11,603.38	1
Spalding DeDecker	\$8,500.00	5.00%	\$100,000	\$5,000.00	\$13,500.00	2

Note: The other four pre-qualified firms did not submit proposals.

Of the two firms that submitted proposals, URS firm had the lowest fee and met all requirements listed in the request for proposals (see attached URS proposal dated July 10, 2007). URS' fee proposal included costs for soil borings, and Spalding DeDecker's did not. Because soil borings are not anticipated for either intersection, these costs were deducted from URS' fee.

URS is pre-qualified by MDOT to design traffic signals and can therefore complete the design without the use of a sub-consultant. URS successfully completed engineering for the Eleven Mile Road Culvert and Nine Mile Road Water Main projects, and is currently working on the 2007 Neighborhood Streets project as well as the Beck Road Short-Term Improvements project.

The design phase of this project will be completed by September and the construction phase will be completed by November 2007.

**RECOMMENDED ACTION:** Approval to award a contract for design and construction engineering services for the 2007 Traffic Signal Upgrade project (intersections of Thirteen Mile/Meadowbrook, and Fourteen Mile/Novi) to URS Corporation for a not-to-exceed design fee of \$13,851.26 and a construction engineering fee equal to a fixed 5.61% and 4.44% of the estimated construction cost for Thirteen Mile/Meadowbrook and Fourteen Mile/Novi, respectively, (estimated to be \$8,655.50) for a total of \$22,506.76.

	1	2	Υ	Ν
Mayor Landry				
Mayor Pro Tem Capello				
Council Member Gatt				
Council Member Margolis				

	1	2	Υ	N
Council Member Mutch				
Council Member Nagy				
Council Member Paul				

# **Existing Lane Markings** Meadowbrook Road and 13 Mile Road



FEET

1 INCH EQUALS 50 FEET

**GIS** 

MAP AUTHOR: Brian Coburn, P.E.

# Existing Lane Markings Fourteen Mile Road and Novi/Decker Road

Map Publication Date: 06/21/07

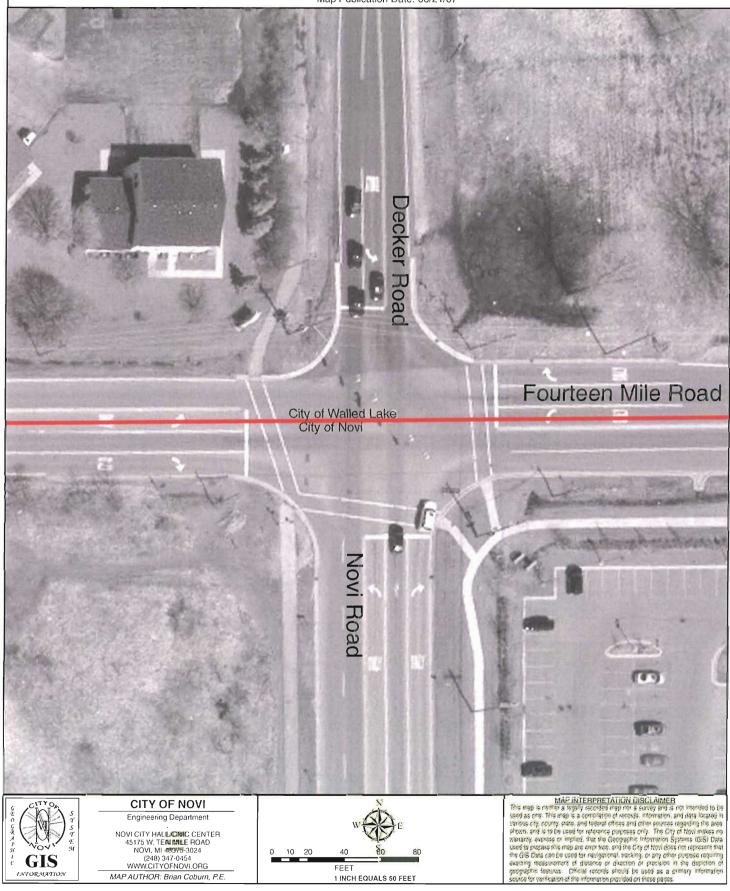




Figure 1. Meadowbrook Road looking north to Thirteen Mile Road



Figure 2. Thirteen Mile Road looking west at Meadowbrook Road



Figure 3. Fourteen Mile looking west toward Novi/Decker



Figure 4. Novi Road looking North toward Fourteen Mile Road



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

# Engineering Services for 2007 Traffic Signal Upgrade

The City of Novi will receive sealed proposals for **Engineering Services for 2007 Traffic Signal Upgrades** according to the specifications of the City of Novi.

Sealed proposals will be received until **3:00 P.M.** prevailing Eastern Time, **Tuesday, July 10, 2007.** 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 2007 TRAFFIC SIGNAL UPGRADES"

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: June 22, 2007



#### REQUEST FOR PROPOSALS CITY OF NOVI

#### ENGINEERING SERVICES FOR 2007 TRAFFIC SIGNAL UPGRADES June 22, 2007

This Request for Proposals (RFP) for 2007 TRAFFIC SIGNAL UPGRADES is being sent to the firms selected in the Roadway Qualification Process completed on March 19, 2007.

#### **Project Descriptions**

Project 1 Meadowbrook Road and Thirteen Mile Road. The project includes the addition of a left turn phase of the existing traffic signal from eastbound Thirteen Mile Road to southbound Meadowbrook Road. It is our understanding in speaking with the Road Commission for Oakland County (RCOC) that the existing signal will need to be reconstructed as a box span configuration. The consultant will coordinate with RCOC to meet their standards and specification and coordinate the programming of the signal. This intersection is under the jurisdiction of the City of Novi, but is operated under contract by RCOC, as such no permit will be required. The project will be constructed within the 2007 construction season. The estimated cost for the construction is \$75,000.

Project 2 Fourteen Mile Road and Novi/Decker Road. The project includes the addition of a left turn phase of the existing traffic signal from eastbound Fourteen Mile Road to southbound Novi/Decker Road. It is our understanding in speaking with the Road Commission for Oakland County (RCOC) that the existing signal may need to be reconfigured as a box span configuration. The consultant would coordinate with RCOC in making this determination. For the purpose of the proposal, the consultant shall assume that the entire signal will be reconstructed as a box span configuration. This intersection is under the jurisdiction of RCOC and will require permitting through that agency. The project will be constructed within the 2007 construction season. The estimated cost for the construction is \$100,000.

#### SCOPE OF SERVICES

The selected consultant shall conduct the following activities:

- 1.) Upon authorization by the City Council and the City Engineer, the Consultant shall:
  - Meet with the City at the beginning of the project to verify the scope of the project.
  - Visit the site to understand existing site conditions.
  - Provide a complete design using RCOC standards and specifications for the traffic signal at
    each intersection. The location of proposed signal poles shall be coordinated with each
    jurisdiction (City of Novi, RCOC, City of Walled Lake, as applicable).
  - Contact and coordinate with all utility companies with facilities within the project limits.
  - Coordinate permitting of the project with the Road Commission for Oakland County for Fourteen Mile Road, which is under RCOC's jurisdiction.
  - 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 City will provide information as needed in the form of recording drawings of existing roadways and utilities (as available), standard details, specifications, benchmarks, etc., as required to assist the Consultant in completing the work.
- The plans shall be designed in accordance with the City of Novi Design and Construction Standards, Chapter 11, Novi Code of Ordinances and RCOC requirements as applicable.
- The Consultant shall be responsible for specifying protection of existing survey monumentation and coordinating with the County surveyor as required.
- 2.) The Consultant shall 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 SESC Program Manual.
- 3.) 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 Division and Purchasing Department.
- 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 Division 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 Division.

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 Roadway Projects.

#### **CONSULTANT SELECTION**

As a pre-qualified consultant, the selection for this roadway project will be based on an evaluation of the fee proposal, which is labeled as Exhibit A, in addition to the Consultant's project understanding, approach, schedule, staffing plan, past performance on City engineering projects, and value-added concepts that would improve the overall project (i.e., cost savings, time savings, innovation, etc.).

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. Prevailing Eastern Time, Tuesday July 10, 2007 addressed to Carol J. Kalinovik, Purchasing Director, and clearly labeled 2007 TRAFFIC SIGNAL 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.

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

Questions regarding this Request for Proposals may be directed to:

City Engineer, Robert F. Hayes, P.E. (248) 735-5606 -or-Civil Engineer, Brian T. 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- Location Maps and photos of existing conditions
- C Engineering Consultant Agreement



PLEASE TYPE:

#### EXHIBIT A FEE PROPOSAL CITY OF NOVI

# ENGINEERING SERVICES FOR 2007 TRAFFIC SIGNAL UPGRADES

We the undersigned propose to furnish to the City of Novi services consistent with the Request for Qualifications dated January 11, 2007 and Request for Proposals dated June 22, 2007, respectively. Design fees will be paid on an hourly basis for actual work performed to a maximum as proposed. A separate fee schedule is being provided should the City request additional work on an hourly basis.

Project No.	Project	Phase	Total Fee
		Design Phase (no soil borings required)	\$
1	Meadowbrook and Thirteen Mile Traffic	Construction Cost Estimate: \$	
1	Signal	Construction Phase:% of Construction Cost	\$
		TOTAL ESTIMATED FEE* PROJECT 1	\$
		Design Phase (no soil borings required)	\$
2.	Fourteen Mile and Novi/Decker Road	Construction Cost Estimate:	
2	Signal	Construction Phase: % of Construction Cost	\$
		TOTAL ESTIMATED FEE* PROJECT 2	\$

<sup>\*</sup>Total Estimated Fee consists of a not-to-exceed design phase fee (which includes geotechnical costs if applicable) and a fixed percentage construction phase fee which is used to estimate an approximate fee amount based on the cost estimate above. The actual construction phase fee will be established when the project is awarded to a contractor by multiplying the fixed percentage provided and the bid price of the successful bidder.

Company Name:	
Address:	
Agent's Name:	
Agent's Title:	
Agent's Signature:	
Telephone Number:	Fax Number:
E-mail Address:	Date:



July 10, 2007

Ms. Carol J. Kalinovik Purchasing Director City of Novi 45175 W. Ten Mile Road Novi, MI 48375-3024

Reference:

**Request for Proposals** 

2007 Traffic Signal Upgrade Project

Dear Ms. Kalinovik:

Please find enclosed an original and five copies of our Proposal for the above referenced projects. Our Statement of Qualifications included general information and an explanation of our overall approach to possible assignments. This proposal includes more specific information on the scope of services, staffing, schedule, and costs for the 2007 Traffic Signal Upgrade Project.

URS has a deserved reputation for designing and inspecting large scale, complex municipal projects. We have also provided quality services on hundreds of projects of all types and scales to Cities, Villages and Counties throughout the State of Michigan, including the City of Novi.

We are currently providing design, construction engineering, layout, and inspection services for the City of Novi on the Beck Road Design Project and the 2007 Neighborhood Roads Project. The Beck Road Design Project includes the design of a new traffic signal at the Beck and 10 Mile Road intersections. These projects provided us the opportunity to work with Novi staff and to become familiar with City of Novi procedures and requirements.

If you have any questions, please feel free to contact me at (248) 553-9449 or Project Manager Matt Klawon at (248) 994-7474. We appreciate your consideration of our submittal and look forward to working with you again.

Sincerely,

URS Corporation - Great Lakes, Inc.

Khaled Soubra, Ph.D., PE

Vice President / Operations Manager

Attachments:

Fax: 248.553.9571

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#### INTRODUCTION

The URS team includes experienced staff that has successfully completed many traffic signal design projects for various local agency clients. Our office in Farmington Hills is close to Novi and allows quick access to the project site and to City Staff at the Novi City Hall. Our team is available to focus on this project and will complete the design and construction phases quickly and efficiently.

We have reviewed the Request For Proposals and have visited the project site to gain a better understanding of the project. We understand what is required to perform the needed services. We have designed roadways under the jurisdiction of the City of Novi such as the current Beck Road Project which includes the traffic signal design at the Beck Road and 10 Mile Road. We are very familiar with Novi standards and requirements.

As shown in the organization chart, the URS team includes:

#### **URS Corporation (URS)**

Design Surveys Construction Inspection and Contact Administration Project Management

#### Professional Service Industries, Inc. (PSI)

Geotechnical Studies Materials Testing

#### GENERAL APPROACH

Completing work efficiently and at the lowest possible cost is important to the City, and thus is important to us. A deliberate and structured approach will be provided to ensure that this goal is met. At URS, a Quality Assurance/Quality Control Plan is developed for all projects, regardless of size. A Senior Engineer is assigned to each project with the



responsibility to ensure that the established process is followed and that independent checks are made of all work products. We firmly believe that our process results in lower overall costs for us and a reduction in claims during construction.

Our overall approach to the project is as follows:

#### Initial Meeting

After selection and prior to beginning work, we would schedule a "Scope Verification" meeting with the City. Staff that will be working on the project will attend this meeting. The purpose of this meeting will be to:

- Obtain information from City records needed to complete the work.
- Review and confirm the project requirements and work limits.
- Discuss in detail our management approach and any special project concerns.
- Establish a communication network to keep the essential decisionmakers involved.
- Review the project schedule, design budget, construction budget, deliverables and project milestones.

#### Preliminary Design

URS will complete the topographic surveys required for the project immediately after the Initial Meeting. A detailed work plan will be developed and reviewed with the City at the Initial Meeting. URS crews have completed numerous surveys in Novi and will follow the requirements outlined in the Request for Qualifications and Request for Proposals.

A preliminary traffic signal design concept will be developed based upon our initial meeting and a field visit by the design team. This preliminary concept will be used to establish the layout of the traffic signal equipment and the placement of traffic signal support structures.



Soil Borings will be obtained and a Geotechnical Report which includes design recommendations will be prepared by PSI. Twenty-five foot deep borings will be obtained within a 10 foot radius of the proposed traffic signal support structure.

Existing utilities will be identified and located as part of the topographic surveys. URS will coordinate with the various utility companies to obtain and verify this information. Close coordination with the utility companies regarding conflicts with the proposed project and relocation of utilities will be maintained.

After the topographic surveys and other needed information is obtained, a preliminary design will be completed.

Upon completion of 30% Design Plans, the plans and preliminary estimate will be prepared and submitted for review by the City.

We anticipate that different options for constructing the traffic signals within the existing right of way may merit consideration. The preliminary design package submitted will include all of the information required for the City to make the basic decisions required for the project. In addition to plans, this may include alternative cost estimates and/or schedules.

#### Detailed Design

Following the 30% Design Review, URS will prepare the 90% Design Review Submittal Package. The resolution of issues raised at the 30% Design stage will be incorporated into the plans and specifications. The project estimate will be updated and additional details added to the plans. A complete Specifications booklet, including bidding proposal, bonds, insurance requirements, and technical specifications for the work will be provided. The General Conditions and Supplemental Conditions used by the City will be incorporated in the Specifications package.



A review meeting with the City will be attended to receive comments on the 90% Design Submittal package.

The 90% Review package will contain a final design of the project, with only minor details not yet included. If there are outstanding issues that require a decision by the City to resolve, these will be explicitly outlined in the meeting agenda. Alternate drawings/exhibits and cost estimates will be presented as needed to help resolve outstanding issues.

#### Final Plans, Specifications, and Estimates

Following the 90% Review, the project plans and specifications will be finalized and a final submittal of contract documents ready for advertising will be sent to the City. The package will include an Advertisement for Bids and a final cost estimate for the work.

#### Advertising

During the advertising phase, we will answer questions from bidders regarding the contract documents. If needed, addenda will be prepared to include any needed clarifications or revisions to the contract documents.

We also will attend the bid opening, analyze the bids submitted and provide a formal recommendation letter to the City concerning contract award.

#### Construction Administration and Inspection

URS personnel will provide Construction Inspection and Contract Administration services.

Full time Inspection will be provided to ensure that all work is done in full compliance with the contract documents. Inspection services would also include verification that soil erosion control measures are in compliance with MDEQ and City of Novi requirements.



Contract Administration includes the determination of completed quantities and submittal of pay estimates for completed work.

Coordination with utility companies during construction will also be done.

The URS Inspector will be the point of contact between the Contractor, the City, and local residents for issues that arise during construction. We anticipate that one full time inspector will be required whenever construction operations are actively in progress. Keeping the City informed of project progress and issues and also coordinating the staking and materials testing operations will be the responsibility of the Inspector.

#### Construction Staking

Staking during construction will be done by URS as required to construct the project. The control points set for the design surveys will be used for this work. The exact locations/offsets/ and information needed on the stakes will be discussed with the Contractor prior to starting work.

#### Materials Testing

During construction, Professional Service Industries, Inc. (PSI) and the URS Inspector will perform materials testing needed to ensure compliance with the project specifications.

#### CRITICAL ISSUES

#### Schedule

Completing the design and construction of this project in 2007 is a challenge. To meet the schedule, avoiding "backing up" during the design phase will be critical. Identifying the City's desires and constraints on the project design must be done at the Initial Meeting. Creating the preliminary traffic signal design and final plans can be done quickly and efficiently.



A potential wetland area has been identified in the northeast quadrant of the 14 Mile Road at Novi/Decker intersection. It is anticipated that the existing wood pole located in this quadrant may be utilized for the new traffic signal design.

The project schedule and fee attached does not include time and effort for obtaining an MDEQ Permit for impacts to wetlands or alterations to inland lakes or streams. Careful attention during design will be taken to avoid impacts to wetlands and drainage outlets, if at all possible. If the impacts cannot be avoided URS will work with the City to resolve these issues. Existing wetlands would then be delineated and the required MDEQ Permit application will be prepared. If necessary, URS will expedite the preparation of the permit submittal to help keep the project on schedule.

The schedule may be delayed if there is a need for significant utility relocations due to the box span design and limited right-of-way availability. The design team will seek and anticipate any utility conflicts early in the design phases in an effort to complete the construction work 2007.

Availability of construction materials may affect the project schedule if the specified equipment is back ordered. However, it is anticipated that the standard traffic signal equipment necessary to construct an operating traffic signal are available.

We understand the challenges that the project schedule offers. The staff to be assigned to this project are available and will be committed to completing the work in 2007.

#### Right of Way

URS will work to provide a complete design utilizing the existing Right of Way available for the proposed traffic signal designs. The project schedule does not allow time for obtaining extensive new right of way or



easements. We also understand that there is no budget established for obtaining Right of Way.

#### ADA Sidewalk Ramps and Facilities

As part of the traffic signal design and construction, URS proposes that the City incorporate the installation of ADA compliant sidewalk ramps and facilities. Placement of the ramps and pedestrian pushbuttons will be taken into consideration during the design phase of the project.

URS understands that the City has successfully used cast iron detectable warning strips on the sidewalk ramps in the vicinity of the City Hall. If desired, URS will incorporate this warning strip specification into the final design package.

#### Maintaining Traffic During Construction

Although the roadway will be open to traffic during construction, the contractor will likely need to also use the roadway for the delivery of equipment and materials. Construction of traffic signal support structures and the installation of overhead electrical devices will require temporary lane closures. It is anticipated that one lane of traffic for both directions of travel will be maintained at all times, with the Contractor providing approved traffic control measures, will likely be needed at certain times to accommodate the work. The Specifications will include provisions regarding the maintenance of traffic that will limit the times when this situation is allowed to non-peak hours in order to minimize inconvenience to the public.



# STAFFING

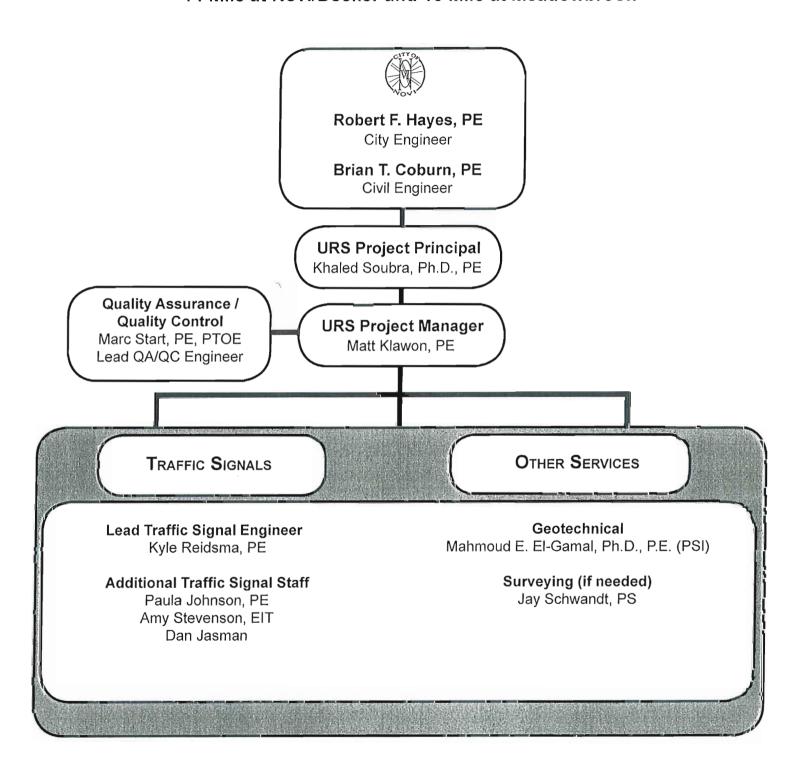
URS has approximately 350 professionals in Farmington Hills and Grand Rapids.

An organization chart follows for the 2007 Traffic Signal Upgrade Project. Resumes for all key staff members listed were included in the Statement of Qualifications submitted in January, 2007.

We understand that construction of this project is to be completed in the 2007 construction season. We will commit additional staff, if required, to ensure that this happens.



# Organizational Chart 2007 Traffic Signal Upgrade Project 14 Mile at Novi/Decker and 13 Mile at Meadowbrook



All proposed key and lead staff are employees of URS Corporation unless otherwise noted: Professional Service Industries - (PSI)



# IMPLEMENTATION SCHEDULES

The schedule for the 2007 Traffic Signal Upgrade Project is included in this section. The schedule shows key dates, tasks, and submittals for the design and construction phases of the project.

We understand that completion of construction in late 2007 is desired. We have set the schedule and have the resources available to commit to this project to ensure that this goal is met.



ID Task Name	Start	Finish	Duration 007						
Notice to Proceed	Wed 08/01/07	Wed 08/01/07	0 days	Ainc	August	September	October	November	December
Project Kickoff Meeting	Wed 08/08/07	Wed 08/08/07	0 days		•				
3 Project Setup	Thu 08/09/07	Fri 08/10/07	2 days		67E				
PRELIMINARY DESIGN - 30%	Thu 08/02/07	Thu 08/23/07	17 days	12					
5 Observation of Existing Conditions	Thu 08/02/07	Thu 08/02/07	1 day						
Soil Borings and Geotechnical	Wed 08/08/07	Fri 08/10/07	3 days						
Design Surveys	Wed 08/08/07	Fri 08/10/07	3 days						
B Preliminary Design	Thu 08/02/07	Wed 08/22/07	16 days	, and .					
9 Submit Preliminary Design	Thu 08/23/07	Thu 08/23/07	0 days		♦ 08/23				
10 DETAILED DESIGN PHASE	Fri 08/31/07	Fri 09/21/07	16 days						
11 Develop Detailed Design Plans &	Fri 08/31/07	Fri 09/07/07	6 days						
Plan Submittal to City	Fri 09/07/07	Fri 09/07/07	0 days			•			
13 Permit Submittals	Fri 09/07/07	Fri 09/07/07	0 days			•			
14 City Review	Mon 09/10/07	Fri 09/14/07	5 days						
15 Review Meeting	Tue 09/18/07	Tue 09/18/07	0 days			•			
Final Plan and Specifications Revisions	Wed 09/19/07	Fri 09/21/07	3 days						
No Submit Package for Advertising	Fri 09/21/07	Fri 09/21/07	0 days						
18 CONSTRUCTION PHASE	Mon 09/24/07	Tue 11/27/07	47 days			13			See Mark
Advertise for Bids	Mon 09/24/07	Mon 10/08/07	11 days				10/08		
20 Bids Evaluation	Tue 10/09/07	Fri 10/12/07	4 days						
21 Award Contract	Mon 10/15/07	Mon 10/15/07	0 days				\$ 10/15		
22 Construction	Mon 10/29/07	Tue 11/27/07	22 days						
Construction Contract Closeout	Tue 11/27/07	Tue 11/27/07	0 days					•	
FINALIZE AND CONTRACT CLOSOUT	Wed 11/28/07	Wed 12/19/07	16 days					1.0	
Prepare Record / As-Built Plans	Wed 11/28/07	Tue 12/11/07	10 days					••••	
Submit Reports & Final Deliverable to City	Wed 12/12/07	Wed 12/12/07	1 day						
Z7 Contract Closeout	Wed 12/19/07	Wed 12/19/07	0 days						12/19

# FEE PROPOSAL

A fee proposal is included in this section as well as a breakdown of hours by task and by labor category.





### EXHIBIT A FEE PROPOSAL CITY OF NOVI

# ENGINEERING SERVICES FOR 2007 TRAFFIC SIGNAL UPGRADES

We the undersigned propose to furnish to the City of Novi services consistent with the Request for Qualifications dated January 11, 2007 and Request for Proposals dated June 22, 2007, respectively. Design fees will be paid on an hourly basis for actual work performed to a maximum as proposed. A separate fee schedule is being provided should the City request additional work on an hourly basis.

Project No.	Project	Phase	Total Fee
		Design Phase (no soil borings required)	\$ 6,693.13
1	Meadowbrook and Thirteen Mile Traffic	Construction Cost Estimate: \$ 75,000	
-	Signal	Construction Phase:5.61_% of Construction Cost	\$ 4,210.25
		TOTAL ESTIMATED FEE* PROJECT 1	\$ 13,113.38
		Design Phase (no soil borings required)	\$ 7,158.13
2.	Fourteen Mile and Novi/Decker Road	Construction Cost Estimate: \$ 100,000	
2	Signal	Construction Phase: 4,44 % of Construction Cost	\$ 4,445.25
		TOTAL ESTIMATED FEE* PROJECT 2	\$ 12,843.48

<sup>\*</sup>Total Estimated Fee consists of a not-to-exceed design phase fee (which includes geotechnical costs if applicable) and a fixed percentage construction phase fee which is used to estimate an approximate fee amount based on the cost estimate above. The actual construction phase fee will be established when the project is awarded to a contractor by multiplying the fixed percentage provided and the bid price of the successful bidder.

#### PLEASE TYPE:

Company Name: URS Corporation Great Lakes
Address: 34555 W.12 Mile Road, Farmington Hills, MI 48331
Agent's Name: Khaled Soubra
Agent's Title:Vice President/Operations Manager
Agent's Signature: K. Javonn
Telephone Number: (248)553-9449 Fax Number: (248)553-9571
E-mail Address: khaled soubra@urscorp.come: July 10, 2007

# City of Novi 2007 Traffic Signal Upgrade Project Cost Proposal BILLING RATE SHEET

Personnel Classification	Billing Rate
Project Manager	\$125.00
Senior Engineer	\$110.00
Engineer	\$85.00
Junior Engineer	\$70.00
CADD Technician	\$55.00
Professional Surveyor	\$80.00
Survey Technician	\$65.00
Senior Inspector	\$85.00
Inspector	\$65.00

URS Corporation July 10, 2007

City of Novi 2007 Traffic Signal Upgrade Project Project # 1 Meadowbrook and 13 Mile Road Traffic Signal Proposal Hours

	Proj	Senior	Engr	Junior	CADD	Prof	Surv	Senior Insp.	Insp.	TOTAL
	Mgr	Engr		Engr	Tech	Surv	Tech	lnsp.		HRS
Design Phase										
Meetings and Coordination	ιΩ	4								တ
Roadway Geotech Investigation		-				9	9			13
Preliminary Signal Plans		_	9	4	7					19
Review Preliminary Plans			-							2
Final Signal Plans		က	4	က						10
Maintaining Traffic Design and Drafting		-	_	-	_					4
Specifications		7	γ							က
Estimates		7	~	2						22
Project Management	4									4
Total Hours - Design	6	21	14	10	3	9	9	0	0	69
Construction Admin/Assistance	4	4		-	7			2	40	52
Total Hours - Construction Assistance	4	4	0	1	1	0	0	2	40	52
Total Hours	13	25	4	1	4	9	9	2	40	121

## City of Novi 2007 Traffic Signal Upgrade Project Project # 1 Meadowbrook and 13 Mile Road Traffic Signal Cost Proposal

Personnel Classification		Hours	Billing	Rate	Cost
Design Phase Labor					
Project Manager		9	\$125		\$1,125.00
Senior Engineer		21	\$110		\$2,310.00
Engineer		14	\$85		\$1,190.00
Junior Engineer		10	\$70		\$700.00
CADD Technician		3	\$55		\$165.00
Professional Surveyor		6	\$80		\$480.00
Survey Technician		6	\$65		\$390.00
Senior Inspector		0	\$85		\$0.00
Inspector		0	\$65		\$0.00
Total Labor Cost		69			\$6,360.00
Design Phase Expenses					
Mileage	125	Miles @	\$0.48		\$60.63
Printing and Plots	125	Prints @	\$0.50		\$62.50
Mylar Plots	15	Mylars @	\$10.0	0	\$150.00
Misc Supplies					\$30.00
Postage and Mailing					\$30.00
Total Design Phase Expenses					\$333.13
Total Estimated URS Design Phase	Cost				\$6,693.13
Construction Phase Labor					
Project Manager		4	\$125		\$500.00
Senior Engineer		4	\$110		\$440.00
Engineer		0	\$85		\$0.00
Junior Engineer		1	\$70		\$70.00
CADD Technician		1	\$55		\$55.00
Professional Surveyor		0	\$80		\$0.00
Survey Technician		0	\$65		\$0.00
Senior Inspector		2	\$85		\$170.00
Inspector		40	\$65		\$2,600.00
Total Labor Cost		52			\$3,835.00
Construction Phase Expenses					
Mileage -	150	Miles @	\$0.485	5	\$72.75
Rental Vehicle (\$42/day)	5		\$42.000	0	\$210.00
Fuel for Rental Vehicle (\$10/day)	5		\$10.000	0	
Printing and Plots	25	Prints @	\$0.50		\$12.50
Mylar Plots	5	Mylars @	\$10.00	l	\$50.00
Misc Supplies					\$15.00
Postage and Mailing					\$15.00
Total Design Phase Expenses					\$375.25
Total Estimated URS Construction P	hase Cos	t			\$4,210.25
Design Phase Geotechnical Cost (PS	SI)				\$2,210.00
ΓΟΤΑL Project Cost					\$13,113.38

URS Corporation July 10, 2007

City of Novi 2007 Traffic Signal Upgrade Project Project #2 Fourteen Mile and Novi/Decker Road Traffic Signal Proposal Hours

	Proj	Senior	Engr	Junior	CADD	Prof	Surv	Senior	lnsp.	TOTAL
	Mgr	Engr		Engr	Tech	Surv	Tech	lnsp.		HRS
Design Phase			_							
Meetings and Coordination	9	4								10
Roadway Geotech Investigation		-	-			9	9			14
Preliminary Signal Plans		7	9	4	2					19
Review Preliminary Plans		2	-							က
Final Signal Plans		က	4	က						10
Maintaining Traffic Design and Drafting		1	-	1	_					4
Specifications		2	1							က
Estimates		2	1	2						5
Project Management	2									5
Total Hours - Design	11	22	15	10	3	9	9	0	0	73
Construction Admin/Assistance	2	5		1	τ-			2	40	54
Total Hours - Construction Assistance	5	2	0	1	1	0	0	2	40	54
Total Hours	16	27	15	11	4	9	9	7	40	127

## City of Novi 2007 Traffic Signal Upgrade Project Project #2 Fourteen Mile and Novi/Decker Road Traffic Signal Cost Proposal

Personnel Classification		Hours	Billing R	ate Cost
Design Phase Labor				
Project Manager		11	\$125	\$1,375.00
Senior Engineer		22	\$110	\$2,420.00
Engineer		15	\$85	\$1,275.00
Junior Engineer		10	\$70	\$700.00
CADD Technician		3	\$55	\$165.00
Professional Surveyor		6	\$80	\$480.00
Survey Technician		6	\$65	\$390.00
Senior Inspector		0	\$85	\$0.00
Inspector		0	\$65	\$0.00
Total Labor Cost		73		\$6,805.00
Design Phase Expenses				
Mileage	125	Miles @	\$0.485	\$60.63
Printing and Plots	125	Prints @	\$0.50	\$62.50
Mylar Plots	15	Mylars @	\$10.00	\$150.00
Misc Supplies				\$40.00
Postage and Mailing				\$40.00
Total Design Phase Expenses				\$353.13
Total Estimated URS Design Phase	Cost			\$7,158.13
Construction Phase Labor				
Project Manager		5	\$125	\$625.00
Senior Engineer		5	\$110	\$550.00
Engineer		0	\$85	\$0.00
Junior Engineer		1	\$70	\$70.00
CADD Technician		1	\$55	\$55.00
Professional Surveyor		0	\$80	\$0.00
Survey Technician		0	\$65	\$0.00
Senior Inspector		2	\$85	\$170.00
Inspector		40	\$65	\$2,600.00
Total Labor Cost		54		\$4,070.00
Construction Phase Expenses				
Mileage	150	Miles @	\$0.485	\$72.75
Rental Vehicle (\$42/day)	5		\$42.000	\$210.00
Fuel for Rental Vehicle (\$10/day)	5		\$10.000	
Printing and Plots	25	Prints @	\$0.50	\$12.50
Mylar Plots	5	Mylars @	\$10.00	\$50.00
Misc Supplies				\$15.00
Postage and Mailing				\$15.00
Total Design Phase Expenses				\$375.25
Total Estimated URS Construction F	Phase Cost	t		\$4,445.25
Design Phase Geotechnical Cost (P	SI)			\$1,240.00
TOTAL Project Cost				\$12,843.38