



CITY of NOVI CITY COUNCIL

Agenda Item E
January 6, 2014

SUBJECT: Approval to award an engineering services agreement with Orchard, Hiltz & McCliment for design engineering services related to the 2014 Capital Preventative Maintenance Program—Major Roads (for Meadowbrook between 8 Mile and 9 Mile) in the amount of \$7,332.

SUBMITTING DEPARTMENT: Department of Public Services, Engineering Division

CITY MANAGER APPROVAL:

EXPENDITURE REQUIRED	\$ 7,332
AMOUNT BUDGETED	\$ 458,959
LINE ITEM NUMBER	202-202.00-866.500

BACKGROUND INFORMATION:

City Council approved a Capital Preventative Maintenance Program (CPM) as part of the FY13-14 budget to help improve the City's major roadways to limit further deterioration of existing pavement defects and extend the service life of the pavement. Preventative maintenance typically addresses segments of streets containing relatively minor pavement defects.

The 2014 CPM program will focus on Meadowbrook Road between Eight Mile and Nine Mile. This mile of road received a mill and overlay treatment in 2009. The road surface now contains some surface defects, which is a typical condition for an arterial road four years after rehabilitation. The surface defects are primarily minor cracking which have received crack seal treatments over the past few years. Although crack sealing could continue for future years, a more intense cost-effective preventative maintenance treatment could be used to not only seal the cracks, but help to prevent additional cracks from forming. This type of preventative maintenance would involve the treatment of the entire roadway surface with one or more combinations of asphalt emulsion with fine aggregates or aggregate chips. The attached memo provides additional discussion about the various preventative maintenance options that will be reviewed as part of the design phase. Please note that one of the treatment alternatives to be evaluated, slurry seal, was first used recently in Heatherbrae, Heatherlea and Heatherwyke subdivisions. As a result, staff learned several lessons about this technique including: 1) an appropriate stone size needs to be selected based on traffic volume and speed; and 2) the specifications should better address the aesthetics of the application.

OHM's engineering fees are based on the fixed fee schedule established in the Agreement for Professional Engineering Services for Public Projects. The design fees for this project will be \$7,332.00 (10.0% of the estimated construction cost of \$73,320). The construction phase engineering fees will be awarded at the time of construction award and will be based on the contractor's bid price and the fee percentage established in the Agreement for Professional Engineering Services for Public Projects. A draft of the

Supplemental Professional Engineering Services Agreement for this project is enclosed and includes the project scope and estimate.

The design engineering would be completed over the winter, and the work is anticipated for spring or summer construction.

RECOMMENDED ACTION: Approval to award an engineering services agreement with Orchard, Hiltz & McCliment for design engineering services related to the 2014 Capital Preventative Maintenance Program—Major Roads (for Meadowbrook between 8 Mile and 9 Mile) in the amount of \$7,332.

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

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



MEMORANDUM

TO: BRIAN COBURN, P.E.; ENGINEERING MANAGER
FROM: BEN CROY, ^{PE} P.E., CIVIL ENGINEER
SUBJECT: 2014 CAPITAL PREVENTATIVE MAINTENANCE
DATE: DECEMBER 20, 2014

Mayor and Council -
Preparing for the 2014
Construction Season some
preventative maintenance
methods being considered for
Meadowbrook between 8 and
9 mile roads.
- Victor

One of the primary goals of the Department of Public Services' asset management program is the preservation of the City's roadways to prevent costly reconstruction. Some preventative and most routine maintenance including crack sealing, road patching, curb repairs, and shoulder grading are routinely performed by in-house DPS staff to help keep the good roads in good condition. However, a key component of road preservation is capital preventative maintenance, which is maintenance that is more resource-intensive but less costly than reconstruction. The objective of preventative maintenance is to preserve good quality roads using lower-cost rehabilitation techniques, rather than allowing the roads to deteriorate to a point that requires road reconstruction involving much more effort at a higher cost. Novi's preventative maintenance program, in conjunction with the other road programs, is intended to result in an overall improvement in the quality of the City's roadways and increase the overall PASER rating for the roadway network. The City Council approved a Capital Preventative Maintenance Program (CPM) as part of the FY13-14 budget to help improve the City's major roadways to limit further deterioration of existing pavement defects and extend the service life of the pavement. Preventative maintenance typically addresses segments of streets containing relatively minor pavement defects.

The 2014 CPM program will focus on Meadowbrook Road between Eight Mile and Nine Mile. This mile of road received a mill and overlay treatment in 2009. The road surface now contains some surface defects which is typical of an arterial road four years after rehabilitation. The surface defects are primarily minor cracking which have received crack seal treatments over the past few years. Although crack sealing could continue for future years, a more intense preventative maintenance treatment could be used to not only seal up the cracks, but help prevent additional cracks from forming. This type of preventative maintenance would involve the treatment of the entire roadway surface with one or more combinations of asphalt emulsion with fine aggregates or aggregate chips. Below are a few of the surface treatments that will be considered for this project:

Slurry Seal – This is a mixture of asphalt emulsion and fine aggregate. This treatment is typically used when minor cracking is observed, intended to seal the cracks, waterproof the pavement surface, and increase surface friction. The surface following this treatment can have a rough, non-uniform appearance. Loose aggregate can be an issue for a few weeks following the treatment, but can be controlled with frequent sweeping.

Chip Seal – This is an asphalt emulsion applied to the surface followed by an application of aggregate chips which are rolled and embedded into the emulsion. The aggregate used for a chip seal is typically larger than that used for a slurry seal. This treatment is used to seal the pavement and provide a new wearing surface to increase life of the pavement. The

chip seal application will result in a rough surface with visible exposed aggregate. However, over time, vehicle traffic will further imbed the aggregate into the emulsion. Loose aggregate can be an issue for a few weeks following the treatment, but can be controlled with frequent sweeping.

Cape Seal – This process combines the processes of a chip seal and a slurry seal. The chip seal is applied followed by the slurry seal, resulting in a smoother, more uniform, and more durable surface. A cape seal is longer-lasting surface, more appropriate for higher volume roads, and more resistant to damage from snowplowing. Loose aggregate can be an issue until the slurry application, typically a few days following the chip seal. Although the surface will be smoother than the above treatments, it will still be rougher than a new asphalt road.

Microsurface – This is a polymer-modified slurry seal, applied in a thicker layer to seal pavement cracks and provide a new durable wearing surface. This treatment provides a smooth, uniform appearance, without loose aggregate. This surface will be smoother than all the above treatments, but still rougher than a new asphalt road.

The above surface treatments are intended to extend the life of pavements at a lower expense. As these treatments are not structural, they will wear down over time and will require reapplication every few years. The frequency of reapplication will vary depending on traffic volume and other factors. This treatment cycle can keep the pavement surface in good condition, and prevent more costly rehabilitation (e.g. mill/overlay).

2014 CAPITAL PREVENTATIVE MAINTENANCE

Major Roads

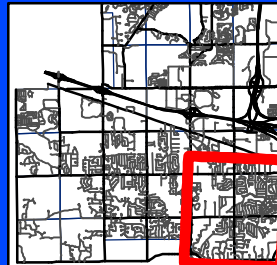
Location Map



Map Author: Croy
 Date: 12/23/13
 Project: 2014 CPM Majors
 Version #: v1.0

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.



City of Novi
 Engineering Division
 Department of Public Services
 26300 Lee BeGole Drive
 Novi, MI 48375
 cityofnovi.org

SUPPLEMENTAL PROFESSIONAL ENGINEERING SERVICES AGREEMENT

2014 CAPITAL PREVENTATIVE MAINTENANCE PROGRAM **MAJOR ROADS**

This Agreement shall be considered as made and entered into as of the date of the last signature hereon, and is between the City of Novi, 45175 W. Ten Mile Road, Novi, MI 48375-3024, hereafter, "City," and Orchard, Hiltz & McCliment, Inc., whose address is 34000 Plymouth Road, Livonia, Michigan 48150, hereafter, "Consultant."

RECITALS:

This Agreement shall be supplemental to, and hereby incorporates the terms and conditions of the AGREEMENT FOR PROFESSIONAL ENGINEERING SERVICES FOR PUBLIC PROJECTS, and attached exhibits, entered into between the City and the Consultant on December 18, 2012.

The project includes the design and the preparation of plans and specifications for the 2014 Capital Preventative Maintenance Program for major roads. The project includes assistance with selection of the segment of road (currently assumed to be Meadowbrook Road between 8 Mile and 9 Mile), and the selection of the type of treatment to be used.

NOW, THEREFORE, in consideration of the foregoing, the City and Consultant agree as follows:

Section 1. Professional Engineering Services.

For and in consideration of payment by the City as provided under the "Payment for Engineering Services" section of this Agreement, Consultant shall perform the work described in the manner provided or required by the following Scope of Services, which is attached to and made a part of this Agreement as Exhibit A, all of said services to be done in a competent, efficient, timely, good and workmanlike manner and in compliance with all terms and conditions of this Agreement.

Exhibit A Scope of Services

Section 2. Payment for Professional Engineering Services.

1. Basic Fee.

- a. Design Phase Services: The Consultant shall complete the design phase services as described herein for a lump sum fee of \$7,332, which is 10% of the estimated construction cost (\$73,320) as indicated on the design and construction engineering fee curve provided in Exhibit B of the Agreement for Professional Engineering Services for Public Projects.
- b. Construction Phase Services will be awarded at the time of construction award, should it occur.

2. Payment Schedule for Professional Engineering Services Fee.

Consultant shall submit monthly statements for professional engineering services rendered. The statements shall be based on Consultant's estimate of the proportion of the total services actually completed for each task as set forth in Exhibit A at the time of billing. The City shall confirm the correctness of such estimates, and may use the City's own engineer for such purposes. The monthly statements should be accompanied by such properly completed reporting forms and such other evidence of progress as may be required by the City. Upon such confirmation, the City shall pay the amount owed within 30 days.

Final billing under this agreement shall be submitted in a timely manner but not later than three (3) months after completion of the services. Billings for work submitted later than three (3) months after completion of services will not be paid. Final payment will be made upon completion of audit by the City.

3. Payment Schedule for Expenses.

All expenses required to complete the scope of services described herein, including but not limited to costs related to mileage, vehicles, reproduction, computer use, etc., shall be included in the basic fee and shall not be paid separately. However, as compensation for expenses that are not included in the standard scope of services, when incurred in direct connection with the project, and approved by the City, the City shall pay the Consultant its actual cost times a factor of 1.15.

Section 4. Ownership of Plans and Documents; Records.

1. Upon completion or termination of this agreement, all documents prepared by the Consultant, including tracings, drawings, estimates, specifications, field notes, investigations, studies, etc., as instruments of service shall become the property of the City.

2. The City shall make copies, for the use of the Consultant, of all of its maps, records, laboratory tests, or other data pertinent to the work to be performed by the Consultant under this Agreement, and also make available any other maps, records, or other materials available to the City from any other public agency or body.

3. The Consultant shall furnish to the City, copies of all maps, records, field notes, and soil tests that were developed in the course of work for the City and for which compensation has been received by the Consultant.

Section 5. Termination.

1. This Agreement may be terminated by either party upon 7- days' prior written notice to the other party in the event of substantial failure by the other party to fulfill its obligations under this agreement through no fault of the terminating party.

2. This Agreement may be terminated by the City for its convenience upon 90 days' prior written notice to the Consultant.

3. In the event of termination, as provided in this Article, the Consultant shall be paid as compensation in full for services performed to the date of that termination, an amount calculated in accordance with Section 2 of this Agreement. Such amount shall be paid by the City upon the Consultant's delivering or otherwise making available to the City, all data, drawings, specifications, reports, estimates, summaries, and that other information and materials as may have been accumulated by the Consultant in performing the services included in this Agreement, whether completed or in progress.

Section 6. Disclosure.

The Consultant affirms that it has not made or agreed to make any valuable gift whether in the form of service, loan, thing, or promise to any person or any of the person's immediate family, having the duty to recommend, the right to vote upon, or any other direct influence on the selection of consultants to provide professional engineering services to the City within the two years preceding the execution of this Agreement. A campaign contribution, as defined by Michigan law shall not be considered as a valuable gift for the purposes of this Agreement.

Section 7. Insurance Requirements.

1. The Consultant shall maintain at its expense during the term of this Agreement, the following insurance:

- A. Worker's Compensation insurance relative to all Personnel engaged in performing services pursuant to this Agreement, with coverage not less than that required by applicable law.
- B. Comprehensive General Liability insurance with maximum bodily injury limits of \$1,000,000 (One Million Dollars) each occurrence and/or aggregate and minimum Property Damage limits of \$1,000,000 (One Million Dollars) each occurrence and/or aggregate.
- C. Automotive Liability insurance covering all owned, hired, and non-owned vehicles with Personal Protection insurance to comply with the provisions of the Michigan No Fault Insurance Law including Residual Liability insurance with minimum bodily injury limits of \$1,000,000 (One Million Dollars) each occurrence and/or aggregate minimum property damage limits of \$1,000,000 (One Million Dollars) each occurrence and/or aggregate.
- D. The Consultant shall provide proof of Professional Liability coverage in the amount of not less than \$1,000,000 (One Million Dollars) per occurrence and/or aggregate, and Environmental Impairment coverage.

2. The Consultant shall be responsible for payment of all deductibles contained in any insurance required hereunder.

3. If during the term of this Agreement changed conditions or other pertinent factors should in the reasonable judgment of the City render inadequate insurance limits, the Consultant will furnish on demand such additional coverage as may reasonably be required under the

circumstances. All such insurance shall be effected at the Consultant's expense, under valid and enforceable policies, issued by the insurers of recognized responsibility which are well-rated by national rating organizations and are acceptable to the City.

4. All policies shall name the Consultant as the insured and shall be accompanied by a commitment from the insurer that such policies shall not be canceled or reduced without at least thirty (30) days prior notice to the City.

With the exception of professional liability, all insurance policies shall name the City of Novi, its officers, agents, and employees as additional insured. Certificates of Insurance evidencing such coverage shall be submitted to Sue Morianti, Purchasing Manager, City of Novi, 45175 West Ten Mile Road, Novi, MI 48375-3024 prior to commencement of performance under this Agreement and at least fifteen (15) days prior to the expiration dates of expiring policies.

5. If any work is sublet in connection with this Agreement, the Consultant shall require each subconsultant to effect and maintain at least the same types and limits of insurance as fixed for the Consultant.

6. The provisions requiring the Consultant to carry said insurance shall not be construed in any manner as waiving or restricting the liability of the Consultant under this Agreement.

Section 8. Indemnity and Hold Harmless.

A. The Consultant agrees to indemnify and hold harmless the City, its elected and appointed officials and employees, from and against any and all claims, demands, suits, losses and settlements, including actual attorney fees incurred and all costs connected therewith, for any damages which may be asserted, claimed or recovered against the City by reason of personal injury, death and/or property damages which arises out of or is in any way connected or associated with the actions or inactions of the Consultant in performing or failing to perform the work.

The Consultant agrees that it is its responsibility and not the responsibility of the City to safeguard the property and materials used in performing this Agreement. Further, this Consultant agrees to hold the City harmless for any loss of such property and materials used pursuant to the Consultant's performance under this Agreement.

Section 9. Nondiscrimination.

The Consultant shall not discriminate against any employee, or applicant for employment because of race, color, sex, age or handicap, religion, ancestry, marital status, national origin, place of birth, or sexual preference. The Consultant further covenants that it will comply with the Civil Rights Act of 1973, as amended; and the Michigan Civil Rights Act of 1976 (78. Stat. 252 and 1976 PA 4563) and will require a similar covenant on the part of any consultant or subconsultant employed in the performance of this Agreement.

Section 10. Applicable Law.

This Agreement is to be governed by the laws of the State of Michigan and the City of Novi Charter and Ordinances.

Section 11. Approval; No Release.

Approval of the City shall not constitute nor be deemed release of the responsibility and liability of Consultant, its employees, associates, agents and subconsultants for the accuracy and competency of their designs, working drawings, and specifications, or other documents and services; nor shall that approval be deemed to be an assumption of that responsibility by the City for any defect in the designs, working drawings and specifications or other documents prepared by Consultant, its employees, subconsultants, and agents.

After acceptance of final plans and special provisions by the City, Consultant agrees, prior to and during the construction of this project, to perform those engineering services as may be required by City to correct errors or omissions on the original plans prepared by Consultant and to change the original design as required.

Section 12. Compliance With Laws.

This Contract and all of Consultants professional services and practices shall be subject to all applicable state, federal and local laws, rules or regulations, including without limitation, those which apply because the City is a public governmental agency or body. Consultant represents that it is in compliance with all such laws and eligible and qualified to enter into this Agreement.

Section 13. Notices.

Written notices under this Agreement shall be given to the parties at their addresses on page one by personal or registered mail delivery to the attention of the following persons:

City: Rob Hayes, P.E., Director of Public Services and Maryanne
Cornelius, Clerk, with a copy to Thomas R. Schultz, City Attorney

Consultant: James Stevens, P.E.

Section 14. Waivers.

No waiver of any term or condition of this Agreement shall be binding and effective unless in writing and signed by all parties, with any such waiver being limited to that circumstance only and not applicable to subsequent actions or events.

Section 15. Inspections, Notices, and Remedies Regarding Work.

During the performance of the professional services by Consultant, City shall have the right to inspect the services and its progress to assure that it complies with this Agreement. If such inspections reveal a defect in the work performed or other default in this Agreement, City shall provide Consultant with written notice to correct the defect or default within a specified

number of days of the notice. Upon receiving such a notice, Consultant shall correct the specified defects or defaults within the time specified. Upon a failure to do so, the City may terminate this Agreement by written notice and finish the work through whatever method it deems appropriate, with the cost in doing so being a valid claim and charge against Consultant; or, the City may preserve the claims of defects or defaults without termination by written notice to Consultant.

All questions which may arise as to the quality and acceptability of work, the manner of performance and rate of progress of the work, and the interpretation of plans and specifications shall be decided by the City. All questions as to the satisfactory and acceptable fulfillment of the terms of this agreement shall be decided by the City.

Section 16. Delays.

No charges or claims for damages shall be made by the Consultant for delays or hindrances from any cause whatsoever during the progress of any portions of the services specified in this agreement, except as hereinafter provided.

In case of a substantial delay on the part of the City in providing to the Consultant either the necessary information or approval to proceed with the work, resulting, through no fault of the Consultant, in delays of such extent as to require the Consultant to perform its work under changed conditions not contemplated by the parties, the City will consider supplemental compensation limited to increased costs incurred as a direct result of such delays. Any claim for supplemental compensation must be in writing and accompanied by substantiating data.

When delays are caused by circumstances or conditions beyond the control of the Consultant as determined by the City, the Consultant shall be granted an extension of time for such reasonable period as may be mutually agreed upon between the parties, it being understood, however, that the permitting of the Consultant to proceed to complete the services, or any part of them, after the date to which the time of completion may have been extended, shall in no way operate as a waiver on the part of the City of any of its rights herein set forth.

Section 17. Assignment.

No portion of the project work, heretofore defined, shall be sublet, assigned, or otherwise disposed of except as herein provided or with the prior written consent of the City. Consent to sublet, assign, or otherwise dispose of any portion of the services shall not be construed to relieve the Consultant of any responsibility for the fulfillment of this agreement.

Section 18. Dispute Resolution.

The parties agree to try to resolve any disputes as to professional engineering services or otherwise in good faith. In the event that the parties cannot resolve any reasonable dispute, the parties agree to seek alternative dispute resolution methods agreeable to both parties and which are legally permissive at the time of the dispute. The parties agree to use their best efforts to resolve any good faith dispute within 90 (ninety) days notice to the other party. In the event the parties cannot resolve that dispute as set forth above, they may seek such remedies as may be permitted by law.

WITNESSES

Orchard, Hiltz & McCliment, Inc.

By:
Its:

The foregoing _____ was acknowledged before me this ____ day of _____,
20____, by _____ on behalf of

_____.

Notary Public
_____ County, Michigan
My Commission Expires: _____

WITNESSES

CITY OF NOVI

By: Robert J. Gatt
Its: Mayor

The foregoing _____ was acknowledged before me this ____ day of _____,
20____, by _____ on behalf of the City of Novi.

Notary Public
Oakland County, Michigan
My Commission Expires: _____

EXHIBIT A - SCOPE OF SERVICES

Consultant shall provide the City professional engineering services in all phases of the Project to which this Agreement applies as hereinafter provided. These services will include serving as the City's professional engineering representative for the Project, providing professional engineering consultation and advice and furnishing customary civil, structural, mechanical and electrical engineering services and customary engineering services incidental thereto, as described below.

A. **Basic Services.**

[see attached]

B. **Performance.**

1. The Consultant agrees that, immediately upon the execution of this Agreement, it will enter upon the duties prescribed in this agreement, proceed with the work continuously, and make the various submittals on or before the dates specified in the attached schedule. The City is not liable and will not pay the Consultant for any services rendered before written authorization is received by the Consultant.
2. The Consultant shall submit, and the City shall review and approve a timeline for submission of plans and/or the completion of any other work required pursuant to this Scope of Services. The Consultant shall use its best efforts to comply with the schedule approved by the City.
3. If any delay is caused to the Consultant by order of the City to change the design or plans; or by failure of the city to designate right-of-way, or to supply or cause to be supplied any data not otherwise available to the Consultant that is required in performing the work described; or by other delays due to causes entirely beyond the control of the Consultant; then, in that event, the time schedules will be adjusted equitably in writing, as mutually agreed between the City and the Consultant at the moment a cause for delay occurs.
4. Since the work of the Consultant must be coordinated with the activities of the City (including firms employed by and governmental agencies and subdivisions working with the City), the Consultant shall advise the City in advance, of all meetings and conferences between the Consultant and any party, governmental agency, political subdivision, or third party which is necessary to the performance of the work of the Consultant.

EXHIBIT A - Scope of Services

2014 CPM Majors – Design Services

OHM Advisors, Inc., is pleased to provide engineering services to the City of Novi. We understand that the City wishes to complete preventative maintenance on Meadowbrook Road from Eight Mile to Nine Mile Road. As you are aware the City completed an overlay project in 2009 on this section of road, and are now looking to compete continued maintenance to keep the road in good condition, a proven asset management strategy to cost effectively keep City roads in good condition.

The scope of engineering services shall include the following tasks:

1. Conduct a site visit and develop preventive maintenance options for the City to consider on this roadway within the available budget
2. Meet with the City to discuss the options available and assist the City in selecting the preventive maintenance to be performed on this section of roadway.
3. Prepare a preliminary engineer's opinion of probable construction costs.
4. Conduct a site inventory "log format" to quantify required work items based upon field conditions.
5. Prepare specifications and necessary details for a complete package for contractors to bid on.
6. Revise preliminary engineer's opinion of probable construction costs.
7. Attend an additional meeting with the City to review the final bid specifications and details.
8. Prepare final road and sidewalk plans and specifications, based upon requested revisions from the City.
9. Provide the necessary printing and administration to facilitate the bidding process.
10. Prepare bid tabulation and letter of recommendation to the City.

The following services have not been included. In the event any of these services are required, an addendum to the supplemental engineering agreement will be submitted for your approval prior to performing said services.

1. Permit or application fees – to be paid by the City
2. Topographic survey and detailed design
3. Design of any utility relocations.
4. Right-of-way and/or easement acquisitions – to be acquired by the City

It is anticipated that the work would take place through the winter and spring, for spring bidding and early summer construction.