



CITY of NOVI CITY COUNCIL

**Agenda Item F
July 8, 2013**

SUBJECT: Approval to award an engineering services agreement with Orchard Hiltz & McCliment for design engineering services related to the 2014 Pathway Program and 2014 ADA Compliance Program in the amount of \$29,610.

SUBMITTING DEPARTMENT: Department of Public Services, Engineering Division *BC*

CITY MANAGER APPROVAL: *[Signature]*

EXPENDITURE REQUIRED	<p>\$ 3,240 13 Mile (Segment 16) \$ 22,870 Meadowbrook (Segment 73) <u>\$ 3,500 ADA Compliance Program</u> \$ 29,610 TOTAL</p>
AMOUNT BUDGETED	<p>\$ 5,000 13 Mile (Segment 16) \$ 20,000 Meadowbrook (Segment 73) <u>\$ 50,000 ADA Compliance Program</u> \$ 75,000 TOTAL</p>
LINE ITEM NUMBER	<p>204-204.00-974.440 13 Mile (Segment 16) 204-204.00-974.442 Meadowbrook (Segment 73) 204-204.00-805.003 ADA Compliance Program</p>

BACKGROUND INFORMATION:

The 2014 Pathway Gap Program includes the construction of pathways in two areas of the City. The first segment (Segment 16) involves the construction of 225 LF of 8-foot wide concrete pathway along the south side of 13 Mile between Novi Road and Holmes Drive to complete the sidewalk connection along 13 Mile from Meadowbrook Road to Novi Road. The second segment (Segment 73) involves the construction of 1,025 feet of 6-foot wide concrete pathway to fill in two existing gaps along the east side of Meadowbrook Road from Grand River to just north of 11 Mile where it will connect to the Metro Connector Trail that is currently in design. This project was ranked 22nd in the 2012 Sidewalk Prioritization update and would link the I-275 pathway and future Metro Connector Trail to Meadowbrook Road and Grand River Avenue. A location map has been included for reference.

This project also includes the third year of the Americans with Disabilities Act (ADA) Compliance Implementation as recommended by the ADA Compliance Transition Plan as adopted in March 2011 and funded in the 2013-14 fiscal year CIP. The ADA Compliance Transition Plan (see attached excerpt) provides a long-term plan for bringing the City's public sidewalks and other related facilities into compliance with ADA requirements. This annual program is intended to address high priority areas (e.g., high pedestrian usage, and areas where pathway barriers exist). Orchard Hiltz & McCliment (OHM) will assist staff to develop the final construction scope for this project as part of the design phase concentrating on areas near Pavilion Shore Park, 13 Mile Road and Novi Road.

The three projects are being combined for engineering and construction in order to potentially obtain cost savings typically realized on larger projects.

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 \$29,610 (10% of the estimated construction cost of \$296,100). 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 project may require easements from adjacent property owners and will require permits for crossing Bishop Creek and the associated flood plain. It is anticipated that the project would be ready for construction in summer 2014.

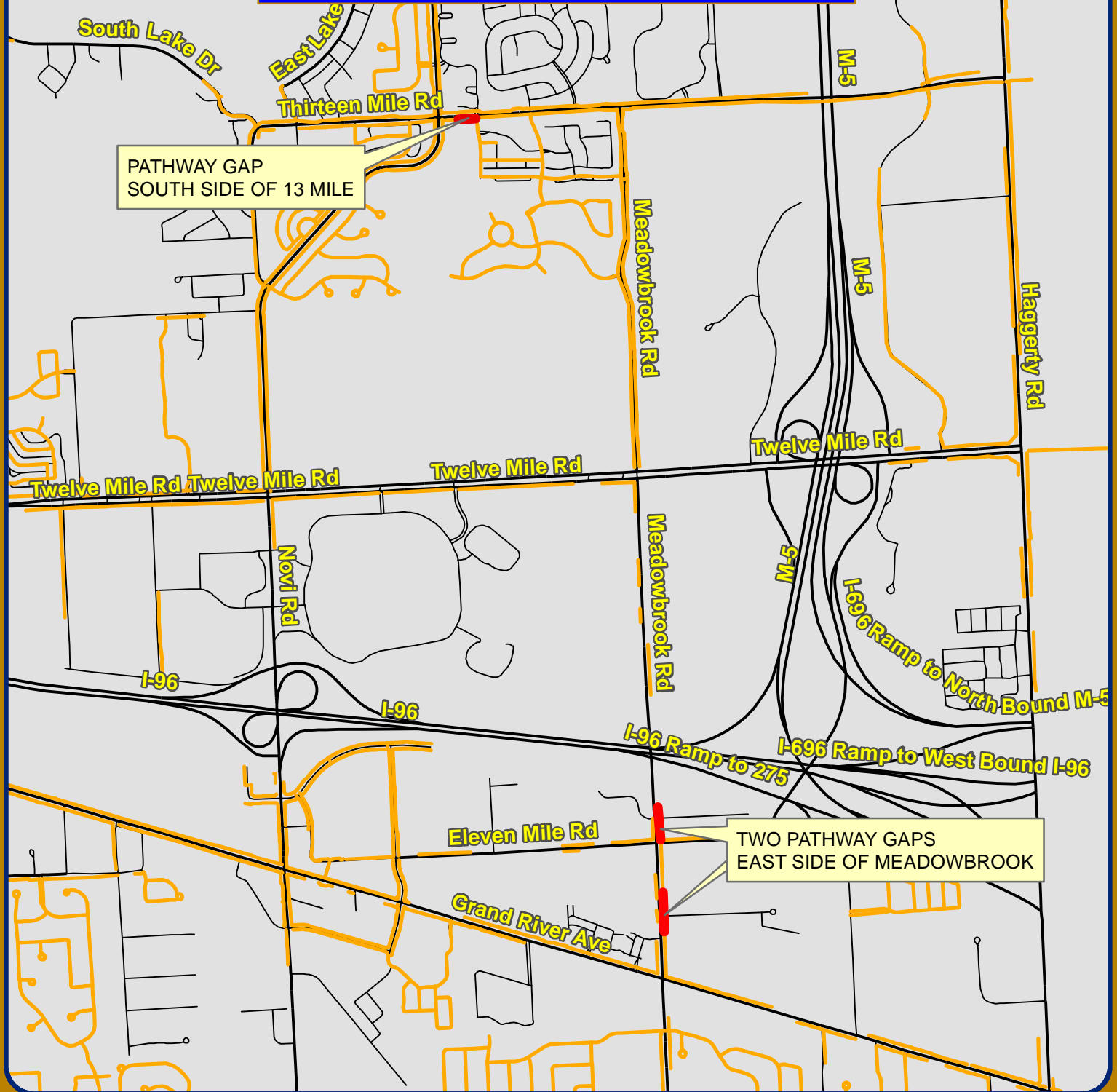
RECOMMENDED ACTION: Approval to award an engineering services agreement with Orchard Hiltz & McCliment for design engineering services related to the 2014 Pathway Program and 2014 ADA Compliance Program in the amount of \$29,610.

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

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

2014 Sidewalk Gap Program and 2014 ADA Compliance Program

Location Map



Map Author: Croy
Date: 6/25/13
Project: Novi Pathways and ADA
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.

Legend

 Existing Pathways (on-road)



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



1 inch = 2,000 feet

SUPPLEMENTAL PROFESSIONAL ENGINEERING SERVICES AGREEMENT

2014 PATHWAY GAP PROGRAM AND 2014 ADA COMPLIANCE IMPLEMENTATION PROGRAM

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 2012 Pathway Gap Program, and the 2012 Americans with Disabilities Act (ADA) Compliance Implementation Program.

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 \$29,610, which is 10% of the estimated construction cost (\$296,100) 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

City of Novi – 2014 Pathway Gap Program and 2014 ADA Ramp Program – Preliminary Design

Orchard, Hiltz & McCliment, Inc. is pleased to provide engineering services to the City of Novi. We understand that the City desires to complete pathway gaps and intends to construct a six foot wide sidewalk on the east side of Meadowbrook Road between the I-275 Metro Trail (located just north of Bridge Street) and the existing sidewalk north of Grand River Avenue. We also understand the City desires to construct an eight foot wide sidewalk on the south side of 13 Mile Road between Novi Road and Holmes Road. In addition, we understand the City intends to construct sidewalk ramp upgrades in conformance with the City's transition plan. Design of the sidewalk and sidewalk ramps will be required to meet accessibility requirements of the Americans with Disabilities Act (ADA).

The scope of engineering services shall include the following tasks:

1. Conduct a site visit and develop a preliminary alignment map.
2. Assist the City in determining project locations for ADA sidewalk ramp improvements.
3. Perform a complete topographic survey of the project area including all significant surface features (manholes, trees, pavement edge, etc.) from the Meadowbrook Road centerline to the east right-of-way line, from the 13 Mile Road centerline to the south right-of-way line, and at the intersection proposed for ADA sidewalk ramp improvements.
4. Coordinate with the Michigan Department of Environmental Quality for crossing of the Bishop Creek on Meadowbrook Road.
5. Prepare a preliminary engineer's opinion of probable construction costs.
6. Coordinate with the City's geotechnical engineer regarding soil borings and analysis, if applicable.
7. Prepare preliminary sidewalk and bridge crossing plans and specifications.
8. Prepare up to five (5) easement document exhibits (sketch and legal description) for temporary or permanent easements required to construct the pathway.
9. Attend one meeting with the City to review the plans and specifications and address any requested revisions.
10. Attend one public open house with City and local residents, if requested.
11. Revise preliminary plans and alignment for the sidewalk based upon City and resident comments.
12. Revise preliminary engineer's opinion of probable construction costs.
13. Submit US Army Corp of Engineers and MDEQ Joint Permit Application for work in the Bishop Creek and tributaries. This joint permit application is anticipated to include Floodplain (Part 31), Inland Lakes & Streams (Part 301), and Wetlands Protection (Part 303).
14. Prepare final design plans, specifications, and contract documents for bidding as one contract.
15. Prepare a final engineer's opinion of probable construction cost.

16. Assist the City with advertising and soliciting bids, printing and distributing bidding documents to interested bidders, attend the bid opening, tabulate and review the bids, check contractor references and provide a recommendation of the award of the project construction to a qualified contractor.

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. Coordination or design for utility relocations or repairs
3. Right-of-way and/or easement acquisitions – to be acquired by the City
4. Remediation or removal of contaminated or hazardous soils or materials

We can perform any of these above-mentioned services. In the event any of these services are required, an authorization for additional services will be submitted for your approval prior to performing said services.

Schedule:

1. Design completed in December 2013.
2. Bids received in February 2013.
3. Construction to begin in April 2014 and be completed by May 2014.

We thank you for this opportunity to provide professional engineering service and we look forward to continuing to serve the City of Novi.



ORCHARD, HILTZ & McCLIMENT, INC.
 34000 Plymouth Road, Livonia, Michigan, 48150

CLIENT: City of Novi
PROJECT: 2014 Pathway Gap Program and 2014 ADA Ramp Program
LOCATION: Meadowbrook Road (Bridge St to Grand River Ave)
13 Mile Road (Novi Road to Holmes Road)
2014 ADA Ramps (locations TBD)

BASIS FOR ESTIMATE: CONCEPTUAL PRELIMINARY FINAL
WORK: 6 foot wide sidewalk along the east side of Meadowbrook Road
 7 foot wide sidewalk along the east side of Meadowbrook Road
 8 foot wide sidewalk along the south side of 13 Mile Road
 ADA Ramp Program

Description

Meadowbrook Rd (Metro Connector to 11 Mile Rd)	\$	64,800.00
Meadowbrook Rd (Vincenti Ct to Grand River Ave)	\$	163,900.00
13 Mile Rd (Novi Rd to Holmes Rd)	\$	32,400.00
ADA Ramp Program	\$	35,000.00

Total Opinion of Construction Costs = **\$ 296,100.00**

**ENGINEER'S OPINION OF PROBABLE
 CONSTRUCTION COST**

Telephone: (734) 522-6711 FAX: (734) 522-6427

DATE: Jun 27, 2013
PROJECT NO. _____
ESTIMATOR: BSA
CHECKED BY: JAR



**ENGINEER'S OPINION OF PROBABLE
CONSTRUCTION COST**

ORCHARD, HILTZ & McCLIMENT, INC.
34000 Plymouth Road, Livonia, Michigan, 48150

Telephone: (734) 522-6711 FAX: (734) 522-6427

CLIENT: City of Novi
PROJECT: 2014 Pathway Gap Program
LOCATION: 13 Mile Road (Novi Rd to Holmes Rd)

DATE: Jun 27, 2013
PROJECT NO.: _____
ESTIMATOR: BSA
CHECKED BY: JAR

BASIS FOR ESTIMATE: CONCEPTUAL PRELIMINARY FINAL

WORK: **8 foot wide sidewalk along the southside of West 13 Mile Road**

Assumptions: Connect sidewalk to complete gap west of Holmes Rd
13 Mile Rd 8 foot wide sidewalk cross-section to be 4 inch concrete on 6 inch aggregate base
Traffic control includes both 13 Mile Rd and Holmes Rd

Item	Description	Unit	Total Quantity	Unit Price	Total Cost
1	Mobilization, Max. 10%	LS	1	\$2,860.00	\$2,860.00
2	Digital Recorded Video Survey	LS	1	\$1,000.00	\$1,000.00
3	Traffic Maintenance and Control	LS	1	\$5,000.00	\$5,000.00
4	Erosion Control	LS	1	\$1,500.00	\$1,500.00
5	Pavement Removal	Syd	30	\$6.00	\$180.00
6	Sidewalk Removal	Syd	30	\$3.00	\$90.00
7	Curb and Gutter Removal	Ft	32	\$8.00	\$256.00
8	Sewer CI E, 12 inch, Tr Det _	Ft	30	\$35.00	\$1,050.00
9	Dr Structure, 48 inch dia	Ea	1	\$3,500.00	\$3,500.00
10	Subgrade Undercut, Type II, Modified	Cyd	9	\$35.00	\$315.00
11	Aggregate Base, 21AA, 6 inch	Ton	120	\$18.00	\$2,160.00
12	Station Grading	Sta	2.2	\$1,000.00	\$2,200.00
13	Sidewalk, Conc, 4 inch	Sft	1,758	\$5.00	\$8,789.60
14	Sidewalk Ramp, Conc, 6 inch	Sft	290	\$6.00	\$1,740.00
15	HMA Hand Patching	Ton	2	\$100.00	\$200.00
16	Detectable Warnings Surface	Ft	10	\$30.00	\$300.00



**ENGINEER'S OPINION OF PROBABLE
CONSTRUCTION COST**

ORCHARD, HILTZ & McCLIMENT, INC.
34000 Plymouth Road, Livonia, Michigan, 48150

Telephone: (734) 522-6711 FAX: (734) 522-6427

CLIENT: City of Novi
PROJECT: 2014 Pathway Gap Program
LOCATION: Meadowbrook Rd (Bridge St to 11 Mile Rd)

DATE: Jun 27, 2013
PROJECT NO.: _____
ESTIMATOR: BSA
CHECKED BY: JAR

BASIS FOR ESTIMATE: CONCEPTUAL PRELIMINARY FINAL
WORK: **6 foot wide sidewalk along the east side of Meadowbrook Road**

Assumptions: Connect to existing I-275 Metro Trail at Bridge Street, heading south to 11 Mile Road
Meadowbrook Rd 6 foot wide sidewalk cross-section to be 4 inch concrete on 6 inch aggregate base
Traffic control includes both Meadowbrook Road and 11 Mile Road

Item	Description	Unit	Total Quantity	Unit Price	Total Cost
1	Mobilization, Max. 10%	LS	1	\$5,890.00	\$5,890.00
2	Digital Recorded Video Survey	LS	1	\$2,000.00	\$2,000.00
3	Traffic Maintenance and Control	LS	1	\$5,000.00	\$5,000.00
4	Erosion Control	LS	1	\$1,000.00	\$1,000.00
5	Pavement Removal	Syd	10	\$6.00	\$60.00
6	Sidewalk Removal	Syd	10	\$3.00	\$30.00
7	Curb and Gutter Removal	Ft	15	\$8.00	\$120.00
8	Concrete Culvert End Section Removal	Ea	1	\$80.00	\$80.00
9	Structure Cover Adjust	Ea	2	\$650.00	\$1,300.00
10	Sign, Rem, Salv and Relocate	Ea	3	\$50.00	\$150.00
11	Sewer CI E, 12 inch, Tr Det _	Ft	40	\$35.00	\$1,400.00
12	Dr Structure, 48 inch dia	Ea	1	\$3,500.00	\$3,500.00
13	Concrete Spillway	Ft	40	\$50.00	\$2,000.00
14	Riprap	Syd	5	\$55.00	\$275.00
15	Subgrade Undercut, Type II, Modified	Cyd	17	\$35.00	\$595.00
16	Aggregate Base, 21AA, 6 inch	Ton	230	\$18.00	\$4,140.00
17	Station Grading	Sta	5.5	\$1,000.00	\$5,500.00
18	Curb and Gutter, Conc, Det __	Ft	15	\$20.00	\$300.00
19	Sidewalk, Conc, 4 inch	Sft	3,300	\$5.00	\$16,500.00
20	Sidewalk Ramp, Conc, 6 inch	Sft	160	\$6.00	\$960.00
21	Detectable Warnings Surface	Ft	10	\$30.00	\$300.00
22	HMA Hand Patching	Ton	1	\$100.00	\$100.00
23	Retaining Wall	Sft	200	\$45.00	\$9,000.00
24	Surface Restoration	Syd	1,530	\$3.00	\$4,590.00

Opinion of Construction Cost \$64,800.00



**ENGINEER'S OPINION OF PROBABLE
CONSTRUCTION COST**

ORCHARD, HILTZ & McCLIMENT, INC.
34000 Plymouth Road, Livonia, Michigan, 48150

Telephone: (734) 522-6711 FAX: (734) 522-6427

CLIENT: City of Novi
PROJECT: 2014 Pathway Gap Program
LOCATION: Meadowbrook Rd (11 Mile Rd to Grand River Ave)

DATE: Jun 27, 2013
PROJECT NO.: _____
ESTIMATOR: BSA
CHECKED BY: JAR

BASIS FOR ESTIMATE: CONCEPTUAL PRELIMINARY FINAL

WORK: **6 foot wide sidewalk along the east side of Meadowbrook Road**

Assumptions: Connect to 11 Mile Road heading south to Grand River Road
Meadowbrook Rd 6 foot wide sidewalk cross-section to be 4 inch concrete on 6 inch aggregate base
Timber boardwalk to be 8 feet wide and placed on pilings
Prefabricated bridge structure to be 8 feet wide with abutments on the north and south banks of the creek
Traffic control includes all Meadowbrook Road, 11 Mile Road, Vincenti Court, and Grand River Avenue

Item	Description	Unit	Total Quantity	Unit Price	Total Cost
1	Mobilization, Max. 10%	LS	1	\$14,900.00	\$14,900.00
2	Digital Recorded Video Survey	LS	1	\$2,000.00	\$2,000.00
3	Traffic Maintenance and Control	LS	1	\$5,000.00	\$5,000.00
4	Erosion Control	LS	1	\$1,000.00	\$1,000.00
5	Pavement Removal	Syd	10	\$6.00	\$60.00
6	Curb and Gutter Removal	Ft	12	\$8.00	\$96.00
7	Tree Removal	Ea	10	\$500.00	\$5,000.00
8	Structure Cover Adjust	Ea	2	\$650.00	\$1,300.00
9	Sign, Rem, Salv and Relocate	Ea	2	\$50.00	\$100.00
10	Sewer CI E, 24 inch, Tr Det _	Ft	40	\$50.00	\$2,000.00
11	Dr Structure, 48 inch dia	Ea	1	\$3,500.00	\$3,500.00
12	Subgrade Undercut, Type II, Modified	Cyd	14	\$35.00	\$490.00
13	Aggregate Base, 21AA, 6 inch	Ton	190	\$18.00	\$3,420.00
14	Station Grading	Sta	4.5	\$1,000.00	\$4,500.00
15	Sidewalk, Conc, 4 inch	Sft	2,700	\$5.00	\$13,500.00
16	Sidewalk Ramp, Conc, 6 inch	Sft	144	\$6.00	\$864.00
17	HMA Hand Patching	Ton	1	\$100.00	\$100.00
18	Timber Boarwalk, 8 feet wide	Ft	80	\$400.00	\$32,000.00
19	Pile, Treated Timber, Furn & Driven	Ft	800	\$25.00	\$20,000.00
20	Prefabricated Bridge, 8 feet wide	Ft	50	\$1,000.00	\$50,000.00
21	Detectable Warnings Surface	Ft	10	\$30.00	\$300.00
22	Surface Restoration	Syd	1,500	\$2.50	\$3,750.00

Opinion of Construction Cost \$163,900.00