



CITY of NOVI CITY COUNCIL

Agenda Item O
July 2, 2012

SUBJECT: Approval to award a contract for preliminary design engineering services for the Greenways Development Phase 1 (part of the regional pathway that will link the ITC Community Sports Park and Maybury State Park to the south with Providence Park Hospital and the City of Wixom to the north) to URS Corporation for a design fee of \$56,270.

SUBMITTING DEPARTMENT: Parks, Recreation and Cultural Services
Department of Public Services, Engineering Division *BLC*

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

EXPENDITURE REQUIRED	\$ 56,270
AMOUNT BUDGETED	\$ 72,080
LINE ITEM NUMBER	208-691.00-974.105

BACKGROUND INFORMATION:

A north-south regional pathway in the western portion of the City was included in the adopted *City of Novi Non-Motorized Master Plan 2011*. The proposed regional pathway would provide a connection between ITC Community Sports Park and Maybury State Park to the south and the City of Wixom to the north. The master plan shows this non-motorized pathway roughly following a corridor of property owned by International Transmission Company (ITC).

The City originally proposed a different trail alignment to the west through City park land (the Singh Trail) for the portion of the regional trail that would have connected Nine Mile Road to Ten Mile Road. The MDEQ permit to construct the Singh Trail has expired; however, the Singh Trail is no longer required now that ITC has offered a license agreement that would locate most of Phase 1 of this project within the ITC utility corridor (a separate item on this agenda). Construction of the Singh Trail would have posed several practical difficulties, mostly related to the extensive woodlands and wetlands in the park land; and consequently would have been much more expensive to construct. In comparison, although it contains some wetland areas, much of the ITC corridor has been cleared of trees.

This project will consist of an approximately 2.25 mile long, 10-foot wide, asphalt pathway between ITC community Sports Park and Fire Station No. 4 at Ten Mile, where a trailhead parking area could be located (refer to attached map, segment labeled Phase 1). The majority of the path will be located along the ITC Transmission Corridor, with one or more easements needed along the portion outside the ITC corridor. See attached memo for additional information.

Because there are many aspects to this project (such as easements, wetlands, soil conditions, ITC license agreement requirements, among other unknowns) that make it difficult to accurately scope, the approved fiscal year 2012-13 project budget included

only preliminary engineering so the consultant could conduct a topographic survey, review the wetland boundaries and scope the necessary easements. Once the preliminary engineering is completed, staff can establish a construction budget, and then final engineering award can be recommended based on construction estimates.

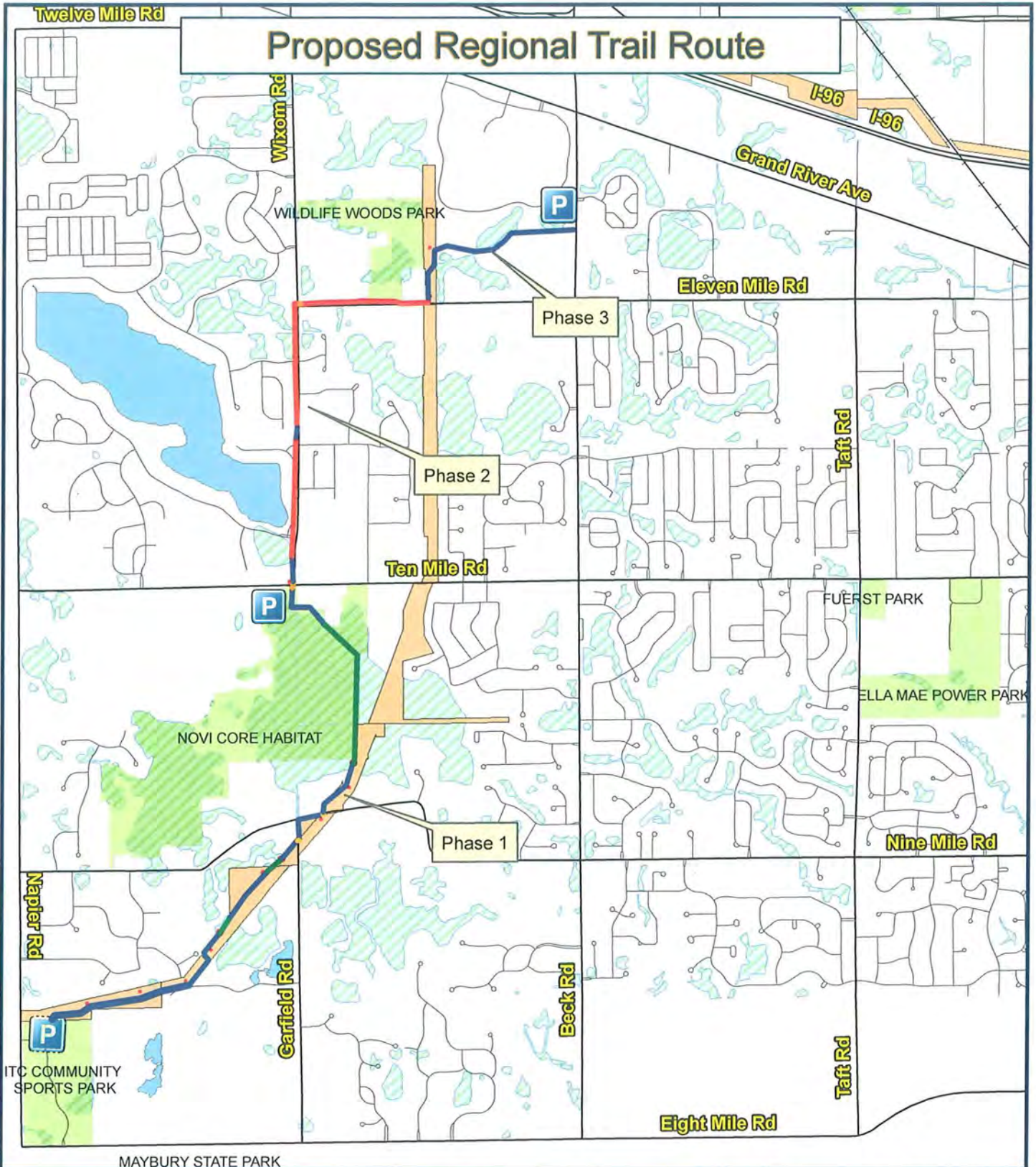
URS' engineering fees are based on the fixed fee schedule established in the Agreement for Professional Engineering Services for Public Projects. The total design fees for this project would be 7.5% of the estimate construction costs, however staff is recommending that only preliminary engineering be awarded at this time (equal to one half of the total design fee, or 3.75%). Therefore, the preliminary design engineering fee will be \$56,270 (3.75% of the estimated construction cost of \$1,500,520). The final design engineering fee will be awarded at a later date based on the final construction cost estimate. 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.

Preliminary engineering of the Greenways Development Phase 1 is funded for FY12-13 and is anticipated to be completed in late fall 2012. The final design and construction schedule is dependent upon the acquisition of the necessary easements and permits and future funding.

RECOMMENDED ACTION: Approval to award a contract for preliminary design engineering services for the Greenways Development Phase 1 (part of the regional pathway that will link the ITC Community Sports Park and Maybury State Park to the south with Providence Park Hospital and the City of Wixom to the north) to URS Corporation for a design fee of \$56,270.

	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				



Proposed Regional Trail Route

Map Author: Nathan Bartlett
 Date: 8/02/10
 Project: Engineering ITC Trail Route
 Version #: 1.2

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.

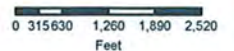
Legend

- Parkland
- ITC Property
- WETLAND
- POTENTIAL PARKING
- Existing Pathway
- Proposed Pathway
- Proposed Boardwalk
- Proposed Road Crossing



City of Novi

Engineering Division
 Department of Public Services
 45175 W Ten Mile Rd
 Novi, MI 48375
 cityofnovi.org



1 inch = 2,500 feet



SUPPLEMENTAL PROFESSIONAL ENGINEERING SERVICES AGREEMENT

GREENWAYS DEVELOPMENT PHASE 1

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 URS Corporation – Great Lakes., whose address is 27777 Franklin Road, Suite 2000, Southfield, MI 48034, 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 September 24, 2009.

The project includes the design and the preparation of plans and specifications for the Greenways Development Phase 1 project, which is a non-motorized pathway extending from the ITC Community Sports Park to Fire Station #4 on Ten Mile. This initial design phase shall include survey and base plans which will then be used to determine the final design scope.

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. Preliminary Engineering Design Phase Services: The Consultant shall complete the design phase services as described herein for a lump sum fee of \$56,269.50, which is 3.75% of the estimated construction cost (\$1,500,520). It should be noted that the above fee is based on half of the fee percentage for this type of project as indicated on the design and construction engineering fee curve provided in Exhibit B of the Agreement for Professional Engineering Services for Public Projects. This reduced fee is intended to cover the preliminary design engineering for the project (Tasks 1 and 2 of the attached scope).

- b. Final Engineering Design Phase Services will be awarded following preliminary engineering design, if needed.
- c. 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 claim and/or aggregate, and Environmental Impairment coverage. The retroactive date indicated on the policy shall either be unlimited, or, shall be the date that the Consultant established its initial coverage.

In the event that Consultant is sold or dissolved, Consultant shall provide purchase, at its expense, a "tail" or extended reporting period for the professional liability coverage for a period not less than 5 years.

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 hold harmless and indemnify the City, its officers, agents, employees from and against all claims, demands, suits liability, losses, damages or costs (including reasonable attorney fees and costs) arising out, of or resulting from the Consultant's tortious or negligent acts, errors, or omissions in performing this Agreement.

B. The City agrees, to the extent permitted by law, to indemnify and hold harmless the Consultant, its officers, partners, employees, stockholders, and sub-consultants (collectively Consultant) from and against any and all claims, suits, demands, liability, losses, damages or costs, including reasonable attorney's fees and costs arising out of or resulting from the City's tortious or negligent acts or errors in performing this Agreement.

C. Section 8(B) of this Agreement shall not apply to individual design and/or construction management projects.

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: Jan M. Hauser, P.E., Vice President Water/Wastewater

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

URS Corporation – Great Lakes

By: Jan M. Hauser
Its: Vice President

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:
Its:

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.



June 22, 2012

Mr. Ben Croy, PE
City of Novi
Field Services Complex
26300 Delwal Drive
Novi, MI 48375

Reference: Greenways Development Phase 1 Project

Dear Mr. Croy,

URS is pleased to submit this proposal for the above referenced project. The following tasks will be completed:

Task 1 – Initial Meeting and Scope Verification

The intent of this task is to meet with the City and verify the limits and scope of work for the project. The need for and location of soil borings and pavement cores will also be discussed and determined at the scope verification meeting.

Upon completion of this task, the URS team will move forward with the surveying and preliminary design.

Task 2 – Survey and Base Plans

The intent of this task is to provide topographic survey and base mapping as needed for the proposed design work. A full topographic survey will be completed for the project area.

As the necessary survey is completed, URS will prepare base plans (30%-40% complete) to identify the major design features. These plans will also be used to further the utility investigation and resolution of potential conflicts and geotechnical investigations.

Base plans will include the results of the survey information, utility information from response to our solicitations, and a preliminary design. An estimate will be included with the submittal.

URS will distribute the base plan design set to the utility companies that have indicated that they have facilities in the project area. URS will incorporate the additional information that utility companies provide to URS into the plan set. On-site meetings may be necessary to further clarify coordination and clearance of particular overhead and underground utility facilities.

Task 3 – Preliminary Plans

Incorporating the information obtained from the above tasks, URS will prepare the preliminary plan set (90%) and proposal package. This submission will include items such as utility locations, typical cross sections, materials/quantities and boring logs. The preliminary plan submittal will also include the Project Manual and an estimate of cost.

Task 4 Final Plans and Proposal

Incorporating comments from the City, URS will develop the Final Plans, Project Manual, and Cost Estimate.

Tasks 1-2 are recommended for award at this time.



Mr. Ben Croy
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 June 22, 2012

Task 5 Advertising

URS will respond to any final comments received from the City and will prepare the advertisement for bids. URS will distribute the contract documents to plan rooms and prospective bidders and answer questions and prepare addenda, as required, during the bidding.

Tasks 6 and 7– Bid Opening and Award

URS will attend the bid opening and analyze the bids received. A tabulation of bids and a letter with recommendations on award of a contract will then be prepared and submitted.

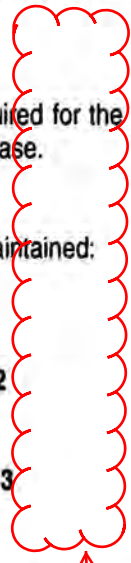
Tasks 8 and 9 – Construction

URS will provide full time inspection, contract administration, and staking as required for the project and will solicit and coordinate the efforts of the Materials Testing firm hired for the construction phase.

Schedule

Upon notification to proceed, it is estimated that the following schedule could be maintained:

- Task 1 – Scope Verification Meeting July 15, 2012
- Task 2 – Survey & Base Plans Submittal October 15, 2012
- Task 3 – Preliminary Plans Submittal November 30, 2012
- Task 4 – Final Plans Submittal January 10, 2013
- Task 6 – Advertise for Bids January 20, 2013
- Task 7 – Contract Award (By City) Late February, 2013
- Task 8 – Begin Construction May 1, 2013
- Task 9 – End Construction August 1, 2013



Greenways Development Phase 1 Construction Cost Estimate

Item No.	Item Description	Unit	Quantity	Unit Price	Cost
1	Mobilization	LS	1	\$75,000.00	\$ 75,000.00
2	Maintaining Traffic	LS	1	\$ 1,000.00	\$ 1,000.00
3	Clearing	Acre	3.0	\$25,000.00	\$ 75,000.00
4	Pathway Grading	Foot	8,525	\$ 11.00	\$ 93,775.00
5	21AA Aggregate Base, 6 inch	Syd	10,420	\$ 6.00	\$ 62,520.00
6	Soil Erosion and Sedimentation Control	LS	1	\$25,000.00	\$ 25,000.00
7	Subgrade Undercutting, Type II	CYD	1,700	\$ 18.00	\$ 30,600.00
8	HMA, 4C, 3 inch	Syd	9,472	\$ 15.00	\$ 142,125.00
9	Boardwalk, 10 foot wide	Ft	3,500	\$ 27.50	\$ 96,250.00
10	Sidewalk Crossing	Each	2	\$ 4,000.00	\$ 8,000.00
11	Turf Establishment	LS	1	\$25,000.00	\$ 25,000.00
TOTAL CONSTRUCTION COST					\$ 1,500,520.00

Scope of Preliminary Engineering



Mr. Ben Croy
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June 22, 2012

The following assumptions were made regarding the scope of services:

- An MDEQ Permit will be required for impacts to wetlands. Staking of wetlands and preparation of the permit application submittal is included in the Scope of Services. Wetland Mitigation plans, if required by MDEQ, are not included but could be added if needed.
- Drainage revisions will be studied and incorporated into the design as required to maintain existing drainage patterns. Detention ponds, if required or desired, are not included in the scope of services but could be added if needed.
- A full topographic survey will be performed. Base plans will be created using the survey data and supplemented using available aerial photography.
- Pathway easement documents will be created for up to 2 properties. Negotiations, payment, and recording of documents is assumed to be by Novi staff.
- Geotechnical Investigation and Materials Testing work will be solicited by and the work coordinated by URS. Payment for the work will be by the City and is not included in the design fee.

Estimated Design Fees

DESIGN (7.5% of \$1,500,000.00)	\$112,500
CONSTRUCTION ADMINISTRATION AND ENGINEERING (5.0% of \$1,500,000)	\$ 75,000
INSPECTION (80Crew Days@ \$615.00)	\$ 49,200
TOTAL	\$ 236,700

Please contact our project manager Sean Kelsch if you have any questions or wish to discuss this submittal. .

Sincerely

URS Corporation -- Great Lakes

for 
Jan Hauser, PE
Vice President


Sean Kelsch, PE
Manager, Highway Engineering Services

MEMORANDUM



TO: CLAY PEARSON, CITY MANAGER
FROM: BRIAN COBURN, P.E.; SENIOR CIVIL ENGINEER ^{BTE}
BEN CROY, P.E.; CIVIL ENGINEER
SUBJECT: PROPOSED REGIONAL PATHWAY SYSTEM
ITC COMMUNITY SPORTS PARK TO PROVIDENCE PARK
DATE: AUGUST 3, 2010

The Community Development Department has worked with the Walkable Novi Committee to identify several alternatives for a 4.5 mile long north-south regional pathway. The pathway would connect ITC Community Sports Park to the Providence Park Campus. We have evaluated the proposed routes to identify the most cost-effective and feasible alternative for the development of a preliminary design and cost estimate.

Proposed Phasing

Due to the length of the path being proposed, a phased approach to design and construction would be likely. The attached map shows the general location of the pathway, and designates three phases. Phase 1 of the pathway would begin at the ITC Community Sports Park, continue along the ITC corridor, cross near the Garfield and Nine Mile intersection, continue north again in the ITC corridor and end at the parking lot of Fire Station No. 4, where a parking area could be located. Phase 2 would be located along Wixom and Eleven Mile Roads, utilizing the existing path for the majority of that length, with some additional path and minor upgrades necessary. Phase 3 would connect the path from Eleven Mile to Beck Road using the ITC Corridor and Providence Park property. Another parking area near Beck Road may be possible at the Lanny's Pump Station on Beck Road.

Proposed Alignment

Phase 1 of the project is approximately 2.25 miles long and about 70 percent of the pathway in this phase is proposed within the ITC property. The specific location of the path within the ITC corridor would have to follow ITC's strict requirements, such as locating the path at the outer edge of their easement/property and only crossing under the electric transmission lines at specific locations. This phase also traverses a vast area of wooded wetlands not only on ITC property but also within the Novi property south of Fire Station 4. After walking a portion of the proposed route, it is apparent that a large length of boardwalk is required through not only the wetland system, but several other areas where poor soils exist.

The second phase of the project is 1.5 miles long and follows existing pathways along the west side of Wixom Road and the north side of 11 Mile Road to connect Fire Station 4 to the ITC corridor north of 11 Mile Road. The existing pathway along Wixom Road is only 8 feet wide (the proposed design width is 10 feet) and there are few gaps of

several hundred feet that would need to be constructed. The existing pathway along 11 Mile Road is only 5 feet wide and therefore would require reconstruction to a minimum of 8 feet, if not 10 feet wide, to accommodate the proposed users.

The third phase of the project is 0.75 miles long and utilizes the ITC corridor and an existing sanitary sewer easement on Providence Park property to make the connection to Beck Road from 11 Mile Road. This phase could also connect the regional path to Wildlife Woods Park and Providence Park's trail system by constructing spurs from the regional pathway. This phase requires coordination with the Medilodge site (located east of the ITC corridor on 11 Mile Road), which is in review with Community Development for a Planned Rezoning Overlay. The concept plan for Medilodge includes construction of a portion of the regional pathway. This phase also requires coordination with Providence Park Hospital which must grant additional easements for the proposed alignment through the site and potential parking at Beck Road.

Construction Techniques and Challenges

Staff has investigated two potential types of construction materials for paving the pathway. The first is the traditional asphalt path with aggregate base. The second involves the use of compacted limestone fines (particles of limestone smaller than 3/8 inch in diameter). This material has not yet been used in Novi, but was recently used on a similar project in Southfield (see photos, right) and is less expensive, provides a firm stable surface that works well for pedestrians and bicyclists, and meets Americans with Disability Act requirements when installed properly. Additionally, the limestone material presents a more natural appearance in a natural setting than asphalt. Staff is researching the use of compacted limestone fine for path construction in other communities, but based on initial discussions, it appears to be a viable method of construction. Limestone path construction appears to require some additional effort during construction (the specification for the limestone material is critical to the design, and therefore can be difficult to control during construction), and may require more maintenance immediately following construction where repairs may be needed (e.g over bad soils, water damage, etc.).



However, once a stable and firmly compacted path is achieved it appears that this type of path would prove to be durable for many years. This type of path has been installed in many locations in surrounding areas with reported success. The limestone path would most likely require an annual maintenance program that amounts to more than required for an asphalt path (limestone reshaping, leaf blowing, vegetation removal), but these costs may be offset in the future by the repairs typically required of an aging asphalt path.

Staff is also investigating other alternatives for the construction of the boardwalk through the wetlands. One option is to fill the wetlands and construct equalization culverts under the pathway; however the difficulty of hauling in fill over unstable soils to complete the work and the remote likelihood that a permit would be issued by MDNRE for this work makes this option unattractive. We will continue to discuss options with other communities as we discuss the use of limestone material.

Easements

The proposed alignment was developed to incorporate the fewest number of easements from the fewest number of property owners. As proposed, easements would be required from ITC, Providence Park Hospital, Lawrence Schmidt (property owner on Wixom Road), and Medilodge. The remainder of the alignment is located within the right-of-way, existing highway or pathway easements, or on City owned property. Easement acquisition should be begin at the time of preliminary design and should be completed before final design is completed.

Preliminary Construction Cost Estimates

The enclosed preliminary construction cost estimates were developed with very limited amount of field work and should therefore be used only for budgetary purposes. Without conducting a topographic survey, several assumptions were made in the development of the estimates. These assumptions are identified below:

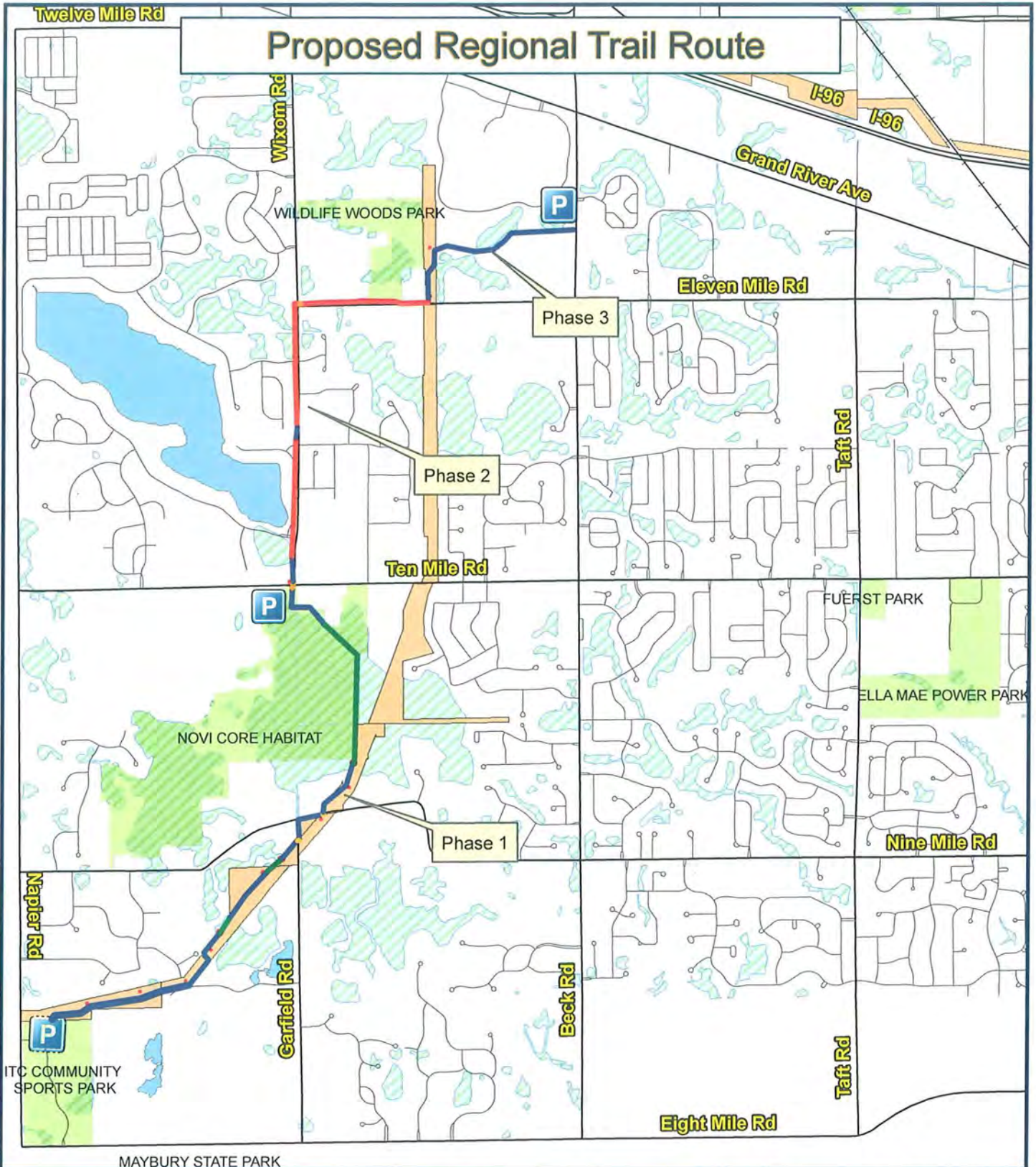
- The presence of wetlands and poor soils will require approximately 3,500 feet of 10-foot wide boardwalk for Phase 1 at a cost of \$1,000,000.
- The use of the compacted limestone fines is suitable for the pathway construction in Phase 1.
- The use of the existing 8-foot pathway along Wixom Road is acceptable.
- The replacement of the existing 5-foot sidewalk with an 8 foot or 10 foot wide pathway is required along 11 Mile Road.
- All easements will be granted at no cost.
- The proposed signal upgrade at 10 Mile Road and Wixom Road (scheduled for fall 2010 completion) will meet the requirements for the pathway and there will be no additional signal work required with this project.
- The pathway in Phase 3 will be asphalt and constructed to support trucks because it will be co-located on ITC's service road and within the city's sanitary sewer easement which requires occasional access by large vehicles.
- A contingency of 20% is included until topographic survey is complete.

Given these assumptions, the construction cost estimates are summarized as follows:

Phase/Description	Construction	Engineering, Legal & Administrative	Contingency	Total Estimate
Phase 1 (ITC Sports to Fire Station 4)—Limestone	\$1,646,000	\$411,000	\$329,000	\$2,386,000
Phase 2 (Fire Station 4 to ITC Corridor on 11 Mile)—Asphalt	\$80,000	\$20,000	\$16,000	\$116,000
Phase 3 (11 Mile to Beck via Providence Park)—Asphalt	\$267,000	\$67,000	\$53,000	\$387,000
Potential Parking at Fire Station 4	\$26,000	\$7,000	\$5,000	\$38,000
Potential Parking at Beck Road	\$26,000	\$7,000	\$5,000	\$38,000
Grand Total	\$2,045,000	\$512,000	\$408,000	\$2,965,000

Copies of the detailed construction cost estimates are attached for your reference. The estimates for the asphalt surface for Phase 1 and the limestone surface for Phase 3 are also included, but are not referenced above. The cost of the preferred methods and materials are included in the above table.

cc: Rob Hayes, P.E.; Director of Public Services/City Engineer
 Nancy Cowan, Acting Director of Parks, Recreation and Cultural Services
 Barbara McBeth; Deputy Community Development Director
 Mark Spencer, City Planner



Proposed Regional Trail Route

Map Author: Nathan Bartlett
 Date: 8/02/10
 Project: Engineering ITC Trail Route
 Version #: 1.2

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.

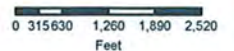
Legend

-  Parkland
-  ITC Property
-  WETLAND
-  POTENTIAL PARKING
-  Existing Pathway
-  Proposed Pathway
-  Proposed Boardwalk
-  Proposed Road Crossing



City of Novi

Engineering Division
 Department of Public Services
 45175 W Ten Mile Rd
 Novi, MI 48375
 cityofnovi.org



1 inch = 2,500 feet



**PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COSTS
PROJECT DESCRIPTION**

ITC Pathway - Phase 1 Asphalt Pathway (ITC Sports Park to Ten Mile Rd)

DATE: July 28, 2010

No.	Description	Unit	Estimated Quantity	Unit Price	Total
1	Soil Erosion Control	LF	17050	\$ 1.50	\$ 25,575.00
2	Maintaining Traffic	LSUM	1	\$ 1,000.00	\$ 1,000.00
3	Tree Removal	EA	245	\$ 500.00	\$ 122,500.00
4	Clearing and Grubbing	LF	2000	\$ 8.00	\$ 16,000.00
5	Pathway Grading	LF	8525	\$ 15.00	\$ 127,875.00
6	21AA Aggregate Base (6")	SY	10420	\$ 7.00	\$ 72,940.00
7	Undercutting of Soils	CY	1705	\$ 24.00	\$ 40,920.00
8	Asphalt (3")	SY	9472	\$ 16.00	\$ 151,555.56
9	10' wide boardwalk	LF	3500	\$ 300.00	\$ 1,050,000.00
10	Mid-Block Crossing	EA	2	\$ 4,000.00	\$ 8,000.00
11	Restoration	SY	18944	\$ 2.00	\$ 37,888.89
12	Mobilization (5%)	LSUM	1	\$ 82,712.72	\$ 82,712.72
CONSTRUCTION TOTAL					\$ 1,736,967.17
Engineering, Legal and Administrative (25%)					\$ 434,241.79
Contingency (20%)					\$ 347,393.43
BUDGET TOTAL					\$ 2,518,602.39

NOTES:

This estimate was based on the City GIS drawings/aerial photography. Cost may be strongly effected by soil types, existing water courses, etc.
 Estimate established using best cost information at the time. Cost of pavement and construction may increase.
 All pathways were estimated as 10' in width using a 3" bituminous over 6" aggregate cross section.

Cost per LF	\$ 209.45
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By: Lindon Ivezaj

**PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COSTS
PROJECT DESCRIPTION**

ITC Pathway - Phase 1 Compacted Limestone (ITC Sports Park to Ten Mile Rd)

DATE: July 28, 2010

No.	Description	Unit	Estimated Quantity	Unit Price	Total
1	Soil Erosion Control	LF	17050	\$ 1.50	\$ 25,575.00
2	Maintaining Traffic	LSUM	1	\$ 1,000.00	\$ 1,000.00
3	Tree Removal	EA	245	\$ 500.00	\$ 122,500.00
4	Clearing and Grubbing	LF	2000	\$ 8.00	\$ 16,000.00
5	Pathway Grading	LF	8525	\$ 15.00	\$ 127,875.00
6	10' Crushed Limestone Pathway	LF	8525	\$ 19.00	\$ 161,975.00
7	Undercutting of Soils	CY	695	\$ 24.00	\$ 16,680.00
8	10' wide boardwalk	LF	3500	\$ 300.00	\$ 1,050,000.00
9	Mid-Block Crossing	EA	2	\$ 4,000.00	\$ 8,000.00
10	Restoration	SY	18944	\$ 2.00	\$ 37,888.89
11	Mobilization (5%)	LSUM	1	\$ 78,374.69	\$ 78,374.69
CONSTRUCTION TOTAL					\$ 1,645,868.58
Engineering, Legal and Administrative (25%)					\$ 411,467.15
Contingency (20%)					\$ 329,173.72
BUDGET TOTAL					\$ 2,386,509.45

NOTES:

This estimate was based on the City GIS drawings/aerial photography. Cost may be strongly effected by soil types, existing water courses, etc.
 Estimate established using best cost information at the time. Cost of pavement and construction may increase.
 All pathways were estimated as 10' in width using a compacted limestone surface.

Cost per LF	\$ 198.46
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By: Lindon Ivezaj

**PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COSTS
PROJECT DESCRIPTION**

ITC Pathway - Phase 2 (Ten Mile and Wixom Rd to Eleven Mile Rd and ITC Easement)

DATE: July 28, 2010

No.	Description	Unit	Estimated Quantity	Unit Price	Total
1	Soil Erosion Control	LF	1575	\$ 1.50	\$ 2,362.50
2	Removal of Ex. Pavement	SY	555	\$ 7.00	\$ 3,885.00
3	Pathway Grading	LF	1575	\$ 15.00	\$ 23,625.00
4	Asphalt Pathway (4" Bit/6" 21AA Agg.)	SY	1400	\$ 28.00	\$ 39,200.00
5	Restoration	SY	3500	\$ 2.00	\$ 7,000.00
6	Mobilization (5%)	LSUM	1	\$ 3,803.63	\$ 3,803.63
CONSTRUCTION TOTAL					\$ 79,876.13
Engineering, Legal and Administrative (25%)					\$ 19,969.03
Contingency (20%)					\$ 15,975.23
BUDGET TOTAL					\$ 115,820.38

NOTES:

This estimate was based on the City GIS drawings/aerial photography. Cost may be strongly effected by soil types, existing water courses, etc.
 Estimate established using best cost information at the time. Cost of pavement and construction may increase.
 All pathways were estimated as 8' in width using a bituminous asphalt pavement.
 Phase 2 includes two segments along Wixom Rd, a new 515' section at the northwest corner as well as removal and replacement of a 160' segment of 3' wide sidewalk further north. The Phase 2 also includes removal of a 900' segment of concrete sidewalk along Eleven Mile Rd and replacing it with 8' wide asphalt pathway.

Cost per LF	\$	73.54
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By: Lindon Ivezaj

**PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COSTS
PROJECT DESCRIPTION**

ITC Pathway - Phase 3 Asphalt Pathway (Eleven Mile Rd to Beck Rd)

DATE: July 28, 2010

No.	Description	Unit	Estimated Quantity	Unit Price	Total
1	Soil Erosion Control	LF	8000	\$ 1.50	\$ 12,000.00
2	Clearing and Grubbing	LF	1000	\$ 8.00	\$ 8,000.00
3	Pathway Grading	LF	3930	\$ 15.00	\$ 58,950.00
4	21AA Aggregate Base (6")	SY	1285	\$ 7.00	\$ 8,995.00
5	21AA Aggregate Base (8")	SY	3520	\$ 9.00	\$ 31,680.00
6	Undercutting of Soils	CY	820	\$ 24.00	\$ 19,680.00
7	Asphalt (3")	SY	3200	\$ 16.00	\$ 51,200.00
8	Asphalt (4")	SY	1170	\$ 22.00	\$ 25,740.00
9	Boardwalk (10')	LF	70	\$ 300.00	\$ 21,000.00
10	Restoration	SY	8740	\$ 2.00	\$ 17,480.00
11	Mobilization (5%)	LSUM	1	\$ 12,736.25	\$ 12,736.25
CONSTRUCTION TOTAL					\$ 267,461.25
Engineering, Legal and Administrative (25%)					\$ 66,865.31
Contingency (20%)					\$ 53,492.25
BUDGET TOTAL					\$ 387,818.81

NOTES:

This estimate was based on the City GIS drawings/aerial photography. Cost may be strongly effected by soil types, existing water courses, etc.
 Estimate established using best cost information at the time. Cost of pavement and construction may increase.
 All pathways were estimated as 10' in width using a 4" bituminous over 8" aggregate cross section in the ITC easement and 3" bituminous over 6" aggregate outside of the ITC easement.

Cost per LF	\$ 96.95
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By: Lindon Ivezaj

PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COSTS
PROJECT DESCRIPTION
ITC Pathway - Phase 3 Compacted Limestone Pathway (Eleven Mile Rd to Beck Rd)

DATE: July 28, 2010

No.	Description	Unit	Estimated Quantity	Unit Price	Total
1	Soil Erosion Control	LF	8000	\$ 1.50	\$ 12,000.00
2	Clearing and Grubbing	LF	1000	\$ 8.00	\$ 8,000.00
3	Pathway Grading	LF	3930	\$ 15.00	\$ 58,950.00
4	10' Crushed Limestone Pathway	LF	2880	\$ 19.00	\$ 54,720.00
5	Asphalt (4")	SY	1170	\$ 22.00	\$ 25,740.00
6	21AA Aggregate Base (8")	SY	3520	\$ 9.00	\$ 31,680.00
7	Boardwalk (10')	LF	70	\$ 300.00	\$ 21,000.00
8	Undercutting of Soils	CY	410	\$ 24.00	\$ 9,840.00
9	Restoration	SY	8740	\$ 2.00	\$ 17,480.00
10	Mobilization (5%)	LSUM	1	\$ 11,970.50	\$ 11,970.50
CONSTRUCTION TOTAL					\$ 251,380.50
Engineering, Legal and Administrative (25%)					\$ 62,845.13
Contingency (20%)					\$ 50,276.10
BUDGET TOTAL					\$ 364,501.73

NOTES:

This estimate was based on the City GIS drawings/aerial photography. Cost may be strongly effected by soil types, existing water courses, etc.
Estimate established using best cost information at the time. Cost of pavement and construction may increase.
All pathways were estimated as 10' in width using a compacted limestone surface outside of the ITC easement.
Pathways within the ITC eaement were estimated as 4" bituminous asphalt over 8" of

Cost per LF	\$	91.13
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By: Lindon Ivezaj

**PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COSTS
PROJECT DESCRIPTION**

ITC Pathway - Asphalt Parking Lots (Fire Station 4 and Beck Rd Lift Station)

DATE: July 28, 2010

No.	Description	Unit	Estimated Quantity	Unit Price	Total
1	Soil Erosion Control	LF	500	\$ 1.50	\$ 750.00
8	Asphalt Pathway (4" Bit/6" 21AA Agg.)	SY	800	\$ 28.00	\$ 22,400.00
11	Striping	LF	684	\$ 1.50	\$ 1,026.00
13	Restoration	SY	270	\$ 2.00	\$ 540.00
14	Mobilization (5%)	LSUM	1	\$ 1,235.80	\$ 1,235.80
CONSTRUCTION TOTAL					\$ 25,951.80
Engineering, Legal and Administrative (25%)					\$ 6,487.95
Contingency (20%)					\$ 5,190.36
BUDGET TOTAL					\$ 37,630.11

NOTES:

This estimate was based on the City GIS drawings/aerial photography. Cost may be strongly effected by soil types, existing water courses, etc.
 Estimate established using best cost information at the time. Cost of pavement and construction may increase.
 Both parking lots were estimated on a 60' x 60' pavement section to accomedate 10 parking spaces each.

By: Lindon Ivezaj