AGREEMENT BETWEEN WASHTENAW ENGINEERING COMPANY

AND CITY OF ANN ARBOR FOR PROFESSIONAL SERVICES

The City of Ann Arbor, a Michigan municipal corporation, having its offices at 100 North Fifth Avenue, Ann Arbor, Michigan 48107 ("City"), and Washtenaw Engineering Company, a Michigan Corporation with its address at 3250 W. Liberty Road, Ann Arbor, Michigan 48106 ("Consultant"), agree as follows:

The Consultant agrees to provide professional services to the City under the following terms and conditions:

I. DEFINITIONS

Administering Service Area/Unit means Project Management Services Unit.

Contract Administrator means <u>Homayoon Pirooz, P.E.</u>, Manager, Project Management Services Unit, acting personally or through any assistants authorized by the Administrator/Manager of the Administering Service Area/Unit.

Project means the Catherine Street 16" Water Main Replacement, File # 2007-080; the Plymouth Road Water Main Replacement, File # 2007-079; the Wagner Road Sanitary Sewer Extension, File # 2008-033; the Glendaloch Circle Watermain Replacement, File # 2008-034; and the Clair Circle Water Main Replacement, File # 2008-032.

II. DURATION

This agreement shall become effective on May 5, 2008, and shall remain in effect until satisfactory completion of the Services specified above unless terminated as provided for in this agreement.

III. SERVICES

- A. The Consultant agrees to provide professional engineering services ("Services") in connection with the Project as described in Exhibit A. The City retains the right to make changes to the quantities of service within the general scope of the agreement at any time by a written order. If the changes add to or deduct from the extent of the services, the contract sum shall be adjusted accordingly. All such changes shall be executed under the conditions of the original agreement.
- B. Quality of Services under this agreement shall be of the level of professional quality performed by experts regularly rendering this type of service. Determination of acceptable quality shall be made solely by the Contract Administrator.

- C. The Consultant shall perform its Services for the Project in compliance with all applicable laws, ordinances and regulations. Unless otherwise noted, the Consultant shall perform its Services in accordance with the City's Public Services Department Standard Specifications.
- D. The Consultant may rely upon the accuracy of reports and surveys provided to it by the City except when defects should have been apparent to a reasonably competent professional or when it has actual notice of any defects in the reports and surveys.

IV. COMPENSATION OF CONSULTANT

- A. The Consultant shall be paid on the basis of reasonable time spent and materials used at the rates and prices specified in Exhibit B for acceptable work performed and acceptable Deliverables received. The total fee to be paid the Consultant for the Services shall not exceed \$148,586.00. Payment shall be made monthly following receipt of invoices submitted by the Consultant, and approved by the Contract Administrator.
- B. The Consultant will be compensated for Services performed in addition to the Services described in Section III, only when those additional Services have received prior written approval of the Contract Administrator. Compensation will be on the basis of reasonable time spent and reasonable quantities of materials used, according to the schedule of rates in Exhibit B. The Contract Administrator shall be the sole arbitrator of what shall be considered "reasonable" under this provision.
- C. The Consultant shall keep complete records of time spent and materials used on the Project so that the City may verify invoices submitted by the Consultant. Such records shall be made available to the City upon request and submitted in summary form with each invoice.

V.INSURANCE/INDEMNIFICATION

- A. The Consultant shall procure and maintain during the life of this Contract, such insurance policies, including those set forth below, as will protect itself from all claims for bodily injuries, death or property damage which may arise under this Contract; whether the acts were made by the Consultant or by any subcontractor or anyone employed by them directly or indirectly. The following insurance policies are required:
 - 1. Professional liability insurance protecting the Consultant and its employees in an amount not less than \$1,000,000.
 - 2. Worker's Compensation Insurance in accordance with all applicable state and federal statutes. Further, Employers Liability Coverage shall be obtained in the following minimum amounts:

Bodily Injury by Accident - \$500,000 each accident Bodily Injury by Disease - \$500,000 each employee Bodily Injury by Disease - \$500,000 each policy limit

3. Commercial General Liability Insurance equivalent to, as a minimum, Insurance Services Office form CG 00 01 07 98. The City of Ann Arbor shall be an additional insured. There shall be no added exclusions or limiting endorsements including, but not limited to: Products and Completed Operations, Explosion, Collapse and Underground coverage or Pollution. Further, the following minimum limits of liability are required:

\$1,000,000 Each occurrence as respect Bodily Injury Liability or Property Damage Liability, or both combined.

\$2,000,000 Per Job General Aggregate

\$1,000,000 Personal and Advertising Injury

- 4. Motor Vehicle Liability Insurance, including Michigan No-Fault Coverages, equivalent to, as a minimum, Insurance Services Office form CA 00 01 07 97. The City of Ann Arbor shall be an additional insured. There shall be no added exclusions or limiting endorsements. Coverage shall include all owned vehicles, all non-owned vehicles and all hired vehicles. Further, the limits of liability shall be \$1,000,000 for each occurrence as respects Bodily Injury Liability or Property Damage Liability, or both combined.
- 5. Umbrella/Excess Liability Insurance shall be provided to apply excess of the Commercial General Liability, Employers Liability and the Motor Vehicle coverage enumerated above, for each occurrence and for aggregate in the amount of \$1,000,000.
- B Insurance required under V.A.3 and V.A.4 of this Contract shall be considered primary as respects any other valid or collectible insurance that the City may possess, including any self-insured retentions the City may have; and any other insurance the City does possess shall be considered excess insurance only and shall not be required to contribute with this insurance. Further, the Contractor agrees to waive any right of recovery by its insurer against the City.
- In the case of all Contracts involving on-site work, the Consultant shall provide to the City before C. the commencement of any work under this Contract documentation demonstrating it has obtained the above mentioned policies. Documentation must provide and demonstrate an unconditional 30 day written notice of cancellation in favor of the City of Ann Arbor. Further, the documentation must explicitly state the following: (a) the policy number; name of insurance company; name and address of the agent or authorized representative; name and address of insured; project name; policy expiration date; and specific coverage amounts; (b) any deductibles or self-insured retentions which shall be approved by the City, in its sole discretion; (c) that the policy conforms to the requirements specified. An original certificate of insurance may be provided as an initial indication of the required insurance, provided that no later than 21 calendar days after commencement of any work the Consultant supplies a copy of the endorsements required on the policies. Upon request, the Consultant shall provide within 30 days a copy of the policy(ies) to the City. If any of the above coverages expire by their terms during the term of this Contract, the Consultant shall deliver proof of renewal and/or new policies to the Administering Service Area/Unit at least ten days prior to the expiration date.
- D. Any insurance provider of Consultant shall be admitted and authorized to do business in the State of Michigan and shall carry and maintain a minimum rating assigned by A.M. Best & Company's Key Rating Guide of "A-" Overall and a minimum Financial Size Category of "V". Insurance policies and certificates issued by non-admitted insurance companies are not acceptable unless approved in writing by the City.
- E. To the fullest extent permitted by law, for any loss not covered by insurance under this contract, the Consultant shall indemnify, defend and hold the City, its officers, employees and agents

harmless from all suits, claims, judgments and expenses including attorney's fees resulting or alleged to result, to its proportionate extent, from any negligent, grossly negligent, reckless and/or intentional wrongful or tortious acts or omissions by the Consultant or its employees and agents occurring in the performance of this agreement.

VI. COMPLIANCE REQUIREMENTS

- A. Nondiscrimination. The Consultant agrees to comply with the nondiscrimination provisions of Chapter 112 of the Ann Arbor City Code and to take affirmative action to assure that applicants are employed and that employees are treated during employment in a manner which provides equal employment opportunity and tends to eliminate any inequality based upon race, national origin or sex. The Consultant agrees to comply with the provisions of Section 9:161 of Chapter 112 of the Ann Arbor City Code, Exhibit C.
- B. Living Wage. The Consultant is a "covered employer" as defined in Chapter 23 of the Ann Arbor City Code and agrees to comply with the living wage provisions of Chapter 23 of the Ann Arbor City Code. The Consultant agrees to pay those employees providing Services to the City under this Agreement a "living wage," as defined in Section 1:815 of the Ann Arbor City Code; to post a notice approved by the City of the applicability of Chapter 23 in every location in which regular or contract employees providing services under this agreement are working; to maintain records of compliance; if requested by the City, to provide documentation to verify compliance; to take no action that would reduce the compensation, wages, fringe benefits, or leave available to any employee or person contracted for employment in order to pay the living wage required by Section 1:815; and otherwise to comply with the requirements of Chapter 23. A copy of selected provisions of Chapter 23 of the Ann Arbor City Code is attached as Exhibit D. The current living wage rates under Section 1:815 of the Ann Arbor City Code, as adjusted in accordance with Section 1:815(3) of the Ann Arbor City Code, is \$10.33 an hour for a covered employer that provides employee health care to its employees and \$11.96 an hour for a covered employer that does not provide health care to its employees.

VII. WARRANTIES BY THE CONSULTANT

- A. The Consultant warrants that the quality of its Services under this agreement shall conform to the level of professional quality performed by experts regularly rendering this type of service.
- B. The Consultant warrants that it has all the skills, experience, and professional licenses necessary to perform the Services it is to provide pursuant to this agreement.
- C. The Consultant warrants that it has available, or will engage, at its own expense, sufficient trained employees to provide the Services specified in this agreement.
- C.The Consultant warrants that it is not, and shall not become overdue or in default to the City for any contract, debt, or any other obligation to the City including real and personal property taxes.

VIII. TERMINATION OF AGREEMENT

- A. This agreement may be terminated by either party without further notice in the case of a breach of this agreement by the other party, if the breaching party has not corrected the breach within 15 days after notice of the breach.
- B. The City may terminate this agreement if it decides not to proceed with the Project by notice pursuant to Article XII. If the Project is terminated for reasons other than the breach of the agreement by the Consultant, the Consultant shall be compensated for reasonable time spent and reasonable quantities of materials used prior to notification of termination.

IX. OBLIGATIONS OF THE CITY

- A. The City agrees to give the Consultant access to the Project area and other City owned properties as required to perform the necessary Services under this agreement.
- B. The City shall notify the Consultant of any defects in the Services of which the Contract Administrator has actual notice.

X.ASSIGNMENT

- A. The Consultant shall not subcontract or assign any portion of the services without prior written consent from the City. Notwithstanding any consent by the City to any assignment, Consultant shall at all times remain bound to all warranties, certifications, indemnifications, promises and performances, however described, as are required of it under the Agreement unless specifically released from the requirement, in writing, by the City.
- B. The Consultant shall retain the right to pledge payment(s) due and payable under this agreement to third parties.

XI. NOTICE

All notices and submissions required under this agreement shall be by personal delivery or by first-class mail, postage prepaid, to the address stated in this agreement or such other address as either party may designate by prior written notice to the other. Notice shall be considered delivered under this agreement when personally delivered to the Contract Administrator or placed in the U.S. mail, postage prepaid to the Administering Service Area/Unit, care of the Contract Administrator.

XII. CHOICE OF LAW

This agreement shall be construed, governed, and enforced in accordance with the laws of the State of Michigan. By executing this agreement, the Consultant and the City agree to venue in a court of appropriate jurisdiction sitting within Washtenaw County for purposes of any action arising under this agreement.

XIII. CONFLICT OF INTEREST

Consultant certifies it has no financial interest in the Services to be provided under this agreement other than the compensation specified herein. Consultant further certifies that it presently has no personal or financial interest, and shall not acquire any such interest, direct or indirect, which would conflict in any manner with its performance of the Services under this agreement.

XIV.SEVERABILITY OF PROVISIONS

Whenever possible, each provision of this agreement will be interpreted in a manner as to be effective and valid under applicable law. However, if any provision of this agreement or the application of any provision to any party or circumstance will be prohibited by or invalid under applicable law, that provision will be ineffective to the extent of the prohibition or invalidity without invalidating the remainder of the provisions of this agreement or the application of the provision to other parties and circumstances.

XV. EXTENT OF AGREEMENT

This agreement represents the entire understanding between the City and the Consultant and it supersedes all prior representations or agreements whether written or oral. Neither party has relied on any prior representations, of any kind or nature, in entering into this agreement. This agreement may be altered, amended or modified only by written amendment signed by the Consultant and the City.

XVI. OWNERSHIP OF DOCUMENTS

Upon completion or termination of this agreement, all documents prepared by the Consultant, including tracings, drawings, estimates, specifications, field notes, investigations, studies and reports shall become the property of, and, at the option of the City, be delivered to, the City. The City acknowledges that the documents are prepared only for the Project. Prior to completion of the contracted Services the City shall have a recognized proprietary interest in the work product of the Consultant.

FOR CONSULTANT	FOR THE CITY OF ANN ARBOR
By Polit Wing Its: President	By John Hieftje, Mayor
	By
Approved as to form and content	Approved as to substance
Approved as to form and content	Approved as to substance
	By
Stephen K. Postema, City Attorney	By Roger W. Fraser, City Administrator
Stephen K. Postema, City Attorney	Roger W. Fraser, City Administrator
Stephen K. Postema, City Attorney	

EXHIBIT "A" SCOPE OF SERVICES

PROJECT DESCRIPTION - CATHERINE STREET 16" WATER MAIN

This project is identified in the City of Ann Arbor CIP to be constructed in March 2008. Prepare plans for the construction of a new 16" water main on Catherine Street from Glen Street to Zina Pitcher to provide redundancy for the Geddes Hill pressure district.

The project will be designed in accordance with all current City of Ann Arbor, American Water Works Association (AWWA), and Michigan Department of Environmental Quality requirements.

The utility evaluation is described as follows:

Existing water main – Evaluate fire hydrant coverage and main break information; Existing sanitary and storm sewers – Review of City provided video tape;

PROPOSED WORK PLAN

This project will cause disruption to the University of Michigan Medical Center and should be constructed when U of M is in its summer recess. There are numerous existing utilities and thrust blocks in Catherine Street so locating a new 16" water main will be challenging. It appears that some of the existing water mains and valving could be eliminated and still provide the required service. This could free additional space for the proposed water main.

We will evaluate the existing system and propose recommendations for reconfiguring the existing system. The design of the new system will need to avoid disturbing the existing thrust blocks.

The following items will need to be considered during the completion of the design and preparation of bid documents for the project:

- 1) The pipe restraint will need to handle the requirements for the offline, dead-end hydrostatic testing of the main.
- 2) The required flushing of the main during the testing phase, will necessitate the construction of larger-than-normal interconnects, launching tees and backflow protection, which will need to be accommodated when connecting to the City's water distribution system for a potable water source.
- 3) During the construction the testing of the main will require the flushing of large quantities of chlorinated water that will need to be properly collected and disposed of in the City's sanitary sewer system. The discharge of chlorinated water may need to be monitored to assure that it will not overwhelm the existing sanitary sewer system.
- Changes to the horizontal and vertical alignment of the proposed water main that may be required during the construction that are a result of utility conflicts, can be very expensive. Therefore, our team has developed a design approach from past experience that it may be more practical and cost effective in some cases to relocate the existing small-diameter existing water mains vertically away from the proposed pipe route. This approach provides provisions, in the bid documents, for the reinforced concrete encasement of the vertical relocation of the smaller diameter water main and utilities. In addition, we will identify critical locations we would recommend having the contractor perform exploratory excavation of these existing mains and other utilities prior to the start of the pipe laying process. This would provide us the opportunity to adjust the geometric alignment of the proposed water main to provide the best design possible. In the past we have determined that these exploratory excavations have allowed us to eliminate the need for some lowering of the mains and, therefore, the elimination of some concrete encasements. This has proven to provide a considerable cost and time savings on past projects.
- 5) The vertical alignment of proposed water main can, if not designed properly, dramatically impact the

existing sanitary sewer leads that service adjacent properties. Due to this problem we would plot the location of the existing sanitary sewer leads in the plan profiles to evaluate alignment strategies to eliminate as much as possible the need to relocate sanitary sewer leads. However, we would also include provisions in the bid documents for relocating and reconstructing existing sanitary sewer leads if they are found to be in conflict with the new main.

- 6) The design drawings will be developed by placing the proposed water main information on layers consistent with the City of Ann Arbor's Geographical Information System (GIS) requirements.
- 7) Placement of line valves will be provided to meet the requirements of the City's standards. The valve type and the requirement for pigging the pipe will be discussed with City personnel, and the decision will be incorporated into the bid documents.

Elements of the work plan will be separated into two phases:

The first phase will include the evaluation of potential routes for the proposed water main (two alternate routes will be evaluated). This work will include the development of aerial photometric drawings that include a "Miss Dig quality" evaluation of the existing utilities and features that would be impacted. The anticipated placement of the proposed water main will be completed for each alternative route, and corresponding estimates of probable construction costs will be developed.

The second phase will include a detailed final design and the preparation of contract documents. All required material testing and analysis (soil and pavement) will be performed. The PA-399 (DEQ) construction permit will be prepared. The plans will include, but not be limited to, to detailed plan and profile sheets, traffic control plans, and soil erosion control plans based on Chapter 63 of the City Code. We will also prepare a final estimate of probable construction costs, and any other work items necessary prior to award of a construction contract to a qualified construction contractor.

TASK BREAKDOWN - CATHERINE STREET 16" WATER MAIN

A – PLANNING PHASE (ALTERNATIVE ROUTES)

Task 1 - Preliminary Meeting and Investigative Work

- Task 1-1 WECO will attend a project "kick-off" meeting with representatives of the City and the U of M to discuss the project in detail.
- Task 1-2 WECO will review the City and U of M as-built records and perform the necessary investigative effort to determine the location of the existing utilities along the project route and review the Public Services Department Standard Specifications.

WECO will contact all local utility agencies and request plans of their existing and/or proposed facilities located within the project limits. Written documentation of the utility status for the project will be provided to the City.

- Task 1-3 WECO will prepare a preliminary schematic layout drawing on a City-provided GIS map, for two alternative water main routes. A detailed narrative will be developed that outlines the benefits and disadvantages for each route, including estimated costs for their construction. We will also provide a recommendation of the route that we feel should be selected, and why.
- Task 1-4 WECO will attend a project planning meeting with representatives of the City and U of M to discuss the alternative water main routes, their benefits and disadvantages, and their estimate of probable construction costs. WECO will document in writing the items discussed at the meeting.
- Task 1-5 Using the information and possible additions and deletions discussed during the project meeting with the City personnel, WECO will develop final estimate of probable construction cost for each route. The final estimate and alternative route map will be provided to the City and U of M for evaluation.
- Task 1-6 WECO will attend a project meeting with representatives of the City and U of M to determine which final route will be used for the design of the project. WECO will document in writing the items discussed at the meeting.

B – PROJECT DESIGN AND BID DOCUMENTS PREPARATION

Task 2 - Surveying and Preparation of Preliminary Drawings and Specifications

Task 2-1 WECO shall perform all field surveying within the Catherine Street right-of-way and 10' outside the right-of-way.

A Survey Total Station will be used to develop complete topographic drawing(s) along the project route. It will identify enough spot elevations to document the existing surface elevations, existing underground utilities including depths, sizes and casting elevations. It will also include significant trees, curbs and sidewalks, and any other significant features between right-of-way to right-of-way that might impact the design and construction of the project. This information will be the basis of the development of the design drawings and will have a horizontal scale of 1 inch = 40 feet.

During the gathering of all field work, WECO or its designee shall provide traffic control in accordance with the Michigan Manual of Uniform Traffic Control Devices (MMUTCD).

Task 2-2 Geotechnical work will be performed by a consultant, who is an expert in this field, working

as a subcontractor to WECO.

Geotechnical work will consist of soil borings at 500 foot intervals staggered about the centerline of the route. The borings will be drilled to a depth of 10 feet or as required to determine the limits of unsuitable or contaminated soils, if found during the boring operation. In addition, the thickness and condition of the existing pavement sections will be recorded.

During the gathering of all field work, WECO or its designee shall provide traffic control in accordance with the Michigan Manual of Uniform Traffic Control Devices (MMUTCD).

- Task 2-3

 Based on the information determined from the field work and soils investigation, WECO will prepare preliminary drawings that include the plan and profile of the proposed water main. These drawings will be prepared with a horizontal scale of 1 inch = 40 feet and a vertical scale of 1 inch = 4 feet. The preliminary drawings will be submitted to the City and U of M for review and comment. The drawing set will include a cover sheet, plan and profile sheets, detail sheet(s), soil erosion control sheets and project construction sequencing and traffic control sheets.
- Task 2-4 Based on the City's standards, WECO will prepare a complete set of draft specifications for the construction and bidding of the project. The draft specifications will be submitted to the City for review and comment.
- Task 2-5 Upon the completion of the City and U of M review of the preliminary drawings and specifications, WECO will attend a meeting with the City representatives to answer questions and provide clarifications of the preliminary drawings and specifications. WECO will document in writing the items discussed in the meeting.

Task 3 – Preparation of Final Construction Documents

Task 3-1 Based on the review comments received from the City and U of M from their review of the preliminary drawings and specifications, WECO will prepare final drawings and specifications and permit applications. The final drawings and specifications will be prepared in accordance with the requirements of the City and will include all necessary information for the construction of the project.

The final drawings and specifications will be submitted to the City and U of M for review and comment.

- Task 3-2 Based on any final review comments received from the City, U of M and MDEQ, WECO will revise the final drawings and specifications as required and submit them to the City. The submittal will include a complete set of reproducible Contract Documents (drawings and specifications). The text information will be provided in Microsoft Word, and the drawing information will be provided in AutoCAD Version 2006, with both electronic files to be provided on a CD-Rom.
- Task 3-3 WECO shall prepare and submit to the City, a construction cost estimate for the work of this project. The information will be provided in a Microsoft Excel spreadsheet on a CD-Rom.
- Task 3-4 WECO will assist the City in the answering of bidder's questions and the preparation of any addenda if required during the advertisement and bidding process.
- Task 3-5 WECO will review the bid tabulations and assist the City with the recommendations of the contractor.

LABOR BREAKDOWN **CATHERINE STREET 16" WATER MAIN**

A - PLANNING PHASE (ALTERNATIVE ROUTES) TASK 1 - PRELIMINARY MEETING AND INVESTIGATIVE WORK

Task 1-1	Project kick-off meeting.
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1 ask 1-1	Project kick-off meeting.		
	Emplo	yee Classification	Hours
	Principal		2
	Project Manager		2
	Project Engineer		2
Task 1-2	Review as-built records, collect	t necessary information, provide utili	ty status to City.
	Emplo	yee Classification	Hours
	Project Manager		1
	Project Engineer		1
	Engineer Technician		6
Task 1-3	Preliminary schematic layout d	rawing for two alternative water mai	n routes.
	Emplo	yee Classification	Hours
	Principal		2
	Project Manager		2
	Project Engineer		6
	Engineer Technician		4
	Cad Supervisor		1
	Cad/Design Draftsperson		4
	Clerical		1
Task 1-4	Project planning meeting for all costs.	ternative water main routes and esti	mate of probable
	Emplo	yee Classification	Hours
	Principal		2
	Project Manager		2
	Clerical		1
Task 1-5	Develop final estimate of proba	able construction cost for each route	4
	Emplo	yee Classification	Hours
	Principal		1
			_

2

4 1

Project Manager Engineer Technician

Clerical Technician

Task 1-6 Project meeting to determine final route for the design of the p	project.
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Employee Classification	Hours
Principal	2
Project Manager	2
Clerical	1

B-PROJECT DESIGN AND BID DOCUMENTS PREPARATION

TASK 2 - SURVEYING AND PREPARATION OF PRELIMINARY DRAWINGS AND SPECIFICATIONS

Task 2-1 Perform all field surveying.

Employee Classification	Hours
Project Manager	2
Cad Supervisor	1
Cad/Design Draftsperson	24
Survey Supervisor	2
2-Man Survey Crew	40

Task 2-2 Geotechnical work.

Employee Classification	Hours
Project Engineer	2
Soils Consultant	

Task 2-3 Preliminary drawings that include plan and profile of proposed watermain.

Employee Classification	Hours
Project Manager	2
Project Engineer	24
Engineer Technician	10
Cad/Design Draftsperson	24
Technician	2

Task 2-4 Prepare complete set of draft specifications.

Employee Classification	Hours
Project Manager	2
Project Engineer	4
Engineer Technician	4
Clerical	2
Technician	1

Task 2-5 Meeting to answer questions and provide clarification for drawings and specifications.

	Employee Classification	Hours
Project Manager		2

TASK 3 - PREPARATION OF FINAL CONSTRUCTION DOCUMENTS

Task 3-1 Prepare final drawings and specifications.

	Employee Classification	Hours
Project Manager		10

	Project Engineer Traffic Engineer Engineer Technician Cad/Design Draftsperson Clerical	12 2 60 60 2
	Technician	10
Task 3-2	Revise final drawings and specifications and submit to the City.	
	Employee Classification	Hours
	Principal	1
	Project Manager	2
	Project Engineer	8
	Engineer Technician	12
	Cad/Design Draftsperson	16
	Clerical	1
	Technician	2
Task 3-3	Prepare and submit a construction cost estimate for the project.	
	Employee Classification	Hours
	Project Manager	2
	Engineer Technician	3
	Clerical	1
Task 3-4	Assist the City with any addenda if required during the advertisement and process.	bidding
	Employee Classification	Hours
	Project Engineer	4
	Cad/Design Draftsperson	4
	Clerical	1
Task 3-5	Attend final close-out meeting.	
	Employee Classification	Hours
	Principal	1
	Project Manager	3

PROJECT SCHEDULE - CATHERINE STREET 16" WATER MAIN

PROJECT T	'ASKS I	ME SUBMITTAL/ COMPLETION WEEL	<u> </u>		
Contract Aw	ard	1 Day 1			
A – PLANNI	NG PHASE (ALTERNATIVE ROUTES)				
TASK 1 – PI	RELIMINARY MEETING AND INVESTIG	TIVE WORK			
Task 1-1 Task 1-2	Kick-off meeting Utility Information, Contact	1 Day 1			
	and Collection	1 Day 1			
Task 1-3	Preliminary Schematic Layout, Alternate Routes & Cost Estimate	3 Days 2			
Task 1-4 Task 1-5	Route Planning Meeting Revise Route Selection Criteria	1 Day 2			
Task 1-6	and Cost Estimate Route Selection Meeting	2 Days 2 1 Day 3			
	CT DESIGN AND BID DOCUMENTS PR	•			
	URVEYING AND PREPARATION OF PF		IFICATIONS		
Task 2-1 Task 2-2	Survey Topographic Preparation Geotechnical (Soil Borings),	5 Days 6			
raon L	Lighting Evaluation	2 Days 6			
Task 2-3	Preliminary Drawings Preparation	2 Days* 8			
Task 2-4	Draft Specifications Preparation	1 Day 8			
Task 2-5	Preliminary Drawings and Draft				
	Specifications Review Meeting with Ci	1 Day 9			
TASK 3 – PREPARATION OF FINAL CONSTRUCTION DOCUMENTS					
Task 3-1	Prepare Final Drawings and Specifica				
Task 3-2	Revise Final Drawings	3 days 12			
Task 3-3	Submission of Final Drawings, Specifications and Cost Estimates	1 Days 14			
(END OF DESIGN SEGMENT)					
Task 3-4	Bidding Process Assistance	15 Days			
Task 3-5	Contract Award Assistance	2 Days			

^{*}Note: Includes 1 week for City Review.

SCOPE OF SERVICES

PROJECT DESCRIPTION - PLYMOUTH ROAD WATER MAIN REPLACEMENT

This project is identified in the City of Ann Arbor CIP to be constructed in July 2008. Replace approximately 1,550 lineal feet (from valve 4990 to 4463 and from valve 4046 to 2681) of 20" water main in Plymouth Road. Due to the high number of water main breaks in this area the water main needs to be replaced.

It will also include application for a construction permit from the Michigan Department of Environmental Quality.

The project will be designed in accordance with all current City of Ann Arbor, American Water Works Association (AWWA), and Michigan Department of Environmental Quality requirements.

The utility evaluation is described as follows:

Existing water main – Evaluate fire hydrant coverage and main break information; Existing sanitary and storm sewers – Review of City provided video tape;

PROPOSED WORK PLAN

It appears that this project could be a candidate for pipe bursting. We would investigate that options feasibility.

The following items will need to be considered during the completion of the design and preparation of bid documents for the project:

- 1) The pipe restraint will need to handle the requirements for the offline, dead-end hydrostatic testing of the main.
- 2) The required flushing of the main during the testing phase, will necessitate the construction of larger-than-normal interconnects, launching tees and backflow protection, which will need to be accommodated when connecting to the City's water distribution system for a potable water source.
- 3) During the construction the testing of the main will require the flushing of large quantities of chlorinated water that will need to be properly collected and disposed of in the City's sanitary sewer system. The discharge of chlorinated water may need to be monitored to assure that it will not overwhelm the existing sanitary sewer system.
- Changes to the horizontal and vertical alignment of the proposed water main that may be required during the construction that are a result of utility conflicts, can be very expensive. Therefore, our team has developed a design approach from past experience that it may be more practical and cost effective in some cases to relocate the existing small-diameter existing water mains vertically away from the proposed pipe route. This approach provides provisions, in the bid documents, for the reinforced concrete encasement of the vertical relocation of the smaller diameter water main and utilities. In addition, we will identify critical locations we would recommend having the contractor perform exploratory excavation of these existing mains and other utilities prior to the start of the pipe laying process. This would provide us the opportunity to adjust the geometric alignment of the proposed water main to provide the best design possible. In the past we have determined that these exploratory excavations have allowed us to eliminate the need for some lowering of the mains and, therefore, the elimination of some concrete encasements. This has proven to provide a considerable cost and time savings on past projects.
- The vertical alignment of proposed water main can, if not designed properly, dramatically impact the existing sanitary sewer leads that service adjacent properties. Due to this problem we would plot the location of the existing sanitary sewer leads in the plan profiles to evaluate alignment strategies to eliminate as much as possible the need to relocate sanitary sewer leads. However, we would also

- include provisions in the bid documents for relocating and reconstructing existing sanitary sewer leads if they are found to be in conflict with the new main.
- The design drawings will be developed by placing the proposed water main information on layers consistent with the City of Ann Arbor's Geographical Information System (GIS) requirements.
- 7) Placement of line valves will be provided to meet the requirements of the City's standards. The valve type and the requirement for pigging the pipe will be discussed with City personnel, and the decision will be incorporated into the bid documents.

Elements of the work plan will be separated into two phases:

The first phase will include the evaluation of potential routes for the proposed water main (two alternate routes will be evaluated). This work will include the development of aerial photometric drawings that include a "Miss Dig quality" evaluation of the existing utilities and features that would be impacted. The anticipated placement of the proposed water main will be completed for each alternative route, and corresponding estimates of probable construction costs will be developed.

The second phase will include a detailed final design and the preparation of contract documents. All required material testing and analysis (soil and pavement) will be performed. The PA-399 (DEQ) construction permit will be prepared. The plans will include, but not be limited to, to detailed plan and profile sheets, traffic control plans, and soil erosion control plans based on Chapter 63 of the City Code. We will also prepare a final estimate of probable construction costs, and any other work items necessary prior to award of a construction contract to a qualified construction contractor.

TASK BREAKDOWN - PLYMOUTH ROAD WATER MAIN REPLACEMENT

A - PLANNING PHASE (ALTERNATIVE ROUTES)

Task 1 - Preliminary Meeting and Investigative Work

- Task 1-1 WECO will attend a project "kick-off" meeting with representatives of the City to discuss the project in detail.
- Task 1-2 WECO will review the City's as-built records and perform the necessary investigative effort to determine the location of the existing utilities along the project route and review the Public Services Department Standard Specifications.

WECO will contact all local utility agencies and request plans of their existing and/or proposed facilities located within the project limits. Written documentation of the utility status for the project will be provided to the City.

- Task 1-3 WECO will prepare a preliminary schematic layout drawing on a City-provided GIS map, for two alternative water main routes. A detailed narrative will be developed that outlines the benefits and disadvantages for each route, including estimated costs for their construction. We will also provide a recommendation of the route that we feel should be selected, and why.
- Task 1-4 WECO will attend a project planning meeting with representatives of the City to discuss the alternative water main routes, their benefits and disadvantages, and their estimate of probable construction costs. WECO will document in writing the items discussed at the meeting.
- Task 1-5 Using the information and possible additions and deletions discussed during the project meeting with the City personnel, WECO will develop final estimate of probable construction cost for each route. The final estimate and alternative route map will be provided to the City for evaluation.
- Task 1-6 WECO will attend a project meeting with representatives of the City to determine which final route will be used for the design of the project. WECO will document in writing the items discussed at the meeting.

B - PROJECT DESIGN AND BID DOCUMENTS PREPARATION

Task 2 - Surveying and Preparation of Preliminary Drawings and Specifications

Task 2-1 WECO shall perform all field surveying within the Plymouth Road right-of-way and 10' outside the right-of-way.

A Survey Total Station will be used to develop complete topographic drawing(s) along the project route. It will identify enough spot elevations to document the existing surface elevations, existing underground utilities including depths, sizes and casting elevations. It will also include significant trees, curbs and sidewalks, and any other significant features between right-of-way to right-of-way that might impact the design and construction of the project. This information will be the basis of the development of the design drawings and will have a horizontal scale of 1 inch = 40 feet.

During the gathering of all field work, WECO or its designee shall provide traffic control in accordance with the Michigan Manual of Uniform Traffic Control Devices (MMUTCD).

Task 2-2 Geotechnical work will be performed by a consultant, who is an expert in this field, working

as a subcontractor to WECO.

Geotechnical work will consist of soil borings at 500 foot intervals staggered about the centerline of the route. The borings will be drilled to a depth of 10 feet or as required to determine the limits of unsuitable or contaminated soils, if found during the boring operation. In addition, the thickness and condition of the existing pavement sections will be recorded.

During the gathering of all field work, WECO or its designee shall provide traffic control in accordance with the Michigan Manual of Uniform Traffic Control Devices (MMUTCD).

- Task 2-3

 Based on the information determined from the field work and soils investigation, WECO will prepare preliminary drawings that include the plan and profile of the proposed water main. These drawings will be prepared with a horizontal scale of 1 inch = 40 feet and a vertical scale of 1 inch = 4 feet. The preliminary drawings will be submitted to the City for review and comment. The drawing set will include a cover sheet, plan and profile sheets, detail sheet(s), soil erosion control sheets and project construction sequencing and traffic control sheets.
- Task 2-4 Based on the City's standards, WECO will prepare a complete set of draft specifications for the construction and bidding of the project. The draft specifications will be submitted to the City for review and comment.
- Task 2-5 Upon the completion of the City's review of the preliminary drawings and specifications, WECO will attend a meeting with the City representatives to answer questions and provide clarifications of the preliminary drawings and specifications. WECO will document in writing the items discussed in the meeting.

Task 3 – Preparation of Final Construction Documents

Task 3-1 Based on the review comments received from the City from their review of the preliminary drawings and specifications, WECO will prepare final drawings and specifications and permit applications. The final drawings and specifications will be prepared in accordance with the requirements of the City and will include all necessary information for the construction of the project.

The final drawings and specifications will be submitted to the City for review and comment.

- Task 3-2 Based on any final review comments received from the City and MDEQ, WECO will revise the final drawings and specifications as required and submit them to the City. The submittal will include a complete set of reproducible Contract Documents (drawings and specifications). The text information will be provided in Microsoft Word, and the drawing information will be provided in AutoCAD Version 2006, with both electronic files to be provided on a CD-Rom.
- Task 3-3 WECO shall prepare and submit to the City, a construction cost estimate for the work of this project. The information will be provided in a Microsoft Excel spreadsheet on a CD-Rom.
- Task 3-4 WECO will assist the City in the answering of bidder's questions and the preparation of any addenda if required during the advertisement and bidding process.
- Task 3-5 WECO will review the bid tabulations and assist the City with the recommendations of the contractor.

LABOR BREAKDOWN PLYMOUTH ROAD WATER MAIN REPLACEMENT

A - PLANNING PHASE (ALTERNATIVE ROUTES) TASK 1 - PRELIMINARY MEETING AND INVESTIGATIVE WORK

Project kick-off meeting. Task 1-1

	Employee Classification	Hours
	Principal	2
	Project Manager	2
	Project Engineer	2
Task 1-2	Review as-built records, collect necessary information, provide utility statu	us to City.
	Employee Classification	Hours
	Project Engineer	1
	Engineer Technician	2
Task 1-3	Preliminary schematic layout drawing for two alternative water main route	S.
	Employee Classification	Hours
	Principal	1
	Project Manager	20
	Project Engineer	20
	Engineer Technician	24
	Cad Supervisor	1
	Cad/Design Draftsperson	4
		4 1
Task 1-4	Cad/Design Draftsperson	1
Гask 1-4	Cad/Design Draftsperson Clerical Project planning meeting for alternative water main routes and estimate of	1
Task 1-4	Cad/Design Draftsperson Clerical Project planning meeting for alternative water main routes and estimate costs.	1 f probable Hours 2
Task 1-4	Cad/Design Draftsperson Clerical Project planning meeting for alternative water main routes and estimate costs. Employee Classification Principal Project Manager	1 of probable Hours 2 2
Task 1-4	Cad/Design Draftsperson Clerical Project planning meeting for alternative water main routes and estimate costs. Employee Classification Principal	1 f probable Hours 2
	Cad/Design Draftsperson Clerical Project planning meeting for alternative water main routes and estimate costs. Employee Classification Principal Project Manager	1 of probable Hours 2 2
	Cad/Design Draftsperson Clerical Project planning meeting for alternative water main routes and estimate of costs. Employee Classification Principal Project Manager Clerical	1 of probable Hours 2 2
	Cad/Design Draftsperson Clerical Project planning meeting for alternative water main routes and estimate of costs. Employee Classification Principal Project Manager Clerical Develop final estimate of probable construction cost for each route.	f probable Hours 2 2 1
	Cad/Design Draftsperson Clerical Project planning meeting for alternative water main routes and estimate of costs. Employee Classification Principal Project Manager Clerical Develop final estimate of probable construction cost for each route. Employee Classification	f probable Hours 2 2 1 Hours
	Cad/Design Draftsperson Clerical Project planning meeting for alternative water main routes and estimate of costs. Employee Classification Principal Project Manager Clerical Develop final estimate of probable construction cost for each route. Employee Classification Principal	f probable Hours 2 2 1 Hours
Task 1-4 Task 1-5	Cad/Design Draftsperson Clerical Project planning meeting for alternative water main routes and estimate of costs. Employee Classification Principal Project Manager Clerical Develop final estimate of probable construction cost for each route. Employee Classification Principal Project Manager	1 f probable Hours 2 2 1 Hours 1 4
Task 1-5	Cad/Design Draftsperson Clerical Project planning meeting for alternative water main routes and estimate of costs. Employee Classification Principal Project Manager Clerical Develop final estimate of probable construction cost for each route. Employee Classification Principal Project Manager Engineer Technician	f probable Hours 2 2 1 Hours 1 4 4
Гask 1-5	Cad/Design Draftsperson Clerical Project planning meeting for alternative water main routes and estimate of costs. Employee Classification Principal Project Manager Clerical Develop final estimate of probable construction cost for each route. Employee Classification Principal Project Manager Engineer Technician Clerical	f probable Hours 2 2 1 Hours 1 4 4
Гask 1-5	Cad/Design Draftsperson Clerical Project planning meeting for alternative water main routes and estimate of costs. Employee Classification Principal Project Manager Clerical Develop final estimate of probable construction cost for each route. Employee Classification Principal Project Manager Engineer Technician Clerical Project meeting to determine final route for the design of the project.	f probable Hours 2 2 1 Hours 1 4 4 1 Hours
	Cad/Design Draftsperson Clerical Project planning meeting for alternative water main routes and estimate of costs. Employee Classification Principal Project Manager Clerical Develop final estimate of probable construction cost for each route. Employee Classification Principal Project Manager Engineer Technician Clerical Project meeting to determine final route for the design of the project. Employee Classification	f probable Hours 2 2 1 Hours 1 4 4 1 Hours

B-PROJECT DESIGN AND BID DOCUMENTS PREPARATION

TASK 2 - SURVEYING AND PREPARATION OF PRELIMINARY DRAWINGS AND SPECIFICATIONS

Task 2-1 Perform all field surveying.

	Employee Classification	Hours
	Project Manager	1
	Cad/Design Draftsperson	4
	Survey Supervisor	1
	2-Man Survey Crew	8
Task 2-2	Geotechnical work.	
	Employee Classification	Hours
	Project Engineer	1
	Soils Consultant	
Task 2-3	Preliminary drawings that include plan and profile of proposed watermain.	
	Employee Classification	Hours
	Project Manager	15
	Project Engineer	20
	Cad/Design Draftsperson	35
	Technician	1
Task 2-4	Prepare complete set of draft specifications.	
	Employee Classification	Hours
	Project Manager	15
	Project Engineer	2
	Engineer Technician	4
	Clerical	2
	Technician	1
Task 2-5	Meeting to answer questions and provide clarification for drawings and spe	cifications.
	Employee Classification	Hours
	Project Manager	2

TASK 3 - PREPARATION OF FINAL CONSTRUCTION DOCUMENTS

Task 3-1 Prepare final drawings and specifications.

Employee Classification	Hours
Project Manager	35
Project Engineer	28
Engineer Technician	8
Cad/Design Draftsperson	12
Clerical	1
Technician	2

Task 3-2 Revise final drawings and specifications and submit to the City.

Employee Classification	Hours
Principal	1
Project Manager	5
Project Engineer	4
Engineer Technician	8
Cad/Design Draftsperson	8
Clerical	1
Technician	2

Task 3-3 Prepare and submit a construction cost estimate for the project.

Employee Classification	Hours
Project Manager	2
Engineer Technician	3
Clerical	1

Assist the City with any addenda if required during the advertisement and bidding Task 3-4 process.

Employee Classification	Hours
Project Engineer	4
Cad/Design Draftsperson	4
Clerical	1

Task 3-5 Attend final close-out meeting.

Employee Classification	Hours
Principal	1
Project Manager	2

PROJECT SCHEDULEPLYMOUTH ROAD WATER MAIN REPLACEMENT

PROJECT T	'ASKS	<u> TIME</u>	SUBMIT COL	TAL/ MPLETION WEEK	
Contract Aw	ard	1	Day	1	
A – PLANNI	NG PHASE (ALTERNATIVE ROUTES)				
	RELIMINARY MEETING AND INVESTIG				
Task 1-1 Task 1-2	Kick-off meeting Utility Information, Contact	1	Day	1	
	and Collection	1	Day	1	
Task 1-3	Preliminary Schematic Layout, Alternate Routes & Cost Estimate	3	Days	2	
Task 1-4	Route Planning Meeting		Day	2	
Task 1-5	Revise Route Selection Criteria		5		
Task 1-6	and Cost Estimate Route Selection Meeting		Days Day	2 3	
rask 1-0	House delection Meeting	•	Day	Ü	
B – PROJE	CT DESIGN AND BID DOCUMENTS PF	REPARA	TION		
TASK 2 - SI	URVEYING AND PREPARATION OF PR	RELIMIN	ARY DRAW	INGS AND SPECIFICATION	<u>1S</u>
Task 2-1 Task 2-2	Survey Topographic Preparation Geotechnical (Soil Borings),	5	Days	6	
1 a5k 2-2	Lighting Evaluation	2	Days	6	
Task 2-3	Preliminary Drawings Preparation		Days*	8	
Task 2-4	Draft Specifications Preparation	1	Day	8	
Task 2-5	Preliminary Drawings and Draft Specifications Review Meeting with C	itv 1	Day	9	
	,		Duj	v	
*Note: Inclu	des 1 week for City Review.				
PROJECT 1	<u>'ASKS</u>	TIME	SUBMIT	TAL/ MPLETION WEEK	
			<u>50.</u>		
TASK 3 – PI	REPARATION OF FINAL CONSTRUCT	ION DOC	CUMENTS		
Task 3-1	Prepare Final Drawings and Specifica		Days*	12	
Task 3-2	Revise Final Drawings	3	days	12	
Task 3-3	Submission of Final Drawings, Specifications and Cost Estimates	1	Days	14	
(END OF DESIGN SEGMENT)					
Task 3-4	Bidding Process Assistance	15	5 Days		
Task 3-5	Contract Award Assistance		Days		
*Note: Inclu	des 1 week for City Review.				

SCOPE OF SERVICES

PROJECT DESCRIPTION - WAGNER ROAD SANITARY SEWER SOUTH

This project is identified as a sanitary sewer main extension from Jackson Plaza south to service the properties on the east side of Wagner Road which are currently on a septic tank drainfield sewage disposal system. The project will be designed in accordance with all current City of Ann Arbor and Michigan Department of Environmental Quality requirements.

PROPOSED WORK PLAN

Wagner Road was recently reconstructed causing major disruptions to vehicular traffic, businesses and residences. The design of this sewer extension will require minimal impact on the new road and the area stakeholders. It appears that due to limited space on the east side of Wagner Road that the sewer may be located on the west side with possible directional drilling for the building leads. Our Scope of Services will include evaluation of 2 alternatives with estimates for the City to review.

The second phase will include a detailed final design and the preparation of contract documents. All required material testing and analysis (soil and pavement) will be performed. The MDEQ construction permit will be prepared. The plans will include, but not be limited to, to detailed plan and profile sheets, traffic control plans, and soil erosion control plans based on Chapter 63 of the City Code. We will also prepare a final estimate of probable construction costs, and any other work items necessary prior to award of a construction contract to a qualified construction contractor.

TASK BREAKDOWN

A – PLANNING PHASE (ALTERNATIVE ROUTES)

Task 1 - Preliminary Meeting and Investigative Work

- Task 1-1 WECO will attend a project "kick-off" meeting with representatives of the City to discuss the project in detail.
- Task 1-2 WECO will review the City and WCRC as-built records and perform the necessary investigative effort to determine the location of the existing utilities along the project route.
 - WECO will meet with property owners to determine the location of the sanitary leads.

WECO will contact all local utility agencies and request plans of their existing and/or proposed facilities located within the project limits. Written documentation of the utility status for the project will be provided to the City.

- Task 1-3 WECO will prepare a preliminary schematic layout drawing for two alternative routes. A detailed narrative will be developed that outlines the benefits and disadvantages for each route, including estimated costs for their construction. We will also provide a recommendation of the route that we feel should be selected, and why.
- Task 1-4 WECO will attend a project planning meeting with representatives of the City to discuss the alternative routes, their benefits and disadvantages, and their estimate of probable construction costs. WECO will document in writing the items discussed at the meeting.
- Task 1-5
 Using the information and possible additions and deletions discussed during the project meeting with the City and WCRC personnel, WECO will develop final estimate of probable construction cost for each route. The final estimate and alternative route map will be

B – PROJECT DESIGN AND BID DOCUMENTS PREPARATION

Task 2 - Surveying and Preparation of Preliminary Drawings and Specifications

Task 2-1 WECO shall perform all field surveying within the Wagner Road right-of-way and 10' outside the right-of-way.

A Survey Total Station will be used to develop complete topographic drawing(s) along the project route. It will identify enough spot elevations to document the existing surface elevations, existing underground utilities including depths, sizes and casting elevations. It will also include significant trees, curbs and sidewalks, and any other significant features between right-of-way to right-of-way that might impact the design and construction of the project. This information will be the basis of the development of the design drawings and will have a horizontal scale of 1 inch = 40 feet.

During the gathering of all field work, WECO or its designee shall provide traffic control in accordance with the Michigan Manual of Uniform Traffic Control Devices (MMUTCD).

Task 2-2 Geotechnical work will be performed by a consultant, who is an expert in this field, working as a subcontractor to WECO.

Geotechnical work will consist of soil borings at 500 foot intervals staggered about the centerline of the route. The borings will be drilled to a depth of 10 feet or as required to determine the limits of unsuitable or contaminated soils and ground water, if found during the boring operation.

During the gathering of all field work, WECO or its designee shall provide traffic control in accordance with the Michigan Manual of Uniform Traffic Control Devices (MMUTCD).

- Task 2-3

 Based on the information determined from the field work and soils investigation, WECO will prepare preliminary drawings that include the plan and profile of the proposed sewer. These drawings will be prepared with a horizontal scale of 1 inch = 40 feet and a vertical scale of 1 inch = 4 feet. The preliminary drawings will be submitted to the City for review and comment. The drawing set will include a cover sheet, plan and profile sheets, detail sheet(s), soil erosion control sheets and project construction sequencing and traffic control sheets.
- Task 2-4 Based on the City's standards, WECO will prepare a complete set of draft specifications for the construction and bidding of the project. The draft specifications will be submitted to the City and WCRC for review and comment.
- Task 2-5 Upon the completion of the City and WCRC review of the preliminary drawings and specifications, WECO will attend a meeting with the City representatives to answer questions and provide clarifications of the preliminary drawings and specifications. WECO will document in writing the items discussed in the meeting.
- Task 2-6 WECO will contact property owners impacted by the project to present the project and identify concerns.

Task 3 – Preparation of Final Construction Documents

Task 3-1 Based on the review comments received from the City and WCRC from their review of the preliminary drawings and specifications, WECO will prepare final drawings and specifications and permit applications. The final drawings and specifications will be

prepared in accordance with the requirements of the City and will include all necessary information for the construction of the project.

The final drawings, specifications, and WCRC permit application will be submitted to the City and WCRC for review and comment.

- Task 3-2 Based on any final review comments received from the City, WCRC and MDEQ, WECO will revise the final drawings and specifications as required and submit them to the City. The submittal will include a complete set of reproducible Contract Documents (drawings and specifications). The text information will be provided in Microsoft Word, and the drawing information will be provided in AutoCAD Version 2004, with both electronic files to be provided on a CD-Rom.
- Task 3-3 WECO shall prepare and submit to the City, a construction cost estimate for the work of this project. The information will be provided in a Microsoft Excel spreadsheet on a CD-Rom.
- Task 3-4 WECO will assist the City in the answering of bidder's questions and the preparation of any addenda if required during the advertisement and bidding process.
- Task 3-5 WECO will review the bid tabulations and assist the City with the recommendations of the contractor.

SCOPE OF SERVICES

PROJECT DESCRIPTION - GLENDALOCH CIRCLE WATER MAIN REPLACEMENT

This project is identified in the City of Ann Arbor CIP to be under construction in July 2009. Glendaloch has a 4" and 6" water main both are undersized and are in need of replacement. There is also a 6" main that runs from the end of Glendaloch northerly to Heatherway Street. It appears that this main is under or very close to existing buildings. We suggest that this main be relocated between Lots 11 and 12 or be placed in a casing pipe at its current location. This portion of the main will need to be bored. It is also possible that the cross lot main could be abandoned and the area be serviced by a 6" dead end main. With this proposal the hydrant would not meet city standards. Depending on the available pressure fire flow may still be acceptable.

The project will need to be designed such that access to the property is maintained at all times and that there be minimal disruptions to the water supply.

It will also include application for a construction permit from the Michigan Department of Environmental Quality.

The project will be designed in accordance with all current City of Ann Arbor, American Water Works Association (AWWA), and Michigan Department of Environmental Quality requirements.

The utility evaluation is described as follows:

Existing water main – Evaluate fire hydrant coverage and main break information

PROPOSED WORK PLAN

The following item will need to be considered during the completion of the design and preparation of bid documents for the project:

1) The design drawings will be developed by placing the proposed water main information on layers consistent with the City of Ann Arbor's Geographical Information System (GIS) requirements.

TASK BREAKDOWN

A – PLANNING PHASE (ALTERNATIVE ROUTES)

Task 1 - Preliminary Meeting and Investigative Work

- Task 1-1 WECO will attend a project "kick-off" meeting with representatives of the City to discuss the project in detail.
- Task 1-2 WECO will review the City's as-built records and perform the necessary investigative effort to determine the location of the existing utilities along the project route and review the Public Services Department Standard Specifications.

WECO will contact all local utility agencies and request plans of their existing and/or proposed facilities located within the project limits. Written documentation of the utility status for the project will be provided to the City.

Task 1-3 WECO will prepare a preliminary schematic layout drawing on a City-provided GIS map, for two alternative water main routes. A detailed narrative will be developed that outlines the benefits and disadvantages for each route, including estimated costs for their construction.

We will also provide a recommendation of the route that we feel should be selected, and why.

- Task 1-4 WECO will attend a project planning meeting with representatives of the City to discuss the alternative water main routes, their benefits and disadvantages, and their estimate of probable construction costs. WECO will document in writing the items discussed at the meeting.
- Task 1-5 Using the information and possible additions and deletions discussed during the project meeting with the City personnel, WECO will develop final estimate of probable construction cost for each route. The final estimate and alternative route map will be provided to the City for evaluation.
- Task 1-6 WECO will attend a project meeting with representatives of the City to determine which final route will be used for the design of the project. WECO will document in writing the items discussed at the meeting.

B – PROJECT DESIGN AND BID DOCUMENTS PREPARATION

Task 2 - Surveying and Preparation of Preliminary Drawings and Specifications

Task 2-1 WECO shall perform all field surveying within the Glendaloch right-of-way and 10' outside the right-of-way.

A Survey Total Station will be used to develop complete topographic drawing(s) along the project route. It will identify enough spot elevations to document the existing surface elevations, existing underground utilities including depths, sizes and casting elevations. It will also include significant trees, curbs and sidewalks, and any other significant features between right-of-way to right-of-way that might impact the design and construction of the project. This information will be the basis of the development of the design drawings and will have a horizontal scale of 1 inch = 40 feet.

During the gathering of all field work, WECO or its designee shall provide traffic control in accordance with the Michigan Manual of Uniform Traffic Control Devices (MMUTCD).

Task 2-2 Geotechnical work will be performed by a consultant, who is an expert in this field, working as a subcontractor to WECO.

Geotechnical work will consist of soil borings at 500 foot intervals staggered about the centerline of the route. The borings will be drilled to a depth of 15 feet or as required to determine the limits of unsuitable or contaminated soils, if found during the boring operation. In addition, the thickness and condition of the existing pavement sections will be recorded.

During the gathering of all field work, WECO or its designee shall provide traffic control in accordance with the Michigan Manual of Uniform Traffic Control Devices (MMUTCD).

- Task 2-3

 Based on the information determined from the field work and soils investigation, WECO will prepare preliminary drawings that include the plan and profile of the proposed water main. These drawings will be prepared with a horizontal scale of 1 inch = 40 feet and a vertical scale of 1 inch = 4 feet. The preliminary drawings will be submitted to the City for review and comment. The drawing set will include a cover sheet, plan and profile sheets, detail sheet(s), soil erosion control sheets and project construction sequencing and traffic control sheets.
- Task 2-4 Based on the City's standards, WECO will prepare a complete set of draft specifications for the construction and bidding of the project. The draft specifications will be submitted to the City for review and comment.

Task 2-5 Upon the completion of the City's review of the preliminary drawings and specifications, WECO will attend a meeting with the City representatives to answer questions and provide clarifications of the preliminary drawings and specifications. WECO will document in writing the items discussed in the meeting.

Task 3 – Preparation of Final Construction Documents

Task 3-1 Based on the review comments received from the City from their review of the preliminary drawings and specifications, WECO will prepare final drawings and specifications and permit applications. The final drawings and specifications will be prepared in accordance with the requirements of the City and will include all necessary information for the construction of the project.

The final drawings and specifications will be submitted to the City for review and comment.

- Task 3-2 WECO will assist the City in the answering of bidder's questions and the preparation of any addenda if required during the advertisement and bidding process.
- Task 3-3 WECO will review the bid tabulations and assist the City with the recommendations of the contractor.

PROJECT SCHEDULE

PROJECT TA	<u>ASKS</u>	TIME	SUB	MITTAL/ COMPLETION WEEK	
Contract Awa	rd		1 Day	1	
A – PLANNIN TASK 1 – PR	A – PLANNING PHASE (ALTERNATIVE ROUTES) TASK 1 – PRELIMINARY MEETING AND INVESTIGATIVE WORK				
Task 1-1 Task 1-2	Kick-off meeting Utility Information, Contact		1 Day	1	
	and Collection		1 Day	1	
Task 1-3	Preliminary Schematic Layout, Alternate Routes & Cost Estimate		3 Days	2	
Task 1-4 Task 1-5	Route Planning Meeting Revise Route Selection Criteria		1 Day	2	
Task 1-6	and Cost Estimate Route Selection Meeting		2 Days 1 Day	2 3	
B – PROJEC	T DESIGN AND BID DOCUMENTS F	PREPAR	ATION		
TASK 2 – SU	RVEYING AND PREPARATION OF I	PRELIMI	INARY DR	AWINGS AND SPECIFICATIONS	
Task 2-1 Task 2-2	Survey Topographic Preparation Geotechnical (Soil Borings),		5 Days	4	
	Lighting Evaluation		2 Days 2 Days*	4 5	
Task 2-3 Task 2-4	Preliminary Drawings Preparation Draft Specifications Preparation		1 Days	5	
Task 2-5	Preliminary Drawings and Draft Specifications Review Meeting with	City	1 Day	5	
	,		-		
TASK 3 - PREPARATION OF FINAL CONSTRUCTION DOCUMENTS					
Task 3-1	Prepare Final Drawings and Specific	cations	10 Days*	6	
(END OF DE	(END OF DESIGN SEGMENT)				
Task 3-2 Task 3-3	Bidding Process Assistance Contract Award Assistance		15 Days 2 Days		

^{*}Note: Includes 1 week for City Review.

SCOPE OF SERVICES

PROJECT DESCRIPTION - CLAIR CIRCLE WATER MAIN REPLACEMENT

This project is identified in the City of Ann Arbor CIP to be under construction in July 2009. Clair Circle has a 4" water main and it undersized and in need of replacement. Hydrant coverage is inadequate.

The project will need to be designed such that access to the property is maintained at all times and that there be minimal disruptions to the water supply.

It will also include application for a construction permit from the Michigan Department of Environmental Quality.

The project will be designed in accordance with all current City of Ann Arbor, American Water Works Association (AWWA), and Michigan Department of Environmental Quality requirements.

The utility evaluation is described as follows:

Existing water main – Evaluate fire hydrant coverage and main break information

PROPOSED WORK PLAN

The following item will need to be considered during the completion of the design and preparation of bid documents for the project:

1) The design drawings will be developed by placing the proposed water main information on layers consistent with the City of Ann Arbor's Geographical Information System (GIS) requirements.

TASK BREAKDOWN

A – PLANNING PHASE (ALTERNATIVE ROUTES)

Task 1 - Preliminary Meeting and Investigative Work

- Task 1-1 WECO will attend a project "kick-off" meeting with representatives of the City to discuss the project in detail.
- Task 1-2 WECO will review the City's as-built records and perform the necessary investigative effort to determine the location of the existing utilities along the project route and review the Public Services Department Standard Specifications.
 - WECO will contact all local utility agencies and request plans of their existing and/or proposed facilities located within the project limits. Written documentation of the utility status for the project will be provided to the City.
- Task 1-3 WECO will prepare a preliminary schematic layout drawing on a City-provided GIS map, for two alternative water main routes. A detailed narrative will be developed that outlines the benefits and disadvantages for each route, including estimated costs for their construction. We will also provide a recommendation of the route that we feel should be selected, and why.
- Task 1-4 WECO will attend a project planning meeting with representatives of the City to discuss the alternative water main routes, their benefits and disadvantages, and their estimate of probable construction costs. WECO will document in writing the items discussed at the meeting.

- Task 1-5 Using the information and possible additions and deletions discussed during the project meeting with the City personnel, WECO will develop final estimate of probable construction cost for each route. The final estimate and alternative route map will be provided to the City for evaluation.
- Task 1-6 WECO will attend a project meeting with representatives of the City to determine which final route will be used for the design of the project. WECO will document in writing the items discussed at the meeting.

B - PROJECT DESIGN AND BID DOCUMENTS PREPARATION

Task 2 - Surveying and Preparation of Preliminary Drawings and Specifications

Task 2-1 WECO shall perform all field surveying within the Glendaloch right-of-way and 10' outside the right-of-way.

A Survey Total Station will be used to develop complete topographic drawing(s) along the project route. It will identify enough spot elevations to document the existing surface elevations, existing underground utilities including depths, sizes and casting elevations. It will also include significant trees, curbs and sidewalks, and any other significant features between right-of-way to right-of-way that might impact the design and construction of the project. This information will be the basis of the development of the design drawings and will have a horizontal scale of 1 inch = 40 feet.

During the gathering of all field work, WECO or its designee shall provide traffic control in accordance with the Michigan Manual of Uniform Traffic Control Devices (MMUTCD).

Task 2-2 Geotechnical work will be performed by a consultant, who is an expert in this field, working as a subcontractor to WECO.

Geotechnical work will consist of soil borings at 500 foot intervals staggered about the centerline of the route. The borings will be drilled to a depth of 15 feet or as required to determine the limits of unsuitable or contaminated soils, if found during the boring operation. In addition, the thickness and condition of the existing pavement sections will be recorded.

During the gathering of all field work, WECO or its designee shall provide traffic control in accordance with the Michigan Manual of Uniform Traffic Control Devices (MMUTCD).

- Task 2-3

 Based on the information determined from the field work and soils investigation, WECO will prepare preliminary drawings that include the plan and profile of the proposed water main. These drawings will be prepared with a horizontal scale of 1 inch = 40 feet and a vertical scale of 1 inch = 4 feet. The preliminary drawings will be submitted to the City for review and comment. The drawing set will include a cover sheet, plan and profile sheets, detail sheet(s), soil erosion control sheets and project construction sequencing and traffic control sheets.
- Task 2-4 Based on the City's standards, WECO will prepare a complete set of draft specifications for the construction and bidding of the project. The draft specifications will be submitted to the City for review and comment.
- Task 2-5 Upon the completion of the City's review of the preliminary drawings and specifications, WECO will attend a meeting with the City representatives to answer questions and provide clarifications of the preliminary drawings and specifications. WECO will document in writing the items discussed in the meeting.

Task 3 - Preparation of Final Construction Documents

Task 3-1

Based on the review comments received from the City from their review of the preliminary drawings and specifications, WECO will prepare final drawings and specifications and permit applications. The final drawings and specifications will be prepared in accordance with the requirements of the City and will include all necessary information for the construction of the project.

The final drawings and specifications will be submitted to the City for review and comment.

- Task 3-2 WECO will assist the City in the answering of bidder's questions and the preparation of any addenda if required during the advertisement and bidding process.
- Task 3-3 WECO will review the bid tabulations and assist the City with the recommendations of the contractor.

PROJECT SCHEDULE - CLAIR CIRCLE WATER MAIN REPLACEMENT

PROJECT T	<u>TASKS</u> <u>T</u>	IME SUBMIT CO	TAL/ MPLETION WEEK		
Contract Aw	ard	1 Day	1		
A – PLANNI TASK 1 – PI	A – PLANNING PHASE (ALTERNATIVE ROUTES) TASK 1 – PRELIMINARY MEETING AND INVESTIGATIVE WORK				
Task 1-1 Task 1-2	Kick-off meeting Utility Information, Contact	1 Day	1		
Task 1-3	and Collection Preliminary Schematic Layout,	1 Day	1		
	Alternate Routes & Cost Estimate	3 Days	2		
Task 1-4 Task 1-5	Route Planning Meeting Revise Route Selection Criteria	1 Day	2		
Task 1-6	and Cost Estimate Route Selection Meeting	2 Days 1 Day	2 3		
B – PROJE	CT DESIGN AND BID DOCUMENTS PRE	PARATION			
TASK 2 – S	URVEYING AND PREPARATION OF PR	ELIMINARY DRAW	INGS AND SPECIFICATIONS		
Task 2-1 Task 2-2	Survey Topographic Preparation Geotechnical (Soil Borings),	5 Days	4		
	Lighting Evaluation	2 Days	4		
Task 2-3	Preliminary Drawings Preparation	2 Days*	5		
Task 2-4 Task 2-5	Draft Specifications Preparation Preliminary Drawings and Draft	1 Day	5		
rask 2-5	Specifications Review Meeting with City	y 1 Day	5		
TASK 3 – PI	TASK 3 – PREPARATION OF FINAL CONSTRUCTION DOCUMENTS				
Task 3-1	Prepare Final Drawings and Specificati	ons 10 Days*	6		
(END OF DE	(END OF DESIGN SEGMENT)				
Task 3-2	Bidding Process Assistance	15 Days			
Task 3-3	Contract Award Assistance	2 Days			

^{*}Note: Includes 1 week for City Review.

EXHIBIT "B" FEE SCHEDULE CATHERINE STREET 16" WATER MAIN

A - PLANNING PHASE (ALTERNATIVE ROUTES)

TASK 1 - PRELIMINARY MEETING AND INVESTIGATIVE WORK

Task 1-1 Project kick-off meeting.

Employee Classification	Hours	Rate	Amount
Principal	2	\$158.00	\$316.00
Project Manager	2	\$136.00	\$272.00
Project Engineer	2	\$112.00	\$224.00
Mileage and Materials			\$10.00
Total for Task 1-1			\$822.00

Task 1-2 Review as-built records, collect necessary information, provide utility status to City.

Employee Classification	Hours	Rate	Amount
Project Manager Project Engineer	1	\$136.00 \$112.00	\$136.00 \$112.00
Engineer Technician	6	\$74.00	\$444.00
Mileage and Materials Total for Task 1-2			\$50.00 \$742.00

Task 1-3 Preliminary schematic layout drawing for two alternative water main routes.

Employee Classification	Hours	Rate	Amount
Principal	2	\$158.00	\$316.00
Project Manager	2	\$136.00	\$272.00
Project Engineer	6	\$112.00	\$672.00
Engineer Technician	4	\$74.00	\$296.00
Cad Supervisor	1	\$100.00	\$100.00
Cad/Design Draftsperson	4	\$71.00	\$284.00
Clerical	1	\$53.00	\$53.00
Mileage and Materials			\$100.00
Total for Task 1-3			\$2,093.00

Project planning meeting for alternative water main routes and estimate of probable Task 1-4 costs.

Employee Classification	Hours	Rate	Amount
Principal	2	\$158.00	\$316.00
Project Manager	2	\$136.00	\$272.00
Clerical	1	\$53.00	\$53.00

Task 1-5 Develop final estimate of probable construction cost for each route.

Employee Classification	Hours	Rate	Amount
Principal	1	\$158.00	\$158.00
Project Manager	2	\$136.00	\$272.00
Engineer Technician	4	\$74.00	\$296.00
Clerical	1	\$53.00	\$53.00
Technician	1	\$33.00	\$33.00
Mileage and Materials			\$50.00
Total for Task 1-5			\$862.00

Task 1-6 Project meeting to determine final route for the design of the project.

Employee Classification	Hours	Rate	Amount
Principal Project Manager	2 2	\$158.00 \$136.00	\$316.00 \$272.00
Clerical	1	\$53.00	\$53.00
Mileage and Materials Total for Task 1-6			\$20.00 \$661.00

B-PROJECT DESIGN AND BID DOCUMENTS PREPARATION

TASK 2 - SURVEYING AND PREPARATION OF PRELIMINARY DRAWINGS AND SPECIFICATIONS

Task 2-1 Perform all field surveying.

Employee Classification	Hours	Rate	Amount
Project Manager	2	\$136.00	\$272.00
Cad Supervisor	1	\$100.00	\$100.00
Cad/Design Draftsperson	24	\$71.00	\$1,704.00
Survey Supervisor	2	\$102.00	\$204.00
2-Man Survey Crew	40	\$142.00	\$5,680.00
Mileage and Materials			\$200.00
Total for Task 2-1			\$8,160.00

Task 2-2 Geotechnical work.

Employee Classification	Hours	Rate	Amount
Project Engineer Soils Consultant	2	\$130.00	\$260.00 \$2,800.00
Mileage and Materials Total for Task 2-2			\$30.00 \$3,090.00

Task 2-3 Preliminary drawings that include plan and profile of proposed watermain.

Employee Classification	Hours	Rate	Amount
Project Manager	2	\$136.00	\$272.00
Project Engineer	24	\$112.00	\$2,688.00
Engineer Technician	10	\$74.00	\$740.00
Cad/Design Draftsperson	24	\$71.00	\$1,704.00
Technician	2	\$33.00	\$66.00
Mileage and Materials			\$250.00
Total for Task 2-3			\$5,720.00

Task 2-4 Prepare complete set of draft specifications.

Employee Classification	Hours	Rate	Amount
Project Manager	2	\$136.00	\$272.00
Project Engineer	4	\$112.00	\$448.00
Engineer Technician	4	\$74.00	\$296.00
Clerical	2	\$53.00	\$106.00
Technician	1	\$33.00	\$33.00
Mileage and Materials Total for Task 2-4			\$50.00 \$1,205.00

Task 2-5 Meeting to answer questions and provide clarification for drawings and specifications.

Employee Classification	Hours	Rate	Amount
Project Manager	2	\$136.00	\$272.00
Mileage and Materials Total for Task 2-5			\$20.00 \$292.00

TASK 3 - PREPARATION OF FINAL CONSTRUCTION DOCUMENTS

Task 3-1 Prepare final drawings and specifications.

Employee Classification	Hours	Rate	Amount
Project Manager	10	\$136.00	\$1,360.00
Project Engineer	12	\$112.00	\$1,344.00
Traffic Engineer	2	\$70.00	\$140.00
Engineer Technician	60	\$74.00	\$4,440.00
Cad/Design Draftsperson	60	\$71.00	\$4,260.00
Clerical	2	\$53.00	\$106.00
Technician	10	\$33.00	\$330.00
Mileage and Materials Total for Task 3-1			\$100.00 \$12,080.00

Task 3-2 Revise final drawings and specifications and submit to the City.

Employee Classification	Hours	Rate	Amount
Principal	1	\$158.00	\$158.00
Project Manager	2	\$136.00	\$272.00
Project Engineer	8	\$112.00	\$896.00

Engineer Technician Cad/Design Draftsperson Clerical	12 16 1	\$74.00 \$71.00 \$53.00	\$888.00 \$1,136.00 \$53.00
Technician	2	\$33.00	\$66.00
Mileage and Materials Total for Task 3-2			\$100.00 \$3,569.00

Task 3-3 Prepare and submit a construction cost estimate for the project.

Employee Classification	Hours	Rate	Amount
Project Manager	2	\$136.00	\$272.00
Engineer Technician	3	\$74.00	\$222.00
Clerical	1	\$53.00	\$53.00
Mileage and Materials			\$10.00
Total for Task 3-3			\$557.00

Assist the City with any addenda if required during the advertisement and bidding Task 3-4 process.

Employee Classification	Hours	Rate	Amount
Project Engineer	4	\$136.00	\$544.00
Cad/Design Draftsperson	4	\$71.00	\$284.00
Clerical	1	\$53.00	\$53.00
Total for Task 3-4			\$881.00

Task 3-5 Attend final close-out meeting.

Employee Classification	Hours	Rate	Amount
Principal Project Manager	1 3	\$158.00 \$136.00	\$158.00 \$408.00
Mileage and Materials Total for Task 3-5			\$10.00 \$576.00
TOTAL ESTIMATE FOR PROJECT COM	PLETION		\$41,971.00

FEE SCHEDULE PLYMOUTH ROAD WATER MAIN REPLACEMENT

A - PLANNING PHASE (ALTERNATIVE ROUTES)

TASK 1 - PRELIMINARY MEETING AND INVESTIGATIVE WORK

Task 1-1 Project kick-off meeting.

Employee Classification	Hours	Rate	Amount
Principal Project Manager	2	\$158.00 \$136.00	\$316.00 \$272.00
Project Manager Project Engineer	2	\$112.00	\$224.00
Mileage and Materials Total for Task 1-1			\$10.00 \$822.00

Task 1-2 Review as-built records, collect necessary information, provide utility status to City.

Employee Classification	Hours	Rate	Amount
Project Engineer Engineer Technician	1 2	\$112.00 \$74.00	\$112.00 \$148.00
Mileage and Materials Total for Task 1-2			\$20.00 \$280.00

Task 1-3 Preliminary schematic layout drawing for two alternative water main routes.

Employee Classification	Hours	Rate	Amount
Principal	1	\$158.00	\$158.00
Project Manager	20	\$136.00	\$2,720.00
Project Engineer	20	\$112.00	\$2,240.00
Engineer Technician	24	\$74.00	\$1,776.00
Cad Supervisor	1	\$100.00	\$100.00
Cad/Design Draftsperson	4	\$71.00	\$284.00
Clerical	1	\$53.00	\$53.00
Mileage and Materials			\$100.00
Total for Task 1-3			\$7,431.00

Task 1-4 Project planning meeting for alternative water main routes and estimate of probable costs.

Employee Classification	Hours	Rate	Amount
Principal	2	\$158.00	\$316.00
Project Manager	2	\$136.00	\$272.00
Clerical	1	\$53.00	\$53.00

Task 1-5 Develop final estimate of probable construction cost for each route.

Employee Classification	Hours	Rate	Amount
Principal	1	\$158.00	\$158.00
Project Manager	4	\$136.00	\$544.00
Engineer Technician	4	\$74.00	\$296.00
Clerical	1	\$53.00	\$53.00
Mileage and Materials Total for Task 1-5			\$10.00 \$1,061.00

Task 1-6 Project meeting to determine final route for the design of the project.

Employee Classification	Hours	Rate	Amount
Principal	2	\$158.00	\$316.00
Project Manager	2	\$136.00	\$272.00
Clerical	1	\$53.00	\$53.00
Mileage and Materials			\$20.00
Total for Task 1-6			\$661.00

B-PROJECT DESIGN AND BID DOCUMENTS PREPARATION

Employee Classification

TASK 2 - SURVEYING AND PREPARATION OF PRELIMINARY DRAWINGS AND SPECIFICATIONS Task 2-1 Perform all field surveying.

	Employee Classification	Hours	Rate	Amount
	Project Manager	1	\$136.00	\$136.00
	Cad/Design Draftsperson	4	\$71.00	\$284.00
	Survey Supervisor	1	\$102.00	\$102.00
	2-Man Survey Crew	8	\$142.00	\$1,136.00
	Mileage and Materials			\$50.00
	Total for Task 2-1			\$1,708.00
Task 2-2	Geotechnical work.			
	Employee Classification	Hours	Rate	Amount
	Project Engineer Soils Consultant	1	\$130.00	\$130.00 \$2,800.00
	Mileage and Materials			\$30.00
	Mileage and Materials Total for Task 2-2			\$30.00 \$2,960.00

Hours

Rate

Amount

Project Manager	15	\$136.00	\$2,040.00
Project Engineer	20	\$112.00	\$2,240.00
Cad/Design Draftsperson	35	\$71.00	\$2,485.00
Technician	1	\$33.00	\$33.00
Mileage and Materials			\$50.00
Total for Task 2-3			\$6,848.00

Task 2-4 Prepare complete set of draft specifications.

Employee Classification	Hours	Rate	Amount
Project Manager	15	\$136.00	\$2,040.00
Project Engineer	2	\$112.00	\$224.00
Engineer Technician	4	\$74.00	\$296.00
Clerical	2	\$53.00	\$106.00
Technician	1	\$33.00	\$33.00
Mileage and Materials			\$150.00
Total for Task 2-4			\$2,849.00

Task 2-5 Meeting to answer questions and provide clarification for drawings and specifications.

Employee Classification	Hours	Rate	Amount
Project Manager	2	\$136.00	\$272.00
Mileage and Materials Total for Task 2-5			\$20.00 \$292.00

TASK 3 - PREPARATION OF FINAL CONSTRUCTION DOCUMENTS

Task 3-1 Prepare final drawings and specifications.

Employee Classification	Hours	Rate	Amount
Project Manager	35	\$136.00	\$4,760.00
Project Engineer	28	\$112.00	\$3,136.00
Engineer Technician	8	\$74.00	\$592.00
Cad/Design Draftsperson	12	\$71.00	\$852.00
Clerical	1	\$53.00	\$53.00
Technician	2	\$33.00	\$66.00
Mileage and Materials			\$50.00
Total for Task 3-1			\$9,509.00

Task 3-2 Revise final drawings and specifications and submit to the City.

Employee Classification	Hours	Rate	Amount
Principal	1	\$158.00	\$158.00
Project Manager	5	\$136.00	\$680.00
Project Engineer	4	\$112.00	\$448.00
Engineer Technician	8	\$74.00	\$592.00
Cad/Design Draftsperson	8	\$71.00	\$568.00

Clerical	1	\$53.00	\$53.00
Technician	2	\$33.00	\$66.00
Mileage and Materials			\$50.00
Total for Task 3-2			\$2,615.00
Total for Task o Z			* -,

Task 3-3 Prepare and submit a construction cost estimate for the project.

Employee Classification	Hours	Rate	Amount
Project Manager Engineer Technician	2 3	\$136.00 \$74.00	\$272.00 \$222.00
Clerical	1	\$53.00	\$53.00
Mileage and Materials Total for Task 3-3			\$10.00 \$557.00

Task 3-4 Assist the City with any addenda if required during the advertisement and bidding process.

Employee Classification	Hours	Rate	Amount
Project Engineer	4	\$136.00	\$544.00
Cad/Design Draftsperson	4	\$71.00	\$284.00
Clerical	1	\$53.00	\$53.00
Total for Task 3-4			\$881.00

Task 3-5 Attend final close-out meeting.

Employee Classification	Hours	Rate	Amount
Principal Project Manager	1 2	\$158.00 \$136.00	\$158.00 \$272.00
Mileage and Materials Total for Task 3-5	_	•	\$10.00 \$440.00
TOTAL ESTIMATE FOR PROJECT COMPLE	TION		\$39,575.00

FEE SCHEDULE WAGNER ROAD SANITARY SEWER SOUTH

A - PLANNING PHASE (ALTERNATIVE ROUTES)

TASK 1 - PRELIMINARY MEETING AND INVESTIGATIVE WORK

Task 1-1	Project kick-off	meeting.
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Employee Classification	Hours	Rate	Amount
Principal Project Manager	2 2	\$158.00 \$112.00	\$316.00 \$224.00
Froject Manager	2	ψ112.00	Ψ224.00
Mileage and Materials Total for Task 1-1			\$10.00 \$550.00

Task 1-2 Review as-built records, collect necessary information, provide utility status to City.

Employee Classification	Hours	Rate	Amount
Project Manager Project Engineer Engineer Technician	1 1 6	\$112.00 \$94.00 \$74.00	\$112.00 \$94.00 \$444.00
Mileage and Materials Total for Task 1-2			\$50.00 \$700.00

Task 1-3 Preliminary schematic layout drawing for two alternative routes.

Employee Classification	Hours	Rate	Amount
Principal	2	\$158.00	\$316.00
Project Manager	2	\$112.00	\$224.00
Engineer Technician	4	\$74.00	\$296.00
Cad Supervisor	1	\$100.00	\$100.00
Cad/Design Draftsperson	4	\$71.00	\$284.00
Mileage and Materials			\$100.00
Total for Task 1-3			\$1,320.00

Task 1-4 Project planning meeting for alternative routes and estimate of probable costs.

Employee Classification	Hours	Rate	Amount
Principal	2	\$158.00 \$112.00	\$316.00 \$224.00
Project Manager Mileage and Materials Total for Task 1-4	2	\$112.00	\$20.00 \$560.00

Task 1-5 Develop final estimate of probable construction cost for each route.

Employee Classification	Hours	Rate	Amount

Principal	1	\$158.00	\$158.00
Project Manager	2	\$112.00	\$224.00
Engineer Technician	4	\$74.00	\$296.00
Mileage and Materials Total for Task 1-5			\$50.00 \$728.00

B - PROJECT DESIGN AND BID DOCUMENTS PREPARATION

TASK 2 - SURVEYING AND PREPARATION OF PRELIMINARY DRAWINGS AND SPECIFICATIONS

Task 2-1 Perform all field surveying.

Employee Classification	Hours	Rate	Amount
Project Manager	2	\$112.00	\$224.00
Cad Supervisor	1	\$100.00	\$100.00
Cad/Design Draftsperson	16	\$71.00	\$1,136.00
Survey Supervisor	2	\$102.00	\$204.00
2-Man Survey Crew	32	\$142.00	\$4,544.00
Mileage and Materials			\$200.00
Total for Task 2-1			\$6,408.00
Geotechnical work.			

Task 2-2

Employee Classification	Hours	Rate	Amount
Project Engineer Soils Consultant	2	\$112.00	\$224.00 \$2,800.00
Mileage and Materials Total for Task 2-2			\$30.00 \$3,054.00

Preliminary drawings that include plan and profile of proposed sewer. Task 2-3

Employee Classification	Hours	Rate	Amount
Project Manager	2	\$112.00	\$224.00
Project Engineer	24	\$94.00	\$2,256.00
Engineer Technician	10	\$74.00	\$740.00
Cad/Design Draftsperson	24	\$71.00	\$1,704.00
Technician	2	\$33.00	\$66.00
Mileage and Materials			\$250.00
Total for Task 2-3			\$5,240.00

Prepare complete set of draft specifications. Task 2-4

Employee Classification	Hours	Rate	Amount
Project Manager	2	\$112.00	\$224.00
Project Engineer	4	\$94.00	\$376.00

Engineer Technician	4	\$74.00	\$296.00
Clerical	2	\$53.00	\$106.00
Technician	1	\$33.00	\$33.00
Mileage and Materials			\$50.00
Total for Task 2-4			\$1,085.00

Task 2-5 Meeting to answer questions and provide clarification for drawings and specifications.

Employee Classification	Hours	Rate	Amount
Project Manager	2	\$112.00	\$224.00
Mileage and Materials Total for Task 2-5			\$20.00 \$244.00

Task 2-6 Property Owner Notification/Presentation

Employee Classification	Hours	Rate	Amount
Project Engineer	5	\$94.00	\$470.00
Secretary	1	\$53.00	\$53.00
Mileage and Materials Total for Task 2-6			\$50.00 \$573.00

TASK 3 - PREPARATION OF FINAL CONSTRUCTION DOCUMENTS

Task 3-1 Prepare final drawings and specifications.

Employee Classification	Hours	Rate	Amount
Project Manager	10	\$112.00	\$1,120.00
Project Engineer	12	\$94.00	\$1,128.00
Traffic Engineer	2	\$70.00	\$140.00
Engineer Technician	40	\$74.00	\$2,960.00
Cad/Design Draftsperson	30	\$71.00	\$2,130.00
Clerical	2	\$53.00	\$106.00
Technician	5	\$33.00	\$165.00
Mileage and Materials Total for Task 3-1			\$250.00 \$7,999.00

Task 3-2 Revise final drawings and specifications and submit to the City.

Employee Classification	Hours	Rate	Amount
Principal	1	\$158.00	\$158.00
Project Manager	2	\$112.00	\$224.00
Project Engineer	8	\$94.00	\$752.00
Engineer Technician	12	\$74.00	\$888.00
Cad/Design Draftsperson	16	\$71.00	\$1,136.00
Technician	5	\$33.00	\$165.00
Mileage and Materials			\$250.00
Total for Task 3-2			\$3,573.00

Prepare and submit a construction cost estimate for the project. Task 3-3

Employee Classification	Hours	Rate	Amount
Project Manager	2	\$112.00	\$224.00
Engineer Technician	3	\$74.00	\$222.00
Mileage and Materials			\$10.00
Total for Task 3-3			\$456.00
Assist the City with any addenda if require	ed during the a	dvertisement an	nd bidding

Task 3-4 process.

Employee Classification	Hours	Rate	Amount
Project Engineer Cad/Design Draftsperson	4 4	\$94.00 \$71.00	\$376.00 \$284.00
Total for Task 3-4			\$660.00

Task 3-5 Attend final close-out meeting.

Employee Classification	Hours	Rate	Amount
Principal	1	\$158.00	\$158.00
Project Manager	3	\$112.00	\$336.00
Mileage and Materials			\$10.00
Total for Task 3-5			\$504.00
TOTAL ESTIMATE FOR PROJECT COMP	PLETION		\$33,654.00

FEE SCHEDULE GLENDALOCH CIRCLE WATER MAIN REPLACEMENT

A - PLANNING PHASE (ALTERNATIVE ROUTES)

TASK 1 - PRELIMINARY MEETING AND INVESTIGATIVE WORK

Task 1-1	Project kick-off meeting.
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Employee Classification	Hours	Rate	Amount
Principal	2	\$158.00	\$316.00
Project Manager	2	\$112.00	\$224.00
ACL AM-A-G-I-			¢10.00
Mileage and Materials			\$10.00
Total for Task 1-1			\$550.00

Task 1-2 Review as-built records, collect necessary information, provide utility status to City.

Employee Classification	Hours	Rate	Amount
Project Manager Engineer Technician	1 2	\$112.00 \$74.00	\$112.00 \$148.00
Mileage and Materials Total for Task 1-2			\$10.00 \$270.00

Task 1-3 Preliminary schematic layout drawing for two alternative routes.

Employee Classification	Hours	Rate	Amount
Principal	1	\$158.00	\$158.00
Project Manager	1	\$112.00	\$112.00
Project Engineer	4	\$94.00	\$376.00
Engineer Technician	4	\$74.00	\$296.00
Cad Supervisor	1	\$100.00	\$100.00
Cad/Design Draftsperson	4	\$71.00	\$284.00
Mileage and Materials			\$25.00
Total for Task 1-3			\$1,351.00

Task 1-4 Project planning meeting for alternative routes and estimate of probable costs.

Employee Classification	Hours	Rate	Amount
Principal Project Manager	1 2	\$158.00 \$112.00	\$158.00 \$224.00
Mileage and Materials Total for Task 1-4			\$20.00 \$402.00

Task 1-5 Develop final estimate of probable construction cost for each route.

Employee Classification	Hours	Rate	Amount

Principal	1	\$158.00	\$158.00
Project Manager	2	\$112.00	\$224.00
Engineer Technician	2	\$74.00	\$148.00
Mileage and Materials			\$50.00
Total for Task 1-5			\$580.00

Task 1-6 Project meeting to determine final route for the design of the project.

Employee Classification	Hours	Rate	Amount
Principal	1	\$158.00	\$158.00
Project Manager	1	\$112.00	\$112.00
Total for Task 1-6			\$270.00

B-PROJECT DESIGN AND BID DOCUMENTS PREPARATION

TASK 2 - SURVEYING AND PREPARATION OF PRELIMINARY DRAWINGS AND SPECIFICATIONS

Task 2-1 Perform all field surveying.

Employee Classification	Hours	Rate	Amount
Project Manager	2	\$112.00	\$224.00
Cad Supervisor	1	\$100.00	\$100.00
Cad/Design Draftsperson	6	\$71.00	\$426.00
Survey Supervisor	1	\$102.00	\$102.00
2-Man Survey Crew	16	\$142.00	\$2,272.00
Mileage and Materials Total for Task 2-1			\$200.00 \$3,324.00

Task 2-2 Geotechnical work.

Employee Classification	Hours	Rate	Amount
Project Engineer Soils Consultant	1	\$112.00	\$112.00 \$2,800.00
Mileage and Materials Total for Task 2-2			\$30.00 \$2,942.00

Task 2-3 Preliminary drawings that include plan and profile of proposed sewer.

Employee Classification	Hours	Rate	Amount
Project Manager	2	\$112.00	\$224.00
Project Engineer	10	\$94.00	\$940.00
Engineer Technician	4	\$74.00	\$296.00
Cad/Design Draftsperson	8	\$71.00	\$568.00
Mileage and Materials			\$250.00
Total for Task 2-3			\$2,278.00

Task 2-4 Prepare complete set of draft specifications.

Employee Classification	Hours	Rate	Amount
Project Manager Project Engineer Engineer Technician	1 2 4	\$112.00 \$94.00 \$74.00	\$112.00 \$188.00 \$296.00
Mileage and Materials Total for Task 2-4			\$50.00 \$646.00

Task 2-5 Meeting to answer questions and provide clarification for drawings and specifications.

Employee Classification	Hours	Rate	Amount
Project Manager	1	\$112.00	\$112.00
Mileage and Materials Total for Task 2-5			\$20.00 \$132.00

TASK 3 - PREPARATION OF FINAL CONSTRUCTION DOCUMENTS

Task 3-1 Prepare final drawings and specifications.

Employee Classification	Hours	Rate	Amount
Project Manager	2	\$112.00	\$224.00
Project Engineer	12	\$94.00	\$1,128.00
Engineer Technician	16	\$74.00	\$1,184.00
Cad/Design Draftsperson	8	\$71.00	\$568.00
Clerical	2	\$53.00	\$106.00
Technician	2	\$33.00	\$66.00
Mileage and Materials Total for Task 3-1			\$250.00 \$3,526.00

Assist the City with any addenda if required during the advertisement and bidding process.

Employee Classification	Hours	Rate	Amount
Project Engineer	2	\$94.00	\$188.00
Total for Task 3-2			\$188.00

Task 3-3 Attend final close-out meeting.

Employee Classification	Hours	Rate	Amount
Project Manager	2	\$112.00	\$224.00
Mileage and Materials Total for Task 3-3			\$10.00 \$234.00
TOTAL ESTIMATE FOR PROJECT COM	DI ETION		\$16 603 NN

TOTAL ESTIMATE FOR PROJECT COMPLETION

\$16,693.00

Task 3-2

FEE SCHEDULE CLAIR CIRCLE WATER MAIN REPLACEMENT

A - PLANNING PHASE (ALTERNATIVE ROUTES)

TASK 1 - PRELIMINARY MEETING AND INVESTIGATIVE WORK

Task 1-1 Project kick-off meeting.

Employee Classification	Hours	Rate	Amount
Principal	2	\$158.00	\$316.00
Project Manager	2	\$112.00	\$224.00
Mileage and Materials			\$10.00
Total for Task 1-1			\$550.00

Task 1-2 Review as-built records, collect necessary information, provide utility status to City.

Employee Classification	Hours	Rate	Amount
Project Manager Engineer Technician	1 2	\$112.00 \$74.00	\$112.00 \$148.00
Mileage and Materials Total for Task 1-2			\$10.00 \$270.00

Task 1-3 Preliminary schematic layout drawing for two alternative routes.

Employee Classification	Hours	Rate	Amount
Principal	1	\$158.00	\$158.00
Project Manager	1	\$112.00	\$112.00
Project Engineer	4	\$94.00	\$376.00
Engineer Technician	4	\$74.00	\$296.00
Cad Supervisor	1	\$100.00	\$100.00
Cad/Design Draftsperson	4	\$71.00	\$284.00
Mileage and Materials			\$25.00
Total for Task 1-3			\$1,351.00

Task 1-4 Project planning meeting for alternative routes and estimate of probable costs.

Employee Classification	Hours	Rate	Amount
Principal Project Manager	1 2	\$158.00 \$112.00	\$158.00 \$224.00
Mileage and Materials Total for Task 1-4			\$20.00 \$402.00

Task 1-5 Develop final estimate of probable construction cost for each route.

Employee Classification	Hours	Rate	Amount
Principal	1	\$158.00	\$158.00
Project Manager	2	\$112.00	\$224.00
Engineer Technician	2	\$74.00	\$148.00
Mileage and Materials Total for Task 1-5			\$50.00 \$580.00

Task 1-6 Project meeting to determine final route for the design of the project.

Employee Classification	Hours	Rate	Amount
Principal	1	\$158.00	\$158.00
Project Manager	1	\$112.00	\$112.00
Total for Task 1-6			\$270.00

B-PROJECT DESIGN AND BID DOCUMENTS PREPARATION

TASK 2 - SURVEYING AND PREPARATION OF PRELIMINARY DRAWINGS AND SPECIFICATIONS

Task 2-1 Perform all field surveying.

Employee Classification	Hours	Rate	Amount
Project Manager	2	\$112.00	\$224.00
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Survey Supervisor	1	\$102.00	\$102.00
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Mileage and Materials Total for Task 2-1			\$200.00 \$3,324.00

Task 2-2 Geotechnical work.

Employee Classification	Hours	Rate	Amount
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Employee Classification	Hours	Rate	Amount
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Engineer Technician	4	\$74.00	\$296.00
Cad/Design Draftsperson	8	\$71.00	\$568.00
Mileage and Materials Total for Task 2-3			\$250.00 \$2,278.00

Task 2-4 Prepare complete set of draft specifications.

Employee Classification	Hours	Rate	Amount
Project Manager Project Engineer Engineer Technician	1 2 4	\$112.00 \$94.00 \$74.00	\$112.00 \$188.00 \$296.00
Mileage and Materials Total for Task 2-4			\$50.00 \$646.00

Task 2-5 Meeting to answer questions and provide clarification for drawings and specifications.

Employee Classification	Hours	Rate	Amount
Project Manager	1	\$112.00	\$112.00
Mileage and Materials Total for Task 2-5			\$20.00 \$132.00

TASK 3 - PREPARATION OF FINAL CONSTRUCTION DOCUMENTS

Task 3-1 Prepare final drawings and specifications.

Employee Classification	Hours	Rate	Amount
Project Manager	2	\$112.00	\$224.00
Project Engineer	12	\$94.00	\$1,128.00
Engineer Technician	16	\$74.00	\$1,184.00
Cad/Design Draftsperson	8	\$71.00	\$568.00
Clerical	2	\$53.00	\$106.00
Technician	2	\$33.00	\$66.00
Mileage and Materials Total for Task 3-1			\$250.00 \$3,526.00
10(a) 101 1 a5k 3-1			ψυ,υΣυ.υυ

Assist the City with any addenda if required during the advertisement and bidding process.

Employee Classification	Hours	Rate	Amount
Project Engineer	2	\$94.00	\$188.00
Total for Task 3-4			\$188.00

Task 3-3 Attend final close-out meeting.

Employee Classification	Hours	Rate	Amount
Project Manager	2	\$112.00	\$224.00
Mileage and Materials Total for Task 3-5			\$10.00 \$234.00
TOTAL ESTIMATE FOR PROJECT COMPL	ETION		\$16,693.00

Task 3-2

PRINCIPALS R.J. WANTY, P.E. D.J. HOUCK

ASSOCIATES K.E. BOND, R.L.A. T.L. SUTHERLAND, P.S. D.L. MOORE



CIVIL ENGINEERS * PLANNERS * SURVEYORS TRANSPORTATION ENGINEERS LANDSCAPE ARCHITECTS

BILLING RATES

JANUARY 2007

PRINCIPAL/ENGINEER ENGINEER/PROJECT MANAGER PLANNER PROJECT ENGINEER SENIOR SOILS ENGINEER SENIOR BITUMINOUS ENGINEER TRAFFIC ENGINEER PROJECT MANAGER DESIGN ENGINEER ENGINEER TECHNICIAN SENIOR INSPECTOR LANDSCAPE ARCHITECT CAD SUPERVISOR CAD/DESIGNER II CAD DESIGNER SECRETARIAL/DATA PROCESSING TECHNICIAN SENIOR SURVEYOR SURVEYOR/CREW CHIEF SURVEYOR/CONSTRUCTION RODMAN 2-MAN CREW 3-MAN CREW	\$158.00 / hr \$136.00 / hr \$116.00 / hr \$112.00 / hr \$ 94.00 / hr \$ 94.00 / hr \$ 94.00 / hr \$ 94.00 / hr \$ 68.00 / hr \$ 74.00 / hr \$ 71.00 / hr \$ 71.00 / hr \$ 53.00 / hr \$ 33.00 / hr \$ 102.00 / hr
GPS EQUIPMENT COMPUTER/DESIGN EQUIPMENT DIGITIZER EQUIPMENT IRONS (REGULAR) LATH HUBS MONUMENTS MILEAGE REPRODUCTIONS (24" X 36") TRAFFIC COUNTERS REIMBURSABLES	\$100.00 / hr \$ 24.00 / hr \$ 24.00 / hr \$ 1.50 / ea \$.85 / ea \$.85 / ea \$ 15.00 / ea \$.60 / mi \$ 1.00 / ea \$ 40.00 / day Cost + 10%

^{*}overhead rate is included in above billing rates.

EXHIBIT C FAIR EMPLOYMENT PRACTICE

The consultant, its agents or sub-contractors, shall comply with all requirements of Chapter 112 of Title IX of the Code of the City of Ann Arbor and in particular the following excerpts therefrom:

9:161 NONDISCRIMINATION BY CITY CONTRACTORS

- (1) All contractors proposing to do business with the City of Ann Arbor shall satisfy the nondiscrimination administrative policy adopted by the City Administrator in accordance with the guidelines of this section. All contractors shall receive approval from the Director prior to entering into a contract with the City, unless specifically exempted by administrative policy. All City contractors shall take affirmative action to insure that applicants are employed and that employees are treated during employment in a manner which provides equal employment opportunity and tends to eliminate inequality based upon race, national origin or sex.
- (2) Each prospective contractor shall submit to the City data showing current total employment by occupational category, sex and minority group. If, after verifying this data, the Director concludes that it indicates total minority and female employment commensurate with their availability within the contractor's labor recruitment area, i.e., the area from which the contractor can reasonably be expected to recruit, said contractor shall be accepted by the Director as having fulfilled affirmative action requirements for a period of one year at which time the Director shall conduct another review. Other contractors shall develop an affirmative action program in conjunction with the Director. Said program shall include specific goals and timetables for the hiring and promotion of minorities and females. Said goals shall reflect the availability of minorities and females within the contractor's labor recruitment area. In the case of construction contractors, the Director shall use for employment verification the labor recruitment area of the Ann Arbor-Ypsilanti standard metropolitan statistical area. Construction contractors determined to be in compliance shall be accepted by the Director as having fulfilled affirmative action requirements for a period of six (6) months at which time the Director shall conduct another review.
- (3) In hiring for construction projects, contractors shall make good faith efforts to employ local persons, so as to enhance the local economy.
- (4) All contracts shall include provisions through which the contractor agrees, in addition to any other applicable Federal or State labor laws:
 - (a) To set goals, in conference with the Human Resources Director, for each job category or division of the work force used in the completion of the City work;
 - (b) To provide periodic reports concerning the progress the contractor has made in meeting the affirmative action goals it has agreed to;
 - (c) To permit the Director access to all books, records and accounts pertaining to its employment practices for the purpose of determining compliance with the affirmative action requirements.
- (5) The Director shall monitor the compliance of each contractor with the nondiscrimination provisions of each contract. The Director shall develop procedures and regulations consistent with the administrative policy adopted by the City Administrator for notice and enforcement of non-compliance. Such procedures and regulations shall include a provision for the posting of contractors

not in compliance.

- (6) All City contracts shall provide further that breach of the obligation not to discriminate shall be a material breach of the contract for which the City shall be entitled, at its option, to do any or all of the following:
 - (a) To cancel, terminate, or suspend the contract in whole or part and/or refuse to make any required periodic payments under the contract;
 - (b) Declare the contractor ineligible for the award of any future contracts with the City for a specified length of time;
 - (c) To recover liquidated damages of a specified sum, said sum to be that percentage of the labor expenditure for the time period involved which would have accrued to minority group members had the affirmative action not been breached;
 - (d) Impose for each day of non-compliance, liquidated damages of a specified sum, based upon the following schedule:

	Assessed Damages Per Day of
Contract Amount	Non-Compliance
\$ 10,000 - 24,999	\$ 25.00
25,000 - 99,999	50.00
100,000 - 199,999	100.00
200,000 - 499,999	150.00
500,000 - 1,499,999	200.00
1,500,000 - 2,999,999	250.00
3,000,000 - 4,999,999	300.00
5,000,000 - and above	500.00

(e) In addition the contractor shall be liable for any costs or expenses incurred by the City of Ann Arbor in obtaining from other sources the work and services to be rendered or performed or the goods or properties to be furnished or delivered to the City under this contract.

EXHIBIT D LIVING WAGE REQUIREMENTS

If a "covered employer," Contractor will comply with all the requirements of Chapter 23 of the Ann Arbor City Code (Sections 1:811 B 1:821), in particular but not limited to the following sections thereof:

1:813. Definitions.

For purposes of this Chapter, the following definitions shall apply:

- (1) "Contractor/vendor" is a person or entity that has a contract with the City primarily for the furnishing of services where the total amount of the contract or contracts with the City exceeds \$10,000 for any 12month period. "Contractor/vendor" does not include a person or entity that has a contract with the City primarily for the purchase of goods or property, or for the lease of goods or property to or from the City.
- "Covered Employee" means a person employed by a covered employer to perform services which are covered or funded by the contract with or grant from the City; provided, however, that persons who are employed pursuant to federal, state or local laws relating to prevailing wages shall be exempt from this Chapter.
- (3) "Covered Employer" means a contractor/vendor or grantee that has not been granted an exemption from this Chapter pursuant to Section 1:817.
- (4) "Employee" means an individual who provides personal services performed for wages under any contract calling for the performance of personal services, whether written or oral, express or implied. The term "employee" does not include any individual who volunteers to perform services for an employer if
 - (a) The individual receives no compensation or is paid expenses, reasonable benefits, or a nominal fee to perform the services for which the individual volunteered; and
 - (b) Such services are not the same type of services which the individual is employed to perform for such employer.
- (5) "Employee Health Benefits" or "Health Benefits" means providing health care benefits for employees (or employees and their dependents) at employer cost or making an employer contribution toward the purchase of such health care benefits for employees (or employees and their dependents), provided that the employer cost or contribution equals no less than \$1 an hour for the average work week of such employee, and provided further that any employee payment or contribution toward health care shall not exceed 50 cents an hour for the average work week for such employee.
- (6) "Grant" means any form of financial assistance to a "Grantee" as set forth and defined in Section 1:813(7). "Grant" does not include financial assistance used for the purchase or lease of property or other nonpersonnel costs.
- (7) "Grantee" is a person or entity that is a recipient of any financial assistance from the City in the form of any federal, state or local grant program administered by the City, revenue bond

financing, tax increment financing, tax abatement, tax credit, direct grant, or any other form of financial assistance that exceeds \$10,000 for any 12month period, including any contractors, subcontractors, or leaseholders of the grantee whose contract, subcontract or lease with the grantee exceeds \$10,000 for any 12month period.

- (8) "Living Wage" means a wage equal to the levels established in Section 1:815.
- (9) "Person" means any individual, copartnership, corporation, association, club, joint adventure, estate, trust, and any other group or combination acting as a unit, and the individuals constituting such group or unit.
- (10) "\$10,000 for any 12 month period" is computed by taking the total amount of the contract, grant or loan and dividing it by the number of months the contract, grant or loan covers.

1:814. Applicability.

- (1) This Chapter shall apply to any person that is a contractor/vendor or grantee as defined in Section 1:813 that employs or contracts with five (5) or more individuals; provided, however, that this Chapter shall not apply to a nonprofit contractor/vendor or nonprofit grantee unless it employs or contracts with ten (10) or more individuals.
- (2) This Chapter shall apply to any grant, contract, or subcontract or other form of financial assistance awarded to or entered into with a contractor/vendor or grantee after the effective date of this Chapter and to the extension or renewal after the effective date of this Chapter of any grant, contract, or subcontract or other form of financial assistance with a contractor/vendor or grantee.

1:815. Living Wages Required.

- (1) Every contractor/vendor or grantee, as defined in Section 1:813, shall pay its covered employees a living wage as established in this Section.
 - (a) For a covered employer that provides employee health care to its employees, the living wage shall be \$10.33 an hour, or the adjusted amount hereafter established under Section 1:815(3).
 - (b) For a covered employer that does not provide health care to its employees, the living wage shall be \$11.96 a hour, or the adjusted amount hereafter established under Section 1:815(3).
- (2) In order to qualify to pay the living wage rate for covered employers providing employee health care under subsection 1:815(1)(a), a covered employer shall furnish proof of said health care coverage and payment therefor to the City Administrator or his/her designee.
- (3) The amount of the living wage established in this Section shall be adjusted upward no later than April 30, 2002, and every year thereafter by a percentage equal to the percentage

increase, if any, in the federal poverty guidelines as published by the United States Department of Health and Human Services for the years 2001 and 2002. Subsequent annual adjustments shall be based upon the percentage increase, if any, in the United States Department of Health and Human Services poverty guidelines when comparing the prior calendar year's poverty guidelines to the present calendar year's guidelines. The applicable percentage amount will be converted to an amount in cents by multiplying the existing wage under Section 1.815(1)(b) by said percentage, rounding upward to the next cent, and adding this amount of cents to the existing living wage levels established under Sections 1:815(1)(a) and 1:815(1)(b). Prior to April 1 of each calendar year, the City will notify any covered employer of this adjustment by posting a written notice in a prominent place in City Hall, and, in the case of a covered employer that has provided an address of record to the City, by a written letter to each such covered employer.

1:816. Employees Covered.

A covered employer shall pay each of its employees performing work on any covered contract or grant with the City no less than a living wage as defined in Section 1:815.

1:817. Exemptions.

Notwithstanding any other provisions in this Chapter, the following exemptions shall apply:

- (1) Sweat equity contracts for home construction or rehabilitation grant will not subject the grantee to coverage under this Chapter. Housing construction or rehabilitation grants or contracts that are passed through to a contractor in their entirety are exempt from the provisions of this Chapter, even when the City participates in the selection of the contractor.
- (2) For any contract or grant, the City Council may grant a partial or complete exemption from the requirements of this Chapter if it determines one of the following:
 - (a) To avoid any application of this Chapter that would violate federal, state or local law(s); or
 - (b) The application of this Chapter would cause demonstrated economic harm to an otherwise covered employer that is a nonprofit organization, and the City Council finds that said harm outweighs the benefits of this Chapter; provided further that the otherwise covered nonprofit employer shall provide a written plan to fully comply with this Chapter within a reasonable period of time, not to exceed three years, and the City Council then agrees that granting a partial or complete exemption is necessary to ameliorate the harm and permit the nonprofit organization sufficient time to reach full compliance with this Chapter.
- (3) A loan shall be considered a grant under this ordinance only to the extent that a loan is provided at below market interest rates and then only the difference between the amount of the loan and the present value of the payments thereunder, discounted over the life of the loan, shall be treated as financial assistance under this ordinance.

(4) A payment of funds for the purpose of purchasing services, property, or goods on behalf of individuals being assisted by a covered employer or potentially covered employer (sometimes known as a "pass through" grant) that is used for said purchases shall not be considered a grant; such funds shall be considered a grant only to the extent that any such funds are retained by the covered employer or potentially covered employer to provide financial assistance and support to its own operations.

1:818. Monitoring and Enforcement.

- (1) Every covered employer shall agree to the payment of a living wage as a condition of entering into or renewing a covered contract or grant with the City, shall agree to post a notice regarding the applicability of this Chapter in every work place or other location in which employees or other persons contracted for employment are working, and shall agree to provide payroll records or other documentation as deemed necessary within ten (10) business days from the receipt of the City's request. All City contracts and grants covered by this Chapter shall provide that a violation of the living wage requirements of this Chapter shall be a material breach of the contract or grant. The Human Rights Office of the City shall monitor the compliance of each contractor/vendor or grantee under procedures developed by the Human Rights Office and approved by the City Administrator.
- (2) Each covered employer shall submit to the Human Rights Office of the City information regarding number of employees and applicable wage rates of its employees covered by this Chapter in such manner as requested by that office. At the request of the Human Rights Office, any contractor/vendor or grantee shall provide satisfactory proof of compliance with the living wage provisions of this Chapter.
- (3) Any person may submit a complaint or report of a violation of this Chapter to the Human Rights Office. Upon receipt of such a complaint or report, the Human Rights Office shall investigate to determine if there has been a violation.

1:819. Penalties and Enforcement.

- (1) A violation of any provision of this Chapter is a civil infraction punishable by a fine of not more than \$500.00 plus all costs of the action. The Court may issue and enforce any judgment, writ, or order necessary to enforce this Chapter, including payment to the affected employee or employees of the difference between wages actually paid and the living wage that should have been paid, interest, and other relief deemed appropriate.
- (2) Each day upon which a violation occurs shall constitute a separate violation.
- (3) In addition to enforcement under Subsections (1) and (2), the City shall have the right to modify, terminate, and/or seek specific performance of any contract or grant with an affected covered employer or to cancel, terminate or suspend the contract in whole or in part and/or to refuse any further payments under the contract or grant;

(4) Nothing contained in this Chapter shall be construed to limit in any way the remedies, legal or equitable, which are available to the City or any other person for the correction of violations of this Chapter

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1:821. Other Provisions.

(1) No affected covered employer shall reduce the compensation, wages, fringe benefits, or leave available to any covered employee or person contracted for employment in order to pay the living wage required by this Chapter.

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- (3) No employee covered by a federal, state or local law requiring the payment of prevailing wages shall be covered by this Chapter.
- (4) This Chapter shall not be construed to apply to any person or entity that is a tax exempt religious, educational or charitable organization under state or federal law, but is not a contractor/vendor or grantee as defined in Section 1:813.
- (5) This Chapter shall not be applicable to the establishment and/or continuation of the following if developed specifically for high school and/or college students:
 - (a) A bona fide training program;
 - (b) A summer or youth employment program;
 - (c) A work study, volunteer/public service, or internship program.

* * * * *