

**AGREEMENT BETWEEN
MALCOLM PIRNIE, INC.
AND THE 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 48104 ("City"), and Malcolm Pirnie, Inc., a Michigan Corporation with its address at 1001 Woodward Avenue, Suite 1000, Detroit, MI 48226 agree as follows on this _____ day of _____, 2012.

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

I. DEFINITIONS

Administering Service Area/Unit means Public Services Area.

Contract Administrator means Public Services Area Administrator, acting personally or through any assistants authorized by the Administrator/Manager of the Administering Service Area/Unit.

Deliverables means all Plans, Specifications, Reports, Recommendations, and other materials developed for or delivered to City by Consultant under this Agreement

Project means Facilities Renovations Improvements Project.

II. DURATION

This Agreement shall become effective on _____, 2012, and shall remain in effect until satisfactory completion of the Services specified below 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 statutory, regulatory and contractual requirements now or hereafter in effect as may be applicable to the rights and obligations set forth in the Agreement.
- 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 in the manner set forth in Exhibit B. Payment shall be made monthly, unless another payment term is specified in Exhibit B, 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 and the City 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 in 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.

- C. In the case of all contracts involving on-site work, the Consultant shall provide to the City, before 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 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, as adjusted in accordance with Section 1:815(3) and specified in Exhibit D; 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.

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 specified in 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.
- D. 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. If either party is in breach of this Agreement for a period of fifteen (15) days following receipt of notice from the non-breaching party with respect to a breach, the non-breaching party may pursue any remedies available to it against the breaching party under applicable law, including but not limited to, the right to terminate this Agreement without further notice.
- 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.

- C. Consultant acknowledges that, if this Agreement extends for several fiscal years, continuation of this Agreement is subject to appropriation of funds for this Project. If funds to enable the City to effect continued payment under this Agreement are not appropriated or otherwise made available, the City shall have the right to terminate this Agreement without penalty at the end of the last period for which funds have been appropriated or otherwise made available by giving written notice of termination to the Consultant. The Contract Administrator shall give the Consultant written notice of such non-appropriation within thirty (30) days after it receives notice of such non-appropriation.
- D. The remedies provided in this Agreement will be cumulative, and the assertion by a party of any right or remedy will not preclude the assertion by such party of any other rights or the seeking of any other remedies.

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 any right or obligation under this Agreement 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 will be governed and controlled in all respects by the laws of the State of Michigan, including interpretation, enforceability, validity and construction. The parties submit to the jurisdiction and venue of the Circuit Court for Washtenaw County, State of Michigan, or, if original jurisdiction can be established, the United States District Court for the Eastern District of Michigan, Southern Division, with respect to any action arising, directly or indirectly, out of this Agreement or the performance or breach of this Agreement. The parties stipulate that the venues referenced in this Agreement are convenient and waive any claim of non-convenience.

XIII. OWNERSHIP OF DOCUMENTS

Upon completion or termination of this Agreement, all documents (i.e., deliverables) prepared by or obtained by the Consultant as provided under the terms of this Agreement shall be delivered to and become the property of the City. Original basic survey notes, sketches, charts, drawings, partially completed drawings, computations, quantities and other data shall remain in the possession of the Consultant as instruments of service unless specifically incorporated in a deliverable, but shall be made available, upon request, to the City without restriction or limitation on their use. 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.

Unless otherwise stated in this Agreement, any intellectual property owned by Consultant prior to the effective date of this Agreement (i.e., preexisting information) shall remain the exclusive property of Consultant even if such Preexisting Information is embedded or otherwise incorporated in materials or products first produced as a result of this Agreement or used to develop Deliverables. The City's right under this provision shall not apply to any Preexisting Information or any component thereof regardless of form or media.

XIV. 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.

XV. 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.

XVI. EXTENT OF AGREEMENT

This Agreement, together with any affixed exhibits, schedules or other documentation, constitutes the entire understanding between the City and the Consultant with respect to the subject matter of the Agreement and it supersedes, unless otherwise incorporated by reference herein, all prior representations, negotiations, agreements or understandings 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.

FOR CONSULTANT

By _____
Type name

FOR THE CITY OF ANN ARBOR

By _____
John Hieftje, Mayor

By _____
Jacqueline Beaudry, City Clerk

Approved as to substance

Steven D. Powers, City Administrator

Craig Hupy, P.E., Interim Public Service Administrator

Approved as to Form and Content

Stephen K. Postema, City Attorney

EXHIBIT A
SCOPE OF SERVICES

**City of Ann Arbor WWTP
Facilities Renovations Project
Attachment A – Scope of Services for Items 1 through 14 - Construction Phase of Services**

General Assumptions:

1. The Estimated construction duration is based on a five year time period from April 2012 to April 2017.
2. 2,080 hours per year were used as a basis for determining percentages for Malcolm Pirnie staff.
3. 2012 labor rates were used as a basis to develop costs for work performed in 2012.
4. An average yearly escalation of 4% was used to determine a budget amount for escalation of costs over years 2, 3 at 3% and years 4 and 5 at 5%. The actual escalation for years after the first year will be based on the Bureau of Labor Statistics – Employee Cost Index (see attached example). Labor rates will change based on the third quarter results and be effective in January of each year starting in 2013.
5. Engineering Fees were developed based on a core resident field team, engineering support from the Malcolm Pirnie design team, QA/QC review of the project and engineering and field services by the design team sub-consultants. The sub-consultants are:
 - a. NTH Consultants LLC for geotechnical engineering support.
 - b. PMA LLC for Project Controls.
 - c. Atwell LLC for field surveying for as-built drawing preparation, LOMR preparation and general surveying as required throughout construction.
6. Malcolm Pirnie will use a mark-up of 5% on sub-consultants and other direct costs.

Descriptions of tasks 1 through 14 are provided below.

1. Project Management

Task Assumptions

- i. Includes all resident project representative (RPR) time for 90% of the five year duration for management of all tasks listed herein.
- ii. Includes QA/QC at four site visits per year at eight hours per visit.
- iii. Includes five construction resolution meetings at 16 hours per visit. These visits may be required to review major construction issues that cannot be resolved at the field level. We have included time for senior level Pirnie staff to visit the site and attend construction resolution meetings. In addition, there will be on-going construction resolution by the Malcolm Pirnie field staff throughout the estimated construction duration which is not included in this task.
- iv. Includes preparation of the site health and safety (H & S) plan and H & S coordination with Ann Arbor and the contractor.
- v. Includes the preparation of the communications plan.
- vi. Includes a project controls engineer on-site to review and evaluate the contractor's schedule submittals, changes and claims to the Contract, contractor's schedule of values (SOV) and monthly pay requests, and monitor and track contractor compliance with the general conditions. PMA will be on-site for approximately 80% of the five year duration. See Task 1b for details.

a. Project Management:

- i. **General:** This task includes the time for management of the construction phase of the work. Malcolm Pirnie's Resident Project Representative (RPR) will be on-site for the duration of the construction phase for 90% of the time accounting for contractor mobilization at the beginning and end of the project. This work includes the management of the MPI field staff, sub-consultants, coordination with Ann Arbor and outside agencies including Ann Arbor Township, Washtenaw County, Superior Township, MDEQ, FEMA, and other agencies involved with the project. This task includes overall responsibility of the tasks contained herein including the review and approval of all project documents and directives to the contractor.
- ii. **QA/QC:** Throughout the construction phase, Malcolm Pirnie will provide periodic quality reviews of the project.
- iii. **Project Communications:** Malcolm Pirnie will prepare a project communications plan between Ann Arbor, MPI and the contractor for Ann Arbor's review and approval prior to construction.
- iv. **Site Safety:** Malcolm Pirnie will:
 - Prepare Site Health and Safety Plan for Malcolm Pirnie employees at the site or visiting the site.
 - Coordinate with Ann Arbor's safety personnel during construction.
 - Coordinate with the Contractor's site safety officer during construction.

b. Project Controls:

- i. **Schedule Review and Analysis:** Provide base line and monthly reviews of Contractor schedule submittals to assure that they are in accordance with the contract documents, accurately depict the completed and remaining work, and the Owner's interests are protected throughout the review process. Evaluate the changes that have taken place throughout the contract and ensure that they are accurately and fairly reflected in the schedule submittals.
- ii. **Change Management:** Proactively manage the change order process to avoid changes whenever possible. Create electronic and hard copy logs and issue folders that track potential changes early and keep Ann Arbor informed through special meetings between Ann Arbor and Malcolm Pirnie. When a change is requested, Malcolm Pirnie will evaluate requests for changes for entitlement, evaluate contractor pricing when it is determined that there is entitlement, and negotiate changes with the Contractor. Throughout this entire process Malcolm Pirnie will keep the Owner informed of the pending changes and present financial and time impacts of the changes, make recommendations to Ann Arbor and work with Ann Arbor to obtain the necessary approvals throughout the process.

Malcolm Pirnie will immediately reject changes and claims that have no merit, Prepare change directives and change orders and prepare independent Engineer's estimates of the change/claim and negotiate the impacts of the change (time and/or costs) with Contractor.

All changes will be categorized using the following categories:

- Contractor convenience
- Contractor error
- Design error
- Design omission
- Differing site condition
- Latent site condition
- General conditions
- Labor problems
- Multiple resolution
- Owner request
- Quantity adjustment
- Regulatory mandated
- Safety requirement

iii. Contractor pay request process:

- Malcolm Pirnie will provide an initial review of the contractor Schedule of Value (SOV) submittal and work with the Owner and Contractor towards developing an SOV that is fair and protects the Owner's interests.
- On a monthly basis review the SOV with the Contractor and then with the Owner for the purpose of the monthly payment. Review the status of approved change orders and make sure their progress is also fairly reflected in the monthly payment.
- Malcolm Pirnie will meet in advance of the Contractor's official monthly pay estimate to review the Contractor's "pencil copy" a preliminary copy of what work the Contractor believes was completed. The pencil copy will be reviewed and differences in the contractor's estimate and the engineer's estimate will usually be resolved prior to recommendation to Ann Arbor for payment.

iv. Compliance with commercial terms: As part of the project controls effort it is necessary to review all aspects of the project for consistency with the schedule reviews, change management effort, and the contractor pay requests. In order to best protect the City of Ann Arbor's financial interests it is important that these project controls items are consistent with each other and that all letters, meeting minutes, RFI responses, submittal comments, and other written correspondence are also consistent with the project controls effort. To accomplish this coordination, the project controls lead will attend all project meetings and be responsible for either reviewing or drafting written correspondence on the project. The correspondence will also be reviewed for compliance with all aspects of the Division 0 and Division 1 documents.

2. Construction Field Services

Task Assumptions

- i. Includes time for the Project Engineer to supervise specific tasks that develop during construction requiring field investigation, documentation and field resolutions of construction issues. The Project Engineer will also serve as the RPR in the absence of RPR designated in Task 1.
- ii. Includes an on-site project inspector time for 100% of the five year duration with 10% OT. This task will be covered by a primary inspector who will be on-site for the majority of the time and a secondary inspector who will be on-site if two inspectors are required and if the primary inspector cannot be at the site.
- iii. Includes a document management clerk for an average of three days per week for four years.
- iv. Includes an Atwell LLC surveying crew and engineering support for general surveying for 60 days at a daily rate. When surveying cannot be scheduled for a full day, the 2009 Atwell, LLC Billing Rates (attached) will be used to determine payment for surveying services. Similarly, these billing rates will be used when engineering services are required for construction issues requiring Atwell's input. General surveying includes checks on the contractor's layout and surveying for issues that include dimensional or space conflicts requiring survey measurements for resolution.

a. Construction Field Services:

i. Maintenance of Plant Operations – Malcolm Pirnie will:

- Enforce the equipment shutdown requirements which are specified in the Contract Documents
- Coordinate project shutdowns with the plant staff and contractor
- Review Contractor's equipment shutdown requests
- Chair equipment shutdown meetings well in advance of actual shutdown.
- Startup, testing and operational demonstration period will be actively managed by Malcolm Pirnie. See Scope of Services Item Nos. 6 through 10

ii. Resident Engineering Inspection of the Work:

- Malcolm Pirnie will physically inspect construction activities every day that the contractor works – if the contractor is working on site, a Malcolm Pirnie staff member will be on-site to inspect and document the contractor's activities.
- Malcolm Pirnie will enforce the requirements of the Contract Documents
- Prepare Daily Reports
- Provide Written and Photographic/video documentation of the work as required to properly document the work
- Issue directives to the contractor in accordance with the communications plan
- Verify contractor's progress and monthly work quantities
- Proactively identify and report field conditions that prevent construction as originally planned.
- Monitor Contractor's material testing
- Prepare field orders

- A member of the field staff will accompany Ann Arbor Township inspectors during inspections of the Work and resolve Township issues related to stormwater management and soil erosion control.
 - Two of Malcolm Pirnie’s staff will be certified Stormwater inspectors.
 -
- iii. Document Management:
- Maintain electronic and hard copy of all project documents
 - Maintain access to all project data with mobile tablet technology
 - Create and keep logs of submittals, RFIs, issues, change directives and change orders, correspondence, progress photographs, minutes of all meetings, contractor’s material testing reports, punch lists for interim and final substantial completion and project schedule submittals.
 - All logs will be prepared by Malcolm Pirnie and serve as the official logs for the project.
 - The document management system data base “Contract Manager” will be searchable and available to Ann Arbor at any time.
 - Malcolm Pirnie will have a document management clerk at the site for an average of 3 days per week for a five year period.
- iv. Review and Evaluate Contractor Alternatives: Malcolm Pirnie will review and evaluate the contractor’s alternatives through the submittal process and by special meetings. The evaluation of alternatives will be based on the requirements of the contract documents. If the alternative has merit, Malcolm Pirnie will evaluate the time and cost impacts of the alternative and make recommendations to Ann Arbor.
- v. Environmental Services: Will be provided to enforce the Contract Documents with respect to the environmental hazards at the site including lead base paint removal, bird droppings abatement and removal, asbestos removal, contaminated soil removal and disposal, and pipeline and equipment content removal and disposal.
- vi. Surveying Services – Atwel LLC will provide field surveying for the project including the survey of the embankment for the FEMA LOMR, general surveying and as-built verification as required to check the contractor’s as-built surveying data.
- vii. Chair Project meetings and prepare and publish meeting minutes: Our team will take responsibility for organizing and conducting regular meetings and maintaining enough flexibility to adjust for changing conditions or scheduling conflicts.
- Meeting minutes will be electronically recorded, logged and issued to all attendees and stakeholders on a timely basis.
 - Meeting minutes and agendas will be prepared using a systematic numbering system so that incomplete business items remain a focus of each meeting.
 - Action items and ball-in-court designations will be identified for each new or old business item.
 - Meetings will include the following: Pre-construction meeting, Monthly/weekly Progress meetings, Monthly pay request meetings,

Equipment shutdown meetings, Claim negotiation meetings, special meetings as required.

3. Geotechnical Services:

Task Assumptions

- i. Includes a geotechnical engineer on-site for a minimum of one year over a five year period for the geotechnical engineering responsibilities listed in the scope. It is anticipated that most of the geotechnical services will be required over the first three years.
- ii. Includes a geotechnical technician for one year on an as-needed basis in the event additional inspection is required and for tasks that do not require a geotechnical engineer.
- iii. The assumed no. of residential wells that will need replacement or repair due to artesian dewatering is as follows: 10 wells replaced and 27 wells to be redeveloped between zones 1 (2,000 feet) and zone 2 (6,500 feet). The work associated with this work will be inspected by NTH.
- iv. The NTH Fee Schedule is attached to provide a breakdown of their fees per task.
- v. The east plant work will not require as-needed geotechnical engineering services

a. Geotechnical Services - NTH will provide the following geotechnical services during construction

- i. Geotechnical Construction Oversight
- ii. Review of geotechnical submittals and RFIs
- iii. West Plant As-Needed Geotechnical Assistance
- iv. Inspection of the installation of Geotechnical instrumentation
- v. Inspection of the installation of artesian groundwater pumping and monitoring wells
- vi. Reviewing Geotechnical instrumentation data collected by the contractor
- vii. Reviewing artesian groundwater data collected by the contractor
- viii. Residential well inspections during artesian groundwater monitoring
- ix. Inspection of foundation pier installation for the Administration Building
- x. Inspection of Temporary Earth Retentions Systems (TERS) throughout the site.
- xi. Design assistance during construction.
- xii. Material testing as required to spot check the contractor's testing sub-contractor.
- xiii. Residential well inspections and the inspection of residential well improvements and new residential well installations.

4. Construction Engineering Support

Task Assumptions

- i. Includes engineering support during the construction phase including: design support during construction, review of requests for information and submittal review. The costs associated with each engineering discipline are provided.

a. Construction Engineering Support

i. Design Team Support: Malcolm Pirnie will coordinate and schedule Design Team assistance throughout construction to minimize impacts to construction. Apart from the full time construction management staff, the project will require the services of the Malcolm Pirnie design team and sub-consultants from all of the design disciplines. Malcolm Pirnie will manage and coordinate this task from the field office with key design staff. Engineering support will be available on an as-needed basis for: modification of the design if required, design revisions due to unanticipated existing conditions, construction sequencing operations, site visits to resolve construction issues and special inspections. This task also includes shop drawing review and responses to RFIs, as detailed below.

ii. Shop Drawing Review and approval process:

- All submittals and shop drawings submitted by the contractor will be coordinated, reviewed and checked for conformance with the submittal requirements in the Contract Documents at the field level first. Shop drawings that do not require specific design discipline review will be reviewed in the field and returned to the contractor.
- Shop drawings requiring design clarification will be electronically routed to the design team for review and approval.
- Submittals requiring revisions will be returned directly to the contractor with the submittal deficiencies clearly defined and noted.
- A submittal log will be prepared and attached to the progress meeting minutes and available to the project team at any time.

iii. Response to Request for Information (RFIs) from the contractor:

- RFIs will be reviewed at the field level to determine if the RFI is already answered in the Contract Documents or if it will require design discipline review.
- If the RFI requires input from design team, it will be routed electronically to the design team member(s) responsible for providing the information requested.
- An RFI log will be prepared and attached to the progress meeting minutes and available to the project team at any time.
- All RFIs will be routed through the field office for completeness, as well as potential cost or schedule impacts prior to issuing the response to the contractor

5. As-built Drawing Preparation - Malcolm Pirnie will provide the following as-built services:

Task Assumptions

- i. Item 5b provides the scope and engineering fees to provide redline and CADD 2D as-built drawings of all new construction.

- ii. For 2D as-built drawings, the contractor will provide the surveying, approved shop drawings and other measurements required to develop the as-builts for the project.
- iii. Malcolm Pirnie's survey team, Atwell LLC will provide field verification as required of the contractor's survey work to check the work and to minimize survey errors. We have assumed 20 days of surveying for this task.
- iv. Malcolm Pirnie will prepare the as-builts in Auto-CADD Version 11.

a. 2D As-Built Drawing Preparation: Malcolm Pirnie will maintain a set of drawings that will serve as as-built drawings.

- i. These drawings will be redlined weekly to show changes in the contract drawings.
- ii. These drawings will be made to represent as-built construction, approved shop drawing reviews, substitutions, clarifications, and change order information.
- iii. Malcolm Pirnie will review the redlined set of drawings weekly to determine the accuracy and completeness of the information.
- iv. Malcolm Pirnie will transfer the redline information to a set of "Real-Time" as-built drawings monthly that are kept and maintained electronically.
- v. Malcolm Pirnie will provide the services of qualified personnel to prepare the "Real-Time" as-built drawings and provide supplemental field data as required.
- vi. Malcolm Pirnie will deliver CADD version 11 as-builts of the new completed work in CADD format without X-refs and PDF format for paper copies.
- vii. Malcolm Pirnie field staff will field verify as-built information prior to preparation of the electronic CADD files.
- viii. The responsibility for gathering as-built information will be the contractors.
- ix. Malcolm Pirnie will provide regular as-built survey services to spot check the contractor's as-built data on a monthly basis.
Malcolm Pirnie's Project Engineer will review and approve as-builts prior to finalization of the drawings and submittal to Ann Arbor.

6. Startup Planning

Task Assumptions

- i. Develop a high-level commissioning plan; similar for all the trains (see the scope below for content).
- ii. Startup coordination meetings organized and led by our on-site Startup and Operations Specialist.
- iii. Support from Pirnie design and process engineers

a. Startup Planning: Startup planning will begin several months before startup, with regular coordination meetings which become more frequent as startup gets closer. These meetings are separate from and in addition to construction progress meetings. The contract documents have specific startup planning and submittal requirements for the contractors, and these requirements will need to be closely tied in to our overall planning process. In addition,

startup related activities, including those mentioned above and below, will be planned and scheduled to ensure that they occur when needed. Startup planning activities will include:

- i. Conduct regular startup coordination meetings with Ann Arbor and contractors. Meetings will begin approximately 6 months prior to scheduled startup and continue throughout the startup period.
- ii. Facilitate small focus-group meetings as necessary for specific startup topics or issues (e.g., initial seeding, wastewater diversion planning).
- iii. Develop a draft Startup Plan and with updates to reflect modifications and decisions made by the Ann Arbor, Engineer, and contractors during the startup planning period.
- iv. Submit the final Startup Plan to the City documenting the final startup approach.

Startup Plan: On this project, we envision at a minimum the following elements to comprise the Startup Plan:

- Introduction and overview – a brief narrative of the facility startup and the startup process.
- Roles and responsibilities matrix – summarizes access and contact information, including the involvement of Ann Arbor staff and contractors, and any 3rd party involvement.
- Overall sequencing - defining how the individual unit processes will be brought on line, including testing, etc.
- Process startup plan- detailing how the biological process in particular will be started.
- Wastewater diversion plan – defining how and when the flows feeding the new facility will be introduced. This planning will require careful coordination with the Plant.
- Initial target process parameters – summarize based on the design and use for the startup and initial operating period.
- Training Plan – identifying the requirements and approach for planning and scheduling equipment, SCADA, and process and systems training.
- Equipment Status – develop and maintain a spreadsheet tool to track and summarize the status of the equipment checkout, testing, and overall readiness for startup and turnover.
- Process monitoring – develop or assemble sampling, testing, and process data collection forms.
- Relevant Contract Document – assemble specifications, process schematics, and other reference material.

7. Overall Process and Plant-Specific Systems Training

Task Assumptions

- i. Develop a brief 2 – 3 page plan to lay out the training, attendees, durations, etc.
- ii. Develop and deliver 3 separate training sessions timed throughout the construction.
- iii. We use PowerPoint, drawings and schematics as training aids and materials.

- iv. Each session will be approximately 2 – 3 hours and include field and classroom.
- v. Each session can be repeated 2 times and be delivered to accommodate the plant staff schedule including 24 hour days.

- a. **Overall Process and Plant-Specific Systems Training** - Just prior to bringing new systems and processes on-line, Malcolm Pirnie will provide a training session covering a general overview of the new systems and equipment, tying together the equipment-specific training provided by the vendors with the overall treatment process. The training will provide the background and theory on each of the new processes and systems, describe the system(s) and how all the elements work together, and identify new equipment coming on-line as part of the project.
 - i. This overview training will start out in the classroom and include visits to the installed equipment, and generally is scheduled for two-hour sessions that can be repeated.
 - ii. The training provided in this task, will be reinforced during the On-Site Startup Assistance, with emphasis on hands-on activities and the use of SOPs and troubleshooting guides developed in other tasks.
 - iii. Deliverables include:
 - Sign in sheets.
 - Reusable presentation materials including handouts and PowerPoint presentations that the staff can use to provide additional refresher training in the future.

8. On-site Startup Assistance:

Task Assumptions

- i. Assume our startup and operations specialist is on site for a total of 20 weeks for all six trains. Includes office and field support on engineering and process issues.

a. On-site Startup Assistance

- i. General - Malcolm Pirnie will provide on-site startup assistance to support the startup plan implementation and help transition the work from construction phase into operation. We will help to initially shake out the new systems, optimize the process, and troubleshoot issues that may arise during the startup and initial operating period. We will plan for and collect data necessary to demonstrate successful project implementation.
- ii. Startup Assistance - Startup activities will include conducting a walk-through with staff, assisting in initial startup, monitoring initial operation, and assisting to shake-out and troubleshoot the new systems as they are brought on-line.
- iii. Reinforce Training – Reinforce training using SOPs and other tools developed in other tasks.
- iv. Deliverables include:
 - Coordination meeting summaries.
 - Equipment status updated and maintained.
 - Completed process monitoring forms.

- Periodic summaries and updates to City staff.

9. Standard Operating Procedures (SOPs)

Task Assumptions

- Assume 20 SOPs
- Pre-identify the list of SOPs for development with Ann Arbor staff.
- Develop and turnover an SOP writing standard to enable Ann Arbor staff to develop additional SOPs.

a. Standard Operating Procedures

- During and following the start-up period, Malcolm Pirnie will develop SOPs. These SOPs will be simple, concise, site-specific procedures or guides designed for the operator to use in routine and understood operations. We would work with Ann Arbor staff to develop the list of SOPs that are required, and then develop the final format and presentation. The SOPs developed under this task will be incorporated into the overall plant O&M Manuals and can also be used as stand-alone SOPs.
- Deliverables Include:
 - SOP templates and writing standards.
 - Draft and Final SOPs in hardcopy and electronic format.

10. Operations and Maintenance Manuals:

Task Assumptions

- Assume 15 sections for the O&M.
- Summary of maintenance requirements.
- Provide MS Word and PDF versions of the O&M sections.

a. Plant-Wide O&M Manuals

- Development of the O&M Manual Content: Under this task, Malcolm Pirnie will develop overall O&M content for new or extensively modified treatment processes and systems that are part of the upgrade project. In each process section, we propose the following subsections:
- Purpose
 - Process/System Description and Theory
 - Design Criteria
 - Instrumentation and Controls
 - Operating Strategies and Routine Operation
 - Troubleshooting Operational Problems
 - References
- For each treatment process and system we are to develop, we will prepare draft O&M manual text, tables, and figures for delivery to the City. The relevant sections will be drafted to coincide with the startup period where possible. The draft manual sections along with other documentation will help support training and optimization

and allow us to incorporate lessons learned during the startup and initial operation of the new facilities into the manuals. Malcolm Pirnie will:

- iv. Provide an outline structure of the overall O&M manual prior to initiating work.
- v. Draft and incorporate O&M content
- vi. Summarize asset and maintenance requirements for the new equipment. Each item will identify:
 - Name of equipment item
 - Location
 - ID number
 - Manufacturer
 - Recommended routine maintenance schedule
 - Develop an overall process flow diagram.
- vii. Deliverables:
 - Draft O&M manual outline and sections and related content for the City of Ann Arbor review and comment.
 - Final O&M manual outline and sections for the City of Ann Arbor use.
 - Writing guidelines for the City of Ann Arbor designated writers.

11. Letter of Map Revision (LOMR):

Task Assumptions

- i. Malcolm Pirnie will prepare the LOMR application and associated tasks related to this application with the final deliverable being a corrected FIRM for the Ann Arbor WWTP.
- ii. Atwell LLC will provide surveying services

a. LOMR Application

- i. Malcolm Pirnie has made it a requirement that the embankment improvements must be one of the first activities the contractor completes in accordance with the Conditional Letter of Map Revision (CLOMR). Once this activity is completed, Malcolm Pirnie will prepare a LOMR to be submitted by Ann Arbor to FEMA. This work will include survey of the embankment and all of the required paper work for the LOMR application. Similar to the CLOMR application, Malcolm Pirnie will correspond with FEMA to obtain a LOMR from FEMA.

12. SRF Administration During Construction:

Task Assumptions

- i. Malcolm Pirnie will manage and administer the require documentation associated with SRF funding.

a. SRF Administration During Construction

- i. The following services are required during construction:

- Davis-Bacon Compliance Services During Construction:
 - review weekly prime contractor/sub-contractor payrolls
 - verify receipt of weekly signed Davis-Bacon certifications
 - conduct quarterly wage interviews with prime contractor
 - verify contractor fringe contributions
 - verify that prime and sub-contractors have registrations/certifications for apprentices and trainees
 - verify that ratio of apprentices and trainees meets ratio prescribed by US Department of Labor
 - verify that Davis-Bacon wage poster and wage rates are posted at site
 - Review certified payrolls (sub-consultant).
 - Coordinate/lead MDEQ SRF compliance related site visits.
 - MDEQ Record Keeping Requirements for SRF Projects
 - bid advertisement
 - bid opening
 - contract award / contract documents
 - contract addenda
 - documentation of Disadvantaged Business Enterprises (DBE)
 - change orders
 - engineering and vendor agreements
 - construction testing results
 - RPR daily logs
 - approved shop drawings
 - as built drawings
 - manufacturers manuals, warranties, and bonds
 - required permits
 - construction progress meeting reports
 - construction progress schedule and updated
 - Davis Bacon compliance related documents
 - all project correspondence
 - operation and maintenance manuals
 - initiation of operation notification to MDEQ
 - project accounting records
 - check that all punch list items have been completed for City certification
- ii. Prepare monthly draft/final disbursement requests for Ann Arbor review/signature and gather & review supporting documentation for each disbursement request.
 - iii. Prepare final disbursement request of eligible project costs.

13. Public Relations and Community Outreach

a. Public Relations and Community Outreach Scope

- i. Malcolm Pirnie will update the project web site on a regular schedule and at least 4 times per year.
- ii. Malcolm Pirnie will lead Community Outreach efforts such as site tours for students during construction, preparation of technical papers, presentations to the community and engineering organizations and societies, and possibly site tours and presentations to the Ann Arbor community that will benefit from this project.

14. Pre-Construction Design Services

- a. **Pre-Construction Design Services:** Malcolm Pirnie will incorporate the following elements into the design documents
 - i. Re-route dewatering drain lines in East Primary Building to the east splitter box so that drains flow to all four aeration tanks.
 - ii. Replace 42-inch sluice gates in Tertiary Filter Building so that the west plant can be drained.
 - iii. Repair/replace 42-inch influent gate at the south end of the UV facility
 - iv. Delete secondary water plant wide with the exception of the SHB and SHB SW loop
 - v. Include the removal of the skimmings structure located within the north portion of the UV structure.
 - vi. Repair main effluent gate to the river at the south end of the UV structure
 - vii. Prepare responses to bidder's questions and issue addendum.
 - viii. Assist in the preparation of the presentation to City council and attend the meeting.

EXHIBIT B
FEE SCHEDULE

Ann Arbor WWTP
 Facilities Renovations
 CONSTRUCTION PHASE SERVICES
 Attachment B - Engineering Fee Schedule

Item	Description	Names	Rates	Estimated Hours	Subtotals	Subs/ODCs	Sub/ODC Markup	Totals	Comments
1a	Project Management								
a	Project Management	Officer	\$ 247	200.0	\$ 49,368				
		Sr. Associate	\$ 235	9,360.0	\$ 2,195,856				
		Associate	\$ 207		\$ -				
		E6	\$ 167		\$ -				
		E5	\$ 138		\$ -				
		E4	\$ 121	60.0	\$ 7,283				
		E3	\$ 113		\$ -				
		E2	\$ 107		\$ -				
		E1	\$ 99		\$ -				
		S3	\$ 113		\$ -				
		T8	\$ 137		\$ -				
		T7	\$ 131		\$ -				
		T6	\$ 104		\$ -				
		A4	\$ 104		\$ -				
		T4	\$ 84		\$ -				
		T2	\$ 64		\$ -				
		T1	\$ 62		\$ -				
	Site visits, travel, lodging					\$ 35,000			
	Total Item 1a			9,620.0	\$ 2,252,507	\$ 35,000	\$ 1,750	\$ 2,289,257	

Ann Arbor WWTP
 Facilities Renovations
 CONSTRUCTION PHASE SERVICES
 Attachment B - Engineering Fee Schedule

Item	Description	Names	Rates	Estimated Hours	Subtotals	Subs/ODCs	Sub/ODC Markup	Totals	Comments
1b	Project Controls								
i.	Schedule Review and Analysis								
		Officer	\$ 247		\$ -				
		Sr. Associate	\$ 235		\$ -				
		Associate	\$ 207		\$ -				
		E6	\$ 167		\$ -				
		E5	\$ 138		\$ -				
		E4	\$ 121		\$ -				
		E3	\$ 113		\$ -				
		E2	\$ 107		\$ -				
		E1	\$ 99		\$ -				
		S3	\$ 113		\$ -				
		T8	\$ 137		\$ -				
		T7	\$ 131		\$ -				
		T6	\$ 104		\$ -				
		A4	\$ 104		\$ -				
		T4	\$ 84		\$ -				
		T2	\$ 64		\$ -				
		T1	\$ 62		\$ -				
	PMA Consultants					\$ 347,760			
	Total Item 1bi			0.0	\$ -	\$ 347,760	\$ 17,388	\$ 365,148	
1b	Project Controls								
ii.	Change Management								
		Officer	\$ 247		\$ -				
		Sr. Associate	\$ 235		\$ -				
		Associate	\$ 207		\$ -				
		E6	\$ 167		\$ -				
		E5	\$ 138		\$ -				
		E4	\$ 121		\$ -				
		E3	\$ 113		\$ -				
		E2	\$ 107		\$ -				
		E1	\$ 99		\$ -				
		S3	\$ 113		\$ -				
		T8	\$ 137		\$ -				
		T7	\$ 131		\$ -				
		T6	\$ 104		\$ -				
		A4	\$ 104		\$ -				
		T4	\$ 84		\$ -				
		T2	\$ 64		\$ -				
		T1	\$ 62		\$ -				
	PMA Consultants					\$ 209,760			
	Total Item 1bii			0.0	\$ -	\$ 209,760	\$ 10,488	\$ 220,248	

Ann Arbor WWTP
Facilities Renovations
CONSTRUCTION PHASE SERVICES
Attachment B - Engineering Fee Schedule

Item	Description	Names	Rates	Estimated Hours	Subtotals	Subs/ODCs	Sub/ODC Markup	Totals	Comments
1b	Project Controls								
iii.	Contractor Pay Request Process								
		Officer	\$ 247		\$ -				
		Sr. Associate	\$ 235		\$ -				
		Associate	\$ 207		\$ -				
		E6	\$ 167		\$ -				
		E5	\$ 138		\$ -				
		E4	\$ 121		\$ -				
		E3	\$ 113		\$ -				
		E2	\$ 107		\$ -				
		E1	\$ 99		\$ -				
		S3	\$ 113		\$ -				
		T8	\$ 137		\$ -				
		T7	\$ 131		\$ -				
		T6	\$ 104		\$ -				
		A4	\$ 104		\$ -				
		T4	\$ 84		\$ -				
		T2	\$ 64		\$ -				
		T1	\$ 62		\$ -				
	PMA Consultants					\$ 281,520			
	Total Item 1biii			0.0	\$ -	\$ 281,520	\$ 14,076	\$ 295,596	
1b	Project Controls								
iv.	Compliance with Commercial Terms								
		Officer	\$ 247		\$ -				
		Sr. Associate	\$ 235		\$ -				
		Associate	\$ 207		\$ -				
		E6	\$ 167		\$ -				
		E5	\$ 138		\$ -				
		E4	\$ 121		\$ -				
		E3	\$ 113		\$ -				
		E2	\$ 107		\$ -				
		E1	\$ 99		\$ -				
		S3	\$ 113		\$ -				
		T8	\$ 137		\$ -				
		T7	\$ 131		\$ -				
		T6	\$ 104		\$ -				
		A4	\$ 104		\$ -				
		T4	\$ 84		\$ -				
		T2	\$ 64		\$ -				
		T1	\$ 62		\$ -				
	PMA Consultants					\$ 287,040			
	Total Item 1biv			0.0	\$ -	\$ 287,040	\$ 14,352	\$ 301,392	
	Total Item 1b			0.0	\$ -	\$ 1,126,080	\$ 56,304	\$ 1,182,384	

Ann Arbor WWTP
 Facilities Renovations
 CONSTRUCTION PHASE SERVICES
 Attachment B - Engineering Fee Schedule

Item	Description	Names	Rates	Estimated Hours	Subtotals	Subs/ODCs	Sub/ODC Markup	Totals	Comments
2a	Construction Field Services								
		Officer	\$ 247		\$ -				
		Sr. Associate	\$ 235		\$ -				
		Associate	\$ 207	2,500.0	\$ 517,650				
		E6	\$ 167		\$ -				
		E5	\$ 138		\$ -				
		E4	\$ 121		\$ -				
		E3	\$ 113	11,440.0	\$ 1,295,237				
		E2	\$ 107		\$ -				
		E1	\$ 99		\$ -				
		S3	\$ 113		\$ -				
		T8	\$ 137		\$ -				
		T7	\$ 131		\$ -				
		T6	\$ 104		\$ -				
		A4	\$ 104		\$ -				
		T4	\$ 84		\$ -				
		T2	\$ 64		\$ -				
		A2	\$ 62	4,992.0	\$ 310,602				
	MPI Field Equipment and Supplies					\$ 10,000			
	Atwell, LLC; general construction (1 day/month * 60 months @ 2,525 daily rate)					\$ 151,500			
	Total Item 2a			18,932.0	\$ 2,123,489	\$ 161,500	\$ 8,075	\$ 2,293,064	

Ann Arbor WWTP
Facilities Renovations
CONSTRUCTION PHASE SERVICES
Attachment B - Engineering Fee Schedule

Item	Description	Names	Rates	Estimated Hours	Subtotals	Subs/ODCs	Sub/ODC Markup	Totals	Comments
4ai	Construction Engineering Support - Summary								
i	Design Team Support								
		Officer	\$ 247		\$ -				
		Sr. Associate	\$ 235	16.0	\$ 3,754				
		Associate	\$ 207	1,104.0	\$ 228,594				
		E6	\$ 167	614.0	\$ 102,710				
		E5	\$ 138		\$ -				
		E4	\$ 121	976.0	\$ 118,467				
		E3	\$ 113	420.0	\$ 47,552				
		E2	\$ 107		\$ -				
		E1	\$ 99		\$ -				
		S3	\$ 113		\$ -				
		T8	\$ 137	40.0	\$ 5,467				
		T7	\$ 131		\$ -				
		T6	\$ 104	64.0	\$ 6,659				
		A4	\$ 104		\$ -				
		T4	\$ 84		\$ -				
		T2	\$ 64		\$ -				
		T1	\$ 62		\$ -				
	Expenses					\$ 30,500			
	Total Item 4ai			3,234.0	\$ 513,203	\$ 30,500	\$ 1,525	\$ 545,228	
4aai	Construction Engineering Support - Summary								
ii	Shop Drawing Review and Approval Process								
		Officer	\$ 247		\$ -				
		Sr. Associate	\$ 235	48.0	\$ 11,261				
		Associate	\$ 207	695.0	\$ 143,907				
		E6	\$ 167	1,525.5	\$ 255,186				
		E5	\$ 138	400.0	\$ 55,080				
		E4	\$ 121	3,967.5	\$ 481,575				
		E3	\$ 113	228.0	\$ 25,814				
		E2	\$ 107	676.0	\$ 72,400				
		E1	\$ 99		\$ -				
		S3	\$ 113		\$ -				
		T8	\$ 137	64.0	\$ 8,748				
		T7	\$ 131		\$ -				
		T6	\$ 104	284.0	\$ 29,547				
		A4	\$ 104		\$ -				
		T4	\$ 84		\$ -				
		T2	\$ 64	60.0	\$ 3,856				
		T1	\$ 62		\$ -				
	Total Item 4aai			7,948.0	\$ 1,087,373	\$ -	\$ -	\$ 1,087,373	

Ann Arbor WWTP
Facilities Renovations
CONSTRUCTION PHASE SERVICES
Attachment B - Engineering Fee Schedule

Item	Description	Names	Rates	Estimated Hours	Subtotals	Subs/ODCs	Sub/ODC Markup	Totals	Comments
4aiii	Construction Engineering Support - Summary								
iii	Response to Requests for Information (RFIs) from the Contractor								
		Officer	\$ 247		\$ -				
		Sr. Associate	\$ 235	18.0	\$ 4,223				
		Associate	\$ 207	827.5	\$ 171,342				
		E6	\$ 167	459.0	\$ 76,782				
		E5	\$ 138		\$ -				
		E4	\$ 121	1,528.5	\$ 185,529				
		E3	\$ 113	160.0	\$ 18,115				
		E2	\$ 107	400.0	\$ 42,840				
		E1	\$ 99		\$ -				
		S3	\$ 113		\$ -				
		T8	\$ 137	108.0	\$ 14,761				
		T7	\$ 131		\$ -				
		T6	\$ 104	80.0	\$ 8,323				
		A4	\$ 104		\$ -				
		T4	\$ 84		\$ -				
		T2	\$ 64	60.0	\$ 3,856				
		T1	\$ 62		\$ -				
	Total Item 4aiii			3,641.0	\$ 525,771	\$ -	\$ -	\$ 525,771	
	Total Item 4			14,823.0	\$ 2,126,347	\$ 30,500	\$ 1,525	\$ 2,158,372	

Ann Arbor WWTP
 Facilities Renovations
 CONSTRUCTION PHASE SERVICES
 Attachment B - Engineering Fee Schedule

Item	Description	Names	Rates	Estimated Hours	Subtotals	Subs/ODCs	Sub/ODC Markup	Totals	Comments
4a1iii	Construction Engineering Support - Environmental								
iii	Response to Requests for Information (RFIs) from the Contractor								
		Officer	\$ 247		\$ -				
		Sr. Associate	\$ 235		\$ -				
		Associate	\$ 207	120.0	\$ 24,847				
		E6	\$ 167		\$ -				
		E5	\$ 138		\$ -				
		E4	\$ 121		\$ -				
		E3	\$ 113		\$ -				
		E2	\$ 107		\$ -				
		E1	\$ 99		\$ -				
		S3	\$ 113		\$ -				
		T8	\$ 137		\$ -				
		T7	\$ 131		\$ -				
		T6	\$ 104		\$ -				
		A4	\$ 104		\$ -				
		T4	\$ 84		\$ -				
		T2	\$ 64		\$ -				
		T1	\$ 62		\$ -				
	Total Item 4a1iii			120.0	\$ 24,847	\$ -	\$ -	\$ 24,847	
	Total Item 4			620.0	\$ 128,377	\$ -	\$ -	\$ 128,377	

Ann Arbor WWTP
 Facilities Renovations
 CONSTRUCTION PHASE SERVICES
 Attachment B - Engineering Fee Schedule

Item	Description	Names	Rates	Estimated Hours	Subtotals	Subs/ODCs	Sub/ODC Markup	Totals	Comments
4a2iii	Construction Engineering Support - Civil/Process/Mechanical								
iii	Response to Requests for Information (RFIs) from the Contractor								
		Officer	\$ 247		\$ -				
		Sr. Associate	\$ 235		\$ -				
		Associate	\$ 207	450.0	\$ 93,177				
		E6	\$ 167		\$ -				
		E5	\$ 138		\$ -				
		E4	\$ 121	1,000.0	\$ 121,380				
		E3	\$ 113		\$ -				
		E2	\$ 107	400.0	\$ 42,840				
		E1	\$ 99		\$ -				
		S3	\$ 113		\$ -				
		T8	\$ 137		\$ -				
		T7	\$ 131		\$ -				
		T6	\$ 104		\$ -				
		A4	\$ 104		\$ -				
		T4	\$ 84		\$ -				
		T2	\$ 64		\$ -				
		T1	\$ 62		\$ -				
	Total Item 4a2iii			1,850.0	\$ 257,397	\$ -	\$ -	\$ 257,397	
	Total Item 4			5,044.0	\$ 724,539	\$ -	\$ -	\$ 724,539	

Ann Arbor WWTP
Facilities Renovations
CONSTRUCTION PHASE SERVICES
Attachment B - Engineering Fee Schedule

Item	Description	Names	Rates	Estimated Hours	Subtotals	Subs/ODCs	Sub/ODC Markup	Totals	Comments
4a3i	Construction Engineering Support - Structural								
i	Coordination with Design Team								
		Officer	\$ 247		\$ -				
		Sr. Associate	\$ 235	8.0	\$ 1,877				
		Associate	\$ 207		\$ -				
		E6	\$ 167	184.0	\$ 30,780				
		E5	\$ 138		\$ -				
		E4	\$ 121		\$ -				
		E3	\$ 113		\$ -				
		E2	\$ 107		\$ -				
		E1	\$ 99		\$ -				
		S3	\$ 113		\$ -				
		T8	\$ 137		\$ -				
		T7	\$ 131		\$ -				
		T6	\$ 104		\$ -				
		A4	\$ 104		\$ -				
		T4	\$ 84		\$ -				
		T2	\$ 64		\$ -				
		T1	\$ 62		\$ -				
	Expenses					\$ 5,000			
	Total Item 4a3i			192.0	\$ 32,656	\$ 5,000	\$ 250	\$ 37,906	
4a3ii	Construction Engineering Support - Structural								
ii	Shop Drawing Review and Approval Process								
		Officer	\$ 247		\$ -				
		Sr. Associate	\$ 235	32.0	\$ 7,507				
		Associate	\$ 207		\$ -				
		E6	\$ 167	412.0	\$ 68,919				
		E5	\$ 138	400.0	\$ 55,080				
		E4	\$ 121	100.0	\$ 12,138				
		E3	\$ 113		\$ -				
		E2	\$ 107		\$ -				
		E1	\$ 99		\$ -				
		S3	\$ 113		\$ -				
		T8	\$ 137		\$ -				
		T7	\$ 131		\$ -				
		T6	\$ 104	100.0	\$ 10,404				
		A4	\$ 104		\$ -				
		T4	\$ 84		\$ -				
		T2	\$ 64		\$ -				
		T1	\$ 62		\$ -				
	Total Item 4a3ii			1,044.0	\$ 154,049	\$ -	\$ -	\$ 154,049	

Ann Arbor WWTP
 Facilities Renovations
 CONSTRUCTION PHASE SERVICES
 Attachment B - Engineering Fee Schedule

Item	Description	Names	Rates	Estimated Hours	Subtotals	Subs/ODCs	Sub/ODC Markup	Totals	Comments
4a3iii	Construction Engineering Support - Structural								
iii	Response to Requests for Information (RFIs) from the Contractor								
		Officer	\$ 247		\$ -				
		Sr. Associate	\$ 235	10.0	\$ 2,346				
		Associate	\$ 207		\$ -				
		E6	\$ 167	182.0	\$ 30,445				
		E5	\$ 138		\$ -				
		E4	\$ 121		\$ -				
		E3	\$ 113		\$ -				
		E2	\$ 107		\$ -				
		E1	\$ 99		\$ -				
		S3	\$ 113		\$ -				
		T8	\$ 137		\$ -				
		T7	\$ 131		\$ -				
		T6	\$ 104	8.0	\$ 832				
		A4	\$ 104		\$ -				
		T4	\$ 84		\$ -				
		T2	\$ 64		\$ -				
		T1	\$ 62		\$ -				
	Total Item 4a3iii			200.0	\$ 33,623	\$ -	\$ -	\$ 33,623	
	Total Item 4			1,436.0	\$ 220,328	\$ 5,000	\$ 250	\$ 225,578	

Ann Arbor WWTP
Facilities Renovations
CONSTRUCTION PHASE SERVICES
Attachment B - Engineering Fee Schedule

Item	Description	Names	Rates	Estimated Hours	Subtotals	Subs/ODCs	Sub/ODC Markup	Totals	Comments
4a4i	Construction Engineering Support - Architectural								
i	Coordination with Design Team								
		Officer	\$ 247		\$ -				
		Sr. Associate	\$ 235	8.0	\$ 1,877				
		Associate	\$ 207		\$ -				
		E6	\$ 167		\$ -				
		E5	\$ 138		\$ -				
		E4	\$ 121		\$ -				
		E3	\$ 113		\$ -				
		E2	\$ 107		\$ -				
		E1	\$ 99		\$ -				
		S3	\$ 113		\$ -				
		T8	\$ 137	40.0	\$ 5,467				
		T7	\$ 131		\$ -				
		T6	\$ 104		\$ -				
		A4	\$ 104		\$ -				
		T4	\$ 84		\$ -				
		T2	\$ 64		\$ -				
		T1	\$ 62		\$ -				
	Expenses					\$ 2,500			
	Total Item 4a4i			48.0	\$ 7,344	\$ 2,500	\$ 125	\$ 9,969	
4a4ii	Construction Engineering Support - Architectural								
ii	Shop Drawing Review and Approval Process								
		Officer	\$ 247		\$ -				
		Sr. Associate	\$ 235	16.0	\$ 3,754				
		Associate	\$ 207		\$ -				
		E6	\$ 167		\$ -				
		E5	\$ 138		\$ -				
		E4	\$ 121		\$ -				
		E3	\$ 113		\$ -				
		E2	\$ 107		\$ -				
		E1	\$ 99		\$ -				
		S3	\$ 113		\$ -				
		T8	\$ 137	64.0	\$ 8,748				
		T7	\$ 131		\$ -				
		T6	\$ 104		\$ -				
		A4	\$ 104		\$ -				
		T4	\$ 84		\$ -				
		T2	\$ 64	60.0	\$ 3,856				
		T1	\$ 62		\$ -				
	Total Item 4a4ii			140.0	\$ 16,357	\$ -	\$ -	\$ 16,357	

Ann Arbor WWTP
Facilities Renovations
CONSTRUCTION PHASE SERVICES
Attachment B - Engineering Fee Schedule

Item	Description	Names	Rates	Estimated Hours	Subtotals	Subs/ODCs	Sub/ODC Markup	Totals	Comments
4a5i	Construction Engineering Support - HVAC								
i	Coordination with Design Team								
		Officer	\$ 247		\$ -				
		Sr. Associate	\$ 235		\$ -				
		Associate	\$ 207		\$ -				
		E6	\$ 167	20.0	\$ 3,346				
		E5	\$ 138		\$ -				
		E4	\$ 121	52.0	\$ 6,312				
		E3	\$ 113		\$ -				
		E2	\$ 107		\$ -				
		E1	\$ 99		\$ -				
		S3	\$ 113		\$ -				
		T8	\$ 137		\$ -				
		T7	\$ 131		\$ -				
		T6	\$ 104		\$ -				
		A4	\$ 104		\$ -				
		T4	\$ 84		\$ -				
		T2	\$ 64		\$ -				
		T1	\$ 62		\$ -				
	Expenses					\$ 3,000			
	Total Item 4a5i			72.0	\$ 9,657	\$ 3,000	\$ 150	\$ 12,807	
4a5ii	Construction Engineering Support - HVAC								
ii	Shop Drawing Review and Approval Process								
		Officer	\$ 247		\$ -				
		Sr. Associate	\$ 235		\$ -				
		Associate	\$ 207		\$ -				
		E6	\$ 167	120.0	\$ 20,074				
		E5	\$ 138		\$ -				
		E4	\$ 121	420.0	\$ 50,980				
		E3	\$ 113		\$ -				
		E2	\$ 107		\$ -				
		E1	\$ 99		\$ -				
		S3	\$ 113		\$ -				
		T8	\$ 137		\$ -				
		T7	\$ 131		\$ -				
		T6	\$ 104		\$ -				
		A4	\$ 104		\$ -				
		T4	\$ 84		\$ -				
		T2	\$ 64		\$ -				
		T1	\$ 62		\$ -				
	Total Item 4a5ii			540.0	\$ 71,053	\$ -	\$ -	\$ 71,053	

Ann Arbor WWTP
Facilities Renovations
CONSTRUCTION PHASE SERVICES
Attachment B - Engineering Fee Schedule

Item	Description	Names	Rates	Estimated Hours	Subtotals	Subs/ODCs	Sub/ODC Markup	Totals	Comments
4a5iii	Construction Engineering Support - HVAC								
iii	Response to Requests for Information (RFIs) from the Contractor								
		Officer	\$ 247		\$ -				
		Sr. Associate	\$ 235		\$ -				
		Associate	\$ 207		\$ -				
		E6	\$ 167	24.0	\$ 4,015				
		E5	\$ 138		\$ -				
		E4	\$ 121	56.0	\$ 6,797				
		E3	\$ 113		\$ -				
		E2	\$ 107		\$ -				
		E1	\$ 99		\$ -				
		S3	\$ 113		\$ -				
		T8	\$ 137		\$ -				
		T7	\$ 131		\$ -				
		T6	\$ 104		\$ -				
		A4	\$ 104		\$ -				
		T4	\$ 84		\$ -				
		T2	\$ 64		\$ -				
		T1	\$ 62		\$ -				
	Total Item 4a5iii			80.0	\$ 10,812	\$ -	\$ -	\$ 10,812	
	Total Item 4			692.0	\$ 91,523	\$ 3,000	\$ 150	\$ 94,673	

Ann Arbor WWTP
 Facilities Renovations
 CONSTRUCTION PHASE SERVICES
 Attachment B - Engineering Fee Schedule

Item	Description	Names	Rates	Estimated Hours	Subtotals	Subs/ODCs	Sub/ODC Markup	Totals	Comments
4a6i	Construction Engineering Support - Plumbing								
i	Coordination with Design Team								
		Officer	\$ 247		\$ -				
		Sr. Associate	\$ 235		\$ -				
		Associate	\$ 207		\$ -				
		E6	\$ 167	8.0	\$ 1,338				
		E5	\$ 138		\$ -				
		E4	\$ 121		\$ -				
		E3	\$ 113		\$ -				
		E2	\$ 107		\$ -				
		E1	\$ 99		\$ -				
		S3	\$ 113		\$ -				
		T8	\$ 137		\$ -				
		T7	\$ 131		\$ -				
		T6	\$ 104	64.0	\$ 6,659				
		A4	\$ 104		\$ -				
		T4	\$ 84		\$ -				
		T2	\$ 64		\$ -				
		T1	\$ 62		\$ -				
	Total Item 4a6i			72.0	\$ 7,997	\$ -	\$ -	\$ 7,997	
4a6ii	Construction Engineering Support - Plumbing								
ii	Shop Drawing Review and Approval Process								
		Officer	\$ 247		\$ -				
		Sr. Associate	\$ 235		\$ -				
		Associate	\$ 207		\$ -				
		E6	\$ 167	24.0	\$ 4,015				
		E5	\$ 138		\$ -				
		E4	\$ 121		\$ -				
		E3	\$ 113		\$ -				
		E2	\$ 107		\$ -				
		E1	\$ 99		\$ -				
		S3	\$ 113		\$ -				
		T8	\$ 137		\$ -				
		T7	\$ 131		\$ -				
		T6	\$ 104	184.0	\$ 19,143				
		A4	\$ 104		\$ -				
		T4	\$ 84		\$ -				
		T2	\$ 64		\$ -				
		T1	\$ 62		\$ -				
	Total Item 4a6ii			208.0	\$ 23,158	\$ -	\$ -	\$ 23,158	

Ann Arbor WWTP
 Facilities Renovations
 CONSTRUCTION PHASE SERVICES
 Attachment B - Engineering Fee Schedule

Item	Description	Names	Rates	Estimated Hours	Subtotals	Subs/ODCs	Sub/ODC Markup	Totals	Comments
4a6iii	Construction Engineering Support - Plumbing								
iii	Response to Requests for Information (RFIs) from the Contractor								
		Officer	\$ 247		\$ -				
		Sr. Associate	\$ 235		\$ -				
		Associate	\$ 207		\$ -				
		E6	\$ 167	8.0	\$ 1,338				
		E5	\$ 138		\$ -				
		E4	\$ 121		\$ -				
		E3	\$ 113		\$ -				
		E2	\$ 107		\$ -				
		E1	\$ 99		\$ -				
		S3	\$ 113		\$ -				
		T8	\$ 137		\$ -				
		T7	\$ 131		\$ -				
		T6	\$ 104	72.0	\$ 7,491				
		A4	\$ 104		\$ -				
		T4	\$ 84		\$ -				
		T2	\$ 64		\$ -				
		T1	\$ 62		\$ -				
	Total Item 4a6iii			80.0	\$ 8,829	\$ -	\$ -	\$ 8,829	
	Total Item 4			360.0	\$ 39,984	\$ -	\$ -	\$ 39,984	

Ann Arbor WWTP
Facilities Renovations
CONSTRUCTION PHASE SERVICES
Attachment B - Engineering Fee Schedule

Item	Description	Names	Rates	Estimated Hours	Subtotals	Subs/ODCs	Sub/ODC Markup	Totals	Comments
4a7i	Construction Engineering Support - Electrical								
i	Coordination with Design Team								
		Officer	\$ 247		\$ -				
		Sr. Associate	\$ 235		\$ -				
		Associate	\$ 207		\$ -				
		E6	\$ 167	402.0	\$ 67,247				
		E5	\$ 138		\$ -				
		E4	\$ 121	798.0	\$ 96,861				
		E3	\$ 113		\$ -				
		E2	\$ 107		\$ -				
		E1	\$ 99		\$ -				
		S3	\$ 113		\$ -				
		T8	\$ 137		\$ -				
		T7	\$ 131		\$ -				
		T6	\$ 104		\$ -				
		A4	\$ 104		\$ -				
		T4	\$ 84		\$ -				
		T2	\$ 64		\$ -				
		T1	\$ 62		\$ -				
	Expenses					\$ 20,000			
	Total Item 4a7i			1,200.0	\$ 164,108	\$ 20,000	\$ 1,000	\$ 185,108	
4a7ii	Construction Engineering Support - Electrical								
ii	Shop Drawing Review and Approval Process								
		Officer	\$ 247		\$ -				
		Sr. Associate	\$ 235		\$ -				
		Associate	\$ 207	75.0	\$ 15,530				
		E6	\$ 167	769.5	\$ 128,722				
		E5	\$ 138		\$ -				
		E4	\$ 121	2,095.5	\$ 254,352				
		E3	\$ 113		\$ -				
		E2	\$ 107		\$ -				
		E1	\$ 99		\$ -				
		S3	\$ 113		\$ -				
		T8	\$ 137		\$ -				
		T7	\$ 131		\$ -				
		T6	\$ 104		\$ -				
		A4	\$ 104		\$ -				
		T4	\$ 84		\$ -				
		T2	\$ 64		\$ -				
		T1	\$ 62		\$ -				
	Total Item 4a7ii			2,940.0	\$ 398,603	\$ -	\$ -	\$ 398,603	

Ann Arbor WWTP
 Facilities Renovations
 CONSTRUCTION PHASE SERVICES
 Attachment B - Engineering Fee Schedule

Item	Description	Names	Rates	Estimated Hours	Subtotals	Subs/ODCs	Sub/ODC Markup	Totals	Comments
4a7iii	Construction Engineering Support - Electrical								
iii	Response to Requests for Information (RFIs) from the Contractor								
		Officer	\$ 247		\$ -				
		Sr. Associate	\$ 235		\$ -				
		Associate	\$ 207	37.5	\$ 7,765				
		E6	\$ 167	165.0	\$ 27,601				
		E5	\$ 138		\$ -				
		E4	\$ 121	472.5	\$ 57,352				
		E3	\$ 113		\$ -				
		E2	\$ 107		\$ -				
		E1	\$ 99		\$ -				
		S3	\$ 113		\$ -				
		T8	\$ 137		\$ -				
		T7	\$ 131		\$ -				
		T6	\$ 104		\$ -				
		A4	\$ 104		\$ -				
		T4	\$ 84		\$ -				
		T2	\$ 64		\$ -				
		T1	\$ 62		\$ -				
	Total Item 4a7iii			675.0	\$ 92,718	\$ -	\$ -	\$ 92,718	
	Total Item 4			4,815.0	\$ 655,429	\$ 20,000	\$ 1,000	\$ 676,429	

Ann Arbor WWTP
 Facilities Renovations
CONSTRUCTION PHASE SERVICES
 Attachment B - Engineering Fee Schedule

Item	Description	Names	Rates	Estimated Hours	Subtotals	Subs/ODCs	Sub/ODC Markup	Totals	Comments
4a8i	Construction Engineering Support - I&C								
i	Coordination with Design Team								
		Officer	\$ 247		\$ -				
		Sr. Associate	\$ 235		\$ -				
		Associate	\$ 207	104.0	\$ 21,534				
		E6	\$ 167		\$ -				
		E5	\$ 138		\$ -				
		E4	\$ 121		\$ -				
		E3	\$ 113	420.0	\$ 47,552				
		E2	\$ 107		\$ -				
		E1	\$ 99		\$ -				
		S3	\$ 113		\$ -				
		T8	\$ 137		\$ -				
		T7	\$ 131		\$ -				
		T6	\$ 104		\$ -				
		A4	\$ 104		\$ -				
		T4	\$ 84		\$ -				
		T2	\$ 64		\$ -				
		T1	\$ 62		\$ -				
	Total Item 4a8i			524.0	\$ 69,087	\$ -	\$ -	\$ 69,087	
4a8ii	Construction Engineering Support - I&C								
ii	Shop Drawing Review and Approval Process								
		Officer	\$ 247		\$ -				
		Sr. Associate	\$ 235		\$ -				
		Associate	\$ 207	80.0	\$ 16,565				
		E6	\$ 167	200.0	\$ 33,456				
		E5	\$ 138		\$ -				
		E4	\$ 121		\$ -				
		E3	\$ 113	228.0	\$ 25,814				
		E2	\$ 107		\$ -				
		E1	\$ 99		\$ -				
		S3	\$ 113		\$ -				
		T8	\$ 137		\$ -				
		T7	\$ 131		\$ -				
		T6	\$ 104		\$ -				
		A4	\$ 104		\$ -				
		T4	\$ 84		\$ -				
		T2	\$ 64		\$ -				
		T1	\$ 62		\$ -				
	Total Item 4a8ii			508.0	\$ 75,835	\$ -	\$ -	\$ 75,835	

Ann Arbor WWTP
 Facilities Renovations
 CONSTRUCTION PHASE SERVICES
 Attachment B - Engineering Fee Schedule

Item	Description	Names	Rates	Estimated Hours	Subtotals	Subs/ODCs	Sub/ODC Markup	Totals	Comments
5a	2D As-Built Drawing Preparation								
	On-going as-built documentation								
		Officer	\$ 247		\$ -				
		Sr. Associate	\$ 235		\$ -				
		Associate	\$ 207	430.0	\$ 89,036				
		E6	\$ 167		\$ -				
		E5	\$ 138		\$ -				
		E4	\$ 121		\$ -				
		E3	\$ 113		\$ -				
		E2	\$ 107	340.0	\$ 36,414				
		E1	\$ 99		\$ -				
		S3	\$ 113		\$ -				
		T8	\$ 137		\$ -				
		T7	\$ 131		\$ -				
		T6	\$ 104		\$ -				
		A4	\$ 104		\$ -				
		T4	\$ 84	1,200.0	\$ 100,368				
		T2	\$ 64		\$ -				
		T1	\$ 62		\$ -				
	Atwell, LLC; As-built documentation (2 people * 20 days @ 2,525 daily rate)					\$ 50,500			
	Total Item 5a			1,970.0	\$ 225,818	\$ 50,500	\$ 2,525	\$ 278,843	

Ann Arbor WWTP
 Facilities Renovations
 CONSTRUCTION PHASE SERVICES
 Attachment B - Engineering Fee Schedule

Item	Description	Names	Rates	Estimated Hours	Subtotals	Subs/ODCs	Sub/ODC Markup	Totals	Comments
6a	Start-up Planning								
		Officer	\$ 247		\$ -				
	For scope see Attachment A, Task 6 - Start-up Planning	Sr. Associate	\$ 235	80.0	\$ 18,768				
		Associate	\$ 207	160.0	\$ 33,130				
		E6	\$ 167	200.0	\$ 33,456				
		E5	\$ 138		\$ -				
		E4	\$ 121		\$ -				
		E3	\$ 113		\$ -				
		E2	\$ 107		\$ -				
		E1	\$ 99		\$ -				
		S3	\$ 113		\$ -				
		T8	\$ 137	480.0	\$ 65,606				
		T7	\$ 131		\$ -				
		T6	\$ 104		\$ -				
		A4	\$ 104		\$ -				
		T4	\$ 84		\$ -				
		T2	\$ 64		\$ -				
		T1	\$ 62		\$ -				
	Expenses					\$ 15,000			
	Total Item 6a			920.0	\$ 150,960	\$ 15,000	\$ 750	\$ 166,710	

Ann Arbor WWTP
 Facilities Renovations
 CONSTRUCTION PHASE SERVICES
 Attachment B - Engineering Fee Schedule

Item	Description	Names	Rates	Estimated Hours	Subtotals	Subs/ODCs	Sub/ODC Markup	Totals	Comments
7a	Overall Process and Plant-Specific Systems Training								
		Officer	\$ 247		\$ -				
	For scope see Attachment A, Task 7 - Overall Process and Plant-Specific Systems Training	Sr. Associate	\$ 235	80.0	\$ 18,768				
		Associate	\$ 207		\$ -				
		E6	\$ 167	160.0	\$ 26,765				
		E5	\$ 138		\$ -				
		E4	\$ 121		\$ -				
		E3	\$ 113		\$ -				
		E2	\$ 107		\$ -				
		E1	\$ 99		\$ -				
		S3	\$ 113		\$ -				
		T8	\$ 137	480.0	\$ 65,606				
		T7	\$ 131		\$ -				
		T6	\$ 104		\$ -				
		A4	\$ 104		\$ -				
		T4	\$ 84		\$ -				
		T2	\$ 64		\$ -				
		T1	\$ 62		\$ -				
	Expenses					\$ 2,000			
	Total Item 7a			720.0	\$ 111,139	\$ 2,000	\$ 100	\$ 113,239	

Ann Arbor WWTP
 Facilities Renovations
 CONSTRUCTION PHASE SERVICES
 Attachment B - Engineering Fee Schedule

Item	Description	Names	Rates	Estimated Hours	Subtotals	Subs/ODCs	Sub/ODC Markup	Totals	Comments
8a	On-site Startup Assistance								
		Officer	\$ 247		\$ -				
	For scope see Attachment A, Task 8 - On-site Startup Assistance	Sr. Associate	\$ 235	160.0	\$ 37,536				
		Associate	\$ 207	160.0	\$ 33,130				
		E6	\$ 167	80.0	\$ 13,382				
		E5	\$ 138		\$ -				
		E4	\$ 121		\$ -				
		E3	\$ 113		\$ -				
		E2	\$ 107		\$ -				
		E1	\$ 99		\$ -				
		S3	\$ 113		\$ -				
		T8	\$ 137	1,000.0	\$ 136,680				
		T7	\$ 131		\$ -				
		T6	\$ 104		\$ -				
		A4	\$ 104		\$ -				
		T4	\$ 84		\$ -				
		T2	\$ 64		\$ -				
		T1	\$ 62		\$ -				
	Expenses					\$ 20,000			
	Total Item 8a			1,400.0	\$ 220,728	\$ 20,000	\$ 1,000	\$ 241,728	

Ann Arbor WWTP
Facilities Renovations
CONSTRUCTION PHASE SERVICES
Attachment B - Engineering Fee Schedule

Item	Description	Names	Rates	Estimated Hours	Subtotals	Subs/ODCs	Sub/ODC Markup	Totals	Comments
10	Operations and Maintenance Manuals								
ai	Development of the O&M manual content								
		Officer	\$ 247		\$ -				
	For scope see Attachment A, Task 10 - Operations and Maintenance Manuals	Sr. Associate	\$ 235	80.0	\$ 18,768				
		Associate	\$ 207	80.0	\$ 16,565				
		E6	\$ 167	160.0	\$ 26,765				
		E5	\$ 138		\$ -				
		E4	\$ 121	1,500.0	\$ 182,070				
		E3	\$ 113		\$ -				
		E2	\$ 107		\$ -				
		E1	\$ 99		\$ -				
		S3	\$ 113		\$ -				
		T8	\$ 137	160.0	\$ 21,869				
		T7	\$ 131		\$ -				
		T6	\$ 104		\$ -				
		A4	\$ 104		\$ -				
		T4	\$ 84		\$ -				
		T2	\$ 64		\$ -				
		T1	\$ 62		\$ -				
	Expenses					\$ 5,000			
	Total Item 10			1,980.0	\$ 266,036	\$ 5,000	\$ 250	\$ 271,286	

Ann Arbor WWTP
 Facilities Renovations
 CONSTRUCTION PHASE SERVICES
 Attachment B - Engineering Fee Schedule

Item	Description	Names	Rates	Estimated Hours	Subtotals	Subs/ODCs	Sub/ODC Markup	Totals	Comments
11	Letter of Map Revision (LOMR)								
a	LOMR Application	Officer	\$ 247	8.0	\$ 1,975				
		Sr. Associate	\$ 235	56.0	\$ 13,138				
		Associate	\$ 207	380.0	\$ 78,683				
		E6	\$ 167	240.0	\$ 40,147				
		E5	\$ 138		\$ -				
		E4	\$ 121		\$ -				
		E3	\$ 113	204.0	\$ 23,097				
		E2	\$ 107		\$ -				
		E1	\$ 99		\$ -				
		S3	\$ 113		\$ -				
		T8	\$ 137		\$ -				
		T7	\$ 131		\$ -				
		T6	\$ 104		\$ -				
		A4	\$ 104		\$ -				
		T4	\$ 84		\$ -				
		T2	\$ 64		\$ -				
		T1	\$ 62		\$ -				
	Atwell LLC; Surveying (2 people * 5 days @ \$2,525 daily rate)					\$ 12,625			
	FEMA LOMR Processing Fee (subject to change)					\$ 5,000			
	Expenses					\$ 2,000			
	Total Item 11			888.0	\$ 157,039	\$ 19,625	\$ 981	\$ 177,645	

Ann Arbor WWTP
 Facilities Renovations
 CONSTRUCTION PHASE SERVICES
 Attachment B - Engineering Fee Schedule

Item	Description	Names	Rates	Estimated Hours	Subtotals	Subs/ODCs	Sub/ODC Markup	Totals	Comments
12	SRF Administration During Construction								
ai	Davis-Bacon Compliance services	Officer	\$ 247		\$ -				
		Sr. Associate	\$ 235		\$ -				
		Associate	\$ 207	500.0	\$ 103,530				
		E6	\$ 167		\$ -				
		E5	\$ 138		\$ -				
		E4	\$ 121		\$ -				
		E3	\$ 113		\$ -				
		E2	\$ 107		\$ -				
		E1	\$ 99		\$ -				
		S3	\$ 113		\$ -				
		T8	\$ 137		\$ -				
		T7	\$ 131		\$ -				
		T6	\$ 104		\$ -				
		A4	\$ 104		\$ -				
		T4	\$ 84		\$ -				
		T2	\$ 64		\$ -				
		T1	\$ 62		\$ -				
	Michigan Fair Contracting Center					\$ 30,000			
	Total Item 12			500.0	\$ 103,530	\$ 30,000	\$ 1,500	\$ 135,030	

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:

<u>Contract Amount</u>	<u>Assessed Damages Per Day of Non-Compliance</u>
\$ 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.
- (2) "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 \$11.83 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 \$13.19 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.

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