AMENDMENT NUMBER 2 TO
AGREEMENT FOR PROFESSIONAL SERVICES
BETWEEN
DLZ Michigan, Inc.
AND
THE CITY OF ANN ARBOR

The City of Ann Arbor, a Michigan municipal corporation, with offices at 301 E. Huron St. Ann Arbor, Michigan 48107-8647 (“City”) and DLZ Michigan, Inc., having its offices at 1425 Keystone Ave, Lansing MI 48911-4039 (“Consultant”) agree to amend the professional services agreement for the City of Ann Arbor Wastewater Treatment Plant 2014 Access Bridge Repair Project, RFP No. 875 executed by the parties dated May 21, 2014 and amended May 4, 2015 as follows:

1) Article III, SERVICES, is amended to read as follows:

A. The Consultant agrees to provide professional consulting engineering services (''Services'') in connection with the Project as described in Exhibit A of the original Agreement dated May 21, 2014, in Exhibit A-1 of Amendment 01 dated May 4, 2015, and attached Exhibit A-2 of this Amendment. The City retains the right to make changes to the quantities of service within the general scope of the Agreement or within a Work Statement 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.

2) Article IV, COMPENSATION OF CONSULTANT is amended to read as follows

A. The Consultant shall be paid in the manner set forth in Exhibit B of the original Agreement dated May 21, 2014, in Exhibit B-1 of Amendment 01 dated may 4, 2015, and in Exhibit B-2 of this Amendment, or the applicable Work Statement. Payment shall be made monthly, unless another payment terms are specified in Exhibit B, B-1 and B-2 or applicable Work Statement, following receipt of invoices submitted by the Consultant, and approved by the Contract Administrator. Total compensation payable for all Services performed during the term of this Agreement, Amendment No. 01 and Amendment 02 shall not exceed **One Hundred Twenty-Two Thousand Thirty-Eight Dollars and Sixty-Seven Cents ($ 122,038.67).**

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 payable according to the fee schedule in Exhibit B of the original Agreement dated May 21, 2014, in attached Exhibit B-1 of Amendment 01 and in Exhibit B-2 of this Amendment. 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.

All terms, conditions, and provisions of the original agreement between the parties executed May 21, 2014 and amended May 4, 2015, unless specifically amended above, are to apply to this amendment and are made a part of this amendment as though expressly rewritten, incorporated, and included herein.

This amendment to the agreement between the parties shall be binding on the heirs, successors and assigns of the parties.

Dated this _____, 2015.

For Consultant

By_____

For City of Ann Arbor

By_____
Christopher Taylor, Mayor

By_____
Jacqueline Beaudry, City Clerk

Approved as to form and content

_____
Stephen K. Postema, City Attorney

Approved as to substance

_____
Steven D. Powers, City Administrator

_____
Craig Hupy, Public Services Area Administrator

EXHIBIT A-1

SCOPE OF SERVICES

(negotiated scope of work based on accepted terms of Proposal)

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PROPOSED WORK PLAN

The Request for Proposal (RFP) No. 875 for the design services was awarded to DLZ. The RFP described the Wastewater Treatment Plant's (WWTP) intention to have the design firm submit a proposal for construction support services for this project. DLZ's understanding of these services is described below.

Scope of Services

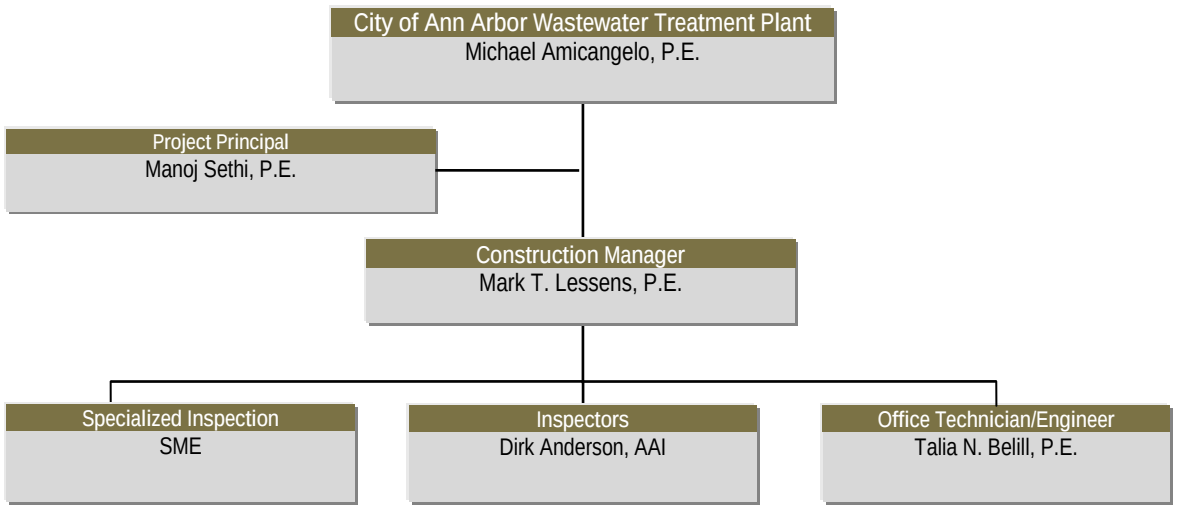
The following services will be provided by the Consultant in conjunction with the construction and delivery of the project:

- Project Management and Resident Engineering
- Office Engineering
- Project Staking and "As-Built" Plans
- Specific Tasks
- On-Site Inspection
- Technical Support
- Project Close-Out

Role of Key Personnel

The project team assembled to perform the tasks described above is shown on the organizational chart below. This project team has been assembled based upon experience and knowledge of these types of projects. The DLZ project team will perform all work tasks out of DLZ's Lansing office located within 66 miles of the proposed project.

Organization Chart



The DLZ team has a wealth of experienced individuals dedicated specifically to this project. **As shown on the organizational chart above, Mr. Mark T. Lessens, P.E., will be your *Construction Manager and single point of contact***. All key team members are located in our Lansing office and are currently available and committed to this important contract. All project staff assigned to this project will remain on the project. No staff member will be removed from the project without expressed approval from the WWTP. The following section briefly describes the roles and responsibilities of our key staff.

Mark T. Lessens, P.E., will be assigned as the ***Construction Manager*** for this project. Mr. Lessens has more than 30 years of experience in all areas related to bridge design, project management, construction and inspection, and he is also a Qualified Team Leader (QTL) for bridge inspections. Mr. Lessens has been involved with the planning, design, construction engineering, and inspection of more than 100 bridge projects and numerous road/highway projects for the Michigan Department of Transportation (MDOT), municipalities, county road commissions, and the Indiana Department of Transportation (INDOT). He is very familiar with this structure having inspected it for the City of Ann Arbor (City) in October 2014. Mr. Lessens is intimately familiar with the design plans and specifications for this project. Mr. Lessens will oversee the inspection, office management, schedule, and budget.

Talia N. Belill, P.E., will be the ***Project Engineer/Office Technician.*** She has more than 14 years of experience on local agency and MDOT bridge replacement and rehabilitation projects in design, inspection, and construction inspection. Ms. Belill was a MDOT Certified Office Technician in FieldManager and has served as an Office Technician on bridge projects. Ms. Belill currently serves as the Project Manager for the design portion of this bridge repair project. She has developed the design plans and detailed specifications for this project and is familiar with the site having been the QTL for biennial bridge inspections at this structure in 2010 and 2012. Ms. Belill will assist the inspector in tracking the progress of the project, generating pay estimates, and assisting the inspector on-site as required.

Dirk Anderson, AAI will serve as the ***Inspector***. Mr. Anderson has been with DLZ for 30 years working as a construction inspector on a variety of road, bridge, and environmental projects. He is a certified concrete field testing technician. Mr. Anderson will utilize the FieldBook software to track daily on-site activities.

Soil and Material Engineers (SME) will perform the ***Specialized Inspection Services***. SME is familiar with the site having performed concrete testing on the pier during the design phase of the project. SME developed the abutment and pier crack repair detailed specifications and has staff qualified to oversee the crack repairs on the substructure units.

Work Plan

Due to the limited scope of repairs and the unique work windows detailed in the design plans and specifications, construction inspection will be required on a full-time basis as dictated by the Contractor's schedule. The Contractor will be required to submit a detailed schedule of work at the pre-construction meeting. This schedule will be used by DLZ to coordinate inspection staff and specialized inspection services. DLZ assumes the full-time inspection at 9 hours per day, 5 days per week for 10 weeks. Full-time inspection includes 5 hours of overtime inspection per week. If the project duration extends beyond 10 weeks, and the allotted hours are exceeded, DLZ and the City will negotiate additional inspection and office support time utilizing the rates provided in the fee proposal section. Per the Detailed Specifications, no material testing is required.

A description of the Scope of Services follows:

1. **Project Management and Resident Engineering:** This task will include functions and activities necessary to manage and coordinate the project in a capacity as the **City's agent**. The functions and activities of this task include those typically associated with a project of this nature, including, but not limited to;

a. Establish and maintain lines of communication.
b. Meet regularly with the WWTP's Project Manager to review all aspects of the project.
c. Review project documents (plans and proposal).
d. Review applicable City and MDOT standard specifications to verify a full and complete understanding of the scope of work, staging, and schedule.
e. Respond to inquiries and/or requests for information.
f. Resolve issues that arise during construction of the project, specifically with the various City Departments, police agencies, fire department, emergency response agencies, utility companies, and the general public.
g. Coordinate and consult with the WWTP's Project Manager as needed.
h. Review proposals/claims and make recommendations related to contract modifications, extra work, extra compensation, and/or extensions of contract time.
i. Maintain proper records on issues involving disputed claims for compensation.
j. Inspect the project work for acceptance of work for final contract completion date.
k. Daily oversight, management, and coordination of inspection, testing, and project documentation activities.
l. Plan, conduct, and chair the pre-construction meeting, the bi-weekly progress/planning meetings, and others as necessary (prepare and distribute written minutes). For the proposal, four bi-weekly progress/planning meetings were assumed.
m. Review and approve the Contractor's Material Source Lists.
n. Review and approve the bi-weekly construction estimate; properly measure, calculate, and document material quantities.
o. Document the project consistent with City requirements.
p. Review and approve shop drawings.
q. Maintain records related to shop drawing submittal and approval.
r. Review contractor submittals for proposed design changes from the contract documents.
s. Maintain records related to contractor construction method(s) submittal and approval.
t. Verify that the contractor generally uses equipment and methods approved in, or specified by, the contract.
u. Daily oversight of the contractor's activities to verify that the project is being constructed in conformance with the project plans and specifications.
v. Verify that the contractor complies with all contract requirements related to the protection of utilities, property, and the environment, safety and health provisions.
w. Verify that the contractor complies with all permit requirements as they pertain to Michigan Department of Environmental Quality (MDEQ) and the City, etc.
x. Resolve daily contractor disputes and prepare work orders as necessary.

For purposes of this agreement, where terms "review", "approve", or "accept" are used to describe a requirement of the Consultant as to the Contractor's work, it is intended by the parties such terms shall mean and convey to the Consultant only the authority to evaluate that work for compliance with the construction contract documents and to advise the WWTP accordingly. The City will remain ultimately responsible for approval and acceptance of the contractor's work.

2. **Office Engineering:** The office engineering and contract administration tasks include those typically associated with a project of this nature, including:
   a. Establish, maintain, and utilize a project documentation filing system following MDOT standard construction file procedures with the exception that non-applicable construction folders are eliminated.

b. Initialize and update material source files associated with the chosen management software.
c. Import, review, and post Inspector's Daily Reports (IDR) and any associated calculation/ drawings; track materials (certification/testing) and material quantities.
d. Generate and process the bi-weekly construction estimate.
e. Monitor, review, critique, certified payrolls as required to verify compliance with applicable local, state and federal standards.
f. Process and maintain records for contract modifications and/or work orders.
g. Generate and process the Bi-Weekly Construction Progress Report.
h. Monitor project progress vs. the planned critical path method schedule.
i. Track and maintain status of miscellaneous submittals and Requests for Information (RFI).
j. Balance final quantities of pay items as the project progresses.

3. **Project Staking and "As-Built" Plans:** These tasks will include limited staking activities necessary for the Contractor's use in constructing the project as detailed on the plans and in the specifications, and activities associated with developing "as-built" plans. The specific project staking tasks include:
   a. Stake any required clearing limits, erosion control device locations, and miscellaneous sign locations. It is our understanding that this staking can be performed by an Inspector with a measuring tape, and that we will not need to perform surveying activities with any other equipment.
   b. Maintain field notes in bound books and daily logs.

4. **Specific Tasks:** The specific tasks associated with the development of the "as-built" plans include:
   a. Obtain "original" (electronic format) contract plans.
   b. Document all plan changes, extra work, "revisions to" notes, etc. as project work progresses.
   c. Collect and confirm all field changes. Location and measurement changes documented by the Inspector with a measuring tape. It is our understanding that we will not need to perform surveying activities with any other equipment.
   d. Develop the appropriate "as-constructed" notes.
   e. Develop/draft the "as-built" drawings.
   f. Review and approve the "as-built" plans. The "as-built" plans will conform to the City's Standard Specifications and the Public Services Department's AutoCAD drafting standards and will be provided to the City on CD's or other approved media. DLZ's Inspector will perform all required staking and measurements as required using a measuring tape. Field survey tasks are not included in this project scope of work.

5a. **On-Site Inspection:** Activities associated with this task will be dedicated to verifying that materials provided and work performed is in conformance with the project plans and specifications, including:
   a. Thorough review of the plans and specifications and other project related documents prior to construction start up.
   b. Daily communication with contractor supervision to coordinate inspection activities and to properly inspect, test, measure, and document the work.
   c. Daily communication with the contractor, advising of needed corrections to the work, i.e., traffic control or soil erosion device maintenance, etc.
   d. Daily communication with specialized inspection personnel from SME.
   e. Attend the bi-weekly progress/planning meeting.
   f. Inspect materials to be used in the work, verifying they meet the project specifications.
   g. Document material usage and quantities on the IDR using chosen software.

h. Review/inspect the Contractor's equipment to confirm it meets the project specifications, and document the specific type and amount of equipment used on the IDR.
i. Inspect the contractor's workmanship to verify that it meets the design, tolerances, time requirements, temperature requirements etc., of the specifications, and document this on the IDR.
j. Inspect and document that the work is performed and completed to the lines, grades, and elevations required by the project plans and specifications.
k. Document the contractor workforce and weather conditions on the IDR.
l. Document daily contractor activities, including any description and explanation of downtime, damage to the work, any actions taken by others including utilities, WWTP/City forces, adjacent property owners, etc. on the IDR; where possible final measure work as it is done by the contractor, calculate quantities and document this on the IDR or in field books as appropriate.
m. Conduct daily review/inspection of temporary traffic control devices and the maintenance of traffic throughout the construction influence area.
n. Conduct daily inspection of all soil erosion and sedimentation control devices for proper maintenance and effectiveness as placed.
o. Suspend any work and/or reject any materials not conforming to the contract requirements
p. Perform and document wage rate interviews.
q. Document changes, extra work, "revisions to" notes etc. on the "field" set of plans to assist in the preparation of "as built" plans.
r. Develop and maintain the project "punch list."
s. Keep needed force account documentation, as required; and, perform a follow-up inspection relating to Detailed Specification for Slope Restoration.

The Consultant's inspectors shall be furnished with equipment and materials as necessary to properly perform their work. This shall include, but is not limited to, cell phones, proposal, plans, MDOT Standard Specifications for Construction, City of Ann Arbor standard plans and specifications, MDOT standard plans and any other hand tools needed to inspect the work.

5b**. Specialized On-Site Inspection:** Activities associated with this task will be performed by DLZ's subconsultant, SME, in conformance with the project plans and specifications for the construction monitoring of the abutment and pier crack repairs. A copy of SME's complete proposal for work is included as Attachment A. Their tasks include:

a. Monitoring surface preparation, including surface, crack and injection port cleaning procedures; crack routing; injection port installation; seal installation; grout material verification according to specifications; grout mixing procedures according to manufacturer data; grout injection; and grout finishing for full height, vertical abutment crack repair and pier injection crack repair.
b. Monitor crack repairs above the waterline.
c. Record monitoring in IDRs, including photographs, applicable sketches, and quantities.
d. SME will notify the City and DLZ if the Contractor has not conformed to the detailed specifications and has the authority to stop the Contractor from working if necessary.

6. **Technical Support:** The technical support activities associated with this task include:

a. Review shop drawing submittals for compliance with design documents.
b. Review existing contract documents and make written recommendations relative to specification and/or design changes or modifications.

c. Review and make written recommendations relative to methods of construction submittals by the contractor.
d. Provide technical support in resolving disputes and issues that arise during construction and documentation of the project.

7. **Project Close-Out:** The project close-out tasks include:
a. Resolve outstanding disputes and issues relative to pay item quantities and materials documentation.
b. Prepare, review, and balance final pay item quantities; prepare final contract modifications.
c. Provide project documentation and files, specifically as they relate to correspondence, meeting minutes, submittals, contract modifications, work orders, material certifications, test reports, certified payrolls, and interim progress estimates.
d. Generate and process the final estimate package.
e. Coordinate submittal of project files and "as-built" plans to the WWTP in digital and full size hard copy format.

The project files will be purged of all duplicate and extraneous materials and organized in a neat and professional manner. An index detailing the location of project materials will be provided.

ATTACHMENT A – SME COMPLETE PROPOSAL

ANN ARBOR WASTEWATER TREATMENT PLANT ACCESS ROAD BRIDGE CONSTRUCTION MONITORING

I. SCOPE OF WORK

SME will provide on-site Construction Monitoring services during the rehabilitation phases of this construction project. In our experience, providing a complete scope and the associated professional fee prior to the lelling of the contract, or without a detailed scope in a formal request for proposal, is difficult since the project schedule and contractor's means and methods are unknown. The following is a general outline of the services we will provide, based on your request in your email dated February 19, 2015, and subsequent phone conversations outlining our understanding of the details of the project. This has been revised as per your request to only perform construction monitoring services for the pier and abutment crack repairs.

The field engineer will monitor the following tasks associated with the concrete restoration aspect of the construction project as per the project specifications and plans, as detailed below.

- Abutment full height vertical crack repair: Surface preparation, including surface, crack and injection port cleaning procedures; crack routing; injection port installation; seal installation; grout material verification according to specifications; grout mixing procedures according to manufacturer data; grout injection; and grout finishing. Grout material testing is not included. Surface preparation will include verification and documentation per ICRI - 03732 Surface Standards. (one engineer, four half day visits budgeted)

- Pier injection crack repair for an internal crack repair: Surface preparation, including surface, crack and injection port cleaning procedures; crack routing; injection port installation; seal installation; grout material verification according to specifications; grout mixing procedures according to manufacturer data; grout injection; and grout finishing. Grout material testing is not included. Surface preparation will include verification and documentation per ICRI - 03732 Surface Standards. (one engineer, two full day visits budgeted)

Construction monitoring of these tasks will only include the portions visible above the water line or within the de-watered area inside the cofferdam at the center pier. SME is not responsible for any observations to repair work performed below the water line at the abutments, as work in these areas cannot be verified by the field engineer.

The field engineer will stop the contractor's work and notify the DLZ engineer and the project managers if non-conformance is found during inspection and observation. DLZ will advise the contractor regarding conformance to the project specifications and returning to work.

II is assumed that the contractor will provide access for the field engineer to all work locations for proper observation and inspection of the work being performed and that all observation and inspection work will be performed during normal weekday work hours (I.e. Monday through Friday, 8:00 am to 5:00 pm). Per your email on June 22, 2015 and our discussion on June 23,2015, you have advised us that this work will likely occur during weekends due to use of the access road bridge and restricted working hours. We have provided a pricing breakdown for scenarios where work will be performed during normal working hours, or during night or weekend hours.

Should services be required for additional site visits beyond the estimated scope indicated above due to construction schedule, access restrictions, or other factors, additional fees will be billed on a time and expenses basis in accordance with our Fee Schedule (FS:O - 04/15) which is available upon request.

SCOPE OF WORK (CONT'D)

Documentation of the monitoring services will be provided via inspector's daily reports (IDR). These reports will also include photographic documentation of procedures and field conditions observed and may inciude applicable sketches, quantity verification and other pertinent information regarding the conditions observed and work performed. The quantity of the repairs to the abutment and pier cracks will be documented as length of crack repaired and volume of injected material used for the repair. Dally environmental conditions will be monitored during all construction observations using hand-held recording instrumentation for temperature, humidity and dew point. Reports will be submitted to the resident engineer on a daily basis. SME's field engineer will coordinate and communicate with the DLZ engineer on a daily basis regarding all inspection activities, general observations, significant findings or analysis results, and issues for immediate resolution (as necessary). (Estimate 8 hours for all documentation & communication)

II. QUALIFICATIONS OF TEAM

SME will assist DLZ, as sub-vendor, in monitoring the construction activities and providing quality control during the concrete repairs to the abutments and center pier.

KEY PERSONNEL:

TEAM PROJECT MANAGER

Jason A. Fogg, P.E., Senior Project Engineer, will be the primary contact for this project. Mr. Fogg will work with SME's field engineer and DLZ's resident engineer to assure the efficient completion and reporting of the inspection and testing. Jason has over 14 years of bridge inspection, construction and project management experience.

QA/QC ENGINEER

John C. Zarzecki, CWI, CDT, CET, NDE, Senior Consultant, wiil be the quality assurance / quality control engineer and advisor for this project. Mr. Zarzecki will provide technical assistance to the team and maintain that all technical standards are adhered to during the construction monitoring and reporting. John has over 40 years of materials, testing, consulting and construction experience and brings unique perspective and expertise to the project.

ON-SITE MATERIALS TESTING AND QA INSPECTION

Hayder H. AI-Hilal, P.E., NACE CIP-1, Senior Engineer, will be the primary field engineer for this project. Mr. AI-Hilal will coordinate with the DLZ resident engineer and perform the crack repair monitoring tasks. Hayder is an FHWA certified bridge inspection team leader and has over 10 years of concrete and steel materials, coatings and bridge inspection experience, including construction inspection at the Ambassador Bridge deck replacement. He is NACE CIP-1 certified and has performed coating inspection for fabrication shops and field warranty work in addition to field recoating projects as well as aUended the MDOT Bridge Paint School.

Roland Bogdani, P.E., Senior Engineer, will serve as an alternate primary field engineer for this project. Mr. Bogdani will perform the crack repair monitoring tasks and/or assist Mr. AI-Hilal as necessary. Roland has over five (5) years of experience in providing engineering evaluation of eXisting structures, including highway, railroad and pedestrian bridges, commercial and historical bUildings, and underground structures.

ON-SITE MATERIALS TESTING AND QA INSPECTION (CONT'D)

Christopher Buyle, NACE CIP-1, ICC-S1, will assist the primary field inspector for this project. Christopher has over seven (7) years of materials and construction inspection, specializing in coatings and has performed coating inspection for MOOT bridge warranty review and correction work. He is NACE CIP-1 certified and has performed coating inspection for field recoating projects as well as attended the MOOT Bridge Paint School.

Matthew Baker, CWI, NACE CIP-1, will serve as an alternate assistant for the primary field inspector for this project, should the need arise. Mr. Baker has 27 years of quality control review and observation structural steel fabrication, erection, nondestructive testing and coating. He is a NACE CIP-1 certified coatings inspector with coatings experience ranging from fabrication shops to field application review as well as attending the MDOT Bridge Paint School.

Resumes for the staff listed above are not included with this proposal but are available upon request.

III. PRICING BREAKDOWN

As per your request, our cost estimates for the services described in this proposal's scope of services are broken down by bulleted task item. These costs do not include attending project kick-off or progress meetings, reviewing of materials submittals, and development of reports beyond daily inspection reports and observations.

EXHIBIT B

(negotiated compensation based on accepted terms of Proposal)

FEES

DLZ

DERIVATION OF COST PROPOSAL

COST ESTIMATION FOR DESIGN SERVICES

PROJECT NUMBER:	PROJECT DESCRIPTION:
	Construction Assistance - Full-Time Inspection
PRIME CONSULTANT:	CLIENT:
DLZ	**ANN ARBOR WASTEWATER TREATMENT PLANT**

DIRECT LABOR:

Classification	Person Hours	x	Hourly Rate	=	Labor Cost
Construction Manager (Mark Lessens, P.E.)	62		$47.00		$ 2,914.00
Construction Inspector (Dirk Anderson)	412		$29.10		$ 11,989.20
Construction Inspector (OT) (5 hrs/wk)	50		$43.65		$ 2,182.50
Office Tech/Project Engineer (Talia Belill, P.E.)	96		$38.00		$ 3,648.00
					$ -
Total Hours	**620**			**Subtotal**	**$ 20,733.70**
				Total Labor	**$ 20,733.70**

OVERHEAD:

$20,733.70	x	159.47%	= Total Overhead	$	33,064.03
			Subtotal	**$**	**53,797.73**
FCC/COM		Labor *1.55%		**$**	**321.37**

DIRECT EXPENSES:

Design Phase Services	$	13,776.00
Mileage	$	4,782.00
SME (Night/Weekend Rates)	$	7,994.51
Total Direct Expenses	**$**	**26,552.51**

FIXED FEE:

$53,797.73	x	10.0%	= Total Fixed Fee	**$**	**5,379.77**
			TOTAL NOT-TO-EXCEED COST	**$**	**86,051.39**