



**AGENDA ITEM EXECUTIVE SUMMARY**

Agenda Item number: 5.e

Title:

Recommendation to Approve Professional Service Agreement for the Riverside Lift Station

Presenter:

Tim Wilson

Meeting: Government Services Committee

Date: September 28, 2020

Proposed Cost: \$1,389,000

Budgeted Amount: \$1,315,000

Not Budgeted:

**Executive Summary** (if not budgeted please explain):

The design portion of the Riverside lift station project is budgeted to start this fiscal year. Riverside Lift Station is located at the intersection of Riverside Avenue (Illinois Route 25) and Devereaux Way. The lift station is located at the site of what was the City of St. Charles’ first wastewater treatment facility, which was a treatment tank. When the wastewater treatment facility was relocated up the hill to the east in the 1930’s, this site remained as a collection point and major lift station for the City of St. Charles’ wastewater system.

Replacement of the lift station includes a full building and wet weather capacity expansion. Along with the new building and supporting system. The public areas around the lift station will be modified and improved. The probable construction cost to replace the Riverside Lift Station is between \$10 – \$11 million. Based on the preliminary design study, three construction sites have been identified as feasible construction locations. The building will be relocated from its existing location adjacent the river, to an area across Riverside Ave. near or in place of the Jones Law Office. Through the design process, staff will continue to work with impacted parties to provide the most reasonable location. Construction bid advertisements are anticipated to go out in the fall/winter of 2021 with the construction of the facility expected to be completed Spring 2023.

The funding source of this project is the Water Pollution Control Loan Program and requires a process for Engineering Procurement based on the qualification’s selection. This process included the City issuing a Request for Qualifications (RFQ). On October 21, 2019, the City received three (3) RFQ submissions. City staff evaluated the RFQ submittals and ranked the firms based on the standard criteria. Because the complexity of this project staff waited until a construction feasibility study was completed prior to negotiating the final contract and scope of work. The City started the negotiation phase on July, 2020. Any expenditures over the budgeted amount will be covered through the Water Pollution Control Loan Program.

The proposed engineering contract for the project includes: design services, IEPA loan application, bid process, contractor negotiations and construction phase oversight and budgeting for this project extends over the next three years. Staff recommend to approve and award the engineering contract in its entirety to Trotter and Associates, with final funding approved annually as part of the budget approval process.

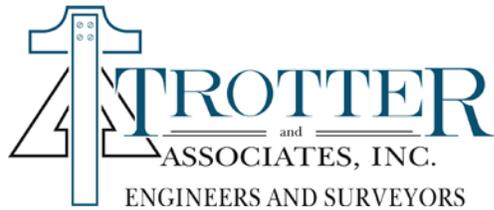
**Attachments** (please list):

\* Riverside Lift station Replacement Professional Services Agreement

**Recommendation/Suggested Action** (briefly explain):

Recommendation to approve Professional Services Agreement for the Riverside Lift Station Replacement to Trotter and Associates for \$1,389,000 and a Resolution authorizing the Mayor and Clerk to execute the same on the behalf of the City of St Charles.





August 26, 2020

Honorable Raymond Rogina  
Mayor of St. Charles  
City of St. Charles  
2 E. Main Street  
St. Charles, Illinois 60174

Re: Riverside Lift Station Replacement  
Professional Services Agreement

Dear Mayor Rogina:

We sincerely appreciate this opportunity to offer our services. Enclosed for your review is the engineering services agreement for the referenced project. Please contact us if there are any questions or changes to the listed scope of services. If you would like to proceed with the contract, please sign and return one copy of the agreement.

Sincerely,

TROTTER & ASSOCIATES, INC.

Robert Scott Trotter, P.E., BCEE  
President

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August 26, 2020

Honorable Raymond Rogina  
Mayor of St. Charles  
City of St. Charles  
2 E. Main Street  
St. Charles, Illinois 60174

**Re: Riverside Lift Station Replacement**  
Professional Services Letter Agreement and Exhibits

Dear Mayor Rogina,

Trotter and Associates, Inc. (ENGINEER) is pleased to provide professional services to the City of St. Charles, IL (CLIENT) for the Riverside Lift Station Replacement Project (hereinafter referred to as the "PROJECT").

### **Project Background**

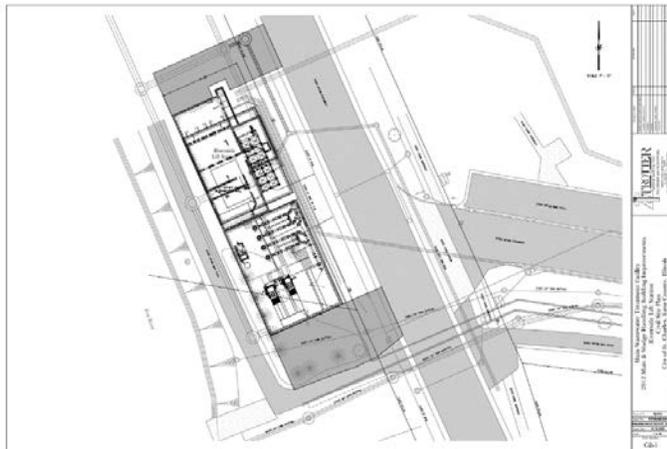
Near the end of 2019, the City contracted with Trotter and Associates to develop the conceptual design of the Riverside Lift Station Replacement. Included with this agreement was coordination of a half-day work session and several follow-up discussions with City staff to develop the best potential alternatives for this project. The City also provided an addendum to the agreement to facilitate survey of the existing conditions of the site.

The City of St. Charles Wastewater Division is comprised of two wastewater treatment plants, designated as the Main Wastewater Treatment Facility (9.0 MGD) and Westside Water Reclamation Facility (0.7 MGD). The Main WWTF receives flow from two tributary lift stations, East Side and Riverside Lift Station. Riverside Lift Station is located at the site of what was the City of St. Charles' first wastewater treatment facility, and part of the original structure is still utilized as part of this station. This lift station was constructed as part of the wastewater treatment plant improvements in the early 1930's and served the entire community until East Side Lift Station was constructed as part of Stage II in 1973. The existing masonry structure at Riverside was constructed in 1981, and included screening, a five-pump system, an emergency back-up generator, and construction of a new 24" force main.

TAI completed a Facility Plan for the Main Service Area in 2015, and in that plan identified the Riverside Lift Station as needing major rehabilitation or replacement. The Riverside Lift Station serves most of the downtown area and west to Randall Road. Based on previous sanitary sewer analyses, the estimated peak wet weather flow was 28.6 MGD which exceeds the rated firm capacity of this lift station of 19.7 MGD. The drawdown test conducted as a part of the Facility Plan identified that the capacity of the submersible pumps was compromised, and that the actual firm capacity of the lift station at that time was 13.4 MGD.

Pump	Rated Capacity	Test Flow Rate and Pressure	Tolerance (flow and pressure)
No. 1 (75 HP)	3,480 gpm @ 59.0' TDH	1,980 gpm @ 52.2' TDH	-43% and -12%
No. 2 (75 HP)	3,480 gpm @ 59.0' TDH	2,280 gpm @ 53.3' TDH	-34% and -10%
No. 3 (180 HP)	6,700 gpm @ 73.5' TDH	5,150 gpm @ 46.4' TDH	-23% and -37%
No. 4 (180 HP)	6,700 gpm @ 73.5' TDH	6,710 gpm @ 46.4' TDH	0% and -37%
Firm Capacity	13,660 gpm (19.7 MGD)	9,325 gpm (13.4 MGD)	

During development of the 2015 Facility Plan, numerous constraints were considered, including proximity of the bike path, IL Route 25, Devereaux Way, existing utilities, floodplain/floodway, and bedrock. Additional considerations include higher Peak Wet Weather Flows, odor concerns, maintenance concerns, and constructability. During the Facility Plan, alternative locations for the new lift station were considered but at that time the team was directed to utilize the existing location. TAI therefore worked with City Staff to develop a conceptual plan that addressed the constraints and concerns on the existing site.



### Lift Station Conceptual Design

In order to properly size the new lift station, TAI first performed a study to confirm the 10-year wet weather flows to the existing lift station. After reviewing the information from previous sanitary evaluation studies (namely the report from 1996), the 10-year flows to the Riverside Lift Station was approximately 30 MGD. This was deduced by tracing the manhole data upstream of the lift station for a 10-year event.

Tributary Area	CFS	MGD
North (1996 - page 91)	24.452	15.803
Park Shore (1996 - pg 95)	14.312	9.249
Second Place 2 (1996 page 94)	0.847	0.547
Second Place 1 (1996 page 93)	3.027	1.956
		<b>27.556</b>

Comparing the most recent capacity study for basin SC-02, it is estimated that the Prairie Centre development and future development in this basin will lead to a net increase of the 10-year flows from this sub-basin by 0.534 MGD. The sanitary sewer along IL Route 31 that is currently in design to increase to a 21" line will increase conveyance of 1.76 MGD beyond the 15". According to water service data and historical aerial photography, development has added approximately 1,585 PE since the SSES was performed in 1996, which would increase peak hourly flow to the Riverside Lift Station by 0.58 MGD. This brings the total 10-year flow to the lift station to 29.89 MGD. Considering a 10% increase for future development and redevelopment within the tributary area, it is recommended that the new Riverside Lift Station be sized for a minimum firm capacity of 33 MGD.

Prior to proceeding with the concept presented in the Facility Plan, the City and TAI revisited alternative locations which may be more consistent with the City's long-term needs. TAI evaluated six alternative locations and presented those alternatives during a half-day work session with the City. As a result of those discussions, TAI was directed to further develop preliminary layouts, analyze impacts and update cost estimates for the top three alternatives. Once complete, the top three alternatives were presented to City staff and it was decided that Alternative #3 was the best solution.



<b>GENERAL CONDITIONS</b>	\$912,500
<b>SITWORK</b>	\$1,677,880
<b>LIFT STATION REPLACEMENT</b>	\$3,622,490
<b>ELECTRICAL &amp; CONTROLS</b>	\$691,500
<b>CONSTRUCTION SUB-TOTAL</b>	<b>\$6,904,370</b>
<b>CONTIGENCY @ 25%</b>	<b>\$1,726,093</b>
<b>ESTIMATED CONSTRUCTION COST</b>	<b>\$8,630,463</b>
<b>DESIGN ENGINEERING</b>	<b>\$746,002</b>
<b>CONSTRUCTION ENGINEERING</b>	<b>\$685,208</b>
<b>PROJECT TOTAL</b>	<b>\$10,061,673</b>

### Project Schedule

TAI's schedule for the conceptual design of the Riverside Lift Station is indicated below. This is based on an effective date of September 1<sup>st</sup>, 2020:

<b>TASK</b>	<b>DATE</b>
Preliminary Design	September - November, 2020
Permitting	October 2020 - June 2021
Design Development	November 2020 - March 2021
Final Design	March 2021 - August 2021
Bidding <sup>1</sup>	September 2021 - November 2021
Construction <sup>1</sup>	March 2022 - April 2023

**NOTE: 1. Date of this task will be dependent on approval by City Council.**

## Scope of Services

Our services will consist of customary civil engineering and surveying services and related engineering services incidental thereto, described as follows;

### General Tasks

1. Schedule and facilitate a project Kick off Meeting with City staff.
2. Evaluate and determine the project schedule to meet City timeframe.
3. Schedule and facilitate a minimum of five monthly meetings over the proposed design schedule.
4. Schedule site visits to City facilities.
5. Review existing City documentation that may be appropriate to project.
6. Provide monthly status reports on; project progress, tasks accomplished in previous month, action items for upcoming month and project budget.
7. Provide lead permit coordination, submittal, meetings, and design changes to all agencies.
8. Provide recommendations to offsite improvement and operational impacts.
9. Submit draft versions of design at 60%, 95% and final completion.

### 1. Preliminary Engineering Report

- a. Prepare conceptual design summary memo for three alternative concept designs to City staff and receive direction to proceed with conceptual design.
- b. Further develop the conceptual design including geometrics, profiles, simplified plan view of the proposed lift station, preliminary hydraulics, soil boring analysis, and preliminary equipment selection.
- c. Prepare concept cost estimates.
- d. Present the concept and cost estimates in two meetings, one with City Administration and one with Council for final approval.
- e. Prepare a preliminary engineering report consistent with the Illinois EPA Facilities Planning Submittal Checklist for use in evaluation for Low Interest Loan Funding.
  - i. Conduct a minimum of 5 meetings with Staff (and vendors) to review design and equipment selection.
  - ii. Conduct site visits as needed for conceptual layouts of facilities with the selected technology.
  - iii. Develop conceptual site plan with layout of proposed structures, traffic routing, conceptual piping, and sequence of construction to keep existing system in operation during construction.
  - iv. Based on the conceptual design, prepare conceptual cost estimate for the proposed improvements.
- f. City to provide legal review, development/zoning review, Building and Fire Department review, and coordination will all other internal review agencies. City to facilitate meetings with Kane County Forest Preserve and IDOT Local Roads. City to provide soil borings as necessary. TAI's attendance and preparation/follow-up for meetings with internal and external agencies shall be paid for through the allowance as they cannot be identified at this time.

2. Preparation of IEPA Low Interest Loan Application

- a. Prepare and Submit Low Interest Loan Pre-Application.
- b. Develop and submit planning documents as required by the IEPA.
- c. Complete necessary documents for the IEPA for City's approval and signatures.
- d. Act as liaison between the IEPA Project Manager and the City to address the IEPA Low Interest Loan package, review comments and correspondence.
- e. Work with the City to develop the required ordinances/resolutions required for the Low Interest Loan.
- f. Incorporate IEPA required contract documents into the project specifications.

3. Preliminary Design Phase

- a. Meet with City on a bi-weekly basis to determine design layout details for the project.
- b. Make measured drawings of and investigate existing conditions or facilities, or to verify the accuracy of as-built drawings or other information furnished by the City.
- c. Make necessary field surveys and topographic for relocation of historical monuments.
- d. Obtain preliminary approval of design from Building and Fire Departments.
- e. Schedule 25% Progress Review Meeting.

4. Design and Development Phase

- a. Based on the approved Preliminary Design Phase, prepare Preliminary Engineering Plans and Specifications to show the scope, extent and character of the work to be furnished and performed by the Contractor for the proposed modifications to the existing system and layout. Include the following but is not limited to these drawings.
  - i. General Construction Details and Notes
  - ii. 60% Site Civil Drawings showing roadway, pathway improvements, underground utilities, process piping, site grading and landscaping if applicable.
  - iii. 60% Demolition drawings showing existing structures and utilities to be removed if applicable.
  - iv. 60% Architectural drawings including layout and elevation views.
  - v. 60% Structural drawings including layout and section views.
  - vi. 60% Mechanical drawings including layout views and equipment schedules.
  - vii. 60% Process drawings including the equipment layout, valves, meters and process piping.
  - viii. 60% Electrical Drawings depicting power distribution requirements within the proposed improvements.
  - ix. 60% Instrumentation drawing depicting the scope and extent of the proposed control system.
  - x. 60% Project specifications with all process equipment selected in accordance with the 32 / 64 Division CSI Format.
- b. Coordinate with Sub-consultants and other engineers including the City's SCADA coordinator of Concentric Integration as required to deliver the drawings and specifications indicated in Item 4.a.
- c. Advise City if additional reports, data, information, or testing services are necessary and assist City in obtaining such reports, data, information, or services.

- d. Based on the information contained in the Preliminary Design Phase documents, submit a revised opinion of probable Construction Cost and any adjustments to Total Project Costs known to Engineer.
- e. Furnish the Design Development Phase documents to and review with the City.
- f. Coordinate with City Fire and Building Departments to obtain feedback on their requirements.
- g. Submit to the City revised opinion of probable Construction Cost within 60 days after authorization to proceed with this phase.

#### 5. Final Design Phase

- a. Based on the approved Design Development, prepare Final (95%) Engineering Plans and Specifications to show the scope, extent and character of the work to be furnished and performed by the Contractor. Include the following but is not limited to these drawings.
  - i. General Construction Details and Notes.
  - ii. Site Civil Drawings showing roadway, storm water management, process piping, underground utilities & site restoration.
  - iii. Demolition drawings if needed including plans, sections, details and schedules detailing existing structures and utilities to be removed.
  - iv. Architectural drawings including floor plans, roof plans, elevation views, sections, details and schedules for any proposed structures.
  - v. Structural drawings including plans, sections, details and schedules for construction of the foundations and slabs.
  - vi. Process drawings including the plans, sections, details and schedules for equipment and process piping.
  - vii. Electrical Drawings depicting lighting, controls and power distribution plans, elevations, and schedules.
  - viii. Instrumentation drawings depicting the scope and extent of the proposed control system.
  - ix. Project specifications in accordance with the 32/64 Division CSI Format or recommended alternative.
  - x. Develop other documents necessary to bid the project.
- b. Submit final engineering plans and specifications to Illinois EPA for construct and operate permit.
- c. Prepare an updated opinion of probable cost, based on the Final Engineering Plans.
- d. Provide 95% complete plans to the City, City's SCADA coordinator and effected agencies for review and approval.
- e. Make revisions to the plans to incorporate changes required by reviewing agencies.
- f. Acquire permits through all pertinent jurisdictional agencies.
- g. Complete 100% drawings to satisfaction of appropriate permitting bodies.

#### 6. Bidding and Negotiating Phase

- a. Assist City in advertising for and obtaining bids or negotiating proposals for the Work.
- b. Issue Addenda as appropriate to clarify, correct, or change the Bidding Documents.
- c. Attend the Bid opening, prepare Bid tabulation sheets, and assist the City of St. Charles in evaluating Bids or proposals and in assembling and awarding contracts work.
- d. Participate in any negotiations or clarification discussion.
- e. Furnish and supply drawings and project specification copies as required.

7. Construction Phase

- a. Consult with the City and act as the City's representative during execution of construction.
- b. Provide full-time field engineering services (resident project representative) during the duration of construction activities.
- c. Assist the City in the selection of an independent testing laboratory to perform all necessary testing and inspections required during construction.
- d. Prepare and participate in a Pre-Construction Conference prior to commencement of Work at the Site.
- e. As appropriate, establish baselines and benchmarks for locating the work, which in the Engineer's judgments are necessary to enable Contractor to proceed.
- f. During Construction collect all GIS data for city as defined in attached GIS requirements (reference Exhibit G). On final close-out and as-built submittal all collected data will be coordinated and transferred to City GIS group.
- g. Make additional visits to the Site at intervals appropriate to the various stages of construction, as Engineer deems necessary, in order to observe as and experienced and qualified design professional the progress and quality of the Work.
- h. Recommend to the City, if necessary, that Contractor's work be disapproved and rejected while it is in progress.
- i. Issue necessary clarifications and interpretations of the Contract Documents as appropriate to the orderly completion of Contractor's work.
- j. Recommend Change Orders and Work Change Directives to the City, as appropriate, and prepare Change Orders and Work Change Directives as required.
- k. Review and approve or take other appropriate action in respect to Shop Drawings and Samples and other data which Contractor is required to submit, but only for conformance with the information given in the Contract Documents and compatibility with the design concept of the completed Project as a functioning whole as indicated in the Contract Documents.
- l. Evaluate and determine the acceptability of substitute or "or-equal" materials and equipment proposed by Contractor.
- m. Require such special inspections or tests of Contractor's work as deemed reasonably necessary, and receive and review all certificates of inspections, tests, and approvals required by Laws and Regulations or the Contract Documents.
- n. Provide weekly reports to City staff on status of construction, hours spent on site.

Contractor's Completion Documents.

- a. Receive and review maintenance and operating instructions, schedules, warranties, and guarantees.
- b. Receive bonds, certificates, or other evidence of insurance not previously submitted and required by the Contract Document's, certificates of inspection, tests and approvals, Shop Drawings, Samples and other data. Engineer shall transmit these documents to the City.
- c. After notice from Contractor that Contractor considers the entire Work ready for its intended use, in company with City and Contractor, conduct an inspection to determine if the Work is Substantially Complete.
- d. Prepare and furnish to the City Record Drawings showing appropriate record information based on Project annotated record documents received from Contractor.
- e. Preparation of operation and maintenance manuals and transmit these documents to the City. Preliminary Engineering Report

In order to address minor changes in project scope, the overall fee schedule for design engineering services includes a separate dedicated amount that may be authorized by City staff for minor changes. Changes to the scope of services outlined in this agreement shall be authorized through execution of an Exhibit D - Contract Addendum.

## Compensation

A fixed fee amount of \$1,389,000.00 based on the following assumed distribution of compensation:

General Tasks	\$118,000
Preliminary Report	\$67,000
IEPA Loan	\$14,000
Preliminary Design Phase	\$48,000
Design Development Phase	\$211,000
Final Design Phase	\$221,000
Design Addendum	\$20,000
<u>Reimbursable Expenses</u>	<u>\$5,000</u>
<b>Design Engineering Subtotal</b>	<b>\$704,000</b>
Bidding and Negotiating Phase	\$37,000
Construction Phase	\$610,000
Contractor's Completion Documents	\$33,000
<u>Reimbursable Expenses</u>	<u>\$5,000</u>
<b>Construction Engineering Subtotal</b>	<b>\$685,000</b>

**Not to Exceed Grand Total:                      \$1,389,000**

ENGINEER may alter the distribution of compensation between individual phases of the work noted herein to be consistent with services actually rendered, but shall not exceed the total estimated compensation amount unless approved in writing by CLIENT. The total estimated compensation for ENGINEER's services included in the breakdown by phases incorporates all labor, overhead, profit, and ENGINEER's Consultant's charges.

The amounts billed for ENGINEER's services will be based on the cumulative hours charged to the PROJECT during the billing period by each class of ENGINEER's employees times Standard Hourly Rates for each applicable billing class, plus Reimbursable Expenses and ENGINEER's Consultant's charges. The Standard Hourly Rates and Reimbursable Expenses Schedule will be adjusted annually as of January 1<sup>st</sup> to reflect equitable changes in the compensation payable to ENGINEER.

*Design Addendum.* ENGINEER has incorporated a portion of this proposal that will only be billable if approved in writing at the discretion of the CLIENT.

*Subconsultants.* ENGINEER has incorporated subconsulting services for Architectural, Structural, Mechanical, and Fire Protection engineering services into the proposal.

*Reimbursable Expenses.* Engineer has incorporated \$10,000 for Reimbursable Expenses, including printing, plotting and shipping required for the completion of the work. Actual expenses will be compensated for based on actual cost as a pass-through without mark-up.

### **Miscellaneous**

This Agreement constitutes the entire agreement between the parties and supersedes any prior oral or written representations. This agreement may not be changed, modified, or amended except in writing signed by both parties. In the event of any conflict among the exhibits, the exhibit of the latest date shall control.

ENGINEER may have portions of the Services performed by its affiliated entities or their employees, in which event ENGINEER shall be responsible for such services and CLIENT shall look solely to ENGINEER as if ENGINEER performed the Services. In no case shall CLIENT'S approval of any subcontract relieve ENGINEER of any of its obligations under this Agreement. However, ENGINEER is not responsible whatsoever for any obligations its subcontractors might have to its employees, including but not limited to proper compensation of its employees.

In the event CLIENT uses a purchase order form or other CLIENT developed document to administer this Agreement, the use of such documents shall be for the CLIENT'S convenience only, and any provisions, terms or conditions within the CLIENT developed document shall be deemed stricken, null and void. Any provisions, terms or conditions which the CLIENT would like to reserve shall be added to Exhibit C – Supplemental Conditions and agreed to by both parties.

ENGINEER acknowledges that this project and the scope of work performed thereto will require ENGINEER and all lower tiered subcontractors of ENGINEER to comply with all obligations under and pursuant to the any applicable local, state and/or federal prevailing wage laws (e.g. Davis-Bacon Act, Illinois Prevailing Wage Act, etc.), including but not limited to all wage, notice and/or record keeping requirements to the extent applicable, necessitated and required by law.

If during negotiations or discussion with a Client it becomes clear that Client has determined prevailing wages are not applicable to the work performed by Trotter & Associates, it is best to confirm that understanding in writing with appropriate indemnification language.

**Contents of Agreement**

This Letter Agreement and the Exhibits attached hereto and incorporated herein, represent the entire understanding with respect to the Project and may only be modified in writing signed by both parties.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement.

CLIENT:

Trotter and Associates, Inc.:

\_\_\_\_\_

\_\_\_\_\_

By: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Effective

Date Signed:

Date: \_\_\_\_\_

\_\_\_\_\_

Address for giving notices:

Address for giving notices:

Designated Representative

Designated Representative

Title:

Title:

Phone Number:

Phone Number:

Facsimile Number:

Facsimile Number:

E-Mail Address:

E-Mail Address:

**ATTACHMENTS:**

EXHIBIT A – STANDARD TERMS AND CONDITIONS

EXHIBIT B – SCHEDULE OF HOURLY RATES AND REIMBURSIBLE EXPENSES

EXHIBIT C – SUPPLEMENTAL GENERAL CONDITIONS

EXHIBIT D – CONTRACT ADDENDUM

EXHIBIT E – UPDATED FACILITY PLAN COST ESTIMATE

EXHIBIT F – MANHOURLY ESTIMATE

**EXHIBIT A - STANDARD TERMS AND CONDITIONS**

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**ARTICLE 1 - SERVICES OF ENGINEER**

**1.01 Scope**

A. ENGINEER shall provide the Professional Services set forth herein and in the Letter Agreement.

B. Upon this Agreement becoming effective, ENGINEER is authorized to begin Services.

**ARTICLE 2 - CLIENT'S RESPONSIBILITIES**

**2.01 General**

- A. Provide ENGINEER with all criteria and full information as to CLIENT's requirements for the Project, including design objectives and constraints, space, capacity and performance requirements, flexibility, and expandability, and any budgetary limitations; and furnish copies of all design and construction standards which CLIENT will require to be included in the Drawings and Specifications; and furnish copies of CLIENT's standard forms, conditions, and related documents for ENGINEER to include in the Bidding Documents, when applicable.
- B. Furnish to ENGINEER any other available information pertinent to the Project including reports and data relative to previous designs, or investigation at or adjacent to the Site.
- C. Following ENGINEER's assessment of initially-available Project information and data and upon ENGINEER's request, furnish or otherwise make available such additional Project related information and data as is reasonably required to enable ENGINEER to complete its Basic and Additional Services. Such additional information or data would generally include the following:
  - 1. Property descriptions.
  - 2. Zoning, deed, and other land use restrictions.
  - 3. Property, boundary, easement, right-of-way, and other special surveys or data, including establishing relevant reference points.
  - 4. Explorations and tests of subsurface conditions at or contiguous to the Site, drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site, or hydrographic surveys, with appropriate professional interpretation thereof.
  - 5. Environmental assessments, audits, investigations and impact statements, and other relevant environmental or cultural studies as to the Project, the Site, and adjacent areas.
  - 6. Data or consultations as required for the Project but not otherwise identified in the Agreement or the Exhibits thereto.
- D. Give prompt written notice to ENGINEER whenever CLIENT observes or otherwise becomes aware of a Hazardous Environmental Condition or of any other development that affects the scope or time of performance of ENGINEER's services, or any defect or nonconformance in ENGINEER's services or in the work of any Contractor.
- E. Authorize ENGINEER to provide Additional Services as set forth in Exhibit D - Addendum of the Agreement as required.

- F. Arrange for safe access to and make all provisions for ENGINEER to enter upon public and private property as required for ENGINEER to perform services under the Agreement.
- G. Examine all alternate solutions, studies, reports, sketches, Drawings, Specifications, proposals, and other documents presented by ENGINEER (including obtaining advice of an attorney, insurance counselor, and other advisors or consultants as CLIENT deems appropriate with respect to such examination) and render in writing timely decisions pertaining thereto.
- H. Provide reviews, approvals, and permits from all governmental authorities having jurisdiction to approve all phases of the Project designed or specified by ENGINEER and such reviews, approvals, and consents from others as may be necessary for completion of each phase of the Project.
- I. Provide, as required for the Project:
  - 1. Accounting, bond and financial advisory, independent cost estimating, and insurance counseling services.
  - 2. Legal services with regard to issues pertaining to the Project as CLIENT requires, Contractor raises, or ENGINEER reasonably requests.
  - 3. Such auditing services as CLIENT requires to ascertain how or for what purpose Contractor has used the moneys paid.
  - 4. Placement and payment for advertisement for Bids in appropriate publications.
- J. Advise ENGINEER of the identity and scope of services of any independent consultants employed by CLIENT to perform or furnish services in regard to the Project, including, but not limited to, cost estimating, project peer review, value engineering, and constructability review.
- K. Furnish to ENGINEER data as to CLIENT's anticipated costs for services to be provided by others for CLIENT so that ENGINEER may make the necessary calculations to develop and periodically adjust ENGINEER's opinion of Total Project Costs.
- L. If CLIENT designates a manager or an individual or entity other than, or in addition to, ENGINEER to represent CLIENT at the Site, the duties, responsibilities, and limitations of authority of such other party shall be disclosed to the ENGINEER and coordinated in relation to the duties, responsibilities, and authority of ENGINEER.
- M. If more than one prime contract is to be awarded for the Work designed or specified by ENGINEER, designate a person or entity to have authority and responsibility for coordinating the activities among the various prime Contractors, and define and set forth the duties, responsibilities, and limitations of authority of such individual or entity and the relation thereof to the duties, responsibilities, and authority of ENGINEER is to be mutually agreed upon and made a part of this Agreement before such services begin.
- N. Attend the pre-bid conference, bid opening, pre-construction conferences, construction progress and other job related meetings, and Substantial Completion and final payment inspections.
- O. Provide the services of an independent testing laboratory to perform all inspections, tests, and approvals of Samples, materials, and equipment required by the Contract Documents, or to evaluate the performance of materials, equipment, and facilities of CLIENT, prior to their incorporation into the Work with appropriate professional interpretation thereof.
- P. Provide inspection or monitoring services by an individual or entity other than ENGINEER (and disclose the identity of such individual or entity to ENGINEER) as CLIENT determines necessary to verify:
  - 1. That Contractor is complying with any Laws and Regulations applicable to Contractor's performing and furnishing the Work.
  - 2. That Contractor is taking all necessary precautions for safety of persons or property and complying with any special provisions of the Contract Documents applicable to safety.
- Q. Provide ENGINEER with the findings and reports generated by the entities providing services pursuant to paragraphs 2.01.O and P.

### ARTICLE 3 - TIMES FOR RENDERING SERVICES

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#### 3.01 General

- A. ENGINEER's services and compensation under this Agreement have been agreed to in anticipation of the orderly and continuous progress of the Project through completion. Unless specific periods of time or specific dates for providing services are specified in this Agreement, ENGINEER's obligation to render services hereunder will be for a period which may reasonably be required for the completion of said services.
- B. If in this Agreement specific periods of time for rendering services are set forth or specific dates by which services are to be completed are provided, and if such periods of time or dates are changed through no fault of ENGINEER, the rates and amounts of compensation provided for herein shall be subject to equitable adjustment. If CLIENT has requested changes in the scope, extent, or character of the Project, the time of performance of ENGINEER's services shall be adjusted equitably.
- C. For purposes of this Agreement the term "day" means a calendar day of 24 hours.

#### 3.02 Suspension

- A. If CLIENT fails to give prompt written authorization to proceed with any phase of services after completion of the immediately preceding phase, or if ENGINEER's services are delayed through no fault of ENGINEER, ENGINEER may, after giving seven days written notice to CLIENT, suspend services under this Agreement.
- B. If ENGINEER's services are delayed or suspended in whole or in part by CLIENT, or if ENGINEER's services are extended by Contractor's actions or inactions for more than 90 days through no fault of ENGINEER, ENGINEER shall be entitled to equitable adjustment of rates and amounts of compensation provided for elsewhere in this Agreement to reflect, reasonable costs incurred by ENGINEER in connection with, among other

things, such delay or suspension and reactivation and the fact that the time for performance under this Agreement has been revised.

#### ARTICLE 4 - PAYMENTS TO ENGINEER

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##### 4.01 Methods of Payment for Services and Reimbursable Expenses of ENGINEER

- A. *For Basic Services.* CLIENT shall pay ENGINEER for Basic Services performed or furnished under as outlined in the Letter Agreement
- B. *For Additional Services.* CLIENT shall pay ENGINEER for Additional Services performed or furnished as outlined in Exhibit D.
- C. *For Reimbursable Expenses.* CLIENT shall pay ENGINEER for Reimbursable Expenses incurred by ENGINEER and ENGINEER's Consultants as set forth in Exhibit B.

##### 4.02 Other Provisions Concerning Payments

- A. *Preparation of Invoices.* Invoices will be prepared in accordance with ENGINEER's standard invoicing practices and will be submitted to CLIENT by ENGINEER, unless otherwise agreed.
- B. *Payment of Invoices.* Invoices are due and payable within 30 days of receipt. If CLIENT fails to make any payment due ENGINEER for services and expenses within 30 days after receipt of ENGINEER's invoice therefor, the amounts due ENGINEER will be increased at the rate of 1.0% per month (or the maximum rate of interest permitted by law, if less) from said thirtieth day. In addition, ENGINEER may, after giving seven days written notice to CLIENT, suspend services under this Agreement until ENGINEER has been paid in full all amounts due for services, expenses, and other related charges. Payments will be credited first to interest and then to principal.
- C. *Disputed Invoices.* In the event of a disputed or contested invoice, only that portion so contested may be withheld from payment, and the undisputed portion will be paid.
- D. *Payments Upon Termination.*
  - 1. In the event of any termination under paragraph 6.06, ENGINEER will be entitled to invoice CLIENT and will be paid in accordance with Exhibit B for all services performed or furnished and all Reimbursable Expenses incurred through the effective date of termination.
  - 2. In the event of termination by CLIENT for convenience or by ENGINEER for cause, ENGINEER, in addition to invoicing for those items identified in subparagraph 4.02.D.1, shall be entitled to invoice CLIENT and shall be paid a reasonable amount for services and expenses directly attributable to termination, both before and after the effective date of termination, such as reassignment of personnel, costs of terminating contracts with ENGINEER's Consultants, and other related close-out costs, using methods and rates for Additional Services as set forth in Exhibit B.
- E. *Records of ENGINEER's Costs.* Records of ENGINEER's costs pertinent to ENGINEER's compensation under this Agreement shall be kept in accordance with generally accepted accounting

practices. To the extent necessary to verify ENGINEER's charges and upon CLIENT's timely request, copies of such records will be made available to CLIENT at cost.

- F. *Legislative Actions.* In the event of legislative actions after the Effective Date of the Agreement by any level of government that impose taxes, fees, or costs on ENGINEER's services or other costs in connection with this Project or compensation therefore, such new taxes, fees, or costs shall be invoiced to and paid by CLIENT as a Reimbursable Expense to which a Factor of 1.0 shall be applied. Should such taxes, fees, or costs be imposed, they shall be in addition to ENGINEER's estimated total compensation.

#### ARTICLE 5 - OPINIONS OF COST

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##### 5.01 Opinions of Probable Construction Cost

- A. ENGINEER's opinions of probable Construction Cost provided for herein are to be made on the basis of ENGINEER's experience and qualifications and represent ENGINEER's best judgment as an experienced and qualified professional generally familiar with the industry. However, since ENGINEER has no control over the cost of labor, materials, equipment, or services furnished by others, or over the Contractor's methods of determining prices, or over competitive bidding or market conditions, ENGINEER cannot and does not guarantee that proposals, bids, or actual Construction Cost will not vary from opinions of probable Construction Cost prepared by ENGINEER. If CLIENT wishes greater assurance as to probable Construction Cost, CLIENT shall employ an independent cost estimator.

##### 5.02 Designing to Construction Cost Limit

- A. If a Construction Cost limit is established between CLIENT and ENGINEER, such Construction Cost limit and a statement of ENGINEER's rights and responsibilities with respect thereto will be specifically set forth in Exhibit C - Supplemental General Conditions.

##### 5.03 Opinions of Total Project Costs

- A. ENGINEER assumes no responsibility for the accuracy of opinions of Total Project Costs.

#### ARTICLE 6 - GENERAL CONSIDERATIONS

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##### 6.01 Standards of Performance

- A. The standard of care for all professional engineering and related services performed or furnished by ENGINEER under this Agreement will be the care and skill ordinarily used by members of ENGINEER's profession practicing under similar circumstances at the same time and in the same locality. ENGINEER makes no warranties, express or implied, under this Agreement or otherwise, in connection with ENGINEER's services.
- B. ENGINEER shall be responsible for the technical accuracy of its services and documents resulting therefrom, and CLIENT shall not be responsible for discovering deficiencies therein. ENGINEER shall correct such deficiencies without additional compensation except to the extent such action is directly attributable to deficiencies in CLIENT-furnished information.

- C. ENGINEER shall perform or furnish professional engineering and related services in all phases of the Project to which this Agreement applies. ENGINEER shall serve as CLIENT's prime professional for the Project. ENGINEER may employ such ENGINEER's Consultants as ENGINEER deems necessary to assist in the performance or furnishing of the services. ENGINEER shall not be required to employ any ENGINEER's Consultant unacceptable to ENGINEER.
- D. ENGINEER and CLIENT shall comply with applicable Laws or Regulations and CLIENT-mandated standards. This Agreement is based on these requirements as of its Effective Date. Changes to these requirements after the Effective Date of this Agreement may be the basis for modifications to CLIENT's responsibilities or to ENGINEER's scope of services, times of performance, or compensation.
- E. CLIENT shall be responsible for, and ENGINEER may rely upon, the accuracy and completeness of all requirements, programs, instructions, reports, data, and other information furnished by CLIENT to ENGINEER pursuant to this Agreement. ENGINEER may use such requirements, reports, data, and information in performing or furnishing services under this Agreement.
- F. CLIENT shall make decisions and carry out its other responsibilities in a timely manner and shall bear all costs incident thereto so as not to delay the services of ENGINEER.
- G. Prior to the commencement of the Construction Phase, CLIENT shall notify ENGINEER of any other notice or certification that ENGINEER will be requested to provide to CLIENT or third parties in connection with the Project. CLIENT and ENGINEER shall reach agreement on the terms of any such requested notice or certification, and CLIENT shall authorize such Additional Services as are necessary to enable ENGINEER to provide the notices or certifications requested.
- H. ENGINEER shall not be required to sign any documents, no matter by whom requested, that would result in the ENGINEER's having to certify, guarantee or warrant the existence of conditions whose existence the ENGINEER cannot ascertain. CLIENT agrees not to make resolution of any dispute with the ENGINEER or payment of any amount due to the ENGINEER in any way contingent upon the ENGINEER's signing any such certification.
- I. During the Construction Phase, ENGINEER shall not supervise, direct, or have control over Contractor's work, nor shall ENGINEER have authority over or responsibility for the means, methods, techniques, sequences, or procedures of construction selected by Contractor, for safety precautions and programs incident to the Contractor's work in progress, nor for any failure of Contractor to comply with Laws and Regulations applicable to Contractor's furnishing and performing the Work.
- J. ENGINEER neither guarantees the performance of any Contractor nor assumes responsibility for any Contractor's failure to furnish and perform the Work in accordance with the Contract Documents.
- K. ENGINEER shall not be responsible for the acts or omissions of any Contractor(s), subcontractor or supplier, or of any of the Contractor's agents or employees or any other persons (except ENGINEER's own employees) at the Site or otherwise furnishing or performing any of the Contractor's work; or for any decision made on interpretations or clarifications of the

Contract Documents given by CLIENT without consultation and advice of ENGINEER.

- L. The General Conditions for any construction contract documents prepared hereunder are to be the "Standard General Conditions of the Construction Contract" as prepared by the Engineers Joint Contract Documents Committee (Document No. 1910-8, 1996 Edition) unless both parties mutually agree to use other General Conditions.

#### 6.02 Authorized Project Representatives

- A. Contemporaneous with the execution of this Agreement, ENGINEER and CLIENT shall designate specific individuals to act as ENGINEER's and CLIENT's representatives with respect to the services to be performed or furnished by ENGINEER and responsibilities of CLIENT under this Agreement. Such individuals shall have authority to transmit instructions, receive information, and render decisions relative to the Project on behalf of each respective party.

#### 6.03 Design without Construction Phase Services

- A. Should CLIENT provide Construction Phase services with either CLIENT's representatives or a third party, ENGINEER's Basic Services under this Agreement will be considered to be completed upon completion of the Final Design Phase or Bidding or Negotiating Phase as outlined in the Letter Agreement.
- B. It is understood and agreed that if ENGINEER's Basic Services under this Agreement do not include Project observation, or review of the Contractor's performance, or any other Construction Phase services, and that such services will be provided by CLIENT, then CLIENT assumes all responsibility for interpretation of the Contract Documents and for construction observation or review and waives any claims against the ENGINEER that may be in any way connected thereto.

#### 6.04 Use of Documents

- A. All Documents are instruments of service in respect to this Project, and ENGINEER shall retain an ownership and property interest therein (including the right of reuse at the discretion of the ENGINEER) whether or not the Project is completed.
- B. Copies of CLIENT-furnished data that may be relied upon by ENGINEER are limited to the printed copies (also known as hard copies) that are delivered to the ENGINEER. Files in electronic media format of text, data, graphics, or of other types that are furnished by CLIENT to ENGINEER are only for convenience of ENGINEER. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk.
- C. Copies of Documents that may be relied upon by CLIENT are limited to the printed copies (also known as hard copies) that are signed or sealed by the ENGINEER. Files in electronic media format of text, data, graphics, or of other types that are furnished by ENGINEER to CLIENT are only for convenience of CLIENT. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk.
- D. Because data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, the party receiving electronic files agrees that it will perform acceptance tests or procedures within 60 days,

after which the receiving party shall be deemed to have accepted the data thus transferred. Any errors detected within the 60-day acceptance period will be corrected by the party delivering the electronic files. ENGINEER shall not be responsible to maintain documents stored in electronic media format after acceptance by CLIENT.

- E. When transferring documents in electronic media format, ENGINEER makes no representations as to long term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by ENGINEER at the beginning of this Project.
- F. CLIENT may make and retain copies of Documents for information and reference in connection with use on the Project by CLIENT. Such Documents are not intended or represented to be suitable for reuse by CLIENT or others on extensions of the Project or on any other project. Any such reuse or modification without written verification or adaptation by ENGINEER, as appropriate for the specific purpose intended, will be at CLIENT's sole risk and without liability or legal exposure to ENGINEER or to ENGINEER's Consultants. CLIENT shall indemnify and hold harmless ENGINEER and ENGINEER's Consultants from all claims, damages, losses, and expenses, including attorneys' fees arising out of or resulting therefrom.
- G. If there is a discrepancy between the electronic files and the hard copies, the hard copies govern.
- H. Any verification or adaptation of the Documents for extensions of the Project or for any other project will entitle ENGINEER to further compensation at rates as defined in Exhibit B.

#### 6.05 Insurance

- A. ENGINEER shall procure and maintain insurance as set forth below:
  - 1. Workers Compensation & Employer's Liability
    - a. Each Occurrence: \$1,000,000
  - 2. General Liability
    - a. Each Occurrence: \$1,000,000
    - b. General Aggregate: \$2,000,000
  - 3. Excess or Umbrella Liability
    - a. Each Occurrence: \$5,000,000
    - b. General Aggregate: \$5,000,000
  - 4. Automobile Liability
    - a. Combined Single Limit (Bodily Injury and Property Damage):  
Each Accident \$1,000,000
  - 5. Professional Liability
    - a. Each Occurrence: \$2,000,000
    - b. General Aggregate: \$2,000,000
- B. CLIENT shall cause ENGINEER and ENGINEER's Consultants to be listed as additional insureds on any general liability or property insurance policies carried by CLIENT which are applicable to the Project.
- C. CLIENT shall require Contractor to purchase and maintain general liability and other insurance as specified in the Contract Documents and to cause ENGINEER and ENGINEER's Consultants to be listed as additional insureds with respect to

such liability and other insurance purchased and maintained by Contractor for the Project

- D. CLIENT and ENGINEER shall each deliver to the other certificates of insurance evidencing the coverage.
- E. All policies of property insurance shall contain provisions to the effect that ENGINEER's and ENGINEER's Consultants' interests are covered and that in the event of payment of any loss or damage the insurers will have no rights of recovery against any of the insureds or additional insureds thereunder.
- F. At any time, CLIENT may request that ENGINEER, at CLIENT's sole expense, provide additional insurance coverage, increased limits, or revised deductibles that are more protective. If so requested by CLIENT, with the concurrence of ENGINEER, and if commercially available, ENGINEER shall obtain and shall require ENGINEER's Consultants to obtain such additional insurance coverage, different limits, or revised deductibles for such periods of time as requested by CLIENT.

### 6.06 Termination

- A. The obligation to provide further services under this Agreement may be terminated:
1. *For cause,*
    - a. By either party upon 30 days written notice in the event of substantial failure by the other party to perform in accordance with the terms hereof through no fault of the terminating party.
    - b. By ENGINEER:
      - 1) upon seven days written notice if ENGINEER believes that ENGINEER is being requested by CLIENT to furnish or perform services contrary to ENGINEER's responsibilities as a licensed professional; or
      - 2) upon seven days written notice if the ENGINEER's services for the Project are delayed or suspended for more than 90 days for reasons beyond ENGINEER's control.
      - 3) ENGINEER shall have no liability to CLIENT on account of such termination.
    - c. Notwithstanding the foregoing, this Agreement will not terminate as a result of such substantial failure if the party receiving such notice begins, within seven days of receipt of such notice, to correct its failure to perform and proceeds diligently to cure such failure within no more than 30 days of receipt thereof; provided, however, that if and to the extent such substantial failure cannot be reasonably cured within such 30 day period, and if such party has diligently attempted to cure the same and thereafter continues diligently to cure the same, then the cure period provided for herein shall extend up to, but in no case more than, 60 days after the date of receipt of the notice.
  2. *For convenience,*
    - a. By CLIENT effective upon the receipt of notice by ENGINEER.
- B. The terminating party under paragraphs 6.06.A.1 or 6.06.A.2 may set the effective date of termination at a time up to 30 days later than otherwise provided to allow ENGINEER to demobilize personnel and equipment from the Site, to complete tasks whose value would otherwise be lost, to prepare notes as to the status of completed and uncompleted tasks, and to assemble Project materials in orderly files.

### 6.07 Controlling Law

- A. This Agreement is to be governed by the law of the state in which the Project is located.

### 6.08 Successors, Assigns, and Beneficiaries

- A. CLIENT and ENGINEER each is hereby bound and the partners, successors, executors, administrators and legal representatives of CLIENT and ENGINEER (and to the extent permitted by paragraph 6.08.B the assigns of CLIENT and ENGINEER) are hereby bound to the other party to this

Agreement and to the partners, successors, executors, administrators and legal representatives (and said assigns) of such other party, in respect of all covenants, agreements and obligations of this Agreement.

- B. Neither CLIENT nor ENGINEER may assign, sublet, or transfer any rights under or interest (including, but without limitation, moneys that are due or may become due) in this Agreement without the written consent of the other, except to the extent that any assignment, subletting, or transfer is mandated or restricted by law. Unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under this Agreement.
- C. Unless expressly provided otherwise in this Agreement:
1. Nothing in this Agreement shall be construed to create, impose, or give rise to any duty owed by CLIENT or ENGINEER to any Contractor, Contractor's subcontractor, supplier, other individual or entity, or to any surety for or employee of any of them.
  2. All duties and responsibilities undertaken pursuant to this Agreement will be for the sole and exclusive benefit of CLIENT and ENGINEER and not for the benefit of any other party. The CLIENT agrees that the substance of the provisions of this paragraph 6.08.C shall appear in the Contract Documents.

### 6.09 Dispute Resolution

- A. CLIENT and ENGINEER agree to negotiate all disputes between them in good faith for a period of 30 days from the date of notice prior to exercising their rights under provisions of this Agreement, or under law. In the absence of such an agreement, the parties may exercise their rights under law.
- B. If and to the extent that CLIENT and ENGINEER have agreed on a method and procedure for resolving disputes between them arising out of or relating to this Agreement, such dispute resolution method and procedure is set forth in Exhibit C, "Supplemental Conditions."

### 6.10 Hazardous Environmental Condition

- A. CLIENT represents to Engineer that to the best of its knowledge a Hazardous Environmental Condition does not exist.
- B. CLIENT has disclosed to the best of its knowledge to ENGINEER the existence of all Asbestos, PCB's, Petroleum, Hazardous Waste, or Radioactive Material located at or near the Site, including type, quantity and location.
- C. If a Hazardous Environmental Condition is encountered or alleged, ENGINEER shall have the obligation to notify CLIENT and, to the extent of applicable Laws and Regulations, appropriate governmental officials.
- D. It is acknowledged by both parties that ENGINEER's scope of services does not include any services related to a Hazardous Environmental Condition. In the event ENGINEER or any other party encounters a Hazardous Environmental Condition, ENGINEER may, at its option and without liability for consequential or any other damages, suspend performance of services on the portion of the Project affected thereby until CLIENT: (i) retains appropriate specialist consultant(s) or contractor(s) to identify and, as appropriate, abate, remediate, or

remove the Hazardous Environmental Condition; and (ii) warrants that the Site is in full compliance with applicable Laws and Regulations.

- E. CLIENT acknowledges that ENGINEER is performing professional services for CLIENT and that ENGINEER is not and shall not be required to become an “arranger,” “operator,” “generator,” or “transporter” of hazardous substances, as defined in the Comprehensive Environmental Response, Compensation, and Liability Act of 1990 (CERCLA), which are or may be encountered at or near the Site in connection with ENGINEER’s activities under this Agreement.
- F. If ENGINEER’s services under this Agreement cannot be performed because of a Hazardous Environmental Condition, the existence of the condition shall justify ENGINEER’s terminating this Agreement for cause on 30 days notice.

### 6.11 Allocation of Risks

#### A. Indemnification

1. To the fullest extent permitted by law, ENGINEER shall indemnify and hold harmless CLIENT, CLIENT’s officers, directors, partners, and employees from and against any and all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) caused solely by the negligent acts or omissions of ENGINEER or ENGINEER’s officers, directors, partners, employees, and ENGINEER’s Consultants in the performance and furnishing of ENGINEER’s services under this Agreement.
2. To the fullest extent permitted by law, CLIENT shall indemnify and hold harmless ENGINEER, ENGINEER’s officers, directors, partners, employees, and ENGINEER’s Consultants from and against any and all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) caused solely by the negligent acts or omissions of CLIENT or CLIENT’s officers, directors, partners, employees, and CLIENT’s consultants with respect to this Agreement or the Project.
3. To the fullest extent permitted by law, ENGINEER’s total liability to CLIENT and anyone claiming by, through, or under CLIENT for any cost, loss, or damages caused in part by the negligence of ENGINEER and in part by the negligence of CLIENT or any other negligent entity or individual, shall not exceed the percentage share that ENGINEER’s negligence bears to the total negligence of CLIENT, ENGINEER, and all other negligent entities and individuals.
4. In addition to the indemnity provided under paragraph 6.11.A.2 of this Agreement, and to the fullest extent permitted by law, CLIENT shall indemnify and hold harmless ENGINEER and its officers, directors, partners, employees, and ENGINEER’s Consultants from and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) caused by, arising out of or resulting from a Hazardous Environmental Condition, provided that (i) any such cost, loss, or damage

is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than completed Work), including the loss of use resulting therefrom, and (ii) nothing in this paragraph 6.11.A.4. shall obligate CLIENT to indemnify any individual or entity from and against the consequences of that individual’s or entity’s own negligence or willful misconduct.

5. The indemnification provision of paragraph 6.11.A.1 is subject to and limited by the provisions agreed to by CLIENT and ENGINEER in Exhibit C, “Supplemental Conditions,” if any.

### 6.12 Notices

- A. Any notice required under this Agreement will be in writing, addressed to the appropriate party at its address on the signature page and given personally, or by registered or certified mail postage prepaid, or by a commercial courier service. All notices shall be effective upon the date of receipt.

### 6.13 Survival

- A. All express representations, indemnifications, or limitations of liability included in this Agreement will survive its completion or termination for any reason.

### 6.14 Severability

- A. Any provision or part of the Agreement held to be void or unenforceable under any Laws or Regulations shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon CLIENT and ENGINEER, who agree that the Agreement shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

### 6.15 Waiver

- A. Non-enforcement of any provision by either party shall not constitute a waiver of that provision, nor shall it affect the enforceability of that provision or of the remainder of this Agreement.

### 6.16 Headings

- A. The headings used in this Agreement are for general reference only and do not have special significance.

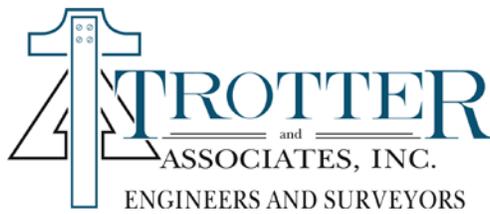
### 6.16 Definitions

- A. Defined terms will be in accordance with EJDCD No. 1910-1 (1996 Edition)

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CLIENT Initial \_\_\_\_\_

TAI Initial \_\_\_\_\_



**EXHIBIT B  
SCHEDULE OF HOURLY RATES AND REIMBURSABLE EXPENSES**

**2020 Reimbursable Expenses**

**2020 Schedule of Hourly Rates**

Classification	Billing Rate	Item	Unit	Unit Price
Engineering Intern	\$55.00	Engineering Copies 1- 249 Sq. Ft.	Sq. Ft.	\$0.29
Engineer Level I	\$110.00	Engineering Copies 250-999 Sq. Ft.	Sq. Ft.	\$0.27
Engineer Level II	\$122.00	Engineering Copies 1000-3999 Sq. Ft.	Sq. Ft.	\$0.25
Engineer Level III	\$134.00	Engineering Copies 3999 Sq. Ft. & Up	Sq. Ft.	\$0.23
Engineer Level IV	\$149.00	Engineering Copies 3999 Sq. Ft. & Up	Sq. Ft.	\$0.23
Engineer Level V	\$168.00	Engineering Copies 3999 Sq. Ft. & Up	Sq. Ft.	\$0.23
Engineer Level VI	\$195.00	Engineering Copies 3999 Sq. Ft. & Up	Sq. Ft.	\$0.23
Engineer VII	\$205.00	Mylar Engineering Copies up to 24" by 36"	Each	\$8.00
Engineer VIII	\$233.00	Mylar Engineering Copies up to 24" by 36"	Each	\$8.00
Principal Engineer	\$238.00	Color Presentation Grade Large Format Print	Sq. Ft.	\$5.15
Technician Level I	\$98.00	Comb Binding > 120 Sheets	Each	\$4.75
Technician Level II	\$112.00	Comb Binding < 120 Sheets	Each	\$3.50
Technician Level III	\$135.00	Comb Binding < 120 Sheets	Each	\$3.50
Technician Level IV	\$147.00	Binding Strips (Engineering Plans)	Each	\$1.00
Senior Technician	\$162.00	5 Mil Laminating	Each	\$1.25
GIS Specialist I	\$98.00	Copy 11" x 17" - Color	Each	\$0.50
GIS Specialist II	\$111.00	Copy 11" x 17" - Color	Each	\$0.50
GIS Specialist III	\$151.00	Copy 11" x 17" - Black and White	Each	\$0.25
Clerical Level I	\$64.00	Copy 8.5" x 11" - Color	Each	\$0.25
Clerical Level II	\$76.00	Copy 8.5" x 11" - Color	Each	\$0.25
Clerical Level III	\$88.00	Copy 8.5" x 11" - Black and White	Each	\$0.12
Survey Technician Level I	\$66.00	Copy 8.5" x 11" - Black and White	Each	\$0.12
Survey Technician Level II	\$79.00	Recorded Documents	Each	\$25.00
Survey Crew Chief	\$161.00	Recorded Documents	Each	\$25.00
Professional Land Surveyor	\$194.00	Plat Research	Time and Material	
Department Director	\$192.00	Per Diem	Each Day	\$30.00
Prevailing Wage Survey Foreman**	\$185.00	Field / Survey Truck	Each Day	\$45.00
Prevailing Wage Survey Worker**	\$181.00	Postage and Freight		Cost
Sub Consultants	Cost Plus 5%	Mileage	Per Mile	Federal Rate

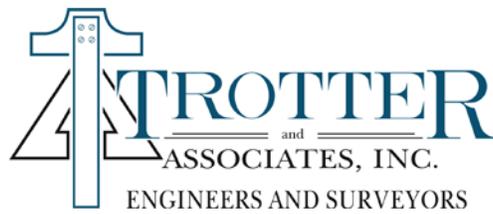
*\*\*Rates will be escalated for Overtime & Holiday Pay to adjust for Premium Time based on the current Illinois Department of Labor Rules*

*Note: On January 1<sup>st</sup> of each year, the fees and hourly rates may be escalated by an amount not to exceed five (5) percent.*

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CLIENT Initial \_\_\_\_\_

TAI Initial \_\_\_\_\_



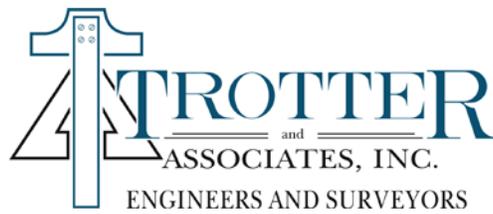
**EXHIBIT C  
SUPPLEMENTAL CONDITIONS**

Engineer hereby agrees to incorporate and accept the following provisions to be included in the aforementioned Agreement at no additional compensation:

- A. The Engineer agrees to take affirmative steps to assure that disadvantaged business enterprises are utilized when possible as sources of supplies, equipment, construction and services in accordance with the Clean Water Loan Program rules as required by the award conditions of USEPA's Assistance Agreement with the IEPA. The Engineer acknowledges that the fair share percentages are 5% for MBE's and 12% for WBE's.
- B. The Engineer shall not discriminate on the basis of race, color, national origin or sex in the performance of this contract. The Engineer shall carry out applicable requirements of 40 CFR Part 33 in the award and administration of contracts awarded under EPA financial assistance agreements. Failure by the contractor to carry out these requirements is a material breach of this contract which may result in the termination of this contract or other legally available remedies.
- C. Audit and access to records clause:
  1. Books, records, documents and other evidence directly pertinent to performance of PWSLP loan work under this agreement shall be maintained consistent with generally accepted accounting standards in accordance with the American Institute of Certified Public Accountants Professional Standards. The Agency or any of its authorized representatives shall have access to the books, records, documents and other evidence for the purpose of inspection, audit and copying. Facilities shall be provided for access and inspection.
  2. Audits conducted pursuant to this provision shall be in accordance with generally accepted auditing standards.
  3. All information and reports resulting from access to records pursuant to the above section C.1 shall be disclosed to the Agency. The auditing agency shall afford the engineer an opportunity for an audit exit conference and an opportunity to comment on the pertinent portions of the draft audit report. The final audit report shall include the written comments, if any, or the audited parties.
  4. Records under the above section C.1 shall be maintained and made available during performance of project services under this agreement and for 3 years after the final loan closing. In addition, those records that relate to any dispute pursuant to Section 365.650 (Disputes) of Illinois Administrative Code, Title 35, litigation, the settlement of claims arising out of project performance, costs or items to which an audit exception has been taken shall be maintained and made available for 3 years after the resolution of the appeal, litigation, claim or exception.

CLIENT Initial \_\_\_\_\_

TAI Initial \_\_\_\_\_



D. Covenant Against Contingent Fees:

The Engineer warrants that no person or selling agency has been employed or retained to solicit or secure this contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bonafide employees. For breach or violation of this warranty, the Owner shall have the right to annul this agreement without liability or in its discretion to deduct from the contract price or consideration or otherwise recover, the full amount of such commission, percentage, brokerage, or contingent fee.

E. Certification Regarding Debarment, Suspension and Other Responsibility Matters

The Engineer certifies to the best of its knowledge and belief that it and its principals:

1. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any federal department or agency;
2. Have not within a three year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property.
3. Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (2) of this certification; and
4. Have not within a three year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

The Engineer understands that a false statement on this certification may be grounds for rejection of this proposal or termination of the award. In addition under 18 USC Sec. 1001, a false statement may result in a fine of up to \$10,000 or imprisonment for up to 5 years, or both.

CLIENT Initial \_\_\_\_\_

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**EXHIBIT D  
CONTRACT ADDENDUM**

Project Name: Riverside Lift Station Replacement

Project No. STC140

Addendum No. \_\_\_\_\_

This is an addendum attached to, made part of and incorporated by reference into the Agreement between CLIENT and ENGINEER for modification of scope and compensation for the PROJECT. All other terms and conditions of the original Agreement between CLIENT and ENGINEER are unchanged by this Contract Addendum and shall remain in full force and effect and shall govern the obligations of both CLIENT and ENGINEER, including obligations created by this Contract Addendum.

The contract modifications are described below:

- 1.
- 2.
- 3.

CONTRACT SUMMARY

Original Contract Amount	\$ _____
Changes Prior to This Change	\$ _____
Amount of This Change	\$ _____
Revised Contract Amount:	\$ _____

For purposes of expediency, ENGINEER and CLIENT agree that an executed electronic version of this Contract Addendum shall suffice. The original of this Contract Addendum shall be returned to ENGINEER after execution.

CLIENT:

ENGINEER:

CITY OF ST. CHARLES

TROTTER AND ASSOCIATES, INC.

SIGNED:

\_\_\_\_\_

\_\_\_\_\_

TITLE

TITLE

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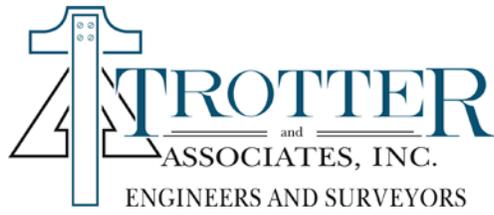
**EXHIBIT E  
CONCEPTUAL COST ESTIMATE**

<b>GENERAL CONDITIONS</b>	\$912,500
<b>SITework</b>	\$1,677,880
<b>LIFT STATION REPLACEMENT</b>	\$3,622,490
<b>ELECTRICAL &amp; CONTROLS</b>	\$691,500
<b>CONSTRUCTION SUB-TOTAL</b>	<b>\$6,904,370</b>
<b>CONTINGENCY @ 25%</b>	<b>\$1,726,093</b>
<b>ESTIMATED CONSTRUCTION COST</b>	<b>\$8,630,463</b>
<b>DESIGN ENGINEERING</b>	<b>\$746,002</b>
<b>CONSTRUCTION ENGINEERING</b>	<b>\$685,208</b>
<b>PROJECT TOTAL</b>	<b>\$10,061,673</b>

Description	Quantity	Unit	Unit Price	Total Cost
<b>GENERAL CONDITIONS</b>				
Supervision	12	Mo.	\$12,000	\$144,000
Record Drawings	1	L.S.	\$3,500	\$3,500
Disposal Costs	1	L.S.	\$30,000	\$30,000
Bonds & Insurance	1	L.S.	\$60,000	\$60,000
Overhead & Profit	1	L.S.	\$600,000	\$600,000
Electrical Allowance	1	L.S.	\$7,500	\$7,500
SCADA Allowance	1	L.S.	\$7,500	\$7,500
Demolition Allowance	1	L.S.	\$60,000	\$60,000
Bypass Pumping	0	L.S.	\$70,000	\$0
<b>TOTAL GENERAL CONDITIONS</b>				<b>\$912,500</b>
<b>SITework</b>				
Excavation and Sheeting	1	L.S.	\$176,800	\$176,800
Bedrock Removal (including piping and manholes)	230	CY	\$300	\$69,000
Bedrock Removal (including Lift Station, only)	2,660	CY	\$300	\$798,000
Backfill	650	Cu. Yd.	\$30	\$19,500
Demolition - Pumps, Pipe, Electric, etc.	1	L.S.	\$120,000	\$120,000
Structure Demolition	1	L.S.	\$250,000	\$250,000
Backfill Existing Structure	1,200	Cu. Yd.	\$30	\$36,000
Tank Removal and Backfill	1	L.S.	\$10,000	\$10,000
6" DIP NPW from Line Near Chlorine Bldg.	700	Lin. Ft.	\$125	\$87,500
Dewatering	1	L.S.	\$50,000	\$50,000
Pavement	200	Sq. Yd.	\$75	\$15,000
Bike Path Reroute	120	Sq. Yd.	\$9	\$1,080
Temporary Facilities and Controls				
Traffic Control on Route 25	1	Mo.	\$5,000	\$5,000
Restoration	1	L.S.	\$20,000	\$20,000
Site Electrical	1	L.S.	\$20,000	\$20,000
<b>TOTAL SITework</b>				<b>\$1,677,880</b>

CLIENT Initial \_\_\_\_\_

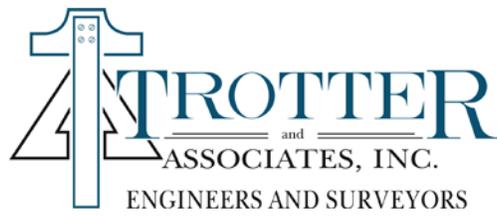
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Description	Quantity	Unit	Unit Price	Total Cost
<b>LIFT STATION REPLACEMENT</b>				
Precast Concrete Manhole	4	Each	\$7,000	\$28,000
New Concrete Lift Station	680	Cu. Yd.	\$1,000	\$680,000
Structural Steel for Bridge Crane and Screen Hoists Process	90	Lin. Ft	\$130	\$11,700
NPW System Upgrades at Main Plant				
NPW Pumps	3	Each	\$15,000	\$45,000
NPW Pump Installation	3	Each	\$5,000	\$15,000
Booster Pumps at Lift Station	1	Skid	\$50,000	\$50,000
Hydro-Pneumatic Tank at Lift Station	1	Each	\$10,000	\$10,000
100 HP Pumps	4	Each	\$85,000	\$340,000
40 HP Pumps	4	Each	\$40,000	\$160,000
Guidrails and Base Shoe Installation	1	L.S.	\$32,000	\$32,000
New Mechanical Screening Equipment	2	Each	\$200,000	\$400,000
New Screenings Washer/Compactor	2	Each	\$111,000	\$222,000
48" DIP Gravity Sewer	260	Lin. Ft	\$960	\$249,600
48" Piping Installation	13	Each	\$200	\$2,600
27" DIP Gravity Sewer	0	Lin. Ft	\$540	\$0
24" DIP Force Main Removal	20	Lin. Ft	\$80	\$1,600
24" DIP Force Main Bypass	60	Lin. Ft	\$490	\$29,400
24" DIP Force Main, MJ	40	Lin. Ft	\$490	\$19,600
24" DIP Force Main, FL	120	Lin. Ft	\$500	\$60,000
24" Fittings	16	Each	\$3,000	\$48,000
24" Magnetic Flow Meter	1	Each	\$10,000	\$10,000
24" Piping Installation	26	Each	\$600	\$15,600
16" DIP Force Main, FL	100	Lin. Ft	\$320	\$32,000
16" DIP Force Main, MJ	60	Lin. Ft	\$320	\$19,200
16" Fittings	19	Each	\$2,600	\$49,400
16" Plug Valves	5	Each	\$3,500	\$17,500
16" Magnetic Flow Meter	1	Each	\$9,000	\$9,000
16" Piping Installation	35	Each	\$500	\$17,500
12" DIP Force Main, FL	160	Lin. Ft	\$240	\$38,400
12" Fittings	24	Each	\$1,700	\$40,800
12" Plug Valves	8	Each	\$2,500	\$20,000
12" Check Valves	8	Each	\$4,500	\$36,000
12" Piping Installation	50	Each	\$400	\$20,000
Pipe Paint	1	L.S.	\$40,000	\$40,000
Architectural				
Brick and Block	4,960	Sq. Ft.	\$25	\$124,000
Interior Block	5,040	Sq. Ft.	\$16	\$80,640
Louvers	600	Sq. Ft.	\$50	\$30,000
Roll Doors	1	Each	\$15,000	\$15,000
Exterior Double Doors	5	Each	\$8,000	\$40,000
Exterior Aluminum Doors	4	Each	\$6,000	\$24,000
Interior Aluminum Doors	2	Each	\$6,000	\$12,000
Epoxy Flooring	4,000	Sq. Ft.	\$15	\$60,000
Steel Lintels and Sills	60	Lin. Ft	\$20	\$1,200
Liquid Water Repellent	4,000	Sq. Ft.	\$2	\$8,000
Firestopping	1	L.S.	\$3,000	\$3,000
Bollards	2	Each	\$500	\$1,000
Access Hatches	8	Each	\$4,500	\$36,000
Roof Planks	2,400	Sq. Ft.	\$11	\$26,400
Roof	24	SQ	\$245	\$5,880
Paint	15,040	Sq. Ft.	\$3	\$45,120
Fire Extinguishers	3	Each	\$450	\$1,350
Grating	1,000	Sq. Ft.	\$24	\$24,000
Toilets and Fixtures	1	L.S.	\$10,000	\$10,000
Aluminum Stairs	2	Each	\$15,000	\$30,000
Mechanical				
MOD & Louver	2	Each	\$2,000	\$4,000
Unit Heaters	8	Each	\$2,500	\$20,000
Ductwork	200	Lin. Ft	\$120	\$24,000
Odor Control Unit	1	Each	\$200,000	\$200,000
Air Conditioner	1	Each	\$20,000	\$20,000
Bathroom HVAC	1	L.S.	\$5,000	\$5,000
Floor Drains	20	Lin. Ft	\$60	\$1,200
1" Condensate Line	20	Lin. Ft	\$40	\$800
<b>TOTAL LIFT STATION REPLACEMENT</b>				<b>\$3,622,490</b>

CLIENT Initial \_\_\_\_\_

TAI Initial \_\_\_\_\_



Description	Quantity	Unit	Unit Price	Total Cost
<b>ELECTRICAL &amp; CONTROLS</b>				
Interior Lighting	6	Each	\$800	\$4,800
Interior Explosion-Proof Lighting	8	Each	\$2,500	\$20,000
Exterior Lighting	5	Each	\$2,000	\$10,000
Odor Control System	1	Each	\$5,000	\$5,000
Mechanical Screening Equipment	2	Each	\$12,000	\$24,000
Screenings Washer/Compactor	1	Each	\$8,000	\$8,000
Pumps	8	Each	\$6,000	\$48,000
VFDs	8	Each	\$10,000	\$80,000
MCC Sections	12	Each	\$20,000	\$240,000
Conduit & Wire	2,000	Lin. Ft	\$30	\$60,000
Stand-By Generator	1	Each	\$50,000	\$50,000
Wire Generator	1	Each	\$7,500	\$7,500
Automatic Transfer Switch	1	Each	\$7,500	\$7,500
Wire Automatic Transfer Switch	1	Each	\$2,500	\$2,500
New Control Panel	1	Each	\$45,000	\$45,000
PLC Based System	1	L.S.	\$40,000	\$40,000
Floats	12	Each	\$600	\$7,200
Submersible Level Transducer	2	Each	\$4,000	\$8,000
Ultrasonic Level Sensors	4	Each	\$4,000	\$16,000
Magnetic Flow Meters	2	Each	\$4,000	\$8,000
<b>TOTAL ELECTRICAL &amp; CONTROLS</b>				<b>\$691,500</b>

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**EXHIBIT F  
 MANHOOR ESTIMATE**

	Principal Engineer	Engineer VIII	Engineer VII	Engineer VI	Engineer V	Engineer III	Engineer II	Engineer I	Sr. Technician	Technician Level IV	Technician Level III	Technician Level II	Clerical Level II	PLS	Survey Crew Chief	Department Director	
General Tasks	42	0	0	70	64	272	0	214	0	40	40	40	0	0	0	40	822
Preliminary Report	43	0	0	61	83	70	0	0	40	28	0	0	0	0	0	0	325
IEPA Loan	2	0	0	4	48	36	0	0	0	0	0	0	0	0	0	0	90
Preliminary Design Phase	24	0	0	22	52	84	0	0	32	40	0	0	24	4	24	0	306
Design Development Phase	41	96	16	202	32	264	0	80	20	352	0	0	0	0	0	0	1103
Final Design Phase	30	152	40	292	16	164	0	116	8	376	0	0	0	0	0	0	1194
Design Addendum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Reimbursables	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bidding and Negotiating Phase	8	12	8	30	34	56	0	0	8	24	0	0	0	0	0	0	180
Construction Phase	50	50	40	370	0	560	2900	0	8	0	0	88	0	12	40	18	4136
Contractor's Completion Documents	8	0	0	36	40	0	84	0	4	0	24	0	0	4	16	0	216
Reimbursables	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	<b>248</b>	<b>310</b>	<b>104</b>	<b>1087</b>	<b>369</b>	<b>1506</b>	<b>2984</b>	<b>410</b>	<b>120</b>	<b>860</b>	<b>64</b>	<b>128</b>	<b>24</b>	<b>20</b>	<b>80</b>	<b>58</b>	

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