

**AGREEMENT #15066 FOR ENGINEERING SERVICES**

This AGREEMENT is entered into by and between Lake County (County) and Applied Technologies, 468 Park Avenue, Lake Villa, IL 60046 (hereafter "Engineer").

**RECITALS**

WHEREAS, Lake County is seeking an Engineer to provide Engineering services for

PW#2012.027 East Main Force Main Repair Design as described in Attachment A; and

WHEREAS, the Engineer is a professional provider of Engineering services; and

**NOW, THEREFORE, Lake County and the Engineer AGREE AS FOLLOWS:**

**SECTION 1. AGREEMENT DOCUMENTS**

This AGREEMENT constitutes the entire agreement between the County and the Engineer.

**SECTION 2. SCOPE OF SERVICES**

The Engineer shall provide engineering services described in Attachment A.

**SECTION 3. DURATION**

The work shall be completed within 90 days after execution of this Agreement.

**SECTION 4. INDEMNIFICATION**

The Engineer agrees to indemnify, save harmless and defend the County, their agents, servants, and employees, and each of them against and hold it and them harmless from any and all lawsuits, claims, demands, liabilities, losses and expenses, including court costs and attorney's fees, for or on account of any injury to any person, or any death at any time resulting from such injury, or any damage to property, which may arise or which may be alleged to have arisen out of Engineer's negligent acts in connection with the services covered by this Agreement. The foregoing indemnity shall apply except if such injury, death or damage is caused directly by the willful and wanton conduct of the County, their agents, servants, or employees or any other person indemnified hereunder.

**SECTION 5. INSURANCE**

The Engineer must obtain, for the Contract term and any extension of it, insurance issued by a company or companies qualified to do business in the State of Illinois and provide the County with evidence of insurance. Insurance in the following types and amounts is necessary:

- **Worker's Compensation Insurance** covering all liability of the Engineer arising under the Worker's Compensation Act and Worker's Occupational Disease Act at statutory limits.
- **Professional Liability** to include, but not be limited to, coverage for Errors and Omissions to respond to claims for loss there from.
  - **General Aggregate Limit** \$3,000,000
  - **Each Occurrence Limit** \$1,000,000
- **Automobile Liability:**
  - **Bodily Injury, Property Damage (Each Occurrence Limit) \$1,000,000**

Engineer agrees that with respect to the above required Automobile Liability insurance, Lake County shall:

- Be named as additional insured by endorsement to the extent of the negligence of the Engineer;
- Be provided with thirty (30) days notice, in writing, of cancellation of material change;
- Be provided with Certificates of Insurance evidencing the above required insurance, prior to commencement of this Contract and thereafter with certificates evidencing renewals or replacements of said policies of insurance at least fifteen (15) days prior to the expiration of cancellation of any such policies. Forward Notices and Certificates of Insurance to: Lake County Central Services, 18 N. County St, Waukegan, IL 60085-4350.

**SECTION 6. AGREEMENT PRICE**

Lake County will pay to the Engineer the amount not to exceed \$ 66,900<sup>00</sup>.

**SECTION 7. INVOICES & PAYMENT**

Invoices may be submitted for work performed on a monthly basis based upon the percent of work completed in the amount not-to-exceed in Section 6. Submit invoice(s) detailing the services provided. Payments shall be made in accordance with the Local Government Prompt Payment Act.

Engineer will address Invoices to:

Lake County Public Works  
 650 West Winchester Road  
 Libertyville, IL 60048-1391  
 Attn: David Humbert

County will make Payments to:

Applied Technologies  
 468 Park Avenue  
 Lake Villa, IL 60046

#### **SECTION 8. STATEMENT OF OWNERSHIP**

The drawings, specifications and other documents prepared by the Engineer for this Project are the property of the County, and Engineer may not use the drawings and specifications for any purpose not relating to the Project without the County's consent, except for the Engineer's services related to this Project. All such documents shall be the property of the County who may use them without Engineer's permission for any current or future Lake County project; provided, however, any use except for the specific purpose intended by this Agreement will be at the County's sole risk and without liability or legal exposure to the Engineer.

The Engineer shall retain its copyright and ownership rights in its design, drawing details, specifications, data bases, computer software, and other proprietary property. Intellectual property developed, utilized, or modified in the performance of the services shall remain the property of the Engineer.

#### **SECTION 9. TERMINATION**

The County reserves the right to terminate this Agreement, or any part of this Agreement, upon thirty(30) days written notice. In case of such termination, the Engineer shall be entitled to receive payment from the County for work completed to date in accordance with terms and conditions of this Agreement. In the event that this Agreement is terminated due to Engineer's default, the County shall be entitled to contract for consulting services elsewhere and charge the Engineer with any or all losses incurred, including attorney's fees and expenses.

#### **SECTION 10. JURISDICTION, VENUE, CHOICE OF LAW**

This Agreement shall be governed by and construed according to the laws of the State of Illinois. Jurisdiction and venue shall be exclusively found in the 19th Judicial Circuit Court, State of Illinois.

#### **SECTION 11. INDEPENDENT CONTRACTOR**

The Engineer is an independent contractor and no employee or agent of the Engineer shall be deemed for any reason to be an employee or agent of the County.

#### **SECTION 12. WARRANTIES**

The Engineer represents and warrants to the County that none of the work included in this contract will in any way infringe upon the property rights of others. The Engineer shall defend all suits or claims for Engineer's infringement of any patent, copyright or trademark rights and shall hold the County harmless from loss on account thereof.

#### **SECTION 13. ASSIGNMENT**

Neither the Engineer nor the County shall assign any duties of performance under this Agreement without the express prior written consent of the other.

**SECTION 14. MODIFICATION**

This Agreement may be amended or supplemented only by an instrument in writing executed by the party against whom enforcement is sought.

**SECTION 15. DISPUTE RESOLUTION**

All issues, claims, or disputes arising out of this Agreement shall be resolved in accordance with the Appeals and Remedies Provisions in Article 9 of the Lake County Purchasing Ordinance.

**SECTION 16. NO IMPLIED WAIVERS**

The failure of either party at any time to require performance by the other party of any provision of this Agreement shall not affect in any way the full right to require such performance at any time thereafter. Nor shall the waiver by either party of a breach of any provision of this Agreement be taken or held to be a waiver of the provision itself.

**SECTION 17. SEVERABILITY**

If any part of this Agreement shall be held to be invalid for any reason, the remainder of this Agreement shall be valid to the fullest extent permitted by law.

**SECTION 18. CHANGE IN STATUS**

The Engineer shall notify the County promptly of any change in its status resulting from any of the following: (a) vendor is acquired by another party; (b) vendor becomes insolvent; (c) vendor, voluntary or by operation law, becomes subject to the provisions of any chapter of the Bankruptcy Act; (d) vendor ceases to conduct its operations in normal course of business. The County shall have the option to terminate this Agreement with the Engineer immediately on written notice based on any such change in status.

**SECTION 19. DELIVERABLES**

The Engineer shall provide deliverables as identified in Attachment A.

IN WITNESS HEREOF, the undersigned have caused this Agreement to be executed in their respective names on the dates hereinafter enumerated.

Lake County:

Applied Technologies:

\_\_\_\_\_  
Ruth Anne Hall  
Purchasing Agent  
Lake County

  
\_\_\_\_\_  
James J. Smith  
President  
Applied Technologies, Inc.

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

Date: 3/3/15

## ATTACHMENT A

February 24, 2015



Mr. David Humbert, P.E.  
Lake County Public Works Department  
650 West Winchester Road  
Libertyville, Illinois 60048-1391

Subject:           Proposal for Engineering Services  
                      East Main Force Main Repair Design (Step 2)

Dear Dave:

Applied Technologies, Inc. (ATI) is pleased to submit this proposal to provide engineering design services to the Lake County Public Works Department (LCPWD) for repair of the East Main Force Main. The following paragraphs present a project description, scope of work, and engineering budget.

### PROJECT DESCRIPTION

The LCPWD owns and operates the 30-inch East Main Force Main, which is about 5,300 feet long. This main conveys wastewater flow from the East Main Street Pumping Station to the 42-inch gravity sewer in North Wilson Road, which ultimately conveys the wastewater to the Fox Lake Northwest Regional Water Reclamation Facility.

The force main was constructed in 1979 of prestressed concrete cylinder pipe (PCCP), which was commonly used at the time. This pipe features an interior concrete core, an embedded thin steel cylinder, a high strength prestressing wire wound around the steel cylinder, and an exterior mortar coating covering the prestressing wire. Although still available, this material is not as commonly employed today.

The LCPWD commissioned a study of the East Main Force Main to determine the condition of the pipeline. The study included the following non-destructive inspection and testing methods:

- Transient pressure monitoring
- Leak and gas pocket survey using acoustical technology
- Robotic visual and electromagnetic inspection



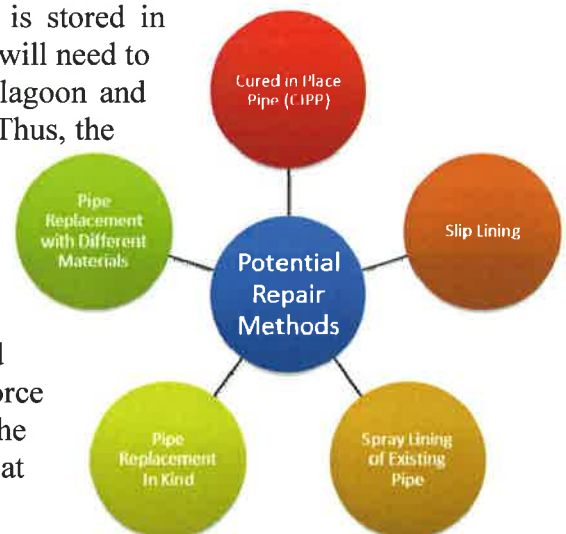
The report observed that approximately 1,200 feet of the interior pipe wall displays deterioration consistent with hydrogen sulfide corrosion. It recommends rehabilitation or replacement of the deteriorated pipe, as well as improvements to the air release valves (ARVs). However, the report does not recommend specific rehabilitation or repair methods. Table 1 outlines the pipe segments that were identified as deteriorated:

Table 1 Deteriorated Pipe Segments			
Segment	Beginning Station	Ending Station	Pipe Length (feet)
1	20+16	20+37	21
2	24+29	27+76	347
3	28+37	28+79	42
4	30+52	34+27	375
5	40+47	44+49	402

The force main has been in service for 35 years. The extent of the deterioration is significant, although there have been no structural failures to date. Based on the report and video from the pipeline inspection, it is clear that the deteriorated portions of the force main must be repaired to ensure continued long-term reliability.

The existing force main is a single, non-redundant component of the wastewater transmission system, so it must remain in service to maintain sanitary sewer service to a large area. However, the force main can be shut down for short periods of time (approximately 24 hours) while the wastewater flow is stored in storage lagoons. Following a shutdown, the force main will need to be in service long enough to both empty the storage lagoon and convey new flow before the next shutdown can occur. Thus, the 24 hour shutdowns would be limited to once or twice per week. This limitation will require careful planning of the construction activities.

The purpose of the current project is to design the rehabilitated East Main Force Main and the associated ARVs. The repair method(s) used to rehabilitate the force main will be determined in the study that will precede the design work. The potential repair methods are listed at right.







The sections of deteriorated pipe include two air and vacuum relief valves that will be replaced as a part of this rehabilitation project. The valves may be replaced at their original locations if the host PCCP pipe components are sufficiently sound to be reused for this purpose. If not, a Tee can be included on the new pipe installed in the nearest access point, along with the necessary fittings and access manhole.

## SCOPE OF WORK

Figure 1 illustrates the proposed scope of services for this project. These steps are further detailed below.

**Figure 1**  
**Scope of Work – Design Services**



### Design Services

1. Obtain field information in the project area.
  - a. Coordinate and furnish survey personnel and equipment to obtain the field information necessary to prepare Contract Documents for the Project. Provide utility locator services in areas proposed for excavations.
  - b. Coordinate and furnish ecological personnel to delineate wetlands boundaries. Prepare correspondence to the Lake County Stormwater Management Commission requesting wetlands jurisdictional determination. Advise the project team regarding wetlands issues.
2. Prepare drawings and specifications for incorporation into Contract Documents. Contract Documents shall be submitted to the Client for review at the 50% and 90% completion points. The drawings will show the general scope, extent and character of the work to be furnished and performed by a Contractor. The specifications will be prepared in conformance with the sixteen-division format of the Construction Specifications Institute. The design work is to be based on a single prime construction contract.



3. Prepare the following for review and approval by the Client, its legal counsel and other advisors. All of these documents shall be consistent with the forms and pertinent guide sheets prepared by the Engineers Joint Contract Documents Committee.
  - a. Contract agreement forms
  - b. General conditions
  - c. Supplementary conditions
  - d. Bid forms
  - e. Invitations to bid and instructions to bidders.
4. Furnish 5 copies of the Contract Documents for review and approval by the Client and to obtain Project approval by government agencies having jurisdiction.
5. Assist the Client in processing the Contract Documents with the appropriate regulatory agencies. The Client shall pay the costs for all permits and inspection fees.
6. Prepare an opinion of probable construction cost at the 90% completion point.
7. Meet with the Client to present a summary of the project and the estimated construction cost at the 50% and 90% completion points.
8. Incorporate client comments into the Contract Documents and provide 100% complete documents ready for construction bidding.

### **Construction Related Services**

Construction related services, which may include bidding, contract administration, and construction inspection, will be determined following the design services. The scope of services for construction related services will be incorporated into the Agreement by Addendum.

### **ENGINEERING BUDGET**

We propose an engineering budget of \$66,900 for the East Main Force Main Repair Design project, as detailed on Table 2. We propose to bill you monthly based upon personnel time spent on the project and our standard hourly rates plus expenses. Subconsultant expenses will be billed at costs for the services provided. We anticipate completion of the design services within three months of your notice to proceed.





Table 2 Engineering Budget	
Service	Cost
<b>Applied Technologies, Inc.</b>	
Design Engineering	\$52,900
<b>Manhard Consulting</b>	
Topographic Survey and Benchmarks	\$5,000
Utility Locator Services*	\$2,000
Railroad ROW Access Permit and Insurance Surcharge*	\$4,000
<b>Hey and Associates</b>	
Wetland Field Investigation	\$1,600
Request for Jurisdictional Determination	\$400
Ecological Consulting	\$1,000
<b>Total</b>	<b>\$66,900</b>

\* If required

Please contact either of us with any questions regarding this proposal at (847) 265-7325. We value our partnership with the Lake County Public Works Department and thank you for the opportunity to continue to be of service.

Best regards,  
Applied Technologies, Inc.

James J. Smith, P.E.  
President

Frank Tiefert, P.E.  
Vice President



**Lake County Public Works Department**  
***East Main Force Main Repair Design***

Accepted by:

Owner: \_\_\_\_\_  
By (Signed): \_\_\_\_\_  
By (Print): \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

## GENERAL PROVISIONS

### 1. Scope of Services and Time Limit

The Proposal or Agreement for Professional Services, hereinafter both called the Agreement, is valid for a period of 60 days. Signing of the Agreement by the Client shall be considered as authorization for Applied Technologies, Inc. (ATI) to proceed with the Scope of Services. If acceptance is not received within 60 days, ATI reserves the right to revise the Scope of Services, Compensation, schedule, and personnel commitments.

### 2. Compensation

Compensation for the Scope of Services shall be as indicated in the Agreement, including any rate schedule or other attachments. All time spent on the Project by professional, technical, and clerical personnel will be invoiced. Unless otherwise stated, any compensation or fee estimate is considered a budget estimate only, and is not a lump-sum fee. If it becomes apparent to ATI that the total amount of compensation will exceed the budget estimate, ATI will notify the Client. Promptly thereafter, the Client and ATI shall review the matter of compensation and either the budget estimate or the remaining Scope of Services shall be revised. Rate schedules are adjusted on January 1st of each calendar year.

### 3. Additional Services

Additional compensation shall be negotiated between the Client and ATI for Additional Services beyond the Scope of Services. Unless otherwise noted, these Additional Services will include, but not be limited to: investigating the condition of existing facilities; verifying the accuracy of drawings or information furnished by the Client; surveying and preparation of easements and right-of-way descriptions, redesign after approval of preliminary phase documents; preparation of alternative designs; bid protests; redesign and rebidding; Client-requested change orders involving redesign; restaking of construction stakes; and delays beyond the control of ATI.

### 4. Payments to ATI

Progress invoices will be issued monthly by ATI for all services performed under the Agreement. Invoices are due and payable on receipt. Interest at the rate of 1% per month will be charged on all past due amounts.

### 5. Professional Standards

ATI shall be responsible, to the level of competency presently maintained by other practicing professionals in the same type of work and time in the Client's community, for the professional and technical soundness, accuracy, and adequacy of all design, drawings, specifications, and other work and materials furnished under this Agreement. Professional services are not subject to, and ATI can not provide, any warranty or guarantee, express or implied, including warranties or guarantees contained in any uniform commercial code. Any such warranties or guarantees contained in any purchase orders, requisitions or notices to proceed issued by the Client are specifically objected to.

### 6. Opinions of Cost

Since ATI 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, the opinions of probable Total Project Costs and Construction Cost are made on the basis of ATI's experience and qualifications and represent ATI's professional judgment. ATI does not guarantee that proposals, bids or actual Total Project Costs or Construction Costs will not vary from the opinions of probable cost prepared by ATI. If prior to bidding, the Client wishes greater assurance as to Total Project or Construction Costs, the Client shall employ an independent cost estimator. ATI's services to modify the Contract Documents to bring the Construction Cost within any limitation established by Client will be considered Additional Services.

### 7. Construction Observation

During construction observation ATI shall not supervise, direct, or have control over the Contractor's work or responsibility for the means, methods, techniques, sequences, or procedures of construction, nor for construction safety precautions and programs. ATI shall not be responsible for any failure of the Contractor to comply with applicable laws, rules, regulations, ordinances, or codes. ATI can neither guarantee the performance of the construction contract by the Contractor nor assume responsibility for the Contractor's failure to furnish and perform work in accordance with the Contract Documents.

### 8. Insurance

ATI shall procure and maintain insurance for protection from claims under workers' compensation acts, claims for damages because of bodily injury including personal injury, sickness or disease or death of any and all employees or of any person other than such employees, and from claims or damages because of injury to or destruction of property including loss of use.

### 9. Indemnification

ATI agrees to indemnify Client from any claims, damages, losses, and costs, including, but not limited to, attorney's fees and litigation costs, arising out of claims by third parties for property damage and bodily injury, including death, caused solely by the negligence or willful misconduct of ATI in connection with the project. Client agrees to indemnify ATI from any claims, damages, losses, and costs, including, but not limited to, attorney's fees and litigation costs, arising out of claims by third parties for property damage and bodily injury, including death, caused solely by the negligence or willful misconduct of Client, Client's employees, or agents in connection with the project.

If the negligence or willful misconduct of both ATI and Client (or a person identified above for whom each is liable) is a cause of such damage or injury, the loss, cost, or expense shall be shared between ATI and Client in proportion to their relative degrees of negligence or willful misconduct and the right of indemnity shall apply for such proportion.

### 10. Limitation of Liability

The Client agrees to limit any and all liability or claim for damages, cost of defense, or expenses levied against ATI to a sum not to exceed \$50,000 or the amount of total compensation under this Agreement, whichever is less, on account of any design defect, error, omission, or professional negligence.

### 11. Reuse of Documents

Any reuse of documents including reports, drawings, specifications, Contract Documents and other deliverables furnished by ATI, whether in hard copy or electronic form, under this Agreement without specific written verification or adaption by ATI will be at the Client's sole risk and without liability or legal exposure to ATI. Any such reuse, verification or adaption will entitle ATI to further compensation at rates agreed upon by the Client and ATI.

### 12. Termination

Either the Client or ATI may terminate the Agreement by giving 30 days written notice to the other party. In such an event, the Client shall pay ATI in full for all work previously authorized and performed prior to the effective date of termination. All relationships and obligations created by this Agreement shall be terminated upon completion of all applicable requirements of this Agreement.

### 13. Dispute Resolution

In the event of a dispute arising under this Agreement, the Client and ATI shall attempt to settle the dispute by discussion between the Client's and ATI's management. If any dispute cannot be resolved in this manner, in a reasonable length of time, the Client and ATI agree to attempt non-binding mediation or other alternative dispute resolution prior to filing any legal proceedings. In the event actions are brought to enforce this Agreement, the prevailing party shall be entitled to collect its litigation costs from the other party.

### 14. Controlling Law and Severability

This Agreement is to be governed by the law of the principal place of business of ATI. If any provisions, paragraph, word, section, or subsection of this Agreement is invalidated by any court of competent jurisdiction, the remaining provisions, paragraphs, words, sections, and subsections shall not be affected and shall continue in full force and effect.

### 15. Entire Agreement

This Agreement represents the entire agreement between the Client and ATI. No other terms, conditions, promises, understandings, statements, or representations, express or implied, covered in the subject matter of this Agreement exist or have been made. This Agreement cancels and supersedes all previous agreements, proposals and understandings, if any, written or oral, between the parties relating to the subject matter of this Agreement.

