

AGREEMENT #16203 FOR ENGINEERING SERVICES

This AGREEMENT is entered into by and between Lake County (County) and Donohue & Associates, Inc., 3311 Weeden Creek Road, Sheboygan, WI 53081 (hereafter "Engineer").

RECITALS

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

PW#2014.092 - Mill Creek Water Reclamation Facility Process Improvements 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 works shall be completed within 150 days after execution of this Agreement.
↳ (completion of final bid documents)

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 \$ 161,700.

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 Department of Public Works
650 Winchester Road
Libertyville, IL 60048-1391
Attn: Heather L. Galan, P.E.

County will make Payments to:

Donohue & Associates, Inc.
3311 Weeden Creek Road
Sheboygan, WI 53081

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. WARRANTS

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.

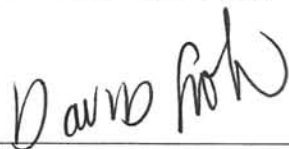
IN WITNESS HEREOF, the undersigned have caused this Agreement to be executed in their respective names on the dates hereinafter enumerated.

Lake County:

RuthAnne Hall
Purchasing Agent
Lake County

Date: _____

Donohue & Associates, Inc.:



David Froh
Vice President
Donohue & Associates, Inc.

Date: 9/22/2016

Appendix A

Project: Mill Creek WRF Nitrogen Removal and Aeration Control Improvements

PART I

PROJECT DESCRIPTION/SCOPE OF SERVICES/TIMING

A. PROJECT DESCRIPTION

Lake County Department of Public Works (Owner) has identified the following upgrades to the Mill Creek WRF:

1. Incorporation of nitrogen removal in the aeration tanks by installing the following:
 - a. Mixed liquor recycle pumps in Zone 1D and 2D
 - b. Mixed liquor recycle piping from Zone 1D and 2D to Zone 1A3 and 2A4
 - c. Installation of two new baffle walls and two new floating mixers in Zone 1B and 2B along with modifications to the aeration grids in these zones to create sufficient anoxic volume for nitrogen removal when both aeration trains are in service.
2. Incorporation of automatic dissolved oxygen control for Zones 1B, 1C, 1D, 2B, 2C, and 2D by installing the following:
 - a. Dissolved oxygen probes in Zones 1C, 1D, 2C, and 2D (1B and 2B already have DO probes)
 - b. Electrically actuated butterfly valves in Zones 1B, 1C, 1D, 2B, 2C, and 2D
 - c. Mass flow meters for airflow in Zones 1B, 1C, 1D, 2B, 2C, and 2D
 - d. Modifications to the ALP piping associated with the above equipment locations
 - e. Control modifications to operate the aeration blowers on a discharge pressure control loop
 - f. Control modifications to operate the new butterfly valves on a DO setpoint control loop
3. Modifications to the MCC equipment in the RAS Pump Station to include clarifiers, channel blower, and WAS valve on backup generator service.
4. Installation of a new level monitoring device in the septage tank for improved level control.

B. SCOPE OF SERVICES

Basic Services to be provided by Donohue (Engineer) for this Project under this Agreement are as follows:

Design and Bidding

1. Conduct site investigation with Process, Electrical, and Instrumentation engineers to familiarize the design team with the site and scope of work.
2. Develop design basis calculations for new equipment and piping systems.
3. Prepare layout drawings for the identified improvements.
4. Prepare draft process and instrumentation diagrams for improvements.
5. Conduct a preliminary layout drawings review workshop with Lake County staff.

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6. Prepare draft bidding drawings for the improvements listed in Section A above incorporating comments received at the preliminary layout drawings review workshop.
7. Prepare technical specifications for the improvements listed in Section A above excluding Division 0 front-end documents prepared by Lake County staff.
8. Provide quality control reviews on calculations, drawings, and specifications.
9. Prepare an engineer's opinion of probable construction cost for the project.
10. Conduct a bidding document review workshop with Lake County staff.
11. Prepare bidding documents (plans and specifications) incorporating comments received at the bidding document review workshop.
12. Prepare and submit IEPA construction permit application.
13. Deliver electronic bidding document files in PDF format to Lake County for use in bidding.
14. Respond to questions during bidding and prepare changes to drawings and/or specifications for Lake County staff to incorporate into addendums.
15. Other than scope item 12 above, no additional permitting activities are included in the scope.
16. No survey is included in the scope.

Engineering Services During Construction

1.0 Construction Phase Engineering Services.

Upon successful completion of the Bidding Phase, and upon award of a construction contract, Engineer shall provide the following construction phase services for this project:

- 1.1 *Construction Contract Document Execution.* Prepare contract documents for signature by the Contractor and Lake County. Issue Notice to Proceed with Construction upon satisfactory submission of bonds and insurance by the Contractor.
- 1.2 *Pre-Construction Conference and Progress Meetings.* Attend and conduct a Pre-Construction Conference for the project prior to commencement of Work at the project site. Also attend monthly construction progress meetings, conducted by the Contractor, for the project. Engineer to prepare and distribute minutes for Pre-Construction Conference and the Contractor shall prepare and distribute all monthly progress meeting minutes.
- 1.3 *Visits to Site and Observation of Construction.* Make visits to the site when Owner deems necessary, in order to observe as an experienced and qualified design professional the progress and quality of the Work. Such visits and observations by Engineer are not intended to be exhaustive or to extend to every aspect of a Contractor's work in progress or to involve detailed inspections of a Contractor's work in progress beyond the responsibilities specifically assigned to Engineer in this Agreement and the Contract Documents, but rather are to be limited to spot checking and general observation of the Work based on Engineer's exercise of professional judgment. The structural, process, electrical, and controls design engineers will each

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conduct up to two separate site visits to observe the work of the contractor.

- 1.4 *Clarifications and Interpretations.* Provide input to Owner on necessary clarifications and interpretations of the Contract Documents as appropriate to the orderly completion of Contractor's work.
- 1.5 *Change Orders and Work Change Directives.* Provide input to Owner on Change Orders and Work Change Directives. Owner to prepare Change Orders and Work Change Directives as required.
- 1.6 *Shop Drawings and Samples.* Provide a technical review and approve or take other appropriate action in respect to Shop Drawings and Samples and other data which the 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 project as a functioning whole as indicated in the Contract Documents. Such reviews and approvals or other action will not extend to means, methods, techniques, sequences or procedures of construction or to safety precautions and programs incident thereto.
- 1.7 *Manufacturer O&M and Training Manuals:* Review submitted manufacturer O&M and training manuals for compliance with contract document requirements. O&M and training manual submittals that comply with the contract document requirements that have been "approved" or "approved as noted" will then be forwarded to the Owner for their reference and use during vendor training and the startup of equipment.
- 1.8 *Substitutes and "or-equal."* Evaluate and determine the acceptability of substitute or "or-equal" materials and equipment proposed by a Contractor.
- 1.9 *Inspections and Tests.* Receive and review all certificates of inspections, tests, and approvals required by the Contract Documents. Engineer's review of such certificates will be for the purpose of determining that the results certified indicate compliance with the Contract Documents and will not constitute an independent evaluation that the content or procedures of such inspections, tests, or approvals comply with the requirements of the Contract Documents. Engineer shall be entitled to rely on the results of such tests.
- 1.10 *Applications for Payment.* Review and provide input to Owner on applications for payment and accompanying supporting documentation from the Contractor.
- 1.11 *O&M Manual and Post Startup Services.*
 - 1.11.1 *O&M manual.*
 - 1.15.4.1 Donohue will prepare a new O&M manual section that reflects upgrades that are part of this project.
 - 1.15.4.2 The new O&M manual section will be assembled using chapters as follows:

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1. Biological Nutrient Removal (Phosphorus and Nitrogen)
 - a. System Description
 - b. Design Basis
 - c. Modes of Operation
 - d. Process Troubleshooting
2. Activated Sludge Aeration
 - a. System Description
 - b. Design Basis
 - c. Modes of Operation
 - d. Process Troubleshooting

1.11.2 *Post-startup assistance*

- 1.15.6.1 Provide operational assistance via teleconference on a weekly basis for the first three months after startup.

- 1.12 *Final Notice of Acceptability of the Work.* Conduct a final inspection to determine if the completed Work of the Contractor is acceptable so that Engineer may recommend, in writing, final payment to a Contractor.
- 1.13 *Record Documents.* Receive annotated record documents from the Contractor, which are to be assembled by the Contractor in accordance with the Contract Documents to obtain final payment. Prepare Record Drawings showing appropriate record information based on the project annotated record documents received from the Contractor. The completed Record Drawing deliverables for the project shall consist of two full size and two half size printed-paper sets and an electronic set in PDF and AutoCAD format.
- 1.14 *Limitation of Responsibilities.* Engineer shall not be responsible for the acts or omissions of the Contractor, or of any of its subcontractors, suppliers, or of any other individual or entity performing or furnishing any of the Work. Engineer shall not be responsible for failure of the Contractor to perform or furnish the Work in accordance with the Contract Documents.

2.0 *OPTIONAL SCOPE ALTERNATE Construction Phase Resident Project Representative Services (Separate authorization required from Lake County for this scope)*

- 2.1 Engineer shall furnish a part-time Resident Project Representative (RPR) to assist Engineer in observing progress and quality of the Work.
- 2.2 Through such additional observations of Contractor's work in progress and field checks of materials and equipment by the RPR, Engineer shall endeavor to provide further protection for Owner against defects and deficiencies in the Work. However, Engineer shall not, during such visits or as a result of such observations of a Contractor's work in progress, supervise, direct, or have control over the Contractor's Work nor shall Engineer have authority over or responsibility for the means, methods, techniques, sequences, or procedures selected by the Contractor, for safety precautions and programs incident to the Contractor's work in progress, for any

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failure of the Contractor to comply with Laws and Regulations applicable to Contractor's performing and furnishing the Work, or responsibility of construction for the Contractor's failure to furnish and perform the Work in accordance with the Contract Documents.

- 2.3 The RPR shall be on site for the following estimated hours during an active construction period of 6 months. Estimated hours are based on observing the construction in the two aeration trains separately (only one train can be out of service at a time).

2.3.1	Monthly progress meetings	24 hrs
2.3.2	Baffle wall rebar observation	8 hrs
2.3.3	Baffle wall form work observation	8 hrs
2.3.4	Baffle wall concrete pour	8 hrs
2.3.5	Mixed liquor return pump and piping observation	16 hrs
2.3.6	Diffuser grid modifications observation	8 hrs
2.3.7	Aeration piping and control valves observation	8 hrs
2.3.8	Mixer installation observation	8 hrs
2.3.9	Structure 45 MCC modifications observation	16 hrs
2.3.10	Electrical feeds to aeration control valves observation	8 hrs
2.3.11	Airflow meter installation observation	8 hrs
2.3.12	Integrator observation	8 hrs
2.3.13	Total Estimated RPR Observation	128 hrs

C. PROJECT TIMING

Donohue shall be authorized to commence the Services set forth herein upon execution of this Agreement. Final bidding documents will be delivered within 5 months after execution of this Agreement. Engineering Services During Construction will follow schedule established by construction contractor.

PART II OWNER RESPONSIBILITIES

A. In addition to other responsibilities of Owner set forth in this Agreement, Owner shall:

1. Identify a person authorized to act as the Owner's representative to respond to questions and make decisions on behalf of Owner, accept completed documents, approve payments to Donohue, and serve as liaison with Donohue as necessary for Donohue to complete its Services.
2. Furnish to Donohue copies of existing documents and data pertinent to Donohue's Scope of Services, including but not limited to and where applicable: design and record drawings for existing facilities; property descriptions, land use restrictions, surveys, geotechnical and environmental studies, or assessments.

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3. Provide to Donohue existing information regarding the existence and locations of utilities and other underground facilities.
4. Provide Donohue safe access to premises necessary for Donohue to provide the Services.

PART III COMPENSATION, BILLING AND PAYMENT

- A. Compensation for the work as defined in the Scope of Services (Part I) of this Agreement shall be in accordance with Donohue's standard chargeout rates in effect at the time the Services are performed. Routine expenses will be billed at cost. The total cost for these Services will not exceed \$143,220 without prior written approval from Owner. A separate written approval from Owner is required for authorization of the optional scope alternate for Resident Project Representative services. The total cost for the alternate services will not exceed \$18,480.
- A. Donohue will bill Owner monthly, with net payment due in 30 days.
- B. Donohue will notify Owner if Project scope changes require modifications to the above-stated contract value. Services relative to scope changes will not be initiated without authorization from Owner.