

ENGINEERING SERVICES AGREEMENT

THIS IS AN AGREEMENT made as of May 8, 2025, between the LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT (**OWNER**) and Kentucky Engineering Group, LLC. (**CONSULTANT**). **OWNER** intends to proceed with the Investigation and Design Services for the West Hickman ASH Tank Blower Improvements as described in the attached Exhibit A, "**RFP #10-2025.**" The services are to include customary civil, sanitary, geotechnical, mechanical, structural, and electrical engineering services as related to completion and submission of reports and deliverables as described in Exhibit A, detailing the findings of all field inspections, inventory and required analysis completed by the **CONSULTANT**. The services are hereinafter referred to as the **PROJECT**.

OWNER and **CONSULTANT** in consideration of their mutual covenants herein agree in respect of the performance of professional engineering services by **CONSULTANT** and the payment for those services by **OWNER** as set forth below.

CONSULTANT shall provide professional consulting services for **OWNER** in all phases of the **PROJECT** to which this Agreement applies, serve as **OWNER'S** professional engineering representative for the **PROJECT** as set forth below and shall give professional consultation and advice to **OWNER** during the performance of services hereunder.

SECTION 1 - BASIC SERVICES OF CONSULTANT

1.1. General

CONSULTANT shall perform professional services as hereinafter stated that include customary civil, geotechnical, structural, mechanical, electrical and sanitary engineering services incidental thereto.

1.2. Project Phase

After written authorization to proceed, **CONSULTANT** shall:

- 1.2.1. Notify the **OWNER** in writing of its authorized representative who shall act as Project Engineer and liaison representative between the **CONSULTANT** and the **OWNER**.
- 1.2.2. The **CONSULTANT** must perform all duties necessary to fully complete the deliverables described in attached Exhibit A "The Investigation/Design Services for the West Hickman ASH Tank Blower Improvements; RFP #10-2025" (including Appendices), and attached Exhibit C the "Proposal of Engineering Services and Related Matters" (the **CONSULTANT's** response to RFP #10-2025).

- 1.2.3. To the extent of any conflict among the provisions of these documents and/or this Agreement, the provisions of this Agreement shall control, followed by the provisions of **EXHIBIT A and then EXHIBIT C**.
- 1.2.3 The **CONSULTANT** shall provide written documentation of all meetings and be responsible for incorporating all comments and changes resulting therefrom in final work product.
- 1.2.4. The **CONSULTANT** shall post all initial draft work products on the project document management portal. If the project document management portal is not functional on the draft posting date, the **CONSULTANT** shall submit five (5) copies (hardcover) of all initial draft final work products for this **PROJECT**. The copies of the initial draft final reports are submitted for review and comment by the **OWNER**, and should be presented in person to the **OWNER**.
- 1.2.5. After the **OWNER'S** detailed review, the **CONSULTANT** will revise the initial draft final for all work products for this **PROJECT**, and the **CONSULTANT** shall post all draft final work products on the project document management portal. If the project document management portal is not functional on the draft posting date, the **CONSULTANT** shall five (5) copies (hardcover). One electronic copy of the all work products for this **PROJECT**, including all appendices, shall be provided and prepared in such a manner that it can readily be converted to a quick-link accessible form for the **OWNER'S** Website. The **OWNER** shall have ten (10) business days within which to accept or deny each such final draft. If is denied, the **OWNER** shall provide a detailed explanation in writing for the basis of such denial. Once the **OWNER** accepts the draft as final, a total of ten (10) final copies (hardcover) are required in addition to an electronic copy.
- 1.2.6 Immediately notify **OWNER** of any delay in the delivery of a work product or deliverable, regardless of cause. Give written notice to **OWNER** within five (5) business days whenever **CONSULTANT** observes or otherwise becomes aware of any development that affects the scope or timing of **CONSULTANT'S** services, or any defect in the work of Contractor(s).

SECTION 2 - EXTRA WORK BY CONSULTANT

- 2.1. The **OWNER** may desire to have the **CONSULTANT** perform work or render services in connection with this **PROJECT** other than provided by the expressed intent of this Agreement. Such work shall be considered as "Extra Work", subject to a change order, supplemental to this Agreement, setting forth the character and scope thereof and the compensation therefore. Work under such change order shall not proceed until the **OWNER** gives written authorization. Should the **OWNER** find it desirable to have previously satisfactorily completed and accepted plans or parts thereof revised, the **CONSULTANT** shall make such revisions as directed, in writing, by the **OWNER**. This work shall be considered as "Extra Work" and shall be paid as such.
- 2.2. All "Extra Work" is subject to prior written authorization of **OWNER** and necessary appropriations made by the Urban County Council.

SECTION 3 - OWNER'S RESPONSIBILITIES

OWNER shall:

- 3.1. Provide criteria and information as to **OWNER'S** requirements for the **PROJECT**, including design objectives and constraints, space, capacity and performance requirements, flexibility and expandability, and any budgetary limitations.
- 3.2. Assist **CONSULTANT** by placing at his disposal available information pertinent to the Project.
- 3.3. Examine all studies, reports, sketches, drawings, specifications, proposals and other documents presented by **CONSULTANT**, and render in writing decisions pertaining thereto within a reasonable time so as not to delay the services of **CONSULTANT**.
- 3.4. Designate in writing a person to act as **OWNER'S** representative with respect to the services to be rendered under this Agreement. Such person shall have complete authority to transmit instructions, receive information, interpret, and define **OWNER'S** policies and decisions with respect to materials, equipment, elements, and systems pertinent to **CONSULTANT'S** services.
- 3.5. Give written notice to **CONSULTANT** whenever **OWNER** observes or otherwise becomes aware of any development that affects the scope or timing of **CONSULTANT'S** services, or any defect in the work of Contractor(s).
- 3.6. Furnish or direct **CONSULTANT** to provide, necessary Extra Work as stipulated in Section Two (2) of this Agreement or other services as required.

SECTION 4 - PERIOD OF SERVICES

- 4.1. Time is of the essence in the performance of this Agreement. See attached Exhibit A "Proposal of Engineering Services and Related Matters" for the project schedule.
- 4.2. The provisions of this Section Four (4) and the various rates of compensation for **CONSULTANT'S** services provided for elsewhere in this Agreement have been agreed to in anticipation of the orderly and continuous progress of the **PROJECT** through completion.
- 4.3. If a delay results from the acts of **OWNER** or another entity that is required to permit or approve the work or services, an extension of time for such delay will be considered by **OWNER**.
 - 4.3.1. If the above type of delay occurs and **CONSULTANT** wants an extension of time, it must, within ten (10) days from the date of the delay, apply in writing to **OWNER** for an extension of time for a reasonable period, which must be agreed upon by **OWNER**.
 - 4.3.2. If the extension of time is approved by **OWNER**, the **PROJECT** schedule/Final Task Order shall be revised to reflect the extension. Such extension of time to the completion date shall in no way be construed to operate as a waiver on the part of **OWNER** of any of its other rights in the Agreement.

- 4.3.3. If the above type of delay would prevent complete performance of the **PROJECT/Final Task Order** within ninety (90) days of the time specified therein, **OWNER** shall have the option of cancelling the **PROJECT/Final Task Order** or otherwise adjusting the scope of the services or work and any related fees.
- 4.3.4. If the parties cannot mutually agree to an extension of time or an adjustment, Section 6.5 under "DISPUTES" of this Agreement shall apply.

4.4. If delays result solely by reason of acts of the **CONSULTANT**, the **CONSULTANT** must immediately notify the **OWNER** in the event of such delay, and provide the **OWNER** a written action plan within five (5) business days on how it will reasonably attempt to resolve the delay. If the parties cannot mutually agree to an extension of time or an adjustment, Section 6.5 under "DISPUTES" of this Agreement shall apply. If the above type of delay would prevent complete performance of the **PROJECT/Final Task Order** within ninety (90) days of the time specified therein, **OWNER** shall have the option of cancelling the **PROJECT/Final Task Order** or otherwise adjusting the scope of the services or work and any related fees.

SECTION 5 - PAYMENTS TO CONSULTANT

5.1. Methods of Payment for Services of CONSULTANT.

5.1.1. For Basic Services

OWNER shall pay **CONSULTANT** a lump sum fee not exceeding \$156,300.00.

5.1.2. For Extra Work

"Extra Work" shall be paid for by the **OWNER** on the basis of a fixed fee, the amount of which shall be determined by negotiation. The **OWNER** shall have the right to negotiate alternate methods of payment for "Extra Work" if the **OWNER** determines that the fixed fee basis is not feasible. In the event the **OWNER** and the **CONSULTANT** are unable to agree upon the amount of payment for "Extra Work", then the amount of such payment shall be determined as set forth in Section 6.5, "DISPUTES" of this Agreement.

5.2. Times of Payment

- 5.2.1. **CONSULTANT** shall submit monthly statements for Basic Services and Extra Work rendered. The Statements will be based upon **CONSULTANT'S** estimate of the proportion of the total services actually completed at the time of billing. **OWNER** shall respond to **CONSULTANT'S** monthly statements within thirty (30) days, either denying payment or making payment.

5.3. Other Provisions Concerning Payments

- 5.3.1.** In the event the Agreement is terminated by the **OWNER** without fault on the part of the **CONSULTANT**, the **CONSULTANT** shall be paid for the work performed or services rendered for which it has not already been paid as determined by mutual agreement between the **OWNER** and the **CONSULTANT**.
- 5.3.2.** In the event the services of the **CONSULTANT** are terminated by the **OWNER** for fault on the part of the **CONSULTANT**, the **CONSULTANT** shall be paid reasonable value of the work performed or services rendered and delivered for which it has not already been paid, and the amount to be paid shall be determined by the **OWNER**.

SECTION 6 - GENERAL CONSIDERATIONS

6.1. Termination

- 6.1.1.** **CONSULTANT** may only terminate this Agreement due to **OWNER'S** material breach of the terms hereof which breach causes **CONSULTANT** to be unable to perform its duties and responsibilities under this Agreement and upon forty-five (45) days written advance notice to **OWNER**.
- 6.1.2.** The **OWNER** may terminate this Agreement for cause upon seven (7) business days written advance notice to the **CONSULTANT**. The **OWNER** reserves the right to terminate the Agreement for any reason whatsoever, with or without cause, at any time upon thirty (30) days written advance notice to the **CONSULTANT**.

6.2. Ownership and Reuse of Documents

All documents, including raw data, reports, Drawings and Specifications, prepared by the **CONSULTANT** pursuant to this Agreement shall be delivered to and become the property of the **OWNER**. The **OWNER** shall have the right to reuse same without restriction or limitation, but without liability or legal exposure to **CONSULTANT**.

6.3. Legal Responsibilities and Legal Relations

- 6.3.1.** The **CONSULTANT** shall familiarize himself with and shall at all times comply with all federal, state, and local laws, ordinances, and regulations that in any manner affect the services of this Agreement.
- 6.3.2.** In performing the services hereunder, the **CONSULTANT** and its consultants, employees, agents and representatives shall not be deemed or construed to be employees of **OWNER** in any manner whatsoever. Except as otherwise provided in this Agreement, the **CONSULTANT** shall be acting as an independent contractor. The **CONSULTANT** shall not hold itself out as, nor claim to be, an officer or employee of **OWNER** by reason hereof and shall not make any claim, demand or application to or for any right or privilege applicable to an officer or employee of

OWNER. The **CONSULTANT** shall be solely responsible for any claims for wages or compensation by **CONSULTANT'S** employees, agents and representatives, including consultants, and shall save and hold **OWNER** harmless therefrom.

- 6.3.3. The parties hereto agree that causes of actions between the parties shall be governed by applicable provisions of the Kentucky Revised Statutes, and that venue of any legal action shall be a court of appropriate jurisdiction in Fayette County, Kentucky. The parties further agree that Kentucky law shall apply with respect to the interpretation of any provision of this Agreement.

6.4. Successors and Assigns

- 6.4.1. **CONSULTANT** binds itself and his partners, successors, executors, administrators, assigns and legal representatives to this Agreement in respect to all covenants, agreements, and obligations of this Agreement. **CONSULTANT** shall not assign any interest, obligation or benefit in this Agreement. **CONSULTANT** shall not assign any interest, obligation or benefit in this Agreement nor transfer any interest in the same, whether by assignment or novation, without prior written consent of **OWNER**.
- 6.4.2. The **CONSULTANT** shall not subcontract more than fifty percent (50%) of the work, based upon dollar value of the work. The **CONSULTANT** shall obtain written approval prior to subletting or assigning any services contained in this Agreement, and consent to sublet or assign any part of this Agreement shall not be construed to relieve the **CONSULTANT** of any responsibility for compliance with the provisions of this Agreement.
- 6.4.3. Nothing herein shall be construed to give any rights or benefits hereunder to anyone other than **OWNER** and **CONSULTANT**.

6.5. Disputes

Except as otherwise provided in this Agreement, any dispute hereunder may be resolved by agreement of the **OWNER'S** Agent (Section 8.1.1) and the **CONSULTANT**. In the absence of such an agreement, the dispute shall be submitted to the **OWNER'S** Commissioner, Department of Environmental Quality & Public Works, whose decision shall be final and conclusive unless determined by a court of competent jurisdiction to have been fraudulent, capricious, arbitrary, or so grossly erroneous as necessarily to imply bad faith. Pending a final decision of a dispute hereunder, the **CONSULTANT** shall proceed diligently with the performance of the Agreement in accordance with the directions of the **OWNER**.

6.6. Accuracy of **CONSULTANT'S** Work

The **CONSULTANT** shall be required to perform this Agreement in accordance with the degree of ordinary and reasonable skill and care usually exercised by professional engineers prevailing at the time, place and under similar conditions as the services hereunder are rendered.

The **CONSULTANT** shall be responsible for the accuracy of all work, even though raw data, reports, Drawings and Specifications have been accepted by the **OWNER**, and it shall make any necessary revisions or corrections resulting from its errors and/or omissions for no additional compensation. By submission of reports, soils and subsurface information, quantities estimates, calculations and Drawings and Specifications to the **OWNER**, the **CONSULTANT** has made an incontrovertible representation that the information is accurate within the appropriate standard of skill and care. Failure on the part of **CONSULTANT** to provide the expected level of accuracy may be grounds for the **OWNER** to terminate this Agreement.

6.7. Security Clause

The **CONSULTANT** certifies that he shall not at any time release or divulge any information concerning the services covered by this Agreement to any person or any public or private organization except the **OWNER** without prior approval of the **OWNER** unless required by law

6.8. Access to Records

The **CONSULTANT** and his sub-consultants shall maintain all books, documents, papers, and accounting records, and make such materials available at their respective offices at all reasonable times during the Agreement period and for three (3) years from the date of final payment under the Agreement for inspection by the **OWNER**, and copies thereof shall be furnished if requested. Failure to maintain such records for three (3) years after the date of final payment may be grounds for the **OWNER** to disqualify the **CONSULTANT** from consideration for future consultant engineering Agreements.

6.9. Risk Management Provisions, Insurance and Indemnification

6.9.1. DEFINITIONS

The **CONSULTANT** understands and agrees that the Risk Management Provisions of this Agreement define the responsibilities of the **CONSULTANT** to the **OWNER**.

As used in these Risk Management Provisions, the terms "**CONSULTANT**" and "**OWNER**" shall be defined as follows:

- a. **CONSULTANT** means the consultant and its employees, agents, servants, owners, principals, licensees, assigns and subcontractors of any tier.
- b. **OWNER** means the Lexington-Fayette Urban County Government and its elected and appointed officials, employees, agents, boards, assigns, volunteers, and successors in interest.

6.9.2. INDEMNIFICATION AND HOLD HARMLESS PROVISION

- a. It is understood and agreed by the parties that **CONSULTANT** hereby assumes the entire responsibility and liability for any and all damages to persons or property caused by or resulting from or arising out of any act or omission on the part of **CONSULTANT** or its employees, agents, servants, owners, principals, licensees, assigns or subcontractors of any tier (hereinafter "**CONSULTANT**") under or in connection with this agreement and/or the provision of goods or services and the performance or failure to perform any work required thereby.
- b. **CONSULTANT** shall indemnify, save, hold harmless and defend the Lexington-Fayette Urban County Government and its elected and appointed officials, employees, agents, volunteers, and successors in interest (hereinafter "**OWNER**") from and against all liability, damages, and losses, including but not limited to, demands, claims, obligations, causes of action, judgments, penalties, fines, liens, costs, expenses, interest, defense costs and reasonable attorney's fees that are in any way incidental to or connected with, or that arise or are alleged to have arisen, directly or indirectly, from or by **CONSULTANT**'s performance or breach of the agreement and/or the provision of goods or services provided that: (a) it is attributable to personal injury, bodily injury, sickness, or death, or to injury to or destruction of property (including the loss of use resulting therefrom), or to or from the negligent acts, errors or omissions or willful misconduct of the **CONSULTANT**; and (b) not caused solely by the active negligence or willful misconduct of **OWNER**.
- c. Notwithstanding, the foregoing, with respect to any professional services performed by **CONSULTANT** hereunder (and to the fullest extent permitted by law), **CONSULTANT** shall indemnify, save, hold harmless and defend **OWNER** from and against any and all liability, damages and losses, including but not limited to, demands, claims, obligations, causes of action, judgments, penalties, fines, liens, costs, expenses, interest, defense costs and reasonable attorney's fees, for any damage due to death or injury to any person or injury to any property (including the loss of use resulting therefrom) to the extent arising out of, pertaining to or relating to the negligence, recklessness or willful misconduct of **CONSULTANT** in the performance of this agreement.
- d. In the event **OWNER** is alleged to be liable based upon the above, **CONSULTANT** shall defend such allegations and shall bear all costs, fees and expenses of such defense, including but not limited to, all reasonable attorneys' fees and expenses, court costs, and expert witness fees and expenses, using attorneys approved in writing by **OWNER**, which approval shall not be unreasonably withheld.

- e. These provisions shall in no way be limited by any financial responsibility or insurance requirements, and shall survive the termination of this agreement.
- f. **OWNER** is a political subdivision of the Commonwealth of Kentucky. **CONSULTANT** acknowledges and agrees that **OWNER** is unable to provide indemnity or otherwise save, hold harmless, or defend the **CONSULTANT** in any manner.

6.9.3. FINANCIAL RESPONSIBILITY

The **CONSULTANT** understands and agrees that the **CONSULTANT** shall, prior to final acceptance of the **CONSULTANT'S** proposal and the commencement of any work; demonstrate the ability to assure compliance with the Indemnity Agreement and other provisions of this Agreement.

6.9.4. INSURANCE REQUIREMENTS

6.9.4.1. Required Insurance Coverage

CONSULTANT shall procure and maintain for the duration of this Agreement the following or equivalent insurance policies at no less than the limits shown below and cause its subcontractors to maintain similar insurance with limits acceptable to **OWNER** in order to protect **OWNER** against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by **CONSULTANT**. The cost of such insurance shall be included in any proposal:

<u>Coverage</u>	<u>Limits</u>
General Liability (Insurance Services Office Form CG 00 01)	\$1 million per occurrence, \$2 million aggregate or \$2 million combined single limit
Commercial Automobile Liability (Insurance Services Office Form CA 0001)	combined single, \$1 million per occurrence
Professional Liability	\$1 million per occurrence, \$2 million aggregate
Worker's Compensation	Statutory
Employer's Liability	\$500,000.00

The policies above shall contain the following conditions:

- a. **OWNER** shall be named as an additional insured in the General Liability Policy and

Commercial Automobile Liability Policy.

- b. The General Liability Policy shall be primary to any insurance or self-insurance retained by **OWNER**.
- c. The General Liability Policy shall include Business Interruption coverage.
- d. The Contractor shall carry Builders Risk coverage at a level sufficient to cover the replacement cost of any equipment or machinery used at the work site, if applicable.
- e. The General Liability Policy shall include a Pollution Liability endorsement and/or Environmental Casualty coverage unless it is deemed not to apply by **OWNER**.
- f. The General Liability Policy shall have a Professional Liability endorsement (including Errors and Omissions), which shall include Business interruption coverage and this policy or endorsement shall include Environmental Casualty coverage for any services performed pursuant to the contract, and/or a separate Professional Liability Policy shall be obtained unless it is deemed not to apply by **OWNER**. (**OWNER** does not need to be named as additional insured).
- g. **OWNER** shall be provided at least 30 days advance written notice via certified mail, return receipt requested, in the event any of the required policies are canceled or non-renewed.
- h. The Professional Liability policy shall be maintained for a minimum of three years beyond the completion date of the project, to the extent commercially available. If not commercially available, **CONSULTANT** shall notify **OWNER** and obtain similar insurance that is commercially available and acceptable to **OWNER**.
- i. Said coverage shall be written by insurers acceptable to **OWNER** and shall be in a form acceptable to **OWNER**. Insurance placed with insurers with a rating classification of no less than Excellent (A or A-) and a financial size category of no less than VIII, as defined by the most current Best's Key Rating Guide shall be deemed automatically acceptable.

6.9.4.2. Renewals

After insurance has been approved by **OWNER**, evidence of renewal of an expiring policy must be submitted to **OWNER**, and may be submitted on a manually signed renewal endorsement form. If the policy or carrier has changed, however, new evidence of coverage must be submitted in accordance with these Insurance Requirements.

6.9.4.3. Right to Review, Audit and Inspect

CONSULTANT understands and agrees that **OWNER** may review, audit and inspect any and all of **CONSULTANT'S** records and operations to insure compliance with these Insurance Requirements.

6.9.5. SAFETY AND LOSS CONTROL

CONSULTANT shall comply with all applicable federal, state, and local safety standards related to the performance of its works or services under this Agreement and take necessary action to protect the life, health and safety and property of all of its personnel on the job site, the public, and **OWNER**.

6.9.6. DEFINITION OF DEFAULT

CONSULTANT understands and agrees that the failure to comply with any of these provisions shall constitute default under this Agreement. **CONSULTANT** also agrees that **OWNER** may elect as its option any single remedy or penalty or any combination of remedies and penalties, as available, including but not limited to purchasing insurance and charging **CONSULTANT** for any such insurance premiums purchased, or suspending or terminating this Agreement.

SECTION 7 - EQUAL EMPLOYMENT OPPORTUNITY

During the performance of this Agreement, the **CONSULTANT** agrees as follows:

7.1. The **CONSULTANT** will not discriminate against any employee or application for employment because of race, color, religion, national origin, sex, age, or handicap. The **CONSULTANT** will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, national origin, sex, age, or handicap. Such action shall include, but not be limited to the following: employment upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeships. The **CONSULTANT** agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this non-discrimination clause.

7.2.1. The **CONSULTANT** will, in all solicitations or advertisements for employees placed by or on behalf of the **CONSULTANT**, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, national origin, sex, age (between forty and seventy), or handicap.

SECTION 8 - SPECIAL PROVISIONS, EXHIBITS, AND SCHEDULES

8.1. This Agreement is subject to the following provisions.

8.1.1. Pursuant to subparagraph 3.4 of this Agreement, **OWNER** has assigned Charles H. Martin, P.E., Director of the Division of Water Quality (the "**OWNER'S Agent**"), as the authorized agent of **OWNER**, to monitor, direct and review the performance of work of the **CONSULTANT**. Documents, data, reports, and all matters associated with carrying out this Agreement shall be addressed to the **OWNER'S Agent** or his designee. Questions by the **CONSULTANT** regarding interpretations of the terms, provisions and requirements under this Agreement shall be addressed to the **OWNER'S Agent** or his designee. The **CONSULTANT** shall look only to the **OWNER'S Agent** or his designee for direction in its performance under this Agreement; no other direction shall be binding upon **OWNER**. **OWNER** shall respond to written requests by **CONSULTANT** within thirty (30) days.

8.2. This Agreement, together with the Incorporated Documents (Section 1.2) constitutes the entire Agreement between **OWNER** and **CONSULTANT** and supersedes all prior written or oral understandings. This Agreement and **EXHIBITS A, B, C and D** and any related schedules or documents may only be amended, supplemented, modified or canceled by a duly executed written instrument.

8.3. NO THIRD PARTY RIGHTS. This agreement does not create a contractual relationship with or right of action in favor of a third party against either **OWNER** or **CONSULTANT**.

8.4 UNENFORCEABLE TERMS/SURVIVABILITY. If any term or provision of this Agreement shall be found to be illegal or unenforceable, this Agreement shall remain in full force and such term or provision shall be deemed stricken. The provisions of Section 6 of this Agreement shall survive its termination.

8.5. NON-WAIVER. The failure of either party to enforce any right reserved to it in this Agreement shall not be a waiver of any such right to which the party is entitled.

IN WITNESS WHEREOF, the parties hereto have made and executed this Agreement as of the day and year first above written.

OWNER:

LEXINGTON-FAYETTE URBAN
COUNTY GOVERNMENT

BY: Linda Gorton
LINDA GORTON, MAYOR

CONSULTANT:

Kentucky Engineering Group, PLLC

BY: James C. Thompson

ATTEST:

Deputy Mackenzie Stock
URBAN COUNTY COUNCIL CLERK
COMMONWEALTH OF KENTUCKY)
COUNTY OF FAYETTE)

The foregoing Agreement was subscribed, sworn to and acknowledged before me by
JAMES C. THOMPSON, as the duly authorized representative for and on
behalf of KY ENGINEERING, on this the 20 day of May, 2025.

My commission expires: 05-11-2026.

Joseph Stewart
NOTARY PUBLIC






CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

05/08/2025

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER  Donna Payne Insurance Agency State Farm Insurance 501 Willin Way Mt Sterling Ky 40353		CONTACT NAME: Donna Payne PHONE (A/C, No, Ext): 859-498-5498 FAX (A/C, No): 866-531-7570 E-MAIL ADDRESS: donna@donnapayne.net	
INSURED Kentucky Engineering Group, PLLC PO Box 1034 Versailles Ky 40383		INSURER(S) AFFORDING COVERAGE INSURER A: State Farm Mutual Automobile Insurance Company INSURER B: INSURER C: INSURER D: INSURER E: INSURER F:	
		NAIC # 25178	

COVERAGES**CERTIFICATE NUMBER:****REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADD INSD	SUB WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> Business office GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:			97-AJ-C921-9	08/03/2024	08/03/2025	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ MED EXP (Any one person) \$ 5,000 PERSONAL & ADV INJURY \$ GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000 \$
	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> NON-OWNED AUTOS ONLY			1408985,1419866,1419881	12/11/24	06/11/2025	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000
				1563621	11/11/2024	11/11/2025	BODILY INJURY (Per person) \$
				1681876	03/01/2025	09/01/2025	BODILY INJURY (Per accident) \$
			1987431	01/30/2025	07/30/2025	PROPERTY DAMAGE (Per accident) \$ \$	
	UMBRELLA LIAB <input type="checkbox"/> OCCUR EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$						EACH OCCURRENCE \$ AGGREGATE \$ \$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? <input checked="" type="checkbox"/> Y/N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below		N/A	97-KN-7442-6	04/14/2025	04/14/2026	PER STATUTE <input type="checkbox"/> OTH-ER <input type="checkbox"/> E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Civil Engineering

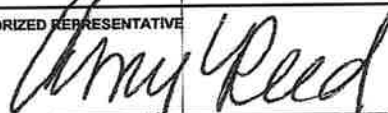
Business-office policy includes - Pollutant clean up and removal \$10,000 limit \$1000 deductible

CERTIFICATE HOLDER**CANCELLATION**

Lexington-Fayette Urban County Government,
DWQ
301 Jimmie Campbell Drive
Lexington KY 40504

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE



© 1988-2015 ACORD CORPORATION. All rights reserved.



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

05/08/2025

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER State Farm Donna Payne Insurance Agency State Farm Insurance 501 Willin Way Mt Sterling Ky 40353	CONTACT NAME: Donna Payne PHONE (A/C, No, Ext): 859-498-5498 E-MAIL ADDRESS: donna@donnapayne.net	FAX (A/C, No): 866-531-7570
	INSURER(S) AFFORDING COVERAGE INSURER A: State Farm Mutual Automobile Insurance Company INSURER B: INSURER C: INSURER D: INSURER E: INSURER F:	
INSURED Kentucky Engineering Group, PLLC PO Box 1034 Versailles Ky 40383		NAIC # 25178

COVERAGES**CERTIFICATE NUMBER:****REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADD INSD	SUB WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
	COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:						EACH OCCURRENCE \$ DAMAGE TO RENTED PREMISES (Ea occurrence) \$ MED EXP (Any one person) \$ PERSONAL & ADV INJURY \$ GENERAL AGGREGATE \$ PRODUCTS - COMP/OP AGG \$ COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000
A	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> NON-OWNED AUTOS ONLY			2543270 2738357 2921684 3079378	05/08/2025 04/20/2025 02/24/2025 01/08/2025	11/30/2025 10/20/2025 08/24/2025 07/08/2025	BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
	UMBRELLA LIAB <input type="checkbox"/> OCCUR EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$						EACH OCCURRENCE \$ AGGREGATE \$ PER STATUTE <input type="checkbox"/> OTH-ER <input type="checkbox"/> \$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N <input type="checkbox"/>	N/A				E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Civil Engineering

Business-office policy includes - Pollutant clean up and removal \$10,000 limit \$1000 deductible

CERTIFICATE HOLDER**CANCELLATION**

Lexington-Fayette Urban County Government, DWQ 301 Jimmie Campbell Drive Lexington KY 40504	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE
---	---

© 1988-2015 ACORD CORPORATION. All rights reserved.



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
05/08/2025

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER State Farm Donna Payne Insurance Agency State Farm Insurance 501 Wilfin Way Mt Sterling Ky 40353	CONTACT NAME: Donna Payne PHONE (A/C, No, Ext): 859-498-5498 E-MAIL ADDRESS: donna@donnapayne.net FAX (A/C, No): 866-531-7570
	INSURER(S) AFFORDING COVERAGE INSURER A: State Farm Mutual Automobile Insurance Company INSURER B: INSURER C: INSURER D: INSURER E: INSURER F:
INSURED Kentucky Engineering Group, PLLC PO Box 1034 Versailles Ky 40383	NAIC # 25178

COVERAGES

CERTIFICATE NUMBER:

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADD INSD	SUB WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
	COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PROJECT <input type="checkbox"/> LOC OTHER:						EACH OCCURRENCE \$ DAMAGE TO RENTED PREMISES (Ea occurrence) \$ MED EXP (Any one person) \$ PERSONAL & ADV INJURY \$ GENERAL AGGREGATE \$ PRODUCTS - COMP/OP AGG \$ \$
A	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> NON-OWNED AUTOS ONLY			4168373 4330852 4632579	02/26/2025 12/07/2024 04/07/2025	08/26/2025 06/07/2025 10/07/2025	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
	UMBRELLA LIAB <input type="checkbox"/> OCCUR EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$						EACH OCCURRENCE \$ AGGREGATE \$ \$ PER STATUTE OTH-ER \$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? <input type="checkbox"/> Y/N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below		N/A				E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Civil Engineering

Business-office policy Includes - Pollutant clean up and removal \$10,000 limit \$1000 deductible

CERTIFICATE HOLDER

CANCELLATION

Lexington-Fayette Urban County Government, DWQ 301 Jimmie Campbell Drive Lexington KY 40504	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE
--	---

EXHIBIT A

**REQUEST FOR PROPOSALS/
SCOPE OF ENGINEERING SERVICES**

AND RELATED MATTERS

RFP#10-2025

**Investigation / Design Services for West Hickman WWTP
Aerated Sludge Holding (ASH) Tanks Blower Improvements**

Lexington – Fayette Urban County Government (LFUCG) Division of Water Quality

The Lexington-Fayette Urban County Government is accepting proposals from interested consulting engineering firms for the Investigation / Design Services for West Hickman WWTP ASH Tanks Blower Improvements.

1. General Project Description

The CONSULTANT shall perform professional services as hereinafter stated which shall include but is not limited to customary civil, geotechnical, structural, mechanical, electrical engineering, and programming services as related to the Investigation / Design for West Hickman WWTP ASH Tank Blower Improvements Project.

The CONSULTANT will evaluate different options for blowers for the Aerated Sludge Holding Tanks at The West Hickman Creek Wastewater Treatment Plant. Chapter 9 (Aerated Sludge Holding Tanks) of the Operations and Maintenance Manual for West Hickman WWTP from 2000, is included in Appendix A. While reviewing the O&M Manual, please note that ASH Tanks 3 and 4 are the only 2 tanks used. They were covered to be able to control odors from the sludge. Blowers 1 and 3 (60 HP Blowers) are out of service and Blowers 5 and 6 (150 HP Blowers) can, currently, only be used one at a time due to piping limitations. The current layout of the Blowers and Tanks are shown in the drawings included in Appendix B. The current blower arrangement does not allow operations staff the aeration capacity needed. Staff would like to maintain a DO of 2 mg/l in ASH Tanks 3 and 4. A contractor was hired to run parallel piping for the 150 HP Blowers. Once that project is complete staff should be able to maintain a DO of 2mg/l in each tank. The parallel piping is complete, and staff have been collecting data.

The CONSULTANT selected will make recommendations for blowers and piping modifications needed to achieve the operational needs. Blower replacements for the 60 HP blowers are to be considered along with options for the 150 HP blowers. Other equipment related to the operation of the ASH Tanks, includes evaluation of existing electrical capacity; possible ways to reduce the noise of the blowers; moving the existing blowers for better use or purchase new blowers; evaluation of the existing diffusers; and recommendations of any additional SCADA control/monitoring needed. This is not meant to be an all-inclusive list. Attached, in Appendix C, are the original blower specifications and the original diffuser specifications. Pictures of the existing blowers and MCCs are shown in Appendix D.

Currently, funding for this project is 100% sewer fund revenue; no federal fund involvement is expected. There is a possibility of a State Revolving Fund (SRF) Loan.

2. Scope of Work: ASH Tank Blower Improvements Project

The CONSULTANT will evaluate the existing blowers and related equipment. Up to 4 options will be explored.

In the Preliminary Engineering Report (PER), the suggested blower options and rehabilitation of the area will be outlined and any modifications or recommended improvements presented.

A well-developed sequence of construction will be defined. The plant must continue to operate during construction. Shutdowns will be coordinated with plant staff; limitations will be defined in the design documents. The CONSULTANT will need to consider the necessary valve additions, valve replacements, and/or piping modifications to facilitate construction while keeping the ASH Tanks and blowers operational.

The CONSULTANT will also be responsible for all electrical, instrumentation, mechanical, structural, and plumbing design for equipment related to the project. This is not intended to be an all-inclusive list of items to be addressed.

The PER will summarize the options with detailed construction estimates.

A. Task 1: Existing ASH Tank Operations Review

- (1) Interview West Hickman Wastewater Treatment Plant Operations and Maintenance staff for input regarding the current process equipment, equipment controls, electrical capacity, aeration piping, diffusers, noise, and functionality related to the existing ASH Tank related operations.
- (2) Collect any operational information needed for design.
- (3) Review operational data and reports to determine the needs of the operational staff to achieve the necessary parameters to aid in the aeration of the sludge.
- (4) Collect any other supporting data needed for design decisions.
- (5) Observe the operations and trends for the ASH Tanks.
- (6) Complete a review to make sure the design and replacement of the blowers are compliant with NFPA 79 and 820.

B. Task 2: Develop Equipment/Process Replacement Concepts and Schedules

- (1) Evaluate blower replacement options. Address all electrical, SCADA controls, noise control, ventilation, lighting, PLC replacement, and building improvements. Meet with plant staff and engineering group to discuss the options.

- (2) Prepare a conceptual layout and construction sequence for evaluated options along with design calculations.
- (3) Conduct a 20-year life cycle and present worth analysis for each conceptual design evaluated.
- (4) Prepare preliminary cost estimates and implementation schedules for all conceptual designs.
- (5) Present Preliminary Engineering Report to Treatment Plant Staff and Engineering Group for a review of all conceptual designs and receive guidance for progress towards the final design.
- (6) LFUCG will respond in writing to the Preliminary Engineering Report, providing authorization for work under Task 3.
- (7) Preliminary Engineering Report will be finalized to document final decisions.

C. Task 3: Detailed Design

- (1) Conduct detailed design progress meetings at 25%, 50%, 90% and 100% completion. The dates for these progress meetings will be decided on during the first pre-design meeting. Progress reports and drawings will be submitted one week before the Lexington-Fayette Urban County Government review and comment. (3 copies)
- (2) Conduct and present any related design calculations to support the new equipment/process.
- (3) Furnish detailed cost estimates for probable cost and revise the 20-year life cycle and present worth analysis for the 50% review and the final design.
- (4) Update project schedules at 25%, 50% and 90%.

D. Task 4: Bidding Services

- (1) Prepare final plans and specifications ready for bidding. Plans and specifications are to be provided in both hard copy and standard electronic format compatible with Lexington-Fayette Urban County Government equipment. The most recent plans and specifications have been submitted in PDF format. A minimum of 7 copies will be required.
- (2) Coordinate and submit plans, specifications, and permit application to the Kentucky Division of Water for the purposes of receiving a construction permit.

- (3) Provide customary bidding services including preparation of advertisement, conducting pre-bid meeting, issuing required addenda, evaluating bids and providing a recommendation of award.

E. Task 5: Construction Administration Services

- (1) Track, review, and approve all shop drawings.
- (2) Track change orders, review requests, recommendation comments, and prepare the paperwork to be submitted to council.
- (3) Track and answer all Request for Information (RFIs)
- (4) Coordinate and lead monthly construction progress meetings.
- (5) Conduct construction inspections and submit weekly reports once construction begins. Please submit estimated hours per week, total hours included for inspections and the hourly rate with your detailed cost estimate
- (6) Take before and after photos of all stages of construction.
- (7) Review and approve contractor's monthly payment applications.
- (8) Attend and maintain test reports for all equipment start-up for the project.
- (9) Coordinate final inspection of completed work and prepare the final punch list.
- (10) Transfer field notes from the contractor's drawings and submit final as-built drawings to the owner.

NOTE: This outline is not intended to be all-inclusive but is intended to be a guide for prospective firms as to the general expectations of the Owner. The Lexington-Fayette Urban County Government will not compensate firms for the cost of proposal preparation.

F. Task 6: State Revolving Fund (SRF) Program Paperwork

A line has been added but will not be included in the total. Please show the cost necessary to manage the SRF Program Paperwork if an SRF Loan is granted. Base the cost on the SRF Loan Conditions Checklist provided in Appendix E.

3. Detailed Cost Estimates

The CONSULTANT shall prepare a detailed cost estimate for this proposal based on the Tasks defined in this Request for Proposal. The estimate shall show a preliminary schedule estimating the time necessary to complete the Tasks outlined with a unit price associated. The intent of this proposal is to show the number of hours associated with a lump sum fee for the ASH Tanks Blower Improvements Project. If your firm has additional

Tasks that would be recommended show the new Tasks as separate line items with the scope well defined.

4. Proposal Content

The proposal will contain the following components.

- A. Cover Letter
- B. Scope/fee (Detailed Cost Estimate) – No more than 8 pages. ***The attached Fee Schedule completed with your estimated cost will be the last page in this section.***
- C. Estimated Schedule – No more than 4 pages.
- D. Project Team with **One-Page** Resumes (Do not submit resumes for individuals contributing less than 10% of total man hours allocated)
- E. A list of 5 similar projects with owner contact information. This section shall be no more than 5 pages total.

5. Schedule and Completion

The proposed timeline for completion of the Scope of Services outlined in the proposal is as follows:

ASH Tanks Blower Improvements Project

Award Design Contract	June	2025
Final PER	September	2025
Meeting to Review Final Design – 90% Completion	December	2025
Bid Opening	February	2026
Award of GC Contract	March	2026
RMP Construction Completion	December	2026

The CONSULTANT shall coordinate the exact time and location of all meetings with the Plant Engineering Manager, Division of Water Quality.

NOTE: Schedule may be adjusted based on final negotiations. When submitting the schedule with your proposals please indicate if your firm could complete this project any sooner than the estimated time above. If your experience indicates a shorter construction period based on shorter equipment lead times, the design period can be adjusted.

6. Method of Invoice and Payment

The CONSULTANT shall submit invoices monthly for basic services or work rendered, based upon the CONSULTANT'S estimate of the portion of the total services actually

completed during the billing cycle. Each invoice shall be accompanied by a breakdown of hours attributed to each task for both the billing cycle and the cumulative project period. Also include the percent Disadvantaged Business Enterprise (DBE) cost with each monthly invoice.

The Director of Water Quality or his designee shall respond to the invoice within thirty days of receipt, either denying or approving payment. Specific project time sheets and other payroll information may be subject to reviews and audits by the Lexington-Fayette Urban County Government.

7. Miscellaneous

All plans, specifications and accompanying documents are subject to review by the Lexington-Fayette Urban County Government's Division of Water Quality, Division of Engineering, Division of Risk Management and Division of Building Inspection. The CONSULTANT shall be responsible for incorporating the comments and requirements of the divisions into all documents.

**Investigation/Design Services for West Hickman WWTP
Aerated Sludge Holding (ASH) Tanks Blower Improvements Project**

Fee Schedule

(For a description of task refer to Section 2 of the RFP)

Section 2

Scope of Work: ASH Tanks Blower Improvements Project

- | | | |
|----|--|--------------------|
| A. | Task 1: Existing Process Performance Review | Cost Task 1: _____ |
| B. | Task 2: Develop Equipment/Process Replacement Concepts | Cost Task 2: _____ |
| C. | Task 3: Detailed Design | Cost Task 3: _____ |
| D. | Task 4: Bidding Services | Cost Task 4: _____ |
| E. | Task 5: Construction Administration Services | Cost Task 5: _____ |

Details for Task 5.5 - The total cost should be included in Cost Task 5. Please provide the following breakdown. Estimated Weekly Inspection Hrs/Estimated Total Inspection Hrs/Hourly Rate.

_____/_____/_____

Section 2 Total Cost:

- | | | |
|----|---------------------------------------|--------------------|
| E. | Task 6: SRF Loan Conditions Checklist | Cost Task 6: _____ |
|----|---------------------------------------|--------------------|

APPENDIX A

Aerated Sludge Holding Tanks O&M (2000)

CHAPTER 9
AERATED SLUDGE HOLDING TANKS

CHAPTER 9
AERATED SLUDGE HOLDING TANKS

TABLE OF CONTENTS

	PAGE
Purpose	9-1
Major Component Description	9-1
Operations	9-2
Aerated Sludge Holding Tanks	9-3
 EXHIBIT	
8 - Site Piping Plan	9-4

CHAPTER 9

AERATED SLUDGE HOLDING TANKS

PURPOSE:

The purpose of the Aerated Sludge Holding Tanks (ASHT's) is to provide storage, aeration and compaction of the waste activated sludge (WAS) prior to dewatering. There are several operational schemes that are provided using the ASHT's, these schemes are discussed in the operational procedures of this Chapter.

MAJOR COMPONENT DESCRIPTION

There are four aerated sludge holding tanks, one large and three small. Each tank has fine bubble diffusers located in the tanks floor.

There are two 150 hp blowers dedicated to the large ASHT each blower is capable of 1206 SCFM each at 14.7 psi. The three smaller ASHT's have four 60 hp blowers capable of 471 SCFM each at 14.7 psi. There is also a connected line that allows the use of the large blowers for the small ASHT's or the small blowers for the large ASHT's.

Each ASHT has an 6" telescope valve for transferring solids or decanting supernatant. Two 30 hp transfer pumps rated at 400 gpm at 9- ft/ TDH are also available for transferring the contents of the ASHT's from one to the other. There is also numerous valves and lines that provide transferring the contents from one ASHT to the other.

Drain valves are provided on each ASHT for draining the contents either to the head of WWTP, to another ASHT or to the gravity thickener.

Thickened sludge pumps are provided to pump either from the ASHT's or gravity thickeners to the belt filter presses. There are four thickened sludge pumps rated at 34 gpm to 138 gpm at 217 psi or 72.5 psi respectively.

The thickened sludge pumps have variable frequency drives and are controlled from the belt filter press control panel. This allows the operator to select the desired flow rate. Thickened sludge pumps one through three are dedicated to their respective belt filter presses while number four is a standby, capable to pumping to any press.

There are also included in the basement of the respective ASHT's a recirculation pumping system. All of the ASHT's can be recirculated except No. 4.

OPERATIONS

There are numerous schemes of operation of the ASHT's:

1. Waste Directly to the Large ASHT and set valves so flow overflows to smaller ASHT's in series. The final ASHT would be used for decanting the clear liquid and solids compaction prior to the dewatering at the belt filter presses.
2. Waste directly to the large ASHT and batch transfer by alternating between ASHT's No. 2 and No. 3; decanting from those tanks and then transferring compacted solids to ASHT No. 4 for dewatering via the belt filter presses.
3. Waste to the gravity thickeners then to the ASHT directly to the belt filter presses.
4. Waste to the ASHT then to the gravity thickeners and back to an ASHT for compaction prior to dewatering via the belt filter presses.

The operator must choose the scheme of operation based on conditioning of the waste solids the most efficient and odor free way possible.

Waste sent directly to the ASHT's must be monitored for alkalinity, freshness, dissolved oxygen and odors. Decanting and batch wasting requires considerable operator awareness and time.

The operator must also be aware of the closeness of the neighbors and take whatever steps necessary to prevent objectionable odors and foam that may be blown by winds.

Each ASHT has fine bubble air diffusers and blowers for mixing and some dissolve air addition. The blower capacity is not designed for aerobic digestion and must be utilized to keep the solids fresh.

The ASHT's can be operated in the schemes previously mentioned or any combination the operator chooses. One must remember that the ASHT's purpose is for storage and or compaction prior to dewatering.

AERATED SLUDGE HOLDING TANKS

No. 1

Dimensions

Diameter (ft.)	80
Sidewater Depth (ft.)	30
Diffuser (9")	812
Volume Cubic Feet	150,720
Gallons	1.13 mg
Gallons Per Foot Depth	37,680

No. 2 , 3 and 4

Dimensions

Diameter (ft.)	50 ft.
Sidewater Depth (ft.)	32.3 ft.
Diffuser (9")	312 Each
Volume Cubic Feet	63,448 c.f.
Gallons	.476 mg
Gallons Per Foot Depth	14,719 gals.

Total Storage All	2.558 mg
-------------------	----------

APPENDIX B

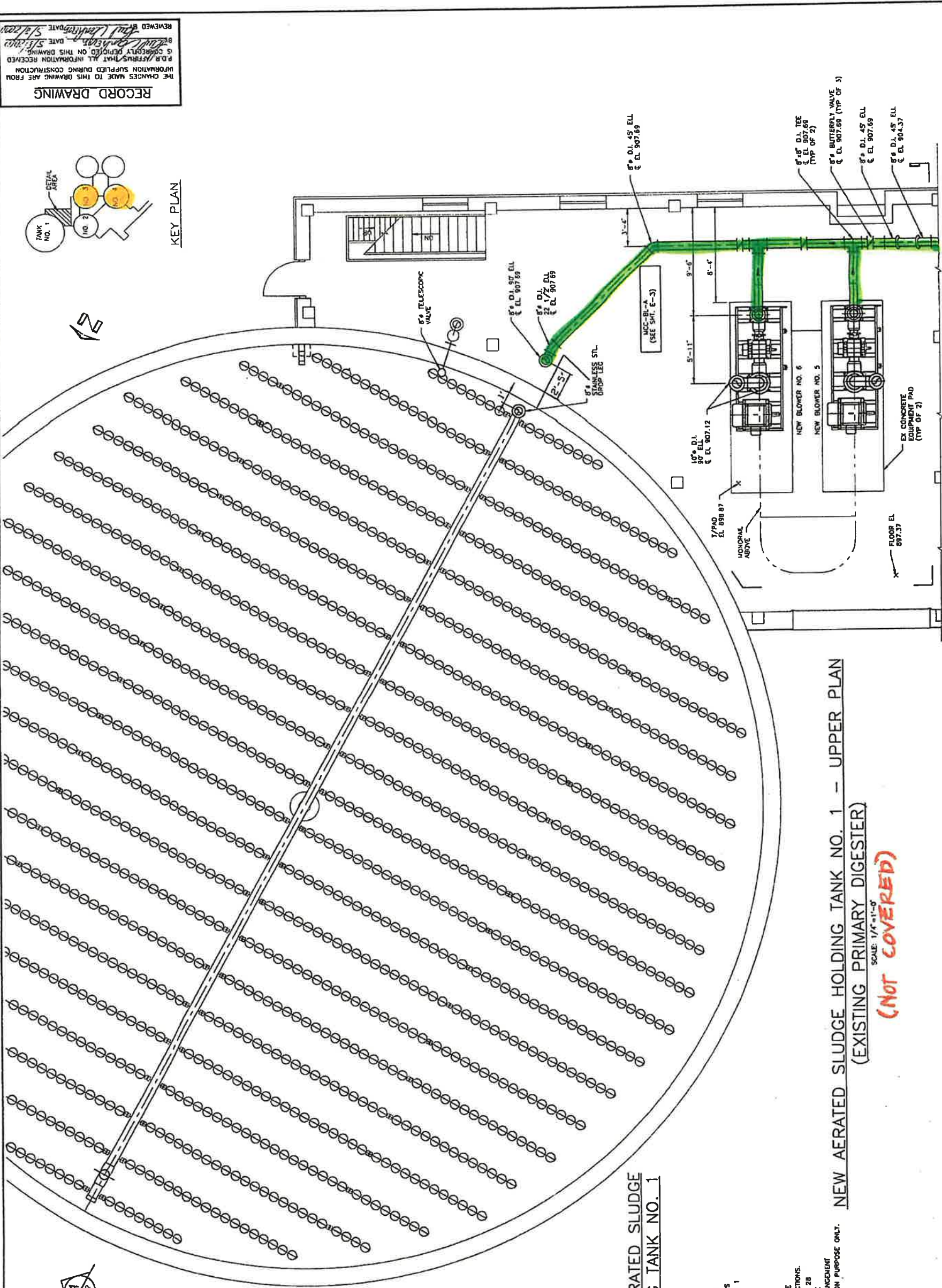
DRAWINGS

Contract No. 1 – Aerated Sludge Holding Tanks	Sheet M-10
Contract No. 1 – Aerated Sludge Holding Tanks	Sheet M-11

- NOTES:
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO CONSTRUCTION
 - CONTRACTOR SHALL INSTALL A MINIMUM OF 312 FINE BUBBLE 9" MEMBRANE DIFFUSERS INSIDE AERATED SLUDGE HOLDING TANK NO. 1 IN ACCORDANCE WITH THE DIFFUSER MANUFACTURER'S INSTRUCTIONS.
 - CONTRACTOR SHALL INSTALL NEW 150 HP BLOWERS ON TOP OF EXISTING 18" HIGH CONCRETE EQUIPMENT PADS IN ACCORDANCE WITH THE BLOWER MANUFACTURER'S INSTRUCTIONS.
 - CONTRACTOR SHALL INSTALL A MINIMUM OF 28 HEADERS WITH A 7'-10" & TO & DISTANCE BETWEEN. PLEASE NOTE THAT HEADER ARRANGEMENT SHOWN ON DRAWING IS FOR REPRESENTATION PURPOSE ONLY.

80"Ø AERATED SLUDGE HOLDING TANK NO. 1

NEW AERATED SLUDGE HOLDING TANK NO. 1 - UPPER PLAN
(EXISTING PRIMARY DIGESTER)
(NOT COVERED)



RECORD DRAWING
THE CHANGES MADE TO THIS DRAWING ARE FROM
INFORMATION SUPPLIED DURING CONSTRUCTION
P.D. & J.R. HAS REVIEWED ALL INFORMATION RECEIVED
IS CORRECTLY REFLECTED ON THIS DRAWING.
DATE: 5/15/2009
REVIEWED BY: J.R. HAS
DATE: 5/15/2009

Lexington-Cincinnati-Louisville-Memphis-Huntsville-Queensboro-Indianapolis
800 Corporate Dr. • Lexington, Kentucky 40503 • (606) 223-8000
Engineers, Inc.

LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT
WEST HICKMAN WTP IMPROVEMENTS
LEXINGTON, KENTUCKY
EXISTING DIGESTER
MODIFICATIONS
UPPER PLAN - IMPROVEMENTS
CONTRACT NO. 1 - AERATED SLUDGE HOLDING TANKS

SCALE: 1/4"=1'-0"
JOB No.: 98263
DESIGNED BY: JLR
CHECKED BY: JLR
DATE: JAN. 1999
COPYRIGHT © 1998
PDR ENGINEERS, INC.

REVISIONS:

SHEET: M-10
OF 20

RECORD DRAWING
P.O.D. NUMBER THAT ALL INFORMATION RECEIVED IS CORRECTLY SHOWN ON THIS DRAWING
DATE 5/1/2000
REVIEWED BY: J. L. H. / J. L. H. / J. L. H.
DATE 5/1/2000

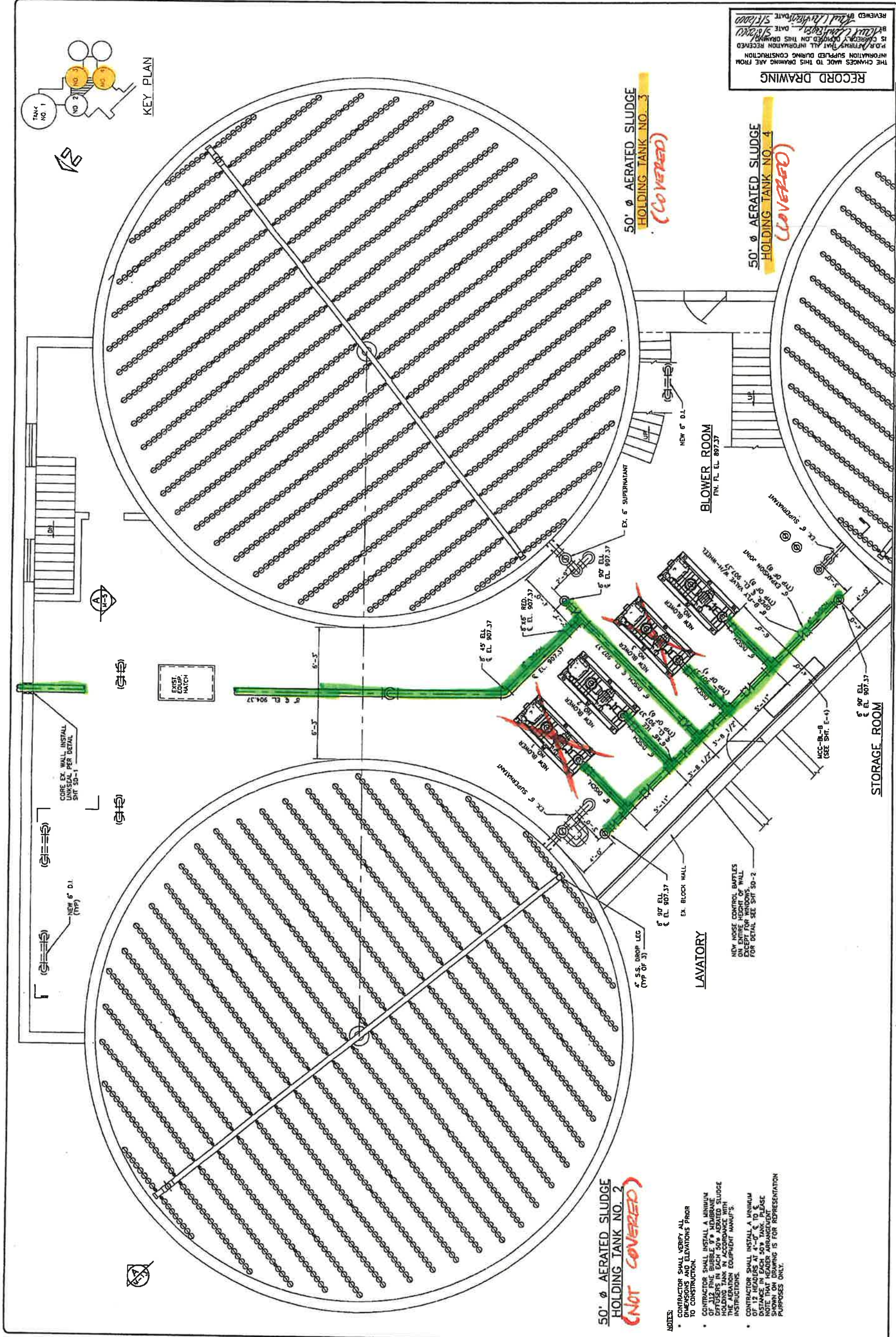
SHEET: M-11
OF 20

REVISIONS

SCALE: 1/8"=1'-0"
JOB NO.: 98263
DESIGNED BY: ALL
DETAILED BY: JLP
CHECKED BY:
DATE: JAN. 1999
COPYRIGHT © 1998
FOR ENGINEERS, INC.

LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT
WEST HICKMAN WWTP IMPROVEMENTS - CONTRACT NO. 1
LEXINGTON, KENTUCKY
EXISTING DIGESTERS
MODIFICATIONS
UPPER PLAN - IMPROVEMENTS

Engineers, Inc.
Lexington • Cincinnati • Louisville • Memphis • Huntsville • Owensboro • Indianapolis
800 Corporate Dr. • Lexington, Kentucky 40503 • (606) 223-8000



- NOTES:
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO CONSTRUCTION.
 - CONTRACTOR SHALL INSTALL A MINIMUM OF 1/12" FINE BUBBLE 9" MEMBRANE DISTRICTS IN EACH 50' TANK. PLEASE NOTE THAT FIBER ARRANGEMENT SHOWN ON DRAWING IS FOR REPRESENTATION PURPOSES ONLY.
 - CONTRACTOR SHALL INSTALL A MINIMUM OF 12 HEADERS AT 4'-0" TO 6'-0" DISTANCE IN EACH 50' TANK. PLEASE NOTE THAT FIBER ARRANGEMENT SHOWN ON DRAWING IS FOR REPRESENTATION PURPOSES ONLY.

50' Ø AERATED SLUDGE HOLDING TANK NO. 2
(NOT COVERED)

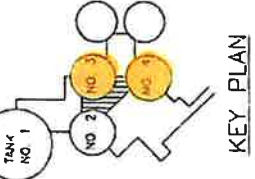
50' Ø AERATED SLUDGE HOLDING TANK NO. 3
(COVERED)

50' Ø AERATED SLUDGE HOLDING TANK NO. 4
(COVERED)

BLOWER ROOM
FIN. FL. EL. 907.37

STORAGE ROOM

LAVATORY



APPENDIX C

Specifications – 1999 Project

Section 11372 Aeration Blowers

Section 11376 Air Diffuser Systems

SECTION 11372
AERATION BLOWERS

PART 1 - GENERAL

1.01 WORK INCLUDED

A. Furnish and install all rotary positive displacement blowers as described herein and as shown on the Drawings. Installation shall include all piping, electrical and controls required for the complete system.

B. Mechanical systems for the work herein specified include:

1. Pipe and pipe fittings.
2. Insulation.
3. Supports, anchors and seals.
4. Concrete grouting.
5. Instrumentation.
6. Controls.
7. Electrical.
8. Adjustment and start-up.

1.02 RELATED WORK

- A. Section 02610 - Process Pipe and Fittings.
- B. Section 02640 - Valves.
- C. Section 16050 - General Electrical Provisions.
- D. Section 16150 - Motors.

1.03 DESCRIPTION OF SYSTEM

The blowers shall be of the straight, two lobe involute, rotary positive displacement design, Roots Division, Dresser Industries, Inc., or equal. The blowers shall be designed to operate continuously without overheating or overloading the motor at any discharge pressure up to an including relief valve set pressure, as specified.

A. Blowers for 50' diameter sludge holding tanks:

Model No.: 409 RAM-J

Blower Quantity: 4

Flow rate: 471 SCFM (measured at 14.7 PSIA, 68 F, and 35% R.H.)

Inlet volume: 541 ACFM (measured at blower inlet flange)
Barometric pressure: 14.2 PSIA (900 ft. elevation)
Inlet pressure: 14.02 PSIA @ blower inlet flange
Inlet temperature: 95°F
Relative humidity: 85%
Discharge pressure: 29.32 PSIA (measured at blower discharge flange)
Maximum design capability of blower: 18 PSIG
Maximum blower speed: 3000 RPM
Maximum gear tip speed: 3450 FPM
Maximum power consumption: 52 BHP @ blower shaft $\pm 4\%$
Motor: 60 HP, 460 volts, 60 Hz, 3 phase

B. Blowers for 80' diameter sludge holding tank:

Model No. 715 RCS-J
Blower Quantity: 2
Flow rate: 1206 SCFM (measured at 14.7 PSIA, 68 F, and 35% R.H.)
Inlet volume: 1436 FM (measured at blower inlet flange)
Barometric pressure: 14.2 PSIA (900 ft. elevation)
Inlet pressure: 14.02 PSIA @ blower inlet flange
Inlet temperature: 95°F
Relative humidity: 85%
Discharge pressure: 28.45 PSIA (measured at blower discharge flange)
Maximum design capability of blower: 15 PSIG
Maximum blower speed: 1950 RPM
Maximum gear tip speed: 3570 FPM
Maximum power consumption: 132 BHP @ blower shaft $\pm 4\%$
Motor: 150 HP, 460 volts, 60 Hz, 3 phase

The actual inlet CFM design rating shall be guaranteed with and allowable tolerance of $\pm 4\%$.

1.04 SUBMITTAL

A. Submit to the Engineer in accordance with Section 01300 for shop drawings, installation drawings, foundation and setting plans, schematics and wiring diagrams, detailed dimensions drawings and materials of construction for each equipment item being furnished.

B. Submit the following pertinent operating data for the low pressure air supply equipment:

1. Blower data, including performance curves indicating the blower flow capacity and horsepower requirements throughout the range of operation.
2. Motors:
 - a. Manufacturer
 - b. Enclosure
 - c. HP, RPM, Volts, Hz, Phase
 - d. Service factor
 - e. Insulation
 - f. Temperature rise rating
 - g. Efficiency and power factor rating full load, 3/4 and 1/2 load
3. Drive data.

4. Inlet filter units and silencers.
5. Valves, including check valves, relief valves and isolation valves, as applicable.
6. Statement signed by an officer of the blower manufacturer that the supplier of the equipment is an authorized representative of the blower manufacturer schooled and experienced in the design and fabrication of their blower packages. there shall be a statement that the supplier of the equipment will stock parts and be able to service the blowers supplied within a 100-mile radius of the plant.

C. Installation, operation and maintenance manuals shall be submitted in accordance with Section 01300.

D. Complete information regarding the factory applied painting system to be used.

1.05 SPECIAL TOOLS AND SPARE PARTS

A. Any special tools required to perform routine maintenance functions, such as replacement of gears and bearings, shall be furnished with the blowers.

B. The following spare parts, as applicable, shall be furnished with the equipment:

1. One (1) complete set of gaskets, seals, o-rings and bearings for each blower.
2. One (1) complete set of V-belts of each size for each blower.
3. One (1) complete set of filter elements for each inlet filter.

PART 2 - PRODUCTS

2.01 GENERAL

A. All equipment shall be designed and proportioned to have liberal strength, stability and stiffness and shall be especially adapted for the intended service. Ample room and facilities shall be provided for inspection, repairs and adjustments.

B. Blower bases shall be rigidly and accurately anchored into position. All equipment base anchor bolts, nuts and washers shall be furnished by the blower manufacturer and installed by the Contractor.

C. The blower manufacturer shall furnish the drive motors and factory mount and align the motor, drive and blower on a common base of cast iron or steel fabrication.

D. Nameplates stating the manufacturer, serial number and design operating characteristics shall be rigidly attached to each major piece of equipment.

E. The blower shall be shipped with openings sealed after injection of rust inhibiting powder and shall include ten (1) copies of instruction manuals and parts lists.

F. The Contractor shall furnish and install all interconnecting piping and wiring, gaskets, bolts, nuts, washers and anchor bolts for auxiliary equipment to complete the system as shown on the Drawings and specified herein.

2.02 BLOWERS

A. The air blowers shall be of the rotary positive displacement type as described in Paragraph 1.03 and be constructed with inlet and discharge connections as shown on the Drawings.

B. The blower case shall be of one piece construction with separate headplates and shall be made of close-grained cast iron suitably ribbed to prevent distortion under the specified operating conditions.

C. The impellers and shafts shall be made from a common ductile iron casting with a tensile strength of at least 60,000 psi and shall operate without ribbing or liquid meals or lubrication. The impellers shall be statically and dynamically balanced by removing metal from the impeller body.

D. The impellers shall be timed by a pair of accurately machined steel gears. The wide faced spur gears shall be carburized and ground and manufactured to AGMA standards and operate in an oil bath. The gears shall be mounted on the impeller shafts on a tapered fit and secured by locknuts.

E. Each impeller and shaft assembly shall be supported by cylindrical roller bearings sized for a design B-10 bearing life of over 50,000 hours. The drive end bearings shall be fixed axially to control the axial location of the impeller assembly in the unit. The drive end bearings and the gear end bearings shall be splash lubricated from oil reservoir on each end.

F. A double sealing arrangement shall be provided to prevent lubricant from contaminating the air stream. Each bearing shall be provided with a positive lip type oil seal designed to prevent lubricant from entering the air stream and a rotary piston ring seal designed to reduce air leakage at the point where the shaft extends through the headplate of the blower casing. Further provision shall be made to vent the area between the two sealing systems to atmosphere to relieve excessive pressure on the seals.

2.03 MOTORS AND DRIVES

A. Each blower shall be driven by a horizontal, constant speed, NEMA design B, 1750 RPM motor. Motor horsepower shall be as specified in Paragraph 1.03; however, the motors shall be sized so they will not be overloaded nor have their service factor reduced when the blower is operating at the maximum design speed and differential pressure. The motor enclosure design shall be TEFC and the motor shall have a service factor rating of 1.15. Motor shall meet or exceed the requirements of Section 16150.

B. The motor shall be direct connected to the blower with a Falk Steelflex, or equal, drive coupling or shall drive the blower through heavy duty multiple V-belts. Motor bases shall incorporate a means to easily adjust belt tension. Drive guards shall be provided in accordance with OSHA.

C. Each motor shall be supplied with an extra stainless steel nameplate to be turned over to the electrical contractor. These nameplates will be epoxied on the inside of each starter bucket.

2.04 BLOWER ACCESSORY EQUIPMENT

A. Each blower shall be provided with anchor bolts, inlet filter, inlet silencer, inlet and discharge expansion joints, discharge silencer, combination pressure relief and unloading valve or spring type pressure relief valve, check valve, thermometer and other accessories as shown on the Drawings.

B. Inlet filters shall be of the dry element type having a washable filter media complete with weather hood. Efficiency shall be 90% or better on 10 micron material. The filter shall be sized to pass 100% of the blower flow with a pressure drop not to exceed 3 inches of W.C. for a clean filter. (NOTE: Size air filter for minimum of maintenance/replacement with greater than 60 days of continuous service without maintenance. The size of the air filter is the entire responsibility of the Blower Manufacturer.)

C. Inlet silencers shall be of the chamber-absorptive type with top inlet and side outlet connection to match the blower connection as shown on the Drawings, with capacity not less than 541 CFM (409 RAM-J Blower), and 1436 CFM (715 RCS-J Blower). The silencer shall be sized for 100% of the blower flow with a pressure drop not to exceed 5.5 inches of W.C. The silencer shall be provided with supporting legs, shall be all welded steel construction and shall be Model No. RISY-5 (409 RAM-J), and RIS-8 (715 RCS-J) manufactured by Universal, or equal.

D. Discharge silencers shall be of the chamber-absorptive type with side inlet and top discharge and connection sized as shown on the Drawings. The silencer shall be sized such that a pressure drop of 5.5 inches W.C. will not be exceeded at the specified blower operation conditions. The silencer shall be provided with supporting legs, shall be all welded steel construction, and shall be Model No. SDY-5 (409 RAM-J), and SDY-8 (715 RCS-J) as manufactured by Universal, or equal.

E. Expansion joints or flexible connectors shall be provided at the inlet and discharge of the blower. The joints shall be of the single arch style and designed for the maximum temperature, pressure and vibration that may result from operation of the system. The joint shall be sized to match the blower connections. A control unit shall be provided to limit the axial movement of the discharge expansion joint.

F. A combination relief and unloading valve shall be provided in the blower discharge piping. The valve shall be pilot operated by blower line pressure and shall have no accumulation. The valve shall have an aluminum body and stainless steel tubing. The elastomers shall be suitable for intended service. A solenoid valve shall be provided and mounted on the valve for automatic unloading. A backflow preventer device shall be provided where necessary. In applications where unloading valves are not required, a spring type pressure relief valve may be used. The valve shall be sized by the blower manufacturer to relieve the entire discharge flow without overloading the blower.

G. Local thermometers for indicating the discharge air temperatures and bearing temperatures. The case shall be of phenolic or aluminum with white laminated plastic dial. The unit shall have a 4-1/2" dial with a range of approximately 50 to 500° F. for air and shall have appropriate range for the bearings and shall have a accuracy of at least 1 percent of scale range.

H. The blower discharge pressure shall be measured by a wall mounted manometer. They shall be the direct reading, wall type using mercury and shall be graduated in pounds and tenths of pounds; range shall be 0 to 20 psi. Wetted parts shall be of semi-steel. Scales shall be adjustable. The units shall be sealed from moisture. Suitable drain, fill, vent plugs and 1/4 inch pressure connection shall be included. The manometer shall be as manufactured by Meriam Instrument Company, or equal.

I. A wafer type check valve shall be installed in the blower discharge piping, downstream of the silencer and relief valve. The check valve shall have a cast-iron body, stainless steel pin and spring and two-semi-circular cast-iron or aluminum plates. The seat material shall be either Viton or Silicone for high temperature operations.

PART 3 - EXECUTION

3.01 INSTALLATION

A. The blowers and accessories shall be in accordance with the approved shop drawings and the manufacturer's instructions.

B. Each blower shall be shipped with openings sealed after injection of rust inhibiting powder.

C. Installation shall include the furnishing and installation of all supports and bracing as required to support the blowers, silencers and piping and to prevent any excessive vibration or movement which may be harmful to the equipment.

D. Each blower shall be given a factory mechanical test to ensure mechanical integrity. All adjustments required for smooth operation and reliability shall be made prior to shipment.

E. An authorized factory representative shall inspect the complete air blower system and provide a written certification that the equipment has been properly installed and aligned.

F. Each blower shall be equipped with its individual air intake filter assembly. Air filters shall be capable of allowing greater than 60 days of continuous operation without maintenance and without causing excessive blower heat (due to lack of air flow).

3.02 PAINTING

A. The blowers and accessories shall receive a factory applied coating in accordance with the manufacturer's standard.

B. Field painting shall be performed by the Contractor and is described in Section 09900.

3.03 MANUFACTURER'S SERVICE

A. The equipment manufacturer shall supply and verify the installation of the equipment included in this work.

B. Tests:

1. Each blower shall be given a factory mechanical test to assure mechanical integrity and a slip test to confirm capacity. If the tests indicate that adjustments are necessary to ensure conformance to the manufacturer's standards, such adjustments shall be made prior to shipment.
2. Successful performance, as indicated by this test, shall be considered as the basis for acceptance by the Engineer. Certified copies of the test results shall be submitted to the Engineer.

C. The blowers and accessories shall be a complete package by the blower manufacturer's authorized supplier who has provided systems on a minimum of 10 similar projects, the same size or larger than those specified herein, that have been in successful operation of wastewater treatment plants for a minimum of 5 years.

3.04 TECHNICAL ASSISTANCE

The Contractor shall furnish the services of an experienced and qualified manufacturer's technician to supervise the installation, start-up and calibration of the equipment specified in this Section.

3.05 FIELD TESTING

Each blower with its valving and accessories shall be field tested to show that they comply with these specifications. The verification shall include:

- A. Blower speed.
- B. Proper operation of check valves, butterfly valves and pressure relief valves.
- C. Proper operation of all gages and sensors.
- D. Proper operation of controls.

3.06 WARRANTY

The blowers and all associated equipment shall be warranted for one (1) year after acceptance by the ENGINEER.

- END OF SECTION -

SECTION 11376
AIR DIFFUSER SYSTEMS

PART 1 - GENERAL

1.01 SCOPE OF WORK

A. Furnish, install and test aeration piping and fine bubble diffuser systems, including air mains, drop pipes, valves, expansion joints, couplings, diffusers, supports and appurtenances necessary to make the aeration systems complete and operable as indicated on the Drawings and herein specified. Diffuser systems shall be provided in the three (3) 50' diameter sludge holding tanks, and one (1) 80' diameter sludge holding tank at the West Hickman Wastewater Treatment Plant.

B. Pipe diameters shall be as shown on the Drawings. Smaller pipe diameters will not be permitted.

1.02 RELATED WORK

A. Special requirements for equipment are included in Sections 01300 and 01730.

B. Mechanical piping, valves, pipe hangers and supports are included in the respective Sections of Divisions 2 and 15.

1.03 QUALIFICATIONS

The equipment covered by these specifications shall be obtained from a single manufacturer. The equipment covered by these specifications are intended to be standard aeration equipment of proven ability as manufactured by a reputable manufacturer having significant experience in the production of diffuser aeration systems. The equipment furnished shall be designed, constructed, and installed in accordance with the best practice and methods and shall operate satisfactorily when installed. The aeration equipment shall be as manufactured by Sanitaire Water Pollution Control Corp. The diffusers shall be "Silver Series" as manufactured by Sanitaire.

1.04 SUBMITTALS

A. Copies of all materials required to establish compliance with the Specifications shall be submitted in accordance with Section 01300. Submittals shall include at least the following:

1. Literature and drawings describing the equipment in sufficient details, including parts list and materials and details of construction, to indicate full compliance with the detail Specifications.
2. Certified dimensional drawings of each item of equipment auxiliary apparatus to be furnished.
3. Certified foundation and anchor bolt plans and details.
4. Bolts and nuts materials and dimensions.
5. A sample diffuser.

B. The Contractor shall submit the following information from the air diffuser supplier to the Engineer for approval.

1. Structural calculations showing that the new diffuser connections, new header and drop pipe assembly are capable of withstanding all forces exerted upon them in operation.
2. Certified diffuser performance tests as specified herein.
3. A one year warranty on all materials supplied to cover material defects and diffuser performance. The warranty shall include the costs of replacing any defective materials and diffusers with new ones including labor. The warranty period shall begin after acceptance of the system by the Engineer.
4. For manufacturer's not listed, a reference list of similar installations shall be supplied with equipment submittal. This list shall include names, telephone number and application. A minimum of five installation shall be provided. The diffusers shall be proven to provide reliable, trouble-free performance in wastewater.

1.05 OPERATING INSTRUCTIONS

A. Operating and maintenance instructions shall be furnished to the Engineer as provided for in Section 01730.

B. A factory representative who has complete knowledge of proper operation and maintenance of the diffuser systems shall be provided for one (1) day to instruct representatives of the Owner on proper operation and maintenance.

1.06 TOOLS AND SPARE PARTS

A. The required spare parts for the diffuser assemblies shall be those as recommended by the manufacturer and shall include, as minimum, all special tools required for normal operation and maintenance including one (1) retaining ring spanner wrench, and spare diffuser membranes the amount of which shall be equal to 5% of the total number installed.

B. All spare parts shall be packed in containers which are clearly identified with indelible markings on containers.

PART 2 - PRODUCTS

2.01 PERFORMANCE

Diffuser performance data shall be submitted to the Engineer as defined in Part 3.02 of this section.

2.02 STAINLESS STEEL MATERIALS AND FABRICATION

A. Fabricate all welded parts and assemblies from sheets and plates of 304L stainless steel. Fabricate non-welded parts and pieces from sheets and plates of 304 stainless steel.

B. Pickle all stainless steel assemblies and parts after welding, fabrication and wire brushing by complete immersion in an acid solution as specified in ASTM A380-88, Section 6.2.11. The acid shall be a nitric-hydrofluoric solution as defined in Table A2.1., Annex A2 of ASTM A380. Provide a final rinse using

ordinary industrial or potable water and dry in conformance with Section 8.3 of ASTM A380. Corrosion protection techniques not employing full immersion methods will not be acceptable.

C. Do all welding in the factory using MIG, TIG or plasma-arc welding inert gas processes. Field welding will NOT be permitted.

2.03 CPVC MATERIALS AND FABRICATION

A. Produce all CPVC pipe and fittings from CPVC compound with a minimum tensile strength of 7000 PSI.

B. Provide lower drop pipes and manifolds of the diameter shown on the drawings with a minimum Schedule 40 wall for 6" and larger sizes and SDR 33.5 for 4" diameter sizes. Schedule 40 material shall comply with ASTM specification D1784, D1785 and D2466. SDR material shall comply with ASTM D3915 and D3034.

C. Provide 4" diameter distribution headers as shown on the drawings with a maximum outside diameter to wall thickness ratio of SDR 33.5. SDR material shall comply with ASTM specifications D3915 and D3034.

D. Add two parts by weight of titanium dioxide per 100 parts of resin to CPVC compounds for air distribution headers, diffuser element holders and retainer rings to minimize ultraviolet light degradation.

E. Factory solvent weld all CPVC joints. Field solvent welding will NOT be permitted.

2.04 MEMBRANE MATERIALS AND FABRICATION

A. Manufacture circular membrane diffuser discs of EPDM synthetic rubber compound with precision die formed slits. Thermoplastic materials such as plasticized PVC or polyurethane will NOT be acceptable.

B. Diffuser shall be a one-piece compression molded part with a minimum thickness of 0.080" for nominal 9-inch diameter unit. This part thickness shall limit the maximum tensile stress of the rubber membrane to 10 psi when operating at 2.4 SCFM per square foot of membrane media. Larger disc diffusers shall be proportionately thicker to limit the maximum tensile stress at the specified air rate.

C. The EPDM rubber compound shall have the following minimum characteristics:

	<u>VALUE/UNITS</u>	<u>ASTM</u>
Base Polymer	EPDM	
UV Resistance	Carbon Black	
Specific Gravity	1.25 or Less	
Ozone Resistance	Pass	D1171
Durometer, Shore A: 2240	60 Point \pm 5	
Tensile Strength	1450 psi	D412
Elongation at Break	500%	D412
Accelerated Aging Max. Compression Set		
@ 23°C, 22 hrs.	20%	D573
@ 70°C, 22 hrs.	40%	

D. Furnish diffuser membranes with uniform distribution of air bubble release across the active surface of the diffuser element when submerged in water. Manufacture membrane discs with integral sealing gasket.

E. Furnish diffuser membranes to meet or exceed the following criteria:

1. Membrane shall collapse and seal when aeration system air is turned off.
2. Membrane shall be able to collapse onto support base when air is not being diffused.

2.05 MEMBRANE AERATION SYSTEM EQUIPMENT COMPONENTS

A. Provide a 304L stainless steel and CPVC drop pipe from air main connection to a point approximately 3' above the manifold.

B. Provide CPVC manifolds as shown on the drawings perpendicular to the air distribution headers. Support manifold with a minimum of two stainless steel supports. Maximum spacing between supports shall not exceed 8'. Design manifold, connections and supports to resist thrust generated by expansion or contraction of the air distribution headers. Furnish manifolds for long-term exposure to 130°F mean-wall temperatures. Fabricate manifolds with 4" diameter fixed joint connection to each air distribution header.

C. Provide 4" diameter SDR 33.5 CPVC air distribution headers as shown on the drawings perpendicular to the air manifold

1. Join sections of distribution headers with positive fixed threaded union or flange type joints to prevent blow apart. All underwater joints shall be positive locking type. Push on, bell in spigot or expansion type joints will NOT be acceptable.
2. Fabricate distribution headers with diffuser element holders factory solvent welded to the crown of the header. Attach diffuser element holders to distribution headers to resist a dead load of 200 lbs. applied vertically to the outer most edge of the diffuser holder.
3. Support each section of distribution header with a minimum of two supports having a maximum spacing 7.5'. Distribution header supports, or guides, shall allow longitudinal movement of the header section to prevent stress build-up in the header due to thermal expansion/contraction forces. Guide supports that clamp or grip the header will be unacceptable.

2.06 DIFFUSER ASSEMBLIES

A. Furnish diffuser assemblies consisting of a diffuser membrane with integral gasket, diffuser holder, air flow control orifice and retaining device. Diffusers utilizing ceramic or plastic type diffusion media elements will not be acceptable as alternatives to the membrane disc design. Diffusers that require a center bolt to limit membrane deflection will not be allowed.

B. Furnish CPVC diffuser element holders with an air plenum chamber below the diffuser support plate. Provide a mechanism to attach the diffuser to the holder.

1. Element holders shall provide peripheral edge support for the membrane diffuser element.

2. Solvent weld element holders to the distribution headers in the factory to resist dead load of 200 lbs. applied vertically to the outer edge of the diffuser unit.
3. Furnish retaining device to securely hold and seal the membrane diffuser to the holder.
 - a. Design diffuser assembly and retaining device to prevent air escape at the diffuser element-sealing gasket interface. Make gasket integral with diffuser membrane.
 - b. Provide a method to vary the applied sealing force between the sealing gasket and membrane diffuser. Sealing method or retaining device shall generate a minimum of 50 pounds per inch of circumference of the sealing gasket to provide a long-term positive seal and prevent air escape except through the active area of the diffuser membrane.
4. Provide screw-on retainer rings with a positive o-ring seat and a minimum of 2½ complete threads for engagement. Threads shall have a minimum cross section of 1/8 inch. Alternatives utilizing a threaded nipple design for attaching diffuser to header must use stainless steel nipples and stainless steel inserts molded into the CPVC headers. Threading the diffuser directly into a hole tapped into the header shall not be allowed unless the header is a minimum of Schedule 80.

2.07 SUPPORTS

A. Manifold supports shall include manifold hold-down, guide straps, anchor bolts and supporting structure. Guide straps shall be a minimum 2" wide. Provide supports with a mechanism to provide for plus or minus 2" vertical adjustment for alignment of the manifold in the field. Supports shall be designed to allow for complete removal from the tank (less anchor bolt) to facilitate cleaning and maintenance of tank bottom.

B. Air Distribution Header Supports

1. Provide stainless steel air distribution header supports of both guide and fixed type to allow for expansion of the system. Supports shall be designed to allow for complete removal from the tank (less anchor bolt) to facilitate cleaning and maintenance of tank bottom.
2. Guide supports shall consist of a self-limiting hold down and sliding mechanism. Hold down and sliding mechanism shall provide a full circumferential 1.5" wide contoured bearing surface with chamfered leading edges to minimize binding of the air distribution header. Sliding mechanism shall provide minimum resistance to movement of the air distribution header under full buoyant up-lift load. Mechanism shall provide 1/8" clearance around header and be self-limiting if the mechanism is overtightened. Worm gear clamps shall not be utilized for attaching header pipe to supports.
3. Fixed supports shall consist of a hold down mechanism and self-limiting clamp device. Hold down mechanism and clamp shall provide a full circumferential 1.5" wide contoured bearing surface for the air distribution header. Clamping device shall positively grip the air distribution header when tight and be self-limiting to prevent overstressing the header if the clamp is overtightened. Worm gear clamps shall not be utilized for attaching header pipe to supports.

4. Provide supports with a mechanism to provide for plus or minus 1.5" vertical adjustment for alignment of the air distribution headers in the field. Adjusting and aligning mechanism shall be infinitely adjustable within its limits to allow precise leveling of the air distribution headers and diffuser assemblies to within plus or minus 1/4" of a common horizontal plane without removing the header from the support.
5. Attach supports to tank floor with one stainless steel expansion type anchor bolt designed for embedment in 3000 psi concrete. Size anchor bolts with pull-out strength, design safety factor of 4 or more.

2.08 HEADER AND MANIFOLD PIPE JOINTS

- A. Provide positive type connection joints bolted of flanged or threaded union type for all submerged header and manifold joints.
- B. Bell and spigot, slip on or expansion type joints shall not be utilized for submerged joints. All joints must be positive locking type.
- C. Threaded union joints shall consist of a spigot section solvent welded to one end of a distribution header, a threaded socket section solvent welded to the mating distribution header, an "O" ring gasket and a threaded screw on retainer ring. Solvent welding shall be done in the factory. Flanged joints shall be of follower type with stainless steel hardware and shall have standard 125 b. drilling.

2.09 DRAINLINE, SUMP AND AIRLIFT PURGE SYSTEM

- A. Furnish one CPVC drainline, sump, airlift purge eductor line and eductor carrier column to drain the entire submerged aeration piping system for each aeration grid.
- B. Construct each aeration grid with an integral drainline terminating at a sump. The sump bottom elevation shall be lower than the invert of the air distribution headers and drainline.

2.10 WORKMANSHIP AND DESIGN

- A. All parts of the equipment shall be amply proportioned for long, continuous, and uninterrupted service. Provision shall be made for easy access for service or replacement of parts. Corresponding parts of multiple units shall be interchangeable. Except as otherwise specified, steel members which are not stainless steel shall have a minimum thickness of 1/4 in. and bolts a minimum diameter of 1/2 in.
- B. Workmanship shall be first class in all respects. All welding shall be in accordance with the latest applicable codes of the American Welding Society. Welding on the submerged piping and equipment shall be completed in the factory. Field welding shall not be permitted.
- C. Interior weld beads shall be smooth, evenly distributed, with an interior projection not exceeding 1/16 in. beyond the I.D. of the air header or fitting.
- D. The outside weld area shall be wire brushed. Brushes shall be of stainless steel and used only on stainless steel. All discoloration and deposits left by welding shall be removed by pickling.
- E. After fabrication all stainless steel assemblies and parts shall be passivated by immersion in a pickling-solution of 6 percent nitric acid and 3 percent hydrofluoric acid at 140°F for a minimum of 15

minutes. Parts shall be free of iron particles or other foreign material. A complete neutralizing operation shall be required by immersion in a trisodium phosphate rinse.

PART 3 - EXECUTION

3.01 INSTALLATION

A. The installation of the main aeration equipment shall be as specified by the equipment manufacturer and as indicated on the Drawings. All labor and materials necessary for the installation, and the necessary testing apparatus required for testing the equipment shall be furnished by the Contractor at no additional cost to the OWNER. The placing of diffusers shall not begin until the Engineer's approval has been obtained. Prior to connecting the diffusers to the headers, the Contractor shall carefully clean all piping, headers, and accessories through which air is delivered, so that all dust, dirt, oil, grease, or other foreign material will be removed from contact with the air being blown through the tubes. This cleaning shall be done with clean water at a velocity of two or three feet per second.

B. Diffusers shall be installed as shown in conformance with the recommendations of the manufacturer. Particular care shall be taken by the Contractor to ensure that all diffuser air connections on a single header are installed in a single horizontal plane within a tolerance of plus or minus 1/4 inch. Particular care shall be taken by the Contractor to ensure all distribution headers are installed in a single horizontal plane within a tolerance of plus or minus 1/4 inch. All diffusers and distribution headers found to be out of tolerance shall be reinstalled to place into tolerance by the Contractor at no additional cost to the Owner.

C. Provide the services of a competent factory representative familiar with the installation of fine bubble membrane aeration equipment as required for three (3) days to assist the Contractor in proper installation of the equipment and instruct the Owner's personnel in the equipment's operation and maintenance.

3.02 FACTORY TESTS

A. Air diffuser equipment installed shall be tested for oxygen transfer efficiency and mixing capability. The Contractor shall submit to the Engineer certified test data and calculations from the manufacturer to show what the headloss and oxygen transfer efficiencies are. The diffuser system tested must either be the equipment to be actually installed or identical equipment.

B. The Contractor shall provide any and all modifications to the equipment necessary to achieve performance standards.

C. Prior to installation, the air diffusion equipment shall be tested to demonstrate the capability of the equipment to meet the oxygen transfer requirements as specified.

1. The tests shall be conducted in general conformance with the procedures outlined in the Water Pollution Control Federation Manual of Practice No. 5 dated 1971, Section 2.4. Cobalt catalyst addition shall not be greater than 0.05 mg/l.
2. The tests shall be performed in test tanks having similar cross section as the tanks in which the equipment is to be installed. The test tank shall have a minimum length of 20 feet.
3. The aeration equipment shall be installed in the test tank in the same configuration and submergence as specified for the tanks in which it is to be installed.

4. The test tank shall be thoroughly cleaned and inspected prior to testing.
5. The tank shall be filled to the required depth with clear tap water. The test water temperature shall be maintained between 18 degrees C and 22 degrees C. Before the first test and after the last test on each batch of test water, a sample of tank water shall be withdrawn for possible water analysis.
6. A total of five tests at each transfer rate shall be conducted on the accepted diffuser arrangement.
7. In order to determine the value of saturation dissolved oxygen concentration (c^* , mg/l), the tests shall be performed for a period of time not less than 4 divided by the estimated overall mass transfer coefficient (KLa , 1/hr) of the equipment being tested. Where deemed necessary by the Engineer, the tests shall be performed for period of time of up to 6 divided by KLa .
8. These tests may be conducted at the manufacturer's facility. Costs for the testing shall be included in the contract price.
9. Test data shall be analyzed by methods which are acceptable to the Engineer and are in conformance with the latest recommendations of the Subcommittee on Oxygen Transfer Standards of the American Society of Civil Engineers.
10. Prior to the shop tests, the Contractor shall submit to the Engineer the following information for review:
 - a. Detail arrangement drawings for the equipment.
 - b. Detail drawings of supports, connections, expansion joints, and diffuser connectors.
 - c. Manufacturing specifications and tolerances for equipment.
 - d. Complete head loss calculations for the equipment from the manufacturer's point of responsibility.
 - e. Diffuser details.
 - f. Performance guarantee for oxygen transfer and head loss.
 - g. Complete description of shop test.
 - h. Certified test data from previous similar tests which supports oxygen transfer claims.
11. Description of the test shall include, but NOT be limited to:
 - a. Details of the test tank.
 - b. Aeration equipment layout in test tank.
 - c. Location and specification of all instrumentation.

- d. Sampling locations and hardware specifications.
- e. Sample calculations and formulae used for converting actual conditions to standard conditions.
- f. Test Procedures: The average of the result of the five tests shall not be less than the guaranteed transfer rate, and each test shall be within 5.0 percent of the mean value.

All data from all tests shall be submitted as itemized herein for acceptance by the Engineer prior to fabrication of any equipment.

3.03 LEAKAGE TESTS

For each aeration system specified herein, after cleaning has been completed and the diffusers installed, clear water shall be introduced into the channels and tanks. When the diffusers are covered by about 2 in. of water, compressed air shall be admitted to the system and all piping shall be inspected for leaks and any leaks thus found shall be repaired. This test shall be repeated until the entire system is reasonably tight, to the satisfaction of the Engineer. Testing shall be done by the Contractor.

3.04 ACCEPTANCE TESTS

A. For each aeration system specified herein, after installation of the equipment and the leakage test hereinbefore specified, and after completion of the services of the manufacturer's representative and when plant influent is available, the Contractor shall operate each unit to demonstrate its ability to perform its functions satisfactorily.

B. Uniformity of diffusion shall be determined visually for each diffuser header under actual operating conditions. When the diffusers are covered to a depth of 2 ft., compressed air shall be admitted to the system. The diffusion of air from each header will be considered uniform if air is released from each diffuser in equal quantities and pattern with no undue proportion from any single diffuser.

C. All defects and defective equipment shall be corrected promptly and replaced at the expense of the Contractor. If necessary, the tests shall be repeated until satisfactory results are obtained. The cost for all testing shall be borne by the Contractor.

D. All final adjustments necessary to place the equipment in satisfactory working order shall be made at the time of the above tests.

3.05 WARRANTY

A. Warrant all parts to be free from defects in materials and workmanship for a period of one year after installation.

B. Furnish replacement parts to the Owner for any items found to be defective within the one-year warranty period.

- END OF SECTION -

APPENDIX D

PICTURES



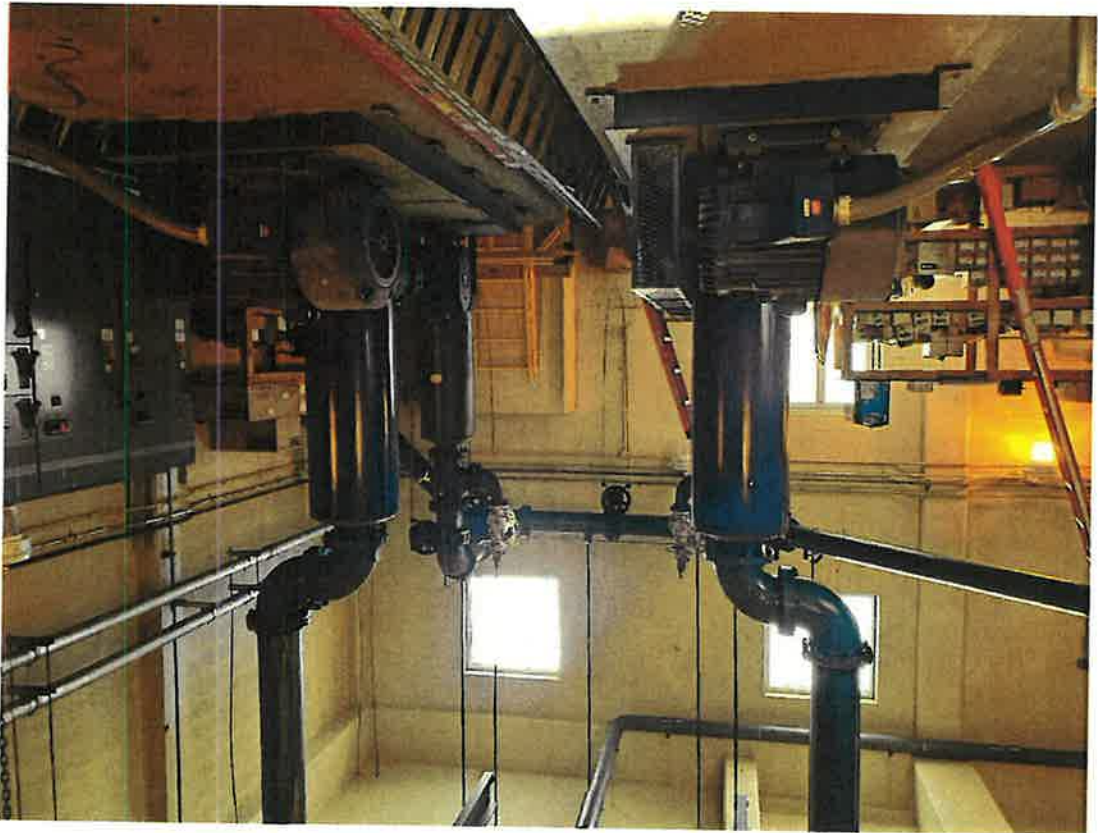
60 HP Blowers



MCC for 60 HP Blowers



MCC for 150 HP Blowers



150 HP Blowers

APPENDIX E

SRF LOAN CONDITIONS CHECKLIST

SRF LOAN CONDITIONS CHECKLIST

Congratulations on receiving a conditional commitment of funding from the State Revolving Fund (SRF) Program. Borrowers will now be assigned a Compliance Analyst to help guide them through the rest of the loan process based on which Area Development District (ADD) they are located. Please submit all documents to one of the following contacts:

- Julie Bickers (Julie.Bickers@ky.gov, 502-892-3455): Purchase, Pennyrite, Green River, Barren River, Lake Cumberland, Big Sandy, Cumberland Valley, KY River
- Debbie Landrum (Debbie.Landrum@ky.gov, 502-892-3454): Lincoln Trail, KIPDA, Northern KY, Bluegrass, Buffalo Trace, Gateway, FIVCO

After all of the conditions of the Conditional Commitment Letter have been fulfilled, KIA will initiate the Assistance Agreement with the borrower. The Assistance Agreement must be fully executed before any funds may be disbursed. The following is a list of items needed to process your loan (forms can be found here <https://kia.ky.gov/FinancialAssistance/Pages/Forms.aspx>):

Before bid opening, submit the following items to the designated Compliance Analyst/DOW Contact:

Submit To:		
KIA	<input type="checkbox"/>	Conditional Commitment Letter (this letter is sent to the borrower via email shortly following KIA board approval and is to be signed by the authorizing official);
USBANK	<input type="checkbox"/>	Authorization for Electronic Deposit/Debit of Borrower Disbursements/ Payment (these forms are attached to the loan commitment letter sent after KIA board approval and are to be signed by the authorizing official and forwarded directly to US Bank via Email: KentuckyInfrastructureAuth@usbank.com)
KIA	<input type="checkbox"/>	Transparency Form (this form is attached to the loan commitment letter sent after KIA board approval)
DOW	<input type="checkbox"/>	Fiscal Sustainability Plan Certification and Cost and Effectiveness Certification (required for "A" loans only, prior to plans approval)
DOW	<input type="checkbox"/>	Environmental review (Kentucky Division of Water will review and is required prior to plans approval. KIA will need copy of approval letter)
DOW	<input type="checkbox"/>	Plans and specifications (Kentucky Division of Water will review and KIA will need copy of approval letter)
KIA	<input type="checkbox"/>	Proof of compliance with any special condition identified in the Conditional Commitment Letter (e.g. adopted ordinance)

After the project has opened bids, please submit the following items to the designated Compliance Analyst/DOW Contact. It is imperative that the remaining standard conditions are fulfilled by the deadlines set forth in the Conditional Commitment Letter.

Submit To:		
DOW	<input type="checkbox"/>	Authority to Award (ATA) Package , the Kentucky Division of Water will review and forward approval to KIA.
DOW	<input type="checkbox"/>	Davis-Bacon prevailing wage rates , the Kentucky Division of Water will review and forward approval to KIA.
KIA	<input type="checkbox"/>	Procurement and Wage Certification (KIA sends to borrower after bid opening.)
KIA	<input type="checkbox"/>	Certification of obtainable revenue projections (KIA sends to borrower after bid opening.)
DOW	<input type="checkbox"/>	Certification of clear site (DOW will forward to KIA.)
	<input type="checkbox"/>	Plans and specifications approval from the Kentucky Division of Water (DOW will send approval to KIA.)
KIA	<input type="checkbox"/>	Public Service Commission (PSC) approval , (CPCN and Authorization to Incur Debt) if applicable.

EXHIBIT B

CERTIFICATE OF INSURANCE




CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

05/08/2025

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER  Donna Payne Insurance Agency State Farm Insurance 501 Wilfin Way Mt Sterling Ky 40353	CONTACT NAME: Donna Payne PHONE (A/C, No, Ext): 859-498-5498 FAX (A/C, No): 866-531-7570 E-MAIL ADDRESS: donna@donnapayne.net
INSURED Kentucky Engineering Group, PLLC PO Box 1034 Versailles Ky 40383	INSURER(S) AFFORDING COVERAGE INSURER A: State Farm Mutual Automobile Insurance Company NAIC# 25178 INSURER B: <input checked="" type="checkbox"/> INSURER C: <input checked="" type="checkbox"/> INSURER D: <input checked="" type="checkbox"/> INSURER E: <input checked="" type="checkbox"/> INSURER F: <input checked="" type="checkbox"/>

COVERAGES

CERTIFICATE NUMBER:

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INBR LTR	TYPE OF INSURANCE	ADD INSD	SUB WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> Business office GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:			97-AJ-C921-9	08/03/2024	08/03/2025	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ MED EXP (Any one person) \$ 5,000 PERSONAL & ADV INJURY \$ GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COM/OP AGG \$ 2,000,000
A	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input checked="" type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> NON-OWNED AUTOS ONLY			1408985, 1419866, 1419881 1563621 1681876 1887431	12/11/24 11/11/2024 03/01/2025 01/30/2025	08/11/2025 11/11/2026 09/01/2025 07/30/2025	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
	UMBRELLA LIAB <input type="checkbox"/> OCCUR EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$						EACH OCCURRENCE \$ AGGREGATE \$
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? <input checked="" type="checkbox"/> Y/N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below		N/A	97-KN-7442-6	04/14/2025	04/14/2026	PER STATUTE <input type="checkbox"/> OTH-ER <input type="checkbox"/> E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Civil Engineering

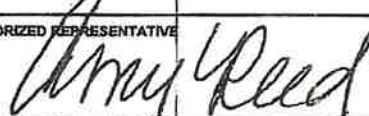
Business-office policy includes - Pollutant clean up and removal \$10,000 limit \$1000 deductible

CERTIFICATE HOLDER**CANCELLATION**

Lexington-Fayette Urban County Government,
DWQ
301 Jimmie Campbell Drive
Lexington KY 40504

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE



© 1985-2015 ACORD CORPORATION. All rights reserved.



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

05/08/2025

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER  Donna Payne Insurance Agency State Farm Insurance 501 Wilin Way Mt Sterling Ky 40353	CONTACT NAME: Donna Payne PHONE (A/C, No, Ext): 859-498-5498 FAX (A/C, No): 866-531-7570 E-MAIL ADDRESS: donna@donnapayne.net
	INSURER(S) AFFORDING COVERAGE INSURER A: State Farm Mutual Automobile Insurance Company INSURER B: <input type="checkbox"/> INSURER C: <input type="checkbox"/> INSURER D: <input type="checkbox"/> INSURER E: <input type="checkbox"/> INSURER F: <input type="checkbox"/>
INSURED Kentucky Engineering Group, PLLC PO Box 1034 Versailles Ky 40383	NAIC # 25178

COVERAGES**CERTIFICATE NUMBER:****REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADD INSD	SUB WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
	COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:						EACH OCCURRENCE \$ DAMAGE TO RENTED PREMISES (Ea occurrence) \$ MED EXP (Any one person) \$ PERSONAL & ADV INJURY \$ GENERAL AGGREGATE \$ PRODUCTS - COM/PO/ AGG \$ \$
A	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> SCHEDULED AUTOS NON-OWNED AUTOS ONLY			2543270 2738357 2921684 3079378	05/08/2025 04/20/2025 02/24/2025 01/08/2025	11/30/2025 10/20/2025 08/24/2025 07/08/2025	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
	UMBRELLA LIAB <input type="checkbox"/> OCCUR EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED \$ RETENTION \$						EACH OCCURRENCE \$ AGGREGATE \$ \$ PER STATUTE <input type="checkbox"/> OTH-ER <input type="checkbox"/> \$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? <input type="checkbox"/> Y/N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below		N/A				E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

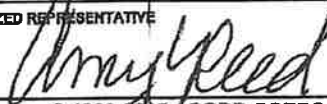
Civil Engineering

Business-office policy includes - Pollutant clean up and removal \$10,000 limit \$1000 deductible

CERTIFICATE HOLDER**CANCELLATION**Lexington-Fayette Urban County Government,
DWQ
301 Jirmmie Campbell Drive
Lexington KY 40504

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE



© 1988-2015 ACORD CORPORATION. All rights reserved.




CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

05/08/2025

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER  State Farm Donna Payne Insurance Agency State Farm Insurance 501 Wilfin Way Mt Sterling Ky 40353	CONTACT NAME: Donna Payne PHONE (A/C, No, Ext): 859-498-5498 E-MAIL: donna@donnapayne.net ADDRESS: donna@donnapayne.net FAX (A/C, No): 866-531-7570
INSURED Kentucky Engineering Group, PLLC PO Box 1034 Versailles Ky 40383	INSURER(S) AFFORDING COVERAGE INSURER A: State Farm Mutual Automobile Insurance Company INSURER B: INSURER C: INSURER D: INSURER E: INSURER F:
	NAIC # 25178

COVERAGES**CERTIFICATE NUMBER:****REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADD INSD	SUB WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
	COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:						EACH OCCURRENCE \$ DAMAGE TO RENTED PREMISES (Ea occurrence) \$ MED EXP (Any one person) \$ PERSONAL & ADV INJURY \$ GENERAL AGGREGATE \$ PRODUCTS - COMPIOP AGG \$ \$
A	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input checked="" type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> NON-OWNED AUTOS ONLY			4168373 4330852 4632579	02/28/2025 12/07/2024 04/07/2025	08/28/2025 08/07/2025 10/07/2025	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
	UMBRELLA LIAB <input type="checkbox"/> OCCUR EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED <input type="checkbox"/> RETENTION \$						EACH OCCURRENCE \$ AGGREGATE \$ \$ PER STATUTE <input type="checkbox"/> OTH-ER <input type="checkbox"/> \$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? <input type="checkbox"/> Y <input checked="" type="checkbox"/> N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below		N/A				E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Civil Engineering

Business-office policy includes - Pollutant clean up and removal \$10,000 limit \$1000 deductible

CERTIFICATE HOLDER**CANCELLATION**Lexington-Fayette Urban County Government,
DWQ
301 Jimmie Campbell Drive
Lexington
KY 40504

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

© 1988-2015 ACORD CORPORATION. All rights reserved.

EXHIBIT C

**PROPOSAL OF ENGINEERING SERVICES
AND RELATED MATTERS**



April 17, 2025

Todd Slatin, Director, Division of Central Purchasing
Lexington-Fayette Urban County Government
200 East Main Street, 3rd Floor
Lexington, Kentucky 40507

Re: RFP-10-2025
Investigation/Design Services for West Hickman ASH Tank Blower Improvements
Lexington-Fayette Urban County Government (LFUCG)
Lexington, Kentucky

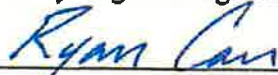
Dear Mr. Slatin:

Kentucky Engineering Group, PLLC is very pleased to submit our qualifications for engineering services relative to the RFP-10-2025 Investigation/Design Services for West Hickman ASH Tank Blower Improvements Project. We sincerely appreciate this opportunity to provide our services to LFUCG and have assembled a very experienced team of professionals. We at Kentucky Engineering Group are dedicated and committed to providing the very best service. We believe that we are uniquely qualified to complete this project based on our many years of experience. Our commitment to you is to try and provide the best possible service.

The following proposal will elaborate on our reputation and our team's overall qualifications in more detail. I want to underscore the importance we place not only on this project, but more importantly, on continuing our relationship with LFUCG.

Sincerely,

Kentucky Engineering Group, PLLC



Ryan Carr, PE

P.O. Box 1034
Versailles, Kentucky 40383
Phone: (859) 251.4127
Fax: (859) 251.4137
Email: info@kyengr.com
www.kyengr.com

TABLE OF CONTENTS

- **Cover Letter**
- **Section 1 - Scope, Schedule & Fee**
 - Task Schedule
 - Fee Schedule
- **Section 2 - Project Experience**
 - Wastewater Treatment
- **Section 3 - Resumes**
- **Section 4 - RFQ 10-2025 Submittal Requirements**



SECTION 1 – SCOPE, SCHEDULE & FEE

SCOPE, SCHEDULE & FEE

LFUCG – INVESTIGATION /DESIGN SERVICES for WEST HICKMAN ASH TANK BLOWER IMPROVEMENTS

INTRODUCTION

Members of Kentucky Engineering Group have worked in and throughout Kentucky for over 30 years. Our team has successfully completed many water and wastewater projects throughout the state. We know the area and have unequalled knowledge and experience with wastewater treatment plant and wastewater collection and conveyance systems.

Members of **Kentucky Engineering Group** have been involved in the design of wastewater treatment plants, pumping stations and hundreds of miles of wastewater force mains, gravity collection and conveyance mains including both new and rehabilitated wastewater treatment and collection systems. Working with Sanitation Districts, Commissions, City Councils, Fiscal Courts, funding, and regulatory agencies, we have successfully completed wastewater treatment, collection and conveyance system projects in both large and small communities, in urban, rural, and regional areas.



WASTEWATER TREATMENT AND COLLECTION SYSTEMS

Kentucky Engineering Group has designed and provided construction services for wastewater treatment and collection systems in a variety of configurations and process systems. We have been associated with the wastewater industry for many years and have provided engineering and environmental services to large urban and small rural clients all over the state of Kentucky.

Services include:

- facilities planning
- infiltration/inflow studies
- sewer system evaluation surveys
- water quality evaluations (point and non-point source contributions)
- water quality modeling
- sewer system new design, including
- interceptors, pumping stations, gravity and pressure systems
- sewer system rehabilitation, with knowledge on “trenchless technologies” such as slip-lining, internal grouting, fold-and-form, pipe bursting, cured-in-place, as well as conventional tunneling, open-cut replacement, and parallel relief sewers
- sewer separation programs
- drainage system design
- pumping stations (submersible and wet pit/dry pit)
- combined sewer overflow abatement planning and design
- storm water modeling using SWMM and other appropriate models
- permitting and regulatory interface
- wastewater treatment plant planning, design, rehabilitation, expansion, and construction
- wastewater facilities start-up, troubleshooting, operation, maintenance, operator training
- residuals management



DESIGN TEAM

Kentucky Engineering Group is proposing the following design team based on their individual experience with design and construction of water and wastewater treatment facilities, although all Kentucky Engineering Group staff members may contribute to the project on an as needed basis. The proposed team has well over 70 years of combined work experience in the water and wastewater treatment industry. The team proposed is:

- **Ryan Carr, PE** – Project Manager, Design Engineer
- **Matt Baker, PE** – Project Manager, Design Engineer
- **Jeff Bond** – Production Manager, Designer
- **Ben Murphy, PE** – Mechanical/Electrical Engineer

Resumes of each individual are included as an attachment to our response.

PROJECT FAMILIARITY

Kentucky Engineering Group (KEG) made a site visit on April 15th for an introductory meeting with the West Hickman WWTP superintendent to gain familiarity with the proposed project. The discussion during the site visit centered around the challenges associated with replacement of the blowers. The superintendent gave a history of the original installation of the four (4) 60 horsepower (hp) blowers and the two (2) 150 hp blowers. The biggest challenge will be getting equipment in and out of the building and making modifications while keeping at least one of the blowers in service. The options included for evaluating the project will include the type of blowers (considering life cycle cost and efficiency), number of blowers, piping/valve arrangement for blower redundancy and an evaluation of the diffusers to assess their condition for efficiency and compatibility with the selected blowers.

We at KEG pride ourselves on diligently working through the challenges of a project such as the replacement of the blowers and associated equipment. At this point we feel we have become as familiar as possible with the scope of the project. If selected, we will work closely with the WWTP's staff to better understand the system in an effort to provide the best engineering service possible. Direct and honest communication with a simple but effective solution will be our approach.

Kentucky Engineering Group is eager to have the opportunity to provide engineering and construction services for LFUCG, as we work together for timely and efficient solutions to your wastewater system needs.

PROPOSAL SCOPE

Our approach will be simple; **listen to the client**, understand the ultimate end goal of the project and then strategize to determine the best and most cost-efficient solution for the project. We have already instituted a portion of our approach by meeting on site with the WWTP operators to listen to and understand the ultimate end goal for the project. There would be more preliminary engineering work required if we were selected for the project, but the initial steps have been implemented. We will utilize this initial gathering of information and our previous project experience to develop recommendations. Gathering data and further interviewing the WWTP staff would be the initial step. This information will ultimately allow us to finalize the blower selection and sequencing of construction. After the information is gathered, recommendations made and the project scope is clearly defined, KEG will do a cost estimate and move forward with final design. The cost estimate provided will be based on the current market and our experience. We will give our honest opinion on the cost and not just the number you may want to hear. KEG will coordinate with LFUCG through the design, bidding and construction process. KEG will provide periodic inspections as required throughout



construction. The project managers/engineers for KEG will make frequent site visits during construction to supplement the inspection work of the contractor.

Kentucky Engineering Group prides itself on being a true client driven engineering firm. We take great care in promoting effective and clear communication between all project stakeholders. Therefore, upon selection we will request a project kickoff meeting to address key components of the project and the overall project schedule. To further foster healthy client participation, the project will be broken into milestones such as 25%, 50% and 90% design to allow input from LFUCG DWQ along the way. Kentucky Engineering Group has vast experience addressing strategic design and properly staged construction phases. We believe our approach and our company's dedication to client satisfaction make Kentucky Engineering Group the best qualified candidate for this project.

SCHEDULE/CAPACITY

Kentucky Engineering Group's project team is very familiar with projects with tight timeframes. We pride ourselves on efficiency and our ability to complete projects in a timely manner. We have completed many projects ahead of schedule and this has benefited both the client and Kentucky Engineering Group. Our project teams are comfortable working within a specified schedule and producing a technically sound and economical project within that timeframe.

It is our understanding that per the schedule outlined in the request for proposals, the deadline for the 90% final design review is November 2025 with a bid opening of January 2026. We have immediate capacity to begin the project planning and design. Our design of the project will not be the limiting factor as to meeting the project deadlines. Again, Kentucky Engineering's client driven service and overall team mentality allows for flexibility in the project's schedule.

The Kentucky Engineering Group design team has a long history of providing necessary water and sewer infrastructure in Kentucky. We look forward to performing design and construction engineering services for this wastewater collection system improvement project.

CUSTOMER SERVICE

Kentucky Engineering Group's project team will work with LFUCG to obtain all of the information available for this project. We will work directly and on-site to assure you of a quality project. Our team will work closely with LFUCG staff throughout the project, from design through the completion of construction.

FEE

The following *Scope/Fee* provides a breakdown of the anticipated hours and associated rate for each of the project milestones.

Once again, Kentucky Engineering Group's number one priority is customer service, and a sincere commitment to LFUCG and the customers you serve!



**Investigation/Design Services for West Hickman WWTP
Aerated Sludge Holding (ASH) Tanks Blower Improvements Project**

Fee Schedule

(For a description of task refer to Section 2 of the RFP)

Section 2

Scope of Work: ASH Tanks Blower Improvements Project

- | | | |
|----|--|---------------------------------|
| A. | Task 1: Existing Process Performance Review | Cost Task 1: <u>\$17,690.00</u> |
| B. | Task 2: Develop Equipment/Process Replacement Concepts | Cost Task 2: <u>\$29,100.00</u> |
| C. | Task 3: Detailed Design | Cost Task 3: <u>\$45,730.00</u> |
| D. | Task 4: Bidding Services | Cost Task 4: <u>\$11,980.00</u> |
| E. | Task 5: Construction Administration Services | Cost Task 5: <u>\$51,800.00</u> |

Details for Task 5.5 - The total cost should be included in Cost Task 5. Please provide the following breakdown. Estimated Weekly Inspection Hrs/Estimated Total Inspection Hrs/Hourly Rate.

16 HRS / WK / 192 HRS / \$80 / HR

Section 2 Total Cost: \$156,300.00

- | | | |
|----|---------------------------------------|---------------------------------|
| E. | Task 6: SRF Loan Conditions Checklist | Cost Task 6: <u>\$10,000.00</u> |
|----|---------------------------------------|---------------------------------|

West Hickman ASH Tank Blower Improvements

LFUCG - RFP

SCOPE/FEE

	Billing Rates/Hour (\$)			Survey Crew	Resident Inspection	ME (LoVo) Lump Sum	Subtotal
	PM/SR PE	PE	Eng Tech/CAD				
Task Description	\$175	\$160	\$115	\$200	\$80		
Task 1 Existing Process Performance Review							
Interview Staff	8	8				1,000.00	\$3,680
Collect Operational Info	8	8					\$2,680
Review Data/Reports for Increasing Blower Capacity	8	8					\$2,680
Collect Other Supporting Data	10	10					\$3,350
Observe Operations/Trends of Blowers	4	20					\$3,900
Review Compliance w/ NFPA 79 & 820	8						\$1,400
							\$17,690
Task 2 Develop Equip/Process Replacement Concepts/Schedules							
Evaluate Blower Replacement Options	24	12				1,000.00	\$7,120
Prepare Conceptual Layout & Construction Sequence	20	10	20			2,000.00	\$9,400
20 Year Life Cycle & Present Worth	8	16					\$3,960
Preliminary Cost Estimate	4	8					\$1,980
Present PER to Staff	8	8					\$2,680
PER Revisions	4	8					\$1,980
Prepare/Submit FER	4	8					\$1,980
							\$29,100
Task 3 Detailed Design							
Design/Calculations	8	16	80			15,000.00	\$28,160
Design Progress Mtgs 25%, 50% & 90%	18	18					\$6,030
Detailed Cost Est/Revise 20 Yr Life Cycle & Present Worth	20	20					\$6,700
Update Project Schedules	24	4					\$4,840
							\$0
							\$45,730
Task 4 Bidding Services							
Distribute Bid Documents (Min 7 Copies to LFUCG)	2	6	6			2,000.00	\$4,000
Respond to Questions	8	12					\$3,320
Conduct Pre-Bid Meeting	4	4					\$1,340
Conduct Bid Opening	4	4					\$1,340
Bid Evaluation	4	8					\$1,980
							\$11,980
Task 5 Construction Administration Services							
Track and review shop drawings	4	8	8			5,000.00	\$7,900
Track and review change orders	8	18					\$4,280
Track and answer RFIs	8	8					\$2,680
CA Services, Monthly Progress Mtgs, Pay Est Review, Etc.	20	64					\$13,740
Equipment Start-Ups	8	12					\$3,320
Record Drawings	4	4	16				\$3,180
Weekly Inspection Reports					192		\$15,360
Substantial Inspection/Final Inspection	4	4					\$1,340
							\$51,800

\$156,300.00

Subtotal Hours	266	334	130	0	192		
Subtotals	\$46,550.00	\$53,440.00	\$14,950.00	\$0.00	\$15,360.00	\$26,000.00	\$156,300.00

West Hickman ASH Tank Blower Improvements

LFUCG - RFP

SCHEDULE

Task Description	Target Completion Date
Task 1 Existing Process Performance Review	
Interview Staff	June 2025
Collect Operational Info	June 2025
Review Data/Reports for Increasing Blower Capacity	June 2025
Collect Other Supporting Data	June 2025
Observe Operations/Trends of Blowers	June 2025
Review Compliance w/ NFPA 79 & 820	June 2025
Task 2 Develop Equip/Process Replacement Concepts/Schedules	
Evaluate Blower Replacement Options	July 2025
Prepare Conceptual Layout & Construction Sequence	July 2025
20 Year Life Cycle & Present Worth	July 2025
Preliminary Cost Estimate	July 2025
Present PER to Staff	August 2025
PER Revisions	August 2025
Prepare/Submit FER	August 2025
Task 3 Detailed Design	
Design/Calculations	September 2025
Design Progress Mtgs 25%, 50% & 90%	Sept 2025, Oct 2025 & Nov 2025
Detailed Cost Est/Revise 20 Yr Life Cycle & Present Worth	November 2025
Update Project Schedules	November 2025
Task 4 Bidding Services	
Distribute Bid Documents (Min 7 Copies to LFUCG)	December 2025
Respond to Questions	December 2025
Conduct Pre-Bid Meeting	December 2025
Conduct Bid Opening	January 2026
Bid Evaluation	January 2026
Task 5 Construction Administration Services	
Preparation of Conformance Documents	February 2026
Shop Drawing Review	February 2026
Preconstruction Meeting	March 2026
CA Services	March 2026 - December 2026
Equipment Start-Ups	November 2026
Record Drawings	December 2026
Weekly Inspection Reports	October 2026 - December 2026
Substantial Inspection/Final Inspection	December 2026

SECTION 2 – PROJECT EXPERIENCE

PROJECT EXPERIENCE

Wastewater Treatment

The **Kentucky Engineering Group** staff members have specialized in wastewater treatment system design projects in the Commonwealth of Kentucky for over twenty-five years. Kentucky Engineering Group has a reputation of leadership thanks to our ability to identify affordable alternatives, produce accurate construction documents and communicate effectively with our clients. The following is a listing of recent wastewater treatment plant projects. The project list includes the aggregate work experience of individual staff members and our proposed Project Team and is not meant to reflect work solely contracted to Kentucky Engineering Group.

Wastewater Treatment Plant No 2 – Sludge Processing Upgrades, Georgetown Municipal Water & Sewer System (GMWSS), Georgetown, Kentucky

Description: Kentucky Engineering Group, PLLC's project team provided planning, design and construction administration for replacement of belt filter presses with two automated screw presses and associated controls which also included replacement of the sludge conveyance system to discharge into sludge dumpsters, replacement of progressive cavity sludge pumps and macerators including all associated piping, valves and appurtenances, building alterations to accommodate new sludge processing equipment and addition of a 20 cubic yard dumpster including structural, architectural, electrical and HVAC improvements. Alternate dewatering technologies were evaluated and piloted with GMWSS to provide a cost effective, maintenance friendly and performance-based solution to upgrade the existing dewatering facility. Construction of the project began in July 2021 and is anticipated to be completed in November 2021. As-Bid Construction Cost: \$1,660,000

Project Manager: Ryan Carr, P.E.

Contact: Alan Bryan, GMWSS, Georgetown, Kentucky, (859) 559-5850.

Wastewater Treatment Plant Sludge Processing Facilities, Harrodsburg, Kentucky

Description: The project included the planning, design, construction administration and funding/financial services for a new sludge dewatering building with mechanical belt press sludge dewatering equipment. Pilot testing for alternate sludge dewatering equipment and manufacturers was conducted on site prior to deciding on a mechanical belt filter press. The new dewatering facility was a 3,360 square foot building which included room for future expansion to add a redundant belt filter press, polymer feed system, sludge



conveyor system and outside bay for disposal to a sludge dumpster. Also included with the project was rotary lobe pumps and macerator to feed the new belt press; new influent flow metering; raw sewage sampling equipment; and replacement of the mechanical bar screen and influent screw pumps. The project was constructed in 2014. Construction Cost: \$2,400,000

Project Manager: Ryan Carr, P.E.

Contact: Troy Gowins, City of Harrodsburg, (859) 734-2113.

Taylor Mill Treatment Plant Residuals Improvements
Northern Kentucky Water District, Taylor Mill, Kentucky

Description: The project included the design and construction administration for the replacement of a 2 meter belt filter press at the 10 MGD Taylor Mill Treatment Plant which included demolition/removal/replacement of the existing belt press from the second story floor and installing a winch system for removal and installation. Alternative dewatering technologies were evaluated along with consideration of the necessary modifications to the existing building before ultimately determining the belt filter press to be the most viable long term solution. The project also included replacement of process pumping equipment in the residuals processing building including the replacement of the progressive cavity belt filter press feed pumps, the submersible pumps that feed the plate thickener, decant valves in the residuals holding tank, associated piping and valves and variable frequency drives on the submersible pumps. Construction Cost: Approximately \$2,200,000

Project Manager: Ryan Carr, P.E.

Contact: Amy Kramer, Northern Kentucky Water District, (859) 578-5458

Wastewater Treatment Plant Improvements, City of Lebanon, Kentucky

Description: Kentucky Engineering Group, PLLC's project team worked with the City of Lebanon to provide the most cost effective project to upgrade the City of Lebanon's WWTP to include construction of new aeration equipment, a new splitter box, a new secondary clarifier, additional sludge digestors, new digested sludge pump station, and a new sludge digester blower and diffusers. Design of the project began in 2024 and should begin construction in August 2025. Estimated Construction Cost: \$7,660,000

Project Manager: Matt Baker, P.E.

Contact: John Thomas, City Administrator, City of Lebanon, Kentucky, (270) 692-6272.



Lexington-Fayette Urban County Government (LFUCG), West Hickman Trunk D Sewer Replacement.

Description: Kentucky Engineering Group, in conjunction with LFUCG, developed a project approach to replace approximately 6,300 LF of 42" diameter sanitary sewer with 54" and 48" diameter sanitary sewer in order to fulfil the Consent Decree requirements. Methods of replacement for the project included paralleling of the existing trunk sewer with new trunk sewer, dig and replacement (including bypass pumping). Challenges for this project, consistent with most urban area sewer replacement projects, included traffic coordination, existing utility conflicts, public relations and easement acquisition. The project was completed in 2020. Construction Cost: \$5,815,000

Contact: Robert Peterson, P.E., Division of Water Quality, LFUCG, (859) 258-3415.

Wastewater Treatment Plant Expansion (3.5 MGD), Harrodsburg, Kentucky

Description: The project included the planning, design, construction administration and funding/financial services for expansion of the Harrodsburg Wastewater Treatment Plant. Major items of work include new pre-treatment building (screening and grit removal), replacement of existing RBC biological treatment process with new oxidation ditch treatment process designed for biological nutrient removal, new circular final clarifiers, new return/waste sludge pumping, new ultra-violet disinfection facilities and conversion of existing anaerobic digestion facilities to aerated sludge holding basins included installation of positive displacement blowers. Construction Cost: Approximately \$16,000,000

Project Manager: Ryan Carr, P.E.

Contact: Troy Gowins, City of Harrodsburg, (859) 734-2113.



SECTION 3 – RESUMES

Ryan C. Carr, PE

Project Manager and Engineer

TECHNICAL EXPERTISE

- Water Treatment Facilities
- Water Storage Tanks
- Pumping Stations
- Water Distribution Systems
- Wastewater Treatment Facilities
- Collection and Conveyance
- Hydraulic Modeling
- Site Development

YEARS OF EXPERIENCE

25

EDUCATION

BS/1999/Civil Engineering;
University of Kentucky

PROFESSIONAL REGISTRATION

Professional Engineer:
KY

PROFESSIONAL AFFILIATIONS

AWWA, WEF

OWNERSHIP

Kentucky Engineering Group
Owner



PROFESSIONAL PROFILE

Ryan has more than 25 years of experience in water, wastewater and site development engineering. He has project management responsibilities that include project development, coordination of resources, construction inspection, and contract administration. He is also responsible for the design and layout of water distribution systems, pumping stations, storage tanks, and treatment facilities; wastewater collection systems, pumping stations, and treatment facilities; and site development. Ryan is also responsible for hydraulic analysis, layout, permitting, specifications, plan production, cost estimating, and budgeting. He is responsible for completing contract documents, reviewing schedules and the cost of ongoing projects, and technical overview of projects. In addition, Ryan maintains client contact during the planning, design, and construction, and is responsible for maintaining client contact following project completion.

REPRESENTATIVE PROJECT EXPERIENCE

Water Resources:

- Lancaster Water Treatment Plant, Lancaster, KY
- McCreary County Water District - Stearns to Smithtown Water Main Replacement, McCreary County, KY
- Lebanon Water Treatment Plant Improvements, Lebanon Water Works Company, Lebanon, KY
- Water Treatment Plant Improvements, Southern Water and Sewer District, Floyd County, KY
- Garrard County Water Association Water System Improvements: Contract 2 - 250,000 Gallon Elevated Water Storage Tank, Lancaster, KY
- Harrodsburg North Main Tank Improvements, Harrodsburg, KY -
- Harrodsburg Water Distribution System Improvements, Harrodsburg, KY
- Harrodsburg Water Line Improvements, Harrodsburg, KY
- Harrodsburg Water Treatment Plant and Raw Water Intake Pump Station Expansion (6 MGD) - Phase 2, Harrodsburg, KY
- Northern Kentucky Water District Taylor Mill Treatment Plant Basin Structural Evaluation, Fort Thomas, KY
- Northern Kentucky Water District Taylor Mill Treatment Plant Residuals Improvements, Fort Thomas, KY
- Northern Kentucky Water District Taylor Mill Treatment Plant Sludge Press Replacement, Taylor Mill, KY
- Northern Kentucky Water District Taylor Mill WTP Advanced Treatment Improvements, Fort Thomas, KY
- 5.0 MGD Water Treatment Plant, Columbia/Adair County Water Commission, Adair County, KY

Wastewater Systems:

- GMWSS WWTP No 2 - Sludge Processing Upgrades, Georgetown, KY
- WWTP Chemical Room Improvements, McCreary County Water District
- US 127 North Sanitary Sewer Extension, Harrodsburg, KY
- Hawesville Wastewater Treatment Plant, Hawesville, KY
- Hardinsburg Wastewater Treatment Plant Improvements, Hardinsburg, KY
- West Hickman Trunk D Sewer Replacement, LFUCG, Lexington, KY
- Harrodsburg Cherokee Pump Station and Force Main, Harrodsburg, KY
- Harrodsburg College Street Sanitary Sewer Improvements, Harrodsburg, KY
- Harrodsburg Main Street Sewer Replacement, Harrodsburg, KY
- Harrodsburg Regional Wastewater Facilities Plan, Harrodsburg, KY
- Harrodsburg Sewer Rehabilitation (2012), Harrodsburg, KY
- Harrodsburg Sewer Rehabilitation (2014), Harrodsburg, KY
- Harrodsburg South Bypass Interceptor Sewer, Harrodsburg, KY
- Harrodsburg WWTP Expansion (3.5 MGD), Harrodsburg, KY
- Harrodsburg WWTP Sludge Processing Facilities, Harrodsburg, KY
- Sanitation District No. 1 Western Regional Water Reclamation Facility (20 MGD), Boone County, KY

Prior to Kentucky Engineering Group, PLLC:

GRW Engineers, Inc., Lexington, Kentucky
Monarch Engineering, Inc., Lawrenceburg, Kentucky
HMB Professional Engineers, Inc., Frankfort, Kentucky

Matthew A. Baker, PE

Project Manager and Engineer

TECHNICAL EXPERTISE

- Water and Wastewater Treatment Facilities
- Water distribution systems
- Wastewater collection systems
- Wastewater Collection Rehabilitation
- Pumping stations
- Storage Tanks
- Hydraulic Modeling

YEARS OF EXPERIENCE

22

EDUCATION

BS/2001/Civil Engineering;
University of Kentucky

PROFESSIONAL REGISTRATION

Professional Engineer:
KY

PROFESSIONAL PROFILE

Matt has more than twenty-two years of experience in water and wastewater engineering. He has project management responsibilities that include project development, coordination of resources, construction inspection, and contract administration. He is also responsible for the design and layout of water distribution systems, booster stations, storage tanks, and treatment facilities; wastewater collection systems, pumping stations, and treatment facilities. Matt is also responsible for hydraulic analysis, layout, permitting, specifications, plan production, cost estimating, and budgeting.

Matt is responsible for completing contract documents, reviewing schedule and cost of ongoing projects, and technical overview of projects. In addition, Matt maintains client contact during study, design, and construction, and is responsible for maintaining client contact following project completion.

REPRESENTATIVE PROJECT EXPERIENCE

Water Resources:

Water Treatment Plant Upgrade - City of Leitchfield, KY
Chlorine Dioxide System - Princeton, KY
Water Treatment Plant Upgrade - City of Manchester, KY
Project 19 Grayson County Water District, Leitchfield, KY
Bluegrass Drive Waterline Extension City of LaCenter, KY
Waterline Extensions and Pump Stations, LaRue County WD #1
2018 Water System Improvements - Green Taylor Water District
Memorial Drive Utility (Water) Relocation City of Manchester, KY
Maple Leaf Utility Relocation City of Maysville, KY
US 421 Utility Relocation City of Manchester, KY
US 68 (Southern Loop) Utility Relocation City of Maysville, KY
Project 15 Grayson County Water District
Sardis Tank Buffalo Trail Water Association
Industrial Park IV Tank City of Maysville, KY
Tank Rehabilitation LaRue County WD #1
Kenton Station Tank Rehabilitation City of Maysville, KY

Wastewater:

Wastewater Treatment Plant Upgrade City of LaCenter, KY
Wastewater Treatment Plant Upgrade City of Maysville, KY
Wastewater Treatment Plant Upgrade City of Mount Olivet, KY
Wastewater Treatment Plant Upgrade City of Wingo, KY
Long Term Control Plan (2005- 2023) City of Maysville, KY
Lawrence Creek Force Main City of Maysville, KY
Combined Sewer Overflows Phase 1 and 1b City of Maysville, KY

Prior to Kentucky Engineering Group, PLLC:

HMB Professional Engineers, Inc., Frankfort, Kentucky
Cann-Tech, LLC, Lawrenceburg, Kentucky
City of Maysville, Kentucky
Kentucky Division of Water, Drinking Water Plans Review



Jeffrey A. Bond

Production Manager / Senior Designer

TECHNICAL EXPERTISE

- Production of Documents
- Wastewater System Design
- Water System Design
- Storm Water System Design
- Production Management

YEARS OF EXPERIENCE

24

EDUCATION

Geology
University of Kentucky

PROFESSIONAL PROFILE

Jeff has more than 20 years of experience in civil engineering. His role at Kentucky Engineering includes Production Manager and Senior Designer, and is responsible for the coordination and production of documents and the design of water and wastewater facilities. His experience includes the design of sanitary sewer infrastructure projects including wastewater treatment plants, wet weather storage basins, pump stations, gravity trunk sewers, gravity collector sewers and force mains. Water system projects including water treatment plants, water transmission mains, pumping stations and water storage tanks.

SOFTWARE EXPERIENCE AND KNOWLEDGE

AutoCAD releases 10 through 14

Autodesk Civil 3D 2018

SURVCADD release 11 through SURVDADD Civil 2018 – Carlson Software

REPRESENTATIVE PROJECTS

Responsible for design, layout and production of plan sheets.

Wastewater Projects:

- Versailles, KY – Wastewater Treatment Plant Improvements
- Corbin, KY – Wastewater Treatment Plant Upgrade and Improvements
- Harrodsburg, KY – Wastewater Treatment Plant Expansion
- South Dearborn Regional Sewer District – Lawrenceburg, IN – Sludge Dewatering Improvements
- Murray, KY – Bee Creek Wastewater Treatment Plant Expansion
- Harrodsburg, KY – Wastewater Treatment Plant Improvements
- Harrodsburg, KY – Wastewater Treatment Plant Sludge Heater Building
- Scottsville, KY – Wastewater Treatment Plant Improvements
- Harrodsburg, KY – Wastewater Treatment Plant - Cooling / Flow Equalization Lagoon
- Paducah-McCracken Joint Sewer Agency – Paducah, KY – Perkins Creek Force Main and Pump Station
- Frankfort, KY – East Frankfort Pump Station and Force Main
- Paducah-McCracken Joint Sewer Agency – Paducah Wastewater Treatment Plant Improvements
- Nicholasville, KY – Jessamine Creek Environmental Control Facility – Wastewater Treatment Facility Expansion
- Sellersburg, IN – Wastewater Treatment Plant Expansion
- Berea Municipal Utilities – Berea, KY – Wastewater Treatment Plant Expansion, and Belt Filter Press

Prior to Kentucky Engineering Group, PLLC:

GRW Engineers, Inc., Lexington KY

Commonwealth Technology, Inc./Tetra Tech, Inc., Lexington, KY

Delta Natural Gas Company, Inc., Winchester, KY

Baldwin Engineering, Inc., Winchester, KY

Tennessee Gas Pipeline Company, Winchester, KY





EDUCATION:

BS Mechanical
Engineering, University of
Kentucky

Master of Arts
St. Meinrad Archabbey

Industrial Electronics &
Automation Diploma, KY
Advanced Technology
Institute

REGISTRATION:

Professional Engineer,
Kentucky #25348
West Virginia #18560
California #M35292

Master Electrician,
Kentucky # ME12832

PROFESSIONAL AFFILIATIONS:

ASHRAE #07987032

Mr. Murphy's area's of
expertise include electrical
power distribution design,
municipal water/
wastewater electrical
design, instrumentation
design, SCADA system
design and installation,
HVAC system design, fire
protection design, code
compliance, industrial
control panels,
troubleshooting, controls
systems, laboratory data
acquisition and analysis,
and wireless
communication design.

RELEVANT EXPERIENCE:

- Monticello Membrane Filter Water Treatment Plant
Expansion Electrical & SCADA Design & Construction
Administration, Monticello, KY
- Somerset Membrane Filter Water Treatment Plant
Expansion Electrical & SCADA Design & Construction
Administration, Somerset, KY
- Madisonville Membrane Filter Water Treatment Plant
Expansion, SCADA & Electrical Design, Madisonville, KY
- Campton Membrane Filter Water Plant, Electrical &
SCADA Design & Construction Admin., Campton, KY
- Richmond Water Treatment Plant, RWI Power Supply
Improvements, Madison County, KY
- Warren County North Wellfield Pumping System,
Electrical, HVAC, & SCADA Design, Warren Co., OH
- Greensburg Water Treatment Plant, Electrical & SCADA
Design, Danville, KY
- City of Danville Pump Station Electrical & SCADA
Designs: Balls Branch, York Lane, Phylben Village
- Deerfield-Hamilton Water Plant Expansion HVAC,
Electrical & SCADA Design, Warren County, OH
- Hopkinsville 2500 HP Raw Water Intake Electrical &
SCADA Design, Hopkinsville, KY
- Shepherdsville Wastewater Treatment Plant Expansion
Electrical, HVAC, & SCADA Design & Construction
Administration, Shepherdsville, KY
- Jessamine County Wastewater Plant Expansion,
Electrical & SCADA Design, Nicholasville, KY
- McLean County Water Treatment Plant Expansion,
Electrical & SCADA Design, Calhoun, KY
- Sellersburg Wastewater Plant Expansion, Electrical &
SCADA Design, Sellersburg, IN
- Beech Fork Water Plant Improvements, Electrical &
SCADA Design, Stanton, KY
- Winchester Lower Howards Creek Water Treatment
Plant, Electrical & SCADA Design, Winchester, KY

SECTION 4 – RFP 10-2025
SUBMITTAL REQUIREMENTS

AFFIDAVIT

Comes the Affiant, RYAN CARR, and after being first duly sworn, states under penalty of perjury as follows:

1. His/her name is RYAN CARR and he/she is the individual submitting the proposal or is the authorized representative of KENTUCKY ENGINEERING GROUP, PLLC, the entity submitting the proposal (hereinafter referred to as "Proposer").
2. Proposer will pay all taxes and fees, which are owed to the Lexington-Fayette Urban County Government at the time the proposal is submitted, prior to award of the contract and will maintain a "current" status in regard to those taxes and fees during the life of the contract.
3. Proposer will obtain a Lexington-Fayette Urban County Government business license, if applicable, prior to award of the contract.
4. Proposer has authorized the Division of Central Purchasing to verify the above-mentioned information with the Division of Revenue and to disclose to the Urban County Council that taxes and/or fees are delinquent or that a business license has not been obtained.
5. Proposer has not knowingly violated any provision of the campaign finance laws of the Commonwealth of Kentucky within the past five (5) years and the award of a contract to the Proposer will not violate any provision of the campaign finance laws of the Commonwealth.
6. Proposer has not knowingly violated any provision of Chapter 25 of the Lexington-Fayette Urban County Government Code of Ordinances, known as "Ethics Act."

Continued on next page

7. Proposer acknowledges that "knowingly" for purposes of this Affidavit means, with respect to conduct or to circumstances described by a statute or ordinance defining an offense, that a person is aware or should have been aware that his conduct is of that nature or that the circumstance exists.

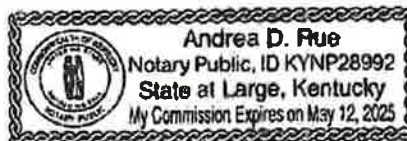
Further, Affiant sayeth naught.

Ryan Carr
STATE OF KENTUCKY
COUNTY OF WOODFORD

The foregoing instrument was subscribed, sworn to and acknowledged before me
by Ryan Carr on this the 17th day
of April, 2025

My Commission expires: 5-12-25

Andrea Rue
NOTARY PUBLIC, STATE AT LARGE



EQUAL OPPORTUNITY AGREEMENT

Standard Title VI Assurance

The Lexington Fayette-Urban County Government, (hereinafter referred to as the "Recipient") hereby agrees that as a condition to receiving any Federal financial assistance from the U.S. Department of Transportation, it will comply with Title VI of the Civil Rights Act of 1964, 78Stat.252, 42 U.S.C. 2000d-4 (hereinafter referred to as the "Act"), and all requirements imposed by or pursuant to Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, (49 CFR, Part 21) Nondiscrimination in Federally Assisted Program of the Department of Transportation – Effectuation of Title VI of the Civil Rights Act of 1964 (hereinafter referred to as the "Regulations") and other pertinent directives, no person in the United States shall, on the grounds of race, color, national origin, sex, age (over 40), religion, sexual orientation, gender identity, veteran status, or disability be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity for which the Recipient receives Federal financial assistance from the U.S. Department of Transportation, including the Federal Highway Administration, and hereby gives assurance that will promptly take any necessary measures to effectuate this agreement. This assurance is required by subsection 21.7(a) (1) of the Regulations.

The Law

- Title VII of the Civil Rights Act of 1964 (amended 1972) states that it is unlawful for an employer to discriminate in employment because of race, color, religion, sex, age (40-70 years) or national origin.
- Executive Order No. 11246 on Nondiscrimination under Federal contract prohibits employment discrimination by contractor and sub-contractor doing business with the Federal Government or recipients of Federal funds. This order was later amended by Executive Order No. 11375 to prohibit discrimination on the basis of sex.
- Section 503 of the Rehabilitation Act of 1973 states:

The Contractor will not discriminate against any employee or applicant for employment because of physical or mental handicap.

- Section 2012 of the Vietnam Era Veterans Readjustment Act of 1973 requires Affirmative Action on behalf of disabled veterans and veterans of the Vietnam Era by contractors having Federal contracts.
- Section 206(A) of Executive Order 12086, Consolidation of Contract Compliance Functions for Equal Employment Opportunity, states:

The Secretary of Labor may investigate the employment practices of any Government contractor or sub-contractor to determine whether or not the contractual provisions specified in Section 202 of this order have been violated.

The Lexington-Fayette Urban County Government practices Equal Opportunity in recruiting, hiring and promoting. It is the Government's intent to affirmatively provide employment opportunities for those individuals who have previously not been allowed to enter into the mainstream of society. Because of its importance to the local Government, this policy carries the full endorsement of the Mayor, Commissioners, Directors and all supervisory personnel. In following this commitment to Equal Employment Opportunity and because the Government is the benefactor of the Federal funds, it is both against the Urban County Government policy and

illegal for the Government to let contracts to companies which knowingly or unknowingly practice discrimination in their employment practices. Violation of the above mentioned ordinances may cause a contract to be canceled and the contractors may be declared ineligible for future consideration.

Please sign this statement in the appropriate space acknowledging that you have read and understand the provisions contained herein. Return this document as part of your application packet.

Bidders

We agree to comply with the Civil Rights Laws listed above that govern employment rights of minorities, women, Vietnam veterans, handicapped and aged persons.

Ryan Can
Signature

KENTUCKY ENGINEERING Group, PLLC
Name of Business

WORKFORCE ANALYSIS FORM

Name of Organization: KENTUCKY ENGINEERING GROUP, PLLC

Categories	Total	White (Not Hispanic or Latino)		Hispanic or Latino		Black or African- American (Not Hispanic or Latino)		Native Hawaiian and Other Pacific Islander (Not Hispanic or Latino)		Asian (Not Hispanic or Latino)		American Indian or Alaskan Native (not Hispanic or Latino)		Two or more races (Not Hispanic or Latino)		Total	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Administrators		1	1													1	1
Professionals		3														3	
Superintendents																	
Supervisors		3														3	
Foremen																	
Technicians		3														3	
Protective Service																	
Para-Professionals																	
Office/Clerical																	
Skilled Craft		1														1	
Service/Maintenance																	
Total:		11	1													11	1

Prepared by: Ryan Carr - OWNER Date: 4, 14, 2025

(Name and Title)

Revised 2015-Dec-15

Firm Submitting Proposal: KENTUCKY ENGINEERING GROUP, PLLC

Complete Address: 101 HIGH STREET VERSAILLES 40383
Street City Zip

Contact Name: RYAN CARR Title: PROJECT MANAGER

Telephone Number: 859.251.4127 Fax Number: 859.251.4137

Email address: rcarr@kyengr.com



LEXINGTON

LFUCG MWDBE PARTICIPATION FORM

Bid/RFP/Quote Reference # 10 - 2025

The MWDBE and/or veteran subcontractors listed have agreed to participate on this Bid/RFP/Quote. If any substitution is made or the total value of the work is changed prior to or after the job is in progress, it is understood that those substitutions must be submitted to the Division of Procurement for approval immediately. **Failure to submit a completed form may cause rejection of the bid.**

MWBE Company, Name, Address, Phone, Email	DBE/MBE WBE/VOSB/SDVOSB	Work to be Performed	Total Dollar Value of the Work	% Value of Total Contract
1. None				
2.				
3.				
4.				

The undersigned company representative submits the above list of MDWBE and veteran firms to be used in accomplishing the work contained in this Bid/RFP/Quote. Any misrepresentation may result in the termination of the contract and/or be subject to applicable Federal and State laws concerning false statements and false claims.

Kentucky Engineering Group, PLLC
Company

Ryan Carr
Company Representative

GENERAL PROVISIONS

1. Each Respondent shall comply with all Federal, State & Local regulations concerning this type of service or good.

The Respondent agrees to comply with all statutes, rules, and regulations governing safe and healthful working conditions, including the Occupational Health and Safety Act of 1970, 29 U.S.C. 650 *et. seq.*, as amended, and KRS Chapter 338. The Respondent also agrees to notify the LFUCG in writing immediately upon detection of any unsafe and/or unhealthful working conditions at the job site. The Respondent agrees to indemnify, defend and hold the LFUCG harmless from all penalties, fines or other expenses arising out of the alleged violation of said laws.

2. Failure to submit ALL forms and information required in this RFP may be grounds for disqualification.
3. Addenda: All addenda and IonWave Q&A, if any, shall be considered in making the proposal, and such addenda shall be made a part of this RFP. Before submitting a proposal, it is incumbent upon each proposer to be informed as to whether any addenda have been issued, and the failure to cover in the bid any such addenda may result in disqualification of that proposal.
4. Proposal Reservations: LFUCG reserves the right to reject any or all proposals, to award in whole or part, and to waive minor immaterial defects in proposals. LFUCG may consider any alternative proposal that meets its basic needs.
5. Liability: LFUCG is not responsible for any cost incurred by a Respondent in the preparation of proposals.
6. Changes/Alterations: Respondent may change or withdraw a proposal at any time prior to the opening; however, no oral modifications will be allowed. Only letters, or other formal written requests for modifications or corrections of a previously submitted proposal which is addressed in the same manner as the proposal, and received by LFUCG prior to the scheduled closing time for receipt of proposals, will be accepted. The proposal, when opened, will then be corrected in accordance with such written request(s), provided that the written request is contained in a sealed envelope which is plainly marked "modifications of proposal".
7. Clarification of Submittal: LFUCG reserves the right to obtain clarification of any point in a bid or to obtain additional information from a Respondent.
8. Bribery Clause: By his/her signature on the bid, Respondent certifies that no employee of his/hers, any affiliate or Subcontractor, has bribed or attempted to bribe an officer or employee of the LFUCG.

9. **Additional Information:** While not necessary, the Respondent may include any product brochures, software documentation, sample reports, or other documentation that may assist LFUCG in better understanding and evaluating the Respondent's response. Additional documentation shall not serve as a substitute for other documentation which is required by this RFP to be submitted with the proposal,
10. **Ambiguity, Conflict or other Errors in RFP:** If a Respondent discovers any ambiguity, conflict, discrepancy, omission or other error in the RFP, it shall immediately notify LFUCG of such error in writing and request modification or clarification of the document if allowable by the LFUCG.
11. **Agreement to Bid Terms:** In submitting this proposal, the Respondent agrees that it has carefully examined the specifications and all provisions relating to the work to be done attached hereto and made part of this proposal. By acceptance of a Contract under this RFP, proposer states that it understands the meaning, intent and requirements of the RFP and agrees to the same. The successful Respondent shall warrant that it is familiar with and understands all provisions herein and shall warrant that it can comply with them. No additional compensation to Respondent shall be authorized for services or expenses reasonably covered under these provisions that the proposer omits from its Proposal.
12. **Cancellation:** If the services to be performed hereunder by the Respondent are not performed in an acceptable manner to the LFUCG, the LFUCG may cancel this contract for cause by providing written notice to the proposer, giving at least thirty (30) days notice of the proposed cancellation and the reasons for same. During that time period, the proposer may seek to bring the performance of services hereunder to a level that is acceptable to the LFUCG, and the LFUCG may rescind the cancellation if such action is in its best interest.

A. Termination for Cause

- (1) LFUCG may terminate a contract because of the contractor's failure to perform its contractual duties
- (2) If a contractor is determined to be in default, LFUCG shall notify the contractor of the determination in writing, and may include a specified date by which the contractor shall cure the identified deficiencies. LFUCG may proceed with termination if the contractor fails to cure the deficiencies within the specified time.
- (3) A default in performance by a contractor for which a contract may be terminated shall include, but shall not necessarily be limited to:
 - (a) Failure to perform the contract according to its terms, conditions and specifications;
 - (b) Failure to make delivery within the time specified or according

- to a delivery schedule fixed by the contract;
- (c) Late payment or nonpayment of bills for labor, materials, supplies, or equipment furnished in connection with a contract for construction services as evidenced by mechanics' liens filed pursuant to the provisions of KRS Chapter 376, or letters of indebtedness received from creditors by the purchasing agency;
 - (d) Failure to diligently advance the work under a contract for construction services;
 - (e) The filing of a bankruptcy petition by or against the contractor; or
 - (f) Actions that endanger the health, safety or welfare of the LFUCG or its citizens.

B. At Will Termination

Notwithstanding the above provisions, the LFUCG may terminate this contract at will in accordance with the law upon providing thirty (30) days written notice of that intent. Payment for services or goods received prior to termination shall be made by the LFUCG provided these goods or services were provided in a manner acceptable to the LFUCG. Payment for those goods and services shall not be unreasonably withheld.

- 13. **Assignment of Contract:** The contractor shall not assign or subcontract any portion of the Contract without the express written consent of LFUCG. Any purported assignment or subcontract in violation hereof shall be void. It is expressly acknowledged that LFUCG shall never be required or obligated to consent to any request for assignment or subcontract; and further that such refusal to consent can be for any or no reason, fully within the sole discretion of LFUCG.
- 14. **No Waiver:** No failure or delay by LFUCG in exercising any right, remedy, power or privilege hereunder, nor any single or partial exercise thereof, nor the exercise of any other right, remedy, power or privilege shall operate as a waiver hereof or thereof. No failure or delay by LFUCG in exercising any right, remedy, power or privilege under or in respect of this Contract shall affect the rights, remedies, powers or privileges of LFUCG hereunder or shall operate as a waiver thereof.
- 15. **Authority to do Business:** The Respondent must be a duly organized and authorized to do business under the laws of Kentucky. Respondent must be in good standing and have full legal capacity to provide the services specified under this Contract. The Respondent must have all necessary right and lawful authority to enter into this Contract for the full term hereof and that proper corporate or other action has been duly taken authorizing the Respondent to enter into this Contract. The Respondent will provide LFUCG with a copy of a corporate resolution authorizing this action and a letter from an attorney confirming that the proposer is authorized to do business in the State of Kentucky if requested. All proposals must

be signed by a duly authorized officer, agent or employee of the Respondent.

16. **Governing Law:** This Contract shall be governed by and construed in accordance with the laws of the Commonwealth of Kentucky. In the event of any proceedings regarding this Contract, the Parties agree that the venue shall be the Fayette County Circuit Court or the U.S. District Court for the Eastern District of Kentucky, Lexington Division. All parties expressly consent to personal jurisdiction and venue in such Court for the limited and sole purpose of proceedings relating to this Contract or any rights or obligations arising thereunder. Service of process may be accomplished by following the procedures prescribed by law.
17. **Ability to Meet Obligations:** Respondent affirmatively states that there are no actions, suits or proceedings of any kind pending against Respondent or, to the knowledge of the Respondent, threatened against the Respondent before or by any court, governmental body or agency or other tribunal or authority which would, if adversely determined, have a materially adverse effect on the authority or ability of Respondent to perform its obligations under this Contract, or which question the legality, validity or enforceability hereof or thereof.
18. Contractor understands and agrees that its employees, agents, or subcontractors are not employees of LFUCG for any purpose whatsoever. Contractor is an independent contractor at all times during the performance of the services specified.
19. If any term or provision of this Contract shall be found to be illegal or unenforceable, the remainder of the contract shall remain in full force and such term or provision shall be deemed stricken.
20. Contractor [or Vendor or Vendor's Employees] will not appropriate or make use of the Lexington-Fayette Urban County Government (LFUCG) name or any of its trade or service marks or property (including but not limited to any logo or seal), in any promotion, endorsement, advertisement, testimonial or similar use without the prior written consent of the government. If such consent is granted LFUCG reserves the unilateral right, in its sole discretion, to immediately terminate and revoke such use for any reason whatsoever. Contractor agrees that it shall cease and desist from any unauthorized use immediately upon being notified by LFUCG.

Signature

Ryan Carr

Date

4/14/2025

ENGINEERING SERVICES AGREEMENT

RFP #10-2025

**Investigation/Design Services for West Hickman WWTP
Aerated Sludge Holding (ASH) Tanks Blower Improvements**