

March 22, 2023 Revised September 14, 2023

Mr. Alex Jackson Energy Coordinator City of Duluth Property & Facilities Management 1532 West Michigan Street Duluth, MN 55806

RE: Proposal for Mechanical, Electrical, and Plumbing (MEP) Engineering and Commissioning (Cx) Services Duluth Property and Facilities Management Building HVAC Renovation KFI Proposal # P23-0272 (Z0-0007.8W)

Dear Alex,

KFI Engineers (KFI) is pleased to provide this proposal for Mechanical, Electrical, and Plumbing (MEP) engineering and Commissioning (Cx) services on the above-referenced project. This proposal outlines our scope of work and associated compensation. This proposal is valid for 45 days from the proposal date.

### **PROJECT UNDERSTANDING**

The Property and Facilities Management (PFM) building consists of an office and garage and storage areas. This project consists of renovating the existing HVAC system for the office areas that total 8,400 sq. ft. The existing air handler and condensing unit are beyond their useful life. PFM personnel have several VRF cassettes and air-cooled heat pumps they would like to use to upgrade dehumidification and ventilation for the office spaces. Ventilation would be provided with a new Dedicated Outdoor Air System (DOAS) that would be connected to the existing distribution ductwork.

#### **BASIC SERVICES SCOPE OF WORK**

KFI will perform the following scope of work:

#### **Construction Documents**

- 1. Review onsite conditions and MEP plans. Conduct site observation with M and E correspondence.
- 2. MEP design and construction documents for systems as noted below:
  - Review existing VRF model numbers and sizes to install at PFM.
  - Develop Mechanical and Plumbing construction documents (plans and specifications, sections, details, diagrams, and equipment schedules as needed).
  - Structural review of the building construction where new equipment is proposed to be located.
  - Design modifications to electrical power distribution as required.
- 3. Coordination of MEP drawings with the Owner's project staff.
- 4. Generate technical specifications for MEP construction to be included in the project manual published by KFI.
- 5. This proposal includes one (1) bid package.
- 6. Attend two (2) design review and coordination meetings.

via email: ajackson@duluthmn.gov



# **Construction Phase Support Services**

- 1. Support bidding phase efforts including attending one (1) pre-bid meeting, clarifying documents during bidding, and assisting with the evaluation of bids, as required.
- 2. During the construction phase of the project, KFI will provide clarifications to construction documents for contractors and respond in writing to RFI's submitted by contractors.
- 3. Review and approval of MEP shop drawing submittals. This fee includes one (1) review. Multiple reviews can be provided as an additional service.
- 4. Attend monthly construction meetings in-person to support construction during periods of significant MEP construction activity. The fee assumes construction will be three (3) months.
- 5. Perform one (1) final site review and generate a final punch list upon substantial completion of construction. Any request for additional reviews for phased completion or multiple areas is additional scope.
- 6. Additional CA site visits or scope of work beyond the base CA will be considered additional services on a Time and Materials basis.

## Information Provided by Others

- 1. Existing building plans (Revit or AutoCAD files).
- 2. Owner design standards.
- 3. Electronic files in AutoCAD for use as backgrounds in producing MEP design work.
- 4. Space programming information from the Owner.
- 5. Equipment information supplied by the design consultant contracted by others.
- 6. Owner-supplied equipment.

## Controls:

KFI will engineer controls for the systems described in this proposal. Controls engineering services shall include:

- 1. Controls hardware design, installation drawings, sequences, and bill of materials.
- 2. Construction support, support installers and coordinate as needed.
- 3. Software design, programming, and graphics.
- 4. Checkout, on-site start-up, and fine-tuning of controls.

## COMMISSIONING (CX):

KFI will commission the following systems:

- 5. HVAC Systems and Associated Controls
  - Air Cooled VRF Heat Pumps seven (7)
  - VRF Cassettes twenty-one (21)
  - Dedicated Outside Air Unit one (1)
  - Test & Balance Review

The commissioning tasks to be performed are:

## Design Phase

- 1. Develop a Commissioning (Cx) Plan. Update the Cx Plan throughout the project. The Cx Plan will identify members of the Cx team, the roles, and responsibilities of each team member, the Cx schedule, and provide a narrative of Cx tasks.
- 2. Develop a project-specific Cx specification for inclusion in the construction documents. Provide specifications to the design team and owner for review.



# Construction & Acceptance Phases

- 1. Review the project schedule and provide the construction team Cx milestones and task durations for inclusion in the official project schedule.
- 2. Attend and lead Cx kickoff meeting to assist with Cx coordination.
- 3. Review initial equipment submittals for the commissioned systems concurrent with the design team. Submittal review comments will be forwarded to the design team for consideration and official inclusion in their submittal review comments.
  - Participate in a temperature controls workshop with the design team, owner, and contractors to review the controls submittal.
- 4. Develop custom construction checklists after all submittals have been approved by the design team. KFI will review the checklists' information in the field to verify accuracy. Checklists include:
  - Delivery acceptance criteria to confirm supplied equipment matches submittals.
  - Verification checks to observe if installation correlates with the details, specifications, and manufacturer requirements.
  - Contractors will complete any contract document required for pre-functional verifications that verify equipment startups, BAS point-to-point verifications, and preliminary sequence checks.
- 5. Perform one (1) construction site visit during the project. During the site visit, we anticipate the following tasks:
  - Review contractor progress on the construction checklists.
  - Review equipment and system installations for conformance to the construction documents, industry standards, manufacturer recommendations, and KFI experience. Document deficiencies on observation reports, and forward to the project team for review and action.
  - Conduct commissioning meetings to review progress on Cx tasks (and provide agendas, minutes, etc.). We will coordinate site visits to coincide with regular construction meetings whenever possible to make the best use of everyone's time. When we cannot attend construction meetings, we will review meeting minutes and provide comments where necessary.
- 6. Review start-up documentation for completeness and accuracy (and provide comments).
- 7. After reviewing and accepting the controls contractor self-testing (pre-functional testing) documents, KFI will execute functional performance testing at the sampling rates identified above. Testing includes the following tasks:
  - Point-to-point verification (including sensor calibrations, and input/output verification).
  - Review graphics for accuracy to systems, menu operability, links, and schematic accuracy.
  - Perform sequence testing through a combination of setpoint adjustments, trend reviews, and manual overrides.
  - Perform integrated systems testing.

KFI anticipates approximately two (2), multi-day trips during this phase to perform functional testing and retesting.

- 8. Perform one (1) seasonal testing virtual review of HVAC systems to review sequence testing of equipment under appropriate loads in all seasons.
- Document functional test deficiencies on the Master Issue Tracking List and assist with project team to verify that corrective actions are performed. After written notification of correction, KFI will retest deficiencies. KFI considers one (1) retest part of the normal scope of work. Additional retests will be at the contractor's expense.



# **Closeout Phase**

- 1. Provide a final commissioning report in PDF format at the conclusion of the project:
  - Provide a summary of the commissioning process (including a summary of any open issues & associated documentation), a building/system description, a review of the tasks executed, and a brief summary of the testing methods executed for future reference by the owner.
  - Include all commissioning documentation from the tasks identified above.
  - Provide a summary of equipment deficiencies with regards to performance/efficiency, executed documentation, and training.
  - Provide recommendations for any of the systems.
- 2. Conduct five (5) commissioning meetings virtually to discuss open commissioning issues with the construction team.

## **PROJECT SCHEDULE**

Pricing is based upon the completion of construction documents by late April. If the Project Schedule is significantly delayed, and the delay impacts KFI's ability to perform, the Client agrees to compensate KFI for the delay. KFI currently has the ability to commence work by early April 2023. This date will need to be reconfirmed upon receipt of the fully executed agreement.

# **EXCLUSIONS, USE OF AutoCAD**

**Exclusions** (may be provided as an additional service upon request):

- 1. Value Engineering (VE) meetings, revisions, and redesign
- 2. Architectural design
- 3. Structural engineering and design
- 4. Multiple bid packages
- 5. Conformed construction drawings and specifications
- 6. Equipment bidding and procurement
- 7. Detailed cost estimating
- 8. Controls hardware and materials shall be furnished and installed by others.

## Use of AutoCAD

1. Basic Services will provide MEP design for existing office spaces produced in AutoCAD, utilizing the electronic background provided by the City of Duluth.

## **TERMS AND CONDITIONS**

- <u>Acceptance of Proposal</u>: This letter outlining professional services is the "Proposal". This Proposal is an offer by KFI that is not binding unless and until CLIENT accepts it. CLIENT may accept this Proposal within 45 days after the date of this Proposal by returning a fully-executed copy of this Proposal to KFI. Upon CLIENT's acceptance, this Proposal will become a binding agreement between CLIENT and KFI (this "Agreement"). If CLIENT does not accept this Proposal within the 45 days after the date of this Proposal, it shall expire and shall no longer be binding. No changes to this Proposal will be binding on KFI unless KFI accepts them in writing.
- 2. <u>Change Requests and Change Orders</u>: This Agreement may not be modified except in writing. If CLIENT wishes to modify the scope of work described in this Agreement, CLIENT must submit a written work scope change request. KFI will respond promptly by stating in writing what effect, if any, the request will have on the price and schedule of delivery of the professional services described by this Agreement (the "Professional Services"). If KFI and CLIENT agree on a work scope change request and any adjustment to the price or delivery date, CLIENT and KFI will sign a change request modifying this Agreement.



- 3. <u>Delays</u>: KFI will not be liable for any delay that results any cause outside of KFI's commercially reasonable control. If the project covered by this Agreement (the "**Project**") is delayed for more than 120 days for any reason other than a cause within KFI's commercially reasonable control, KFI may, at its sole option, cancel this Agreement and the Project by delivering a written termination notice to CLIENT, in which case CLIENT will pay KFI for all fees and charges incurred, and all Professional Services completed, through the date of the termination, and neither party shall have any further rights or obligations under or in connection with this Agreement or the Project.
- 4. <u>Waiver of Consequential Damages</u>: KFI will make every commercially reasonable effort to complete the Professional Services by the date or dates stated in this Agreement, but KFI SHALL NOT BE LIABLE FOR ANY DAMAGES, WHETHER DIRECT, INDIRECT, CONSEQUENTIAL OR INCIDENTAL, ARISING OUT OF ANY DELAY IN DELIVERY OF THE PROFESSIONAL SERVICES.
- 5. <u>Limit of Liability</u>: KFI's liability to CLIENT for any error or omission (including claims for indemnity or contribution) is limited to KFI's fee.
- 6. <u>Cancellation</u>: CLIENT may cancel this Agreement by delivering a written cancellation notice to KFI before the Professional Services are completed, provided that CLIENT must pay KFI at KFI's current standard billing rates for the time and materials that KFI expended through the date of cancellation. All designs, drawings and specifications shall remain the property of KFI.
- 7. <u>Reuse of KFI's Plans, Specifications, and Other Documents</u>: All plans, specifications, and other documents furnished by KFI are instruments of KFI's services for use solely for the Project, and KFI retains all ownership and property rights in them regardless whether the Project is completed. CLIENT may retain copies for reference in connection with the use and occupancy of the Project, but KFI does not represent that the documents are suitable for reuse on extension of the Project or on other projects. CLIENT and others shall not use the documents on other projects or extensions of this Project except with KFI's express written agreement, which KFI may withhold in its sole discretion. To the fullest extent permitted by law, CLIENT will defend, indemnify, and hold harmless KFI from any and all costs and expenses, including the cost of defense, related to claims or causes of action asserted by any third person or entity to the extent such costs and expenses arise out of or relate in any way to CLIENT's unauthorized use of KFI's plans, specifications or design documents.
- 8. <u>Insurance</u>: KFI will maintain worker's compensation insurance, professional liability insurance, and comprehensive general insurance and will provide CLIENT with a certificate of insurance upon request.
- 9. <u>Third-party Indemnification</u>: To the fullest extent permitted by law, CLIENT shall and does agree to indemnify and hold harmless KFI and its members, officers, employees and representatives from and against all claims, costs, damages, losses, liens, causes of action, suits, judgments and expenses (including reasonable attorney's fees and other costs of defense) of any nature, kind or description, to the extent which (a) are caused by, arise out of, or result from acts or omissions of the CLIENT and (b) are attributable to bodily injury, personal injury, sickness, disease or death of any person, or to damage to or destruction of property but (c) only to the extent they are caused by any negligent acts, errors or omissions of the CLIENT or breach of this Agreement by the CLIENT, or anyone directly or indirectly employed by the CLIENT or anyone for whose acts the CLIENT is legally liable.

To the fullest extent permitted by law, KFI shall and does agree to indemnify and hold harmless CLIENT and its members, officers, employees and representatives (the "Indemnitees") from and against all claims, costs, damages, losses, liens, causes of action, suits, judgments and expenses (including reasonable attorney's fees and other costs of defense) of any nature, kind or description (the "Indemnified Claims"), to the extent which (a) are caused by, arise out of, or result from performance of KFI's services hereunder and (b) are attributable to bodily injury, personal injury, sickness, disease or death of any person, or to damage to or



destruction of property but (c) only to the extent they are caused by any negligent acts, errors or omissions of KFI or breach of this Agreement by the KFI, or anyone directly or indirectly employed by the KFI or anyone for whose acts the KFI is legally liable.

Regardless of anything else herein to the contrary, KFI does not have a defense obligation for any Indemnified Claims that will be covered by KFI's Professional Liability Insurance Policy (a "PL Covered Indemnified Claim"); provided however, for the avoidance of doubt, any costs and expenses (including reasonable attorney's fees and court costs) that the Indemnitees incur in connection with the Indemnitees' defense of a PL Covered Indemnified Claim are included in KFI's indemnification obligation for such PL Covered Indemnified Claim.

- 10. <u>Resolution of Disputes</u>: Any controversy, claim or dispute arising out of or relating in any manner to this Agreement or the Project shall be resolved as follows: Both parties will first attempt in good faith to promptly resolve the controversy, claim or dispute by negotiations between senior executives of the parties who have authority to settle the matter and who do not have direct responsibility for the administration of the Project. If the controversy, claim, or dispute has not been resolved by such negotiations within 60 days after written request by either party, the matter shall upon written request of either party then be settled by binding arbitration in accordance with the Construction Arbitration Rules of the American Arbitration Association, and judgment on the award rendered by the arbitrator(s) may be entered in any court having jurisdiction thereof. The arbitrator(s) shall be experienced in and have knowledge of the professional service(s) discipline KFI has been contracted for. The parties agree that any arbitration hearing shall be held in Saint Paul, Minnesota. Any claim in connection with this Agreement or the Project not made within 2 years after completion of the Professional Services shall be waived.
- 11. <u>Resolution of Dispute Costs</u>: The prevailing party to any dispute arising out of or relating to this Agreement or the Project shall be entitled to recover its reasonable fees and costs from the other party, including attorney fees and the costs of any arbitration, lawsuit, or other proceeding.
- 12. <u>Governing Law</u>: This Agreement shall be governed by the laws and statutes of Minnesota. Because this Agreement pertains to the provision of services, the parties agree and acknowledge that the Uniform Commercial Code does not apply to this Agreement or the services rendered hereunder.
- 13. <u>Force Majeure</u>: The obligations of KFI and the CLIENT to perform under this Agreement shall be excused during each period of delay caused by matters which are beyond the reasonable control of the party obligated to perform, such as, acts of God, fire, pandemics, epidemics, quarantine restrictions, flood and other weather conditions, war, embargo, explosions, riots, civil unrest, laws, rules, regulations and order of any governmental authority (each a "Force Majeure Event"). The party claiming excuse from performance ("Claiming Party") must take reasonable efforts to remove the cause of its inability to perform or its delay in performance. The Claiming Party must give prompt written notice to the other party of the Force Majeure Event, specifying its nature and anticipated duration.

Neither party may claim from the other party any penalties, interest, or any other compensation or damages for delays or lack of fulfillment of obligations to the extent due to a Force Majeure Event. The Non-Claiming Party may terminate this Agreement upon thirty (30) days' prior written notice in the event of the Claiming Party's inability for more than thirty (30) days to substantially perform all of its material obligations under this Agreement due to a Force Majeure Event.

14. <u>Miscellaneous</u>: This Agreement comprises the final and complete agreement between KFI and CLIENT. It supersedes all previous or contemporaneous communications, representations, or agreements, whether oral or written, relating to the subject matter of this Agreement and shall be binding upon the heirs, executors, administrators, successors and assigns of KFI and CLIENT. Neither KFI nor CLIENT may assign or



transfer this Agreement or any rights or interest in this Agreement, and no third party is intended to be benefited by this Agreement.

15. <u>Payment</u>: Fees and charges are due upon CLIENT's receipt of an invoice. CLIENT will pay a late payment charge of 10% per annum on the balance due beginning 30 days from the original invoice date. Each invoice from KFI shall be deemed correct, conclusive, and binding on CLIENT unless CLIENT, within 10 days after receiving that invoice, notifies KFI in writing of any claimed inaccuracies, discrepancies, or errors. If CLIENT fails to pay KFI within 30 days after receiving an invoice, KFI shall have the right to cancel this Agreement, in which case CLIENT shall pay KFI for all fees and charges incurred, and all Professional Services performed, through the date of termination.

# COMPENSATION

#### **Basic Services Fee**

For the Basic Services Scope of Work described above, the Client shall compensate KFI as follows:

#### **Construction Document Phase:**

- Fixed Fee in the amount of \$34,800. Included in the Fixed Fee amount are travel and production expenses. Plan review fees paid by KFI on the Owner's behalf are not included in the Fixed Fee amount. They are considered to be reimbursable and will be invoiced at cost times 1.1.

#### **Construction Phase:**

- On a Time and Materials basis at KFI's standard hourly rates effective during the invoice billing period, up to a Not-to-Exceed amount of \$13,200. Subcontracted consultant costs, travel, and production expenses are reimbursable and will be invoiced at cost times 1.1 up to the above-stated Not-to-Exceed amount.

#### **Controls:**

- Fixed Fee in the amount of \$19,000. Included in the Fixed Fee amount are travel and production expenses.

## **Commissioning (Construction – Closeout Phases):**

- Fixed Fee in the amount of \$16,600. Included in the Fixed Fee amount are travel and production expenses.

#### **Additional Services**

KFI may be requested by the Client to provide additional services which are in addition to the Basic Services Scope of Work. The Client will compensate KFI for these additional services on a Time and Material basis at KFI's current standard hourly rates and at 1.1 times the cost to KFI of consultants and at 1.1 times the cost of reimbursable expenses. Such compensation will be over and above any maximums set forth above.

When any portions of the Project are deleted or otherwise not constructed, compensation for those portions shall be payable to the extent services are performed on those portions. KFI shall be entitled to compensation in accordance with this agreement for all services performed whether or not the Construction Phase commenced.

Invoicing will occur on a monthly basis, payment terms are net 30 days, no retainage.

If you find this proposal acceptable, please sign and date this letter and return a copy to our office.



Thank you for the opportunity to provide engineering services for this project. Please contact me at (612) 670-9670 if you have any questions.

Respectfully submitted,

**KFI Engineers** 

Daniel A. Sieben, P.E. Senior Mechanical Engineer

Accepted By: City of Duluth

Mr. Alex Jackson Energy Coordinator Date

Attachments: KFI Hourly Rates

KFI CIA Short Form S & F CONTRACT template 20230111

# **KFI Engineers**

#### Hourly Rates & Reimbursable Expenses Effective 01/01/2023 through 12/31/2023

Mechanical, Electrical & Chemical Engineering Staff	<u>F</u>	
Engineer IV	\$	220.00
Engineer III	\$	195.00
Engineer II	\$	181.00
Engineer I	\$	170.00
Senior Designer	\$	181.00
Designer III	\$	170.00
Designer II	\$	153.00
Designer I	\$	140.00
Project Manager	\$	202.00
Construction Administration Manager	\$	195.00
Assistant Project Manager	\$	189.00
Structural Engineering Staff		
Engineer IV	\$	206.00
Engineer III	\$	177.00
Engineer II	\$	165.00
Engineer I	\$	152.00
Senior Designer	\$	160.00
Designer II	\$	130.00
Designer I	\$	118.00
Testing & Commissioning Services		
Controls Design Manager	\$	220.00
Technician III	\$	195.00
Technician II	\$	181.00
Technician	\$	170.00
Ancillary Staff		
Principal in Charge	\$	247.00
Senior Technical Specialist	\$	244.00
Energy Modeling Engineer	\$	195.00
BIM Manager	\$	189.00
IT - Project Specific Services	\$	153.00
Field Representative	\$	189.00
Instrumentation Technician	\$	189.00
Project Coordinator	\$	114.00
Administrative	\$	95.00
Technician Aide	\$	84.00

Note: If a single person serves in more than one role, the higher rate is used as the bill rate.

Delivery / Courier	Cost Plus 10%
Mileage	Federal Govt. Rate
Travel	Cost Plus 10%
Meter/Equipment Rental:	
Data Loggers	\$100/per wk
Thermal Imaging	\$250/per day
Rented	Cost Plus 10%

#### Our rates include:

Internal printing costs Postage, fax, long distance and cell phone Internet Truck and manual tool charges Calibration of Equipment Overtime Our rates do not include:

Plan Review Fees Printing costs for distribution sets Subconsultants Testing (other than KFI) Premium for legal assistance

