### PROFESSIONAL ENGINEERING SERVICES AGREEMENT

### **ENGINEER & CITY OF DULUTH**

THIS AGREEMENT, effective as of the date of attestation by the City Clerk, is made by and between the City of Duluth, Minnesota hereinafter referred to as the "City" and:

Name:Gausman & Moore Associates, Inc.Address:501 South Lake Ave, Suite 210, Duluth, MN 55802

hereinafter referred to as the "Engineer", in consideration of the mutual promises contained herein.

Payments as described in Section V shall be made from Funding 540-0920-1499-5530; and Resolution No. 19-0759R, passed on November 12, 2019.

The professional engineering services obtained by the City under this agreement concern the following described project hereinafter referred to as the "Project":

Project Number:	19-0638
Project Name:	Professional Engineering Services for Building Conversions – Phase 3
Project Description:	Mechanical design and engineering services for the conversion of 15 buildings
	on Superior Street from a district energy steam system to a hot water system;
	Phase III.

The professional engineering services to be provided under this agreement consist of those phases A through G checked below. A more particular description of each phase is contained in Section II, "Basic Services", of the agreement.

	Phase	Description
	А.	Study and Report Phase
$\boxtimes$	В.	Preliminary Survey Phase
$\boxtimes$	C.	Preliminary Design Phase
$\boxtimes$	D.	Final Design Phase
$\boxtimes$	E.	Bidding Phase
	F.	Construction Survey and Layout Phase
	G.	Construction Administration and Inspection Phase

### SECTION I. GENERAL

### A. ENGINEER

The Engineer shall provide professional engineering services for the City in all phases of the Project to which this agreement applies, serve as the City's professional engineering representative for the Project as set forth below and shall give professional engineering consultation and advice to the City during the performance of services hereunder. All services provided hereunder shall be performed by the Engineer in accordance with generally accepted Engineering standards to the satisfaction of the City.

### B. NOTICE TO PROCEED

The Engineer shall only begin performance of each Phase of work required hereunder upon receipt of a written Notice to Proceed by City representative with that Phase.

### C. TIME

The Engineer shall begin work on each successive phase promptly after receipt of the Notice to Proceed and shall devote such personnel and materials to the Project so as to complete each phase in an expeditious manner within the time limits set forth in Section II. Time is of the essence to this agreement.

### D. CITY'S REPRESENTATIVE

The City's representative to the Engineer shall be the City Engineer or his or her designees assigned in writing.

### E. ENGINEERING GUIDELINES

All work performed as part of this project shall conform to the most current edition of the Engineering Guidelines for Professional Engineering Services and Developments as approved by the City Engineer and on file in the office of the City Engineer.

### F. SUBCONSULTANTS

Engineer may contract for the services of sub-consultants to assist Engineer in the performance of the services to be provided by Engineer hereunder but the selection of any sub-consultant to perform such services shall be subject to the prior written approval of the City Engineer. Engineer shall remain responsible for all aspects of any services provided by such sub-consultants to City under this Agreement. City shall reimburse Engineer for sub-consultant services under the categories of services to be provided by Engineer under Phases A through G, as applicable.

### SECTION II. BASIC SERVICES

### A. STUDY AND REPORT PHASE

- $\Box$  Included in this Agreement
- $\boxtimes$  Not included in this Agreement

### The Engineer shall:

### 1) <u>City's Requirements</u>

Review available data and consult with the City to clarify and define the City's requirements for the Project.

### 2) <u>Advise Regarding Additional Data</u>

Advise the City as to the necessity of the City's providing or obtaining from others data or services in order to evaluate or complete the Project and, if directed by the City's representative, act on behalf of the City in obtaining other data or services.

### 3) <u>Technical Analysis</u>

Provide analysis of the City's needs, planning surveys, site evaluations, and comparative studies of prospective sites and solutions.

### 4) Economic Analysis

Provide a general economic analysis of various alternatives based on economic parameters and assumptions provided by the City.

### 5) <u>Report Preparation</u>

Prepare a report containing schematic layouts, sketches and conceptual design criteria with appropriate exhibits to indicate clearly the considerations involved and the alternative solutions available to the City and setting forth the Engineer's findings and recommendations with opinions of probable total costs for the Project, including construction cost, contingencies, allowances for charges of all professionals and consultants, allowances for the cost of land and rights-of-way, compensation for or damages to properties and interest and financing charges (all of which are hereinafter called "Project Costs").

### 6) <u>Report Presentation</u>

Furnish three copies of the report and present and review the report in person with the City as the City Representative shall direct.

### 7) Supplementary Duties

The duties and responsibilities of Engineer during the Study and Report Phase shall also include any additional duties and responsibilities to be provided pursuant to the Engineer's proposal attached as Exhibit B.

### 8) Completion Time

The Study and Report Phase shall be completed and report submitted by n/a.

### B. PRELIMINARY SURVEY PHASE

- $\boxtimes$  Included in this Agreement
- $\Box$  Not included in this Agreement

After written authorization by the City's representative to proceed with the preliminary survey phase, the Engineer shall:

### 1) General

Perform topographic survey as necessary to prepare the design and provide Construction Survey and Layout as described in Section II.F

2) <u>Boundary Survey</u>

Perform boundary survey if checked.

3) Document Presentation

Furnish a CADD file of the survey base map to the City. Files shall be in the software specified in the Engineering Guidelines for Professional Engineering Services and Developments described in Section I.E.

4) Supplementary Duties

The duties-responsibilities of the Engineer during the preliminary survey phase shall also include any additional duties and responsibilities to be provided pursuant to the Engineer's proposal attached as Exhibit B.

5) Completion Time

The preliminary survey phases shall be completed and submitted as follows:

Package 1 by November 30, 2019. Package 2 by December 31, 2019. Package 3 by February 15, 2020.

### C. PRELIMINARY DESIGN PHASE

- $\boxtimes$  Included in this Agreement
- □ Not included in this Agreement

After written authorization by the City's Representative to proceed with the Preliminary Design Phase, the Engineer shall:

### 1) Preliminary Design Documents

Prepare preliminary design documents consisting of final design criteria, preliminary drawings and outline specifications.

2) <u>Revised Project Costs</u>

Based on the information contained in the preliminary design documents, submit a revised opinion of probable Project costs.

3) <u>Preparation of Grants; Environmental Statements</u>

Preparation of applications and supporting documents for governmental grants, loans or advances in connection with the Project, preparation or review of environmental assessments and impact statements; review and evaluation of the effect on the design requirements of the Project of any such statements and documentation prepared by others; and assistance in obtaining approvals of authorities having jurisdiction over the anticipated environmental impact of the Project.

4) <u>Renderings and Models</u>

Providing renderings or models for the City's use.

### 5) Economic Analysis

Investigations involving detailed consideration of operations, maintenance and overhead expenses; providing value engineering during the course of design; the preparation of feasibility studies, cash flow and economic evaluations, rate schedules and appraisals; assistance in obtaining financing for the Project; evaluating processes available for licensing and assisting the City in obtaining licensing; detailed quantity surveys of material, equipment and labor; and audits of inventories required in connection with construction performed by the City.

### 6) <u>Document Presentation</u>

Furnish three copies of the above preliminary design documents and present and review such documents in person with the City as the City Engineer may direct.

### 7) <u>Supplementary Duties</u>

The duties and responsibilities of the Engineer during the Preliminary Design Phase shall also include any additional duties and responsibilities to be provided pursuant to the Engineer's proposal attached as Exhibit B.

### 8) Completion Time

The Preliminary Design Phase shall be completed and reports or plans submitted as follows:

Package 1 by December 31, 2019. Package 2 by January 31, 2020. Package 3 by April 15, 2020.

### D. FINAL DESIGN PHASE

- $\boxtimes$  Included in this Agreement
- $\Box$  Not included in this Agreement

### 1) Drawings and Specifications

On the basis of the accepted preliminary design documents and the revised opinion of probable Project costs, prepare for incorporation in the contract documents Construction Plans to show the character and extent of the Project and specifications.

### 2) Approvals of Governmental Entities

Furnish to the City such documents and design data as may be required for, and prepare the required documents so that the City may apply for approvals and permits of such governmental authorities as have jurisdiction over design criteria applicable to the Project, and assist in obtaining such approvals by participating in submissions to and negotiations with appropriate authorities.

### 3) Adjusted Project Costs

Advise the City of any adjustments to the latest opinion of probable Project costs, identify cause of change and furnish a revised opinion of probable Project cost based on the drawings and specifications.

### 4) Contract Document Preparation

Prepare for review and approval by the City, its Attorney and other advisors, contract agreement forms, general conditions and supplementary conditions and (where requested) bid forms, invitations to bid and instructions to bidder, including for federally funded Projects, all documentation, including wage determinations, in order to comply with Davis-Bacon Act or City code requirements, and assist in the preparation of other related contract documents. To the extent possible, the Engineer will follow the document format supplied by the City and use the standard terms and conditions supplied by the City in preparation of these documents.

### 5) <u>Real Estate Acquisition: Legal Description</u>

Based on preliminary design documents, furnish a legal description and recordable reproducible 8-1/2" X 11" plat of each parcel of real estate in which the City must acquire an interest in order to proceed with construction of the Project.

### 6) Document Presentation

Furnish three copies of the above documents and present and review them in person with the City.

### 7) Supplementary Duties

The duties and responsibilities of the Engineer during the Final Design Phase shall also include any additional duties and responsibilities to be provided pursuant to the Engineer's proposal attached as Exhibit B.

8) Completion Time

The Final Design Phase shall be completed and contract documents submitted as follows:

Package 1 by January 15, 2020. Package 2 by February 15, 2020. Package 3 by May 15, 2020.

### E. BIDDING PHASE

- ☑ Included in this Agreement
- □ Not included in this Agreement

The Engineer shall:

1) Assist in Bidding

Assist the City in obtaining bids for each separate City contract for construction, materials, equipment and services.

### 2) Advise Regarding Contractors and Subcontractors

Consult with and advise the City as to the acceptability of subcontractors and other persons and organizations proposed by the City's contractor(s) (hereinafter called "Contractor(s)" for those portions of the work as to which such acceptability is required by the bidding documents).

### 3) Consult Regarding Substitutes

Consult with and advise the City as to the acceptability of substitute materials and equipment proposed by the contractor(s) when substitution prior to the award of contracts is allowed by the bidding documents.

### 4) <u>Evaluation of Bids</u>

Assist the City in evaluating bids or proposals and in assembling and awarding contracts.

### 5) <u>Supplementary Duties</u>

The duties and responsibilities of the Engineer during the Bidding Phase shall also include any additional duties and responsibilities to be provided pursuant to the Engineer's proposal attached as Exhibit B.

### 6) <u>Completion Time</u>

The bidding phase shall be completed as follows:

Package 1 by February 15, 2020. Package 2 by March 31, 2020. Package 3 by June 30, 2020.

### F. CONSTRUCTION SURVEY AND LAYOUT PHASE

- □ Included in this Agreement
- $\boxtimes$  Not included in this Agreement

### 1) General

This phase of work may or may not be performed in conjunction with Phase G, "Construction Administration and Inspection Phase" of this agreement. Inclusion of this phase in the agreement does not imply that services identified under Phase G are to be provided unless specifically indicated in this agreement.

### 2) Duties

The Engineer shall provide horizontal and vertical control line and grade to enable construction of the improvement as depicted in the Project plans. The number of control points to be established by the Engineer shall be sufficient to permit the construction contractor to construct the improvement within the

construction tolerances established in the Project specifications. In addition, the number of control points shall be consistent with standard engineering practice.

### 3) <u>Accuracy</u>

The Engineer shall provide the horizontal and vertical control points within the same measurement tolerances as the construction tolerances established in the Project specifications. The Engineer shall be responsible for the accuracy of the control points which are established. The Engineer shall be responsible for costs which may result from errors in placement of control points. The Engineer shall be required to establish control points at Engineer's costs only one time. Control points which are lost, damaged, removed or otherwise moved by the Contractor or others shall be promptly replaced by the Engineer and costs for such replacement shall be computed on a time and materials basis, and reimbursed by the City. The Engineer shall take all reasonable and customary actions to protect the control points established by the Engineer.

### 4) Supplementary Duties

The duties and responsibilities of the Engineer during the construction survey and layout phase shall also include any additional duties and responsibilities to be provided pursuant to the Engineer's proposal attached as Exhibit B.

### 5) <u>Completion Time</u>

The construction survey & layout phase shall be completed by n/a.

### G. CONSTRUCTION ADMINISTRATION AND INSPECTION PHASE

- $\Box$  Included in this Agreement
- $\boxtimes$  Not included in this Agreement

### 1) General Duties

Consult with and advise the City and act as its representative as provided herein and in the General Conditions of the construction contract for the Project. This phase of the work may or may not be performed in conjunction with Phase F "Construction Survey and Layout Phase" of this agreement. Inclusion of this phase in the agreement does not imply that services identified under Phase F are to be provided unless specifically indicated in this agreement.

### 2) Construction Inspection and Reporting

Make visits to the site with sufficient frequency at the various stages of construction to observe as an experienced and qualified design professional the progress and quality of the executed work of the contractor(s) and to insure that such work is proceeding in accordance with the contract documents. During such visits and on the basis of on-site observations, the Engineer shall keep the City informed of the progress of the work, shall endeavor to guard the City against defects and deficiencies in such work and may disapprove or reject work failing to conform to the contract documents.

### 3) <u>Warranty Inspection</u>

Eleven months following construction completion, conduct an inspection to document any items to be repaired by the contractor under the conditions of the construction contract warranty. Submit work to be corrected to the Contractor and the City.

### 4) <u>Review of Technical and Procedural Aspects</u>

Review and approve (or take other appropriate action in respect to Shop Drawings), the results of tests and inspections and other data which each contractor is required to submit, determine the acceptability of substitute materials and equipment proposed by the contractor(s), and receive and review (for general content as required by the specifications) maintenance and operating instructions, schedules, guarantees, bonds and certificates of inspection which are to be assembled by the contractor(s).

### 5) Contract Documents

Receive from each contractor and review for compliance with contract documents all required document submissions including but not limited to performance and payment bonds, certificates of insurance report forms required by any City, State or Federal law or rule or regulation and submit the forms to the City for final approval.

### 6) <u>Conferences and Meetings</u>

Attend meetings with the contractor, such as preconstruction conferences, progress meetings, job conferences and other Project-related meetings, and prepare and circulate copies of the minutes thereof including to the City.

### 7) <u>Records</u>

a) Maintain orderly files for correspondence, reports of job conferences, shop drawings and samples, reproductions of original contract documents, including all work directive changes, addenda, change orders, field orders, additional drawings issued subsequent to the execution of the contract, the Engineer's clarifications and interpretations of the contract documents, progress reports, and other Project-related documents.

b) Keep a diary or log book, recording the contractor's hours on the job site, weather conditions, data relative to questions of work directive changes, change orders, or changed conditions, list of job site visitors, daily activities, decisions, observations in general, and specific observations in more detail, as in the case of observing test procedures and send copies to the City. Take multiple photographs of the Work and keep a log and file of the photos. Specifically maintain records of acceptance and rejection of materials and workmanship.

c) Record names, addresses and telephone numbers of all the contractors, subcontractors, and major suppliers of materials and equipment.

### 8) Reports

a) Furnish the City periodic reports, as required, on progress of the work and of the contractor's compliance with the progress schedule and schedule of shop drawings and sample submittals.

b) Consult with the City, in advance of scheduled major tests, inspections, or start of important phases of the Work.

c) Draft proposed change orders and work directive changes, obtaining back-up material from the contractor, and make recommendations to the City regarding change orders, work directive changes and field orders.

d) Report immediately to the City upon the occurrence of any accident.

### 9) Contract Interpretation, Review of Quality of Work

Issue all instruction of the City to the contractor(s); issue necessary interpretations and clarifications of the contract Documents and in connection therewith prepare change orders as required, subject to the City's approval; have authority, as the City's representative, to require special inspection or testing of the work; act as initial interpreter of the requirements of the contract documents and judge of the acceptability of the work there under and make decisions on all claims of the contract documents pertaining to the acceptability of the work or the interpretation of the requirements of the contract documents pertaining to the execution and progress of the work.

### 10) Change Orders and Revisions

Prepare change orders to reflect changes in the Project requested or approved by the City, evaluate substitutions proposed by the contractor(s) and make revisions to drawings and specifications occasioned thereby, and provide any additional services necessary as the result of significant delays, changes or price increases occurring as a direct or indirect result of material, equipment or energy shortages.

### 11) Review of Applications for Payment

Based on the Engineer's on-site observations as an experienced and qualified design professional and on review of applications for payment and the accompanying data and schedules, determine the amount owing to the contractor(s) and recommend in writing payments to the contractor(s) in such amounts; such recommendations of payment will constitute a representation to the City, based on such observations and review, that the work has progressed to the point indicated, that, to the best of the Engineer's knowledge, information and belief, the quality of such work is in accordance with the contract documents (subject to an evaluation of such work as a functioning Project upon substantial completion, to the results of any subsequent tests called for in the contract documents, and to any qualifications stated in his recommendation), and that payment of the amount recommended is due the contractor(s).

### 12) Determination of Substantial Completion

Conduct an inspection to determine if the Project is substantially complete and a final inspection to determine if the work has been completed in accordance with the contract documents and if each contractor has fulfilled all of his obligations there under so that the Engineer may recommend, in writing, final payment to each contractor and may give written notice to the City and the contractor(s) that the work is acceptable (subject to any conditions therein expressed).

### 13) Authority and Responsibility

The Engineer shall not guarantee the work of any contractor or subcontractor, shall have no supervision or control as to the work or persons doing the work, shall not have charge of the work, shall not be responsible for safety in, on, or about the job-site or have any control of the safety or adequacy of any equipment, building component, scaffolding, supports, forms or other work aids. If the Engineer determines that there are deficiencies in materials or workmanship on the Project, or otherwise deems it to be in the best interest of the City to do so, the Engineer shall be responsible to stop any contractor or subcontractor from performing work on the Project, until conditions giving rise to this need, therefore, are rectified.

### 14) Engineer Not Responsible for Acts of Contractor

The Engineer shall not be responsible for the supervision or control of the acts or omissions or construction means, methods or techniques of any contractor, or subcontractor, or any of the contractor(s)' or subcontractors' or employees or any other person (except the Engineer's own employees and agents) at the site or otherwise performing any of the contractor(s) work; however, nothing contained in this paragraph shall be construed to release the Engineer from liability for failure to properly perform duties undertaken by him in these contract documents or this agreement.

### 15) Preparation of Record Drawings

The Engineer shall prepare a set of record drawings in accordance with the Engineering Guidelines for Professional Engineering Services and Development described in Section I.E.

### 16) Manuals

The Engineer shall furnish operating and maintenance manuals; protracted or extensive assistance in the utilization of any equipment or system (such as initial start-up, testing, and adjusting and balancing); and training personnel for operation and maintenance.

### 17) Supplementary Duties

The duties and responsibilities of the Engineer during the construction administration and inspection phase shall also include any additional duties and responsibilities to be provided pursuant to the Engineer's proposal attached as Exhibit B.

### 18) <u>Completion Time</u>

The construction administration and inspection phase shall be completed by n/a.

### SECTION III. CITY'S RESPONSIBILITIES

### A. FURNISH REQUIREMENTS AND LIMITATIONS

Provide all criteria and full information as to the City's requirements for the Project, including design objectives and constraints, space, capacity and performance requirements, flexibility and expendability, economic parameters and any budgetary limitations; and furnish copies of all design and construction standards which the City will require to be included in the Drawings and Specifications.

### B. FURNISH INFORMATION

Assist the Engineer by placing at the Engineer's disposal all available information reasonably known to and in possession of the City.

### C. REVIEW DOCUMENTS

Examine all studies, reports, sketches, drawings, specifications, proposals and other documents presented by the Engineer.

### D. OBTAIN APPROVALS AND PERMITS

Furnish approvals and permits from all governmental authorities having jurisdiction over the Project and such approvals and consents from others as may be necessary for completion of the Project.

### E. ACCOUNTING, LEGAL AND INSURANCE SERVICE

Provide such accounting, independent cost estimating and insurance counseling services as may be required for the Project, such auditing service as the City may require to ascertain how or for what purpose any contractor has used the monies paid to him under the construction contract, and such inspection services as the City may require to ascertain that the contractor(s) are complying with any law, rule or regulation applicable to their performance of the work except as otherwise provided in Section II.

### F. NOTIFY THE ENGINEER OF DEFECTS OR DEVELOPMENT

Give prompt written notice to the Engineer whenever the City observes or otherwise becomes aware of any development that affects the scope or timing of the Engineer's services, or any defect in the work of the contractor(s).

### G. COSTS OF THE CITY'S RESPONSIBILITIES

Bear all costs incidental to compliance with the requirements of this Section III.

### SECTION IV. GENERAL CONSIDERATIONS

### A. SUCCESSORS AND ASSIGNS

The City and the Engineer each binds their respective partners, successors, executors, administrators and assigns to the other party of this agreement and to the partners, successors, executors, administrators, and assigns of such other party, in respect to all covenants of this agreement; the Engineer shall not assign, sublet, or transfer their respective interests in this agreement without the written consent of the City. Nothing herein shall be construed as creating any personal liability on the part of any officer or agent of any public body which may be a party hereto, nor shall it be construed as giving any rights or benefits hereunder to anyone other than the City and the Engineer.

### B. OWNERSHIP OF DOCUMENTS

All drawings, specifications, reports, records, and other work product developed by the Engineer in connection with this Project shall remain the property of the City whether the Project is completed or not. Reuse of any of the work product of the Engineer by the City on extensions of this Project or any other Project without written permission of the Engineer shall be at the City's risk and the City agrees to defend, indemnify and hold harmless the Engineer from all damages and costs including attorney fees arising out of such reuse by the City or others acting through the City.

### C. ESTIMATES OF COST (COST OPINION)

Estimates of construction cost provided are to be made on the basis of the Engineer's experience, qualifications and the best of their professional judgment, but the Engineer does not guarantee the accuracy of such estimates as compared to the contractor's bids or the Project construction cost.

### D. INSURANCE

1) Engineer shall provide the following minimum amounts of insurance from insurance companies authorized to do business in the state of Minnesota unless Engineer shall have successfully demonstrated to the City Attorney, in the reasonable exercise of his or her discretion that such insurance is not reasonably available in the market. If the Engineer demonstrates to the reasonable satisfaction of the City Attorney that such insurance requires hereunder is not reasonably available in the market, the City Attorney may approve an alternative form of insurance which is reasonably available in the market which he or she deems to provide the highest level of insurance protection to the city which is reasonably available.

- a) Workers' compensation insurance in accordance with the laws of the State of Minnesota.
- b) Public Liability Insurance and Automobile Liability Insurance with limits not less than
   \$1,500,000 Single Limit, and twice the limits provided when a claim arises out of the release or threatened release of a hazardous substance; shall be in a company approved by the city of Duluth; and shall provide for the following: Liability for Premises, Operations, Completed

Operations, Independent Contractors, and Contractual Liability.

- c) Professional Liability Insurance in an amount not less than \$1,500,000 Single Limit; provided further that in the event the professional malpractice insurance is in the form of "claims made," insurance, Engineer hereby commits to provide at least 60 days' notice prior to any change to the Professional Liability Insurance policy or coverage ; and in event of any change, Engineer agrees to provide the City with either evidence of new insurance coverage conforming to the provisions of this paragraph which will provide unbroken protection to the City, or, in the alternative, to purchase at its cost, extended coverage under the old policy for the period the state of repose runs; the protection to be provided by said "claims made" insurance shall remain in place until the running of the statute of repose for claims related to this Agreement.
- d) City of Duluth shall be named as Additional Insured under the Public Liability and Automobile Liability, or as an alternate, Engineer may provide Owners-Contractors Protective policy, naming himself and City of Duluth. Engineer shall also provide evidence of Statutory Minnesota Workers' Compensation Insurance. Engineer to provide Certificate of Insurance evidencing such coverage with notice to City of cancellation in accordance with the provisions of the underlying insurance policy included. The City of Duluth does not represent or guarantee that these types or limits of coverage are adequate to protect the Engineer's interests and liabilities.
- e) If a certificate of insurance is provided, the form of the certificate shall contain an unconditional requirement that the insurer notify the City without fail not less than the notice provisions contained in the underlying insurance policy or policies. In addition, Engineer commits to provide to City notice to City at least 30 days prior to any change of the policy or coverages.

2) The insurance required herein shall be maintained in full force and effect during the life of this Agreement and shall protect Engineer, its employees, agents and representatives from claims and damages including but not limited to personal injury and death and any act or failure to act by Engineer, its employees, agents and representatives in the performance of work covered by this Agreement.

3) Certificates showing that Engineer is carrying the above described insurance in the specified amounts shall be furnished to the City prior to the execution of this Agreement and a certificate showing continued maintenance of such insurance shall be on file with the City during the term of this Agreement.

4) The City shall be named as an additional insured on each liability policy other than the professional liability and the workers' compensation policies of the Engineer.

5) The certificates shall provide that the policies shall not be cancelled during the life of this Agreement without advanced notice being given to the City at least equal to that provided for in the underlying policy of insurance.

6) Except as provided for in Section IV.D.1.d) above, Engineer hereby commits to provide notice to City at least 30 days in advance of any change in the insurance provided pursuant to this Section IV or in advance of that provided for in the underlying insurance policy or policies whichever is longer. For the purposes of Section IV.D of this Agreement, the term, "changed", shall include cancellation of a policy of insurance provided hereunder and any modification of such policy which reduces the amount of any coverage provided thereunder below the amounts required to be provided hereunder or otherwise reduces the protections provided under such policy to City.

### E. HOLD HARMLESS

The Engineer agrees that it shall defend, indemnify and hold harmless the City of Duluth and its officers, agents, servants and employees from any and all claims including claims for contribution or indemnity, demands, suits, judgments, costs and expenses asserted by any person or persons including agents or employees of the City of Duluth or the Engineer by reason of death or injury to person or persons or the loss or damage to property arising out of, or by reason of, any act, omission, operation or work of the Engineer or its employees while engaged in the execution or performance of services under this Agreement except to the extent that such indemnification is specifically prohibited by Minnesota Statutes Chapter 337 or Section 604.21. Engineer shall not be required to indemnify City for claims of liability arising out of the sole negligent or intentional acts or omission of the City but shall be specifically required to and agrees to defend and indemnify City in all cases

where claims of liability against the City arise out of acts or omissions which are passive or derivative of the negligent or intentional acts or omissions of Engineer, including but not limited to, the failure of the City to supervise, the failure to warn, the failure to prevent such acts or omission by Engineer and any other such source of liability. On ten days' written notice from the City of Duluth, the Engineer shall appear and defend all lawsuits against the City of Duluth growing out of such injuries or damages.

### F. TERMINATION

1) This agreement may be terminated in whole or in part in writing by either party in the event of substantial failure by the other party to fulfill its obligation under this agreement through no fault of the terminating party; provided that no such termination may be affected unless the other party is given not less than fifteen (15) calendar days' prior written notice (delivered by certified mail, return receipt requested) of intent to terminate.

2) This agreement may be terminated in whole or in part in writing by the City for its convenience; provided that the Engineer is given (1) not less than fifteen (15) calendar days' prior written notice (delivered by certified mail, return receipt requested) of intent to terminate and (2) an opportunity for consultation with the City prior to termination.

3) Upon receipt of a notice of intent to terminate from the City pursuant to this agreement, the Engineer shall (1) promptly discontinue all services affected (unless the notice directs otherwise), and (2) make available to the City at any reasonable time at a location specified by the City all data, drawings, specifications, reports, estimates, summaries, and such other information and materials as may have accumulated by the Engineer in performing this agreement, whether completed or in process.

4) Upon termination pursuant to this agreement, the City may take over the work and prosecute the same to completion by agreement with another party or otherwise.

### G. LAWS, RULES AND REGULATIONS

The Engineer agrees to observe and comply with all laws, ordinances, rules and regulations of the United States of America, State of Minnesota, the City of Duluth and their respective agencies and instrumentalities which are applicable to the work and services to be performed hereunder.

### H. INDEPENDENT CONTRACTOR STATUS

Nothing contained in this agreement shall be construed to make the Engineer an employee or partner of the City. The Engineer shall at all times hereunder be construed to be an independent contractor.

### I. FEDERAL FUNDING

If Federal Funds (i.e. HUD, FEMA, Revenue Sharing) are utilized as a source of Project funding, the Engineer shall abide by the terms of all Federal requirements in the performance of duties hereunder.

### J. AMENDMENT OF AGREEMENT

This agreement shall be amended or supplemented only in writing and executed by both parties hereto.

### SECTION V. PAYMENT

### A. BASIS OF BILLING

City shall pay the Engineer based on hourly rates for all services rendered under Section II Phases A through G, an amount not to exceed the amount in Section V.C, including any and all Project-related expenses such as travel, reproduction of reports and drawings, tolls, mileage, etc. For the purposes of this agreement, the principals and employees of the Engineer and their hourly rates are set forth in Exhibit A.

### B. PAYMENT FOR WORK COMPLETED

1) Monthly progress payments may be requested by the Engineer for work satisfactorily completed and shall be made by the City to the Engineer as soon as practicable upon submission of statements requesting payment by the Engineer to the City. When such progress payments are made, the City may withhold up to five percent (5%) of the vouchered amount until satisfactory completion by the Engineer of all work and services within a phase called for under this agreement. When the City determines that the work under this

agreement for any specified phase hereunder is substantially complete, it shall release to the Engineer any retainage held for that phase.

2) No payment request made pursuant to subparagraph 1 of this Section V shall exceed the estimated maximum total amount and value of the total work and services to be performed by the Engineer under this agreement without the prior authorization of the City. These estimates have been prepared by the Engineer and supplemented or accompanied by such supporting data as may be required by the City.

3) Upon satisfactory completion of the work performed hereunder, and prior to final payment under this agreement, and as a condition precedent thereto, the Engineer shall execute and deliver to the City a release of all claims against the City arising under or by virtue of this agreement.

4) In the event of termination by City under Section IV.F., upon the completion of any phase of the Basic Services, progress payments due Engineer for services rendered through such phase shall constitute total payment for such services. In the event of such termination by City during any phase of the Basic Services, Engineer also will be reimbursed for the charges of independent professional associates and consultants employed by Engineer to render Basic Services, and paid for services rendered during that phase on the basis of hourly rates defined in Exhibit A of this agreement for services rendered during that phase to date of termination by Engineer's principals and employees engaged directly on the Project. In the event of any such termination, Engineer will be paid for all unpaid additional services plus all termination expenses. Termination expenses mean additional expenses directly attributable to termination, which, if termination is at City's convenience, shall include an amount computed as a percentage of total compensation for basic services earned by Engineer to the date of termination as follows: 10% of the difference between the amount which the Engineer has earned computed as described in paragraphs A and B of this section and the maximum payment amount described in paragraph C of this section. The above applies only if termination is for reasons other than the fault of the Engineer.

### C. TOTAL NOT TO EXCEED:

All payments under this Contract are not to exceed One Hundred Thirty Thousand and no/100ths Dollars (\$130,000.00).

### SECTION VI. SPECIAL PROVISIONS

The following exhibits are attached to and made part of this agreement:

- 1) Exhibit A, Engineer's Hourly Rates
- 2) Exhibit B, Engineer's Proposal

In the event of a conflict between the agreement and any Exhibit, the terms of the Agreement will be controlling.

### SECTION VII. COUNTERPARTS

This Agreement may be executed in two or more counterparts, each of which shall be deemed to be an original as against any party whose signature appears thereon, but all of which together shall constitute but one and the same instrument. Signatures to this Agreement transmitted by facsimile, by electronic mail in "portable document format" (".pdf"), or by any other electronic means which preserves the original graphic and pictorial appearance of the Agreement, shall have the same effect as physical delivery of the paper document bearing the original signature.

[Remainder of this page intentionally left blank. Signature page to follow.]

IN WITNESS WHEREOF, the parties have hereunto set their hands on the date of attestation shown below.

CITY OF DULUTH-Client	GAUSMAN & MOORE ASSOCIATES, INC.
By:	
Mayor	By:
Attest:	Its: Title of Representative
By:	1
City Clerk	Date:
Date:	
Countersigned:	
City Auditor	
Approved as to Form:	
City Attorney	

## Proposal to the City of Duluth

ProfessionalEngineeringServices for DES Hot Water Customer Connections RFP Number 19-20AA





Authorized Representative Paul D. Haslach, PE, LEED AP BD+C Partner

Email: phaslach@gausman.com Phone: 651.604.3131

Gausman & Moore Associates, Inc. 501 Lake Avenue South, Suite 210 | Duluth, MN 55802



Gausman & Moore Associates, Inc. has provided exceptional service for 85 years delivering consulting engineering services for mechanical, electrical, plumbing, fire protection, low voltage design, and commissioning for the built environment.

### PROPOSAL COVER SHEET CITY OF DULUTH RFP# 19-20AA

Ві	Bidder Information:					
Bidder Name Gausman & Moore Associates, Inc.						
Mailing Address	510 Lake Avenue South, Suite 210 Duluth, MN 55802					
Contact Person	Paul D. Haslach, PE, LEED AP BD+C					
Contact Person's Phone Number	651.651.604.3131					
Contact Person's E-Mail Address	phaslach@gausman.com					
Federal ID Number	41-8761165					
Authorized Signature	Paul D Hodal					
Title	Partner Mechanical, Plumbing & Fire Protection Engineer					



CITY OF DULUTH PURCHASING DIVISION Room 120 City Hall 411 West First Street Duluth, Minnesota 55802-1199 218/730-5340 purchasing@duluthmn.gov

### Addendum #1 File # 19-20AA ENGINEERING SERVICES FOR DES HOT WATER CUSTOMER CONNECTIONS – PHASE 3

This addendum serves to notify all bidders of the following additional information:

The Pre-proposal conference will be held on Thursday, October 10, 2019 at 2:30 p.m. at City Hall, 411 West First Street, Duluth, MN in Conference Room 155 (formerly 106A).

Please acknowledge receipt of this Addendum by including the page in your proposal.

Posted: October 3, 2019

An Equal Opportunity Employer

Email	WEDAVIS & KFI-ENG. COM	PHASLACH @ Gausman. com	DAVID WILLASS CHBCORS 10	alecathone the con					
PHONE	Lef 763 - 228-0769	651-624-3131	7:42562812	4512 PHZ 8KC					
COMPANY	KFI Enginals	Gaussnand Mosse	8H1	2MB					
NAME	William F. DAMS	PAUL HASIACH	DAVID WILLIANS	Alec Ashan					

PREE-BID MEETING SIGN-IN SHEET BID # 19-20AA RFP Eng Svcs for DES Building Conversions (Customer Connections) Phase 3 Thursday October 10th, 2019 at 2:30 PM



**CITY OF DULUTH** PURCHASING DIVISION Room 120 City Hall 411 West First Street Duluth, Minnesota 55802-1199 218/730-5340 purchasing@duluthmn.gov

### Addendum #2 File # 19-20AA Engineering Services for DES Hot Water Customer Connections – Phase 3

This addendum serves to notify all bidders of changes to the bid documents as identified in the attachments.

Please acknowledge receipt of this Addendum by including the page in your proposal.

Posted: October 22, 2019

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## ENGINEERING SERVICES FOR DES HOT WATER CUSTOMER CONNECTIONS PHASE 3 BID NUMBER 19-20AA

## ADDENDUM #2

### **QUESTIONS RECEIVED**

**Question:** In the RFP under Section 2 Project Description and Scope of Services, there is a bullet item to "Prepare and participate in biweekly meetings with DES or as requested by its Project Manager"? Are these meeting intended for the construction phase or are biweekly design meeting also required during the design phase?

### Answer: This is during the design phase.

**Question:** In the RFP under Section 3 Specific Project Information, there is a bullet item for "Completion of the DEED Jobs Report and Worksheet for State Funded Projects. Form will be provided by DES." Will this form be provided in the RFP addendum?

### Answer: A sample DEED Jobs Report and Worksheet is attached.

**Question:** Are the Bid Results available for the Phase 1 and 2 RFP, 2017 RFP 17 0610 City of Duluth & Duluth Energy Systems – Request for Proposal for Mechanical Engineering Design and Planning? The RFP was available on the City web site, but no bid results were posted.

**Answer:** Pricing should be based on the work to be completed as stated in the Phase 3 RFP. The amount of buildings and the overall scope is different from the Phase 1 and 2 work. With that said the Phase 1 and 2 Engineering Services proposal numbers are below:

Company	Score	Cost
Karges-Faulconbridge, Inc.	83	\$89,500
LHB	81	\$148,015
Gausman & Moore	75	\$182,000
MEP Associates	69	\$262,600
AMI Consulting Engineers	63	\$168,700



### GENERAL

- I. Bid pricing shall be separated out by building.
- II. The following buildings shall only include the design for the location, installation, and primary side plumbing for the ETS. No building side conversion is required at this time:
  - a. 105 W Maurices Building
  - b. Sawmill Building
  - c. Dubh-Linn
  - d. Cosmetology Center
- III. The following buildings shall be removed from the Request for Proposal documents:
  - a. Holiday Inn Center
  - b. Zeitgeist
- IV. Alworth/Lonsdale shall include the piping to tie into the lines that run under Michigan Street (existing).
- V. See revised building list below with square footage, stories, and opinion of probable cost for each conversion.

Bldg #	Building Name	Square Footage	Floors <sup>1</sup>	OPC
4310	Wellsfargo	96,468	10	\$500,000.00
1270	MN Natl Bank	17,250	3	\$55,000.00
1260	MN Surplus	8,625	3	\$150,000.00
1241	DTA Center - Superior St	11,500	2	\$110,000.00
1250/1251	Harbour Center/Apt's	50,250	7	\$180,000.00
2400 & 2490	Northshore Bank - 125W & 131W	26,752	2	\$250,000.00
2380	Maurices 105 W sup	54,280	4	\$370,000.00
2150	Bella Grace	34,942	3	\$130,000.00
2350	US Bank	139,044	10	\$350,000.00
2950	Sawmill Furniture	5,750	2	\$250,000.00
2370	Maurices 117W	42,420	3	\$25,000.00
860	Hunter Building	19,460	3	\$95,000.00
810	Foxx Furs	5,220	2	\$90,000.00
850	Global Village	6,541	2	\$75,000.00
1300/1350	Alworth/Lonsdale	160,216	14	

1) The amount of floors does not include building basements or Michigan Street levels.

### Jobs Report and Worksheet for State Funded Projects Community Finance Unit, DEED (for contractors, engineering, architectural and other professional firms)

Pursuant to M.S. Sec. 16A.633, subd. 4, which was added during the 2012 legislative session, DEED is required to report the number of jobs created or retained during construction by Project. To enable DEED to comply with M.S. Sec. 16A.633 subd. 4, the community must submit job reports for the Project through Project completion. Each report must contain answers to all questions:

## Please answer questions 1-8 below, and complete the table if the box for question #9 in the jobs section is not marked. Complete one report and worksheet per Project.

1. Name of Person Completing This Form Pho	ne #	
2. Project Name		
3. County Your Project is Located If more than 1 county, primary county		
4. Prime Construction Contractor Name	Contractor P	hone #
If pre-design or design grant - leave prime contractor and subcontractor lines blank		
Number of Subcontractors		
Number of Administrative Firms (Engineering, Architectural, Professional, etc.)		
5. Project Start Date (mm/dd/year)	Рау	Ranges Without Fringes
When actual construction began, or if a pre-design or design grant, when that work began	Range 1	less than \$10.00 per hour
	Range 2	\$10.01 - \$15
6. Project Completion Date (mm/dd/year)	Range 3	\$15.01 - \$20
	Range 4	\$20.01 - \$25
7. DEED Grant Number: (most begin with BDPI or SPAP):	Range 5	\$25.01 - \$30
	Range 6	\$30.01 - \$35
	Range 7	\$35.01 - \$40
	Range 8	over \$40

### **Jobs Section**

Instructions: Complete table below for all entities (General, Subs and Administrative Firms) listed in Question #4 above. Do not enter data into any colored cell as they contain calculations or samples. NOTE: A small figure for FTE's would be normal for this report.

If grant was for construction purposes, report job activity beginning when construction began to end. If the grant was for pre-design or design purposes, report jobs for when the corresponding work began and ended.

\* A created job is defined as a job that did not exist prior to this project, or an unfilled position that was filled because of the project. A retained job is defined as a job that existed at a specific wage level prior to the project, but would have been lost but for the project.

8. If neither definition for retained or created jobs applies to any jobs with entities listed in Question #4 above, mark an X in this box:

*Note: If box for Question #8 contains an X, no action is needed in the table below.* 

		Job Calculator	and Report	Form			
Contractor or Firm Name: Enter Data For All Contractors and Firms Counted and Reported in Question	Job Category (Engineering, Construction, Professional or	Total Combined Worker Hours For Selected Job Category On this Project	FTE's before pro-	Percentage of DEED	*Jobs Created or Retained (see definitions	Hourly Pay Range # From Gray	FTEs for the Project
EXAMPLE: Joe's Contracting	Construction	1500	0.72	50%	Retained	4	0.36
EXAMPLE: Minnesota Engineering	Engineering	450	0.22	50%	Retained	8	0.11
			0.00				0.00
			0.00				0.00
			0.00				0.00
			0.00				0.00
			0.00				0.00
			0.00				0.00
			0.00				0.00



**CITY OF DULUTH** PURCHASING DIVISION Room 120 City Hall 411 West First Street Duluth, Minnesota 55802-1199 218/730-5340 purchasing@duluthmn.gov

### Addendum #3 File # 19-20AA Engineering Services for DES Hot Water Customer Connections – Phase 3

This addendum serves to notify all bidders of changes to the bid documents as identified in the attachments.

Please acknowledge receipt of this Addendum by including the page in your proposal.

Posted: October 25, 2019

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## ENGINEERING SERVICES FOR DES HOT WATER CUSTOMER CONNECTIONS PHASE 3 BID NUMBER 19-20AA

## ADDENDUM #3

**Question:** During the Pre-Bid Meeting held on October 10th, 2019 it was clarified that: "The date indicated in the RFQ of February 28th, 2020 to provide all building construction documents was for (Bid Package One) buildings only. The project will require construction documents to be issued through four (4) separate bid packages." Addendum No. 2 did not mention this clarification from the meeting. Are all buildings still to be completed in a single bid package to be issued on February 28th, 2020 or are multiple packages to be provided, what is anticipated scheduled dates required for each of the three (3) additional bid packages?

**Answer:** The building designs do not need to be completed as a single bid package. The initial design packages shall focus on the buildings located on the north side of Superior Street. By mid-January (January 17<sup>th</sup>, 2020) the following buildings shall be complete:

- Northshore Bank
- Foxx Furs
- Global Village
- Cosmetology Careers

By early-March (March 6<sup>th</sup>, 2020) the following buildings shall be complete:

- Hunter Building
- 105 W Maurices
- Duhblinn's
- 117 W Maurices

The remaining buildings, buildings south of Superior Street, shall all be completed by May 1<sup>st</sup>, 2020.



## **TABLE OF CONTENTS**

## Attachment D – Proposal Cover Sheet

Addendums

Table of Contents	Page 1
Cover Letter	Page 2
Addendum Acknowledgement	Page 3
Mandatory Disclosures	Page 4
Project Approach / Work Plan	Pages 4 - 8
Project Schedule	Page 9
Firm Overview	Page 10
Team Resumes	Pages 11 – 13
Cost Submittal	Separate Envelope

## **COVER LETTER**



October 29, 2019

City of Duluth Attention: Purchasing Division City Hall, Room 120 411 West 1<sup>st</sup> Street Duluth, MN 55802

Re: RFP Response to the City of Duluth for Engineering Services for Des Hot Water Customer Connections, Phase 3 Project Number 19-20AA

Thank you for the invitation to submit our qualifications for mechanical and electrical engineering services on your upcoming DES Hot Water Customer Connections project. The City of Duluth and DES have high expectations for this project and Gausman & Moore is the right consultant to help you meet your goals.

### Commitment

Gausman & Moore has assembled a team for this project that includes four shareholders in the firm. These are individuals that define and live our corporate values. We live to make our client's life easier. Asking the right questions is as important as giving the right answers. Our team looks over the horizon to ask the right questions to inform design and deliver on your project goals.

### **Right Place Right Time**

The Duluth marketplace is unique and special to Gausman & Moore. This year we celebrated having an office in Duluth for 30 years! Our long term commitment to Duluth shines through in staff members connected to the community and understanding the local culture. Having staff in Duluth means we are a moment away from stopping by your office or visiting one of the sites in the RFP.

### **Alignment of Values**

The City of Duluth works to provide the community with the best and most efficient options for energy. Gausman & Moore delivers engineering solutions that puts our client's needs first. One of the unique aspects of our team is that we strive to make your life easier.

The City of Duluth is looking for partner to convert the District Energy consumers from a steam system to a hot water system. By selecting Gausman & Moore as their partner for this project, the City will build on the long list of projects where they received exceptional service and met their project goals. We are passionate about our work and look forward to working with you on another successful project.

Sincerely,

Gausman & Moore Associates, Inc.

Paul D. Haslach, PE, LEED AP BD+C

Partner e: phaslach@gausman.com | p: 651.6604.3131 501 South Lake Avenue, Suite 210 Duluth, MN 55802



## ADDENDUM ACKNOWLEDGEMENT

Gausman & Moore acknowledges that we have received and received and reviewed the following addendums. The original pages are included and are located after Attachment D – Proposal Cover Sheet.

Addendum No. 1, date posted October 3, 2019

Pre-bid Meeting Sign-in Sheet, dated October 10, 2019

Addendum No. 2, date posted October 22, 2019

Addendum No. 3, date posted October 25, 2019

## **MANDATORY DISCLOSURES**

Per section 1-9, page 3 of 3, of the RFP documents by submitting this proposal, Gausman & Moore understands, represents, and acknowledges that:

- A. Their proposal has been developed by the Bidder independently and has been submitted without collusion with and without agreement, understanding, or planned common course of action with any other vendor or suppliers of materials, supplies, equipment, or services described in the Request for Proposals, designed to limit independent bidding or competition, and that the contents of the proposal have not been communicated by the Bidder or its employees or agents to any person not an employee or agent of the Bidder.
- B. There is no conflict of interest. A conflict of interest exists if a Bidder has any interest that would actually conflict, or has the appearance of conflicting, in any manner or degree with the performance of work on the project. If there are potential conflicts, identify the municipalities, developers, and other public or private entities with whom your company is currently, or have been, employed and which may be affected.
- C. It is not currently under suspension or debarment by the State of Minnesota, any other state or the federal government.
- D. The company is either organized under Minnesota law or has a Certificate of Authority from the Minnesota Secretary of State to do business in Minnesota, in accordance with the requirements in M.S. 303.03.



### WORK TO BE COMPLETED BY GAUSMAN & MOORE

Gausman & Moore (G&M) will prepare construction documents for the conversion of seventeen existing Duluth Energy Systems (DES) customer buildings from steam to hot water. For each building the following scope of work will be performed.

- ✓ Provide a detailed site survey for each building.
- ✓ Provide peak heating load calculations for each building (with the exception of the Alworth/Lonsdale building) for the energy transfer station heat exchanger(s) and pump sizing as applicable to each building.
- ✓ Sizing of equipment to be changed out from steam to hot water.
- ✓ Biweekly design progress meetings as requested by the DES project Manager.
- ✓ Certified construction documents and specifications indicating specific demolition necessary to complete the system conversion, new equipment, piping and appurtenances necessary to complete the system conversion, location of the service entrance and energy transfer station and equipment details and schedules.
- Additional specific building systems scope include the following:



### Wells Fargo

- Size heating water pumps for installation on the energy transfer station package.
- Replace seven air handling unit steam coils with hot water coils.
- Replace two steam cabinet unit heaters with hot water cabinet unit heaters.
- Replace twelve steam unit heaters with hot water unit heaters.
- Provide heating water piping routed to ninth floor penthouse baseboard radiation hot water loop.

### **MN National Bank**

- Provide heating water piping from existing heating water loop to new energy transfer station.
- Provide new hot water unit heater in subbasement at existing steam service entrance.

### **MN Surplus**

- Size heating water pumps for installation on the energy transfer station package.
- Provide heating water distribution piping.
- Replace approximately six steam baseboard radiation sections with hot water radiation.
- Replace three steam unit heaters with hot water unit heaters.

### **DTA Center**

- Size heating water pumps for installation on the energy transfer station package.
- Provide heating water distribution piping.
- Replace two air handling unit steam coils with hot water coils.
- Replace one steam unit heaters with hot water unit heaters.
- Replace one steam cabinet unit heaters with hot water cabinet unit heaters.
- Replace four steam baseboard radiation sections with hot water radiation.



### Northshore Bank

- Size heating water pumps for installation on the energy transfer station package.
- Provide heating water distribution piping.
- Replace three air handling unit steam coils with hot water coils.
- Replace three steam duct coils with hot water coils.
- Replace two steam unit heaters with hot water unit heaters.
- Replace one steam cabinet unit heaters with hot water cabinet unit heaters.
- Replace five steam baseboard radiation sections with hot water radiation.
- Connection of domestic water from new energy transfer station heat exchanger to existing building domestic hot water loop.

### Cosmetology

• Energy transfer station installation only.

### **105 Maurices**

• Energy transfer station installation only.

### 117 Maurices

 Connection of heat pump loop from new energy transfer station to existing building heat pump loop.

### **US Bank**

- Size heating water pumps for installation on the energy transfer station package. Possible site stick built energy transfer station.
- Provide heating water distribution piping to make up air unit on the roof.
- Connection of heat pump loop from new energy transfer station to existing building heat pump loop.
- Connection of radiation loop from new energy transfer station to existing building radiation loop.
- Replace make up air handling unit steam coils with hot water coils.
- Replace steam humidifier with electric steam humidifier in make-up air unit system.

### Sawmill

• Energy transfer station installation only.

### Foxx Furs

- Size heating water pumps for installation on the energy transfer station package.
- Provide heating water distribution piping.
- Replace five steam baseboard radiation sections with hot water radiation.
- Provide one new hot water radiation section in basement.
- On second floor, replace one steam unit heater and section steam radiation with new hot water radiation

### **Global Village**

- Size heating water pumps for installation on the energy transfer station package.
- Provide heating water distribution piping.
- Replace three steam unit heaters with hot water unit heaters.
- Provide new hot water unit heater in basement.

### Harbor View Apartments/Center

- Size heating water pumps for installation on the energy transfer station package.
- Provide heating water distribution piping.
- Connection of two heat pump loop from new energy transfer station to existing building heat pump loops.
- Replace two steam unit heaters with hot water unit heaters.
- Replace four steam cabinet unit heaters with hot water cabinet unit heaters.
- Replace one steam baseboard radiation sections with hot water radiation.

### Dubh Linn Pub

Energy transfer station installation only.



### **Bella Grace**

- Size heating water pumps for installation on the energy transfer station package.
- Provide heating water distribution piping.
- Replace one air handling unit steam coils with hot water coils.
- Replace one steam unit heaters with one hot water unit heaters.
- Replace steam cabinet unit heaters with hot water cabinet unit heaters in south west stair tower.
- Connect new hot water piping to existing hot water loops feeding the mezzanine air handling units and building baseboard radiation loop.

### Alworth/Lonsdale

- Route primary DES hot water mains through the building to feed Alworth/Lonsdale and existing connections feeding Harbor View Apartments/Center.
- Connection of heat pump loop from new energy transfer station to existing building heat pump loop.

### **Hunter Building**

- Size heating water pumps for installation on the energy transfer station package.
- Provide heating water distribution piping to make up air unit, cabinet unit heaters and baseboard radiation.
- Connection of heat pump loop from new energy transfer station to existing building heat pump loop.
- Replace make up air handling unit steam coil with hot water coil.
- Replace two steam cabinet unit heaters with hot water cabinet unit heaters.
- Replace one steam baseboard radiation sections with hot water radiation.

### WORK EXCLUDED FROM OF G&M's SCOPE:

- Architectural or structural work associated with the removal or installation of equipment.
- Construction phase services with the exception of a reasonable amount of contractor RFIs.
- Front end specification information.
- Permit submittal and associated fees.
- Bid solicitation.
- Specifications or testing for removal of hazardous materials.
- Upgrades to electrical service or distribution equipment. It is assumed that adequate electrical power and distribution will exist at each site to power new and replaced mechanical equipment.
- Reimbursables are not included in the base proposed fees.



### **DESIGN TEAM**

Our primary design team will consist of:

Paul D. Haslach, PE, Partner-In-Charge. Paul will oversee the project from a high level keeping track of the project team's progress and overall status as well as providing mechanical quality control reviews. He will also be the Mechanical Engineer of Record.

### John M. Samuelson, PE, Project Manager.

John will be in charge of overseeing the day to day project management of the team and will be involved in the mechanical design aspects and production of the design documents.

### Kalysta J. Davis, PE, Mechanical Job Captain.

Kalysta will be in charge of the overall drawing production, mechanical design aspects and will be G&M's "boots on the ground" for quick access as needed to gather information at the buildings and answering requests for information.

### Dave T. Blume, PE, Electrical Project Manager.

Dave will provide electrical design, electrical quality control reviews and will be the Electrical Engineer-of-Record.

### Lyssa A. Hattenberger, Electrical Job Captain.

Lyssa will be in charge of the electrical design and drawing production.

In addition to the primary design team, our 40+ staff are available for support of the design team.

# STEPS GAUSMAN & MOORE WILL TAKE TO PERFORM THE MECHANICAL SYSTEM CONVERSIONS DESIGNS

Gausman & Moore's approach to the DES Hot Water Customer Connections project will be to organize our team to efficiently produce biddable documents for the installation the 17 building energy transfer station and conversions of the buildings from steam to hot water heating systems. We understand the importance of meeting the project schedule to produce documents for contractor bidding in a timely manner. Completion of each building project is critical for building owners to have heating available for the 2020-2021 heating season.

Following receipt of authorization for G&M to proceed we will work with DES to gather and review all of the documents that DES has prepared and can make available for our use. Any additional information needed will be requested from DES. We will prepare a schedule of building visits for the convenience of the building owners or managers and the efficiency of our team's work. The building visits will be scheduled to coincide with the design packages as indicated by DES. Once the first design package surveys are complete, design on those buildings will commence while surveys are completed for the following packages. This will allow the designs for packages 2 and 3 to start immediately as the previous package is completed and put out to bid.

Peak heating load calculations will be completed using computer software for each building. The heating load calculations will be an entire building load and will not be broken out per space unless a specific space within the building warrants this. The energy transfer station preliminary sizing will be reviewed and information provided to DES for any sizing adjustments required based on the heating load calculations.



G&M will prepare architectural backgrounds for the areas where the energy transfer stations will be located and other areas of the building that are affected by the conversion work. These backgrounds will be generated from floor plans received from DES and/or the building Owners. Once the physical sizes of the energy transfer station skids are finalized, the pathways into the associated building will be reviewed to determine any access issues. If an access issues is found the location and installation pathway will be reviewed with DES to determine the best course of action. Pipe routing to new hot water equipment will be indicated on the plans. Any issues found with replacement of steam to hot water piping and equipment will also be discussed with DES to determine the best and most cost effective solution.

Electrical power to serve circulating pumps and controls will be located during the site survey and will be included on the mechanical design drawings.

Preliminary plans will be provided to DES for review and comment prior to issuing for bid. Final certified engineering drawings will be provided to DES for bid issue through the City of Duluth.

### SYSTEMS OR SERVICES REQUIRED FROM DES

The following are items G&M anticipates to need from DES in preparation of the construction documents.

- Electronic or paper plans of the floor plans for each building where work is to be conducted, if available (electronic preferred). It is assumed that some sort of plans will be available and creation of floor plans from field measurements will not be required.
- Aid in gaining access to buildings for site surveys and information gathering.

"Gausman & Moore's detail and thoroughness needs to be instituted more regularly in an industry that too often ignores these characteristics.

Adam DePaul, Project Manager Jones Lang LaSalle



## **PROJECT SCHEDULE**

### Package 1: North Shore Bank, Foxx Furs, Global Village, Cosmetology

Date	Task
11/13/19	Notice of authorization to proceed
11/18/19	Project kick-off meeting with DES
11/18/19 – 11/22/19	Site surveys
11/25/19 – 12/20/19	Load Calculations, CD documents, any additional building survey work required
12/20/19	Submit progress drawings to DES for review
1/3/20	Receive DES review comments
1/6/20 – 1/10/19	Finalize Package 1 construction document
1/10/20	Issue Package 1 for bid (Note: issued prior to DES schedule of 1/17/20)

### Package 2: Hunter Building, 105 W Maurices, Dubh Linn Pub, 117 W Maurices

Date	Task
12/16/19 - 12/20/19	Site surveys
12/23/19 - 1/24/20	Load Calculations, CD documents, any additional building survey work required
1/24/20	Submit progress drawings to DES for review
2/7/20	Receive DES review comments
2/10/20 - 2/14/20	Finalize Package 2 construction document
2/14/20	Issue Package 2 for bid (Note: issued prior to DES schedule of 3/6/20)

## <u>Package 3</u>: Wells Fargo, MN National Bank, MN Surplus, DTA Center, US Bank, Sawmill, Harbor View Apartments/Center, Bella Grace, Alworth/Lonsdale

Task
Site surveys
Load Calculations, CD documents, any additional building survey work required
Submit progress drawings to DES for review
Receive DES review comments
Finalize Package 3 construction document
Issue Package 3 for bid



## **FIRM OVERVIEW**

Gausman & Moore operates as a full-service mechanical and electrical consulting engineering firm. The company was founded in 1935 based on three principles: exceptional client service, intelligent engineering, and the right expertise. Our Duluth office was established in 1989.

Intelligent engineering leads to innovation. Striving to capitalize on the capacity of building modeling software, Gausman & Moore developed a productivity package to complement Revit. The productivity package enhances discipline coordination, reduces redundant work efforts, provides a common database, and uses manufacturer's data readily available on the web. Our clients benefit directly from the intelligence built into every set of project documents.

Design services are provided for industrial, health care, retail, institutional, corporate, and government clients throughout the United States. Specialized services include: sustainable design, commissioning, fire protection and smoke control, energy audits, forensic studies, arc flash studies, and mission critical power systems design.



St. Louis County Government Service Center - Duluth, MN

Gausman & Moore distinguishes itself in the industry by providing unmatched responsiveness during the delivery of service to our clients. We are committed to fully serving our clients and take pride in developing strong, collaborative relationships with owners, architects, and contractors.

Our people – honest, hardworking, professional, and energetic – characterize Gausman & Moore. We have Professional Engineers licensed in all 50 states and the District of Columbia. Our 50 person staff includes 15 licensed Professional Engineers and nine graduate engineers, supported by 25+ technical staff. Our team also includes 15 LEED Accredited Professionals. Through their dedication and integrity, our team continues to embrace the principles of our founders and is committed to meeting clients' expectations on time, every time.

"We can no longer imagine developing a project without taking an integrated design approach. The interdisciplinary thinking that the team brought to the project has smoothed out the bumps and we are getting a much better product."

Tony Mancuso, Property Management Director St. Louis County Government Services Center Renovation Project

### **Our Commitment**

It is our philosophy to be responsive to our clients and sensitive to the architecture, using appropriate technology to design efficient, cost effective systems that are safe, easily maintained, and sensitive to the environment.

Duluth, MN 501 South Lake Avenue Suite 210 Duluth, MN 55802 218.722.2555 St. Paul/Minneapolis, MN Headquarters 1700 Highway 36 West Suite 700 Roseville, MN 55113 651.639.9606

#### Los Angeles

26145 Carl Boyer Drive Suite 205 Santa Clarita, CA 91350 661.291.1978



## **TEAM RESUMES**



### Education

University of Minnesota, Minneapolis, MN BS Mechanical Engineering

### **Registrations**

Licensed Mechanical & Fire Protection Engineer, Minnesota No. 24488

LEED Accredited Professional with a specialty in Building Design & Construction

### **Professional Associations**

American Council of Engineering Companies

American Society of Heating, Refrigerating and Air Conditioning Engineers

American Society of Healthcare Engineering Society of Fire Protection Engineers

U.S. Green Building Council

## PAUL D. HASLACH, PE, LEED AP BD+C

Partner-in-Charge

Mechanical | Plumbing | Fire Protection Engineer

Mr. Haslach brings his knowledge of all types of mechanical and fire protection systems to solve many unique design problems for military, state and local governments, residential, commercial, institutional, and retail clients.

Paul will oversee the project team from a high level keeping track of the project team's progress and overall project status, as well as providing mechanical quality control review. Paul will be the Mechanical Engineer-of-Record.

### Experience

**Community Memorial Hospital** Cloquet, MN

**Duluth Tree Farm** Vehicle Storage Facility Duluth, MN

**Duluth Zoo** Boiler & HVAC Replacement Duluth, MN

**Frandsen Bank** Duluth, MN

**Essentia Health** Behavior Health Clinic Superior, WI

**Essentia Health – Duluth Clinic** 1<sup>st</sup> Street Building Duluth, MN

Essentia Health Orthopedics Urgent Care Duluth, MN

Orthopaedics Associates of Duluth Hermantown, MN **Maurices Headquarters** 

Duluth, MN

**St. Luke's Chequamegon Clinic** Ashland, WI

**St. Luke's Lake View Hospital** Office Renovation Two Harbors, MN

**St. Luke's Miller Creek Clinic** Hermantown, MN

**St. Luke's Hospital of Duluth** Duluth, MN

**St. Louis County Government Service Center** Duluth, MN

**St. Louis County Government Service Center** Virginia, MN

Target Stores Nationwide

UnitedHealth Group Nationwide



## **TEAM RESUMES**



## JOHN M. SAMUELSON, PE, LEED AP BD+C, CPPM

Role Project Manager

**Education** Bachelor of Science, Mechanical Engineering and Applied Mechanics, North Dakota State University, Fargo, ND

John is an accomplished, motivated mechanical engineer with a proven record of project leadership, cross-functioning team collaboration and technical expertise working on systems assessments and commissioning. John is also a Certified Professional Project Manager.

John will be in charge of overseeing the day to day project management of the team and will be involved in the mechanical design aspects and production of the design drawings.

### Experience

Amazon Distribution Center, Peer Review Shakopee, MN

**Bloomingtdales Stanford HVAC,** Peer Review Lawrence, IN

Macy's, MEP Assessment Minneapolis, MN

**Rigedale Center**, Building #2 Ironwood, MI

Simon Properties Houston Galleria Commons, Renovation Houston, TX

**Sno-King Ice Arena** Snoqualmie, WA

Target Stores | Target Super Stores Nationwide

University of Minnesota Biological Sciences St. Paul, MN



## KALYSTA DAVIS PE, CGD-IT, LEED GREEN ASSOCIATE

### Role

Mechanical Job Captain

**Education** Bachelor of Science Mechanical Engineering, Michigan Technological University, Houghton, MI

As a licensed professional mechanical engineer with over 6 years of experience, Kalysta has worked on teams designing mechanical systems for new construction and renovations in Commercial, Government, Industrial and multiuse buildings.

Kalysta will be in charge of the overall drawing production, mechanical design aspects, and will be G&M's "boots on the ground" for quick access as needed to gather information at the buildings and answering requests for information.

### Experience

Ashland Ford Expansion Ashland, WI

**City of Duluth**, Vehicle Storage Facility Duluth, MN

**Community Memorial Hospital** Cloquet, MN

**Ecumen Detroit Lakes** Detroit Lakes, MN

**Essentia Health**, Orthopedics Urgent Care Duluth, MN

**Maurice's Headquarters** Duluth, MN

**St. Louis County Government Service Center** Duluth, MN

**St. Louis County Government Service Center** Virginia, MN



## **TEAM RESUMES**



## DAVE T BLUME, PE, LEED AP BD+C



## LYSSA A. HATTENBERGER LEED AP BD+C

Role	Electrical Project Manager and Electrical Engineer-of-Record
Education	Bachelor of Science, Electrical Engineering, Michigan Technological University,
	Houghton, MI

Mr. Blume is the Electrical Department Head and an Electrical Project Engineer with 26 years of experience working on government, educational, industrial, and commercial projects from new construction, assessments, and renovations.

Dave will provide electrical design, electrical quality control reviews, and will be the Electrical Engineer-of-Record.

### Experience

Habitat for Humanity Office Building St. Paul, MN

MoZaic East Office Building Minneapolis, MN

Maurices Headquarters Duluth, MN

Norman Pointe, GSA Offices Bloomington, MN

**Prudential North Center Plymouth Office** Plymouth MN

**St. Louis County Government Service Center** Duluth, MN

**St. Louis County Government Services Center** Virginia, MN Role Electrical Job Captain

**Education** Associate of Applied Science in Electrical Construction Design and Management, Dunwoody Technical Institute, Minneapolis, MN

Lyssa has over 20 years of experience as a professional electrical designer working on electrical and lighting systems for new construction and renovations in Education, Government, Commercial, Healthcare, Hospitality, and multi-use buildings.

Lyssa will be in charge of the electrical design and drawing production.

### Experience

Ashland Ford Expansion Ashland, WI

**City of Duluth**, Vehicle Storage Facility Duluth, MN

Maurice's Headquarters Duluth, MN

Northeast Service Cooperative Mountain Iron, MN

Northern MN Service Facility Buhl, MN

**St. Louis County Government Service Center** Duluth, MN

**St. Louis County Government Service Center** Virginia, MN



October 29, 2019

City of Duluth Attn: Purchasing Division City Hall, Room 120 411 West 1<sup>st</sup> Street Duluth, MN 55802

Re: Cost Submittal for City of Duluth Response for Engineering Services for Des Hot Water Customer Connections, Phase 3 Project Number 19-20AA

BUILDING	BUILDING DESIGN FEE
Wells Fargo	\$ 35,000
MN National Bank	\$ 3,200
MN Surplus	\$ 7,800
DTA Center	\$ 7,300
Northshore Bank	\$ 15,400
Cosmetology	\$ 2,600
105 Maurices	\$ 2,600
117 Maurices	\$ 3,500
_US Bank	\$ 16,200
Sawmill	\$ 2,600
Foxx Furs	\$ 5,800
Global Village	\$ 5,300
Harbor View Apartments/Center	\$ 7,500
Dubh Linn Pub	\$ 2,600
Bella Grace	\$ 8,500
Alworth/Lonsdale	\$ 5,000
Hunter	\$ 7,500

TOTAL \$ 138,400

Sincerely,

Gausman & Moore Associates, Inc.

rand

Paul D. Haslach, PE, LEED AP BD+C Partner e: phaslach@gausman.com | p: 651.604.3131 501 South Lake Avenue, Suite 210 Duluth, MN 55802