EXHIBIT A

PROFESSIONAL ENGINEERING SERVICES AGREEMENT

ENGINEER & CITY OF DULUTH

THIS A GREEMENT, 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: LHB, Inc.

Address: 21 W. Superior St., #500, 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 455-035-5530, RED-RUS-2004; Project # 2004; and Resolution No. 21-0588R, passed on August 16, 2021.

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

Project Number: 2004

Project Name: East 1st Street and East 1st Street Alley Reconstruction Project

Project Description: Design and Construction Services for the East 1st Street and East 1st Street

Alley Reconstruction Project

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.

	<u>Phase</u>	<u>Description</u>
	A.	Study and Report Phase
\boxtimes	B.	Preliminary Survey Phase
\boxtimes	C.	Preliminary Design Phase
\boxtimes	D.	Final Design Phase
\boxtimes	E.	Bidding Phase
\boxtimes	F.	Construction Survey and Layout Phase
\boxtimes	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's hall 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
	Included in this Agreement 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) Advise Regarding Additional Data

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) Report Preparation

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) Report Presentation

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 A.

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
	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) Boundary Survey

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 A.

5) Completion Time

The preliminary survey phase shall be completed and submitted by November 1, 2021.

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) Revised Project Costs

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

3) Preparation of Grants; Environmental Statements

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 juris diction over the anticipated environmental impact of the Project.

4) Renderings and Models

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) Document Presentation

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) Supplementary Duties

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 A.

8) Completion Time

The Preliminary Design Phase shall be completed and report or plan submitted by December 1, 2021.

D. FINAL DESIGN PHASE

\boxtimes	Included in this Agreement
	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 juris diction 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) <u>Contract Document Preparation</u>

Prepare final plans and specifications for the Project, which shall include incorporation of plans and specifications prepared by subconsultants. Engineer shall as sist in the preparation of contract documents. Engineer shall prepare all necessary project/plan review forms checklists, labor compliance requests, wage determination requests, bidding documents and other forms to assist the City with procuring Bids. Engineer shall review all plans and specifications and supporting documentation and resolve any inconsistencies in said documents being incorporated into the Contract prior to bid. 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) Real Estate Acquisition: Legal Description

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 A.

8) Completion Time

The Final Design Phase shall be completed and contract documents submitted by February 14, 2022.

E. BIDDING PHASE

\times	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) Evaluation of Bids

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

5) Supplementary Duties

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 A.

6) Completion Time

The bidding phase shall be completed by March 31, 2022.

F. CONSTRUCTION SURVEY AND LAYOUT PHASE

	\boxtimes	Included	in this	Agreement
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☐ 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) Accuracy

The Engineer's hall 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 replacements hall 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 A.

5) Completion Time

The construction survey & layout phase shall be completed by April 15, 2022.

G. CONSTRUCTION ADMINISTRATION AND INSPECTION PHASE

\boxtimes	Included in this Agreement
	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) Warranty Inspection

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) Review of Technical and Procedural Aspects

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) Conferences and Meetings

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) Records

- 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 is sued 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

Is sue all instruction of the City to the contractor(s); is sue 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 contractor(s) relating 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) <u>Determination of Substantial Completion</u>

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's hall 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 A.

18) Completion Time

The construction administration and inspection phase shall be completed by December 1, 2022.

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 claimarises 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 laws uits 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 A GREEMENT

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. TOTALNOT TO EXCEED:

All payments under this Contract are not to exceed Four Hundred Fifty-Four Thousand, Eighty and 00/100 Dollars (\$454,080.00).

SECTION VI. SPECIAL PROVISIONS

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

1) Exhibit A, Engineer's Hourly Rates and 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	LHB, INC.	
By:	By:	
Mayor		
	Its:	
Attest:	Title of Representative	
By:	Date:	
City Clerk		
Date:		
Countersigned:		
City Auditor		
Approved as to Form:		
City Attorney		



August 4, 2021

Duncan Schwensohn, Senior Engineer City of Duluth – Public Works & Utilities 411 West First Street Room 240 Duluth, MN 55802

PROPOSAL FOR PROFESSIONAL SERVICES EAST 1ST STREET AND EAST 1ST STREET ALLEY RECONSTRUCTION PROJECT

LHB is pleased to provide this proposal for professional design services and looks forward to assisting the City by providing engineering design services to complete the required street and utility designs for work at 1st Street and the East 1st Street Alley Reconstruction Project. LHB is uniquely qualified to assist the City with this project: we previously completed borings and a structural assessment of the inplace stone retaining wall at lower side of 1st Street; LHB designed the previous reconstruction of 1st Street along this project segment and we've recently completed design work and survey in the project area which will gain efficiency and save project design costs.

PROJECT UNDERSTANDING

LHB will provide topographic survey, engineering design and construction observation/staking for the proposed improvements along 1st Street from 5th Ave E to 9th Ave East and on the 1st Street Alley from the end of City Project No. 1842 to 7th Avenue East.

Work is summarized as follows:

1st STREET

First Street is a Municipal State Aid Streets (MSAS 129) located in the heart of downtown Duluth. Within the project limits 1st Street serves as a minor collector with ADTs of about 3,700 vpd. The roadway consists of 12-ft bituminous driving lanes with approximately 9-ft parking lanes on each side. The roadway profile grades vary between 2% to 4% with a vertical crest near 6th Avenue East. The roadway corridor is characterized by a combination of residential houses, commercial businesses, and healthcare facilities. The horizontal alignment is straight with a 33-ft right-of-way. The inplace pavement section consists of 5-inches of bituminous over 7-inches of aggregate base and 24" of granular base.

The proposed project will remove and replace the inplace stone masonry retaining wall located on the lower (south) side of 1st Street near its intersection with 6th Avenue East. The inplace retaining wall is approximately 300-ft long and supports the roadway. The proposed structure will be similarly designed to retain the roadway and associated infrastructure. We anticipate the proposed retaining wall will consist of cast-in-place retaining wall with spread footings supported on bedrock, native soil or a combination of both. A new railing is to be provided along the top of the retaining wall. LHB will coordinate the new wall design and details with the two properties at 620 and 624 East First Street. In the case of the former, the sidewalk in front of the building acts as a bridge from the existing wall to the building threshold. In the case of the latter the existing retaining wall appears to terminate and/or tie into the existing building foundation. These detailed areas will be fully vetted and accommodated during final design and the plans will account for required staged construction in order to maintain property access during construction.

Duluth, MN | Minneapolis, MN | Cambridge, MN | Superior, WI

Within the limits of the work associated with replacing the retaining wall the City will reconstruct sidewalks, curb and gutter, and aprons. The City will also replace the existing 12-inch cast iron watermain that dates from 1880's within the limits of the retaining wall work and tie-in into the recently complete main just to the west of the project. All new water mains will be HDPE and LHB anticipates the new main will be 20-inch to conform with the recently completed work that extended the main 500-ft to east of 4th Avenue East. New water services will be connected to the watermain and extended to the City right-of-way. A temporary water service plan will be prepared to maintain water service during construction. LHB has working knowledge of the City's water main design requirements and can demonstrate more than 10,000 Lin Ft of 8-inch or larger HDPE water main design experience within the last 5-years. We also understand the City intends to evaluate the existing storm sewer system including storm sewer leads, trunk mains, catch basins, and structures. Pending City confirmation of the system condition, our proposal assumes complete removal and replacement of the existing storm sewer system.

Detailed traffic control plans will be prepared to coordinate the work with other projects in the area including ongoing work at the Vision Northland campus. New signing and pavement markings will be provided along the project corridor.

1st STREET ALLEY

The First Street alley segment is anticipated to begin approximately 500-ft west of 4th Ave East at the termination of the work associated with City projects 1842 and 1863. Beginning at this point, the overall length of the project is approximately 1000-ft to the project end point at 1st Street and 7th Avenue East. The alley has a 20-ft right-of-way and is a combination of bituminous and concrete. The alley corridor contains buried TV, telephone, vitrified clay sanitary, steam and gas utilities.

The project will reconstruct the alley roadway surface to City standards. The inplace sanitary main will be lined and sanitary laterals will be removed and replaced to the alley right-of-way. Complete reconstruction of the alley storm sewer including mains, leads, catch basins and structures will be provided.

Street signage and new pavement markings will be provided. Detailed traffic control plans and phasing and staging plans will be required to coordinate the work with other projects in the area and the work at 1st Street.

SCOPE OF SERVICES

LHB will perform design for each project segment as described. The following describes the project work plan subject to the location specific project scope descriptions / modification listed above and as noted in the project Assumptions.

LHB will provide engineering project management to administer the project design and construction phases. The project manager will provide the City with regular project status updates regarding progress, schedule, and budget; establish and schedule meetings to address coordination needs and solicit input; and identify issues and resolutions. The project manager will implement and monitor the project QA/QC plan to ensure plan quality. LHB will facilitate design and coordination meetings with City staff including agenda preparation and minutes. We will work proactively with the City to define and prioritize project goals, anticipate potential obstacles to successful completion, and work aggressively to maintain project schedules to deliver a successful project.

1. Initial Site Visit and Consultations

LHB will meet with City of Duluth representatives to review project scope and complexity, design criteria, related requirements, view existing conditions, gather data from the City engineering files and previously prepared reports. Additional consultations will, where necessary, clarify the technical requirements and objectives of the contract and may be in the form of letters, emails and/or telephone conversations.

LHB will provide documentation of meetings and data provided. LHB will ascertain the applicability of information provided, review data for completeness, and notify the City of any additional data required.

The development of an accurate base map is critical for the success of your project. All our planning decisions, permitting, right-of-way acquisition, and plan development will be based on this map. We will develop a plan to gather the data

appropriate for the final design engineering. GIS data and digital mapping will be supplemented as needed with in-field measurements. LHB will utilize GPS and traditional total workstation equipment to perform the field topographic survey. The survey will be completed with City standard datum and quality control checks. We will perform a Design Locate one-call for the project corridor.

We will implement project utility coordination in accordance with the 13-step process outlined in MnDOT's Utility Accommodation and Coordination Manual to ensure the timely and proactive identification and verification of utilities within the project work corridors and to provide any needed relocations or adjustments. Work includes the preparation of the utility identification, verification and relocation meetings correspondence and materials; completion of the project utility certification; coordination with the City and utility owners; and incorporating utility information into the final plans.

2. Plans and Specifications (Preliminary & Final Design)

LHB will prepare construction drawings for the project including street work, retaining walls, intersection and connecting street/entrance work, replacement of water and storm water utilities and sanitary lining and laterals as described above. Preliminary design will from a conceptual state to a practical solution that will meet the goals of the project. LHB will complete all roadway and utility designs, profiles and typical sections all in accordance with City and State Aid Design requirements to the extents necessary to determine construction limits, utility impacts, and ultimate estimated costs. Final design will culminate in the completion and integration of final construction plans for all the required components of the overall project including grading plans and design, construction staging, stormwater and erosion control, utilities, and retaining wall design. LHB will provide traffic control plans to address the construction needs of the project and address traffic and access staging needs. Final design will also include preparation and submittal of 30%, 60% and 90% plans for City review and input.

Drawings will include all details, plans and specifications necessary for all work as required by appropriate approval agencies. The specification preparation will also include appropriate sections for bidding, bonding, agreements, general and special provisions, and other appropriate contract provisions as well. These sections will be developed in accordance with City and state bonding fund requirements. The drawings will include necessary site maps, plans, elevations, sections, details, and notes as needed or necessary to adequately show, explain and describe the features of the project.

The contract drawing sequence will follow the standard City of Duluth format. The drawings will be prepared to meet all City and Minnesota State Aid Standards. Variances from standards, if required, will be prepared and submitted for approval.

LHB will coordinate with the power company and any telecommunication companies with facilities in the right of way in the utility coordination task.

We have included geotechnical subconsultant costs for geotechnical site investigation related to the street and wall designs.

3. Cost Estimate

LHB will provide preliminary cost estimates for budgeting purposes as required. Following the completion of the plans and specifications a quantity takeoff and a detailed itemized construction cost estimate for each individual phase of the project will be provided.

4. Project Bidding

Upon completion of plans and specifications, LHB will provide all documents and services to provide for bidding and will assist with award for construction. LHB will prepare/ answer any questions brought up during bidding.

5. Construction Administration

Upon completion of plans and specifications, LHB will provide all documents and services to provide for construction inspection, construction staking, and inspection for final completion and acceptance of the street and utility improvements as outlined in the RFP. Construction Administration Services provided by LHB will include the following: engineering observation,

progress reports, shop drawing review, materials testing (sub-consultant task) and project management, including the completed record drawings and final records.

6. Construction Inspection

LHB will provide a certified construction inspector with the necessary MnDOT and City training certifications to provide construction inspection. Per the RFP our proposal assumes 60 hours per week of inspection.

ASSUMPTIONS

- For retaining wall design, ordinary aesthetic levels are assumed. No architectural surfacing (form liner), inset panels or other aesthetic details will be required.
- No portion of the existing retaining wall is assumed to remain in place unless it is critical to the support of other structures.
- Barrier atop the new retaining wall will be a combination of lower concrete barrier with a metal railing provided to bikeway height.
- Right-of-way acquisition needed for retaining wall construction are not included in this proposal. We have included
 the preparation of exhibits for five (5) parcels located along the extents of the wall for easements to be obtained and
 executed by the City.
- Environmental services (Phase 1 / Phase 2) are not included in this proposal.

SCHEDULE

LHB is prepared to move forward with the design upon notice to proceed by the City. We acknowledge and are committed to meeting the project timeline outlined in the City's RFP.

PROPOSED FEE

Our detailed work plan and associated costs are attached. Please review and let us know if you have any questions or would like us to revisit our work plan or assumptions.

We appreciate the opportunity to provide you with our services. We look forward to working with you. Please contact me at 218.279-2474 if you have any questions.

LHB, INC.

Brad Scott, Principal

c: LHB Project No. 210497

Attachments: Work Plan & Cost Proposal

AD 80

WORK PLAN

PROJECT NAME 1ST STREET & ALLEY
CLIENT CITY OF DULUTH
PREPARER LHB

PROJECT NUMBER **210497**DATE **08/04/2021**

COST PROPOSAL

Т						LHB								
		Brad	Megan	Adam	Jon	Chris	Nathan	Steven	Paul	Tony	-			
		Scott	Goplin	Bese	Siiter	Miller	Bruno	Hohenstein	Vogel	Hanson			TOTAL	TOTAL
													LABOR	COST
Vork		Project	Project	Utility	Structural	Structural	Drainage			Survey	TOTAL	TOTAL	COST PER	PER
Γask [Description	Manager	Engineer	Engineer	Lead	Engineer	Lead	Technician	Land Surveyor	Tech	HOURS	EXPENSES	TASK	DELIVERABLE
1.00	INITIAL SITE VISITS AND CONSULTATIONS	16	3	30	4 (6	8	8	83 12	90	25	5 \$ -	\$ 28,291.00	<u> </u>
1.01	Review Information / Initial Site Visit / Meeting Minutes	6	8	6		6	6	5	6				\$ 5,064.00	
1.02	(4) Status Meetings with City	6		8 4	1		2	2					\$ 2,376.00	
1.03	Gopher State One Call & Utility Verification	4	1	16					32				\$ 6,236.00	
2.00	Site Survey PLANS & SPECIFICATIONS	82	2 27	71 120	10	0 160	228	2	85 8	90	192	4 \$ 13,000.00	\$ 14,055.00 \$ 233,657.00	
2.00	Title Sheet (1 Sheet)	02	21	2	40	100	220	90	00 0	30	1924	4 \$ 15,000.00	\$ 253,657.00	
2.02	Statement of Estimated Quantities (2 Sheets)	,	, 1	20 20			20						\$ 4,370.00	•
2.03	Construction Notes & Standard Plates (1 Sheet)	1		2	[\$ 439.00	
2.04	Tabulations (4 Sheets)	4	. 4	10			40)	60				\$ 17,800.00	
2.05	Typical Sections (2 Sheets)	4	. 1	16					24				\$ 5,380.00	
2.06	Construction Details (15 Sheets)	5	1	15					45				\$ 7,670.00	
2.07	Removal Plans	10	$\frac{1}{4}$	10				8	80				\$ 15,590.00	
2.08	Construction Plans and Profiles (8 Sheets - 1" = 40')	20	8	80 80			120	16	60				\$ 47,380.00	
2.09	Geotechnical Site Investigation (Subconsultant)											\$ 13,000.00		\$ 13,000.00
2.10	Temporary Water Plans	2	2	16	5				40			,	\$ 4,630.00	
2.11	Retaining Wall Plans	2			40	160		44	40				\$ 74,230.00	
2.12	Erosion and Sediment Control Plan						8	3	8				\$ 1,936.00	
2.13	Drainage Proffiles & Tab	2	2	8			40)	8				\$ 7,662.00	
2.14	Traffic Control and Permanent Signing/Pavement Markings	12	. 2	24					60				\$ 11,688.00	
2.15	Cross Sections (50-ft intervals)	10) 3	30					60				\$ 12,130.00	
2.16	Special Provisions	8	3	4	1								\$ 1,928.00	
2.17	Right-of-Way Exhibits (Assume 5 Exhibits & Legals for Easement related to wall)								8	30			\$ 3,760.00	\$ 3,760.00
3.00	COST ESTIMATE	8	3 1	12	2 12	2 0	2	2	0 0	0	3	6 \$ -	\$ 5,574.00	\$ 5,574.00
3.01	Project Estimates at Preliminary, 30%, 60%, 90%, 95% & 100%	8	3 1	12 2	2 12	2	2	2					\$ 5,294.00	
1.00	PROJECT BIDDING	2	?	4	2 (0	0		0 0	0		8 \$ -	\$ 1,158.00	
1.01	Bidding Assistance	2	2	4	2								\$ 878.00	-
5.00	CONSTRUCTION ADMINISTRATION	80		0	0	0	0		0 0	0	8	0 \$ 30,000.00		
5.01	Construction Administration (20 wks)	80)										\$ 14,000.00	\$ 14,000.00
5.02	Materials Testing (Subconsultant)								••			\$ 30,000.00		
5.00	CONSTRUCTION INSPECTION	0		0		0	0	120		0	120	0 \$ -	\$ 128,400.00	
5.01	Construction Inspection (20 wks x 60 hrs / wk)					+		120	00				\$ 128,400.00	\$ 128,400.00
7	TOTAL HOURS	188	31	17 128	58	8 166	238	226	68 20	120	230	3	SUMMARY	
(COST PER HOUR	\$ 175	\$ 13	2 \$ 140	\$ 170	\$ 125	\$ 135	\$ 10	7 \$ 170	\$ 80			TOTAL LABOR	\$ 411,080.00
	OUT LITTIOUT	Ψ 173	Ψ 13.	Δ Ψ 140	170	Ψ 123	Ψ 100	Ψ 10	170	Ψ 00				
	TOTAL COST	\$ 32,900	\$ 41,844	4 \$ 17,920	\$ 9,860	\$ 20,750	\$ 32,130	\$ 242,67	3,400	\$ 9,600			TOTAL FEE	\$ 454,080
	COST PER HOUR TOTAL COST	\$ 175 \$ 32,900		2 \$ 140 4 \$ 17,920		\$ 125 \$ 20,750			7 \$ 170 6 \$ 3,400					TOTAL LABOR TOTAL EXPENSES TOTAL FEE