PROFESSIONAL ENGINEERING SERVICES AGREEMENT

LHB, INC. & 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: **LHB, Inc.**
Address: **21 West Superior Street, Suite 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 **535-500-1945-5310; UtilB-2208**; Project # **2208**; and Resolution No. **24-0823R**, passed on **October 28, 2024**.

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

Project Number: **2208**
Project Name: **Palm Street Stormwater Project**
Project Description: **Design work for the Palm Street Smart Pond for stormwater improvements.**

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
☐	A.	Study and Report Phase
☐	B.	Preliminary Survey Phase
☐	C.	Preliminary Design Phase
☒	D.	Final Design Phase
☐	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

☐ Included in this Agreement
☒ Not included in this Agreement

The Engineer shall:

1) City's Requirements

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) Technical Analysis

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 B.

8) Completion Time

The Study and Report Phase shall be completed and report submitted by **N/A**.

B. PRELIMINARY SURVEY PHASE

☐ 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 B.

5) Completion Time

The preliminary survey phase shall be completed and submitted by **N/A**.

C. PRELIMINARY DESIGN PHASE

☐ 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 jurisdiction 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 B.

8) Completion Time
The Preliminary Design Phase shall be completed and report or plan submitted by **N/A**.

D. FINAL DESIGN PHASE

☒ 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 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 final plans and specifications for the Project, which shall include incorporation of plans and specifications prepared by subconsultants. Engineer shall assist 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 B.

8) Completion Time

The Final Design Phase shall be completed and contract documents submitted by **March 28, 2025**.

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) 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 B.

6) Completion Time

The bidding phase shall be completed by **N/A**.

F. CONSTRUCTION SURVEY AND LAYOUT PHASE

☐ Included in this Agreement
☒ 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 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) Completion Time

The construction survey & layout phase shall be completed by **N/A**.

G. CONSTRUCTION ADMINISTRATION AND INSPECTION PHASE

☐ 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 ensure 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 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 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) 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) Completion Time

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:

a) Workers' compensation insurance in accordance with the laws of the State of Minnesota.

b) Commercial General and Automobile Liability Insurance with limits not less than **$1,500,000** Single Limit 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. Umbrella coverage with a "form following" provision may make up the difference between the commercial general and auto liability coverage amounts and the required minimum amount stated above.

c) Professional Liability Insurance in an amount not less than **$1,500,000** Single Limit; provided further that in the event the professional liability 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 Commercial General and Automobile Liability Policies. 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.

2) 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.

3) 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.

4) 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.

5) 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

To the fullest extent permitted by law, Engineer agrees that it shall indemnify and hold harmless the City, its officers, employees, and agents, past or present, from and against any and all claims including but not limited to claims for contribution or indemnity, demands, suits, judgments, costs, and expenses (including attorneys' fees and incurred defense costs) asserted by itself or any person or persons including agents or employees of the City of Duluth or Engineer by reason of death or injury to person or persons or the loss or damage to property to the extent attributable to, or by reason of, any act, omission, operation or work of Engineer or its employees while engaged in the execution or performance of services under this Agreement. Said obligations to indemnify and hold harmless shall include, but not be limited to the obligation to indemnify and hold harmless the City in all matters where claims of liability against the City arise out of, relate to, are attributable to, are passive or derivative of, or vicarious to the negligent, intentional, or wrongful acts or omissions of Engineer, including but not limited to the failure to supervise, breach of warranty, the failure to warn, the failure to prevent such act or omission by Engineer, its employees, or its agents, and any other source of liability. Said obligations to indemnify and hold harmless shall be triggered upon the assertion of a claim for damages against City. Engineer shall not be required to indemnify City for amounts found by a fact finder to have arisen out of the sole negligent or intentional acts or omission of the City unless Engineer should fail to comply with its insurance obligations in this contract to the detriment of City, in which case Engineer shall indemnify, defend, and hold harmless the City for any and all amounts except amounts attributed to intentional, willful or wanton acts of the City.

This Section, in its entirety, shall survive the termination of this Agreement if any amount of work has been performed by Engineer. Nothing in this provision shall affect the limitations of liability of the City as set forth in Minnesota Statutes Chapter 466.
Engineer understands this provision may affect its rights and may shift liability.

Engineer shall hold and save the City, its officers, employees, representatives and agents, and the Architect, harmless from liability of any nature or kind, including costs and expenses and reasonable attorney's fees and incurred defense costs to the extent attributable to Engineer's intellectual property infringement of any patented or unpatented invention, process, article, or appliance manufactured or used in the performance of the Contract, including its use by the City, unless otherwise specifically stipulated in the Technical Specifications.

Nothing herein is intended to impose an obligation on Engineer that is void and unenforceable under Minnesota Statutes Section 604.21.

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.

K. WAIVER OF CLAIM

The Engineer waives the right to make any claim whatsoever against any officer, agent or employee of the City for, or on account of, anything done, or omitted to be done, in connection with the drafting or ratification of this contract. In addition, if it is determined that this contract was not drafted or ratified in conformity with Minnesota or federal law, or City of Duluth ordinance or charter provisions, or if the contract includes obligations that are void as to Minnesota or federal law or City of Duluth ordinance or charter provisions, the Engineer agrees to raise no defense and make no claim against the City on the basis of ratification, laches, estoppel, or implied contract. **The Engineer understands this provision may affect its rights and may shift liability and specifically agrees to the same.**

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, Forty-Seven Thousand, Six Hundred Four and 00/100 Dollars** ($**147,604.00**).

SECTION VI. SPECIAL PROVISIONS

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

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

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

By: _____
Mayor

Attest:

By: _____
City Clerk

Date: _____

Countersigned:

_____
City Auditor

Approved as to Form:

_____
City Attorney

LHB, INC.

By: _____

Its: _____
Title of Representative

Date: _____

EXHIBIT A

September 13, 2024

Brad Scott, P.E.
Senior Engineer, City of Duluth
411 West 1st St, Room 240 City Hall
Duluth, MN 55802
bscott@duluthmn.gov

PROPOSAL FOR PROFESSIONAL SERVICES
PALM STREET SMART POND FINAL DESIGN

Thank you for the opportunity to provide Professional Engineering Services for the Final Design of the Palm Street Smart Pond project. We are looking forward to continuing our work with you and the City's team through final design on this innovative project. Based on our conversations, our scope, assumptions, and fees follow.

Project Understanding

The City of Duluth plans to reconstruct the stormwater pond on the south side of Palm Street near the intersection of Blackman Avenue. Early in 2024, LHB assisted the City of Duluth in preparing preliminary hydraulic analyses and retaining wall designs for an MPCA grant application. The City was awarded the grant funding and is planning to move forward with final design. Construction is planned for summer 2025.

The City has requested professional engineering services to complete the final design for the project. The stormwater pond will be designed as a "Smart Pond," which will allow it to be emptied before major storm events, increasing storage in the watershed, and reducing peak flows. During predesign, LHB worked with the City to prepare a preliminary design of the Smart Pond, which included preliminary pond sizing, preliminary structural design of a retaining wall which will increase the holding volume of the pond, and geotechnical exploration.

The importance of attenuating stormwater flows cannot be overstated, especially in the context of climate change. With the projected increase in frequency and intensity of storm events, the resilience of Brewery Creek is paramount. The stormwater management practices provided by this pond not only reduce the risk of flooding and erosion, but also contribute to the long-term sustainability of the entire system, including the reduced wear and tear of the downstream storm tunnels.

The final design phase of the Palm Street Smart Pond project will include final design of structural, hydraulic, civil, electrical, and landscaping; plan production; wetland delineation; and permitting. Due to our involvement in the predesign phase, and our local presence in the city, we have a thorough understanding of the site; thus, our team at LHB is uniquely qualified to complete this project. We also have a diverse team of design professionals which allows us to complete all required design tasks in-house and locally. Following you will find our proposed scope of work and associated fees.

Scope of Services

Task 1 – Project Management

LHB will provide project management and coordination services which include quality assurance/control of project deliverables and tracking project schedule. This task assumes final design will span from October 2024 to February 2025 (approx. 24 weeks).

Services

- Prepare and distribute project correspondence.
- Facilitate Kickoff Meeting (1 virtual meeting).
- City Check-In Meetings (assume 4 virtual meetings).
- Monitor project budget.
- Manage Quality Control and Assurance process.
- Communicate with City staff.

Deliverables

- Project correspondence.
- Project invoicing.

Provided by City

- Timely project coordination, comments, and review/feedback to questions during design.

Task 2 – Survey and Right-of Way Mapping

Topographic field survey of the site was collected during the preliminary design phase. Some additional survey is anticipated during final design. We have budgeted an additional two (2) days of survey work in this final design proposal.

LHB will also provide property research to accurately map the existing right-of-way and property. It is assumed that no permanent or temporary easement will be acquired for the project. Easement exhibits are not included in our fee, but LHB can provide these upon request.

Services

- Perform additional topographic field survey (assume 2 days).
- Merge new survey data with previously completed data into one comprehensive base map.
- Perform property research and mapping.

Deliverables

- Project survey with base map.
- Right-of-way and property mapping.

Provided by City

- Previously completed survey data and mapping.

Task 3 – Structural Design

As part of the preliminary design, LHB completed an initial investigation into different wall types that could be utilized in the Smart Pond to increase the volumetric capacity of the pond. The two wall types considered for this location were a steel sheet pile wall and a prefabricated modular block wall, or big block wall.

Boring logs, available from the original construction of Palm Street to the south, showed the presence of peat, while the logs from the neighboring Arris building development to the north showed possible bedrock conflict. Since the presence of high bedrock would make sheet pile walls infeasible, and the presence of peat would make construction of a big block wall difficult, it was decided that additional geotechnical exploration was needed for final determination of wall type.

Braun performed a series of flight augers and standard penetration tests at 23 total locations around the perimeter of the proposed pond, to an approximate elevation of 1190. The boring logs show a combination of clayey and silty sand. Bedrock was not encountered in any of the locations.

Based on the soil characteristics present, and the absence of bedrock within the bore depth, cantilever steel sheet pile walls with no structural tiebacks would be recommended. LHB has extensive experience in the design and detail of steel sheet pile walls for both temporary and permanent conditions. Preliminary analysis of a sheet pile wall does indicate that in some locations, where the retained height is higher than the elevation of the pile tip, the piles would need to extend below the bored depth by approximately five feet. Driving piling deeper than the borings does pose some risk in encountering bedrock, however the overall wall design will look to optimize embedment for both economy and conflict. Additionally, the recently received geotechnical report dated September 5, 2024, states the existing stiff soils may slow down production as compared to average sheet pile construction.

It is desired to design a cap on the top of the sheet pile walls with fencing around for safety. LHB will detail these components in our final plans.

Services
- Final structural design and detailing of sheet pile retaining walls.

Deliverables
- Final structural design drawings.
- Final structural special provisions.

Provided by City
- Geotechnical investigation report.

Task 4 – Hydraulic Design

LHB will perform the final hydraulic calculations for the design of the Palm Street Smart Pond and ensure compliance with grant requirements. The pond will be designed with a variable normal water surface elevation to allow for the draw-down of the pond prior to large storm events. In addition, a Letter of Map Revision (LOMR) will be required due to the project's impacts on the existing floodway. LHB will provide the modeling of Brewery Creek, create the documentation required for the LOMR, and submit the LOMR to FEMA for review and approval.

Services
- Perform all calculations necessary to provide recommendations for the stormwater pond size/volume requirements. LHB will use HydroCAD to model the 100-yr, 10-yr, and 2-yr storm events.
- Prepare LOMR.

Deliverables
- Stormwater memorandum summarizing the drainage calculations and conformance with the grant requirements.
- Final pond, drainage structure and pipe design.
- LOMR submittal.

Task 5 – Civil Design

The LHB design team will incorporate the final drainage design into the final construction plans. In addition to the pond, a maintenance access and trail replacement will be included in the design. The final plans will include a summary of quantities, tabulations, notes and details, drainage profiles and site/pond layout and grading sheets.

Services
- Final site design and grading.
- Final plan production.

Deliverables
- Final civil and drainage plans.
- Final civil and drainage special provisions.

Task 6 – Electrical Design

The 'Smart Pond' will have controls to activate the pond drawdown in advance of large storm events. These controls are expected to be solar powered and will require integration with the City data system. LHB's drainage and electrical designers will research and recommend the control system for the pond and design the required connections and integration into the City's SCADA system. Vehicle gates with automatic controls are also planned at the site to provide maintenance access and security. These gate controls and minor site lighting will be included in the electrical design. It is anticipated that a new electrical service will be needed for the site. We have included coordination with the utility provider in our scope. Electrical plans, details and specifications will be incorporated in the final design.

Services
- Research and recommendation of pond controls.
- Coordinate new electrical service.
- Final electrical design.

Deliverables
- Final electrical plans and details.
- Final electrical special provisions.

Task 7 – Landscape Design

With the addition of the walls and fencing, there is a desire to soften the look of the pond by adding landscaping and screening plantings around the site and within the pond. Our landscape team will specify appropriate plantings, trees and shrubs for the site and design a planting plan to complement the site plan. We have also included two (2) rendering to show how the landscape design will look with the overall site.

Services
- Landscape planting design.
- Develop renderings (assume 2).

Deliverables
- Landscape rendering.
- Final landscape plans and details.
- Final landscape special provisions.

Task 8 – Wetland Delineation and Permitting

LHB has included time in our proposal to evaluate and delineate wetlands on the site. The existing stormwater treatment pond on the site was built into the historic channel of Brewery Creek. Our team will evaluate and determine if wetland permitting is required based on this history and the site characteristics. A wetland delineation will be completed, and the wetland mapping and report will be submitted to the regulatory agency for review.

LHB will also determine if a DNR permit is required for the proposed new outfall location downstream. Even though Brewery Creek is not a designated trout stream, the project will be changing many characteristics of the outfall culvert. Because of this, a DNR permit may be required. We have included time to complete these permits if required for the project.

Services

- Field wetland delineation.
- Create wetland mapping and delineation report.
- Preparation and submittal of WCA/USACE Joint Permit Application (if required).
- Facilitate Technical Evaluation Panel (TEP) Site Review (if required).
- DNR Permit (if required).

Deliverables

- Wetland Delineation.
- WCA/USACE Joint Permit Application (if required).
- TEP approved wetland report (if required).
- DNR Permit (if required).

Provided by City

- Review and sign permit application forms.
- Permitting agency fees.

Assumptions

1. The City will provide LHB the following:
    a. Available in-place topography & utility information (.dwg format).
    b. Available historical record drawings (.dwg or .pdf format).
    c. GIS information for the area including LIDAR, existing utilities, and property information.
    d. Geotechnical information.
2. Scope does not include:
    a. Construction inspection.
    b. Public engagement.

Schedule

- Final Plans and Specifications completed by February 2025
- Construction to begin Summer 2025

Proposed Fee

LHB proposes an hourly fee with an estimate of One Hundred Forty-Seven Thousand Six Hundred Four Dollars ($147,604) including reimbursable expenses.

We appreciate the opportunity to provide you with our services and look forward to working with you. Please contact me at 218.249.7152 if you have any questions.

LHB, INC.

MEGAN GOPLIN, PE
CIVIL ENGINEERING MANAGER

MATT J. SETTERGREN, PE
VICE PRESIDENT

Attachments: LHB Fee Estimate Worksheet dated September 13, 2024

c: LHB Project No. 240078

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LHB

FEE ESTIMATE

Project Name Palm Street Smart Pond Final Design
Client City of Duluth
Preparer LHB

Project Number 240078
Date September 13, 2024

Project Breakdown Task Description	P1 Project Principal $ 210	P4 Project Manager $ 196	P8 Drainage Eng. $ 150	T3 Senior Tech. $ 119	P9 Structural Eng. $ 146	P10 Structural Eng. $ 135	T7 Senior Tech. $ 100	P5 Elec. Eng. $ 185	P13 Landscape Arch. $ 111	P5 Land Surveyor $ 180	T6 Survey Tech $ 105	P8 Wetland Specialist $ 156	Total Labor Costs ($)
Task 1 - Project Management													**$ 4,648.00**
Invoicing, Communication	2	6	2		2								$ 2,188.00
Meetings with City (assume 5)		5	5		5								$ 2,460.00
Task 2 - Survey and Right-of-Way Mapping													**$ 7,112.00**
Additional field survey (assume 2 days)		1								4	20		$ 3,016.00
Mapping		1								2	16		$ 2,236.00
Right-of-way/Property Mapping										8	4		$ 1,860.00
Task 3 - Structural Design/Plan Generation													**$ 58,732.00**
Preliminary Structural Design					16								$ 2,336.00
Sheet Pile Wall Design	2				12	24							$ 5,412.00
Summary of Quantities, General Notes	1				8		16						$ 2,978.00
Wall Alignment Tabulation	2				16	8	32						$ 7,036.00
Wall Plan and Elevation (10 Sheets assumed)	3				24	8	120						$ 17,214.00
Wall Sections & Cap Details	2				16	4	24						$ 5,696.00
Safety Fence Details	2				8	4	16						$ 3,728.00
Safety Fence Plan and Post Spacing (4 sheets assumed)	1				8	8	32						$ 5,658.00
Inlet and Outlet Details	1				8	2	20						$ 3,648.00
Pipe Penetration Details	1				8	2	20						$ 3,648.00
Structural Special Provisions	1				8								$ 1,378.00
Task 4 - Hydraulic Design													**$ 26,784.00**
Preliminary Hydraulic Design and Grading			60										$ 9,000.00
Final Hydraulic Design and memo		2	12										$ 2,192.00
LOMR Model Hydraulics			60										$ 9,000.00
LOMR Preparation		2	20				32						$ 6,592.00
Task 5 - Civil Design/Plan Generation													**$ 21,126.00**
Title Sheet		2		4									$ 868.00
Summary of Quantities and General Notes		2	6	6									$ 2,006.00
Tabulations		2	8	24									$ 4,448.00
Construction Details		2	8	16									$ 3,496.00
Drainage Profiles		1	8	8									$ 2,348.00
Pond/Site Layout and Grading Sheets		8	8	32									$ 6,576.00
Civil and Drainage Special Provisions		4	4										$ 1,384.00

Project Breakdown Task Description	P1 Project Principal $ 210	P4 Project Manager $ 196	P8 Drainage Eng. $ 150	T3 Senior Tech. $ 119	P9 Structural Eng. $ 146	P10 Structural Eng. $ 135	T7 Senior Tech. $ 100	P5 Elec. Eng. $ 185	P13 Landscape Arch. $ 111	P5 Land Surveyor $ 180	T6 Survey Tech $ 105	P8 Wetland Specialist $ 156	Total Labor Costs ($)
Task 6 - Electrical Design													**$ 13,770.00**
Research and Recommend pond Controls		1	6					6					$ 2,206.00
Pond Control System Integration			4					8					$ 2,080.00
Coordination with power provider and new service		1						4					$ 936.00
Vehical gate Design		1		6				4					$ 1,650.00
Site Lighting Design		1		8				8					$ 2,628.00
Electrical Plans and Details		1	2	12				4					$ 2,664.00
Electrical Special Provisions		1	2					6					$ 1,606.00
Task 7 - Landscape Design													**$ 4,564.00**
Landscape Renderings (assume 2)		2							16				$ 2,168.00
Landscape plans and details		2		4					8				$ 1,756.00
Landscape special provisions		1							4				$ 640.00
Task 8 - Wetland Delineation and Permitting													**$ 10,218.00**
Field Wetland Delineation		1		8								4	$ 1,772.00
Wetland Mapping and Report		1		12								4	$ 2,248.00
TEP Meeting												4	$ 624.00
WCA/USACE Joint Permit Application		2		12								10	$ 3,380.00
DNR Permit	1	4	8										$ 2,194.00
Total Hours	19	57	223	152	139	60	312	40	28	14	40	22	

Travel Expenses	Qty		Rate	Cost
				-
			-	-
			-	-
			-	-
Total Travel Costs				-

Other Direct Expenses	Cost
GPS Unit	250.00
Survey Truck	400.00
Total Direct Costs	650.00

Labor Cost	$ 146,954.00
Travel Costs	$ -
Direct Costs	$ 650.00
Total Estimated Cost	$ 147,604.00