

**PROFESSIONAL ENGINEERING SERVICES AGREEMENT**

**MSA PROFESSIONAL SERVICES, 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: **MSA Professional Services, Inc.**  
Address: **332 W. Superior Street, Suite 600, 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 **440-038-5530, SIP2024-2090**; Project # **2090**; and Resolution No. **23-0785R**, passed on **October 16, 2023**.

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

Project Number: **2090**  
Project Name: **2024 Street Preservation Project**  
Project Description: **Engineering services for the 2024 Street Preservation 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>
<input type="checkbox"/>	A.	Study and Report Phase
<input checked="" type="checkbox"/>	B.	Preliminary Survey Phase
<input checked="" type="checkbox"/>	C.	Preliminary Design Phase
<input checked="" type="checkbox"/>	D.	Final Design Phase
<input checked="" type="checkbox"/>	E.	Bidding Phase
<input type="checkbox"/>	F.	Construction Survey and Layout Phase
<input type="checkbox"/>	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 **November 29, 2023**.

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 **January 31, 2024**.

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 **February 14, 2024**.

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 **March 31, 2024**.

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 defend, 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) 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 arising out of, 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 defend, indemnify, and hold harmless shall include, but not be limited to the obligation to defend, 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 defend, indemnify, and hold harmless shall be triggered upon the assertion of a claim for damages against City. On ten days' written notice from the City of Duluth, Engineer shall appear and defend all lawsuits against the City of Duluth growing out of such injuries or damages. 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 defend and 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, for, or on account 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.

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 **Three Hundred Sixty-Nine Thousand, Seven Hundred Forty-One and 70/100 Dollars (\$369,741.70)**.

**SECTION VI. SPECIAL PROVISIONS**

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

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

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

**SECTION VII. COUNTERPARTS**

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

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

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

**CITY OF DULUTH-Client**

**MSA PROFESSIONAL SERVICES, INC.**

By: \_\_\_\_\_  
Mayor

By: \_\_\_\_\_

Attest:

Its: \_\_\_\_\_  
Title of Representative

By: \_\_\_\_\_  
City Clerk

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Countersigned:

\_\_\_\_\_  
City Auditor

Approved as to Form:

\_\_\_\_\_  
City Attorney



**COST PROPOSAL TO PROVIDE ENGINEERING  
SERVICES FOR:**  
2024 Street Preservation Project



**Prepared for:**  
City of Duluth, MN  
September 26, 2023







332 W. Superior Street, Suite 600  
Duluth, MN 55802  
(218) 722-3915  
[www.msa-ps.com](http://www.msa-ps.com)

September 26, 2023

Patti Stalvig, Purchasing Agent  
City Hall  
411 West 1<sup>st</sup> Street, Room 120  
Duluth, MN 55802

Re: Cost Proposal to Provide Engineering Services for 2024 Street Preservation Project

Dear Patti and Selection Committee,

Enclosed is the cost proposal from MSA Professional Services, Inc. (MSA) for design services for this project. The cost proposal is based on the following:

- The breakdown of hours by task and employee, which matches the work plan included in the project proposal.
- Direct expense estimates and unit cost rates, summarized in the cost proposal and broken out with cost rates on a separate detail page.
- Design service fees are based on 2023 billing rates.

Thank you again for the opportunity to propose on this vital City of Duluth infrastructure project. Please contact me anytime at my contact information below to discuss costs or any questions you may have.

Sincerely,  
MSA Professional Services, Inc.

A handwritten signature in blue ink, appearing to read "Jeff Goetzman".

Jeff Goetzman, PE  
Project Manager  
(218) 216-7281  
[jgoetzman@msa-ps.com](mailto:jgoetzman@msa-ps.com)

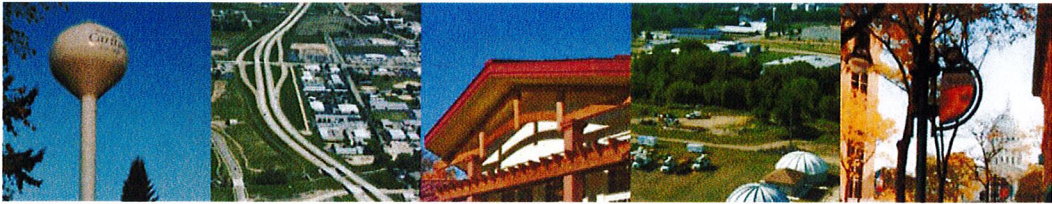
A handwritten signature in blue ink, appearing to read "Scott Martin".

Scott Martin, PE  
Regional Service Line Leader  
\*Scott is an authorized member of the firm



2024 Street Preservation Project - RFP Number: 23-99649 - Work Plan															
Phase	Task / Deliverable	Project Manager	QA/QC & Storm Design	State Aid & ADA QA/QC	Lead Design Engineer	Project Engineer	Graduate Engineer	GIS Technician	Professional Land Surveyor	Surveyor	Total Hours	Labor Cost	Direct Expenses	Total Cost	
		Goetzman	Loye	Watters	Taylor	Abrams	Weber	Farrell	Schley	Koos					
Task No.	Task / Deliverable	Hourly Rate	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours				
<b>1</b>	<b>Initial Site Visit &amp; Consultations</b>		42	6	4	44	60	44	0	0	0	200	\$23,970.00	\$84.50	\$24,054.50
	Project Kickoff Meeting w/ City Engineering Staff		4			4	4	4				16	\$1,938.00	\$23.00	\$1,961.00
	<i>Confirm schedule, scope, deliverables, procedures and follow up correspondence with city staff</i>														
	Project Site Review & Site Research		8	4		16	24	24				76	\$8,500.00	\$11.50	\$8,511.50
	<i>Review existing information, conduct site review, identify utilities and site issues pre-site visit.</i>														
	Public & Stakeholder Involvement		10	2		4	12	16				44	\$5,168.00	\$50.00	\$5,218.00
	<i>Public Participation (5 informational meetings)</i>														
	Project Meetings and Status Updates		20		4	20	20					64	\$8,364.00	\$0.00	\$8,364.00
	<i>Follow-up status/consultation meetings and minutes via video teleconference (assume 10, i.e. biweekly)</i>														
<b>2</b>	<b>Public Participation</b>		12	2	0	12	12	6	0	0	0	44	\$5,525.00	\$0.00	\$5,525.00
	Public & Stakeholder Involvement		12	2		12	12	6				44	\$5,525.00	\$0.00	\$5,525.00
	<i>Public Participation (5 informational meetings)</i>														
<b>3</b>	<b>Reconnaissance, Field Surveys &amp; Geotechnical Exploration</b>		40	16	2	88	162	128	24	16	190	666	\$70,601.00	\$97,310.70	\$167,911.70
	Topographic and ROW Survey*		8			12	12	8		10	150	200	\$20,145.00	\$18,085.00	\$38,230.00
	<i>Topo survey (ADA survey at 40% of intersections, curb, driveways, structures, Level 3)</i>														
	Base Map Preparation/Aerial Imagery/GIS Utilities		16			40	80	80	24	4	36	280	\$29,478.00	\$50.00	\$29,528.00
	<i>Parcel research and base map prep, draft basemap in AutoCAD and generate existing surface</i>														
	Agency Coordination & Permitting		6	12		10	30					58	\$6,902.00	\$0.00	\$6,902.00
	<i>Tree Clearing Exhibit, Agency Coordination: MNDNR, MPCA, DOT</i>														
	Easement Exhibits		2			8	8			2	4	24	\$2,754.00	\$4.00	\$2,758.00
	<i>Easement exhibits--exhibit identifying potential ROW conflicts (easements, descriptions additional work)</i>														
	Storm Sewer Cleaning/Televising		4	4		10	16	16				50	\$5,542.00	\$15,593.20	\$21,135.20
	<i>Cleaning and televising, condition report, coordination with subconsultant (Great Lakes)</i>														
	Geotechnical Exploration		4		2	8	16	24				54	\$5,780.00	\$63,578.50	\$69,358.50
	<i>Soil borings, geotechnical report, coordination with subconsultant (AET)</i>														
<b>4</b>	<b>Preliminary Recommendations &amp; Costs</b>		12	2	4	20	28	34	0	2	0	102	\$11,543.00	\$0.00	\$11,543.00
	Recommendation and Cost Memo		6	2	4	16	20	24		2		74	\$8,296.00	\$0.00	\$8,296.00
	<i>Prepare preliminary engineering memo and construction cost estimates to verify scope and budget</i>														
	Preliminary Recommendations Meeting		6			4	8	10				28	\$3,247.00	\$0.00	\$3,247.00
	<i>Meet with City staff to review preliminary recommendations and initial cost estimate, finalize scope</i>														
<b>5</b>	<b>Plans &amp; Specifications</b>		60	54	32	194	416	482	16	2	100	1356	\$143,735.00	\$935.50	\$144,670.50
	Preliminary Street Design		6	4	6	36	80	120				252	\$26,044.00	\$575.00	\$26,619.00
	<i>Layout of plan view, plan/profile for Bayview, Main St., &amp; 7th St</i>														
	Preliminary & Final Stormwater Design		10	18	2	42	80	60				212	\$23,188.00	\$23.00	\$23,211.00
	<i>Develop storm sewer systems, draft hydraulics, coordinate with Tom Johnson for 3 main reclamation and storm sewer locations (Bayview, Main Street, 7th Street)</i>														
	Utilities Design & Coordination		8			12	10	16				46	\$5,304.00	\$50.00	\$5,354.00
	<i>Coordinate review of utility conflicts and utility relocations</i>														
	Final Plan Design/Drafting		8	4		36	100	120	12			280	\$28,832.00	\$287.50	\$29,119.50
	<i>Final Plans and exhibit drafting</i>														
	Plan Development Meetings		10	4		10	16	16	4			60	\$6,970.00	\$0.00	\$6,970.00
	<i>Meet with City staff at 30%, 60%, 90% design stage to review</i>														
	Pedestrian Ramp and ADA Compliance*		10	8	16	28	90	110		2	100	364	\$37,383.00	\$0.00	\$37,383.00
	<i>377 ramp/corners to be reviewed in existing sidewalk areas (est. 40% with detail design)</i>														
	Preliminary & Final Plan QA/QC		8	16	8	30	40	40				142	\$16,014.00	\$0.00	\$16,014.00
	<i>Review deliverables for compliance with state and federal aid standards</i>														
<b>6</b>	<b>Cost Estimate</b>		4	0	2	8	20	24	0	0	0	58	\$6,188.00	\$0.00	\$6,188.00
	Cost Estimates Prelim Recommendation, 30% design, 60%, 90%, and 100%		4		2	8	20	24				58	\$6,188.00	\$0.00	\$6,188.00
	<i>Five (5) cost estimates</i>														
<b>7</b>	<b>Project Bidding</b>		12	4	2	16	22	30	0	0	0	86	\$9,809.00	\$40.00	\$9,849.00
	Deliver Final Bid Package to City Purchasing		4	4	2	6	16	24				56	\$6,086.00	\$20.00	\$6,106.00
	<i>Host Pre-bid Meeting for Contractors (agenda, minutes)</i>		4			4						8	\$1,156.00	\$0.00	\$1,156.00
	Bidding Support		4			6	6	6				22	\$2,567.00	\$20.00	\$2,587.00
	<i></i>														
<b>GRAND TOTAL</b>			182	84	46	382	720	748	40	20	290	2512	\$271,371.00	\$98,370.70	\$369,741.70
<b>*Project Design Assumptions:</b>															
1. Sidewalks include 377 curb corners/potential ramp evaluations as part of the sidewalk work on 70 sites. It is estimated that 25% of corners require ADA design and survey. We will review all sites with City staff as our first step, and determine which require full survey and which can be accommodated with use of standard plans for pedestrian ramps.															
2. 70 individual construction sites each requiring creating a plan set which includes imagery, utility information, plan view, construction notes, quantities tabulation, typical section.															
3. Topographic survey assumed for all 10 reclamation sections as need to re-establish center line locations, and storm sewer improvements being proposed. This is 23 blocks of work. Our survey budget includes work at an estimated 25% of sidewalk/street corners to obtain information necessary to design ADA-compliant ramps. During our desktop review of sites, if a larger number are found to require detailed survey, that would be performed as extra work.															
4. Topographic survey budget included for additional survey areas including pedestrian ramps, driveways, spot drainage issues. Level loop will be run for reclaim areas with storm, grading so City has tie-ins for construction.															
5. Included time for site visit to each sites selected for onsite visit with City staff (estimated to be 25%).															
6. Survey monuments located on the project will be perpetuated/tied out by City staff during construction.															





**RATE SCHEDULE**  
2023

<u>CLASSIFICATION</u>	<u>LABOR RATE</u>
Administrative .....	\$ 85 – \$140/hr.
Architects .....	\$ 70 – \$205/hr.
Community Development Specialists .....	\$140 – \$175/hr.
Digital Design .....	\$165 – \$180/hr.
Environmental Scientists/Hydrogeologists .....	\$100 – \$170/hr.
Geographic Information Systems (GIS) .....	\$ 90 – \$175/hr.
Housing Administration .....	\$ 90 – \$160/hr.
Inspectors/Zoning Administrators .....	\$100 – \$120/hr.
IT Support .....	\$165 – \$180/hr.
Land Surveying .....	\$ 90 – \$175/hr.
Landscape Designers & Architects .....	\$ 70 – \$205/hr.
Planners .....	\$ 95 – \$160/hr.
Principals .....	\$200 – \$300/hr.
Professional Engineers/Designers of Engineering Systems .....	\$140 – \$175/hr.
Project Managers .....	\$145 – \$220/hr.
Real Estate Professionals .....	\$130 – \$145/hr.
Staff Engineers .....	\$ 70 – \$130/hr.
Technicians .....	\$ 90 – \$140/hr.
Wastewater Treatment Plant Operator .....	\$ 85 – \$105/hr.

REIMBURSABLE EXPENSES

Copies/Prints .....	Rate based on volume
Specs/Reports .....	\$10
Copies .....	\$0.12/page
Plots .....	\$0.006/sq.in.
Flash Drive .....	\$10
GPS Equipment .....	\$20/hour
Dini Laser Level .....	\$30/per day
Mailing/UPS .....	At cost
Mileage – Reimbursement .....	IRS Rate – IRS Rate + \$5/day
Mileage – MSA Vehicle .....	\$0.75 mile standard/ \$0.67 mile for DOT
Nuclear Density Testing .....	\$25.00/day + \$10/test
Organic Vapor Field Meter .....	\$100/day
PC/CADD Machine .....	Included in labor rates
Robotic Survey Equipment .....	\$20/hour - \$15/hour for DOT
Stakes/Lath/Rods .....	At cost
Travel Expenses, Lodging, & Meals .....	At cost
Traffic Counting Equipment & Data Processing .....	At cost
Geodimeter .....	\$30/hour
Drone Flight .....	\$375/flight

Labor rates represent an average or range for a particular job classification. These rates are in effect until December 31, 2023.



**APPENDIX A - PROPOSAL COVER SHEET  
CITY OF DULUTH  
RFP# 23-99649 Engineering Services for 2024 Street Preservation Project**

<b>Bidder Information:</b>	
Bidder Name	MSA Professional Services, Inc.
Mailing Address	332 W. Superior Street, Suite 600, Duluth, MN 55802
Contact Person	Jeff Goetzman, PE
Contact Person's Phone Number	(218) 216-7281
Contact Person's E-Mail Address	jgoetzman@msa-ps.com
Federal ID Number	39-1016174
Authorized Signature	<i>Scott Martin</i>
Name & Title of Authorized Signer	Scott Martin, PE, Regional Service Line Leader
Email of Authorized Signer	smartin@msa-ps.com

# PROPOSAL TO PROVIDE ENGINEERING SERVICES FOR: 2024 Street Preservation Project



## TABLE OF CONTENTS

Letter of Interest

Goals and Objectives	1
Knowledge, Experience, and Personnel	2
Work Plan	6
Work Schedule	9
References	10
Addendum 1	i
Cost Proposal	Separate Envelope

**Prepared for:**  
City of Duluth, MN  
September 26, 2023



332 W. Superior Street, Suite 600  
Duluth, MN 55802  
(218) 722-3915  
www.msa-ps.com

September 26, 2023

Patti Stalvig, Purchasing Agent  
City Hall  
411 West 1<sup>st</sup> Street, Room 120  
Duluth, MN 55802

Re: Proposal to Provide Engineering Services for 2024 Street Preservation Project

Dear Patti and Selection Committee,

The City of Duluth is aggressively working to improve its municipal street system. MSA Professional Services, Inc. (MSA) is pleased to be part of recent accomplishments and sees this project as another great opportunity to partner with the City. MSA, with its full-service team, is very familiar with the City's design criteria.

MSA's purpose is to positively impact the lives of others. Primary to this is our careful collaboration with City of Duluth staff. To gain this end, our core team of professionals specialize in the up-front planning process and the development of plans, specifications and bidding documents to match the City of Duluth process and applicable State Aid processes. MSA's team has extensive experience in roadway reconstruction, stormwater design, Americans with Disabilities Act (ADA) requirements, and the State Aid review process. As a full-service firm, we are able to adapt to potential project changes smoothly and efficiently. If needed, MSA also has a first-rate team of project managers available for the post-bid phase of construction.

As you read through our proposal, you will see how our portfolio of roadway projects demonstrates our ability to develop sound, constructible and successful plans. Specifically, as the proposed Project Manager for this pursuit, I bring the experience of working on the design of the City's 2022, 2021 and 2020 Street Preservation Projects. This history, combined with our team's technical expertise, means the City of Duluth can have confidence in our ability to thoroughly assess and resolve any issues and constraints the project may present, particularly in terms of dealing with project complexities.

Thank you for the opportunity to present our qualifications and work plan. We look forward to continuing our work with the City and to making a positive impact with the community. Please contact me anytime to discuss our qualifications or any questions you may have.

Sincerely,  
MSA Professional Services, Inc.

A handwritten signature in blue ink, appearing to read "Jeff Goetzman".

Jeff Goetzman, PE  
Project Manager  
(218) 390-9295  
jgoetzman@msa-ps.com

A handwritten signature in blue ink, appearing to read "Scott Martin".

Scott Martin, PE  
Regional Service Line Leader  
*\*Scott is an authorized member of the firm*





## GOALS AND OBJECTIVES

### BACKGROUND

As noted in the RFP, the City of Duluth is proposing to rehabilitate approximately 14.85 miles across 70 City streets. The City is interested in retaining a consulting engineer to provide design engineering services for the project. The 2024 Street Preservation Project work will include material removals, pavement reclamation, milling, bituminous paving, grading, stormwater drainage improvements, ditching, curb and gutter replacement, construction of ADA-compliant pedestrian ramps, turf establishment as necessary, and striping. The project will be funded through City of Duluth sales tax funding (local funds).

To meet project objectives, we have assembled a team of professionals that will lead each of these components, under the guidance and support of Project Manager Jeff Goetzman, PE. MSA has a long resume of projects in the region using both local and State Aid funding, and we understand the process to meet budget and schedule needs. Our team has the support of the entire MSA organization, including in-house professional surveyors, transportation engineers, and individuals experienced in road, storm, structure and utility design. This provides the City of Duluth with a team that can quickly adapt to changing project needs while requiring limited coordination or staffing modifications.

### GOALS

The improvements being made as part of Duluth's 2024 Street Preservation Project provide an opportunity for the City to update road conditions in several neighborhoods as illustrated by the City's maps (i.e., east, central, west project maps) included within the RFP. Our team has made a preliminary assessment of the project sites and details. We have identified goals for the 2024 Street Preservation Project which can be summarized as follows:

**Positive public involvement experience.** By actively engaging with the public early in the design process, our team will help to make sure that stakeholders have a positive experience and have their concerns incorporated in the design process where applicable.

**Improved ride quality.** Motorists will experience improved driving experience on these local streets with newly reconstructed pavement surfacing, improved stormwater drainage, and enhanced pedestrian access points.

**Improve stormwater collection and primary treatment.** The City of Duluth has steep road grades which can contribute significant amounts of runoff and sediment to the City's storm sewer system. Improvements to stormwater infrastructure are included in the project scope.

**Improve pedestrian/public safety.** There is a need to address ADA-compliant access issues with provision of curb ramps and truncated domes along with grades that improve suitable accessibility.

### OBJECTIVES

Our past experience delivering projects for the City of Duluth and other clients would indicate that the critical path schedule items for projects such as the 2024 Street Preservation Project include evaluation of right-of-way easements, utility coordination, permitting and environmental documentation. Our approach with the preliminary engineering and stormwater study will be to identify those concerns early on and to provide the City with a summary of key issues and a path forward to address them in an efficient manner.

The following are key objectives of the preliminary engineering for the 2024 Street Preservation Project:

- Investigate ways to reconstruct each roadway, improve pedestrian accommodations, and manage stormwater while providing a safe separation from traffic and minimizing easement acquisition.
- Engage stakeholders and refine design based on feedback from public informational meetings.
- Improve street pavement conditions and stormwater controls on the priority mileage identified in the RFP and within the City's project budget.



**EAST SECOND STREET**  
**Duluth, MN**

In conjunction with a \$1 billion dollar medical district construction project in the City of Duluth, this project involved major renovations at the two hospitals in the area. This project was an urban street reconstruction that included the installation of a new 20-inch water main with services, street design and layout, coordination with the City’s gas engineers and Duluth Energy systems (hot water heating loop replacement) as well as two years of construction effort all coordinated with the reconstruction of St. Luke’s Hospital.

Additional details of this project included the replacement of City-owned, water main, sanitary sewer, storm sewer, and hot water systems. It also reconstructed sidewalk infrastructure to provide a durable transportation corridor that will continue to serve its planned purpose, with reduced maintenance, and improved safety for all.

**PROJECT HIGHLIGHTS**

- Two-year, multi-phase construction
- Urban street
- ADA design
- Coordination with St. Luke’s Hospital
- Utilities and stormwater
- Transit coordination

**PROJECT TEAM MEMBERS**

- James Watters (Project Engineer)
- Sophie Abrams (Design Engineer)



**SP 6910-112 RIVERWEST DRIVE**  
**Duluth, MN**

Riverwest Drive, formerly referred to as Kayak Bay Drive during project planning, is a new City street that provides access to mixed-use residential and commercial development between the St. Louis River and Minnesota Trunk Highway 23 (Grand Avenue) on the west side of Duluth.

The project features a new signalized intersection at Grand Avenue (TH 23) and an at-grade crossing of the Munger Trail. Railroad coordination was required to complete underground utility crossing of an active BNSF rail spur. Additionally, the project includes construction of new water main, sanitary sewer, storm sewer, and gas facilities for the urban street section. The project was funded through a wide range of sources, including Transportation Economic Development funds, and City of Duluth funding.

**PROJECT HIGHLIGHTS**

- State Aid, urban design
- Utility design, including water main, sanitary sewer, storm sewer
- ADA design
- Shared-use path design
- Raised crosswalk at Willard Munger trail crossing

**PROJECT TEAM MEMBERS**

- James Watters (Project Manager)



**SP 202-101-014 UGSTAD ROAD & ARROWHEAD ROAD IMPROVEMENTS**  
**Hermantown, MN**

Rehabilitation of Ugstad Road and Arrowhead Road is a highly visible and important project for the City of Hermantown. The Ugstad Road corridor is a primary north-south route that provides access to the Hermantown Elementary, Middle, and High Schools via its intersection with Hawk Circle Drive. The Hermantown Hockey Arena and Essential Wellness Center are also accessible via Ugstad Road near the Arrowhead Road intersection. Arrowhead Road is a major collector for the City of Hermantown and also provides access to the Hermantown schools via the intersection with Hawk Circle Drive. This project will consist of approximately 6,100 LF of mill and overlay work, approximately 2,800 LF of reclaim and overlay work, and approximately 1,500 LF of full roadway reconstruction. Additional work includes storm sewer construction, new concrete curb and gutter, culvert extensions/replacements, turn lane additions, permanent markings and signing.

**PROJECT HIGHLIGHTS**

- ADA design
- Utility Coordination
- Similar Funding Sources

**PROJECT TEAM MEMBERS**

- James Watters (Project Manager)
- Jon Loye (Project Engineer)
- Sophie Abrams (Design/Construction)

**Knowledge of Duluth Standards**

Key MSA team members are based in Duluth and possess expertise in Construction Standards and Engineering Guidelines. MSA has been operating in Duluth for over 20 years, handling various infrastructure projects such as **East Second Street, Riverwest Drive, Thunderbird Wren, Flood Repairs, and Morgan Park Development**. This extensive experience enables us to deliver plans and specifications that meet the City’s expectations and align with MnDOT Construction Standards, Engineering Guidelines and general engineering practices.





**SAP 069-596-012 CHICAGO AVE. & W. AUSTIN ST. RECONSTRUCTION  
Rice Lake, MN**

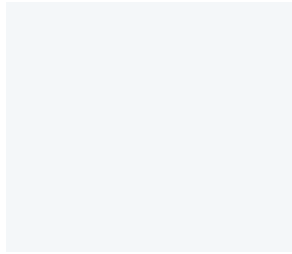
During the design of the reconstruction of Chicago Avenue, City staff requested a curb and gutter system to better accommodate runoff from the hilly terrain on the west side. Stormwater drainage frequently channelized on the western edge of Chicago Avenue prior to reaching poorly defined ditches, resulting in continual washouts of the gravel roadway. To accommodate the storm runoff, this local road was reconstructed into a standard 22-foot-wide bituminous surface with curb and gutter and associated storm sewer network. Upgrades also included water main and sanitary sewer utilities. To help fund the roadway construction, MSA helped the City apply and receive Local Road Improvement Program funds. The water main construction was funded through the MnPFA's Clean Water Revolving Fund.

**PROJECT HIGHLIGHTS**

- Urban reconstruction
- New storm sewer and water main
- State Aid funds

**PROJECT TEAM MEMBERS**

- James Watters (Street Design)



**2020 STREET IMPROVEMENTS  
Hermantown, MN**

*Project Manager Jeff Goetzman and QA/QC Jon Loye's experience prior to joining MSA.*

The project involved rehabilitation of approximately 1.9 miles of municipal roads, including ditch work, storm sewer repairs, culvert replacements and maintenance of sanitary sewers and water mains. The project enhanced the condition of the City's oldest roads and elevated safety standards, improving visibility for both motor and pedestrian traffic.

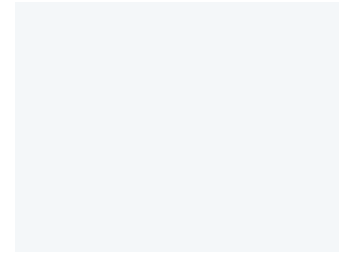
Jeff and Jon collaborated closely with the City to provide effective communication with residents, keeping them informed about potential impacts and the project's construction schedule.

**PROJECT HIGHLIGHTS**

- Ditch work
- Storm sewer repairs
- Culvert replacements
- Maintenance of sanitary sewers and water mains

**PROJECT TEAM MEMBERS**

- Jeff Goetzman (QA/QC)
- Jon Loye (Project Manager)



**2022, 2021, AND 2020 STREET PRESERVATION PROJECTS  
Duluth, MN**

*Project Manager Jeff Goetzman's experience prior to joining MSA.*

Working with a previous firm, Jeff provided design and construction services for the 2022, 2021 and 2020 Street Preservation Projects which included commercial, residential and Municipal State Aid streets. The street improvements consisted of removal and replacement of damaged curb, mill and overlay of bituminous pavement, full depth pavement reclamation, bituminous paving, storm structure repairs, pedestrian ramps, ADA and sidewalk improvements, grading, spot utility repairs, and restoration. The projects spanned multiple facets, including an initial cost evaluation for construction, the development of comprehensive project plans and specifications, as well as providing invaluable support in the form of construction oversight and administration.

**PROJECT HIGHLIGHTS**

- Pavement rehabilitation
- Curb and gutter repair
- Storm structure repair
- Pedestrian ramps
- ADA and sidewalk improvements
- Construction oversight and administration

**PROJECT TEAM MEMBERS**

- Jeff Goetzman (Project Manager)
- Jon Loye (Stormwater Design)

**LEAD WATER SERVICE REPLACEMENT Duluth, MN**

MSA has been facilitating the replacement of lead water service lines and regular water service lines for many years for the City of Duluth. Most recently, MSA was contracted to provide engineering services for the replacement of lead water services in the Gary Neighborhood. Project scope includes plan set creation, construction inspection, and administration. **Project highlights:** City of Duluth project, significant utility coordination. **Project team members:** Jon Loye (Project Manager), Will Taylor (Design Lead).

## KEY PERSONNEL

MSA understands no change in personnel assigned to the project will be permitted without approval of the City.



### Jeff Goetzman, PE | PROJECT MANAGER

B.S., Civil Engineering, University of Minnesota - Twin Cities  
Professional Engineer, MN, WI

*Jeff will be the City's main point of contact and Project Manager for this project.* Jeff has more than 30 years of municipal engineering experience. As an experienced team leader, he has developed strong project management skills for both public and private clients. Jeff has designed and managed street, drainage, bridge, and municipal utility projects through planning, budgeting, design and construction. These projects include city streets and county state aid highways, bridges and large diameter culverts, storm and sanitary sewers, watermains, trails, and parks.

#### Similar Project Experience

- 2020, 2021, and 2022 Street Preservation Projects, Duluth, MN\*
- Wrenshall Street, Lily Lane, & Pleasant View Court Street Improvements, Wrenshall, MN\*
- Western Waterfront Trail Renewal, Duluth, MN\*
- Devonshire St Reconstruction and Safe Routes to School, Duluth, MN\*
- Chester Park Drive Reconstruction, Duluth, MN\*
- City Engineer (2018-2023), Wrenshall, MN\*
- City Engineer (2018-2023), Scanlon, MN\*



### Jon Loye, PE | QA/QC & STORM DESIGN

B.C.E., Civil Engineering, University of Minnesota  
B.A., Architecture, University of Minnesota  
Professional Engineer, MN

*Jon will be providing oversight of storm sewer design and QA/QC on plan documents for this project.* Jon has more than 15 years of engineering experience, having worked at a municipality, consulting engineering firms, and a large contractor during his career. He has managed State Aid, local public and private projects throughout MN. He has experience with stormwater, sanitary, water and other utility design on both public and private projects, working across numerous agencies to meet permitting and regulatory requirements.

#### Similar Project Experience

- 2020 and 2021 Street Preservation Projects, Duluth, MN\*
- Lead Water Service Replacement, Duluth, MN
- Rice Lake Rd Utility Extension, Rice Lake, MN
- Rice Lake Rd Lift Station and Utility Extension, Rice Lake, MN
- SE Utility and Street Reconstruction, Calumet, MN



### Wil Taylor, PE | LEAD DESIGN ENGINEER

B.A., Civil Engineering, University of Minnesota-Duluth  
Professional Engineer, MN

*Wil will be leading the design work and plan production for this project.* Wil has more than 7 years of experience in the industry. His work experience includes municipal street and utility projects, site grading, storm water analysis and geotechnical exploration and observation.

#### Similar Project Experience

- Citywide Lead Water Service Replacement, Duluth, MN
- 2020 and 2021 Street Preservation, Duluth, MN\*
- Lift Station Design, Rice Lake, MN
- Water Tower and Watermain Improvements, Shafer, MN
- Housing Area Street and Utilities, Fond du Lac Band of Lake Superior, MN
- Lakewalk Restoration Phase II and III, Duluth, MN & Two Harbors, MN\*



### James Watters, PE | STATE AID & ADA QA/QC

B.S., Civil Engineering, Iowa State University  
Professional Engineer, MN, WI, IA

*James is well versed in curb ramp design and ADA compliance for transportation projects and will provide oversight for ADA design on this project.* James has more than 12 years of experience in transportation design covering many forms of mobility ranging from DOT interchange projects to rural highway design. This design experience has been accompanied by years of construction inspection and project administration utilizing various funding sources available in Minnesota. James is familiar with the many forms of agency coordination including correspondence with MnDOT State Aid, MnDNR, U.S. Army Corps of Engineers and Local Governing Units (LGUs). He has experience in construction materials testing and research.

#### Similar Project Experience

- East Second Street Design and Construction Phase, Duluth, MN
- Riverwest Drive, Duluth, MN
- 7<sup>th</sup> Street Reconstruction, Red Wing, MN
- Flowerfield Road Reconstruction, Lexington, MN
- Ugstad Rd. & Arrowhead Rd. Improvements, Hermantown, MN
- Gitchi Gami Trail, Tofte South Segment, Cook County, MN
- Raven Street NW Reconditioning, Oak Grove, MN

\*Denotes experience prior to MSA.



**Casey Farrell | GIS TECHNICIAN**

Masters Certificate, Geographic Information Systems, Saint Mary's University

B.S., Geography and Economics, University of Wisconsin-Eau Claire

*Casey will provide layout of aerial photography and the City's GIS utility layers for the project plans.* Casey has more than 15 years of GIS experience using Esri software and applications. He has a background in geospatial data analysis, figure creation, customer service and data management. Casey has worked on projects that include environmental site assessments and investigations, stormwater protection planning, wetland delineations, transportation planning, geotechnical investigation, and pollution control.

**Similar Project Experience**

- ArcGIS Online Administration Services, Lindstrom, MN; Harris, MN; Lexington, MN; Shoreview, MN
- City Wide Lead Water Service Replacement, Duluth, MN
- Prior and Associates GIS Services, United States
- Fairview Cemetery App., Lindstrom, MN
- GIS Services, Rice Lake, MN



**Fletcher Koos | SURVEYOR**

Survey Technology Diploma, Hennepin Technical College

B.S., Physical Science Education, University of Minnesota

*Fletcher will perform onsite topographic survey for this project.* Fletcher has 18 years of experience that includes boundary surveying, ALTA surveys, PLSS corner restorations, title research, right-of-way descriptions, real estate valuation, right-of-way acquisition, preliminary engineering surveys, computations, Civil 3D drafting, GIS and construction staking.

**Similar Project Experience**

- Interstate 35 between Hinckley and Sandstone, MnDOT\*
- Piedmont Elementary School Reconstruction, Duluth, MN\*
- PLSS Corner Restoration, Beltrami County, MN\*
- Topo Survey for Hwy 1, Tower, MN\*
- US Forest Service, Ely, MN\*
- US Army Camp Guernsey Boundary Survey, Guernsey, WY\*



**Sophie Abrams | ENGINEER**

B.S., Civil Engineering, Michigan Technological University

ACI Concrete Field Testing Technician – Grade I

MnDOT Density Technology

*Sophie will be helping with storm sewer modeling and plan production for this project.* With three years of experience, Sophie's background includes project feasibility studies, permitting, preliminary layouts, cost estimates, and construction observation and materials testing for various transportation projects across Minnesota.

**Similar Project Experience**

- East Second Street Reconstruction, Duluth, MN
- Riverside Road/Serenity Way Paving, Thomson, MN
- General Engineering Services, Thomson, MN
- Lake Vermillion State Park Trailside Campground Wetland Permitting, MN
- GGST - Tofte South Segment, Tofte, MN
- GGST - Lutsen Phase II Segment, Lutsen, MN
- Keene Creek Trail Development, Duluth, MN

**SUBCONSULTANTS**

**American Engineering Testing, Inc.**

Geotechnical



MSA and AET have a long-standing working relationship on countless projects. AET will provide geotechnical services. AET provides geotechnical, environmental, materials and forensic engineering, consulting, testing, and laboratory services to a broad range of market sectors including agriculture, transportation, energy, government and commercial.

**Ritter & Ritter Inc.**

Stormwater Video Inspection & Drainage Report



Ritter & Ritter strives to provide a top quality service to municipalities with all of their sewer, drain cleaning, and grouting needs. Maintaining a superior knowledge in the advancements of new age technology has led the firm to become one of Minnesota's leaders in trenchless technology for sewer system needs.

\*Denotes experience prior to MSA.



## WORK PLAN

MSA staff have reviewed the City's RFP in detail and visited project sites to complete an assessment of potential design challenges. The main design challenges for the 2024 Street Preservation Project include:

- Evaluating watershed drainage patterns and alternatives for adequate stormwater management specifically at the Bayview Heights, Main Street, and East 7<sup>th</sup> Street project areas identified in the RFP.
- Developing plans for ADA-compliant pedestrian ramps at intersections with existing sidewalks given varying steep slopes of some streets.
- Utility coordination—talking with the City's operators and maintenance crews regarding problem areas in the 70 street segments included in the project early in the design process will help to make sure that our design work can address these concerns as part of the rehabilitation project.
- Public involvement will be an important element of the project design process as well, with early meetings providing our team with additional input as to drainage, access or other issues residents are aware of which can be remedied as part of the project design.

### TASK 1 – INITIAL SITE VISIT & CONSULTATIONS

**Project Kickoff Meeting.** MSA will conduct a kickoff meeting with the City of Duluth to review concerns from City staff, project scope, and available documents (previous reports, precedent projects, known survey monuments, local knowledge, etc.) pertaining to the project corridor and design. This will also serve as a meeting to clarify project direction, introduce key staff and discuss important tasks at the beginning of the project.

At the kick-off meeting we will determine the preferred methods for communication with the project team members. We will develop a Project Management Plan for the project summarizing the methods of communication, set dates for progress meetings with City staff, and Quality Management Plan. MSA will document the meeting and provide City staff with minutes.

#### **Task 1 Deliverables & Assumptions:**

- Coordinate and lead the project kickoff meeting.
- Distribute meeting minutes to attendees.
- Review project materials (reports, record drawings, existing right-of-way information within City's file, known survey monuments, utility contacts).

### TASK 2 – PUBLIC PARTICIPATION

**Public & Stakeholder Involvement.** Given the residential nature of the project corridor, public meetings will be a key piece for providing a means of communication and feedback for the community. The City has scheduled initial public engagement meetings at noontime and the evening of October 5, 2023. Our team will be prepared to assist City staff by attending those early meetings to engage with the public/stakeholders. MSA will also work with City

staff to schedule and present at five (5) additional neighborhood information meetings which will serve to both present information to the public and to gather public feedback and concerns which can be evaluated as part of the project study. Direct feedback regarding issues such as stormwater ponding, erosion, or impacts to trees is valuable to the team for being able to address specific concerns with the existing infrastructure. Per the City's RFP, we will use virtual meetings where we introduce key decision makers and design staff, provide a short presentation, then discuss concerns or questions residents may have. We plan to use three (3) of the public meetings early on to introduce the project and gather feedback from affected residents. One meeting would be held in each of the mapped project areas (i.e., east, west, central). Remaining meetings would be used to discuss design plans and the anticipated construction and traffic impacts to the public.

As project design progresses, our team will provide the City with monthly updates on design status which can be shared with stakeholders and press releases/notices that can be used with media outlets to provide updates to the public.

#### **Task 2 Deliverables & Assumptions:**

- Assist City staff with attending and engaging with interested public at meetings on October 5, 2023.
- Provide exhibits, draft meeting invites and provide summary of attendees and comments for five (5) neighborhood information meetings.
- Press releases/mail public notices and provide communication with local media (MSA to create content, City of Duluth to send out).
- Monthly project status updates for posting/updates to stakeholders.

### TASK 3 – RECONNAISSANCE, FIELD SURVEYS & GEOTECHNICAL EXPLORATION

Our first task will be to create a street layout over aerial imagery for each of the 70 street segments. We will review each segment with City staff using Google Earth to determine the scope of ADA surveys and other design elements required for each site.

**Topographic Survey.** Our survey team will perform topographic survey of the street segments in the 2024 Street Preservation Project as necessary to locate driveways, curb lines, drainage features, ditches and yard slopes. We will begin by completing a Gopher State One Call (GSOC) to mark known utilities within each of the project areas. The topographic survey may also include tree lines/large trees, adjacent building corners, entrances, steps, walls, and slopes within 10 feet of the right-of-way. Intersections will include information within 100 feet of intersecting side roads for design of ADA-compliant pedestrian facilities. The level of detail for intersections and curb ramps will be at a Level 3 per MnDOT's ADA Project Design Guide.

We will locate survey monuments to establish and layout the existing street right-of-way and create plan notes so the City can

preserve or reset these monuments during construction. Our team will work to provide a summary of retaining walls or encroachments to the right-of-way. Recommendations for replacement will be strictly on a visual basis. We will create an exhibit for each typical section illustrating where trees would be required to be removed to facilitate construction. This information is valuable for the City's removal contractor, but also for discussion with the public.

Several known issues for stormwater improvements were identified in the City's RFP, including Bayview Heights, Main Street and East 7<sup>th</sup> Street. In these areas, topographic survey data will be collected as necessary to supplement the City's GIS data for stormwater modeling. This will include spot elevations on existing drainage ditches along streets and alleys, verifying invert elevations and grades on existing downstream storm sewer infrastructure, as well as downstream structures. This information will be used as part of our stormwater analysis to determine stormwater controls for these areas and to develop typical sections to support improved drainage.

**Agency Coordination & Permitting.** Changes to existing stormwater structures near public waters would trigger DNR involvement. A SWPPP and MPCA permit will be prepared as necessary for larger areas of construction impact on the project. MSA's Jon Loye will lead coordination with regulatory agencies for initial discussions and eventual permit applications.

**Geotechnical Exploration.** Subconsultant American Engineering Testing, Inc. (AET) will complete the geotechnical exploration for the project. AET will obtain borings and cores to verify the existing roadway section and subgrade soils as well as pavement recommendations for the proposed street reconstruction.

Stormwater Video Inspection & Drainage Report. Subconsultant Ritter & Ritter will clean, televise, and work with our design team to create an assessment report for storm sewer piping and structures in the road segments identified for reclamation on the project. The Storm Video Inspection and Drainage Assessment Report will include high-resolution video logs, structure reports, and recommendations for repair or replacement. Our assessment work and report will be prepared in accordance with NASSCO MACP/PACP Level 1 Standards. This work shall be undertaken early in the design process so that there is time for City staff to evaluate the proposed repair/replacement needs and associated costs and can make an informed decision on how to move forward.

**Task 3 Deliverables & Assumptions:**

- Topographic survey of project areas, as necessary.
- Right-of-way layout.
- Gopher One field locate tickets.
- Summary of retaining walls/right-of-way encroachments.
- City utility system maps and field locates.
- Base mapping of the corridor based on topographic survey and existing surface model of topographic survey in AutoCAD Civil 3D for reclamation segments.

- Bat Survey 4f/6f impacts not anticipated or included.
- Permit applications for submittal by the City of Duluth.
- Geotechnical report and detailing pavement design recommendations (AET).

**TASK 4 PRELIMINARY RECOMMENDATIONS & COSTS**

**Preliminary Recommendations & Costs.** The City has conveyed expectations for the 2024 Street Preservation Project through its RFP for engineering services. Once we have completed the topographic survey and made some initial observations, MSA's team will take the opportunity to meet with City staff to discuss findings and direction for the preliminary design task. MSA will prepare a short memo detailing the information gathered in Tasks 2 and 3. Our memo will also include preliminary recommendations and high-level cost estimates highlighting:

- Typical section costs, issues, and challenges.
- Initial stormwater discussion with City staff on segments with televising and assessments.
- Initial construction cost estimate for each of the roadway segments included in the project, broken down with pay item details.

MSA will meet with the City to talk through the recommendations memo to discuss how the proposed design fits within the City's vision for the project and budget constraints. We will commence with preliminary design tasks following this discussion with City staff.

**Task 4 Deliverables & Assumptions:**

- Preliminary recommendations memo and preliminary cost estimate showing each segment and anticipated construction pay items.
- Preliminary recommendations memo review meeting with staff and minutes.

**TASK 5 – PLANS & SPECIFICATIONS**

**Geometric Layouts.** MSA will prepare construction drawings for each of the 70 street segments included in the 2024 Street Preservation Project. Layouts will be created and provided for City staff review which may include horizontal and vertical roadway geometry, typical sections, cross sections, utility layouts, right-of-way and construction limits. Drainage design and modeling calculations shall also be prepared as applicable for areas with significant storm sewer improvements. Once layout sheets have been created, MSA will meet with City staff to review each segment in an office setting to discuss critical needs at each site. We will arrange site visits and topographic survey based on these discussions and include a budget for time in our proposal for this effort.

GIS Technician Casey Farrell will develop the background imagery and existing utility layouts for our plan set production, incorporating recent aerial imagery with the City's GIS utility information. Our design team, including Design Engineers Wil Taylor and Sophie Abrams, will develop the details to bid and construct each of these improvements. Our approach will be to develop an overall Statement of Estimated Quantities (SEQ) that includes all 70 locations—each project location will have a column

dedicated to it, highlighting the applicable pay items and quantities and note references—so that each column represents the items of work pertaining to a particular segment. We will group our plan set such that similar types of work—overlays, mill and overlays, and reclaims—are grouped together, and the locations will be listed from east to west in terms of location in Duluth. Typically, each location will have a plan view, existing and proposed typical sections, and tabulated pay item quantities to provide contractors with adequate information as to what is required. Storm sewer plan/profiles, pedestrian ramp standard plans and details, storm sewer structure, erosion control and paving details will be added as applicable to each location.

**Utility Design & Coordination.** The project will follow applicable sections of the MnDOT Utility Accommodation and Coordination Manual. Wil Taylor will coordinate with affected utility owners early on in design, and a pre-design meeting will be scheduled early in the project. We will work with the City of Duluth to obtain utility location information and collaborate with private utility owners to avoid conflicts. A second review meeting will be held after completing the utilities to address concerns or conflicts discovered during design. The final utility plans will seamlessly integrate into the format of the entire plan set.

**Design Review Meetings.** Our team will meet with City staff regularly to discuss design progress, schedules and issues which require City review as the design progresses. We plan to have a formal review meeting with City staff at both 30% and 90% design stages to help make sure the design is on track and meeting the City's requirements. We also anticipate meeting with Tom Johnson, Stormwater Engineer for Duluth, to discuss and review stormwater concerns and design elements as the project development proceeds. Early meetings to discuss the City's background knowledge of each stormwater problem will help us to formulate the design solution going forward and we can review these design solutions with the City to help make sure design considerations and requirements are being met.

QA/QC of design deliverables will be provided by Jon Loye and James Watters for conformance with City standards, State Aid design standards (where applicable), and for ADA compliance. We feel the need for senior-level staff with local design experience is a critical component to the success of our projects.

**Task 5 Deliverables & Assumptions:**

- Prepare draft layouts for each street segment with plan view over aerial imagery with known utilities.
- Develop stormwater model and design for affected segments, review with Duluth Stormwater Engineer Tom Johnson to review and reach consensus on design solutions for final plan documents.
- Attend one (1) utility informational meeting and one (1) utility design meeting.

- Complete and submit 30% (preliminary) design plans to include any geometric corrections, ADA improvements, and evaluation of stormwater features with feasibility of utility improvements.
- Prepare plans exhibits, letters, meeting agendas and minutes for design review meetings.
- Complete and submit 90% (final) design plans which is complete to a level that primary design decisions have been addressed to construct the project including any phasing or traffic control.
- Participate in plan review meetings with City staff at 30% and 90% design.
- Complete and submit 100% design plan set representing a complete design to biddable level with estimated quantities, details and special provisions

**TASK 6 – COST ESTIMATE**

MSA will refine our preliminary design and 30% construction plans for all work in the project. MSA has extensive experience in detailing the Statement of Estimated Quantities (SEQ) for State Aid eligible items; this includes the additional splits for participating and non-participating (locally funded) water and utility items. We will provide the City with updated construction cost estimates, broken down by street segment, with each plan submittal for a total of five (5) estimates. We will provide a final itemized construction cost estimate for each individual segment with final plans and specifications.

**Task 6 Deliverables & Assumptions:**

- Cost estimates with each set of design level plan deliverables (30%, 90%, 100%) as well as preliminary recommendations.

**TASK 7 – PROJECT BIDDING**

The project is expected to bid in February 2024. During the bidding process, MSA will assist the City by attending a pre-bid meeting, answering Contractor questions, and evaluating bids. We will provide the City with bidding documents in PDF, AutoCAD Civil 3D, Excel (bid sheets/quantities), and a bid form in .CSV format. We are happy to work with Purchasing to customize these documents in whatever format is required for compiling the bidding package.

**Task 7 Deliverables & Assumptions:**

- Final bid package in PDF, AutoCAD Civil 3D, Excel, CSV formats as necessary for bidding.
- Host pre-bid meeting for contractors bidding the project and provide an agenda/minutes.
- Answer contractor questions during the bidding process.



★ Indicates Critical Date	Task Number	2023			2024					
		O	N	D	J	F	M	A	M	
<b>Task 1 - Initial Site Visit &amp; Consultations</b>										
	Project Kickoff Meeting (w/ City, Agencies, MnDOT, Utilities)	A	★							
	Stakeholder Meetings/Review Meetings	B		★		★	★			LOM*
	Project Site Review & Site Research	C								
	Project Meetings & Status Updates	D								
<b>Task 2 - Public Participation</b>										
	Public & Stakeholder Involvement	A	★	10/5, PIM #1		★	Jan., PIM #2-5			
<b>Task 3 - Reconnaissance, Field Surveys &amp; Geotechnical Exploration</b>										
	Topographic & ROW Survey	A								
	Base Map Preparation/Imagery/Utilities	B								
	Agency Coordination/Permitting/Environmental Documentation	C		★		★	★			
	Easement Exhibits	D								(if required, additional work scope)
	Storm Sewer Cleaning/Televising	E								
	Geotechnical Exploration	F			(AET)					
<b>Task 4 - Preliminary Recommendations &amp; Costs</b>										
	Recommendation & Cost Memo	A								
	Preliminary Recommendations Meeting	B		★	11/1 Recs & Cost Memo, Meeting					
<b>Task 5 - Plans &amp; Specifications</b>										
	Preliminary Street Design	A								
	Prelim & Final Stormwater Design	B								
	Utilities Design & Coordination	C								
	Final Plan Design/Drafting	D								
	Pedestrian Ramp and ADA Compliance	E								
	Preliminary and Final Plan QA/QC	F								
<b>Task 6 - Cost Estimate</b>										
	Cost Estimates Prelim Recommendation, 30%, 60%, 90%, Final	A								
<b>Task 7 - Project Bidding</b>										
	Final Plans	A					★	2/14, Final PS&E		
	Final Project Specifications	B						Advertise, 2/21		
	Bid Support	C						★	3/6, Bids	
PIM = Public Involvement Meeting. PS&E = Plans Specifications & Estimate. LOM* = Local Official/Stakeholder Meeting. Kick-off, Preliminary Cost/Recommendations, 30%, 90%, and Final Review Meetings.										



*Deteriorated pavement will be replaced to improve ride and surface drainage.*



2024 Street Preservation Project - RFP Number: 23-99649 - Work Plan											
Phase	Task / Deliverable	Project Manager Goetzman	QA/QC & Storm Design Loye	State Aid & ADA QA/QC Watters	Lead Design Engineer Taylor	Project Engineer Abrams	Graduate Engineer Weber	GIS Technician Farrell	Professional Land Surveyor Schley	Surveyor Koos	Total Hours
<i>(Notes) Subtasks/task notes &amp; details</i>											
<b>1</b>	<b>Initial Site Visit &amp; Consultations</b>	42	6	4	44	60	44	0	0	0	200
	<b>Project Kickoff Meeting w/ City Engineering Staff</b>	4			4	4	4				16
	<i>Confirm schedule, scope, deliverables, procedures and follow up correspondence with city staff</i>										
	<b>Project Site Review &amp; Site Research</b>	8	4		16	24	24				76
	<i>Review existing information, conduct site review, identify utilities and site issues pre-site visit.</i>										
	<b>Public &amp; Stakeholder Involvement</b>	10	2		4	12	16				44
	<i>Public Participation (5 informational meetings)</i>										
	<b>Project Meetings and Status Updates</b>	20		4	20	20					64
	<i>Follow-up status/consultation meetings and minutes via video teleconference (assume 10, i.e. biweekly)</i>										
<b>2</b>	<b>Public Participation</b>	12	2	0	12	12	6	0	0	0	44
	<b>Public &amp; Stakeholder Involvement</b>	12	2		12	12	6				44
	<i>Public Participation (5 informational meetings)</i>										
<b>3</b>	<b>Reconnaissance, Field Surveys &amp; Geotechnical Exploration</b>	40	16	2	88	162	128	24	16	190	666
	<b>Topographic and ROW Survey*</b>	8			12	12	8		10	150	200
	<i>Topo survey (ADA survey at 40% of intersections, curb, driveways, structures, Level 3)</i>										
	<b>Base Map Preparation/Aerial Imagery/GIS Utilities</b>	16			40	80	80	24	4	36	280
	<i>Parcel research and base map prep, draft basemap in AutoCAD and generate existing surface</i>										
	<b>Agency Coordination &amp; Permitting</b>	6	12		10	30					58
	<i>Tree Clearing Exhibit, Agency Coordination: MNDNR, MPCA, DOT</i>										
	<b>Easement Exhibits</b>	2			8	8			2	4	24
	<i>Easement exhibits—exhibit identifying potential ROW conflicts (easements, descriptions additional work)</i>										
	<b>Storm Sewer Cleaning/Televising</b>	4	4		10	16	16				50
	<i>Cleaning and televising, condition report, coordination with subconsultant (Great Lakes)</i>										
	<b>Geotechnical Exploration</b>	4		2	8	16	24				54
	<i>Soil borings, geotechnical report, coordination with subconsultant (AET)</i>										
<b>4</b>	<b>Preliminary Recommendations &amp; Costs</b>	12	2	4	20	28	34	0	2	0	102
	<b>Recommendation and Cost Memo</b>	6	2	4	16	20	24		2		74
	<i>Prepare preliminary engineering memo and construction cost estimates to verify scope and budget</i>										
	<b>Preliminary Recommendations Meeting</b>	6			4	8	10				28
	<i>Meet with City staff to review preliminary recommendations and initial cost estimate, finalize scope</i>										
<b>5</b>	<b>Plans &amp; Specifications</b>	60	54	32	194	416	482	16	2	100	1356
	<b>Preliminary Street Design</b>	6	4	6	36	80	120				252
	<i>Layout of plan view, plan/profile for Bayview, Main St., &amp; 7th St</i>										
	<b>Preliminary &amp; Final Stormwater Design</b>	10	18	2	42	80	60				212
	<i>Develop storm sewer systems, draft hydraulics, coordinate with Tom Johnson for 3 main reclamation and storm sewer locations (Bayview, Main Street, 7th Street)</i>										
	<b>Utilities Design &amp; Coordination</b>	8			12	10	16				46
	<i>Coordinate review of utility conflicts and utility relocations</i>										
	<b>Final Plan Design/Drafting</b>	8	4		36	100	120	12			280
	<i>Final Plans and exhibit drafting</i>										
	<b>Plan Development Meetings</b>	10	4		10	16	16	4			60
	<i>Meet with City staff at 30%, 60%, 90% design stage to review</i>										
	<b>Pedestrian Ramp and ADA Compliance*</b>	10	8	16	28	90	110		2	100	364
	<i>377 ramp/corners to be reviewed in existing sidewalk areas (est. 40% with detail design)</i>										
	<b>Preliminary &amp; Final Plan QA/QC</b>	8	16	8	30	40	40				142
	<i>Review deliverables for compliance with state and federal aid standards</i>										
<b>6</b>	<b>Cost Estimate</b>	4	0	2	8	20	24	0	0	0	58
	<b>Cost Estimates Prelim Recommendation, 30% design, 60%, 90%, and 100%</b>	4		2	8	20	24				58
	<i>Five (5) cost estimates</i>										
<b>7</b>	<b>Project Bidding</b>	12	4	2	16	22	30	0	0	0	86
	<b>Deliver Final Bid Package to City Purchasing</b>	4	4	2	6	16	24				56
	<b>Host Pre-bid Meeting for Contractors (agenda, minutes)</b>	4			4						8
	<b>Bidding Support</b>	4			6	6	6				22
<b>GRAND TOTAL</b>		182	84	46	382	720	748	40	20	290	2512



Pedestrian ramps will be reconstructed to provide better pedestrian access.



New curbs and storm sewer structures will improve surface drainage and pavement quality.

## REFERENCES

### CITY OF SUPERIOR, WI

Todd Janigo, Public Works Director  
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janigot@ci.superior.wi.us  
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TBlomdahl@RiceLakeCityMN.com  
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### \*FALL LAKE TOWNSHIP, MN

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\*Reference for Jeff Goetzman for his work prior to joining MSA



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**Addendum 1**  
**Solicitation 23-99649**  
**RFP for Engineering Svcs for 2024 Street Preservation**

This addendum serves to notify all bidders of the following changes to the solicitation documents:

Language added to the RFP is underlined; language stricken from the RFP will be ~~struck through~~.

3e. Add language:

The Consultant shall do all necessary geotechnical exploration to determine/verify the existing section on the reclaim and mill/overlay sections. The consultant shall coordinate with the City for boring locations. Assume for this proposal the total number of subsurface explorations is one (1) per 400 ft. The Reclaim streets shall have borings done to a maximum depth of 2 LF. Mill and overlays shall be cored to determine pavement thickness above subgrade or concrete pavement. Consultant shall provide a boring Log Report with boring number, surface elevation, depth to bottom of pavements, depth to bottom of granular fill, depth to top of native soils and gradation results. Assume all borings on reclaims shall have a gradation done. All boring locations will be shown on the construction plans with a boring/core number and a pavement thickness on all streets. See plan example.

3g. Add language:

The Consultant, as part of design services, shall arrange for and include the cost to televise all the storm water pipes and drainage structures, including inspection of the structures on ONLY those segments of road identified for reclamation. Assume 2600 LF of 12', 15' or 18" pipe for proposal. All pipe must be cleaned before televising. Any collapsed pipes or structures that can't be televised must be brought immediately to the City's attention during televising. The consultant shall provide a "Storm Video Inspection and Drainage Assessment Report" that will include high resolution video logs, manhole/structure reports, and repair and/or replacement recommendations, as appropriate. Pipe and drainage structure inspections and defect and feature coding shall be in accordance with NASSCO MACP / PACP Level 1 standards. The inspection and all forms, reports, photos, exhibits, diagrams, required viewer software, etc. shall be provided early in the design process so repairs and replacements can be assessed and incorporated in the project design to meet the City's overall project schedule.

PROJECT OVERVIEW AND BACKGROUND

Change language on the street list:

N 84<sup>th</sup> Ave W, from Grand Ave to ~~Knowlton Blvd~~ Coleman Ave

Please acknowledge receipt of this Addendum by including a copy of it with your proposal. The pages included will not count toward any page limitation, if any, identified in the RFP.

Posted: **9/22/2023**