PROFESSIONAL ENGINEERING SERVICES AGREEMENT

ENGINEER & CITY OF DULUTH

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

Name: SRF Consulting Group, Inc.
Address: 1 Carlson Parkway North, Suite 150, Minneapolis, MN 55447-4453

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 550-500-5535 and 411-035-5530, PI2020-1807; Project # 1752 / 1807; and Resolution No. 20-0150R, passed on February 24, 2020.

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

Project Number:	1752/1807
Project Name:	Woodland-Kent-E 8th St Traffic Signal Replacement
Project Description:	**Professional Services for Design and Construction Administration Services for a New Traffic Signal and ADA Improvements at the Intersection of Woodland Ave, Kent Rd, and E 8th St in Duluth, MN**

This Agreement shall incorporate by reference the professional engineering services for this Project previously performed by Engineer under Master Service Agreement L30086 which shall be deemed to have been performed under this Agreement; except that to the extent that there is any difference between the terms and conditions of this agreement and Master Service Agreement L30086, the terms and conditions of this agreement shall be deemed to be controlling.

The professional engineering services to be provided under this agreement, including work for this project previously performed under Master Service Agreement L30086, consist of those phases A through G checked below. A more particular description of each phase is contained in Section II, "Basic Services", of the agreement.

	Phase	Description
☐	A.	Study and Report Phase
☒	B.	Preliminary Survey Phase
☒	C.	Preliminary Design Phase
☒	D.	Final Design Phase
☒	E.	Bidding Phase
☒	F.	Construction Survey and Layout Phase
☒	G.	Construction Administration and Inspection Phase

SECTION I. GENERAL

A. ENGINEER

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

B. NOTICE TO PROCEED

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

C. TIME

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

D. CITY'S REPRESENTATIVE

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

E. ENGINEERING GUIDELINES

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

F. SUBCONSULTANTS

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

SECTION II. BASIC SERVICES

A. STUDY AND REPORT PHASE

☐ Included in this Agreement
☒ Not included in this Agreement

The Engineer shall:

1) City's Requirements

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

2) Advise Regarding Additional Data

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

3) Technical Analysis

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

4) Economic Analysis

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

5) Report Preparation

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

6) Report Presentation

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

7) Supplementary Duties

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

5) Completion Time

The preliminary survey phase shall be completed and submitted by July 1, 2019.

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 Exhibits A and B.

8) Completion Time
The Preliminary Design Phase shall be completed and report or plan submitted by September 30, 2019.

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

5) 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 Exhibits A and B.

8) Completion Time
The Final Design Phase shall be completed and contract documents submitted by January 31, 2020.

E. BIDDING PHASE

☒ Included in this Agreement
☐ Not included in this Agreement

The Engineer shall:

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

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

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

4) 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 Exhibits A and B.

6) Completion Time
The bidding phase shall be completed by March 1, 2020.

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 Exhibits A and B.

5) Completion Time

The construction survey & layout phase shall be completed by August 31, 2020.

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 insure that such work is proceeding in accordance with the contract documents. During such visits and on the basis of on-site observations, the Engineer shall keep the City informed of the progress of the work, shall endeavor to guard the City against defects and deficiencies in such work and may disapprove or reject work failing to conform to the contract documents.

3) Warranty Inspection

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

4) Review of Technical and Procedural Aspects

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

5) Contract Documents

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

6) Conferences and Meetings

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

7) Records

a) Maintain orderly files for correspondence, reports of job conferences, shop drawings and samples, reproductions of original contract documents, including all work directive changes, addenda, change orders, field orders, additional drawings 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 Exhibits A and B.

18) Completion Time

The construction administration and inspection phase shall be completed by October 31, 2020.

SECTION III. CITY'S RESPONSIBILITIES

A. FURNISH REQUIREMENTS AND LIMITATIONS

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

B. FURNISH INFORMATION

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

C. REVIEW DOCUMENTS

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

D. OBTAIN APPROVALS AND PERMITS

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

E. ACCOUNTING, LEGAL AND INSURANCE SERVICE

Provide such accounting, independent cost estimating and insurance counseling services as may be required for the Project, such auditing service as the City may require to ascertain how or for what purpose any contractor has used the monies paid to him under the construction contract, and such inspection services as the City may

require to ascertain that the contractor(s) are complying with any law, rule or regulation applicable to their performance of the work except as otherwise provided in Section II.

F. NOTIFY THE ENGINEER OF DEFECTS OR DEVELOPMENT

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

G. COSTS OF THE CITY'S RESPONSIBILITIES

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

SECTION IV. GENERAL CONSIDERATIONS

A. SUCCESSORS AND ASSIGNS

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

B. OWNERSHIP OF DOCUMENTS

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

C. ESTIMATES OF COST (COST OPINION)

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

D. INSURANCE

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

   a) Workers' compensation insurance in accordance with the laws of the State of Minnesota.
   b) Public Liability Insurance and Automobile Liability Insurance with limits not less than **$1,500,000** Single Limit, and twice the limits provided when a claim arises out of the release or threatened release of a hazardous substance; shall be in a company approved by the city of Duluth; and shall provide for the following: Liability for Premises, Operations, Completed Operations, Independent Contractors, and Contractual Liability.
   c) Professional Liability Insurance in an amount not less than **$1,500,000** Single Limit; provided further that in the event the professional malpractice insurance is in the form of "claims made," insurance, Engineer hereby commits to provide at least 60 days' notice prior to any change to the Professional Liability Insurance policy or coverage ; and in event of any change, Engineer agrees to provide the City with either evidence of new insurance coverage conforming to the provisions of this paragraph which will provide unbroken protection to the City, or, in the alternative, to purchase at its cost, extended coverage under the old policy for

the period the state of repose runs; the protection to be provided by said "claims made" insurance shall remain in place until the running of the statute of repose for claims related to this Agreement.

d) **City of Duluth shall be named as Additional Insured** under the Public Liability and Automobile Liability, or as an alternate, Engineer may provide Owners-Contractors Protective policy, naming himself and City of Duluth. Engineer shall also provide evidence of Statutory Minnesota Workers' Compensation Insurance. Engineer to provide Certificate of Insurance evidencing such coverage with notice to City of cancellation in accordance with the provisions of the underlying insurance policy included. The City of Duluth does not represent or guarantee that these types or limits of coverage are adequate to protect the Engineer's interests and liabilities.

e) If a certificate of insurance is provided, the form of the certificate shall contain an unconditional requirement that the insurer notify the City without fail not less than the notice provisions contained in the underlying insurance policy or policies. In addition, Engineer commits to provide to City notice to City at least 30 days prior to any change of the policy or coverages.

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

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

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

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

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

E. HOLD HARMLESS

The Engineer agrees that it shall defend, indemnify and hold harmless the City of Duluth and its officers, agents, servants and employees from any and all claims including claims for contribution or indemnity, demands, suits, judgments, costs and expenses asserted by any person or persons including agents or employees of the City of Duluth or the Engineer by reason of death or injury to person or persons or the loss or damage to property arising out of, or by reason of, any act, omission, operation or work of the Engineer or its employees while engaged in the execution or performance of services under this Agreement except to the extent that such indemnification is specifically prohibited by Minnesota Statutes Chapter 337 or Section 604.21. Engineer shall not be required to indemnify City for claims of liability arising out of the sole negligent or intentional acts or omission of the City but shall be specifically required to and agrees to defend and indemnify City in all cases where claims of liability against the City arise out of acts or omissions which are passive or derivative of the negligent or intentional acts or omissions of Engineer, including but not limited to, the failure of the City to supervise, the failure to warn, the failure to prevent such acts or omission by Engineer and any other such source of liability. On ten days' written notice from the City of Duluth, the Engineer shall appear and defend all lawsuits against the City of Duluth growing out of such injuries or damages.

F. TERMINATION

1) This agreement may be terminated in whole or in part in writing by either party in the event of

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

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

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

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

G. LAWS, RULES AND REGULATIONS

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

H. INDEPENDENT CONTRACTOR STATUS

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

I. FEDERAL FUNDING

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

J. AMENDMENT OF AGREEMENT

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

SECTION V. PAYMENT

A. BASIS OF BILLING

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

B. PAYMENT FOR WORK COMPLETED

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

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

3) Upon satisfactory completion of the work performed hereunder, and prior to final payment under this

agreement, and as a condition precedent thereto, the Engineer shall execute and deliver to the City a release of all claims against the City arising under or by virtue of this agreement.

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

C. TOTAL NOT TO EXCEED:
All payments under this Contract, including work identified in Exhibit B and previously performed under Master Services Agreement L30086, are not to exceed Seventy-Nine Thousand, Seven Hundred Seventy-Four and 00/100 Dollars ($79,774.00).

SECTION VI. SPECIAL PROVISIONS

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

1) Exhibit A, Engineer's Proposal and Hourly Rates, dated February 3, 2020, entitled "Project Amendment Request, Woodland Avenue and Kent Road Traffic Signal Design"
2) Exhibit B**,** Engineer's Proposal and Hourly Rates, dated January 17, 2019, entitled "Proposal for Professional Services for Woodland Avenue and Kent Road Traffic Signal Design, Duluth, MN "

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

SECTION VII. COUNTERPARTS

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

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

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

CITY OF DULUTH-Client

By:_____
Mayor

Attest:

By:_____
City Clerk

Date: _____

Countersigned:

_____
City Auditor

Approved as to Form:

_____
City Attorney

SRF CONSULTING GROUP, INC.

By:_____

Its: _____
Title of Representative

Date: _____

Exhibit A

SRF 13494.PP

February 3, 2020

Ms. Taryn J. Erickson
Project Engineer
City of Duluth
411 West First Street, Room 211
Duluth, MN 55802-1101

Subject: Project Amendment Request, Woodland Avenue and Kent Road Traffic Signal Design

Dear Ms. Erickson:

With this letter, we respectfully request a supplement to our current agreement for the design of a new traffic signal system and ADA improvements at the intersection of Woodland Avenue and Kent Road in Duluth. This amendment adds construction services to the scope of services. Attached is an updated Work Tasks and Person-Hours Estimate with the proposed amendment work appearing in red text.

Scope of Services

We propose to carry out the work ("Work Tasks and Person-Hours Estimate"), set forth in Attachment A, attached hereto and incorporated into this Agreement.

Assumptions

Specific assumptions for the construction services are included in the Work Tasks and Person-Hours Estimate, Attachment A, attached hereto and incorporated into this Agreement.

Schedule

We will complete this work within a mutually agreed-upon time schedule, which will be linked to the project construction schedule.

Basis of Payment/Budget

We propose to be reimbursed for our services on an hourly basis for the actual time expended. Other direct project expenses such as printing, supplies, reproduction, etc., will be billed at cost and mileage will be billed at the current allowable IRS rate for business miles. Invoices are submitted monthly for work performed during the previous month. Payment is due within 30 days.

Based on our understanding of the project and our scope of services, we estimate the cost of our services associated with this amendment to be $38,856 which includes both time and expenses. The original contract amount was $40,918; this amendment adjusts the total contract amount to $79,774. It is understood that in-construction services costs are highly dependent on factors beyond our control, such as construction contractor quality, construction contractor efficiency, and weather and as such, this is only an estimate.

Changes in the Scope of Services

It is understood that if the scope or extent of work changes, the cost will be adjusted accordingly. Before any out-of-scope work is initiated, however, we will submit a budget request for the new work and will not begin work until we receive authorization from you.

Acceptance/Notice to Proceed

A signed copy of this proposal, mailed or emailed to George Stuempfig in our office, will serve as acceptance of this proposal and our notice to proceed. The email address is gstuempfig@srfconsulting.com.

We sincerely appreciate your consideration of this project amendment request and look forward to continuing to work with you on this project. Please feel free to contact us if you have any questions or need additional information.

Sincerely,

SRF CONSULTING GROUP, INC.

Luke S. James George M. Stuempfig

Luke James, PE (MN)
Project Manager

George M. Stuempfig, PE, PTOE (MN IL WI)
Principal

LJ/GMS/ko

Attachment A – Work Tasks and Person-Hours Estimate including amendment tasks
Attachment B – Original Proposal for Design Services
Attachment C – AET Proposal

Approved: (City of Duluth)

_____
(signature)

Name _____

Title _____

Date _____

This cost proposal is valid for a period of 90 days. SRF reserves the right to adjust its cost estimate after 90 days from the date of this proposal.

SRF Consulting Group, Inc.

Client: City of Duluth

Project: Woodland Ave @ Kent Rd Traffic Signal Design

Attachment A - Work Tasks and Person-Hours Estimate

Consulting Group, Inc.

12369rev2.PP

Subconsultants:

TASK NO.	SUMMARY OF TASKS
1.0	Project Management, QA/QC
2.0	Data Collection
3.0	Signal Justification
4.0	ADA Pedestrian Ramp Design
5.0	Traffic Signal Design
6.0	Construction Services

Project Overview:

This project involves providing signal justification to satisfy the MnDOT Office of State Aid, and designing a new traffic control signal system incorporating interconnect, intersection lighting and associated ADA-compliant pedestrian ramp improvements.

The subject intersection is at Woodland Avenue and Kent Road. The signal will incorporate components at the Woodland Avenue/College Street intersection.

SRF Consulting Group, Inc.
Client: City of Duluth
Project: Woodland Ave @ Kent Rd Traffic Signal Design

Attachment A - Work Tasks and Person-Hours Estimate

Consulting Group, Inc.

12369rev2.PP

TASK NO.	TASK DESCRIPTION	PRINCIPAL	SR. ASSOC.	ASSOCIATE	SR. PROF	PROF.	TECHNICAL	INTERN	TOTALS	EST. FEE
1.0	**Project Management, QA/QC** Assumptions: • One trip to Duluth for a combined project kickoff meeting and field review. This will be a one-day trip without overnight lodging. • Design (and project management) will occur over a period of three months from NTP. Client Deliverables: • Attendance at project kickoff meeting.									
1.1	Day-to-day project management, internal/external coordination, monthly invoices	8	0	6	8	0	0	0	22	$3,398
1.2	Project kickoff meeting.	0	0	0	4	0	0	0	4	$448
1.3	Contact Gopher State One Call to obtain design locates of utilities within the project area. Create Utility Log to track correspondence and utility representative contact information.	0	0	0	4	0	0	0	4	$448
1.4	QA/QC review of work products.	7	0	0	0	0	0	0	7	$1,470
	SRF Deliverables: • Monthly invoices. • Project kickoff meeting agenda and minutes.									
	SUBTOTAL - TASK 1	**15**	**0**	**6**	**16**	**0**	**0**	**0**	**37**	**$5,764**
2.0	**Data Collection** Assumptions: • Topo survey will be conducted by a two person crew to account for potential adverse weather conditions (snow and ice). The topo survey will be scheduled to allow the survey crew to pick up the video camera upon completion of the video data collection. Client Deliverables:									
2.1	Topographic survey covering Woodland Avenue from Kent Road to College Street, inclusive.	0	2	0	0	12	12	0	26	$3,000
2.2	Gather video of intersection operations for use in performing turning movement counts.	0	0	0	0	8	1	0	9	$904
2.3	Perform 13 hours of turning movement counts from existing video.	0	0	0	0	0	0	12	12	$720
	SRF Deliverables: • Topo survey data. • Video files. • Turning movement count data.									
	SUBTOTAL - TASK 2	**0**	**2**	**0**	**0**	**20**	**13**	**12**	**47**	**$4,624**

SRF Consulting Group, Inc.

Client: City of Duluth

Project: Woodland Ave @ Kent Rd Traffic Signal Design

Attachment A - Work Tasks and Person-Hours Estimate

Consulting Group, Inc.

12369rev2.PP

TASK NO.	TASK DESCRIPTION	PRINCIPAL	SR. ASSOC.	ASSOCIATE	SR. PROF	PROF.	TECHNICAL	INTERN	TOTALS	EST. FEE
3.0	**Signal Justification**									
	Assumptions:									
	• Only one round of agency review and comment on draft report.									
	Client Deliverables:									
	• Review comments on draft SJR.									
3.1	Perform signal warrants analysis.	0	0	0	0	2	0	0	2	$196
3.2	Prepare draft signal justification report (SJR). Submit to MnDOT State Aid and City of Duluth for review.	0	0	0	2	11	5	0	18	$1,902
3.3	Address review comments. Prepare final SJR and route for signatures.	0	0	0	2	3	0	0	5	$518
	SRF Deliverables:									
	• Draft and final SJR.									
	SUBTOTAL - TASK 3	**0**	**0**	**0**	**4**	**16**	**5**	**0**	**25**	**$2,616**

SRF Consulting Group, Inc.
Client: City of Duluth
Project: Woodland Ave @ Kent Rd Traffic Signal Design

Attachment A - Work Tasks and Person-Hours Estimate

Consulting Group, Inc.

12369rev2.PP

TASK NO.	TASK DESCRIPTION	PRINCIPAL	SR. ASSOC.	ASSOCIATE	SR. PROF	PROF.	TECHNICAL	INTERN	TOTALS	EST. FEE
4.0	**ADA Pedestrian Ramp Design** Assumptions: • Basemaps and plans will be created and delivered in AutoCAD 2018 format. • All work will fit within existing right-of-way. Acquisition of additional right-of-way will not be necessary. • No storm sewer, watermain or other public utility work is required. • City will perform all activities related to bidding and letting the project. • As-built drawings not included. Client Deliverables: • City of Duluth GIS data (existing ROW and utilities). • City of Duluth AutoCAD template and associated supporting files. • City AutoCAD layering files and definitions for design. • Comments at 60% and 95% design reviews.									
4.1	Prepare existing conditions basemap (AutoCAD digital drawing) of sufficient dimensions on all four legs of the intersection. Create existing ground surface. Show all key features, including edge of pavement, lane lines, median locations, drainage features and major above-ground features.	0	0	0	0	2	2	0	4	$436
4.2	Prepare Existing Utilities basemap (AutoCAD digital drawing) showing above- and below-ground utilities within the project area. Supplement survey with existing utility linework from City GIS information.	0	0	0	0	1	1	0	2	$218
4.3	Prepare existing right-of-way basemap (AutoCAD digital drawing) from City GIS information.	0	0	0	0	1	1	0	2	$218
4.4	Prepare 60% pedestrian ramp design including crosswalk layouts and stop bar locations. Submit 60% plans for review.	0	0	4	0	14	8	0	26	$2,880
4.5	Prepare and submit 60% Division S special provisions.	0	0	4	0	0	0	0	4	$548
4.6	Develop 95% plan set based on 60% review comments. Submit for State Aid and City review.	0	0	2	0	12	6	0	20	$2,170
4.7	Develop 95% Division S special provisions based on 60% review comments.	0	0	2	0	0	0	0	2	$274
4.8	Prepare Engineer's Estimate.	0	0	2	0	4	0	0	6	$666
4.9	Prepare and submit final PS&E package based on 95% review comments. Assemble final AutoCAD design files and associated supporting files.	0	0	4	0	4	2	0	10	$1,180

SRF Consulting Group, Inc.
Client: City of Duluth
Project: Woodland Ave @ Kent Rd Traffic Signal Design

Attachment A - Work Tasks and Person-Hours Estimate

Consulting Group, Inc.

12369rev2.PP

TASK NO.	TASK DESCRIPTION	PRINCIPAL	SR. ASSOC.	ASSOCIATE	SR. PROF	PROF.	TECHNICAL	INTERN	TOTALS	EST. FEE
	SRF Deliverables: • 60% draft plans (pdf, including title sheet, Standard Layouts and Plans (MnDOT ADA Level 2), Existing Conditions and Utilities, Removal Plans, Construction Plans and Signing/Pavement Marking Plans). • 95% plans, pdf, including sheets from 60% submittal plus SEQ, Tabulations, Alignment Tabulations, Pedestrian Ramp and Intersection Details, and Signing/Pavement Markings Details and Tabulations. • 60% (pdf) and 95% (pdf and Word) Specifications. • 95% Engineer's Estimate (pdf, Excel). • Final Plans (one paper copy, pdf), Specifications (one paper copy, pdf, Word) and Estimate (pdf, Excel) • Final AutoCAD design files and associated supporting files.									
	SUBTOTAL - TASK 4	0	0	18	0	38	20	0	76	$8,590
5.0	**Traffic Signal Design** Assumptions: • Assumes a construction temporary signal will be necessary because of tight right-of-way at intersection. In the course of the design we will determine whether a temporary signal can be avoided. • Assumes that existing fiber interconnect to 21st Avenue will be reused by rerouting in new conduit system at the intersection. Assumes that new fiber interconnect will be installed from Kent Road to Clover Street along Woodland Avenue. • Electronic and paper files/information (AutoCAD, pdf, etc.) of available signal data, including signal plans at Woodland Ave/Kent Rd and Woodland Ave/Clover St. • Assumes no temporary interconnect for construction temporary signal. Client Deliverables: • Review comments on draft 60% and 95% plans and special provisions.									
5.1	Construction temporary signal design, plans.	0	0	0	7	46	0	0	53	$5,292
5.2	Permanent signal and interconnect design, plans.	0	0	0	13	103	0	0	116	$11,550
5.3	Division SS special provisions.	0	0	0	4	10	0	0	14	$1,428
5.4	Engineer's estimate for signal and interconnect work.	0	0	0	0	4	0	0	4	$392
	SRF Deliverables: • 60% and 95% draft signal plans. • 95% draft Division SS signal special provisions. • Final signal plans, special provisions and estimate (PS&E).									
	SUBTOTAL - TASK 5	0	0	0	24	163	0	0	187	$18,662

SRF Consulting Group, Inc.
Client: City of Duluth
Project: Woodland Ave @ Kent Rd Traffic Signal Design

Attachment A - Work Tasks and Person-Hours Estimate

Consulting Group, Inc.

12369rev2.PP

TASK NO.	TASK DESCRIPTION	PRINCIPAL	SR. ASSOC.	ASSOCIATE	SR. PROF	PROF.	TECHNICAL	INTERN	TOTALS	EST. FEE
6.0	**Construction Services** Assumptions: • Construction schedule assumed to be 12 weeks of primary construction, 4 weeks for punchlist and final completion. • Project administration/documentation consistent with State Aid requirements. • Assumes ten trips to Duluth by SRF engineering/inspection staff, including one pre-construction conference, one utility coordination meeting, six site inspection visits including during concrete pours, one trip to create punchlist, and one final inspection. • Assumes two trips by a two-person survey crew for construction staking: one for removals and one for new construction. Client Deliverables: • Provide a minimum of 48 hours notice prior to need for construction staking. • Project control for construction staking.									
6.1	Construction project management (2 hrs/wk over 12 weeks). Assign and manage staff, monthly progress reports, quality control reviews of deliverables.	12	0	0	12	0	0	0	24	$3,864
6.2	Construction engineering support. Shop drawing review, plan clarifications, plan revisions.	0	0	4	14	0	0	0	18	$2,116
6.3	Contract administration, project engineer. Pre-construction conference, utility coordination meeting, progress meetings (every other week), submittal tracking and review, contract change documents, pay requests, labor compliance review, final documentation package.	0	0	0	32	0	0	0	32	$3,584
6.4	Construction observation. Assume 6 trips to observe construction (every other week on average during primary construction activities), one punchlist trip, and one final inspection. Construction observation diaries, photo documentation, measure quantities for payment, schedule material testing, schedule staking, labor interviews, prepare punchlist, schedule final inspection with State Aid.	0	0	0	42	0	70	0	112	$13,104
6.5	Construction staking. Staking for removals/limits, signal bases, pedestrian push button stations, curb, sidewalk and pedestrian ramps.	0	4	0	0	0	64	0	68	$8,448
6.6	Material testing. Task completed by AET; see attached AET scope; cost indicated on Subconsultant line below.	0	0	0	0	0	0	0	0	$0
6.4	As-built plans. Gather information on as-built conditions from contractor, prepare record drawings.	2	0	2	8	0	0	0	12	$1,590
	SRF Deliverables: • Construction observation diaries and photo records. • Shop drawing review documentation. • Material testing reports (from AET). • Punchlist documentation. • Final record drawings.									

SRF Consulting Group, Inc.
Client: City of Duluth
Project: Woodland Ave @ Kent Rd Traffic Signal Design

Attachment A - Work Tasks and Person-Hours Estimate

Consulting Group, Inc.
12369rev2.PP

TASK NO.	TASK DESCRIPTION	PRINCIPAL	SR. ASSOC.	ASSOCIATE	SR. PROF	PROF.	TECHNICAL	INTERN	TOTALS	EST. FEE
	• Final documentation package.									
	SUBTOTAL - TASK 6	**14**	**4**	**6**	**108**	**0**	**134**	**0**	**266**	**$32,706**
	TOTAL ESTIMATED PERSON-HOURS	**29**	**6**	**30**	**152**	237	**172**	12	**638**	
	AVERAGE HOURLY BILLING RATES	$210	$192	$137	$112	$98	$120	$60		
	ESTIMATED LABOR AND OVERHEAD	$6,090	$1,152	$4,110	$17,024	$23,226	$20,640	$720		$72,962
	ESTIMATED DIRECT NON-SALARY EXPENSES									$6,812
	TOTAL ESTIMATED FEE									**$79,774**

ESTIMATE OF DIRECT NON-SALARY EXPENSES:

MILEAGE:	Personal Vehicles	5160	Miles @	$0.580	$2,993
HOTEL:	Hotel	2	Nights @	$100.00	$200
MEALS:	Meals	30	Meals @	$15.00	$450
REPRODUCTION:	Copy Duplication	0	Copies @	$0.10	$0
	Color Copies	0	Copies @	$0.35	$0
	Bond Prints	0	Prints @	$6.00	$0
	Mylar Prints	0	Prints @	$12.00	$0
COURTHOUSE COPIES:		0	Copies @	$1.00	$0
PRINTING:					$0
SUPPLIES:					$0
COMMUNICATIONS:	Mail, Express, Etc.				$0
	Cell Phone Charges	0	Minutes @	$0.30	$0
SUBCONSULTANTS: AET (materials testing)					$3,169
ESTIMATED DIRECT NON-SALARY EXPENSES					$6,812

Exhibit B

SRF No. 12369.PP(rev)

January 17, 2019

Ms. Cari Pedersen
Chief Transportation Engineer
City of Duluth
411 West First Street, Room 211
Duluth, MN 55802-1101

Subject: Proposal for Professional Services for Woodland Avenue and Kent Road Traffic Signal Design
Duluth, MN

Dear Ms. Pedersen:

Based on your request, SRF Consulting Group, Inc. (SRF) is pleased to submit this proposal to provide professional services for traffic signal and ADA pedestrian ramp design at Woodland Avenue and Kent Road.

Scope of Services

We propose to carry out the work ("Scope of Services"), set forth in Attachment A, attached hereto and incorporated into this Agreement.

Schedule

We anticipate completing the design this winter to enable the start of construction in summer 2019.

Basis of Payment/Budget

We propose to be reimbursed for our services on an hourly basis for the actual time expended. Other direct project expenses such as printing, supplies, reproduction, etc., will be billed at cost and mileage will be billed at the current allowable IRS rate for business miles. Invoices are submitted on a monthly basis for work performed during the previous month. Payment is due within 30 days.

Based on our understanding of the project and our scope of services, we estimate the cost of our services to be $40,918 which includes both time and expenses.

Changes in the Scope of Services

It is understood that if the scope or extent of work changes, the cost will be adjusted accordingly. Before any out-of-scope work is initiated, however, we will submit a budget request for the new work and will not begin work until we receive authorization from you.

Standard Terms and Conditions

The existing Master Agreement for Professional Services and Work Tasks and Person-Hours Estimate (Attachment A), together with this proposal for professional services, constitute the entire agreement between the Client and SRF Consulting Group, Inc. and supersede all prior written or oral understandings. This agreement may only be amended, supplemented, modified, or canceled by a duly executed written instrument.

Acceptance/Notice to Proceed

A signed copy of this proposal, mailed or emailed to our office, will serve as acceptance of this proposal and our notice to proceed. The email address is gstuempfig@srfconsulting.com.

We sincerely appreciate your consideration of this proposal and look forward to working with you on this project. Please feel free to contact us if you have any questions or need additional information.

Sincerely,

SRF CONSULTING GROUP, INC.

George M. Stuempfig

George M. Stuempfig, PE, PTOE
Principal

GMS/lf

Attachment A—Work Tasks and Person-Hours Estimate

Approved

_____
(signature)

Name _____

Title _____

Date _____

This cost proposal is valid for a period of 90 days. SRF reserves the right to adjust its cost estimate after 90 days from the date of this proposal.

SRF Consulting Group, Inc.

Client: City of Duluth

Project: Woodland Ave @ Kent Rd Traffic Signal Design

Attachment A - Work Tasks and Person-Hours Estimate

12369rev.PP

Subconsultants:

TASK NO.	SUMMARY OF TASKS
1.0	Project Management, QA/QC
2.0	Data Collection
3.0	Signal Justification
4.0	ADA Pedestrian Ramp Design
5.0	Traffic Signal Design

Project Overview:

This project involves providing signal justification to satisfy the MnDOT Office of State Aid, and designing a new traffic control signal system incorporating interconnect, intersection lighting and associated ADA-compliant pedestrian ramp improvements.

The subject intersection is at Woodland Avenue and Kent Road. The signal will incorporate components at the Woodland Avenue/College Street intersection.

The scope includes design of a construction temporary signal system. This task will be eliminated if it is determined that the new signal system can be constructed while the existing signal continues to operate.

The scope does not include shop drawing review or in-construction services. These can be added if desired.

SRF Consulting Group, Inc.

Client: City of Duluth

Project: Woodland Ave @ Kent Rd Traffic Signal Design

Attachment A - Work Tasks and Person-Hours Estimate

Consulting Group, Inc.

12369rev.PP

TASK NO.	TASK DESCRIPTION	PRINCIPAL	SR. ASSOC.	ASSOCIATE	SR. PROF	PROF.	TECHNICAL	INTERN	TOTALS	EST. FEE
1.0	**Project Management, QA/QC** Assumptions: • One trip to Duluth for a combined project kickoff meeting and field review. This will be a one-day trip without overnight lodging. • Design (and project management) will occur over a period of three months from NTP. Client Deliverables: • Attendance at project kickoff meeting.									
1.1	Day-to-day project management, internal/external coordination, monthly invoices	8	0	6	8	0	0	0	22	$3,398
1.2	Project kickoff meeting.	0	0	0	4	0	0	0	4	$448
1.3	Contact Gopher State One Call to obtain design locates of utilities within the project area. Create Utility Log to track correspondence and utility representative contact information.	0	0	0	4	0	0	0	4	$448
1.4	QA/QC review of work products.	7	0	0	0	0	0	0	7	$1,470
	SRF Deliverables: • Monthly invoices. • Project kickoff meeting agenda and minutes.									
	SUBTOTAL - TASK 1	**15**	**0**	**6**	**16**	**0**	**0**	**0**	**37**	**$5,764**
2.0	**Data Collection** Assumptions: • Topo survey will be conducted by a two person crew to account for potential adverse weather conditions (snow and ice). The topo survey will be scheduled to allow the survey crew to pick up the video camera upon completion of the video data collection. Client Deliverables:									
2.1	Topographic survey covering Woodland Avenue from Kent Road to College Street, inclusive.	0	2	0	0	12	12	0	26	$3,000
2.2	Gather video of intersection operations for use in performing turning movement counts.	0	0	0	0	8	1	0	9	$904
2.3	Perform 13 hours of turning movement counts from existing video.	0	0	0	0	0	0	12	12	$720
	SRF Deliverables: • Topo survey data. • Video files. • Turning movement count data.									
	SUBTOTAL - TASK 2	**0**	**2**	**0**	**0**	**20**	**13**	**12**	**47**	**$4,624**

SRF Consulting Group, Inc.

Client: City of Duluth

Project: Woodland Ave @ Kent Rd Traffic Signal Design

Attachment A - Work Tasks and Person-Hours Estimate

12369rev.PP

TASK NO.	TASK DESCRIPTION	PRINCIPAL	SR. ASSOC.	ASSOCIATE	SR. PROF	PROF.	TECHNICAL	INTERN	TOTALS	EST. FEE
3.0	**Signal Justification** Assumptions: • Only one round of agency review and comment on draft report. Client Deliverables: • Review comments on draft SJR.									
3.1	Perform signal warrants analysis.	0	0	0	0	2	0	0	2	$196
3.2	Prepare draft signal justification report (SJR). Submit to MnDOT State Aid and City of Duluth for review.	0	0	0	2	11	5	0	18	$1,902
3.3	Address review comments. Prepare final SJR and route for signatures.	0	0	0	2	3	0	0	5	$518
	SRF Deliverables: • Draft and final SJR.									
	SUBTOTAL - TASK 3	**0**	**0**	**0**	**4**	**16**	**5**	**0**	**25**	**$2,616**

SRF Consulting Group, Inc.

Client: City of Duluth

Project: Woodland Ave @ Kent Rd Traffic Signal Design

Attachment A - Work Tasks and Person-Hours Estimate

Consulting Group, Inc.

12369rev.PP

TASK NO.	TASK DESCRIPTION	PRINCIPAL	SR. ASSOC.	ASSOCIATE	SR. PROF	PROF.	TECHNICAL	INTERN	TOTALS	EST. FEE
4.0	**ADA Pedestrian Ramp Design** Assumptions: • Basemaps and plans will be created and delivered in AutoCAD 2018 format. • All work will fit within existing right-of-way. Acquisition of additional right-of-way will not be necessary. • No storm sewer, watermain or other public utility work is required. • City will perform all activities related to bidding and letting the project. • As-built drawings not included. Client Deliverables: • City of Duluth GIS data (existing ROW and utilities). • City of Duluth AutoCAD template and associated supporting files. • City AutoCAD layering files and definitions for design. • Comments at 60% and 95% design reviews.									
4.1	Prepare existing conditions basemap (AutoCAD digital drawing) of sufficient dimensions on all four legs of the intersection. Create existing ground surface. Show all key features, including edge of pavement, lane lines, median locations, drainage features and major above-ground features.	0	0	0	0	2	2	0	4	$436
4.2	Prepare Existing Utilities basemap (AutoCAD digital drawing) showing above- and below-ground utilities within the project area. Supplement survey with existing utility linework from City GIS information.	0	0	0	0	1	1	0	2	$218
4.3	Prepare existing right-of-way basemap (AutoCAD digital drawing) from City GIS information.	0	0	0	0	1	1	0	2	$218
4.4	Prepare 60% pedestrian ramp design including crosswalk layouts and stop bar locations. Submit 60% plans for review.	0	0	4	0	14	8	0	26	$2,880
4.5	Prepare and submit 60% Division S special provisions.	0	0	4	0	0	0	0	4	$548
4.6	Develop 95% plan set based on 60% review comments. Submit for State Aid and City review.	0	0	2	0	12	6	0	20	$2,170
4.7	Develop 95% Division S special provisions based on 60% review comments.	0	0	2	0	0	0	0	2	$274
4.8	Prepare Engineer's Estimate.	0	0	2	0	4	0	0	6	$666
4.9	Prepare and submit final PS&E package based on 95% review comments. Assemble final AutoCAD design files and associated supporting files.	0	0	4	0	4	2	0	10	$1,180

SRF Consulting Group, Inc.

Client: City of Duluth

Project: Woodland Ave @ Kent Rd Traffic Signal Design

Attachment A - Work Tasks and Person-Hours Estimate

Consulting Group, Inc.

12369rev.PP

TASK NO.	TASK DESCRIPTION	PRINCIPAL	SR. ASSOC.	ASSOCIATE	SR. PROF	PROF.	TECHNICAL	INTERN	TOTALS	EST. FEE
	SRF Deliverables: • 60% draft plans (pdf, including title sheet, Standard Layouts and Plans (MnDOT ADA Level 2), Existing Conditions and Utilities, Removal Plans, Construction Plans and Signing/Pavement Marking Plans). • 95% plans, pdf, including sheets from 60% submittal plus SEQ, Tabulations, Alignment Tabulations, Pedestrian Ramp and Intersection Details, and Signing/Pavement Markings Details and Tabulations. • 60% (pdf) and 95% (pdf and Word) Specifications. • 95% Engineer's Estimate (pdf, Excel). • Final Plans (one paper copy, pdf), Specifications (one paper copy, pdf, Word) and Estimate (pdf, Excel) • Final AutoCAD design files and associated supporting files.									
	SUBTOTAL - TASK 4	0	0	18	0	38	20	0	76	$8,590
5.0	**Traffic Signal Design** Assumptions: • Assumes a construction temporary signal will be necessary because of tight right-of-way at intersection. In the course of the design we will determine whether a temporary signal can be avoided. • Assumes that existing fiber interconnect to 21st Avenue will be reused by rerouting in new conduit system at the intersection. Assumes that new fiber interconnect will be installed from Kent Road to Clover Street along Woodland Avenue. • Electronic and paper files/information (AutoCAD, pdf, etc.) of available signal data, including signal plans at Woodland Ave/Kent Rd and Woodland Ave/Clover St. • Assumes no temporary interconnect for construction temporary signal. Client Deliverables: • Review comments on draft 60% and 95% plans and special provisions.									
5.1	Construction temporary signal design, plans.	0	0	0	7	46	0	0	53	$5,292
5.2	Permanent signal and interconnect design, plans.	0	0	0	13	103	0	0	116	$11,550
5.3	Division SS special provisions.	0	0	0	4	10	0	0	14	$1,428
5.4	Engineer's estimate for signal and interconnect work.	0	0	0	0	4	0	0	4	$392
	SRF Deliverables: • 60% and 95% draft signal plans. • 95% draft Division SS signal special provisions. • Final signal plans, special provisions and estimate (PS&E).									
	SUBTOTAL - TASK 5	0	0	0	24	163	0	0	187	$18,662

SRF Consulting Group, Inc.
Client: City of Duluth
Project: Woodland Ave @ Kent Rd Traffic Signal Design

Attachment A - Work Tasks and Person-Hours Estimate

Consulting Group, Inc.

12369rev.PP

TASK NO.	TASK DESCRIPTION	PRINCIPAL	SR. ASSOC.	ASSOCIATE	SR. PROF	PROF.	TECHNICAL	INTERN	TOTALS	EST. FEE
	TOTAL ESTIMATED PERSON-HOURS	**15**	**2**	**24**	**44**	**237**	**38**	**12**	**372**	
	AVERAGE HOURLY BILLING RATES	$210	$192	$137	$112	$98	$120	$60		
	ESTIMATED LABOR AND OVERHEAD	$3,150	$384	$3,288	$4,928	$23,226	$4,560	$720		$40,256
	ESTIMATED DIRECT NON-SALARY EXPENSES									$662
	TOTAL ESTIMATED FEE									**$40,918**

ESTIMATE OF DIRECT NON-SALARY EXPENSES:

MILEAGE:	Personal Vehicles	960	Miles @	$0.580	$557
HOTEL:	Hotel	0	Nights @	$100.00	$0
MEALS:	Meals	7	Meals @	$15.00	$105
REPRODUCTION:	Copy Duplication	0	Copies @	$0.10	$0
	Color Copies	0	Copies @	$0.35	$0
	Bond Prints	0	Prints @	$6.00	$0
	Mylar Prints	0	Prints @	$12.00	$0
COURTHOUSE COPIES:		0	Copies @	$1.00	$0
PRINTING:					$0
SUPPLIES:					$0
COMMUNICATIONS:	Mail, Express, Etc.				$0
	Cell Phone Charges	0	Minutes @	$0.30	$0
SUBCONSULTANTS:					$0
ESTIMATED DIRECT NON-SALARY EXPENSES					$662

AMERICAN ENGINEERING TESTING, INC.

CONSULTANTS
· ENVIRONMENTAL
· GEOTECHNICAL
· MATERIALS
· FORENSICS

January 31, 2020

SRF Consulting Group, Inc.
1 Carlson Parkway North
Plymouth, MN 55447-4443

Attn: Mr. George M. Stuempfig, PE (gstuempfig@srfconsulting.com)

RE: Quality Assurance Testing Proposal
Woodland Avenue & Kent Road/East 8th Street Signal Replacement
S.A.P. 118-134-018, 118-153-003, & 118-157-024
Client Project No. 1807
Duluth, Minnesota
AET Proposal No. 07-20506

Dear Mr. Stuempfig:

Thank you for the opportunity to provide a proposal to perform testing services on the referenced project. This proposal has been prepared in response to your recent request on January 31, 2020, and describes our understanding of the project, our anticipated scope of services, our unit rates, and an estimated total fee to perform these services.

PROJECT INFORMATION

The City of Duluth (the City) will be performing intersection improvements (or reconstruction) project during the 2020 construction season at Woodland Avenue and Kent Road. The project will be funded with state aid funds.

Plans and Specifications were prepared by SRF. We understand Construction Inspection and Contract Management of the project will be performed by SRF.

The project includes curb and gutter, concrete pavement, concrete sidewalk, and pedestrian ramps.

PROJECT APPROACH

During the construction improvements, AET will provide experienced MnDOT certified Engineering Technicians to perform sampling and material testing services in accordance with the 2019 State Aid for Local Transportation Schedule of Materials Control (2019 SALT SMC). For this project, Chelsea Buck will be AET's contact. She can be reached at (218) 216-9903 (office). The field staff which will service this project will be mobilized from our Duluth, Minnesota location.

We understand that the City will contract with others for concrete plant monitoring.

SCOPE OF SERVICES

Based on our review of the available plans, our anticipated scope of services is outlined below. These services will be provided on a part-time, will-call basis coordinated through authorized SRF field personnel.

Concrete Sampling and Testing

During the placement of concrete, AET will perform field testing consisting of slump, air content, temperature of the plastic concrete, and casting of cylinders for compression testing. The 2019 SALT SMC requires field testing for slump, air content, and temperature per every 100 cubic yards of each type of concrete placed each day. Compressive strength cylinders (1 set of 3 cylinders) are required once per every 300 cubic yards of each type of concrete placed each day; the cylinders will be retrieved the following day for curing and testing in our laboratory. The 3 cylinders are to be tested at 28-days. We are proposing to cast sets of 5 cylinders, with compressive strength testing as follows: 1 at 7 days, 3 at 28 days, and the 5th cylinder will be held in reserve for future testing if the 28-day strength requirement is not met.

We have assumed SRF personnel will be compiling the concrete batch tickets, certificates of compliance, and AET's field test results of the plastic concrete, which we will provide each day we are on-site performing testing services.

Concrete Plant Inspection

This proposal does not incorporate the time and cost to perform concrete plant inspections. These services will be provided at your request.

REPORTING

AET staff will prepare reports for SRF to review. These reports will include the results of our field and laboratory testing as performed per the 2019 SALT SMC.

ESTIMATED FEES

Our services will be provided on a unit cost basis according to the unit rates provided in the attached Materials Testing Estimate. Our invoices will be determined by multiplying the number of personnel hours or tests by their respective unit rates. The rates are from the annual fee schedule for 2020 projects.

We have estimated a "likely needed estimate" which is the cost that we anticipate will be required to complete the previously described testing services, based on our experience and assumed scheduling of the project. Our "likely needed" estimated fee is **$3,169.00**. We refer you to the attached Materials Testing Estimate as reference to how we arrived at this estimated cost. We caution that this is only an estimated cost.

We caution that this is only an estimated cost. Often, variations in the overall cost of the services occur due to reasons beyond our control, such as weather delays, changes in the contractor's

schedule, unforeseen conditions, or retesting. These variations will affect the actual invoice totals, either increasing or decreasing our total costs for the project from those estimated in this proposal. If more time or tests are required, additional fees may be needed to complete the project testing services. If less time or tests are needed, a cost savings will be realized. We will not, however, exceed the estimated total cost for the project without first obtaining your authorization.

TERMS AND CONDITIONS

Our services will be provided subject to a signed Professional Services Subconsultant Agreement between SRF Consulting Group, Inc. and American Engineering Testing, Inc.

ACCEPTANCE

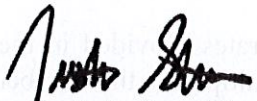
AET requests written acceptance of this proposal in the Proposal Acceptance box below, but the following actions shall constitute your acceptance of this proposal together with the Terms and Conditions: 1) issuing an authorizing purchase order for any of the Services described in this proposal, 2) authorizing AET's presence on site, or 3) written or electronic notification for AET to proceed with any of the Services described in this proposal. Please indicate your acceptance of this proposal by signing below and returning a copy to us. When you accept this proposal, you represent that you are authorized to accept on behalf of the Client.

GENERAL REMARKS

AET appreciates the opportunity to provide this service for you and looks forward to working with you on this project. If you have any questions or need addition information, please contact me.

Sincerely,
American Engineering Testing, Inc.

Prepared By:



Justin L. Staker, PE
Staff Engineer
Phone: (651) 523-1265
Email: jstaker@amengtest.com

Reviewed By:

Attachments: Materials Testing Estimate

AMERICAN ENGINEERING TESTING, INC.

Materials Testing Estimate for Woodland Ave & Kent Rd Signal Replacement – 2019 SALT SMC
SAP 118-134-018, 118-153-003, 118-157-024; CP 1807; Duluth, Minnesota

Material	Units	Quantity	Trips	Hours	Agency Testing & Frequency	# of Tests Likely	Cost per Test ($)	Cost ($) Likely
Common Embankment	yd^3	10 (note 1)			Proctor (1/soil type)		145.00	0.00
					Specified Density Nuclear Gauge (1/4,000 yd^3)		30.00	0.00
					Moisture Content (1/10,000 yd^3, 10 max)		13.00	0.00
Aggregate Base Class 5	yd^3	9 (note 1)			Gradation (2 per lot, 1 lot ≤ 2,000 yd^3)		105.00	0.00
					DCP (1/500 yd^3), assumes not test rolled		50.00	0.00
					Moisture Content (1/1,000 yd^3, 10 max)		13.00	0.00
Concrete - Pavement, Walkk, Pedestrian Ramps, Curb & Gutter	yd^3	17 (note 2)	6	18	Plastic Concrete Testing (1 set of tests/100 yd^3/day) - Included in hourly rate			
					Cylinder Molds (5 cylinders/300 yd^3/day)	30	3.00	90.00
					Concrete Compressive Strength, Curing, & Handling 4x8 Cylinders	30	22.00	660.00
					Concrete sample pick up from job site	6	75.00	450.00
			6	18			**Subtotal =**	**1,200.00**

Notes:
1. Per the 2019 SALT SMC, less than 500 tons (250 CY) may be accepted by the Engineer without testing.
2. Material Quantities are estimated based upon Statement of Estimated Quantities, standard conversions, and plans.

Time and Mileage	Unit	Rate ($)	Likely Quantity	Cost
Mileage	Mile	0.75	84	63.00
Technician Time	Hour	91.00	18	1,638.00
Project Management	Hour	134.00	2	268.00
			Subtotal =	**1,969.00**

	Likely
Total Cost Estimate =	**3,169.00**

Estimate prepared by: **Justin Staker**