

# **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: Short Elliott Hendrickson Inc.  
Address: 418 West Superior St., Suite 200, Duluth, MN 55802-1512

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

Payments hereunder, in the estimated amount of Sixty Thousand Seven Hundred and no/100ths Dollars (\$60,700.00) shall be made from Funding 452-030-5530; HANDHTAX-1506; Resolution No. 17-0311R passed on April 24, 2017 and Requisition Number 17-0304.

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

Project Number: 1506  
Project Name: Lower Spirit Nordic  
Project Description: Design, field surveying, wetland permitting, as-builts and preparation of construction documents for the Grand Ave Nordic Ski Center – Final Design

The professional engineering services to be provided under this agreement consist of those phases A through H 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>
<u>      </u>	A. Study and Report Phase
<u>      </u>	B. Preliminary Survey Phase
<u>  X  </u>	C. Preliminary Design Phase
<u>  X  </u>	D. Final Design Phase
<u>      </u>	E. Bidding Phase
<u>  X  </u>	F. Construction Survey and Layout Phase
<u>      </u>	G. Construction Administration and Inspection Phase
<u>      </u>	H. Additional Services

### **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 H as applicable and within the amounts allocated for such services pursuant to Section V.D below.

**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 of the types described in Section III.C, in order to evaluate or complete the Project and, if directed by the City's representative, act on behalf of the City in obtaining other data or services.

3) Technical Analysis

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

4) Economic Analysis

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

5) Report Preparation

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

6) Report Presentation

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

7) Supplementary Duties

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

8) Completion Time

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

B. PRELIMINARY SURVEY PHASE

☐ Included in this agreement

☒ Not included in this agreement

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

1) General

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

2) Boundary Survey

Perform boundary survey if checked.

3) Document Presentation

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

4) Supplementary Duties

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

5) Completion Time

The preliminary survey phase shall be completed and submitted by n/a.

C. PRELIMINARY DESIGN PHASE

☒ Included in this agreement

☐ Not included in this agreement

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

1) Preliminary Design Documents

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

2) Revised Project Costs

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

3) Preparation of Grants; Environmental Statements

Preparation of applications and supporting documents for governmental grants, loans or advances in connection with the Project, preparation or review of environmental assessments and impact statements; review and evaluation of the effect on the design requirements of the Project of any such statements and

documentation prepared by others; and assistance in obtaining approvals of authorities having jurisdiction over the anticipated environmental impact of the Project.

4) Renderings and Models

Providing renderings or models for the City's use.

5) Economic Analysis

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

6) Document Presentation

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

7) Supplementary Duties

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

8) Completion Time

The Preliminary Design Phase shall be completed and report or plan submitted by October 15, 2017.

D. FINAL DESIGN PHASE

  X   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 Exhibit B.

8) Completion Time

The Final Design Phase shall be completed and contract documents submitted by October 15, 2017.

E. BIDDING PHASE

☐ Included in this agreement

☒ Not included in this agreement

The Engineer shall:

1) Assist in Bidding

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

2) Advise Regarding Contractors and Subcontractors

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

3) Consult Regarding Substitutes

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

4) Evaluation of Bids

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

5) Supplementary Duties

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

6) Completion Time

The bidding phase shall be completed by n/a.

F. CONSTRUCTION SURVEY AND LAYOUT PHASE

☒ Included in this agreement

☐ Not included in this agreement

1) General

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

2) Duties

The Engineer shall provide horizontal and vertical control line and grade to enable construction of the improvement as depicted in the Project plans. The number of control points to be established by the Engineer shall be sufficient to permit the construction contractor to construct the improvement within the construction tolerances established in the Project specifications. In addition, the number of control points shall be consistent with standard engineering practice.

3) Accuracy

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

4) Supplementary Duties

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

5) Completion Time

The construction survey & layout phase shall be completed by November 30, 2017.

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 Exhibit B.

18) Completion Time

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

H. ADDITIONAL SERVICES

\_\_\_\_\_ Included in this agreement

X Not included in this agreement

If authorized in writing by the City, the Engineer shall furnish or obtain other additional services of the following types which are not considered normal or customary basic services except to the extent specifically provided in Section II; these will be paid for by the City as indicated in Section V.

1) Significant Changes

Services resulting from significant changes in extent of the Project or its design including, but not limited to, changes in size, complexity, City's schedule or character of construction or method of financing; and revising previously accepted studies, reports, design documents or contract documents when such revisions are due to causes beyond the Engineer's control.

2) Alternate Bid Documents

Preparing documents for alternate bids requested by the City for contractor(s)' work which is not executed or documents for out-of-sequence work.



3) Services Resulting from Acts Beyond Engineer's Control

Additional or extended services during construction made necessary by (1) work damaged by fire or other cause during construction, (2) a significant amount of defective or neglected work of the contractor(s) as determined by the city representative, (3) prolongation of the contract time due to delays by the contractor, (4) acceleration of the progress schedule involving services beyond normal working hours, and (5) default by the contractor.

4) Services After Construction Phase

Services after completion of the construction phase excluding the warranty inspection.

5) Legal Proceedings

Preparing to serve or serving as a consultant or witness for the City in any litigation, public hearing or other legal or administrative proceeding involving the Project (except as agreed to under Basic Services).

6) Services Not Otherwise Provided

Additional services in connection with the Project, including services normally furnished by the City and services not otherwise provided for implicitly or by fair implication of this agreement.

7) Supplementary Duties

The following additional services have been identified and are included in the Additional Services Phase any additional duties and responsibilities to be provided pursuant to the Engineer's proposal attached as Exhibit B.

8) Completion Time

The time limit to complete additional services cannot be fully specified in this agreement because the full nature and full extent of additional services are unknown.

### **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 incident 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 an amount based on hourly rates not to exceed \$60,700.00 for all services rendered under Section II Phases A through H, 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 D of this section. The above applies only if termination is for reasons other than the fault of the Engineer.

#### C. STANDARD PAYMENT

The Engineer shall complete all services described in Section II.A through G including all attachments to Section II for an amount including all Project-related expenses for the estimated amounts shown hereunder:

<u>Section II</u>	<u>Description</u>	<u>Estimated Compensation</u>
A.	Study and Report Phase	\$ 0.00
B.	Preliminary Survey Phase	\$ 0.00
C.	Preliminary Design Phase	\$ 14,000.00
D.	Final Design Phase	\$ 27,700.00
E.	Bidding Phase	\$ 0.00
F.	Construction Survey and Layout Phase	\$ 19,000.00
G.	Construction Administration and Inspection Phase	\$ 0.00
<b>TOTAL</b>		<b>\$ 60,700.00</b>

The maximum compensation for all phases A through G shall not exceed **Sixty-Thousand, Seven Hundred and 00/100 Dollars**.

#### D. PAYMENT FOR ADDITIONAL SERVICES

City shall pay the Engineer for all additional services rendered under Section II.H an amount based on hourly rates shown in Exhibit A for services rendered by principals and employees assigned to the Project. The maximum payment described in Section V.C shall not apply to additional services.

The Engineer and City agree that the full extent of additional services may be unknown. Those additional services which have been identified are described in Section II.H, and that payment for those additional services is estimated to be \$0.00.

This agreement is made between the City and the Engineer entered into on the last date below written. In witness, the parties have executed this agreement.

#### E. TOTAL NOT TO EXCEED:

All payments under this Contract are not to exceed \$60,700.00 Payable under funding 452-030-5530 HANDHTAX-1506.

### 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.

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

**CITY OF DULUTH-Client**

**ENGINEER  
SHORT ELLIOTT HENDRICKSON, INC.**

By:

\_\_\_\_\_  
Mayor

\_\_\_\_\_  
Company Representative

\_\_\_\_\_  
Date

Attest:

Its:

\_\_\_\_\_  
City Clerk

\_\_\_\_\_  
Title of Representative

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

Countersigned:

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

\_\_\_\_\_  
Date

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

\_\_\_\_\_  
Date

## EXHIBIT A

### SEH Hourly Billable Rate Range

Classification	Billable Rate <sup>(1)</sup>
<b>Office Staff</b>	
Principal	\$145.00 - \$170.00
Project Manager	\$125.00 - \$145.00
Licensed Engineer/Scientist	\$100.00 - \$145.00
Staff Engineer	\$80.00 - \$95.00
Staff Scientist	\$70.00 - \$95.00
Senior Technician	\$85.00 - \$115.00
Technician	\$70.00 - \$85.00
Administrative Assistant	\$75.00 - \$90.00
<b>Field Staff</b>	
Land Surveyor	\$110.00 - \$140.00
Resident Project Representative	\$100.00
Senior Survey Crew Chief	\$95.00
Survey Crew Chief	\$85.00
<b>Vehicle Mileage Rate</b>	
All Vehicles	Current Federal Allowable Rate
<b>Equipment</b>	
Total Station with AutoLock	\$30.00/hour
Survey Grade GPS	\$30.00/hour
GeoXT/HR GPS	\$15.00/hour

<sup>(1)</sup> The actual rate charged is dependent upon the hourly rate of the employee assigned to the project. The rates shown are subject to change.

Effective: January 1, 2017  
Expires: December 31, 2017







Building a Better World  
for All of Us®

## EXHIBIT B

March 21, 2017

RE: Grand Avenue Nordic Center  
Proposed Cross-Country Ski Trails  
Design Phase Services  
Duluth, Minnesota  
SEH Project No.: DULUT 140414

Mr. Jim Shoberg  
Project Coordinator  
City of Duluth  
411 West First Street  
Duluth, MN 55802

Dear Jim:

Short Elliott Hendrickson Inc. (SEH®) is pleased to submit this proposal for professional engineering and permitting services relating to the proposed cross-country ski trails at Grand Avenue Nordic Center (GANC). This proposal is based on our understanding of recent discussions with you regarding overall project coordination, and from our February 17, 2017 meeting with the City of Duluth, USACE, and South St. Louis SWCD regarding wetland permitting requirements. The work plan presented below serves as an amendment to our existing Professional Engineering Services Agreement for preliminary design phase and permit consultation services.

### Project Overview

The City of Duluth is ready to construct a new Nordic ski center at the base of Spirit Mountain, consisting of lighted Nordic ski trails, Nordic-dedicated snowmaking, race staging area, and a connector trail to the existing trail system at the top of Spirit Mountain. The City's goal is to have the ski trails open by the end of November 2017, although some elements of the overall project may need to be phased due to budget constraints. The project is a collaborative effort between the City of Duluth and the DXC ski club.

The City of Duluth has requested SEH's assistance with the following elements of the project:

- Remote sensing, and revisions to trail alignment and construction limits drawings
- Trail clearing plans and specifications for public bidding
- Culvert and drainage system improvements design, plans and specifications for public bidding
- Wetland delineation & wetland/aquatic resources permit application
- Design and Construction surveying (trail, culverts, drainage improvements and construction limits within wetlands)

The following paragraphs provide a detailed description of our proposed work plan, deliverables, and basic project assumptions.

### Work Plan

<b>Task 1</b>	<b>Trail Drawing Revisions</b>	<b>\$6,000</b>
	During the preliminary design phase, it was determined that several data pieces necessary for preliminary trail design and permit consultation were missing or inaccurate. City of Duluth	

Engineers | Architects | Planners | Scientists

Short Elliott Hendrickson Inc., 418 West Superior Street, Suite 200, Duluth, MN 55802-1512

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staff instructed SEH to perform the following additional services, and to include these additional services in this Design Phase professional services proposal:

- Utilize remote sensing technologies to estimate wetland boundaries for the connector trail that were not previously field delineated.
- Topo survey the trail centerline along the connector trail to verify actual location in lieu of topo survey of soil stockpile.
- Revise trail alignment and earthwork corridor calculations to re-create quantities and estimate construction limits.
- Additional coordination meetings with City staff.

In addition to the above work that has already been performed, SEH will perform the following drawing revisions for final design and permitting use:

- During the February 17, 2017 pre-application meeting, City staff noticed that the snowmaking trail alignment provided by the City was of questionable positional accuracy, and that these inaccuracies need to be corrected so that the trail can be accurately depicted on the drawings used for permitting and construction. Additionally, the agencies indicated that the pending permit application must include descriptions and drawings of trail design "constraints" (such as specimen trees and rock outcrops), and soil "borrow areas." Refer to Task 5 below for a description of the additional topo survey proposed.
- Incorporate the final snowmaking piping, pipe supports, and lighting (as provided by the City in AutoCAD or GIS format) into the construction limits drawing.
- Revise the trail alignment and earthwork corridor based on the above modifications and determine construction limits. For this Task, SEH will use the typical section for the snowmaking trail and for the connector trail developed in the preliminary design phase.

#### **Deliverables**

- Revised trail alignment and drawings
- Final trail alignment and construction limits drawing in AutoCAD format
- One additional coordination meeting

#### **Task 2      Trail Clearing Plans & Technical Specifications      \$1,200**

The City of Duluth will publically bid tree clearing (grubbing will be performed by the trail contractor under separate contract). Using the construction limits drawing (from Tasks 1 and 3), and the tree count and species tabulation provided by the City, SEH will prepare a Special Provision specification section and plan sheet. The City will prepare final Bidding Documents, obtain bids for the work, and perform all construction contract administration and observation services.

#### **Deliverables**

- Drawings: Title Sheet, Construction Limits Drawing
- Special Provisions for tree clearing
- Calculation of number of acres within the trail footprint for the City to prepare a Bid Form

**Task 3 Culvert and Drainage System Plans and Specs \$19,000**

The culvert and drainage system improvements, restoration and erosion control will be publically bid as one bid package (combined with the trail construction). Construction oversight of this work will be provided by the City.

Some preliminary design of the culverts and drainage system has been completed during the preliminary design phase. The work of this task consists of revising and refining the prior work based on the final trail alignment and profiles, providing the required drainage report and plan review submittals to the City of Duluth Engineering department, and providing plans and specifications for public bidding. This task consists of the following sub tasks.

- **Preliminary Design Submittal Worksheet and Meeting:** One preliminary design meeting with City staff was completed in the preliminary design phase. We will attend one brief additional meeting with the City to review new alignment changes.
- **Drainage Report:** The preliminary culvert locations and sizes, and the Bessemer Street neighborhood drainage swales will be revised based on the final trail and snowmaking alignment and profile (provided by the City). Final culvert and drainage hydraulic analysis will be performed. The drainage report will be prepared and submitted to the City for review. Since there will be no increase in impervious area, and no significant changes to the existing drainage patterns, it is anticipated that a short memo will be sufficient. Drainage design will be performed for the trail culverts, Bessemer Street area drainage swale, replacement of one (former) DWP crossing culvert, and replacement of one Spirit Mountain Recreation Area service road culvert.
- **Plan Sheets:** The following information will be provided to the City Engineering Department for review, and for the City's use in Bidding and construction oversight.
  - **Title Sheet**
  - **Plan Sheets:**
    - Culvert Plan Sheets (2). Two plan sheets will be provided (similar to Exhibits 1 & 2 from the Preliminary Design Memo). Sheets will identify culverts and Bessemer area drainage improvements, and show overall drainage patterns.
    - Culvert Table. Table will list culvert diameter, pipe material, apron conditions, riprap, and culvert end invert coordinates (x, y, z).
    - Culvert Details.
    - Bessemer area drainage swale details.
    - Erosion Control Plan and SWPPP (see below).
- **Erosion Control Plan:** An erosion control plan and SWPPP will be prepared based on the trail design provided by the City. The SWPPP will be provided to the City for their use during construction activities. Since SEH is not performing construction phase services, we assume that City staff will update the SWPPP during construction as required.
- **MS4 Statement of Compliance:** Issued by the City.
- **Specifications:** Technical specifications will be prepared for the culverts, ditch improvements and erosion control items. Construction phasing and sequencing specifications will be provided by the City.
- **Record Drawings, Shop Drawings and Post-Construction O & M Manual:** SEH will perform the required record plan survey of the culvert ends (see Task 5 below), review the culvert and riprap shop drawings, prepare Record Drawings for the culverts (revise tabular data), and submit copies of the shop drawings to the City at

the end of construction. The O & M Manual requirement does not apply to this culvert system.

**Deliverables**

- Drainage Report (memo)
- Drainage System Plans and specifications
- Erosion Control Plan & SWPPP
- Record Plans

**Task 4 Trail Construction Plans and Specifications \$1,500**

The trail construction will be publically bid (in the same bid package with the drainage and erosion control items). Construction oversight of this work will be provided by the City. It is our understanding that the trail contractor will work directly with the City of Duluth during construction to field design the trail alignment and profile, therefore SEH has not included any work for trail design or calculation of earthwork quantities in this scope. This task consists of the following sub tasks.

- **Plan Sheets:** The following information will be provided to the City for the City's use in Bidding and construction oversight.
  - **Title Sheet**
  - **Plan Sheets:**
    - Trail Alignment Plan Sheets (2). Two plan sheets will be provided (similar to Exhibits 1 & 2 from the Preliminary Design Memo). Sheets will identify trail centerline, edge of trail, and construction limits only.
    - Trail typical sections (2) – one for the snowmaking loop and one for the connector trail. Section will show trail only.
- **Specifications:** A performance style Special Provision section will be prepared based on performance criteria and sample specification language provided by the City. A Bid Form will be provided based on the following unit prices: connector trail construction (per LF), snowmaking loop trail construction (per LF). The City will provide language for the coordination and scheduling section.

**Deliverables**

- Trail Construction Plans and specifications
- Record Plans will not be provided

**Task 5 Wetland Delineation and Permitting Services \$14,000**

SEH will conduct a wetland delineation of the proposed connector trail and the project area above Bessemer Street that have not been field assessed wetlands/aquatic resources. We will use Level 2 (on-site inspection necessary) methodology, as outlined in the U.S. Army Corps of Engineers (USACE) 1987 *Wetlands Delineation Manual* and applicable *Regional Supplement*. Wetland delineation will be conducted as soon as possible in spring 2017 when visible "green-up" is apparent with onset of the growing season. The wetland delineation would encompass the areas needed for the direct trail placement and the extent of the construction limits (including temporary work space).

The results of the field wetland delineation will provide the additional information needed to calculate wetland/aquatic resources/tributary impacts due to trail construction and culvert placement under the proposed trail. These data will be incorporated into the overall plan view of the proposed project so that all impacts can be calculated for the project. This includes the lower trail system, as preliminarily designed to date, the connector trail, and the

Bessemer Street area. Total wetland impacts will be calculated to account for the following project actions:

- Temporary or permanent or fill in wetlands/aquatic resources
- Temporary or permanent tree/shrub clearing in wetlands for construction or final condition
- Temporary or permanent cut/fill for installation of lighting infrastructure and water/snow-making equipment
- Temporary work space in wetland (i.e., construction limits) outside of the trail corridor

A wetland delineation report will be prepared for inclusion in a permit application for the project. As discussed at a pre-application consultation meeting with representatives from the City of Duluth, South St. Louis County SWCD, and USACE on February 17, 2017, these agency representatives would accept the results of the wetland delineation of the connector trail and Bessemer Street area in conjunction with a permit application. It is anticipated that the wetland regulatory agencies would conduct any field reviews of the newly delineated wetlands within the connector trail and Bessemer Street areas in conjunction with their review of the permit application.

A wetland permit application will be prepared that describes the overall project purpose and need, alternatives considered for minimizing or avoiding wetlands/aquatic resources where possible, and the proposed action. We anticipate at least two (2) iterative reviews/comments by the City of Duluth will be provided to SEH that include details on the alternative designs considered avoided/minimized wetlands/aquatic resources or other site elements of concern. For example, along with several wetlands and drainages on-site, we understand there are areas of steep terrain, rock outcrops, and mature trees that were given specific consideration to avoid. These are relevant data and discussion items to provide in detailing how the preferred trail alignment was developed.

A mitigation plan for any wetland/aquatic resources impacts would be included with the permit application. It is anticipated that temporary wetland impacts would be mitigated by restoring the wetland/aquatic resources areas temporarily affected by the project. However, if the project requires mitigation for permanent wetland impacts, it is anticipated this mitigation will be accomplished through purchase of wetland credits from an approved bank within the same Bank Service Area (BSA) of the project (i.e., BSA 1). SEH would facilitate the preparation of a wetland credit purchase agreement for the City of Duluth's review, approval, and eventual execution of purchase of credits.

#### **Wetland Delineation & Permit Application Major Deliverables**

- Level 2 field wetland delineation of connector trail and Bessemer Street area
- Wetland Delineation Report to be incorporated into Wetland Permit Application
- Joint Local/State/Federal Permit Application for wetland/aquatic resource impacts at the project
- Wetland credit purchase agreement paperwork for approved wetland bank in BSA 1
- Agency coordination and response to comments from wetland regulatory agencies
- Field review of wetland delineation with agencies (if needed)

**Task 6      Trail Centerline, Construction Staking and Record Plans      \$19,000**

The following is a description of the surveying services requested by the City. It is assumed that all surveying will be provided using survey grade GPS units, under "leaf-off" and snow free conditions.

- Limited topo survey of: the segment of trail centerline not previously surveyed, trail "constraints," and stockpile "borrow" areas. This work will include providing one survey staff and GPS unit for two 8 hour days to locate points identified in the filed by the City of Duluth and DXC.
- Construction stakes for construction limits (at wetland crossings only), culvert ends (invert), and ditch profile. It is assumed that all of these stakes will be provided with one multi-day mobilization. Additional staking to replace stakes, or providing multiple mobilizations for staking will be performed as an additional service.
- Record Plans: Provide x, y, z coordinates for each culvert end (invert). It is assumed that all of the record plan survey data will be collected at one time. Invert elevations will be collected to an accuracy of +/- 0.1 ft.

**Assumptions**

Our work plan and deliverables were built on the following assumptions:

- City will provide final trail alignments, borrow pit areas, and design "constraints" point files suitable for import directly into AutoCAD.
- The City will provide AutoCAD files of final snowmaking water line and lighting/power layouts and supports.
- SEH will attend one (1) design team review meeting at City Hall or at the SEH Duluth office.
- SEH will attend one (1) field review of the delineated wetlands in the connector trail and Bessemer Street project area as needed.
- No changes or reevaluation of the previously delineated and approved wetland boundaries in the lower loop trails will be needed.
- City of Duluth will provide locations of site elements that were considered in developing the preferred trail location that minimized/avoided steep terrain, rock outcrops, specific mature trees or clusters of trees, and wetlands/aquatic resources.
- The full trail alignment, including connector trail and Bessemer Street project area, will be provided in a format suitable to incorporation into AutoCad so wetland impacts can be calculated.
- Construction limits, including areas for tree clearing in wetlands, will be provided by the City of Duluth (or its trail designer) in a format suitable for incorporation into AutoCad so wetland impacts can be calculated.
- City of Duluth (or its project affiliates) will be responsible for approving a wetland credit purchase agreement, including any earnest money to the banker (if needed by the bank owner).
- Existing available data from the City's previously prepared EAW will be sufficient in providing past environmental review for the project, and no supplemental studies will be necessary (e.g., Phase 1 environmental site assessment, Phase 1 archeological/cultural resources/historic properties assessment, threatened/endangered species surveys, etc.).

**Potential Additional Services**

If authorized, SEH can provide the following additional services:

- Provide a more detailed vertical alignment (with vertical curves at high points and low points) and additional corridor earthwork calculations to better refine construction limits in specific areas.

- Provide additional construction staking or point files.
- Additional AutoCAD or GIS work for preparation of presentation drawings.
- Participation at public meetings.

**Schedule**

Prepare draft wetland permit application upon notice to proceed	(March – May 2017)
Import City provided topo survey data into trail drawing and revise trail alignment	(one week after receipt of data)
Import final snowmaking and lighting file into construction limits drawing	(one week after receipt of data)
Finalize drainage and culvert hydraulic design	(one month)
Finalize culvert and drainage plans	(two weeks)
Field wetland delineation and report	(late April – mid May 2017; seasonal dependent)
Finalize wetland permit application, including delineation report	(May 31, 2017)
Submit wetland permit application	(June 1, 2017)
Agency review, comment, decision, including finalizing wetland credit purchase agreement	(June 1 – September 30, 2017)
Permit issuance	(October 1, 2017)

**Fee Estimate**

We have estimated a total fee of \$60,700 to complete our services which would be billed on an hourly basis.

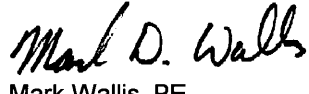
We look forward to discussing this project with you further. If you have any questions, please contact me at 218.279.3025 or via email at mbolf@sehinc.com.

Sincerely,

SHORT ELLIOTT HENDRICKSON INC.



Matt Bolf, PE  
Principal



Mark Wallis, PE  
Project Manager

mh

