

PURCHASING & LICENSING COMMITTEE

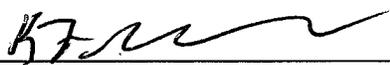
12-0434R

RESOLUTION AUTHORIZING AN AGREEMENT WITH NORTHLAND CONSULTING ENGINEERS, LLP, FOR PROFESSIONAL ENGINEERING SERVICES IN THE REPAIR/RESTORATION/REPLACEMENT OF THE CHAMBERS GROVE SEA WALL AND BOARDWALK FOR \$67,026.

CITY PROPOSAL:

RESOLVED, that the proper city officials are hereby authorized to enter into an agreement with Northland Consulting Engineers, LLP, substantially the same as that on file in the office of the city clerk as Public Document No. \_\_\_\_\_, for professional design and construction engineering services in the repair, restoration, and/or replacement of the sea wall and boardwalk at Chambers Grove Park located near the far western Duluth neighborhood of Fond-Du-Lac along the St. Louis River, for an amount not to exceed \$67,026, payable from the Disaster Recovery Fund 225, Dept./Agency 125 (Finance), Division 1804 (Water Control Facilities), Object 5310 (Contract Services), Project No. Flood - 299.

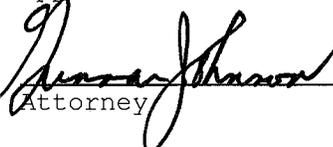
Approved:

  
\_\_\_\_\_  
Department Director  
Purchasing Agent DLS

Approved for presentation to council:

  
\_\_\_\_\_  
Chief Administrative Officer

Approved as to form:

  
\_\_\_\_\_  
Attorney

Approved:

  
\_\_\_\_\_  
Auditor

FAC MGMT/PRCH DS:SW:le 08/16/2012

STATEMENT OF PURPOSE: This resolution authorizes an agreement with Northland Consulting Engineers, LLP, for the repair, restoration, and/or repair of the Chambers Grove sea wall and boardwalk for an amount not to exceed \$67,026. This

project for the boardwalk is planned due to the significant damage from settlement along the sea wall and generally unsightly and potentially unsafe existing conditions.

Northland Consulting Engineers, LLP, is located in Duluth, Minnesota.

Requisition 12-0506

**PROFESSIONAL ENGINEERING SERVICES AGREEMENT**

**NORTHLAND CONSULTING ENGINEERS, LLP  
&  
CITY OF DULUTH**

This agreement is made this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, by and between the **City of Duluth**, Minnesota hereinafter referred to as the "City" and:

Name: **Northland Consulting Engineers, LLP**  
Address: 102 South 21<sup>st</sup> Avenue West  
Duluth, Minnesota 55806

hereinafter referred to as the "Engineer", in consideration of the mutual promises contained herein. This agreement consists of seven sections, a total of \_\_\_\_\_ pages including Exhibit A attached.

Payments hereunder, in the estimated amount of Sixty-Seven-Thousand-Twenty-Six and 00/100 Dollars (**\$67,026.00**) shall be made from Disaster Recovery Fund (225), Dept./Agency 125 (Finance), Division 1804 (Water Control Facilities), Object 5310 (Contract Services), Vendor Code 2294, Requisition No.12-0506.

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

File No. 12-0506  
Proj. No. Flood 299  
Proj. Name Professional design and construction engineering services for the repair, restoration, and/or replacement of the Chambers Grove Park sea wall and boardwalk near the far western neighborhood of Fond-Du-Lac, along the St. Louis River in Duluth, Minnesota.

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

**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 Facilities Project Specialist or designee 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.

**SECTION II. BASIC SERVICES**

**A) STUDY AND REPORT PHASE – N/A**

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 IV.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. The cost of report reproduction shall be considered a reimbursable expense and paid in accordance with Section VI.C of this agreement.

7) Supplementary Duties

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

8) Completion Time

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

B) PRELIMINARY SURVEY PHASE

Included in this agreement

Not included in this agreement

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

1) General

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

2)  Boundary Survey

Perform boundary survey if checked.

3) Document Presentation

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

4) Supplementary Duties

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

5) Completion Time

The preliminary survey phase shall be completed and submitted by October 12, 2012.

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) 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. The cost of document reproduction shall be considered to be a reimbursable expense and paid in accordance with Section VI.C of this agreement.

4) Supplementary Duties

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

5) Completion Time

The Preliminary Design Phase shall be completed and report or plan submitted by November 16, 2012.

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) Document Presentation

Furnish three copies of the above documents and present and review them in person with the City. The cost of document reproduction shall be considered to be a reimbursable expense and paid in accordance with Section VI.C of this agreement.

6) Supplementary Duties

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

7) Completion Time

The Final Design Phase shall be completed and contract documents submitted by December 14, 2012.

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 A.
- 6) Completion Time  
The bidding phase shall be completed by January 31, 2012.

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 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 A.

5) Completion Time

The construction survey & layout phase shall be completed by March 1, 2013.

G) CONSTRUCTION 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. The cost of document reproduction shall be considered to be a reimbursable expense and paid in accordance with Section VI.C of this agreement.

16) Supplementary Duties

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

17) Completion Time

The construction inspection phase shall be completed by June 28, 2013.

H. ADDITIONAL SERVICES

Included in this agreement

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 VI.

1) 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.

2) 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.

- 3) 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.
- 4) Renderings and Models  
Providing renderings or models for the City's use.
- 5) 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.
- 6) 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.
- 7) 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.
- 8) Manuals  
Preparation of 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.
- 9) Services after Construction Phase  
Services after completion of the construction phase excluding the warranty inspection.
- 10) 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).
- 11) 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.
- 12) 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 A.
- 13) 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. (Reserved for future use)**

### **SECTION IV. 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 IV.

**SECTION V. 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 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, 60 days notice prior to any cancellation or modification shall be required; and in such event, 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 30-days notice of cancellation, non-renewal or material change provisions 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 30 days prior to any cancellation, non-renewal or modification of the policy or coverage's evidenced by said certificate and shall further provide that failure to give such notice to City will render any such change or changes in said policy or coverage's ineffective as against the City.
  - (f) **The use of an "Accord" form as a certificate of insurance shall be accompanied by two forms – 1) ISO Additional Insured Endorsement (CG-2010 pre-2004) and 2) Notice of Cancellation Endorsement (IL 7002) or equivalent, as approved by the Duluth City Attorney's Office.**
- 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 changed or canceled during the life of this Agreement without at least 30 days advanced notice being given to the City.

**E) 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.

**F) 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.

**G) 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.

**H) FEDERAL FUNDING**

If Federal Funds (HUD, Revenue Sharing or otherwise) 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.

**I) AMENDMENT OF AGREEMENT**

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

**J) 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. 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, such as, but 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.

## SECTION VI. PAYMENT

### A) BASIS OF BILLING

City shall pay the Engineer for all services rendered under Section II Phases A through I an amount based on:

1. Hourly rates, not to exceed \$

2. Lump sum **\$67,026.00**

For the purposes of this agreement, the principals and employees of the Engineer and their hourly rates are set forth in Exhibit A hereto.

### B) REIMBURSABLE EXPENSES **N/A**

In addition to payments provided for in paragraphs A and B of this Section, the City shall pay the Engineer the actual costs of all reimbursable expenses incurred in connection with all basic and additional services. Reimbursable expenses means the actual expenses incurred directly in connection with the Project for transportation costs on the basis of actual cost if public transportation is used or (N/A) cents per mile if Engineer's vehicle is used, for travel outside City of Duluth, required hotel and meal expenses as per City policy, toll telephone calls, reproduction of reports, drawings, specifications and similar Project-related items in addition to those required under Section II.

### C) 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. Each statement shall be accompanied by an Invoice Data Sheet as shown in Exhibit A. 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 VI shall exceed the estimated maximum total amount and value of the total work and services to be performed by the Engineer under this agreement for that phase or additional service 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 V.E., 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 Section VI.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 and unpaid reimbursable expenses, plus all termination expenses. Termination expenses mean additional reimbursable 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, B and C of this section and the maximum payment amount described in paragraph E of this section. The above applies only if termination is for reasons other than the fault of the Engineer.

D) 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 direct expenses not to exceed the amount shown hereunder:

<u>Section II</u>	<u>Description</u>	<u>Maximum Compensation</u>
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 Inspection Phase	\$
H.	Additional Services	\$ N/A
I.	Reimbursable Expenses	\$ N/A

**TOTAL \$ \$67,026.00**

The maximum compensation for all phases A through I shall not exceed:

**Sixty-Seven-Thousand and Twenty-Six Dollars and 00/100th.**

E) 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 Section VI.A for services rendered by principals and employees assigned to the Project. For the purposes of this agreement, the principals and employees of the Engineer and their hourly rates are set forth in Exhibit A hereto. The maximum payment described in Section VI.E 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 **\$N/A**.

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.

F) TOTAL NOT TO EXCEED:

All payments under this Contract are not to exceed **\$67,026.00, and are payable under Disaster Recovery Fund No. 225.**

**SECTION VII SPECIAL PROVISIONS**

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

- 1) Exhibit A, Engineer's Proposal

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

IN WITNESS WHEREOF, the parties to these presents have hereunto caused these presents to be executed the day and year first above written.

Countersigned:

\_\_\_\_\_  
City Auditor  
Approved this \_\_\_\_\_ day of \_\_\_\_\_, 2012

\_\_\_\_\_  
Department Director  
Approved this \_\_\_\_\_ day of \_\_\_\_\_, 2012

\_\_\_\_\_  
Purchasing Agent  
Approved this \_\_\_\_\_ day of \_\_\_\_\_, 2012

\_\_\_\_\_  
Assistant City Attorney  
Approved this \_\_\_\_\_ day of \_\_\_\_\_, 2011

**CITY OF DULUTH-Client**

By:

\_\_\_\_\_  
Mayor

Attest:

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

Date Attested:

\_\_\_\_\_

**Engineer**  
Northland Consulting Engineers, LLP

Company Representative

Its:

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Title of Representative

Date:

---

# Exhibit A

## Structural Engineering Report

**By:** Northland Consulting Engineers LLP  
102 S 21<sup>st</sup> Ave. West  
Duluth, MN 55806  
FOR

**Tari Rayala, AIA**  
City of Duluth  
1532 West Michigan Street  
Duluth, MN 55806

**Date:** May 25, 2012

**Project Name:** Chambers Grove Park- Sea-Wall and Boardwalk Review

**Project Location:** Duluth , MN

**Project Description:** We were asked to observe the existing boardwalk and sea-wall conditions at Chambers Grove Park located near the far western Duluth neighborhood of Fond-Du-Lac along the St. Louis River. The boardwalk is planned to be restored or replaced due to significant damage from settlement along the sea-wall and the generally unsightly and potentially unsafe existing conditions. Within this report, we were asked to provide:

1. A summary of our observations regarding the existing conditions
2. Our recommendations for repair or replacement
3. An overall project budget to implement our recommended repair
4. A comprehensive design fee proposal for the engineering design and complete construction administration services.

**Observations and Recommendations:** We visited the site on May 17<sup>th</sup> 2012 to observe and document the boardwalk and sea-wall. See the attached photos with commentary. The existing sea wall can be divided into three types. We have made assumptions regarding available repair methods. Our assumptions will require review and authorization by the various permitting agencies prior to final design and construction. (refer to Exhibit 1 and 2) (refer to photo's #1 to #9)

1. The Southeastern portion - gabion type retaining structure. (approximately 270 lineal feet) This portion of retaining structure is leaning outward and is being damaged by scour and ice. After review and discussions with the regulating authorities, it is our professional opinion that the existing gabion system is insufficient to prevent erosion along the river at this location over the long term. Therefore the gabion system should be replaced with driven sheet pile walls. The separate fishing decks would be eliminated in lieu of a new continuous boardwalk where fishing can occur at any location.
2. The Intermediate portion -Cold-formed Driven sheet pile wall (approximately 380 lineal feet). This portion of sheet piling appears to be performing adequately. However, due to the type of piling, and the numerous burn holes etc, in the walls near the waterline, the earth behind the wall has settled causing the undermining of the boardwalk structure.
3. The Northwestern portion-Hot-rolled Driven sheet pile (approximately 170 lineal feet). This portion of sheet piling is leaning outward, particularly the far Northwest end. Also, due to an existing gap at the upstream end of the wall and the numerous holes etc. in the walls near the waterline, the earth behind the wall

has settled significantly causing the undermining of the boardwalk structure. In our opinion, a portion of the piling in this section may need to be replaced or reinforced prior to replacement of the boardwalk.

For the entire length of the sea wall, (approximately 800 lineal feet) we are proposing to remove the existing boardwalk, excavate the existing backfill to the mud-line of the river, replace the backfill with suitable free draining rock backfill, wrapped with geotextile, cap the backfill with a concrete slab, install a new boardwalk with durable low maintenance IPE wood decking, re-grade and landscape the adjacent surfaces as required. The existing railings and lights would also be replaced. (See Exhibit #2).

**Design  
Engineering Fees:**

NCE's proposed compensation for Design Engineering Services is an Hourly Rate Basis, estimated to total \$40,440.00. Refer to the attached NCE Design Engineering Fee Estimate worksheet (Table 1). (Includes Electrical engineering, soil borings and topographic survey as well) If the understood project area, program or complexity changes significantly, our fee estimate may require adjustment.

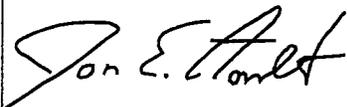
**Construction  
Engineering Fees:**

NCE's proposed compensation for Construction Engineering Services is an Hourly Rate Basis, estimated to total \$26,586.00. Refer to the attached NCE Construction Engineering Fee Estimate worksheet (Table 2). (Includes Material Testing and Construction Staking as well) If the understood project area, program or complexity changes significantly, our fee estimate may require adjustment.

**Construction Cost  
Estimate:**

We have estimated the construction cost based on the description of work outlined above. As discussed, the assumptions we have made, must be verified by final design, and then by the appropriate regulating authorities prior to final design and construction. The estimated total construction cost is \$1,108,000.00 (refer to Table 3 – Construction Cost Estimate).

**Submitted By:**

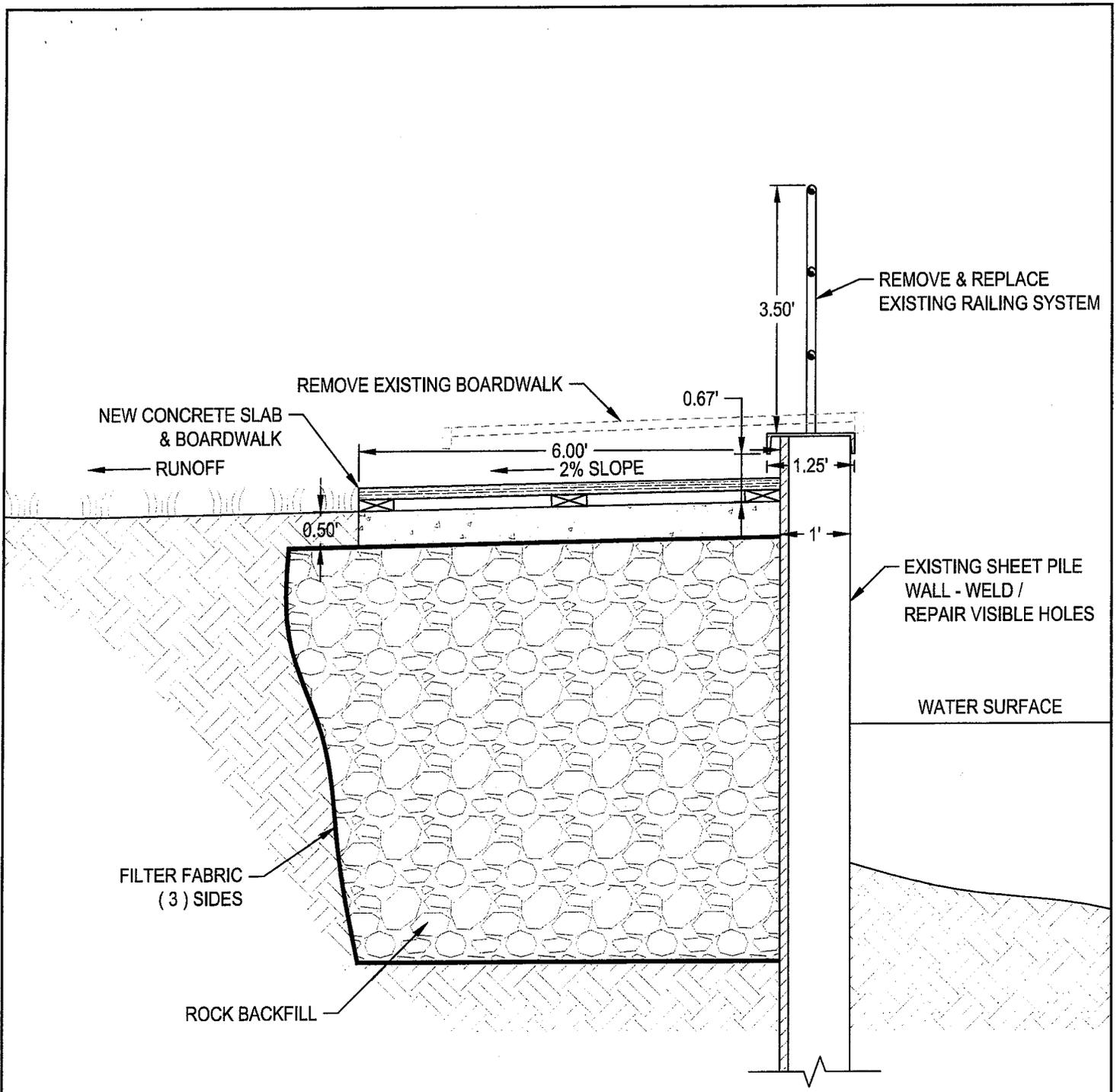


Jon E. Aamodt P.E  
Principal Partner

**Attached:**

- Exhibit #1 – Site overview
- Exhibit #2- Restoration Detail
- Table #1 to #3 – Fee and Construction Estimates
- Photo Pages – Photo #1 to #9









**Table 2 - NCE Construction Engineering Fee Estimate Worksheet**

Job No.	Title:
Date: 5/25/2012	Client: Chambers Grove Park City of Duluth - Architects Office

Activity	Estimated Hours				Extended \$
	Principal	PE	Technician	Clerical	
<b>Construction Engineering</b>					
Construction Management - Weekly Meetings, Pay Estimates, Permit Closeout		60			\$ 7,500.00
Construction Inspection		10	20		\$ 2,750.00
Project Documentation - Weekly Diary and Record Drawings		40	20		\$ 6,500.00
Material Testing Coordination and Oversight		10			\$ 1,250.00
Shop Drawing Review		8			\$ 1,000.00
					<b>Subtotal \$ 19,000.00</b>
<b>Construction Staking</b>					<b>Subtotal \$ 2,000.00</b>
<b>Material Testing</b>					<b>Subtotal \$ 5,586.00</b>
		128	40	0	
		Total Hours/Service			

RATES/HOUR	QTY.	EXT. Cost
Principal \$ 155.00		\$0.00
PE \$ 125.00		\$0.00
Technician \$ 75.00		\$0.00
Clerical \$ 50.00		\$0.00
Other \$ -		\$0.00

REIMBURSEABLE EXP.	QTY.	EXT. Cost
Mileage (per mile)	\$0.62	\$0.00
Bond Plan Copies (each)	\$3.00	\$0.00
Photocopies	\$0.15	\$0.00
Photographs (each)	\$3.00	\$0.00
TTL. Reimbursables		\$0.00

Construction Engineering \$ 19,000.00  
 TOTAL NCE Fee \$ 19,000.00  
 Subconsultant Fee \$ 7,586.00  
 Contractor Administration \$ -  
 Reimbursables \$ -  
**TOTAL ESTIMATE \$ 26,586.00**

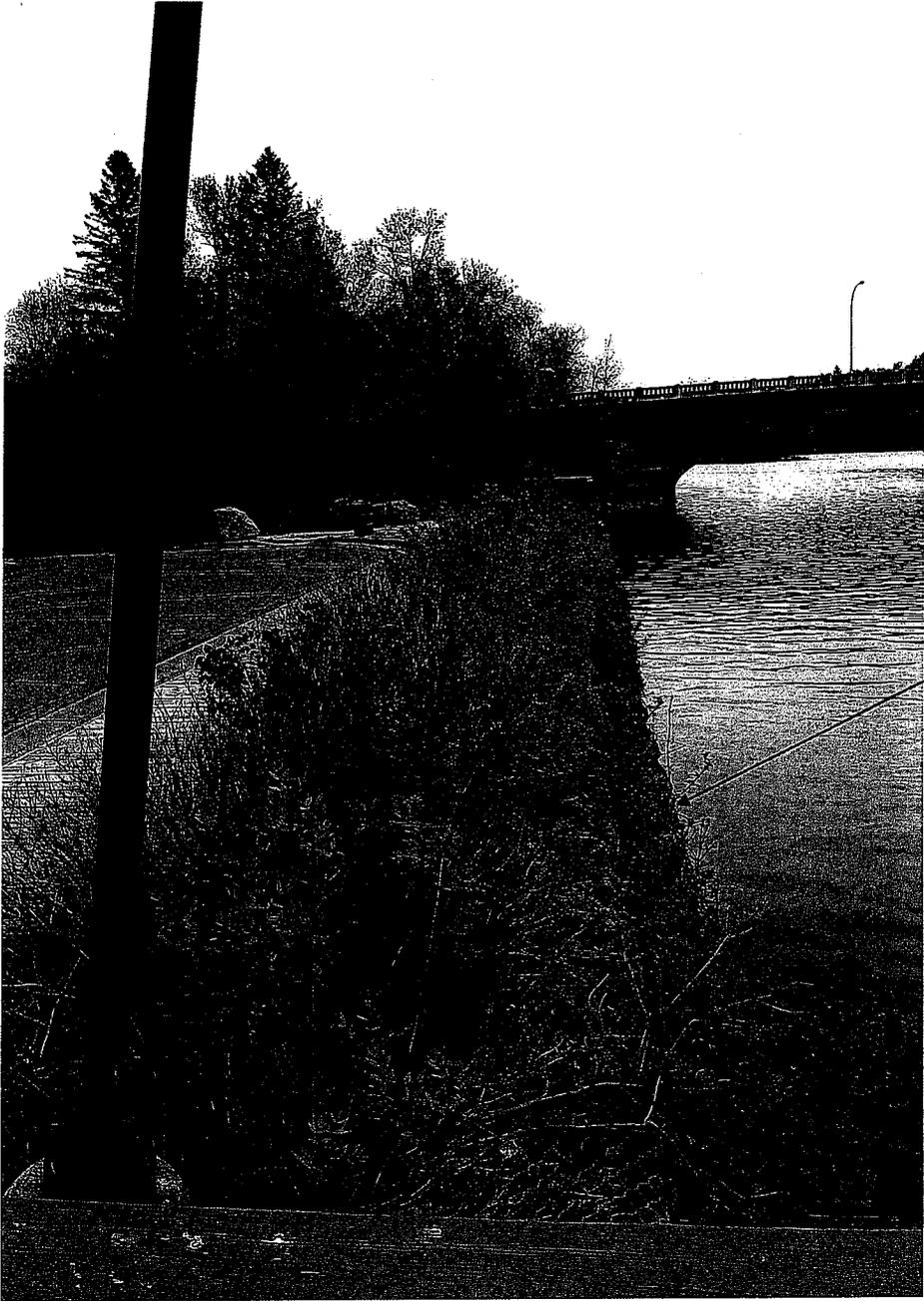
**Assumptions:**

No Wetland delineation or permitting services are included.  
 Construction Administration based on 15 weeks of construction at 8 hours per week for Project Engineer.

Table 3 - Construction Cost Estimate

Item #	Item Description	Unit of Measure	Unit		Totals	
			Price	Quantity	Quantity	Cost
1	Mobilization	Lump Sum	\$ 25,000.00	1		\$ 25,000.00
2	Removal of Gabions, Boardwalk and Fishing Decks	Lump Sum	\$ 25,000.00	1		\$ 25,000.00
3	Repair Sheet Pile Sea Wall	Lump Sum	\$ 50,000.00	1		\$ 50,000.00
4	Electrical System	Lump Sum	\$ 50,000.00	1		\$ 50,000.00
5	Parking Lot Restoration	Lump Sum	\$ 10,000.00	1		\$ 10,000.00
6	Landscape Restoration	Lump Sum	\$ 10,000.00	1		\$ 10,000.00
7	Site Grading	CY	\$ 15.00	2400		\$ 36,000.00
8	Rock Backfill of Sheet Pile	CY	\$ 60.00	2000		\$ 120,000.00
9	Railings	Linear Foot	\$ 800.00	250		\$ 200,000.00
10	New Sheet Pile Wall	Linear Foot	\$ 1,000.00	300		\$ 300,000.00
11	Board Walk	Square Foot	\$ 40.00	6000		\$ 240,000.00
12	Concrete Base Under Board Walk	Square Foot	\$ 7.00	6000		\$ 42,000.00
					<b>Total</b>	<b>\$ 1,108,000.00</b>

Photo #1  
Gabion Wall @ Southeast  
end of boardwalk



Seawall is leaning,  
containment cages are  
broken due to ice and  
scour



Photo #2  
Existing Boardwalk  
at Northwest end

severe subsidence  
due to wash-out  
behind the wall



Photo #3  
Existing Boardwalk  
at Northwest end

Previous attempts  
to correct the  
subsidence  
problem

Photo #4  
Northwest portion  
of boardwalk



Chain handrail  
could pose a  
danger to children  
and should be  
replaced with a  
code compliant  
system

Photo #5  
Far Northwest  
corner



Gap at corner of  
sheet-pile wall  
allows current to  
enter behind the  
wall to erode the  
ground under  
the boardwalk



Photo #6  
Existing fishing deck

Due to subsidence and failure of gabion system, decks are un-supported at front end in some locations



Photo #7  
Southeast end of boardwalk

Gabion walls are leaning and failing due to ice action and scour

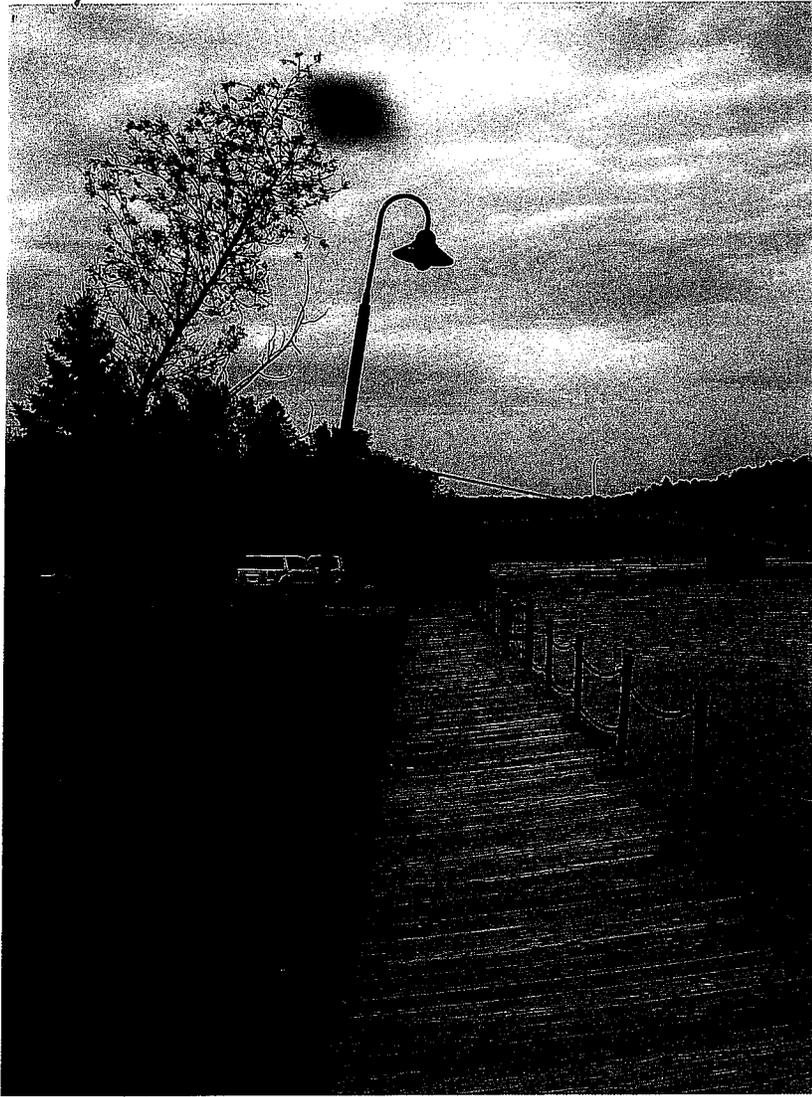


Photo #8  
Middle section of boardwalk

Light poles are leaning severely



Photo #9  
Southeast portion

Gabion walls are failing  
steel cages are  
released, allowing rock  
to be washed out.