

# QUOTATION FORM

Grand Rapids, MN

Fairgrounds Pond - NE 14<sup>th</sup> St & Crystal Lake Blvd

**Submit quotation form to Dominic DeGuisseppi, City of Grand Rapids, 500 SE 4<sup>th</sup> St, Grand Rapids, MN by 12:00 pm on Friday September 22<sup>nd</sup>, 2023. Quotes can be mailed, emailed or hand delivered:**

Quote package shall include the following:

1. Quotation Form
2. Scope/Plan specifications
3. Location map

All spaces of the quotation form shall be filled in. The quote must be in a sealed envelope labeled "Quote for Grand Rapids – Fairgrounds Pond – NE 14<sup>th</sup> St & Crystal Lake Blvd.

Project Description: The project includes the revitalization of a City owned pond. The quote includes all of the labor, materials and all associated work activities. Additional details are provided in the special provisions.

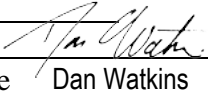
Project will be estimated on a sum per pond basis, based on the following estimated quantities:

Fairgrounds Pond – NE 14<sup>th</sup> St & Crystal Lake Blvd Quote Total \$29,000.00

We, the undersigned, doing business as Casper Construction, Inc. have carefully examined the Quotation Documents and the site of the proposed work, and are familiar with all of the conditions, laws and regulations surrounding the construction of the proposed project including the availability of materials and labor. We hereby propose to the City of Grand Rapids to furnish all labor, materials, equipment, skills and facilities for the complete construction of the BMP Revitalization as described herein. The prices shown include sales tax and all other applicable taxes, permits and fees.

Dated this 22 day of September, 2023

Name of Company Casper Construction, Inc.

Signature of Authorized Representative 

Printed Name of Authorized Representative Dan Watkins

Title of Authorized Representative Senior Estimator/Project Manager

Legal Address 212 SE 10th St., Grand Rapids, MN 55744

Business Phone 218-326-9637

## **SPECIAL PROVISIONS**

### **General:**

1. EJCDC Standard General Conditions of the Construction Contract shall apply to the project.
2. All material shall be in accordance with applicable building codes and local specifications.
3. Prevailing wage requirements for the State of Minnesota, Itasca County, apply to the project. Contractor shall adhere to Minn. Stat. Chap. 177.41-44 regarding prevailing wage rates and contracts and corresponding Rules 5200.1000 to 5200.1120.
4. Final completion shall be November 17<sup>th</sup>, 2023
5. Liquidated damages shall be set at \$250 per day for every day after the completion dates that the project is not complete.
6. Contractor shall provide proof of insurance meeting the City's requirements. No bonds will be required.
7. Construction staking/layout will not be provided by the owner. Refer to original design plans provided in packet.
8. Project should be completed within a 14 day time period.



### BMP Revitalization Scope/Plan

Excavate detention/retention ponds to original elevation by removal of collected sediment and unwanted vegetation maximizing pond capacity and efficiency.

#### **NE 14<sup>th</sup> St & Crystal Lake Blvd**

- De-water all loads on site prior to transportation. Excavation area is approximately .2 acres (highlighted in blue on map).
- Excavate to original elevation. Sediment has been tested and deemed Level 1 Dredged Material and can be used as fill without restrictions.
- Remove unwanted vegetation. (Cattails at inlets/outlets and around perimeter of pond)
- Clean/jet inlets and outlet pipes back to nearest manhole or catch basin.
- Maintain perimeter and outlet control throughout duration of project.
- Do not disturb trees surrounding perimeter of pond.
- At completion of project, stabilize disturbed banks using erosion control matting with the purpose of turf establishment. All construction debris shall be cleaned up and staging areas leveled, seeded and matted to prevent erosion.
- In case of a rain event, take measures to protect city streets and/or private property from flooding and contain contaminated runoff so that it is not discharged from the pond.

## Pond Location









## 3.0 SEDIMENT SAMPLING AND TESTING

### 3.1 Sediment Collection

#### Fairground Pond

Two hand auger borings F-1 North (N) and F-2 South (S) were advanced within the pond basin on opposite ends of the pond. Each boring was advanced 3 feet into the pond sediment. Water depths were approximately 1-2 feet below surface. Fill and till material of sand with organics was observed from 2-4 feet. Till was identified from 4-5 feet as gray sand with clay in each hand auger. **Figure 2** shows the locations of the hand auger borings advanced for this project.

#### Eagle North Pond

Two hand auger borings EN-1 North (N) and EN-2 South (S) were advanced within the pond basin on opposite ends of the pond. Each boring was advanced 3 feet into the pond sediment. Water depths were approximately 2 feet below surface. Fill and till material of sand with organics was observed from 2-4 feet. Till was identified from 4-5 feet as gray sand with small gravel in each hand auger. **Figure 2** shows the locations of the hand auger borings advanced for this project.

#### Eagle South Pond

Two hand auger borings ES-1 North (N) and ES-2 South (S) were advanced within the pond basin on opposite ends of the pond. Each boring was advanced 3 feet into the pond sediment. Water depths were approximately 2 feet below surface. Fill and till material of sand with organics was observed from 2-4 feet. Till was identified from 4-5 feet as gray sand in each hand auger. **Figure 2** shows the locations of the hand auger borings advanced for this project.

Sediment generated from each boring was composited to create a unique sample for laboratory analysis from that sample location, in accordance with the May 2017 Stormwater Sediment Manual. AET's General Environmental Sampling Method, included in **Appendix A**, provides a general description of sampling methods used during this project.

### 3.2 Classification Methods

Sediment samples obtained in the field were visually/manually classified in general accordance with the Unified Soil Classification System (USCS) described in ASTM: D 2488. Boring logs are included in **Appendix C**.

### 3.3 Laboratory Analysis

AET submitted two sediment samples from the fairground pond, two from the eagle pond north and two from the eagle pond south to Eurofins (TestAmerica) for laboratory analysis of the following parameters:

- arsenic
- copper
- cPAHs

**Appendix B** includes the laboratory analytical report.

AET's geotechnical testing laboratory located in Duluth, MN analyzed three sediment samples for grain size analyses using ASTM Method C-136, one from each of the three ponds. **Appendix C** shows the results of the grain size analyses.

### 3.4 Reference Standards

In this report, we compare the analytical results to the baseline environmental regulatory standards in use by the MPCA. The reference standards are included in the results tables for comparison with assessment results. The following reference standards apply to potential contaminant exposures in soils:

- MPCA Tier 1 Residential Soil Reference Values (SRVs): Compound-specific values for long-term soil exposure in unrestricted-use settings (i.e., residential) above which an unacceptable risk to human health is predicted to exist. Soils below Tier 1 SRVs are suitable for reuse in residential settings.
- MPCA Tier 2 Industrial SRVs: Compound-specific values for long-term soil exposure in industrial-use settings above which an unacceptable risk to human health is predicted to exist. Soils below Tier 2 SRVs are suitable for reuse in industrial settings.
- MPCA Tier 1 Screening Soil Leaching Values (SLVs): Compound-specific values in unsaturated soils above which an unacceptable risk of leaching to groundwater and/or receptors is predicted to exist.

## 4.0 RESULTS

### 4.1 Sample Locations

Sample depths were chosen based on the information the Client provided on the anticipated dredge depth for the three ponds. The sample locations were chosen based on the Client's desired dredging area.

### 4.2 Sediment Description

The sediments encountered in the Fairground Pond consisted mostly of organic silt, vegetative pieces and sand. At the termination depth of the hand augers gray clay was encountered. The sediments in the Eagle Pond North and the Eagle Pond South consisted of sand with organic silt, some gravel was encountered at the termination depth of the hand augers.



## 4.3 Analytical Results

AET submitted one sample from each hand auger boring for laboratory analysis, two from the Fairground Pond, two from Eagle Pond North and two from Eagle Pond South. Laboratory analytical results are shown in the attached **Table 1** for the Fairground Pond and in **Table 2** for both Eagle Ponds. The results are compared to regulatory criteria published by the MPCA in the Tables. The laboratory reports are included as **Appendix B**.

### 4.3.1 PAHs

PAHs were Not Detected (ND) in the two samples from the Fairground Pond, the north end of the northern Eagle Pond or the south end of the southern Eagle Pond. PAHs were detected in the north end of the southern Eagle Pond as chrysene at 0.21 mg/kg, fluoranthene at 0.36 mg/kg and pyrene at 0.31 mg/kg, none of which were above their respective Tier 1 Residential/Recreational, Commercial/Industrial SRVs or SLVs and a BaP equivalent of 0.00017 mg/kg. Various PAHs were detected on the south end of the Northern Eagle Pond. Benzo(a) Pyrene, Benzo (b&j) Fluoranthene, Benzo(e) Pyrene and Benzo (g,h,i) Perylene were detected at their respective Report Limits (RL). Chrysene was noted at 1.8 mg/kg, fluoranthene at 4.0 mg/kg, phenanthrene at 1.6 mg/kg and pyrene at 3.3 mg/kg, none of these compounds were above their respective Tier 1 Residential/Recreational, Commercial/Industrial SRVs. Benzo(a) Pyrene at 1.5 mg/kg identified as equal to its Report Limit (RL) of 1.5 mg/kg exceeded its Screening SLV of 1.41 mg/kg. The BaP equivalent result was noted at 0.00095 mg/kg, none of the remaining PAH compounds were above their respective Tier 1 Residential/Recreational, Commercial/Industrial SRVs or SLVs.

### 4.3.2 Metals

Copper was Not Detected (ND) in the sediment samples analyzed from the three ponds. Arsenic was detected in the Fairground Pond north end at 1.13 mg/Kg, in the northern Eagle Pond south end at 2.21 mg/kg, and the southern Eagle Ponds south end at 1.11 mg/kg. None of the concentrations detected exceed their respective Tier 1 Residential/Recreational SRV, Commercial/Industrial SRV or SLVs.

### 4.3.3 Particle Size Distribution

The particle size distribution of the pond sediment in the Fairground Pond is sand with silt. The Fairground Pond sample was noted at 76.3% sand. Both of the Eagle Ponds particle size distribution of pond sediments was noted mostly as sand. The Eagle Pond North sample was noted at 75.7% sand and the Eagle Pond South sample at 63.1% sand.

## 5.0 DISCUSSION/CONCLUSIONS

The measured concentrations of the individual PAHs do not exceed any of their respective Tier 1 Residential/Recreational or Commercial/Industrial SRVs. Benzo(a) Pyrene at 1.5 mg/kg obtained in the south end of the Northern Eagle Pond was equal to its Report Limit (RL) of 1.5 mg/kg and exceeded its Screening SLV of 1.41 mg/kg.

Arsenic and copper were detected in the samples collected at concentrations below their respective SRVs and SLVs. Both metals occur naturally in the environment and the measured concentrations of arsenic and copper appear to be consistent with typical background concentrations.

According to the MPCA's Best Management Practices for Offsite Use of Unregulated Fill (MPCA BMP Guidance), the MPCA recommends avoiding placing unregulated fill at schools, playgrounds, daycares, residential properties, in gardens where food will be produced, and near lakes, rivers or streams. The MPCA indicates that unregulated fill is best suited for use at industrial or commercial properties. The MPCA BMP Guidance is attached (**Appendix D**).

## 6.0 RECOMMENDATIONS

During excavation, the water level should be kept below any outlets of the stormwater management area for the duration of the sediment excavating activity, or the discharge must be protected or controlled in such a manner as to prevent turbid water and/or dredged sediment from being released to a water resource. We recommend the water in the stormwater management area be drained as much as possible.

The MPCA May 2017 Stormwater Sediment Manual recommends that best management practices (BMPs) for erosion and sediment control should be employed at the site as well as the location where sediment is temporarily stockpiled. The MPCA also recommends that records of all dredge projects (e.g., reports, permits, plans, waste manifests, etc.) be maintained by the owner and operator of the stormwater management facilities.

## 7.0 STANDARD OF CARE

The data derived through this sampling program have been used to develop our opinions about subsurface conditions. However, because no sampling program can reveal totally what is in the subsurface, conditions between samples, and at other times, may differ from conditions described in this report. The sampling we conducted identified soil conditions only at those points where we took samples. Depending on the sampling methods and sampling frequency, every soil type may not be observed, and some materials or layers which are present in the ground may not be documented.

AET has endeavored to perform services for this project in a manner consistent with the level of skill and care ordinarily exercised by other members of the profession currently practicing in this area, under similar budgetary and time constraints. No additional warranty, express or implied, is made. This report is based on our current understanding of the project. If conditions differing from our original understanding or findings are identified, AET should be consulted to determine if there are material impacts on our conclusions or recommendations.