MEMORANDUM
Comfort Lake-Forest Lake Watershed District

To: Board of Managers
From: Mike Kinney
Subject: Shields Lake Alum Treatment Contract Award

Date: September 24, 2019

Background/Discussion

On September 5, 2019, the Board ordered the Shields Lake Alum Treatment Project and directed that the Administrator solicit bids for the work. The purpose of this agenda item is for the Board to consider awarding the construction contract for the Project.

Project Funding (updated from August 21, 2019 CLFLWD memo)

The quoted cost for the Alum Treatment is $204,669. Of this amount, at least $108,000 would be supplied by a Clean Water Fund grant. The District is in the process of requesting a grant work plan and budget amendment which may shift additional grant dollars to the alum treatment. The remainder would be supplied by the CLFLWD through an ad valorem tax levy on real property within the watershed, apportioned between Chisago and Washington Counties in accordance with the net tax capacity of each. In the short-term, the match portion of this project will be funded by the District’s Clean Water Partnership loan.

The budget line item for this project is 5-226-D – Shields Diagnostic Implementation (SW Harvest & Alum Treatment). The CLFLWD 2019 Budget contains $305,200 for this line item, which also covers other associated project costs such as engineering and any remaining upstream stormwater reuse system construction items that may have remained for 2019.

Project Summary (updated from August 21, 2019 CLFLWD memo)

In many ways this project is similar to the Moody Lake Alum Treatment Project, which was ordered by the board of managers at the August 9, 2018 regular meeting. This project will apply aluminum sulfate (commonly known as alum) to Shields Lake in order to bind suspended phosphorus in the water column and trap it in the lake bottom sediment. Once bound to the alum, the phosphorus will no longer be biologically available for algae, thus improving water clarity. This project is a major component of a systematic, multi-year diagnostic and implementation planning process that the District began in 2015. The approach aims to reduce external pollutant loads first and then in-lake internal loads.

External loading has largely been addressed through the recent implementation of the upstream stormwater harvest and irrigation reuse system project. Other methods for controlling internal loading have either been ongoing in recent years or are underway. These include the retrofit of the tributary stream fish barrier, a fall 2019 carp harvest, ongoing coordination with the City of Forest Lake to operate its winter aeration system, and ongoing springtime curly-leaf pondweed management.

The combination of the alum treatment with these other projects is expected to fully achieve Shields Lake’s long-term water quality goal of an in-lake phosphorus concentration of 60 micrograms per liter. This will bring Shields Lake to a clear water state and reduce phosphorus loading to downstream Forest Lake by an estimated 250 pounds per year.
Major project accomplishments to date include: execution of the Clean Water Fund grant agreement, coordination with the City of Forest Lake regarding staging and access, completion of alum dosing plans, project permitting, distribution of informational mailers, a newspaper press release, a neighborhood meeting on the project on May 15, 2018, presentation of alum information at the August 28, 2018 open house, an alum treatment informational open house at the District office on September 23, 2019, project ordering and direction to solicit bids, and solicitation of bids.

The mailers and press release contained several updates on the multiple ongoing projects for Shields Lake. The August 28, 2018 open house was held at the District office and included a presentation on the Shields Lake Stormwater Harvest, Irrigation Reuse System and Alum Treatment project as a whole. The September 23, 2019 open house focused more specifically on the alum treatment, including information on both the District’s fall 2019 alum treatments – Shields and Moody lakes.

**Recommended Action**

As described in the accompanying EOR memo, staff and EOR have reviewed the bids and find HAB Aquatic Solutions, Inc. to be the low responsive bidder and find that HAB is a responsible contractor. It is recommended that the contract be awarded to HAB Aquatic Solutions, Inc. in the amount of $204,669 by way of adopting resolution 19-09-03.

**Proposed Motion:** Manager ____________ moves to adopt resolution 19-09-03. Seconded by Manager _____________. [Roll call vote]

**Attached:**
1. EOR Recommendation of Award Memo (9-23-2019)
2. Resolution 19-09-03 – Contract Award
The purpose of this memorandum is to provide a recommendation for selecting a Contractor to implement the Shields Lake Alum Treatment.

**Bid Summary**

The CLFLWD Board of Managers authorized Solicitation for Bids on September 5, 2019. The Request for Bids was posted on QuestCDN on September 8, 2019 and bids were opened on September 20, 2019 at 2pm at the District Office.

In order for us to formulate our recommendation, we compared the Total Bid values for each of the contractors. This value includes 2 mobilizations, 2 demobilizations, 170 US tons of liquid aluminum sulfate application, and 93 US tons of liquid sodium aluminate application. A total of two bids were received. Emmons & Olivier Resources, Inc. (EOR) has reviewed the bids and determined that all are responsive. The low bidder is HAB Aquatic Solutions, Inc. with a Total Bid of $204,669. The Engineer’s estimate was $202,210, plus or minus a 20% ($40,442) contingency to account for variability in chemical prices and mobilization/demobilization.

**Recommendation**

EOR finds that HAB Aquatic Solutions, Inc., is a responsible bidder. For this project, we recommend award of the contract to the low responsive bidder, HAB Aquatic Solutions, Inc., in the amount of $204,669, to implement the Shields Lake Alum Treatment.
RESOLUTION 19-09-03
COMFORT LAKE-FOREST LAKE WATERSHED DISTRICT
BOARD of MANAGERS

AWARDING CONTRACT for the
SHIELDS LAKE WETLAND ALUM TREATMENT PROJECT

Manager _____________ offered the following resolution and moved its adoption, seconded by Manager _____________:

WHEREAS the District has adopted a watershed management plan (WMP) in accordance with Minnesota Statutes §103B.231, which, in project 5-226-D, identifies, among other projects, an alum treatment to reduce the internal load of phosphorus to Shields Lake (hereafter the “Project”);

WHEREAS in accordance with the WMP, the District will address the rough fish population through harvesting in fall 2019 and ongoing winter aeration, and will have addressed watershed loads through implementation of the Shields Lake Stormwater Harvest and Irrigation Reuse Project (“Reuse Project”) prior to the alum treatment;

WHEREAS the District has calculated appropriate alum dosing levels using information from the District’s deep sediment core study and other available data and resources;

WHEREAS the District applied for and has been awarded a Clean Water Fund grant in the amount of $824,000, for both the Project and the Reuse Project;

WHEREAS Project staging would be located on land riparian to Shields Lake owned by the City of Forest Lake, and the District and City are in the process of executing an access and staging agreement;

WHEREAS the District distributed informational mailers to nearby residents, submitted a press release to its official newspapers, presented on the Project at an open house event on August 28, 2018, held an additional open house on September 23, 2019, and will hold a public field demonstration during the alum treatment in fall 2019;

WHEREAS on September 5, 2019, the Board adopted Resolution 19-09-01 ordering the Project and directing the solicitation of bids;

WHEREAS the District solicited bids for the Project, pursuant to which two bids were submitted and reviewed by the District engineer;

WHEREAS the District engineer has reviewed the bids and, in a memorandum dated September 23, 2019, finds that the bid of HAB Aquatic Solutions, Inc. in the amount of $204,669.00 is the low bid and that the bid is conforming, and further finds that HAB Aquatic Solutions, Inc., is a responsible bidder, and recommends the award to HAB Aquatic Solutions, Inc.;

WHEREAS the Board adopts the findings and recommendations of the District engineer;
THEREFORE BE IT RESOLVED that the Board of Managers hereby:

1. Awards the Moody Lake Alum Treatment contract to HAB Aquatic Solutions, Inc. for the contract price of $204,669.00;

2. Authorizes the District administrator to sign and transmit the notice of award, sign the contract, and issue the notice to proceed on advice of counsel and when all prerequisites for issuance have been met by the contractor; and

3. Authorizes the District administrator to sign task orders increasing the contract price in an aggregate net amount not exceeding 10 percent of the contract price.

The question was on the adoption of the above resolution and there were _____ ayes and _____ nays as follows:

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The President declared the resolution adopted.

Dated: September 26, 2019

___________________________________
Jen Oknich, Secretary

___________________________________
Jen Oknich, Secretary