

## **AMENDMENT #1**

### **AGREEMENT FOR ENGINEERING AND DESIGN SERVICES FOR THE SPRING VALLEY LAKE RECOVERY PROJECT SPRING VALLEY CSA-2**

THIS AMENDMENT, is entered into this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ by and between the County of Lake, on behalf of CSA 2 Spring Valley, hereinafter referred to as COUNTY, and Anchor QEA, LLC, hereinafter referred to as CONSULTANT.

#### **RECITALS**

WHEREAS, the Agreement for design services dated August 24, 2021 was entered into by COUNTY and CONSULTANT, collectively referred to as the "parties"; and

WHEREAS, Section 5, "MODIFICATION", provides for the modification of the Agreement by written Amendment for matters which affect the compensation; and

WHEREAS, the COUNTY has identified several additional scope of work items that are necessary to complete the design.

NOW, THEREFORE based on the foregoing recitals the parties hereto agree as follows:

#### **I. SCOPE OF WORK**

##### **Task 1 – Repair or Replace Existing Dam Drain Valve**

CONSULTANT will coordinate with the COUNTY to have COUNTY crews field locate and assess the condition of the existing valve including estimating its size based on type of valve and number of turns from fully open to fully closed. CONSULTANT will make a site visit to document and confirm existing conditions and ancillary infrastructure. Scope to include a means to convey the water from the drain outlet pipe to Wolf Creek. Scope to include site notes and photos, construction plans and specifications describing the work required to repair or replace the dam valve as well as improvements to convey the flow more directly to Wolf Creek and an engineer's cost estimate for the work.

##### **Task 2 – Demolition of Existing Restroom at the North End of the Lake**

CONSULTANT will review existing design or as-built information and make a site visit to document and confirm existing conditions at and around the existing restroom structure. CONSULTANT will coordinate with the COUNTY regarding the preference of abandonment and demolition of the restroom. Scope to include site notes and photos, construction plans and specifications to describe the work required to demolish and abandon the existing restroom along with an engineer's cost estimate for the work.

##### **Task 3 – Retaining Wall for the Material Haul Route Around the End of the Dam**

The original scope of work identified a haul route along the northern edge of the lake, to minimize construction traffic on local subdivision roads. In order to avoid the northeastern end of the dam, and avoid any formal consultation and approvals by the Division of Safety of Dams (DSOD), a retaining wall will need to be constructed. This will allow work to move forward without any delay caused by consultation with and approval from DSOD. CONSULTANT will perform a site specific geotechnical investigation focused on the design of a retaining wall at this location. CONSULTANT will coordinate the recommended retaining wall design with the COUNTY prior to design. Scope to include a Geotechnical Investigation Technical Memorandum, construction plans and specifications and an engineer's cost estimate for the work.

#### Task 4 – Geotechnical Investigation of Sediment Deposits in the Lake

To date there is no accurate or documented quantification of the nature and extent of the deposits within the lake. The subsurface investigation will help the Parties define, negotiate and delineate the involvement of Clear Lake Lava, identify disposal options for the sediment along with estimated quantities of potentially marketable materials, and thereby more accurately estimate the overall project cost. CONSULTANT will perform a set of nine (9) geotechnical borings along the length of the lake, along with a number of visual and laboratory tests to define and quantify the nature and properties of the materials. Soil borings will be advanced a few feet below the historical bottom of the lake. Laboratory testing will include analysis of metals as well as testing for other hazardous contaminants to meet California Title 22 requirements. Laboratory testing will be used to classify the soils and estimate their engineering properties. Three of the nine borings will be converted to groundwater monitoring wells that will be installed in accordance with local and State requirements. The monitoring wells will be used to monitor groundwater levels as well as provide preliminary information to aid in the conceptual design of a dewatering system that is to be designed and used by the Contractor during lake excavation work. Scope to include site visit notes and photos and the Geotechnical Investigation Technical Memorandum and three monitoring wells.

#### Task 5 – Additional Identification and Documentation of Key Site Features

CONSULTANT'S ongoing design work has revealed the presence of additional features and structures that appear to extend beyond certain private property lines and in some cases into the Lake boundary. To properly describe these potentially impactful features and consider them as the design is completed, the CONSULTANT needs additional time in the field to further identify, locate and describe these features that reside within or very near the areas of anticipated earthwork. CONSULTANT will conduct follow-up site reconnaissance to observe and document key features. Additional work will include locating the approximate outline and general description of key structures, including those that appear to extend beyond the property line, approximate location of fences and gates in areas of interest, approximate location of overhead electrical and or communication lines, power poles and guy wires with estimation of height from existing grade to the lowest overhead wire and general description of this infrastructure, approximate location of surface markings for buried utilities, approximate location and general description of limits of concrete, asphalt and gravel roads, or similar improvements, i.e. playgrounds, baseball fields, parking lots, etc.. Location of features will be performed with a hand-held GPS unit.

## II. **COMPENSATION**

Compensation by COUNTY to CONSULTANT for additional services described shall be \$134,351.00 with the revised total agreement being for \$563,808.00. The cost of each task is as follows:

Task 1:	\$14,553.00
Task 2:	\$11,142.00
Task 3:	\$46,481.00
Task 4:	\$47,275.00
<u>Task 5:</u>	<u>\$14,900.00</u>
Total:	\$134,351.00

Executed at \_\_\_\_\_, California on \_\_\_\_\_.

COUNTY OF LAKE

CONSULTANT



\_\_\_\_\_  
CHAIR, Board of Supervisors

\_\_\_\_\_  
Michael Whelan, PE Principal Engineer  
Anchor QEA, LLC

ATTEST:

APPROVED AS TO FORM:

SUSAN R. PARKER  
Clerk to the Board of Supervisors

ANITA L. GRANT  
County Counsel

By: \_\_\_\_\_

By:  \_\_\_\_\_