# CITY OF OBERLIN, OHIO

## ORDINANCE No. 19-63 AC CMS

AN ORDINANCE AMENDING THE CONTRACT WITH ENVIRONMENTAL DESIGN GROUP, INC. OF AKRON, OHIO, TO PROVIDE FOR ADDITIONAL PROFESSIONAL ENGINEERING SERVICES FOR THE ALTERNATIVES ANALYSIS OF THE OBERLIN WATERWORKS UPGROUND RESERVOIRS No. 1 & 2 AND DECLARING AN EMERGENCY

WHEREAS, by Ordinance No. 19-31 AC CMS, the City Council of the City of Oberlin authorized the City Manager to enter into a contract with Environmental Design Group, Inc. of Akron, Ohio for professional engineering services for the development of an Alternatives Analysis for the Oberlin Waterworks Upground Reservoirs No. 1 & 2 on Morgan St. in the City of Oberlin in an amount not to exceed \$71,200.00; and

WHEREAS, in the course of the work, it has been discovered by the Public Works Department that additional professional engineering services are necessary in order to document the existing conditions of the embankments of Reservoirs No. 1 & 2 in order to develop a thorough alternatives analysis for the City of Oberlin.

NOW, THEREFORE, BE IT ORDAINED by the Council of the City of Oberlin, County of Lorain, State of Ohio:

SECTION 1. That the City Manager is hereby authorized and directed to execute the contract amendment with Environmental Design Group, Inc. of Akron, Ohio for additional professional engineering services for the development of the Alternatives Analysis for the Oberlin Waterworks Upground Reservoirs No. 1 & 2 in an amount not to exceed \$12,500.00.

SECTION 2. It is hereby found and determined that all formal actions of this Council concerning or relating to the adoption of this ordinance were adopted in an open meeting of this Council, and that all deliberations of this Council and of any of its committees that resulted in such formal action, were in meetings open to the public in compliance with all legal requirements, including Section 121.22 of the Ohio Revised Code.

SECTION 3. That this Ordinance is hereby declared to be an emergency measure necessary for the immediate preservation of the public peace, health and safety of the citizens of the City of Oberlin, Ohio, or to provide for the usual daily operation of a municipal department, to wit: to continue with the planning and design for improvements to the Oberlin Waterworks Upground Reservoirs, No. 1 & 2 in a timely manner to ensure compliance with Ohio Department of Natural Resources regulations, and shall take effect immediately upon passage; and provided that it is elevated to emergency status by the affirmative vote of at least five members of Council and receives the affirmative vote of at least five members of Council upon final passage, it shall go into full force and effect from and immediately after its passage; otherwise, it shall take effect at the earliest period allowed by law.

POSTED: 10/22/2019

PASSED:	1 <sup>st</sup> Reading: October 21, 2019	:/Passed on Emergency
	2 <sup>nd</sup> Reading:	
	3 <sup>rd</sup> Reading:	
ATTEST:  Milling Mouses  BELINDA B. ANDERSON, MMC  CLERK OF COUNCIL		BRYAN BURGESS PRESIDENT OF COUNCIL

EFFECTIVE DATE: 10/21/2019



October 10, 2019

Mr. Jeff Baumann City of Oberlin Public Works Director 85 South Main Street Oberlin, Ohio 44074

Re:

Oberlin Waterworks Upground Reservoirs No. 1 & 2 Alternatives Analysis

Amendment No. 1

Environmental Design Group No. 19-00153-010

Dear Mr. Baumann:

Per our discussions, please find here Amendment No. 1 to the Agreement between Client (City of Oberlin) and Environmental Design Group, LLC dated May 16, 2019. While coordinating with the Ohio Department of Natural Resources (ODNR) for Task 1 of the original scope of services, we learned that the Oberlin Waterworks Upground Reservoirs No. 1 & 2 used to be regulated by ODNR separately. However, during an ODNR inspection in 2009, the stability of the embankment between Reservoir No. 1 & 2 was questioned due to the inspectors' observations. ODNR has not performed an analysis to determine if this embankment meets their stability requirements; without that analysis ODNR concluded that the embankment may not meet their stability requirements. If this embankment does not meet ODNR's stability requirements, the reservoirs act as one body of water and must therefore be regulated as one dam. ODNR therefore began regulating Reservoirs No. 1 & 2 as one dam. If the embankment does meet ODNR's stability requirements, Reservoir No. 1 & 2 can be regulated separately. A slope stability analysis is required to make this determination.

The stability of this embankment is a critical factor in the Alternatives Analysis. The results of the analysis will determine whether either reservoir may be eliminated or lowered. The results will also indicate the modifications required to stabilize the embankment, if necessary, for any alternatives and will inform the cost estimates for each alternative. If the reservoirs are regulated separately, it becomes easier to make modifications so they are exempt from ODNR requirements. Our survey and calculations determined that the storage volume for Reservoir No. 1 is 59 acre-feet and the storage volume for Reservoir No. 2 is 50 acre-feet. Recall that a dam must be less than 10 feet high with a storage volume less than 50 acre-feet to be exempt from ODNR requirements. The Dam Safety Inspection Report indicated a storage volume of 60 acre-feet. However, it appears that this number was carried over from Reservoir No. 1 when the reservoirs began to be regulated together in 2009. With each reservoir storing much more water than originally thought, treating the reservoirs as two dams opens up more opportunities for the alternatives analysis.

Our geotechnical engineering subconsultant, CTL Engineering, performed a site visit on September 30, 2019. In addition to determining the boring locations for this slope stability analysis, they identified a potential slope stability issue at the southeast corner of Reservoir No. 1. They recommend a slope stability analysis of the south embankment since Plum Creek's natural erosion has the potential to compromise the safety of the dam. Even if this dam becomes exempt from ODNR requirements, it is prudent to evaluate the stability of this embankment for public safety.

CORPORATE

450 Grant Street / Akron, OH 44311 P 330.375.1390 / F 330.375.1590 TF 800.835.1390

CLEVELAND OFFICE 2800 Euclid Avenue, Suite 620 Cleveland, Ohio 44115

COLUMBUS OFFICE 88 East Broad Street, Suite 880 Columbus, Ohio 43215

envdesigngroup.com

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### SCOPE OF SERVICES

The following services are the changes made to the referenced agreement:

#### Task 3 - Slope Stability Analysis

Environmental Design Group will perform an additional topographic survey to supplement the field survey previously completed for this project. The additional survey will extend below the water elevation in Reservoirs No. 1 & 2 to complete a cross section of the embankment separating the reservoirs. This information is required to perform a slope stability analysis of the embankment.

CTL Engineering will contact Ohio Utility Protection Services (OUPS) and drill up to five soil borings at 25-30 feet deep each or auger refusal, whichever occurs first, in the locations shown on the attached figure. The surface elevation of each boring location will be determined from the Environmental Design Group topographic survey previously completed for this project. Field and laboratory testing will be performed in accordance with ASTM specifications. A geotechnical engineering evaluation and report will be completed including a general description of the site, boring logs and soil profiles, existing subsurface conditions, a slope stability analysis, and recommendations for slope stabilization if needed.

CTL plans to use a Geoprobe or an ATV for the soil borings. The width of these machines is approximately five feet. To access the location of each boring location, brush, branches, and trees less than 3-inch caliper in some isolated portions of the path may need to be cleared. Clearing will be kept to a minimum and will only be done if required for the Geoprobe or ATV's access to the boring locations.

If the geotechnical engineering report concludes that the embankment between Reservoirs No. 1 and 2 is stable, Environmental Design Group will coordinate with ODNR to request that each reservoir be regulated separately and provide the engineering evaluation to support this conclusion. ODNR's acceptance of the request is not guaranteed. If the geotechnical engineering report concludes that the either the embankment between the reservoirs or the southern embankment of Reservoir No. 1 is not stable, Environmental Design Group will incorporate these results and recommendations into the alternatives analysis.

## PROJECT QUOTATION

The above changes will be made for a **lump sum fee of Twelve Thousand Five Hundred Dollars and No Cents (\$12,500.00).** Therefore, the total contract amount will be adjusted from \$71,200.00 to \$83,700.00. All previously agreed-upon terms and conditions still apply.

This offer remains valid for thirty (30) days; acceptance thereafter is subject to our approval. Reimbursable expenses (i.e., prints, reproductions, photos, mileage, consultant and agency fees, etc.) are included in the price shown for professional services.

From the date of acceptance of this agreement, the above fees will apply for one (1) year. If the work is not completed during that period, the agreement may be subject to renegotiation.

# **ASSUMPTIONS AND EXCLUSIONS**

Below is a list of assumptions and exclusions that apply to this proposal for technical services. In addition to the assumptions contained in our original authorization, these clarifications will also apply. These items were considered while defining the scope and fee for Environmental

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Jeff Baumann Public Works Director October 10, 2019 Page 3

Design Group's services and further explain the responsibilities of Client and Environmental Design Group.

- 1. Inclement weather may affect the project schedule for field activities.
- 2. This proposal is based upon the current regulations of the Ohio Department of Natural Resources. While we do not anticipate major changes in their regulations, if changes occur it will affect our cost.
- 3. There are no guarantees of approvals. We offer a professional service and will work to accomplish the client's goals, but our fees shall be paid regardless of the
- 4. Our work will be considered complete when all comments from reviewing agencies have been addressed.

# PROJECT INITIATION PROCEDURES

If this amendment is satisfactory, you may authorize Environmental Design Group to proceed by returning one (1) signed copy of this letter to us. If there is a need for clarification, please contact me at 330-375-1390.

Sincerely

Katherine G. Holmok, PLA ASLA

Principal-in-Charge

Julie A. Lawson, P.E., C.F.M.

Project Manager | Principal Contact

ACCEPTED: CITY OF OBERLIN

Approved as to form

Law Director

Oberlin Waterworks Upground Reservoirs No. 1 & 2 Alternatives Analysis

Amendment No. 1

Proposed Soil Boring Locations

