

ORDINANCE NO. 2021-019

COPY

AN ORDINANCE AUTHORIZING THE CITY
MANAGER TO EXECUTE A CONTRACT WITH BURGESS & NIPLE AND
DECLARING AN EMERGENCY

WHEREAS, the City desires to do improvements to the Glosser Road Pump Station and Equalization Basin; and

WHEREAS, the City wishes to enter into an agreement for design services with Burgess & Niple; and

WHEREAS, Burgess & Niple was the chosen firm from RFQ #20-1842; and

WHEREAS, A price of \$740,829.00 for design of the recommended improvements was negotiated; and

WHEREAS, the project is needed due to a Notice from the Ohio Environmental Protection Agency outlining a violation of our NPDES permit; and

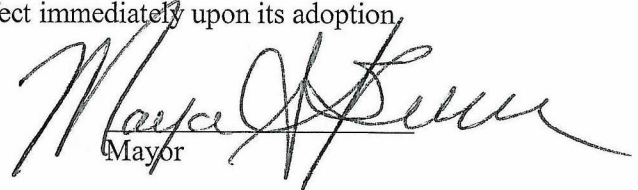
WHEREAS, the project is included in the 2021-2025 Capital Improvement Program; and

WHEREAS, the design will be funded from the Sewer Fund.

NOW, THEREFORE, BE IT ORDAINED by the Council of the City of Lebanon, Ohio:

SECTION 1. That the City Manager be authorized and directed to execute an Agreement between the City of Lebanon and Burgess & Niple, in substantially the same Form as the agreement set forth in 'Exhibit 1'.

SECTION 2. This Ordinance is hereby declared an emergency measure for the immediate preservation of the public peace, health safety, morals and welfare of the City of Lebanon, Ohio; and, for the further reason, to allow to begin work immediately to stay on schedule with the plan provided to the OEPA, then this ordinance shall take effect immediately upon its adoption.


Mayor

Passed: February 23, 2021
Attest:


Clerk of Council

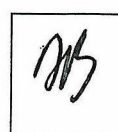
Sponsors

Council members

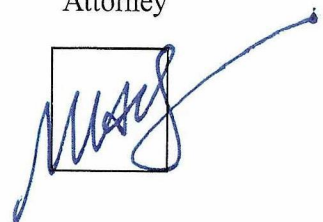
City
Manager



City
Auditor



City
Attorney



**CITY OF LEBANON
CONSULTANT AGREEMENT**

THIS AGREEMENT MADE AT LEBANON, OHIO, on the **15th** day of **February, 2021**, by and between the City of LEBANON, Ohio, acting by and through its City Manager, duly authorized by Ordinance No. 2021-019, passed by the Council of the City of LEBANON, Ohio, and dated the **15th** day of **February, 2021**, herein after referred to as the CITY, and **Burgess & Niple**, hereinafter referred to as the CONSULTANT.

WITNESSETH:

WHEREAS, the CITY desires to engage the CONSULTANT to render certain professional design services for **RFO #20-1842 – Glosser Road Pump Station – EQ Basin Improvements Design Services** hereinafter referred to as the PROJECT; and

WHEREAS, the CONSULTANT is willing to provide said service for the considerations and upon the terms and conditions hereinafter set forth.

NOW, THEREFORE, in consideration of the mutual covenants, promises, conditions, and terms to be kept and performed, it is agreed between the parties as follows:

SECTION 1. Description of Work.

A. The CONSULTANT agrees to perform the following work upon authorization by the CITY to prepare all items for the **PROJECT** as described in the attached Scope of Services (Exhibit A) prepared by the CONSULTANT dated **February 3, 2021** and the CONSULTANT's Hours and Fee Estimate (Exhibit B) dated **February 3, 2021**.

SECTION 2. Work Schedule and Progress Reports.

The CONSULTANT agrees to submit monthly progress and status reports showing what work has been accomplished. The reports shall be transmitted to the CITY within ten (10) calendar days from the end of the previous month.

SECTION 3. Compensation.

The CITY agrees to compensate the CONSULTANT for the performance of work specified in this Agreement as follows:

A. The CONSULTANT shall receive a lump sum amount of **Seven Hundred Forty Thousand Eight Hundred Twenty Nine and 00/100 Dollars (\$740,829.00)** for the professional engineering services to prepare the final deliverables.

B. The CITY shall make monthly partial payments to the CONSULTANT, based on the work actually performed, upon receipt of an invoice from the CONSULTANT. The invoice shall include the current billing breakdown of person hours, a history of invoicing and documentation of reimbursable expenses.

C. Reimbursable expenses, including subconsultant costs, shall be the actual miscellaneous out-of-pocket expenses for services provided under this Agreement. No multiplier shall be added to reimbursable expenses.

SECTION 10. The CONSULTANT expressly agrees that no CITY employees shall be used to complete the work contemplated by this Agreement, whether or not said employees are compensated by the CONSULTANT, without the express written permission of the City Manager. The CONSULTANT further understands that any unauthorized use of CITY employees may result in the immediate termination of this Agreement.

SECTION 11. The CONSULTANT shall have access to such pertinent public records as are available to the CITY and applicable to the work to be done under this Agreement at no cost to the CONSULTANT. The CITY does not guarantee the accuracy, completeness, or validity of any of said records. The CONSULTANT shall verify the public records and existing conditions to the extent necessary to assure a complete PROJECT.

The CITY shall, at all reasonable times, have access to the work and drawings of the CONSULTANT for purposes of inspection and review.

SECTION 12. The CONSULTANT agrees that it will make no claim or charge for delays or hindrances from any causes. Compensation for such delays or hindrances shall be by extension of time for such reasonable periods of time as the CITY may decide.

SECTION 13. The CITY and the CONSULTANT each binds itself and its successors, executors, administrators, and assigns to the other party to this Agreement and to the successors, executors, administrators and assigns of such other party in respect to all covenants of this Agreement. Neither the CITY nor the CONSULTANT shall assign, sublet, or transfer its interest to this Agreement without the express written consent of the other. 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.

SECTION 14. The CITY may terminate this Agreement at any time by written notification to the CONSULTANT by the City Manager. Immediately upon receipt of such notification, the CONSULTANT shall cease all work unless such notification states otherwise.

Compensation due the CONSULTANT in the event of termination shall be as mutually determined by the CITY and the CONSULTANT based upon the usable plans and data submitted or audited cost incurred. The CONSULTANT shall make no claim for additional compensation by reason of such termination.

SECTION 15. The CONSULTANT shall comply with all Federal, State and City laws, statutes, resolutions, ordinances, rules and/or regulations, including the Worker's Compensation Law of the State of Ohio.

SECTION 16. Insurance Requirements.

- A. The CONSULTANT shall take out and maintain during the life of this Agreement at his own expense, such General Liability and Automobile Liability Insurance, as shall protect himself, the CITY, their agents, employees, representatives and subconsultants, from claims for damages for bodily injury, including wrongful death, as well as from claims for property damage which may arise under this contract. The amounts of such insurance shall be no less than the following:

IN WITNESS WHEREOF, the parties hereunto have caused this Agreement to be executed in duplicate the day and year first above written.

Signed and Acknowledged
in the presence of:

THE CITY OF LEBANON, OHIO

Witness Diana Lakes

BY: [Signature]
Scott C. Brunka
City Manager

Witness Connie Baughen

BURGESS & NIPLE

Witness Mark Upton

BY: Ken Sponaugle
Ken Sponaugle

Witness Vicki Schallert

Title: Executive Vice President

**APPROVED AS TO FORM
AND CORRECTNESS:**

[Signature]
Mark Yurick
Director of Law
City of Lebanon

Date: 2/24/21

CERTIFICATE OF CITY AUDITOR

RFQ #20-1842

Glosser Road Pump Station – EQ Basin Improvements Design Services

I hereby certify that payment will be made on invoices issued to the City of LEBANON under the agreement, and that sufficient money is in the treasury or in the process of collection to the credit of the appropriate fund or division to discharge the City's obligation under this agreement as authorized by Ordinance No. 019 2021

Dan Burke 2/23/2021
Dan Burke Date
City Auditor

FEBRUARY 3, 2021

Exhibit A

Scope of Work

City of Lebanon Glosser Road Pumping Facility Improvements

Introduction

The City of Lebanon, Ohio owns and operates, as part of its sewage system, the Glosser Road Pump Station (GRPS). This facility was originally the influent pump station to a Wastewater Treatment Plant (WWTP) located at Glosser Road. Approximately 30 years ago the City's WWTP was relocated to a new site approximately 5 miles away and the Glosser Road PS was converted to a remote influent station. Over time there were a series of wet weather events which caused overflows from the influent sewer to Turtle Creek. The City added an Equalization Basin, with an effective volume of 3.25 million gallons (MG), to eliminate overflows. Over time the City grew, and flows increased. Overflow events re-appeared in 2017. In 2019, Ohio EPA issued a Notice of Violation to the City requiring elimination of the overflow events. During 2020, the City hired engineering consultant Burgess & Niple, Inc (B&N) to complete an evaluation of the overflows, develop a basis of design storm event and evaluate alternative design solutions. This Preliminary Engineering Report (PER) was completed in September 2020. It was presented to the City and in turn to Ohio EPA.

The recommended solution is to replace the 60 year old, and twice renovated, GRPS with a new pump station discharging into the existing force main. To increase flows while limiting pressure in the force main it is proposed to add a booster pump station that will be active during wet weather flow events. The Booster Station is planned to be located approximately half way along the 25,000 foot force main on property owned by the City along Columbia Rd. At GRPS the new facility will also include screening, modifications to the Equalization Basin to increase effective volume to 4.4 MG, new electrical system, and related site piping, paving, grading, and drainage.

In November 2020, the City initiated a Request for Proposals from engineering firms for the design and construction phase engineering services. After receiving multiple proposals and evaluating same, in January 2021 the City staff selected Burgess and Niple, Inc to complete these services. The following sets for the scope of work.

Project Team

Burgess & Niple is the lead consultant and will be under contract to the City to complete the proposed work. They will employ as sub-consultants several other firms as follows:

- Environmental Engineering Services (EES): This Lebanon based engineering and environmental services company was part of the PER team and will continue as part of the design team.
- Surveyor: From a list of firms acceptable to both the City and B&N; B&N will obtain quotations for the needed survey work to assist in the engineering design and any property survey required at the Booster PS site.
- Geotechnical: A soils investigation is required to complete the design. B&N will obtain quotes from a list of Geotechnical firms acceptable to both the City and B&N to provide soil borings and analysis, establish ground water levels, determine the seismic classification of the site, and make foundation and support of excavation recommendations.

FEBRUARY 3, 2021

- **Environmental:** As part of the project the existing pump station building will be modified for non-pumping uses or demolished. To accomplish this the structure needs to be surveyed for asbestos, lead paint, PCBs and mercury. B&N will obtain quotes from a list of Environmental firms acceptable to both the City and B&N to provide this evaluation. Brief observation of the structure suggests that PCB transformers or light ballasts and mercury light switches are not present. Lead paint is likely on any piping that pre-dates 1974. Asbestos is suspect in roofing materials and the grout of glass block window.
- **Control System Integration:** The City's RFP for engineering services specified that the detail programming of the control system be performed as part of the engineering services contract, rather than the construction contract, as this gives the City a greater level of control over the approach to the controls and the "look and feel" of the human machine interface. From a list of sub-consultants acceptable to both the City and B&N: B&N will sub-contract with a system integrator to complete this task.

In the following scope of work the term "B&N" should be understood to mean Burgess & Niple, Inc and/or its sub-consultants.

Permitting

This project will require obtaining a number of permits from various government agencies to allow the project to be completed. B&N will complete the following Permitting tasks:

- **Ohio EPA Permit to Install-** complete the permit application, submit to Ohio EPA, and respond to review comments. City to pay permit fee.
- **Building Permit:** Separate Building Permits are required for the Glosser Road PS, the Booster PS, and possibly the modification of the existing pump station. B&N will prepare the permit applications, deliver it to the City for the City to submit, and respond to review comments. City to pay permit fees. There are separate electrical permits which must be obtained by the electrical contractor that use the Design Drawings as the basis for the permit.
- **Stormwater Permit:** The construction contractor must submit a Notice of Intent (NOI) to have the construction site covered by the National NPDES Stormwater Permit. B&N will include in the plans, Erosion and Sediment Control Plans that the contractor can use as the basis for said permit. Contractor to pay fee.
- **USACE Section 401/404 Permit:** The US Army Corps of Engineers administers the permitting for Sections 401 and 404 of the Clean Water Act requiring a permit to do any construction or excavation and fill work in a Flood Plain. The proposed new wet weather overflow outfall pipe and headwall will encroach the Flood Plain of Turtle Creek. B&N will prepare and submit the application and respond to comments. City to pay fee. The work should be above the Ordinary High Water Elevation allowing this permit to fall under the scope of an existing Nation-wide permit for utility construction. It is anticipated that this is not a major permitting activity.
- There was a recent (last 4 years) revision to the FEMA flood delineation that removed the Glosser Road site from the flood plain. Based on mapping provided by the City, the proposed Booster PS site is not in a Flood Plain. Based on these, there is no flood plain permitting anticipated.
-

FEBRUARY 3, 2021

Construction Funding

B&N will assist the City in identifying and submitting for construction grants and low interest loans for the construction phase. The primary source will be the Ohio Water Pollution Control Loan Fund (WPCLF).

Design

Overview

B&N will complete the engineering and architectural design tasks to prepare plans and specifications to allow the City to obtain bids for the construction of the proposed facilities. B&N will complete the design and make progress submittals to the City for design review and comment. There will be formal submittals at 30%, 60%, and 90% complete documents. Then Final sealed documents will be prepared for use in the bidding and construction phases.

- 30% submittal includes site plans, major plans and sections of structures, hydraulic calculations, preliminary pump selections, The specifications Table of Contents and other key calculations. This submittal is also called the Basis of Design (BOD). This submittal is the critical “what is being designed” document.
- 60% Submittal includes more developed site design, all of the major process and architectural views of facilities, key specification sections. Review of this submittal is the key time for City staff to add detail about the final facility.
- 90% submittal includes a nearly complete design. This submittal is used for submittal to permitting agencies.
- Final submittal are the documents that will be used for construction bidding and construction.
- The 30%, 60%, and 90% submittals each include a sequence of document submittal, review by City Staff, a workshop for City staff and design team to discuss the design, and the City to make formal comments and the design team to respond to those comments.

The major elements of the design includes:

- At Glosser Road
 - A new submersible pump station with wet weather, dry weather and EQ Basin transfer pumps
 - A new influent screen facility
 - New electrical facilities
 - Modifications to the Equalization Basin
 - Modification to, or demolition of, the existing pump building
 - Related site work and site piping
- At the Columbia Road Booster Pump Station
 - A new 10 MGD wet weather booster pump station
 - New electrical facilities
 - Necessary site piping and site work

Following is a more detailed description of each facility to be designed.

Glosser Road Pump Station: GRPS has three pumping tasks.

- The system driving the project is the needed ability to pump 10 MGD (6,840 gpm or nominally 7,000 gpm) from Glosser Road to the WWTP during peak wet weather events. This will be accomplished with three pumps sized to deliver 5 MGD each when two pumps are running with the head necessary to reach the booster pump station. A second criteria is that one wet weather pump will deliver at least 4,700 gpm with head sufficient to reach the WWTP. The design goal is to make use of two existing Flygt N3312 pumps.
- Dry weather pumps: Because of drastically different head conditions the wet weather pumps cannot be operated during dry weather low flow conditions. This service will be provided by three dry weather pumps each rated for 2,000 gpm with head sufficient to deliver flow to the WWTP.
- Once the Equalization Basin reaches a level of 12 feet it is necessary to pump flow to the Basin. The pump station will include low head high volume pumps to complete this transfer. Hydraulics will be examined to determine if a dry weather pump can be used for this purpose or whether separate pumps are necessary.
- The pump station wet well will be provided with a divided wet well so that half of the station may be operated during dry weather while the other half of the station is closed for maintenance. The pump station can be arranged as either having pavement pad for a boom truck or a monorail crane over the pump openings for pump removal.

Screening

- Hydraulically ahead of the pump station there will be an influent channel with an automated bar screen for the removal of coarse solids. Here the intent of screening is to remove only solids that might damage pumps or heavy fall leaf loads. The goal is to pump smaller putrescible solids to limit any odor issue.
- The Bar Screen will be enclosed in a building which is heated to prevent freezing and ventilated enough to provide a safe work space. The screen room will include screenings handling equipment—screenings press and/or conveying—to be decided; and a screenings dumpster.
- The screenings building has an electrical hazard classification of Class 1 Division 1. The electrical system in the room will be designed accordingly.

Electrical Building and Equipment

- New electrical service will be extended from either a new terminal pole or extended from the existing terminal pole. A new utility company owned pad mount transformer will be located.
- A Diesel standby generator and automatic transfer switch will be designed.
- The above will feed new primary switch board and motor control center. The pumps will be powered by variable frequency drives.

Buildings

- The buildings are planned as double wythe masonry construction. Roof type to be determined. Slab on grade foundation.
- For security no windows are planned.

FEBRUARY 3, 2021

- At the Booster PS the pump Room and Electrical Rooms will be separate rooms in the same building. At Glosser Rd, the Electrical Building will be a separate building.

Equalization Basin

- The goal of the design is to increase the effective usable depth of the basin from 12.5 feet to 17 feet; thus adding 1,165,000 gallons of storage.
- Interim Improvements made during the PER Study will be made permanent and automated.'
- The basin floating aerator supports will be modified to allow the aerator to float freely to a water depth of 18 feet.
- A new high level overflow weir will be added inside the basin at a weir elevation to allow the 17 feet storage prior to any overflow. Depth over weir to be held to 6" to 9"
- Basin return line to be modified to allow a calibrated return of flow during a wet weather event.

Existing Pump Building

- The existing pump building will have electrical equipment, pumps, other equipment, and piping removed and the structure made safe. Minor modifications will be made to allow use as a storage or office area. Pump hatch openings may or may not be infilled.

Site Work - Glosser Road

- The 33" influent sewer will be re-intercepted and directed to the screen building. The 15" influent will be extended to the new intercept box.
- Revised piping to and from the Equalization Basin will be provided.
- A new overflow with headwall will be designed from the Equalization Basin to the creek. The existing outfall will be abandoned and removed to inside the facility fence.
- Connections from the new pump station to the existing force main will be designed.
- Paving, grading and drainage will be revised to coordinate with the new facilities.

Booster Pump Station

- At the Columbia Road site, a new three pump booster system will be designed.
- Piping, valving, and controls will be designed to allow the flow from Glosser Road dry weather pumps and one wet weather pump to bypass the Booster Station and continue to the WWTP. When a second wet weather pump is started at Glosser Road the Booster Station will be activated and flow will enter the station and be repumped to provide the increased head to convey flow to the WWTP.
- The station will have three pumps sized for the necessary head and 5 MGD (3,500 gpm) each when two pumps are running. The pumps will be powered by variable frequency drives. The tentative pump selection is to utilize horizontal split case centrifugal pumps. The pump suction will be hard-piped to the incoming force main. With no open water surface this should eliminate odor risk.
- A separate electrical room will be provided inside of the pump building.
- The pump building is planned as a double wythe masonry building. Roof type to be determined.

FEBRUARY 3, 2021

- The site piping at the booster station will allow dry weather flow, up to 4,000 gpm or flow from one wet weather pump, to transit around the station with flows automatically routing through the station when the set point is reached. This flow transfer would reverse when flow rates fall.
- The station will be provided with a flush water system so that the station piping is flushed and left full of water rather than sewage at the end of wet weather events.
- Site work will include paving, drainage, and grading. Assuming proposed development occurs on the balance of the site, site grading will either direct surface runoff to the adjacent creek or to the stormwater pond.
- The Booster Pump Station will be provided with a new electrical power service from the public utility including a pad mount transformer. A standby diesel generator and automatic transfer switch will be provided. These will power new primary switches, the pump VFD drives, Motor Control Center and lighting and power panels.

Instrumentation

- Both sites will be provided with automated controls tied to the WWTP SCADA system. The communication link at Glosser Road will be relocated from the existing station to the new station. A new communication link will be designed for the Booster Pump Station site.
- Control logic is intended to pump all flow to the WWTP during dry weather and small wet weather events. During larger wet weather events the following sequence is anticipated.
 - The second wet weather pump turns on and the two pumps ramp to peak flow delivering 10 MGD flow to the WWTP (through the Booster Station)
 - When 10 MGD is being pumped and influent sewer level continues to rise, begin diversion to Equalization Basin (EQ).
 - At any time that level falls below a setpoint sewer level, begin returning flow to the wetwell so that 10 MGD continues to be pumped to the WWTP.
 - If sewer level again rises return to sending flow to the EQ Basin. If the level falls again return to emptying the EQ Basin.
 - When the EQ Basin exceeds 12 feet. Close the influent gate and begin pumped transfer to the Basin.
 - Empty the EQ Basin to a pre-set low level while continuing to pump 10 MGD to the WWTP.
 - Once the low level is reached (approximately 5 feet), begin pumped return to complete the emptying of the Basin and reduce pumping rate as dictated by level.

Project Management

The project scope includes those activities necessary to manage the design process, direct the work, and maintain communications with the City and regulatory and permitting agencies. This includes communications with sub-consultants, City, and various agencies. It includes monthly progress meetings with the City, monthly written progress reports to the City and approximately weekly email or telephone status reports. Project management includes managing and invoicing the prime contract and the various sub-contracts.

FEBRUARY 3, 2021

Bidding Phase Services

As part of the Final Design Submittal B&N will provide .pdf format electronic copies of the plans, specifications, and bidding documents. The City will be responsible for making these available to perspective Bidders.

During the Bidding Phase B&N will:

- Respond to questions received by the City from perspective bidders
- Prepare needed Addendum and provide such in .pdf format to the City for distribution. It is assumed there will be three addenda.
- Attend the pre-bid meeting and site tour.
- Attend the bid opening
- Review the bid packages and make a recommendation of award.

Construction Phase Engineering Services

Overview

It is anticipated that the construction period will be:

- 90 day Bid Period including Advertise and Bid Construction Project, review Bids, Award Contract and reach a Construction Notice to Proceed.
- 18 months from Construction Notice to Proceed to Construction Substantial Completion
- 4 month Project Close-out including 60 days from Construction Substantial Completion to Construction Final Completion and then 2 months of engineering close out including preparation of Record Drawings.

During these times the Engineering Team fills four roles

- Construction Administration
- Construction Phase engineering Services
- Resident Project Representative or Inspection
- Control System Integration

The Engineer does not control or direct the Work of the Contractor and does not dictate or direct the method, means, or manner of conducting the Work.

Construction Administration

Cities or Utilities that do not have a continuously active construction program do not have staff with both the expertise and the time to administer a complex project. B&N will provide these services including:

- General communications with the contractor and suppliers
- General communications with the Owner
- Processing of schedules
- Processing of pay applications and confirming stored materials

FEBRUARY 3, 2021

- Managing the flow of project documentation including submittals, Shop Drawings, Requests for Information (RFI), Requests for Proposal (RFP), Change Orders (CO), material test reports, contractor and inspector daily reports.
- Conducting monthly progress meetings including preparation of agenda and meeting minutes.
- Interaction with regulators and permitting agency inspectors.

Construction Phase Engineering Services

At B&N the Design Team remains engaged in the project throughout the Construction Period and assists the Construction Administrator in providing the technical reviews. These include

- Review of submittals, shop drawings and equipment Data
- Prepare responses to RFIs
- Prepare the technical scope of RFPs
- Assist with startup, testing, and commissioning.
- Prepare record drawings

Inspection

- The Site inspector is the Owner's Representative on the construction site on a daily basis. This role may be full time or part time. It may be part time during early and late activities and full time when there is a lot of activity. The inspector observes the work and notifies the Contractor and Construction Manager of deficiencies.
- The inspector tracks stored material and confirms that maintenance of machinery is completed while stored.
- The inspector reviews the physical progress to confirm the validity of scope for each pay application.
- Recent Code changes, particularly the 2017 Building Code Revision now requires a long list of "special Inspections" that must be completed by a qualified person. Most of these inspections can be completed by the site inspector.
- The construction services fee in the proposal includes a total of 1,600 hours of site representative time over the 18 month construction period.

System Integration

The extension of the City's wastewater SCADA system to the two new facilities requires the development of custom software within the context of the SCADA software platform used by the City. This software development is "System Integration" and shall be performed by a sub-consultant specializing in this activity. Such development shall include:

- Incorporation of Discrete and Analog Input and Output from/to field devices.
- Management of the Input/output (I/O) list.
- Work with City staff to define the "look and feel" of software screens which constitute the Human Machine Interface.
- Develop internal process common to Wastewater SCADA systems such as alarm reporting and response, data historian, report preparation.

Pricing Assumptions

The following assumptions were used in the development of work effort.

1. The location of both the new Glosser Road Pump Station and the Columbia Road Booster Station are as shown in the Preliminary Engineering Report. An alternative site for the Booster Station that is along the force main, has ready access to power, water, and roadway, is outside the flood plain, and doesn't require Consultant activity to define would not impact work effort. It is assumed that the Booster Station site is firmly established by the City prior to the start of site design and that the facility site is not changed after the beginning of design.
2. Utilities: It is assumed that power for Glosser Road will come from either the existing terminal pole or a new terminal pole (closer to the new station) set by the power company. There is sufficient power available at these points and power company will set a new utility owned pad mount transformer. At the Booster Station it is assumed that the power utility will set a terminal pole with sufficient power and extend to a new utility owned pad mount transformer. At the Booster Station it is assumed that potable water is available at the street.
3. It is assumed that a standby diesel generator with automatic transfer switch is included in the design at both sites.
4. It is assumed that the wet weather pumps will utilize the existing 6 year old and nearly new Flygt N3312 pumps plus a third identical unit.
5. It is assumed that both sites are outside of the 100 year flood plain. The latest FEMA flood map revision confirms this for the Glosser Road site.
6. It is assumed that the minor incursion into the Flood Plain for the new Equalization Basin overflow will be entirely above the Ordinary High Water Elevation, that a 401/404 permit will be required; but that this permit is a routine filing to be covered by the National Permit for utility work and that specific environmental studies are not required.
7. The following schedule is assumed.
 - a. Design is completed and accepted by the City in calendar year 2021
 - b. Permitting, funding and bidding occur during the first and second quarters of 2022 and
 - c. Construction occurs July 2022 through December 2023.
8. It is assumed that most project meetings are video conferences via Teams and do not require the time and expense of travel. Site data collection does require travel time but is limited to travel from EES's Lebanon office or B&Ns Cincinnati or Columbus, Ohio offices.
9. It is assumed that Ohio EPA makes a final acceptance of the Preliminary Engineering Report as presented in a timely manner.
10. It is assumed that deep foundations are not required for structural support or to resist flotation. Flotation can be resisted by the mass of the structure.
11. It is assumed that the soil seismic classification is typical for the area and that the ground water conditions, while requiring dewatering during construction, are readily dewaterable.
12. It is assumed that the City has an existing SCADA system to which the two pump stations can be added as new nodes. It is assumed that PLC programming will occur within the software environment of the existing system.
13. It is assumed that abandonment of the existing Glosser Road Pump station will include removal of piping, pumps, electrical gear and other process equipment. It will include patching, plugging, or blind flanging of pipe penetrations to make the structure water tight. It does not include

FEBRUARY 3, 2021

structural modifications or overall demolition. Heat and lighting will be left in place to allow use as storage.

14. It is assumed that the design is subject to the 2017 Ohio Building Code, NEC-latest edition, NFPA 820, and rules from Ohio EPA for the design of sewage pumping facilities. It is not subject to ADA requirements or handicap accessible components of the cited codes.
15. A part time site representative has been proposed for a total of 1,600 hours during construction. This is estimated to be:
 - a. 8 hours/week for 13 weeks beginning with the Construction Notice to Proceed.
 - b. 24 hours/week for 50 weeks through the peak of construction
 - c. 16 hours/week during the remaining 15 weeks to scheduled substantial completion
 - d. A total of 56 hours during the period between Substantial Completion and Final Completion.
16. It is assumed that the progress of the project is not disrupted by any discovery of antiquities, endangered species, hazardous material, or other events that disrupt or delay the project or require more than minimal consultant involvement. It is assumed that this project is "essential work" and can proceed under essential work criteria of a Covid pandemic shutdown.
17. It is recognized that Glosser Road is a sewage pumping and wet weather storage facility and that wet weather events must be accommodated in the work flow. At the same time, it is assumed that the project is not disrupted by flooding or extraordinary weather events.

