

**PROPOSAL AND CONTRACT
FOR
PROFESSIONAL ENGINEERING SERVICES**

**NORTH BEACH WATER DISTRICT
WASHINGTON**

NOVEMBER 2023

Job. No. PR235.64

**GRAY & OSBORNE, INC. G&O
CONSULTING ENGINEERS**

CONTRACT FOR
PROFESSIONAL ENGINEERING SERVICES

THIS Contract between NORTH BEACH WATER DISTRICT, Washington, hereinafter called the "Agency"; and GRAY & OSBORNE, INC., Consulting Engineers, Seattle, Washington, hereinafter called the "Engineer".

WITNESSETH:

WITNESSETH THAT, the Agency now finds that it is in need for the engagement of professional engineering services. The purpose of this Contract is to define the scope of work to be performed, the conditions under which it shall be performed, and method of payment for professional engineering services authorized by the Agency.

NOW, THEREFORE, in consideration of the mutual covenants and agreements herein contained, the parties hereto do mutually agree as follows:

ARTICLE 1

EMPLOYMENT OF THE ENGINEER

The Agency, acting pursuant to its vested authority, does hereby engage the Engineer and the Engineer agrees to furnish the engineering services as requested by the Agency in connection with the South Wellfield Investigation and Pilot Study, hereinafter also called the "Project." These services are outlined in this Contract and shall be undertaken upon request by the Agency to the Engineer.

ARTICLE 2

CHARACTER & EXTENT OF ENGINEERING SERVICES

Upon execution of this Contract, and authorization of the Agency to proceed, the Engineer shall provide engineering services more fully described in Exhibit "A."

SPECIAL SERVICES

The Engineer may employ competent professionals to assist in the completion of the work as described as scope of work and budget herein.

The information so secured shall be made available to the Agency and the Engineer for the use and development of the Agency's projects.

ARTICLE 3

SCOPE OF OWNER SERVICES

The AGENCY shall provide or perform the following:

Provide full information as to the Agency's requirements for the Project. Assist the Engineer by placing at his disposal all available information pertinent to the site of the Project, including previous reports, drawings, plats, surveys, utility records, and any other data relative to the Project. Absent specific written direction to the contrary, the Engineer shall be entitled to rely upon the completeness and accuracy of such documentation.

Examine all studies, reports, sketches, estimates, specifications, drawings, proposals, and other documents presented by the Engineer.

ARTICLE 4

COMPENSATION

It is mutually agreed that the Agency will compensate the Engineer for services furnished based on the cost reimbursement method.

The total cost of these services shall not exceed the amount shown in Exhibit "B" without further written authorization by the Agency.

Total compensation is based on the following:

- (a) Cost Ceiling: The total amount of compensation for engineering services as described herein, and as further defined in letters or exhibits to this Contract including profit (fee), out-of-pocket expenses, direct labor costs, direct overhead and indirect overhead shall not exceed the total dollar cost agreed upon, without a formal amendment to this Contract.
- (b) Compensation Determination: Payment for work accomplished is on the basis of the Engineer's fully burdened labor cost plus direct non-salary costs.
 - 1. Fully burdened labor costs are determined by multiplying the hours spent by employees on the project, times the employee's fully burdened billing rate. The fully burdened billing rates are identified on Exhibit "C" and include direct salary cost, overhead, and profit. Overhead includes federal, state, and local taxes; insurance and medical; professional development and education; vacations and holidays; secretarial and clerical work; GIS, CADD,

and computer equipment; owned survey equipment and tools; attendance at non-project-specific public meetings for the purpose of keeping the public informed in regard to infrastructure improvements in the community and how the public will be affected; rent, utilities, and depreciation; office expenses; recruiting; professional services; incentive and retirement; and facilities cost of capital.

2. The direct non-salary costs are those costs directly incurred in fulfilling the terms of this Contract including, but not limited to travel, reproduction, supplies and fees for special professional services of outside consultants. If the Engineer is directed to employ special, professional expertise, the Agency will be billed by the Engineer for the special service invoiced amount plus ten percent (10%) for administrative overhead.

Payment of compensation shall be upon submittal to the Agency of a bill by the Engineer at approximate monthly intervals for services rendered during the preceding time period.

The cost records and accounts pertaining to this Contract are to be kept available for inspection by representatives of the Agency for a period of three (3) years after final payment. In the event any audit or inspection identifies any discrepancy in the financial records, the Engineer shall provide clarification and/or make adjustments accordingly.

ARTICLE 5

ADDITIONAL WORK

If during the performance of this contract, or subsequent to completion of the work under this contract, other or additional services other than those previously specified, including but not limited to additions or revisions by the Agency are ordered in writing by the Agency, the Engineer agrees to provide the services and the Agency agrees to compensate the Engineer under the same method of Compensation Determination described herein, to be determined at the time the additional services are ordered. The Engineer agrees not to proceed with the additional services until such time as the costs for the additional services have been approved by the Agency.

ARTICLE 6

PUBLIC RECORDS REQUESTS

The Engineer shall comply with Agency requests for documents which are the result of public records requests made under the Public Records Act. The Agency hereby acknowledges that gathering, copying and transmitting documents requested in this manner is Additional Work and agrees to compensate the Engineer accordingly.

ARTICLE 7

MAJOR REVISIONS

If, after the design has been approved by the Agency, and the Engineer has proceeded with the final design, and has performed work in processing same and the Agency authorizes new or substantially alters the design, the Agency will pay the Engineer a just and equitable compensation as mutually agreed upon by the Agency and the Engineer, or if an agreement cannot be reached within thirty (30) days, the equitable compensation shall be determined by mediators.

ARTICLE 8

COST ESTIMATE

The Agency is herewith advised that the Engineer has no control over the cost of labor, material, and equipment, including the contractors' and suppliers' methods of producing and delivering such goods and services; or over the methods and styles of competitive bidding or market conditions; and, accordingly, the Engineer's cost estimates are made and furnished on the basis of his experience and qualifications and represent only his best judgment as a design professional and within his familiarity with the construction industry, and, as such, the Engineer cannot and does not warrant, in any other manner or style, the accuracy of the cost estimates, nor that the estimates will or will not vary significantly with bids received by or construction costs realized by the Agency.

ARTICLE 9

FACILITIES TO BE FURNISHED BY THE ENGINEER

The Engineer shall furnish and maintain a central office, work space and equipment suitable and adequate for the prosecution of the work that is normal to the functioning of an established operating engineering practice.

ARTICLE 10

OWNERSHIP OF PLANS

All reports, designs, drawings and specifications prepared by the Engineer, as provided under this Contract shall be and do become the property of the Agency upon payment to the Engineer of his compensation as set forth in this Contract. Reuse of any of the instruments of services of the Engineer by the Agency on extensions of this project or on any other project without the written permission of the Engineer shall be at the Agency's risk and the Agency agrees to defend, indemnify and hold harmless the Engineer from all claims, damages and expenses including attorney's fees arising out of such unauthorized reuse of the Engineer's instruments of service by the Agency or by others acting through the Agency.

ARTICLE 11

SEVERABILITY

If any provision of this Contract is held invalid, the remainder of this Contract shall not be affected thereby, if such remainder would then continue to conform to the terms and requirements of the applicable law.

ARTICLE 12

MEDIATION

All claims, disputes and other matters in question between Agency and Engineer shall, in the first instance, be subject to mediation. Either party may notify the other, by certified mail, of the existence of a claim or dispute. If such claim or dispute cannot promptly be resolved by the parties, the Engineer shall promptly contact the Judicial Arbitration and Mediation Service, Inc., or any other recognized mediation service agreed to by the parties, to arrange for the engagement and appointment of a mediator for the purpose of assisting the parties to amicably resolve the claim or dispute. The cost of the mediator shall be borne equally by the parties. The Agency and Engineer further agree to cooperate fully with the appointed mediator's attempt to resolve the claim or dispute, and also agree that litigation may not be commenced, by either party, for a period of ninety calendar days following the receipt by the other party of the written notice of claim or dispute. This mediation provision may be asserted by either party as grounds for staying such litigation.

ARTICLE 13

ASSIGNABILITY

The Engineer shall not assign nor transfer any interest in this Contract without the prior written consent of the Agency.

ARTICLE 14

EQUAL EMPLOYMENT OPPORTUNITY

The Engineer agrees that it will not discriminate against any employee or applicant for employment because of race, religion, color, sex, age or national origin.

The parties hereby incorporate 41 C.F.R. 60-1.4(a)(7); 29 C.F.R. Part 471, Appendix A to Subpart A; 41 C.F.R. 60-300.5(a)11; and 41 C.F.R. 60-741.5(a)6; if applicable.

This contractor and subcontractor shall abide by the requirements of 41 C.F.R. 60-300.5(a) and 41 C.F.R. 741.5(a). These regulations prohibit discrimination against qualified protected veterans, and qualified individuals on the basis of disability,

respectively, and require affirmative action by covered prime contractors and subcontractors to employ and advance in employment qualified protected veterans and qualified individuals with disabilities, respectively.

ARTICLE 15

COVENANT AGAINST CONTINGENT FEES

The Engineer warrants that no person or selling agency has been employed or retained to solicit or secure this Contract upon an agreement or understanding for a commission, percentage, brokerage or contingent fees, excepting bona fide employees. For breach or violation of this warranty, the Agency shall have the right to annul this Contract without liability or in its discretion to deduct from the Contract price or consideration or otherwise recover the full amount of such commission, percentage, brokerage or contingent fee.

ARTICLE 16

SAFETY

The duty and/or Services furnished hereunder by the Engineer, does not include a review of the adequacy of any contractor's safety measures in, on, or near a project construction site. The contractor alone shall have the responsibility and liability thereof, and shall be insured accordingly. Neither the activities of the Engineer, nor the presence of the Engineer's employees at a site, shall relieve the contractor of their obligations, duties, and responsibilities with any health or safety precaution required to ensure the safety of the jobsite.

ARTICLE 17

INDEMNITY AGREEMENT

The Engineer shall hold the Agency harmless from, and shall indemnify the Agency against, any and all claims, demands, actions or liabilities caused by or occurring by reason of any negligent act or omission of the Engineer, its agents, employees or subcontractors, arising out of or in connection with the performance of this Contract.

In those cases where damages have been caused by the concurrent negligence of the Agency and Engineer, its agents, employees or subcontractors the Engineer shall be required to indemnify the Agency for that portion of the damages caused by the negligence of the Engineer, its agents, employees or subcontractors.

The Engineer has no duty to indemnify the Agency where damages were caused by the negligence of the Agency.

ARTICLE 18

INSURANCE

A. Public Liability

The Engineer shall provide evidence of comprehensive Public Liability and Property Damage Insurance which includes but is not limited to, operations of the Engineer, commercial general liability, and blanket limited contractual liability with limits of not less than:

COMPREHENSIVE GENERAL LIABILITY

Bodily Injury & Property Damage: \$1,000,000 each person
\$1,000,000 each occurrence
\$1,000,000 each aggregate

AUTOMOBILE LIABILITY

Bodily Injury: \$1,000,000 each person
\$1,000,000 each occurrence

Property Damage: \$1,000,000 single limit

The Agency shall be named as an additional insured as respects this Contract. In conjunction therewith, the Engineer shall furnish a certificate of such insurance to the Agency at the time of execution of this Contract.

B. Professional Liability

The Engineer shall provide Professional Errors and Omissions Liability Insurance which shall provide coverage for any negligent professional acts, errors or omissions for which the Engineer is legally responsible, with limits of not less than:

PROFESSIONAL ERRORS \$1,000,000 each occurrence
AND

OMISSIONS LIABILITY \$1,000,000 aggregate

The Engineer shall furnish a certificate of such insurance to the Agency at the time of execution of this Contract.

ARTICLE 19

STATUS OF ENGINEER

The Engineer is an independent contractor operating for its own account, and is in no way and to no extent an employee or agent of the Agency. The Engineer shall have the sole judgment of the means, mode or manner of the actual performance of this Contract. The Engineer, as an independent contractor, assumes the entire responsibility for carrying out and accomplishing this Contract.

ARTICLE 20

CERTIFICATION OF ENGINEER

Attached hereto is Exhibit "D" Certification Regarding Debarment, Suspension and Other Responsibility Matters.

ARTICLE 21

CHOICE OF LAW/JURISDICTION/VENUE

This Contract shall be governed as to validity, interpretation, construction and effect, and in all other respects, by the laws of the State of Washington. Jurisdiction of any suit or action arising out of or in connection with this Contract shall be in the State of Washington, and the venue thereof be in the same County as the Agency.

ARTICLE 22

NOTICES

In every case where, under any of the provisions of this Contract or in the opinion of either the Agency or the Engineer or otherwise, it shall or may become necessary or desirable to make, give, or serve any declaration, demand, or notice of any kind or character or for any purpose whatsoever, the same shall be in writing, and it shall be sufficient to either (1) deliver the same or a copy thereof in person to the District Manager, if given by the Engineer, or to the President or Secretary of the Engineer personally, if given by the Agency; or (2) mail the same or a copy thereof by registered or certified mail, postage prepaid, addressed to the other party at such address as may have theretofore been designated in writing by such party, by notice served in the manner herein provided, and until some other address shall have been so designated, the address of the Agency for the purpose of mailing such notices shall be as follows:

NORTH BEACH WATER DISTRICT
2212 272nd Street
P.O. Box 618
Ocean Park, Washington 98640

and the address of the Engineer shall be as follows:

GRAY & OSBORNE, INC.
1130 Rainier Avenue South
Suite 300
Seattle, Washington 98144

ARTICLE 23

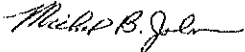
ATTORNEY'S FEES

The parties agree that in the event a civil action is instituted by either party to enforce any of the terms and conditions of this Contract, or to obtain damages or other redress for any breach hereof, the prevailing party shall be entitled to recover from the other party, in addition to its other remedies, its reasonable attorney's fees in such suit or action and upon any appeal therefrom.

IN WITNESS WHEREOF, the parties hereto have executed this Contract as of the day and year written below.

ENGINEER: Gray & Osborne, Inc.

AGENCY: North Beach Water District

By: 
(Signature)

By: _____
(Signature)

Name/Title: Michael B. Johnson, P.E., President

Name/Title: _____
(Print)

Date: 11/13/23

Date: _____

"Equal Opportunity/Affirmative Action Employer"

EXHIBIT “A”

SCOPE OF WORK

NORTH BEACH WATER DISTRICT SOUTH WELLFIELD INVESTIGATION AND PILOT TESTING

PROJECT UNDERSTANDING

North Beach Water District (North Beach) drilled three new wells in 2013 and 2014 as replacement wells for their South Wellfield, which had high levels of iron, manganese, and arsenic and were experiencing clogging issues with iron bacteria. The new wells, called Wiegardt Wells 1, 2, and 3, have capacities of 150 gpm each. The water quality at the time of the drilling was better than the existing wells and is summarized in Table 1.

TABLE 1

Wiegardt Wells Initial Water Quality⁽¹⁾

Well	Iron, mg/L MCL = 0.3 mg/L	Manganese, mg/L MCL = 0.05 mg/L	Arsenic, mg/L MCL = 0.01 mg/L
Wiegardt 1	<0.1	<0.01	0.016
Wiegardt 2	<0.02	<0.005	0.016
Wiegardt 3	<0.02	<0.01	0.015

(1) Bold values indicate MCL exceedances.

The levels of iron and manganese in all three wells were well below the regulatory maximum contaminant level (MCL) for iron and manganese of 0.3 mg/L and 0.05 mg/L, respectively. The concentration of arsenic in each well, however, was above the MCL of 0.01 mg/L. In addition to the contaminants in Table 1, hydrogen sulfide was also noted at levels where it would be detectable by customers. Consequently, a treatment facility was designed to treat:

- Noticeable hydrogen sulfide smell, and
- High levels of arsenic.

The South Wellfield Treatment Plant was designed to treat the hydrogen sulfide and arsenic using a catalytic carbon filter system. Since the North Beach system wanted to remain unchlorinated at that time, chlorine could not be used to oxidize the hydrogen sulfide as is typical in chlorinated systems. A special catalytic carbon media was used which catalyzes the oxidation of hydrogen sulfide in the presence of oxygen. The addition of ferric chloride created iron oxide solids to which the arsenic adsorbed. The iron solids and adsorbed arsenic were then removed through filtration by the carbon. Periodic backwashing removed the accumulated solids.

After the South Wellfield Treatment Plant was built in 2017, the plant provided good removal of arsenic and hydrogen sulfide for several years.

In recent months, however, North Beach staff have noticed deteriorating water quality from the plant including the presence of iron and manganese in the finished water. Samples of raw and finished water from the South Wellfield from October 2023 are shown in Table 2.

TABLE 2
South Wellfield October 2023 Water Quality⁽¹⁾

Well	Iron, mg/L MCL = 0.3 mg/L	Manganese, mg/L MCL = 0.05 mg/L	Arsenic, mg/L MCL = 0.01 mg/L
Raw Water (Wiegardt Wellfield)	1.9	0.19	0.021
Finished Water	0.733	0.26	0.004

(1) Bold values indicate MCL exceedances.

A comparison of the well water quality in Tables 1 and 2 indicates that the Wiegardt Well water quality has changed since the wells were drilled. The data from 2023 indicate that iron and manganese is now present in levels well above the MCL and that the arsenic level may be slightly higher than then the wells were drilled. The finished water sample shows that the existing plant is not removing the iron and manganese, which is not surprising since the plant was not designed to do so. The finished water sample does show that the plant is still removing arsenic to a level below the MCL. Arsenic is a primary contaminant due to health issues while iron and manganese are both secondary contaminants that are aesthetic concerns.

Given the apparent change in raw water quality, North Beach would like to investigate the treatment options for the South Wellfield to remove iron and manganese, as well as the continued removal of arsenic and hydrogen sulfide. The goal of the treatment investigation would be two-fold as indicated below.

1. Determine a treatment scheme that would remove iron, manganese, and arsenic to levels below their respective MCLs and eliminate any aesthetic concerns with hydrogen sulfide.
2. Reuse as much of the existing equipment at the South Wellfield as possible.

Since the startup of the South Wellfield Treatment Plant, North Beach started chlorinating the water to maintain a residual. Consequently, chlorine addition can now be considered in any potential treatment process.

The treatment technique that will be investigated first is oxidation and filtration to remove iron and manganese. This is a standard treatment technique to remove iron and manganese. In oxidation and filtration, chlorine is added to oxidize the iron and manganese to form solid iron and manganese oxides that are insoluble and can be readily filtered out. Iron is easily oxidized but the oxidation of manganese is much slower. To facilitate this oxidation, a catalytic media must be used that has a manganese dioxide surface. Historically, this was first done with greensand, a glauconite sand onto which a manganese dioxide surface was added using permanganate in situ. Further technological developments produced media with a more durable manganese dioxide surface that was provided with the media. These types of media include Greensand Plus®, Birm®, and MTM®, the media that is used at the North Wellfield. In addition, naturally mined manganese ore can be used as filter media in products like pyrolusite or pyrolox.

Arsenic can also be removed by the oxidation and filtration process. As indicated above, arsenic will adsorb to iron solids so if there is iron in the raw water, its oxides will co-precipitate with the arsenic and facilitate removal with the iron solids on the media. If sufficient iron is not present in the groundwater, addition of iron in the form of ferric chloride can be added in a similar fashion to what is done with the existing technology at the South Wellfield Treatment Plant.

Hydrogen sulfide can also be treated in the oxidation and filtration process. Adding chlorine will oxidize the hydrogen sulfide to a mixture of elemental sulfur or sulfate, the ratio of the two determined by pH. The elemental sulfur can be removed on the filters along with the metal oxide solids. Any sulfate in the water would remain but it is not problematic unless there are extreme reducing conditions in the distribution system where bacterial action could reduce it back to hydrogen sulfide. This is unlikely in the North Beach system since there is a chlorine residual in the distribution system.

To determine the most applicable technology, the scope of work defined below is proposed. An initial alternatives analysis will review the options for treating the Wiegardt Wells based upon the current water quality. The possible alternatives will also be reviewed for how adaptable they are with the existing treatment infrastructure at the plant. Ideally, the proposed oxidation and filtration media would have similar hydraulic characteristics to the carbon media in terms of hydraulic loading and backwash flow requirements so it could be loaded into the existing filter vessels. If suitable media are not available, the cost for replacing equipment will be included in the analysis.

The alternatives analysis will be prepared as a technical memorandum and provided to North Beach for review. A final memorandum will be prepared after receiving North Beach comment.

Based upon the findings of the alternatives analysis, Gray & Osborne will perform a pilot study at the South Wellfield to field verify recommended media options from the alternatives analysis. It is anticipated that two or three media would be tested. The pilot test would use a sidestream of flow up to 5 to 10 gpm from the wells to test the media in 4-inch test columns. The resulting treated water would be analyzed onsite by Gray &

Osborne staff for iron, manganese, and hydrogen sulfide. Commercial lab samples would also be taken to verify the field work. The test is expected to take no more than 2 to 3 days. An extended pilot test could be performed under a separate contract, if so desired.

The results of the pilot study will be documented in a project report meeting the requirements of WAC 296-240-110. The report will describe the pilot study, document the findings, and recommend a solution. The design parameters and modifications to the South Wellfield Treatment Plant will be included.

This scope of work further assumes the following:

- North Beach personnel will be available to assist Gray & Osborne staff is setting up the pilot study and operating the wellfield during the pilot study. It is anticipated that a flow of chlorinated water at 5-10 gpm and access to 110 VAC power will be required.
- Gray & Osborne will provide the pilot study filter columns and piping for the setup.
- Gray & Osborne will perform the pilot on site at the treatment plant for two to three days. An extension of the pilot to observe longer term effects can be arranged but would be completed under a separate contract.
- The design of any treatment plant modifications resulting from this work will be completed under a separate contract.

Professional design services for this work will be provided in accordance with the tasks outlined below.

Task 1 – Project Management

Objective: Provide overall project management and oversight of the project work by the Project Manager and senior staff members.

- A. Provide overall project management and oversight services, to include:
 - 1. Procure sufficient staff resources to dedicate to the project.
 - 2. Manage and control project budget and schedule.
 - 3. Manage and provide monthly invoices.

Deliverables:

- Monthly invoices.

Task 2 – Prepare an Alternatives Analysis

Objective: Analyze the possible options for treating the Wiegardt Wells with their current water quality and provide recommendations on the optimal method based upon effectiveness at contaminant removal and ability to be incorporated into the existing treatment plan infrastructure.

- A. Review manufacturer information on possible treatment techniques and filtration media.
- B. Prepare technical memorandum outlining treatment options and their suitability at the South Wellfield. Recommended options will be noted.
- C. Provide a draft technical memorandum to North Beach for review.
- D. Prepare final technical memorandum after receiving comment from North Beach.

Task 3 – Perform Pilot Study

Objective: Perform a pilot study to verify the suitability of the recommended treatment options and media type(s) from the previous task.

- A. Prepare a pilot study protocol to outline the pilot study equipment, setup, and execution. Submit to North Beach for review and comment.
- B. Coordinate with City staff to set up pilot equipment at the South Wellfield Treatment Plant. Up to three different filter media will be tested mimicking conditions that would be seen in the existing filter vessels, if possible.
- C. Perform pilot study to verify design parameters, chemical dosing, and removal effectiveness. After performing initial testing, Gray & Osborne will operate the filters for 8-24 hours to investigate filter run length.

Task 4 – Pilot Study Report

Objective: Prepare a pilot study report that documents the results of the pilot study. The pilot data will be used to estimate capital, operating, and life-cycle costs to provide a recommended treatment strategy.

- A. Prepare a summary of the pilot data.
- B. Analyze the feasibility of modifying the existing treatment equipment with the recommended option from the pilot study.

- C. Provide information on any equipment that would be required if the existing treatment plant equipment is not suitable for reuse or modification.
- D. Document design parameters for the full-scale facility.
- E. Prepare a cost estimate for the treatment plant modifications.
- F. Provide a recommendation, if appropriate, for additional future pilot testing that may be useful or necessary to design a full-scale facility.
- G. Incorporate the information in a report format.
- H. Submit the report to Washington Department of Health for review and approval.

Deliverables:

- Draft Project Report for City review.
- Final Project Report

Task 5 – Quality Assurance/Quality Control

- A. Conduct Quality Assurance/Quality Control reviews of the pilot study report.

BUDGET

The maximum amount payable to the Engineer for completion of work associated with this scope of work, including contingencies, salaries, overhead, direct non-salary costs, and net fee, is set forth in the attached Exhibit B. This amount will not be exceeded without prior written authorization of the District.

EXHIBIT "B"

ENGINEERING SERVICES SCOPE AND ESTIMATED COST

NORTH BEACH WATER DISTRICT - SOUTH WELLFIELD INVESTIGATION AND PILOT STUDY

Tasks	Principal Hours	Project Manager Hours	Civil Eng. Hours	Electrical Eng. Hours	Engineer-In-Training Hours	AutoCAD/ GIS Tech./ Eng. Intern Hours
1 Provide Project Management		4				
2 Prepare an Alternatives Analysis		8	8			
3 Perform Pilot Study		32	32		32	
4 Pilot Study Report		24	40	4	40	24
5 Complete QA/QC Review	4	2	2		2	
Hour Estimate:	4	70	82	4	74	24
Fully Burdened Billing Rate Range:*	\$150 to \$245	\$140 to \$245	\$115 to \$180	\$125 to \$225	\$100 to \$180	\$65 to \$175
Estimated Fully Burdened Billing Rate:*	\$240	\$230	\$170	\$200	\$150	\$125
Fully Burdened Labor Cost:	\$960	\$16,100	\$13,940	\$800	\$11,100	\$3,000

Total Fully Burdened Labor Cost: \$ 45,900

Direct Non-Salary Cost:

Mileage & Expenses (Mileage @ current IRS rate) \$ 500

Equipment \$ 2,000

Subconsultant:

Commercial Lab \$ 1,000

Subconsultant Overhead (10%) \$ 100

TOTAL ESTIMATED COST: \$ 49,500

* Actual labor cost will be based on each employee's actual rate. Estimated rates are for determining total estimated cost only. Fully burdened billing rates include direct salary cost, overhead, and profit.

EXHIBIT "C"

GRAY & OSBORNE, INC.

PROFESSIONAL ENGINEERING SERVICES CONTRACT FULLY BURDENED BILLING RATES* THROUGH JUNE 15, 2024**

<u>Employee Classification</u>	<u>Fully Burdened Billing Rates</u>		
AutoCAD/GIS Technician/Engineering Intern	\$ 65.00	to	\$175.00
Electrical Engineer	\$125.00	to	\$225.00
Structural Engineer	\$120.00	to	\$220.00
Environmental Technician/Specialist	\$ 95.00	to	\$170.00
Engineer-In-Training	\$100.00	to	\$180.00
Civil Engineer	\$115.00	to	\$180.00
Project Engineer	\$125.00	to	\$185.00
Project Manager	\$140.00	to	\$245.00
Principal-in-Charge	\$150.00	to	\$245.00
Resident Engineer	\$125.00	to	\$190.00
Field Inspector	\$100.00	to	\$185.00
Field Survey (2 Person)***	\$180.00	to	\$310.00
Field Survey (3 Person)***	\$300.00	to	\$425.00
Professional Land Surveyor	\$125.00	to	\$200.00
Secretary/Word Processor***	N/A		

* Fully Burdened Billing Rates include overhead and profit.

** Updated annually, together with the overhead.

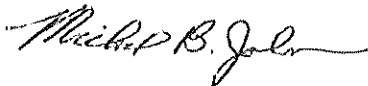
All actual out-of-pocket expenses incurred directly on the project are added to the billing. The billing is based on direct out-of-pocket expenses; meals, lodging, laboratory testing and transportation. The transportation rate is \$0.65 per mile or the current maximum IRS rate without receipt IRS Section 162(a).

*** Administration expenses include secretarial and clerical work; GIS, CADD, and computer equipment; owned survey equipment and tools (stakes, hubs, lath, etc. – Note: mileage billed separately at rate noted); miscellaneous administration tasks; facsimiles; telephone; postage; and printing costs, which are less than \$150.

EXHIBIT "D"

CERTIFICATION REGARDING DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS

- I. The Engineer, Gray & Osborne, Inc., certifies to the best of its knowledge and belief, that it and its principals:
- A. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any federal department or agency;
 - B. Have not within a 3-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission or fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (federal, state, or local) transaction or contract under a public transaction; violation of federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 - C. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (federal, state, or local) with commission of any of the offenses enumerated in paragraph (I)(B) of this certification; and
 - D. Have not within a 3-year period preceding this application/proposal had one or more public transactions (federal, state, or local) terminated for cause or default.



Michael B. Johnson, P.E., President
Gray & Osborne, Inc.

11/13/23

Date

The Agency may confirm the Engineer's suspension or debarment status on General Services Administration Excluded Parties List System website: www.epls.gov.