

DOCUMENT 00 91 13  
ADDENDUM NO. 1

Brunswick County  
Wastewater Treatment and Disposal for the City of Southport  
Mulberry Branch Water Reclamation Facility  
DWI Project Number CS370714-03  
WKD Project Number 20170253.00.WL

ADDENDUM NO. 1

July 6, 2023

**BID DATE: July 20, 2023 at 3:00 p.m.**

**TO ALL BIDDERS:**

This Addendum forms a part of the Contract Documents and modifies the Bidding Documents dated August 16, 2022 and all previous Addenda.

Acknowledge receipt of this Addendum in the space provided in the Bid Form. Failure to do so may disqualify the Bidder.

Below are changes, additions, and/or clarifications to the bid documents for this project.

**Clarifications**

- Item 1:** Build America Buy American requirements do not apply to this Clean Water State Revolving Fund project.
- Item 2:** The creek crossing culvert product foundation design is the responsibility of the Contractor. The shop drawing shall include a foundation design for the aluminum structural headwalls, pipe arch, and box as part of the Contractor's submittal.
- Item 3:** The Electronic Management System is a web-based project management service that is no cost to the Contractor.
- Item 4:** The Prefabricated Electrical Building at the Influent Pump Station is a precast concrete building per 03 48 00.
- Item 5:** Specification 09 87 10 specifically limits the installation of Protective Lining for Concrete to the headworks and influent pump station. This specification is not applicable to any other structures within the project aside from the headworks and influent pump station.
- Item 6:** The table at the end of Specification 09 90 00 specifically includes: Submerged Ferrous Metal, Non-Submerged Ferrous Metal, Mill Coated Piping, and Interior Concrete (specific only to the new clarifier). The Interior Concrete section of this table is only applicable to the clarifier.
- Item 7:** Each painting and coating specification indicates which areas receive what coating/painting.
- Item 8:** The trench drain shall be 10-inch schedule 40 slotted PVC pipe as indicated on Sheet D1.
- Item 9:** There are no vehicle gates that are detailed on Sheet D14 included in this project.

Item 10: The project includes 11 monitoring wells that are to be constructed according to the dimensions shown on Sheet D7.

## Specifications

Item 11: Notice to Bidders was revised to reflect required licensing classification as Building, Public Utilities, or Unclassified.

Item 12: The Bid Form was revised to remove duplicate items and include an alternative for prestressed concrete digester tank and increased SCADA allowance. No other bid form shall be used.

Item 13: Section 01 10 00 Summary was reissued to reflect equalization basin and digester and cast in place tanks. Quantities updated to match revised Bid Form.

Item 14: Removed Section 33 11 13 Groundwater Monitoring Well as Section 33 51 39 Monitoring Wells supersedes Section 31 11 13.

Item 15: Architectural Specifications Table of Contents items 099113 EXTERIOR PAINTING replaced with 099113 EXTERIOR PAINTING – BUILDING ONLY and 099123 INTERIOR PAINTING replaced with 099123 INTERIOR PAINTING – BUILDING ONLY.

Item 16: In Section 06 64 00 Plastic Paneling, added 2.2.A.4 Panel Sizes: Manufacturer’s standard width by 10-foot height.

Item 17: In Section 07 41 13.16 Standing-Seam Metal Roof Panels, added 2.2.B.5: Panel Coverage: 16 Inches. Added 2.2.B.6: Panel Height – 2.0 Inches.

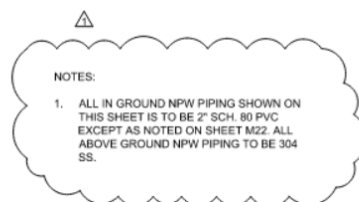
Item 18: Updated Specification title from 09 91 13 – EXTERIOR PAINTING to 09 91 13 – EXTERIOR PAINTING – BUILDING ONLY.

Item 19: Updated Specification title from 09 91 23 – INTERIOR PAINTING to 09 91 23 – INTERIOR PAINTING – BUILDING ONLY.

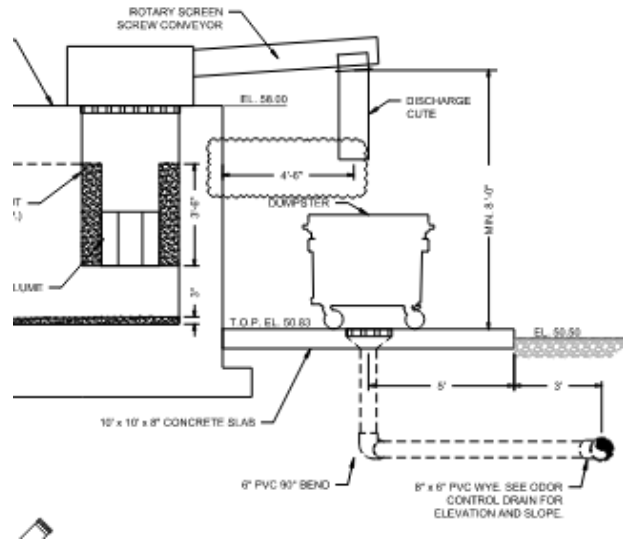
Item 20: Added Specification Section 10 51 13 Metal Lockers.

## Drawings

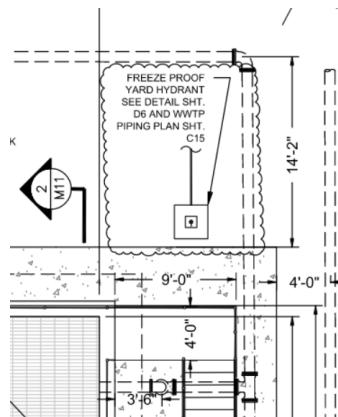
Item 21: On Sheet C15, Note 1 changed to better clarify the NPW pipe requirements at the Mulberry Branch WWTP. Note 1 reads “ALL IN GROUND NPW PIPING SHOWN ON THIS SHEET IS TO BE 2” SCH. 80 PVC EXCEPT AS NOTED ON SHEET M22. ALL ABOVE GROUND NPW PIPING TO BE 304 SS.”



Item 22: The distance from the edge of structure to the center line of the screen conveyor discharge chute added on Drawing M4, Detail 4/M1. The distance is 4'-6".



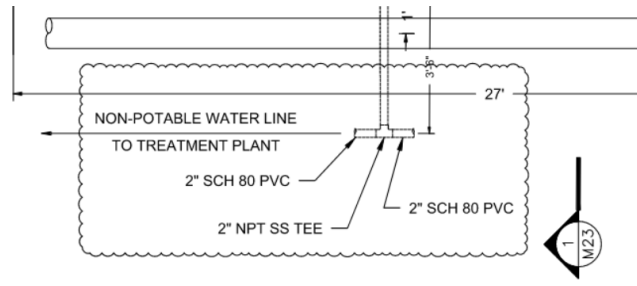
Item 23: On Sheet M10, a yard hydrant was added which is reflected on Sheet C15. (Northern corner of Anaerobic Selector)



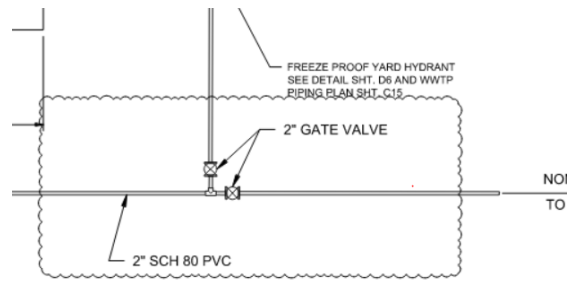
Item 24: On Sheet M22, added Note 3 to reflect grade of stainless steel NPW pipe (Schedule 40 304 SS). Note 3 reads "ALL STAINLESS STEEL NPW PIPING TO BE 304 SCHEDULE 40." Drawing edits added to show the inground transition from schedule 40 304 SS pipe to schedule 80 PVC, and show gate valves for isolation. Drawing re-issued for clarity.

1. ALL ANCHOR BOLTS TO BE 304 STAINLESS STEEL. ANCHOR BOLTS TO BE INSTALLED PER MANUFACTURER'S RECOMMENDATION.
2. ALL PIPING TO BE DIP UNLESS OTHERWISE NOTED.

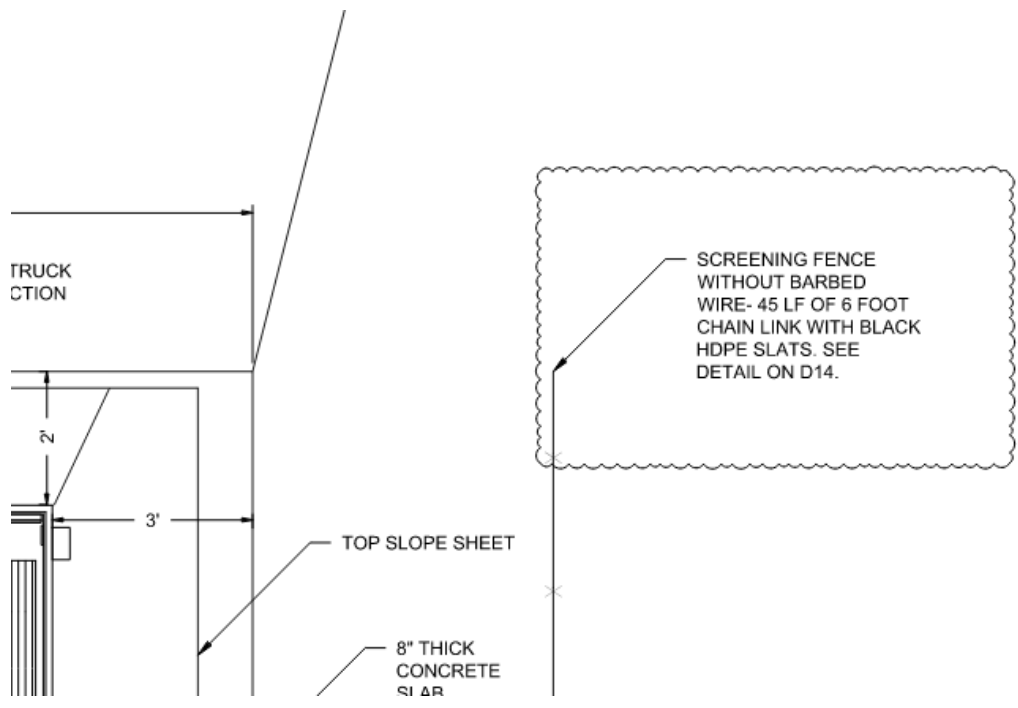
3. ALL STAINLESS STEEL NPW PIPING TO BE 304 SCHEDULE 40.



**EFFLUENT AND NON-POTABLE  
PUMP STATION**



**Item 25:** Drawing M28: Note revised to read “SCREENING FENCE WITHOUT BARBED WIRE. 45 LF OF 6 FOOT CHAIN LINK WITH BLACK HDPE SLATS. SEE DETAIL ON SHEET D14.”



Receipt of this Addendum must be acknowledged on Page BF-12 of your Bid Form.

Sincerely,

**W. K. Dickson & Co., Inc.**

N.C. License F-0374

Steve Gerlach, PE  
Senior Project Engineer

Attachments:

1. Pre-Bid Meeting Sign-In Sheet
2. Pre-Bid Meeting Minutes
3. Notice to Bidders
4. Bid Form
5. Section 01 10 00 - Summary
6. Section 10 51 13 - Metal Lockers
7. Drawing M22 - EFFLUENT PUMP STATION – PLAN



Jul 6 2023

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# M E E T I N G M I N U T E S



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300 North Third Street, Suite 301

Wilmington, North Carolina 28401

910.762.4200 tel.

704.334.0078 fax

**PURPOSE:** Pre-Bid Meeting

**PROJECT:** Wastewater Treatment and Disposal for the City of Southport  
Mulberry Branch Water Reclamation Facility  
DWI Project No. CS370714-03 / WKD Project No. 20170253.00.WL

**DATE OF MEETING:** Wednesday, June 28, 2023 at 11:00 a.m.

**LOCATION:** Brunswick County Public Utilities Operations Center

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## I. Introductions - Project Team and Owner Representatives\*

\*See attached sign-in sheet for additional attendees

## II. Bid Information

### A. Bid Opening Date, Time, and Location

Thursday, July 20<sup>th</sup> at 3:00 p.m.

Brunswick County Public Utilities Operations Center

250 Grey Water Road NE

Supply, North Carolina 28462

Bids must be delivered to Brent Lockamy, PE, Deputy Director of Design & Construction

## III. Project Summary

### A. Summary (Section 01 10 00)

- Construction of new 0.75 million gallon per day water reclamation facility and associated piping at Forest Street Extension in Shallotte, NC
  - Site work includes preloading with soil
  - Influent force main from US 17 to Shallotte WWTP to new WRF and from WRF to disposal areas
  - Three high-rate infiltration basins with groundwater lowering drains
  - 11.18-acre spray application field
  - Lagoon modifications
-

B. Time and Completion of Work and Liquidated Damages

Substantial completion within 700 consecutive calendar days of NTP

Final completion within 730 consecutive calendar days of NTP

Liquidated Damages: **\$1,800.00** per day beyond time allotted for final completion

C. Instructions to Bidders

D. Communication Protocol During Bid Process

- Email of questions and comments is preferred. See contact below.

E. Delivery Process and Deadline for Questions During Bid Process

- All questions and comments must be submitted by email or fax to Steve Gerlach, PE at [sgerlach@wkdickson.com](mailto:sgerlach@wkdickson.com) or 704-334-0078.
- Deadline: Thursday, July 13, 2023 at 4:00 p.m.

F. Availability of Site for Examination

- Site visit to be coordinated with Brunswick County operator.

G. Bid Form Review

- The project is a lump sum bid. The unit prices are explained in the bid form. Unit prices will be used to review bids and evaluate changes in the scope of work.
- Alternates are for evaluation of cost savings. Alternate by removal of the equalization tank and associated piping.

H. "Or Equal"

- The specifications provide performance criteria. Where manufacturers of equipment or materials are listed, the manufacturers listed provides an example of the required quality of materials. The Brunswick County Approved Products List provides materials that have been formally approved and are to be part of the base bid and cited in the bid form. Equipment or materials that are requested to be considered as "or equal" shall meet the specifications and provide cost savings. The evaluation of a proposed "or equal" is described in the specifications (Instruction to Bidders and General Conditions, Article 9).

I. Special Inspections

- Special inspections and construction materials testing will be paid by allowance. Brunswick County shall approve the testing firm and make payment based on invoice cost. Special inspections required are presented on structural plan sheet.

J. SCADA

- SCADA programming will be provided as an allowance.

K. Endangered Species – Small’s Bog Bottom (Special Provisions 00 80 00)

- Endangered species plants (Small’s Bog Bottom) are identified in the plans and specifications to be removed and replanted. These plants are identified in the plans (and a picture provided in the Special Provisions) in the effluent force main construction.

L. High Rate Infiltration System Excavation

- The high rate infiltration system excavation shall be planned to remove clay materials that are identified in the plans and specifications (excavation section). This work is critical to the performance of the high rate infiltration system as the sands must not be fouled by fines tracked in by excavation equipment. The work will be reviewed by on-site hydrogeologist.

M. Sequence of Construction

- The sequence of construction provided in the specifications states the preference for the Mulberry Branch crossing to be completed early on as this will provide access to the disposal area. The disposal area and linework should be completed and tested prior to wastewater treatment components needing these for project completion.

N. Startup

- The startup of equipment is described in the specifications.

O. Permits

- Permits for the project, including Town of Shallotte, are presented in the project manual.

P. Use of Site During Construction - temporary facilities, storage, parking, daily cleaning, etc.

- The property has many areas available for storage and locating the job site trailer. Contractor to coordinate with Owner.



#### **IV. Contract Requirements**

- A. Contractor's License (Notice to Bidders, NTB-3)
- B. Insurance Requirements (GC-53)
- C. MBE Goal is 10.9% and Affidavit Documentation Required (NC Division of Water Infrastructure Compliance Supplement)
- D. E-Verify
- E. Iran Divestment Act
- F. Clean Water State Revolving Fund Requirements
  - 1. Davis-Bacon
  - 2. American Iron and Steel

#### **V. Question and Answer Period**

- Q1. Was any of the equipment pre-negotiated?  
A1. No.
  - Q2. Is there a SCADA programming defined scope of work? Has programming been sourced to one specific vendor?  
A2. SCADA programming scope of work has not been provided. Programming for this project has not been sourced to a specific vendor.
  - Q3. Is WKD contracting a hydrogeologist?  
A3. Yes.
  - Q4. Since this is a rebid, have there been any design changes?  
A4. No design changes were made.
  - Q5. Has the County received more money for the job?  
A5. The County needs updated bids to secure funding.
  - Q6. Is there a new budget for the project? Is there a new estimate for the project? Either way, will the project go through?  
A6. This depends on the current market value of the project.
  - Q7. Is the project tax-exempt?  
A7. The project is not tax-exempt. Contractor must pay taxes and submit sales tax forms.
  - Q8. Are the equalization and digester tanks to be prestressed or precast?
-

- A8. Provisions in the documents allow for precast or prestressed tanks. An addendum will clarify.
- Q9. On the last bid, what was the completion time? Will there be leniency on long lead times? Are LDs open for discussion?
- A9. For the previous bid, final completion in 540 calendar days. The project duration has been changed in this bid to 730 days. Requests for extensions will be handled according to the contract.
- Q10. When do you anticipate Notice to Proceed?
- A10. There is approximately a 60- to 90-day period after receiving bids for project approval. Consideration may be given to extending the Notice to Proceed from the Notice of Award to allow for submittals and material order.
- Q11. Pre-load surcharge piles: Monitoring for 3-4 months? Can you explain why? How much movement should we be waiting for? What happens if this takes longer than 4 months?
- A11. Contractor needs to account for the time for surcharge. See geotechnical report for details.
- Q12. Is design criteria for the access bridge outlined in the specifications?
- A12. Yes.

## NOTICE TO BIDDERS

Sealed bids will be received until 3:00 p.m. ET on Thursday, July 20, 2023, in the Brunswick County Public Utilities Operations Center in Supply, NC, for the furnishing of labor, material, and equipment entering into the construction of: **Wastewater Treatment and Disposal for the City of Southport, Mulberry Branch Water Reclamation Facility** and shortly thereafter the bids will be opened publicly and read aloud.

**Sealed bids shall be labeled with the project name, Contractor's name, address, and license number and must be marked "SEALED BID, DO NOT OPEN." Sealed Bids shall be sent to:**

Alternate Shipping Service or Hand Delivery  
Brunswick County Public Utilities  
Utilities Operations Center  
Attention: Brent Lockamy, PE  
250 Grey Water Road NE  
Supply, NC 28462  
(910) 253-2657

US Post Office  
Brunswick County Public Utilities  
Attention: Brent Lockamy, PE  
P. O. Box 249  
Bolivia, NC 28422

**Project Description:** Supplying, installation, startup, and related work for a new 0.75 million gallon per day water reclamation facility and associated piping, site work, influent force main from US 17 to Shallotte WWTP from Shallotte WWTP to new WRF and from WRF to disposal areas, three high-rate infiltration basins with groundwater lowering drains, and 11.18-acre spray application field. The foregoing description shall not be construed as a complete description of all work required.

Bids will be received as **Single Prime**. All bids shall be lump sum with provisions for unit prices as indicated in the Form of Proposal. The project shall be completed within Seven Hundred Thirty (730) consecutive days from NTP. There are liquidated damages associated with this project. Liquidated damages will be in the amount of \$1,800.00 per day for each calendar day beyond the completion date set from the Notice to Proceed.

**Site Visitation:** Inspection of the proposed construction site may be allowed outside of the pre-bid meeting. Individual inspection of the proposed construction site may be allowed only by approval of Brunswick County. Telephone or email **Brent Lockamy**, [brent.lockamy@brunswickcountync.gov](mailto:brent.lockamy@brunswickcountync.gov), (910) 253-2460 (office) to schedule a visit.

**Pre-Bid Meeting:** An open pre-bid meeting will be held for all interested bidders and vendors on Wednesday, June 28, 2023, at 11:00 a.m. ET. Directions are as follows: From Wilmington follow US 17 toward Supply. Turn right onto Hwy 211 heading toward Bolton. Turn right onto Grey Water Road in approximately one mile (beside athletic park). Utilities Operations Center is on the right.

The pre-bid meeting will address project specific questions, issues, and bidding procedures. A copy of all questions, further clarifications, and answers will be made in the form of an Addendum and will be provided to all known interested bidders and posted on the County's website. Bidders are responsible for ensuring they have all Addenda.

All questions or comments shall be submitted in writing to Steve Gerlach, PE, at [sgerlach@wkdickson.com](mailto:sgerlach@wkdickson.com) or (704) 334-0078 (fax) by 4:00 p.m., ET, on Thursday, July 13, 2023. A copy of all questions, further clarifications, and answers will be made in the form of an Addendum and will be provided to all known interested bidders and posted on the County's website. Bidders are responsible for ensuring they have all Addenda.

Any changes to the specifications or clarifications to the bidding documents will be made in the form of an Addendum and will be supplied to all known prospective bidders and posted on the Brunswick County website. Bidders will be responsible for ensuring that they have all Addenda.

Copies of the Contract Documents may be purchased by going to the Plan Room at [www.wkdickson.com](http://www.wkdickson.com). Please note that only registered plan holders may bid as a General Contractor.

No refund for any Contract Documents shall be made and no partial sets of the Contract Documents will be issued. The Contract Documents may be examined at the following locations:

- Carolinas A.G.C. Digital Plan Room online [www.cagc.org](http://www.cagc.org) on iSqFt®
- CDC News Office online [www.cdcnews.com](http://www.cdcnews.com)
- McGraw Hill Construction Dodge Digital Plan Room online [www.construction.com](http://www.construction.com)
- Construction Market Data online [www.cmdgroup.com](http://www.cmdgroup.com)
- Hispanic Contractors Association of the Carolinas online [www.thehcac.org](http://www.thehcac.org)
- Brunswick County Public Utilities Operations Center (8:00 a.m. – 4:30 p.m., business days)
- W.K. Dickson & Co., Inc., 300 N. Third Street, Suite 301, Wilmington, NC 28401 (9:00 a.m. – 4:00 p.m., business days)

Brunswick County will not be responsible for any costs or expenses incurred by the bidder in submitting a bid or for any other activities associated therewith. Further, Brunswick County reserves the right to cancel the work described herein prior to issuance and acceptance of any contractual agreement even if the Board of Commissioners has formally accepted the recommendation.

In addition to the terms and conditions contained herein, by submitting a bid, bidder, if selected, agrees to enter into and be bound by the provisions of a Construction or Repair Agreement in substantially the form attached hereto and incorporated herein by reference. To the extent that any of the terms of the Bidding Documents and the terms of the Construction or Repair Agreement conflict, the terms of the Construction or Repair Agreement shall prevail.

Award shall be made to the lowest responsive, responsible bidder unless otherwise specified. Brunswick County shall not be deemed to have finally selected a bidder until a contract has been successfully negotiated and signed by both parties.

Submission of a bid indicates explicit acceptance by the bidder of the terms and conditions contained herein or in any Addenda hereto.

**Insurance Requirements:** The Contractor is required to have insurance as outlined in the General Conditions and the County's Minimum Insurance Requirements.

**Licensing:** All Contractors are hereby notified that they must have proper license as required under the state laws governing their respective trades. General Contractors are notified that Chapter 87, General Statutes of North Carolina, will be observed in receiving and awarding general contracts. General Contractors submitting bids on this project must have license classification for Building, Public Utilities, or Unclassified.

**NOTE:** Under NCGS 87-1, a Contractor that superintends or manages construction of any building, highway, public utility, grading, structure, or improvement shall be deemed a "General Contractor" and shall be so licensed. Therefore, a single prime project that involves other trades will require the Single Prime Contractor to hold a proper General Contractor's license.

### **Compliance with Federal Laws, Regulations, and Executive Orders**

Contractors submitting a bid hereby acknowledge that federal financial assistance may be used to fund all or a portion of this procurement. As such, the Contractor will comply with all applicable federal laws, regulations, executive orders, federal government policies, procedures, directives, and the terms and conditions of the funding award. Contractor further acknowledges that funding is contingent upon compliance with the foregoing.

### **Disclaimer of Federal Government Obligations or Liability**

Contractors submitting a bid, and any subcontractors, acknowledge and agree that, notwithstanding any concurrence by the federal government in or approval of the solicitation or award of a contract in connection with this Invitation to Bid, absent the express written consent by the federal government, the federal government is not a party to this procurement or any subsequent agreement and shall not be subject to any obligations or liabilities to the Contractor, or any other party pertaining to any matter resulting from the Invitation to Bid or subsequent agreement. It is further agreed that this clause shall be included in each subcontract and shall not be modified, except to identify the subcontractor who will be subject to its provision.

### **Federal Uniform Guidance**

If funding for this procurement is from a federal source, whether in whole or in part, the following provisions also apply (as applicable):

- Equal Employment Opportunity (41 C.F.R. Part 60)
- Davis-Bacon Act (40 U.S.C. 3141-3148)
- Copeland "Anti-Kickback" Act (40 U.S.C. 3145)
- Contract Work Hours and Safety Standards Act (40 U.S.C. 3701-3708)
- Clean Air Act (42 U.S.C. 7401-7671q)
- Federal Water Pollution Control Act (33 U.S.C. 1251-1387)
- Debarment and Suspension (Executive Orders 12549 and 12689)
- Byrd Anti-Lobbying Amendment (31 U.S.C. 1352)
- Procurement of Recovered Materials (2 C.F.R. § 200.322)
- Record Retention Requirements (2 C.F.R. § 200.324)
- Prohibition on Contracting for Covered Telecommunications Equipment or Services (2 C.F.R. § 200.216)
- Domestic Preference for Procurements (2 C.F.R. § 200.322)
- Title VI of the Civil Rights Act of 1964
- Section 504 of the Rehabilitation Act of 1973
- The Age Discrimination Act of 1975

### **Minority Business Enterprises**

Brunswick County has implemented a Minority Business Enterprise Policy that requires Contractors to exhibit a good faith effort to contact minority business subcontractors whose work on the project would represent 10% of the total value of the work. In addition to the foregoing, if subcontracts are to be let, the Contractor is required to take all “affirmative steps” identified in 2 C.F.R. § 200.321(b)(1)-(5) to ensure that small and minority businesses, women’s business enterprises, and labor surplus area firms are used when possible. See NC DWI MBE/WBE (DBE) Compliance Supplement (Good Faith Efforts Form and Tables A and B).

“Affirmative steps” include, but are not necessarily limited to:

- Placing qualified small and minority businesses and women's business enterprises on solicitation lists;
- Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;
- Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises;
- Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises; and
- Using the services and assistance, as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce.

### **Utilization of Small Business Concerns**

Pursuant to 48 C.F.R. § 52.219-8:

- “(a) It is the policy of the United States that small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUBZone small business concerns, small disadvantaged business concerns, and women-owned small business concerns shall have the maximum practicable opportunity to participate in performing contracts let by any Federal agency, including contracts and subcontracts for subsystems, assemblies, components, and related services for major systems. It is further the policy of the United States that its prime Contractors establish procedures to ensure the timely payment of amounts due pursuant to the terms of their subcontracts with small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUBZone small business concerns, small disadvantaged business concerns, and women-owned small business concerns.
- (b) The Contractor hereby agrees to carry out this policy in the awarding of subcontracts to the fullest extent consistent with efficient contract performance. The Contractor further agrees to cooperate in any studies or surveys as may be conducted by the United States Small Business Administration or the awarding agency of the United States as may be necessary to determine the extent of the Contractor’s compliance with this clause.

(c) *Definitions.* As used herein –

*HUBZone small business concern* means a small business concern that appears on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration.

*Service-disabled veteran-owned small business concern* –

- (1) Means a small business concern –
  - (i) Not less than 51 percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more service-disabled veterans; and
  - (ii) The management and daily business operations of which are controlled by one or more service-disabled veterans or, in the case of a service-disabled veteran with permanent and severe disability, the spouse or permanent caregiver of such veteran.
- (2) Service-disabled veteran means a veteran, as defined in 38 U.S.C. 101(2), with a disability that is service-connected, as defined in 38 U.S.C. 101(16).

*Small business concern* means a small business as defined pursuant to Section 3 of the Small Business Act and relevant regulations promulgated pursuant thereto.

*Small disadvantaged business concern* means a small business concern that represents, as part of its offer that—

- (1)
  - (i) It has received certification as a small disadvantaged business concern consistent with 13 CFR part 124, subpart B;
  - (ii) No material change in disadvantaged ownership and control has occurred since its certification;
  - (iii) Where the concern is owned by one or more individuals, the net worth of each individual upon whom the certification is based does not exceed \$750,000 after taking into account the applicable exclusions set forth at 13 CFR 124.104(c)(2); and
  - (iv) It is identified, on the date of its representation, as a certified small disadvantaged business in the CCR Dynamic Small Business Search database maintained by the Small Business Administration, or
- (2) It represents in writing that it qualifies as a small disadvantaged business (SDB) for any Federal subcontracting program, and believes in good faith that it is owned and controlled by one or more socially and economically disadvantaged individuals and meets the SDB eligibility criteria of 13 CFR 124.1002.

*Veteran-owned small business concern* means a small business concern –

- (1) Not less than 51 percent of which is owned by one or more veterans (as defined at 38 U.S.C. 101(2)) or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more veterans; and

- (2) The management and daily business operations of which are controlled by one or more veterans.

*Women-owned small business concern* means a small business concern –

- (1) That is at least 51 percent owned by one or more women, or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and
- (2) Whose management and daily business operations are controlled by one or more women.
- (3) Contractors acting in good faith may rely on written representations by their subcontractors regarding their status as a small business concern, a veteran-owned small business concern, a service-disabled veteran-owned small business concern, a small disadvantaged business concern, or a women-owned small business concern.
- (4) The Contractor shall confirm that a subcontractor representing itself as a HUBZone small business concern is certified by SBA as a HUBZone small business concern by accessing the System for Award Management database or by contacting the SBA. Options for contacting the SBA include –
  - (i) HUBZone small business database search application Web page at [http://dsbs.sba.gov/dsbs/search/dsp\\_searchhubzone.cfm](http://dsbs.sba.gov/dsbs/search/dsp_searchhubzone.cfm) or <http://www.sba.gov/hubzone>;
  - (ii) In writing to the Director/HUB, U.S. Small Business Administration, 409 3rd Street, SW., Washington DC 20416; or
  - (iii) The SBA HUBZone Help Desk at [hubzone@sba.gov](mailto:hubzone@sba.gov).”

### **Energy Conservation Requirements**

Pursuant to 42 U.S.C. 6321 et seq., the Contractor agrees to comply with mandatory standards and policies relating to energy efficiency, which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act.

### **American with Disabilities Act (ADA)**

The Contractor agrees to comply with all applicable requirements of the Americans with Disabilities Act of 1990 (ADA), as amended, 42 USC § 12101 et seq.; Section 504 of the Rehabilitation Act of 1973, as amended, 29 USC § 794; 49 USC § 5301(d); and any implementing requirements of the federal government. These regulations provide that no handicapped individual, solely by reason of his or her handicap, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity included in or resulting from this proposal.

### **Privacy Act**

The Contractor agrees to comply with, and assures the compliance of its employees with, the information restrictions and other applicable requirements of the Privacy Act of 1974, 5 U.S.C. § 552a. The Contractor agrees to obtain the express consent of the federal government before the Contractor or its employees operate a system of records on behalf of the federal government. The Contractor understands that the requirements of the Privacy Act, including the civil and criminal penalties for violation of that Act, apply to those individuals involved, and that failure to comply with the terms of the Privacy Act may result in



termination of the underlying contract.

The Contractor also agrees to include these requirements in each subcontract to administer any system of records on behalf of the federal government financed, in whole or in part, with Federal assistance.

### **Drug Free Workplace**

The Contractor shall adhere to the Federal Drug Free Workplace requirements as outlined in 2 C.F.R. § 182. Contractor shall make good faith efforts to maintain a drug-free workplace, publish a workplace statement and establish drug-free awareness programs for employees. Contractor should take action concerning employees who are convicted of violating drug statutes in the workplace. Contractor shall contact Brunswick County if Contractor cannot adhere to the requirements of the Federal Regulations noted above. Failure to comply with said provisions shall be considered a breach of contract.

Each bid shall be accompanied by a cash deposit or a certified check drawn on some bank or trust company, insured by the Federal Deposit Insurance Corporation, of an amount equal to not less than five percent (5%) of the bid, or in lieu thereof a bidder may offer a bid bond of five percent (5%) of the bid executed by a surety company licensed under the laws of North Carolina to execute the contract in accordance with the bid bond. Said deposit shall be retained by the owner as liquidated damages in event of failure of the successful bidder to execute the contract within ten (10) days after the award or to give satisfactory surety as required by law.

A performance bond and a payment bond will be required for one hundred percent (100%) of the contract price. An additional bond with the North Carolina Department of Transportation may be required for work performed in the right-of-way. Surety companies must be authorized to do business in North Carolina.

Contractor agrees that the Contractor and the Contractor's subcontractors shall comply with the requirements of Article 2 of Chapter 64 of the North Carolina General Statutes. E-Verify is a program in which the employment eligibility of all newly hired employees will be confirmed after the Employment Eligibility Verification Form (Form I-9) has been completed.

Payment will be made based on ninety-five percent (95%) of monthly estimates and final payment made upon completion and acceptance of work.

Brunswick County reserves the unqualified right to reject any or all bids and to waive informalities or technical defects. Brunswick County further reserves the rights to amend the scope or specifications and request new bids at any time prior to the award of a contract. All decisions of Brunswick County shall be final and binding.

Designer:  
W.K. Dickson & Co., Inc.  
Steve Gerlach, PE ([sgerlach@wkdickson.com](mailto:sgerlach@wkdickson.com))  
1213 W. Morehead Street, Suite 300  
Charlotte, NC 28208  
(704) 334-5348  
(704) 334-0078

Owner:  
Brunswick County

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**FORM OF PROPOSAL**

To: **BRUNSWICK COUNTY**

From: *Bidder* \_\_\_\_\_

*Address* \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

*Tele./Fax* \_\_\_\_\_

*Date of Bid* \_\_\_\_\_

The undersigned, as bidder, hereby declares that the only person or persons interested in this proposal as principal or principals is or are named herein and that no other person than herein mentioned has any interest in this proposal or in the Contract to be entered into; that this proposal is made without connection with any other person, company, or parties making a bid or proposal; and that it is in all respects fair and in good faith without collusion or fraud. By signing this proposal, the bidder affirms they are not listed and will not utilize a subcontractor or vendor listed on the Final Divestment List created by the State Treasurer pursuant to NCGS 143-6A-4, Iran Divestment Act Certification. The Bidder further declares that he has examined the site of the work and the Contract Documents relative thereto, and has read all special provisions furnished prior to the opening of bids; that he has satisfied himself relative to the work to be performed.

The Bidder proposes and agrees if this proposal is accepted to Contract with **Brunswick County** in the form of Contract specified below, to furnish all necessary materials, equipment, machinery, tools, apparatus, means of transportation, supplies, labor, etc. necessary to complete the construction of:

Wastewater Treatment and Disposal for the City of Southport  
Mulberry Branch Water Reclamation Facility

in full in complete accordance with the plans, specifications, and Contract Documents, to the full and entire satisfaction of **Brunswick County** and their representatives with a definite understanding that no money will be allowed for extra work except as set forth in the General Conditions and the Contract Documents, for the sum of:

**SINGLE PRIME CONTRACT:**

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**Base Bid:**

A 0.75 MGD Water Reclamation Facility with cast in place 75 feet diameter aerobic digester tank; influent pump station with headworks, generator, and odor control; 55 feet diameter cast in place influent equalization tank, septic receiving station, lagoon modifications, approximately 3,440 linear feet of 16 inch force main, approximately 7,515 linear feet of 12 effluent inch force main to high rate infiltration basins; spray field force main connection and approximately 7,779 linear feet of 12 inch spray irrigation force main; approximately 2,895 linear feet of 10 inch force main, approximately 2,533 linear feet of 8 inch force main, relocation of Small's Bog Bottom plants, three infiltration basins, approximately 8,224 linear feet of groundwater lowering drain, approximately 6,638 square yards of asphalt paving, approximately 14,862 linear feet of gravel access road, Williams Branch culvert and structural headwalls, 11 acre irrigation spray field, and electrical supply to infiltration basins and spray field. Base bid includes all work covered in the Contract Documents **including** unit price items, allowance items, testing allowance, and change order allowance.

Dollars(\$)

---

General Subcontractor:

Plumbing Subcontractor:

\_\_\_\_\_Lic\_\_\_\_\_

\_\_\_\_\_Lic\_\_\_\_\_

Mechanical Subcontractor:

Electrical Subcontractor:

\_\_\_\_\_Lic\_\_\_\_\_

\_\_\_\_\_Lic\_\_\_\_\_

When the project is a Building, NCGS 143-128(d) requires all Single Prime Bidders to identify their Subcontractors for the above subdivisions of work. A Contractor whose bid is accepted shall not substitute any person as Subcontractor in the place of the Subcontractor listed in the original bid, except in accordance with NCGS 143-128(d).

Under separate Prime Contracts, the Contractor shall act as Project Expediter for all Prime Contracts. See Supplementary General Conditions.

**ALTERNATES:**

Should any of the alternates as described in the Contract Documents be accepted, the amount written below shall be the amount to be "added to" or "deducted from" the base bid. (Strike out "Add" or "Deduct" as appropriate.)

**GENERAL CONTRACT:**

Alternate No. G-1 The use of products on the Approved Products List in the Supplementary General Conditions (or if omitted, the Approved Products List effective at the time of bid). Where there is a cost differential between the approved products and the base bid, list the item type, manufacturer, model, item number, and item cost deduction.

<b>SCHEDULE G-1 TABULATION OF MAJOR EQUIPMENT ITEMS AND PRODUCTS</b>				
Specification	Description	Base Bid Equipment or Products Mfr.	Owner Preferred Alternate Equip. or Product Mfr. or Equal	Addition/ Deduction to Base Bid Price for Preferred Alternate Equip. or Product
43 32 64	Ultraviolet Disinfection Equipment		Trojan	
44 42 33	Secondary Clarifiers		Veolia	
46 51 47	Oxidation Ditch Equipment		Veolia	
33 34 00	Air Release Valve		ARI	
33 34 00	Plug Valves		Dezurik, Milliken	
26 29 15	Operator Interface Terminal		C-More HMI	
26 29 15	Programmable Logic Controller		Square D	
22 13 30	Variable Frequency Drives (<75 HP)		Square D, ABB, Siemens	
26 24 16	MCC, NEMA Starters, Panel Boards and Switch Boards, Heavy Duty rated disconnects		Square D, Schneider Electric	
40 91 16	Flow Meter (Magnetic)		Krohne, Siemens	
26 36 00	Automatic Transfer Switch		ASCO	
26 32 13	Diesel Generator		Cummins, Caterpillar, MTU	

Alternate No. G-1 Addition to Base Bid Price for Preferred Alternative Equip. or Product  
(Add) (Deduct) \_\_\_\_\_ Dollars(\$)

Alternate No. G-2 Deduct influent equalization tank and piping to influent equalization tank.  
(Add) (Deduct) \_\_\_\_\_ Dollars(\$)

Alternate No. G-3 Aerobic digester tank change from cast in place to prestressed concrete tank including structural design.  
(Add) (Deduct) \_\_\_\_\_ Dollars(\$)

**TRENCHLESS PIPE INSTALLATION SUBCONTRACTORS:**

Horizontal Directional Drill Subcontractor:

\_\_\_\_\_

See the General Conditions Article 20 D 3 and Article 35 D.

**ATTACHED DOCUMENTS**

The following documents are attached to and made a condition of this Bid:

- Bid Security
- NC Division of Water Infrastructure MBE/WBE (DBE) Compliance Supplement

## **UNIT PRICES**

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Unit prices quoted and accepted shall apply throughout the life of the Contract, except as otherwise specifically noted. Unit prices shall be applied, as appropriate, to compute the total value of changes in the scope of the work all in accordance with the Contract Documents. Bidder acknowledges that quantities are approximate only and are given as the basis for comparison of Bids. The Owner may increase or decrease the quantity of any item or portion of the work as may be deemed necessary or expedient. An increase or decrease in the quantity of any item will not be regarded as sufficient ground for an increase or decrease in the unit prices, nor in the time allowed for the completion of the work, except as provided for in the General Conditions. The quantities shown on the proposal form are for the base bid only unless the contract documents specifically indicate that the item(s), or any portion thereof, are part of an alternate bid element. It is the responsibility of the Contractor to apportion the cost of unit price items to the base bid and any alternates listed in the Proposal using information in the Contract Documents. In the event that the Owner selects an alternate that clearly increases or decreases the estimated quantity of a unit price item shown on the proposal form, after selection of the Contractor, the Contractor shall be provided an updated list of estimated unit price quantities reflective of the alternates chosen. This updated list shall be used in determining any variation between the actual quantities and the estimated quantities of the unit price work. An estimated unit price quantity shall be updated only in the event that the Contract Documents clearly indicate that the unit price item was indeed part of the Owner-selected alternate. The cost for all unit price items shall be included within either the base bid or an alternate, as applicable.

The bidder further proposes and agrees hereby to commence work under this Contract on a date to be specified in a written order of the Designer and shall fully complete all work thereunder within the time specified in the Notice to Bidders. Applicable liquidated damages amount is also stated in the Notice to Bidders (see General Conditions "Time of Completion, Delays, Extension of Time".)



Unit Price Items

Item	Item Description	Unit	Base Bid QTY	Unit Price	Extended Price
1.30	Undercut of unsuitable soils and replacement with #57 Stone	CY	50		
1.35	Surcharge Anaerobic Selector and Aerobic Digester	CY	4,660		
1.40	Select Fill	CY	500		
1.50	SCADA Integrator Programming Allowance	EA	1	110,000	110,000
1.55	Construction Materials Testing (CMT) Allowance (GC Article 30)	EA	1	150,000	150,000
1.58	Change Order Allowance	EA	1	50,000	50,000
1.71	18" RJ DIP from Outlet Structure to Lagoon 3	LF	235		
1.80	Paved Access Road	SY	6,638		
2.01	24" x 16" Tapping Sleeve and Valve Connection to Existing 24" DI Force Main	EA	3		
2.02	Force Main Bypass Connection including Check Valve Vault with 16" Check Valve and 16" RJDIP and Fittings	EA	1		
2.03	16" RJDIP Plug Valve with Valve Box	EA	3		
2.05	16" PVC Force Main including bends and restraint	LF	3,440		
2.06	16" C905 Fusible PVC By Directional Drill	LF	340		
2.07	Anti-Seep Collar on 16" Pipe	EA	2		

Item	Item Description	Unit	Base Bid QTY	Unit Price	Extended Price
2.08	16" RJDI Connection into WWTP Headworks	EA	1		
2.09	Air Release Valve with Manhole	EA	15		
2.10	Remove Valve and Cap 8" Influent Force Main to Lower Lagoon	LS	1		
2.15	Removal and Disposal of Contaminated Soil and Replacement with Structural Fill	CY	50		
2.20	12" PVC Effluent Force Main, to High Rate Infiltration Basins including bends and restraint	LF	7,515		
2.21	8" PVC Force Main, including bends and restraint	LF	145		
2.30	10" PVC Force Main, including bends and restraint	LF	2,895		
2.31	8" PVC Force Main, including bends and restraint	LF	2,533		
2.40	8" RJDI Plug Valve	EA	4		
2.41	6" RJDI Plug Valve	EA	1		
2.50	12" Motor Actuated Gate Valve	EA	5		
2.60	Cut and Cap Existing Header Pipe to Spray Fields 1A and 1B	LS	1		
2.60	12" PVC Spray Irrigation Force Main, including bends and restraint	LF	7,779		
2.70	Remove and Replant Small's Bog Bottom Plants	SF	100		

Item	Item Description	Unit	Base Bid QTY	Unit Price	Extended Price
3.01	Infiltration Basins Including Excavation, Dewatering, Backfill, Seeding, Staff Gauges	EA	3		
3.02	Infiltration Basin Inlet Structures	EA	3		
3.03	Groundwater Lowering Drain	LF	8,224		
3.04	Level Spreader Outfall	EA	2		
3.05	Level Spreader Outfall Manholes	EA	2		
3.06	Groundwater Lowering Drain Manholes	EA	14		
3.07	Groundwater Lowering System Flowmeters	EA	3		
3.09	Access Road	LF	14,862		
3.10	Replace Access Road Drainage Culverts with 15" CPP	LF	21		
3.11	Replace Access Road Drainage Culverts with 24" CPP	LF	39		
3.13	Mulberry Branch Wetland Reseeding	AC	0.32		
3.15	Irrigation Spray Field Including Piping, Fittings, and Irrigation Heads	EA	11		
3.16	Monitoring Wells	EA	11		
3.17	Excavation of Unsuitable Soil in Infiltration Basins	CY	1,772		

Item	Item Description	Unit	Base Bid QTY	Unit Price	Extended Price
3.18	Irrigation Spray Field Grading and Fill	CY	13		

**MINORITY BUSINESS PARTICIPATION REQUIREMENTS:**

*Provide with the bid* - Under 01 NCAC 301.0308 and the NC Division of Water Infrastructure Minority Business MBE/WBE (DBE) Compliance Supplement, the undersigned Bidder shall identify **in its bid** the minority businesses that it will use on the project with the total dollar value of the bids that will be performed by the minority businesses (Table A: Prime Contractor and List of Selected Subcontractors) and include the good faith efforts made to solicit minority participation in the bid effort (Good Faith Efforts Form). Brunswick County has implemented a Minority Business Enterprise Policy that requires contractors to exhibit a good faith effort to contact minority business subcontractors whose work on the project would represent 10% of the total value of the work. In addition to the foregoing, if subcontracts are to be let, the contractor is required to take all "affirmative steps" identified in 2 C.F.R. § 200.321(b)(1)-(5) to ensure that small and minority businesses, women’s business enterprises, and labor surplus area firms are used when possible.

“Affirmative steps” include, but are not necessarily limited to:

- Placing qualified small and minority businesses and women's business enterprises on solicitation lists;
- Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;
- Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises;
- Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises; and
- Using the services and assistance, as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce.

*After the bid opening* - The Owner will consider all bids and alternates and determine the lowest responsible, responsive bidder. Upon notification of being the apparent low bidder, the bidder shall then file Table B within seventy-two (72) hours of the notification of being the apparent lowest bidder.

**Note:** Bidders must always submit **with their bid** the Good Faith Efforts Form and Table A listing all Minority Business contractors, vendors, and suppliers that will be used. If there is no Minority Business participation, then fill out Table A listing only the Prime Contractor and enter

none or zero on the form for MBE/WBE Subs Total. Failure to file required documentation with the bid or after being notified apparent low bidder is grounds for rejection of the bid.

**Proposal Signature Page**

The undersigned further agrees that in the case of failure on his part to execute the said Contract, provide performance and payment bonds, and certificates of insurance within ten (10) consecutive calendar days after being given written notice of the award of Contract, the certified check, cash, or bid bond accompanying this bid shall be paid into the funds of the Owner's account set aside for the project, as liquidated damages for such failure; otherwise the certified check, cash, or bid bond accompanying this proposal shall be returned to the undersigned.

Respectfully submitted this day of \_\_\_\_\_

\_\_\_\_\_  
(Name of Firm or Corporation Making Bid)

WITNESS:

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

\_\_\_\_\_  
(Proprietorship, Partnership, or LLC)

Name: \_\_\_\_\_  
Print or Type

Title: \_\_\_\_\_  
(Owner/Co-Partner/President/Vice President/Manager)

Address: \_\_\_\_\_

ATTEST:

\_\_\_\_\_

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

License No. \_\_\_\_\_

Title: \_\_\_\_\_  
(Corp. Sec. or Asst. Sec. only)

Federal I.D. No. \_\_\_\_\_

(CORPORATE SEAL)

Addendum received and used in computing bid:

Addendum No. 1 \_\_\_\_\_ Addendum No. 3 \_\_\_\_\_ Addendum No. 5 \_\_\_\_\_ Addendum No. 7 \_\_\_\_\_

Addendum No. 2 \_\_\_\_\_ Addendum No. 4 \_\_\_\_\_ Addendum No. 6 \_\_\_\_\_ Addendum No. 8 \_\_\_\_\_

SECTION 01 10 00  
SUMMARY

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:

1. Contract description.
2. Specification Conventions.
3. Contractor's use of site and premises.
4. Work sequence.
5. Owner occupancy.

1.2 CONTRACT DESCRIPTION

The contract description below generally highlights the scope of the project but is not meant to be an exclusive list. The combination of the specification documents and drawings together establish the work of the project.

The project work with consist of three (3) divisions generally described as follows:

A. Division 1 – Mulberry Branch Water Reclamation Facility bid on a lump sum basis:

1. Influent headworks consisting of two flow monitors for each of the influent force mains 12-inch and 16-inch, a mechanical rotary drum screen with wash/press, by-pass manual bar screen, stacked tray grit separators and grit classifier units, and odor control.
2. Influent pump station to convey wastewater to the proposed equalization tank, existing lagoon, and proposed anaerobic selector of the oxidation ditch.
3. Flow equalization provided by one (1) 55-foot diameter cast in place concrete tank with jet mixing and aeration.
4. Oxidation ditch treatment system with multistage anaerobic selectors and automated, time based influent distribution system.
5. Two (2), 35-foot diameter secondary clarifiers with bridge supported center drives with center feedwell, sludge rake and scum skimmer.
6. Return Activated Sludge (RAS) and Waste Activated Sludge (WAS) pump station.
7. Two (2) disk filter units with cloth media and associated backwash systems.
8. Ultraviolet (UV) disinfection system consisting of two (2) channels with four (4) UV banks and associated gates, wires and instrumentation.

9. Effluent pump station to convey wastewater to proposed high rate infiltration basins.
  10. One (1), 75-foot diameter cast in place concrete aerobic digester with associated equipment for sludge offloading to sludge transport trucks and provisions for lime stabilization.
  11. Site buildings consisting of a RAS/WAS pump building, electrical building, and control building.
  12. Septage Receiving Station to offload materials with high solids at the existing Upper Lagoon.
  13. Modification and installation of piping and channels to redirect the flow of wastewater through the lagoons of the existing Shallotte WWTP.
  14. Associated plant piping, instrumentation, controls, and SCADA system.
- B. Division 2 – Force Mains to the Headworks and to the Infiltration Basins bid on a unit cost basis:
1. Approximately 3,500 LF of proposed 16-inch influent force main from existing force main at Highway 17 to proposed headworks.
  2. Approximately 2,910 LF of proposed 10-inch force main from the proposed headworks to the proposed anaerobic selector at the oxidation ditches.
  3. Approximately 2,550 LF of proposed 8-inch force main from the plant drain pump station to the existing influent pump station wet well.
  4. Approximately 7,779 LF of proposed 12-inch force main from the existing spray field force main to the proposed spray fields.
  5. Approximately 7,515 LF of proposed 12-inch force main from the proposed effluent pump station to the proposed infiltration basins.
- C. Division 3 – Infiltration Basins and Spray Application System bid on a lump sum basis:
1. Infiltration basin system including three (3) infiltration basins totaling approximately 4.05 acres and groundwater lowering drainage system.
  2. Approximately 11.3-acre effluent spray irrigation system including pumps and controls.

### 1.3 SPECIFICATION CONVENTIONS

- A. These specifications are written in imperative mood and streamlined form. This imperative language is directed to the Contractor, unless specifically noted otherwise. The words “shall be” are included by inference where a colon (:) is used within sentences or phrases.



- B. “NIC” (Not in Contract) indicates items that are to be furnished and installed by the Owner or other contractors selected by the Owner at a later date.

#### 1.4 CONTRACTOR'S USE OF SITE AND PREMISES

- A. The Contractor will be allowed access to the site during operational hours corresponding to the wastewater treatment plant operation or prior scheduled with the Owner.
- B. All work associated with the renovations shall be performed in a manner such that there will be no impact to the existing wastewater treatment operations or performance.
- C. All work requiring utility outages of shutdown will be limited and must be scheduled with the Owner in advance.
- D. The initial contract period is to be utilized for shop drawing submittals and approvals and other non-site related work and the field construction work at the Brunswick County WWTP site to be limited to the contract period noted in the Agreement.

#### 1.5 WORK SEQUENCE

- A. This is a suggested sequence of construction. The proposed project schedule shall be submitted and approved by the Engineer in accordance with Section 01 33 01.1.11.A
- B. Contractor shall plan and construct work to cause minimum inconvenience to the owner and the public.
- C. The contractor shall provide, erect, and maintain at all times during the progress or temporary suspension of work suitable barriers, fences, signs, or other adequate protection, including flagmen and watchmen as necessary to ensure the safety of the public as well as those engaged in the construction work. Construction signage shall be in accordance with the latest edition of “Construction and Maintenance Operations Supplement to the Manual on Uniform Traffic Control Devices” by the NC DOT.
- D. Construction work to be performed and coordinated with the Owner’s WWTP Operations Staff to maintain treatment operations at all times.
- E. Construction Work Sequence:
  - 1. Site Work
    - a. Establish and maintain erosion control
    - b. Construct construction entrances as applicable to work area necessary
    - c. Construct vehicle access roads with adequate drainage for construction
    - d. Clearing and grading
  - 2. High Rate Infiltration Basins and Spray Application
    - a. Construct groundwater lowering outfall level spreader
    - b. Construct Drain outfall
    - c. Stockpile and reuse clean sand for trench backfill
    - d. Construct groundwater lowering drain
    - e. Bench infiltration basins excavation to allow removal of clay soils to excavation depth without contaminating infiltration basin final grades by traffic across basin.

- f. Excavate remaining basin dimensions to basin excavation limits and backfill with clean sand.
  - g. Establish vegetation on specified slopes of basin excavation.
  - h. Construct spray application system. Coordinate planting vegetation with startup to provide lagoon effluent for irrigation.
2. Headworks and Equalization Basin
    - a. Headworks and Equalization Basin may proceed concurrently based upon the Contractor's schedule. As the new headworks and connections into Shallotte WWTF and piping are completed, tested and approved by the Engineer for use, these facilities may be activated for Shallotte wastewater.
  3. Lagoon Modifications
    - a. Construct piping modifications for lagoon system.
  4. Force Mains
    - a. Construct proposed new force mains, spray irrigation, influent and effluent force mains. Complete testing and activate in coordination with completion of other facilities and authorization from Engineer.
  5. Mulberry Branch Water Reclamation Facility
    - a. Prior to the construction of Mulberry Branch Water Reclamation Facility, the removal of irrigation piping and spray heads related to irrigation spray fields 1a and 1b are to be removed as part of site clearing. Irrigation piping should be capped with concrete blocking.
    - b. Construct the new wastewater treatment site and facility may proceed concurrently based upon the Contractor's schedule.
  6. Influent Force Main Connection
    - a. New 16-inch force main may be constructed concurrent with other activities but connection to the headworks must be coordinated with the completion of the headworks.
    - b. Connection to the force main on US 17 must be coordinated with the startup of the wastewater treatment and disposal components.
  7. Roads
    - a. Pave asphalt roads
    - b. Finish grading and patching of gravel roads.

## 1.6 OWNER OCCUPANCY

- A. The Owner will occupy the site and facilities during the entire period of construction for the conduct of normal operations. All of the new equipment components installations can be completed, checked out with final placement into operation held until approval from the North Carolina Department of Environmental Quality (NCDEQ) is received. Any areas where work requires acceptance and placement of components of the wastewater treatment plant renovations into service as completed will necessitate close communication with the Owner, Engineer and partial approvals to operate from NCDEQ.
- B. Cooperate with Owner to minimize conflict and to facilitate Owner's operations.
- C. Schedule the Work to accommodate Owner occupancy.

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION - Not Used

END OF SECTION

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SECTION 10 51 13  
METAL LOCKERS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
1. Welded corridor lockers.

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.
1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for each type of metal locker.
- B. Shop Drawings: For metal lockers.
1. Include plans, elevations, sections, and attachment details.
  2. Show locker trim and accessories.
  3. Include locker identification system and numbering sequence.
- C. Samples for Verification: For lockers.
- D. Product Schedule: For lockers.

1.3 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer.
- B. Sample Warranty: For special warranty.

1.4 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For adjusting, repairing, and replacing locker doors and latching mechanisms to include in maintenance manuals.

1.5 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
1. The following metal locker hardware items equal to 10 percent of amount installed for each type and finish installed, but no fewer than three units:
    - a. Blank identification plates.
    - b. Hooks.

## 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Do not deliver metal lockers until spaces to receive them are clean, dry, and ready for their installation.

## 1.7 FIELD CONDITIONS

- A. Field Measurements: Verify actual dimensions of recessed openings by field measurements before fabrication.

## 1.8 COORDINATION

- A. Coordinate sizes and locations of framing, blocking, furring, reinforcements, and other related units of work specified in other Sections to ensure that metal lockers can be supported and installed as indicated.

## 1.9 WARRANTY

- A. Special Warranty: Manufacturer agrees to repair or replace components of metal lockers that fail in materials or workmanship, excluding finish, within specified warranty period.
  - 1. Failures include, but are not limited to, the following:
    - a. Structural failures.
    - b. Faulty operation of latches and other door hardware.
  - 2. Damage from deliberate destruction and vandalism is excluded.
  - 3. Warranty Period for Welded Metal Lockers: 10 years from date of Substantial Completion.

## PART 2 - PRODUCTS

### 2.1 MANUFACTURERS

- A. Source Limitations: Obtain metal lockers and accessories from single source from single locker manufacturer.

### 2.2 PERFORMANCE REQUIREMENTS

- A. Accessibility Standard: For lockers indicated to be accessible, comply with applicable provisions in the USDOJ's "2010 ADA Standards for Accessible Design" and ICC A117.1.

### 2.3 WELDED CORRIDOR LOCKERS

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
  - 1. AJW Architectural Products.
  - 2. ASI Storage Solutions.

3. [Art Metal Products.](#)
4. [DEBOURGH ALL-AMERICAN LOCKERS.](#)
5. [GSS Lockers.](#)
6. [List Industries Inc.](#)
7. [LockersMFG.](#)
8. [Lyon LLC.](#)
9. [Olympus Lockers & Storage Products, Inc.](#)
10. [Penco Products, Inc.](#)
11. [Republic Storage Systems, LLC.](#)
12. [Top Tier Storage Products.](#)
13. [WEC Manufacturing LLC.](#)

- B. Configuration: Double-tier, 15-inches wide, 15-inches deep, 78-inches tall.
- C. Doors: One piece; fabricated from 0.075-inch nominal-thickness steel sheet; formed into channel shape with double bend at vertical edges and with right-angle single bend at horizontal edges.
1. Reinforcement: Manufacturer's standard reinforcing angles, channels, or stiffeners for doors more than 15 inches wide; welded to inner face of doors.
  2. Door Style: Vented panel as follows:
    - a. Louvered Vents: No fewer than three louver openings at top and bottom for double-tier lockers.
- D. Body: Assembled by welding body components together. Fabricate from unperforated steel sheet with thicknesses as follows:
1. Tops, Bottoms, and Sides: 0.060-inch nominal thickness.
  2. Backs: 0.048-inch nominal thickness.
  3. Shelves: 0.060-inch nominal thickness, with double bend at front and single bend at sides and back.
- E. Frames: Channel formed; fabricated from 0.060-inch nominal-thickness steel sheet; lapped and factory welded at corners; with top and bottom main frames factory welded into vertical main frames. Form continuous, integral, full-height door strikes on vertical main frames.
- F. Hinges: Welded to door and attached to door frame with no fewer than two factory-installed rivets per hinge that are completely concealed and tamper resistant when door is closed; fabricated to swing 180 degrees.
1. Continuous Hinges: Manufacturer's standard, steel, full height.
- G. Projecting Door Handle and Latch: Finger-lift latch control designed for use with either built-in combination locks or padlocks; positive automatic latching, chromium plated; pry and vandal resistant.
1. Latch Hooks: Equip doors 48 inches and higher with three latch hooks and doors less than 48 inches high with two latch hooks; fabricated from 0.105-inch nominal-thickness

- steel sheet; welded or riveted to full-height door strikes; with resilient silencer on each latch hook.
2. Latching Mechanism: Manufacturer's standard, rattle-free latching mechanism and moving components isolated to prevent metal-to-metal contact, and incorporating a prelocking device that allows locker door to be locked while door is open and then closed without unlocking or damaging lock or latching mechanism.
- H. Identification Plates: Manufacturer's standard, etched, embossed, or stamped plates, with numbers and letters at least 3/8 inch high.
- I. Hooks: Manufacturer's standard ball-pointed, aluminum or steel; zinc plated.
- J. Continuous Zee Base: Fabricated from, manufacturer's standard thickness, but not less than 0.060-inch nominal-thickness steel sheet.
1. Height: 4 inches.
- K. Filler Panels: Fabricated from 0.048-inch nominal-thickness steel sheet.
- L. Finished End Panels: Fabricated from 0.024-inch nominal-thickness steel sheet to cover unused penetrations and fasteners, except for perimeter fasteners, at exposed ends of nonrecessed metal lockers; finished to match lockers.
- M. Materials:
1. Cold-Rolled Steel Sheet: ASTM A1008/A1008M, Commercial Steel (CS), Type B, suitable for exposed applications.
- N. Finish: Baked enamel or powder coat.
1. Color: As selected by Architect from manufacturer's full range.

## 2.4 FABRICATION

- A. Fabricate metal lockers square, rigid, without warp, and with metal faces flat and free of dents or distortion. Make exposed metal edges safe to touch and free of sharp edges and burrs.
1. Form body panels, doors, shelves, and accessories from one-piece steel sheet unless otherwise indicated.
  2. Provide fasteners, filler plates, supports, clips, and closures as required for complete installation.
- B. Fabricate each metal locker with an individual door and frame; individual top, bottom, and back; and common intermediate uprights separating compartments.
- C. Equipment: Provide each locker with an identification plate and the following equipment:
1. Double-Tier Units: One double-prong ceiling hook and two single-prong wall hooks.



- D. Welded Construction: Factory preassemble metal lockers by welding all joints, seams, and connections; with no bolts, nuts, screws, or rivets used in assembly of main locker groups. Factory weld main locker groups into one-piece structures. Grind exposed welds smooth and flush.
- E. Accessible Lockers: Fabricate as follows:
  - 1. Locate bottom shelf no lower than 15 inches above the floor.
  - 2. Where hooks, coat rods, or additional shelves are provided, locate no higher than 48 inches above the floor.
- F. Continuous Zee Base: Fabricated in lengths as long as practical to enclose base and base ends; finished to match lockers.
- G. Finished End Panels: Fabricated to conceal unused penetrations and fasteners, except for perimeter fasteners, at exposed ends of nonrecessed metal lockers; finished to match lockers.
  - 1. Provide one-piece panels for double-row (back-to-back) locker ends.

## 2.5 ACCESSORIES

- A. Fasteners: Zinc- or nickel-plated steel, slotless-type, exposed bolt heads; with self-locking nuts or lock washers for nuts on moving parts.
- B. Anchors: Material, type, and size required for secure anchorage to each substrate.
  - 1. Provide nonferrous-metal or hot-dip galvanized anchors and inserts on inside face of exterior walls for corrosion resistance.
  - 2. Provide toothed-steel or lead expansion sleeves for drilled-in-place anchors.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine walls and floors or support bases, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
- B. Prepare written report, endorsed by Installer, listing conditions detrimental to performance of the Work.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 INSTALLATION

- A. Install lockers level, plumb, and true; shim as required, using concealed shims.
  - 1. Anchor locker runs at ends and at intervals recommended by manufacturer, but not more than 36 inches o.c. Using concealed fasteners, install anchors through backup reinforcing plates, channels, or blocking as required to prevent metal distortion.

2. Anchor single rows of metal lockers to walls near top and bottom of lockers.
- B. Welded Lockers: Connect groups together with manufacturer's standard fasteners, with no exposed fasteners on face frames.
- C. Equipment:
1. Attach hooks with at least two fasteners.
  2. Identification Plates: Identify metal lockers with identification indicated on Drawings.
    - a. Attach plates to each locker door, near top, centered, with at least two aluminum rivets.
- D. Trim: Fit exposed connections of trim, fillers, and closures accurately together to form tight, hairline joints, with concealed fasteners and splice plates.
1. Attach finished end panels using fasteners only at perimeter to conceal exposed ends of nonrecessed metal lockers.
- 3.3 ADJUSTING
- A. Clean, lubricate, and adjust hardware. Adjust doors and latches to operate easily without binding.
- 3.4 PROTECTION
- A. Protect metal lockers from damage, abuse, dust, dirt, stain, or paint. Do not permit use during construction.
- B. Touch up marred finishes, or replace metal lockers that cannot be restored to factory-finished appearance. Use only materials and procedures recommended or furnished by locker manufacturer.

END OF SECTION 105113

