

CITY OF HIGH POINT

AGENDA ITEM



Title: Ward Water Treatment Plant Upgrades – Contract Administration/Construction Inspection

From: Terry Houk – Public Services Director

Derrick Boone – Public Services Asst. Director **Meeting Date:** September 17, 2018

Trevor Spencer – Projects Engineer

Public Hearing: N/A

Advertising Date: NA

Advertised By: NA

Attachments: Formal Bid Recommendation
Attachment A – Scope of Services

PURPOSE:

The City has budgeted for contract administration and construction inspection services for the Ward Water Treatment Plant Upgrades Project.

BACKGROUND:

The Ward Water Treatment Plant has been evaluated by Black and Veatch International Company for electrical and HVAC upgrades to meet current industry standards and improve long term functionality of the water plant. Public Services has received a proposal for contract administration and construction inspection services to be performed by Black and Veatch for the duration of the construction project.

BUDGET IMPACT:

Funds for these services are available in the FY 2018-2019 budget .

RECOMMENDATION / ACTION REQUESTED:

The Public Services Department recommends approval of the contract and that the appropriate City official and/or employee be authorized to execute all necessary documents to award the services to Black & Veatch International Co. in the amount of \$1,784,600.⁰⁰.



**FORMAL BID RECOMMENDATION
REQUEST FOR COUNCIL APPROVAL**

DEPARTMENT: **Public Services**

COUNCIL AGENDA DATE: **Sep 17, 2018**

BID NO.: **NA**

CONTRACT NO.:

DATE OPENED:

DESCRIPTION:

Ward Water Treatment Plant Upgrades - Contract Administration and Construction Inspection Services

PURPOSE:

The City has budgeted for contract administration and construction inspection services for the Ward Water Treatment Plant Upgrades Project.

COMMENTS:

The Ward Water Treatment Plant has been evaluated by Black & Veatch International Co. for electrical and HVAC upgrades of the water plant. Public Services has received a proposal for contract administration and construction inspection services to be performed by Black & Veatch for the duration of the project.

RECOMMEND AWARD TO:

Black & Veatch International Co.

AMOUNT:

1,784,600.00

JUSTIFICATION:

Black & Veatch performed all engineering design services for the Ward Water Treatment Plant Upgrades project; therefore, Public Services recommends that Black & Veatch provide contract administration and construction inspection services based on project background and knowledge of plant facilities.

ACCOUNTING UNIT	ACCOUNT	ACTIVITY	CATEGORY	BUDGETED AMOUNT
421779	527105	421101024520	40206	1,784,600.00
TOTAL BUDGETED AMOUNT				1,784,600.00

DEPARTMENT HEAD:

Terry Houk

Digitally signed by Terry Houk
DN: cn=Terry Houk, o=City of High Point, ou=Public
Services, email=terry.houk@highpointnc.gov, c=US
Date: 2018.09.05 09:27:27 -0400

DATE: **Sep 5, 2018**

The Purchasing Division concurs with recommendation submitted by the **Public Services** and recommends award to the lowest responsible, responsive bidder **Black & Veatch** in the amount of \$ **1,784,600.00**.

PURCHASING MANAGER:

Erik Conti

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email=erik.conti@highpointnc.gov, c=US
Date: 2018.09.06 15:54:36 -0400

DATE: **Sep 6, 2018**

Approved for Submission to Council

FINANCIAL SERVICES DIRECTOR:

Jeffrey A. Moore

Digitally signed by Jeffrey A. Moore
Date: 2018.09.07 08:38:29 -0400

DATE: **Sep 7, 2018**

CITY MANAGER:

Greg Demko

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Date: 2018.09.07 09:35:36 -0400

DATE: **Sep 7, 2018**

**AMENDMENT 2
ATTACHMENT A
SCOPE OF SERVICES**

Owner: City of High Point (CITY)
Project: Ward Water Treatment Plant Upgrade

SCOPE OF SERVICES

The services to be performed by the CONSULTANT under this AMENDMENT consist of construction phase support services for the Ward Water Treatment Plant (WTP) Upgrades Project. Work included in the amendment is as specifically identified below.

A. General Administration of Construction Contract:

Following successful completion of Bid Phase Services, and authorization from CITY, CONSULTANT shall perform services during the construction phase of the Project. The Construction Phase will commence with the execution of the Construction Contract for the Project for a period of 31 months to achieve final completion. Duties and responsibilities of CONSULTANT during the construction phase are listed below.

1. Provide project management and administration for a 31 month period to:
 - a. Correspond and consult with CITY,
 - b. Coordinate activities of the project team,
 - c. Develop and implement specific work plans, procedures and a quality control and quality assurance plan, and
 - d. Provide overall project direction to Engineer's personnel to meet CITY's objectives.
 - e. Maintain a project filing system throughout the life of Project to use for storage and retrieval of project documents.
 - f. Prepare monthly invoices and status reports to document project progress.
2. Coordinate with CITY to issue "Notice to Proceed" to Contractor. Notice to Proceed shall clearly state date of Notice to Proceed, Contract Substantial and Final Completion Dates, and any interim completion dates that have been established in the Construction Contract.
3. Conform contract documents to incorporate addenda and assemble contracts for construction, materials, equipment and services. CITY will issue conformed contract documents to Contractor.
4. Organize and administer a Pre-Construction Conference and record minutes of conference for distribution to CITY and Contractor.

5. Meet with CITY's representative and Contractor on a monthly basis (30 meetings) to review the general status of Project. CONSULTANT will lead these meetings at CITY provided meeting facilities and prepare and distribute written meeting summaries of project status meetings.
6. Review Contractor's schedule for the construction phases of the project. The schedule will be reviewed with the CITY and finalized, with copies sent to the CITY. Coordinate Engineer's services with the construction schedule.
7. Consult with and advise CITY and act as CITY's representative as set forth herein and as provided in the General Conditions and Supplementary General Conditions of the Contract for Construction included in the Contract Documents for the Project. The extent and limitations of the duties, responsibilities and authority of CONSULTANT as assigned in said Contract Documents shall not be modified, except as CONSULTANT and CITY may otherwise agree in this document or by a written amendment to this Agreement signed by the parties.
8. CITY's instructions to the Contractor(s) shall be issued through CONSULTANT who shall have the authority to act on behalf of CITY in dealings with Contractor to the extent provided in this Agreement, except as otherwise provided in writing.
9. Make visits to the site at intervals appropriate to the stage of construction to observe as an experienced and qualified design professional the progress and quality of the Work and to determine in general if the Work is proceeding in accordance with the Contract Documents. Such visits and observations by CONSULTANT and the Resident Project Representative are not intended to be exhaustive or to extend to every aspect of Contractor's work in progress or to involve detailed inspections of Contractor's work in progress beyond the responsibilities specifically assigned to CONSULTANT in this Agreement and the Contract Documents, but rather are to be limited to spot checking, selective sampling, and similar methods of general observation of the Work based on Engineer's exercise of professional judgment as assisted by the Resident Project Representative. In addition, the CONSULTANT shall provide the services of a Resident Project Representative at the site to assist Engineer. However, Engineer's observation shall not be intended to involve work beyond the responsibility specifically assigned to CONSULTANT in this Agreement and the Contract Documents. On the basis of on-site observation, CONSULTANT shall keep the CITY informed of the progress and quality of the Work, and shall alert the CITY to defects and deficiencies in the Work of the Contractor. CONSULTANT shall not, during such visits or as a result of such observations of Contractor's work in progress, supervise, direct, or have control or charge of and shall not be responsible for construction means, methods, techniques, sequences, procedures of construction selected by Contractor or for safety and environmental programs and precautions incident to the Work. CONSULTANT shall not be responsible for the failure of

the Contractor, his Subcontractors or any other persons performing any of the Work to comply with laws, rules, regulations, ordinances, code or orders, or for failure of any of them to carry out the Work in accordance with the Contract Documents. Accordingly, CONSULTANT neither guarantees the performance of any Contractor nor assumes responsibility for any Contractor's failure to furnish and perform its work in accordance with the Contract Documents.

10. The purpose of Engineer's visits to and representation by the Resident Project Representative at the site will be to enable CONSULTANT to better carry out the duties and responsibilities assigned to and undertaken by CONSULTANT during the Construction Phase, and, in addition, by the exercise of Engineer's efforts as an experienced and qualified design professional, to provide for CITY a greater degree of confidence that the completed work of Contractor will conform to the Contract Documents and that the integrity of the design concept of the completed Project as a functioning whole as indicated in the Contract Documents has been implemented and preserved by Contractor.
11. Make recommendations to CITY concerning the disapproval or rejection of Contractors' Work while it is in progress if CONSULTANT believes that such Work does not produce a completed PROJECT that conforms generally to the Contract Documents or that it will prejudice the integrity of the design concept of the PROJECT as a functional whole as reflected in the Contract Documents. CONSULTANT shall have access to the Work at all times wherever it is in preparation or progress.
12. Review and approve or take other appropriate action with respect to Shop Drawings, samples and other data which Contractor is required to submit, but only for conformance with the design concept of the PROJECT and compliance with the information given in the Contract Documents. Such reviews or other action shall not include means, methods, techniques, sequences, or procedures of construction or safety programs and precautions incident thereto.
13. CONSULTANT shall issue necessary clarifications and interpretations of the Contract Documents as appropriate to the orderly completion of the Work. Such clarifications and interpretations will be consistent with the intent of and reasonably inferable from the Contract Documents. CONSULTANT may issue Field Orders authorizing minor variations from the requirements of the Contract Documents. Field Orders shall not involve change in Contract Price or Time.
14. CONSULTANT shall recommend Change Orders and Work Change Directives to CITY as appropriate, and shall prepare Change Orders and Work Change Directives as required. CONSULTANT shall not issue such Change Orders

until CITY has approved and accepted Contractor's cost and schedule change to implement such Change Orders.

15. Evaluate and determine the acceptability of substitute or "or-equal" materials and equipment proposed by Contractor.
16. CONSULTANT shall coordinate with CITY the provision of special inspections or testing of the Work and have authority to receive and review all certificates of inspections, testing and approvals required by laws, rules, regulations, ordinances, codes, orders or the Contract Documents to determine generally that their content complies with the requirements of, and the results certified indicate compliance with, the Contract Documents. CONSULTANT shall be entitled to rely on the results of such tests and will provide certification at project close that the work complies with the Contract Documents. Materials and soils testing and other special inspection services required by code, but not provided by the CONSULTANT shall be furnished by a consultant provided by the CITY.
17. Act as initial interpreter of the requirements of the Contract Documents, judge the acceptability of the Work and render formal written decisions on all claims of CITY and Contractor relating to the acceptability of the Contractor's Work or the interpretation of the requirements of the Contract Documents pertaining to the execution and progress of the Contractor's Work. In rendering such decisions, CONSULTANT shall be fair and not show partiality to CITY or Contractor and not be liable for the results of any such interpretations or decisions rendered in good faith.
18. Determine the amount owing to Contractor based on Engineer's observations and inspections at the site and the data comprising the Application for Payment, and the accompanying data and schedules, and recommend in writing payments to Contractor in such amounts. Such recommendations of payment will constitute a representation to CITY that the Work has progressed to the point indicated and that, to the best of Engineer's knowledge, information and belief, the quality of the Work is in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, to the results of any subsequent tests called for in the Contract Documents and to any other qualifications stated in the recommendation) and the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe Contractor's Work. In the case of unit price work, Engineer's recommendations of payment will include final determinations of quantities and classifications of Contractor's work (subject to any subsequent adjustments allowed by the Contract Documents). The issuance of a recommendation will further constitute a representation that the Contractor is entitled to payment in the amount certified. However, the issuance of a recommendation for payment will not be a representation that the CONSULTANT is responsible for construction means, methods,

techniques, sequences or procedures or has ascertained how or for what purpose the Contractor has used money previously paid on account of the Contract Price. By recommending any payment, CONSULTANT shall not thereby be deemed to have represented that observations made by CONSULTANT to check the quality or quantity of Contractor's work as it is performed and furnished have been exhaustive, extended to every aspect of Contractor's work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to CONSULTANT in this Agreement and the Contract Documents. Neither Engineer's review of Contractor's work for the purposes of recommending payments nor Engineer's recommendation of any payment including final payment will impose on CONSULTANT responsibility to supervise, direct, or control Contractor's work in progress or for the means, methods, techniques, sequences, or procedures of construction or safety precautions or programs incident thereto, or Contractor's compliance with Laws and Regulations applicable to Contractor's furnishing and performing the Work. It will also not impose responsibility on CONSULTANT to make any examination to ascertain how or for what purposes Contractor has used the moneys paid on account of the Contract Price, or to determine that title to any portion of the work in progress, materials, or equipment has passed to CITY free and clear of any liens, claims, security interests, or encumbrances, or that there may not be other matters at issue between CITY and Contractor that might affect the amount that should be paid.

19. Receive, review, and transmit to CITY with written comments maintenance and operating instructions, schedules, guarantees, certificates of insurance, marked-up record drawings (including shop drawings, samples and other data), bonds, certificates of inspection and tests and approvals of equipment which are to be provided by Contractor in accordance with the Contract Documents. Determine that their content complies with the requirements of the Contract Documents.
20. Following notice from Contractor that Contractor considers the entire work ready for its intended use, CONSULTANT and CITY, accompanied by Contractor, shall conduct a walk-through to determine if the work is substantially complete. If the entire work is deemed suitable for its intended use, CONSULTANT shall deliver a notice of completion to CITY and Contractor. If work is not deemed suitable, CONSULTANT shall provide in writing a list of deficiencies to be corrected before the work can be deemed Complete. CONSULTANT shall re-inspect the work when the Contractor provides in writing a statement that all deficiencies have been corrected.
21. Conduct a final construction review to determine if the completed Work is acceptable to CONSULTANT and CITY so that CONSULTANT may recommend, in writing, final payment to Contractor and may give written notice to CITY and Contractor that the Work is acceptable, subject to any conditions therein expressed. Accompanying the recommendation for final

payment, CONSULTANT shall indicate that the work is acceptable to the best of Engineer's knowledge, information and belief and based on the extent of the services performed and furnished by CONSULTANT under this Agreement.

22. Prior to final payment to the Contractor, and in company with the CITY, CONSULTANT shall visit the Project to observe any apparent defects in the completed work, assist CITY in consultations and discussions with Contractor concerning correction of such defects, and make recommendations as to replacement or correction of defective work.
23. After determining that the completed Work is acceptable, issue a written Notice of Acceptance to the Contractor. Notice shall establish the completion date.
24. Receive, review, and approve Contractor's final payment request. Prepare a final adjusting change order to be signed by the Contractor and submitted to the CITY with the final pay request.
25. Provide Engineer's certification that the work has been completed substantially in accordance with CITY's approved plans and specifications.
26. CONSULTANT shall not be responsible for the acts or omissions of any Contractor, or of any of their subcontractors, suppliers, or of any other individual or entity performing or furnishing any of the Work. CONSULTANT shall not be responsible for failure of any Contractor to perform or furnish the Work in accordance with the Contract Documents.
27. Prepare Record Drawings showing those changes made during the construction process, based on the marked-up prints, shop drawings, drawings, and other data furnished by Contractor to Engineer. The record prints shall also incorporate the Resident Field Representative's observation of changes made during construction. CONSULTANT shall deliver three (3) sets of bond Record Drawings and an electronic file in PDF format to the CITY.
28. Operational Phase:
 - a. Following completion of construction and Final Acceptance by CITY, CONSULTANT shall provide the following services.
 - b. Assist CITY in resolving with the Contractor, unanticipated warranty or operational issues that arise during the one-year Contractor warranty period.
 - c. At the eleventh month (prior to end of the Contractor's warranty period), conduct warranty review and advise Contractor of any warranty items to be corrected.

- d. Conduct one follow-up review with CITY to determine status of items corrected by Contractor.

B. Resident Field Observation

Following the Notice to Proceed, CONSULTANT shall provide a Resident Project Representative (RPR) to monitor construction by the Contractor and to perform the duties listed herein. It is anticipated that one (1) RPR will be provided for an average of 40 hours per week for the construction period, supplemented by a part-time resident when needed to oversee specific elements of electrical, I&C, or HVAC construction.

1. CITY and CONSULTANT agree that representation at the site shall be provided. CONSULTANT shall provide Resident Project Representatives to assist CONSULTANT in observing the progress and quality of the work of the Contractor. Field representation shall be on a full-time basis, and is intended to be at a level sufficient to observe the Contractor's work. CONSULTANT shall notify CITY promptly if above level of field representation is insufficient to observe work as defined by CONSULTANT and CITY.
2. Such Project Representatives shall be selected, employed, and directed by Engineer. The duties, responsibilities and limitations of authority of such Project Representatives shall be described in the EJCDC General Conditions of the Contract Documents and as detailed herein.
3. Through on-site observations of the work in progress and field checks of materials and equipment by the Resident Project Representative and assistants, CONSULTANT shall use reasonable effort to provide further protection for CITY against defects and deficiencies in the work of Contractor. However, CONSULTANT shall not, during such visits or as a result of such observations of Contractor's work in progress, supervise, direct, or have control over Contractor's work nor shall CONSULTANT have authority over or responsibility for the means, methods, techniques, sequences or procedures selected by Contractor, for safety procedures and programs incident to the work of Contractor, for any failure of Contractor to comply with laws, rules, regulations, ordinances, codes or orders applicable to Contractor's performing and furnishing the work, or responsibility of construction for Contractor's failure to furnish and perform the Work in accordance with the Contract Documents.

The duties and responsibilities of the Resident Project Representative are limited to those of CONSULTANT in CONSULTANT's Agreement with the CITY and in the construction Contract Documents as set forth herein and are further limited and described as follows:

- a. General

Resident Project Representative is CONSULTANT's agent at the site, will act as directed by and under the supervision of Engineer, and will confer with CONSULTANT regarding Resident Project Representative's actions. Resident Project Representative's dealings in matters pertaining to the on-site work shall in general be with CONSULTANT and Contractor, keeping CITY advised as necessary. Resident Project Representative's dealing with Contractor's subcontractors shall only be through or with the full knowledge and approval of Contractor. Resident Project Representative shall generally communicate with CITY with the knowledge of and under the direction of Engineer.

- b. Duties and Responsibilities of Resident Project Representative
 - 1) Schedules: Review the progress schedule, schedule of Shop Drawing submittals and schedule of values prepared by Contractor and consult with CONSULTANT concerning acceptability.
 - 2) Conferences and Meetings: Attend meetings with Contractor, such as preconstruction conferences, progress meetings, job conferences and other project-related meetings, and prepare and circulate copies of minutes thereof.
 - 3) Liaison: Serve as Engineer's liaison with Contractor, working principally through Contractor's superintendent and assist in understanding the intent of Contract Documents; and assist CONSULTANT in serving as CITY's liaison with Contractor when Contractor's operations affect CITY's on-site operations.
 - 4) Assist in obtaining from CITY additional details or information when required for proper execution of the Work.
- c. Shop Drawings and Samples:

Advise CONSULTANT and Contractor of the commencement of any Work requiring a Shop Drawing or Sample if the submittal has not been approved by Engineer.
- d. Review of Work, Rejection of Defective Work, Observations and Tests:
 - 1) Conduct on-site observations of the Work in progress to assist CONSULTANT in determining if the Work is proceeding in accordance with the Contract Documents.
 - 2) Report to CONSULTANT whenever Resident Project Representative believes that any Work will not produce a completed Project that conforms to the Contract Documents or

will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated in the Contract Documents, or has been damaged, or does not meet the requirements of any observation, test or approval required to be made; and advise CONSULTANT of Work that Resident Project Representative believes should be corrected or rejected or should be uncovered for observation, or requires special testing, observation or approval.

- 3) Verify that tests, equipment and systems start-ups and operating and maintenance training are conducted in the presence of appropriate personnel and that Contractor maintains adequate records thereof; and observe, record and report to CONSULTANT appropriate details relative to the test procedures and start-ups.
- 4) Accompany visiting observers representing public or other agencies having jurisdiction over the Project, record the results of these observations and report to Engineer.
- 5) Review the results of tests made by the independent soils and materials testing consultant and laboratory (Provided and paid by CITY).
- 6) Interpretation of Contract Documents: Report to CONSULTANT when clarifications and interpretations of the Contract Documents are needed and transmit to Contractor clarifications and interpretations as issued by Engineer.
- 7) Modifications: Consider and evaluate Contractor's suggestions for modifications in Drawings or Specifications and report with Resident Project Representative's recommendations to Engineer. Transmit to Contractor in writing decisions as issued by Engineer.

e. Records:

- 1) Maintain at the job site orderly files for correspondence, reports of job conferences, Shop Drawings and Samples, reproductions of original Contract Documents including all Work Changes, Addenda, Change Orders, Field Orders, additional Drawings issued subsequent to the execution of the Contract, Engineer's clarifications and interpretations of the Contract Documents, progress reports, Shop Drawing submittals received from and delivered to Contractor and other Project related documents.

- 2) Prepare a daily report, keep a diary or log book, recording Contractor's hours on the job site, weather conditions, data relative to questions of Work Change Directives, Change Orders or changed conditions, list of job site visitors, daily activities, decisions, observations in general, and specific observations in more detail as in the case of observing test procedures; and send copies to Engineer.
- 3) Record names, addresses and telephone numbers of Contractors, subcontractors and major suppliers of materials and equipment.

f. Reports:

- 1) Furnish to CONSULTANT periodic reports as required of progress of the Work and of Contractor's compliance with the progress schedule and schedule of Shop Drawing and Sample submittals.
- 2) Consult with CONSULTANT in advance of scheduled major tests, observation or start of important phases of the Work.
- 3) Draft proposed Change Orders and Work Change Directives, obtaining backup material from Contractor and recommend to CONSULTANT Change Orders, Work Change Directives, and Field Orders.
- 4) Report immediately to CONSULTANT and CITY the occurrence of any accident.

g. Payment Requests:

Review Applications for Payment with Contractor for compliance with the established procedures for their submission and forward with recommendations to Engineer, noting particularly the relationship of the payment requests to the schedule of values, Work completed and materials and equipment delivered at the site but not incorporated in the Work.

h. Certificates, Maintenance and Operation Manuals:

During the course of the Work, verify that certificates, maintenance and operation manuals and other data required to be assembled and furnished by Contractor are applicable to the items actually installed and in accordance with the Contract Documents, and have this material delivered to CONSULTANT to review for forwarding to CITY prior to final payment for the Work.

- i. Completion:
 - 1) Before CONSULTANT issues a Certificate of Substantial Completion, prepare and submit a list of observed items requiring completion or correction. This list shall be transmitted to Contractor by Engineer.
 - 2) Observe whether Contractor has performed observations required by laws, rules, regulations, ordinances, codes, or orders applicable to the Work, including but not limited to those to be performed by public agencies having jurisdiction over the Work.
 - 3) Conduct a final observation in the company of Engineer, CITY and Contractor and prepare a final list of items to be completed or corrected.
 - 4) Observe whether all items on final list have been completed or corrected and make recommendations to CONSULTANT concerning acceptance and issuance of the Notice of Acceptability of the Work.
- 4. Limitations of Authority by Resident Project Representative -- Resident Project Representative:
 - a. Shall not authorize any deviation from the Contract Documents or substitution of materials or equipment (including "or-equal" items), unless authorized by Engineer.
 - b. Shall not exceed limitations of Engineer's authority as set forth in the Agreement or the Contract Documents.
 - c. Shall not undertake any of the responsibilities of Contractor, Subcontractors, Suppliers or Contractor's superintendent.
 - d. Shall not advise on, issue directions relative to or assume control over any aspect of the means, methods, techniques, sequences, procedures of construction, or health and safety procedures unless such advice or directions are specifically required by the Contract Documents.
 - e. Shall not accept Shop Drawing or Sample submittals from anyone other than Contractor.
 - f. Shall not authorize CITY to occupy the Project in whole or in part.
 - g. Shall not participate in specialized field or laboratory tests or observations conducted by others except as specifically authorized by Engineer.

CITY and CONSULTANT acknowledge that the Contractor shall be solely responsible for all construction means and methods, including all safety and environmental procedures and programs necessary in connection with the Work and Services. However, should the Engineer's Resident Project Representative have actual knowledge that a condition exists at the site which he knows to be in violation of OSHA or other established safety regulations or which may lead to imminent danger of injury or death, the Resident Project Representative shall notify a representative of the Contractor of the observed conditions. If, to the best of the Engineer's actual knowledge and belief the conditions are not promptly corrected, the Resident Project Representative shall notify the CITY and the OSHA enforcement agency. To the extent that this section conflicts with any other provisions of this Attachment A, Engineer's Agreement with the CITY, or the construction Contract Documents, the provisions of this section shall control in every instance. No provision of the construction Contract Documents, nor amendment of this Attachment A, or Engineer's Agreement with CITY, shall be construed to amend or otherwise modify the provisions of this section without express and specific reference to this section.

Deliverables:

- Meeting summaries, reports, pay applications and shop drawings.
- Record Drawings
- Certificates of Completion

C. Supplemental Services

Any work requested by CITY that is not included in one of the items listed in any other phase will be classified as supplemental services. Supplemental services may include, but are not limited to:

1. Additional meetings with local, State, or Federal agencies to discuss the project.
2. Supplemental engineering work required to meet the requirements of regulatory or funding agencies that become effective subsequent to the date of this agreement.
3. Special consultants or independent professional associates required by CITY.
4. Changes in the general scope, extent, or character of the project, including, but not limited to:
 - a. Changes in size or complexity.
 - b. Method of financing.
 - c. CITY's schedule, design, or character of construction.
 - d. Revision of previously accepted studies, reports, design documents, or construction contract documents when such revisions are required by changes in laws, rules, regulations, ordinances, codes, or orders enacted subsequent to the preparation of such studies, reports, documents, or designs; or are required by any other causes beyond Engineer's control.

5. Additional permitting or regulatory meeting assistance. Payment of permitting fees.
6. Value engineering reviews or services.
7. Revisions of design, drawings, and specifications to incorporate changes arising from value engineering type reviews.
8. Survey and staking
9. Geotechnical Engineering Services, Materials Testing, and Special Inspections. CONSULTANT will coordinate these services to be performed by CITY's consultant.
10. Assistance in financially related transactions for the Project.
11. Additional Construction phase services beyond the services scheduled and budgeted herein.
12. Hazardous materials testing and subsequent provisions for hazardous material handling and disposal.
13. Special Inspections including welding, torque adjustment, soils, materials, etc. (provided by CITY).
14. Completion of harmonic analysis or electrical coordination study.
15. Equipment procurement services other than those specifically identified in the scope of services.
16. Special consultants or independent professional associates requested or authorized by CITY.
17. Preparation for litigation, arbitration, or other legal or administrative proceedings; and appearances in court or at arbitration sessions, in connection with bid protests, change orders or construction incidents.
18. Appearances at public hearings or before special boards.
19. Concrete and/or soil field testing services (provided by CITY).
20. Assistance in financially related transactions for the project other than those specifically included in the scope of services.
21. Extended services during construction made necessary by (1) work damage by fire or other cause during construction, (2) a significant amount of defective or neglected work by and Contractor or manufacturer, (3) acceleration of the progress schedule involving service beyond normal working hours, (4) default by any Contractor, and (5) failure of the Contractor to complete the Work within the construction contract time.
22. Evaluation of unusually complex or unreasonably numerous claims submitted by Contractor or others in connection with the Work.
23. Operations and Maintenance manuals and operations training and startup assistance.
24. Assistance in correction of warranty items during the correction period.
25. Special reports requested by CITY concerning facilities operations and personnel matters during the operation startup period.
26. Construction phase service in excess of the number of months indicated above.

**AMENDMENT 2
ATTACHMENT B**

Owner: City of High Point
Project: Ward Water Treatment Plant Upgrades

COMPENSATION

For services covered by this Contract, the CITY agrees to pay CONSULTANT as follows:

- A. Work performed will be invoiced on a billing rate basis at the rates provided herein. Base services are estimated to be \$1,784,600.00 and the total amount of billings will not exceed this amount unless authorized by the CITY in writing.
- B. For Supplemental Services, CITY and CONSULTANT will negotiate a written amendment to this Agreement for the additional services.
- C. CONSULTANT will submit to CITY invoices for Services performed over a monthly period. CITY agrees to pay Engineer's invoice upon receipt. Invoices will be in Engineer's standard format.

Billing Rate Schedule

For the Scope of Services, CITY will compensate CONSULTANT in accordance with the Bill Rate Schedule below, plus reimbursable expenses times 1.0, plus subconsultant expenses times 1.10. Standard hourly rates are subject to review and adjustment annually. Hourly rates effective on the date of this Agreement are as follows:

HOURLY RATE SCHEDULE	
Effective through December 31, 2018	
Principal	\$255-290
Sr. Planning Manager	\$220-275
Sr. Project Manager	\$220-275
Project Manager	\$190-250
Sr. Engineering Manager	\$200-255
Engineering Manager	\$180-225
Sr. Engineer	\$195-240
Project Engineer	\$155-195
Staff Engineer 4	\$145-170
Staff Engineer 3	\$135-160
Staff Engineer 2	\$125-150
Staff Engineer 1	\$100-135
Sr. Architect	\$160-210
Architect	\$140-180
Sr. Construction Manager	\$175-230
Construction Manager	\$150-190
Resident Project Representative	\$120-170
Construction Inspector	\$80-150
Technical Specialist	\$170-250
Sr. Engineering Technician	\$155-180
Engineering Technician	\$105-150
Sr. Drafter	\$95-150
Drafter	\$80-120
Project Controls	\$100-175
Finance/Accountant	\$95-160
Project Administrator	\$95-125
Clerical	\$74-95

The following expenses are reimbursable work items and will be billed at cost: bulk reproduction of documents (outside reproduction services will be treated as a subconsultant); charges for review of drawings and specifications by government agencies, if any; vehicular transportation costs at the rate established by the Internal Revenue Service; airline tickets, meals, and lodging with out-of-town travel.



August 29, 2018

City of High Point
Ward Water Treatment Plant Upgrades

Project No. 190221
B&V File 60.5000

City of High Point
211 South Hamilton Street
Suite 206
High Point, NC 27261

Attention: Trevor Spencer, Project Manager
Subject: Recommendation of Award

On August 22, 2018 at 2:00 p.m., bids were opened for the Ward Water Treatment Plant Upgrades project. The proposed Work consists of the following:

Process and Electrical Upgrades:

- Demolition of the existing 2300V power supply and related equipment serving high service pumps.
- New 4160V power supply including switchgear, transformers, medium voltage AFDs and 4160V rated motors for high service pumps.
- Electrical building to house switchgear and AFDs for high service pumps, and associated facilities.
- Demolition of MCC units.
- Upgrade of existing 480V power supply with new MCCs and feeders to MCCs.
- New medium voltage cable and conduit and low voltage cable and conduit to power existing loads and new equipment.
- New 12 MGD high service pump with 4160V rated motor with AFD and associated piping.
- New 12 MGD transfer pump with 480V rated motor with AFD and associated piping.
- Replace existing starters with soft starters for TP-5,6 and AFDs for TP-2,3.
- New plant control system.
- Associated sitework including grading, paved access road and parking, yard piping, ductbank, storm drainage, seeding, and erosion control.
- Appurtenant work as indicated in these specifications and on the contract drawings.

HVAC Upgrades:

- Demolition of existing Boiler/Chiller in Operations Building with associated ductwork.
- Installation of new single large heat pump and associated piping.
- Replacement of dehumidifier serving transfer pump room/filter gallery area.
- Provision of supply and exhaust fans, electric duct heater, and exhaust stacks for the laboratory spaces within the Operations Building.
- Electrical work associated with HVAC upgrades.

Ten contractors held bid documents and five bids were received. We conclude that the project was adequately advertised and available to the construction industry.

A Tabulation of Bids received is attached.

The low bid was submitted by Wharton-Smith, Inc. whose corporate headquarters is in Sanford, Florida; however, they maintain a local office in Charlotte, NC. Their total bid amount was \$12,737,000. The second and third lowest bids were within 1.4% of the low bid. Therefore, we conclude that the bid is responsible and is an accurate reflection of the cost of the work.

The bidders were requested to submit names of subcontractors for electrical and HVAC work. All five bidders named Industrial HVAC for the HVAC work. Most named Cooper Electric for electrical work. The low bidder named Sinns and Thomas of NC (S&T) for electrical work. We verified with low bidder that S&T is properly licensed in NC to do the work and has adequate electrical experience. The low bidder's named subcontractors are acceptable.

Bidders were also requested to complete an Equipment Questionnaire naming equipment proposed for use in this project. The low bidder's named equipment is acceptable.

Bidders were also requested to complete an Instrumentation and Control System Questionnaire. The low bidder's named System Supplier and manufacturers of principle devices are acceptable.

Wharton- Smith is properly licensed to do this work.

Therefore, Black & Veatch recommends award of this Contract to the low bidder, Wharton-Smith, Inc. in the lump sum contract amount of \$12,737,000.

Please let us know if you have questions regarding this recommendation.

Best Regards,
BLACK & VEATCH INTERNATIONAL COMPANY



H. Keith Proffit
Engineering Manager

Enclosures

cc: Mike Osborne, B&V

City of High Point Ward Water Treatment Plant Upgrades Tabulation of Bids Received August 22, 2018						
DESCRIPTION						
1	Bid Form (Bid Proposal) Executed?					
1	Subcontracts					
1a	Electrical					
1b	HVAC					
2	Adjustment Unit Prices					
2a	Undercutting and Replacement with Select Fill					
3	Bid Amount					
3a	Allowance					
3b	HVAC work within Operations building (including electrical for HVAC Equipment)					
3c	All other Work					
3d	TOTAL BID AMOUNT					
		Jimmy R. Lynch & Sons, Inc.	Adams Robinson Enterprises, Inc.	English Construction Company, Inc.	Crowder Construction Company	Wharton-Smith, Inc.
		YES	YES	YES	YES	YES
		Cooper Electrical	Cooper Electrical	Cooper Electrical	N/A - Self Perform	Sinns & Thomas of NC Inc.
		Industrial HVAC	Industrial HVAC	Industrial HVAC	Industrial HVAC	Industrial HVAC
		\$ 20.00	\$ 200.00	\$ 150.00	\$ 25.00	\$ 150.00
		\$ 377,201.00	\$ 377,201.00	\$ 377,201.00	\$ 377,201.00	\$ 377,201.00
		\$ 2,757,163.00	\$ 2,012,000.00	\$ 2,711,799.00	\$ 2,650,000.00	\$ 2,509,799.00
		\$ 9,612,424.00	\$ 14,793,799.00	\$ 11,014,000.00	\$ 9,891,799.00	\$ 9,850,000.00
		\$ 12,746,788.00	\$ 17,183,000.00	\$ 14,103,000.00	\$ 12,919,000.00	\$ 12,737,000.00

Certification Statement:

I hereby certify that this is a true tabulation of Bids received August 22, 2018 for the Ward Water Treatment Plant Upgrades Project.


 H. KEITH PROFIT
 ENGINEER
 8749
 NORTH CAROLINA
 PROFESSIONAL SEAL
 8/28/2018