ATTACHMENT A SCOPE OF SERVICES

Owner: City of Hendersonville, NC Engineer: Black & Veatch International Company Project: French Broad River Intake & Pumping Station Restorative Work

Project Description

The French Broad River Intake and Pumping Station project (Project) generally consists of the construction of intake, pumping station, and connection to existing 30" raw water transmission main to supply raw water to the City of Hendersonville Water Treatment Plant. The intake is located on the bank of the French Broad River and includes raw water screening, micropile supported foundation, and pipe/sheet pile bank stabilization and erosion protection system. The pumping station consists of an elevated operating level containing 3-5 MGD vertical diffusion vane pumps, electrical room, office, engine generator, surge tank, and associated piping and appurtenances.

Hurricane Helene caused severe flooding along the French Broad River in September 2024. This flooding inundated the Intake & Pumping Station resulting in damage prior to completion of the original construction contract. Black & Veatch provided emergency repair services to assist the City and Contractor to stabilize the protect the facilities from further damage under a separate contract. On behalf of City, Engineer will provide Flood Damage Repair Services for the Project to restore the facilities to condition prior to flood event with the scope of services described herein.

The Scope of services is anticipated to be performed as follows:

- Project Administration <u>November 2024</u> to <u>October 2025</u> (12 months)
- Damage Assessment and Documentation <u>November 2024</u> to <u>January 2025</u> (3 months)
- Contracting Assistance and Cost Estimating <u>February 2025</u> to <u>April 2025</u> (3 months)
- Construction Administration <u>May 2025</u> to <u>October 2025</u> (6 months)
- Resident Field Observation <u>August 2025</u> to <u>October 2025</u> (3 months)

Phase 1000. Project Administration

- 1. Provide project management and administration to:
 - a. Correspond and consult with Owner,
 - 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 meet Owner's objectives.

- e. Maintain a project filing system to document and retain project records.
- f. Prepare monthly invoices and status reports to document project progress.
- 2. Arrange for and participate in project status meetings to review progress, budget, schedule, and deviations from this scope of services and exchange ideas and information. Meetings shall include a mix of inperson and conference calls.
 - a. Prepare and distribute the minutes for project meetings. Minutes for the project meetings will include a record of decisions made.
- 3. Provide administration and coordination of sub-consultants.

Phase 2000. Damage Assessment and Documentation

Engineer shall perform services for the assessment of flood damage and development scope of repair work to be performed by the contractor. Duties and responsibilities of Engineer during this phase are listed below.

- 1. Conduct site visit with City and Contractor to assess flood damage to facilities.
- 2. Prepare Flood Damage Observation List to compile assessment results and identify scope of repair work.
- 3. Conduct a Flood Damage Observation workshop to discuss assessment results with City and Contractor.
- 4. Review equipment supplier inspection reports provided by Contractor.
- 5. Discuss and evaluate solutions for repair of damaged equipment and facilities.
- 6. Conduct a workshop to review and finalize the scope of work for repair services with City and Contractor.
- 7. Review and develop strategies for enhancement of flood resiliency of the pump station, critical equipment and infrastructure.
- 8. Capture the scope of repair work through marked up set of Contract Drawings.

Phase 3000. Contracting Assistance and Cost Estimating

Engineer shall perform services to assist City with execution of construction contract with the contractor and cost estimating services. Duties and responsibilities of Engineer during this phase are listed below.

- 1. Develop engineer's opinion of probable construction cost for the scope of repair work. OPCC will utilize supplier quotes for equipment and materials provided by the contractor.
- 2. Review contractor's cost estimate with respect to scope of repair work and cost reasonableness. Develop and submit a letter to City summarizing the review of the contractor's cost estimate.

- 3. Review contractor's schedule for contracting, procurement of equipment and materials, and construction work.
- 4. Review City's construction contract for repair work and provide comments.
- 5. Attend site visit and meeting with Owner and FEMA staff. Assist Owner with documentation of flood damage for FEMA.

Phase 4000. General Administration of Construction Contract

Engineer shall perform services on a part-time basis 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 6 months to achieve final completion. Duties and responsibilities of Engineer during the construction phase are listed below.

- 1. 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.
- 2. Schedule and attend monthly progress meetings to review and discuss construction procedures and progress scheduling, engineering management procedures, and other matters concerning the Project. Preside at the monthly construction progress meeting. Record and distribute minutes of the monthly progress meetings.
- 3. Review Contractor's schedule for the construction phases of 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.
- 4. 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 Engineer as assigned in said Contract Documents shall not be modified, except as Engineer and City may otherwise agree in this document or by a written amendment to this Agreement signed by the parties.
- 5. City's instructions to the Contractor(s) shall be issued through Engineer 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.
- 6. Make periodic visits to the construction site, observe with reasonable care progress of the Work, and consult with the City and the Contractor

concerning problems and progress of the Work (Assumes site visits are limited to two (2) per month by an engineer). Engineer 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. Engineer 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, Engineer 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.

- 7. The purpose of Engineer's visits to and representation by the Resident Project Representative at the site will be to enable Engineer to better carry out the duties and responsibilities assigned to and undertaken by Engineer 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.
- 8. Make recommendations to City concerning the rejection of Contractors' Work while it is in progress if Engineer 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. Engineer shall have access to the Work at all times wherever it is in preparation or progress.
- 9. Review, with reasonable care and for conformity to the construction Contract Documents, shop drawings, schedules, O&M manuals, resubmittals and other data submitted by the Contractor as required by the construction Contract Documents. Engineer's review shall not relieve the Contractor of any of their contractual responsibilities. Such reviews shall not extend to means, methods, techniques, sequences, or procedures of construction, or to safety precautions and programs incident thereto. Engineer's review of subsequent re-submissions due to the Contractor's failure to provide all previously requested corrected data or additional information will be considered Supplemental

Services. The construction Contract Documents will require the Contractor to reimburse the City for these Supplemental Services.

- 10. Interpret construction Contract Documents when requested by City or the Contractor. Evaluate and respond to request for information (RFI) from Contractor. For budgeting, 25 requests for information were estimated.
- 11. Provide documentation and administer the processing of change orders (not to exceed 3) and work change directives, including applications for extensions of construction time. Evaluate the cost and scheduling aspects of all change orders and, where necessary, negotiate with the Contractor to obtain a fair price for the Work. Said negotiation shall be subject to the approval of the City.
- 12. Evaluate and determine the acceptability of substitute or "or-equal" materials and equipment proposed by Contractor.
- 13. 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, Engineer 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.
- 14. Review and process the Contractor's monthly payment requests, and forward to the City if appropriate. Engineer's review shall be for the purpose of making an independent mathematical check of the Contractor's payment request. Engineer will assess whether the progress of the Work is consistent with the requirements of the construction schedules submitted by the Contractor at the time of Contractor's payment requests. Nothing herein shall confer liability upon Engineer for Contractor's completion of Project according to Contract Schedules.
- 15. Assist City in completing forms for insurance/funding agency partial/final payment requests, review of Application for Payment for compliance with insurance/funding agency requirements, and coordination with insurance/funding agency during construction period. Engineer will not be responsible for failure of Construction Contracts to comply with FEMA or Insurance Requirements but will merely administer the projects and notify City if compliance issues arise.

- 16. 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.
- 17. Following notice from Contractor that Contractor considers the entire work ready for its intended use, Engineer 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, Engineer shall deliver a notice of completion to City and Contractor. If work is not deemed suitable, Engineer shall provide in writing a list of deficiencies to be corrected before the work can be deemed Complete. Engineer shall re-inspect the work when the Contractor provides in writing a statement that all deficiencies have been corrected.
- 18. Conduct a final construction review to determine if the completed Work is acceptable to Engineer and City so that Engineer 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, Engineer 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 Engineer under this Agreement.
- 19. Prior to final payment to the Contractor, and in company with the City, Engineer 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.
- 20. After determining that the completed Work is acceptable, issue a written Notice of Acceptance to the Contractor. Notice shall establish the completion date.
- 21. 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.
- 22. Engineer 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. Engineer shall not be responsible for failure of any Contractor to perform or furnish the Work in accordance with the Contract Documents.

23. Review changes made during the construction process, based on the marked-up prints, drawings, and other data furnished by Contractor to Engineer. Engineer shall deliver Contractor's hand marked construction set to the City.

Phase 5000. Resident Field Observation

Following the Notice to Proceed, Engineer shall provide a Resident Project Representative (RPR) to monitor construction by the Contractor and to perform the duties listed herein. It is anticipated that Engineer will provide one (1) Senior RPR employed by Engineer to visit site for one (1) day every other week, not to exceed 6 site visits. The purpose of the site visits by Senior RPR is to provide guidance and support to Subconsultants RPR. Through a subcontract, Engineer will provide the services of a part-time RPR for a period of 3 months (12 weeks) at an average of 4 hours per week (Not to exceed 48 hours).

- 1. City and Engineer agree that representation at the site shall be provided. Engineer shall provide Resident Project Representatives to assist Engineer in observing the progress and quality of the work of the Contractor. Field representation shall be on a part-time basis. Engineer shall notify City promptly if above level of field representation is insufficient to observe work as defined by Engineer and City.
- 2. 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 Site observations of the Work in progress and field checks of materials and equipment by the Resident Project Representative and assistants, Engineer shall use reasonable effort to provide further protection for City against defects and deficiencies in the work of Contractor. However, Engineer 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 Engineer 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 Engineer in Engineer'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 Engineer's agent at the site, will act as directed by and under the supervision of Engineer, and will confer with Engineer regarding Resident Project Representative's actions. Resident Project Representative's dealings in matters pertaining to the on-site work shall in general be with Engineer 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
 - 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 Engineer in serving as City's liaison with Contractor when Contractor's operations affect City's on-site operations.
 - 2) Assist in obtaining from City additional details or information when required for proper execution of the Work.
- c. Review of Work, Rejection of Defective Work, Observations and Tests:
 - 1) Conduct on-site observations of the Work in progress to assist Engineer in determining if the Work is proceeding in accordance with the Contract Documents.
 - 2) Report to Engineer 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 Engineer 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 Engineer 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) Interpretation of Contract Documents: Report to Engineer when clarifications and interpretations of the Contract Documents are needed and transmit to Contractor clarifications and interpretations as issued by Engineer.

d. Records:

- 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.
- 2) Record names, addresses and telephone numbers of Contractors, subcontractors and major suppliers of materials and equipment.

e. Reports:

1) Furnish to Engineer 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 Engineer in advance of scheduled major tests, observation or start of important phases of the Work.
- 3) Report immediately to Engineer and City the occurrence of any accident.
- f. Completion:
 - Before Engineer 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) Conduct a final observation in the company of Engineer, City and Contractor and prepare a final list of items to be completed or corrected.
 - Observe whether all items on final list have been completed or corrected and make recommendations to Engineer 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 Engineer 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.

Supplemental Services

Any work requested by Owner that is not included in one of the items listed in any other phase will be classified as supplemental services. 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 Owner.
- 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. Owner'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 Construction Phase Services beyond the number of hours scheduled and budgeted in the scope of services.
- 6. Additional permitting or regulatory meeting assistance. Payment of permitting fees.
- 7. Value engineering reviews or services.
- 8. Revisions of design, drawings, and specifications to incorporate changes arising from value engineering type reviews.
- 9. Assistance in financially related transactions for the Project.
- 10. Hazardous materials testing and subsequent provisions for hazardous material handling and disposal.
- 11. Equipment procurement services.
- 12. Special consultants or independent professional associates requested or authorized by Owner.
- 13. Assistance with Bid protests and rebidding.
- 14. 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.
- 15. Appearances at public hearings or before special boards.
- 16. Assistance in financially related transactions for the project other than those specifically included in the scope of services.
- 17. Special reports requested by Owner concerning facilities operations and personnel matters during the operation startup period.
- 18. Conform Contract Documents to incorporate addenda and assemble contracts for construction, materials, equipment and services.
- 19. Special Inspections or Materials Testing for repair work.
- 20. Completion of harmonic analysis or electrical coordination study.
- 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. Special reports requested by City concerning facilities operations and personnel matters during the operation startup period.
- 25. Construction phase service in excess of the number of months indicated above.
- 26. Assistance during the correction period and warrantee period.
- 27. Assistance with and travel for witness testing of equipment.
- 28. Preparation of Record Drawings

ATTACHMENT B

Owner: City of Hendersonville, NC Engineer: Black & Veatch International Company Project: French Broad River Intake & Pumping Station Restorative Work

COMPENSATION

For services covered by this Contract, the Owner agrees to pay Engineer as follows:

- A. For Phase 1000, Phase 2000, Phase 3000, Phase 4000, and Phase 5000, as defined in Attachment A of the contract, a lump sum amount of \$246,000.00.
- B. For Supplemental Services as defined in Attachment A of the contract, Owner and Engineer will negotiate a written amendment to this contract prior to beginning work on Supplemental Services.

ATTACHMENT C

Owner: City of Hendersonville, NC Engineer: Black & Veatch International Company Project: French Broad River Intake & Pumping Station Restorative Work

SCHEDULE

The scope of services is anticipated to be performed as follows:

Project Administration	12 months
Damage Assessment and Documentation	3 months
Contracting Assistance and Cost Estimating	3 months
Construction Administration	6 months
Resident Project Observation	3 months