



November 21, 2025

Fulton County Government  
Department of Purchasing and Contract Compliance  
130 Peachtree Street SW, Suite 1168  
Atlanta, GA 30303

Attention: Mr. David Clark, P.E., Director of Public Works

Reference: Johns Creek Environmental Campus Membrane System Upgrade & Expansion, Phase1B

David,

Please find the attached Phase 1B Scope of Work for review and consideration. The scope follows the services as outlined in the RFP document and all other components of our contract remain in place. We will follow with and advanced procurement and installation proposal for the Ultra-Violet Disinfection Equipment

**The basis of this price** for this **Amendment No. 1** is shown on the attached Compensation Schedule as **\$1,602,134**.

**The Substantial Completion Date** upon which this proposal is November 30, 2026.

Our **Contract Compliance Subcontractor Utilization** is shown on the Exhibit B-2, at **23%** of the value. All other components of our approved Compliance Plan remain in place.

We at the Ruby-Collins/Brown and Caldwell Joint Venture look forward to the successful continuation of this very important project to the County. If you should have any questions, feel free to reach out to me directly.

Sincerely,

A handwritten signature in blue ink, reading 'Jesse B. Brown'.

Jesse B Brown, Senior Project Manager  
Ruby-Collins, Inc.

A handwritten signature in blue ink, reading 'Kelly Comstock'.

Kelly Comstock, Vice President  
Brown and Caldwell

**Attachment A**  
**Phase1B Design Scope for**  
**Progressive Design-Build Services for**  
**Johns Creek Environmental Campus Membrane System Upgrade & Expansion**  
**Fulton County Project Number 24RFP0808K-DB**

**Scope Summary**

This Scope of Work describes services to be provided by the Ruby Collins/Brown and Caldwell Joint Venture associated with the progressive design-build of the FULTON COUNTY Johns Creek Environmental Campus (JCEC) membrane system upgrade and expansion Phase 1B contract for Pre-Construction and Design Services. This Phase of the project consists of the preconstruction and detailed design services to 80% design and establishment of a Guaranteed Maximum Price (GMP) for construction of the project.

The following summarizes the major components of the proposed improvements for the Johns Creek Environmental Campus based on the Technical Memoranda and the Design Development Report established in Phase 1A:

- Removal and upgrade of the existing membrane system
- Retrofit existing aerobic digestion system with a new Rotary Drum Thickener for the purposes of recuperative thickening including associated chemical and pumping systems.
- New emergency sump pump system for membrane gallery
- Replacement of existing mixing systems in the following locations:
  - Primary Clarifier Effluent Channel
  - BNR Distribution Channel
  - Anaerobic Tanks
  - Pre-Anoxic Tanks
  - Anoxic Tanks 1
  - Anoxic Tanks 2
  - Swing Tanks
- New primary clarifier and treatment train passive overflow system
- Electrical System Upgrades
  - CTs/PTs at MVSWGR will be replaced
  - MVSWGR and Dewatering MCC Main and Tie Breakers will be replaced
  - Repair/replace the two outdoor XFMRs outside Dewatering Building that are leaking oil
  - Inspection and testing of all other XFMRs for age and use for replacements

- Provide updated Arc Flash study and replacement of labeling to come into code compliance
- Provide SCADA upgrades for new equipment
- Retrofit existing SCADA system

Planned engineering services to be performed under this Agreement comprise and are limited to those specifically set forth in this exhibit. Ruby-Collins will work alongside BROWN AND CALDWELL with continuous constructability review through out the design phases and lead the team during GMP Development

The Scope of Services is divided into the following tasks:

- Task 1: Project Management
- Task 2: 30 Percent Design Development (Reference RFP Deliverable Name)
- Task 3: 60 Percent Design Development (Reference RFP Deliverable Name)
- Task 4: 80 Percent Design Development to Support Development of the Proposed Guaranteed Maximum (GMP) for Construction (GMP Design Submittal)
- Task 5: Permitting Services
- Task 6: GMP Development Assistance

## **PHASE 1B – DETAILED DESIGN AND GMP SUPPORT**

### **Task 1 – Project Management**

Project management includes those services necessary to provide execution of detailed design and pre-construction services for Phase 1B, management of BROWN AND CALDWELL team staff and its subconsultants, to coordinate preconstruction work with RUBY-COLLINS and FULTON COUNTY, and to regularly report progress.

1.1 Management and Coordination of Design Team Work. The BROWN AND CALDWELL project manager will coordinate the conduct of each of the various work tasks performed by BROWN AND CALDWELL. Subcontract agreements will be prepared and executed, and the work of subcontractors will be supervised. The BROWN AND CALDWELL project manager will also review and coordinate with the RUBY-COLLINS project manager to finalize the Project Management Plan, Quality Assurance procedures (preconstruction), Quality Controls (preconstruction), decision log and the project Risk Register.

### 1.2 Team Coordination

1.2.1 Design Team Coordination. BROWN AND CALDWELL will be responsible for coordination of all the BROWN AND CALDWELL design team members including all subconsultants. It is anticipated that regular interface will take place throughout the design process including weekly design coordination meetings.

- 1.2.2 Coordination with RUBY COLLINS and FULTON COUNTY. Close coordination will be maintained with RUBY-COLLINS and FULTON COUNTY's staff. Work will include attending meetings, regular working sessions, design coordination, resolving technical issues, and coordinating tasks that will involve BROWN AND CALDWELL personnel, as well as preparing for and attending working session meetings with RUBY-COLLINS and FULTON COUNTY.
- 1.3 Monthly Project Progress Summary. On a monthly basis, following the contract date, BROWN AND CALDWELL will furnish RUBY-COLLINS with a monthly progress report. The monthly progress report will contain, as required by the RFP, the following:
- 1.3.1 Work Summary. A brief summary of the work completed during the given period, and a description of any items that will potentially impact the project's critical path if not immediately resolved.
- 1.3.2 Percent completed. A financial breakdown of the status of the job to date.
- 1.3.3 Any updates to the design schedule
- 1.4 Quality Control Reviews: Formal design quality control (QC) reviews will be performed as part of the standard Quality Assurance (QA) program. QC reviews will be performed at the following milestones:
- 30 Percent Design / Preliminary Design Report (PDR)
  - 60 Percent Design
  - 80 Percent Design
- The 30 percent reviews will focus on confirmation of sizing and will validate appropriate design criteria, operability review, and finalize appropriate equipment sizing that will impact other disciplines. The 60 percent QC reviews will address constructability and the adequacy of the drawings and specifications to depict the intended facilities adequately for construction. The 80 percent QC review will be a detailed coordination check to identify and address discipline coordination issues and verify that the scope and cost developed for the GMP are in alignment with the design and that any remaining design items not shown on the drawings have been appropriately included in an allowance.
- 1.5 Project Management Plan Updates. As design development progresses BROWN AND CALDWELL will perform periodic updates of the Project Management Plan originally prepared under Phase 1A. Updates will include required plan changes and revisions resulting from design advancement and development of the future construction sequencing and schedule.
- 1.6 Risk Assessment and Management. BROWN AND CALDWELL in close collaboration with RUBY COLLINS and FULTON COUNTY will continue to identify project risks as well

as mitigation strategies. Risk register updates will be performed to document risk items, risk assessment and management/ mitigation strategies. Risk allocation and potential impacts on the Schedule, GMP and/or project contingencies will be identified and documented.

1.7 Project Documentation. BROWN AND CALDWELL will document all meetings and decisions by providing the following:

1.7.1 Meeting summaries: following each meeting a meeting summary will be provided that includes information on meeting content, attendees, a copy of the meeting agenda and any handouts, as well as a current version of the Design Decision Log.

1.7.2 Design Decision Log: A Design Decision Log will be developed in Excel and use to identify all decisions made during the Phase 1B component of the project. It will also be used to track pending decisions and identify additional information needed to support the decision process. This will be included with each monthly report as well as each meeting summary.

## **Task 2 – 30 Percent Design Development**

2.1 30 Percent Design Development. During this task a 30 percent design and a draft Basis of Design Report (BODR) will be developed. The Anticipated scope is as follows:

- The BODR will utilize information developed in the DDR during Phase 1A as well as updated information from the design effort undertaken by the membrane supplier. The BODR will include sufficient information to reflect the scope of the project and applicable design criteria on which the final design of facility improvements will be based.
- List of planned specifications
- Preliminary Equipment List
- Results of the laser scanning effort and REVIT Model Backgrounds documenting the existing As-Built Conditions in the areas noted herein.
- 30% Preliminary Mechanical Design. This will consist of piping concepts and preliminary layout of membrane supplier modules and equipment.
- 30% Electrical and SCADA design including preliminary Process and Instrumentation Diagrams (P&IDs) and preliminary power one-line diagram(s). The P&IDs will depict process mechanical equipment, identification of variable speed equipment, piping with preliminary sizes, valves with types and preliminary sizes, and primary element instrumentation.

- Preliminary Structural Details. Preliminary structural details will be provided.
- Input on Preliminary Construction schedule (Developed by RC)
- Input on Preliminary Construction cost estimate (Developed by RC)

## 2.2 30 Percent Design Review:

A one half-day 30 percent design review meeting will be held at the 30 percent design milestone to walk all team members through the progress deliverable. This meeting is intended to be a comprehensive meeting with the team to discuss and make design decisions to be incorporated in the next phase of design. Meeting summary will be prepared and distributed electronically to the team for review and comment. The summary will include a list of design decisions agreed to during the workshop, as well as written responses to all review comments that have been provided by the OWNER. A maximum of six sets of drawings and related documents for the 30 percent design deliverable will be provided to the OWNER for review prior to the meeting.

## **Task 3 – 60 Percent Design Development**

3.1 60 Percent Design Development. During this task continued design and production of a 60 percent design package will take place. The 60 percent design will incorporate feedback from the 30 percent design review and continue to develop the design. The 60 percent design is anticipated to include:

- Changes from the Preliminary 30 Percent Design, and justification thereof
- Update of any BODR Design Criteria that has changed since 30 percent (if applicable)
- Updated equipment list
- Preliminary process control narratives (to be finalized as control strategies in Final Design)
- 60% Demolition drawings showing elements to be removed and some coordination notes
- 60% Process mechanical plans, sections, and selected details with location of major equipment, piping, and appurtenances; membrane equipment, minor piping may be partially complete
- A progress set of structural details
- 60% Control system network diagram

- 60% Piping and instrumentation diagrams (P&IDs) based on equipment selections, configuration, operating strategies and pipe sizes and valve types and sizes updated
- 60% Electrical overall one-line diagrams with applicable electrical room layouts and preliminary panel layouts
- 60% Preliminary power plans and schedules
- Draft 60% specifications with project-specific information
- Updated Construction sequencing (Prepared jointly with BC and JV)
- Input on Updated Construction schedule (Developed by RC)
- Updated Construction cost estimate (BY JV)
- Initial Construction planning (e.g. trailers, laydown, parking and truck access) (BY RC with BC assistance)

### 3.2 60 Percent Design Review:

A one half-day 60 percent design review meeting will be held at the 60 percent design milestone to walk all team members through the progress deliverable. This meeting is intended to be a comprehensive meeting with the team to discuss and make design decisions to be incorporated in the next phase of design. Meeting summary will be prepared and distributed electronically to the team for review and comment. The summary will include a list of design decisions agreed to during the workshop, as well as written responses to all review comments that have been provided by the OWNER. A maximum of six sets of drawings and related documents for the 60 percent design deliverable will be provided to the OWNER for review prior to the meeting.

## **Task 4 – 80 Percent Design Development**

4.1 80 Percent Design Development. During this task continued design and production of an 80 percent design package will take place. The 80 percent design will incorporate feedback from the 60 percent design reviews and continue to develop the design. The 80 percent design is anticipated to include:

- Changes from the 60 Percent Design, and justification thereof
- Update of any BODR Design Criteria that has changed since 60 percent (if applicable)
- Updated equipment list

- Updated process control narratives (to be finalized as control strategies in Final Design)
- 80% Demolition drawings showing elements to be removed and some coordination notes
- 80% Process mechanical plans, sections, and selected details with location of major equipment, piping, and appurtenances; membrane equipment, minor piping may be partially complete
- 80% Structural design
- 80% Control system network diagram
- 80% Piping and instrumentation diagrams (P&IDs) based on equipment selections, configuration, operating strategies and pipe sizes and valve types and sizes updated
- 80% Electrical overall one-line diagrams with applicable electrical room layouts and preliminary panel layouts
- 80% Preliminary power plans and schedules
- Draft 80% specifications with project-specific information
- Updated Construction sequencing (Prepared jointly with BC and JV)
- Input on Updated Construction schedule (Developed by RC)
- Updated Construction cost estimate (BY JV)
- Initial Construction planning (e.g. trailers, laydown, parking and truck access) (BY RC with BC assistance)

#### 4.2 80 Percent Design Review:

A one half-day 80 percent design review meeting will be held at the 80 percent design milestone to walk all team members through the progress deliverable as well as the GMP. This meeting is intended to be a comprehensive meeting with the team to discuss and make design decisions to be incorporated in the next phase of design. Meeting summary will be prepared and distributed electronically to the team for review and comment. The summary will include a list of design decisions agreed to during the workshop, as well as written responses to all review comments that have been provided by the OWNER. Updates to the design and drawings coming out of the workshop will take place during the 100% design in Phase 2. A maximum of six sets of drawings and related documents for the 80 percent design deliverable will be provided to the OWNER for review prior to the meeting.



## Task 5 – Permitting Services

During Phase 1B, permitting services will take place in order to prepare the design for eventual construction under Phase 2. Since no modifications are being made to the buildings, it is not anticipated that building permits will be necessary with the City of Roswell for this project. However this will be verified during Phase 1B. The following scope is anticipated under Phase 1B:

5.1 NPDES Update During Phase 1B, NPDES modifications will be undertaken to implement the phased permit to 20 mgd. Other permits are not anticipated as the facilities will not change from the current permitted process.

5.2 Local Limits Evaluation: A local limits evaluation will be completed for JCEC as follows”.

BC will evaluate existing local limits for WPCP in accordance with the 2004 U.S. EPA *Local Limits Development Guidance*.

- Evaluate existing Maximum Allowable Headworks Loadings (MAHLs) compared to WPCP influent loadings
- Population trends
- Industrial User (IU) inventory
- IU flow trends
- Treatment Plant Compliance History
- Any changes to the conditions or limiting criteria for which the existing local limits were calculated (e.g., changes in the NPDES permit or water quality standards)

BC will evaluate the list of POCs, together with the information above, to assess if any new POCs need a local limit, and calculate MAHLs.

BC will develop MAHLs, where applicable, for the following environmental criterion:

- Acute and chronic water quality standards
- NPDES permit limits
- Reuse standards and septage practices (if applicable)
- Sludge/Biosolids treatment and end uses, and/or sludge disposal and landfilling, and land application
- Treatment plant design criteria and process inhibition provided by Fulton County or others
- Protection of treatment works, collection system, and workers

- Once allowable headworks loadings are calculated for each applicable environmental criterion, the most stringent of these loadings is designated as the MAHL. The MAHL of each pollutant of concern will be converted to a mass-based local limit. Per Fulton County, local limits will be established as mass-based limits for industrial users rather than uniform concentration limits, with the flexibility to establish daily max and monthly average concentration limits based on permitted flow.

BC will submit the draft report of the completed local limits evaluation or development to Fulton County outlining the evaluation process and any recommendations concerning proposed limits changes. The report will include the following components:

- Guidance on the development of local limits on discharges to the WPCP
- Assumptions and rationale used during the development process
- Descriptions and sources of equations used for calculating local limits
- Sources and limitations of data utilized in the development of local limits
- Hard copies and PDF of all spreadsheets and calculation worksheets used in the evaluation process
- PDF summary of MAHL and MAIL determinations
- Proposed local limits and a comparison to existing local limits
- Recommendations based on technical criteria

Fulton County staff will be provided a draft report for review and comment. BC will incorporate Fulton County's comments into a final report suitable for submission to Georgia EPD for approval.

5.2 Comprehensive Nutrient Optimization Plan: BC will prepare a Comprehensive Nutrient Optimization Plan (CNOP) in accordance with the NPDES permit condition as follows:

*Within 24 months of the effective date of this permit, the Permittee shall develop and submit to EPD a Comprehensive Nutrient Optimization Plan (CNOP). Wastewater treatment efficiency optimization is an adaptive management strategy the Permittee shall use to limit the discharge of total nitrogen. The CNOP will include a suite of site specific best management practices. The CNOP shall, at a minimum, identify and quantify sources of nutrients entering the wastewater treatment plant, evaluate potential source reductions, identify and implement operational adjustments aimed to reduce nutrients, and establish annual nutrient reduction goals. The CNOP shall be updated annually and retained on site. Prior to the submittal of the CNOP, the permittee will submit semi-annual progress reports detailing the status of the*

*development and implementation of the CNOP to the assigned EPD Compliance Office.*

Per Georgia EPD guidance, the CNOP will consist of an evaluation of existing treatment processes for nutrient reduction and identify opportunities through influent source identification, operational adjustments designed to enhance nitrification and denitrification, minor retrofits such as the incorporation of anoxic zones, side-stream management opportunities, and minor upgrades, as applicable. The CNOP will establish quantitative and/or qualitative annual nutrient reduction goals.

BC will submit the draft CNOP to Fulton County for review. BC will incorporate Fulton County's comments into a final report suitable for submission to Georgia EPD for approval.

#### **Task 6 – Procurement and GMP Development (BC will support RC who will lead this)**

It is anticipated the during the procurement process outreach to subcontractors will take place as part of the GMP development. BC has planned for participating in a site tour / outreach effort for supporting this process.

BC has also planned for the support of GMP Development. BC will address questions during the GMP development period and will review the GMP in advance helping to identify the potential for gaps in the design and developing adequate contingency to address these gaps.

GMP Development includes those services necessary to advance development of the Project Phase 2 costs from the Opinion of the Probable Construction Costs provided at the completion of Phase 1A to a GMP proposal for the OWNER consideration and approval at the completion of Phase 1B.

A Procurement Plan will be developed by incorporating agreed to procurement procedures coordinated with the OWNER and the OWNER Purchasing Department. Plan will include a detailed approach to the procurement of the subcontractors, materials, suppliers and equipment required to complete the project. Selection criteria and solicitation procedures will be established as part of the plan. Trade Level RFP based competitive procurement method will be utilized with most of the Trade Packages. Plan will outline procedures for Limited Non-Competitive Procurement options for those scopes to be performed by JV Team.

Additionally, plan will allow early engagement of the core subcontractors, equipment and material suppliers to ensure design and cost accuracy while creating competitive procurement environment in support of the open book GMP development.

Phase 2 Overall Project Schedule (OPS) will be developed utilizing Primavera Project Scheduler. Work of the JV Team will be planned, scheduled, executed, and reported using the critical path method (CPM).

## **Key Assumptions and Limitations:**

Shown below are key assumptions and limitations to the scope of services described herein:

- Channel and tank mixers are assumed to be replaced with in-kind units – no additional evaluations of alternatives to the existing technologies are assumed to be needed.
- It is assumed that passive overflow and other work will not require hydraulic modeling efforts or field measurements to calibrate the model developed in Phase 1A.
- It is assumed that no building permits will be needed with City of Roswell.
- Any changes identified in the 80% design / GMP review would be made during final design in Phase 2.
- BC will coordinate with Dupont and our proposal assumes that a mutual agreeable schedule for achieving all 3 deliverables within a 10 month period is achievable.
- It is assumed that any additional BioWin modeling required in Phase 1B would be minor and not involve looking at alternative conditions or operating scenarios beyond those already modeled in Phase 1A.
- It is assumed that membrane system related upgrades and design operating conditions will align with the Membrane supplier proposal.
- It is assumed that the canopy/awning requested at the side entrance to the Education Building will be a small/simple pre-engineered structure.
- It is assumed that existing membrane tank covers will remain, as Membrane supplier stated in their proposal that no significant modifications are needed.
- It is assumed that, per Veolia statements and discussions in Workshops, existing equipment (unless noted otherwise herein such as channel/tank mixers) is in acceptable condition to continue to be used, and will not need to be replaced or upgraded in this project.
- It is assumed that ancillary upgrades covered herein will follow the approaches presented in the Workshops, and additional alternatives evaluations or related efforts will not be needed.
- It is assumed that the membrane replacement will utilize the same existing control panels (with upgraded components) and that RAS pump discharge flowmeters will not be installed.

Johns Creek Environmental Campus  
Membrane System Upgrade & Expansion, Phase 1B  
Compensation Schedule

Task	Amendment No. 1 Value (Lump Sum)	MB/FBE Subcontractor Value* (Part of Amendment No.1 Value)
Task 1 - Project Management	\$ 123,238	\$ 10,000.00
Task 2 - 30% Design Development	\$ 419,633	\$ 105,500.90
Task 3 - 60% Design Development	\$ 456,580	\$ 109,215.70
Task 4 - 80% Design Development	\$ 250,955	\$ 57,301.08
Task 5 - Permitting Services	\$ 103,298	\$ 25,000.00
Task 6- GMP Development	\$ 103,329	\$ 56,517.68
<b>Subtotal Task Cost</b>	<b>\$ 1,457,034</b>	<b>\$ 363,535.36</b>
Dupont Shop Drawings / Submittals (Dupont)	\$ 56,700	-
Dupont Design Assistance Services (Dupont)	\$ 88,400	-
<b>TOTAL</b>	<b>\$ 1,602,134</b>	<b>\$ 363,535.36</b>

EXHIBIT B2 FORM

SUB-CONTRACTORS (INCLUDING SUPPLIERS) TO BE UTILIZED IN THE  
PERFORMANCE OF THE SCOPE OF WORK/SERVICES(S), IF AWARDED ARE LISTED BELOW

**Certification Designation:** AABE – African American Business Enterprise, HBE – Hispanic American Business Enterprise, NABE – Native American Business Enterprise, ABE – Asian American Business Enterprise, FBE – Female Business Enterprise, MBE – Minority Business Enterprise, SDVBE – Service Disabled Veteran Business Enterprise, SBE – Small Business Enterprise, DBE – Disadvantage Business Enterprise

Subcontractor Name	Email Address	City, State, Phone	Ethnic Group	Certification Agency	Certification Designation	Scope of Work	Dollar Amount	Percentage
Player and Company, LLC	brischar@playerco.com	Atlanta, GA, (404) 351-3481	AA	COA	AABE	Electrical	\$49,035	3%
SL King & Associates	acarter@slking.com	Atlanta, GA , 404.524.5800	AA	FC	AABE	Design and Commissioning	\$277,500	17%
VLW Group	valister@vlwgroupllc.com	Decatur, GA, 678.922.2480	AA	FC	AABE	Scheduling	\$12,000	1%
Q Solutions	qsolutionsinc@qsiworld.com	Tucker, GA - 770.939.6500	A	FC	FBE	Permitting	\$25,500	2%