



CITY OF COLUMBIA
AGENDA MEMORANDUM

MEETING DATE: July 19, 2016

DEPARTMENT: Utilities and Engineering

FROM: *Joey Jaco, Director of Utilities and Engineering*

SUBJECT: East Rocky Branch Improvements Phase II

PRESENTER: Joseph D. Jaco

FINANCIAL IMPACT: Funding for this Amendment will come from (5529999-SS733702-658650)

ORIGINAL BUDGET: \$1,920,000.00

BUSINESS PROGRAM: Mentor Protege Program

CLEAN WATER 2020?: Yes

FEMA DR-SC4241?: No

The above referenced Amendment is to compensate Hussey Gay Bell for additional engineering services for the construction of approximately 2,700 additional linear feet of 42” gravity sewer to replace existing gravity sewer from manhole 14373MH to manhole 24193MH, which is also a part of Phase 2, but was originally proposed to be done by others, as requested by the Utilities and Engineering Department. The original budget of \$1,920,000.00 was decreased in the amount of \$720,000.00 to reduce the level of professional services required to complete the design and administration of the project due to fewer outside schedule drivers.

Hussey Gay Bell is a firm headquartered in Savannah, GA with a local office located in Columbia, SC. Hussey Gay Bell mentors Civil Engineering of Columbia under the Mentor Protégé Program. The following subconsultants will provide additional services: Civil Engineering of Columbia (Protégé), a SBE firm with headquarters in Columbia, SC, will provide assistance with construction administration and observation services. Terracon Consultants, Inc., a firm with Olathe, KS and a local office in Columbia, SC, will provide geotechnical services. MA Engineering Consultants, Inc., a firm with headquarters in Cary, NC, will provide subsurface utility engineering services. Environmental Permitting Consultants, a firm with headquarters in Greenville, SC and a local office in Columbia, SC will provide environmental permitting services. This is a Clean Water 2020 project. Services to be performed will impact City Council District 2 and portions outside City limits.

New Contract Amount: \$1,530,000.00

\$306,000.00 (20.00% of the total contract value) awarded to Civil Engineering of Columbia, will provide assistance with construction administration and observation services.

\$21,000.00 (1.37% of the total contract value) awarded to Terracon Consulting, will provide geotechnical services.

\$10,500.00 (0.69% of the total contract value) awarded to MA Engineering, will provide subsurface utility engineering services.

\$17,500.00 (1.14% of the total contract value) awarded to Environmental Permitting Consultants, will provide environmental permitting.

Original Contract Amount: \$1,920,000.00

Previous Contract Amendment subtracted: \$720,000.00

This Contract Amendment Adds: \$330,000.00

New Contract Total: \$1,530,000.00

The Legal Department has reviewed the Agreement. The Director of Utilities and Engineering and the ACM for Operations recommend its approval.



Clean Water 2020
Columbia's Clear Vision for Clean Water



DHM: February 24, 2016
Mann Working\MISC\Maps

-  Sewer Manholes
-  Sewer Pressurized Mains
-  Pump Station
-  Sewer Gravity Mains
-  Phase 2B



1 inch = 350 feet

0 75 150 300 450
Feet

East Rocky Branch Phase 2B

Prepared For: Clean Water 2020

Agreement for Engineering Services
East Rocky Branch Improvement Phase II
Project Funding Number: 5529999-SS733702-658650

Hussey Gay Bell and City of Columbia, SC

Contract Amendment # 2

June 27, 2016

Description of Change: Request change in Agreement for Engineering Services between the City of Columbia (City) and Hussey Gay Bell (Engineer) dated August 18, 2015 (Agreement) amended on January 27, 2016. This amendment is to provide construction of approximately 2,700 additional linear feet of 42" gravity sewer to replace existing gravity sewer from manhole 14373MH to manhole 24193MH. This information is more clearly defined in Attachment A, hereto Funding Source: 5529999-SS733702-658650

All other provisions of the Agreement, except as herein modified or changed, remain in full force and effect.

Proposed Change and Basis for Payment:

Original Contract Price:	\$ 1,920,000.00
Previous Change Orders:	\$ (720,000.00)
This Change	\$ 330,000.00
Revised Contract Price:	\$ 1,530,000.00

Additional funds are to be provided in the following manner: 5529999-SS733702-658650

This Change is Acceptable:

By: Kevin F. Strickland Hussey Gay Bell.
KEVIN F. STRICKLAND Title: MANAGING DIRECTOR

Recommended for Approval: Joseph D. Jaco Director of Utilities and Engineering
Joseph D. Jaco, P.E.

Recommended for Approval: _____ Assistant City Manager for Operations
Melissa Gentry, P.E.

Approval of Change: _____ City Manager
Teresa Wilson

COST CHANGE AMENDMENT DETAILS

**PROJECT NAME: East Rocky Branch Improvements Phase 2
CIP NUMBER: SS733702
Contract Amendment #2**

I. SCOPE ADDITION/DELETION

Amendment 2 addresses the addition of an additional 2,700 linear feet of 42" gravity sewer to replace existing gravity sewer from manhole SS-RB05-14373-MH to manhole SS-RB05-24193-MH.

Task 200 - Preliminary Planning, Investigation, Engineering and Alternative Analysis

In addition to the Amendment 1 modification, this task will include an addition/update to the current PER and not a separate PER.

Task 300 - Survey and Utility Mapping

The current project scope will remain the same for the additional 2,700 linear feet of gravity sewer as defined above.

Task 400 - Geotechnical Investigation

CONSULTANT will utilize Terracon for geotechnical services to provide subsurface soil conditions along the additional proposed project routing. Three (3) borings to depths ranging from approximately 20 to 25 feet each (or auger refusal, if shallower) will be taken along the project route. Information obtained from the borings will be used to design pipe bedding details, evaluate soils for potential dewatering requirements, the capability of soils to be effectively dewatered, estimate rock excavation, and estimate the amount of additional suitable backfill material needed (if any) for the project.

Four (4) split barrel samples will be obtained in the upper ten (10) feet of each boring and at intervals of five (5) feet thereafter. Ground water levels will be observed and recorded after drilling, at the end of the day, and if present again at 24 hours. After which, all boreholes will be backfilled with grout.

Task 500 - Final Design

The current project scope will remain the same; Amendment 2 is addressing the addition of 2,700 linear feet of gravity sewer as defined above.

Task 600 - Permits and Property

The permitting scope will remain the same, but CONSULTANT will utilize Environmental Permitting Consultants (EPC) to handle this work.

At this time, there will be no more than four (4) additional easements.

Task 800 - General Administration of Construction Contract

The scope has been modified to include additional construction of approximately 2,700 linear feet of 42" gravity sewer to replace existing gravity sewer from manhole SS-RB05-14373-MH to manhole SS-RB05-24193-MH. The engineering services will follow the original contract scope language and modifications as set forth in Amendment 1. Civil Engineering of Columbia, our protégé firm, will be allocated 20% of the project during Task 800, Engineering Services During Construction.

Task 1000 Project Closeout

The current project scope will remain the same; Amendment 2 is addressing the additional 2,700 linear feet of gravity sewer as defined above.

II. COMPENSATION

The following changes to the current SS733702 contract are requested in this amendment:

- Task 200 - "Preliminary Planning, Investigation, Engineering and Alternative Analysis" increase dollar amount by \$72,000 (from \$122,000 to \$194,000).
- Task 300 - "Survey and Utility Mapping" increase dollar amount by \$67,000 (from \$116,000 to \$183,000).
- Task 400 - "Geotechnical Investigation" increase dollar amount by \$4,400 (from \$21,000 to \$25,400).
- Task 500 - "Final Design" increase dollar amount by \$119,000 (from \$281,400 to \$400,400).
- Task 600 - "Permits and Property" increase dollar amount by \$46,000 (from \$76,800 to \$122,800).
- Task 1000 - "Project Closeout" increase dollar amount by \$9,000 (from \$21,000 to \$30,000).

The new contract values based on the above recommended changes are presented below:

Task Number	Task Title	Original Contract	Previous Amendments	Current Amendment	New Contract Value
Task 100	Evaluation and Design Phase Administration	\$96,000	\$0	\$0	\$96,000
Task 200	Preliminary Planning, Investigation, Engineering and Alternative Analysis	\$249,600	\$(127,600) [CA #1]	\$72,000	\$194,000
Task 300	Survey and Utility Mapping	\$172,800	\$(56,800) [CA#1]	\$67,000	\$183,000
Task 400	Geotechnical Investigation	\$48,000	\$0	\$17,000	\$65,000
Task 500	Final Design	\$806,400	\$(525,000) [CA#1]	\$119,000	\$400,400
Task 600	Permits and Property	\$76,800	\$0	\$46,000	\$122,800
Task 650	Permits and Property (Permit Fees)	\$0	\$5,000 (NTE) [CA#1]	\$0	\$5,000 (NTE)
Task 700	Bidding and Award	\$28,800	\$0	\$0	\$28,800
Task 800	Engineering Services During Construction	\$441,600	\$(51,600) [CA#1]	\$0	\$390,000
Task 1000	Project Closeout	\$0	\$21,000 [CA#1]	\$9,000	\$30,000
Task 1100	Additional Services	\$0	\$15,000 (NTE) [CA#1]	\$0	\$15,000 (NTE)
Total Fee		\$1,920,000	\$(720,000) [CA#1]	\$330,000	\$1,530,000

III. SCHEDULE

No additional time has been added to the schedule from the original contract schedule. Once approval to begin work has been given by the City, the schedule will be updated to reflect appropriate dates.

IV. SUBCONSULTANT FIRM INFORMATION

The original contract included Civil Engineering of Columbia (CEC) as a Protégé Firm and Terracon as a sub-consultant Firm, for a Protégé percentage of 20.0% and total combined Protégé/Sub-consultant fee of 20.7%. MA Engineering Consultants was added as a sub-consultant Firm with CA#1. Environmental Permitting Consultants (EPC) is being added as a sub-consultant Firm with CA#2. The updated Protégé and sub-consultant percentages and amounts are listed in the table below for the original contract and each contract

amendment, as well as the updated total. The Protégé participation will remain at 20.0%. This amendment will increase the total combined Protégé/Sub-consultant fee from the original contract from 20.7% to 23.2%

	Total Contract Amount	CEC Amount (Protégé)	% of Contract Amount	Terracon Amount (Sub-cons.)	% of Contract Amount	MA Eng. Amount (Sub-cons.)	% of Contract Amount	EPC Amount (Sub-cons.)	% of Contract Amount
Original Contract	\$1,920,000	\$384,000	20.0%	\$14,300	0.7%	\$0	0.0%	\$0	0.0%
CA#1	\$(720,000)	\$(144,000)	(20.0)%	\$0	0.0%	\$8,500	1.2%	\$0	0.0%
CA#2	\$330,000	\$66,000	18.8%	\$6,700	2.0%	\$2,000	0.6%	\$17,500	5.3%
New Total Contract Amount	\$1,530,000	\$306,000	20.0%	\$21,000	1.4%	\$10,500	0.7%	\$17,500	1.1%



CITY OF COLUMBIA

Department of Utilities and Engineering
Compliance Division
P.O. Box 147 | Columbia, South Carolina 29217
Phone: 803-545-3049 Fax: 803-545-4130

MENTOR PROTÉGÉ PROGRAM Implementation Plan

Date: May 26, 2016

Project Number: CIP 99799702

Mentor: Hussey Gay Bell

Project Name: Roddy Branch SS Replacement

Protégé: Civil Engineering of Columbia

Duration of the Project: 2 years

Project Contract Amount: \$1,630,000

Protégé Amount: \$308,000

Statement of Commitment: Both Mentor and Protégé are committed to providing an adequate amount of resources and effort to execute the plan below. Mentor and Protégé acknowledge the Implementation Plan is a joint plan and agree to meet at least quarterly to verify compliance with this Plan.

1. How do the Mentor and Protégé intend to work together on the designated project? Address contractual relationship, general roles and informal learning arrangements.

The protège will provide assistance with permitting and easement preparation and will be primarily responsible for construction administration and inspections.

2. How will the specific, quantitative goals in the Annual Business Plan and MPP Agreement be implemented via the work on the project? Address general goals here and specific goals in question 9.

Protège will gain experience with gravity sewer projects of this size and magnitude which can be translated to opportunities for future work.

3. How will the team focus on developing protégé's business and implementing the actions necessary to obtain results reflected in the Mentor-Protégé Agreement? Identify milestones, thresholds, or other indicators team that would indicate success is being achieved.

Once project is complete Protège will have experience with gravity sewer projects of this size and magnitude that can be included in the company's resume for winning future work.



CITY OF COLUMBIA

**Department of Utilities and Engineering
Compliance Division
P.O. Box 147 | Columbia, South Carolina 29217
Phone: 803-645-9049 Fax: 803-645-4130**

4. Proposed manpower and resources from both the Mentor and the Protégé is required for the project. Address key personnel, equipment/materials, and insurance/bonding. Address special arrangements where applicable.

Mentor:

Mentor will provide the Project Manager, Project Engineer, Design support staff, survey team and required equipment

Protégé:

Protége will provide design support staff, construction administrator and inspector

Subcontractors:

See attached Exhibit D - Subconsultant Firm Information Records.

Special Arrangements:

N/A

5. What scope of work to be performed by each participant of the MFP team?

a. Description of Mentor's responsibilities:

Mentor will provide design and overall project management including direction of proteges services.

b. Description of Protégé's responsibilities on project:

Protége will assist with permitting, easement preparation and provide construction administration and inspections

c. Description of responsibilities that will be completed as a team:

All work performed by Protége will be in partnership with Mentor.

6. What is the anticipated duration (in months) of each major phase of the project? During which phases will the Protégé be utilized?

See attached schedule. Protége will be involved in the permitting, easements and construction phases.



CITY OF COLUMBIA

**Department of Utilities and Engineering
Compliance Division
P.O. Box 147 | Columbia, South Carolina 29217
Phone: 803-645-3049 Fax: 803-645-4130**

7. How will the team comply with and maintain the focus on the requirements of the program for the duration of the project?

The Team will have regular meetings to discuss the effectiveness of the program and make adjustments as necessary to assure a successful outcome.

8. What are the team's specific, quantitative goals and milestones for the current project?

The team's goals are to provide the City a project on time and on-budget and are as defined in the scope and schedule of the contract.

9. Outline of Regularly Scheduled meeting between Mentor and Protégé (Progress reporting).

Progress reporting/meetings will be conducted on a routine basis of no less than once per month and will correspond with the City's regularly scheduled progress meetings.

10. Define payment schedule and financial terms identifying milestones for initial, progress and final payments.

Payment schedule and financial terms will match that included in the Mentor's contract with the City of Columbia.



CITY OF COLUMBIA

Department of Utilities and Engineering
 Compliance Division
 P.O. Box 147 | Columbia, South Carolina 29217
 Phone: 803-545-3049 Fax: 803-545-1130

11. List the Subcontractors that will be used on this project, as well as the information requested below: (The Subcontractor(s) listed below will NOT consist of your Protégé.)

Subcontractor's Name	Telephone	Address	Who will they report to?	Contract Amount	MPP, MBE, WBE, SBE
Terracon Consultants	803-741-8800	621 Clemson Road	Hussey Gay Bell	\$21,000	
MA Engineering Cons.	877-823-2123		Hussey Gay Bell	\$10,500	
Env. Permitting Cons.	884-271-3040		Hussey Gay Bell	17,500	

12. What percentage of the project is being implemented by the Protégé? Must equate to a minimum of 20% of total contract amount.

Protégé Contract Value: <u>\$308,000</u>	
Percentage of Contract: <u>20%</u>	(Minimum of 20% of total contract amount is required)



CITY OF COLUMBIA

Department of Utilities and Engineering
Compliance Division
P.O. Box 147 | Columbia, South Carolina 29217
Phone: 803-545-3049 Fax: 803-545-4130

MENTOR-PROTEGE IMPLEMENTATION PLAN SIGNATURE SHEET

IN WITNESS WHEREOF, the parties hereto have caused these presents to be executed by their proper officials thereunto duly authorized as of the dates below indicated:

EXECUTED by Hussey Gray Bell (Mentor Firm) this 1st day of June 2016.
Corporate SEAL

By: Kevin F. Strickland Kevin F. Strickland
Title: Managing Director

ATTEST:
By: Keith Uthman Keith Uthman
Title: Project Manager

EXECUTED by CFC (Protégé Firm) this 3rd day of June 2016.
Corporate SEAL

By: Tal Rob
Title: VP

ATTEST:
By: Kevin F. Strickland
Title: Managing Director

RECOMMENDED FOR APPROVAL:

EXECUTED by the Department of Utilities & Engineering, Compliance Division on this 21st day of June 2016.

By: Ayesha Driggers
Title: Compliance Administrator

Exhibit D

**City of Columbia
CIP # 88733702
Rocky Branch Sanitary Sewer Replacement**

SUBCONSULTANT FIRM INFORMATION RECORDS

The Engineer shall list all firms, including minority and female owned firms, providing sub-consulting services under this Agreement. The list shall be submitted in the format provided below. Any proposed changes must be submitted in writing to the City, including the reason(s) for the proposed changes, prior to initiation of any action by the Engineer. Any invoices submitted for payment under this Agreement must include the dollar amount to be paid to each firm listed below for the invoice period.

Firm Name and Address	Contact Name and Telephone #	Group/Classification (MBE, WBE, SBE, Non MBE/WBE/SBE) Select ONE	Services to be Provided	Dollar Value of Services*
Civil Engineering of Columbia	Josh Rabon, PE 803-798-2820	SBE (Protégé)	Assistance with Construction Administration and Observation	\$306,000
Terracon Consultants, Inc.	Phillip Morrison, PE 803-741-9000	NON-MBE/WBE/SBE	Geotechnical Services	\$21,000
MA Engineering Consultants, Inc.	M. Hart Weatherford, PE, PLS, CFM 877-623-2123	NON-MBE/WBE/SBE	Subsurface Utility Engineering	\$10,500
Environmental Permitting Consultants	Richard Bates 864-271-3040	NON-MBE/WBE/SBE	Environmental Permitting	\$17,500

*Estimated fee; fee may vary based on actual services provided.
Please clearly note the Protégé Firm in the "Group" Column.
Add additional rows as needed.