



December 8, 2021

Mr. Srikanth Yamala
Director of Public Works and Utilities
Hall County Government
2875 Browns Bridge Road
Gainesville, GA 30504

**Re: Change Order 1: RFP #41-012 - Solid Waste Master Plan Study
Allen Creek Landfill Feasibility Study**

Dear Mr. Yamala,

Burns & McDonnell Engineering Company, Inc. (Burns & McDonnell) sincerely appreciates the opportunity to provide the enclosed scope of work to evaluate the feasibility of reopening the Allen Creek Landfill for solid waste disposal. The feasibility study will be completed as change order to the Solid Waste Master Plan project. Report sections from the Allen Creek Landfill feasibility study will be incorporated into the final Solid Waste Master Plan report.

We look forward to continuing to assist Hall County on its Solid Waste Master Plan initiatives and evaluation of the Allen Creek Landfill site. Please contact Veronica Roof at 770-956-6634 or vroof@burnsmcd.com with any questions.

Sincerely,

Burns & McDonnell Engineering Company, Inc.

A handwritten signature in black ink, appearing to read 'Tara McCullen'.

Tara V. McCullen, CHMM
Principal / Regional Environmental Services Manager

A handwritten signature in black ink, appearing to read 'V Roof'.

Veronica Roof, JD
Project Manager

CHANGE ORDER 1:

ALLEN CREEK LANDFILL FEASIBILITY STUDY

The following scope of work is to complete a Feasibility Study to:

- ▶ Mine the existing unlined Allen Creek Landfill,
- ▶ Place the mined landfill waste on a new lined landfill cell to be constructed at the 400+ acre Allen Creek facility, and
- ▶ Develop a new larger landfill facility at the Allen Creek Landfill location.

The tasks presented in this proposal will be completed sequentially, such that if an early task determines it is not feasible to mine and build a new landfill at Allen Creek, the budget for the subsequent tasks will not be expended. Each task will conclude with a report section that will be incorporated into the Solid Waste Master Plan Study final report that is currently in progress.

Task 1: Site Assessment

During the Solid Waste Master Plan project, Burns & McDonnell toured the Allen Creek Landfill and discussed the potential for the site to be redeveloped and used as a long-term waste management solution for the County. Burns & McDonnell will review the existing conditions at the Allen Creek Landfill and identify opportunities and challenges with redeveloping the site. The site assessment will be used to develop the permit matrix, waste mining plan, and conceptual design as described in subsequent tasks.

The site assessment will include a review and evaluation of the following:

- ▶ Landfill design and permit documentation
- ▶ Groundwater monitoring data
- ▶ Landfill gas monitoring data
- ▶ Remediation reports
- ▶ Site topography
- ▶ Buffer area
- ▶ Wetlands and drainageways
- ▶ Existing entrance road (Allen Creek Road)
- ▶ Neighboring properties

Task 1 Deliverables:

- ▶ Submit Request for Information for related documents provided by County
- ▶ Report Section that describes the site assessment

Task 2: Environmental Review and Permit Matrix Development

Burns & McDonnell will provide an environmental permit matrix specific to the project, which will identify potentially required environmental permits or other authorizations from federal, state, and local agencies/entities per project specifics. Additionally, the permit matrix will include a review of requirements for the project to include: solid waste facility permit modifications, wetland and waterway permitting, stormwater plans, Section 404 of the Clean Water Act permitting, floodplain authorization, protected species compliance, and cultural resources permissions.

The permit matrix will provide line items for each potential permit or authorization, denoting approximate timeframes, fees, triggering thresholds, and summary of needed items to complete each potential requirement.

This task assumes that Burns & McDonnell will be allowed to contact federal, state, and local agencies/entities to discuss the project for determining permitting requirements.

Task 2 Deliverables:

- ▶ Report Section that includes the permit matrix and identifies the key permitting requirements

Task 3: Waste Mining Strategy and Challenges

Redevelopment of the Allen Creek Landfill would include mining in-situ waste from old, unlined cells to be placed in new, lined cells. For this task, Burns & McDonnell will develop a plan that discusses the following:

- ▶ Sequencing of mining operations with the construction of new cells and other landfill facilities
- ▶ Equipment, labor, and space requirements for mining operations
- ▶ Potential for recycling metal from existing waste
- ▶ Use of mechanically stabilized earthen (MSE) walls to maximize landfill capacity
- ▶ Health and safety considerations
- ▶ Pollution prevention and environmental monitoring considerations

Task 3 Deliverables:

- ▶ Report Section that describes the waste mining strategies and challenges

Task 4: Conceptual Facility Design

The project team will create a conceptual design for the redevelopment of the Allen Creek Landfill. The results of Tasks 1-3 will serve as the foundation of the design. The conceptual facility design will include:

- ▶ Conceptual-level base and final cover grading plans
- ▶ Scale house and public drop-off location
- ▶ Material recovery facility location
- ▶ Leachate management facility location
- ▶ Equipment maintenance and storage facility location
- ▶ Site roads

As part of this task, members of the project team will give a presentation which summarizes the key findings and recommendations from the Feasibility Study. The presentation will be given after Task 5 is complete to incorporate opinion of probable costs and financial plan information evaluated as part of that task. Members of the project team will be available following the presentation to answer any remaining questions from the County.

Task 4 Deliverables:

- ▶ Report Section that summarizes the conceptual facility design
- ▶ A set of figures which show conceptual grading designs and locations of landfill facilities as described above
- ▶ Presentation given by members of the project team

Task 5: Opinion of Probable Cost and Financial Plan

As part of the scope, Burns & McDonnell will develop an opinion of probable cost for the construction of new landfill facilities and mining the existing waste. The cost estimates will be considered “order of magnitude” level such that they can be used for medium to long-term planning purposes. The cost estimates will be developed in

present value and inflated at a standard inflation rate to the year that they are anticipated to be completed. A table presenting the construction cost estimates and timing will be developed.

It should be noted that the accuracy of the opinion of probable costs are not guaranteed. Burns & McDonnell will rely on bid results from similar projects and professional opinion to develop the opinions of probable costs; however, there are many factors that could impact future actual pricing at bid time including: material supply, economic conditions, labor availability, market conditions for similar projects, etc.

The capital costs will be incorporated into a pro forma financial plan. The pro forma financial plan will consider operational costs by using existing operational costs (to be provided by the County) and project them forward over the length of the pro forma period. The avoided cost of remediation of the landfill via other remediation alternatives (e.g., gas extraction) will be taken into consideration when developing the pro forma financial plan for the new landfill.

Task 5 Deliverables:

- ▶ Report Section that discusses the opinion of probable cost and the pro forma financial plan

Budget

The following table summarizes the proposed budget for this scope of work. Work will be invoiced on a time and materials basis in accordance with the attached rate sheet (BMR22-5A). The total fee presented in the table below will not be exceeded without written authorization by the County.

Task	Budget
Task 1: Site Assessment	\$13,600
Task 2: Environmental Review and Permit Matrix Development	\$17,400
Task 3: Waste Mining Strategy and Challenges	\$18,800
Task 4: Conceptual Facility Design	\$41,400
Task 5: Opinion of Probable Cost and Financial Plan	\$13,900
Total	\$105,100

Schedule

It is anticipated that the scope of this project will require six months to complete following County authorization to proceed.

Assumptions

The following assumptions are incorporated in this proposal:

- ▶ The opinion of probable costs prepared as part of the project will be rough order of magnitude estimates intended to be used for initial budgetary planning purposes only. As noted above, the accuracy of the opinion of probable costs are not guaranteed. Burns & McDonnell will rely on bid results from similar projects and professional opinion to develop the opinions of probable costs; however, there are many factors that could impact future actual pricing at bid time including: material supply, economic conditions, labor availability, market conditions for similar projects, etc.
- ▶ Structural, electrical, and mechanical calculations are excluded from the scope of this project.
- ▶ Utility locates are excluded from the scope of this project. If available, County-provided utility locate data will be utilized for the conceptual design analysis.

- ▶ Geotechnical exploration and testing are excluded from the scope of this project. County-provided geotechnical data will be utilized for the site assessment review. If geotechnical data is not available, Burns & McDonnell will utilize publicly available information.
- ▶ Onsite surveying is excluded from the scope of this project. County provided survey data will be utilized for the site assessment review. If County survey data is not available, Burns & McDonnell will utilize publicly available information.
- ▶ The task deliverables included with this scope of work will be incorporated into the Solid Waste Master Plan report that is currently in progress.
- ▶ The final presentation will be in person in Hall County and attended by the Burns & McDonnell team member feasibility lead. The presentation task included in this scope of work includes preparation, travel costs, and actual presentation.
- ▶ The Conceptual Facility Design task does not include conceptual design of the interior portion of the site buildings. This includes the proposed material recovery facility, shop, scale house, and other supporting buildings. The conceptual facility design will include the location of the buildings, and approximate size and orientation.

Schedule of Hourly Professional Service Billing Rates

Position Classification	Classification Level	Hourly Billing Rate
General Office *	5	\$65.00
Technician *	6	\$83.00
Assistant *	7	\$99.00
	8	\$134.00
	9	\$161.00
Staff *	10	\$183.00
	11	\$202.00
Senior	12	\$223.00
	13	\$246.00
Associate	14	\$254.00
	15	\$256.00
	16	\$258.00
	17	\$262.00

NOTES:

- Position classifications listed above refer to the firm's internal classification system for employee compensation. For example, "Associate", "Senior", etc., refer to such positions as "Associate Engineer", "Senior Architect", etc.
- For any nonexempt personnel in positions marked with an asterisk (*), overtime will be billed at 1.5 times the hourly labor billing rates shown.
- For outside expenses incurred by Burns & McDonnell, such as authorized travel and subsistence, and for services rendered by others such as subcontractors, the client shall pay the cost to Burns & McDonnell plus 10%.
- Monthly invoices will be submitted for payment covering services and expenses during the preceding month. Invoices are due upon receipt. A late payment charge of 1.5% per month will be added to all amounts not paid within 30 days of the invoice date.
- The services of contract/agency and/or any personnel of a Burns & McDonnell subsidiary or affiliate shall be billed to Owner according to the rate sheet as if such personnel is a direct employee of Burns & McDonnell.
- The rates shown above are effective for services through December 31, 2022, and are subject to revision thereafter.