

AMENDMENT NO. 1
To
AGREEMENT For PROFESSIONAL ENGINEERING SERVICES
Between
BURNS & McDONNELL ENGINEERING COMPANY, INC.
Centennial, Colorado
and
CITY OF RAPID CITY, SOUTH DAKOTA

This Contract amendment is made by and between Burns & McDonnell Engineering Company, Inc., a Missouri Corporation and City of Rapid City, South Dakota, this 2nd day of October, 2012, for the Rapid City Landfill Cells 15 & 16 Landfill Liner and Leachate Collection System Design Project (LF11-1974)

Whereas, it is the mutual desire of the parties hereto to amend the AGREEMENT for PROFESSIONAL ENGINEERING SERVICES entered into on the 7th day of January 2012, hereinafter called the Existing Agreement, and amended on the 2nd of October, 2012, hereinafter called Amendment No. 1.

Therefore, it is hereby agreed that the Existing Agreement be amended as follows:

SCOPE OF SERVICES

Add the following to Section 1.2

1.2.3 Perform the tasks described below:

- Task 1 – Design
 - Cell 15/16 Stormwater/Sedimentation Basin Access
 - Prepare a grading design to enable the City to pump stormwater out of the Cell 15 & 16 stormwater/sedimentation pond after construction is complete. The design will include a grading plan for truck access to sediment pond bottom.
 - Storm Water Pollution Prevention Plan (SWPPP)

Burns & McDonnell's subconsultant, CETEC Engineering, will perform the work related to the Storm Water Pollution Prevention Plan (SWPPP) preparation and associated erosion control plans. The following documents will be prepared for the Cell 15 and 16 immediate work area, the Kahler Property (borrow area only), the leachate line work area to Catron Blvd, and the Johnson Property (stockpile location only). CETEC's proposal to Burns & McDonnell for this work is included in Exhibit D. Only work and deliverables specified in CETEC's proposal will be completed. Assumptions related to this task are also included in Exhibit D.

 - Temporary sediment control plans
 - Permanent stabilization erosion control plans
 - Storm Water Pollution Prevention Plan in general conformance with South Dakota Department of Environment and Natural Resources

- Notice of Intent requirements and the City of Rapid City Storm Water Quality Manual. This includes the Notice of Intent.
- Realign Private Main Leachate Line and Reconfiguration of Connection to City's Sanitary Sewer System
 - Realign current leachate sewer layout to tie into to Manhole I10-027 (CETEC Manhole #6), rather than Manhole I10-026 (CETEC Manhole #7).
 - Perform necessary design calculations and drawing modifications to support the realignment.

 - Task 2.0 – Cells 15 and 16 Base Grade Modifications

If the work executed as part of Tasks 3.0 – 9.0 (see below) results in inadequate suitable soil liner quantities and/or groundwater nature and occurrence deems appropriate, Burns & McDonnell will raise the base grades of Cells 15 and 16 (raising the base grades will be performed as part of the original contract scope of work). Task 2.0 will commence upon written approval by City. Work to be performed under Task 2.0 includes the following:

 - Evaluate the economic and technical feasibility of constructing the liner out of GCL instead of soil.
 - If GCL is deemed the most desirable alternative, submit a permit modification to the SD DENR to permit GCL as the liner material for Cell 15 and 16. This includes:
 - \$5000 permit fee (to be paid directly to SD DENR by the City)
 - Formal request for substitution of GCL for soil liner
 - HELP Modeling
 - Equivalency demonstration – to be provided through supplier research.
 - Modify the grading plan, cross sections, and details to reflect GCL use.
 - Create geocomposite and GCL technical specifications.

 - Task 3.0 – Work Plan for Additional Cell 15 Investigation
 - The purpose of this work plan and subsequent field investigation activities is: 1) potentially avoid the loss of airspace in the design, 2) further evaluate the nature / occurrence of surface water and groundwater, 3) evaluate the relationship between the surface water and groundwater and the currently permitted base grade elevations of the landfill, and 4) identify potential additional soil liner material.
 - Prepare test pit and boring work plan for the additional subsurface investigation in Cell 15.

 - Task 4.0 – Work Plan for Kahler Property Investigation
 - The purpose of the investigation of the Kahler Property is to identify additional suitable soil liner material.
 - Review existing information from past investigations on the Kahler Property

- Prepare work plan for the suitable soil liner investigation activities at the Kahler Property.
- Task 5.0 – Cell 15 Additional Investigation
 - Perform additional subsurface investigation in Cell 15 to further define the following: 1) potentially avoid the loss of airspace in the design, 2) further evaluate the nature / occurrence of surface water and groundwater, 3) evaluate the relationship between the surface water and groundwater and the currently permitted base grade elevations of the landfill, and 4) identify potential additional soil liner material.
 - Perform a field investigation including:
 - drilling and logging 4 boreholes
 - excavating and logging 3 test pits (test pits will be excavated by City personnel using City equipment)
 - surveying borehole and test pit locations
 - sampling and testing potentially suitable soil liner materials
- Task 6.0 – Cell 15 Borrow Source Evaluation
 - Data collected during field investigation activities will be reviewed and evaluated. All available data will be used for cell design and to develop a placement range for the landfill liner.
 - Prepare site investigation data and results for inclusion in the Preliminary Design Report, including suitability of onsite materials, soil liner material volume calculations, soil liner placement range, and soil testing results.
 - Refine groundwater elevations and define relationship to landfill base grades and liner placement.
- Task 7.0 – Kahler Property Soil Liner Investigation
 - Subsurface investigation is being performed to identify potentially suitable soil liner material.
 - Perform a field investigation including:
 - drilling and logging 8 boreholes
 - excavating and logging 6 test pits (test pits will be excavated by City personnel using City equipment)
 - surveying borehole and test pit locations
 - sampling and testing potentially suitable soil liner materials
- Task 8.0 – Kahler Property Borrow Source Evaluation
 - Data collected during field investigation activities will be reviewed and evaluated. All available data will be used for cell design and to develop a placement range for the landfill liner.
 - Perform suitable soil liner material volume calculations
 - Prepare Kahler Property investigation data and results for inclusion in the Preliminary Design Report. This includes suitability of onsite materials, soil

liner material volume calculations, soil liner placement range, and soil testing results.

- Prepare and include Borrow Plan Drawing of the Kahler Property in the Construction Drawings
- Task 9.0 – Cell 15 Test Pit Excavation, Pond Drainage and Trench Observation
 - Observe the construction of a trench in the north facing slope of Cell 15 for the purpose of evaluating the quantity of groundwater that could be produced from an excavation that is below the mapped piezometric surface (based on the existing characterization). Burns & McDonnell has assumed City will construct the trench using City equipment. Trench will need to be approximately 25-30 feet deep at the deepest point.
 - Periodically visit the site to observe the nature and occurrence of apparent groundwater in the trench area.
 - Observe the base of the Cell 16 pond to evaluate potential for suitable subgrade material. Burns & McDonnell has assumed City will pump pond using equipment and piping identified, procured, and installed by the City.
 - Observe the construction of several test pits in the bottom of the existing pond. Burns & McDonnell has assumed the City will excavate test pits using City's equipment.
 - Periodically visit the site to observe the nature and occurrence of apparent groundwater in the pond area.

Periodic site visits for Task 9.0 will be conducted by a local Burns & McDonnell employee. No travel time or expenses are included in this task.

Engineer's subcontractor, American Engineering Testing (AET) will perform drilling services. CETEC Engineering (CETEC) will perform surveying services. Alpha-Omega Geotech, Inc. (AOG) will perform geotechnical testing services. Testing includes index testing; reduced, standard, and modified proctors; and a minimum of three permeability tests per proctor curve.

Please refer to Exhibit D for additional information and specifics regarding number of borings and test pits, assumed depths, and geotechnical testing requirements.

- Task 10.0 – DEDUCT – Dewatering Plan
 - This task reflects a deduct for Task 1.2c of the original contract. Burns & McDonnell will not be required to perform the work as follows, "1.2c. Develop plan for dewatering of the cell base prior to construction." Dewatering of the Cell 16 base will be conducted by the City using equipment and methods identified by the City. The City will initiate and conduct all regulatory correspondence and permitting required for the pumping of the Cell 16 basin.

ASSUMPTIONS

- Burns & McDonnell has assumed the City will identify and provide the Cell 15 storm water pump and associated piping. Burns & McDonnell's scope only includes a place to install the City's identified and procured pump, pumping apparatus, and associated piping.
- Burns & McDonnell has assumed the City will coordinate with the South Dakota Department of Environment and Natural Resources (SD SENR) regarding storm water discharges from the Cell 15 sediment basin.
- No storm water calculations will be performed by Burns & McDonnell for the pumping of the Cell 15 or Cell 16 storm water basins.
- The access road into the bottom of the sediment basin would be used to access water in the basin and enable City to clean out basin prior to the next construction project.
- All erosion control notes will be on the contract drawings. Specifications will not be prepared.
- The SD DENR Notice of Intent for coverage under the General Storm Water Discharges Associated with Construction Activities Permit will be filled out on behalf of the City of Rapid City for the mayor to sign. The contractor will be required to complete the Contractor Certification as a requirement of the contract documents and is not included in this scope.
- It is assumed the SWPPP Notice of Termination will be completed as part of the Professional Services Agreement for Construction Administration, and is not included in this scope of work.
- Stabilization design plans for any landfill operations post-construction are not included in this scope of work.
- On-site erosion control inspections and/or storm water reporting is not included in this scope of work.
- All SD DENR permit fees will be paid directly to SD DENR by the City.
- Other than the SWPPP, all permits will be obtained by the Contractor.
- Slope stability analysis on the GCL is not required.
- City will excavate all test pits with City equipment.
- City personnel will cut drill pads for the drilling subcontractor at the drilling subcontractor or Engineer's field geologist's request.
- Weather delays are not accounted for in cost estimate.
- Assumptions pertaining to on-site field time are presented in Exhibit D.
- City will provide current topography of Kahler property in AutoCad format.

SCHEDULE

Final Design Criteria Report will be provided within 8 weeks of drilling demobilization. Drilling is anticipated in the month of October 2012.

60% Design and Specification will be provided 20 days following the Final Design Criteria Report.

100% Drawings, Specifications, and Bidding will be complete within 40 days of the 60% Design and Specification submittal.

Submittal schedule is dependent upon review and comments being provided by City personnel within one week of submittal by Engineer.

FEE

Revise as follows:

“5.2. The maximum amount of the fee for the services as detailed in Section 1.2 shall not exceed Three Hundred Seventy Four Thousand Four Hundred Thirty One dollars and Forty-Two cents (\$374,431.42) unless the scope of the project is changed as outlined in Section 4. If expenses exceed the maximum amount, the Engineer shall complete the design as agreed upon here without any additional compensation. Sub task dollar amounts may be reallocated to other tasks as long as the total fee is not exceeded.

- a. Exhibit D of this Amendment presents the detailed Professional Engineering Services Fee Estimate for Scope Items listed above. Tasks 1.0 and 3.0 – 9.0 total One Hundred Twenty Eight Thousand One Hundred Seven dollars and Forty-Two cents (\$128,107.42). Only upon separate written authorization will Burns & McDonnell proceed with Task 2.0, which totals Eighteen Thousand Two Hundred Fifty Six dollars (\$18,256.00).
- b. The Professional Engineering Services Fee Estimate in Exhibit D includes a project costs deduct of One Thousand Three Hundred Ninety Nine dollars (\$1,399.00).”

This amendment will be deemed a part of, and be subject to, all terms and conditions of the Existing Agreement. Except as modified above, the Existing Agreement will remain in full force and effect.

BURNS & MCDONNELL ENGINEERING CO.

ACCEPTED:

By Mark A. Lehtinen

Title Vice President

Date 9/14/2012

ATTEST:

By Daniel A. Komick

Title Principal

Date 9/14/2012

CITY OF RAPID CITY

ACCEPTED:

By _____

Title Mayor

Date _____

ATTEST:

By _____

Title Finance Officer

Date _____

END OF AMENDMENT NO. 1

EXHIBIT D
AMENDMENT NO. 1 COST ESTIMATE

Exhibit D

Rapid City Landfill Cell 16 Landfill Liner and Leachate Collection System Design Project

Project No. LF11-1974

Task 1.0	-	Design Additions	
1.1	-	Grading Plan for Cell 15 Sedimentation Basin Access	\$1,453.00
1.2	-	Storm Water Pollution Prevention Plan and Erosion Control Drawings	\$14,400.36
1.3	-	Leachate Realignment and Sanitary Sewer Connection	\$3,268.00
Total For Task 1.0 - Design Additions			\$19,121.36
Task 2.0	-	Cell 15 and 16 Base Grade Modifications	
Total For Task 2.0 - Cell 15 and 16 Base Grade Modifications			\$18,256.00
Task 3.0	-	Office Preparation / Work Plan for Additional Cell 15 Investigation	
Total for Task 3.0 - Office Preparation / Work Plan for Additional Cell 15 Investigation			\$3,184.00
Task 4.0	-	Office Preparation / Work Plan for Kahler Property Investigation	
Total for Task 4.0 - Office Preparation / Work Plan for Kahler Property Investigation			\$8,560.00
Task 5.0	-	Cell 15 Additional Investigation	
Total for Task 5.0 - Cell 15 Additional Investigation			\$23,005.59
Task 6.0	-	Cell 15 Borrow Source Evaluation	
Total for Task 6.0 - Cell 15 Borrow Source Evaluation			\$16,238.00
Task 7.0	-	Kahler Property Soil Liner Investigation	
Total for Task 7.0 - Kahler Property Soil Liner Investigation			\$34,998.87
Task 8.0	-	Kahler Property Borrow Source Evaluation	
Total for Task 8.0 - Kahler Property Borrow Source Evaluation			\$15,656.00
Task 9.0	-	Cell 15 Test Pit Excavation, Pond Drainage and Trench Observation	
Total for Task 9.0 - Cell 15 Test Pit Excavation, Pond Drainage and Trench Observation			\$7,343.60
Task 10.0	-	Deduct - Dewatering Plan	
Total for Task 10.0 - Deduct - Dewatering Plan			(\$1,399.00)
Total for All Tasks 1.0 - 10.0			\$144,964.42