

**WORK AUTHORIZATION # CM2096-WA16
NASSAU COUNTY
BOARD OF COUNTY COMMISSIONERS
RFQ/BID NO. NC13-033**

16 JUL 18 PM 3:17

Consultant:	S2L, Incorporated
Contract Number:	CM2096
Contact Name:	Sam Levin, P.E.
Contact Number:	407-475-9163
Email:	Slevin@s2Li.com

CURRENT WORK AUTHORIZATION			
Project Short Title: Lofton Creek Landfill Stabilization Study			
		CONTRACT OVERVIEW	
		Total of Previous Authorizations	\$724,187.09
Date Submitted	07/11/2016	Adjustments/Change Orders	\$4,843.09
Amount	\$45,924.72	This Work Authorization	\$45,924.72
Scheduled Completion	300 days from 11/1/16	Current Contract Total	\$774,954.90

This Work Authorization is to the AGREEMENT between Nassau County and the Consultant known as the Continuing Contract for Professional Engineering Services – Solid Waste Landfills and Other Related Ancillary Facilities for Nassau County, Florida, dated April 16, 2014. The services to be provided under this Work Authorization are as follows:

ARTICLE 1. Services Described as:

S2Li and their Sub-consultant (The Colinas Group (TCG)) will prepare a Technical Report to present and evaluate semi-annual groundwater and surface water monitoring data collected at the Landfill over the latest 10-year period of record from Winter (December) 2006 through June 2016. A concise Executive Summary of findings, conclusions and recommendations for permit modifications derived from the water quality monitoring evaluation will be presented in the Technical Report. The Technical Report will address each of the evaluation criteria presented in Rule 62-701.510(8)(b) F.A.C. and in the Water Quality Monitoring Plan (WQMP) in accordance with the scope of services, attached hereto as Attachment "A".

ARTICLE 2. Time Schedule

It is anticipated that the services will be provided within a 300-day period. A draft report document is to be submitted to County staff for review by March 15, 2017. The County is expected to provide comments to S2Li within two weeks after receiving the draft report. After addressing and incorporating County staff comments, the draft document is to be submitted to FDEP by April 14, 2017. Assuming timely comments and meeting arrangements with FDEP, the final report is to be submitted to FDEP by June 9, 2017 or earlier.

16 JUL 22 PM 4:09

Office of the Clerk of the Board
Nassau County, Florida

ARTICLE 3. Budget

The cost estimate to conduct the Work as described in the Scope of Services is \$45,924.72. A detailed breakdown for each task in conjunction with the estimated labor hours, contract labor rates, and expenses are included in Exhibit 1 of Attachment "A" for the S2Li Team and subconsultant's. Costs incurred will be invoiced on a time and material basis. The County will be notified when the overall project budget is nearing its limit.

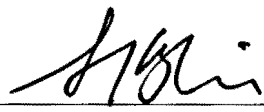
Article 4. Other Provisions

The Services covered by this Work Authorization will be performed in accordance with the provisions set forth in the AGREEMENT referenced above and any of its attachments or schedules. Additional terms or contract provisions whether submitted purposely or inadvertently, shall have no force or effect. This Work Authorization will become a part of the referenced AGREEMENT when executed by both parties.

In presenting this Work Authorization, Consultant agrees that:

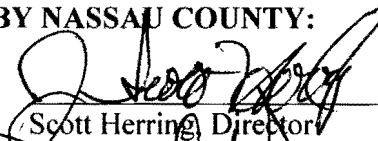
Unless detailed herein, all drawings, data, electronic files and other information required for this Work Authorization has been accepted by Consultant. Specifically, all electronic files have been reviewed and accepted for the purposes of this Work assignment. Any additional information, including detailed scope of services are attached.

AGREED TO BY: S2L, INCORPORATED

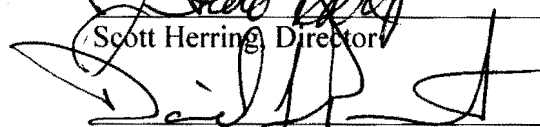
BY: 
Print Name: Samuel B. Levin
Title: President
Date: July 12, 2016

RECOMMENDED AND APPROVED BY NASSAU COUNTY:


Public Works Director:


Scott Herring, Director

Contract Management :


David J. Pensante, Procurement Manager

Office of Management & Budget:


Shanea Jones

County Manager


Ted Selby

APPROVED by the County Coordinator, designee for the BOARD OF COUNTY COMMISSIONERS, the _____ day of _____, 2016.

ACCOUNT NO.: 01363534-531000 \$45,924.72

(FY16/17)
S 7/29/16

**Preparation
of a
Landfill Stabilization Report
for the
Lofton Creek Landfill**

**County Contract Number: CM2096-WA16
S2Li Project Number: 16-676**

BACKGROUND

In August 1997, Nassau County ("County") received closure certification from Florida Department of Environmental Protection ("FDEP" or "Department") for its closed Lofton Creek Landfill ("Landfill"). At that point, the Landfill entered into long-term care ("LTC"). The duration of LTC for the Landfill is 20 years unless extended due to landfill site issues. Note that this landfill site has been plagued with off-site water quality issues. During this LTC period, the County has been:

- conducting water quality testing and reporting for on- and off-site locations;
- conducting landfill gas measurements (no longer required for this landfill site property);
- maintaining a stormwater management system;
- mowing the surface of the landfill property;
- maintaining a vegetative cover and soil and erosion control; and
- continuing other miscellaneous operational and maintenance items required for a closed facility.

On February 15, 2012, FDEP issued the County a Solid Waste LTC Renewal Permit (Permit No. 0064999-006-SF) with a County requested 7-year term that sets the conditions for LTC at the Landfill. The existing LTC permit for the Landfill is scheduled to expire on February 15, 2018. The existing permit requires that a renewal application to continue LTC be submitted to FDEP by December 15, 2017. Before the end of the permit term and for the reason of a County requested 7-year permit term, the preparation of a Landfill Stabilization Report is required to be submitted to the Department by June 11, 2017 to address any County or FDEP related action or approach such as the ones provided in FDEP's February 20, 2016, "*Guidance Document SWM-04.45 – LTC at Solid Waste Disposal Facilities*" prior to the end of the current permit term.

This Work Authorization will provide for the preparation and submission of a Landfill Stabilization Study and Report for the Lofton Creek Landfill to FDEP in accordance to the Landfill's permit conditions and Chapter 62-701.620(6), Florida Administrative Code (F.A.C.) Under the scope of services for this Work Authorization, S2L, Incorporated (S2Li) and its subconsultant, the Colinas Group ("TCG") (collectively known as the S2Li Team) will perform the following:

SCOPE OF SERVICES

Task 1 – Preparation of a Water Quality Technical Report

A Technical Report will be prepared to present and evaluate semi-annual groundwater and surface water monitoring data collected at the Landfill over the latest 10-year period of record from Winter (December) 2006 through June 2016. A concise Executive Summary of findings, conclusions and recommendations for permit modifications derived from the water quality monitoring evaluation will be presented in the Technical Report. The Technical Report will address each of the evaluation criteria presented in Rule 62-701.510(8)(b) F.A.C. and in the Water Quality Monitoring Plan (WQMP) and will include:

- a. Tabular displays of any data which shows that a monitoring parameter has been detected, and graphical displays of any leachate key indicator parameters detected, including hydrographs for all monitor wells;
- b. Trend analyses of any monitoring parameters consistently detected;
- c. Comparisons among shallow, middle and deep zone wells;
- d. Comparisons between background water quality and the water quality in detection and compliance wells;
- e. Correlations between related parameters such as total dissolved solids and specific conductance;
- f. Discussion of erratic and/or poorly correlated data;
- g. An interpretation of the ground water contour maps, including an evaluation of ground water flow rates, and;
- h. An evaluation of the adequacy of the water quality monitoring frequency and sampling locations based upon site conditions.

The Technical Report will present recommendations for modification of the current landfill Monitoring Plan Implementation Schedule (MPIS) to include consideration of retirement of specific monitoring wells, deletion of specific monitoring parameters and, if warranted by evaluation of long-term monitoring results, retirement of the WQMP and cessation of routine monitoring for the Lofton Creek Closed Landfill.

Task 2 – Landfill Stabilization Study and Report

Subtask 2.1 - Draft Document Preparation. The S2Li Team will prepare a draft report to assess landfill stability in accordance with Chapter 62-701.620 (6), F.A.C. The following criteria will be addressed and assessed in the report as to meeting stability requirements and will include the evaluation results, conclusions and recommendations:

- Water quality conditions as required by Chapter 62-701.510(8)(b);
- Landfill gas generation, emission, and migration;
- Landfill surface subsidence activity;
- Condition of vegetative cover related to soil and erosion control and barrier layer effectiveness; and
- Storm water management system function.

The report document will be provided in digital form and is expected to be organized at follows:

- Signed and Sealed Cover Page
- Transmittal Letter
- Introduction
- Background
- Site History
- Existing Conditions with Respect to Stabilization Criteria
 - a. Water Quality Technical Report
 - b. Subsidence
 - c. Barrier Layer Effectiveness
 - d. Stormwater Management
 - e. Gas Production and Management
- Summary of Existing Conditions Meeting Landfill Stability Criteria
- Conclusions
- Recommendations
- Exhibit 1 – Water Quality Technical Report

Subtask 2.2 - County Review. The S2Li Team will prepare and submit to the County a draft report for review and comment. S2Li will meet via conference call with the County as needed to discuss any staff comments. The S2Li Team will incorporate final comments received from the County associated with S2Li's scope of services, and will prepare an updated draft report for submittal to FDEP.

Deliverables: Draft Report for County Review

Task 3 – FDEP Submittals and Meetings

Subtask 3.1 - FDEP Draft Report Submittal. After incorporating any County comments, the updated draft report will be submitted to FDEP by April 2017 for their review and comment. This will allow time for a meeting with the Department and incorporate any comments to the report's conclusions and recommendations sections before the actual report due date of June 9, 2017.

Subtask 3.2 - Meeting with FDEP. The S2Li Team will prepare for and attend a meeting with the County and FDEP in the FDEP's Northeast District office in Jacksonville to discuss the results of the landfill stabilization report and recommendations including whether there is a need to extend the permit term, modify the water quality monitoring plan, continue financial assurance, and if there is a need for a permit modification.

The S2Li Team will provide the County any information that will be provided at the FDEP meeting in draft form for County review and comment. The S2Li Team shall meet with County representatives prior to the pre-application meeting to review the agenda, items to be addressed, and the approaches to be utilized in discussions with FDEP.

Subtask 3.3 - FDEP Final Report Submittal. After incorporating any additional County and/or FDEP comments, the S2Li Team will submit a final draft report for County review, and upon approval by the County, the report will be submitted to FDEP by June 9, 2017.

Deliverables: Draft Report for FDEP, questions for FDEP, agenda for FDEP meeting, final report submission to FDEP.

Task 4 – FDEP’s Requests for Additional Information (RAI)

Should any questions or minor requested changes be received from FDEP whether it is a part of the review of the draft or final report submittals, the S2Li Team, with the assistance of the County, will modify the report, and/or prepare responses, as appropriate, within the required time period. The County understands that the level of effort for RAI response cannot be determined beforehand, and that the budget for Task 4 is based on an educated guess of the level of effort that will be required. The level of effort to be expended for this task is limited to the fee estimate for this task. If additional investigations, analyses, testing, design, or research are required to provide satisfactory responses to FDEP, beyond the fee estimate of this Task 4, S2Li Team will perform the additional work effort only after receipt of written approval from the County. The S2Li Team will review any responses, permit updates, or any other related correspondents from FDEP and provide any comments to the County.

Deliverables: Formal and informal RAI responses and review of correspondents from FDEP.

SCHEDULE

- Written Notice-to-Proceed received from the County by November 1, 2016;
- A draft report document is to be submitted to County staff for review by March 15, 2017. The County is expected to provide comments to S2Li within two weeks after receiving the draft report;
- After addressing and incorporating County staff comments, the draft document is to be submitted to FDEP by April 14, 2017;
- Assuming timely comments and meeting arrangements with FDEP, the final report is to be submitted to FDEP by June 9, 2017 or earlier; and
- Total expected time period for this work authorization is ten months which includes time for the County to receive and S2Li to review any final correspondents from FDEP in July/August 2017.

SCOPE OF SERVICES - COUNTY ASSUMPTIONS

It has been assumed that the County will perform, provide or make available the following:

- Permit application fee if not completely waived;
- Previous water quality results information provided by the County’s outside laboratory and technical reports from other consultants;
- Any requested changes to the existing permit’s specific conditions, and
- Review and provide comments to any correspondences from FDEP.

Some of the information may have already been received, so the S2Li Team will work with County staff to ensure that S2Li has received all of the information.

COST ESTIMATE

The cost estimate to conduct the Work as described in the above listed Scope of Services is \$45,924.72. A detailed breakdown for each task in conjunction with the estimated labor hours, contract labor rates, and expenses are included in the attached Exhibit 1 for the S2Li Team. Costs incurred will be invoiced on a time and material basis. The County will be notified when the overall project budget is nearing its limit.

July 7, 2016
Total Project Costs
 S2Li Fee Estimate

EXHIBIT 1
Preparation of a
Landfill Stabilization Report
Lofton Creek Landfill
 Nassau County, Florida

S2Li No. 16-676
 County No. CM2096-WA16

LABOR		LABOR CATEGORY AND RATE						TOTAL HOURS	SUBTOTAL LABOR
		Project Dir./ Principal \$225.00	Regional Manager/ QC Officer \$208.88	Principal Engineer \$171.38	Senior Engineer \$122.51	Associate Engineer \$47.47	CAD Technician \$47.47		
TASK	DESCRIPTION								
1	Preparation of a Water Quality Technical Report	2	6	0	0	0	2	10	\$1,840.20
2	Landfill Stabilization Study and Report	9	36	0	0	0	6	51	\$9,955.44
	- Draft Document Preparation	8	32				4	44	\$8,758.00
	- County Review	1	4				2	7	\$1,197.44
3	Application Package Preparation and Submittals to FDEP	4	28	0	0	0	5	37	\$7,090.94
	- FDEP Draft Report Submittal	1	4				1	6	\$1,128.98
	- Meeting with FDEP	2	16				2	20	\$3,929.00
	- FDEP Final Report Submittal	1	8				2	11	\$2,032.96
4	FDEP RAIs and Questions	2	6	0	0	0	1	9	\$1,771.74
	SUBTOTALS:	17	76	0	0	0	14	107	\$ 20,658.32

EXPENSES		Field Vehicle (\$90/day)	Lab Testing (est.)	Equipment Rental (est.)	Parts (est.)	The Colinas Group (see attached)			SUBTOTAL EXPENSES
TASK	DESCRIPTION								
1	Preparation of a Water Quality Technical Report	\$ -	\$ -	\$ -	\$ -	\$ 20,501.20			\$ 20,501.20
2	Landfill Stabilization Study and Report	\$ -	\$ -	\$ -	\$ -	\$ -			\$ -
3	Application Package Preparation and Submittals to FDEP	\$ -	\$ -	\$ -	\$ -	\$ 2,980.00			\$ 2,980.00
4	FDEP RAIs and Questions	\$ -	\$ -	\$ -	\$ -	\$ 1,785.20			\$ 1,785.20
	SUBTOTALS:	\$ -	\$ -	\$ -	\$ -	\$ 25,266.40	\$ -	\$ -	\$ 25,266.40

COST SUMMARY				
TASK	DESCRIPTION	S2LI LABOR	SUBTOTAL EXPENSES including Subconsultants	TASK TOTAL
1	Preparation of a Water Quality Technical Report	\$ 1,840.20	\$ 20,501.20	\$ 22,341.40
2	Landfill Stabilization Study and Report	\$ 9,955.44	\$ -	\$ 9,955.44
3	Application Package Preparation and Submittals to FDEP	\$ 7,090.94	\$ 2,980.00	\$ 10,070.94
4	FDEP RAIs and Questions	\$ 1,771.74	\$ 1,785.20	\$ 3,556.94
	TOTALS	\$ 20,658.32	\$ 25,266.40	\$ 45,924.72

July 7, 2016

Attachment - The Colinas Group Fee Estimate - Subconsultant

**Preparation of a
Landfill Stabilization Report
Lofton Creek Landfill
Nassau County, Florida**

S2Li No. 16-676
County No. CM2096-WA16

LABOR		LABOR CATEGORY AND RATE										TOTAL HOURS	SUBTOTAL LABOR
		Principal Consultant \$145.60	Senior Hydrogeologist \$117.60	Staff Hydrogeologist \$86.20	Env. Field Technician \$84.15	Draftperson/ CAD \$60.00	Clerk/ Word Process. \$37.50						
TASK	DESCRIPTION												
1	Preparation of a Water Quality Technical Report	32	60	80	0	24	12	0	0	0	0	208	\$20,501.20
2	Landfill Stabilization Study and Report - Draft Document Preparation - County Review	0	0	0	0	0	0	0	0	0	0	0	\$0.00
3	Application Package Preparation and Submittals to FDEP - FDEP Draft Report Submittal - Meeting with FDEP - FDEP Final Report Submittal	16 16	4 4	0		0	0	0	0	0	0	20 20 0	\$2,800.00
4	FDEP RAIs and Questions	8	4	0	0	0	4					16	\$1,785.20
SUBTOTALS:		56	68	80	0	24	16	0	0	0	0	244	\$ 25,086.40

EXPENSES		Field Vehicle (\$90/day)	Lab Testing (est.)	Equipment Rental (est.)	Parts (est.)									SUBTOTAL EXPENSES
TASK	DESCRIPTION													
1	Preparation of a Water Quality Technical Report	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -					\$ -
2	Landfill Stabilization Study and Report	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -					\$ -
3	Application Package Preparation and Submittals to FDEP	\$ 180	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -					\$ 180
4	FDEP RAIs and Questions	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -					\$ -
SUBTOTALS:		\$ 180	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -					\$ 180

TOTAL \$25,266.40

append to CS-15-211



**Nassau County Engineering Services Department
96161 Nassau Place
Yulee, Florida 32097**

*J. Scott Herring, P.E.
Public Works Director*

September 12, 2016

Sent via email:
slevin@s2li.com

Sam Levin, P.E.
President
S2L, Inc.
531 Versailles Drives, Suite 202
Maitland, Florida 32751-7301

Subject: Notice to Proceed
Lofton Creek Landfill Stabilization Report
Contract No. CM2096-WA16

Dear Mr. Levin,

This letter shall serve as the official Notice to Proceed for the Lofton Creek Landfill Stabilization Report, Work Authorization No. 16. The effective date of the Notice to Proceed is hereby established as October 1, 2016.

All work must be conducted in accordance with the agreement referenced above.

If you have any questions, please do not hesitate to contact me.

Sincerely,

Becky Hiers-Bray, P.E.
Engineer III

Cc: Scott Herring, Public Works Director
David Pensante, Contracts Manager
Omar Smith, S2Li