WORK AUTHORIZATION # CM2096-WA20 NASSAU COUNTY **BOARD OF COUNTY COMMISSIONERS RFQ/BID NO. NC13-033**

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

		T WORK AUTHORIZATION	
Project Short Title:	Preparation of an	Intermediate Permit Modification	
		CONTRACT OVERVIE	W SHIP IN SHIP
		Total of Previous Authorizations	\$971,866.04
Date Submitted	08/02/2017	Adjustments/Change Orders	(\$12,873.70)
Amount	\$35,460.12	This Work Authorization	\$35,460,12
Scheduled Completion	150 days	Current Contract Total	\$994,452.46

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 Team will provide preparation and submission of a permit modification application to the Florida Department of environmental Protection for the Lofton Creek Landfill

ARTICLE 3. Budget
The cost estimate to conduct the Work as described in the Scope of Services is \$35,460.12.

Article 4. Other Provisions

The Services covered by this Work Authorization will be the provisions set forth in the AGREEMENT referred advertently, shall have the reference. 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, Incorp	porated / 1 // -
	BY:
	Print Name: Samuel B. Levin
	Title: President
	Date:August 28, 2017
RECOMMENDED AND APPR	ROVED BY NASSAU COUNTY:
Public Works Director:	1 200 000g
Contract Management:	angela Dreggy
Office of Management & Budget:	July Atom
County Manager:	(Suz
APPROVED by the County Manager, do	esignee for the BOARD OF COUNTY COMMISSIONERS, the 017.

ACCOUNT NO.: 01363534-531000

Preparation of an Intermediate Permit Modification For a New Water Quality Monitoring Plan at the Lofton Creek Landfill

County Contract Number: CM2096-WA20 S2Li Project Number: 17-734

This Work includes preparation and submission of a permit modification application to the Florida Department of Environmental Protection (FDEP or Department) for the Lofton Creek Landfill (Site) Long-Term Care (LTC) Permit (Number 0064999-006-SF as modified by Permit Modification Number 0064999-007-MM). Changes to the Site Water Quality Monitoring Plan and permit term period are a result of the Department's May 25, 2017 letter from Julie R. Hudson, Environmental Manager of the Air, Waste Clean-up, and Solid Waste Management Department with FDEP's Northeast District.

In Ms. Hudson's May 25, 2017 letter to Nassau County, the Department concurred with the conclusions and recommendations of both the "June 2007 - December 2016 Water Quality Technical Report" and the "2017 Stabilization Report", as submitted by Nassau County. The Department stated that the Site LTC could not end because, according to their records, the Lofton Creek Class I Closed Landfill (Facility) continues to impact ground water at concentrations above Department water quality standards. The Department extended the County's LTC permit to February 15, 2022 with a requirement for the County to continue the Facility's monitoring and maintenance activities to assess potential off-site water quality issues. The Department also stated that the Site's Financial Assurance requirements are to end on August 11, 2017 and need not be extended.

Specifically, the Department wants the County to:

- Request an extension of the term of the County's existing LTC permit term to comprise a total 10-year period (through February 15, 2022), which will allow the County to continue to assess possible off-site water quality issues (note in the May 2017 letter, it appears that the permit has already been extended, but the Department has asked for the permit modification application to formally request the extension); and
- Apply for a permit modification to its existing monitoring plan implementation schedule (MPIS), requesting reductions within the existing surface and ground water programs for both water quality testing parameters and sampling locations.

No application fee from the County is assumed to be required as part of this intermediate permit application submission. The Department's approval of this permit modification application will result in a reduction in current operational and maintenance costs incurred for continued monitoring of the Site.

The County is to consider continuing limited water quality testing at wells adjacent to residential units along Meadowfield Bluffs Road that continue to use onsite drinking water wells instead of potable water which could be made available within water mains from offsite sources. The purpose of the limited testing is to ensure and document to the public that water quality near their water supply wells continues to meet or exceed drinking water quality standards. This continuation of the monitoring of these wells is for County information and use only and not to be addressed as part of FDEP's MPIS modification application. A final decision on this County program will be made by the County by the time the draft permit modification application is ready to be submitted to the FDEP.

This Work Authorization No. CM2096-WA20 will provide engineering and hydrogeological consulting services associated with the above-described intermediate permit modification application. S2Li Team will also provide supplemental information, evaluation and recommendations to assist Nassau County with development of internal plans and procedures to monitor groundwater quality at existing monitoring wells installed along Meadowfield Bluffs Road to the west of the closed landfill. The plan for any additional monitoring along Meadowfield Bluffs Road is not to be a part of the FDEP's required Lofton Creek Landfill's Site Monitoring Plan and reporting but to serve as an independent monitoring plan for County's use and documentation.

Scope of Services

Under the scope of services, the S2Li Team will perform the following:

Task 1 - Preparation of Intermediate Permit Modification Application

1.1 Draft Application:

S2Li Team will prepare an intermediate permit modification application for the Lofton Creek Landfill (Site) LTC Permit (Number 0064999-006-SF as modified by Permit Modification Number 0064999-007-MM) to request changes to the permit term and the water quality monitoring plan. The permit modification application will include the following:

- a) Title Page;
- b) Transmittal letter summarizing the requested changes;
- c) Preparation of applicable portions of FDEP form 62-701.900(1) (no previous submittal refence is required for a permit modification application);
- d) Preparation of Application for Permit Modification Part L (Water Quality and Leachate Monitoring Requirements (62-701.510, FAC)). This Part L portion will address recommended changes to the MPIS as provided in the approved May 2017 Water Quality Technical Report. The recommended changes with include:
 - Revised MPIS list of groundwater and surface water monitoring locations;
 - Scaled site map accurately depicting modified groundwater and surface water sampling locations; and
 - Tabulation of proposed monitoring well and surface water field and laboratory parameters for measurement and analysis.

1.2 Submission of Draft Application for Review and Comments:

- a) S2Li Team will submit a draft modification application to County staff for review and comment.
- b) After incorporating any County comments, the updated draft will be submitted to FDEP at their request for their review and comment. It is anticipated that the Department will contact the County and/or the S2Li Team to discuss the County's requested permit changes and then submit any alternative (or counter) draft language for review and comment from the County. Once the revised specific condition language is acceptable to the County, the Department will ask the County to incorporate the Department's requested changes into the draft application, then finalize and submit the signed and sealed application to the Department. The Department then should quickly process the application request and issue a new and updated permit. The S2Li Team will review the permit issued by the Department (preferably in draft form prior to permit issuance), and provide any comments to the County and then, to FDEP.

c) This scope of services includes the preparation of response(s) to one Request for Additional Information from the FDEP upon their review of the draft or final version of the application for the permit modification.

TASK 2 – Recommendations for Self-Monitoring Plan for Nassau County Government

S2Li Team proposes to develop a recommended groundwater monitoring plan for implementation by Nassau County to monitor water quality in the "rock aquifer" commonly used as a drinking water source for private residential dwellings in the County. The recommended monitoring plan will focus on residences located on Meadowfield Bluffs Road west of the closed Lofton Creek Landfill. This plan for monitoring along Meadowfield Bluffs Road is not to be a part of the FDEP's required Lofton Creek Landfill's Site Monitoring Plan and reporting but is to serve as an independent monitoring plan for County's use and documentation.

S2Li Team will compile an inventory of existing private domestic water supply wells along Meadowfield Bluffs Road using information from the Florida Department of Health - Nassau County Office well construction permit files and published information from previous FDEP permit applications. This information will provide a basis for determining the existence and locations of private wells finished in and withdrawing from either the shallow rock aquifer or the deeper Floridan aquifer, which are primary sources of drinking water in Nassau County.

Based on the occurrence and distribution of private water supply wells along Meadowfield Bluffs Road, S2Li Team will prepare a recommended groundwater monitoring plan for consideration by Nassau County. The monitoring plan will include a map showing existing private water wells and specific existing landfill monitoring wells considered suitably constructed and located for monitoring purposes. The plan will include a listing of chemical parameters and sampling frequency for routine monitoring.

S2Li Team will prepare a written Recommended Monitoring Plan report presenting the results of the well inventory, evaluation of hydrogeologic conditions and recommendations for future monitoring considerations by Nassau County.

Schedule

Work authorized under this Change Order is expected to be completed within 150 days of a written notice-to-proceed which includes the preparation of the permit application, review time for the County staff and FDEP, and issuance of the FDEP permit. This assumes that a draft application will be submitted to the County within 50 days of a written notice-to-proceed and assumes that the County reviews and offers comments on the draft application within a one week period from the receipt of the draft application. Once submitted to FDEP, it is assumed that the draft language will be finalized between FDEP and the County within a 30-day period, with the final permit from FDEP sent to the County within 30 days. The recommended Self-Monitoring Plan plan will be submitted to the County with 45 after the FDEP permit modification submittal.

Cost Estimate

The cost estimate to conduct this work as described in the above listed Scope of Services is \$35,460.12. A detailed breakdown for each additional 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.

August 2, 2017 **Total Project Costs** S2Li Fee Estimate

EXHIBIT 1 Preparation of an

S2LI No.

17-734 County No. CM2096-WA20

Intermediate Permit Modification

For a New Water Quality Monitoring Plan **Lofton Creek Landfill**

Nassau County, Florida

LABOR TASK DESCRIPTION		LABOR CATEGORY AND RATE								
		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	Office Manager \$68.46	TOTAL HOURS	SUBTOTAL LABOR
1	Landfill Stabilization Study and Report	6	72	0	0	0	0	8	86	\$16,937.04
	- Draft Application Document Preparation - County / FDEP Review and Submittal	4	48					4	56 30	\$11,200.08 \$5,736.96
2	Recommendations for Self Monitoring Plan - Well Inventory	4 2	18	0	0	0	0	4 2	26	\$4,933.68 \$1,840.20
	- Monitoring Plan	2	12					2	16	\$3,093.48
	SUBTOTALS:	10	90	0	0	0	0	12	112	\$ 21,870.72
EXPENS		Field Vehicle (\$90/day)	Lab Testing (est.)	Equipment Rental (est.)	Parts (est.)		The Colinas Group (see			SUBTOTAL EXPENSES
TASK 1	DESCRIPTION Landfill Stabilization Study and Report		ė .	ė .	ė .	e .	attached) \$ 6,578.80	erecesses.		\$ 6,578.80
2	Recommendations for Self Monitoring Plan	\$ -	\$ -	\$ -		\$ -	\$ 7,010.60			\$ 7,010.60
	SUBTOTALS:	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 13,589.40	\$ -	\$ -	\$ 13,589.40

	COST SUMMAR	Y				
TASK	DESCRIPTION	SUBTOTAL SZLI LABOR	SUBTOTAL EXPENSES including Subconsultants	TASK TOTAL		
1	Landfill Stabilization Study and Report	\$ 16,937.04	\$ 6,578.80	\$ 23,515.84		
2	Recommendations for Self Monitoring Plan	\$ 4,933.68	\$ 7,010.60	\$ 11,944.28		
T	OTALS	\$ 21,870.72	\$ 13,589.40	\$ 35,460.12		

August 2, 2017

Attachment - The Colinas Group Fee Estimate - Subconsultant

Preparation of an Intermediate Permit Modification Lofton Creek Landfill

Lofton Creek Landfill Nassau County, Florida S2U No. 17-734 County No. CM2096-WA20

			LABOR CATEGORY AND RATE												
TASK DESCRIPTION		Con	Principal Consultant \$145.60		Senior Hydrogeologist \$117.60	Staff Hydrogeologist \$86.20	Env. Field Technician \$84.15	CAD \$60.00	Clerk/ Word Process. \$37.50					HOURS	SUBTOTAL LABOR
1	Landfill Stabilization Study and Report - Draft Application Document Preparation - County / FDEP Review and Submittal		12		24	16	0	8	4	0	0	0		64	\$6,578.80
2	Recommendations for Self Monitoring Plan - Well Inventory - Monitoring Plan		24		16	8		12	6	0	0	0	0	66	\$7,010.60
	SUBTOTALS:		36	T	40	24	0	20	10	0	0	0	0	130	\$ 13,589.40
EXPENSES		V	Field ehicle (0/day)		Lab Testing (est.)	Equipment Rental (est.)	Parts (est.)			Subcontractors (est.)					SUBTOTAL EXPENSES
TASK	DESCRIPTION	6 5 099 16-2	din elle				Provinces	er Breathann		135	ensile				
	Landfill Stabilization Study and Report	s		\$		\$ - \$ -	\$ -	\$ -	\$ -	\$ -					\$ -
1 2	Recommendations for Self Monitoring Plan								\$.	\$ -					1.