WORK AUTHORIZATION # CM2685-WA16 NASSAU COUNTY BOARD OF COUNTY COMMISSIONERS CONTINUING CONTRACT FOR PROFESSIONAL ENGINEERING SERVICES SOLID WASTE LANDFILLS AND OTHER RELATED ANCILLARY FACILITIES FOR NASSAU COUNTY, FLORIDA RFQ/BID NO. NC19-001

Consultant:	S2L, Incorporated
Contract Number: CM2685	
Contact Name:	Omar Smith, P.E., V.P.
Contact Number:	407-475-9163
Email: osmith@s2li.com	

	CURRENT WOR	K AUTHORIZATION			
Project Short Title: Pro the Lofton Creek Land		oilization and Water Quality Technica	al Reports for		
CONTRACT OVERVIEW					
		Total of Previous Authorizations	\$840,908.28		
Date Submitted	7/21/20	Adjustments/Change Orders	\$0		
Amount	\$44,593.08	This Work Authorization	\$44,593.08		
Scheduled Completion	11 months from NTP estimated on 11/1/2020	Current Contract Total	\$885,501.36		

This Work Authorization is to the CONTRACT 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 July 26, 2019. The services to be provided under this Work Authorization are as follows:

ARTICLE 1. Services Described as:

This Work Authorization will provide for the preparation and submission of Landfill Stabilization and Water Quality Technical Reports for the Lofton Creek Landfill to FDEP in accordance to the Landfill's permit conditions (Specific Condition Section 2.G.3) 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 task further described in Attachment "A", attached hereto and incorporated herein.

Task 1 – Preparation of a Water Quality Technical Report

Task 2 - Preparation of a Landfill Stabilization Study and Report

Task 3 - FDEP Submittals and Request for Additional Information (RAI)

ARTICLE 2. Time Schedule

Work under the Scope of Services provided above will begin upon receipt of a written Notice to Proceed. Assuming a receipt of a Notice to Proceed by November 1, 2020; A draft report document is to be submitted to County staff for review by April 30, 2021. The County is expected to provide comments to S2Li within two weeks after receiving the draft report; After addressing and incorporating County staff comments, a draft document may be submitted to

FDEP by May 31, 2021; Assuming timely comments with FDEP, the final report is to be submitted to FDEP by June 15, 2021, or earlier; and The total expected time period for this work authorization is 11 months which includes time for the County to receive and S2Li to review any final correspondents from FDEP in July/August 2021.

ARTICLE 3. Budget

The cost estimate to conduct the work as described in the attached Scope of Service is \$44,593.08. 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 Project 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.

ARTICLE 4. Other Provisions

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

Print Name: Samuel B. Levin

S2L, Incorporated

Title:

Date: September 17, 2020

Account No.: 01363534-531000

RECOMMENDED AND APPROVED BY NASSAU COUNTY:

Public Works:	Douglas Podiak
Contract Management:	John Cox
Office of Management & Budget:	Megan Diehl 330 20
County Manager:	Michael S. Mullin
Ex-Officio Clerk:	N/A John Crawford
County Attorney:	Michael S. Mullin

APPROVED by the County Manager, Designee for NASSAU COUNTY BOARD OF COUNTY COMMISSIONERS, the 8 day of September , 2020.

Attachment "A"

Scope of Services

Preparation of a

Landfill Stabilization and Water Quality Technical Reports for the Lofton Creek Landfill

County Contract Number: CM2685-WA16 S2Li Project Number: 20-889

BACKGROUND

In August 1997, Nassau County ("County") received closure certification from the Florida Department of Environmental Protection ("FDEP" or "Department") for its closed Lofton Creek Landfill ("Landfill"). At that point, the Landfill entered into a 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;
- maintaining access control;
- 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. On February 16, 2018, FDEP issued the County a permit extension (Permit No. 0064999-009-SF) which extended regulatory LTC but eliminated the need for the County to maintain a financial assurance account for the facility. The existing LTC permit for the Landfill is scheduled to expire on February 15, 2022. The existing permit requires that a renewal application to continue LTC be submitted to FDEP by December 15, 2021. Before the end of the permit term, the preparation of Landfill Stabilization and Water Quality Technical Reports are required to be submitted to the Department by June 15, 2021, 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" before the end of the current permit term. This also allows the County to assess possible changes to the Water Quality Monitoring Plan for the site.

This Work Authorization will provide for the preparation and submission of Landfill Stabilization and Water Quality Technical Reports for the Lofton Creek Landfill to FDEP in accordance to the Landfill's permit conditions (Specific Condition Section 2.G.3) 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 5-year period of record from Summer (June) 2016 through Winter (December 2020). 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 the 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 groundwater contour maps, including an evaluation of groundwater 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 may present recommendations for modification of the current landfill Monitoring Plan Implementation Schedule (MPIS) if warranted based on evaluation of long-term monitoring results. Recommendations may include consideration of retirement of specific monitoring wells, deletion of specific monitoring parameters and potentially, the retirement of the WQMP and cessation of routine monitoring for the Lofton Creek Closed Landfill.

Any recommended changes to the WQMP will be requested as part of the permit application renewal due to the Department by December 15, 2021. The permit application renewal is not a part of this Work Authorization.

Task 2 - Preparation of a Landfill Stabilization Study and Report

<u>Subtask 2.1 - Draft Document Preparation</u>. The S2Li Team will prepare a draft report to assess landfill stability in accordance with Chapter 62-701.620 (6), F.A.C. for an unlined landfill. 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

<u>Subtask 2.2 - County Review</u>. 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

Subtask 2.3 – LTC Plan Update

The S2Li Team will review and revised the existing LTC Plan including the inspection forms. The proposed changes will be submitted to the County for review and acceptance. After receiving any comments, the plan will be finalized for submission to FDEP.

Deliverables: Draft Plan for County Review

Task 3 – FDEP Submittals and Request for Additional Information (RAI)

<u>Subtask 3.1 - FDEP Draft Report Submittal</u>. After incorporating any County comments, the updated draft report will be submitted to FDEP by April 2021 for their review and comment. This will allow time for a telephone call meeting with the Department and incorporate any comments to the report's conclusions and recommendations sections before the actual report due date of June 15, 2021.

<u>Subtask 3.2 - FDEP Final Report Submittal</u>. 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, 2021.

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

Subtask 3.3 - FDEP's 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 this subtask 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 Subtask 3.3, 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 correspondence from FDEP and provide any comments to the County.

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

It is assumed that the preparation of the Permit Application Renewal due to FDEP by December 15, 2021, is not a part of this Work Authorization.

SCHEDULE

- Written Notice-to-Proceed received from the County by November 1, 2020;
- A draft report document is to be submitted to County staff for review by April 30, 2021. The County is
 expected to provide comments to S2Li within two weeks after receiving the draft report;
- After addressing and incorporating County staff comments, a draft document may be submitted to FDEP by May 31, 2021;
- Assuming timely comments with FDEP, the final report is to be submitted to FDEP by June 15, 2021, or earlier; and
- The total expected time period for this work authorization is 11 months which includes time for the County to receive and S2Li to review any final correspondents from FDEP in July/August 2021.

SCOPE OF SERVICES - COUNTY ASSUMPTIONS

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

- Permit application fees if not completely waived;
- Previous water quality results from 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 \$44,593.08. 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.

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July 21, 2020 **Total Project Costs**

EXHIBIT 1 Preparation of

S2Li No.

20-889 County No. CM2685-WA16

S2Li Fee Estimate

Landfill Stabilization and Water Quality Technical Reports

Lofton Creek Landfill Nassau County, Florida

			1403	sau County, Fi	orius						
		LABOR CATEGORY AND RATE							Programme Tolking		
LABOR		Project Dir./ Principal	Regional Manager/ QC Officer	Principal Engineer	Senior Engineer	Project Engineer	Associate Engineer/CADD	Field Technician	Office Manager	TOTAL HOURS	SUBTOTAL LABOR
TASK	DESCRIPTION	\$250,00	\$232.25	\$190.26	\$137.09	\$97.92	\$74.21	\$52.38	\$76.24		E RECEIVE
1	Preparation of a Water Quality Technical Report	4	16	0	0	0	0	0	4	24	\$5,020.96
2	Preparation of a Landfill Stabilization Study and Report	4	36	0	0	24	24	0	8	0	\$14,102.04
3	FDEP Submittal, Requests for Additional Information and Permit Review	2	16	0	0	0	0	0	2	20	\$4,368.48
	SUBTOTALS:	10	68	0	0	24	24	0	14	44	\$23,491.48
EXPEN:	EXPENSES		Lab Testing (est.)	Equipment Rental (est.)	Parts (est.)	The Colinas Group					SUBTOTAL EXPENSES
TASK	DESCRIPTION	(\$100/day)				(Attachment)					
1	Preparation of a Water Quality Technical Report	\$ -	\$ -	\$ -		\$ 21,101.60					\$ 21,101.60
	Preparation of a Landfill Stabilization Study and Report	\$ -	\$ -	\$ -	\$ -	\$ -					\$ -
2				A .	1	\$0.00	1				\$ -
3	FDEP Submittal, Requests for Additional Information and Permit Review	\$ -	\$ -	\$ -		\$0.00			-		<u> </u>

ı		COST SUMMARY						
	TASK	DESCRIPTION		SUBTOTAL SZLI LABOR		SUBTOTAL EXPENSES including Subconsultants		TASK
I	1	Preparation of a Water Quality Technical Report	\$	5,020.96	\$	21,101.60	\$	26,122.56
Г	2	Preparation of a Landfill Stabilization Study and Report	\$	14,102.04	\$	-	\$	14,102.04
T	3	FDEP Submittal, Requests for Additional Information and Permit Review	\$	4,368.48	\$		\$	4,368.48
ſ	To	DTALS	\$	23,491.48	\$	21,101.60	\$	44,593.08

THE COLINAS GROUP, INC.

HYDROGEOLOGISTS & ENGINEERS

July 21, 2020

Mr. Omar Smith, P.E. S2L, Inc. 531 Versailles Drive, Suite 202 Maitland, Florida 32751

Subj: Proposal for Professional Hydrogeological Services Preparation of Water Quality Monitoring Technical Report Lofton Creek Closed Landfill Nassau County, Florida TCG Proposal No. P-603

Dear Mr. Smith:

The Colinas Group, Inc. (TCG) is pleased to present this proposal to assist S2Li with preparation of a Landfill Stabilization Report and renewal of the Florida Department of Environmental Protection (FDEP) long-term care permit issued for Nassau County's Lofton Creek Closed Class I Landfill located in eastern Nassau County, Florida.

Scope of Services

We propose to provide expert hydrogeological services for preparation of the water quality monitoring Technical Report in support of the Landfill Stabilization Report. TCG will provide professional services to complete the following Work Tasks for this project:

TASK 1: Preparation of Water Quality Monitoring Technical Report

TCG proposes to prepare a water quality monitoring Technical Report for the Lofton Creek Closed landfill for the 5-year period Summer (June) 2016 through Winter (December) 2020, in accordance with the Water Quality Monitoring Plan (WQMP) made part of the facility's long-term care permit issued by the Florida Department of Environmental Protection (FDEP) on February 15, 2012 and last modified on February 16, 2018.

The Technical Report will address, but may not be limited to, the information requirements listed in Rule 62-701.510(8)(b), F.A.C. and the landfill's long-term care permit to include:

- 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;
- Comparisons among shallow, middle and deep zone wells;
- 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 may present recommendations for modification of the current landfill Monitoring Plan Implementation Schedule (MPIS) if warranted based on evaluation of long-term monitoring results. Recommendations may 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.

TCG will prepare and deliver an electronic copy of the draft Technical Report presenting the results or our evaluation and recommendations for future monitoring of the Lofton Creek Closed Landfill. Upon receipt of review comments, TCG will prepare the final report with recommendations and submit one electronic copy suitable for submission to the FDEP to complete this portion of Task 1.

TASK 2: Meetings with Nassau County / FDEP Northeast District

TCG will prepare for and attend one teleconference with Nassau County and one teleconference with the FDEP Northeast District Office in Jacksonville. TCG will be prepared to review and discuss findings, conclusions and recommendations derived from preparation of the water quality monitoring Technical Report for the Lofton Creek Closed Landfill.

TASK 3: Monitoring Plan and Vicinity Well Inventory Update

TCG will prepare a revised Water Quality Monitoring Plan for the landfill suitable for submission to the FDEP as part of the permit renewal process. Revisions to the current WQMP will be

based on conclusions and recommendations presented in the water quality monitoring Technical Report and discussions with the FDEP.

TCG will complete a one-mile radius well inventory to update the most recent inventory submitted to the FDEP in conjunction with the 2016 permit renewal for the Lofton Creek Closed Landfill. TCG will identify and locate any new public and private water wells constructed within the area since 2016 based on recent aerial photography review, review of Nassau County utility service and well permitting files and physical reconnaissance of the project area.

TCG will prepare a Well Inventory Update to include a map showing locations of new wells located within the search radius centered on the Lofton Creek Landfill. The Well Inventory Update will be suitable for submission to the FDEP as part of the permit renewal process.

Estimated Professional Labor Fees

TCG proposes to complete the above Scope of Services in accordance with our current standard hourly fee schedule. An estimate of fees to complete this project is provided below as follows:

Task	Personnel	Hours	Rate	Totals
1	Principal-in-Charge/Project Manager	20	\$ 152.80	\$ 3,056.00
	Senior Hydrogeologist	46	\$ 123.50	5,681.00
OR WEIGH	Staff Hydrogeologist	48	\$ 90.50	4,344.00
	Draftsman/CADD Operator	8	\$ 62.00	496.00
	Clerical/Word Processor	8	\$ 39.50	316.00
			Sub-Total Task 1	\$ 13,893.00
2	Principal-in-Charge/Project Manager	4	\$ 152.80	\$ 611.20
	Senior Hydrogeologist	4	\$ 123.50	494.00
			Sub-Total Task 2	\$ 1,105.20
3	Principal-in-Charge/Project Manager	8	\$ 152.80	\$ 1,222.40
	Senior Hydrogeologist	16	\$ 123.50	1,976.00
	Staff Hydrogeologist	24	\$ 90.50	2,172.00
	Draftsman/CADD Operator	8	\$ 62.00	496.00
	Clerical/Word Processor	6	\$ 39.50	237.00
			Sub-Total Task 3	\$ 6,103.40
		Total Esti	mated Fee	\$ 21,101.60

TCG will not exceed the above fee estimates for Tasks 1 through 3 unless the Scope of Services is increased, and then only upon receipt of written authorization from S2Li.

Project Schedule

TCG estimates approximately 90 days from receipt of the December 2020 monitoring event sampling results for the Lofton Creek Landfill to complete the water quality monitoring Technical Report and deliver our draft report to S2Li for review and acceptance. The final report will be delivered within 5 working days from receipt of S2Li and Nassau County draft review comments. Task 2 will be completed prior to submission of the draft Technical Report. We estimate 30 days following conclusion of discussions with the FDEP to complete Task 3.

We appreciate the opportunity to present this proposal for your consideration and look forward to being of service to S2Li and Nassau County. If you have any questions concerning this proposal please do not hesitate to contact our office at your convenience.

Very truly yours,

THE COLINAS GROUP, INC.

Richard L. Potts, Jr., P.G.

Principal Consultant

FL P.G. Reg. No. 1113



Attachment "B"

Proposed Loaded Billing Rates for 2019/2020 for Services Provided by S2Li on Behalf of Nassau County

Contract Position	Hourly Rates
Project Director/Principal-in-Charge	\$250.00
Regional Manager/QC Officer	\$232.25
Principal Engineer	\$190.26
Senior Engineer	\$137.09
Project Engineer	\$ 97.92
Associate Engineer/CADD	\$ 74.21
Field Technician	\$ 52.38
Office Manager	\$ 76.24

- 1. Billing rate based on applying a 10% profit to S2Li's breakeven multiplier. Project Director was capped at \$250.00 per hour.
- Rates include typical expenses such as reproduction, travel costs (except for field vehicle), lodging, and printing. Any other extraordinary direct expenses shall be negotiated on a case by case basis and will be identified in the Work proposal.
- 3. Subconsultant costs and parts purchased on the County's behalf will be billed as pass-through costs with no profit or markup added by S2Li in addition to actual costs.
- 4. Field vehicle (truck) will be billed at \$100/day.

THE COLINAS GROUP

Mr. Omar Smith, P.E. S2L, Inc. 529 Versailles Drive, Suite 202 Maitland, FL 32751

April 4, 2019

Subj: Professional Hydrogeologic Services Fee Schedule

S2L, Inc - Nassau County Continuing Contract for Engineering Services

Dear Mr. Levin:

The Colinas Group, Inc. (TCG) herein presents our proposed Professional Services Fee Schedule for hydrogeologic services that may be required from time to time in support of specific projects assigned to S2Li by Nassau County:

S2L, Inc. / Nassau County Continuing Professional Engineering Services Contract Support April 4, 2019

Personnel Classification	Billing 1/.
Principal Consultant/Project Manager (PG)	\$ 152.80
Sr. Hydrogeologist (PG)	\$ 123.50
Staff Hydrogeologist	\$ 90.50
Environmental Field Technician	\$ 88.35 2/.
Draftsperson/CAD Operator	\$ 62.00
Clerk/Word Processor	\$ 39.50

1/. Billing Rates include typical expenses such as mileage, reproduction and communication costs.

2/. Billing Rate includes mileage, field-testing instrument rental and water sampling supplies.

3/. As required, on a project-by-project basis, specialized field investigation equipment rental and subcontract drilling and well construction services will be billed as pass through costs with no profit or other fees added to actual cost.

The above billing rates will remain in force throughout the duration of S2Li's contract term with Nassau County.

Very truly yours, THE COLINAS GROUP, INC.

Richard L. Potts, Jr., P.G Principal Consultant FL P.G. Reg. No.1113

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