

**WORK AUTHORIZATION # CM2685-WA07**  
**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**

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

CURRENT WORK AUTHORIZATION			
Project Short Title: Preparation of a FDEP Report on the Inward Gradient Impact to Water Quality Standards at the 42-Acre West Nassau Class I Landfill Area			
		CONTRACT OVERVIEW	
		Total of Previous Authorizations	\$324,293.52
Date Submitted	7/26/19	Adjustments/Change Orders	\$0
Amount	\$22,873.00	This Work Authorization	\$22,873.00
Scheduled Completion	120 days from NTP	Current Contract Total	\$347,166.52

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:**

S2Li will begin preparation of a FDEP Report on the Inward Gradient Impact to Water Quality Standards at the 42-Acre West Nassau Class I Landfill Area. Services for the Work Authorization are further described in Attachment "A", attached hereto and incorporated herein.

**ARTICLE 2. Time Schedule**

Work under the Scope of Services provided above will begin upon receipt of the signed Work Authorization. Assuming a receipt of a Notice to Proceed by mid-October 2019, the draft report for County review will be submitted within 70 days such that corrections and finalization can be made to allow for final submittal to FDEP by January 7, 2020. A meeting with FDEP to discuss the report results and the LTC permit renewal is assumed to be conducted by February 15, 2020. Total days to conduct the services within this Work Authorization is 120 days from the Notice-to-Proceed.

**ARTICLE 3. Budget**

The cost estimate to conduct the work as described in the attached Scope of Service is \$22,873.00. 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.


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 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 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:

BY:   
Print Name: Samuel B. Levin  
Title: President  
Date: August 27, 2019

**Account No.: 01362534-531000**

**RECOMMENDED AND APPROVED BY NASSAU COUNTY:**

Public Works:

  
Department Head or Designee

Contract Management:

  
Grayson Hagins

Office of Management & Budget:

  
Megan Diehl

County Manager:

  
Michael S. Mullin

Ex-Officio Clerk:

N/A  
John Crawford

County Attorney:

  
Michael S. Mullin



**Attachment "A"**  
**Scope of Services**

**Preparation of a FDEP Report  
on the  
Inward Gradient Impact to Water Quality Standards  
at the  
42-Acre West Nassau Class I Landfill Area**

**Nassau County**  
**S2L, Inc.'s Contract and Work Authorization Number: CM2685-WA07**  
**S2Li Project Number: 19-845**

**BACKGROUND**

In July 2015, Nassau County ("County") renewed a closure permit (Permit No. 0002870-017-SF) that provided for long-term care ("LTC") after the closure of the West Nassau Class I Landfill ("Landfill" consisting of both the old closed unlined 11-acre and the lined 42-acre areas). Specific Condition No. C.8.b. allowed the County to discontinue groundwater withdrawal through the use of the "Recovery Well System" in the southeast corner of the Landfill for a testing period until July 1, 2020, to demonstrate that turning the system off will not result in violations of State water quality standards outside of the slurry wall. During this testing period, the County did not need to maintain an inward gradient at the slurry wall for the southern portion of the Landfill but is required to continue to monitor water level measurements inside and outside the slurry wall during this period. This monitoring work is currently being conducted by S2L, Incorporated ("S2Li") under a separate Work Authorization.

With the demonstration period nearing an end at the time of the LTC permit renewal, water quality analysis of the ground and surface water quality needs to be conducted for the demonstration period to determine if any water quality standards were impacted as a result of turning off the Recovery Well System. This analysis will include review of the water quality testing results and inward gradient well measurements to corollate any impact to water quality. The results of this analysis will formulate a recommendation to the Florida Department of Environmental Protection (FDEP) to either permanently shut down and abandon the Recovery Well System, or extend the demonstration period, or to turn the Recovery Well System back on. The report will be submitted to FDEP prior to meeting with the permitting staff to discuss the results/recommendation of the analysis. This analysis is to be conducted prior to preparing the Water Quality Technical Report due to FDEP by May 2020.

This Work Authorization will provide engineering and hydrogeological consulting services by S2Li and The Colinas Group ("TCG") (S2Li's hydrogeological subconsultant) collectively known as the "S2Li Project Team" to conduct an analysis of the inward gradient system and impacts to the water quality standards, and to assist the County in technical representations to the FDEP. Under the scope of services for this Work Authorization, S2Li Project Team will perform the following:

## SCOPE OF SERVICES

### **Task 1: Water Quality Results Comparison to Inward Gradients Measurements**

S2Li Project Team will analyze recorded monthly groundwater levels and results of semi-annual water quality sampling and chemical analyses available over the testing period to assess whether monitoring data indicate a resumption of internal groundwater withdrawals is necessary to protect groundwater resources outside the landfill slurry wall.

S2Li Project Team will prepare a written report presenting water level and water quality data used in the assessment, graphic presentations of the monitoring data, conclusions drawn as a result of the analysis, and recommendations for the future operation or shutdown of the Recovery Well System.

*Deliverables: Draft and Final Report Documents*

### **Task 2: Meeting with FDEP**

S2Li Project Team will prepare for and attend one meeting with Nassau County and FDEP to discuss the results of our analysis and recommendations for future facility operations related to groundwater gradient control and the Recovery Well System at the West Nassau Landfill.

*Deliverables: Meeting Agenda*

## SCHEDULE

Work under the Scope of Services provided above will begin upon receipt of the signed Work Authorization. Assuming a receipt of a Notice to Proceed by mid-October 2019, the draft report for County review will be submitted within 70 days such that corrections and finalization can be made to allow for final submittal to FDEP by January 7, 2020. A meeting with FDEP to discuss the report results and the LTC permit renewal is assumed to be conducted by February 15, 2020. Total days to conduct the services within this Work Authorization is 120 days from the Notice-to-Proceed.

## COST ESTIMATE

The cost estimate to conduct the Work as described in the above listed Scope of Services is \$22,873.00. 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.

August 5, 2019

**Total Project Costs**

S2Li Fee Estimate

**EXHIBIT 1**

**Preparation of a FDEP Report  
Inward Gradient Impact to Water Quality Standards  
West Nassau Landfill - 42 Acre Lined Area  
Nassau County, Florida**

S2Li No.

19-845

County No.

CM2685-WA07

LABOR		LABOR CATEGORY AND RATE								TOTAL HOURS	SUBTOTAL LABOR
		Project Dir./ Principal ✓	Regional Manager/ QC Officer ✓	Principal Engineer ✓	Senior Engineer ✓	Project Engineer ✓	Associate Engineer/CADD	Field Technician	Office Manager		
TASK	DESCRIPTION	\$250.00	\$232.25	\$190.26	\$137.09	\$97.92	\$74.21	\$52.38	\$76.24		
1	Water Quality Results Comparison to Inward Gradients Measurements Report	2	16	0	8	8	0	0	6	40	\$6,553.52
2	Meeting with FDEP	0	16	0	0	0	0	0	2	18	\$3,868.48
	SUBTOTALS:	2	32	0	8	8	0	0	8	58	\$10,422.00

EXPENSES		Field Vehicle (\$100/day)	Lab Testing (est.)	Equipment Rental (est.)	Parts (est.)	The Colinas Group (Attachment)					SUBTOTAL EXPENSES
TASK	DESCRIPTION										
1	Water Quality Results Comparison to Inward Gradients Measurements Report	\$ -	\$ -	\$ -		\$10,617.40					\$ 10,617.40
2	Meeting with FDEP	\$ -	\$ -	\$ -		\$1,833.60					\$ 1,833.60
	SUBTOTALS:	\$ -	\$ -	\$ -	\$ -	\$ 12,451.00	\$ -	\$ -	\$ -	\$ -	\$ 12,451.00

COST SUMMARY				
TASK	DESCRIPTION	SUBTOTAL S2Li LABOR	SUBTOTAL EXPENSES including Subconsultants	TASK TOTAL
1	Water Quality Results Comparison to Inward Gradients Measurements Report	\$ 6,553.52	\$ 10,617.40	\$ 17,170.92
2	Meeting with FDEP	\$ 3,868.48	\$ 1,833.60	\$ 5,702.08
TOTALS		\$ 10,422.00	\$ 12,451.00	\$ 22,873.00

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August 5, 2019

**Preparation of a FDEP Report  
Inward Gradient Impact to Water Quality Standards  
West Nassau Class I Landfill  
Nassau County, Florida**

S2Li No. 19-845  
County No. CM2685-WA07

**Attachment - The Colinas Group Fee Estimate - Subconsultant**

LABOR		LABOR CATEGORY AND RATE										TOTAL HOURS	SUBTOTAL LABOR
		Principal Consultant/ Project Manager \$152.80	Senior Hydrogeologist \$123.50	Staff Hydrogeologist \$90.50	Environ. Field Tech. \$88.35	Draftsperson/ CADD Oper. \$62.00					Clerk/ Word Processor \$39.50		
TASK	DESCRIPTION												
1	Water Quality Results Comparison to Inward Gradients Measurements Report	13	34	40	0	8					8	103	\$10,617.40
2	Meeting with FDEP	12	0	0	0	0					0	12	\$1,833.60
	SUBTOTALS:	25	34	40	0	8					8	115	\$12,451.00

EXPENSES		Field Vehicle (\$90/day)	Lab Testing (est.)	Equipment Rental (est.)	Parts (est.)	Landtec Web Data Base (\$500/m)		Subcon- tractors (est.)					SUBTOTAL EXPENSES
TASK	DESCRIPTION												
1	Water Quality Results Comparison to Inward Gradients Measurements Report	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -					\$ -
2	Meeting with FDEP	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -					\$ -
	SUBTOTALS:	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -					\$ -
	TOTAL												\$12,451.00

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# THE COLINAS GROUP, INC.

HYDROGEOLOGISTS & ENGINEERS

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August 5, 2019

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

Subj: Proposal for Hydrogeological Services  
**Inward Hydraulic Gradient Analysis**  
**West Nassau Closed Landfill**  
TCG Proposal No. P-584

Dear Mr. Smith:

The Colinas Group, Inc. (TCG) is pleased to submit this proposal and fee estimate to complete the following Scope of Services for hydrogeological services in support of regulatory compliance actions for Nassau County's West Nassau Closed Class I Landfill.

## **SCOPE OF SERVICES**

In the most recent permit modification for the closed West Nassau Landfill in July 2015, the FDEP approved discontinuing internal groundwater pumping inside the southern cell of the landfill's surrounding slurry wall for a testing period extending until July 1, 2020. The purpose of the testing period is to demonstrate that turning the internal pumping off has, or has not, resulted in violations of State of Florida water quality standards in groundwater outside of the slurry wall.

TCG will analyze monthly groundwater levels recorded by Nassau County staff and results of semi-annual water quality sampling and chemical analyses available over the testing period to assess whether monitoring data indicate resumption of internal groundwater withdrawals is necessary to protect groundwater resources outside the landfill slurry wall.

TCG will prepare a written report presenting water level and water quality data used in the assessment, graphic presentations of the monitoring data, conclusions drawn for the analysis, and recommendations for future operation of the landfill inward hydraulic gradient pumping system.

TCG will attend one meeting with Nassau County and the FDEP to discuss the results of our analysis and recommendations for future facility operations related to groundwater gradient control at the West Nassau Landfill.

#### ESTIMATED FEES AND COSTS

TCG proposes to complete the above Scope of Services on a not-to-exceed fee basis in accordance with our personnel standard hourly rates. A summary of professional labor fees to complete this assignment is provided below:

##### Professional Labor

Principal Consultant/Project Manager	25 Hours @ \$152.80/Hr.	\$ 3,820.00
Sr. Hydrogeologist	34 Hours @ \$123.50/Hr.	4,199.00
Staff Hydrogeologist	40 Hours @ \$ 90.50/Hr.	3,620.00
Draftsperson/CAD Operator	8 Hours @ \$ 62.00/Hr.	496.00
Clerk/Word Processor	8 Hours @ \$ 39.50/Hr.	<u>316.00</u>
TOTAL ESTIMATED FEE		<b>\$12,451.00</b>

#### PROJECT COMPLETION

We estimate approximately 60 days from notice to proceed to complete the Inward Hydraulic Gradient Analysis and submit a written draft report to S2Li for review and comment. The final report will be delivered electronically within two weeks of draft review and approval.

I trust this proposal is suitable for your budget and contracting needs. If you have any questions or require further information, please do not hesitate to contact me at your convenience. We look forward to being of continued service to S2Li and Nassau County.

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.
2. 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**

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

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

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

<sup>3/</sup>. 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



### Operating Expenditures Detail

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