

**WORK AUTHORIZATION # CM2096-WA19
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

CURRENT WORK AUTHORIZATION			
Project Short Title: Groundwater Monitoring Well Abandonment Services for Bryceville Landfill			
		CONTRACT OVERVIEW	
		Total of Previous Authorizations	\$958,272.04
Date Submitted	05/11/17	Adjustments/Change Orders	(\$12,873.70)
Amount	\$13,594.00	This Work Authorization	\$13,594.00
Scheduled Completion	60 days	Current Contract Total	\$958,992.34

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 the services of a Florida-licensed Water Well Contractor (Environmental Drilling Service, Inc.) to complete the well probe and vent abandonment process. Plugging and abandonment of existing monitoring wells at the County's closed Landfill will be performed in accordance with the requirements of Chapter 62-701, F.A.C., Rule 62-532.500(4), Florida Code (F.A.C.) and St. Johns River Water Management District Rule 40C-3.531. S2L, Incorporated (S2Li) shall perform the work in accordance with the scope of services, attached hereto as Attachment "A".

ARTICLE 2. Time Schedule

Total expected time period for this work authorization is 60 days.

ARTICLE 3. Budget

The cost estimate to conduct the Work as described in the Scope of Services is \$13,594.00.

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:

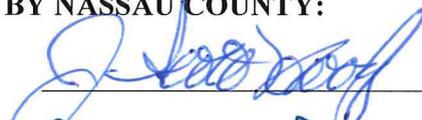
Unless detailed herein, all drawings, data, electronic files and other information required for this Work Authorization has been accepted by Consultant. Specifically, all electronic files have been reviewed and accepted for the purposes of this Work assignment. Any additional information, including detailed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

AGREED TO BY: **S2L, Incorporated**

BY: 
Print Name: Samuel B. Levin
Title: President
Date: May 18, 2017

RECOMMENDED AND APPROVED BY NASSAU COUNTY:

Public Works Director:



Contract Management:

Charotte Young 5/24/17

Office of Management & Budget:



County Manager:

 6/9/17

APPROVED by the County Manager, designee for the BOARD OF COUNTY COMMISSIONERS, the ___ day of _____, 2017.

ACCOUNT NO.: 01364534-531000 Bryceville

Groundwater Monitoring Well Abandonment Services for the Bryceville Landfill

**County Contract Number: CM2096-WA19
S2Li Project Number: 17-730**

BACKGROUND

On December 16, 2016, the Florida Department of Environmental Protection ("FDEP") released Nassau County's ("County") Bryceville Landfill ("Landfill") from its State of Florida solid waste permit requirements. This release means that the County is no longer obligated to comply with regulatory long-term care (LTC) permit conditions, including those for water quality sampling. As part of this release, FDEP has requested that the Landfill's groundwater monitoring wells be abandoned in accordance with St. Johns River Water Management District regulations.

This Work Authorization provides for the services required to abandon the Landfill's groundwater monitoring wells in accordance with St. Johns River Water Management District regulations. 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

S2Li Team will provide the services of a Florida-licensed Water Well Contractor (Environmental Drilling Service, Inc.) to complete the well probe and vent abandonment process. Plugging and abandonment of existing monitoring wells at the County's closed Landfill will be performed in accordance with the requirements of Chapter 62-701, F.A.C., Rule 62-532.500(4), Florida Administrative Code (F.A.C.) and St. Johns River Water Management District Rule 40C-3.531.

S2Li Team has identified monitoring wells to be plugged and abandoned at the Landfill from information available on the FDEP Oculus website related to routine semi-annual monitoring activities. Twelve existing monitoring wells have been identified to be abandoned at the Landfill. A Schedule of Monitoring Wells, including reported total depths for individual wells, is presented on Attachment A to the scope of services provided by TCG.

A total of 12 monitoring wells are fitted with above-grade casing risers, metal well covers/locks and concrete well pads as indicated on Attachment A to the scope of services prepared by TCG. These above-ground structures will be dismantled and removed from the site for proper disposal.

Above-grade well casings will be cut-off and the wells filled with neat cement from the well bottom back to land surface. Placement of neat cement will proceed using a tremie pipe to eliminate the possibility of grout-bridging and to confirm complete filling from bottom to top by grout returns to land surface.

Debris, including concrete well pads, well covers, pipe and grout waste, created by the abandonment process, will be removed from the site and transported for disposal at a permitted waste disposal facility. The S2Li Team will direct and oversee the abandonment procedures, confirm complete grouting and prepare DEP Well Abandonment Form 62-532.900(2), F.A.C. for each monitoring well abandoned.

A Site Map will be prepared depicting locations of abandoned monitoring wells. S2Li Team will prepare a Well Abandonment package suitable for submission to the FDEP and provide one electronic copy of the submittal documents to the County to complete this project.

Deliverables: Well Abandonment Package.

SCHEDULE

Total expected time period for this work authorization is 60 days.

SCOPE OF SERVICES - COUNTY ASSUMPTIONS

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

- Access to the entrance into the Landfill;
- Prior to field activities, remove any salvageable materials e.g. locks.

COST ESTIMATE

The cost estimate to conduct the Work as described in the above listed Scope of Services is \$13,594. 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.

April 20, 2017

Total Project Costs

S2Li Fee Estimate

EXHIBIT 1

S2Li No.

17-730

County No.

CM2096-WA19

**Groundwater Monitoring Well Abandonment
Bryceville Landfill
Nassau County, Florida**

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	Office Manager \$68.46		
TASK	DESCRIPTION									
	Monitoring Well Abandonment	2	12	0	0	0	0	4	18	\$3,230.40
	SUBTOTALS:	2	12	0	0	0	0	4	18	\$ 3,230.40

EXPENSES		Field Vehicle (\$90/day)	Lab Testing (est.)	Equipment Rental (est.)	Parts (est.)		The Colinas Group (see attached)			SUBTOTAL EXPENSES
TASK	DESCRIPTION									
	Monitoring Well Abandonment	\$ -	\$ -	\$ -		\$ -	\$ 10,363.60			\$ 10,363.60
	SUBTOTALS:	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,363.60	\$ -	\$ -	\$ 10,363.60

COST SUMMARY				
TASK	DESCRIPTION	SUBTOTAL S2LI LABOR	SUBTOTAL EXPENSES including Subconsultants	TASK TOTAL
	Monitoring Well Abandonment	\$ 3,230.40	\$ 10,363.60	\$ 13,594.00
	TOTALS	\$ 3,230.40	\$ 10,363.60	\$ 13,594.00

April 20, 2017

Attachment - The Colinas Group Fee Estimate - Subconsultant

Groundwater Monitoring Well Abandonment
 Bryceville Landfill
 Nassau County, Florida

S2Li No. 17-730
 County No. CM2096-WA19

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												
	Monitoring Well Abandonment	6	12	24	0	4	4	0	0	0	0	50	\$ 4,743.60
	SUBTOTALS:	6	12	24	0	4	4	0	0	0	0	50	\$ 4,743.60

EXPENSES		Field Vehicle (\$90/day)	Lab Testing (est.)	Equipment Rental (est.)	Parts (est.)		Subcontractors (est.)						SUBTOTAL EXPENSES
TASK	DESCRIPTION												
	Monitoring Well Abandonment	\$ 180.00	\$ -	\$ -	\$ -	\$ -	\$ 5,440.00	\$ -					\$ 5,620.00
	SUBTOTALS:	\$ 180.00	\$ -	\$ -	\$ -	\$ -	\$ 5,440.00	\$ -					\$ 5,620.00
TOTAL												\$10,363.60	

THE COLINAS GROUP, INC.

HYDROGEOLOGISTS & ENGINEERS

April 18, 2017

Mr. Omar Smith, P.E.

S2L, Inc.

531 Versailles Drive, Suite 202

Maitland, Florida 32751

Subj: Proposal for Hydrogeological Services
Monitoring Well Abandonment
Bryceville Closed Landfill (Nassau County)
TCG Proposal No. P-558

Dear Mr. Edwards:

The Colinas Group, Inc. (TCG) is pleased to submit this proposal and fee estimate to complete the following Scope of Services for completion of proper abandonment of groundwater monitoring wells at the Bryceville Closed Landfill and preparation of Well Abandonment Reports for submission to the Florida Department of Environmental Protection (FDEP).

SCOPE OF SERVICES

TCG will provide qualified professional labor and the services of a Florida-licensed Water Well Contractor to complete plugging and abandonment of existing monitoring wells at Nassau County's closed Bryceville Landfill in accordance with the requirements of Chapter 62-701, F.A.C., Rule 62-532.500(4), F.A.C. and St. Johns River Water Management District Rule 40C-3.531.

TCG has identified monitoring wells to be plugged abandoned at the landfill from information available on the FDEP Oculus website related to routine semi-annual monitoring activities. We have identified twelve (12) existing monitoring wells to be abandoned at the landfill. A Schedule of Monitoring Wells, including reported total depths for individual wells, is presented on Attachment A.

A total of twelve (12) monitoring wells are fitted with above-grade casing risers, metal well covers/locks and concrete well pads as indicated on Attachment A. These above-ground structures will be dismantled and removed from the site.

Above-grade well casings will be cut-off and the wells filled with neat cement from the well bottom back to land surface. Placement of neat cement will proceed using a tremie pipe to eliminate the possibility of grout-bridging and to confirm complete filling from bottom to top by grout returns to land surface.

Debris, including concrete well pads, well covers, pipe and grout waste, created by the abandonment process will be removed from the site and transported for disposal at permitted waste disposal facility. TCG will direct and oversee abandonment procedures, confirm complete grouting and prepare DEP Well Abandonment Form 62-532.900(2), F.A.C. for each monitoring well abandoned.

A Site Map will be prepared depicting locations of abandoned monitoring wells. We will prepare a Well Abandonment package suitable for submission to the FDEP and provide one electronic copy of the submittal documents to S2L, Inc. to complete this project.

ESTIMATED FEES AND COSTS

TCG proposes to complete the above Scope of Services on a not-to-exceed fee basis in accordance with the personnel standard hourly rates identified in our Professional Services Contract for Nassau County with S2L, Inc.

A breakdown of man-hours and estimated fees and costs for completion of the monitoring facility abandonment is provided below. TCG will contract with Environmental Drilling Service, Inc. (EDS) to complete the well, probe and vent abandonment process. A quote received from EDS for completion of the abandonments is attached.

Estimated Professional Labor Fee

Principal Consultant	6 Hours @ \$145.60/Hour.....	\$ 873.60
Sr. Hydrogeologist	12 Hours @ \$117.60/Hour.....	1,411.20
Staff Hydrogeologist	24 Hours @ \$ 86.20/Hour.....	2,068.80
Draftsperson	4 Hours @ \$ 60.00/Hour.....	240.00
Clerk/Word Proc.	4 Hours @ \$ 37.50/Hour.....	150.00

Direct Costs

Field Vehicle	2 Days @ \$90.00/Day.....	\$ 180.00
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TOTAL ESTIMATED FEES AND COSTS:	\$ 4,923.60
WELL ABANDONMENT CONTRACTOR COST:	\$ <u>5,440.00</u>
TOTAL ESTIMATED FEES AND COSTS:	\$ 10,363.60

PROJECT COMPLETION

We estimate approximately forty-five (45) days from notice to proceed from S2L, Inc. to complete the facility abandonments and deliver the well abandonment reports for the Bryceville Closed Landfill to complete this project.

I trust this proposal and attached fee and cost estimate are 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 the successful and timely completion of this assignment for S2L, Inc. and Nassau County.

Very truly yours,
THE COLINAS GROUP, INC.



Richard L. Potts, Jr., P.G.
Principal Consultant/Project Manager
Fl. P.G. Reg. No.1113

ATTACHMENT A

SCHEDULE OF MONITORING WELLS BRYCEVILLE CLOSED LANDFILL

No.	Well I.D.	Total Well Depth* (ft.)	Well Cover and Pad
1.	MW-1	33	X
2.	MW-2S	36	X
3.	MW-2i	56	X
4.	MW-3S	33	X
5.	MW-3i	65	X
6.	MW-4S	31	X
7.	MW-4i	63	X
8.	MW-4D	112	X
9.	MW-5S	32	X
10.	MW-5i	63	X
11.	MW-6S	38	X
12.	MW-6i	62	X
Total of Well Depths		624 L. Ft.**	

* Well depths are reported by others.

** All well casings are 2" PVC

ENVIRONMENTAL DRILLING SERVICE, INC.
 4712 OLD WINTER GARDEN ROAD
 ORLANDO, FL 32811

QUOTATION

Quote Number: 17289
 Quote Date: Mar 30, 2017
 Page: 1

Voice: 407 295 3532
 Fax: 407 296 3957

Quoted To:
Colinas Group Inc. 377 Maitland Ave Suite 2012 Altamonte Springs, FL 32701

Customer ID	Good Thru	Payment Terms	Sales Rep
COLINAS	4/29/17	Net 30 Days	

Quantity	Item	Description	Unit Price	Amount
		BRYCEVILLE CLOSED LANDFILL, CALLAHAN, NASSAU CO, FL		
		Scope of work: Abandon 12 - 2" Monitor wells with a total footage of 624 ft - remove/dispose above ground casing		
		Estimated time to complete: 1 to 1.5 days		
624.00	WA2	per ft, 2" Well Abandonment	6.00	3,744.00
12.00	WPR	Above ground casing removal	75.00	900.00
1.00	Mob	Mobilization	500.00	500.00
1.00	PR	Permit - Nassau Co (no charge well abandon)		
1.00	PD	Per Diem, per crew,per night (estimate/ff needed)	300.00	300.00
			Subtotal	5,444.00
			Sales Tax	
			TOTAL	5,444.00

NASSAU COUNTY CONTRACT MANAGEMENT

CONTINUING CONTRACT FOR PROFESSIONAL ENGINEERING SERVICES - SOLID WASTE LANDFILLS AND OTHER RELATED ANCILARY FACILITIES
 S2L, INCORPORATED
 CONTRACT NO. CM2096

WA#	PROJECT NAME	APPROVAL DATE	ORIGINAL FEE	CHANGE ORDERS	CONTRACT FEE	STATUS	ACTUAL COST	DIFFERENTIAL
01	Operation, Monitoring, Maintenance and Reporting for the Landfill Gas Collection and Control System at the West Nassau Class I Landfill		\$ 101,250.04	\$ -	\$ 101,250.04	Completed	\$ 100,922.38	\$ (327.66)
02	Preparation of a Title V Air Permit Renewal Application for the West Nassau Class I Landfill		\$ 20,399.06	\$ -	\$ 20,399.06	Completed	\$ 19,916.71	\$ (482.35)
03	Preparation of a 2014 Landfill Financial Assurance Report		\$ 15,906.20	\$ -	\$ 15,906.20	Completed	\$ 15,590.06	\$ (316.14)
04	Preparation of an Inward Gradient Analysis and Meeting with FDEP for the West Nassau Class I Landfill		\$ 24,329.98	\$ 14,009.84	\$ 38,339.82	Completed	\$ 37,446.13	\$ (893.69)
05	Operation, Monitoring, Maintenance and Reporting for the Landfill Gas Collection and Control System at the West Nassau Class I Landfill		\$ 174,387.83	\$ -	\$ 174,387.83	Completed	\$ 166,317.75	\$ (8,070.08)
06	Preparation of Technical Bidding Documents for a Flare Station Blower Replacement Landfill Gas Collection and Control System West Nassau Class I Landfill		\$ 25,925.39	\$ 3,362.12	\$ 29,287.51	In progress	\$ 29,287.51	\$ -
07	Well No. 2i Investigation at the Bryceville Landfill	02/05/15	\$ 6,499.93	\$ -	\$ 6,499.93	Completed	\$ 5,900.88	\$ (599.05)
08	Preparation of a Permit Application for Long-Term Care Renewal for the West Nassau Class 1 Landfill		\$ 77,546.42	\$ -	\$ 77,546.42	Completed	\$ 77,156.79	\$ (389.63)
09	Preparation of a 2015 Landfill Financial Assurance Report for Landfills		\$ 13,206.88	\$ -	\$ 13,206.88	Completed	\$ 11,756.61	\$ (1,450.27)
10	Leachate Storage Tank System Repairs & Maintenance		\$ 23,064.21	\$ -	\$ 23,064.21	In progress	\$ 23,064.21	\$ -
11	Operation, Monitoring, Maintenance and Reporting for the Landfill Gas Collection and Control System at the West Nassau Class I Landfill; FY15/16		\$ 176,237.83	\$ -	\$ 176,237.83	Completed	\$ 161,008.57	\$ (15,229.26)
12	Preparation of a 2016 Landfill Financial Assurance Report for submittal to FDEP		\$ 13,686.56	\$ -	\$ 13,686.56	Completed	\$ 12,458.85	\$ (1,227.71)
13	Preparation of Technical Documents for Groundwater and Surface Water Monitoring at Nassau County's Landfills		\$ 8,555.66	\$ -	\$ 8,555.66	Completed	\$ 7,295.84	\$ (1,259.82)
14	Prepare a draft air construction permit application using the FDEP's (EPSAP) with attachments for one (1) newly installed emergency generator and one (1) newly installed landfill flare replacement blower.		\$ 10,326.34	\$ -	\$ 10,326.34	In progress	\$ 10,326.34	\$ -
15	Preparation of a Water Quality Technical Report Landfill Stabilization Report for the Bryceville Landfill		\$ 32,864.76	\$ -	\$ 32,864.76	In progress	\$ 32,864.76	\$ -
16	Preparation of a Landfill Stabilization Report for the Lofton Creek Landfill		\$ 45,924.72	\$ -	\$ 45,924.72	In progress	\$ 45,924.72	\$ -
17	Operation, Monitoring, Maintenance, and Reporting for the Landfill Gas Collection and Control System at the West Nassau Class I Landfill		\$ 176,868.55	\$ -	\$ 176,868.55	In progress	\$ 176,868.55	\$ -
18	Preparation of a 2017 Landfill Financial Assurance Report for submittal to FDEP		\$ 11,291.68	\$ -	\$ 11,291.68	Pending	\$ 11,291.68	\$ -
19	Groundwater Monitoring Well Abandonment Services for the Bryceville Landfill		\$ 13,594.00	\$ -	\$ 13,594.00	Pending	\$ 13,594.00	\$ -
			\$ 971,866.04	\$ 17,371.96	\$ 989,238.00		\$ 958,992.34	\$ (30,245.66)

CURRENT CONTRACT VALUE: \$ 958,992.34