#### **SEGMENT 3 CELL 1 LANDFILL GAS COLLECTION SYSTEM EXPANSION**

#### **ENGINEERING SERVICES DURING CONSTRUCTION**

Thi	s Amendmei	nt ${f 1}$ to Indian River County (IRC) Landfill Work	Order Number 2 is entered into as of
this	day of	, 2021, in accordance with FS 287.055,	Consultant's Competitive Negotiation
Act pe	r the Reque	st for Qualification #2017048 for Engineering	Consulting Services for Landfill Closure,
Landfi	II Gas Collec	tion System Expansion, and Cell Construction,	dated July 18, 2017 (referred to as the
"Agre	ement"), by	and between INDIAN RIVER COUNTY, a politic	al subdivision of the State of Florida
("COU	NTY") and C	CDM Smith Inc. (CDM Smith) ("Consultant").	
1.		JNTY has selected the Consultant to perform	n the professional services set forth in

- n existing Work Order Number 2, Effective Date <u>05/19/2020</u>.
- The COUNTY and the Consultant desire to amend this Work Order as set forth on Exhibit A 2. (Scope of Work) attached to this Amendment and made part hereof by this reference. The professional services will be performed by the Consultant for the fee schedule set forth in Exhibit B (Fee Schedule), and within the timeframe more particularly set forth in Exhibit A (Time Schedule), all in accordance with the terms and provisions set forth in the Agreement.
- From and after the Effective Date of this Amendment, the above-referenced Work Order is 3. amended as set forth in this Amendment. Pursuant to Section 1.4 of the Agreement, nothing contained in any Work Order shall conflict with the terms of the Agreement and the terms of the Agreement shall be deemed to be incorporated in each individual Work Order as if fully set forth herein.

IN WITNESS WHEREOF, the parties hereto have executed this Work Order as of the date first written above.

CONSULTANT:			BOARD OF COUNTY COMMISSIONERS
CDM Smith Inc	and. A		OF INDIAN RIVER COUNTY
By:		Ву:	
Print Name: Title:	Eric J. Grotke, P.E., BCEE Vice President	_	Joseph E. Flescher, Chairman
		BCC Approve	ed Date:
		Attest: Jeffre	ey R. Smith, Clerk of Court and Comptroller
		Ву:	
		-	Deputy Clerk
		Approved:	
			Jason E. Brown, County Administrator
	Approved as to form and le	gal sufficiency:	
			Dylan T. Reingold, County Attorney

#### **EXHIBIT A**

#### AMENDMENT NO. 1 TO WORK ORDER NO. 2

## INDIAN RIVER COUNTY SOLID WASTE DISPOSAL DISTRICT SEGMENT 3 CELL 1 LANDFILL GAS COLLECTION SYSTEM EXPANSION ENGINEERING SERVICES DURING CONSTRUCTION

This Amendment No. 1 to Work Order No. 2, when executed, shall be incorporated in and become part of the Agreement for Consulting Services between Indian River County Solid Waste Disposal District (SWDD) and CDM Smith Inc., (CONSULTANT), dated July 18, 2017, hereafter referred to as the AGREEMENT.

#### PROJECT BACKGROUND

The SWDD has requested that CONSULTANT prepare this Amendment No. 1 to Work Order No. 2 to provide professional engineering services during construction for the proposed Class I Landfill Segment 3 Cell 1 landfill gas (LFG) collection system expansion. The proposed landfill collection system expansion is for the construction of vertical and horizontal landfill gas collection wells, header pipes, compressed air piping, and leachate forcemains. The design and permitting was completed and the project was advertised to bid in Indian River County Bid No. 2021006. Bid opening was January 6, 2021.

The Scope of Services for Engineering Services During Construction, of the landfill gas expansion system is described below:

#### **SCOPE OF SERVICES**

CONSULTANT will provide engineering services during construction to act as the OWNER's representative during the construction of the project. Based on recent discussions with SWDD staff and our familiarity with the landfill site design of the project, the proposed Scope of Services includes the following tasks as a continuation of the previously approved tasks:

#### **TASK 1.0 - PROJECT QUALITY MANAGEMENT**

Activities performed under this task consist of those generally administrative functions required to maintain the project on schedule, within budget, and that the quality of the work products defined within this scope is consistent with CONSULTANT's standards, SWDD's requirements, and FDEPs permit requirements.

#### **Subtask 1.4 - Construction Quality Management**

CONSULTANT's project manager will manage the independent review of CONSULTANT's deliverables, monthly project status reviews, and project close-out activities. CONSULTANT will meet with SWDD staff for project planning and coordination, as needed. CONSULTANT will perform quality technical reviews on the construction phase CONSULTANT deliverables such as record drawings and the Florida Department of Environmental Protection Certifications of Construction Completion. Preparation of invoices and project administration will also be performed under this task.



#### TASK 7.0 - GENERAL ENGINEERING SERVICES DURING CONSTRUCTION

These services shall include the following subtasks:

- **Subtask 7.1** After issuance of a Notice of Award, SWDD will develop the conformed contract with technical specification and the CONSULTANT will develop the conformed drawings. CONSULTANT will prepare for and attend a preconstruction meeting with the Contractor.
- **Subtask 7.2** CONSULTANT will consult with and advise SWDD and act as its representative as provided in the General Conditions of the construction contract. Consult with and advise SWDD as to the acceptability of substitute materials and equipment proposed by the Contractor when substitution is permitted by the Contract Documents.
- Subtask 7.3 CONSULTANT will make up to 10 visits to the site at intervals appropriate to the various stages of construction to observe the progress and quality of the executed work of the Contractor and to determine in general if such work is proceeding in accordance with the Contract Documents. During such visits and on the basis of onsite observations, CONSULTANT shall keep SWDD informed of the progress of the work and shall endeavor to determine in general if such work is proceeding in accordance with the Contract Documents. Additionally, during such visits and on the basis of such observations, CONSULTANT shall disapprove or reject Contractor's work while it is in progress if CONSULTANT believes that such work will not produce a completed Project that conforms generally to the Contract Documents or that it will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated in the Contract Documents.
- Subtask 7.4 CONSULTANT will review and approve shop drawings (estimated at 15) and samples, the results of laboratory tests and other data, which the contractor is required to submit by the contract documents. The CONSULTANT will inspect deliveries of the materials to confirm compliance with the shop drawings and the project specifications.
- Subtask 7.5 CONSULTANT will issue instructions to the Contractor and issue necessary interpretations and clarifications of the Contract Documents. CONSULTANT will respond to requests for information (estimated at 3). Act as SWDD's representative to require special inspection or testing of the work. Act as initial interpreter of the requirements of the Contract Documents regarding the execution and progress of the work.
- **Subtask 7.6** Based on CONSULTANT's on-site observations and on review of applications for payment and the accompanying data and schedules CONSULTANT will determine the amounts owing to the Contractor and recommend in writing, payments to the Contractor in such amounts.
- Subtask 7.7 As construction nears substantial completion, CONSULTANT will perform an initial walkthrough to develop a preliminary checklist of items to be performed by the Contractor, based upon observations made jointly between the Contractor, SWDD, and CONSULTANT. CONSULTANT will perform a second walkthrough to identify



which items remain to be performed from the initial checklist and to supplement that list as necessary and for the purpose of developing a joint single final punch list. CONSULTANT will perform a final walk-through to determine if the all of the work has been completed in accordance with the final punch list and Contract Documents. CONSULTANT reserves the right to request additional compensation should additional walkthroughs be required.

- Subtask 7.8 CONSULTANT will assist the SWDD with project related correspondence to CONTRACTOR, regulatory agencies, and other parties; provide monthly project status reports; prepare monthly progress meeting minutes; and maintain comprehensive project records and documentation on file. CONSULTANT will maintain document log and documentation during the project.
- **Subtask 7.9** CONSULTANT will monitor/check performance tests and review field test reports for conformance with project contract documents.

The level of work estimated for this project is based on a 210-calendar day (147 working days) construction period from the Notice to Proceed to Final Completion. CONSULTANT reserves the right to request additional compensation, should Final Completion of construction extend beyond the 210-calendar day (147 working days) period.

#### TASK 8.0 - SPECIAL ENGINEERING SERVICES DURING CONSTRUCTION

Activities performed under this task consist of supplementary and special engineering services required during the construction and implementation of the project:

- **Subtask 8.1** Prepare for SWDD a set of reproducible record drawings, digital copy in AutoCAD and two Record Drawing prints showing those significant changes made during the construction process based on information furnished to CONSULTANT by the Contractor.
- **Subtask 8.2** Provide services in connection with preparing work change directives, change orders to reflect changes to the construction project. A maximum of two change orders are budgeted incorporating an estimated three items per change order.
- **Subtask 8.3** Provide services in connection with preparing final certifications of completion of construction to the regulatory agencies. Final certification document is required to close the permits for the landfill gas system expansion to FDEP.

#### TASK 9.0 - REPRESENTATIVE SERVICES DURING CONSTRUCTION

The activities performed under this task consist of providing resident project representative (RPR), which will be conducted by CONSULTANT personnel during the construction and implementation of the project:

Subtask 9.1 Activities performed under this task consist of furnishing a part-time RPR during the project construction period of 210 calendar days (147 working days) when the CONTRACTOR is on site performing work. We estimate the on on-site activities will take 80 working days of the 147 working days period from Notice to Proceed to Final Completion to observe the performance of the work of the contractor.



- Subtask 9.2 The RPR as CONSULTANT's agent will act as directed by and under the supervision of the CONSULTANT, and will confer with CONSULTANT regarding his actions. The RPR's dealings in matters regarding the on-site work shall in general be only with CONSULTANT and the Contractor, and dealings with subcontractors shall only be through or with the full knowledge of the Contractor. Written communication with SWDD will be only through or as directed by CONSULTANT.
- **Subtask 9.3** The RPR will prepare daily reports, describing the general working conditions, areas of construction activity, tests performed and special and document unusual events.

CONSULTANT will provide the RPR for observation of the work performed by the contractor, direct and supervise the RPR, prepare supporting documentation in dealings with the contractor, and manage the documentation, daily reports, and test reports. Consultant will supply a recording rain gage to be used for official rain monitoring for the project at the site of the work. The rain gage will be turned over to SWDD once the project is completed.

The level of work estimated for RPR labor under this task is 320 labor-hours (80 working days averaging 4 hours per day) and 44 labor-hours of CONSULTANT staff support for project representative time. CONSULTANT reserves the right to request additional compensation, should construction extend beyond the 320 labor-hour period for the RPR and 44 labor-hour period for CONSULTANT staff support for all of Task 9.

#### **ASSUMPTIONS**

- SWDD will be responsible for all permit application fees.
- An independent Quality Control laboratory is to be retained by the Contractor.
- Contractor will be responsible for reimbursing CONSULTANT for all overtime incurred by CONSULTANT for work performed outside normal working hours, which are defined as Monday through Friday, 7:00 am to 5:00 pm, in accordance with the Contract Documents.
- This Scope of Services does not include a National Pollutant Discharge Elimination System (NPDES) Notice of Intent, a St. Johns River Water Management District Dewatering Permit, or any construction/building permits, which shall be obtained by the Contractor constructing the project, if required.
- CONSULTANT reserves the right to seek additional compensation for work performed beyond the described in this Scope of Services.
- CONSULTANT reserves the right to request additional compensation, should Final Completion of construction extend beyond 210-days (147 working days) after Notice to Proceed or field services extend beyond the hours estimated above.

#### TASK 10.0 - ADDITIONAL ENGINEERING SERVICES DURING CONSTUCTION (CONTINGENCY)

At the request of the SWDD, CONSULTANT will perform additional engineering services for work expressly excluded from this Work Order as noted in the assumptions above or requested by the SWDD during the project. Additional Engineering Service may include but not be limited to any other extended/additional engineering services or exceeding durations assumed above. A not-to-exceed amount of \$10,000 is established for services related to this task.



#### **PROJECT SCHEDULE**

The following preliminary project schedule has been developed based on authorization to provide engineering services during construction which follows the award of the contract to the selected Contractor. A final schedule will be prepared based on Contractor's actual Notice to Proceed.

MILESTONE	DATE
Bid Opening	January 6, 2021
Award of Contract	February 9, 2021
Contract Documents Executed	February 21, 2021
Contractor's Notice to Proceed	March 23, 2021
Mobilization / Shop Drawing Reviews Start	April 7, 2021
Substantial Completion Milestone 1	September 19, 2021
Final Completion	October 19, 2021
Final Certifications of Construction Completion	November 18, 2021
Project Closeout	December 3, 2021

#### **PAYMENT AND COMPENSATION**

Compensation for this Amendment No. 1 to Work Order No. 2 described herein shall be made in accordance with the Contract between SWDD and CONSULTANT. The lump sum amount of this Amendment No. 1 to Work Order No. 2, for Tasks 1, 7, and 8, is \$80,840. The not-to-exceed amount of this Amendment No. 1, for Tasks 9 is \$48,350 and Task 10 is \$10,000 as a contingency. The new grand total not-to-exceed amount of this Work Order is \$339,000. CONSULTANT will submit monthly invoices for services rendered based on the percentage of work for each task completed for Tasks 1 through 8 as authorized by SWDD, and Tasks 9 and 10 will be invoiced based on the time incurred and the labor billing rates, plus direct costs, in accordance with the AGREEMENT.

For invoice purposes only, the value of each task in this Amendment No. 2 is as shown in **Table 1**.



#### Table 1

TASK VALUE FOR INVOICE PURPOSE -AMENDMENT NO. 1 TO WORK ORDER NO. 2					
TASK	DESCRIPTION	VALUE			
1.0	Project Quality Management	\$8,39			
7.0	General Engineering Services During Construction	\$53,90			
8.0	Special Engineering Services During Construction	\$18,55			
	Lump Sum =	\$80,84			
9.0	Representative Services During Construction	\$48,35			
	Not-To-Exceed (NTE) =	\$48,35			
10.0	Additional Engineering Services during Construction (contingency).	\$10,00			
	Not to Exceed (NTE) =	\$10,00			
	TOTAL AMENDMENT NO. 1 TO WORK ORDER NO. 2 (NTE) =	\$139,19			
	ORIGINAL WORK ORDER NUMBER 2 (NTE) =	\$199,81			
	GRAND TOTAL AMOUNT FOR WORK ORDER NO. 2 (NTE) =	\$339,00			



## **EXHIBIT B-1**

### AMENDMENT NO. 1 TO WORK ORDER NO. 2

# INDIAN RIVER COUNTY SOLID WASTE DISPOSAL DISTRICT SEGMENT 3 CELL 1 LANDFILL GAS COLLECTION SYSTEM EXPANSION ENGINEERING SERVICES DURING CONSTRUCTION

	Sr. Officer	Sr. Technical Expert	Officer	Principal	Senior Prof	Prof I	Senior Support Services (Drafting)	Staff Support Services	Document Control Specialist	Hours By Task
TASK 1.0 - Project Quality Management	1	4	1	12	8	0	8	14	4	52
TASK 7.0 - General Engineering Services During Construction	3	20	5	78	113	18	12	22	28	299
TASK 8.0 - Special Engineering Services During Construction	2	6	4	24	24	8	26	8	0	102
TASK 9.0 - Representative Services During Construction	0	0	0	20	24	320	0	0	0	364
Total	6	30	10	134	169	346	46	44	32	817



#### **EXHIBIT B-2**

#### **BUDGET**

PROJECT: Indian River County Solid Waste Disposal District

Segment 3 Cell 1 Landfill Gas Collection System Expansion

Amendment No. 1 To Work Order No. 2 Engineering Services During Construction

Tasks 1, 7, And 8 – Lump Sum

DESCRIPTION: As Outlined in the Scope of Services, Exhibit A

REFERENCE: Agreement between Indian River County Solid Waste Disposal District and

CDM Smith Inc.

<u>Labor Category</u>	<u>Hours</u>	<u>Rate</u>	<u>Labor</u>
Sr. Officer	6	\$240	\$1,440
Sr. Technical Expert	30	\$235	\$7,050
Officer	10	\$230	\$2,300
Principal	114	\$210	\$23,940
Senior Professional	145	\$175	\$25,375
Professional II	26	\$120	\$3,120
Professional I	46	\$130	\$5,980
Senior Support Services	44	\$95	\$4,180
Staff Support Services	32	\$90	\$2,880
Document Control Specialist	6	\$240	\$1,440

TOTAL HOURS 453

TOTAL LABOR COST \$76,265

OTHER DIRECT COSTS (5.6 Percent of Labor) \$4,575

(Hotels, field vehicle, field supplies, field safety equipment, etc.)

TOTAL LUMP SUM AMOUNT AMENDMENT NO. 1 \$80,840



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#### **EXHIBIT B-3**

#### **BUDGET**

PROJECT: Indian River County Solid Waste Disposal District

Segment 3 Cell 1 Landfill Gas Collection System Expansion

Amendment No. 1 To Work Order No. 2 **Engineering Services During Construction** 

Tasks 9 and 10 – Not-To-Exceed Residential Services During Construction

DESCRIPTION: As Outlined in the Scope of Services, Exhibit A

REFERENCE: Agreement between Indian River County Solid Waste Disposal District and CDM

Smith Inc.

<u>Labor Category</u>	<u>Hours</u>	<u>Rate</u>	<u>Labor</u>
Principal	20	\$210	\$4,200
Senior Professional	24	\$175	\$4,200
Professional I	320	\$120	\$38,400
TOTAL HOURS	364		

**TOTAL HOURS** 

\$46,800 **TOTAL LABOR COST** 

OTHER DIRECT COSTS (Rain Gage & Mileage) \$1,550

Task 10. Additional Engineering Services (Contingency) \$10,000

TOTAL NOT TO EXCEED AMOUNT AMENDMENT NO. 1 \$58,350

