#### Segment 3 Expansion, Segment 2 Partial Closure And Landfill Gas System Expansion

#### Phase II - Design, Permitting, And Bidding Services

This Amendment **1** to Indian River County (IRC) Landfill Work Order Number **1** is entered into as of this <u>3</u> day of <u>October</u>, 201<u>7</u>, in accordance with FS 287.055, Consultant's Competitive Negotiation Act per the Request for Qualification #2017048 for Engineering Consulting Services for Landfill Closure, Landfill Gas System Expansion, and Cell Construction, dated July 18, 2017 (referred to as the "Agreement"), by and between INDIAN RIVER COUNTY, a political subdivision of the State of Florida ("COUNTY") and CDM Smith Inc. ("Consultant").

- 1. The COUNTY has selected the Consultant to perform the professional services set forth in existing Work Order Number 1, Effective Date 7/18/2017.
- 2. The COUNTY and the Consultant desire to amend this Work Order as set forth on Exhibit A (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.
- 3. From and after the Effective Date of this Amendment, the above-referenced Work Order is amended as set forth in this Amendment. Pursuant to Section 1 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. |  | OF INDIAN RIVER COUNTY                     |  |  |  |  |  |
| By:<br>Title:  | Vice President  By:                        | Joseph A. Flescher, Chairman               |  |  |  |  |  |
| Title:         | BCC Appro                                  | ved Date:                                  |  |  |  |  |  |
|                |  |  |  |  |  |  |  |
|                | Attest: Jeffre                             | y R. Smith, Clerk of Court and Comptroller |  |  |  |  |  |
|                | By:  |  |  |  |  |  |  |
|                |  | Deputy Clerk                               |  |  |  |  |  |
|                | Approved:                                  |  |  |  |  |  |  |
|                |  | Jason E. Brown, County Administrator       |  |  |  |  |  |
|                | Approved as to form and legal sufficiency: |  |  |  |  |  |  |
|                |  | Dylan T. Reingold, County Attorney         |  |  |  |  |  |

#### **EXHIBIT A**

#### **WORK ORDER NO. 1 - AMENDMENT 1**

## INDIAN RIVER COUNTY LANDFILL SEGMENT 3 CELL 2 EXPANSION, SEGMENT 2 PARTIAL CLOSURE, AND LANDFILL GAS SYSTEM EXPANSION PHASE II - DESIGN, PERMITTING, AND BIDDING SERVICES

This Amendment 1 to Work Order No. 1, 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.

#### **BACKGROUND**

The SWDD, the owner and operator of the Indian River County Landfill, has requested that CONSULTANT prepare this Work Order to provide professional engineering services for the design, permitting, and bidding for the proposed Class I Landfill Segment 3 Cell 2 expansion, Segment 2 Partial Closure, and expansion of the landfill gas collection (LFG) system. The proposed new cell is Cell 2 of Segment 3 (approximately 10.6 acres in size), as shown on Drawing No. 5 of the 20-Year Permit Drawings dated September 2015. Segment 3 Cell 2 will be located immediately to the east of the existing Segment 3 Cell 1. The proposed Segment 2 Partial Closure (approximately 25 acres in size) includes closure of the Segment 1/Infill vertical expansion area and the final elevations of Segment 2, which has historically been referred to as the Segment 2C area. Expansion of the LFG system within Segment 2 is proposed to be constructed concurrently with the Segment 2 Partial Closure so that the final components can be installed prior to the closure cap being constructed.

Phase I of this project is currently under way and includes data collection, geotechnical services, and surveying services to be utilized in design and permitting phase. The Scope of Services for Phase II of this project is described below:

#### **SCOPE OF SERVICES**

CONSULTANT will undertake the design, permitting, and bidding of the Class I Landfill Segment 3 Cell 2 expansion, Segment 2 Partial Closure, and LFG system expansion located at the Indian River County Landfill. The design will include the Segment 3 Cell 2 bottom liner system, leachate collection and conveyance systems, and stormwater management facilities, Segment 2 Partial Closure cap liner system and stormwater management facilities, and the Segment 2 LFG system expansion. CONSULTANT will also include an access roadway, leachate pump station and force main design services as requested by SWDD to support future cell expansion. CONSULTANT will modify, update, and make additions to the existing permit drawings previously prepared in 2010 and updated in 2015 by Geosyntec to prepare final design drawings and specifications. The procedures of Rule 61G15-27.001, Florida Administrative Code (F.A.C.) will be followed for successor engineer requirements of the Florida Board of Professional Engineers.

Based on recent discussions with SWDD staff and our familiarity with the landfill site and preliminary review of the existing permit drawings, the proposed Scope of Services includes the following tasks:

A-1 ij2077 Exhibit A.docx

#### TASK 1.0 - MEETINGS, DATA COLLECTION, SURVEY, AND GEOTECHNICAL INVESTIGATION

There are no changes to Subtasks 1.2 through 1.6 from the original work order.

Subtask 1.7 Preliminary Leachate Pre-Treatment Evaluation – CONSULTANT will assist the SWDD in evaluating the landfill leachate water quality data and identifying parameters that can potentially impact operations of the West Regional Wastewater Treatment Plant (WWTP) from the additional flow from the proposed Segment 3 Cells 1-4 lift station. This evaluation will also include a comparison of the landfill leachate water quality to Indian River County's pretreatment local limits to identify parameters that may not meet the pretreatment limits. This task includes preparing a Technical Memorandum that summarizes the methods that were used to evaluate the potential impact to the operations West Regional WWTP. The methods will be developed by CONSULTANT and provided to SWDD for review and approval prior to proceeding with the analysis. Upon SWDD's final approval of the mutually agreed upon methodology, CONSULTANT will perform the analysis.

Listed below are some of the factors that are anticipated to be used to perform the analysis:

- Landfill leachate water quality data.
- Sanitary wastewater quality (from available published sources).
- West Regional WWTP treatment processes.
- West Regional WWTP influent and effluent water quality data.
- Wastewater flows rates at the West Regional WWTP.
- Landfill leachate flows from the IRC Landfill.
- Sanitary wastewater flow rates from the Indian River County Landfill.
- Pretreatment local limits.

A draft Technical Memorandum will summarize the methods, results of the evaluation, and recommendations The Technical Memorandum will also include a summary of potential impact to the operations at the West Regional WWTP, water quality parameters of concern, identification of parameters that do not meet Indian River County's pretreatment local limits, and identification of potential pretreatment methods.

CONSULTANT will provide a draft Technical Memorandum for the SWDD's review and comments. Upon receipt of all SWDD comments, CONSULTANT will incorporate the comments and prepare the final Technical Memorandum.

Subtask 1.8 Preliminary Fire Suppression System Investigation - SWDD has requested the CONSULTANT evaluate feasibility for installing a fire suppression system. CONSULTANT will evaluate potential water sources and potable water connection points. Potential fire suppression systems for the site will be evaluated based upon available water supply. CONSULTANT will provide a Technical Memorandum that summarizes the results and recommendations.

#### Deliverables:

- Preliminary Leachate Pre-Treatment Evaluation Technical Memorandum
- Preliminary Fire Suppression System Investigation Technical Memorandum

#### TASK 2.0 - 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.

Task 2.0 is amended to include the specific activities identified below:

- **Subtask 2.1 Project Update Meetings** CONSULTANT's project manager will prepare for and attend a kickoff meeting and status meetings throughout the life of the project. It is estimated that meetings will be held on the average of once a month.
- **Subtask 2.2 Quality Technical Review** CONSULTANT maintains a quality management system (QMS) on all of its projects. A Project Quality Management Workshop will be held at initiation of the project. One formal quality technical review/technical specialist review meeting has been budgeted for and will be conducted at the 90 percent completion stage of the project. SWDD's representatives will be invited to attend and participate at the TRC meetings.

Deliverables produced for the quality technical review/technical specialist review meeting will be as follows:

• 90 Percent – Complete set of Contract Documents (drawings and technical specifications) including two hard copies and an electronic PDF.

In addition, technical specialist reviews will be performed on the technical memorandums included in this Work Order.

Subtask 2.3 Final Design Review – CONSULTANT will prepare and submit a complete set of Contract Documents (drawings and technical specifications) to SWDD for review at the 100 percent (final) completion stage. CONSULTANT will incorporate SWDD's written comments, prepare the final Contract Documents, and submit two hard copies and a PDF copy of the design drawings and technical specifications to the SWDD. The technical specifications will also be provided in Microsoft Word format for review.

Deliverables:

Contract Documents (Issued for Bid) – two hard copies and an electronic PDF

### TASK 3.0 - FINAL DESIGN, DRAWINGS, SPECIFICATIONS, AND OPINION OF PROBABLE CONSTRUCTION COST PREPARATION

This task consists of performing final design and developing Contract Documents (drawings and specifications) in accordance with the design requirements set forth in Chapter 62-701, F.A.C., to procure and construct the project.

Subtask 3.1 Liner, Leachate Collection System, and Force Main Design – Segment 3 Cell 2 is designed and permitted with a double-liner system consisting of a primary and secondary high-density polyethylene (HDPE) geomembrane. The design of the liner system is based on the results of foundation settlement and stability analysis and meets the requirements of Chapter 62-701.400, F.A.C. A geosynthetic clay liner

(GCL) with a hydraulic conductivity of  $10^{-7}$  cm/sec or less will be specified below the secondary geomembrane liner. Calculations will be performed to specify a geocomposite capable of handling the flow and load conditions.

A primary leachate collection and removal system above the primary geomembrane is designed to limit the leachate head less than 12-inches above the liner as required by Chapter 62-701, F.A.C. A leak detection system will be designed between the primary and secondary liners. The leachate collection system piping was previously sized and permitted. CONSULTANT will confirm these calculations. The leachate collection and conveyance systems will be designed to handle additional loads due to increase in density of the waste (i.e. achieve the 0.3 percent minimum post-settlement slope requirement of Chapter 62-701.400, F.A.C.).

The SWDD has requested that Cell 2 gravity drain to a manhole, which is a modification of the permitted sump pump design. In addition, SWDD has requested that a new lift station and force main be designed to handle the flows from existing Segment 3 Cell 1 and future Cells 2-4. CONSULTANT will recommend the location for the new lift station and perform the required calculations to confirm the size of the lift station and force main. In addition, CONSULTANT will design the electrical connections and control panels for the lift station.

In addition, per SWDD's request to divert stormwater flow, CONSULTANT will design a headwall to be installed behind the existing Segment 1 & 2 lift station (located at NW corner of Segment 2). Details for the headwall will be included in the drawings in Subtask 2.8.

- Subtask 3.2 Closure Subbase Grading CONSULTANT will utilize the latest topographic survey information obtained in Phase I to prepare the grading plan. CONSULTANT will evaluate overfills and underfills using an AutoCAD Civil 3D model and prepare grade differentials comparing the topographic survey to the permitted final closure grades. The subbase grading will help determine the tie-in of the new partial closure grading to the existing closed grades. CONSULTANT will notify SWDD if any design considerations need to be made for the over/underfills.
- **Subtask 3.3 Stormwater Management System Design –** CONSULTANT will review the permitted stormwater management system including overall swale sizing, letdown pipe locations and sizes, terrace swales, structures at terrace details, flashboard risers, and control structures and incorporate into the design drawings. Work includes verification of the design ICPR model to confirm parameters and results.
- **Subtask 3.4 Final Cover System Design –** CONSULTANT will design the final cover system in accordance with 62-701.600, F.A.C. The available geomembrane materials and geocomposites will be evaluated to prepare the design of the final cover system. The design will include the required details for geomembrane boots for gas wells, cleanouts, sideslope risers, and other penetrating components, geomembrane edge markers, and tie-ins to the existing bottom liner system and existing cap liner system. The permit set details will be utilized and additional details will be added as necessary.

- **Subtask 3.5 Landfill Access Road** CONSULTANT will design an extension to the landfill access road on Segment 2. CONSULTANT will work with SWDD to determine the preferred access road route. Design will include review of stormwater collection and stability for the road. Design details will be developed and incorporated into the drawings.
- Subtask 3.6 Landfill Gas System Expansion Prior to commencing the design drawings, CONSULTANT will evaluate the existing LFG well pumping system and air system to determine its functionality and any required improvements. CONSULTANT will make a site visit and coordinate with the SWDD and their LFG system operator as needed for LFG system monitoring and operations data. CONSULTANT will incorporate the improvements into the LFG drawings.

SWDD has requested that the CONSULTANT evaluate the need for flare upgrades/rehabilitation. CONSULTANT will make a site visit and review the flare asbuilts and operations and maintenance manual to determine the required rehabilitation.

Subtask 3.7 Design Drawing Preparation - CONSULTANT will prepare detailed contract drawings for the construction of the proposed Segment 3 Cell 2 expansion, Segment 2 Partial Closure, and LFG system expansion. CONSULTANT will include incorporating the construction permit conditions into the drawings prior to award of contract. Below is a preliminary list of drawings required for the construction of this project:

| Sheet No. | Title   |
|-----------|---|
| General   |   |
|           | Cover   |
| G-1       | Index, Location Map, General Notes  |
| G-2       | Symbols and Legend  |
| G-3       | Abbreviations   |
| G-4       | Site Aerial/Contractor Staging Area/Construction Trailer Area/Limits of Construction                  |
|           |   |
| Civil     |   |
| C-1       | Segment 3 Cell 2 Site Survey Information/Existing Conditions/Boring Locations/Horizontal Control Plan |
| C-2       | Segment 3 Cell 2 Demolition Plan  |
| C-3       | Segment 3 Cell 2 Top of Processed Sand Grading Plan   |
| C-4       | Segment 3 Cell 2 Leachate Piping System Plan  |
| C-5       | Segment 3 Cell 2 Force Main Plan  |
| C-6       | Segment 3 Cell 2 Cross Section and Profile  |
| C-7       | Segment 3 Cell 2 LDS Sump Plan  |
| C-8       | Segment 2 Site Survey Information/Existing Conditions/Boring Locations/<br>Horizontal Control Plan    |
| C-9       | Segment 2 Cover Grading and Stormwater Control System Plan  |
| C-10      | Segment 2 Gas System Plan   |
| C-11      | Segment 2 Closure Sections 1-3  |
| C-12      | Segment 2 Closure Sections 4-6  |
| C-13      | Stormwater Pollution Prevention Plan  |

| Sheet No.  | Title   |  |  |  |
|------------|---|--|--|--|
| CD-1       | Liner and Leachate Collection System Details                      |  |  |  |
| CD-2       | Leachate Collection/Leachate Detection Sump Details               |  |  |  |
| CD-3       | Liner and Berm Details  |  |  |  |
| CD-4       | Leachate Collection/Detection Details                             |  |  |  |
| CD-5       | Piping Details  |  |  |  |
| CD-6       | General and Civil Details   |  |  |  |
| CD-7       | Closure Civil Detail I  |  |  |  |
| CD-8       | Closure Civil Detail II   |  |  |  |
| CD-9       | Closure Civil Detail III  |  |  |  |
| CD-10      | Paving, Grading, and Drainage Details                             |  |  |  |
| CD-11      | Landfill Access Road Details                                      |  |  |  |
| CD-12      | Gas System Details I  |  |  |  |
| CD-13      | Gas System Details II   |  |  |  |
| CD-14      | Gas System Details III  |  |  |  |
| CD-15      | Gas System Details IV   |  |  |  |
|            |   |  |  |  |
| Mechanical |   |  |  |  |
| M-1        | Segment 3 Cells 1-4 Leachate Pump Station Plan                    |  |  |  |
| M-2        | Segment 3 Cells 1-4 Leachate Pump Station Plan and Section        |  |  |  |
| M-3        | Segment 3 Cell 2 Leachate Detection Pump Station Plan and Section |  |  |  |
| MD-1       | Pump Station Details and General Notes                            |  |  |  |
|            |   |  |  |  |
| Electrical |   |  |  |  |
| E-1        | Electrical Symbols/Abbreviations/Notes                            |  |  |  |
| E-2        | Electrical Site Plan  |  |  |  |
| E-3        | Electrical Plan and Details                                       |  |  |  |
| E-4        | Leachate Pump Station Control Panel Details                       |  |  |  |
| E-5        | Leachate Detection Pump Station Control Panel Details             |  |  |  |
| E-6        | Installation Details  |  |  |  |

# Subtask 3.8 Specifications - CONSULTANT will prepare specifications, utilizing the EJCDC/CSI format (traditional 16-Division), which will consist of written technical descriptions of materials, equipment, construction systems, standards and workmanship as applied to this project. Specifications for construction will include the bottom liner system, cap liner system, granular fill materials, earthwork, piping, lift station, electrical, sod, LFG system components, and other applicable items. CONSULTANT will include incorporating the construction permit conditions into the specifications prior to award of contract.

## **Subtask 3.9** Front-End Documents - SWDD will supply the Front-End Documents and CONSULTANT will edit them to provide the project specific information needed to bid the project. CONSULTANT will work with SWDD to develop owner direct purchase language to be included in the front-end documents.

**Subtask 3.10** Opinion of Probable Construction Cost (OPCC) - CONSULTANT will prepare OPCCs at the 90 and 100 percent completion stages, and submit the estimates to SWDD for review. The estimates will be based on generally accepted costs for this type of work.

#### Deliverables:

- 90 and 100 percent drawings (PDF and Auto CADD format, including associated X-refs) and specifications
- Final Contract Documents Package in PDF format
- Opinion of probable construction cost at 90 and 100 percent design

#### TASK 4.0 - PERMITTING ASSISTANCE

The Segment 3 Cell 2 expansion and Segment 2 Partial Closure were previously permitted under Construction/Operation Permit Nos: 0128769-022-SC and 0128769-023-SO. This permit requires notification to Florida Department of Environmental Protection (FDEP) prior to beginning construction of new cells and closure and a certification of construction completion prior to operation. As a result of modifications requested by SWDD, an intermediate modification to the construction permit (Permit No: 0128769-022-SC) is being required by FDEP.

Environmental Resources Permit (ERP) No. 31-163429-010 was extended in 2015 and requires notification of FDEP prior to construction or closure activities.

Activities performed under this task consist of those functions required to prepare the construction permit (Permit No: 0128769-022-SC) modification application and supporting documents for submittal to the FDEP, pre-application meeting with FDEP, and responding to up to two of FDEP's requests for additional information (RAI). Also included are preparation of the notifications required by the operations permit and ERP. More specifically, this task includes the following subtasks:

- **Subtask 4.1** Pre-Application Meeting: CONSULTANT will attend one pre-application meeting with FDEP staff via a teleconference. The purpose of the meeting will be to communicate with FDEP regarding the proposed contents of the permit application submittal packages.
- **Subtask 4.2** Permit Application: CONSULTANT will prepare and submit to FDEP the permit application documents required by Chapter 62-701.320, F.A.C. to modify the Operations and Construction Permit. In addition to the construction drawings and specifications prepared under Task 2.0 of this proposal, CONSULTANT will prepare the following permit documents:
  - (a) General site information.
  - (b) Any updates to the ground water monitoring plan required by Rule 62-701.410(1) and 62-701.510, F.A.C., respectively.
  - (c) The geotechnical investigation required by Rule 62-701.410(2), F.A.C.
  - (d) A statement of how the applicant will demonstrate financial responsibility for the closing and long-term care of the landfill.

- (e) Operational plans and drawings as required in Rules 62-701.500, F.A.C.
- (f) Construction quality assurance plan for installation and testing of soils and geosynthetics.
- Subtask 4.3 Environmental Resources Permit (ERP): CONSULTANT will prepare and submit to FDEP an ERP notification prior to the start of construction. This notification will include the updated final design drawings as a courtesy to FDEP. This task order does not include additional Environmental Resource Permitting, and if required, these activities will be included in a separate Task Order.
- **Subtask 4.4** RAIs: CONSULTANT will respond to up to two RAIs from FDEP.

Deliverables:

- Segment 3 Cell 2 expansion permit modification application
- ERP notification letter

#### TASK 5.0 - BIDDING ASSISTANCE

In this task, CONSULTANT will assist SWDD in obtaining bids for the construction of the project, assist SWDD in evaluating the bids and in assembling and awarding the contract, and will arrange and preside over a pre-bid conference.

- **Subtask 5.1** CONSULTANT will provide a Contract Documents Package in PDF format suitable for distribution to bidders, coordinate the advertisement of the bid, respond to communications from Contractors, attend a pre-bid conference, and issue addenda, as necessary. SWDD will advertise for bids and distribute documents to the plan holders.
- **Subtask 5.2** CONSULTANT will attend one bid opening, evaluate bids, and recommend a bidder for award of contract to SWDD. The bidding phase of the project terminates when an assumed Notice of Award is issued to a Contractor.

#### TASK 6.0 - ADDITIONAL ENGINEERING SERVICES

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, preparation of additional design modifications, assistance in preparing documents not expressly included in the above tasks, environmental assessments, additional permitting, or any other extended/additional engineering services. A not-to-exceed amount of \$25,150 is established for services related to this task.

#### **ASSUMPTIONS**

- SWDD will be responsible for all permit application fees.
- The Segment 3 Cell 2 expansion, Segment 2 Partial Closure, and LFG system expansion will be bid as a single Contract Documents bid package to be constructed by one Contractor. CONSULTANT reserves the right to request additional compensation, should

- the SWDD request to bid the Segment 3 Cell 2 expansion and Segment 2 Partial Closure separately.
- CONSULTANT has based this proposal upon utilization of previously permitted design documents. In the event that the CONSULTANT is unable to utilize these documents, CONSULTANT reserves the right to request additional compensation in order to obtain and or complete the required scope of services.
- The stormwater collection system will not require a modification to the ERP.
- Segment 2 Partial Closure will not require a solid waste permit modification.
- AutoCAD Civil 3D grading surfaces are not available and will need to be redeveloped.
- Unless otherwise stated in the tasks, all previously performed design calculations, analysis, drawings, and reports that were prepared by Geosyntec Consultants or their subconsultants as part of, and/or referenced in, the 20-Year Renewal Permit Application and Drawings (dated September 2015), are complete, sufficient, accurate, and do not require any revisions/corrections. If CONSULTANT determines that the previously prepared design calculations, analysis, drawings, and reports are incomplete or require revisions/corrections, CONSULTANT reserves the right to seek additional compensation.
- This Work Order does not include engineering services during construction.
- CONSULTANT reserves the right to seek additional compensation for work performed, as agreed to by SWDD, beyond what is described in this Work Order.
- This Work Order was formulated based upon the current FDEP permitted closure and expansion design. In the case that SWDD decides to utilize an alternate capping system, an amendment will be required to accommodate additional design and permitting services.
- The Preliminary Leachate Pre-Treatment Evaluation will only include a desktop analysis utilizing existing information provided by COUNTY. No laboratory or treatability testing is provided in this Work Order. Design of a pre-treatment system, if required, will require additional compensation through an amendment or separate work order.
- SWDD will provide leachate water quality data and have additional analysis performed, if required.
- SWDD will provide influent and effluent water quality data from the West Reginal WWTP.
- SWDD will provide wastewater flow rates at the West Regional WWTP.
- SWDD will provide landfill leachate and sanitary wastewater flow rates from the Indian River County Landfill site.
- Analysis will be performed using standard/general procedures, factors, rates, etc. either taken from reference sources or agreed upon assumptions. No detailed analysis to calculate precise values will be required/performed.

#### **PROJECT SCHEDULE**

The following project schedule has been developed based on authorization to provide design services being received on October 3, 2017.

| Milestone                              | Date                                  |
|--|---------------------------------------|
| Receive Authorization                  | October 3, 2017                       |
| Begin Design                           | October 3, 2017                       |
| 90% Design Submittal to SWDD           | November 17, 2017                     |
| 90% TRC Meeting                        | December 4, 2017                      |
| Submit Permit Application              | December 8, 2017                      |
| Final Design Submittal to SWDD         | January 5, 2018                       |
| Receive Permits*                       | February 6, 2018                      |
| Draft Subtask 1.7 Technical Memorandum | December 3, 2017                      |
| Draft Subtask 1.8 Technical Memorandum | December 3, 2017                      |
| Final Subtask 1.7 Technical Memorandum | 2 weeks from receipt of SWDD comments |
| Final Subtask 1.8 Technical Memorandum | 2 weeks from receipt of SWDD comments |
| Advertise for Bids                     | January 7, 2018                       |
| Receive Bids                           | February 6, 2018                      |
| Award Contract                         | February 21, 2018                     |

<sup>\*</sup>Project schedule will be dependent on permitting and procurement activities. Schedule will be adjusted accordingly.

#### **PAYMENT AND COMPENSATION**

Compensation for this Amendment No. 1 to Work Order No. 1 described herein shall be made in accordance with the Contract between SWDD and CONSULTANT. The lump sum amount of this Amendment No. 1 for Tasks 1 thru 5 is \$533,529; the not to exceed amount for Task 6 is \$25,150; and the total not to exceed amount of Amendment No. 1 is \$558,679. The new not to exceed Grand Total Amount of Work Order No. 1 is \$690,499. CONSULTANT will submit monthly invoices for services rendered based on the percentage of work for each task completed for Tasks 1 thru 5. Task 6 will be invoiced based on a percentage of work complete as authorized by SWDD.

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

Table 1

| T/   | TASK VALUE FOR INVOICE PURPOSE – AMENDMENT NO. 1 TO WORK ORDER NO. 1 |           |  |  |  |  |
|------|--|-----------|--|--|--|--|
| TASK | DESCRIPTION  | VALUE     |  |  |  |  |
| 1    | Meetings, Data Collection, Survey, and Geotechnical Investigation    | \$28,440  |  |  |  |  |
| 2    | Project Quality Management   | \$90,426  |  |  |  |  |
| 3    | Final Design, Drawings, Specifications, and Opinion of Probable      |           |  |  |  |  |
|      | Construction Cost Preparation  | \$342,581 |  |  |  |  |
| 4    | Permitting Assistance  | \$43,790  |  |  |  |  |
| 5    | Bidding Assistance   | \$28,292  |  |  |  |  |
|      | LUMP SUM SUBTOTAL AMOUNT =   | \$533,529 |  |  |  |  |
| 6    | Additional Engineering Services – Not to Exceed                      | \$25,150  |  |  |  |  |
|      | TOTAL AMENDMENT NO. 1 TO WORK ORDER NO. 1 NOT TO EXCEED =            | \$558,679 |  |  |  |  |
|      |  |           |  |  |  |  |
|      | WORK BREAKDOWN FOR FUNDING PURPOSES                                  |           |  |  |  |  |
|      | Segment 3 Cell 2 Expansion =   | \$330,964 |  |  |  |  |
|      | Segment 2 Partial Closure and LFG System Expansion =                 | \$227,715 |  |  |  |  |

#### **EXHIBIT B-1**

#### WORK ORDER NO. 1 – AMENDMENT 1

## INDIAN RIVER COUNTY LANDFILL SEGMENT 3 CELL 2 EXPANSION, SEGMENT 2 PARTIAL CLOSURE, AND LANDFILL GAS SYSTEM EXPANSION PHASE II – DESIGN, PERMITTING, AND BIDDING SERVICES

B-1

|  | Sr.<br>Officer | Officer | Associate | Principal | Senior<br>Prof | Pro II | Pro I | Sr. Technical<br>Expert | Senior<br>Support<br>Services | Staff<br>Support<br>Services<br>(Drafting) | Document<br>Control<br>Specialist | Hours<br>By Task |
|--|----------------|---------|-----------|-----------|----------------|--------|-------|-------------------------|-------------------------------|--|-----------------------------------|------------------|
| Task 1.0 - Meetings, Data Collection, Survey, and Geotechnical Investigation | 0              | 0       | 14        | 22        | 40             | 40     | 0     | 18                      | 0                             | 0  | 8                                 | 142              |
| Task 2.0 - Project Quality Management  | 12             | 26      | 54        | 74        | 120            | 70     | 50    | 32                      | 0                             | 0  | 22                                | 460              |
| Task 3.0 - Final Design, Drawings, Specifications, And Opinion of Probable   |                |         |           |           |                |        |       |                         |                               |  |                                   |                  |
| Construction Cost Preparation  | 6              | 0       | 124       | 24        | 326            | 444    | 356   | 78                      | 548                           | 332  | 38                                | 2276             |
| Task 4.0 - Permitting Assistance   | 0              | 0       | 20        | 4         | 52             | 78     | 42    | 0                       | 0                             | 0  | 22                                | 218              |
| Task 5.0 - Bidding Assistance  | 0              | 4       | 10        | 10        | 40             | 40     | 20    | 10                      | 4                             | 10   | 30                                | 178              |
| Task 6.0 - Additional Engineering Services                                   | 0              | 8       | 20        | 8         | 24             | 32     | 30    | 10                      | 0                             | 0  | 30                                | 162              |
| Total  | 18             | 38      | 242       | 142       | 602            | 704    | 498   | 148                     | 552                           | 342  | 150                               | 3,436            |



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

#### **BUDGET**

PROJECT: INDIAN RIVER COUNTY LANDFILL

SEGMENT 3 CELL 2 EXPANSION, SEGMENT 2 PARTIAL CLOSURE, AND LANDFILL

**GAS SYSTEM EXPANSION** 

PHASE II – DESIGN, PERMITTING, AND BIDDING SERVICES

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

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

Smith Inc.

| Labor Category   | Hours | Rate  | Labor            |  |  |  |  |
|--|-------|-------|------------------|--|--|--|--|
| Sr. Officer  | 18    | \$240 | \$4,320          |  |  |  |  |
| Officer  | 38    | \$230 | \$8,740          |  |  |  |  |
| Associate  | 242   | \$215 | \$52,030         |  |  |  |  |
| Principal  | 142   | \$210 | \$29,820         |  |  |  |  |
| Senior Professional  | 602   | \$175 | \$105,350        |  |  |  |  |
| Professional II  | 704   | \$140 | \$98,560         |  |  |  |  |
| Professional I   | 498   | \$120 | \$59,760         |  |  |  |  |
| Senior Technical Expert  | 148   | \$235 | \$34,780         |  |  |  |  |
| Senior Support Services  | 552   | \$130 | \$71,760         |  |  |  |  |
| Staff Support Services (Drafting)  | 342   | \$95  | \$32,490         |  |  |  |  |
| Document Control Specialist  | 150   | \$90  | \$13,500         |  |  |  |  |
| TOTAL HOURS  | 3,436 |       |                  |  |  |  |  |
| TOTAL LABOR COST   |       |       | <u>\$511,110</u> |  |  |  |  |
| OUTSIDE PROFESSIONAL SERVICES  Beeson Consulting, Inc \$23,000                           |       |       |                  |  |  |  |  |
| Beeson Consulting, Inc   |       |       |                  |  |  |  |  |
| OTHER DIRECT COSTS (Hotels, field vehicle, field supplies, field safety equipment, etc.) |       |       |                  |  |  |  |  |
| TOTAL AMOUNT AMENDMENT NO. 1 (TASKS 1 – 6)   |       |       |                  |  |  |  |  |
| ORIGINAL WORK ORDER NO.  |       |       |                  |  |  |  |  |
| NEW GRAND TOTAL AMOUNT FOR WORK ORDER NO. 1  |       |       |                  |  |  |  |  |

