

CCNA2023 WORK ORDER 7

**FISCAL YEAR 2022-2023 FULL COST ACCOUNTING, FINANCIAL ASSURANCE AND
LANDFILL DEPLETION MODEL**

This Work Order Number 7 is entered into as of this ___ day of _____, 2023, pursuant to that certain Continuing Consulting Engineering Services Agreement for Professional Services entered into as of the 2ND day of May, 2023 (the "Agreement"), by and between INDIAN RIVER COUNTY, a political subdivision of the State of Florida ("COUNTY") and Kimley-Horn and Associates, Inc. ("Consultant").

The COUNTY has selected the Consultant to perform the professional services set forth on Exhibit A (Scope of Work), attached to this Work Order 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), attached to this Work Order and made a part hereof by this reference. The Consultant will perform the professional services within the timeframe more particularly set forth in Exhibit C (Time Schedule), attached to this Work Order and made a part hereof by this reference all in accordance with the terms and provisions set forth in the Agreement. Pursuant to paragraph 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:

Kimley-Horn and Associates, Inc.

**BOARD OF COUNTY COMMISSIONERS
OF INDIAN RIVER COUNTY**

By:

Brian A. Good, P.E.

By:

Susan Adams, Chairman

Print Name:

Title:

Senior Vice President

BCC Approved Date:

Attest: Ryan L. Butler, Clerk of Court and Comptroller

By:

Deputy Clerk

Approved:

John A. Titkanich, Jr., County Administrator

Approved as to form and legal sufficiency:

K. Keith Jackman, Assistant County Attorney

WORK ORDER NUMBER 7

**FISCAL YEAR 2022 – 2023 FULL COST ACCOUNTING, FINANCIAL ASSURANCE
AND LANDFILL DEPLETION MODEL**

EXHIBIT A

SCOPE OF WORK

PROJECT UNDERSTANDING

Indian River County (COUNTY) Solid Waste Disposal District (SWDD) is required to update and submit the landfill closure cost estimate to the Florida Department of Environmental Protection (FDEP) Solid Waste Operations Permit No. 0128769-023-SO Specific Condition F.2. SWDD is also required to document full cost accounting and financial assurance every five years in accordance with Specific Condition A.6; however, to ensure that the landfill escrow balance remains on track to adequately cover the closure costs, SWDD completes the full cost accounting and financial assurance process annually (without submittal to FDEP). Kimley-Horn and Associates (CONSULTANT) will perform following Scope of Services for the preparation of the Full Cost Accounting Evaluation (Fiscal Year 2022-2023), Financial Assurance (FY 2023-2024), and Closure Cost Estimate Update. The Scope of Services will also include development of a model to simulate the filling sequence of the available airspace to more accurately predict the timing for construction of future cells.

SCOPE OF SERVICES

Task 1: Full Cost Accounting Evaluation for Fiscal Year 2022 - 2023

In accordance with the requirements of Chapter 62-708.400(1), F.A.C., and F.S. 403.7049, the COUNTY shall determine the full cost for solid waste management services. This shall include the rate charged by the county or municipality to the end user for solid waste management services plus any other direct, indirect or outside contractor costs associated with solid waste management services.

CONSULTANT will prepare a draft table using information provided by the COUNTY within 60 days of receipt of the data from the COUNTY. The draft public notice, summary tables and working documents will be provided electronically, unless otherwise requested. The COUNTY will coordinate and facilitate publication of the public notice.

In accordance with Chapter 403.7049 Florida Statutes:

“Each municipality shall establish a system to inform, no less than once a year, residential and nonresidential users of solid waste management services within the municipality’s service area of the user’s share, on an average or individual basis, of the full cost for solid waste management as determined pursuant to subsection (1). Counties shall provide the information required of municipalities only to residential and nonresidential users of solid waste management services within the county’s service area that are not served by a municipality. Municipalities shall include costs charged to them or persons contracting with them for disposal of solid waste in the full

cost information provided to residential and nonresidential users of solid waste management services.”

Task 2: Financial Assurance FY23-24

The COUNTY operates both a Class I landfill and a Construction and Demolition Debris Landfill through a contract with Republic Services. In accordance with Chapter 62-701, F.A.C., the COUNTY is required to submit cost adjustments based on an inflation factor for closure annually. Every five years, the closure cost estimate must be revised by recalculating the total cost of closure.

Subtask 2.1 Closure Cost Estimate Adjustment

CONSULTANT will provide the Closure Cost Estimate adjustment to the COUNTY based on the most recent Implicit Price Deflator for Gross National Product published by the U.S. Department of Commerce in its Survey of Current Business. CONSULTANT will include escrow account balance recommendations for Fiscal Year 2022-2023, and escrow budget recommendations for Fiscal Year 2023-2024.

Subtask 2.2 Survey and Airspace Assessment

CONSULTANT will provide surveys and assessments of airspace used by our subconsultant, Masteller, Moler & Taylor, Inc. (MM&T) for the Class I landfill and C&D debris disposal facility. The topographic survey will be performed on the entire COUNTY landfill site, including the Class I waste area (Segment I, II, and III and the ditches and roadways surrounding the Class I area), the C&D disposal facility (waste area, fence line, ditches and berms adjacent to C&D Debris site), expansion areas, stormwater pond, and administrative area.

The deliverable from MM&T will consist of a survey identifying the dates the field survey was completed. The airspace consumed, and the remaining airspace will be calculated and provided. The survey shall also include the results of the volumetric calculations for Segments II and II portions of the Class I landfill, and the C&D disposal facility. Deliverables accompanying the survey are as described in MM&T’s proposal, attached.

For the Class I Landfill (Segments I, II, and III), we will include an evaluation of the waste compaction, so the COUNTY may determine whether Republic Services is meeting its contractual compaction requirements.

Ongoing projects at the landfill are also anticipated to impact one of the aerial targets used to conduct the annual survey. This Task includes replacement of one aerial target, including physical reconstruction (pouring of concrete and painting), as well as surveying the new location of the target. The target will be relocated to a location that is determined by SWDD within the allowable distance from the current target.

Task 3: Landfill Depletion Model

Preparation of the FA and FCA (Tasks 1 and 2) typically rely on total permitted capacity of each cell or segment of the landfill to determine the anticipated closure date for financial planning; however, in reality, the full capacity of a cell cannot be reached until the subsequent cell is constructed to a certain elevation to reach the last of the usable air space in the prior cell. Constructability limits the ability to discretely close one cell before moving to the next cell. The CONSULTANT will utilize a series of tools to model the placement of Class 1 waste to more accurately determine when the next cell must be online in order to maximize the capacity in the active cell.

A landfill depletion model will be developed utilizing the following information/tools:

1. Historical waste generation data
2. Historical in-place densities
3. BEBR medium density county population projections (to predict increases in waste generation)
4. Excel based landfill depletion model
5. Civil 3D surfaces

Waste generation will be projected using historical data and adjusted utilizing BEBR population projections to incrementally increase the volume of waste anticipated in future years. Population projection growth will be used with straight line interpolation between data points (BEBR publishes 5-year increments). Civil 3D surfaces will be generated to simulate placement of waste. Several iterations of surfaces will be prepared to determine the approximate future date when the next cell will be needed. This will be continued to a future date where the in-place waste reaches the permitted capacity of the active cell. CONSULTANT will then work with the COUNTY to back track from that date to determine when planning/permitting and design of the next cell should begin.

This task will also include two review/coordination meetings with the landfill's contract operator to gain concurrence on waste placement and operational assumptions. A summary memorandum will be prepared upon completion to document the process.

Deliverables

Task 1	Table and Working Documents
Subtask 2.1	Assurance Form and Escrow Balance and Budget recommendations
Subtask 2.2	Survey (as described in MM&T's proposal), remaining airspace and evaluation of compaction
Task 3	Landfill Depletion Summary Memorandum

Assumptions

Information to be provided by the COUNTY includes:

- Site access
- Escrow account balances

- The rates and number of dwelling units for each of the transporters
- Available site surveys
- Level of service for each transporter
- Monthly fee for both single family residence and multi-family residences collected via non-ad valorem assessment
- Number of parcels, equivalent residential units, and waste generation units (WGU) for Fiscal Year 2021-2022 for each customer
- Wastestream monthly totals
- Changes to Basis of Allocation
- Direct and indirect cost breakdowns
- Confirmation of waste generation units
- Amount of residential assessment
- Excel spreadsheets prepared by others for prior fiscal year for escrow balance and airspace calculations
- Coordination of meetings with landfill operator

EXHIBIT B

FEE SCHEDULE

The County agrees to pay and the Consultant agrees to accept for services rendered, pursuant to this Agreement, a lump sum fee inclusive of expenses as follows:

Task	Description	Fee
Task 1	Full Cost Accounting Evaluation for FY2021 - 2022	\$7,500
Task 2	Financial Assurance	
Subtask 2.1	Closure Cost Adjustment	\$6,500
Subtask 2.2	Survey and Air Space Assessment	\$10,750
Task 3	Landfill Depletion Model	\$26,800
Total Labor Fee		\$51,550
Subconsultant - MM&T Survey		\$22,500
Other Direct Costs		\$1,000
Total Lump Sum Fee		\$75,050

EXHIBIT C

SCHEDULE

Task 1	Full Cost Accounting	30 days from Receipt of Data
Task 2.1	Closure Cost Adjustment	30 days from Receipt of Data
Task 2.2	Survey/Air Space Assessment	90 days from Notice to Proceed
Task 3	Landfill Depletion Model	60 days from Notice to Proceed



Masteller, Moler & Taylor, Inc.

1655 27th Street, Suite 2
Vero Beach, Florida 32960
Phone: (772) 564-8050
Fax: (772) 794-0647
e-mail: dt5243@bellsouth.net

AGREEMENT FOR PROFESSIONAL SURVEYING & MAPPING SERVICES

PROJECT:	IRC Landfill 2023 Volumetric Survey	PHONE:	Work - (772) 562-7981
CLIENT NAME:	Kimley Horn & Associates - Jill Grimaldi	PHONE:	-
SITE ADDRESS:	1325 74th Avenue SW Vero Beach, FL 32968	MAILING ADDRESS:	445 24th Street, Suite 200 Vero Beach, FL 32960

MMT, Inc. is pleased to provide you with this proposal for performance of surveying services in support of current landfill conditions for property located in Indian River County and lying in Section 25-33S-38E and identified as The Indian River County Landfill Volume Calculations survey which shall include the following:

Scope of Services:

1. Recover and expose existing aerial control for orientation and rectification of the aerial photography.
2. Coordinate with sub-consultant, Alert 5, Engineering Advanced Solutions to obtain new color aerial imagery and LIDAR data and production of a 1"=50' Planimetric and Topographic. This mapping is to be completed in AutoCAD format as one file at a scale of 1-inch=50-feet with 1 foot contours. The mapping will be completed for the entire landfill site including Segment I, Segment II, Segment III and the C & D areas.
3. Integrate aerial data into survey drawing and overlay with topographic data from previous year.
4. Calculate volumetric differences comparing current mapped areas against the prior data completed in February, 2021. Calculations shall be performed on Segments I, II, III Cells 1 and 2, and the C & D area.
5. Prepare cross sections at 200 foot intervals across each of the Segment areas depicting current and prior data lines.

Deliverables:

- a. Two (2) color digital ortho-rectified photo enlargements (24"x36") of entire area.
- b. One (1) color photo enlargement (24"x36") for each Segment I, II, III and C&D.
- c. Four (4) bond copies (24"x36") of the topographic map (1 inch = 50 feet contour map of each segment)
- d. Four (4) bond copies (8.5"x14") of the topographic map (1 inch = 200 feet contour map of each segment)
- e. Four (4) copies of Volumetric survey, including overall site, segments and cross sections.
- f. Two (2) copies of Report of Survey for aerial imagery from sub-consultant.
- g. One CD containing PDF of each map, AutoCAD and ASCII point files.

We propose to perform the above described Scope of Services for a lump sum fee of \$ 22,500.00. We estimate the following time frame for the project. Field acquisition, quality control, ground verification and sub-consultant deliverables: 3 - 4 weeks from notice to proceed; Volumetric survey completed within 2 weeks from receipt of sub-consultant data.

I, the undersigned, agree to all the terms of this Agreement and the Standard Conditions of this Contract attached hereto.

Client's Printed Name

Client's Signature

Date

David Taylor, President
Masteller, Moler & Taylor, Inc.

11/6/2023

Date