AMENDMENT TO WORK ORDER FOR
SPOONBILL MARSH RIVER INTAKE STATION ACCESS
ROAD & ELECTRIC POWER
(Project Name)

This Amendment 1 to Work Order Number 5 is entered into as of ,pursuant to that certain Continuing Contract Agreement, dated May 2, 2023 , ("Agreement"), by and between INDIAN RIVER COUNTY, a political subdivision of the State of Florida ("COUNTY") and MASTELLER & MOLER, INC. ("Consultant").

1. The COUNTY has selected the Consultant to perform the professional services set forth in existing Work Order Number 5 , with an Effective Date of November 30, 2023.

2. The COUNTY and the Consultant desire to amend this Work Order as set forth on Exhibit A (Modification to Scope of Work), attached to this Amendment and made part hereof by this reference. The professional services will be performed by the Consultant within the timeframe set forth in the Work Order, or as amended in Exhibit A, 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 modified as set forth in this Amendment. 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 Amendment as of the date first written above.

CONSULTANT:

By: _____

Print Name: Stephen E. Moler, PE

Title: President

BOARD OF COUNTY COMMISSIONERS
OF INDIAN RIVER COUNTY

By: _____
Susan Adams, Chairman

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

Scope, thresholds and amendment number confirmed by: _____
Purchasing

EXHIBIT A

Masteller & Moler, Inc. is pleased to present the Indian River County Department of Utilities Services (IRCDUS) with this Work Order which provides for performance of civil engineering and related subconsultant services associated with the design and permitting for the following proposed work:

Phase 1: Installation of a replacement Electric Services for the Spoonbill Marsh Demineralized Concentrate Treatment Facility Raw Water Pumping Station; and

Phase 2: Upgrade the existing unpaved access maintenance roadway leading to the Raw Water Pumping Station.

Project Description:

The Project will involve two (2) phases of Design, Permitting & Construction. Phase 1 will include the construction of a new electrical power system to the existing Spoonbill Marsh Intake Pumping Facility to replace the wiring, which has been determined to be in failure mode. Phase 2 will involve upgrading the existing maintenance roadway leading to the intake pumping facility to a higher elevation.

The work is proposed to be completed on lands owned by Grand Harbor North Lands LLC (GHNL). It shall be the County's responsibility to obtain, if required, authorization from GHNL for performance of the work. It is acknowledged the Consultant has a contractual relationship with GHNL as related to the ongoing Spoonbill Preserve residential development project. Consultant's services do not include any negotiations with GHNL on behalf of the County as related to this work authorization.

Specifically, Masteller & Moler, Inc. and its subconsultants propose to perform the following scope of services:

Scope of Work:

Phase 1: New Electric Power Service

Task 1A – Civil Engineering Design & Preparation of Construction Plans:

Consultant shall design and prepare Civil Construction Plans for the installation of a new electric power system to the Spoonbill Marsh Intake Pumping Facility from the existing transformer to the Intake Pumping Facility's control panel.

As a result of previous work completed on this project, it has been determined the route of the new direct buried power system shall generally follow the southern edge of the existing unpaved maintenance road.

The Construction Plans will also depict the expected temporary impacts of wetlands that will occur as a result of the proposed new electric power installation.

Task 1B – Electrical Engineering Services (by C&W Engineering, Inc.):

Consultant shall provide for Electrical Engineering Services to be performed by C&W Engineering Inc. to include the following services:

A. Use accurate updated Route Survey as the basis for modifying previously completed electrical wiring and conduit design / construction plans for a new direct buried electrical system from the existing transformer to the intake pumping facility to be consistent with site civil engineering plans along with a riser diagram, installation details, and electrical plans;

B. The drawing documents will include equipment specification and installation means and methods presented as notes to the drawings to assure compliance with applicable electric codes.

C. The drawing design documents electrical riser diagram will show existing equipment and 480V service, the proposed new power 480V, 3 phase feeder, and the existing Spoonbill pump station control panel and termination information inside the control panel; no modifications are being provided.

Task 1C – Environmental Services (by Atlantic Environmental of Florida)

FDEP / SJRWMD Environmental Resource Permitting:

It is anticipated the Phase 1 construction work will result in "Temporary" wetland impacts only. Consultant shall provide for the required Environmental Services to be performed by subconsultant Atlantic Environmental of Florida, LLC to include the following services:

A. UMAM Analysis (IF REQUIRED) or Development of Restoration Plan of Temporary Impacts: Based on the site inspections and coordination with the FDEP, Atlantic Environmental will develop a Unified Mitigation Assessment Methodology (UMAM) analysis for expected Temporary wetland impacts that will occur as a result of the installation of the new buried electrical system. If no mitigation required, Atlantic Environmental will develop restoration plan of temporary impacts.

B. Development of Mitigation Plan (IF REQUIRED): Atlantic Environmental will coordinate with IRC Staff, project engineer, and FDEP to develop a mitigation plan for the Temporary wetland impacts including conducting meetings with these agencies and IRC/engineer.

C. Site Meeting: Atlantic Environmental will conduct, if required, an on-site meeting at both the project site with the FDEP to allow their assessment of the project and mitigation project, as well as the completion of the UMAM Analysis.

D. ERP Application: Based on information obtained from the regulatory agencies and the client, Atlantic Environmental will develop the environmental portion of the Environmental Resource Permit (ERP) Application, including all necessary forms, narratives, mitigation plan, maps, tables, and UMAM data sheets for the temporary wetland impacts.

E. Submittal of RAI Responses: Atlantic Environmental will prepare the environmental responses to 2 FDEP RAIs, including, but not limited to, narrative descriptions of impacts and proposed mitigation, site plan, associated environmental maps and figures, and, monitoring plan and schedule. Atlantic Environmental will coordinate with IRC Staff, the project engineer, and FDEP to obtain all information necessary for the completion of the responses.

F. Coordination: Complete necessary coordination between IRC Staff, the project engineer, and remaining project team in order to speed permitting process and avoid costly time delays.

USACE Environmental Permitting:

G. UMAM Analysis (IF REQUIRED) or Development of Restoration Plan of Temporary Impacts: Based on the site inspections and coordination with the USACE, Atlantic Environmental will develop a UMAM analysis for the expected Temporary wetland impacts associated with the installation of the new buried electrical power system. If no mitigation is required, Atlantic Environmental will develop a restoration plan of temporary impacts.

H. Development of Mitigation Plan (IF REQUIRED): Atlantic Environmental will coordinate with IRC Staff, project engineer, and USACE to develop a mitigation plan for the temporary wetland impacts including conducting meetings with these agencies and IRC/engineer.

I. Site Meeting: Atlantic Environmental will conduct, if required, an on-site meeting at the project site with USACE to allow their assessment of the project, as well as the completion of the UMAM Analysis.

J. Application: Based on information obtained from the regulatory agencies and the client, Atlantic Environmental will prepare the environmental portions of the necessary USACE Permit Application(s), including all necessary forms, narratives, mitigation plans, maps, tables, and UMAM data sheets.

K. Submittal of RAI Responses: Atlantic Environmental will prepare the environmental responses to 2 USACE RAIs, including, but not limited to, narrative descriptions of impacts and proposed mitigation, site plan, associated environmental maps and figures, and, monitoring plan and schedule. Atlantic Environmental will coordinate with IRC Staff, the project engineer, and USACE to obtain all information necessary for the completion of the responses.

L. Coordination: Complete necessary coordination between IRC Staff, the project engineer, and remaining project team in order to speed permitting process and avoid costly time delays.

Task 1D – Soils Investigation (by KSM Engineering & Testing)

We shall acquire soil borings along the intended route of the new buried electric power supply to obtain the type of soils conditions for use by the selected underground utility contractor for the project. Consultant shall provide for the required Geotechnical Engineering Services to be performed by subconsultant KSM Engineering & Testing to include the following services in accordance with the Industry Standard of Care and the current Florida Building Code:

A. Perform five (5) borings to a depth up to 4' in accordance with ASTM D1452 along the south side of the maintenance route.

B. Upon completing the required borings, a geotechnical report covering the investigation including the boring logs illustrating the soil classification, thickness of each layer, groundwater depth along with KSM's conclusions pertaining to the existing water table and the ability of onsite soils, in the locations tested to be suitable for the installation of the proposed utility line.

Task 1E – Construction Procurement Assistance

It is understood the County intends to directly select a Utility Contractor through its procurement process for performance of the work rather than through a public bidding process. Consultant shall coordinate with the County Purchasing Department to allow for the Phase 1 construction work to be contracted through the County's procurement process.

Task 1F – Construction Services (Electrical)

Consultant shall provide for Electrical Engineering Services to be performed by C&W Engineering Inc. to include the following services:

A. Attend a pre-construction meeting.

B. Provide conformed drawings.

C. Review material and equipment shop drawings.

D. Provide two field visits during construction, including one to inspect progress and to witness the cable splicing using approved means as indicated on Contract Documents.

E. Provide response to Contractor RFIs; we anticipate two (2).

F. Attend a startup and testing phase after substantial completion is done to confirm installation of equipment, witness tests results and see underground feeder and existing pump station operational with no issues. We will provide a punch list for the Contractor to complete.

Task 1G – Construction Services (Civil)

Shop Drawing Review /Pre-Construction Meeting: We shall review all shop drawings and submittals for site civil construction.

We will coordinate with the Contractor and his sub-contractors and Indian River County Utilities Personnel to set up the required pre-construction meeting. The "pre-con" provides an opportunity for the County to offer instructions regarding areas of special concern and to describe the construction inspection and project completion procedures.

On-Site Construction Observation: During construction of the site improvements by the Contractor, we shall perform sufficient construction observation at our discretion on an as-

needed basis such that we can certify the construction of the completed civil work. Formal inspections require forty-eight (48) hours' notice prior to procedure.

Full-time resident construction observation is not required and therefore not included.

Our proposal for performance of these services is not based on meeting Indian River County Utilities Permit Conditions which generally states:

> *"The Engineer-of-Record (EOR) shall have an on-site representative (inspector) whom shall witness and document all materials used, installation procedures, problems encountered and all tests specified by the Operation Permit Checklist. Daily construction reports shall be submitted not less than monthly to IRCDUS. The daily reports shall be signed and sealed by the EOR. The daily construction reports shall be submitted to IRCDUS no later than seven days after completion of that portion of the construction requiring clearance. Indian River County has unconditional rights to inspect the construction and materials at any time."*

As-Built Review: Upon completion of construction, Masteller & Moler, Inc. must be provided with As-Built surveys to confirm proper horizontal and vertical alignment of constructed electrical systems. The As-Built survey is typically provided by the Contractor's Surveyor (licensed in the State of Florida) and must be provided in AutoCAD format, black line, and mylar with reference to State Plane Coordinates as required by Indian River County.

While reviewing the as-built survey, we shall conduct an initial walk-through and develop a punchlist of construction deficiencies. The punchlist shall be provided to the Contractor and the client. Once the contractor has satisfactorily corrected the punchlist items and we are confident that the site has been constructed in compliance with the permit approvals, and we are provided with all required information, we shall submit a Certification of Construction Completion to Indian River County and request final inspection. In the event the County prepares a punchlist, we will provide said punchlist to the Contractor in order that the items may be addressed. Once the County's punchlist has been resolved to our satisfaction, we shall notify the County that the site is ready for re-inspection.

This task shall also include our inspector's attendance of progress meetings and assistance during the Construction Completion process. Required certifications shall be prepared and submitted as described herein.

Pay Request Review: We shall also review contractor's partial payment requests and provide a certification each partial payment / final payment request accurately reflects completed work.

The As-built survey is not included in our fees. Daily and Periodic inspections of erosion control devices and reports required by the NPDES General Permit are the Responsibility of the Contractor and are not included in this proposal.

***Engineering Certifications*:** Upon completion of civil construction work and review of As-Built and Testing results to confirm proper construction, we shall prepare Engineering Certifications to be submitted to the following agencies:

1. IRC Department of Utility Services;
2. Florida DEP Temporary Wetlands Impact Restoration Certification
3. ACOE Temporary Wetlands Impact Restoration Certification

Our submittal of certifications assumes that all civil work will be properly constructed and tested prior to submittal of the Engineering Certifications and request to place systems into operation.

Phase 2 – Unpaved Maintenance Road Upgrade

Task 2A – Civil Engineering Design & Construction Plans

Consultant shall design and prepare Construction Plans for the upgrade of the existing unpaved maintenance roadway from the vicinity of the Spoonbill Marsh Florida Power & Light Transformer to the Intake Pumping Facility. It is intended to have roadway remain unpaved, however, be designed to be raised to a minimum elevation of 3.0' NAVD88.

The Construction Plans will include the estimated limits of permanent wetlands impacts. Due to the fact the upgraded roadway will remain unpaved with a similar surface, has limited use, and there will be no increase in impervious surfaces, the Construction Plans will not be supported by any stormwater computations.

As the scope of the work to upgrade the existing roadway is considered a maintenance upgrade, we have not included any scope of services related to obtaining a permit associated with the treatment and attenuation of the runoff from the roadway as runoff conditions will not be substantially altered.

Task 2B – Environmental Services

It is anticipated the Phase 2 construction work will result in "Permanent" wetland impacts for which mitigation will be required. Consultant shall provide for the required Environmental Services to be performed by subconsultant Atlantic Environmental of Florida, LLC to include the following services:

- FDEP / SJRWMD Environmental Resource Permitting (by Atlantic Environmental of Florida):

  A. UMAM Analysis (IF REQUIRED): Based on the site inspections and coordination with the FDEP, Atlantic Environmental will develop a Unified Mitigation Assessment Methodology (UMAM) analysis for any wetland impact allowing the Functional Loss that will occur to the wetlands as a result of the project. In addition, Atlantic Environmental will develop a wetland mitigation strategy that will provide sufficient Relative Functional Gain to offset the calculated Functional Loss. The UMAM analysis will be generated for a mitigation

alternative that most successfully balances cost effectiveness, viability, and permittability.

B. Development of Mitigation Plan (IF REQUIRED): Atlantic Environmental will coordinate with IRC Staff, project engineer, and FDEP to develop a mitigation plan to compensate for proposed wetland impacts, conduct meetings with these agencies and IRC/engineer, and establish the proposed mitigation plan.

C. Site Meeting: Atlantic Environmental will conduct an on-site meeting at both the project site and, if required, the mitigation site with FDEP to allow their assessment of the project and mitigation project, as well as the completion of the UMAM Analysis.

D. ERP Application: Based on information obtained from the regulatory agencies and the client, Atlantic Environmental will develop the environmental portion of the Environmental Resource Permit (ERP) Application, including all necessary forms, narratives, mitigation plan, maps, tables, and UMAM data sheets.

E. Submittal of RAI Responses: Atlantic Environmental will prepare the environmental responses to 2 FDEP RAIs, including, but not limited to, narrative descriptions of impacts and proposed mitigation, site plan, associated environmental maps and figures, and, monitoring plan and schedule. Atlantic Environmental will coordinate with IRC Staff, the project engineer, and FDEP to obtain all information necessary for the completion of the responses.

F. Coordination: Complete necessary coordination between IRC Staff, the project engineer, and remaining project team in order to speed permitting process and avoid costly time delays.

G. Negotiation: Due to limited space and the fact the County does not own the subject lands, we have assumed the mitigation plan will consist of a negotiated payment to a mitigation bank.

- <u>USACE Environmental Permitting (by Atlantic Environmental of Florida)</u>:

H. UMAM Analysis (IF REQUIRED): Based on the site inspections and coordination with the USACE, Atlantic Environmental will develop a UMAM analysis for any wetland impact allowing the Functional Loss that will occur to the wetlands as a result of the project. In addition, Atlantic Environmental will develop a wetland mitigation strategy that will provide sufficient Relative Functional Gain to offset the calculated Functional Loss. The UMAM analysis will be generated for a mitigation alternative that most successfully balances cost effectiveness, viability, and permittability.

I. Development of Mitigation Plan (IF REQUIRED): Atlantic Environmental will coordinate with IRC Staff, project engineer, and USACE to develop a mitigation plan to compensate for proposed wetland/SAV impacts, conduct meetings with these agencies and IRC/engineer, and establish the proposed mitigation plan.

J. Site Meeting: Atlantic Environmental will conduct an on-site meeting at both the project site and, if required, the mitigation site with USACE to allow their assessment of the project and mitigation project, as well as the completion of the UMAM Analysis.

K. Application: Based on information obtained from the regulatory agencies and the client, Atlantic Environmental will develop the environmental portions of the necessary USACE Permit Application(s), including all necessary forms, narratives, mitigation plans, maps, tables, and UMAM data sheets.

L. Submittal of RAI Responses: Atlantic Environmental will prepare the environmental responses to 2 USACE RAIs, including, but not limited to, narrative descriptions of impacts and proposed mitigation, site plan, associated environmental maps and figures, and, monitoring plan and schedule. Atlantic Environmental will coordinate with IRC Staff, the project engineer, and USACE to obtain all information necessary for the completion of the responses.

M. Coordination: Complete necessary coordination between IRC Staff, the project engineer, and remaining project team in order to speed permitting process and avoid costly time delays.

N. Negotiation: Due to limited space and the fact the County does not own the subject lands, we have assumed the mitigation plan will consist of a negotiated payment to a mitigation bank.

Task 2C – Construction Procurement Assistance

It is understood the County intends to select a contractor through its procurement process for performance of the work rather than through a public bidding process. Consultant shall coordinate with the County Purchasing Department to allow for the Phase 2 construction work to be contracted for through the County's procurement process.

Task 2D – Construction Services (Civil)

Shop Drawing Review /Pre-Construction Meeting: We shall review all shop drawings and submittals for site work construction pertaining to the proposed roadway materials.

We will coordinate with the Contractor and his sub-contractors and Indian River County Personnel to set up the required pre-construction meeting. The "pre-con" provides an opportunity for the County to offer instructions regarding areas of special concern and to describe the construction inspection and project completion procedures.

On-Site Construction Observation: During construction of the site improvements by the Contractor, we shall perform sufficient construction observation at our discretion on an as-needed basis such that we can certify the construction of the upgraded maintenance roadway. Formal inspections require forty-eight (48) hours' notice prior to procedure.

Full-time resident construction observation is not required and therefore not included.

Our proposal for performance of these services is not based on meeting Indian River County Utilities Permit Conditions which generally states:

> *"The Engineer-of-Record (EOR) shall have an on-site representative (inspector) whom shall witness and document all materials used, installation procedures, problems encountered and all tests specified by the Operation Permit Checklist. Daily construction reports shall be submitted not less than monthly to IRCDUS. The daily reports shall be signed and sealed by the EOR. The daily construction reports shall be submitted to IRCDUS no later than seven days after completion of that portion of the construction requiring clearance. Indian River County has unconditional rights to inspect the construction and materials at any time."*

As-Built Review: Upon completion of construction, Masteller & Moler, Inc. must be provided with As-Built surveys to confirm proper horizontal and vertical alignment of the upgraded maintenance roadway. The As-Built survey is typically provided by the Contractor's Surveyor (licensed in the State of Florida) and must be provided in AutoCAD format, black line, and mylar with reference to State Plane Coordinates as required by Indian River County.

While reviewing the as-built survey, we shall conduct an initial walk-through and develop a punchlist of construction deficiencies. The punchlist shall be provided to the Contractor and the client. Once the contractor has satisfactorily corrected the punchlist items and we are confident that the site has been constructed in compliance with the permit approvals, and we are provided with all required information, we shall submit a Certification of Construction Completion to Indian River County and request final inspection. In the event the County prepares a punchlist, we will provide said punchlist to the Contractor in order that the items may be addressed. Once the County's punchlist has been resolved to our satisfaction, we shall notify the County that the site is ready for re-inspection.

This task shall also include our inspector's attendance of progress meetings and assistance during the Construction Completion process. Required certifications shall be prepared and submitted as described herein.

Pay Request Review: We shall also review contractor's partial payment requests and provide a certification each partial payment / final payment request accurately reflects completed work.

The As-built survey is not included in our fees. Daily and Periodic inspections of erosion control devices and reports required by the NPDES General Permit are the Responsibility of the Contractor and are not included in this proposal.

***Engineering Certifications*:** Upon completion of the maintenance roadway upgrade and review of As-Built and Testing results to confirm proper construction, we shall prepare Engineering Certifications to be submitted to the following agencies:

1. IRC Utilities
2. FDEP Wetlands Impact Certification
3. ACOE Wetlands Impact certification

The intent of the FDEP /ACOE certifications will be to confirm the project has been constructed with no more wetland impacts than was permitted.

We shall prepare One (1) Engineering Certification for each of the above-listed permits. Our submittal of certifications assumes that all maintenance roadway upgrade work will be properly constructed and tested prior to submittal of the Engineering Certifications.

Fee Schedule:

Phase 1 – New Electric Power System

Task 1A – Civil Engineering Design & Preparation of Construction Plans	$ 8,000.00
Task 1B – Electrical Engineering Design & Preparation of Construction Plans	$ 4,600.00
Task 1C – Environmental Services	$ 10,350.00
Task 1D – Soils Investigation	$ 4,025.00
Task 1E(1) – Construction Procurement Services (Civil)	$ 3,000.00
Task 1E(2) – Construction Procurement Services (Electric)	$ 1,150.00
Task 1F – Construction Services (Electrical)	$ 6,325.00
Task 1G – Construction Services (Civil)	$ 5,000.00
Sub-Total	**$ 42,450.00**

Phase 2 – Unpaved Maintenance Roadway Upgrade

Task 2A – Civil Engineering Design & Preparation of Construction Plans	$ 16,000.00
Task 2B – Environmental Services	$ 14,260.00
Task 2C – Construction Procurement Services	$ 3,000.00
Task 2D – Construction Services (Civil)	$ 8,000.00
Sub-Total	**$ 41,260.00**

Reimbursable Expenses Phases 1 & 2 (Not To Exceed)	**$ 4,000.00**
Total Fees	**$ 87,710.00**

Permit review fees are not included in the fees above. As the permit review fees are unknown at this time, Consultant shall provide the fees and will invoice for them separately to be reimbursed by the County.

Mitigation fees are excluded from this Work Order.

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Time Schedule:

The Work Order tasks shall be completed based on the following schedule:

Phase 1	Working Days
1. Soils Investigation	10 Days after NTP
2. Civil Services (MM)	15 Days after NTP
3. Electrical Services (C&W)	15 Days after NTP
4. Environmental Services (Submit Applications)	5 days after 1-3
Phase 2	
1. Soils Investigation	10 Days after NTP
2. Civil Services (MM)	15 Days after NTP
3. Electrical Services (C&W)	15 Days after NTP
4. Environmental Services (Submit Applications)	5 days after 1-3

Deliverables:

The ENGINEER shall provide the COUNTY with the following Deliverables:

Phase 1

1. Soils Investigation	PDF
2. Environmental Services	PDF
3. Civil Engineering Design Plans	
30%	PDF & 1 Hard Copy
60%	PDF & 1 Hard Copy
90%	PDF & 1 Hard Copy
100%	PDF & ACAD File & 3 Hard Copy Sets
4. Electrical Engineering Design Plans	
30%	PDF & 1 Hard Copy
60%	PDF & 1 Hard Copy
90%	PDF & 1 Hard Copy
100%	PDF & ACAD File & 3 Hard Copy Sets

Phase 2

1. Environmental Services	PDF
2. Civil Engineering Design Plans	
30%	PDF & 1 Hard Copy
60%	PDF & 1 Hard Copy
90%	PDF & 1 Hard Copy
100%	PDF & ACAD File & 3 Hard Copy Sets