

CCNA2018 WORK ORDER 7

437717 8TH STREET 24" FM RELOCATION

This Work Order Number 7 is entered into as of this ___ day of _____, 201_, pursuant to that certain Continuing Consulting Engineering Services Agreement for Professional Services entered into as of this 17th day of April, 2018 (collectively referred to as the "Agreement"), by and between INDIAN RIVER COUNTY, a political subdivision of the State of Florida ("COUNTY") and Masteller & Moler, 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 A (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 A (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:
MASTELLER & MOLER, INC.**

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

By: _____

By: _____

Print Name: Earl H. Masteller, PE, BCEE

Bob Solari, Chairman

Title: President

BCC Approved Date: _____

Attest: Jeffrey 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 7

8th Street 24" Force Main Relocation

Masteller & Moler, Inc. is pleased to present you with Work Order Number 7 which provides Professional Engineering Services for design, permitting, and specifications with bidding services.

Project Description

The State of Florida Department of Transportation, along with Indian River County plans to construct a bridge replacement project for the 8th Street bridge over the Lateral "C" Canal at 74th Avenue in Vero Beach, Florida. Said project requires that Indian River County Utilities relocate certain existing wastewater improvements in advance of the referenced project in order to eliminate conflicts with the bridge replacement design. The existing 24" force main on the south side of 8th Street will need to be relocated and replaced with a new force main system. Any adjustments necessary to the existing potable water main system and related accessories, including gate valves, etc. are not included as part of this Work Order Number 7.

The estimated Construction Cost for the Utility Improvements Scope of Services for Work Order No. 7 is \$440,000.00.

In order to expedite the Project Scope and to not duplicate acquisition of survey information previously prepared by the FDOT, County has provided Consultant with copies of the FDOT's Roadway Improvement Plans, both hard copy and AutoCAD format. These documents include route survey information and proposed roadway and stormwater improvements construction details. It is understood that the information provided reflects "Preliminary" design of the project improvements, and that changes to the current Plans may occur. Furthermore, it is understood that the County has obtained authorization from the FDOT to allow said information to be used by Consultant in the performance of the Scope of Services described herein.

In order that Indian River County may construct the required utility replacements as described above, Consultant proposes to perform the following scope of services;

Scope of Services

Task A – Surveying Services

The drawings provided by County to Consultant in AutoCAD format represent raw survey data acquired by the FDOT's roadway consultant and/or their sub-consultants. The data, in its current format, is not usable in the preparation of the Construction Plans. The raw data will need to be converted into a final product that will be used as the Base Plans for the project. Consultant will utilize the services of our survey sub-consultant, Masteller, Moler, & Taylor, Inc. to convert the raw data into a Route Survey and Base Plans.

Task B – Engineering Design & Preparation of Construction Plans

Consultant shall use the aforementioned Base Plans for design and preparation of Construction Plans for a new 24" PVC wastewater force main including a directional bore underneath the Indian River Farms Water Control District's (IRFWCD's) Lateral "C" Canal. Consultant shall prepare plans and specifications which shall include requirements for connection of the new utilities to existing systems to remain. Plans and specifications will also

include the requirements for abandonment of portions of the system replaced by new main, and demolition of certain existing fixtures. Due to the "Preliminary" nature of the FDOT Project Plans, we shall coordinate with the FDOT as needed to ensure the Roadway Improvements and related Stormwater Improvements and the Utility Relocation Plans are not in conflict. Additionally, the designs shall be supported by maintenance of traffic standards consistent with FDOT Specifications.

The following information is requested from the Utilities Department:

1. Existing Maximum Pump Flow Condition for County Lift Station #89;
2. Existing system pressure in the 24" Force Main at the Project location;
3. Further information on a possible bypass of the existing 24" Force Main to the South WWTP so as to possibly eliminate costly wet tapping of the existing force main.

Task C – Quality Assurance / Quality Control Engineering Review

Consultant shall use the services of our directional boring engineering sub-consultant, Jim Williams, PE of Brierley Associates, to perform Quality Assurance and Quality Control engineering review services throughout the design phase as follows:

- 60% Plans review
- 100% Plans review

Consultant will coordinate with Jim Williams, PE of Brierley Associates to ensure that the proposed directional bore results in the best design and force main route with the lowest construction, operational, and maintenance cost to the County.

Task D – Soils Engineering Services

Consultant shall use the services of our soils engineering sub-consultant KSM Engineering & Testing to provide soil engineering services for the project along the proposed route corridor as follows:

- Perform two (2) soil borings to a depth of 45' on either side of the Lateral "C" Canal along the directional bore route; and
- Provide a report detailing all findings and conclusions as to the suitability of the subsurface soils for the project.

Task E – Permitting

We shall secure permits for the proposed work from the following agencies:

- Indian River Farms Water Control District
- Indian River County Public Works:
 1. Road Crossings
 2. Soil Borings

Permit application fees are not included in this Work Authorization.

Task F – Bidding Services and Specifications

Using IRCDUS standard bid documents, we shall prepare Contract Plans and Specifications with Bid Documents to allow the Indian River County Purchasing Department to advertise and bid the proposed Utility Replacement Project. Additionally, we will provide engineering services during the project's bidding process generally including but not limited to the following:

1. Preparation for and attendance at a mandatory pre-bid meeting and preparation of a letter of response to include in an addendum.
2. Revise and/or amend Contract Plans and Specifications and prepare written addendum / addenda during bidding to reflect any comments and/ or requirements by permitting agencies.
3. Research and responses to bidders' questions to be incorporated into written addenda during the bidding process.
4. Review submitted bids, evaluate for correctness and completion, compile bid comparison by line item for each bidder, contact references (if applicable), and provide Letter of Findings and Recommendation of Contract Award.

Deliverables – The **ENGINEER** shall provide the **COUNTY**:

- a. 60% Construction Plans and Preliminary Specifications - 2 Sets
- b. Final Construction Plans - 2 Sets + PDF
- c. Bid Documents and Final Specifications necessary for Advertisement and Bidding of the work
- d. Related digital AutoCAD, DOC, and PDF files

TIME SCHEDULE

Project shall be completed as follows:

Engineering Design & Preparation of Construction Plans (after NTP Receipt)	<u>40</u> Working Days
Submittal of Permit Applications (after NTP Receipt)	<u>50</u> Working Days

FEE SCHEDULE

Consultant proposes to provide the outlined Scope of Services based on the following lump sum fees:

• Task A – Surveying Services	\$ 1,500.00
• Task B – Engineering Design & Preparation of Construction Plans	\$ 30,800.00
• Task C – Quality Assurance / Quality Control Engineering Review	\$ 3,800.00
• Task D – Soils Engineering Services	\$ 5,900.00
• Task E – Permitting	\$ 5,320.00
• <u>Task F – Bidding Services and Specifications</u>	<u>\$ 6,220.00</u>
Total Lump Sum Fee	\$ 53,540.00