## WORK ORDER NUMBER <u>XX</u> Old Fire Lookout Tower – Condition Assessment and Structural Evaluation Services Project Number: IRC-XXXX

This Work Order Number <u>XX</u> is entered into as of this <u>day of</u> day of <u>2021</u>, pursuant to that certain Continuing Consulting Engineering Services Agreement for Professional Services, dated April 17, 2018, renewed and amended as of May 18, 2021 (collectively referred to as 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. 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.

#### EXHIBIT A – SCOPE OF WORK

#### Old Fire Lookout Tower – Condition and Structural Assessment Services

The COUNTY has requested the Consultant perform a condition assessment and a structural evaluation of the existing fire lookout tower that is located at the northwest corner of 4<sup>th</sup> Street and 43<sup>rd</sup> Avenue. The existing structure was constructed in the 1950s. The COUNTY would like to have the existing tower evaluated using the loading of the current America Society of Civil Engineers Minimum Design Loads for Buildings and Other Structures (ASCE 7-16) to see if the tower is structurally adequate. If the tower does not meet current wind loading the COUNTY has requested an Opinion of Probable Construction cost to retrofit and strengthen the existing tower to withstand current wind loading.

#### Task 1 – Field Review and Data Collection

The Consultant under this task will conduct a field visit and perform a visual assessment of the above ground elements of the tower. The Consultant will measure accessible members and obtain adequate measurements in order to map the tower structure and perform a structural analysis of the tower. The Consultant will also attempt to measure the accessible connections. The visual assessment will also investigate if the existing stair well system meets the current geometric requirements of the 2020 Florida Build Code.

If during the tower assessment, observed deficiencies require the attention of a specific expert or testing laboratory, Consultant will notify the COUNTY. If desired by the COUNTY, the use of experts and testing laboratories will be an additional service.

#### Task 2 – Structural Evaluation

The Consultant will perform a structural analysis on the existing tower utilizing field measurements obtained in task 1. Where information is unknown, the Consultant will make conservative assumptions (steel material properties, connection properties, soil properties, etc.) to facilitate the analysis. The initial analysis will investigate the structure for both live load as well as wind load in accordance with current design code. If the tower does not meet the current design code the Consultant will identify areas where the tower would need to be strengthened to withstand current design loading. The design and detailing of the strengthened members and/or connections is not included in this scope of services. The foundation of the tower will be evaluated using conservative soil parameters as found in the Florida Building Code.

The Consultant will estimate an Opinion of Probable Construction Cost associated with the strengthening of the existing tower to bring the structure up to the current design codes if possible.

#### Task 3 – Condition Assessment and Structural Evaluation Report

Under this task the Consultant will summarize the current condition and structural adequacy of the existing tower. The condition assessment portion of the report will consist of descriptions, representative photographs, industry standard references, and professional opinions of various elements of the existing tower. The report will also provide recommendations for intrusive testing if deficiencies could not be determined with visual-only observations. This section will also summarize how the existing stair well geometry compares to the Florida Build Code requirements.

The structural evaluation section of the report will summarize the structural evaluation completed for the tower in task 2. This section will also describe the elements that would require strengthening to bring the structure up to current design codes as necessary. This section will also summarize the opinion of probably construction cost associated with strengthening the existing tower.

#### Additional Services

Any other services, including but not limited to the following, are not included in the Agreement.

- 1. Material testing
- 2. Safety recommendations outside stair well geometry
- 3. Design and/or detailing of strengthened elements
- 4. Repair or rehabilitation plans
- 5. Assessment of the existing steel coating system

Any services not specifically provided for in the above scope of work will be billed as additional services at our then current rates.

Information Provided By Client

We shall be entitled to rely on the completeness and accuracy of all information provided by the COUNTY or the COUNTY's consultants or representatives. The COUNTY shall provide all information requested by the Consultant during the project, including but not limited to the following:

- 1. Nearby geotechnical information (if available)
- 2. As-built records for the existing tower

## EXHIBIT B – FEE SCHEDULE

The COUNTY agrees to pay and the Consultant agrees to accept for services rendered pursuant to this Agreement fees inclusive of expenses in accordance with the following:

A. Professional Services Fee

The basic compensation mutually agreed upon by the Consultant and the COUNTY is as follows:

Lump Sum Components

Task	Labor Fee
Field Review and Data Collection	\$ 7,650
Structural Evaluation	\$25,190
Condition Assessment and Structural Evaluation Report	\$14,050

Project Total

#### <u>\$ 46,890</u>

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## EXHIBIT C – TIME SCHEDULE

# Upon authorization to proceed by the COUNTY, final report is expected to take approximately four (4) months from the Notice to Proceed (NTP).

NTP	contingent upon BOCC approval
Task 1	4 weeks following NTP
Tasks 2 & 3	3 months

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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:		By:	
-	Brian Good, P.E.		Jason E. Brown, County Administrator
Title:	Senior Vice President	BCC Approv	ed Date:
		Attest: Jeffre	ey R. Smith, Clerk of Court and Comptroller
		By:	
		-	Deputy Clerk
	Approved as to form and legal	sufficiency:	

Dylan T. Reingold, County Attorney