

## Aviation Boulevard Extension (33rd Street - 36th Street)

ENGINEERING SERVICES WORK ORDER 26

This Work Order Number 26 is entered into as of this \_\_\_\_ day of \_\_\_\_\_, 2025, 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 KIMLEY HORN & 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 mutually agreed upon lump sum or maximum amount not-to-exceed professional fee. Any additional costs must be approved in writing, and at a rate not to exceed the prices set forth in Exhibit B of the Agreement (Rate Schedule) for RFQ 2023015, 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: KIMLEY HORN & ASSOCIATES, INC.

By: 

Name: Brian Good

Title: Senior Vice President

BOARD OF COUNTY COMMISSIONERS OF  
INDIAN RIVER COUNTY:

By: \_\_\_\_\_

Deryl Loar, Chairman

BCC Approval Date: \_\_\_\_\_

By: 

John A. Titkanich, Jr., County Administrator

Approved as to Form and Legal Sufficiency:

By: 

Jennifer W. Shuler, County Attorney

Ryan L. Butler, Clerk of Court and Comptroller

Attest: \_\_\_\_\_

Deputy Clerk

(SEAL)

## EXHIBIT A – SCOPE OF WORK

The County desires to extend Aviation Boulevard east of US Highway 1 to provide an alternative mobility connection to the Cleveland Clinic Indian River Hospital. Presently, the primary mobility access is obtained from 37<sup>th</sup> Street located between US Highway 1 and Indian River Boulevard. The roadway extension will consist of constructing Aviation Boulevard as a 2-lane roadway with buffered bike lanes and pedestrian facilities along both sides of the corridor. The extension of Aviation Boulevard east of the Florida Department of Transportation (FDOT) State Road 5/US 1 at Aviation Boulevard Project Development and Environmental (PD&E) Study eastern termini will be consistent with the Preferred Alignment identified in the Aviation Boulevard Extension Alternative Alignment Study.

The Aviation Boulevard extension typical section from 33rd Street to 36th Street is proposed to be a right-of-way width that varies between 90- to 122-foot. The roadway typical sections consist of the following elements:

- Urban section (curb & gutter)
- Rural section (roadside swales)
- Two travel lanes
- 7-foot wide paved outside shoulders (buffered bike lanes)
- 6-foot wide concrete sidewalks located along both sides of the corridor

### A. Supplemental Topographic Design Survey:

The Consultant will provide supplemental topographic design survey services necessary to support and facilitate contemplated design and permitting activities associated with this project. This task will consist of the preparation of digital base map topographic surveys in accordance with the Standards of Practice, established by the Board of Professional Surveyors and Mappers, Chapter 5J-17, Florida Administrative Codes, pursuant to current Section 472.027, Florida Statutes, per 5J-17.050 through 5J-17.052. The survey will include:

The survey will include:

1. Establishment of a project wide Horizontal Control Network within the PROJECT LIMITS. A Design Survey Baseline will be established and monumented. A minimum of six Design Survey Baseline monuments will be installed.
2. Establishment of a project wide Vertical Control Network within the PROJECT LIMITS. All elevations will be referenced to NAVD 1988 datum.

The limits of the supplemental topographic design survey are as follows:

13<sup>th</sup> Avenue - between 32<sup>nd</sup> and 33<sup>rd</sup> Street to assist in designing the proposed roadway and drainage improvements identified within this area.

Van Valkenberg Creek – supplemental survey data is needed at the western terminus of the existing creek to assist in designing outfall improvements needed to serve the proposed stormwater management facilities.

Legal Description & Sketch – the Consultant will prepare up to six (6) legal description and sketches to support the acquisition of property and/or easements identified.

B. Supplemental Geotechnical Investigation:

The Consultant will retain the services of a Geotechnical sub-consultant to assist in evaluating the existing soil and roadway pavement conditions. Due to the change in State water quality standards, additional geotechnical investigation will be needed. The supplemental geotechnical investigation may include the following services:

1. Field Exploration Program

- Soil permeability testing
- 6-feet deep hand augers
- 10-feet deep hand augers

2. Engineering Analysis and Report

The Geotechnical Sub-Consultant Engineer shall perform analysis of all the data obtained to evaluate subsurface conditions and develop engineering recommendations.

C. Construction Documents:

The Construction plan set shall consist of the following:

PHASE SUBMITTALS	60%	90%	100%
Cover Sheet (Location map, Project Length, Engineer of Record)	C	F	F
General Notes	C	C	F
Summary of Pay Items/Quantities	P	C	F
Horizontal and Vertical Control Sheets (Benchmarks, Reference Points, Section Corners)	C	C	F
Details	P	C	F
Plan and Profile Sheets (40 scale)	C	C	F
Cross Sections at approximately 100 ft intervals, extending 10' beyond proposed right-of-way (1"=5' Vertically, 1"=20' Horizontally)	C	C	F
Signage & Pavement Marking Plans (40 scale) Included in Plan Sheets	P	C	F
Signalization Plans	P	C	F
Stormwater Pollution Prevention Plans	C	C	C
Construction Cost Estimate and Quantities	C	C	F

Notes: P – Preliminary, C – Complete, but subject to change, F - Final

#### General Construction Plan Requirements:

- Plans shall be prepared on 11" x 17" sheets.
- Each phase submittal shall include drawings in PDF format.
- Plan sheets shall depict existing right-of-way, section lines, property lines, and centerline of construction. Horizontal control points with state plane coordinates for all PC's, PT's, curve radius, curve length and horizontal PI's shall be included on the Plan or summarized in an alignment table.
- Plans shall include spot grades adequate to describe any proposed grading.
- Match lines shall not be located within the limits of an intersection.
- All quantities shall reference FDOT Pay Item Numbers.
- All details shall reference FDOT Index Numbers.
- All specifications shall reference to FDOT Specifications for Road and Bridge Construction. Any deviations are special specifications not included in FDOT Specifications are required in the Technical Specifications.

10. Preliminary (60% completion), interim (90% completion) and Final Plan (100% completion) Submittal shall include the following:

- i. One (1) set of drawings in PDF format.
- ii. One (1) Opinion of Probable Construction Cost

The plans will be prepared based upon English units. Final design files will be submitted in AutoCAD format.

D. Signing and Pavement Marking Plans:

Signing and Pavement Markings will be included within the Roadway Plan set. Quantities will be provided in the Summary of Pay Items sheet. All signing and pavement markings are to be prepared in accordance with the latest design standards and practices (MUTCD), FDOT Standard Specifications, Indexes, and shall be accurate, legible, and complete in design.

E. Drainage Design:

The Consultant will perform drainage investigations and analysis necessary to prepare a design which will drain the project in accordance with Indian River County and St. Johns River Water Management District (SJRWMD) design criteria. The Consultant will assist the County with the submittal of the permit applications, coordination and supporting documentation for the project to the following agencies:

- Indian River County Public Works
- St. Johns River Water Management District

A Stormwater Pollution Prevention Plan (SW3P) will be developed in conjunction with this project.

F. Jurisdictional Permitting:

The Consultant shall prepare jurisdictional permit applications necessary to support the proposed improvements. The following agencies are anticipated to require applications/review to facilitate the proposed improvements:

- Saint Johns River Water Management District (SJRWMD) – Environmental Resource General Permit

The Consultant has included \$1,190 as a reimbursable expense to address SJRWMD application fees. The County will be responsible for any mitigation bank costs necessary to mitigate potential environmental impacts, if necessary.

G. Signalization Plans:

A mast-arm traffic signal configuration will be designed to meet current County and FDOT standards. Luminaries will be provided on each mast arm pole. The following intersections are contemplated to have signalization improvements associated:

- 36<sup>th</sup> Street / Aviation Boulevard (35<sup>th</sup> Lane)

H. Right-of-Way Acquisition Support

The Consultant will provide support to the COUNTY and its consultant relative to the evaluation and preparation of proposed right-of-way acquisition appraisals. The Consultant will develop Cure Plans associated with Parcel 122 and Parcel 123, to assist in remediating roadway encroachments proposed to be constructed within the parcels.

## 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*

<u>Task</u>	<u>Labor Fee</u>
Supplemental Topographic Design Survey	\$ 17,500
Supplemental Geotechnical Investigation	\$ 5,000
Construction Documents	\$ 233,145
Signing and Pavement Marking Plans	\$ 14,250
Drainage Design	\$ 60,210
Jurisdictional Permitting	\$ 18,610
Signalization Plans	\$ 35,680
Right-of-Way Acquisition Support	\$ 36,000

Project Total = \$ 420,395

## EXHIBIT C – TIME SCHEDULE

Upon authorization to proceed by the COUNTY, final design documents are expected to take approximately twelve (12) months from the Notice to Proceed (NTP).

NTP	contingent upon approval
60% Plan Submittal	6 months following NTP
90% Plan Submittal	9 months following NTP
100% Plan Submittal	12 months following NTP



# Summary

## Project Name

### Task Summary

Aviation Boulevard Extension Project - 33rd Street to 36th Street

Manhours for project

Task	Principle \$300	Senior Professional \$270	Registered Professional \$210	Professional 1 \$130	Designer \$165	Support Staff \$75	Remarks
Design Analysis	68	100	8	300	120	16	
Construction Plans	12	45	214	294	367	8	
Drainage Design and Permitting	12	64	140	140	50	12	
Signing and Marking Plans	8	7	24	15	18	0	
Signalization Plans	8	24	40	40	80	0	
Total Hours =	108	240	426	789	635	36	
Labor Fee =	\$32,400	\$64,800	\$89,460	\$102,570	\$104,775	\$2,700	
Sub-Total Fee =	\$396,705						
Supplemental Design Topo Fee =	\$17,500						
Supplemental Geotech Fee =	\$5,000						
Permit Fees =	\$1,190 - SJRWMD ERP						
Project Total Fee =	\$420,395						

## Design Analysis

**Activity: Design Analysis / Review**

Task	Principle	Senior Professional	Registered Professional	Professional 1	Designer	Support Staff	Support Staff
Contract File	4					4	
Cost Estimate		20		20			Cost est. conducted at 60%, 90% and 100%
Coordination							
IR County	20	60		60		12	Three review submittals to County
Cure Plan Development							
Parcel 122	20			80	40		
Parcel 123	20			80	40		
Field Review		20		20			Site Visits
Computation Book & Quantities			8	40	40		
QC/QA							
Project Management	4						
Subtotal	68	100	8	300	120	16	

Construction Plans

Activity: Roadway Plans

Task	Principle	Senior Professional	Registered Professional	Professional 1	Designer	Support Staff	Clerical
Cover Sheet				2	4		
General Notes Sheet				2	2		1 sheet
Summary of Quantities Sheet			4	8	24		1 sheet
Horiz/Vert Control Sheet			2	8			
Typical Sections							
<i>Aviation Blvd</i>			4	8	16		
<i>13th Avenue</i>			4	8	16		
Plan Sheets							
<i>Aviation Blvd</i>		12	96	60	72		6 sheets @ 40 hrs/ sht
<i>13th Avenue</i>		2	16	10	12		1 sheets @ 40 hrs/ sht
Cross Sections							
<i>Aviation Blvd</i>		6	48	30	36		100 ft Sections (30) @ 4.0 hrs / x-sect
<i>13th Avenue</i>		1	10	6	7		100 ft Sections (8) @ 4.0 hrs / x-sect
Stormwater Management Facility							
<i>SMF 1</i>		10		40	40		
<i>SMF 2</i>		10		40	40		
Erosion Control Plans							
<i>Aviation Blvd</i>			4	8	12		2 sheets @ 12 hrs / sht
<i>13th Avenue</i>			2	4	6		1 sheets @ 12 hrs / sht
Franchise Utility Coordination			4	20	40	8	
Miscellaneous Const. Details			20	40	40		
QC/QA	12						
Project Management		4					
Subtotal	12	45	214	294	367	8	

Activity: Drainage Design and Permitting

Task	Principle	Senior Professional	Registered Professional	Professional 1	Designer	Support Staff	Remarks
<b>Drainage Design</b>							
Aviation Blvd		20	80	80	40		
13th Avenue		20	20	20	10		
Report			40			8	
<b>St Johns River Water Management District</b>		20		40		4	
QC/QA	12						
Project Management		4					
<b>Subtotal</b>	12	64	140	140	50	12	

Activity: Signing and Marking Plans

Task	Principle	Senior Professional	Registered Professional	Professional 1	Designer	Support Staff	Remarks
<b>Signing and Marking Plans</b>							
Aviation Blvd		2	19	12	14		3 sheets @ 16 hrs / sht
13th Avenue		1	5	3	4		1 sheets @ 12 hrs / sht
QC/QA	8						
Project Management		4					
<b>Subtotal</b>	8	7	24	15	18	0	

Activity: Signalization

Task	Principle	Senior Professional	Registered Professional	Professional 1	Designer	Support Staff	Remarks
<b>Signalization Plan</b>							
<i>Aviation Blvd &amp; 36th Street</i>		20	40	40	80		Mast-Arm Configuration
		0	0	0	0		
<b>QC/QA</b>	8						
<b>Project Management</b>		4					
<b>Subtotal</b>	8	24	40	40	80	0	