

ENGINEERING SERVICES WORK ORDER 02

This Work Order Number 02 is entered into as of this ____ day 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 CARTER 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: CARTER ASSOCIATES, INC.

By: _____

Name: _____

Title: _____

BOARD OF COUNTY COMMISSIONERS OF
INDIAN RIVER COUNTY:

By: _____

Joseph E. Flescher, 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)

July 2, 2025

Addie Javed, PhD, PE, CFM
Public Works Director
Indian River County Engineering Division
1801 27th Street
Vero Beach, Florida 32960

**Re: IRC-Project No. 2508 - 20th Avenue Sidewalk (8th Street to 12th Street)
Engineering Services Agreement**

Dear Mr. Javed:

It is our pleasure to present for your acceptance, this proposed Agreement for engineering services for the above referenced project. The project includes analyzing and designing improvements to accommodate new sidewalk along approximately 0.5 miles of 20th Avenue between 8th Street and 12th Street. The project design process will include a full survey of the project area. The following describes our proposed scope of work and terms of agreement between Indian River County (COUNTY) and Carter Associates, Inc. (CAI):

SCOPE OF SERVICES:

PHASE 1 – Initial 30%

Following issuance of a Notice to Proceed (NTP), CAI will coordinate a kick-off meeting with COUNTY staff to discuss specific issues relative to the project and to establish procedure and protocol.

A. Surveying Services:

The project Limits consist of 20th Avenue right-of-way between 8th Street and 12th Street plus the intersections of 20th Avenue with 8th Street and 12th Street.

Survey tasks:

Research:

- Right of way information.
- Deeds of adjacent parcels. Approximately 55+ parcels, the majority unplatted.
- Record survey information.

- Recorded and unrecorded plats.
- Local benchmarks.
- County provided survey information.
- Prepare field crew file, worksheets, and maps for survey observations.

Field survey crew tasks:

- Review survey objective and scope of project with the field crew.
- Establish maintenance of traffic (**MOT**) daily for work performed in right of way.
- Establish horizontal site control for route survey and boundary reconnaissance.
- Establish vertical site control for site specific topographic survey utilizing differential leveling from published benchmarks.
- Reconnoiter monumentation from deeds, record survey information, and plats adjacent to the project.
- Locate trees and vegetation within right of way and those within 15 feet outside the right of way.
- Perform detailed cross sections of IRFWCD canals, roadway, and sidewalks for surface creation.
- Observe all visible above ground improvements within right of way and within 15 feet outside right of way (e.g. culverts, driveways, mailboxes, water meters, valves, back flow preventers, fences, etc.)
- Differential leveling to critical drainage structures and culverts.

Field tasks **NOT** included in this proposal:

- Subsurface Utility Engineering (S.U.E.) and survey observations of S.U.E. markings.
- Aerial mapping and establishment of aerial ground control points.
- LiDAR topographic survey services.
- Construction staking
- As-built survey observations

Office tasks:

- Calculation and boundary determination of right of way per record information.
- Prepare survey base map of route right of way based on record and observed information.
- Prepare 24"x 36" control sheets of the route with 100-foot stationing for engineering design plans at 1"=20' (approximately 7 sheets)
- Generate Triangulated Irregular Network (T.I.N.) surface from survey observations and break lines. Provide to project engineer for design drawings.
- Input as-built utilities from county provided GIS information.
- Prepare plan sheets of the topographic survey of the project site with improvements, spot grades and contours. Plan sheets only at 1"= 20' on 24"x 36" (approximately 7 sheets)

B. Drainage Study

- Develop a drainage basin map for the project area based on available information including but not limited to plats, survey, COUNTY provided lidar, IRFWCD drainage study, and field observations.
- Conduct site visits to research and observe drainage patterns and drainage obstacles.
- Identify what drainage improvements will be needed to prevent historic flows from being blocked by proposed improvements.
- Evaluate drainage improvement considerations for the sidewalk location options including but not limited to restoration of existing swales and installation of additional piping.
- Provide drainage calculations for stormwater conveyance within the limits of the project.

C. Conceptual Design (30%):

- Meet with and coordinate with COUNTY staff throughout the conceptual design process with occasional progress meetings.
- Conduct site visits to observe existing conditions and identify obstacles.
- Develop conceptual plans for replacement sidewalk along west side of 20th Avenue and new sidewalk along east side of 20th Avenue. Design will follow the latest FDOT Greenbook standards. Concept plans to include site plan, typical section, preliminary grading and drainage and identify potential utility conflicts. The west side sidewalk will connect to existing sidewalk approximately 400' north of 8th Street. The west side crosswalk at 12th Street will most likely be relocated. The east side sidewalk will either be located at the R-O-W line or adjacent to a curb. A new east side crosswalk and pedestrian signal will be required at 12th Street.
- Verify permitting requirements.
- Provide 30% submittal to COUNTY.

PHASE 2 – Progress 60, 90, 100%

A. Design Development

Progress 60%

- Meet with and coordinate with COUNTY staff throughout the design development process with occasional progress meetings.
- Address COUNTY 30% comments.
- Review as-built utilities from COUNTY provided GIS information and provide utility coordination.
- Identify conflicts and develop options to resolve conflicts.
- Determine if a IRFWCD culvert extension is needed at 12th Street for relocated west side crosswalk.

- For new crosswalk, design pedestrian signal equipment, conduit runs, pullboxes and connection to the existing signal controller. Intersection isolated timings will be reviewed and updated as needed (yellow, all-red and ped timings). Coordination meetings with COUNTY and one field review. (by LJA Orlando office).
- 20th Avenue / 12th Street intersection lighting: Coordination with COUNTY and the power company regarding existing lighting, utility lighting options, analysis of the existing lighting at the intersection, development of lighting improvements that will meet FDOT FDM lighting criteria, development of a simple lighting report to document that criteria is met, and development of plans for lighting installation (potentially all power company lighting). (by LJA Orlando office).
- Update drainage calculations and plans accordingly.
- Provide 60% submittal to COUNTY.

Constructability 90%

- Address COUNTY 60% comments.
- Prepare final full set of plans.
- Finalize drainage calculations.
- Provide quantity take-off and engineer's estimate of probable construction cost.
- Provide 90% submittal to COUNTY.

Final 100%

- Address COUNTY 90% comments.
- Submit final 100% plans, quantities and engineer's estimate to COUNTY.

B. Permitting

- Prepare and submit IRFWCD permit application (w/ 60 % plans). COUNTY to provide application fees.
- Address comments and resubmit as necessary to obtain permit.

PHASE 3 – Bidding and Construction

A. Bidding

- Provide bid quantities and civil documents to COUNTY. COUNTY will solicit bids.
- Attend pre-bid meeting. Pre-bid meeting to be scheduled and conducted by COUNTY.
- Provide clarifications upon request.

B. Construction Administration

- Attend pre-construction meeting to be scheduled and conducted by COUNTY.
- Address contractor's RAI's when applicable.
- Review and approve shop drawings.
- Provide periodic construction observations as needed for EOR certification. COUNTY to provide inspections on regular basis.

- Conduct initial final inspection and prepare punch list.
- Review as-built drawings and provide comments if warranted.
- Conduct final inspection.
- Prepare and submit final certifications.

General:

CAI will invoice the COUNTY monthly for the previous month's charges. All tasks will be billed on a percent complete basis plus expenses which will be invoiced in accordance with the attached rate schedule. Reimbursable expenses are estimated to not exceed \$1,000.00.

CAI's fees are summarized as follows:

Phase 1 - Initial 30% Services:

Surveying Services.....	\$43,725.00
Drainage Study.....	\$14,120.00
Conceptual Design (30%).....	\$32,760.00
Subtotal =	\$90,605.00

Phase 2 – Progress 60, 90 & 100% Services:

Design Development (60, 90 & 100%).....	\$44,100.00
Pedestrian Crosswalk Signalization.....	\$12,600.00
20 th Avenue / 12 th Street Intersection Lighting.....	\$10,200.00
Permitting.....	\$2,250.00
Subtotal =	\$69,150.00

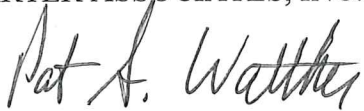
Phase 3 Bidding & Construction Services:

Bidding.....	\$2,270.00
Construction Admin.....	\$11,290.00
Pedestrian Crosswalk Signalization /Intersection Lighting.....	\$2,000.00
Subtotal =	\$15,560.00

TOTAL =	\$175,315.00
Reimbursable Expenses =	\$1,000.00
Grand Total =	\$176,315.00

If additional services are desired above and beyond the scope of work described herein, then fees for additional services will be negotiated based on the attached rate schedule and shall be approved by separate written authorization in the form of an amendment to this Agreement. CAI looks forward to furnishing the services described herein. Our Man-hour/Fee estimate and anticipated schedule is attached. Should you have any questions regarding our proposed scope of work or terms of agreement, please feel free to call me at your convenience.

Sincerely,
ARTER ASSOCIATES, INC.



Patrick S. Walther, P.E.
Vice President

Attachments

Cc via e-mail: Adam Heltemes
Douglas Ferrante

CARTER ASSOCIATES, INC.

INDIAN RIVER COUNTY 2023-2026 RATE SCHEDULE

<u>Staff Type:</u>	<u>Hourly Rates</u>
Engineer (Principal)	\$195.00
Engineer I	\$175.00
Engineer II	\$160.00
Engineer III	\$140.00
Engineer IV	\$130.00
Engineer V	\$115.00
Surveyor (Principal)	\$185.00
Surveyor (Sr. Consultant)	\$160.00
Surveyor I	\$160.00
Surveyor II	\$140.00
Surveyor III	\$125.00
CAD/GIS Tech I	\$130.00
CAD/GIS Tech II	\$125.00
CAD/GIS Tech III	\$120.00
CAD/GIS Tech IV	\$110.00
CAD/GIS Tech V	\$100.00
Administrative Staff	\$ 75.00
Expert Witness	\$350.00
4 Man Survey Crew	\$200.00
3-Man Survey Crew	\$175.00
2-Man Survey Crew	\$150.00
1-Man Survey Crew	\$120.00
Inspector	\$ 90.00
It Systems Administrator	\$100.00

SPECIALIZED EQUIPMENT:

Leica HD P40 Scanner	\$175.00/Hour
Aluminum Boat	\$500.00/Day
All-Terrain Vehicle (ATV)/Trailer	\$250.00/Day
	\$1,000.00/Week

REIMBURSABLE EXPENSES:

Postage, Express Mail, etc.	Cost
Blueprints/Blackline (24" x 36")	\$2.20/Each
Color Prints (24"x36)	\$5.50/Each
Mileage	IRS Standard Rate
Mylar	\$7.00/Each
Photocopies:	
8.5" x 11"	16¢/Each
8.5" x 14"	27¢/Each
11" x 17"	38¢/Each
Concrete Monuments	\$20.00/Each
Rebar	\$ 2.50/Each
Laths	\$ 0.75/Each
Hubs	\$ 1.00/Each

Sub-Consultants

Cost + 10%

Note: These hourly billing rates will remain effective up to (1) one year from contract date.

20th Avenue Sidewalk (8th Street to 12th Street) - IRC Project No. 2508									Exhibit "A"	
Carter Associates, Inc. Fee Estimate 06/06/2025										
	\$195.00	\$175.00	\$115.00	\$120.00	\$185.00	\$140.00	\$175.00	\$125.00		
	Eng Principal	Eng I	Eng V	Eng CAD Tech III	Sur Principal	Surveyor II	3-Man Sur crew	Sur GIS Tech II	*Sub-Consultant	Subtotal
Phase 1										
A. Survey										
- Field Work							131			\$22,925.00
- Office Work					22	32		98		\$20,800.00
B. Drainage Study	8	40	40	8						\$14,120.00
C. Conceptual Design (30%)	48	40	80	60						\$32,760.00
Phase 2										
A. Design Development (60, 90 & 100%)										
Pedestrian Crosswalk Signalization	40	60	120	100					\$12,600.00	\$12,600.00
20th Avenue / 12th Street Intersection Lighting									\$10,200.00	\$10,200.00
B. Permitting	2	8	4							\$2,250.00
Phase 3										
A. Bidding										
B. Construction Admin	2	8		4						\$2,270.00
Pedestrian Crosswalk Signalization /Intersection Lighting	20	10	24	24					\$2,000.00	\$2,000.00
Total Manhours										
	98	148	244	168	22	32	131	98		
Total Fee Estimate										
									Total	\$175,315.00
									Reimbursable	\$1,000.00
									GRAND TOTAL	\$176,315.00

*Note: Pedestrian crosswalk signalization and intersection lighting will be handled by our LJA office in Orlando.

PROJECTED SCHEDULE FOR ENGINEERING DESIGN SERVICES:

PROJECT SCHEDULE FOR ENGINEERING SERVICES:
(COMMENCEMENT UPON RECEIPT OF NOTICE TO PROCEED)

