

EXECUTIVE SUMMARY

SUBJECT:	IPO 110 – First Avenue and Fo	rest Street Drainage Stud	y Update		
REQUESTED	ACTION: Council Option				
	☐ Work Session (Report Only)☑ Regular Meeting	DATE OF MEETING: Special Meeting	March 10, 2020		
CONTRACT:	□ N/A	Vendor/Entity:	Kimley-Horn and Associates, Inc.		
	Effective Date: 03/11/2020	Termination Date:	03/11/2021		
	Managing Division / Dept:	Public Works			
BUDGET IMPACT: Not to Exceed \$51,770.00					
Annual	FUNDING SOURCE:	Unfunded This FY			
🔀 Capital	EXPENDITURE ACCOUN	T:			
□ N/A					

HISTORY/RECOMMENDATIONS:

Mayor & Council,

Town Council requested engineering firm Kimley-Horn and Associates, Inc. to prepare a drainage review and study of the stormwater improvements that were installed in and around First Avenue and Forest Street. At the January 28, 2020 workshop, KHA presented Council with their technical memorandum along with recommendations to adjust the system to better accept surface water runoff during times of high rainfall events and high-water levels. During the workshop, Council members requested a current topographic map and additional surveying, elevations and data be provided for the overall drainage basin to determine where the surface water is coming from.

As part of the Towns' Master Agreement for Continuing Engineering Services, find attached Kimley-Horn and Associates, Inc. Individual Project Order (IPO) Number 110 for the drainage analysis and surveying services to fulfill the request. Staff is requesting Council direction for this IPO. Or Council may want to accept the 2016 Light Detection and Ranging (LIDAR) provided by Orange County Surveying as an accurate representation of current topo and land elevations in the area.



INDIVIDUAL PROJECT ORDER NUMBER 110 March 6, 2020

Describing a specific agreement between Kimley-Horn and Associates, Inc. (Kimley-Horn), and The Town of Windermere (the Client or the Town) in accordance with the terms of the Master Agreement for Continuing Engineering Services dated May 15, 2019, which is incorporated herein by reference.

Identification of Project:

Project: First Avenue and Forest Street Drainage Study Update

Client: Town of Windermere

Project Understanding:

This Individual Purchase Order (IPO) identifies the scope, schedule, and fee for engineering services to update the *Technical Memorandum for Forest Street and First Avenue* (submitted January 2020) and provide additional data collection and analysis to determine drainage patterns and flows upstream that contribute to the flooding problem along the Forest St, between 1st Ave. and 2nd Ave.

Specific Scope of Basic Services:

Task 1 - Drainage Study and Documentation

Kimley-Horn will update the Technical Memorandum for Forest Street and First Avenue. The updated memorandum will focus on the area upstream of 2nd Avenue to identify flow condition and drainage patterns that contribute to the flooding downstream, located north of 2nd Avenue along Forest Street. Kimley-Horn will obtain and review the Orange County LIDAR (recent and historicals). This task includes one (1) field review during a storm event and a meeting with the Public Works Director.

Task 2 - Survey Services

Kimley-Horn will retain the services of PEC Surveying and Mapping, LLC (PEC) to perform the study survey for approximately 6 acres of drainage basin. Refer to attached subconsultant proposal for additional information.

Project Deliverables:

Update Technical memorandum to be presented at Town Council Workshop

Additional Services if required:

The following services are not included in this IPO, but may be performed if authorized by the Town. Payment for these additional services will be agreed upon prior to their performance.

- Attendance at meetings in addition to those noted in the scope of services
- Opinions of probable construction cost
- Survey in addition to those noted in the scope of services
- Geotechnical services in addition to those noted in the scope of services
- Construction Plans
- Permitting

Information Provided By Client:

The Town will provide the following information, upon which Kimley-Horn can rely:

- Existing plans
- Drainage documentation



- Permit application for the existing system
- Historical aerials
- Right-of-way maps
- Flooding reports
- Video pipe inspection reports

Schedule:

This IPO is anticipated to be completed within 90 days of notice to proceed.

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Method of Compensation:

Kimley-Horn will perform the services in Tasks 1-3 for a lump sum fee of \$51,770 inclusive of expenses. A breakdown of fee by task is provided in the table below.

Task	Fee
Task 1: Drainage Study and Documentation	\$15,840.00
Task 2: Survey Services	\$35,930.00

Lump sum fees will be invoiced monthly based upon the overall percentage of services performed. Payment will be due within 25 days of your receipt of the invoice.

ACCEPTED:	
THE TOWN OF WINDERMERE, FLORIDA	KIMLEY-HORN AND ASSOCIATES, INC.
BY:	BY:Hao T. Chau, PE
TITLE:	TITLE: Assistant Secretary/Project Manager
DATE:	DATE: <u>03/06/2020</u>
KIMLEY-HORN AND ASSOCIATES, INC.	
BY:Victor H. Gallo, PE	
,	
TITLE: <u>Drainage Engineer</u>	
DATE: <u>03/06/2020</u>	

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1. Drainage Study and Documentation

March 6, 2020

KIMLEY-HORN AND ASSOCIATES, INC.

Project: IPO 110 - First Avenue and Forest Street Drainage Study Upo Client: Town of Windermere

97.0 \$

15,840.00

PROJECT LABOR Hours Lump Sum Project: IPO 110 - First Avenue and Forest Street Drainage Study Update 97.0 \$ 15,840.00

SUBTOTAL KIMLEY-HORN LABOR FEES:	97.0	\$ 15,840.00
Subconsultant: 2. Survey Services (PEC)		\$ 35,930.00
Subconsultant:		
Subconsultant:		
Total Subconsultant		\$ 35,930.00
GRAND TOTAL FEES AND CHARGES:		\$ 51,770.00

Kimley»Horn

Principal	pa	Proj Manager	Sr Engineer	Project Engineer	Analyst/Designer	Clerical
-	240.00	12 \$ 2,400.00	18 \$ 3,600.00	32 \$ 5,600.00	32 \$ 3,840.00	2 \$ 160.00
1.0%		12.4%	18.6%	33.0%	33.0%	2.1%

Notes:

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March 6, 2020

Kimley Horn and Associates, Inc. Mr. Hao T. Chau, P.E. 189 S. Orange Avenue, Suite 1000 Orlando, Florida 32801 PS16671-KHA

Re:

W 2nd Avenue Drainage Basin - Surveying and Mapping Services

Windermere, Florida

Dear Mr. Chau:

PEC-Surveying and Mapping (PEC) is pleased to submit our proposal for surveying and mapping services in connection with the above-referenced project.

Topographic Survey: We propose to perform a Topographic Survey of the Project Area. The Project Area is defined by the attached Exhibit. The Southern Limits of the Project area is approximately 150 north of W 3rd Avenue; the Eastern Limits of the Project area is approximately 80 feet east of Main Street; the West Project Limits is 80 feet East of Palm Street and a diagonal from 80 feet East of Palm Street at W 2nd Avenue Northeasterly to Butler Street and extending North to Lake Butler; the North Limits is approximately 1,100 feet North of the Southern Limits East of Lake Butler.

Approach to Survey

Bench Levels: A Closed Bench Level loop will be performed about the perimeter of the Project Area. The one-mile level loop will establish Benchmarks, or monumentation of know elevation, at 600-foot intervals. Benchmark Forms will be prepared to document the Benchmarks for the City records. The benchmarks will be used for the Topographic Survey.

Right-way Cross Sections: We propose to obtain elevations of the right-of-ways within the Project Limits by performing cross-sections along the right-of-ways at 100 foot intervals; obtaining elevations of the centerline, edge of traveled way, and right-of-way within the Project Limts. All visible drainage structures will be Surveyed and the utility inverts obtained. This represents approximately the following lengths per street:

Main Street: 1,500 Feet

Forest Street: 1,370 Feet W 2nd Avenue: 1,300 Feet

W 1st Avenue: 1,100 Feet

Butler Street: 800 Feet 1st Court: 220 Feet

North Drive: 350 Feet

Kimley Horn and Associates, Inc. - Mr. Hao T. Chau, P.E. W 2nd Avenue Drainage Basin — Surveying and Mapping Services PS16671-KHA March 6, 2020 Page Two

Residential Finished Floor Elevations: Elevations of all finished floors of the buildings within the Project Limits will be surveyed and the elevations determined. There are 50 Finished Floors to be Surveyed.

Side Yard Topography: Profiles will be performed along all accessible side yard lines within the Project Limits, establishing elevations at approximately 100-foot intervals and any grade breaks. There are approximately 9,000 feet of profiles to be performed.

Supplemental Topographic Detail: It is anticipated that additional topographic Surveying will be identified once the base map described above is defined. We propose an initial budgetary amount to accomplish the Supplemental Topographic Detail to be defined.

Digital Terrain Model: Surface Contours will be created of the Project Area resulting in a Digital Terrain Model.

Deliverables: Deliverables will consist of an AutoDesk CAD file to be used as the engineering basemap at a scale of 0ne-inch to 50 feet.

Schedule: We are prepared to commence within five (5) working days from Notice to Proceed and can complete the assignment within twenty-five (25) working days from commencement.

Fees: We propose to perform the work for the following Fees:

Bench Level Survey (1.5 miles):\$	2,000.00
Benchmarks with Benchmark Forms: (12):\$	1,700.00
Right-of-way Cross-sections: (6,700 Feet):\$	15,250.00
Finished Floor Elevations (50):	3,980.00
Side Yard Topographic Survey (9,000 Feet):\$	-

Thank you for the opportunity of submitting this proposal to you. Should this result in a contractual agreement please have the entity responsible for payment execute below and return to serve as our Notice to Proceed. This proposal is valid for 30 days.

Should you have any questions or comments please do not hesitate to contact us.

Sincerely

PEC Surveying and Mapping

David A. White P.S.M.

President

