



Misc. Professional Services

EC 2022-38

STA No. 02

Project Name: Village of Estero Water Monitoring

Consultant: Johnson Engineering, Inc.

Village of Estero Contract No.: EC-2022-38

Village of Estero Account Number: 001-260-5373105

Brief Description: Monitoring water quality, flow and water level throughout the Village of Estero

Total Fees: \$91,776.00

The Consultant shall perform the services outlined in the attached Exhibit A – Scope of Services and Fees, under the terms and conditions outlined in the above referenced Village of Estero Contract No. EC2022-38.

Consultant: Johnson Engineering, Inc.

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

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Village of Estero

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

Name: Steve Sarkozy

Title: Village Manager

Date: \_\_\_\_\_

Attachments:

Exhibit A – Scope of Services and fees

## EXHIBIT A

### CN 2020-01 MISCELLANEOUS PROFESSIONAL SUPPLEMENTAL TASK AUTHORIZATION NO. 14

#### SCOPE OF SERVICES

September 15, 2022

#### FOR: WATER QUALITY MONITORING ASSISTANCE 2022-2023

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##### A. PROJECT OVERVIEW

Johnson Engineering, Inc. (“CONSULTANT”) shall provide water monitoring assistance to The Village of Estero (Village). The Village desires to implement a water resource monitoring program. The program will improve the Village’s understanding of its water resources. The data can be used to help guide future actions/programs by the Village. The water quality parameters follow those measured by Lee County to allow direct comparisons.

##### B. SCOPE OF SERVICES

###### **TASK 1: Doppler Flowmeter Relocation**

CONSULTANT will relocate the flowmeter labeled as HC@WR on the Flow Monitoring Location Map, *Attachment III*. The Doppler flowmeter will be removed from below the Whispering Creek bridge and re-installed downstream in a pipe below Knollview Blvd. The Flow Monitoring Location Map will be updated with the new location. CONSULTANT will measure and record water level above flowmeter and dimensions for each pipe below the road. CONSULTANT will use a level rod and velocity meter to verify water level and velocity measurements displayed by the flowmeter at the time of installation.

###### **TASK 2: Monthly Water Quality and Flow Monitoring**

CONSULTANT will conduct monthly surface water sampling at five (5) water quality monitoring locations shown on the Water Quality Monitoring Location Map, *Attachment I, from October 1, 2022, through September 30, 2023*. The sampling will be conducted on the same day that Lee County will be sampling nearby locations. Sampling will be conducted at each location where water is at least a foot deep. One (1) field blank sample will also be collected each quarter. CONSULTANT will record field measurements of temperature, pH, specific conductance, dissolved oxygen, and turbidity at each location. CONSULTANT will collect the samples in accordance with proper Florida Department of Environmental Protection (FDEP) Standard Operating Procedures (SOP). CONSULTANT will prepare a Chain-Of-Custody (COC) for the samples and deliver them to a state certified laboratory following proper COC procedures in adherence to established hold times. The samples will be laboratory analyzed for bacteria, nutrients, metals, and other parameters. Velocity measurements will be recorded at each sample location where applicable. In addition, CONSULTANT will record surface water velocity, water depth, and channel area as needed to calculate flow at the four (4) sites labeled on the updated Flow Monitoring Location Map, Velocity and level data recorded by the Doppler flowmeter relocated from Whispering Creek bridge (HC@WR) to below Knollview Blvd. will be recorded hourly and downloaded monthly.

### **TASK 3: Quarterly Surface Water Level Downloading**

CONSULTANT will download the seven (7) surface water monitor wells shown on the Water Level Monitoring Location map, *Attachment II*. CONSULTANT will also download the BaroTroll as part of this task. Flow data from two (2) United States Geological Society (USGS) sites shown on the Flow Monitoring Location Map, *Attachment III*, will be downloaded from USGS. Water level, flow, and water quality data from Lee County sites in Village will be downloaded from Lee County. CONSULTANT will manage and prepare charts of the data in Excel quarterly.

### **TASK 4: Annual Water Monitoring Report**

CONSULTANT will prepare a short monitoring report covering data collected from October 2022 through September 2023. The report will summarize the data collected using tables and charts. It will also provide a comparison of the Village water quality data to the nearby Lee County water quality data. The report will be provided on or before January 31, 2024.

### **C. SCHEDULE**

Upon notice to proceed by Village, monitoring will be for the period beginning October 1, 2022 through September 30, 2023.

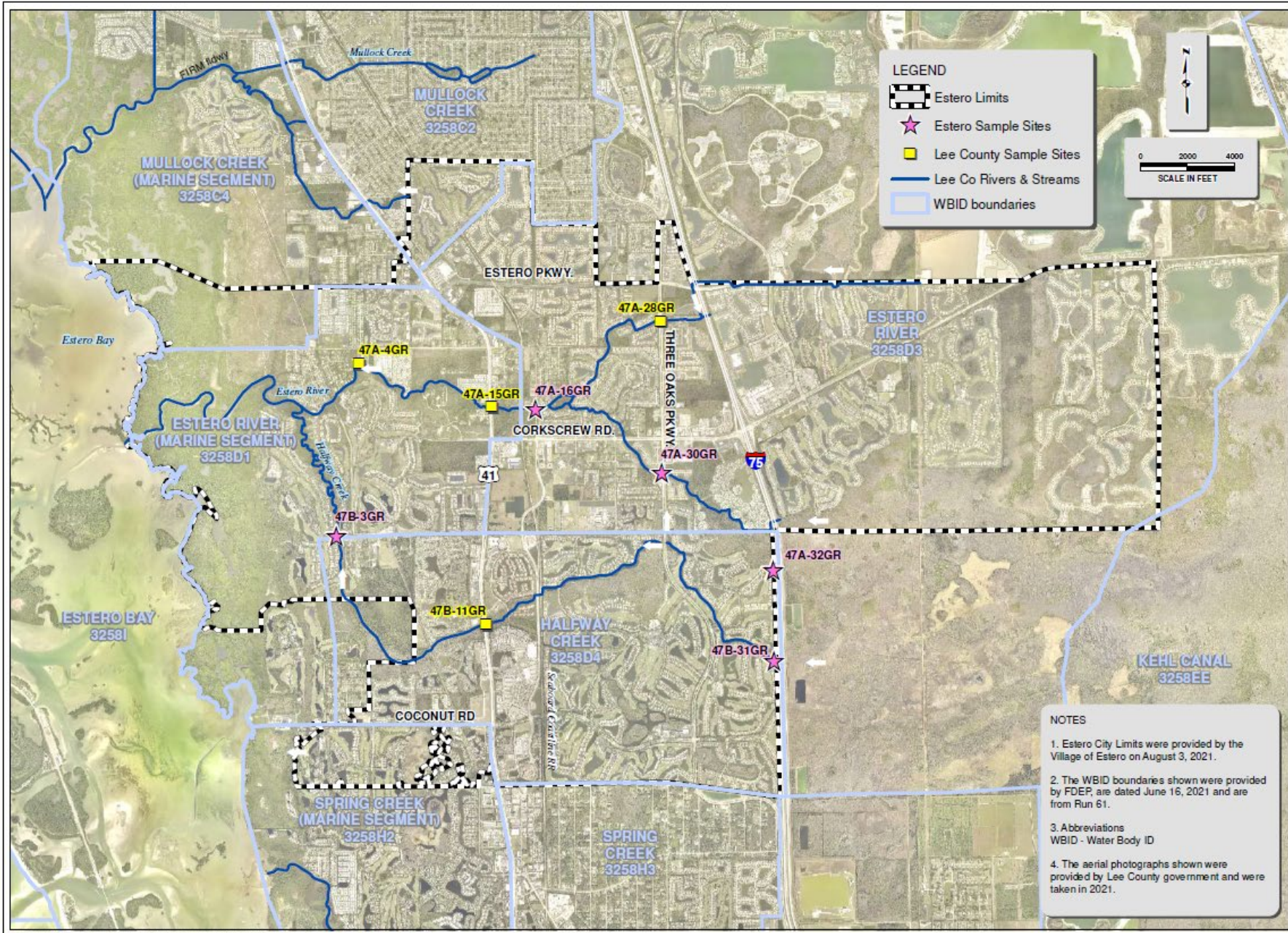
### **SUB-CONSULTANT SERVICES:**

#### **LAB: Laboratory Testing**

Benchmark EnviroAnalytical, Inc. for laboratory testing.



Attachment I to Exhibit A



**LEGEND**

- Estero Limits
- Estero Sample Sites
- Lee County Sample Sites
- Lee Co Rivers & Streams
- WBID boundaries

0 2000 4000  
SCALE IN FEET

**NOTES**

1. Estero City Limits were provided by the Village of Estero on August 3, 2021.
2. The WBID boundaries shown were provided by FDEP, are dated June 16, 2021 and are from Run 61.
3. Abbreviations  
WBID - Water Body ID
4. The aerial photographs shown were provided by Lee County government and were taken in 2021.

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 E.S. 8642 & L.S. 8642



**WATER QUALITY MONITORING**  
**VILLAGE OF ESTERO**

DATE	REVISIONS

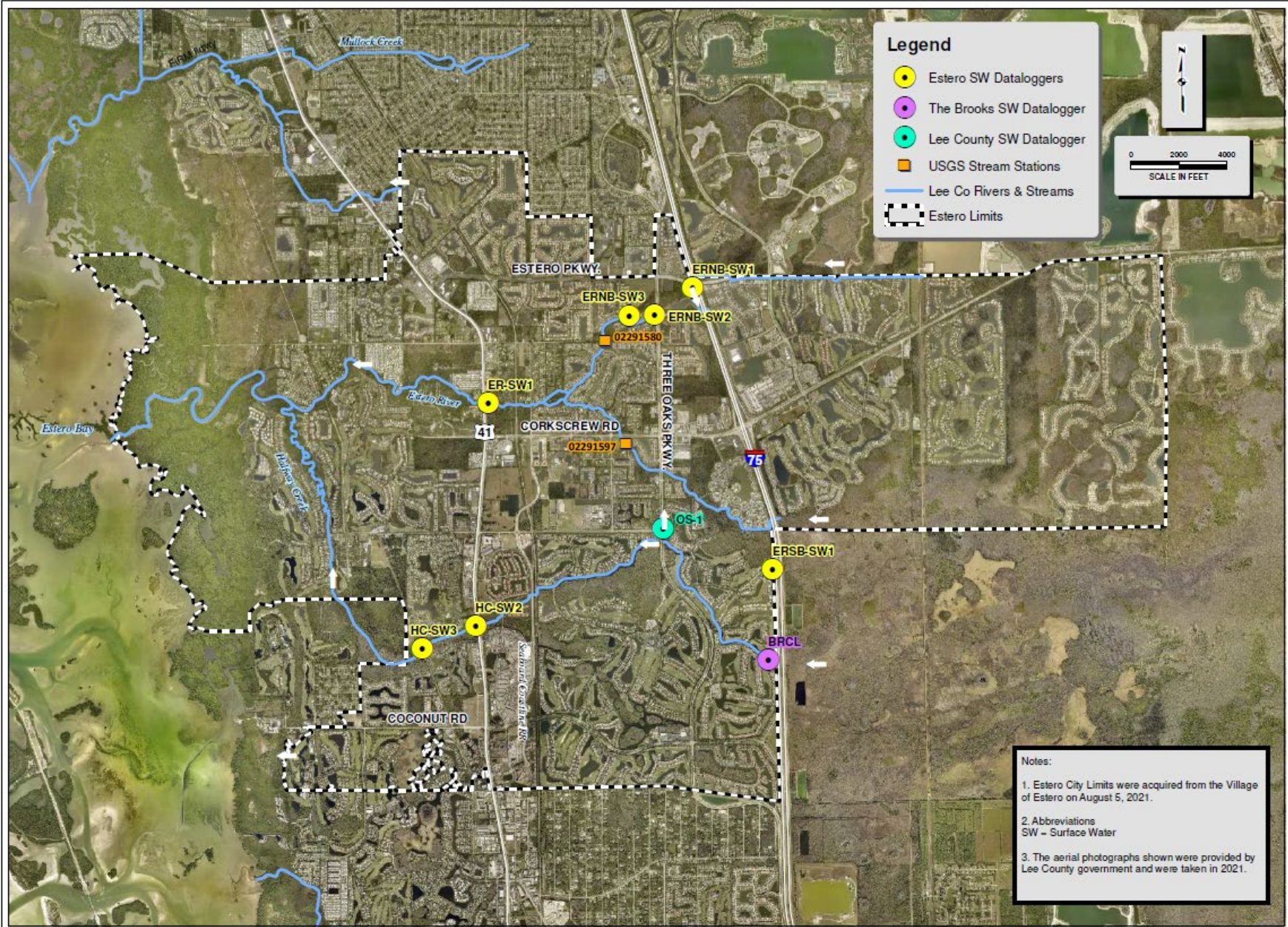
DATE: March 2022  
 PROJECT NO.: 20003173-002  
 FILE NO.:  
 SCALE: As Shown

**WATER QUALITY MONITORING LOCATION MAP**

\\fms01\drawings\2020\20203173-007\ArcGIS\Estero Aerial WQ Sample Sites WBID - March2022 11x17.mxd



Attachment II to Exhibit A



**Legend**

- Estero SW Dataloggers
- The Brooks SW Datalogger
- Lee County SW Datalogger
- USGS Stream Stations
- Lee Co Rivers & Streams
- - - Estero Limits

0 2000 4000  
SCALE IN FEET

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**WATER LEVEL MONITORING**  
**VILLAGE OF ESTERO**

NO.	REVISIONS DESCRIPTION	DATE

DATE: March 2022  
 PROJECT NO: 2020317-6-002  
 FILE NO: -  
 SCALE: As Shown

**Notes:**

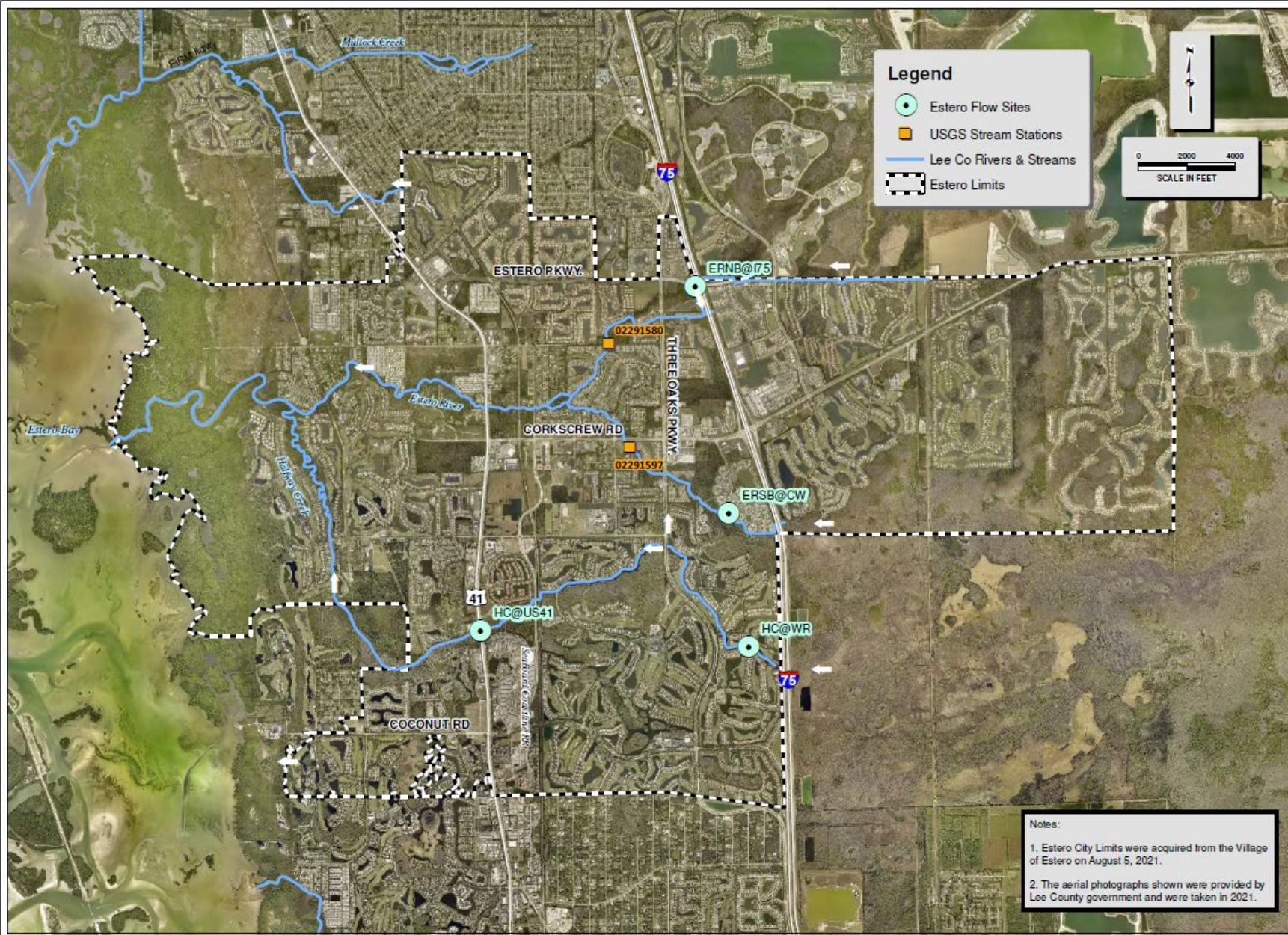
1. Estero City Limits were acquired from the Village of Estero on August 5, 2021.
2. Abbreviations SW - Surface Water
3. The aerial photographs shown were provided by Lee County government and were taken in 2021.

**WATER LEVEL MONITORING LOCATION MAP**

\\fms01\drawings\2020\20203178-002\ArcGIS\Estero Aerial Water Levels-March2022 11x17.mxd

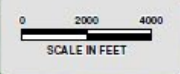


Attachment III to Exhibit A



**Legend**

- Estero Flow Sites
- USGS Stream Stations
- Lee Co Rivers & Streams
- Estero Limits



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FLOW MONITORING  
 VILLAGE OF ESTERO

NO.	REVISIONS DESCRIPTION	DATE

DATE: March 2022  
 PROJECT NO.: 20203178-002  
 FILE NO.:  
 SCALE: As Shown

**Notes:**

1. Estero City Limits were acquired from the Village of Estero on August 5, 2021.
2. The aerial photographs shown were provided by Lee County government and were taken in 2021.

FLOW MONITORING  
 LOCATION MAP

\\fms01\drawings\2020\20203178-002\ArcGIS\Estero Aerial Flows March 2022 11x17.mxd

**EXHIBIT B**

**CN 2020-01 MISCELLANEOUS PROFESSIONAL  
SUPPLEMENTAL TASK AUTHORIZATION NO. 14**

**COMPENSATION**

**September 15, 2022**

**FOR: WATER QUALITY MONITORING ASSISTANCE 2022-2023**

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The fees for Task 1 through 4 will be Lump Sum and the Subconsultant will be billed on a Time & Materials basis. Total not to exceed **\$ 91,776.00**.

For services provided and performed by CONSULTANT for providing and performing the Task(s) set forth and enumerated in Exhibit A entitled "Scope of Services", the VILLAGE shall compensate the CONSULTANT as follows:

<b>TASK</b>	<b>ITEM</b>	<b>AMOUNT</b> (Estimated if T&M)	<b>FEE TYPE</b> (LS; T&M)
1	Doppler Flowmeter Relocation	\$2,200.00	LS
2	Monthly Water Quality and Flow Monitoring (Oct 2022 through Sept 2023)*	\$37,500.00	LS
3	Quarterly Water level Downloading (4 quarters)**	\$9,500.00	LS
4	Annual Report (1 year)	\$6,600.00	LS
<b>TOTAL COMPENSATION FOR CONSULTANT'S SERVICES:</b>		<b>\$55,800.00</b>	<b>LS</b>

\* Task 2: To be billed at approximately \$3,125 per month.

\*\* Task 3: To be billed at approximately \$2,375 per quarter.

For services of CONSULTANT's Sub-Consultants engaged to perform or furnish services, the VILLAGE shall compensate the CONSULTANT as follows:

<b>TASK</b>	<b>SUB-CONSULTANT</b>	<b>AMOUNT</b> (Estimated if T&M)	<b>FEE TYPE</b> (LS; T&M)
LAB	Cost for lab analysis of the samples is estimated at \$600 per sample x 5 samples for 12 monthly events including quarterly field blanks	\$35,976.00	T&M
<b>TOTAL COMPENSATION FOR SUB-CONSULTANT'S SERVICES:</b>		<b>\$35,976.00</b>	<b>T&amp;M</b>

<b>TOTAL COMPENSATION, INCLUDING SUB-CONSULTANTS:</b>		<b>\$91,776.00</b>	<b>LS; T&amp;M</b>
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