

RESOLUTION

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF FLORENCE, ALABAMA as follows:

SECTION 1. That the agreement with ADS Environmental Services dated November 14, 2024, a copy of which is attached hereto, to provide monitoring and critical flow and capacity data for a period of three (3) months at the Western Sewer Interceptor, Florence Alabama in the total contract amount of \$11,427.00. The same is hereby approved, ratified and confirmed.

SECTION 2. That the Council has investigated and ascertained and hereby finds ADS Environmental Services, to be qualified, responsible, and competent to perform said services.

SECTION 3. That the contract for such services be awarded to ADS Environmental Services, and that the proper officials of the City execute the contract in the name of and on behalf of said City.

ADOPTED this the _____ day of _____, 2024.

CITY COUNCIL

APPROVED this the _____ day of _____, 2024.

MAYOR

ADOPTED & APPROVED this the _____ day of _____, 2024.

CITY CLERK-TREASURER



340 The Bridge Street, Suite 204
 Huntsville, AL 35806
 256-430-3366
www.adsenv.com

ADS Contact

Matthew Brown | Business Development Manager
 51 Wentworth Ave, Suite 15 | Londonderry, NH 03053
MBrown3@idexcorp.com | 256.656.6385

Will Glenn, P.E.
 Engineers of the South, LLC
 2143 Arlington Blvd. Suite 3
 Florence, AL 35630

Quote Reference: Florence.EoS.TFM.AL.24
Date: 11.14.2024
Terms: Net 30
Delivery: 30 Days ARO
Effective To: 12.31.2024

Description	Ext. Price
ADS Temporary Flow Monitoring Calibration, Site Investigation, Site Selection, Kickoff Meeting, Installation, Equipment Removal, Mobilization, Equipment Rental, Operation and Maintenance, Data Analysis, Quality Control, Data Finalization, Wireless Telemetry & Webhosting. 1 Flow Monitor x 3 Months	\$11,437.00
Total:	\$11,427.00
Items may be taxable in accordance with local tax laws.	

NOTES:

- Client responsible for providing pipe sizes, pipe segment to be monitored in a specific manhole, and flow schematic as requested.
- Pricing assumes free & legal access to each site and no modifications to the selected monitoring sites are necessary for installation.
- Permits and police detail charges for traffic control, as deemed necessary by local authorities for crew and or public safety are the client responsibility and not included in the above pricing.
- Pricing assumes ADS standard Health & Safety Plan is sufficient. Additional document preparation or on-site access required training may result in a change order to account for costs incurred.
- The above quote assumes ADS standard levels of insurance are acceptable. Additional insurance can be acquired upon request, but ADS reserves the right to requote to account for additional cost.
- Any work requested beyond the specific scope of services listed or changes to the scope will require additional fees to be negotiated.
- Extensions of the monitoring period at the above unit rates may be arranged by notifying ADS prior to the end of the monitoring period.
- The above-described professional services do not include any Prevailing Wages.
- Installations cannot be scheduled until a signed agreement is in place. Work will be scheduled based upon availability and will be scheduled through the project manager.
- Acceptance of this proposal for the purchase of ADS services constitutes your and/or your company's agreement to ADS' Standard Terms and Conditions of Sale found at <https://www.adsenv.com/sites/default/files/documentation/ADS-Equipment-and-Services-Combined-Terms-and-Conditions.pdf>

Client:**ADS Environmental Services:****Signature:** _____**Signature:** _____**Name & Title:** _____**Name & Title:** _____**Date:** _____**Date:** _____

ADS always meets or exceeds our client's expectations...

ADS Environmental understand the impactful nature of the data we provide, and how it informs the mission critical, multimillion dollar decisions of our municipal clients. From our innovative hardware and software designs, to the regimented processes we follow, we have taken the desire and knowledge required to deliver the world's most accurate data – on time and within budget – and institutionalized it. Our quality assurance management plan, the bedrock of the products and services that ADS delivers, ensures our consistent performance and satisfaction of our contract requirements and deliverables. Our client referrals, returning customers, and decades of experience speak for itself – ADS always meets or exceeds our client's expectations.

Scope

ADS has reviewed the project documents and intends to provide the following services

Phase 1: Temporary Flow Monitoring x 12 Weeks

- One (1) Flow Monitor
- Wireless Telemetry and Webhosting
- Full Service, Data Analysis, & Reporting

ADS Standard Work Template

Below is a standard project timeline. This can be adjusted as needed to adhere to any required process or project demands. Our standard process can be divided into three phase: Mobilization, Flow Monitoring, and Data Finalization & Reporting. A brief description of each phase is included below along with a list of independent actions taken during each phase. Detailed descriptions of each bulleted item can be provided upon request.

Mobilization begins the day contractual paperwork has been reviewed and signed by both parties. This phase covers all project setup to installation of hardware. A few actions occur simultaneously with equipment being staged for installation occurring at the same time as site selection discussions and kickoff meetings. Activities that occurring during this stage are listed below.

- Kick-off Meeting
- Site Location Review
- Site Investigations
- Site Report Generation
- Equipment Installation
- Monitor Activation

Flow Monitoring begins the first full day after the last installation. This is the bulk of the project timeline and consists of activities primarily related to data acquisition. Routine data review and service occur during this time to ensure data quality and uptime are maximized. Routine reporting and data review meetings can also occur during this phase to ensure that everyone is on the same page regarding all data sets. Activities that occurring during this stage are listed below.

- Data Collection
- Equipment Maintenance
- Confirmations
- Data Review Meetings
- Data Analysis
-

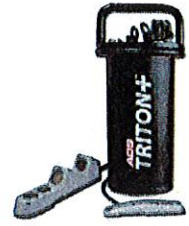
Data Finalization & Reporting begins the day after the final full day of data collection. The sites will be reviewed by the project team and the client to ensure the project objectives have been met. From here the monitors are removed and the dataset undergoes our finalization process. A standard final report is typically delivered within 30 days of the final monitoring day.

- Demobilization
- Data Editing
- Final Deliverables
- Final Data/Report Meeting

Equipment

Flow Monitor

The **ADS® TRITON+®** is a “Fit-for-Purpose” open channel flow monitor for use in sanitary, combined, and storm sewers. It is designed to be the most readily adaptable flow monitoring device available for wastewater collection systems. The **TRITON+®** flow monitor design is the culmination of our 40+ years of flow monitoring engineering experience and development and offers the capability of a single flow monitor to drive every major sewer flow measurement technology available. The **TRITON+®** monitor provides exceptional accuracy and reliability in measuring open-channel flow depth and velocity to determine flow rate in pipes. This flow data is the essential element required to successfully perform investigative, analytical, and reporting activities. It is compatible with a suite of sensors designed to cover a wide range of applications and a hydraulic conditions. The ADS sensor suite comes with area-velocity (AV) sensors and depth sensors using submerged or non-contact mounting options. The **TRITON+®** is configurable with one or two sensors measuring one or two monitoring points allowing for additional redundancy or multi-pipe installation options.



Battery Life

The **TRITON+®** Flow Monitor is powered by an internal 12-volt battery. This eliminates the limitations present when requiring an external power source. The **TRITON+®** has industry-leading battery life. It offers a longer battery life and fewer parts for a more reliable system, providing a lower purchase price and lower ownership cost over the life of the monitor.

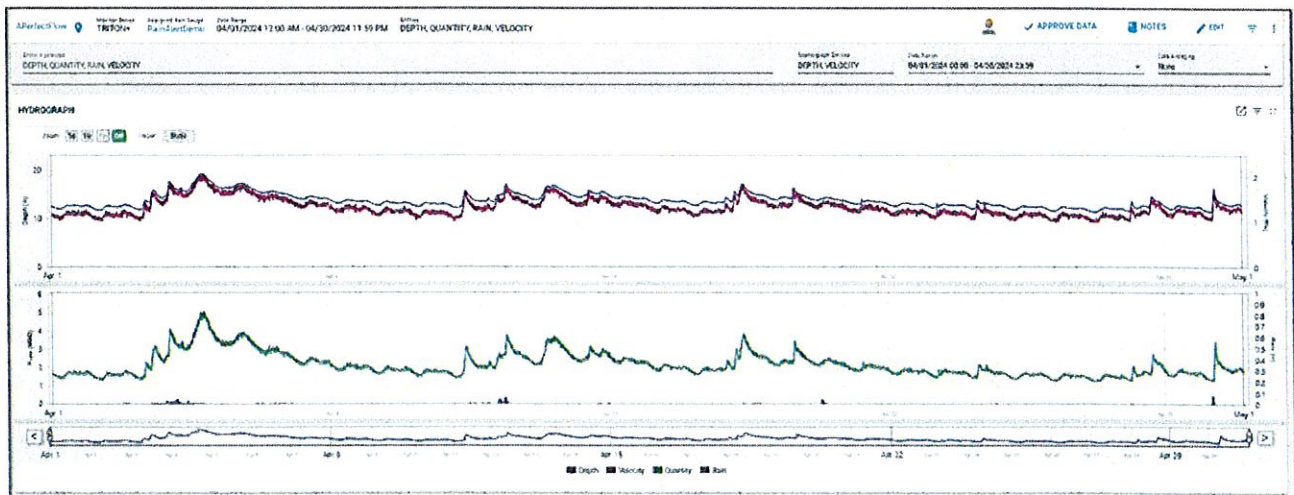
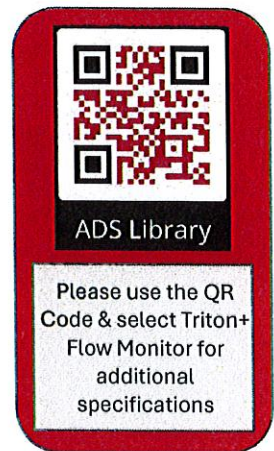
Wireless Telemetry

Wireless communication occurs over the Verizon® LTE-M network, or the AT&T LTE-M network using TCP/IP (Transmission Control Protocol/Internet Protocol). The TCP/IP networks facilitate high-speed, low-cost, efficient digital communication in coverage areas using static and dynamic IP address services allowing users to collect data on the go without requiring a site visit.









Internal Data Storage

Each **TRITON+®** unit is equipped with internal storage. While there is some variability to the amount of data that can be stored depending on sensor configuration and data interval, the standard sensor configuration can store up to six (6) weeks of data at a time. This provides peace of mind that if communications go down data will continue to be collected and will push to the **PRISM™** website once communications have been restored.

The **TRITON+®** when used in conjunction with wireless telemetry and **PRISM™** lets you access data with ease. Data will be uploaded automatically in hydrograph, scattergraph, and tabular format for quick review or as needed data export.



Sensor Table

	Sensors	Sensor Technologies	Min/Max Depth/Range	Velocity Operating Range	Recommended Flow Conditions
Area-Velocity Wetted	AV GATED™  P/N: 8K-CS7-10-35	Dual depth: up-looking ultrasonic and pressure Velocity: gated velocity, averaged velocity through wide range of flow	Ultrasonic: 5 to 72 in. (0.125 to 1.8 m) Pressure: 0 to 277 in. (0 to 7 m)	± 15 ft/s (± 4.60 m/s) in Bidirectional mode or ± 20 fps (6.10 m/s) in Forward and Backwards mode; minimum depth for velocity is 5 in. (0.125 m)	Recommended for deeper flow measurements. A minimum flow depth of 5 in. (0.125 m) is recommended, although it may operate in shallower flows. Gated Velocity provides a better velocity distribution across the wetted area and can reduce field confirmations.
	AV Max™  P/N: 8K-CS9-10-35	Dual depth: up-looking ultrasonic and pressure Velocity: continuous wave Doppler, peak velocity measurement correlated to average	Ultrasonic: 1 to 60 in. (0.025 to 1.5 m) Pressure: 0 to 277 in. (0 to 7 m)	± 30 ft/s (± 9.14 m/s) Deadband 1.00 in. (0.025 m) from the bottom of the pipe	General use sensor and recommended for most applications. Based on the Peak Combo Sensor, AV Max provides improved durability in a more ruggedized housing for harsh sewer environments.
	Peak Combo™  P/N: 8K-CS4-05-35	Dual depth: up-looking ultrasonic and pressure Velocity: continuous wave Doppler, peak velocity measurement correlated to average	Ultrasonic: 1 to 60 in. (0.025 to 1.5 m) Pressure 0-5: 0 to 138 in. (0 to 3.5 m) Pressure 0-15: 0 to 415 in. (0 to 10.5 m) Pressure 0-30: 0 to 830 in. (0 to 21.0 m)	± 30 ft/s (± 9.14 m/s) Deadband 1.00 in. (0.025 m) from the bottom of the pipe	General use sensor recommended for most applications including surcharge depths greater than 277 in. (7 m). Largest pressure operating range across all ADS sensors.
Area-Velocity Non-Contact	Surface Combo™  P/N: 8K-CS5-V2-05-30	Dual depth: down-looking ultrasonic and surcharge pressure Velocity: surface Doppler, correlated to average Surcharge Velocity: continuous wave Doppler	Ultrasonic: 0 to 120 in. (0 to 3 m) Pressure 0-5: 0 to 138 in. (0 to 3.5 m)	Surface velocity air range: 3 to 42 in. (0.075 to 1.1 m) Surface velocity range: 1.0 to 15.0 ft/s (0.3 to 4.6 m/s)	For use in shallow and fast flow conditions. Not recommended when velocity is less than 1.0 ft/s (0.3 m/s).
	PARAFLOW™  P/N: 8K-CS8-V2-10-30-15	Dual depth: down-looking ultrasonic and surcharge pressure Velocity: surface Doppler, correlated to average Surcharge Velocity: continuous wave Doppler	Ultrasonic: 0 to 144 in. (0 to 3.6 m) Surcharge Pressure: 0 to 277 in. (0 to 7 m)	Surface velocity air range: 0 to 42 in. (0 to 1.1 m) Surface velocity range: 1.0 to 15.0 ft/s (0.3 to 4.6 m/s)	Recommended for use in shallow and fast flow conditions. Not recommended when velocity is less than 1.0 ft/s (0.3 m/s). Improved sensing technology using parabolic focusing in a more ruggedized housing compared to the Surface Combo sensor. Easy maintenance using the Topside Retrieval System (TRS).
Depth - Non-Contact	PARADEPTH™  P/N: 8K-CS8-D1-00-30-15	Depth: down-looking ultrasonic, parabolic focusing	Ultrasonic: 0 to 144 in. (0 to 3.6 m)	Not applicable	Non-contact depth sensor recommended in sewer manholes and sewer pipes and in conjunction with AV Gated, AV Max, or Peak Combo wetted sensor. Can be used with flumes or weirs. TRS option available.
	Long Range Depth™  P/N: 8K-CS6-C1-10	Depth: down-looking ultrasonic, parabolic focusing Submersion: detects submersion when fully covered with liquid	Ultrasonic: 0 to 240 in. (0 to 6.0 m)	Not applicable	Recommended for long-range depth monitoring applications in sewer manholes, storm vaults, streams, ponds, and lagoons.
Specialty	INCLINOMETER™  P/N: 8000-0528	Displacement angle from zero set point	Not applicable	Not applicable	Used to monitor status of tide gates, flow rates over bending weirs, and intrusion alarming.

ADS will work with the client to select the monitoring configuration that works best to meet project objectives while accounting for site specific hydraulics.



PRELIMINARY,
NOT FOR
CONSTRUCTION,
RECORDING
PURPOSES, OR
IMPLEMENTATION

NO	DATE	DESCRIPTION

REVISIONS

NO	DATE	DESCRIPTION

FOR REVIEW AS-BUILT REVISIONS AS-BUILT

CITY OF FLORENCE, AL
WATER & WASTEWATER DEPARTMENT
NEW DEVELOPMENT

FLOW MONITOR
LOCATION

BOX IS 2 IN WIDE
AT FULL SCALE

JOB NO: NA
DATE: DEC 2022
DESIGNED BY:
DRAWN BY:
DWG: 05-C-03
SHEET NUMBER 1



PRELIMINARY

FLOW MONITOR LOCATION
SCALE: 1"=200'