Jefferson Parish
State of Louisiana

Bid Number 50–00147627

PURCHASE OF SAMPLING EQUIPMENT FOR JEFFERSON PARISH DEPARTMENT OF ENVIRONMENTAL AFFAIRS STORMWATER DIVISION

BID DUE: May 06, 2025 AT 11:00 AM

ATTENTION VENDORS!!!

Please review all pages and respond accordingly, complying with all provisions in the technical specifications and Jefferson Parish Instructions for Bidders and General Terms and Conditions. All bids must be received on the Purchasing Department's eProcurement site, www.jeffparishbids.net, by the bid due date and time. Late bids will not be accepted.

Jefferson Parish Purchasing Department
200 Derbigny Street
General Government Building, Suite 4400
Gretna, LA 70053
Purchasing Specialist: Theresa Banks
Email: theresa.banks@jeffparish.gov
Phone: 504-364-2683

Teledyne Isco 750 Area Velocity Flow Module

Engineering Specifications

1) INSTRUMENT
There shall be furnished a plug-in flow module to convert the sampler into a combination sampler and flow meter. An area velocity sensor shall be used to measure flow rate.

2) AREA VELOCITY SENSOR

A) The sensor shall directly measure average liquid velocity using the ultrasonic Doppler technique. The sensor shall not require a multiplying factor based on flow depth to convert a point velocity to the average liquid velocity. The sensor shall not require velocity profiling and calibration at the measurement site. The sensor shall not contain electrical contacts exposed to the liquid to measure velocity.

i) The Doppler velocity measurement frequency shall be 500 kHz with a transmission angle of 35 degrees. The velocity measurement range of the sensor shall be from -5 to +20 feet per second (-1.5 to +6.1 meters per second). The velocity in water with a uniform velocity profile and a speed of sound of 4850 feet per second (1480 meters per second) shall be measured with a maximum error of +/-0.1 feet per second (+/-0.03 meters per second) over a range of -5 to +5 feet per second (-1.5 to +1.5 meters per second), and +/-2% of reading over a range of 5 to 20 feet per second (1.5 to 6.1 meters per second).

B) The sensor shall also contain a differential integrated circuit pressure transducer to measure the hydrostatic pressure of the liquid to determine the liquid depth.

i) The level measurement range of the sensor shall be from {[0.05 to 10.0 feet (0.015 to 3.05 m)][0.05 to 30 feet (0.015 to 9.14 m)]}[1]. {[The level shall be measured with a maximum error of +/- 0.008 feet per foot (+/- 0.008 m per m) over a range of 0.033 to 5.0 feet (0.010 to 1.52 m), and +/- 0.012 feet per foot (+/- 0.0012 m per m) for levels greater than 5.0 feet (1.52 m).][The level shall be measured with a maximum error of +/- 0.03 feet (+/- 0.009 m) over a range of 0.05 to 15 feet (0.015 to 4.57 m), +/- 0.09 feet (+/- 0.027 m) over a range of 0.05 to 21 feet (0.015 to 6.40 m), and +/- 0.30 feet (+/- 0.09 m) from 0.05 to 30 feet (0.015 to 9.14 m).]}[1] {[The temperature coefficient shall be +/- 0.005 feet per degree F (+/- 0.0027 m per degree C) from 0.05 to 4.0 feet (0.015 to 1.22 m) and +/- 0.007 feet per degree F (+/- 0.0038 m per degree C) from 4.0 to 10.0 feet (1.22 to 3.05 m) over the compensated temperature range of 32 to 100 degrees F (0 to 38 degrees C).] [The temperature coefficient shall be +/- 0.008 feet per degree F (+/- 0.0044 m per degree C) from 0.05 to 30.0 feet (0.015 to 9.14 m) over the compensated temperature range of 32 to 100 degrees F (0 to 38 degrees C).]}[1]

C) The sensor cable shall be {[25 feet (7.62 m)][50 feet (15.2 m)]} [1] long. The cable shall terminate in a sealed, military style connector so that the sensor can be easily replaced in the field. The connect cable for the sensor shall include a vent tube that shall reference one side of the pressure transducer to atmospheric pressure. [An optional (25 ft. - 7.62 m) vented extension cable shall be supplied.] [2] Sensor materials exposed to the flow stream shall be polybutadiene-based polyurethane, stainless steel, polyvinyl chloride (PVC), and chlorinated polyvinyl chloride (CPVC).

3) FLOW MODULE

A) The flow module shall be capable of being added to the sampler at any time, and shall be interchangeable in the field. With the flow module plugged in, the sampler shall be capable of converting level and velocity measurements from the flow module into flow rate, totalizing flow, and displaying level, velocity, flow rate, and total flow in user-selectable units of measure. The sampler shall also be capable of activating and pacing sampling. The sampler shall also be capable of storing level, velocity, rainfall, and sample data in memory for retrieval with a rapid transfer device or a computer, or printout using a field printer. All capabilities shall be programmable using the keypad and display on the sampler.

i) Measured liquid level readings from the flow module shall be converted into the area of the flow using internal conversion algorithms in the sampler, and the sampler shall calculate flow rate by multiplying the area of the flow by the velocity reading from the flow module. The sampler shall contain conversions for round, U-shaped, rectangular and trapezoidal channels. The sampler shall accept up to 50 pairs of level-area data points.

(1) Alternatively, measured liquid level readings from the flow module shall be converted into corresponding flow rate readings using conversion algorithms in the sampler. The sampler shall contain conversions for V-notch weirs, rectangular weirs with and without end contractions, Cipolletti weirs, and Parshall, Palmer-Bowlus, trapezoidal, and H flumes. For monitoring in applications using the Manning formula in round, U-shaped, rectangular and trapezoidal channels, the sampler shall accept information for channel shape and size, and slope and roughness coefficient. The sampler shall accept up to 50 pairs of level-flow rate data points.

(2) The sampler shall be capable of activating sampling based on an AND/OR combination of any two of level, velocity, flow rate and rainfall. The sampler shall be capable of collecting flow proportional samples, or event paced samples based on an AND/OR combination of any two of level, velocity, flow rate and rainfall. The sampler shall store the time and bottle number of each sample in internal memory.

(3) The sampler shall have internal memory to store level, velocity, rainfall, and sample data. The memory shall have a capacity of 64,000 bytes. Timing for the storage of level, velocity, and rainfall data shall be selectable from 1, 2, 5, 10, 15, or 30 minute intervals. Data shall be in a

triggered slate, storing data one hour before sampling activation. Stored data and/or pre-formatted ASCII reports shall be retrieved using a rapid transfer device or a computer, or printed using a field printer.

B) The program memory in the flow module shall be non-volatile, programmable flash memory. The program memory shall be capable of being updated via the serial port on the sampler using a PC.

C) The flow module shall be powered by 12 volts DC provided by the sampler.

D) The flow module shall be housed in a rugged, watertight, dust-tight, submersible, corrosion resistant (self-certified NEMA 4X, 6 and IP67) polystyrene enclosure. The enclosure shall measure 4.9 in. (12.4 cm) high x 5.7 in. (14.5 cm) wide x 2.0 in. (5.1 cm) deep.

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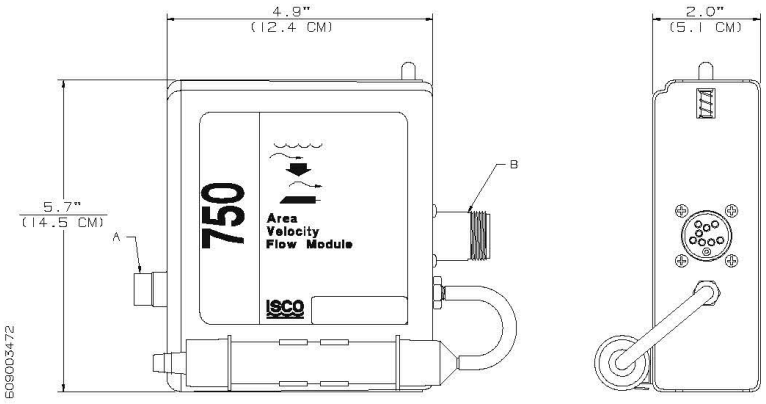
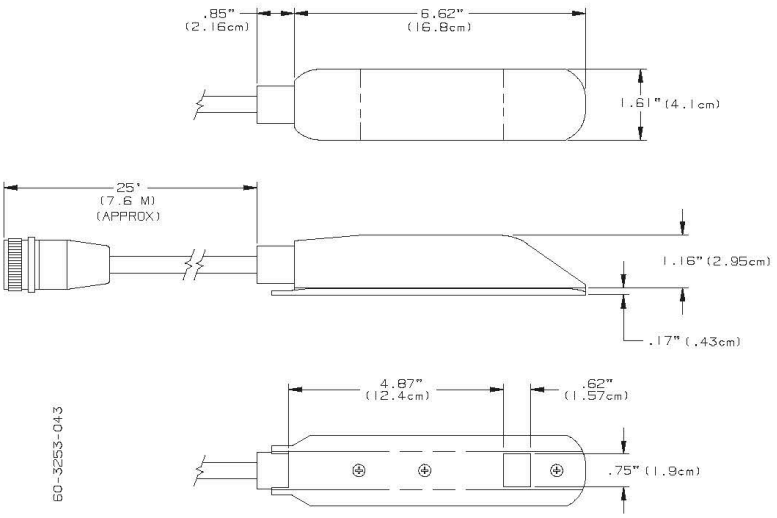
[1] Specify level measurement range of sensor.

[2] Specify optional vented extension cable.

Isco 750 Area Velocity Flow Module



Isco Standard Area Velocity Sensor



SECTION []
Teledyne Isco 6712 Portable Sampler
Engineering Specifications
Revised: February 22, 2010

PART [] PRODUCTS

1.1 Manufacturer

A. Wastewater sampling equipment supplied by Teledyne Isco, Inc. 4700 Superior Street, Lincoln, NE, 68504-1398. Phone (402) 464-0231, fax (402) 465-3064, email IscoInfo@teledyne.com, web site www.isco.com.

2.1 Design

There shall be furnished a portable sampler for sequential and composite sampling applications. The instrument shall be capable of collecting samples from a variety of sources including open channels, sewers, and storm water conduits. The instrument shall route samples to storage containers for collection and off-site analysis. The instrument shall be suited to collect priority pollutant or general purpose samples in multiple bottles or a single bottle. The unit shall be capable of either battery or line (AC) power operation.

3.1 Description

A. Physical Description

1. The sampler shall be circular in shape with an outside diameter of less than 20 inches (51 cm) and shall be at least 31.5 inches (80 cm) in height. The dry weight of the unit shall not be less than 52 pounds (24 kg).

B. External Construction

1. The exterior shall be a light-colored ABS plastic for superior sample preservation, corrosion resistance, and all-weather durability. Other external components shall be constructed of stainless steel, plated aluminum, or other corrosion resistant materials. The base section shall typically hold 30 pounds of crushed ice when using 24 round 350 ml sample bottles to cool samples after collection. The base section and center section shall be a two piece construction and include foamed in place insulation. This external hardware shall provide an insulation value of at least R-10. Large handles for easy transportation shall be located on both the center section and base. A side mounted drain shall allow for the discharge of cooling water. The controller cover shall be designed to allow external equipment to be mounted directly to the cover. The design of the external hardware shall allow easy assembly and disassembly of sampler components. Large spring-loaded latches shall hold the sections together firmly and shall remain in the open position when not attached to the external latch keeper.

C. Sampler Controller

1. All electrical components shall be housed in a single controller. There shall be no external electrical or control components. The controller shall use a 4 line, 20 character per line, 80 total character display to show sampler and attached module status and program information. This display shall be angled for easy viewing and backlit for easy use in all light conditions. A 17 position keypad shall be used for all program entries, manual control of the sampler, and data transfer functions. The sealed control unit shall be removable to allow use with either a portable or refrigerated sampler. Program firmware shall be stored in Flash memory. This shall allow program software updates to be transferred to the sampler without opening the sampler enclosure.

2. The control box shall be constructed of 1/4"-thick Noryl® plastic and the enclosure shall conform to NEMA 4X, 6 (IP 67 control box, IP 17 pump) standards for water tight, dust tight, and corrosion resistance and submersion. A desiccator shall be located inside the control box to prevent moisture damage to electrical components.
3. The controller shall have an operating temperature of 32 to 120 °F (0 to 49 °C), and a storage temperature of 0 to 140 °F (-18 to 60 °C).
4. The sampler shall require 12 volt DC power for operation. This power shall be supplied from [(Isco Nickel-Cadmium Battery) (Isco Lead-Acid Battery) (Isco AC Power Converter 120 or 240 volt) (Isco AC Battery-Backed Power Converter) (External user-supplied 12 volt DC power source)][1]
5. The sampler controller shall have two programming modes: standard and extended. Additionally, two styles of programming shall be available: quick view and sequential programming styles. There shall be a sequence available to select either standard or extended programming. On-line help shall be available to direct the user through the programming sequence or refer to specific sections in the instruction manual. The sampler shall provide 512 kilobytes of battery-backed RAM memory with a minimum life of five years. This memory shall maintain the sampler's program settings, stored programs, and the results of the last sampling sequence when the sampler is turned off or an external power interruption occurred. A user-initiated diagnostics routine shall determine the operational status of the sampler. Any error conditions detected by the diagnostic routines shall be displayed to the user.
6. Standard programming shall allow the user to define specific program operational parameters. Additionally, the sampler shall be able to be programmed to operate on specific days of the week. An option shall be available to automatically re-run the active program. No user re-activation shall be required if this option is selected. The user can program the sampler to collect sequential or composite samples at user-definable intervals. A delay to first sample collection shall be programmable in minutes from 0 to 9,999 or by the real-time clock or eliminated. The user shall be able to enter a 10 character alpha numeric description as a sampling site name.
    a. Time Pacing, Standard Programming
       The sampler shall use an internal real-time clock to provide time and date information. Uniform time paced samples shall be collected at regular time intervals from 1 minute to 99 hours and 59 minutes.
    b. Flow Pacing, Standard Programming
       The sampler shall accept a 12V DC flow proportional pulse or isolated dry contact closure from an external flow meter for flow pacing. The pulse or contact closure shall be at least 25 ms in duration. The user shall select the number of flow pulses as the flow interval for each sample collection. If connected to a 700 series flow module, flow pacing shall be stated in interval flow volume between each sample.
7. Extended programming shall allow the user to enter intricate programs for sample collection. All options available in standard programming mode are available with extended programming. The sampler shall have the ability to be programmed for up to 2 real-time pause/resume sampling times. The pause/resume routines and delay to the first sample are independent of the sample pacing interval. The sampler shall be capable of storing up to 5 sampling routines. The duration and frequency of purges can be controlled by the user in this mode. Sample retries and line rinses shall be selectable from 0 to 3. The user shall be able to

enter a 10 character alpha numeric description as a sampling site name. The user shall also be able to enter 10 character alphanumeric names for each stored sampling program.

a. Two-part programming shall provide multiple sample pacing for collecting independent samples in distinct bottle sets. This shall be used for storm water runoff monitoring or other applications. Sample volumes and intervals for the independent samples shall be separately programmed. All programming options shall be available for the independent programs. These two distinct programs shall be capable of being initiated separately by external conditions.
b. Time Pacing, Extended Programming
   The sampler shall use an internal real-time clock to provide time and date information. Uniform time paced samples shall be collected at regular time intervals from 1 minute to 99 hours and 59 minutes. Additionally, non-uniform time interval sampling shall be available. These non-uniform time intervals shall be capable of being paced by clock time, or in specific minute intervals for each sample collected. An additional non-uniform timed sampling mode shall allow the user to enter the number and volume of samples to collect and a time period to complete the sampling routine. The sampler shall then randomly select and record each sample collection.
c. Flow Pacing, Extended Programming
   The sampler shall accept a 12V DC flow proportional pulse or isolated dry contact closure from an external flow meter for flow pacing. The pulse or contact closure must be at least 50 ms in duration. The user shall select the number of flow pulses as the flow interval for each sample collection. If connected to a 700 series flow module, flow pacing can also be stated in interval flow volume between each sample.
d. Flow Dependent Sample Volumes
   For extended programs that are uniform time paced, a flow-dependent-sample-volume option shall be offered. If a flow module is attached, the input signal shall be the module's flow volume. Otherwise, it shall be the flow pulse count at the external flow meter connector. The user shall enter the amount of flow required for each 10 ml of sample. At sample time, the sample volume shall be calculated based on the flow that occurred since the last sample. This sample volume will be at least 20 ml, but not more than the bottle volume (or 9,990 ml, whichever is smaller). No sample shall be taken at the start time.
e. Event Paced Sampling
   This mode of sampling shall allow the user to select specific external events to pace a sampling routine. A sample shall be collected when specific external events occur. Sampling shall take place with each occurrence of the external event.

8. Sampler Controller Outputs
   a. Three optional internal isolated analog outputs shall be available. These outputs shall be configurable to either 4-20 mA or 0-20 mA. These outputs shall be programmable for any parameter measured by the sampler with the exception of rainfall.[2]
   b. A serial data output shall be available. ASCII data shall be transmitted at user selectable intervals of 15 seconds, 1 minute, 5 minutes, or 15 minutes. Additionally the data out put can be accessed by sending a specific command to the sampler. Baud rates shall be selectable from: 1200, 2400, 4800, or 9600. At all baud rates, the data shall be sent with no parity, 8 data bits, and one stop bit. Data shall be is in a comma-separated-value format.

c. There shall be available a programmable input/output (I/O) port that shall initiate a signal, based on monitored events, capable of activating an optional single, dual, or triple contact closure for controlling external devices or signaling other equipment. The signal is a 5 volt CMOS digital signal programmable to activate high or low, based on a programmed TRUE or FALSE condition(s). These outputs shall be programmable through the front panel and can be re-configured by the user.
d. The 6712 shall track how much power has been consumed since the last time it lost power. The current power consumption, as well as the previous power consumption, shall be accessed by pressing the STOP key while in the main menu. For proper operation, it is the responsibility of the user to use a freshly charged battery when starting the sampler.
e. For those programs that have delayed or scheduled start times, parameter readings shall be displayed while waiting for the start time. At the start time for the sampling program, the totalizer shall be reset to display total flow information for the sampling program. Parameter and flow readings shall also be displayed after the program is complete. Additionally, the 6712 sampler shall be capable of operating as a display and logging unit only.

9. Command Driven Mode
There shall be provided an operational mode where the sampler shall be fully controlled through an external device. The external controller shall be responsible for determining when to take a sample, how much volume to pump, and where to put the sample. The external controller shall directly interface to the sampler via an RS-232 communications port at 2400 baud, 8 data bits, 1 stop bit, and no parity. A comma-separated-value protocol is used by the external controller to make requests, and by the sampler to report results. At the appropriate time as determined by the external controller, a command is sent to the sampler. The sampler shall move the distribution arm to the appropriate location and collect the volume of sample directed by the controller. After sample collection, the sampler shall signal back to the controller that the sample was successfully captured, or any operational faults that can be detected by the sampler.

D. Sample Delivery
1. Samples shall be collected using a peristaltic pump. This pump shall produce typical line velocities of 3.0 feet per second in a 3/8 inch (0.95 cm) ID suction line at 3 feet (1 m) of head. At 25 feet (7.6 m) of head the pump shall typically produce a line velocity of 2.2 feet (0.67 m) per second. The pump shall be capable of lifting a sample 28 feet (8 m). The body of the peristaltic pump shall be an integral part of the sampler controller. The pump shall be constructed of high strength Noryl plastic and designed for corrosion resistance and long tubing life. Before and after each sample is collected, the pump shall air purge the suction line. Pre-purges and post-purges shall be automatically controlled, and no pre-calibration adjustments are required. User selectable purge lengths shall also be available. The sample stream shall be a direct path from sample source to sample bottle. Samples shall not pass through metering chambers or other diversions. The pump shall include a latched cover and thumbscrew opening for the replacement of pump tubing. The pump shall include a built-in safety interlock. With the opening of the pump's latch and band, all power shall be removed from the sampler's pump motor, to eliminate the possibility of a pump activation injuring personnel.
2. The sampler shall typically deliver sample volumes with an accuracy of 10 ml or 10%, whichever is greater, of the programmed value. The sample volume repeatability shall be 5

ml or 5%, whichever is greater, of the average of the maximum and minimum sample volume in the sample set. The user can select sample volumes from 10 to 9,990 ml in 1 ml increments. The liquid detector also monitors for anomalies in the sample collection process. If no liquid is detected, the sampler shall be capable of retrying the sampling sequence up to three times. Additionally, the sampler shall be capable of being programmed to rinse the suction line with the source liquid up to three times.

3. Liquid Detector
   The sampler shall utilize a non-wetted, non-conductive detector to sense the presence of the liquid. The sensor shall not be dependent on, or affected by, the chemical or physical properties of the liquid or its contents. The sensor shall not require routine maintenance or cleaning. The liquid detection system shall minimize the effects of changing head, intermittent flow in the suction line, or variable battery conditions on sample volume. After initial detection of liquid, the sensor shall monitor for the presence of liquid during the sample collection sequence. Additionally, the liquid detector shall be used to detect bottle full conditions when the sampler is operated in the single bottle sampling mode.
4. Pump Revolution Counter
   After liquid detection, the pump revolution counter shall count actual pump revolutions to determine sample volume delivery to the storage containers. If liquid flow is interrupted during the sample collection sequence, the detector shall inhibit the pump revolution counter from incrementing until liquid flow is restored. Automatic compensations for air slugs in the sample shall be made by the delivery system. Additionally, the pump revolution counter shall monitor the total number of pump revolutions and alert the user when a pre-selected number of counts has been reached. This tubing life indicator shall alert the user to the need to replace the pump tubing. This indicator shall be on the sampler's display screen. The pump tubing used shall be specially treated to minimize water extractable pollutants. Specially designed bands shall indicate the correct placement of the tubing inside the pump. The tubing shall typically last for a minimum of 1,000,000 pump counts. One pump revolution is equivalent to 12 pump counts.
5. Sample distribution shall be through the use of a worm gear drive mechanism. This system shall lock the corrosion-resistant distribution arm above the appropriate sample container. A dual optical sensor shall be used for positive location of the distributor arm. A single adjustable distributor arm shall be used for all bottle configurations and sampler mounting possibilities.
6. The sampler program shall allow the user to select from 3 types of sample distribution: samples per bottle, bottles per sample, and multiple bottle compositing. In the samples per bottle mode, a minimum of 15 samples shall be capable of being deposited in each sample container. In the bottles per sample mode, all sample bottles shall be capable of being filled with a single initiation. Multiple bottle compositing shall allow the user to place multiple samples in a single bottle while simultaneously creating a duplicate bottle or set of bottles. The sampler shall switch bottles after a period of time has elapsed, or a predetermined number of samples have been collected.

E. Suction Lines and Strainers
   The sampler shall require a suction line and strainer. The suction line shall be made of {[3/8 inch (.95 cm) ID vinyl] [3/8 inch (.95 cm) ID Teflon®] with a length of _____ feet}.[3] [An optional (all stainless steel strainer for 3/8" (.95 cm) line) (all CPVC weighted strainer for 3/8" (.95 cm) line) shall be supplied].[4]

F. Sample Collection Containers
The sampler shall be supplied with sample collection container(s). The container(s) shall be [(24 wedge 1 liter polypropylene) (24 round 350 ml glass) (12 round 1 liter polypropylene) (12 round 950 ml glass) (8 round 2 liter polyethylene) (8 round 1.8 liter glass) (4 round 3.7 liter (1 gallon) glass) (4 round 3.7 l iter(1 gallon) polypropylene) (Single 9.4 liter {2.5 gallon} polyethylene) (Single 9.4 liter {2.5 gallon} glass) (24 ProPak polypropylene holders and disposable 1 liter low-density polyethylene sample bags) (single vented polyethylene container and disposable ProPak 2 gallon low-density polyethylene sample bags)][5]

G. Interfacing Options
1. Model 581 Rapid Transfer Device (RTD)
There shall be provided a hand-held device for transferring data from the 6712 sampler. This information shall be in the form of daily summaries of the sampling data and other external sensing devices accompanying the 6712 sampler. The 581 shall typically store reports from up to 25 samplers. The unit shall be housed in a totally encapsulated polyurethane housing. The 581 shall meet standards for NEMA 4X, 6 (IP 68) standards for water-tightness. The communications protocol shall use a RS-232 serial communications, transmitting at 9600 baud. The total data storage capability shall be 967 Kbytes.[6]
2. Model 2102 wireless module
There shall be provided a wireless communications module to communicate with a personal computer. This device will communicate similar to that of a direct connection to the sampler without the communications cable. The user can download all stored information from the 6712 for later manipulation.[7]
3. Personal Computer Software (Samplink)
There shall be provided software that shall allow two separate reports to be transferred to an IBM compatible computer: sampling results report and a program settings report. The program shall include fail-safe loading with site ID codes to prevent field errors due to multiple files.[8]
4. 674 Rain Gauge
There shall be provided a tipping bucket rain gauge for measurement of on-site rainfall amounts. The unit shall connect directly to the 6712 controller and data is stored at the storage interval rate. The 674 shall be available for use with SDI-12 sensors also connected to the sampler.[9]
5. YSI SDI-12 Sonde
The sampler controller will include an SDI-12 input interface. The controller will function as a SDI-12 logger. A maximum of 10 input devices can be attached to the sampler controller. A maximum of 8 parameters from the sensors which may include multi-parameter sondes can be stored in the controller's memory, and an additional 8 parameters can be used for program initiation or event-paced sampling. The controller shall accept Teledyne Isco compatible sondes with a minimum of additional programming. Compatible, non-Teledyne Isco SDI-12 sensors must be programmed for the type of parameter and units selected for measurement.[10]

H. Communication Options
1. Internal Phone Modem
The 6712 shall be compatible with an internal phone modem. This landline analog modem shall operate at a transfer speed of 2400 Baud. The modem shall be capable of enabling the transfer of stored data from the 6712 sampler to a PC, and alarm information via telephone.

In addition, software shall be available to enable the sampler to accept remote commands via the modem. These shall include: Sample program initiation, taking a sample, selection of stored program to operate, or the end of a sampling routine. [11]

2. CDMA Modem
   The 6712 shall be compatible with an external digital cellular CDMA modem for issuing alarm information in the form of digital text messages via dialup server to cellular phones. Remote operation shall be possible through a computer command program such as Hyper Terminal. An external digital modem is available from Teledyne Isco. [12]
3. TDMA Modem
   The 6712 shall be compatible with an external digital cellular GSM modem for issuing alarm information in the form of digital text messages using SMS to cellular phones. Remote operation shall be possible through a computer command program such as Hyper Terminal. An external digital modem is available from Teledyne Isco. [13]

I. ProHanger Suspension Bracket
   A stainless steel extendable bracket assembly shall be furnished for suspension of the sampler in manholes 18 to 24 inches in diameter. The bracket shall be rated to 200 pounds.[14]

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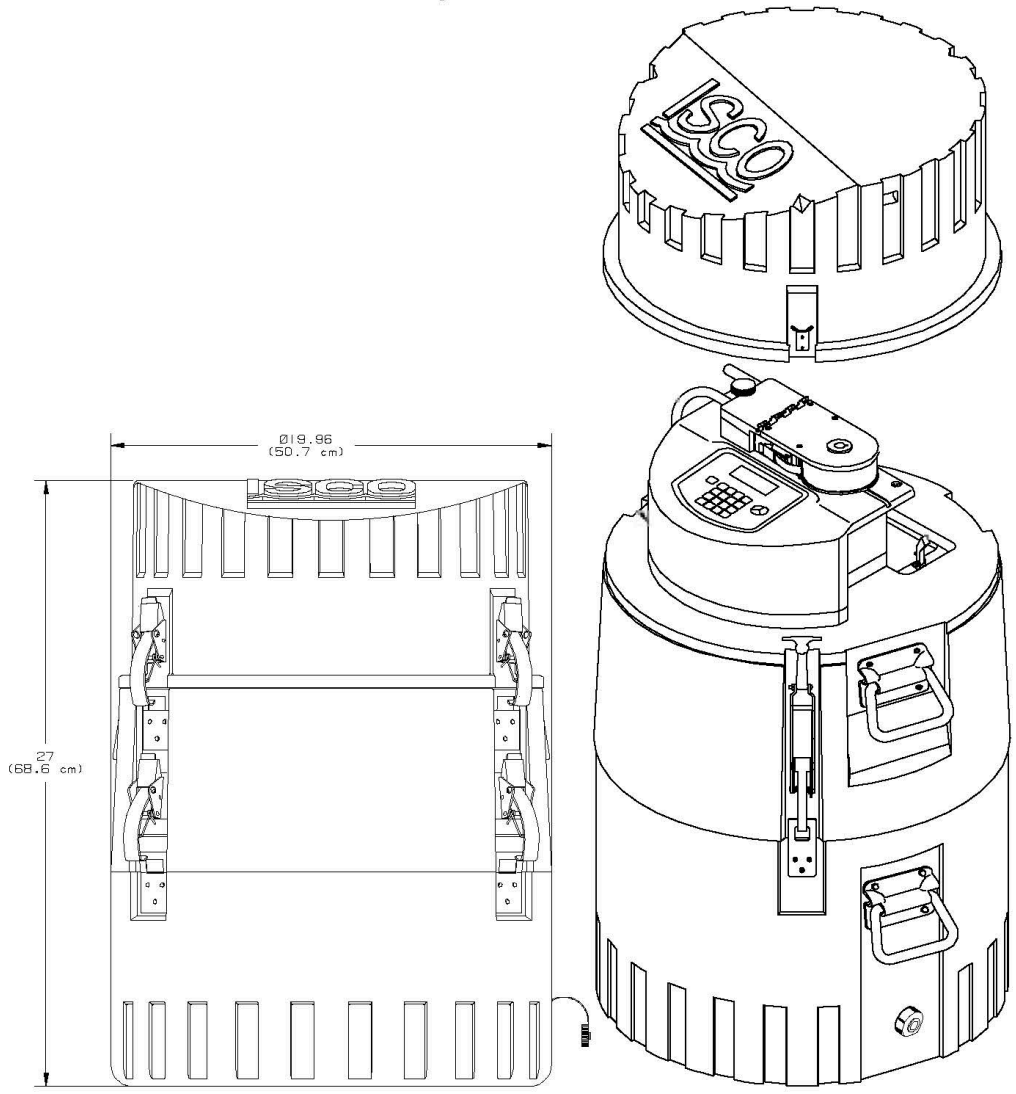
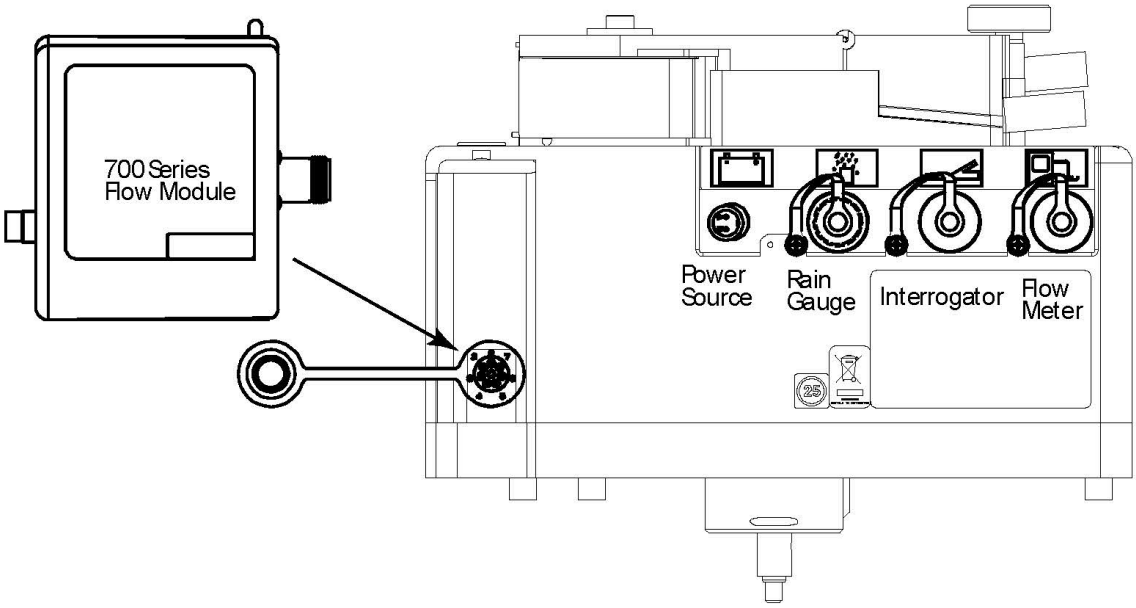
[1] Specify one or more power sources as required
[2] Specify optional internal analog outputs.
[3] Specify length and material for sampler suction line
[4] Specify type of strainer for sampler suction line
[5] Specify bottle or bottles required
[6] Specify 581 rapid transfer device.
[7] Specify 2102 wireless communication module.
[8] Specify software and required connect cable for computer
[9] Specify tipping bucket rain gauge.
[10] Specify YSI parameter sonde.
[11] Specify 4200T telephone modem.
[12] Specify CDMA cellular modem.
[13] Specify GSM cellular modem.
[14] Specify ProHanger manhole suspension bracket.

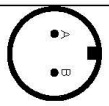
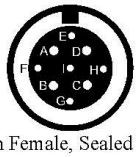
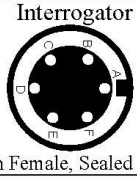
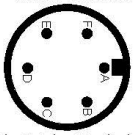
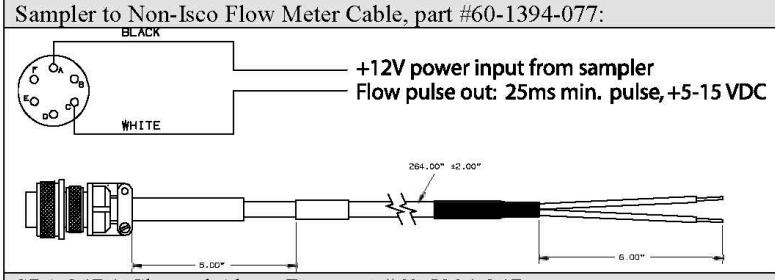
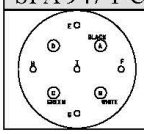
6712 Full Size Portable Sampler



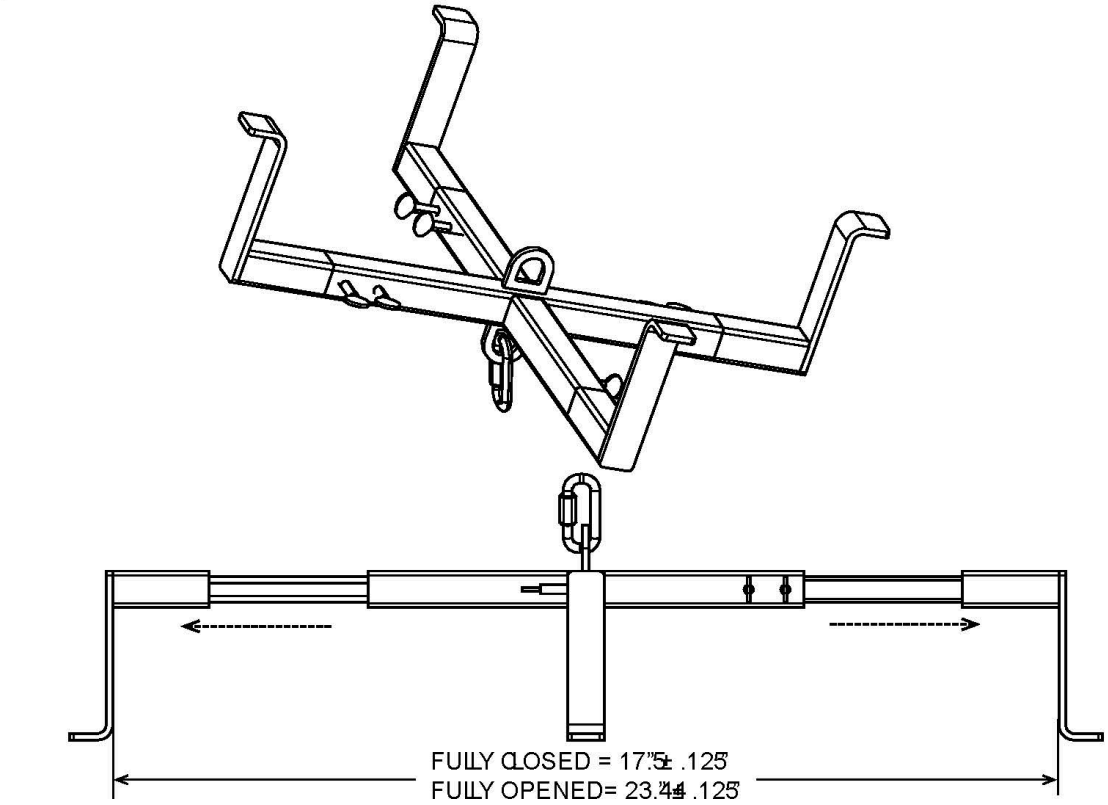
6712 Controller Connectors (see table for pinouts)



Connector	Pin	Function	Details
Power Source	A GND B +VIN	Ground +12 volts	DC power return DC power supply

 2-Pin Male, Sealed			
Rain Gauge / 947 I/O Alarm Box  9-Pin Female, Sealed	A +12V B GND C I/O1 D RAIN E SW12SPA F XCV G XMT?? H I/O2 I I/O3	+12 volts Ground I/O1 Rain gauge tip Power out SDI-12 Data ????????????? I/O2 I/O3	DC power output DC power return Programmable pin DC input or output signal Receives 48 ms, 0VDC pulses Switched DC output (SPA only); normally N/C Serial input or output signal Serial output signal?? Programmable pin DC input or output signal Programmable pin DC input or output signal
Interrogator  6-Pin Female, Sealed	A SW12 B GND C SENSE D XMT E RCV F N/C	+12 volts Ground Connection sense Transmit Receive No connection	Switched DC power output DC power return DC input signal Serial output signal Serial input signal N/A
Flow Meter  6-Pin Male, Sealed	A +VIN B GND C FPULSE D BTL# E EVENT F INHIBIT	+12 volts Ground Flow pulse in Bottle number out Event mark out Inhibit in	DC power output DC power return 25ms (minimum) pulse, +5 to 15 VDC Pulsed output signal/dual sampler out 3S,+12 VDC pulse @ beginning of sample DC input signal
Sampler to Non-Isco Flow Meter Cable, part #60-1394-077:			
			
SPA 947 1-Channel Alarm Box, part #60-5304-947:			
			

ProHanger Manhole Suspension Bracket



[END OF SECTION]

DATE: 5/01/2025

INVITATION TO BID
THIS IS NOT AN ORDER

BID NO.: 50-00147627

JEFFERSON PARISH

PURCHASING DEPARTMENT
P.O. BOX 9
GRETNA, LA. 70054-0009
504-364-2678

VENDOR: C.C. LYNCH AND ASSOCIATES, INC.

PURCHASING SPECIALIST:
TBANKS@jeffparish.net

Bids will be received until 11:00 AM, 5/06/2025

LATE BIDS WILL NOT BE ACCEPTED

NOTE: ONLY BIDS WRITTEN IN INK OR TYPEWRITTEN, AND PROPERLY SIGNED BY A MEMBER OF THE FIRM OR AUTHORIZED REPRESENTATIVE, WILL BE ACCEPTED. PENCIL AND/OR PHOTOSTATIC FIGURES OR SIGNATURES SHALL RESULT IN BID REJECTION. HOWEVER, ELECTRONIC SIGNATURES AS DEFINED IN LSA – R.S. 9:2602(8) ARE ACCEPTABLE. SIGNATURE MUST BE A SECURED DIGITAL SIGNATURE AND MUST PROVIDE PROOF OF THE SECURED SIGNATURE WITH BID SUBMISSION.

All bids submitted are subject to these instructions and general conditions and any special conditions and specifications contained herein, all of which are made part of this bid proposal reference. By submitting a bid, vendor agrees to comply with all provisions of Louisiana Law, as well be in compliance with the Jefferson Parish Code of Ordinances, Louisiana Code of Ethics, applicable Jefferson Parish ethical standards and Jefferson Parish Resolution No. 136353 as amended. A copy of these resolutions may be obtained from the Office of the Parish Clerk, Suite 6700, Jefferson Parish General Government Building, 200 Derbigny Street, Gretna, LA 70053. You may also obtain a copy by visiting the Purchasing Department webpage at http://www.jeffparish.gov/464/Purchasing and clicking on On-line forms.

All vendors submitting bids should register as a Jefferson Parish vendor if not already yet registered. Registration forms may be downloaded from http://www.jeffparish.gov/464/Purchasing and by clicking on Vendor Information. Current W-9 forms with respective Tax Identification numbers and vendor applications may be submitted at any time; however, if your company is not registered and/or a current W-9 form is not on file, vendor registration is mandatory. Vendors may experience a delay in payment if your company is not a registered vendor with Jefferson Parish.

Jefferson Parish is exempt from paying sales tax under LSA-R.S. 47:301 (8)(c). All prices for purchases by Jefferson Parish of supplies and materials shall be quoted in the unit of measure specified and unless otherwise specified, shall be exclusive of state and local taxes. The price quoted for work shall be stated in figures. In the event there is a difference in unit prices and totals, the unit price shall prevail. Quotations shall be based on F.O.B. Delivered, anywhere within the Parish as designated by the Purchasing Department. JEFFERSON PARISH WILL ACCEPT ONE BID ONLY FROM EACH VENDOR. Items bid must meet specifications. JEFFERSON PARISH will accept one price for each item unless otherwise indicated. Two or more prices for one item will result in bid rejection. Bidders are required to complete, sign and return the bid form and/or complete and return the associated line item pricing forms as indicated. The price quoted for work shall be stated in figures. In the event there is a difference in unit prices and totals, the unit prices shall prevail

JEFFERSON PARISH reserves the right to award contracts or place orders on a lump sum or individual item basis, or such combination, as shall in its judgment be in the best interest of JEFFERSON PARISH. Every contract or order shall be awarded to the LOWEST RESPONSIVE and RESPONSIBLE BIDDER, taking into consideration the CONFORMITY WITH THE SPECIFICATIONS and the DELIVERY AND/OR COMPLETION DATE

PROTESTS: Only those vendors that submit bids in response to this solicitation may protest any element of the procurement, in writing to the Director of the Purchasing Department. Written protest must be received within 48 hours of the release of the bid tabulation by the Purchasing Department. After consultation, the Parish Attorney's Office will then respond to protests in writing. (For more information, please see Chapter 2, Article VII, Division 2, Sec. 2-914.1 of the Jefferson Parish Code of Ordinances.)

JEFFERSON PARISH reserves the right to cancel all or any part of an order if not shipped promptly. No charges will be allowed for parking or cartage unless specified in the quotation. The order must not be filled at a higher price than quoted. JEFFERSON PARISH reserves the right to cancel at any time and for any reason by issuing a THIRTY (30) day written notice to the contractor.

JEFFERSON PARISH requires all products to be new (current) and all work must be performed according to standard practices for the project. Unless otherwise specified, no aftermarket parts will be accepted. Unless otherwise specified, all workmanship and materials must have at least one (1) year guaranty, in writing, from the date of delivery and/or acceptance of the project. Any deviations or alteration from the specifications must be indicated on the bid form for each item and upon request, product data for same must be submitted by the time specified by the Purchasing Department.

If this bid requires a pre-bid conference (see Additional Requirements section), bidders are advised that such conference will be held to allow bidders the opportunity to identify any discrepancies in the bid specifications and seek further clarification regarding instructions. The Purchasing Department will issue a written response to bidders' questions in the form of an Addendum.

All formal Addenda require written acknowledgment on the bid form by the bidder by the bidder placing the Addendum number in the appropriate section. Failure to acknowledge an Addendum on the bid form shall cause the bid to be rejected; JEFFERSON PARISH reserves the right to award bid to next lowest responsive and responsible bidder in this event.

USE OF BRAND NAMES AND STOCK NUMBERS: Where brand names and stock numbers are specified, it is for the purpose of establishing certain minimum standards of quality. Bids may be submitted for products of equal quality, provided brand names and stock numbers are specified. Complete product data may be required prior to award.

Quantities listed are for bidding purposes only. Actual requirements may be more or less than quantities listed.

INSTRUCTIONS FOR BIDDERS AND GENERAL CONDITIONS

Bidders are not to exclude from participation in, deny the benefits of, or subject to discrimination under any program or activity, any person in the United States on the grounds of race, color, national origin, or sex; nor discriminate on the basis of age under the Age Discrimination Act of 1975, or with respect to an otherwise qualified handicapped individual as provided in Section 504 of the Rehabilitation Act of 1973, or on the basis of religion, except that any exemption from such prohibition against discrimination on the basis of religion as provided in the Civil Rights Act of 1964, or Title VI and VII of the Act of April 11, 1968, shall also apply. This assurance includes compliance with the administrative requirements of the Revenue Sharing final handicapped discrimination provisions contained in Section 51.55 (c), (d), (e), and (k)(5) of the Regulations. New construction or renovation projects must comply with Section 504 of the 1973 Rehabilitation Act, as amended, in accordance with the American National Standard Institute's specifications (ANSI Al 17.1-1961).

Jefferson Parish and its partners as the recipients of federal funds are fully committed to awarding a contract(s) to firm(s) that will provide high quality services and that are dedicated to diversity and to containing costs. Thus, Jefferson Parish strongly encourages the involvement of minority and/or woman-owned business enterprises (DBE's, including MBE's, WBE's and SBE's) to stimulate participation in procurement and assistance programs.

IN ACCORDANCE WITH STATE REGULATIONS JEFFERSON PARISH OFFERS ELECTRONIC PROCUREMENT TO ALL VENDORS

This electronic procurement system allows vendors the convenience of reviewing and submitting bids online. This is a secure site and authorized personnel have limited read access only. Bidders are to submit electronically using this free service; while the website accepts various file types, one single PDF file containing all appropriate and required bid documents is preferred. Bidders submitting uploaded images of bid responses are solely responsible for clarity. If uploaded images/documents are not legible, then bidder's submission will be rejected. Please note all requirements contained in this bid package for electronic bid submission.

Please visit our E-Procurement Page at www.jeffparishbids.net to register and view Jefferson Parish solicitations. For more information, please visit the Purchasing Department page at http://www.jeffparish.gov/464/Purchasing.

ADDITIONAL REQUIREMENTS FOR THIS BID

PLEASE MATCH THE NUMBERS PRINTED IN THIS BOX WITH THE CORRESPONDING INSTRUCTIONS BELOW. IF THE NUMBER IS NOT SPECIFIED IN THIS BOX, IT IS NOT APPLICABLE FOR THIS BID.

13

1. All bidders must attend the MANDATORY pre-bid conference and will be required to sign in and out as evidence of attendance. In accordance with LSA R.S. 38:2212(I), all prospective bidders shall be present at the beginning of the MANDATORY pre-bid conference and shall remain in attendance for the duration of the conference. Any prospective bidder who fails to attend the conference or remain for the duration shall be prohibited from submitting a bid for the project.

2. Attendance to this pre-bid conference is optional. However, failure to attend the pre-bid conference shall not relieve the bidder of responsibility for information discussed at the conference. Furthermore, failure to attend the pre-bid conference and inspection does not relieve the successful bidder from the necessity of furnishing materials or performing any work that may be required to complete the work in accordance with the specification with no additional cost to the owner.

3. Contractor must hold current applicable JEFFERSON PARISH licenses with the Department of Building Permits. Contractor shall obtain any and all permits required by the JEFFERSON PARISH Department of Building Permits. The contractor shall be responsible for the payment of these permits. All permits must be obtained prior to the start of the project. Contractor must also hold any and all applicable Federal and State licenses. Contractor shall be responsible for the payment of these permits and shall obtain them prior to the start of the project.

4. A LA State Contractor's License will be required in accordance with LSA R.S. 37-2150 et. seq. and such license number will be shown on the outside of the bid electronic envelope. Failure to comply will cause the bid to be rejected. When submitting the bid electronically, the license number must be entered in the appropriate field in the electronic procurement system. Failure to comply will cause the bid to be rejected.

INSTRUCTIONS FOR BIDDERS AND GENERAL CONDITIONS

5. It is the bidder's responsibility to visit the job site and evaluate the job before submitting a bid.

6. Job site must be clean and free of all litter and debris daily and upon completion of the contract. Passageways must be kept clean and free of material, equipment, and debris at all times. Flammable material must be removed from the job site daily because storage will not be permitted on the premises. Precaution must be exercised at all times to safeguard the welfare of JEFFERSON PARISH and the general public.

7. PUBLIC WORKS BIDS: All awards for public works in excess of $5,000.00 will be reduced to a formal contract which shall be recorded at the contractor's expense with the Clerk of Court and Ex-Officio Recorder of Mortgages for the Parish of Jefferson. A price list of recordation costs may be obtained from the Clerk of Court and Ex-Officio Recorder of Mortgages for the Parish of Jefferson. All awards in excess of $25,000.00 will require both a performance and a payment bond. Unless otherwise stated in the bid specifications, the performance bond requirements shall be 100% of the contract price. Unless otherwise state in the bid specifications, the payment bond requirements shall be 100% of the contract price. Both bonds shall be supplied at the signing of the contract.

8. NON-PUBLIC WORKS BIDS: A performance bond will be required for this bid. The amount of the bond will be 100% of the contract price unless otherwise indicated in the specifications. The performance bond shall be supplied at the signing of the contract.

9. NON-PUBLIC WORKS BIDS: A payment bond will be required for this bid. The amount of the bond will be 100% of the contract price unless otherwise indicated in the specifications. The payment bond shall be supplied at the signing of the contract.

10. All bidders must comply with the requirements stated in the attached "Standard Insurance Requirements" sheet attached to this bid solicitation. Any deviation from the Standard Insurance Requirements must be requested in writing prior to bid opening. Written approval for any deviation, must be submitted with your bid submission. Failure to comply with this instruction will result in bid rejection.

11. A bid bond will be required with bid submission in the amount of 5% of the total bid, unless otherwise stated in the bid specifications. All sureties must be in original format (no copies). When submitting a bid online, vendors must submit an electronic bid bond through the respective online clearinghouse bond management system(s) as indicated in the electronic bid solicitation on Central Auction House. No scanned paper copies of any bid bond will be accepted as part of the electronic bid submission.

12. This is an as needed basis contract. JEFFERSON PARISH makes no representations on warranties with regard to minimum guaranteed quantities unless otherwise stated in the bid specifications.

13. Freight charges should be included in total cost when quoting. If not quoted FOB DELIVERED, freight must be quoted as a separate item. Bid may be rejected if not quoted FOB DELIVERED or if freight charges are not indicated on bid form.

14. PUBLIC WORKS BIDS - Completed, Signed and Properly Notarized Affidavits Required; This applies to all solicitations for construction, alteration or demolition of public buildings or projects, in conformity with the provisions contained in LSA-RS 38:2212.9, LSA-RS 38:2212.10, LSA-RS 38:2224, and Sec 2-923.1 of the Jefferson Parish Code of Ordinances. For bidding purposes, all bidders must submit with bid submission COMPLETED, SIGNED and PROPERLY NOTARIZED Affidavits, including: Non-Conviction Affidavit, Non-Collusion Affidavit, Campaign Contribution Affidavit, Debt Disclosures Affidavit and E-Verify Affidavit. For the convenience of vendors, all affidavits have been combined into one form entitled PUBLIC WORKS BID AFFIDAVIT. This affidavit must be submitted in its original format, and without material alteration, in order to be compliant and for the bid to be considered responsive. A scanned copy of the completed, signed and properly notarized affidavit may be submitted with the bid, however, the successful bidder must submit the original affidavit in its original format and without material alteration upon contract execution. Failure to comply will result in the bid submission being rejected as non-responsive. The Parish reserves the right to award bid to the next lowest responsive and responsible bidder in this event.

15. NON PUBLIC WORK BIDS - Completed, Signed and Properly Notarized Affidavits Required in conformity with the provisions contained in LSA – RS 38:2224 and Sec 2-923.1 of the Jefferson Parish Code of Ordinances. For bidding purposes, all bidders must submit with bid submission COMPLETED, SIGNED and PROPERLY NOTARIZED Affidavits, including: Non-Collusion Affidavit, Debt Disclosures Affidavit and Campaign Contribution Affidavit. For the convenience of vendors, all affidavits have been combined into one form entitled NON PUBLIC WORKS BID AFFIDAVIT. This affidavit must be submitted in its original format, and without material alteration, in order to be compliant and for the bid to be considered responsive. A scanned copy of the completed, signed and properly notarized affidavit may be submitted with the bid, however, the successful bidder must submit the original affidavit in its original format and without material alteration upon contract execution. Failure to comply will result in the bid submission being rejected as non-responsive. The Parish reserves the right to award bid to the next lowest responsive and responsible bidder in this event.

16. The ensuing contract for this bid solicitation may be eligible for FEMA reimbursement and/or Federal funding/reimbursement. As such, the referenced appendix will be applicable accordingly and shall be considered a part of the bid documents. All applicable certifications must be duly completed, signed and submitted as per the appendix instructions. Failure to submit applicable certifications as per the appendix instructions will result in bid rejection.

17. For this project, the Contractor shall not pay any state or local sales or use taxes on materials and equipment which are affixed and made part of the immovable property of the project or which is permanently incorporated in the project (hereinafter referred to as "applicable materials and equipment"). All purchases of applicable materials or equipment shall be made by the contractor on behalf of and as the agent of Jefferson Parish (Owner), a political subdivision of the State of Louisiana. No state and local sales and use taxes are owed on applicable materials and equipment under the provisions of Act 1029 of the 1991 Regular Session - Louisiana Revised Statute 47:301(8)(c). Owner will furnish to contractor a certificate form which certifies that Owner is not required to pay such state or local sales and use taxes, and contractor shall furnish a copy of such certificate to all vendors or suppliers of the applicable materials and equipment, and report to Owner the amount of taxes not incurred.

DATE: 5/01/2025

INVITATION TO BID
THIS IS NOT AN ORDER

BID NO.: 50-00147627

JEFFERSON PARISH

PURCHASING DEPARTMENT
P.O. BOX 9
GRETNA, LA. 70054-0009
504-364-2678

VENDOR: C.C. LYNCH AND ASSOCIATES, INC.

PURCHASING SPECIALIST: TBANKS

As per LSA-RS 47:301 et seq., all governmental bodies are excluded from payment of sales taxes to any Louisiana taxing body. Quotations shall be based on F.O.B. Agency warehouse or jobsite, anywhere within the Parish as designated by the Purchasing Department.

JEFFERSON PARISH reserves the right to cancel all or any part of an order if not shipped promptly. No charges will be allowed for parking or cartage unless specified in quotation. The order must not be filled at a higher price than quoted. JEFFERSON PARISH reserves the right to cancel at any time and for any reason by issuing a THIRTY (30) day written notice to the contractor.

JEFFERSON PARISH is expecting all products to be new and all work to be done in workman-like manner, according to standard practices. Any deviations or alteration from the specifications must be indicated on the bid form for each item and upon request, product data for same must be submitted by the time specified by the Purchasing Department.

DELIVERY: FOB JEFFERSON PARISH

INDICATE DELIVERY DATE ON EQUIPMENT AND SUPPLIES: 35 Days ARO

INDICATE STARTING TIME (IN DAYS) FOR CONSTRUCTION WORK: _____

INDICATE COMPLETION TIME (IN DAYS) FOR CONSTRUCTION WORK: _____

In the event that addenda are issued with this bid, bidders MUST acknowledge all addenda on the bid form. Bidder must acknowledge receipt of an addendum on the bid form by placing the addendum number as indicated. Failure to acknowledge any addendum on the bid form will result in bid rejection.

Acknowledge Receipt of Addenda: NUMBER: _____

NUMBER: _____

NUMBER: _____

NUMBER: _____

LOUISIANA CONTRACTOR'S LICENSE NO.: (if applicable) 40936

***** ALL BIDDERS MUST COMPLETE SECTION BELOW *****

FIRM NAME: C.C. LYNCH AND ASSOCIATES, INC.

SIGNATURE: (Must be signed here) John W Campbell III

TITLE: President

PRINT OR TYPE NAME: John W. Campbell III

ADDRESS: 300 Davis Avenue

CITY, STATE: Pass Christian, MS

ZIP: 39571

TELEPHONE: (228) 452-4612

FAX: (228) 452-2563

EMAIL ADDRESS:c trey@cclynch.com

TOTAL PRICE OF ALL BID ITEMS: $ 39,320.00

INVITATION TO BID FROM JEFFERSON PARISH - continued

BID NO.: 50-00147627

SEALED BID

ITEM NUMBER	QUANTITY	U/M	DESCRIPTION OF ARTICLES	UNIT PRICE QUOTED	TOTALS
			PURCHASE OF SAMPLING EQUIPMENT FOR JEFFERSON PARISH DEPARTMENT OF ENVIRONMENTAL AFFAIRS STORMWATER DIVISION		
1	2.00	EA	**0001 Water Quality Monitoring Equipment: Isco #686710071** **6712C Compact portable sampler. Includes controller, top cover, center section,base, distributor arm,and two pumptubes. Does not include bottle configuration kit.**	$ 6,031.00	$ 12,062.00
2	2.00	EA	**0002 Isco #686700025 1-bottle configuration.** **Standard Compact Base Portable sample only. Includes 2.5-gallon (10-Liter)round polyethylene bottle, cap,tube guide and two discharge tubes.** ***Line items 0002-0013 are the parts needed to configure the sampler units in line item 0001.**	$ 353.00	$ 706.00
3	2.00	EA	**0003 Isco #682700005 1 glass 9400ml bottle with lid**	$ 151.00	$ 302.00
4	2.00	EA	**0004 Isco #681680058 3/8 inch vinyl suction line-100ft.** **Includes tubing coupler.**	$ 145.00	$ 290.00
5	2.00	EA	**0005 Isco #692903138 3/8 inch stainless steel strainer, low** **flow.**	$ 103.00	$ 206.00
6	2.00	EA	**0006 Isco #609004031 750 Module for Low Profile Area** **Velocity Sensor. Area velocity sensor and sensor mounting hardware sold separately.**	$ 4,381.00	$ 8,762.00
7	2.00	EA	**0007 Isco #603254021 Low Profile Area Velocity Sensor with** **25 ft. cable, measures 10 ft. level range.**	$ 2,323.00	$ 4.646.00
8	2.00	EA	**0008 Isco #605304992 Area Velocity Sensor Extension Cable**	$ 606.00	$ 1,212.00

INVITATION TO BID FROM JEFFERSON PARISH - continued

BID NO.: 50-00147627

SEALED BID

ITEM NUMBER	QUANTITY	U/M	DESCRIPTION OF ARTICLES	UNIT PRICE QUOTED	TOTALS
			for Models 4150/4250 or 6712 with 750 module, length is 50 ft.		
9	2.00	EA	0009 Isco #603204029 Sensor carrier for attaching low profile area velocity sensor to ISCO mounting rings or sensor mounting plate.	$ 89.00	$ 178.00
10	2.00	EA	0010 Isco #603004196 Sensor mounting plate. Flat plate for mounting up to 3 sensors in rectangular, trapezoidal, or irregular channels. Includes plastic ties to fasten the sensor cable. Requires carriers for low profile area velocity sensors, submerged probes, pH probes, temperature probes, bubble lines, D.O. sensors, and pH sensors. Not recommended for ADFM/accQpulse sensors.	$ 163.00	$ 326.00
11	2.00	EA	0011 Isco #603284001 674 Rain Gauge. Tips every 0.01 inch of rainfall. Tipping bucket rain gauge with 50 ft. cable and connector for use with a 4100 Series Flow Logger, 4200 Series flowmeter, or 6700 Series/ Avalanche Sampler.	$ 1,207.00	$ 2,414.00
12	2.00	EA	0012 Isco #601394023 Connect cable for external 12 VDC source Six ft. cable for powering portable ISCO sampler or flowmeters from an external 12 VDC source, such as an automotive or deep-cycle marine battery. Terminates in heavy-duty battery clips. For use with ISCO GLS, 3700, 6100, 6700 Series portable samplers; 4200 Series flowmeters, and 150 Portable Peristaltic Pump.	$ 175.00	$ 350.00
13	2.00	EA	0013 AMS #VLS-90W-PMK Solar Panel Power Kit, Including 90 watt Solar Panel (VLS-90T), Charge Controller (SS-6L-12V), Output Cable (#10-2X20'OP), Mounting Bracket (HPM50U) Regulator Battery Cable (#10-1X36"R-B)	$ 938.00	$ 1,876.00
14	2.00	EA	0014 Field Service #Start.Up 2500 Equipment Start-up and Installation.	$ 2,500.00	$ 5,000.00

INVITATION TO BID FROM JEFFERSON PARISH - continued

BID NO.: 50-00147627

SEALED BID

ITEM NUMBER	QUANTITY	U/M	DESCRIPTION OF ARTICLES	UNIT PRICE QUOTED	TOTALS
			Including Instrument Programming, Calibration, Operator Training and Certificate of Proper Operation.		
15	1.00	EA	0015 Transportation Services Shipping Charges	$ 990.00	$ 990.00