



CITY OF AUSTIN, TEXAS
Purchasing Office
REQUEST FOR PROPOSAL (RFP)
OFFER SHEET

SOLICITATION NO: EAD0128

DATE ISSUED: 6/20/16

REQUISITION NO.: 16032400342

COMMODITY CODE: 96169

FOR CONTRACTUAL AND TECHNICAL ISSUES CONTACT THE FOLLOWING AUTHORIZED CONTACT PERSON(S):

Erin D'Vincent
 Senior Buyer Specialist
Phone: (512) 974-3070
E-Mail: erin.dvincent@austintexas.gov

Danielle Lord
 Corporate Purchasing Manager
Phone: (512) 974-2298
E-Mail: danielle.lord@austintexas.gov

COMMODITY/SERVICE DESCRIPTION: Wastewater Flow Monitoring Services

PRE-PROPOSAL CONFERENCE TIME AND DATE: 6/29/16, 10 AM – 11 AM. Call in: 512-974-9300 Code: 810786

LOCATION: MUNICIPAL BUILDING, 124 W 8th STREET
 RM 308, AUSTIN, TEXAS 78701

PROPOSAL DUE PRIOR TO: 7/12/16, 2:00 PM Central

PROPOSAL CLOSING TIME AND DATE: 7/12/16, 2:00 PM Central

LOCATION: MUNICIPAL BUILDING, 124 W 8th STREET
 RM 308, AUSTIN, TEXAS 78701

LIVE SOLICITATION CLOSING ONLINE: For RFP's, only the names of respondents will be read aloud

For information on how to attend the Solicitation Closing online, please select this link:

<http://www.austintexas.gov/department/bid-opening-webinars>

When submitting a sealed Offer and/or Compliance Plan, use the proper address for the type of service desired, as shown below:

Address for US Mail (Only)	Address for Fedex, UPS, Hand Delivery or Courier Service
City of Austin	City of Austin, Municipal Building
Purchasing Office-Response Enclosed for Solicitation # EAD0128	Purchasing Office-Response Enclosed for Solicitation # EAD0128
P.O. Box 1088	124 W 8 th Street, Rm 308
Austin, Texas 78767-8845	Austin, Texas 78701
	Reception Phone: (512) 974-2500

NOTE: Offers must be received and time stamped in the Purchasing Office prior to the Due Date and Time. It is the responsibility of the Offeror to ensure that their Offer arrives at the receptionist's desk in the Purchasing Office prior to the time and date indicated. Arrival at the City's mailroom, mail terminal, or post office box will not constitute the Offer arriving on time. See Section 0200 for additional solicitation instructions.

All Offers (including Compliance Plans) that are not submitted in a sealed envelope or container will not be considered.

SUBMIT 1 ORIGINAL AND 6 ELECTRONIC COPIES OF YOUR RESPONSE IN PDF ON A FLASH DRIVE

*****SIGNATURE FOR SUBMITTAL REQUIRED ON PAGE 3 OF THIS DOCUMENT*****

This solicitation is comprised of the following required sections. Please ensure to carefully read each section including those incorporated by reference. By signing this document, you are agreeing to all the items contained herein and will be bound to all terms.

SECTION NO.	TITLE	PAGES
0100	STANDARD PURCHASE DEFINITIONS	*
0200	STANDARD SOLICITATION INSTRUCTIONS	*
0300	STANDARD PURCHASE TERMS AND CONDITIONS	*
0400	SUPPLEMENTAL PURCHASE PROVISIONS	9
0500	SCOPE OF WORK	15
0510	EXCEPTIONS	1
0600	PROPOSAL PREPARATION INSTRUCTIONS & EVALUATION FACTORS	5
0601	PRICE PROPOSAL	4
0605	LOCAL BUSINESS PRESENCE IDENTIFICATION FORM – Complete and return	2
0800	NON-DISCRIMINATION CERTIFICATION	*
0805	NON-SUSPENSION OR DEBARMENT CERTIFICATION	*
0810	NON-COLLUSION, NON-CONFLICT OF INTEREST, AND ANTI-LOBBYING CERTIFICATION	*
0815	LIVING WAGES CONTRACTOR CERTIFICATION–Complete and return	1
0835	NONRESIDENT BIDDER PROVISIONS – Complete and return	1
0900	MBE/WBE PROCUREMENT PROGRAM PACKAGE NO GOALS FORM – Complete & return	2
Attachment A	Meter Locations	6
Attachment B	Charts & Graphs	15
Attachment C	Confined Space Entry Policy	4
Attachment D	Contract Flow Meter Map	1

*** Documents are hereby incorporated into this Solicitation by reference, with the same force and effect as if they were incorporated in full text. The full text versions of the * Sections are available on the Internet at the following online address:**

http://www.austintexas.gov/financeonline/vendor_connection/index.cfm#STANDARDBIDDOCUMENTS

If you do not have access to the Internet, you may obtain a copy of these Sections from the City of Austin Purchasing Office located in the Municipal Building, 124 West 8th Street, Room #308 Austin, Texas 78701; phone (512) 974-2500. Please have the Solicitation number available so that the staff can select the proper documents. These documents can be mailed, expressed mailed, or faxed to you.

INTERESTED PARTIES DISCLOSURE

In addition, Section 2252.908 of the Texas Government Code requires the successful offeror to complete a Form 1295 “Certificate of Interested Parties” that is signed and notarized for a contract award requiring council authorization. The “Certificate of Interested Parties” form must be completed on the Texas Ethics Commission website, printed, signed and submitted to the City by the authorized agent of the Business Entity with acknowledgment that disclosure is made under oath and under penalty of perjury prior to final contract execution.

https://www.ethics.state.tx.us/whatsnew/elf_info_form1295.htm

The undersigned, by his/her signature, represents that he/she is submitting a binding offer and is authorized to bind the respondent to fully comply with the solicitation document contained herein. The Respondent, by submitting and signing below, acknowledges that he/she has received and read the entire document packet sections defined above including all documents incorporated by reference, and agrees to be bound by the terms therein.

Company Name: _____

Company Address: _____

City, State, Zip: _____

Federal Tax ID No. _____

Printed Name of Officer or Authorized Representative: _____

Title: _____

Signature of Officer or Authorized Representative: _____

Date: _____

Email Address: _____

Phone Number: _____

*** Proposal response must be submitted with this Offer sheet to be considered for award**

Section 0605: Local Business Presence Identification

A firm (Offeror or Subcontractor) is considered to have a Local Business Presence if the firm is headquartered in the Austin Corporate City Limits, or has a branch office located in the Austin Corporate City Limits in operation for the last five (5) years, currently employs residents of the City of Austin, Texas, and will use employees that reside in the City of Austin, Texas, to support this Contract. The City defines headquarters as the administrative center where most of the important functions and full responsibility for managing and coordinating the business activities of the firm are located. The City defines branch office as a smaller, remotely located office that is separate from a firm’s headquarters that offers the services requested and required under this solicitation.

OFFEROR MUST SUBMIT THE FOLLOWING INFORMATION FOR EACH LOCAL BUSINESS (INCLUDING THE OFFEROR, IF APPLICABLE) TO BE CONSIDERED FOR LOCAL PRESENCE.

NOTE: ALL FIRMS MUST BE IDENTIFIED ON THE MBE/WBE COMPLIANCE PLAN OR NO GOALS UTILIZATION PLAN (REFERENCE SECTION 0900).

USE ADDITIONAL PAGES AS NECESSARY

OFFEROR:

Name of Local Firm		
Physical Address		
Is your headquarters located in the Corporate City Limits? (circle one)	Yes	No
or		
Has your branch office been located in the Corporate City Limits for the last 5 years?		
Will your business be providing additional economic development opportunities created by the contract award? (e.g., hiring, or employing residents of the City of Austin or increasing tax revenue?)	Yes	No

SUBCONTRACTOR(S):

Name of Local Firm		
Physical Address		
Is your headquarters located in the Corporate City Limits? (circle one)	Yes	No
or		
Has your branch office been located in the Corporate City Limits for the last 5 years	Yes	No

Will your business be providing additional economic development opportunities created by the contract award? (e.g., hiring, or employing residents of the City of Austin or increasing tax revenue?)	Yes	No

SUBCONTRACTOR(S):

Name of Local Firm		
Physical Address		
Is your headquarters located in the Corporate City Limits? (circle one)	Yes	No
or		
Has your branch office been located in the Corporate City Limits for the last 5 years	Yes	No
Will your business be providing additional economic development opportunities created by the contract award? (e.g., hiring, or employing residents of the City of Austin or increasing tax revenue?)	Yes	No

Section 0815: Living Wages Contractor Certification

Company Name _____

Pursuant to the Living Wages provision (reference Section 0400, Supplemental Purchase Provisions) the Contractor is required to pay to all employees directly assigned to this City contract a minimum Living Wage equal to or greater than \$13.03 per hour.

The below listed employees of the Contractor who are directly assigned to this contract are compensated at wage rates equal to or greater than \$13.03 per hour.

Employee Name	Employee Job Title

USE ADDITIONAL PAGES AS NECESSARY

- (1) All future employees assigned to this Contract will be paid a minimum Living Wage equal to or greater than \$13.03 per hour.
- (2) Our firm will not retaliate against any employee claiming non-compliance with the Living Wage provision.

A Contractor who violates this Living Wage provision shall pay each affected employee the amount of the deficiency for each day the violation continues. Willful or repeated violations of the provision or fraudulent statements made on this certification may result in termination of this Contract for Cause and subject the firm to possible suspension or debarment, or result in legal action.

Section 0835: Non-Resident Bidder Provisions

Company Name _____

- A. Bidder must answer the following questions in accordance with Vernon's Texas Statutes and Codes Annotated Government Code 2252.002, as amended:

Is the Bidder that is making and submitting this Bid a "Resident Bidder" or a "non-resident Bidder"?

Answer: _____

- (1) Texas Resident Bidder- A Bidder whose principle place of business is in Texas and includes a Contractor whose ultimate parent company or majority owner has its principal place of business in Texas.
- (2) Nonresident Bidder- A Bidder who is not a Texas Resident Bidder.

- B. If the Bidder id a "Nonresident Bidder" does the state, in which the Nonresident Bidder's principal place of business is located, have a law requiring a Nonresident Bidder of that state to bid a certain amount or percentage under the Bid of a Resident Bidder of that state in order for the nonresident Bidder of that state to be awarded a Contract on such bid in said state?

Answer: _____ Which State: _____

- C. If the answer to Question B is "yes", then what amount or percentage must a Texas Resident Bidder bid under the bid price of a Resident Bidder of that state in order to be awarded a Contract on such bid in said state?

Answer: _____

Section 0900: Minority- and Women-Owned Business Enterprise (MBE/WBE) Procurement Program No Goals Form

SOLICITATION NUMBER:	EAD0128
PROJECT NAME:	Wastewater Flow Monitoring Services

The City of Austin has determined that no goals are appropriate for this project. Even though goals were not assigned for this solicitation, the Bidder/Proposer is required to comply with the City's MBE/WBE Procurement Program, if areas of subcontracting are identified.

If any service is needed to perform the Contract and the Bidder/Proposer does not perform the service with its own workforce or if supplies or materials are required and the Bidder/Proposer does not have the supplies or materials in its inventory, the Bidder/Proposer shall contact the Small and Minority Business Resources Department (SMBR) at (512) 974-7600 to obtain a list of MBE and WBE firms available to perform the service or provide the supplies or materials. The Bidder/Proposer must also make a Good Faith Effort to use available MBE and WBE firms. Good Faith Efforts include but are not limited to contacting the listed MBE and WBE firms to solicit their interest in performing on the Contract, using MBE and WBE firms that have shown an interest, meet qualifications, and are competitive in the market; and documenting the results of the contacts.

Will subcontractors or sub-consultants or suppliers be used to perform portions of this Contract?

No _____ **If no, please sign the No Goals Form and submit it with your Bid/Proposal in a sealed envelope**

Yes _____ **If yes, please contact SMBR to obtain further instructions and an availability list and perform Good Faith Efforts. Complete and submit the No Goals Form and the No Goals Utilization Plan with your Bid/Proposal in a sealed envelope.**

After Contract award, if your firm subcontracts any portion of the Contract, it is a requirement to complete Good Faith Efforts and the No Goals Utilization Plan, listing any subcontractor, sub-consultant, or supplier. Return the completed Plan to the Project Manager or the Contract Manager.

I understand that even though goals were not assigned, I must comply with the City's MBE/WBE Procurement Program if subcontracting areas are identified. I agree that this No Goals Form and No Goals Utilization Plan shall become a part of my Contract with the City of Austin.	

Company Name	

Name and Title of Authorized Representative (Print or Type)	

Signature	Date

Minority- and Women-Owned Business Enterprise (MBE/WBE) Procurement Program No Goals Utilization Plan
 (Please duplicate as needed)

SOLICITATION NUMBER:	EAD0128
PROJECT NAME:	Wastewater Flow Monitoring Services

PRIME CONTRACTOR / CONSULTANT COMPANY INFORMATION

Name of Contractor/Consultant			
Address			
City, State Zip			
Phone Number		Fax Number	
Name of Contact Person			
Is Company City certified?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	MBE <input type="checkbox"/> WBE <input type="checkbox"/> MBE/WBE Joint Venture <input type="checkbox"/>

I certify that the information included in this No Goals Utilization Plan is true and complete to the best of my knowledge and belief. I further understand and agree that the information in this document shall become part of my Contract with the City of Austin.

Name and Title of Authorized Representative (Print or Type)

Signature _____
Date

Provide a list of all proposed subcontractors / sub-consultants / suppliers that will be used in the performance of this Contract. **Attach Good Faith Effort documentation if non MBE/WBE firms will be used.**

Sub-Contractor / Sub-Consultant			
City of Austin Certified	MBE <input type="checkbox"/>	WBE <input type="checkbox"/>	Ethics / Gender Code: <input type="checkbox"/> Non-Certified
Vendor ID Code			
Contact Person		Phone Number	
Amount of Subcontract	\$		
List commodity codes & description of services			

Sub-Contractor / Sub-Consultant			
City of Austin Certified	MBE <input type="checkbox"/>	WBE <input type="checkbox"/>	Ethics / Gender Code: <input type="checkbox"/> Non-Certified
Vendor ID Code			
Contact Person		Phone Number	
Amount of Subcontract	\$		
List commodity codes & description of services			

FOR SMALL AND MINORITY BUSINESS RESOURCES DEPARTMENT USE ONLY:			
Having reviewed this plan, I acknowledge that the proposer (HAS) or (HAS NOT) complied with City Code Chapter 2-9A/B/C/D, as amended.			
Reviewing Counselor _____	Date _____	Director/Deputy Director _____	Date _____

**CITY OF AUSTIN
PURCHASING OFFICE
SUPPLEMENTAL PURCHASE PROVISIONS**

The following Supplemental Purchasing Provisions apply to this solicitation:

1. **EXPLANATIONS OR CLARIFICATIONS:** (reference paragraph 5 in Section 0200)

All requests for explanations or clarifications must be submitted in writing to the Purchasing Office by email to erin.dvincent@austintexas.gov no later than close of business on 6/30/16.

2. **INSURANCE:** Insurance is required for this solicitation.

A. **General Requirements:** See Section 0300, Standard Purchase Terms and Conditions, paragraph 32, entitled Insurance, for general insurance requirements.

- i. The Contractor shall provide a Certificate of Insurance as verification of coverages required below to the City at the below address prior to contract execution and within 14 calendar days after written request from the City. Failure to provide the required Certificate of Insurance may subject the Offer to disqualification from consideration for award
- ii. The Contractor shall not commence work until the required insurance is obtained and until such insurance has been reviewed by the City. Approval of insurance by the City shall not relieve or decrease the liability of the Contractor hereunder and shall not be construed to be a limitation of liability on the part of the Contractor.
- iii. The Contractor must also forward a Certificate of Insurance to the City whenever a previously identified policy period has expired, or an extension option or holdover period is exercised, as verification of continuing coverage.
- iv. The Certificate of Insurance, and updates, shall be mailed to the following address:

City of Austin Purchasing Office
P. O. Box 1088
Austin, Texas 78767

B. **Specific Coverage Requirements:** The Contractor shall at a minimum carry insurance in the types and amounts indicated below for the duration of the Contract, including extension options and hold over periods, and during any warranty period. These insurance coverages are required minimums and are not intended to limit the responsibility or liability of the Contractor.

- i. **Worker's Compensation and Employers' Liability Insurance:** Coverage shall be consistent with statutory benefits outlined in the Texas Worker's Compensation Act (Section 401). The minimum policy limits for Employer's Liability are \$100,000 bodily injury each accident, \$500,000 bodily injury by disease policy limit and \$100,000 bodily injury by disease each employee.
 - (1) The Contractor's policy shall apply to the State of Texas and include these endorsements in favor of the City of Austin:
 - (a) Waiver of Subrogation, Form WC420304, or equivalent coverage
 - (b) Thirty (30) days Notice of Cancellation, Form WC420601, or equivalent coverage
- ii. **Commercial General Liability Insurance:** The minimum bodily injury and property damage per occurrence are \$500,000 for coverages A (Bodily Injury and Property Damage) and B (Personal and Advertising Injury).
 - (1) The policy shall contain the following provisions:
 - (a) Contractual liability coverage for liability assumed under the Contract and all other Contracts related to the project.
 - (b) Contractor/Subcontracted Work.
 - (c) Products/Completed Operations Liability for the duration of the warranty period.
 - (d) If the project involves digging or drilling provisions must be included that provide Explosion, Collapse, and/or Underground Coverage.
 - (2) The policy shall also include these endorsements in favor of the City of Austin:
 - (a) Waiver of Subrogation, Endorsement CG 2404, or equivalent coverage

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- (b) Thirty (30) days Notice of Cancellation, Endorsement CG 0205, or equivalent coverage
 - (c) The City of Austin listed as an additional insured, Endorsement CG 2010, or equivalent coverage
 - iii. **Business Automobile Liability Insurance:** The Contractor shall provide coverage for all owned, non-owned and hired vehicles with a minimum combined single limit of \$500,000 per occurrence for bodily injury and property damage. Alternate acceptable limits are \$250,000 bodily injury per person, \$500,000 bodily injury per occurrence and at least \$100,000 property damage liability per accident.
 - (1) The policy shall include these endorsements in favor of the City of Austin:
 - (a) Waiver of Subrogation, Endorsement CA0444, or equivalent coverage
 - (b) Thirty (30) days Notice of Cancellation, Endorsement CA0244, or equivalent coverage
 - (c) The City of Austin listed as an additional insured, Endorsement CA2048, or equivalent coverage.
 - C. **Endorsements:** The specific insurance coverage endorsements specified above, or their equivalents must be provided. In the event that endorsements, which are the equivalent of the required coverage, are proposed to be substituted for the required coverage, copies of the equivalent endorsements must be provided for the City's review and approval.
3. **TERM OF CONTRACT:**
- A. The Contract shall be in effect for an initial term of 48 months and may be extended thereafter for up to 4 additional 12 month periods, subject to the approval of the Contractor and the City Purchasing Officer or his designee.
 - B. Upon expiration of the initial term or period of extension, the Contractor agrees to hold over under the terms and conditions of this agreement for such a period of time as is reasonably necessary to solicit and/or complete the project (not to exceed 120 days unless mutually agreed on in writing).
 - C. Upon written notice to the Contractor from the City's Purchasing Officer or his designee and acceptance of the Contractor, the term of this contract shall be extended on the same terms and conditions for an additional period as indicated in paragraph A above.
 - D. Prices are firm and fixed for the first 12 months. Thereafter, price changes are subject to the Economic Price Adjustment provisions of this Contract.
4. **QUANTITIES:** The quantities listed are annual estimates for the Contract. The City reserves the right to purchase more or less of these quantities as may be required during the Contract term. Quantities will be as needed and specified by the City for each order. Unless specified in the solicitation, there are no minimum order quantities.
5. **CONTRACT AWARD:** This contract will be awarded in an annual amount not to exceed \$1,200,000. This is a requirements based contract and work will be requested as required and specified by the City for each project. The not to exceed annual amount is not a guarantee of any work under the contract.
6. **INVOICES and PAYMENT:** (reference paragraphs 12 and 13 in Section 0300)
- A. Invoices shall contain a unique invoice number and the information required in Section 0300, paragraph 12, entitled "Invoices." Invoices received without all required information cannot be processed and will be returned to the vendor.
 - B. Contractor shall submit records as required in Section 0500 Section 9.3, including level and velocity verification with each monthly payment request.

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Invoices shall be mailed to the below address:

	City of Austin
Department	Austin Water – Field Operations Division
Attn:	Accounts Payable
Address	2600 Webberville Rd Center
City, State Zip Code	Austin, TX 78702

- C. The Contractor agrees to accept payment by either credit card, check or Electronic Funds Transfer (EFT) for all goods and/or services provided under the Contract. The Contractor shall factor the cost of processing credit card payments into the Offer. There shall be no additional charges, surcharges, or penalties to the City for payments made by credit card.

7. MATERIALS SPECIFICATIONS/DESCRIPTIVE LITERATURE:

- A. If a solicitation refers to a Qualified Products List (QPL), Standard Products List (SPL) or a manufacturer’s name and product, any Offeror offering products not referenced in the solicitation must submit as part of their Offer materials specifications/descriptive literature for the non-referenced product. Materials specifications/descriptive literature must be identified to show the item(s) in the Offer to which it applies.
- B. Materials specifications/descriptive literature are defined as product manufacturer’s catalog pages, “cut sheets” applicable tests results, or related detailed documents that specify material construction, performance parameters, and any industrial standards that are applicable such as ANSI, ASTM, ASME, SAE, NFPA, NBS, EIA, ESL, and NSA. The submitted materials specifications/descriptive literature must include the manufacturer’s name and product number of the product being offered.
- C. The failure of the materials specifications/descriptive literature to show that the product offered conforms to the requirements of the Solicitation shall result in rejection of the Offer.
- D. Failure to submit the materials specifications/descriptive literature as part of the Offer may subject the Offer to disqualification from consideration for award.

8. SAMPLES – QUALIFIED PRODUCTS LIST (QPL) and/or STANDARD PRODUCTS LIST (SPL):

- A. If requested by the City, Offeror shall submit a sample of all proposed “equal” non-QPL and/or non-SPL products included in the Offer. The City reserves the right to test any “equal” non-QPL and/or non-SPL product that is offered prior to determination of award. If the amount of time required for testing exceeds ten (10) calendar days from the date of receipt of the sample, the City may award to Offerors with pretested products. The product will still be tested and if it meets specifications, will be added to the QPL and or SPL for future Solicitations.
- B. Send samples to the City at the following address:

City of Austin	
Department	Austin Water – Field Operations Division
Address	2600 Webberville Rd Center
City, State Zip Code	Austin, TX 78702

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Attn:	Kevin Koeller
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- C. Products that are not pretested must be available within forty-eight (48) hours of request from City at no charge to the City for testing and evaluation.
- D. All products (except brand-name) provided to the City under this Solicitation will be evaluated or tested and must meet all requirements of the specification, regardless of whether or not all requirements are to be evaluated or tested.
- E. Samples will be provided at no cost to the City, will be retained by the City, and may be used in assuring compliance with materials specifications after award. Failure to supply samples when requested shall subject the Offer to disqualification from consideration for award.

9. HAZARDOUS MATERIALS:

- A. If this Solicitation involves hazardous materials, the Offeror shall furnish with the Offer Material Safety Data Sheets (MSDS), (OSHA Form 20), on all chemicals and hazardous materials specifying the generic and trade name of product, product specification, and full hazard information including receiving and storage hazards. Instructions, special equipment needed for handling, information on approved containers, and instructions for the disposal of the material are also required.
- B. Failure to submit the MSDS as part of the Offer may subject the Offer to disqualification from consideration for award.
- C. The MSDS, instructions and information required in paragraph "A" must be included with each shipment under the contract.

10. PUBLISHED PRICE LISTS:

- A. Offerors may quote using published price lists in the following ways:
 - i. Offerors may quote one discount from a Published Price List for all offered items to be covered in the Contract. The discount must remain firm during the life of the Contract.
 - ii. Offerors may quote their dealer cost, plus a percentage markup to be added to the cost. The percentage markup must remain firm during the life of the contract.
- B. Two (2) copies of the list upon which the discounts or markups are based shall be submitted with the Offer. All price lists identified in the Offer shall clearly include the Offeror's name and address, the solicitation number, prices, title of the discount and number, and the latest effective date of the price list. If the Offer is based on a discount or markup on a manufacturer's price list, the price list must also include the manufacturer's name, the manufacturer's latest effective date, and the manufacturer's price schedule. All price lists submitted become part of the Offer.
- C. The price list may be superseded or replaced during the Contract term only if price revisions are the result of the manufacturer's official price list revision. Written notification from the Contractor of price changes, along with two (2) copies of the revised list must be submitted to the Buyer in the Purchasing Office with the effective date of change to be at least 30 calendar days (30 unless a different period is inserted) after written notification. The City reserves the right to refuse any list revision.
- D. The discounts or markups on equipment rental, material, supplies, parts, and contract services shall be fixed throughout the term of the Contract, and are not subject to increase.
- E. Failure to submit written notification of price list revisions will result in the rejection of new prices being invoiced. The City will only pay invoices according to the last approved price list.

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11. LIVING WAGES:

- A. The minimum wage required for any Contractor employee directly assigned to this City Contract is \$13.03 per hour, unless Published Wage Rates are included in this solicitation. In addition, the City may stipulate higher wage rates in certain solicitations in order to assure quality and continuity of service.
- B. The City requires Contractors submitting Offers on this Contract to provide a certification (**see the Living Wages Contractor Certification included in the Solicitation**) with their Offer certifying that all employees directly assigned to this City Contract will be paid a minimum living wage equal to or greater than \$13.03 per hour. The certification shall include a list of all employees directly assigned to providing services under the resultant contract including their name and job title. The list shall be updated and provided to the City as necessary throughout the term of the Contract.
- C. The Contractor shall maintain throughout the term of the resultant contract basic employment and wage information for each employee as required by the Fair Labor Standards Act (FLSA).
- D. The Contractor shall provide to the Department's Contract Manager with the first invoice, individual Employee Certifications for all employees directly assigned to the contract. The City reserves the right to request individual Employee Certifications at any time during the contract term. Employee Certifications shall be signed by each employee directly assigned to the contract. The Employee Certification form is available on-line at https://www.austintexas.gov/financeonline/vendor_connection/index.cfm.
- E. Contractor shall submit employee certifications annually on the anniversary date of contract award with the respective invoice to verify that employees are paid the Living Wage throughout the term of the contract. The Employee Certification Forms shall be submitted for employees added to the contract and/or to report any employee changes as they occur.
- F. The Department's Contract Manager will periodically review the employee data submitted by the Contractor to verify compliance with this Living Wage provision. The City retains the right to review employee records required in paragraph C above to verify compliance with this provision.

12. NON-COLLUSION, NON-CONFLICT OF INTEREST, AND ANTI-LOBBYING:

- A. On November 10, 2011, the Austin City Council adopted Ordinance No. 20111110-052 amending Chapter 2.7, Article 6 of the City Code relating to Anti-Lobbying and Procurement. The policy defined in this Code applies to Solicitations for goods and/or services requiring City Council approval under City Charter Article VII, Section 15 (Purchase Procedures). During the No-Contact Period, Offerors or potential Offerors are prohibited from making a representation to anyone other than the Authorized Contact Person in the Solicitation as the contact for questions and comments regarding the Solicitation.
- B. If during the No-Contact Period an Offeror makes a representation to anyone other than the Authorized Contact Person for the Solicitation, the Offeror's Offer is disqualified from further consideration except as permitted in the Ordinance.
- C. If an Offeror has been disqualified under this article more than two times in a sixty (60) month period, the Purchasing Officer shall debar the Offeror from doing business with the City for a period not to exceed three (3) years, provided the Offeror is given written notice and a hearing in advance of the debarment.
- D. The City requires Offerors submitting Offers on this Solicitation to certify that the Offeror has not in any way directly or indirectly made representations to anyone other than the Authorized Contact Person during the No-Contact Period as defined in the Ordinance. The text of the City Ordinance is posted on the Internet at: <http://www.ci.austin.tx.us/edims/document.cfm?id=161145>

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13. **WORKFORCE SECURITY CLEARANCE AND IDENTIFICATION (ID):**

- A. Contractors are required to obtain a certified criminal background report with fingerprinting (referred to as the “report”) for all persons performing on the contract, including all Contractor, Subcontractor, and Supplier personnel (for convenience referred to as “Contractor’s personnel”).
- B. The report may be obtained by reporting to one of the below governmental entities, submitting to fingerprinting and requesting the report [requestors may anticipate a two-week delay for State reports and up to a four to six week delay for receipt of a Federal report.].
 - i. Texas Department of Public Safety for any person currently residing in the State of Texas and having a valid Texas driver’s license or photo ID card;
 - ii. The appropriate governmental agency from either the U.S. state or foreign nation in which the person resides and holds either a valid U.S. state-issued or foreign national driver’s license or photo ID card; or
 - iii. A Federal Agency. A current Federal security clearance obtained from and certified by a Federal agency may be substituted.
- C. Contractor shall obtain the reports at least 30 days prior to any onsite work commencement. Contractor also shall attach to each report the project name, Contractor’s personnel name(s), current address(es), and a copy of the U.S. state-issued or foreign national driver’s license or photo ID card.
- D. Contractor shall provide the City a Certified Criminal Background Report affirming that Contractor has conducted required security screening of Contractor’s personnel to determine those appropriate for execution of the work and for presence on the City’s property. A list of all Contractor Personnel requiring access to the City’s site shall be attached to the affidavit.
- E. Upon receipt by the City of Contractor’s affidavit described in (D) above and the list of the Contractor’s personnel, the City will provide each of Contractor’s personnel a contractor ID badge that is required for access to City property that shall be worn at all times by Contractor’s personnel during the execution of the work.
- F. The City reserves the right to deny an ID badge to any Contractor personnel for reasonable cause, including failure of a Criminal History background check. The City will notify the Contractor of any such denial no more than twenty (20) days after receipt of the Contractor’s reports. Where denial of access by a particular person may cause the Contractor to be unable to perform any portion of the work of the contract, the Contractor shall so notify the City’s Contract Manager, in writing, within ten (10) calendar days of the receipt of notification of denial.
- G. Contractor’s personnel will be required to wear the ID badge at all times while on the work site. Failure to wear or produce the ID badge may be cause for removal of an individual from the work site, without regard to Contractor’s schedule. Lost ID badges shall be reported to the City’s Contract Manager. Contractor shall reimburse the City for all costs incurred in providing additional ID badges to Contractor Personnel.
- H. ID badges to enter and/or work on the City property may be revoked by the City at any time. ID badges must be returned to the City at the time of project completion and acceptance or upon removal of an individual from the work site.
- I. Contractor is not required to obtain reports for delivery personnel, including but not limited to FedEx, UPS, Roadway, or other materials delivery persons, however all delivery personnel must present company/employer-issued photo ID and be accompanied by at least one of Contractor’s personnel at all times while at the work site.

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J. The Contractor shall retain the reports and make them available for audit by the City during regular business hours (reference paragraph 17 in Section 0300, entitled Right to Audit).

14. ECONOMIC PRICE ADJUSTMENT:

A. **Price Adjustments:** Prices shown in this Contract shall remain firm for the first 12-months of the Contract. After that, in recognition of the potential for fluctuation of the Contractor's cost, a price adjustment (increase or decrease) may be requested by either the City or the Contractor on the anniversary date of the Contract or as may otherwise be specified herein. The percentage change between the contract price and the requested price shall not exceed the percentage change between the specified index in effect on the date the solicitation closed and the most recent, non-preliminary data at the time the price adjustment is requested. The requested price adjustment shall not exceed twenty-five percent (25%) for any single line item and in no event shall the total amount of the contract be automatically adjusted as a result of the change in one or more line items made pursuant to this provision. Prices for products or services unaffected by verifiable cost trends shall not be subject to adjustment.

B. **Effective Date:** Approved price adjustments will go into effect on the first day of the upcoming renewal period or anniversary date of contract award and remain in effect until contract expiration unless changed by subsequent amendment.

C. **Adjustments:** A request for price adjustment must be made in writing and submitted to the other Party prior to the yearly anniversary date of the Contract; adjustments may only be considered at that time unless otherwise specified herein. Requested adjustments must be solely for the purpose of accommodating changes in the Contractor's direct costs. Contractor shall provide an updated price listing once agreed to adjustment(s) have been approved by the parties.

D. **Indexes:** In most cases an index from the Bureau of Labor Standards (BLS) will be utilized; however, if there is more appropriate, industry recognized standard then that index may be selected.

i. The following definitions apply:

- (1) **Base Period:** Month and year of the original contracted price (the solicitation close date).
- (2) **Base Price:** Initial price quoted, proposed and/or contracted per unit of measure.
- (3) **Adjusted Price:** Base Price after it has been adjusted in accordance with the applicable index change and instructions provided.
- (4) **Change Factor:** The multiplier utilized to adjust the Base Price to the Adjusted Price.
- (5) **Weight %:** The percent of the Base Price subject to adjustment based on an index change.

ii. **Adjustment-Request Review:** Each adjustment-request received will be reviewed and compared to changes in the index(es) identified below. Where applicable:

- (1) Utilize final Compilation data instead of Preliminary data
- (2) If the referenced index is no longer available shift up to the next higher category index.

iii. **Index Identification:** Complete table as they may apply.

Weight % of Base Price: 50%	
Database Name: Employment Cost Index	
Series ID: CIU20200001200001	
<input checked="" type="checkbox"/> Not Seasonally Adjusted	<input type="checkbox"/> Seasonally Adjusted
Geographical Area: United States	
Description of Series ID: Professional and related occupations	

E. **Calculation:** Price adjustment will be calculated as follows:

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Single Index: Adjust the Base Price by the same factor calculated for the index change.

Index at time of calculation
Divided by index on solicitation close date
Equals Change Factor
Multiplied by the Base Rate
Equals the Adjusted Price

- F. If the requested adjustment is not supported by the referenced index, the City, at its sole discretion, may consider approving an adjustment on fully documented market increases.

- 15. **INTERLOCAL PURCHASING AGREEMENTS:** (applicable to competitively procured goods/services contracts).
 - A. The City has entered into Interlocal Purchasing Agreements with other governmental entities, pursuant to the Interlocal Cooperation Act, Chapter 791 of the Texas Government Code. The Contractor agrees to offer the same prices and terms and conditions to other eligible governmental agencies that have an interlocal agreement with the City.
 - B. The City does not accept any responsibility or liability for the purchases by other governmental agencies through an interlocal cooperative agreement.

- 16. **OWNERSHIP AND USE OF DELIVERABLES:** The City shall own all rights, titles, and interests throughout the world in and to the Deliverables.
 - A. **Patents:** As to any patentable subject matter contained in the Deliverables, the Contractor agrees to disclose such patentable subject matter to the City. Further, if requested by the City, the Contractor agrees to assign and, if necessary, cause each of its employees to assign the entire right, title, and interest to specific inventions under such patentable subject matter to the City and to execute, acknowledge, and deliver and, if necessary, cause each of its employees to execute, acknowledge, and deliver an assignment of letters patent, in a form to be reasonably approved by the City, to the City upon request by the City.
 - B. **Copyrights:** As to any Deliverable containing copyrighted subject matter, the Contractor agrees that upon their creation, such Deliverables shall be considered as work made-for-hire by the Contractor for the City and the City shall own all copyrights in and to such Deliverables, provided however, that nothing in this Paragraph 36 shall negate the City's sole or joint ownership of any such Deliverables arising by virtue of the City's sole or joint authorship of such Deliverables. Should by operation of law, such Deliverables not be considered work made-for-hire, the Contractor hereby assigns to the City (and agrees to cause each of its employees providing services to the City hereunder to execute, acknowledge, and deliver an assignment to the City of Austin) all worldwide right, title, and interest in and to such Deliverables. With respect to such work made-for-hire, the Contractor agrees to execute, acknowledge and deliver and cause each of its employees providing services to the City hereunder to execute, acknowledge, and deliver a work-for-hire agreement, in a form to be reasonably approved by the City, to the City upon delivery of such Deliverables to the City or at such other time as the City may request.
 - C. **Additional Assignments:** The Contractor further agrees to, and if applicable, cause each of its employees to execute, acknowledge, and deliver all applications, specifications, oaths, assignments, and all other instruments which the City might reasonably deem necessary in order to apply for and obtain copyright protection, mask work registration, trademark registration and/or protection, letters patent, or any similar rights in any and all countries and in order to assign and convey to the City, its

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successors, assigns, and nominees, the sole and exclusive right, title, and interest in and to the Deliverables, The Contractor's obligations to execute acknowledge, and deliver (or cause to be executed, acknowledged, and delivered) instruments or papers such as those described in this Paragraph 36 A., B., and C. shall continue after the termination of this Contract with respect to such Deliverables. In the event the City should not seek to obtain copyright protection, mask work registration or patent protection for any of the Deliverables, but should arise to keep the same secret, the Contractor agrees to treat the same as Confidential Information under the terms of Paragraph above.

17. **CONTRACT MANAGER:** The following person is designated as Contract Manager, and will act as the contact point between the City and the Contractor during the term of the Contract:

Kevin Koeller

512-972-2055

Kevin.Koeller@austinwater.com

*Note: The above listed Contract Manager is not the authorized Contact Person for purposes of the **NON-COLLUSION, NON-CONFLICT OF INTEREST, AND ANTI-LOBBYING Provision** of this Section; and therefore, contact with the Contract Manager is prohibited during the no contact period.

Scope of Work
Solicitation No. EAD0128
Description: Wastewater Flow Monitoring Services

1.0 Purpose

The City of Austin (City) seeks proposals from a qualified Contractor to perform wastewater flow monitoring services for the City of Austin, Austin Water ("City"). This service shall provide the flow data to the City for Inflow and Infiltration (I/I) investigations, temporary flow monitoring, and sewer system hydraulic model calibrations. Based upon the data collected under this contract, the City will calibrate the hydraulic model, evaluate the flow in the wastewater collection system and use the data as a warning tool for identifying potential sanitary sewer overflows. It is vital for the City to obtain accurate data from this contract under all weather conditions at all times, and especially during and after major wet rain weather events.

2.0 Applicable References

- 2.1 TMUTCD: Texas Department of Transportation Manual on Uniform Traffic Control Devices.
www.txdot.gov
- 2.2 National Fire Protection Agency (NFPA) 820
www.nfpa.org
- 2.3 National Electric Code (NFPA 70)
www.nfpa.org
- 2.4 29 CFR, Part 1926; United States Department of Labor Rules 29 CFR, Part 1926 Occupational Safety and Health Administration (OSHA)
www.osha.gov
- 2.5 29 CFR Part 1910.146, Permit Required Confined Spaces, United States Department of Labor, Occupational Safety and Health Administration (OSHA)
www.osha.gov
- 2.6 ANSI Z 117, Safety Requirements for Confined Spaces
www.asse.org
- 2.7 Austin Water Standard Operating Procedure C-4, Confined Space Entry. Refer to Policy C-4 Confined Space Entry attachment, or the most current version.

3.0 Contractor General Requirements

- 3.1 The Contractor shall provide clear and timely communication. The Contractor shall answer written correspondence from the City within three (3) working days and return phone messages within one (1) working day. This communication is essential for the City.
- 3.2 Hours of Work: The Contractor shall perform work in the field within standard working hours of 7:00 a.m. to 6:00 p.m. Monday through Friday (except City observed holidays). The Contractor shall request prior approval from the City for alternate work hours for the installation and removal of FMS in low flow conditions.
- 3.3 Scheduling: The Contractor shall propose and develop an overall schedule of work for each year of the contract. The Contractor shall provide to the City the general locations of the planned work. Changes to the schedule and locations during the contract as requested by the City shall be at no additional cost to the City. City will review and approve before any work may start.

- 3.4 Standards: The Contractor shall conduct themselves in a professional manner. At a minimum, the Contractor's personnel shall wear the approved uniform and nametag. The Contractor's field equipment shall be properly maintained, clean, and in working condition. The Contractor's vehicles shall be clearly marked with the Contractor's name, contact phone number, and marked with "Under Contract with the City of Austin" on both sides of the vehicle. The Contractor shall maintain written customer service procedures for field operations.
- 3.5 Security Access (other than City sites): One of the flow metering sites is located within the property of the Texas National Guard. The City will coordinate with the officials at Camp Mabry to allow access to the flow-metering site. It is the responsibility of the Contractor to comply with all the requirements to work in such an area.
- 3.6 No substitutions or deviations in equipment during the term of the contract may occur unless approved in writing by the City.

4.0 Contractor Material Requirements

- 4.1 The Contractor shall provide all flow meters, labor, materials, equipment, and accessories necessary to install and remove flow meters, maintain and calibrate installed flow meters, verify operation of the flow meters, power flow monitors, including powering data transmission, flow monitoring, collecting, and processing of the flow data, and automatically transferring the data on an hourly basis to an FTP (File Transfer Protocol) site provided by the City.
- 4.2 The Contractor shall provide and install a Flow Meter System (FMS) at each metering site listed in Tables 2, 3, 4, 5 and 6 that consists of flow meter logger, flow meter sensors, remote terminal unit (RTU), if required, modem, and associated power sources.
- 4.3 The Contractor shall provide flow meter devices capable of collecting data at five (5) minute intervals. The flow sensors or probes shall maintain recording accuracies during surcharge conditions. The Contractor shall furnish the necessary hardware devices to attach the probe to the wastewater main and install them. The flow meter shall meet the following flow component measurement:
 - a. Depth Component of Flow – The Contractor shall use ultrasonic depth sensor for primary depth measurement. Pressure depth sensor may be installed for redundancy. Sensors shall have an accuracy of at least 0.5 inches. The range of the pressure transducer shall be the minimum standard range that exceeds the depth of the manhole for each location.
 - b. Velocity Component of Flow – The Contractor shall use a submersible electromagnetic or ultrasonic doppler sensor primary velocity measurement. A surface velocity sensor may be installed for redundancy. Sensors shall have an accuracy of 0.25 feet per second with a range of 1 to 15 fps. If surface velocity meters are installed, the Contractor shall provide a correlation between the surface velocity and the inflow measured velocity.
- 4.4 The flow meters shall meet the requirements of this scope of work and shall be capable of measuring open channel flows with different cross sectional area and non-circular pipes. The following are currently acceptable manufacturers for flow meters:
 - a. Triton + as manufactured by ADS Environmental Services, Huntsville, Alabama
 - b. FI 900 System Meter as manufactured by HACH Company, Loveland, Colorado
 - c. Austin Water approved equal. In order to be an approved equivalent, flow meter devices shall meet the requirements outlined in Section 4.3.a. and 4.3.b.
- 4.5 All flow monitoring equipment shall be located within manholes and all flow monitoring

components shall be suitable for the wastewater environment, including exposure to sewer gases. In the sewer environment, ignitable mixtures of sewer gases may be present under normal conditions, regardless of time. All flow monitoring equipment shall have appropriate safety features and meet industry standards for this sewer environment.

- 4.6 All sensors and probes on flow monitoring equipment shall be new and calibrated at the beginning of the contract. During the contract, the Contractor shall be responsible for maintaining and keeping all meters, sensors, and probes in working condition. If any components are damaged or broken, the Contractor shall have a field crew on site within forty-eight (48) hours and complete the repairs or replacement within seventy-two (72) hours after initial notification. All repairs and replacements of the components in flow meters are considered part of the price submitted and shall not be billed separately.
- 4.7 The modem, and RTU, if provided, shall be compatible with the flow meter. The Contractor shall be responsible for costs associated with the transmission or transfer of data to the FTP site of the City.
- 4.8 Power source shall be solar, AC, or battery operated. The Contractor shall maintain the source of power for the duration of the contract. The Contractor shall be responsible for all costs associated with the power source for the Flow Meter System.
- 4.9 After the City awards the contract and before any flow meter installation starts, the Contractor shall document and examine the hydraulic and site conditions of each of the flow monitoring sites. The Contractor shall be responsible for the selection and determination of the appropriate flow meter and sensors that match the hydraulic and site conditions, submit the documentation to the City for review and comment prior to the installation of the FMS, and make proper modifications and adjustments of the FMS to obtain accurate and reliable data.
- 4.10 Rotating Meters, Level Indication Only

The Contractor shall provide long-range depth sensor and logger devices capable of collecting data at five (5) minute intervals. The Contractor shall furnish the necessary hardware devices to attach the probe to a section of the wastewater manholes and install them. The depth sensor shall meet the following flow component measurement:

- a. Depth component of flow – The Contractor shall use ultrasonic depth sensor for measuring depth of flow in a manhole. The depth measurement will be field verified at installation by the Contractor in accordance with the manufacturer's recommendations and as required to calculate flow data. In addition, one additional level reading shall be taken within one week after installation. At a minimum, the contractor shall conform to the manufacturer published requirements for the following;
 - i. The proper installation of the sensor.
 - ii. The maximum and minimum allowable distance of sensor to liquid level.
- b. The logger shall be able to provide both a depth and flow data. The flow data shall be computed using pre-programmed manning equation where it is appropriate.

The long-range depth sensor to be used shall be capable of measuring open channel flows depth. The Contractor shall provide data in Telog Electronic Data Format (EDF) . The following are currently acceptable long-range depth sensors;

- a. Flow Shark Triton with Long Range Depth Sensors as manufactured by ADS Environmental Services
- b. FLO-Dar Intrinsically Safe Sensor and or FL 900 System with Depth monitoring systems as manufactured by HACH Company
- c. Smart Cover Systems as manufactured by Hadronex, Inc

d. Austin Water approved equal

4.11 When purchased or proprietary software is used, the Contractor shall provide software packages or access to the Contractor's system for the loggers to the City at no additional cost for the life of the contract. The City estimates that approximately five City staff will need the software package and/or access to the Contractor's system.

5.0 Contractor Operational Requirements

5.1 There are a number of existing flow meters as outlined in Table 1. The Contractor shall be responsible for removing existing FMS components within one (1) month after coordinating with the City and returning them to the City. The Contractor shall notify and coordinate with the City prior to removal so that the City can be present during the removal of all components.

5.2 Refer to Tables 2, 3, 4, 5, and 6 for a list of locations of permanent and rotating flow meters. The locations of the temporary flow meters will be designated by the City, as the needs of Austin Water arise and are currently unknown. In all cases, the temporary flow meters will be no more than 30 feet deep or 72 inches in diameter. The Contractor shall be prepared to install FMS at site conditions ranging from busy streets and state highway ROW to isolated creek beds and green fields. Paved roads may not be nearby; therefore, the Contractor shall either carry or drive the equipment off road and possibly remove small amounts of debris and/or sediment from around or inside the manhole for accessibility.

5.3 The Contractor shall investigate each of the flow metering sites listed in Tables 2, 3, 4, 5, and 6 to verify if the existing flow condition is suitable for installing the flow meter to record accurate data. If the site condition is not suitable for flow monitoring, the Contractor shall notify the City.

5.4 If needed, the City will clean the sewer main once prior to the start of flow monitoring. If prior to the start of the contract, the Contractor determines that the site needs to be cleaned due to the presence of accumulated "large" trash or trash from subsequent storm events, the Contractor shall request in writing and coordinate with the City to clean the sewer main. Depending on the site conditions, the cleaning of each sewer main could take two (2) to four (4) weeks from notice to the City.

5.5 During the term of contract, the Contractor shall remove debris, sediment, or any object that alters the performance of the sensor and affects the accuracy of the flow monitoring. This shall include cleaning, removing, and disposing of any large trash including tree limbs, rocks, construction materials, or any large objects that affects the flow monitoring. The trash shall be transported and dumped by the Contractor to dewatering roll-off containers located at the City's Walnut Creek Wastewater Treatment Plant located on 7113 East MLK Blvd., Austin, Texas 78724. The Contractor shall be responsible for removal and reinstallation of the flow meter probes in the sewer main at no additional cost to the City. The Contractor shall also be responsible to collect the verification points according to Sections 5.10, 5.11, and 5.12 after each cleaning and reinstallation. During this period, there shall be no compensation for the Contractor if they cannot meet the 90 percent uptime and accurate data requirements.

5.6 In sites where sediment is present, the Contractor shall develop a profile and accurately determine the cross sectional area of the flow at the depth-measuring point. Record the depth of the sediment in the Site Sheet (Table 7). The Contractor shall enter the information into the flow meter so that the computation of the flow quantities has included the necessary adjustment for the presence of silt affecting the flow.

5.7 At a minimum of 180 days prior to the end of the contract, Contractor shall follow the transition plan as submitted with the RFP under Tab 12, or, agree to provide the City with a mutually approved transition plan.

- 5.8 The Contractor shall coordinate the permanent installation of objects within the flood plain (outside of manholes) with the local flood plain administrator, in accordance with the local codes, AW Safety Regulations, National Fire Protection Agency 820 Standard, National Electric Code and federal (National Flood Plain Insurance Program) regulations. The Contractor shall be responsible for the cost of such coordination activities. If there is a component of the flow meter system outside of the manhole and the manhole is in the flood plain, then the contractor shall comply with this requirement.
- 5.9 The Contractor shall perform routine maintenance services for each permanent, rotating, and temporary FMS as requested by the City or as needed to insure the 90% uptime requirements. Routine maintenance shall include the following:
- a. Replace battery, scrub sensors, troubleshoot the equipment and restore or replace any defective or non-performing equipment, and calibrate level sensors, as necessary.
- 5.10 For each permanent and rotating flow meter, the Contractor shall perform an initial verification and flow stabilization for each FMS installed and prepare a site-specific velocity profile. This initial verification and flow stabilization shall include the following for each metering site:
- a. Collect verification points for level and velocity when the flow meter is installed:
 - b. Collect verification points for level and velocity three additional times, no later than two weeks after initial installation. Each verification point shall be taken on separate days and at different times during the day.
 - c. Verification points shall consist of a minimum of two (2) level measurements and in general, a total of seven (7) velocity measurements. In certain low flow conditions and with approval of the City, the number of velocity measurements may be reduced on a case by case basis.
 - d. For each metering site, plot both the velocity and depth diurnal curve and develop a velocity profile which accurately represents the velocity as a component of the cross sectional area of the flow at the depth-measuring point.
 - e. Based on the data collected, verify, show and confirm that the flow stream has stabilized and that the verification points taken are on or close to the diurnal curve.
 - f. The contractor shall submit a Flow Stabilization Report per Section 10.1.
- 5.11 For each permanent and rotating flow meter, the Contractor shall perform verification for each FMS as needed, at least every ninety (90) calendar days. Verification shall include the following:
- a. Collect level verification points for the level for each FMS by measuring the level of the flow, with a minimum of two (2) level measurements. Level sensor verification shall include comparing the returned level sensor values against independent devices.
 - b. Collect velocity verification points for the velocity for each FMS by measuring the instantaneous velocity at 20%, 40%, and 80% depths, with a minimum of seven instantaneous velocity measurements as shown in Figure 10, and then integrating them to derive an average for comparison to the meters calculated average velocity. For levels below five inches, measure the instantaneous velocity at 40% depths with a minimum of three instantaneous velocity measurements as shown in Figure 11, and then integrating them to derive an average for comparison to the meters calculated average velocity.

- c. Submit verification records including level and velocity verification to the City with each monthly payment request.
- 5.12 For all temporary meters, the Contractor shall perform verification for each FMS at installation, every two weeks, and at removal. Verification shall include the following:
- a. Collect level verification points for the level for each FMS by measuring the level of the flow, with a minimum of two (2) level measurements. Level sensor verification shall include comparing the returned level sensor values against independent devices.
 - b. Collect velocity verification points for the velocity for each FMS by measuring the instantaneous velocity at 20%, 40%, and 80% depths, with a minimum of seven instantaneous velocity measurements as shown in Figure 10, and then integrating them to derive an average for comparison to the meters calculated average velocity. For levels below five inches, measure the instantaneous velocity at 40% depths with a minimum of three instantaneous velocity measurements as shown in Figure 11, and then integrating them to derive an average for comparison to the meters calculated average velocity.
- 5.13 The Contractor shall perform verifications for each FMS in accordance with the scope of work. Supplemental verifications shall be required under the following conditions. These supplemental verifications will be part of the contract price and at no additional cost to the City.
- a. Verifications shall be performed any time there is a cleaning of sensors or removal of silt in or around the flow meter.
 - b. Verifications shall be performed any time there is a major adjustment or change in the equipment such as, but not limited to replacement of probes, sensors, or meters.
 - c. Verifications shall be performed any time there is a change in the flow environment, such as, but not limited to band movement, sensor movement, or accumulation of significant silt.
 - d. Verifications shall be performed at times when it is required to confirm quality assurance as outlined in Section 8.
 - e. Submit verification records including level and velocity verification to the City with each monthly payment request.
- 5.14 In the event of a major flooding event, emergency maintenance shall be performed by the Contractor to produce accurate data and as required by the Contractor's data analysts or the City's data analysts. In these instances, the Contractor shall have a field crew on site within forty-eight (48) hours for maintenance service and complete the service within seventy-two (72) hours after notification from the City. Measurements, adjustments, and efforts undertaken during site visits shall be logged in a maintenance log specific to that site, which shall be available within three (3) business days after request by the City. When the City determines that a FMS requires the emergency maintenance due to conditions listed, the City will contact the Contractor's data analyst and discuss the concern. The City reserves the right to require the Contractor perform the emergency maintenance without additional cost to the City.
- 5.15 In the event of a major rain event (defined as over 2-inches in 24 hours), the Contractor shall provide processed flow monitoring data within forty-eight (48) hours after the major rain event.
- 5.16 Figure 1 illustrates the data transfer from the meter to the FTP site. The Contractor

shall be responsible to produce the Telog EDF to be transferred to the FTP site. The Contractor shall transmit the data following the City's site naming convention. The City's Telog Module E-AIM3 can only accept flow meter data in the Telog EDF format. The City will not accept any other data format. The Contractor shall be responsible for all costs associated with, the set-up, data transfer and usage of all cell communication.

5.17 For all permanent, rotating, and temporary flow meters, the flow monitoring data shall be submitted to the FTP site and shall include the following information:

- a. Meter Name
- b. Date and Time
- c. Velocity (feet per second) – TV
- d. Flow Depth (inches) – TD
- e. Flow (gallons per minute)* - TQ (*Contractor shall provide the Continuity Equation used in the flow calculation).
- f. Flow (gallons per minute)** Q Manning (** Contractor shall provide the Manning equation used in the flow calculation).
- g. Flow (gallons per minute)*** - Q Sensor (***)Contractor shall provide the Continuity Equation used in the flow calculation for each depth sensor).

5.18 For Rotating Meters, Level Indication Only - The flow data shall be submitted to the FTP site shall include the following information:

- a. Meter Name
- b. Date and Time
- c. Flow Depth (inches) – TD
- d. Flow (gallons per minute)** Q Manning (** Contractor shall provide the Manning equation used in the flow calculation).

5.19 The installation of the FMS and obtaining the data may be performed outside normal business hours of 7:00 a.m. to 6:00 p.m. The flows are dynamic and especially after a rain event. The City will not assist in the flow control or diversion for any installation or maintenance of the FMS. The Contractor will determine when flow levels are acceptable for the installation of the FMS.

5.20 Site Conditions: For permanent and rotating meters, the Contractor, by submitting their proposal, agrees that they have evaluated site conditions and incorporated such impacts into their proposal. The Contractor shall expect some variation of information presented in the Tables. The prices on the Offer Sheet (Section 0601) for Installation and Removal of the meters are for meters of all depths and all sizes of pipes. For temporary meters, the contractor, by submitting their proposal, agrees that they will evaluate site conditions to obtain stable flow monitoring data, prior to the installation of the temporary flow meters.

5.21 Job Site Management: The Contractor shall set up, manage, and restore each job site in a responsible manner that includes but is not limited to maintenance of traffic, pedestrian safety, and property protection. At no time during active progress of work shall the Contractor leave the job site unattended. The Contractor shall request and gain approval from the City for any specific job site work that may extend past one (1) workday.

6.0 Traffic Control and Permits

6.1 Contractor shall be responsible for obtaining Temporary Use of Right of Way Permits (TURP) from the City and the provision of and maintenance of temporary traffic control devices as required by the City of Austin.

6.2 Contractor shall be responsible for obtaining permits for any work performed in the Texas Department of Transportation right of way.

6.3 Contractor shall follow all federal, state and local guidelines, resolutions, and ordinances.

6.4 Permit Application Process: City of Austin Transportation Department for the TURP:

- A. Request for the use of City right-of-way, including sidewalks, traffic lanes, parking lanes or meters, for all purposes, shall be authorized by the Austin Transportation Department. Contractor will only be compensated for the actual permit costs. All other costs associated with the permitting process shall be subsidiary to other work.
- B. Contractor is responsible for submitting an application for the Permit for a TURP. The application shall be submitted online through the Right of Way Management Network (ROWMAN) at www.austintexas.gov/rowman.

Instructions for the process can be found at:

www.austintexas.gov/sites/default/files/files/Transportation/Right_of_Way/temporary-use-permitting.pdf

TURP Permits are required for all work temporarily using City of Austin Right of Way other than excavation, filming, non-construction related parking spaces, or street events. The Contractor shall coordinate with scheduled Right of Way work.

- C. Some typical information that may be required to be provided along with the application will be:
 - a. Approximate time frame of work for each manhole.
 - b. Possibility of intersection work.
 - c. Locations of each manhole and type of closure involved including sidewalk, parking or traffic lane.
 - d. Traffic Control Plan to address each type of closure scenario.
- D. If the installation of FMS at a location disrupts the normal flow of traffic in work areas, the Contractor shall make every effort to minimize the disruption of traffic flow, comply with the City of Austin Transportation Criteria Manual, and Texas Department of Transportation Manual on Uniform Traffic Control Devices. The Contractor is required to use the City of Austin standard details as they apply. If any of these details are not appropriate for a specific work area, the Contractor shall inform the City with appropriate explanation and details.
- E. Contractor is responsible for the appropriate use of standard Traffic Control details that is available online at www.austintexas.gov/department/transportation. The cost associated with this effort will be included in the cost for the installation of the FMS.
- F. If any of these standard Traffic Control details are not appropriate for a specific work area, the Contractor shall inform the City with appropriate details and as required, the City will coordinate to have the City or its designee prepare an Engineered Traffic Control plan for the appropriate Work area. When required by Right of Way Management, the City or its designee will prepare a Traffic Control Plan (TCP) by a Professional Engineer registered in the state of Texas, which shall be submitted to the City ROW Management for review and approval. Contractor shall schedule their work and provide adequate notification and planning for the preparation of Engineered Traffic Control Plans. For the purpose of this scope of work, adequate notice is 4 to 6 weeks in advance of the scheduled work.

6.5 The Contractor shall comply with the requirements of Section 6, Traffic Control and Permits when they are working on City streets.

7.0 Safety

7.1 The Contractor shall follow all applicable OSHA (Occupational and Safety Health

Administration) rules for any jobs performed during this contract. Contractor shall also follow industry standard safety procedures and other safety practices for all work performed under this contract. The Contractor shall be responsible for the safety of their employees and if applicable, any subcontractors at all times. In addition, the Contractor and if applicable, any subcontractors shall provide a safe environment for the driving public and citizens during Contractor's activities.

7.2 The Contractor submit their Health and Safety Plan with their proposal, which will be approved by the AW safety officer before any field activities take place. The City and AW safety officer will not accept any liability or release the contractor from any safety responsibilities. The Contractor is responsible for adherence to their Health and Safety Plan throughout the life of the contract.

7.3 The Contractor's Health and Safety Plan shall include, but not be limited to, the following:

a. Confined Space Safety Plan: The Contractor shall provide confined space access safety equipment, and traffic control devices required to meet Federal, State and Local requirements. The Confined Space Safety Plan shall include details regarding the installation and removal of meters, including during emergency conditions. The Contractor's employees involved in the installation and maintenance of the equipment shall be OSHA Confined Space Entry trained and certified, and shall adhere to federal, state and local rules, regulations, and requirements regarding Confined Space Entry. The Contractor shall submit proof of Confined Space Entry training certifications with their proposal.

b. Whenever the Contractor uses the equipment for confined space entry that requires the equipment handler to be trained and certified by the equipment manufacturer, the Contractor shall submit to the Contract Manager the manufacturer certifications for each of the Contractor's employees that use such equipment. The Contractor shall submit these certifications before starting any work.

7.4 In the sewer environment, ignitable mixtures of sewer gases can be present under normal conditions, regardless of time. All flow monitoring equipment shall have appropriate safety features and meet industry standards for the sewer environment.

7.5 Prior to entering manholes or other structures, the Contractor shall use their calibrated gas detection equipment to determine the presence of toxic, flammable or explosive vapors, and to determine oxygen deficient conditions. The Contractor shall take appropriate remedial measures to protect its workers.

7.6 The Contractor shall provide calibrated gas detection equipment equipped with sensors for the expected gases they may encounter and oxygen levels as well as explosive gases. This equipment shall be made available to all employees engaged in field activities. Gas monitors shall be worn at all times during installation and removal of the flow meters.

8.0 Processed Data, Quality Assurance, and Quality Control

8.1 The data collected under this contract is vital to Austin Water's modelers system planning. Accordingly, the Contractor shall perform their own Quality Assurance and Quality Control as detailed in this section and submit "processed" data to the City. The Contractor shall demonstrate to the City that every attempt has been made to achieve quality data for every metering site.

8.2 The Contractor shall have a Quality Assurance and Quality Control Plan and be able to implement the process for accurate raw and processed data delivery. The Contractor's Quality Assurance and Quality Control Plan shall be submitted with their proposal and shall be approved by the City before any field activities take place. The Contractor is responsible for adherence to their Quality Assurance and Quality Control Plan

throughout the term of the entire contract.

8.3 The Contractor's Quality Assurance and Quality Control Plan shall include at least the following:

- a. Procedures for initial meter installation, setup, and calibration, including defining initial set up and troubleshooting.
- b. Procedures for calibrating meters and QA/QC procedures for verifying data.
- c. Procedures for developing the initial velocity profile as outlined in Section 5.10.
- d. Equipment used for initial calibration as well as equipment used during verification checks.
- e. Procedures for verification checks on meters as outlined in Sections 5.11 and 5.12 including how data is measured, collected and checked.
- f. Procedures detailing how the Contractor will provide "processed" flow meter data to the City. For the basis of this scope of work, "processed" flow meter data is data, which has been edited and processed by a data analyst to fill in any gaps or downtime in data.
- g. Procedures on how the Contractor shall adjust, if required, any flow meter data for the City. For the basis of this scope of work, adjustment of the data involves moving the database upward or downward based upon verification points taken in the field as required in Sections 5.11 and 5.12.

8.4 The Contractor's data analyst shall perform a daily comprehensive review of collected data. The data analyst shall assess any maintenance or monitor performance issues and if required shall dispatch a crew to resolve the issue. Items to review daily include:

- a. Verify all sensors are working correctly, including identifying invalid data resulting from sensors that may be affected by debris.
- b. Identify all data gaps and corresponding equipment service needs.
- c. Review the accuracy of all data, verify diurnal patterns and reasonable depths and velocities, including identifying any data that is outside expected and normal operating ranges. Examples include band movement, sensor movement, data shifts, and accumulated silt.
- d. Use various analytical tools such as hydrographs, scattergraphs, and flow balancing methods to verify the accuracy and precision of the flow data.
- e. Review all field site visits and verification points taken during these site visits, including identifying all field measurements that are outside expected operating ranges.

8.5 The Contractor's data analyst shall edit and adjust all raw data into a "processed" format to be submitted monthly to the City of Austin. The data analyst shall use industry standards and data diagnostic tools such as hydrographs and "scattergraphs" to edit and adjust the raw data. All "processed" data shall be in accordance with the Contractor's Quality Assurance and Quality Control Plan.

8.6 As outlined in Section 5.15, in the event of a major rain event (defined as over 2-inches in 24 hours) the Contractor's data analyst shall edit and adjust all raw data into a "processed" format to be submitted to the City of Austin. This processed data shall include I/I flow rates, peaking factors, and the identification of any significant red flags or concerns. This major rain event data shall be submitted within forty-eight (48) hours

after the major rain event. All “processed” data for these major rain events shall be in accordance with the Contractor’s Quality Assurance and Quality Control Plan.

8.7 The Contractor shall submit a Quality Assurance and Quality Control Report monthly with each invoice which shall include, but not be limited to, the following:

- a. Verification checks on meters as outlined in Sections 5.11 and 5.12.
- b. Provide a report identifying the raw and processed data explaining detailed steps taken and performed to obtain this data. This report should include but not be limited to the following sections:
 - i. Percentage of edited data.
 - ii. **Hydraulic explanation for all data with anomalies:** Anomalies with flow data include, but are not limited to electronic, debris, shifts, trends, or gaps. In these cases, the data shall be edited and adjusted per industry standards and in accordance with the Contractor’s Quality Assurance and Quality Control Plan with an explanation provided on all adjustments. In the case of significant anomalies, the City reserves the right to request the Contractor to poll the meter and obtain the data.
 - iii. **Verification of flow reported in meters that are downstream of other meters:** This verification refers to a balanced distribution of flow reported in the meters in the system during dry weather conditions. Based upon system conditions, land use standards, and standard operation procedures, the contractor shall provide an explanation for any meters which do not flow balance. Flow balance refers to an increasing flow reported by the meters that are downstream of other meters. For example, in Figure 12, the Q at FM3 shall be larger than $Q_{FM1} + Q_{FM2} + \text{estimated } Q$ for the wastewater basin WWB3. An estimate for the Q for flow for a wastewater basin will be provided by Systems Planning.
 - iv. An explanation for any adjustments or hydraulic shifts which result in an increase or decrease in level or velocity data as shown in Figures 7 and 8.

8.8 Verification points shall be taken as outlined in Sections 5.11 and 5.12 and in accordance with the scope of work. Based on the data, if there is a need to verify and confirm the quality of the flow metering data the Contractor shall perform additional verifications per Sections 5.11 and 5.12 at no additional cost to the City. This would occur under the following situations:

- a. Each verification point should be on or close to the diurnal curve. If the most recent verification points are greater than 15% of the diurnal curve or of the previous reading, the City reserves the right to request the Contractor collect additional verification points to confirm and verify that the data is correct.
- b. If the raw data has over 15% gaps, the City reserves the right to request the Contractor collect additional verification points to confirm and verify that the data is correct.
- c. If the raw data is outside expected and normal operating ranges and the data is greater than 15% of normal operating ranges, the City reserves the right to request the Contractor collect additional verification points to confirm and verify that the data is correct.
- d. If the difference between the primary sensors and the backup or redundant sensors is greater than 15%, the City reserves the right to request the Contractor collect additional verification points to confirm and verify that the data is correct.

- e. If the verification of flows and balanced distribution of flow reported in the meters in the system during dry weather conditions is greater than 15%, the City reserves the right to request the Contractor collect additional verification points to confirm and verify that the data is correct.

9.0 Acceptance of Work and Payment

- 9.1 The Contractor shall post raw data automatically every hour in Telog EDF file format to a secured FTP site provided by the City. All processed data shall be submitted with the monthly invoice.
- 9.2 The raw data delivered to the City shall be a minimum 90% of up time and 90% accurate data for each meter on a monthly basis for the monitoring period. Up time and accurate data are considered raw data without any of the following;
 - a. Missing Data as shown on Figure 2.
 - b. Flat Line data as shown in Figure 3.
 - c. Drifts Data as shown in Figure 4.
 - d. Spiked Data as shown in Figure 5.
- 9.3 At each monthly payment request, the Contractor shall include, at a minimum:
 - a. A report which identifies which sewer meter locations that have achieved 90% "up time" and accurate data and which location did not achieve the 90% up time and accurate data.
 - b. Verification points for each of the FMS location collected during the month in Telog EDF format transferred to the FTP site.
 - c. Processed data for 100% in Telog EDF format transferred to the FTP site.
 - d. A report identifying the raw and processed data explaining what has been performed to obtain this data, including percent edited data and adjustments.
 - e. Annotations to identify changes in metering in Telog EDF format transferred to the FTP site. Annotations shall include changes in sensor type; band, sensor, or meter repair or replacement; or changing between continuity and manning flow rate.
 - f. Maintenance log sheets for each site.
 - g. Updated project schedule.
 - h. QA/QC Reports in Accordance with Section 8.
- 9.4 The Contractor shall only be paid for the percentage of "up time" and accurate raw data for each individual site. For those sites that are less than 90% "up time" and accurate data, no payment will be made. Monthly payment will be based upon total number of flow meter sites at or in excess of 90% "up time" and accurate data. For example, during any month during the contract period, if there are only 80 out of 100 of the flow meter sites with 90% "up time" raw data for each of the individual sites, the Contractor shall invoice only the cost for the month for 80 of the flow meter sites. The Contractor shall provide the necessary verification points and the "processed" data for the sites eligible for invoicing. Please note that the reduced invoice amount shall not relieve the Contractor of the contractual responsibility to meet the required "up time." The Contractor shall notify Austin Water in writing if they have tried to remedy the situation within one (1) month and are not able to maintain 90 percent up time. The City will determine at that time if a change in location is appropriate. The Contractor will be in breach of contract when there is any flow meter location that cannot achieve 90 percent uptime for three consecutive months in a contract period.

Depth uptime and raw Q uptime are defined below:

- a. Raw Depth Uptime: depth uptime shall be defined as the number of measurement intervals where a flow value can be calculated from a measured depth for a common time interval divided by the total number of measurement intervals in the reporting period.
- b. Raw Q uptime shall be defined as the number of measurement intervals where a flow value can be calculated from both the measured velocity and the measured depth for a common time interval divided by the total number of measurement intervals in the reporting period. If either the measured depth or measured velocity do not meet the uptime or accurate data requirements, a raw flow value cannot be calculated as shown in Figure 9. For the raw Q to be counted in uptime, it shall have both a simultaneous depth and velocity readings.

10.0 Reports

- 10.1 For permanent and rotating meters, within two (2) months of receiving the notice to proceed from the City, the Contractor shall demonstrate that flow has stabilized and submit a Flow Stabilization Report to the City for review and comment. This report shall include pre-installation site conditions, site pictures, device serial numbers, manholes numbers, GPS coordinates (NAD 83) of manhole (1-3 cm Real Time Kinematic horizontal and vertical accuracy), site names and any additional information deemed pertinent by the Contractor.

For temporary meters, within two (2) weeks of receiving the notice to proceed from the City, the Contractor shall demonstrate that flow has stabilized and submit a Flow Stabilization Report to the City for review and comment. This report shall include pre-installation site conditions, site pictures, device serial numbers, manholes numbers, GPS coordinates (NAD 83) of manhole (1-3 cm Real Time Kinematic horizontal and vertical accuracy), site names and any additional information deemed pertinent by the Contractor

The City will review and comment on the Flow Stabilization Report within 2 weeks. The Flow Stabilization Report shall be in format agreed upon by the City and Contractor and shall include, but not be limited to, the following:

- a. For each metering site, a plot of both the velocity and depth diurnal curve as shown on Figure 6 with four (4) verification points each shown to be on or close to the diurnal curve. Each verification point shall be taken on separate days and at different times of the day.
- b. Site Sheet as shown on Table 7.

For permanent and rotating meters, after the City approves the Flow Stabilization Report, the Contractor shall commence collecting flow data. Only data collected from that point on will be eligible for a payment request consideration.

For temporary meters, after the Flow Stabilization Report is submitted to the City, the next calendar day may be a start date for eligible payment request consideration if agreed upon by the City and the Contractor. In the event, there is not an agreement between the City and Contractor, the start date will be after the City approves the Flow Stabilization Report.

- 10.2 At the initial progress meeting, the Contractor shall submit a preliminary schedule that shall include critical milestones for review and approval. The approved schedule shall serve as the baseline for this contract. At each monthly payment request, the Contractor shall submit an updated project schedule indicating progress achieved to date for each task.

- 10.3 With the monthly payment request, the Contractor shall submit to the City a Quality

Assurance and Quality Control Report per Section 8 of this scope of work. This shall include an “up time” data table to demonstrate compliance with the uptime requirement, including a thorough explanation of the reasons for not meeting the up-time requirement at any site.

11.0 Contractor Personnel Requirements

Unless specified otherwise, the Contractor shall provide distinct personnel for each of the roles listed below.

- 11.1 Firm Experience: Contractor shall have at least seven (7) years or more of experience in working with and servicing wastewater flow meters and providing wastewater flow monitoring services. Contractor shall detail out the information required in Tab 7 & Tab 8 in Section 0600 Proposal Preparation Instructions. Experience shall include providing flow-monitoring services for projects with a minimum of one hundred (100) meters per project for at least three (3) projects. The Contractor shall have experience with pipe sizes ranging from six (6) to ninety six (96) inches. The Contractor shall have at least five (5) years experience with flow balancing for a minimum of one hundred (100) meters per project for at least three (3) projects. Experience in flow-monitoring services shall include wastewater flow meter installation, removal, calibration, maintenance, data collection, data verification, Telog EDF data retrieval, Telog EDF data transfer, flow data analysis, quality assurance, and quality control.
- 11.2 Equipment Resources: The Contractor shall detail the equipment to be used to complete the work specified in this solicitation, including equipment specification sheets in Tab 9 in Section 0600 Proposal Preparation Instructions. In addition, the Contractor shall describe their ability to obtain replacement flow meters during the term of the contract. The City prefers a Contractor that will maintain immediately accessible, local inventory equal to at least fifty percent (50%) of the total flow meters to be installed. The Contractor shall have direct experience with the flow meters to be installed.
- 11.3 Data Delivery: The Contractor shall detail the method by which the data will be transferred from the meter to the City’s FTP site and the City’s Enterprise Server in Tab 10 in Section 0600 Proposal Preparation Instructions. The Contractor shall include their ability to address and resolve issues with data transfer. The Contractor shall have Telog Enterprise software, licenses, and Telog Enterprise support throughout the contract period.
- 11.4 Personnel Qualifications and Resources: The Contractor shall identify key staff that will be assigned to this contract and provide a resume of not more than one (1) page for each staff member, describing their professional qualifications (to include education, licenses, certifications for working in confined spaces, and associations) and relevant experience. At a minimum, the staff qualifications and quantities shall meet the requirements stated in this specification. If applicable, identify any subcontractors included as part of this contract, their role and relevant experience, including an abbreviated, one half page, resume for key staff of subcontractors. If subcontractors are to be utilized, reference the No Goals Form (Section 0900) for further instructions.
- 11.5 Staff: The Contractor shall utilize an experienced project manager and experienced field crews to conduct the work. Contractor field crews shall consist of a minimum of two (2) employees. However, in confined space entry in order to comply with OSHA, State and City regulations, additional employees may be required. The field crew shall wear easily recognizable uniforms containing prominently displayed picture identification badges with the Contractor’s name and employee name. Field crews shall carry a letter describing the project and work to be performed.
- 11.6 Project Manager: The Contractor’s project manager shall manage the entire project on a day-to-day basis on behalf of the Contractor and ensure that assessments are carried out in a professional manner and in compliance with the assessment. The

project manager shall have a minimum of five (5) years of experience managing similar contracts, and shall be familiar with the applicable regulations and safe and proper flow meter operation procedures. The Contractor's project manager shall be the primary point of contact and shall be available to meet with the City on a monthly or more frequent basis to update progress against the assessment schedule and discuss any issues.

- 11.7 Field Operation Manager: Each field crew shall be led by the Contractor's field operations manager. The field operations manager shall be onsite continuously when FMS are being installed, maintained, worked on, removed, etc., except for City observed holidays and vacations during which the Contractor shall provide a qualified substitute pre-approved by the City. The field operations manager shall have a minimum of three (3) years of experience as a crew leader overseeing installation, operation and maintenance of flow meters in large diameter wastewater mains and be familiar with applicable regulations and proper flow meter operations procedures.
- 11.8 Field Technicians: Each field crew shall include one or more Contractor's field technicians. Field Technicians shall be onsite continuously when flow meters are installed, maintained, operated, removed and other field work is being performed. Field technicians shall have a minimum of one (1) year of experience with installation, operation and maintenance of flow meters in large diameter wastewater mains and be familiar with applicable regulations and safe and proper flow meter operations procedures. Field technicians shall have Safety, First Aid, and Confined Spaced Entry Certifications.

Note: One individual may simultaneously serve as Project Manager and Field Operations Manager providing the above qualifications are met.

- 11.9 Data Analyst: The Contractor's data analyst performing quality control of the data including "correcting the database" shall have a minimum of seven (7) years of direct experience in flow monitoring data analysis and management. The data analyst shall have a minimum of three (3) years of direct experience with Telog EDF. The data analyst shall have at least five (5) years experience with flow balancing for a minimum of one hundred (100) meters per project on at least three (3) projects. Trained data analysts shall be experienced in processing and analyzing flow data from wastewater systems, including experience with hydrographs, scattergraphs, and flow balancing methods. The Contractor's data analyst shall review and evaluate all depth and velocity readings for each flow meter site on an ongoing basis as data is collected and, in general, no later than twenty-four (24) hours after data is collected.

12.0 Omissions

- 12.1 It is the intent of this scope of work to acquire complete wastewater flow monitoring services for the City. Any services that have been omitted from this scope of work which are clearly necessary for the completion and legal operation of this service are to be considered a requirement, although not directly specified or called for in this scope of work. These omissions shall be brought to the immediate attention of the Buyer listed in the solicitation documents and a determination shall be made as to whether the requirements are to be incorporated into the solicitation.



**CITY OF AUSTIN
PURCHASING OFFICE
EXCEPTIONS**

Solicitation Number: RFP EAD0128

The City will presume that the Offeror is in agreement with all sections of the solicitation unless the Offeror takes specific exception as indicated below. Complete the exception information indicating each exception taken, provide alternative language, and justify the alternative language. The City, at its sole discretion, may negotiate exceptions that do not result in material deviations from the sections contained in the solicitation documents. Material deviations as determined by the City may result in the City deeming the Offer non-responsive. The Offeror that is awarded the contract shall be required to sign the contract with the provisions accepted or negotiated.

Place this attachment in Tab 3 of your offer. Copies of this form may be utilized if additional pages are needed.

Indicate:

- 0300 Standard Purchase Terms & Conditions**
- 0400 Supplemental Purchase Provisions**
- 0500 Scope of Work**

Page Number

Section Number

Section Description

Alternative Language:

Justification:

**CITY OF AUSTIN
PURCHASING OFFICE
PROPOSAL PREPARATION INSTRUCTIONS AND EVALUATION FACTORS
SOLICITATION NUMBER: RFP EAD0128**

1. 1. **PROPOSAL FORMAT**

Submit one original paper copy and an electronic copy of the original proposal in PDF version on six separate flash drives. The original proposal shall contain ink signatures and shall be typed on standard 8 1/2" X 11" paper, double-sided, and have consecutively numbered pages.

The proposal itself shall be organized in the following format and informational sequence. Use tabs to divide each part of the Proposal and include a Table of Contents:

Section I

Tab 1 – City of Austin Purchasing Documents - Complete and submit the following documents:

- A. Signed Offer Sheet
- B. Section 0510 Exceptions
- C. Section 0601 Price Proposal
- D. Section 0605 Local Business Presence Identification Form
- E. Section 0815 Living Wages Certification
- F. Section 0835 Non-Resident Bidder Provisions Form
- G. Section 0900 Minority and Women-Owned Business Enterprise (MBE/WBE) Procurement Program No Goals Form

Tab 2 – Authorized Negotiator: Include name, address, and telephone number of person in your organization authorized to negotiate Contract terms and render binding decisions on Contract matters.

Tab 3 – Exceptions: List any exceptions that your company is making to the solicitation on form 0510 of the solicitation packet. Exceptions not listed on the form may not be considered. Be advised that exceptions to any portion of the Solicitation may jeopardize acceptance of the Proposal.

Tab 4 – Proposal Acceptance Period: All proposals are valid for a period of one hundred and eighty (180) calendar days subsequent to the RFP closing date unless a longer acceptance period is offered in the proposal

Tab 5 – Executive Summary: Proposer shall provide an Executive Summary of three (3) pages or less, which gives in brief, concise terms, a summation of the proposal.

Tab 6 – Business Organization: State full name and address of your organization and identify parent company if you are a subsidiary. Specify the branch office or other subordinate element which will perform, or assist in performing, work herein. Indicate whether you operate as a partnership, corporation, or individual. Additionally, specifically include the following:

- Is your firm legally authorized, pursuant to the requirements of the Texas Statutes, to do business in the State of Texas?
- List and describe all bankruptcy petitions (voluntary or involuntary) which have been filed by or against your firm, its parent or subsidiaries, predecessor organization(s), or any wholly owned subsidiary during the past five (5) years. Include in the description the disposition of each such petition.
- List all claims, arbitrations, administrative hearings, and lawsuits brought by or against your firm, its predecessor organization(s), or any wholly owned subsidiary during the last five (5) years. The list shall include all case names; case, arbitration, or hearing identification numbers; the name of the project over which the dispute arose; a description of the subject matter of the dispute; and the final outcome of the claim.

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- List and describe all criminal proceedings or hearings concerning business related offenses in which your firm, its principals, officers, predecessor organization(s), or wholly owned subsidiaries were defendants.
- Has your firm ever failed to complete any work awarded to you? If so, where and why?
- Has your firm ever been terminated from a contract? If so, where and why?

Tab 7 – Prior Experience & References: Provide detailed description of applicable prior experience associated with flow monitoring on pipe sizes ranging from six (6) to ninety six (96) inches. Detailed experience shall be described for each of the following topics: flow-monitoring services including wastewater flow meter installation, removal, calibration, maintenance, data collection, data verification, Telog EDF data retrieval, Telog EDF data transfer, flow data analysis, quality assurance, and quality control. Describe only relevant experience and individual experience for personnel who will be actively engaged in the project. Do not include corporate experience unless personnel assigned to this project actively participated.

Provide a minimum of three (3) customer references services for projects with a minimum of one hundred (100) meters per project equivalent to the size and scope described in this RFP. All client reference information must be supported and verified. Reference contacts must be aware that they are being used and agreeable to City interview for follow-up.

The City may solicit from previous clients, or any available sources, relevant information concerning Proposer's record of past performance. Provide references to any sources in active use by the user community of the proposed solution.

References shall include the following information:

- Name of Agency
- Number of Flow Meters
- Contact name – agency Project Manager
- Contact telephone number and email
- Year project took place and length of project
- Budget/award amount of project
- Scope and magnitude of project
- Was project completed on time and in budget?

Tab 8 – Personnel Qualifications and Resources: Include names and qualifications of all professional personnel including the Project Manager, Field Operations Manager, Field Technicians, and Data Analyst who will be assigned to this project. State the primary work assigned to each person and the percentage of time each person will devote to this work. Identify key persons by name and title. Provide a resume of not more than one (1) page for each staff member, describing their professional qualifications (to include education, licenses, certifications for working in confined spaces, and associations) and relevant experience. Provide details on resources the firm has available for this project.

Tab 9 – Equipment Resources: The Contractor shall detail the specific equipment proposed on the project, including equipment specification sheets and details on reliability and accuracy of the flow meters, probes, sensors, and corresponding flow monitoring equipment. In addition, the Contractor shall describe their ability to obtain and provide replacement flow meters and parts during the term of the contract. The Contractor shall also provide equipment details on Telog Enterprise software and interaction and transferring data to the City's FTP site.

Tab 10 – Project Approach and Processing Data: This section shall describe the offeror's understanding of the City's requirements, the approach and/or methodology to be employed, and a work plan for accomplishing the results proposed. Provide details on how the data will be collected, verified, and checked and methods and procedures for field verifications. Include details on monitoring raw data, when site visits will be performed, details and steps how raw data will be processed for final data, and procedures on how the Contractor shall adjust, if required, any flow meter data for the City. The Contractor shall detail the method by which the data

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will be transferred on an hourly basis from the meter to the City's FTP site and the City's Enterprise Server. Provide details and examples of work products and reports as listed in Section 0500 Scope of Work, Item 10.0 Reports.

Tab 11 – Plans: In accordance with Section 0500 Scope of Work, Item 7.0 and Item 8.0, the Contractor shall submit their Health and Safety Plan and their Quality Assurance, and Quality Control Plan with their proposal. Under this Tab, submit your plans and describe in detail and provide examples of the processes and procedures your company does to provide a safe working environment and reliable and quality flow monitoring data. Each of these two plans are described in greater detail below. Note: this tab is limited to a maximum of 100 pages.

Provide a high level overview of your proposed Health and Safety Plan including at least the following:

- Confined Space Safety Plan
- Proof of Confined Space Entry training certifications

Provide a high level overview of your proposed Quality Assurance and Quality Control Plan including at least the following:

- Procedures for initial meter installation setup, and calibration, including defining initial set up and troubleshooting should be in conformance with the manufacturer's recommendation.
- Procedures for calibrating meters should be in conformance with the manufacturer's recommendation.
- Procedures for developing the initial velocity profile.
- Procedures for flow balancing.
- Procedures for addressing data anomalies.

Tab 12 – Schedule: Provide a detailed proposed project schedule by task with due dates. Reference 3.3 in Section 0500 Scope of Work. Contractor shall also include a detailed transition plan addressing equipment removals, service expectation, and transition to a new Contractor (if applicable) at the end of the contract. Transition plan shall address any outstanding issues and what steps will be taken to ensure Austin Water is fully functional until the contract close out is complete.

Tab 13 – Innovations, Cost Savings, and Value Added: As outlined in this Request for Proposal, the City is requesting a comprehensive flow monitoring program. Under this tab, the Contractor can propose innovations, potential cost saving, and other value added items for consideration by the City. Include details on the proposed concept, benefits, risks, and potential cost savings.

Tab 14 – Compliance: A statement of your compliance with all applicable rules and regulations of Federal, State and Local governing entities. The Proposer must state his compliance with terms of this Request for Proposal (RFP).

Section II

Part I - Local Business Presence: The City seeks opportunities for businesses in the Austin Corporate City Limits to participate on City contracts. A firm (Offeror or Subcontractor) is considered to have a Local Business Presence if the firm is headquartered in the Austin Corporate City Limits, or has a branch office located in the Austin Corporate City Limits in operation for the last five (5) years, currently employs residents of the City of Austin, Texas, and will use employees that reside in the City of Austin, Texas, to support this contract. The City defines headquarters as the administrative center where most of the important functions and full responsibility

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for managing and coordinating the business activities of the firm are located. The City defines branch office as a smaller, remotely located office that is separate from a firm's headquarters that offers the services requested and required under this solicitation. Points will be awarded through a combination of the Offeror's Local Business Presence and/or the Local Business Presence of their subcontractors. Evaluation of the Team's Percentage of Local Business Presence will be based on the dollar amount of work as reflected in the Offeror's MBE/WBE Compliance Plan or MBE/WBE Utilization Plan. Specify if and by which definition the Offeror or Subcontractor(s) have a local business presence.

Part II - Proprietary Information: All material submitted to the City becomes public property and is subject to the Texas Open Records Act upon receipt. If a Proposer does not desire proprietary information in the proposal to be disclosed, each page must be identified and marked proprietary at time of submittal. The City will, to the extent allowed by law, endeavor to protect such information from disclosure. The final decision as to what information must be disclosed, however, lies with the Texas Attorney General. Failure to identify proprietary information will result in all unmarked sections being deemed non-proprietary and available upon public request.

Part III – Proposal Preparation Costs: All costs directly or indirectly related to preparation of a response to the RFP or any oral presentation required to supplement and/or clarify a proposal which may be required by the City shall be the sole responsibility of the Proposer.

Part IV - Price Proposal: Information described in the following subsection is required from each Proposer. A firm fixed price or not-to-exceed Contract is anticipated. Proposer shall submit one printed original of the completed price proposal provided in Section 0601, Price Proposal Sheet in the original paper copy response of the RFP.

Proposer shall provide pricing for each base item and optional item listed in Section 0601 Price Proposal in order to be considered for award. Failure to submit pricing for each item, using one total price for base items and optional items instead of breaking it out per item, or failure to use the form provided will result in the Offeror being disqualified and not eligible for award. Items listed as "Optional Items" shall be at the City's discretion based on available funding each year. Proposers are required to provide pricing for all items, including optional items. 30 points will be awarded for base item pricing and 10 points will be awarded for optional item pricing for a total of 40 points for total evaluated price.

- i. If applicable, travel expenses by the Contractor shall be included in the total contract price and will not be paid separately.

Section III

1. EVALUATION FACTORS AND AWARD

A. **Competitive Selection:** This procurement will comply with applicable City Policy. The successful Proposer will be selected by the City on a rational basis. Evaluation factors outlined in Paragraph B below shall be applied to all eligible, responsive Proposers in comparing proposals and selecting the Best Offeror. Award of a Contract may be made without discussion with Proposers after proposals are received. Proposals should, therefore, be submitted on the most favorable terms.

B. **Evaluation Factors:**

- i. 100 points.
 - (1) Total Evaluated Price (reference Section II Part IV) – 40 Points Total. Up to 30 points will be awarded for base item pricing and up to 10 points will be awarded for optional item pricing. Proposer shall provide pricing on each line item for both base items and optional items in order to be considered for award.

**CITY OF AUSTIN
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- (2) Plans including Health and Safety and Quality Assurance and Quality Control (reference Section I Tab 11) – 20 points
- (3) Prior Experience, Personnel Qualifications and Resources (reference Section I Tab 7 and Tab 8) – 15 Points
- (4) Project Approach and Processing Data (reference Section I Tab 10) – 10 Points
- (5) Equipment Resources (reference Section I Tab 9) – 5 Points
- (6) LOCAL BUSINESS PRESENCE (Maximum 10 points)

Team's Local Business Presence	Points Awarded
Local business presence of 90% to 100%	10
Local business presence of 75% to 89%	8
Local business presence of 50% to 74%	6
Local business presence of 25% to 49%	4
Local presence of between 1 and 24%	2
No local presence	0

ii. Interviews, Optional. Interviews may be conducted at the discretion of the City. The City will score proposals based on the items listed above. The City may select a “short list” of Proposers based on those scores. Short listed Proposers may be invited for interviews with the City. The City reserves the right to rescore short listed proposals as a result of the interviews and to make an award recommendation on that basis. The City reserves the right to negotiate the actual contract scope of work and price after submission. Maximum 25 points.

Base Items – Contractor shall include pricing on all items to be considered. This section will be scored out of 30 points. The annual budget for these services is estimated in the range of \$1 million to \$1.2 million dollars.

Item 1: Removal of 4 Meters - Removal of Existing Meters at all depth and sewer main sizes. The quantity is for four (4) metering sites at the beginning of the contract period.

Total Cost per Removal each site for Item 1: \$
 Total Cost for Removal for 4 sites for Item 1: \$

Item 2: Installation of 45 Permanent Meters – Installation of flow meters at all depth and sewer main sizes. This is the installation of the each flow meter at each site. The quantity is for forty five (45) metering sites installed at the beginning of the contract period.

Total Cost per Installation each site for Item 2: \$
 Total Cost for Installation for 45 sites for Item 2: \$

Item 3: Removal of 45 Permanent Meters – Removal of flow meters from all depths and all sewer main line sizes at the end of contract period. This is the removal of each flow meter from each site. The quantity is forty five (45) metering sites removed at the end of the contract period.

Total Cost per Removal for each site for Item 3: \$
 Total Cost for Removal for 45 sites for Item 3: \$

Item 4: 45 Permanent Meters – Monthly Metering, Raw Interactive Data Delivery, and Telog Enterprise Data Upload for forty-five (45) sites per month. This includes the monthly metering and raw data. Payment will be based on raw depth uptime as detailed in Section 9.4 a [of the Scope of Work](#).

Total Cost Per Month for Item 4 (this shall be the monthly cost for all 45 sites): \$
 Total Cost Per Year for Item 4: \$

Item 5: 45 Permanent Meters – Processed flow monitoring Data Delivery and Telog Enterprise Data Upload for forty-five (45) sites per month. This includes the processing raw data and QA/QC as detailed Section 8. Payment will be based of processing the data per Section 8 [of the Scope of Work](#).

Total Cost Per Month for Item 5 (this shall be the monthly cost for all 45 sites): \$
 Total Cost Per Year for Item 5: \$

Item 6: Installation of 25 Rotating Meters – Installation of flow meters at all depth and sewer main sizes. This is the installation of the each flow meter at each site. The quantity is twenty five (25) metering sites installed at the beginning of each twelve (12) month contract period.

Total Cost per Installation for each site Item 6: \$
 Total Cost for Installation for 25 sites Per Year for Item 6: \$

Item 7: Removal of 25 Rotating Meters – Removal of flow meters from all depths and all sewer main line sizes. This is the removal of each flow meter from each site. The quantity is twenty five (25) metering sites removed at the end of each twelve (12) month contract period.

Total Cost per Removal for each site for Item 7: \$
 Total Cost for Removal for 25 sites Per Year for Item 7: \$

Item 8: 25 Rotating Meters – Monthly Metering, Raw Interactive Data Delivery, and Telog Enterprise Data Upload for twenty five (25) sites per month. This includes the monthly metering and [raw](#) data. Payment will be based on raw depth uptime as detailed in Section 9.4 a [of the Scope of Work](#).

Total Cost Per Month for Item 8 (this shall be the monthly cost for all 25 sites): \$
 Total Cost Per Year for Item 8: \$

Base Items – Contractor shall include pricing on all items to be considered. This section will be scored out of 30 points. The annual budget for these services is estimated in the range of \$1 million to \$1.2 million dollars.

Item 9: 25 Rotating Meters – Processed flow monitoring Data Delivery and Telog Enterprise Data Upload for twenty five (25) sites per month. This includes the processing raw data and QA/QC as detailed Section 8. Payment will be based of processing the data per Section 8 [of the Scope of Work](#).

Total Cost Per Month for Item 9 ~~(this shall be the monthly cost for all 25 sites):~~ \$
 Total Cost Per Year for Item 9: \$

Item 10: Installation of Temporary Meters – Installation of temporary flow meters at no more than 30 feet deep or 72 inches in diameter. This is the installation of the each flow meter at each site. The quantity is [up to](#) eighteen (18) metering sites ~~for~~ [for](#) each twelve (12) month contract period.

Total Cost per Installation each site for Item 10: \$
~~Total Cost for Installation for up to 18 sites Per Year for Item 10:~~ \$

Item 11: Removal of Temporary Meters – Removal of temporary flow meters from each temporary site. The quantity is up to eighteen (18) metering sites ~~for~~ [for](#) each twelve (12) month contract period.

Total Cost per Removal for each site for Item 11: \$
~~Total Cost for Removal for up to 18 sites Per Year for Item 11:~~ \$

Item 12: Temporary Meters – Monthly Metering, Raw Interactive Data Delivery, and Telog Enterprise Data Upload for each site per month. This includes the monthly metering and raw data. The ~~estimated~~ quantity is up to thirty (30) location-months [within each twelve \(12\) month contract period. A temporary flow meter location-month is defined as a flow meter in a location for a period of one month. For example: 3 temporary flow meter location-months could be a combination of 3 flow meter locations for up to one month each or 1 flow meter location for a 3 months duration. The City reserves the right to have different length of duration for each flow meter location.](#) Payment will be based on raw depth uptime as detailed in Section 9.4 a.

~~Total Cost per meter location per month:~~ \$
~~Total Cost Per Location-Month for Item 12:~~ \$
~~Total Cost for 30 Location-Months Per Year for Item 12:~~ \$

Item 13: Temporary Meters – Processed flow monitoring Data Delivery and Telog Enterprise Data Upload for each site per month. This includes the processing raw data and QA/QC as detailed Section 8. The quantity up to thirty (30) ~~locations~~ [location-months within each twelve \(12\) month contract period. A temporary flow meter location-month is defined as a flow meter in a location for a period of one month. For example: 3 temporary flow meter location-months could be a combination of 3 flow meter locations for up to one month each or 1 flow meter location for a 3 months duration. The City reserves the right to have different length of duration for each flow meter location.](#) Payment will be based of processing the data per Section 8.

~~Total Cost per meter location per month:~~
~~Total Cost Per Location-Month for Item 13:~~ \$
~~Total Cost for 30 Location-Months Per Year for Item 13:~~ \$

Item 14: Allowance For Permits – Compensation for permit costs shall be based upon the actual costs of permits substantiated with a City of Austin Invoice. The Contractor's efforts to coordinate, assist, and oversee permits shall be subsidiary and are not included as part of this allowance. This allowance covers the cost of permits for both the base items and any option items, if selected.

Allowance Lump Sum Per Year for Item 14: \$5,000.00 (do not change this amount)

Item 15: All Other Items. The contractor shall include related services in their price proposal including, but not limited to data and equipment, computer or cell compatibility, reporting, transferring software, training, maintenance service, debris removal, permits and licenses, removal

Base Items – Contractor shall include pricing on all items to be considered. This section will be scored out of 30 points. The annual budget for these services is estimated in the range of \$1 million to \$1.2 million dollars.

emergency safety plan.

Total Cost Lump Sum Per Year for Item 15: \$

Item 16: Processing flow monitoring data after a major rain event approximately 10 times per year

Total Cost Per Rain Event for Item 16: \$

Total Cost for 10 Rain Events Per Year for Item 16: \$

Optional Items – Contractor shall include pricing on all items to be considered for award. Failure to provide pricing for each option will result in disqualification of response. This section will be scored out of 10 points. Some or all of these items will only be purchased if there is money available in the annual budget.

Option # 1:

Item 17 – Installation of 25 Rotating Level Indicating Meters – Installation of level indication only flow meters at all depth and sewer main sizes. This is the installation of the each flow meter at each site. The quantity is twenty five (25) metering sites installed at the beginning of each twelve (12) month contract period.

~~Price-Total Cost~~ per installation for each site for Item 17: \$
~~Total Price for installation for 25 sites Per Year for Item 17: \$~~
Total Cost for installation for 25 sites Per Year for Item 17: \$

Item 18 – Removal of 25 Rotating Level Indicating Meters – Removal of level indicating meters from all depths and all sewer main line sizes at the end of contract period. This is the removal of each flow meter from each site. The quantity is twenty five (25) metering sites removed at the end of for each (12) month contract period.

~~Price-Total Cost~~ per removal for each site for Item 18: \$
~~Total Price for removal for 25 sites Per Year for Item 18: \$~~
Total Cost for removal for 25 sites Per Year for Item 18: \$

Item 19 – 25 Rotating Meters Level Indicating Meters – Monthly Metering, Interactive Data Delivery, and Telog Enterprise Data Upload for twenty five (25) sites per month. This includes the monthly metering and data. Payment shall be based on raw depth uptime. Uptime shall be defined as the number of measurement intervals where a flow value can be calculated from a measured depth for a common time interval divided by the total number of measurement intervals in the reporting period.

~~Total Cost~~Price Per Month for Item 19 (this shall be the monthly cost for all 25 sites): \$
~~Total Cost~~ ~~Total Price~~ Per Year for Item 19: \$

Option # 2:

Item 20 – Installation of Temporary Meters – Installation of temporary flow meters at no more than 30 feet deep or 72 inches in diameter. This is the installation of the each flow meter at each site. The quantity is up to twenty four (24) metering sites ~~for~~ for each twelve (12) month contract period.

~~Total Cost~~Price per installation for each site for Item 20: \$
~~Total Price for installation for up to 24 sites Per Year for Item 20: \$~~

Item 21 – Removal of Temporary Meters – Removal of temporary flow meters from each temporary site. The quantity is up to twenty four (24) metering sites ~~for~~ for each twelve (12) month contract period.

~~Price-Total Cost~~ per removal for each site for Item 21: \$
~~Total Price for removal for up to 24 sites Per Year for Item 21: \$~~

Item 22 – Temporary Meters – Monthly Metering, Raw Interactive Data Delivery, and Telog Enterprise Data Upload for each site per month. This includes the monthly metering and raw data. The quantity is up to forty eight (48) location-months within each twelve (12) month contract period. A temporary flow meter location-month is defined as a flow meter in a location for a period of one month. For example: 3 temporary flow meter location-months could be a combination of 3 flow meter locations for up to one month each or 1 flow meter location for a 3 months duration. The City reserves the right to have different length of duration for each flow meter location. Payment will be based on raw depth uptime as detailed in Section 9.4 a of the Scope of Work.

Total Cost per meter location per month:
~~Price Per Month for Item 22 (this shall be the monthly cost for all 48 locations per month):-~~

Optional Items – Contractor shall include pricing on all items to be considered for award. Failure to provide pricing for each option will result in disqualification of response. This section will be scored out of 10 points. Some or all of these items will only be purchased if there is money available in the annual budget.

~~Total Price for 48 Location-Months Per Year for Item 22: \$~~

Item 23 – Temporary Meters – Processed flow monitoring Data Delivery and Telog Enterprise Data Upload for each site per month. This includes the processing raw data and QA/QC as detailed Section 8. The quantity is up to forty eight (48) location-months within each twelve (12) month contract period. A temporary flow meter location-month is defined as a flow meter in a location for a period of one month. For example: 3 temporary flow meter location-months could be a combination of 3 flow meter locations for up to one month each or 1 flow meter location for a 3 months duration. The City reserves the right to have different length of duration for each flow meter location. Payment will be based of processing the data per Section 8 of the Scope of Work.

Total Cost per meter location per month:

~~Price Per Month for Item 23 (this shall be the monthly cost for all 48 locations per month): \$~~

~~Total Price for 48 Location-Months Per Year for Item 23: \$~~

Option # 3:

Item 24 – 45 Permanent Meters, Raw Q Uptime – Monthly Metering, Interactive Data Delivery, and Telog Enterprise Data Upload for forty five (45) sites per month in Base Items. This includes the monthly metering and data. The quantity is forty five (45) metering sites for each twelve (12) month contract period. Payment shall be based on Raw Q uptime as detailed in Section 9.4 b of the Scope of Work.

~~Price-Total Cost~~ Per Month for Item 24(this shall be the monthly cost for all 45 sites): \$

Total ~~Price-Cost~~ Per Year for Item 24: \$

Option # 4:

Item 25 – 25 Rotating Meters, Raw Q Uptime – Monthly Metering, Interactive Data Delivery, and Telog Enterprise Data Upload for twenty five (25) sites per month in Option # 1. This includes the monthly metering and data. The quantity is twelve (12) months. The quantity is twenty five (25) metering sites for each twelve (12) month contract period. Payment shall be based on Raw Q uptime as detailed in Section 9.4 b of the Scope of Work.

~~Price-Total Cost~~ Per Month for Item 25 (this shall be the monthly cost for all 25 sites): \$

Total ~~Price-Cost~~ Per Year for Item 25: \$

Option # 5:

Item 26 – 45 Permanent Meters, Monthly Verifications for forty five (45) sites per month in Base Item. This includes monthly verifications of each FMS per Section 5.11 of the Scope of Work. The quantity is twelve (12) months for forty five (45) metering sites for each twelve (12) month contract period.

~~Price-Total Cost~~ Per Month for Item 26 (this shall be the monthly cost for all 45 sites): \$

Total ~~Price-Cost~~ Per Year for Item 26: \$

Option # 6:

Item 27 – 25 Rotating Meters, Monthly Verifications for twenty five (25) sites per month in Option #1. This includes monthly verifications for each FMS in Option # 1 per Section 5.11 of the Scope of Work. The quantity is twelve (12) months for twenty five (25) metering sites for each twelve (12) month contract period.

~~Price-Total Cost~~ Per Month for Item 27 (this shall be the monthly cost for all 25 sites): \$

Total ~~Price-Cost~~ Per Year for Item 27: \$

Attachment A

Table 1: Meter Removal Sites

No	Site	Manhole No	Pipe Diameter (Inches)	Manhole Depth (Feet)
1	GT G04 TWN MH 233792	233792	54	41
2	OT O02 ONI MH 59668	59668	84	53
3	OT O13 30 SLA MH 1438	1438	30	42
4	OT O13 36 SLA MH 1438	1438	36	42

Table 2: 45 Meter Locations

No	Flow Meter Name	Manhole No	Pipe Diameter (Inches)	Manhole Depth (Feet)
1	CT C02 FOU MH 117907	117907	18	15
2	CT C03 TAU MH 238456	238456	30	12
3	CT C04 TAU MH 73543	73543	96	85
4	CT C06 WLU MH 50791	50791	24	16
5	CT C08 WLU MH 52153	52153	96	101
6	CT C09 SHU MH 253164	253164	66	65
7	CT C17 SHU MH 34523	34523	42	14
8	CT C18 SHU MH 37203	37203	48	20
9	CT C20 FOU MH 73642	73642	96	55
10	CT C24 LKC MH 43709	43709	45	10
11	CT C25 HUK MH 33946	33946	84	67
12	CT C27 BUL MH 21168	21168	60	17
13	CT C01 WLN MH 80572	80572	84	28
14	CT C13 WLN MH 77869	77869	54	22
15	CT C14 WLN MH 90923	90923	60	31
16	CT C16 LWA MH 76617	76617	42	25
17	CT C21 LWA MH 240949	240949	42	20
18	CT C26 WLN MH 198975	198975	36	15
19	GT G01 TWN MH 231154	231154	36	12
20	GT G02 TWN MH 105071	105071	54	23
21	GT G03 CNT MH 60431	60431	36	22
22	GT G06 TWN MH 242261	242261	90	70
23	GT G07 WBO MH 29578	29578	36	14
24	GT G09 BLU MH 231529	231529	30	31
25	GT G10 BAR MH 204893	204893	33	20
26	GT G12 TWN MH 118902	118902	36	15
27	GT G13 TWN MH 48367	48367	44	19

Attachment A

Table 2 : Continued

No	Flow Meter Name	Manhole No	Pipe Diameter (Inches)	Manhole Depth (Feet)
28	GT G15 TWN MH 118707	118707	42	16
29	GT G19 TWN MH 29447	29447	42	12
30	GT G23 JOH MH 30108	30108	24	13
31	GT G28 BOG MH 133800	133800	48	23
32	GT G34 CAR MH 136039	136039	18	16
33	GT G35 CAR MH 72191	72191	36	23
34	GT G36 TWN MH 259249	259249	54	79
35	OT O03 WMS MH 246506	246506	42	9
36	OT O04 WMS MH 25227	25227	36	17
37	OT O06 42 WMS MH 246509	246509	42	16
38	OT O08 ONI MH 44204	44204	54	13
39	OT O09 36 SBG MH 111904	111904	36	56
40	OT O11 SLA MH 112266	112266	54	46
41	OT O12 48 SLA MH 112123	112123	48	13
42	OT O14 WMS MH 4180	4180	30	11
43	OT O17 ONI MH 110986	110986	84	49
44	OT O18 ONI MH 80081	80081	36	26
45	OT O19 WMS MH 7824	7824	36	12

Table 3: Govalle 25 Meter Locations

No	Flow Meter Name	Manhole No	Pipe Diameter (Inches)	Manhole Depth (Feet)
1	GT SHL MH 29139	29139	42	12
2	GT EBO MH 29302	29302	24	13
3	GT WLL MH 118631	118631	21	11
4	GT JOH MH 31258	31258	18	15
5	GT NO MH 29806	29806	42	9
6	GT BAR MH 225940	225940	12	12
7	GT SHL MH 30682	30682	15	10
8	GT CNT MH 45994	45994	18	16
9	GT CNT MH 46108	46108	24	16
10	GT TWN MH 47781	47781	33	10

Attachment A

11	GT TWN MH 48786	48786	12	11
12	GT CAR MH 59800	59800	18	10
13	GT TAL MH 72587	72587	30	18
14	GT FOL MH 72597	72597	24	24
15	GT BOL MH 61657	61657	24	15
16	GT WBO MH 27470	27470	15	11
17	GT TWN MH 119155	119155	15	12
18	GT CNT MH 119574	119574	15	11
19	GT SO MH 124605	124605	30	10
20	GT TWN MH 136771	136771	24	6
21	GT WBO MH 208690	208690	24	20
22	GT BAR MH 209295	209295	33	65
23	GT CAR MH 71747	71747	12	8
24	GT HRP MH 233789	233789	30	39
25	GT SHL MH 243987	243987	36	72

Table 4: Onion 25 Meter Locations

No	Flow Meter Name	Manhole No	Pipe Diameter (Inches)	Manhole Depth (Feet)
1	OT SLA MH 1462	1462	15	13
2	OT WMS MH 3547	3547	15	12
3	OT WMS MH 3920	3920	18	10
4	OT WMS MH 3938	3938	21	18
5	OT WMS MH 8243	8243	18	12
6	OT WMS MH 8352	8352	42	10
7	OT SBG MH 12055	12055	30	10
8	OT WMS MH 14308	14308	15	10
9	OT WMS MH 24428	24428	24	5
10	OT WMS MH 24794	24794	21	11
11	OT WMS MH 25207	25207	21	15

Attachment A

12	OT WMS MH 25294	25294	18	8
13	OT ONI MH 71640	71640	30	20
14	OT WMS MH 108840	108840	24	10
15	OT SLA MH 111608	111608	18	15
16	OT SLA MH 112246	112246	30	12
17	OT SLA MH 121913	121913	36	10
18	OT ONI MH 122707	122707	21	37
19	OT SLA MH 122760	122760	30	15
20	OT SLA MH 123210	123210	24	15
21	OT SLA MH 123352	123352	18	6
22	OT SLA MH 123804	123804	18	15
23	OT WMS MH 124941	124941	30	43
24	OT WMS MH 198363	198363	15	11
25	OT ONI MH 242738	242738	36	54

Table 5: Crosstown 25 Meter Locations

No	Flow Meter Name	Manhole No	Pipe Diameter (Inches)	Manhole Depth (Feet)
1	CT BUL MH 42807	42807	24	10
2	CT BUL MH 41538	41538	21	8
3	CT WBL MH 88082	88082	36	22
4	CT SHU MH 90378	90378	36	8
5	CT SHU MH 57830	57830	21	6
6	CT BUL MH 90133	90133	60	15
7	CT SHU MH 55840	55840	15	5
8	CT FOU MH 136007	136007	18	13
9	CT SHU MH 92952	92952	30	17
10	CT DRN MH 116935	116935	18	4
11	CT SHU MH 53612	53612	24	13

Attachment A

12	CT FOU MH 98780	98780	18	15
13	CT TAU MH 198091	198091	21	11
14	CT TYN MH 198676	198676	20	65
15	CT TYS MH 214219	214219	15	6
16	CT LKA MH 209425	209425	18	17
17	CT WLU MH 245452	245452	15	12
18	CT WLU MH 245395	245395	24	14
19	CT WBL MH 20891	20891	48	25
20	CT BOU MH 204164	204164	30	21
21	CT TAU MH 197506	197506	24	21
22	CT TAU MH 123991	123991	15	15
23	CT BOU MH 204151	204151	30	16
24	CT WLU MH 52022	52022	18	16
25	CT WLU MH 52307	52307	30	20

Table 6: Walnut 25 Meter Locations

No	Flow Meter Name	Manhole No	Pipe Diameter (Inches)	Manhole Depth (Feet)
1	WN LKC MH 124299	124299	30	13
2	WN WLN MH 78124	78124	30	15
3	WN HRS MH 114626	114626	18	14
4	WN WLN MH 78239	78239	21	7.5
5	WN WLN MH 70426	70426	30	11
6	WN WLN MH 124769	124769	36	23
7	WN WLN MH 70066	70066	15	21
8	WN WLN MH 77881	77881	18	15
9	WN WLN MH 77872	77872	24	11
10	WN LWA MH 88877	88877	15	10
11	WN WLN MH 77494	77494	21	12
12	WN LWA MH 67868	67868	24	14

Attachment A

13	WN LWA MH 89940	89940	15	11
14	WN WLN MH 116570	116570	48	31
15	WN LWA MH 76605	76605	15	11
16	WN LWA MH 75755	75755	30	8
17	WN LWA MH 195695	195695	60	24
18	WN LWA MH 197203	197203	24	10
19	WN LWA MH 201644	201644	15	13
20	WN GIL MH 219541	219541	30	26
21	WN GIL MH 235801	235801	18	19
22	WN WLN MH 253295	253295	24	43
23	WN LKC MH 270523	270523	42	26
24	WN RAT MH 270527	270527	42	42
25	WN WLN MH 86247	86247	36	17

Table 7: Typical Site Sheet

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB		
1	Site ID: (Manhole #)		Site Name:															Meter City Tag #		Meter Serial #		Probe Length:								
2	Pipe Size		Telog Coa#		Modem #:														Meter Model		Probe City Tag#		Probe Serial #							
3	Pipe Type		Telog SN#		Modem HEX:																Probe City Tag#		Probe Serial #							
4	Basin		Telog Type		All meters internal clocks are to be set to standard time																									
5	Installed By		BEFORE MAINTENANCE										AFTER MAINTENANCE																	
6			DEPTH (inches)			VELOCITY (ft/sec)					Time End of 10 minute window	Silt Level	Probe position	Entrant	Time Start of 10 minute window	VELOCITY (ft/sec)				DEPTH (inches)			Silt Level	Probe Position	Battery (Volts)	and Calibrate?	Comments			
7	Date	of 10 minute window	Meter Reading Depth	Measured Depth	Meter Reading Velocity	1st Peak	Profile	2nd Peak	Measured Depth	Time End of 10 minute window	Silt Level	Probe position	Entrant	Time Start of 10 minute window	Measured Depth	1st Peak	Profile	2nd Peak	Reading Velocity	Measured Depth	Reading Depth	End of 10 minute window	Silt Level	Probe Position	Battery (Volts)	and Calibrate?	Comments			
8	10/1900	0:00	0.00	0.00	0.00	0.00		0.00	0.00	0:00	0.00	0:00	0	0:00	0.00	0.00		0.00	0.00	0.00	0.00	0:00	0.00	0:00						
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Table 7a: Table 3 Enlarged View Before Maintenance

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Site ID: (Manhole #)		Site Name:										
2	Pipe Size		Telog Coa#				Modem # :						
3	Pipe Type		Telog SN#				Modem HEX:						
4	Basin		Telog Type				All meters internal clocks are to be set to standard time						
5	Installed By		BEFORE MAINTENANCE										
6			DEPTH (inches)		VELOCITY (ft/sec)				Time End of 10 minute window	Silt Level	Probe position	Time Start of 10 minute window	
7	Date	Time Start of 10 minute window	Meter Reading Depth	Actual Measured Depth	Meter Reading Velocity	1st Peak	Profile	2nd Peak					Actual Measured Depth
8	1/0/1900	0:00	0	0	0	0		0	0	0:00	0:00	0:00	0:00
9													
10													
11													

Table 7b: Enlarged View After Maintenance

M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	
				Meter City Tag #				Meter Serial #				Probe Length:				
				Meter Model				Probe City Tag#				Probe Serial #				
								Probe City Tag#				Probe Serial #				
time																
AFTER MAINTENANCE																
Time Start of 10 minute window	Actual Measured Depth	VELOCITY (ft/sec)				DEPTH (inches)		Time End of 10 minute window	Silt Level	Probe Position	Battery (Volts)	Pull and Calibrate ?	Comments			
		1st Peak	Profile	2nd Peak	Meter Reading Velocity	Actual Measured Depth	Meter Reading Depth									

Figure 1: Flow Meter System Communication – describes the firewall and the information needs to work and flow through City of Austin servers

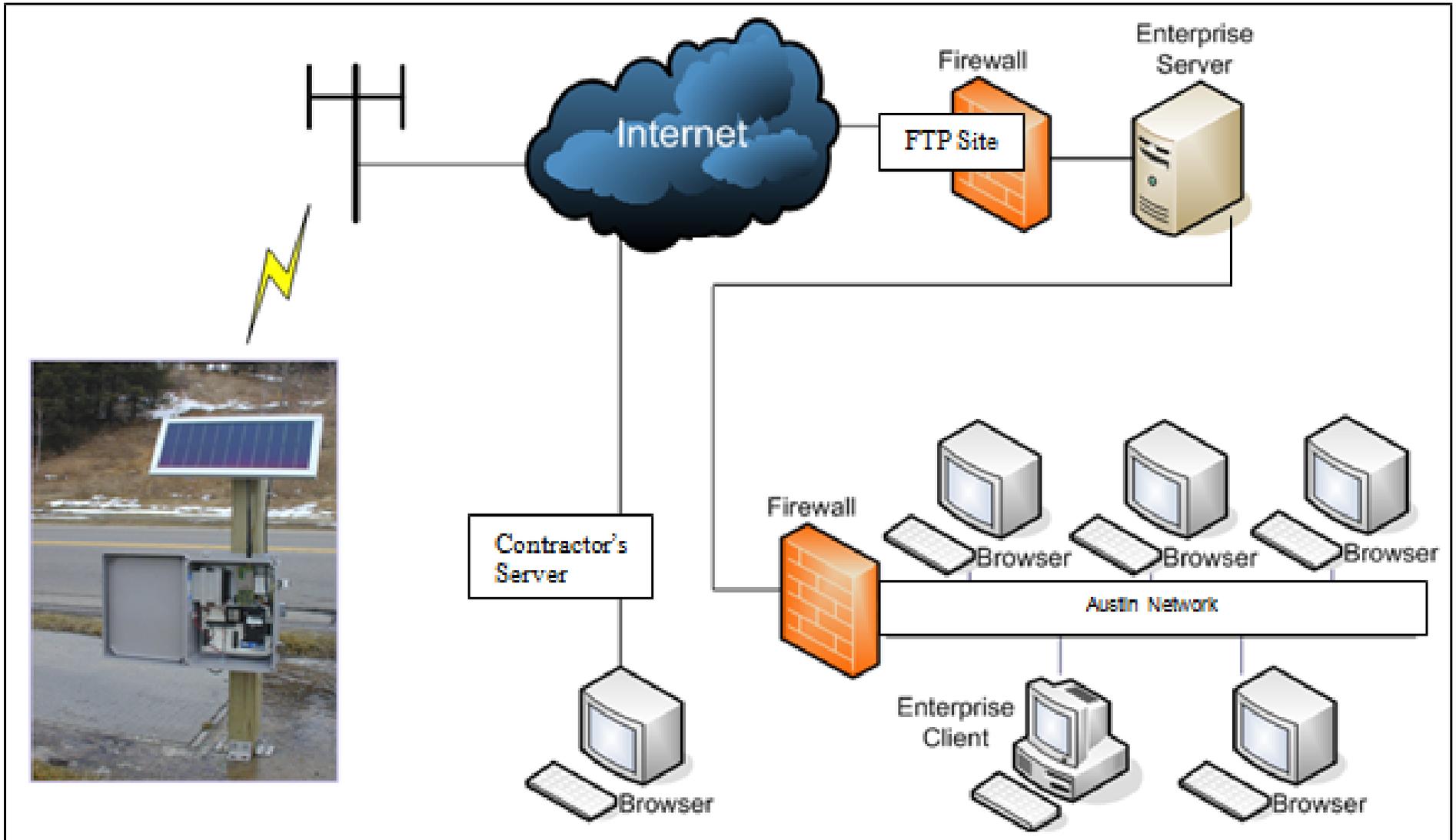


Figure 2: Missing Data – example of not meeting uptime requirement due to missing data

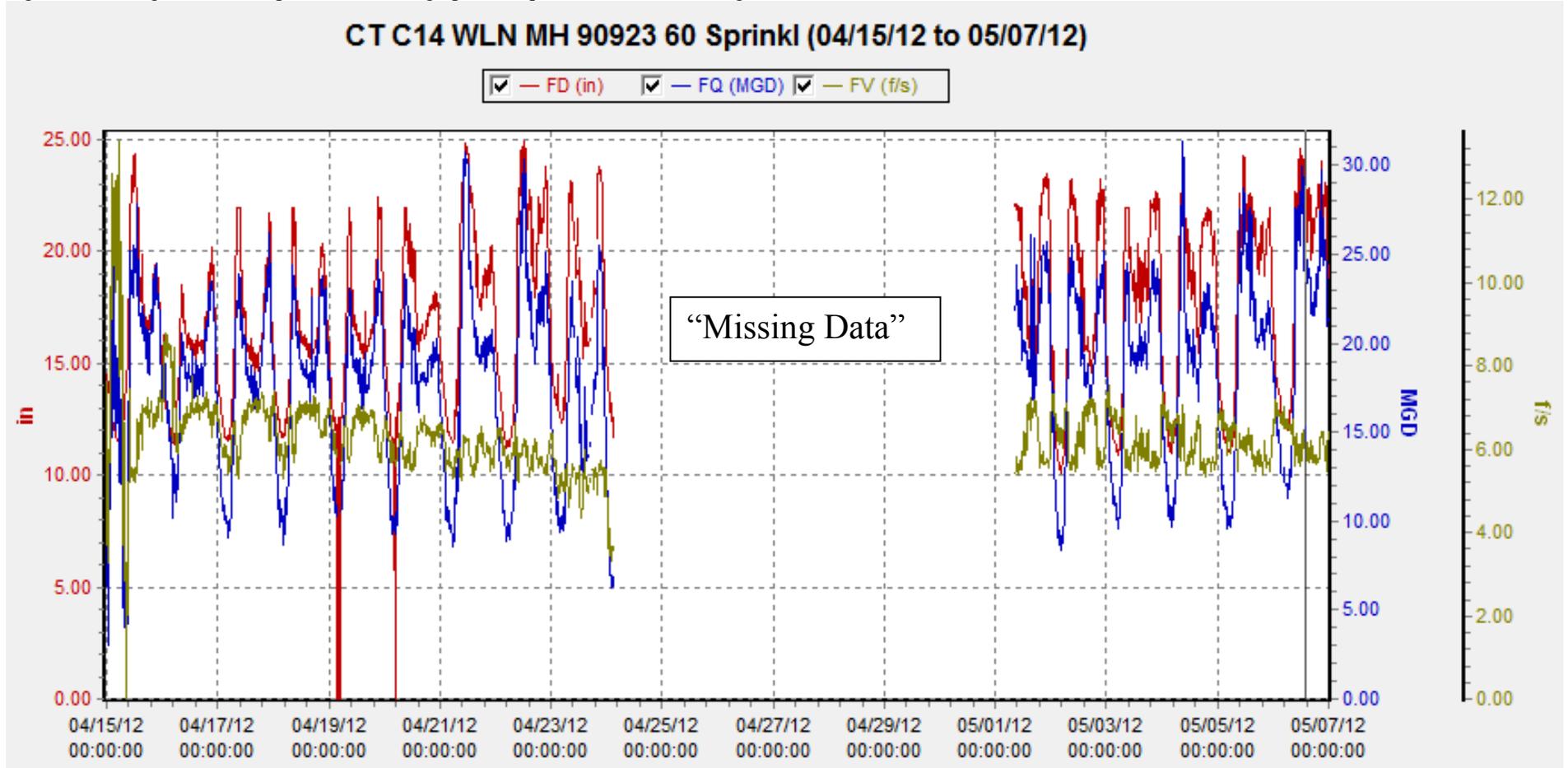


Figure 3: Flat Lines – flat line data will not count towards uptime

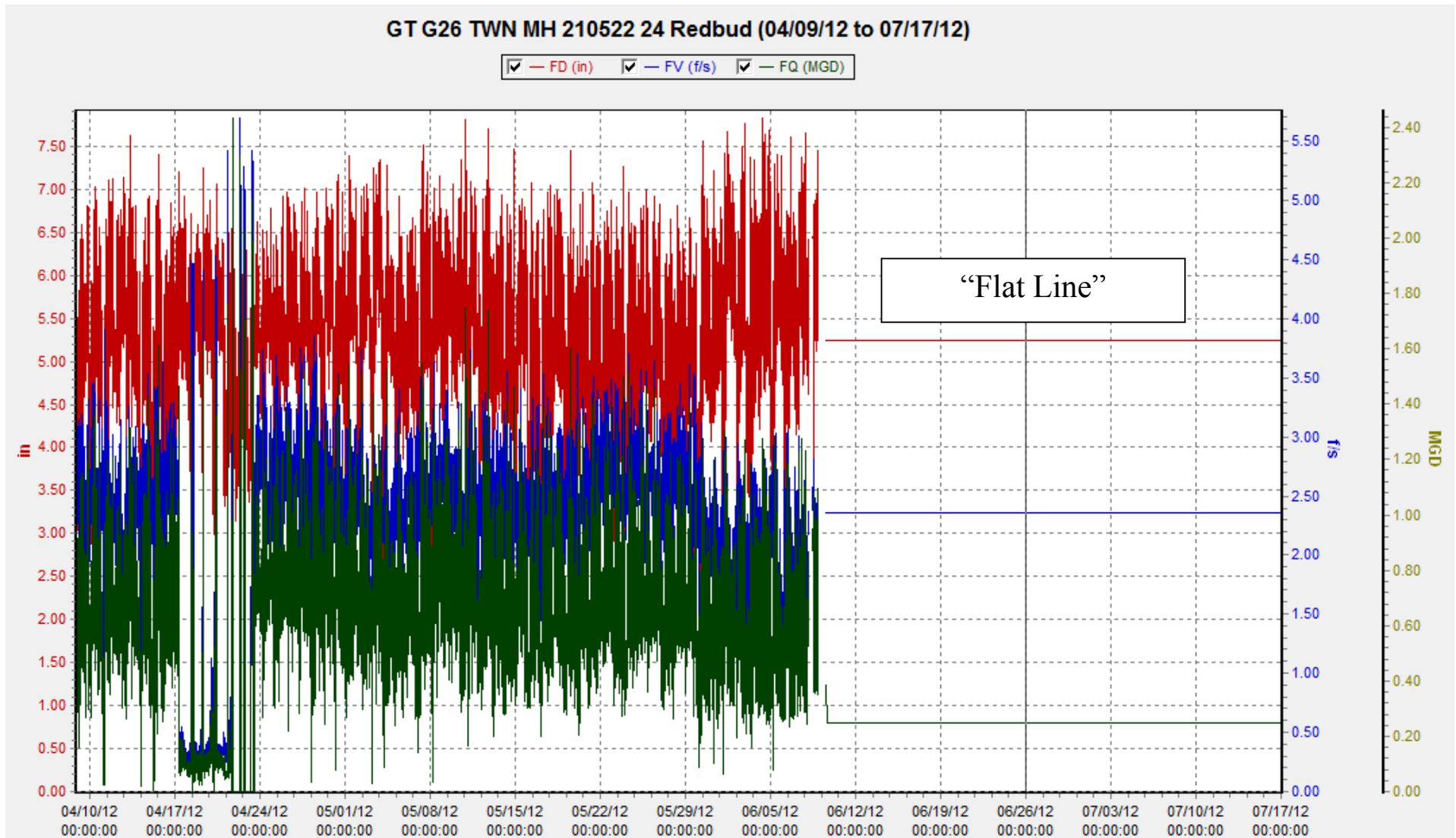


Figure 4: Drifts

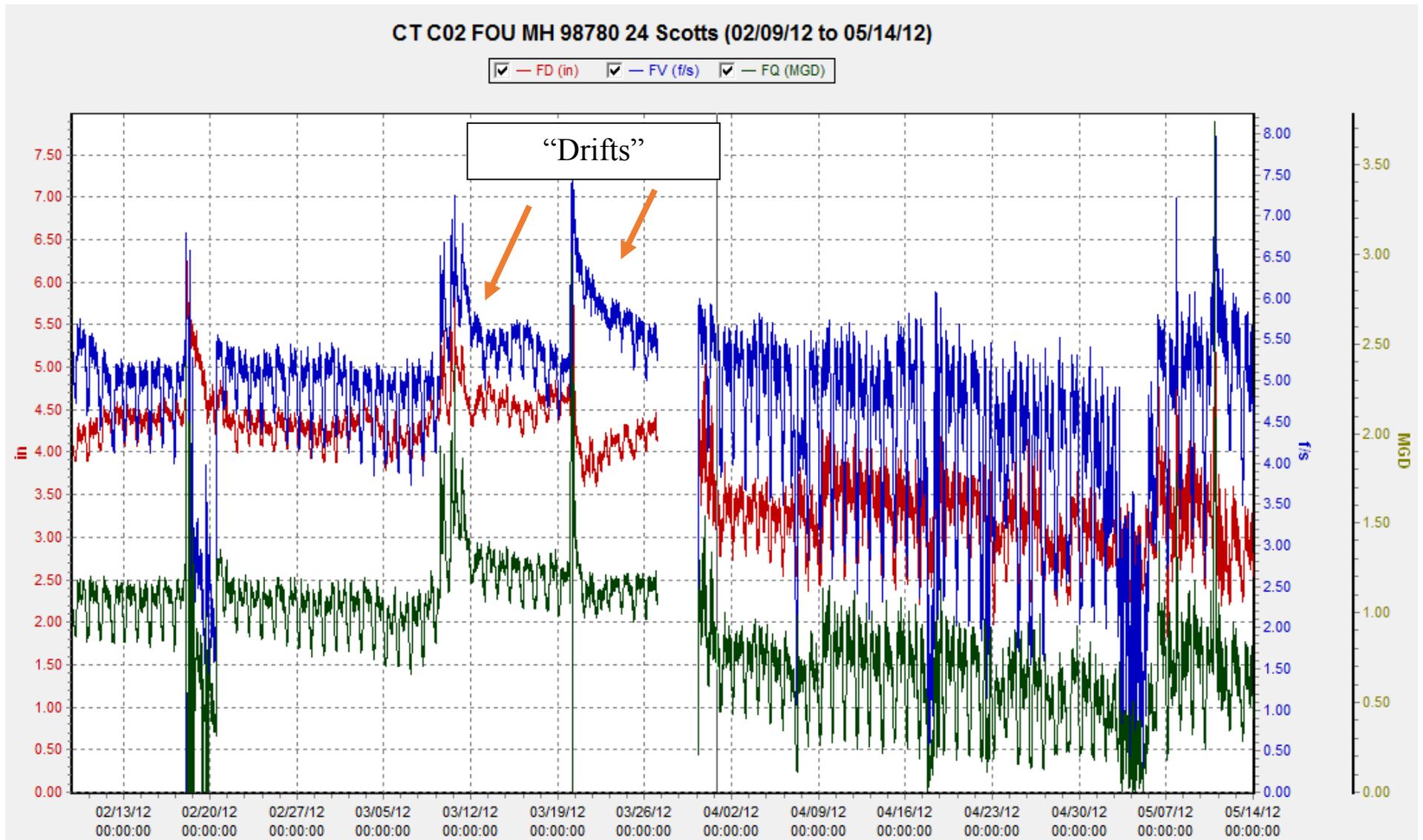


Figure 5: Spikes – will not count towards uptime

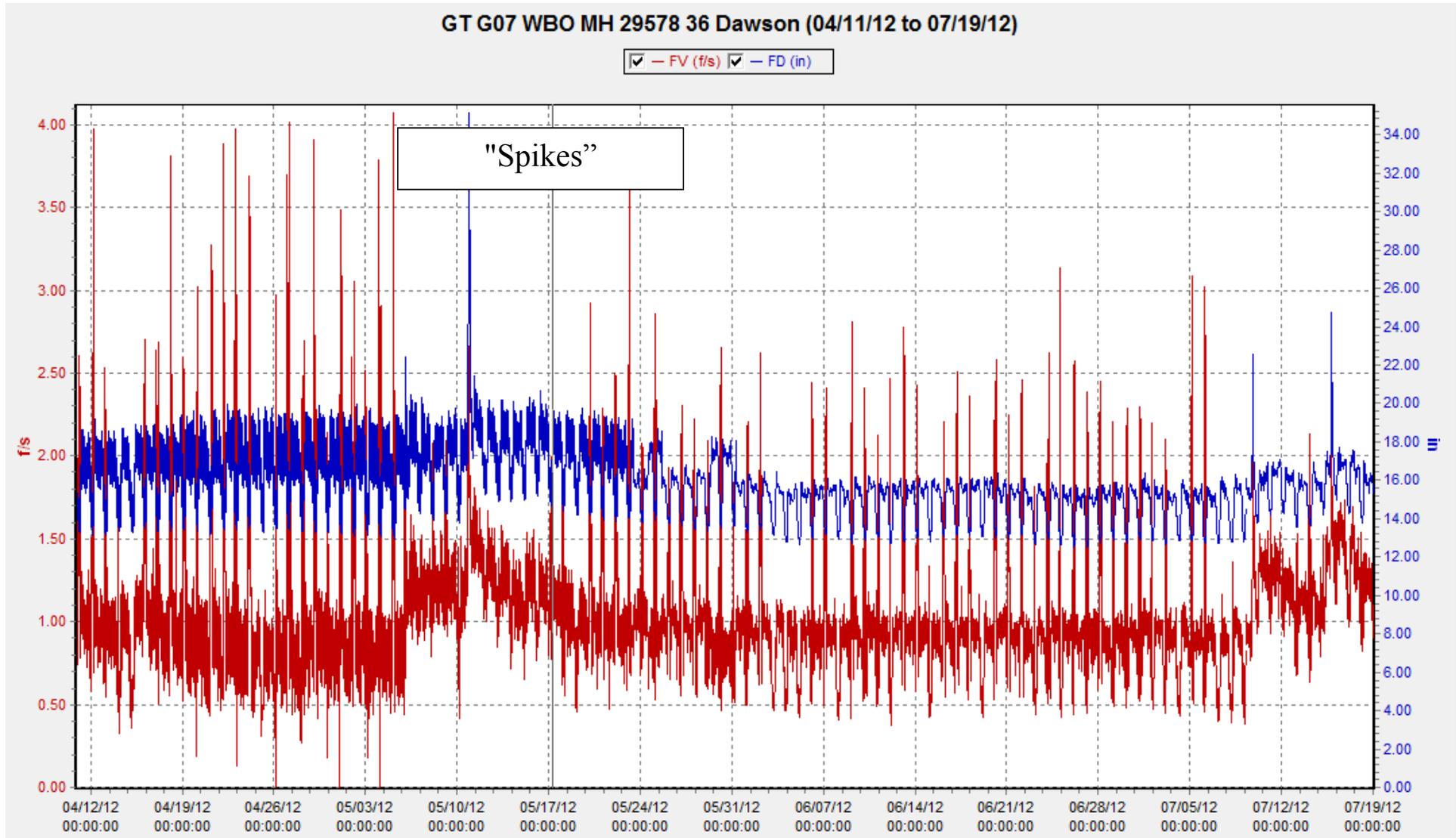


Figure 6: Verification Points – data that is acceptable and verification that is acceptable

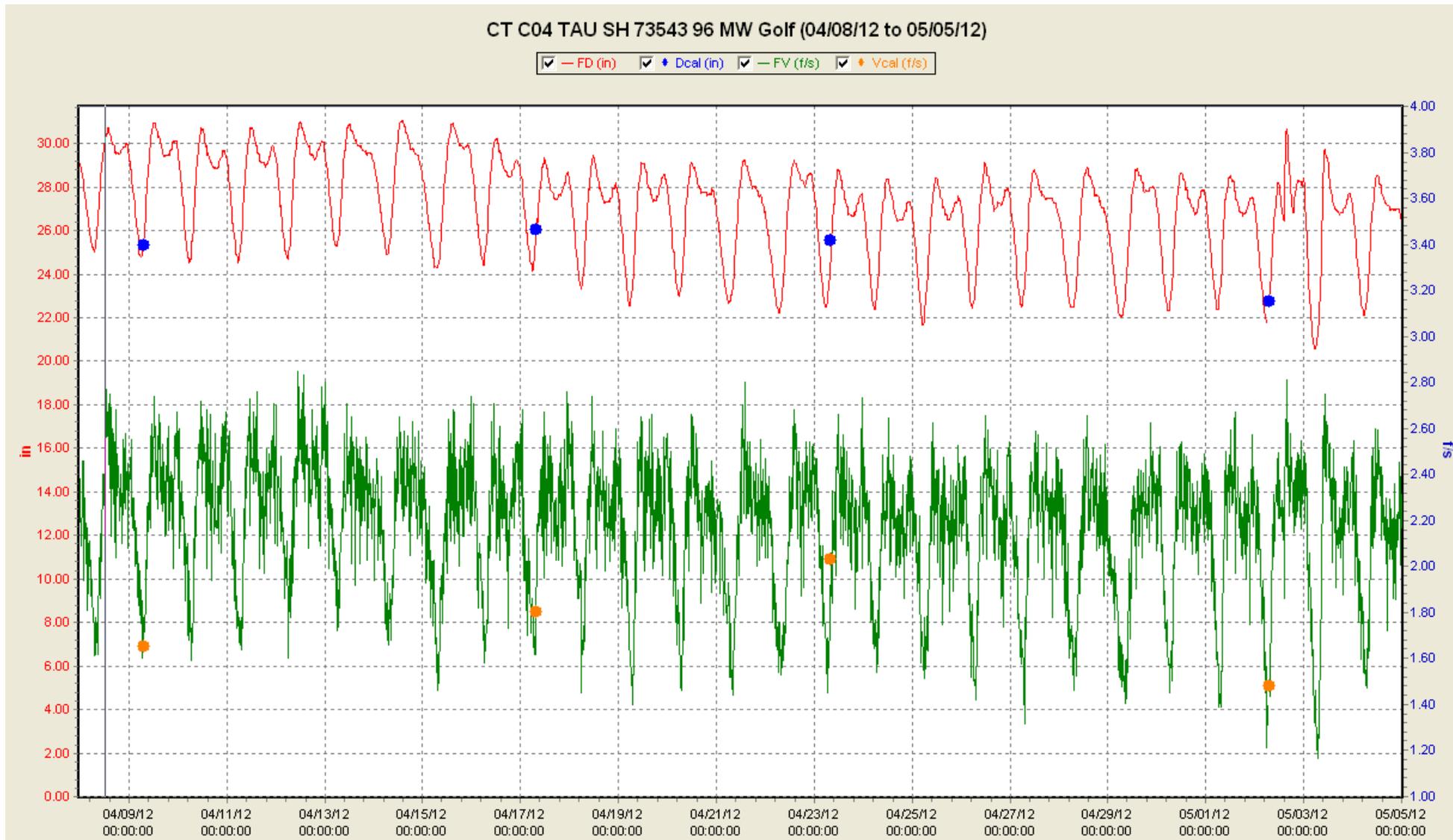


Figure 7: Shift – Level increasing with velocity decreasing – Contractor shall be able to explain the shifts

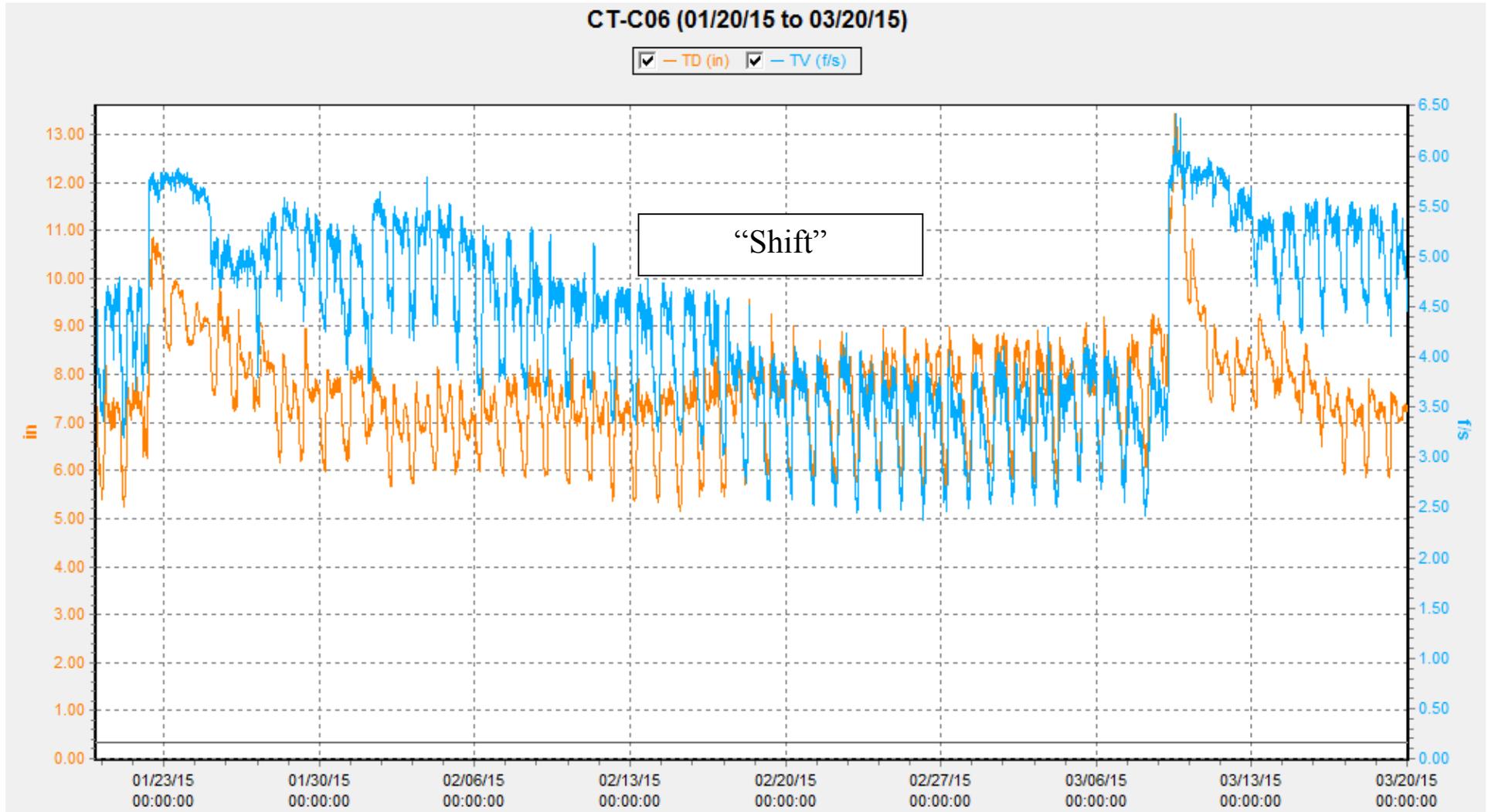


Figure 8: Shift – Level decreasing with velocity increasing – Contractor shall be able to explain the shifts

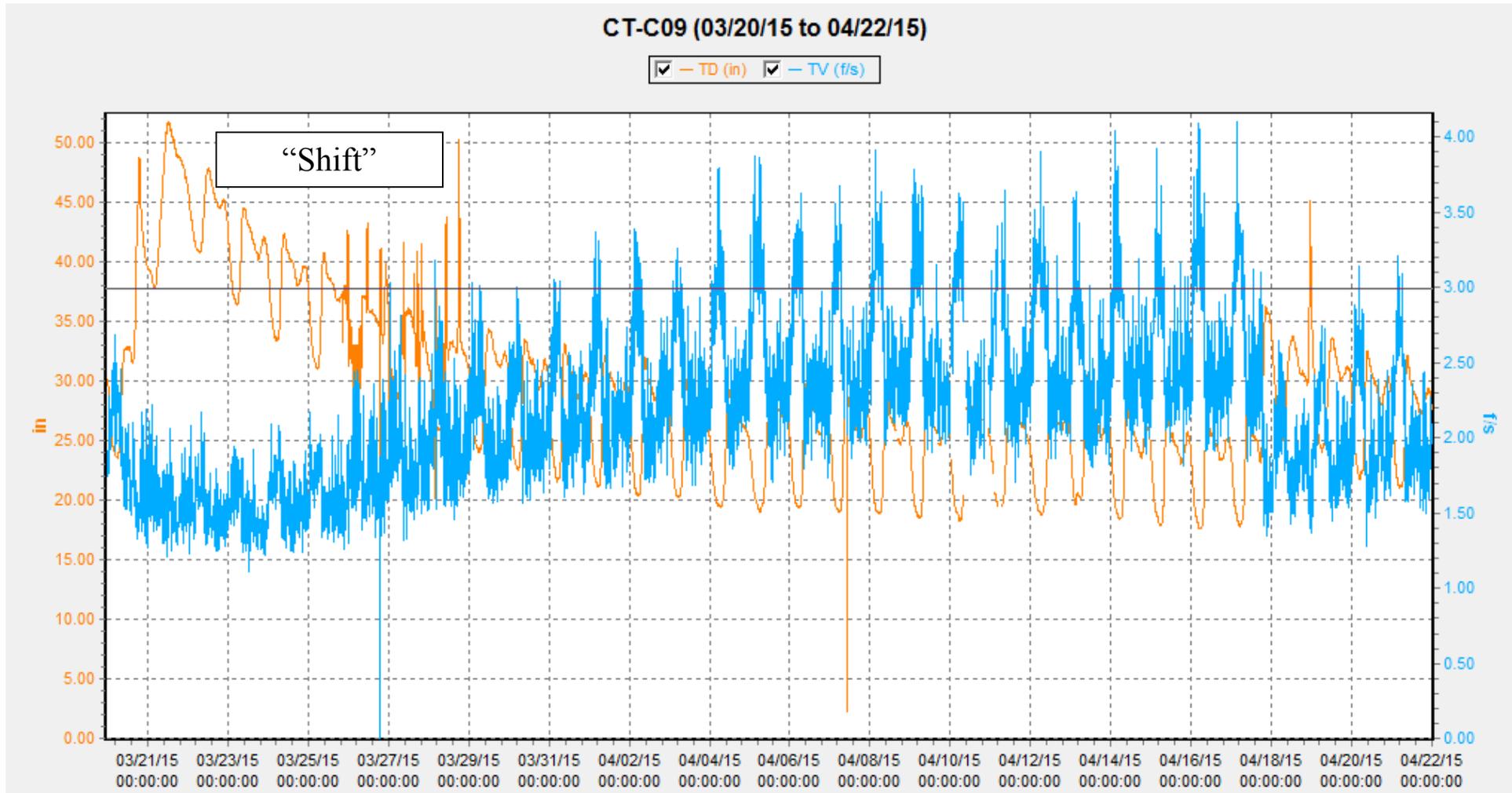


Figure 9: Flow below 90% uptime because of missing velocity

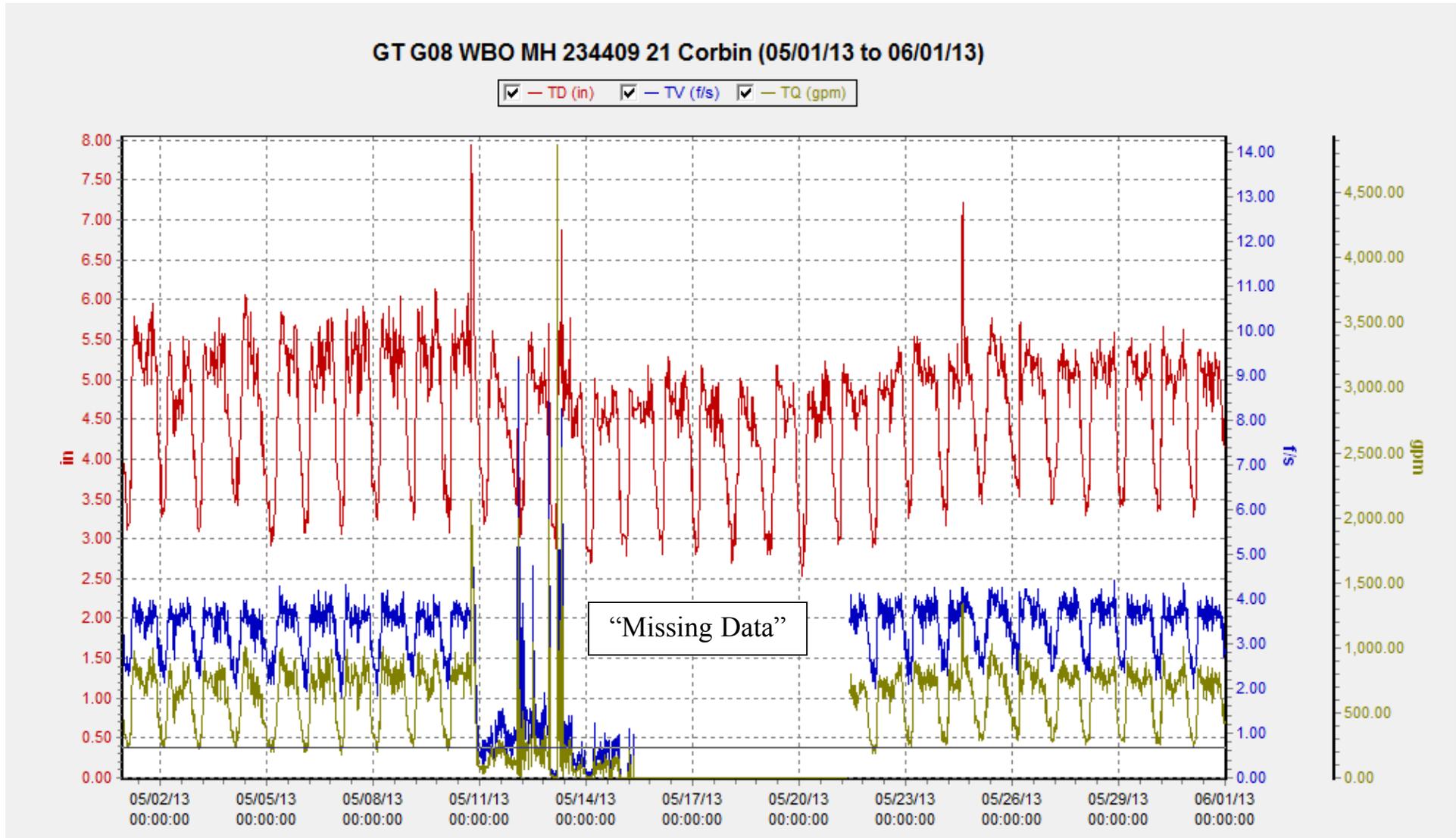


Figure 10: Velocity profile for levels above 5 inches

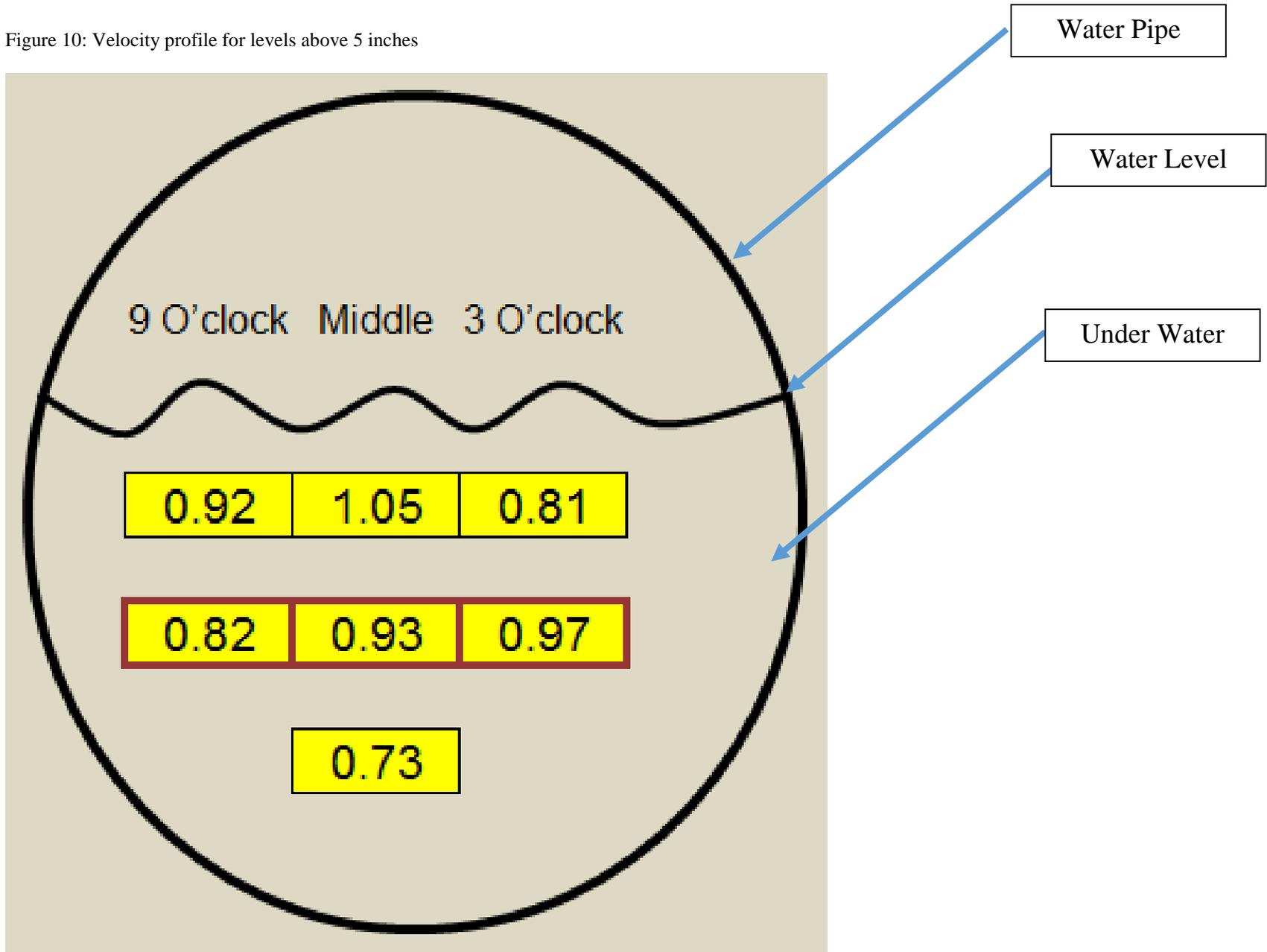


Figure 11: Velocity profile for levels below 5 inches

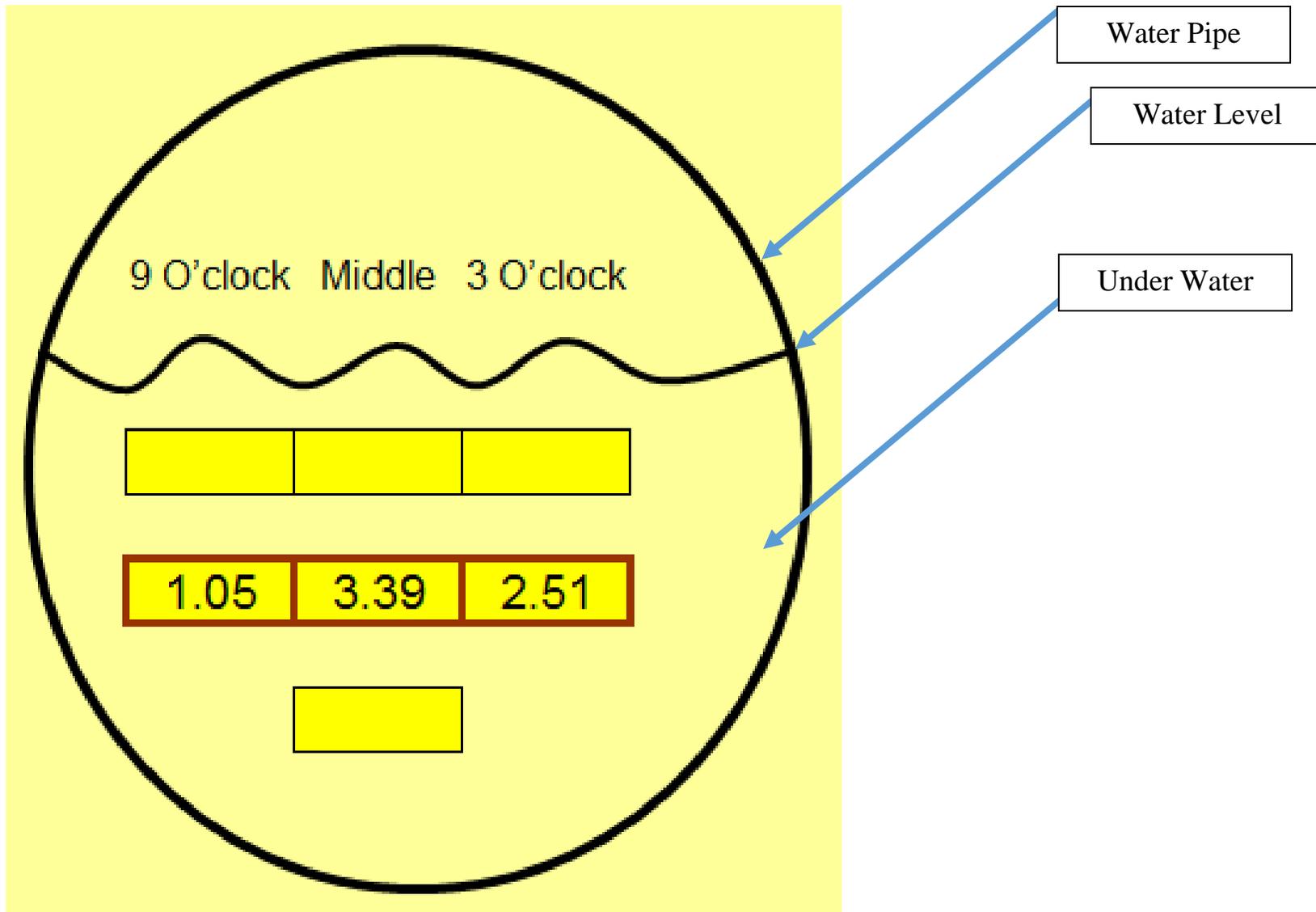
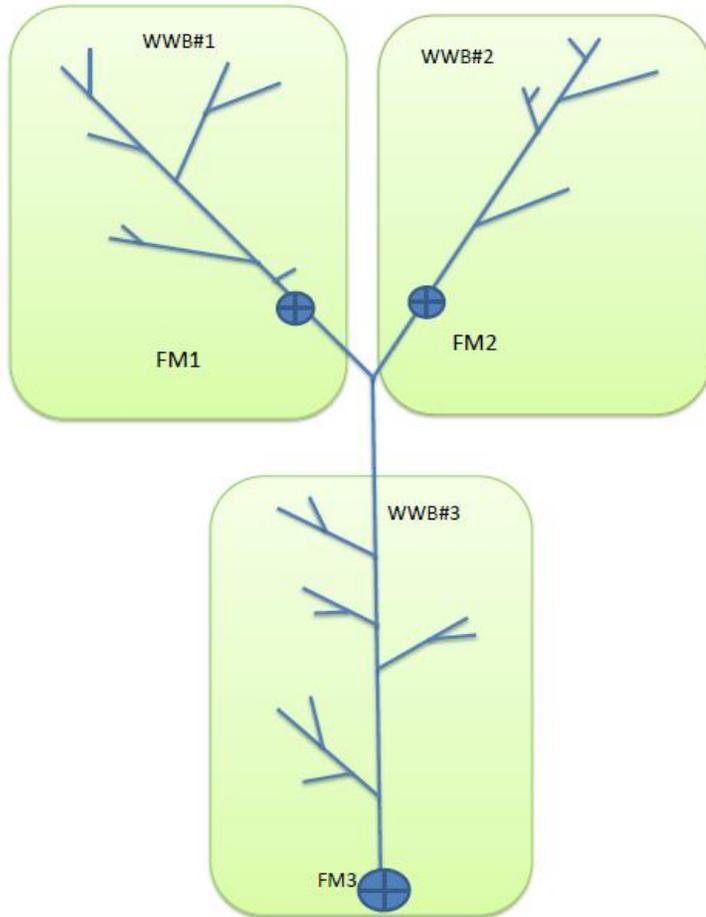


Figure 12: Flow Balance – required for permanent and rotating meters



Legend

Wastewater Basin (WWB)



Flow Meter (FM)



Wastewater Pipe Network



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New/Last Revision: 05/03/2003

B. Division Supervisors are responsible for:

1. Ensuring they comply with all standards and rules listed in Attachment 1 (City of Austin, Water and Wastewater Utility, Confined Space Entry Program) to this procedure when dealing with a situation that includes a confined space entry.
2. Ensuring all persons who enter or have the potential to enter confined spaces are promptly sent to the medical service contractor for annual respiratory physicals when scheduled. (See Utility SOP R-2, Respiratory Protection.)
3. Ensuring all persons who enter or have the potential to enter confined spaces have all required personal protective equipment available prior to entry into confined spaces.
 - a) Hard hat with chin strap
 - b) Eye protection
 - c) Safety-Toed Shoes/Boot or Rubber Boots or Waders
 - d) Gloves (appropriate for conditions)
 - e) Full body harness (For entry into permit-required spaces)
4. Ensuring all newly assigned person who will be assigned to enter or have the potential to enter confined spaces are scheduled and sent to receive the following services and training prior to being allowed to enter a confined space.
 - a) Receive a respiratory physical
 - b) Successfully complete Confined Space Entry training
 - c) Successfully complete Respiratory Protection training
 - d) Receive an initial respirator "Fit Test"
 - e) Successfully complete a First Aid training course
 - f) Successfully complete a CPR training course
5. Prohibiting persons from entering confined spaces if they do not pass a respiratory physical or fit test, or they fail to successfully complete any one of the training courses above.
6. Stopping or shutting down any confined space entry job that does not meet the standards listed in Attachment 1 to this document.
7. Ensuring all confined spaces encountered are assessed for atmospheric and physical hazards prior to allowing entry by any Utility employees including themselves, using the pre-entry checklists required by Attachment 1 herein.
8. Ensuring each employee who enters a confined space or has the potential to enter a confined space is issued a copy of Attachment 1 of this document.

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 New/Last Revision: 05/03/2003

- C. Utility Employees who enter or have the potential to enter confined spaces are responsible for:
1. Ensuring they comply with all standards and rules listed in Attachment 1, City of Austin, Water and Wastewater Utility, Confined Space Entry Program, when dealing with a situation that includes a confined space entry.
 2. Ensure they promptly report to the medical service contractor for annual respiratory physical when scheduled. (See Utility SOP R-2, Respiratory Protection).
 3. Ensuring they have and wear all required personal protective equipment prior to entry into confined spaces.
 - f) Hard hat with chin strap
 - g) Eye protection
 - h) Safety-Toed Shoes/Boot or Rubber Boots or Waders
 - i) Gloves (appropriate for conditions)
 - j) Full body harness (For entry into permit-required spaces)
 4. Attend initial and refresher confined space entry, respiratory training, first aid and CPR training when scheduled.
- D. Utility Safety and Technical Training Division will:
1. Conduct an annual review of the Confined Space Entry Program and this document no later than the end of February, of the next year. The records of activity from the preceding year will be gathered, reviewed and assessed for information necessary to make changes that will enhance the program.
 2. Review and incorporate any recommended changes submitted by any division or employee that may enhance the Confined Space Entry Program.
 3. In coordination with the Austin Fire Department, Rescue Squad, be the final authority for any improvisations that may be required in emergency situations. Situations must involve a real danger to the health and welfare of employees or the public to be considered an emergency. Improvisations will never place employees or the public at risk for any reason.
 4. Conduct scheduled Permit-Required Confined Space Entry training courses.

IV. STANDARDS

The information in this Standard Operating Procedure, including Attachment 1, meets or exceeds Title 29 Code of Federal Regulations, 1910.146, Permit-Required Confined Space. This document includes all the elements for Permit-Required Confined Space compliance programs required in paragraph 1910.146©(4), (d), (k4) and (l).

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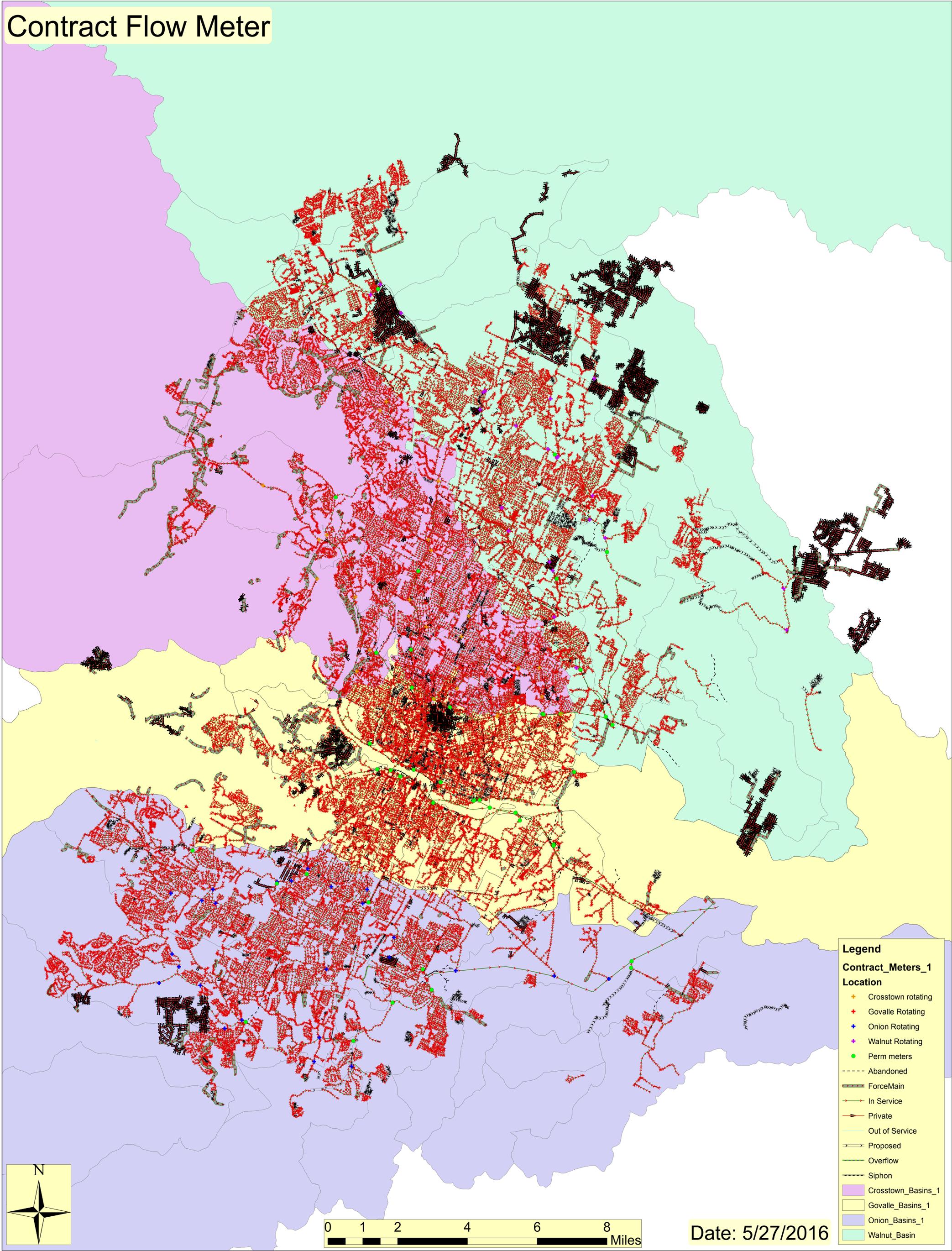
Effective Date: 05/03/2003

New/Last Revision: 05/03/2003

V. PROCEDURES

- A. The requirements and procedures listed in the attached "Attachment 1, City of Austin, Water and Wastewater Utility, Confined Space Entry Program" is the accepted Utility procedure for Safe Confined Space Entry. All Utility Managers, Supervisors and Employees will adhere to the provision in this document when dealing with confined space situations that require entry by Utility employees.
- B. Managers and Supervisors will submit any recommended changes to this document to the Utility Safety & Technical Training Division. Changes to this document may be sent at any time, but it is especially important that changes be sent during the annual program review.
- C. The Utility Safety Team will conduct the annual review of the Confined Space Program no later than the end of February, of the next year, after all program documentation from the preceding year has been gathered.

Contract Flow Meter

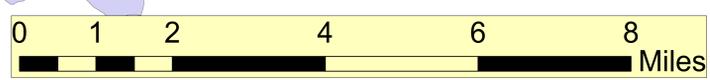


Legend

Contract_Meters_1

Location

- + Crosstown rotating
- + Govalle Rotating
- + Onion Rotating
- + Walnut Rotating
- Perm meters
- - - Abandoned
- ForceMain
- In Service
- Private
- Out of Service
- Proposed
- Overflow
- Siphon
- Crosstown_Basins_1
- Govalle_Basins_1
- Onion_Basins_1
- Walnut_Basin



Date: 5/27/2016