WB-B: TECHNICAL QUESTIONNAIRE

These guidelines are provided for standardizing the preparation and submission by all Vendors. The intent of these guidelines is to assist Vendors in preparation of their Proposal, to simplify the review process, and to help assure consistency in format and content.

The narrative Proposal shall be limited to 200 one-sided pages (8-1/2 inches x 11 inches), excluding appendices and a separate Financial Workbook.

The proposal submission shall respond to the information requirements below. Vendors should number their responses using the same numbering scheme, same titles and addressing the topics in the order presented in this document. Hyperlinks or website references should not be used and will be disregarded. Additional materials referenced in the response but provided as a separate document should be clearly identified in the document.

Information considered by vendor to be pertinent to this project and which has not been specifically solicited may be placed in a separate appendix section. Vendors are cautioned, however, that this does not constitute an invitation to submit large amounts of extraneous materials; **appendices should be relevant and brief**.

MANDATORY REQUIREMENTS

1) All functionality described within your proposal must be available within the current version of the proposed solution which is in full production and not any kind of testing or development phase. Proponents may include commentary about future plans within the proposal, but where such features are described, Proponents must explicitly state that the feature is not currently available. Confirm that your proposal reflects a solution that is fully available at the time of proposal submission. Check one: Yes No
2) The water meters and the AMI system being proposed must be provided by the same manufacturer. The Citis not accepting solutions provided by different manufacturers. Confirm that your proposal reflects a water meter and AMI Radio Transmitter solution manufactured by a single vendor. Check one: Yes No

SECTION 1: INTRODUCTION AND TRANSMITTAL LETTER

- 1. This introduction is a brief overview (should be a maximum of 3 pages) that helps contextualize and inform the detailed responses to the remaining questions.
 - identification of Contractor, including name, address and telephone number;
 - identification of all subcontractors, including name, address telephone number, website, email address:
 - Proposals submitted by a multi-party team should list the companies involved in the performance
 and supply of work, what each company will supply, and clearly describe each company's role and
 responsibilities in relation to the work. Identify the entity(ies) that will assume contractual
 responsibility for the project phase and the AMI Software licensor. These two roles can be
 performed by a single legal entity or by two separate legal entities.
 - Provide a high-level description of the proposed AMI System and Meter Installation System (MIS).
 - Provide a description of the proposed water meters.
 - Provide a description of the installation services.

- acknowledgment of receipt of all RFP addenda, if any. Prime contractor is responsible for ensuring addenda have been reviewed by all subcontractors;
- name, title, email address and telephone number of Contractor's contact person during period of proposal evaluation;
- signature of a person authorized to bind Contractor to the terms of the proposal.

SECTION 2: BUSINESS DRIVERS

2. Describe how the proposed solution achieves the project goals and business drivers detailed in Section III (Scope of Work). To avoid duplication, proponents may reference functionality descriptions provided for other responses. However, the reference must be clearly linked to the exact section and response number. Failure to clearly reference the section and response number may result in information being missed by the evaluators resulting in a lower score for that particular response. Preference will be given to systems that can support as many of the AMI Business drivers as possible.

ID	Revenue Protection (RP)	Score
RP1a	Unauthorized Use of Water	Important
RP1b	Unauthorized Use of Private Hydrants	Important
RP2	Stopped Meter	Important
RP4	High Bill Complaints	Critical
RP4a	Suspension of Service Monitoring for Non-Payment	Critical
RP4b	Support for Leak Forgiveness Program	Important
	Operational Efficiency (OE)	
OE1	Collecting Meter Readings	Critical
OE3	Meter Reading Reliability / Elimination of Estimates	Critical
OE4	Detect Register and Cut Wiring Problems	Important
	Enhanced Customer Service (CS)	
CS1c	Customer Engagement – Progressive	Critical
CS2	Leak Detection – Small	Important
CS3	Leak Detection - Broken pipe	Important
CS5	High Consumption Monitoring	Important
	Smart Cities / Smart Utility	
SC1	Wastewater Monitoring	Important
	Water Conservation / Societal Benefits (SB)	
SB1	Water Conservation Program Support	Critical
SB3	Greenhouse Gas Reduction	Important
SB4	Lead Service Line (LSL) Identification	Critical
	Improved Distribution System Management	
DS3	Acoustic Leak Detection (ALD)	Important
DS4	Detect Backflow Events	Important

SECTION 3: PROJECT MANAGEMENT

Project Team

The City expects that the personnel included in your response will be the people assigned to the project. Any changes to the proposed personnel may impact the City's evaluation.

- 3. Provide a project organization chart that includes the names of the personnel who will be assigned to the City of Pleasanton project and label the company each project team member is employed by.
- 4. Include a brief description of key project team members who will be assigned to the project (name, role, primary responsibilities, qualifications). Include senior manager(s) directly involved in the project, project manager(s) and team member(s) who will oversee installations, lead the AMI network deployment, deployment of the AMI software, system integrations, data management and public outreach. Identify expected availability of team members for the duration of the project.
- 5. Resumes of key project members are to be provided as an Appendix to the proposal and the proponent should identify what role each individual will fulfill in accordance with the project organization chart. Resumes not associated with a role identified in the project organization chart will not be considered. Resumes must include education, work experience and project experience specifically related to water meter installation services, AMI, and/or software support. Resumes should be kept to two (2) pages.

Experience

6. Provide examples of projects of similar (or greater) scope and complexity that the proponent has led as the prime contractor and describe the completion rate achieved with supporting details (e.g., actual completed installations, timeline, production rates, plan versus actual). Projects provided where the proponent was not the prime contractor will not be considered. Example projects must be included as references as requested in Section 8, below.

User Acceptance Test

7. Describe the proposed approach to User Acceptance Testing (UAT) and describe the resources to be provided by the City to help fulfill this task (percentage of a Full Time equivalent (FTE)).

Project Plan

- 8. Include a preliminary project schedule (example Microsoft Project) as an Appendix that details the major tasks involved in the implementation of the project including at a minimum start-up, proof of concept, and production phases. Include the major tasks the City should expect to perform. An electronic copy of the project plan is requested with the proposal submission. The Project Schedule should include a work breakdown structure based on the main work components including network deployment, AMI software implementation and training, data interfaces as described in RFP-2 Scope of Work, meter installation system setup, public outreach development, customer service, water meter supply and installer training. Proponents can assume an award date from the anticipated execution of agreement, and a project final completion as detailed in RFP-2 Scope of Work, Section 1.6.4.5 Completion Milestone 5.
- 9. Provide a weekly production schedule (Excel) starting from Proof-of-Concept through to Substantial Completion. The production schedule should provide Planned Installations / Week, Number of Installers / Week, Target Weekly Production / Crew.
- 10. Provide examples from a current and a completed project that demonstrate project production rates. Examples of projects 20,000 endpoints or greater are preferred. Project examples should be listed as reference projects as requested in Section 8 References.

Product Support and Lead Times

11. Detail the sales channels for the products proposed: water meters, AMI radio transmitters, data collectors. Indicate who will provide the first line of support to the City, where they are located, if they have a local

- distribution center, how long they have been supporting the proposed products, and how they will provide direct support to the City.
- 12. Describe the support the City will receive for product ordering (including lead times), warranty and product/problem investigation. Proposals should detail expected lead times for water meters and radio transmitters, the amount of product available for immediate delivery, and the typical response time for new orders.
- 13. Describe the return material authorization (RMA) process the City will need to follow for any supplied products.
- 14. Describe any current issues related to supply chain, lead times and/or component shortages (especially computer chips) which may impact this project. At the time of writing, what are typical lead times for your water meter and radio transmitter products with your existing customers? What is your approach to addressing supply chain issues to ensure the project will meet the City's timelines? Are tariffs expected to impact costs for any proposed products?

SECTION 4: AMI SYSTEM

AMI System Experience

- 15. Provide details of your company's AMI System experience:
 - Years in the AMI business.
 - Radio Transmitter model and Protocol (Proprietary, LoRaWAN, Cat-M1, etc.) being proposed.
 - Approximate total number of deployed Radio Transmitter units that are being proposed.
 - List where the proposed AMI System has been successfully deployed in water utilities with at least 20,000 AMI radio transmitters. Include the utility name, state, number of water radio transmitters, radio manufacturer, type of collection system, water meter manufacturer, installation company used and who was the prime contractor. These projects should be included in the reference projects requested in the Section 8 of this form.
- 16. Provide the expected useful life of the proposed components (small water meters, intermediate and large water meters, AMI Radio Transmitters, Data Collection Equipment) with supporting documentation. Provide the annual failure rates for the lifespan of the proposed components (Water Meters, AMI Radio Transmitters, Data Collection Equipment), this should equal 100% by the end of the useful life. This should reflect expected failure rate as described in the Pricing Workbook.
- 17. Provide information on any occurrences in the past 15 years where your radio transmitter or data collector products experienced failures during their warranty periods that were in excess of 5% of the total devices shipped to a given customer. What were the causes of these failures? How was the customer's issue handled? How were the products improved to prevent the recurrence of these issues?
- 18. Are there any active lawsuits or negotiated settlements (outside a court) in the last five years related to premature AMI product failures. What caused the failure, what was the impact and what was the resolution? How many times have you been sued for failure of the solution?

AMI Radio Transmitter

- 19. Describe the proposed AMI Radio Transmitter(s) for this project including model(s) and part number(s) and describe how they operate.
- 20. Provide the performance characteristics of the AMI Radio transmitter (radiated output power, operating frequency band, licensed or unlicensed channel, how often the radio reads the meter, how often the

- readings are transmitted, how 8-digit top of the hour hourly readings are transmitted and presented in the AMI software). Detail any limitations that may have an impact on performance, specifically with respect to radio transmitters in meter pits. Describe how alarms are provided from the AMI Radio Transmitter to the AMI software (i.e. on a regular schedule or as they occur).
- 21. Describe the functionality that the AMI Radio Transmitter supports (water meter low battery, empty pipe, burst pipe, pressure, temperature, other flags, time synchronization, firmware updates, demand readings) for the proposed water meters. List the water meter manufacturer's encoder registers that support this functionality in the radio transmitter.
- 22. Describe the installation process, including required and ideal mounting specifications for inside premise AMI radio transmitters. If there is an alternative mounting option, please describe. Describe the installation process of the AMI radio transmitter and identify if programming is required. Describe the AMI radio transmitter installation and programming handheld tool. Is the handheld required or can the installer use a standard-issue smart phone? If so, please outline the compatible smart phone makes, models, and operating systems.
- 23. For evaluation purposes, detail the warranty provided for the AMI Radio Transmitter proposed, the replacement costs and any factors that will impact the warranty. Provide Warranty and RMA Statements. Higher consideration will be given to solutions with longer warranty periods.
- 24. Can the City obtain a full replacement fifteen (15) year warranty on AMI Radio Transmitters? Would there be an additional cost related to a fifteen (15) year warranty?
- 25. Will the Contractor offer Radio Transmitter warranties that include in and out costs to retrieve failed products from the field while covered under the warranty?

AMI Network

Provide responses to the applicable group of questions based on the solution proposed.

Standalone City-Owned AMI Network (if applicable)

- 26. Provide an overview description of the AMI Network architecture proposed (include a diagram). Describe the components (data collectors, repeater, etc.) of the overall system that is proposed (physical characteristics, weight, power options, back-up battery, operating temperatures). Submit Specification Sheets as an appendix where applicable. Describe the available backhaul options from the Data Collection Equipment and the proposed solution for transmission of data from the Data Collector(s) to the AMI software.
- 27. Provide a propagation study for the City of Pleasanton metered service area. Within the propagation study, clearly indicate which locations the Contractor plans to use to mount its Data Collection Equipment and the required height of the antenna at each location. Clearly identify any additional locations that will be required other than those identified on the City's Facility List (RFP-4a), including whether new poles or other installation equipment is necessary. Detail the upset limit for data collection equipment.
- 28. Explain what support is required from the City during and after the AMI network deployment; what type of skillsets and how much of someone's time should the City allocate (% of a Full Time Equivalent (FTE)). Explain how City support and required skillsets may change over time.
- 29. Describe how the proposed AMI Network Services will meet and exceed the specification detailed in the Scope of Work, Section 2.3.8 AMI Network Services. Describe what and how proactive annual monitoring and maintenance will be performed on the network. Describe what and how reactive monitoring and maintenance will be performed. Confirm all costs associated with network monitoring, backhaul costs,

- proactive and reactive maintenance including data collection equipment replacement have been included for the full 20-year life of the system.
- 30. Provide a list of North American water utilities currently using the proposed AMI Network in the western United States.
- 31. Where an FCC license is required for the proposed AMI network, describe the licensing process and confirm that the City will have ownership of the license.
- 32. Provide a sample of the proposed service level agreement for the AMI Network Services.

Third Party-Owned AMI Network (if applicable)

- 33. Provide an overview of the Third-Party Owned AMI Network architecture proposed (include a diagram), the type of technology used. Who owns, monitors, and maintains the AMI Network? Confirm if the AMI Network is already deployed or if the AMI Network is yet to be deployed. If it has yet to be deployed, does the proposed data collection equipment require City facilities?
- 34. Provide a coverage map of the proposed AMI network and confirm that City's entire service area has coverage. Confirm the proposed AMI network will meet or exceed the Read Success Rate detailed in this document. Describe the process for investigating and resolving AMI radio transmitter performance issues including expected duration of resolution.
- 35. Where the proposed solution is a third-party AMI network, when was the AMI network installed? When is it due for replacement and will the Third-party agree to maintain and support the AMI network for the full 20-year system life?
- 36. Where the proposed AMI Network is a cellular network, detail the type of network (4G LTE, 5G, etc.), the length of the current contract with the cellular provider, who the cellular provider is, and what the expected support life of the system is.
- 37. Provide a list of North American water utilities currently using the proposed AMI Network.
- 38. Provide a sample of the proposed service level agreement for the proposed AMI Network Services.

Coverage of Kilkare Woods

- 39. Describe the proposed approach for reading meters in the Kilkare Woods territory. Include the following:
 - Indicate if any special design or installation measures are proposed to overcome the geographic challenges of the Kilkare Woods canyon environment.
 - Are any hybrid or alternate communication technologies (high-gain antennas, or drive-by backup options) proposed to maintain coverage and reliability?
 - Provide a schedule and testing plan to confirm coverage prior to system acceptance.
- 40. If proposing coverage in Kilkare Woods using an AMI system, provide a detailed propagation study specifically addressing the Kilkare Woods area. Be sure to include:
 - Expected coverage and signal strength within the canyon
 - Proposed locations of collectors, repeaters, gateways, or other network infrastructure to achieve the required coverage, and
 - Any known or anticipated coverage gaps and proposed mitigation measures.

Software

- 41. Describe how your system is secured against inappropriate access of the data and control of the system from radio to software. Specify the data security standards and certifications that your solution and company's practices conform with, such as ISO/IEC 27001 Certification or SOC report (Type I and II).
- 42. Provide an overview diagram showing the different software applications that make up the AMI software suite (e.g. AMI headend, MDM).
- 43. Describe whether the application(s) is a SaaS or hosted solution. The City prefers all software applications to be SaaS. Where a software application is not available as a SaaS, the Contractor may propose a privately hosted software setup. Higher points will be given for a SaaS software application. Any SaaS or hosted system data and backup data must be stored exclusively on servers located within the United States. Describe the data center (location, security, hosting provider, etc.) where the application will be hosted, including any redundant locations. Confirm that all hosting locations have security certifications (SOC 2 Type II, ISO 27001, or equivalent). Describe if the application is shared among AMI customers or if the application is dedicated to the City. What is the contracted service level? For City-hosted deployments, the Contractor must meet City's IT environment standards and include full patch/upgrade support in base price.
- 44. Provide an overview of the required data interfaces that need to be developed by the Contractor and the City, how the new interfaces will interact with the existing systems, the direction of proposed data flow, the purpose of the proposed interface and who is responsible (where applicable). Confirm the availability of documented, secure API's. All operational and customer data should be exportable without vendor lock-in.
- 45. Confirm the proposed applications support a 2-way data exchange with the City's Tyler Munis Customer Information System for scheduled reads. Describe the process for integration with the billing system for ondemand reads, meter updates, and service orders. Provide detail regarding any error-handling, automated retries, and monitoring for integration failures. Provide a list of implementations where the proposed software is successfully integrated with the Munis software.
- 46. Confirm that the proposed applications support the delivery of hourly meter reading data and alerts to the City's SEW customer via API as well as file transfer.
- 47. Describe how the solution supports single sign on (SSO) capabilities for the City's Users for all applications. Describe your experience in utilizing Microsoft Entra ID (formerly Azure Active Directory)" with your previous customers. SSO should cover all modules, with integration cost included. Describe the role provisioning model (e.g., AD group mapping).
- 48. Describe how many user groups or types of users can be set up in the applications.
- 49. Describe the overall approach to system and data security of the proposed software(s). Describe the IT security processes the SaaS or Hosted against which the applications have been tested. Detail the system's alignment with NIST Cybersecurity Framework or America's Water Infrastructure Act (AWIA) requirement for cyber-incident response planning. Specify minimum encryption standards (e.g. AES-256 for data at rest, TLS 1.2+ for data in transit) for both operational and backup data.
- 50. Describe how the software licensing works. Is it by named user, or an enterprise license? And how is pricing calculated during the project and once the project is complete. (Do not include any pricing information in the response. The response should only describe the approach to pricing.)
- 51. Describe the minimum (provider, version) server operating system, database platforms, User desktop operating system, web browser, mobile operating systems required to enable use of the proposed software(s).
- 52. As an appendix to this submission, provide the software, hardware support and maintenance agreements that would be proposed.

- 53. Provide a software development roadmap for supporting the solution for the full 20-year system life. How can the City participate or provide feedback on the product or software roadmap? Describe the process for software updates and introducing new software functionality.
- 54. Discuss system responsiveness. Detail how a financial credit will be applied to the City's account (what the calculation is, when it would be applied) if the proposed software goes down. Describe the redundancy in data centers or architecture that will ensure the required data is stored, secure from cyber-attacks, and backed up for a minimum of 3 years.
- 55. The proponent shall distinguish in their proposal under what circumstances additional license fees will be charged, for additional licenses required to enable fault-tolerance in active-active or active-passive server instantiations.

AMI Software

- 56. Provide an overview of the functionality of each application being proposed (Meter Reading, Data Collection, headend, and Meter Data Management).
- 57. Describe the utility user's interface to search, view and display individual water meter consumption.
- 58. Describe the utility user interface to search, view and display groups of water meter consumption related to groups of meters, parent/child deductive meter consumption, comparisons to other groups or averages, etc.
- 59. Describe the mapping functionality that is available to different users. Does the map allow the cursor to display key meter information? Can groups be created using a drag and drop type features (point, line polygon) on the map?
- 60. Confirm weather data (including at minimum precipitation and temperature) that is pulled into the AMI software solution. In what modules is this data available for viewing and reporting?
- 61. Describe how the meter reading process works with the AMI software solution.
- 62. Describe how the utility user can initiate a read request to obtain the most current data available for an individual account or group of accounts. Explain the anticipated latency for such read requests, i.e. will they return data less than one hour old, less than one day old, or less than one month old?
- 63. Describe how water meter and radio transmitter maintenance conditions are identified (cut wire, empty pipe, stopped meter, etc.) within the AMI Software. Can the AMI System send work orders to other City systems via API (or alternate flat file) and is the meter maintenance (install, replacement, re-programming, etc.) history tracked within the AMI software solution?
- 64. Describe how the Utility User Module enables City personnel to view and monitor the network data collection devices.
- 65. Describe any other Utility user interfaces or modules that allow the City to use the AMI data for various functions.
- 66. Describe how the software can display and/or report on non-revenue water.
- 67. Describe how reverse flow is identified. Is a flag provided by the meter or is it determined by the AMI Software where more reverse than forward flow has occurred in a given interval to trigger a reverse flow alert?
- 68. Describe if meters can be placed into a virtual shut-off group and how the City is notified of consumption among this group.
- 69. Discuss any analytics your software provides to detect mis-applied meters and how the data is leveraged to make the determination.
- 70. Describe the reporting functionality for standard and custom reports, are there any additional costs associated with these reports (aside from what is required within RFP-2 Scope of Work)?

- 71. Describe how alerts (continuous consumption, high consumption, reverse consumption) can be set up in the AMI software solution? Can the City set different thresholds for different sized meters? Are these thresholds a function of the AMI software or the Radio Transmitters? Can these thresholds be easily changed in bulk through the AMI network? How are these alerts communicated to the Utility users? Can Alerts be "resolved" for a period of time, once the City has performed an investigation, to allow this address to be excluded from future reports?
- 72. Is data encrypted when stored within production and backup environments?

AMI Software Support and Training

- 73. What types of software customer service support are available (phone, email, live chat, onsite, etc.) and what are the hours associated with each type of support?
- 74. Describe the different types of training that will be provided to the various City departments (meter shop, customer service, water billing, distribution). How long are the sessions during the initial training, and what type of on-going training after the project is complete?

Future-Proof

75. Describe how the proposed system addresses the potential desire to add functionality in the future such as, but not limited to, data analytics, machine learning, water quality monitoring, asset geolocation, acoustic leak monitoring, and temperature and pressure monitoring.

SECTION 5: WATER METER SUPPLY

Water Meter Experience

- 76. What are the proposed water meter manufacturer, type, register, and part number of the proposed meter products? Submit Specification Sheets as an appendix for each water meter/register proposed. State yes or no to confirm all metering and non-metering products meet or exceed certifications NSF/ANSI 61 Annex G and NSF 372 certifications.
- 77. Provide details of your company's water meter experience (number of meters manufactured by meter type, years in the business, years of operation).
- 78. Describe how long the proposed water meter has been manufactured.

How many of the proposed model(s) of water meters have been manufactured in the last five years.

- 79. Detail any product changes or improvements to the proposed water meter in the last ten years.
- 80. Provide details on your water metering products' failure rates. Include information regarding any lawsuits against your company as it relates to the proposed meters, whether any significant failures have occurred. and how they were rectified.

Water Meter and Encoder Register Performance and Functionality

81. Complete the following table with published performance characteristics for meters up to 2" in size.

Ref	Performance Criteria	UOM	5/8"	3/4"	1"	1.5"	2"
a.	Total volume of water that can pass	CCF					
	through the water meter where the						
	meter will still perform to new meter						
	accuracy.						

Ref	Performance Criteria	UOM	5/8"	3/4"	1"	1.5"	2"
b.	Normal Operating Flow Range where	gpm					
	water meter accuracy is maintained						
	within AWWA Accuracy Standards for						
	new meter accuracy (98.5% to 101.5%).						
c.	Maximum Continuous Flow Rate where	gpm					
	water meter accuracy is maintained						
	within the appropriate AWWA Series						
	Accuracy Standards for new meter						
	accuracy.						
d.	The lowest flow rate where accuracy is	gpm					
	attained at 98.5% or better.						
e.	Minimum Flow Rate at which the meter	gpm					
	will register consumption						
f.	Accuracy at Minimum Flow Rate shown	%					
	in 3f above						
g.	What is the sampling rate of the	per					
	proposed meter?	second					
h.	What is the failure rate of the meter	%					
	being proposed by size?						

Complete the following table with published performance characteristics for meters 3" and larger.

Ref	Performance Criteria	UOM	3"	4"	6"	8"	10"
a.	Total volume of water that can pass	CCF					
	through the water meter where the						
	meter will still perform to new meter						
	accuracy.						
b.	Normal Test Flow Limits where water	gpm					
	meter accuracy is maintained within						
	AWWA Accuracy Standards for new						
	meter accuracy (98.5% to 101.5%).						
c.	Safe Maximum Operating Capacity	gpm					
	(SMOC) where water meter accuracy is						
	maintained within the appropriate						
	AWWA C715 Series Accuracy Standards						
	for new meter accuracy.						
d.	The lowest flow rate where accuracy is	gpm					
	attained at 98.5% or better.						
e.	Minimum Test Flow Rates where	gpm					
	accuracy is attained at 95% or better						
f.	Maximum Allowable Head Loss at SMOC	psi or					
		kPa					
g.	What is the sampling rate of the	per					
	proposed meter?	second					
h.	What is the failure rate of the meter	%					
	being proposed by size?						

- 82. What is the estimated life of the water meter without the need to perform maintenance on the meter or encoder register (i.e., battery replacement, etc.)? How is the battery/component life calculated? Provide any / all justification for the meter life being suggested.
- 83. Is the battery and/or measuring element field replaceable?
- 84. For the type of water meter being proposed, is the register capable of remote installation from the meter body? If so, provide any limitations (i.e., distance between register and meter body). What is the meter and register's IP (Ingress Protection) rating?
- 85. Detail the encoder register firmware version number that is currently being proposed and any AMI radio transmitter(s) the encoder register has been certified and published as compatible by the AMI Manufacturer.
- 86. Describe what features of the encoder register are programmable.

Enhanced Encoder Functionality

- 87. Does the encoder register provide a low battery flag. Is the low battery flag a time-based flag or a low voltage flag? Does the encoded output provide an actual measure of the voltage? What is the time duration between when a low voltage alarm is triggered to complete failure?
- 88. Does the encoder register provide a backflow flag. How is the backflow flag triggered? How will the City know how much backflow occurred?
- 89. Describe if the water meter or encoder register has a empty pipe flag indicator. If so, describe how this flag works.
- 90. Describe if the water meter or encoder register measures pressure. If so, describe how this feature works and confirm that it can be passed to an AMI radio transmitter.
- 91. Describe if the water meter or encoder register measures temperature. If so, describe how this feature works and confirm that it can be passed to an AMI radio transmitter.
- 92. Describe if the water meter or encoder register measures flow rate. If so, describe how this feature works and confirm that it can be passed to an AMI radio transmitter.

Water Meter Warranty

- 93. For evaluation purposes, detail the warranty provided for water meters of all sizes, the replacement costs and any factors that will impact the warranty. Provide Warranty and RMA Statements. Higher consideration will be given to solutions with longer warranty periods.
- 94. Can the City obtain a full replacement fifteen (15) year warranty for small water meters? Would there be an additional cost related to a fifteen (15) year warranty?
- 95. Will the Contractor offer small meter warranties that include in and out costs to retrieve failed products from the field while covered under the warranty? Provide details on the cost of meter replacements under warranty.

SECTION 6: INSTALLATION SERVICES

Installation Project Experience

96. Provide details of your company's water meter installation experience (total number of meters installed, years in the water meter installation business). Provide a list of installation projects where the proposed

approach has been successfully employed. Indicate the prime contractor, the meter manufacturer, the system manufacturer, the installation company, the number of meters and project dates. Include information on experience with inside installations, and installations in meter pits. These projects should be included in the reference projects requested in Section 8 of this form.

Warehouse and Office

97. Describe the proposed warehouse / office facility for use by installation staff during the deployment. If you wish to use City of Pleasanton facilities, include details regarding specific requirements for space, equipment, utilities, security, badging, etc. What is the estimated square footage required for storage of meters and radio transmitters, both new and those removed from the field. Note that if you prefer to use City of Pleasanton facilities, a credit should be offered on Tab C8 Optional of WB-C Financial Workbook.

Project Personnel

98. Provide an overview of the project personnel as it relates to administration, quality assurance, call center and the number of installers that will be dedicated to the project during each phase. Document the positions that will be filled by subcontractors and the positions that will be filled by employees.

Work Requirements

99. Detail the project methodology that will be used to successfully implement the City of Pleasanton's AMI and water metering project. Also include details on: addressing difficult installations, procedures that will be implemented to get a project back on schedule if it falls behind, and communication methods that will be used to update the City on project status and progress.

Safety Requirements

100. Describe your health and safety program and include any relevant details as it pertains to the City's project. Include a copy of your Injury Prevention Program as an appendix to your proposal.

Data Management

- 101. Describe your back-office system for managing the project (i.e., your Meter Installation System MIS). Using an electronic work order system, explain how data collected in the field will be managed and how data integrity will be maintained (through the backend system and in the field).
- 102. Confirm how the City and its representatives will obtain individual installation information from the system in near real time. Describe how the City will look up, view and report on installation (old meter, final reading, new meter, new reading, pictures, etc.) information during the project.

Customer Service

103. Detail the features and functionality of the call center that will be used to support the project. What is the minimum and average number of live call center representatives able to receive calls and perform required call center activities? Describe how public outreach communications will be tracked in the system. Discuss how common customer service issues/problems will be addressed by various members of the Contractor's team. How will issues be escalated to resolve a problem?

Public Outreach

104. Describe your company's experience developing and executing a public outreach program for this type of project. Appointment generation is essential for project success. Provide examples from previous projects

that demonstrate your company's abilities to generate program acceptance and what makes your approach successful.

105. Detail the public outreach approach that will be used to successfully implement the City's AMI and water metering project. Provide samples of each proposed material as an appendix in your proposal.

Quality Control

106. Describe the quality assurance plan and highlight what quantitative data is used to measure the performance of the project (provide samples from other projects where possible). What percentage of post-installation inspections (both in the office and in the field) will the proponent perform to ensure quality workmanship, and what is the corrective action process for an installer who is not meeting the installation specifications?

SECTION 7: EXCEPTIONS TO THE SCOPE OF WORK

Please provide all exceptions to the Scope of Work. Failing to provide a detailed list of exceptions (including reference to what section each proposed exception refers to) will mean the Proponent takes no exceptions. While this section is not scored separately, Exceptions to the Scope of Work can impact the score of associated questions.

107. Exceptions to Scope of Work (RFP-2 Scope of Work).

SECTION 8: REFERENCES

108. All references should be for AMI projects of similar or greater size and scope to the City of Pleasanton's project. To accommodate the range of possible roles that your company may have had on a project, the references have been categorized by Water Meter, AMI System, and Installation Services. References may be repeated if the scope of work your company provided covers more than one of the reference categories. For clarity, the minimum number of references you should provide is three (3), as long as all of those references were supplied Water Meters, AMI System, and Installation Services from the proposing company(s).

Note that any material misrepresentation, including invalid names, emails, or phone numbers may result in disqualification.

The following tables may be replicated and adjusted as needed to provide the required information.

109. Provide a minimum of three (3) references for AMI projects where the Contractor provided the AMI system.

AMI System					
	Reference #1	Reference #2	Reference #3		
Utility Name:					
State/Province:					
Number of AMI Radio					
Transmitters Supplied:					
Makes & Models of AMI					
Systems Supplied:					
Make & Model of Water					
Meters Used in this					
Project:					
Installation Company					
Used on this Project:					

Prime Contractor on this		
Project:		
Project Dates – Start to		
Finish:		
Person to Contact:		
Position:		
Phone Number:		
Email Address:		

110. Provide a minimum of three (3) references for AMI projects where the Contractor provided water meters.

Water Meters					
	Reference #1	Reference #2	Reference #3		
Utility Name:					
State/Province:					
Number of Water Meters					
Supplied:					
Makes & Models of					
Water Meters Supplied:					
Make & Model of AMI					
System Used in this					
Project:					
Installation Company					
Used on this Project:					
Prime Contractor on this					
Project:					
Project Dates – Start to					
Finish:					
Person to Contact:					
Position:					
Phone Number:					
Email Address:					

111. Provide a minimum of three (3) references for AMI projects where the Contractor provided installation services for the project's meters and radio transmitters.

Installation Services				
	Reference #1	Reference #2	Reference #3	
Utility Name:				
State/Province:				
Number of AMI Radio				
Transmitters Installed:				
Makes & Models of AMI				
Radio Transmitters				
Installed:				
Number of Water Meters				
Installed:				

Make & Model of Meters		
Installed:		
Prime Contractor on this		
Project:		
Project Dates – Start to		
Finish:		
Person to Contact:		
Position:		
Phone Number:		
Email Address:		

SECTION 9: OPTIONS

- 112. Describe the ability to provide a remote shut off water meter and/or remote shut off valve. How is the shut off / turn on process enabled within the AMI system proposed? Please describe if a latency period exists in activating a shut off / turn on, and the duration of the latency. Is the remote shut off valve built into the meter?
- 113. Proponents may offer additional goods, features, functionality, or services that are not requested in the RFP. Proponents should detail any such additional goods, features, functionality, and services available to the City that would enhance or expand the capabilities of the AMI System. Pricing for these additional options may be provided in the Price Form Workbook in the sheets named "Optional" and should not be included in the Technical Proposal.

Optional products and services will not form part of the RFP evaluation and will only be considered with the selected proponent during negotiations.