Statement of Work

IEE MDM 7.0 TO IEE 8.1 UPGRADE

City of Denton

Version #: *1.1*

Date: *August 26th , 2014*

SOW Point of Contact: *Udo Van Rijssen, Itron Inc.*

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Table of Contents

A. About this Document

This Statement of Work ("***SOW***") document defines the activities ("***Services***") to be performed by Itron, Inc. ("***Itron***") for the City of Denton. ("***Customer***") for the Itron Enterprise Edition ("IEE") Meter Data Management ("MDM") Upgrade from IEE v7.0 SP4 to IEEv8.1 project ("***Project***"). This SOW is entered into as of this _____ day of _____, 2014 ("***Effective Date***") and is governed by the terms and conditions of the Software License and Services Agreement, dated 0714/2010 by and between Customer and Itron. This document will describe agreed upon scope, services to be provided, assumptions, timeline and costs.

B. Document Controls

B.1. Change Record

Date	Author	Version	Change Reference
December 5, 2013	Robert Syrenne	1.0	Initial Draft
August 26, 2014	Udo van Rijssen	1.1	Updated SLA

B.2. Reviewers

Name	Sign-off Required	Position
<Name>	Yes	City of Denton
Kevin Coons		Itron – Software Sales Director
Udo Van Rijssen		Itron – Solution Delivery
Itron Contracts	Yes	Itron – Contract Request

B.3. Document Storage

This document was created using MS Word and is stored at Itron under the Denton SharePoint site.

B.4. Document Owner

This document contains information that is confidential and proprietary to Itron, who is the document owner and is responsible for developing and maintaining this document. It is understood that this document is for the purposes of the IEE MDM Upgrade Project as described. This document or portions thereof should not be referred to, re-produced, distributed or utilized in any manner outside of the project's needs, without prior written consent of Itron.

C. Project Overview

Denton is seeking from Itron; the provision of Services to upgrade their present IEE MDM v7.0 SP4 to IEE MDM v8.1. Itron will provide the required resources to implement this project as described herein, along with support from Denton.

For the project, no new functionality or changes to existing system configurations will be provided unless determined as a mandatory Itron v8.1 software requirement. Denton requires that the same level of functionality which their present version 7.0 SP4 operates with will be consistent in the production cutover to version 8.1 in order to ensure delivery of a production system that will support current system operations and billing requirements. New functionality of v8.1 software will explored after this upgrade project, only if mutually agreed to by both parties and acknowledged through either the change order process or a new SOW.

Itron will design, build, and test an IEE MDM v8.1 upgrade in Denton's test environment, and move the system into production as detailed further within this SOW.

D. Solution Overview

This section provides an overview of the Itron solution to be deployed as part of the IEE MDM 7.0 to IEE 8.1 Upgrade Project.

D.1. Solution/Business Objectives

As Itron works to deliver the IEE MDM version 8.1 upgrade project to Denton, a clear understanding of the project objectives must be understood and agreed upon by both Parties.

Solution Objective (business objectives)	Project Strategy
Upgrade the IEE MDM meter data collection, data management, and data distribution solution.	Support Denton's requirements for meter data collection, data management, and data distribution.
Maintain the current integration between IEE MDM and head-end, and IEE MDM and CIS.	Support Denton's present system integration between IEE MDM and external systems to facilitate the distribution of meter configuration and meter reading data.
Deploy a scalable system and architecture to support growth.	Provide Denton with a scalable interval meter data acquisition and management platform to support potential growth in interval meter deployments. Provide an architecture that will support Denton in future efforts to improve and enhance surrounding technologies and business processes.
Support customer with minimal disruption through implementation process.	Support customer with a bare minimum of disruption to their existing technology and business processes.
Complete the upgrade project prior to any additional Denton projects.	New functionality will not be introduced during the upgrade project. Should Denton decide to implement enhancements available in the 8.1 release of IEE MDM, those will be considered after the system has been migrated from 7.0 to 8.1 and detailed in amending change order or new SOW.

E. Services Provided

By signing this SOW, Denton engages Itron, and Itron agrees to provide, the following Services according to the detailed assumptions in Section F. of this SOW.

E.1. Services Provided

Services Provided	Description
Manage project	Manage Itron project schedule, scope and financials. Project reporting/communications (as agreed by both parties). Active participant in project Deliverables Management of Itron project resources involved in the project delivery Issue and Risk Management
Design solution	Verify the current solution's technical and functional configurations and processes to ensure no changes have been made since last production cut over.
Install and configure all IEE MDM software	Install IEE MDM software version 8.1 with the latest hotfix Configure IEE MDM business rules Support Denton system and user acceptance testing Support integration to Denton's existing in-house systems
Configure IEE MDM to export and import data from other current systems	Configure IEE MDM to export metering data to the identified CIS system Configure IEE MDM to import customer account data from the identified CIS system Configure IEE MDM to import data from the identified data collection systems
Data Migration	Develop 7.0 SP4 to 8.1 data migration scripts Develop data migration controls Perform data migration testing
Testing	Support test plan & test case creation (based on existing Denton 7.0 SP 4 test scripts) Perform and support testing activities as identified and agreed
Train the Denton IEE MDM users	Provide IEE MDM functional and technical training on version 8.1, focusing on version differences (v7.0 SP4 versus v8.1)
Go Live Support	On-site and remote support assistance as required for production 'go live'

E.2. Project Timeline

The project timeline and proposed resources are based on Itron's best practices for delivery of the IEE MDM Upgrade Project as well as the Deliverables and assumptions provided in this SOW. For detailed project schedule; please refer to the Project Plan located in Appendix C.

The general timeline includes:

#	Event / Deliverable	Timeline
1.	Project start	TBD
2.	Estimated Project Completion	TBD

It is recognized that both parties have obligations and delivery responsibilities within this project and the project schedule. As such, Itron shall not be held responsible for any delivery delays caused by others or associated costs from such delays. Project Schedule impacts will be reviewed and managed by both Itron and Denton accordingly.

E.3. Project Resources

Itron will provide suitably trained and skilled resources for the services to be provided. The estimated resource requirements for this project are as follows

Resource	4/14	5/14	6/14	7/14	Total
Itron Project Manager	20	20	20	20	80
Itron Business Consultant	40				40
Itron Technical Consultant -DBA	80	80	40	120	320
Total Estimated FTEs	140	100	60	140	440

Note: Should any named resources become unavailable due to any reason, a suitable and trained alternative will be provided under the approval of both parties. Effort will be taken to minimize any schedule delay or impact in any resource transitions.

E.4. Itron Project Roles and Responsibilities

The following table provides an overview of the Itron and Denton project resources and responsibilities required for this project delivery and the associated work as identified in this SOW.

No other service delivery responsibilities or work requirements will be provided beyond that described below, without detailed identification and formal agreement by both parties through the change order process.

Itron Role	Responsibilities	Name
Project Manager	Responsible for overall Itron Project delivery management as it relates to the Itron deliverables and responsibilities described in this SOW including: – Management of Itron Project resources involved in the Project – Project planning & scope – Project financials – Itron Project Schedule – Project Reporting (as agreed by both parties) – Issue and Risk Management – Contract Management	
Technical Consultant/s (TC)	Provides technical services, support and assistance: – Upgrade Project technical evaluation – Provides any updated documentation for Denton's existing Technical Architecture Design (TAD)	

Itron Role	Responsibilities	Name
	document to reflect any new requirements or modifications for the Upgrade to v8.1 – Data workflow – Supports systems integration & migration – Scalability & security assessment – Installs Itron software in Denton's test environment – Leads upgrade test effort with Denton's support – Upgrade recovery planning – Data migration design – Data migration scripts/code – Historical data migration – Design and build of Data Base schema changes, table portioning – Database assessment and recommendations for optimization – Supports: - Requirements gathering - Review of test cases - Test plan preparation - Technical Issue evaluation/resolution - Training activities - Verify results meet objectives - Review of Operational Readiness – Leads Production Upgrade and cutover. – Provides "Go-Live" technical support. – Support Final System Performance validation	
Business Consultant(BC)	Provides: – Product capabilities overview and Product information support – Business requirements gathering – Updates documentation for Denton's existing Business Solution Requirements (BSR) document to reflect any new requirements or modifications for the upgrade to v8.1 – Supports Denton in their development of Test Cases/Scripts – Supports Denton in the development of a Deployment Readiness Plan or its evaluation prior to production cutover or Go-Live. – Supports Denton in their development or modification of existing Itron MDM specific Standard Operating Procedures (SOP's). – Provides initial Training Overview and training support material. – Provides product documentation – Support for Itron related SW testing activities (functional and/or integration testing)	

E.5. Denton Project Roles and Responsibilities:

Denton will provide suitably trained and skilled resources to support the Project to the effort and timeline agreed upon by both parties. Technical and Business resources shall be fully familiar with Denton's present IT Operations as it relates to the IEE MDM v7.0 SP4 software, IT environments and associated systems.

Denton Role	Responsibilities	Name
Project Sponsor	– Drives project charter for Denton – Provides suitably trained and skilled resources for the project delivery – Issue/Risk oversight – Final reviews and approvals of Project deliverables, documentation, schedule, finance, plans & contract amendments.	<Name>
Project Manager	Works collaboratively with Itron Project Manager in: – Managing and achieving overall project deliverables – Tracking progress and managing schedule – Communications and reporting – Issue & Risk management – Project planning Also provides: – Review of key documentation – Management of Denton project resources – Financial and Contract Management	<Name>
Business Process Owner	Works collaboratively with Itron BC to: – Gather business requirements – Leads Design and testing – Leads Development/Modification to Denton's SOP's – Review of BSR and/or other document requirements – Training Lead, Train the trainer, and then leads ongoing Denton internal training requirements	<Name>
Technical Resource	Technical resource who: – Acts as the technical lead on the project for Denton – Has access to other Denton technical or support resources and systems as may be necessary to support the project work or to troubleshoot systems – Oversees Denton IT standards and IT server requirements (procurement and support) – Leads IT Test Environment build Works collaboratively with Itron TC to: – Evaluate design requirements and supporting documentation – Leads development of test cases or test scripts – Leads development of the Deployment Readiness Plan and/or evaluation prior to production cutover – Leads other system integration or upgrade requirements – Supports Production Upgrade and cutover. – Provides "Go-Live" technical support. – Leads Final System Performance validation – Provides ongoing administration of MDM system	<Name>
Database Administrator (DBA)	Works collaboratively with Itron TC,BC, and DBA to perform build and test activities, migrate test to production	<Name>

Denton Role	Responsibilities	Name
Testers	Will perform actual testing and running of test scripts	<Name>

F. General Project Assumptions

The following is a list of General Project Assumptions used in the creation of this SOW. Clarification or changes to any of the below will be managed through the change order process.

#	Assumption
Project Scope Assumptions	
1.	This Project will execute against the requirements or amendments identified and documented in the Business Solution Requirement (BSR) document and the Technical Architecture Design (TAD) document. No customization of the Itron software, application modules or of the standard IEE MDM reports, other than explicitly noted in the BSR and TAD, is included in the scope of work. If, during business process discussions, the need for a product enhancement, product customization or custom reports other than those explicitly mentioned are identified, this will be considered out of scope, and will require a Change Order to be approved prior to initiation of such work.
2.	The level of services quoted assumes that the project time line is consistent with the scope to be provided by Itron. Changes to the schedule due to delays by others may require changes in the fixed service fees mutually agreed upon by Denton and Itron.
3.	Any changes to this SOW will only be acknowledged though the formal change order process, and as agreed to and signed by both parties prior to any such work being initiated. For more information about the Change Order process, please see the Change Order section of this document.
4.	Existing data quality is the responsibility of Denton; effort is provided for a fixed number of hours for Itron support, including writing and testing scripts.
Project Personnel Assumption	
5.	The specific Itron personnel who may be assigned to this project may change subject to availability. Itron reserves the right to make resource changes at any time. Itron will communicate any staffing changes to Denton with one week's prior notice. Such changes will be managed by Itron to ensure continuity on the project and minimization of project schedule impact. A suitably trained alternative will be provided upon acceptance of both parties.
6.	All Itron project resources will report to and be managed by the Itron Project Manager.
7.	Denton will assign a project manager and other appropriate staff as identified for the duration of the project. The Denton Project Manager will provide overall responsibility for the project, and work deliverables. All associated Denton staff will be identified prior to commencement of work. The specific Denton personnel who may be assigned to this project may change subject to availability. Denton reserves the right to make resource changes at any time. Denton will communicate any staffing changes to Itron with one week's prior notice. Such changes will be managed by Denton to ensure continuity on the project and minimization of project schedule impact. A suitably trained alternative will be provided.
8.	Denton will identify any outside consultants and partners who will participate in the project, along with their roles and contact information, prior to project start and final price proposal. 3rd parties participating in this work will require coverage under Itron NDA.
Estimate Assumptions	
9.	Taxes, Tariffs and Duties are not included in the price and are the responsibility of Denton.
10.	Itron will invoice Denton on a monthly basis. Expenses will be charged at actual.
11.	No work will commence until the SOW is fully executed.

12.	If any staffing quantities (employees, contractors, consultants, or other) are added or vary from what has been identified and agreed to in this SOW for Denton, Itron reserves the right to reassess pricing and scope through the change order process.
"Other" Assumptions	
13.	Work under this SOW is expected to be performed at the Denton facilities. Remote work/support will be allowed if directed and approved by both parties.
14.	Denton will provide a suitable and safe work space, work site access, software/data access, wireless internet, and other items as required for the Itron resources to be able to conduct the associated work in a safe and productive manner. Itron resources will be provided with Itron issued laptops, however if Denton require the work to be performed on any other laptop or computer it will be Denton's sole responsibility to provide that hardware and manage accordingly.
15.	Itron will provide the Services under this SOW during normal business hours, 8:00 AM to 5:00 PM Local Time Monday through Friday, except holidays. If necessary, Denton will provide after-hours access to facilities to Itron personnel if required for performance of the work. Itron personnel (if remote to area) will be allowed time to travel to the work site on Monday morning, and depart Friday afternoon, unless otherwise agreed by both parties. Any work requirements requested beyond this normal work week will be billed as over-time (1.5 times normal rate).

G. Key Deliverable Overview

The following are key Deliverables to the successful implementation of the IEE MDM Upgrade Project. This section provides an overview of these Deliverables. Detailed task, schedule and resource information can be found in later sections.

#	Phase/Area	Key Deliverables / Activities	Description
	Define Phase		
1.	Project Planning	Project Control & Management Services	Project Management is achieving the goals or objectives of the project within budget, on time, and at the desired quality level to meet the delivery expectations. This includes management of resources, scope, risk, project financials and communication.
2.	Project Kick-off	Customer Kick-off Meeting	Once this SOW has been executed by both parties, resources will be requested from the Itron Resource Manager. The project will be set-up by the Project Manager. An internal Itron kick-off meeting will be held. Once all Itron players are in place and suitably prepared for project start, a customer-kick-off meeting will be held with the Denton stakeholders to introduce all project members, review the project SOW and objectives, and discuss the next steps in the project. The high level project timeline may also be reviewed.
	Design Phase		
3.	Business Solution Requirements & Design	BSR, BSD	Upon completion of the Business Solution Requirements workshops, the Business Solution Design document is prepared or existing document from v7.0 installation is amended. This document maps the requirements to key design decisions. It also outlines the key process designs in maps and narratives.
4.	System Architecture, Environments & Design	Data Migration Strategy & Design	Itron TC works with the Denton TC to document the data sources, acquisition processes, migration requirements, and method employed. Once the requirements have been gathered a Data Migration detailed design document is prepared. This document lists the data migration requirements, design, design assumptions, testing requirements, and more.
5.	System Architecture, Environments & Design	Data Integration Design	Once solution is designed, the Itron TC prepares detailed integration design documents or amends existing documentation. This document lists the data integration requirements, design, design assumptions, testing requirements, and more.
6.	Train	Training Plan	Itron works w/ Denton to plan the logistics and content for training users on the delivered IEE MDM solution, with specific focus of v8.1 to v7.0 differences.
7.	**Build Phase**		

#	Phase/Area	Key Deliverables / Activities	Description
	Installation, Build & Configure	Install Production Hardware & Prepare Environments (Test/Production)	Once any hardware has been procured by Denton it may be installed and the environments readied for development, testing, training and production deployment.
8.	Train	Customer Specific Training Materials	Once the Training Plan is complete and the solution is designed, the customer-specific content is prepared from existing training materials. Business scenarios identified in the solution design, are often used as a basis for the materials.
9.	Test	Test Cases	Itron consultants work with Denton to develop test cases. The business scenarios identified during the solution design Workshops should be the basis for these test cases. Test Cases include the following types of information: – Test condition – Test steps for that test condition – Expected result – Actual result If test failed, Identify Impact
10	Test	End-to-End Test Complete	Performed to ensure the IEE MDM data integration is functioning and system components can pass data and commands as designed. Also to ensure that all standard functionality, business scenarios, and custom functionality work as identified in the solution design.
11	Test	Internal Validation Test	This test is an end-to-end test using test cases. It is to be performed by Denton. This test should meet and validate solution design objectives. Upon completion, Denton will notify Itron of acceptance.
12	Test	Performance Test	IEE system processes and functionality should be reviewed, analyzed and optimized to maximize performance and production timings. As part of the Engagement, a detailed review and performance assessment of the design, configuration and overall architecture is expected to occur. Realistic performance standards should be devised and agreed upon prior to the Engagement.
13	Train	Trained Users	Prior to go live, all essential system owners should be trained. Training Plan should dictate approach, audience and schedule.
14	Production Live System	Deployment Readiness Plan	Once the solution is designed, a strategy for production cutover is documented. Readiness criteria are also included.
15	Production Live System	Product Use of the Solution	System is live and Denton is operating the system.
16	**Transfer Phase**		
17	Project Transfer	Transition to Support Plan	This activity is started early on. It documents / identifies key details needed by Itron Support Services to effectively support Denton. It ensures that Itron Support Services has

#	Phase/Area	Key Deliverables / Activities	Description
			implemented a plan to support Denton upon project completion.
	Project Transfer	Transition to Support Plan Completed	This activity documents/identifies key details needed by Itron Support Services to effectively support Denton. This includes a review of the plan to ensure all new/missed items are captured.
18	Project Completion	Contract Completion Sign-Off	To complete the project, a Project Completion review meeting is scheduled and sign-off is obtained.

H. Key Deliverable Details

This section describes in detail each Deliverable, tasks associated, effort, participants, completion criteria and assumptions. It is organized by areas A. – H. (as illustrated in the Itron Advantage implementation methodology framework).

A. Project Management

Deliverable Assumptions

#	Assumptions
1.	Itron will act as the coordinator, facilitator, and editor of the Itron Deliverables in this SOW. Much of the content of these documents is to be provided by Itron and Denton personnel, individually or via meetings. Delivery quality and schedule is dependent on all parties meeting task schedules and delivering quality content.
2.	All project resources will use methodologies, tools and templates to be determined by the Itron Project Manager with the approval of the Denton Project Manager. All Deliverables completed by Itron will conform to standards defined and agreed upon by Denton and Itron.
3.	Itron will provide the Denton team members with a standard set of Itron documentation such as Technical Architecture, Business Requirements and Design, training materials, production information, etc. for Denton's use in preparing for and executing the project.
4.	Itron will provide a weekly status report which will include issue and risk reporting.
5.	Itron Project Manager will participate a weekly project status meetings with the Denton Project Manager, or less frequently as agreed.

Deliverable Tasks

	Task and Description	Itron Responsibility	Denton Responsibility
1.	Project Activities Include:		
1a.	**Establish Project Team** – Establish, assign, and document resources for the project team. Gain organizational commitment of specific resources for each role.	Itron will forecast resources for the project team. However, resources are not guaranteed until after the SOW is executed.	Denton will establish project team
1b.	**Project Finances** – Track, manage and communicate project financial status to project stakeholders during the project phases	Itron will provide status and appropriate financial info to Denton project manager monthly. This will compare Itron monthly actuals, and YTD against project forecast estimate.	Denton will report on Denton's cost or combined total project cost versus Denton internal project budget.
1c.	**Project Scope Control** – Review new requirements and efforts that may be required. Evaluate whether within contractual scope of the project. Follow change control process if adjustments to the contract or SOW are required.	Itron will participate in review and approval of scope changes using the change control process located in Appendix A.	Denton will participate in review and approval of scope changes using the change control process located in Appendix A.

	Task and Description	Itron Responsibility	Denton Responsibility
1d.	**Risk Mitigation** – Identify potential risks before they become issues, create strategies to reduce the potential, determine metrics to identify risks, agree on mitigation plans and action to initiate the plan.	Itron will communicate foreseen risks to Denton project manager as well as options on mitigating those risks.	Denton will discuss mitigation options with Itron. Denton will communicate foreseen risks also.
1e.	**Project Communication** – Establish and manage ongoing status reporting, issue tracking, risk reporting.	Itron will communicate progress and status of the project through a weekly status report and project meeting.	Denton will review and discuss with Itron. Denton will initiate the weekly project meeting as required.
1f.	**Issue Resolution –** resolve defects that do not meet requirements. See Appendix E for severity definitions. – Defect is considered any existing functionality that is not working as it currently does in 7.0 environment. – Change request is added functionality or feature that is outside of the current functionality of 8.1	Itron will provide tracking and resolution to Itron defects within a reasonable amount of time according to the severity of the issue as agreed between Itron and Denton. Itron will provide a Change Order for added functionality that includes cost and timeline.	Denton will ensure fixes correct the situation and review the test results. Denton will provide tracking and resolution to other system or operational defects according to the severity of the issue as agreed between Itron and Denton. Denton will provide requirements for any new functionality.
2.	Conduct **Kick-off Meeting** - First on-site meeting of the Project Team. The sessions will include: – Review of SOW – Review of roles and responsibilities – Discussion of the project requirement and process documents that will be used during throughout the project. – Project plan – System architecture discussions – Set "next steps" and action items – Establish regular project review meetings schedule	Itron will schedule the meeting, provide agenda and prepare the Kickoff presentation.	Denton will host meeting at their location and invite necessary participants. Denton will participate in meeting presentation as requested.
3.	Update **Project Plan** – After all roles and responsibilities are determined and kickoff meeting complete, update the Project Schedule to reflect any changes.	Itron will provide updated schedule and advise Denton of any changes from the original plan. Resource schedules,	Denton will incorporate its team tasks and schedules into the project plan. For instance, Denton recognized holidays,

	Task and Description	Itron Responsibility	Denton Responsibility
		holidays and vacation plans are some factors that affect schedule.	meetings and other company activities including employee planned vacations that will affect project schedule. These should be noted at the beginning of the project.

B. Business Solution Design

Description, Strategy and Completion Criteria

Upon completion of the Solution Requirements workshop, the Business Solution Requirements will be documented and signed-off by Denton. The document will include a summary of the workshop requirements that were identified and list any gaps identified. The document will cover data collection, data distribution, and conversion from IEE MDM 7.0 to IEE MDM 8.1.

The Solution Requirements document is a critical document that provides direct input into many other Deliverables. As a result, this key deliverable requires sign-off.

Deliverable Assumptions

#	Assumption
1.	Assumes Denton will utilize 3rd party reporting software to create any additional reporting needs beyond the baseline IEE MDM reports.
2.	Denton has documented existing business process and file structure/data model and data flow in advance of project start. Examples of the information that is important to the project team is how the current IEE MDM system is configured and how are exceptions handled.
3.	Itron expects that the appropriate Denton Subject Matter Experts will be able to participate in workshops given appropriate advanced notice. Poor attendance or inability to quickly resolve discussion items within the workshops (e.g., within 24 hours) will increase the time to complete the requirements gathering activities

Deliverable Tasks

#	Task and Description	Itron Responsibility	Denton Responsibility
1.	Update Technical Architecture Design document	Itron will prepare the document and submit for review.	Denton will review document and provide formal approval.
2.	Update the Business Solution Requirement document	Itron will prepare the document and submit for review.	Denton will review document and provide formal approval.
3.	Complete the Business Solution Design document (if required)	Itron will prepare the document and submit for review.	Denton will review document and provide formal approval.
4.	Update the Product Configuration Design document (if required)	Itron will prepare the document and submit for review.	Denton will review document and provide formal approval.

C. System Architecture, Environments & Design

Itron will facilitate sessions to determine and document the System Architecture, Environments and Design. The documentation will describe the hardware and software components of the system and identify the data inputs, outputs, formats, and schedules.

Additionally, Itron Technical Consultant will assist Denton in procuring hardware and designing all detailed data migration/interface design specifications.

Deliverable Assumptions

#	Assumption
1.	Completed architecture documents will be reviewed by both Itron and Denton and form the basis for design decisions.
2.	Remote Access to test and production IEE MDM server(s) will be provided (VPN\Terminal Services\WebEx).
3.	Denton will provide Itron a local administrator account on all servers as needed, provided that Itron complies with Denton's policies and procedures with respect to network access.
4.	Denton is responsible for procuring test, production and/or any other servers, in accordance with Itron recommendations and specifications. Itron is not providing any hosting services or servers as part of this scope.
5.	All server hardware, disk storage and network connectivity will be procured and configured by Denton prior to the build phase of the project.
6.	Itron assumes that there will be two (2) environments: Test and Production.
7.	Denton will ensure that subject matter experts are available for all system components that are integrated with the IEE MDM system or use IEE MDM data.
8.	Denton will provide, install and configure all hardware, operating system, database and any 3rd party software as described in the IEE 8.1 Installation Guide (Included as Appendix D) prior to the build phase of the project. Any delays will cause the project schedule to extend.
9.	Denton will provide a data/integration lead during the analysis and design phase of historical data migration and synchronization interface development. Itron will provide a data/integration lead member.
10	Configuration information will be provided electronically by Denton per Itron requirements.
11	Itron assumes data quality is the responsibility of Denton; data purging and clean-up will be Denton responsibility.

Deliverable Tasks

#	Task and Description	Itron Responsibility	Denton Responsibility
1.	Schedule Design reviews to discuss System Architecture	Primary	Denton will participate in all sessions
2.	Finalize all necessary system components.	Primary	Denton will participate in all sessions
3.	Finalize integrations and data migrations for the IEE MDM Upgrade Project.	Primary	Denton will participate in all sessions
4.	Finalize hardware requirements for IEE MDM solution applications.	Primary	Denton will participate in all sessions

#	Task and Description	Itron Responsibility	Denton Responsibility
5.	Update Technical Architecture Design	Itron will prepare the document and submit for review/sign-off.	Denton will review document and provide formal approval.
6.	Procure Hardware		Primary
7.	Prepare Data Migration Strategy	Itron will prepare the document and submit for review/sign-off.	Denton will review document and provide formal approval.
8.	Prepare detailed Data Migration Design	Primary	Denton will review.

D. Install, Build & Configure

Once the hardware has been procured and the solution is designed, the system may be installed, data migrated and IEE MDM system configured. Functional tests will occur to ensure connectivity and desired functionality.

Deliverable Assumptions

#	Assumption
1.	Changes to the IEE MDM configuration not explicitly covered by the agreed upon IEE MDM Business Solution document will require an approved Change Order to be in place before the changes can be made.
2.	Standard IEE MDM import and export file formats will be utilized.
3.	Itron will do the initial install of IEE MDM and all subsequent installs – upgrade, service packs, hot fixes – through production go live in test and production environments. Once v8.1 is implemented in production, Denton will assume responsibility for any further upgrades.
4.	The Itron solution will be configured according to the customer data provided to Itron by Denton. Denton technical resources will be responsible for providing customer data in existing Itron formats prior to Itron Consulting resources beginning the solution system configuration / implementation. Ongoing system configuration (adding, removing, or changing, meters, accounts, points, customers, etc.) will be the responsibility of Denton. After approval of the Business Solution Design document, any ongoing system configuration changes are the responsibility of Denton.
5.	Unless specifically stated otherwise in the SOW, Denton will be responsible for taking data from the Itron interfaces in standard IEE MDM formats to the existing Denton information systems and delivering data from existing Denton systems to the Itron IEE MDM interfaces in standard IEE MDM formats. Denton assumes there will be no changes to the existing interfaces.
6.	Assumes IEE MDM standard windows authentication functionality will be used to allow IEE MDM users to automatically log on to the GUI using Denton network credentials. If additional functionality is required, a Change Order will be created and an estimate for the effort will be provided.
7.	Denton will not implement any VE changes for interval/register data at the time of the Upgrade Project.
8.	Should historical data quality be missing intervals or of poor quality, Denton would be responsible for synchronizing data updates either via manual entry or via standard APIs.
9.	Assumes integration of Itron IEE MDM software with Denton's systems is accomplished using the known integration formats currently in production as the demarcation point between Itron and Denton. Denton will be responsible for taking data from the Itron interfaces in known formats currently in production to existing Denton information systems and delivering data from existing Denton systems to the Itron IEE MDM interfaces in those formats as follows:

#	Assumption
	- All subsequent updates, deletions or additions of configuration data will be automatically generated by Denton and delivered by Denton to IEE MDM in IEE MDM standard configuration XML API formats. Denton is responsible for the accurate generation and formatting of the configuration data. - Denton will provide a backup of the current 7.0 databases to Itron. Itron will convert this data to conform to 8.1 database schemas. - Denton will provide interfaces as they exist to the 8.1 environment. This includes configuration information from Northstar as well as readings from Trilliant and MV90.

Deliverable Tasks

#	Task and Description	Itron Responsibility	Denton Responsibility
1.	Install production hardware	Support	Primary
2.	Install and configure operating system(s)	Support	Primary
3.	Install and configure network connections	Support	Primary
4.	Install and configure database software	Support	Primary
5.	Install and configure software connections	Primary	Denton will participate in all sessions
6.	Provide Database tuning as required	Primary	Support
7.	Complete Data Migration Formatting & Data Collection	Primary	Support
8.	Configure Business Solution & Conduct Functional Test	Primary	Support

E. Test

This activity is a collaborative effort across technical and business process teams. A Test Plan is prepared during the design phase. It identifies the testing approach, participants, schedule, environment setup, sign-off criteria, and test problem management processes. The Test Cases are then prepared. These are prepared to test the solution to ensure the Itron product is working as expected. The first cycle of tests include Functional testing and Integration Testing. The second cycle (conducted by Denton) includes the End-to-End and User Validation Test. Once Denton signs off on their testing, Itron should to be notified that this system is ready to begin/complete production cutover activities.

Deliverable Assumptions

#	Assumption
1.	Denton will develop the test plan and test cases with support from Itron.
2.	Denton will lead the functional, integration and end-to-end testing supported by Itron..
3.	The end-to-end testing will include testing of 21 bill cycles.

#	Assumption
4.	Denton will perform an end-to-end test supported by Itron and a validation test prior to implementing IEE MDM in a production mode. Itron provides advisory and troubleshooting support as needed.
5.	Denton will provide sufficient resources to assume the responsibility for the execution of the end-to-end and validation test through the implementation phase.
6.	Denton will define testing criteria and cases, mapping requirements to test cases. Itron will provide feedback if requested.

Deliverable Tasks

#	Task and Description	Itron Responsibility	Denton Responsibility
1.	Provide Test Cases used for IEE MDM 7.0 upgrade		Primary
2.	Develop Test Cases.	Support	Primary
3.	Develop a Test Plan.	Itron will review and provide support if needed.	Primary
4.	Conduct Functional Tests	Support	Primary
5.	Conduct Integration Tests	Support	Primary
6.	Conduct End-to-End Tests	Support	Primary
7.	Conduct Validation Tests		Primary
8.	Conduct Performance Tests	Support	Primary
9.	Sign-off on testing (to recognize all test cases have been complete to satisfaction).	Itron will prepare the document and submit for review/sign-off.	Denton will review document and provide formal approval.

F. Training

The Itron Business Consultant(s) work with Denton to plan the training approach, logistics and content for training users on the delivered solution.

Itron support multiple training approaches, such as, train-the-trainer (most common), classroom training and one-on-one training. Only one training session is planned in this project delivery.

Deliverable Assumptions

#	Assumption
1.	All training will use Denton data, if possible. However, if it is not possible, the training will be provided with test data.
2.	The Training Plan will be developed by Itron and signed-off by Denton.
3.	Denton agrees to furnish training facilities as required by Itron including dedicated training space (not shared with other concurrent company work activities), white board and/or tablet space with markers for instructor notations and diagrams, projection equipment (minimum 1024x768 lines of resolution). Itron recommends one training computer per student. The minimum of one training computer for every two students is required. Itron recommends a class size of 8-12 participants per class.
4.	Denton will identify attendees for each training session in advance of such training scheduling.

Deliverable Tasks

#	Task and Description	Itron Responsibility	Denton Responsibility
1.	Develop a Training Plan.	Itron will prepare the document and submit for review/sign-off.	Denton will review document and provide formal approval.
2.	Develop Base Training Materials.	Primary	Support
3.	Conduct Training.	Primary	

G. Production Live System

The Itron Technical Consultants work with Denton's Technical Lead to finalize the optimum IT hardware and software for the environment. The Deployment Readiness Plan is prepared in the design phase. This outlines the steps required to move testing environment to production. It also includes readiness criteria (go, no-go) to be reviewed by the project team prior to cutover. The Project Team will conduct a readiness review. If all is a go, activities to carry out production cutover will be scheduled, completed and system will be live for use.

Deliverable Assumptions

#	Assumption
1.	All critical and major defects have been closed or suitable actions are agreed upon to address.

Deliverable Tasks

#	Task and Description	Itron Responsibility	Denton Responsibility
1.	Develop Deployment Readiness Plan – After the solution has been designed a production readiness and cutover plan is developed.	Itron will update plan and submit for review and sign-off.	Denton to review and provide formal approval.
2.	Conduct Deployment Readiness Review.	Support	Primary
3.	Review & Execute Deployment Readiness Plan tasks.	Support	Primary
4.	Data Migration Completed	Primary	Support
5.	Production Upgrade Completed	Primary	Support
6.	Production 7.0 and Production 8.1 run in parallel for 1 week	Onsite Project team support	Primary
7.	Production Upgrade Certified	Support	Primary
8.	Denton has Production Use of Solution		Primary

H. Transfer

Prior to go live, the Itron Project Manager reviews the transition plan document and process with Denton and reviews the solution with Itron Support Services. After go live, the PM ensures all documentation is accounted for so Denton may assume ownership.

Itron offers a Post Project Review survey and report. It provides an opportunity to collect lessons learned in order to document key accomplishments and point out areas for improvement.

Finally, to complete the project, a Project Completion review meeting is scheduled and sign-off is obtained. This documents that the solution objectives have been met.

I. IEE MDM 8.1 Upgrade – Data Warehousing Support

Itron will not provide any services regarding data warehousing under this SOW.

I. Service Fees

This project will be based on a T&E basis. Total labor fees are estimated at US $99,000 for this project, not including travel and expenses. Itron will invoice Denton on a monthly basis for both time and expenses. Rates for resources are as follows:

IEE MDM 8.1 Upgrade

Resource	Rate	Estimated Quantity	Estimated Total
Project Manager	$225/hr	80	$18,000
Business Consultant	$225/hr	40	$9,000
Technical Consultant	$225/hr	320	$72,000
Total		**440**	**$99,000**

Travel and expenses are estimated to be $15,000 for the project, based on $225/day for 4 days per week, and Air Fare estimated at $1000/week. Travel and expenses will be charged at actual cost on a monthly basis. Expenses include: Accommodations/lodging, meals, car rental, car fuel, and miscellaneous. All air fare will be based on economy flight booking.

Notes:

1. Above totals are estimates, for budget purposes only.

2. Itron will not charge for travel time to or from the work site. All time onsite will be charged at the hourly rate charge indicated.

3. Denton shall pay all taxes, if applicable, for Services provided by Itron to Denton under this SOW.

4. Payment terms are net 30 days after invoice date. Any disagreements to invoice detail or amounts charged must be advised to Itron Project Manager, within 10 days after invoice date.

To ensure that Itron has all the correct billing information, please verify the following billing information:

Requested	Denton Data
Billing Contact Name	

Requested	Denton Data
Billing Contact Phone # (s)	
Billing Contact Email Address	
Billing Address	
Special Billing Requirements?	
Purchase Order #	

J. Statement of Work Agreement Approval

Denton agrees to these terms and the description of services as described within this SOW, and authorizes commencement of the Project.

City of Denton	Itron Inc.
Authorized Signature	**Authorized Signature**
Printed Name	**Printed Name**
Title	**Title**
Date	**Date**

SOW Author: R. Syrenne

SOW Itron Point of Contact: Udo Van Rijssen

Please return this signed SOW to:

Itron, Inc.

2111 N. Molter Rd.

Liberty Lake, WA 99019

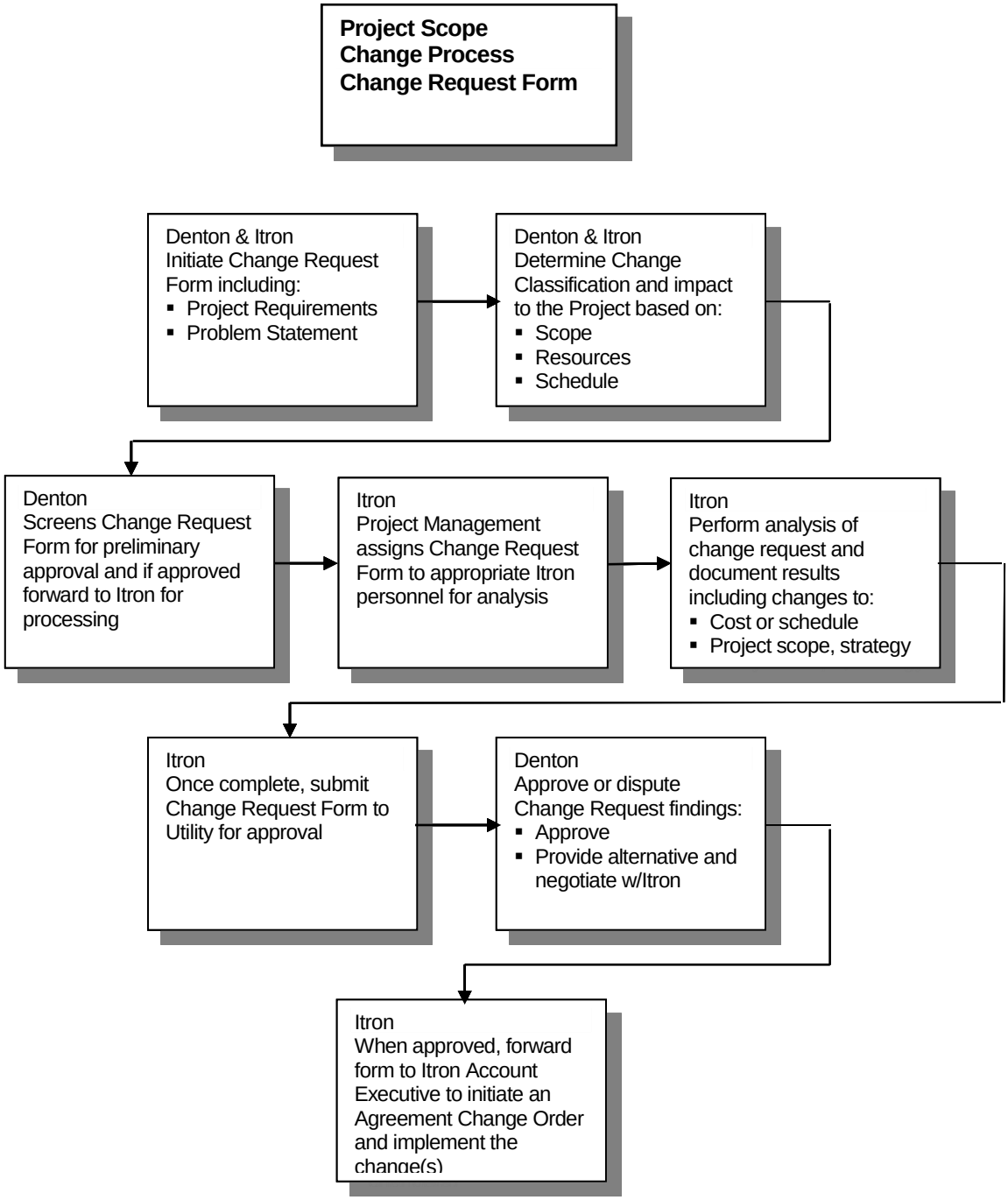
Attn: Contract Administration

Fax: (509) 891.3331 or PDF and email to contract.request@itron.com

* A fully executed version will be returned

Appendix A – Change Control Process

A Project Change Order will be the vehicle for communicating changes. The Change Order must describe the change requested, the rationale for the change, the estimated price and the effect the change will have on the Project. All Change Orders must be approved by both parties and be fully executed before any related work can be initiated.



Appendix B – Change Order Form

Statement of Work

City of Denton

IEE MDM Upgrade Project

Change Order #<X> – <Description>

	Name	Date
Client Name:		
Requestor:		
Client Authorization:		
Itron Rep. Authorization:		
Contract Admin. Auth.:		

Send Pricing Summary to Client? ☐ **Yes** ☐ **No**

Has contract been signed? ☐ **Yes** ☐ **No**

General Description:

Order Processing:
PO/Contract #: _____

Hardware Changes:

Qty	Item Description	Unit Price

Qty	Item Description	Unit Price

Comments:

Software Changes:

☐ **Modifications** ☐ **Meter Licenses** ☐ **Other**

Description	Unit Price

Comments:

Implementation Labor and Expense:

☐ **Billable** ☐ **Non-billable** **Charge to:** _____

Purpose	Description	Days	@ $	Total
	Labor			
	Per Diem			
	Misc.			
	Total			

Comments:

Accepted By (Authorized Representatives):

Itron Inc.	**City of Denton**
Signature:_____	**Signature:**_____
Name (Printed): _____	**Name (Printed):** _____
Date: _____	**Date:** _____

Please return this signed Change Order to:

Itron Inc.

2111 North Molter Road

Liberty Lake, WA 99019-9469

Attn: Contract Administration

Or via Email to: contract.request@itron.com – a fully executed version will be returned.

Appendix C– IEE 8.1 Installation Guide and Upgrade Guide

See PDF file named IEE v8.1 Installation Guide for SQL Server.pdf

IEEv8.1InstallationGuideforSQLServer.pdf

See PDF file named IEE v8.1 Upgrade Guide for SQL Server.pdf

IEEv8.1UpgradeGuideforSQLServer.pdf

Appendix D – Severity Definitions

Severity definitions of issues used by Itron and Denton in previous projects are below:

Severity 1: SEVERE BUSINESS IMPACT - Product defect/software problem/application issue causes a complete loss of service and no work can reasonably continue. No workaround is unavailable.
Severity 2: SIGNIFICANT BUSINESS IMPACT - Severe loss of service, important features are not working properly, and there are no acceptable work-arounds, however, operation does continue in a restrictive fashion.
Severity 3: MINOR BUSINESS IMPACT - Minor loss of service, impact is inconvenience. A workaround is available.
Severity 4: INFORMATION/TRAINING/MINOR ERRORS - No loss of service, includes requests for more information, questions on particular application functionality, or minor system errors.
Severity 5: ENHANCEMENT REQUEST - A request for new application functionality.