

**EXHIBIT C**  
**HARRIS STATEMENTS OF WORK**

**OBJECTIVE**

For purposes of this contract, Harris SmartWorks is an Utiliuse subcontractor responsible for implementing the Harris SmartWorks Meter Data Management Solution and Advanced Customer Engagement Portal. Through this Agreement, Harris will be responsible for delivering the implementation services described herein to the Client.



**Statement of Work**  
*for*  
*SmartWorks Compass*

*Presented to*

*Norman Utilities Authority, OK*

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## Revision Control

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## 1. Introduction

This Statement of Work (SOW) defines the work to be performed by the SmartWorks division of N. Harris Computer Corporation (herein referred to as “SmartWorks”) for Norman, (herein referred to as “Customer” or “”). This SOW includes a high-level timeline and other Terms and Conditions specific to the services requested by Customer.

This document serves as the complete understanding, between Customer and SmartWorks, as to what the current Statement of Work entails. SmartWorks will use this document as a reference for the configuration and implementation of **SmartWorks Compass** (herein referred to as the “SmartWorks Software”). This document will also be used by Customer to determine if the SmartWorks Software provides the functionality requested and agreed to, per this document. If there are any issues during the project lifecycle, this document will be used to determine if the issue is a configuration/development issue or if the issue was not included as part of the current Statement of Work.

Changes to this document shall be made through a Change Management Process as described Section 4.3.

The implementation project will accomplish the following high-level objectives:

- 1) Install, configure and implement the SmartWorks Software as defined in Section 2.
  - a) The **SmartWorks Compass** solution will be installed at the **SmartWorks Hosting Facility**.
- 2) Initiate within SmartWorks Software the collection and management of register and interval read data from AMI Meters.
- 3) Integrate with
  - a) Sensus AMI to import register and interval reads, import meter events/alarms, and initiate remote actions
  - b) AUS CIS to import meter and location data and provide billing determinants
  - c) ESRI GIS for integration with base maps URL
- 4) Deliver system training designed to develop Customer competency with the use and configuration of the SmartWorks Software.
- 5) Provide support during User Acceptance Testing.

### 1.1. Glossary of Terms

Term	Definition
Acceptance Testing Period	A defined period of time to perform User Acceptance Testing on the Solution including testing in a live pre-production environment.
Actual Solution Acceptance Date	Date that written acceptance by Customer is received by SmartWorks that Solution substantially meets the Functional and Integration Requirements Document, and substantially satisfies the testing criteria set forth in the Solution Acceptance Criteria.

Term	Definition
Billing Determinant	<p>The measure of consumption used to calculate a customer’s bill. A billing determinant is either:</p> <ul style="list-style-type: none"> <li>• A register read; or</li> <li>• A value calculated by the MDM for billing purposes based on interval and/or register read data. If rates are blocked, seasonally differentiated, time-differentiated, or separated by demand and energy measures, then the billing determinants are organized in the same fashion.</li> </ul>
Change Management Process	The process outlined in section 4.3 of the SOW, which SmartWorks and Customer will follow for any proposed changes to the SOW.
Deliverable	An item created during the project that requires formal review and approval by Customer.
Deliverable Acceptance Criteria	Criteria by which Customer determines that the Deliverable provided by SmartWorks is in accordance with this Statement of Work.
Deliverable Acceptance Criteria Document	A central listing of all Deliverables and Work Products developed by and maintained throughout the project.
Expected Solution Acceptance Date	The date, identified in the Detailed Project Plan, by which Customer and SmartWorks expect Solution Acceptance to be achieved.
Functional Testing	Testing of the core Solution components (configuration, interfaces, reports, and modifications) against agreed upon requirements, prior to User Acceptance Testing.
Go-Live Plan Document	A Deliverable identifying and describing the activities to be performed during the Deployment phase of the project.
Integration Testing	Testing of the end-to-end process based on business processes and scenarios against the agreed upon integration requirements.
Interval Read Data	<p>A meter read (actual or virtual) showing the consumption over a defined period of time, demand, or interval, normally 60 minutes, 30 minutes, 15 minutes or 5 minutes.</p> <p>Typical units of measure include kilowatt-hours (kWh) for electric meters, Gallons/cubic foot or cubic meter for water meters.</p>
Meter Channel (physical)	<p>Unique stream of meter read data, with corresponding UOM (Unit of Measure), measured by meters and stored under a unique Channel ID within SmartWorks Compass.</p> <p>Each channel can consist of consumption data (referred to as consumption channel) or a demand data (referred to as demand channel).</p>

Term	Definition
Meter Channel (virtual)	Unique stream of meter data, with corresponding UOM (Unit of Measure), generally calculated by and stored under a unique Channel ID within SmartWorks Compass. Each channel can consist of consumption data (referred to as consumption channel) or a demand data (referred to as demand channel).
Meter Event	An anomalous network situation or notification reported by an AMI meter; for example, issues related to quality of supply, security failures, fraud, or issues with network communications. Meter events are collected and reported by Customer's AMI system as part of the routine meter interrogation cycle.
Post Implementation Grace Period	Time period after Actual Solution Acceptance Date during which SmartWorks Software is operating as Customer's primary operating system with respect to functionality contained herein.
Register Read Data	<p>A value provided by the meter that is shown on the meter's faceplate, and hence can be validated by the customer by visual inspection of the meter. This can include:</p> <ul style="list-style-type: none"> <li>• Cumulative Consumption Register Read – total measured consumption since the meter was manufactured or refurbished (typical units of measure include kilowatt-hours (kWh) for electric meters and Gallons/ cubic foot or cubic meter for water meters.)</li> <li>• Time of Use Consumption Register (total consumption during a specific time of use window)</li> </ul>
Solution	The set of related software programs and services to be implemented according to this Statement of Work.
Solution Acceptance	Customer determination by written acknowledgement that the Solution provided by SmartWorks performs in accordance with the Functional and Integration Requirements documents developed for this Statement of Work.
Standard Project Plan	A baseline plan created by SmartWorks in collaboration with Customer during the Initiation and Build phase of the project. The plan establishes the implementation timeline (including certain milestones) for the project.
Third-Party Vendor	Any vendor or organization that is not part of SmartWorks or Customer
Unit Testing	Ad hoc testing of individual Solution components to validate that each component meets the specifications set forth during the project.
User Acceptance Testing	Testing to validate that Solution behaves per agreed upon requirements as defined in the Functional and Integration Requirements Document based on the test cases and selected scenarios.
Work Product	An item created during the engagement that is reviewed by Customer but does not require formal approval.



## 1.2. Roles and Responsibilities

The activities to be carried out are detailed in each section of this SOW. The table below defines the associated roles and responsibilities at a high level. References to the corresponding sections of the SOW are included when a more detailed description is required.

Task	Responsible Party
Define scope of work with CIS Vendor under a separate agreement. <b>Note:</b> This includes development of the integrations listed in this SOW as well as integration with the AMI head end system for meter provisioning	Project Manager (Customer)
Establish detailed Project Plan	Project Managers (SmartWorks/Customer)
Ensure resources are available to carry out tasks defined in section 5.6 Customer Resource Involvement	Project Manager (Customer)
Engage in tasks defined in section 5.6 Customer Resource Involvement	Project Core Team (Customer)
Ensure resources are available to perform work as defined in SOW	Project Manager (SmartWorks)
Ensure assistance and cooperation by Third-Party Vendors (including AMI, CIS and GIS)	Project Manager (Customer)
Participate in weekly project calls	Entire Project Team (SmartWorks/Customer)
Confirm User Authentication method and assist with configuration. <b>Note:</b> User/password authentication can be performed by an external Identity Provider (IdP) such as the cloud based Microsoft Azure Active Directory via SAML (Security Assertion Markup Language) single-sign-on protocol or via an on-premise LDAP (Lightweight Directory Access Protocol) server such as Microsoft Active Directory. The three options are: <ul style="list-style-type: none"> <li>• Approach 1: Framework manages authentication, role membership and access.</li> <li>• Approach 2: IdP manages authentication only.</li> <li>• Approach 3: IdP manages authentication and role membership.</li> </ul>	IT (Customer)

Task	Responsible Party
Configure Virtual Private Network (VPN) as required to enable access to 3 <sup>rd</sup> Party Software.  <b>Note:</b> When the SmartWorks software is hosted using our cloud / SaaS environment, and an SAML integration is not possible, the LDAP / ActiveDirectory integration is achieved via a secure IPSec VPN tunnel between the hosted SmartWorks application server and the customer's LDAP / ActiveDirectory server.	IT (Customer)
Perform initial install in <b>SmartWorks Hosting Facility</b>	Infrastructure specialist (SmartWorks)
Install Software Modules as per section 2 SmartWorks Compass Implementation Scope	Consultants (SmartWorks)
Provide deliverables as defined in section 2.7 Project Deliverables and Work Products	Consultants (SmartWorks)
Provide AMI infrastructure and meter data	Metering (Customer via AMI vendor)
Provide input data for integration points as defined in section 3 Software Integrations	Project Team (Customer)
Install and configure integration points as defined in section 3 Software Integrations	Consultants (SmartWorks)
Perform data validation for each DataSync iterations and confirm validity of AMI data	Project Team (Customer)
Identify User Roles and User Groups	Project Team (Customer)
Perform Unit Testing	Consultants (SmartWorks)
Perform Functional and Integration Testing	Consultants (SmartWorks)
Provide user training	Consultants (SmartWorks)
Create User Acceptance Scripts	Project Team (Customer)
Perform User Acceptance Testing	Project Team (Customer)
Provide support during User Acceptance Testing	Consultants (SmartWorks)
Perform configuration updates once training has been delivered and User Acceptance Testing is completed <b>Note:</b> Guidance will be provided by SmartWorks until the project is deemed completed.	Project Team (Customer)

### 1.3. Related Documents

Related documents to the SOW are:

- 1) Software License Agreement
- 2) Software Implementation Services Agreement
- 3) Hosting/SaaS Services Agreement
- 4) Support and Maintenance Agreement

## 2. SmartWorks Compass Implementation Scope

The scope of this Statement of Work is to implement the SmartWorks Software Solution for the Customer and to train key Customer personnel on the operation of the SmartWorks Software. The Customer will procure and install their respective advanced meters and supporting network infrastructure.

### 2.1. Environments

SmartWorks will deploy two (2) instances of the SmartWorks Software in the SmartWorks Hosting Facility in the United States: one (1) Test instance and one (1) Production instance.

The intent of a test environment is to test new or existing functionality with a minimal set of data representative of the meter population prior to a production update.

The Test and Production environment specifications are shown in the Server Specification Assumptions table below. The use of the Test instance as a copy of production with a full set of data and corresponding full dataset processing is not included in the scope of work. Server specifications and associated hosting costs, if applicable, included in scope are based on these assumptions. Changes to the environments may be brought into scope using the Change Management process described in section 4.3.

#### Server Specification Assumptions

	Live Storage	Meter Population	Integrations	VEE
<b>Test instance</b>	12 months	Meter Deployment following table in Section 2.3	Integrations defined in Section 3, not real time.  Real-time integrations only enabled/active as required e.g. DataSync, real-time events, remote actions	The test environment is designed to be used for functional testing with meter data refreshed by database imported on an annual basis, as needed. Regular VEE processing will not be performed.
<b>Production instance</b>	36 months	Meter Deployment following table in Section 2.3	All integrations defined in Section 3.	Enabled

### 2.2. Storage

The SmartWorks Software will be capable of importing, processing and storing thirty-six (36) months of data for the meters reflected in the table below. Each instance will be sized appropriately to manage this volume of data. Changes to the table below that may affect the size of the SmartWorks Hosting Facility will be made in accordance with by the terms and conditions of the Hosting Services Agreement.

An archive and purge process will be used for data older than thirty-six (36) months. Archived data will be recoverable for a period of sixty (60) months after the date of archive, after which it will be purged.

To restore a location's data that has been previously purged and archived, users must enter the Location Number or meter ID. Once the restore execution is complete, all data for the selected meter ID, or for all meters associated with the selected location, will now be available in the system again, and can be viewed in graphs, tables, or other reports. This data will remain in the system indefinitely and will be excluded



from further data purge processes. Users will also be able to configure a “Data Purge Exclusion Meter List”.

Changes to storage and data processing requirements including storage duration, meter counts, configuration of intervals length or number of channels impact the storage requirements submitted with our proposal. These may be brought into scope using the Change Management process described in section 4.3.

A set of test meters in the Production environment will be defined by the Customer as being eligible for testing functionality (for example, disconnect features).

### 2.3. Meter Configuration

The SmartWorks Software will be capable of importing, processing and storing meter usage data based on the interval length and channels submitted with our proposal and defined below. Changes to meter counts, configuration of intervals or number of channels may be brought into scope using the Change Management process described in section 4.3.

Service	Number of Meters	Billing Determinant	Interval Length	UOM
Water Residential	36,000	Daily Midnight Register	60	GAL
Water Commercial	4,000	Daily Midnight Register	60	GAL

The number of daily processed reads is estimated to be 960,000

### 2.4. SmartWorks Compass Meter Data Types

For each meter provided in the DataSync process, there are four (4) different record types supported in Compass MDM:

- INT (Interval reads): reads processed through VEE,
- REG (Register reads): reads processed through VEE,
- EVN (Meter events)
- OMD (Other Meter Data values).

The SmartWorks Compass record layout for each of these four record types is detailed in the tables below.

### Raw Interval Reads

<i>Field Name</i>	<i>Field Type</i>	<i>Description</i>
<b>Record Indicator</b>	String (3 chars)	Must have value 'INT' for interval reads.
<b>Meter_id</b>	String (Not exceeding 30 characters)	Unique meter identifier. Must exactly match the unique meter identifier stored in AMI and CIS systems.
<b>Channel_id</b>	Integer	Channel identifier. A meter must have only one channel identifier with a given unit of measure. Data with different units of measure must each have their own channel identifier.
<b>Read_dtm</b>	Date/Time	Date and time of the end of the interval, in the meter's local standard time (not including daylight savings) or UTC. Preferred format is: "yyyy/mm/dd hh24:mi:ss".
<b>Read_value</b>	Decimal (any precision)	Numeric value representing the meter reading (either consumption or max demand, depending on the channel's Unit of Measure) for the interval.
<b>UOM</b>	String (not exceeding 30 characters)	Unit of measure for the reading. For example, KWH, KW, KVAR, KVA, GAL, M3, FT3
<b>Source_collector_id</b>	String (not exceeding 30 characters)	Unique identifier of the data collection device that obtained this meter reading (optional).

### Raw Register Reads

<i>Field Name</i>	<i>Field Type</i>	<i>Description</i>
<b>Record Indicator</b>	String (3 chars)	Must have value 'REG' for register reads.
<b>Meter_id</b>	String (Not exceeding 30 characters)	Unique meter identifier. Must exactly match the unique meter identifier stored in AMI and CIS systems.
<b>Channel_id</b>	Integer	Channel identifier. A meter must have only one channel identifier with a given unit of measure. Data with different units of measure must each have their own channel identifier.

<i>Field Name</i>	<i>Field Type</i>	<i>Description</i>
<b>Read_dtm</b>	Date/Time	Date and time the meter's register was read, in the meter's local standard time (not including daylight savings). Preferred format is: "yyyy/mm/dd hh24:mi:ss".
<b>Read_value</b>	Decimal (any precision)	Numeric value representing the meter register reading, which should match the meter's faceplate value at that time.
<b>UOM</b>	String (not exceeding 30 characters)	Unit of measure for the reading. For example, KWH, KW, KVAR, KVA, GAL, M3, FT3
<b>Source_collector_id</b>	String (not exceeding 30 characters)	Unique identifier of the data collection device that obtained this meter reading (optional).

#### Meter Events

<i>Field Name</i>	<i>Field Type</i>	<i>Description</i>
<b>Record Indicator</b>	String (3 chars)	Must have value 'EVN' for meter events.
<b>Meter_id</b>	String (not exceeding 30 chars)	Unique meter identifier. Must exactly match the unique meter identifier stored in AMI and CIS systems.
<b>Channel_id</b>	Int	Where applicable, indicate the channel ID associated with this event. In most cases, the event is associated at the meter-level, and not with a particular channel. In such cases, just put "1".
<b>event_dtm</b>	Date/Time	Date and time associated with the event, in the meter's local standard time (not including daylight savings). Preferred format is: "yyyy/mm/dd hh24:mi:ss".
<b>Event_tp</b>	String (not exceeding 30 chars)	Text indicating the type of event (example, 'Tamper', 'Outage', 'Leak', etc.)
<b>Event_Comments</b>	String (not exceeding 256 chars)	Text description of the event. If none is available, just duplicate the value in the Event Type field.

#### Other Meter Data

<i>Field Name</i>	<i>Field Type</i>	<i>Description</i>
<b>Record Indicator</b>	String (3 chars)	Must have value 'OMD' for other meter data.
<b>Meter_id</b>	String (not exceeding 30 chars)	Unique meter identifier. Must exactly match the unique meter identifier stored in AMI and CIS systems.
<b>Value_Type</b>	String (not exceeding 30 chars)	Identifier of the type of other meter data – for example: "blink count, current, pressure, temperature".



<i>Field Name</i>	<i>Field Type</i>	<i>Description</i>
<b>value_dtm</b>	Date/Time	Date and time associated with the data value, in the meter's local standard time (not including daylight savings). Preferred format is: "yyyy/mm/dd hh24:mi:ss".
<b>Value_qty</b>	Decimal	Numeric value indicating the quantity of the data value.
<b>UOM</b>	String (not exceeding 8 chars)	Unit of measure for the data value.
<b>Source_collector_id</b>	String (not exceeding 30 chars)	Unique identifier of the collector device that obtained this meter data value (optional).

## 2.5. SmartWorks Compass Modules

The following SmartWorks Compass Software modules will be installed and configured as part of the scope of this engagement.

SmartWorks Compass, including the following modules:

- MeterSense MDMS
- KPI Dashboard
- Automated Move-In and Move-Out
- VEE Acceptance Prediction

This section includes a description of each module as well as their corresponding Pre-requisites and Assumptions.

### 2.5.1. MeterSense MDM

SmartWorks will install and configure **MeterSense MDM** module.

Module Functionality includes:

- Support meter deployment
- Reports to help ensure that meters are provisioned correctly and communicating in the field
- Monitor AMI Performance
- Report on number of reads delivered compared to AMI Service Level Agreement
- Enable Meter-to-Cash
- Validation of reads, billing determinants and customer service support
- Alert via Meter Events
- Store and report on Tamper, Leaks, error and other meter flags

#### 2.5.1.1. Pre-Requisites & Assumptions

- Meter reads are imported from the AMI as defined in section 3.1 **Error! Reference source not found.** AMI Head End Systems.
- Meter events are imported from the AMI as defined in section 3.1 AMI Head End System.
- Meters installation/removal are synchronized with the system of record as defined in sections 3.2.1 CIS Synchronization Integration.
- After installation of **MeterSense** MDM by SmartWorks, meter reads validation routines (VEE – Validate, edit, estimate) as defined in SmartWorks User-Guide VEE will be available for configuration.
- Data will be presented in the **MeterSense** MDM reports based on the modules identified in this Statement of Work and the availability of the data described in section 3 Software Integrations.

### 2.5.2.KPI Dashboard

SmartWorks will install and configure the **KPI Dashboard** module. The KPI Dashboard enables the user to configure one or more dashboards to display information on Key Performance Indicators (KPIs). A KPI is a metric that is represented by a One-Dimension or Two-Dimension Visualization component:

- One-Dimension KPI Visualization includes: Numeric, Thermometer, or Speedometer
- Two-Dimension KPI Visualization includes: Area, Bar, Column, Scatter, Pie, or Table

For each KPI, a panel of information is available. This includes:

- Value of the KPI displayed as a numeric value, speedometer graphic or thermometer graphic.
- If a drilldown link was defined when the KPI was registered, clicking anywhere on the value will launch a window with the drilldown page.
- Color coded value (red/yellow/green), depending on settings.
- Max/min statistics and trend area.
- Secondary KPI value, where configured. If the secondary KPI value has been defined with a drilldown link, clicking on the value will launch a window with the drilldown page.

Information on a KPI can be shared via email on a scheduled basis or threshold-driven exception basis.

A set of standard KPIs are made available with the application. These are arranged into a set of standard dashboards. It may be that not all dashboards or KPIs are applicable to a utility depending on available information, modules deployed, and integrations performed. Users may configure their own dashboards from the available KPIs.

#### 2.5.2.1. Pre-Requisites & Assumptions

- Deployment of the **Compass Framework**, if not already in place.
- Population of any data required for calculation of KPIs as per section 3 of this SOW.

### 2.5.3.Automated Move-In / Move-Out



SmartWorks Compass Automated Move-In/Move-Out (MIMO) module automates the process of populating and resolving MIMO service orders with start reads and final reads to save the CSRs the time to do it manually.

Virtual Disconnect is enabled by monitoring for usage on inactive accounts and proactively notifying the utility if usage is discovered.

KPI Dashboards provide tracking of the MIMO processes in general and the effort saved by automating them.

- KPI Dashboards of processes including:
  - Actions performed
  - Number of successes, number of failures
  - Effort saved due to automation of these processes
- Rule for determining start reads and final reads for transition customers, including:
  - Identifying open MIMO Service Orders
  - Determining the appropriate final read for Move-Out Service orders
  - Determining the appropriate start read for Move-In Service Orders
  - Populating the MIMO Service Orders with the appropriate reads
    - Success/failure of connection command recorded at time of execution
    - Auto re-try for failed switch operations, e.g. up to 3 attempts
- User Interface in Compass for single customer On-Demand Reads in the context of a Move
- Virtual Disconnect through identifying Usage on Inactive Accounts
  - User Interface to interrogate the system and generate report of usage on Inactive Accounts
  - Exception based reporting through scheduling of the report.

#### **Implementation**

- Consultant will implement and configure the above functionality.
- Consultant will train customer on module functionality and uses.
- Consultant will support customer testing.

#### **Pre-Requisites & Assumptions**

- Deployment of the Compass Framework by SmartWorks, if not already in place.
- Population of any data required.
- The CIS datasync is in place and working. If this is not in place, another statement of work will need to be issued.
  - For Virtual Disconnect reporting, it is assumed that meters status are set to “OFF” as part of the datasync process.
- Where Meter Actions such as On Demand Read or Remote Connect/Disconnect are required, the AMI remote actions are in place and working. If this is not in place, another statement of work will need to be issued.

- Move-In and Move-Out transitions will be recorded in the CIS as Service Orders (SO). Customer will provide a detailed list of these actionable Service Orders (SO) for automated Move-In / Move-Out processes. CIS is the system of record for whether a SO is actionable, considering items such as:
  1. Validating that SO is supported by meter type
  2. Life support/special needs customers
  3. Landlord/Tenant agreements
  4. Holidays
  5. Weather
- It is assumed that each CIS service order is tied to only one (1) meter.
- It is assumed that each CIS service order is tied to only one (1) remote action type (e.g. On-Demand read, Remote Connect, Remote Disconnect)
- It is assumed that the CIS provider allows and technically enables service order integration via MultiSpeak calls.
  - VEE Acceptance Prediction functionality

This functionality is provided as an Extension to the MeterSense module from the SmartWorks Compass Suite. It improves the efficiency for users processing register read failures as part of the Validation, Estimation and Editing (VEE) process.

This Extension includes the following functionality:

- SmartWorks Athena AI Machine Learning solution for VEE Acceptance Prediction
- Provide recommendations as to whether register read validation failures should be accepted. These recommendations may be followed manually or executed automatically based on configurable level of confidence. For example, the system may be configured to automatically accept each register read failure, when Athena has greater than 90% confidence that the user would choose to accept the read failure. Athena's recommendation and confidence level are based on an AI model that was trained from past user behavior and takes into account the complex nature of each new read failure. In this way, Athena mimics the judgement of utility personnel that have manually reviewed read failures in the past.
- Acceptance Prediction setup
- Acceptance Prediction filtering in Register Read VEE Failures screens
- Acceptance prediction parameter in Register Read Validation Routines Setup.

Users can perform the following actions:

- Create, setup, copy, edit, import, and export AI algorithm configurations
- Modify the data elements used by the AI algorithms
- Train or re-train algorithms
- View performance data for AI algorithms
- Compare different AI algorithms, and compare versus past handled validation failures to compare how the algorithm predicts versus what a human did
- For viewing Register Read Validation Failures, user can use Acceptance Prediction confidence thresholds for filtering the list of Register Read Validation Failures. This

therefore allows confidence threshold filtering for manual acceptance of multiple failures at one time from this screen.

- When configuring Validation Parameters, users can set Acceptance Prediction confidence thresholds to define which Register Read failures will be set to Auto-Accept.

Refer to the Implementation Services section for details about which functions have been configured for the deployment.

## 2.6. Reporting

All standard reports available within the SmartWorks Software will be made available for all licensed modules.

No custom reports have been identified for delivery. However, if during the project, Customer identifies a requirement for a custom report, the services can be brought into scope using the Change Management process described in section 4.3.

## 2.7. Project Deliverables and Work Products

The following deliverables, milestones and work products are included in this project. **Deliverables** are items created during the project that require formal review and approval by the customer. **Work products** are items created during the project that are reviewed by the customer but do not require formal approval by the customer.

### 2.7.1. Deliverables

The following list identifies the key deliverables associated with this project:

- Functional and Integration Requirements Document
- SmartWorks Software installation
- SmartWorks Software configuration
- SmartWorks Software integration as defined in section 3
- SmartWorks Software End-User Training

### 2.7.2. Work Products

The following list identifies the key work product documentation associated with this project:

- Project Schedule
- Acceptance Criteria Document
- Test Case Scenario Checklist
- Testing Plan
- Training Plan
- Training Material
- SmartWorks Software User Guides
- Go-Live Approach Document

## 2.8. SmartWorks Compass Training and Discovery Sessions

To enable users to effectively use the software both during acceptance testing and in a production capacity, SmartWorks will provide end-user training as part of this project. Onsite and remote training sessions will be provided the Customer as outlined in the table below.

Activity	Location	Attendees	Length
Kick Off Meeting	Remote	Core project team, Executive Sponsors	1-2hrs
SmartWorks Compass demo	Onsite* (with Discovery)	Core project team, Billing, Meter Op, CSR, IT	1hr
Discovery Sessions	Onsite*	Core project team, Billing, Meter Op, CSR, IT 3 <sup>rd</sup> Parties (CIS, AMI)	1.5 day
<b>Workshop 1: Compass Overview and Introduction to VEE</b>	Remote	Core project team	0.5 day
Navigation Training Sessions	Onsite*	Core project team, Billing, Meter Op, CSR, IT	2 days
<b>Workshop 2: Data Validation</b>	Remote	Core project team	0.5 day
<b>Workshop 3: Roles and Groups configuration</b>	Remote	Core project team	1hr
Processes and System review Session	Onsite*	Core project team, Billing, Meter Op, CSR, IT 3 <sup>rd</sup> Parties (CIS, AMI, etc.)	3 days
<b>Workshop 4: Addressing VEE Exceptions and fine-tuning</b>	Remote	Core, Billing, Meter Op, CSR	2 x 0.5 days
SmartWorks Compass Functional and Process Training	Remote	Core, Billing, Meter Op, CSR	3 x 0.5days
Test scripts review	Remote	Core, Billing, Meter Op, CSR	1hr
UAT Acceptance Testing Support	Remote	Core, Billing, Meter Op, CSR, IT	10 days

**Note:** Onsite\* sessions will take place when safe and appropriate. The onsite sessions can be replaced with remote online sessions upon agreement between SmartWorks and Customer.

### 2.8.1. Kick Off Meeting

The purpose of this onsite meeting is to introduce project team members and review the MDM project at a high level. Topics include scheduling, methodology, milestones, communication plan and short-term focus.

### 2.8.2. SmartWorks Compass Demo

High level review of SmartWorks Compass features and functionalities. The purpose of this demo is to prepare Customer to engage in discussions during the Discovery Sessions.

### 2.8.3. Discovery Sessions

Preliminary requirements for the CIS Data mapping (DataSync) and billing (Meter to Cash), as well as for the AMI integration (Implementation Questionnaire) are reviewed during these sessions. The Solution Architecture Diagram and infrastructure components such as VPN connection are also scheduled as part of the initial discovery sessions. The VPN discussions should have started remotely, prior to Discovery.

These sessions are technical and participation from Customer's subject matter experts as well as third party vendors are expected to ensure optimal efficiency during the initial phases of the project. Meeting the dependencies identified during the initial discovery sessions is critical for the scheduling of subsequent project activities.

### 2.8.4. Workshop 1: Compass Overview and Introduction to VEE

The purpose of this session is to introduce the core team to SmartWorks Compass functionality and to the existing Validation Routines available within SmartWorks Compass.

The Overview Training Session is held with the core user group when initial configuration is complete. This session occurs during the Pilot phase and is held remotely, in preparation for the Onsite Discovery Session, enabling users to navigate the SmartWorks Software prior to the decision-making process that will take place during the Discovery Session.

The Overview Training Session provides users an overview of current system functionality. Upon conclusion of this session, users are able to navigate **SmartWorks Compass** platform and understand existing configuration.

### 2.8.5. Workshop 2: Data Validation

This workshop is held once initial configuration of DataSync and AMI read import is completed. The purpose of this Workshop is to review data within SmartWorks compass, including the review of validation reports. Following this workshop, it is expected that users will proceed with validation of the data from the CIS DataSync and AMI integrations, by comparing to their existing CIS and AMI systems.

### 2.8.6. Navigation Training Sessions

The Functional and Navigation Training Session is held once initial configuration of DataSync and AMI read import is complete. The purpose of this training session is to introduce the Core project team to the SmartWorks Compass application, enabling users to navigate the SmartWorks Software prior to the decision-making process that will take place during the following remote workshops and onsite sessions.

The Navigation Training Session provides users an overview of current system functionality. Upon conclusion of this session, users are able to navigate **SmartWorks Compass** platform and understand existing configuration.

Topics typically covered in this training include:

- SmartWorks Compass Navigation training
- Data Setup

- Meter Reads & Validating, Estimating, Editing – VEE
- Using Maps and Reports
- Advanced Reporting and KPI Dashboards
- System Administration

### **2.8.7. Workshop 3: Roles and Groups configuration**

The purpose of this Workshop is to determine who will be the user groups of the SmartWorks Compass solution, their access level and which permissions will be assigned to each group.

### **2.8.8. Processes and System review Session**

The purpose of the Process and System review Session is to demonstrate existing functionality of the SmartWorks Software using Customer data and elicit feedback for updates to that functionality. Emphasis is placed on understanding Customer's existing business process. The impact to the process due to SmartWorks Software is documented in the Functional and Integration Requirement Document.

Customization (custom reports) as well as purchased Modules (see section 2.5) are discussed during this session.

### **2.8.9. Workshop 4: Addressing VEE Exceptions and fine-tuning**

The purpose of this workshop is to provide users with the steps required to review validation reports and assist them in the investigation of VEE Exception reports. A fine-tuning of the VEE Parameter configuration may also be required during this session.

### **2.8.10. Functional and Process Training**

During the Functional and Process Training, up to 12 users will be provided training on the SmartWorks Software. This training includes a refresher of System Navigation as well as a review of the main business functions and use cases applicable to Customer. This training will also cover customization and features related to Modules purchased by the customer.

Topics typically covered in this training include:

- SmartWorks Compass Refresher training
- Billing & Customer Service Functions
- Sessions specific to each SmartWorks Compass module defined in section 2.5
- Process Automation Overview

### **2.8.11. Test scripts review**

This session will be used to review SmartWorks test scripts with Customer and how to monitor testing progress using test scripts dashboard. It is Customer responsibility to create, update and adapt the test scripts for the purpose of their User Acceptance Testing phase.

### **2.8.12. UAT Acceptance Testing support**

Customer is expected to focus and engage in User Acceptance Testing for a period of 2 weeks, with the remote support from the SmartWorks project team. The Validation/Testing Approach is described in section 5.4 of this SOW.

### 3. Software Integrations

During software integration:

- Customer will act as or provide an integration coordinator who will be responsible for overseeing integration communications for this project.

The integration coordinator role consists in securing, as required and in a timely fashion, the assistance and cooperation of third-party vendors. A change order will be required if a third-party vendor is unavailable or non-cooperative and causes an impact to the project schedule or effort.

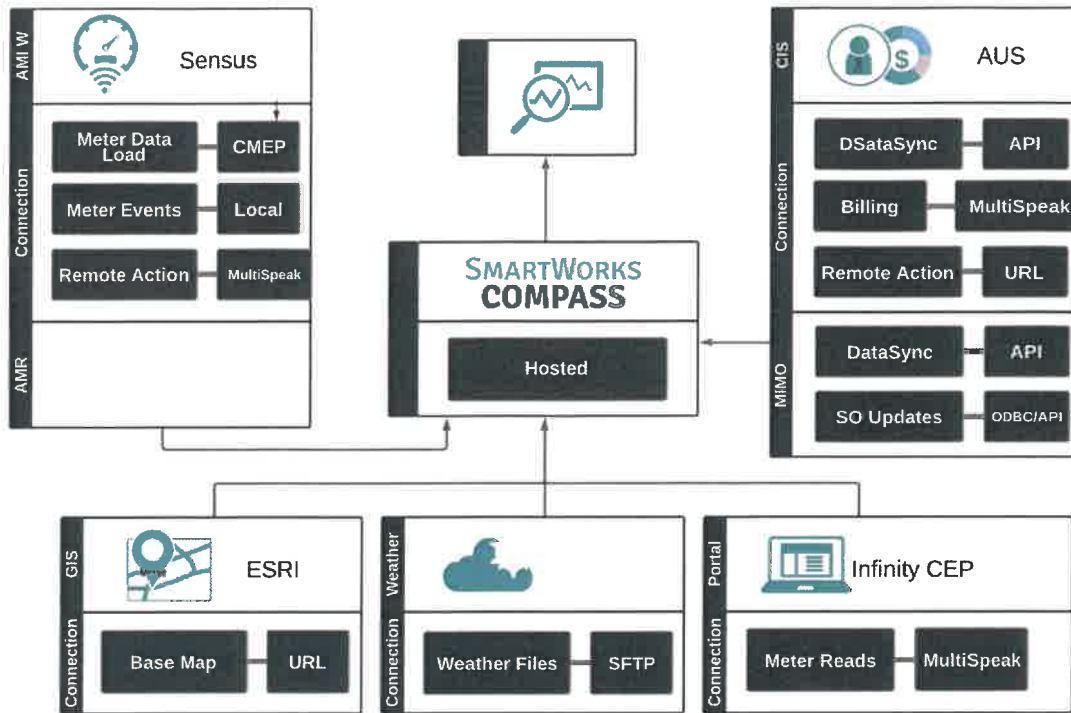
- SmartWorks will provide advice and recommendations regarding its experience and leading practice.

SmartWorks will make a reasonable attempt to provide sufficient lead time when making requests for assistance from third-party vendors. When deemed appropriate by Customer, SmartWorks will also work directly with third-party vendors if direct communication will result in efficient execution of the project.

Any version changes to integrating systems that occur during the project will be reviewed by SmartWorks and will require a change order if integration updates or re-testing activities are required.

The following diagram illustrate the Interconnectivity model between SmartWorks Compass and each integration point. The final integration diagram is subject to the final discovery session that will be held between the technical teams implementing the solution.





The following Integrations are included in the project scope for the project:

### 3.1. AMI Head End System (Sensus), version X.X

SmartWorks Software will integrate with the AMI Head End System to:

- **Meter reads:** Import the current day's readings as well as older reads that were previously missed. Interval and register read data will be received from AMI Head End system.
- **Meter events:** Import meter event data from AMI Head End. Examples include alerts such as tamper, leak, etc. Specific alarms will be defined between Sensus and Customer.
- **Remote action:** Where the functionality is supported by the meters or compatible others, SmartWorks Software will integrate with the AMI Head End to perform On Demand reads and Remote Connects & Disconnects.
- **Other Meter Data:** Other meter data can include any interval data that is not consumption data.
  - It is assumed that Other Meter Data types be kept to a minimum as to not cause performance concerns for the Compass system. Core Reports in Compass do not look at the data in the OMD table. Custom reports would need to be created using specific data in the OMD table. These custom reports are not in scope but can be brought into scope using the Change Management Process.

Integration	Initiator	Type(s)	Protocol	Frequency
<b>Meter Reads</b>	AMI	CMEP Read File	sFTP	1-3 times/day
<b>Meter Events</b>	AMI	CMEP Event File	sFTP	1-3 times/day
<b>Meter Events</b>	AMI	Real Time events (to be defined)	MultiSpeak® methods	Near Real Time
<b>Remote Actions</b>	AMI	OnDemand read	MultiSpeak® methods	Near Real Time

**Assumptions:**

- If flat files are used for providing meter data, the files are expected to be delivered by 5:00am (local time) or an agreed upon time suitable to Consultant and Customer in order for the SmartWorks Software to perform the VEE process. The AMI Head End may deliver files at multiple times during the day in order to collect the maximum amount of meter data.
- It is assumed that the applicable AMI Head End version will be installed on the Customer system in time for Consultant to perform its development and testing activities.
- It is assumed that interval reads provided by the AMI will scale to the register reads provided by the AMI (i.e. sum of interval reads will add up with the difference between register reads, after multiplier will pass at 95%). Failing to meet these may result in poor data quality in the MDM
- It is assumed that there will not be more than 5% missing intervals reads per day. Failing to meet these will result in performance issues when MDM tries to fill in gaps
- It is assumed that compound meters are two separate encoder heads and AMI Modules on one physical meter. Compass is Meter ID centric, therefore the system of record for meter information should see the High and Low sides of these meters as separate meter numbers. Compass can handle a single Meter ID assuming that the CIS can associate the High and Low sides of the meter using the Alt\_Meter\_ID and 'H' and 'L' suffixes in the datasync.

### 3.2. Customer Information System (CIS) (AUS Infinity)

In collaboration with Customer or Customer’s agent(s), Consultant will provide the following integrations with Customer’s CIS. The integrations will require ongoing support from the CIS vendor through the SmartWorks integration project.

**Summary of integrations**

Integration	Initiator	Type	Protocol	Frequency
<b>DataSync</b>	CIS	API	API	
<b>DataSync</b>	MDM	Queries API	API	1-3 times/day
<b>Billing</b>	CIS	Billing Request	MultiSpeak® 4.1	TBD during discovery
<b>Billing</b>	MDM	Billing Response	MultiSpeak® 4.1	TBD during discovery
<b>Remote Action</b>	CIS	OnDemand read request	MultiSpeak® 4.1	Real Time
<b>Remote Action</b>	MDM	OnDemand read response	MultiSpeak® 4.1	Real Time
<b>Work Order Creation</b>	MDM	2 rules to be defined	MultiSpeak® 4.1	TBD during discovery

### 3.2.1.CIS Synchronization Integration

Import of customer and meter data into the SmartWorks Software for validation of AMI data. A daily full periodic synchronization activity will occur.

The minimum information to be provided from the CIS will include the following:

	SmartWorks Compass
<b>METERS:</b> List of meters with identifiers, meter types, etc.	X
<b>METER COORDINATES:</b> Meter latitude and longitude information	X
<b>LOCATION:</b> List of location(account) numbers, service addresses	X
<b>METER LOCATION:</b> A date-driven cross reference between meter and location number (i.e. when a meter is installed and removed from a location)	X
<b>METER CONNECTION STATUS:</b> State of the meter (ON/OFF)	X
<b>METER ALIAS:</b> Descriptive information related to the meter, combining meter/location attributes	X
<b>BILLING SCHEDULE:</b> Cycle/Route schedule indicating billing period and reading period	X

#### Assumptions:

- It is expected that when a radio is installed or removed from a meter, a cross reference between meter ID and associated radio ID will be maintained in the CIS and provided during DataSync.
- This integration will be established using a REST API. Any delays with the availability of this integration will impact the project timeline. In the case of significant delays, Customer has the option to pause the project until the integration is available or follow Change Management process described in section 4.3 to keep the SmartWorks Project team engaged until the files are available.
- It is assumed there will be multiple iterations of the DataSync (typically 3-4) where the list of fields to be provided by the CIS via the API, will be finalized after discovery and prior to UAT. Customer is responsible for validating the data as a result of each DataSync iteration.
- Depending on Customer requirements, the synchronization will occur between 1 to 3 times per day and will be scheduled to occur after the CIS Customer database has been updated.
- Customer will be responsible for assisting in identifying and validating the data required for data synchronization
- Integration with the AMI head end system for the purpose of facilitating synchronization of the meter status (meter provisioning) between the AMI head end system and CIS is not included in the scope of this project. This integration enables the identification of meters that should be transmitting data to the MDM. It is therefore assumed that a direct integration will be made between the AMI head end system and the CIS. It is expected that Customer and AMI provider will work collaboratively to develop this integration.

### 3.2.2.Billing Interface (MultiSpeak® or MV-RS)



Customer will initially bill using register reads, not time-based determinants for most meters. Customer CIS will apply the correct rate to each register.

AUS and SmartWorks Software will use a MultiSpeak® web service (synchronous SOAP call) call to request and receive the latest available read. [CIS Vendor] will apply the correct rate to each register.

OR

Customer will use **SmartWorks Compass** billing interface, which makes use of an MV-RS file format. The MV-RS file will be created in the CIS and uploaded to an ftp/sftp site using CIS processes. **SmartWorks Compass** will be configured to automatically update the file with reads and place it on an ftp/sftp site for download back to the CIS.

**Assumptions:**

It is assumed that all reads required for the purpose of billing will be provided by the AMI system. Should **SmartWorks Compass** be required to perform calculation (e.g. TOU, Net Billing), the services can be brought into scope using the Change Management process described in section 4.3.

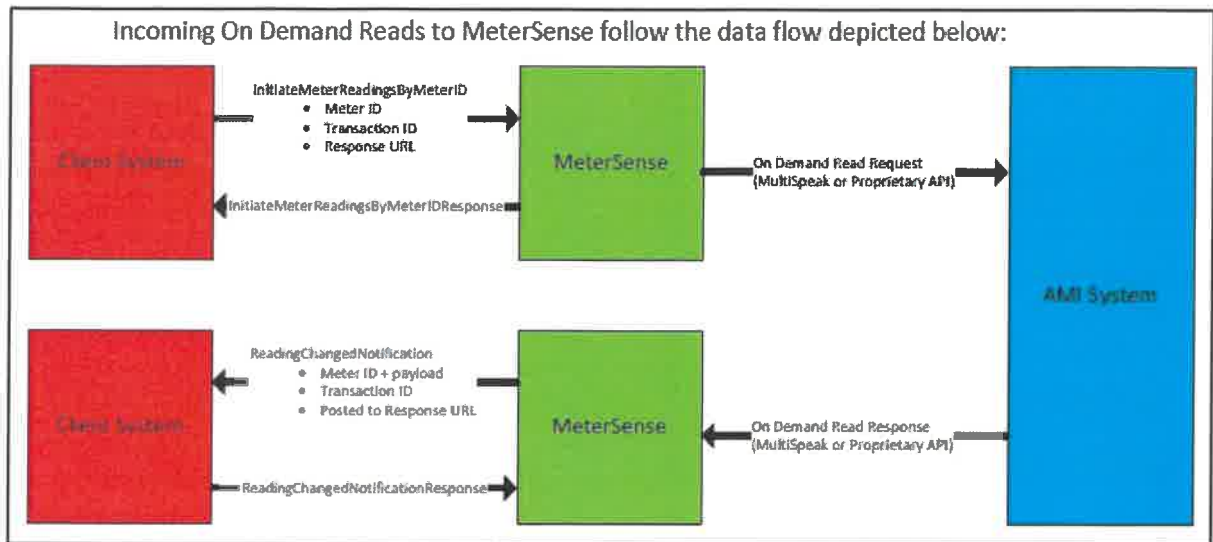
- Where TOU blocks/buckets are used for billing the blocks/buckets will be passed to **SmartWorks Compass** from the AMI. **SmartWorks Compass** will pass the blocks/buckets as generated at the meter level and passed to **SmartWorks Compass** through the AMI out to the Client's CIS.

**3.2.3. Meter Action Initiation from CIS**

- On Demand reads
  - In the context of Move
- Remote Disconnect/Remote Connect
  - In the context of a Move

The SmartWorks Software will provide the ability for a user to use the CIS to initiate a remote meter action (On Demand read, Remote Connect, Remote Disconnect).

MultiSpeak® methods will be used to accomplish this integration. The SmartWorks Software will act as the server end of MultiSpeak® an asynchronous command for a remote meter action from the CIS. The SmartWorks Software will broker the transaction by integrating with the AMI head end system.



### 3.2.4. Service Order Creation from MDM

The SmartWorks Software will have a MultiSpeak® interface with the CIS that allows the Process Automation rules to create service orders.

- The SmartWorks Software will query the CIS to confirm if a Service Order already exists for the location/account,
- If a Service Order does not already exist, a Services Order will be created. Customer is responsible for providing Service Order type for each use case.

As part of the scope of this integration, SmartWorks will deliver up to two (2) business rules that will each enable the automation of one (1) Service Order type and one (1) resulting action.

Examples of Business Cases:

- Non-Communicating meter
- Meter tamper

**Assumptions:**

- For these rules to be implemented as part of the project, Customer will provide a decision on the applicable Business Cases within **2 weeks** after the delivery of the Processes and System review session.

### 3.2.5. Off-Cycle Read retrieval

SmartWorks will integrate with CIS to provide the ability for a user to initiate the read retrieval from CIS based on data from MDM.

When requested by a Customer Service Representative (CSR), from the Reading History tab of the AccountView form in CIS Infinity a read will be displayed on the screen, an event will be logged and the

date/time of the reading will be recorded in CIS Infinity. An identifier of the person requesting the read will also be recorded.

Read option within CIS are as follows:

- Current read (On Demand reads) – will not return any reads as Customer AMI meter does not support this functionality
- Read as of date
- Latest read.

### 3.2.6. Location Summary reports

The CSR will have the ability to view SmartWorks Compass Location Summary report within CIS Infinity – Account View – MDM tab.

## 3.3. Geographic Information System (GIS) Integration - ESRI

### 3.3.1. Base Map

The SmartWorks Software will be configured so that meter data will be overlaid on top of one or more ESRI “Base Maps” via URL live link. With this capability, the Customer will be able to view meter data together with their other data layers within SmartWorks Software.

Customer will create URL and provide a custom base map to SmartWorks for configuration of **MeterSense**. This scope of integration assumes Customer is hosting ESRI on a web server and can provide a URL.

## 3.4. The Weather Network

The SmartWorks Software will integrate weather data services with daily feed of observed weather data received from the Weather Network weather station determined to be closest to Customer’s location.

The following weather data, if provided by the weather station, will be imported into SmartWorks Software:

- Temperature (Hourly)
- Humidity (Hourly)
- Wind Speed (Hourly)
- Wind Direction (Hourly)
- Weather Conditions (Hourly)
- Precipitation (Daily)

This data is automatically downloaded from SmartWorks’ data provider for a weather station or stations in the Customer’s service area and is automatically inserted into the SmartWorks Software database.



### **3.5. Customer Portal - Infinity CEP (Advanced)**

The SmartWorks Software will implement an interface between SmartWorks Compass and SilverBlaze. SmartWorks will facilitate the integration of the MeterSense MDMS with SilverBlaze to provide usage data for all meter channels for meters and support the implementation of the portal.

SilverBlaze will build integration points for Customer smart meter usage details using SmartWorks MDMS MultiSpeak web services or SmartWorks MDMS SOAP API.



## 4. Project Management Approach

### 4.1. Communication/Relationship Management Approach

Communication Management is the cornerstone of any project and a well-structured communication plan is a must from the beginning. Regular, or ongoing, communications include those opportunities to communicate with project team members, sponsors, steering committee members, and other key stakeholders on a regular basis. These types of communication include regular status reports, scheduled project team meetings, and monthly updates with the steering committee or with executive project sponsors on a project.

#### 4.1.1. Guiding Principles

Our intent is to work together to establish a long-term partnership between our companies. The project will last months, but the business relationship will last for years.

The following guiding principles will assist in meeting this goal:

- Openness, honesty, credibility, and trust in all communications.
- All parties will conduct themselves with respect in all situations.
- Two-way communication, with feedback valued and requested.
- Understanding that different team members may have different objectives for the solution. We will seek to understand each other's point of view and work collaboratively to find solutions to problems.
- Recognition that this is a project and not normal daily operations. All team members may not be accustomed to the demands of a project and will have to readily adjust to the needs of meeting deadlines and multi-tasking for this project to be successful.
- Project Team and Management ownership of the communication program with ongoing commitment to the communications process.
- Recognition that the project schedule is our agreed to timeframe for the completion of the work and that we will work together to ensure that the schedule remains viable by collaborative coordination of our teams' efforts and transparent communications.
- Adhering to decisions made. This is vital to minimize impact on the Project Schedule. If later, adjustments are absolutely required, they can be made following the Change Management process.
- Incorporate SmartWorks best practices when possible, to maximize the capability of the Solution.
- Focus on our project goals and on activities that will continue to move the project forward to a successful outcome.

These principles define how we wish to work together during the implementation of the Solution. Due to the pressures of a project such as this and the inevitable risks (unknowns) that will be introduced over the life of the project, there may be times when both parties may not feel we are working well together or towards the same objectives. At those times both parties will refocus on the critical importance of the project, review the guiding principles, and find a mutually agreeable path through the difficulties.



#### 4.1.2.Goals of Communication Strategy

During the Project Kick Off meeting, a Communication Plan will be presented and reviewed with Customer staff based on the following Communication Strategy:

- Keep people informed on project status
- Focus on communication to effectively prepare Customer for their software rollout
- Focus on communication to build support for project
- Monitor effectiveness of communication

#### 4.1.3.Effective Communication Guidelines

- There are multiple audiences for project communications
- Communication needs to be:
  - Tailored to specific groups
  - Regular and informative
  - Real-time and relevant
- Communication content needs to be of interest to the target audience

#### 4.1.4.Communication Plan

Following is the proposed communication plan for the project:

What	Who / Target	Purpose	When / Frequency	Type/Method(s)
Project Kick Off	All stakeholders	Communicate plans and stakeholder roles/responsibilities.	At or near Project Start Date	Remote Meeting
Status Reports	All stakeholders and Project Office	Update stakeholders on progress of the project.	Weekly	Distribute electronically using agreed Status Report template
Team Meetings	Entire Project Team	To review detailed plans (tasks, assignments, and action items) and risks.	Weekly	Meeting Review Project Plan, Status Reports, and Risk Log
Project Management Status Meetings	Sponsor(s) and Project Manager (SmartWorks, Customer, AMI Vendor, CIS Vendor)	Update Sponsor(s) on status and discuss critical issues. Seek approval for changes to Project Plan.	Weekly	Meeting
Executive Sponsor Meetings	Executive Sponsor(s) and Project Manager(s)	Update Sponsor(s) on status and discuss critical issues. Seek approval for changes to Project Plan.	Monthly	Meeting

## 4.2. Work Management Approach

Work will be managed through the use of the Project Schedule. The SmartWorks Project Manager will have the responsibility to create and maintain the Project Schedule for the modules and integrations listed in this Statement of Work. It is expected that Customer Project Manager will work in conjunction with the

SmartWorks Project Manager to ensure that key Customer activities that impact the project are also contained in the Project Plan.

During and after the User Acceptance Testing phase, the SmartWorks TeamSupport solution will be used to track project issues such as bugs or other lower level action items. The entire project team (SmartWorks / Customer) will have access to TeamSupport.

### 4.3. Change Management Approach

This document serves as the complete understanding, between Customer and SmartWorks, as to what the current Statement of Work entails. Customer and/or SmartWorks may propose changes to the scope of work defined in this document (“Change”). The Change Order Form (Appendix A) must be used for all change requests. SmartWorks shall have no obligation to commence work in connection with any change until the fee and schedule impact of the change is agreed upon in a written Change Order Form signed by the designated representatives from both parties.

Upon a request for a change, SmartWorks shall submit the standard Change Order Form describing the change, including the impact on the schedule, budget, scope and expenses. The Change Management Process that will be employed is defined below:

- Identify and document proposed change
- Assess impact of proposed change
- Estimate required effort / cost of proposed change
- Submit Change Order for Approval / Disapproval
- Communicate Change Order Decision
- If Change Order is Approved:
  - Assign responsibility
  - SmartWorks to update Project Plan as needed
  - If there are project delays due to Change Request, SmartWorks may create subsequent Change Requests to address those delays
  - Monitor and report progress

Within ten (10) consecutive business days of receipt of the Change Order Form, Customer shall either:

- Accept the proposed change by signing the Change Order Form, or
- Reject the proposed change and inform SmartWorks Project Manager via email.

If SmartWorks is advised not to perform the change, or in the absence of Customer acceptance or rejection within ten (10) days, then SmartWorks:

- Will not perform the proposed change and will proceed only with the original services
- May create a new Change Request to accommodate the expenses incurred during the discussion of the proposed change. This may happen only in cases where:
  - Customer takes longer than ten (10) days to reach the decision, or does not reach a decision, and/or
  - Overall project timeline, budget or scope are affected.

#### 4.4. Risk Management Approach

Risk Management planning is an important part of project management and a core component of the SmartWorks Project Implementation Methodology. Risk Management planning is about defining the process of how to engage and oversee risk management activities for a project. Having a viable plan on how to manage risk allows one to mitigate risk versus attempting to decide in the midst how to handle a risk. The earlier Risk Management planning is engaged within the project increases the probability of success of risk mitigation activities. Risk Management planning will be initiated at the start of the project by having the initial discussion with Customer prior to, or during the Project Kick Off Meeting.

Risks can be raised by any project stakeholder, including project team members, Customer, third-party integrators, or vendors during the project.

Risks will be entered on the Risk Log and categorized by type and priority. The Project Manager will investigate the risk and, if necessary, will update the Risk Log with background information to place the risk in perspective.

At a minimum, the following information will be captured and tracked for all risks:

- RISK ID – each risk should have a unique ID
- TITLE – short description of the risk (usually a few words or a sentence, helpful when reporting risks)
- DESCRIPTION – complete description of the risk, the more details the better
- IMPACT – impact to the project and/or business in terms of money, time, and/or quality
- PROBABILITY – indicate the probability of the risk
- SEVERITY – risk severity (typically values could be “critical”, “high”, “medium”, “low”)
- TYPE – type of risk (e.g. technical, process, organizational, etc.)
- RISK MITIGATION PLAN – detailed description of actions (including dates and owners) required mitigating the risk
- STATUS – current status of the risk (typical values are “open” or “closed”)

The following Risk Matrix will be used to establish the severity of risk:

<b>PROBABILITY</b>	High (3)	3	6	9
	Medium (2)	2	4	6
	Low (1)	1	2	3
		Low (1)	Medium (2)	High (3)
		<b>IMPACT</b>		



Throughout the duration of the project, as risks are identified they will be added to the Risk Log and will be reviewed at weekly Status Meetings with the team to determine the possibility of occurrence and the best plan for mitigation.

If identified risk(s) and/or mitigation strategies are deemed to have an effect on project timeline, or budget, or scope, a Change Request may be created, as per section 4.3, to address those concerns.

Based on SmartWorks' experience, the following have been identified as dependencies that could have negative effect on project timeline, cost and/or scope and could become potential risks:

- VPN ports not opened for SmartWorks personnel and for communication between integration points
- AMI not ready on time, or not sending the data
- Data source not ready for DataSync
- Resources not available to provide required information

Early engagement and commitments on timelines by all parties can significantly reduce risks linked to the above dependencies. SmartWorks will do its best to not change assigned personnel during the course of this project. Should any change be considered, SmartWorks will communicate such consideration to Customer.

#### 4.5. Acceptance Management Approach

In collaboration with Customer, SmartWorks will develop and maintain a central listing of all Deliverables and Work Products to be completed throughout the project "**Deliverable Acceptance Criteria Document**". The Deliverable Acceptance Criteria Document will also set forth the acceptance criteria for each deliverable ("**Deliverable Acceptance Criteria**").

A baseline version of the Deliverable Acceptance Criteria document will be created through a combined effort between SmartWorks and Customer during the Initiation and Build phase. The Deliverable Acceptance Criteria Document will be reviewed with Customer regularly and updated to record the approval of the Deliverables as they are accepted. The approvals of the Deliverables in the Acceptance Criteria document will constitute final system acceptance.

A core component of the Deliverable Acceptance Criteria Document will be the execution of the test plan and test cases. The Testing Plan, also created in the Initiation and Build phase, and the Test Case Scenarios, created during the Initiation and Build phase, are customized specific to the implementation for Customer. The Test Plan and Test Case Scenarios are used for testing and will be provided to Customer for their own review and testing of the system. SmartWorks Implementation Team and Customer staff will work as a team to ensure that exhaustive testing is carried out. During the Testing phase, when the system testing is being executed, the Project Team will be meeting to review the testing status and ensure that scheduled testing is being carried out.

Once system testing has been completed, and Customer staff has been trained on the system, Customer staff will have the necessary tools to review the system for acceptance. Customer will have access to its own instance of the SmartWorks Software, loaded with their data, to train and test on. SmartWorks Consultants assigned to Customer will provide training of the system to the staff, along with training



documents, consisting of User Guides and PowerPoint. Training will be conducted onsite and using WebEx sessions, phone calls and documentation when needed.

## 5. Delivery Approach

### 5.1. Implementation Approach – Phases, Deliverables, Key Milestones

Successful implementation is based on SmartWorks' understanding of Customer requirements and experience gained through the implementations of SmartWorks Software at various Customers across North America. 's project will leverage SmartWorks' Implementation Methodology which has been honed and perfected over the company's long history to successfully guide project implementation from Initiation to Deployment.

### 5.2. Implementation Methodology

The SmartWorks Methodology is based on the following guiding principles:

- *Promote and foster customer ownership of solution;*
- *Establish and maintain consistent and regular touchpoints with Customer;*
- *Ensure that project performance is visible, measurable, tracked and risks identified and mitigated – No Surprises!; and*
- *Seek to minimize customer cost and time while still achieving project objectives.*

The Implementation Methodology consists of two main areas: **Project Management** and **SmartWorks Software Implementation Management** where each has associated (where applicable):

- Processes / Checklists / Matrices that define how to operate;
- Deliverables that are formal outputs that require Customer sign-off;
- Work Products that are outputs produced as part of the work required to achieve the desired project goals; and
- Tools / Assets that are leveraged to produce defined outputs.

The **Project Management** area defines how projects are managed. It includes:

- **Communication/Status Management** aimed at establishing internal and external communications as well as monitoring and communicating project status and effort spent;
- **Relationship Management** aimed at measuring the pulse of Customers and partners;
- **Work Management** aimed at capturing and monitoring effort, cost and work to be performed;
- **Change Management** aimed at defining and controlling project scope;
- **Risk Management** aimed at planning, mitigating, tracking and monitoring risks;
- **Acceptance Management** aimed at ensuring that expected deliverables are delivered and accepted; and
- **Financial/Contract Management** aimed at monitoring project financial health.

The **Implementation Management** area defines the Implementation Phases and associated Work Products and Deliverables that are part of this project. The Implementation Phases are defined in the following table:

Implementation Phases	Objectives	Key Work Products and Activities	Deliverables
<b>Phase I Initiation and Build</b> Key Milestones <ul style="list-style-type: none"> <li>Kick Off Meeting Held</li> <li>Project Plan Reviewed/Updated</li> </ul>	<ul style="list-style-type: none"> <li>To Kick Off project and establish successful working relationship</li> <li>To obtain detailed agreement on Project Plan</li> <li>To install and perform base configuration work</li> </ul>	<ul style="list-style-type: none"> <li>Kick Off Meeting</li> <li>Implementation Questionnaire</li> <li>Acceptance Criteria Document</li> <li>Initial Configuration complete</li> <li>Physical Architecture Recommendation</li> </ul>	<ul style="list-style-type: none"> <li>SmartWorks Software installation</li> <li>Software Overview Training Session</li> </ul>
<b>Phase II Analysis</b> Key Milestones <ul style="list-style-type: none"> <li>Integration Documents signed</li> <li>Functional and Integration Requirement Document signed</li> </ul>	<ul style="list-style-type: none"> <li>To demonstrate base configuration functionality</li> <li>Conduct Discovery Sessions</li> <li>To obtain an agreement on what is remaining to be delivered</li> </ul>	<ul style="list-style-type: none"> <li>Discovery Session(s) Summary</li> </ul>	<ul style="list-style-type: none"> <li>Functional and Integration Requirements Document</li> </ul>
<b>Phase III Development</b> Key Milestones <ul style="list-style-type: none"> <li>Solution Feature / Code / Configuration Complete</li> </ul>	<ul style="list-style-type: none"> <li>To configure according to requirements and build the Solution components</li> <li>To write associated test cases that Customer would execute for acceptance of the Solution</li> </ul>	<ul style="list-style-type: none"> <li>Test Scenarios / Cases</li> <li>User Acceptance Test Scripts</li> <li>Base Solution Installed and Configured</li> </ul>	<ul style="list-style-type: none"> <li>SmartWorks Software configuration</li> <li>SmartWorks Software integration</li> </ul>
<b>Phase IV Testing</b> Key Milestones <ul style="list-style-type: none"> <li>User Acceptance Testing Complete</li> </ul>	<ul style="list-style-type: none"> <li>To move the Solution to a known state of quality and ready for deployment</li> <li>To train customer on their Solution</li> </ul>	<ul style="list-style-type: none"> <li>Functional Testing Results</li> <li>Integration Testing Results</li> <li>User Acceptance Test (UAT) Results</li> <li>Accepted Solution per UAT</li> </ul>	<ul style="list-style-type: none"> <li>Functional and Process Training</li> <li>User Acceptance Testing Support</li> <li>Go-Live Plan Document</li> </ul>
<b>Phase V Deployment</b> Key Milestones <ul style="list-style-type: none"> <li>Solution Live</li> </ul>	<ul style="list-style-type: none"> <li>To move the Solution into a production environment state and transition support to the operations team</li> </ul>	<ul style="list-style-type: none"> <li>Solution Live</li> </ul>	<ul style="list-style-type: none"> <li>Installation Acceptance</li> </ul>

To minimize project costs, the majority of project work will be performed at one of the SmartWorks' locations except for key project activities such as Discovery Sessions where face-to-face is deemed more effective for a successful project. Throughout the project, SmartWorks' Project Team will be engaged with Customer using WebEx sessions to review configuration work and provide remote support.



### 5.3. Implementation Timeline

The estimated duration to implement the SmartWorks Software within scope is approximately 8-10 months.

The actual duration and scheduling of project activities will be evaluated during the Initiation and Build phase and a detailed baseline Project Plan will be jointly created at that time.

A baseline plan will be delivered within fourteen (14) calendar days of the project Kick Off Meeting allowing Customer an opportunity to review the Project Plan over the next ten (10) business days. If Customer does not agree to the proposed Project Plan, Customer and SmartWorks will work collaboratively to develop a mutually agreeable plan within a reasonable timeline.

The Project Plan will include a project completion date (the date where project is completed based on the criteria in section 5.7 Project Completion Criteria). The Project Plan will be reviewed periodically during the project and may be revised. Changes to the project completion date will require a Change Order if it is mutually determined that the delay in completion is the fault of the Customer or Customer's third-party vendors.

### 5.4. Validation/Testing Approach

Systems Testing is an activity that is addressed through all Phases of the SmartWorks Software Implementation Methodology but is the focus of the Testing Phase.

To ensure that a quality Solution is delivered to Customer, the Testing Phase focuses on validating that the configured and developed Customer Solution performs per agreed upon requirements for each module. This includes three (3) main testing activities:

- **Unit Testing** to test individual Solution components to validate that each component meets the specifications set forth during the project.
- **Functional Testing** to test the core Solution components (Configuration, Interfaces, Reports, and Modifications) against agreed upon requirements as defined in the Functional and Integration Requirements Document based on the test cases and scenarios developed during the Development phase.
- **Integration Testing** to test the end-to-end process based on business processes and scenarios developed during the Development phase.
- **User Acceptance Testing** to provide Customer the opportunity to validate that Solution behaves per agreed upon requirements as defined in the Functional and Integration Requirements Document based on the test cases and selected scenarios collaboratively developed with Customer during the Development phase. User Acceptance Testing sign-off per agreed upon criteria is necessary to move to Deployment phase.

The progress for performing the three (3) testing activities will be logged into TeamSupport. At a minimum, the TeamSupport will include the following information:

- The test name
- The objective for performing the test



- A Description of the steps required to perform the test “**Test Script**”
- The expected result that will demonstrate the test is successful “**Test Acceptance Criteria**”
- The actual result observed after performing the test “**Test Result**”

Prior to commencing Functional Testing and Integration Testing activities, the Test Scripts and Test Acceptance Criteria will be documented in TeamSupport by SmartWorks using Test Scripts that have been defined by SmartWorks.

While performing testing activities, the tester will update the TeamSupport with the Test Result and will make a determination as to whether the result meets the Test Acceptance Criteria.

Functional Testing and Integration Testing will be performed by SmartWorks. User Acceptance Testing will be performed by Customer with support from SmartWorks.

#### 5.4.1. User Acceptance Testing Procedure

Once Functional Testing and Integration Testing have been completed, and Customer staff has received Functional Process Training, Customer staff will have the necessary tools to perform User Acceptance Testing.

Prior to commencing User Acceptance Testing activity, the Test Scripts and Test Acceptance Criteria will be documented in TeamSupport by SmartWorks collaboratively with Customer.

Customer will have its own instance of The SmartWorks Software, loaded with its data, to train and test on. The Application SmartWorks assigned to Customer will provide the documents and training of the system to the staff. Training will be conducted onsite and using WebEx sessions, phone calls and documentation as needed.

Customer will have a defined period of time to perform User Acceptance Testing on the Solution (including testing in a live production environment) (the “**Acceptance Testing Period**”). The length of the Acceptance Testing Period will be defined in the Detailed Project Plan. This User Acceptance Testing Period will begin upon formal written notification from SmartWorks to Customer that the SmartWorks Software has been configured and is ready for testing. During such Acceptance Testing Period, both Parties shall work diligently and dedicate the appropriate resources to conclude the evaluation in a timely and efficient fashion.

If the Solution substantially meets the Functional and Integration Requirements Document, and substantially satisfies the testing criteria set forth in TeamSupport (together the “**Solution Acceptance Criteria**”), Customer will provide SmartWorks with written acceptance notice thereof, and the date of such notice to be the “**Actual Solution Acceptance Date**”.

In the event Customer determines that the results of a test do not meet the Solution Acceptance Criteria, following the initial User Acceptance Testing cycle, Customer will provide SmartWorks with written notice thereof, specifying in reasonable detail how the Solution failed to meet the Solution Acceptance Criteria. If Customer delivers to SmartWorks such notice of retesting, SmartWorks shall make all necessary corrections, repairs, fixes, modifications, or additions to or replacements of all or any part of the rejected SmartWorks Software as well as integrations for which SmartWorks is responsible so that it conforms to

and performs in accordance with the Solution Acceptance Criteria. SmartWorks will have a defined period of time “**Correction Period**” to correct any deficiency, after which the User Acceptance Testing will be resumed. The Correction Period will be defined in the Detailed Project Plan.

Should the Customer require additional testing outside of SmartWorks’ standard testing routines, such as for Disaster Recovery, these can be brought into scope via Change Order.

In the event retesting is required by Customer, the User Acceptance Testing process will then be repeated.

Customer shall not unreasonably reject or fail to accept the Solution based on any Severity 3 issues, as defined in the table below.

Severity Level	Description
<b>1</b>	<ul style="list-style-type: none"> <li>• <i>System Down (Software Application, Hardware, Operating System, Database)</i></li> <li>• <i>Program errors without workarounds</i></li> <li>• <i>Incorrect calculation errors impacting one-third of records</i></li> <li>• <i>Error messages preventing data integration and update</i></li> <li>• <i>Performance issues of severe nature impacting critical processes</i></li> <li>• <i>Security Issues</i></li> </ul>
<b>2</b>	<ul style="list-style-type: none"> <li>• <i>System errors that have workarounds</i></li> <li>• <i>Calculation errors impacting less than one-third of records</i></li> <li>• <i>Reports calculation issues</i></li> <li>• <i>Performance issues not impacting critical processes</i></li> <li>• <i>Usability issues</i></li> <li>• <i>Workstation connectivity issues (Workstation specific)</i></li> </ul>
<b>3</b>	<ul style="list-style-type: none"> <li>• <i>Training questions, how to, or implementation of new processes</i></li> <li>• <i>Aesthetic issues</i></li> <li>• <i>Issues where a workaround is available for a large majority of cases</i></li> <li>• <i>Recommendations for enhancements on system changes</i></li> <li>• <i>Questions on documentation</i></li> <li>• <i>Test environment issues or questions</i></li> </ul>

During the Acceptance Testing Period, Customer may in collaboration with SmartWorks, acting reasonably, extend the Acceptance Testing Period, the Correction Period, and the Expected Solution Acceptance Date (such that the extended Acceptance Testing Period shall expire on the revised Expected Solution Acceptance Date). During the Acceptance Testing Period, Customer should provide written notification to SmartWorks of any deficiency of a test result. Any issues identified after the end of the Testing Period will be address by SmartWorks according to the Support and Maintenance agreement.

## 5.5. Software Progression and Configuration Management

During the course of the project, updates are performed as described in the table below.

Phase(s)	Environment	Updates	Details
<b>Initiation and Build Analysis Development</b>	Pre-production	Configuration	Performed on an ongoing basis by SmartWorks Implementation Team. No Customer approval required.
		Software updates	Performed on an ongoing basis by SmartWorks Implementation Team. No Customer approval required.
		Software upgrades	<b><i>Not performed without prior agreement between SmartWorks and Customer.</i></b>
<b>Testing</b>	Pre-production	Configuration	Performed to address issues raised as a result of UAT.
		Software updates	Performed to address issues raised as a result of UAT. Release notes will be available upon request.
		Software upgrades	Not performed.
<b>Deployment</b>	Pre-production	Configuration	Performed for items related to Go-Live deployment activities.
		Software updates	Not performed, unless issues found during Go-Live deployment activities. <b><i>Requires agreement between SmartWorks and Customer.</i></b>
		Software upgrades	Not performed.
<b>Deployment</b>	Test*	Configuration	Can be performed by Customer to test additional configurations for Post Go-Live.
		Software updates	Not performed, unless exception scenario is encountered. <b><i>Requires agreement between SmartWorks and Customer.</i></b>
		Software upgrades	Not performed.
<b>Post Go-Live</b>	Pre-production & Test	Configuration	See Software Support Agreement
		Software updates	See Software Support Agreement
		Software upgrades	See Software Support Agreement

\*Once the Test instance is setup during the Deployment phase, the migration of items (configuration, updates or upgrades) from Test to Production will be evaluated for each scenario and a plan will be agreed upon between Customer and SmartWorks.

## 5.6. Customer Resource Involvement

SmartWorks strongly believes that a successful implementation project requires that both Customer and SmartWorks resources work openly and collaboratively towards a common objective. As such, Customer's involvement will be required through all phases of the implementation project. SmartWorks also believes that the involvement of key Customer resources will help with the organizational change management activities that are essential to obtain acceptance of the new solution.

The factors that will determine the size of Customer's team includes the following:

- The level and expertise of each of the Customer Project Core Team members;
- The ability of Customer Project Manager to make decisions regarding the project;
- Whether current job responsibilities will interfere with Core Team responsibilities;
- The amount of business reengineering that Customer determines is necessary; and
- The number of personnel that Customer will use to run their Solution, which in turn affects the amount of training needed.

Based on SmartWorks' experience with other clients, the following list outlines the anticipated involvement of Customer throughout the implementation project, by phase.

### **Phase I: Initiation and Build**

1. Work with the SmartWorks to develop the Project Schedule.
2. Identify users of the Solution.
3. Complete the Implementation Questionnaire provided by SmartWorks. This questionnaire provides SmartWorks with the technical and environmental details required to configure the SmartWorks Software.
4. Ensure that any third-parties required for the success of this project such as the AMI and CIS vendors have been informed and that they are ready to participate and contribute on an as-required basis.
5. Install VPN connection(s).
6. Assist with ensuring that SmartWorks Software is accessible from within Customer environment.

### **Phase II: Analysis**

1. Ensure the staff members that have been identified to participate in Discovery Session(s) are available on dates agreed to and scheduled.

### **Phase III: Development**

1. Provide and ensure all required technical staff are available on dates agreed to and scheduled.
2. Create User Acceptance Testing Plan, including Test scenarios.

**Phase IV: Testing**

1. Determine the appropriate staff to be trained.
2. Ensure the staff members that have been identified to participate in the training sessions are available on dates agreed to and scheduled.
3. Assist with Functional / Integrated Testing.
4. Conduct User Acceptance Testing.
5. Log issues in the SmartWorks TeamSupport system (a web-based issue tracking system). The issues logged in TeamSupport will be addressed by SmartWorks Consultants per triage and priority.
6. Assist SmartWorks in developing a Go-Live Plan Document.

**Phase V: Deployment**

1. Assist in activities as defined within the Go-Live Plan Document.

**5.7. Project Completion Criteria**

The Implementation Project is deemed complete once the following criteria have been met:

- An agreed upon sample of AMI meters representing different meter types and location classes have been installed and tested during User Acceptance Testing, within the project timeline indicated in section 5.3.
- Solution Acceptance has been given by Customer.
- SmartWorks Software Functionality within scope of this SOW has been deployed for a minimum of thirty (30) calendar days “Post Implementation Grace Period”.
- Severity Level 1 issues identified during the Post Implementation Grace Period have been addressed. The Severity Matrix Table presented in section 5.4.1, defines the Severity Level 1 issues.

Customer will be transitioned to support upon completion of the project. Severity Level 2 and 3 issues logged in TeamSupport within the first three (3) weeks of the Post Implementation Grace Period will be reviewed by the Implementation Team prior to the transition to support and if possible, will be addressed prior to the end of the Grace Period. After the transition to support all outstanding Severity Level 2 and 3 issues will be addressed following the Master Support and Maintenance Agreement.

**5.7.1.Completion Criteria Summary**

Milestone	Phase	Deliverable/ Completion Criteria	Assumptions/Dependencies
Contract execution	Alpha		<ul style="list-style-type: none"> <li>• Agreements signed by all parties</li> </ul>

Milestone	Phase	Deliverable/ Completion Criteria	Assumptions/Dependencies
Software installation	Alpha	<ul style="list-style-type: none"> <li>Pre-production system provisioned</li> </ul>	<ul style="list-style-type: none"> <li>Introduction call between SmartWorks and Customer Project Managers held prior to installation</li> </ul>
Kick off Session held	Alpha	<ul style="list-style-type: none"> <li>Team Introduction</li> <li>Confirm project planning and review of Statement of Work</li> <li>Initial review of Data Mapping requirements and implementation Questionnaire</li> </ul>	<ul style="list-style-type: none"> <li>Data Mapping requirements and implementation Questionnaire have been presented but will be updated throughout the project</li> </ul>
Initial DataSync and AMI integration completed	Alpha	<ul style="list-style-type: none"> <li>Initial Data Mapping requirements completed</li> <li>Initial Implementation Questionnaire completed</li> <li>DataSync completed for pre-defined test meters</li> <li>AMI data populated in MDM for pre-defined test meters</li> <li>Compass Overview training session has been delivered</li> </ul>	<ul style="list-style-type: none"> <li>Customer provided timely input for the documentation presented during Kick Off</li> <li>Acceptance only includes pre-defined test meters</li> <li>3<sup>rd</sup> parties provided requested data as per agreed upon schedule</li> </ul>
Delivery of requirements document	Beta	<ul style="list-style-type: none"> <li>Discovery Sessions have been held (as outlined in Section 2.8)</li> <li>Initial requirements documents have been delivered to Customer for review</li> </ul>	<ul style="list-style-type: none"> <li>Acceptance linked to initial delivery of documents</li> <li>Customer will complete review and comment on each draft of the Requirements Document within 10 Business Days to maintain adherence to the project schedule.</li> </ul>
Completion of integrations	Beta	<ul style="list-style-type: none"> <li>Integration as defined in section 3 of the SOW have been delivered</li> </ul>	<ul style="list-style-type: none"> <li>Final requirements documents have been approved</li> </ul>
Completion of Functional and Process Training	Beta	<ul style="list-style-type: none"> <li>Software modules as defined in section 2.5 available</li> <li>Training as defined in section 2.8 has been delivered</li> </ul>	<ul style="list-style-type: none"> <li>SmartWorks provides agenda prior to training</li> <li>SmartWorks provides training plan prior to training</li> <li>Customer is engaged and completes training exercises</li> <li>Configuration has been completed, as mutually agreed upon between SmartWorks and Customer PMs</li> </ul>



Milestone	Phase	Deliverable/ Completion Criteria	Assumptions/Dependencies
<b>Completion of UAT</b>	Beta	<ul style="list-style-type: none"> <li>• Test results documented by Customer</li> <li>• Severity level 1 tickets have been addressed</li> </ul>	<ul style="list-style-type: none"> <li>• Test scripts have been defined by Customer</li> <li>• Customer resources are available to perform testing for a period of 10 business days</li> <li>• Tickets logged after completion of UAT will not delay acceptance</li> </ul>
<b>Transition to Support</b>	Beta	<ul style="list-style-type: none"> <li>• Transition to Support meeting has been held</li> </ul>	
<b>Completion of Advanced Process Automation Module Training</b>	Beta	<ul style="list-style-type: none"> <li>• Training as defined in Section 2.6 has been delivered</li> </ul>	
<b>Monthly PM/meeting Fee</b>	Alpha/ Beta	<ul style="list-style-type: none"> <li>• 25 hours/month</li> </ul>	<ul style="list-style-type: none"> <li>• A monthly PM fee will be charged to Customer for the duration of the project, until the Transition to Support occurs.</li> <li>• These tasks include: weekly project teams attended by Project Manager, Technical Consultant, and Business Consultant; Project Manager meetings; meeting agenda and minutes.</li> </ul>



## 6. Assumptions

The Services, fees and delivery schedule for this project are based upon the following assumptions:

1. **This SOW defines the scope of work for SmartWorks and does not include any work or expenses required from other vendors including GIS, AMI, CIS, etc.**
2. This project currently has, and will continue to have, the support of senior Customer management and will be assigned sufficient priority with respect to other projects to ensure its success.
3. Customer will assign a Project Manager to act as an internal resource and guide throughout this project.
4. Customer will secure the appropriate staff in a timely fashion in order to discuss or review the various materials produced when required, provided SmartWorks gives reasonable notice of such request.
5. SmartWorks will provide a written agenda and notice of any prerequisites to prior to any onsite or remote sessions.
6. SmartWorks will provide adequate resources to support the efforts to complete the project as schedules and within the constraints of the project budget.
7. SmartWorks will provide the resumes for resources assigned to the project upon 's request.
8. The SmartWorks Solution implementation is dependent upon accurate and timely information cooperation and delivery of third-party vendors solutions in order to achieve functional integration. SmartWorks will identify those dependencies to Customer and create a mutually agreed schedule to provide the assistance and information. Customer will ensure the cooperation and involvement of third-party vendors on or before the agreed schedule date. Failure to achieve delivery of the identified dependency on the agreed schedule will result in a change order being issued.
9. Customer will secure, as required and in a timely fashion, the assistance and cooperation of third-party vendors (e.g. CIS, AMI, OMS) to ensure a successful implementation. A Change Order will be created if the third-party vendor is unavailable or non-cooperative and as such results in an impact to the schedule or effort.
10. Third-Party vendor solutions are able to provide data required by the SmartWorks Software as well as accept information provided by the SmartWorks Software.
11. All third-party software and hardware products are assumed to perform correctly in Customer environment, in accordance with the appropriate third-party vendor's specifications.
12. Any upgrade to third-party software resulting in changes to the initial integrations requirements, will be subject to a Change Order during implementation. A separate quote will be issued after transition to Support has occurred.
13. All documentation provided by Customer shall be up-to-date and accurate or if that is not the case, advise SmartWorks as such.
14. All network components supplied by Customer are working properly and are free of defects and will meet minimum industry standards provided during the project.
15. To minimize project costs, the majority of project work will be performed at one of the SmartWorks' locations except for project activities where onsite is deemed more effective.



16. Customer will provide the appropriate monitored remote access to its network, facilities, and systems as may be required to perform activities from one of SmartWorks' locations. SmartWorks shall abide by all rules and directions of Customer when accessing Customer's network, facilities or. A Change Order will be created if appropriate remote access to its network is not available during agreed upon business hours, resulting in project delay or additional fees.
17. Any items not explicitly identified within this document are considered out of scope. Any changes to those responsibilities and/or deliverables will be considered a change in scope for the project. Any proposed change to the project scope must be put into written format and be submitted to SmartWorks during this project for review and consideration.

## 7. Document Acceptance and Sign-off

Accepted on this day by:

**Norman**

**N.Harris Computer Corporation (Harris Utilities,  
SmartWorks)**

By: \_\_\_\_\_

By: \_\_\_\_\_

Name: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_



## APPENDIX A – Change Order Template

### Harris Utilities SmartWorks Change Order

This document defines the work to be performed by the Harris Utilities, SmartWorks division of N. Harris Computer Corporation (herein referred to as “SmartWorks”) for Norman (herein referred to as “Customer”), upon authorization to proceed from Customer.

**Date:** <Date>

**Change Order #:** <xx>

**Customer:** <Customer>

**Customer Contact:** <Name of Requester/Technical Contact>

**Description of Change:** <Title of Change Order>

### Related Documents

1. This Change Order is subject to the terms and conditions of the Software License Agreement, Support and Maintenance Agreement, Software Implementation Services Agreement and Hosting Services Agreement between Norman and N. Harris Computer Corp. signed <date signed>
2. This Change Order describes a change from the scope or schedule defined in<Statement of Work (SOW) details>
3. (other related documents such as Technical Specification Documents)

### Scope of Change

<Describe changes to be made>

### Assumptions and Constraints

1. <List any applicable assumptions/constraints>

### Schedule Impact

<Identify schedule impact, if any>

## Change Order Effort

Description	Estimated Effort (Hours)
Work Description 1	0
Work Description 2	0
<b>Project Total</b>	0

## Change Order Fees

### **Support and Maintenance**

Monthly Support & Maintenance fees may be adjusted based on the increased functionality or complexity resulting from this scope of work.

### **Taxes**

Fees exclude any applicable taxes.

### **Validity**

The price estimate is valid for a period of thirty (30) days from the quote submission. Customer may request this date to be extended.

### **Scope Changes**

If there are material changes to the scope or SmartWorks' understanding of the scope, the price estimate is subject to change.

- The discounted hourly rate for Change Orders during the scope of the implementation project, until the go-live milestone is achieved, will be USD \$230.00
- The Support & Maintenance fees may be adjusted accordingly as well.

It is expected that once the deliverables included in the Statement of Work have been delivered and the project is closed, all future services (including but not limited to training, customization, consulting) will be delivered using SmartWorks Standard hourly rate applicable at the time of the request for services.



## Change Order Payment Schedule

Customer will be invoiced based on the following payment fees and schedule. All prices are in USD.

Description	Payment	
(Milestone A TBD)	X%	\$0.00
(Milestone B TBD)	X%	\$0.00
<b>Total</b>	<b>100%</b>	<b>\$0.00</b>
Additional Annual Support & Maintenance fees		
Notes: <ul style="list-style-type: none"> <li>• This fee is intended to cover support and maintenance activities anticipated for new functionality provided in this quote.</li> <li>• The fee will be applied upon installation in test environment (or production if a test environment is not available).</li> <li>• The first-year fee will be pro-rated to align with Customer's existing maintenance payment schedule.</li> </ul> Annual fees are subject to change as defined in the Support and Maintenance Agreement.		<b>\$0.00</b>

Invoices are payable on a net 30-day basis.



## Change Order Acceptance and Sign-off

A signature below will serve as authorization to proceed with the work defined in this document.

Please sign and return this document to [Project Manager]:

- Fax: 613-482-4874
- Email: [projectmanager]@harriscomputer.com

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### Approval to Proceed

Please provide both an authorized signature for sign-off on this Change Order, and a technical contact where we should be directing Technical Issues.

---

Print Name (Authorized signature)	Signature	Date
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Name (Technical Contact)	e-mail	Phone Number
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### **N. Harris Computer Corporation**

SmartWorks manager authorized to sign this Change Order

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Print Name (Authorized signature)	Signature	Date
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If you have any questions or need further information, please feel free to contact the Project Manager noted above.





# **Infinity Customer Engagement Portal**

**Norman Utilities Authority**

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## **1. Executive Summary**

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**Advanced Utility Systems (Advanced) is providing this scope of work (SOW) to implement Infinity Customer Engagement Portal for the Norman Utilities Authority. Included is a description of project scope, with Advanced/Norman Utilities Authority roles and responsibilities, proposed solution architecture, detailed action items and assignment of tasks, key resources and additional customer requirements.**

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## 2. Scope

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**The scope of the Project is to provide Norman Utilities Authority with: Infinity Customer Engagement Portal Discovery Sessions. Advanced to work with Norman Utilities Authority to determine functionality and integration requirements and capabilities, and design approaches to deliver the My Account portal.**

**Install and configure Infinity Customer Engagement Portal software with rich web presentment of “My Account” information for water customers of Norman Utilities Authority, including graphical display features, historical reporting and customer comparison analytics. The presentation experience should accommodate the browsers identified below:**

<b>Browser</b>	<b>Verified Version Support</b>
<b>Desktop</b>	
<b>MS Internet Explorer</b>	11 until its end of life in Microsoft (June 15, 2022)
<b>MS Edge</b>	v104 or better
<b>Google Chrome</b>	v100 or better
<b>Firefox</b>	v100 or better
<b>Safari</b>	V14 or better
<b>iPhone/iPad</b>	The latest iOS version
<b>Android</b>	Android 10 and higher

**Infinity Customer Engagement Portal CIS Integration: Norman Utilities Authority to work with Advanced to implement real time Integration between CIS and portal using Advanced REST API.**

**E-Bill Presentment: Configuration of e-billing, including e-bill history and opt in/out of paperless bills via SSO integration with PCI compliant payment provider. Bills will be presented in PDF format. Existing bill print design will be used. Any changes to bill print design are not within scope and may require additional effort, change order, and/or cost.**

**Payment Presentment: Online Payment processing via SSO integration with PCI compliant payment portal provider (Paymentus real-time payment integration using SSO).**

**AMI/MDM Integration: Provide data integration with the MDM data repository Compass utilized by Norman, for smart meter data web presentment, including daily and hourly usage graphical display, as available from the MDM usage alert notification and leak detection features. The presentation experience will accommodate most common**

**browsers and mobile devices. Data integration would be provided via real-time MultiSpeak and SOAP API web service integration and consumption data integration.**

**Infinity Customer Engagement Portal CSR Support: Interface for Norman Utilities Authority Customer Service Representatives (CSR's) to assist customers during the online experience.**

**Infinity Customer Engagement Portal Site Account Management: An Account Management system that provides customer profile management, including customer self-registration, contact and access management, and single login for multiple accounts.**

**Infinity Customer Engagement Portal Site Administration: Administration facility for the Norman Utilities Authority staff to easily customize and manage utility customer portal corporate branding, messaging and content.**

**Infinity Customer Engagement Portal CSR Training: Provide training for Norman Utilities Authority CSRs on the Infinity Customer Engagement Portal CSR module to assist customers during the online experience.**

**Infinity Customer Engagement Portal Smart Forms Discovery Sessions: Advanced will work with Norman Utilities Authority to produce a high-level design of the online forms, integration requirements and capabilities. Advanced will identify all specific requirements to design and deliver form functionality. A total of 5 Smart Form templates are included in the customer portal subscription addressed in this proposal.**

**Install and configure Smart Forms for Utilities software, specific to Norman Utilities Authority requirements with rich web presentment of customer web forms to residential and commercial Water customers of Norman Utilities Authority. The presentation experience will accommodate most common browsers and computer devices (desktop, notebook, tablet, smart phone).**

**Smart Forms CIS Integration: Provide real-time data integration with Advanced CIS Infinity V4 utilized by Norman Utilities Authority using RESTful APIs. The User Interface will accommodate most common browsers and mobile devices.**

**Smart Forms Customer Service Representative (CSR) Training: Provide training for Norman Utilities Authority CSRs on the Smart Forms CSR module to manage customer web form submissions.**

The following table outlines the tentative functional requirements for the solution. Requirements may be amended and documented based on Infinity Customer Engagement Portal Discovery Sessions. If the additional changes identified during the discovery sessions represent a substantial level of effort, Advanced may charge for these efforts via a change order to the City.

Item & Requirements	Deliverable
<p><b>Site Registration:</b> Ability for customers to register for account access. An email confirmation will be sent to customers to validate their registration request. A welcome email will be sent after confirmation.</p>	<p><b>Online form for customer to enter:</b></p> <ul style="list-style-type: none"> <li>○ User Name</li> <li>○ Password</li> <li>○ Security Question/Answer</li> <li>○ Paperless billing opt-in</li> <li>○ Email consent opt-in</li> <li>○ First name/Last name</li> <li>○ Email</li> <li>○ Telephone</li> <li>○ Mobile</li> <li>○ Account Number</li> <li>○ Either Mailing Address Zip or Service Address ZIP</li> <li>○ Google reCAPTCHA v2</li> <li>○ Accept Terms &amp; Conditions</li> </ul> <p><b>Email addresses will be allowed on multiple profiles.</b></p> <ul style="list-style-type: none"> <li>○ This affects Guest Access invites.</li> <li>○ If the email used on the invitation is not unique in the Portal, then that Guest cannot be invited.</li> </ul> <p><b>Accounts will be allowed on multiple login profiles.</b></p> <p><b>Verification email template.</b></p> <p><b>Online account welcome email template.</b></p>
<p><b>Reset Password:</b> Ability for customers to reset their forgotten password or disabled login.</p>	<p><b>Online form for customer to enter email address.</b></p> <p><b>Email template with encrypted link to reset password workflow where customers will need to enter a response to their security question.</b></p>

Item & Requirements	Deliverable
	<p>Successful answers will allow customers to enter a new password with a password strength indicator.</p>
<p><b>Forgot User Name:</b> Ability for customers to request a forgotten user name.</p>	<p>Online form for customers to enter account number and Mailing Address Zip</p> <p>Email template with user name reminder.</p>
<p><b>Login:</b> Login page for customers to access the portal.</p>	<p>Online form for customers to enter user name and password for site access.</p> <p>User authentication will be carried out against the Infinity CEP Portal user registry with SSO into the PAYMENTUS portal</p> <p>Links to:</p> <ul style="list-style-type: none"> <li>○ registration,</li> <li>○ reset password,</li> <li>○ forgot access code,</li> <li>○ contact us,</li> </ul> <p>Quick/One-time Pay option that will link to PAYMENTUS one-time payment page.</p> <p>Messaging for site features and various corporate programs.</p>
<p><b>Customer Dashboard:</b> Show a dashboard after login containing a summary of the customer account information.</p>	<p>Ability to view and select multiple accounts linked to the site login.</p> <p>Selected account ribbon showing:</p> <ul style="list-style-type: none"> <li>○ Account number,</li> <li>○ Service address,</li> <li>○ Customer name,</li> <li>○ Account balances,</li> <li>○ Payment plan,</li> <li>○ Nickname</li> <li>○ Installment payment details</li> </ul> <p>Navigation tabs providing access to various site features based on the customer type.</p>



Item & Requirements	Deliverable
	<p><b>Current Bill section showing:</b></p> <ul style="list-style-type: none"> <li>○ <b>Current balance,</b></li> <li>○ <b>View current bill button,</b></li> <li>○ <b>Pay bill button,</b></li> <li>○ <b>Pre-authorized payment messaging if applicable,</b></li> <li>○ <b>Request payment extension (Promise-to-Pay) button if applicable</b></li> <li>○ <b>Bill Detail Charges table:</b> <ul style="list-style-type: none"> <li>• <b>Service</b></li> <li>• <b>Current Charges</b></li> <li>• <b>Past Due</b></li> <li>• <b>Penalty</b></li> <li>• <b>Balance</b></li> </ul> </li> </ul> <p><b>My Recent Usage section showing:</b></p> <ul style="list-style-type: none"> <li>○ <b>Usage on current bill</b></li> <li>○ <b>Usage on previous bill</b></li> <li>○ <b>Amount of usage more or less than previous bill</b></li> <li>○ <b>Reasons why usage is higher or lower (number of billing days and/or average temperature)</b></li> <li>○ <b>Link to view more history</b></li> </ul> <p><b>My Recent Account Activity section showing a table of the 5 most recent transactions for the account. Columns can include:</b></p> <ul style="list-style-type: none"> <li>○ <b>Transaction date</b></li> <li>○ <b>Description</b></li> <li>○ <b>Amount</b></li> <li>○ <b>Balance</b></li> <li>○ <b>Link to view all transaction history</b></li> </ul> <p><b>My Smart Meter Activity section showing:</b></p> <ul style="list-style-type: none"> <li>○ <b>Current billing period usage</b></li> <li>○ <b>Predicted usage for current bill</b></li> </ul> <p><b>Left Carousel showing carousel slides specific to The Norman Utilities Authority activities and programs.</b></p>

Item & Requirements	Deliverable
	<p>Right Carousel showing carousel slides specific to The Norman Utilities Authority activities and programs.</p> <p>Rate this page comments and star ratings</p>
<p><b><u>Bills &amp; Payment:</u></b> Show account billing history with the ability to view PDF bills and pay bills online via SSO integration with Paymentus payment portal.</p> <p>Notifications to customers for new bills, payment reminders and late payments also managed by Paymentus.</p>	<p>Show a listing of bills available online for the current account.</p> <p>My Electronic Bills section listing details can include:</p> <ul style="list-style-type: none"> <li>View bill button</li> <li>Bill Date</li> <li>Bill Amount</li> <li>Due Date</li> </ul> <p>Pay Bill section showing:</p> <ul style="list-style-type: none"> <li>Current Balance</li> <li>Pre-authorized payment enrollment messaging if applicable</li> <li><u>Pay My Bill</u> button that links to Paymentus.</li> <li><u>Auto Pay</u> button that links to Paymentus.</li> <li><u>Paperless Bills</u> button that links to Paymentus.</li> </ul>
<p><b><u>Payment Activity:</u></b> Show account payment history showing activity with the ability to download details in spreadsheet format.</p>	<p>Show a listing of payments for the current account.</p> <p>Your Payment Details section can include:</p> <ul style="list-style-type: none"> <li>○ Payment date</li> <li>○ Description</li> <li>○ Amount</li> <li>○ Balance</li> <li>○ Download to spreadsheet button will generate a CSV file for customers to download.</li> </ul>
<p><b><u>Billed Usage (Non-Smart Meter) Usage:</u></b></p>	<p>Show navigation buttons for access to Water based on the customer profile.</p>

Item & Requirements	Deliverable
<p>Show billed usage (non-smart meter) reading details for Water services in an interactive chart with reading details available in a table format. Provide the ability to download reading details in spreadsheet format.</p>	<p>Usage Report Subscription button allows customers to subscribe to the portal reporting service where usage reports and attachments can be emailed on a selected schedule.  <b>NOTE: Usage Report Subscriptions are dependent on a water usage nightly extract file implementation</b></p> <p><b>My Events section includes:</b>            Allow customer to define events that mark important dates that could impact usage. Events can be shown on the chart as annotations.</p> <p><b>Interactive Chart section can include:</b>            Dropdown select list of meters attached to the current account.            Usage summary tiles for lowest usage, highest usage and average usage for the past X months. Tile details will show usage units, cost and billing period.            Consumption bar chart showing monthly reads and temperature overlays – average temperature, humidity and precipitation.</p> <p><b>Consumption Details table section can include:</b></p> <ul style="list-style-type: none"> <li>○ Meter ID</li> <li>○ Reading date</li> <li>○ Description</li> <li>○ Consumption</li> <li>○ Download to spreadsheet button will generate a CSV file for customers to download.</li> </ul>
<p><b>Smart Meter Usage Charts:</b>            Show smart meter usage details for daily and hourly summaries in an interactive chart</p>	<p>Show navigation buttons for daily and hourly details.</p> <p><b>My Events section includes:</b>            Allow customer to define events that mark important dates that could impact usage. Events can be shown on the chart as annotations.</p>

Item & Requirements	Deliverable
	<p><b>Smart Meter Consumption Inquiry section can include:</b></p> <ul style="list-style-type: none"> <li>○ Smart Meter data retrieved from MeterSense via Multispeak or SOAP API</li> <li>○ Default view to daily consumption chart showing most recent 30 days by default.</li> <li>○ From and to date select calendars where customers can change the inquiry dates and consumption details.</li> <li>○ Consumption bar charts showing water consumed and temperature overlays – average temperature, precipitation and heating/cooling degree days.</li> <li>○ Clicking/tapping a bar on the chart will open corresponding days 24 hourly consumption details with next and previous day navigation.</li> <li>○ Download to spreadsheet button will generate a CSV for customers to download.</li> </ul>
<p><b><u>Smart Meter Usage Downloads:</u></b> Allow customers to download smart meter usage details to CSV spreadsheet format. Customers should be able to select daily/hourly detail and the desired date range.</p>	<p><b>Download Settings section will include:</b></p> <ul style="list-style-type: none"> <li>○ Level of detail either hourly or daily</li> <li>○ From and To date range</li> </ul> <p><b>Download Format section will include:</b> <b>Spreadsheet (CSV)</b></p>
<p><b><u>Compare Last Bill:</u></b> Similar to My Recent Usage widget on the dashboard with the ability to compare other read dates.</p>	<p><b>Compare Last Bill section showing:</b> Dropdown select list of meters attached to the current account. Dropdown select list for Amount or Value inquiries where Amount presents the usage in dollar amounts and Value presents usage in Service values.</p>

Item & Requirements	Deliverable
	<p>Dropdown select list of billing periods available for inquiry.  Usage on current bill  Usage on previous bill  Amount of usage more or less than previous bill  Reasons why usage is higher or lower</p>
<p><b><u>Compare Usage to Last Year:</u></b>  Show customers their usage this year and how it compared to last year along with temperature overlays</p>	<p><b>Compare Usage to Last Year section can include:</b></p> <ul style="list-style-type: none"> <li>○ Dropdown select list of meters attached to the current account.</li> <li>○ Dropdown select list for Usage inquiries where value presents usage in Service values.</li> <li>○ Interactive chart showing consumption bars for the billing periods this year and last year.</li> <li>○ Weather overlays for current and previous year – average temperature, humidity and precipitation.</li> </ul>
<p><b><u>Service Requests:</u></b>  Show account service request summary with the ability to download details in spreadsheet format.</p>	<p><b>Show a listing of service requests for the current account.</b></p> <p><b>Your Service Request Summary section can include:</b></p> <ul style="list-style-type: none"> <li>○ Request date</li> <li>○ Request Number</li> <li>○ Request Type</li> <li>○ Status</li> <li>○ Download to spreadsheet button will generate a CSV file for customers to download.</li> </ul>
<p><b><u>Profile – My Profile:</u></b>  Provide a facility for customers to manage their portal login profile to change personal details, add/remove accounts and set various alerts.</p>	<p><b>My Account Profile section can include:</b></p> <p>User Name  First &amp; Last Name  Security question and answer  Email  Telephone &amp; Extension  Mobile  E-Billing (paperless) opt-in/out  Email consent opt-in/out</p>

Item & Requirements	Deliverable
	<p><b>Password with password indicator</b></p> <p><b>User profiles cannot be changed by customers or CSRs.</b></p> <p><b>Account Access List section includes:</b></p> <ul style="list-style-type: none"> <li><b>Add account – Account Number and Zip Code</b></li> <li><b>Favourite account selector/indicator</b></li> <li><b>Account Number</b></li> <li><b>Nickname</b></li> <li><b>Service Address</b></li> </ul> <p><b>My Subscriptions section can include:</b></p> <ul style="list-style-type: none"> <li>○ <b>Subscription button to sign-up, change or unsubscribe to the report</b></li> <li>○ <b>Report name</b></li> <li>○ <b>Subscription settings</b></li> <li>○ <b>Last Sent – date and time</b></li> <li>○ <b>NOTE: Subscriptions are dependent on a water usage data received from SmartWorks MDM</b></li> </ul> <p><b>Smart Meter:</b></p> <ul style="list-style-type: none"> <li>○ <b>Usage threshold preferences.</b></li> <li>○ <b>High Usage alert preferences.</b></li> </ul> <p><b>Show leak detection notification settings where the Infinity CEP portal will send notifications and show dashboard widget alerts.</b></p> <p><b>Leak Notifications</b></p> <ul style="list-style-type: none"> <li>○ <b>Leak Alert data imported from SmartWorks MDM into SilverBlaze and notification delivered from SilverBlaze by emailInterval Data for leak detection will be retrieved from MeterSense via Multispeak.</b></li> </ul>
<p><b>Profile – Guest Access:</b> <b>Provide a facility for customers to invite</b></p>	<p><b>Invite someone for Guest Access section includes:</b></p> <ul style="list-style-type: none"> <li><b>Account number dropdown list</b></li> </ul>

Item & Requirements	Deliverable
<p><b>and manage guest users for online access to their accounts.</b></p>	<p><b>Guest Email</b> <b>Access Settings</b></p> <p><b>You have granted Guest Access section includes:</b></p> <ul style="list-style-type: none"> <li>○ <b>Account Number</b></li> <li>○ <b>Guest Email</b></li> <li>○ <b>Guest Status</b></li> <li>○ <b>Access Details</b></li> </ul> <p><b>You have been invited as a Guest section includes:</b></p> <ul style="list-style-type: none"> <li>○ <b>Account Number</b></li> <li>○ <b>Name</b></li> <li>○ <b>Access Details</b></li> </ul>

### Smart Forms

Item & Requirements	Deliverable
<p><b><u>Customer-Facing Smart Forms</u></b> <b>Provide customers the ability to submit specific service requests.</b></p>	<p><b>Standard Customer-Facing Smart Forms to be delivered:</b></p> <ul style="list-style-type: none"> <li>○ <b>Transfer Service</b></li> <li>○ <b>Move In</b></li> <li>○ <b>Move Out</b></li> <li>○ <b>Simple Service Request</b></li> <li>○ <b>Update Account Info</b></li> </ul>



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## **3. Advanced Responsibilities**

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- 1. Assign Advanced Project Manager to coordinate with the Norman Utilities Authority Project Manager.**
- 2. Assign Consultants to work remotely to perform the Advanced deliverables (See Section 5. Advanced and Norman Utilities Authority Deliverables) listed below.**
- 3. Provide Norman Utilities Authority Project Manager regular status updates to include all accomplishments, issues and project tasks assigned to the Advanced and Norman Utilities Authority team.**
- 4. Detailed actions and assigned deliverables as outlined in Section 5.**

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## **4. Norman Utilities Authority Responsibilities**

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- 1. Assign Norman Utilities Authority Project Manager to coordinate with Advanced Project Manager.**
- 2. Norman Utilities Authority Project Manager to provide Advanced Project Manager regular status on all accomplishments, issues and tasks assigned to the Norman Utilities Authority team.**
- 3. Detailed actions and assigned deliverables as outlined in Section 5.**

## 5. Norman Utilities Authority and Advanced Deliverables

### 5.1 Setup Server & Install Software

	Description	Comments	Responsible
	<b>Provision of Infrastructure</b>	<b>AUS to provision a server connected to the Internet. Norman Utilities Authority will provide VPN access to this to infrastructure to allow connectivity between Infinity CEP and Infinity CIS and Client mail server.</b>	<b>AUS / Norman Utilities Authority</b>
	<b>Provide/Configure App Server Resources</b>	<b>Provision and Configure required App Server Resources</b>	<b>AUS</b>
	<b>Email Server Availability</b>	<b>Norman Utilities Authority to provide access to an email server so that AUS Customer Portal can send email notifications to customers in the public domain. Needs to relay messages as required.</b>	<b>Norman Utilities Authority</b>

## 5.2 Configure Infinity Customer Engagement Portal

Description	Comments	Responsible
<b>Customer Account Portal</b>		
Determine Registration page criteria	Norman Utilities Authority to determine what information will be required by customers to register new web accounts.	Norman Utilities Authority
Customer service/support emails and notification lists	Norman Utilities Authority to provide a list of customer service or support emails that will get notified for site issues.	Norman Utilities Authority
Customize content for portal pages	Norman Utilities Authority to review content text and provide updates to Advanced team to apply to the site.	Norman Utilities Authority / Advanced
Account Master (ACCMST) Integration	Advanced integration points for customer account and service details using CIS Infinity V4 RESTful APIs	Advanced
Payment History (PAYHIST) Integration	Advanced integration points for customer transaction history (debit & credit details using CIS Infinity V4 RESTful APIs.	Advanced
Water Consumption (WATCONSUM) Integration	Advanced integration points for customer Water consumption details using CIS Infinity V4 Web Service APIs.	Advanced
Portal User Profile (USRMST) Integration	Advanced integration points for portal user profile updates using CIS Infinity V4 RESTful APIs	Advanced
E-Bill History (BILLMST) Integration	Advanced integration points for customer bill history details using Paymentus Web Service APIs.	Advanced
E-Bill Presentment & Notification Integration	Advanced integration points for customer bill PDF web presentment using Web Service APIs.	Advanced
Email template customization	Norman Utilities Authority to provide specific layout of email notification templates including: <ul style="list-style-type: none"> <li>Forgot Password</li> </ul>	Norman Utilities Authority

	<ul style="list-style-type: none"> <li>• <b>Forgot User Name</b></li> <li>• <b>Registration Request</b></li> <li>• <b>Registration Confirmation</b></li> </ul>	
<b>Setup Test Portal</b>	<b>Advanced to setup a test portal for ongoing support and upgrade testing.</b>	<b>Advanced</b>
<b>UAT Support</b>	<p><b>Norman Utilities Authority to provide appropriate resources to test the project and ensure functional requirements have been met.</b></p> <p><b>Advanced to provide resources to apply changes as required based on test results.</b></p>	<b>Norman Utilities Authority / Advanced</b>
<b>Go Live Support</b>	<p><b>Norman Utilities Authority to set the host name and firewall to point to the Customer Portal server.</b></p> <p><b>Norman Utilities Authority to test the live site as required.</b></p> <p><b>Advanced to support testing as required.</b></p>	<b>Norman Utilities Authority / Advanced</b>

### 5.3 Configure Advanced Smart Forms for Norman Utilities Authority Requirements

Description	Comments	Responsible
<b>Forms &amp; Integration</b>		
<b>Determine Specific Field Validation Rules</b>	<b>Norman Utilities Authority to determine specific validations for mandatory field and account field masks. Advanced to configure</b>	<b>Norman Utilities Authority/Advanced</b>
<b>Form Wording</b>	<b>Norman Utilities Authority to provide wording for terms and conditions. Norman Utilities Authority to provide any field label changes. Advanced to implement.</b>	<b>Norman Utilities Authority/Advanced</b>
<b>Field Selection</b>	<b>Norman Utilities Authority to review form field selections and provide any required changes. Advanced to configure.</b>	<b>Norman Utilities Authority/Advanced</b>
<b>Site Images and Forms Headers</b>	<b>Norman Utilities Authority to provide form images and header requirements. Advanced to implement.</b>	<b>Norman Utilities Authority/Advanced</b>
<b>Confirmation Email Wording</b>	<b>Norman Utilities Authority to provide wording and details for the confirmation email. Advanced to implement.</b>	<b>Norman Utilities Authority/Advanced</b>
<b>Web Service API Availability</b>	<b>Advanced and Norman Utilities Authority to ensure the appropriate CIS Infinity V4 RESTful APIs are installed and available for testing. Advanced integration points for customer account and service details using CIS Infinity V4 RESTful APIs for all applications forms among:</b> <ul style="list-style-type: none"> <li>○ <b>Transfer Service</b></li> <li>○ <b>Move In</b></li> <li>○ <b>Move Out</b></li> <li>○ <b>Simple Service Request</b></li> <li>○ <b>Update Account Info</b></li> </ul>	<b>Norman Utilities Authority/Advanced</b>

Description	Comments	Responsible
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<b>Host Configuration</b>		
<b>Define site hostname</b>	<b>Norman Utilities Authority to register required domain names for customer portal.</b>	<b>Norman Utilities Authority</b>
<b>SSL Certificate for site</b>	<b>Norman Utilities Authority to provide SSL certificate and private key for secure site access. Norman Utilities Authority responsible for purchasing SSL certificate from certification authority (i.e., Verisign). Advanced to apply SSL certificate to web portal.</b>	<b>Norman Utilities Authority/Advanced</b>
<b>Verify email working</b>	<b>Norman Utilities Authority to provide to SMTP details for email integration. Advanced/Norman Utilities Authority to test email flow and verify receipt.</b>	<b>Norman Utilities Authority/Advanced</b>
<b>Testing</b>		
<b>User Acceptance Testing &amp; Support</b>	<b>Norman Utilities Authority to provide appropriate resources to test the project and ensure functional requirements have been met. Advanced to provide support resources to apply changes as required based on test results.</b>	<b>Norman Utilities Authority/Advanced</b>
<b>Go Live Support</b>	<b>Norman Utilities Authority to set host name and firewall to point to the CEP server. Norman Utilities Authority to test the live site as required. Advanced to support testing as required.</b>	<b>Norman Utilities Authority/Advanced</b>

## **5.4 Project Management**

**Project management resources will be assigned by both Norman Utilities Authority and Advanced to both perform tasks including:**

- **Project planning.**
- **Administration and project tracking.**
- **Attendance of regularly scheduled status meetings throughout the project – frequency to be determined based on Norman Utilities Authority availability.**
- **Interfacing with Norman Utilities Authority team members for requirements, planning, testing, etc.**



## **5.5 Training provided by Advanced has several elements as follows:**

### **Server Administration Training will include:**

- **Up to 2 hours of training for two administrators.**
- **How the Application Server is configured.**
- **How to start and stop the services.**
- **How to find the logs and troubleshoot.**

### **Infinity Customer Engagement Portal Administration Training will include:**

- **Up to 2 hours of training for two administrators.**
- **How to manage users, navigation, language labels, and other administrative aspects of the software.**
- **Location of various resources and assets on the file system.**
- **Troubleshooting.**
- **Up to 2 hours of training for CSR's.**
- **Review site features and get CSR team familiar with how to use the site.**
- **Usually provided in two 1-hour group training sessions.**

### **Smart Forms Administration Training will include:**

- **Up to 2 hours of training for two administrators.**
- **How to manage users, navigation and other administrative aspects of the software.**
- **Up to 2 hours of training for CSRs.**
- **Review site features and get CSR team familiar with how to use the CSR Dashboard.**
- **Usually provide in two 1-hour group training sessions. Software License**

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## **6. Key Project Assumptions**

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- 1. All prices are quoted in US dollars.**
- 2. The Fixed Cost as outlined in the payment schedule will be firm for the services identified herein through the project's duration, as identified in this SOW. No travel planned or anticipated for this SOW. Any travel requested by the Norman Utilities Authority will be subject to further agreement of the parties, including any necessary board or governing body approvals, and invoiced to the City as travel costs are incurred.**
- 3. The Norman Utilities Authority, with required support from Advanced, will upgrade CIS V4 to the recommended release (4.1.64 branch or later) prior to Advanced installing the CEP environments. This upgrade is not part of the scope outlined here and would fall under a separate scope of work.**
- 4. This Project is not normal daily operations. Team members should be aware of the demands of a project of this nature and will have to readily adjust to the needs of meeting deadlines and multi-tasking for this project to be successful.**
- 5. Advanced and Norman Utilities Authority will each assign a project manager who will be responsible for jointly managing the overall implementation to a successful conclusion.**
- 6. Project success is dependent upon both Advanced and Norman Utilities Authority supplying the resources required to complete all deliverables in a timely matter. Areas of expertise required include Project Management and IT Support (Hardware, Network, Database).**
- 7. Norman Utilities Authority and Advanced will ensure team members will attend meetings, workshops, discussions, and conference calls upon request by the other party with reasonable notice and to the best of their ability. Project team members will respond to information requests in a timely matter to minimize delays in the project.**
- 8. Norman Utilities Authority will perform testing as required including, functional, integration testing, and user acceptance testing. It is critical that Norman Utilities Authority report testing results to Advanced in a manner consistent with requested/ defined timeframes and format.**
- 9. Advanced will perform unit testing to validate that the solution as implemented and configured meet the specifications as designed and documented. Additionally, Advanced will assist in issue resolution activities as needed from Norman Utilities Authority performing functional, integration testing, and user acceptance testing.**
- 10. Norman Utilities Authority will strive to make a reasonable effort to minimize the impact of competing initiatives within the organization that may have a negative impact to the project.**