FIRST AMENDMENT

This Amendment made and entered into this _5TH_ day of _FEBRUARY_, 20_19_, by and between Pinellas County, a political subdivision of the State of Florida, hereinafter referred to as "County," and Woolpert, Inc, Dayton, Ohio hereinafter referred to as "Contractor," (individually referred to as "Party", collectively "Parties").

WITNESSETH:

WHEREAS, the County and the Contractor entered into an agreement on June 21, 2016, pursuant to Pinellas County Contract No. 156-0032-G (hereinafter "Agreement") pursuant to which the Contractor agreed to provide Enterprise Asset Management software implementation service for County; and

WHEREAS, Section Twenty-one (21) of the Agreement permits modification by mutual written agreement of the parties; and

WHEREAS, the County and the Contractor now wish to modify the Agreement in order to provide for a revised Statement of Work and Project Schedule, at the same terms, and conditions;

NOW THEREFORE, the Parties agree that the Agreement is amended as follows:

1.   Exhibit A - Statement of Work is modified from a two-phase implementation approach consisting of configuration (Phase1) and deployment (Phase 2) to an implementation divided into two tracks; each track consisting of configuration, deployment and all necessary tasks to complete a fully deployed solution, as stated on the revised Exhibit A, attached hereto.

2.   Compensation due for such services shall not exceed $11,102,525.00 payable on a fixed-fee basis for the deliverables, and at the hourly rates, as set out in Exhibit B- Price Proposal.

3.   Section 4, Term of the Agreement is modified to reflect that services shall be completed by December 31, 2021, as provided on Exhibit C - Project Schedule.

4.   Section 5.B of the Agreement is increased from a not-to exceed sum of $6,547,551.94 to $11,102,525.00.

5.   Except as changed or modified herein, all provisions and conditions of the original Agreement and any amendments thereto shall remain in full force and effect.

Each Party to this Amendment represents and warrants that: (i) it has the full right and authority and has obtained all necessary approvals to enter into this Amendment; (ii) each person executing this Amendment on behalf of the Party is authorized to do so; (iii) this Amendment constitutes a valid and legally binding obligation of the Party, enforceable in accordance with its terms.

IN WITNESS WHEREOF the Parties herein have executed this First Amendment as of the day and year first written above.

PINELLAS COUNTY, FLORIDA
by and through its
Board of County Commissioners

Karen Seel
Chairman

ATTEST:
KEN BURKE

Norman D. Kay
Deputy Clerk

CONTRACTOR:

David Feuer   2019.01.15 13:41:46 -07'00'
Authorized Signature

David Feuer
Printed Authorized Signature

Vice President
Title Authorized Signature

APPROVED AS TO FORM

By: _____
Office of the County Attorney

EXHIBIT A: STATEMENT OF WORK

STATEMENT OF WORK

Pinellas County Asset Management Program Development and Cityworks Implementation

Tracks 1& 2 Implementation Scope of Work

Pinellas County, Florida

December 12, 2018

Prepared by Woolpert, Inc.
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Tampa, FL 33614

www.woolpert.com

WOOLPERT
ARCHITECTURE | ENGINEERING | GEOSPATIAL

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Introduction

Pinellas County, Florida, is part of the growing Tampa/St. Petersburg/Clearwater Metropolitan Statistical Area. The county business, under the direction of the Board of County Commissioners (BCC), is responsible for providing different levels of services to citizens across the county, including courts, jails, animal services, economic development, 911, emergency medical system, mosquito control, social services, and arterial roads.

The BCC operates based on five strategic directions and expects all enterprise level projects to conform to the following standards:

- Establish, define, and focus on a core set of services.
- Maximize and improve the service delivery of core services.
- Continuously improve efficiency of operations.
- Increase community partnership through leadership and improved communication.
- Maintain a high-performing workforce.

The County owns and operates a portfolio worth $3.8 billion in horizontal and vertical assets within the 5 identified operating departments that need to be tracked, maintained, repaired, and replaced. Additionally, there are a number of federal and state reporting requirements that are tied to these assets and an overarching responsibility to the citizens of Pinellas to provide management of these assets in the most effective and efficient way possible. The goal is to provide a comprehensive enterprise asset management program with the highest priority placed on optimizing the life cycle of these assets and the resources supporting them.

An initial scope of work has been completed on this project. In that scope of work, the foundation components of the asset management system were established and a set of software implementation planning tasks were executed. This scope is a direct outcome of the planning tasks. The originally scoped project consisted of two main efforts. 1) The first effort was to configure the solution for all the participating work groups. 2) The second effort was to deploy the solution to all the participating work groups. During the Departmental Readiness Assessment (DRA), it became clear that there were too many groups involved to take all of them through the implementation projects as originally planned. A new approach was conceived and proposed by the joint Woolpert and County project team and accepted by the County. The new approach is to divide the implementation into two tracks. Each track will be a full implementation effort, including system configuration, deployment, and all the necessary tasks to realize a fully deployed solution.

This scope of work covers implementation Tracks 1 and 2. This scope of work will identify and describe all the tasks necessary to configure the Cityworks software solution, migrate data, develop system integrations, and deploy a complete solution for the divisions within five major operating departments at the county—Public Works, Utilities, Real Estate Management, Solid Waste, and Parks and Conservation Resources.

Overview
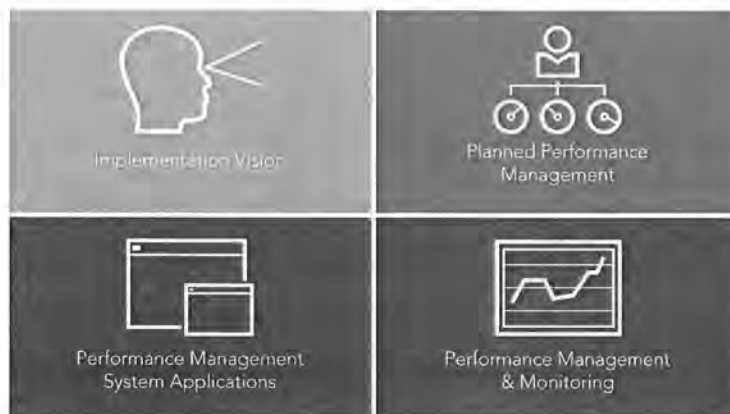
Woolpert's Asset Management Program Development and Enterprise Asset Management System Implementation projects are focused on delivering a comprehensive set of management strategies, technology tools, and asset management best practices that support our clients' planned asset sustainability performance objectives. **Through this scope of services, Woolpert will develop and deploy a usable Cityworks solution for the divisions within the five operating departments (Utilities, Public Works, Solid Waste, Park Conservation Resources, and Real Estate Management) that are listed in the following Track 1 and Track 2 tables.** The solution will build upon the planning activities which were executed in a previous scope of work and defined the foundation of the County's AM program, established Countywide business processes and AM standards, and defined a set of global configuration settings.

There are many related Tasks and Sub-Tasks that have to be properly managed, executed, delivered, and accepted to ensure a successful outcome of a high-value Cityworks AMS Enterprise Asset Management System deployment. **Woolpert's proven project methodology fully addresses all aspects of this complex project and ensures all critical success factors are fully addressed in a logical order.**

Services, and associated deliverables, are categorized into several groupings called phases, as more fully detailed in the following sections. Completion of each phase will culminate with the execution of a Phase Acceptance and Close document signifying the County's acceptance of the services rendered to date and authorization for Woolpert to proceed with work on subsequent phases. In some cases, work in subsequent phases will not begin until the deliverables in previous phases have been accepted by the County. In other cases, work in multiple phases will occur simultaneously.

The foundation of the County's Asset Management Program will be developed, and the Cityworks AMS solution will be configured per this Statement of Work (Scope of Services) for the divisions within Public Works (PW), Utilities (UTIL), Real Estate Management (REM), Solid Waste (SW), and Parks & Conservation Resources (PCR) in two tracks as identified in the following table:

TRACK 1		
Departments	**Divisions**	
Public Works Department	• Customer Service • Mosquito Control & Vegetation • Roadway Maintenance	• Stormwater • Transportation
Utilities Department	• Customer, Field Service (Admin) • Maintenance	• Water Quality

TRACK 2		
Departments	**Divisions**	
Public Works (PW)	• Environmental Management • Stormwater Engineering	
Utilities (UTIL)	• Plant Operations	
Real Estate Management (REM)	• Building Design & Construction • Real Estate Management • Real Property • Fleet Management • Southeast Section	• Detection Section • Facility Operations • Maintenance Programs • Northwest Section • Star Center
Solid Waste (SW)	• Business & Financial Services • Customer Outreach	• Infrastructure Management • Operations Management
Parks & Conservation Resources (PCR)	• Air Quality • County Horticulture Operations • Ft DeSoto • Heritage Village • PCR Trades	• Park North District • Park South District • PCR Administration • Resources and Asset Management

NOTE: Divisions that perform similar tasks may be grouped into a single set of configuration workshops.

Our project plan, its associated budget, and schedule were developed based on many bounding assumptions inferred from information provided to us by the County and discussions with County staff. Both parties (Woolpert and County) agree to these bounding assumptions and understand that if they are not adhered to, there is risk for scope, schedule, and budget impact. The following assumptions apply to this scope of work:

- The make-up of the County's project team will be as follows:
  - **County Program Sponsor** – The County Program Sponsor will liaise between the County project team and both the Assistant County Administrator assigned to the Asset Management Program and the Directors from each of the five (5) operating departments that will implement the Cityworks solution. Program Sponsor is expected to be a visible and vocal advocate of the Cityworks implementation and asset management program development to stakeholders within the County's employ and beyond, such as County

citizens, businesses and commissioners. Sponsor should ensure that each department provides the appropriate amount of emphasis on communicating the coming changes, address senior and mid-level managers within the departments who are not acting as visible and vocal advocates of the coming changes, and participate in Leadership Action Plan meetings, own and assign action items and ensure their timely completion.

o **County Project Manager** – The County is to identify and empower a Project Manager who will jointly manage the project along with the Woolpert Project Manager. The County Project Manager will be responsible for ensuring the availability, readiness, and participation of the County resources including County-directed sub-consultants, as well as the execution of the County-assigned tasks and completion of the County-assigned deliverables.

o **County Implementation Team** – The County is to identify and empower a set of individuals that constitute the County Core Team, also referred to as the Implementation Team. The Team will consist of Subject Matter Experts from each of the implementing divisions/departments/groups. The selected representatives from each of the participating departments will be available for the project throughout its entirety. Woolpert recommends two power users from each of the divisions to be implemented. We recognize that this will result in a large number of staff being involved in the project, so Team Members who can represent multiple divisions are encouraged. We also strongly recommend that no single set of expertise is single threaded; each division should be championed by multiple core team members so that staff workloads and turnover does not unduly affect the project.

o **County Technical Team** – The County is to identify and empower a set of IT professionals to support this project. These individuals will be known collectively as the Technical Team. The selected representatives from each of the participating departments will be available for the project throughout its entirety. The Technical Team will be comprised of experts on each of the software and hardware components involved in this project including, but not limited to, County servers and workstations, County network infrastructure, Esri GIS and the County's Esri deployment, each of the software solutions from which data may be migrated, and each of the software solutions to which Cityworks may be integrated. When Technical Team participation is noted within the detailed scope of services, the expectation is that the appropriate Technical Team experts will participate, not all of the team members.

o **County Cityworks Subject Matter Experts** – The County is to identify at least two individuals as Cityworks System Administrators. The selected individuals will serve as System Administrators for the Cityworks AMS solution once it has been deployed in a Production environment. System Administrators are expected to be involved in the project tasks that directly relate to system configuration decisions, such as business process and configuration workshops, as well as tasks that indirectly relate to system configuration such as integration workshops. These individuals will benefit from learning both how the system can be/is configured but also how external systems can affect/drive its configuration.

o **Organizational Change Management Lead** – The County is to identify and empower a Change Management Lead who will support the County PM in ensuring the readiness of the organization, from executive leadership through front line operators and technicians. This individual will work across departments/divisions to prepare the organization for upcoming tasks. The Change Management Lead is responsible for looking well into the future of the project and identifying potential issues related to readiness or willingness to adopt the coming changes and for taking the necessary steps to mitigate those issues. The County

Change Management Lead will also be responsible for measuring the adoption and benefit of the implemented solution.

- o **Communications Lead** – The County is to identify and empower a Communications Lead who will support the County PM in ensuring that the appropriate messaging is permeated throughout the organization during all of phases of the project. The Communications Lead will set meetings, coordinate mass e-mail communications, author/edit project newsletters, maintain a project website, and organize readiness activities.

  NOTE: The County may elect to assign multiple roles to a single individual.

- System Configuration will be performed during _Phase 3: Core System Design and Configuration_ in each Track. The implemented system will support a multitude of service request, work order, and inspection workflows through the Cityworks AMS software. Cityworks Work Orders will be configured to support a variety of maintenance activities including preventive maintenance, scheduled corrective maintenance, and unplanned reactive maintenance. If, during the Track 2 Configuration Phase, it is determined that neither standard nor advanced configuration options are able to satisfy a County requirement, Woolpert will develop a business use case, and upon County's formal request by the Project Manager, a specification and scope to address the requirement via system customization, application development, system integration and/or implementation of a third-party solution. Execution of these customization-related efforts will be scoped and contracted external to this scope of services.

  NOTE: A set of customizations have been identified, scoped and included in this document for Track 1. The effort to deliver these items is included in _Phase 11: System Customizations_.

- The County desires that the required effort and resulting benefit of migrating data from legacy software solutions (to be retired as a result of this project) be evaluated. The effort included in this scope of work is to perform an analysis for the migration from each of these systems. Upon acceptance of the migration requirements, Woolpert will perform the migrations.

  Woolpert will evaluate, develop, and deploy the migration of data from the following legacy software solutions:

  - o Maximo 4.0.3 (Utilities & Star Center) & 6.2 (REM)
  - o Agile Assets
  - o ProLease
  - o VCMS
  - o Traffic Copp
  - o LINKO
  - o Maximus

- The County desires that several existing County software solutions be integrated with the Cityworks solution for providing a true enterprise asset management program solution. The effort in this scope of work is to develop a Software Requirements Specification (SRS) document for each system integration. Upon acceptance of the integration SRS documents, Woolpert will develop the integrations.

  Woolpert will plan, develop, and deploy integrations to the following, existing County software solutions:

- o Oracle eBusiness Suite R12.1.3 (Track 1)
- o SAP Customer Information System (Hosted Solution) (Track 1)
- o GraniteNet (Track 1)
- o Fuel Management System (Track 2)
- o PAVER 7 (Track 2)

- o SeeClickFix (Track 1)
- o NAPA Spare Parts Inventory (TRACS) (Track 2)
- o Wonderware (SCADA) (Track 2)

NOTE: The Grainger Keepstock program will also be vetted as a possible integration between Cityworks and the Grainger inventory management solution.

- The County desires that Woolpert provide a formal Organizational Change Management (OCM) resource to lead the OCM activities throughout the Track 1 implementation. Per Change Control Notice (CCN) # 6, the County has taken over full ownership and execution of the OCM related tasks in Track 1 post June 1, 2018. The County will continue to assume full ownership and execution of the OCM activities in Track 2.

- Woolpert has included a dedicated full-time resource into the project scope and fee for the duration of the current scope of work. The currently scoped duration of Track 1 is 120 weeks. Reducing PM effort for known holidays, Woolpert has included 115 weeks of PM time to manage Track 1. The currently scoped duration of Track 2 is 114 weeks. Reducing PM effort for known holidays, Woolpert has included 109 weeks of PM time to manage Track 2. The Woolpert Project Manager will be on-site as much as necessary to support Project tasks but may work remotely at times. While working remotely as needed, the Woolpert Project Manager will be accessible and available for meetings, conversations, and phone calls as needed by the County.

- The County and Woolpert will jointly ensure that enterprise GIS structure and data for those asset classes that are covered by the implementation in Tracks 1 and 2 are available before Woolpert can begin configuration of Cityworks AMS software. QA/QC of the GIS data to be consumed by the Cityworks AMS software will be the County's responsibility. Specific roles and responsibilities around GIS readiness are identified in *Phase 8: GIS Readiness*.

Technical Approach

The Woolpert approach will consist of the following phases for both Tracks:

Phase 1:	Project Management	Support Phase
Phase 2:	Implementation Planning (completed)	Technical Phase
Phase 3:	Core System Design and Configuration	Technical Phase
Phase 4:	Advanced Configuration and Functionality	Technical Phase
Phase 5:	System Deployment	Technical Phase
Phase 6:	Extended Support	Technical Phase
Phase 7:	Organizational Change Management	Support Phase
Phase 8:	GIS Readiness Support	Technical Phase
Phase 9:	ISO 55K EAM Program Development Support	Program Phase
Phase 10:	Owner Directed Funds	Program Phase
Phase 11:	Track 1 System Customizations	Technical Phase
Phase 12:	Cityworks Upgrade	Technical Phase

The Technical Phases are executed in conjunction with the Project Management and Organizational Change Management activities (Support Phases) defined in phases 1 and 7, respectively. GIS Preparedness, Phase 8, is Technical in nature and executed in advance of Track 2. In Track 1, Phase 8 work follows the technical Phases 3–6. Each phase will also include the Quality Management activities and the intrinsic Knowledge Transfer that occurs naturally throughout the implementation by our teams' many collaborative activities. Deliberate execution of each technical phase, with continuous County involvement and feedback enables Woolpert to ensure a successfully planned, designed, configured, and deployed asset management solution that is used and useful immediately upon "Go-Live," provides the tools and resources needed to support current and planned asset management activities, and enables the means to monitor and measure continuous improvement activities.

Phase 9 is a Program Phase and is a continuation of foundational work in ISO EAM Framework development started in the Implementation Planning Phase conducted prior to Track 1 kickoff.

Phase 10 is a Program Phase and will be used to fund new scope items as identified, justified and ultimately approved by the County.

Phase 11 is a Technical Phase that defines the scope for developing and deploying the known Track 1 Cityworks customizations.

Phase 12 is a Technical Phase that describes the expectations and responsibilities as related to periodic system upgrades.

Each of the technical phases is performed as laid out in the project schedule, with specific phase deliverables achieving County sign-off in each of the appropriately defined Tasks or Sub-Tasks. The culmination of each phase is solidified by a Phase Acceptance and Close-out process that signifies delivery and acceptance of the Phase Tasks/Sub-Tasks and clears the way to proceed with the subsequent phase.

Each of the phases is presented in detail in the subsequent sections of this Statement of Work document.

Quality Management Process

Aligning expectations between the Woolpert and County teams is critical to producing results that satisfy the County. As each task is planned and executed, the Woolpert and County project managers will discuss the scoped deliverables. The Woolpert team will describe the deliverables that they intend to produce (agendas, documents, software configurations, software code, etc.). Where possible, the Woolpert team will provide samples created on similar projects to illustrate the deliverable. No task should begin until both Woolpert and the County expectations of the deliverables are aligned.

Each type of deliverable on a project serves a purpose. And the quality review process exists to ensure that the purpose is met. In general, the deliverables that are intended for a larger audience or are expected to be used for a longer time and possibly "survive" the project (be used beyond software go-live) will undergo a more intense quality review. Other deliverables are simply a stepping stone to move the project forward. These are considered "disposable" deliverables. The following examples illustrate how different deliverables serve different purposes.

- **Disposable Example: Meeting Agenda** will ensure that a meeting is planned according to expectations (topics and durations), that the right attendees are invited, and that the time and place for the meeting are appropriate. After the meeting, the agenda serves no further purpose. Agendas will be lightly peer-reviewed by an appropriate team member to ensure that its content and message is appropriate. The review will not place emphasis on writing style.

- **Surviving Example: AM Program Foundational Document** will be held to a high-quality standard. The DRAFT deliverable will be reviewed for content, message, and writing style. The FINAL version will be reviewed for content, message, writing style, grammar and spelling and mistakes will be corrected prior to final delivery to the County.

Deliverables will be reviewed for the following items, as appropriate for the deliverable:

1. **Content:** ensure that the deliverable contains the correct information and that the information is accurate

2. **Messaging:** ensure that the voice and tone of the writing conveys the appropriate message; ensure that the message is clear and easily understood by the intended audience

3. **Writing Style:** ensure that the writing is easily read and presents the content in a logical manner; writing is professional and uses minimal slang and jargon

4. **Grammar:** ensure that writing is free of grammatical errors that could affect the meaning of the statements

5. **Spelling and Typos:** ensure that the deliverable is free from spelling and typographical errors

The following table lists the typical types of deliverables that will be produced on this project and the extent and focus of Woolpert's quality reviews.

Deliverable	Extent of Review	Areas of Focus
Meeting/Workshop Agenda	Low	Content
On-site Prep Sheets	Low	Content
Meeting/Workshop Presentation	Medium	Content, Messaging

Deliverable	Extent of Review	Areas of Focus
Stakeholder Presentation (for audiences outside of the project team)	Medium	Content, Messaging
Stakeholder Documents (for audiences outside of the project team)	DRAFT Version: Medium FINAL Version: High	Content, Messaging Content, Messaging, Grammar and Spelling
Industry Presentations	Medium	Content, Messaging
Industry Documents (trade journal articles)	DRAFT Version: Medium FINAL Version: High	Content, Messaging Content, Messaging, Grammar and Spelling
AM Foundational Document	DRAFT Version: Medium FINAL Version: High	Content, Messaging Content, Messaging, Grammar and Spelling
System Configuration	High	Content
Integration Components	High	Content
Reports	High	Content

In general, Woolpert employs five types of quality control methods. The appropriate quality control activities are executed prior to delivering to the County the DRAFT and FINAL versions of a deliverable.

- *Subject Matter Expert (SME) Peer Review* – A Woolpert SME that is not involved in the project will review the deliverable prior to delivery to the County. External SMEs will review documents that do not require intimate knowledge of the County's project.

- *Project Team Member Peer Review* – Many Woolpert deliverables will be produced by a two-person team after a great deal of interaction with County team members. These deliverables require that the reviewer have detailed working knowledge of the County's project. Deliverables that require such knowledge will be created by one member of the two-person Woolpert team and reviewed by the other. In some instances, the Woolpert project manager will also review the documents. Along with providing feedback on their quality, the project manager will also perform periodic reviews so that they can stay abreast of decisions made by others, particularly in the areas of system configuration, systems integrations and organizational change management.

- *Technical Writing Review* – Woolpert employs several technical writers who routinely review documents that require the highest level of polish. Deliverables reviewed by these individuals are typically externally facing documents that are designed to survive the project.

- *Internal Demos to Peers* – The Woolpert team stages an internal demonstration of deliverables such as system configuration and integration code (non-document deliverables) to one or more Woolpert peers who are not involved in the project as though they were providing the demonstration to the County team. The peer(s) prepares for the demonstration by reviewing the project documentation (configuration and/or integrations documents). They then sit through the demonstration and ask specific configuration and process questions of the presenters. Along with ensuring that the look and feel of the deliverables are up to Woolpert standards, any gaps in the configuration or documentation are addressed prior to delivery.

- *Client Reviews* – Woolpert employs an iterative approach to configuration. As a result, this approach reduces defects and mitigates configuration issues because we're getting valuable feedback from the County throughout the project.

Any time Woolpert observes or is otherwise made aware of a project deliverable or staff performance deficiency, the Woolpert project manager will immediately undertake the efforts required to resolve the identified issue(s). This can include executing a more rigorous quality control process, re-visiting/clarifying assumptions, or removing non-performing project team members. Each quality issue often has its own set of unique circumstances that need to be addressed. Woolpert's team dedicated to this Project takes quality and client satisfaction issues very seriously. Processes are in place internally to immediately engage all necessary parties and employ all appropriate strategies to resolve all quality issues that arise on this project.

As a matter of practice, Woolpert embeds each phase in the Technical Approach with an associated Quality Control sub-phase estimated at 5% of the phase fee to cover a combination of the quality control methods that will be employed as appropriate and described in this section.

Phase 1 - Project Management

The development of an Asset Management Program and the implementation of a Cityworks Asset Management System (AMS) are complex endeavors that present a variety of strategic, technical and organizational challenges that will need to be identified, analyzed, understood, and continually managed in order to ensure a successful outcome. **Woolpert's Project Management approach provides the resources and tools needed to successfully manage the project through all phases/processes, including:**

Figure 1 - Project Life-Cycle Process Groups

- **Initiation:** Project authorizations and expectations.
- **Planning:** Project definitions, objectives, deliverables, analysis of alternatives.
- **Execution:** Coordination of resources, quality management, product and service delivery.
- **Monitoring and Controlling:** Monitoring and measuring to identify variances and imitate corrective actions.
- **Close-Out:** Acceptance of project deliverables and results.

To fulfill each of these objectives, Woolpert will employ the various project management tools described in the following sections.

WBS Task 1.1: Ongoing Project Management Tasks

Woolpert will continue to provide ongoing project management tasks (as defined in the original scope of work) as described below.

Project Administration

This task was completed prior to the Implementation Planning phase. Deliverables in this task will be revisited as necessary. Woolpert will provide the following general project management services:

- Develop, in cooperation with the County's Project Manager, a project plan and schedule.

- Proactively manage and update project plan and schedule, as required, throughout the duration of the project. Project plan and schedule modifications will be facilitated upon common agreement between the County and Woolpert Project Managers in accordance with the issue control process detailed in the project plan; acceptance by county will be within 5 working days of submission.

- Coordinate project events with the County Project Manager and Woolpert team members.

- Author, edit, review, and distribute project documentation and technical reports as required.

Figure 2 - Woolpert's Project Collaboration Web Site

- Facilitate in-process review meetings with the County Project Manager, committees, management, and end-users as scheduled, and appropriate, throughout the duration of the project.

- Maintain a secure project collaboration web site to post project schedule details, in-process tasks and responsible parties, technical documentation, as well as other project collaboration tools.

- Perform miscellaneous project administration (e.g., arrange travel, internal project updates).

- Anticipate problem areas and propose and facilitate solutions.

Project Schedule Coordination

Project schedule coordination and management will be performed using Microsoft Project software. Project schedules and tasks will be monitored and adjusted as needed, depending upon the County's priorities and ability to make its staff and facilities available at the appropriate times throughout the project. An updated project schedule delineating resources, scheduled tasks, and completed tasks will be maintained and available to all Woolpert and County project participants.
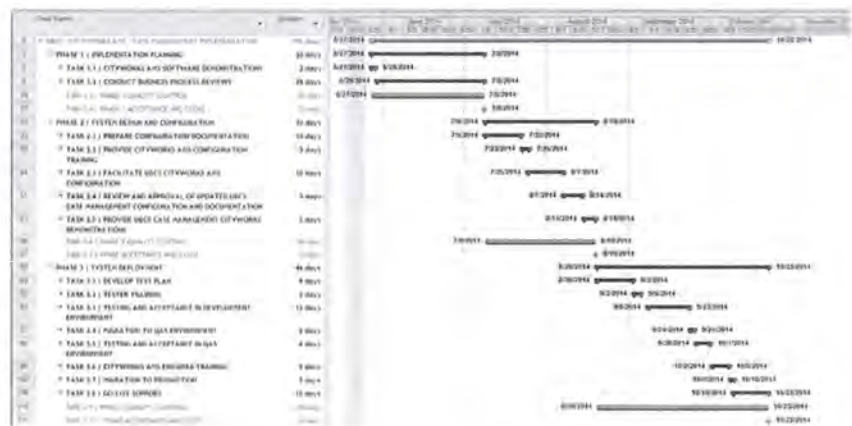
Figure 3 - Microsoft Project Gantt Chart

Deliverables

- Woolpert to maintain a project schedule in Microsoft Project and to update the project schedule with significant changes and percent completes on a regular basis.

Assumptions

- The activities discussed in this section are a continuation of the activities conducted during the initial effort to develop the ISO 55000 framework and perform implementation planning tasks; no significant changes were incorporated.
- These activities are included in this scope of services for the duration of this effort, as currently scoped.
- Refer to Overview Section, page 2, for details around project duration and PM time.

County Responsibilities

- County to participate in project schedule reviews on a regular basis.

Project Manager Status Meetings

Woolpert will facilitate regular Project Manager Status Meetings with the County Project Manager. The Woolpert Project Manager and other Woolpert project team members, as appropriate, will participate in regularly scheduled project status meetings with the County Project Manager and designees, as appropriate, for the purpose of reviewing project issues including: 1) activities, action items, and deliverables completed to date; 2) activities, action items, and deliverables in process or scheduled; 3) upcoming activities, action items, and deliverables; and 4) technical or contractual issues that require corrective action. Woolpert meeting participants will include Woolpert's Project Manager and ad hoc team members, as required. County meeting participants will be as determined by the County Project Manager, or as requested by the Woolpert Project Manager.

When feasible, Project Manager Status Meetings will be held on-site at County facilities in conjunction with other scheduled on-site tasks. Otherwise, Project Manager Status Meetings will be facilitated remotely using teleconference and web meeting tools.

Deliverables

- Woolpert to facilitate weekly Project Manager meetings.
- Woolpert to author Meeting Minutes for each Project Manager meeting and to upload the minutes to project website.

Assumptions

- Refer to Overview Section, page 2, for details around project duration and PM time.

County Responsibilities

- County to schedule appropriate internal staff and provide facilities for on-site meetings and off-site conference calls.
- County to review and accept project status reports, or otherwise provide comments within a reasonable time frame.
- County to schedule meeting space and supporting technology peripherals suitable for on-site meetings.
- County to coordinate and schedule meeting attendees.

Internal Coordination Meetings

Internal Woolpert-resource coordination meetings will be held on a regular basis to ensure continuous communication about tasks in process, scheduled tasks, and any issues impacting a successful implementation. The Woolpert Project Manager will utilize these meetings to gather information from project team members required to manage on-going resource loading.

Deliverables

- Regularly scheduled internal coordination meetings attended by Woolpert team members.

Assumptions

- See previous assumptions.

County Responsibilities

- None.

Change Control

This section defines how changes to the original objectives and/or deliverables defined in this Statement of Work will be handled. Both Woolpert and the County recognize that change is a normal part of the project life cycle. Woolpert believes that managing change to project scope, cost, and schedule is critical to a project's success. We employ a comprehensive approach to change control. Woolpert's established change control process is documented as follows.

Any project team member (County or Woolpert), through their respective PM, may initiate a change request whenever there is a perceived need for a change that will affect the desired or anticipated outcome of the work or any element of the project. The project team member will use a Change Control Notice (CCN) form as appropriate for the change:

- As required by PMs, agreement to a change and execution of the CCN signifies agreement to a change in overall costs, functionality, time scales, schedule or other identified project impact.

- Changes will be identified and communicated by/to the respective Project Managers by any of the prescribed communication channels. Change requests may be introduced via verbal conversation or other form of communication but must be supported by the appropriate CCN document.

Figure 4 - Sample Change Control Notice

- All CCN's will be signed by both the County and Woolpert Project Managers to indicate acceptance of the changes.

- All project participants should understand that time is of the essence when initiating, reviewing, negotiating, and approving requested changes, as any delays to work in progress caused by a CCN may impact the overall project schedule and budget.

All change requests should be managed from their initiation through to their completion (acceptance or rejection) within five (5) business days from the start of the process. If the County and Woolpert Project Managers cannot reach common agreement on the request change within this time frame, the issue will be elevated to the next level of management (both County and Woolpert) for resolution. During the resolution process, all downstream project tasks potentially impacted by the requested change will be placed on hold until such time that resolution is achieved.

The following workflow diagram graphically depicts the above detailed process:
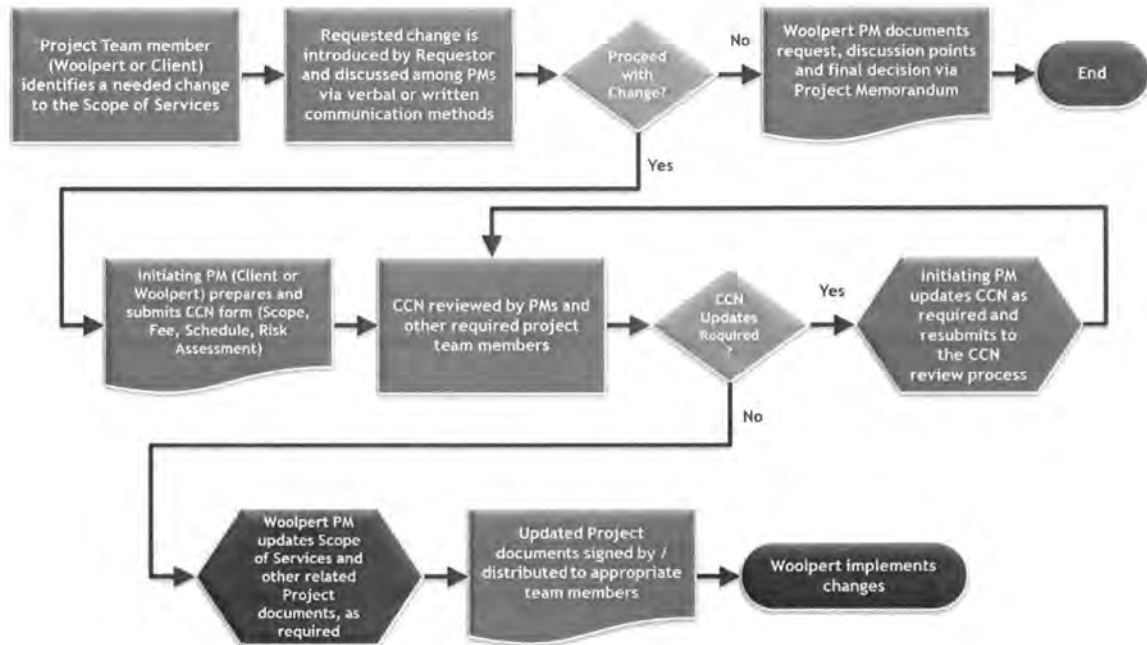
Figure 5 - Change Control Process

Each Change Control Notice (CCN) will clearly document the following:

- Date
- Change Control Number
- CCN Initiated By
- Original Scope of Services (language from the original scope that is being considered for change)
- Proposed Change (narrative of the proposed change(s) being sought)
- Schedule Impact (details about the proposed change(s) impact to the overall project schedule
- Fee Impact (details on the proposed change(s) impact to the project budget)
- Risk Assessment (narrative discussion about the risks the proposed change(s) will introduce to the project and the ways in which said risk will be mitigated)
- Acceptance Signatures (Woolpert and County Project Managers)

Phase 2 – Implementation Planning

This phase is complete. To maintain phase numbers that have been adopted by the project team, Phase 2 tasks were deleted from this scope of work, but Phase number 2 will not be repurposed for the subsequent efforts. Both Tracks will have a Phase 2 in the MPP but without any tasks, activities or resources assigned to it.

Phase 3 – Core System Design and Configuration

Using the "road map" developed in Phase 2 as our guide Woolpert will lead the County's Implementation Team through the AMS software design and configuration tasks and will create the software configuration document. The end result of Phase 3 activities will be a fully configured Cityworks AMS solution deployed to the County's development environment, but without working system integrations, any legacy transactional data records or the development of software customizations, custom application development or the implementation of third-party software solutions that may have been identified during the configuration tasks.

The data migration and system integration efforts, included in Phase 4 of this scope of services, will run concurrently with the Phase 3 tasks. At the conclusion of the Phase 4 tasks, all legacy data migrations and system integrations will be fully developed and in-place, ready for system testing activities. The intent is to complete all system configuration, data migration and system integration development work prior to moving to _Phase 5: System Deployment_.

It was decided during the _Phase 2: Implementation Planning_ activities that software customizations will be kept to only those that are absolutely required or that provide a great deal of value to the deployed system and future business processes. Should any software customizations, custom application development and/or implementation of third-party software solutions be identified as required during the configuration phase, Woolpert and the County will evaluate each effort and determine how to proceed with the delivery of each. The delivery of these solutions is not included within this scope of services.

Woolpert will work with all the divisions included in this scope of work to design and configure Cityworks for their work management requirements. Intertwined in this phase (Phase 3) during the Track 1 tasks is the development of an Asset Specific Plan (carry over task from Phase 2: Implementation Planning) for County pavement assets in Track 1. However, for Track 2, this phase is solely focused on the Core System Design and Configuration tasks.

In Phase 2: Project Planning, the Global Configuration Standards task resulted in a document called _Global Asset Management Business Processes and System Configurations_. The work processes and configuration items defined in this document will serve as the starting point of the configuration workshops for both Tracks. Woolpert will initiate the configuration activities by developing a set of configuration documents. The documents will include the baseline information from the _Global Asset Management Business Processes and System Configurations_ document. Woolpert will submit the baseline configuration document to the County Implementation Team for the purpose of gaining a level of familiarity with the various aspects of the system components that will need to be configured (service requests, work orders, inspections, job plans, work crews, default schedule dates, etc.). Then, Woolpert will deliver a Configuration Prep Info Session so that the County Implementation Team can understand how the Configuration Document ties to the actual

> **_Key Core System Design and Configuration (Phase 3) Deliverables_**
>
> - **System Configuration for Track 1 & 2 to include:**
>   - Development of a baseline Configuration Document for each Track
>   - Cityworks Introduction Training for the Track's Core Team
>   - Multiple Rounds of Configuration Workshops and a Configured Solution
>   - On-site Software Demonstrations for Track Acceptance

system configuration. In essence, the Configuration Prep Info Session is about telling the County Implementation Team what information they will be asked for during the Configuration Workshops.

Following the Cityworks AMS Configuration Prep Info Session, Woolpert will facilitate three rounds of on-site configuration workshops, whereby the Cityworks AMS software solution will be iteratively configured and loaded with information provided by the County Implementation Team.

- First round of configuration workshops gather specific information pertaining to types of service requests, activities performed against assets by County's employees for both work orders and inspections and information pertaining to reporting.

- The second round of configuration workshops explores the recently configured Cityworks AMS software with the County Implementation Team. Round 2 workshops provide the County Implementation Team more exposure to the software and allows them the opportunity to make changes once viewing the information within the actual software.

- A third round of workshops will be used to refine the system configuration ever further. We expect that nearly all of the system will be configured prior to these workshops and that these last workshops will be used to tailor the system to the final known details.

From a project standpoint, it is necessary to freeze the core system configuration activities four (4) weeks beyond the end of Round 3 workshops so that the project team members can move on to system deployment activities. Woolpert and the County will jointly determine how to record the core configuration change requests beyond the freeze date in order to ensure that they are addressed after system go-live. Core Configuration changes beyond the freeze date will need to be scoped out and approved by County. Configuration changes resulting from System Integration, Reporting, or Legacy Data Migration phases are not subject to the freeze date. These configuration changes will be made within the scope and schedule required to complete these phases.

Within each round of workshops will be multiple cycles. A cycle is three weeks in duration in Track 1 and four weeks in duration for Track 2. In each cycle, the first week is the on-site workshop effort. In Track 1, the second week is the remote system configuration and documentation effort. In Track 2, the second and third week are used for remote system configuration and documentation effort. In Track 1, the third week is a collaborative effort between Woolpert and County resources where Woolpert provides a remote demonstration of the configured solution to the workshop participants. The workshop participants then use the system, creating records as directed by the Woolpert team. At the end of the week, Woolpert will configure summary report(s) of the records created and processed by the workshop participants which the County can run to monitor activity. In Track 2, this is done in week four. The final week of each cycle in both Tracks is to ensure that the workshop participants "put hands on" the system so that they are more prepared with feedback for the Woolpert configuration team at subsequent workshops. The workshop participants are encouraged to continue "playing" with the system beyond the final week of their cycle, but no formal tracking of their activities will be reported of those activities.

Once all the configuration activities have been completed, Woolpert will facilitate a series of on-site system demonstrations. These demonstrations will "walk" the system through asset/maintenance management workflows in the manner they were configured and provide the County Implementation Team, Stakeholders and end-users an opportunity to view the system fully configured.

WBS Task 3.1: System Design and Configuration

The divisions to be configured in Track 1 are those in the Utilities and Public Works Departments. Workshops will be conducted for the following nine (9) Division/groups as listed in the following tables:

Department	Grouping
Utilities	Customer, Field Services Division
	Water Quality
	Maintenance Division
Public Works	Mosquito Control and Vegetation Management
	Stormwater
	Customer Service
	Transportation
	Roadway Maintenance

The divisions to be configured in Track 2 are those in the Utilities, Public Works, Real Estate Management, Solid Waste, and Parks and Conservation Resources Departments. Workshops will be conducted for the following nineteen (19) Division/groups as follows:

Department	Grouping
Utilities	Plant Operations
Solid Waste	Customer Outreach
	Infrastructure Management
	Operations Management
	Business & Financial Services
Public Works	Environmental Management
	Stormwater Engineering
Real Estate Management	Building Design & Construction, Real Estate Management
	Detention Section, Facility Operations, Maintenance Programs, Northwest Section, Southeast Section
	Real Property
	Fleet Management
Parks and Conservation Resources	Air Quality
	County Horticulture Operations
	Ft DeSoto, Park North District, Park South District
	Heritage Village
	PCR Trades
	PCR Administration
	Resources and Asset Management

WBS Task 3.1.1: Prepare Configuration Document

Woolpert will compile the asset management program data gathered and documented through the multiple on-site workshops and other related project meetings completed project-to-date (Departmental Readiness

Assessment, Global Configuration Standards, etc.) and distill this information into an organized configuration document. This configuration documentation, consisting of standard Cityworks AMS system elements, as well as the customized details required to support the County's specific asset management program, will be used to guide the configuration of the Cityworks AMS system such that it is localized to the County's specific work tracking and asset management requirements.

Deliverables

- Woolpert will develop a Cityworks AMS configuration document.
- Woolpert will facilitate one (1) remote review meetings up to four (4) hours in duration each with the County Implementation Team to review the Cityworks AMS Configuration Document.

Assumptions

- All tasks will be performed remotely.
- County Implementation Team will attend and actively participate in the document review meeting.

County Responsibilities

- Review the prepared Cityworks AMS Configuration Document prior to the review meeting.
- Participate in the remote review meeting.

WBS Task 3.1.2: Conduct Configuration Preparation Info Session for Implementation Team

Woolpert will facilitate on-site Configuration Preparation Info Session for providing the Department Implementation Team with the Cityworks AMS software knowledgebase needed to support the system design and implementation decisions. Configuration Prep Info Session will be comprised of a curriculum designed to cover all relative aspects of the Cityworks AMS configuration. Completion of the configuration prep info session will ensure the Department project participants (those with implementation responsibilities) are provided with enough exposure to, and understanding of, the Cityworks AMS software work order and asset management functionality such that they are able to make smart and informed configuration decisions as they relate to the overall implementation objectives. The intent of the info session is not to provide the skills needed to maintain the daily operations of the system. This End-User Training is provided later.

Configuration Prep Info Session will be facilitated in a classroom environment (computer lab or training room) on-site at County facilities.

Deliverables

- Woolpert will develop a Configuration Prep Info Session agenda and submit it to the County Project Manager.
- Woolpert will conduct up to thirty-two (32) hours of Configuration Prep Info Session in multiple blocks of time on-site at County facilities for both tracks. The breakdown of the session (number of and duration of sessions) will be determined by the project team.

Assumptions

- Info session will be facilitated utilizing the installed on-premise Cityworks AMS software environment.
- Info Session to be conducted over four (4) consecutive business days within a single business week (Monday – Friday).
- Woolpert has access to the Cityworks AMS software environment installed on-premise to perform demo of the solution during the info session.

County Responsibilities

- County to review and accept agenda for info session.
- County to schedule the appropriate County project team members such that they are available, without undue interruption, for the required number of days.
- County will provide a conference room or meeting room with a projector. During Configuration info session, individual computers are not needed for the participants. The software functionality will be demonstrated from the instructor's computer.

WBS Task 3.1.3: Core Cityworks AMS Configuration

Woolpert will facilitate the Core Cityworks AMS Software Configuration for each Department through a series of three (3) rounds of on-site configuration workshops in both Tracks. Each round of workshops will allow each of the configuration groups to define their system requirements for _both work and spare part inventory management_ such that the Woolpert Implementation Team can configure the Cityworks solution to their needs. Also, during this task, the Department Implementation Team members will collect or develop, and deliver to Woolpert, data that will be loaded into the Cityworks solution.

Within each round of workshops will be multiple cycles. A cycle is three weeks in Track 1 and four weeks in duration in Track 2. The first week is the on-site workshop effort. The second week is the remote system configuration and documentation effort. In Track 2, this continues for the third week as well. In Track 1, the third week is a collaborative effort between Woolpert and County resources where Woolpert provides a remote

demonstration of the configured solution to the workshop participants. The workshop participants then use the system, creating records as directed by the Woolpert team. Woolpert has configured a summary report of the records created and processed by the workshop participants which the County can run to monitor progress. In Track 2, this is conducted in week four. In both Tracks, the final week is to ensure that the workshop participants "put hands on" the system so that they are more prepared with feedback for the Woolpert configuration team at subsequent workshops. The workshop participants are encouraged to continue "playing" with the system beyond week three, and the County is free to track their use, but the spirit of the report is to ensure that County participants are prepared with feedback during the next set of configuration workshops.

> Cityworks is a complex and powerful software product. But too often, it is implemented in a less than optimal manner and as a result does not deliver the desired results. Our three-round configuration process is a critical factor in capturing user requirements and refining workflows before testing begins. Not all implementation firms use this approach, but our long history shows that the extra time spent at this stage helps make the remainder of the project much smoother.

Each successive round of workshops will address the following topics at increasing level of detail:

- **Domains**. This is the security architecture that determines how employees, work orders and other asset maintenance management information can be shared across organization-al boundaries.
- **Employee Hierarchy**. Determines security protocols for each user of the system as well as practical grouping of employees for assignments to work orders, inspections, and service requests (e.g., crews).
- **Work Orders**. Templates for each of the type of maintenance activities that will be per-formed on each asset in the system
- **Tasks**. Individual work items associated with a work order. For example, a repair sewer main work order might have tasks for establish traffic control, utility locate, excavate, etc.
- **Materials Hierarchy**. Organization and rules for items that are used to repair assets. Examples of materials are things such as pipes and meters.
- **Equipment Hierarchy**. Organization and rules for items that are utilized to complete a work order but are not consumed. Examples are items such as backhoes, vehicles, vacuum trucks, etc.
- **Service Requests**. Templates for requests for service. Many times maintenance activities are initiated starting with a service request whose purpose is to determine if a work is necessary or not.
- **Inspections**. Templates for each type of periodic and ad-hoc asset inspection where detailed attributes need to be stored as individual data elements.
- **Reporting**. Current or future expected reports will be discussed and designed.
- **Projects**. Projects to be managed within the AMS software

At the end of each round of workshops, there will be a set of action items for the Department Implementation Team members, such as compiling a list of employees, work crews, and contractors, as well as hard copies of work orders, reports, inspection forms, and other relevant data sets. Woolpert and County to define process and ensure AIs are assigned / owned when created. Business use cases are usually created to define system customizations, custom software development, third-party solutions or other methods to satisfy County requirements that cannot be satisfied using out-of-the-box Cityworks functionality. As a rule, the County agreed that customizations and business cases documenting them will not be entertained as part of Track 1 and 2 implementations. However, PLEASE NOTE that business use case evaluations will only be created for requirements that are necessary and/or provide a high value to the final solution. Should any business case documentation and subsequent evaluation be deemed worth the effort, Woolpert can prepare a scope of services and fee for documentation and its execution for the County's consideration.

Round 1 is about collecting quantity at a moderate level of detail. At the end of the first round of configuration workshops and subsequent WebEx meetings, Woolpert expects to have gathered enough information to configure a majority of the maintenance management functionality that can be satisfied with standard Cityworks configuration. Workshops in subsequent rounds will add detail to these work activities.

Round 2 is about collecting details on work activities identified in Round 1 as well as additional maintenance management activities. At the end of the second-round workshops and subsequent WebEx meetings, Woolpert expects to have gathered enough information to configure most of the asset maintenance management functionality at a nearly complete level of detail that can be satisfied with standard Cityworks configuration.

Round 3 is about finalizing the details of the maintenance management activities configured in Rounds 1 and 2 as well as determining final user groups and permissions. At the end of the third round of configuration and subsequent WebEx meetings, Woolpert expects to have gathered enough information to configure all maintenance activities and user access settings that can be satisfied with standard Cityworks configuration.

In Track 2, Three rounds of configuration will be conducted in parallel by two sets of Woolpert Analyst Teams. To optimize the length of the configuration phase, each cycle will be 4 weeks long and staggered instead of being sequential. Thereby, 13 cycles of configuration across 3 rounds spanning 39 weeks (if executed sequentially) can now be accomplished in 28 weeks effectively. However, this approach requires careful and efficient coordination and communication between the Woolpert Analyst teams, County Project, Core and Implementation Teams.

Deliverables

- Woolpert will deliver an On-site Prep Sheet (OPS) at least four weeks prior to each week of on-site activity. OPS will describe the purpose of the workshops and recommend the County skillsets that should attend.

- Round 1 Workshop Deliverables:
  - Woolpert will facilitate Round 1 workshop sessions for each of the nine (9) configuration groups in Track 1 and nineteen (19) in Track 2. Although workshop time can be reallocated between the implementation groups and may vary in duration depending on how they are grouped, the total amount of workshop time will not exceed one hundred and twenty-eight (128) hours or four on-site weeks for Track 1 and one hundred and ninety-two (192) hours or six on-site weeks for Track 2 – one on-site week per cycle and 32 hours/on-site week.
  - Woolpert will perform up to one (1) follow-up remote meetings via WebEx for each of the Round 1 Workshops weeks. Each meeting will be no longer than four (4) hours. This meeting will be held during the third week of each cycle and be used to show the County Implementation Team how to "play with" the system by creating records and experiencing the system's configuration and functionality.
  - Woolpert will configure a report that the County project team can run at the end of each cycle's week 3 to show the records created by the County Implementation Team.
  - Woolpert will perform system configuration in the County on premise development environment based on the outcome of the Round 1 workshops.
  - Woolpert will document business case evaluations for potential customizations based on the outcome of the Round 1 workshops.
  - Woolpert will conduct one (1) remote meeting with the County Cityworks System Administrator Team Members to show the technical details of system configuration built at the end of Round 1.

- Round 2 Workshop Deliverables:
  - Woolpert will facilitate Round 2 workshop sessions for each of the nine (9) configuration groups in Track 1 and nineteen (19) in Track 2. Although workshop time can be reallocated between the implementation groups and may vary in duration depending on how they are grouped, the total amount of workshop time will not exceed ninety-six (96) hours or three on-site weeks for Track 1 and one hundred and twenty-eight (128) hours or four on-site weeks for Track 2 – one on-site week per cycle and 32 hours/on-site week.
  - Woolpert will perform up to one (1) follow-up remote meetings via WebEx for each of the Round 2 Workshops weeks. Each meeting will be no longer than four (4) hours. This meeting will be held during the third week of each cycle and be used to show the County Implementation Team how to "play with" the system by creating records and experiencing the system's configuration and functionality.
  - Woolpert will update the configuration documentation based on the outcome of the Round 2 configuration workshops.

- o Woolpert will perform system configuration in the County on-premise development environment based on the outcome of the Round 2 workshops.
- o Woolpert will document business case evaluations for potential customizations based on the outcome of the Round 2 workshops.
- Round 3 Workshop Deliverables:
  - o Woolpert will facilitate Round 3 workshop sessions for each of the nine (9) configuration groups in Track 1 and nineteen (19) in Track 2. Although workshop time can be reallocated between the implementation groups and may vary in duration depending on how they are grouped, the total amount of workshop time will not exceed sixty-four (64) hours or two on-site weeks for Track 1 and ninety-six (96) hours or three on-site weeks for Track 2—one on-site week per cycle and 32 hours/on-site week.
  - o Woolpert will perform up to one (1) follow-up remote meetings via WebEx for each of the Round 3 Workshops weeks. Each meeting will be no longer than four (4) hours. This meeting will be held during the third week of each cycle and be used to show the County Implementation Team how to "play with" the system by creating records and experiencing the system's configuration and functionality.
  - o Woolpert will update the configuration documentation based on the outcome of the Round 3 configuration workshops.
  - o Woolpert will perform system configuration in the County on-premise development environment based on the outcome of the Round 3 workshops.
- Woolpert will document business case evaluations for potential customizations based on the outcome of the Round 3 workshops.

Assumptions

- All work aside from the actual workshops and the one week of on-site system configuration will be performed remotely.
- All Round 1 workshops will take place over the course of four (4) business weeks (Monday – Friday) for Track 1 and six (6) business weeks for Track 2.
- All Round 2 workshops will take place over the course of three (3) business weeks (Monday – Friday) for Track 1 and four (4) business weeks for Track 2.
- All Round 3 workshops will take place over the course of two (2) business weeks (Monday – Friday) for Track 1 and three (3) business weeks for Track 2.
- Actual workshops will be administered on-site at County facilities.
- County staff participating in the Configuration workshops will do so uninterrupted.
- The GIS data and structure for assets owned and maintained by the participating divisions will be complete before the starting of Round 1 of the Cityworks configuration workshops. This information is essential for Woolpert to configure Cityworks in a timely manner. Any delay in the completion of GIS data and structure prior to Configuration kickoff will impact the budget and schedule of this phase.
- Woolpert will provide the County GIS team the services defined in Phase 8 to prepare GIS data and structures.
- A map service and geocoding service will be available for Woolpert to consume specific to the AMS divisions.

County Responsibilities

- County to schedule the appropriate Department project team members such that they are available, without undue interruption, for the required number of days.

- County will provide a conference room or training room with a projector. During Configuration Training, individual computers are not needed for the participants. The software functionality will be demonstrated from the instructor's computer.

- Workshop participants shall actively participate in workshop activities.

- Workshop participants shall participate in the remote review meetings, as requested.

- County Technical Team will provide Woolpert a map service and geocoding service for Woolpert to consume, specific to the AMS divisions.

- County will ensure that Workshop participants "play" in the system at the end of each cycle and generate reporting on system use.

- County will review the draft and final documents and provide feedback and approval within the defined timeframes in the project schedule.

WBS Task 3.1.4: Review and Approval of Updated System and Configuration Documentation

Woolpert will provide an updated system configuration document for review by the County. This document will represent everything that is configured within the database and must be approved before the final demonstration of the Cityworks AMS system can be performed. Woolpert will perform a thorough remote review of this document with the County implementation team. However, the document is long and complicated. If the County team does not take the time throughout the Phase to learn the document's sections and information, it will be very difficult for the County team to recommend with any degree of confidence the acceptance of the document. Hence, Woolpert strongly recommends that the County team immerse themselves in learning this document throughout this phase.

Deliverables

- Woolpert to submit updated configuration documentation to the County Project Manager.
- Woolpert to facilitate a remote configuration documentation review meeting, up to four (4) hours in duration in Track 1 and twenty-four (24) hours in duration in Track 2, with the County Implementation Team.
- Woolpert will update the configuration documentation based on the outcome of the County review and re-submit the updated documentation to the County Project Manager.

Assumptions

- County implementation team members will understand the documentation for its accuracy.
- Configuration Document will be accepted by County before official Testing of the system can begin.

County Responsibilities

- County Project Manager and Implementation team will review and provide feedback on the configuration document.

- County Project Manager and technical team will participate in a remote configuration document review meeting.
- The County Project Manager will approve and sign the configuration document.
- County will review the draft and final documents and provide feedback and approval within the defined timeframes in the project schedule.

WBS Task 3.1.5: Provide Roadshow (Demonstrations) of Core Cityworks AMS Configured Solution

After completion of the core AMS software configuration and approval of the updated configuration documentation, Woolpert will facilitate a Roadshow in which Woolpert will provide a series of on-site full AMS software demonstrations to the entire future user community and project stakeholders for the configured groups. Woolpert will provide the same demonstration as many times as necessary and possible/reasonable over a five-day (5) period to accommodate the 545 Stakeholders in Track 1 and 506 Stakeholders in Track 2. Similar to the demonstrations in Implementation Planning phase, this Roadshow provides an opportunity for the County to assess the readiness of their staff. Should any apprehension or reluctance to adopt the new system become apparent, the County still has time to address those concerns and maximize staff readiness prior to Go-Live. After the Roadshow, the Woolpert implementation team and Project Manager and the County Project Manager and stakeholders, will hold a wrap up meeting to discuss the plan to address the need to develop business use cases for requirements that could not be met with standard or advanced Cityworks configurations and for deployment activities.

> This task doubles as an opportunity for the County to evaluate the readiness of their workforce. Staff apprehension early in the project can be re-evaluated. New and continuing concerns can be noted at this point in the project as there is still time to ready the organization prior to Go-Live.

Deliverables

- Woolpert will provide agendas for the on-site roadshow.
- Woolpert will provide on-site Cityworks AMS software solution demonstrations for five (5) consecutive business days in Track 1 and Track 2.
- Woolpert to facilitate one (1) configuration wrap-up meeting for up to four (4) hours.

Assumptions

- All demonstration preparation activities will be performed remotely.
- County staff participating in the roadshow will do so un-interrupted.

County Responsibilities

- Secure an appropriate facility for demo.
- Coordinate and schedule roadshow participants.
- Coordinate and schedule a configuration wrap-up meeting.
- County will review the draft and final documents and provide feedback and approval within the defined timeframes in the project schedule.

WBS Task 3.2: Strategy and Planning | Asset-Specific Plan (Track 1 Task)

The development of a single Asset-Specific Plan was originally part of Phase 2: Implementation Planning in the previous Project 1-Project 2 structure. When the decision to move to a multi-track implementation structure

from the original Project 1-Project 2 structure was made, it was decided that the development of the plan is more appropriate during the Phase 3: Core System Design and Configuration phase in Track 1 since the plan will be created for Pavement assets. The Pavement group within Public Works was also part of the Track 1 Cityworks AMS software implementation. This WBS Task pertains to Track 1 only. A similar WBS Task does not exist in Track 2.

Woolpert will facilitate workshops and develop, in conjunction with the appropriate County asset subject matter experts, a single Asset-Specific Plan to document the ISO 55000 subjects of Technical Standards and Legislation, Asset Creation and Acquisition, Systems Engineering, Configuration Management, Maintenance Delivery, Reliability Engineering, Asset Operations, Resource Management, Shutdown and Outage Management, Fault and Incident Response Management and Asset Decommissioning and Disposal, as each subject relates to the asset. Workshops will be repetitive in nature, meaning that Round 2 workshops will cover the same topics as Round 1 workshops, but in greater depth. The expectation is that much of the content will be readily available within the organization and that these workshops will be to assemble that content, identify and fill the gaps and knit it together into a single life-cycle plan for assets of that type.

The final deliverable for this task is a single Microsoft Word document that defines the life-cycle activities for the selected asset type. The document may contain, at a minimum, a section for each of the ISO subjects or equivalent topics determined to be applicable to the production of the Asset Specific Management Plan. Within each subject section, the document will identify specific tactics that will be applied as well as potential tactics that should be considered under various circumstances and asset conditions. The document will be focused on a single asset type and may reference yet-to-be-created documents so that its focus is not diluted with content specific to other types of assets.

Deliverables

- Woolpert will develop a Request for Information and submit it to the County Project Manager.
- Woolpert will perform a desktop audit of the information.
- Woolpert will develop an agenda and submit it to the County Project Manager.
- Woolpert will facilitate up to thirty-six (36) hours within a single business week (Monday – Friday) for Round 1 of Asset Planning workshops covering a selection of topics that may include:
  - Technical Standards and Legislation
  - Asset Creation and Acquisition
  - Configuration Management
  - Maintenance Delivery
  - Reliability Engineering
  - Asset Operations
  - Resource Management
  - Shutdown and Outage Management
  - Fault and Incident Management
  - Asset Decommissioning and Disposal
- Woolpert will develop a DRAFT version of the Asset Specific Plan and submit it to the County Project Manager.
- Woolpert will facilitate up to thirty-six (36) hours within a single business week (Monday – Friday) for Round 2 of Asset Planning workshops covering the same topics as in Round 1 or any additional that are deemed necessary based on Round 1 discussions.

- Woolpert will develop a FINAL version of the Asset Specific Plan and submit it to the County Project Manager.

Assumptions

- All County maintenance, operations, engineering, planning and other personnel involved in the life cycle of the pavement assets for which the ASP is developed will participate in all workshops will participate in the appropriate workshops.
- All activities, other than the actual workshops, will be performed remotely.
- The DRAFT document will not require joint reviews, only review by County staff in preparation for the Round 2 workshops.
- The FINAL version of the document will be submitted after the second round of workshops; no joint review or County feedback will be required.
- All Round 1 workshops will take place within a single business week (Monday – Friday).
- All Round 2 workshops will take place within a single business week (Monday – Friday).
- This task applies only to Track 1. At the writing of this scope, a similar ASP is NOT planned in Track 2.

County Responsibilities

- County Project Manager will schedule all County workshop attendees and ensure site readiness and staff participation for the workshops.
- County workshop attendees will review the DRAFT versions of the documents in preparation for the Round 2 workshops.
- County will accept the FINAL version of the ASP.

WBS Task 3.3: Phase 3 Quality Control

Woolpert will apply the Quality Management Process stated earlier in this scope document to Phase 3 tasks, activities and deliverables.

WBS Task 3.4: Phase 3 Acceptance and Close

This is the Phase exit document that the County Project Manager signs indicating Woolpert has delivered the Configuration phase in accordance with the Scope of Work and Project Plan.

Phase 4 – Advanced Configuration and Functionality

While Phase 3 is focused on configuring the Core Cityworks asset management functionality that supports work/asset maintenance management activities, Phase 4 tasks are undertaken to define and develop a more robust enterprise Cityworks AMS solution.

Planned Performance Management

During *Phase 2: Implementation Planning*, five (5) systems that contain legacy data for the divisions involved in Track 1 and four (4) systems in Track 2 were deemed important enough to consider for migration. Also during that phase, four (4) existing County software solutions were identified which the new Cityworks AMS will need to interface in Track 1. Similarly, four (4) existing County software solutions were identified for interface with Cityworks AMS in Track 2. Included in this scope of services is the effort to evaluate the data migration and system integration efforts as well as to perform the actual data migration and develop the system integration components for Tracks 1 and 2.

Performance Management System Applications

Custom reports and dashboard requirements will be defined and refined throughout the Advanced Configuration phase. Woolpert will develop report specifications based on information previously gathered and develop saved searches, dashboards, inboxes and custom reports as required to meet the County users' requirements.

Performance Management & Monitoring

Completion of Phase 4 tasks will result in the following:

> **Key Advanced Configuration and Functionality (Phase 4) Deliverables**
>
> • **Legacy Data Conversions**
> • **Custom Reports and Dashboards**
> • **Software Development for System Integrations**

1. Migrated legacy data from five (5) identified existing systems in Track 1 and six (6) in Track 2.

2. Integrations with the four (4) identified existing business solutions in Track 1 and five (5) in Track 2.

3. A set of dashboards, saved searched, KPIs and custom reports as identified in *Phase 3: Core System Design and Configuration*.

WBS Task 4.1: Legacy Data Migrations

Woolpert will perform the necessary data migration planning, data mapping and data migration script development activities to migrate historical work history records (transactional data) from the identified legacy software solutions to Cityworks AMS. Qualifying historical work activities will be migrated to Cityworks AMS as work orders. Historical work activities qualify for migration if they are associated to an asset in the legacy system and contain information about the work performed or costs of the work effort. In support of the work order migration, certain static data will be preserved. This includes data for validated fields on a work order such as Employees, Failure Codes, etc. Migration effort does NOT include migration of asset data into the Esri GIS.

WBS Task 4.1.1: Data Migration Planning

The County has identified the following solutions for Track 1 and Track 2 as containing data that may need to be migrated to the new Cityworks AMS.

Track 1		
Data	**Current Environment**	**Legacy System**
Work Management	Oracle 8i	Maximo 4.0.3
Mosquito Control	Oracle 10g	VCMS

Track 1		
Data	Current Environment	Legacy System
Work Management	Access DB	Traffic Copp
Work Management	Oracle 10g	Agile Assets
Compliance Tracking	Oracle 10g	LINKO

Track 2		
Data	Current Environment	Legacy System
Work Management	Oracle 8i	Maximo 4.0.3
Work Management	Oracle 8i	Maximo 6.2
Work Management	Oracle 10g	ProLease
Work Management	Oracle 10g	Maximus
Historical Inspections	Oracle 10g	Agile Assets PAVER data
Work Management	Oracle 8i	Maximo 4.0.3 (Star Center)

Woolpert will begin the analysis with a remote discussion with the legacy systems' data managers and stakeholders. The discussion will be to set the expectations for this migration evaluation task and learn a little about the data to be converted. Woolpert will follow up those discussions with a request for information about each legacy dataset. Once the County has provided the requested information, Woolpert analysts can examine it for completeness and accuracy as well as evaluate its overall data structure as it relates to migrating into the Cityworks data structures. Woolpert will then facilitate on-site workshops to further evaluate the data with the County legacy data managers and users. Woolpert will author a Technical Memorandum evaluating the pros and cons of migrating the data from each legacy solution. Where appropriate, Woolpert will recommend alternate methods to archive legacy data such that it remains in an accessible, reportable format. Woolpert will facilitate a joint review of the Tech Memo and validate the scope of data migration activities.

Deliverables

- Woolpert to facilitate up to five (5) remote discussions in Track 1 and four (4) in Track 2, each up to one (1) hour in duration, with the managers and stakeholders of the legacy systems being evaluated.
- Woolpert to develop a Request for Information for each of the legacy data systems and submit them to the County Project Manager.
- Woolpert to perform a desktop evaluation of each legacy system.
- Woolpert to facilitate five (5) on-site workshops in Track 1, each four (4) hours in duration, with the managers, stakeholders and key users of each legacy system.
- Woolpert to facilitate on-site workshops in Track 2 with the managers, stakeholders and key users of each legacy system spread over a period of five days. Total on-site workshop time is not to exceed thirty-two (32) hours.
- Woolpert to develop one Tech Memo each in Tracks 1 and 2 and evaluating the effort to migrate the data from each legacy system and other options that might be available to properly maintain the history of the systems and submit the memo to the County Project Manager.
- Woolpert to facilitate a remote review with the County to review the Tech Memo for a duration of no more than four (4) hours.

- Woolpert to modify the Tech Memos based on County feedback provided during the remote review session.

Assumptions

- County Technical Team and business unit staff familiar with the legacy data and legacy data system will be available and attend each workshop.
- Workshops will be grouped to occur over the course of consecutive business days within a single business week (Monday – Friday).

County Responsibilities

- County to participate in pre-RFI discussions.
- County to thoroughly respond to request for information.
- County to secure an appropriate meeting facility for the on-site workshops and to coordinate and schedule workshop participants.
- Workshop participants shall actively participate in workshop activities without undue interruption.
- County team members to thoroughly read and prepare comments/talking points for document review WebEx meetings.
- County will review the draft and final documents and provide feedback and approval within the defined timeframes in the project schedule.

WBS Task 4.1.2: Data Migration Development

For each legacy data migration effort, Woolpert will perform the following tasks:

1. Woolpert will develop a data migration mapping document for each of the legacy software solutions from which data will be migrated to Cityworks AMS.

2. Woolpert will submit the data mapping document to the County team for review and then facilitate a joint, remote review of the of the document. During this task, Woolpert and the County team will review the data types involved in the mapping and agree to any data manipulation, such as truncating and concatenating fields, that will be automated in the load scripts. During the task, the Woolpert and County team will also discuss the importance for the data to be standardized, normalized, deduplicated and in other ways, cleaned prior to loading in Cityworks. To a small degree, these data clean-up tasks can be performed in the load scripts, but more likely, the data clean-up will need to be performed by the County in the legacy system or on the extracted load files before they are delivered to Woolpert.

3. As appropriate, Woolpert will update the data migration document.

Upon agreement of the data mapping, Woolpert will develop the necessary scripts to load the data into the Cityworks data structures. The necessary data cleansing tasks on the source data will be performed as per the agreement in the data mapping task. It will be the County's responsibility to extract the source data and provide it to Woolpert in MS SQL format since the County's Cityworks application runs on SQL.

Woolpert will load the data in a test environment to be identified by the project team. Woolpert will facilitate a joint, remote review of the loaded data. As appropriate, Woolpert will revise the data mapping document to ensure common agreement to the requested changes. Woolpert will revise the data loading scripts per County

feedback. The County will perform additional data clean-up and re-extract data in the SQL format, as defined in the mpp.

Woolpert will load the data a second time into a test environment. Woolpert will facilitate a joint, remote review of the loaded data. As appropriate, Woolpert will revise the data mapping document to ensure common agreement to the requested changes. Woolpert will revise the data loading scripts per County feedback. The County will perform additional data clean-up and re extract data in the SQL format, as defined in the mpp.

This task will conclude with the second loading of the data into a test environment. Subsequent loading of the data, as defined in *WBS 4.1.3 Data Migration Deployment*, will be performed prior to User Acceptance Testing (UAT), End User Training (EUT), and Go-Live. After the UAT and EUT loads, minor changes to the data migration scripts and additional data clean-up may still be required and will be reviewed on a per case basis as along as it does not impact Go Live.

Deliverables

- Woolpert to develop a data mapping document for each legacy data migration effort.
- Woolpert to provide County with all SQL scripts developed to facilitate data migration.
- Woolpert to facilitate a joint, remote review of the data mapping document and make updates, as appropriate.
- Woolpert to load the source data from each system up to twice in a test Cityworks environment. After each load, Woolpert will facilitate a joint, remote review of the data in the test environment. As appropriate, Woolpert will update the data mapping documents and migration scripts.

Assumptions

- If data source is from a non-RDBMS, normalization of the data will be completed by the County.
- One Cityworks transactional record will be created within Cityworks AMS based on field mapping requirements.
- Each required field within the source system will have an identified field on the same Cityworks module record type (e.g., service request, work order, inspection). The source systems' required fields for one record will not span across multiple Cityworks modules (service request, work order, inspection).
- Child work orders and linked records are excluded from this scope of work.
- All employee names from the previous data from the source system will be migrated 'as-is'. This means they will not be searchable in Cityworks.
- The costs associated to labor, materials and equipment that will be added as part of the transactional work order record but will not be added to the template information pertaining to labor, materials or equipment.
- The information used for dropdown menus within the source system must be identified for configuration within Cityworks AMS in order for the fields to be searchable within Cityworks AMS. In addition, the content within the dropdown fields must match exact.
- If the County requires an attached asset for the Cityworks AMS record, an x and y value must be provided within the source data as well as a unique identification number for said asset. Utilizing a geocoding service based on an address to collect spatial information in order to attach an

asset to the Cityworks Legacy case is excluded from this scope of work. Only updating values that already exist within the source system will be completed.

- Any track 1 data migration items (e.g., tables or fields) that were not addressed in Track 1 will not be considered for Track 2 unless negotiated for change request with the Woolpert PM.
- Changes to configuration that impact the Data Migration process may impact schedule.
- All work will be performed remotely.

County Responsibilities

- County to perform the required clean-up on the legacy data either in the legacy system or in the data sets after they have been extracted and converted to SQL and before they are delivered to Woolpert.
- County to participate in the joint, remote reviews of the migrated data. County to provide feedback on the mapping and to make the necessary updates to the source data as agreed-to during this task.
- County will review the draft and final documents and provide feedback and approval within the defined timeframes in the project schedule.

WBS Task 4.1.3: Data Migration Deployment

For each legacy data migration effort, Woolpert will perform the following tasks:

1. Prior to User Acceptance Testing (UAT), Woolpert will load the data in the environment that will be used for UAT.

2. Prior to End User Training (EUT), Woolpert will load the data in the environment that will be used for EUT.

3. Prior to Go-Live, Woolpert will load the data in the environment that will be used for Go-Live.

County will extract the legacy data and provide it to Woolpert in SQL format each time that Woolpert is required to load the data. Woolpert will load the data in an environment to be identified by the project team prior to UAT, EUT and Go-Live. County personnel involved in UAT and EUT will provide the necessary feedback to Woolpert if any changed need to be made to the loaded data. As appropriate, Woolpert will revise the data mapping document to ensure common agreement to the requested changes. Woolpert will revise the data loading scripts per County feedback. The County will perform additional data clean-up and re-extract data in the SQL format, as necessary. The revised data will not be reloaded until the next scheduled load activity. In other words, changes identified during UAT will not be reloaded for UAT but will be loaded for EUT. Likewise, changes identified during EUT will not be reloaded for EUT but will be loaded for Go-Live.

Deliverables

- Woolpert to load the data one (1) time for UAT.
- Woolpert to update the data mapping documents and data loading scripts, as appropriate, from the feedback of the testing team.
- Woolpert to load the data one (1) time for EUT.
- Woolpert to update the data mapping documents and data loading scripts, as appropriate, from the feedback of the training team.
- Woolpert to load the data one (1) time for Go-Live.

Assumptions

- All work will be performed remotely.

County Responsibilities

- County to perform the required clean-up on the legacy data either in the legacy system or in the data sets after they have been extracted and before they are delivered to Woolpert.

- County to extract the legacy data and provide it to Woolpert in the SQL format each time that Woolpert is required to load the data.

- County testers and trainers will provide the necessary feedback on the legacy data during the UAT and EUT tasks.

- County will review the draft and final documents and provide feedback and approval within the defined timeframes in the project schedule.

WBS Task 4.2: Custom Reports and Metrics

Woolpert will develop the necessary inboxes, dashboards, saved searches, KPIs, metrics and custom reports for the appropriate Departments/divisions in Tracks 1 and 2.

WBS Task 4.2.1: Report and Metric Planning

During *Phase 3: Core System Design and Configuration*, County and Woolpert will develop a list of existing and desired reports that should be producible with the new Cityworks AMS software. During this task, County will provide a prioritized list of reports ranked from most to least critical for each Department/division in Track 1 and 2. Woolpert's implementation/report development team will develop a report specification document detailing how the report will look to include items such as data elements, grouping, sections, sums, charts/graphs, etc. Each of the nine (9) Divisions/groups in Track 1 and nineteen (19) in Track 2 will have a prioritized list of reports aggregated at the Department level or as deemed appropriate by the Woolpert implementation team and the County. During this task, Woolpert will develop specifications for as many of the identified reports as possible in their order of priority within the allocated time and budget. Woolpert will facilitate an on-site review of the report specification document with each Department before finalizing the specifications and commencing report development.

In Track 2, Woolpert reporting involvement is reduced but he scope remains to develop report specifications for as many reports as possible in the order of their priority, as assigned by the County, within the allocated time and budget. The County is responsible for developing the specifications for remaining reports.

Deliverables

- Woolpert to develop a report specification document for as many reports as possible within the allocated budget using the priority list provided by the County to determine the order (from highest to lowest priority) in which they are developed.

- Woolpert to facilitate an on-site review of the report specification document for up to five (5) business days.

- Woolpert to provide guidance on industry standards, best practices, and recommended KPIs and metrics to be developed.

Assumptions

- All work will be performed remotely except for the report specification review.

County Responsibilities

- County to prioritize the list of reports for which specifications and reports will be developed.
- County team to thoroughly review the report specification document and provide the necessary feedback.
- County team to participate in the on-site review of the report specification document.
- County team to develop the remaining specifications for reports beyond those covered in Woolpert's specification document.
- County will review the draft and final documents and provide feedback and approval within the defined timeframes in the project schedule.

WBS Task 4.2.2: Report and Metric Development

During this task, Woolpert will develop and deploy as many of the identified reports as possible within the allocated budget. Woolpert will deploy the reports and metrics via Cityworks Saved Queries, Cityworks Dashboards and KPIs, Cityworks Inboxes or custom-developed Crystal Reports. The reports will be reviewed with, and informally tested by, the County staff through a series of in-process development reviews. Woolpert will incorporate requested changes into the reports. The reports will be formally tested as part of the overall User Acceptance Testing efforts. In addition to reporting, Woolpert will work with the County Technical Teams to ensure that they know how the reports, dashboards and metrics were created such that they can create related items once the system is live.

In Track 1, Woolpert has primary responsibility for the development and deployment of the identified reports subject to allocated budget in WBS Task 4.2.1 for each of the nine (9) Divisions/groups.

Deliverables

- Woolpert to develop as many identified reports as possible within the allocated budgets in Track 1 and 2 from a prioritized list.
- Woolpert to facilitate periodic remote review and approvals of the reports in batches with the County team.
- Woolpert to provide guidance on industry standards, best practices, and recommended KPIs and metrics to be developed.
- Woolpert to provide a final list of the reports to be developed, which the County will accept and approved.

Assumptions

- All report development and review work will be performed remotely.
- Woolpert will work with the County on each reporting batch until final acceptance is received from the County. The estimate of number of hours/report/batch was based on one review session with feedback by the County. If the County requires more than one (1) review session/batch, there will be an impact on the number of batches completed within this task. As

an example, if Batches 1–3 consume more than one review cycle each, reports in Batches 5 and 6 may not be developed.

- County will provide a prioritize list of reports for Woolpert to author.

County Responsibilities

- County team to develop the remaining reports beyond those that can be developed by Woolpert within the time and budget constraints.

- County team to participate in the periodic remote review and approval of the reports in batches and provide the necessary feedback in both Tracks.

- County will review the draft and final documents and provide feedback and approval within the defined timeframes in the project schedule.

WBS Task 4.3: System Integrations

The County has identified the following solutions (target systems) as existing County solutions that need to be integrated to the new Cityworks AMS during Tracks 1 and 2. NOTE: Woolpert understands that the County requires that the Esri GIS solution be a required integration. However, that integration will be configured on an ongoing basis as part of the *Phase 3: Core System Design and Configuration* tasks.

Track 1		
Data	**Current Environment**	**Current System**
ERP	Oracle 11g DB	Oracle eBusiness Suite R12.1.3 (OPUS)
ERP	Oracle 11g DB	SAP (CIS – Customer Information System, Hosted Solution)
CCTV	Oracle 10g	GraniteNet
Customer Requests		SeeClickFix

Track 2		
Data	**Current Environment**	**Current System**
SCADA		Wonderware
Spare Parts Inventory		NAPA TRACS
Fuel Management		Fleet Fuel System
Pavement Inspection		PAVER 7
Customer Requests		SeeClickFix

NOTE: During Track 2, a potential interface to support the Grainger Keepstock program used by PCR will be vetted as part of the onsite integration planning workshops. If an interface is deemed necessary by the County, it will be incorporated into the scoped deliverables via a Change Control Notice.

Woolpert's technical approach to building the integrations will remain consistent for both Tracks, which involve the use of the County's development environment to access the Software AG platform (Integration Server and WebMethods); use of a combination of elements including Flow and Java services, separate Web APIs, and a

JMS Messaging Provider as is determined to provide reasonable manageability for the County while providing necessary efficiency and reliability.

The Software AG integration platform will be used for all custom integrations; COTS integrations (GraniteNet, Paver, and SeeClickFix) will not use the Software AG platform.

The detail included in each of the descriptions below represents a preliminary expectation of integration effort based on a combination of Woolpert's understanding of the needs, data, and processes at the County, as well as our experience building similar integrations for other clients, and serves as a starting point for aligning expectations for all stakeholders. **As part of WBS 4.3.1 - System Integrations Planning, the requirements and technical specifications defined in this scope will be discussed, explored, refined and updated**. It is expected that the changes resulting from these requirements meetings will not represent a significant difference in the total estimated level of effort. If a significant variance is recognized, Woolpert and the County will collaboratively determine options for addressing anything that exceeds the original scope.

Oracle eBusiness Suite Vendors Integration: One-way

This will be a one-way integration going from Oracle into Cityworks. Vendors from Oracle will be pushed into Cityworks as both Contractors and Suppliers. Vendors that are no longer active in Oracle eBusiness Suite will be set to inactive in Cityworks.

The following Vendor information will be sent to Cityworks:
- Oracle eBusiness Suite Vendor ID
- Vendor Name
- Active status

Oracle eBusiness Suite and LDAP Employees Integration: One-way

This will be a one-way integration going from Oracle eBusiness Suite into Cityworks. Employees from Oracle and from LDAP will be pushed into Cityworks. Employees that are no longer active will be set to inactive in Cityworks. Employee internal and external rates will be calculated based on a multiplier applied at the division level, based on multipliers stored in configuration. Certain changes such as a new employee, or a change to employee title, department, division, or login name, will generate a service request for a Cityworks administrator to review the employee's permissions and settings within Cityworks.

The following Employee information will be sent to Cityworks:
- County employee ID
- Last name
- Middle initial (optional)
- First name
- Title
- Work phone
- Email
- Base rate, which will be used to calculate an Internal and External rate stored in Cityworks
- Cityworks Domain
- Department
- Division
- Source
- IsActive
- Last Update Date

GIS to SAP Integration: One-way

This will be a one-way integration going from ArcSDE into SAP. The integration will monitor for meters added to the GIS, and for meters that have been decommissioned. This integration will run nightly due the fact that it will be a resource-intensive process.

The following information is expected to be sent to SAP:
- Item number (Material number), or its component attributes
- Serial number
- Equipment category
- Manufacturer
- Construction Year
- Valid From date
- Register Group
- Inspection relevant
- Description

Assumptions:
- The integration will have access to a version of the meters table. Although the version may be dropped and recreated, the name will not change.
- Only meters will be handled via this integration.
- The County will work with the 3rd party vendor (Vertex) to ensure that the necessary APIs are available for receiving this data.

SAP Work Integration: Two-way

This will be a two-way integration linking SAP service notification (SVN) records and Cityworks service request and work order records. Information is expected to be shared across the systems at several trigger points:

- New SVN created in SAP
- New work order created in Cityworks
- Work order updated, closed, or cancelled in Cityworks

A list of service requests and work order types that will be handled by the integration need to be identified. Assets and specific data fields that will be handled will vary based on the work type, however common data fields that will be updated across systems include:
- Work type
- ID numbers (SVN/SR/WO)
- Description
- Category (preventive, corrective, predictive)
- Status
- Priority
- Location description
- Address
- Comments
- Personnel who initiated/assigned/performed work
- Asset information (e.g., meter or AMR identifier)
- Initiated date
- Projected Start date

- Projected finish date
- Actual start date
- Actual finish date
- Comments
- Instructions
- Account

Assumptions:
- The integration will have access to a version of the meters table. Although the version may be dropped and recreated, the name will not change.
- Only meters will be handled via this integration.
- The County will work with the 3rd party vendor (Vertex) to ensure that the necessary APIs are available for providing and receiving the necessary data.
- The County and Vertex are responsible for all data inserts into and extracts from SAP. An agreed-upon method for managing the handoff of this information with the County middleware will be developed.

GraniteNet

This will be a two-way integration between GraniteNet and Cityworks AMS software using a Commercial Off The Shelf (COTS) solution approach- Cityworks Software Module for GraniteNet or Cityworks' CCTV Interface.

Assumptions:
- The integration capabilities will be limited to the capabilities in the COTS integration components supplied by GraniteNet.
- Integration will not use the County middleware solution.

PAVER 7 (Moved to Track 2 due to incompatibility of Cityworks' PAVER Interface with County's PAVER version)

This will be a two-way integration between PAVER 7 and Cityworks AMS software using a Commercial Off The Shelf (COTS) solution approach- Cityworks' PAVER Interface. Note: Cityworks's current version 15.2 does not have the capability to interface with PAVER 7. It is expected that Cityworks will release an updated version 15.4 that will have the PAVER 7 interface capability. Azteca has not indicated the release date for 15.4. Since Track 1 will Go Live with 15.3, this COTS integration has been moved to Track 2. Once the County upgrades all Track 1 users to a PAVER compatible version of Cityworks post Go Live, Woolpert will consider the PAVER 7 integration along with other Track 2 integration tasks.

Assumptions:
- The integration capabilities will be limited to the capabilities in the COTS integration components supplied by Cityworks.
- Integration will not use the County middleware solution.

SeeClickFix

This will be a two-way integration between SeeClickFix and Cityworks AMS software using a Commercial Off The Shelf (COTS) solution approach.

Assumptions:
- The integration capabilities will be limited to the capabilities in the COTS integration components supplied by SeeClickFix.
- Integration will not use the County middleware solution.

Wonderware to Cityworks: One-way

NOTE 1: A SCADA integration can include the automatic creation of work orders in Cityworks based on SCADA warning and alarm messages. This type of integration is only successful if the messages are valid and justified. Many organization's SCADA systems are programmed to generate messages that are not actionable.. They serve to alert operators of potential issues that never raise to the level of requiring human intervention. Automated work order creation for non-actionable messages are an unnecessary nuisance and can cause O&M personnel to ignore actionable SCADA-triggered work orders. Hence, they are not included in this integration at this time. If, during Discovery, these types of SCADA messages warrant auto-creation of work orders, Woolpert will provide recommendations on an approach to this integration requirement. If the integration is desired by the County, it will be incorporated into the scope via a Change Control Notice.

NOTE 2: A SCADA message will only create a work order in Cityworks, never a Service Request. Work orders should be assigned to an asset record, similar to the SCADA alarm, which monitors and generates messages for specific assets within the system.

This integration is scoped as a one-way integration going from Wonderware to Cityworks and will be executed on predetermined schedule (once a day, most likely nightly). Wonderware readings are captured in a historical equipment reading database. An integration will retrieve these equipment readings on a regular interval and send them to be recorded as readings in Cityworks through the Cityworks API (..\Reading\Add method). Cityworks out-of-the-box meter reading functionality will be configured for assets that will accept periodic readings through the interface and will generate work orders when the readings meet or exceed the thresholds configured for the asset within Cityworks.

A one-way integration will import values from the SCADA readings database to Cityworks. Information can include:

- Point Id
- Reading type
- Last reading value
- Notes

Assumptions:

- Full evaluation of all SCADA (Wonderware) functionality used by the County will be led by Woolpert
- The SCADA point id will match the asset id in GIS
- All readings are available in one reading database
- The County will manually update a table or file to indicate when SCADA devices are swapped, providing the fresh start reading
- The SCADA reading database supports retrieval of the information described here on a regular basis
- The county will obtain a license for the Cityworks Readings API

Fuel Management System: One-way

This will be a one-way integration going from Fuel Management System (FMS) to Cityworks and will be executed on predetermined schedule (once a day, most likely nightly). This integration will take mileage readings from FMS and record them in Cityworks through the Cityworks API (..\Reading\Add method) as readings associated with specific Cityworks asset (a vehicle). Readings will then be configured in Cityworks to create work orders or inspections based on the predetermined thresholds (for example every 3,000 miles oil change work order will be generated).

Grainger KeepStock (Vendor Managed Inventory)

A potential interface to support the Grainger Keepstock program used by PCR will be vetted. If that interface is deemed necessary by the County, it will be incorporated into the scoped deliverables via a Change Control Notice. The driver for this interface is to facilitate recording material charges for Grainger-supplied items on work orders.

A one-way integration will import values from the FMS to Cityworks. Information can include:
- Vehicle Id
- Reading type
- Last reading value
- Notes

Assumptions:
- The vehicle Id from FMS will match the asset Id in GIS
- All readings are available in one FMS database
- The County will manually update a table or file to indicate when readings are reset, providing the fresh start reading
- The FMS database supports retrieval of the information described here on a regular basis
- The county will obtain a license for the Cityworks Metrics API

NAPA TRACS – Costs Integration: One-way

This will be a one-way integration going from NAPA TRACS to Cityworks. Using the NAPA TRACS Accounting Link or other means, NAPA personnel will periodically export from NAPA TRACS information detailing the parts (materials) issued to work orders. The integration will retrieve this information and add the material items as costs on the work orders. The materials are added as Contractor Materials. Any parts that cannot be successfully added to a work order will be reported for manual review.

A one-way integration will import values from the NAPA TRACS to Cityworks. Information can include:
- Item Id/number
- Item description/stock number/account number
- Item quantity
- Item cost
- Date issued
- Issued by/name
- Issued from

Assumptions:
- NAPA TRACS Accounting Link information will include item number, description, cost, quantity, Cityworks work order ID, date issued, and name of person issued to and issued from
- NAPA TRACS Accounting Link can export information into a standard file format that can be consumed by the integration
- The County will be responsible for any licensing and management of the Accounting Link module or other customizations or configuration needed to NAPA TRACS
- Inventory of the materials used are not managed in Cityworks Storeroom; the integration will not update or sync their quantities in Cityworks Storeroom.
- The integration will run once a day (nightly).
- Cityworks work order number will be recoded in NAPA TRACS and will be associated with each material or part that needs to be recorded in Cityworks.

- Each NAPA TRACS record that needs to be processed will contain DateTime stamp that will be used to determine new transactions that need to be processed since that last integration run.
- Item returns will be managed through NAPA TRACS and integration will delete them from work order in Cityworks. It is assumed that when item is returned in NAPA TRACS, it is no longer associated with a work order or is somehow marked as being returned. This is required so that integration code can identify material or part that was returned.
- For work orders with multiple attached assets, the material quantity (and therefore the cost) will be evenly redistributed against all assets attached to the work order. NOTE: Cityworks does not allow for splitting the material so if material quantity cannot be equally redistributed, first attached asset will receive the portion of the leftover quantity/cost.
- The county will obtain a license for the Cityworks Extended Work order API

NAPA TRACS Analysis: Remote Inventory Management

Based on the information uncovered in the Departmental Readiness Assessment conducted as part of Phase 2: Integration Planning phase, there seems to be a lag in the time it takes to get information about parts issued in remote storerooms into the NAPA TRACS system. There may be solutions that could reduce the time it takes to get the information into NAPA TRACS, however, based on current understanding, the solution does not involve an integration built by Woolpert. A requirements-gathering workshop is required to discuss the issue, and then determine if there is a simple solution, such as through NAPA TRACS, Cityworks configuration, or using simple technologies such as email workflows. The output of such a workshop will be a recommendations document.

Assumptions:
- The County will provide a Subject Matter Expert familiar with the NAPA TRACS system and its capabilities for the discussion.

WBS Task 4.3.1: System Integration Planning

Woolpert will begin the planning task developing potential workflows for the integrations between Cityworks and each of the systems identified for integration in Tracks 1 and 2. The potential workflows will be based on Woolpert experience integrating Cityworks with these and similar software solutions for other clients and on discussions about these integrations during the _Phase 2: Integration Planning_ phase. Woolpert will then facilitate on-site discussion with the data managers and stakeholders of each system. The discussion will be to formalize the expectations for the integrations. Woolpert will author a Software Requirement Specification (SRS) documents for each target system integration. Each SRS document will provide the following sections, as appropriate for the integration:

- A vision for the application integration identifying the integration components that must be developed and the team (Woolpert or County) who will develop each component
- High-level system architecture diagrams
- Assumptions
- Data mapping tables
- Lists of functionality requirements and their priorities
- Detailed application workflows
- Detailed integration requirements – this section will further expand upon the functional and technical requirements
- Use case narratives (where applicable)
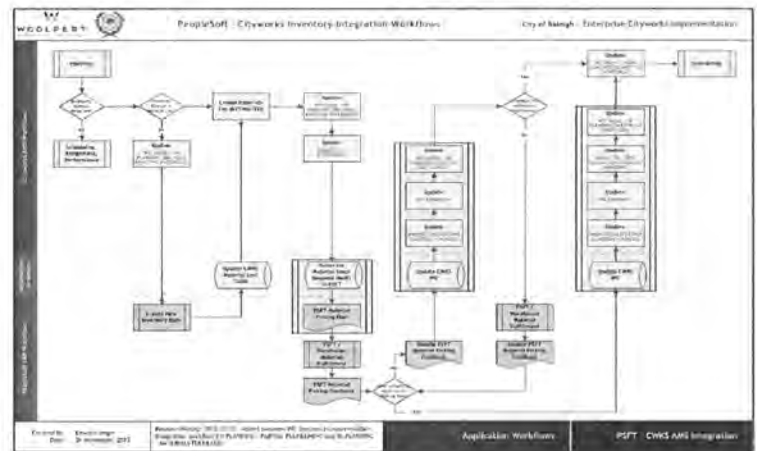
Figure 6 - Sample Application Integration Workflow Diagram

Once the draft SRS documents have been developed, Woolpert will submit them to the County Project Manager for review and comment. Woolpert will then facilitate a series of remote review meetings with the Technical Team members to discuss the findings of their reviews, address their comments, and make adjustments where necessary. Woolpert will update the SRS documents, and validate the scopes, schedules and fees. Woolpert and County project personnel will adjust the project as appropriate based on the finding of this task.

Deliverables

- Woolpert to develop potential data-flow diagrams for each system interface.
- Woolpert to facilitate on-site workshops with the managers, stakeholders and key users of each target system; workshops will be of the following durations:
  - *Track 1*
    - Oracle eBusiness Suite .... Eight (8) hours
    - SAP (Hosted Solution).. Eight (8) hours
    - GraniteNet (No SRS will be developed).............. Four (4) hours
    - SeeClickFix .... Four (4) hours
  - *Track 2*
    - Wonderware SCADA.. Twelve (12) hours
    - NAPA TRACS Inventory....................................... Twelve (12) hours
    - Fleet Fuel Management System.......................... Twelve (12) hours
    - PAVER 7 (No SRS will be developed) .... Not Required (performed in Track 1)
    - Grainger Keepstock (SRS will be if necessary)..... Four (4) hours

- Woolpert to post Pre-planning Discovery meeting minutes for each target system integration
- Woolpert to develop one for each target system—of Integration SRS documents and submit them to the County Project Manager.
- Specifically, in Track 2, Woolpert to develop a NAPA TRACS Analysis Remote Inventory Management Document documenting recommendations from a requirement gathering workshop to address an identified lag in the time it takes to get information about parts issued in remote storerooms into the NAPA TRACS system.

- Woolpert to facilitate remote reviews of the SRS documents with the County for no more than twenty-seven (27) hours; an average of three (3) hours per document.
- Woolpert to modify the SRS documents based on County feedback provided during the remote review session and submit FINAL versions to the County.

Assumptions

- Woolpert will develop integration components that extract data from, or insert data into, the Cityworks and Esri GIS software solutions.
- County Technical Team of third-party contractors will be responsible for developing the integration components that extract data from, or insert data into, software systems other that Cityworks and the Esri GIS.
- All 3rd party software has documented interface capabilities (flat file, interface tables, or web APIs) that support the necessary data exchange
- County Technical Team and business unit staff familiar with the target system will be available and attend each workshop; where County relies on external contractors as subject matter experts, such as Vertex Group for SAP CIS, County will ensure that these external experts attend, are prepared for and actively participate in the workshops.
- All comments and feedback on the SRS documents will be provided during the scheduled document review session. These comments will remain open until they are suitably addressed by Woolpert and accepted by the County. New comments and feedback received after that review session will be considered as enhancements and out of scope for the development effort. The Woolpert/County team will determine the best method for addressing these items.
- Workshops will be grouped to occur over the course of consecutive business days within a single business week (Monday – Friday).

County Responsibilities

- County to participate in pre-workshop discussions.
- County to secure an appropriate meeting facility for the on-site workshops and to coordinate and schedule workshop participants.
- Workshop participants shall actively participate in workshop activities without undue interruption.
- County to review the SRS documents prior to the joint review.
- County will accept the SRS document upon update after the remote review.
- County will review the draft and final documents and provide feedback and approval within the defined timeframes in the project schedule.

WBS Task 4.3.2: System Integration Development and Testing

For each system integration development effort, Woolpert will perform the following tasks:

1. **Coding**
   a. Custom Integrations - Woolpert to develop integration components on County infrastructure in Software AG DEV environment for those interfaces that warrant use of the middleware. **NOTE:** For integrations that require use of the middleware, integration components that insert data into or extract data from systems other than Cityworks and Esri will be developed by the County or third-

party consultants contracted by the County. For clarity and unless otherwise noted, integration components will be referred to a Woolpert-developed (Cityworks and Esri inserts and extracts) and County-developed (inserts and extracts for softwares other than Cityworks and Esri).

b. COTS integrations – PAVER, GraniteNet, and SeeClickFix will not be developed in the County's middleware. No County-developed integration components are expected.

2. **Deployment and Testing**

a. Woolpert to create and test installers, installation scripts, etc. to deploy the Woolpert-developed integration components on County infrastructure in Software AG TEST environment. During this time, County should create similar items for County-developed integrations.

b. Woolpert to support County integration testing Round 1.

c. Woolpert to modify the Woolpert-developed integration components on County DEV infrastructure, as appropriate. Woolpert to update the Integration SRS documents, as appropriate. During this time, County will modify County-developed integration components on County infrastructure, as appropriate.

d. Woolpert to re-deploy Woolpert-developed integration components from the DEV to the TEST County environment. During this time, County should re-deploy County-developed integration components, as appropriate.

e. Woolpert to support County integration testing Round 2. Round 2 component testing will address bugs identified in Round 1.

f. Woolpert to modify integration components on County infrastructure, as appropriate. Woolpert to update the Integration SRS documents, as appropriate. During this time, County will modify integration components on County infrastructure, as appropriate.

g. Woolpert to support County integration testing Round 3. Round 3 component testing will test that the full integration, data flowing out of the source system and into the target system, functions successfully.

h. Prior to End User Training (EUT), Woolpert will deploy the Woolpert-developed integration components in the environment that will be used for EUT. County will deploy the County-developed integration components in the same environment.

1. **Go-Live Planning**

a. Woolpert will work with the County to develop a rollout plan and provide production deployment support.

b. Prior to Go-Live, Woolpert will assist County IT in deploying the Woolpert-developed integration components in the environment that will be used for Go-Live. County will deploy the County-developed integration components in the same environment.

Deliverables

- Woolpert to develop and iteratively test, with participation from the County team, the integration components for each system interface.
- Woolpert to update the Integration SRS documents as appropriate based on the learnings from the development efforts.
- Woolpert to develop Draft and Final versions of the Integration Administrator's Guide.

- Woolpert to develop integration installers and supporting scripts.

Assumptions

- All tasks will be performed remotely.
- The County is responsible for working with 3rd party software vendors to ensure that any configuration necessary to support the integration is tested by the vendor. The County will provide evidence of successful testing prior to Integration Acceptance Testing (IAT).
- The County will coordinate with the 3rd party software vendor for support during testing (IAT).
- Any necessary Cityworks configuration to support the integration will be coordinated with and performed prior to UAT Testing.
- Once an SRS has been approved by the County, any requested changes that add a new, or change an approved integration requirement as defined in the SRS document will be considered an enhancement and out of the development scope of work. The Woolpert/County team will collectively determine how to handle the requirement.
- The County is responsible for the maintenance and administration of the systems and architecture supporting the integrations, including Software AG WebMethods Integration Server and the County's chosen JMS messaging provider.
- The County will provide development workstations with access to all necessary software.
- The County will provide Woolpert with access to source control tool that allows Comparing and Merging code. Lack of access to this tool could lead to loss of work and duplicated effort resulting in schedule and cost delays.
- GIS readiness responsibilities are defined in Phase 8.

County Responsibilities

- County will develop a suitable testing environment that includes a testing version of all the source and target software solutions. The environment should include, at a minimum, Cityworks, Esri, OPUS, SAP, SeeClickFix, PAVER 7, GraniteNet, Wonderware, Fuel Management System, NAPA and TRACS. The testing environment should match, as closely as possible, all aspects of these systems' production environments, including, but not limited to, server specifications, project version, network architecture (firewalls, switches, security, etc.), system configuration, etc., and a recent version of the production database should be restored to each testing system prior to testing activities.
- County to be responsible for the development of the integration components as identified during the previous task.
- County Technical Team to actively participate in the testing sessions of the integration components.
- County Technical Team to identify Lead Integration Administrator for each integration (can be same or different people for each integration) who will be responsible for installing, configuring, and managing the integration under the direction of the Woolpert Lead Integration Developer.
- County to identify Integration Testing Team to develop Integration Acceptance Test Scripts, conduct testing, and document results.
- County will license the necessary Cityworks APIs (Metrics, Inspections, Work Order – Advanced, etc.).
- County to review the SRS documents prior to the joint review.

- County will accept the SRS document upon update after the remote review and verification by the County that updates accurately reflect County feedback and comments have been addressed.
- County will review the draft and final documents and provide feedback and approval within the defined timeframes in the project schedule.

WBS Task 4.4: Phase 4 Quality Control

Woolpert will apply the Quality Management Process stated earlier in this scope document to Phase 4 tasks, activities and deliverables.

WBS Task 4.5: Phase 4 Acceptance and Close

This is the Phase exit document that County signs indicating Woolpert has delivered the Advanced Functionality Phase in accordance with the Scope of Work and Project Plan.

Phase 5 – System Deployment

Once the Cityworks solution has been configured and the advanced functionality items deployed, Woolpert will lead the County Implementation Team through a series of related deployment tasks that will ensure a fully tested and accepted solution, as well as a County team of fully trained system administrators and end users who are ready to put the system to use daily.

Woolpert recognizes that there will be approximately 545 stakeholders in Track 1 and 506 in Track 2 in the system once it is fully utilized by all planned users in their respective tracks. To reduce risk associated with Go-Live, Woolpert will perform two distinct Go-Live efforts, one for the Public Works divisions and one for the Utilities divisions in Track 1 and five distinct Go-Live efforts in Track 2 for divisions within each of the five participating departments plus a separate one for the REM department's Fleet division.

Woolpert will develop a thorough Testing and Acceptance Plan (TAP) for all aspects of the new system. The TAP documents entry and exit criteria for User Acceptance Testing (UAT). The test plan (an accompanying document to the TAP) is designed to step the testers through the configured solution and ensure that all the configurations meet the specifications defined by the business. The Test Plan as well as the Testing and Acceptance Plan will be developed with assistance and input from the County team and then submitted to the County for review and acceptance.

Following acceptance of the UAT planning documents, Woolpert will facilitate on-site Tester Training sessions.

In Track 1, Woolpert will be responsible for tasks and activities related to preparing the UAT Planning and on-site testing. In Track 2, UAT Planning will be the sole responsibility of the County whereas on-site testing will be equally shared by the County and Woolpert.

Woolpert will follow a structured End User Training (EUT) program and develop the following training materials to support End User Training activities:

1. Training Videos
2. Training Class Plans and Handout Materials
3. Training Class Assessments

> **Key Enterprise System Deployment (Phase 5) Deliverables**
> - UAT Planning Documents
> - User Acceptance Testing
> - End User Training
> - Go-Live Support

Woolpert will provide a Training Curriculum that describes the training classes, pre-requisites for each class, intended audience, learning objectives, etc. Logistical details about the training itself will be developed closer to delivery of these services and included as an addendum to the training curriculum.

Training Videos

Woolpert will create video tutorials for common work steps that will be performed by many end-users. The goal is for the County to have a repository of supplementary training videos that illustrate functions that will need to be reinforced to existing staff and while onboarding new staff. These videos will also serve as a supplement to on-site End User Training reinforcement activities. A sample list of Training Videos may include the tutorials listed in the table below.

Training Video Library		
• Navigating the user interface • Using the Inbox • Using the map 1 – Navigation • Using the Map 2 – Working with layers • Using the Map 3 – Locating an address or intersection • Using the Map 4 – Creating and using Bookmarks • Using the Map X – Whichever other tools are relevant to Pinellas Co • Creating a service request	• Working with service request search results • Creating a saved service request search • Creating an unattached work order • Creating an attached work order • Creating a work order from a service request • Creating a child work order • Searching for work orders • Creating a saved work order search • Searching for service requests	• Working with work order search results • Creating an unattached inspection • Creating an attached inspection • Creating an inspection from a work order • Searching for inspection • Creating a saved inspection search • Working with inspection search results

A sample Training Video that Woolpert has created on "Using the Quick Search Tool in GIS Viewer" is available on the Woolpert iMeet site created for this project.

Majority of the Training Videos will be created in Track 1. Track 2 implementation may warrant creation of some additional videos to supplement those that were created in Track 1. Woolpert and the County will collectively agree and prioritize the topics for these videos to be created in Tracks 1 and 2 within the allocated budget.

Training Class Plans and Handout Materials
Once the training classes have been identified, class plans will be developed to summarize the objectives, target audience, and key concepts/system functions that will be taught. A sample list of Training classes will include the following:

1. *System/Domain Administrator Training* – Administration training is designed for those individuals who after go-live will maintain the system with updates, additions, deletions, security management, and system troubleshooting. These individuals are identified prior to configuration workshop rounds. Cityworks Administrator training consists of the Cityworks Designer Module. This is a thorough training of all components applicable to the County for system administrators

2. *AMS A & B* – End User Training for work management includes training of the inbox, map, service request, work order, and inspection modules of the Cityworks AMS end-user product. This training is designed for all users who will require access to Cityworks to perform their daily job functions. This end-user training is a slower paced training course and allows the Woolpert trainer and the training room proctor (Woolpert or County team member) to manage the room and attend to the participants' learning pace appropriately.

3. *Reporting/Dashboard Training* – End User Training for reporting, and dashboards is designed for County staff interested in pulling information from Cityworks rather than the day-to-day use of Cityworks. Topics

include learning how to create saved searches and add them to the map (event layers), create charts and graphs from searches, run reports, etc.

4. *Storeroom Admin/Transaction Training* – Storeroom training is for the Warehouse staff to learn and understand how the Storeroom module functions. This training is designed for all users who will require access to Cityworks Storeroom to perform their daily job functions. This end-user training is a slower paced training course and allows the training room proctor (Woolpert or County team member) to manage the room and attend to the participants' learning pace appropriately.

Customized hand out materials/slide decks/demos for each Division/group will be developed for use and distribution during the training classes. For example, AMS A Training class will have identical structure and topics throughout Tracks 1 and 2. However, end users from respective division/groups will work within their Department's Cityworks domain during training and handouts/demo will refer to their division's assets, workflows, and maps where possible.

Training Class Assessments

Trainee assessment questionnaires will be used to gauge the readiness of each trainee for system use in a production environment. The objective of the in-class self-assessment is to quickly gage the effectiveness of the training and offer the opportunity for reinforcement training prior to Go Live.

Woolpert will develop electronic assessment forms customized to the content of the Training Class. The forms will be created in Cityworks itself where the users will be required to take the assessment before logging off at the end of their training class. Woolpert will develop a method to query the assessment results once they are submitted by the end users and display it instantly for the Woolpert Trainer/Classroom Proctor and County Project/Core Team members. This exercise is expected to help instantly identify those end users that may need follow up reinforcement training and facilitate scheduling of a follow up class to be offered during the same week or the next.

All training materials will be developed in conjunction with the County's input and feedback. Two scheduled reviews of training materials (Interim and Final) will provide formal feedback. However, it is expected that informal reviews of the materials prior to Final review will also be a normal part of material development process. A final, formal review and acceptance of the training materials will be conducted to ensure both Woolpert and County personnel are fully aligned with the materials.

End User Training will be scheduled and delivered immediately prior to the Go-Live activities to ensure system administrators and end users are prepared to adopt and embrace the new technology solution right out of the gate. With a user community as large as the ones in both implementation tracks, all training for end users within the same department will occur within one (1) month prior to Go-Live for that Department. To accomplish training the number of users involved in both implementation tracks, Woolpert expects that County Core and Implementation Team members will be heavily involved as Proctors in the classroom training.
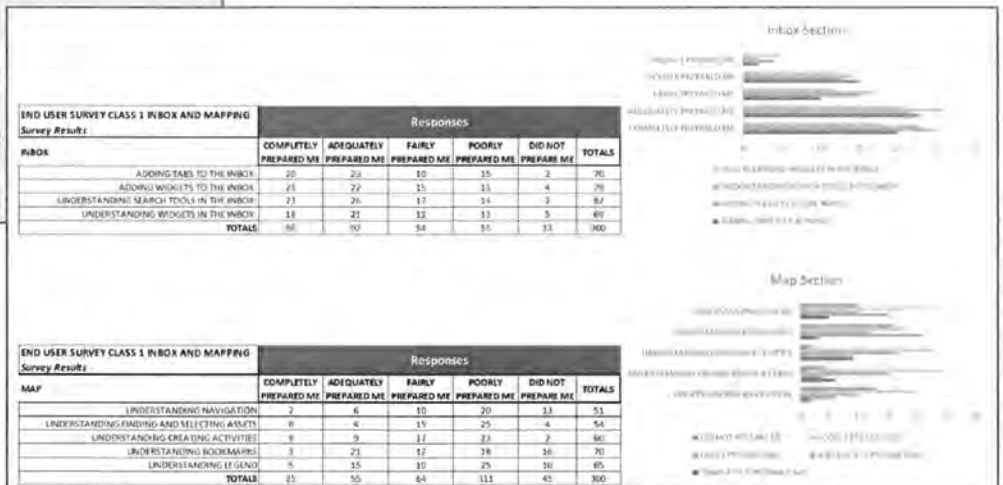
Prior to User Acceptance Testing, End User Training and Go-Live activities, Woolpert and the County system administrators will construct and/or validate that the appropriate environments are established for each set of activities. Ensuring that the appropriate environments exist will be a shared responsibility. Requirements prior to each activity include ensuring that the necessary test versions of each system are properly installed and configured for the system integrations, performing all Cityworks database configurations, migrating legacy data, and installing integration components.

Woolpert will support the Go-Live activities for two (2) distinct waves; one for the Public Works divisions and one for the Utilities divisions in Track 1.

Woolpert will support the Go-Live activities for five (5) distinct waves; one each for Utilities, Real Estate Management, Fleet, Solid Waste, and one combined for Parks Conversation and Resources and Public Works divisions in Track 2.

WBS Task 5.1: Test Plans

The focus of system testing efforts is to thoroughly test the newly installed/configured Cityworks AMS solution and ensure all global and application workflows and configuration templates (SR/WO/Inspection) are functioning properly.

Woolpert will take the lead on developing a Testing and Acceptance Plan and a Test Plan (collectively referred to as "UAT Planning documents" henceforth) in Track 1. This will be a County owned responsibility in Track 2. Woolpert will facilitate one (1) week of on-site workshops in Track 1 with the involved divisions to collectively define the test plans. UAT Planning documents will derive their focus from the previously prepared AMS system configuration documents, business process workflows, user rights and permissions defined in the global configuration workshops. Test scenarios designed to step testers through the UAT process will be developed as part of this plan. Final plan contents will be a combination of configuration element testing and scenario-based scripts that will allow users to test real situations utilizing the software.

Woolpert will submit a draft version of the UAT Planning documents for County review. Woolpert will facilitate a joint review of these documents. Woolpert will make the requested updates to the UAT Planning document and resubmit the documents in their final version. Actual UAT will only begin after the County accepts the UAT Planning documents.

The County will take on all UAT Planning documentation development in Track 2.

Deliverables

- Woolpert will facilitate up to five (5) days of on-site workshop with the County implementation team to identify the test plan requirements/components. It is estimated that Divisions/groups within Utilities and Public Works will require one and a half (1.5) and two and a half (2.5) days of workshops, respectively, in Track 1. However, the workshop days can be reallocated as necessary if it is believed that some groups will require additional (or less) time to define their testing requirements.
- Woolpert will develop the test plans as defined in the workshops in Track 1.
- Woolpert will facilitate one remote review meeting with the County Testing Team for up to four (4) hours in duration in Track 1.
- Woolpert will update the UAT Planning documents per the results of the review meeting and re-submit the final version to the County in Track 1.

Assumptions

- Test plan collaborative workshops will be conducted over the course of one (1) business week in both Tracks, Monday – Friday.
- UAT is testing for system configuration only. Integration, Migration and Reporting Testing is handled separately.
- Woolpert will have no involvement in the development of these materials or in executing this task (WBS Task 5.1) in Track 2.

County Responsibilities

- County testing team will attend and actively participate in the appropriate Test Plan development workshops.

- County testing team will participate in the remote reviews of the UAT plans.
- County testing team will accept the UAT Planning documents.
- County will take full ownership of this task (WBS Task 5.1) in Track 2.
- County will review the draft and final documents and provide feedback and approval within the defined timeframes in the project schedule.

WBS Task 5.2: User Acceptance Testing (UAT)

Woolpert and County team members will ensure that an appropriate UAT environment exists prior to UAT activities. The specifications of the UAT environment will be determined provided in the UAT Planning documents, however, it is expected that the environment will contain:

1. All of the Cityworks configurations and customizations that will be included in the production environment.
2. A copy of the production GIS.

Once the UAT environment is established, there are two (2) main components to UAT; tester training and user acceptance testing. It will be the responsibility of the County to select a Testing Team consisting of implementation team members, future end-users and application support staff who will execute the testing of the newly configured Cityworks solution and other items associated with the enterprise Cityworks AMS solution.

To effectively test the system in accordance with the Test Plans, training will be provided to the testing team. The training will take place over four (4) days for Track 1 and five (5) days for Track 2; each within a single business week. In Track 1, Tester training has been estimated as two (2) days for each of the Utilities and Public Works testers, but the actual use of the four days of tester training will be determined by the Woolpert/County project team closer to the scheduled date of testing. Similarly, in Track 2, Tester training has been estimated as one (1) day each for Utilities, REM, PCR, Solid Waste, and Public Works testers, but the actual use of the five days of tester training will be determined by the Woolpert/County project team closer to the scheduled date of testing.

During the tester training, Woolpert will instruct the testers how to read the test scripts, how to record a test scenario as Pass or Fail, what to do when they think they find an error, and the information they must record to ensure that the error can be recreated. Woolpert will instruct the testers how to process work transactions including, but not limited to, Service Requests, Work Orders and Inspections. **This instruction will not include the additional context that end users receive during end user training, only enough direction to complete the testing tasks.** Woolpert will instruct the testers how to process inventory and replenishment transactions, including, but not limited to, low-stock and ad-hoc replenishment requisitions, receiving materials into stock, and transferring/issuing materials between storerooms and to work orders. **This instruction will not include the additional context that end users receive during training, only enough direction to complete the testing tasks.**

Once all testers have been trained, the County testing groups will, one-by-one, execute the UAT test scenarios defined within the plan in the designated Cityworks testing environment. There will be two rounds on on-site testing activities in both Tracks 1 and 2. In Track 1, each round will be 1 week of on-site testing support; a total of 2 on-site weeks. In Track 2 each round will be 3 weeks of on-site testing support, a total of 6 on-site weeks. Most of the required corrections will be completed while Woolpert is on-site and the County testing team can retest immediately. Failed test scenarios that require additional time to correct will be completed remotely and retested during subsequent testing sessions or via a WebEx meeting.

All test scenarios will be marked as either "pass" or "fail" with appropriate notes and screen shots provided to Woolpert for resolution. Testing and related configuration updates will continue until acceptable performance is achieved as defined within the Test Plan.

Deliverables

- Woolpert to develop all tester training materials in Track 1.
- Woolpert and County to share tester training material development effort in Track 2.
- Woolpert and County to jointly prepare the UAT environment.
- Woolpert will provide up to four (4) days of tester training in Track 1. Tester training has been estimated as two (2) days for each of the Utilities and Public Works testers. However, the actual use of the four days of tester training will be determined by the Woolpert/County project team closer to the scheduled date of testing.
- Woolpert will provide up to five (5) days of tester training in Track 2. Tester training in this track has been estimated as one (1) day each for Utilities, REM (including Fleet), PCR, Solid Waste, and Public Works testers, but the actual use of the five days of tester training will be determined by the Woolpert/County project team closer to the scheduled date of testing.
- Woolpert will provide up to five (5) days during each of the two rounds of system testing in Track 1. Each 5-day round to be completed during a single business week. Woolpert on-site testing support for all Utilities Divisions/groups will be scheduled over two (2) days during the week and on-site testing support for all Public Works Divisions/groups will be scheduled over a different two (2) days within the week. For the fifth day in the week, the Woolpert/County team will determine where to staff Woolpert support. The Woolpert/County project team can reallocate Woolpert's on-site testing support resource, as necessary, to deliver testing support as the team deems most appropriate.

  Both Round 1 and Round 2 on-site testing support are currently scoped as follows:
  - Utilities Divisions/Groups ....2 days/16 hours
  - Public Works Divisions/Groups ....2 days/16 hours
  - Overflow Testing Time (used at PMs' discretion) ....1 days/8 hours

- Woolpert will provide up to fifteen (15) days for each of the two rounds of system testing in Track 2 over three (3) business weeks. Testing activities for all Divisions/groups in each of the five departments are scheduled such that they do not overlap. For example, all Solid Waste Division/groups are scheduled to go through UAT with Woolpert on-site support over a single two (2) day period. Subsequent Track 2 Division/groups will test over other 1 or 2 day spans during which time the remaining Division/groups will not perform testing with Woolpert support. The Woolpert/County project team can reallocate these days, as necessary, to deliver testing support as the team deems most appropriate.

  The three-week breakdown for both Round 1 and Round 2 testing support are currently scoped as follows:

  ### Week 1 UAT
  - Utilities and Solid Waste Divisions/Groups ....2 days/16 hours
  - REM Divisions/Groups ....2 days/16 hours
  - Overflow Testing Time (used at PMs' discretion)...............................1 days/8 hours

  ### Week 2 UAT
  - REM Divisions/Groups ....2 days/16 hours

- o PCR Divisions/Groups ....2 days/16 hours
- o Overflow Testing Time (used at PMs' discretion)...............................1 days/8 hours

Week 3 UAT

- o PCR Divisions/Groups ....2 days/16 hours
- o PW Divisions/Groups ....2 days/16 hours
- o Overflow Testing Time (used at PMs' discretion)...............................1 days/8 hours

- Woolpert will make the necessary updates to the Cityworks AMS Configuration, Cityworks AMS Configuration Document, System Integrations and System Integration Documents where testing results show a deviation from the documented requirements.

Assumptions

- All on-site Tester Training activities will occur within a single business week (Monday – Friday) in both Track 1 and Track 2.

- All on-site Testing Support for Round 1 will occur within one business week (Monday – Friday) in Track 1 and three business weeks in Track 2.

- All on-site Testing Support for Round 2 will occur within one business week (Monday – Friday) in Track 1 and three business weeks in Track 2.

- County will ensure the key team members are available to support the testing updates.

- All defects ("fail" scenarios) will be catalogued and prioritized to be addressed either before Go Live or post Go Live. Prioritization criteria will be defined in the Testing and Acceptance Plan document.

- In some instances, defects that cannot be corrected and successfully retested during the on-site testing periods will be corrected remotely and validated by the County testers during a WebEx demonstration. Woolpert or County team members will retest the failed scenarios and the County will provide acceptance of the fix. This applies only to those defects that are categorized as ones that need to be addressed before Go Live.

County Responsibilities

- Participate in the preparation of the UAT environment.

- Assume full ownership of UAT Planning documentation in Track 2.

- Provide one (1) lead resource to share the level of effort with Woolpert UAT Lead for on-site testing in Track 2.

- Ensure that the appropriate testers attend the tester training and user testing activities. Testers will include users in systems integrated in Track 1 and 2.

- Distribute training materials to the County testing team prior to the scheduled training sessions.

- Secure appropriate training facilities and schedule/ensure that trainees attend sessions.

- Schedule and accommodate the appropriate County testing team members such that they are available, without undue interruption, for the required number of days.

- County will review the draft and final documents and provide feedback and approval within the defined timeframes in the project schedule.

WBS Task 5.3: End-User Training (EUT)

Woolpert and County team members will ensure that an appropriate EUT environment exists prior to EUT activities. The specifications of the EUT environment will be determined when the team is preparing for EUT activities, however, it is expected that the environment will contain:

1. All of the Cityworks configurations and customizations that will be included in the production environment.

2. A copy of the production GIS.

3. All legacy data migrated per the migration task.

4. A working version of all system interfaces with test versions of those target systems.

Once the EUT environment is established, there are two (2) main components to EUT; 1) development of training materials and 2) delivery of end user training. The Woolpert/County team will collectively identify the complete list of roles configured in Cityworks/Global Workflows at the outset of this task. The team will determine the duration of the training effort, number of classes required to train each group, general overview of class content, timing of training relative to Go-Live (e.g., 1 week before, 2 weeks before), and criteria for self-assessment. The Woolpert/County team will develop a complete list of supplementary training videos, classroom plans, trainee assessments, and classroom training materials.

Once this complete list is agreed-upon, Woolpert will take the lead in developing all training materials within allocated budget in both Tracks. County team's direct involvement in the development of materials, if any, will be determined once the complete list of materials is known. At a minimum, County team will provide periodic review and feedback of the training materials. County reviews of training materials are scoped twice (interim and final) through the development process but can be performed more or less frequently as determined by the project team. County will provide formal acceptance for all materials prior to beginning end user training.

Woolpert will provide up to six (6) weeks of on-site end user training in each Tracks. In Track 1, on-site weeks 1, 2, 4, and 5 will consist of up to forty (40) hours of training time from two (2) Woolpert trainers, each leading a training session and each supported by one (1) County team member as Proctor. Weeks 3 and 6 are Reinforcement Training weeks consisting of up to twenty-four (24) hours of training time from two (2) Woolpert trainers, each leading a training session and each supported by one (1) County team member as Proctor.

In Track 2, first four on-site weeks will consist of up to forty (40) hours of training time from one (1) Woolpert trainer and one (1) County trainer each leading a training session and each supported by one (1) County team member as Proctor. The fifth on-site week will consist of up to sixteen (16) hours of training time from one (1) Woolpert trainer and one (1) County trainer each leading a training session and each supported by one (1) County team member as Proctor. The sixth on-site week will consist of up to thirty-two (32) hours of training time from one (1) Woolpert trainer and one (1) County trainer each leading a training session and each supported by one (1) County team member as Proctor.

A training class is run by one trainer and assisted by a second. Maximum class size is assumed at 20 participants. In Track 1, the County will staff a second trainer/Proctor in each class allowing the two (2) Woolpert trainers to offer two classes simultaneously. Estimated training hours (assumes 2 Woolpert trainers each supported by one County trainer in each class in Track 1 and only one Woolpert trainer in Track 2) are shown in the following table. The actual training schedule will be determined when this task is executed. To optimize the duration of EUT and accommodate the number of stakeholder in each Department/Division/group within the constraints of a class size of 20, classes are designed to run currently in 4-hour blocks of time.

Below is a breakdown of the planned training courses to be led by Woolpert.

Track 1 → Week 1 & 2 → Public Works (5 Days)

1. AMS A → eight 4-hour classes → 2 classes running concurrently............................2 Days
2. AMS B → eight 4-hour classes → 2 classes running concurrently............................2 Days
3. System Administration → two 4-hour classes ....0.5 Days
4. Storeroom Transaction/Admin → two 4-hour classes..0.5 Days

Track 1 → Week 3 → Public Works Reinforcement (3 Days)

1. AMS A → four 4-hour classes → 2 classes running concurrently ....1 Day
2. AMS B → four 4-hour classes → 2 classes running concurrently .... 1 Day
3. System Administration → two 4-hour classes ....0.5 Day
4. Storeroom Transaction/Admin → two 4-hour classes... 0.5 Day

Track 1 → Week 4 & 5 → Utilities (5 Days)

1. AMS A → eight 4-hour classes → 2 classes running concurrently............................2 Days
2. AMS B → eight 4-hour classes → 2 classes running concurrently............................2 Days
3. System Administration → two 4-hour classes ....0.5 Day
4. Storeroom Transaction/Admin → two 4-hour classes... 0.5 Day

Track 1 → Week 6 → Utilities Reinforcement (3 Days)

1. AMS A → four 4-hour classes → 2 classes running concurrently ....1 Day
2. AMS B → four 4-hour classes → 2 classes running concurrently .... 1 Day
3. System Administration → two 4-hour classes ....0.5 Day
1. Storeroom Transaction/Admin → two 4-hour class ....0.5 Day

Track 2 → Week 1 → Utilities Plant Operations

1. AMS A → five 4-hour classes → 2 classes running concurrently............................1.5 Days
2. AMS B → five 4-hour classes → 2 classes running concurrently ....1.5 Days
3. System Administration → one 4-hour class..0.5 Day
4. Storeroom Transaction/Admin → two 4-hour classes.. 0.5 Day
5. AMS A (Reinforcement)→ three 4-hour classes → running concurrently............... 0.5 Day
6. AMS B (Reinforcement)→ three 4-hour classes → running concurrently............... 0.5 Day

Track 2 → Week 2 → PCR

1. AMS A → eight 4-hour classes → 2 classes running concurrently............................2 Days
2. AMS B → eight 4-hour classes → 2 classes running concurrently............................2 Days
3. System Administration → one 4-hour class..0.5 Day
4. Storeroom Transaction/Admin → two 4-hour classes.. 0.5 Day

Track 2 → Week 3 → PCR & Public Works

1. AMS A → two 4-hour classes → 2 classes running concurrently............................. 0.5 Day
2. AMS B → two 4-hour classes → 2 classes running concurrently............................. 0.5 Day
3. System Administration → one 4-hour class..0.5 Day
4. Storeroom Transaction/Admin → two 4-hour classes.. 0.5 Day
5. AMS A (Reinforcement)→ six 4-hour classes running concurrently ....1.5 Days
6. AMS B (Reinforcement)→ six 4-hour classes running concurrently ....1.5 Days

Track 2 → Week 4 → REM

1. AMS A → seven 4-hour classes → 2 classes running concurrently .... 1.75 Days
2. AMS B → seven 4-hour classes → 2 classes running concurrently....................... 1.75 Days
3. System Administration → one 4-hour classes .... 0.5 Day
4. Storeroom Transaction/Admin → two 4-hour class .... 0.5 Day
5. AMS A (Reinforcement)→ one 4-hour class runs concurrently with Sys Admin ..... 0.5 Day
6. AMS B (Reinforcement)→ two 4-hour classes running concurrently .... 0.5 Day

Track 2 → Week 5 → REM Reinforcement

1. AMS A (Reinforcement)→ four 4-hour classes running concurrently .... 1 Day
2. AMS B (Reinforcement)→ four 4-hour classes running concurrently .... 1 Day

Track 2 → Week 6 → Solid Waste

1. AMS A → four 4-hour classes → 2 classes running concurrently .... 1 Day
2. AMS B → four 4-hour classes → 2 classes running concurrently .... 1 Day
3. System Administration → one 4-hour class .... 0.5 Day
4. Storeroom Transaction/Admin → two 4-hour class .... 0.5 Day
5. AMS A (Reinforcement)→ two 4-hour class → running concurrently.................... 0.5 Day
6. AMS B (Reinforcement)→ two 4-hour classes → running concurrently .... 0.5 Day

Each class will be facilitated on-site at County identified training facility.

Deliverables

- Woolpert will develop a maximum of twenty-four (24) training videos in Track 1 and twelve (12) additional videos in Track 2 from a prioritized list agreed to by Woolpert and the County, duration of each video not to exceed 5 minutes.
- For each class, Woolpert will develop an Agenda, Syllabus and required custom training materials (manuals, quick reference guides, etc.) to support the class.
- Woolpert will facilitate two (2) formal reviews (interim and final) of the training materials. Woolpert may request ad-hoc reviews with County team between formal review sessions.
- Woolpert to support preparation of the EUT environment.
- Woolpert will provide two (2) analyst resources on-site for up to one hundred and ninety-two (192) hours each for End User Training in Track 1.
- Woolpert will provide one (1) analyst resource on-site for up to two hundred and eight (208) hours for End User Training in Track 2.

Assumptions

- Training will occur over six (6) business weeks (Monday – Friday). Training weeks may not be consecutive.
- Training materials will not be edited after final approval.
- Each class will be facilitated by two Woolpert trainers in Track 1 and one Woolpert trainer in Track 2.
- County has adequate training facilities that can accommodate the number of staff to be trained in the classes identified within this scope of services.

- County trainers will be staff members who have been involved with the project in a capacity that has allowed them to learn system configuration and use through their assigned role. Their participation in user training activities will not be their first introduction to the software. Upon completion of the scoped training, County trainers, who either led or supported the Woolpert-supported training classes, will be able to further train their end-users (with minimal or no support from Woolpert) if additional follow up training is required above and beyond the scoped Reinforcement training.

County Responsibilities

- Co-develop the list of County roles to be trained and details of each training class. Participate in the development of training materials as determined at that time.
- Participate in the formally-scheduled and ad-hoc training material reviews.
- Participate in the preparation of the EUT environment.
- Secure an appropriate training facility.
- Coordinate and schedule training participants.
- Participate in the training classes, as appropriate. County must provide a Trainer in Track 2 that can describe the integrations to other business systems where applicable to a training class.
- Provide hard-copies of training materials, as appropriate.
- Administer training surveys and ensure that trainees provide the requested feedback in addition to the in-class assessments planned in this scope.
- Ensure that training participants actively participate in training activities.
- County will review the draft and final documents and provide feedback and approval within the defined timeframes in the project schedule.

WBS Task 5.4: Provide Go-Live Support

Woolpert and County team members will ensure that the production version of the Go-Live environment exists prior to Go-Live activities. The Go-Live environment will contain:

1. All the Cityworks configurations and customizations that will be included in the production environment.
2. A connection to the production GIS.
3. All legacy data migrated per the migration task.
4. A working version of all system interfaces with production versions of those target systems.

During Go-Live support in both Tracks, two Woolpert analyst resources will be on-site to support County end-users and system administrators as they encounter the typical issues associated with any Go-Live. As the issues subside, Woolpert will work with individuals, typically system administrators and heavy users who want to get more out of their new solution, to provide additional coaching and supplemental training services, on an as-needed and as-available basis. Go-Live week is also a time where known tasks that were identified after the configuration was 'frozen' can be executed to 'catch the system up' based on the defect prioritization scheme as discussed in the UAT section of this scope. For example, if additional employees, materials or equipment were identified after the cutoff point for new data, the System Administrator would load these items during the Go-Live week so that, if they were to run into issues, the on-site Woolpert resource could provide immediate assistance. Beyond the on-site go-live support, Woolpert has scoped remote go-live support for a period to time. During this time, the Woolpert team will ensure their availability remotely to work through with any lingering issues.

For Track 1, Go-Live has been scoped in two waves; one for Public Works and one for Utilities. The effort to develop the production-worthy environment will be performed only once. All other tasks will be performed once for each Go-Live effort. The Public Works Go-Live will immediately follow Week #3 of the Public Works Reinforcement End User Training. This is designed to swiftly facilitate the end users in Public Works, who were put through End User Training, to apply the learning in their daily function by giving them access to a live production version of Cityworks AMS. The same process occurs for Utilities as well, Go Live follows Week # 6 of the Utilities Reinforcement End User Training.

In Track 2, Go-Live has been scoped in five waves; one each for Utilities, REM, Fleet, Solid Waste and one wave for PCR and Public Works combined. Like Track 1, each Department's Go-Live wave immediately follows the End User Training imparted for Division/groups belonging to that department.

Deliverables

- Woolpert will support deployment of Cityworks AMS into the Production environment for each wave.
- Woolpert to provide on-site support for up to forty (40) hours each for two Analysts to support the Go-Live activities for each Go-Live week in Tracks 1 and 2.
- In Track 1, Woolpert will provide up to one hundred (100) hours of remote post go-live support immediately following the on-site go-live support, hours begin immediately after completion of the on-site support for first go-live support wave and all hours to be consumed no later than one (1) month after the end of the second on-site Go-Live support wave.
- In Track 2, Woolpert will provide up to two hundred (200) hours of remote post go-live support, hours begin immediately after completion of the on-site support for first go-live support, and all hours to be consumed no later than one (1) month after the end of the fifth on-site Go-Live support wave.

Assumptions

- County will sign-off and accept the end user training prior to the go-live cutover tasks and on-site end user and system administrator support efforts.
- County Project Manager will provide project sign-off within agreed upon timeframe following Go-Live.

County Responsibilities

- County Project Manager and IT support staff should equally assist in administering the Go-Live tasks to make sure it is clear to the End-Users that County is internally capable of supporting the newly deployed Enterprise solution. The County system administrators and IT support staff will benefit from learning basic Cityworks troubleshooting routines during this time beyond the admin training class that they will also attend.
- County will review the draft and final documents and provide feedback and approval within the defined timeframes in the project schedule.

WBS Task 5.5: Phase 5 Quality Control

Woolpert will apply the Quality Management Process stated earlier in this scope document to Phase 5 tasks, activities and deliverables.

QUALITY MANAGEMENT

WBS Task 5.6: Phase Acceptance and Close

This is the Phase exit document that the County Project Manager signs indicating Woolpert has delivered Deployment phase services in accordance with the Scope of Work and Project Plan.

Phase 6 – Extended Support

Post Go-Live, as the Asset Management System is leveraged to support daily maintenance management and asset sustainability objectives, the system end-users will undoubtedly identify additional system modifications and enhancements they would like to see implemented into the configuration. Users will identify workflow enhancements, new user- defined custom fields to capture additional data, modifications to in-boxes and dashboards, new and modified custom reports, and even perhaps additional system integrations. Some of these elements may have been already identified as "nice to have" during the core system implementation but were not made part of the scope at that time – we refer to this as "being placed in the parking lot for future consideration."

WBS Task 6.1: Extended Review and Modifications

Woolpert will facilitate a series of extended system configuration reviews and modifications. The intent of these extended reviews/modifications is to give the County system users and administrators an opportunity to monitor and assess system usage and efficiencies over an extended period of time post Go-Live. During scheduled reviews, the County will likely identify configuration modifications that are desired to support new or modified business objectives. Woolpert will facilitate up to two (2) review/modification sessions, one at thirty (30) days and one at ninety (90) days after the last Go-Live wave in Track 1. Because the County will be positioned to make administrative changes as required, Woolpert will not provide any Extended Support after Track 2 Go Live.

Each extended review session will have three (3) parts; an on-site review of the County issue list, a technical memorandum from Woolpert proposing the items that should be addressed and how they should be addressed, and the effort to address the items. The review of the County issue list will be performed on-site at County facilities. Woolpert will work though the issue list as prioritized by the County. Woolpert will meet with the necessary system administrators and end users to more fully understand the issues. After the on-site review sessions, Woolpert will work remotely to document all the meeting discussion points and decisions and use this information to generate a Modifications Plan. This Technical Memorandum will be submitted to the County for review and then Woolpert will facilitate a joint review of the document. Upon agreement, Woolpert will work remotely with the County system administrators to execute the modifications.

Any items of the County issue list that were not able to be addressed within the allocated number of hours will be revisited, as their priority dictates, during the next extended review period.

Deliverables

- The following deliverables are applicable to each of the two (2) review sessions:
  - Woolpert will facilitate an on-site Modifications Review Meeting up to three (3) days in duration with the County system administrators and end users.
  - Woolpert will generate a Modification Plan technical memorandum.
  - Woolpert will facilitate a review meeting up to four (4) hours in duration with the County team to review the tech memo.
  - Woolpert will deliver up to a total of forty (40) hours of system design, configuration, testing, and deployment services to achieve the goals of the 30-day Modification Plan in Track 1.

- Woolpert will deliver up to a total of sixteen (16) hours of system design, configuration, testing, and deployment services to achieve the goals of the 90-day Modification Plan in Track 1.

Assumptions

- All system design, configuration, testing, training and deployment tasks are scoped to be performed remotely.
- Any work that the Client determines needs to be performed on-site, instead of remotely, will need to be fit within the allocated budget, or the budget will need to be adjusted accordingly.

County Responsibilities

- County will compile a prioritized list of desired system configuration modifications/enhancements and provide same to Woolpert no later than one (1) week prior to the scheduled on-site review meeting.
- County will ensure site readiness and staff participation for the on-site review meeting, as well as the remote Plan review meeting.
- County will secure an appropriate meeting facility in which Woolpert will conduct the on-site review meeting.
- County will participate in the discovery sessions to collect the details describing the desired modifications/enhancements.
- County will review the tech memo and prepare comments.
- County will participate in a review meeting with the Woolpert project manager or senior systems analyst.
- County will participate in making the modification as defined and agreed-to in the tech memo.
- County will be responsible for extended support to Track 2 end users after Go Live.
- County will review the draft and final documents and provide feedback and approval within the defined timeframes in the project schedule.

WBS Task 6.2: Phase 6 Quality Control

Woolpert will apply the Quality Management Process stated earlier in this scope document to Phase 6 tasks, activities and deliverables.

QUALITY MANAGEMENT

WBS Task 6.3: Phase Acceptance and Close

This is the Phase exit document that the County Project Manager signs indicating Woolpert has delivered Extended Support phase services in accordance with the Scope of Work and Project Plan.

Phase 7 – Organizational Change Management

Per Change Control Notice (CCN) # 6, the County has taken over full ownership and execution of the OCM related tasks in Track 1 post June 1, 2018. The County will continue to assume full ownership and execution of the OCM activities in Track 2.

Phase 8 – GIS Readiness Support for Track 1

Woolpert will provide GIS services to Pinellas County in support of the Enterprise Asset Management (EAM) implementation project. The goal of this support is to help build a strong asset registry that will act as the foundation on which the Enterprise Asset Management (EAM) program can be built.

Woolpert will provide continued GIS support for the Track 1 Cityworks Implementation Project. As identified, GIS tools and automated processes will be developed as requested for asset data collection and maintenance. Since Cityworks is a GIS-centric solution and all of the assets to which work orders will be written are maintained in the GIS, these newly developed tools can be incorporated into the future work and maintenance workflows. Using the tools to collect the data in advance of the Cityworks Go-Live allows EAM stakeholders to start using GIS tools and adopt data management processes that will continue to be utilized once Cityworks is fully implemented.

Key Core GIS Services Deliverables

- **GIS Data Migration and Tools for GIS**
  - **GIS Data Maintenance Tools (Optional Task)**
- **GIS Implementation Support**
  - **Ongoing GIS Support**
  - **Asset Data Maintenance Plan**

WBS Task 8.1 and 8.2: Publish GIS Schema

NOTE: WBS Tasks 8.1 and 8.2 are currently scoped to be fully executed by the County.

Additionally, the County needs to establish a plan for collecting and improving GIS data. GIS data collection/maintenance tools will also need to be developed to support the data migration / collection / maintenance efforts. The planning and tool development tasks owned by the County can be summarized as follows:

- GIS Data Planning – The County will conduct activities to provide overarching strategies and specific plans to migrate, collect and maintain asset records in the GIS.

- Develop GIS Data Maintenance Tools – Optional, time and materials, not-to-exceed task for developing and deploying new GIS data maintenance tools identified in the GIS Data Plan as requested.

A GIS Data Plan document developed by the County will be used as a road map for the asset data migration (County), asset data maintenance plans (Woolpert), WBS 8.4.2, and the development of GIS tools to support the collection/maintenance of asset data (County)

WBS Task 8.3: Data Maintenance Tools for GIS (T&M Task)

If requested, Woolpert will work with the County to develop, test, and deploy GIS data maintenance tools described in the GIS Data Planning document. The work for this task will not exceed the planned level of effort outlined in the Deliverable section below.

The County will prioritize the potential list of GIS data maintenance tools to be developed. Using that prioritized list and the level of effort estimated in the GIS Data Planning document, the County and Woolpert will mutually agree upon the tools that will be developed under this scope of work.

Develop GIS Data Maintenance Tools. The GIS data maintenance tool development can begin once the list of tools is agreed upon. Woolpert will develop these tools locally in a Woolpert environment and later deploy the tools to the County development environment. Development progress will be reported to County GIS

resources and demonstrations of partially working tools may be provided to solicit feedback during the development process.

Test GIS Data Maintenance Tools. Once deployed to the County development environment, Woolpert will work with County GIS resources to develop a testing plan in preparation for an on-site GIS data maintenance tool testing workshop. A Woolpert Developer and Senior System Analysis will both be on-site address any concerns raised during the testing sessions. After the workshop, Woolpert will make updates in the Woolpert environment and later deploy the updates to the County Development environment. Once this second version of the tools have been deployed, Woolpert will facilitate a remote meeting to review the tool feedback.

Deploy GIS Data Maintenance Tools. Woolpert, with oversight from a County GIS Resource, will develop user guides for the newly developed tools. In preparation for end user training, the tools will be deployed to the County test, training, and production environments. Woolpert and County team members will ensure that the production version of the Go-Live environment exists prior to Go-Live activities.

GIS Data Maintenance Go-Live Support. During Go-Live support, two (2) Woolpert resources will be on-site to support County end-users and County GIS Resources as they encounter the typical issues associated with any Go-Live. As the issues subside, Woolpert will work with individuals, County GIS Resources and heavy users who want to get more out of their new solution, to provide additional coaching and supplemental training services, on an as-needed and as-available basis.

Deliverables

- If requested, Woolpert System Analysis and Developer will facilitate up to five (5) on-site workshops.

Assumptions

- **This is an optional, time and materials task.**
- The County will mutually agree on the scope, level of effort, and deliverables in writing before any work will be performed for this task.
- All work aside from the actual workshops will be performed remotely.
- County staff participating in the workshops will do so uninterrupted.
- The GIS Data Planning document will provide all tool development specifications.
- County will have Development, Testing, Training, and Production system environments, as appropraite.

County Responsibilities (If Woolpert is requested to take over ownership of Task)

- County will coordinate with Woolpert and provide ample time to identify Woolpert resources to work on this task.
- County to schedule the appropriate Department project team members such that they are available, without undue interruption, to participate in workshops and remote meetings.
- County will provide a conference room or training room with a projector.
- Workshop participants shall actively participate in workshop activities.
- Workshop participants shall participate in the remote review meetings, as requested.
- County Technical Team will provide Woolpert access to Development, Testing, Training, and Production system environments, as appropraite.

- County will review the draft and final documents and provide feedback and approval within the defined timeframes in the project schedule.

WBS Task 8.4: GIS Implementation Support

During the Track 1 Cityworks Implementation project, Woolpert will consult on GIS as it related to the project. Woolpert will meet with County GIS Resources on a regular basis to provide project related GIS leadership and guidance. Prior to the Go-Live of the Cityworks software, Woolpert will work with the County to develop an Asset Data Maintenance Plan.

WBS Task 8.4.1: Bi-Weekly GIS Support Meeting

Woolpert will attend meetings facilitated by the County on a regular basis to provide project related GIS consulting and guidance. County GIS Resources will present project related GIS challenges/opportunities to Woolpert for discussion. Woolpert will share GIS experiences, best practices, and make recommendations to help County GIS Resources work through the challenges/opportunities.

Deliverables

- Woolpert to attend two hours bi-weekly GIS Support meetings through the month of October 2019.
- Woolpert will provide 6 hours of ad-hoc GIS support between meetings.

Assumptions

- All work will be performed remotely.
- This will span the entire Track 1 project from Kickoff to Go Live.

County Responsibilities

- County will facilitate and host the meeting and provide meeting minutes.
- County to schedule the appropriate staff members such that they are available, without undue interruption, to participate in the remote meetings.
- County will review the draft and final documents and provide feedback and approval within the defined timeframes in the project schedule.

WBS Task 8.4.2: Asset Data Maintenance Plan

Woolpert will work with County stakeholders to develop an ongoing Asset Data Maintenance Plan document for assets types included in the Track 1 Cityworks Implementation project. The plan document will detail asset maintenance strategies for each asset type. The objective is to develop an Asset Data Maintenance Plan that:

- Aligns with the County Asset Management Policy.
- Aligns with the County Asset Management Strategy and Objectives.
- Aligns with County Asset Information Management Plan.
- Considers individual department business needs.
- Follows industry best practices.
- Leverages Cityworks and Esri technology opportunities to improve accuracy and efficiency.
- Streamlines asset data maintenance processes.
- Empowers department end users.

This plan will define how the asset register is maintained during the entire life cycle of the asset. Woolpert will work with County stakeholders to develop a "to be" plan for Asset Data Maintenance Plan that includes procedures for:

- One-at-a-time commissioning assets.
- Bulk/Mass commissioning assets.
- Updating asset information.
- Decommissioning assets.
- Rebuilt assets.

Woolpert will document the following for each procedure:

- Responsible stakeholder.
- Hardware/Software utilized.
- Unique ID management.
- Quality control assurances.
- Asset data timing.

Deliverables

- Woolpert will develop an Asset Data Maintenance Planning Workshop agenda and submit it to the County Project Manager.
- Woolpert will facilitate workshop sessions for each of the two (2) departments. Each session is allocated eight (8) hours. Workshop time can be reallocated between the Asset Data Maintenance Planning workshops. However, the total amount of workshop time will not exceed sixteen (16) hours during a single on-site week.
- Woolpert will provide Asset Data Maintenance documentation for the County to review before each remote review meeting.
- Woolpert will perform 1 Round of remote review meetings via WebEx. Each session will be no longer than one-and-a-half (1.5) hours. This meeting will be used to discuss updates to the Asset Data Maintenance Plan documentation.
- Woolpert will provide a final Asset Data Maintenance Plan document.

Assumptions

- All work aside from the actual workshops will be performed remotely.
- Actual workshops will be administered on-site at County facilities over the course of fa single business week.
- County staff participating in the workshops will do so uninterrupted.
- The GIS Data Planning documentation will provide valuable information to support this task.
- The EAM Program's ISO Foundational document - Asset Information Plan will provide valuable information to support this task.
- This work is limited to GIS objects associated to the Track 1 Cityworks Implementation.

County Responsibilities

- County to schedule the appropriate Department project team members such that they are available, without undue interruption, to participate in workshops and remote meetings.
- County will provide a conference room or training room with a projector.
- Workshop participants shall actively participate in workshop activities.
- Workshop participants shall participate in the remote review meetings, as requested.
- County will review the draft and final documents and provide feedback and approval within the defined timeframes in the project schedule.

WBS Task 8.3: Phase 8 Quality Control

Woolpert will apply the Quality Management Process stated earlier in this scope document to Phase 8 tasks, activities and deliverables.

QUALITY MANAGEMENT

WBS Task 8.4: Phase Acceptance and Close

This is the Phase exit document that the County Project Manager signs indicating Woolpert has delivered GIS Readiness Support phase services in accordance with the Scope of Work and Project Plan.

Phase 8 – GIS Readiness Support for Track 2

Woolpert will provide GIS services to Pinellas County in support of the Enterprise Asset Management (EAM) implementation project. The goal of this support is to help build a strong asset registry that will act as the foundation on which the EAM Asset Management program can be built. This will be accomplished by designing and implementing GIS data models that support department business needs and are structured to also support EAM objectives. Standardized data model templates will be leveraged as much as possible and best practice data models will be developed where the standard data models do not exist or don't support the EAM objectives. Once the data models are designed and implemented, plans will be developed to migrate existing data into the new data models. Primarily, this asset data migration will consist of Facility data and Utility Plant data that exists in legacy Maximo systems. Where data does not exist, tools and processes will be developed for asset data collection and integration into the GIS system. Since Cityworks is a GIS centric solution, these data collection tools can be incorporated into the future asset data maintenance workflows.

Key Core GIS Services Deliverables

- Esri Geodatabase Data Model Development
- GIS Data Migration and Tools for GIS
  - GIS Data Planning
  - Develop GIS Data Maintenance Tools (Optional Task)
  - Migrate Legacy Data to New GIS Database
- GIS Implementation Support

These GIS services will reorganize selected existing GIS data to support EAM needs, migrate data from outside systems into GIS, establish processes for data maintenance, and provide GIS support for the implementation of the following Track 2 Cityworks asset needs:

- Building Facility Assets
- Utilities Plant Assets
- Parks Assets
- Recycle Center Assets
- Data Models Shared with Solid Waste; NOTE: Assets in the Waste to Energy (W2E) facility will not be modeled to match the level of detail / hierarchy that may exist in the CMMS solution currently in place for that facility. However, W2E assets may be created to support assignment of Cityworks inspections.
- Environmental Management Assets
- Fleet Assets

These services will result in a stronger GIS foundation with tools and processes for GIS data models identified above. Implementing these services in advance of Track 2 Cityworks Configuration Workshops will mitigate project risk that could arise if the asset registry schema was not well established. More important, in some cases, it will allow EAM stakeholders to start using GIS tools and adopt data management processes now that will continue to be utilized once Cityworks is fully implemented.

WBS Task 8.1: Geodatabase Data Model Development

Woolpert will develop Esri based (Geodatabase) data model schemas for each of the critical asset data tables that need to be populated to be ready for use by Cityworks at a future date. These Geodatabase tables include:

- Building Facility Data Model – While this data model will primarily support the Real Estate Management Department's management of Building Facility assets, it will be utilized to a lesser extent by other EAM participating departments.

- Utilities Plant Data Model – This data model will support the Utilities Department's management of Water Plants, Wastewater Plants, Pump Stations, and SCADA systems. Solid Waste maintains many of the same asset types and will follow the direction established by the Utilities Department.

- Parks Data Model – This data model will support Parks' management of Parks and Recreation type assets.

- Recycle Center Data Model and Shared Data Models – This data model will support Solid Waste's management of Recycling type assets. In addition, shared aspects of the Solid Waste department's use of the Utilities Plants, Facility, and Road data models will be planned and implemented.

- Environmental Management Data Model – This data model will support Public Works management of Waterbodies, Navigation Markers, and Beach type assets.

- Fleet Data Model – This data model will support the Real Estate Management of Fleet assets.

WBS Task 8.1.1: Woolpert to Facilitate Geodatabase Workshops

Woolpert will facilitate a series of data modeling workshops to develop an Esri geodatabase. The workshops will be conducted in four rounds, each round of workshops will build upon the previous round, with each iteration getting closer to a final data model that will be put into production. The completed data models will be deployed in the County development environment and will be loaded with sample data to enable department stakeholders to conduct their review and provide acceptance and validation of the models. The main objective of each round of workshops is detailed below:

Round 1: Identifying Asset Types

- Perform discovery with County and identify a list of potential assets types.

- Review existing asset types used in existing source system with stakeholders.

- Review and analyze application of Esri ArcGIS for Local Government Solutions with stakeholders.

- Establish a proposed list of EAM asset types with stakeholders.

- Vertical asset types will be arranged hierarchically into process and sub process and / or location-based groupings, as appropriate, with stakeholders.

- Build data model using asset types from Round 1 feedback.

Round 2: Identifying Attribution

- Review updated data model with stakeholders.

- Validate asset types and update as necessary with stakeholders.

- Establish process and sub processes categories for Utility Plant asset types with stakeholders.

- Review attribution and identify attributes that are specific by asset type with stakeholders.

- Update data model using information from Round 2.

Round 3: Finalizing Model

- Review updated data model with stakeholders.

- Finalize asset types with stakeholders.

- Finalize asset attribution with stakeholders.

- Review attribute domain values and identify lists of values with stakeholders.
- Update data model using information from Round 3.

Round 4: Validating Usability

- Prepare for workshops by adding sample data records.
- Review updated data model with stakeholders.
- Test/validate data model with stakeholders.
- Further develop attribute domains with stakeholders.
- Identify preferred method for maintaining and developing data with stakeholders (if necessary).

Woolpert will deploy the final data model to the County development environment. Attribute domain values will not be finalized as part of this task. The domain values will continue to mature as the newly developed data models are populated with data.

Deliverables

- Woolpert will develop On-site Session agendas and submit it to the County Project Manager.
- Round 1 Workshop Deliverables
  - Woolpert will facilitate Round 1 workshop sessions for each of the data models. Each session is allocated between four (4) and sixteen (16) hours. Workshop time can be reallocated between the data model workshops. However, the total amount of workshop time will not exceed fifty-six (56) hours or two (2) on-site weeks.
  - Woolpert will provide data model documentation for the County to review.
  - Woolpert will perform one (1) follow-up remote meeting via WebEx for each of the Round 1 workshops sessions. Each session will be no longer than two (2) hours. These sessions will be held during the fourth week of each cycle and be used to discuss updates to the data model documentation.
  - Woolpert will perform system configuration in the County on premise development environment based on the outcome of the Round 1 workshops and remote meetings.
- Round 2 Workshop Deliverables
  - Woolpert will facilitate Round 2 workshop sessions for each of the data models. Each session is allocated between four (4) and sixteen (16) hours. Workshop time can be reallocated between the data model workshops. However, the total amount of workshop time will not exceed fifty-six (56) hours or two (2) on-site weeks.
  - Woolpert will provide data model documentation for the County to review.
  - Woolpert will perform one (1) follow-up remote meeting via WebEx for each of the Round 1 workshops sessions. Each session will be no longer than two (2) hours. These sessions will be held during the fourth week of each cycle and be used to discuss updates to the data model documentation.
  - Woolpert will perform system configuration in the County on premise development environment based on the outcome of the Round 2 workshops and remote meetings.
- Round 3 Workshop Deliverables

- o Woolpert will facilitate Round 3 workshop sessions for each of the data models. Each session is allocated between four (4) and sixteen (16) hours. Workshop time can be reallocated between the data model workshops. However, the total amount of workshop time will not exceed fifty-six (56) hours or two (2) on-site weeks.
  - o Woolpert will provide data model documentation for the County to review.
  - o Woolpert will perform one (1) follow-up remote meeting via WebEx for each of the Round 1 workshops sessions. Each session will be no longer than two (2) hours. These sessions will be held during the fourth week of each cycle and be used to discuss updates to the data model documentation.
  - o Woolpert will perform system configuration in the County on premise development environment based on the outcome of the Round 3 workshops and remote meetings.
- Round 4 Workshop Deliverables
  - o Woolpert will facilitate Round 4 workshop sessions for each of the data models. Each session is allocated between four (4) and sixteen (16) hours. Workshop time can be reallocated between the data model workshops. However, the total amount of workshop time will not exceed fifty-six (56) hours or two (2) on-site weeks.
  - o Woolpert will provide data model documentation for the County to review.
  - o Woolpert will perform one (1) follow-up remote meeting via WebEx for each of the Round 1 workshops sessions. Each session will be no longer than two (2) hours. These sessions will be held during the fourth week of each cycle and be used to discuss updates to the data model documentation.
  - o Woolpert will perform system configuration in the County on premise development environment based on the outcome of the Round 4 workshops and remote meetings.

Assumptions

- All work aside from the actual workshops will be performed remotely.
- Round 1 workshops will take place over the course of two (2) separate business weeks (Monday – Friday).
- Round 2 workshops will take place over the course of two (2) separate business weeks (Monday – Friday).
- Round 3 workshops will take place over the course of two (2) separate business weeks (Monday – Friday).
- Round 4 workshops will take over the course of two (2) separate business weeks (Monday – Friday).
- Actual workshops will be administered on-site at County facilities.
- County staff participating in the workshops will do so uninterrupted.
- The EAM Program's ISO Foundational document – Asset Information Plan will provide valuable information to support this task .

County Responsibilities

- After the Round 4 workshops, no new information will be provided to Woolpert for inclusion into the data models. New information can be included in an Action Item for future consideration.

- County to schedule the appropriate Department project team members such that they are available, without undue interruption, to participate in workshops and remote meetings.
- County will provide a conference room or training room with a projector.
- Workshop participants shall actively participate in workshop activities.
- Workshop participants shall participate in the remote review meetings, as requested.
- County Technical Team will provide Woolpert access to GIS development environment to deploy data model.
- County will review the draft and final documents and provide feedback and approval within the defined timeframes in the project schedule.

WBS Task 8.2: GIS Data Migration and Tools for GIS

Woolpert will develop a process to move existing data into the new GIS data models. Where data does not exist, a strategy for collecting the data will be established and GIS data collection/maintenance tools will be developed (if requested by the County – Optional Task) to support the effort. A planning effort will outline the strategy and work required to support the strategy. Following completion and acceptance of the plan, data migration scripts will be developed and GIS data maintenance tools will be developed and deployed. These tasks are detailed below:

- GIS Data Planning – provides a plan for potential asset migration, maintenance, creation, and/or data tool development requirements.

- Develop GIS Data Maintenance Tools – time and materials not-to-exceed task for and deploying new GIS data maintenance and creation tools recommended in the GIS Data Plan.

- Migrate Legacy Data to New GIS Database – time and materials not-to-exceed task for the migration of existing data into the newly created GIS data model as laid out in the GIS Data Plan.

A GIS Data Plan document will be developed and will be used as a road map for the asset data migration, asset data maintenance plans, and the development of GIS tools to support the collection/maintenance of asset data.

WBS Task 8.2.1: GIS Data Planning

Woolpert will facilitate a series of workshops and remote meetings to develop a GIS Data Plan document. Using the list of asset types developed during the Geodatabase Data Model Development task, detailed strategies will be developed and documented for each asset type and will include the following information:

- Data Migration – With the help of County stakeholders, Woolpert will perform analysis of available source data and develop a detailed mapping from the source data to the new GIS data model (if applicable). Timing for the execution of the data migration scripts will be determined and mutually agreed upon. Data migration plans must be created for the assets in the REM Maximo database and the Utilities Maximo database. Other migration plans to populate asset information may consist of moving existing GIS data into the new model and/or the identification of Excel/Access data sources that need to be migrated.

- Data Creation – With the help of County stakeholders, Woolpert will identify and prioritize data gaps. A method for collection of the data will be documented. If GIS data collection tools need to be developed, specifications will be included under the Tool Development category. The strategy will include asset onboarding plans.

- Data Maintenance – With the help of County stakeholders, Woolpert will develop plans to maintain the asset data. These plans may affirm existing processes and/or complement data migration/creation

strategies. For instance, if data is migrated into the new GIS data model, a strategy to keep the data current will be established. For Maximo data, the data may be kept current in the existing system and a final import may be performed closer to the transition from the Maximo system to the Cityworks system.

- Data Sharing – With the help of County stakeholders, Woolpert will develop plans to address changes in shared data. These may include simple process changes or more complex tool development to support the needs of the various County departments. Data "views" and/or publishing strategies may be used when the needs of multiple department/groups cannot be satisfied with a single data model schema.

- GIS Tool Development Recommendation – As required, Woolpert will provide a formal recommendation for the development of a tools or automated process which will include, at a minimum: a level of effort, list of functional requirements, and a proposed solution.

- Unique ID – Woolpert will recommend a strategy for maintaining a unique ID for each individual asset record. This strategy may vary from asset type to asset type.

This GIS Data Planning document will contain requirements necessary to execute the Develop GIS Data Maintenance Tools task and the Migrate Legacy Data to New GIS Database task included in this scope of work.

Deliverables

- Woolpert will develop On-site Session agendas and submit it to the County Project Manager.
- Woolpert will facilitate two (2) rounds of workshop sessions, each round will be conducted within a single business week, for each of the five (5) departments. Each session is allocated eight (8) hours. Workshop time can be reallocated between the Data Development Planning workshops. However, the total amount of workshop time will not exceed forty (40) hours for each round.
- Woolpert will provide GIS Data Planning documentation for the County to review before each remote review meeting.
- Woolpert will perform 3 remote review meetings via WebEx. Each review meeting will consist of five (5) sessions. Each session will be no longer than one-and-a-half (1.5) hours. This meeting will be used to discuss updates to the GIS Data Planning documentation.
- Woolpert will provide a final GIS Data Planning document.

Assumptions

- The number of datasets is unknown at the time of scoping. If the scoped workshop time in rounds 1 and 2 is insufficient to review all of the datasets and processes, Woolpert will compile only the information collected. Should the County desire additional workshop time, Woolpert can scope that as new tasks or replace other tasks in this SOW with those additional workshops.
- At the conclusion of the remote review meetings via WebEx, no new County-supplied information will be included in the Data Plan document.
- All work aside from the actual workshops will be performed remotely.
- Actual workshops for each round will be administered on-site at County facilities over the course of five (5) business weeks (Monday – Friday).
- County staff participating in the workshops will do so uninterrupted.
- The EAM Program's ISO Foundational document – Asset Information Plan will provide valuable information to support this task.

County Responsibilities

- County to schedule the appropriate Department project team members such that they are available, without undue interruption, to participate in workshops and remote meetings.
- County will provide a conference room or training room with a projector.
- Workshop participants shall actively participate in workshop activities.
- Workshop participants shall participate in the remote review meetings, as requested.
- County Technical Team will provide Woolpert access to GIS development environment to deploy data model.
- County will review the draft and final documents and provide feedback and approval within the defined timeframes in the project schedule.

WBS Task 8.2.2: Develop GIS Data Maintenance Tools (T&M Task)

If requested, Woolpert will work with the County to develop, test, and deploy GIS data maintenance tools described in the GIS Data Planning document. The work for this task will not exceed the planned level of effort outlined in the Deliverable section below unless additional funds are added to this task or other scoped tasks are removed. The County will prioritize the list of potential GIS data maintenance tools to be developed. Using that prioritized list and the level of effort estimated in the GIS Data Planning document, the County and Woolpert will mutually agree upon the tools that will be developed under this scope of work.

Develop GIS Data Maintenance Tools. The GIS data maintenance tool development can begin once the list of tools is agreed upon. Woolpert will develop these tools locally in a Woolpert environment and later deploy the tools to the County development environment. Development progress will be reported to County GIS resources and demonstrations of partially working tools may be provided to solicit feedback during the development process.

Test GIS Data Maintenance Tools. Once deployed to the County development environment, Woolpert will work with County GIS resources to develop a testing plan in preparation for an on-site GIS data maintenance tool testing workshop. A Woolpert Developer and Senior System Analysis will both be on-site address any concerns raised during the testing sessions. After the workshop, Woolpert will make updates in the Woolpert environment and later deploy the updates to the County Development environment. Once this second version of the tools have been deployed, Woolpert will facilitate a remote meeting to review the tool feedback.

Deploy GIS Data Maintenance Tools. Woolpert, with oversight from a County GIS Resource, will develop user guides for the newly developed tools. In preparation for end user training, the tools will be deployed to the County test, training, and production environments. Woolpert and County team members will ensure that the production version of the Go-Live environment exists prior to Go-Live activities.

GIS Data Maintenance Go-Live Support. During Go-Live support, two (2) Woolpert resources will be on-site to support County end-users and County GIS Resources as they encounter the typical issues associated with any Go-Live. As the issues subside, Woolpert will work with individuals, County GIS Resources and heavy users who want to get more out of their new solution, to provide additional coaching and supplemental training services, on an as-needed and as-available basis.

Deliverables

- **If requested**, Woolpert System Analyst and Developer will facilitate up to five (5) on-site workshops.

Assumptions

- **This is an optional, time and materials task.**
- The County will agree on the scope, level of effort, and deliverables in writing before any work will be performed for this task.
- All work aside from the actual workshops will be performed remotely.
- Actual workshops will be administered on-site at County facilities over the course of five (5) business weeks (Monday – Friday).
- County staff participating in the workshops will do so uninterrupted.
- The GIS Data Planning document will provide all tool development specifications.
- County will have Development, Testing, Training, and Production system environments, as appropriate.

County Responsibilities (If Woolpert is requested to take over ownership of Task)

- County will coordinate with Woolpert and provide ample time to identify Woolpert resources to work on this task.
- County to schedule the appropriate Department project team members such that they are available, without undue interruption, to participate in workshops and remote meetings.
- County will provide a conference room or training room with a projector.
- Workshop participants shall actively participate in workshop activities.
- Workshop participants shall participate in the remote review meetings, as requested.
- County Technical Team will provide Woolpert access to Development, Testing, Training, and Production system environments, as appropriate, to deploy data model.
- County will review the draft and final documents and provide feedback and approval within the defined timeframes in the project schedule.

WBS Task 8.2.3: Migrate Legacy Data to New GIS Database

Woolpert plans to migrate data from the REM Maximo system and the Utilities Maximo system into the newly developed GIS data model. Additional data sources identified in the GIS Data Plan document may be migrated into the new GIS data model, too. The work for this task will not exceed the planned level of effort outlined in the Deliverable section below. The County will prioritize the potential list of data sources to be imported into GIS. Using that prioritized list and the level of effort estimated in the GIS Data Plan document, the County and Woolpert will mutually agree upon the data to be migrated into the new GIS data model under this scope of work.

Woolpert will work with the County technical staff to undertake the tasks necessary to move the data sets from the existing data sources and prepare them for loading into the new databases. It will be the County's responsibility to extract the source data sets and provide them to Woolpert for transforming and loading into the new databases. Once Woolpert receives the data from the County, we will perform a number of tests on the data sets, checking for data cleanliness, completeness, relevancy, and conformance to the standards established in the GIS Data Plan document. Woolpert will facilitate remote data conversion review meetings to validate the

migrated data. If necessary, the County will perform additional data cleanup and/or Woolpert will update the components in the migration process.

Once this iterative process is complete, Woolpert will transform and load the data into a County development database to complete the data conversion. After the migration process has been fully tested, the entire process will be documented and Esri map services supporting Cityworks will be published.

During the GIS Implementation Support task, Woolpert will re-run the process just prior to go-live to load the legacy data into the production GIS database.

Deliverables

- Woolpert will develop two (2) Remote Session agendas and submit it to the County Project Manager.
- Woolpert will perform two (2) remote review meetings not exceeding eight (8) hours each via WebEx.
- Woolpert will provide a final GIS Data Migration document.

Assumptions

- All work will be performed remotely.
- County staff participating in the remote review meetings will do so uninterrupted.
- All data migration specifications have been detailed in the GIS Data Plan document.
- Only two iterations of data migration will be performed. Should the County fail to provide properly scrubbed data per the migration specifications in the GIS Data Planning document, additional iterations may require this work will be performed via Scope Change Order.

County Responsibilities

- County to schedule the appropriate Department project team members such that they are available, without undue interruption, to participate in remote meetings.
- County Team Members shall participate in the remote review meetings.
- County Technical Team will provide Woolpert access to GIS development environment.
- County will perform prep, scrubbing, and extraction of data from source databases.
- County will review the draft and final documents and provide feedback and approval within the defined timeframes in the project schedule.

WBS Task 8.3: GIS Implementation Support

During the Track 2 Cityworks Implementation project, Woolpert will consult on GIS as it related to the project. Woolpert will meet with County GIS Resources on a regular basis to provide project related GIS leadership and guidance. Prior to the Go-Live of the Cityworks software, Woolpert will work with the County to develop an Asset Data Maintenance Plan.

WBS Task 8.3.1: Bi-Weekly GIS Support Meeting

Woolpert will meet with County GIS Resources on a regular basis to provide project related GIS leadership and guidance. County GIS Resources will present project related GIS challenges/opportunities to Woolpert for

discussion. Woolpert will share GIS experiences, best practices, and make recommendations to help County GIS Resources work through the challenges/opportunities.

Deliverables

- Woolpert to facilitate bi-weekly GIS Support meetings.
- Woolpert to author Meeting Minutes for each GIS Support meeting and to upload the minutes to project website.

Assumptions

- All work will be performed remotely.
- This will span the entire Track 2 project from kickoff to Go Live.

County Responsibilities

- County to schedule the appropriate staff members such that they are available, without undue interruption, to participate in the remote meetings.
- County will review the draft and final documents and provide feedback and approval within the defined timeframes in the project schedule.

WBS Task 8.3.2: Asset Data Maintenance Plan

Woolpert will work with County stakeholders to develop an ongoing Asset Data Maintenance Plan document for assets types included in the Track 2 Cityworks Implementation project. The plan document will detail asset maintenance strategies for each asset type. The objective is to develop an Asset Data Maintenance Plan that:

- Aligns with the County Asset Management Policy.
- Aligns with the County Asset Management Strategy and Objectives.
- Aligns with County Asset Information Management Plan.
- Considers individual department business needs.
- Follows industry best practices.
- Leverages Cityworks and Esri technology opportunities to improve accuracy and efficiency.
- Streamlines asset data maintenance processes.
- Empowers department end users.

This plan will define how the asset register is maintained during the entire life cycle of the asset. Woolpert will work with County stakeholders to develop a "to be" plan for Asset Data Maintenance Plan that includes procedures for:

- One-at-a-time onboarding assets.
- Bulk/Mass onboarding assets.
- Updating asset information.
- Decommissioning assets.
- Rebuilt assets.

Woolpert will document the following for each procedure:

- Responsible stakeholder.

- Hardware/Software utilized.
- Unique ID management.
- Quality control assurances.
- Asset data timing.

Deliverables

- Woolpert will develop On-site Session agendas and submit it to the County Project Manager.
- Woolpert will facilitate workshop sessions for each of the five (5) departments. Each session is allocated eight (8) hours. Workshop time can be reallocated between the Asset Data Maintenance Planning workshops. However, the total amount of workshop time will not exceed forty (40) hours for one on-site week. The Count and Woolpert will collectively prioritize the number of assets per department that can be covered in each eight (8) hour session.
- Woolpert will provide Asset Data Maintenance documentation for the County to review before each remote review meeting.
- Woolpert will perform 2 Round of remote review meetings via WebEx. Each session will be no longer than one-and-a-half (1.5) hours. This meeting will be used to discuss updates to the Asset Data Maintenance Plan documentation.
- Woolpert will provide a final Asset Data Maintenance Plan document.

Assumptions

- The number of datasets is unknown at the time of scoping. If the scoped workshop time in Rounds 1 is insufficient to review all of the datasets and processes, Woolpert will compile only the information collected. Should the County desire additional workshop time, Woolpert can scope that as new tasks or replace other tasks in this SOW with those additional workshops.
- At the conclusion of the remote review meetings via WebEx, no new County-supplied information will be included in the Data Plan document.
- All work aside from the actual workshops will be performed remotely.
- Actual workshops will be administered on-site at County facilities over the course of five (5) business weeks (Monday – Friday).
- County staff participating in the workshops will do so uninterrupted.
- The GIS Data Planning documentation will provide important information to support this task.
- The EAM Program's ISO Foundational document - Asset Information Plan will provide valuable information to support this task.
- This work is limited to GIS objects associated to the Track 2 Cityworks Implementation.

County Responsibilities

- County to schedule the appropriate Department project team members such that they are available, without undue interruption, to participate in workshops and remote meetings.
- County will provide a conference room or training room with a projector.
- Workshop participants shall actively participate in workshop activities.
- Workshop participants shall participate in the remote review meetings, as requested.
- County will review the draft and final documents and provide feedback and approval within the defined timeframes in the project schedule.

WBS Task 8.4: Phase 8 Quality Control

Woolpert will apply the Quality Management Process stated earlier in this scope document to Phase 8 tasks, activities and deliverables.

QUALITY MANAGEMENT

WBS Task 8.5: Phase Acceptance and Close

This is the Phase exit document that the County Project Manager signs indicating Woolpert has delivered GIS Readiness Support phase services in accordance with the Scope of Work and Project Plan.

Phase 9 – ISO 55K EAM Program Development Support

In Track 1, Woolpert will provide IAM-certified Asset Management Subject Matter Experts to support the County's ISO55000 based Enterprise Asset Management (EAM) Program development objectives. The goal of this support is to help set the County on a roadmap to executing the strategies and objectives defined during *Phase 2: Implementation Planning* efforts undertaken during 2016 and 2017. This will be accomplished by first administering an EAM maturity assessment with the County Core, Project, Leadership and key Stakeholder teams. Standardized Assessment tools such as the IAM Self-Assessment model will be leveraged as much as possible to provide an assessment of the County's current maturity level and compare it to the previous self-determined maturity level. The assessment will also identify gaps in processes and practices to be closed over a set period to move to the County to the next logical maturity level.

Key Core Deliverables
- **EAM Maturity Assessment**
- **AM Strategy & Objectives Implementation Roadmap**
- **AM Strategy & Objectives Implementation Roadmap Support Scope**

Linked to this effort is the prioritization of Action Items outlined in the Asset Management Strategies and Objectives document. The thirteen strategies stated in this document have associated objectives and action items that need to be vetted and prioritized for execution over a certain period, preferably the next 3–4 years. Woolpert will facilitate the development of a roadmap document with identified mini-projects representing each objective/action item within the thirteen strategies. The roadmap document will be comprehensive in nature consisting of a detailed project plan for each mini-project complete with a Gantt Chart and Resource Plan. Woolpert will prepare and submit a scope of work to support execution of the roadmap mini-projects.

WBS Task 9.1: EAM Program Maturity Assessment

Maturity assessments are a key component of any strategic planning process. IAM provides a Self-Assessment Methodology tool, Self-Assessment Methodology+ (SAM+), that is designed to measure an organization's capabilities against the requirements of BSI PAS 55 and ISO 55000. The benefit of using SAM+ for the maturity assessment is to:

- Allow Pinellas to assess its capabilities against the requirements of ISO 55001.

- Facilitate the identification of best practices and preparation of action plans for improvement to the next maturity level.

- Allow Pinellas to track improvements in their EAM Asset Management program over time using a standard methodology.

- Position Pinellas to achieve ISO 55000 certification.
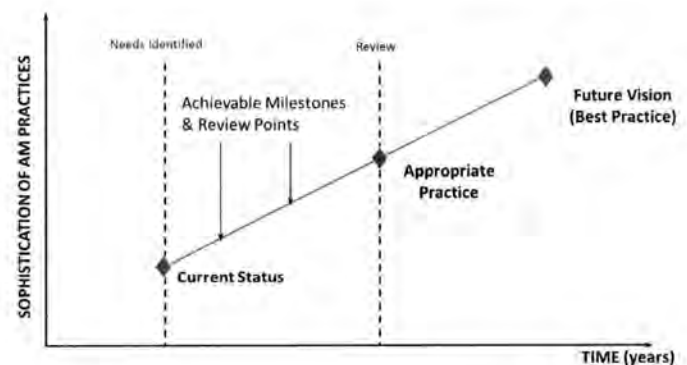
The "gap" is the distance between the "as is" of the current state and the "to be" of the desired future state of an organization. SAM+ provides a quantified approach to determining "where the County is" relative to where the it needs to go within the next few years. The SAM+ Tool provides the means to quantify the basis for understanding how Pinellas can achieve its future vision.

During the creation of the Asset Management Strategies and Objectives document in 2016, Pinellas County, through an **informal self-assessment**, identified itself as between maturity levels 1 (Aware) and 2 (Developing)

on the Asset Management Maturity Scale. In this task, Woolpert will use an IAM recommended SAM+ tool to facilitate a formal maturity assessment to confirm the current state of maturity. Since the last informal self-assessment in 2016, the County has embarked on the implementation of the Cityworks AMS application for two of its Departments, setup an organizational structure to support Enterprise Asset Management efforts, begun to address Organizational Change Management aspects, standardized work management work flows throughout the enterprise, to name a few. SAM+ will capture these developments and formalize the maturity level quantification providing a clear roadmap for achieving the County's future vision for its EAM program.

WBS Task 9.1.1: Facilitate EAM Maturity Assessment

Woolpert will work with County Project and Core Teams to identify key participants in the AM Maturity Assessment exercise. The objective is to have stakeholders and leaders in each function area (example - operations, maintenance, work management systems, GIS, finance, inventory, materials management, etc.) be involved to develop an accurate understanding of the of the County's current asset management related practices. It is expected that the Core and Project Teams will be able to provide a ground truth as assessments are being made during the workshops.

The statements and questions in SAM+ are designed to delve into the specific functions and capabilities that contribute to good asset and work management practice. The formal assessment will be conducted through facilitated on-site workshops consisting of a diverse group of stakeholders throughout Pinellas recommended by the County Project and Core Teams. Responses to each question will be captured in the workshops and documented in an "AM Maturity Assessment" report accompanied by scores for the elements assessed in each workshop.
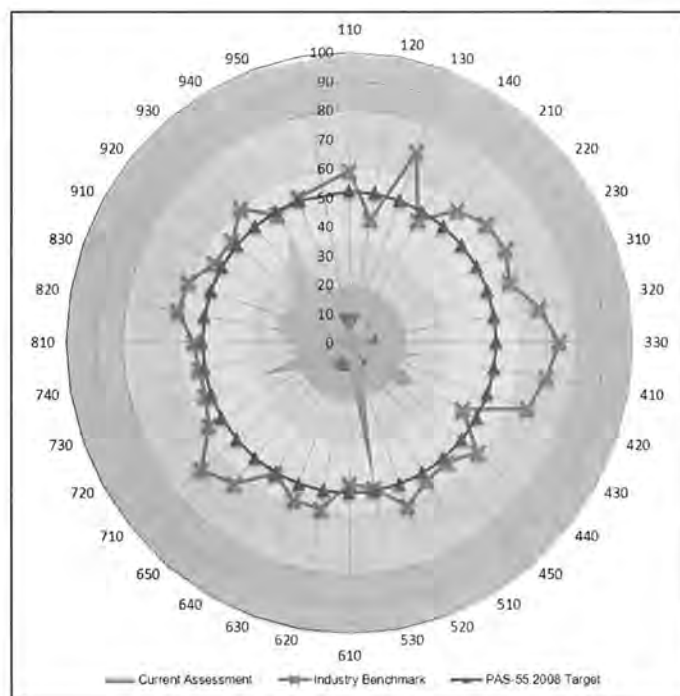
The design and layout of the assessment working sessions will also be finalized in consultation with the County Project and Core Teams. If necessary, follow up meetings and discussions with relevant functional area staff will allow Woolpert to solicit additional information in support of determining the current state of asset and work management practices.

The outcome of this task will be a set of initiatives that will be required to move the organization from the current state of maturity to the desired state. Each initiative will be structured in a common layout with the intent to expand on the desired outcomes, key tasks, and resource requirements. Specifically, these initiative documents will include the following:

- Initiative Overview
- Existing Initiatives and Investments
- Priority
- Timing
- Cost Estimate

- Duration
- Team Member Roles and Responsibilities
- Team Member Staffing Requirements
- Description
- Dependencies
- Key Deliverables
- Outcomes and Benefits
- Initiative Goals and Measures
- Sustainability Needs

Based on the initiatives defined as part of the Gap Assessment activities, Woolpert will work with the County Core and Management Teams to update the Strategies and Objectives document to reflect revised action items, as required. These efforts will be completed as part of Task 9.2: AM Strategy & Objectives Implementation Roadmap.

Deliverables

- Woolpert will facilitate multiple assessment workshops over a four (4) day business week. Workshop time can be reallocated between stakeholder groups, but the total amount of workshop time will not exceed forty (32) hours for one on-site week.

- Woolpert will provide a DRAFT AM Maturity Assessment Report for the County to review before the on-site review meeting.

- Woolpert will facilitate one (1) on-site review meeting not to exceed eight (8) hours. This meeting will be used to discuss the County's comments to the DRAFT AM Maturity Assessment Report and make edits.

- Woolpert will provide FINAL AM Maturity Assessment Report.

Assumptions

- All work aside from the actual workshops will be performed remotely.
- On-site workshops will be administered at County facilities over the course of one (1) business week (Monday – Friday).
- County staff participating in the workshops will do so uninterrupted.

PROJECT C1. ASSET MANAGEMENT TRAINING

Project Description and Outcome:
This project involves increasing the understanding of asset management best practices throughout the Division. This includes development of a formal definition of the Division's asset management vision and policy and sharing it throughout the Division. Additionally, both through formal training sessions and informal education by peers will be implemented.
Outcome: The Division is increasingly aware of asset management best practices and can use appropriate systems to aid in practicing good asset management.

Tasks:
The tasks of the project include:
- C1-1. Develop and communicate AM vision and policy.
- C1-2. Provide training on asset management best practices.
- C1-3. Provide Maximo training with regard to AM BP's

Major Deliverables:
The major deliverables from this project are:
- A developed and documented asset management vision and asset management policy for the Division
- The asset management vision and asset management policy are formally introduced to the Minneapolis Water employees.
- Appropriate members of Maximo implementation team, Infrastructure Strategy Team, Asset Management Team, etc. are given a defined responsibility to educate their peers on an informal basis
- The need for formal training on asset management best practices and use of Maximo with regard to asset management best practices is evaluated and appropriate training is set up and implemented.

Estimated Level of Effort:

Estimated Project Duration and Dependencies:
This project is scheduled to stretch from Q2 2015 to the start of Q1 2016. This project should be implemented parallel to other training tasks (Projects C2 and C3) and should be timed appropriately to be as relevant as possible with regard to the Maximo 7.5 Implementation (Project A1).

Related Information and/or Issues:
- EPA Asset Management Training Material: http://simple.werf.org/Books/Contents/Interactive-Training/EPA-Asset-Management-Training-Material

Gap Assessment Cross Reference:
- 5.01.01: Organizational commitment to Asset Management.
- 5.01.03: Asset Management roles and responsibilities.
- 5.01.07: The corporate vision reflects a commitment to best practice in Asset Management.
- 6.01.02: Good AM attitude and culture.
- 6.01.06: Processes for the development and implementation of asset management training programs.

County Responsibilities

- County to schedule the appropriate staff such that they are available, without undue interruption, to participate in workshops and remote meetings.
- County will provide a conference room or training room with a projector.
- Workshop participants shall actively participate in workshop activities.
- Workshop participants shall participate in the remote review meetings, as requested.
- County will review the draft and final documents and provide feedback and approval within the defined timeframes in the project schedule.

WBS Task 9.2: AM Strategy & Objectives Implementation Roadmap

Pinellas County's first-generation **Asset Management Strategy** developed in 2016 includes the following thirteen (13) specific strategies:

1. Systematic Approach
2. Service Levels
3. Asset Management Plans
4. Criticality and Risk Management
5. Asset Life-Cycle Planning and Optimization
6. Asset Resiliency
7. Service Delivery and Funding Opportunities
8. Resource Management and Development
9. Asset Data
10. Asset Reporting
11. Technology Enablers
12. Continual Improvement and Innovation
13. Asset Management Performance Management

Each Asset Management Strategy has an associated list of objectives and action items that link to accomplishment of those objectives. There are fifty (50) Action Items spanning thirteen strategies that can be considered as "mini" projects (mProjects) in themselves that the County needs to undertake as part of furtherance of its Enterprise Asset Management Program. This task facilitates evaluation of these fifty (50) mProjects by developing and jointly implementing a prioritization methodology with the County. Adjustments to the current 50 mProjects will be undertaken, as necessitated by the results of the EAM Program Maturity Assessment (Task 9.1).

The outcomes from this task is a roadmap consisting of prioritized list of mProjects representing fifty (50) Action Items with owners assigned, a mProject plan consisting of a Gantt Chart and level of effort, and identification of necessary County staff to deliver these mProjects.

Deliverables

- Woolpert will facilitate one on-site AM Strategy & Objectives Review workshop with the County. Workshop time will not exceed eight (8) hours.
- Woolpert will provide a DRAFT AM Strategy & Objectives Implementation Roadmap document for the County to review before the on-site review meeting.

- Woolpert will facilitate one (1) on-site review meeting not to exceed eight (8) hours. This meeting will be used to discuss the County's comments to the DRAFT AM Strategy & Objectives Implementation Roadmap document and make edits.

- Woolpert will submit FINAL Strategy & Objectives Implementation Roadmap document.

Assumptions

- All work aside from the actual workshops will be performed remotely.

- On-site workshops will be administered at County facilities over the course of one (1) business week (Monday – Friday).

- County staff participating in the workshops will do so uninterrupted.

County Responsibilities

- County to schedule the appropriate staff such that they are available, without undue interruption, to participate in workshops and remote meetings.

- County will provide a conference room or training room with a projector.

- Workshop participants shall actively participate in workshop activities.

- Workshop participants shall participate in the remote review meetings as requested.

- County will review the draft and final documents and provide feedback and approval within the defined timeframes in the project schedule.

WBS Task 9.3: AM Strategy & Objectives Implementation Roadmap Support Scope

Upon finalization of the AM Strategy and Objectives Implementation Roadmap document, Woolpert will prepare a scope of services to support the mProjects in the Roadmap. Woolpert will work with the County to select the Roadmap mProjects to include in the support services scope.

The execution of the scope of services proposed in this task is outside the scope of Tracks 1 and 2. The County will have to approve the fees with this scope for Woolpert to assign resources to support the AM Strategy & Objectives Implementation Roadmap mProjects.

Deliverables

- Woolpert will provide a DRAFT Scope of Services to support selected Roadmap mProjects.

- Woolpert will facilitate one (1) remote review meeting not to exceed four (4) hours. This meeting will be used to discuss the County's comments to the DRAFT Scope of Services to support selected Roadmap mProjects and make edits.

- Woolpert will submit FINAL Scope of Services to support selected Roadmap mProjects.

Assumptions

- All work will be performed remotely.

County Responsibilities

- County to work with Woolpert and select Roadmap projects for which Woolpert support scope of services need to be developed.

- County to review Woolpert's Roadmap Projects Support Scope of Services.

- County to participate in a joint remote review of Woolpert's Roadmap Projects Support Scope of Services.

- County to review and accept Woolpert's Roadmap Projects Support Scope of Services.

- County will review the draft and final documents and provide feedback and approval within the defined timeframes in the project schedule.

WBS Task 9.4: Phase 8 Quality Control

Woolpert will apply the Quality Management Process stated earlier in this scope document to Phase 9 tasks, activities and deliverables.

QUALITY MANAGEMENT

WBS Task 9.5: Phase Acceptance and Close

This is the Phase exit document that the County Project Manager signs indicating Woolpert has delivered ISO55K EAM Program Development Support phase services in accordance with the Scope of Work and Project Plan.

Phase 10 – Owner-Directed Funds (ODF)

Tracked in this phase will be a contingency fund to be used for tasks as directed by the County. The funds in this phase will be encumbered by the Board of County Commissioners (BCC) at the onset of the project but will not be consumed unless they are allocated to a newly scoped set of tasks. As the collective Woolpert-County project team identifies un-scoped tasks that require Woolpert participation, the County will request of Woolpert either a scope of work with a firm-fixed fee for a set of definable services or a scope of work with a rate table for ad-hoc or loosely-defined services. The scope of services will require formal approval by the County project leadership to begin the work, but the funding, should it be equal to or less than the amount of the ODF phase, will not require commission approval. As funds are allocated from this phase to newly scoped services, the amount available for subsequent un-scoped tasks will be reduced. Similarly, if the Woolpert-County team determines that any tasks included in the original fixed-fee scope are not required, Woolpert will remove them from the fixed-fee scope and allocate their funds to this ODF phase, effectively replenishing the reserve and making more funds available for other un-scoped tasks.

Phase 11: Track 1 System Customizations

During the Track 1 configuration efforts, several system customizations were identified by the Woolpert / County configuration team as critical functionality desired at system go-live. This phase identifies and describes the tasks necessary to deliver those customizations.

NOTE: No Track 2 customizations have been identified at this time. Should a potential customization be identified, the process for Woolpert to identify and present options to the County team, and then to vet and scope one or more option, is defined elsewhere. Should the County desire that a customization be developed and deployed with Track 2, those efforts will be incorporated into the scope via a Change Request Notice.

A general description of the Track 1 customizations is as-follows:

Employee Historical Rate Tracking: Cityworks maintains multiple types of labor rates (e.g. Regular Time, Overtime, Holiday, etc.) but only the current value for each type is stored for each Employee. If historical labor rates are required for reporting, or other reasons, they cannot be retrieved from the Cityworks database. In order to provide a historical view of expired labor rates, Woolpert will create a new table in the Cityworks database and develop a trigger that populates rate information for each employee with a start and end date so that previous (non-current) labor rates are available.

The agreed-upon specification for this customization can be found in Appendix A.

Problem, Cause, Remedy (PCR) Admin Tool: Cityworks allows PCR values to be created for work order templates as custom fields. There is no logic between custom fields. Each field's pick-list is independent from the others and non-sensical Problem, Cause and Remedy combinations can be selected. This customization will allow Cityworks users to create cascading lists of values for PCR fields so that the selected values make logical sense.

The agreed-upon specification for this customization can be found in Appendix A.

Service Request Question and Answer (Q&A) Instruction Expansion: Cityworks provides functionality that allows scripted questions to be displayed to caller takers when a service request is being created. The system will prompt the call taker with questions and allow them to record the caller's responses. Some responses are configured to provide the call takers with an instruction. That instruction is not immediately or automatically visible to the user. The user must enter the response and then click on the questions panel down-arrow to expose the instructions. This customization will auto-expand the instructions panel when an instruction is configured for the selected response.

The agreed-upon specification for this customization can be found in Appendix A.

Work Order (WO) Priority Automation: Cityworks allows users assign a Category value to a Work Order Template. County has determined that different Category values equate to varying levels of priority for the work activity, Predictive / Preventive work is a lower priority that Reactive / Corrective work. County is also assigning a value to asset records to indicate the risk posed by each asset. Certain assets pose more risk to the County than others. Two assets may require the same type of work (preventive Maintenance), but if one asset has greater risk value, that work order should be prioritized higher than the work on the low risk asset.

Work Order Template categories are assigned numerical values from 1 to 3. Asset risk scores assigned asset records range from 1 to 5. A work order field called Work Priority will auto-populate with the product of multiplying

the Work Order Template Category value by the Asset Risk value. Users will prioritize work orders based on the Work Priority field.

The agreed-upon specification for this customization can be found in Appendix A.

Deliverables

- Employee Historical Rate Tracking:
  - Customization Specification
  - Customization Components; tables, triggers, code, etc.
  - Components deployed for Testing
  - Components deployed for Go-Live
- PCR Admin Tool
  - Customization Specification
  - Design Mock-up
  - Customization Components; tables, triggers, code, etc.
  - Components deployed for Testing
  - Components deployed for Go-Live
- Service Request Q&A Instruction Expansion
  - Customization Specification
  - Customization Components; tables, triggers, code, etc.
  - Components deployed for Testing
  - Components deployed for Go-Live
- WO Priority Automation
  - Customization Specification
  - Design Mock-up
  - Customization Components; tables, triggers, code, etc.
  - Components deployed for Testing
  - Components deployed for Go-Live

Assumptions

- The known customizations are fully vetted, documented, and agreed-to by the County.

County Responsibilities

- Review and approve the specifications.
- Review and provide feedback on any mock-ups
- Participate in Testing until the customization is accepted

Phase 12: Cityworks Upgrades

Cityworks releases new software versions every 12-18 months. Each version contains major upgrades to the system's functional capabilities, technology / architecture, or both. In the interim, software patches and upgrades are provided to correct bugs and provide minor functional improvements.

Track 1 will go live on Cityworks v15.3.3. Woolpert will ensure that the Cityworks environments (PROD, TEST, TRN, and DEV) are running this version of the software.

In order to configure the PAVER interface during Track 2, Cityworks needs to be upgraded to version 15.4 or higher. Cityworks is developing an out of the box integration tool with PAVER that is scheduled to be released in version 15.4. Upgrading Cityworks once Track 1 is live is the responsibility of the County.

Appendix A: Track 1 Customization Specifications

The following are the four (4) specification documents for the scoped customizations in Phase 11.

Specifications and Scope

Cityworks Track 1 Customizations
Service Request QA Instructions Expansion Script

Pinellas County

August 2018

WOOLPERT

Table of Contents

Revision History and Change Control

Table 1: Revision History		
Name	Date	Change
James Lloyd	June 7, 2018	Initial draft
James Lloyd	August 21, 2018	QA/QC
Anthony Brown	October 3, 2018	QA/QC

WOOLPERT

Description

Pinellas County has identified customizations that they are interested in having Woolpert develop as part of their enterprise-wide Cityworks deployment. This document provides the technical details for the Service Request Question / Answer Expansion customization.

Cityworks provides functionality that allows questions for callers when a service request is created. The system will prompt the call taker with any number of questions. As the call taker enters responses to the questions, instructions may be configured that are associated with the specific question and response entered.

Throughout the core configuration of Cityworks for the County, there were many question and answer options configured and a number with associated instructions.

When creating a service request that is configured with instructions on question and answers, the in-structions are not immediately or automatically visible to the user. The user must select an answer and then click on the questions panel down-arrow ⏷ to expose the instructions.

Functionality

This customization will automatically display the instructions panel when the user selects an answer to a question where instructions are configured.

The following images show an example of a question with an answer selected that has associated in-structions. The image on the left has the instructions panel collapsed. This is the default state of the in-structions panel. The image on the right shows the same question and answer after the user expands

WOOLPERT
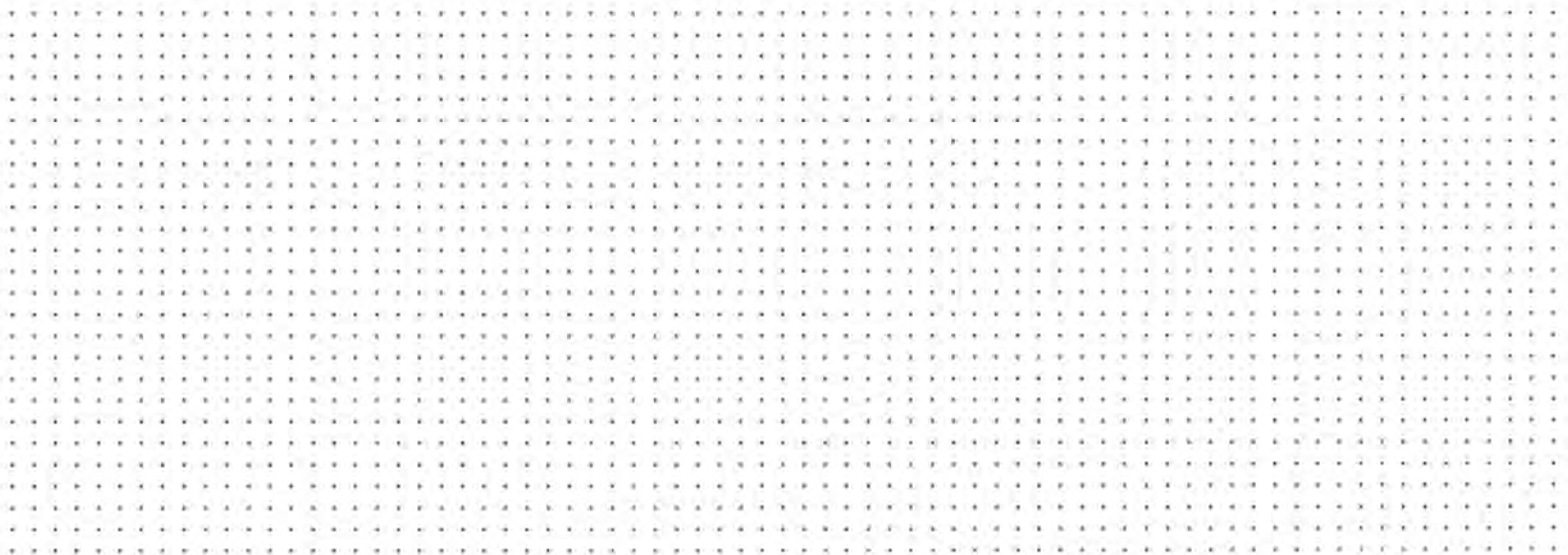
the instructions by clicking on the down-arrow.
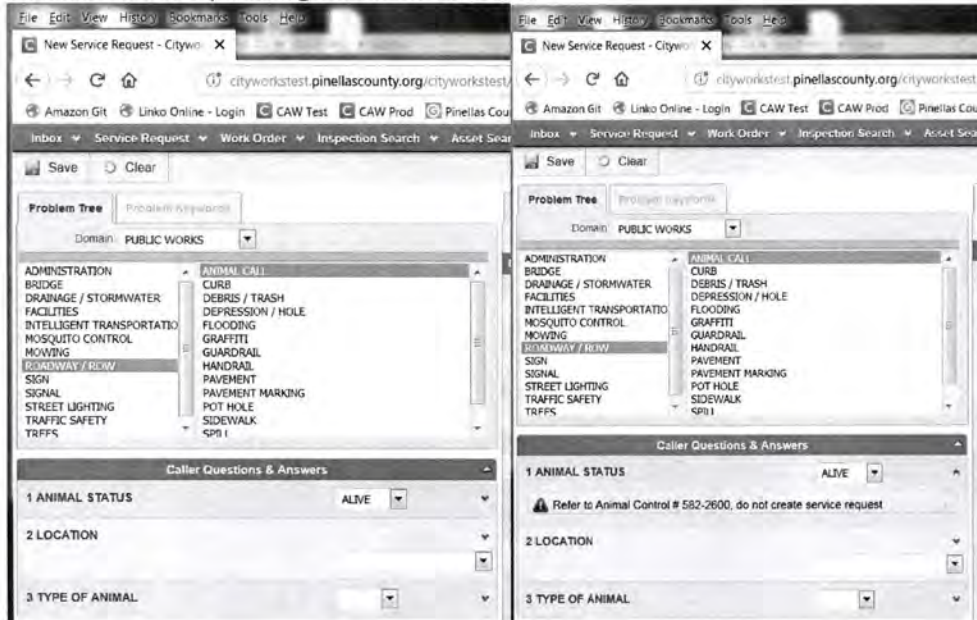
Functional Requirements

The following table lists the required functional requirements of this customization:

Table 2: Functional Requirements

Functional Requirements	
ID	Assumption
FR 1.	If instructions are associated with an answer selected, the automation will expand the instructions panel.
FR 2.	If the user changes a previously entered answer that has associated instructions to one that does not, the instruction panel will be collapsed to the default position.

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This customization will consist of custom JavaScript code. The code will reside on the Cityworks application server. The code will be linked into Cityworks by modifying Cityworks-supplied XML files. The XML files are part of the core Cityworks software and are used to configure minor modifications to the application interface.

This customization will be developed on Woolpert's local environment before being deployed to the County servers.

Estimated Schedule and Level of Effort

Table 3: Level of Effort

Task Name	Duration	Cost
Pinellas County EAM Implementation Track 1 SR QA Instructions Expansion	1.75 days	$4,788.36
Develop Code	1 day	$2,292.20
Deploy code to County environment	0.25 days	$687.66
Testing	0.25 days	$687.66
Documentation	0.25 days	$1,120.84
County to Accept	0 days	$0.00

Assumptions

Table 4: Systemic Assumptions

Assumptions	
ID	Description
A1.	Woolpert will provide source code to the County.
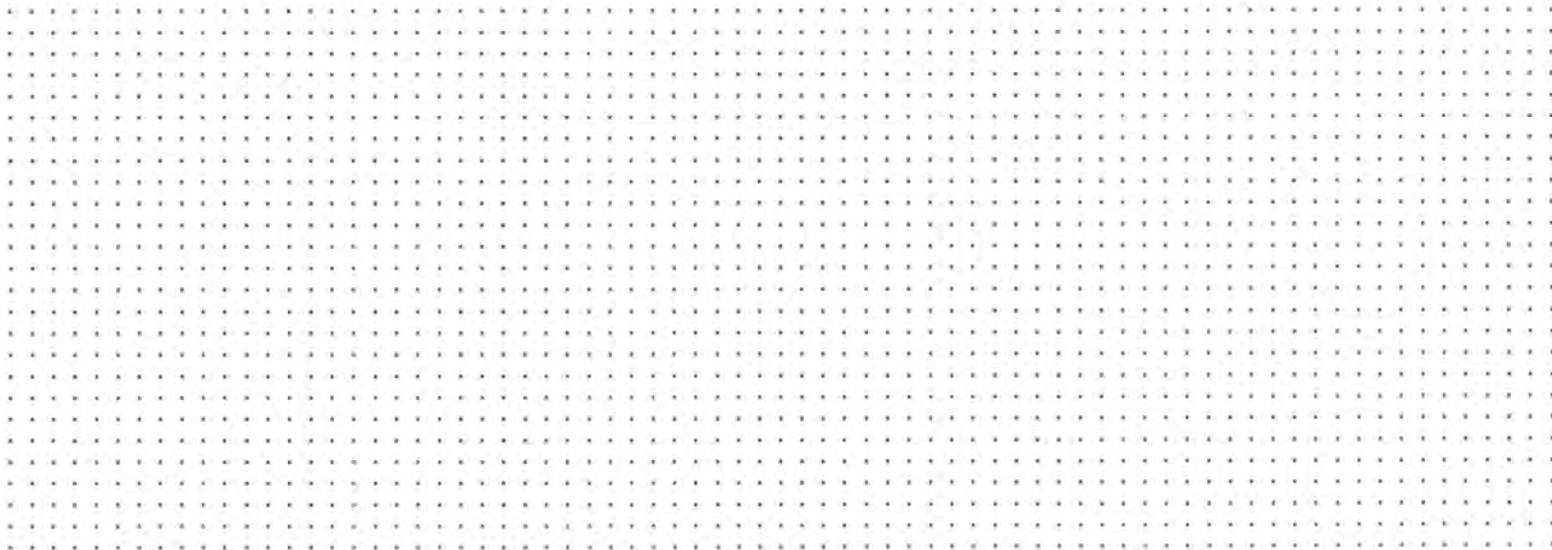
Pinellas County

Specifications and Scope

Cityworks Track 1 Customizations
Problem Cause Remedy (PCR) Administrator Interface

Pinellas County

October 2018
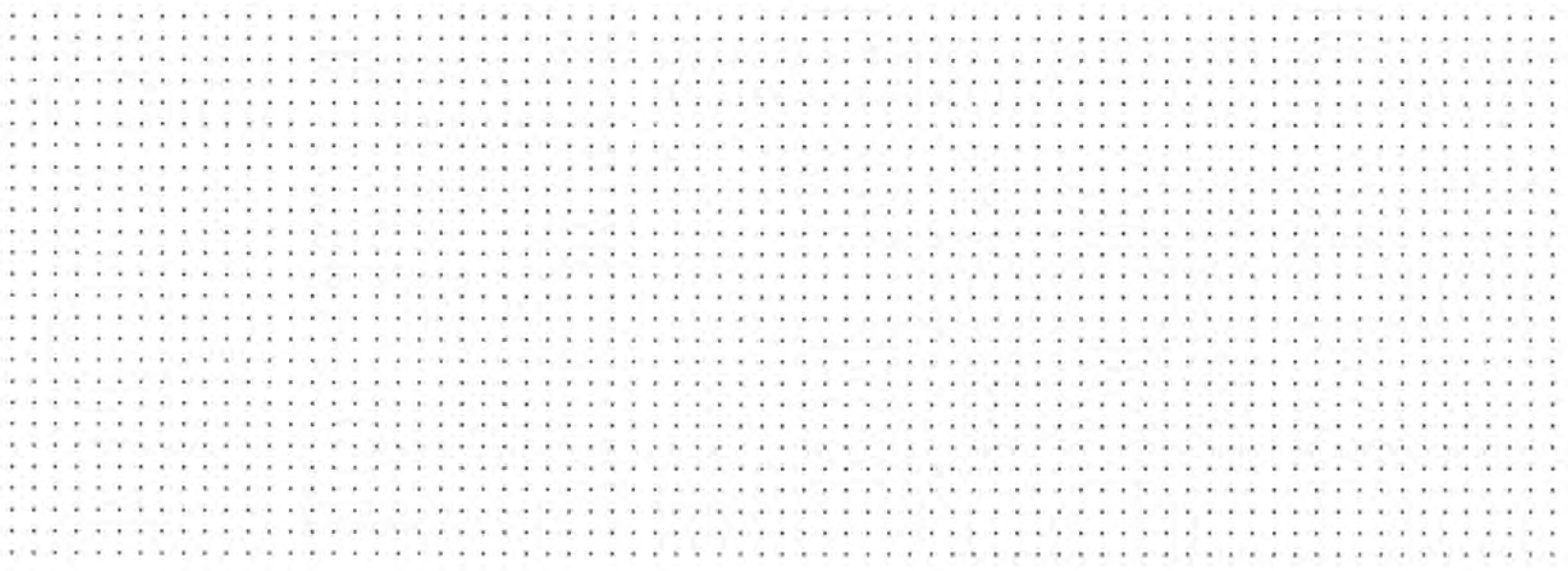
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Revision History and Change Control

Table 2: Revision History		
Name	Date	Change
James Lloyd	May 7, 2018	Initial draft
Anthony Brown	August 9, 2018	Revisions
James Lloyd	August 21, 2018	QA/QC
Anthony Brown	October 4, 2018	Questions addressed
James & Anthony	October 8, 2018	Question / Answer revision

Description

Pinellas County has identified potential customizations that they are interested in having Woolpert develop as part of their enterprise-wide Cityworks deployment. This document provides the technical details for the PCR Administrator Interface.

Pinellas County requires implementation of a Woolpert-developed set of cascading dropdown fields on work order records in Cityworks. These fields provide related input pick lists that are used on corrective work orders to capture the problem, the cause related to the problem, and the remedy used to correct the problem. These values are tailored to each work order template.

Cityworks does not provide a user interface (UI) to manage the Problem Cause Remedy (PCR) data. This document describes the requirements for the development of a UI to managing the PCR data.

Functionality

This interface should augment Cityworks Designer functionality and will include a custom menu button in the Designer screen for easy access by the Cityworks administrator. The interface will be web-based and generally function as an integrated part of Cityworks Designer.

The primary function of this interface is to manage the contents of the custom database table PROBLEMCODES.

The following image shows a sample of the contents of the custom database table:

	CATEGORYID	CATEGORY	PROBLEM	CAUSE	REMEDY	ID	DOMAIN	DIVISION
97	27	MANHOLE	COVER	BROKEN/ CRACKED	REPLACE BASE/FRAME	203	2	UTIL-MAINT
98	27	MANHOLE	COVER	LOOSE	ADJUST	204	2	UTIL-MAINT
99	27	MANHOLE	COVER	LOOSE	REPLACE BASE/FRAME	205	2	UTIL-MAINT
100	27	MANHOLE	DAMAGED	CORROSION	REPAIR	206	2	UTIL-MAINT
101	27	MANHOLE	DAMAGED	CORROSION	REPLACE BASE/FRAME	207	2	UTIL-MAINT
102	27	MANHOLE	DAMAGED	IMPROPER INSTALL	REINSTALL	208	2	UTIL-MAINT
103	27	MANHOLE	DAMAGED	ROOTS IN SYSTEM	LINE	209	2	UTIL-MAINT
104	27	MANHOLE	DAMAGED	ROOTS IN SYSTEM	REMOVE	210	2	UTIL-MAINT
105	27	MANHOLE	HEIGHT	ELEVATION	LOWER	211	2	UTIL-MAINT
106	27	MANHOLE	HEIGHT	ELEVATION	RAISE	212	2	UTIL-MAINT
107	27	MANHOLE	INFILTRATION	LOOSE	ADJUST SEAL	213	2	UTIL-MAINT
108	27	MANHOLE	INFILTRATION	LOOSE	REPLACE BASE/FRAME	214	2	UTIL-MAINT
109	27	MANHOLE	INFLOW	COVER	INSTALL NEW	215	2	UTIL-MAINT
110	27	MANHOLE	INFLOW	COVER	REPLACE BASE/FRAME	216	2	UTIL-MAINT
111	27	MANHOLE	INFLOW	DESIGN	REDESIGN	217	2	UTIL-MAINT

The interface will include pick-lists that allow the user to easily select existing custom field categories, domain, and division values.

The custom field categories will be managed using existing Cityworks Designer tools.

Functional Requirements

The following table lists the required functional requirements of this customization:

Table 2: Functional Requirements

Function Requirements	
ID	Description
FR 1.	Add, update, delete PCR related values.
FR 2.	Provide pick-lists for all related values to include CATEGORY, DOMAIN, DIVISON
FR 3.	Button added to Designer screen for access to interface.

Estimated Schedule and Level of Effort

Table 3: Estimated Schedule and Level of Effort

Task Name	Duration	Cost
Pinellas County EAM Implementation Track 1 PCR Admin Tool	13.5 days	$21,929.34
Develop design mock-ups	1 day	$3,183.82
County to Accept	0.5 days	$1,808.50
Develop Code	10 days	$11,461.00
Deploy code to County environment	0.5 days	$1,375.32
Testing	1 day	$2,292.20
Documentation	0.5 days	$1,808.50
County to Accept	0 days	$0.00

Assumptions

Table 4: Systemic Assumptions

Assumptions	
ID	Description
A1	Custom fields will continue to be managed & maintained within Designer; as well as the association of Custom Field Categories to the Work Order Templates.
A2	Woolperts' custom PCR solution is deployed to the Cityworks instance.
A3.	Custom field categories will continue to be managed using build-in Cityworks Designer tools.
A4.	ID value in the PROBLEMCODES table is an auto-incremented system value.
A5.	Woolpert will provide source code to the County.

Specifications and Scope

Cityworks Track 1 Customizations
Work Order Priority Automation

Pinellas County

October 2018
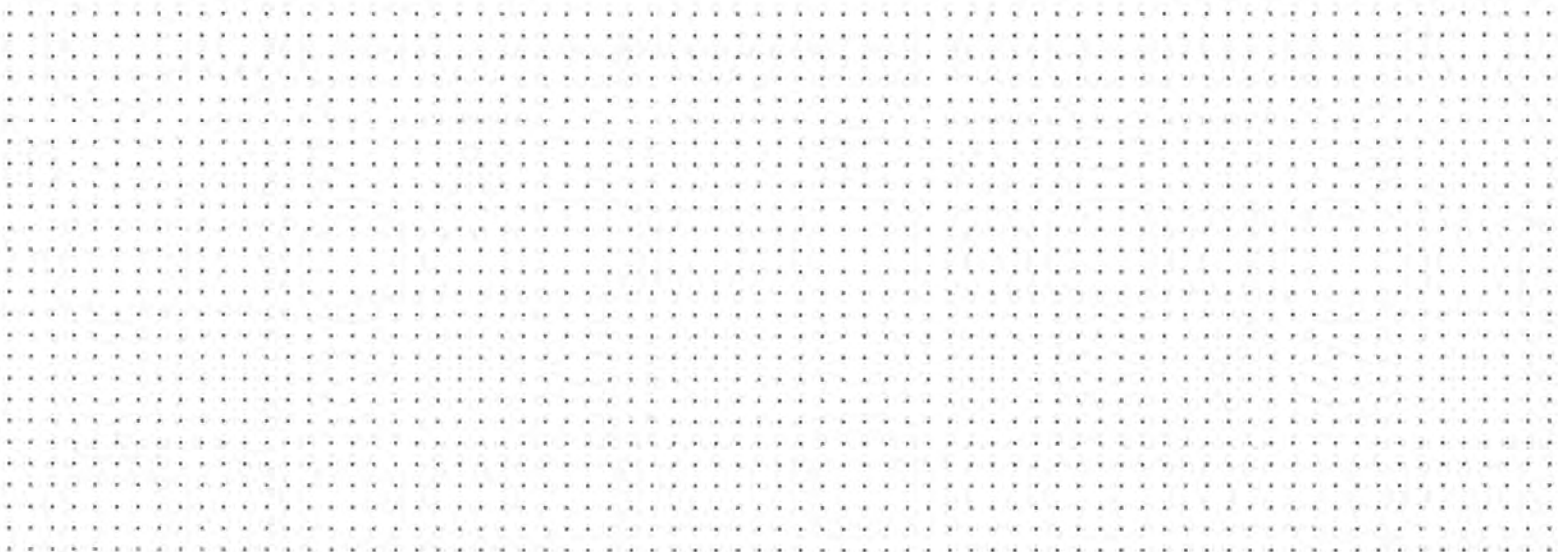
WOOLPERT

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Revision History and Change Control

Table 3: Revision History		
Name	Date	Change
James Lloyd	June 7, 2018	Initial draft
James Lloyd	August 21, 2018	QA/QC
Anthony Brown	October 2, 2018	Questions Addressed
James & Anthony	October 8, 2018	Formatting Adjustment

WOOLPERT

Description

Pinellas County has identified customizations that they are interested in having Woolpert develop as part of their enterprise-wide Cityworks deployment. This document provides the technical details for the Work Order Priority Automation customization.

This customization involves scripting that will automatically set the priority value on a work order based on the value of the asset criticality value combined with the work order category.

Asset Criticality

Assets in the GIS have an attribute field called "Criticality". This numeric value, unless manually set, is a calculated field and a function of "Likelihood of Failure" value multiplied by the "Consequence of Failure" value. These two values are impacted by other details of the asset that may include install date, material, proximity or service to critical infrastructure or customers. The potential asset criticality values the County has established as an enterprise range for all assets is one (1) to five (5) with one (1) being the lowest impact in the event or a failure and five (5) being the highest.

Work Category

Each work order template in Cityworks has been configured with a default work category value. The following table lists each category, their basic definition, as well as the score value assigned to each:

Table 4: Work Categories

Work Category	Work Priority Score
Reactive Action Repairs that are completed either after the asset has already failed, is close to breaking down, impacts safety or does not meet the required level of service. This type of maintenance is generally unplanned, can be carried out in response to service requests, requires an immediate response and may result in a break of scheduled work. *These* activities, although corrective in nature, do not generally result from preventive maintenance work and focus on restoring the asset to operating conditions and to maintain its level of service, security, and integrity.	3
Corrective Action Activities generated from preventive/predictive maintenance inspections, routine operational requests, and routine service requirements carried out prior to the asset failing. These activities make up the maintenance backlog and typically are planned and scheduled in advance.	3
Preventive Action Performance of regularly scheduled maintenance activities on an asset to prevent the possibility of malfunctions and failures, to extend asset life, and to reduce maintenance and operating costs. Activities such as inspections, tests, service, replacement, repairs and other tasks performed as cyclic work intended to help reduce the impact and frequency of asset failures.	2

Predictive Action
Activities which allow failures to be forecasted through analysis of asset's condition. The analysis is generally conducted through some form of trending of a parameter, such as vibration, temperature, flow, sonics and oil analysis. Preventive maintenance differs from predictive maintenance in that it focuses on time-based tasks, whereas PdM uses some form of technology or measurement to allow assets to be repaired at times that do not interfere with production schedules. An extension of PdM is condition-based maintenance, which is maintenance performed as needed based on an asset's condition score.

Functionality

This customization will multiply the work category score by the asset criticality score. The product range determines the resulting work order priority.

The table below illustrates the resulting work order priority values that are to be computed and set based on this calculation:

Adjusted Work Order Priority
EMERGENCY: 15
HIGH: 8, 9, 10, 12
MEDIUM: 5, 6
LOW: 1, 2, 3, 4

For example: If a work order with a default status value of LOW and a work category 1 (predictive) is attached an asset with a criticality value of 5, the resulting value of 5 (green box, top-right) means that the new work order status will be set to MEDIUM.

Functional Requirements

The following table lists the required functional requirements of this customization:

Table 5: Functional Requirements

Function Requirements	
ID	**Description**
FR 1.	Work order templates that have a default priority of "EMERGENCY" will be exempt from this automation. When created, the priority on these work orders will remain at the EMERGENCY level unless manually lowered by the Cityworks user.
FR 2.	This functionality will execute when a work order is created, and/or an asset is attached.

FR 3.	If the asset criticality value on the asset or assets attached to a work order are null, the functionality will not adjust the work order status value.
FR 4.	If there are multiple assets on a work order, this customization will use the highest asset criticality value of the assets attached for the computation.
FR 5.	If a user manually selects a different work order priority, the customization will not re-compute the priority.
FR 6.	If the user manually selects a different work category, the customization will re-compute the priority.

This customization will consist of custom JavaScript code. The code will reside on the Cityworks application server. The code will be linked into Cityworks by modifying Cityworks-supplied XML files. The XML files are part of the core Cityworks software and are used to configure minor modifications to the application interface.

In addition, this customization will employ the use of server-side technologies to include webservices.

Estimated Schedule and Level of Effort

Table 4: Level of Effort

Task Name	Duration	Cost
Pinellas County EAM Implementation Track 1 WO Priority Automation	13.5 days	$24,234.17
Develop design mock-ups	1 day	$2,508.79
County to Accept	0.5 days	$1,808.50
Develop Code	10 days	$14,211.64
Deploy code to County environment	0.5 days	$1,375.32
Testing	1 day	$2,292.20
Documentation	0.5 days	$2,037.72
County to Accept	0 days	$0.00

Assumptions

Table 5: Systemic Assumptions

	Assumptions	
ID	Description	
A1	The County is responsible for computing and populating the GIS with any asset criticality values.	
A2	Woolpert will develop and deploy this customization in the test, development, and production environments.	

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A3	Woolpert will provide custom code to the County.

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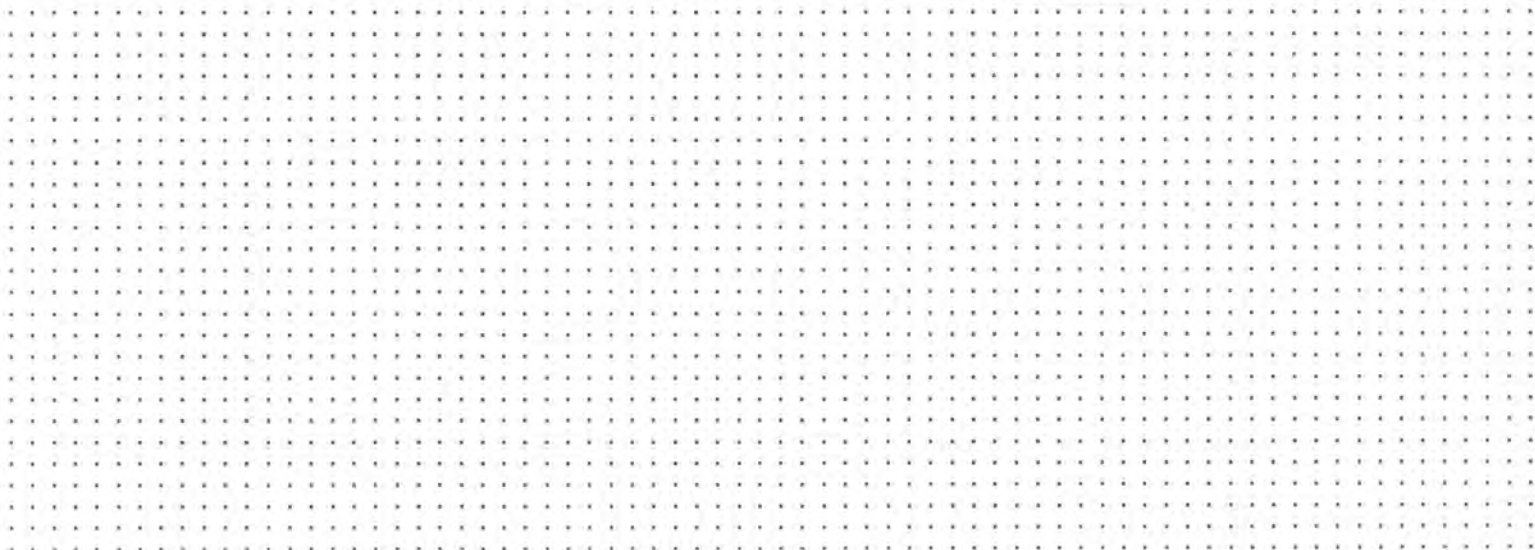
Pinellas
County

Specifications and Scope

Cityworks Track 1 Customizations
Service Request & Work Order – Employee Historical Rates Updating & Tracking

Pinellas County

October 2018
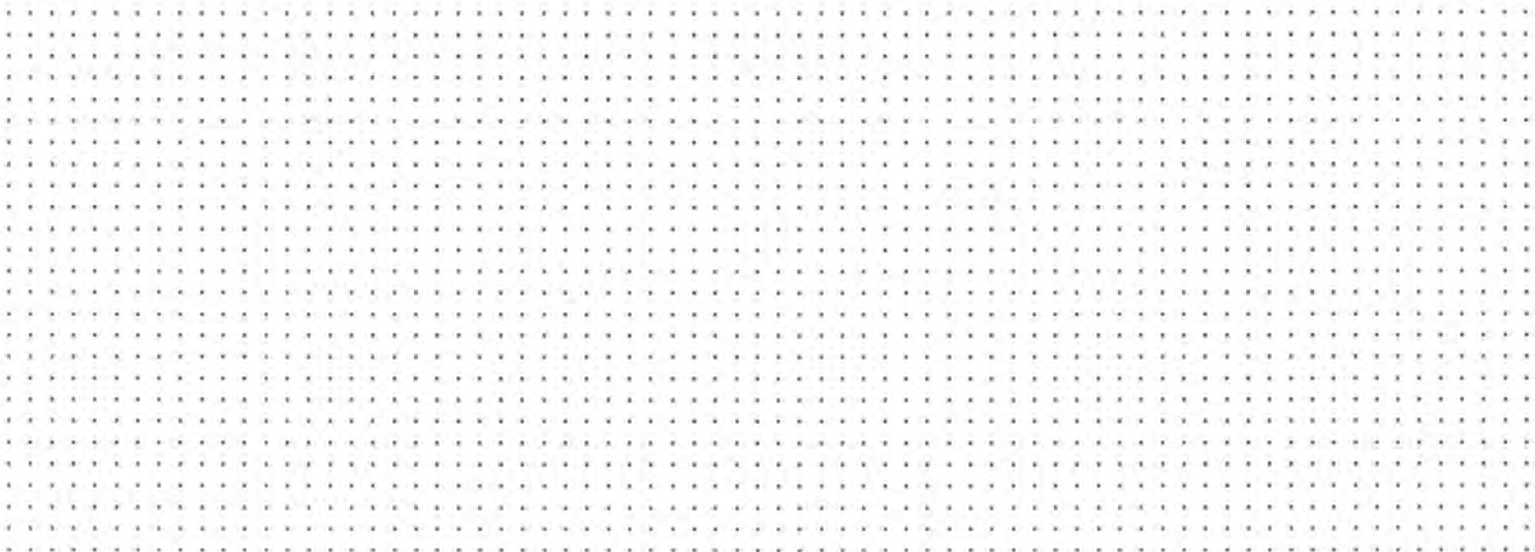
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Revision History and Change Control

Table 6: Revision History		
Name	**Date**	**Change**
Anthony Brown	August 8, 2018	Initial draft
James Lloyd	August 21, 2018	QA/QC
Anthony Brown	October 4, 2018	Questions Addressed
James Lloyd	October 4, 2018	Questions Addressed
James & Anthony	October 8, 2018	Questions & Answers, Formatting Adjustments.

Description

Pinellas County has identified customizations that they are interested in having Woolpert develop as part of their enterprise-wide Cityworks deployment. This document provides the technical details for the Employee Historical Rates Tracking customization.

Pinellas County has engaged Woolpert for a large-scale implementation of a Cityworks Asset Management System and integration with several enterprise software systems. To coordinate with the OPUS Employee integration as well as to provide additional reporting capabilities for Cityworks, the need to capture additional transactional rate information was identified. See the OPUS/LDAP – Cityworks Employee Integration SRS document for specific details of the OPUS Employee integration with Cityworks.

The integration will set new or update existing employees and corresponding rate values in Cityworks configuration tables. The integration will populate the internal rate for all employees and multiplier values for external cost charge. The external charge computations will be visualized via custom reports (to be developed during Reports / Metrics Development tasks).

The integration does not track historical rates. These rates are overwritten when the integration updates an employees' rate values. Also, when a Cityworks administrator manually adds or edits employee rate values, the system does not maintain the history of the changes.

This customization proposed the creation of a custom table to house the rate values for all employees and persist the historical values. Any custom reports will leverage this custom table to produce accurate reports using the rates and multipliers that were in effect for the time the work records were produced.

Functionality

A trigger will be developed and applied to the "EMPLOYEE" table. When a new employee is added to Cityworks, and rate values added, the trigger will populate the custom table with the required values.

Data will be collected by one (1) custom created table. The custom table will reside in the Cityworks database.

Functional Requirements

The following table lists the required functional requirements of this customization:

Table 2: Functional Requirements

Function Requirements	
ID	**Description**
FR 1.	Custom table will be created to house historical rates for all employees.
FR 2.	Custom table will reside in the Cityworks database.
FR 3.	Insert Trigger – Populates Custom Table when employee rate value(s) added.
FR 4.	Update Trigger - Populates Custom Table when employee rate value(s) updated.
FR 5.	Fields required: • EMPLOYEESID decimal (10,0) • EXTERNAL decimal (7,2) • INTERNAL decimal (7,2) • EDITDATE (datetime) • FIRSTNAME nvarchar (15) • MIDDLEINITIAL nvarchar (2) • LASTNAME nvarchar (15)

Estimated Schedule and Level of Effort

Table 3: Level of Effort

Task Name	Duration	Cost
Pinellas County EAM Implementation Track 1 Employee Historical Rates Tracking	1 day	$2,954.60
Develop Custom Table	0.25 days	$687.66
Develop Custom Trigger	0.25 days	$687.66
Deploy code to County environment	0.13 days	$229.22
Testing	0.13 days	$229.22
Documentation	0.25 days	$1,120.84
County to Accept	0 days	$0.00

Assumptions

Table 4: Systemic Assumptions

Assumptions	
ID	**Description**
A1.	Historical Employee Rates may be overwritten nightly by the OPUS Employee integration.
A2.	Custom reports developed that require employee rates will use the custom table as the source for labor cost computations.
A3.	Woolpert will provide source code to the County.

EXHIBIT B: PRICE PROPOSAL

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Price Proposal

Fixed Scope / Fixed-Fee Services

Woolpert has developed a detailed scope of services document in Microsoft Word and a companion schedule of activities using Microsoft Project. The Microsoft Project schedule is a hierarchical breakdown of the project Phases into major task groupings and specific work activities. Microsoft Project allows us to assign hourly bill-rates to resources and resources to work activities for a set number of hours. The number of hours assigned to an activity for each resource multiplied by their bill-rate yields a cost for that activity. Microsoft Project aggregates activity costs throughout the project work breakdown structure (WBS) and presents a cost for each major task grouping and project phase. The following table presents those costs by each project phase and major task grouping.

The rates used in this fee schedule align with the rates in the General Services Administration (GSA) Federal Supply Service Contract Number GS-35F-0425P through April 6, 2019. Woolpert plans to reapply for the GSA contract at new rates. Since those rates are as-yet unapproved, services beyond that date (4/6/2019) in the project schedule have been costed at the 2018-2019 rates. Should new work activities to be performed after April 6, 2019 be added to the scope of services, Woolpert will use updated GSA rates, if available to cost new work, else will use the 2018-2019 rates. Woolpert will not adjust costs for contracted work when new rates are approved. Included in this firm fixed-fee schedule are all travel-related expenses for non-local resources to be onsite for the appropriate activities.

The following table represents our proposed fees in support of the scope of work document and two MPPs -

Project Summary	**$11,102,525**

Implementation Planning (Pre-Track 1 & 2)	**$1,438,873.00**
PHASE 0: IMPLEMENTATION PLANNING	**$1,438,873.00**

Track 1 Tasks	**$4,944,640.29**
PHASE 1: PROJECT MANAGEMENT	**$1,477,315.09**
PHASE 2: IMPLEMENTATION PLANNING	**$0.00**
PHASE 3: SYSTEM DESIGN AND CONFIGURATION	**$585,438.53**
WBS TASK 3.1: Cityworks Configuration for Public Works and Utilities	$479,630.65
WBS TASK 3.2: Pavement Asset-Specific Plan	$85,758.28
WBS TASK 3.3: Phase 3 Quality Control	$20,049.60
PHASE 4: ADVANCED CONFIGURATION AND FUNCTIONALITY	**$1,358,127.64**
WBS TASK 4.1: Legacy Data Migration	$336,591.24
WBS TASK 4.2: Custom Reports and Metrics	$228,278.84
WBS TASK 4.3: System Integrations	$726,099.56
WBS TASK 4.4: Phase 4 Quality Control	$67,158.00
PHASE 5: SYSTEM DEPLOYMENT	**$752,882.80**
WBS TASK 5.1: Test Plans	$59,236.10
WBS TASK 5.2: User Acceptance Testing	$116,178.98
WBS TASK 5.3: End User Training	$424,893.30
WBS TASK 5.4: Go-Live Support	$116,540.80

WOOLPERT

PINELLAS COUNTY
ASSET MANAGEMENT PROGRAM DEVELOPMENT AND CITYWORKS IMPLEMENTATION
PROPOSED BY: WOOLPERT, INC.

WBS TASK 5.5: Phase 5 Quality Control	$36,033.62
PHASE 6: EXTENDED SUPPORT	$57,038.23
PHASE 7: ORGANIZATIONAL CHANGE MANAGEMENT	$152,303.64
PHASE 8: GIS READINESS	$203,873.36
WBS TASK 8.3: Data Maintenance Tools	$113,110.06
WBS TASK 8.4: GIS Implementation Support	$81,101.30
WBS TASK 8.5: Phase 8 Quality Control	$9,662.00
PHASE 9: ISO 55000 AM PROGRAM SUPPORT	$152,246.09
WBS TASK 9.1: EAM Program Maturity Assessment	$71,282.00
WBS TASK 9.2: AM Strategies and Objectives Implementation Roadmap	$59,812.04
WBS TASK 9.3: AM Strategies and Objectives Implementation Support	$13,902.24
WBS TASK 9.4: Phase 9 Quality Control	$7,249.81
PHASE 10: OWNER DIRECTED FUNDS	$155,125.44
PHASE 11: CUSTOMIZATIONS	$50,289.47
WBS TASK 11.1: Employee Historical Rate Tracking	$2,954.60
WBS TASK 11.2: PCR Admin Tool	$20,120.84
WBS TASK 11.3: SR Q&A Instruction Expansion	$4,788.36
WBS TASK 11.4: WO Priority Automation	$22,425.67
PHASE 12: CITYWORKS UPGRADE TO V15.3	$0.00
Track 2 Tasks	**$4,719,011.74**
PHASE 1: PROJECT MANAGEMENT	$1,444,283.79
PHASE 2: IMPLEMENTATION PLANNING	$0.00
PHASE 3: SYSTEM DESIGN AND CONFIGURATION	$841,935.65
WBS TASK 3.1: REM, Solid Waste and PCR Cityworks Configuration	$802,013.31
WBS TASK 3.2: Placeholder Asset-Specific Plan	$0.00
WBS TASK 3.3: Phase 3 Quality Control	$39,922.34
PHASE 4: ADVANCED CONFIGURATION AND FUNCTIONALITY	$673,520.28
WBS TASK 4.1: Legacy Data Migration	$285,832.60
WBS TASK 4.2: Custom Reports and Metrics	$33,431.66
WBS TASK 4.3: System Integrations	$322,194.02
WBS TASK 4.4: Phase 4 Quality Control	$32,062.00
PHASE 5: SYSTEM DEPLOYMENT	$603,089.46
WBS TASK 5.1: Test Plans	$2,750.64
WBS TASK 5.2: User Acceptance Testing	$102,934.38
WBS TASK 5.3: End User Training	$207,008.27
WBS TASK 5.4: Go-Live Support	$261,146.62
WBS TASK 5.5: Phase 5 Quality Control	$29,249.55
PHASE 6: EXTENDED SUPPORT	$0.00
PHASE 7: ORGANIZATIONAL CHANGE MANAGEMENT	$0.00
PHASE 8: GIS READINESS	$843,184.16
WBS TASK 8.1: Geodatabase Data Model Development	$283,212.98
WBS TASK 8.2: GIS Data Migration and Tools	$363,659.02
WBS TASK 8.3: GIS Implementation Support	$156,161.16

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WBS TASK 8.4: Phase 8 Quality Control...	**$40,151.00**
PHASE 9: ISO 55000 AM PROGRAM SUPPORT	**$0.00**
PHASE 10: OWNER DIRECTED FUNDS	**$312,998.40**
PHASE 11: CUSTOMIZATIONS	**$0.00**
PHASE 12: CITYWORKS UPGRADE TO V15.x..	**$0.00**

Ad-Hoc / Time and Material Services

Woolpert's rate schedule for non-scoped implementation services will be scoped and priced following the General Services Administration (GSA) Federal Supply Service Contract Number GS-35F-0425P; rates are listed in the following table. County may request that ad-hoc services be scoped and priced as fixed-fee work including all labor efforts and travel expenses, or, that ad-hoc services be estimated and billed on an actual time and material basis. If services will be billed as time and material, Woolpert will invoice hourly effort per the GSA fee schedule and travel expenses at actual value.

AUTHORIZED GSA SCHEDULE CONTRACT PRICING					
GS-35F-0425P					
Labor Category	4/7/16-4/6/17 GSA Price	4/7/17-4/6/18 GSA Price	4/7/18-4/6/19 GSA Price	County Price	Qty
Program Manager	$244.51	$250.62	$256.89		
Project Manager	$206.16	$211.31	$216.59		
Group Manager	$218.18	$223.63	$229.22		
Sr. Tech Specialist	$218.18	$223.63	$229.22		
System Analyst	$201.63	$206.67	$211.84		
Sr. DB Dev/Programmer	$218.18	$223.63	$229.22		
DB Dev/Programmer	$195.60	$200.49	$205.50		
Jr. DB Dev/Programmer	$182.07	$186.62	$191.29		
Technical Specialist	$124.90	$128.02	$131.22		
Sr. Technical Writer	$135.41	$138.80	$142.27		
Technical Writer	$127.15	$130.33	$133.59		
Clerical	$69.22	$70.95	$72.72		

EXHIBIT C: PROJECT SCHEDULE

TRACK 1

ID	WBS		Task Name	Duration	Start	Finish	Notes	Cost	Work
0	0		Pinellas County EAM Implementation_Track 1 DRAFT MPP ver	683.64	Thu 6/8/17	Fri 3/20/20		$4,944,640.29	24,283.02 hrs
1	1	🔢	**PHASE 1: Project Management**	565 day	Thu 6/8/17	Mon 9/23/19		$1,477,315.09	0 hrs
2	1.1	🔢	Ongoing Project Management	565 days	Thu 6/8/17	Mon 9/23/19		$1,477,315.09	0 hrs
3	1.1.1	🔢	Full time Project Management from Track 1 Kick-off until August 6 2018 (58 Weeks)	286 days	Thu 6/8/17	Mon 8/6/18	[7/27 sri]	$745,080.55	0 hrs
4	1.1.2		Full time Project Management beyond August 6 2018 until Track 1 Completion (57 Weeks)	279 days	Tue 8/7/18	Mon 9/23/19	[10/2 sri]	$732,234.54	0 hrs
5	2	🔢	PHASE 2: Implementation Planning	30 days	Mon 6/12/17	Fri 7/21/17		$0.00	0 hrs
6	3		**PHASE 3: Core System Design and Configuration**	341 day	Mon 6/12/17	Thu 10/25/18		$585,438.53	2,792 hrs
7	3.1		Public Works and Utilities	336 day	Mon 6/12/17	Thu 10/18/18		$479,630.65	2,348 hrs
8	3.1.1		Prepare Configuration Documentation	6.5 days	Mon 6/12/17	Tue 6/20/17		$14,479.16	68 hrs
9	3.1.1.1	🔢	Woolpert to Prepare Draft Configuration Documentation	5 days	Mon 6/12/17	Fri 6/16/17		$12,739.40	60 hrs
10	3.1.1.2		Woolpert to Submit to County for Review	0 days	Fri 6/16/17	Fri 6/16/17		$0.00	0 hrs
11	3.1.1.3		Woolpert to Facilitate Remote Review Meeting with County	0.5 days	Tue 6/20/17	Tue 6/20/17		$1,739.76	8 hrs
12	3.1.2		Conduct Configuration Prep Info Session for Implementation	8 days	Tue 6/20/17	Fri 6/30/17		$22,343.52	88 hrs
13	3.1.2.1		Woolpert to Prepare Configuration Prep Info Session Agend.	2 days	Tue 6/20/17	Thu 6/22/17		$1,789.04	8 hrs
14	3.1.2.2		Woolpert to Submit Agenda to County Project Team	0 days	Thu 6/22/17	Thu 6/22/17		$0.00	0 hrs
15	3.1.2.3		County Project Team to Prepare Site for Config Prep Info Se:	2 days	Thu 6/22/17	Mon 6/26/17		$0.00	0 hrs
16	3.1.2.4		Config Prep Info Session for Implementation Team (ONSIT	4 days	Mon 6/26/17	Fri 6/30/17		$13,918.08	64 hrs
17	3.1.2.4.	🔢	Woolpert to Provide Config Prep Info Session - Class 1 (O	2 days	Mon 6/26/17	Wed 6/28/17		$6,959.04	32 hrs
18	3.1.2.4.	🔢	Woolpert to Provide Config Prep Info Session - Class 1 (Of	2 days	Wed 6/28/17	Fri 6/30/17		$6,959.04	32 hrs
19	3.1.2.5		Travel for Configuration Prep Info Session	4 days	Mon 6/26/17	Fri 6/30/17		$6,636.40	16 hrs
20	3.1.2.5.		Travel for Configuration Prep Info Session	4 days	Mon 6/26/17	Fri 6/30/17		$6,636.40	16 hrs
21	3.1.3		Core Cityworks AMS Configuration	164.5 da	Mon 7/3/17	Fri 3/9/18		$370,609.19	1,557 hrs
22	3.1.3.1		Round 1 AMS Configuration Workshops	79 days	Mon 7/3/17	Fri 10/20/17		$199,185.80	836 hrs
23	3.1.3.1.		Woolpert to Prepare for AMS Configuration Workshops (I	1 day	Mon 7/3/17	Tue 7/4/17		$869.88	4 hrs
24	3.1.3.1.		County to Prepare for AMS Workshops (First Round)	1 day	Wed 7/5/17	Thu 7/6/17		$0.00	0 hrs
25	3.1.3.1.		Woolpert to Facilitate AMS Configuration Workshops (R	74 days	Mon 7/10/17	Fri 10/20/17		$162,348.32	752 hrs
26	3.1.3.1		Round 1: 3 Week Cycle 1	14 days	Mon 7/10/17	Fri 7/28/17		$40,587.08	188 hrs
27	3.1.3.1.	🔢👤	Utilities | Customer, Field Services AMS Configuratio	2 days	Mon 7/10/17	Wed 7/12/17		$7,730.04	36 hrs
28	3.1.3.1.	🔢👤	Utilities | Maintenance AMS Configuration Worksho	2 days	Wed 7/12/17	Thu 7/13/17		$7,730.04	36 hrs
29	3.1.3.1		Woolpert to Update AMS Configuration Docun	6 days	Fri 7/14/17	Fri 7/21/17		$10,327.20	48 hrs
30	3.1.3.1		Woolpert to Perform AMS Configuration in De	6 days	Fri 7/14/17	Fri 7/21/17		$10,327.20	48 hrs
31	3.1.3.1		Woolpert to prep for interim Workshop # 1 Co	1 day	Mon 7/24/17	Mon 7/24/17		$1,789.04	8 hrs
32	3.1.3.1		Woolpert to Faciliate Joint System Review afte	0.5 day	Wed 7/26/17	Wed 7/26/17		$894.52	4 hrs
33	3.1.3.1		Woolpert to report County testing results	1 day	Thu 7/27/17	Fri 7/28/17		$1,789.04	8 hrs
34	3.1.3.1		Round 1: 3 Week Cycle 2	14.5 da	Mon 7/31/17	Fri 8/18/17		$40,587.08	188 hrs
35	3.1.3.1	🔢	Public Works | Roadway Maintenance AMS Co	2 days	Mon 7/31/17	Tue 8/1/17		$7,730.04	36 hrs
36	3.1.3.1		Public Works | Transportation AMS Configurat	2 days	Wed 8/2/17	Thu 8/3/17		$7,730.04	36 hrs
37	3.1.3.1		Woolpert to Update AMS Configuration Docun	6 days	Fri 8/4/17	Fri 8/11/17		$10,327.20	48 hrs
38	3.1.3.1		Woolpert to Perform AMS Configuration in De	6 days	Fri 8/4/17	Fri 8/11/17		$10,327.20	48 hrs
39	3.1.3.1		Woolpert to prep for interim Workshop # 2 Co	1 day	Mon 8/14/17	Mon 8/14/17		$1,789.04	8 hrs
40	3.1.3.1		Woolpert to Faciliate Joint System Review afte	0.5 day	Wed 8/16/17	Wed 8/16/17		$894.52	4 hrs
41	3.1.3.1		Woolpert to report County testing results	1 day	Thu 8/17/17	Fri 8/18/17		$1,789.04	8 hrs
42	3.1.3.1		Round 1: 3 Week Cycle 3	14.5 da	Mon 8/21/17	Fri 9/8/17		$40,587.08	188 hrs
43	3.1.3.1	🔢	Public Works | Customer Service AMS Configur	2 days	Mon 8/21/17	Tue 8/22/17		$7,730.04	36 hrs

ID	WBS		Task Name	Duration	Start	Finish	Notes	Cost	Work
44	3.1.3.1		Public Works | Stormwater AMS Configuration	2 days	Wed 8/23/17	Thu 8/24/17		$7,730.04	36 hrs
45	3.1.3.1		Woolpert to Update AMS Configuration Docun	6 days	Fri 8/25/17	Fri 9/1/17		$10,327.20	48 hrs
46	3.1.3.1		Woolpert to Perform AMS Configuration in De	6 days	Fri 8/25/17	Fri 9/1/17		$10,327.20	48 hrs
47	3.1.3.1		Woolpert to prep for interim Workshop # 3 Co	1 day	Mon 9/4/17	Mon 9/4/17		$1,789.04	8 hrs
48	3.1.3.1		Woolpert to Faciliate Joint System Review afte	0.5 day:	Wed 9/6/17	Wed 9/6/17		$894.52	4 hrs
49	3.1.3.1		Woolpert to report County testing results	1 day	Thu 9/7/17	Fri 9/8/17		$1,789.04	8 hrs
50	3.1.3.1		**Round 1: 3 Week Cycle 4**	14.5 da	Mon 10/2/17	Fri 10/20/17		$40,587.08	188 hrs
51	3.1.3.1		Public Works | Mosquito Control & Vegetation AMS Configuration Workshop 4	2 days	Mon 10/2/17	Tue 10/3/17		$7,730.04	36 hrs
52	3.1.3.1		Public Works | Placeholder Workshop 4 (ONSI	2 days	Wed 10/4/17	Thu 10/5/17		$7,730.04	36 hrs
53	3.1.3.1		Woolpert to Update AMS Configuration Docun	6 days	Fri 10/6/17	Fri 10/13/17		$10,327.20	48 hrs
54	3.1.3.1		Woolpert to Perform AMS Configuration in De	6 days	Fri 10/6/17	Fri 10/13/17		$10,327.20	48 hrs
55	3.1.3.1		Woolpert to prep for interim Workshop # 4 Co	1 day	Mon 10/16/17	Mon 10/16/17		$1,789.04	8 hrs
56	3.1.3.1		Woolpert to Faciliate Joint System Review afte	0.5 day:	Wed 10/18/17	Wed 10/18/17		$894.52	4 hrs
57	3.1.3.1		Woolpert to report County testing results	1 day	Thu 10/19/17	Fri 10/20/17		$1,789.04	8 hrs
58	3.1.3.1		**Woolpert to facilitate Environment Migration &**	3 days	Mon 10/16/17	Wed 10/18/17		$0.00	0 hrs
59	3.1.3.1		Woolpert to migrate PW & UTIL configurations from TEST to DEV environment	1 day	Mon 10/16/17	Mon 10/16/17		$0.00	0 hrs
60	3.1.3.1		Woolpert to provide BTS Staff with an update on the Configuration at the end of Round 1	1 day	Tue 10/17/17	Tue 10/17/17		$0.00	0 hrs
61	3.1.3.1		Woolpert to wrap up Round 1 configuration related action items and prepare for Round 2	1 day	Wed 10/18/17	Wed 10/18/17		$0.00	0 hrs
62	3.1.3.1.		**Travel for Round 1 AMS Configuration Workshops**	72.5 day	Mon 7/10/17	Wed 10/18/17		$35,967.60	80 hrs
63	3.1.3.1.		Travel for Round 1 AMS Configuration Workshops	4 days	Mon 7/10/17	Fri 7/14/17		$7,193.52	16 hrs
64	3.1.3.1.		Travel for Round 1 AMS Configuration Workshops	4 days	Mon 7/31/17	Thu 8/3/17		$7,193.52	16 hrs
65	3.1.3.1.		Travel for Round 1 AMS Configuration Workshops	4 days	Mon 8/21/17	Thu 8/24/17		$7,193.52	16 hrs
66	3.1.3.1.		Travel for Round 1 AMS Configuration Workshops	4 days	Mon 10/2/17	Thu 10/5/17		$7,193.52	16 hrs
67	3.1.3.1.		Travel for Round 1 AMS Configuration Workshops	3 days	Mon 10/16/17	Wed 10/18/17		$7,193.52	16 hrs
68	3.1.3.2		**Round 2 AMS Configuration Workshops**	38 days	Wed 11/1/17	Mon 1/15/18		$111,370.88	472 hrs
69	3.1.3.2.		Woolpert to Prepare for AMS Configuration Workshops (:	1 day	Wed 11/1/17	Thu 11/2/17		$860.60	4 hrs
70	3.1.3.2.		County to Prepare for AMS Workshops (Second Round)	1 day	Thu 11/2/17	Fri 11/3/17		$0.00	0 hrs
71	3.1.3.2.		**Woolpert to Facilitate AMS Configuration Workshops (R**	35.5 day	Mon 11/6/17	Mon 1/15/18		$110,510.28	468 hrs
72	3.1.3.2		**Round 2: 3 Week Cycle 1**	14 days	Mon 11/6/17	Fri 12/1/17		$28,942.74	134 hrs
73	3.1.3.2		Utilities | Customer, Field Services AMS Config	1.5 day:	Mon 11/6/17	Tue 11/7/17		$5,797.53	27 hrs
74	3.1.3.2		Utilities | Maintenance AMS Configuration Wo	1.5 day:	Wed 11/8/17	Thu 11/9/17		$5,797.53	27 hrs
75	3.1.3.2		Woolpert to Update AMS Configuration Docun	4 days	Thu 11/9/17	Wed 11/15/17		$6,884.80	32 hrs
76	3.1.3.2		Woolpert to Perform AMS Configuration in De	4 days	Thu 11/9/17	Wed 11/15/17		$6,884.80	32 hrs
77	3.1.3.2		Woolpert to prep for interim Workshop # 1 Co	0.5 day:	Thu 11/16/17	Thu 11/16/17		$894.52	4 hrs
78	3.1.3.2		Woolpert to Faciliate Joint System Review afte	0.5 day:	Mon 11/27/17	Mon 11/27/17		$894.52	4 hrs
79	3.1.3.2		Woolpert to report County testing results	1 day	Thu 11/30/17	Fri 12/1/17		$1,789.04	8 hrs
80	3.1.3.2		**Round 2: 3 Week Cycle 2**	16 days	Mon 11/27/17	Tue 1/2/18		$28,739.22	134 hrs
81	3.1.3.2		Public Works | Roadway Maintenance AMS Co	1.5 day:	Mon 11/27/17	Tue 11/28/17		$5,797.53	27 hrs
82	3.1.3.2		Public Works | Transportation AMS Configurat	1.5 day:	Wed 11/29/17	Thu 11/30/17		$5,797.53	27 hrs
83	3.1.3.2		Woolpert to Update AMS Configuration Docun	4 days	Thu 11/30/17	Wed 12/6/17		$6,884.80	32 hrs
84	3.1.3.2		Woolpert to Perform AMS Configuration in De	4 days	Thu 11/30/17	Wed 12/6/17		$6,884.80	32 hrs
85	3.1.3.2		Woolpert to prep for interim Workshop # 2 Co	0.5 day:	Thu 12/7/17	Thu 12/7/17		$894.52	4 hrs

ID	WBS	Task Name	Duration	Start	Finish	Notes	Cost	Work
86	3.1.3.2	Woolpert to Faciliate Joint System Review afte	0.5 days	Mon 12/11/17	Mon 12/11/17		$826.68	4 hrs
87	3.1.3.2	Woolpert to report County testing results	1 day	Mon 1/1/18	Tue 1/2/18		$1,653.36	8 hrs
88	3.1.3.2	Round 2: 3 Week Cycle 3	15 days	Mon 12/11/17	Mon 1/15/18	Why I	$32,807.76	152 hrs
89	3.1.3.2	Public Works | Customer Service AMS Configui	1.5 days	Mon 12/11/17	Tue 12/12/17		$5,797.53	27 hrs
90	3.1.3.2	Public Works | Stormwater AMS Configuration	1.5 days	Wed 12/13/17	Thu 12/14/17		$5,797.53	27 hrs
91	3.1.3.2	Public Works | Mosquito Control & Vegetation AMS Configuration Workshop 3	1 day	Thu 12/14/17	Fri 12/15/17		$3,865.02	18 hrs
92	3.1.3.2	Woolpert to Update AMS Configuration Docun	4 days	Thu 12/14/17	Wed 1/3/18		$6,884.80	32 hrs
93	3.1.3.2	Woolpert to Perform AMS Configuration in De	4 days	Thu 12/14/17	Wed 1/3/18		$6,884.80	32 hrs
94	3.1.3.2	Woolpert to prep for interim Workshop # 3 Co	0.5 days	Thu 1/4/18	Thu 1/4/18		$894.52	4 hrs
95	3.1.3.2	Woolpert to Faciliate Joint System Review after Workshop # 3 & Refresher for # 2	0.5 days	Mon 1/8/18	Mon 1/8/18		$894.52	4 hrs
96	3.1.3.2	Woolpert to report County testing results	1 day	Fri 1/12/18	Mon 1/15/18		$1,789.04	8 hrs
97	3.1.3.2.	Travel for Round 2 AMS Configuration Workshops	24 days	Mon 11/6/17	Thu 12/14/17		$20,020.56	48 hrs
98	3.1.3.2.	Travel for Round 2 AMS Configuration Workshops	4 days	Mon 11/6/17	Thu 11/9/17		$6,673.52	16 hrs
99	3.1.3.2.	Travel for Round 2 AMS Configuration Workshops	4 days	Mon 11/27/17	Thu 11/30/17		$6,673.52	16 hrs
100	3.1.3.2.	Travel for Round 2 AMS Configuration Workshops	4 days	Mon 12/11/17	Thu 12/14/17	No on	$6,673.52	16 hrs
101	3.1.3.3	Round 3 AMS Configuration Workshops	31.5 days	Thu 1/25/18	Fri 3/9/18		$60,052.51	249 hrs
102	3.1.3.3.	Woolpert to Prepare for AMS Configuration Workshops (	1 day	Thu 1/25/18	Fri 1/26/18		$860.60	4 hrs
103	3.1.3.3	County to Prepare for AMS Workshops (Third Roun	1 day	Fri 1/26/18	Mon 1/29/18		$0.00	0 hrs
104	3.1.3.3	Woolpert to Facilitate AMS Configuration Worksho	29.5 days	Mon 1/29/18	Fri 3/9/18		$59,191.91	245 hrs
105	3.1.3.3	3 Week Cycle 1	14 days	Mon 1/29/18	Fri 2/16/18		$22,057.94	102 hrs
106	3.1.3.3	Utilities | Customer, Field Services AMS Config	1 day	Mon 1/29/18	Tue 1/30/18		$3,865.02	18 hrs
107	3.1.3.3	Utilities | Maintenance AMS Configuration Wo	1 day	Tue 1/30/18	Wed 1/31/18		$3,865.02	18 hrs
108	3.1.3.3	Public Works | Roadway Maintenance AMS Co	1 day	Wed 1/31/18	Thu 2/1/18		$3,865.02	18 hrs
109	3.1.3.3	Woolpert to Update AMS Configuration Docun	2 days	Fri 2/2/18	Tue 2/6/18		$3,442.40	16 hrs
110	3.1.3.3	Woolpert to Perform AMS Configuration in De	2 days	Fri 2/2/18	Tue 2/6/18		$3,442.40	16 hrs
111	3.1.3.3	Woolpert to prep for interim Workshop # 1 Co	0.5 days	Thu 2/8/18	Thu 2/8/18		$894.52	4 hrs
112	3.1.3.3	Woolpert to Faciliate Joint System Review afte	0.5 days	Mon 2/12/18	Mon 2/12/18		$894.52	4 hrs
113	3.1.3.2	Woolpert to report County testing results	1 day	Thu 2/15/18	Fri 2/16/18		$1,789.04	8 hrs
114	3.1.3.3	3 Week Cycle 2	13.5 days	Tue 2/20/18	Fri 3/9/18		$23,786.93	111 hrs
115	3.1.3.3	Public Works | Transportation AMS Configurat	1 day	Tue 2/20/18	Wed 2/21/18		$3,865.02	18 hrs
116	3.1.3.3	Public Works | Customer Service AMS Configui	1 day	Wed 2/21/18	Thu 2/22/18		$3,865.02	18 hrs
117	3.1.3.3	Public Works | Stormwater AMS Configuration	1 day	Thu 2/22/18	Fri 2/23/18		$3,865.02	18 hrs
118	3.1.3.3	Public Works | Mosquito Control & Vegetation AMS Configuration Workshop 2	0.5 days	Fri 2/23/18	Fri 2/23/18		$1,932.51	9 hrs
119	3.1.3.3	Woolpert to Update AMS Configuration Docun	2 days	Mon 2/26/18	Tue 2/27/18		$3,442.40	16 hrs
120	3.1.3.3	Woolpert to Perform AMS Configuration in De	2 days	Mon 2/26/18	Tue 2/27/18		$3,442.40	16 hrs
121	3.1.3.3	Woolpert to prep for interim Workshop # 2 Co	0.5 days	Fri 3/2/18	Fri 3/2/18		$894.52	4 hrs
122	3.1.3.3	Woolpert to Faciliate Joint System Review afte	0.5 days	Mon 3/5/18	Mon 3/5/18		$826.68	4 hrs
123	3.1.3.3	Woolpert to report County testing results	1 day	Fri 3/9/18	Fri 3/9/18		$1,653.36	8 hrs
124	3.1.3.3	Travel for Round 3 AMS Configuration Worksho	19 days	Mon 1/29/18	Fri 2/23/18		$13,347.04	32 hrs
125	3.1.3.3.	Travel for Round 3 AMS Configuration Workshops	4 days	Mon 1/29/18	Fri 2/2/18		$6,673.52	16 hrs
126	3.1.3.3.	Travel for Round 3 AMS Configuration Workshops	4 days	Mon 2/19/18	Fri 2/23/18	No on	$6,673.52	16 hrs
127	3.1.4	Review and Approval of Updated System and Configura	121 days	Fri 4/27/18	Thu 10/18/18		$10,715.12	137 hrs
128	3.1.4.1	Woolpert to Submit Updated Configuration Document	0 days	Fri 4/27/18	Fri 4/27/18		$0.00	0 hrs

ID	WBS	Task Name	Duration	Start	Finish	Notes	Cost	Work
129	3.1.4.2	County Technical Team to Review Updated Configuration and Documentation (COUNTY TASK)	20 days	Mon 4/30/18	Fri 5/25/18		$0.00	68 hrs
130	3.1.4.3	Woolpert to Facilitate Remote Review Meeting with C	0.5 day	Tue 5/29/18	Tue 5/29/18		$3,658.16	24 hrs
131	3.1.4.4	Woolpert to Update Configuration Documentation per	2 days	Wed 5/30/18	Thu 5/31/18		$7,056.96	32 hrs
132	3.1.4.5	Woolpert to Submit Updated Pre-Final Configuration	0 days	Wed 7/11/18	Wed 7/11/18		$0.00	0 hrs
133	3.1.4.6	County to Review and Accept Pre-Final Configuration	70 days	Thu 7/12/18	Thu 10/18/18		$0.00	13 hrs
134	**3.1.5**	**Provide Cityworks AMS Software Demonstrations**	**10 days**	**Thu 7/12/18**	**Wed 7/25/18**		**$61,483.66**	**498 hrs**
135	3.1.5.1	Woolpert to Prepare for On-Site Software Demonstrat	5 days	Thu 7/12/18	Wed 7/18/18		$18,075.58	82 hrs
136	3.1.5.2	County to Prepare for On-Site Software Demonstratio	5 days	Thu 7/12/18	Wed 7/18/18		$0.00	80 hrs
137	**3.1.5.3**	**Woolpert to Facilitate On-Site Software Demonstrations (ONSITE TASK)**	**5 days**	**Thu 7/19/18**	**Wed 7/25/18**	Origir sched	**$43,408.08**	**336 hrs**
138	3.1.5.3	Facilitate Software Demonstration 1 (ONSITE TASK)	0.5 day	Thu 7/19/18	Thu 7/19/18		$3,658.16	32 hrs
139	3.1.5.3	Facilitate Software Demonstration 2 (ONSITE TASK)	0.5 day	Thu 7/19/18	Thu 7/19/18		$3,658.16	32 hrs
140	3.1.5.3	Facilitate Software Demonstration 3 (ONSITE TASK)	0.5 day	Fri 7/20/18	Fri 7/20/18		$3,658.16	32 hrs
141	3.1.5.3	Facilitate Software Demonstration 4 (ONSITE TASK)	0.5 day	Fri 7/20/18	Fri 7/20/18		$3,658.16	32 hrs
142	3.1.5.3	Facilitate Software Demonstration 5 (ONSITE TASK)	0.5 day	Mon 7/23/18	Mon 7/23/18		$3,658.16	32 hrs
143	3.1.5.3	Facilitate Software Demonstration 6 (ONSITE TASK)	0.5 day	Mon 7/23/18	Mon 7/23/18		$3,658.16	32 hrs
144	3.1.5.3	Facilitate Software Demonstration 7 (ONSITE TASK)	0.5 day	Tue 7/24/18	Tue 7/24/18		$3,658.16	32 hrs
145	3.1.5.3	Facilitate Software Demonstration 8 (ONSITE TASK)	0.5 day	Tue 7/24/18	Tue 7/24/18		$3,658.16	32 hrs
146	3.1.5.3	Facilitate Software Demonstration 9 (ONSITE TASK)	0.5 day	Wed 7/25/18	Wed 7/25/18		$3,658.16	32 hrs
147	3.1.5.3	Facilitate Software Demonstration 10 (ONSITE TASK)	0.5 day	Wed 7/25/18	Wed 7/25/18		$3,658.16	32 hrs
148	3.1.5.3	**Travel for Final Software Demonstrations**	**5 days**	**Thu 7/19/18**	**Wed 7/25/18**		**$6,826.48**	**16 hrs**
149	3.1.5.3	Travel for Final Software Demonstrations	5 days	Thu 7/19/18	Wed 7/25/18		$6,826.48	16 hrs
150	**3.2**	**Strategy and Planning: Asset Specific Plans**	**97.75 d**	**Tue 9/5/17**	**Thu 2/8/18**		**$85,758.28**	**364 hrs**
151	**3.2.1**	**Develop Asset Specific Plan for Pavement Asset Class**	**97.75 d**	**Tue 9/5/17**	**Thu 2/8/18**		**$85,758.28**	**364 hrs**
152	**3.2.1.1**	**Request for Information**	**15 days**	**Tue 9/5/17**	**Mon 9/25/17**		**$6,884.80**	**32 hrs**
153	3.2.1.1	Woolpert to Develop Request for Information	1 day	Tue 9/5/17	Tue 9/5/17		$1,789.04	8 hrs
154	3.2.1.1	Woolpert to Submit Request for Information	0 days	Tue 9/5/17	Tue 9/5/17		$0.00	0 hrs
155	3.2.1.1	County to Collect Information (COUNTY TASK)	10 days	Wed 9/6/17	Tue 9/19/17		$0.00	0 hrs
156	3.2.1.1	County to Submit Information to Woolpert (COUNT	0 days	Tue 9/19/17	Tue 9/19/17		$0.00	0 hrs
157	3.2.1.1	Woolpert to Perform Desktop Audit of Information	4 days	Wed 9/20/17	Mon 9/25/17		$5,095.76	24 hrs
158	**3.2.1.2**	**Asset Specific Plan Workshops Round 1**	**13.5 da**	**Tue 9/26/17**	**Fri 10/13/17**		**$27,198.63**	**109 hrs**
159	3.2.1.2	Woolpert to Develop Agenda for Asset Specific Plan	1 day	Tue 9/26/17	Wed 9/27/17		$1,789.04	8 hrs
160	3.2.1.2	Woolpert to Submit Asset Specific Plan Workshops	1 day	Wed 9/27/17	Wed 9/27/17		$0.00	0 hrs
161	3.2.1.2	Woolpert to Prepare for Asset Specific Plan Worksh	0.5 day	Thu 9/28/17	Thu 9/28/17		$860.60	4 hrs
162	3.2.1.2	County to Prepare for Asset Specific Plan Workshop	1 day	Thu 9/28/17	Thu 9/28/17		$0.00	0 hrs
163	**3.2.1.2**	**Woolpert to facilitate ASP Workshops Round 1 (ON**	**4.5 day**	**Mon 10/9/17**	**Fri 10/13/17**		**$17,392.59**	**81 hrs**
164	3.2.1.2	ASP Workshop 1: Technical Standards and Legisla	0.25 da	Mon 10/9/17	Mon 10/9/17		$966.26	4.5 hrs
165	3.2.1.2	ASP Workshop 1: Asset Creation and Acquisition	0.25 da	Mon 10/9/17	Mon 10/9/17		$966.26	4.5 hrs
166	3.2.1.2	ASP Workshop 1: Systems Engineering (ONSITE T	0.5 day	Mon 10/9/17	Mon 10/9/17		$1,932.51	9 hrs
167	3.2.1.2	ASP Workshop 1: Configuration Management (ON	0.5 day	Tue 10/10/17	Tue 10/10/17		$1,932.51	9 hrs
168	3.2.1.2	ASP Workshop 1: Maintenance Delivery (ONSITE	0.5 day	Tue 10/10/17	Tue 10/10/17		$1,932.51	9 hrs
169	3.2.1.2	ASP Workshop 1: Reliability Engineering (ONSITE	0.5 day	Wed 10/11/17	Wed 10/11/17		$1,932.51	9 hrs
170	3.2.1.2	ASP Workshop 1: Asset Operations (ONSITE TASK	0.5 day	Wed 10/11/17	Wed 10/11/17		$1,932.51	9 hrs
171	3.2.1.2	ASP Workshop 1: Resource Management (ONSIT	0.25 da	Thu 10/12/17	Thu 10/12/17		$966.26	4.5 hrs
172	3.2.1.2	ASP Workshop 1: Shutdown and Outage Manage	0.5 day	Thu 10/12/17	Thu 10/12/17		$1,932.51	9 hrs

ID	WBS	Task Name	Duration	Start	Finish	Notes	Cost	Work
173	3.2.1.2	ASP Workshop 1: Fault and Incident Managemen	0.5 days	Thu 10/12/17	Fri 10/13/17		$1,932.51	9 hrs
174	3.2.1.2	ASP Workshop 1: Asset Decommissioning and Dis	0.25 da	Fri 10/13/17	Fri 10/13/17		$966.26	4.5 hrs
175	3.2.1.2	**Travel for ASP Workshops Round 1**	**4 days**	**Mon 10/9/17**	**Thu 10/12/17**		**$7,156.40**	**16 hrs**
176	3.2.1.2	Travel for ASP Workshops Round 1	4 days	Mon 10/9/17	Thu 10/12/17		$7,156.40	16 hrs
177	3.2.1.3	**Woolpert to develop Asset Specific Plan DRAFT Docu**	**48 days**	**Fri 10/13/17**	**Wed 1/10/18**		**$17,212.00**	**80 hrs**
178	3.2.1.3	Woolpert to Develop DRAFT ASP Document	5 days	Fri 10/13/17	Fri 10/20/17		$17,212.00	80 hrs
179	3.2.1.3	Woolpert to Submit DRAFT ASP Document	1 day	Fri 11/17/17	Mon 11/27/17		$0.00	0 hrs
180	3.2.1.3	County to Review DRAFT ASP Document (COUNTY T	20 days	Mon 11/27/17	Mon 1/8/18		$0.00	0 hrs
181	3.2.1.3	County to provide Feedback on DRAFT ASP Docume	1 day	Mon 1/8/18	Tue 1/9/18		$0.00	0 hrs
182	3.2.1.3	Woolpert to address County feedback in Round 2 A	1 day	Tue 1/9/18	Wed 1/10/18		$0.00	0 hrs
183	3.2.1.4	**Asset Specific Plan Workshops Round 2**	**8.75 da**	**Wed 1/10/18**	**Tue 1/23/18**		**$25,856.85**	**103 hrs**
184	3.2.1.4	Woolpert to Develop Agenda for Asset Specific Plan	0.25 da	Wed 1/10/18	Wed 1/10/18		$447.26	2 hrs
185	3.2.1.4	Woolpert to Submit Asset Specific Plan Workshops	0 days	Wed 1/10/18	Wed 1/10/18		$0.00	0 hrs
186	3.2.1.4	Woolpert to Prepare for Asset Specific Plan Worksh	1 day	Wed 1/10/18	Thu 1/11/18		$860.60	4 hrs
187	3.2.1.4	County to Prepare for Asset Specific Plan Workshop	1 day	Thu 1/11/18	Fri 1/12/18		$0.00	0 hrs
188	3.2.1.4	**Woolpert to facilitate Asset Specific Plan Worksho**	**4.5 day**	**Tue 1/16/18**	**Tue 1/23/18**		**$17,392.59**	**81 hrs**
189	3.2.1.4	ASP Workshop 2: Technical Standards and Legisla	0.25 da	Tue 1/16/18	Tue 1/16/18		$966.26	4.5 hrs
190	3.2.1.4	ASP Workshop 2: Asset Creation and Acquisition	0.25 da	Wed 1/17/18	Wed 1/17/18		$966.26	4.5 hrs
191	3.2.1.4	ASP Workshop 2: Systems Engineering (ONSITE T	0.5 day	Wed 1/17/18	Wed 1/17/18		$1,932.51	9 hrs
192	3.2.1.4	ASP Workshop 2: Configuration Management (Of	0.5 day	Wed 1/17/18	Thu 1/18/18		$1,932.51	9 hrs
193	3.2.1.4	ASP Workshop 2: Maintenance Delivery (ONSITE	0.5 day	Thu 1/18/18	Thu 1/18/18		$1,932.51	9 hrs
194	3.2.1.4	ASP Workshop 2: Reliability Engineering (ONSITE	0.5 day	Thu 1/18/18	Fri 1/19/18		$1,932.51	9 hrs
195	3.2.1.4	ASP Workshop 2: Asset Operations (ONSITE TASK	0.5 day	Fri 1/19/18	Fri 1/19/18		$1,932.51	9 hrs
196	3.2.1.4	ASP Workshop 2: Resource Management (ONSITE	0.25 da	Fri 1/19/18	Fri 1/19/18		$966.26	4.5 hrs
197	3.2.1.4	ASP Workshop 2: Shutdown and Outage Manage	0.5 day	Mon 1/22/18	Mon 1/22/18		$1,932.51	9 hrs
198	3.2.1.4	ASP Workshop 2: Fault and Incident Managemen	0.5 day	Mon 1/22/18	Mon 1/22/18		$1,932.51	9 hrs
199	3.2.1.4	ASP Workshop 2: Asset Decommissioning and Dis	0.25 da	Tue 1/23/18	Tue 1/23/18		$966.26	4.5 hrs
200	3.2.1.4	**Travel for ASP Workshops Round 2**	**4 days**	**Mon 1/15/18**	**Fri 1/19/18**		**$7,156.40**	**16 hrs**
201	3.2.1.4	Travel for ASP Workshops Round 2	4 days	Mon 1/15/18	Fri 1/19/18		$7,156.40	16 hrs
202	3.2.1.5	**Woolpert to develop Asset Specific Plan FINAL Docun**	**12.5 da**	**Tue 1/23/18**	**Thu 2/8/18**		**$8,606.00**	**40 hrs**
203	3.2.1.5	Woolpert to Develop FINAL ASP Document	2.5 day	Tue 1/23/18	Thu 1/25/18		$8,606.00	40 hrs
204	3.2.1.5	Woolpert to Submit FINAL ASP Document	0 days	Thu 1/25/18	Thu 1/25/18		$0.00	0 hrs
205	3.2.1.5	County to Review and Accept FINAL ASP Document	5 days	Thu 2/1/18	Thu 2/8/18		$0.00	0 hrs
206	3.3	Phase 3: Quality Control	327 day	Mon 6/12/17	Fri 10/5/18	[09.2.]	$20,049.60	80 hrs
207	3.4	Phase 3: Acceptance and Close	0 days	Thu 10/25/18	Thu 10/25/18		$0.00	0 hrs
208	4	**PHASE 4: Advanced Configuration and Functionality**	**480.39**	**Wed 10/4/17**	**Mon 9/23/19**		**$1,358,127.64**	**9,879.02 hrs**
209	4.1	**Legacy Data Migrations**	**405.64**	**Mon 1/29/18**	**Fri 9/13/19**		**$336,591.24**	**2,847.5 hrs**
210	4.1.1	**Data Migration Planning**	**191.5 d**	**Mon 1/29/18**	**Fri 10/26/18**		**$52,880.52**	**317.5 hrs**
211	4.1.1.1	**Woolpert to Perform Desktop Analysis of Legacy Datasets**	**9 days**	**Mon 1/29/18**	**Fri 2/9/18**		**$16,264.33**	**73.5 hrs**
212	4.1.1.1	Woolpert to Facilitate Discussion about Datasets	0.5 day	Mon 1/29/18	Mon 1/29/18		$2,634.28	12 hrs
213	4.1.1.1	Woolpert to Create Tech Memo Detailing Data Requ	1 day	Wed 1/31/18	Wed 1/31/18		$2,571.75	11.5 hrs
214	4.1.1.1	County to Provide Legacy Datasets to Woolpert	4 days	Thu 2/1/18	Tue 2/6/18		$0.00	0 hrs
215	4.1.1.1	Maximo 4.0.3 - Work Management Legacy Data Des	0.5 day	Wed 2/7/18	Wed 2/7/18		$2,211.66	10 hrs
216	4.1.1.1	LINKO - Work Management Legacy Data Desktop Ar	0.5 day	Wed 2/7/18	Wed 2/7/18		$2,211.66	10 hrs
217	4.1.1.1	VCMS Legacy Data Desktop Analysis	0.5 day	Thu 2/8/18	Thu 2/8/18		$2,211.66	10 hrs

ID	WBS		Task Name	Duration	Start	Finish	Notes	Cost	Work
218	4.1.1.1	👤	Traffic Copp Legacy Data Desktop Analysis	0.5 days	Thu 2/8/18	Thu 2/8/18		$2,211.66	10 hrs
219	4.1.1.1		Agile Assets Legacy Data Desktop Analysis	0.5 days	Fri 2/9/18	Fri 2/9/18		$2,211.66	10 hrs
220	4.1.1.2		**Woolpert to Facilitate Onsite Review of Legacy Datasets (ONSITE TASK)**	**4 days**	**Wed 3/7/18**	**Tue 3/13/18**		**$19,830.73**	**75 hrs**
221	4.1.1.2		Maximo 4.0.3 - Work Management Legacy Data Onsite Review (ONSITE TASK)	1 day	Wed 3/7/18	Thu 3/8/18		$4,212.01	19 hrs
222	4.1.1.2		LINKO - Work Management Legacy Data Onsite Rev	0.5 days	Thu 3/8/18	Thu 3/8/18		$2,211.66	10 hrs
223	4.1.1.2		VCMS Legacy Data Onsite Review (ONSITE TASK)	0.5 days	Fri 3/9/18	Fri 3/9/18		$2,211.66	10 hrs
224	4.1.1.2		Traffic Copp Legacy Data Onsite Review (ONSITE TA	1 day	Fri 3/9/18	Mon 3/12/18		$2,211.66	10 hrs
225	4.1.1.2		Agile Assets Legacy Data Onsite Review (ONSITE TAS	1 day	Mon 3/12/18	Tue 3/13/18		$2,211.66	10 hrs
226	4.1.1.2		Travel for Legacy Data Migration Analysis Worksho	4 days	Wed 3/7/18	Tue 3/13/18		$6,772.08	16 hrs
227	4.1.1.2		Travel for Legacy Data Migration Analysis Worksh	4 days	Wed 3/7/18	Tue 3/13/18		$6,772.08	16 hrs
228	4.1.1.3		**Woolpert to create Specifications for Data Conversion & Migration**	**124.5 days**	**Wed 5/2/18**	**Fri 10/26/18**		**$16,785.46**	**169 hrs**
229	4.1.1.3		**Develop Tech Memo with DRAFT Specs for Legacy Data Conversion & Migration**	**9 days**	**Wed 5/2/18**	**Tue 5/15/18**		**$11,334.70**	**55 hrs**
230	4.1.1.3		Maximo 4.0.3 - Work Management: Develop DRAFT Specs Technical Memo	2 days	Wed 5/2/18	Fri 5/4/18		$2,266.94	10 hrs
231	4.1.1.3		LINKO - Work Management: Develop DRAFT Spec	1 day	Fri 5/4/18	Mon 5/7/18		$2,266.94	10 hrs
232	4.1.1.3		VCMS: Develop DRAFT Specs Technical Memo	2 days	Mon 5/7/18	Wed 5/9/18		$2,266.94	10 hrs
233	4.1.1.3		Traffic Copp: Develop DRAFT Specs Technical Me	2 days	Wed 5/9/18	Fri 5/11/18		$2,266.94	10 hrs
234	4.1.1.3		Agile Assets: Develop DRAFT Specs Technical Me	2 days	Fri 5/11/18	Tue 5/15/18		$2,266.94	10 hrs
235	4.1.1.3		**Review and Approve Tech Memo for Legacy Data Conversion & Migration**	**114.5 days**	**Wed 5/16/18**	**Fri 10/26/18**		**$5,450.76**	**114 hrs**
236	4.1.1.3		Woolpert to Submit DRAFT Specs Tech Memo Recommendations for Legacy Data Conversion &	0 days	Wed 5/16/18	Wed 5/16/18		$0.00	0 hrs
237	4.1.1.3	👤	County Technical Team to Review DRAFT Specs Tech Memo for Legacy Data Conversion &	14 days	Thu 5/17/18	Thu 6/7/18		$0.00	46 hrs
238	4.1.1.3		Woolpert to Facilitate Joint Review of DRAFT Specs Tech Memo for Legacy Data Conversion &	0.5 days	Thu 6/7/18	Thu 6/7/18		$2,700.12	32 hrs
239	4.1.1.3		Woolpert to Modify DRAFT Specs Tech Memo for Legacy Data Conversion & Migration	5 days	Wed 8/29/18	Wed 9/5/18		$2,750.64	12 hrs
240	4.1.1.3	🖥	County to Review and Accept FINAL Specs Tech Memo for Legacy Data Conversion & Migration	5 days	Mon 9/17/18	Fri 9/21/18		$0.00	12 hrs
241	4.1.1.3		Woolpert to Update FINAL Specs Tech Memo for Legacy Data Conversion & Migration	25 days	Mon 9/24/18	Fri 10/26/18		$0.00	12 hrs
242	4.1.2		**Data Migration Development**	**153.5 days**	**Mon 8/27/18**	**Fri 4/19/19**		**$238,221.76**	**2,166 hrs**
243	4.1.2.1		**Agile Assets Data Migration**	**116 days**	**Mon 8/27/18**	**Tue 2/26/19**		**$45,641.12**	**624 hrs**
244	4.1.2.1		**Data Migration Mapping**	**80 days**	**Mon 8/27/18**	**Mon 1/7/19**		**$6,677.44**	**384 hrs**
245	4.1.2.1	👤	Woolpert to Develop Data Migration Mapping	54 days	Mon 8/27/18	Fri 11/9/18		$6,677.44	32 hrs
246	4.1.2.1		Woolpert to Submit Data Migration Mapping to COUNTY	0 days	Fri 11/16/18	Fri 11/16/18		$0.00	0 hrs
247	4.1.2.1	👤	COUNTY to Review and Provide Feedback on Data Migration Mapping (COUNTY TASK)	8 days	Wed 12/5/18	Fri 12/14/18		$0.00	256 hrs
248	4.1.2.1		Woolpert to Update Data Migration Mapping	3 days	Mon 12/31/18	Wed 1/2/19		$0.00	0 hrs

ID	WBS	Task Name	Duration	Start	Finish	Notes	Cost	Work
249	4.1.2.1	COUNTY to Sign and Approve Data Migration Mapping (COUNTY TASK)	3 days	Thu 1/3/19	Mon 1/7/19		$0.00	96 hrs
250	**4.1.2.1**	**Develop and Test Migration Scripts**	42 days	Mon 12/31/18	Tue 2/26/19		**$38,963.68**	**240 hrs**
251	4.1.2.1	COUNTY to Extract and Cleanse Legacy Data (COL	5 days	Mon 12/31/18	Fri 1/4/19		$0.00	38 hrs
252	4.1.2.1	Woolpert to Develop Data Load Scripts	20 days	Wed 1/9/19	Tue 2/5/19		$17,388.80	80 hrs
253	4.1.2.1	Woolpert to Load Legacy Data	3 days	Wed 2/6/19	Fri 2/8/19		$6,677.44	32 hrs
254	4.1.2.1	Woolpert to Facilitate Remote Review of Loaded	0.5 days	Mon 2/11/19	Mon 2/11/19		$1,669.36	8 hrs
255	4.1.2.1	Woolpert to Modify Load Scripts	5 days	Mon 2/11/19	Mon 2/18/19		$8,220.00	40 hrs
256	4.1.2.1	COUNTY to Re-Extract and Cleanse Legacy Data (	5 days	Mon 2/11/19	Mon 2/18/19		$0.00	18 hrs
257	4.1.2.1	Woolpert to Re-Load Legacy Data	1 day	Mon 2/18/19	Tue 2/19/19		$3,338.72	16 hrs
258	4.1.2.1	Woolpert to Facilitate Remote Review of Loaded	0.5 days	Tue 2/26/19	Tue 2/26/19		$1,669.36	8 hrs
259	**4.1.2.2**	**VCMS Data Migration**	50.5 da	Mon 10/29/18	Mon 1/28/19		**$45,641.12**	**376 hrs**
260	**4.1.2.2**	**Data Migration Mapping**	30 days	Mon 10/29/18	Fri 12/14/18		**$6,677.44**	**112 hrs**
261	4.1.2.2	Woolpert to Develop Data Migration Mapping	5 days	Mon 10/29/18	Fri 11/2/18		$6,677.44	32 hrs
262	4.1.2.2	Woolpert to Submit Data Migration Mapping to COUNTY	1 day	Fri 11/9/18	Fri 11/9/18		$0.00	0 hrs
263	4.1.2.2	COUNTY to Review and Provide Feedback on Data Migration Mapping (COUNTY TASK)	10 days	Mon 11/12/18	Fri 11/30/18		$0.00	16 hrs
264	4.1.2.2	Woolpert to Update Data Migration Mapping	8 days	Mon 12/3/18	Wed 12/12/18		$0.00	0 hrs
265	4.1.2.2	COUNTY to Sign and Approve Data Migration Mapping (COUNTY TASK)	2 days	Thu 12/13/18	Fri 12/14/18		$0.00	64 hrs
266	**4.1.2.2**	**Develop and Test Migration Scripts**	20.5 da	Mon 12/31/18	Mon 1/28/19		**$38,963.68**	**264 hrs**
267	4.1.2.2	COUNTY to Extract and Cleanse Legacy Data (COUNTY TASK)	1.5 days	Mon 12/31/18	Tue 1/1/19		$0.00	38 hrs
268	4.1.2.2	Woolpert to Develop Data Load Scripts	5 days	Tue 1/1/19	Tue 1/8/19		$17,388.80	80 hrs
269	4.1.2.2	Woolpert to Load Legacy Data	2 days	Wed 1/9/19	Fri 1/11/19		$6,677.44	32 hrs
270	4.1.2.2	Woolpert to Facilitate Remote Review of Loaded Data	0.5 days	Mon 1/14/19	Mon 1/14/19		$1,669.36	20 hrs
271	4.1.2.2	Woolpert to Modify Load Scripts	5 days	Tue 1/15/19	Mon 1/21/19		$8,220.00	40 hrs
272	4.1.2.2	COUNTY to Re-Extract and Cleanse Legacy Data (COUNTY TASK)	5 days	Mon 1/14/19	Fri 1/18/19		$0.00	18 hrs
273	4.1.2.2	Woolpert to Re-Load Legacy Data	1 day	Mon 1/21/19	Mon 1/21/19		$3,338.72	16 hrs
274	4.1.2.2	Woolpert to Facilitate Remote Review of Loaded Data	0.5 days	Mon 1/28/19	Mon 1/28/19		$1,669.36	20 hrs
275	**4.1.2.3**	**Maximo 4.0.3 - Work Management Data Migration**	65.5 da	Tue 1/1/19	Tue 4/2/19		**$55,657.28**	**382 hrs**
276	**4.1.2.3**	**Data Migration Mapping**	28 days	Tue 1/1/19	Thu 2/7/19		**$6,677.44**	**80 hrs**
277	4.1.2.3	Woolpert to Develop Data Migration Mapping	15 days	Tue 1/1/19	Mon 1/21/19		$6,677.44	32 hrs
278	4.1.2.3	Woolpert to Submit Data Migration Mapping to COUNTY	0 days	Mon 1/21/19	Mon 1/21/19		$0.00	0 hrs
279	4.1.2.3	COUNTY to Review and Provide Feedback on Data Migration Mapping (COUNTY TASK)	5 days	Tue 1/22/19	Mon 1/28/19		$0.00	16 hrs
280	4.1.2.3	Woolpert to Update Data Migration Mapping	5 days	Tue 1/29/19	Mon 2/4/19		$0.00	0 hrs
281	4.1.2.3	COUNTY to Sign and Approve Data Migration Maj	3 days	Tue 2/5/19	Thu 2/7/19		$0.00	32 hrs
282	**4.1.2.3**	**Develop and Test Migration Scripts**	38.5 da	Thu 2/7/19	Tue 4/2/19		**$48,979.84**	**302 hrs**
283	4.1.2.3	COUNTY to Extract and Cleanse Legacy Data as required (COUNTY TASK)	5 days	Thu 2/7/19	Wed 2/13/19		$0.00	28 hrs
284	4.1.2.3	Woolpert to Develop Data Load Scripts	20 days	Thu 2/14/19	Wed 3/13/19		$17,388.80	80 hrs

ID	WBS		Task Name	Duration	Start	Finish	Notes	Cost	Work
285	4.1.2.3	🕴	Woolpert to Load Legacy Data	5 days	Thu 3/14/19	Wed 3/20/19		$16,693.60	80 hrs
286	4.1.2.3	🕴	Woolpert to Facilitate Remote Review of Loaded Data	0.5 days	Thu 3/21/19	Thu 3/21/19		$1,669.36	20 hrs
287	4.1.2.3	🕴	Woolpert to Modify Load Scripts	2 days	Fri 3/22/19	Mon 3/25/19		$8,220.00	40 hrs
288	4.1.2.3		COUNTY to Re-Extract and Cleanse Legacy Data (COUNTY TASK)	5 days	Fri 3/22/19	Thu 3/28/19		$0.00	18 hrs
289	4.1.2.3	🕴	Woolpert to Re-Load Legacy Data	1 day	Fri 3/29/19	Fri 3/29/19		$3,338.72	16 hrs
290	4.1.2.3	🕴	Woolpert to Facilitate Remote Review of Loaded Data	0.5 days	Tue 4/2/19	Tue 4/2/19		$1,669.36	20 hrs
291	4.1.2.4		**Traffic Copp Data Migration**	44.5 da	Tue 1/1/19	Mon 3/4/19		**$45,641.12**	**384 hrs**
292	4.1.2.4		**Data Migration Mapping**	33 days	Tue 1/1/19	Thu 2/14/19		**$6,677.44**	**144 hrs**
293	4.1.2.4	🕴	Woolpert to Develop Data Migration Mapping	20 days	Tue 1/1/19	Mon 1/28/19		$6,677.44	32 hrs
294	4.1.2.4		Woolpert to Submit Data Migration Mapping to COUNTY	0 days	Mon 1/28/19	Mon 1/28/19		$0.00	0 hrs
295	4.1.2.4	🕴	COUNTY to Review and Provide Feedback on Data Migration Mapping (COUNTY TASK)	5 days	Tue 1/29/19	Mon 2/4/19		$0.00	16 hrs
296	4.1.2.4		Woolpert to Update Data Migration Mapping	5 days	Tue 2/5/19	Mon 2/11/19		$0.00	0 hrs
297	4.1.2.4	🕴	COUNTY to Sign and Approve Data Migration Mapping (COUNTY TASK)	3 days	Tue 2/12/19	Thu 2/14/19		$0.00	96 hrs
298	4.1.2.4		**Develop and Test Migration Scripts**	19.5 da	Tue 2/5/19	Mon 3/4/19		**$38,963.68**	**240 hrs**
299	4.1.2.4	🕴	COUNTY to Extract and Cleanse Legacy Data (COUNTY TASK)	1.5 days	Tue 2/5/19	Wed 2/6/19		$0.00	38 hrs
300	4.1.2.4	🕴	Woolpert to Develop Data Load Scripts	5 days	Wed 2/6/19	Wed 2/13/19		$17,388.80	80 hrs
301	4.1.2.4	🕴	Woolpert to Load Legacy Data	2 days	Thu 2/14/19	Mon 2/18/19		$6,677.44	32 hrs
302	4.1.2.4	🕴	Woolpert to Facilitate Remote Review of Loaded Data	0.5 days	Tue 2/19/19	Tue 2/19/19		$1,669.36	8 hrs
303	4.1.2.4	🕴	Woolpert to Modify Load Scripts	5 days	Wed 2/20/19	Wed 2/27/19		$8,220.00	40 hrs
304	4.1.2.4	🕴	COUNTY to Re-Extract and Cleanse Legacy Data (COUNTY TASK)	5 days	Wed 2/20/19	Wed 2/27/19		$0.00	18 hrs
305	4.1.2.4	🕴	Woolpert to Re-Load Legacy Data	1 day	Wed 2/27/19	Thu 2/28/19		$3,338.72	16 hrs
306	4.1.2.4	🕴	Woolpert to Facilitate Remote Review of Loaded Data	0.5 days	Mon 3/4/19	Mon 3/4/19		$1,669.36	8 hrs
307	4.1.2.5		**LINKO - Work Management Data Migration**	45.5 da	Fri 2/15/19	Fri 4/19/19		**$45,641.12**	**400 hrs**
308	4.1.2.5		**Data Migration Mapping**	23 days	Fri 2/15/19	Tue 3/19/19		**$6,677.44**	**144 hrs**
309	4.1.2.5	🕴	Woolpert to Develop Data Migration Mapping	10 days	Fri 2/15/19	Thu 2/28/19		$6,677.44	32 hrs
310	4.1.2.5		Woolpert to Submit Data Migration Mapping to COUNTY	0 days	Thu 2/28/19	Thu 2/28/19		$0.00	0 hrs
311	4.1.2.5		COUNTY to Review and Provide Feedback on Data Migration Mapping (COUNTY TASK)	5 days	Fri 3/1/19	Thu 3/7/19		$0.00	16 hrs
312	4.1.2.5		Woolpert to Update Data Migration Mapping	5 days	Fri 3/8/19	Thu 3/14/19		$0.00	0 hrs
313	4.1.2.5	🕴	COUNTY to Sign and Approve Data Migration Mapping (COUNTY TASK)	3 days	Fri 3/15/19	Tue 3/19/19		$0.00	96 hrs
314	4.1.2.5		**Develop and Test Migration Scripts**	22.5 da	Wed 3/20/19	Fri 4/19/19		**$38,963.68**	**256 hrs**
315	4.1.2.5	🕴	COUNTY to Extract and Cleanse Legacy Data (COUNTY TASK)	5 days	Wed 3/20/19	Tue 3/26/19		$0.00	38 hrs
316	4.1.2.5	🕴	Woolpert to Develop Data Load Scripts	5 days	Wed 3/27/19	Tue 4/2/19		$17,388.80	80 hrs
317	4.1.2.5	🕴	Woolpert to Load Legacy Data	2 days	Wed 4/3/19	Thu 4/4/19		$6,677.44	32 hrs
318	4.1.2.5	🕴	Woolpert to Facilitate Remote Review of Loaded	0.5 day	Mon 4/8/19	Mon 4/8/19		$1,669.36	16 hrs

ID	WBS	Task Name	Duration	Start	Finish	Notes	Cost	Work
319	4.1.2.5	Woolpert to Modify Load Scripts	5 days	Tue 4/9/19	Mon 4/15/19		$8,220.00	40 hrs
320	4.1.2.5	COUNTY to Re-Extract and Cleanse Legacy Data (I 5 days		Tue 4/9/19	Mon 4/15/19		$0.00	18 hrs
321	4.1.2.5	Woolpert to Re-Load Legacy Data	1 day	Tue 4/16/19	Tue 4/16/19		$3,338.72	16 hrs
322	4.1.2.5	Woolpert to Facilitate Remote Review of Loaded	0.5 day:	Fri 4/19/19	Fri 4/19/19		$1,669.36	16 hrs
323	4.1.3	Data Migration Deployment	96.14 d	Thu 5/2/19	Fri 9/13/19		$45,488.96	364 hrs
324	4.1.3.1	Public Works	26 days	Thu 5/2/19	Thu 6/6/19		$22,744.48	190 hrs
325	4.1.3.1	Load Data for EUT	23 days	Thu 5/2/19	Mon 6/3/19		$10,736.72	92 hrs
326	4.1.3.1	COUNTY to Extract and Cleanse Legacy Data for E	5 days	Thu 5/2/19	Wed 5/8/19		$0.00	40 hrs
327	4.1.3.1	Woolpert to Load Legacy Data for EUT	5 days	Thu 5/9/19	Wed 5/15/19		$4,533.68	22 hrs
328	4.1.3.1	Woolpert to Modify Load Scripts per EUT Feedba	3 days	Thu 5/30/19	Mon 6/3/19		$6,203.04	30 hrs
329	4.1.3.1	Load Data for Go-Live	6 days	Thu 5/30/19	Thu 6/6/19		$12,007.76	98 hrs
330	4.1.3.1	COUNTY to Extract and Cleanse Legacy Data for C	3 days	Thu 5/30/19	Mon 6/3/19		$0.00	40 hrs
331	4.1.3.1	Woolpert to Load Legacy Data for Go-Live	3 days	Tue 6/4/19	Thu 6/6/19		$12,007.76	58 hrs
332	4.1.3.2	Utilities	38.14 d	Tue 7/23/19	Fri 9/13/19		$22,744.48	174 hrs
333	4.1.3.2	Load Data for EUT	37.14 d	Tue 7/23/19	Thu 9/12/19		$10,736.72	92 hrs
334	4.1.3.2	COUNTY to Extract and Cleanse Legacy Data for E	5 days	Tue 7/23/19	Mon 7/29/19		$0.00	40 hrs
335	4.1.3.2	Woolpert to Load Legacy Data for EUT	5 days	Tue 7/30/19	Mon 8/5/19		$4,533.68	22 hrs
336	4.1.3.2	Woolpert to Modify Load Scripts per EUT Feedba	6 days	Wed 9/4/19	Thu 9/12/19		$6,203.04	30 hrs
337	4.1.3.2	Load Data for Go-Live	7 days	Wed 9/4/19	Fri 9/13/19		$12,007.76	82 hrs
338	4.1.3.2	COUNTY to Extract and Cleanse Legacy Data for C	3 days	Wed 9/4/19	Mon 9/9/19		$0.00	24 hrs
339	4.1.3.2	Woolpert to Load Legacy Data for Go-Live	4 days	Mon 9/9/19	Fri 9/13/19		$12,007.76	58 hrs
340	4.2	Custom Reports and Metrics	179 day	Tue 7/17/18	Mon 4/15/19		$228,278.84	2,706.67 hrs
341	4.2.1	Reports / Metrics Planning	128 day	Tue 7/17/18	Fri 2/1/19		$76,554.20	1,901.33 hrs
342	4.2.1.1	Utilities Report / Metric Development	128 day	Tue 7/17/18	Fri 2/1/19		$35,423.84	885.33 hrs
343	4.2.1.1	Develop Report / Metric Specifications	128 day	Tue 7/17/18	Fri 2/1/19		$35,423.84	885.33 hrs
344	4.2.1.1	Woolpert to Facilitate Remote Report Orientatio	0.5 day:	Tue 7/17/18	Tue 7/17/18		$0.00	0 hrs
345	4.2.1.1	Woolpert to submit DRAFT list of enterprise repo	0 days	Tue 7/17/18	Tue 7/17/18		$0.00	0 hrs
346	4.2.1.1	County to Provide Woolpert a Prioritized List of R	20 days	Tue 7/17/18	Tue 8/14/18		$0.00	341.33 hrs
347	4.2.1.1	Woolpert to Review Reports and Develop On-site Report and Metric Workshop	1 day	Tue 8/14/18	Wed 8/15/18		$3,528.48	16 hrs
348	4.2.1.1	Woolpert to Facilitate Onsite Review of Report and Metric Specification Document	2 days	Thu 9/13/18	Fri 9/14/18	[8.29. sri]	$3,667.52	16 hrs
349	4.2.1.1	Woolpert to Submit DRAFT Report and Metric Specification Design Document to County	0 days	Fri 9/14/18	Fri 9/14/18		$0.00	0 hrs
350	4.2.1.1	Woolpert to Create DRAFT Report and Metric Spe	51 days	Mon 10/1/18	Mon 12/31/18		$17,642.40	80 hrs
351	4.2.1.1	County to Review DRAFT Report and Metric Spec	10 days	Tue 1/1/19	Mon 1/14/19		$0.00	240 hrs
352	4.2.1.1	Woolpert to Update DRAFT Report and Metric Sp	5 days	Tue 1/15/19	Mon 1/21/19		$10,585.44	48 hrs
353	4.2.1.1	Woolpert to Submit FINAL Report and Metric Spe	1 day	Tue 1/22/19	Tue 1/22/19		$0.00	0 hrs
354	4.2.1.1	County to Review and Accept FINAL Report and N	3 days	Wed 1/30/19	Fri 2/1/19		$0.00	144 hrs
355	4.2.1.2	Public Works Report / Metric Development	123 day	Tue 7/17/18	Fri 1/25/19		$41,130.36	1,016 hrs
356	4.2.1.2	Develop Report / Metric Specifications	123 day	Tue 7/17/18	Fri 1/25/19		$41,130.36	1,016 hrs
357	4.2.1.2	Woolpert to Facilitate Remote Report Orientatio	0.5 day:	Tue 7/17/18	Tue 7/17/18		$0.00	0 hrs
358	4.2.1.2	Woolpert to submit DRAFT list of enterprise repo	0 days	Tue 7/17/18	Tue 7/17/18		$0.00	0 hrs
359	4.2.1.2	County to Provide Woolpert a Prioritized List of R	20 days	Tue 7/17/18	Tue 8/14/18		$0.00	480 hrs
360	4.2.1.2	Woolpert to Review Reports and Develop DRAFT Report and Metric Specification Document	1 day	Tue 8/14/18	Wed 8/15/18		$3,528.48	16 hrs

ID	WBS	Task Name	Duration	Start	Finish	Notes	Cost	Work
361	4.2.1.2	Woolpert to Submit DRAFT Report and Metric Sp	0 days	Wed 8/15/18	Wed 8/15/18		$0.00	0 hrs
362	4.2.1.2	Woolpert to Facilitate Onsite Review of Report and Metric Specification Document	3 days	Mon 9/10/18	Wed 9/12/18	[8.29. sri]	$5,501.28	24 hrs
363	4.2.1.2	Travel for Report and Metric Specification Docur	4 days	Mon 9/10/18	Thu 9/13/18		$3,872.76	8 hrs
364	4.2.1.2	Travel for Report and Metric Document ONSITI	4 days	Mon 9/10/18	Thu 9/13/18		$3,872.76	8 hrs
365	4.2.1.2	Woolpert to Submit DRAFT Report and Metric Specification Design Document to County	0 days	Fri 9/14/18	Fri 9/14/18		$0.00	0 hrs
366	4.2.1.2	Woolpert to Create DRAFT Report and Metric Spe	49 days	Mon 10/1/18	Thu 12/13/18		$17,642.40	80 hrs
367	4.2.1.2	County to Review DRAFT Report and Metric Spec	10 days	Fri 12/14/18	Thu 1/10/19		$0.00	240 hrs
368	4.2.1.2	Woolpert to Update DRAFT Report and Metric Sp	5 days	Fri 1/11/19	Thu 1/17/19		$10,585.44	48 hrs
369	4.2.1.2	Woolpert to Submit FINAL Report and Metric Spe	1 day	Fri 1/18/19	Fri 1/18/19		$0.00	0 hrs
370	4.2.1.2	County to Review and Accept FINAL Report and N	5 days	Mon 1/21/19	Fri 1/25/19		$0.00	120 hrs
371	4.2.2	Reports / Metrics Development	73 days	Thu 1/3/19	Mon 4/15/19		$151,724.64	805.33 hrs
372	4.2.2.1	Utilities Report / Metric Development	66 days	Mon 1/14/19	Mon 4/15/19		$75,862.32	402.67 hrs
373	4.2.2.1	Develop Reports and Metrics	66 days	Mon 1/14/19	Mon 4/15/19		$75,862.32	402.67 hrs
374	4.2.2.1	Woolpert to Develop Custom Reports	65 days	Mon 1/14/19	Fri 4/12/19		$70,569.60	320 hrs
375	4.2.2.1	Woolpert to Facilitate In-Process Review Meetings with Client Technical Team	46 days	Mon 2/4/19	Mon 4/8/19		$5,292.72	60 hrs
376	4.2.2.1	Batch # 1 Reports Review & Approval	0.5 day	Mon 2/4/19	Mon 2/4/19		$882.12	10 hrs
377	4.2.2.1	Batch # 2 Reports Review & Approval	0.5 day	Mon 2/18/19	Mon 2/18/19		$882.12	10 hrs
378	4.2.2.1	Batch # 3 Reports Review & Approval	0.5 day	Fri 3/1/19	Fri 3/1/19		$882.12	10 hrs
379	4.2.2.1	Batch # 4 Reports Review & Approval	0.5 day	Mon 3/11/19	Mon 3/11/19		$882.12	10 hrs
380	4.2.2.1	Batch # 5 Reports Review & Approval	0.5 day	Mon 3/25/19	Mon 3/25/19		$882.12	10 hrs
381	4.2.2.1	Batch # 6 Reports Review & Approval	0.5 day	Mon 4/8/19	Mon 4/8/19		$882.12	10 hrs
382	4.2.2.1	County to Accept Reports and Metrics	5 days	Tue 4/9/19	Mon 4/15/19		$0.00	22.67 hrs
383	4.2.2.2	Public Works Report / Metric Development	66 days	Thu 1/3/19	Thu 4/4/19		$75,862.32	402.67 hrs
384	4.2.2.2	Develop Reports and Metrics	66 days	Thu 1/3/19	Thu 4/4/19		$75,862.32	402.67 hrs
385	4.2.2.2	Woolpert to Develop Custom Reports	65 days	Thu 1/3/19	Wed 4/3/19		$70,569.60	320 hrs
386	4.2.2.2	Woolpert to Facilitate In-Process Review Meetings with Client Technical Team	46 days	Thu 1/24/19	Thu 3/28/19		$5,292.72	60 hrs
387	4.2.2.2	Batch # 1 Reports Review & Approval	0.5 day	Thu 1/24/19	Thu 1/24/19		$882.12	10 hrs
388	4.2.2.2	Batch # 2 Reports Review & Approval	0.5 day	Thu 2/7/19	Thu 2/7/19		$882.12	10 hrs
389	4.2.2.2	Batch # 3 Reports Review & Approval	0.5 day	Wed 2/20/19	Wed 2/20/19		$882.12	10 hrs
390	4.2.2.2	Batch # 4 Reports Review & Approval	0.5 day	Thu 2/28/19	Thu 2/28/19		$882.12	10 hrs
391	4.2.2.2	Batch # 5 Reports Review & Approval	0.5 day	Thu 3/14/19	Thu 3/14/19		$882.12	10 hrs
392	4.2.2.2	Batch # 6 Reports Review & Approval	0.5 day	Thu 3/28/19	Thu 3/28/19		$882.12	10 hrs
393	4.2.2.2	County to Accept Reports and Metrics	5 days	Fri 3/29/19	Thu 4/4/19		$0.00	22.67 hrs
394	4.3	System Integrations	480.39	Wed 10/4/17	Mon 9/23/19		$726,099.56	4,324.86 hrs
395	4.3.1	System Integration Planning	274.5 d	Wed 10/4/17	Fri 11/16/18		$214,131.39	943 hrs
396	4.3.1.1	Develop Potential Integration Workflows	10 days	Wed 10/4/17	Tue 10/17/17		$13,555.19	61 hrs
397	4.3.1.1	Woolpert to Develop Potential Integration Data Flo	5 days	Wed 10/4/17	Tue 10/10/17		$12,238.05	55 hrs
398	4.3.1.1	Woolpert to Prep for Onsite Discussion about Integr	5 days	Wed 10/11/17	Tue 10/17/17		$1,317.14	6 hrs
399	4.3.1.2	Woolpert to Facilitate Integration Planning Discussio	5 days	Mon 10/23/17	Fri 10/27/17		$21,928.46	82 hrs
400	4.3.1.2	OPUS Integration Discussion (ONSITE TASK)	1 day	Mon 10/23/17	Mon 10/23/17		$4,000.70	18 hrs
401	4.3.1.2	SAP Integration Discussion (ONSITE TASK)	1 day	Tue 10/24/17	Tue 10/24/17		$4,000.70	18 hrs

ID	WBS	Task Name	Duration	Start	Finish	Notes	Cost	Work
402	4.3.1.2	Granite XP Integration Discussion (ONSITE TASK)	0.5 days	Wed 10/25/17	Wed 10/25/17		$2,211.66	10 hrs
403	4.3.1.2	Micropaver Integration Discussion (ONSITE TASK)	0.5 days	Wed 10/25/17	Wed 10/25/17		$2,211.66	10 hrs
404	4.3.1.2	SeeClickFix Integration Discussion (ONSITE TASK)	0.5 days	Thu 10/26/17	Thu 10/26/17		$2,211.66	10 hrs
405	4.3.1.2	**Travel for Integration Planning Workshops**	5 days	Mon 10/23/17	Fri 10/27/17		$7,292.08	16 hrs
406	4.3.1.2	Travel for System Integration Planning Workshops	5 days	Mon 10/23/17	Fri 10/27/17		$7,292.08	16 hrs
407	4.3.1.3	**Software Requirements Specifications (SRS) for System Integrations**	259.5 days	Wed 10/25/17	Fri 11/16/18		$178,647.74	800 hrs
408	4.3.1.3	**Develop SRS Documents**	234.5 d	Wed 10/25/17	Fri 10/12/18		$138,554.50	620 hrs
409	4.3.1.3	Develop SRS for OPUS Integration	19 days	Thu 10/26/17	Wed 11/29/17		$18,489.24	84 hrs
410	4.3.1.3	Develop SRS for SAP Integration	225 day	Wed 10/25/17	Fri 9/28/18	[10.1.	$103,175.62	460 hrs
411	4.3.1.3	Develop SRS for Granite Net Integration	30 days	Wed 5/2/18	Thu 6/14/18		$8,255.06	38 hrs
412	4.3.1.3	Develop SRS for SeeClickFix Integration	54 days	Fri 7/27/18	Fri 10/12/18		$8,634.58	38 hrs
413	4.3.1.3	**Review and Approve SRS Documents**	239 day	Wed 11/29/17	Fri 11/16/18		$40,093.24	180 hrs
414	4.3.1.3	Woolpert to Submit DRAFT SRS Documents	207 day	Wed 11/29/17	Wed 10/3/18		$0.00	0 hrs
415	4.3.1.3	County Technical Team to Review SRS Documents (COUNTY TASK)	220 days	Wed 11/29/17	Mon 10/22/18		$0.00	0 hrs
416	4.3.1.3	Woolpert to Facilitate Review of SRS Documents	3.25 days	Wed 12/6/17	Mon 12/11/17		$11,169.18	50 hrs
417	4.3.1.3	Woolpert to Modify SRS Documents	11.75 d	Wed 12/13/17	Fri 1/12/18		$28,924.06	130 hrs
418	4.3.1.3	Woolpert to Submit FINAL SRS Documents	220 day	Wed 1/3/18	Mon 11/12/18		$0.00	0 hrs
419	4.3.1.3	County to Accept SRS Documents (COUNTY TASK)	219 days	Wed 1/10/18	Fri 11/16/18		$0.00	0 hrs
420	4.3.2	**System Integration Development**	381.89	Mon 3/12/18	Mon 9/23/19		$511,968.17	3,381.86 hrs
421	4.3.2.1	**Integration Development: OPUS**	312.75	Mon 3/12/18	Tue 6/18/19		$106,905.82	1,274 hrs
422	4.3.2.1	**Coding**	40 days	Mon 3/12/18	Mon 5/7/18		$45,498.95	210 hrs
423	4.3.2.1	Develop Source Code	148 day	Mon 3/12/18	Tue 10/9/18		$45,498.95	210 hrs
424	4.3.2.1	**Deployment and Testing**	58 days	Tue 9/11/18	Fri 12/7/18	[7.18.	$58,197.78	1,050 hrs
425	4.3.2.1	Create and test installers, installation scripts	42 days	Mon 3/12/18	Wed 5/9/18	[7.18. sri]	$4,079.24	18 hrs
426	4.3.2.1	Woolpert to Facilitate Vendor Integration Testing (Round 1)	3 days	Mon 6/4/18	Wed 6/6/18		$3,833.59	81 hrs
427	4.3.2.1	Woolpert to Modify Integration Components on COUNTY Infrastructure	3 days	Thu 6/7/18	Mon 6/11/18		$9,129.12	42 hrs
428	4.3.2.1	Woolpert to Facilitate Vendor Integration Testing (Round 2)	3 days	Wed 6/20/18	Fri 6/22/18		$3,833.59	81 hrs
429	4.3.2.1	Woolpert to Modify Integration Components on COUNTY Infrastructure	90 days	Mon 6/25/18	Tue 10/30/18	[10.2. sri]	$9,129.88	508 hrs
430	4.3.2.1	Woolpert to Facilitate Vendor Integration Testing (Round 3)	3 days	Wed 10/31/18	Fri 11/2/18		$1,133.47	37 hrs
431	4.3.2.1	COUNTY to Accept Integration Components (COUNTY TASK)	0 days	Fri 11/2/18	Fri 11/2/18		$0.00	0 hrs
432	4.3.2.1	Woolpert to Facilitate Employee Integration Testing (Round 1)	5 days	Mon 1/14/19	Fri 1/18/19		$3,833.59	81 hrs

ID	WBS	Task Name	Duration	Start	Finish	Notes	Cost	Work
433	4.3.2.1	Woolpert to Modify Integration Components on COUNTY Infrastructure	10 days	Mon 1/21/19	Fri 2/1/19		$9,129.12	42 hrs
434	4.3.2.1	Woolpert to Facilitate Employee Integration Testing (Round 2)	2 days	Mon 4/22/19	Tue 4/23/19		$3,833.59	81 hrs
435	4.3.2.1	Woolpert to Modify Integration Components on COUNTY Infrastructure	10 days	Tue 4/23/19	Mon 5/6/19		$9,129.12	42 hrs
436	4.3.2.1	Woolpert to Facilitate Employee Integration Testing (Round 3)	2 days	Tue 5/7/19	Wed 5/8/19	[10.1 sri]	$1,133.47	37 hrs
437	4.3.2.1	COUNTY to Accept Integration Components (COUNTY TASK)	0 days	Wed 5/8/19	Wed 5/8/19		$0.00	0 hrs
438	4.3.2.1	**Go-Live Planning**	11.25 d	Mon 6/3/19	Tue 6/18/19		$3,209.08	14 hrs
439	4.3.2.1	Develop Rollout Plan	0.5 days	Mon 6/3/19	Mon 6/3/19		$916.88	4 hrs
440	4.3.2.1	Production Deployment Support	1.25 da	Mon 6/17/19	Tue 6/18/19		$2,292.20	10 hrs
441	4.3.2.2	**Integration Development: SAP**	224.89 days	Mon 10/22/18	Mon 9/23/19		$355,390.70	1,733.86 hrs
442	4.3.2.2	Coding	118 day	Mon 10/22/18	Thu 4/25/19		$281,461.36	1,296 hrs
443	4.3.2.2	Develop Source Code Group 3 Interfaces	28 days	Mon 10/22/18	Thu 12/6/18	[12.1	$64,101.36	296 hrs
444	4.3.2.2	Develop Source Code Group 1 Interfaces	34 days	Fri 12/14/18	Thu 2/14/19	[10.1	$108,680.00	500 hrs
445	4.3.2.2	Develop Source Code Group 2 Interfaces	34 days	Fri 3/8/19	Thu 4/25/19	[10.1	$108,680.00	500 hrs
446	4.3.2.2	**Deployment and Testing**	168.39	Mon 11/26/18	Thu 8/1/19	[7.18	$70,720.26	423.86 hrs
447	4.3.2.2	Create and test installers, installation scripts	139 day	Mon 11/26/18	Fri 6/21/19		$4,125.96	18 hrs
448	4.3.2.2	Woolpert to Facilitate Integration Testing (Group	29 days	Fri 12/7/18	Thu 1/31/19		$13,595.36	108.87 hrs
449	4.3.2.2	Woolpert to Facilitate Integration Testing (Group	39 days	Fri 4/5/19	Thu 5/30/19		$25,496.00	165.04 hrs
450	4.3.2.2	Woolpert to Facilitate Integration Testing (Group 2)	39.39 days	Fri 6/7/19	Thu 8/1/19		$27,502.94	131.95 hrs
451	4.3.2.2	COUNTY to Accept Integration Components	0 days	Thu 8/1/19	Thu 8/1/19		$0.00	0 hrs
452	4.3.2.2	**Go-Live Planning**	7.75 da	Wed 9/11/19	Mon 9/23/19		$3,209.08	14 hrs
453	4.3.2.2	Develop Rollout Plan	0.5 days	Wed 9/11/19	Thu 9/12/19		$916.88	4 hrs
454	4.3.2.2	Production Deployment Support	1.25 da	Fri 9/20/19	Mon 9/23/19		$2,292.20	10 hrs
455	4.3.2.3	**Integration Development: GraniteNet**	142.89 days	Mon 3/4/19	Thu 9/19/19		$15,700.09	124 hrs
456	4.3.2.3	Setup	4.5 day	Mon 3/4/19	Fri 3/8/19		$5,216.64	24 hrs
457	4.3.2.3	Workflow/Configuration Exploration Workshop w	0.5 day	Mon 3/4/19	Mon 3/4/19		$1,738.88	8 hrs
458	4.3.2.3	GNet-CW Interface setup Support	4 days	Tue 3/5/19	Fri 3/8/19		$3,477.76	16 hrs
459	4.3.2.3	**Deployment and Testing**	16 days	Mon 3/18/19	Mon 4/8/19	[7.18	$7,274.37	86 hrs
460	4.3.2.3	Woolpert to Support Integration Testing (Round	1 day	Mon 3/18/19	Mon 3/18/19		$1,833.76	40 hrs
461	4.3.2.3	Woolpert to Modify Configuration Components c	0.5 day	Tue 3/19/19	Tue 3/19/19		$2,173.60	10 hrs
462	4.3.2.3	Woolpert to Support Integration Testing (Round	0.5 day	Mon 3/25/19	Mon 3/25/19		$916.88	20 hrs
463	4.3.2.3	Woolpert to Modify Configuraiton Components c	0.5 day	Tue 3/26/19	Tue 3/26/19		$1,738.88	8 hrs
464	4.3.2.3	Woolpert to Support Integration Testing (Round	0.5 day	Mon 4/1/19	Mon 4/1/19		$611.25	8 hrs
465	4.3.2.3	COUNTY to Accept Gnet-CW Interface Related Co	0 days	Mon 4/8/19	Mon 4/8/19		$0.00	0 hrs
466	4.3.2.3	**Go-Live Planning**	5.75 days	Wed 9/11/19	Thu 9/19/19		$3,209.08	14 hrs
467	4.3.2.3	Develop Rollout Plan	0.5 day	Wed 9/11/19	Thu 9/12/19		$916.88	4 hrs
468	4.3.2.3	Production Deployment Support	1.25 days	Wed 9/18/19	Thu 9/19/19		$2,292.20	10 hrs
469	4.3.2.4	**Integration Development: SeeClickFix**	143 day	Wed 11/7/18	Fri 6/14/19	Need	$33,971.56	250 hrs

ID	WBS	Task Name	Duration	Start	Finish	Notes	Cost	Work
470	4.3.2.4	Setup	23 days	Wed 11/7/18	Fri 12/14/18		$16,519.36	76 hrs
471	4.3.2.4	Interface Configuration Exploration Workshop	3 days	Wed 11/7/18	Fri 11/9/18		$3,477.76	16 hrs
472	4.3.2.4	County to Provide Configuration Requirements (C	10 days	Mon 11/12/18	Fri 11/30/18		$0.00	0 hrs
473	4.3.2.4	Woolpert to Update Configuration	10 days	Mon 12/3/18	Fri 12/14/18		$13,041.60	60 hrs
474	4.3.2.4	Deployment and Testing	13 days	Mon 1/7/19	Wed 1/23/19		$14,243.12	160 hrs
475	4.3.2.4	Woolpert to Facilitate Integration Testing (Round	1 day	Mon 1/7/19	Mon 1/7/19		$3,667.52	48 hrs
476	4.3.2.4	Woolpert to Modify Configuration Components c	2 days	Tue 1/8/19	Wed 1/9/19		$6,086.08	28 hrs
477	4.3.2.4	Woolpert to Facilitate Integration Testing (Round	1 day	Thu 1/10/19	Thu 1/10/19		$1,833.76	40 hrs
478	4.3.2.4	Woolpert to Modify Configuration Components c	4 days	Fri 1/11/19	Wed 1/16/19		$1,738.88	8 hrs
479	4.3.2.4	Woolpert to Facilitate Integration Testing (Round	1 day	Thu 1/17/19	Thu 1/17/19		$916.88	36 hrs
480	4.3.2.4	COUNTY to Accept SCF Related Configuration Cor	0 days	Wed 1/23/19	Wed 1/23/19		$0.00	0 hrs
481	4.3.2.4	Go-Live Planning	10 days	Mon 6/3/19	Fri 6/14/19		$3,209.08	14 hrs
482	4.3.2.4	Develop Rollout Plan	0.5 days	Mon 6/3/19	Mon 6/3/19		$916.88	4 hrs
483	4.3.2.4	Production Deployment Support	5 days	Mon 6/10/19	Fri 6/14/19		$2,292.20	10 hrs
484	4.4	Phase 4: Quality Control	320 day	Tue 1/30/18	Thu 5/16/19	[12.1(	$67,158.00	0 hrs
485	4.5	Phase 4: Acceptance and Close	5 days	Thu 5/16/19	Wed 5/22/19		$0.00	0 hrs
486	5	PHASE 5: System Deployment	308.14	Mon 7/9/18	Fri 10/4/19		$752,882.80	4,676 hrs
487	5.1	Test Plans	27.5 da	Fri 10/26/18	Tue 12/11/18		$59,236.10	466 hrs
488	5.1.1	Develop DRAFT UAT Plan Documents	5 days	Fri 10/26/18	Thu 11/1/18		$21,531.60	116 hrs
489	5.1.1.1	Woolpert to Develop and Submit DRAFT Test Plan Des	5 days	Fri 10/26/18	Thu 11/1/18		$10,765.80	50 hrs
490	5.1.1.2	Woolpert to Develop and Submit DRAFT Testing and A	5 days	Fri 10/26/18	Thu 11/1/18		$10,765.80	50 hrs
491	5.1.1.3	Woolpert to Facilitate Remote Review Meeting with C	0.5 day	Thu 11/1/18	Thu 11/1/18		$0.00	16 hrs
492	5.1.2	Develop User Acceptance Test Plans	13.5 da	Thu 11/15/18	Tue 12/11/18		$37,704.50	350 hrs
493	5.1.2.1	Woolpert to Facilitate UAT Planning Workshops (ONS	4 days	Thu 11/15/18	Tue 11/27/18		$22,569.12	184 hrs
494	5.1.2.1	Develop UAT Plan: Utilities Customer & Field Servic	0.5 day	Thu 11/15/18	Thu 11/15/18		$1,980.83	21 hrs
495	5.1.2.1	Develop UAT Plan: Utilities Maintenance (ONSITE T	0.5 day	Thu 11/15/18	Thu 11/15/18		$1,980.83	21 hrs
496	5.1.2.1	Develop UAT Plan: Utilities Water Quality (ONSITE T	0.5 day	Fri 11/16/18	Fri 11/16/18		$1,980.83	21 hrs
497	Develc UAT	Develop UAT Plan: Public Works Roadway Maintenance (ONSITE TASK)	0.5 days	Fri 11/16/18	Fri 11/16/18		$1,980.83	21 hrs
498	5.1.2.1	Develop UAT Plan: Public Works Transportation (ON	0.5 day	Mon 11/26/18	Mon 11/26/18		$1,980.83	21 hrs
499	5.1.2.1	Develop UAT Plan: Public Works Customer Service (	0.5 day	Mon 11/26/18	Mon 11/26/18		$1,980.83	21 hrs
500	5.1.2.1	Develop UAT Plan: Public Works Stormwater (ONSI	0.5 day	Tue 11/27/18	Tue 11/27/18		$1,980.83	21 hrs
501	5.1.2.1	Develop UAT Plan: Public Works Mosquito Control and Vegetation Management (ONSITE TASK)	0.5 days	Tue 11/27/18	Tue 11/27/18		$1,980.83	21 hrs
502	5.1.2.1	Travel for UAT Plan Development Workshops	4 days	Thu 11/15/18	Tue 11/27/18		$6,722.48	16 hrs
503	5.1.2.1	Travel for UAT Plan Development Workshops - W	4 days	Thu 11/15/18	Tue 11/27/18		$6,722.48	16 hrs
504	5.1.2.2	Woolpert to Update DRAFT Test Plan Document	3 days	Thu 11/29/18	Mon 12/3/18		$6,252.39	29 hrs
505	5.1.2.3	Woolpert to Update DRAFT Testing and Acceptance Pl	3 days	Thu 11/29/18	Mon 12/3/18		$6,252.39	29 hrs
506	5.1.2.4	Woolpert to Facilitate Remote Review Meeting with C	0.5 day	Tue 12/4/18	Tue 12/4/18		$2,630.60	28 hrs
507	5.1.2.5	Woolpert to Submit FINAL Test Plan to COUNTY	0 days	Tue 12/4/18	Tue 12/4/18		$0.00	0 hrs
508	5.1.2.6	Woolpert to Submit FINAL Testing and Acceptance Pla	0 days	Tue 12/4/18	Tue 12/4/18		$0.00	0 hrs
509	5.1.2.7	COUNTY to Review and Accept FINAL UAT Plan (COUN	5 days	Tue 12/4/18	Tue 12/11/18		$0.00	80 hrs
510	5.2	User Acceptance Testing (UAT)	58 days	Tue 12/11/18	Thu 3/14/19		$116,178.98	1,080 hrs
511	5.2.1	Provide Tester Training	28 days	Tue 12/11/18	Thu 1/31/19		$38,516.80	392 hrs
512	5.2.1.1	Tester Training Preparation	11 days	Tue 12/11/18	Tue 1/8/19		$17,642.40	104 hrs
513	5.2.1.1	Woolpert to Prepare Tester Training Materials	10 days	Tue 12/11/18	Mon 1/7/19		$17,642.40	80 hrs

ID	WBS	Task Name	Duration	Start	Finish	Notes	Cost	Work
514	5.2.1.1	County to Prepare Client Site for Tester Training (CC	1 day	Tue 1/8/19	Tue 1/8/19		$0.00	24 hrs
515	5.2.1.2	Woolpert to Provide On-Site Tester Training	4 days	Mon 1/28/19	Thu 1/31/19		$14,113.92	272 hrs
516	5.2.1.2	Tester Training - Utilities (ONSITE TASK)	2 days	Mon 1/28/19	Tue 1/29/19		$7,056.96	128 hrs
517	5.2.1.2	Tester Training - Public Works (ONSITE TASK)	2 days	Wed 1/30/19	Thu 1/31/19		$7,056.96	144 hrs
518	5.2.1.3	Travel for On-Site Tester Training	4 days	Mon 1/28/19	Thu 1/31/19		$6,760.48	16 hrs
519	5.2.1.3	Travel for On-Site Tester Training	4 days	Mon 1/28/19	Thu 1/31/19		$6,760.48	16 hrs
520	5.2.2	Support User Acceptance Testing (UAT)	24 days	Mon 2/4/19	Thu 3/7/19		$77,662.18	688 hrs
521	5.2.2.1	Woolpert to Provide Onsite UAT Support (Round 1)	4 days	Mon 2/4/19	Thu 2/7/19		$22,693.94	278 hrs
522	5.2.2.1	Support UAT 1: Utilities Customer & Field Service (C	2 days	Mon 2/4/19	Tue 2/5/19		$0.00	16 hrs
523	5.2.2.1	Support UAT 1: Utilities Maintenance (ONSITE TASK	2 days	Mon 2/4/19	Tue 2/5/19		$0.00	16 hrs
524	5.2.2.1	Support UAT 1: Utilities Water Quality (ONSITE TASI	2 days	Mon 2/4/19	Tue 2/5/19		$0.00	16 hrs
525	5.2.2.1	Support UAT 1: Public Works Roadway Maintenance	2 days	Wed 2/6/19	Thu 2/7/19		$0.00	16 hrs
526	5.2.2.1	Support UAT 1: Public Works Transportation (ONSIT	2 days	Wed 2/6/19	Thu 2/7/19		$0.00	16 hrs
527	5.2.2.1	Support UAT 1: Public Works Customer Service (ON	2 days	Wed 2/6/19	Thu 2/7/19		$0.00	16 hrs
528	5.2.2.1	Support UAT 1: Public Works Stormwater (ONSITE T	2 days	Wed 2/6/19	Thu 2/7/19		$0.00	16 hrs
529	5.2.2.1	Support UAT 1: Public Works Mosquito Control and Vegetation Management (ONSITE TASK)	2 days	Wed 2/6/19	Thu 2/7/19		$0.00	16 hrs
530	5.2.2.1	Travel for UAT Support Round 1	4 days	Mon 2/4/19	Thu 2/7/19		$7,280.48	16 hrs
531	5.2.2.1	Travel for UAT Support Round 1	4 days	Mon 2/4/19	Thu 2/7/19		$7,280.48	16 hrs
532	5.2.2.2	Woolpert to Update AMS and Related Application Co	10 days	Mon 2/11/19	Fri 2/22/19		$18,770.88	86 hrs
533	5.2.2.2	Update Cityworks AMS Configuration	10 days	Mon 2/11/19	Fri 2/22/19		$5,292.72	24 hrs
534	5.2.2.2	Update Configuration Documentation	10 days	Mon 2/11/19	Fri 2/22/19		$4,350.58	20 hrs
535	5.2.2.2	Update System Integration Documentation	10 days	Mon 2/11/19	Fri 2/22/19		$9,127.58	42 hrs
536	5.2.2.3	Woolpert to Provide Onsite UAT Support (Round 2)	4 days	Mon 2/25/19	Thu 2/28/19		$22,693.94	262 hrs
537	5.2.2.3	Support UAT 2: Utilities Customer & Field Service (C	2 days	Mon 2/25/19	Tue 2/26/19		$0.00	16 hrs
538	5.2.2.3	Support UAT 2: Utilities Maintenance(ONSITE TASK)	2 days	Mon 2/25/19	Tue 2/26/19		$0.00	16 hrs
539	5.2.2.3	Support UAT 1: Utilities Water Quality (ONSITE TASI	2 days	Mon 2/25/19	Tue 2/26/19		$0.00	16 hrs
540	5.2.2.3	Support UAT 2: Public Works Roadway Maintenance	1.5 days	Wed 2/27/19	Thu 2/28/19		$0.00	12 hrs
541	5.2.2.3	Support UAT 2: Public Works Transportation (ONSIT	1.5 days	Wed 2/27/19	Thu 2/28/19		$0.00	12 hrs
542	5.2.2.3	Support UAT 2: Public Works Customer Service (ON	1.5 days	Wed 2/27/19	Thu 2/28/19		$0.00	12 hrs
543	5.2.2.3	Support UAT 2: Public Works Stormwater (ONSITE T	1.5 days	Wed 2/27/19	Thu 2/28/19		$0.00	12 hrs
544	5.2.2.3	Support UAT 2: Public Works Mosquito Control and	2 days	Wed 2/27/19	Thu 2/28/19		$0.00	16 hrs
545	5.2.2.3	Travel for UAT Support Round 2	4 days	Mon 2/25/19	Thu 2/28/19		$7,280.48	16 hrs
546	5.2.2.3	Travel for UAT Support Round 2	4 days	Mon 2/25/19	Thu 2/28/19		$7,280.48	16 hrs
547	5.2.2.4	Woolpert to Update AMS and Related Application Co	5 days	Fri 3/1/19	Thu 3/7/19		$13,503.42	62 hrs
548	5.2.2.4	Update Cityworks AMS Configuration	5 days	Fri 3/1/19	Thu 3/7/19		$2,611.60	12 hrs
549	5.2.2.4	Update Configuration Documentation	5 days	Fri 3/1/19	Thu 3/7/19		$2,197.42	10 hrs
550	5.2.2.4	Update System Integration Documentation	5 days	Fri 3/1/19	Thu 3/7/19		$8,694.40	40 hrs
551	5.2.3	COUNTY to Accept UAT (COUNTY TASK)	0 days	Thu 3/14/19	Thu 3/14/19		$0.00	0 hrs
552	5.3	End-User Training (EUT)	287.14	Mon 7/9/18	Thu 9/5/19		$424,893.30	2,630 hrs
553	5.3.1	Woolpert to prepare Training Materials	205.5 d	Mon 7/9/18	Tue 5/14/19		$270,850.02	1,382 hrs
554	5.3.1.1	Training Videos	180 day	Mon 7/9/18	Mon 4/8/19		$118,849.80	540 hrs
555	5.3.1.2	Training Class Plans and Hand-Out Materials Developn	180 day	Mon 7/9/18	Mon 4/8/19		$92,543.80	420 hrs
556	5.3.1.3	Training Class Assessments (EUT)	10 days	Tue 3/12/19	Mon 3/25/19		$39,616.60	180 hrs
557	5.3.1.4	Interim Review of Training Materials	16 days	Mon 12/3/18	Mon 1/7/19		$10,802.03	81 hrs
558	5.3.1.4	Woolpert to Submit DRAFT Training Materials to CC	0 days	Mon 12/3/18	Mon 12/3/18		$0.00	0 hrs

ID	WBS	Task Name	Duration	Start	Finish	Notes	Cost	Work
559	5.3.1.4	COUNTY to Review Interim Training Materials (COU	10 days	Mon 12/3/18	Fri 12/14/18		$0.00	32 hrs
560	5.3.1.4	Woolpert to Facilitate Joint Review of Interim Traini	1 day	Mon 12/31/18	Mon 12/31/18		$3,745.07	17 hrs
561	5.3.1.4	Woolpert to Update Training Materials per COUNTY	5 days	Tue 1/1/19	Mon 1/7/19		$7,056.96	32 hrs
562	5.3.1.5	**FINAL Review of Training Materials**	25.5 da	Mon 4/8/19	Tue 5/14/19		$9,037.79	161 hrs
563	5.3.1.5	Woolpert to Submit Pre-FINAL Training Materials to	0 days	Mon 4/8/19	Mon 4/8/19		$0.00	0 hrs
564	5.3.1.5	COUNTY to Review Training Materials (COUNTY TAS	10 days	Tue 4/9/19	Mon 4/22/19		$0.00	56 hrs
565	5.3.1.5	Woolpert to Facilitate Joint Review of Interim Traini	0.5 day	Tue 4/23/19	Tue 4/23/19		$1,980.83	17 hrs
566	5.3.1.5	Woolpert to Update and Submit FINAL Training Mat	5 days	Tue 4/23/19	Tue 4/30/19		$7,056.96	32 hrs
567	5.3.1.5	COUNTY to Review and Accept Training Materials (C	10 days	Tue 4/30/19	Tue 5/14/19		$0.00	56 hrs
568	5.3.2	**Woolpert to Provide On-Site End User Training (EUT)**	124.14	Fri 3/15/19	Thu 9/5/19		$154,043.28	1,248 hrs
569	5.3.2.1	COUNTY to establish TRAINING & PROD ENV (COUNTY	5 days	Fri 3/15/19	Thu 3/21/19		$0.00	0 hrs
570	5.3.2.2	COUNTY to perform Load Testing (COUNTY TASK)	5 days	Fri 3/22/19	Thu 3/28/19		$0.00	0 hrs
571	5.3.2.3	Woolpert to Prepare for On-Site EUT	1 day	Wed 5/15/19	Wed 5/15/19		$0.00	0 hrs
572	5.3.2.4	Woolpert to Support County in Deploying Public Works Related System Integrations in TRAIN ENV	3 days	Wed 5/15/19	Fri 5/17/19		$8,694.40	40 hrs
573	5.3.2.5	COUNTY to Prepare Client Site for Training (COUNTY T	1 day	Fri 5/10/19	Fri 5/10/19		$0.00	8 hrs
574	5.3.2.6	**Woolpert to Conduct Onsite EUT**	83.14 d	Mon 5/13/19	Thu 9/5/19		$145,348.88	1,200 hrs
575	5.3.2.6	**Week 1 - AMS Public Works**	5 days	Mon 5/13/19	Fri 5/17/19		$19,375.12	208 hrs
576	5.3.2.6	Day 1	1 day	Mon 5/13/19	Mon 5/13/19		$3,528.48	40 hrs
577	5.3.2.6	Morning - Public Works	0.5 day	Mon 5/13/19	Mon 5/13/19		$0.00	0 hrs
578	5.3.2.6	EUT - AMS A (ONSITE)	0.5 day	Mon 5/13/19	Mon 5/13/19		$0.00	0 hrs
579	5.3.2.6	EUT - AMS A (ONSITE)	0.5 day	Mon 5/13/19	Mon 5/13/19		$0.00	0 hrs
580	5.3.2.6	Afternoon - Public Works	0.5 day	Mon 5/13/19	Mon 5/13/19		$0.00	0 hrs
581	5.3.2.6	EUT - AMS A (ONSITE)	0.5 day	Mon 5/13/19	Mon 5/13/19		$0.00	0 hrs
582	5.3.2.6	EUT - AMS A (ONSITE)	0.5 day	Mon 5/13/19	Mon 5/13/19		$0.00	0 hrs
583	5.3.2.6	Day 2	1 day	Tue 5/14/19	Tue 5/14/19		$3,528.48	40 hrs
584	5.3.2.6	Morning - Public Works	0.5 day	Tue 5/14/19	Tue 5/14/19		$0.00	0 hrs
585	5.3.2.6	EUT - AMS A (ONSITE)	0.5 day	Tue 5/14/19	Tue 5/14/19		$0.00	0 hrs
586	5.3.2.6	EUT - AMS A (ONSITE)	0.5 day	Tue 5/14/19	Tue 5/14/19		$0.00	0 hrs
587	5.3.2.6	Afternoon - Public Works	0.5 day	Tue 5/14/19	Tue 5/14/19		$0.00	0 hrs
588	5.3.2.6	EUT - AMS A (ONSITE)	0.5 day	Tue 5/14/19	Tue 5/14/19		$0.00	0 hrs
589	5.3.2.6	EUT - AMS A (ONSITE)	0.5 day	Tue 5/14/19	Tue 5/14/19		$0.00	0 hrs
590	5.3.2.6	Day 3	1 day	Wed 5/15/19	Wed 5/15/19		$3,528.48	40 hrs
591	5.3.2.6	Morning - Public Works	0.5 day	Wed 5/15/19	Wed 5/15/19		$0.00	0 hrs
592	5.3.2.6	EUT - AMS B (ONSITE)	0.5 day	Wed 5/15/19	Wed 5/15/19		$0.00	0 hrs
593	5.3.2.6	EUT - AMS B (ONSITE)	0.5 day	Wed 5/15/19	Wed 5/15/19		$0.00	0 hrs
594	5.3.2.6	Afternoon - Public Works	0.5 day	Wed 5/15/19	Wed 5/15/19		$0.00	0 hrs
595	5.3.2.6	EUT - AMS B (ONSITE)	0.5 day	Wed 5/15/19	Wed 5/15/19		$0.00	0 hrs
596	5.3.2.6	EUT - AMS B (ONSITE)	0.5 day	Wed 5/15/19	Wed 5/15/19		$0.00	0 hrs
597	5.3.2.6	Day 4	1 day	Thu 5/16/19	Thu 5/16/19		$3,528.48	40 hrs
598	5.3.2.6	Morning	0.5 day	Thu 5/16/19	Thu 5/16/19		$0.00	0 hrs
599	5.3.2.6	EUT - AMS B (ONSITE)	0.5 day	Thu 5/16/19	Thu 5/16/19		$0.00	0 hrs
600	5.3.2.6	EUT - AMS B (ONSITE)	0.5 day	Thu 5/16/19	Thu 5/16/19		$0.00	0 hrs
601	5.3.2.6	Afternoon	0.5 day	Thu 5/16/19	Thu 5/16/19		$0.00	0 hrs
602	5.3.2.6	EUT - AMS B (ONSITE)	0.5 day	Thu 5/16/19	Thu 5/16/19		$0.00	0 hrs
603	5.3.2.6	EUT - AMS B (ONSITE)	0.5 day	Thu 5/16/19	Thu 5/16/19		$0.00	0 hrs

ID	WBS	Task Name	Duration	Start	Finish	Notes	Cost	Work
604	5.3.2.6	Day 5	1 day	Fri 5/17/19	Fri 5/17/19		$3,528.48	40 hrs
605	5.3.2.6	Morning	0.5 day	Fri 5/17/19	Fri 5/17/19		$0.00	0 hrs
606	5.3.2.6	EUT - AMS System Admin 1 of 2 (Review)	0.5 day	Fri 5/17/19	Fri 5/17/19		$0.00	0 hrs
607	5.3.2.6	EUT - Storeroom Transaction	0.5 day	Fri 5/17/19	Fri 5/17/19		$0.00	0 hrs
608	5.3.2.6	Afternoon	0.5 day	Fri 5/17/19	Fri 5/17/19		$0.00	0 hrs
609	5.3.2.6	EUT - AMS System Admin 2 of 2 (Review)	0.5 day	Fri 5/17/19	Fri 5/17/19		$0.00	0 hrs
610	5.3.2.6	EUT - Storeroom Admin	0.5 day	Fri 5/17/19	Fri 5/17/19		$0.00	0 hrs
611	5.3.2.6	Week 2 - AMS Public Works	5 days	Mon 5/20/19	Fri 5/24/19		$19,375.12	208 hrs
612	5.3.2.6	Day 1	1 day	Mon 5/20/19	Mon 5/20/19		$3,528.48	40 hrs
613	5.3.2.6	Morning	0.5 day	Mon 5/20/19	Mon 5/20/19		$0.00	0 hrs
614	5.3.2.6	EUT - AMS A (ONSITE)	0.5 day	Mon 5/20/19	Mon 5/20/19		$0.00	0 hrs
615	5.3.2.6	EUT - AMS A (ONSITE)	0.5 day	Mon 5/20/19	Mon 5/20/19		$0.00	0 hrs
616	5.3.2.6	Afternoon	0.5 day	Mon 5/20/19	Mon 5/20/19		$0.00	0 hrs
617	5.3.2.6	EUT - AMS A (ONSITE)	0.5 day	Mon 5/20/19	Mon 5/20/19		$0.00	0 hrs
618	5.3.2.6	EUT - AMS A (ONSITE)	0.5 day	Mon 5/20/19	Mon 5/20/19		$0.00	0 hrs
619	5.3.2.6	Day 2	1 day	Tue 5/21/19	Tue 5/21/19		$3,528.48	40 hrs
620	5.3.2.6	Morning	0.5 day	Tue 5/21/19	Tue 5/21/19		$0.00	0 hrs
621	5.3.2.6	EUT - AMS A (ONSITE)	0.5 day	Tue 5/21/19	Tue 5/21/19		$0.00	0 hrs
622	5.3.2.6	EUT - AMS A (ONSITE)	0.5 day	Tue 5/21/19	Tue 5/21/19		$0.00	0 hrs
623	5.3.2.6	Afternoon	0.5 day	Tue 5/21/19	Tue 5/21/19		$0.00	0 hrs
624	5.3.2.6	EUT - AMS A (ONSITE)	0.5 day	Tue 5/21/19	Tue 5/21/19		$0.00	0 hrs
625	5.3.2.6	EUT - AMS A (ONSITE)	0.5 day	Tue 5/21/19	Tue 5/21/19		$0.00	0 hrs
626	5.3.2.6	Day 3	1 day	Wed 5/22/19	Wed 5/22/19		$3,528.48	40 hrs
627	5.3.2.6	Morning	0.5 day	Wed 5/22/19	Wed 5/22/19		$0.00	0 hrs
628	5.3.2.6	EUT - AMS B (ONSITE)	0.5 day	Wed 5/22/19	Wed 5/22/19		$0.00	0 hrs
629	5.3.2.6	EUT - AMS B (ONSITE)	0.5 day	Wed 5/22/19	Wed 5/22/19		$0.00	0 hrs
630	5.3.2.6	Afternoon	0.5 day	Wed 5/22/19	Wed 5/22/19		$0.00	0 hrs
631	5.3.2.6	EUT - AMS B (ONSITE)	0.5 day	Wed 5/22/19	Wed 5/22/19		$0.00	0 hrs
632	5.3.2.6	EUT - AMS B (ONSITE)	0.5 day	Wed 5/22/19	Wed 5/22/19		$0.00	0 hrs
633	5.3.2.6	Day 4	1 day	Thu 5/23/19	Thu 5/23/19		$3,528.48	40 hrs
634	5.3.2.6	Morning	0.5 day	Thu 5/23/19	Thu 5/23/19		$0.00	0 hrs
635	5.3.2.6	EUT - AMS B (ONSITE)	0.5 day	Thu 5/23/19	Thu 5/23/19		$0.00	0 hrs
636	5.3.2.6	EUT - AMS B (ONSITE)	0.5 day	Thu 5/23/19	Thu 5/23/19		$0.00	0 hrs
637	5.3.2.6	Afternoon	0.5 day	Thu 5/23/19	Thu 5/23/19		$0.00	0 hrs
638	5.3.2.6	EUT - AMS B (ONSITE)	0.5 day	Thu 5/23/19	Thu 5/23/19		$0.00	0 hrs
639	5.3.2.6	EUT - AMS B (ONSITE)	0.5 day	Thu 5/23/19	Thu 5/23/19		$0.00	0 hrs
640	5.3.2.6	Day 5	1 day	Fri 5/24/19	Fri 5/24/19		$3,528.48	40 hrs
641	5.3.2.6	Morning	0.5 day	Fri 5/24/19	Fri 5/24/19		$0.00	0 hrs
642	5.3.2.6	EUT - AMS System Admin 1 of 2 (Review)	0.5 day	Fri 5/24/19	Fri 5/24/19		$0.00	0 hrs
643	5.3.2.6	EUT - Storeroom Transaction	0.5 day	Fri 5/24/19	Fri 5/24/19		$0.00	0 hrs
644	5.3.2.6	Afternoon	0.5 day	Fri 5/24/19	Fri 5/24/19		$0.00	0 hrs
645	5.3.2.6	EUT - AMS System Admin 2 of 2 (Review)	0.5 day	Fri 5/24/19	Fri 5/24/19		$0.00	0 hrs
646	5.3.2.6	EUT - Storeroom Admin	0.5 day	Fri 5/24/19	Fri 5/24/19		$0.00	0 hrs
647	5.3.2.6	Week 3 - AMS Public Works Reinforcement	3 days	Mon 5/27/19	Wed 5/29/19		$11,451.80	124 hrs
648	5.3.2.6	Day 1	1 day	Mon 5/27/19	Mon 5/27/19		$3,528.48	40 hrs
649	5.3.2.6	Morning	0.5 day	Mon 5/27/19	Mon 5/27/19		$0.00	0 hrs

ID	WBS		Task Name	Duration	Start	Finish	Notes	Cost	Work
650	5.3.2.6		EUT - AMS A (ONSITE)	0.5 day	Mon 5/27/19	Mon 5/27/19		$0.00	0 hrs
651	5.3.2.6		EUT - AMS A (ONSITE)	0.5 day	Mon 5/27/19	Mon 5/27/19		$0.00	0 hrs
652	**5.3.2.6**		**Afternoon**	**0.5 day**	**Mon 5/27/19**	**Mon 5/27/19**		**$0.00**	**0 hrs**
653	5.3.2.6		EUT - AMS A (ONSITE)	0.5 day	Mon 5/27/19	Mon 5/27/19		$0.00	0 hrs
654	5.3.2.6		EUT - AMS A (ONSITE)	0.5 day	Mon 5/27/19	Mon 5/27/19		$0.00	0 hrs
655	**5.3.2.6**		**Day 2**	**1 day**	**Tue 5/28/19**	**Tue 5/28/19**		**$3,528.48**	**40 hrs**
656	5.3.2.6		Morning	0.5 day	Tue 5/28/19	Tue 5/28/19		$0.00	0 hrs
657	5.3.2.6		EUT - AMS B (ONSITE)	0.5 day	Tue 5/28/19	Tue 5/28/19		$0.00	0 hrs
658	5.3.2.6		EUT - AMS B (ONSITE)	0.5 day	Tue 5/28/19	Tue 5/28/19		$0.00	0 hrs
659	5.3.2.6		Afternoon	0.5 day	Tue 5/28/19	Tue 5/28/19		$0.00	0 hrs
660	5.3.2.6		EUT - AMS B (ONSITE)	0.5 day	Tue 5/28/19	Tue 5/28/19		$0.00	0 hrs
661	5.3.2.6		EUT - AMS B (ONSITE)	0.5 day	Tue 5/28/19	Tue 5/28/19		$0.00	0 hrs
662	**5.3.2.6**		**Day 3**	**1 day**	**Wed 5/29/19**	**Wed 5/29/19**		**$3,528.48**	**40 hrs**
663	**5.3.2.6**		**Morning**	**0.5 day**	**Wed 5/29/19**	**Wed 5/29/19**		**$0.00**	**0 hrs**
664	5.3.2.6		EUT - AMS System Admin 1 of 2 (Review)	0.5 day	Wed 5/29/19	Wed 5/29/19		$0.00	0 hrs
665	5.3.2.6		EUT - Storeroom Transaction	0.5 day	Wed 5/29/19	Wed 5/29/19		$0.00	0 hrs
666	**5.3.2.6**		**Afternoon**	**0.5 day**	**Wed 5/29/19**	**Wed 5/29/19**		**$0.00**	**0 hrs**
667	5.3.2.6		EUT - AMS System Admin 2 of 2 (Review)	0.5 day	Wed 5/29/19	Wed 5/29/19		$0.00	0 hrs
668	5.3.2.6		EUT - Storeroom Admin	0.5 day	Wed 5/29/19	Wed 5/29/19		$0.00	0 hrs
669	5.3.2.6		Woolpert to Support County in Deploying Utilities Related System Integrations in TRAIN ENV	3 days	Thu 7/25/19	Mon 7/29/19		$8,694.40	40 hrs
670	**5.3.2.6**		**Week 4 - AMS Utilities**	**5 days**	**Fri 8/16/19**	**Fri 8/23/19**		**$19,375.12**	**208 hrs**
671	**5.3.2.6**		**Day 1**	**1 day**	**Fri 8/16/19**	**Mon 8/19/19**		**$3,528.48**	**40 hrs**
672	**5.3.2.6**		**Morning - Utilities**	**0.5 day**	**Fri 8/16/19**	**Fri 8/16/19**		**$0.00**	**0 hrs**
673	5.3.2.6		EUT - AMS A (ONSITE)	0.5 day	Fri 8/16/19	Fri 8/16/19		$0.00	0 hrs
674	5.3.2.6		EUT - AMS A (ONSITE)	0.5 day	Fri 8/16/19	Fri 8/16/19		$0.00	0 hrs
675	**5.3.2.6**		**Afternoon - Utilities**	**0.5 day**	**Fri 8/16/19**	**Mon 8/19/19**		**$0.00**	**0 hrs**
676	5.3.2.6		EUT - AMS A (ONSITE)	0.5 day	Fri 8/16/19	Mon 8/19/19		$0.00	0 hrs
677	5.3.2.6		EUT - AMS A (ONSITE)	0.5 day	Fri 8/16/19	Mon 8/19/19		$0.00	0 hrs
678	**5.3.2.6**		**Day 2**	**1 day**	**Mon 8/19/19**	**Tue 8/20/19**		**$3,528.48**	**40 hrs**
679	**5.3.2.6**		**Morning - Utilities**	**0.5 day**	**Mon 8/19/19**	**Mon 8/19/19**		**$0.00**	**0 hrs**
680	5.3.2.6		EUT - AMS A (ONSITE)	0.5 day	Mon 8/19/19	Mon 8/19/19		$0.00	0 hrs
681	5.3.2.6		EUT - AMS A (ONSITE)	0.5 day	Mon 8/19/19	Mon 8/19/19		$0.00	0 hrs
682	**5.3.2.6**		**Afternoon - Utilities**	**0.5 day**	**Mon 8/19/19**	**Tue 8/20/19**		**$0.00**	**0 hrs**
683	5.3.2.6		EUT - AMS A (ONSITE)	0.5 day	Mon 8/19/19	Tue 8/20/19		$0.00	0 hrs
684	5.3.2.6		EUT - AMS A (ONSITE)	0.5 day	Mon 8/19/19	Tue 8/20/19		$0.00	0 hrs
685	**5.3.2.6**		**Day 3**	**1 day**	**Tue 8/20/19**	**Wed 8/21/19**		**$3,528.48**	**40 hrs**
686	**5.3.2.6**		**Morning - Utilities**	**0.5 day**	**Tue 8/20/19**	**Tue 8/20/19**		**$0.00**	**0 hrs**
687	5.3.2.6		EUT - AMS B (ONSITE)	0.5 day	Tue 8/20/19	Tue 8/20/19		$0.00	0 hrs
688	5.3.2.6		EUT - AMS B (ONSITE)	0.5 day	Tue 8/20/19	Tue 8/20/19		$0.00	0 hrs
689	**5.3.2.6**		**Afternoon - Utilities**	**0.5 day**	**Tue 8/20/19**	**Wed 8/21/19**		**$0.00**	**0 hrs**
690	5.3.2.6		EUT - AMS B (ONSITE)	0.5 day	Tue 8/20/19	Wed 8/21/19		$0.00	0 hrs
691	5.3.2.6		EUT - AMS B (ONSITE)	0.5 day	Tue 8/20/19	Wed 8/21/19		$0.00	0 hrs
692	**5.3.2.6**		**Day 4**	**1 day**	**Wed 8/21/19**	**Thu 8/22/19**		**$3,528.48**	**40 hrs**
693	5.3.2.6		Morning	0.5 day	Wed 8/21/19	Wed 8/21/19		$0.00	0 hrs
694	5.3.2.6		EUT - AMS B (ONSITE)	0.5 day	Wed 8/21/19	Wed 8/21/19		$0.00	0 hrs

ID	WBS	Task Name	Duration	Start	Finish	Notes	Cost	Work
695	5.3.2.6	EUT - AMS B (ONSITE)	0.5 day	Wed 8/21/19	Wed 8/21/19		$0.00	0 hrs
696	5.3.2.6	Afternoon	0.5 day	Wed 8/21/19	Thu 8/22/19		$0.00	0 hrs
697	5.3.2.6	EUT - AMS B (ONSITE)	0.5 day	Wed 8/21/19	Thu 8/22/19		$0.00	0 hrs
698	5.3.2.6	EUT - AMS B (ONSITE)	0.5 day	Wed 8/21/19	Thu 8/22/19		$0.00	0 hrs
699	5.3.2.6	Day 5	1 day	Thu 8/22/19	Fri 8/23/19		$3,528.48	40 hrs
700	5.3.2.6	Morning	0.5 day	Thu 8/22/19	Thu 8/22/19		$0.00	0 hrs
701	5.3.2.6	EUT - AMS System Admin 1 of 2 (Review)	0.5 day	Thu 8/22/19	Thu 8/22/19		$0.00	0 hrs
702	5.3.2.6	EUT - Storeroom Transaction	0.5 day	Thu 8/22/19	Thu 8/22/19		$0.00	0 hrs
703	5.3.2.6	Afternoon	0.5 day	Thu 8/22/19	Fri 8/23/19		$0.00	0 hrs
704	5.3.2.6	EUT - AMS System Admin 2 of 2 (Review)	0.5 day	Thu 8/22/19	Fri 8/23/19		$0.00	0 hrs
705	5.3.2.6	EUT - Storeroom Admin	0.5 day	Thu 8/22/19	Fri 8/23/19		$0.00	0 hrs
706	5.3.2.6	Week 5 - AMS Utilities	5 days	Fri 8/23/19	Fri 8/30/19		$19,375.12	208 hrs
707	5.3.2.6	Day 1	1 day	Fri 8/23/19	Mon 8/26/19		$3,528.48	40 hrs
708	5.3.2.6	Morning - Utilities	0.5 day	Fri 8/23/19	Fri 8/23/19		$0.00	0 hrs
709	5.3.2.6	EUT - AMS A (ONSITE)	0.5 day	Fri 8/23/19	Fri 8/23/19		$0.00	0 hrs
710	5.3.2.6	EUT - AMS A (ONSITE)	0.5 day	Fri 8/23/19	Fri 8/23/19		$0.00	0 hrs
711	5.3.2.6	Afternoon - Utilities	0.5 day	Fri 8/23/19	Mon 8/26/19		$0.00	0 hrs
712	5.3.2.6	EUT - AMS A (ONSITE)	0.5 day	Fri 8/23/19	Mon 8/26/19		$0.00	0 hrs
713	5.3.2.6	EUT - AMS A (ONSITE)	0.5 day	Fri 8/23/19	Mon 8/26/19		$0.00	0 hrs
714	5.3.2.6	Day 2	1 day	Mon 8/26/19	Tue 8/27/19		$3,528.48	40 hrs
715	5.3.2.6	Morning - Utilities	0.5 day	Mon 8/26/19	Mon 8/26/19		$0.00	0 hrs
716	5.3.2.6	EUT - AMS A (ONSITE)	0.5 day	Mon 8/26/19	Mon 8/26/19		$0.00	0 hrs
717	5.3.2.6	EUT - AMS A (ONSITE)	0.5 day	Mon 8/26/19	Mon 8/26/19		$0.00	0 hrs
718	5.3.2.6	Afternoon - Utilities	0.5 day	Mon 8/26/19	Tue 8/27/19		$0.00	0 hrs
719	5.3.2.6	EUT - AMS A (ONSITE)	0.5 day	Mon 8/26/19	Tue 8/27/19		$0.00	0 hrs
720	5.3.2.6	EUT - AMS A (ONSITE)	0.5 day	Mon 8/26/19	Tue 8/27/19		$0.00	0 hrs
721	5.3.2.6	Day 3	1 day	Tue 8/27/19	Wed 8/28/19		$3,528.48	40 hrs
722	5.3.2.6	Morning - Utilities	0.5 day	Tue 8/27/19	Tue 8/27/19		$0.00	0 hrs
723	5.3.2.6	EUT - AMS B (ONSITE)	0.5 day	Tue 8/27/19	Tue 8/27/19		$0.00	0 hrs
724	5.3.2.6	EUT - AMS B (ONSITE)	0.5 day	Tue 8/27/19	Tue 8/27/19		$0.00	0 hrs
725	5.3.2.6	Afternoon - Utilities	0.5 day	Tue 8/27/19	Wed 8/28/19		$0.00	0 hrs
726	5.3.2.6	EUT - AMS B (ONSITE)	0.5 day	Tue 8/27/19	Wed 8/28/19		$0.00	0 hrs
727	5.3.2.6	EUT - AMS B (ONSITE)	0.5 day	Tue 8/27/19	Wed 8/28/19		$0.00	0 hrs
728	5.3.2.6	Day 4	1 day	Wed 8/28/19	Thu 8/29/19		$3,528.48	40 hrs
729	5.3.2.6	Morning	0.5 day	Wed 8/28/19	Wed 8/28/19		$0.00	0 hrs
730	5.3.2.6	EUT - AMS B (ONSITE)	0.5 day	Wed 8/28/19	Wed 8/28/19		$0.00	0 hrs
731	5.3.2.6	EUT - AMS B (ONSITE)	0.5 day	Wed 8/28/19	Wed 8/28/19		$0.00	0 hrs
732	5.3.2.6	Afternoon	0.5 day	Wed 8/28/19	Thu 8/29/19		$0.00	0 hrs
733	5.3.2.6	EUT - AMS B (ONSITE)	0.5 day	Wed 8/28/19	Thu 8/29/19		$0.00	0 hrs
734	5.3.2.6	EUT - AMS B (ONSITE)	0.5 day	Wed 8/28/19	Thu 8/29/19		$0.00	0 hrs
735	5.3.2.6	Day 5	1 day	Thu 8/29/19	Fri 8/30/19		$3,528.48	40 hrs
736	5.3.2.6	Morning	0.5 day	Thu 8/29/19	Thu 8/29/19		$0.00	0 hrs
737	5.3.2.6	EUT - AMS System Admin 1 of 2 (Review)	0.5 day	Thu 8/29/19	Thu 8/29/19		$0.00	0 hrs
738	5.3.2.6	EUT - Storeroom Transaction	0.5 day	Thu 8/29/19	Thu 8/29/19		$0.00	0 hrs
739	5.3.2.6	Afternoon	0.5 day	Thu 8/29/19	Fri 8/30/19		$0.00	0 hrs
740	5.3.2.6	EUT - AMS System Admin 2 of 2 (Review)	0.5 day	Thu 8/29/19	Fri 8/30/19		$0.00	0 hrs

ID	WBS	Task Name	Duration	Start	Finish	Notes	Cost	Work
741	5.3.2.6	EUT - Storeroom Admin	0.5 day	Thu 8/29/19	Fri 8/30/19		$0.00	0 hrs
742	5.3.2.6	Week 6 - AMS Utilities Reinforcement	3 days	Fri 8/30/19	Wed 9/4/19		$11,451.80	124 hrs
743	5.3.2.6	Day 1	1 day	Fri 8/30/19	Mon 9/2/19		$3,528.48	40 hrs
744	5.3.2.6	Morning - Utilities	0.5 day	Fri 8/30/19	Fri 8/30/19		$0.00	0 hrs
745	5.3.2.6	EUT - AMS A (ONSITE)	0.5 day	Fri 8/30/19	Fri 8/30/19		$0.00	0 hrs
746	5.3.2.6	EUT - AMS A (ONSITE)	0.5 day	Fri 8/30/19	Fri 8/30/19		$0.00	0 hrs
747	5.3.2.6	Afternoon - Utilities	0.5 day	Fri 8/30/19	Mon 9/2/19		$0.00	0 hrs
748	5.3.2.6	EUT - AMS A (ONSITE)	0.5 day	Fri 8/30/19	Mon 9/2/19		$0.00	0 hrs
749	5.3.2.6	EUT - AMS A (ONSITE)	0.5 day	Fri 8/30/19	Mon 9/2/19		$0.00	0 hrs
750	5.3.2.6	Day 2	1 day	Mon 9/2/19	Tue 9/3/19		$3,528.48	40 hrs
751	5.3.2.6	Morning - Utilities	0.5 day	Mon 9/2/19	Mon 9/2/19		$0.00	0 hrs
752	5.3.2.6	EUT - AMS B (ONSITE)	0.5 day	Mon 9/2/19	Mon 9/2/19		$0.00	0 hrs
753	5.3.2.6	EUT - AMS B (ONSITE)	0.5 day	Mon 9/2/19	Mon 9/2/19		$0.00	0 hrs
754	5.3.2.6	Afternoon - Utilities	0.5 day	Mon 9/2/19	Tue 9/3/19		$0.00	0 hrs
755	5.3.2.6	EUT - AMS B (ONSITE)	0.5 day	Mon 9/2/19	Tue 9/3/19		$0.00	0 hrs
756	5.3.2.6	EUT - AMS B (ONSITE)	0.5 day	Mon 9/2/19	Tue 9/3/19		$0.00	0 hrs
757	5.3.2.6	Day 3	1 day	Tue 9/3/19	Wed 9/4/19		$3,528.48	40 hrs
758	5.3.2.6	Morning	0.5 day	Tue 9/3/19	Tue 9/3/19		$0.00	0 hrs
759	5.3.2.6	EUT - AMS System Admin 1 of 2 (Review)	0.5 day	Tue 9/3/19	Tue 9/3/19		$0.00	0 hrs
760	5.3.2.6	EUT - Storeroom Transaction	0.5 day	Tue 9/3/19	Tue 9/3/19		$0.00	0 hrs
761	5.3.2.6	Afternoon	0.5 day	Tue 9/3/19	Wed 9/4/19		$0.00	0 hrs
762	5.3.2.6	EUT - AMS System Admin 2 of 2 (Review)	0.5 day	Tue 9/3/19	Wed 9/4/19		$0.00	0 hrs
763	5.3.2.6	EUT - Storeroom Admin	0.5 day	Tue 9/3/19	Wed 9/4/19		$0.00	0 hrs
764	5.3.2.6	Travel for EUT	83.14 d	Mon 5/13/19	Thu 9/5/19		$36,250.40	80 hrs
765	5.3.2.6	Travel for EUT - Week 1	4 days	Mon 5/13/19	Thu 5/16/19		$7,242.48	16 hrs
766	5.3.2.6	Travel for EUT - Week 2	4 days	Mon 5/20/19	Thu 5/23/19		$7,242.48	16 hrs
767	5.3.2.6	Travel for EUT - Week 3	4 days	Mon 5/27/19	Thu 5/30/19		$7,242.48	16 hrs
768	5.3.2.6	Travel for EUT - Week 4	4 days	Fri 8/16/19	Thu 8/22/19		$7,242.48	16 hrs
769	5.3.2.6	Travel for Reinforcement EUT - Week 5	4 days	Fri 8/30/19	Thu 9/5/19		$7,280.48	16 hrs
770	5.4	Go-Live Support	86.14 d	Thu 5/30/19	Fri 9/27/19		$116,540.80	500 hrs
771	5.4.1	Public Works Go-Live Support - On-Site	12 days	Thu 5/30/19	Fri 6/14/19		$40,320.08	168 hrs
772	5.4.1.1	System Integrations Deployment for Go-Live	2 days	Thu 5/30/19	Fri 5/31/19		$6,955.52	32 hrs
773	5.4.1.2	Woolpert to Migrate AMS Configuration to Production Environment	5 days	Thu 5/30/19	Wed 6/5/19		$6,677.44	32 hrs
774	5.4.1.3	Woolpert to Prepare for On-Site Go-Live Support	0.5 days	Thu 6/6/19	Thu 6/6/19		$1,764.24	8 hrs
775	5.4.1.4	Public Works On-Site Go-Live Support Week 1 (On-Site Task)	5 days	Mon 6/10/19	Fri 6/14/19		$17,642.40	80 hrs
776	5.4.1.5	Travel for Public Works Go Live Support	4 days	Mon 6/10/19	Thu 6/13/19		$7,280.48	16 hrs
777	5.4.1.5	Travel for Public Works Go-Live Support	4 days	Mon 6/10/19	Thu 6/13/19		$7,280.48	16 hrs
778	5.4.2	Utilities Go-Live Support - On-Site	12 days	Wed 9/4/19	Fri 9/20/19		$41,189.52	172 hrs
779	5.4.2.1	System Integrations Deployment for Go-Live (Utilities)	2.25 days	Wed 9/4/19	Fri 9/6/19		$7,824.96	36 hrs
780	5.4.2.2	Woolpert to Migrate AMS Configuration to Production Environment	5 days	Wed 9/4/19	Wed 9/11/19		$6,677.44	32 hrs

ID	WBS		Task Name	Duration	Start	Finish	Notes	Cost	Work
781	5.4.2.3		Woolpert to Prepare for On-Site Go-Live Support	0.5 days	Wed 9/11/19	Wed 9/11/19		$1,764.24	8 hrs
782	5.4.2.4		Utilities On-Site Go-Live Support Week 1 (On-Site Task)	5 days	Fri 9/13/19	Fri 9/20/19		$17,642.40	80 hrs
783	5.4.2.5		**Travel for Utilities Go Live Support**	**4 days**	**Fri 9/13/19**	**Thu 9/19/19**		**$7,280.48**	**16 hrs**
784	5.4.2.5		Travel for Utilities Go-Live Support	4 days	Fri 9/13/19	Thu 9/19/19		$7,280.48	16 hrs
785	5.4.3		**Remote Go-Live Support**	**74.14 days**	**Mon 6/17/19**	**Fri 9/27/19**		**$35,031.20**	**160 hrs**
786	5.4.3.1		**Public Works**	**5 days**	**Mon 6/17/19**	**Fri 6/21/19**		**$17,515.60**	**80 hrs**
787	5.4.3.1		Remote Go-Live Support	5 days	Mon 6/17/19	Fri 6/21/19		$8,821.20	40 hrs
788	5.4.3.1	♦	System Integrations Remote Go-Live Support	5 days	Mon 6/17/19	Fri 6/21/19		$8,694.40	40 hrs
789	5.4.3.2		**Utilities**	**5 days**	**Fri 9/20/19**	**Fri 9/27/19**		**$17,515.60**	**80 hrs**
790	5.4.3.2		Remote Go-Live Support	5 days	Fri 9/20/19	Fri 9/27/19		$8,821.20	40 hrs
791	5.4.3.2	♦	System Integrations Remote Go-Live Support	5 days	Fri 9/20/19	Fri 9/27/19		$8,694.40	40 hrs
792	5.5	▦	Phase 5: Quality Control	300 day	Mon 7/9/18	Mon 9/23/19	[4.13.	$36,033.62	0 hrs
793	5.6		Phase 5: Acceptance and Close	5 days	Fri 9/27/19	Fri 10/4/19		$0.00	0 hrs
794	6		**PHASE 6: Extended Support**	**110.5 d**	**Fri 10/4/19**	**Fri 3/20/20**		**$57,038.23**	**1,330 hrs**
795	6.1		**Extended Review and Modifications**	**105.5 d**	**Fri 10/4/19**	**Fri 3/13/20**		**$54,322.12**	**1,330 hrs**
796	6.1.1		**30 Day Review and Modifications**	**46.5 da**	**Fri 10/4/19**	**Mon 12/16/1!**		**$29,045.34**	**553 hrs**
797	6.1.1.1		COUNTY to Establish a Listing of Desired System Modif	30 days	Fri 10/4/19	Fri 11/15/19		$0.00	380 hrs
798	6.1.1.2	♦	Woolpert to Facilitate an On-Site Modifications Revie	3 days	Fri 11/15/19	Wed 11/20/1!		$5,501.28	72 hrs
799	6.1.1.3		**Travel for 30 Day Review and Modification Workshop**	**4 days**	**Fri 11/15/19**	**Thu 11/21/19**		**$5,027.76**	**8 hrs**
800	6.1.1.3		Travel for 30 Day Review and Modification Worksh(	4 days	Fri 11/15/19	Thu 11/21/19		$5,027.76	8 hrs
801	6.1.1.4		Woolpert to Prepare DRAFT 30 Day Modifications Tecl	4 days	Wed 11/20/19	Tue 12/3/19		$7,335.04	32 hrs
802	6.1.1.5		Woolpert to Submit DRAFT Technical Memorandum tc	0 days	Tue 12/3/19	Tue 12/3/19		$0.00	0 hrs
803	6.1.1.6	♦	Woolpert to Facilitate Remote Review Meeting with C	0.5 day!	Thu 12/5/19	Thu 12/5/19		$1,783.24	20 hrs
804	6.1.1.7		Woolpert to Update Technical Memorandum per Revi	2 days	Thu 12/5/19	Mon 12/9/19		$229.22	1 hr
805	6.1.1.8		Woolpert to Facilitate Agreed-Upon AM System Modif	5 days	Mon 12/9/19	Mon 12/16/1!		$9,168.80	40 hrs
806	6.1.2		**90 Day Review and Modifications**	**75.5 da**	**Fri 11/15/19**	**Fri 3/13/20**		**$25,276.78**	**777 hrs**
807	6.1.2.1	♦	COUNTY to Establish a Listing of Desired System Modif	60 days	Fri 11/15/19	Fri 2/21/20		$0.00	620 hrs
808	6.1.2.2		**Woolpert to Facilitate an On-Site Modifications Revie**	**3 days**	**Fri 2/21/20**	**Wed 2/26/20**		**$5,501.28**	**72 hrs**
809	6.1.2.3		**Travel for 90 Day Review and Modification Workshop**	**4 days**	**Fri 2/21/20**	**Thu 2/27/20**		**$6,760.48**	**16 hrs**
810	6.1.2.3		Travel for 90 Day Review and Modification Worksh(	4 days	Fri 2/21/20	Thu 2/27/20		$6,760.48	16 hrs
811	6.1.2.4		Woolpert to Prepare DRAFT 90 Day Modifications Tecl	4 days	Thu 2/27/20	Wed 3/4/20		$7,335.04	32 hrs
812	6.1.2.5		Woolpert to Submit Technical Memorandum to COUN	0 days	Wed 3/4/20	Wed 3/4/20		$0.00	0 hrs
813	6.1.2.6		Woolpert to Facilitate Remote Review Meeting with C	0.5 day!	Wed 3/4/20	Wed 3/4/20		$1,783.24	20 hrs
814	6.1.2.7		Woolpert to Update Technical Memorandum per Revi	2 days	Wed 3/4/20	Fri 3/6/20		$229.22	1 hr
815	6.1.2.8		Woolpert to Facilitate Agreed-Upon AM System Modif	5 days	Fri 3/6/20	Fri 3/13/20		$3,667.52	16 hrs
816	6.2		Phase 6 Quality Control	105.5 d	Fri 10/4/19	Fri 3/13/20		$2,716.11	0 hrs
817	6.3	▦	Phase 6 Acceptance and Close	5 days	Fri 3/13/20	Fri 3/20/20		$0.00	0 hrs
818	7		PHASE 7: Organizational Change Management (OCM)	5 days	Thu 6/14/18	Wed 6/20/18	[8/30	$152,303.64	0 hrs
819	7.1	▦	Phase 7 Acceptance and Close	5 days	Thu 6/14/18	Wed 6/20/18		$152,303.64	0 hrs
820	8		**PHASE 8: GIS Readiness Support**	**245.25**	**Fri 10/5/18**	**Fri 10/4/19**		**$203,873.36**	**1,818 hrs**
821	8.1		County to FINALIZE and Publish GIS Schema for Track 1 Assets impacted by SAP System Integration	1 day	Fri 10/12/18	Fri 10/12/18		$0.00	0 hrs
822	8.2		County to FINALIZE and Publish GIS Schema for Track 1 Ass(	1 day	Fri 11/2/18	Fri 11/2/18		$0.00	0 hrs

ID	WBS	Task Name	Duration	Start	Finish	Notes	Cost	Work
823	8.3	Data Maintenance Tools for GIS (T&M Task)	63 days	Mon 1/14/19	Wed 4/10/19		$113,110.06	910 hrs
824	8.3.1	Develop GIS Data Maintenance Tools	63 days	Mon 1/14/19	Wed 4/10/19		$113,110.06	910 hrs
825	8.3.1.1	Develop GIS Data Maintenance Tools	15 days	Mon 1/14/19	Fri 2/1/19		$24,426.52	182 hrs
826	8.3.1.1	Develop GIS Maintenance Tools Using Data Develop	10 days	Mon 1/14/19	Fri 1/25/19		$16,566.80	96 hrs
827	8.3.1.1	Deploy GIS Maintenance Tools to Development Env	5 days	Fri 1/25/19	Fri 2/1/19		$7,859.72	86 hrs
828	8.3.1.2	Test GIS Data Maintenance Tools	29 days	Mon 2/4/19	Thu 3/14/19		$37,820.80	346 hrs
829	8.3.1.2	Develop GIS Maintenance Tools Testing Plan	5 days	Mon 2/4/19	Fri 2/8/19		$4,698.28	38 hrs
830	8.3.1.2.	Woolpert to Facilitate GIS Data Maintenance Tool Testir	8 days	Mon 2/11/19	Wed 2/20/19		$21,873.36	184 hrs
831	8.3.1.2.	Public Works GIS Data Maintenance Tool Testing (ONS	2 days	Mon 2/11/19	Tue 2/12/19		$7,543.80	84 hrs
832	8.3.1.2.	Utilities GIS Data Maintenance Tool Testing (ONSITE T/	2 days	Wed 2/13/19	Thu 2/14/19		$7,543.80	84 hrs
833	8.3.1.2.	Travel for GIS Data Maintenance Tool Testing	4 days	Fri 2/15/19	Wed 2/20/19		$6,785.76	16 hrs
834	8.3.1.2	Perform GIS Data Maintenance Tool Updates	5 days	Wed 2/20/19	Wed 2/27/19		$8,346.80	56 hrs
835	8.3.1.2	Deploy Update to GIS Data Maintenance Tools to D	5 days	Wed 2/27/19	Wed 3/6/19		$2,902.36	28 hrs
836	8.3.1.2.	County to Review Data Maintenance Tool Updates	5 days	Thu 3/7/19	Wed 3/13/19		$0.00	40 hrs
837	8.3.1.2.	County to Accept Data Maintenance Tool Updates	1 day	Thu 3/14/19	Thu 3/14/19		$0.00	0 hrs
838	8.3.1.3	Deploy GIS Data Maintenance Tools	19 days	Thu 3/14/19	Wed 4/10/19		$50,862.74	382 hrs
839	8.3.1.3	Develop User Guides	5 days	Thu 3/14/19	Thu 3/21/19		$16,693.60	88 hrs
840	8.3.1.3	Deploy Data Maintenance Tools to Test, Training, a	5 days	Thu 3/21/19	Thu 3/28/19		$4,957.36	48 hrs
841	8.3.1.3	Woolpert to Prepare for GIS Data Maintenance Too	5 days	Fri 3/29/19	Thu 4/4/19		$6,339.30	30 hrs
842	8.3.1.3.	County to Prepare for GIS Data Maintenance Tool Trainin	5 days	Fri 3/29/19	Thu 4/4/19		$0.00	32 hrs
843	8.3.1.3.	Woolpert to Facilitate GIS Data Maintenance Tool Traini	2 days	Fri 4/5/19	Mon 4/8/19		$13,393.64	100 hrs
844	8.3.1.3.	Public Works GIS Data Maintenance Tool Training (ON	1 day	Fri 4/5/19	Fri 4/5/19		$3,771.90	42 hrs
845	8.3.1.3.	Utilities GIS Data Maintenance Tool Training (ONSITE T	1 day	Mon 4/8/19	Mon 4/8/19		$3,855.42	42 hrs
846	8.3.1.3.	Travel for GIS Data Maintenance Tool Training	2 days	Fri 4/5/19	Mon 4/8/19		$5,766.32	16 hrs
847	8.3.1.3.	GIS Data Maintenance Tool Go Live Support	2 days	Tue 4/9/19	Wed 4/10/19		$9,478.84	84 hrs
848	8.3.1.3.	Public Works GIS Data Maintenance Tool Go Live Supp	1 day	Tue 4/9/19	Tue 4/9/19		$3,855.42	42 hrs
849	8.3.1.3.	Utilities GIS Data Maintenance Tool Go Live Support (C	1 day	Wed 4/10/19	Wed 4/10/19		$3,855.42	42 hrs
850	8.3.1.3.	Travel for GIS Data Maintenance Tool Go Live Support	0 days	Tue 4/9/19	Wed 4/10/19		$1,768.00	0 hrs
851	8.4	GIS Implementation Support	245.25	Fri 10/5/18	Fri 10/4/19		$81,101.30	908 hrs
852	8.4.1	Ongoing GIS Support	245.25	Fri 10/5/18	Fri 10/4/19		$45,481.96	500 hrs
853	8.4.1.1	Bi-Weekly GIS Support Meeting	245.25	Fri 10/5/18	Fri 10/4/19		$45,481.96	500 hrs
854	8.4.1.1	Bi-Weekly GIS Support Meeting 1	2 hrs	Fri 10/5/18	Fri 10/5/18		$1,795.92	20 hrs
855	8.4.1.1	Bi-Weekly GIS Support Meeting 2	2 hrs	Fri 10/19/18	Fri 10/19/18		$1,795.92	20 hrs
856	8.4.1.1	Bi-Weekly GIS Support Meeting 3	2 hrs	Fri 11/2/18	Fri 11/2/18		$1,795.92	20 hrs
857	8.4.1.1	Bi-Weekly GIS Support Meeting 4	2 hrs	Fri 11/16/18	Fri 11/16/18		$1,795.92	20 hrs
858	8.4.1.1	Bi-Weekly GIS Support Meeting 5	2 hrs	Fri 12/7/18	Fri 12/7/18		$1,795.92	20 hrs
859	8.4.1.1	Bi-Weekly GIS Support Meeting 6	2 hrs	Fri 1/11/19	Fri 1/11/19		$1,795.92	20 hrs
860	8.4.1.1	Bi-Weekly GIS Support Meeting 7	2 hrs	Fri 1/25/19	Fri 1/25/19		$1,795.92	20 hrs
861	8.4.1.1	Bi-Weekly GIS Support Meeting 8	2 hrs	Fri 2/8/19	Fri 2/8/19		$1,795.92	20 hrs
862	8.4.1.1	Bi-Weekly GIS Support Meeting 9	2 hrs	Fri 2/22/19	Fri 2/22/19		$1,795.92	20 hrs
863	8.4.1.1	Bi-Weekly GIS Support Meeting 10	2 hrs	Fri 3/8/19	Fri 3/8/19		$1,795.92	20 hrs
864	8.4.1.1	Bi-Weekly GIS Support Meeting 11	2 hrs	Fri 3/22/19	Fri 3/22/19		$1,795.92	20 hrs
865	8.4.1.1	Bi-Weekly GIS Support Meeting 12	2 hrs	Fri 4/5/19	Fri 4/5/19		$1,795.92	20 hrs
866	8.4.1.1	Bi-Weekly GIS Support Meeting 13	2 hrs	Fri 4/19/19	Fri 4/19/19		$1,840.84	20 hrs
867	8.4.1.1	Bi-Weekly GIS Support Meeting 14	2 hrs	Fri 5/3/19	Fri 5/3/19		$1,840.84	20 hrs
868	8.4.1.1	Bi-Weekly GIS Support Meeting 15	2 hrs	Fri 5/17/19	Fri 5/17/19		$1,840.84	20 hrs

ID	WBS	Task Name	Duration	Start	Finish	Notes	Cost	Work
869	8.4.1.1	Bi-Weekly GIS Support Meeting 16	2 hrs	Fri 5/31/19	Fri 5/31/19		$1,840.84	20 hrs
870	8.4.1.1	Bi-Weekly GIS Support Meeting 17	2 hrs	Fri 6/14/19	Fri 6/14/19		$1,840.84	20 hrs
871	8.4.1.1	Bi-Weekly GIS Support Meeting 18	2 hrs	Fri 6/28/19	Fri 6/28/19		$1,840.84	20 hrs
872	8.4.1.1	Bi-Weekly GIS Support Meeting 19	2 hrs	Fri 7/12/19	Fri 7/12/19		$1,840.84	20 hrs
873	8.4.1.1	Bi-Weekly GIS Support Meeting 20	2 hrs	Fri 7/26/19	Fri 7/26/19		$1,840.84	20 hrs
874	8.4.1.1	Bi-Weekly GIS Support Meeting 21	2 hrs	Fri 8/9/19	Fri 8/9/19		$1,840.84	20 hrs
875	8.4.1.1	Bi-Weekly GIS Support Meeting 22	2 hrs	Fri 8/23/19	Fri 8/23/19		$1,840.84	20 hrs
876	8.4.1.1	Bi-Weekly GIS Support Meeting 23	2 hrs	Fri 9/6/19	Fri 9/6/19		$1,840.84	20 hrs
877	8.4.1.1	Bi-Weekly GIS Support Meeting 24	2 hrs	Fri 9/20/19	Fri 9/20/19		$1,840.84	20 hrs
878	8.4.1.1	Bi-Weekly GIS Support Meeting 25	2 hrs	Fri 10/4/19	Fri 10/4/19		$1,840.84	20 hrs
879	8.4.2	**Asset Data Maintenance Plan**	**33 days**	**Thu 4/11/19**	**Mon 5/27/19**		**$35,619.34**	**408 hrs**
880	8.4.2.1	Woolpert to Prepare for Asset Data Maintenance Plan	5 days	Thu 4/11/19	Wed 4/17/19		$6,120.98	32 hrs
881	8.4.2.2	County to Prepare for Asset Data Maintenance Plan Worksh	5 days	Thu 4/11/19	Wed 4/17/19		$0.00	22 hrs
882	8.4.2.3	Woolpert to Facilitate Asset Data Maintenance Plan Works	4 days	Thu 4/18/19	Tue 4/23/19		$12,289.08	100 hrs
883	8.4.2.3.	Public Works Asset Data Maintenance Plan Workshop (OI	1 day	Thu 4/18/19	Thu 4/18/19		$3,246.30	42 hrs
884	8.4.2.3.	Utilities Asset Data Maintenance Plan Workshop (ONSITE	1 day	Fri 4/19/19	Fri 4/19/19		$3,246.30	42 hrs
885	8.4.2.3.	Travel for Asset Data Maintenance Plan Workshop	2 days	Mon 4/22/19	Tue 4/23/19		$5,796.48	16 hrs
886	8.4.2.4	Woolpert to Update Asset Data Maintenance Plan Doc	10 days	Mon 4/22/19	Fri 5/3/19		$8,769.92	76 hrs
887	8.4.2.5	Woolpert to Submit Asset Data Maintenance Plan Doc	1 day	Mon 5/6/19	Mon 5/6/19		$0.00	0 hrs
888	8.4.2.6	County to Review Asset Data Maintenance Plan Documenta	4 days	Tue 5/7/19	Fri 5/10/19		$0.00	48 hrs
889	8.4.2.7	Woolpert to Facilitate Joint Remote Review #1 of Asset Data Maintenance Plan Documentation	8 hrs	Mon 5/13/19	Mon 5/13/19		$2,813.12	50 hrs
890	8.4.2.8	Woolpert to Update Asset Data Maintenance Plan Doc	4 days	Tue 5/14/19	Fri 5/17/19		$5,626.24	32 hrs
891	8.4.2.9	Woolpert to Submit Asset Data Maintenance Plan Doc	1 day	Mon 5/20/19	Mon 5/20/19		$0.00	0 hrs
892	8.4.2.1(	County to Review Asset Data Maintenance Plan Documenta	4 days	Tue 5/21/19	Fri 5/24/19		$0.00	48 hrs
893	8.4.2.1	County to Accept Asset Data Maintenance Plan Documentat	1 day	Mon 5/27/19	Mon 5/27/19		$0.00	0 hrs
894	8.5	Phase 8: Quality Control	227 day	Fri 10/5/18	Mon 9/9/19	[12/1	$9,662.00	0 hrs
895	8.6	Phase 8: Acceptance and Close	0 days	Fri 10/4/19	Fri 10/4/19		$0.00	0 hrs
896	9	**PHASE 9: ISO 55k AM Program Development Support**	**150 day**	**Mon 2/4/19**	**Fri 8/30/19**		**$152,246.09**	**2,808 hrs**
897	9.1	**EAM Program Maturity Assessment**	**75.75 d**	**Mon 2/4/19**	**Mon 5/20/19**		**$71,282.00**	**466 hrs**
898	9.1.1	Woolpert to Facilitate AM Maturity Assessment Exercis	75.75 d	Mon 2/4/19	Mon 5/20/19		$71,282.00	466 hrs
899	9.1.1.1	Woolpert to Prepare for AM Maturity workshop with (	10 days	Mon 2/4/19	Fri 2/15/19		$12,008.32	48 hrs
900	9.1.1.2	County to schedule necessary staff to participate in AN	5 days	Mon 2/4/19	Fri 2/8/19		$0.00	4 hrs
901	9.1.1.3	Woolpert to Facilitate AM Maturity Assessment ONSITE W	4 days	Mon 2/18/19	Thu 2/21/19		$18,810.48	140 hrs
902	9.1.1.3.	Assessment Prep Workshop with Project and Core Teams	0.5 days	Mon 2/18/19	Mon 2/18/19		$1,893.92	16 hrs
903	9.1.1.3.	Facilitate administration of IAM Self Assessment Tool wit	3.5 days	Mon 2/18/19	Thu 2/21/19		$13,257.44	116 hrs
904	9.1.1.3.	Travel for ONSITE AM Maturity Assessment Workshop	4 days	Mon 2/18/19	Thu 2/21/19		$3,659.12	8 hrs
905	9.1.1.4	Woolpert to Develop DRAFT AM Maturity Assessment	20 days	Fri 2/22/19	Fri 3/22/19		$24,883.00	100 hrs
906	9.1.1.5	Woolpert to Submit DRAFT AM Maturity Assessment F	1 day	Fri 3/22/19	Mon 3/25/19		$0.00	0 hrs
907	9.1.1.6	County to Review DRAFT AM Maturity Assessment Re	10 days	Mon 3/25/19	Mon 4/8/19		$0.00	60 hrs
908	9.1.1.7	Woolpert to Facilitate ONSITE Review Workshop of DF	1 day	Tue 4/16/19	Wed 4/17/19		$3,787.84	34 hrs
909	9.1.1.8	Travel for ONSITE Review of AM Maturity Assessment Repor	0.5 days	Mon 4/15/19	Wed 4/17/19		$2,161.56	4 hrs
910	9.1.1.9	Woolpert to Update DRAFT AM Maturity Assessment I	12 days	Wed 4/17/19	Fri 5/3/19		$9,630.80	40 hrs
911	9.1.1.1	Woolpert to Submit FINAL AM Maturity Assessment R	1 day	Thu 5/2/19	Fri 5/3/19		$0.00	0 hrs
912	9.1.1.1	County to Review and Accept DRAFT AM Maturity Ass	10 days	Mon 5/6/19	Mon 5/20/19		$0.00	36 hrs
913	9.2	**AM Strategy & Objectives Implementation Roadmap**	**65.25 d**	**Wed 4/3/19**	**Wed 7/3/19**		**$59,812.04**	**386 hrs**

ID	WBS		Task Name	Duration	Start	Finish	Notes	Cost	Work
914	9.2.1	▦ ♦	Woolpert to Prepare for AM Strat & Objectives Review w	10 days	Wed 4/3/19	Wed 4/17/19		$12,008.32	48 hrs
915	9.2.2		County to schedule necessary staff to participate in AM S	5 days	Wed 4/3/19	Wed 4/10/19		$0.00	4 hrs
916	9.2.3		Woolpert to Facilitate AM Strat & Objectives ONSITE Workshi	2 days	Wed 4/17/19	Fri 4/19/19		$7,179.32	60 hrs
917	9.2.3.1	♦	Workshop Prep with Project and Core Teams (ONSITE TASK)	0.5 days	Wed 4/17/19	Thu 4/18/19		$1,893.92	16 hrs
918	9.2.3.2	♦	Facilitate AM Strat & Objectives Review workshop with COU	1 day	Thu 4/18/19	Fri 4/19/19		$3,787.84	40 hrs
919	9.2.3.3		Travel for ONSITE AM Strat & Objectives Review Workshop	2 days	Wed 4/17/19	Fri 4/19/19		$1,497.56	4 hrs
920	9.2.4	♦	Woolpert to Develop DRAFT AM Strat & Objectives Imple	20 days	Mon 4/22/19	Fri 5/17/19		$24,016.64	96 hrs
921	9.2.5		Woolpert to Submit AM Strat & Objectives Implementati	1 day	Fri 5/17/19	Fri 5/17/19		$0.00	0 hrs
922	9.2.6	♦	County to Review AM Strat & Objectives Implementatior	10 days	Mon 5/20/19	Fri 5/31/19		$0.00	60 hrs
923	9.2.7		Woolpert to Facilitate ONSITE Review of AM Strat & Obj	1 day	Tue 6/4/19	Tue 6/4/19		$3,787.84	34 hrs
924	9.2.8		Travel for ONSITE Review of AM Strat & Objectives Implementa	2 days	Mon 6/3/19	Tue 6/4/19		$3,189.12	8 hrs
925	9.2.9		Woolpert to Update DRAFT AM Strat & Objectives Imple	10 days	Wed 6/5/19	Tue 6/18/19		$9,630.80	40 hrs
926	9.2.10		Woolpert to Submit FINAL AM Strat & Objectives Implen	1 day	Tue 6/18/19	Tue 6/18/19		$0.00	0 hrs
927	9.2.11		County to Review and Accept AM Strat & Objectives Imp	10 days	Thu 6/20/19	Wed 7/3/19		$0.00	36 hrs
928	9.3		AM Strat & Obj Implementation Roadmap Support Scope	37 days	Thu 7/4/19	Fri 8/23/19		$13,902.24	140 hrs
929	9.3.1	▦	Woolpert to work with County to select Roadmap Projec	5 days	Thu 7/4/19	Wed 7/10/19		$2,488.30	10 hrs
930	9.3.2	▦	Woolpert to Develop Scope of Services to support select	10 days	Thu 7/11/19	Wed 7/24/19		$7,031.72	28 hrs
931	9.3.3		Woolpert to Submit Scope of Services to support selecte	1 day	Thu 7/25/19	Thu 7/25/19		$0.00	0 hrs
932	9.3.4		County to Review Woolpert's Roadmap Projects Support	10 days	Thu 7/25/19	Wed 8/7/19		$0.00	48 hrs
933	9.3.5		Woolpert to Facilitate Joint Remote Review of Roadmap	8 hrs	Thu 8/8/19	Thu 8/8/19		$1,893.92	8 hrs
934	9.3.6		Woolpert to Update DRAFT Scope of Services to support	1 day	Fri 8/9/19	Fri 8/9/19		$2,488.30	10 hrs
935	9.3.7		Woolpert to Submit FINAL Scope of Services to support s	1 day	Fri 8/9/19	Fri 8/9/19		$0.00	0 hrs
936	9.3.8	♦	County to Review and Accept Scope of Services to suppo	10 days	Mon 8/12/19	Fri 8/23/19		$0.00	36 hrs
937	9.4	▦	Phase 9: Quality Control	145 day	Mon 2/4/19	Fri 8/23/19	[08.2!	$7,249.81	1,816 hrs
938	9.5		Phase 9: Acceptance and Close	0 days	Fri 8/30/19	Fri 8/30/19		$0.00	0 hrs
939	10		PHASE 10: Owner Directed Funds	530 day	Mon 6/12/17	Wed 8/7/19	[7/10	$155,125.44	720 hrs
940	10.1	▦	ESB Eco System (SAG,Messaging, etc) Investigation	500 day	Mon 7/10/17	Wed 7/24/19	[10.2.	$68,944.64	320 hrs
941	10.2	▦	Legacy Data Migration Data Cleanup Support	500 day	Mon 7/10/17	Wed 7/24/19	[10.4.	$43,090.40	200 hrs
942	10.3	▦	Ad-hoc consulting	500 day	Mon 7/10/17	Wed 7/24/19	[10.4.	$43,090.40	200 hrs
943	11		PHASE 11: Customizations	30.25 d	Tue 1/8/19	Tue 2/19/19		$50,289.47	260 hrs
944	11.1		Employee Historical Rate Tracking	6.25 days	Tue 1/8/19	Wed 1/16/19		$2,954.60	21 hrs
945	11.1.1		Develop Custom Table	0.5 day:	Tue 1/8/19	Tue 1/8/19		$687.66	3 hrs
946	11.1.2		Develop Custom Trigger	0.25 da	Tue 1/8/19	Tue 1/8/19		$687.66	3 hrs
947	11.1.3		Deploy code to County Environment	0.13 da	Tue 1/8/19	Tue 1/8/19		$229.22	1 hr
948	11.1.4		Testing	0.13 da	Tue 1/8/19	Tue 1/8/19		$229.22	1 hr
949	11.1.5		Document customization specifications	0.25 da	Wed 1/9/19	Wed 1/9/19		$1,120.84	5 hrs
950	11.1.6	♦	COUNTY to Accept Customization (COUNTY TASK)	5 days	Wed 1/9/19	Wed 1/16/19		$0.00	8 hrs
951	11.2		PCR Admin Tool	21 days	Thu 1/10/19	Fri 2/8/19		$20,120.84	104 hrs
952	11.2.1	▦ ♦	Develop design mock-ups	1 day	Thu 1/10/19	Fri 1/11/19		$3,183.82	14 hrs
953	11.2.2		COUNTY to Accept design (COUNTY TASK)	3 days	Fri 1/11/19	Wed 1/16/19		$0.00	8 hrs
954	11.2.3	♦	Develop Code	10 days	Wed 1/16/19	Wed 1/30/19		$11,461.00	50 hrs
955	11.2.4	♦	Deploy code to County environment	0.5 day:	Wed 1/30/19	Wed 1/30/19		$1,375.32	6 hrs
956	11.2.5	♦	Testing	1 day	Wed 1/30/19	Thu 1/31/19		$2,292.20	10 hrs
957	11.2.6	♦	Document customization specifications	0.5 day:	Thu 1/31/19	Fri 2/1/19		$1,808.50	8 hrs
958	11.2.7	♦	COUNTY to Accept Customization (COUNTY TASK)	5 days	Fri 2/1/19	Fri 2/8/19		$0.00	8 hrs

ID	WBS		Task Name	Duration	Start	Finish	Notes	Cost	Work
959	11.3		SR Q&A Instruction Expansion	6.75 days	Mon 1/28/19	Tue 2/5/19		$4,788.36	21 hrs
960	11.3.1	👤	Develop Code	1 day	Mon 1/28/19	Tue 1/29/19		$2,292.20	10 hrs
961	11.3.2	👤	Deploy code to County environment	0.25 da	Tue 1/29/19	Tue 1/29/19		$687.66	3 hrs
962	11.3.3	👤	Testing	0.25 da	Tue 1/29/19	Tue 1/29/19		$687.66	3 hrs
963	11.3.4	👤	Document customization specifications	0.25 da	Tue 1/29/19	Tue 1/29/19		$1,120.84	5 hrs
964	11.3.5		COUNTY to Accept Customization (COUNTY TASK)	5 days	Wed 1/30/19	Tue 2/5/19		$0.00	0 hrs
965	11.4		WO Priority Automation	21 days	Mon 1/21/19	Tue 2/19/19		$22,425.67	114 hrs
966	11.4.1	🖽👤	Develop design mock-ups	1 day	Mon 1/21/19	Tue 1/22/19		$2,508.79	11 hrs
967	11.4.2		COUNTY to Accept design (COUNTY TASK)	3 days	Tue 1/22/19	Fri 1/25/19		$0.00	8 hrs
968	11.4.3	👤	Develop Code	10 days	Fri 1/25/19	Fri 2/8/19		$14,211.64	62 hrs
969	11.4.4	👤	Deploy code to County environment	0.5 day	Fri 2/8/19	Fri 2/8/19		$1,375.32	6 hrs
970	11.4.5	👤	Testing	1 day	Fri 2/8/19	Mon 2/11/19		$2,292.20	10 hrs
971	11.4.6	👤	Document customization specifications	0.5 day	Mon 2/11/19	Tue 2/12/19		$2,037.72	9 hrs
972	11.4.7	👤	COUNTY to Accept Customization (COUNTY TASK)	5 days	Tue 2/12/19	Tue 2/19/19		$0.00	8 hrs
973	12		PHASE 12: Cityworks 15.3 Upgrade	33 days	Tue 10/2/18	Thu 11/15/18		$0.00	0 hrs
974	12.1		Woolpert to provide revised pre-requisite and upgrade guid	2 days	Tue 10/2/18	Wed 10/3/18		$0.00	0 hrs
975	12.2		COUNTY to schedule planning meeting w/ OTI/BTS (COUNT	10 days	Thu 10/4/18	Wed 10/17/18		$0.00	0 hrs
976	12.3		COUNTY and Woolpert to perform upgrade (REMOTE TASK	1 day	Thu 11/15/18	Thu 11/15/18		$0.00	0 hrs

TRACK 2

ID	WBS	Deltek Phase	Task Name	Duration	Start	Finish	Note	Cost	Work
0	0		Pinellas County EAM Implementation_Track 2 DRAFT MPP ver 2.2	724 days	Mon 1/14/19	Mon 1/31/22		$4,719,01...	30,722.4 hrs
1	1		PHASE 1: Project Management	512 days	Mon 10/28/19	Fri 12/31/21		$1,444,28...	0 hrs
2	1.1		Ongoing Project Management	512 days	Mon 10/28/19	Fri 12/31/21		$1,444,28...	0 hrs
3	1.1.1		Full time Project Management (109 weeks)	512 days	Mon 10/28/19	Fri 12/31/21	[10.(	$1,444,283...	0 hrs
4	2		PHASE 2: Implementation Planning	5 days	Mon 10/28/19	Fri 11/1/19		$0.00	0 hrs
5	3		PHASE 3: Core System Design and Configuration	242 days	Mon 10/28/19	Fri 10/30/20		$841,935.65	6,915 hrs
6	3.1		Real Estate Management, Solid Waste, Utilities, Parks and Conservation Resources, Public Works	241.25 days	Mon 10/28/19	Fri 10/30/20		$802,013.31	6,709 hrs
7	3.1.1	27	Conduct Configuration Prep Info Workshops for Implementation	11 days	Mon 10/28/19	Tue 11/12/19		$19,222.00	214 hrs
8	3.1.1.1		Woolpert to Prepare Config Prep Info Workshop Agenda	2 days	Mon 10/28/19	Tue 10/29/19		$1,375.32	6 hrs
9	3.1.1.2		Woolpert to Submit Agenda to County Project Team	0 days	Tue 10/29/19	Tue 10/29/19		$0.00	0 hrs
10	3.1.1.3		County Project Team to Prepare Site for Workshop (Client-Own)	2 days	Wed 10/30/19	Thu 10/31/19		$0.00	8 hrs
11	3.1.1.4		Training for Implementation Team (ONSITE TASK)	4 days	Wed 11/6/19	Tue 11/12/19		$14,265.92	192 hrs
12	3.1.1.4.1		Woolpert to Provide Implementation Team Training - Class 1	4 days	Wed 11/6/19	Tue 11/12/19		$14,265.92	192 hrs
13	3.1.1.5		Travel for Configuration Training	4 days	Wed 11/6/19	Tue 11/12/19		$3,580.76	8 hrs
14	3.1.1.5.1		Travel for Configuration Training	4 days	Wed 11/6/19	Tue 11/12/19		$3,580.76	8 hrs
15	3.1.2	26	Prepare Configuration Documentation	16.5 days	Thu 11/14/19	Fri 12/13/19		$18,015.56	162 hrs
16	3.1.2.1		Woolpert to Prepare and Submit RFI	1 day	Thu 11/14/19	Thu 11/14/19	RFI f	$882.12	4 hrs
17	3.1.2.2		County Provide Response to RFI	10 days	Fri 11/15/19	Thu 12/5/19		$0.00	68 hrs
18	3.1.2.3		Woolpert to Prepare Draft Configuration Documentation	5 days	Fri 12/6/19	Thu 12/12/19	RFI f	$15,350.20	70 hrs
19	3.1.2.4		Woolpert to Submit to County for Review	0 days	Thu 12/12/19	Thu 12/12/19		$0.00	0 hrs
20	3.1.2.5		Woolpert to Facilitate Remote Review Meeting with County Cor	0.5 days	Fri 12/13/19	Fri 12/13/19		$1,783.24	20 hrs
21	3.1.3		Core Cityworks AMS Configuration	142.75 days	Fri 12/13/19	Thu 7/23/20		$673,810.41	5,215 hrs
22	3.1.3.1	28	Round 1 AMS Configuration Workshops	74 days	Fri 12/13/19	Fri 4/10/20		$328,704.08	2,494 hrs
23	3.1.3.1.1		Woolpert to Prepare for AMS Configuration Workshops (First	0.5 days	Fri 12/13/19	Fri 12/13/19		$3,566.48	16 hrs
24	3.1.3.1.2		County to Prepare for AMS Workshops (First Round)	0.5 days	Mon 12/16/19	Mon 12/16/19		$0.00	2 hrs
25	3.1.3.1.3		Woolpert to Facilitate AMS Configuration Workshops (Roun	68 days	Mon 1/6/20	Fri 4/10/20		$277,878.72	2,380 hrs
26	3.1.3.1.3.1		Round 1: 4 Week Cycle 1 (Team Peace)	17.75 days	Mon 1/6/20	Fri 1/31/20		$47,783.32	352 hrs
27	3.1.3.1.3.1.1		Utilities	Plant Operations AMS Configuration Worksho	5 days	Mon 1/6/20	Mon 1/13/20	Wee	$19,375.12	208 hrs
28	3.1.3.1.3.1.2		Woolpert to Update AMS Configuration Documentatio	10 days	Mon 1/13/20	Tue 1/28/20	Wee	$13,058.00	60 hrs
29	3.1.3.1.3.1.3		Woolpert to Perform AMS Configuration in Developmei	10 days	Mon 1/13/20	Tue 1/28/20	Wee	$13,058.00	60 hrs
30	3.1.3.1.3.1.		Woolpert to prep for interim Workshop # 1 Config	0.5 days	Tue 1/28/20	Tue 1/28/20	Wee	$916.88	4 hrs
31	3.1.3.1.3.1.5		Woolpert to Faciliate Joint System Review after Worksh	0.5 days	Tue 1/28/20	Tue 1/28/20	Wee	$916.88	16 hrs
32	3.1.3.1.3.1.		Woolpert to report County testing results	0.25 days	Fri 1/31/20	Fri 1/31/20		$458.44	4 hrs
33	3.1.3.1.3.2		Round 1: 4 Week Cycle 2 (Team Harmony)	19 days	Mon 1/20/20	Fri 2/14/20		$47,783.32	476 hrs
34	3.1.3.1.3.2.1		Solid Waste	AMS Configuration Workshop 2 (ONSITE	5 days	Mon 1/20/20	Mon 1/27/20	Wee	$19,375.12	328 hrs
35	3.1.3.1.3.2.2		Woolpert to Update AMS Configuration Documentatio	10 days	Mon 1/27/20	Fri 2/7/20	Wee	$13,058.00	60 hrs
36	3.1.3.1.3.2.3		Woolpert to Perform AMS Configuration in Developmei	10 days	Mon 1/27/20	Fri 2/7/20	Wee	$13,058.00	60 hrs
37	3.1.3.1.3.2.		Woolpert to prep for interim Workshop # 2 Config	0.5 days	Mon 2/10/20	Mon 2/10/20	Wee	$916.88	4 hrs
38	3.1.3.1.3.2.5		Woolpert to Faciliate Joint System Review after Worksh	1 day	Mon 2/10/20	Mon 2/10/20	Wee	$916.88	20 hrs
39	3.1.3.1.3.2.		Woolpert to report County testing results	1 day	Fri 2/14/20	Fri 2/14/20		$458.44	4 hrs
40	3.1.3.1.3.3		Round 1: 4 Week Cycle 3 (Team Peace)	19.75 days	Mon 2/3/20	Fri 2/28/20	Req	$47,783.32	384 hrs
41	3.1.3.1.3.3.1		REM	Fleet and Real Property AMS Configuration Worl	5 days	Mon 2/3/20	Fri 2/7/20	Wee	$19,375.12	236 hrs
42	3.1.3.1.3.3.2		Woolpert to Update AMS Configuration Documentatio	10 days	Mon 2/10/20	Fri 2/21/20	Wee	$13,058.00	60 hrs
43	3.1.3.1.3.3.3		Woolpert to Perform AMS Configuration in Developmei	10 days	Mon 2/10/20	Fri 2/21/20	Wee	$13,058.00	60 hrs
44	3.1.3.1.3.3.		Woolpert to prep for interim Workshop # 3 Config	0.5 days	Mon 2/24/20	Mon 2/24/20	Wee	$916.88	4 hrs

ID	WBS	Deltek Phase	Task Name	Duration	Start	Finish	Note	Cost	Work
45	3.1.3.1.3.3.5		Woolpert to Faciliate Joint System Review after Worksh	0.5 days	Mon 2/24/20	Mon 2/24/20	Wee	$916.88	20 hrs
46	3.1.3.1.3.3.		Woolpert to report County testing results	0.25 days	Fri 2/28/20	Fri 2/28/20		$458.44	4 hrs
47	**3.1.3.1.3.4**		**Round 1: 4 Week Cycle 4 (Team Harmony)**	**19.25 days**	**Mon 2/17/20**	**Fri 3/13/20**		**$42,490.60**	**400 hrs**
48	3.1.3.1.3.4.1		REM	Real Estate Management, Building Design and Construction AMS Configuration Workshop 4 (ONSITE	1.5 days	Mon 2/17/20	Wed 2/19/20	Wee 1	$6,159.08	88 hrs
49	3.1.3.1.3.4.2		REM	Detention Section, Facility Operations, Maintenance Programs, Northwest Section, Southeast	2 days	Wed 2/19/20	Fri 2/21/20	Wee 1	$7,923.32	164 hrs
50	3.1.3.1.3.4.3		Woolpert to Update AMS Configuration Documentation	10 days	Mon 2/24/20	Mon 3/9/20	Wee	$13,058.00	60 hrs
51	3.1.3.1.3.4.4		Woolpert to Perform AMS Configuration in Developme	10 days	Mon 2/24/20	Mon 3/9/20	Wee	$13,058.00	60 hrs
52	3.1.3.1.3.4.		Woolpert to prep for interim Workshop # 4 Config	0.5 days	Mon 3/9/20	Tue 3/10/20	Wee	$916.88	4 hrs
53	3.1.3.1.3.4.6		Woolpert to Faciliate Joint System Review after Worksh	0.5 days	Mon 3/9/20	Tue 3/10/20	Wee	$916.88	20 hrs
54	3.1.3.1.3.4.		Woolpert to report County testing results	0.25 days	Fri 3/13/20	Fri 3/13/20		$458.44	4 hrs
55	**3.1.3.1.3.5**		**Round 1: 4 Week Cycle 5 (Team Peace)**	**19.75 days**	**Mon 3/2/20**	**Fri 3/27/20**		**$44,254.84**	**372 hrs**
56	3.1.3.1.3.5.1		PCR	Ft DeSoto, Park North District, Park South Distric	1.5 days	Mon 3/2/20	Tue 3/3/20	Wee	$5,725.90	98 hrs
57	3.1.3.1.3.5.2		PCR	Air Quality AMS Configuration Workshop 5 (ONS	1 day	Tue 3/3/20	Wed 3/4/20	Wee	$3,961.66	50 hrs
58	3.1.3.1.3.5.3		PCR	Heritage Village AMS Configuration Workshop 5	0.5 days	Wed 3/4/20	Wed 3/4/20	Wee	$2,197.42	26 hrs
59	3.1.3.1.3.5.4		PCR	Resources and Asset Management AMS Configur	1 day	Thu 3/5/20	Thu 3/5/20	Wee	$3,961.66	50 hrs
60	3.1.3.1.3.5.5		Woolpert to Update AMS Configuration Documentation	10 days	Mon 3/9/20	Fri 3/20/20	Wee	$13,058.00	60 hrs
61	3.1.3.1.3.5.6		Woolpert to Perform AMS Configuration in Developme	10 days	Mon 3/9/20	Fri 3/20/20	Wee	$13,058.00	60 hrs
62	3.1.3.1.3.5.		Woolpert to prep for interim Workshop # 5 Config	0.5 days	Mon 3/23/20	Mon 3/23/20	Wee	$916.88	4 hrs
63	3.1.3.1.3.5.8		Woolpert to Faciliate Joint System Review after Worksh	0.5 days	Mon 3/23/20	Mon 3/23/20	Wee	$916.88	20 hrs
64	3.1.3.1.3.5.		Woolpert to report County testing results	0.25 days	Fri 3/27/20	Fri 3/27/20		$458.44	4 hrs
65	**3.1.3.1.3.6**		**Round 1: 4 Week Cycle 6 (Team Harmony)**	**18.75 days**	**Mon 3/16/20**	**Fri 4/10/20**		**$47,783.32**	**396 hrs**
66	3.1.3.1.3.6.1		PCR	Countywide Horticulture Operations AMS Config	1 day	Mon 3/16/20	Tue 3/17/20		$3,961.66	50 hrs
67	3.1.3.1.3.6.2		PCR	Park Natural Resource Management AMS Config	1.5 days	Tue 3/17/20	Thu 3/19/20	Wee	$5,725.90	74 hrs
68	3.1.3.1.3.6.3		PCR	PCR Administration AMS Configuration Workshop	0.5 days	Thu 3/19/20	Thu 3/19/20	Wee	$2,197.42	26 hrs
69	3.1.3.1.3.6.4		PW	Environmental Management Division AMS Config	1 day	Thu 3/19/20	Fri 3/20/20	Wee	$3,745.07	49 hrs
70	3.1.3.1.3.6.5		PW	Stormwater Engineering Division AMS Configurati	1 day	Fri 3/20/20	Mon 3/23/20	Wee	$3,745.07	49 hrs
71	3.1.3.1.3.6.6		Woolpert to Update AMS Configuration Documentation	10 days	Mon 3/23/20	Mon 4/6/20	Wee	$13,058.00	60 hrs
72	3.1.3.1.3.6.7		Woolpert to Perform AMS Configuration in Developme	10 days	Mon 3/23/20	Mon 4/6/20	Wee	$13,058.00	60 hrs
73	3.1.3.1.3.6.		Woolpert to prep for interim Workshop # 6 Config	0.5 days	Mon 4/6/20	Tue 4/7/20	Wee	$916.88	4 hrs
74	3.1.3.1.3.6.9		Woolpert to Faciliate Joint System Review after Worksh	0.5 days	Mon 4/6/20	Tue 4/7/20	Wee	$916.88	20 hrs
75	3.1.3.1.3.6.		Woolpert to report County testing results	0.25 days	Fri 4/10/20	Fri 4/10/20		$458.44	4 hrs
76	**3.1.3.1.4**		**Travel for Round 1 AMS Configuration Workshops**	**54.25 days**	**Mon 1/6/20**	**Mon 3/23/20**		**$47,258.88**	**96 hrs**
77	3.1.3.1.4.1		Travel for Round 1, Cycle 1 AMS Configuration Workshops	5 days	Mon 1/6/20	Mon 1/13/20		$7,876.48	16 hrs
78	3.1.3.1.4.2		Travel for Round 1, Cycle 2 AMS Configuration Workshops	5 days	Tue 1/21/20	Mon 1/27/20		$7,876.48	16 hrs
79	3.1.3.1.4.3		Travel for Round 1, Cycle 3 AMS Configuration Workshops	5 days	Mon 2/3/20	Fri 2/7/20		$7,876.48	16 hrs
80	3.1.3.1.4.4		Travel for Round 1, Cycle 4 AMS Configuration Workshops	5 days	Mon 2/17/20	Mon 2/24/20		$7,876.48	16 hrs
81	3.1.3.1.4.5		Travel for Round 1, Cycle 5 AMS Configuration Workshops	5 days	Mon 3/2/20	Fri 3/6/20		$7,876.48	16 hrs
82	3.1.3.1.4.6		Travel for Round 1, Cycle 6 AMS Configuration Workshops	5 days	Mon 3/16/20	Mon 3/23/20		$7,876.48	16 hrs
83	**3.1.3.2**	**28**	**Round 2 AMS Configuration Workshops**	**51 days**	**Wed 3/25/20**	**Fri 6/5/20**		**$203,041.32**	**1,578 hrs**
84	3.1.3.2.1		Woolpert to Prepare for AMS Configuration Workshops (Seco	1 day	Wed 3/25/20	Thu 3/26/20		$3,566.48	16 hrs
85	3.1.3.2.2		County to Prepare for AMS Workshops (Second Round)	1 day	Thu 3/26/20	Fri 3/27/20		$0.00	2 hrs
86	3.1.3.2.3		Woolpert to Facilitate AMS Configuration Workshops (Roun	48 days	Mon 3/30/20	Fri 6/5/20		$166,882.56	1,484 hrs
87	**3.1.3.2.3.1**		**Round 2: 4 Week Cycle 1 (Team Peace)**	**18.75 days**	**Mon 3/30/20**	**Fri 4/24/20**		**$36,903.74**	**282 hrs**
88	3.1.3.2.3.1.1		Utilities	Plant Operations AMS Configuration Worksho	2 days	Mon 3/30/20	Wed 4/1/20	Wee	$7,923.32	100 hrs

ID	WBS	Deltek Phase	Task Name	Duration	Start	Finish	Note	Cost	Work
89	3.1.3.2.3.1.2		Public Works | Environmental Management and Stormwater Engineering AMS Configuration Workshop	1 day	Wed 4/1/20	Thu 4/2/20	Wee 1	$3,961.66	50 hrs
90	3.1.3.2.3.1.3		Woolpert to Update AMS Configuration Documentatio	10 days	Mon 4/6/20	Mon 4/20/20	Wee	$11,363.28	52 hrs
91	3.1.3.2.3.1.4		Woolpert to Perform AMS Configuration in Developme	10 days	Mon 4/6/20	Mon 4/20/20	Wee	$11,363.28	52 hrs
92	3.1.3.2.3.1.		Woolpert to prep for interim Workshop # 7 Config	0.5 days	Mon 4/20/20	Mon 4/20/20	Wee	$916.88	4 hrs
93	3.1.3.2.3.1.6		Woolpert to Faciliate Joint System Review after Worksh	0.5 days	Mon 4/20/20	Mon 4/20/20	Wee	$916.88	20 hrs
94	3.1.3.2.3.1.		Woolpert to report County testing results	0.25 days	Fri 4/24/20	Fri 4/24/20		$458.44	4 hrs
95	**3.1.3.2.3.2**		**Round 2: 4 Week Cycle 2 (Team Harmony)**	**19.75 days**	**Mon 4/13/20**	**Fri 5/8/20**		**$45,585.90**	**386 hrs**
96	3.1.3.2.3.2.1		Solid Waste | AMS Configuration Workshop 8 (ONSITE	2.5 days	Mon 4/13/20	Wed 4/15/20	Wee	$9,470.97	123 hrs
97	3.1.3.2.3.2.2		REM | Fleet Management Configuration Workshop 8 (C	2 days	Wed 4/15/20	Fri 4/17/20	Wee	$7,706.73	99 hrs
98	3.1.3.2.3.2.3		Woolpert to Update AMS Configuration Documentatio	10 days	Mon 4/20/20	Mon 5/4/20	Wee	$13,058.00	60 hrs
99	3.1.3.2.3.2.4		Woolpert to Perform AMS Configuration in Developme	10 days	Mon 4/20/20	Mon 5/4/20	Wee	$13,058.00	60 hrs
100	3.1.3.2.3.2.		Woolpert to prep for interim Workshop # 8 Config	0.5 days	Mon 5/4/20	Mon 5/4/20	Wee	$916.88	4 hrs
101	3.1.3.2.3.2.6		Woolpert to Faciliate Joint System Review after Worksh	0.5 days	Mon 5/4/20	Mon 5/4/20	Wee	$916.88	36 hrs
102	3.1.3.2.3.2.		Woolpert to report County testing results	0.25 days	Fri 5/8/20	Fri 5/8/20		$458.44	4 hrs
103	**3.1.3.2.3.3**		**Round 2: 4 Week Cycle 3 (Team Peace)**	**19.75 days**	**Mon 4/27/20**	**Fri 5/22/20**		**$40,432.22**	**422 hrs**
104	3.1.3.2.3.3.1		REM | Real Estate Management, Building Design and Construction AMS Configuration Workshop 9 (ONSITE	1 day	Mon 4/27/20	Mon 4/27/20	Wee 1	$3,961.66	58 hrs
105	3.1.3.2.3.3.2		REM | Detention Section, Facility Operations, Maintenance Programs, Northwest Section, Southeast	1.5 days	Tue 4/28/20	Wed 4/29/20	Wee 1	$5,509.31	121 hrs
106	3.1.3.2.3.3.3		REM | Real Property AMS Configuration Workshop 9 (C	0.5 days	Wed 4/29/20	Wed 4/29/20	Wee	$1,980.83	25 hrs
107	3.1.3.2.3.3.4		PCR | Heritage Village AMS Configuration Workshop 9	0.5 days	Thu 4/30/20	Thu 4/30/20	Wee	$1,980.83	25 hrs
108	3.1.3.2.3.3.5		PCR | PCR Administration AMS Configuration Workshop	0.5 days	Thu 4/30/20	Thu 4/30/20	Wee	$1,980.83	25 hrs
109	3.1.3.2.3.3.6		Woolpert to Update AMS Configuration Documentatio	10 days	Mon 5/4/20	Fri 5/15/20	Wee	$11,363.28	52 hrs
110	3.1.3.2.3.3.7		Woolpert to Perform AMS Configuration in Developme	10 days	Mon 5/4/20	Fri 5/15/20	Wee	$11,363.28	52 hrs
111	3.1.3.2.3.3.		Woolpert to prep for interim Workshop # 9 Config	0.5 days	Mon 5/18/20	Mon 5/18/20	Wee	$916.88	4 hrs
112	3.1.3.2.3.3.9		Woolpert to Faciliate Joint System Review after Worksh	0.5 days	Mon 5/18/20	Mon 5/18/20	Wee	$916.88	56 hrs
113	3.1.3.2.3.3.		Woolpert to report County testing results	0.25 days	Fri 5/22/20	Fri 5/22/20		$458.44	4 hrs
114	**3.1.3.2.3.4**		**Round 2: 4 Week Cycle 4 (Team Harmony)**	**17.75 days**	**Mon 5/11/20**	**Fri 6/5/20**		**$43,960.70**	**394 hrs**
115	3.1.3.2.3.4.1		PCR | Ft DeSoto, Park North District, Park South Distric	1 day	Mon 5/11/20	Tue 5/12/20	Wee	$3,961.66	66 hrs
116	3.1.3.2.3.4.2		PCR | Air Quality AMS Configuration Workshop 10 (ON	1 day	Tue 5/12/20	Wed 5/13/20	Wee	$3,745.07	49 hrs
117	3.1.3.2.3.4.3		PCR | Resources and Asset Management AMS Configura	1 day	Wed 5/13/20	Thu 5/14/20	Wee	$3,745.07	49 hrs
118	3.1.3.2.3.4.4		PCR | Countywide Horticulture Operations AMS Config	1 day	Thu 5/14/20	Fri 5/15/20	Wee	$3,745.07	49 hrs
119	3.1.3.2.3.4.5		PCR | Park Natural Resource Management AMS Config	1 day	Fri 5/15/20	Mon 5/18/20	Wee	$3,745.07	49 hrs
120	3.1.3.2.3.4.6		Woolpert to Update AMS Configuration Documentatio	10 days	Mon 5/18/20	Tue 6/2/20	Wee	$11,363.28	52 hrs
121	3.1.3.2.3.4.7		Woolpert to Perform AMS Configuration in Developme	10 days	Mon 5/18/20	Tue 6/2/20	Wee	$11,363.28	52 hrs
122	3.1.3.2.3.4.		Woolpert to prep for interim Workshop # 10 Conf	0.5 days	Tue 6/2/20	Wed 6/3/20	Wee	$916.88	4 hrs
123	3.1.3.2.3.4.9		Woolpert to Faciliate Joint System Review after Worksh	0.5 days	Tue 6/2/20	Wed 6/3/20	Wee	$916.88	20 hrs
124	3.1.3.2.3.4.		Woolpert to report County testing results	0.25 days	Fri 6/5/20	Fri 6/5/20		$458.44	4 hrs
125	3.1.3.2.4		Travel for Round 2 AMS Configuration Workshops	35.25 days	Mon 3/30/20	Mon 5/18/20		$32,592.28	76 hrs
126	3.1.3.2.4.1		Travel for Round 2, Cycle 1 AMS Configuration Workshops	5 days	Mon 3/30/20	Mon 4/6/20		$8,238.60	20 hrs
127	3.1.3.2.4.2		Travel for Round 2, Cycle 2 AMS Configuration Workshops	5 days	Mon 4/13/20	Mon 4/20/20		$7,356.48	16 hrs
128	3.1.3.2.4.3		Travel for Round 2, Cycle 3 AMS Configuration Workshops	5 days	Mon 4/27/20	Fri 5/1/20		$8,238.60	20 hrs
129	3.1.3.2.4.4		Travel for Round 2, Cycle 4 AMS Configuration Workshops	5 days	Mon 5/11/20	Mon 5/18/20		$8,758.60	20 hrs
130	3.1.3.3	28	**Round 3 AMS Configuration Workshops**	40.75 days	Wed 5/20/20	Thu 7/23/20		$142,065.01	1,143 hrs
131	3.1.3.3.1		Woolpert to Prepare for AMS Configuration Workshops (Thir	1 day	Wed 5/20/20	Thu 5/21/20		$3,566.48	16 hrs
132	3.1.3.3.2		County to Prepare for AMS Workshops (Third Round)	1 day	Thu 5/21/20	Fri 5/22/20		$0.00	8 hrs

ID	WBS	Deltek Phase	Task Name	Duration	Start	Finish	Note	Cost	Work
133	3.1.3.3.3		Woolpert to Facilitate AMS Configuration Workshops (Roun	38.25 days	Tue 5/26/20	Thu 7/23/20		$116,429.09	1,071 hrs
134	**3.1.3.3.3.1**		**Round 3: 4 Week Cycle 1 (Team Peace)**	**18.25 days**	**Tue 5/26/20**	**Fri 6/19/20**		**$38,737.50**	**322 hrs**
135	3.1.3.3.3.1.1		Utilities | Plant Operations AMS Configuration Worksh(	2 days	Tue 5/26/20	Wed 5/27/20	Wee	$7,490.14	98 hrs
136	3.1.3.3.3.1.2		Public Works | Environmental Management and Stormwater Engineering AMS Configuration Workshop	1 day	Thu 5/28/20	Thu 5/28/20	Wee 1	$3,961.66	50 hrs
137	3.1.3.3.3.1.3		REM | Fleet Management Configuration Workshop 11 (	1 day	Fri 5/29/20	Fri 5/29/20	Wee	$3,961.66	50 hrs
138	3.1.3.3.3.1.4		Woolpert to Update AMS Configuration Documentatior	10 days	Mon 6/1/20	Fri 6/12/20	Wee	$10,515.92	48 hrs
139	3.1.3.3.3.1.5		Woolpert to Perform AMS Configuration in Developmer	10 days	Mon 6/1/20	Fri 6/12/20	Wee	$10,515.92	48 hrs
140	3.1.3.3.3.1.		Woolpert to prep for interim Workshop # 11 Conf	0.5 days	Mon 6/15/20	Mon 6/15/20	Wee	$916.88	4 hrs
141	3.1.3.3.3.1.7		Woolpert to Faciliate Joint System Review after Worksh	0.5 days	Mon 6/15/20	Mon 6/15/20	Wee	$916.88	20 hrs
142	3.1.3.3.3.1.		Woolpert to report County testing results	0.25 days	Fri 6/19/20	Fri 6/19/20		$458.44	4 hrs
143	**3.1.3.3.3.2**		**Round 3: 4 Week Cycle 2 (Team Harmony)**	**17.75 days**	**Mon 6/8/20**	**Wed 7/1/20**		**$38,737.50**	**374 hrs**
144	3.1.3.3.3.2.1		Solid Waste | AMS Configuration Workshop 12 (ONSITE	2 days	Mon 6/8/20	Wed 6/10/20	Wee	$7,273.55	97 hrs
145	3.1.3.3.3.2.2		REM | Real Estate Management, Building Design and Construction AMS Configuration Workshop 12 (ONSITE	0.5 days	Wed 6/10/20	Wed 6/10/20	Wee 1	$2,197.42	30 hrs
146	3.1.3.3.3.2.3		REM | Detention Section, Facility Operations, Maintenance Programs, Northwest Section, Southeast	1 day	Wed 6/10/20	Thu 6/11/20	Wee 1	$3,961.66	82 hrs
147	3.1.3.3.3.2.4		REM | Real Property AMS Configuration Workshop 12 (	0.5 days	Thu 6/11/20	Fri 6/12/20	Wee	$1,980.83	25 hrs
148	3.1.3.3.3.2.5		Woolpert to Update AMS Configuration Documentatior	10 days	Mon 6/15/20	Mon 6/29/20	Wee	$10,515.92	48 hrs
149	3.1.3.3.3.2.6		Woolpert to Perform AMS Configuration in Developmer	10 days	Mon 6/15/20	Mon 6/29/20	Wee	$10,515.92	48 hrs
150	3.1.3.3.3.2.		Woolpert to prep for interim Workshop # 12 Conf	0.5 days	Mon 6/29/20	Mon 6/29/20	Wee	$916.88	4 hrs
151	3.1.3.3.3.2.8		Woolpert to Facilate Joint System Review after Worksh	0.5 days	Mon 6/29/20	Mon 6/29/20	Wee	$916.88	36 hrs
152	3.1.3.3.3.2.		Woolpert to report County testing results	0.25 days	Wed 7/1/20	Wed 7/1/20		$458.44	4 hrs
153	**3.1.3.3.3.3**		**Round 3: 4 Week Cycle 3 (Team Peace)**	**19.25 days**	**Mon 6/22/20**	**Thu 7/23/20**		**$38,954.09**	**375 hrs**
154	3.1.3.3.3.3.1		PCR | Heritage Village AMS Configuration Workshop 1:	0.5 days	Mon 6/22/20	Mon 6/22/20	Wee	$1,980.83	25 hrs
155	3.1.3.3.3.3.2		PCR | PCR Administration AMS Configuration Worksho|	0.5 days	Mon 6/22/20	Mon 6/22/20	Wee	$1,980.83	25 hrs
156	3.1.3.3.3.3.3		PCR | Ft DeSoto, Park North District, Park South Distric	1 day	Tue 6/23/20	Tue 6/23/20	Wee	$3,745.07	65 hrs
157	3.1.3.3.3.3.4		PCR | Air Quality AMS Configuration Workshop 13 (ON	0.5 days	Wed 6/24/20	Wed 6/24/20	Wee	$1,980.83	25 hrs
158	3.1.3.3.3.3.5		PCR | Resources and Asset Management AMS Configur	0.5 days	Wed 6/24/20	Wed 6/24/20	Wee	$1,980.83	25 hrs
159	3.1.3.3.3.3.6		PCR | Countywide Horticulture Operations AMS Configi	0.5 days	Thu 6/25/20	Thu 6/25/20	Wee	$1,980.83	25 hrs
160	3.1.3.3.3.3.7		PCR | Park Natural Resource Management AMS Config	0.5 days	Thu 6/25/20	Thu 6/25/20	Wee	$1,980.83	25 hrs
161	3.1.3.3.3.3.8		Woolpert to Update AMS Configuration Documentatior	10 days	Mon 6/29/20	Thu 7/16/20	Wee	$10,515.92	48 hrs
162	3.1.3.3.3.3.9		Woolpert to Perform AMS Configuration in Developmer	10 days	Mon 6/29/20	Thu 7/16/20	Wee	$10,515.92	48 hrs
163	3.1.3.3.3.3.		Woolpert to prep for interim Workshop # 13 Conf	0.5 days	Fri 7/17/20	Fri 7/17/20	Wee	$916.88	4 hrs
164	3.1.3.3.3.3.1		Woolpert to Faciliate Joint System Review after Worksh	0.5 days	Fri 7/17/20	Fri 7/17/20	Wee	$916.88	56 hrs
165	3.1.3.3.3.3.		Woolpert to report County testing results	0.25 days	Thu 7/23/20	Thu 7/23/20		$458.44	4 hrs
166	3.1.3.3.4		Travel for Round 3 AMS Configuration Workshops	24 days	Tue 5/26/20	Fri 6/26/20		$22,069.44	48 hrs
167	3.1.3.3.4.1		Travel for Round 3, Cycle 1 AMS Configuration Workshops	5 days	Tue 5/26/20	Mon 6/1/20		$7,356.48	16 hrs
168	3.1.3.3.4.2		Travel for Round 3, Cycle 2 AMS Configuration Workshops	5 days	Mon 6/8/20	Mon 6/15/20		$7,356.48	16 hrs
169	3.1.3.3.4.3		Travel for Round 3, Cycle 3 AMS Configuration Workshops	5 days	Mon 6/22/20	Fri 6/26/20		$7,356.48	16 hrs
170	3.1.4	33	Review and Approval of Updated System and Configuration Docu	50 days	Mon 7/27/20	Tue 10/6/20		$53,167.84	648 hrs
171	3.1.4.1		Woolpert to compile Updated Configuration Documentat	10 days	Mon 7/27/20	Mon 8/10/20		$20,892.80	96 hrs
172	3.1.4.2		Woolpert to Submit Updated Configuration Documentation to (	0 days	Mon 8/10/20	Mon 8/10/20		$0.00	0 hrs
173	3.1.4.3		County Technical Team to Review Updated Configuration and D	15 days	Mon 8/10/20	Mon 8/31/20		$0.00	216 hrs
174	3.1.4.4		Woolpert to Facilitate Remote Review Meeting with County Tec	5 days	Mon 8/31/20	Tue 9/8/20		$14,632.64	136 hrs
175	3.1.4.5		Woolpert to Update Configuration Documentation per County (	10 days	Tue 9/8/20	Tue 9/22/20		$17,642.40	80 hrs

ID	WBS	Deltek Phase	Task Name	Duration	Start	Finish	Note	Cost	Work
176	3.1.4.6		Woolpert to Submit Updated Pre-Final Configuration Documentation to County	0 days	Tue 9/22/20	Tue 9/22/20		$0.00	0 hrs
177	3.1.4.7		County to Review and Accept Pre-Final Configuration Document	5 days	Tue 9/29/20	Tue 10/6/20		$0.00	120 hrs
178	3.1.5	34	**Provide Cityworks AMS Software Demonstrations**	**18 days**	**Tue 10/6/20**	**Fri 10/30/20**		**$37,797.50**	**470 hrs**
179	3.1.5.1		Woolpert to Prepare for On-Site Software Demonstrations	10 days	Tue 10/6/20	Tue 10/20/20	Ensu	$18,075.58	82 hrs
180	3.1.5.2		County to Prepare for On-Site Software Demonstrations (COUN	10 days	Tue 10/6/20	Tue 10/20/20		$0.00	8 hrs
181	3.1.5.3		**Woolpert to Facilitate On-Site Software Demonstrations (ONSITE TASK)**	**5 days**	**Fri 10/23/20**	**Fri 10/30/20**		**$19,721.92**	**380 hrs**
182	3.1.5.3.1		Facilitate Software Demonstration 1 - PCR (ONSITE TASK)	1 day	Fri 10/23/20	Mon 10/26/20		$3,566.48	112 hrs
183	3.1.5.3.2		Facilitate Software Demonstration 2 - REM (ONSITE TASK)	1 day	Mon 10/26/20	Tue 10/27/20		$3,566.48	112 hrs
184	3.1.5.3.3		Facilitate Software Demonstration 3 - SW (ONSITE TASK)	1 day	Tue 10/27/20	Wed 10/28/20		$3,566.48	72 hrs
185	3.1.5.3.4		Facilitate Software Demonstration 4 - UTIL (ONSITE TASK)	1 day	Wed 10/28/20	Thu 10/29/20		$3,566.48	48 hrs
186	3.1.5.3.5		Facilitate Software Demonstration 5 - PW (ONSITE TASK)	0.5 days	Thu 10/29/20	Thu 10/29/20		$1,783.24	28 hrs
187	3.1.5.3.6		**Travel for Final Software Demonstrations**	**5 days**	**Fri 10/23/20**	**Fri 10/30/20**		**$3,672.76**	**8 hrs**
188	3.1.5.3.6.1		Travel for Final Software Demonstrations	5 days	Fri 10/23/20	Fri 10/30/20		$3,672.76	8 hrs
189	3.2		Strategy and Planning	Asset Specific Plan (Dummy Task)	1 day	Mon 10/28/19	Mon 10/28/19		$0.00	0 hrs
190	3.3	35	**Phase 3: Quality Control**	**238 days**	**Mon 10/28/19**	**Mon 10/26/20**	QAC	**$39,922.34**	**190 hrs**
191	3.4		**Phase 3: Acceptance and Close**	**4 days**	**Mon 10/26/20**	**Fri 10/30/20**		**$0.00**	**16 hrs**
192	4		**PHASE 4: Advanced Configuration and Functionality**	**206.25 days**	**Mon 6/8/20**	**Thu 4/29/21**	Adv	**$673,520.28**	**7,476 hrs**
193	4.1		**Legacy Data Migrations**	**175.5 days**	**Mon 7/27/20**	**Thu 4/29/21**		**$285,832.60**	**3,025 hrs**
194	4.1.1		**Data Migration Planning**	**52.25 days**	**Mon 7/27/20**	**Thu 10/8/20**		**$57,519.76**	**692 hrs**
195	4.1.1.1	65	**Woolpert to Perform Desktop Analysis of Legacy Datasets**	**14 days**	**Mon 7/27/20**	**Fri 8/14/20**		**$15,002.22**	**90 hrs**
196	4.1.1.1.1		Woolpert to Facilitate Discussion about Datasets	1 day	Mon 7/27/20	Tue 7/28/20	The	$4,100.70	30 hrs
197	4.1.1.1.2		Woolpert to Create Tech Memo (RFI) Detailing Data Request	0.5 days	Wed 7/29/20	Wed 7/29/20		$1,833.76	8 hrs
198	4.1.1.1.3		County to Provide Legacy Datasets to Woolpert	10 days	Wed 7/29/20	Wed 8/12/20		$0.00	12 hrs
199	4.1.1.1.4		Maximo 6.2 - Work Management Legacy Data Desktop Analy	0.5 days	Wed 8/12/20	Thu 8/13/20		$2,266.94	10 hrs
200	4.1.1.1.5		Maximo 4.0.3 - Work Management Legacy Data Desktop Ana	0.5 days	Wed 8/12/20	Thu 8/13/20		$2,266.94	10 hrs
201	4.1.1.1.6		ProLease Legacy Data Desktop Analysis	0.5 days	Thu 8/13/20	Thu 8/13/20		$2,266.94	10 hrs
202	4.1.1.1.7		Maximus Legacy Data Desktop Analysis	0.5 days	Thu 8/13/20	Fri 8/14/20		$2,266.94	10 hrs
203	4.1.1.2	66	**Woolpert to Facilitate Onsite Review of Legacy Datasets (ONSI**	**4.75 days**	**Mon 8/17/20**	**Fri 8/21/20**		**$27,999.02**	**266 hrs**
204	4.1.1.2.1		Maximo 6.2 REM - Work Management Legacy Data Onsite Re	1.5 days	Mon 8/17/20	Tue 8/18/20	REM	$5,934.46	74 hrs
205	4.1.1.2.2		Maximo 4.0.3 STAR Center - Work Management Legacy Data Onsite Review (ONSITE TASK)	0.5 days	Tue 8/18/20	Tue 8/18/20	REM	$2,266.94	26 hrs
206	4.1.1.2.3		Maximo 4.0.3 UTIL Plants - Work Management Legacy Data C	2 days	Wed 8/19/20	Thu 8/20/20	Utili	$7,768.22	98 hrs
207	4.1.1.2.4		ProLease Legacy Data Onsite Review (ONSITE TASK)	0.5 days	Fri 8/21/20	Fri 8/21/20		$2,266.94	26 hrs
208	4.1.1.2.5		Maximus (M4) Legacy Data Onsite Review (ONSITE TASK)	0.5 days	Fri 8/21/20	Fri 8/21/20	REM	$2,266.94	26 hrs
209	4.1.1.2.6		**Travel for Legacy Data Migration Analysis Workshops**	**4.5 days**	**Mon 8/17/20**	**Fri 8/21/20**		**$7,495.52**	**16 hrs**
210	4.1.1.2.6.1		Travel for Legacy Data Migration Analysis Workshops	4.5 days	Mon 8/17/20	Fri 8/21/20		$7,495.52	16 hrs
211	4.1.1.3	67	**Woolpert to create Specifications for Data Conversion & Migra**	**32 days**	**Mon 8/24/20**	**Thu 10/8/20**		**$14,518.52**	**336 hrs**
212	4.1.1.3.1		**Develop Tech Memo with DRAFT Specs for Legacy Data Con**	**4 days**	**Mon 8/24/20**	**Fri 8/28/20**		**$9,067.76**	**40 hrs**
213	4.1.1.3.1.1		Maximo 6.2 - Work Management: Develop DRAFT Specs T	2 days	Mon 8/24/20	Wed 8/26/20		$2,266.94	10 hrs
214	4.1.1.3.1.2		Maximo 4.0.3 - Work Management: Develop DRAFT Specs	2 days	Wed 8/26/20	Fri 8/28/20		$2,266.94	10 hrs
215	4.1.1.3.1.3		ProLease: Develop DRAFT Specs Technical Memo	1 day	Mon 8/24/20	Tue 8/25/20		$2,266.94	10 hrs
216	4.1.1.3.1.4		Maximus: Develop DRAFT Specs Technical Memo	2 days	Wed 8/26/20	Fri 8/28/20		$2,266.94	10 hrs
217	4.1.1.3.2		**Review and Approve Tech Memo for Legacy Data Conversio**	**26 days**	**Tue 9/1/20**	**Thu 10/8/20**		**$5,450.76**	**296 hrs**
218	4.1.1.3.2.1		Woolpert to Submit DRAFT Specs Tech Memo Recommen	0 days	Tue 9/1/20	Tue 9/1/20		$0.00	0 hrs

ID	WBS	Deltek Phase	Task Name	Duration	Start	Finish	Note	Cost	Work
219	4.1.1.3.2.2		County Technical Team to Review DRAFT Specs Tech Memo for Legacy Data Conversion & Migration (COUNTY	10 days	Mon 9/14/20	Mon 9/28/20	9-da lag	$0.00	40 hrs
220	4.1.1.3.2.3		Woolpert to Facilitate Joint Review of DRAFT Specs Tech Memo for Legacy Data Conversion & Migration with	2 days	Mon 9/28/20	Wed 9/30/20		$2,700.12	44 hrs
221	4.1.1.3.2.4		Woolpert to Modify DRAFT Specs Tech Memo for Legacy [	1 day	Wed 9/30/20	Thu 10/1/20		$2,750.64	12 hrs
222	4.1.1.3.2.5		County to Review and Accept FINAL Specs Tech Memo for Legacy Data Conversion & Migration (COUNTY TASK)	5 days	Thu 10/1/20	Thu 10/8/20		$0.00	200 hrs
223	**4.1.2**		**Data Migration Development**	**113.5 days**	**Fri 10/9/20**	**Fri 4/16/21**		**$179,718.64**	**2,022 hrs**
224	**4.1.2.1**		**Maximo 6.2 - Work Management Data Migration**	**26.75 days**	**Fri 10/9/20**	**Wed 11/18/20**		**$32,754.28**	**362 hrs**
225	**4.1.2.1.1**		**Data Migration Mapping**	**6.5 days**	**Fri 10/9/20**	**Mon 10/19/20**		**$5,008.08**	**64 hrs**
226	4.1.2.1.1.1		Woolpert to Develop Data Migration Mapping	1.5 days	Fri 10/9/20	Mon 10/12/20		$5,008.08	24 hrs
227	4.1.2.1.1.2		Woolpert to Submit Data Migration Mapping to COL	0 days	Mon 10/12/20	Mon 10/12/20		$0.00	0 hrs
228	4.1.2.1.1.3		COUNTY to Review and Provide Feedback on Data M	5 days	Tue 10/13/20	Mon 10/19/20		$0.00	40 hrs
229	**4.1.2.1.2**		**Develop and Test Migration Scripts**	**20.25 days**	**Tue 10/20/20**	**Wed 11/18/20**		**$27,746.20**	**298 hrs**
230	4.1.2.1.2.1		Woolpert to Develop Data Load Scripts	10 days	Tue 10/20/20	Mon 11/2/20		$9,864.00	48 hrs
231	4.1.2.1.2.2		COUNTY to Extract and Cleanse Legacy Data (COUNT	10 days	Tue 10/20/20	Mon 11/2/20		$0.00	104 hrs
232	4.1.2.1.2.3		Woolpert to Load Legacy Data	1.5 days	Tue 11/3/20	Wed 11/4/20		$5,008.08	24 hrs
233	4.1.2.1.2.4		Woolpert to Facilitate Remote Review of Loaded Dat	0.5 days	Fri 11/6/20	Fri 11/6/20		$2,535.72	28 hrs
234	4.1.2.1.2.5		Woolpert to Modify Load Scripts	4 days	Mon 11/9/20	Fri 11/13/20		$6,165.00	30 hrs
235	4.1.2.1.2.6		COUNTY to Re-Extract and Cleanse Legacy Data (COL	4 days	Mon 11/9/20	Fri 11/13/20		$0.00	24 hrs
236	4.1.2.1.2.7		Woolpert to Re-Load Legacy Data	0.75 days	Mon 11/16/20	Mon 11/16/20		$2,504.04	12 hrs
237	4.1.2.1.2.8		Woolpert to Facilitate Remote Review of Loaded Dat	0.5 days	Tue 11/17/20	Wed 11/18/20		$1,669.36	28 hrs
238	**4.1.2.2**		**Maximo 4.0.3 STAR Center - Work Management Data Mi**	**25.75 days**	**Fri 10/9/20**	**Tue 11/17/20**		**$27,771.56**	**374 hrs**
239	**4.1.2.2.1**		**Data Migration Mapping**	**6 days**	**Fri 10/9/20**	**Mon 10/19/20**		**$3,338.72**	**88 hrs**
240	4.1.2.2.1.1		Woolpert to Develop Data Migration Mapping	1 day	Fri 10/9/20	Mon 10/12/20		$3,338.72	16 hrs
241	4.1.2.2.1.2		Woolpert to Submit Data Migration Mapping to COL	0 days	Mon 10/12/20	Mon 10/12/20		$0.00	0 hrs
242	4.1.2.2.1.3		COUNTY to Review and Provide Feedback on Data M	5 days	Mon 10/12/20	Mon 10/19/20		$0.00	72 hrs
243	**4.1.2.2.2**		**Develop and Test Migration Scripts**	**19.75 days**	**Mon 10/19/20**	**Tue 11/17/20**		**$24,432.84**	**286 hrs**
244	4.1.2.2.2.1		Woolpert to Develop Data Load Scripts	10 days	Mon 10/19/20	Mon 11/2/20		$8,220.00	40 hrs
245	4.1.2.2.2.2		COUNTY to Extract and Cleanse Legacy Data (COUNT	10 days	Mon 10/19/20	Mon 11/2/20		$0.00	104 hrs
246	4.1.2.2.2.3		Woolpert to Load Legacy Data	1 day	Mon 11/2/20	Tue 11/3/20		$3,338.72	16 hrs
247	4.1.2.2.2.4		Woolpert to Facilitate Remote Review of Loaded Dat	0.5 days	Thu 11/5/20	Thu 11/5/20		$2,535.72	32 hrs
248	4.1.2.2.2.5		Woolpert to Modify Load Scripts	4 days	Fri 11/6/20	Thu 11/12/20		$6,165.00	30 hrs
249	4.1.2.2.2.6		COUNTY to Re-Extract and Cleanse Legacy Data (COL	4 days	Fri 11/6/20	Thu 11/12/20		$0.00	24 hrs
250	4.1.2.2.2.7		Woolpert to Re-Load Legacy Data	0.75 days	Fri 11/13/20	Fri 11/13/20		$2,504.04	12 hrs
251	4.1.2.2.2.8		Woolpert to Facilitate Remote Review of Loaded Dat	0.5 days	Mon 11/16/20	Tue 11/17/20		$1,669.36	28 hrs
252	**4.1.2.3**		**Maximo 4.0.3 - Work Management Data Migration**	**26.75 days**	**Tue 11/17/20**	**Thu 1/21/21**		**$32,754.28**	**398 hrs**
253	**4.1.2.3.1**		**Data Migration Mapping**	**6.5 days**	**Tue 11/17/20**	**Wed 12/2/20**		**$5,008.08**	**96 hrs**
254	4.1.2.3.1.1		Woolpert to Develop Data Migration Mapping	1.5 days	Tue 11/17/20	Wed 11/18/20		$5,008.08	24 hrs
255	4.1.2.3.1.2		Woolpert to Submit Data Migration Mapping to COL	0 days	Wed 11/18/20	Wed 11/18/20		$0.00	0 hrs
256	4.1.2.3.1.3		COUNTY to Review and Provide Feedback on Data M	5 days	Wed 11/18/20	Wed 12/2/20		$0.00	72 hrs
257	**4.1.2.3.2**		**Develop and Test Migration Scripts**	**20.25 days**	**Wed 12/2/20**	**Thu 1/21/21**		**$27,746.20**	**302 hrs**
258	4.1.2.3.2.1		Woolpert to Develop Data Load Scripts	10 days	Wed 12/2/20	Wed 12/16/20		$9,864.00	48 hrs
259	4.1.2.3.2.2		COUNTY to Extract and Cleanse Legacy Data (COUNT	10 days	Wed 12/2/20	Wed 12/16/20		$0.00	104 hrs
260	4.1.2.3.2.3		Woolpert to Load Legacy Data	1.5 days	Wed 12/16/20	Fri 12/18/20		$5,008.08	24 hrs
261	4.1.2.3.2.4		Woolpert to Facilitate Remote Review of Loaded Dat	0.5 days	Tue 1/12/21	Tue 1/12/21		$2,535.72	32 hrs
262	4.1.2.3.2.5		Woolpert to Modify Load Scripts	4 days	Tue 1/12/21	Tue 1/19/21		$6,165.00	30 hrs

ID	WBS	Deltek Phase	Task Name	Duration	Start	Finish	Note	Cost	Work
263	4.1.2.3.2.6		COUNTY to Re-Extract and Cleanse Legacy Data (COL	4 days	Tue 1/12/21	Tue 1/19/21		$0.00	24 hrs
264	4.1.2.3.2.7		Woolpert to Re-Load Legacy Data	0.75 days	Tue 1/19/21	Wed 1/20/21		$2,504.04	12 hrs
265	4.1.2.3.2.8		Woolpert to Facilitate Remote Review of Loaded Dat	0.5 days	Thu 1/21/21	Thu 1/21/21		$1,669.36	28 hrs
266	**4.1.2.4**		**ProLease - Data Migration**	**26.75 days**	**Fri 1/22/21**	**Mon 3/1/21**		**$32,754.28**	**366 hrs**
267	**4.1.2.4.1**		**Data Migration Mapping**	**6.5 days**	**Fri 1/22/21**	**Mon 2/1/21**		**$5,008.08**	**64 hrs**
268	4.1.2.4.1.1		Woolpert to Develop Data Migration Mapping	1.5 days	Fri 1/22/21	Mon 1/25/21		$5,008.08	24 hrs
269	4.1.2.4.1.2		Woolpert to Submit Data Migration Mapping to COL	0 days	Mon 1/25/21	Mon 1/25/21		$0.00	0 hrs
270	4.1.2.4.1.3		COUNTY to Review and Provide Feedback on Data M	5 days	Mon 1/25/21	Mon 2/1/21		$0.00	40 hrs
271	**4.1.2.4.2**		**Develop and Test Migration Scripts**	**20.25 days**	**Mon 2/1/21**	**Mon 3/1/21**		**$27,746.20**	**302 hrs**
272	4.1.2.4.2.1		Woolpert to Develop Data Load Scripts	10 days	Mon 2/1/21	Mon 2/15/21		$9,864.00	48 hrs
273	4.1.2.4.2.2		COUNTY to Extract and Cleanse Legacy Data (COUNT	10 days	Mon 2/1/21	Mon 2/15/21		$0.00	104 hrs
274	4.1.2.4.2.3		Woolpert to Load Legacy Data	1.5 days	Mon 2/15/21	Tue 2/16/21		$5,008.08	24 hrs
275	4.1.2.4.2.4		Woolpert to Facilitate Remote Review of Loaded Dat	0.5 days	Fri 2/19/21	Fri 2/19/21		$2,535.72	32 hrs
276	4.1.2.4.2.5		Woolpert to Modify Load Scripts	4 days	Fri 2/19/21	Thu 2/25/21		$6,165.00	30 hrs
277	4.1.2.4.2.6		COUNTY to Re-Extract and Cleanse Legacy Data (COL	4 days	Fri 2/19/21	Thu 2/25/21		$0.00	24 hrs
278	4.1.2.4.2.7		Woolpert to Re-Load Legacy Data	0.75 days	Thu 2/25/21	Fri 2/26/21		$2,504.04	12 hrs
279	4.1.2.4.2.8		Woolpert to Facilitate Remote Review of Loaded Dat	0.5 days	Mon 3/1/21	Mon 3/1/21		$1,669.36	28 hrs
280	**4.1.2.5**		**Maximus - Data Migration**	**26.75 days**	**Fri 1/22/21**	**Mon 3/1/21**		**$32,754.28**	**366 hrs**
281	**4.1.2.5.1**		**Data Migration Mapping**	**6.5 days**	**Fri 1/22/21**	**Mon 2/1/21**		**$5,008.08**	**64 hrs**
282	4.1.2.5.1.1		Woolpert to Develop Data Migration Mapping	1.5 days	Fri 1/22/21	Mon 1/25/21		$5,008.08	24 hrs
283	4.1.2.5.1.2		Woolpert to Submit Data Migration Mapping to COL	0 days	Mon 1/25/21	Mon 1/25/21		$0.00	0 hrs
284	4.1.2.5.1.3		COUNTY to Review and Provide Feedback on Data M	5 days	Mon 1/25/21	Mon 2/1/21		$0.00	40 hrs
285	**4.1.2.5.2**		**Develop and Test Migration Scripts**	**20.25 days**	**Mon 2/1/21**	**Mon 3/1/21**		**$27,746.20**	**302 hrs**
286	4.1.2.5.2.1		Woolpert to Develop Data Load Scripts	10 days	Mon 2/1/21	Mon 2/15/21		$9,864.00	48 hrs
287	4.1.2.5.2.2		COUNTY to Extract and Cleanse Legacy Data (COUNT	10 days	Mon 2/1/21	Mon 2/15/21		$0.00	104 hrs
288	4.1.2.5.2.3		Woolpert to Load Legacy Data	1.5 days	Mon 2/15/21	Tue 2/16/21		$5,008.08	24 hrs
289	4.1.2.5.2.4		Woolpert to Facilitate Remote Review of Loaded Dat	0.5 days	Fri 2/19/21	Fri 2/19/21		$2,535.72	32 hrs
290	4.1.2.5.2.5		Woolpert to Modify Load Scripts	4 days	Fri 2/19/21	Thu 2/25/21		$6,165.00	30 hrs
291	4.1.2.5.2.6		COUNTY to Re-Extract and Cleanse Legacy Data (COL	4 days	Fri 2/19/21	Thu 2/25/21		$0.00	24 hrs
292	4.1.2.5.2.7		Woolpert to Re-Load Legacy Data	0.75 days	Thu 2/25/21	Fri 2/26/21		$2,504.04	12 hrs
293	4.1.2.5.2.8		Woolpert to Facilitate Remote Review of Loaded Dat	0.5 days	Mon 3/1/21	Mon 3/1/21		$1,669.36	28 hrs
294	**4.1.2.6**		**Agile Assets Data Migration - PAVER DATA ONLY**	**34.25 days**	**Mon 3/1/21**	**Fri 4/16/21**		**$20,929.96**	**156 hrs**
295	**4.1.2.6.1**		**Develop and Test Migration Scripts**	**34.25 days**	**Mon 3/1/21**	**Fri 4/16/21**		**$20,929.96**	**156 hrs**
296	4.1.2.6.1.1		COUNTY to Extract and Cleanse Legacy Data (COUNT	10 days	Mon 3/1/21	Mon 3/15/21		$0.00	38 hrs
297	4.1.2.6.1.2		Woolpert to Develop Data Load Scripts	10.5 days	Mon 3/15/21	Tue 3/30/21		$3,477.76	16 hrs
298	4.1.2.6.1.3		Woolpert to Load Legacy Data	1.5 days	Tue 3/30/21	Wed 3/31/21		$5,008.08	24 hrs
299	4.1.2.6.1.4		Woolpert to Facilitate Remote Review of Loaded Dat	0.75 days	Wed 3/31/21	Thu 4/1/21		$2,504.04	12 hrs
300	4.1.2.6.1.5		Woolpert to Modify Load Scripts	3 days	Thu 4/1/21	Tue 4/6/21		$4,932.00	24 hrs
301	4.1.2.6.1.6		COUNTY to Re-Extract and Cleanse Legacy Data (COL	5 days	Thu 4/1/21	Thu 4/8/21		$0.00	18 hrs
302	4.1.2.6.1.7		Woolpert to Re-Load Legacy Data	0.75 days	Thu 4/8/21	Fri 4/9/21		$2,504.04	12 hrs
303	4.1.2.6.1.8		Woolpert to Facilitate Remote Review of Loaded Dat	0.75 days	Fri 4/16/21	Fri 4/16/21		$2,504.04	12 hrs
304	**4.1.3**		**Data Migration Deployment**	**8.75 days**	**Mon 4/19/21**	**Thu 4/29/21**		**$48,594.20**	**311 hrs**
305	**4.1.3.1**		**Load Data for UAT**	**5 days**	**Mon 4/19/21**	**Fri 4/23/21**		**$14,897.44**	**92 hrs**
306	4.1.3.1.1		COUNTY to Extract and Cleanse Legacy Data for UAT (C	1 day	Mon 4/19/21	Mon 4/19/21		$0.00	20 hrs
307	4.1.3.1.2		Woolpert to Load Legacy Data for UAT	4 days	Tue 4/20/21	Fri 4/23/21		$7,423.36	36 hrs
308	4.1.3.1.3		Woolpert to Modify Load Scripts per UAT Feedback	3 days	Mon 4/19/21	Wed 4/21/21		$7,474.08	36 hrs

ID	WBS	Deltek Phase	Task Name	Duration	Start	Finish	Note	Cost	Work
309	4.1.3.2		Load Data for EUT	8.75 days	Mon 4/19/21	Thu 4/29/21		$23,731.32	152 hrs
310	4.1.3.2.1		COUNTY to Extract and Cleanse Legacy Data for EUT (C 2 days		Thu 4/22/21	Fri 4/23/21		$0.00	38 hrs
311	4.1.3.2.2		Woolpert to Load Legacy Data for EUT	3.75 days	Mon 4/26/21	Thu 4/29/21		$11,249.16	54 hrs
312	4.1.3.2.3		Woolpert to Modify Load Scripts per EUT Feedback	4.5 days	Mon 4/19/21	Fri 4/23/21		$12,482.16	60 hrs
313	4.1.3.3		Load Data for Go-Live	5.5 days	Mon 4/19/21	Mon 4/26/21		$9,965.44	67 hrs
314	4.1.3.3.1		COUNTY to Extract and Cleanse Legacy Data for Go-Live 1 day		Fri 4/23/21	Mon 4/26/21		$0.00	19 hrs
315	4.1.3.3.2		Woolpert to Load Legacy Data for Go-Live	4 days	Mon 4/19/21	Thu 4/22/21		$9,965.44	48 hrs
316	4.2		Custom Reports and Metrics	108.5 days	Mon 7/27/20	Tue 1/26/21	Stag	$33,431.66	1,914 hrs
317	4.2.1		Reports / Metrics Planning	38 days	Mon 7/27/20	Fri 9/18/20		$20,671.12	1,112 hrs
318	4.2.1.1		PCR Develop Report / Metric Specifications	38 days	Mon 7/27/20	Fri 9/18/20		$20,671.12	184 hrs
319	4.2.1.1.1		County to Provide Woolpert a Prioritized List of Reports / Me 10 days		Mon 7/27/20	Mon 8/10/20		$0.00	60 hrs
320	4.2.1.1.2		Woolpert to Review Reports Provided by County	5 days	Mon 8/10/20	Mon 8/17/20		$5,362.24	24 hrs
321	4.2.1.1.3		Woolpert to Facilitate Report Specification Workshop with Pr 0.5 days		Mon 8/17/20	Mon 8/17/20		$1,764.24	8 hrs
322	4.2.1.1.4		Woolpert to Develop DRAFT Report and Metric Specification 5 days		Mon 8/17/20	Mon 8/24/20		$10,863.52	48 hrs
323	4.2.1.1.5		Woolpert to Submit DRAFT Report and Metric Specification D 0 days		Mon 8/24/20	Mon 8/24/20		$0.00	0 hrs
324	4.2.1.1.6		County to Review DRAFT Report and Metric Specification Doc 5 days		Mon 8/24/20	Mon 8/31/20		$0.00	16 hrs
325	4.2.1.1.7		Woolpert to Create FINAL Report and Metric Specification Dc 3 days		Mon 8/31/20	Thu 9/3/20		$2,681.12	12 hrs
326	4.2.1.1.8		Woolpert to Submit FINAL Report and Metric Specification D 0 days		Thu 9/3/20	Thu 9/3/20		$0.00	0 hrs
327	4.2.1.1.9		County to Accept FINAL Report and Metric Specification Docu 5 days		Fri 9/11/20	Fri 9/18/20		$0.00	16 hrs
328	4.2.1.2		REM Develop Report / Metric Specifications (COUNTY OWNED 20 days		Mon 7/27/20	Mon 8/24/20		$0.00	232 hrs
329	4.2.1.2.1		County to Prioritize List of Reports / Metrics (COUNTY TASK) 10 days		Mon 7/27/20	Mon 8/10/20		$0.00	60 hrs
330	4.2.1.2.2		County to Review Reports	5 days	Mon 8/10/20	Mon 8/17/20		$0.00	0 hrs
331	4.2.1.2.3		County to Develop DRAFT Report and Metric Specification Dc 5 days		Mon 8/17/20	Mon 8/24/20		$0.00	0 hrs
332	4.2.1.2.4		County to Submit DRAFT Report and Metric Specification Doc 0 days		Mon 8/24/20	Mon 8/24/20		$0.00	0 hrs
333	4.2.1.2.5		County to Create FINAL Report and Metric Specification Docu 1 day		Mon 7/27/20	Tue 7/28/20		$0.00	12 hrs
334	4.2.1.2.6		County to Submit FINAL Report and Metric Specification Docu 1 day		Tue 7/28/20	Wed 7/29/20		$0.00	0 hrs
335	4.2.1.2.7		County to Accept FINAL Report and Metric Specification Docu 5 days		Wed 8/5/20	Wed 8/12/20		$0.00	160 hrs
336	4.2.1.3		SW Develop Report / Metric Specifications (COUNTY OWNED 120 days		Mon 7/27/20	Mon 8/24/20		$0.00	232 hrs
337	4.2.1.3.1		County to Prioritize List of Reports / Metrics (COUNTY TASK) 10 days		Mon 7/27/20	Mon 8/10/20		$0.00	60 hrs
338	4.2.1.3.2		County to Review Reports	5 days	Mon 8/10/20	Mon 8/17/20		$0.00	0 hrs
339	4.2.1.3.3		County to Develop DRAFT Report and Metric Specification Dc 5 days		Mon 8/17/20	Mon 8/24/20		$0.00	0 hrs
340	4.2.1.3.4		County to Submit DRAFT Report and Metric Specification Doc 0 days		Mon 8/24/20	Mon 8/24/20		$0.00	0 hrs
341	4.2.1.3.5		County to Create FINAL Report and Metric Specification Docu 1 day		Mon 7/27/20	Tue 7/28/20		$0.00	12 hrs
342	4.2.1.3.6		County to Submit FINAL Report and Metric Specification Docu 1 day		Tue 7/28/20	Wed 7/29/20		$0.00	0 hrs
343	4.2.1.3.7		County to Accept FINAL Report and Metric Specification Docu 5 days		Wed 8/5/20	Wed 8/12/20		$0.00	160 hrs
344	4.2.1.4		UTIL Develop Report / Metric Specifications (COUNTY OWNED 20 days		Mon 7/27/20	Mon 8/24/20		$0.00	232 hrs
345	4.2.1.4.1		County to Prioritize List of Reports / Metrics (COUNTY TASK) 10 days		Mon 7/27/20	Mon 8/10/20		$0.00	60 hrs
346	4.2.1.4.2		County to Review Reports	5 days	Mon 8/10/20	Mon 8/17/20		$0.00	0 hrs
347	4.2.1.4.3		County to Develop DRAFT Report and Metric Specification Dc 5 days		Mon 8/17/20	Mon 8/24/20		$0.00	0 hrs
348	4.2.1.4.4		County to Submit DRAFT Report and Metric Specification Doc 0 days		Mon 8/24/20	Mon 8/24/20		$0.00	0 hrs
349	4.2.1.4.5		County to Create FINAL Report and Metric Specification Docu 1 day		Mon 7/27/20	Tue 7/28/20		$0.00	12 hrs
350	4.2.1.4.6		County to Submit FINAL Report and Metric Specification Docu 1 day		Tue 7/28/20	Wed 7/29/20		$0.00	0 hrs
351	4.2.1.4.7		County to Accept FINAL Report and Metric Specification Docu 5 days		Wed 8/5/20	Wed 8/12/20		$0.00	160 hrs
352	4.2.1.5		PW Develop Report / Metric Specifications (COUNTY OWNED 20 days		Mon 7/27/20	Mon 8/24/20		$0.00	232 hrs
353	4.2.1.5.1		County to Prioritize List of Reports / Metrics (COUNTY TASK) 10 days		Mon 7/27/20	Mon 8/10/20		$0.00	60 hrs
354	4.2.1.5.2		County to Review Reports	5 days	Mon 8/10/20	Mon 8/17/20		$0.00	0 hrs

ID	WBS	Deltek Phase	Task Name	Duration	Start	Finish	Note	Cost	Work
355	4.2.1.5.3		County to Develop DRAFT Report and Metric Specification Dc	5 days	Mon 8/17/20	Mon 8/24/20		$0.00	0 hrs
356	4.2.1.5.4		County to Submit DRAFT Report and Metric Specification Doc	0 days	Mon 8/24/20	Mon 8/24/20		$0.00	0 hrs
357	4.2.1.5.5		County to Create FINAL Report and Metric Specification Doc	1 day	Mon 7/27/20	Tue 7/28/20		$0.00	12 hrs
358	4.2.1.5.6		County to Submit FINAL Report and Metric Specification Doc	1 day	Tue 7/28/20	Wed 7/29/20		$0.00	0 hrs
359	4.2.1.5.7		County to Accept FINAL Report and Metric Specification Doc	5 days	Wed 8/5/20	Wed 8/12/20		$0.00	160 hrs
360	4.2.2		**Reports / Metrics Development**	**70.5 days**	**Fri 9/18/20**	**Tue 1/26/21**		**$12,760.54**	**802 hrs**
361	4.2.2.1		**PCR Develop Reports and Metrics**	**32.5 days**	**Fri 9/18/20**	**Tue 11/3/20**		**$12,760.54**	**250 hrs**
362	4.2.2.1.1		Develop Custom Reports	32.5 days	Fri 9/18/20	Tue 11/3/20	Woc	$10,085.68	196 hrs
363	4.2.2.1.2		**Woolpert to Facilitate In-Process Review Meetings with Client Technical Team**	**19.5 days**	**Wed 9/30/20**	**Tue 10/27/20**		**$2,674.86**	**36 hrs**
364	4.2.2.1.2.1		Batch # 1 Reports Review & Approval	0.5 days	Wed 9/30/20	Wed 9/30/20		$891.62	12 hrs
365	4.2.2.1.2.2		Batch # 2 Reports Review & Approval	0.5 days	Mon 10/12/20	Mon 10/12/20		$891.62	12 hrs
366	4.2.2.1.2.3		Batch # 3 Reports Review & Approval	0.5 days	Tue 10/27/20	Tue 10/27/20		$891.62	12 hrs
367	4.2.2.1.3		County to Accept Reports and Metrics in Development Enviro	5 days	Fri 9/18/20	Fri 9/25/20		$0.00	18 hrs
368	4.2.2.2		**REM Develop Reports and Metrics (COUNTY OWNED TASK)**	**30 days**	**Fri 9/18/20**	**Fri 10/30/20**		**$0.00**	**162 hrs**
369	4.2.2.2.1		Develop Custom Reports	30 days	Fri 9/18/20	Fri 10/30/20	Woc	$0.00	120 hrs
370	4.2.2.2.2		**County to Facilitate In-Process Review Meetings with Count**	**19.5 days**	**Wed 9/30/20**	**Tue 10/27/20**		**$0.00**	**24 hrs**
371	4.2.2.2.2.1		Batch # 1 Reports Review & Approval	0.5 days	Wed 9/30/20	Wed 9/30/20		$0.00	8 hrs
372	4.2.2.2.2.2		Batch # 2 Reports Review & Approval	0.5 days	Mon 10/12/20	Mon 10/12/20		$0.00	8 hrs
373	4.2.2.2.2.3		Batch # 3 Reports Review & Approval	0.5 days	Tue 10/27/20	Tue 10/27/20		$0.00	8 hrs
374	4.2.2.2.3		County to Accept Reports and Metrics in Development Enviro	5 days	Fri 9/18/20	Fri 9/25/20		$0.00	18 hrs
375	4.2.2.3		**SW Develop Reports and Metrics (COUNTY OWNED TASK)**	**30 days**	**Fri 10/30/20**	**Mon 1/11/21**		**$0.00**	**162 hrs**
376	4.2.2.3.1		Develop Custom Reports	30 days	Fri 10/30/20	Mon 1/11/21	Woc	$0.00	120 hrs
377	4.2.2.3.2		**County to Facilitate In-Process Review Meetings with Count**	**19.5 days**	**Thu 11/12/20**	**Wed 12/16/20**		**$0.00**	**24 hrs**
378	4.2.2.3.2.1		Batch # 1 Reports Review & Approval	0.5 days	Thu 11/12/20	Thu 11/12/20		$0.00	8 hrs
379	4.2.2.3.2.2		Batch # 2 Reports Review & Approval	0.5 days	Tue 12/1/20	Tue 12/1/20		$0.00	8 hrs
380	4.2.2.3.2.3		Batch # 3 Reports Review & Approval	0.5 days	Wed 12/16/20	Wed 12/16/20		$0.00	8 hrs
381	4.2.2.3.3		County to Accept Reports and Metrics in Development Enviro	5 days	Fri 10/30/20	Fri 11/6/20		$0.00	18 hrs
382	4.2.2.4		**UTIL Develop Reports and Metrics (COUNTY OWNED TASK)**	**30 days**	**Fri 10/30/20**	**Mon 1/11/21**		**$0.00**	**162 hrs**
383	4.2.2.4.1		Develop Custom Reports	30 days	Fri 10/30/20	Mon 1/11/21	Woc	$0.00	120 hrs
384	4.2.2.4.2		**County to Facilitate In-Process Review Meetings with Count**	**19.5 days**	**Thu 11/12/20**	**Wed 12/16/20**		**$0.00**	**24 hrs**
385	4.2.2.4.2.1		Batch # 1 Reports Review & Approval	0.5 days	Thu 11/12/20	Thu 11/12/20		$0.00	8 hrs
386	4.2.2.4.2.2		Batch # 2 Reports Review & Approval	0.5 days	Tue 12/1/20	Tue 12/1/20		$0.00	8 hrs
387	4.2.2.4.2.3		Batch # 3 Reports Review & Approval	0.5 days	Wed 12/16/20	Wed 12/16/20		$0.00	8 hrs
388	4.2.2.4.3		County to Accept Reports and Metrics in Development Enviro	5 days	Fri 10/30/20	Fri 11/6/20		$0.00	18 hrs
389	4.2.2.5		**PW Develop Reports and Metrics (COUNTY OWNED TASK)**	**10.5 days**	**Mon 1/11/21**	**Tue 1/26/21**		**$0.00**	**66 hrs**
390	4.2.2.5.1		Develop Custom Reports	10 days	Mon 1/11/21	Tue 1/26/21	Woc	$0.00	40 hrs
391	4.2.2.5.2		**County to Facilitate In-Process Review Meetings with Count**	**0.5 days**	**Tue 1/19/21**	**Tue 1/19/21**		**$0.00**	**8 hrs**
392	4.2.2.5.2.1		Batch # 1 Reports Review & Approval	0.5 days	Tue 1/19/21	Tue 1/19/21		$0.00	8 hrs
393	4.2.2.5.3		County to Accept Reports and Metrics in Development Enviro	5 days	Tue 1/19/21	Tue 1/26/21		$0.00	18 hrs
394	4.3		**System Integrations**	**134.38 days**	**Mon 6/8/20**	**Tue 1/19/21**		**$322,194.02**	**2,521 hrs**
395	4.3.1		**System Integration Planning**	**38.88 days**	**Mon 6/8/20**	**Thu 8/6/20**		**$91,981.68**	**911 hrs**
396	4.3.1.1	69	**Develop Potential Integration Workflows**	**10 days**	**Mon 6/8/20**	**Mon 6/22/20**		**$20,987.20**	**110 hrs**
397	4.3.1.1.1		Woolpert to Facilitate Discussion about Systems to be Integr	0.5 days	Mon 6/8/20	Mon 6/8/20		$2,266.94	18 hrs
398	4.3.1.1.2		Woolpert to Create Tech Memo (RFI) Detailing Data Request	0.63 days	Mon 6/8/20	Tue 6/9/20		$2,292.20	10 hrs
399	4.3.1.1.3		County to Provide Legacy Datasets to Woolpert	10 days	Mon 6/8/20	Mon 6/22/20		$0.00	10 hrs

ID	WBS	Deltek Phase	Task Name	Duration	Start	Finish	Note	Cost	Work
400	4.3.1.1.4		Woolpert to Develop Potential Integration Data Flow Diagrar	5 days	Mon 6/8/20	Mon 6/15/20		$14,619.56	64 hrs
401	4.3.1.1.5		Woolpert to Prep for Onsite Discussion about Integrations	4 days	Mon 6/15/20	Fri 6/19/20		$1,808.50	8 hrs
402	4.3.1.2	70	Woolpert to Facilitate Integration Planning Discussions (ONSIT	5 days	Mon 6/22/20	Mon 6/29/20		$27,999.02	314 hrs
403	4.3.1.2.1		Wonderware Integration Discussion (ONSITE TASK)	2 days	Mon 6/22/20	Wed 6/24/20		$6,367.64	92 hrs
404	4.3.1.2.2		NAPA TRACS Inventory Integration Discussion (ONSITE TASK)	1.5 days	Wed 6/24/20	Thu 6/25/20		$5,934.46	74 hrs
405	4.3.1.2.3		Fleet Fuel System Integration Discussion (ONSITE TASK)	1.5 days	Fri 6/26/20	Mon 6/29/20		$6,151.05	75 hrs
406	4.3.1.2.4		Grainger Keepstock Integration Discussion (ONSITE TASK)	0.5 days	Fri 6/26/20	Fri 6/26/20		$2,050.35	57 hrs
407	4.3.1.2.5		Travel for Integration Planning Workshops	5 days	Mon 6/22/20	Mon 6/29/20		$7,495.52	16 hrs
408	4.3.1.2.5.1		Travel for System Integration Planning Workshops	5 days	Mon 6/22/20	Mon 6/29/20		$7,495.52	16 hrs
409	4.3.1.3	71	Software Requirements Specifications (SRS) for System Integra	23.88 days	Mon 6/29/20	Thu 8/6/20		$42,995.46	487 hrs
410	4.3.1.3.1		Develop SRS Document Wonderware	17 days	Mon 6/29/20	Tue 7/28/20		$9,372.76	117 hrs
411	4.3.1.3.1.1		Develop SRS for Wonderware Integration	0.5 days	Mon 6/29/20	Mon 6/29/20		$6,176.31	31 hrs
412	4.3.1.3.1.2		Review and Approve SRS Document Wonderware	17 days	Mon 6/29/20	Tue 7/28/20	For (	$3,196.45	86 hrs
413	4.3.1.3.1.2.1		Woolpert to Submit DRAFT SRS Document	0 days	Mon 6/29/20	Mon 6/29/20		$0.00	0 hrs
414	4.3.1.3.1.2.2		County Technical Team to Review SRS Document (COUI	10 days	Mon 6/29/20	Fri 7/17/20		$0.00	40 hrs
415	4.3.1.3.1.2.3		Woolpert to Facilitate Review of SRS Document	0.25 days	Fri 7/17/20	Fri 7/17/20	Addi	$2,738.01	20 hrs
416	4.3.1.3.1.2.4		Woolpert to Modify SRS Document	0.25 days	Mon 7/20/20	Mon 7/20/20		$458.44	2 hrs
417	4.3.1.3.1.2.5		Woolpert to Submit FINAL SRS Document	0 days	Mon 7/20/20	Mon 7/20/20		$0.00	0 hrs
418	4.3.1.3.1.2.6		County to Review and Accept SRS Document (COUNTY	5 days	Tue 7/21/20	Tue 7/28/20		$0.00	24 hrs
419	4.3.1.3.2		Develop SRS Document Fleet Fuel System	23.88 days	Mon 6/29/20	Thu 8/6/20		$10,060.42	117 hrs
420	4.3.1.3.2.1		Develop SRS for Fleet Fuel System Integration	0.5 days	Mon 6/29/20	Mon 6/29/20		$6,176.31	31 hrs
421	4.3.1.3.2.2		Review and Approve SRS Document Fleet Fuel System	23.88 days	Mon 6/29/20	Thu 8/6/20	For (	$3,884.11	86 hrs
422	4.3.1.3.2.2.1		Woolpert to Submit DRAFT SRS Document	0 days	Mon 6/29/20	Mon 6/29/20		$0.00	0 hrs
423	4.3.1.3.2.2.2		County Technical Team to Review SRS Document (COUI	10 days	Mon 6/29/20	Fri 7/17/20		$0.00	40 hrs
424	4.3.1.3.2.2.3		Woolpert to Facilitate Review of SRS Document	0.25 days	Fri 7/24/20	Fri 7/24/20		$3,196.45	19 hrs
425	4.3.1.3.2.2.4		Woolpert to Modify SRS Document	0.38 days	Thu 7/30/20	Thu 7/30/20		$687.66	3 hrs
426	4.3.1.3.2.2.5		Woolpert to Submit FINAL SRS Document	0 days	Thu 7/30/20	Thu 7/30/20		$0.00	0 hrs
427	4.3.1.3.2.2.6		County to Review and Accept SRS Document (COUNTY	5 days	Thu 7/30/20	Thu 8/6/20		$0.00	24 hrs
428	4.3.1.3.3		Develop SRS Document NAPA TRACS	17.75 days	Mon 6/29/20	Wed 7/29/20		$12,110.77	129 hrs
429	4.3.1.3.3.1		Develop SRS for NAPA TRACS Integration	2 days	Mon 6/29/20	Wed 7/1/20		$7,768.22	38 hrs
430	4.3.1.3.3.2		Review and Approve SRS Document NAPA TRACS	17.75 days	Mon 6/29/20	Wed 7/29/20	For (	$4,342.55	91 hrs
431	4.3.1.3.3.2.1		Woolpert to Submit DRAFT SRS Document	0 days	Mon 6/29/20	Mon 6/29/20		$0.00	0 hrs
432	4.3.1.3.3.2.2		County Technical Team to Review SRS Document (COUI	10 days	Mon 6/29/20	Fri 7/17/20		$0.00	40 hrs
433	4.3.1.3.3.2.3		Woolpert to Facilitate Review of SRS Document	0.25 days	Fri 7/17/20	Fri 7/17/20		$2,967.23	21 hrs
434	4.3.1.3.3.2.4		Woolpert to Modify SRS Document	0.75 days	Tue 7/21/20	Wed 7/22/20		$1,375.32	6 hrs
435	4.3.1.3.3.2.5		Woolpert to Submit FINAL SRS Document	0 days	Wed 7/22/20	Wed 7/22/20		$0.00	0 hrs
436	4.3.1.3.3.2.6		County to Review and Accept SRS Document (COUNTY	5 days	Wed 7/22/20	Wed 7/29/20		$0.00	24 hrs
437	4.3.1.3.4		Develop SRS Document PAVER	22 days	Mon 6/29/20	Tue 8/4/20		$11,451.51	124 hrs
438	4.3.1.3.4.1		Develop SRS for PAVER Integration	5 days	Mon 6/29/20	Fri 7/10/20		$8,255.06	38 hrs
439	4.3.1.3.4.2		Review and Approve SRS Document PAVER	17 days	Fri 7/10/20	Tue 8/4/20	For (	$3,196.45	86 hrs
440	4.3.1.3.4.2.1		Woolpert to Submit DRAFT SRS Document	0 days	Fri 7/10/20	Fri 7/10/20		$0.00	0 hrs
441	4.3.1.3.4.2.2		County Technical Team to Review SRS Document (COUI	10 days	Fri 7/10/20	Fri 7/24/20		$0.00	40 hrs
442	4.3.1.3.4.2.3		Woolpert to Facilitate Review of SRS Document	0.25 days	Fri 7/24/20	Fri 7/24/20	Addi	$2,738.01	20 hrs
443	4.3.1.3.4.2.4		Woolpert to Modify SRS Document	0.25 days	Mon 7/27/20	Mon 7/27/20		$458.44	2 hrs
444	4.3.1.3.4.2.5		Woolpert to Submit FINAL SRS Document	0 days	Mon 7/27/20	Mon 7/27/20		$0.00	0 hrs
445	4.3.1.3.4.2.6		County to Review and Accept SRS Document (COUNTY	5 days	Tue 7/28/20	Tue 8/4/20		$0.00	24 hrs

ID	WBS	Deltek Phase	Task Name	Duration	Start	Finish	Note	Cost	Work
446	4.3.2		System Integration Development	102.38 days	Tue 7/28/20	Tue 1/19/21		$230,212.34	1,610 hrs
447	4.3.2.1		Establish Development Environment	0.5 days	Thu 8/6/20	Thu 8/6/20		$1,786.32	8 hrs
448	4.3.2.2		Integration Development: Wonderware	24.75 days	Tue 7/28/20	Tue 9/1/20	...	$52,670.08	320 hrs
449	4.3.2.2.1		Coding	15 days	Tue 7/28/20	Tue 8/18/20	Codi	$34,332.48	150 hrs
450	4.3.2.2.1.1		Develop Source Code	15 days	Tue 7/28/20	Tue 8/18/20		$34,332.48	150 hrs
451	4.3.2.2.2		Deployment and Testing	9.75 days	Tue 8/18/20	Tue 9/1/20	Depl	$18,337.60	170 hrs
452	4.3.2.2.2.1		Create and test installers, installation scripts	2.25 days	Tue 8/18/20	Thu 8/20/20		$4,125.96	18 hrs
453	4.3.2.2.2.2		Woolpert to Facilitate Integration Testing (Round 1)	1 day	Thu 8/20/20	Fri 8/21/20		$2,750.64	52 hrs
454	4.3.2.2.2.3		Woolpert to Deploy Integration Components to COU	0.25 days	Fri 8/21/20	Fri 8/21/20		$3,209.08	14 hrs
455	4.3.2.2.2.4		Woolpert to Facilitate Integration Testing (Round 2)	0.5 days	Mon 8/24/20	Mon 8/24/20		$2,750.64	32 hrs
456	4.3.2.2.2.5		Woolpert to Modify Integration Components on COL	0.5 days	Mon 8/24/20	Mon 8/24/20		$2,750.64	12 hrs
457	4.3.2.2.2.6		Woolpert to Facilitate Integration Testing (Round 3)	0.25 days	Tue 8/25/20	Tue 8/25/20		$2,750.64	30 hrs
458	4.3.2.2.2.7		COUNTY to Review and Accept Integration Compone	5 days	Tue 8/25/20	Tue 9/1/20		$0.00	12 hrs
459	4.3.2.3		Integration Development: Fleet Fuel System	24.75 days	Thu 8/6/20	Fri 9/11/20	...	$51,753.20	308 hrs
460	4.3.2.3.1		Coding	15 days	Thu 8/6/20	Thu 8/27/20	Codi	$34,332.48	150 hrs
461	4.3.2.3.1.1		Develop Source Code	15 days	Thu 8/6/20	Thu 8/27/20		$34,332.48	150 hrs
462	4.3.2.3.2		Deployment and Testing	9.75 days	Thu 8/27/20	Fri 9/11/20	Depl	$17,420.72	158 hrs
463	4.3.2.3.2.1		Create and test installers, installation scripts	2.25 days	Thu 8/27/20	Mon 8/31/20		$4,125.96	18 hrs
464	4.3.2.3.2.2		Woolpert to Facilitate Integration Testing (Round 1)	1 day	Mon 8/31/20	Tue 9/1/20		$2,750.64	52 hrs
465	4.3.2.3.2.3		Woolpert to Deploy Integration Components to COU	0.25 days	Tue 9/1/20	Tue 9/1/20		$3,209.08	14 hrs
466	4.3.2.3.2.4		Woolpert to Facilitate Integration Testing (Round 2)	0.5 days	Tue 9/1/20	Wed 9/2/20		$2,750.64	32 hrs
467	4.3.2.3.2.5		Woolpert to Modify Integration Components on COL	0.5 days	Wed 9/2/20	Wed 9/2/20		$2,750.64	12 hrs
468	4.3.2.3.2.6		Woolpert to Facilitate Integration Testing (Round 3)	0.25 days	Wed 9/2/20	Thu 9/3/20		$1,833.76	18 hrs
469	4.3.2.3.2.7		COUNTY to Review and Accept Integration Compone	5 days	Thu 9/3/20	Fri 9/11/20		$0.00	12 hrs
470	4.3.2.4		Integration Development: NAPA TRACS	29.75 days	Fri 9/11/20	Thu 10/22/20	...	$69,173.92	420 hrs
471	4.3.2.4.1		Coding	20 days	Fri 9/11/20	Fri 10/9/20	Codi	$50,836.32	222 hrs
472	4.3.2.4.1.1		Develop Source Code	20 days	Fri 9/11/20	Fri 10/9/20		$50,836.32	222 hrs
473	4.3.2.4.2		Deployment and Testing	9.75 days	Fri 10/9/20	Thu 10/22/20	Depl	$18,337.60	198 hrs
474	4.3.2.4.2.1		Create and test installers, installation scripts	2.25 days	Fri 10/9/20	Tue 10/13/20		$4,125.96	18 hrs
475	4.3.2.4.2.2		Woolpert to Facilitate Integration Testing (Round 1)	1 day	Tue 10/13/20	Wed 10/14/20		$3,667.52	56 hrs
476	4.3.2.4.2.3		Woolpert to Deploy Integration Components to COU	0.25 days	Wed 10/14/20	Wed 10/14/20		$3,209.08	14 hrs
477	4.3.2.4.2.4		Woolpert to Facilitate Integration Testing (Round 2)	0.5 days	Wed 10/14/20	Thu 10/15/20		$2,750.64	32 hrs
478	4.3.2.4.2.5		Woolpert to Modify Integration Components on COL	0.5 days	Thu 10/15/20	Thu 10/15/20		$2,750.64	12 hrs
479	4.3.2.4.2.6		Woolpert to Facilitate Integration Testing (Round 3)	0.25 days	Thu 10/15/20	Thu 10/15/20		$1,833.76	18 hrs
480	4.3.2.4.2.7		COUNTY to Review and Accept Integration Compone	5 days	Thu 10/15/20	Thu 10/22/20		$0.00	48 hrs
481	4.3.2.5		Integration Development: PAVER	35.5 days	Thu 10/22/20	Mon 1/11/21		$24,066.34	318 hrs
482	4.3.2.5.1		System Upgrade	2 days	Thu 10/22/20	Mon 10/26/20		$4,100.70	28 hrs
483	4.3.2.5.1.1		Woolpert to Facilitate DEV/TEST ENV Upgrade for Track 1 from 15.3.3 to PAVER 7 compatible version	2 days	Thu 10/22/20	Mon 10/26/20		$4,100.70	28 hrs
484	4.3.2.5.2		Coding	10 days	Tue 10/27/20	Tue 11/10/20		$6,955.52	32 hrs
485	4.3.2.5.2.1		Develop Source Code	10 days	Tue 10/27/20	Tue 11/10/20		$6,955.52	32 hrs
486	4.3.2.5.3		Deployment and Testing	23 days	Tue 11/10/20	Mon 1/11/21		$9,801.04	244 hrs
487	4.3.2.5.3.1		Woolpert to Facilitate Integration Testing (Round 1)	1 day	Tue 11/10/20	Thu 11/12/20		$3,667.52	48 hrs
488	4.3.2.5.3.2		Woolper to Modify Integration Components on COU	0.75 days	Thu 11/12/20	Fri 11/13/20		$3,477.76	16 hrs
489	4.3.2.5.3.3		Woolpert to Facilitate Integration Testing (Round 2)	0.5 days	Fri 11/20/20	Fri 11/20/20		$611.25	8 hrs
490	4.3.2.5.3.4		Woolpert to Modify Integration Components on COL	0.5 days	Fri 11/20/20	Mon 11/30/20		$1,738.88	8 hrs

ID	WBS	Deltek Phase	Task Name	Duration	Start	Finish	Note	Cost	Work
491	4.3.2.5.3.5		Woolpert to Facilitate Integration Testing (Round 3)	0.25 days	Mon 12/7/20	Mon 12/7/20		$305.63	4 hrs
492	4.3.2.5.3.6		COUNTY to Review and Accept Integration Compone	5 days	Mon 12/14/20	Mon 1/11/21		$0.00	160 hrs
493	4.3.2.5.4		Go-Live Planning	1.25 days	Thu 10/22/20	Mon 10/26/20		$3,209.08	14 hrs
494	4.3.2.5.4.1		Develop Rollout Plan	0.5 days	Thu 10/22/20	Fri 10/23/20		$916.88	4 hrs
495	4.3.2.5.4.2		Production Deployment Support	1.25 days	Thu 10/22/20	Mon 10/26/20		$2,292.20	10 hrs
496	4.3.2.6		Integration Development: SeeClickFix	41 days	Thu 10/22/20	Tue 1/19/21	Nee	$30,762.48	236 hrs
497	4.3.2.6.1		Setup	23 days	Thu 10/22/20	Wed 12/2/20		$16,519.36	76 hrs
498	4.3.2.6.1.1		Interface Configuration Exploration Workshop	3 days	Thu 10/22/20	Tue 10/27/20		$3,477.76	16 hrs
499	4.3.2.6.1.2		County to Provide Configuration Requirements (COUNTY TASK)	10 days	Tue 10/27/20	Tue 11/10/20		$0.00	0 hrs
500	4.3.2.6.1.3		Woolpert to Update Configuration	10 days	Tue 11/10/20	Wed 12/2/20		$13,041.60	60 hrs
501	4.3.2.6.2		Deployment and Testing	13 days	Wed 12/9/20	Tue 1/19/21		$14,243.12	160 hrs
502	4.3.2.6.2.1		Woolpert to Facilitate Integration Testing (Round 1)	1 day	Wed 12/9/20	Thu 12/10/20		$3,667.52	48 hrs
503	4.3.2.6.2.2		Woolpert to Modify Configuration Components on COUNTY Infrastructure	2 days	Thu 12/10/20	Mon 12/14/20		$6,086.08	28 hrs
504	4.3.2.6.2.3		Woolpert to Facilitate Integration Testing (Round 2)	1 day	Mon 12/14/20	Tue 12/15/20		$1,833.76	40 hrs
505	4.3.2.6.2.4		Woolpert to Modify Configuration Components on COUNTY Infrastructure	4 days	Tue 12/15/20	Mon 1/11/21		$1,738.88	8 hrs
506	4.3.2.6.2.5		Woolpert to Facilitate Integration Testing (Round 3)	1 day	Mon 1/11/21	Tue 1/12/21		$916.88	36 hrs
507	4.3.2.6.2.6		COUNTY to Review and Accept SCF Related Configuration Components	0 days	Tue 1/19/21	Tue 1/19/21		$0.00	0 hrs
508	4.4	72	Phase 4: Quality Control	141 days	Mon 6/8/20	Thu 1/28/21	QAO	$32,062.00	0 hrs
509	4.5		Phase 4: Acceptance and Close	1 day	Thu 1/28/21	Fri 1/29/21		$0.00	16 hrs
510	5		PHASE 5: System Deployment	202.5 days	Fri 1/29/21	Fri 11/12/21		$603,089.46	6,880.6 hrs
511	5.1		Test Plans (COUNTY OWNED TASK)	38.75 days	Fri 1/29/21	Thu 3/25/21		$2,750.64	672 hrs
512	5.1.1		Develop User Acceptance Test Plans	38.75 days	Fri 1/29/21	Thu 3/25/21		$2,750.64	672 hrs
513	5.1.1.1		County to Develop DRAFT UAT Plan Document	12.5 days	Fri 1/29/21	Tue 2/16/21		$0.00	100 hrs
514	5.1.1.2		County to Conduct UAT Planning Workshops (ONSITE)	8 days	Mon 2/22/21	Wed 3/3/21		$0.00	328 hrs
515	5.1.1.2.1		Develop UAT Plan: Utilities Plant Ops (ONSITE TASK)	2 days	Mon 2/22/21	Tue 2/23/21		$0.00	40 hrs
516	5.1.1.2.2		Develop UAT Plan: Solid Waste (ONSITE TASK)	2 days	Wed 2/24/21	Thu 2/25/21		$0.00	64 hrs
517	5.1.1.2.3		Develop UAT Plan: PCR Parks and Conservation Resour	2 days	Fri 2/26/21	Mon 3/1/21		$0.00	104 hrs
518	5.1.1.2.4		Develop UAT Plan: REM Real Property (ONSITE TASK)	1 day	Tue 3/2/21	Tue 3/2/21		$0.00	96 hrs
519	5.1.1.2.5		Develop UAT Plan: Public Works (ONSITE TASK)	1 day	Wed 3/3/21	Wed 3/3/21		$0.00	24 hrs
520	5.1.1.3		County to Update DRAFT UAT Plan	6 days	Thu 3/4/21	Thu 3/11/21		$0.00	48 hrs
521	5.1.1.4		County to Submit DRAFT UAT Plan to Woolpert	0 days	Thu 3/11/21	Thu 3/11/21		$0.00	0 hrs
522	5.1.1.5		Woolpert to Review DRAFT UAT Plan	5 days	Fri 3/12/21	Thu 3/18/21		$1,833.76	152 hrs
523	5.1.1.6		County to Facilitate Remote Review Meeting with Woolp	0.5 days	Fri 3/19/21	Fri 3/19/21		$916.88	16 hrs
524	5.1.1.7		County to Update DRAFT UAT Plan per Woolpert Comme	3.5 days	Fri 3/19/21	Wed 3/24/21		$0.00	28 hrs
525	5.1.1.8		County to Submit Updated UAT Plan to Woolpert	0 days	Thu 3/25/21	Thu 3/25/21		$0.00	0 hrs
526	5.2		User Acceptance Testing (UAT)	58.75 days	Mon 4/5/21	Fri 6/25/21		$102,934.38	2,132 hrs
527	5.2.1		Provide Tester Training	9.75 days	Mon 4/5/21	Fri 4/16/21		$17,625.96	416 hrs
528	5.2.1.1		Woolpert to Prepare Tester Training Materials	4 days	Mon 4/5/21	Fri 4/9/21		$4,584.40	40 hrs
529	5.2.1.2		County PM to Prepare Client Site for Tester Training (COU	1 day	Thu 4/8/21	Fri 4/9/21		$0.00	8 hrs
530	5.2.1.3		Woolpert to Provide On-Site Tester Training	5 days	Mon 4/12/21	Fri 4/16/21		$9,168.80	360 hrs
531	5.2.1.3.1		Tester Training - Utilities (ONSITE TASK)	1 day	Mon 4/12/21	Mon 4/12/21		$1,833.76	40 hrs
532	5.2.1.3.2		Tester Training - REM (ONSITE TASK)	1 day	Tue 4/13/21	Tue 4/13/21		$1,833.76	104 hrs

ID	WBS	Deltek Phase	Task Name	Duration	Start	Finish	Note	Cost	Work
533	5.2.1.3.3		Tester Training - PCR (ONSITE TASK)	1 day	Wed 4/14/21	Wed 4/14/21		$1,833.76	104 hrs
534	5.2.1.3.4		Tester Training - Solid Waste (ONSITE TASK)	1 day	Thu 4/15/21	Thu 4/15/21		$1,833.76	64 hrs
535	5.2.1.3.5		Tester Training - Public Works (ONSITE TASK)	1 day	Fri 4/16/21	Fri 4/16/21		$1,833.76	48 hrs
536	5.2.1.4		**Travel for On-Site Tester Training**	**5 days**	**Mon 4/12/21**	**Fri 4/16/21**		**$3,872.76**	**8 hrs**
537	5.2.1.4.1		Travel for On-Site Tester Training	5 days	Mon 4/12/21	Fri 4/16/21		$3,872.76	8 hrs
538	5.2.2		**Support User Acceptance Testing (UAT)**	**44 days**	**Mon 4/19/21**	**Fri 6/18/21**		**$85,308.42**	**1,690 hrs**
539	5.2.2.1	System Testing	**Woolpert to Provide Onsite UAT Support (Round 1)**	**25 days**	**Mon 4/19/21**	**Fri 5/21/21**		**$43,914.92**	**912 hrs**
540	5.2.2.1.1		**Support UAT Round 1, Week 1**	**5 days**	**Mon 4/19/21**	**Fri 4/23/21**		**$12,507.34**	**334 hrs**
541	5.2.2.1.1.1		Support UAT 1: Utilities Plant Operations (ONSITE TA	2 days	Mon 4/19/21	Tue 4/20/21		$0.00	48 hrs
542	5.2.2.1.1.2		Support UAT 1: Solid Waste Customer Outreach (ON	2 days	Mon 4/19/21	Tue 4/20/21		$0.00	16 hrs
543	5.2.2.1.1.3		Support UAT 1: Solid Waste Infrastructure Managem	2 days	Mon 4/19/21	Tue 4/20/21		$0.00	16 hrs
544	5.2.2.1.1.4		Support UAT 1: Solid Waste Business & Financial Ser	2 days	Mon 4/19/21	Tue 4/20/21		$0.00	16 hrs
545	5.2.2.1.1.5		Support UAT 1: Solid Waste Operations Managemen	2 days	Mon 4/19/21	Tue 4/20/21		$0.00	16 hrs
546	5.2.2.1.1.6		Support UAT 1: REM Detention Section (ONSITE TASI	2 days	Wed 4/21/21	Thu 4/22/21		$0.00	16 hrs
547	5.2.2.1.1.7		Support UAT 1: REM Facility Operations (ONSITE TAS	2 days	Wed 4/21/21	Thu 4/22/21		$0.00	16 hrs
548	5.2.2.1.1.8		Support UAT 1: REM Maintenance Programs (ONSITE	2 days	Wed 4/21/21	Thu 4/22/21		$0.00	16 hrs
549	5.2.2.1.1.9		Support UAT 1: REM Northwest Section (ONSITE TAS	2 days	Wed 4/21/21	Thu 4/22/21		$0.00	16 hrs
550	5.2.2.1.1.10		Support UAT 1: REM Southeast Section (ONSITE TASI	2 days	Wed 4/21/21	Thu 4/22/21		$0.00	16 hrs
551	5.2.2.1.1.11		**Travel for UAT Support Round 1**	**5 days**	**Mon 4/19/21**	**Fri 4/23/21**		**$3,872.76**	**8 hrs**
552	5.2.2.1.1.11.1		Travel for UAT Support Round 1 - Week 1	5 days	Mon 4/19/21	Fri 4/23/21		$3,872.76	8 hrs
553	5.2.2.1.2		**Support UAT Round 1, Week 2**	**4 days**	**Mon 4/26/21**	**Thu 4/29/21**		**$12,507.34**	**270 hrs**
554	5.2.2.1.2.1		Support UAT 1: REM Fleet (ONSITE TASK)	2 days	Mon 4/26/21	Tue 4/27/21		$0.00	16 hrs
555	5.2.2.1.2.2		Support UAT 1: REM Real Estate Management (ONSI	2 days	Mon 4/26/21	Tue 4/27/21		$0.00	16 hrs
556	5.2.2.1.2.3		Support UAT 1: REM Building Design and Constructic	2 days	Mon 4/26/21	Tue 4/27/21		$0.00	16 hrs
557	5.2.2.1.2.4		Support UAT 1: REM Real Property (ONSITE TASK)	2 days	Mon 4/26/21	Tue 4/27/21		$0.00	16 hrs
558	5.2.2.1.2.5		Support UAT 1: PCR Ft DeSoto (ONSITE TASK)	2 days	Wed 4/28/21	Thu 4/29/21		$0.00	16 hrs
559	5.2.2.1.2.6		Support UAT 1: PCR Park North District (ONSITE TASI	2 days	Wed 4/28/21	Thu 4/29/21		$0.00	16 hrs
560	5.2.2.1.2.7		Support UAT 1: PCR Park South District (ONSITE TASI	2 days	Wed 4/28/21	Thu 4/29/21		$0.00	16 hrs
561	5.2.2.1.2.8		Support UAT 1: PCR Air Quality (ONSITE TASK)	2 days	Wed 4/28/21	Thu 4/29/21		$0.00	16 hrs
562	5.2.2.1.2.9		**Travel for UAT Support Round 1**	**4 days**	**Mon 4/26/21**	**Thu 4/29/21**		**$3,872.76**	**8 hrs**
563	5.2.2.1.2.9.1		Travel for UAT Support Round 1 - Week 2	4 days	Mon 4/26/21	Thu 4/29/21		$3,872.76	8 hrs
564	5.2.2.1.3		**Support UAT Round 1, Week 3**	**4 days**	**Mon 5/3/21**	**Thu 5/6/21**		**$12,507.34**	**254 hrs**
565	5.2.2.1.3.1		Support UAT 1: PCR Countywide Horticulture Operat	2 days	Mon 5/3/21	Tue 5/4/21		$0.00	16 hrs
566	5.2.2.1.3.2		Support UAT 1: PCR Heritage Village (ONSITE TASK)	2 days	Mon 5/3/21	Tue 5/4/21		$0.00	16 hrs
567	5.2.2.1.3.3		Support UAT 1: PCR Park Natural Resource Managen	2 days	Mon 5/3/21	Tue 5/4/21		$0.00	16 hrs
568	5.2.2.1.3.4		Support UAT 1: PCR Administration (ONSITE TASK)	2 days	Mon 5/3/21	Tue 5/4/21		$0.00	16 hrs
569	5.2.2.1.3.5		Support UAT 1: PCR Resources and Asset Manageme	2 days	Mon 5/3/21	Tue 5/4/21		$0.00	16 hrs
570	5.2.2.1.3.6		Support UAT 1: Public Works Environmental Manage	2 days	Wed 5/5/21	Thu 5/6/21		$0.00	16 hrs
571	5.2.2.1.3.7		Support UAT 1: Public Works Stormwater Engineerin	2 days	Wed 5/5/21	Thu 5/6/21		$0.00	16 hrs
572	5.2.2.1.3.8		**Travel for UAT Support Round 1**	**4 days**	**Mon 5/3/21**	**Thu 5/6/21**		**$3,872.76**	**8 hrs**
573	5.2.2.1.3.8.1		Travel for UAT Support Round 1 - Week 3	4 days	Mon 5/3/21	Thu 5/6/21		$3,872.76	8 hrs
574	5.2.2.1.4		**Woolpert to Update AMS and Related Application Cor**	**10 days**	**Mon 5/10/21**	**Fri 5/21/21**		**$6,392.90**	**54 hrs**
575	5.2.2.1.4.1		Update Cityworks AMS Configuration	10 days	Mon 5/10/21	Fri 5/21/21		$3,667.52	32 hrs
576	5.2.2.1.4.2		Update Configuration Documentation	10 days	Mon 5/10/21	Fri 5/21/21		$2,725.38	22 hrs
577	5.2.2.2		**Woolpert to Provide Onsite UAT Support (Round 2)**	**19 days**	**Mon 5/24/21**	**Fri 6/18/21**		**$41,393.50**	**778 hrs**

ID	WBS	Deltek Phase	Task Name	Duration	Start	Finish	Note	Cost	Work
578	5.2.2.2.1		Support UAT Round 2, Week 1	4 days	Mon 5/24/21	Thu 5/27/21		$12,507.34	286 hrs
579	5.2.2.2.1.1		Support UAT 1: Utilities Plant Operations (ONSITE TA	2 days	Mon 5/24/21	Tue 5/25/21		$0.00	16 hrs
580	5.2.2.2.1.2		Support UAT 1: Solid Waste Customer Outreach (ON	2 days	Mon 5/24/21	Tue 5/25/21		$0.00	16 hrs
581	5.2.2.2.1.3		Support UAT 1: Solid Waste Infrastructure Managem	2 days	Mon 5/24/21	Tue 5/25/21		$0.00	16 hrs
582	5.2.2.2.1.4		Support UAT 1: Solid Waste Business & Financial Ser	2 days	Mon 5/24/21	Tue 5/25/21		$0.00	16 hrs
583	5.2.2.2.1.5		Support UAT 1: Solid Waste Operations Managemen	2 days	Mon 5/24/21	Tue 5/25/21		$0.00	16 hrs
584	5.2.2.2.1.6		Support UAT 1: REM Detention Section (ONSITE TASI	2 days	Wed 5/26/21	Thu 5/27/21		$0.00	16 hrs
585	5.2.2.2.1.7		Support UAT 1: REM Facility Operations (ONSITE TAS	2 days	Wed 5/26/21	Thu 5/27/21		$0.00	16 hrs
586	5.2.2.2.1.8		Support UAT 1: REM Maintenance Programs (ONSITE	2 days	Wed 5/26/21	Thu 5/27/21		$0.00	16 hrs
587	5.2.2.2.1.9		Support UAT 1: REM Northwest Section (ONSITE TAS	2 days	Wed 5/26/21	Thu 5/27/21		$0.00	32 hrs
588	5.2.2.2.1.1(		Support UAT 1: REM Southeast Section (ONSITE TASI	2 days	Wed 5/26/21	Thu 5/27/21		$0.00	16 hrs
589	5.2.2.2.1.11		Travel for UAT Support Round 2	4 days	Mon 5/24/21	Thu 5/27/21		$3,872.76	8 hrs
590	5.2.2.2.1.11.		Travel for UAT Support Round 2 - Week 1	4 days	Mon 5/24/21	Thu 5/27/21		$3,872.76	8 hrs
591	5.2.2.2.2		Support UAT Round 2, Week 2	4 days	Fri 5/28/21	Thu 6/3/21		$12,507.34	238 hrs
592	5.2.2.2.2.1		Support UAT 1: REM Fleet (ONSITE TASK)	2 days	Fri 5/28/21	Tue 6/1/21		$0.00	16 hrs
593	5.2.2.2.2.2		Support UAT 1: REM Real Estate Management (ONSI	2 days	Fri 5/28/21	Tue 6/1/21		$0.00	16 hrs
594	5.2.2.2.2.3		Support UAT 1: REM Building Design and Constructic	2 days	Fri 5/28/21	Tue 6/1/21		$0.00	16 hrs
595	5.2.2.2.2.4		Support UAT 1: REM Real Property (ONSITE TASK)	2 days	Fri 5/28/21	Tue 6/1/21		$0.00	16 hrs
596	5.2.2.2.2.5		Support UAT 1: PCR Ft DeSoto (ONSITE TASK)	2 days	Wed 6/2/21	Thu 6/3/21		$0.00	16 hrs
597	5.2.2.2.2.6		Support UAT 1: PCR Park North District (ONSITE TASI	2 days	Wed 6/2/21	Thu 6/3/21		$0.00	16 hrs
598	5.2.2.2.2.7		Support UAT 1: PCR Park South District (ONSITE TASI	2 days	Wed 6/2/21	Thu 6/3/21		$0.00	16 hrs
599	5.2.2.2.2.8		Support UAT 1: PCR Air Quality (ONSITE TASK)	2 days	Wed 6/2/21	Thu 6/3/21		$0.00	16 hrs
600	5.2.2.2.2.9		Travel for UAT Support Round 2	4 days	Fri 5/28/21	Thu 6/3/21		$3,872.76	8 hrs
601	5.2.2.2.2.9.1		Travel for UAT Support Round 2 - Week 2	4 days	Fri 5/28/21	Thu 6/3/21		$3,872.76	8 hrs
602	5.2.2.2.3		Support UAT Round 2, Week 3	4 days	Mon 6/7/21	Thu 6/10/21		$12,507.34	222 hrs
603	5.2.2.2.3.1		Support UAT 1: PCR Countywide Horticulture Operat	2 days	Mon 6/7/21	Tue 6/8/21		$0.00	16 hrs
604	5.2.2.2.3.2		Support UAT 1: PCR Heritage Village (ONSITE TASK)	2 days	Mon 6/7/21	Tue 6/8/21		$0.00	16 hrs
605	5.2.2.2.3.3		Support UAT 1: PCR Park Natural Resource Managen	2 days	Mon 6/7/21	Tue 6/8/21		$0.00	16 hrs
606	5.2.2.2.3.4		Support UAT 1: PCR Administration (ONSITE TASK)	2 days	Mon 6/7/21	Tue 6/8/21		$0.00	16 hrs
607	5.2.2.2.3.5		Support UAT 1: PCR Resources and Asset Manageme	2 days	Mon 6/7/21	Tue 6/8/21		$0.00	16 hrs
608	5.2.2.2.3.6		Support UAT 1: Public Works Environmental Manage	2 days	Wed 6/9/21	Thu 6/10/21		$0.00	16 hrs
609	5.2.2.2.3.7		Support UAT 1: Public Works Stormwater Engineerin	2 days	Wed 6/9/21	Thu 6/10/21		$0.00	16 hrs
610	5.2.2.2.3.8		Travel for UAT Support Round 2	4 days	Mon 6/7/21	Thu 6/10/21		$3,872.76	8 hrs
611	5.2.2.2.3.8.1		Travel for UAT Support Round 2 - Week 3	4 days	Mon 6/7/21	Thu 6/10/21		$3,872.76	8 hrs
612	5.2.2.2.4		Woolpert to Update AMS and Related Application Configurations per Testing Results	5 days	Mon 6/14/21	Fri 6/18/21		$3,871.48	32 hrs
613	5.2.2.2.4.1		Update Cityworks AMS Configuration	5 days	Mon 6/14/21	Fri 6/18/21		$2,292.20	20 hrs
614	5.2.2.2.4.2		Update Configuration Documentation	5 days	Mon 6/14/21	Fri 6/18/21		$1,579.28	12 hrs
615	5.2.3		COUNTY to Review and Accept UAT (COUNTY TASK)	5 days	Mon 6/21/21	Fri 6/25/21		$0.00	26 hrs
616	5.3		End-User Training (EUT)	183.5 days	Fri 1/29/21	Fri 10/15/21		$207,008.27	1,925 hrs
617	5.3.1		Woolpert to prepare Training Materials	62 days	Fri 1/29/21	Tue 4/27/21		$112,011.14	514 hrs
618	5.3.1.1		Training Videos	60 days	Fri 1/29/21	Fri 4/23/21		$54,659.92	248 hrs
619	5.3.1.2		Training Class Plans and Hand-Out Materials Developmen	60 days	Fri 1/29/21	Fri 4/23/21		$49,861.08	232 hrs
620	5.3.1.3		Training Class Assessments (EUT)	2 days	Fri 4/23/21	Tue 4/27/21		$7,490.14	34 hrs
621	5.3.2		Interim Review of Training Materials	8 days	Fri 3/12/21	Wed 3/24/21		$5,717.87	169 hrs
622	5.3.2.1		Woolpert to Submit DRAFT Training Materials to COUNTY	0 days	Fri 3/12/21	Fri 3/12/21		$0.00	0 hrs

ID	WBS	Deltek Phase	Task Name	Duration	Start	Finish	Note	Cost	Work
623	5.3.2.2		COUNTY to Review Interim Training Materials (COUNTY T.	5 days	Fri 3/12/21	Fri 3/19/21		$0.00	120 hrs
624	5.3.2.3		Woolpert to Facilitate Joint Review of Interim Training M	1 day	Fri 3/19/21	Mon 3/22/21		$2,050.35	17 hrs
625	5.3.2.4		Woolpert to Update Training Materials per COUNTY Feed	2 days	Mon 3/22/21	Wed 3/24/21		$3,667.52	32 hrs
626	5.3.3		**FINAL Review of Training Materials**	**22.5 days**	**Tue 4/27/21**	**Thu 5/27/21**		**$4,800.99**	**241 hrs**
627	5.3.3.1		Woolpert to Submit Pre-FINAL Training Materials to COU	0 days	Tue 4/27/21	Tue 4/27/21		$0.00	0 hrs
628	5.3.3.2	Training	COUNTY to Review Training Materials (COUNTY TASK)	10 days	Tue 4/27/21	Tue 5/11/21		$0.00	96 hrs
629	5.3.3.3		Woolpert to Facilitate Joint Review of Interim Training M	0.5 days	Tue 5/11/21	Tue 5/11/21		$1,133.47	17 hrs
630	5.3.3.4		Woolpert to Update and Submit FINAL Training Materials	2 days	Wed 5/12/21	Thu 5/13/21		$3,667.52	32 hrs
631	5.3.3.5	Training	COUNTY to Review and Accept Training Materials (COUN	10 days	Fri 5/14/21	Thu 5/27/21		$0.00	96 hrs
632	5.3.4	**Training**	**Woolpert to Provide On-Site End User Training (EUT)**	**79 days**	**Mon 6/28/21**	**Fri 10/15/21**		**$84,478.27**	**1,001 hrs**
633	5.3.4.1		Woolpert to Prepare for On-Site EUT	1 day	Mon 6/28/21	Mon 6/28/21		$1,833.76	16 hrs
634	5.3.4.2	Training	COUNTY to Prepare Client Site for Training (COUNTY TASK	2 days	Mon 6/28/21	Tue 6/29/21		$0.00	64 hrs
635	5.3.4.3	**Training**	**Woolpert to Conduct Onsite EUT**	**74 days**	**Mon 7/5/21**	**Fri 10/15/21**		**$82,644.51**	**921 hrs**
636	5.3.4.3.1		Week 1 - AMS Utilities Plant Operations	5 days	Mon 7/5/21	Fri 7/9/21		$10,901.52	168 hrs
637	5.3.4.3.1.1		Day 1	1 day	Mon 7/5/21	Mon 7/5/21		$1,833.76	32 hrs
638	5.3.4.3.1.1		**Morning - Utilities Plant Operations**	**0.5 days**	Mon 7/5/21	Mon 7/5/21		$0.00	0 hrs
639	5.3.4.3.1.1.1		EUT - AMS A (ONSITE)	0.5 days	Mon 7/5/21	Mon 7/5/21		$0.00	0 hrs
640	5.3.4.3.1.1.		EUT - AMS A (ONSITE)	0.5 days	Mon 7/5/21	Mon 7/5/21		$0.00	0 hrs
641	5.3.4.3.1.1		**Afternoon - Utilities Plant Operations**	**0.5 days**	Mon 7/5/21	Mon 7/5/21		$0.00	0 hrs
642	5.3.4.3.1.1.		EUT - AMS A (ONSITE)	0.5 days	Mon 7/5/21	Mon 7/5/21		$0.00	0 hrs
643	5.3.4.3.1.1.		EUT - AMS A (ONSITE)	0.5 days	Mon 7/5/21	Mon 7/5/21		$0.00	0 hrs
644	5.3.4.3.1.2		Day 2	1 day	Tue 7/6/21	Tue 7/6/21		$1,833.76	32 hrs
645	5.3.4.3.1.2		**Morning - Utilities Plant Operations**	**0.5 days**	Tue 7/6/21	Tue 7/6/21		$0.00	0 hrs
646	5.3.4.3.1.2.		EUT - AMS A (ONSITE)	0.5 days	Tue 7/6/21	Tue 7/6/21		$0.00	0 hrs
647	5.3.4.3.1.2.		EUT - AMS B (ONSITE)	0.5 days	Tue 7/6/21	Tue 7/6/21		$0.00	0 hrs
648	5.3.4.3.1.2		**Afternoon - Utilities Plant Operations**	**0.5 days**	Tue 7/6/21	Tue 7/6/21		$0.00	0 hrs
649	5.3.4.3.1.2.		EUT - AMS B (ONSITE)	0.5 days	Tue 7/6/21	Tue 7/6/21		$0.00	0 hrs
650	5.3.4.3.1.2.		EUT - AMS B (ONSITE)	0.5 days	Tue 7/6/21	Tue 7/6/21		$0.00	0 hrs
651	5.3.4.3.1.3		Day 3	1 day	Wed 7/7/21	Wed 7/7/21		$1,833.76	32 hrs
652	5.3.4.3.1.3		**Morning - Utilities Plant Operations**	**0.5 days**	Wed 7/7/21	Wed 7/7/21		$0.00	0 hrs
653	5.3.4.3.1.3.1		EUT - AMS B (ONSITE)	0.5 days	Wed 7/7/21	Wed 7/7/21		$0.00	0 hrs
654	5.3.4.3.1.3.		EUT - AMS B (ONSITE)	0.5 days	Wed 7/7/21	Wed 7/7/21		$0.00	0 hrs
655	5.3.4.3.1.3		**Afternoon - Utilities Plant Operations**	**0.5 days**	Wed 7/7/21	Wed 7/7/21		$0.00	0 hrs
656	5.3.4.3.1.3.		EUT - AMS Division Admin	0.5 days	Wed 7/7/21	Wed 7/7/21		$0.00	0 hrs
657	5.3.4.3.1.3.		EUT - Storeroom Transaction	0.5 days	Wed 7/7/21	Wed 7/7/21		$0.00	0 hrs
658	5.3.4.3.1.4		Day 4	1 day	Thu 7/8/21	Thu 7/8/21		$1,833.76	32 hrs
659	5.3.4.3.1.4		**Morning - Utilities Plant Operations**	**0.5 days**	Thu 7/8/21	Thu 7/8/21		$0.00	0 hrs
660	5.3.4.3.1.4.		EUT - Storeroom Admin	0.5 days	Thu 7/8/21	Thu 7/8/21		$0.00	0 hrs
661	5.3.4.3.1.4		**Afternoon**	**0.5 days**	Thu 7/8/21	Thu 7/8/21		$0.00	0 hrs
662	5.3.4.3.1.4.		EUT - AMS A (Reinforcement)	0.5 days	Thu 7/8/21	Thu 7/8/21		$0.00	0 hrs
663	5.3.4.3.1.4.		EUT - AMS A (Reinforcement)	0.5 days	Thu 7/8/21	Thu 7/8/21		$0.00	0 hrs
664	5.3.4.3.1.5		Day 5	1 day	Fri 7/9/21	Fri 7/9/21		$1,833.76	32 hrs
665	5.3.4.3.1.5		**Morning**	**0.5 days**	Fri 7/9/21	Fri 7/9/21		$0.00	0 hrs
666	5.3.4.3.1.5.1		EUT - AMS B (Reinforcement)	0.5 days	Fri 7/9/21	Fri 7/9/21		$0.00	0 hrs
667	5.3.4.3.1.5.		EUT - AMS B (Reinforcement)	0.5 days	Fri 7/9/21	Fri 7/9/21		$0.00	0 hrs
668	5.3.4.3.1.5		**Afternoon**	**0.5 days**	Fri 7/9/21	Fri 7/9/21		$0.00	0 hrs

ID	WBS	Deltek Phase	Task Name	Duration	Start	Finish	Note	Cost	Work
669	5.3.4.3.1.5.		EUT - AMS A (Reinforcement)	0.5 days	Fri 7/9/21	Fri 7/9/21		$0.00	0 hrs
670	5.3.4.3.1.5.		EUT - AMS B (Reinforcement)	0.5 days	Fri 7/9/21	Fri 7/9/21		$0.00	0 hrs
671	5.3.4.3.2		Week 2 - AMS Parks and Conservation Resrouces	5 days	Mon 7/26/21	Fri 7/30/21		$10,901.52	168 hrs
672	5.3.4.3.2.1		Day 1	1 day	Mon 7/26/21	Mon 7/26/21		$1,833.76	32 hrs
673	5.3.4.3.2.1		Morning	0.5 days	Mon 7/26/21	Mon 7/26/21		$0.00	0 hrs
674	5.3.4.3.2.1.		EUT - AMS A (ONSITE)	0.5 days	Mon 7/26/21	Mon 7/26/21		$0.00	0 hrs
675	5.3.4.3.2.1.		EUT - AMS A (ONSITE)	0.5 days	Mon 7/26/21	Mon 7/26/21		$0.00	0 hrs
676	5.3.4.3.2.1		Afternoon	0.5 days	Mon 7/26/21	Mon 7/26/21		$0.00	0 hrs
677	5.3.4.3.2.1.		EUT - AMS B (ONSITE)	0.5 days	Mon 7/26/21	Mon 7/26/21		$0.00	0 hrs
678	5.3.4.3.2.1.		EUT - AMS B (ONSITE)	0.5 days	Mon 7/26/21	Mon 7/26/21		$0.00	0 hrs
679	5.3.4.3.2.2		Day 2	1 day	Tue 7/27/21	Tue 7/27/21		$1,833.76	32 hrs
680	5.3.4.3.2.2		Morning	0.5 days	Tue 7/27/21	Tue 7/27/21		$0.00	0 hrs
681	5.3.4.3.2.2.1		EUT - AMS A (ONSITE)	0.5 days	Tue 7/27/21	Tue 7/27/21		$0.00	0 hrs
682	5.3.4.3.2.2.		EUT - AMS A (ONSITE)	0.5 days	Tue 7/27/21	Tue 7/27/21		$0.00	0 hrs
683	5.3.4.3.2.2		Afternoon	0.5 days	Tue 7/27/21	Tue 7/27/21		$0.00	0 hrs
684	5.3.4.3.2.2.		EUT - AMS B (ONSITE)	0.5 days	Tue 7/27/21	Tue 7/27/21		$0.00	0 hrs
685	5.3.4.3.2.2.		EUT - AMS B (ONSITE)	0.5 days	Tue 7/27/21	Tue 7/27/21		$0.00	0 hrs
686	5.3.4.3.2.3		Day 3	1 day	Wed 7/28/21	Wed 7/28/21		$1,833.76	32 hrs
687	5.3.4.3.2.3		Morning	0.5 days	Wed 7/28/21	Wed 7/28/21		$0.00	0 hrs
688	5.3.4.3.2.3.		EUT - AMS A (ONSITE)	0.5 days	Wed 7/28/21	Wed 7/28/21		$0.00	0 hrs
689	5.3.4.3.2.3.		EUT - AMS A (ONSITE)	0.5 days	Wed 7/28/21	Wed 7/28/21		$0.00	0 hrs
690	5.3.4.3.2.3		Afternoon	0.5 days	Wed 7/28/21	Wed 7/28/21		$0.00	0 hrs
691	5.3.4.3.2.3.		EUT - AMS B (ONSITE)	0.5 days	Wed 7/28/21	Wed 7/28/21		$0.00	0 hrs
692	5.3.4.3.2.3.		EUT - AMS B (ONSITE)	0.5 days	Wed 7/28/21	Wed 7/28/21		$0.00	0 hrs
693	5.3.4.3.2.4		Day 4	1 day	Thu 7/29/21	Thu 7/29/21		$1,833.76	32 hrs
694	5.3.4.3.2.4		Morning	0.5 days	Thu 7/29/21	Thu 7/29/21		$0.00	0 hrs
695	5.3.4.3.2.4.1		EUT - AMS A (ONSITE)	0.5 days	Thu 7/29/21	Thu 7/29/21		$0.00	0 hrs
696	5.3.4.3.2.4.		EUT - AMS A (ONSITE)	0.5 days	Thu 7/29/21	Thu 7/29/21		$0.00	0 hrs
697	5.3.4.3.2.4		Afternoon	0.5 days	Thu 7/29/21	Thu 7/29/21		$0.00	0 hrs
698	5.3.4.3.2.4.		EUT - AMS B (ONSITE)	0.5 days	Thu 7/29/21	Thu 7/29/21		$0.00	0 hrs
699	5.3.4.3.2.4.		EUT - AMS B (ONSITE)	0.5 days	Thu 7/29/21	Thu 7/29/21		$0.00	0 hrs
700	5.3.4.3.2.5		Day 5	1 day	Fri 7/30/21	Fri 7/30/21		$1,833.76	32 hrs
701	5.3.4.3.2.5		Morning	0.5 days	Fri 7/30/21	Fri 7/30/21		$0.00	0 hrs
702	5.3.4.3.2.5.		EUT - AMS Division Admin	0.5 days	Fri 7/30/21	Fri 7/30/21		$0.00	0 hrs
703	5.3.4.3.2.5.		EUT - Storeroom Transaction	0.5 days	Fri 7/30/21	Fri 7/30/21		$0.00	0 hrs
704	5.3.4.3.2.5		Afternoon	0.5 days	Fri 7/30/21	Fri 7/30/21		$0.00	0 hrs
705	5.3.4.3.2.5.		EUT - Storeroom Admin	0.5 days	Fri 7/30/21	Fri 7/30/21		$0.00	0 hrs
706	5.3.4.3.3		Week 3 - AMS Parks and Conservation Reservation & Public	5 days	Mon 8/2/21	Fri 8/6/21		$10,901.52	168 hrs
707	5.3.4.3.3.1		Day 1	1 day	Mon 8/2/21	Mon 8/2/21		$1,833.76	32 hrs
708	5.3.4.3.3.1		Morning	0.5 days	Mon 8/2/21	Mon 8/2/21		$0.00	0 hrs
709	5.3.4.3.3.1.1		EUT - AMS A (ONSITE)	0.5 days	Mon 8/2/21	Mon 8/2/21		$0.00	0 hrs
710	5.3.4.3.3.1.		EUT - AMS A (ONSITE)	0.5 days	Mon 8/2/21	Mon 8/2/21		$0.00	0 hrs
711	5.3.4.3.3.1		Afternoon	0.5 days	Mon 8/2/21	Mon 8/2/21		$0.00	0 hrs
712	5.3.4.3.3.1.		EUT - AMS B (ONSITE)	0.5 days	Mon 8/2/21	Mon 8/2/21		$0.00	0 hrs
713	5.3.4.3.3.1.		EUT - AMS B (ONSITE)	0.5 days	Mon 8/2/21	Mon 8/2/21		$0.00	0 hrs
714	5.3.4.3.3.2		Day 2	1 day	Tue 8/3/21	Tue 8/3/21		$1,833.76	32 hrs

ID	WBS	Deltek Phase	Task Name	Duration	Start	Finish	Note	Cost	Work
715	5.3.4.3.3.2		Morning	0.5 days	Tue 8/3/21	Tue 8/3/21		$0.00	0 hrs
716	5.3.4.3.3.2.		EUT - AMS Division Admin	0.5 days	Tue 8/3/21	Tue 8/3/21		$0.00	0 hrs
717	5.3.4.3.3.2.		EUT - Storeroom Transaction	0.5 days	Tue 8/3/21	Tue 8/3/21		$0.00	0 hrs
718	5.3.4.3.3.2		Afternoon	0.5 days	Tue 8/3/21	Tue 8/3/21		$0.00	0 hrs
719	5.3.4.3.3.2.		EUT - Storeroom Admin	0.5 days	Tue 8/3/21	Tue 8/3/21		$0.00	0 hrs
720	5.3.4.3.3.3		Day 3	1 day	Wed 8/4/21	Wed 8/4/21		$1,833.76	32 hrs
721	5.3.4.3.3.3		Morning	0.5 days	Wed 8/4/21	Wed 8/4/21		$0.00	0 hrs
722	5.3.4.3.3.3.		EUT - AMS A (Reinforcement)	0.5 days	Wed 8/4/21	Wed 8/4/21		$0.00	0 hrs
723	5.3.4.3.3.3.		EUT - AMS B (Reinforcement)	0.5 days	Wed 8/4/21	Wed 8/4/21		$0.00	0 hrs
724	5.3.4.3.3.3		Afternoon	0.5 days	Wed 8/4/21	Wed 8/4/21		$0.00	0 hrs
725	5.3.4.3.3.3.		EUT - AMS A (Reinforcement)	0.5 days	Wed 8/4/21	Wed 8/4/21		$0.00	0 hrs
726	5.3.4.3.3.3.		EUT - AMS B (Reinforcement)	0.5 days	Wed 8/4/21	Wed 8/4/21		$0.00	0 hrs
727	5.3.4.3.3.4		Day 4	1 day	Thu 8/5/21	Thu 8/5/21		$1,833.76	32 hrs
728	5.3.4.3.3.4		Morning	0.5 days	Thu 8/5/21	Thu 8/5/21		$0.00	0 hrs
729	5.3.4.3.3.4.		EUT - AMS A (Reinforcement)	0.5 days	Thu 8/5/21	Thu 8/5/21		$0.00	0 hrs
730	5.3.4.3.3.4.		EUT - AMS B (Reinforcement)	0.5 days	Thu 8/5/21	Thu 8/5/21		$0.00	0 hrs
731	5.3.4.3.3.4		Afternoon	0.5 days	Thu 8/5/21	Thu 8/5/21		$0.00	0 hrs
732	5.3.4.3.3.4.		EUT - AMS A (Reinforcement)	0.5 days	Thu 8/5/21	Thu 8/5/21		$0.00	0 hrs
733	5.3.4.3.3.4.		EUT - AMS B (Reinforcement)	0.5 days	Thu 8/5/21	Thu 8/5/21		$0.00	0 hrs
734	5.3.4.3.3.5		Day 5	1 day	Fri 8/6/21	Fri 8/6/21		$1,833.76	32 hrs
735	5.3.4.3.3.5		Morning	0.5 days	Fri 8/6/21	Fri 8/6/21		$0.00	0 hrs
736	5.3.4.3.3.5.		EUT - AMS A (Reinforcement)	0.5 days	Fri 8/6/21	Fri 8/6/21		$0.00	0 hrs
737	5.3.4.3.3.5.		EUT - AMS B (Reinforcement)	0.5 days	Fri 8/6/21	Fri 8/6/21		$0.00	0 hrs
738	5.3.4.3.3.5		Afternoon	0.5 days	Fri 8/6/21	Fri 8/6/21		$0.00	0 hrs
739	5.3.4.3.3.5.		EUT - AMS A (Reinforcement) - PW	0.5 days	Fri 8/6/21	Fri 8/6/21		$0.00	0 hrs
740	5.3.4.3.3.5.		EUT - AMS B (Reinforcement) - PW	0.5 days	Fri 8/6/21	Fri 8/6/21		$0.00	0 hrs
741	5.3.4.3.4		Week 4 - AMS Real Estate Management	5 days	Mon 8/30/21	Fri 9/3/21		$10,901.52	168 hrs
742	5.3.4.3.4.1		Day 1	1 day	Mon 8/30/21	Mon 8/30/21		$1,833.76	32 hrs
743	5.3.4.3.4.1		Morning	0.5 days	Mon 8/30/21	Mon 8/30/21		$0.00	0 hrs
744	5.3.4.3.4.1.		EUT - AMS A (ONSITE)	0.5 days	Mon 8/30/21	Mon 8/30/21		$0.00	0 hrs
745	5.3.4.3.4.1.		EUT - AMS A (ONSITE)	0.5 days	Mon 8/30/21	Mon 8/30/21		$0.00	0 hrs
746	5.3.4.3.4.1		Afternoon	0.5 days	Mon 8/30/21	Mon 8/30/21		$0.00	0 hrs
747	5.3.4.3.4.1.		EUT - AMS B (ONSITE)	0.5 days	Mon 8/30/21	Mon 8/30/21		$0.00	0 hrs
748	5.3.4.3.4.1.		EUT - AMS B (ONSITE)	0.5 days	Mon 8/30/21	Mon 8/30/21		$0.00	0 hrs
749	5.3.4.3.4.2		Day 2	1 day	Tue 8/31/21	Tue 8/31/21		$1,833.76	32 hrs
750	5.3.4.3.4.2		Morning	0.5 days	Tue 8/31/21	Tue 8/31/21		$0.00	0 hrs
751	5.3.4.3.4.2.1		EUT - AMS A (ONSITE)	0.5 days	Tue 8/31/21	Tue 8/31/21		$0.00	0 hrs
752	5.3.4.3.4.2.		EUT - AMS A (ONSITE)	0.5 days	Tue 8/31/21	Tue 8/31/21		$0.00	0 hrs
753	5.3.4.3.4.2		Afternoon	0.5 days	Tue 8/31/21	Tue 8/31/21		$0.00	0 hrs
754	5.3.4.3.4.2.		EUT - AMS B (ONSITE)	0.5 days	Tue 8/31/21	Tue 8/31/21		$0.00	0 hrs
755	5.3.4.3.4.2.		EUT - AMS B (ONSITE)	0.5 days	Tue 8/31/21	Tue 8/31/21		$0.00	0 hrs
756	5.3.4.3.4.3		Day 3	1 day	Wed 9/1/21	Wed 9/1/21		$1,833.76	32 hrs
757	5.3.4.3.4.3		Morning	0.5 days	Wed 9/1/21	Wed 9/1/21		$0.00	0 hrs
758	5.3.4.3.4.3.		EUT - AMS A (ONSITE)	0.5 days	Wed 9/1/21	Wed 9/1/21		$0.00	0 hrs
759	5.3.4.3.4.3.		EUT - AMS A (ONSITE)	0.5 days	Wed 9/1/21	Wed 9/1/21		$0.00	0 hrs
760	5.3.4.3.4.3		Afternoon	0.5 days	Wed 9/1/21	Wed 9/1/21		$0.00	0 hrs

ID	WBS	Deltek Phase	Task Name	Duration	Start	Finish	Note	Cost	Work
761	5.3.4.3.4.3.		EUT - AMS B (ONSITE)	0.5 days	Wed 9/1/21	Wed 9/1/21		$0.00	0 hrs
762	5.3.4.3.4.3.		EUT - AMS B (ONSITE)	0.5 days	Wed 9/1/21	Wed 9/1/21		$0.00	0 hrs
763	5.3.4.3.4.4		Day 4	1 day	Thu 9/2/21	Thu 9/2/21		$1,833.76	32 hrs
764	5.3.4.3.4.4		Morning	0.5 days	Thu 9/2/21	Thu 9/2/21		$0.00	0 hrs
765	5.3.4.3.4.4.1		EUT - AMS A (ONSITE)	0.5 days	Thu 9/2/21	Thu 9/2/21		$0.00	0 hrs
766	5.3.4.3.4.4.		EUT - AMS B (ONSITE)	0.5 days	Thu 9/2/21	Thu 9/2/21		$0.00	0 hrs
767	5.3.4.3.4.4		Afternoon	0.5 days	Thu 9/2/21	Thu 9/2/21		$0.00	0 hrs
768	5.3.4.3.4.4.		EUT - AMS Division Admin	0.5 days	Thu 9/2/21	Thu 9/2/21		$0.00	0 hrs
769	5.3.4.3.4.4.		EUT - Storeroom Transaction	0.5 days	Thu 9/2/21	Thu 9/2/21		$0.00	0 hrs
770	5.3.4.3.4.5		Day 5	1 day	Fri 9/3/21	Fri 9/3/21		$1,833.76	32 hrs
771	5.3.4.3.4.5		Morning	0.5 days	Fri 9/3/21	Fri 9/3/21		$0.00	0 hrs
772	5.3.4.3.4.5.		EUT - Storeroom Admin	0.5 days	Fri 9/3/21	Fri 9/3/21		$0.00	0 hrs
773	5.3.4.3.4.5.		EUT - AMS A (Reinforcement)	0.5 days	Fri 9/3/21	Fri 9/3/21		$0.00	0 hrs
774	5.3.4.3.4.5		Afternoon	0.5 days	Fri 9/3/21	Fri 9/3/21		$0.00	0 hrs
775	5.3.4.3.4.5.		EUT - AMS B (Reinforcement)	0.5 days	Fri 9/3/21	Fri 9/3/21		$0.00	0 hrs
776	5.3.4.3.4.5.		EUT - AMS B (Reinforcement)	0.5 days	Fri 9/3/21	Fri 9/3/21		$0.00	0 hrs
777	5.3.4.3.5		Week 5 - AMS Real Estate Management (Reinforcement)	2 days	Tue 9/7/21	Wed 9/8/21		$4,317.29	67 hrs
778	5.3.4.3.5.1		Day 1	1 day	Tue 9/7/21	Tue 9/7/21		$1,833.76	32 hrs
779	5.3.4.3.5.1		Morning	0.5 days	Tue 9/7/21	Tue 9/7/21		$0.00	0 hrs
780	5.3.4.3.5.1.		EUT - AMS A (Reinforcement)	0.5 days	Tue 9/7/21	Tue 9/7/21		$0.00	0 hrs
781	5.3.4.3.5.1.		EUT - AMS B (Reinforcement)	0.5 days	Tue 9/7/21	Tue 9/7/21		$0.00	0 hrs
782	5.3.4.3.5.1		Afternoon	0.5 days	Tue 9/7/21	Tue 9/7/21		$0.00	0 hrs
783	5.3.4.3.5.1.		EUT - AMS A (Reinforcement)	0.5 days	Tue 9/7/21	Tue 9/7/21		$0.00	0 hrs
784	5.3.4.3.5.1.		EUT - AMS B (Reinforcement)	0.5 days	Tue 9/7/21	Tue 9/7/21		$0.00	0 hrs
785	5.3.4.3.5.2		Day 2	1 day	Wed 9/8/21	Wed 9/8/21		$1,833.76	32 hrs
786	5.3.4.3.5.2		Morning	0.5 days	Wed 9/8/21	Wed 9/8/21		$0.00	0 hrs
787	5.3.4.3.5.2.1		EUT - AMS A (Reinforcement)	0.5 days	Wed 9/8/21	Wed 9/8/21		$0.00	0 hrs
788	5.3.4.3.5.2.		EUT - AMS B (Reinforcement)	0.5 days	Wed 9/8/21	Wed 9/8/21		$0.00	0 hrs
789	5.3.4.3.5.2		Afternoon	0.5 days	Wed 9/8/21	Wed 9/8/21		$0.00	0 hrs
790	5.3.4.3.5.2.		EUT - AMS A (Reinforcement)	0.5 days	Wed 9/8/21	Wed 9/8/21		$0.00	0 hrs
791	5.3.4.3.5.2.		EUT - AMS B (Reinforcement)	0.5 days	Wed 9/8/21	Wed 9/8/21		$0.00	0 hrs
792	5.3.4.3.6		Week 6 - AMS Solid Waste	4 days	Mon 10/11/21	Thu 10/14/21		$8,634.58	134 hrs
793	5.3.4.3.6.1		Day 1	1 day	Mon 10/11/21	Mon 10/11/21		$1,833.76	32 hrs
794	5.3.4.3.6.1		Morning	0.5 days	Mon 10/11/21	Mon 10/11/21		$0.00	0 hrs
795	5.3.4.3.6.1.		EUT - AMS A (ONSITE)	0.5 days	Mon 10/11/21	Mon 10/11/21		$0.00	0 hrs
796	5.3.4.3.6.1.		EUT - AMS A (ONSITE)	0.5 days	Mon 10/11/21	Mon 10/11/21		$0.00	0 hrs
797	5.3.4.3.6.1		Afternoon	0.5 days	Mon 10/11/21	Mon 10/11/21		$0.00	0 hrs
798	5.3.4.3.6.1.		EUT - AMS B (ONSITE)	0.5 days	Mon 10/11/21	Mon 10/11/21		$0.00	0 hrs
799	5.3.4.3.6.1.		EUT - AMS B (ONSITE)	0.5 days	Mon 10/11/21	Mon 10/11/21		$0.00	0 hrs
800	5.3.4.3.6.2		Day 2	1 day	Tue 10/12/21	Tue 10/12/21		$1,833.76	32 hrs
801	5.3.4.3.6.2		Morning	0.5 days	Tue 10/12/21	Tue 10/12/21		$0.00	0 hrs
802	5.3.4.3.6.2.1		EUT - AMS A (ONSITE)	0.5 days	Tue 10/12/21	Tue 10/12/21		$0.00	0 hrs
803	5.3.4.3.6.2.		EUT - AMS A (ONSITE)	0.5 days	Tue 10/12/21	Tue 10/12/21		$0.00	0 hrs
804	5.3.4.3.6.2		Afternoon	0.5 days	Tue 10/12/21	Tue 10/12/21		$0.00	0 hrs
805	5.3.4.3.6.2.		EUT - AMS B (ONSITE)	0.5 days	Tue 10/12/21	Tue 10/12/21		$0.00	0 hrs
806	5.3.4.3.6.2.		EUT - AMS B (ONSITE)	0.5 days	Tue 10/12/21	Tue 10/12/21		$0.00	0 hrs

ID	WBS	Deltek Phase	Task Name	Duration	Start	Finish	Note	Cost	Work
807	5.3.4.3.6.3		Day 3	1 day	Wed 10/13/21	Wed 10/13/21		$1,833.76	32 hrs
808	5.3.4.3.6.3		Morning	0.5 days	Wed 10/13/21	Wed 10/13/21		$0.00	0 hrs
809	5.3.4.3.6.3.1		EUT - AMS Division Admin	0.5 days	Wed 10/13/21	Wed 10/13/21		$0.00	0 hrs
810	5.3.4.3.6.3.		EUT - Storeroom Transaction	0.5 days	Wed 10/13/21	Wed 10/13/21		$0.00	0 hrs
811	5.3.4.3.6.3		Afternoon	0.5 days	Wed 10/13/21	Wed 10/13/21		$0.00	0 hrs
812	5.3.4.3.6.3.		EUT - Storeroom Admin	0.5 days	Wed 10/13/21	Wed 10/13/21		$0.00	0 hrs
813	5.3.4.3.6.4		Day 4	1 day	Thu 10/14/21	Thu 10/14/21		$1,833.76	32 hrs
814	5.3.4.3.6.4		Morning	0.5 days	Thu 10/14/21	Thu 10/14/21		$0.00	0 hrs
815	5.3.4.3.6.4.1		EUT - AMS A (Reinforcement)	0.5 days	Thu 10/14/21	Thu 10/14/21		$0.00	0 hrs
816	5.3.4.3.6.4.		EUT - AMS A (Reinforcement)	0.5 days	Thu 10/14/21	Thu 10/14/21		$0.00	0 hrs
817	5.3.4.3.6.4		Afternoon	0.5 days	Thu 10/14/21	Thu 10/14/21		$0.00	0 hrs
818	5.3.4.3.6.4.		EUT - AMS B (Reinforcement)	0.5 days	Thu 10/14/21	Thu 10/14/21		$0.00	0 hrs
819	5.3.4.3.6.4.		EUT - AMS B (Reinforcement)	0.5 days	Thu 10/14/21	Thu 10/14/21		$0.00	0 hrs
820	5.3.4.3.7		Travel for EUT	74 days	Mon 7/5/21	Fri 10/15/21		$26,086.56	48 hrs
821	5.3.4.3.7.1		Travel for EUT - Week 1	5 days	Mon 7/5/21	Fri 7/9/21		$3,872.76	8 hrs
822	5.3.4.3.7.2		Travel for EUT - Week 2	5 days	Mon 7/26/21	Fri 7/30/21		$4,442.76	8 hrs
823	5.3.4.3.7.3		Travel for EUT - Week 3	5 days	Mon 8/2/21	Fri 8/6/21		$4,442.76	8 hrs
824	5.3.4.3.7.4		Travel for EUT - Week 4	5 days	Mon 8/9/21	Fri 8/13/21		$4,442.76	8 hrs
825	5.3.4.3.7.5		Travel for EUT - Week 5	5 days	Tue 9/7/21	Mon 9/13/21		$4,442.76	8 hrs
826	5.3.4.3.7.6		Travel for EUT - Week 6	5 days	Mon 10/11/21	Fri 10/15/21		$4,442.76	8 hrs
827	5.4		Go-Live Support	84 days	Mon 7/12/21	Fri 11/5/21		$261,146.62	2,142 hrs
828	5.4.1		Woolpert to Prepare for On-Site Go-Live Support	1 day	Mon 7/12/21	Mon 7/12/21		$5,934.46	34 hrs
829	5.4.2		Integrations Go-live planning	7 days	Tue 7/13/21	Wed 7/21/21		$12,836.32	56 hrs
830	5.4.2.1		Develop Rollout Plan	2 days	Tue 7/13/21	Wed 7/14/21		$3,667.52	16 hrs
831	5.4.2.2		Production Deployment Support	5 days	Thu 7/15/21	Wed 7/21/21		$9,168.80	40 hrs
832	5.4.3		Utilities Go-Live Support - On-Site	9 days	Tue 7/13/21	Fri 7/23/21		$35,863.84	344 hrs
833	5.4.3.1	Go-Live	Woolpert to Migrate AMS Configuration to Production En	3 days	Tue 7/13/21	Thu 7/15/21		$10,344.96	48 hrs
834	5.4.3.2	Go-Live	Utilities On-Site Go-Live Support Week 1 (On-Site Task)	5 days	Mon 7/19/21	Fri 7/23/21		$17,642.40	280 hrs
835	5.4.3.3		Travel for Go Live Support	5 days	Mon 7/19/21	Fri 7/23/21		$7,876.48	16 hrs
836	5.4.3.3.1		Travel for Go-Live Support	5 days	Mon 7/19/21	Fri 7/23/21		$7,876.48	16 hrs
837	5.4.4		PCR Go-Live Support - On-Site	10 days	Mon 8/9/21	Fri 8/20/21		$27,987.36	328 hrs
838	5.4.4.1	Go-Live	Woolpert to Migrate AMS Configuration to Production En	5 days	Mon 8/9/21	Fri 8/13/21		$10,344.96	48 hrs
839	5.4.4.2	Go-Live	PCR On-Site Go-Live Support Week 1 (On-Site Task)	5 days	Mon 8/16/21	Fri 8/20/21		$17,642.40	280 hrs
840	5.4.5		PW Go-Live Support - On-Site	10 days	Mon 8/9/21	Fri 8/20/21		$9,052.72	28 hrs
841	5.4.5.1	Go-Live	Woolpert to Migrate AMS Configuration to Production En	5 days	Mon 8/9/21	Fri 8/13/21		$2,586.24	12 hrs
842	5.4.5.2	Go-Live	PW On-Site Go-Live Support Week 1 (On-Site Task)	5 days	Mon 8/16/21	Fri 8/20/21	No li	$0.00	0 hrs
843	5.4.5.3		Travel for Go Live Support	5 days	Mon 8/16/21	Fri 8/20/21		$6,466.48	16 hrs
844	5.4.5.3.1		Travel for Go-Live Support	5 days	Mon 8/16/21	Fri 8/20/21	Trav	$6,466.48	16 hrs
845	5.4.6		REM Go-Live Support - On-Site	12 days	Thu 9/9/21	Fri 9/24/21		$35,863.84	344 hrs
846	5.4.6.1	Go-Live	Woolpert to Migrate AMS Configuration to Production En	5 days	Thu 9/9/21	Wed 9/15/21		$10,344.96	48 hrs
847	5.4.6.2	Go-Live	REM On-Site Go-Live Support Week 1 (On-Site Task)	5 days	Mon 9/20/21	Fri 9/24/21		$17,642.40	280 hrs
848	5.4.6.3		Travel for Go Live Support	5 days	Mon 9/20/21	Fri 9/24/21		$7,876.48	16 hrs
849	5.4.6.3.1		Travel for Go-Live Support	5 days	Mon 9/20/21	Fri 9/24/21		$7,876.48	16 hrs
850	5.4.7		Fleet Go-Live Support - On-Site	10 days	Mon 9/27/21	Fri 10/8/21		$35,901.84	344 hrs
851	5.4.7.1	Go-Live	Woolpert to Migrate AMS Configuration to Production En	5 days	Mon 9/27/21	Fri 10/1/21		$10,344.96	48 hrs
852	5.4.7.2	Go-Live	Fleet On-Site Go-Live Support Week 1 (On-Site Task)	5 days	Mon 10/4/21	Fri 10/8/21		$17,642.40	280 hrs

ID	WBS	Deltek Phase	Task Name	Duration	Start	Finish	Note	Cost	Work
853	5.4.7.3		Travel for Waste Go Live Support	5 days	Mon 10/4/21	Fri 10/8/21		$7,914.48	16 hrs
854	5.4.7.3.1		Travel for Waste Go-Live Support	5 days	Mon 10/4/21	Fri 10/8/21		$7,914.48	16 hrs
855	5.4.8		Solid Waste Go-Live Support - On-Site	10 days	Mon 10/18/21	Fri 10/29/21		$35,863.84	344 hrs
856	5.4.8.1	Go-Live	Woolpert to Migrate AMS Configuration to Production En	5 days	Mon 10/18/21	Fri 10/22/21		$10,344.96	48 hrs
857	5.4.8.2	Go-Live	Solid Waste On-Site Go-Live Support Week 1 (On-Site Tas	5 days	Mon 10/25/21	Fri 10/29/21		$17,642.40	280 hrs
858	5.4.8.3		Travel for Solid Waste Go Live Support	5 days	Mon 10/25/21	Fri 10/29/21		$7,876.48	16 hrs
859	5.4.8.3.1		Travel for Solid Waste Go-Live Support	5 days	Mon 10/25/21	Fri 10/29/21		$7,876.48	16 hrs
860	5.4.9		Remote Go-Live Integration Support	83 days	Tue 7/13/21	Fri 11/5/21		$61,842.40	320 hrs
861	5.4.9.1		Remote Go-Live Support	74 days	Mon 7/26/21	Fri 11/5/21		$44,453.60	200 hrs
862	5.4.9.2		System Integrations Remote Go-Live Support	83 days	Tue 7/13/21	Fri 11/5/21		$17,388.80	120 hrs
863	5.5		Phase 5: Quality Control	83 days	Tue 7/13/21	Fri 11/5/21	[8.7.	$29,249.55	0 hrs
864	5.6		Phase 5: Acceptance and Close	3 days	Mon 11/8/21	Fri 11/12/21		$0.00	9.6 hrs
865	6		PHASE 6: Extended Support (COUNTY TASK)	25 days	Mon 11/15/20	Fri 12/31/21		$0.00	0 hrs
866	7		PHASE 7: Organizational Change Management (OCM)	512 days	Mon 10/28/19	Fri 12/31/21		$0.00	0 hrs
867	8		PHASE 8: GIS Readiness Support	724 days	Mon 1/14/19	Mon 1/31/22		$843,184.16	8,010.8 hrs
868	8.1		Geodatabase Data Model Development	161 days	Mon 1/14/19	Thu 9/5/19		$283,212.98	2,804.8 hrs
869	8.1.1	xx	Woolpert to Facilitate Geodatabase Workshops Round 1	44 days	Mon 1/14/19	Fri 3/15/19		$75,679.88	791.2 hrs
870	8.1.1.1		Woolpert to Prepare for GIS Database Planning	5 days	Mon 1/14/19	Fri 1/18/19		$5,982.18	32 hrs
871	8.1.1.2		County to Prepare for GIS Database Planning	10 days	Mon 1/14/19	Mon 1/28/19		$0.00	88 hrs
872	8.1.1.3		Round 1: 4 Week Cycle 1	20 days	Tue 1/22/19	Mon 2/18/19		$35,327.88	337.2 hrs
873	8.1.1.3.1		REM	Facility Geodatabase Workshop Round 1 Cycle 1	2 days	Tue 1/22/19	Wed 1/23/19		$6,355.32	84 hrs
874	8.1.1.3.2		Utilities	Plant Geodatabase Workshop Round 1 Cycle 1	2 days	Thu 1/24/19	Fri 1/25/19		$6,355.32	84 hrs
875	8.1.1.3.3		Travel for Geodatabase Workshop Round 1 Cycle 1	4 days	Tue 1/22/19	Fri 1/25/19		$6,836.48	16 hrs
876	8.1.1.3.4		Woolpert to Update Geodatabase Documentation	5 days	Mon 1/28/19	Fri 2/1/19		$1,634.68	10 hrs
877	8.1.1.3.5		Woolpert to Perform Geodatabase Updates to Develop	10 days	Mon 1/28/19	Fri 2/8/19		$6,861.20	40 hrs
878	8.1.1.3.6		Woolpert to Submit Geodatabase Documentation to C	1 day	Mon 2/4/19	Mon 2/4/19		$0.00	0 hrs
879	8.1.1.3.7		County to Review Geodatabase Documentation	4.5 days	Mon 2/4/19	Mon 2/11/19		$0.00	43.2 hrs
880	8.1.1.3.8		Woolpert to Facilitate Joint Remote Review Meeting R	4 hrs	Mon 2/11/19	Mon 2/11/19		$2,219.60	30 hrs
881	8.1.1.3.9		Woolpert to Update Geodatabase Documentation	5 days	Tue 2/12/19	Mon 2/18/19		$1,634.68	10 hrs
882	8.1.1.3.10		Woolpert to Perform Geodatabase Updates to Develop	5 days	Tue 2/12/19	Mon 2/18/19		$3,430.60	20 hrs
883	8.1.1.4		Round 1: 4 Week Cycle 2	19 days	Tue 2/19/19	Fri 3/15/19		$34,369.82	334 hrs
884	8.1.1.4.1		Parks	Park Geodatabase Workshop Round 1 Cycle 2 (	1 day	Tue 2/19/19	Tue 2/19/19		$3,177.66	42 hrs
885	8.1.1.4.2		REM	Fleet Geodatabase Workshop Round 1 Cycle 2 (	0.5 days	Wed 2/20/19	Wed 2/20/19		$1,588.83	21 hrs
886	8.1.1.4.3		Solid Waste	Recycle and Shared Geodatabase Worksh	1 day	Wed 2/20/19	Thu 2/21/19		$3,177.66	42 hrs
887	8.1.1.4.4		Public Works	Environmental Management Geodatabase Workshop Round 1 Cycle 2 (ONSITE	0.5 days	Thu 2/21/19	Thu 2/21/19		$1,588.83	21 hrs
888	8.1.1.4.5		Travel for Geodatabase Workshop Round 1 Cycle 2	3 days	Tue 2/19/19	Thu 2/21/19		$6,836.48	16 hrs
889	8.1.1.4.6		Woolpert to Update Geodatabase Documentation	5 days	Fri 2/22/19	Thu 2/28/19		$1,634.68	10 hrs
890	8.1.1.4.7		Woolpert to Perform Geodatabase Updates to Develop	10 days	Fri 2/22/19	Thu 3/7/19		$6,861.20	40 hrs
891	8.1.1.4.8		Woolpert to Submit Geodatabase Documentation to C	1 day	Fri 3/1/19	Fri 3/1/19		$0.00	0 hrs
892	8.1.1.4.9		County to Review Geodatabase Documentation	4 days	Mon 3/4/19	Thu 3/7/19		$0.00	48 hrs
893	8.1.1.4.10		Woolpert to Facilitate Joint Remote Review Meeting R	8 hrs	Thu 3/7/19	Fri 3/8/19		$4,439.20	64 hrs
894	8.1.1.4.11		Woolpert to Update Geodatabase Documentation	5 days	Mon 3/11/19	Fri 3/15/19		$1,634.68	10 hrs
895	8.1.1.4.12		Woolpert to Perform Geodatabase Updates to Develop	5 days	Mon 3/11/19	Fri 3/15/19		$3,430.60	20 hrs
896	8.1.2	xx	Woolpert to Facilitate Geodatabase Workshops Round 2	39 days	Mon 3/18/19	Thu 5/9/19		$69,177.70	671.2 hrs
897	8.1.2.1		Round 2: 4 Week Cycle 1	20 days	Mon 3/18/19	Fri 4/12/19		$35,327.88	337.2 hrs

ID	WBS	Deltek Phase	Task Name	Duration	Start	Finish	Note	Cost	Work
898	8.1.2.1.1		REM | Facility Geodatabase Workshop Round 2 Cycle 1	2 days	Mon 3/18/19	Tue 3/19/19		$6,355.32	84 hrs
899	8.1.2.1.2		Utilities | Plant Geodatabase Workshop Round 2 Cycle	2 days	Wed 3/20/19	Thu 3/21/19		$6,355.32	84 hrs
900	8.1.2.1.3		Travel for Geodatabase Workshop Round 2 Cycle 1	4 days	Mon 3/18/19	Thu 3/21/19		$6,836.48	16 hrs
901	8.1.2.1.4		Woolpert to Update Geodatabase Documentation	5 days	Fri 3/22/19	Thu 3/28/19		$1,634.68	10 hrs
902	8.1.2.1.5		Woolpert to Perform Geodatabase Updates to Develop	10 days	Fri 3/22/19	Thu 4/4/19		$6,861.20	40 hrs
903	8.1.2.1.6		Woolpert to Submit Geodatabase Documentation to C(	1 day	Fri 3/29/19	Fri 3/29/19		$0.00	0 hrs
904	8.1.2.1.7		County to Review Geodatabase Documentation	4.5 days	Fri 3/29/19	Fri 4/5/19		$0.00	43.2 hrs
905	8.1.2.1.8		Woolpert to Facilitate Joint Remote Review Meeting R(	4 hrs	Fri 4/5/19	Fri 4/5/19		$2,219.60	30 hrs
906	8.1.2.1.9		Woolpert to Update Geodatabase Documentation	5 days	Mon 4/8/19	Fri 4/12/19		$1,634.68	10 hrs
907	8.1.2.1.10		Woolpert to Perform Geodatabase Updates to Develop	5 days	Mon 4/8/19	Fri 4/12/19		$3,430.60	20 hrs
908	**8.1.2.2**		**Round 2: 4 Week Cycle 2**	**19 days**	**Mon 4/15/19**	**Thu 5/9/19**		**$33,849.82**	**334 hrs**
909	8.1.2.2.1		Parks | Park Geodatabase Workshop Round 2 Cycle 2 ((	1 day	Mon 4/15/19	Mon 4/15/19		$3,177.66	42 hrs
910	8.1.2.2.2		REM | Fleet Geodatabase Workshop Round 2 Cycle 2 ((	0.5 days	Tue 4/16/19	Tue 4/16/19		$1,588.83	21 hrs
911	8.1.2.2.3		Solid Waste | Recycle and Shared Geodatabase Worksh	1 day	Tue 4/16/19	Wed 4/17/19		$3,177.66	42 hrs
912	8.1.2.2.4		Public Works | Environmental Management Geodatabase Workshop Round 2 Cycle 2 (ONSITE	0.5 days	Wed 4/17/19	Wed 4/17/19		$1,588.83	21 hrs
913	8.1.2.2.5		Travel for Geodatabase Workshop Round 2 Cycle 2	3 days	Mon 4/15/19	Wed 4/17/19		$6,316.48	16 hrs
914	8.1.2.2.6		Woolpert to Update Geodatabase Documentation	5 days	Thu 4/18/19	Wed 4/24/19		$1,634.68	10 hrs
915	8.1.2.2.7		Woolpert to Perform Geodatabase Updates to Develop	10 days	Thu 4/18/19	Wed 5/1/19		$6,861.20	40 hrs
916	8.1.2.2.8		Woolpert to Submit Geodatabase Documentation to C(	1 day	Thu 4/25/19	Thu 4/25/19		$0.00	0 hrs
917	8.1.2.2.9		County to Review Geodatabase Documentation	4 days	Fri 4/26/19	Wed 5/1/19		$0.00	48 hrs
918	8.1.2.2.10		Woolpert to Facilitate Joint Remote Review Meeting R(	8 hrs	Wed 5/1/19	Thu 5/2/19		$4,439.20	64 hrs
919	8.1.2.2.11		Woolpert to Update Geodatabase Documentation	5 days	Fri 5/3/19	Thu 5/9/19		$1,634.68	10 hrs
920	8.1.2.2.12		Woolpert to Perform Geodatabase Updates to Develop	5 days	Fri 5/3/19	Thu 5/9/19		$3,430.60	20 hrs
921	**8.1.3**	xx	**Woolpert to Facilitate Geodatabase Workshops Round 3**	**39 days**	**Fri 5/10/19**	**Thu 7/11/19**		**$69,177.70**	**671.2 hrs**
922	**8.1.3.1**		**Round 3: 4 Week Cycle 1**	**20 days**	**Fri 5/10/19**	**Fri 6/7/19**		**$35,327.88**	**337.2 hrs**
923	8.1.3.1.1		REM | Facility Geodatabase Workshop Round 3 Cycle 1	2 days	Fri 5/10/19	Mon 5/13/19		$6,355.32	84 hrs
924	8.1.3.1.2		Utilities | Plant Geodatabase Workshop Round 3 Cycle	2 days	Tue 5/14/19	Wed 5/15/19		$6,355.32	84 hrs
925	8.1.3.1.3		Travel for Geodatabase Workshop Round 3 Cycle 1	4 days	Fri 5/10/19	Wed 5/15/19		$6,836.48	16 hrs
926	8.1.3.1.4		Woolpert to Update Geodatabase Documentation	5 days	Thu 5/16/19	Wed 5/22/19		$1,634.68	10 hrs
927	8.1.3.1.5		Woolpert to Perform Geodatabase Updates to Develop	10 days	Thu 5/16/19	Thu 5/30/19		$6,861.20	40 hrs
928	8.1.3.1.6		Woolpert to Submit Geodatabase Documentation to C(	1 day	Thu 5/23/19	Thu 5/23/19		$0.00	0 hrs
929	8.1.3.1.7		County to Review Geodatabase Documentation	4.5 days	Thu 5/23/19	Fri 5/31/19		$0.00	43.2 hrs
930	8.1.3.1.8		Woolpert to Facilitate Joint Remote Review Meeting R(	4 hrs	Fri 5/31/19	Fri 5/31/19		$2,219.60	30 hrs
931	8.1.3.1.9		Woolpert to Update Geodatabase Documentation	5 days	Mon 6/3/19	Fri 6/7/19		$1,634.68	10 hrs
932	8.1.3.1.10		Woolpert to Perform Geodatabase Updates to Develop	5 days	Mon 6/3/19	Fri 6/7/19		$3,430.60	20 hrs
933	**8.1.3.2**		**Round 3: 4 Week Cycle 2**	**19 days**	**Mon 6/10/19**	**Thu 7/11/19**		**$33,849.82**	**334 hrs**
934	8.1.3.2.1		Parks | Park Geodatabase Workshop Round 3 Cycle 2 ((	1 day	Mon 6/10/19	Mon 6/10/19		$3,177.66	42 hrs
935	8.1.3.2.2		REM | Fleet Geodatabase Workshop Round 3 Cycle 2 ((	0.5 days	Tue 6/11/19	Tue 6/11/19		$1,588.83	21 hrs
936	8.1.3.2.3		Solid Waste | Recycle and Shared Geodatabase Worksh	1 day	Tue 6/11/19	Wed 6/12/19		$3,177.66	42 hrs
937	8.1.3.2.4		Public Works | Environmental Management Geodatabase Workshop Round 3 Cycle 2 (ONSITE	0.5 days	Wed 6/12/19	Wed 6/12/19		$1,588.83	21 hrs
938	8.1.3.2.5		Travel for Geodatabase Workshop Round 3 Cycle 2	3 days	Mon 6/10/19	Wed 6/12/19		$6,316.48	16 hrs
939	8.1.3.2.6		Woolpert to Update Geodatabase Documentation	5 days	Thu 6/13/19	Wed 6/19/19		$1,634.68	10 hrs
940	8.1.3.2.7		Woolpert to Perform Geodatabase Updates to Develop	10 days	Thu 6/13/19	Wed 6/26/19		$6,861.20	40 hrs
941	8.1.3.2.8		Woolpert to Submit Geodatabase Documentation to C(	1 day	Thu 6/20/19	Thu 6/20/19		$0.00	0 hrs

ID	WBS	Deltek Phase	Task Name	Duration	Start	Finish	Note	Cost	Work
942	8.1.3.2.9		County to Review Geodatabase Documentation	4 days	Fri 6/21/19	Wed 6/26/19		$0.00	48 hrs
943	8.1.3.2.10		Woolpert to Facilitate Joint Remote Review Meeting R‹	8 hrs	Wed 6/26/19	Thu 6/27/19		$4,439.20	64 hrs
944	8.1.3.2.11		Woolpert to Update Geodatabase Documentation	5 days	Fri 6/28/19	Thu 7/11/19		$1,634.68	10 hrs
945	8.1.3.2.12		Woolpert to Perform Geodatabase Updates to Develop	5 days	Fri 6/28/19	Thu 7/11/19		$3,430.60	20 hrs
946	8.1.4	xx	**Woolpert to Facilitate Geodatabase Workshops Round 4**	**39 days**	**Fri 7/12/19**	**Thu 9/5/19**		**$69,177.70**	**671.2 hrs**
947	8.1.4.1		**Round 4: 4 Week Cycle 1**	**20 days**	**Fri 7/12/19**	**Thu 8/8/19**		**$35,327.88**	**337.2 hrs**
948	8.1.4.1.1		REM | Facility Geodatabase Workshop Round 4 Cycle 1	2 days	Fri 7/12/19	Mon 7/15/19		$6,355.32	84 hrs
949	8.1.4.1.2		Utilities | Plant Geodatabase Workshop Round 4 Cycle	2 days	Tue 7/16/19	Wed 7/17/19		$6,355.32	84 hrs
950	8.1.4.1.3		Travel for Geodatabase Workshop Round 4 Cycle 1	4 days	Fri 7/12/19	Wed 7/17/19		$6,836.48	16 hrs
951	8.1.4.1.4		Woolpert to Update Geodatabase Documentation	5 days	Thu 7/18/19	Wed 7/24/19		$1,634.68	10 hrs
952	8.1.4.1.5		Woolpert to Perform Geodatabase Updates to Develop	10 days	Thu 7/18/19	Wed 7/31/19		$6,861.20	40 hrs
953	8.1.4.1.6		Woolpert to Submit Geodatabase Documentation to C‹	1 day	Thu 7/25/19	Thu 7/25/19		$0.00	0 hrs
954	8.1.4.1.7		County to Review Geodatabase Documentation	4.5 days	Thu 7/25/19	Thu 8/1/19		$0.00	43.2 hrs
955	8.1.4.1.8		Woolpert to Facilitate Joint Remote Review Meeting R‹	4 hrs	Thu 8/1/19	Thu 8/1/19		$2,219.60	30 hrs
956	8.1.4.1.9		Woolpert to Update Geodatabase Documentation	5 days	Fri 8/2/19	Thu 8/8/19		$1,634.68	10 hrs
957	8.1.4.1.10		Woolpert to Perform Geodatabase Updates to Develop	5 days	Fri 8/2/19	Thu 8/8/19		$3,430.60	20 hrs
958	8.1.4.2		**Round 4: 4 Week Cycle 2**	**19 days**	**Fri 8/9/19**	**Thu 9/5/19**		**$33,849.82**	**334 hrs**
959	8.1.4.2.1		Parks | Park Geodatabase Workshop Round 4 Cycle 2 (‹	1 day	Fri 8/9/19	Fri 8/9/19		$3,177.66	42 hrs
960	8.1.4.2.2		REM | Fleet Geodatabase Workshop Round 4 Cycle 2 (‹	0.5 days	Mon 8/12/19	Mon 8/12/19		$1,588.83	21 hrs
961	8.1.4.2.3		Solid Waste | Recycle and Shared Geodatabase Worksl	1 day	Mon 8/12/19	Tue 8/13/19		$3,177.66	42 hrs
962	8.1.4.2.4		Public Works | Environmental Management Geodatabase Workshop Round 4 Cycle 2 (ONSITE	0.5 days	Tue 8/13/19	Tue 8/13/19		$1,588.83	21 hrs
963	8.1.4.2.5		Travel for Geodatabase Workshop Round 4 Cycle 2	3 days	Fri 8/9/19	Tue 8/13/19		$6,316.48	16 hrs
964	8.1.4.2.6		Woolpert to Update Geodatabase Documentation	5 days	Wed 8/14/19	Tue 8/20/19		$1,634.68	10 hrs
965	8.1.4.2.7		Woolpert to Perform Geodatabase Updates to Develop	10 days	Wed 8/14/19	Tue 8/27/19		$6,861.20	40 hrs
966	8.1.4.2.8		Woolpert to Submit Geodatabase Documentation to C‹	1 day	Wed 8/21/19	Wed 8/21/19		$0.00	0 hrs
967	8.1.4.2.9		County to Review Geodatabase Documentation	4 days	Thu 8/22/19	Tue 8/27/19		$0.00	48 hrs
968	8.1.4.2.10		Woolpert to Facilitate Joint Remote Review Meeting R‹	8 hrs	Tue 8/27/19	Wed 8/28/19		$4,439.20	64 hrs
969	8.1.4.2.11		Woolpert to Update Geodatabase Documentation	5 days	Thu 8/29/19	Thu 9/5/19		$1,634.68	10 hrs
970	8.1.4.2.12		Woolpert to Perform Geodatabase Updates to Develop	5 days	Thu 8/29/19	Thu 9/5/19		$3,430.60	20 hrs
971	8.2		**GIS Data Migration and Tools for GIS**	**157 days**	**Fri 9/6/19**	**Wed 5/6/20**		**$363,659.02**	**3,524 hrs**
972	8.2.1	xx	**GIS Data Planning**	**67 days**	**Fri 9/6/19**	**Tue 12/17/19**		**$109,701.02**	**1,284 hrs**
973	8.2.1.1		Woolpert to Prepare for Data Development Planning Woi	5 days	Fri 9/6/19	Thu 9/12/19		$5,982.18	32 hrs
974	8.2.1.2		County to Prepare for Data Development Planning Works	5 days	Fri 9/6/19	Thu 9/12/19		$0.00	22 hrs
975	8.2.1.3		**Round 1**	**26 days**	**Fri 9/13/19**	**Fri 10/18/19**		**$45,523.10**	**540 hrs**
976	8.2.1.3.1		**Woolpert to Facilitate Data Development Planning W‹**	**5 days**	**Fri 9/13/19**	**Thu 9/19/19**		**$23,244.78**	**226 hrs**
977	8.2.1.3.1.1		Parks | Park Data Development Planning Workshop ‹	1 day	Fri 9/13/19	Fri 9/13/19		$3,177.66	42 hrs
978	8.2.1.3.1.2		Public Works | Environmental Management Data Development Planning Workshop #1 (ONSITE TASK)	1 day	Mon 9/16/19	Mon 9/16/19		$3,177.66	42 hrs
979	8.2.1.3.1.3		REM | Fleet Data Development Planning Workshop ‹	1 day	Tue 9/17/19	Tue 9/17/19		$3,177.66	42 hrs
980	8.2.1.3.1.4		Solid Waste | Recycle and Shared Data Development Planning Workshop #1 (ONSITE TASK)	1 day	Wed 9/18/19	Wed 9/18/19		$3,177.66	42 hrs
981	8.2.1.3.1.5		Utilities Data Development Planning Workshop #1 (C‹	1 day	Thu 9/19/19	Thu 9/19/19		$3,177.66	42 hrs
982	8.2.1.3.1.6		Travel for Data Development Planning Workshop #1	5 days	Fri 9/13/19	Thu 9/19/19		$7,356.48	16 hrs
983	8.2.1.3.2		Woolpert to Update GIS Data Planning Documentation	6 days	Fri 9/20/19	Fri 9/27/19		$12,350.16	120 hrs
984	8.2.1.3.3		Woolpert to Submit GIS Data Planning Documentation	1 day	Mon 9/30/19	Mon 9/30/19		$0.00	0 hrs

ID	WBS	Deltek Phase	Task Name	Duration	Start	Finish	Note	Cost	Work
985	8.2.1.3.4		County to Review GIS Data Planning Documentation	4 days	Tue 10/1/19	Fri 10/4/19		$0.00	48 hrs
986	8.2.1.3.5		Woolpert to Facilitate Joint Remote Review #1 of GIS D	8 hrs	Mon 10/7/19	Mon 10/7/19		$4,439.20	66 hrs
987	8.2.1.3.6		Woolpert to Update GIS Data Planning Documentation	4 days	Tue 10/8/19	Fri 10/11/19		$5,488.96	32 hrs
988	8.2.1.3.7		Woolpert to Submit GIS Data Planning Documentation	1 day	Mon 10/14/19	Mon 10/14/19		$0.00	0 hrs
989	8.2.1.3.8		County to Review GIS Data Planning Documentation	4 days	Tue 10/15/19	Fri 10/18/19		$0.00	48 hrs
990	**8.2.1.4**		**Round 2**	**36 days**	**Mon 10/21/19**	**Tue 12/17/19**		**$58,195.74**	**690 hrs**
991	**8.2.1.4.1**		**Woolpert to Facilitate Data Development Planning Wc**	**5 days**	**Mon 10/21/19**	**Fri 10/25/19**		**$23,244.78**	**226 hrs**
992	8.2.1.4.1.1		Parks | Park Data Development Planning Workshop	1 day	Mon 10/21/19	Mon 10/21/19		$3,177.66	42 hrs
993	8.2.1.4.1.2		Public Works | Environmental Management Data Development Planning Workshop #2 (ONSITE TASK)	1 day	Tue 10/22/19	Tue 10/22/19		$3,177.66	42 hrs
994	8.2.1.4.1.3		REM | Fleet Data Development Planning Workshop	1 day	Wed 10/23/19	Wed 10/23/19		$3,177.66	42 hrs
995	8.2.1.4.1.4		Solid Waste | Recycle and Shared Data Development Planning Workshop #2 (ONSITE TASK)	1 day	Thu 10/24/19	Thu 10/24/19		$3,177.66	42 hrs
996	8.2.1.4.1.5		Utilities Data Development Planning Workshop #2 (C	1 day	Fri 10/25/19	Fri 10/25/19		$3,177.66	42 hrs
997	8.2.1.4.1.6		Travel for Data Development Planning Workshop #2	5 days	Mon 10/21/19	Fri 10/25/19		$7,356.48	16 hrs
998	8.2.1.4.2		Woolpert to Update GIS Data Planning Documentation	6 days	Mon 10/28/19	Mon 11/4/19		$12,350.16	120 hrs
999	8.2.1.4.3		Woolpert to Submit GIS Data Planning Documentation	1 day	Tue 11/5/19	Tue 11/5/19		$0.00	0 hrs
1000	8.2.1.4.4		County to Review GIS Data Planning Documentation	4 days	Wed 11/6/19	Tue 11/12/19		$0.00	48 hrs
1001	8.2.1.4.5		Woolpert to Facilitate Joint Remote Review #2 of GIS D	8 hrs	Wed 11/13/19	Wed 11/13/19		$4,439.20	66 hrs
1002	8.2.1.4.6		Woolpert to Update GIS Data Planning Documentation	4 days	Thu 11/14/19	Tue 11/19/19		$5,488.96	32 hrs
1003	8.2.1.4.7		Woolpert to Submit GIS Data Planning Documentation	1 day	Wed 11/20/19	Wed 11/20/19		$0.00	0 hrs
1004	8.2.1.4.8		County to Review GIS Data Planning Documentation	4 days	Thu 11/21/19	Tue 12/3/19		$0.00	48 hrs
1005	8.2.1.4.9		Woolpert to Facilitate Joint Remote Review #3 of GIS D	8 hrs	Wed 12/4/19	Wed 12/4/19		$4,439.20	66 hrs
1006	8.2.1.4.10		Woolpert to Update GIS Data Planning Documentation	4 days	Thu 12/5/19	Tue 12/10/19		$5,488.96	32 hrs
1007	8.2.1.4.11		Woolpert to Submit GIS Data Planning Documentation	1 day	Wed 12/11/19	Wed 12/11/19		$2,744.48	16 hrs
1008	8.2.1.4.12		County to Review GIS Data Planning Documentation	3 days	Thu 12/12/19	Mon 12/16/19		$0.00	36 hrs
1009	8.2.1.4.13		County to Accept GIS Data Planning Documentation	1 day	Tue 12/17/19	Tue 12/17/19		$0.00	0 hrs
1010	**8.2.2**	xx	**Develop GIS Data Maintenance Tools (T&M Task)**	**90 days**	**Tue 12/17/19**	**Wed 5/6/20**		**$184,167.00**	**1,472 hrs**
1011	**8.2.2.1**		**Develop GIS Data Maintenance Tools**	**30 days**	**Tue 12/17/19**	**Wed 2/12/20**		**$51,331.72**	**336 hrs**
1012	8.2.2.1.1		Develop GIS Maintenance Tools Using Data Developme	25 days	Tue 12/17/19	Wed 2/5/20		$41,417.00	240 hrs
1013	8.2.2.1.2		Deploy GIS Maintenance Tools to Development Enviror	5 days	Wed 2/5/20	Wed 2/12/20		$9,914.72	96 hrs
1014	**8.2.2.2**		**Test GIS Data Maintenance Tools**	**35 days**	**Thu 2/13/20**	**Wed 4/1/20**		**$52,514.50**	**486 hrs**
1015	8.2.2.2.1		Develop GIS Maintenance Tools Testing Plan	5 days	Thu 2/13/20	Wed 2/19/20		$6,753.28	48 hrs
1016	**8.2.2.2.2**		**Woolpert to Facilitate GIS Data Maintenance Tool Tes**	**5 days**	**Thu 2/20/20**	**Wed 2/26/20**		**$26,165.26**	**226 hrs**
1017	8.2.2.2.2.1		Parks | Park GIS Data Maintenance Tool Testing (ON	1 day	Thu 2/20/20	Thu 2/20/20		$3,771.90	42 hrs
1018	8.2.2.2.2.2		Public Works | Environmental Management GIS Data Maintenance Tool Testing (ONSITE TASK)	1 day	Fri 2/21/20	Fri 2/21/20		$3,771.90	42 hrs
1019	8.2.2.2.2.3		REM | Fleet GIS Data Maintenance Tool Testing (ON:	1 day	Mon 2/24/20	Mon 2/24/20		$3,771.90	42 hrs
1020	8.2.2.2.2.4		Solid Waste | Recycle and Shared GIS Data Maintena	1 day	Tue 2/25/20	Tue 2/25/20		$3,771.90	42 hrs
1021	8.2.2.2.2.5		Utilities GIS Data Maintenance Tool Testing (ONSITE	1 day	Wed 2/26/20	Wed 2/26/20		$3,771.90	42 hrs
1022	8.2.2.2.2.6		Travel for GIS Data Maintenance Tool Testing	5 days	Thu 2/20/20	Wed 2/26/20		$7,305.76	16 hrs
1023	8.2.2.2.3		Perform GIS Data Maintenance Tool Updates	10 days	Wed 2/26/20	Wed 3/11/20		$16,693.60	112 hrs
1024	8.2.2.2.4		Deploy Update to GIS Data Maintenance Tools to Deve	5 days	Wed 3/11/20	Wed 3/18/20		$2,902.36	28 hrs
1025	8.2.2.2.5		County to Review Data Maintenance Tool Updates	9 days	Thu 3/19/20	Tue 3/31/20		$0.00	72 hrs
1026	8.2.2.2.6		County to Accept Data Maintenance Tool Updates	1 day	Wed 4/1/20	Wed 4/1/20		$0.00	0 hrs
1027	**8.2.2.3**	xx	**Deploy GIS Data Maintenance Tools**	**25 days**	**Wed 4/1/20**	**Wed 5/6/20**		**$80,320.78**	**650 hrs**

ID	WBS	Deltek Phase	Task Name	Duration	Start	Finish	Note	Cost	Work
1028	8.2.2.3.1		Develop User Guides	5 days	Wed 4/1/20	Wed 4/8/20		$16,693.60	88 hrs
1029	8.2.2.3.2		Deploy Data Maintenance Tools to Test, Training, and F	5 days	Wed 4/8/20	Wed 4/15/20		$4,957.36	48 hrs
1030	8.2.2.3.3		Woolpert to Prepare for GIS Data Maintenance Tool Tr	5 days	Thu 4/16/20	Wed 4/22/20		$6,339.30	30 hrs
1031	8.2.2.3.4		County to Prepare for GIS Data Maintenance Tool Trair	5 days	Thu 4/16/20	Wed 4/22/20		$0.00	32 hrs
1032	8.2.2.3.5		**Woolpert to Facilitate GIS Data Maintenance Tool Tra**	**5 days**	**Thu 4/23/20**	**Wed 4/29/20**		**$26,165.26**	**226 hrs**
1033	8.2.2.3.5.1		Parks | Park GIS Data Maintenance Tool Training (ON	1 day	Thu 4/23/20	Thu 4/23/20		$3,771.90	42 hrs
1034	8.2.2.3.5.2		Public Works | Environmental Management GIS Data Maintenance Tool Training (ONSITE TASK)	1 day	Fri 4/24/20	Fri 4/24/20		$3,771.90	42 hrs
1035	8.2.2.3.5.3		REM | Fleet GIS Data Maintenance Tool Training (ON	1 day	Mon 4/27/20	Mon 4/27/20		$3,771.90	42 hrs
1036	8.2.2.3.5.4		Solid Waste | Recycle and Shared GIS Data Maintena	1 day	Tue 4/28/20	Tue 4/28/20		$3,771.90	42 hrs
1037	8.2.2.3.5.5		Utilities GIS Data Maintenance Tool Training (ONSITE	1 day	Wed 4/29/20	Wed 4/29/20		$3,771.90	42 hrs
1038	8.2.2.3.5.6		Travel for GIS Data Maintenance Tool Training	5 days	Thu 4/23/20	Wed 4/29/20		$7,305.76	16 hrs
1039	8.2.2.3.6		**GIS Data Maintenance Tool Go Live Support**	**5 days**	**Thu 4/30/20**	**Wed 5/6/20**		**$26,165.26**	**226 hrs**
1040	8.2.2.3.6.1		Parks | Park GIS Data Maintenance Tool Go Live Sup	1 day	Thu 4/30/20	Thu 4/30/20		$3,771.90	42 hrs
1041	8.2.2.3.6.2		Public Works | Environmental Management GIS Data Maintenance Tool Go Live Support (ONSITE	1 day	Fri 5/1/20	Fri 5/1/20		$3,771.90	42 hrs
1042	8.2.2.3.6.3		REM | Fleet GIS Data Maintenance Tool Go Live Sup	1 day	Mon 5/4/20	Mon 5/4/20		$3,771.90	42 hrs
1043	8.2.2.3.6.4		Solid Waste | Recycle and Shared GIS Data Maintenance Tool Go Live Support (ONSITE TASK)	1 day	Tue 5/5/20	Tue 5/5/20		$3,771.90	42 hrs
1044	8.2.2.3.6.5		Utilities GIS Data Maintenance Tool Go Live Support	1 day	Wed 5/6/20	Wed 5/6/20		$3,771.90	42 hrs
1045	8.2.2.3.6.6		Travel for GIS Data Maintenance Tool Go Live Suppo	5 days	Thu 4/30/20	Wed 5/6/20		$7,305.76	16 hrs
1046	8.2.3	xx	**Migrate Legacy Data to New GIS Database**	**49 days**	**Wed 12/18/19**	**Tue 3/10/20**		**$69,791.00**	**768 hrs**
1047	8.2.3.1		County to Generate Flat Files of Legacy Data	5 days	Wed 12/18/19	Tue 1/7/20		$0.00	60 hrs
1048	8.2.3.2		County to Provide Legacy Data Flat Files to Woolpert	1 day	Wed 1/8/20	Wed 1/8/20		$0.00	0 hrs
1049	8.2.3.3		Woolpert to Configure Data Migration Environment on W	3 days	Wed 12/18/19	Fri 12/20/19		$6,582.72	36 hrs
1050	8.2.3.4		Woolpert to Develop, Test, and Refine Data Loading Scrip	10 days	Thu 1/9/20	Thu 1/23/20		$21,815.60	120 hrs
1051	8.2.3.5		Woolpert to Perform Test Data Conversion Load to New GIS Database in Development Environment	3 days	Fri 1/24/20	Tue 1/28/20		$6,544.68	48 hrs
1052	8.2.3.6		**Round 1: 3 Week Cycle**	**10 days**	**Mon 2/3/20**	**Fri 2/14/20**		**$14,530.96**	**214 hrs**
1053	8.2.3.6.1		Woolpert to Facilitate Data Conversion Remote Review	8 hrs	Mon 2/3/20	Mon 2/3/20		$6,032.48	74 hrs
1054	8.2.3.6.2		County to Clean-Up Data as Required	5 days	Tue 2/4/20	Mon 2/10/20		$0.00	72 hrs
1055	8.2.3.6.3		Woolpert to Update Data Conversion Scripts as Requir	5 days	Tue 2/4/20	Mon 2/10/20		$5,482.24	28 hrs
1056	8.2.3.6.4		Woolpert to Reload Updated Data in Development Env	2 days	Tue 2/11/20	Wed 2/12/20		$3,016.24	16 hrs
1057	8.2.3.6.5		County to Review Data	2 days	Thu 2/13/20	Fri 2/14/20		$0.00	24 hrs
1058	8.2.3.7		**Round 2: 3 Week Cycle**	**10 days**	**Mon 2/17/20**	**Fri 2/28/20**		**$13,708.96**	**210 hrs**
1059	8.2.3.7.1		Woolpert to Facilitate Data Conversion Remote Review	8 hrs	Mon 2/17/20	Mon 2/17/20		$6,032.48	74 hrs
1060	8.2.3.7.2		County to Clean-Up Data as Required	5 days	Tue 2/18/20	Mon 2/24/20		$0.00	72 hrs
1061	8.2.3.7.3		Woolpert to Update Data Conversion Scripts as Requir	5 days	Tue 2/18/20	Mon 2/24/20		$5,482.24	28 hrs
1062	8.2.3.7.4		Woolpert to Reload Updated Data in Development Env	2 days	Tue 2/25/20	Wed 2/26/20		$2,194.24	12 hrs
1063	8.2.3.7.5		County to Review Data	2 days	Thu 2/27/20	Fri 2/28/20		$0.00	24 hrs
1064	8.2.3.8		Woolpert to Update GIS Data Migration Documentation	2 days	Mon 3/2/20	Tue 3/3/20		$4,388.48	24 hrs
1065	8.2.3.9		Woolpert to Submit GIS Data Migration Documentation t	1 day	Wed 3/4/20	Wed 3/4/20		$0.00	0 hrs
1066	8.2.3.10		County to Review GIS Data Migration Documentation	4 days	Thu 3/5/20	Tue 3/10/20		$0.00	32 hrs
1067	8.2.3.11		Setup and Publish Supporting GIS Services	2 days	Mon 3/2/20	Tue 3/3/20		$2,219.60	24 hrs
1068	8.3		**GIS Implementation Support**	**502.75 days**	**Fri 11/1/19**	**Fri 12/17/21**		**$156,161.16**	**1,682 hrs**
1069	8.3.1	xx	**Ongoing GIS Support**	**502.75 days**	**Fri 11/1/19**	**Fri 12/17/21**		**$93,387.84**	**1,040 hrs**

ID	WBS	Deltek Phase	Task Name	Duration	Start	Finish	Note	Cost	Work
1070	8.3.1.1		**Bi-Weekly GIS Support Meeting**	**502.75 days**	**Fri 11/1/19**	**Fri 12/17/21**		**$93,387.84**	**1,040 hrs**
1071	8.3.1.1.1		Bi-Weekly GIS Support Meeting 1	2 hrs	Fri 11/1/19	Fri 11/1/19		$1,795.92	20 hrs
1072	8.3.1.1.2		Bi-Weekly GIS Support Meeting 2	4 hrs	Fri 11/15/19	Fri 11/15/19		$1,795.92	20 hrs
1073	8.3.1.1.3		Bi-Weekly GIS Support Meeting 3	4 hrs	Fri 12/6/19	Fri 12/6/19		$1,795.92	20 hrs
1074	8.3.1.1.4		Bi-Weekly GIS Support Meeting 4	4 hrs	Fri 12/20/19	Fri 12/20/19		$1,795.92	20 hrs
1075	8.3.1.1.5		Bi-Weekly GIS Support Meeting 5	4 hrs	Fri 1/17/20	Fri 1/17/20		$1,795.92	20 hrs
1076	8.3.1.1.6		Bi-Weekly GIS Support Meeting 6	4 hrs	Fri 1/31/20	Fri 1/31/20		$1,795.92	20 hrs
1077	8.3.1.1.7		Bi-Weekly GIS Support Meeting 7	4 hrs	Fri 2/14/20	Fri 2/14/20		$1,795.92	20 hrs
1078	8.3.1.1.8		Bi-Weekly GIS Support Meeting 8	4 hrs	Fri 2/28/20	Fri 2/28/20		$1,795.92	20 hrs
1079	8.3.1.1.9		Bi-Weekly GIS Support Meeting 9	4 hrs	Fri 3/13/20	Fri 3/13/20		$1,795.92	20 hrs
1080	8.3.1.1.10		Bi-Weekly GIS Support Meeting 10	4 hrs	Fri 3/27/20	Fri 3/27/20		$1,795.92	20 hrs
1081	8.3.1.1.11		Bi-Weekly GIS Support Meeting 11	4 hrs	Fri 4/10/20	Fri 4/10/20		$1,795.92	20 hrs
1082	8.3.1.1.12		Bi-Weekly GIS Support Meeting 12	4 hrs	Fri 4/24/20	Fri 4/24/20		$1,795.92	20 hrs
1083	8.3.1.1.13		Bi-Weekly GIS Support Meeting 13	4 hrs	Fri 5/8/20	Fri 5/8/20		$1,795.92	20 hrs
1084	8.3.1.1.14		Bi-Weekly GIS Support Meeting 14	4 hrs	Fri 5/22/20	Fri 5/22/20		$1,795.92	20 hrs
1085	8.3.1.1.15		Bi-Weekly GIS Support Meeting 15	4 hrs	Fri 6/5/20	Fri 6/5/20		$1,795.92	20 hrs
1086	8.3.1.1.16		Bi-Weekly GIS Support Meeting 16	4 hrs	Fri 6/19/20	Fri 6/19/20		$1,795.92	20 hrs
1087	8.3.1.1.17		Bi-Weekly GIS Support Meeting 17	4 hrs	Fri 7/10/20	Fri 7/10/20		$1,795.92	20 hrs
1088	8.3.1.1.18		Bi-Weekly GIS Support Meeting 18	4 hrs	Fri 7/24/20	Fri 7/24/20		$1,795.92	20 hrs
1089	8.3.1.1.19		Bi-Weekly GIS Support Meeting 19	4 hrs	Fri 8/7/20	Fri 8/7/20		$1,795.92	20 hrs
1090	8.3.1.1.20		Bi-Weekly GIS Support Meeting 20	4 hrs	Fri 8/21/20	Fri 8/21/20		$1,795.92	20 hrs
1091	8.3.1.1.21		Bi-Weekly GIS Support Meeting 21	4 hrs	Fri 9/4/20	Fri 9/4/20		$1,795.92	20 hrs
1092	8.3.1.1.22		Bi-Weekly GIS Support Meeting 22	4 hrs	Fri 9/18/20	Fri 9/18/20		$1,795.92	20 hrs
1093	8.3.1.1.23		Bi-Weekly GIS Support Meeting 23	4 hrs	Fri 10/2/20	Fri 10/2/20		$1,795.92	20 hrs
1094	8.3.1.1.24		Bi-Weekly GIS Support Meeting 24	4 hrs	Fri 10/16/20	Fri 10/16/20		$1,795.92	20 hrs
1095	8.3.1.1.25		Bi-Weekly GIS Support Meeting 25	4 hrs	Fri 10/30/20	Fri 10/30/20		$1,795.92	20 hrs
1096	8.3.1.1.26		Bi-Weekly GIS Support Meeting 26	4 hrs	Fri 11/13/20	Fri 11/13/20		$1,795.92	20 hrs
1097	8.3.1.1.27		Bi-Weekly GIS Support Meeting 27	4 hrs	Fri 12/4/20	Fri 12/4/20		$1,795.92	20 hrs
1098	8.3.1.1.28		Bi-Weekly GIS Support Meeting 28	4 hrs	Fri 12/18/20	Fri 12/18/20		$1,795.92	20 hrs
1099	8.3.1.1.29		Bi-Weekly GIS Support Meeting 29	4 hrs	Fri 1/22/21	Fri 1/22/21		$1,795.92	20 hrs
1100	8.3.1.1.30		Bi-Weekly GIS Support Meeting 30	4 hrs	Fri 2/5/21	Fri 2/5/21		$1,795.92	20 hrs
1101	8.3.1.1.31		Bi-Weekly GIS Support Meeting 31	4 hrs	Fri 2/19/21	Fri 2/19/21		$1,795.92	20 hrs
1102	8.3.1.1.32		Bi-Weekly GIS Support Meeting 32	4 hrs	Fri 3/5/21	Fri 3/5/21		$1,795.92	20 hrs
1103	8.3.1.1.33		Bi-Weekly GIS Support Meeting 33	4 hrs	Fri 3/19/21	Fri 3/19/21		$1,795.92	20 hrs
1104	8.3.1.1.34		Bi-Weekly GIS Support Meeting 34	4 hrs	Fri 4/2/21	Fri 4/2/21		$1,795.92	20 hrs
1105	8.3.1.1.35		Bi-Weekly GIS Support Meeting 35	4 hrs	Fri 4/16/21	Fri 4/16/21		$1,795.92	20 hrs
1106	8.3.1.1.36		Bi-Weekly GIS Support Meeting 36	4 hrs	Fri 4/30/21	Fri 4/30/21		$1,795.92	20 hrs
1107	8.3.1.1.37		Bi-Weekly GIS Support Meeting 37	4 hrs	Fri 5/14/21	Fri 5/14/21		$1,795.92	20 hrs
1108	8.3.1.1.38		Bi-Weekly GIS Support Meeting 38	4 hrs	Fri 5/28/21	Fri 5/28/21		$1,795.92	20 hrs
1109	8.3.1.1.39		Bi-Weekly GIS Support Meeting 39	4 hrs	Fri 6/11/21	Fri 6/11/21		$1,795.92	20 hrs
1110	8.3.1.1.40		Bi-Weekly GIS Support Meeting 40	4 hrs	Fri 6/25/21	Fri 6/25/21		$1,795.92	20 hrs
1111	8.3.1.1.41		Bi-Weekly GIS Support Meeting 41	4 hrs	Fri 7/9/21	Fri 7/9/21		$1,795.92	20 hrs
1112	8.3.1.1.42		Bi-Weekly GIS Support Meeting 42	4 hrs	Fri 7/23/21	Fri 7/23/21		$1,795.92	20 hrs
1113	8.3.1.1.43		Bi-Weekly GIS Support Meeting 43	4 hrs	Fri 8/6/21	Fri 8/6/21		$1,795.92	20 hrs
1114	8.3.1.1.44		Bi-Weekly GIS Support Meeting 44	4 hrs	Fri 8/20/21	Fri 8/20/21		$1,795.92	20 hrs
1115	8.3.1.1.45		Bi-Weekly GIS Support Meeting 45	4 hrs	Fri 9/3/21	Fri 9/3/21		$1,795.92	20 hrs

ID	WBS	Deltek Phase	Task Name	Duration	Start	Finish	Note	Cost	Work
1116	8.3.1.1.46		Bi-Weekly GIS Support Meeting 46	4 hrs	Fri 9/17/21	Fri 9/17/21		$1,795.92	20 hrs
1117	8.3.1.1.47		Bi-Weekly GIS Support Meeting 47	4 hrs	Fri 10/1/21	Fri 10/1/21		$1,795.92	20 hrs
1118	8.3.1.1.48		Bi-Weekly GIS Support Meeting 48	4 hrs	Fri 10/15/21	Fri 10/15/21		$1,795.92	20 hrs
1119	8.3.1.1.49		Bi-Weekly GIS Support Meeting 49	4 hrs	Fri 10/29/21	Fri 10/29/21		$1,795.92	20 hrs
1120	8.3.1.1.50		Bi-Weekly GIS Support Meeting 50	4 hrs	Fri 11/12/21	Fri 11/12/21		$1,795.92	20 hrs
1121	8.3.1.1.51		Bi-Weekly GIS Support Meeting 51	4 hrs	Fri 12/3/21	Fri 12/3/21		$1,795.92	20 hrs
1122	8.3.1.1.52		Bi-Weekly GIS Support Meeting 52	4 hrs	Fri 12/17/21	Fri 12/17/21		$1,795.92	20 hrs
1123	8.3.2	xx	Asset Data Maintenance Plan	36 days	Thu 5/7/20	Fri 6/26/20		$50,253.12	562 hrs
1124	8.3.2.1		Woolpert to Prepare for Asset Data Maintenance Plan Wc	5 days	Thu 5/7/20	Wed 5/13/20		$5,982.18	32 hrs
1125	8.3.2.2		County to Prepare for Asset Data Maintenance Plan Work	5 days	Thu 5/7/20	Wed 5/13/20		$0.00	22 hrs
1126	8.3.2.3		Woolpert to Facilitate Asset Data Maintenance Plan Wot	5 days	Thu 5/14/20	Wed 5/20/20		$23,244.78	226 hrs
1127	8.3.2.3.1		Parks | Park Asset Data Maintenance Plan Workshop ((	1 day	Thu 5/14/20	Thu 5/14/20		$3,177.66	42 hrs
1128	8.3.2.3.2		Public Works | Environmental Management Asset Data Maintenance Plan Workshop (ONSITE TASK)	1 day	Fri 5/15/20	Fri 5/15/20		$3,177.66	42 hrs
1129	8.3.2.3.3		REM | Fleet Asset Data Maintenance Plan Workshop (C	1 day	Mon 5/18/20	Mon 5/18/20		$3,177.66	42 hrs
1130	8.3.2.3.4		Solid Waste | Recycle and Shared Asset Data Maintena	1 day	Tue 5/19/20	Tue 5/19/20		$3,177.66	42 hrs
1131	8.3.2.3.5		Utilities Asset Data Maintenance Plan Workshop (ONSI	1 day	Wed 5/20/20	Wed 5/20/20		$3,177.66	42 hrs
1132	8.3.2.3.6		Travel for Asset Data Maintenance Plan Workshop	5 days	Thu 5/14/20	Wed 5/20/20		$7,356.48	16 hrs
1133	8.3.2.4		Woolpert to Update Asset Data Maintenance Plan Docum	10 days	Thu 5/21/20	Thu 6/4/20		$11,098.00	88 hrs
1134	8.3.2.5		Woolpert to Submit Asset Data Maintenance Plan Docum	1 day	Fri 6/5/20	Fri 6/5/20		$0.00	0 hrs
1135	8.3.2.6		County to Review Asset Data Maintenance Plan Documer	4 days	Mon 6/8/20	Thu 6/11/20		$0.00	48 hrs
1136	8.3.2.7		Woolpert to Facilitate Joint Remote Review #1 of Asset Data Maintenance Plan Documentation	8 hrs	Fri 6/12/20	Fri 6/12/20		$4,439.20	66 hrs
1137	8.3.2.8		Woolpert to Update Asset Data Maintenance Plan Docum	4 days	Mon 6/15/20	Thu 6/18/20		$5,488.96	32 hrs
1138	8.3.2.9		Woolpert to Submit Asset Data Maintenance Plan Docum	1 day	Fri 6/19/20	Fri 6/19/20		$0.00	0 hrs
1139	8.3.2.10		County to Review Asset Data Maintenance Plan Documer	4 days	Mon 6/22/20	Thu 6/25/20		$0.00	48 hrs
1140	8.3.2.11		County to Accept Asset Data Maintenance Plan Documen	1 day	Fri 6/26/20	Fri 6/26/20		$0.00	0 hrs
1141	8.3.3	xx	Migrate Legacy Data into Production GIS Environment	5 days	Mon 6/28/21	Fri 7/2/21		$12,520.20	80 hrs
1142	8.4		Phase 8 Quality Control	719 days	Mon 1/14/19	Mon 1/24/22	[8/3(	$40,151.00	0 hrs
1143	8.5		Phase 8 Acceptance and Close	5 days	Tue 1/25/22	Mon 1/31/22		$0.00	0 hrs
1144	9		PHASE 9: ISO 55X EAM Program Development Support	512 days	Mon 10/28/19	Fri 12/31/21		$0.00	0 hrs
1145	10		PHASE 10: Owner Directed Funds	512 days	Mon 10/28/19	Fri 12/31/21	[12.:	$312,998.40	1,440 hrs
1146	10.1		ESB Eco System (SAG,Messaging, etc) Investigation	500 days	Mon 10/28/19	Wed 12/8/21	[10.:	$69,555.20	320 hrs
1147	10.2		Wonderware Integration Scope Expansion	15 days	Mon 10/28/19	Mon 11/18/19	[12.:	$52,166.40	240 hrs
1148	10.3		Legacy Data Migration Data Cleanup Support	500 days	Mon 10/28/19	Wed 12/8/21	[10.4	$43,472.00	200 hrs
1149	10.4		Ad-hoc consulting	500 days	Mon 10/28/19	Wed 12/8/21		$43,472.00	200 hrs
1150	10.5		Configuration Customization	502.5 days	Mon 10/28/19	Mon 12/13/21	[12.:	$52,166.40	240 hrs
1151	10.6		Grainger Keepstock Interface Exploration	502.5 days	Mon 10/28/19	Mon 12/13/21	[12.:	$52,166.40	240 hrs
1152	11		PHASE 11: Customizations	512 days	Mon 10/28/19	Fri 12/31/21		$0.00	0 hrs
1153	12		PHASE 12: Cityworks 15.X Upgrade	512 days	Mon 10/28/19	Fri 12/31/21		$0.00	0 hrs
1154	12.1		Woolpert to provide revised pre-requisite and upgrade guide	512 days	Mon 10/28/19	Fri 12/31/21		$0.00	0 hrs
1155	12.2		COUNTY to schedule planning meeting w/ OTI/BTS (COUNTY T.	512 days	Mon 10/28/19	Fri 12/31/21		$0.00	0 hrs
1156	12.3		COUNTY and Woolpert to perform upgrade (REMOTE TASK)	512 days	Mon 10/28/19	Fri 12/31/21		$0.00	0 hrs