Dekalb County, GA Water and Wastewater Plants Cityworks AMS Implementation Statement of Work

WOOLPERT ARCHITECTURE | ENGINEERING | GEOSPATIAL



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Quality

At Woolpert, quality is the cornerstone of our business. We invite your comments and suggestions for improving this document.

Trademarks

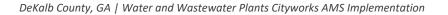
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Docum	nent Chang	e Contr	ol
Date	Author	Version	Change Reference
2022.06.18	John Cestnick	1	Initial Draft
2022.07.21	John Cestnick	2	Revisions made following County review call. Removed WAM data migration Task 3.1 and associated fees. Added Federal Holidays to the schedule to extend the project by one month. Added \$3,870 for one additional month of PM and Administrative services.



General

Woolpert's Enterprise Asset Management System implementations are focused on delivering a comprehensive set of technology tools and asset management best practices that support our clients' planned asset sustainability performance objectives. We achieve our clients' objectives by first understanding their Implementation Vision and then defining the Planned Performance Management strategies to achieve the vision. We then design and deploy the Performance Management System Applications required to support sustained Performance Management & Monitoring.

There are many related tasks and sub-tasks that must be properly executed to ensure a successful outcome of a high-value Enterprise Asset Management System deployment. Woolpert's 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 their associated deliverables, are categorized into four (4) major phases, as more fully detailed in the following sections. Completion of each phase (in order) will culminate with the execution of a Phase Acceptance and Close document signifying the Client's acceptance of the services rendered to date and authorization for Woolpert to proceed with work on the subsequent task.



Figure 1: Enterprise Asset Management Implementation – Guiding Principles

Our statement of work and associated budget and schedule were developed with the bounding assumptions below, which were based on discussions with Client staff.

The following Departments/Divisions will be implemented per this Statement of Work:

- Water Treatment Plants (Scott Candler)
 - Operations
 - o Maintenance
- Wastewater Treatment Plants (Snapfinger and Pole Bridge)
 - o Operations
 - o Maintenance

General Assumptions for the entire project:

- Unless otherwise specified within this Statement of Work, the Client will be responsible for the development and management of an ArcGIS/ArcSDE geodatabase and ArcGIS Server deployment.
- The Client is to identify and empower a Project Manager.
- The Client is to identify and empower (at least) one or two (1-2) power users from each of the user divisions (2 from Scott Candler WTP, 2 from Snapfinder WWTP, and 2 from Pole Bridge WWTP, and 1-2 from GIS/IT) to be implemented for a total of seven to eight (7-8) power users and one project manager. This will constitute the Client Core Team. Additionally, other support members will be brought into the project from the support groups as necessary.
- Client Core Team members will have the ability to connect to remote online workshops and meetings with computers equipped with microphones, speakers and cameras using internet connections suitable for online meetings.
- All Woolpert activities will be performed remotely except for those that are expressly identified as being "on-site."
- Woolpert will train up to sixty (60) Client users.
- This Statement of Work does not include any re-configuration of any existing Watershed Cityworks configurations, nor does it include any system training for any water distribution or wastewater collection Client staff.

- Project Management and Administration fees for Phases 1-4 are based upon a project schedule of fourteen (14) months. Should the project schedule extend beyond sixteen (16) months, Woolpert will bill for, and the Client will pay, additional project management and administration fee of \$3,870 for each month of schedule beyond month fifteen (15). Billing for a portion of a month will be done on a prorated basis.
- This scope of work does not include any system integrations.
- Any change in Client project staff resulting in Woolpert having to repeat already provided services, or to provide support to the new Client project staff to integrate them into the project, is defined as additional services not included within this scope of work. Any additional services will need to be properly authorized by the Client per the contract agreement prior to being performed.
- The Client will be responsible for all software installation services on all Client maintained environments to include (but not limited to) DEV, TEST, UAT, TRAIN, and PROD.

Program Management

An Enterprise Asset Management system implementation is a complex endeavor that presents a variety of 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 for the resources and tools needed to successfully manage the project through all phases / processes, including:

- Initiation. project authorizations and expectations
- **Planning**. project definitions, objectives, deliverables, analysis of alternatives
- **Execution**. coordination of resources, quality management, product and service delivery

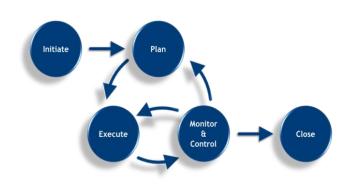


Figure 2: Project Life-Cycle Process Groups

- Monitoring and Controlling. monitoring and measuring to identify variances and initiate corrective actions
- Close-Out. acceptance of project deliverables and results

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

Task PM.1: Project Administration

Woolpert will provide the following project management services:

- Develop, in cooperation with the Client's project manager, a project plan and schedule;
- Proactively manage and update project plan and schedule, on a monthly basis, throughout the duration of the project. Project plan and schedule modifications will be facilitated upon common agreement between the Client and Woolpert in accordance with the issue control process detailed in the project plan;
- Coordinate project events with the Client's project manager and Woolpert team members;
- Author, edit, review, and distribute project documentation and technical reports;
- Facilitate in-process review meetings with the Client's project manager, committees, management, and end-users 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, and project collaboration tools;
- Perform project administration (e.g. arrange travel, internal project updates); and

• Anticipate problem areas and propose and facilitate solutions.

Deliverables

- Draft and final project plan
- Monthly project status reports
- On-going project management, including resource allocation, invoicing and general consulting
- Password protected project collaboration environment and issue log management

Assumptions

- The activities discussed in this section will begin once a Written Notice-to-Proceed is received from the Client
- The activities discussed in this section are limited Figure 3: Woolpert's Project Collaboration Website to the duration of the proposed schedule.

Extensions to the project schedule may require additional project management and administration fees.

Client Responsibilities

- Assemble a team of domain and technical experts and have representation of divisions / departments / work groups involved throughout each project phase
- Provide a point of contact for all project management issues and questions
- Client PM will review and comment on and accept draft project work plan within five days of document delivery
- Client PM will schedule appropriate internal staff and provide facilities for any on-site meetings and off-site conference calls
- Client PM will review and accept project status reports, or otherwise provide comments within five (5) days of receipt of status report delivery from Woolpert PM

Task PM.2: 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 Client's priorities and ability 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 Client project participants.

Deliverables

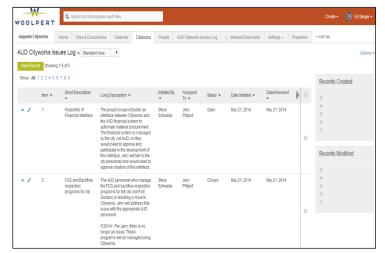
 Woolpert PM will provide the baseline and update schedule to the Client PM on a monthly basis

Assumptions

- Activities discussed in this section will begin upon Written Notice-to-Proceed from the Client PM
- Woolpert PM will develop the schedule using the Critical Path Methodology (CPM)
- Schedules required for internal review will be the responsibility of the Client PM

	Task Name	Duration -	Rey 2014 June 2014 July 2014 August 2014 September 2014 October 2014 1 5/11 5/18 5/25 6/1 6/8 6/15 6/22 6/29 7/6 7/13 7/20 17/27 6/3 6/10 16/17 6/24 6/31 9/7 9/14 9/21 6/28 10/5 6/12/10/19/10/26 11/2	Nove 2 11
0	* UBCS - CITYWORKS ARS - CASE MANAGEMENT IMPLEMENTATION	106 days	627/2014 gamma 10/23/2014	
1	PHASE 1 IMPLEMENTATION PLANNING	30 days	5/27/2014 grant 7/8/2014	
2	* TASK 1.1 J CITYWORKS AMS SOFTWARE DEMONSTRATIONS	2 days	5/27/2014 ggp 5/28/2014	
8	* TASK 1.2 CONDUCT BUSINESS PROCESS REVIEWS	28 days	5/29/2014 g	
30	TASK 1.3 I PHASE 1 QUALITY CONTROL	30 days	527/2014 7/8/2014	
31	TASK 1.4 PHASE 1 ACCEPTANCE AND CLOSE	0 days		
32	PHASE 2 SYSTEM DESIGN AND CONFIGURATION	30 days	7/9/2014 - 8/19/2014	
33	* TASK 2.1 PREPARE CONFIGURATION DOCUMENTATION	10 days	7/9/2014 7/22/2014	
38	* TASK 2.2 PROVIDE CITYWORKS AMS CONFIGURATION TRAINING	3 days	7/23/2014 gpg 7/25/2014	
44	* TASK 2.3 FACILITATE UBCS CITYWORKS AMS CONFIGURATION	10 days	7/25/2014 @ 8/7/2014	
55	 TASK 2.4 REVIEW AND APPROVAL OF UPDATED UBCS CASE MANAGEMENT CONFIGURATION AND DOCUMENTATION 	5 days	87/2014 - 8/14/2014	
61.	 TASK 2.5 PROVIDE UBCS CASE MANAGEMENT CITYWORKS DEMONSTRATIONS 	3 days	8/15/2014 gwop 8/19/2014	
66	TASK 2.6 1 PHASE 2 QUALITY CONTROL	30 days	7/9/2014 8/19/2014	
87	TASK 2.7 PHASE ACCEPTANCE AND CLOSE	0 days	¢ 8/19/2014	
68	PHASE 3 SYSTEM DEPLOYMENT	46 days	8/20/2014 growing 10/23/201-	14
69	* TASK 3.1 DEVELOP TEST PLAN	9 days	8/20/2014 ლოლილ 9/2/2014	
76	* TASK 3.2 TESTER TRAINING	3 days	9/3/2014 grg 9/5/2014	
83	* TASK 3.3 TESTING AND ACCEPTANCE IN DEVELOPMENT ENVIRONMENT	12 days	9/8/2014 g	
87	* TASK 3.4 MIGRATION TO QAS ENVIRONMENT	2 days	9/24/2014 gp 9/25/2014	
90	* TASK 3.5 TESTING AND ACCEPTANCE IN QAS ENVIRONMENT	4 days	926/2014 - 10/1/2014	
95	* TASK 3.6 CITYWORKS AMS END-USER TRAINING	5 days	10/2/2014 gmmg 10/8/2014	
102	* TASK 3.7 MIGRATION TO PRODUCTION	2 days	10/9/2014 gp 10/10/2014	
105	* TASK 3.8 GO-LIVE SUPPORT	10 days	10/10/2014 cmmmg 10/23/201-	14
110	TASK 3.9 PHASE 4 QUALITY CONTROL	46 days	8/20/2014 00/23/2014	4
111	TASK 3.10 PHASE ACCEPTANCE AND CLOSE	0 days	+ 10/23/201-	14

Figure 4: Microsoft Project Gantt Chart





Client Responsibilities

Client will review the project schedule on an on-going basis and provide feedback

Task PM.3: Project Manager Status Meetings

Woolpert will facilitate a regularly occurring status meeting. Woolpert's project manager will participate in regularly scheduled project status meetings with the Client's project manager and designees 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; and 3) technical or contractual issues that require corrective action. Woolpert meeting participants will include Woolpert's project manager and ad hoc team members, as required. Client meeting participants will be as deemed necessary by the Client's project manager.

Deliverables

- Monthly project status reports upload to project website.
- Monthly remote project status meetings.

Assumptions

- The activities discussed in this section will begin upon written Notice-to-Proceed from the Client PM
- The activities discussed in this section are limited to the duration of the proposed schedule. Extensions to the project schedule may require additional project management and administration fees.

Client Responsibilities

- Schedule appropriate internal staff and provide facilities for on-site meetings and off-site conference calls.
- Review and accept project status reports, or otherwise provide comments on same, within a reasonable time frame.
- Coordinate and schedule meeting attendees.

Task PM.4: Internal Coordination Meetings

The Woolpert Project Manager will facilitate regular internal coordination meetings to discuss tasks in process, scheduled tasks, and issues affecting 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

None

Assumptions

- The activities discussed in this section will begin upon written Notice-to-Proceed is received from the Client PM
- The activities discussed in this section are limited to the duration of the proposed schedule. Extensions to the project schedule may require additional project management and administration fees.

Client 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 Client recognize that changes are a normal part of the project life cycle. Woolpert believes that managing change to project scope, cost, and schedule are critical to a project's success and employs a comprehensive approach to change control. Woolpert's established change control process is documented as follows:

Either the Woolpert PM or the Client 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:

- Agreement to a Change Request signifies agreement to a change in overall costs, functionality, time scales, 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.
- All CCN's will be signed by both the Client and Woolpert Project Managers to indicate acceptance of the changes.

		Change Control Notice-04 Enterprise Asset Management Syster Implementatio
To:	Mr. Asset Manager, P	PE - Project Manager
From:	Edward Singer, PE -	Project Director
Date:	May 5, 2014; Revise	d May 13, 2014; Approved June 2, 2014
Subject:	Change control Noti Management	ce 04 - Cityworks AMS Configuration for UBCS Case
This Change C vices) as indic		to modify the referenced Project Plan (Scope of Ser-
Scope of ou service: so Th UI M	atom applications to replace oped to include a total of fit	n development efforts were scoped as TRACK & CUSTOM (GIS-BASED CUSTOMER MANAGEMENT SYSTEM) [TIME & ect Tasks / Fees are as provided for in Attachment 1 to this
Change: de oc pli m fo at in (s s gc vi	termined that the UBCS Case e met through standard confi wered that in order for the S sted in the October 2014 tim ent and without the need to r an extended period, the UI ional in the October timefra order to accommodate the tandard Cityworks AMS confi getting it operational in a p- ible. Woolgen thas prepared	n discovery and planning efforts completed to date, it was R Management busines requirements could almost entrietly guration of the Cityworks AMS application. It was also dis- encine Roll module (First priority - soledalide to be com- ter frame) to be fully functional in a production environ- rum parallel systems (old application plan ene application) DSS Case Management solution would also need to be oper- me. equation versus cutom application development, as well production environment in time for an October Service Roll a standard Citywork AMS implementation scope of ae- n parallel with the original CCPUD EAMS implementation

Figure 5: Sample Change Control Notice

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

All request changes 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 Client 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 Client 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:



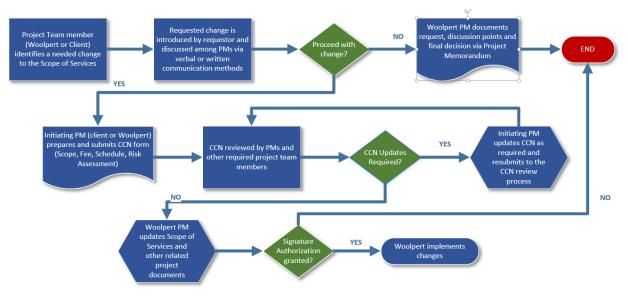


Figure 6: Change Control Process

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 Client project managers)

Technical Approach

Woolpert has developed a four-phased approach to implementing content-rich enterprise asset management solutions. Each of the four technical phases are executed in conjunction with continuous Project Management, Knowledge Transfer & Change Management, and Quality Management activities. Deliberate execution of each phase with continuous client 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 for the tools and resources needed to support current and planned asset management activities, and provides the means to monitor and measure continuous improvement activities.

Each of our phases are performed in order, with specific phase deliverables achieving client 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 next subsequent phase.

Phase 1. Implementation Planning

Key Implementation Planning (Phase 1) Deliverables

- Project Kick-off Meeting
- Cityworks Software Demonstration
- Facilitate Pre-Planning Discovery
- Business Process Workflow Alignment

The Implementation Planning tasks are performed for the purpose of verifying / establishing and documenting a clear purpose for the Cityworks AMS implementation. Woolpert will facilitate a number of Pre-Planning Discovery tasks comprised of a desktop audit of pertinent asset management data, followed by a series of discovery workshops designed to identify, validate, and document levels-ofservice and key asset management program metrics that we will need to configure the solution to support. In those instances where the Client does not yet have well-defined performance metrics, Woolpert will provide some examples of quality metrics that the Client can start with and grow into as use of the system matures over time.

As part of these initial planning efforts, Woolpert will install a

sample / configured Cityworks AMS solution either on-site, on the Client's servers, or in a cloud environment accessible to the Client's project team. This initial system install will be used through all of the implementation phases to "teach and train" users how to navigate the system and ultimately use it to their daily benefit. As the project moves through the phases, this initial install will be updated to reflect the configuration decisions made by the Client's project team until such time that at "Go-Live" it becomes the Production Environment.

Additionally, as part of Woolpert's continuous knowledge transfer and change control efforts, we provide a series of software demonstrations to the Client team early in the process. This early introduction to the system imparts a level of understanding among those Client team members that will be asked to make design and configuration decisions. This is the first of many software demonstrations that will be used throughout our implementation process.

The Implementation Planning Phase culminates with a series of Business Process Review workshops whereby Woolpert works with the Client's key technical staff to establish a best practices approach to managing the request, work order, and inspection data that will be captured, routed, acted-upon, and reported within the asset management software application.

Each of the related Implementation Planning Tasks and Sub-Tasks are detailed in the following sections.

Task 1.1. Project Kick-Off Meeting

Upon written Notice to Proceed, Woolpert's Project Manager will work with the Client's Project Manager to schedule a Project Kick-Off Meeting. The kick-off meeting will address the following topics:

- Project management protocols for stakeholders,
- The Client's implementation goals and objectives,
- Client-Owned source documentation necessary to support the project,
- Critical path schedule milestones,
- Scope and schedule questions that the Client stakeholders may have.

Development of the kick-off meeting agenda is the joint responsibility of the Woolpert PM and Client PM. Woolpert PM will prepare a draft agenda for the kick-off meeting and submit to the Client for comment. Woolpert PM will incorporate comments and distribute the kick-off agenda to Woolpert's team and the Client's PM.

Related Sub-Tasks are as follows:

WBS	Task Name
1.1	Project Kick-Off Meeting
1.1.1	Woolpert to Prepare Kick-Off Meeting Agenda
1.1.2	Woolpert to Submit Kick-Off Meeting Agenda to County PM
1.1.3	Woolpert to Prepare for Kick-Off Meeting
1.1.4	Facilitate Project Kick-Off Meeting (On-Site)
1.1.4.1	Woolpert to Facilitate Project Kick-Off Meeting (On-Site) - Trip 1
1.1.5	Woolpert to Prepare Kick-Off Meeting Notes
1.1.6	Woolpert to Submit Kick-Off Meeting Notes to County PM
1.1.7	County PM to Review and Approve Kick-Off Meeting Notes (County-Owned Task)

Deliverables

- Woolpert will facilitate an on-site kick-off meeting, expecting to last no longer than three (3) hours
- Woolpert PM will provide the kick-off meeting notes uploaded to the Project SharePoint site

Assumptions

- None
- Client Responsibilities
 - Client PM will coordinate and schedule meeting attendees

Task 1.2. Provide Cityworks AMS Software Demonstrations

Woolpert will facilitate one (1) on-site software demonstration for the purpose of introducing the Client's project team members to the core functionality and features of the Cityworks AMS application. For many of the Client's project team members, this will be their first exposure to the new Cityworks software. This demonstration will provide an initial overview of the features and functions of the new software and will serve as a basis of on-going software training and knowledge transfer that will increase in frequency and complexity as the project progresses through the subsequent design, configuration and deployment phases.

Related Sub-Tasks are as follows:

WBS	Task Name
1.2	Provide Cityworks AMS Software Demonstrations
1.2.1	Woolpert to Prepare Cityworks AMS Software Demonstration Agenda
1.2.2	Woolpert to Submit Software Demonstration Agenda to County PM
1.2.3	Woolpert to Prepare for Cityworks AMS Software Demonstrations
1.2.4	Woolpert to Facilitate Cityworks AMS Software Demonstrations
1.2.4.1	Cityworks Demonstration (On-Site) - Trip 1

Deliverables

Woolpert will demonstrate the Cityworks AMS software while on-site

Assumptions

- Woolpert will tailor the software demonstration to the Water and Wastewater Plant industry.
- Software demonstration will immediately follow the project kick-off meeting.

Client Responsibilities

• Client PM will schedule and accommodate the appropriate Client Core Team staff such that they are available, without undue interruption, for the demonstration.



Task 1.3. Facilitate Pre-Planning Discovery

Woolpert will facilitate a series of pre-planning discovery workshops for the purposes of: 1) understanding the Client's over-arching corporate asset management objectives and strategies; 2) aligning the Client's technical and functional requirements with the governing project plan; and 3) identifying and documenting any critical performance requirements that have not been adequately addressed to date (critical/unique asset performance measures, system interfaces, unique workflow details, specific reporting requirements, data conversion requirements).

Ultimately, this pre-planning discovery opportunity is used to engage the Client's management team and technical leads to define the target asset performance measures that the implemented Cityworks AMS will be required to support. By clearly articulating the implementing organization's implementation vision



Performance Management Roadmap

and aligning this with the corporate policies and goals, strategies, and objectives, Woolpert will be able to establish the desired "to-be" position at the very on-set of the project. Woolpert will then compare requirements to the Client's current asset management strategy baseline to define the outstanding measures that need to be implemented as part of the overall project. This will clearly establish the "roadmap" our project team and the Client's project participants will utilize to navigate the design, configuration, and deployment phases of the project. Performance Management Roadmap, above illustrates how the preimplementation planning discovery is used to align implementation goals and objectives and establish the requisite implementation road map.

Any program elements that are discovered during this process that are not part of the Project Plan will be presented to the Client's management team for consideration. At their discretion, the Client's management team may elect to: 1) have these added to a revised Project Plan for inclusion in the core project implementation; or 2) place them in a "parking lot" for future consideration outside of the scope of this implementation plan. Depending upon the Client's decision, Woolpert will make any necessary adjustments to the Project Plan and obtain acceptance from the Client.

WBS	Task Name
1.3	Facilitate Pre-Planning Discovery
1.3.1	Prepare Request for Information (RFI)
1.3.2	Submit RFI to County PM
1.3.3	County PM to Facilitate Data Gathering Process and Provide Data to Woolpert (County-Owned Task)
1.3.4	Woolpert to Perform Desktop Audit of County-Provided Information
1.3.5	Woolpert to Prepare for Discovery Workshops
1.3.6	Woolpert to Facilitate Discovery Workshops (On-Site) - Trip 1
1.3.6.1	Water Operations (On-Site)
1.3.6.2	Water Maintenance (On-Site)
1.3.6.3	Wastewater Operations (On-Site)
1.3.6.4	Wastewater Maintenance (On-Site)
1.3.7	Woolpert to Document Workshop Findings
1.3.8	Woolpert to Submit Draft Implementation Discovery Documents (Technical Memorandum) to County PM
1.3.9	County to Review Draft Implementation Discovery Technical Memorandum and Provide Feedback to Woolpert (County-Owned Task)

Related Sub-Tasks are as follows:



WBS	Task Name
1.3.10	Woolpert to Facilitate Remote Review Meetings with County Core Team (Conf-Call)
1.3.11	Woolpert to Update the Draft Implementation Discovery Technical Memorandum Based on County Feedback
1.3.12	Woolpert to Submit Updated Implementation Discovery Technical Memorandum to County PM
1.3.13	County to Review and Approve Implementation Discovery Technical Memorandum (County- Owned Task)

Deliverables

- Woolpert will prepare a Request for Information and submit it to the Client PM
- Woolpert will perform a desktop review of the data provided by the Client
- Woolpert will facilitate a series of on-site discovery workshops
- Woolpert will document the workshop discussions and findings in a Technical Memorandum to support Cityworks AMS implementation and submit it to the Client PM
- Woolpert will facilitate a remote review with the Client Core Team to review the contents of the Cityworks AMS Technical Memoranda.
- If necessary, Woolpert will update the Technical Memorandum and submit to the Client PM for review and approval

Assumptions

• Client workshop attendees will actively participate in the workshops without undue interruption

Client Responsibilities

- Client PM will facilitate the data gathering process to collect the information detailed in the Woolpert's RFI, and deliver the material to Woolpert no later than seven (7) business days prior to the pre-discovery workshops
- Client PM will schedule the Client workshop attendees
- Client PM and Client Core Team members will review the Technical Memoranda and provide feedback to Woolpert PM within five (5) business days
- Client PM will provide the Woolpert PM with a formal approval of the Technical Memoranda document

Task 1.4. Conduct Cityworks AMS Life-Cycle Business Process Reviews

Woolpert will facilitate a series of on-site Business Process Review workshops with Client staff for aligning application workflows with the Client's various EAMS business processes.

Woolpert has developed a standard set of "best practice" workflow templates to facilitate the understanding of work management life cycles. Woolpert will tailor the workflow templates to accommodate the Client's "planning, scheduling, and execution" workflows.

The objectives of the business process reviews are three-fold:

- 1) Provide Woolpert with a deep understanding of the Client's desired work/asset management work flows / business processes,
- 2) Provide Client Core Team participants with a deeper understanding of the impending business process improvements introduced by the planned Cityworks AMS solution, and
- 3) Establish asset life-cycle management and work management workflows in the context of the Client's asset management strategies and as supported by the Cityworks AMS functional and technical capabilities.

Woolpert will facilitate a series of remote workshops that investigate various standard workflows detailing the life-cycle management of work requests within the Cityworks AMS application. The eight (8) primary workflow areas addressed include:

- 1. Initiation 4. Scheduling 7. Emergency Work
- 2. Screening5. Assignment8. QA Review & Completion

3. Planning

6. Performance

Along with the workflows, the Woolpert Project Manager will introduce the use of the following items:

- Work order statuses
- Priority levels and how to calculate level of importance
- Multiple domains versus single domain
- On-Hold Reasons (reasons why work order / inspection performance might be delayed, such as awaiting parts, awaiting available crews, etc.;)
- Job progress tracking and reporting for work orders throughout their lifecycle (how factors relate to establishing a work management environment that moves from reactive maintenance to a more proactive maintenance position)

Also, as part of these workshop discussions, Woolpert will expand upon the discussions of Levels of Service, asset performance measures, and specialized reporting requirements to identify key custom data fields for configuration.

WBS	Task Name
1.4	Conduct Cityworks AMS Life-Cycle Business Process Reviews
1.4.1	Woolpert to Prepare Business Process Review Agenda
1.4.2	Woolpert to Submit Business Process Review Agenda to County PM
1.4.3	Woolpert to Prepare for Business Process Review Workshops
1.4.4	Woolpert to Facilitate Business Process Review Workshops (On-Site) - Trip 2
1.4.4.1	Global Business Processes
1.4.4.2	Water Plant Operations
1.4.4.3	Water Plant Maintenance
1.4.4.4	Wastewater Plant Operations
1.4.4.5	Wastewater Plant Maintenance
1.4.5	Woolpert to Document Business Process Review Workshop Findings
1.4.6	Woolpert to Submit Draft Workflow Documentation to County PM
1.4.7	County Core Team to Review Draft Workflow Documentation and Provide Feedback to Woolpert (County-Owned Task)
1.4.8	Woolpert to Facilitate Remote Review Meetings with County Core Team (Conf-Call)
1.4.9	Woolpert to Update Workflow Documentation Based on County Feedback

Deliverables

- Woolpert will facilitate a series of on-site Business Process Review Workshops as follows:
 - Global Business Processes (for up to one half (.5) days)
 - Water Plant Operations (for up to one half (.5) days)
 - Water Plant Maintenance (for up to one half (.5) days)
 - Wastewater Plant Operations (for up to one half (.5) days)
 - Wastewater Plant Maintenance (for up to one half (.5) days)
- Woolpert will document the outcome of the workshops in the form of Business Process Review Technical Memorandum and submit it to the Client PM for review, comments, and approval
- Woolpert will facilitate one (1) remote review meeting, up to two (2) hours in duration, with the Client Core Team to review the Business Process Review Technical Memorandum

Assumptions

• On-site workshops will be facilitated during one trip over consecutive days



Client Responsibilities

- Client PM will schedule and accommodate the appropriate Client project participants such that they are available, without undue interruption, for the required workshops
- Client PM will combine feedback and provide one formal written submittal to the Woolpert PM for Business Process Review Technical Memorandum updates
- Client PM will provide written approval of the Business Process Review Technical Memorandum to the Woolpert PM

Task 1.5. Phase 1 Quality Control

Woolpert technical resources, not regularly involved with this implementation will perform independent quality review of the work processes and deliverable products in accordance with the Woolpert Total Quality Plan.

Task 1.6. Phase 1 Acceptance and Close

This is the Phase exit document that the Client project manager signs indicating Woolpert has delivered the Phase 1 services in accordance with the Statement of Work and Project Plan. Certain Phase 2 tasks will begin prior to Phase 1 sign-off, due to the critical schedule of this implementation.

Phase 2. System Design and Configuration

Using the "road map" developed in Phase 1 as our guide, the Woolpert Team will lead the Client's project team through the Cityworks configuration tasks. The result of Phase 2 activities will be a fully configured AM solution – deployed to the Client's development environment – that is ready to undergo User Acceptance Testing.

The first series of tasks involves the development of an Esri GIS geodatabase as the asset repository for the plant asset data. The Cityworks software requires that asset data be stored within an Esri GIS geodatabase. Woolpert will lead the Client through a series of discussions using existing GIS models as examples to finalize a GIS schema design. Once finalized, Woolpert will work with the Client to upload asset data into the schema to then be tested and reviewed by both the Client and Woolpert team members.

Key Implementation Planning (Phase 2) Deliverables

- Develop and Deploy Vertical Asset Geodatabase
- Draft Configuration
 Documentation
- Cityworks Configuration
 Workshops
- Custom Dashboards and System Inboxes

Woolpert will continue with configuration activities utilizing data and information gathered in Phase 1 to develop a set of configuration documents. Woolpert will use the configuration documents to perform the initial configuration and will deploy to the Client's DEV environment. This initial configuration will be deployed prior to the configuration review workshop to be used for obtaining feedback, refining configuration and providing a tangible opportunity for knowledge transfer. Woolpert will then facilitate a series of focused review workshops to fine tune the system ahead of user acceptance testing.

Phase 2 will continue with the development of Cityworks Inbox dashboards which will be configured to meet requirements set at the user group level. These dashboards are critical for routing work through the organization as status is updated and for conveying information needed for day-to-day decision making.

Task 2.1: Develop and Deploy Vertical Asset Geodatabase

The purpose of this task and sub-tasks is to establish the asset repository that will be used by the AMS. This task includes the validation, data loading and testing of the vertical asset geodatabase.

The first series of tasks involves the development of an Esri GIS geodatabase as the asset repository for the plant asset data. Woolpert will present to the Client project team a draft GIS geodatabase design using the defined assets found within the Clients legacy Oracle WAM data. Woolpert will assist with modifying the design to fit the assets of the Client's plants. Once the Esri GIS data schema is finalized and accepted, Woolpert will work with the Client to import existing asset data into the Esri GIS data schema then deploy the newly developed vertical asset geodatabase to the Client's Cityworks Development environment.

WBS	Task Name
2.1	Develop and Deploy Vertical Asset Geodatabase
2.1.1	Asset Data Discovery (GIS & WAM)
2.1.1.1	Woolpert to Perform Desktop Audit of Collected Information
2.1.2	Facilitate Vertical Asset Geodatabase Design Review Workshop
2.1.2.1	Woolpert to Prepare Vertical Asset Geodatabase Design Review Workshop Agenda
2.1.2.2	Woolpert to Submit Vertical Asset Geodatabase Design Review Workshop Agenda to County PM
2.1.2.3	Woolpert to Prepare for Vertical Asset Geodatabase Design Review Workshop
2.1.2.4	Woolpert to Facilitate Vertical Asset Geodatabase Design Review Workshop - Round 1 (On- Site) - Trip 3
2.1.2.4.1	Vertical Asset Geodatabase Design Review Workshop - Water
2.1.2.4.2	Vertical Asset Geodatabase Design Review Workshop - Wastewater
2.1.2.5	Woolpert to Update Vertical Asset Geodatabase Design Based on Workshop Outcomes
2.1.2.6	Woolpert to Facilitate Vertical Asset Geodatabase Design Review Workshop - Round 2 (On- Site) - Trip 4
2.1.2.6.1	Vertical Asset Geodatabase Design Review Workshop - Water
2.1.2.6.2	Vertical Asset Geodatabase Design Review Workshop - Wastewater
2.1.2.7	Woolpert to Update Vertical Asset Geodatabase Design Based on Workshop Outcomes
2.1.3	Review and Approve Vertical Asset Geodatabase Design
2.1.3.1	Review Vertical Models with Water Team (Conf-Call)
2.1.3.2	Review Vertical Models with Wastewater Team (Conf-Call)
2.1.3.3	Woolpert to Submit Vertical Asset Geodatabase Design to County PM
2.1.3.4	County Core Team to Review Vertical Asset Geodatabase Design (County-Owned Task)
2.1.3.5	Woolpert to Facilitate Remote Review Meetings (Conf-Call)
2.1.3.6	Woolpert to Update Vertical Asset Geodatabase Design Documents Based on County Feedback
2.1.3.7	Woolpert to Build ArcGIS Schema for Three Treatment Plants
2.1.3.8	Woolpert to Submit ArcGIS Schemas to County PM
2.1.3.9	County to Review and Approve Final ArcGIS Schemas (County-Owned Task)
2.1.3.10	Geodatabase Acceptance
2.1.4	Populate Vertical Asset Geodatabase and Deploy to County DEV GIS Environment
2.1.4.1	Woolpert to Load Existing Plant Asset Data to Esri Geodatabase

Related Sub-Tasks are as follows:

Deliverables

- Woolpert will facilitate up to two (2) rounds of on-site vertical asset geodatabase design workshops, each being no longer than two (2) days on-site.
- Woolpert will provide a DRAFT vertical asset geodatabase design documentation.
- Woolpert will facilitate up to two (2) remote review meetings of the geodatabase design documentation (one for Water, and one for Wastewater)
- Woolpert will update and submit a FINAL geodatabase design documentation based on feedback obtained from the remote review meeting.
- Woolpert will populate the FINAL vertical asset geodatabase with data provided by the Client and will assist in deploying it to the development environment.
- Woolpert will support Client testing and quality control of the populated geodatabase.
- Woolpert will update the data load and schema as required by the results and feedback obtained through testing.

Assumptions

- Client GIS administrator will provide all required access and credentials to perform the geodatabase deployment.
- Client GIS administrator will be an active participant in all tasks and sub-tasks but primarily the documentation review, data loading, geodatabase deployment, testing and approval.
- Woolpert will attempt to load the Client asset data into the FINAL geodatabase no more than two (2) times. If the data load fails after two attempts (due to the cleanliness of the data or other factors attributed to Client responsibilities), it will then be the Client's responsibility to load the asset data into the geodatabase.

Client Responsibilities

- Client PM will schedule and accommodate the appropriate Client project participants such that they are available, without undue interruption, for the required workshops.
- Client Core Team to review the geodatabase documentation and provide feedback to the Client PM
- Client PM will combine feedback and provide one formal written submittal to the Woolpert PM for geodatabase schema updates.
- Client PM will provide written approval of the vertical asset geodatabase and documentation to the Woolpert PM
- The Client will be responsible for exporting the asset information from the legacy work management system, preparing asset data into a format that is clean, consistent, and in a way that can be imported into the FINAL geodatabase.

Task 2.2: Develop Cityworks AMS Configuration Documentation

Woolpert will compile the asset management data gathered and documented through the multiple workshops and other related project meetings completed project-to-date (pre-planning discovery) and distill this information into a System Configuration Document. The System Configuration Document, consisting of standard Cityworks AMS system elements, as well as the customized details required to support the Client's specific requirements.

Related Sub-Tasks are as follows:

WBS	Task Name
2.2	Develop Cityworks AMS Configuration Documentation
2.2.1	Woolpert to Develop Draft Cityworks AMS Configuration Documentation
2.2.2	Woolpert to Submit Draft Cityworks AMS Configuration Documentation to County PM
2.2.3	Woolpert to Facilitate Remote Review Meetings with County Core Team (Conf-Call)

Deliverables

- Woolpert will develop and deliver the initial draft Cityworks AMS configuration documentation (MSExcel and MSWord documents).
- Woolpert will facilitate one (1) remote review meeting, up to two (2) hours in duration, with the Client's Core Team.

Assumptions

- All tasks will be performed remotely.
- The System Configuration Document includes standard Cityworks AMS documentation that is required for this specific scope of services.

Client Responsibilities

- Client Core Team will review the prepared Draft System Configuration Document
- Client Core Team will participate in the remote review meeting.

Task 2.3: Facilitate Cityworks AMS Configuration

Woolpert will facilitate the Core Cityworks Configuration through a series of three (3) rounds of on-site configuration review workshops. Woolpert will pre-configure the system using information and data obtained during Phase 1 as well as industry best practices. This pre-configured system will be demonstrated for the Client Core Team and used to obtain additional detail

required to tailor the solution for the Client. The workshops and subsequent remote review sessions will provide an iterative and collaborative configuration of all Cityworks AMS components.

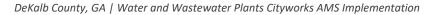
Following each round of workshops, Woolpert will use the information gained to update the Configuration Document as well as to make updates and modifications to the system configuration. Following a review of the modifications made, the Client Core Team will be required to use the configurated Cityworks software to become familiar with the added functionality. This will aid in system training and knowledge transfer to the Core Team members and will inevitably lead to more production workshops to complete the system configuration.

The workshops will address:

- **Domains**. This is the security architecture that determines how employees, work orders and other asset maintenance management information can be shared across organizational 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 performed on each asset in the system.
- Inspections. Templates for each of the type of observation activities that will be performed on each asset in the system.
- Tasks. Individual work items associated with a work order. For example, a motor repair my involve various Tasks for pump Lock-out Tag-out, electricians, mechanics to remove and repair the motor, then electricians to reassemble and restore power.
- 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.
- **Reporting.** Current or future expected reports will be discussed and designed.
- Projects. Projects to be managed within the Cityworks AMS software
- User Group Dashboards. Dashboards will be configured to enhance the user experience with the software by providing a status based interface to track work activities as they progress

Related Sub-Tasks are as follows:

WBS	Task Name
2.3	Facilitate Cityworks AMS Configuration
2.3.1	Pre-Configure Cityworks AMS
2.3.1.1	Woolpert to Perform Initial Cityworks AMS Configuration (using RFI data)
2.3.1.2	Woolpert to Update Cityworks AMS Configuration Documentation
2.3.2	Round 1 Configuration Workshops
2.3.2.1	Woolpert to Prepare Cityworks AMS Configuration Agenda
2.3.2.2	Woolpert to Submit Cityworks AMS Configuration Agenda to County PM
2.3.2.3	Woolpert to Prepare for Cityworks AMS Configuration Workshops
2.3.2.4	Cityworks AMS Configuration Workshops - Round 1 (On-Site) - Trip 5
2.3.2.4.1	Global Configuration Workshop
2.3.2.4.2	Water Plant Workshops
2.3.2.4.3	Wastewater Plant Workshops
2.3.2.5	Woolpert to Prepare Cityworks Functionality Familiarization Documents - 101 (Round 1)
2.3.2.6	Woolpert to Submit Cityworks Functionality Familiarization Documents - 101 (Round 1)
2.3.2.7	Woolpert to Facilitate Remote Review of Cityworks Functionality Familiarization Documents with Core Team (Conf-Call)
2.3.2.8	Woolpert to Update Configuration Documentation (Round 1)



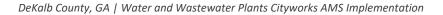
2.3.2.9	Woolpert to Perform Configuration in Development Environment (Round 1)
2.3.2.10	Core Team to Become Familiarized With System Using 101 Document (County-Owned Task)
2.3.3	Round 2 Configuration Workshops
2.3.3.1	Woolpert to Prepare Cityworks AMS Configuration Agenda
2.3.3.2	Woolpert to Submit Cityworks AMS Configuration Agenda to County PM
2.3.3.3	Woolpert to Prepare for Cityworks AMS Configuration Workshops
2.3.3.4	Cityworks AMS Configuration Workshops - Round 2 (On-Site) - Trip 6
2.3.3.4.1	Water Plant Workshops
2.3.3.4.2	Wastewater Plant Workshops
2.3.3.5	Woolpert to Prepare Cityworks Functionality Familiarization Documents - 101 (Round 2)
2.3.3.6	Woolpert to Submit Cityworks Functionality Familiarization Documents - 101 (Round 2)
2.3.3.7	Woolpert to Facilitate Remote Review of Cityworks Functionality Familiarization Documents with Core
	Team (Cont-Call)
2.3.3.8	
2.3.3.9	
2.3.3.10	Core Team to Become Familiarized With System Using 101 Document (County-Owned Task)
2.3.4	Round 3 Configuration Workshops
2.3.4.1	Woolpert to Prepare Cityworks AMS Configuration Agenda
2.3.4.2	Woolpert to Submit Cityworks AMS Configuration Agenda to County PM
2.3.4.3	Woolpert to Prepare for Cityworks AMS Configuration Workshops
2.3.4.4	Cityworks AMS Configuration Workshops - Round 3 (On-Site) - Trip 7
2.3.4.4.1	Water Plant Workshops
2.3.4.4.2	Wastewater Plant Workshops
2.3.4.5	Woolpert to Prepare Cityworks Functionality Familiarization Documents - 101 (Round 3)
2.3.4.6	Woolpert to Submit Cityworks Functionality Familiarization Documents - 101 (Round 3)
2.3.4.7	Woolpert to Facilitate Remote Review of Cityworks Functionality Familiarization Documents with Core
2.3.4.7	Team (Cont-Call)
2.3.4.8	
2.3.4.9	Woolpert to Perform Configuration in Development Environment (Round 3)

Deliverables

- Woolpert will deploy pre-configured Cityworks AMS solution to the Client's development environment which will be based on industry best practices and Phase 1 findings
- Woolpert will facilitate up to three (3) rounds of on-site configuration workshops. Each round will address:
 - Water Plant Operations
 - Water Plant Maintenance
 - Wastewater Plant Operations
 - Wastewater Plant Maintenance
- Woolpert will update the System Configuration Document and the Cityworks system configuration following each round of workshops, resulting in a fully configured Cityworks AMS system ready for use for both Water and Wastewater Plants.

Assumptions

- The Client Cityworks Administrator shall provide Woolpert with access and credentials to deploy the Cityworks AMS solution to the development environment.
- Round 1 of on-site workshops are expected to take up to five (5) consecutive days.
- Round 2 of on-site workshops are expected to take up to four (4) consecutive days.



• Round 3 of on-site workshops are expected to take up to three (3) consecutive days.

Client Responsibilities

- Client PM will schedule and accommodate the appropriate Client project participants such that they are available, without undue interruption, for the required workshops.
- Client Core Team to review the configured solution following the workshop over a period no longer than ten (10) business days and provide feedback to the Client PM
- Following each of the configuration rounds, the Client Core Team will use the Cityworks 101 documents to explore operations within the software with the goal of becoming familiar with its operations.
- Client PM will combine feedback and provide one formal submittal to the Woolpert PM for document updates.
- Client PM will provide written approval of the Cityworks configuration and documentation to the Woolpert PM.

Task 2.4: Facilitate Custom Dashboard Set Up

The Cityworks interface centers upon users quickly and easily creating and locating work activities that are relevant to their respective role within the organization. The mechanism for tracking work activities is the user inbox. Woolpert will create custom inbox dashboards for user groups defined in prior phases of the project. The inbox set up will allow for work activities to be tracked through workflows based on triggers such as activity description, location/facility, status and responsible individual.

Related Sub-Tasks are as follows:

WBS	Task Name
2.4	Facilitate Custom Dashboard Set Up
2.4.1	Woolpert to Configure Template Dashboards

Deliverables

• Woolpert will deploy custom inbox dashboards, based upon work group and individual roles, to the Client's development environment.

Assumptions

• The Client PM will ensure that the necessary team members review and provide feedback on the custom inbox dashboards.

Client Responsibilities

- Client Core Team to review the deployed dashboards and provide any necessary comments to the Client PM.
- Client PM will combine feedback and provide one formal submittal to the Woolpert PM for inbox dashboard updates.
- Client PM will provide written approval of the updated inbox dashboards to the Woolpert PM.

Task 2.5: Phase 2 Quality Control

Woolpert technical resources, not regularly involved with this implementation will perform independent quality review of the work processes and deliverable products in accordance with the Woolpert Total Quality Plan.

Task 2.6: Phase 2 Acceptance and Close

This is the Phase exit document that the Client project manager signs indicating Woolpert has delivered the Phase 2 services in accordance with the Scope of Work and Project Plan. Certain Phase 3 and 4 activities will begin prior to Phase 2 sign-off, due to the critical schedule of this implementation.



Phase 3. Advanced Functionality Development and Configuration

Key Advanced Functionality Development and Configuration (Phase 3) Deliverables

• Custom Report and Dashboard Training Phase 3 tasks are undertaken to deliver the advanced AM system functionality required to deliver robust Enterprise Asset Management capabilities. Completion of Phase 3 tasks will result in training Client staff on custom report and dashboard setup training.

When all of the above tasks are completed and the advanced functionality has been tested and deployed to the Production environment, the Client's asset management team will have all of the data sets, application tools, and business process workflows needed to support the Cityworks implementation and begin to move the organization to a position of proactive asset sustainability.

Task 3.1: Custom Report and Dashboard Training / Development

Cityworks AMS contains many report and dashboard development options and capabilities including the use of saved-searches to build live dashboards, ad-hoc queries, or more elaborate reports to be exported or printed. Woolpert will work with the Client to determine the immediate needs of the water and wastewater plants to determine the best approach for information reporting.

For this task Woolpert is proposing a maximum limit of sixty (60) hours of support to assist the Client either develop reports and dashboards, train Client staff on Cityworks reporting, or some mixture of each.

Related sub-tasks are as follows:

WBS	Task Name
3.1	Custom Report and Dashboard Training
3.1.1	Woolpert to provide Custom Report Support and/or Report Training

Deliverables

• Maximum of sixty (60) hours of report support services. This could include development or training. To be determined between Woolpert and the Client.

Assumptions

- All services to be performed remotely.
- Woolpert and the Client will review the Clients needs and available resources to make a determination on the approach to follow for these services.

Client Responsibilities

- Provide a prioritized list of reports for development consideration.
- Identify available staff for possible training.

Task 3.2: Phase 3 Quality Control

Woolpert technical resources, not regularly involved with this implementation will perform independent quality review of the work processes and deliverable products in accordance with the Woolpert Total Quality Plan.

Task 3.3: Phase 3 Acceptance and Close

This is the Phase exit document that the Client project manager signs indicating Woolpert has delivered the Phase 3 services in accordance with the Scope of Work and Project Plan. Certain Phase 4 activities will begin prior to Phase 3 sign-off, due to the critical schedule of this implementation.

Phase 4. System Deployment

Key System Deployment (Phase 4) Deliverables

- Configured Solution Demonstrations
- User Acceptance and Testing (UAT) Plan
- Tester Training
- UAT Support
- End-User Training
- Go-Live Support

Once the Cityworks AMS solution has been configured, along with any critical related tasks (inventory management, data migration), there are still a number of critical tasks that must be completed before the solution is placed into a production environment. Woolpert will lead the Client's Core Team through a series of related deployment tasks that will ensure a fully tested and accepted solution as well as a Client team of fully trained system administrators and end-users ready to put the system to use on a daily basis.

Woolpert will assist the Client system administrators in developing a thorough Testing and Acceptance Plan, designed to step the configured solution through all of the technical and functional requirements that the system was configured to support. Following acceptance of the test plan, Woolpert will facilitate a series of Tester Training classes for the Client's selected testing team. Immediately

upon completion of this training, the Client's testing team will execute the User Acceptance Testing program in accordance with the plan. While it is the Client's responsibility to assemble a testing team and manage the testing procedures in-house, Woolpert staff will be made available to provide on-site assistance.

Once the system testing has been completed, and all configuration updates have been made, Woolpert will then provide the required end-user training. This training will be scheduled and delivered "just in time", immediately prior to the Go-Live activities to ensure system administrators and end-users are prepared to adopt and embrace the new technology solutions right out of the gate.

The final deployment task is for Woolpert to assist the Client system administrators in migrating the solution from the Development / Testing environment to a live Production environment and provide on-site Go-Live support for the first week that the new system is being placed into productive use.

Task 4.1: Provide Cityworks AMS Software Demonstrations

After completion of the core Cityworks AMS configuration, and approval of the updated configuration documentation, Woolpert will provide two remote full Cityworks demonstrations to Client project participants and stakeholders. Each demonstration will be up to two (2) hours in duration in order to review the configuration in depth and answer any questions. At the end of these meetings, it is anticipated that there may be some minor requested changes to the system configuration. Woolpert will make those configuration updates to the Cityworks environment and update the configuration documentation, as required.

Related Sub-Tasks are as follows:

WBS	Task Name
4.1	Provide Cityworks AMS Software Demonstrations
4.1.1	Woolpert to Prepare for Cityworks AMS Solution Demonstrations
4.1.2	Woolpert to Facilitate Cityworks AMS Solution Demonstrations
4.1.2.1	Water Plant Demonstration (Conf-Call)
4.1.2.2	Wastewater Plant Demonstration (Conf-Call)

Deliverables

- Woolpert will provide two (2) remote Cityworks demonstrations (one for Water Plants, one for Wastewater Plants), each expecting to last no longer than two (2) hours.
- Woolpert will record each demonstration and make the recording available to the Client PM.

Assumptions

• All activities will be performed remotely.

• Any configuration edits to be made following the software demonstration is limited to items defined within the Configuration Document. Any new functionality to be added, or desired changes based on preferences, will require additional compensation.

Client Responsibilities

• Client PM will coordinate and schedule demonstration participants.

Task 4.2: Develop User Acceptance Test Plans (UATPs)

The focus of system testing efforts is to thoroughly test the newly configured Cityworks solution and ensure all delivered functionality (application workflows, templates, reports) are properly functioning.

Woolpert will take the lead on developing a User Acceptance Test Plan (UATP). The UATP will derive its focus from the previously prepared configuration documents. Functional metrics that the Cityworks AMS configurations must successfully achieve prior to being promoted to the Client's production environment will be defined. Additionally, test scenarios designed to step Client Testers through the User Acceptance Testing (UAT) process will be developed as part of this UATP. Final UATP contents will be per common agreement between the Client testing team and Woolpert and will serve as the "script" for testing and approving the system configuration. The UATP will address the AMS functionality specified and configured per the Project Plan and Configuration Document.

Related Sub-Tasks are as follows:

WBS	Task Name
4.2	Develop User Acceptance Test Plans (UATP)
4.2.1	Woolpert to Develop Cityworks AMS UATP
4.2.2	
4.2.3	County Core Team to Review Draft Cityworks AMS Solution UAT Plans and Provide Feedback to Woolpert (County-Owned Task)
4.2.4	Woolpert to Facilitate Remote Review Meeting with County Core Team (Conf-Call)
4.2.5	Woolpert to Update Draft Cityworks AMS Solution UAT Plans Based on County Feedback
4.2.6	Woolpert to Submit Updated Draft Cityworks AMS Solution UAT Plans to County PM
4.2.7	County to Review and Approve Cityworks AMS Solution UAT Plans (County-Owned Task)

Deliverables

- Woolpert will prepare and deliver the DRAFT User Acceptance Test Plan (UATP) (MS Word format) to the Client PM.
- Woolpert will facilitate a remote review meeting, up to three (3) hours in duration with the Client's testing team.
- Woolpert will update the UATP per the results of the review meeting and re-submit as FINAL to the Client's PM.

Assumptions

- The UATP will be developed per common agreement between the Client and Woolpert.
- The Client will provide end-to-end processes and scenarios to be incorporated into test plans (*client developed process testing might be developed in MS Excel*)

Client Responsibilities

- The Client's PM and members of the testing team must thoroughly review and understand the UATP.
- The Client's PM will compile and document any workflows or scenarios that are operation critical that should be incorporated into test plans.

Task 4.3: Facilitate User Acceptance Testing Training

It will be the responsibility of the Client to select several Core Team members who will conduct testing of the newly configured Cityworks solution. In order to effectively test the system in accordance with the UATP, training will be provided to these endusers. Training will be facilitated on-site over a one (1) day period.

Related Sub-Tasks are as follows:

WBS	Task Name
4.3	Facilitate User Acceptance Testing Training
4.3.1	Woolpert to Prepare User Acceptance Testing Training Agendas
4.3.2	Woolpert to Submit User Acceptance Testing Training Agendas to County PM
4.3.3	Woolpert to Prepare for User Acceptance Testing Training
4.3.4	Woolpert to Provide User Acceptance Testing Training (On-Site) - Trip 8
4.3.4.1	Woolpert to Facilitate UAT Training

Deliverables

• Woolpert will facilitate the on-site Tester Training over a one-day (1) period.

Assumptions

- The Client understands that failure to properly prepare and ensuring adequate available training resources will result in the Woolpert/Client training team being unable to provide the required training to the Client testers.
- The Client understands that failure to properly prepare for and participate in the training sessions will significantly impact the Client testing team's ability to effectively make use of the configured AM System application.

Client Responsibilities

- Ensure that all Core Team members performing system testing has adequate computer skills, hardware and software to properly participate in on-site training.
- The Client's PM and testing team must thoroughly review and understand the UATP.
- Schedule and accommodate the appropriate Client testing team members such that they are available, without undue interruption, for the required training sessions.

Task 4.4: Facilitate User Acceptance Testing in Development Environment

Once the UATP has been approved by all parties and the tester training has been delivered, the Client testing team will undertake the UAT activities defined within the UATP – and only those activities defined within the UATP. The test scenarios will be marked as either "pass" or "fail" with appropriate notes and screen shots provided to Woolpert for resolution.

Woolpert will provide on-site support during Client-Owned testing activities. While on-site Woolpert will be tracking identified testing fails and correcting the configuration as required. Once corrected, the Client Testing Team will be able to re-test to validate an acceptable pass. If any identified fails cannot be fixed while on-site, Woolpert will make the required corrections remotely.

Related Sub-Tasks are as follows:

WBS	Task Name
4.4	Facilitate UAT in Development Environment
4.4.1	County Testing Team to Execute UAT (County-Owned Task)
4.4.2	Woolpert to Provide UAT Support (On-site) - Trip 8
4.4.3	Woolpert to Facilitate Updates to the Cityworks AMS Solution Configuration Based on UAT Results

Deliverables

- Woolpert will be on-site for two (2) consecutive days to work directly with the Client Testing Team to complete the UAT.
- Woolpert will update the Cityworks configuration based on UAT results.
- Woolpert will update the configuration documentation based on UAT results and updated configuration.

Assumptions

- Client UAT efforts will remain focused on the scripts and criteria defined in the UATP.
- On-site UAT services will immediately follow the UAT training in Task 4.3 so that both tasks are completed within three (3) consecutive days.

Client Responsibilities

- Set-up and administer adequate testing facilities.
- Manage the testing process.
- Coordinate and schedule testing participants.
- Testing participants will actively participate in testing activities over a two (2) day period (if needed).
- Compile and deliver testing results to Woolpert.

Task 4.5: Develop and Test Cut-Over Plan in TEST Environment

The Client is already using Cityworks AMS prior to the plant go-live activities. Any system updates require a coordinated effort to define the process for deploying and testing updates ahead of making those updates to the PRODUCTION environment.

In this task, Woolpert will develop and deliver a draft cutover plan for the Client to review. Woolpert will facilitate a plan review and make updates as necessary. Woolpert will then work with the Client's Cityworks Administrator to execute the cutover plan to the Client's TEST environment and assist stakeholders system-wide in testing their respective configurations. This "dry-run" will work out any kinks in the plan and mitigate risk inherent with go-live.

Related Sub-Tasks are as follows:

WBS	Task Name
4.5	Develop and Test Cut-Over Plan in TEST Environment
4.5.1	Develop Cut-Over Plan
4.5.1.1	Woolpert to Develop Draft Cut-Over Plan
4.5.1.2	Woolpert to Submit Draft Cut-Over Plan to County PM
4.5.1.3	County Technical Team to Review Draft Cut-Over Plan (County-Owned Task)
4.5.1.4	Woolpert to Facilitate Remote Review Meeting with County Technical Team (Conf-Call)
4.5.1.5	Woolpert to Update Draft Cut-Over Plan Based on County Feedback
4.5.2	Perform Cut-Over Activities in County TEST Environment
4.5.2.1	County to Replicate Existing PROD Environment in TEST (County-Owned Task)
4.5.2.2	Woolpert to Migrate Configured Applications and Databases to County TEST Environment
4.5.2.3	Woolpert to Perform System Tests in County TEST Environment and Correct as Required
4.5.2.4	Woolpert to Review Cut-Over Results and Update Cut-Over Plan as Appropriate

Deliverables

- Woolpert will develop and deliver a draft cutover plan using Woolpert standard technical memo format.
- Woolpert will facilitate at remote review meeting of the cutover plan.
- Woolpert will make updates to the cutover plan and deliver to the Client's PM.
- Woolpert will execute the cutover plan to the Client's TEST environment with the assistance of the Client's Cityworks Administrator.
- Woolpert will assist in system-wide testing and make any corrections to the configuration and cutover plan that are required.

Assumptions

- The Client PM will facilitate communication with citywide Cityworks stakeholders as required.
- The Client's Cityworks Administrator will be available to assist with the execution of the cutover plan.
- The Client PM will be responsible for coordinating stakeholder feedback from citywide stakeholders.

Client Responsibilities

• The Client PM will coordinate the internal review of the cutover plan and will compile feedback for delivery to Woolpert.



- The Client PM will coordinate and ensure that all stakeholders are included in plan review, system testing and feedback cycles of the TEST deployment.
- The Client PM will provide written acceptance of the cutover plan before the project proceeds to the next tasks.

Task 4.6: Facilitate End-User Training

It is important that end-user training be timed to occur immediately prior to beginning live use of the system in the Production environment.

This scope of services includes a training methodology in which every end-user will have the opportunity to attend a Woolpertled End-User Training. However, it is highly recommended that prior to training that a sub-set of users be identified who will become Client trainers post-go-live.

Completion of the training efforts will result in Client system administrators and end-users being provided the system knowledge and capabilities necessary to manage (administrators) and use (end-users) the configured Cityworks AMS in an effective manner such that the Client's overarching business objectives can be met through uthe se of the newly configured system.

Woolpert will facilitate a series of training courses over three separate on-site visits. The first training visit (three days) will include Cityworks Administrator training as well as Storeroom training. The second and third training visits (each four days) will include the end-user training sessions

Each course will be facilitated on-site at the Client's identified training facility. Prior to the training, Woolpert will prepare a training syllabus detailing each topic to be covered. While training materials and syllabi will be standardized, end-user training curriculum will be tailored to the attendees of each course (i.e. Plant Maintenance will be trained using their workflows and scenarios while Plants Operators will be trained using their own workflows).

WBS	Task Name
4.6	Provide End-User Training
4.6.1	Woolpert to Prepare End-User Training Agendas
4.6.2	Woolpert to Submit End-User Training Agendas to County PM
4.6.3	Woolpert to Prepare Standard End-User Training Guides
4.6.4	Woolpert to Prepare for End-User Training
4.6.5	County PM to Prepare Site for End-User Training (County-Owned Task)
4.6.6	Woolpert to Facilitate On-Site End-User Training
4.6.6.1	Cityworks AMS Training (On-Site)
4.6.6.1.1	Cityworks AMS Administrator Training (On-Site) - Trip 9
4.6.6.1.2	Cityworks Storeroom Training (On-Site) - Trip 9
4.6.6.2	Cityworks AMS End-User Training Week 1 (On-Site)
4.6.6.2.1	Water Plant End-User Training (On-Site) - Trip 10
4.6.6.3	Cityworks AMS End-User Training Week 2 (On-Site)
4.6.6.3.1	Wastewater Plant End-User Training (On-Site) - Trip 11

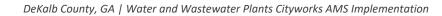
Related Sub-Tasks are as follows:

Deliverables

- Standard Cityworks training materials and course syllabi (MS Word or PDF format).
- Woolpert will facilitate on-site Cityworks training and include three (3) separate on-site trips
 - First on-site visit lasting no longer than three (3) days.
 - Second on-site visit lasting no longer than four (4) days.
 - Third on-site visit lasting no longer than four (4) days.

Assumptions

• All training will take place over a three (3) consecutive week period.



• The Client has an adequate training facility that can accommodate the resultant number of staff to be trained; each accessing the AM system on their own workstation.

Client Responsibilities

- Secure an appropriate training facility and workstations or devices for all trainees.
- Coordinate and schedule training participants.
- Training participants will actively participate in training activities.
- Provide trainees with standard operating procedures that augment and support Woolpert training materials.

Task 4.7: Provide Go-Live Support

Immediately following the Cityworks AMS end-user training, go-live support is provided to assist end-users during the first week of system usage in the PRODUCTION environment. Woolpert will provide four (4) days of on-site go-live support.

In preparation for go-live, Woolpert will work remotely with the Client's project manager and IT support staff to ensure that:

- The Client's TEST environment is migrated to the Client's PRODUCTION environment
- To perform a final Cityworks data load to the Client's PRODUCTION database
- To perform a final legacy data load to the Client's PRODUCTION database
- To perform system testing in the Client's PRODUCTION environment

Related Sub-Tasks are as follows:

WBS	Task Name
4.7	Provide Go-Live Support
4.7.1	Go-Live Preparations (Remote)
4.7.1.1	Woolpert to Migrate Configured Applications and Databases to County PROD Environment
4.7.1.2	2 Woolpert to Perform Final Cityworks Data Load to County PROD Database
4.7.1.3	Woolpert to Perform Final Legacy Data Load to County PROD Cityworks AMS and ArcGIS Databases
4.7.1.4	Woolpert to Perform System Tests in County PROD Environment and Correct as Required
4.7.1.5	Woolpert to Validate System Log-ins and Connectivity
4.7.2	System Go-Live Support (On-Site)
4.7.2.1	Go-Live Support (On-Site) - Trip 12

Deliverables

- Woolpert will provide remote go-live preparation services, as detailed above.
- Woolpert will provide on-site go-live support services for up to four (4) consecutive days.

Assumptions

• The Client's PM will provide project sign-off within agreed upon timeframe following go-live.

Client Responsibilities

 The Client's PM, Cityworks administrators, and IT support staff should equally assist in administering the go-live tasks to make sure it is clear to the End-Users that the Client is internally capable of supporting the newly deployed Cityworks AMS solution. The Client system administrators and IT support staff will benefit from learning basic AM System troubleshooting routines during this time.

Task 4.8: Phase 4 Quality Control

Woolpert technical resources, not regularly involved with this implementation will perform independent quality review of the work processes and deliverable products in accordance with Woolpert's Total Quality Plan.



Task 4.9: Phase 4 Acceptance and Close

This is the Phase exit document that the Client project manager signs indicating Woolpert has delivered the Phase 4 services in accordance with the Scope of Work and Project Plan.



Project Schedule

The following Work Breakdown Structure shows all project tasks defined within this Statement of Work.

- Line items in Blue indicate on-site tasks.
- Line items in Purple indicate remote conference call meetings.
- Line items in Orange indicate Client-owned tasks.
- Line items in Black indicate remote tasks.

/BS	Task Name	Duration	Start	Finish
	DeKalb County GA - Water and Wastewater Treatment Plant Implementation	267.5 days	2023-01-09	2024-02-08
PN	PROGRAM MANAGEMENT	267.5 days	2023-01-09	2024-02-08
1	PHASE 1: IMPLEMENTATION PLANNING	32.75 days	2023-01-09	2023-02-24
1.1	Project Kick-Off Meeting	13.5 days	2023-01-19	2023-02-07
1.1.1	Woolpert to Prepare Kick-Off Meeting Agenda	2 days	2023-01-19	2023-01-20
1.1.2	Woolpert to Submit Kick-Off Meeting Agenda to County PM	0 days	2023-01-20	2023-01-20
1.1.3	Woolpert to Prepare for Kick-Off Meeting	2 days	2023-01-23	2023-01-24
1.1.4	Facilitate Project Kick-Off Meeting (On-Site)	0.5 days	2023-01-27	2023-01-27
1.1.4.1	Woolpert to Facilitate Project Kick-Off Meeting (On-Site) - Trip 1	0.5 days	2023-01-27	2023-01-27
1.1.5	Woolpert to Prepare Kick-Off Meeting Notes	2 days	2023-01-27	2023-01-32
1.1.6	Woolpert to Submit Kick-Off Meeting Notes to County PM	0 days	2023-01-31	2023-01-32
1.1.7	County PM to Review and Approve Kick-Off Meeting Notes (County- Owned Task)	5 days	2023-01-31	2023-02-07
1.2	Provide Cityworks AMS Software Demonstrations	4.25 days	2023-01-23	2023-01-27
1.2.1	Woolpert to Prepare Cityworks AMS Software Demonstration Agenda	2 days	2023-01-23	2023-01-25
1.2.2	Woolpert to Submit Software Demonstration Agenda to County PM	0 days	2023-01-25	2023-01-25
1.2.3	Woolpert to Prepare for Cityworks AMS Software Demonstrations	1 day	2023-01-25	2023-01-20
1.2.4	Woolpert to Facilitate Cityworks AMS Software Demonstrations	0.25 days	2023-01-27	2023-01-2
1.2.4.1	Cityworks Demonstration (On-Site) - Trip 1	0.25 days	2023-01-27	2023-01-2
1.3	Facilitate Pre-Planning Discovery	22.13 days	2023-01-17	2023-02-1
1.3.1	Prepare Request for Information (RFI)	1 day	2023-01-17	2023-01-1
1.3.2	Submit RFI to County PM	0 days	2023-01-17	2023-01-17
1.3.3	County PM to Facilitate Data Gathering Process and Provide Data to Woolpert (County-Owned Task)	10 days	2023-01-18	2023-01-3
1.3.4	Woolpert to Perform Desktop Audit of County-Provided Information	5 days	2023-01-31	2023-02-0
1.3.5	Woolpert to Prepare for Discovery Workshops	1 day	2023-02-01	2023-02-0
1.3.6	Woolpert to Facilitate Discovery Workshops (On-Site) - Trip 1	2 days	2023-01-27	2023-01-3
1.3.6.1	Water Operations (On-Site)	0.5 days	2023-01-27	2023-01-3
1.3.6.2	Water Maintenance (On-Site)	0.5 days	2023-01-30	2023-01-3
1.3.6.3	Wastewater Operations (On-Site)	0.5 days	2023-01-30	2023-01-3
1.3.6.4	Wastewater Maintenance (On-Site)	0.5 days	2023-01-31	2023-01-3
1.3.7	Woolpert to Document Workshop Findings	4 days	2023-01-31	2023-02-0
1.3.8	Woolpert to Submit Draft Implementation Discovery Documents (Technical Memorandum) to County PM	0 days	2023-02-06	2023-02-0
1.3.9	County to Review Draft Implementation Discovery Technical	5 days	2023-02-06	2023-02-1
1.3.10	Woolpert to Facilitate Remote Review Meetings with County Core Team (Conf-Call)	0.13 days	2023-02-13	2023-02-1
1.3.11	Woolpert to Update the Draft Implementation Discovery Technical Memorandum Based on County Feedback	0.25 days	2023-02-13	2023-02-1
1.3.12	Woolpert to Submit Updated Implementation Discovery Technical Memorandum to County PM	0 days	2023-02-14	2023-02-1

NBS	Task Name	Duration	Start	Finish
1.3.13	County to Review and Approve Implementation Discovery Technical	2 days	2023-02-14	2023-02-16
1.4	Memorandum (County-Owned Task) Conduct Cityworks AMS Life-Cycle Business Process Reviews	23.25 days	2023-01-23	2023-02-24
1.4.1		1 day	2023-01-23	2023-01-24
1.4.2		0 days	2023-01-24	2023-01-24
1.4.3		1 day	2023-01-24	2023-01-25
	Woolpert to Facilitate Business Process Review Workshops (On-Site) - Trip 2	2.5 days	2023-02-06	2023-02-09
1.4.4.1	Global Business Processes	0.5 days	2023-02-06	2023-02-07
1.4.4.2	Water Plant Operations	0.5 days	2023-02-07	2023-02-07
1.4.4.3	Water Plant Maintenance	0.5 days	2023-02-07	2023-02-08
1.4.4.4	Wastewater Plant Operations	0.5 days	2023-02-08	2023-02-08
1.4.4.5		0.5 days	2023-02-08	2023-02-09
1.4.5	Woolpert to Document Business Process Review Workshop Findings	3 days	2023-02-09	2023-02-14
1.4.6		0 days	2023-02-14	2023-02-14
	County Core Team to Review Draft Workflow Documentation and			
1.4.7	Provide Feedback to Woolpert (County-Owned Task)	5 days	2023-02-14	2023-02-22
1.4.8	Woolpert to Facilitate Remote Review Meetings with County Core Team (Conf-Call)	0.5 days	2023-02-22	2023-02-22
	Woolpert to Update Workflow Documentation Based on County Feedback	2 days	2023-02-22	2023-02-24
1.5		1 day	2023-01-09	2023-01-09
1.6	Phase 1 Acceptance and Close	0 days	2023-02-24	2023-02-24
2	PHASE 2: SYSTEM DESIGN AND CONFIGURATION	187 days	2023-02-01	2023-10-25
2.1	Develop and Deploy Vertical Asset Geodatabase	67.5 days	2023-02-01	2023-05-08
2.1.1	Asset Data Discovery (GIS & WAM)	5 days	2023-02-01	2023-02-07
2.1.1.1	Woolpert to Perform Desktop Audit of Collected Information	5 days	2023-02-01	2023-02-07
2.1.2	Facilitate Vertical Asset Geodatabase Design Review Workshop	23 days	2023-02-08	2023-03-13
2.1.2.1	Woolpert to Prepare Vertical Asset Geodatabase Design Review Workshop Agenda	1 day	2023-02-08	2023-02-08
2.1.2.2	Woolpert to Submit Vertical Asset Geodatabase Design Review Workshop Agenda to County PM	0 days	2023-02-08	2023-02-08
2122	Woolpert to Prepare for Vertical Asset Geodatabase Design Review	8 days	2023-02-09	2023-02-21
2.1.2.4	Woolpert to Facilitate Vertical Asset Geodatabase Design Review Workshop - Round 1 (On-Site) - Trip 3	2 days	2023-02-22	2023-02-23
2.1.2.4.1	Vertical Asset Geodatabase Design Review Workshop - Water	1 day	2023-02-22	2023-02-22
2.1.2.4.2	Vertical Asset Geodatabase Design Review Workshop - Wastewater	1 day	2023-02-23	2023-02-23
2.1.2.5	Woolpert to Update Vertical Asset Geodatabase Design Based on Workshop Outcomes	5 days	2023-02-24	2023-03-02
2126	Woolport to Escilitate Vertical Asset Goodatabase Design Peview	2 days	2023-03-03	2023-03-06
2.1.2.6.1	Vertical Asset Geodatabase Design Review Workshop - Water	1 day	2023-03-03	2023-03-03
2.1.2.6.2	Vertical Asset Geodatabase Design Review Workshop - Wastewater	1 day	2023-03-06	2023-03-06
2.1.2.7	Woolpert to Update Vertical Asset Geodatabase Design Based on Workshop Outcomes	5 days	2023-03-07	2023-03-13
2.1.3		32 days	2023-03-14	2023-04-26
2.1.3.1	Review Vertical Models with Water Team (Conf-Call)	1 day	2023-03-14	2023-03-14
2.1.3.2	Review Vertical Models with Wastewater Team (Conf-Call)	1 day	2023-03-15	2023-03-15
2.1.3.3	Woolpert to Submit Vertical Asset Geodatabase Design to County PM	0 days	2023-03-15	2023-03-15
2.1.3.4	County Core Team to Review Vertical Asset Geodatabase Design (County-Owned Task)	10 days	2023-03-16	2023-03-29
	Woolpert to Facilitate Remote Review Meetings (Conf-Call)	3 days	2023-03-30	2023-04-03

2.1.3.6Woolpert to Update Vertical Asset Geodatabase Design Documents Based on County Feedback5 da2.1.3.7Woolpert to Build ArcGIS Schema for Water and Wastewater Treatment Plants7 da2.1.3.8Woolpert to Submit ArcGIS Schemas to County PM0 da2.1.3.9County to Review and Approve Final ArcGIS Schemas (County- Owned Task)5 da2.1.3.10Geodatabase Acceptance0 da2.1.4Populate Vertical Asset Geodatabase and Deploy to County DEV GIS Environment7.5 da	ys 2023-04-11 2023-04 ys 2023-04-19 2023-04 ys 2023-04-20 2023-04 ys 2023-04-26 2023-04
2.1.3.6Based on County Feedback5 da2.1.3.7Woolpert to Build ArcGIS Schema for Water and Wastewater Treatment Plants7 da2.1.3.8Woolpert to Submit ArcGIS Schemas to County PM0 da2.1.3.9County to Review and Approve Final ArcGIS Schemas (County- Owned Task)5 da2.1.3.10Geodatabase Acceptance0 da2.1.4Populate Vertical Asset Geodatabase and Deploy to County DEV GIS Environment7.5 da	ys 2023-04-11 2023-04 ys 2023-04-19 2023-04 ys 2023-04-20 2023-04 ys 2023-04-26 2023-04
2.1.3.7 Treatment Plants 7 da 2.1.3.8 Woolpert to Submit ArcGIS Schemas to County PM 0 da 2.1.3.9 County to Review and Approve Final ArcGIS Schemas (County- owned Task) 5 da 2.1.3.10 Geodatabase Acceptance 0 da 2.1.4 Populate Vertical Asset Geodatabase and Deploy to County DEV GIS Environment 7.5 da	ys 2023-04-19 2023-04 ys 2023-04-20 2023-04 ys 2023-04-26 2023-04
2.1.3.8Woolpert to Submit ArcGIS Schemas to County PM0 da2.1.3.9County to Review and Approve Final ArcGIS Schemas (County- Owned Task)5 da2.1.3.10Geodatabase Acceptance0 da2.1.4Populate Vertical Asset Geodatabase and Deploy to County DEV GIS Environment7.5 da2.1.4.1Woolpert to Load Existing Plant Asset Data to Esri Geodatabase7.5 da	ys 2023-04-20 2023-04 ys 2023-04-26 2023-04
2.1.3.9 Owned Task) 5 da 2.1.3.10 Geodatabase Acceptance 0 da 2.1.4 Populate Vertical Asset Geodatabase and Deploy to County DEV GIS Environment 7.5 da 2.1.4.1 Woolpert to Load Existing Plant Asset Data to Esri Geodatabase 7.5 da	ys 2023-04-26 2023-04
Populate Vertical Asset Geodatabase and Deploy to County DEV GIS 7.5 c 2.1.4.1 Woolpert to Load Existing Plant Asset Data to Esri Geodatabase 7.5 c	
2.1.4 Environment 7.5 c 2.1.4.1 Woolpert to Load Existing Plant Asset Data to Esri Geodatabase 7.5 c	dave 2022-04-27 2022-05
	uays 2023-04-27 2023-05
2.2 Develop Cityworks AMS Configuration Documentation 6.5 (days 2023-04-27 2023-05
Develop entyworks Anis configuration bocamentation	days 2023-04-27 2023-05
2.2.1 Woolpert to Develop Draft Cityworks AMS Configuration 6 da	ys 2023-04-27 2023-05
2.2.2 Woolpert to Submit Draft Cityworks AMS Configuration Documentation to County PM	ys 2023-05-04 2023-05-
2.2.3 Woolpert to Facilitate Remote Review Meetings with County Core Team (Conf-Call)	days 2023-05-05 2023-05
2.3 Facilitate Cityworks AMS Configuration 113	days 2023-05-05 2023-10
2.3.1 Pre-Configure Cityworks AMS 13 d	ays 2023-05-05 2023-05
2.3.1.1 Woolpert to Perform Initial Cityworks AMS Configuration (using RFI data)	lays 2023-05-05 2023-05-
2.3.1.2 Woolpert to Update Cityworks AMS Configuration Documentation 3 da	ys 2023-05-19 2023-05
2.3.2 Round 1 Configuration Workshops 38 d	ays 2023-05-26 2023-07
2.3.2.1 Woolpert to Prepare Cityworks AMS Configuration Agenda 1 da	y 2023-05-26 2023-05-
2.3.2.2 Woolpert to Submit Cityworks AMS Configuration Agenda to County 0 da	ys 2023-05-30 2023-05-
2.3.2.3 Woolpert to Prepare for Cityworks AMS Configuration Workshops 1 da	y 2023-05-30 2023-05
2.3.2.4 Cityworks AMS Configuration Workshops - Round 1 (On-Site) - Trip 5 5 da	ys 2023-06-01 2023-06
2.3.2.4.1Global Configuration Workshop1 da	y 2023-06-01 2023-06
2.3.2.4.2Water Plant Workshops2 da	ys 2023-06-02 2023-06
2.3.2.4.3Wastewater Plant Workshops2 da	ys 2023-06-06 2023-06
2.3.2.5 Woolpert to Prepare Cityworks Functionality Familiarization Documents - 101 (Round 1) 3 da	ys 2023-06-08 2023-06
2.3.2.6 Woolpert to Submit Cityworks Functionality Familiarization Documents - 101 (Round 1) 0 da	ys 2023-06-12 2023-06
2.3.2.7 Woolpert to Facilitate Remote Review of Cityworks Functionality Familiarization Documents with Core Team (Conf-Call)	y 2023-06-13 2023-06
2.3.2.8 Woolpert to Update Configuration Documentation (Round 1) 1 da	y 2023-06-14 2023-06
2.3.2.9 Woolpert to Perform Configuration in Development Environment (Round 1)	ays 2023-06-15 2023-07
2.3.2.10 Core Team to Become Familiarized With System Using 101 Document (County-Owned Task) 10 d	ays 2023-07-07 2023-07-
2.3.3 Round 2 Configuration Workshops 39 d	-
2.3.3.1 Woolpert to Prepare Cityworks AMS Configuration Agenda 1 da	y 2023-07-18 2023-07
2.3.3.2 Woolpert to Submit Cityworks AMS Configuration Agenda to County O da	ys 2023-07-19 2023-07
2.3.3.3 Woolpert to Prepare for Cityworks AMS Configuration Workshops 1 da	
2.3.3.4 Cityworks AMS Configuration Workshops - Round 2 (On-Site) - Trip 6 4 da	ys 2023-07-21 2023-07
	ys 2023-07-21 2023-07
2.3.3.4.1Water Plant Workshops2 da	
2.3.3.4.1Water Plant Workshops2 da2.3.3.4.2Wastewater Plant Workshops2 daWoolpert to Prepare Cityworks Functionality Familiarization2 da	ys 2023-07-25 2023-07

WBS	Task Nama	Duration	Ctort	Finich
VV BS	Task Name	Duration	Start	Finish
2.3.3.6	Woolpert to Submit Cityworks Functionality Familiarization Documents - 101 (Round 2)	0 days	2023-07-31	2023-07-31
2227	Woolpert to Facilitate Remote Review of Cityworks Functionality	3 days	2023-08-01	2023-08-03
2.3.3.8		1 day	2023-08-04	2023-08-04
2.3.3.9	Woolpert to Perform Configuration in Development Environment (Round 2)	15 days	2023-08-07	2023-08-25
	Core Team to Become Familiarized With System Using 101 Document (County-Owned Task)	10 days	2023-08-28	2023-09-11
2.3.4		27 days	2023-09-07	2023-10-13
2.3.4.1		1 day	2023-09-07	2023-09-08
2.3.4.2		0 days	2023-09-08	2023-09-08
2.3.4.3		1 day	2023-09-08	2023-09-08
2.3.4.4			2023-09-12	2023-09-14
2.3.4.4.1	Water Plant Workshops	1.5 days	2023-09-12	2023-09-13
2.3.4.4.2		1.5 days	2023-09-13	2023-09-14
2.3.4.5	Woolpert to Prepare Cityworks Functionality Familiarization Documents - 101 (Round 3)	3 days	2023-09-15	2023-09-19
2.3.4.6	Woolpert to Submit Cityworks Functionality Familiarization Documents - 101 (Round 3)	0 days	2023-09-19	2023-09-19
2247	Woolpert to Facilitate Remote Review of Cityworks Functionality	3 days	2023-09-20	2023-09-22
2.3.4.8	Woolpert to Update Configuration Documentation (Round 3)	5 days	2023-09-25	2023-09-29
2.3.4.9	Woolpert to Perform Configuration in Development Environment (Round 3)	10 days	2023-10-02	2023-10-13
2.4	Facilitate Custom Dashboard Set Up	8 days	2023-10-16	2023-10-25
2.4.1	Woolpert to Configure Template Dashboards	8 days	2023-10-16	2023-10-25
2.5	Phase 2 Quality Control	1 day	2023-02-01	2023-02-01
2.6	Phase 2 Acceptance and Close	0 days	2023-10-25	2023-10-25
3	PHASE 3: ADVANCED FUNCTIONALITY DEVELOPMENT AND CONFIGURATION	179 days	2023-01-09	2023-09-21
3.1	Custom Report and Dashboard Training / Development	8 days	2023-09-12	2023-09-21
3.1.1	Woolpert to provide Custom Report Support and/or Report Training	8 days	2023-09-12	2023-09-21
3.2	Phase 3 Quality Control	1 day	2023-01-09	2023-01-09
3.3	Phase 3 Acceptance and Close	0 days	2023-09-21	2023-09-21
4	PHASE 4: SYSTEM DEPLOYMENT	88.5 days	2023-09-22	2024-02-08
4.1	Provide Cityworks AMS Software Demonstrations	6.5 days	2023-10-25	2023-11-02
4.1.1	Woolpert to Prepare for Cityworks AMS Solution Demonstrations	4 days	2023-10-25	2023-10-30
4.1.2	Woolpert to Facilitate Cityworks AMS Solution Demonstrations	0.5 days	2023-11-02	2023-11-02
4.1.2.1	Water Plant Demonstration (Conf-Call)	0.25 days	2023-11-02	2023-11-02
4.1.2.2	Wastewater Plant Demonstration (Conf-Call)	0.25 days	2023-11-02	2023-11-02
4.2	Develop User Acceptance Test Plans (UATP)	25.5 days	2023-10-26	2023-12-08
4.2.1		10 days	2023-10-26	2023-11-08
4.2.2	Woolpert to Submit Draft Cityworks AMS Solution UAT Plans to County PM	0 days	2023-11-08	2023-11-08
4.2.3	County Core Team to Review Draft Cityworks AMS Solution UAT Plans and Provide Feedback to Woolpert (County-Owned Task)	5 days	2023-11-09	2023-11-16
4.2.4	Woolpert to Facilitate Remote Review Meeting with County Core Team (Conf-Call)	0.5 days	2023-11-17	2023-11-17
	Woolpert to Update Draft Cityworks AMS Solution UAT Plans Based on County Feedback	5 days	2023-11-17	2023-12-01

VBS	Task Name	Duration	Start	Finish
	We show the Color it the date of Deeft City works, ANAC Colorises that Disease		Start	THISH
4.2.6	to County PM	0 days	2023-12-01	2023-12-01
4.2.7	County to Review and Approve Cityworks AMS Solution UAT Plans (County-Owned Task)	5 days	2023-12-01	2023-12-08
4.3	Facilitate User Acceptance Testing Training	5 days	2023-12-11	2023-12-18
4.3.1	Woolpert to Prepare User Acceptance Testing Training Agendas	1 day	2023-12-11	2023-12-12
4.3.2	Woolpert to Submit User Acceptance Testing Training Agendas to County PM	0 days	2023-12-12	2023-12-12
4.3.3		1 day	2023-12-12	2023-12-13
4.3.4	Woolpert to Provide User Acceptance Testing Training (On-Site) - Trip 8	1 day	2023-12-15	2023-12-18
4.3.4.1		1 day	2023-12-15	2023-12-18
4.4		5 days	2023-12-18	2024-01-01
4.4.1		2 days	2023-12-18	2023-12-20
4.4.2		2 days	2023-12-18	2023-12-20
4.4.3	Woolpert to Facilitate Updates to the Cityworks AMS Solution	3 days	2023-12-20	2024-01-01
4.5	Develop and Test Cut-Over Plan in TEST Environment	17 days	2023-09-22	2023-10-16
4.5.1		14 days	2023-09-22	2023-10-11
4.5.1.1	Woolpert to Develop Draft Cut-Over Plan	2 days	2023-09-22	2023-09-25
4.5.1.2		0 days	2023-09-25	2023-09-25
4.5.1.3			2023-09-26	2023-10-09
	Woolpert to Facilitate Remote Review Meeting with County Technical Team (Conf-Call)	0.5 days	2023-10-09	2023-10-0
4.5.1.5	Woolpert to Update Draft Cut-Over Plan Based on County Feedback	2 days	2023-10-10	2023-10-12
4.5.2	Perform Cut-Over Activities in County TEST Environment	15 days	2023-09-26	2023-10-16
4.5.2.1	County to Replicate Existing PROD Environment in TEST (County- Owned Task)	10 days	2023-09-26	2023-10-09
4.5.2.2	Woolpert to Migrate Configured Applications and Databases to County TEST Environment	1 day	2023-10-10	2023-10-10
4.5.2.3	Woolpert to Perform System Tests in County TEST Environment and Correct as Required	2 days	2023-10-11	2023-10-1
4.5.2.4	Woolpert to Review Cut-Over Results and Update Cut-Over Plan as Appropriate	2 days	2023-10-13	2023-10-1
4.6	Provide End-User Training	16 days	2024-01-04	2024-01-2
4.6.1	Woolpert to Prepare End-User Training Agendas	1 day	2024-01-04	2024-01-0
4.6.2	Woolpert to Submit End-User Training Agendas to County PM	0 days	2024-01-05	2024-01-0
4.6.3	Woolpert to Prepare Standard End-User Training Guides	3 days	2024-01-05	2024-01-1
4.6.4	Woolpert to Prepare for End-User Training	1 day	2024-01-10	2024-01-1
4.6.5	County PM to Prepare Site for End-User Training (County-Owned Task)	1 day	2024-01-10	2024-01-1
4.6.6	Woolpert to Facilitate On-Site End-User Training	11 days	2024-01-11	2024-01-2
4.6.6.1		3 days	2024-01-11	2024-01-1
4.6.6.1.1		2 days	2024-01-11	2024-01-1
4.6.6.1.2		1 day	2024-01-15	2024-01-1
4.6.6.2		4 days	2024-01-16	2024-01-2
4.6.6.2.1		4 days	2024-01-16	2024-01-2
4.6.6.3		4 days	2024-01-22	2024-01-2
4.6.6.3.1		4 days	2024-01-22	2024-01-2
4.7	••	9 days	2024-01-26	2024-02-08
4.7.1	Go-Live Preparations (Remote) Woolpert to Migrate Configured Applications and Databases to	5 days	2024-01-26	2024-02-02



WBS	Task Name	Duration	Start	Finish
4.7.1.2	Woolpert to Perform Final Cityworks Data Load to County PROD Database	1 day	2024-01-29	2024-01-30
	Woolpert to Perform Final Legacy Data Load to County PROD Cityworks AMS and ArcGIS Databases	1 day	2024-01-30	2024-01-31
	Woolpert to Perform System Tests in County PROD Environment and Correct as Required	1 day	2024-01-31	2024-02-01
4.7.1.5		1 day	2024-02-01	2024-02-02
4.7.2	System Go-Live Support (On-Site)	4 days	2024-02-02	2024-02-08
4.7.2.1	Go-Live Support (On-Site) - Trip 12	4 days	2024-02-02	2024-02-08
4.8	Phase 4 Quality Control	1 day	2023-10-25	2023-10-25
4.9	Phase 4 Acceptance and Close	0 days	2024-02-08	2024-02-08

Project Fee Breakdown

The above defined Statement of Work can be completed for a lump-sum fee of \$534,909. If accepted by DeKalb County, this Statement of Work can be incorporated into an approved and fully executed contract.

	DeKalb County GA - Water and Wastewater Treatment Plant	
	Implementation	\$534,909.00
WBS	Task Description	Fees
PM	PROGRAM MANAGEMENT	\$89,681.00
1	PHASE 1: IMPLEMENTATION PLANNING	\$50,418.58
1.1	Project Kick-Off Meeting	
1.2	Provide Cityworks AMS Software Demonstrations	
1.3	Facilitate Pre-Planning Discovery	
1.4	Conduct Cityworks AMS Life-Cycle Business Process Reviews	
1.5	Phase 1 Quality Control	
1.6	Phase 1 Acceptance and Close	
2	PHASE 2: SYSTEM DESIGN AND CONFIGURATION	\$213,462.56
2.1	Develop and Deploy Vertical Asset Geodatabase	
2.2	Develop Cityworks AMS Configuration Documentation	
2.3	Facilitate Cityworks AMS Configuration	
2.4	Facilitate Custom Dashboard Set Up	
2.5	Phase 2 Quality Control	
2.6	Phase 2 Acceptance and Close	
3	PHASE 3: ADVANCED FUNCTIONALITY DEVELOPMENT AND CONFIGURATION	\$16,578.48
3.1	Custom Report and Dashboard Training / Development	
3.2	Phase 3 Quality Control	
3.3	Phase 3 Acceptance and Close	
4	PHASE 4: SYSTEM DEPLOYMENT	\$93,693.38
4.1	Provide Cityworks AMS Software Demonstrations	
4.2	Develop User Acceptance Test Plans (UATP)	
4.3	Facilitate User Acceptance Testing Training	
4.4	Facilitate UAT in Development Environment	
4.5	Develop and Test Cut-Over Plan in TEST Environment	
4.6	Provide End-User Training	
4.7	Provide Go-Live Support	
4.8	Phase 4 Quality Control	
4.9	Phase 4 Acceptance and Close	
	Travel and Expenses	
	Trip 1 - Kickoff, Demos, Pre Planning Discovery	\$9,002.00
	Trip 2 - Business Process Reviews	\$5,952.00
	Trip 3 - Vertical GDB Round 1	\$5,327.00
	Trip 4 - Vertical GDB Round 2	\$5,327.00

	DeKalb County GA - Water and Wastewater Treatment Plant Implementation	\$534,909.00
WBS	Task Description	Fees
	Trip 5 - Cityworks Configuration Round 1	\$7,202.00
	Trip 6 - Cityworks Configuration Round 2	\$6,185.00
	Trip 7 - Cityworks Configuration Round 3	\$4,935.00
	Trip 8 - UAT Training and UAT	\$5,560.00
	Trip 9 - System Administration Training	\$3,030.00
	Trip 10- End-User Training #1	\$6,185.00
	Trip 11 - End-User Training #2	\$6,185.00
	Trip 12 - Go-Live Support	\$6,185.00