Cartegraph

Coppell, TX

Cartegraph Software and Services Contract

PA#:
PA-3609

Date:
1/21/2021

Purchase Agreement

Cartegraph is pleased to present this Purchase Agreement for the implementation of world class technology solutions. This Purchase Agreement is made and entered into between **Coppell, TX** (hereinafter referred to as **Customer**) and **Cartegraph Systems LLC** (hereinafter referred to as **Cartegraph**). In the case that any terms or conditions provided in the Cartegraph Solutions Agreement different from, are provided in more detail by, or are made irrelevant by the terms and conditions provided in this Purchase Agreement, the terms in this Purchase Agreement shall control. For all terms and conditions not addressed by this Purchase Agreement, the Cartegraph Solutions Agreement shall control.

CUSTOMER ADDRESS:

Coppell, TX
255 Parkway Blvd
Coppell, TX
75019

LICENSEE ADDRESS:

Coppell, TX
255 Parkway Blvd
Coppell, TX
75019

Investment Summary

The addendums attached here to include:

Addendum A - Support Services
Addendum B - Field Services
Addendum C - Additional Services
Addendum D - Project Schedule

Product		Year 1
OMS Plus	Quantity	1
	Price	USD 11,400.00
Facilities	Quantity	1.00
	Price	USD 2,850.00
Sanitary Sewer Domain	Quantity	1.00
	Price	USD 2,850.00
Signal Domain	Quantity	1.00
	Price	USD 2,375.00
Stormwater Domain	Quantity	1.00
	Price	USD 2,850.00
Transportation Domain	Quantity	1.00
	Price	USD 2,850.00
Walkability Domain	Quantity	1.00
	Price	USD 1,140.00
Water Distribution Domain	Quantity	1.00
	Price	USD 2,850.00
Internal Requests	Quantity	1.00
	Price	USD 380.00
OMS User	Quantity	50.00
	Price	USD 15,200.00
Asset Builder	Quantity	1.00
	Price	USD 760.00

Product		Year 1
Systems Integration Support Munis UB	Quantity	1.00
	Price	USD 5,760.00
Systems Integration Support Tyler Energov	Quantity	1.00
	Price	USD 3,840.00
Systems Integration Support Execu Time	Quantity	1.00
	Price	USD 1,280.00
Systems Integration Support Munis Purchasing	Quantity	1.00
	Price	USD 1,920.00
Systems Integration Support Munis HCM	Quantity	1.00
	Price	USD 1,280.00
	TOTAL:	USD 59,585.00

Product	Quantity	Price
Implementation Services OMS	1.00	USD 77,820.00
Implementation Services OMS Munis UB	1.00	USD 10,260.00
Implementation Services OMS Tyler Energov	1.00	USD 6,840.00
Implementation Services OMS Munis Purchasing	1.00	USD 2,280.00
Implementation Services OMS Execu Time	1.00	USD 3,420.00
Implementation Services OMS Munis HCM	1.00	USD 2,280.00
Expense Reimbursement	1.00	USD 25,600.00
	TOTAL:	USD 128,500.00

Additional Optional Services - Billed as needed on a Time and Materials Basis	Quantity	Price
Time and Materials	20 Days	USD76,000.00
Estimated Expenses	1.00	USD24,000.00

NOTES:
- The pricing listed above does not include applicable sales tax.
- The Cartegraph OMS pricing listed above does not include Esri ArcGIS licenses.
- Hosting includes 250GB of available file storage. If additional storage is required, the Organization can purchase in 1TB increments.
- NOTE: The storage calculation only applies to Production, we do not track the storage in the test environment. Cost for an addtional 1TB is $2,500.00.

Payment Terms and Conditions

In consideration for the Solutions and Services provided by **Cartegraph** to **Customer**, **Customer** agrees to pay **Cartegraph** the Fees in U.S. Dollars as described below:

I. DELIVERY

Customer shall be provided with the ability to access and use the Solutions upon execution of this Purchase Agreement. If applicable, Services as set forth in Addenda A and B will be scheduled and delivered upon your acceptance of this Purchase Agreement, which will be considered as your notification to proceed.

II. SERVICES SCHEDULING

Customer agrees to work with Cartegraph to schedule Services in a timely manner (see Addenda A&B). All undelivered Services shall expire 365 days from the signing of this Purchase Agreement.

III. SOLUTIONS INVOICING

The fee for solutions will be due in annual installments 15 days prior to the anniversary of the initial term as follows:

1. $59,585.00 due upon execution of the Purchase Agreement.

IV. FIELD SERVICES INVOICING

Invoicing for the Field Services fee shall occur upon the acceptance of this Purchase Agreement and shall be invoiced as follows:

Phase I
1. 25% upon execution of the Purchase Agreement
2. 25% at the completion of the assessment/delivery.
3. 25% at the completion of the test deployment.
4. 25% at the completion production deployment.

Phase II
1. 25% upon execution of the Purchase Agreement
2. 25% at the completion of the assessment/delivery.
3. 25% at the completion of the test deployment.
4. 25% at the completion production deployment.

V. EXPENSES

In providing the services included in this Purchase Agreement, Cartegraph shall be reimbursed for any reasonable out-of-pocket costs, including, but not limited to, travel, lodging, and meals. Out-of-pocket expenses are billed based on actual costs incurred and are due separately.

VI. PAYMENT TERMS

All payments are due Net 30 days from start date of invoice.

BY SIGNING BELOW, THE PARTIES AGREE THAT ALL USE AND ACCESS TO THE SOLUTIONS DESCRIBED IN THIS PURCHASE AGREEMENT SHALL BE GOVERNED BY THE CARTEGRAPH SOLUTIONS AGREEMENT, WHICH CAN BE REVIEWED AT: https://www.cartegraph.com/solutions-agreement. THE PARTIES AGREE TO BE BOUND BY THE TERMS AND CONDITIONS OF THE CARTEGRAPH SOLUTIONS AGREEMENT AND THIS PURCHASE AGREEMENT REFERENCED HEREIN.

CARTEGRAPH:	CUSTOMER:
Cartegraph Systems LLC	**Coppell, TX**
By:	By:
(Signature)	(Signature)
(Type or Print Name)	(Type or Print Name)
Title: SVP of Sales & Marketing	Title:
Date:	Date:

Cartegraph Systems LLC
Addendum A - Support Services
Cartegraph Support and Training Services – Scope of Work
The Support Services listed in the Investment Summary of the Purchase Agreement are specific Cartegraph Services which will be delivered to the Customer based on the descriptions below and on the terms and conditions and subject to the limitations set forth in this Addendum A, the applicable Purchase Agreement, and the Cartegraph Solutions Agreement. Cartegraph will coordinate with the Customer on service delivery expectations and timeframes.
As part of Customer's subscription to access and use of the Cartegraph Solutions, Customer will receive:

1. Support Services

a. Campus – www.campus.cartegraph.com

Our User Assistance area is a convenient and easily-shareable resource designed to help you and your co-workers better understand the functions and capabilities of your Cartegraph Solutions. Instantly access user tips, step-by-step instructions, videos, and more.

b. Dedicated, Unlimited, Toll-free Phone Support - 877.647.3050 and Live Chat

When questions need answers and difficulties arise, count on our industry-leading Support team to provide the guidance and assistance you need. Reach us as often as you need Monday-Friday, 7:00 am-7:00 pm CT. Live Chat is available within the product or through Campus.

c. Support via Case Submittal or Email

If a phone call or live chat is not your best option, you can always request support via our online case submittal form available in Campus or via email. Email support is available at support@cartegraph.com.

2. Training & Education Services

a.   Convenient Online Resources:

All the information you need, one click away. Take advantage of online training opportunities, tutorial videos, upcoming event information, and more.

b.   Customer Led User Groups

: Meet and network with similar Cartegraph users in your region. Customer led User Groups allow you to find out what other organizations are doing to get more from their Cartegraph solutions and services.

3. Releases & Upgrades

a. New Releases:

Cartegraph is continuously innovating and enhancing the Cartegraph OMS collection of products. As a customer with an active subscription, you will receive each new release of the software.

i. Cloud-hosted customers: Your cloud-hosted site will be upgraded by our Cartegraph System Consultants after the release is available.

ii.

On-premise customers: For your on-premises installation, our Technical Consultants will work with your organization's IT staff to deliver the latest software release. Software will be made available after installation to the Cartegraph cloud-hosted customers.

b. Service Packs:

A Service Pack consists of lower-severity bug fixes and/or small platform updates.

i.

If required, cloud-hosted sites will receive Service Packs as needed. These Service Packs are installed by the Cartegraph System Consultants.

ii. On-premises customers that contacted Cartegraph Technical Support about an issue that is resolved with the Service Pack, will be provided the service pack for installation. These on-premises customers can then schedule a time to install the Service Pack with our Technical Support team

c. Hot Fixes:

If an issue is determined to be a defect and falls outside the standard release cycle, Cartegraph will issue a hot fix and provide application specialists with detailed levels of product knowledge to work with you in achieving a timely and effective resolution

Cartegraph will provide the Support Services only to Customer, provided that Cartegraph reserves the right to contact any third party as necessary to facilitate the delivery of Support Services or other services relating to the Solutions. Said support applies only to the most current version of the product and the previous version in succession.

All Support Services are dependent upon the use by Customer of the Solutions in accordance with Cartegraph's documentation and specifications. Cartegraph is under no obligation to modify the Solutions so that the modified Solutions would depart from Cartegraph's published documentation and specifications for such Solutions.

- The Field Services listed in the Investment Summary of the Purchase Agreement are specific Cartegraph Services which will be delivered to the Customer based on the descriptions below and on the terms and conditions and subject to the limitations set forth in this Addendum B, the applicable Purchase Agreement, and the Cartegraph Solutions Agreement. Cartegraph will coordinate with the Customer on service delivery expectations and timeframes.

Cartegraph OMS – Implementation Scope of Work

Implementation of the Operations Management System (OMS) includes the following professional services:

Cartegraph OMS – Implementation Scope of Work

Implementation of the Operations Management System (OMS) includes the following professional services:

Project Management

- Cartegraph will provide a one-day (1-day) onsite including:
  - Project kick off introducing all team members and discussion of the project scope, project timeline and project approach.
  - System navigation and functionality introduction and overview to help familiarize your staff with the software environment and its common functions. Topics include:
    - Dashboards
    - Standard KPI/ROI Gadgets
    - Logins/Permission
    - Layers
    - Filters
    - Maps
    - Grids
    - System Navigation
    - Views (List & Detail)
    - Standard Reports
    - Attachments
    - Requests, Work, Assets, Resources, Reports, and Administrator Tabs

Phase 1

Setup

- Cartegraph will setup a hosted, test and production OMS environment.
- Cartegraph will provide an overview, up to two (2) hours, of Cartegraph and ArcGIS Online user-based logins and User/Role functionality.
- Cartegraph will provide a template file to be utilized by your staff to populate Roles and Users to be utilized for OMS.
- Cartegraph will utilize the template to create users and roles in OMS. (Note: Subsequent User and/or Role changes will be your administrator's responsibility.)

- Cartegraph will provide documentation and guidance, up to four (4) hours, for your technical GIS staff to configure Esri Basemap Services for OMS integration. Guidance will be geared towards OMS/Esri integration functionality and requirements.
- Cartegraph will setup the OMS Platform, including the Request, Work, Resource, and Asset Management areas of the software. *Asset Management solutions will be setup for all solutions referenced in the Assets section of the scope unless otherwise noted.*

Consulting

- Cartegraph will provide one three-day (3-day) and one two-day (2-day) onsite requirement gathering workshop to increase our understanding of your business and functional goals. Through workshops and interviews, Cartegraph will identify best fit scenarios for OMS and provide a brief including any challenges as well as recommendations for OMS best practices relevant to your implementation.

Training

- Cartegraph will provide remote train-the-trainer training, up to four (4) hours, on overall system navigation and functionality to help familiarize your staff with the software environment and its common functions. Training topics include:
    - Dashboards
    - Standard KPI/ROI Gadgets
    - Logins/Permission
    - Layers
    - Filters
    - Maps
    - Grids
    - System Navigation
    - Views (List & Detail)
    - Standard Reports
    - Attachments
    - Requests, Work, Assets, Resources, Reports, and Administrator Tabs

- Cartegraph will provide remote train-the-trainer training, up to two (2) hours, on OMS Esri integration functionality. Training topics include:
    - OMS Esri integration configuration options
    - Integration functionality (basemap and feature)
    - Overall Esri integration requirements, considerations, and Cartegraph recommended best practices

- Cartegraph will provide a three-day (3-day) onsite "train-the-trainer" training event. The training agenda will be defined and agreed upon by both Cartegraph and your project manager. Topics may include any of the following:

    - Request Management:
        - Requests
        - Requesters
        - Task Creation from Requests
        - Issue library (including settings such as Applies to Asset and Non-Location)
        - Cartegraph recommended best practices for Request and Requester Management

    - Work Management:
        - Create Task(s) (Asset/Non-Asset)
        - Assignments (Add, Edit, Remove)

Addendum B

- Task Menu Actions
- Related Work Items
- Create Work Order
- Associate Task to WO
- Repeat Work Orders
- Work Order Menu Actions
- Enter Resources
- Timesheets
- Activity library (including settings such as Applies to Asset, Inspection, Key Dates, Cost, and Productivity)
- Cartegraph recommended best practices for Work Management

- Asset Management:
    - Asset Details
    - Preventative Maintenance Plans
    - Inspections
    - Linked assets (if applicable)
    - Container/Component Relationships (if applicable)
    - Cartegraph recommended best practices for Asset Management

    To avoid redundancy, and to utilize service time efficiently, training may cover a subset of the assets listed in the Asset section of the scope.

- Resource Management:
    - Resource Details
    - Labor/Equipment Rates
    - Material Management (Stock, Usage, Adjustments)
    - Vendor Price Quotes
    - Cartegraph recommended best practices for Resource Management

- Cartegraph Mobile:
    - Overall system functionality (Navigation, Interface, Maps, Attachments, Sorting)
    - Work Management
        - Create and Update Tasks (Asset/Non-Asset)
        - Assign Tasks
        - Enter Resources
        - Inspections
    - Asset Management
        - Create and Update Assets
    - Request Management
        - View and Update Requests
        - View Requester information
        - Create Task from Request
    - Offline use for Cartegraph for iPad
    - Cartegraph recommended best practices for mobile device use

- Administrator:
    - Administrator:
        - User Administration, Role Administration, Asset Administration, Record Filter Administration, Import/Export, Scheduled Process Log, Error Log
    - Settings:
        - System Settings, Map Administration, Geocode Settings, GIS Integration settings, Asset Color Manager
    - Manager:
        - Layout Manager, Library Manager, Preventative Maintenance, Asset Condition Manager, Notification Manager, Structure Manager, Automation Manager

Addendum B

- Cartegraph will provide remote train-the-trainer training, up to six (6) hours, on OMS Reporting functionality. Training topics include:
  - Security/Roles
  - Report Designer
    - Report Types, Report Styling, Filtering\Parameters, Basic Formulas, Grouping/Sorting
  - Report Viewer
  - Reporting best practices and solution tips/tricks.

- Cartegraph will provide remote train-the-trainer training, up to four (4) hours, on Preventative Maintenance Plans functionality. Training topics include:
  - Preventative Maintenance
  - Cartegraph recommended best practices for proactive asset management

To avoid redundancy, and to utilize service time efficiently, training may cover a subset of the assets listed in the Asset section of the scope.

- Cartegraph will provide remote train-the-trainer training, up to four (4) hours, on Advanced Inspections and Asset Condition Manager functionality. Training topics include:
  - Performance Management
    - Prediction Groups
    - Minimum Condition Groups
    - Activities and Impacts
    - Criticality Factor
    - Install/Replaced Dates
  - Cartegraph recommended best practices for advanced inspections and condition management

To avoid redundancy, and to utilize service time efficiently, training may cover a subset of the assets listed in the Asset section of the scope.

Go-Live Support

- Cartegraph will provide a three-day (3-day) onsite event for Go-Live Support. The agenda will be defined, and agreed upon, by both your and Cartegraph's project managers. Topics may include any of the following:
  - Refresher training for items listed in the scope of work
  - Software and process support for staff during production roll out
  - Field, Layout, and Report configuration guidance, if applicable

Data Services

- Cartegraph will provide one test and one production data load service through standard import/export functionality. Cartegraph will provide template documents for data population. Once populated by your staff, Cartegraph will load the data into your test or production OMS environment. Data loads may include data such as:
  - Parent level asset records
  - Asset location (spatial x/y) attributes
  - Parent level resource (Labor, Equipment Material, Vendor) records
  - Resource Rate (Labor, Equipment, Material) records
  - Standard system libraries

- Cartegraph will provide two test and one production custom data conversion service for your historical data listed below:

- o Dossier data related to: Equipment, Work History

  - o For the custom data conversion service(s) listed above, Cartegraph will provide:
    - A review of the historical data along with recommendations for OMS best fit.
    - A field map workshop, which will identify where and how historical data will appear within OMS
    - A test conversion service to facilitate data conversion validation and testing
    - One revision of the field map used for the test conversion service
    - A production conversion service utilizing the final, approved field map

  All data must be accessible to Cartegraph from a SQL DB, SQL View, Access DB or Comma Delimited File.

- Cartegraph will provide two test and one production custom data conversion service for your historical data listed below:
  - o Energov data related to: Asset Inventory, Work History (4 years)

  - o For the custom data conversion service(s) listed above, Cartegraph will provide:
    - A review of the historical data along with recommendations for OMS best fit.
    - A field map workshop, which will identify where and how historical data will appear within OMS
    - A test conversion service to facilitate data conversion validation and testing
    - One revision of the field map used for the test conversion service
    - A production conversion service utilizing the final, approved field map

  All data must be accessible to Cartegraph from a SQL DB, SQL View, Access DB or Comma Delimited File.

- Cartegraph will provide two test and one production custom data conversion service for your historical data listed below:
  - o Spreadsheet data related to: Assets, Inspection / Condition Imports

  - o For the custom data conversion service(s) listed above, Cartegraph will provide:
    - A review of the historical data along with recommendations for OMS best fit.
    - A field map workshop, which will identify where and how historical data will appear within OMS
    - A test conversion service to facilitate data conversion validation and testing
    - One revision of the field map used for the test conversion service
    - A production conversion service utilizing the final, approved field map

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Assets

Asset implementation includes the following professional services:

- Cartegraph will provide installation and training on the following fourty three (43) asset types:

  - o Signals (8)
    - Preemption; Signal Cabinet; Signal Head; Traffic Camera; Signalized Intersection; Signal Controller; Signal Monitor; Traffic Detector

  - o Transportation (8)
    - Bridge; Light Fixture; Pavement; Sign; Guardrail; Marking; Pavement Area; Support

Addendum B

- o Walkability (2)
  - ADA Ramp; Sidewalk

- o Sanitary Sewer (7)
  - Sewer Cleanout, Sewer Facility, Sewer Force Main, Sewer Lateral, Sewer Main, Sewer Manhole, and Sewer Pump

- o Stormwater (9)
  - Storm Basin; Storm Channel; Storm Culvert; Storm Facility; Storm Inlet; Storm Manhole; Storm Outlet; Storm Pipe; Storm Pump

- o Water Distribution (9)
  - Water Backflow; Water Facility; Water Hydrant; Water Lateral; Water Main; Water Meter; Water Pump; Water Valve; Water Storage Tank

- Cartegraph will provide up to five (5) field configurations for each asset type listed above.

Phase II

Setup

- Cartegraph will setup a hosted, test and production OMS environment.
- Cartegraph will provide an overview, up to two (2) hours, of Cartegraph and ArcGIS Online user-based logins and User/Role functionality.
- Cartegraph will provide a template file to be utilized by your staff to populate Roles and Users to be utilized for OMS.
- Cartegraph will utilize the template to create users and roles in OMS. (Note: Subsequent User and/or Role changes will be your administrator's responsibility.)
- Cartegraph will provide documentation and guidance, up to four (4) hours, for your technical GIS staff to configure Esri Basemap Services for OMS integration. Guidance will be geared towards OMS/Esri integration functionality and requirements.
- Cartegraph will setup the OMS Platform, including the Request, Work, Resource, and Asset Management areas of the software. *Asset Management solutions will be setup for all solutions referenced in the Assets section of the scope unless otherwise noted.*

Consulting

- Cartegraph will provide one three-day (3-day) and one two-day (2-day) onsite requirement gathering workshop to increase our understanding of your business and functional goals. Through workshops and interviews, Cartegraph will identify best fit scenarios for OMS and provide a brief including any challenges as well as recommendations for OMS best practices relevant to your implementation.

Training

- Cartegraph will provide remote train-the-trainer training, up to four (4) hours, on overall system navigation and functionality to help familiarize your staff with the software environment and its common functions. Training topics include:
    - Dashboards
    - Standard KPI/ROI Gadgets
    - Logins/Permission
    - Layers
    - Filters
    - Maps
    - Grids
    - System Navigation
    - Views (List & Detail)
    - Standard Reports
    - Attachments
    - Requests, Work, Assets, Resources, Reports, and Administrator Tabs

- Cartegraph will provide remote train-the-trainer training, up to two (2) hours, on OMS Esri integration functionality. Training topics include:
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- Cartegraph will provide a three-day (3-day) onsite "train-the-trainer" training event. The training agenda will be defined and agreed upon by both Cartegraph and your project manager. Topics may include any of the following:

    - Request Management:
        - Requests
        - Requesters
        - Task Creation from Requests
        - Issue library (including settings such as Applies to Asset and Non-Location)
        - Cartegraph recommended best practices for Request and Requester Management

    - Work Management:
        - Create Task(s) (Asset/Non-Asset)
        - Assignments (Add, Edit, Remove)
        - Task Menu Actions
        - Related Work Items
        - Create Work Order
        - Associate Task to WO
        - Repeat Work Orders
        - Work Order Menu Actions
        - Enter Resources
        - Timesheets
        - Activity library (including settings such as Applies to Asset, Inspection, Key Dates, Cost, and Productivity)
        - Cartegraph recommended best practices for Work Management

    - Asset Management:
        - Asset Details
        - Preventative Maintenance Plans
        - Inspections
        - Linked assets (if applicable)
        - Container/Component Relationships (if applicable)
        - Cartegraph recommended best practices for Asset Management

To avoid redundancy, and to utilize service time efficiently, training may cover a subset of the assets listed in the Asset section of the scope.

- o Fleet Management:
    - Preventative Maintenance
    - Task Management
    - Vehicle Replacement Ratings (VRR) Equipment Detail information
    - Fleet Reports
    - Cartegraph recommended best practices for Fleet Management

- o Resource Management:
    - Resource Details
    - Labor/Equipment Rates
    - Material Management (Stock, Usage, Adjustments)
    - Vendor Price Quotes
    - Cartegraph recommended best practices for Resource Management

- o Cartegraph Mobile:
    - Overall system functionality (Navigation, Interface, Maps, Attachments, Sorting)
    - Work Management
        - Create and Update Tasks (Asset/Non-Asset)
        - Assign Tasks
        - Enter Resources
        - Inspections
    - Asset Management
        - Create and Update Assets
    - Request Management
        - View and Update Requests
        - View Requester information
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    - Offline use for Cartegraph for iPad
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- o Administrator:
    - Administrator:
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    - o Security/Roles
    - o Report Designer
        - Report Types, Report Styling, Filtering\Parameters, Basic Formulas, Grouping/Sorting
    - o Report Viewer
    - o Reporting best practices and solution tips/tricks.

- Cartegraph will provide remote train-the-trainer training, up to four (4) hours, on Preventative Maintenance Plans functionality. Training topics include:
    - o Preventative Maintenance

Addendum B

- o   Cartegraph recommended best practices for proactive asset management

To avoid redundancy, and to utilize service time efficiently, training may cover a subset of the assets listed in the Asset section of the scope.

- Cartegraph will provide remote train-the-trainer training, up to four (4) hours, on Advanced Inspections and Asset Condition Manager functionality. Training topics include:
  - o   Performance Management
    - ▪   Prediction Groups
    - ▪   Minimum Condition Groups
    - ▪   Activities and Impacts
    - ▪   Criticality Factor
    - ▪   Install/Replaced Dates
  - o   Cartegraph recommended best practices for advanced inspections and condition management

To avoid redundancy, and to utilize service time efficiently, training may cover a subset of the assets listed in the Asset section of the scope.

Go-Live Support

- Cartegraph will provide a three-day (3-day) onsite event for Go-Live Support. The agenda will be defined, and agreed upon, by both your and Cartegraph's project managers. Topics may include any of the following:
  - o   Refresher training for items listed in the scope of work
  - o   Software and process support for staff during production roll out
  - o   Field, Layout, and Report configuration guidance, if applicable

Data Services

- Cartegraph will provide one test and one production data load service through standard import/export functionality. Cartegraph will provide template documents for data population. Once populated by your staff, Cartegraph will load the data into your test or production OMS environment. Data loads may include data such as:
  - o   Parent level asset records
  - o   Asset location (spatial x/y) attributes
  - o   Parent level resource (Labor, Equipment Material, Vendor) records
  - o   Resource Rate (Labor, Equipment, Material) records
  - o   Standard system libraries

- Cartegraph will provide two test and one production custom data conversion service for your historical data listed below:
  - o   Energov data related to: Asset Inventory, Work History (4 years)

  - o   For the custom data conversion service(s) listed above, Cartegraph will provide:
    - ▪   A review of the historical data along with recommendations for OMS best fit.
    - ▪   A field map workshop, which will identify where and how historical data will appear within OMS
    - ▪   A test conversion service to facilitate data conversion validation and testing
    - ▪   One revision of the field map used for the test conversion service
    - ▪   A production conversion service utilizing the final, approved field map

All data must be accessible to Cartegraph from a SQL DB, SQL View, Access DB or Comma Delimited File.

- Cartegraph will provide two test and one production custom data conversion service for your historical data listed below:
    - Spreadsheet data related to: Assets, Inspection / Condition Imports

    - For the custom data conversion service(s) listed above, Cartegraph will provide:
        - A review of the historical data along with recommendations for OMS best fit.
        - A field map workshop, which will identify where and how historical data will appear within OMS
        - A test conversion service to facilitate data conversion validation and testing
        - One revision of the field map used for the test conversion service
        - A production conversion service utilizing the final, approved field map

    All data must be accessible to Cartegraph from a SQL DB, SQL View, Access DB or Comma Delimited File.

Assets

Asset implementation includes the following professional services:

- Cartegraph will provide installation and training on the following eight (8) asset types:
    - Facilities (7)
        - Electrical Generator; Facility Lighting; HVAC Equipment; Roofing System; Facility; Fire Protection; Plumbing Fixture; Facility Floor

    - Fleet (1)
        - Fleet

- Cartegraph will provide up to five (5) field configurations for each asset type listed above.

Integration Services

- Cartegraph will provide the following bi-directional (two-way) integration service between MUNIS and Cartegraph. *In the event that additional or alternative functionality is desired, Cartegraph can provide an update to the scope and cost.*
    - Pull all Open\New Water Meter Service Orders
        - Service Order Activity has Utility Billing Work Order toggled True in Activity Library
            - Create a Work Order and associate all tasks to WO
        - Water Meter ID
            - Valid – Create a Water Meter Task
            - Invalid – Non Asset Task
        - Field Mapping Utility Billing to OMS (Additional fields up to a total of 10)

OMS Task Field	Utility Billing	Comments
Task ID		Auto-Generated
Asset Type		Water Meters
Water Meter ID	<meterNumber>	
Service Order Number	YYYY<serviceOrderNumber>	
Activity	Activity	

Notes	<OrderNotes>; <completedNotes>, Last Read: <lastRead>	
Estimated Start Date	<Date>	
Estimated Stop Date	<Date>	

- OMS Task Status is Completed
  - The following fields will be updated on the Service Order
    - Status
    - Date
    - Water Meter
    - Comments
- Create Water Meters in OMS when the Service Order Activity has Utility Billing Work Order toggled True in Activity Library

Assumptions

- All new structure will be created in OMS by Cartegraph.
- All Utility Billing Activity types need to be added to the OMS Activity library.
- Configurable interval will be greater than or equal to 1 minute.
- Cartegraph will use the Utility Billing API to access all information. Any additional cost associated with using the API, will not be the responsibility of Cartegraph. The Utility Billing API must be a documented web API and have the capability to provide the functionality outlined above.
- Cartegraph will have access to a test instance of the Utility Billing system, via the API and user interface to verify transactions.
- Yearly integration support will not cover charges that must be implemented due to a Utility Billing API change.

- Cartegraph will provide the following bi-directional (two-way) integration service between Energov and Cartegraph. *In the event that additional or alternative functionality is desired, Cartegraph can provide an update to the scope and cost.*

  - The integration includes the following:
    - Integration points:
      - Retrieve Service Requests from Energov
      - Import Request data from Energov into Cartegraph
        - Sync of up to twelve (12) fields into Cartegraph, and back to Energov as possible via their API
      - A sync using a unique ID
        - If ID exists; information will be updated
        - If ID does not exist; Cartegraph will create a record or produce an error message
      - Cartegraph will update the source Service Request upon completion status.
        - Relevant inspection forms will be populated and stored in Laserfiche. A linked URL will be created and attached to the record in OMS. The integratiton will send the linked URL back to Energov on completion.
    - Cartegraph will provide error logging capability to easily identify potential integration issues.
    - Cartegraph will provide a customer-configurable time interval to manage integration frequency.

    Assumptions

    - All new structure will be created in OMS by Cartegraph.
    - All Request Issue types need to be loaded into the OMS Issues library.
    - Configurable interval will be greater than or equal to 1 minute.

- Cartegraph will use the Energov API to access all information. Any additional cost associated with using the API, will not be the responsibility of Cartegraph. The Energov API must be a documented web API and have the capability to provide the functionality outlined above.
- Cartegraph will have access to a test instance of the Energov system, via the API and user interface to verify transactions.
- Yearly integration support will not cover charges that must be implemented due to a Utility Billing API change.

- Cartegraph will provide the following standard, uni-directional (one-way) integration service of sick and vacation timesheet data between ExecuTime and Cartegraph. *In the event that additional or alternative functionality is desired, Cartegraph can provide an update to the scope and cost.*
  - The standard integration includes the following:
    - Integration points:
      - ExecuTime timesheet data is integrated with the Cartegraph Tasks and Labor Log recordsets.
      - A sync using a unique ID
        - If ID exists; information will be updated
        - If ID does not exist; Cartegraph will produce an error message
    - Cartegraph will provide error logging capability to easily identify potential integration issues.
    - Cartegraph will provide a customer-configurable time interval to manage integration frequency.

    Assumptions

    - The integration includes up to twelve (12) fields in the same Cartegraph table.
    - All data must be available to the Cartegraph service via a flat file (.csv or .txt)

- Cartegraph will provide the following standard, uni-directional (one-way) integration service of PO and Contract data between MUNIS Purchasing and Cartegraph. *In the event that additional or alternative functionality is desired, Cartegraph can provide an update to the scope and cost.*
  - The standard integration includes the following:
    - Integration points:
      - MUNIS Purchasing PO and inventory information is integrated with the Cartegraph Material Log recordset.
      - MUNIS Purchasing Contract records are integrated with a custom Cartegraph library.
      - MUNIS Vendor records are integrated with a the Cartegraph Vendors recordset.
      - A sync using a unique ID
        - If ID exists; information will be updated
        - If ID does not exist; Cartegraph will produce an error message
    - Cartegraph will provide error logging capability to easily identify potential integration issues.
    - Cartegraph will provide a customer-configurable time interval to manage integration frequency.

    Assumptions

    - The integration includes up to twelve (12) fields in the same Cartegraph table per integrated data point.
    - All data must be available to the Cartegraph service via a flat file (.csv or .txt)

- Cartegraph will provide the following standard, uni-directional (one-way) integration service of Employee and Labor Rate data between MUNIS HCM and Cartegraph. *In the event that additional or alternative functionality is desired, Cartegraph can provide an update to the scope and cost.*

- The standard integration includes the following:
    - Integration points:
        - MUNIS HCM Employee records will be integrated with the Cartegraph Labor recordset.
        - MUNIS HCM Job Class and Pay Rate records will be integrated with the Cartegraph Labor Rates recordset.
        - A sync using a unique ID
            - If ID exists; information will be updated
            - If ID does not exist; Cartegraph will produce an error message
    - Cartegraph will provide error logging capability to easily identify potential integration issues.
    - Cartegraph will provide a customer-configurable time interval to manage integration frequency.

    Assumptions

    - The integration includes up to twelve (12) fields in the same Cartegraph table per integrated data point.
    - All data must be available to the Cartegraph service via a flat file (.csv or .txt)

Cartegraph will provide all services remotely via audio, video, and web conferences unless otherwise noted.

Exclusions

The following service items are not included in the scope of this project:

- Implementation of any custom modification or integration developed by Cartegraph, your internal staff, or any third-party is not included in the scope of this project unless specifically listed above.
- Data conversion services from other software system(s) or sources (including Cartegraph Navigator databases) are not included in the scope of this project unless specifically listed above.
- Any service items discussed during demonstrations, conference calls, or other events are not included in the scope of this project unless specifically listed above.

Customer/Cartegraph Responsibilities

Project representatives from Customer and Cartegraph accepts responsibility for all aspects of project planning, management, and execution not specifically identified as the responsibility of Cartegraph in the Agreement or in the Purchase Agreement. Ongoing management of the day-to-day allocation of Customer and Cartegraph resources and management of project tasks is the responsibility of the Customer and Cartegraph project representatives. Customer and Cartegraph project representatives will provide overall guidance and direction for the project and will direct the project accordingly. Further, and with regard to the Cartegraph obligations listed in this Purchase Agreement, Customer understands that it is vital to the success of the project that Customer provides assistance in the following matters:

1. For those services listed under Field Services, Cartegraph personnel will conduct information gathering and evaluation sessions with various Customer Users and management. While Cartegraph respects the time and workload of Customer staff, dedicated time on the part of the appropriate Customer resources is necessary to complete these exercises.

2. The installation process requires the assistance of Customer personnel and suitable access to hardware and systems (e.g., security clearance). Customer is required to supervise the installation process while systems are accessible to Cartegraph. All hardware and software, for both personal computers and servers, is expected to be available, installed, and operating as specified in Cartegraph's system requirements documentation such that delivery and execution of Cartegraph Field Services will not be impeded.

3. Customer and Cartegraph understand that the successful performance of Field Services depends upon Customer fulfilling its responsibilities. The Project assumes that Customer will provide all personnel required to achieve a successful implementation, including a dedicated project manager responsible for reviewing the implementation scope of work, ensuring all attended meetings are attended by invited staff, and providing leadership and insight on all relevant internal issues such as policy/procedure, organizational structure, project stakeholders, technical architecture, data, and current systems. Customer responsibility also includes internal documentation, internal change management, task completion, staff coordination and schedule commitment.

4. Customer will provide Internet access and IT staff support as required. For those services that are web-based, Cartegraph utilizes WebEx Meeting (or similar) technology.

5. Customer shall ensure that their workstation platform and database meet Cartegraph system requirements as specified in the Cartegraph System Requirements documentation. Solutions will be supported within new versions of these workstation platforms and databases within a reasonable period of time from their release from their manufacturer. Cartegraph will discontinue support of its Solutions within older versions of these workstation platforms and databases as their support is discontinued by their manufacturers.

6. Customer agrees to work with Cartegraph to schedule Field Services in a timely manner. All undelivered Field Services shall expire 365 days from the execution of this Purchase Agreement, unless noted differently in Services Scope listed above. Upon expiration of services, the project may be cancelled at Cartegraph's discretion.

Not-to-Exceed Purchase Agreement

Cartegraph will not exceed the total included in this Purchase Agreement without written approval from Customer. In the event it becomes apparent to Cartegraph that additional Service will be needed due to any changes in the scope of this Purchase Agreement, Cartegraph will notify Customer prior to exceeding the approved efforts and obtain written approval if additional Services are required.

Coppell,TX /Cartegraph Project Plan

PROJECT PHASES: | Define & Plan | Design | Build & Test | Deliver & Support |

PHASE ONE - Signals, Transportation, Walkability, Sanitary Sewer, Stormwater, Water Distribution

TASK	ESTIMATED DELIVER DATE		ROLE/RESPONSIBILITY
DEFINE & PLAN PHASE	2/17/2021	5/21/2021	
Project Initiation			Customer and Cartegraph
Project Kickoff & Goals Review (1-Day Onsite)	2/23/2021	2/25/2021	Customer and Cartegraph (PM, IS)
Project Timeline Development and Approval			Customer and Cartegraph (PM)
Schedule Regular Project Status Meetings			Customer and Cartegraph (PM)
Web Overview Sessions			Customer
Provide Back up Custom Conversions (Dossier, Enrgov, Spreadsheet data related to: Assets, Inspection / Condition Imports)			Customer
Esri Technical Specifications Review Call			Customer and Cartegraph (ISS)
DESIGN PHASE	5/24/2021	7/30/2021	
Requirements Gathering Workshop (5-day Onsite over 2 weeks)	5/24/2021	6/4/2021	Customer and Cartegraph (PM, IS)
Template Review Session			Customer and Cartegraph (ISS)
Database Conversion Reviews			Customer and Cartegraph (ISS)
Provide Start Up Data and Asset Data			Customer and Cartegraph (ISS)
Conversion Field Maps			Customer and Cartegraph (ISS)
Field Maps Review with Customer			Customer and Cartegraph (ISS)
MUNIS Water Meter Service Orders Integration Review			Customer and Cartegraph (ISS)
Energov Integration Review			Customer and Cartegraph (ISS)
ExecuTime Integation Review			Customer and Cartegraph (ISS)
MUNIS PO & Contract Integration Review			Customer and Cartegraph (ISS)
MUNIS HCM (Employee & Labor Rate) Integration Review			Customer and Cartegraph (ISS)
MUNIS Water Meter Service Orders Integration Build			Cartegraph
Energov Integration Build			Cartegraph
ExecuTime Integation Build			Cartegraph
MUNIS PO & Contract Integration Build			Cartegraph
MUNIS HCM (Employee & Labor Rate) Integration Build			Cartegraph
BUILD & TEST PHASE	8/2/2021	10/22/2021	
Test Data Load Services (Templates)			Cartegraph (ISS)
Test Integrations Test Deployment			Cartegraph (ISS)
Test Data Conversion			Cartegraph (ISS)
System Configurations			Cartegraph (ISS)
GIS Set Up Training Call			Customer and Cartegraph (ISS)
GIS Integration – Test Connection Completed by Customer			Customer
Train-the-Trainer (3-day Onsite)	9/20/201	9/24/2021	Customer and Cartegraph (IS)
System Testing & Training			Customer
Determine Testing Approach & Goals			Customer and Cartegraph (PM)
Determine Additional Training Approach & Milestones			Customer and Cartegraph (PM)
Schedule Weekly QA Sessions with Specialist (1 Hour)			Customer and Cartegraph (ISS)
Report Training (Remote)			Customer and Cartegraph (ISS)
Prevenative Maintenance Plans, Advanced Inspection & Asset Condition Manager Training (Remote)			Customer and Cartegraph (ISS)
DELIVER & SUPPORT PHASE	10/25/2021	12/31/2021	
Go Live Readiness Call			Customer and Cartegraph (ISS)
Complete Test System Changes			Customer
Custom Conversion Cut-off dates for final conversions			Customer
Production Data Load Services			Cartegraph (ISS)
Production Data Conversion Loads			Cartegraph (ISS)
Production Integrations Deployment			Customer and Cartegraph (ISS)
Production Database is Available			Customer and Cartegraph (ISS)
GIS Integration – Production Connection- Completed by Customer			Customer
Deliver Custom Integration Documentation			Cartegraph (PM, ISS)
Go Live Support (3-day Onsite)	11/8/2021	11/21/2021	Customer and Cartegraph (IS)
Post Go Live Support	11/15/2021	12/31/2021	Customer and Cartegraph