

RESOLUTION 18-2022

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE GROVELAND COMMUNITY SERVICES DISTRICT APPROVING A CONSULTING SERVICES AGREEMENT WITH PATRICK ENGINEERING FOR WATER, SEWER, TREATMENT PLANT, AND PARKS ASSET DATA CONFLATION AND MIGRATION TO ARCGIS AND CARTOGRAPH OMS

WHEREAS, the Groveland Community Services District (herein referred to as District) is a local government agency formed and operating in accordance with Section §61000 et seq. of the California Government Code; and

WHEREAS, the District issued a Request for a Proposal to Patrick Engineering to develop a ArcGIS platform and integrate it with Cartograph OMS; and

WHEREAS, the District received the proposal on April 20, 2022; and

WHEREAS, on review staff recommends the approval of a consulting contract to Patrick Engineering Inc for the completion of the activities listed in Exhibit A of said resolution.

NOW, THEREFORE BE IT RESOLVED by the Board of Directors of Groveland Community Services District approves Resolution 18-2022 an Agreement with Patrick Engineering Inc. for water, sewer, treatment plant, and parks asset data conflation and migration to ArcGIS and Cartograph OMS.

WHEREFORE, this Resolution is PASSED, APPROVED, and ADOPTED by the Board of Directors of the Groveland Community Services District on May 10, 2022, by the following vote:

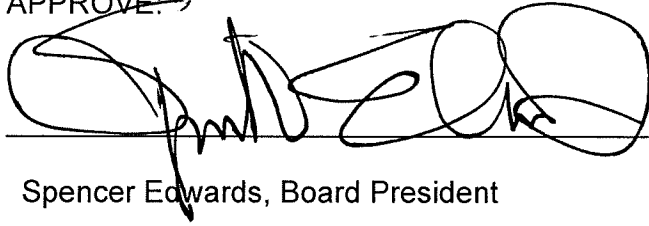
AYES: Directors Edwards, Swan, Kwiatkowski, and Mora

NOES:

ABSTAIN:


ABSENT: Director Armstrong

APPROVE:



Spencer Edwards, Board President

ATTEST:



Rachel Pearlman, Board Secretary

CERTIFICATE OF SECRETARY

I, Rachel Pearlman, the duly appointed and acting Secretary of the Board of Directors of the Groveland Community Services District, do hereby declare that the foregoing Resolution was duly passed and adopted at a Regular Meeting of the Board of Directors of the Groveland Community Services District, duly called and held on May 10, 2022.

DATED: 5.10.2022

Exhibit A

Activity 1: Stakeholder Use Case Validation & ArcGIS Data Model setup

Patrick will provide GIS and Asset Management staff to perform use case validation and ArcGIS data model setup tasks.

Patrick Engineering Responsibilities:

- Stakeholder use case review and validation meeting with GCSD staff (will incorporate findings already gathered from Patrick's recent onsite meetings with GCSD).
- Review, perform gap analysis btw Cartegraph and ArcGIS Water, Sewer, Treatment Plant, and Parks Data Models in support of each of these main asset layer categories.
- Setup and gain acceptance for Cartegraph-enabled ArcGIS Data models.
- Review GCSD Data Repositories and prep data sharing environment.

Activity 2: Data Conflation and Migration to ArcGIS

Patrick will provide GIS and Asset Management staff to perform ArcGIS data conflation and migration tasks. The specific tasks to be performed are listed below.

- Review and prepare GCSD data sources for conflation to common data model (will incorporate findings already gathered from Patrick's recent onsite meetings with GCSD).
- Migrate GCSD sources to ArcGIS GDB utilizing ArcGIS Pro utilizing individual and automated Extract, Translate, Load (ETL) tools.
- Perform standard QA/QC to determine feature and attribute gaps for each of the asset layers described in Activity 1
 - o If available, obtain missing attribute data from GCSD and populate ArcGIS Geodatabase (GDB) hosted feature layers.
- Review ArcGIS GDB with GCSD prior to publishing to ArcGIS Online and perform updates as required with existing GCSD data sources; i.e., Patrick will not create new data.
- Gain acceptance of ArcGIS GDB prior to publishing to AGOL and layer, map, app configuration

Activity 3: ArcGIS Layer, Map, and App Configuration

Patrick will provide GIS and Asset Management technology staff to configure requisite ArcGIS feature layers, maps, services, and apps.

- Prioritize top five applications for GCSD stakeholder use (e.g. Explorer, Editor, Operations Dashboard, and Field Maps apps)
- ArcGIS Feature Layer and Map Settings and Configurations – Labels, Symbology, Scale Dependencies, Filters, Thematic Rendering
- Configure ArcGIS Online Map and Feature Services and Web Maps for use in Explorer, Editor, Dashboard, and Mobile Field Maps
Configure web and mobile application using ArcGIS Online app templates
- Perform user acceptance and testing (UAT) for top five apps to confirm functional use

Activity 4: Perform ArcGIS to Cartegraph Data Migration

Patrick will provide GIS and Asset Management technology staff to perform the requisite migration of ArcGIS GDB feature classes to Cartegraph asset domains.

- Review final, fully populated ArcGIS file-based Geodatabase with the GCSD via remote webcast.
 - Evaluate ArcGIS GDB features classes for migration readiness; make adjustments as needed.
- Deliverables will consist of a populated ArcGIS file-based Geodatabase and ArcGIS Pro project file for viewing the data.
- Geodatabase feature class asset migration and sync (association) with Cartegraph asset registry based on Cartegraph's most current Facility Assets domain and associated data model structure (see https://campus.cartegraph.com/learn/Product_Resources/Asset_Specs/Facility_Assets) available at time of project kickoff.
- If requested and provided access to GCSD systems, Patrick will migrate the ArcGIS Geodatabase to the GCSD's Cartegraph test environment.
- Review, verify, confirm successful migration to Cartegraph test environment.
- Upon verification by the GCSD, Patrick will integrate and sync the ArcGIS Geodatabase to the GCSD's Cartegraph production environment.

Activity 5: Configure Cartegraph Map, Service, App, and Tools

Patrick will provide GIS and Asset Management technology staff to configure ArcGIS and Cartegraph maps, apps, and tools based on the outcome and acceptance of Activity 4 deliverables.

- Prepare and conduct up to two, 2-hour remote meetings with GCSD staff (primary end-user stakeholders) to review Cartegraph supported O&M and capital planning business workflows utilizing Cartegraph web and mobile applications.
- Prioritize GCSD feedback and adjust sequence of steps in workflows to conform with GCSD staff business requirements.
 - o Note: workflow adjustments will be made to the extent that they can be supported by out-of-the-box (OOB; i.e., not custom) Cartegraph web and mobile application capabilities.
- Configurations services will include:
 - o ArcGIS Map and Feature service configuration and publication for use with Cartegraph.
 - o Recommendations and setup of facility layer symbology and cartographic representation for room space and asset visualization in Cartegraph system.
 - o Recommendations, setup, and display of query and filter results of facility space and asset data in Cartegraph.
 - o Recommendations and setup of Cartegraph OOB web and mobile applications to include apps for bar code scanning (e.g., the Cartegraph iPad and Cartegraph One apps for tablets and smart phone devices).

Activity 6: Configure OCI, Budget Scenarios, & other Data and System Sustainment Services

Patrick will provide GIS and Asset Management technology staff for up to 65 hours of remote support for a period of up to six months following the migration and setup of Activity 3, 4, and 5 deliverables.

- Configure Facility Condition Index (FCI) values for facility domain assets utilizing condition attributes collected in Activity 2.
- Configure baseline capital budget scenarios using Cartegraph Scenario Builder (covers up to three scenarios).
- Ongoing ArcGIS and Cartegraph data and system sustainment services that may include:
 - o Assistance with ArcGIS Map and Feature service configuration and publication for use with Cartegraph.
 - o Assistance and recommendations for layer symbology and cartographic representation for room space and asset visualization in Cartegraph system.
 - o Assistance and recommendations for display of query and filter results of facility space and asset data in Cartegraph.
 - o Assistance and recommendations for ongoing setup and configurations of Cartegraph OOB web and mobile applications to include apps for bar code scanning (e.g., the Cartegraph iPad and Cartegraph One apps for tablets and smart phone devices).
 - o Ad hoc or as-needed ArcGIS and/or Cartegraph system administration and

management services.

- o Perform ArcGIS and/or Cartegraph system and tools use knowledge transfer (KT) and remote training for GCSD staff upon request. Requires minimum of two weeks lead time to schedule and prepare for KT or training delivery.

Success Criteria

This project will be deemed complete after each Activity deliverable is provided, reviewed, and/or delivered to the GCSD in format described herein.

Travel Expenses

Unless specified and included in the activity descriptions herein, no additional travel expenses will be required to complete this project.

Schedule

The project start date will be subject to mutual agreement by GCSD and Patrick and is subject to contract initiation. Patrick will provide a project schedule following execution of an agreement. Based on previous projects of this nature, Patrick anticipates that this work will take 12-16 weeks to complete all Activities (~6-8 weeks for Activities 1-3). Activity 6 may extend beyond 16 weeks based on GCSD's level of preparedness following Activity 5 delivery.