# AMENDMENT #1 TO CONTRACT FOR GIS SERVICES

This Amendment #1 ("Amendment #1"), effective as of the date signed by all the parties, amends and revises that certain GIS Services agreement, dated July 1, 2021 (the "Underlying Agreement"), by and between YAMHILL COUNTY, OREGON, a political subdivision of the state of Oregon ("COUNTY") and the MID-WILLAMETTE VALLEY COUNCIL OF GOVERNMENTS ("COG"), a voluntary intergovernmental association created by charter and agreement pursuant to ORS Chapter 190 of which COUNTY is a member. All capitalized terms not defined herein shall have the definitions set forth in the Agreement.

**WHEREAS**, the Parties have agreed to amend the Agreement in order to add an additional scope of work, as further provided below.

**NOW, THEREFORE,** in consideration of the promises and covenants set forth in this Amendment #1, and for good and valuable consideration, the sufficiency of which is acknowledged by the Parties' signatures, the Parties agree as follows:

## Amendment

1. Section A of the Underlying Agreement, COG Responsibilities, is hereby amended to include the Scope of Work attached to this Amendment #1 as Exhibit A, which is incorporated herein by this reference.

2. In the event of any inconsistencies between the terms and conditions contained in the Underlying Agreement and the terms and conditions contained herein, the terms and conditions contained herein shall control. Except as set forth in this Amendment #1, the Underlying Agreement remains in full force and effect, without modification or amendment, and is hereby ratified and confirmed. This Amendment #1 may be executed in multiple counterparts, each of which shall be an original, and all of which shall be one and the same contract. Original signatures transmitted by facsimile or electronic mail shall be effective to create such counterparts. Each person whose signature appears below warrants and represents that they have the requisite authority to execute this Amendment #1 on behalf of the entity for which they are signing.

**IN WITNESS WHEREOF, the foregoing Amendment #1 has been executed by the Parties as of the latest date listed below.**

MID-WILLAMETTE VALLEY
COUNCIL OF GOVERNMENTS

By: _____
Name: _____
Title: _____
Date: 3-29-2022

YAMHILL COUNTY

By: _____
Name: Lindsay Berschauer
Title: Chair, Board of Commissioners
Date: 4/7/22

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Accepted by Yamhill County
Board of Commissioners on
4/7/22 _____ by Board Order
# 22-105

**Exhibit A**

(see attached)

**AMENDMENT #1: Yamhill County/Mid-Willamette Valley Council of Governments (Yamhill County Planning Department), FY 2021-2022**

# Yamhill County ArcGIS Enterprise Server Project
## Scope of Work

**Purpose: to assist the Yamhill County, Oregon Assessor's Department with implementation of ESRI's Parcel Fabric at the Enterprise level to manage their current parcel data model and support multiple users.**

## Overview

This scope of work outlines the tasks to assist the Yamhill County Assessor's Department in the implementation of ArcGIS Parcel Fabric at the Enterprise level to update and optimize their current parcel data, improve accuracy, support multiple users, and create a base to publish and consume geographic services for web, applications, and internal use.

The ArcGIS Parcel Fabric is a services-based, next generation GIS that organizations can use to manage 3D and 4D parcel data including strata and subsurface information, ownership records, and agricultural and natural resource rights. Using parcel mapping, land record organizations can leverage the power of ArcGIS to provide tools that improve communication across their organization.

In an Enterprise environment, the parcel fabric is edited and maintained using a services-based architecture. A services-based architecture allows users to share the parcel fabric across all platforms (desktop, mobile, and web), and different workflows can be enabled on different clients in the field and in the office

When working in an Enterprise environment, the parcel fabric layer is published as a feature service to ArcGIS Enterprise. Before publishing the parcel fabric for editing in an enterprise environment, it is necessary to create the required server architecture that includes ArcGIS Portal, an Enterprise level database and the definition, setup, and hosting for publishing services in an ArcGIS Server.

ESRI recommends that each of the above components be setup and maintained on three different servers to minimize downtime, improve performance, allow for scalability, easy updates, and better security.

Following ESRI recommendations, the following deployment architecture where each component is hosted on a separate server on the Amazon Cloud will be implemented:

1. Portal for ArcGIS Server
2. Database SQL Server to host the Enterprise parcel data and the parcel fabric.
3. ArcGIS Server to publish services

**Portal for ArcGIS** plays a central role in organizing and sharing information within the ArcGIS system. The portal provides a user-friendly, searchable repository for maps and apps. It also helps create and share new maps and apps.

**The Database Server** hosts the parcel data and provides the information for maps and apps.

**The ArcGIS Server** allows the content in the Database Server to be shared with other devices using hosted web services. The portal helps map and app creators to find and use these web services.

The current ArcGIS server will be upgraded, configured and scaled to accommodate new tasks and services. Once the Portal and Database servers have been created and configured, connectivity between the three servers will be established to create the Enterprise environment and will be hosted on the Amazon Cloud. The AWS billing will be transferred from MWVCOG to Yamhill County to be billed directly. Yamhill County must designate a county staff member to serve as the account manager and will need to provide a credit card to AWS for billing purposes.

## Project Tasks

Below is a list of associated tasks for each of the individual server component deployments along with an initial setup of the ESRI Parcel Fabric in a multiuser (ArcGIS Enterprise) environment. As implementation of ESRI Parcel Fabric is new and that no best-practices have been established yet, additional tasks may be needed to successfully complete the project.

1. **Configuration of Existing ArcGIS Server**
   - Upgrade the server capabilities, configure, and scale hardware to match the new tasks
   - Configure the firewall to allow communication to the portal and the enterprise database
   - Increase and configure data storage for hosted feature layers
   - Configure the ArcGIS Server for service publishing
   - Create users and assign rights to match portal
   - Connect ArcGIS Server services to the portal
   - Secure the ArcGIS Server and the connections to the portal

2. **Portal for ArcGIS Creation and Setup**
   - Server Creation on the Amazon Cloud
   - Install Portal for ArcGIS
   - Obtain ESRI license
   - Configure ESRI License Manager
   - Create the Portal
   - Configure the ArcGIS Web Adaptor to connect to the web server and security policy
   - Create the initial administrator account
   - Configure integrated Windows Authentication, LDAP, or PKI for portal authentication.
   - Configure the portal website to include:
     a. Security settings
     b. Dedicated ArcGIS Server sites
     c. The services that are used for printing, geocoding, geometric calculations, and routing
     d. Add logo and banner
     e. Feature selected content on the home page
     f. Setup organization base maps
     g. Setup templates

   - Create groups, users and assign rights and roles
   - Enforce named user licensing

- Configure utility services if needed to enable specific functionality including printing, geocoding, geometry, routing, network etc.
- Set up the portal authentication
- Configure security settings
- Setup and schedule backups

3. **Database Server Creation and Setup**
   - Server Creation on the Amazon Cloud
   - Configure server role as a database host
   - Install SQL server
   - Configure firewall ports
   - Install Microsoft ODBC driver to allow communication between ArcGIS Server and SQL Server
   - Configure SQL Server instances to allow connections from other computers
   - Register the parcel database with the ArcGIS Server
   - Configure groups, users, and roles

4. **ESRI Parcel Fabric Setup (onsite tasks)**
   - Migrate existing parcel file Geodatabase to the Enterprise SQL Geodatabase
   - Setup user authentication, user types, roles, and privileges
   - Configure clients to connect to new Geodatabase
   - Configure the clients firewall to allow connections to the Geodatabase
   - Setup appropriate permissions to publish services
   - Setup clients to publish the parcel fabric to the Portal ArcGIS Server

5. **General Technical Support**
   - Technical support available upon request from county's key contact person or their designee
   - Monthly hours for technical support requests or emergency maintenance not to exceed ___ without prior authorization from key contact person

## Tasks Not Included in Scope of Work

This scope includes the setup of the server architecture and software and migration of database only. Once the transition has been made, county staff will be responsible for administering the Enterprise Geodatabase along with the Parcel Fabric, including setting up attribute rules, validating topology, managing edits, tracking, versioning etc.

## Time Estimate

| Tasks | Hours | Notes |
|---|---|---|
| Portal for ArcGIS Server Setup | 40 | |
| ArcGIS Server Setup | 40 | |
| Database Server Setup | 40 | |
| ESRI Parcel Fabric Setup Assistance as Requested | 20 | |

| | | |
|---|---|---|
| Travel | 10 | |
| Troubleshooting | 40 | |
| Contingency | 80 | |
| Total | 270 | |

## Cost Estimate

At MWVCOG's hourly rate of $99 for FY2021-2022, the cost estimate is $26,730, which includes a contingency of 80 hours. The initial setup cost and monthly fees for the Amazon Cloud servers are not included in the cost estimate and would an additional charge that would be the responsibility of the Yamhill County Assessor's office. After the initial setup of the servers and troubleshooting, it will be the responsibility of Yamhill County for the training of staff and the updating of the parcel fabric. Support for future maintenance of the servers can be requested at an additional hourly cost.

## Supplied Materials

The following materials are to be supplied by Yamhill County

1. The current file geodatabase to do the migration to the Enterprise Geodatabase

## Terms and conditions

Based on a detailed discussion with ESRI representatives, this scope assumes that the current ESRI Parcel Fabric has reached a productive level status. Users at Yamhill County will need to get the appropriate training through ESRI to be proficient in day-to-day parcel fabric related tasks. Since this project is one of the first implementations of the ESRI Parcel Fabric in Oregon, additional time may be needed to address unanticipated technical issues and troubleshoot the project components.