

## AWS, GIS Configuration & Implementation for City of Delray Beach

### Statement of Work

November 23, 2022

### **ROK** **TECHNOLOGIES**

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## 1 Introduction

City of Delray Beach has engaged ROK Technologies, LLC (ROK) to perform high-level services related to City of Delray Beach's AWS Configuration and GIS implementation.

This Statement of Work (SOW) dated November 23, 2022 sets forth the scope of services and deliverables to be provided by ROK and the terms and conditions under which the services shall be conducted.

## 2 Objectives

The following high-level objectives will be completed as part of this project. The timeline is dependent on City of Delray Beach delivering all items defined in section 9.2 of the scope of work entitled Customer Responsibilities to ROK Technologies in a timely manner.

### 2.1 Areas in scope

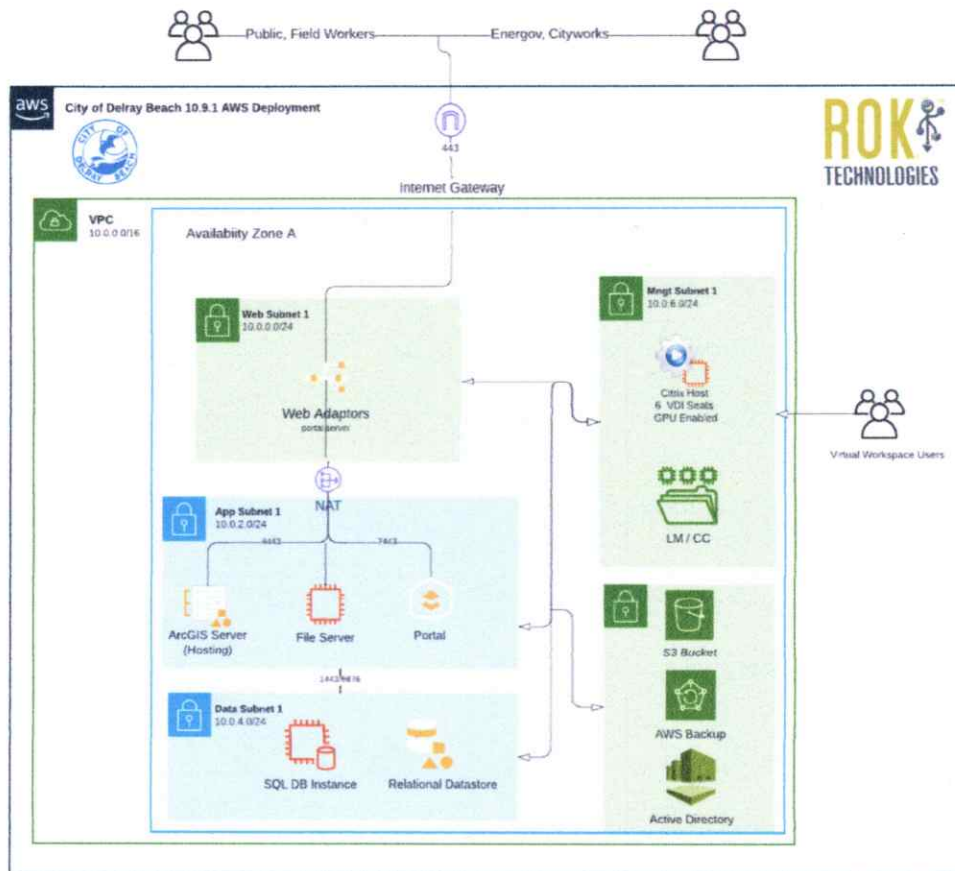
This section outlines the work and activities required to accomplish the objectives set forth in this Statement of Work.

#### ***General project scope***

The City of Delray Beach wishes to perform services related to the creation and configuration of a CLOUD deployment and GIS implementation related services to support the City of Delray Beach's Esri software.

As part of this initiative, City of Delray Beach is looking to have a production ready deployment of the necessary Cloud components to support their Esri software. Examples include the underlying Cloud Tenant, the primary Virtual Network, Storage Accounts, backups and other related items.

Below is a diagram of the requested environments.



### 3. Project approach, timeline, and deliverable acceptance

#### ***Phase 1: Cloud Environment Deployment***

□ ***Time Est: 1 Weeks***

1. Configuration of the necessary Cloud components, including but not limited to:
  - a. Configure Cloud subscription and resource groups
  - b. Configure IP Space, virtual networks, and peering.
  - c. Deploy baseline Network Security Groups
  - d. Deploy Infrastructure, add Infrastructure to Active Directory, and configure account permissions
  - e. Configure back-ups, monitoring, and maintenance Schedules
  
2. Deployment of the following Virtual Machines in AWS:

| City of Delray Beach's Production Environment |                                 |             |          |                 |                   |                  |
|-----------------------------------------------|---------------------------------|-------------|----------|-----------------|-------------------|------------------|
| ENV                                           | Name                            | Server Name | Uptime % | OS Storage (GB) | Data Storage (GB) | Server Size      |
|                                               | AWS Active Directory            | -           |          |                 |                   |                  |
| PRD                                           | AWS ArcGIS Portal               | -           | 100      | 100             | 150               | 4 vCPUs 16GB RAM |
| PRD                                           | AWS ArcGIS Relational DataStore | -           | 100      | 100             | 150               | 4 vCPUs 16GB RAM |
| PRD                                           | AWS ArcGIS Server               | -           | 100      | 100             | 150               | 4 vCPUs 16GB RAM |
| PRD                                           | AWS Citrix Connector            | -           | 100      | 100             | 150               | 2 vCPUs 8GB RAM  |
| PRD                                           | AWS - File Server               |             | 100      | 100             | 500               | 2 vCPUs 8GB RAM  |
| PRD                                           | AWS - SQL Server                |             | 100      | 100             | 300               | 4 vCPUs 32GB RAM |
| PRD                                           | AWS - Web Server                |             | 100      | 100             | 30                | 2 vCPUs 4GB RAM  |
|                                               | AWS - S3 Bucket 1TB             | -           |          |                 |                   |                  |

3. Deployment and configuration of the VDI Environment as specified below:

| Name                | Qty | OS Storage (GB) | Data Storage (GB) | Server Size      |
|---------------------|-----|-----------------|-------------------|------------------|
| Citrix Seat         | 6   |                 |                   |                  |
| AWS - Citrix Server | 1   | 100             | 250               | 8 vCPUs 32GB RAM |

## ***Phase 2: Install and Configure Esri Software***

### **□ Time Est.: 1 Weeks**

Prior to install and configuration City of Delray Beach shall provide ROK Technologies, LLC with the following:

- Any applicable licensing files, software downloads or login credentials to City of Delray Beach's MyEsri.com account.
  - SSL cert as a .pfx. This can be provided by ROK Technologies, LLC by request.
  - Domain account and confirmation of domain names and URLs.
  - VPN and RDP access to existing environment if needed.
1. Pre-Installation Operations: obtain all licensing, configure Service Account(s), configure centralized network location(s) for content and configuration stores.
  2. Install and License the following components of City of Delray Beach's ArcGIS Enterprise Stack:

| <b>City of Delray Beach Enterprise Components</b> | <b>Current Version applicable</b> | <b>if Install Version</b> |
|---------------------------------------------------|-----------------------------------|---------------------------|
| ArcGIS Enterprise                                 | 10.9.1                            | 10.9.1                    |
| ArcGIS Server                                     | N/A                               | 10.9.1                    |

3. Configure ArcGIS Enterprise Environment: configure security posture (import Certificates, HTTPS vs HTTP), configure appropriate ports for SSL communication between application servers, configure Web Adaptors, configure Datastore to the hosting server(s), federate hosting and ArcGIS Server with Portal, configure SAML and Enterprise logins
4. Deploy and Validate ArcGIS Enterprise: apply critical security, OS and Esri Patches, validate Enterprise logins, publishing workflows, and database connectivity.

## ***Phase 3: Asset Migration and Testing***

### **□ Time Est.: 2 Weeks**

#### **Inventory: Analyzing Service Metrics**

**Services** –ROK will collaborate with the City of Delray Beach Team to migrate the following services to the new cloud environment. Set up a file share for you to access your existing project files.

| Service         | Action by ROK | Number |
|-----------------|---------------|--------|
| Mxd(s)          | N/A           |        |
| APRX File(s)    | N/A           |        |
| Hosted Layer(s) | N/A           |        |
| AGOL Content    | N/A           |        |
| Imagery         | N/A           |        |
| DataStore(s)    | N/A           |        |
| Database(s)     | N/A           |        |

#### **Phase 4: Go Live**

□ **Time Est.: 1 Weeks**

**Testing and Parity:** ROK will have worked with City of Delray Beach to approve the new environment through extensive testing. Following this, ROK will request a new database backup from City of Delray Beach to ensure that City of Delray Beach's most recent data is in the new environment.

- **\*\*ROK will not be responsible for updating any services, web maps or apps not listed in this agreement. If additional services, web maps, or apps are not migrated as a part of this agreement, it is the sole responsibility of City of Delray Beach staff to keep those services updated until such time they choose to migrate them in the cloud environment.**
- **Identifying the Date:** ROK will work with City of Delray Beach to identify a weekend that will work for the cutover. The week before the cutover, ROK will take City of Delray Beach through the hand-off documentation that contains all of the new passwords and access information for the new environment, along any relevant training.

## 4 Current Environment Readiness

This Statement of Work assumes that City of Delray Beach's physical and cloud-based environments and network infrastructures are prepared to accommodate the equipment and services to be provided by ROK within the scope of this project. Upon discovering any deficiency that would prevent or otherwise hinder project execution, ROK shall notify City of Delray Beach of the deficiency in writing and work in good faith with City of Delray Beach to adjust the project schedule to accommodate remediation of the issue. Services that are dependent on the remediation of the deficiency will be postponed or suspended until the remediation is complete. ROK is not liable for any delays to the overall project plan necessitated by remedial activities and shall be held harmless for changes in the schedule resulting from such activities.

At present, ROK is not aware of any limitations to a successful engagement.

### 4.1 Project Prerequisites

The following items have been identified as critical to the overall success of this engagement and should be completed by City of Delray Beach prior to commencement of this engagement:

1. Project stakeholders identified, and necessary design and discussion sessions scheduled.
2. Administrative access to environments related to the scope of this engagement shall be provided and tested during an agreed upon window. Access may include but is not limited to: Existing architecture diagram, establishing VPN access to the existing environment, RDP access, administrative access to Esri Software(i.e ArcGIS Server, Portal), IP addresses, administrative access to any RDBMS, usernames and passwords for accounts running software or services involved in this effort.
3. URLs identified.
4. SSL Cert obtained. This can be provided by ROK Technologies, LLC upon request.
5. Licensing required for successful deployment of the items described in this statement of work.
6. Timely access to City of Delray Beach's IT personnel for Q&A support.
7. IT personnel will be responsible for taking backups of authoritative data and snapshots of all servers during an agreed upon window prior to any migration activities taking place.

### 4.2 Customer Environment Access Protocol

As part of ROK's commitment to assuring secure and protected City of Delray Beach environments. ROK requires the use of named accounts for all ROK resources who will engage in activities that involve access to on- premises or cloud-based City of Delray Beach-owned systems. ROK strongly recommends not utilizing shared accounts. The use of shared accounts can lead to an increase in system vulnerability, as well as a reduction in auditing and compliance capabilities. City of Delray Beach accepts all liability for the use of shared accounts.

ROK asks that the following policies be applied to accounts created for ROK resources engaging in project work:

- Based on the initial project plan, the account expiration be set to 8 AM on the day following the scheduled project completion. The ROK Project Manager shall request extensions as necessary to accommodate project delays, change orders, or other events that may cause a project to take longer than initially anticipated.

- Named user accounts shall be configured to require password resets per the City of Delray Beach's standard policy and shall not be set to disable required password changes.
- The length and complexity of named user account passwords shall be configured per the City of Delray Beach's standard policy. ROK suggests that passwords be at least 10 characters in length and utilize a combination of upper and lower-case numbers, numeric values, and special characters i.e., strong passwords.
- A named user account shall be granted no more than the minimal required permissions to perform the specific tasks assigned to the ROK resource.
- For larger projects that involve multiple systems, care shall be taken to not grant a single named user account access across those systems in such a way that could lead to a system-wide compromise. For example, the ability to create and set permissions on Active Directory accounts, as well as the ability to modify Access Control Lists on network security devices shall not be granted. In these cases, separate accounts may be created, or ROK resources will collaborate sufficiently to complete the necessary objectives.

If City of Delray Beach requires and would like assistance in remediating insecure environments to ensure that the policies above can be implemented and enforced, ROK can provide these services through a separate agreement. If any deviations to this policy are required to satisfy project objectives, ROK requests that the specific deviation and justification be communicated to the assigned Project Manager, so it may be evaluated, and potential alternative approaches identified. This will also allow the ROK Project Manager to communicate the removal of approved deviations when they are no longer required to satisfy the project's objectives.

## 5 Scope Exclusions

The following tasks are beyond the scope of services to be provided by ROK during this engagement:

1. Any task not explicitly described as within the scope of this engagement.
2. Corrective measures for any issues or risks identified during the course of this engagement.  
**NOTE:** A change form(s) may be issued for approval and funding of requisite changes to scope

## 6 Deliverables

At the conclusion of this engagement, ROK shall deliver the finalized versions of the deliverables produced and maintained throughout the course of project activities:

| ID  | Deliverable            | State     | Description                                                                                                                   |
|-----|------------------------|-----------|-------------------------------------------------------------------------------------------------------------------------------|
| ENV | Configured Environment | Completed | <ul style="list-style-type: none"><li>• All services in project scope completed and available for use.</li></ul>              |
| DOC | Project Documentation  | Delivered | <ul style="list-style-type: none"><li>• Project documentation in the form of daily worklogs and knowledge transfer.</li></ul> |

## 7 Estimated Duration

This estimated duration is reflective of the work effort associated with each activity and is subject to change due to changes in scope, issues encountered, planned maintenance windows and other business reasons encountered during execution. The actual duration will be finalized during the project initiation.

## 8 Project Fees and Billing

The services associated with this project shall be provided on a Fixed Fee and Time and Materials basis. Project fees shall be billed at inception. The labor fees associated with this project are estimated at \$11,119.00 USD and assume 60 hours of work.

All payments shall be governed by the Local Government Prompt Payment Act, as set forth in Part VII, Chapter 218, Florida Statutes. The CITY shall not be subject to late charges for past due amounts in excess of one percent (1%) as provided for in §218.74, Florida Statutes. Prices applicable to CITY do not include applicable state and local sales, use and related taxes. The CITY is exempt from state and local sales and use taxes and shall not be invoiced for the same. Upon request CITY will provide Company with proof of tax-exempt status.

## 9 Assumptions and Customer Responsibilities

### 9.1 General Assumptions

This SOW is based upon the following assumptions:

- i. ROK will provide project personnel knowledgeable with the aforementioned products based on the skills required at the appropriate times and in accordance with the work breakdown structure.
- ii. The normal “on-hours” workday for the project will be 8:00 AM to 6:00 PM Eastern Time, Monday through Friday. “Afterhours” is work performed between 6 PM and 8 AM Monday through Thursday (Friday at 8 AM) and is billed at 1.5X the standard rate. Weekend and Holiday is any work performed between 6PM Friday and 8 AM Monday or on a National Holiday and is billed at 2X the standard rate.

### 9.2 Customer Responsibilities

If the project is to be successful, City of Delray Beach must commit to the following obligations:

1. City of Delray Beach will provide a single point of contact for project coordination between City of Delray Beach and ROK and that *person* will be responsible for ensuring City of Delray Beach project personnel are on target with their assigned duties in accordance with the work breakdown structure.
2. City of Delray Beach will provide ROK with all relevant system and network documentation, as requested.
3. City of Delray Beach will make all essential stakeholders available to ROK throughout the duration of this engagement.
4. City of Delray Beach will make the majority of the administrative and configuration information available to ROK prior to the commencement of this engagement.
5. City of Delray Beach will make timely decisions in collaboration with ROK regarding escalated or critical issues as they arise during the project.
6. City of Delray Beach will provide suitable work area spaces with desks, chairs, and telephones (if applicable), as well as necessary customer systems accounts and passwords.
7. City of Delray Beach will assume responsibility for management and coordination of all non-ROK managed vendors.
8. City of Delray Beach will provide access with proper licenses to all necessary tools, software, and

third-party products required for ROK and City of Delray Beach to complete their assigned project tasks.

9. City of Delray Beach will maintain active vendor maintenance agreements for the technology impacted by this project or will otherwise obtain vendor maintenance as required to support this project throughout its duration.
10. City of Delray Beach will notify ROK project management of any unscheduled or scheduled projects outside of this implementation that might interfere with the project schedule.
11. City of Delray Beach will obtain any downtime windows reasonably required to keep the project on schedule.
12. City of Delray Beach will provide ROK with high priority access to the City of Delray Beach IT team members with knowledge of current technology configurations and operational processes and with responsibility for administering the technologies that will be impacted by this project.
13. City of Delray Beach will provide ROK with advance notification of any change that is to be introduced in the IT environment and together assess the potential impact of the change to this engagement prior to its implementation. When City of Delray Beach's business needs preclude advance notification, such as timely response to a critical support issue, City of Delray Beach shall notify ROK of such a change within the same business day that the change is implemented.
14. City of Delray Beach shall provide ROK with the primary contact for each vendor supporting the City of Delray Beach IT infrastructure as requested, including, but not limited to, ISP and circuit providers.

## 10 Change Control Process

As ROK and City of Delray Beach collaborate on this project, it is possible that either party will find reasons to change the scope, timeline, or overall budget.

Client or ROK may request changes that would increase or otherwise modify this SLA. Such changes or additional services must be in accordance with the City of Delray Beach Code of Ordinances and Purchasing Policy and must be contained in a written amendment to this SLA executed by the Parties hereto prior to any deviation from the scope herein described. While this need might be identified by a member of City of Delray Beach's team or a member ROK's team, ROK's Project Manager will maintain written documentation of any requested changes to this SLA and all communication related to such of the change(s), ROK will provide such documentation to the City of Delray Beach's designated point of contact upon request. ROK and City of Delray Beach shall work together in good faith to assess the impact of the change and determine whether the proposed change shall be accepted or rejected and shall enter into a written amendment to this SLA if accepted.

## 11 Project Team

### *ROK Team*

The Project Manager is the person responsible for ensuring that the Project Team completes the project. The Project Manager develops the Project Plan with the team and manages the team's performance of project tasks. It is also the responsibility of the Project Manager to secure acceptance and approval of deliverables from the Project Sponsor and Stakeholders. The Project Manager is responsible for communication, including status reporting, risk management, escalation of issues that cannot be resolved in the team, and, in general, making sure the project is delivered in budget, on schedule, and within scope.

Engineers are responsible for executing tasks and producing deliverables as outlined in the Project Plan and directed by the Project Manager, at whatever level of effort or participation has been defined for them.

Stakeholders are all those groups, units, individuals, or organizations, internal or external to our organization, which are impacted by, or can impact, the outcomes of the project

#### *City of Delray Beach Team*

ROK engineers will work with a Primary Contact for each architecture type throughout the project. This person is responsible for maintaining the systems after the ROK engineers have completed the project and providing key data as the project is being completed. This person will shadow ROK's engineers as needed and should review documentation.

The Secondary Contact is someone who can handle issues and escalations should the primary contact be indisposed during the project and after the project is complete. This person will shadow ROK's engineers as needed and should review documentation.

## 12 Acceptance

This Statement of Work constitutes the full agreement ("Agreement") between ROK and City of Delray Beach for the services described herein.

The undersigned parties acknowledge their acceptance of this Agreement and the terms and conditions described herein. Furthermore, the undersigned parties certify that they are authorized representatives of their respective companies with full authority to sign this SOW and enter into this Agreement on behalf of their respective organizations.

| Services                  | Price           |
|---------------------------|-----------------|
| Cloud Implementation Cost | 15,000.00 USD   |
| AWS Partner Funding       | (\$3,881.00)    |
| Services Subtotal         | \$11,119.00 USD |

*Should the length of engagement exceed the timing indicated in this agreement at no fault of ROK Technologies, LLC, additional cost will be invoiced by the hour at a rate of \$250/hour.*

**IN WITNESS WHEREOF**, the City of Delray Beach and ROK Technologies, LLC, executed this Agreement as of the day and year first above written.

ATTEST:

CITY OF DELRAY BEACH

Katerri Johnson, City Clerk

By: Shelly Petrolia, Mayor

Approved as to form and legal sufficiency:

Lynn Gelin, City Attorney

ROK TECHNOLOGIES, LLC.

By: [Signature]

Print Name: CAREY JENKINS

Title: ACCOUNT EXECUTIVE

(SEAL)

STATE OF South Carolina  
COUNTY OF Charleston

The foregoing instrument was acknowledged before me by means of ☒ physical presence or ☐ online notarization, this 6th day of January, 2023 by Carey Jenkins (name of person), as Acct Executive (type of authority) for ROK Technologies (name of party on behalf of whom instrument was executed).

Personally known SCDL OR Produced Identification SCDL  
Type of Identification Produced ✓

[Signature]  
Notary Public – State of SC

