THE CITY OF COLUMBUS
ANDREW J. GINTHER, MAYOR

RESPONSE TO RFQ FOR SOFTWARE, TRAINING AND PROFESSIONAL SERVICES

Attn:

Shoreh Elhami
Citywide GIS Manager
City of Columbus, Department of Technology
1111 East Broad Street, 3rd floor
Columbus, OH 43205
(614) 645-2109
shelhami@columbus.gov

halcyon
IT Business Solutions + Social Responsibility

SBA 8(a), CMMI Level 3 & ISO 9001 Certified

www.halcyonit.com
614-552-9090

tableau PARTNER

Microsoft GOLD CERTIFIED Partner

ORACLE Gold Partner

IBM Business Partner

State of Ohio and City of Columbus Minority Business Enterprise (MBE) Certified

May 12, 2017

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1 BACKGROUND

Halcyon Solutions is a rapidly growing IT consulting firm in the State of Ohio. Our Business Intelligence and Data Analytics practice is one of the fastest growing lines of business in the company. Established in 1992, we have a 25-year history and exemplary track record of building and supporting IT solutions on various platforms for Fortune 500 clients.

Halcyon is one of the largest MBE providers to the State of Ohio.

Our capabilities include application development, business process reengineering, data warehouses, business intelligence and management reporting systems. Additional capabilities include project management, process improvement through Lean and Six Sigma methodologies and business analysis.

Corporate Certifications

- **Tableau Partner**
- **Microsoft Gold Partner**
- **IBM Business Partner**
- **Oracle Gold Partner**
- **Federal GSA**
- **Ohio State Term Schedule**
- **Disadvantaged Business Enterprise (DBE)**
- **Ohio Minority Business Enterprise (MBE)**
- **City of Columbus MBE Certified**
- **EDGE Certified**
- **SBA 8(a) Certified**
- **CMMI Level 3 Certified**
- **ISO 9001 Certified**

Our people are well qualified in their respective professional fields and come with industry standard certifications from Project Management Institute (PMI), Microsoft, IBM, Oracle, Tableau, and EMC. Areas of expertise of our people include data visualization, analytical modeling, data science, statistical analysis, artificial intelligence and database administration.

Excellent client service has been a hallmark of our company. References and testimonials from our clients suggest that our ability to partner with them, solve complex business problems with the help of technology and deliver solutions that far exceed their expectations continues to set us apart in the industry.

As a company, we are recognized by our partners, peers and industry benchmark organizations. We are CMMI Level 3 and ISO 9001 certifications. We have been certified as a gold partner of Microsoft, Oracle and IBM and an Alliance Partner of Tableau - demonstrating the value we bring to their technologies. In addition, the SBA and Columbus Chamber of Commerce awarded us their Small Business Leader awards.

Our social responsibility mission which included providing Veterans with IT Training and helping them find jobs has earned us recognition from Pillar Award, Business First, SBA and many other philanthropic organizations.

Our company is multidimensional in expertise, with an unmatched track record of successful projects, willing to go that extra length to ensure the success of our clients and conscientious in giving back to our communities.

Halcyon has over 100 consulting employees working in the company, with 26 consulting employees experienced in various aspects of Data Warehouse, ETL, Business Intelligence and Data Analytics. Halcyon has delivered approximately 8 projects in the Analytics domain.

2 ACCOUNT AND BILLING INFORMATION

Requirement	Response
a. Business Name and Address	Halcyon Solutions 5880 Innovation Drive Dublin Ohio 43016
b. Business Owner or Principal responsible for the agreement	Sanjay Dudaney President
c. Contact Phone	614-322-3969
d. Contact e-mail address	Sanjay@halcyonit.com
e. Federal Tax ID Number	31-1343200
f. State Term Schedule Number	534354-51
g. Labor cost listed on State Term Schedule	$248.14
h. Quotation must be priced at or below the State Term Schedule's hourly rate	Halcyon quoted rate is $240 per hour (not including travel and expenses). This is below the STS hourly rate.
i. All offerors and their proposed subcontractors, shall have valid City of Columbus Contract Compliance Numbers (CCCN).	43200-93334

3 PROPOSED SOLUTION

Halcyon Solutions is proposing Tableau as the Data Visualization solution for the City of Columbus. Tableau is a market leader in the Business Intelligence and Analytics field. As shown below, Tableau meets all the requirements specified in the RFQ.

RFQ Requirement	Response
3.1 The proposed software must allow on premise and cloud deployment options.	Meets this requirement
3.2 The proposed software must allow for the creation of interactive data dashboards without additional scripting or coding. 3.2.1 For example, end users can define measures, calculations, sets, groups, aggregates, and hierarchies without coding or scripting.	Meets this requirement
3.3 The proposed software must allow for visualizations and dashboards to be published for public consumption without exposing internal data systems to the public.	Meets this requirement
3.4 The proposed software must allow for visualizations and dashboards to be published for public consumption leveraging cloud-based technology.	Meets this requirement
3.5 The proposed software must allow for the creation of various chart types, including but not limited to: 3.5.1 Bubble; 3.5.2 Scatter plots; 3.5.3 Tree; 3.5.4 Histograms; 3.5.5 Bar; 3.5.6 Pie Graphs	Meets this requirement
3.6 The proposed software must include the following functionality, without additional scripting or coding: 3.6.1 Multiple category comparison in a single view;	Meets this requirement

RFQ Requirement	Response
3.6.2 "What-if" analysis; 3.6.3 Data blending; 3.6.4 Simple relationship calculations; 3.6.5 Data sets filters that include at least a thousand data points; 3.6.6 Exclusion of multiple outliers; 3.6.7 Ability to group, organize, or categorize fields in a data set; 3.6.8 Mapping and geospatial capabilities; 3.6.9 Trend or reference lines within a visualization; 3.6.10 Forecasting; and 3.6.11 "Drill down" to transactional level detail on any metric.	
3.7 The proposed software must allow for real time/live data connectivity to data sources including, but not limited to: 3.7.1 Relational databases; 3.7.2 Text files; 3.7.3 Non-structured data source; 3.7.4 Microsoft Excel; 3.7.5 Microsoft SQL Server; and 3.7.6 Oracle.	Meets this requirement
3.8 The proposed software must allow users to connect to structured and unstructured data from various storage platforms both on premise and in the cloud.	Meets this requirement
3.9 The proposed software must allow connectivity to data sources to be provisioned and managed centrally, including credentials to the data sources and user access.	Meets this requirement
3.10 The proposed software must allow for exporting data from the underlying data source into the software tool.	Meets this requirement

RFQ Requirement	Response
3.11 The proposed software must allow for a hybrid of live data connections and exporting data into the software tool.	Meets this requirement
3.12 The proposed software must support the sharing of data marts/data sources between dashboards.	Meets this requirement
3.13 The proposed software must support the ability to join different types of data sources in memory.	Meets this requirement
3.14 **MANDATORY** -The proposed software must be included in the 2017 Gartner Magic Quadrant for Business Intelligence and Analytics Platforms.	Meets this requirement
3.15 The proposed software must include functionality to publish visualizations publicly and securely without data source connections.	Meets this requirement
3.16 The proposed software must allow for users and groups to be administered centrally, including the following functionality: 3.16.1 Integration with Active Directory (AD) / Lightweight Directory Access Protocol (LDAP) users and groups; 3.16.2 Single Sign-On (SSO) with AD / LDAP; 3.16.3 Create and manage content security at the folder, project, or item level; 3.16.4 User accounts can be provisioned automatically; and 3.16.5 Users and groups can be synchronized from AD automatically or scheduled.	Meets this requirement
3.17 The proposed software must support content downloading and printing to Portable Document Format (PDF), Microsoft Excel, and text files.	Meets this requirement
3.18 The proposed software must support content searches by description and tags/keywords.	Meets this requirement

RFQ Requirement	Response
3.19 The proposed software must include functionality to access data dashboards via mobile devices or web browsers.	Meets this requirement
3.20 Vendor must state qualifications to include organization of the company, number of years in business, number of years products/services of similar scope/size to this project have been sold, partnerships, etc.	Please see Section 1
3.21 If any component(s) necessary for operation of the requested system is omitted from Vendor's proposal, Vendor must be willing to provide the component(s) at no additional cost.	Halcyon and Tableau agree to this requirement
3.22 The proposed software must use one tool to create and publish dashboards internally and publicly without having to "re-work" or "re-code".	Meets this requirement
3.23 The proposed software must allow Administrators to seamlessly promote business user defined data sources and models for use across the platform.	Meets this requirement
3.24 The proposed software must ensure the user experience, look and feel, and controls between internal and publicly available content are seamless.	Meets this requirement
3.25 The proposed software must ensure the content can be embedded in portals or applications using APIs, scripts, iframes or other similar techniques.	Meets this requirement
3.26 The proposed software must provide usage stats by content overtime, and by end user.	Meets this requirement
3.27 The proposed software must not require any 3rd party add-ons or multiple product suites to achieve the desired functionality.	Meets this requirement
3.28 The proposed software must have the capability to connect to Esri map and image services and also various versions of Spatial Data	Meets this requirement

RFQ Requirement	Response
formats (Esri shape files, geodatabase, GeoJSON, KML, etc.)	
3.29 The offeror must propose costs for on-site training for desktop users as well as Admin users. A detailed description of the training including course/class content, duration, number of staff/size of class, and location of the training must be included with Offeror's response. Costs associated with training must be included in Attachment A, Cost Information Form.	Please see Section 4 of this response
3.30 The offeror must clearly define the details of professional services provided by the senior information architect for installation and configuration of the product.	Please see Section 5 of this response

4 ON-SITE TRAINING

Tableau offers the following courses to its clients. These courses are taught by Tableau experts with practical experience in implementing Tableau-based solutions. The onsite courses listed below accommodate 15 students, with several of these also offered in a virtual classroom environment.

4.1 DESKTOP I: FUNDAMENTALS

This two day course is designed for the beginner to intermediate-level Tableau user. It's for anyone who works with data – regardless of technical or analytical background. This course teaches the important concepts and techniques used in Tableau to move from simple to complex visualizations and learn how to combine them in interactive dashboards. Available onsite and virtually.

4.2 DESKTOP II: INTERMEDIATE

A two day course that provides the skills required to become a Tableau power user. It is designed for someone who has solid working experience with Tableau and wants to take it to the next level. Attendees should have a deep understanding of all the fundamental concepts of building worksheets and dashboards but may scratch their heads when working with more complex issues. Available onsite and virtually.

4.3 DESKTOP III: ADVANCED

Explore complex data visualization challenges and dig deeper into your data. You'll learn advanced chart techniques for creating innovative analysis and dashboards. Get a better understanding of how to artfully prepare and organize your data and how to get the most out of Tableau Desktop's more technical features.

4.4 DESKTOP I & II: ACCELERATED

A three day course consolidates Fundamentals and Intermediate courses. Offered onsite, this course is best for companies with people ready to challenge themselves to become data rockstars quickly.

4.5 VISUAL ANALYTICS

This two-day course is for users already well-versed in the functionality of Tableau Desktop, but want to improve their analysis skills and deepen their understanding of visual best practices. Through demonstrations and real-world activities, you will become a better analyst, designer, and communicator. Available onsite and virtually.

4.6 WEB AUTHORING

This one-day course will introduce the basic functions of web authoring in Tableau Online and Server. You'll learn the skills needed to create, edit, and interact with basic worksheets that use previously published data sources. Available onsite.

4.7 SERVER ADMINISTRATION

This two-day course provides in-depth coverage of Tableau Server administration. The knowledge and skills acquired are best geared towards those who will be administering the Tableau Server installation, including managing content, users, and permissions. Available onsite and virtually.

4.8 SERVER ARCHITECTURE

This three-day course provides in-depth coverage of Tableau Server architecture and configuration. The knowledge and skills acquired are best geared toward those architecting and administering a large or complex deployment of Tableau Server, or a consultant who will be involved in many deployments of Tableau Server. Available onsite and virtually.

4.9 CUSTOM DATA WORKSHOP

A one-day course which allows students to work from their own data. It allows attendees to first learn the product using standard training samples and then to apply the concepts to their own data. This offering is only delivered in combination with other courses. Available onsite.

5 PROFESSIONAL SERVICES

Tableau consultants from Tableau's Professional Consulting Services Division will work with the City of Columbus technical team, enabling you to manage and support Tableau Server in your environment. Tableau consultants will show you how to backup and restore Tableau Server. They will strategize with you on best practices for data management. They will even make sure you are successful publishing your first workbooks to Tableau Server. At the end of the engagement, City of Columbus will have detailed environment documentation so you know what they did.

Here is a description of Tableua Consulting Services for the **Onsite Server Rapid Start Program**. The result of this four-day program is the complete installation and configuration of the Tableau Server.

Overview

The Onsite Server Rapid Start program will deliver the following benefits to you and your organization:

- Tableau Server installed, configured and running using Tableau best practices
- You and your team trained on how to administer and manage your new Tableau Server
- A disaster recovery plan for your Tableau Server
- Detailed baseline documentation for your Tableau hardware/software environment
- A data management strategy to make data access with Tableau fast and easy for your users

Day 1

Business Planning

- Explore how you plan to use Tableau Server
- Learn about your data requirements
- Discuss change control processes
- Define security requirements (Active Directory, SAML, Kerberos, SSL)
- Plan how to implement your metadata
- Discuss Tableau updates, patches, etc.
- Briefing on how to work with Tableau Support

IT Planning

- Create backup and disaster recovery plans
- Define distributed server architecture, if any
- Outline how security is to be implemented
- Plan data connection strategy
- Discuss Tableau updates, patches, etc.

Pre-Install Checklist

- Network access testing on Tableau Server hardware
- Test user and server accounts used for Tableau

- Source Tableau Setup files
- Source SSL certificates, if any
- Check for current product keys
- Confirm firewall and web proxy settings / access

Day 2

Install Server

- Install Tableau Server
- Test backup and restore
- Add distributed worker servers as necessary
- Configure SSL as necessary
- Verify Tableau Server functionality

Tuning Server

- Configure optimal initialsettings based on environment

Verify Installation

- Verify process health
- Test extract scheduling and refreshing
- Test Active Directory group synchronization
- Test user login functionality
- Test Group functionality
- Test views and data sources
- Confirm Tableau Desktop publishing task

Disaster Recovery

- Review backup and restore process
- Complete dry run of backup / restore

Users, Groups and Security

- Add groups
- Add users
- Configure initial security for users, groups, projects

Validate Security Configuration

- Test that security settings are honored by Tableau
- Test publish / view permissions
- Complete dry run of publishing process as defined by change management plan

Day 3

Dashboard and Visualization Publishing

- Tableau Desktop and Server walkthrough
- View and interact with a dashboard in Tableau Server
- Build interactive visualizations and reports

- Tell stories with your data
- Discuss table calculations

Day 4

Implementation Workshop

- Build business-defined reports and publish to Tableau Server
- Create and publish visualizations with your data
- Review permissions of published workbooks
- Review of workbooks created in Day 4 for Tableau best practices and efficiencies

6 COST

The proposed costs for software licenses, annual software maintenance, training and professional services is provided in the spreadsheet accompanying this response.