

### **Section 4.1.I – On Site Meetings**

**Question:** Are these meetings intended to provide the basis for a detailed functional design of the services and applications to be built as part of this procurement? Does the County intend to develop the criteria for testing and acceptance as part of these meetings?

**Answer:** Yes. While many issues can be covered and resolved via telecommunication, 3-4 on-site meetings will be required to resolve some important key issues during the course of the project when deemed necessary.

### **Section 4.1 II – Post Delivery-Testing**

**Question:** Has the county defined and will it provide the protocols for stress-testing, both prior to delivery and for the 3-month post delivery testing? If not, are proposals to include protocols for county signoff?

**Answer:** It is the vendor’s responsibility to develop feasible testing protocols for inclusion in the proposal.

**Question:** Can you please provide more details on the “required county staff training”?

**Answer:** See Section 4.3 Required Documentation, Installation, Testing, and On-Site Training. The highlights are:

- Prompt documentation delivery: It is required that all accompany documentation for each task phase should be due at the end of each task phase, NOT at the end of the entire project.
- Complete source code and programming documentation delivery.
- At least one day for a training overview that includes separate hardcopy technical specifications and user manuals.

### **Section 4.2 III – GIS Data Viewer Service**

**Question:** This appears to have no relationship to the actual geocoding itself, but rather would be used to retrieve information on existing map services and layers to be used with the GIS Service in item VI. Is this correct? Please provide more details on this service and the objective.

**Answer:**

- Correct. This is designed for reporting the information of all datasets that involved in the layer analysis and provide easy way for viewing that information.
- A demonstrative catalog tree interface that deploy these reporting APIs at application level should also be developed as part of this project.

## **Section 4.2 IV – Basic Service**

**Question:** Can the vendor select the most appropriate geocoding solution or does it have to use both Pitney Bowes Address Broker and ESRI for composite geocoding?

**Answer:**

- It is a requirement to use Pitney Bowes Group1 API for address scrubbing process.
- Pitney Bowes and ESRI are two vendors that provide composite geocoding APIs for application development that the County have contracted.
- It is deemed by the County's GIS staff that geocoding APIs from either Pitney Bowes or ESRI are sufficient to satisfy the requirements for this project.
- While it is not mandatory for the vendors to use those available Geocoding APIs from both Pitney Bowes and ESRI to build composite geocoding functionalities, and the County is also open to hear recommendations of other composite geocoding solutions without encountering extra County expenses, there is no plan at the County to acquire any extra licenses for composite geocoding APIs other than Pitney Bowes or ESRI for this project.

**Question:** Are vendors constrained to using only NavTeq data or can other datasets be used? Does the County have a preference as to which street data is used?

**Answer:** The County is now considering three data sources/providers. They are AIIS Point Address data, NavTeq (Street, point), and Pitney Bowes Group 1 data (Street, point). No decision has been made so far. The respondents are encouraged to forward their suggestions for cost effective datasets. Flexibility of working with alternative datasets is required.

**Question:** Are any County layers other than geo-coding points expected to be integrated into the Google map?

**Answer:** Only the geocoded address points are expected to be integrated into the Google map as defined in Section 4.2 IV Basic Service. While the County does not exclude the possibility of integrating all the County layers involved in this project (Section 4.2 VI GIS Service) into Google map.

## **Section 4.2 V – Basic Service Plus**

**Question:** Are there any sources that relate addresses to SBL, PrintKey, and APN?

**Answer:** The County will provide working sample digital tax parcel data (polygon) that contain SBL attribute (SBL, PrintKey or APN) to the selected vendor. The vendor does not assume any data development responsibility for this project.

## **Section 4.2 VI – GIS Service**

**Question:** Performing the requested overlays for a single address is understood, however, this would be quite complex in returning output for a batch input of multiple addresses. Is this service intended for multiple address inputs? If so, how do you anticipate the vendor returning multiple records for each input address (many to many)? It also could be very

slow for a batch of addresses. It seems that this service should be limited to a single input address. Please clarify.

**Answer:**

- It is a requirement that the web service should be able to respond to applications that require either batch geocoding process or interactive user inputs.
- Many to many cardinality is no longer an issue in today's RDBMS or Geodatabase hosted by industry standard RDBMS.
- It is the vendor's responsibility to figure out the most appropriate way to optimize the performance for batch processing to a practically durable level.

**Question:** The 4<sup>th</sup> bullet, GIS Mapping Function – Does this function mean an ArcGIS Server map service or an application? From the diagram in Appendix III, this appears to result in a map output image from ArcGIS Server in the form of a URL. However, the text also describes an “attribute table opening” which is unclear. Please clarify this. Also, it indicates that the “end user should be allowed to continue to input address names to map...”, which is application level logic rather than web service logic. Please provide an user scenario of this function if possible.

**Answer:**

- To be more accurate, the GIS Map API referred in this RFP, 4.2VI, is ArcGIS map service API with arguments appended in the form of a URL, not only the output image URL.
- The existing applications (built on Java or .NET) call for such GIS map service API by parsing and appending proper arguments to the URL and invoke the mapping application.
- Once the map service API is invoked and called from within existing applications (built on Java or .NET), the ArcGIS server application will be launched with proper parameter appended and the user will interact with it under the application level logic thereafter.
- It is the vendor's responsibility to build such ArcGIS server application and wrap it into map service API in the form of URL with proper appending arguments as part of the final deliverables for this project.
- Check these live examples built on our Mapping Westchester County map service API at [148 Martine Ave, White Plains, NY 10601](#) or Microsoft Virtual Earth API at [148 Martine Ave, White Plains, NY 10601](#) . The address “148 Martine Ave, White Plains, NY 10601” is parsed and appended as arguments to the map service URL. Once the map service is invoked with proper arguments, it will be launched as stand alone web application with proper parameters.

## ***Section 4.2 VII – Existing County Application Integration***

**Question:** Can you provide more details on each of the existing County applications (approximately 10 Java applications) within which the web service would need to be integrated? Or, will the county be providing, prior to the submittal date (08/27/2008), the specifications on the “approximately 10 Java applications” with which the geocoding

service will need to integrate? Does the scope merely include putting those client stubs into the 10 applications, or are there other changes that will be made to the applications?

**Answer:**

- The integration requirements have an emphasis on supporting client requests from both Java and .NET, some are interactive (one at a time or many), and some are batched jobs. The designer of the service (Host) must ensure the Web Service interoperability between calls from Java and .NET platforms. In particular, an uniformed Java client stub should be created for different County Java applications and be included as part of the final deliverable.
- The County would not ask the vendor to change any code of individual applications (Approximately 10 Java applications) directly. Rather, the County require the vendor to develop Java client stub base on the following tentative requirements for estimating the vendors' integration effort in the proposal:
  - The stub should be written on Java 1.4 or higher using IBM JRE and **NOT** using Sun JDK for supporting Websphere 6.1.0.13 **AND** Tomcat 5.5x on which the County's Java applications are running.
  - Use Apache Axis 1.x as framework (<http://ws.apache.org/axis/>)
  - The stub should be built using Apache Maven 2 (<http://maven.apache.org/>)
  - The delivered client stub source code should be able to be opened and further edited as a project using Eclipse 3.x or higher (<http://www.eclipse.org/>).

The requirements above are subject to change with advance notice to the selected vendor.

- The County will not provide detailed description for each of the 10 Java applications prior to the submittal date (08/27/2008). However, more detailed overview for one or two selected existing County Java Applications that need to consume the geocoding web service will be provided to the selected vendor.
- It is also a requirement for the vendor to work closely with the County's project coordinator and County's Java programmer to figure out the best strategy in maintaining stable and sound connections between the Java applications and the .NET Geocoding web service. A complete document for such recommendations is required as part of the final deliverable.

**Question:** It describes integrating the geocoding into existing GIS web applications in ArcIMS and ArcGIS Server (the second bullet). How many GIS web applications are there? Can you provide a brief overview of each?

**Answer:**

- There are over 20 different GIS web applications big or small for both internet and intranet at the County developed both in-house and by different vendors over the years. The most significant one that with geocoding service is our Mapping Westchester County internet application.
- Most of the County's GIS web applications were built on ESRI's ArcIMS. Few newer applications are built on ArcGIS server ADF .NET. They are all running on IIS web server and connect to Oracle SDE Geodatabase.
- The County would not ask the vendor to change any code of our existing GIS web applications directly. However, a detailed documentation of how to call the geocoding service API from within ArcIMS and ArcGIS Server application is required and the vendor is expected to work closely with County's GIS staff to test the geocoding web

service from within ArcIMS and ArcGIS server applications during the stress testing phase of this project.

## **Section 4.2 VIII – Client Application Development**

**Question:** For the first bullet, "A standalone web application interface (ArcGIS Server, ADF.NET) that deploy full set of the Web Service APIs." We understand this to mean that the web application implements (invokes) the full set of geocoding-related services that are listed on pages 17 and 18. Is this correct?

**Answer:** Yes.

**Question:** For the first bullet, we understand that the web application will demonstrate how to invoke the server-based services and provide a model for other webADF developers who wish to incorporate the services. Is this correct?

**Answer:** Yes.

**Question:** For the first bullet, it appears that these applications are intended to simply demonstrate the capability of the web service API and to provide coding examples of how to integrate the API with each platform, rather than as final end user tools for operational use. Is this correct?

**Answer:** Not exactly. To demonstrate the capability of the web service API for both web and windows applications is one of the major purposes for the requirements defined in 4.2 VIII. However, it will also serve as final end user tools for operational use. The standalone web application interface described in the first bullet can be wrapped into the mapping application API as described and explained in [Section 4.2 VI – GIS Service](#)

**Question:** For the second bullet "A custom tool set that deploys full set of the Web Service APIs from within ArcGIS Desktop (VBA, Arc Objects)." - does this mean implements (invokes) the full set of services, as proof and example?

**Answer:** Yes, but also, the toolsets should be developed as distributed windows application built on ArcObjects (ArcObjects is suggested but not required) that can be added as customized tools in Arc Toolbox for operational use with ArcGIS desktop products (ArcMap and ArcCatalog).

**Question:** For the third bullet "Demonstrate the capability of deployment for ArcGIS Mobile applications." -Which version of ArcGIS Mobile? By demonstrate, do you mean configure an ArcMobile application that invokes the services?

**Answer:** There is no mobile application consuming geocoding service currently at the County but this will be the direction that the County need to go in the future. There is no particular requirement for the version of ArcGIS Mobile, the more updated the better. Broad and general demonstration of invoking the geocoding services from within ArcGIS mobile application is highly desired.

## **Section 4.2 IX – Hardware, Software and Performance**

**Question:** The 3<sup>rd</sup> bullet requests the ability to geocode a large dataset. Can you provide more info on the size of the batch requests (i.e. number of addresses that might constitute the maximum size data set)?

**Answer:** Most frequently, the county needs to batch process address from several tens to a few thousands. Some times the batch job can be as large as 500 thousands at a time.

**Question:** The 6<sup>th</sup> bullet, regarding the requirement for a monitoring tool for the geocoding service, what specifically is the tool intended to monitor?

**Answer:** A small piece of testing application interface that can test each method and make sure they are all working and behaving as expected by design.

## **Section 4.2 X – Maintenance and Migration**

**Question:** Please clarify whether Maintenance and Migration support, is within the scope of the fixed price quotation, or is only the maintenance and support *plan* (last line item of the Cost Quotation Form) to be fix priced, with actual maintenance and support service provided on a time and materials basis? Without clarity as to the term and assumption of the maintenance and the scope of the migration requirement it is difficult to costs this and we would recommend that this component be pulled out as a separate services engagement rather than an element in a firm fixed proposal. We would also recommend that “technical support” for the effort be structured as a separate services engagement.

**Answer:**

- The County understands that it would be more reasonable to separate maintenance and migration estimation from the firm and fixed proposal of development effort.
- Though it is practically acceptable for the respondents to provide separate quote for maintenance and migration, it is a requirement of this RFP that all proposals include cost estimation for the actual maintenance/migration/technical support, not just the plan.
- The respondents are encouraged to submit multiple alternative maintenance and support plan (and its execution) provide deferent assumption scenarios based on their past experience in handling similar projects.
- A fixed total estimation for maintenance and support service is desired but not required. Therefore, maintenance and support can be estimated on a time and material basis. However, price quote for each service/material/support unit must be firm and fixed.

### **Other Questions:**

**Question:** What non-functional system requirements must the geocoding web service satisfy?

**Answer:** The County expects the vendor help us to figure out the best hardware software configuration to insure the durable performance for large number of batch process. See RFP 4.2 IX.

**Question:** It appears that the answers and clarifications will be posted on the website sometime on 8/20 2008 and the proposal is due on 8/27 2008 which only leaves one week time. I wonder if it is possible that the County will consider extending the proposal deadline for every one until the following Wednesday, 9/3? Please advice.

**Answer:** The County decides to extend the proposal dead line to September 3, 2008. Please download the document *RFP Addendum 1-Extending Proposal Due Date*. Sign off the document and submit it with the proposal.