

REPLACEMENT

COUNCIL AGENDA: 06-02-09

ITEM: 2.5

Memorandum

TO: HONORABLE MAYOR
AND CITY COUNCIL

FROM: Katy Allen

SUBJECT: SEE BELOW

DATE: 05-20-09

Approved

Date

5/20/09

COUNCIL DISTRICT: Citywide

SUBJECT: CONSULTANT AGREEMENT WITH MRF GEOSYSTEMS CORPORATION FOR THE STORM GIS DATA IMPROVEMENT PROJECT

REASON FOR REPLACEMENT

This memorandum replaces the item that was placed on the May 19, 2009 Council agenda as item 2.12. The Recommendation has been re-stated for clarification.

RECOMMENDATION

Adoption of a resolution authorizing the City Manager to negotiate and execute an agreement with MRF Geosystems Corporation of Calgary, Alberta, Canada from the date of execution through June 30, 2011, in an amount not to exceed \$300,000 for the Storm GIS Data Improvement Project.

OUTCOME

Adoption of the resolution will allow the City to enter into an agreement with MRF Geosystems Corporation to perform the Storm GIS Data Improvement Project (SGDIP).

BACKGROUND

Geographic Information System (GIS) refers to the technology that links tables of database information to geographical features, such as streets, parcels or pipe lines that may be represented on a map. The City's GIS consists of an interdepartmental framework of computer hardware, software, and databases. GIS data may be found in many map-based business and customer service applications such as the City's Integrated Development Tracking System, Computer-Aided Dispatch, and the Capital Project Management System, as well as other digital mapping products such as eMap, and eOrtho - the City's electronic collection of aerial photos. There is great internal and external demand for the City's GIS data, and it is imperative that such data be readily available and as complete and accurate as possible.

The City's Storm Drain GIS data is the last set of major infrastructure data that requires significant improvement. The data is currently maintained in a legacy GIS environment that requires staff to use outdated technologies and inefficient workflows. The data within this system is several years out of date, with a backlog of over 300 new tracts or improvement plans plus an additional 720 changes to be input. To complicate matters further, the graphical components of the storm drain data can be spatially offset by as much as 10 to 200 feet from their true locations. This results in poor alignment with the basemap and sanitary and water utility data, as well as with aerial imagery. Many important data fields are either missing, blank or contain incorrect values, thereby inhibiting precise analysis and creating a negative impact on GIS.

Many key City programs and statutory obligations, such as the Municipal Regional Stormwater NPDES (National Pollutant Discharge Elimination System) Permit, are dependent on Storm GIS data. Therefore, it is important that this data be stored accessibly and be spatially accurate, and that the attributes contain correct values. The goals of the SGDIP are to (1) develop an efficient Storm Drain GIS data model to support current technologies and workflows, (2) provide spatial and attribute corrections to the Storm Drain GIS data, and (3) to consolidate this data in the GIS Enterprise to enable support of, and integration and access to, City applications and programs. For more information on GIS evolution and vision, please refer to the Report on City of San José Geographic Information Systems, September 2007.

ANALYSIS

Funds were appropriated for the Storm GIS Data Improvement Project in the 2008-2009 Capital Budget. A charter was created for the SGDIP and submitted to the Information Technology Department for review. Authorization to proceed was received in March 2009. The Request for Proposal (RFP) was divided into three required phases (1, 2 and 3) and five optional phases (4a, 4b, 4c, 5a and 5b). Each phase was designed to be evaluated separately although the RFP identified a premium for proposers who identified efficiencies by bidding most or all phases.

In Phase 1 the consultant will hold workshops with City staff to elicit data needs then define requirements for the Storm GIS Data Model including a data flow diagram, tables and views that establish relationships among storm data features and finally to develop the computer code that enables data fields to be populated efficiently. In Phase 2 the consultant will improve the spatial accuracy of the data to be consistent within two feet of other GIS data such as street centerline and rights-of-way. Phase 5, which consists of entering data into the GIS system to eliminate a backlog of more than 325 unregistered storm plans and includes the identification and capture of new storm inlet data, will be done in conjunction with Phase 2.

The consultant will follow with Phase 3, which prepares the adjusted spatial and attribute data for uploading into the City's Enterprise GIS system. In Phase 4 the consultant will integrate and synchronize storm GIS data with the Department of Transportation's Storm Sewer Management System, develop an online error reporting site and provide documentation and training for staff on the Phase 4 components.

The RFP was released via the Internet on March 17, 2009 on BidSync, the City's procurement distribution vendor, which can also be reached via the City's BidLine. To reach maximum interested parties, the notification of the RFP was also published on the City's Capital Projects Maintenance System (CPMS) and on a GIS-specific procurement website called GeoBid.

More than 100 potential proposers viewed the RFP notice on BidSync and more than 30 downloaded the RFP. Five potential proposers requested access to the data provided by the City for assistance in creating a proposal. Three proposals were received by the April 7th deadline.

Nine core knowledge areas and three constituency groups were identified as necessary for representation in evaluating the proposals. A group of five City employees who collectively met these criteria were selected as the Technical Evaluation Panel. All three proposals were reviewed for minimum qualifications and found viable. Two proposers submitted for all phases and one submitted for Phases 1, 2, 3 and 5a. The Technical Evaluation Panel scored the proposals for Experience (40%) and Approach (30%). The final 30%, consisting of References and Cost, was scored independently and revealed after the Technical Evaluation was complete.

Results of the Technical Evaluation are presented in Attachment A. Proposer 3 won each of the technical evaluations for which they proposed; however, the lower costs submitted by Proposer 2 were sufficient to create a winning score with the exception of Phase 3. A tie-in total score for Phase 3 was awarded to Proposer 2 on the basis of lower cost and the advantage to the City in dealing with a single proposer for all phases. The selection of Proposer 2 for all phases will allow the City to complete the optional as well as the required phases due to the lower projected costs. Maintaining a significant contingency reserve within the originally allocated project funds will allow the City to successfully complete this project as designed and maximize the value of the GIS enhanced data for internal and external customers without returning to Council for further authorization.

EVALUATION AND FOLLOW-UP

It is anticipated that the success of this project will be manifested in a more complete inventory as well as the improved spatial and attribute accuracy of the City's existing Storm Drain GIS data. Moreover, with the creation of an effective Storm Drain GIS data model, improved efficiencies in the management of data, enhanced customer service and increased effectiveness of the City's environmental oversight responsibilities are expected. Staff anticipates reporting back to Council with an Information Memo on the improvements associated with this project in an 18-24 month timeframe.

PUBLIC OUTREACH/INTEREST



Criterion 1: Requires Council action on the use of public funds equal to \$1 million or greater. **(Required: Website Posting)**

- Criterion 2:** Adoption of a new or revised policy that may have implications for public health, safety, quality of life, or financial/economic vitality of the City. **(Required: E-mail and Website Posting)**
- Criterion 3:** Consideration of proposed changes to service delivery, programs, staffing that may have impacts to community services and have been identified by staff, Council or a Community group that requires special outreach. **(Required: E-mail, Website Posting, Community Meetings, Notice in appropriate newspapers)**

This action does not meet any of the criteria above. The results of the Request for Proposal were posted on BidSync. This memorandum will be posted to the City's website for the June 2, 2009 Council agenda.

COORDINATION

This memorandum has been coordinated with the Departments of Environmental Services, Information Technology, Planning, Building and Code Enforcement and Transportation as well as the City Manager's Budget Office and the City Attorney's Office.

FISCAL /POLICY ALIGNMENT

This project is in support of the City's goal of "effective use of technology."

COST SUMMARY/ IMPLICATIONS

This project is fully funded in the Storm Sewer Capital Fund for 2008-2009. Completion of this project will improve City workflows and incorporate Storm Drain GIS data into cross-functional applications, thereby resulting in ongoing efficiency savings.

BUDGET REFERENCE

Fund #	Appn. #	Appn. Name	Total Appn.	Amt. for Contract	2008-2009 Adopted Capital Budget (Page)	Last Budget Action (Date, Ord. No.)
469	4131	Geographic Information Systems	\$458,000	\$300,000	V-122	6/24/2008 Ord. No. 28349

HONORABLE MAYOR AND CITY COUNCIL

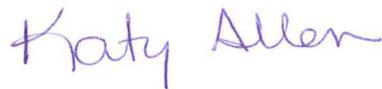
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CEQA

CEQA: Not a project.



KATY ALLEN

Director, Public Works Department

For questions please contact PHIL PRINCE, DEPUTY DIRECTOR, at 408-535-8300.

Attachment A