



Memorandum

TO: HONORABLE MAYOR AND
CITY COUNCIL

FROM: Katy Allen

SUBJECT: SEE BELOW

DATE: 06-10-04

Approved

Date

Council District: Citywide

SUBJECT: AGREEMENT WITH INTERGRAPH CORPORATION FOR DATA MODELING ENHANCEMENT, DATA CONVERSION, MAPBOOK GENERATION AND WEB PLOT DEVELOPMENT PROJECT

RECOMMENDATION

Approval of an agreement with Intergraph Corporation for GIS (Geographic Information System) consultant services for the Data Modeling Enhancement, Data Conversion, Map Book Generation and Web Plot Development Project in an amount not to exceed \$215,000, from the date of execution to December 30, 2005.

CEQA: Not a project.

BACKGROUND

On October 17, 2003, the City Manager approved a consultant services agreement for data modeling enhancement and migration to an open database format for street centerline GIS layers in the amount of \$75,000. This completed work supported the first phase of a separate agreement for the horizontal adjustment of the City's GIS maps. The first phase, which adjusted street centerlines, is now complete and work has started on the second phase, which includes the remainder of City's parcel base map. This proposed agreement provides support for the remaining phases of the horizontal adjustment work.

Data modeling is important because it helps define the data captured in various enterprise databases and the interrelationships between those databases. A good data model increases efficiencies by eliminating unsynchronized updates to redundant databases and increasing system performance.

This agreement includes the data modeling enhancement and data migration to an open database for the parcel base map and sanitary sewer and water layers. This work was dropped from the

previous agreement pending completion of a detailed scope of work and identification of funding sources. This agreement also includes map book generation and web development tasks. When complete, staff can create 'hard copy' and digital map books that will be based upon the new data model and the GIS layers being adjusted. These efforts conform to the "open environment" City standards approved by the IT Planning Board's Technical Advisory Committee.

ANALYSIS

This agreement is proposed for completion in four phases as follows:

Phase 1 includes parcel data modeling that is geared towards use of software that will allow staff to simplify system updates and track the history of development changes over any period of time.

Phase 2 includes Municipal Water and sanitary sewer facility data model enhancements.

Phase 3 includes "hard copy" map book generation enhancements that will be based on the newly adjusted map layers. Map books, updated on a monthly basis, will be available to City's field and office staff for the base map and infrastructure layers dependent upon their needs.

Phase 4 includes development of a web-based viewing and plotting application for City's map books. The map books generated in Phase 3 will be available through the Intranet/Internet websites for printing at different scales dependent upon user needs.

City staff will perform the Quality Assurance/Quality Control (QA/QC) for each phase to ensure compliance with the project specifications and acceptance criteria. Consultant will provide on-site training for use of the new software and applications at the completion of each phase.

The work included in this agreement supports Outcome 3: "Effective Use of State-of-the-Art Technology" of the Strategic Support CSAs' proposed Key Strategic Goals and Objectives.

The estimated start date of this agreement is July 1, 2004 with completion on December 30, 2005.

PUBLIC OUTREACH

City staff is using sole source in this agreement because it is a continuation of a prior agreement and the consultant has extensive knowledge of City's data model and major applications. City staff interviewed only two competent consultants for the prior agreement due to very limited availability of consultants with expertise developing a customized GIS data model that employs Oracle Spatial software in an open environment. Intergraph Corporation was chosen based on

their technical expertise and their familiarity with City's On-Line Permit and Computer Aided Dispatch systems, which are based on Intergraph supplied software.

COORDINATION

This agreement and memo have been coordinated with the Departments of Finance, Environmental Services, Transportation, Fire, Police, Information Technology, City Manager's Budget Office, City Attorney's Office and the County of Santa Clara. This project was taken to the Information Technology Planning Board (ITPB) on April 17, 2003.

COST IMPLICATIONS

1. AMOUNT OF RECOMMENDATION: \$215,000
2. COST OF AGREEMENT: \$215,000
3. SOURCES OF FUNDING:
 - Phase 1 - 001 - General Fund
 - Phase 2 - 500 - Water Utility Capital Fund
 - 540 - Sanitary Sewer Connection Fee
 - Phase 3 - 465 - Construction Excise Tax Fund
 - Phase 4 - 465 - Construction Excise Tax Fund
4. FISCAL IMPACT: This project is consistent with the Council-approved Budget Strategy General Principles section in that it will streamline operations and implement cost saving innovations while supporting vital public safety services. The proposed operating and maintenance costs of this project have been reviewed and it has been determined that the project will have no significant adverse impact on the General Fund operating budget.

BUDGET REFERENCE

Fund #	Appn #	Appn Name	RC #	Total Appn	Amt. For Contract	Adopted Budget Page	Last Budget Action (Date, Ord. No.)
001	0572	NP/Equip-Public Works	000415	\$891,465	\$85,000	2003-04 Adopted Operating Budget Page 547	

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540	4272	Miscellaneous Projects	131081	695,000	26,250	2003-04 Adopted Capital Budget, Page 136	10/14/2003, Ord. No. 26997
500	4737	Utility Management System Enhancements	128579	200,000	31,750	2003-04 Adopted Capital Budget, Page 247	
465	4392	Infrastructure Management System (IMS/GIS)	030023	275,000	72,000	2003-04 Adopted Capital Budget Page 894	10/14/2003, Ord. No. 26997
		Total		\$2,061,465	\$215,000		

CEQA

Not a project.

KATY ALLEN
Director, Public Works Department

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