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OFFICE OF THE CITY CLERK
OAKLAND

CITY OF OAKLAND
COUNCIL AGENDA REPORT

2004 JUN 10 PM 5:45

TO: Office of the City Administrator
ATTN: Deborah Edgerly
FROM: Finance and Management Agency
DATE: June 22, 2004

RE: Resolution authorizing the City Administrator to execute a Professional Services Agreement with Goldstone Technologies LTD to move six of the City of Oakland's application programs from the IBM AS/400 computer to the Sun Server system (IBM AS/400 Migration) for an amount not to exceed two hundred ninety four thousand (\$294,000); and with a contingency amount of six thousand (\$6,000); for a total amount not to exceed three hundred thousand (\$300,000).

SUMMARY

A Resolution has been prepared for City Council approval, which authorizes the City Administrator to execute a Professional Services Agreement with Goldstone Technologies LTD to move six of the City's application programs from the IBM AS/400 computer to a Sun Server system for an amount not to exceed two hundred ninety four thousand (\$294,000); and with a contingency amount of six thousand (\$6,000); for a total amount not to exceed three hundred thousand (\$300,000).

The six applications programs include Automated Collections, Business Tax, County Assessor's Database, and three applications used by the Office of the City Clerk. The conversion will convert the outdated programming languages that were used to develop the six applications, to one modern programming language compatible with the City's Sun server, Oracle, and Internet environment. The conversion method will keep all of the applications' current functionality intact. Users will not notice any change in functionality and will therefore not need to be retrained to use the applications after the conversion and migration process is completed.

The IT Division staff will move historical payroll and finance data currently stored in the IBM AS/400 database to the City's Sun server Oracle database.

The purpose for moving the applications is to resolve maintenance, critical business function recovery, ongoing support, and computer application modernization issues. The City faces the on-going challenge of obtaining reliable hardware replacement parts through a Maintenance Agreement with IBM for repair of system hardware failures. The cost for the Maintenance Agreement increases each year by twenty (20) percent. Under the Agreement, replacement parts for the IBM AS/400 is limited to refurbished parts that are less reliable and have a shorter operating life. In the event of a major IBM AS/400 system failure, the likelihood of refurbished parts being available to successfully recover the critical functions of the revenue generation and collections applications (Business Tax and Automated Collections) of the system will not be feasible. In addition, the outmoded programming languages used to build the applications 15

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years ago are not compatible with today's modern programming languages and these languages are no longer used to develop new applications. A key IT Division technical support staff member will be retiring this year and his experience and knowledge of the revenue application functions, processes, and outmoded programming languages will be difficult, if not impossible, to replace.

FISCAL IMPACT

Funds are available in the amount of \$300,000 in Fund 5500 Project C198620. *Table 1* below summarizes the cost to complete the project.

The actual cost of the contract is \$294,000. The IT Division has allocated \$6,000 as a contingency for the purchase of miscellaneous operational supplies and services.

TABLE 1
IBM AS400 MIGRATION PROJECT
COSTS SUMMARY

Description of Project Costs	Costs
Goldstone Technologies LTD Professional Services	\$294,000
Project Contingency	\$6,000
PROJECT GRAND TOTAL	\$300,000

Table 2 provides a breakdown of the available revenue and the expenditures through fiscal years 2003-04 and 2004-05.

**TABLE 2
 BUDGET PLAN FOR FISCAL YEARS 2003-04 THROUGH 2004-05**

REVENUE	FY 03-04	FY 04-05	TOTALS
Source of Funds – Project C198620	\$300,000	\$0	\$300,000
Total Revenue	\$300,000	\$0	\$300,000
O & M EXPENDITURES			
Payments For Professional Services	\$58,800	\$235,200	\$294,000
Contingency	\$0	\$6,000	\$6,000
Total Expenditures	\$58,800	\$241,200	\$300,000

BACKGROUND

From 1989 to 1998, the IBM AS/400 functioned as the main computer platform for the City, providing processing for financial, budget, revenue generation and collections, administration, and payroll applications. After 1998, the IBM AS/400 financial and payroll applications were replaced with Oracle applications, which use the Sun Server for processing.

Currently, there are only nine (9) application programs remaining on the City’s AS/400 computer. Two of the applications, Fleet Management and Permit Tracking, will be replaced with new fleet management and permitting applications as part of Council approved Public Works and Community and Economic Development Agency (CEDA) technology enhancement projects. The Universal Loans application will be part of an application replacement request that will be brought to the City Council by CEDA. Consequently, six (6) applications remain on the IBM AS/400 that will need to be moved to the Sun Server.

The IT Division proposes that the remaining six (6) applications along with the historical payroll and financial data be moved from the IBM AS/400 system to the Sun server in two phases. The first phase will move the Automated Collections, Business Tax, County Assessor’s Database, and three applications used by the Office of the City Clerk to the Sun server. The second phase will move the IBM AS/400’s historical payroll and financial data to the Oracle database on the Sun server. The IT Division staff will accomplish phase 2 without the assistance of outside services.

Retiring the IBM AS/400 will resolve a number of issues that become more critical as the computer continues to age. The current Maintenance Agreement with IBM for the 15-year-old IBM AS/400 computer increases in cost by twenty (20) percent per year. The City has been advised by IBM Customer Support that it will have to discontinue providing maintenance support for the computer because it does not manufacture new replacement parts for the antiquated hardware and refurbish parts are scarce. On several occasions, over the last two years, IBM had to acquire rebuilt parts from third parties to keep our system operational. The City increases the probability of delaying and possibly interrupting its Automated Collections and Business Tax application processing, which is approximately a \$60 million revenue stream for the City, in the event of a major computer hardware failure.

Despite their obsolescence, the Business Tax and Automated Collections applications currently running on the IBM AS/400 continue to provide business processes that are unique to the City of Oakland. In addition, the historical payroll and financial data still available on the computer, continues to be invaluable for audits, research and analysis, and government record keeping compliance. The City recently found that when off-the-shelf applications were evaluated for replacement of the Business Tax application, and in an attempt to retain some of the unique and valued functionality existing in the current application, it was discovered that most of these features were not available. It appears that replacing the Business Tax application would require extensive and costly customizations to a newly selected off-the-shelf product.

The programming languages used to develop the applications currently running on the IBM AS/400 are outdated and no longer used for modern technology software development. Because of the dramatic advance in technology, it will be difficult and costly for the City to integrate its Oracle and other Internet-based business applications with these existing applications in their current programming language formats. Consequently, the applications programs as currently written are not compatible with the City's web services enabling systems and thereby impede the City's efforts to develop or improve access to public records and mobile access to information by citizens, constituents, businesses or City employees that perform their duties outside the office.

One of the IT Division's most experienced and knowledgeable IBM AS/400 programmer analysts is planning to retire this year. The fact that it has become increasingly difficult to find a programmer analyst with old IBM AS/400 computer language skills will be taken into consideration when moving the applications to the modern technology of the Sun server.

The IT Division examined several options to accomplishing moving the IBM AS/400 applications and historical data to the Sun Server. In November 2003, the IT Division distributed a "Request for Information" (RFI) to over sixty vendors. The information requested was to identify possible strategies and methodologies for moving the applications and data to the modern technology of the Sun server while keeping the applications' existing functionality intact. The recommended solutions proposed by responding vendors were limited to the following:

1. Perform a detailed program functional analysis and rewrite (manual conversion method) all six (6) applications to a modern program language format compatible with the Sun

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server. This proposed manual conversion method proved to be labor intensive, complex, and a large technical challenge that would be too expensive for the City to undertake.

2. Utilize an automated program language conversion tool (automated conversion method) to convert the existing applications to a modern program language format compatible with the Sun server. This automated conversion method proved to be less expensive and achieved the desired goal of moving the applications to the Sun server without the complexity and technical challenges of a manual conversion method.

In December 2003, a "Request for Quotation" was sent to the vendors who had recommended an automated conversion method. The vendors' quotations were reviewed for conformance with budgeted funds and each vendor was invited to present their solution to the IT Division and user stakeholders. Subsequently, a joint committee comprised of the user stakeholders and IT Division technical staff selected Goldstone Technologies LTD.

Goldstone Technologies proposed a partnership with IVEVA Corporation and a twenty (20) percent participation of a SLBE, Oakland Consulting Group, Inc., located in the City of Oakland. Goldstone and their partners have successfully performed IBM AS/400 programming language conversion and migration services for Nestle Corporation, Bank of America, Siemens Corporation, Union Bank of California, and several municipalities outside of the United States.

KEY ISSUES AND IMPACTS

The following issues and impacts were taken into consideration and corrective actions were identified:

Key Support Personnel Retirement

The senior programmer/analysts responsible for maintaining the Business Tax application will be retiring this year. This position provides on-going support and maintenance, as well as enhancements to the Business Tax application as needed by its users on a fulltime basis. Currently, the IT Division does not have any staff with experience in the modern program language (JAVA) that will be used to convert and move the existing Business Tax and Automated Collections applications.

Maintenance and Support

In the event of a major computer failure, the City increases the probability of delaying and possibly interrupting two of its critical business functions, Automated Collections and Business Tax. These applications generated revenues in the amount of approximately \$60 million for the City last year. Moving these applications off the IBM AS/400 and on to the Sun server will provide equipment maintenance and support stability, a sound recovery plan that will ensure business continuity in the event of a major system failure, and staff with experience in supporting the Sun server platform.

Aging Technology

The programming languages used to develop the applications running on the IBM AS/400 are outdated and no longer used in modern technologies.

The automated conversion method that Goldstone Technologies will use will not only convert the outdated programming language into a modern language, but, in doing so, also provide access to an array of commercially available components that provide sophisticated functionality and reduce development costs. This will allow the Finance and Management Agency to retain its invaluable and unique features of the Business Tax and Automated Collection applications while taking advantage of the following conversion benefits:

- The applications (Automated Collections and Business Tax) can be made to “talk to each other” much more easily than ever before.
- The automated conversion method will allow modernizing of the applications while keeping their functionality intact.
- The existing functionality of the applications can be enhanced and new functionality can be added.

Recovery – Business Continuity

In 2003, the City contracted the services of a local consulting firm to assist the City in developing a Business Continuity Plan. The purpose of the Business Continuity Project was to:

1. Identify all critical City services, including revenue streams, supported by department or enterprise computer systems;
2. Identify major risks associated with critical City services, and
3. Identifying which risks would result in the loss of City services and revenue streams as well as impede the City’s ability to restore these services and revenue streams systematically and efficiently following a major disaster.

The consultant reported that the mission critical applications residing on the IBM AS/400 were identified as a major risk to the City’s revenue stream. The movement of these mission critical applications off the IBM AS/400 to the Sun server will eliminate this major identified risk and ensure the City’s ability to restore or maintain its business continuity following a major disaster.

Restricted City Services

The current computer hardware and software technology is both problematic and antiquated. Subsequently, existing architecture restricts the City’s ability to take advantage of web-based technology, which will support the implementation of online electronic services, such as:

1. Business License application
2. Business Tax payment
3. Business Tax dispute resolution
4. Automated Collection payment
5. Automated Collection dispute resolution

The successful movement of these applications from the IBM AS/400 to the Sun server will facilitate the development of application enhancements, which will leverage state-of-the-art technology and make the City more responsive and user-friendly to its citizens, constituents and businesses while enhancing its ability to increase its revenue stream on a more secure computer platform.

Performance

Current users of the IBM AS/400 applications complain of the slow response of the system as well as its inability to provide information in an ad-hoc or expanded Windows format. The City maintains programming staff that invests a sufficient amount of time manipulating these applications in an attempt to provide the requested information. The result only marginally improves the manual processes created by City staff to augment the limitations of the existing applications in terms of responsiveness and functionality.

The movement of these applications will have the look and feel of the current IBM AS/400 versions but will actually operate much faster and more efficiently because of the architectural construction of the SUN server.

Remaining Application

The Universal Loan application will not be moved at this time. The Universal Loan application tracks over 40 different types of loans made by the City and payments received on loans. This application is really three applications: Loan Origination, Loan Servicing, and Construction Loans (this portion has never been fully implemented). The current Loan Servicing and Tracking Application assists with various loan functions such as recording of tax and loan payments, loan deferments, automatic notification when insurances are due, and calculation of outstanding balances. This application is used to service and track \$142,000,000 in City loans. The Universal Loan application will remain on the IBM AS/400 pending the identification of a solution by CEDA. The retention of the Universal Loan application on the AS/400 maintains the *at-risk* status identified in the Business Continuity Project.

CEDA must identify a viable solution, which meets its needs and moves the application to a more secure and modern computer platform. Pending the identification and implementation of such a solution the City will need to maintain the current cost for system support and maintenance of the IBM AS/400.

Implementation Plan

Staff anticipates that this project will be completed approximately five months after the City Council approves this project. The migration of the application programs and historical data to the Sun server will not require any service downtime of the IBM AS/400. Users will continue to use the applications on the IBM AS/400 without interruption. As each application is converted, moved, completely tested, and fully operational on the Sun server, the users will be moved to the server and normal use of the applications will continue.

SUSTAINABLE OPPORTUNITIES

None

DISABILITY AND SENIOR CITIZEN ACCESS

None

ACTION REQUESTED OF THE CITY COUNCIL

Staff requests that the City Council approve a Resolution authorizing the City Administrator to execute a Professional Services Agreement with Goldstone Technologies LTD to move six of the City of Oakland's application programs from the IBM AS/400 computer to a Sun server system for an amount not to exceed two hundred ninety four thousand (\$294,000.00), with a contingency amount of six thousand (\$6,000.00); for a total amount not to exceed three hundred thousand (\$300,000.00).

Respectfully submitted,



**William E. Noland, Director
Finance and Management Agency**

Prepared by:

Ken Gordon, Project Manager III, IT Division
Sam Thomas, Info. System Supervisor, IT Division
Andrew Hopkins, Project Manager II, IT Division

APPROVED AND FORWARDED TO THE
FINANCE AND MANAGEMENT COMMITTEE


OFFICE OF THE CITY ADMINISTRATOR

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Finance and Management Committee
June 22, 2004

FILED
OFFICE OF THE CITY CLERK
APPROVED AS TO FORM AND LEGALITY
2004 JUN 18 PM 5:16
CITY ATTORNEY

OAKLAND CITY COUNCIL

RESOLUTION NO. _____ C.M.S.

INTRODUCED BY COUNCILMEMBER _____

RESOLUTION AUTHORIZING THE CITY ADMINISTRATOR TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT WITH GOLDSTONE TECHNOLOGIES LTD TO MOVE SIX OF THE CITY OF OAKLAND'S APPLICATION PROGRAMS FROM THE IBM AS/400 COMPUTER TO THE SUN SERVER SYSTEM FOR AN AMOUNT NOT TO EXCEED TWO HUNDRED NINETY FOUR THOUSAND DOLLARS (\$294,000.00), WITH A CONTINGENCY AMOUNT OF SIX THOUSAND DOLLARS (\$6,000.00); FOR A TOTAL AMOUNT NOT TO EXCEED THREE HUNDRED THOUSAND DOLLARS (\$300,000.00).

WHEREAS, the City of Oakland (City) desires to execute a Professional Services Agreement to move six of the City's application programs and historical data files from the IBM AS/400 computer to a Sun Server system, a project defined as the City's IBM AS/400 Migration technology enhancement project; and,

WHEREAS, the City has determined that the IBM AS/400 Migration project will address and resolve the 15 year old and outdated IBM AS/400 system's maintenance, recovery, ongoing support, and application program modernization issues; and

WHEREAS, the source of funds are available in the amount of \$300,000 in Project C198620 to accomplish the IBM AS/400 Migration project; and

WHEREAS, the City lacks the technical resources, familiarity and automated tools to accomplish the IBM AS/400 Migration project; and

WHEREAS, the City solicited proposals from information technology contractors for the necessary professional services to accomplish the IBM AS/400 Migration project through a Request For Proposals ("RFP") as described in the staff report which accompanies this resolution; and

WHEREAS, the results of the RFP process identified Goldstone Technologies LTD as the most qualified vendor to contract with for the professional services to accomplish the IBM AS/400 Migration project; and

WHEREAS, the City Council finds and determines that the performance of the IBM AS/400 Migration project under a Professional Services Agreement is in the public interest, benefits the economy, and represents a positive step toward future technological benefits to the City of Oakland constituents and associates; and

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WHEREAS, the City Council finds that the service is temporary in nature; and

WHEREAS, the performance of the IBM AS/400 Migration project work under the Professional Services Agreement shall not result in the loss of employment or salary by any person having permanent status in the competitive service; and

WHEREAS, the City Council finds that the AS/400 migration information technology services are professional and specialized in nature and exempt from the competitive bidding requirements pursuant to Section 2.04.050 I (1) of the Oakland Municipal Code; and

WHEREAS, by reason of the foregoing, it is in the City's best interests to contract with Goldstone Technologies LTD to provide the services described above; and

WHEREAS, the performance of the IBM AS/400 Migration project work under the Professional Services Agreement shall not result in outsourcing any portion of the work outside the United States of America; and

WHEREAS, the City Council, in light of the steps taken as set forth above, finds that it is expedient to authorize the City Administrator or designee to negotiate and execute a Professional Services Agreement as may be required to mitigate the economic risks herein identified; now, therefore, be it

RESOLVED: That the City hereby finds and determines that pursuant to Chapter 2.04, Article I, section 2.04.050.I (1) of the Oakland Municipal Code that the services are professional and specialized, and exempt from the bidding requirements of the Oakland Municipal Code; and be it

FURTHER RESOLVED: That, pursuant to Chapter 2.04, Article I, section 2.04.050 I (5) it is in the best interests of the City to waive the bidding requirements of section 2.04.050 of the Oakland Municipal Code; and be it

FURTHER RESOLVED: that the City Council hereby authorizes the City Administrator to negotiate and execute a Professional Services Agreement ("Agreement") with Goldstone Technologies LTD to move six of the City of Oakland's application programs and historical data files from the IBM AS/400 computer to a Sun Server system for an amount not to exceed two hundred ninety four thousand dollars (\$294,000.00), with a contingency amount of six thousand dollars (\$6,000.00); for a total amount not to exceed three hundred thousand dollars (\$300,000.00); and be it

FURTHER RESOLVED: that the City Council hereby authorizes the City Administrator or designee to enter into an Agreement with Goldstone Technologies LTD to perform the services to complete the specified work and to do all things and take any and all actions and execute and deliver any and all other agreements, and is hereby authorized to approve any subsequent amendments to or extensions of said Agreement with the exception of

those related to an increase in the contract price or the allocation of additional funds provided that such amendments or extensions shall be filed with the City Clerk's office; and be it

FURTHER RESOLVED: That the contract shall be reviewed and approved by the City Attorney's Office for form and legality prior to execution, and a copy shall be placed on file with the City Clerk.

IN COUNCIL, OAKLAND, CALIFORNIA, _____, 2004

PASSED BY THE FOLLOWING VOTE:

AYES- BROOKS, BRUNNER, CHANG, NADEL, QUAN, REID, WAN AND
PRESIDENT DE LA FUENTE

NOES-

ABSENT-

ABSTENTION-

ATTEST: _____

CEDA FLOYD
City Clerk and Clerk of the Council
of the City of Oakland, California

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