



**PURCHASING ITEM
FOR
COUNCIL AGENDA**

1. Agenda Item Number:

30

2. Council Meeting Date:
June 14, 2007

TO: MAYOR & COUNCIL

3. Date Prepared: May 21, 2007

THROUGH: CITY MANAGER

4. Requesting Department: Police

5. SUBJECT: Approval of amendment to Project #PD6-918-2294A to include Consulting Services for a Police Computer Aided Dispatch System with MACRO Corporation in an amount not to exceed \$78,061.

6. RECOMMENDATION: Staff recommends approval of amendment to Project #PD6-918-2294A to include Consultant Services for a Police Computer Aided Dispatch System with MACRO Corporation in an amount not to exceed \$78,061.

7. HISTORICAL BACKGROUND/DISCUSSION: On November 16, 2006 Council approved the Chandler Police Department to utilize the assistance of Macro Corporation to assist in fulfilling the City's operational needs and requirements regarding a Records Management System.

The Records Management System needed by the City would integrate various current methods of completing, indexing, and categorizing police reports. Police reports are currently entered into one system, indexed and categorized by another system, hard copies are scanned in via a third system, and completed reports are retrieved by a fourth system. These systems are integrated by various methods to attempt to produce coherent outputs. Integration is difficult, expensive and unreliable. In addition, beginning January 1, 2009, the Chandler Police Department will be required to electronically report crime data in the National Incident Based Reporting System (NIBRS). The current crime reporting system is done manually and does not support NIBRS; any new Records Management System will report data in NIBRS format and will keep the Police Department in compliance. It is the goal of the City to purchase a Report Management System that would integrate all these functions into one system. A new system will also need to integrate with the Computer Aided Dispatch system and Field Reporting systems in order to achieve this goal.

The Computer Aided Dispatch (CAD) system currently in use was originally purchased in 1990. There have been three upgrades to the system with the last upgrade in 2004 that has a life expectancy of approximately 5 years. Police Emergency Call Takers and Police Dispatchers use the Computer Aided Dispatch system to provided emergency and non-emergency police services to the public. The Computer Aided Dispatch System assists with the efficient handling of requests for emergency services. When telephone calls are received in the Police Communications Center via 9-1-1 or on a non-emergency line, the emergency call taker or dispatcher enters the information into the CAD system. This information is then prioritized for dispatch to police officers. The CAD system makes a recommendation for unit assignment based on availability of patrol units. The system recognizes different call types that require a higher dispatch priority or the dispatch of special equipment, such as injury accidents where the dispatch of a motorcycle officer is needed. All information related to the call for service is documented and tracked in the CAD system. The CAD system is also used to track daily activity of patrol officers, identification technicians, and park rangers. This information is used to generate numerous statistical reports to assist management in the proper allocation and scheduling of public safety personnel. In calendar year 2006, 156,563 incidents were tracked utilizing the CAD system.

This system relieves the dispatcher and emergency call takers of many tedious and time-consuming tasks, allowing them to concentrate more on citizens calling for service and ensuring the rapid dispatch of emergency calls. This system is linked directly to the 9-1-1 system, the Department of Public Safety (DPS) computer system that allows rapid and accurate license and wanted checks and provides links to the FBI computers and other states police and motor vehicle databases.

MACRO Corporation is nearing completion of the first phase of this project, the Needs Analysis and Requirements Analysis. This phase assesses the current and future needs for the computerized Records Management System; Examines any additional Department functions such as case management and crime analysis; Best Practices which will benchmark Chandler's Records Management Process versus other

agencies; Record Management System Software which will identify and describe available Record Management System software; Records Automation which will examine databases currently in use and determine the format, necessity, and viability of data conversion of each; Report Development which will provide options for the Record Management System, provide a conceptual design, and recommendations. As a result of this analysis, it has become apparent that our current Computer Aided Dispatch system will not allow for the enhanced capabilities needed in the new Records Management System.

It was originally estimated that Phase One would be completed in FY 2006-07, Phase II in FY 2007-08, and Phase III in FY 2007-08. The requested amount is to amend Phase 1 to include a Needs Analysis and Requirements Analysis for a new Computer Aided Dispatch system that will fully integrate with the new Records Management System. It is estimated that this analysis will add approximately an additional seven (7) weeks to Phase 1 of the project.

8. EVALUATION PROCESS: Staff interviewed three firms with experience in providing a study of police records management systems. MACRO Corporation, RCC Consultants, Inc., and Gary E. Boyd and Associates, Inc. with 911 INSIGHT. MACRO Corporation was selected due to their qualifications, work experience, and response to the needs of the study. Staff developed a scope of work and negotiated a contract with MACRO Corporation.

The requested amount is to amend Phase 1 to include a Needs Analysis and Requirements Analysis for a new Computer Aided Dispatch system that will fully integrate with the new Records Management System.

The City reserves the right to negotiate and amend the contract for Phase II and Phase III as appropriate.

9. FINANCIAL IMPLICATIONS: Funds for this project are available from 101.1285.0.5219.7IT028, General Fund, Information Technology Infrastructure, Other Professional Services, Police RMS Implementation

10. PROPOSED MOTION: Move to approve an amendment to Project #PD6-918-2294A to include Consulting Services for a Police Computer Aided Dispatch System with MACRO Corporation in an amount not to exceed \$78,061 per staff recommendation.

APPROVALS

11. Requesting Department


Joe Gaylord, Police Commander

12. Department Head


Sherry Kiyler, Police Chief

13. Procurement Officer


Glenda Shackelford, CPPB

14. City Manager


W. Mark Pentz

CITY OF CHANDLER
AMENDMENT TO AGREEMENT
POLICE RECORDS MANAGEMENT SYSTEM
PROJECT NO. PD6-918-2294A

It is mutually agreed by and between the City of Chandler, hereinafter called CITY, and MACRO Corporation, hereinafter called CONTRACTOR, that the AGREEMENT for Police Records Management System consultant, Project No. PD6-918-2294A, dated November 20, 2006, is hereby amended as follows:

- a. The agreement is to amend said project to include need assessment services for a Police Computer Aided Dispatch System. Assessment to include needs analysis, requirement analysis, mobile data computer requirements, and report.
- b. Additional fee of \$78,061. Fee increase from \$188,503 to \$266,564.
- c. All terms and conditions in the original Agreement not specifically amended herein shall be incorporated by reference in its entirety and shall remain in full force and effect.

IN WITNESS WHEREOF, the parties hereto have hereunto subscribed their names this _____ day of _____, 2007.

ATTEST:

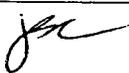
CITY OF CHANDLER

City Clerk

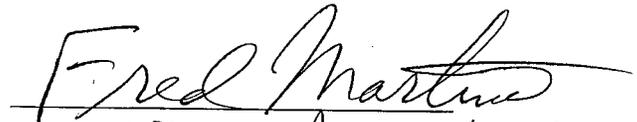
Mayor

APPROVED AS TO FORM:

City Attorney



MACRO CORPORATION
NAME OF FIRM



BY: Vice President
TITLE

EXHIBIT A SCOPE OF WORK

SECTION I: DESCRIPTION OF WORK

CONSULTANT shall provide a study that will identify the costs, pros, and cons of building a reliable, Computer Aid Dispatch System (CAD) for Police operations. This system should improve the efficiency of Police Department personnel through more efficient use of technology by allowing the Police Department to:

- To facilitate incident response to emergency calls for service and communications between dispatch and public safety personnel in the field. Develop a CAD system that will fully integrate with the Records Management System to include Field Reporting, and develop a system that allows for remote query of information.
- Improve the efficiency of Police Department Personnel through more efficient use of technology
- Identify the immediate and long term needs of CAD users
- Understand current best practices in CAD trends in law enforcement and how to best apply them to City of Chandler environment.
- Recommend a new CAD system and project strategy that best satisfies user requirements, offers long-term viability and is suited to the City of Chandler infrastructure.

Phase One consists of four primary functions. Needs Analysis, Requirements Analysis, MDC Requirements and Reports.

CONSULTANT SHALL PROVIDE THE FOLLOWING SERVICES FOR PHASE ONE:

SECTION II: SCOPE OF WORK – PHASE ONE

1. General.

The CONSULTANT shall assess the current and future needs for the computerized Computer Aid Dispatch System by completing the following:

- The CONSULTANT shall meet with selected representatives from the CITY to become familiar with the history and the current CAD system in place.
- The CONSULTANT shall also assess the needs and requests of the CITY with regard to the CAD system. Assessment must include an evaluation of the current hardware platform and its location, remote user access and the availability of user configurable options and reports.
- The CONSULTANT shall assess the current Computer Aided Dispatch system with regard to the age and format of data currently being interfaced to the Field Report Writing System and the Police Records Management Systems.
- The CONSULTANT shall derive and include in the report the technical parameters for the replacement CAD system that include, but are no limited to, the core operational components of a Police Public Safety Dispatch Center:, Call Taking, Location Verification, Dispatching, Unit Status Management, Call Disposition, Mobile

client/Remote access, Mapping, GIS, AVL, and interfaces with other external local, state and federal information systems currently in use.

- The CONSULTANT shall recommend a CAD system that includes seamless compatibility to the proposed Police Record Management System and Field Reporting System.
- The CONSULTANT shall provide the CITY with a recommendation as to how much software customization is appropriate to meet the CITY's needs.
- The CONSULTANT shall identify new emerging technologies for CAD systems that may be of advantage or interest to system users.
- The CONSULTANT shall account for future and emerging technologies in the Public Safety venue.
- The CONSULTANT shall ensure the future integrated CAD system specifications take into account system scalability, granular security, reliability/stability, interoperability, and configuration flexibility.
- The CONSULTANT shall provide details of current system that will be replaced by a new CAD system and make suggestions for functionality that is not included in a new system.
- The CONSULTANT shall provide report detailing systems migration strategy (current system to new system) to minimize downtime.

2. Supporting Infrastructure and System Interfacing.

- The CONSULTANT shall determine the requirements and provide a recommendation for disaster recovery, backup, and business continuity.
- The CONSULTANT shall identify the type and amount of hardware, software, connectivity, and other key infrastructure components necessary to maintain acceptable operations.
- The CONSULTANT shall provide a configuration diagram of the network.
- The CONSULTANT shall determine the requirements and provide a recommendation for data and access security for the proposed CAD system, as well as any proposed RMS and Field Reporting systems, that meet all applicable regulatory security standards.
- The CONSULTANT shall identify new emerging technologies that may be of advantage or interest to system users.
- The CONSULTANT shall determine the requirements and provide a recommendation for redundancy to the future CAD system, as well as any future RMS and Field Reporting systems, to provide up time of 99.999%.
- The CONSULTANT shall provide a recommended location of the hardware platform and the method of network access by remote users must be determined in conjunction with representatives from CITY's technical staff.

3. Project Management .

CONSULTANT shall provide the following:

Under City direction, Project Management shall include, at a minimum:

1. Project plan (following standard project management methodology (PMI) and best practices)
2. Task schedule, administration and coordination of activities
3. Project time and expense management
4. Project status reporting
5. Project risk reporting
6. Change order control management
7. Quality management
8. Project time and expense management

4. Consultant Expertise.

Contractor shall provide sufficient staff with the necessary expertise and support to fully implement and carry out the Project, which includes but is not limited to, a transfer of knowledge to transition the project team through the learning process in completing the business analysis as quickly as possible.

SECTION III: Deliverables

The CONSULTANT shall develop and prepare the following written study presentations and reports:

1. Time and Expense Reports: The Consultant shall provide written project time and expense weekly and monthly reports to the City of Chandler Project Manager. The reporting period begins with execution of the contract and continues through acceptance and completion of the needs assessment and conceptual design.

2. Project Status Reports:

The Consultant shall provide a weekly written project status report to the City of Chandler Project Manager, with monthly and quarterly status reports to be conducted with the City's management team as necessary. The reporting period begins with execution of the contract and continues through acceptance and completion of the system.

3. Statement of Work:

The Consultant shall prepare a detailed statement of work document outlining the overall project plan details and timing along with tasks, resources, responsibilities, completion criteria, deliverables and milestones. The resulting document shall be mutually agreed upon and included in this Contract by a written amendment signed by authorized representatives of both parties.

4. Options description and analysis:

The Consultant shall prepare an analysis for each option that outlines the anticipated benefits to be achieved, costs to be incurred, and the underlying IT and staffing

requirements including estimating the quantifiable costs and describing non-quantifiable costs of options. Among the options to be included are the “no-change” option wherein the existing system and practices are not changed.

The Consultant shall, based on the above analysis, provide a recommendation on what option the City should select. If the replacement option is recommended, specify the timeframe the City should follow.

SECTION IV: PROJECT SCHEDULE

PHASE 1: The final project schedule must be agreed to in writing by both parties and must be consistent with the terms of this contract.

Task A – Needs Analysis and Conceptual Design for CAD

Activity 1A: Collect and Collate Chandler CAD System Information

Activity 1B: Interviews (4)

Activity 1C: Evaluations of Existing CAD System

Activity 1D: Pros & Cons of Existing CAD System

Activity 1E: Present and Replacement CAD System Parameters

-- *Capacity*

-- *Reliability*

-- *Scalability*

-- *Sustainability*

Activity 1F: Review System Infrastructure (Power, Space, HVAC, Grounding, etc.)

Activity 1G: CAD Interview Minutes

Activity 1H: Examine CAD and MDC Functionality

Activity 1I: Examine CAD and MDC Interface Requirements

Activity 1J: Examine CAD Query Requirements

Activity 1K: Examine CAD AVL Requirements

Activity 1L: Determination Benefits of CAD Replacement simultaneous with RMS

Activity 1M: Determination of all Interface Requirements (NCIC, NLETS, ACIC, County, etc)

Activity 1N: Determine of Mapping and Geocode Requirements for CAD

Task B - Requirements Analysis

Activity 2A: Review and Document Goals and Objectives of the CAD Replacements

Activity 2B: Review and Document CAD Sizing Requirements

Activity 2C: Identify and describe current commercial CAD software availability

Activity 2D: Identify CAD Module Requirements

Activity 2E: Determine Size, Capacity, Reliability, etc.

Activity 2F: Determine Query Functionality (Realtime & Latent)

Activity 2G: Determine the Interface Requirements to RMS

Activity 2H: Determine the Interface Requirements for NCIC, NLETS, ACIC, ACJIS, etc,

Activity 2I: Determine Software Requirements to Interface to MDC Terminals

Activity 2J: Determine Call Taking and Incident Entry Requirements

Activity 2K: Determine Dispatching Requirements

Activity 2L: Determine Legacy Data Conversion Requirements

Activity 2M: Determine Training Requirements

Activity 2N: Determine and Document Disaster Recovery, Backup and Continuity

Task C – MDC Requirements

- Activity 3A: Determine MDC Functionality
- Activity 3B: Determine MDC Software Requirements
- Activity 3C: Determine Interface Requirements to RMS
- Activity 3D: Determine Interface Requirements to CAD
- Activity 3E: Determine Hardware Configuration for MDC Interface
- Activity 3F: Determine Configuration for Field Report Writing

Task D – Report Development

- Activity 7A: Draft CAD Needs Assessment for Chandler
- Activity 7B: Provide a Conceptual Design for Chandler's CAD System
- Activity 7C: Provide a Recommendations for Chandler's CAD System with Considerations
- Activity 7D: Develop a Schedule for CAD Replacement
- Activity 7E: Develop Cost Estimate for CAD Replacement
- Activity 7F: Project Status Reporting

- Deliverable 1: CAD Needs Assessment Draft Report
- Deliverable 2: Integration of CAD into RMS System PowerPoint Presentation
- Deliverable 3: Integration of CAD into RMS System Report
- Deliverable 3: Final CAD/RMS System Report (CAD Integration Only)

SECTION V: APPROVALS

All work shall be subject to the reasonable approval of the CITY. CONSULTANT agrees to exercise the skill and care, which would be exercised by comparable professional of public safety consultants performing similar services at the time, and in the locality such services are performed. If the failure to meet these standards results in faulty work, upon CITY's request, CONSULTANT shall undertake, at its own expense, the corrective adjustments or modifications.

EXHIBIT B
FEE SCHEDULE

This table shows the schedule for CAD Project

Payment #	Task Complete	Value	Multiplier	Payment Amount
		\$75,864		
1	Needs Analysis		20%	\$15,172.80
2	Requirement Analysis		15%	\$11,379.60
3	MDC Requirements		15%	\$11,379.60
4	Final Report		40%	\$30,345.60
5	Acceptance of Final Deliverable		10%	\$ 7,586.40

Implementation Fee \$75,864.00
Travel Expenses (not to exceed) \$ 2,197.00

For each task identified above, Consultant shall submit and invoice to the City at the following address:

City of Chandler
Chandler Police Department
P.O.Box 4008, Mail Stop 303
Chandler, AZ 85244-4008

Each invoice shall clearly identify the Task for which payment is being requested. Valid invoice shall be paid within 30 days.