Meeting Agendas/Info

CITY COUNCIL **ITEM COMMUNICATION:** OFFICE OF THE CITY MANAGER CITY OF DES MOINES, IOWA 01-043 **SYNOPSIS** -**AGENDA:** In the 2000-2001 Wastewater Reclamation Authority (WRA) Capital Program Budget entitled "WRA Regional Wastewater Reclamation Facility - Process Control System Replacement," JANUARY 22, 2001 funds were allocated for a Computerized Maintenance Management System (CMMS) at the WRA Wastewater **SUBJECT:** Reclamation Facility (WRF). In order to have this specialized maintenance management system designed and installed by a RFP FOR SELECTION reputable and qualified software consultant company and to get OF CONSULTANT FOR the best value for money invested, it was determined that the Request for Proposals (RFP) process would best accomplish this **COMPUTERIZED** SOFTWARE SYSTEM objective. FOR WASTEWATER RECLAMATION **FACILITY FISCAL IMPACT -**Funds for this project were approved in the 2000-2001 WRA Capital Program Budget, and are included in the WRA Regional TYPE: Wastewater Treatment Plant, Process Control System Replacement, Index 396663, Account 543020, Fund EN267, **RESOLUTION ORDINANCE** Organization ENG990000, Project/Grant WRA066. RECEIVE/FILE **RECOMMENDATION -SUBMITTED BY:** Approval authorizing the City Engineer to issue an RFP for the selection of a software consultant for the CMMS design FLOYD BENTZ, P.E. **CITY ENGINEER** and installation at the WRF. WILLIAM STOWE **PUBLIC WORKS BACKGROUND** -DIRECTOR The purpose of this RFP is to select a qualified software consulting firm to design, furnish, and install a comprehensive computerized maintenance management system at the Des Moines Regional WRF, using up-to-date technology to electronically

track, coordinate, and schedule preventive and corrective

maintenance of the facility's assets and resources. Once the firm is selected, a contract will be negotiated based on a mutually agreed upon scope of services.

The Des Moines Regional WRF's goal of the new business applications computer system is to provide an open, user friendly, easily expandable system in a client/server environment. Users must have the tools to easily access the data they need to perform their jobs. The various modules must be able to interact with one another for an efficient system and business process operation. The software package must be capable of being configured by WRF staff to meet the changing needs of the facility.

The majority of the hardware infrastructure (cabling, personal computers, servers, etc.) will remain intact. A new server, and any other necessary components, will be added to the network to accommodate the new software system.

The WRF has grown dramatically over the past seven years. During that growth, various systems have been installed at different sites to track assets, inventory, and purchasing processes. The WRF desires to consolidate those systems into one integrated computerized maintenance management system. However, the WRF would like to use existing systems wherever feasible. The WRF maintenance team is focused on those maintenance activities (and associated work steps) that are essential to sustaining optimum availability and performance of operating systems. To this end, the WRF shall require the following interface requirements: PeopleSoft, Process Control System, Document Imaging System, and the Laboratory Information System.

The CMMS shall be composed of eight distinct components as follows:

Equipment - Provide the WRF with the ability to electronically track the fixed plant equipment data such as: location, department and cost centers; lifetime labor and material costs; original and replacement costs; manufacturer's data; spare parts lists; meter readings; components; and safety notes. Shall allow link with document sever for the viewing of diagrams, drawings, and pictures. (Requires interface with the Process Control System to allow automatic generation of work requests by alarming when a piece of equipment malfunctions or fails. Allow collection of run time meter data to automatically generate predictive and preventive work orders.)

<u>Inventory</u> - Provide the WRF with the ability to electronically control inventory data such as: account codes, item categories, unit of measure validation, item location, multiple locations, item cost, substitute items, specifications and notes, charge items to work orders, etc.

<u>Labor</u> - Provide the WRF with the ability to electronically track employee costs and training data such as: name, classification, craft rate, training required, and training received. (Desired interface with PeopleSoft, human resource module to update employee data.)

<u>Predictive Maintenance & Scheduling</u> - Provide the WRF with the ability to electronically track, coordinate, and schedule plant employees and equipment for maintenance activities and track such data as: equipment/location based tasks, schedule by date or meter, require parts check during work order generation, labor/resources check during work order generation, specify downtime needed, and provide drag and drop work scheduling calendar. (Requires interface with the Process Control System.)

<u>Work Orders</u> - Provide the WRF with the ability to electronically track, coordinate, and schedule the maintenance functions and determining priorities: scheduled process for work order generation, generation from tasks, automatic numbering, work priorities, labor tracking (employee and vendor), parts tracking, record equipment downtime, reason for failure, solutions, view material and labor costs, and update meter readings from work orders. (Requires interface with the Process Control System.)

Purchasing - Provide the WRF with the ability to electronically track the purchasing information of the facility such as: quotations - generate for items reaching reorder point, automatic generation of requisitions from reorder points, electronic requisition approval, purchase orders, purchase order classification, line item numbering, receive items to stock by work order, equipment, cost centers or employees. (Requires interface with PeopleSoft financials.)

<u>Statistical Predictive Maintenance</u> - Provide the WRF with the ability to electronically predict equipment failures. This module shall provide the following: condition-monitoring of user-defined points, definition of manufacturer's minimum and maximum values, definition of number of consecutive points, quick calculation of mean and standard deviation, and generation of work order for equipment readings outside Supervisory,

Professional, and Management (SPM) limits. (Requires interface with Process Control System.)

<u>Security</u> - Provide the WRF with the ability to set user-defined security levels of the system such as: user accounts with password protection, security groups/roles (tree view), multiple role assignment levels, field security, form security, menu option security, and table security.

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