

**DEPARTMENT OF PUBLIC WORKS
WHITMAN COUNTY
COLFAX, WASHINGTON 99111**

**BID FOR AN AUTOMATED FUEL MANAGEMENT SYSTEM FOR 8
SEPARATE COUNTY SHOP LOCATIONS**

NOTICE TO ALL BIDDERS:

Please contact Whitman County Operations Manager, Phil Meyer (509) 397-4622, if you have any questions.

Bid Closed: For Review Only

**WHITMAN COUNTY
STATE OF WASHINGTON**

**BID FOR AN AUTOMATED FUEL MANAGEMENT SYSTEM FOR 8
SEPARATE COUNTY SHOP LOCATIONS**

INSTRUCTIONS TO BIDDERS

SEALED BIDS will be received by the Board of County Commissioners of Whitman County, Washington, at its office in the Whitman County Courthouse, Colfax, Washington, until the **29th day of December, 2014 at 11:00 a.m.**, Pacific Time, at which time they will be opened and publicly read. Handicap access can be obtained by the Mill Street entrance to the courthouse. FAX BIDS WILL NOT BE ACCEPTED.

EACH BID shall be separately sealed in an envelope addressed to the Board of County Commissioners with the name of the bidder and item bid, including time and date of opening, written plainly on the outside of the envelope and mailed to Whitman County Commissioners, Whitman County Courthouse, Colfax, Washington 99111. (No FAX accepted).

The Board of County Commissioners reserves the right to reject any or all bids or to accept the bid in which in its estimation best serves the interest of Whitman County.

All applicable taxes must be shown when called for in the proposal.

No bidder may withdraw his bid after the hour set for the bid opening thereof, unless award is delayed for a period exceeding thirty (30) days.

It shall be the Dealer's responsibility to furnish Federal Excise Tax Exemption Certificate, when applicable.

A certificate statement shall be furnished to Whitman County on off-shore items in excess of \$2,500. R.C.W. per 39.25.020.

Payment will be made thirty (30) days after delivery and final acceptance by Whitman County. All interest costs incurred to bidder must be computed in the original price bid, as no further compensation will be made.

Description and Locations for Purchase of a Complete Fuel Management System

The following is a description for a complete Fuel Management System. Whitman County has 8 separate shop locations throughout various small towns within Whitman County (Colfax, LaCrosse, St. John, Oakesdale, Pullman, Colton, Palouse and our solid waste facility in between Pullman and Colfax.) that need fuel controllers for tracking fuel use installed that communicate this to our main office. The software for this system will be installed and operated at our office location in Colfax, Washington. Whitman County will be responsible for installing 2' x 2' concrete pads and the necessary conduits from each pad to the pulser and pump that are currently in each location already. Power is also currently present at each location. Please refer to the Specifications for all other details.

Automated Fuel Management System Requirements and Specifications

Furnish, install, test and implement an Automated Fuel Management System, including the Fuel Island Controller (terminal), fuel management software and peripherals, to provide secure access and accountability in connection with the dispensing of fuels. The System shall provide the capability to record and maintain accurate fuel transaction and vehicle mileage and hours information for reporting, accounting and fleet maintenance purposes. The System shall be a stand-alone, driver oriented, automated system able to operate completely unattended 24 hours per day, 7 days per week.

System communications will be achieved via a combination of hard-wired and wireless connections, furnished by the bidder, between each Fuel Island Controller and the nearest building with a communications infrastructure. The System will include the capability to communicate via an existing computer network (provided by Whitman County) that includes the necessary phone connections located within range of each fuel island. With a minimum wireless installation range of 1500 ft.

Fuel Island Controller Configuration

1. Access Device

A. Vehicle Identification/Authorization

The access method for identifying and authorizing a vehicle will be to insert the respective Memory Chip Key into the reading device installed in the Fuel Island Controller.

- The user will touch the screen to initiate the identification/authorization process.
- The user will be prompted to enter the respective vehicle's odometer reading and hours used, which will be checked by the system for "reasonability."
- The System will grant access to fuels only for authorized vehicles that have been entered into the fuel access database.
- The System will grant access only to the appropriate fuel and respective dispensing nozzle.
- The System will limit the fuel dispensed, based on quantity limits specified for the respective vehicle.
- The Fuel Island Controller will record and maintain the fuel transactions to be polled by the Central Controller (CC) computer.

B. Personnel Identification/Authorization

The access method for identifying and authorizing personnel/users will be for the user to enter his/her PIN (Personal Identification Number) using the Fuel Island Controller touch screen/keypad.

- The System will grant access only to authorized users who have been entered into the fuel access database.

2. New System Configuration

The System shall be composed of two levels of processing. The general description of each level is as follows:

Level 1 – Browser-based Fuel Management System Software – Application for maintaining fleet-related vehicle, personnel and department data; polling fuel island controllers and capturing and organizing fuel transaction and vehicle information; and for generating reports for facilitating fueling operation accountability.

Level 2 – Fuel Island Controller – Stand-alone Fuel Island Controller with vehicle Memory Chip Key and personnel proximity device readers for identification/authorization, for turning fuel dispensers on and off and recording transaction data. Transaction data captured by the Fuel Island Controller will be polled by Central Controller (CC) computer with **Browser-based Fuel Management System Software**.

Detail Specifications

A. Level 1 – Central Controller (CC) Computer and Fuel Management Application

The Vendor will provide the Fuel Management Software to reside on the Central Controller (CC) computer (provided by Whitman County), which will initiate polling of each Fuel Island Controller for capturing, organizing, and maintaining fuel transaction data. The Fuel Management Software will be used to maintain the fuel access database, as well as generate all required reports.

Hardware – Central Controller (provided by Whitman County)

Detailed Computer/Server Specifications

Operating System	Microsoft Windows 7 or Microsoft Windows Server 2008 64Bit editions.
Database Storage	Microsoft SQL Server 2005 or SQL Server 2008 R2 or SQL Server 2012 Workgroup, Standard, Express or Enterprise Edition Supported
Miscellaneous	English/US Localization Only Microsoft .Net Framework (included in Windows OS) Internet Information Server (IIS) 5.0 or greater (included in Windows OS)

Software—Fuel Management Application

The Fuel Management Software shall be menu-driven and almost entirely automated. It shall direct the operator through the functions; with polling and reports available on a scheduled (unattended) basis. The Software shall manage all of the database functions of the system, including the storing of transactions, inventory and access device information. All files, both data and control, shall be easily edited through the program. Standard and custom reports must be available, with latitude in the order of sorting and the range of sites, dates, vehicles and other variables.

Vendor's proposal must include statement reflecting policy regarding availability of Software updates, any recurring maintenance fees and costs for software customizations/modifications.

The following specifications are the minimum required for the Fuel Management Application:

- Initiate polling and support communication to each Fuel Island Controller.
- Be able to set polling times and have the Central Controller poll each Fuel Island Controller without operator assistance.
- Manage up to 150 fueling islands.
- Generate daily reports for each Fuel Island Controller showing the number of transactions polled, tank inventory, time of polling, error messages and system parameters.
- Report tank readings and flag for reorder.
- Generate a daily report showing all polled transactions.
- Be able to sort the daily transaction listing by date and time, card number, vehicle number, personnel number or personnel data.
- Be able to print daily a list of each individual department's fueling record and a total fuel use of each type fuel for each department.
- Be able to store and use a list of a minimum of 100 individual departments along with complete alphanumeric labels for each department.
- Be able to print on request a total access device list and each individual vehicle's fueling history.
- Shall be capable of displaying reports on the central computer monitor before the reports are printed, with the capability for the operator to scroll up and down the page of the report.
- Software must offer administrator capability to change, enter, create or eliminate access device and vehicle data information and add, delete or lockout access devices.
- Set prices by tank and pump and assign to the quantity of fuel dispensed to show price per transaction.
- There shall be a method to automatically send Preventive Maintenance (PM) messages to individual vehicles. The number of times the driver is given the message shall be set in the Fuel Management Software (FMS). The PM flag reset shall be performed automatically by the system.

- There shall be a method to send other messages to an individual vehicle. The number of times the driver is given the message shall be set in the FMS by date or number.
- Software must permit the use of a file server and client workstations.
- Transaction data may be transferred to any program accepting an ASCII flat file.
- Must have the ability to interface to tank monitor systems.

Data Management and Reporting

The following information needs to be gathered and stored in a database by type: Vehicle, Personnel, Department, Fuels, Sites, Tanks and Tank Monitors. The system shall provide the following information at the Central Computer as a transaction record:

- Fueler identification number
- Vehicle identification number
- Vehicle odometer and/or hour reading
- Number of units dispensed
- Price
- Fuel Site
- Data & time
- Hose number
- Product number
- Access Device type

B. Level 2 - Hardware Specifications: Fuel Island Controller

The Fuel Island Controller must be a data entry terminal, controlling fuel dispensed from one or more pumps. The Fuel Island Controller will be a 7-day, 24-hour, unattended, Memory Chip Key/PIN -activated unit. The Memory Chip Key will be used to identify the vehicle, and the PIN will be used to identify the driver/user. The Fuel Island Controller shall be the main access point through which the user shall obtain fuel. It will be mounted on the fuel island and shall control the operation of up to 8 dispensing hoses. The Fuel Island Controller shall have the following capabilities:

- Must have a high contrast, non-glare, shatter resistant touch screen display
- Operate up to eight (8) dispensing hoses simultaneously
- Authorize dispensers of the proper fuel type for each vehicle
- Transmit fuel transactions to the Central Controller (computer)
- Easy “Plug & Play” hardware parts designed for ease of use when switching out parts – no computer skills needed
- Deliver special messages and automatic PM (Preventive Maintenance) messages to individual vehicles, or lock out vehicles from fueling privileges
- Provide an internal checking function for memory and communications testing and report any potential problems
- Must read fuel quantities from each dispenser in a variety of increments

- Memory storage size: 500,000 fueling transaction and up to 500,000 vehicle/employee numbers
- Contain manual override switches for each pump in the event of system failure
- Capture fuel quantities dispensed while in manual override
- Have separate timings for Pump Turn On and Pump Turn Off, both programmable from 1 to 98 seconds
- Is resistant to RF interference by use of state-of-the-art components and installation. Fiber optic and/or radio transmissions are a standard installation component used for interference resistance.
- Designed to use components that will protect the unit from power surges and dips
- Invulnerable to power outages and can maintain its data indefinitely without external power and automatically reset all system parameters upon resumption of power. All storage is in flash memory, and a battery backup is not required.
- Constructed to withstand extended normal use, discourage vandalism and to be capable of sustaining operation in local ambient conditions
- A secure method (Memory Chip Key reader) is available to allow identification and local authorization of vehicles.
- Listed by ETL and designed to meet the following specifications:
 - National Electric Code, NFPA #70-1987
 - Uniform Fire Code
 - Underwriters Laboratories 1238 and 913 specifications
 - Must have direct IP capability for real-time instant transaction polling and diagnostics
 - Must have removable USB / Flash drive storage capability
 - Must have a corrosion-resistant Fuel Island Controller pedestal housing
 - Quick disconnect components

The Fuel Management System must offer the capability to interface to an Underground Storage Tank Monitoring System with an RS 232 Communication Port / Card. This interface should automatically supply alarms, levels and delivery information to the Fuel Management System.

3. Fueling Procedures

The following general sequence of actions will occur during each fueling transaction:

- Driver/User touches the screen.
- Driver/User is prompted to enter vehicle mileage and hours.
- The Driver/User is prompted to insert the Memory Chip Key into the Memory Chip Key reader.
- The User is informed of the status of the Memory Chip Key, i.e.:
 - “Key was read correctly”
 - or
 - “Incorrect key type (with reason specified such as locked out, fueling limit reached, wrong system number, etc.)
- The Driver/User will be prompted to enter his/her PIN.

- The touch screen will indicate the available pumps for use (appropriate for respective vehicle) and prompt the Driver/User to make a hose selection.
- The system will prompt the Driver/User to initiate the dispensing of the fuel.

4. Warranty and Maintenance

The contractor will warrant the system to be free from defects during the warranty period and assume sole responsibility for the performance of all equipment, materials, labor, software and programs supplied during this period. The contractor must certify that an engineer or electronics technician trained in the operation and repair of the system is employed by the contractor for warranty work.

Maintenance costs, terms and conditions (that apply after the warranty period) must be stated by the bidder with the proposal. Warranty period must also be given.

5. Training

Included in these specifications is the education of personnel who will operate, maintain and enhance the system at the end of the contract period. Training will be provided for:

- Operation of the Fuel Island Controller (terminal).
- Preventive maintenance of the Fuel Island Controller (terminal)

Documentation will cover all facets of the system, including the various manuals provided by the manufacturer. Bidders must state what type and length of training and for whom it shall be provided.

6. Installation Criteria

Installation shall include all costs necessary to make the entire system fully functional as described in these specifications.

All wiring and construction must conform to all applicable Federal, State and Local laws and regulations. All 110 volt power lines from the Fuel Island Controller to the pumps must be enclosed in steel conduit. Care must be taken to install all components in a manner that will protect them from the environmental conditions of heat, dust and water. Additionally, they will be installed so as not to impede equipment traffic and will be reasonably protected from damage by moving equipment or high winds.

Equipment and Breakdown of Costs (Please fill in)

ITEM	QTY.	LIST PRICE/EA.	TOTAL
<u>Fuel Island Terminals</u> Wireless communications must be supplied to the nearest building with communications infrastructure. Must include all installation costs (Whitman County will supply concrete pad and conduit to pulser and pumps.) Power and pumps already exist at each location.	8	\$	\$
<u>Hose Controls</u> Includes: (Pump Control Module & Pulser Power Unit) Including install.	10	\$	\$
<u>Browser</u> - Based Fuel Management Software	1	\$	\$
<u>Memory Chip Key Encoder</u>	1	\$	\$
<u>Memory Chip Keys</u> for each vehicle	200	\$	\$
Total Cost For All Items			\$

***BASIS OF AWARD**

\$ _____

(*Tax will need to be included at time of invoicing)

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BID PROPOSAL

The undersigned hereby certifies that he has read the attached specifications including warranty requirements for the bid for Fuel Management System for 8 Separate County Shop Locations and desires to submit for our consideration said equipment that conforms to the above specifications.

Signature

Title

ACCEPTED this _____ day of _____ 2014

BOARD OF COUNTY COMMISSIONERS
WHITMAN COUNTY, WASHINGTON

Chair

Commissioner

Maribeth Becker, CMC
Clerk of the Board

Commissioner

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