

MEETING DATE: 3/23/09

AGENDA ITEM: Approval of a Professional Services Agreement with Utility Systems, Science & Software (US3) for Maintenance of the Emergency Notification System (ENS) and the Sewer Flow Monitoring System (SFMS); Approval of an Amendment to Extend the Existing Professional Services Agreement for One (1) Month for the Preparation and Execution of the New Agreement.

ATTACHMENTS

		<u>Pages</u>
1	US3 Proposal, dated February 20, 2009	1-85
2	Spreadsheet summary of the reduced scope of work and costs	86
3	One-month extension proposal from US3	87



UTILITY SYSTEMS, SCIENCE AND SOFTWARE

2009 FEB 23 AM 9:09

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ENGINEERING DIVISION
CITY OF CULVER CITY

February 20th, 2009

File: Culver_R1.doc

Charles Herbertson, P.E. L.S.
Public Works Director/City Engineer
City of Culver City
Engineering Division, 2nd Floor
9770 Culver Blvd
Culver City, CA 90232

Subject: General Agreement for Wastewater Monitoring Services

Hello Charles,

Attached you will find Utility Systems Science and Software (US3) response to Bid Request for the General Agreement for Wastewater Monitoring Services. This proposal is based on examination/walk-down of the existing sites, operation of the existing system, review of project files compiled by Culver and extensive conversations with Culver personnel.

Please note that US3 is an **Authorized Motorola VAR and Marsh-McBirney Integrator** and has providing Wastewater Water Monitoring Services, Systems and Maintenance since 1991 throughout the United States.

Specific advantages of selecting US3 include:

- Direct applicable experience with all components associated with telecommunication systems, including extensive ENS experience.
- An excellent reputation for providing quality engineering & construction services within stipulated budgets and schedules.
- Local support for modifications or refinements to the system.

If you have any questions or comments please contact me at (714) 542-1004.

Sincerely,

A handwritten signature in black ink, appearing to read 'Mark Serres', written in a cursive style.

Mark Serres
Vice President



UTILITY SYSTEMS, SCIENCE AND SOFTWARE

PROPOSAL

TO

Culver City Public Works Department

FOR THE

General Agreement

For Wastewater Monitoring Services

Prepared by:

Utility Systems Science and Software

Marsh-McBirney Authorized Integrator

Motorola Authorized VAR

Motorola Preferred Contractor

2101 E. 4th Street

Suite 130A

Santa Ana, CA 92705

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**Culver City Public Works Department
General Agreement
For Wastewater Monitoring Services**

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Section 1
EXECUTIVE SUMMARY

1.0 EXECUTIVE SUMMARY

US3 is pleased to submit this proposal to Culver City Public Works (Culver) to furnish and deliver, complete in accordance with the solicitation, the Service and Maintenance of the Event Notification System (ENS) and the Wastewater Flow Monitoring System for Culver. US3 understands that the objectives of the proposed Scope of Work are:

1. Provide Motorola MOSCAD ENS support,
2. Provide Marsh-McBirney Flow monitoring support,
3. Provide comprehensive system wide engineering support,
4. Provide VT ENS Software upgrades and support,
5. Provide a comprehensive programming to both existing and future system expansion.
6. Provide 24/7 remote and on-site hardware/software repairs.

Please note that US3 has over 65 engineers and technicians to provide Culver comprehensive maintenance. It should be recognized that US3 has been providing Motorola MOSCAD ENS maintenance directly through Motorola since 1991. eg. US3 is the preferred Motorola ENS system provider in Western United States.

Scope of Supply

US3 will provide both standard and emergency ENS and Sewer Flow Monitoring System (SFMS) maintenance and support. US3 will be responsible for at least the following:

1. Coordinate with City staff on most engineering issues related to ENS, SFMS and related engineering services,
2. Supervise, manage, configure, operate and report on all issues related to ENS and SFMS.
3. Troubleshoot any and all communication issues, computer and networking issues,
4. Inspect, maintain and repair all monitoring sites,
5. Install, calibrate, and enhance any all monitoring sites.
6. Comprehensive engineering services for the wastewater group;
7. Provide data analysis of acquired data;
8. Recommendations regarding operations;
9. Integration services of ENS/SFMS and communication systems;

US3 has been providing Motorola systems and have since the 1991 and Marsh-McBirney integration applications ranging from agricultural operations to water waste/water control, to flood control monitoring and electric utilities.

What makes experience a benefit?

Complex ENS/SFMS systems, particularly those including multiple control points, wide area coverage, difficult topographical problems, data mode operation, parallel system control, paging interface, etc. are highly complex projects. The ability to successfully develop products, engineer systems and implement high quality systems requires years of "real world" experience. US3 has benefited by the experience of implementing hundreds of radio and IP systems over the years. This experience translates to new and improved generations of systems, high quality field engineering, high quality installations and greater customer satisfaction.

US3 Provides ENS/SFMS System Advantages/Superiority

- Culver has significant RTU to RTU direct communications in addition to SFMS to central communications paths to provide the capability for distributed intelligence. This system results in greater data throughput, less airtime utilization and additional reliability.
- US3 has provided Culver a modular design for ease of maintenance and expansion.
- Multiple communications options including: wire line, IP and 800 MHz conventional and wireless broadband.
- Standard Structured Code such that most Motorola VARs can maintain the Culver system.

The Culver MOSCAD System has been programmed by US3 such that one can be connected directly to the MOSCAD via a local RS 232 port. The MOSCAD may also be programmed from almost anywhere in the entire system; via radio (or other supported communication option) from another MOSCAD or from the Master Station. This function is protected by software security routines, but it allows a limited number of trained personnel to maintain a large system without having to travel to the individual remote sites.

Total System Supplier

US3 is the only total engineering system supplier that designs, integrates and services all major components of its ENS/SFMS systems including: remote terminal units, radio transceivers, base stations, repeaters, and computer interface units, control stations, etc. In addition, US3 is the only system supplier that designs, integrates and services all other key communications subsystems including: VT SCADA Work Station, broadband IP network, conventional RF system, microwave systems and telephonic interface.

Why is selecting a total system supplier important?

US3 is uniquely qualified to provide specialized Sewer Flow Monitoring engineering required for near real-time monitoring.

Unlike other vendors, US3 does not piece together systems by utilizing multiple subcontractors for key system components and third party "off the shelf" generic equipment. Nor is the addition of radio communications to an ENS/SFMS system only an "afterthought". The "off the shelf" approach used by others results in no control over product quality, risky system upgrade compatibility, unknown availability of spare parts and future expansion equipment, maintenance difficulties, etc. US3 with our unique approach assures that all components are properly engineered to "fit together", providing an optimal system of the highest quality throughout the life of the system.

Considering the size of the two systems, there has been a minimum of repairs. Typical modifications have been due to changes in the system or system requirements.

Conclusion

Evaluating the differences between the various ENS/SFMS system providers available today can be confusing, particularly when only minor and relatively insignificant technical variances are focused upon. The overall cost effectiveness, reliability, operational performance and avoidance of "planned maintenance" of a system are all key issues which must be considered in addition to merely examining each vendors "technical claims" of unique engineering capabilities.

By selecting US3, Culver also gets factory trained Motorola and Hach engineers, the result will be a system with the highest achievable quality, superior system design, best available performance, orderly system expansion, highest data throughput, superior field engineering, training and service, and Total Customer Satisfaction.

Again, the reasons that US3 system support stand out as the absolute best systems available today are:

- Total system supplier
- Commitment to total customer satisfaction
- Six Sigma quality standard
- Industry leader in new innovative technologies
- Proven experience with ENS/SFMS and Control systems
- National service organization
- Superior field engineering resources
- Certified Motorola VAR Integrator
- Certified VT SCADA Integrator
- Certified Marsh-McBirney Integrator
- Certified MBE
- Over 65 Engineers and Technicians in Southern California

Section 2
TECHNICAL CAPABILITIES

2.0 TECHNICAL CAPABILITIES

2.1 INTRODUCTION

Utility Systems Science and Software. is one of the leading Sewer Flow Monitoring System (SFMS) providers and Systems Integrators in the USA, with an extensive background in the application of wireless Event Notification Systems (ENS), wireless communications and Broadband data delivery to Central Stations.

As a **Motorola Products Integrator**, US3's engineering and construction team are trained to develop to full scale systems utilizing the Motorola product line. As part of the Motorola's Integrator Program, US3's engineering team will take on full responsibility for System Requirements Specification (SRS), System Design Specification (SDS), Detailed Engineering, Fabrication, Construction, Start-up and comprehensive Training (formal class room).

Please note that US3 is an **Authorized Motorola VAR** by Motorola and has providing Motorola ENS Systems and Maintenance since 1991 throughout the United States. All engineers assigned to Culver have continuous Factory Motorola MOSCAD & ACE training.

One of the corporate goals from our Business Plan is to provide our customers with the most professional communications technical services available. To accomplish this, we at US3 believe we must be in a position to apply the highest engineering standards to each customer's application, without compromise. Therefore, while we maintain business relationships with major hardware and software vendors, we preserve our professional independence by not limiting our options. We believe this approach positions US3 as the wireless Communications Systems Integrator to best serve our customers by maximizing the range of our product (expertise and experience) to consider all methodologies, platforms, strategies, etc., given the client's budgetary and performance criteria.

US3's **Quality Assurance Manual** is extremely rigorous and has been developed to provide an independent assessment of US3's services and capabilities to support your projects and operations. It should be recognized that the US3 Quality Assurance program is based on ISO-9001 and thus provides our customers a high-standard for the thoroughness of the final product.

2.2 COMPANY

Motorola's Communications System Integration Program was established as a method for US3's specialist to provide technical service integrators to focus on start up, project management and operations in the industrial business sector. This integration program was created to focus on engineering standards, structured methodology and up-to-date technology and where the principals have completed well over 120 projects ranging from a few thousand to multi-million dollars in size.

US3 is ***The Premier Authorized Marsh-McBirney Integrator*** in the USA. US3 is also the ***Preferred Hach Integrator*** in Western United States. This implies that when Hach Marsh-McBirney implements a project, US3 provides the engineering and systems support for their flow monitoring projects.

Systems Engineering Division Project Focus

Systems Engineering Division primarily focuses on systems projects that require turnkey, single-source responsibility be assigned to a responsible systems engineering contractor. This project approach allows clients to control and direct projects with the minimum of direct supervision and management, while providing ample opportunity for direct input to the project implementation by engineering operations and maintenance through a deliberate "team building" concept.

Technical Capabilities

As required by project demand, US3 provides a single-source point of responsibility and expertise to take a project from the audit, "as built", phase through to start up and training utilizing its own personnel from conceptual and detailed engineering, software, fabrication, installation, communication checkout, calibration, start up, training and ongoing site support.

Site Service and Support

US3 provides to its clients ongoing support on an as needed basis once the system is installed and operational.

We have available field engineers and technicians who have experience with trouble-shooting and the ongoing maintenance of many different types of communication systems.

System Experience

US3's integrator program currently has experience with the following types of systems:

- ***Hach Marsch-McBirney Flo-Dar***
- ***Motorola Moscad Programmable Logic Controllers (PLC)***
- ***Event Notification Systems (ENS)***
- ***Trunk Radio Communication System***
- ***VT SCADA Based Graphics Software Packages***

Engineering and Design Capabilities

US3's System Communication Integration Program has invested heavily in office automation. Most design and drafting is carried out on our CAD system running AutoCAD. The CAD system comprises four operating stations, networked to a central file server. There are two full size plotters that can handle up to "E" size drawings. Engineers are served by their own networked PC-based engineering system.

Additional Services

US3's System Communication Integration & Engineering expertise covers a wide range of communication engineering disciplines. This gives us the opportunity to advise and work closely with our customers in many additional areas such as choice of communication equipment, physical installation design (shelter housing, etc.) and monitoring instrumentation.

2.3 SERVICES

US3's System Integration services include:

Engineering

Project Management: We provide project management and definition including feasibility studies, functional specifications, schedules, facility walkdowns, field analysis, and as-built documentation.

System Design and Integration: We develop the system configuration, detail design, systems integration, ladder logic, drafting and equipment specifications including field and communication devices.

Procurement: We identify, quantify, estimate, evaluate, select, procure, expedite and deliver the project equipment.

Training: We provide hands-on as well as formal classroom training, furnishing support materials such as manuals, documentation and audio-visual tools.

Hardware and Software Integration

Programming: We program the communication equipment, digital or process control equipment, applying the technical control criteria our control systems engineers have specified. Software development will be implemented using IEEE Structured Methodologies.

Hardware/Software Expertise

US3's System Integration Program is not tied to any one system, we understand the nuances of most available hardware and software choices, and have experience with interfacing with the following:

Distributed Control Systems (DCS)

Bailey Infi90

Fisher Provox

Foxboro I/A

Honeywell TDC 3000

Moore Products

Taylor Mod 30 & 300

Westinghouse WDPF

Software Packages

Wonderware's In-Touch

VT SCADA

AB Batchmaster

AB Control View

Gensym's G2

Intellutions FIX (DMACS)

Metretek

Onspec

PCIM

Process Systems

- Programmable Logic Controllers (PLC)
 - Allen Bradley
 - _ Motorola Moscad
 - _ PLC 3/10
 - _ PLC 2 Family
 - _ PLC 5/15 Family
 - Modicon
 - _ 584's
 - _ 984's
 - _ 884's
 - Texas Instrument
 - _ 550's
 - _ 530's
 - GE
 - _ Series 3
 - _ Series 6

2.4 CLIENTELE

US3's System Integration principles have served clients in many diversified industries including utilities and independent co-generation developers, hydrocarbon, food processing, aerospace, water treatment, pharmaceutical and general industries. The following is a partial client list:

INDUSTRIAL

MINING & METALS

ASARCO
Phelps Dodge
North American Chemical
Cyprus-Bagdad
Cyprus-Sierrita
Gould Foil (Nippon Mining)

PULP & PAPER

Palatka Paper Mill
Golden State
Kimberly-Clark

CEMENT

Mitsubishi Cement Co.
Calaveras Cement Co.

GENERAL

Ricoh

HYDROCARBON & CHEMICALS

Chevron Oil Co.
Shell Oil Co.
Sullair Petrosteam Corp.
Texaco, U.S.A
THUMS
UNOCAL
Tosco
GATX
Santa Fe Pipeline

CHEMICAL

Allied Signal Corporation
American Cyanamid
ARCO Biotech, Inc.
Avonite
Criterion Catalyst
GAF
Genstar
North American Chemical Corp
Pittsburgh Plate Glass
AKZO Chemical

MANUFACTURING

FOOD AND BEVERAGE

Carnation
Case Swayne
Coca-Cola
Eagle Snacks
El Metate
Hunt-Wesson
Oscar Mayer
Sparkletts
Sun-kist
Louis Rich Foods

AEROSPACE

Northrop
General Dynamics
Rockwell International Corp.

PHARMACEUTICAL

Angus Biotech, Inc.
Baxter Travenol Labs
Alliance Pharmaceutical

POWER

COMMERCIAL POWER

Arizona Public Service
L.A. Dept. of Water & Power

Nevada Power Co.
Pacific Gas & Electric Co.
Culver
Southern California Edison Co.

OTHER

Southern California Gas Co.
Montenay Pacific Power
City of Long Beach
Univ. of California, Irvine

Motorola Moscad System Support

County of San Bernardino
City of Eugene
City of Astoria
County of Los Angeles
City of Riverside
City of Escondido
City of Laguna Beach
City Medford
City of Beverly Hills
City of Henderson
City of Simi Valley
City of San Diego
County of San Diego
BP Alaska North Slope
Kodiak Island Alaska
City of Lakewood
City of Chino
Inland Empire Agency
City of Redlands
County of San Mateo
(More Cities and Counties upon request)

Typical Projects and Contacts

It should be recognized that Culver's number one reference is Culver City and all of their staff that we have been working with over the past five years. Our recommendation would be to ask virtually anybody in engineering for their opinion. US3 has provided 24/7 support in every way on virtually every engineering discipline we have or had to acquire to meet the changing requirements of Culver. Although we are not perfect, Culver knows that in every way, US3 is looking out for the best service at the best value. In other words, there has been a sense of partnership at every level.

Please call the following organizations for their experiences:

City of Laguna Beach

Motorola Moscad Water Monitoring, ENS, Lift Station Monitoring and Temporary Monitoring

Dates: On-going

Contact: Dave Shissler
 Director of Water Quality
 949-497-0328

City of Laguna Beach 1 - Waste Water Event Notification System



- 2 - Bluebird Canyon Land Slide Waste Water Monitoring.
- 3 - Pump Station Level monitoring.
- 4 - Communication Tower Installation
- 5 - 29 Pump Station Integration Project.
- 6 - Successful Temporary study in a difficult sites.

City of Loma Linda

Waste Water Monitoring, Real-Time SSO Monitoring, Wireless ENS and Permanent Monitoring

Dates: On-going

Contact: Russ Handy
Utilities Operations Manager
909-478-4260

City of Loma Linda



- 1 – Waste Water Flow Monitoring repair and implementation
- 2 - Waste Water / Fresh Water Event Notification System
- 3 – Fresh Water Blending ENS Integration
- 4 – Communication Tower Installations
- 5 – Station Conversion from Radio to Wireless Point to point Ethernet.
- 6 – Repair and Culver Pump Station Control System in 2 sites.
- 7 - Successful Temporary study in a difficult site.

City of Riverside

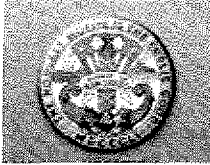
Motorola Moscad / ACE Waste Water Monitoring, Wireless ENS and Permanent Monitoring

Dates: On-going

Contact: Steve Amsden
ENS Systems Supervisor
(951) 351-6185

Additional Typical Projects

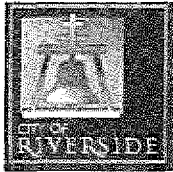
- County of San Diego 1 – Motorola Moscad Waste water telemetry trouble shoot and repair.
2 – Motorola Moscad Event Notification System Integration.



- San Diego MTS 1 – Motorola Moscad Event Notification System for Radio integration



- City of Riverside 1 – Motorola Moscad/ACE Waste Water Event Notification System
2 – Integration of City Wide Radio Telemetry



- City of Santa Maria 1 - Motorola Moscad Fresh Water Event Notification System
2 – Fresh Water Blending ENS Integration.



City of
SANTA MARIA
California

Section 3
WORK PLAN

The US3 ENS Work Plan provides a mechanism such that Culver has full control over the work being performed with accountability. In addition, allows both Culver the flexibility to be responsive to their customers needs. We have the following:

**US3 Matrix for Culver Response System (CRS)
Work Plan**

Document Section	Work Plan	Operations and Technical Recommendation
Sub- Section:	Maintenance	Date: 4/19/07
Procedure Title:		
Date Established:	2-6-2001	US3 Approval
Culver Document Dated:		Date: 9/1/07
Date Revised:	6/30/08	

1. Purpose or Objective

The purpose of this Work Plan is to define the maintenance responsibilities & roles of the CRS Managers / Culver. The maintenance levels for the CRS system & sub-systems must be set to a standard to protect the overall functionality and integrity of the system for all users. A proper maintenance standard will also protect the warranties of the system & sub- systems.

2. Technical Background:

Capabilities

Standards in maintenance protect the integrity of the system and protect the warranties of the sites & equipment. Coordinated maintenance is simplified by having one set of maintenance standards rather than multiple standards, especially at shared sites.

Constraints

Improper maintenance poses a risk to the operational functionality of the CRS system & sub-systems, could risk equipment warranties, and may potentially cause confusion at sites and lost of operation.

3. Operational Context:

Each site & each piece of equipment shall be considered as "owned" by Culver. US3 will then be responsible for the maintenance of the sites & equipment that they own. Agreements between the Culver and/or Maintenance Contractors are at Culver's discretion, but the US3 is still ultimately responsible for the ENS/SFMS.

Maintenance of the System & subsystems is defined into four separate categories:

Priority Level 1 - US3 shall troubleshoot the Deficiency on-site and report the diagnosis within two (2) hours or dispatch a field engineer to arrive and troubleshoot the Deficiency at the impacted facility within four (4) hours of receiving the request for Corrective Maintenance services and report the diagnosis within two (2) hours subsequent to arriving, regardless of time of day or day of week.

Priority Level 2 - US3 shall troubleshoot the Deficiency on-site and report the diagnosis within two (2) hours or dispatch a field engineer to arrive and troubleshoot the Deficiency at the impacted facility within four (4) hours of receiving the request for Corrective Maintenance services and report the diagnosis within two (2) hours subsequent to arriving, during Business Hours.

Priority Level 3 - US3 shall troubleshoot the Deficiency remotely and/or dispatch a field engineer to arrive and troubleshoot the Deficiency at the impacted facility and report the diagnosis within twenty-four (24) hours of receiving the request for Corrective Maintenance services, during Business Hours.

Priority Level 4 - US3 shall troubleshoot the Deficiency remotely and/or dispatch a field engineer to arrive and troubleshoot the Deficiency at the impacted facility and report the diagnosis within ten (10) calendar days of receiving the request for Corrective Maintenance services.

Recommended Procedure:

Any broad maintenance issues that affect Culver ENS/SFMS will first be identified and discussed by Culver. In general however, US3's primary goal is no loss of data or operation.

For day to day maintenance, US3 will maintain the equipment.

For emergency & urgent repairs as defined by Priority Levels, Culver may request and expect support resources (i.e. US3 support staff and/or parts) from US3 to restore equipment / system to normal operation and will include:

- Notifying the US3 of Equipment & Location issues that require attention.
- Managing the inventory of the ENS/SFMS equipment, as defined by US3/Culver.
- Managing the Equipment maintenance logs of the equipment are responsibility of US3 for as defined by their internal department logging processes.
- Service Technician posting information will be kept at the sites.
- Routine equipment maintenance logs will be kept at the Central by US3. Current copies of all as-built documentation will be maintained at the Central and at the offices of the US3. Culver shall be responsible for assuring the accuracy of all as-built data related to the infrastructure equipment, and any changes or alterations that come to the knowledge of Culver.
- US3 will be responsible for coordinating and/or overseeing configuration changes affecting the System Infrastructure.
- All maintenance work being scheduled that may affect the System and/or Sub-systems performance shall be preceded by reasonable notification.
- US3 shall ensure that all technicians who are assigned to work on system equipment shall have successfully completed appropriate Factory training on the equipment they are assigned to work on.
- US3 will maintain a list of the qualifications and contact information of their technical staff and provide updated copies of this list to Culver, in the event of emergency contact needs.

- US3 will maintain a list of the spare parts/equipment pertaining to their System & Sub-system that they have available. This is to provide a reference resource for other managers allowing them the option to request the use of this spare equipment if an appropriate need arises.
- The System & Subsystem equipment is closely integrated, any infrastructure Hardware & Software upgrades or changes that may have the impact of affecting the rest of the system will need reasonable discussion / approval by Culver.
- The Local US3 Administrator responsible for the impaired System & Sub-system will be responsible for determining how critical an equipment failure is operationally and will determine the appropriate action and escalate or de-escalate the repair process as needed. For example, a single failed channel on a main repeater site would not be a critical failure, but a backup failure would be.
- It shall be the intent to share the identified support information electronically within a common / secure area of the system, Culver will be responsible for determining the operational details of information sharing.

6. Management

US3 is responsible for managing the maintenance for the equipment & sites that they are responsible for, and for managing the delegation of repair responsibilities in emergency repair situations.

Recommended Protocol/ Standard for Emergency Work:

Local US3 System Administrators shall be responsible for:

- Monitoring the performance of the system & subsystem equipment using the monitoring and reporting tools that are part of the system. If issues do arise, it shall then be the US3's responsibility to resolve the problem directly, or to bring the issue to Culver Administrator if broader resolution is needed.
- Ensure that State and Federal Regulations are followed.
- Ensure that ISA standards are maintained with existing & future equipment.
- Appropriate spare modules, boards, and field replaceable units for the equipment are US3 responsibility for properly inventoried and maintained equipment. US3 currently has many of the Culver system components in stock and typically on-hand.

- Immediate notification of the appropriate US3 Engineer (Mark Serres @ 714-724-4454), when there is a preventative maintenance issue that may impact other portions of the system.
- Contracts for maintenance service & support will have to be managed and kept current by Culver & US3.

Periodic site inspections will have to be performed to catch problems early, including:

- Power System testing & maintenance
- Antenna Inspection
- Cable Inspection
- Equipment Inspection

Recommended Procedure:

Preventative maintenance shall be performed as outlined by Culver, containing preventative maintenance checklists; personnel each step in the checklists shall "check, Initial, date, and note any deficiencies", logs of the maintenance shall be reviewed & archived by the accountable Local US3 System Administrator.

6. Management

The US3 System Administrators are responsible for managing the preventive maintenance for the equipment & sites that they are responsible for.

Work Plan Web-Based Software

In general, we have two primary issues associated with the Culver Service Plan. One (1) Service of the existing Marsh-McBirney SFMS and the Motorola MOSCAD System and Two (2) Service of the VT SCADA system. Where for the service for both system will be provided by an integrated group of technicians, engineers and support staff equipped to providing complete software support, sewer metering and telecommunications equipment maintenance.

Our personnel are located in Southern California. They can respond quickly with expert solutions to your problems or issues. US3 will have one Electrical Engineer on staff located in Culver City.

SFMS/ENS Maintenance schedule

Culver can simply log in to schedule work as a function of Priority Levels. US3 will maintain the entire system, including the sewer meters, RTUs, VT SCADA software and telecommunications system using methods to optimize our staff and keep Culver informed of the current status of the system. Thus Culver will be given a full accounting of US3 activities. The following is the general format:

Description: The main service order screen shows the requested work as well as the resolution. Access is provided to secondary information including items being serviced, technician time logs and parts & labor used. A service order may be associated with a current maintenance contract or warranty. US3 will access the Dispatch Board for a service order to schedule technicians for the job.

The screenshot shows the 'Service Order 57 for Erickman Sales & Service' window. The interface includes a menu bar (File, Edit, View, Tools, Tasks, SQS, Inventory, Activities, Reports, Help) and a toolbar. A left sidebar contains icons for Pursuit, Quotes, Service, Search, Service Order, Account, Dispatch Board, and Parts. The main area is divided into several sections:

- Brief Desc.:** Problem with main network server
- Contact:** Mr. Bill Johnson
- Contact Ph:** (402) 592-5511
- Account Ph:** (402) 592-8989
- Rel ID:** (empty)
- Status:** Open
- Type:** Phone Support
- Priority:** Medium (0 hrs)
- Work Requested:** Ran through diagnostics, no problem found, need to send someone on site
- Work Performed:** (empty)
- Service Detail:** Tech Responsible: Dave Foxworth
- Account Info:** Received: 06/04/2002 at 09:35 AM; Requested: 06/04/2002 at 10:00 AM; Opened: 06/04/2002 at 11:45 AM; Closed: (empty)
- Order Totals:** Service Zone: (empty); System: Desktop Computers; Contract #: 8; Basis: Time Period; Description: Time Contract; Expires on: 9/18/2003; Remaining: 465 days

The status bar at the bottom indicates the date and time: 6/7/2002 10:44 AM.

Title: Inventory

Description: A complete inventory control sub-system is available for taking a physical inventory and entering variances. Inventory valuation is also included. To perform a physical inventory, US3 will create a work file or current counts by location, print the worksheets, perform the physical counting and then enter the variances in a spreadsheet-like form. In this way, the Culver will know precisely the inventory status of the system.

Enter Physical Inventory Counts

File Help

Location: <ALL>

Order: Location & Item ID

Filter: All Unposted Items

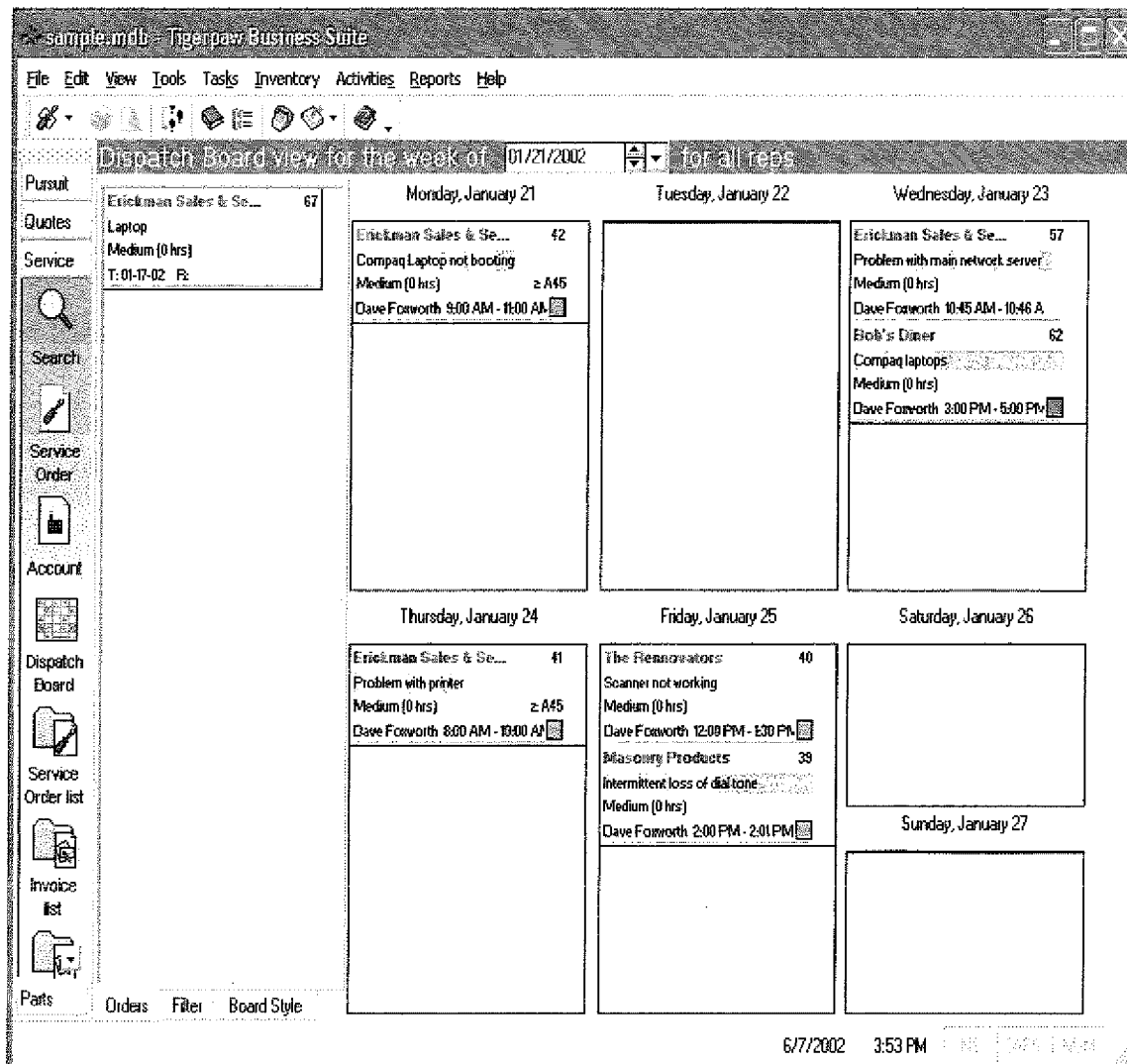
Search For Item ID:

Location	Item ID	Description	Bin	Computed	Actual	Variance	
FRTOFF	HPLASERJET4	HP LaserJet 4 Plus		109			
S1	COM2002LAPTOP	Compaq Laptop 2002		4	0		
S1	COMDESKP4	Compaq Desktop P4		4	0		
S1	COMPAQ1681	Compaq Laptop Model	A10	4	0		
S1	COMPAQ1999	Compaq Laptop 2001		2	0		
S1	HPLASERJET4	HP LaserJet 4 Plus		5	0		
S1	KEYBOARD	101 Keyboard		1	0		
S1	MONITOR	19 inch Monitor		5	0		
S1	NETCARD	Network Card		1	0		
WH1	COM2002LAPTOP	Compaq Laptop 2002		11	0		
WH1	COMDESKP4	Compaq Desktop P4		8	0		
WH1	COMPAQ1681	Compaq Laptop Model	A10	43	0		

NOTE: Variances on serialized items must be reconciled by serial number before the item can be posted to inventory.

Title: Service Dispatch

Description: A graphical dispatching sub-system helps US3 schedule and re-schedule technicians for service orders. By categorizing our technicians based on skill level and assigning the task for a specific geographic region, US3 can quickly and easily find the best available and closest technician to assign to a service request. Color-coding of various types of tasks helps US3 identify critical work assignments.



Title: Service Time Logs

Description: Time logs are detailed entries identifying specific time a service order. Once all technician time has been entered and summarized, US3 uses this tool to help in tracking performance issues with specific or recurring problems.

Time Logs for Service Order 57

File View Filter Help

Start Date Time End Date End Time Hrs. Min. Tech Reason

06/07/2002	10:46 AM	06/07/2002	11:25 AM	0	39	Dave Foxworth	Trouble-shooting
------------	----------	------------	----------	---	----	---------------	------------------

Log Expenses Total Time

Tech: Dave Foxworth

Reason: Trouble-shooting

Comment: run diagnostics

Log Start: 06/07/2002 at 10:46 AM

Log End: 06/07/2002 at 11:25 AM

Actual: 0 Hrs. 39 Min.

Elapsed: 0 Hrs. 39 Min.

Billable: ☐ Charge against contract: ☒

Section 4
STAFFING PLAN

Staffing Plan

In general, most engineers assigned to Culver ENS will be Hach Certified and/or Motorola Factory Trained Engineers with decades of experience. Further, most of the engineers assigned to this project have been working on Culver for both on-site and remote diagnostics & repair.

MARK C. SERRES Senior Control Systems Engineer
BSEE, MSEE

Mr. Serres holds a B.Sc. & M.Sc in Electrical and Electronic Engineering. His capabilities include all disciplines for the execution of engineering in the areas of electrical engineering (Control Engineering, Power Engineering & Communications), computer and process control systems design (DCS), including P&ID's, Loop Diagrams, Elementary and Single Line Diagrams among others. Responsible for Wireless ENS Hardware/Software development & integration, including construction.

US3, Inc. 1991 - Present

Title:	Sr. Electrical Engineer - Project Manager
Function:	Responsible for the planning, design, development and installation of process automation systems for industrial & utility facilities. ENS capabilities include hardware/software integration from the process(s) using telemetry (RF, Microwave & Satellite) and most computer networks.

ASEA BROWN BAVARIE (ABB) IMPELL CORPORATION - 1986 to 1990

Title: Senior Electrical Engineer

Function: Design and implementation of a ENS system design for a processing plant, networking PLC's with a plant-wide supervisory computer (TDC-3000). Activities included power distribution, software using CASE (both PLC and supervisory) and P&ID development.

EDUCATION

Harvard University, Boston Massachusetts School of Public Health
Graduate Level course in aerosol technology, industrial hygiene and air pollution control
Technology

Heriot Watt University, Edinburgh, Scotland
B.Sc. & M.Sc. Electrical and Electronic Engineering

PUBLICATIONS

Real-Time Analysis of NOx Emissions Using Expert Systems
Advances in Instrumentation and Control, ISA, 1993

Advanced Diagnostics Using DCS,
Integrating Diverse Suppliers,
Control Versus Performance Monitoring,
Planning for Future Expansion,
Human Factors in DCS Development,
Measuring True Benefits of Process Automation
Guidelines for Integrated Controls and Monitoring for Fossil Fuel Plants, EPRI, 1990

Application of CASE Tools for DCS Development and Configuration
Taylor MOD-300 World Conference, 1989

PROFESSIONAL COURSES

Taylor Instruments

Distributed Control and Taylor Control Language

Teknowledge M.1 and Knowledge Engineering Methodology

Artificial Intelligence/Expert System Engineering and Design

NEXPERT System Engineering

Artificial Intelligence/Expert System Computer Language Design

UCLA Engineering Extension

Analyzing the Reliability & Performance of Expert Systems

Tom Williams **Senior Control Systems Engineer**
(Engineering Manager)
BSEE, MSEE

Experience: Process Control Development Engineering and Programming
 ENS System Design and Implementation
 Sewer Flow Monitoring System Design and Implementation
 Hardware and Software Selection and Implementation
 Customer Technical Support and Trouble Shooting
 On-Site Start-up Support and Training

Projects: Large Scale Wireless ENS Systems
 Large Scale Sewer Flow Monitoring Systems
 Motor Control System Design and Implementation
 Thermo-Oxidizers and Burner Management
 Conveyor and Material Handling Systems
 Chemical Reactor Process Controls
 Pharmaceutical Process Controls
 Computer Interface Drivers

Operating Systems: VMS, XP, Vista

Software: CAD/CAM (Intergraph Microstation, Autocad)
 VT SCADA Wonderware
 Control View Intellution
 Assembler 68020 C, C++, C#
 FORTRAN Pascal
 Oracle Sybase
 GE Cimplicity

Controllers: Allen Bradley GE Series 6
 OPTO Mystic Mitsubishi
 Modicon Siemens 5S
 MOSCAD ACE

Brian Royer **Systems Engineer**
BSEE

Experience: Motorola MOSCAD Service Systems & Control
Motorola MOSCAD ENS Installation Specialist
UHF/VHF/800 TRUNK 900 TRUNK , 900 MAS
Motorola Radio Service
Radio Path Surveys
Customer Technical Support and Trouble Shooting
On-Site Start-up Support and Training

Projects: Trunking 800 MHz MOSCAD System
UHF MOSCAD/INTRAC Systems
Large Scale Water Distribution ENS Systems
Wide Area Network Installation & Maintenance
Wireless Control System Design
Broadband System Design and Implementation

Operating Systems: XP, NT, Vista

Software:	SQL Server	Wonderware
	VT SCADA	Intellution

Controllers:	Allen Bradley	Modicon
	Motorola	IDEA

Saul Hirshamnn Senior Communications Systems Engineer
BSEE

Experience: Motorola Service Manager for Command & Control
Motorola MOSCAD ENS Installation Specialist
UHF/VHF/800 TRUNK 900 TRUNK , 900 MAS
Motorola Radio Service
Radio Path Surveys
Customer Technical Support and Trouble Shooting
On-Site Start-up Support and Training

Projects: Trunking 800 MHz MOSCAD System
UHF MOSCAD/INTRAC Systems
Large Scale Water Distribution ENS Systems
Wide Area Network Installation & Maintenance
Wireless Control System Design
CNC Machinery Controllers

Service: Responsible for MOSCAD System Implementation

Software: Motorola UHF/VHF Trunk Radio Service Console
Configuration Motorola MOSCAD Toolbox Most PC based MMI
Packages

Controllers: MOSCAD Intrac
Allen-Bradley Modicon

Jimmy Gilbreath Control Systems Engineer
BSEE

Experience: Control System Engineering
 Project Management
 Process Control Development Engineering and Programming
 Hardware and Software Selection and Implementation
 Customer Technical Support and Trouble Shooting
 On-Site Start-up Supervision and Training
 Sewer Flow Monitoring

Projects: Permanent and Temporary Sewer Flow System Monitoring
Implementation
 Water Treatment Production Facilities Automation
 Processing Plant Automation
 ENS System Design

Operating Systems: DOS, Windows 95, 98, NT

Software:	MS Project	MS Access
	Autocad	Wonderware
	VT SCADA	Intellution
	Visual Basic	Oracle

Controllers:	Allen Bradley	GE Series 6
	Modicon	Siemens/TI

Section 5
SYSTEM RELIABILITY
ASSESSMENT

5.0 System Reliability Assessment

US3 will perform a comprehensive System Wide Reliability Assessment (SRA). This will include a comprehensive review of SFMS/ENS system. This will start at the Master Stations to each of the RTUs and sensors. It should be noted that US3 activities are governed by approved standards, codes, and procedures accepted by IEEE & ASME in the areas of Electrical (including instrumentation) and Mechanical Engineering. In general, US3 will perform the SRA from the perspective compliance with ISO-9001. For the purposes of this project, US3 will adhere to most of the ISO Quality Assurance where practical.

The purpose of the US3 SRA is to ensure Culver that the activities affecting the quality of the system are performing as designed not only from the SFMS/ENS perspective, but including the system wide perspective. The SRA will include the systems engineering, specification generation, and associated RTUs. Specific areas of the procedures that the US3 SRA Team will be examining are:

- 1) Design Control
- 2) Document Control
- 3) Procedures, Instructions and Drawings
- 4) System Control
- 5) Test Control

US3 will develop a comprehensive Performance Test Plan. The test plan will include test conditions for coordinating the start and end of each test with Culver City Public Works. The focus of the test plan will be the following:

1. Identify parameters.
2. Determine relative measurements
3. Identify control parameters for optimization of the SFMS/ENS System.

The completed Test Plan Package will include, as a minimum, the following:

1. Results of testing activities.
2. Associated specifications and drawings, including as-built drawings (as required).

3. Test records which contain, as a minimum, the following:
 1. A description of the testing activity.
 2. Evidence of completion and verification of testing activity.
 3. Data and results of tests.
 4. Information on conditions adverse to compliance.
 5. Evidence as to the acceptability of results. Actions taken in connection with any deficiencies.
 6. Test results and certificates.

As part of the SRA, US3 will perform a **Functional Test** of the entire system and could include the following (this is preliminary and will be submitted formally to Culver for review and comment):

- a. Physical inspection for conformance to drawing and appearance of equipment;
- b. Demonstration of the proper functioning of all hardware by a thorough exercising of each device, including CPU's and distributed processors at the Satellites (individually and collectively);
- c. Demonstration of the proper functioning of the System Software;
- d. Demonstration of the all functions associated with the software;
- e. Simulation of the alarm and status change conditions;
- f. Demonstration of all man/machine interface functions;
- g. Simulation of failure situations and failover of each component that has a back-up unit;
- h. Demonstration of the data base management software including tests to verify addition/deletion of points and multiplexes and modifications to various system and application data files;
- i. Demonstration of the display generator/editor, log generator/editor and maintenance functions;
- j. Demonstration of on-line editing, assembling, compiling, testing and integration;

- k. Demonstration of the use of on-line and off-line diagnostics and test programs;
- l. Recovery from AC power source failure;
- m. Random inspections to verify the accuracy of hardware and software documentation;
- n. Demonstration of the accuracy of the system performance monitoring/control software.

Section 6
PRICE PROPOSAL

6.0 Price Proposal

The development of the price proposal is based on Bid No. 1422. Each item has been listed that could incur a cost. It should be noted that these are Not-to-Exceed numbers. Please examine the list carefully for compliance to the Bid. US3 has included instrumentation for the SFMS that must be modernized. It should be recognized that some components may require modernization before the listed five year schedule. In that case, US3 may move materials and hours to meet the needs of the system, with pre-authorization from the City. We have the following:

First Year

On Site Spare Parts to Meet Uptime Requirements

ITEM	QTY.	MODEL	DESCRIPTION	UNIT	EXTENDED
Flow Metering Equipment					
1	4	464-10000	Marsh McBirney FloDar or equivalent version is 12 VDC powered open channel data logging FloMeter includes: Intrinsically Safe sensor and Barrier conforming to UL STD 2279, a Nema 4X enclosure; sensor unit with 30 ft of interconnecting cable; four 4-20mA outputs (flow, velocity and level), a RS232 connector and an instruction manual.	\$13,307	\$53,228
2	2	Moscad	Motorola Moscad Kit. Kit includes, Moscad, backplane, radio, Inputs/Output modules, cables, connectors and antennas	\$5,780	\$11,560
3	1	Dell	PowerEdge System Server, OS, software, cables, connectors and UPS.	\$5,789	\$5,789
4	3	S20MA	Ultra Sonic Level Transmitters	\$1,684	\$5,052
5	2	F6987	Motorola Radio Hardware	\$1,465	\$2,930
6	2	M485	Maple Systems Pump Station MMI	\$687	\$1,374
Spare Parts Total					\$79,933

Project System Enhancement Parts

Off-Site System Backup

1	1	US3-B	US3 Remote DataVault	\$185	\$185
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Data Logger Equipment Replacement

1	14	1104-100	Flo-Station Logger	\$3,125	\$43,750
2	17	SSC-1	StreetTalk	\$1,284	\$21,828

Communications

1	11	iPhone	iPhone 8G PDA Smart Phones	\$199	\$2,189
2	12		DSL	\$119	\$1,428
3	24		Two YearCell Phone Communications	\$980	\$23,520
4	192		Flo-Meter Communications	\$34	\$6,528
5					

System Upgrade Hardware

1	5	Dell	XPS 360 with HD Monitor	\$1,585	\$7,925
2	5	VT	VT SCADA Licence	\$1,530	\$7,650
3	1	F6987	Motorola RTU for Server Room Environmental Monitoring	\$5,780	\$5,780
4	4	Hach	Flow Metering 20% Replacement	\$13,307	\$53,228
5	4	US3PM	Permanent Sensor Mount Hardware.	\$495	\$1,980
6	4	US3EW	3 Year Extended Warranty	\$1,295	\$5,180

Project System Enhancement Parts Total **\$181,171**

First Year Parts

\$261,104

Second Year

ITEM	QTY.	MODEL	DESCRIPTION	UNIT	EXTENDED
Off-Site System Backup					
1	1	US3-B	US3 Remote DataVault	\$185	\$185
2	1	VT-01	VT SCADA Maintenance License	\$3,026	\$3,026
3	1	Lot	System Materials	\$10,000	\$10,000
				0	
Communications					
1	11	0	PDA Smart Phones	\$0	\$0
2	12		DSL	\$119	\$1,428
3	11	0	Cell Phone Communications	\$0	\$0
4	192		Flo-Meter Communications	\$34	\$6,528
System Upgrade Hardware					
1	4	Hach or equal	Flow Metering 20% Replacement	\$13,307	\$53,228
2	4	US3PM	Permanent Sensor Mount Hardware.	\$495	\$1,980
	4	US3EW	3 Year Extended Warranty	\$1,295	\$5,180

Second Year Parts

\$78,344

Third Year

ITEM	QTY.	MODEL	DESCRIPTION	UNIT	EXTENDED
Off-Site System Backup					
1	1	US3-B	US3 Remote DataVault	\$185	\$185
2	1	VT-01	VT SCADA Maintenance License	\$3,026	\$3,026
3	1	Lot	System Materials	\$10,000	\$10,000
				0	
Communications					
1	11	iPhone	iPhone 8G PDA Smart Phones	\$199	\$2,189
2	12		DSL	\$119	\$1,428
3	24		Two Year Cell Phone Communications	\$980	\$23,520
4	192		Flo-Meter Communications	\$34	\$6,528
System Upgrade Hardware					
1	4	Hach or equal	Flow Metering 20% Replacement	\$13,307	\$53,228
2	4	US3PM	Permanent Sensor Mount Hardware.	\$495	\$1,980
3	4	US3EW	3 Year Extended Warranty	\$1,295	\$5,180

Third Year Parts

\$107,264

**Forth
Year**

ITEM	QTY.	MODEL	DESCRIPTION	UNIT	EXTENDED
Off-Site System Backup					
1	1	US3-B	US3 Remote DataVault	\$185	\$185
2	1	VT-01	VT SCADA Maintenace License	\$3,026	\$3,026
3	1	Lot	System Materials	\$10,000 0	\$10,000
Communications					
1	11	0	PDA Smart Phones	\$0	\$0
2	12		DSL	\$119	\$1,428
3	11	0	Cell Phone Communications	\$0	\$0
4	192		Flo-Meter Communications	\$34	\$6,528
System Upgrade Hardware					
1	4	Hach or equal	Flow Metering 20% Replacement	\$13,307	\$53,228
2	4	US3PM	Permanent Sensor Mount Hardware.	\$495	\$1,980
3	4	US3EW	3 Year Extended Warranty	\$1,295	\$5,180
Forth Year Parts					\$81,555

Fifth

ITEM	QTY.	MODEL	DESCRIPTION	UNIT	EXTENDED
Off-Site System Backup					
1	1	US3-B	US3 Remote DataVault	\$185	\$185
2	1	VT-01	VT SCADA Maintenance License	\$3,026	\$3,026
3	1	Lot	System Materials	\$10,000	\$10,000
Communications					
1	11	iPhone	iPhone 8G PDA Smart Phones	\$199	\$2,189
2	12		DSL	\$119	\$1,428
3	24		Two Year Cell Phone Communications	\$980	\$23,520
4	192		Flo-Meter Communications	\$34	\$6,528
System Upgrade Hardware					
1	4	Hach or equal	Flow Metering 20% Replacement	\$13,307	\$53,228
2	4	US3PM	Permanent Sensor Mount Hardware	\$495	\$1,980
3	4	US3EW	3 Year Extended Warranty	\$1,295	\$5,180

Fifth Year Parts

\$107,264

Total Parts (Five years)

\$635,532

* State, Federal, Surcharges taxes and shipping have not been included if applicable.

Engineering Not-to-Exceed Hours

The following hours are based on a not-to-exceed basis as defined by Bid 1422. All hours expended will be documented on a task by task basis and submitted.

Note: US3 is offering a **5% discount** on timely early payment of submitted invoices. Invoices paid within 16 days of submission to Culver will receive a 5% discount on the hourly billing rate for that specific invoice. Invoices paid 17-45 days will be as invoiced. Invoices paid after 46 days will be subject to a 5% finance charge on the overall invoice.

Please examine each entry as identified in Bid 1422. We have the following:

First Year				
Item	Description	Hours	Rate	Sub-total
1	Computer System Maintenance Support (Assuming 8 hours per month) *12 months	96	125	12,000
2	Event logs reviewed Mondays, Wednesdays, and Fridays for system errors, application errors, and logged security events. (Assuming 15 min * 3 days per week * 52)	39	125	4,875
3	Review Antivirus logs on Mondays, Wednesdays, and Fridays to detect any possible compromises. (Assuming 5 min * 2 days per week * 52)	8	125	1,000
4	Perform system updates on a weekly basis as provided by the vendors of the various software installed in the ENS/SFMS system. (Assuming 15 min * 52)	13	125	1,625
5	Daily, review backup logs to ensure that backup routines are maintained. (Assuming 5 min * 5 days per week * 52)	22	125	2,750
6	Every three weeks, perform restoration testing of backup system. (Assuming 1 hour every 3 weeks)	17	125	2,125
7	Perform hardware updates on a weekly basis as provided by the hardware vendors. (Assuming 1 hour every week)	52	125	6,500

Culver City Public Works

Wastewater Monitoring Services

Utility Systems Science and Software

Bid No. 1422

8	On Mondays, Wednesdays, and Fridays, review VTS logs for alarming problems and make necessary maintenance. (Assuming 15 min *3 days per week* 52 weeks)	32	125	4,000
9	On Mondays, Wednesdays, and Fridays, review VTS and associated peripherals and software logs for errors on a weekly basis to ensure proper performance. (Assuming 5 min *3 days per week* 52 weeks)	13	125	1,625
10	On Mondays, Wednesdays, and Fridays, review the SCADA components and associated software for errors and ensure proper performance. (Assuming 5 min *3 days per week* 52 weeks)	13	125	1,625
11	On a monthly basis, review the radio network for performance related issues. (Assuming 1 hour * 12)	12	145	1,740
12	On a monthly basis, review field and remote support ENS equipment. (Assuming 1 hour * 12)	12	145	1,740
13	On a monthly basis, review Electrical and Engineering system components. (Assuming 1 hour * 12)	12	145	1,740
14	On a daily basis, Consultant shall test the SCADA alarm system to confirm its proper operation, and shall take the necessary action to make sure that the ENS/SFMS system can generate and deliver the alarms. (Assuming 15 min/day)	12	125	1,500

15	Coordinate with City staff and support consultants, supervise, manage, operate, configure, troubleshoot, inspect, maintain, repair, install, calibrate, modify, enhance, provide necessary engineering services, constant data analysis, make recommendations regarding operations, provide all necessary integration services, coordinate with third parties, and perform other related duties for the system and components as described in compliance with environmental laws. (Assuming 16 hours/week *50 weeks)	832	125	104,000
16	SCADA System Support, Development, Configuration and Programming (Assuming 16 hours per month).	192	145	27,840
17	Responsible for replacement of system components of the SFMS flow meters, data sensors, flow level sensor, and all system components presently installed or installed as part of this agreement. To this end, Consultant shall be responsible for maintaining current warranty on all system components at its cost during the life of this agreement. (Assuming 4 meters * 16 + 4 Sensors 8)+(16*12) Cleaning and calibrating	288	125	36,000
18	Responsible for replacement of system components of the Motorola FIU/RTU and all system components presently installed or installed as part of this agreement. To this end, Consultant shall be responsible for maintaining current warranty on all system components at its cost during the life of this agreement. (Assuming 8 hours per month *12)	96	145	13,920
19	US3 shall inspect, make recommendation document all ENS/SFMS operation all hardware, all software, all cabling and connections, update schematics and assure fidelity of the installed and operating system with the schematics, as well as modification of the schematics when approved changes are implemented. (Assuming 24 hours per month)	288	145	41,760

20	Responsible for the daily, periodic and regular inspection of all ENS/SFMS server's software and all ENS/SFMS hardware and any repairs to maintain the required uptime on all hardware, software, and communications on a component basis, as well as on a systemic basis. (Assuming 16 hours per month *12)	192	125	24,000
21	On a daily basis, US3 shall spend one hour reviewing pump station data, meter data, diurnal profiles, and ensuring the accuracy of the data reported. (Assuming 1 hour per day, 5 days per week)	260	125	32,500
22	On-Site Motorola ENS Moscad 24/7 Support (80 hours per year)	80	145	11,600
23	ODBC Interlace development with WAP support for emails, pagers and SMS.	120	145	17,400
24	In case of any interruption in communications and storage of data at the field locations, database locations (in Culver City and off-site), for any reason, the Consultant shall manually obtain sewage flow data from each monitoring site and each pump station, process the data, incorporate the manually-collected data to the database, manage the database, format the pertinent periodic data into the report formats for compliance with CLA, and produce the necessary reports to for submittal to the City and CLA on a timely basis. This effort shall take place in a timely manner as to comply with the Amalgamated Agreement report submittal requirements, regardless of the notice interval given to Consultant by the City. (Assuming 8 hour per month)	96	125	12,000

Culver City Public Works

Wastewater Monitoring Services

Utility Systems Science and Software

Bid No. 1422

25	US3 shall be responsible the automated formatting of the data into the various reports submitted to CLA, as well as the modification of these reports and/or the creation of new reports as needed, as determined by City staff. (160 hours)	160	145	23,200
26	Gathering and reporting accurate, timely, and complete sewer flow data for the whole system, including but not limited to the following: a. the sewer flow data for eleven (11) monitoring sites and seven (7) pump stations shall be submitted each month within seven (7) working days after the end of the month; b. the data shall be submitted electronically both as the processed digital data (in excel format) and unprocessed data to City staff and support consultants; c. any missing data will shall be documented in full detail as to the cause and circumstances of the loss, with an explanation as to the cause, including determination of duration of data loss, and action being taken to prevent further data loss and a determination of the date when the condition will be cured (Assuming 5 days per month)	480	125	60,000
27	Configure and install Braddock Pump Station ENS/SFMS flow monitoring instrument ion	160	145	23,200
28	Modify existing Auto CAD drawings for each of the associated sites (8 hours per location)	128	125	16,000
29	First Responder Training for VTS, Alarms, Phone-In and "Reading"	8	145	1,160
30	Administration Training for VTS	60	145	8,700
31	Administration Training for Motorola	60	145	8,700

Culver City Public Works

Wastewater Monitoring Services

Utility Systems Science and Software

Bid No. 1422

32	Administration Training for SQL and Scripting	60	145	8,700
33	Configure and install alarming at each of the 11 monitoring sites.	120	125	15,000
34	Modify the Central Station Monitoring system to incorporate new Alarming	40	145	5,800
35	General System Wide Maintenance (On-Site 80 hours per month)	960	125	120,000
36	As Built Documentation and Operations Manual. Electronic and Hard Copy.	160	125	20,000
Total Cost for the First Year		5193		676,325

Second Year				
Item	Description	Hours	Rate	Sub-total
1	Computer System Maintenance Support (Assuming 8 hours per month) *12 months	96	125	12,000
2	Event logs reviewed Mondays, Wednesdays, and Fridays for system errors, application errors, and logged security events. (Assuming 15 min * 3 days per week * 52)	39	125	4,875
3	Review Antivirus logs on Mondays, Wednesdays, and Fridays to detect any possible compromises. (Assuming 5 min * 2 days per week * 52)	8	125	1,000
4	Perform system updates on a weekly basis as provided by the vendors of the various software installed in the ENS/SFMS system. (Assuming 15 min * 52)	13	125	1,625
5	Daily, review backup logs to ensure that backup routines are maintained. (Assuming 5 min * 5 days per week * 52)	22	125	2,750
6	Every three weeks, perform restoration testing of backup system. (Assuming 1 hour every 3 weeks)	17	125	2,125
7	Perform hardware updates on a weekly basis as provided by the hardware vendors. (Assuming 1 hour every week)	52	125	6,500
8	On Mondays, Wednesdays, and Fridays, review VTS logs for alarming problems and make necessary maintenance. (Assuming 15 min *3 days per week* 52 weeks)	32	125	4,000
9	On Mondays, Wednesdays, and Fridays, review VTS and associated peripherals and software logs for errors on a weekly basis to ensure proper performance. (Assuming 5 min *3 days per week* 52 weeks)	13	125	1,625

10	On Mondays, Wednesdays, and Fridays, review the SCADA components and associated software for errors and ensure proper performance. (Assuming 5 min *3 days per week* 52 weeks)	13	125	1,625
11	On a monthly basis, review the radio network for performance related issues. (Assuming 1 hour * 12)	12	145	1,740
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13	On a monthly basis, review Electrical and Engineering system components. (Assuming 1 hour * 12)	12	145	1,740
14	On a daily basis, Consultant shall test the SCADA alarm system to confirm its proper operation, and shall take the necessary action to make sure that the ENS/SFMS system can generate and deliver the alarms. (Assuming 15 min/day)	12	125	1,500
15	Coordinate with City staff and support consultants, supervise, manage, operate, configure, troubleshoot, inspect, maintain, repair, install, calibrate, modify, enhance, provide necessary engineering services, constant data analysis, make recommendations regarding operations, provide all necessary integration services, coordinate with third parties, and perform other related duties for the system and components as described in compliance with environmental laws. (Assuming 16 hours/week *50 weeks)	832	125	104,000
16	SCADA System Support, Development, Configuration and Programming (Assuming 16 hours per month).	192	145	27,840

17	Responsible for replacement of system components of the SFMS flow meters, data sensors, flow level sensor, and all system components presently installed or installed as part of this agreement. To this end, Consultant shall be responsible for maintaining current warranty on all system components at its cost during the life of this agreement. (Assuming 4 meters * 16 + 4 Sensors 8)+(16*12) Cleaning and calibrating	288	125	36,000
18	Responsible for replacement of system components of the Motorola FIU/RTU and all system components presently installed or installed as part of this agreement. To this end, Consultant shall be responsible for maintaining current warranty on all system components at its cost during the life of this agreement. (Assuming 8 hours per month *12)	96	145	13,920
19	US3 shall inspect, make recommendation document all ENS/SFMS operation all hardware, all software, all cabling and connections, update schematics and assure fidelity of the installed and operating system with the schematics, as well as modification of the schematics when approved changes are implemented. (Assuming 24 hours per month)	288	145	41,760
20	Responsible for the daily, periodic and regular inspection of all ENS/SFMS server's software and all ENS/SFMS hardware and any repairs to maintain the required uptime on all hardware, software, and communications on a component basis, as well as on a systemic basis. (Assuming 16 hours per month *12)	192	125	24,000
21	On a daily basis,US3 shall spend one hour reviewing pump station data, meter data, diurnal profiles, and ensuring the accuracy of the data reported. (Assuming 1 hour per day, 5 days per week)	260	125	32,500
22	On-Site Motorola ENS Moscad 24/7 Support (80 hours per year)	80	145	11,600

23	ODBC Interlace support with WAP emails, pagers and SMS.	80	145	11,600
24	In case of any interruption in communications and storage of data at the field locations, database locations (in Culver City and off-site), for any reason, the Consultant shall manually obtain sewage flow data from each monitoring site and each pump station, process the data, incorporate the manually-collected data to the database, manage the database, format the pertinent periodic data into the report formats for compliance with CLA, and produce the necessary reports to for submittal to the City and CLA on a timely basis. This effort shall take place in a timely manner as to comply with the Amalgamated Agreement report submittal requirements, regardless of the notice interval given to Consultant by the City. (Assuming 8 hour per month)	96	125	12,000
25	US3 shall be responsible the support for formatting of the data into the various reports submitted to CLA, as well as the modification of these reports and/or the creation of new reports as needed, as determined by City staff. (80 hours)	80	125	10,000

Culver City Public Works**Utility Systems Science and Software**

Wastewater Monitoring Services

Bid No. 1422

26	Gathering and reporting accurate, timely, and complete sewer flow data for the whole system, including but not limited to the following: a. the sewer flow data for eleven (11) monitoring sites and seven (7) pump stations shall be submitted each month within seven (7) working days after the end of the month; b. the data shall be submitted electronically both as the processed digital data (in excel format) and unprocessed data to City staff and support consultants; c. any missing data will shall be documented in full detail as to the cause and circumstances of the loss, with an explanation as to the cause, including determination of duration of data loss, and action being taken to prevent further data loss and a determination of the date when the condition will be cured (Assuming 5 days per month)	480	125	60,000
29	Refresher Training for VTS, Alarms, Phone-In and "Reading"	8	145	1,160
30	General System Wide Maintenance (On-Site 80 hours per month)	960	125	120,000
31	As Built Documentation and Operations Manual. Electronic and Hard Copy.	24	125	3,000
Total Cost for the Second Year		4309		554,225

Third Year				
Item	Description	Hours	Rate	Sub-total
1	Computer System Maintenance Support (Assuming 8 hours per month) *12 months	96	125	12,000
2	Event logs reviewed Mondays, Wednesdays, and Fridays for system errors, application errors, and logged security events. (Assuming 15 min * 3 days per week * 52)	39	125	4,875
3	Review Antivirus logs on Mondays, Wednesdays, and Fridays to detect any possible compromises. (Assuming 5 min * 2 days per week * 52)	8	125	1,000
4	Perform system updates on a weekly basis as provided by the vendors of the various software installed in the ENS/SFMS system. (Assuming 15 min * 52)	13	125	1,625
5	Daily, review backup logs to ensure that backup routines are maintained. (Assuming 5 min * 5 days per week * 52)	22	125	2,750
6	Every three weeks, perform restoration testing of backup system. (Assuming 1 hour every 3 weeks)	17	125	2,125
7	Perform hardware updates on a weekly basis as provided by the hardware vendors. (Assuming 1 hour every week)	52	125	6,500
8	On Mondays, Wednesdays, and Fridays, review VTS logs for alarming problems and make necessary maintenance. (Assuming 15 min *3 days per week* 52 weeks)	32	125	4,000
9	On Mondays, Wednesdays, and Fridays, review VTS and associated peripherals and software logs for errors on a weekly basis to ensure proper performance. (Assuming 5 min *3 days per week* 52 weeks)	13	125	1,625

10	On Mondays, Wednesdays, and Fridays, review the SCADA components and associated software for errors and ensure proper performance. (Assuming 5 min *3 days per week* 52 weeks)	13	125	1,625
11	On a monthly basis, review the radio network for performance related issues. (Assuming 1 hour * 12)	12	145	1,740
12	On a monthly basis, review field and remote support ENS equipment. (Assuming 1 hour * 12)	12	145	1,740
13	On a monthly basis, review Electrical and Engineering system components. (Assuming 1 hour * 12)	12	145	1,740
14	On a daily basis, Consultant shall test the SCADA alarm system to confirm its proper operation, and shall take the necessary action to make sure that the ENS/SFMS system can generate and deliver the alarms. (Assuming 15 min/day)	12	125	1,500
15	Coordinate with City staff and support consultants, supervise, manage, operate, configure, troubleshoot, inspect, maintain, repair, install, calibrate, modify, enhance, provide necessary engineering services, constant data analysis, make recommendations regarding operations, provide all necessary integration services, coordinate with third parties, and perform other related duties for the system and components as described in compliance with environmental laws. (Assuming 16 hours/week *50 weeks)	832	125	104,000
16	SCADA System Support, Development, Configuration and Programming (Assuming 16 hours per month).	192	145	27,840

17	Responsible for replacement of system components of the SFMS flow meters, data sensors, flow level sensor, and all system components presently installed or installed as part of this agreement. To this end, Consultant shall be responsible for maintaining current warranty on all system components at its cost during the life of this agreement. (Assuming 4 meters * 16 + 4 Sensors 8)+(16*12) Cleaning and calibrating	288	125	36,000
18	Responsible for replacement of system components of the Motorola FIU/RTU and all system components presently installed or installed as part of this agreement. To this end, Consultant shall be responsible for maintaining current warranty on all system components at its cost during the life of this agreement. (Assuming 8 hours per month *12)	96	145	13,920
19	US3 shall inspect, make recommendation document all ENS/SFMS operation all hardware, all software, all cabling and connections, update schematics and assure fidelity of the installed and operating system with the schematics, as well as modification of the schematics when approved changes are implemented. (Assuming 24 hours per month)	288	145	41,760
20	Responsible for the daily, periodic and regular inspection of all ENS/SFMS server's software and all ENS/SFMS hardware and any repairs to maintain the required uptime on all hardware, software, and communications on a component basis, as well as on a systemic basis. (Assuming 16 hours per month *12)	192	125	24,000
21	On a daily basis,US3 shall spend one hour reviewing pump station data, meter data, diurnal profiles, and ensuring the accuracy of the data reported. (Assuming 1 hour per day, 5 days per week)	260	125	32,500
22	On-Site Motorola ENS Moscad 24/7 Support (80 hours per year)	80	145	11,600

Culver City Public Works

Wastewater Monitoring Services

Utility Systems Science and Software

Bid No. 1422

23	ODBC Interlace support for WAP support for emails, pagers and SMS.	80	145	11,600
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25	US3 shall be responsible the automated formatting of the data into the various reports submitted to CLA, as well as the modification of these reports and/or the creation of new reports as needed, as determined by City staff. (80 hours)	80	125	10,000

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29	First Responder Refresher Training for VTS, Alarms, Phone-In and "Reading"	8	145	1,160
30	General System Wide Maintenance (On-Site 80 hours per month)	960	125	120,000
31	As Built Documentation and Operations Manual. Electronic and Hard Copy.	24	125	3,000
Total Cost for the Third Year		4309		554,225

Forth Year				
Item	Description	Hours	Rate	Sub-total
1	Computer System Maintenance Support (Assuming 8 hours per month) *12 months	96	125	12,000
2	Event logs reviewed Mondays, Wednesdays, and Fridays for system errors, application errors, and logged security events. (Assuming 15 min * 3 days per week * 52)	39	125	4,875
3	Review Antivirus logs on Mondays, Wednesdays, and Fridays to detect any possible compromises. (Assuming 5 min * 2 days per week * 52)	8	125	1,000
4	Perform system updates on a weekly basis as provided by the vendors of the various software installed in the ENS/SFMS system. (Assuming 15 min * 52)	13	125	1,625
5	Daily, review backup logs to ensure that backup routines are maintained. (Assuming 5 min * 5 days per week * 52)	22	125	2,750
6	Every three weeks, perform restoration testing of backup system. (Assuming 1 hour every 3 weeks)	17	125	2,125
7	Perform hardware updates on a weekly basis as provided by the hardware vendors. (Assuming 1 hour every week)	52	125	6,500
8	On Mondays, Wednesdays, and Fridays, review VTS logs for alarming problems and make necessary maintenance. (Assuming 15 min *3 days per week* 52 weeks)	32	125	4,000
9	On Mondays, Wednesdays, and Fridays, review VTS and associated peripherals and software logs for errors on a weekly basis to ensure proper performance. (Assuming 5 min *3 days per week* 52 weeks)	13	125	1,625

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10	On Mondays, Wednesdays, and Fridays, review the SCADA components and associated software for errors and ensure proper performance. (Assuming 5 min *3 days per week* 52 weeks)	13	125	1,625
11	On a monthly basis, review the radio network for performance related issues. (Assuming 1 hour * 12)	12	145	1,740
12	On a monthly basis, review field and remote support ENS equipment. (Assuming 1 hour * 12)	12	145	1,740
13	On a monthly basis, review Electrical and Engineering system components. (Assuming 1 hour * 12)	12	145	1,740
14	On a daily basis, Consultant shall test the SCADA alarm system to confirm its proper operation, and shall take the necessary action to make sure that the ENS/SFMS system can generate and deliver the alarms. (Assuming 15 min/day)	12	125	1,500
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21	On a daily basis,US3 shall spend one hour reviewing pump station data, meter data, diurnal profiles, and ensuring the accuracy of the data reported. (Assuming 1 hour per day, 5 days per week)	260	125	32,500
22	On-Site Motorola ENS Moscad 24/7 Support (80 hours per year)	80	145	11,600

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25	US3 shall be responsible the automated formatting of the data into the various reports submitted to CLA, as well as the modification of these reports and/or the creation of new reports as needed, as determined by City staff. (80 hours)	80	125	10,000

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29	First Responder Refresher Training for VTS, Alarms, Phone-In and "Reading"	8	145	1,160
30	General System Wide Maintenance (On-Site 80 hours per month)	960	125	120,000
31	As Built Documentation and Operations Manual. Electronic and Hard Copy.	24	125	3,000
Total Cost for the Forth Year		4309		554,225

Fifth Year				
Item	Description	Hours	Rate	Sub-total
1	Computer System Maintenance Support (Assuming 8 hours per month) *12 months	96	125	12,000
2	Event logs reviewed Mondays, Wednesdays, and Fridays for system errors, application errors, and logged security events. (Assuming 15 min * 3 days per week * 52)	39	125	4,875
3	Review Antivirus logs on Mondays, Wednesdays, and Fridays to detect any possible compromises. (Assuming 5 min * 2 days per week * 52)	8	125	1,000
4	Perform system updates on a weekly basis as provided by the vendors of the various software installed in the ENS/SFMS system. (Assuming 15 min * 52)	13	125	1,625
5	Daily, review backup logs to ensure that backup routines are maintained. (Assuming 5 min * 5 days per week * 52)	22	125	2,750
6	Every three weeks, perform restoration testing of backup system. (Assuming 1 hour every 3 weeks)	17	125	2,125
7	Perform hardware updates on a weekly basis as provided by the hardware vendors. (Assuming 1 hour every week)	52	125	6,500
8	On Mondays, Wednesdays, and Fridays, review VTS logs for alarming problems and make necessary maintenance. (Assuming 15 min *3 days per week* 52 weeks)	32	125	4,000
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15	Coordinate with City staff and support consultants, supervise, manage, operate, configure, troubleshoot, inspect, maintain, repair, install, calibrate, modify, enhance, provide necessary engineering services, constant data analysis, make recommendations regarding operations, provide all necessary integration services, coordinate with third parties, and perform other related duties for the system and components as described in compliance with environmental laws. (Assuming 16 hours/week *50 weeks)	832	125	104,000
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25	US3 shall be responsible the automated formatting of the data into the various reports submitted to CLA, as well as the modification of these reports and/or the creation of new reports as needed, as determined by City staff. (160 hours)	80	125	10,000

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29	First Responder Refresher Training for VTS, Alarms, Phone-In and "Reading"	8	145	1,160
30	General System Wide Maintenance (On-Site 80 hours per month)	960	125	120,000
31	As Built Documentation and Operations Manual. Electronic and Hard Copy.	24	125	3,000
Total Cost for the Fifth Year		4309		554,225



Culver CITY

PUBLIC WORKS DEPARTMENT

9770 Culver Boulevard, Culver City, California 90232



(310) 253-5600

FAX (310) 253-5626

Charles D. Herbertson, P.E., LS
Public Works Director and
City Engineer

Mate Gaspar, P.E.
Engineering Services Manager

February 11, 2009

PROJECT TITLE

REQUEST FOR PROPOSAL GENERAL AGREEMENT FOR WASTEWATER MONITORING SERVICES

BID NUMBER 1422

ADDENDUM NO. 1

Please note the following changes and clarifications to the RFP provided for bidding purposes for the above-indicated project.

1. CLARIFICATION

- A. Section II, General Scope of Services, under the heading of REPAIR/MAINTAIN/REPLACE, Item No. 28, page 13, reads "As deemed necessary by City staff and/or Consultant, the Consultant shall install, replace, troubleshoot, and repair all componenets of the ENS/SFMS system and equipment, including all supporting software and hardware, cabling, wiring, landing blocks, connectors and appropriately integrate and configure each for the intended proper system operation in order to accomplish its intended purpose and end." Excluded from Item No. 28 is the repair, maintenance and replacement of mechanical equipment in the pump stations. That is, such items as pumps, generators, check valves, and other mechanical equipment which is not a component of the ENS/SFMS.

- B. Section II, General Scope of Services, under the heading of REPAIR/MAINTAIN/REPLACE, Item No. 29, page 13, reads *"The Consultant shall be responsible for all preventative and restorative services, site inspections, repair, configuration and installation of any component."* Excluded from Item No. 29 is the preventative and restorative services of mechanical equipment in the pump stations. That is, such items as pumps, generators, check valves, and other mechanical equipment which is not a component of the ENS/SFMS.
- C. Section II, General Scope of Services, under the heading of ENHANCEMENTS, Item No. 56, page 17, reads *"Consultant shall install new equipment and all related connections, tags, alarms, etc., as per City staff's direction."* Excluded from Item No. 56 is the purchase and installation of mechanical equipment in the pump stations. That is, such items as pumps, generators, check valves, and other mechanical equipment which is not a component of the ENS/SFMS. However, Consultant shall be responsible for incorporating such equipment into the ENS/SFMS system through sensors, digital/analog I/O, flow measuring devices, and others, as indicated in the RFP.

2. **REMOVAL FROM RFP**

Section II, General Scope of Services, under the heading of ENHANCEMENTS, Item No. 67, page 18, reads *"Install HVAC equipment in the ENS/SFMS server room to maintain appropriate temperature throughout the year. Make the necessary modification to the existing HVAC system, create vent access, etc., as approved by the City Engineer upon presentation of a plan by Consultant."* Though this Addendum, Item No. 67 is hereby removed from the RFP.

3. **CHANGE TO RFP**

Section IV, Method of Selection, Item H, page 32, reads *"Consultant or parent company shall be a VAR for Motorola with minimum of 15 years experience."* Though this Addendum, Item H is changed to include the following underlined text and shall read as follows: *"Consultant, ~~or~~ parent company, or subcontractor to Consultant, shall be a VAR for Motorola with minimum of ~~15~~ 10 years experience."*

4. **ADDITION TO RFP**

Through this Addendum, a new item shall be added to the RFP. The new item shall be included in Section II, General Scope of Services, under the new heading of ALTERNATE COMMUNICATION SYSTEM, Item No. 80, and is as follows:
"Consultant may, at its option, provide a detailed and itemized alternate bid for a communication system, other than Motorola, to serve as the principal wide area communication system for the ENS/SFMS. Consultant shall document its competency in the installation, setup, configuration, and maintenance of such alternate communication system, by submitting proof of 10 years experience in such technology, VAR relationship with the manufacturer of the technology, and document the availability of such competent staff with the parent company, Consultant's company, or subcontractor."



Charles D. Herbertson
Public Works Director and City Engineer

Receipt Acknowledged:

02/17/2009

(date)

Bidder's Signature:



Bidder's Name:

MARK SERRES

(print)

Bidder's Title:

VICE PRESIDENT

(print)

Bidder's Company Name:

UTILITY SYSTEMS, SCIENCE & SOFTWARE

(print)

Bidder's Address:

2101 E. 4th. STREET SUITE 130A

(print)

SANTA ANA, CA 92705



CORPORATE QUOTE

Date: February 19, 2009

Terra Keller
Business Sales Agent
Phone 800-342-3212 Ext 6869
Terra_keller@attmobility.suth.com

*QUOTE SUBJECT TO CHANGE AND IS BASED ON A
2YR BUSINESS CONTRACT*

TO Mark Serres
US3
Mark.serres@uscubed.com

Account # TBD

Billing Foundation Account # TBD

Sponsorship Foundation Account # TBD

QTY	ITEM #	MONTHLY SERVICES	UNIT PRICE	DISCOUNT**	LINE TOTAL
1		AT&T Shared Business Solution 10,000 Minute Plan Capped at 20 users	\$535	8%	\$492.20
10		Additional lines to AT&T Shared Business Solution 10,000 Minute Plans	\$9.99	n/a	\$99.90
11		iPhone Unlimited Data (Email and Internet for phones)	\$30	8%	\$303.60
11		Business Shared Unlimited Text Messaging \$25 for 1 st line \$6 each for every other line	\$25 for 1 st line \$6 each for every other line	n/a	\$85

Section 7
WARRANTY

7.0 WARRANTY

7.1 Hardware Warranty

US3 guarantees to Culver to repair, free of charge for materials and labor for any part of the equipment supplied under the contract that becomes defective because of faulty design, materials or workmanship. This warranty applies for one (1) year from the date of Culver's written acceptance of the system following the site acceptance test or eighteen months from time of shipment, whichever is less.

7.2 Software Warranty

US3 guarantees that the software to be supplied will be free from errors. For the purpose of this warranty, software error is understood to be a program's failure to perform a function as designated in this Sequence of Operation and errors by US3. If an error does occur in the software, then US3 shall at it's option and expense:

1. Dispatch software staff to the facility to identify and correct erroneous programs.
2. Make instructions available for modifying any erroneous programs.
3. Generate necessary Culver programs at US3's facility for dispatch to Culver's facility.

This warranty shall apply for one (1) year after the date of Culver's written acceptance (if applicable) of the system at Culver's facility. Acceptance not to exceed (30) days after completion of start-up.

7.3 Design Warranty

US3 guarantees to Culver that modifications supplied will be free from hardware (supplied by US3) and software design errors. If a design error occurs, recognizable by the repeated failure of a single component or program, then US3 shall correct the defective unit per the hardware or software warranty described above.

7.4 Limits of Liability

US3 will not accept liability for consequential damages.

Section 8
EXCEPTIONS

8.0 EXCEPTIONS

US3 should be considered fully compliant to the defined Solicitation.

In addition, US3 is taking no exceptions.

CLARIFICATIONS

- 1) We will require the use of various Culver resources from time to time. These requirements will be requested through the US3/Culver Project Manager. Resource needs will consist of, but will not be limited to, information concerning the process specific parameters, system operation, and process requirements.
- 2) Travel costs have been included.
- 3) US3 engineering services have a one year warranty.
- 4) US3 will not be responsible for Acts of God or Vandalism. However, engineering services and technician services have been included per the specification on a not-to-exceed basis.
- 5) Instrumentation or equipment not part of the ENS or SFMS such as a Variable Frequency Drives (VFD), MCCs or Polysonics materials have not been included. They are currently unknown or have not been defined. However, engineering services and technician services to trouble-shoot the issues have been included.
- 6) The Motorola MOSCAD system will not be replaced as identified in the RFP. This is due to the fact that this system is only 5 years old and should last on the order of 15 years.

US3 has included however radio replacement parts as part of this contract. Further, US3 has most (if not all) replacement parts in the US3 stores. US3 will be providing two spare Motorola Kits should there be an unforeseen emergency. Engineering services have been identified and included. Thus, although US3 will not be replacing the system, the necessary and sufficient precautions have been taken to meet the intent of the Bid.

US3 will require two cubicles located in Culver City Engineering.

US3 will require one parking place located at any of the pump stations or defined area by Culver for a trailer that will house the spare parts and associated tools to meet the intent of the Bid.

APPENDIX 1

TERMS & CONDITIONS

CLASSIFICATION

HOURLY BILLING RATE

ENGINEERING & DESIGN

Associate Engineer I	72.00
Associate Engineer II	76.00
Engineer I	85.00
Engineer II	92.00
Engineer III	98.00
Senior Engineer	125.00
Project Engineer	145.00
Sr. Project Engineer	145.00

PROJECT CONTROL

Clerical (field)	85.00
Clerical (office)	65.00
Scheduler	85.00
Senior Scheduler	85.00
Project Manager	145.00

Insurance: US3 maintains a comprehensive insurance program. The following levels of insurance are maintained:

- Workers' Compensation coverage according to Individual State Statutory laws.
- Comprehensive General Liability coverage in the amount of \$1,000,000 including Employer's Non-ownership Contingent Liability coverage.

US3 will furnish Certificate of Insurance upon request.

Invoicing & Payment Terms:

Payment Terms are NET thirty (30) days.

Note: US3 is offering a **5% discount** on timely early payment of submitted invoices. Invoices paid within 16 days of submission to Culver will receive a 5% discount on the hourly billing rate for that specific invoice. Invoices paid 17-45 days will be as invoiced. Invoices paid after 46 days will be subject to a 5% finance charge on the overall invoice.

Lump Sum Or Fixed Price Contracts: US3 will invoice all contract and change orders based on an agreed upon percent complete of a predetermined contract

price breakdown on a monthly basis. The predetermined price breakdown categories would include, but not be limited to: project mobilization or initialization (35%); design; engineering; material received and stored on-site or off-site at US3 but not yet installed; documentation, training and startup.

Retention is limited to 10% of the total contract price.

Rate Adjustment: US3 Standard Rates are revised on December 31 of each calendar year to reflect any increase in legislated or commercial rates for employee burdens, benefits or business general and administrative costs.

Warranty: US3 warrants equipment and materials to be free from defects in material and workmanship (if installed by US3) for one year from installation or completion of our work.

Limits of Liability: US3 does not assume liability for consequential damages.

US3 does not provide Bid, Payment or Performance Bonds of any type.

Holidays: The following holidays are normally observed by US3:

New Year's Day	President's Day
Memorial Day	Independence Day
Labor Day	Thanksgiving Day
Day after Thanksgiving	Christmas Day

US3 personnel on field assignments will observe holidays consistent with the Owner's policy.

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NEGOTIATED PROPOSAL WITH US3, ANNUAL SUMMARY
(SEE ORIGINAL US3 PROPOSAL, SECTION 6 FOR COMPLETE TASK DESCRIPTIONS, ONLY)

NO.	CATEGORY	BRIEF DESCRIPTION	AMOUNT	NO.
1	COMPUTER SERVER	COMPUTER SYSTEM MAINTENANCE AND SUPPORT	\$ 12,000	1
2	COMPUTER SERVER	REVIEW OF EVENT LOGS	\$ 4,875	2
3	COMPUTER SERVER	REVIEW ANTIVIRUS LOG	\$ 1,000	3
4	COMPUTER SERVER	PERFORM SOFTWARE UPDATES	\$ 1,625	4
5	COMPUTER SERVER	DAILY REVIEW OF BACKUP LOGS	\$ 2,750	5
6	COMPUTER SERVER	DISASTER DATA RECOVERY--BACKUP RESTORATION TESTING	\$ 2,125	6
7	COMPUTER SERVER	PERFORM COMPUTER HARDWARE UPDATES	\$ 6,500	7
8	VTs	LOGS - ALARM PROBLEMS	\$ 4,000	8
9	VTs	INSPECT PERIPHERALS AND RELATED LOGS	\$ 1,625	9
10	VTs	SCADA COMPONENTS AND SOFTWARE	\$ 1,625	10
11	COMMUNICATION	REVIEW RADIO NETWORK FOR PERFORMANCE ISSUES	\$ 1,740	11
12	ENS	INSPECTION OF FIELD ENS EQUIPMENT	\$ 1,740	12
13	EE	INSPECTION OF ELECTRICAL AND ENGINEERING COMPONENTS	\$ 1,740	13
14	VTs	DAILY QA/QC TESTING SCADA SYSTEM--ALARM DELIVERY	\$ 1,500	14
15	ENS/SFMS	ENGINEERING, INTEGRATION SERVICES, RECOMMENDATIONS	\$ 25,000	15
16	VTs	SCADA SUPPORT/DEVELOPMENT/CONFIGURATION	\$ 13,920	16
17	SFMS	REPLACEMENT OF 4 METERS, SENSORS + WARRANTIES	\$ -	17
18	COMMUNICATION	ENS/SFMS REPLACEMENT OF FIU/RTU AND COMPONENTS	\$ -	18
19	ENS/SFMS	INSPECTION AND COMPARISON W/SCHEMATICS	\$ -	19
20	ENS/SFMS	INSPECTION--SOFTWARE/HARDWARE + COMMUNICATION	\$ 12,000	20
21	DATA	DAILY DATA QA/QC 1HR/DAY X 5 DAYS X 52 WKS = 260 HRS/YR	\$ 32,500	21
22	24/7 SUPPORT	ENS/SFMS MOSCAD ON-SITE SUPPORT	\$ 11,600	22
23	COMMUNICATION	SCADA SYSTEM -- ALARM DELIVERY	\$ 17,400	23
24	DATA	MANUAL RETRIEVAL AND INCORPORATION IN DB	\$ 12,000	24
25	REPORTING	AUTOMATION, MODIFICATION, NEW REPORTS, CITY OF LA	\$ -	25
26	DATA	REPORTING ACCURATE & TIMELY DATA	\$ -	26
27	NEW BRADDOCK	INSTALL AND CONFIGURE ENS/SFMS	\$ -	27
28	SCHEMATICS	MODIFY SCHEMATICS	\$ -	28
29	TRAINING	FIRST RESPONDERS	\$ 1,160	29
30	TRAINING	ADMINISTRATOR--VTs	\$ 8,700	30
31	TRAINING	ADMINISTRATOR--MOTOROLA	\$ 8,700	31
32	TRAINING	ADMINISTRATOR--SQL AND SCRIPTING	\$ 8,700	32
33	SFMS	ALARMING 11 MONITORING SITES	\$ 15,000	33
34	SFMS	MODIFY ENS/SFMS CENTRAL TO INCORPORATE 11 SITES	\$ 5,800	34
35	MAINTENANCE	GENERAL SYSTEM WIDE MAINTENANCE	\$ 60,000	35
36	DOCUMENTATION	AS-BUILTS AND OPERATIONS MANUAL	\$ -	36
			\$ 277,325	



SHIP TO **Culver City**
Gabe Garcia
9770 Culver Blvd
Culver City, CA

TOTAL \$6,250.00

Mar 2009 3/3/09

Authorized by _____ Date _____