TO: **James L. App, City Manager**

FROM: **Dennis J. Cassidy, Chief of Police**

SUBJECT: **E911 Phone System Replacement**

DATE: **December 19, 2006**

NEEDS: For the City Council to consider authorizing replacement of the Police Department's E911 phone system, to be entirely funded the State of California

FACTS:

1. The E911 telephone system in the Police Department's Public Safety Answering Point (PSAP) was last replaced in 1998.

2. The industry standard, and the expectation by the State, for replacement of this equipment is every six years.

3. Replacement of the E911 telephone system is paid for by the State of California Department of General Services (DGS) through a special fund that receives annual deposits for the City of Paso Robles.

4. DGS has advised the Police Department that the accumulated replacement allotment in our E911 telephone system fund is $142,036.

5. The Police Department has researched a variety of E911 systems available and authorized by the State of California under this PSAP program and has selected the Plant Vesta Pallas.

6. State contracts for the Plant Vesta Pallas have been established and awarded to a variety of vendors by the Department of General Services.

7. Motorola is a State approved vendor for the Vesta Pallas, and a current contract for this system is on file.

8. Motorola has quoted purchase, installation and 5 years of maintenance for the Vesta Pallas at $134,600, well within the City of Paso Robles allotment.

9. Department of General Services will pay for the purchase of the new system directly to Motorola.

10. The City's Information Technology Manager has reviewed this project and agrees with the Police Department's findings and recommendations in this matter.

ANALYSIS & CONCLUSION: The Police Department is eligible for a new E911 system, funded by the State of California's E911 Public Safety Answering Point program. Extensive research has been conducted in the way of vendor demonstrations and site visits to determine the best replacement system available. The Vesta Pallas is the best solution for replacement. This decision was driven by the fact that the Vesta Pallas is a good, solid system; it has the most effective graphic interface for users, and it is capable of being integrated on one workstation with a radio console, as is the set-up of the current system.

Motorola is the vendor for all equipment currently in the dispatch center (with the exception of some software). The integrated solutions Motorola has provided have been reliable and well serviced. Although Motorola is more expensive than other authorized vendors of the Vesta Pallas, they are the only vendor who will guarantee integration of the E911 system with the current Motorola radio console on a single workstation and monitor. This factor, along with the State contract award to Motorola as an authorized provider of the Vesta Pallas, has driven the decision for this selection.

City Information Technology staff has been heavily involved with the Police Department team in the research and selection process of this system and have given their approval for purchase.

POLICY REFERENCE: City purchasing policy.

FISCAL IMPACT: None. Purchase of the Plant Vesta Pallas E911 telephone system will be completely and directly funded by the State of California Department of General Services.

OPTIONS:

a. Adopt Resolution No. 06-xx authorizing the Chief of Police to execute a contract with Motorola, Inc. to purchase the Plant VESTA Pallas E911 phone system, to be completely and directly funded by the State of California Department of General Services.

b. Amend, modify, or reject the above option.

November 27, 2006

Captain Lisa Solomon
Paso Robles Police Department
900 Park Street
Paso Robles, CA 93446

RE: Motorola Plant E911 Vesta Pallas System

Dear Captain Solomon:

Motorola, Inc is pleased to present the enclosed proposal to provide the City of Paso Robles with quality communications equipment and services. The Motorola project team has taken great care to propose a solution that will meet the needs of the City and provide unsurpassed value.

The proposal consists of this cover letter and the enclosed documents including the Statement of Work ("SOW") and its Exhibits. The proposal is subject to and will be controlled by the terms and conditions of the master 9-1-1 Telephone System Contract Number 54159 between Motorola and the State of California. The proposal shall be valid for a period of 30 days from the date of this letter, at which time it will terminate automatically unless it has already been accepted by the City. The City may accept the proposal by delivering a purchase order to Motorola referencing this proposal and Contract Number 54159.

The proposal includes a one year warranty from acceptance and a 4 year maintenance agreement. Upon mutual agreement of the parties within 60 days of the termination date, the maintenance agreement may be extended for an additional one year term at a cost of $16,100 per year. The option to renew shall be limited to 2 additional one year periods.

The City may direct any questions to Rodney Hughes, your Motorola Account Executive at (805)-390-7782.

Motorola appreciates your interest in Motorola and our quality products and services. We look forward to continuing our relationship and implementing this important project with the City.

Sincerely,

MOTOROLA, INC.

John Quiroz
MSSI Vice President and Director

Customer to supply workstation monitors		MOTOROLA		10/4/06	Paso Robles, CA PSAP - 2 position VESTA Pallas Cost Table			rev 6		Quote expires 12/20/06		DGS MSA 54159 Pricing	
Main Category	Discount Category	Item	Description	Ports per Card	Part#	Unit Price	Extended DNUP Equip	Install Price	Install Extended	Monthly Maint Years 2-5	Extended Maint	Quantity	TOTAL FIVE-YEAR COST
ENHANCED 9-1-1 CONTROLLER AND ASSOCIATED BACKROOM EQUIPMENT	Telephone sets	471	TELEPHONE 16-BUTTON	na	862306-00201	$242.76	$ 728.28	$ 21.85	$ 65.55	$ 168.96	$ 506.88	3	$ 1,300.71
	PBX & Key System	533	BASE UNIT LAN/LAN	na	862309-00101	$6,048.00	$ 6,048.00	$ 544.32	$ 544.32	$ 4,209.41	$ 4,209.41	1	$ 10,801.73
	Add-ons, etc.	466	CARD COMBO 4/16	4/16	862311-00101	$1,196.16	$ 2,392.32	$ 107.65	$ 215.31	$ 832.53	$ 1,665.05	2	$ 4,272.68
	Telephone sets	471	TELEPHONE 16-BUTTON	na	862306-00201	$242.76	$ 485.52	$ 21.85	$ 43.70	$ 168.96	$ 337.92	2	$ 867.14
	Software	497	LAN CTE, 1 SEAT	na	872399-00101	$134.40	$ 268.80	$ 12.10	$ 24.19	$ 93.54	$ 187.08	2	$ 480.08
	Labor	1708	PALLAS STAGING PER POS	na	809800-80400	$1,680.00	$ 3,360.00	$ -	$ -	$ -	$ -	2	$ 3,360.00
	Labor	1709	PALLAS CFG	na	809800-80401	$4,410.00	$ 4,410.00	$ -	$ -	$ -	$ -	1	$ 4,410.00
	Controllers	2038	MTU BASE UNIT	na	852204-00101	$8,820.00	$ 8,820.00	$ 793.80	$ 793.80	$ 6,138.72	$ 6,138.72	1	$ 15,752.52
	Controllers	2043	ACTIVE CAMA MODULE	1	852210-00401	$1,680.00	$ 3,360.00	$ 151.20	$ 302.40	$ 1,169.28	$ 2,338.56	2	$ 6,000.96
	Software	2282	MTU FIRMWARE	na	872299-00101	$1,260.00	$ 1,260.00	$ 113.40	$ 113.40	$ 876.96	$ 876.96	1	$ 2,250.36
	Labor	1722	SPT THRU YR 1 MTU FW	na	809800-90304	$226.80	$ 226.80	$ -	$ -	$ -	$ -	1	$ 226.80
	Servers	292	SVR, MINI	na	62001-00010	$1,943.76	$ 1,943.76	$ 174.94	$ 174.94	$ 1,352.86	$ 1,352.86	1	$ 3,471.56
	Add-ons, etc.	945	80GB SATA DRV/CARRIER KIT	na	04000-00061	$278.88	$ 278.88	$ 25.10	$ 25.10	$ 194.10	$ 194.10	1	$ 498.08
	Monitors		MNTR, 15IN FP BLK		63002-152802	$362.04	$ 362.04	$ 32.58	$ 32.58	$ 251.98	$ 251.98	1	$ 646.50
	Software		SVR WIN 2003 + 5CAL		04000-00355	$1,130.64	$ 1,130.64	$ 101.76	$ 101.76	$ 786.93	$ 786.93	1	$ 2,019.32
	Software	2083	V ALI INTFC MOD		870809-00201	$3,150.00	$ 3,150.00	$ 283.50	$ 283.50	$ 2,192.40	$ 2,192.40	1	$ 5,625.90
	Software	2082	V CAD INTFC MOD		870809-00101	$3,150.00	$ 3,150.00	$ 283.50	$ 283.50	$ 2,192.40	$ 2,192.40	1	$ 5,625.90
	Labor	1587	SYS SVR CFG		809800-70001	$1,470.00	$ 1,470.00	$ -	$ -	$ -	$ -	1	$ 1,470.00
	Add ons	117	EQPMT RACK 19 INCH		55053-503	$371.28	$ 371.28	$ 33.42	$ 33.42	$ 258.41	$ 258.41	1	$ 663.11
	Add ons	2541	PRINTER, HP COLOR USB		64040-60016	$242.76	$ 242.76	$ 21.85	$ 21.85	$ 168.96	$ 168.96	1	$ 433.57
	Add ons	49	CBL USB PRINTER 10FT		F3U133-10	$10.92	$ 10.92	$ 0.98	$ 0.98	$ 7.60	$ 7.60	1	$ 19.50
	Add ons	2048	PALLAS PERIPHERAL EQUIP		862314-00101	$3,360.00	$ 3,360.00	$ 302.40	$ 302.40	$ 2,338.56	$ 2,338.56	1	$ 6,000.96
	Add ons		MODEM PACKAGE		850830-02101	$664.44	$ 664.44	$ 59.80	$ 59.80	$ 462.45	$ 462.45	1	$ 1,186.69
INTELLIGENT WORKSTATION AND ASSOCIATED OPERATIONS ROOM EQUIPMENT (Note: Customer to supply workstation monitors)	Personal Computer	291	WKSTN INTGR XP-M	na	61000-0001XM	$ 1,428.00	$ 2,856.00	$ 128.52	$ 257.04	$ 993.89	$ 1,987.78	2	$ 5,100.82
	Add ons	402	4-CHANNEL, PCI SOUND CARD	na	04000-0LX44	$ 604.80	$ 1,209.60	$ 54.43	$ 108.86	$ 420.94	$ 841.88	2	$ 2,160.35
	Software	2165	VP 2.6 SW/DOC/LIC	na	870899-03002.6	$ 9,240.00	$ 9,240.00	$ 831.60	$ 831.60	$ 6,431.04	$ 6,431.04	1	$ 16,502.64
	Software	2168	VP 2.6 LICENSE ONLY	na	870899-03102.6	$ 9,240.00	$ 9,240.00	$ 831.60	$ 831.60	$ 6,431.04	$ 6,431.04	1	$ 16,502.64
	Software	2101	CPR/SYSPREP IMAGING	na	870890-07501	$ 420.00	$ 420.00	$ 37.80	$ 37.80	$ 292.32	$ 292.32	1	$ 750.12
	Labor	1714	SPT THRU YR 1 V/PALLAS	na	809800-90204	$ 1,663.20	$ 3,326.40	$ -	$ -	$ -	$ -	2	$ 3,326.40
	Software	2085	VIRR PHN/RAD MOD	na	870810-00602	$ 1,254.12	$ 2,508.24	$ 112.87	$ 225.74	$ 872.87	$ 1,745.74	2	$ 4,479.72
	Labor	1650	SPT VIRR THRU YR1 PEI	na	809800-80109	$ 225.96	$ 451.92	$ -	$ -	$ -	$ -	2	$ 451.92
	PBX & Key System	1984	AUDIO CONTROL UNIT (ACU)		850808-00702	$ 2,294.04	$ 4,588.08	$ 206.46	$ 412.93	$ 1,596.65	$ 3,193.30	2	$ 8,194.31
	Labor	1711	V WKSTN CFG PEI		809800-90001	$ 987.00	$ 1,974.00	$ -	$ -	$ -	$ -	2	$ 1,974.00
							$ -	$ -	$ -	$ -	$ -		$ -
	Training	2539	Motorola FSO Call Taker Training per student			$ 100.00		$ -	$ -	$ -	$ -	16	$ 1,600.00
	Training	2538	Motorola FSO Administrator Training Rate per student			$ 100.00		$ -	$ -	$ -	$ -	4	$ 400.00
	Labor	2537	Moto Project Management hourly rate			$ 200.00				$ -	$ -	123	$ 24,600.00
							$ 83,308.68		$ 6,128.06		$ 47,390.33		
	Special Discounts		Motorola Special Incentive				$ (6,155.52)						
			Centralink replacement incentive				$ (6,720.00)	$ -	$ -	$ -	$ -		0.00
			2 Position Pallas incentive				$ (19,656.00)	$ -	$ -	$ -	$ -		0.00

Note: does not include CENTRACOM radio console upgrade costs

SUMMARY	
Equipment	$83,308.68
Add'l Discounts	$ (32,531.52)
Subtotal Equipment	$50,777.16
Sales Tax, Equip 7.250%	$3,681.34
Training	$2,000.00
Installation	$ 6,128.06
Project Management	$ 24,600.00
TOTAL CPE Purchase	**$87,186.56**
Maint Years 2-5 (pd in arrears by State)	$ 47,390.33
Total System Cost	$134,576.90

MOTOROLA
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PASO ROBLES POLICE DEPARTMENT E 9-1-1 Statement of Work

1. STATEMENT OF WORK

This document provides the Statement of Work (SOW) document for Paso Robles Police Department's E911 upgrade to PlantCML's VESTA-Pallas system. This document is presented to Paso Robles Police Department for inclusion in their **9-1-1 CPE Direct Funding Process** documentation to the State of California, Department of General Services.

This Statement of Work (SOW) describes the work to be performed for the installation, optimization, and testing of a Vesta Pallas E911 system for Paso Robles Police Department. It delineates responsibilities between Motorola and Paso Robles Police Department as agreed to by contract.

Changes to this document shall be made through a Change Order as described in the Change Order section of this SOW.

1.1.1 Motorola System Responsibilities (General)

Motorola will be responsible for the performance of all equipment provided by Motorola under this contract. Paso Robles Police Department will assume responsibility for the performance of all other equipment necessary for completion of this project not provided by Motorola. Motorola's responsibilities on this project are further defined in the Project Schedule and in the Work Breakdown Structure (WBS), which is part of this SOW. Motorola's general responsibilities include the following:

- Provide a project implementation team to implement the Paso Robles Police Department system as defined in this SOW.
- Schedule the system upgrades and cutover in agreement with Paso Robles Police Department so as to minimize the downtime of the system and the impact to Paso Robles Police Department.
- Administer safety work procedures for construction and installation.

1.1.2 Paso Robles Police Department's System Responsibilities (General)

Paso Robles Police Department's responsibilities for this project are further defined in the Project Schedule and in the WBS, which is part of this SOW.

Paso Robles Police Department's responsibilities include:

- Provide a designated project manager for system implementation.
- Supply primary commercial power, wiring, and cable terminations.
- Supply the site links as required by the system design. Motorola will provide the appropriate link specification to Paso Robles Police Department.
- Provide information, data, records, and documents, and make such decisions in a prompt and timely manner as may be reasonably required

1.1.3 Site Preparation

Motorola will begin work at a site only after mutual agreement, by Paso Robles Police Department and Motorola, that the site is deemed ready. At a minimum, a site should have adequate room in an existing building to accommodate the equipment to be installed, electrical service, and internal distribution in place. In addition, network testing must be satisfactorily completed.

Before, sites are required to meet or exceed the requirements as defined in the Motorola document "Fixed Network Equipment Installations" (R56 Standard).

The following is a list of the specific site ready requirements for this project.

1.1.3.1 Single Point Grounding

Requirement - The single point ground system is comprised of both internal and external components, which are bonded together, along with all other grounds at the site, to form the overall site grounding system.

Internal – Paso Robles Police Department shall provide a single point ground system to be used on all fixed equipment supplied under this contract. The ground system must include an internal master ground point, and sub-system ground points when applicable, located within (3) feet of the Motorola supplied equipment.

External – Paso Robles Police Department shall provide an external grounding electrode system that is designed and installed in accordance to the document "Standards and Guidelines for Communications Sites - R56." The grounding electrode

system shall have a design goal of 5 ohms or less and shall be met whenever possible. The grounding electrode system shall include an interconnection to all other grounding electrode systems and utility grounds at the site.

System Impact –Failure to meet this requirement could result in reduced equipment reliability, increased maintenance costs and degradation of system effectiveness.

Requirement -Transient voltage surge suppression for telephone circuits, AC power, radio frequency (RF) cabling, and all other applicable external connections and utilities are required to meet or exceed the Motorola document "Standards and Guidelines for Communications Sites - R56".

System Impact –Failure to meet this requirement could result in reduced equipment reliability, increased maintenance costs and degradation of system effectiveness.

1.1.3.2 Electrical

Requirement – Sites must have electrical service and electrical wiring that meets all applicable city, county, state, and National Electrical Codes (NEC) requirements.

1.1.3.3 Equipment Space

Requirement – Sites must have sufficient floor and desk space for the Motorola supplied equipment as identified in the approved equipment installation location document.

1.1.3.4 Environmental Conditions

Requirement – Sites must have adequate environmental controls to meet the heating, ventilation, cooling, and humidity requirements for all equipment that will be installed at the site. This includes heating, ventilation, cooling, and humidity requirements. The sites must be free of hazardous materials such as fuels, asbestos, etc. Contact Motorola to obtain specific equipment specifications required for building environmental control sizing and design. . The temperature range is from 32° to 104° F. The system is convection cooled minimizing the requirement for additional air conditioning system support.

System Impact –Failure to meet this requirement could result in reduced equipment reliability, increased maintenance costs and degradation of system effectiveness.

1.1.3.5 Earthquake Bracing

Requirement – Paso Robles Police Department shall supply, as required, building modifications to accommodate earthquake bracing to meet all applicable city, county, state or national requirements. If Paso Robles Police Department elects to perform some or all of the physical installation of the fixed equipment (as defined in the contract), earthquake bracing must be installed before Motorola resources can optimize the equipment.

1.1.3.6 Site Access

Requirement – Paso Robles Police Department shall provide site access for scheduled site walks, installation, optimization, system troubleshooting and completion of ATP. Paso Robles Police Department shall use its best efforts to provide site access including transportation to sites that are not accessible by regular four-wheel drive vehicles. Paso Robles Police Department shall be responsible for coordinating and scheduling with the Motorola Project Manager access to sites not directly controlled by Paso Robles Police Department.

1.1.4 System Implementation

Implementation of the project will proceed according to the mutually agreed Project Schedule and WBS. The WBS and schedule define the project inter-dependencies of the tasks, as well as reflecting who the responsible party for each task is. A detailed WBS is part of this SOW.

1.1.5 Installation and Optimization of Fixed Equipment

1.1.5.1 Perform Installation of Motorola Supplied Equipment

Motorola will install the equipment as defined by the Equipment List and WBS.

1.1.5.2 Perform On-Site Optimization and Test of Motorola Supplied Equipment

Motorola will verify correct operation of all Motorola supplied equipment as the equipment is installed. After Motorola verifies that the equipment has been correctly installed, Motorola's System Technologist will optimize the entire system. Further, Motorola will verify and reset as necessary, all audio and data levels between Motorola supplied equipment and the inter-site transmission network demarcation points.

1.1.6 Acceptance Test Procedures

After 240 hours of consecutive operation and the successful completion of the detailed testing procedure by Motorola and the Customer, this system is agreed to be certified ready for acceptance.

1.1.7 System Documentation

Motorola provides documentation of the system configurations, physical installation, and system testing. Documentation is created and updated during the project.

1.1.7.1 Design Documentation

Motorola will create or update the following documents during the design phase:

- Block and level diagrams for system and sites
- Programming parameters
- Call Taker area layout
- Equipment room layout

Layout to be determined with Paso Robles Police Department

Figure 1: Call Taker Area Layout.

Layout to be determined with Paso Robles Police Department

Figure 2: Equipment Room Layout.

1.1.7.2 System Manual - "As-Built" Documentation

Motorola will supply "as-built" documentation for the system. The documentation will consist of:

- System drawings
- Programming and level setting data sheets
- Field ATP test sheets and results
- R56 site audit
- Warranty information
- Service Provider

1.1.7.3 Equipment Manuals

Motorola will provide equipment manuals covering both standard and optional features. The content of these manuals is standardized and may not be specific to Paso Robles Police Department.

Some equipment manuals are only available in print. Some equipment manuals are available electronically. Motorola will provide the manual in the format that is standard for that product. No hard copies of the electronic manuals will be delivered under this contract.

1.1.8 Training

Motorola will provide End-User and Administrator training to Paso Robles Police Department personnel. Two, four hour End-User training sessions will be provided for up to six students per session (2 per workstation). One session will be provided for system administrators.

1.1.9 System Acceptance Specification - California Master Agreement DGS-MSA-54159

System Acceptance shall be controlled by the State of California Master Agreement DGS-MSA-54159. Please reference the Acceptance Test Plan section of this proposal.

Each task requiring Acceptance Test procedures to be executed requires both Paso Robles Police Department and Motorola representatives to witness and approve the test.

1.1.10 Project Schedule

Motorola has included a project schedule as a part of this proposal. Implementation of the system will proceed in accordance with a project schedule that is jointly approved by the Motorola project team and Paso Robles Police Department project team. The project schedule will be updated periodically to ensure all parties are apprised of the latest project status.

The project schedule is based upon work being accomplished Monday through Friday during normal business hours.

The overall schedule will depend on the Contract Award date.

Installation Schedule:

Total Time: 21 weeks

3 weeks for initial processing time

8 weeks for order processing

2 weeks for shipping

3 weeks for temporary dispatch setup, cutover and move-in (Motorola)

1 week for training

1 week for improvements, as needed, to the building ground and electrical systems to accommodate the new equipment and comply with all State and local safety codes (Motorola)

1 week for moving and cutback into dispatch room (Motorola)

10 days for Acceptance Test Planning

1.1.11 Change Order Procedure

The State of California Master Agreement DGS-MSA-54159 will control changes to the contract. The following Change Order Request form must be used for all change order requests.

1.1.12 Change Order Request Form

Change Order Request No. _____

Requester:_____ Title_____

Phone No._____ Department _____

Description of Request:_____

Equipment Required: _____
_____

SOW Modification_____
_____
_____

Time Line Modification:_____
_____
_____

Additional Services Required:_____
_____
_____

Justification:_____
_____

Budgetary Dollar Value:

Equipment:_____Services:_____Total:_____

Payment Terms:_____

Other Terms:_____

Unless amended above, all other terms and conditions of the Agreement shall remain in full force and effect.

Approved:

CUSTOMER NAME Project Manager_____ Date _____

Motorola Project Manager _____ Date _____

Motorola Engineer _____ Date _____

Motorola Account Manager _____ Date _____

Motorola Division Controller_____ Date _____

1.1.13 Work Breakdown Structure

The following WBS summarizes the project activities by phase. Each WBS task contains the following information:

- WBS number
- Action item to be performed
- Deliverable
- Who is accountable for the action item
- Who has approval authority over that action item

Table 1: Summary of project activities by phase

	WBS Title	Action	Deliverable	Accountable	Approval
1.	**Contract**	**The project schedule starts at Contract Award.**	**Start of Project**		
1.1	Project Kick Off	A project kickoff meeting will be held to formally begin the implementation of the project, introduce project teams, and review the project.	Meeting with Paso Robles Police Department	Paso Robles Police Department and Motorola	N/A
1.2	Civil Review (Site Review)	During this phase of the project, as planning and inspections related to equipment locations will executed.	Civil Review	Paso Robles Police Department and Motorola	As defined below
1.2.1	Site Access	Paso Robles Police Department will assure site access to inspect equipment installation sites, finalize equipment locations and determine if any course of action is necessary to handle installation constraints. Paso Robles Police Department will provide existing site and system drawings as available.	Site Access and Information	Paso Robles Police Department	Motorola
1.2.2	R56 Site Audit R56 Site Audit report	Motorola will perform a R56 site audit to verify site readiness. Motorola will prepare a report that includes recommendations any site preparation required to provide a suitable environment for installation of this PlantCML 911 system equipment. This report will become part of the final system documentation.	R56 Site Audit Site Walk Reports	Motorola Motorola	N/A N/A
1.2.3	Site preparation	Paso Robles Police Department will prepare the sites for this PlantCML 911 system for implementation based on the recommendations in the Site Walk Reports.	Sites ready for PlantCML 911 system implementation	Paso Robles Police Depatment	Motorola

	WBS Title	Action	Deliverable	Accountable	Approval
2.	**Manufacturing**	**During this phase of the PlantCML 911 system implementation, all equipment is manufactured, staged, and shipped**	**Manufactured, staged, and shipped equipment**	**Paso Robles Police Department and Motorola**	**As defined below**
2.1	Motorola Manufacturing	During this phase, equipment is manufactured.	Manufactured Equipment	Motorola	N/A
2.1.1	Manufacture FNE	Motorola will manufacture the Fixed Network Equipment (FNE).	Manufactured FNE	Motorola	N/A
2.1.2	Ship Equipment Materials Management	Motorola will ship the equipment to Paso Robles Police Department's designated location. Motorola will manage the receiving and tracking of all project equipment. Paso Robles Police Department will designate and provide a central location to ship equipment.	Ship Equipment	Motorola	N/A
3.	Equipment Configuration	Equipment programming and configurations will be determined as defined below.	Equipment Configurations and Programming (Fleet mapping)	Paso Robles Police Department and Motorola	As defined below
3.1.1	Review Operational Rqmts with Paso Robles Police Department Train Paso Robles Police Department on system features	Paso Robles Police Department and Motorola will review Paso Robles Police Department's operational requirements and the impact of those requirements to various equipment configurations. Motorola will provide technical information to Paso Robles Police Department to aid in determining equipment configurations and programming requirements.	Review of Operational Requirements Technical Configuration Input	Paso Robles Police Department and Motorola Motorola	N/A N/A

	WBS Title	Action	Deliverable	Accountable	Approval
	Define Paso Robles Police Department requirements	Paso Robles Police Department will finalize the equipment configurations requirements	Equipment Configurations Requirements	Paso Robles Police Department	Motorola
3.1.2	Develop Templates [E911]	Motorola will develop templates for the following E911 system components: E911 Workstations	Develop Templates	Motorola	Paso Robles Police Department
4.	**Installation**	**During this phase of the project, all prime site components are physically installed. As a part of the physical installation, Motorola will perform the activities described below.**	**Installed Equipment**	**Paso Robles Police Department and Motorola**	**As defined below**
	Grounding and bonding	Motorola will ground and bond the Prime Site equipment to the ground system, in accordance with the R56 site installation standards.	Grounding and bonding	Motorola	N/A
	Clean-up	Motorola will remove and dispose of any debris that is a result of the project activities from the site.	Site Clean Up	Motorola	N/A
	Documentation	Motorola will create “As Built” documentation of the prime site installation for inclusion in the final project documentation,	Documentation	Motorola	N/A
4.1.1	Install Furniture	Motorola will install console furniture as defined by the Equipment List, System Description, and System Drawings. [AS REQUIRED]	Install Furniture	N/A	N/A

	WBS Title	Action	Deliverable	Accountable	Approval
4.1.2		Paso Robles Police Department will complete the following 911 configuration tasks: Build speed call lists Provide a dedicated phone line for Mission Control Transmit ALI records containing X/Y coordinates, if applicable Document and supply configuration information on the existing CPE Transmit a single, valid ALI format (TELEPHONE COMPANY) Install, configure, make operable, and test all telephony components, including but not limited to: trunk interface with Central Office, demarks, lines and ring downs, translations, ALI formats and terminal equipment, and optional features (Music on Hold, Caller ID).		Paso Robles Police Department	
4.1.3	Install 911 Equipment	Motorola will install the control equipment for the E911 system, including: ϖ Vesta Server ϖ LAN ϖ Hub and patch panel ϖ Vesta Workstations, Monitors, and peripherals ϖ ACU interfaces [AS REQUIRED] ϖ RIS boxes and headsets [AS REQUIRED]	Installation of E911 Control Equipment	Motorola	Paso Robles Police Department
5.	Program / Optimize	Motorola will configure, optimize, and program all system prime site equipment. Motorola will prepare the equipment for final ATP testing.	Optimize Vesta Pallas 911 system	Motorola	N/A

	WBS Title	Action	Deliverable	Accountable	Approval
5.1.1	Schedule training	Motorola will schedule the training classes defined in the training plan with Paso Robles Police Department personnel and the training provider.	Schedule Training	Paso Robles Police Department and Motorola	N/A
	Training facility	Paso Robles Police Department will provide the facility for all scheduled training classes.	Training Facility	Paso Robles Police Department	N/A
	Provide system and subscriber equipment for training	Paso Robles Police Department will provide access to the PlantCML 911 system equipment required for training, as defined in the Training Plan.	Vesta Pallas 911 system Training Equipment	Paso Robles Police Department	N/A
5.1.2	911 Acceptance	Paso Robles Police Department will acknowledge successful completion of the 911 system by signing the acceptance document. **During this phase of the project, the system is tested, during the 240 hours of operation, and documented as defined in the Acceptance Test Plan.**	911 Acceptance	Paso Robles Police Department	Motorola
5.1.3	Punch list Resolution	Motorola will resolve punch list documented at System Acceptance	Documentation and Resolution of Punch list Items	Motorola	Paso Robles Police Department
5.1.4	SATP Acceptance	Upon successful execution of the Acceptance Test Plan, Paso Robles Police Department will acknowledge System Acceptance by signing the System Acceptance Certificate. Acceptance will occur on a site by site and system by system basis	System Acceptance Acknowledgement	Paso Robles Police Department	Motorola
5.1.5	Perform training	Upon approval of System Acceptance, Motorola will provide training to designated personnel in accordance with the Training Plan.	Delivery of Training	Motorola	N/A

	WBS Title	Action	Deliverable	Accountable	Approval
6.	**Finalize**	**The Finalization phase of each project consists of ensuring that all criteria for Final Acceptance have been met.**	**Final PlantCML 911 system Acceptance**	Paso Robles Police Department and Motorola	**As defined below**
6.1	Cut-Over	The cutover plan will be executed as described below.	Cutover to use of new PlantCML 911 system	Paso Robles Police Department and Motorola	As defined below
	Planning	Motorola will review the PlantCML 911 system acceptance status, Cutover Plan, and schedule system Cutover with Paso Robles Police Department.	Prepare for System Cutover	Motorola	Paso Robles Police Department
	Paso Robles Police Department Agreement	Paso Robles Police Department will confirm that the cutover plan and cutover planning for execution of the system cutover.	Cutover Agreement	Paso Robles Police Department	N/A
	Perform Cut-over	Motorola will execute Cutover plan.	Cutover to use of PlantCML 911 system	Motorola	N/A
	Equipment removals	Where an existing system is being taken out of service, Motorola will reconfigure new equipment as necessary to delete access to the old equipment. Motorola will remove equipment being taken out of service and locate the equipment in a designated Paso Robles Police Department location.	Decommission Old System	Motorola	N/A
6.2	Contract Items	Motorola will ensure that the criteria for Final Acceptance have been met.	Review Contract Closure Criteria	Paso Robles Police Department and Motorola	N/A
	Service Transition/PTC	Motorola will ensure that the criteria defined to transition the project to service have been completed.	Project Transitioned to Service	Motorola	N/A

	WBS Title	Action	Deliverable	Accountable	Approval
	System Manual	Motorola will provide System Manuals with documentation as defined in the SOW.	Delivery of System Manual	Motorola	N/A
6.2.1	Final Acceptance	Paso Robles Police Department will acknowledge Final System Acceptance upon completion of the criteria for Final System Acceptance for this PlantCML 911 system.	Final Acceptance of PlantCML 911 system	Paso Robles Police Department	Motorola

1.1.14 Contact List:

Project Manager:	John Jackson Motorola – FSO Phone: (408) 593-6035 Email: john.jackson@motorola.com
Installation Technician:	Joe Alba Motorola - FSO Phone: (818) 786-1092 Email: CJA051@motorola.com
Sales Representative:	Rodney Hughes Account Executive Phone: (805) 390-7782 Email: rphughes@motorola.com
Ordering Agency Representative:	Paso Robles Police Department: Captain Lisa Solomon Phone: (805) 227-7520 FAX: (805) 237-4138 Email : lsolomon@prcity.com
State of California: Dept. Of General Services	Sofia Long, 911 Consultant Phone: (916) 657-9180 FAX: (916) 657-9882 Email: sofia.long@dgs.ca.gov

In Paso Robles Police Department, Motorola is interfacing with a customer supplied logging recorder up to the demarcation Main Point of Entry (MPE).

Phone Line Programming:

TBD (see Circuitry table on last page (28) for lines).

Maintenance Response:

The type of maintenance response being provided is Remote/On-site.

Remote Service

Motorola remote assistance and technical support.

Maintenance Service Center

Motorola System Support Center

1-800-323-9949

Technicians:

Primary: Joe Alba

Secondary: Gabriele Weidner

911 System Description

After a meeting with representatives of Paso Robles Police Department, Motorola is providing a PlantCML 9-1-1 system running on a Windows 2003/XP technology. The following are included in this proposal:

a. Monitor Description.

b. Server and Work Station Computer Hardware

c. All associated software to run the PlantCML 9-1-1 system

d. All associated hardware to run the PlantCML 9-1-1 system

The 9-1-1 server will require space in the existing equipment room. Six amps of 120VAC power will be the estimated power consumption. Motorola recommends that the server be installed on a dedicated 15-amp breaker.

The 9-1-1 workstations will require space in the call taker area. Six amps of 120VAC power will be the estimated power consumption. Motorola recommends that the workstations be installed on dedicated 15-amp breakers.

LAN and HUB equipment will be supplied with the VESTA 911 equipment list.

Introduction

The VESTA 911 system is composed of two main components:

VESTA – Computer Telephony Software

PALLAS PBX

Expansion for additional positions can easily be implemented at any point in the future primarily by adding the workstation call-taker position and associated cabling. Adding 9-1-1 trunks will require additional PBX/backroom components (e.g., Active CAMA module); adding 7-digit non-emergency analog lines may require expansion of the PBX (typically adding a circuit board).

VESTA – Computer Telephony Software

The VESTA client software is the heart of the system and provides the functionality to efficiently handle emergency call situations. VESTA is a 32-bit, Windows 2003/XP Client/Server application that streamlines the emergency call-taking process. It is a proven, easy-to-learn, easy-to-use system application that consolidates a variety of equipment into a single, effective solution. It provides call-takers with a single call-processing platform with features that include:

- Modifiable Layout
- Predictive Dialing
- Intuitive TTY
- Pre-recorded greeting
- Alert Intercom
- Multifunctional Volume Control

VESTA also provides functions such as:

- Remote Maintenance
- Priority Answer/Call Sequencer
- Operator Profile Database
- Abandoned Call Processing

Software Overview

The system software is developed using sophisticated software and software development tools. The software emphasis is on reliability, maintainability, and expandability, and provides an environment for the applications of tomorrow without the need for hardware upgrades.

The software design adheres to the same general principles observed in hardware design:

- Modularity
- Distributed Processing
- Reliability and Maintainability
- Flexibility

Modularity

The system software is structured in a modular layered format.

- The base layer is a real-time multi-tasking operating system implementing process control applications requiring non-stop operation.
- The maintenance layer contains the routines that focus on the reliability and maintainability of the system.
- The call-processing layer performs the call setup, feature execution, and call completion functions of the system.
- The database administration layer is the Application Programs layer that allows the user to customize a system to meet specific application needs.

Distributed Processing

Every system interface port card has its own processor enabling many routine functions to be done without burdening the main call processor. Each card and telephone maintains its own software, enabling it to communicate on the communications bus to the processor.

Reliability and Maintainability

The system software architecture provides a level of reliability not found in most of today's communications systems.

- The system software incorporates diagnostic and maintenance routines to isolate potential problems and then reports these errors to a local printer or to a distant service center.
- The system utilizes fault tolerant software that attempts to correct errors encountered in call processing and feature activation so that users are unaffected.
- The system incorporates software routines that isolate system problems and can restart the system software while maintaining calls in progress. This allows the system to clear problems that develop during operation without interrupting normal calling activity.

Flexibility

The software design provides a flexible method for modifying the system configuration and aids the technician or system administrator with easy-to-use troubleshooting tools. Some of the features of this flexible software design enable you to:

- Look at the system error log.
- Add, remove or change system database parameters.
- Take stations and trunks out of service.
- Inventory the system configuration.
- Examine traffic data.
- Identify faulty cards and telephones.

These changes can be done on-site or remotely via a standard modem connected to the RS-232 maintenance port. Most changes can be made on-line while normal call processing is in progress.

ALI Controller Overview

The ALI Controller utilizes PEI ALI Controller/ Software. This design offers a Dispatch solution with a Windows 2003/XP based ALI Platform.

The Motorola VESTA Pallas 911 System Features.

ALI Controller Functions

- Receive RS-232 ANI and call destination information from the ANI Controller.
- Performs Database inquiries using ANI information to display ALI information.
- Format ANI/ALI information windows to CRT displays.
- Interface to the ANI Controller to provide PSAP status information on the screens.
- Interface to external CAD systems.
- Interface to the ANI Controller for feature interaction such as ALI Retry and Manual ALI Retrieval.
- Print Call Record Information.

- Provide the platform for advanced database features such as call taker notes and for a standalone database option.
- The ALI Controller checks the ALI data lines regularly.

ALI Color Display

Each Call Taker screen can be customized for up to nine separate colors and allows individual window sizing providing tremendous flexibility. The feature can be programmed on each position or from the server. Screen Lock Out permits the supervisor/ administrator, with password privileges, to set the screen settings and colors for consistent Call Taker screen management if desired.

The color dispatcher display can be segmented into multiple areas:

- Telephone Company Database ANI/ALI Information and Service Information
- Call Taker Notes
- 911 Line Status with Dynamic Trunk Status
- Quick Keys

Enhanced 911 Product Features

Integration of Telephones and Terminals

The ANI and ALI controllers exchange key information concerning the operation of the PSAP. The ANI Controller informs the ALI Controller which PSAP operator has the call. Therefore, the correct ALI record will be displayed on the correct screen. In addition, if a 911 call is transferred to another operator, the new operator's screen indicates the ALI data of the transferred call.

The integration of the telephone with the ALI Controller allows many features and operations necessary for the PSAP to be easily executed. In most cases, the feature operation is one-button activation on the set by the operator.

Some of these features are described in more detail below.

Access to AT&T Data Management System

The ALI Controller interfaces to the AT&T DMS/ALI system. The inquiry to this system takes place when the ANI information is received from the 911 lines and the ANI Controller. In most cases, the ALI information is available for display to the operator prior to the call being answered. In cases where the

call is answered prior to the address data arriving, the screen will display "waiting for ALI data".

In addition, if the caller abandons the call prior to an operator answering the call, the system will continue the inquiry for the caller's address information. The color screen will mark the call as abandoned with visual and audible alerts that provide the telephone number and address information enabling the operator to return the call.

Real-Time Status of PSAP

On every ALI screen is the real-time status of the most active 911 lines. This screen allows each Call-Taker to see the activity of the PSAP, including calls being handled by other operators. The call the dispatch operator is currently handling is highlighted. If a call is abandoned, the screen displays an abandoned message to alert the operator.

The telephone displays a counter of the unanswered calls waiting in queue. Therefore, if heavy loads of calls arrive at the PSAP, all the operators are alerted to the number of calls waiting to be served.

The status of the 911 call is also indicated on the ALI screen. All operators within the PSAP can see who is on each call. If a call is placed on hold, the call status indicates the call is on hold on all screens within the PSAP. This type of information provides improved performance for the PSAP operators.

Call Taker Notes

Call Taker Notes lets the Call Taker enter and store auxiliary information during 911 calls. Each record can contain up to 1500 characters. For repeat 911 calls, previous notes will be displayed for each associated ANI. Call Taker Notes can be printed locally or remotely with all the 911 ANI/ALI information. Call takers can add to the previous Call Taker Notes, but cannot change the previous notes made for the associated ANI.

ALI Circuit Check

The ALI Controller automatically interrogates each ALI line for responsiveness. If the ALI Controller detects trouble, the ALI status on the screen will indicate a problem. The PSAP operator is alerted and can take appropriate action to correct the problem.

Manual ALI Retrieval

The PSAP operator can manually retrieve ALI records by using the ALI retrieval feature key on the telephone followed by the number dialed on the keypad. This allows operator access to address information in cases where the call is received on regular central office lines (This feature may not be allowed in some areas due to privacy laws or restrictions and can be turned off in States that prohibit this feature).

Retrieve Abandoned Call

When an abandoned call is detected, all the operator screens will beep to provide an audible indication of the abandoned condition. Also, a visual display will keep blinking at every operator screen indicating an Abandoned Call has occurred, and will keep blinking until the Abandoned Call is handled by one of the operators. By activating the Abandoned Call feature, an operator can pull the ANI and ALI data on the abandoned call to the ALI field on their screen. This allows an operator to return the call with all the necessary information. An Abandoned Call counter is part of the summary status line. This counter flashes the total number and the last telephone number of abandoned call(s) needing action in memory.

Privileged Abandoned Call

Privileged Abandoned Call feature allows the supervisor/administrator to manage the access to abandoned calls on a privileged basis.

Recall Previous ALI Screen

In cases where the operator needs to review previous call records and possibly place a callback, the system allows a recall of previous ALI records. By using the Recall Previous ALI feature, the PSAP operator can recall to their screen past calls received over the last 2 hours. The previous ALI fields are displayed one at a time for the operator. This feature can be set per position or globally to review all previous records within the system.

ANI/ALI Continuos Print

A standard part of the system is the continuous printing of all ANI/ALI records for historical record keeping for the PSAP. The printed copies can be stored for future reference. Records can be continuous (multiple records per page) or

incident (one record per page) driven. Additionally, floppy disk storage of records can be used.

ALI Screen Print on Demand

In cases where the PSAP operator requires a hard copy of a call in progress, a feature key on the telephone labeled Print will direct the ALI Controller to print the data on the screen to the ANI/ALI printer.

Retry ALI

In cases where the ALI retrieval failed, the Retry ALI feature can be used to query the ALI database on the known ANI record. The Retry feature is a Quick Key, single button action.

Caller ID

This option provides Caller ID for the administration lines of the PSAP. The ANI information is decoded from the administration lines using integrated Frequency Shift Keying (FSK). The operator's enhanced telephone displays the caller's telephone number.

Wireless

As a major supplier to the wireless (cellular/PCS) sector, Motorola plays an active role in addressing the latest FCC and industry requirements. At this time there are no established universal standards set by NENA or the telephone companies for the delivery of 10/20 digit ANI. The protocols and tariff issues have not been defined. NENA has indicated support for a modified signaling scheme of "Phase II Wireless" signaling. *VESTA PALLAS* has the capability, currently to support "Phase II Wireless" 10 and 20 digit wireless and Format-04 ANI protocol.

Management Reports

The system incorporates common statistical reports, which include reports by position or per PSAP for the following options:

- Day of the Week
- Hour of the Day
- Day of the Week and Hour of the Day

- Average Call Length
- Calls Transferred

This feature will provide the capability to create customized reports through the Ad Hoc Reports Menu, which displays the Report Editor Fields. This standard feature provides common Microsoft Access database commands.

This package supplies a traffic summary by trunk group. The following are those occurrences that are counted and reported on:

Number of Inbound Calls received on that trunk.

Total Number of Minutes of Incoming Call Usage on that trunk.

Number of Outbound Calls made on that trunk.

Total Number of Minutes of Outgoing Call Usage on that Trunk.

All Trunks Busy

Short and **Long Duration Calls** as defied by programmable timers.

Number of Bad Calls on which the bad call feature was entered.

Failure to Respond and Failure to Release

Standalone Database (Optional)

The ALI Controller has the ability to provide storage for a standalone database for the community to use in cases where the ALI database is not available through the telco. With this database option, the PSAP can store address data and would make updates on a regular basis. Software options permit updates by manual entry, by diskette, or by downloads via modem. The system has the capability to support up to three separate databases.

Secondary PSAP Location (Optional)

In many cases, communities have the need to route the caller and/or ANI/ALI data to a remote site. Using an off-premises extension, the caller can be transferred with a single button action to those sites. In addition, the ANI/ALI information can also be sent to a remote PC or printer. This is common with remote fire stations requiring a record of the caller's address to aid in finding the location. The printer or FAX can be dial-up. The PC or off-premise extension requires a dedicated phone line between the primary and secondary locations.

Equipment Specific to Paso Robles Police Department

VESTA PALLAS Equipment

The following items are included with the proposed ANI Controller Package:

- PALLAS PBX Switch
- VESTA PALLAS server
- Operator position interfaces

ALI/Server Equipment

The following items are included with the proposed ALI/Server Package:

1 *PlantCML Equipment 9-1-1* Server under a Windows 2003 Platform

1 15″ Flat Panel Color Monitor

1 *PlantCML Equipment 9-1-1* Server Software Package

1 19 inch equipment rack

1 Hewlett Packard Server Maintenance Response through year 5

1 Remote Maintenance Modems

1 Printer

Call-Taker Position Equipment

The following equipment is included with the proposed Call Taker Position Package:

2 911 Telephones

2 Console Interface Cable

2 (customer-supplied 19" flat panel color monitor)

2 Client PC under a Windows XP Platform

2 Stand alone numeric keypad

2 Hewlett Packard Next Business Day Service through year 5

2 Client Application Software, VESTA 2.6

2 Modem/Detector for TDD

Circuitry

The following 9-1-1 trunks and 7 digit non-emergency lines are identified for connection to the system:

Quantity	Type	Network Provider	Special Requirements Notes
3	911 trunks	AT&T	805-911-2239-1 805-911-2239-2 805-911-2239-3
1	Loop Start	Internal business lines	Intercom
1	Ring Down	Internal, dedicated	Public Entrance
4	7 Digit Emergency Lines	AT&T	805-237-6464,6465,6466,6467

RESOLUTION NO. 06-

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF EL PASO DE ROBLES AUTHORIZING THE PURCHASE OF NEW E911 TELEPHONE SYSTEM EQUIPMENT AND THE ACCEPTANCE OF STATE OF CALIFORNIA REIMBURSEMENT FUNDING

WHEREAS, the City Council of El Paso de Robles is eligible for reimbursement funding to replace the E911 equipment in the Police Department's Public Safety Answering Point; and

WHEREAS, the Police Department has selected the State of California approved E911 system Plant Vesta Pallas; and

WHEREAS, the State of California Department of General Services has awarded contract number DGS-MSA-54159 to Motorola as an approved vendor for the Plant Vesta Pallas system; and

WHEREAS, the Plant Vest Pallas E911 phone system purchase will be completely and directly funded by the State of California Department of General Services.

NOW, THEREFORE, BE IT HEREBY RESOLVED that the City Council of the City of El Paso de Robles does authorize the Chief of Police to execute a contract with Motorola, Inc. to purchase the Plant Vest Pallas E911 phone system, as provided by State of California contract number DGS-MSA-54159.

APPROVED AND ADOPTED by the City Council of the City of El Paso de Robles this 19th day of December, 2006 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

_____
Frank R. Mecham, Mayor

Attest:

_____
Deborah Robinson, Deputy City Clerk