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OFFICE OF THE CITY MANAGER

COMMITTEE MEMORANDUM

TO: Finance and Citywide Projects Committee

FROM: Jimmy L. Morales, City Manager

DATE: January 30, 2014

SUBJECT: **GARAGE GATED REVENUE CONTROL EQUIPMENT**

BACKGROUND

The City's Parking System currently has ten (10) municipal parking garages, totaling 6,106 parking spaces. An 11th facility, Collins Avenue Garage is funded and currently in design with an estimated 470 parking spaces, for a grand total of 6,576 parking spaces.

The gated revenue control system was installed in the City's garages in 1996 by 3M, formerly known as Federal APD, and the system has been serviced and maintained by their locally authorized representative CPE (Consolidated Parking Equipment, Inc.). The gated revenue control system is an essential tool utilized to manage access, usage, point of sale transactions, audit controls, and reporting. This system is comprised of: hardware, software, firmware, and equipment, including, gate arms; loop detectors, fee computers, entry stations, exit stations, and pay on foot (POF) stations. The gated parking revenue control system is an extremely important tool that the City's Parking Department utilizes to operate and manage all of its parking garages. It is important to note that the Parking Department has been transitioning the payment platform from "pay at exit" (cashiers in booths) to Pay-On-Foot (POF) operations, where patrons use walk-up stations to process their transaction. This has resulted in significant operational expense savings, particularly, in parking attendant labor as well as enhanced audit controls.

ANALYSIS

Currently, each garage operates on a standalone basis and certain garages have equipment that is outdated and incompatible across technological lines. The more dated equipment has served us well; however, some of the equipment is out of production and/or obsolete. Other items requiring replacement or upgrade are two years out of production and not fully compatible with current and/or new technology.

The Parking Department is seeking enhancements to upgrade existing software, hardware, firmware and equipment with state-of-the-art technology. These sought after enhancements will allow for a centralized communication, processing, and monitoring system. In other words, all communications, including data, audio, and visual, may be accessed, processed, managed, and stored at a remote central monitoring station for intercoms, CCTV, and access control. This would allow for even greater operational savings as well as enhanced audit controls. In order to achieve this service level, all garages must have compatible hardware, software, firmware, and equipment, meaning that one system (vendor) must equip and service all garages. These technology

enhancements are available from a number of vendors in the industry, including the current vendor, 3M/CPE.

3M/CPE submitted a proposal to upgrade the system, as described above, at a cost of \$1.6M. There are other vendors that provide state-of-the-art garage gated revenue control systems; however, it is important to note that their system/equipment is proprietary. This would require the replacement of all software, hardware, firmware, and equipment at all municipal garages, including those garages which were recently constructed and outfitted with relatively new equipment. The replacement cost for all garages is estimated to at \$3M.

The Administration is seeking guidance from the Committee as to whether to proceed with the current vendor's proposed upgrades or pursue a formal competitive procurement process to ascertain state-of-the-art technology and its related cost. Should the Committee give direction to pursue a formal competitive procurement process, the Administration recommends the issuance of an ITN (Invitation to Negotiate). The scope and specifications for an ITN is attached (see Exhibit 1).

CONCLUSION

The Administration is seeking guidance from the Finance and Citywide Projects Committee with regard to pursuing enhancements for the gated garage revenue control system through either the existing provider or a formal competitive procurement process.

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EXHIBIT 1

ITN Scope of Services

The City's Parking Department is seeking enhancements to its gated parking revenue control system software, hardware, firmware and equipment. The enhancement includes centralized processing of all data for all the City's parking garages and a central monitoring station for intercoms, CCTV, and access control. The successful proposer shall provide product warranty; options for an extended warranty, at the City's sole and absolute discretion; and maintenance and support services.

1. SYSTEM DESCRIPTION

- A. The objectives of the project include, but are not limited to the following:
1. Control access to the parking facilities for various user types including contract/permit parkers, visitors (transient parkers), and special event parking.
 2. Improve upon customer service by providing remote monitoring (CCTV) and assistance on the use of the system by patrons.
 3. Support the City's management of the facilities through a centralized approach.
 4. Improve efficiency and reduce costs.
 5. Introduce technical advancements that result in quick and easy customer interaction with the system.
 6. Provide a high resolution video to the Facility Management Server (FMS) and Central Monitoring Station (CMS) of all peripherals that a customer encounters and has any sort of interaction with.
 7. Provide a secure system that is not vulnerable to any "hacker" attacks, including, but not limited to PCI compliance.
 8. The system should be able to seamlessly interface with an external third party platform for accounts receivables to update customer information within the access card manager module in as close to real time as possible.
 9. The system should be able to seamlessly interface with and accept on-line payment processing using credit/debit card, and or a payment credential representing an entity authorized to make payments within the facility. A payment credential meaning bar codes, QR codes, or NFC and RFID accounts to, at a minimum, pay for monthly and transient parking fees and automatically update the card manager module in as close to real time as possible.
 10. Deliver additional features that would allow for patrons to log on to a web site, create a personal account and acquire a specific type of available parking (e.g. daily or event parking) at any Municipal Garage using a credit card/debit card, and or a payment credential. Such features would also have to be supported by software and hardware enhancements at the

- facility level that would allow for tracking the validity of the transactions and fraudulent duplication or use of the passes purchased-online.
11. Accurately track the required financial and statistical information.
 12. Accurately calculate appropriate fees.
 13. Accurately document the revenues generated by the parking operations.
 14. Ensure flexibility for any future need to update, upgrade, and/or expand the system readily (additional lanes as well as additional facilities).
 15. Provide an intuitive and user-friendly interface for City and its personnel.
 16. Open-architecture system where all interfaces (hardware and software) that conform to national and International Organization for Standardization (ISO) standards.
 17. Provide integration between multiple facilities, monitored by a Central Monitoring Station (CMS) for customer support and revenue security oversight. The CMS must be remotely accessible over an encrypted internet-based (TCP/IP) network.
 18. Interface with existing City programs such as Pay by Phone, Miami Beach Mobile App; and LPR (License Plate Recognition) system.
 19. Interface with other third party mobile applications.
- B. During the life of the system, the City may build facilities that will provide additional parking or incorporate existing parking facilities into the system. The proposed system shall be upgradeable, scalable, and modular in design such that it can support all of the needs of these future facilities.
- C. The parking and other control equipment components provided by the Vendor shall operate as a complete system. Each equipment component shall perform its function in relation to other components. As such, each component shall be compatible with every other related component. All components shall be compatible with the geometric circumstances of the facility or place where they are installed.

2. SOFTWARE

- A. All software and software licensing required by the system shall be provided by the Vendor. To the greatest extent possible, proven, off-the-shelf software (i.e., software already manufactured and available for delivery) shall be used.
- B. The Vendor shall provide perpetual licenses and/or authorization for all software used by the City. If available, a site license shall be provided to the City. The operating systems, application software, development language, peripheral software, and hardware diagnostic software shall be licensed in perpetuity to City.
- C. Database Management System
1. Application software shall consist of software to provide complete operation of the system and include the database management system.

2. Data recorded by the system shall be maintained in files that are in Open Database Connectivity (ODBC) compatible formats. Solution shall support a relational database format for the storage of data.

D. Application Software

1. Application software shall be comprised of computer application programs to provide complete operation of the system and includes the database management system. Application software shall be compatible with the operating system platform. The software programs provided shall allow for future upgrade and expansion of the system.
2. The Vendor shall install and configure all application software and firmware required by the system with all software licenses registered to City.
3. The application software shall provide the following:
 - a. Payment Application Data Security Standard (PA DSS) validated according to PA DSS 2.0, or the latest version in effect at the time of Contract Award, and shall be upgradable to maintain current standards throughout the life of the system.
 - b. Ensure that the application does not implement any changes to the Operating System that can potentially jeopardize PCI Compliance.
 - c. Browser-based – The system software shall be browser-based and web browser enabled, i.e. and capable to monitor any number of locations from a remote site. The system software shall be accessible by an authorized user through an internet browser of any workstation connected to the City network. Users shall not need a client version of the software installed on their workstations to access the software.
 - d. Solution shall provide role-based access control, password-secured and configurable allowing the City to establish roles and permissions to grant rights to software functions based on operational needs. All password security shall have a corresponding record file, and shall create an audit trail of each user's access and use the Solution's software.
 - e. Automatically detect and report fault conditions through a Facility Management System (FMS) – The system shall perform a diagnostic check on a routine basis and provide notification for fault conditions and equipment failure. Fault conditions shall be categorized by severity and the system shall notify through the FMS for any individual fault condition, category of fault, or user-selected group of faults. The system shall provide a continuous end-to-end self checking capability.
 - f. Reporting as outlined in the Audit and Reporting Subsection.
 - g. Facilities remote monitoring of all field devices, e.g., entry station status, barrier gate status, express exit station status, cashier stations status, lane status display, UPS unit status, etc.
 - h. Allow authorized users to approve exceptions transactions occurring in a lane and remotely from a workstation.
 - i. Central access and control of field devices – Users with the appropriate authorization shall be able to issue remote commands

from system workstations to the field devices such as raising and lowering the barrier gates; rebooting the entry or exit station; putting the entry or exit station in or out of service; changing the lanes status signs; applying software patches and updates; etc. The use of central controls shall be logged with user ID, password, time, device controlled and action taken.

- j. The system shall be capable of charging variable rates based upon the time of day, day of week, and special events. The Vendor shall provide independent, variable rate structures for each facility.
 - k. The rate structure shall be programmable to establish daily/weekly/monthly maximum fees, grace times, and complimentary periods.
 - l. Create system generated alarms – System shall be capable of generating alarms for any user selectable event type. Alarm Hierarchy shall be completely configurable so that City can adjust priority of alarms, audible tones, where the alarms are sent, etc. Initial Alarm Hierarchy shall be coordinated with City during implementation.
 - m. Ability to export all query results to multiple formats including comma separated-value, Microsoft Excel®, Microsoft Access®, etc.
 - n. Integration of two-way video/intercom equipment to provide remote customer service at all Ticket Dispensers, POF/PIL/POS stations.
 - o. An In-Lane Validation for Disabled Parking Solution for remote gate vending authorization after documents is verified.
4. To the greatest extent possible, industry standard software packages shall be utilized.

E. Audit and Reporting

1. The system shall document parking revenue and activity and generate revenue and activity reports. All reports shall be available online and on demand for City personnel who have proper password access.
2. The system shall identify and produce reports that reflect separately transient parking, contract/permit parking, special event activities and exceptions.
3. The system's transactional stream of data shall be compiled in an ODBC compliant database. City shall have the ability to prepare custom reports using this data including the ability to export data to Microsoft Excel®, at a minimum, via a comma-separated-value file format or as a PDF file.
4. Capture, record and report separately all exception transactions that could not be processed 100% and automatically by the system (swapped, unreadable, lost, foreign, mutilated, used, disputed fee, cancelled, credit card transactions processed in an off-line mode, etc.)
5. At a minimum, reports provided shall include:
 - a. Shift Reports
 - (1) Cashier shift report
 - (2) Express exit station shift report
 - (3) Automated Pay Station shift report
 - b. Monthly Reports

- c. Daily Reports
- d. Access Card Reports
- e. Reports that allow queries over any length of time (hours or days)
 - (1) Occupancy (including the peak occupancy over a given timeframe)
 - (2) Length of stay
 - (3) Revenue statistics
 - (4) Summary report turnover – movement
 - (5) Summary report events
 - (6) Event journal
 - (7) Charts
 - (8) Comparison reports, month to month, year to year.
- f. Reports specific to each program
 - (1) Validations
 - (2) Special Events
 - (3) Others

3. EQUIPMENT AND SUBSYSTEMS

- A. All equipment and associated materials utilized for replacement and/or enhancements shall be newly manufactured. No used or refurbished equipment and associated materials shall be utilized.
- B. All equipment shall operate in all exterior weather conditions in the Miami Beach area for both indoor and outdoor conditions. Equipment exposed to outdoor conditions shall not rust or corrode for a period of no less than five (5) years.
- C. All lane equipment performing a like function and of the same part number shall be fully interchangeable without the requirement for physical modifications (other than setting of dip switches to designate a specific function selection).
- D. The Vendor shall utilize equipment that supports TCP/IP and remote monitoring of distributed units. SNMP shall be utilized for all equipment that is assigned an IP address.
- E. The system configuration shall provide lane autonomy such that no single point of failure of a device shall cause an operational failure of surrounding lanes. Equipment at a single lane may fail causing a shutdown of a lane; however, the failure shall not affect other lanes.
- F. Application and Data Servers
 - System Servers
 - 1. The system shall be designed to support stand-alone operations (distributed system with intelligent devices) as well as centralized management of the system.
 - 2. The System Servers shall be externally hosted.

3. The Database Servers shall be sufficiently configured such that it would have the ability to maintain 12 months of all system on-line data. This data shall have the following:
 - a. Readily accessible without any delay in processing.
 - b. Long Term Storage Media – Ability to archive all summary data for up to five years with simple retrieval capability.
- G. Credit Card Processing Subsystem
1. All Vendor-provided aspects of the credit card processing subsystem shall be PCI compliant, such that no Vendor-provided product or solution will prevent City from achieving PCI Compliance in its parking operation.
 2. Processing redundancy shall be built into the system. The Vendor shall provide a system such that processing credit card transactions shall not degrade the time allowed for positive authorizations. The system shall process and store credit card transactions at each field device that accepts credit cards while in an offline mode due to a communication loss. For example, if the communication cable to an exit station is unplugged inside of the Exit Verifier, that Exit Verifier shall maintain the ability to process credit card transactions without achieving real time authorization and shall store all transactions in a PCI-compliant manner until communication is reestablished. Once communication is reestablished, the system shall request authorization for all credit card transactions that were processed while offline. If a credit card transaction is denied, City shall receive notice of such denial in the revenue reports.
- H. Entry Stations
- Each Entry Station shall consist of the following components and capabilities:
1. Access door with appropriate tamper-resistant locking system (all entry stations keyed alike, and unique to this installation).
 2. Single-slot technology such that all ticketing and card reading shall be from a single slot in the Entry Station's face.
 3. Issues one credit card-sized, side-striped or center striped, magnetically encoded or barcode parking ticket for each entry transaction.
 4. Entry Station ticket slot shall read an ISO standard side-stripe magnetically encoded card such as a credit card.
 5. Inserted credit cards shall be read in all four directions.
 6. Active color matrix message screen, minimum six inch diagonal display that is easily readable in all ambient lighting conditions.
 7. Utilize visual instructions for patrons to understand the sequence of events to complete a transaction.
 8. Push-button ticket issue.
 9. Illuminated ticket slot.
 10. Push-button intercom integrated into the face of the Entry Station.
 11. Retractable ticket mechanism.
 12. Uniquely encoded parking tickets printed for each specific parking area.
 13. Unique machine identification number.

14. Computerized Lane Control and Interface Processor (LCIP) to control equipment component communications within the lane and to the Servers.
15. Stand-alone capabilities for each Entry Station in the event that network communication is lost, and regardless of where on the network the communication interruption occurs. Specifically, each Entry Station shall provide offline transaction storage capacity for all transactional information for a minimum of 1,800 transactions. The lane shall automatically close in the event that the minimum transaction threshold is reached and shall remain closed until re-establishment of communications.
16. Entry Station shall automatically upload all transaction information to the Servers once communications is restored.
17. Proximity Card Reader with a minimum read range of six inches integrated into the face of the Entry Station.
18. Ticket Stock Low alarm generated on FMS.
19. Ticket Stock Out alarm generated on FMS.

I. Central Cashier Stations

Each cashier station shall be equipped with the following components and capabilities:

1. Cashier terminal with integrated credit card functionality.
2. Web access to assist cashiers to lookup for information in City servers such as Decal Permits, City Wide information.
3. Touch Screen Register.
4. Ticket reader/validator that accepts ISO standard readable cards, magnetic stripe and/or barcode parking tickets, validations from a single slot.
5. Credit card reader that accepts standard credit and debit cards.
6. Touch screen cashier monitor supplemented with standard QWERTY keyboard and mouse.
7. Capability to process all acceptable payment methods.
8. Capability to cancel a credit card or cash & credit card transaction before the credit card is ingested into the ticket transport mechanism.
9. Capability to produce follow up ticket validations.
10. Receipt printer that is capable of producing receipts for a transaction. Duplicate receipt function shall be a user selectable feature that can be disabled, if desired. Receipt printer inside cashier booth shall automatically be disabled in unmanned mode. Customers shall be given the option for a receipt for all transactions (no auto-issued receipts).
11. The system shall implement cashier booth fee displays that are easy to read, LED – type.
12. Dual cash drawer operation (relief cashier shall operate out of their own cash drawer) with removable, lockable inserts.
13. Stand-alone capabilities for each Cashier Station in the event that network communication is lost, and regardless of where on the network the communication interruption occurs. Specifically, each Cashier Station shall provide offline transaction storage capacity for all transactional

information, including storing encrypted credit card data, for a minimum of 1,800 transactions.

14. Capability to read barcode, magnetic stripe, QR code reader.

J. Express Exit Stations

Each Express Exit Station shall be equipped with the following components and capabilities:

1. Access door with appropriate tamper-resistant electronic locking system (each express exit station keyed alike, and unique to this installation).
2. Ticket reader/validator that accepts ISO standard readable cards, magnetic stripe, barcode and QR code parking tickets, validations, and credit cards through the same single slot that shall print a patron receipt and/or a credit card voucher that requires no signature.
3. Customers shall be given a receipt for all credit card transactions.
4. Capacity to hold two full stacks of receipt tickets.
5. Receipt Stock Low alarm generated on FMS.
6. Receipt Stock Out alarm generated on FMS.
7. Active color matrix display, minimum size six inches measured diagonally, shall be readable in all lighting conditions.
8. Utilize visual instructions for patrons to understand the sequence of events to complete a transaction.
9. Cancel button that allows a patron to cancel a transaction once a parking ticket has been inserted.
10. Stand-alone capabilities for each Express Exit Station in the event that network communication is lost, and regardless of where on the network the communication interruption occurs. Specifically, each Express Exit Station shall provide offline transaction storage capacity for all transactional information, including encrypted credit card data, for a minimum of 1,800 transactions. The lane shall automatically close in the event that the minimum transaction threshold is reached and shall remain closed until re-establishment of communications. Express Exit Station shall automatically upload all transaction information to the Servers once communications is restored.
11. Proximity Card Reader with a minimum read range of six inches integrated into the face of the Express Exit Station.
12. Push-button intercom integrated into the face of the Express Exit Station.
13. A two-way integrated audio/video communication system with an area for document presentation, capable of capturing a picture as part of a transaction/validation, such as disabled parking or any exemption that requires documentation.

K. Point of Sale (POS) Mobile Device

1. An integrated POS mobile device capable of real time wireless communication with the network for processing transactions, including credit cards/debit cards; and an option to validate exemptions and photograph related documentation.

2. The POS mobile device shall have the same user/password accessibility as a Central Cashier Station.
3. Capable of producing same reports as a Central Cashier Station.
4. Capable of reading Barcode, Magnetic Stripe and/or QR code.

L. Entry and Exit Lane Vehicle Detection Device

1. Saw cut or embedded loops shall be used for entry and exit lane vehicle detection.
2. Entry Lane Vehicle Detection: Entry lane vehicle detectors shall detect vehicular presence, legal entry, illegal exit, and back-out. Dual arming loops shall be provided for all public entry lanes.
3. Exit Lane Vehicle Detection: Exit lane vehicle detectors shall detect vehicular presence, legal exit, illegal exit, and back-out.
4. The loop detectors shall be dual channel detectors. The detectors shall detect the presence or transit of a vehicle over an embedded loop of wire.
5. The loop detectors shall each incorporate a sensitive Tailgate Recognition System capable of resolving two automobiles within six inches of each other on a standard 2.5 ft W x 6 ft loop.
6. Different sensitivity settings shall allow vehicles of varying height and size to be properly detected.

M. Barrier Gates

1. All barrier gates shall contain the following:
 - a. Direct drive mechanism.
 - b. Aluminum or fiberglass gate with padded arm.
 - c. Electronically controlled rebound feature.
 - d. Single piece gate arm or articulated as required by height limitations.
2. Barrier gates shall have enough power/resistance to ensure they cannot manually be forced open.

N. Lane Open/Closed Signs

1. Lane Open/Closed Signs shall be LED type with the word "OPEN" in green letters and the word "CLOSED" in red letters. Lane Open/Closed Sign shall be easily readable in all ambient lighting conditions from a distance of 200 feet and a minimum viewing angle of 120 degrees.
2. The message displayed by the Lane Open/Closed Sign shall be controlled automatically by the entry/express exit station. When the entry station is in operation, the Lane Open/Closed Sign shall automatically be set to "OPEN". When the entry/express exit station is out of operation the Lane Open/Closed Sign shall be automatically set to "CLOSED". When the entry/express exit station is set into a maintenance mode, the Lane Open/Closed Sign shall automatically be set to "CLOSED".

O. Automated Pay Stations (POS) and Pay In Lane Stations (PIL)

- Each POS and PIL shall be equipped with the following components and capabilities:
1. Access door with appropriate tamper-resistant locking system.

2. Ticket reader/validator that accepts ISO standard readable cards, magnetic stripe and barcode parking tickets, validations, and credit cards through the same single slot that shall print a patron receipt and/or a credit card voucher that requires no signature.
3. Capable of processing parking payments using multiple forms of payment, e.g., any combination of cash, and credit cards/debit cards (without requiring PIN authorization).
4. Door Open alarm generated on FMS.
5. Receipt Stock Low alarm generated on FMS.
6. Receipt Stock Out alarm generated on FMS.
7. Active color matrix display, minimum size six inches measured diagonally shall be readable in all lighting conditions.
8. Utilize visual instructions for patrons to understand the sequence of events to complete a transaction.
9. Cancel button that allows a patron to cancel a transaction once a parking ticket has been inserted.
10. Stand-alone capabilities for each POS and PIL in the event that network communication is lost, and regardless of where on the network the communication interruption occurs. Specifically, each POS shall provide offline transaction storage capacity for all transactional information, including encrypted credit card data, for a minimum of 1,800 transactions. The device shall automatically go out of order in the event that the minimum transaction threshold is reached and shall remain closed until reestablishment of communications. POS and PIL shall automatically upload all transaction information to the Servers once communications is restored.
11. Push-button intercom integrated into the face of the POS.

P. Uninterruptible Power Supplies

1. Conditioned/emergency power through the TCP/IP-enabled UPS units shall be provided for the following components and facilities to protect components from loss of power, power spikes, and power sags:
 - a. Entry lanes.
 - b. Central Cashier Station.
 - c. Express exit lanes.
 - d. Automated Pay Station
2. UPS battery back-up for all equipment shall be sized to last sixty (60) minutes.
3. All UPS units shall be SNMP compatible to allow automated notification when battery power is activated or the battery levels become critically low.

Q. Proximity Card Access System

- The Vendor shall provide a turnkey proximity card access system that shall provide the following features and capabilities:
1. Designated users shall be able to utilize the system for ingress and egress to/from assigned parking facilities.
 2. City shall have the ability to issue and register proximity cards.

3. City shall be able to create 1000 user groups or categories of proximity cards, at a minimum. Authorized users shall have the ability to view and program proximity card privileges and access rules. The Proximity Card Access System shall provide the ability for expiration of account/proximity card for unpaid fees; also, imposition of late fee at user-programmable intervals. The Vendor shall provide City with the appropriate tools to program and/or encode proximity cards from one or multiple system workstations.
 4. System shall have anti-passback capabilities that can be turned on or off at the City's discretion.
 5. The system shall report the occupancy of proximity card patrons in each facility, in real-time.
 6. All user group parameters and rules shall be accessible and changeable by City after credential validation via a Graphical User Interface (GUI) accessible on any of the system workstations provided with the system. Software code changes shall not be required to edit user group parameters and rules.
 7. User groups and individuals within the user groups shall each have the capability of being assigned access privileges based upon facility, date, day of week, time of day, or any combination thereof. For example, it shall be possible to set a user's access privileges to allow access to the facility valid only Monday – Friday from 8:00 AM – 5:00 PM. It shall also be possible to modify user groups or individual accounts to be exempt from anti-passback rules.
 8. The system shall encode and control proximity cards that allow universal access to one, multiple, or all facilities depending on parameters that are input.
 9. The proximity card management system shall provide full accounting functions including account generation, tracking, invoicing, and account payment collection.
 10. The proximity card management system shall have the capability to interface with other proximity cards, such as city employee identification proximity cards, to allow access to gated facilities.
- R. Parking Space Count System (PSCS)
1. The Vendor shall design and implement PSCS software and infrastructure.
 2. The PSCS shall be integrated into the system such that the available parking spaces within the system (based upon a differential count between entries and exits) and available spaces within the PSCS are the same. The PSCS shall obtain count impulses from the detectors used by the parking facilities' entry and exit lanes.
 3. Parking occupancy and availability for each facility shall be displayed within the system.
 4. The PSCS shall be fully automated with no intervention required under normal operating circumstances. While in operation, there shall be allowances for manual adjustments and override of the PSCS via the workstations.

S. Intercom System

1. The Vendor shall provide a turn-key intercom system that consists of two-way audio/video intercom system that shall employ either Internet telephony (IP) capability or Voice-Over Internet Protocol (VOIP) intercom capability. The intercom shall be a push-button intercom such that in the event a patron needs assistance, the button can be pushed and a connection established between the field location and the host intercom station.
2. The intercom communications shall be directed to a command desk console located in an area designated by City with roll over capabilities to a second base station as designated by City. Intercom base stations shall display the physical location of the incoming intercom call.
3. Once activated, two-way communication shall be possible and the intercom line remains open until the parking staff member terminates the call.
4. It shall be possible that if one intercom is open, and a second call comes in, the attendant shall be able to place the first call on hold and answer the second call.

T. Validation System

1. The Vendor shall provide an electronic validation system whereby City may discount a patron's parking fee. The vouchers shall be easily deployable via email and a using a web app interface in single format and in bulk.
2. Validations shall be made for specific dollar amounts (e.g. \$5.00 off), specific durations of time (e.g. two hours free), for a percentage of the parking fee, default to a specific fee table or discount the entire parking fee.
3. Only users with appropriate authorization shall be able to issue validations and the system shall track all validations for auditing purposes by user, validation date, validation type, and validation amount.

U. Data Storage

1. All data shall be immediately available to the City.
2. The system shall store the data on a secure server with minimum retention of one (1) year after the end of the permit term.

4. WARRANTY AND EXTENDED WARRANTY

The vendor shall provide standard warranty terms applicable to all products purchased for a period of two (2) years from the date of installation. The vendor will also provide any new software releases for a period of two (2) years at no cost to the City. The City, at sole and absolute discretion, may extend the warranty period for an additional three (3) years, under the same terms and conditions, by giving notice to the vendor within ninety (90) days before the end of the existing warranty period.

EVALUATION CRITERIA

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|---|-------------|
| Experience and Past Performance: | 20% |
| Quality and Capabilities of the Proposed Solutions: | 30% |
| Technical Support: | 10% |
| Cost Effectiveness of Proposal: | 30% |
| Financial Stability: | 10% |
| Total: | 100% |