

Appendix A

Scope of Services

Requirements are identified as to their priority by:

- 1 Required**
- 2 Desired**

Respond to each item as to whether your proposed system satisfies the requirement:

Fully Provided - The item is satisfied with standard functionality in the proposed system

Modification Required - The item is satisfied with modification to the proposed system. Include the cost for in the Comment column and also include the cost in your price proposal.

Not Provided - The item is not supported by the proposed system and modification is not available.

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REQUIREMENT	Priority	Fully Provided	Modification Required	Not Provided
A. GENERAL REQUIREMENTS				
A 1 The Parking Management application must be browser based, supported by all popular browsers.	1			
A 2 The application must be Responsive and format display consistent with the type device used. Examples of the application display from a desktop, tablet and phone must be included with the proposal. Denote the location of the examples in the comment.	1			
A 3 System must employ a fully relational database that allows data to be manipulated, linked, and queried.	1			
A 4 System must be available for use with Oracle, and MS SQL databases	1			
A 5 System must be able to be hosted by the software provider or self-hosted	1			
A 6 Tasks and activities must be easily initiated via context-sensitive menus.	1			
A 7 All information must be accessible and editable from one single screen	1			
A 8 System tasks must be scheduled to run automatically at user-defined intervals.	1			
A 9 System must be capable of interaction with external relational databases with real time and/or batch processes.	1			
A 10 Record searches that result in a single record meeting the search criteria must automatically open that record.				
A 11 Record searches that result in multiple records meeting the search criteria must display the matching records in a grid that:				
A 11a Displays the qualifying records with additional identifying information	1			
A 11b Allows the user to sort the records in the grid by the values in any column (ascending or descending)	1			
A 11c Allows the user to reorder the sequence of the columns in the grid, saving their individual preference for each individual grid type.	1			
A 11d Directly navigates to any selected record in the grid.	1			
A 11e Provides the ability navigate to a record, while maintaining the results grid that can be returned to for selection of another record.	1			
B. USER SECURITY/CONTROL REQUIREMENTS				
B 1 System must allow for a wide range of user security and control.	1			
B 2 System must have the capability to optionally enforce strong passwords and password expiration	1			
B 3 System must have the capability for the end-user to login and authenticate via a third-party system (LDAP, Active Directory or similar)	1			
B 4 System must automatically log a user off after a predetermined amount of time without activity.	1			
B 5 The system must allow the creation of a profile for each individual user. This profile specifically details the rights and privileges as defined by the system administrator.	1			

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REQUIREMENT	Priority	Fully Provided	Modification Required	Not Provided
B 6 Rights and privileges must be configurable per screen and range from read-only to full supervisor permissions.	1			
B 7 Ability to clone user profiles must exist.	1			
B 8 The system must contain an audit trail of modifications and/or transactions executed by a particular user. Transactions must be date, user and terminal stamped.	1			
C. CITATION MANAGEMENT REQUIREMENTS				
C 1 All features below must be initiated from a single screen.	1			
C 2 Entry (via keyboard entry and/or automatic real-time upload via handheld citation issuance devices), viewing, and printing citations. All information normally associated with a specific citation such as: Ticket #, Plate #/Yr./State (or Province), Plate Type, Meter #, Date Issued, Time Issued, Officer Badge, Location, Infraction, Vehicle Info. (Make, Model, Color), VIN #, Public and Private comments must be entered and viewed on a single screen.	1			
C 3 Detailed violation information including fine structure (base amount, uplifts, accumulations, late fees, discounts, etc.) must be viewable on screen.	1			
C 4 System must include the ability to add notes field (including date of the note, note type, and comments). Notes must be date/time, user and terminal ID stamped.	1			
C 5 System must display detailed status information regarding balance due, addition of late fees and fine increments, administrative holds, and adjustments.	1			
C 6 System must allow application of skeletal payments for citations not currently in the system (citations paid off the windshield).	0			
C 7 System must track all changes and adjustments made to a citation to a specific individual, date and time using a ticket tracker.	1			
C 8 System must display the complete history of transactions associated with the citation without exiting the screen.	1			
C 9 System must allow for the monetary amount of a citation to be adjusted.	0			
C 10 Vehicle, hearing, receipts, notes/attachments, and pre-paid citation data must all be viewable from the citation record.	1			
C 11 The attachment of scanned documentation, digital images, voice memos and/or other electronic items to the citation must be supported.	1			
C 12 Attachments must be date, user and terminal stamped.	1			
C 13 A visual indicator must display on records with attachments, hearing schedules or warning codes.	1			
C 14 Hearing information must be directly accessed from the citation record.	1			
C 15 Receipt (payment) information must be displayed directly on the citation screen.	1			
C 16 Payments must be able to be posted directly on the citation screen, without the need to open a separate cashiering module or add items to a shopping cart.	1			
C 17 A mechanism for rapid and convenient entry of hand-written citations utilizing defaults from the previously entered citation such as date, officer number, location, etc must be provided.	1			

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REQUIREMENT	Priority	Fully Provided	Modification Required	Not Provided
C 18 Full data edit and delete capabilities must be restricted to authorized users.	1			
C 19 The system must have the capability to reassign citations to a different customer (ex. from vehicle leasing company to vehicle lessor).	1			
C 20 Scofflaws rules must be defined, tracked and downloaded to handheld enforcement units. Scofflaw criteria may consist of number of tickets issued, number of unpaid tickets, and number of tickets issued or unpaid within a defined date range, or number of tickets issued/unpaid related to a specified violation code.	1			
C 21 Direct access to customer, vehicle, appeal and payment information must be provided from the citation screen.	1			
C 22 The system must include the ability for notification letters to be generated, printed and/or emailed, while maintaining an audit trail within the application. Direct access to letter history must be provided and a copy of the letter must be stored in the attachments section of the citation.	1			
C 23 System must have the ability for one or more violations per citation.	0			
C 24 System must support the definition of aggregate/escalated fine structure based on number of tickets issued within a user defined time period.	1			
C 25 Aggregate/escalated fine structure can be defined for any individual or combination of violations. Definition of multiple structures must also be supported.	1			
C 26 Aggregate/escalated fine violations must be automatically supported, to assess the correct escalated fine amount when the ticket is issued without any additional user input.	1			
C 27 System must be able to define whether a violation uses aggregate, discount or uplifts in any combination.	1			
C 28 Tickets with discounted fines must display the ticket with the normal/full fine amount, while any display of the ticket for payment (within the application or online) will show the discounted amount due until the discount period ends.	1			
C 29 The system automatically creates an adjustment record for the discount amount when ticket are paid at the discounted amount	1			
C 30 Financial information related to the citation must be accessible directly on screen. This includes payments, adjustments, late/fees, etc.	1			
C 31 Fine uplifts/late fees must be automatically assessed to citations meeting criteria without the user initiating the process.	1			
C 32 System must have the ability to setup custom business rules for consistent and efficient selection from a pick-list. This data includes officer badge ids, locations, violation codes, void codes, appeal codes, and vehicle descriptive data.	1			
C 33 System must be capable of generating custom letters directly from the citation screen.	1			
C 34 System must notify users if the ticket issue date is X amount of days past due.	1			

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REQUIREMENT	Priority	Fully Provided	Modification Required	Not Provided
C 35 They system must support custom user-defined surcharges (different from late fees), which may be applied directly onscreen or automatically assessed.	1			
C 36 Ability to post payments to a citation without leaving the citation screen.	1			
C 37 Ability for authorized users to reopen a ticket without leaving the screen.	1			
C 38 Ability for authorized users to correct data entry errors directly on screen. This data includes ticket number, plate correction and plate ownership correction.	1			
C 39 Ability to group ticket violations under a "Bylaw".	1			
C 40 Ability to define precincts and group citation locations.	1			
C 41 Ability to setup "Automatic surcharges" (not late fees) based upon individual violation, or the ticket as a whole.	1			
C 42 Ability to assess a hold based upon number of issued or unpaid tickets and transfer holds to a third-party system.	1			
C 43 Ability to resend a specific ticket to DMV for lookup.	1			
D. CITATION APPEAL MANAGEMENT REQUIREMENTS				
D 1 The parking system must track the citation appeal and hearing process. When an appeal record is created (either in the software, or through the Internet), the information relating to a citation must be automatically copied into the appeal record as the citation number is entered. The appeals and hearings manager must include the ability to do all of the following.	1			
D 2 Adjust ticket status based upon appeal status (e.g. Appeal Pending, Appeal Approved).	1			
D 3 Attach digital pictures, files or documents. Attachments must be date, user, and terminal stamped.	1			
D 4 Adjust the citation's final amount due and keep track of all adjustments made to the record.	1			
D 5 Put citations on hold (no further accumulation of late fees or notices) while appeal is in process.	1			
D 6 Provide built-in court hearing schedule report.	1			
D 7 Define court schedule (including available dates, times, number of hearings, etc).	1			
D 8 Define court locations and hearing officers.	1			
D 9 Generate/print and/or e-mail appeal decisions and/or letters on demand for a single hearing or in batch for multiple hearings. The hearing/appeals manager must call up one of several user-defined letters in the database file, which includes information about the citation, customer and vehicle.	1			
D 10 Direct access to letter history must be provided as well as storing a copy of the letter in the history.	1			

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D 11 An appeal decision code may be defined for the purpose of notifying customers of the reason why an appeal was upheld or denied. This information must be printed on appeal decision letters.	1			
D 12 Ability for a customer to appeal multiple citations at a single time.	1			
D 13 Ability to access financial information directly from the citation appeal record. This includes payments, adjustments, late/fees, appeal reductions, etc.	1			
D 14 Ability to define a court fee may and apply to an appealed citation.	1			
D 15 Ability to generate a packet containing a bar-coded facsimile of the ticket, detailed ticket history, customer history (number of tickets issued, financial records, outstanding balances, permits, vehicles, etc.), customer appeal history (previous appeal requests, reasons, and decisions), officer/office comments, and all attachments including correspondence and digital images without leaving the screen.	1			
D 16 Ability to view previously void/appealed tickets on screen.	1			
D 17 Reports for appealed tickets, fines reduced due to appeal, tickets pending appeal, appeal denied tickets, and hearing schedules must be provided	1			
D 18 Payments must be automatically credited to the ticket holder's account upon appeal approval.	1			
D 19 The user must be able to free form enter appeal requests, parking department recommendations, and appeal decisions.	1			
D 20 The user must be able to view citation, customer, and receipt records directly on screen.	1			
D 21 Ability to partially appeal a ticket is required.	1			
E. VEHICLE MANAGEMENT REQUIREMENTS				
E 1 The parking management system must provide complete control of the vehicle registration process.	1			
E 2 All activity associated with a vehicle including owner information, citations, permits and warning codes must be viewable from a single screen.	1			
E 3 Ability for multiple vehicles to be associated with a single customer.	1			
E 4 Ability for vehicles to be manually assigned to a warning list (e.g. VIP, Scofflaw). Warnings must be sent to the handheld ticket writers.	1			

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REQUIREMENT	Priority	Fully Provided	Modification Required	Not Provided
E 5 System must have the ability to manage and process DMV plate lookups.	1			
E 6 A history of vehicle ownership information must be maintained.	1			
E 7 The attachment of scanned documentation, digital images or other electronic items on the record must be supported.	1			
E 8 Attachments must be date, user and terminal stamped.	1			
E 9 A visual indicator must display on records with attachments.	1			
E 10 Existing citations must be viewable on screen with the ability to click and swap to the detailed information.	1			
E 11 Existing permits must be viewable on screen with the ability to click and swap to the detailed information.	1			
E 12 Vehicles may be reassigned to a specific account along with any citation information.	1			
E 13 Plates may be edited or removed from a customer's account.	1			
E 14 Vehicles with unknown owner information must be exported for import to a plate lookup system. Likewise, owner information may be imported into parking system.	1			
E 15 Vehicle owner information may be manually entered.	1			
E 16 Warnings must be automatically generated. Criteria includes: number of tickets issued to a specific plate, number of "open" tickets assigned to a specific plate, number of either issued/open tickets that contain a specific violation, and/or any of the above criteria within a specific defined date range.	1			
E 17 Warning messages must be displayed in color for easy recognition.	1			

F. ACCOUNT/PAYMENT MANAGEMENT

F 1 System must provide the ability to view all activity associated with individuals and groups that park or are responsible for parking. Track contact information related to a customer including multiple addresses, phone numbers, and e-mail.	1			
F 2 Ticket/Vehicle Contact Information must be viewable on a single screen without scrolling.	1			
F 3 System must support a barcode reader, receipt printer and electronic cash drawer for a complete point of sale station.	1			
F 4 System must include the ability to post payments directly on the record's screen without opening a separate payment manager or utilizing a shopping cart.	1			
F 5 System must support entry of batch payments. The payment batch must remain open (through user log off and log on) for additional entries until the user initiates closing the batch.	1			
F 6 System must support automatic administration of a discounted fine amount for prompt payment received within a user defined time.	1			
F 7 System must utilize one unique account number issued to a customer and link all related records (citations, tow/boot entries, vehicles and fees) to the unique account.	1			
F 8 The Account record must display a consolidated view of all comments/notes recorded with any ticket, permit or vehicle associated with the account.	1			
F 9 The balance due, with detail, for totals based upon citations, permits and fees must be viewable directly on screen.	1			

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REQUIREMENT	Priority	Fully Provided	Modification Required	Not Provided
F 10 Posting of payments for citations, permits, NSF and fees may be applied on one screen. Payments can be applied automatically (FIFO) or manually to specific items. Split payments must also be supported (ex. Payments in cash and check may be applied in one single transaction).	1			
F 11 All transactions must be tracked by cashier or cash drawer/terminal.	1			
F 12 Payments may be posted in full or partial. Credits from an existing customer balance may be applied.	1			
F 13 A receipt may be printed/emailed as necessary that clearly identifies individual transactions and/or items purchased.	1			
F 14 User-defined payment methods must be supported and interface with third-party systems where applicable (i.e. cash, check, payroll deduction, credit card, interdepartmental check).	1			
F 15 System must support the entry of multiple payment methods (tender types) for payment within a single payment transaction.	1			
F 16 Fields for check number, credit card number, and authorization number or expiration date must be available.	1			
F 17 A complete cash drawer closeout process must be included with a detailed reconciliation report.	1			
F 18 System must include the ability for receipts to be printed, emailed and reprinted/emailed on demand.	1			
F 19 A barcode may be printed on citations and scanned at point of sale to facilitate rapid data entry and lookup.	1			
F 20 System must support establishment and tracking of payment plans	1			
F 21 System must be able to process NSF checks, with assessment of an optional fee, and a flag may be placed on the account (flag must appear on any screen where a payment may be applied).	1			
F 22 A summary, with direct access to all information and invoices associated with a customer must be viewable on one screen.	1			
F 23 System must contain the ability to apply overpayments to a customer account with a complete audit trail	1			
F 24 System must include the ability to generate user-defined customer statements in a variety of formats.	1			
F 25 Complete account history including all vehicles, citations, permits, fees and transactions on an account must be viewable, with the ability to print and/or email.	1			
F 26 System must include the ability for addresses to be defined as invalid. Accounts with invalid addresses should be removed from the billing queue and sent back to DMV for updated address information if requested.	1			
F 27 Potential duplicate customer records may be identified with the option to merge the duplicate records.	1			
F 28 Scanned documentation, digital images or other electronic items may be attached to the record.	1			
F 29 A visual indicator must display on records with attachments.	1			
F 30 Direct access to receipts (payments) associated with the customer must be available for viewing or printing.	1			
F 31 System must allow authorized users to issue refunds and credits to a customer.	1			

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REQUIREMENT	Priority	Fully Provided	Modification Required	Not Provided
F 32 System must allow unlimited, user-defined unique ID numbers to be associated with one customer account.	1			
F 33 System must support custom messages added to an account that will pop up each time the account is called up on screen (account alert).	1			
F 34 System must allow search by unique ID number, name, address, custom fields, citation, permit number, and plate number. Searches may be performed from any screen.	1			
G. INVOICING/LETTER GENERATION				
G 1 The system must be able to print and/or email a variety of invoices related to citations, and account data.	1			
G 2 The system should automatically attach sent correspondence to the pertinent record.	1			
G 3 The system must allow for setup of unlimited custom letters.	1			
G 4 The system must support sending letters to a group of people or individually	1			
G 5 The system must be configurable to automatically send batch produced correspondence via email if an email address exists, or otherwise print the correspondence for mailing.	1			
G 6 The system must generate notices, or billing letters, for overdue citations.	1			
G 7 The system must include the ability to generate billing letters based upon a variety of user-defined criteria.	1			
G 8 Letters may be printed on a standard printer directly connected to the workstation or accessed via a network	1			
G 9 Letters may be "rolled back" if generated in error.	1			
G 10 An audit trail exists to track all notification letters within the system	1			
G 11 Notices may be printed on letterhead.	1			
G 12 The system must have the capability of generating notices without user intervention via a task scheduler.	1			
G 13 System must be able to generate customer statements for mail or email	1			
G 14 Hearing notification letters/results may be generated for mailing or email.	1			
G 15 System must allow the user to define and create different types of letters specifically for on-demand generation from the record's screen with the letter being stored on the account for future reference.	1			
G 16 System must send waiting list notification letters.	1			
G 17 System must be able to email a group of accounts custom letters.	1			
H. REPORTING				
H 1 The parking system must include several pre-defined reports concerning citation, account and financial information.	1			
H 2 Reports must be selectable by date or date range, plus additional relative selection qualifiers.	1			
H 3 Standard reports support multiple levels of sorting based on a variety of variables.	1			
H 4 Reports must be exportable to common formats such as csv, xls, and pdf.	1			

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REQUIREMENT	Priority	Fully Provided	Modification Required	Not Provided
H 5 The parking management system must include the ability to schedule reports to generate and automatically email to designated staff without user intervention.	1			
H 6 At a minimum, the system must include the following standard/canned reports. Denote any of these that are not included in the comments section, along with the cost to provide. <ul style="list-style-type: none"> - Account Balance Owing - Billing History - Fees - Overpayments - Refunds - Payments by Bank Account - Payment Plans - GL Revenue - Payments by Payment Type - Payments by Payment Origin - Payments by Cashier - Ticket Payments - Fee Payments - Violation Payment Amounts - Violation Payment Percentages - Voided Payment Reports - Appeal Results - Billed Tickets - Excessive Tickets on Customer Record - Hearing Schedules - Issued Tickets by Officer, Location, Violation and Status 	1			

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REQUIREMENT	Priority	Fully Provided	Modification Required	Not Provided
<ul style="list-style-type: none"> - Unpaid Tickets - Tickets without Owner Information - Ticket Aging Details - Voided Tickets by Badge and Location - Scofflaws 				
<p>H 7 The system must include a fully-integrated report designer for modification of standard reports. Modified reports must appear within the main reporting menu. Third-party software for generating reports (i.e. Crystal) must not be required.</p>	1			
<p>H 8 Vendor must supply a complete database dictionary.</p>	1			
<p>H 9 Reports must be accessible both from within the parking system and through a browser.</p>	1			
I. CUSTOMER SELF-SERVICE PORTAL / E-COMMERCE				
<p>I 1 The parking system must include a customer self-service/e-commerce module for online ticket payments/appeals, account viewing, and secure online payments.</p>	1			
<p>I 2 The e-commerce module must allow sign on through a single sign on portal, support Shibboleth, LDAP, Active Directory and other commonly used authentication methods.</p>	1			
<p>I 3 The e-commerce module must interface in real-time with the parking management software to enforce business rules and send requests/payments in real-time.</p>	1			
<p>I 4 The e-commerce module must redirect customers to a secure payment gateway for PCI compliant credit card payments.</p>	1			
<p>I 5 The e-commerce module must allow the customer to perform all of the following features</p>	1			
<p>I 6</p> <ul style="list-style-type: none"> - View all current parking activity including contact information, citations, boot/tow, fees, and vehicles on one screen. - Pay entire account balance - Pay/Appeal Ticket - Upload attachments with appeal request - View tickets, including exact reprint, associated pictures, past billing statements 	1			
<p>I 7 The e-commerce module must allow departmental logins and self-service.</p>	1			
<p>I 8 The e-commerce module must be fully brandable to match the institution's branding rules.</p>	1			
<p>I 9 The e-commerce module must include a distinct configuration menu to allow parking administrators to activate/deactivate a variety of features.</p>	1			
<p>I 10 The e-commerce module must support business rules that restrict which violations may be appeals and/or paid online.</p>	1			
<p>I 11 The e-commerce module must generate, display and email receipts to the customer.</p>	1			
<p>I 12 The e-commerce module must support an automated customer inactivity timeout.</p>	1			
<p>I 13 The e-commerce module must operate over a secure network connection including SSL.</p>	1			
<p>I 14 The e-commerce module must include an interface for parking staff to view a real-time Dashboard</p>	1			
<p>I 15 The Dashboard must include all of the following widgets:</p>				

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REQUIREMENT	Priority	Fully Provided	Modification Required	Not Provided
<ul style="list-style-type: none"> - Current parking system users - Current e-commerce activity and server load - Graphs of Hourly and Daily e-commerce users - Issued tickets - Pending ticket voids - Unmatched skeletal payments - Appeal Requests 	1			
I 16 The e-commerce module must support all commonly used browsers including Internet Explorer, Chrome, Firefox, Opera, and Safari	1			
I 17 The e-commerce site must automatically scale to support mobile and desktop browsers	1			
J. SYSTEM INTEGRATION/TASK AUTOMATION				
J 1 The system must be capable of transferring/importing customer, citation, permit, vehicle, tow, wait list, and financial information through data file imports and exports.	1			
J 2 The system must be capable of read/write ASCII and Unicode character sets	1			
J 3 The system must be able to read/write fixed, delimited CSV, SML, tape, and customized file formats.	1			
J 4 The system must include advanced configuration abilities for data field mapping, ordering, formatting and must be able to work with either file headers or footers.	1			
J 5 The system must be able to automatically backup, copy, move, delete and process data files for both import and export through a scriptable procedure.	1			
J 6 The system must be able to upload/download files to or from remote servers using network shares, mapped drives, FTP, sFTP and scp.	1			
J 7 The system must log all file transfers and report on job statuses by date range and/or process name.	1			
J 8 File transfers must include the following. Identify the availability of each file transfer type, indicating whether this is a standard interface or if programming is required in the comments column. Also include pricing for any of these within you pricing proposal.				
J 8a - Demographic (person name, address, etc.) import/export	1			
J 8b - Citation import/export	1			
J 8c - Vehicle import/export	1			
J 8d - Payment import/export	1			
J 8e - General Ledger interface	1			
J 8f - Collection Agency Export and Import	1			
J 8g - Cashiering System Export and Payment import	2			
J 8h - Registered Owner Lookup	1			
J 8i - DMV Registration Hold, if supported by state	1			
J 9 The system should be capable of real-time integration with other software systems	2			
J 10 The system should be capable or real-time integration through web services, stored procedures, tables and views	2			
J 11 The system must include a task scheduler for automation of all system processes, including, but not limited to: <ul style="list-style-type: none"> - Fine escalations 	1			

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REQUIREMENT	Priority	Fully Provided	Modification Required	Not Provided
<ul style="list-style-type: none"> - Bill/Invoice Generation - All file transfers 				
J 12 The task scheduler must allow scheduling by date, day of the week or time	1			
J 13 The task scheduler must run unattended on the server without an operating system user logged in.	1			
J 14 Input and output of tasks must support any of the following: ASCII, API, stored procedure, network share, ftp site	1			
J 15 The task scheduler must log process activity and display warnings and errors.	1			
J 16 The task scheduler must be capable of emailing process logs and activity to multiple email addresses	1			
J 17 The task scheduler must allow configuration by process (distinct schedules per job)	1			
K. ENFORCEMENT SOFTWARE/EQUIPMENT				
K 1 This proposal must include an Android Enforcement app, operating on the smartphone or tablet of our choice, including Bluetooth printer for all enforcement activities.	1			
K 2 The Agency must be able to procure the smartphone/tablet from the carrier of our choice	1			
K 3 The Enforcement App must communicate in real-time with the parking software via WiFi and/or Cellular networks	1			
K 4 The Enforcement app must include the following functionality. Denote any function not supported in the comments.	1			
<ul style="list-style-type: none"> - Citation issuance - Ability to capture unlimited, high resolution color pictures with a single ticket - Ability to record unlimited voice memos with a single ticket - Permit searching - Vehicle Searching - Electronic Tire Chalking shared across all enforcement devices in real-time - Boot/Tow recording and tracking 	1			
K 5 The Enforcement app must send citations to the parking system upon print, including any pictures or recorded voice memos.	1			
K 6 The Enforcement App must send boot/tow information in real-time.	1			
K 7 The Enforcement App must search vehicles in real-time against the database.	1			
K 8 The Enforcement App must track the enforcement officer's GPS path and display this on a map within the parking software	1			
K 9 Tickets issued from the Enforcement App must display the GPS coordinates on a map, directly on the citation screen	1			
K 10 Pre-selected information, including violation codes, makes/models, and other data collection fields must be sent to the Enforcement App via WiFi or cellular network for batch backup	1			
K 11 The Enforcement App must require a valid Badge ID an optional password for log-in	1			
K 12 The Enforcement App must be menu operated for ease of use	1			

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REQUIREMENT	Priority	Fully Provided	Modification Required	Not Provided
K 13 The Enforcement App must support both touchscreen and voice data entry	1			
K 14 The Enforcement App must track issuer productivity	1			
K 15 The Enforcement App must allow reprint of a citation	1			
K 16 The Enforcement App must allow authorized enforcement staff to void tickets in the field	1			
K 17 The Enforcement App must allow the issuer to review tickets issued within the shift	1			
K 18 The Enforcement App must search the parking database in real-time upon entry of a vehicle and display outstanding balance, vehicle warnings (boot/tow eligible, VIP, repeat offender, etc), and all permit information include type, expiration date, parking location, status and associated vehicles	1			
K 19 The Enforcement App must automatically assign multiple levels of escalated fine amounts based on user defined parameters.	1			
K 20 The Enforcement App must include barcode scanning technology for scanning of bar-coded registration stickers or permits.	1			
K 21 The Enforcement App must be capable of printing a QR code on the ticket so that customers can immediately pay the ticket online via their smartphone	1			
K 22 Violation tables must be stored in the Enforcement App for selection by the issuer. Up to three violations may be selected for each citation.	1			
K 23 Late fee amount must be automatically added to violation(s) amount and the total displayed as the amount due if ticket is not paid by the date (displayed) the late fee would be assessed.	1			
K 24 The Enforcement App must automatically assess the correct escalated fine amount based on the parameters established for the violation, without any additional input by the enforcement officer.	1			
K 25 The issuer must be able to review tickets written for the date or date range from the Enforcement App.	1			
K 26 Multiple user-defined warnings (tow lists, scofflaw, VIP, etc.) must be stored in the Enforcement App and accessed real-time from the parking management system. Should one of these plates be entered, the issuer is immediately notified on screen and audibly.	1			
K 27 Additional warnings, previously determined by the Administrator in the system, must also appear upon entry of a plate number associated with that particular warning.	1			
K 28 Data must be selected from user-defined tables to prevent incorrect entry and reduce keystrokes (e.g. a violation code not within the established table cannot be entered).	1			
K 29 The Enforcement App must support both public and private comment codes and free-form comments. Public comments are to be printed on the citation; private comments are to be stored within the parking system for parking department viewing.	1			
K 30 The Enforcement App must communicate in real-time with the parking management system's application server. Cradles and "host communication PCs" must not be necessary to sync data.	1			

L. ENFORCEMENT API

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REQUIREMENT	Priority	Fully Provided	Modification Required	Not Provided
L 1 The system must have an API that facilitates real-time communication between the Enforcement App in the field and Pay-by-Plate, Pay-by Space, Meter and LPR Systems.	1			
L 2 The API must be capable of communication to a variety of third-party companies for pay-by-phone integration to gather real-time pay-by-phone parking information.	1			
L 3 The API must be capable of communication with a variety of Meter manufacturers to gather real-time meter information.	1			
L 4 The API must be capable of communication with a variety of LPR systems for real-time display of LPR hits on the Enforcement App.	1			
L 5 The API must be capable of displaying LPR hits for boot/tow vehicles, overtime parking, and permit verification.	1			
L 6 The API must populate a listing of vehicles that have purchased parking via pay-by-phone systems. The listing must be color-coded to indicate valid plates/spaces, plates/spaces that are due to expire, and expired plates/spaces. The enforcement officer must be able to initiate the ticket issuance process directly from this list.	1			
L 7 The Enforcement API must populate a listing of vehicle hits send in real-time from the LPR system. The enforcement officer must have the ability to issue a citation directly from this screen.	1			
M. OPTIONAL LPR ENFORCEMENT SYSTEM				
M 1 Vendor must offer an LPR enforcement option consisting of mobile or fixed LPR cameras and processing software from a leading, widely installed manufacturer	1			
M 2 Vendor must directly provide the LPR equipment installation and on-going support for the LPR system.	1			
M 3 Vendor application must interact with the LPR Mobile system real-time to provide permit, paid time (meter / pay by phone), and vehicle warning information.	1			
M 4 Vendor must configure the LPR system with geo-fence zones and the related enforcement for the zone (permit types) to support automatic selection by the mobile LPR as it enters the zones.	1			
M 5 Vendor must provide direct integration between the mobile LPR software and their ticketing function on the same LPR vehicle computer with an automated and seamless process.	1			
M 6 LPR system must also send LPR enforcement hits real time to the vendor handheld enforcement devices, with a map display of the violation location.	1			
M 7 All LPR data read (details including date/time, gps coordinates, license information, and both license plate and context images) must be integrated into the Vendors ticket management database..	1			
M 8 LPR Reads will be identified in the database by their status of either READ, HIT (by type), or TICKETED	1			
M 9 Tickets issued as a result of an LPR Hit will have the read details and images attached to and viewable directly from the ticket display.	1			
M 10 Vendor application must include standard reporting, and map and graphical analytics of the LPR data.	1			

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