



STAFF REPORT

CITY COUNCIL OF THE CITY OF SAUSALITO

AGENDA TITLE

Accept Report Regarding Parking and Revenue Control Systems (PARCS) Equipment in Lots 1 and 3 from Walker Parking Consultants and Approve Amendment No. 1 to the Professional Consulting Services Agreement for Integrated Site Improvement Planning Associated with Lots 1-4

RECOMMENDED MOTION

Adopt a Resolution of the City Council of the City of Sausalito Accepting Report Regarding Parking and Revenue Control Systems (PARCS) Equipment in Lots 1 and 3 from Walker Parking Consultants and Approve Amendment No. 1 to the Professional Consulting Services Agreement for Integrated Site Improvement Planning Associated with Lots 1-4

SUMMARY:

The City desires to replace much of the parking equipment associated with its existing Lots, ticket and payment machines, gates, and the hardware and software used to register sales and facilitate enforcement. The City's existing equipment has lived a long and productive life, but the frequency of breakdowns, lack of availability of replacement parts, system crashes, and other interrupts have reduced Staff productivity, and result in poor communication with and inconvenience to customers. The City's objective is higher quality, reliability, security and flexibility to better leverage the skills and expertise of parking staff and result in an optimum balance between revenue generation and the public interest.

With Resolution No. 4996 of January 27, 2009 the City Council approved a professional services agreement with Walker Parking Consultants to provide parking and revenue control systems (PARCS) consulting services to help identify and prepare the drawings and technical specifications necessary for the procurement and installation of new parking equipment, to be implemented first in Lots 1 and 3. Walker has performed the authorized services including conducting a series of meetings with Parking, Police, Public Works and Finance Staff, and their final report (attached) has been provided to the Finance Committee for review.

Walker concluded that while the existing system has provided a relatively high level of service to parking patrons, particularly during the peak weekend exiting periods, it is extremely labor intensive and costly to operate. Walker recommends the installation of multi-space meter

(MSM) replacement system in Lots 1 and 3 because it would allow vehicles to exit the lot at a faster rate, improving not only the efficiency of the exits, but also the vehicular circulation for entering traffic, as congestion and cross-traffic between entering and exiting vehicles would be reduced. User groups such as Yacht Club members and Sausalito residents would still receive discounted parking rates; however, it may be possible to use the Smart Card issued to these individuals to debit a prepaid account directly for parking charges and avoid sending invoices each month. At a future time, the MSM system would also be able to integrate the on-street parking management by providing integrated financial, management, bank reconciliation, maintenance and enforcement reports for the entire parking system, provided that the existing SSM system is replaced with MSMS.

Although it is not feasible to accurately predict revenue effects, it is expected that revenues would be optimized to a greater extent than possible now owing to the ability to operate on a cash advance/debit basis for regular parkers, accept credit cards and avoid cash handling costs for occasional parkers, the scalability of the system to include on-street in the future, and the ability to optimize enforcement using the individual space sensor technology.

Based on the information developed during the course of Walker's work, recognizing the maintenance changes to pedestrian routes likely to occur as a result of the Bridgeway to Ferry Landing NMTTP design (underway) and taking into account the report presented to Council at its May 26, 2009 meeting by the Harbor and Downtown Action Committee, Staff recommends that Walker be authorized to perform additional work concurrently to provide:

- PARCS design and assist the City with procurement and installation for Lots 2 and 4, and the 4 single space meters located on Johnson Street.
- Review submittals for the new parking booth approved for Lot 1 and provide recommendations for possible booth floor plan modifications based on intended use and final booth location selected by the City.
- Provide (without overlap in scope with the Bridgeway to Ferry Landing design) a topographic survey of Lots 1, 2, 3, and 4 which would include observed locations of improvements, utilities, trees, spot elevations, grade breaks, existing striping and other features.
- Develop recommendations for potential improvements to current parking functional design of Lots 1- 4. Improvements will include entry/exit modification and striping modifications.
- Prepare AutoCAD sketches recommending parking layout modifications, as appropriate, utilizing background drawings of the parking areas prepared by our Civil Engineering sub-consultant, CSW/ST2.

On the basis of Walker's recommendations, Staff recommends that the Council:

- (1) Accept the attached Final Report

- (2) Direct Walker to finalize the plans, specifications and other details for the City's subsequent approval and authorization to invite formal bids for removal and replacement of the existing PARCS equipment at Lots 1 and 2 with MSMs using the individual space sensor technology (concurrent with the additional work)
- (3) Approve and authorize the City Manager to direct Staff to prepare a standard form of amendment and execute amendment No. 1 to the agreement with Walker for performance of the additional work described above on a lump sum basis for \$47,888 plus \$1,000 for additional reimbursable expenses to be funded from the adopted budget, Parking Fund 220-420-7000-740 (Machinery & Equipment). The unencumbered balance is \$76,967 in that account as of May 29 2009. Staff will transfer budget from said account into the appropriate Professional Services account for accounting purposes.
- (4) Direct Staff to include the anticipated costs for procurement and installation of the subject PARCS and related improvements as part of the FY09-10 budget reconciling against all other planned and anticipated Parking capital equipment and improvements.

BACKGROUND

The City of Sausalito owns and operates five municipal parking lots, on-street metered parking and a variety of residential and business permit parking programs. The City's Parking Division manages the facilities, revenue collection and enforcement under the supervision and direction of Police Chief Scott Paulin. Approximately 150 monthly permit holders, approximately 1,000 to 1,500 residents with debit parking cards, and 26 spaces in Lot 1 are reserved for carpool participants.

The City desires to replace much of the equipment associated with the Lots including the Lot 1 Booth, ticket and payment machines, gates, and the hardware and software used to register sales and facilitate enforcement. The City's objective is higher quality, reliability, security and flexibility to better leverage the skills and expertise of parking staff and result in an optimum balance between revenue generation and the public interest.

Walker contacted several cities regarding their MSM installations. The City of Oakland reported more than 500 on-street MSMs configured as pay and display meters. The machines operate from solar panels and are on-line with the vendor hosted server through use of wireless GSM/GPRS communication. Oakland accesses the vendor site through a web browser with secured connection. The MSMs are smart meters in that it sends an alarm message to a cell phone for problems such as low battery power, low receipt stock, etc. The machines also accept credit cards. One lesson they learned from their MSM installations is that the machines need scheduled preventive maintenance. Otherwise, problems have been encountered. The solar panels are cleaned up to two times a month since moisture and dust tend to collect on the panel and reduce charging capacity which can lead to low battery charge. The receipt transport mechanisms and credit card read sensors are dusted once a week to prevent jammed receipts and bad card reads.

Oakland indicated that pay-per-space would be their preferred configuration compared to their current pay and display system based on what they now know regarding the fact that parkers furthest away from the machines have to get to the machine and return to their vehicle and display the receipts in their dashboard and the additional maintenance for the receipt mechanisms. Overall, Oakland reported being very happy with the conversion from single meters to MSMs in the locations they have completed to date.

The City of San Rafael has two garages with two MSMs each, and 3 other machines in surface lots. These were installed three years ago and take advantage of the latest technology as far as wireless on-line configuration with the vendor-hosted server and web-based access to the system. The machines inside the garages are powered from the electrical panels while the machines in the lots are solar-powered. All machines have credit card capabilities. The only issue they have is the slow response time from the vendor when they requested new reports. San Rafael indicated they would have liked to evaluate other manufacturers before they chose the one they are using.

The City of Berkeley has 200 MSMs installed in 4 phases over the last 4 years starting in 2005. The machines are similar to the ones in Oakland with solar power and a GSM/GPRS connection to the vendor server. Berkeley staff reported being very happy with the machines. The machines are durable and easy to use. Since the vendor opened up an office in Oakland, they provide the maintenance to keep the machines in good working order. When speaking with the Berkeley staff, they indicated the downtime for the machines are very low and acceptable. There was only one time a major issue came up when the vendor had a major change in their software. The City of Berkeley was made aware of this beforehand, but credit card transactions did not show up in the report until 3-4 days later.

Walker's initial evaluation indicates there would be a significant cost savings (approximately \$158,000 annually) with the MSM system and approximately \$101,000 with the SSM over the 10 year life of the system when compared to the cashiered/POF exit system due to the reduction in staffing and hours required to manage the system. It is expected that the Staff time savings would be spent in more service to residents, parking customers, bus permit applicants etc. Further, although it is not feasible to accurately predict revenue effects, it is expected that revenues would be optimized to a greater extent than possible now owing to the ability to operate on a cash advance/debit basis for regular parkers, accept credit cards and avoid cash handling costs for occasional parkers, the scalability of the system to include on-street in the future, and the ability to optimize enforcement using the individual space sensor technology.

Because the proposed services fall within the definition of "Professional Services" set forth in section 3.30.020 of the Sausalito Municipal Code (SMC) – which specifically includes engineering services – it is not necessary to comply with either formal or informal bidding

procedures with respect to award of the contract. The requirements of SMC Article 4, sections 3.30.500 *et seq.* have been met.

ISSUES

None identified. The proposed professional services will not have an adverse effect on the environment.

FISCAL IMPACT

The funding requested is \$48,888. Said funding is available in the adopted budget, Parking Fund 220-420-7000-740 Machinery & Equipment. The unencumbered balance is \$76,967 in that account as of May 29 2009.

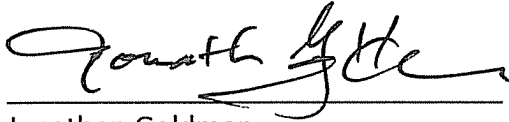
STAFF RECOMMENDATION

Adopt a Resolution of the City Council of the City of Sausalito (1) Accepting Walker's Final Report, (2) Directing Walker to finalize the plans, specifications and other details for the City's subsequent approval and authorization to invite formal bids for removal and replacement of the existing PARCS equipment at Lots 1 and 2 with MSMs using the individual space sensor technology (concurrent with the additional work), and (3) Approving and authorizing the City Manager to execute amendment No. 1 to the agreement with Walker for performance of additional work for a lump sum of \$47,888 plus \$1,000 for additional reimbursable expenses to be funded from the adopted budget, Parking Fund 220-420-7000-740 (Machinery & Equipment).

ATTACHMENTS

1. Walker Parking Consultants' Final Report dated April 17, 2009
2. Resolution of the City Council of the City of Sausalito (1) Accepting Walker's Final Report, (2) Directing Walker to finalize the plans, specifications and other details for the City's subsequent approval and authorization to invite formal bids for removal and replacement of the existing PARCS equipment at Lots 1 and 2 with MSMs using the individual space sensor technology (concurrent with the additional work), and (3) Approving and authorizing the City Manager to execute amendment No. 1 to the agreement with Walker (to be prepared in standard form) for performance of additional work for a lump sum of \$47,888 plus \$1,000 for additional reimbursable expenses to be funded from the adopted budget, Parking Fund 220-420-7000-740 (Machinery & Equipment).

PREPARED BY:



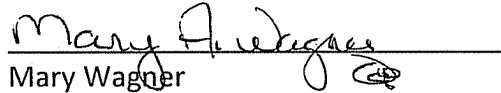
Jonathon Goldman
Director of Public Works

REVIEWED BY:



Charlie Francis
Administrative Services Director

REVIEWED BY:

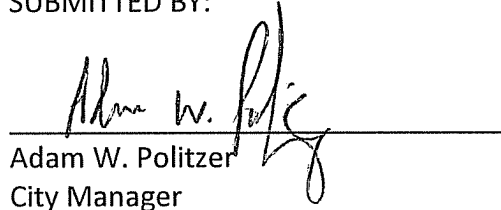


Mary Wagner
City Attorney

REVIEWED BY:

Scott Paulin
Chief of Police

SUBMITTED BY:



Adam W. Politzer
City Manager

[Walker Parking]

ATTACHMENTS 2



WALKER
PARKING CONSULTANTS

135 Main Street, Suite 1030
San Francisco, CA 94105

Voice: 415.644.0630
Fax: 415.644.0637
www.walkerparking.com

April 17, 2009

Mr. Jonathon Goldman
Director of Public Works
City of Sausalito
420 Litho Street
Sausalito, CA 94965

Re: *Parking Access and Revenue Control System Evaluation and Recommendations*
Walker Project# 33-1618.00

Dear Jonathon,

The City of Sausalito (City) retained Walker Parking Consultants (Walker) to provide parking consulting services regarding their multi-facility public parking operation, primarily in Lots 1 & 3 located in the Downtown Business Core. The City seeks to replace their existing parking equipment with an upgraded system that will allow their lots to operate more efficiently, while providing improved management capabilities and an increased level of service for their customers. The purpose of this PARCS (Parking Access and Revenue Control System) study is to review the operations and physical layouts of the individual lots and recommend the most appropriate systems within these facilities to meet these goals.

DESCRIPTION OF PARKING FACILITIES

LOT 1

Lot 1 is a surface parking lot adjacent to the Sausalito Ferry Landing located in downtown Sausalito, California and is bound by Tracy Street on the west and Anchor Street on the north. The facility has a total of 212 spaces which serves members of the Sausalito Yacht Club, visitors of surrounding retail establishments and commuters using the ferry to and from San Francisco. The lot is open for transient parking 24 hours per day seven days per week¹.

Transient parkers are issued a time-stamped parking ticket from the ticket dispenser upon entry, which activates the entrance gate, and they proceed to park in any stall in the facility. When the daily parker is ready to exit the facility, they have the option of paying at an Automated Payment Machine (APM) or a central cashier located in the parking booth. Customers choosing to pay at the central cashier would surrender their ticket to the cashier located in the parking booth prior to retrieving their vehicle. The cashier inserts the ticket into the fee computer, which automatically calculates the fee owed. If there are validations on the ticket, the attendant

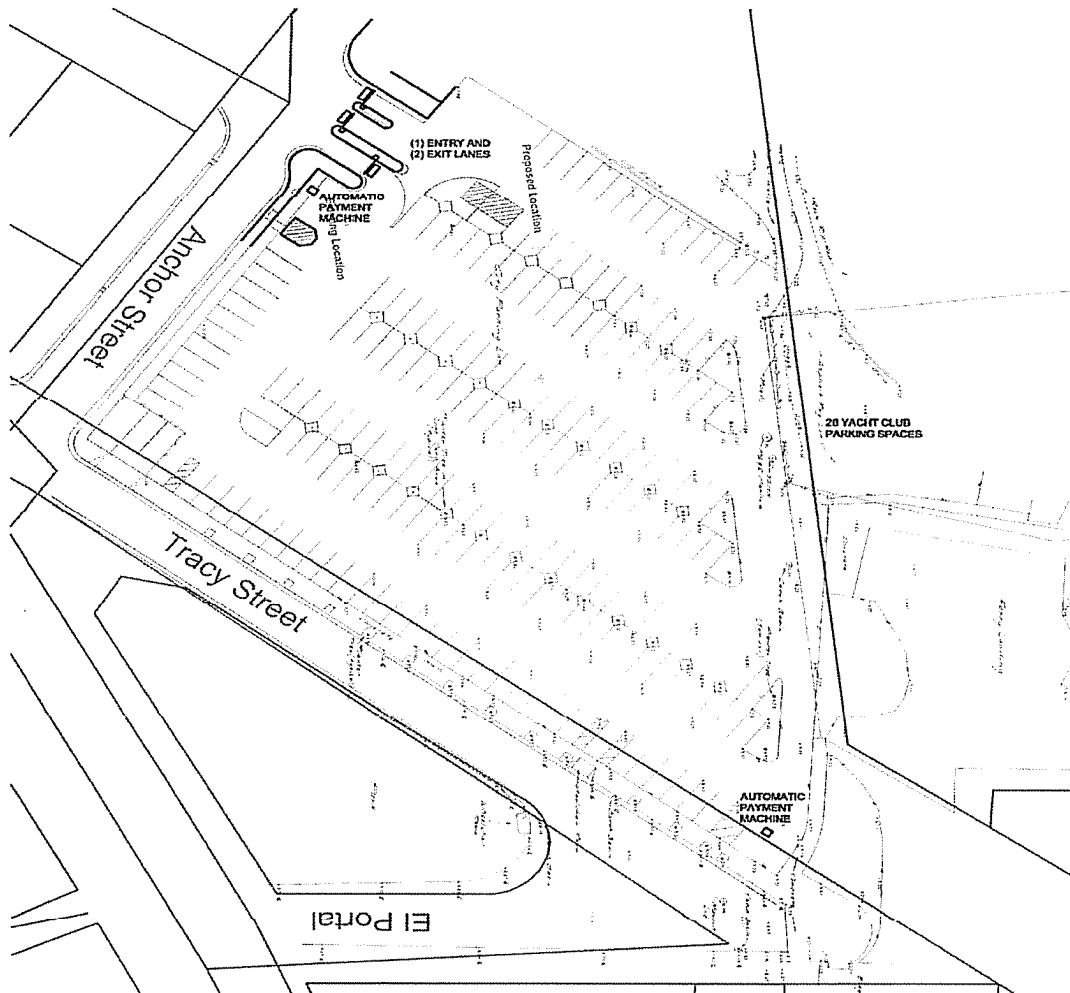
¹ Cashier booth attended from 9:00 am to 10:30 pm seven days per week.



manually enters the validation type into the fee computer, and the amount of validation is subtracted from the fee due. This processed ticket is then used to exit the facility by inserting it into an exit verifier located at the exit lane. Customers not paying the cashier use one of two APM's located in the parking lot to process their ticket, receive a validated ticket, and exit by inserting the validated ticket in an exit verifier in an un-staffed lane. APM's are capable of accepting cash, coins, and credit card payments and dispensing change in notes and/or coins.

Yacht Club Members and Sausalito residents are allowed access 24 hours per day seven days per week via their access cards, which activates the entry gate at Anchor Street. Sausalito residents are allowed to park for three hours without charge and then are billed at regular rates thereafter. Yacht Club Members are allowed to park for free in one of the 26 dedicated Yacht Club spaces; however, the Yacht Club is billed for all members who park outside the designated area at regular rates. See Figure 1 below for existing Lot 1 layout.

Figure 1: Existing Lot 1 Layout



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LOT 3

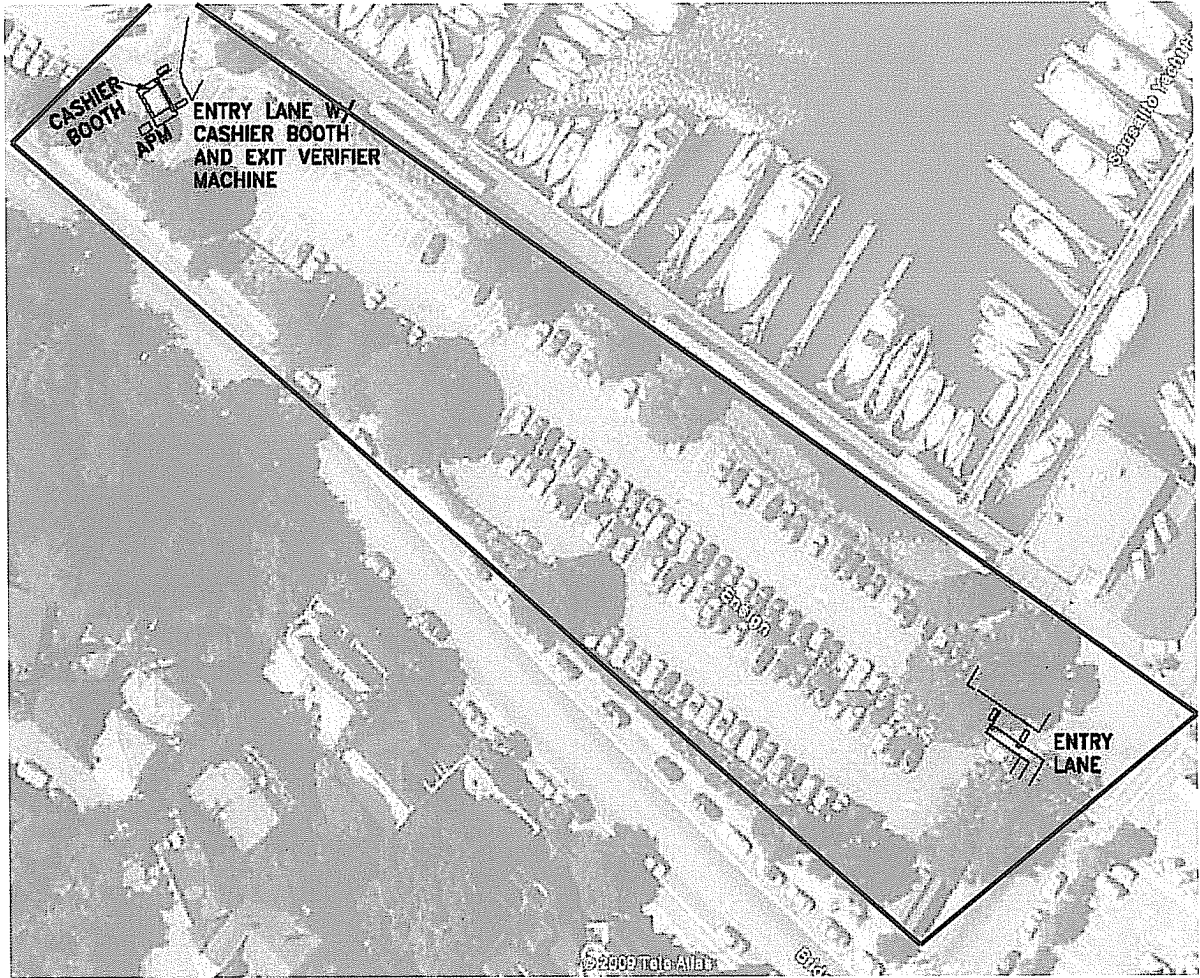
Lot 3 is across the street from the Casa Madrona Hotel, on the same block as the Visitor Center in downtown Sausalito, California and is bound by Bay Street on the south and Bridgeway Street on the West. The facility has a total of 183 spaces which serves visitors of surrounding retail establishments, contractor's (temporary permits), debit card holders and premium D card holders. The lot is open for transient parking 24 hours per day seven days per week.

Transient parkers are issued a time-stamped parking ticket from the ticket dispenser upon entry, which activates the entrance gate, and they proceed to park in any stall in the facility. When the daily parker is ready to exit the facility, they have the option of paying at an Automated Payment Machine (APM) or a cashier located in the parking booth at the exit². Customers choosing to pay at the cashier would surrender their ticket to the cashier located in the parking booth at the exit. The cashier inserts the ticket into the fee computer, which automatically calculates the fee owed. If there are validations on the ticket, the attendant manually enters the validation type into the fee computer, and the amount of validation is subtracted from the fee due. Customers not paying the cashier use the APM located near the parking lot exit to process their ticket, receive a validated ticket, and exit by inserting the validated ticket in an exit verifier in the un-staffed exit lane. APM's are capable of accepting cash, coins and credit card payments and dispensing change in notes and/or coins. See Figure 2 on the next page for existing Lot 3 layout.

² The cashier exit is only manned two days per week during the tourist season. In the absence of a cashier, the facility is automated and patrons must use the APM to pay for parking.



Figure 2: Existing Layout of Lot 3



*IMAGE RETRIEVED FROM GOOGLE EARTH

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EXISTING PARCS EQUIPMENT AND REPLACEMENT TIMELINE

The lots are currently equipped with DataPark equipment, which was originally installed in 2000. Table 1 provides an inventory of the existing DataPark PARCS equipment.

Table 1: Existing PARCS Inventory

LOCATION	EQUIPMENT												
	CR	AG	TD	EV	FC	LFS	APM	INT	CB	CFD	VD/L	IM	FMS
Lot 1 Entry Lane	1	1	1					1			2		
Lot 1 Exit Lanes	2	2		2				2			4		
Lot 1 Payment Devices							2	2					
Lot 3 Entry Lane	1	1	1					1			2		
Lot 3 Exit Lane	1	1		1	1			2	1	1	2		
Lot 3 Payment Devices							1	1					
Parking Management Office					1				1	1		1	1
Total	5	5	2	3	2	0	3	9	2	2	10	1	1

- AG Automatic Gate
- APM Automate Payment Machine
- CB Cashier Booth
- CFD Customer Fee Display
- CR Card Reader
- EV Exit Verifier
- FC Fee Computer
- FMS Facility Management System
- IM Intercom Master Panel
- INT Intercom Substation
- LFS Lot Full Sign
- TD Ticket Dispenser
- VD/L Vehicle Detector w/Loops

The following is a typical timeline that can be used to estimate how long it would take to replace the equipment, as well as to determine the appropriate time to initiate the process.

- 30 days Preparation/distribution of bid documents
Equipment vendor selection
- 8 weeks Equipment order and delivery
- 6 – 8 weeks Installation and testing

OPERATIONS AND EQUIPMENT OPTIONS

The City's goal is to improve the parking operation, reduce operating costs, and increase the level of service for customers exiting the facility by stream-lining the exiting process. The following provides a comparison between the existing Central Cashier/Pay on Foot system and an alternative Pay per Space parking system using Multi Space Meters for consideration:

CENTRAL CASHIER

Arriving parkers take a parking ticket on entry and pay the central cashier prior to retrieving their vehicle. The parker then drives to the un-manned exit lane, inserts the paid ticket into an exit verifier which activates the barrier gate arm allowing the vehicle to leave.

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ADVANTAGES

- The central pay system is more flexible to changing conditions or special requirements. The presence of a cashier permits on-the-spot resolution of abnormal transactions.
- A cashiered system does not require a learning period or customer education process and is the most familiar means of revenue collection.
- The system will not be met with resistance and is the same system as most of the other public parking facilities in the San Francisco Bay area..
- The initial cost of a cashiered system is less than for a pay-on-foot system.

DISADVANTAGES

- The cashiered system is more labor intensive and therefore more expensive to operate over time when compared to an automated payment system.
- The system requires that money collected for parking is handled by employees. The opportunity for improper accounting of transactions or validations and theft is greater than with an automated pre-pay system.

PAY-ON-FOOT (POF)

Instead of paying a cashier, the patrons would pay after visiting the destination, but before retrieving their vehicle to exit the facility. Patrons will pay for parking at one of the automated payment machines (APM), receive a validated ticket, and exit by inserting the validated ticket in an exit verifier in an un-staffed lane. APMs are capable of accepting cash, coins, and credit card payments and dispensing change in notes and/or coins.

ADVANTAGES

- Faster exiting due to patrons simply inserting the pre-paid ticket into the exit verifier machine.
- Improved air quality due to shorter waiting times at the exit lanes, thus resulting in less vehicle idling time and vehicle emissions.
- Reduced staffing and hours due to elimination of cashiers.
- Revenue collection via cash, coin and credit card on a 24-hour basis with minimal personnel. However, it is recommended to have at least one staff member available to assist with trouble calls.
- Although capital cost is much higher, we *typically* find that the system will "pays back" within a few years due to labor savings.



DISADVANTAGES

- Two-Step Process. Although the pre-pay system would speed up the vehicle exiting from the lot, the system does require that exiting patrons complete a two-step process in order to exit. Patrons would have to proceed on foot to the automated payment machine and pay their parking fee, and then drive to the exit and insert their ticket.
- Provisions must be made for collecting fees at exit from those who forgot to pay on foot, but is typically handled by having the patron pay by credit card to the exit verifier. Temporary 5-minute parking spaces can also be provided adjacent to the APM locations for patrons who forgot to pay for parking before returning to their vehicles.
- Pre-pay cashiering systems generally require a greater amount of attention during initial start-up of the system. It requires an initial education and awareness program to overcome the "machine phobia" of much of the public. Our experience in other parking facilities suggests that when these systems are well planned and implemented, the public reacts positively.
- Initial cost of a pay-on-foot system is higher than a cashiering system. However, as previously noted, the staffing costs will be lower.

POF OPERATION - KEYS TO SUCCESS

If the City chooses to retain the current PARCS operating format there are several factors that need to be address to ensure success. Over the last 12 years, gated pay-on-foot installations have achieved varying degrees of success. Some deliver a very high level of customer service, operational cost savings, and ancillary customer service and security benefits. Other facilities have suffered from disappointing customer acceptance, operational difficulties, and/or equipment related problems. The key to a successful deployment is to have a well-formulated system design basis, and an implementation strategy that includes customer education and service, operational procedures and adequate staffing, and support from the equipment vendor and installer. Signage is equally a key element in the design of a POF system. It provides information to the parking customer of the need to keep their parking ticket with them before leaving their vehicle and payment at an APM machine prior to returning to their vehicle.

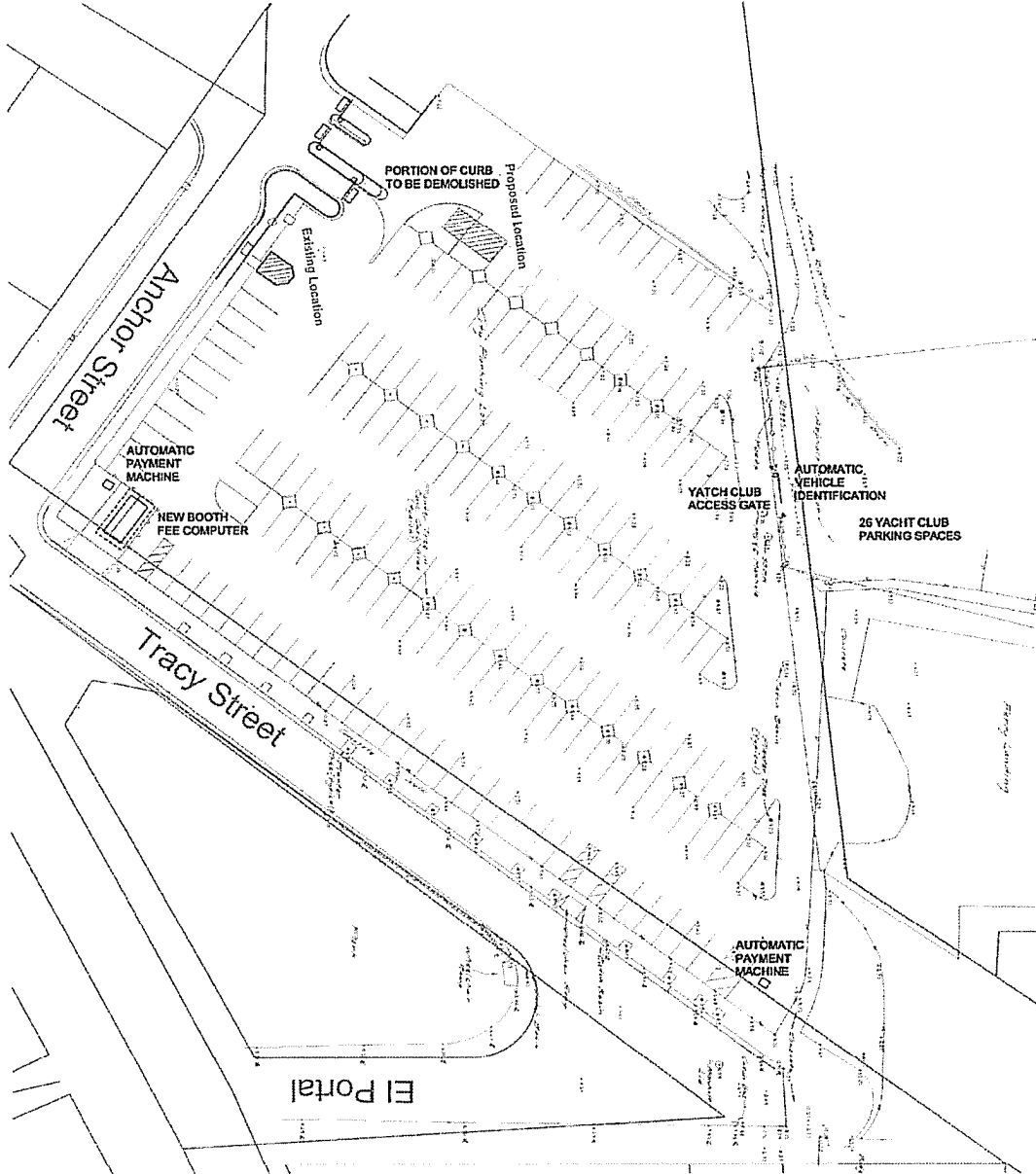
PEDESTRIAN PORTALS

The success and capital cost of pay-on-foot revenue collection are both influenced greatly by the physical layout of the parking facility and the pedestrian access route to the facility. Ideally, the majority of patrons should return to the parking areas through the least number of pedestrian connectors. Lots 1 & 3 are not ideal facilities for a pay-on-foot system since they possess numerous pedestrian portals, or access points, to the lots.

Figure 3 shows our proposed lane configuration and booth location using the current PARCS equipment configuration.



Figure 3: Proposed Lot 1 Layout with APM Configuration

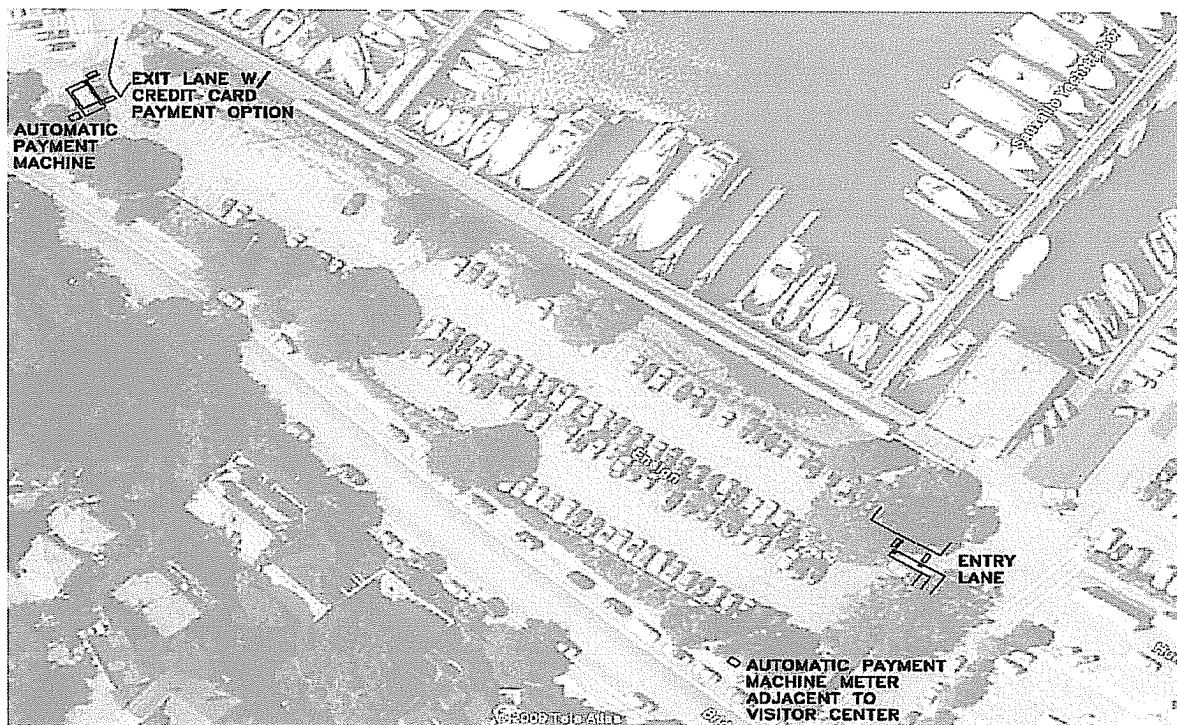


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Figure 4 below shows our proposed lane configuration for Lot 3 eliminating the cashier booth and adding one additional APM unit.

Figure 4: Proposed Lot 3 Layout with APM Configuration



*IMAGE RETRIEVED FROM GOOGLE EARTH

CUSTOMER EDUCATION/PUBLIC RELATIONS

POF revenue collection systems require an investment in customer education and service to ensure their success. Because the traditional approach to gated revenue control in the United States involves a cashiered exit lane, parking patrons have become accustomed to conducting the transaction at the exit. This interaction encompasses everything from the normal fee transaction to handling lost tickets and other exceptions, complaints about service, or requests for driving directions. Customers will need to be re-trained in how to use the pre-pay system, particularly since they have been used to having their payment ready upon exit.

SIGNAGE AND GRAPHICS

Another key element for implementing POF systems is signage and graphics. A cashiered operation is straightforward in that it is a two-step process in which customers are forced to take a ticket upon entry and proceed to the cashier upon exit. A POF operation, on the other hand, requires customers to pre-pay – an intermediate step that would not normally be anticipated. For this reason, customers must be provided with specific instructions as they park and before they exit, to achieve maximum success in a POF operation.

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Signage will be required to inform parking patrons of the need to keep their parking tickets with them when they leave their vehicles. This message would be communicated through strategically placed signs throughout the parking facility. At the entrances to the lots, signs such as, "Please Keep Your Tickets With You, Do Not Leave The Ticket In Your Car" or another popular message, "This Is An Automated Parking Facility. Please Pay Before Exiting", can be reinforced with audio messages at the ticket dispenser. At this point, while customers may not exactly know what this means or why they need to keep their tickets, they are made aware of the fact that there may be something atypical about this lot operation.

Signs with similar messages would be placed throughout the lot near the pedestrian portals asking patrons, "Do You Have Your Parking Tickets? You Must Pay For Parking Before Returning To Your Car". Signs would also be placed at the APM locations informing patrons to "Pay Your Parking Fees Here Before Retrieving Your Car".

Once customers have retrieved their vehicles and proceeded to the exit lanes, signs informing them of the need to have pre-paid will be displayed to allow customers the chance to re-park and visit an APM before being committed in the exit lane. The success of a POF operation will be dependent on parking operations staff in guiding the customers through the process until a significant number of users become familiar with the operation.

PAY ON FOOT SYSTEM CONFIGURATION

To streamline the accounting process and provide the ability to track Yacht Club members parking and generate accurate billing statements for all user groups we recommend some additional equipment (i.e. nested gates, AVI readers and additional software) be added to the configuration.

Table 2 below is the estimated budget for the PARCS replacement project, which includes several recommended system enhancement features required to satisfy the project goals.

Table 2: Proposed Gated PARCS Replacement Costs

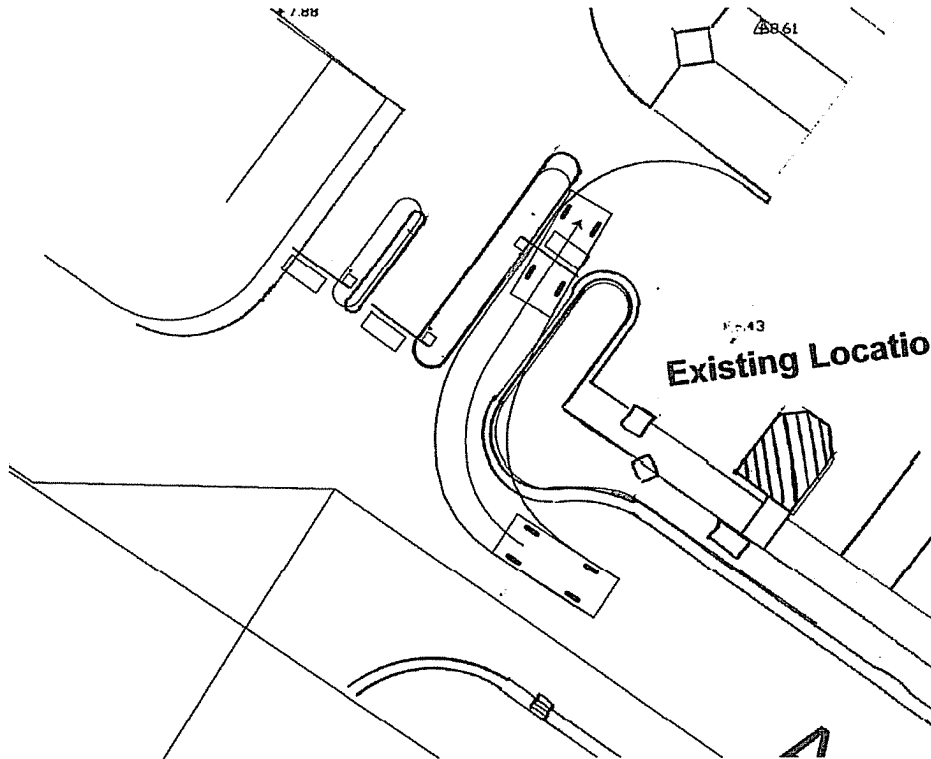
Pay-on-Foot System Configuration Item Description	\$/Unit	Lot 1 Pay-On-Foot		Lot 3 Pay-On-Foot		Lots 1 & 3	
		Units	Extension	Units	Extension	Units	Extension
Entrance Controller (Ticket, CC, ACS etc)	\$18,500	1	\$18,500	1	\$18,500	2	\$37,000
Yacht Club Entry/Exit (AVI, Gate & Loops)	\$9,500	1	\$9,500		\$0	1	\$9,500
Lot 1 Entry/Exit for Yacht Club (AVI Readers Only)	\$5,000	2	\$10,000		\$0	2	\$10,000
Exit Controller (Ticket, CC, ACS, etc)	\$19,500	2	\$39,000	1	\$19,500	3	\$58,500
Pay Station @ Central coins, bills credit	\$50,000	2	\$100,000	2	\$100,000	4	\$200,000
Fee Computer	\$20,000	1	\$20,000		\$0	1	\$20,000
Customer Fee Display	\$1,200	1	\$1,200		\$0	1	\$1,200
Pkg. Office and Equipment							
System Server	\$20,000	1	\$20,000	0	\$0	1	\$20,000
System Software	\$45,000	1	\$45,000	0	\$0	1	\$45,000
Facility Computer	\$15,000	1	\$15,000	0	\$0	1	\$15,000
Credit Card Server & Software	\$9,100	1	\$9,100	0	\$0	1	\$9,100
ACS Software	\$6,500	1	\$6,500	0	\$0	1	\$6,500
Add'l Workstations (incl software)	\$10,000	1	\$10,000	0	\$0	1	\$10,000
Spare Parts and Stock	5%		\$15,190		\$6,900		\$22,090
Installation incl Electrical	25%		\$75,950		\$34,500		\$110,450
Documentation, Training and Warranty	15%		\$45,570		\$20,700		\$66,270
Totals			\$440,510		\$200,100		\$640,610

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In addition to the equipment enhancements, we recommend some modifications be made to the entry lane approach to Lot 1. See Figure 5 (Entry Lane Turn Analysis).

Figure 5: Entry Lane Turn Analysis



MULTI SPACE METER (MSM)

As an alternative to the current cashiered/Pay on Foot system is a MSM system configured with a pay-by space application. This system uses no gates in the entry and exit lanes, allowing traffic to flow freely into and out of the lot. Parkers pay their parking fees at MSM machines that are somewhat similar to parking meters. MSM machines are typically located at central locations within close reach by parkers from any of the parking spaces. The system would require a parker to walk to the MSM machine, identify the parking space they are in and insert the proper fee based on number of hours of stay and fee rate.

Parking management needs to enforce control by patrolling the parking spaces on a random schedule and review a printed report which lists spaces that are paid and spaces that are not occupied. A citation or warning can then be issued to an occupied space that is not indicated as paid. For this system, the spaces are required to be numbered in order for patrons to pay for the spaces and enforcement officer to verify status of each space. Residents and Yacht Club members

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would be issued a smart card that could be used at the MSM to access a different rate structure for each user group and identify the parking space they parked in.

To further automate the enforcement process, wireless sensors can be installed on every parking space to monitor when a space is occupied, monitor the length of stay, and re-set the space once a vehicle has left. This is a fairly new technology and currently we only know of one installation that is in beta testing and a few others that are planned for installation. The manufacturer we talked to employs this technology with their single space meter application. They indicated that they can develop an integration software to extend this concept to MSMs. With this feature, an enforcement officer will be able to use a smartphone or PDA and view a report listing spaces that are occupied but not paid. Enforcement officers no longer have to patrol every space to see if they are occupied and not paid.

The MSM in the market today takes advantage of the latest technology where machines can be installed in any location as long a mounting concrete pad is provided. MSM can be powered from solar panels and not require power conduit to them. Communication typical for these machines are provided via wireless GSM/GPRS where the vendor would host the management server and the City simply logs into the vendors website via a Web browser. With proper access authorization, the user will be able to view, monitor, and program the MSM. Management will also be able to receive alarms related to violation, equipment problems (i.e., low receipts, jammed coin acceptor, etc.) and occupancy status.

The advantages and disadvantages of MSM systems are discussed below:

ADVANTAGES:

- Initial Cost. Initial cost of the MSM systems is much lower than the traditional central cashiering system or the pay-on-foot systems.
- Staffing. Staffing is very minimal, mainly for servicing the equipment (collection of revenue and replacing coin/note dispensers and receipt rolls).
- Fast Entering and Exiting. There are no gates at the entry/exit points.
- No Failed Entry or Exit Problems: There are no gates at the entry/exit points to cause delay.
- Ability to dispense change if paying with paper currency.
- Ability to integrate with On-Street parking system

DISADVANTAGES:

- The main disadvantage with the MSM is that it is essentially an "honor" system and allows scofflaws to take advantage of no gated access to the facility. This can be controlled somewhat depending on the degree of enforcement implemented in the lot.
- Patrons will need to estimate the time of parking and either underpay or overpay for

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parking. Underpayment would result in a citation and overpayment will result in complaints.

- No ability to apply a merchant validation, since all parking is paid for in advance.

MULTI-SPACE METER CONFIGURATION

As an option to the existing combined cashier and pay on foot gated parking system we discussed above, it is possible to convert to a MSM configuration on Lots 1 & 3 and still retain the desired level of control you enjoy with a traditional gated system.

TRANSIENT PARKERS

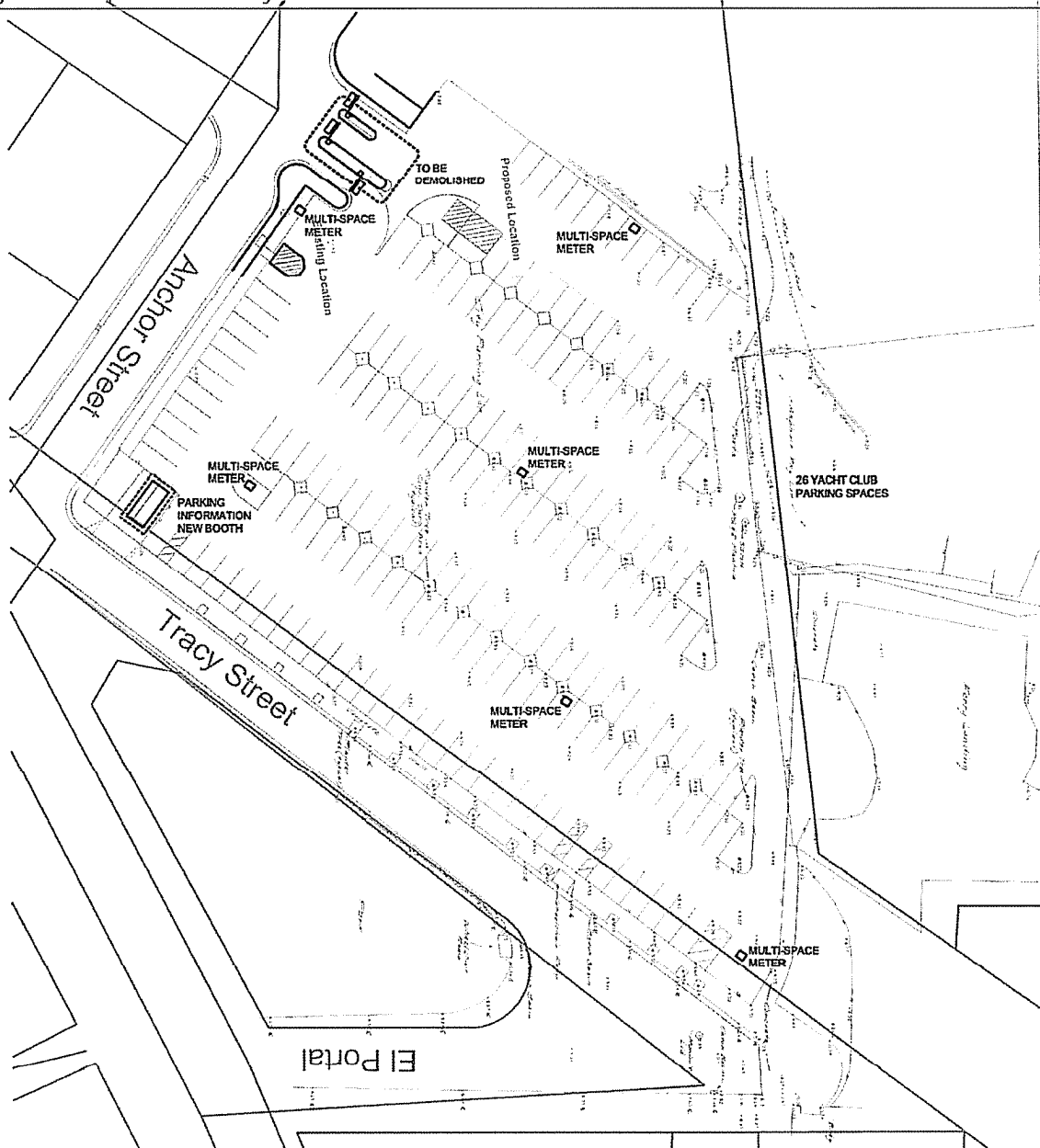
Transient or daily parkers would park their car and proceed to the nearest MSM, identify the parking space number their vehicle is located in and pay for the desired length of stay with coin, currency, credit card or Smart card. The MSM can be programmed to text a message to the parkers phone when time is running out and allow the parker to pay for additional time at any MSM located in Sausalito or via their cell phone.

CONTRACT PARKERS

Yacht Club members, Sausalito residents, debit card holders, premium D card holders and Sausalito employees will all be issued a Smart card programmed with their user group information. A contract parker would park their car and proceed to the nearest MSM, insert their Smart Card and identify the space number they parked in. The Smart card will identify the parkers appropriate user group and rate structure and will either debit charges from the card or track and bill the account according to the length of stay. They can also add time just as the daily parkers do via their cell phone if desired. See Figures 6 and 7 for the proposed MSM layout on Lots 1 & 3



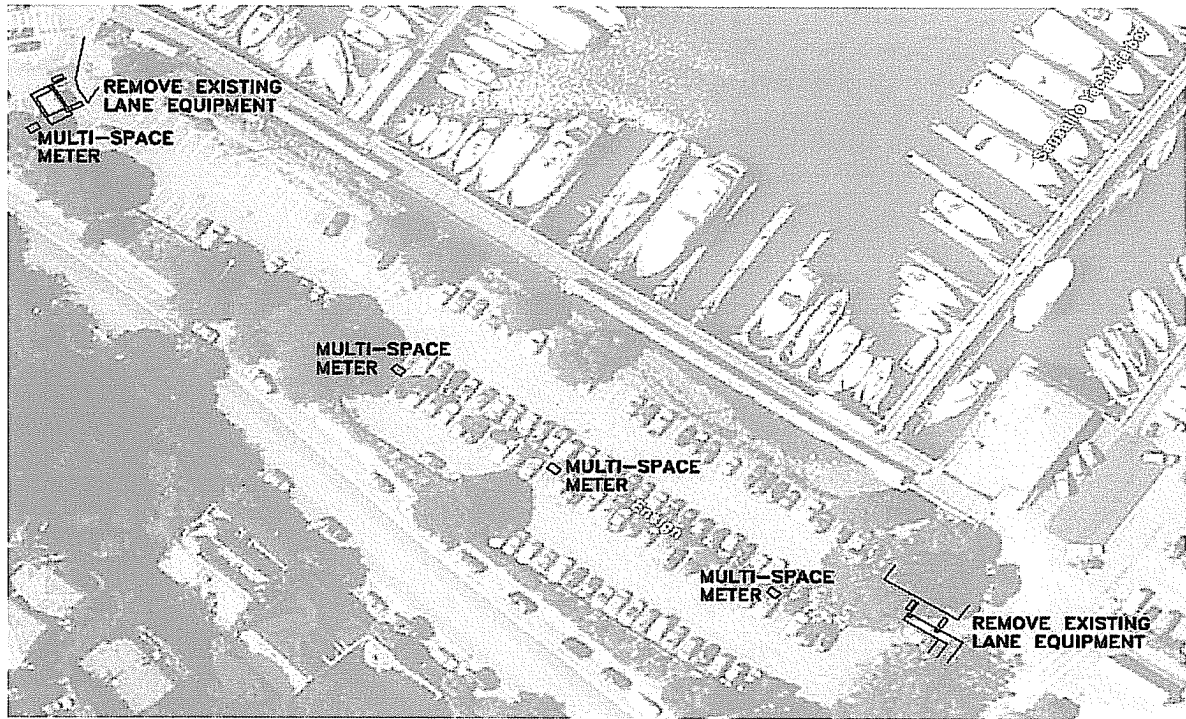
Figure 6: Proposed MSM Layout for Lot 1



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Figure 7: Proposed MSM Layout for Lot 3



*IMAGE RETRIEVED FROM GOOGLE EARTH

Table 3 is our estimated budget to replace the current gated PARCS with a new "State of the Art" MSM system.

Table 3: Proposed MSM PARCS Budget

	\$/Unit	Lot 1		Lot 3		Totals	
		Units	Extention	Units	Extention	Units	Extention
Multi-Space Meters	\$15,000	6	\$90,000	4	\$60,000	10	\$150,000
Intercom's	\$500		\$0		\$0	-	\$0
Pkg. Office and Equipment							
Web Hosted Server Setup Fee	\$16,200	1	\$16,200		\$0	1	\$16,200
Spare Parts and Stock	2%		\$2,124		\$1,200		\$3,324
Installation incl Electrical	10%		\$10,620		\$6,000		\$16,620
Documentation, Training and Warranty	13%		\$13,806		\$7,800		\$21,606
Totals			\$132,750		\$75,000		\$207,750

NOTE: ⁽¹⁾ Multi-Space Meter will be a solar powered web-based unit.

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Table 4 is an estimated budget for the MSM that includes individual parking space sensor.

Table 4: Proposed MSM PARCS Budget including Individual Space Sensors

	Lot 1		Lot 3		Totals		
	\$/Unit	Units	Extention	Units	Extention	Units	Extention
Multi-Space Meters	\$15,000	6	\$90,000	4	\$60,000	10	\$150,000
Pkg. Office and Equipment							
Web Hosted Server Setup Fee	\$16,200	1	\$16,200	0	\$0	1	\$16,200
Individual Space Sensor	\$300	212	\$63,600	183	\$54,900	395	\$118,500
Sensor Intergration Software	\$30,000	1	\$30,000			1	\$30,000
Spare Parts and Stock	2%		\$3,996		\$2,298		\$6,294
Installation	10%		\$19,980		\$11,490		\$31,470
Documentation, Training and Warranty	13%		\$25,974		\$14,937		\$40,911
Totals			\$249,750		\$143,625		\$393,375

NOTE: (1) Multi-Space Meter will be solar powered with GSM/GPRS connection to the vendor server.
 (2) Wireless Individual Parking Space Sensor
 (3) Cost for Individual Space Sensor Custom Intergration Software with MSM
 This is dependent on vendor used and could vary significantly.

SINGLE SPACE METER (SSM)

A third option and one that is universally recognized by the general public is the single space meter (SSM). The new electronic smart meters are solar powered, web-based wireless units that can accept credit cards as well as coins as a method of payment. The units can communicate with the central server and deliver real time reporting of revenue as well as diagnostic and maintenance alerts. These units can also be linked to parking space sensors that gather statistical information for occupancy and length of stay reports, and can be used to reset meters when a vehicle leaves and also alert enforcement staff when violations occur.

The advantages and disadvantages of a typical SSM system are discussed below:

ADVANTAGES:

- The most recognized method of paying for parking in the US.
- Initial Cost. Initial cost of the SSM systems is much lower than the traditional central cashiering system or the pay-on-foot systems; however, are higher than the MSM configuration discussed previously.
- Staffing. Staffing is very minimal, mainly for servicing the equipment (collection of revenue and replacing coin/note dispensers and receipt rolls).
- Fast Entering and Exiting. There are no gates at the entry/exit points.
- No Failed Entry or Exit Problems.
- Instant integration with On-Street parking system

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DISADVANTAGES:

- The same disadvantages as the MSM in that it is essentially an "honor" system and allows scofflaws to take advantage of no gated access to the facility. This can be controlled somewhat depending on the degree of enforcement implemented in the lot.
- Patrons will need to estimate the time of parking and either underpay or overpay for parking. Underpayment would result in a citation and overpayment will result in complaints.
- No ability to apply a merchant validation, since all parking is paid for in advance.
- Cannot accept paper currency as method of payment.

SINGLE -SPACE METER CONFIGURATION

As an option to the existing combined cashier and pay on foot gated parking system we discussed above, it is possible to convert to a SSM configuration on all surface lots and still retain the desired level of control you enjoy with a traditional gated system.

TRANSIENT PARKERS

Transient or daily parkers would park their car, locate the SSM in front of their vehicle and pay for the desired length of stay with coin, credit card or smart card. As an additional feature, the SSM can be programmed to text a message to the parkers phone when time is running out and allow the parker to pay for additional time via their cell phone.

CONTRACT PARKERS

Yacht Club members, Sausalito residents, debit card holders, premium D card holders and Sausalito employees will all be issued a Smart card programmed with their user group information. A contract parker would park their car and proceed to the nearest SSM, insert their smart card. The Smart card will identify the parkers appropriate user group and rate structure and will either debit charges from the card or track and bill the account according to the length of stay. They can also add time just as the daily parkers do via their cell phone if desired.

Table 4 is our estimated budget to replace the current gated system on lots 1 and 3 with the single space parking meters described above.

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Table 5: Single Space Meter Cost Estimate

	Lot 1		Lot 3		Totals		
	\$/Unit	Units	Single Space Meter Extension	Single Space Meter Units	Single Space Meter Extension	Units	Extension
Single-Space Meter Mechanism	\$495	220	\$108,900	178	\$88,110	398	\$197,010
Single-Space Meter Housing (Iron)	\$365		\$0		\$0	-	\$0
Single-Space Meter (Zinc) Housing (Iron) Vault	\$325	220	\$71,500	178	\$57,850	398	\$129,350
Single-Space Meter Housing (Zinc)	\$300		\$0		\$0	-	\$0
Single-Space Meter Poles Installed	\$75	150	\$11,250	100	\$7,500	250	\$18,750
Sensors	\$135	220	\$29,700	178	\$24,030	398	\$53,730
Annual Operating Costs							
Web Hosted Server	\$18	220	\$3,960	178	\$3,204	398	\$7,164
Cell Data Fee	\$42	220	\$9,240	178	\$7,476	398	\$16,716
Spare Parts and Stock	5%		\$11,068		\$8,875	-	\$19,942
Installation incl Electrical	0%		\$0		\$0	-	\$0
Documentation, Training and Warranty	10%		\$22,135		\$17,749	-	\$39,884
Totals			\$267,753		\$214,794		\$482,546

Meter Equipment	\$191,650	\$153,460	\$345,110
Sensors	\$29,700	\$24,030	\$53,730
Operating Costs	\$13,200	\$10,680	\$23,880
Spare Parts & Stock	\$11,068	\$8,875	\$19,942
Installation, Doc, Train	\$22,135	\$17,749	\$39,884

NOTE: ⁽¹⁾ Single-Space Meter will be a solar powered web-based unit.

COST BENEFIT ANALYSIS

HARDWARE AND OPERATING COSTS

The capital and operating costs between the two types of systems, pay-on-foot and multi space meters, were compared on an annual basis. The capital cost of the equipment, therefore, must be annualized and added to the projected annual operating costs. To do this, we assume a 10-year life of equipment and a cost of funds of 5 percent. We then project the annual operating cost of collecting revenues for the operation based on the existing operating hours shown below:

Lot 1	Monday thru Sunday	9:00 AM to 10:30 PM
Lot 3	Saturday	12:00 Noon to 7:00 PM
Lot 3	Sunday	12:00 Noon to 7:00 PM

Note: Monthly parkers have access 24 hours/day 7 days/week with a 72 hour maximum stay.

For this analysis, we used a weighted average hourly wage based on the 2009 approved budget for the City of Sausalito. The analysis assumes that there will be staffing to cover all the operating hours indicated above. See Table 5 below.

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Table 6: Capital and Operating Expense Analysis

	Pay On Foot			Multi Space Meters			Single Space Meters			Multi Space Meters W/Sensors		
Lane Equipment			\$136,000			\$150,000			\$399,000			\$150,000
Central Pay Equipment			\$200,000			\$0			\$0			\$0
Office & Spare Parts			\$128,000			\$20,000			\$44,000			\$171,000
Installation, Documentation, Training & Warranty			\$177,000			\$32,000			\$40,000			\$72,000
TOTAL			\$641,000			\$202,000			\$483,000			\$393,000
Annual Cost to Own Equipment			\$147,100			\$42,500			\$101,200			\$62,300
average life of equipment	10 years			10 years			10 years			10 years		
cost of funds	5%			5%			5%			5%		
annual maintenance cost	10% first cost			8% first cost			8% first cost			8% first cost		
Estimated Annual Staffing Cost	Pd Hrs	Weeks	Staffing/Shift	Pd Hrs	Weeks	Staffing/Shift	Pd Hrs	Weeks	Staffing/Shift	Pd Hrs	Weeks	Staffing/Shift
Lead Parking Attendant	24	52	1	40	52	1	40	52	1	40	52	1
Lead Parking Attendant Eve/Wknd	6	52	1	16	52	1	16	52	1	16	52	1
Parking Attendant +3Yrs	20	52	1	0	52	1	0	52	1	0	52	1
Parking Attendant +3Yrs Eve/Wknd	36.5	52	1	0	52	1	0	52	1	0	52	1
Parking Attendant	28	52	1	0	52	1	0	52	1	0	52	1
Parking Attendant Eve/Wknd	37.04	52	1	0	52	1	0	52	1	0	52	1
Parking Analyst	19.23	52	1	19.23	52	1	19.23	52	1	19.23	52	1
Total Staffing Hours/Year			8880.04			3911.96			3911.96			3911.96
Hourly Wage	\$ 15.19		\$ 134,907	\$ 21.42		\$ 83,794	\$ 21.42		\$ 83,794	\$ 21.42		\$ 83,794
Benefits	8%		\$ 10,320	8%		\$ 6,410	8%		\$ 6,410	8%		\$ 6,410
Supervision/Management/Training	0%		\$ -	0%		\$ -	0%		\$ -	0%		\$ -
Total Annual Staffing Cost			\$ 145,227			\$ 90,204			\$ 90,204			\$ 90,204
TOTAL ANNUAL COST TO OWN AND OPERATE			\$ 292,327			\$ 132,704			\$ 191,404			\$ 172,504

SUMMARY AND RECOMMENDATIONS

While the existing system has provided a relatively high level of service to the parking patrons particularly during the peak weekend exiting periods, it is extremely labor intensive and costly to operate. The installation of a either a SSM or MSM system will definitely be able to exit vehicles out of the lot at a faster rate, improving not only the efficiency of the exits, but also the vehicular circulation for entering traffic, as congestion and cross-traffic between entering and exiting vehicles would be reduced. User groups such as Yacht Club members and Sausalito residents will still receive their discounted parking rates; however, it may be possible to use the Smart Card issued to these individuals to debit a prepaid account directly for parking charges and avoid sending invoices each month. The MSM system would also be able to integrate the on-street parking management by providing integrated financial, management, bank reconciliation, maintenance and enforcement reports for the entire parking system, provided that the existing SSM system is replaced with a MSM.

Walker contacted several cities regarding their MSM installations. The City of Oakland indicated they have over 500 On-street MSM configured as pay and display meters. The machines operate from solar panels and are on-line with the vendor hosted server through use of wireless GSM/GPRS communication. The City accesses the vendor site through a web browser with secured connection. The MSM are smart meters in that it sends an alarm message to a cell phone for problems such as low battery power, low receipt stock, etc. The machines also accept credit cards. One lesson they learned from their MSM installations is that the machines need scheduled preventive maintenance. Otherwise, problems have been encountered. The solar panels are cleaned up to two times a month since moisture and dust tend to collect on the panel and reduce charging capacity which can lead to low battery charge. The receipt transport mechanisms and credit card read sensors are dusted once a week to prevent jammed receipts and bad card reads.

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The City indicated that pay-per-space would be their preferred configuration compared to their current pay and display system based on what they now know regarding the fact that parkers furthest away from the machines have to get to the machine and return to their vehicle and display the receipts in their dashboard and the additional maintenance for the receipt mechanisms. Overall, the City is very happy with the conversion from single meters to MSM in the locations they have completed to date.

The City of San Rafael has two garages with two MSM each, and 3 other machines in surface lots. These were installed three years ago and takes advantage of the latest technology as far as wireless on-line configuration with the vendor-hosted server and web-based access to the system. The machines inside the garages are powered from the electrical panels while the machines in the lots are solar-powered. All machines have credit card capabilities. The only issue they have is the slow response time from the vendor when they requested new reports. The City indicated they would have like to evaluate other manufacturers before they chose the one they are using.

The City of Berkeley has 200 MSM installed in 4 phases over the last 4 years starting in 2005. The machines are similar to the ones in Oakland with solar power and a GSM/GPRS connection to the vendor server. The City is very happy with the machines. The machines are durable and easy to use. Since the vendor opened up an office in Oakland, they provide the maintenance to keep the machines in good working order. When speaking with the City, they indicated the downtime for the machines are very low and acceptable. There was only one time a major issue came up when the vendor had a major change in their software. The City was made aware of this before hand, but credit card transactions did not show up in the report until 3-4 days later.

All the Cities referenced above have MSM configured in a pay and display machines. We have called other Cities around the San Francisco Bay Area and are waiting for their response.

Walker's initial evaluation indicates there would be a significant cost savings (approximately \$158,000 annually) with the MSM system and approximately \$101,000 with the SSM over the 10 year life of the system when compared to the cashiered/POF exit system due to the reduction in staffing and hours required to manage the system³.

We are looking forward to discussing our report with you at your earliest convenience.

Sincerely,
WALKER PARKING CONSULTANTS

Andrew J. Kapeghian, CPP
Director of PARCS Services

Sid Paderna
Parking Consultant

AK:srn

³ The additional cost for enforcement in lots 1 and 3 was not included in the cost model.

RESOLUTION No. _____

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SAUSALITO ACCEPTING WALKER PARKING CONSULTANTS FINAL REPORT DATED THE 17TH DAY OF APRIL, 2009 ASSOCIATED WITH A REPLACEMENT PARKING ACCESS AND REVENUE CONTROL SYSTEM (PARCS) FOR CITY-OWNED PARKING FACILITIES AND AUTHORIZING THE CITY MANAGER TO EXECUTE A STANDARD AGREEMENT AMENDMENT FOR WALKER'S PERFORMANCE OF ADDITIONAL WORK

WHEREAS, with Resolution No. 4996, adopted at its regular meeting on the 27th day of January 27, 2009, the City Council approved a professional services agreement with Walker Parking Consultants ("Walker") for design services for REPLACEMENT PARKING ACCESS AND REVENUE CONTROL SYSTEM ("PARCS") FOR CITY-OWNED PARKING FACILITIES; and

WHEREAS, Walker has performed the bulk of the required services including conducting a series of meetings with Parking, Police, Public Works and Finance Staff, and on that basis prepared its final report dated the 17th day of April, 2009; and

WHEREAS, Walker recommends the removal of the existing gated system and installation of a multi-space meter (MSM) replacement system in Lots 1 and 3 because vehicles will be able to exit the lot at a faster rate, the efficiency of the exits will be improved, and the vehicular congestion between entering and exiting traffic will be reduced. Further, the MSM system will also be able to integrate the on-street parking management by providing integrated financial, management, bank reconciliation, maintenance and enforcement reports for the entire parking system, provided that the existing SSM system is replaced with MSM; and

WHEREAS, based on the information developed during the course of Walker's work, recognizing the maintenance changes to pedestrian routes likely to occur as a result of the Bridgeway to Ferry Landing NMTTP design (underway) and taking into account the report presented to Council at its May 26, 2009 meeting by the Harbor and Downtown Action Committee, Staff requested and Walker proposed additional work to provide:

- PARCS design and assistance to the City with procurement and installation of MSMs for Lots 2 and 4, and the 4 single space meters located on Johnson Street.
- Submittal review for the new parking booth approved for Lot 1 and provide recommendations for possible booth floor plan modifications based on intended use and final booth location selected by the City.
- Provide (without overlap in scope with the Bridgeway to Ferry Landing design) a topographic survey of Lots 1, 2, 3, and 4 which would include observed locations of improvements, utilities, trees, spot elevations, grade breaks, existing striping and other features.
- Develop recommendations for potential improvements to current parking functional design of Lots 1- 4. Improvements will include entry/exit modification and striping modifications.
- Prepare AutoCAD sketches recommending parking layout modifications, as appropriate, utilizing background drawings of the parking areas; and

WHEREAS, the proposal received includes a detailed scope of services, schedule and budget, as well as acceptable terms and conditions for performance of said services.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Sausalito:

1. Accepts Walker's final report dated the 17th day of April, 2009.
2. Authorizes the City Manager to direct staff to prepare a standard form of agreement amendment for and execute the such amendment on behalf of the City for the services described in the attached proposal dated the 9th day of April 2009 for a lump sum of \$47,888 plus up to \$1,000 in reimbursable expenses which shall not be exceeded without express approval.

PASSED AND ADOPTED at a regular meeting of the City Council of the City of Sausalito on the 9th day of June, 2009 by the following vote:

AYES: Councilmembers:
NOES: Councilmembers:
ABSTAIN: Councilmembers:
ABSENT: Councilmembers:

MAYOR OF THE CITY OF SAUSALITO

ATTEST:

DEPUTY CITY CLERK



WALKER
PARKING CONSULTANTS

135 Main Street, Suite 1030
San Francisco, CA 94105

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Fax: 415.644.0637
www.walkerparking.com

April 9, 2009

Mr. Jonathon Goldman
Director of Public Works
City of Sausalito
420 Litho Street
Sausalito, California 94965-1933

Re: *Additional Services Request for Parking Consulting Services
City of Sausalito
Sausalito, California
Walker Project Number: 33-1618.00*

Dear Mr. Goldman:

At your request, Walker Parking Consultants (Walker) is pleased to submit for your review this request for additional services.

At this time, the City of Sausalito would like to expand our current scope of services to include additional lots, civil work, and functional consulting. Our specific scope of work is as follows:

1. Perform PARCS design and assist the City with procurement and installation for Lots 2 and 4, and the 4 single space meters located on Johnson Street.
2. Review submittals for the new parking booth and provide recommendations for possible booth floor plan modifications based on intended use and final booth location selected by the City.
3. Provide a topographic survey of Lots 1, 2, 3, and 4 which would include observed locations of improvements, utilities, trees, spot elevations, grade breaks, existing striping and other features.
4. Develop recommendations for potential improvements to current parking functional design of Lots 1- 4. Improvements will include entry/exit modification and striping modifications.
5. Prepare AutoCAD sketches recommending parking layout modifications, as appropriate, utilizing background drawings of the parking areas prepared by our Civil Engineering sub-consultant, CSW/ST2.

We propose to perform the additional services scope of work noted above on a lump sum fee basis for \$47,888 plus reimbursable expenses, in accordance with our existing professional/consulting services agreement dated January 27, 2009. Reimbursable expenses



include 1.0 times the cost of travel and subsistence associated with the project. We suggest you budget \$1,000 for reimbursable expenses. Our fee breakdown is provided below.

Walker's Task	Amount
Design & Install PARCS in Lots 2 & 4	\$8,000
Review Booth Submittals	\$1,600
Functional Layout & Striping for Lots 1, 2, 3 & 4	\$12,500
SUB-TOTAL	\$22,100

CSW ST2's Task	Amount
Project Control and Crew Coordination	\$1,400
Field Survey and Base Map, Parking Lot 1	\$3,520
Field Survey and Base Map, Parking Lot 2	\$3,330
Field Survey and Base Map, Parking Lot 3	\$3,330
Field Survey and Base Map, Parking Lot 4	\$2,800
Field Survey Verification	\$1,520
Civil Design for Portions of Parking Lots 1 and 3	
1. Widening of Entry to Parking Lot 3 from Bay St.	\$4,344
2. Widening of Entry to Parking Lot 1 from Anchor St.	\$4,344
3. Pad for Parking Lot Attendant Shack	\$1,200
SUB-TOTAL	\$25,788
TOTAL FEE	\$47,888

Trusting that this meets with your approval, please forward to us an authorization to proceed with the work.

We look forward to getting started on this additional work and continue working with you on this project.

If you have any questions please feel free to call me at (415) 644-0630.

Sincerely,
WALKER PARKING CONSULTANTS

Andy Kapeghian
Director of PARCS Services

Sanjay Pandya, (PE License # C60783)
Vice President

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