

# Pennsylvania Private Sanctuary (PPS) Electronic Timekeeping System

---

*GG Consulting, Inc. Proposal*

This is a student project of ETM. Both the consulting company and client are fictional institutions.

Course Title: ETM 510 – Project Planning and Implementation

Instructor:	Jan Mahar
Term :	Summer
Year:	2011
Author (s):	Vera Sell Shailabh Mazari Fannie Black Baraa Abudawod

## Table of Contents

1. Project Charter .....	3
2. Business Case.....	5
2.1 Exhibit A: Financial Analysis .....	8
3. Proposed Personnel.....	10
4. Team Contract .....	11
5. Stakeholder Register & Stakeholder Management Strategy .....	13
5.1 Stakeholder Register .....	13
5.2 Stakeholder Management Strategy – Confidential.....	14
6. Gantt Chart .....	16
7. Responsibility Assignment Matrix (RAM) .....	17
8. MS Project’s ‘Who Does What When’ Report .....	18
9. Risks .....	19
8.1 Risk Breakdown Structure.....	19
8.2 Risk Register .....	20
10. Contract and Statement of Work .....	23
10.1 Contract.....	23
10.2 Statement of Work .....	24
11. Client Acceptance/Project Completion Form .....	25
12. Follow-up and Future Opportunities for Engagement .....	26
13. Lessons Learned Report (Confidential – For Internal Use Only) .....	27
14. Deliverables Website .....	30

## 1. Project Charter

**Project Title:** Electronic Timekeeping System (PPS)

**Project Start Date:** August 4, 2011

**Projected Finish Date:** After winter break 2012

### **Budget Information:**

The budget for this project has not been approved. It has to cost less than the biometrics project that has been rejected. The rough order of magnitude estimate puts the project at \$55,500 (excluding opportunity costs which have been estimated at \$60,000). The majority of the costs for this project will be internal labor for PeopleSoft development and testing.

**Project Manager:** Fannie Black, (503) 805-1329, GG Consulting, Inc., [fannie@ggconsulting.com](mailto:fannie@ggconsulting.com)

**Project Objectives:** Develop an electronic timekeeping system for custodial staff working for the Facilities and Asset Management (FAM) Department at Pennsylvania Private Sanctuary. The objectives are to provide reporting data to assist in shift management, oversight, and provide efficiencies in scheduling personnel.

### **Main Project Success Criteria:**

1. Implementation by winter break and training of custodial staff prior to go-live date.
2. Accurate reporting of custodial staff location and time 90% of the time within the first year after introduction to ensure proper coverage of all buildings and facilities and optimize staff allocation to schools and buildings.
3. Overtime reduction by 30% within the first year after introduction, 50% reduction after two years, and 90% reduction thereafter.
4. Reduce administrative overhead in the central office by 50% to allow focus on staff management within the first year after introduction.
5. The project should pay for itself within three years after introduction.

### **Approach:**

- One-on-one or group interviews of facilities management, central office management, and custodial leads to understand pain-points and solicit input on potential solution alternatives.
- Review internal and external templates and examples of project management documents.
- Research electronic timekeeping alternatives and create a list of potential vendors and integrators.
- Develop an electronic timekeeping system using an iterative approach, soliciting a great deal of user feedback.
- Develop a rollout and training plan for the new electronic timekeeping system, including a prototype and pilot sites.

- Determine a way to measure the value of the electronic timekeeping system in terms of reduced costs and new benefits, both during the project and one year after project completion.

### Roles and Responsibilities

Role	Name	Organization/ Position	Sign-Off	Contact Information
Advisor	Jan Mahar Sturdevant	GG Consulting, Inc., Partner	JM	<a href="mailto:Jan@ggconsulting.com">Jan@ggconsulting.com</a>
Advisor	Yasser Alizadeh	GG Consulting, Inc.	YA	<a href="mailto:Yasser@ggconsulting.com">Yasser@ggconsulting.com</a>
Project Manager	Fannie Black	GG Consulting, Inc., Senior Consultant	FB	<a href="mailto:fannie@ggconsulting.com">fannie@ggconsulting.com</a> 503.805.1326
Team member	Vera Sell	GG Consulting, Inc., Senior Consultant	VS	<a href="mailto:vera@ggconsulting.com">vera@ggconsulting.com</a> 503.206.2656
Team member	Shailabh Mazari	GG Consulting, Inc., Consultant	SM	<a href="mailto:shail@ggconsulting.com">shail@ggconsulting.com</a> 205.765.6106
Team member	Baraa Abudawod	GG Consulting, Inc., Consultant	BA	<a href="mailto:Baraa@ggconsulting.com">Baraa@ggconsulting.com</a> 971.340.7396
Client representative	Clint Eastwood	PPS, Application Development Manager	CE	<a href="mailto:clint@pps.com">clint@pps.com</a> 503.916.3026
Client representative	Julia Roberts	PPS, PeopleSoft Developer	JR	<a href="mailto:julia@pps.com">julia@pps.com</a> 503.916.3916

**Sign-off:** Initials next to names above.

### Comments:

*We would prefer a solution that uses existing systems but are interested to see the analysis of alternative suggestions – Clint Eastwood*

*My availability will be limited due to other projects taking priority – Julia Roberts*

## 2. Business Case

**Project:** PPS Electronic Timekeeping System

**Prepared by:** GG Consulting, Inc.

**Date:** July 21, 2011

### 1.0 Introduction/Background

Pennsylvania Private Sanctuary (PPS) is an urban school district providing K-12 education for 47,000 students, and employs almost 7,000 teachers and staff in 85 schools. PPS is the third largest school district in the Pacific Northwest.<sup>1</sup> Tony Danza, Director of Facilities and Asset Management (FAM), believes that PPS can optimize and streamline custodial staff management by implementing an electronic timekeeping system. The new system will accurately track daily arrival and departure times for 300 custodians at 100 sites, provide comprehensive reporting to the central office, and generate the necessary data for staff management.

### 2.0 Business Objective

The goal of the Facilities and Asset Management Department is to support classroom teaching and learning by providing a safe and healthy environment that is conducive to learning for students and staff. The Electronic Timekeeping System Project will support this goal by providing accurate data to optimize staffing, reduce unnecessary overtime, and provide uninterrupted custodial services to all Pennsylvania Private Sanctuary facilities. In addition, the new system will provide reporting data to assist in shift management, oversight, and provide efficiencies in scheduling personnel. The objective is to improve profitability by reducing administrative costs and payroll inefficiencies.

### 3.0 Current Situation and Problem/Opportunity Statement

Currently, PPS uses exception-based time tracking, meaning staff report vacation or sick leave on a monthly basis. Custodial time reporting at present does not accurately reflect time that custodians are on-site. The current system lacks the option to verify daily arrival and departure times as well as attendance. Facility Services has found out that inefficiencies in the current payroll system and the inability to monitor employee arrival and departure times cost the district \$77,000 annually. Losses from the custodial work force are from inaccurate time reporting, time theft, and unnecessary overtime. Inefficiencies in the verification of the payroll paperwork by administrative staff also contribute significantly.

### 4.0 Critical Assumptions and Constraints

The proposed Electronic Timekeeping System must increase efficiency in payroll and staff scheduling for the PPS Facility and Asset Management Department. It must pay for itself within three years by reducing internal operating costs and losses from inaccurate time reporting, time theft, and unnecessary overtime. Management and users must actively support the project and be available for input and training. Users are assumed to have basic computer literacy and must be willing to use the system as intended. The system should run on existing hardware or require minimal new hardware purchases. It should require minimal technical support. It must be easily accessible to custodial staff and be secure from unauthorized users. The reporting features should match the requirements from the central office and be easy to use and manipulate.

---

<sup>1</sup> PPS Website

## 5.0 Analysis of Option and Recommendation

GG Consulting has identified three alternatives to implement this project.

1. Do nothing. Continue using the current paper-based system.
2. Biometrics: This option would require installing a biometric reader, such as a fingerprint or hand scanner to collect time and location information for custodial staff. This option has been reviewed by PPS and deemed too expensive.
3. PeopleSoft Web Clock: This option would require custodial staff to log in to PeopleSoft and select their location when they arrive on-site and log out when they leave for the day. As outlined in the risks, this option may be cumbersome and result in a poor data set.
4. Card reader: This option would install card readers (RFID or magnetic) near the PC and require custodial staff to swipe their card to log in and log out. Manually logging in to the system would be available as a backup option.

Based on the preliminary discussions with stakeholders and reviewing the project requirements, we believe option 4, a card reader-based electronic timekeeping system, is the best option.

## 6.0 Preliminary Project Requirements

The main features of the Electronic Timekeeping System should include the following:

1. Accurately capture daily arrival and departure times as well as location of custodial staff. Custodial staff need the ability to enter this information either via logging in to the PeopleSoft Web Clock or by swiping a card.
2. Custodial staff need the ability to enter custom information, for example, additional time for commute between locations or time for lock-up.
3. Ability to generate reports by staff member, location, and timeframe.
4. Ability to export data to other formats such as cvs or Excel.
5. Training for input users (custodial staff) and reporting users (central office) as well as documentation for future reference.

## 7.0 Budget Estimate and Financial Analysis

A preliminary estimate of costs for the entire project is \$115,000. This figure includes \$60,000 in opportunity costs, denoting the value of other projects that would be on hold or delayed in favor of the Electronic Timekeeping System Project for FAM. The actual budgetary cost of the project is \$55,500 and assumes 234 hours of work by the PeopleSoft developer. This estimate is based on function point analysis. The project manager is estimated to work 25% of his time on this project for six months (which equals 240 hours at \$100 per hour). The project manager is responsible for seven other projects and no additional resources will be hired. Total estimated equipment costs are approximately \$6,000 for the card readers, the programming device, and magnetic cards. The annual maintenance cost is negligible at \$100 per year based on vendor estimates for the card readers. The computer maintenance is not attributed to this project as these are primarily used for other purposes.

Project benefits are based on the reduction of payroll inefficiencies and costs associated with inaccurate time reporting, time theft, and unnecessary overtime. PPS estimates the overall losses to be \$77,000 annually. The objective of this project is to save 30% of that loss in the first year (\$23,100), 50% in the second year (\$38,500), and 90% in the subsequent years (\$69,300). No additional revenue will be generated directly. Some intangible benefits such as goodwill resulting in higher enrollment and

potential additional funding for technologically advanced schools is not included in the financial analysis as no substantiating data could be found to monetize these benefits accurately.

Exhibit A summarizes the project costs and benefits and shows the estimated net present value (NPV), return on investment (ROI), and year in which payback occurs. It also lists the assumptions made in performing this preliminary financial analysis. All of the financial estimates are very encouraging. The payback will occur within four years. The ROI is fair at almost 70%, a positive NPV of close to \$84,000 based on a five-year system life.

## **8.0 Schedule Estimate**

The sponsor would like to see the project completed within six months, ideally after the 2012 winter break. There is schedule risk as the main programming resource is tasked with other projects. It may be necessary to add a programming resource in order to meet the schedule expectations. We assume that the new system will have a useful life of at least five years.

## **9.0 Potential Risks**

There are several risks involved with this project. Most notably, custodial staff have little incentive for providing accurate log in/log out and location information. The usefulness and accuracy of the reporting feature relies on accurate information inputs. Thus, motivating the custodial staff to use the system as intended and making it as easy as possible is one of the key project objectives. Another risk involves the presumed technical knowledge of the operators both on the input user and reporting user spectrum. The technical risk is relatively low; however, scope changes and new user requirements may put a strain on cost and schedule. The main business risk is whether the invested time and money will yield the expected benefits.

## **10.0 Exhibits**

Exhibit A: Financial Analysis

## 2.1 Exhibit A: Financial Analysis

**Project:** PPS Electronic Timekeeping System

**Prepared by:** GG Consulting, Inc.

**Date:** July 21, 2011

Discount Rate	9.5%						
Period (year)	0	1	2	3	4	5	Total
Costs	\$115,640	\$100	\$100	\$100	\$100	\$100	\$116,140
Discount Factor	1	0.91	0.83	0.76	0.7	0.64	
Discounted Costs	\$115,640	\$91	\$83	\$76	\$70	\$64	\$116,024.00
Benefits	\$0	\$23,100	\$38,500	\$69,300	\$69,300	\$69,300	\$269,500.00
Discount Factor	1	0.91	0.83	0.76	0.7	0.64	
Discounted Benefits	\$0	\$21,021	\$31,955	\$52,668	\$48,510	\$44,352	\$198,506.00
Discounted Benefits - Discounted Costs	(\$115,640)	\$20,930	\$31,872	\$52,592	\$48,440	\$44,288	
Cumulative Discounted Benefits - Discounted Costs	(\$115,640)	(\$94,710)	(\$62,838)	(\$10,246)	\$38,194	\$82,482	
ROI:	71%						
NPV:	\$82,482.00						
Payback Year:	4						



### Cost and Benefit Breakdown

Categories	# Units/ Hrs.	Cost/Unit/Hr.	Subtotals	Category Totals	% of Total
<b>1. Hardware &amp; Equipment</b>				\$6,040	11%
1.1 Equipment (USB magnetic strip reader)	100	\$50	\$5,000		
1.2 Card programming device	2	\$500	\$1,000		
1.3 Cards	500	\$0.08	\$40		
<b>2. Development &amp; Testing</b>				\$23,400	42%
2.1 Development & testing	234	\$100	\$23,400		
<b>3. Project Management</b>				\$25,200	45%
3.1 Project manager	240	\$100	\$24,000		
3.2 Executive overview	10	\$120	\$1,200		
<b>4. Maintenance</b>				\$0	0%
4.1 Annual maintenance	0	\$100	\$0		
<b>5. Training</b>				\$1,000	2%
5.1 Trainee cost	10	\$100	\$1,000		
<b>Actual project costs</b>				<b>\$55,640</b>	<b>100%</b>
Opportunity cost				\$60,000	
<b>Total Costs</b>				<b>\$115,640</b>	

### Notes and Assumptions

- Magtek supplier of card readers and card programming devices. Provides annual maintenance services. <http://www.magtek.com/V2/products/secure-card-reader-authenticators/index.asp>
- ID Super Store: Magnetic cards are sold separately and are available online. This financial analysis assumes an average cost with a minimum order quantity (MOQ) of 500. [www.idsuperstore.com/generic-blank-white-pvc-cards-cr80-30-mil-p-31150.html](http://www.idsuperstore.com/generic-blank-white-pvc-cards-cr80-30-mil-p-31150.html)
- PPS does not discount costs/benefits in their financial analysis. The Treasury Department recommends a discount rate of 9.5% for IT projects at public institutions. <http://www.treasury.gov/tz/publications/guidance/planning/costbenefitanalysis>
- PPS requested to base the financial analysis on a five-year system lifetime; the system may be in operation longer.
- Opportunity cost: denotes the value of other projects that would be on hold or delayed in favor of the Electronic Timekeeping System Project for FAM. This estimate was provided by Clint Eastwood, PPS, Application Development Manager during the project kick-off meeting.
- Benefits: The total benefits are based on the following assumptions:
  - Annual losses in payroll are estimated at \$77,000. This project aims to reduce losses by 30% (\$23,100) in the first year, by 50% (\$38,500) in the second year, and by 90% (\$207,900) subsequently. This estimate was provided by Clint Eastwood, PPS, Application Development Manager during the project kick-off meeting.
  - Additional benefits can be realized through positive impacts of technology reputation on future grants and funding. This analysis assumes a 10% chance to get funding from a program similar to OPEN that would equal \$1,000 (10,000 \* 10%). (<http://nces.ed.gov/edfin/pdf/StFinance/Oregon.pdf>)

### 3. Proposed Personnel

#### 1. PeopleSoft Developer<sup>2</sup>

- Responsibilities of this position include: Analyze, develop, and support standard and custom functionality in PeopleSoft including design, coding, and testing. Provide documentation, training, and support for internal PeopleSoft users.
- Qualifications: This position requires an undergraduate degree in computer science or related technical area. Expert knowledge and experience working with PeopleSoft is required. In addition, candidates must have experience with PeopleSoft integration techniques and a background in software analysis and design. Qualified candidates will have excellent communication skills and work well on a team, as well as independently.
- Annual salary: \$60,000<sup>3</sup>
- 40 hours per week (day shift)

#### 2. Project Manager

- Responsibilities of this position include: Create clear and attainable project objectives, build project requirements, and manage the triple constraint for the project. Responsible for carrying out strategic initiatives and validating overall direction with key stakeholders. Manages and executes detailed project plans, key documentation, process maps, and schedules with responsibility for task and team coordination in addition to keeping track of deliverables.
- Qualifications: This position requires an undergraduate degree in business, training, or technology plus a minimum of three years of project management experience, or an equivalent combination of education and experience. Candidates should possess excellent knowledge of project management methodologies and practices. Accomplished client-management skills, relationship-building skills, requirements gathering experience, and negotiating skills are desired. Must be able to successfully drive multiple projects in parallel. Solid working knowledge of Microsoft Office and Microsoft Project is required.
- PMP certification preferred.
- Annual salary: \$65,000<sup>4</sup>
- 40 hours per week (day shift)

---

<sup>2</sup> PeopleSoft Developer Job Posting:

<http://seeker.dice.com/jobsearch/servlet/JobSearch?op=101&dockey=xm/f/8/f856a25efad14776a7254aa2e4be0693@endecaindex&c=1&source=34&cmpid=AG:4>

<sup>3</sup> Average PeopleSoft Developer salary: <http://www1.salary.com/ERP-Programmer-II-salary.html>

<sup>4</sup> Average Project Manager I salary in Portland, Oregon: <http://swz.salary.com/SalaryWizard/Project-Manager-I-Salary-Details-97229-Portland-OR.aspx>

## 4. Team Contract

### Pennsylvania Private Sanctuary Electronic Timekeeping System Team Contract

#### Communication Mechanisms

All communications will be conducted by email unless otherwise noted. All email communications must be acknowledged, or responded to when possible, within 24 hours of receiving it.

#### Meeting Guidelines

Project team members will adhere to the following meeting guidelines:

1. Meetings will start and end on time. Agenda items not address will be tabled to the beginning of the next meeting.
2. Team members will come prepared to provide updates of the work they are responsible for.
3. Agenda items will be distributed no less than 24 hours from meeting start time.
4. Agenda items must be submitted to project manager no less than 48 hours from meeting start time.
5. Required documentation must be submitted to project manager no less than 24 hours from meeting start time.
6. Meeting minutes will be distributed within 48 hours of completion of the meeting.

#### Code of Conduct

Project team members will adhere to the team code of conduct as illustrated below:

1. Team members will always seek to do the best work possible with the resources available.
2. Team members should foster a positive team dynamic through maintaining a positive and respectful attitude toward themselves and other team members, and placing the needs of the group before their own needs.
3. Team members will always consider customer needs over personal agendas.
4. Team members will exercise financial integrity. They will spend responsibly, making only purchases that are related to the team project and goals. They will not make purchases outside of team knowledge or for personal benefit.
5. Team members agree to make a sincere commitment to designing and developing the product, while at the same time respecting the outside commitments of both themselves and other members. All work will be distributed fairly throughout the team, and members should only take on tasks that they can complete effectively.
6. Team members shall strive to maintain good communications and make the team aware of project progress in a clear, organized, and timely manner. Members should be aware of teammates' efforts in addition to making the team aware of their own. Team members should report results of task force efforts with honesty and integrity, whether they are achievements or failures.

#### Participation

Project team members must meet the following participation expectations:

1. Team members will participate at a high level on all tasks outlined in this project.

2. Team members will strive to uphold a high level of professional integrity in all aspects of their work.
3. Team members will maintain honesty by taking responsibility for actions, recognizing personal limitations, and never taking credit for work done by others.
4. Team members will honestly assess their level of skill in a given assignment and always ask for help if a task proves to be too difficult.

### **Problem-Solving**

Project team members will meet the following problem-solving expectations:

1. Team members will allow all members to have input in team decisions while being open-minded and flexible to the ideas and criticisms of others.
2. Team members will be prepared to provide documentation when needed to support their recommendations.

I (We) agree to abide by the guidelines outlined in this team contract.

<b>Name</b>	<b>Title</b>	<b>Signature</b>	<b>Date</b>
Fannie Black	Project Manager	<i>Fannie Black</i>	6/30/2011
Vera Sell	Team Member	<i>Vera Sell</i>	6/30/2011
Shailabh Mazari	Team Member	<i>Shailabh Mazari</i>	6/30/2011
Baraa Abudawod	Team Member	<i>Baraa Abudawod</i>	6/30/2011

## 5. Stakeholder Register & Stakeholder Management Strategy

### 5.1 Stakeholder Register

Prepared by: Baraa Abudawod, GG Consulting

Date: July 31, 2011

Name	Position	Internal/ External	Project Role	Contact Information
Jan Mahar Sturdevant	GG Consulting, Inc., Partner	External	Advisor	<a href="mailto:Jan@ggconsulting.com">Jan@ggconsulting.com</a>
Yasser Alizadeh	GG Consulting, Inc.	External	Advisor	<a href="mailto:Yasser@ggconsulting.com">Yasser@ggconsulting.com</a>
Fannie Black	GG Consulting, Inc., Senior Consultant	External	Project Manager	<a href="mailto:fannie@ggconsulting.com">fannie@ggconsulting.com</a> 503.805.1326
Vera Sell	GG Consulting, Inc., Senior Consultant	External	Team Member	<a href="mailto:vera@ggconsulting.com">vera@ggconsulting.com</a> 503.206.2656
Shailabh Mazari	GG Consulting, Inc., Consultant	External	Team Member	<a href="mailto:shail@ggconsulting.com">shail@ggconsulting.com</a> 205.765.6106
Baraa Abudawod	GG Consulting, Inc., Consultant	External	Team Member	<a href="mailto:Baraa@ggconsulting.com">Baraa@ggconsulting.com</a> 971.340.7396
Clint Eastwood	PPS, Application Development Manager	Internal	Client Representative	<a href="mailto:clint@pps.com">clint@pps.com</a> 503.916.3026
Julia Roberts	PPS, PeopleSoft Developer	Internal	Client Representative	<a href="mailto:julia@pps.com">julia@pps.com</a> 503.916.3916
Tony Danza	Director of Facilities & Asset Management	Internal	Sponsor	<a href="mailto:tony@pps.com">tony@pps.com</a>
Tom Smith	Assistant Director of Maintenance	Internal	User	<a href="mailto:smith@pps.com">smith@pps.com</a>
George Adams	Operations Manager	Internal	User	<a href="mailto:george@pps.com">george@pps.com</a>
Robert Kennedy	FAM Data	Internal	User	<a href="mailto:robert@pps.com">robert@pps.com</a>
Jennifer Lopez	Secretary/ Timekeeper	Internal	User	<a href="mailto:lopez@pps.com">lopez@pps.com</a>
Jessica Cole	Director of Applications Services	Internal	User	<a href="mailto:jessica@pps.com">jessica@pps.com</a>
Steve Johnson	HR Labor Relations Coordinator	Internal	Influencer	<a href="mailto:steve@pps.com">steve@pps.com</a>
Mark McCarthy	HR Specialist	Internal	Advisor	<a href="mailto:mark@pps.com">mark@pps.com</a>
Rick Wiseman	Representative, SEIU Union	External	Opponent	<a href="mailto:Rick@pps.com">Rick@pps.com</a>
James Bond	Custodian	Internal	User	<a href="mailto:James@pps.com">James@pps.com</a>
Pierce Brosnan	Magtek	External	Vendor	<a href="mailto:Pierce@magtek.com">Pierce@magtek.com</a>
Linda Lohan	XY Consulting	External	Competitor	<a href="mailto:Linda@xyconsulting.com">Linda@xyconsulting.com</a>

## 5.2 Stakeholder Management Strategy – Confidential

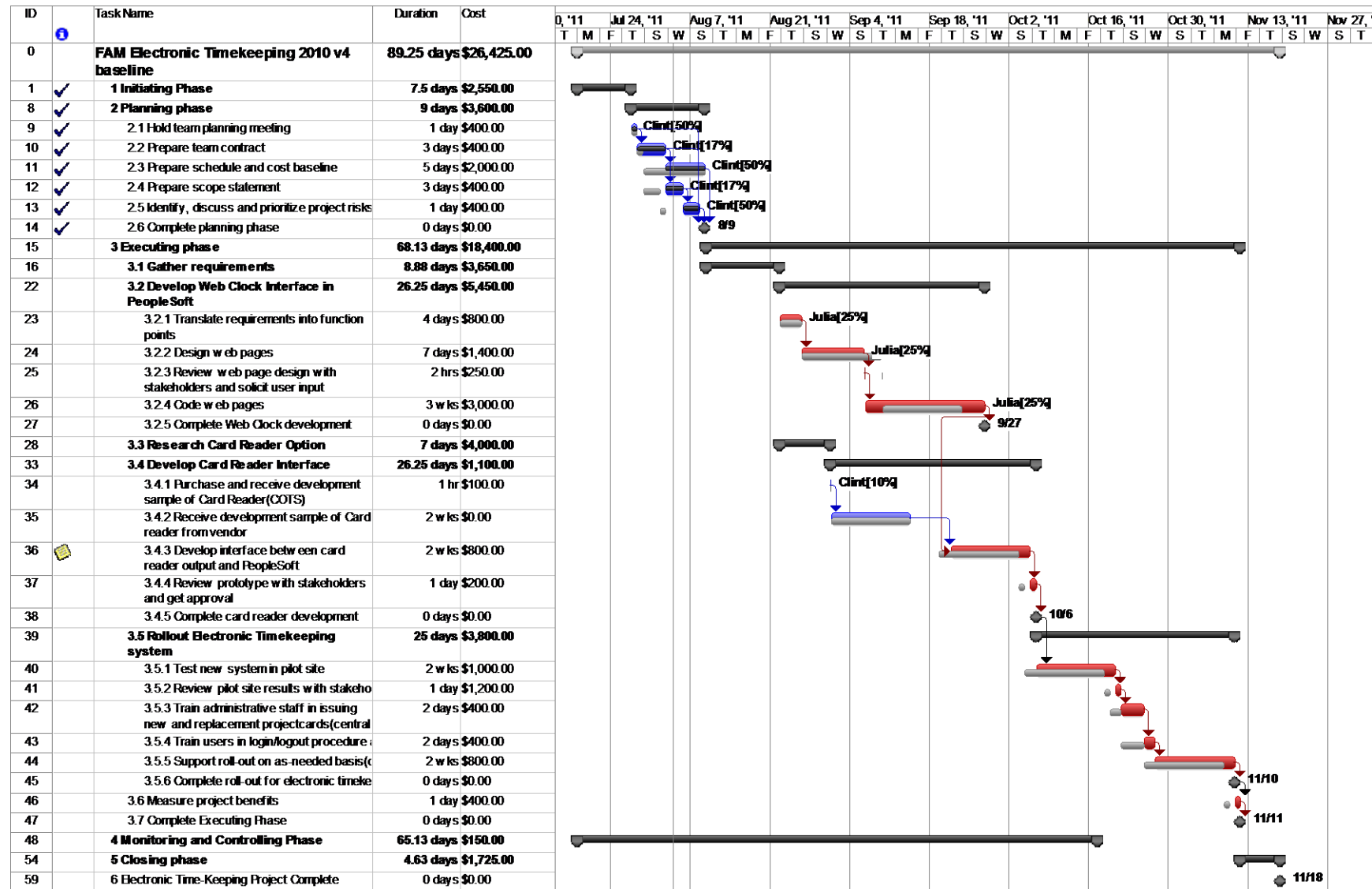
Prepared by: Baraa Abudawod, GG Consulting

Date: July 31, 2011

Name	Position	Internal/ External	Level of Interest	Level of Influence	Potential Management Strategies
Jan Mahar Sturdevant	GG Consulting, Inc., Partner	External	High	High	Jan provides some useful feedback. Keep her updated with the project's progress.
Yasser Alizadeh	GG Consulting, Inc., Partner	External	Medium	Medium	Yasser provides assistance for Jan. Keep him informed as well.
Fannie Black	GG Consulting, Inc., Senior Consultant	External	High	Medium	Fannie is responsible for setting up the meetings with the client representatives and organizing the work. She likes to be informed ahead of time.
Vera Sell	GG Consulting, Inc., Senior Consultant	External	High	Medium	Vera is a hard worker and is task-oriented. She likes to assist others in order to improve the quality of work. Give her some challenging tasks.
Shailabh Mazari	GG Consulting, Inc., Consultant	External	High	Medium	Shailabh has some technical background that can be used to improve the work. Try to exploit his technical skills.
Baraa Abudawod	GG Consulting, Inc., Consultant	External	High	Medium	Baraa is good with numbers, and he likes to deal with the financial aspects of the project. Make him responsible for the financial aspects of the project.
Clint Eastwood	PPS, Application Development Manager	Internal	High	High	Clint does a great job, but he likes to be in control. He is very supportive and he is interested in implementing the new timekeeping system. Keep him updated with the project's progress and issues.
Julia Roberts	PPS, PeopleSoft Developer	Internal	High	High	Julia is responsible for the development of both the Web Clock and card reader systems. Julia is interested in the implementation of the new timekeeping system.
Tony Danza	Director of Facilities & Asset Management	Internal	High	High	Tony is the sponsor of the project. He is very concerned with saving lost costs, so he is looking forward to seeing benefits from the new timekeeping system. His optimal method of communication is face-to-face meetings.
Tom Smith	Assistant Director of Maintenance	Internal	Low	Medium	Tom needs to be motivated, as he doesn't realize that there is a problem that needs to be corrected.

Name	Position	Internal/ External	Level of Interest	Level of Influence	Potential Management Strategies
George Adams	Operations Manager	Internal	Low	Medium	George plans, organizes, and directs the activities and staff. He is not aware that the timekeeping system needs to be changed.
Robert Kennedy	FAM Data	Internal	Low	Medium	Robert is responsible for maintaining/updating the facilities and asset management (FAM) data. He is not interested in changing the timekeeping system, as he doesn't see a problem with the existing system.
Jennifer Lopez	Secretary/ Timekeeper	Internal	High	Medium	Jennifer is a very organized person, and she is doing a good job. She is tired of paying overtime to employees when she knows, but can't prove, that they shouldn't get it. Thus, she is supportive and looking forward to using the new system.
Jessica Cole	Director of Applications Services	Internal	Low	Medium	Jessica likes the existing timekeeping system, so she needs to be motivated to try the new one.
Steve Johnson	HR Labor Relations Coordinator	Internal	Low	Medium	Steve is doing a good job on coordinating labor relations, but he needs some motivation.
Mark McCarthy	HR Specialist	Internal	Low	Medium	Mark is responsible for overseeing daily staffing operations and offering assistance. Since he has a lot to do daily, he likes things to be done on time.
Rick Wiseman	SEIU Union	External	High	Medium	Union management can be difficult. Thus, involving a union representative would ease the process.
James Bond	Custodian	Internal	Low	Medium	Custodians are not interested because the new timekeeping system has no impact on their pay. Thus, they need to be motivated to contribute in the project.
Pierce Brosnan	Vendor	External	Medium	Low	Establishing good communication channels with vendors is very important to the project.
Linda Lohan	XY Consulting	External	Low	Low	We know that another consulting firm is bidding for this project. We have won against them before. Important to keep an eye out to make sure they do not steal the project.

## 6. Gantt Chart





## 7. Responsibility Assignment Matrix (RAM)

A – accountable

P – performing

R – review required

I – input required

S – sign-off required

Task No. & Name	Clint	Julia
<b>3. Executing phase</b>	A P	P
<b>3.1 Gather requirements</b>	A	P
<b>3.1.1</b> Develop interview guide	A P	P
<b>3.1.2</b> Conduct interviews with stakeholders and users	A P	P
<b>3.1.3</b> Analyze, collate, and present responses	A P	I
<b>3.1.4</b> Present requirements and receive stakeholder approval	A P	P
<b>3.1.5</b> Complete requirements gathering	A	P
<b>3.2 Develop Web Clock Interface in PeopleSoft</b>	A	P
<b>3.2.1</b> Translate requirements into function points	I	A P
<b>3.2.2</b> Design Web pages	I	A P
<b>3.2.3</b> Review Web page design with stakeholders and solicit user input	I	A P
<b>3.2.4</b> Code Web pages	I	A P
<b>3.2.5</b> Complete Web Clock development	I	A P
<b>3.3 Research Card Reader Option</b>	A	P
<b>3.4 Develop Card Reader Interface</b>	I	A P
<b>3.4.1</b> Purchase and receive development sample of Card Reader (COTS)	A P	I
<b>3.4.2</b> Receive development sample of Card reader from vendor	A P	I
<b>3.4.3</b> Develop interface between card reader output and PeopleSoft	I	A P
<b>3.4.4</b> Review prototype with stakeholders and get approval	A P	P
<b>3.4.5</b> Complete card reader development	A	P

## 8. MS Project's 'Who Does What When' Report

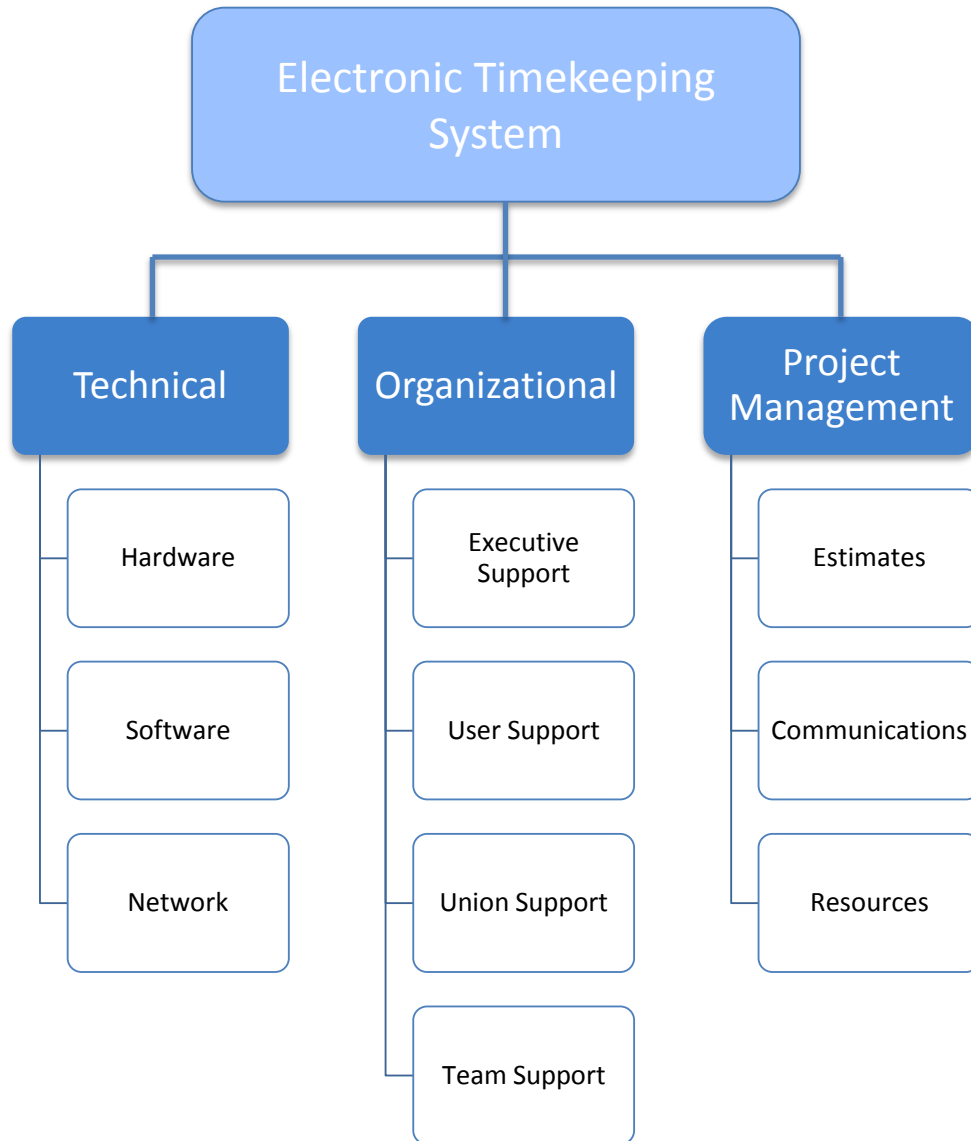
Who Does What When as of Wed 8/10/11  
FAM Electronic Timekeeping 2010 v4 baseline

	7/18	7/19	7/20	7/21	7/22	7/23	7/24	7/25	7/26	7/27	7/28
Clint	3.3...	2.1...	2.1...	2.8...	4 hrs			4 hrs	4 hrs	4 hrs	
Identify stakeholders	2.5 ...										
Develop stakeholder register and management strategy	0.8...	2.1...	2.1...	1.3...	4 hrs			4 hrs	2.5 ...		
Prepare project charter				1.5 ...					1.5 ...		
Sign project charter										1 hr	
Hold Kick-off Meeting with project team										1 hr	
Hold team planning meeting										2 hrs	
Prepare team contract											
Prepare schedule and cost baseline											
Prepare scope statement											
Identify, discuss and prioritize project risks											
Develop interview guide											
Conduct interviews with stakeholders and users											
Analyze, collate and present responses											
Present requirements and receive stakeholder approval											
Review web page design with stakeholders and solicit user input											
Identify vendors											
Create and send RFP to 3 vendors											
Review vendor proposals and select vendor											
Purchase and receive development sample of Card Reader(COTS)											
Review prototype with stakeholders and get approval											
Review pilot site results with stakeholders and get approval											
Measure project benefits											
Status Report 1											
Status Report 2											
Status Report 3											
Prepare final project report											
Deliver final project report											
Prepare lessons learned											
Electronic Time-Keeping Project Complete											
Julia										1 hr	
Hold Kick-off Meeting with project team										1 hr	
Translate requirements into function points											
Design web pages											
Review web page design with stakeholders and solicit user input											
Code web pages											
Develop interface between card reader output and PeopleSoft											
Test new system in pilot site											
Review pilot site results with stakeholders and get approval											
Train administrative staff in issuing new and replacement projectcards(central office)											
Train users in login/logout procedure at site location											
Support roll-out on as-needed basis(on call service)											

Page 1

## 9. Risks

### 8.1 Risk Breakdown Structure



## 8.2 Risk Register

### Option 1: PeopleSoft Web Clock

No.	Rank	Risk	Description	Category	Root Cause	Triggers	Contingency plan	Mitigation plan	Risk Owner	Status
R1	1	Lack of staff motivation to use the timekeeping system	Staff have no incentive to accurately track their location and login/logout times	Organizational	This timekeeping system is for monitoring purposes only, it will not affect payroll	Reports will show if the system is being used, and if it's being used properly	Make this a policy that will affect their payroll	Have an incentive for staff/crews to use the system (gift card or extra vacation time for history of properly using the system)	HR	This has been discussed with client (not incentives), no resolution strategy
R2	2	Staff adhering to new reporting rules	This is a new system, so new time reporting rules will be put into place	Organizational	This timekeeping system is for monitoring purposes only, it will not affect payroll	Reports will show if the system is being used, and if it's being used properly	Make this a policy that will affect their payroll	Have an incentive for staff/crews to use the system (gift card or extra vacation time for history of properly using the system)	HR	This has been discussed with client, no resolution strategy
R3	3	Availability of hardware	It is not certain that all facilities have a computer that staff have access to	Technology	It has not been required before that each facility have a computer for custodial staff to use	Data is not being collected at certain locations	Create a protocol for setting up new hardware so that this can be done seamlessly if a location does not have the required hardware, or if the hardware has to be installed in a new location (e.g., remodeling)	Designate IT staff to determine the availability and physical location of hardware at each PPS facility	IT	This has been discussed with client, they will address this, no longer a risk
R4	4	Capacity of hardware	It is not certain that computers currently available at various facilities can support PeopleSoft software	Technology	It has not been required before that each facility have a computer for custodial staff to use	Data is not being collected at certain locations	Create a protocol for setting up new hardware so that this can be done seamlessly if a location does not have the required hardware, or if the hardware has to be installed in a new location (e.g., remodeling)	Designate IT staff to determine the capacity of hardware at each PPS facility	IT	This has been discussed with client, they will address this, no longer a risk
R5	5	Availability of terminals	It's been assumed that each location that has a computer only has one	Technology	It has not been required before that each facility have a computer for custodial staff to use	Data is not being collected at certain locations	Allow access to a computer in the main office as a backup	Have two computers available at each location that has three or more custodial staff	IT	This has been discussed with client, they will address this, no longer a risk
R6	6	Physical capability of staff	Some staff may not have good eye sight	Organizational	Some staff may have bad eye sight	Data is not being collected for certain staff	Provide a magnifying visual aid at each computer station	Train staff on how to increase computer screen resolution	HR	This has been discussed with client, no resolution strategy

No.	Rank	Risk	Description	Category	Root Cause	Triggers	Contingency plan	Mitigation plan	Risk Owner	Status
R7	7	Lack of technological knowledge of staff	Some staff may have limited or no experience operating computers	Organizational	Computer operation skills are usually not required of custodial staff	Data is not being collected for certain staff	Provide step-by-step instructions at each computer station	Train staff on basic computer operation skills	IT	This has been discussed with client, no resolution strategy
R8	8	Staff signing in from home	The Web interface of PeopleSoft may allow staff to sign in from home	Technology	Web interfaces are usually set up so that users can sign in from any location	Alarms/issues are not being responded to when a staff is supposedly signed in and on-site	Require a PeopleSoft plug-in	Require a PeopleSoft plug-in	IT	This has been discussed with client, no resolution strategy
R9	9	User backlash	Staff may resist using this new system because they were not asked for their input during planning	Organizational	Staff are more supportive of ideas that they had an opportunity to provide feedback for	Data is not being collected	Enforce compliance through their work contract	Survey staff	HR	PPS has decided not to survey staff
R10	10	Union backlash	The staff are part of a union; unions tend to be cautious towards change	Organizational	This new system may raise red flags for the union, since this is a policy change that may affect current/future staff employability	Data is not being collected	HR needs to have documentation of any conversations with the union readily available if any issues or concerns are brought up by the union for something that has already been approved	Include a union representative in the planning stage	HR	HR has met with union representative and confirmed this will not be an issue

## Option 2: Card Reader

No.	Rank	Risk	Description	Category	Root Cause	Triggers	Contingency plan	Mitigation plan	Risk Owner	Status
R11	1	Lack of staff motivation to use the timekeeping system	Staff have no incentive to accurately track their location and login/logout times	Organizational	This timekeeping system is for monitoring purposes only, it will not affect payroll	Reports will show if the system is being used, and if it's being used properly.	Make this a policy that will affect their payroll	Have an incentive for staff/crews to use the system (gift card or extra vacation time for history of properly using the system)	HR	This has not been discussed with client
R12	2	Losing/forgetting card keys	Staff either lose their card key, misplace it, or forget it so they cannot check in/out	Organizational	Card keys can easily be misplaced	Data is not being collected	Allow Web Clock login as a backup	Card key can also double as their staff ID; put the cost of replacing the cards on the staff	HR	This has been discussed with client, no response strategy
R13	3	Data security	Staff person allows another staff person to check them in when they are not physically present	Organizational	Staff may not want to wait in line to check in if there is only one station and multiple staff checking in at the same time	Alarms/issues are not being responded to when a staff is supposedly signed in and on-site; discrepancy in reporting	Allow Web Clock login as a backup	Card key can also double as their staff ID, staff would be less likely to give up their ID	HR	This has been discussed with client, no response strategy
R14	4	Cards losing magnetism	Card keys need to be magnetic, but if kept near electronic devices (e.g., cell phones) they will lose that property and not function properly	Technology	Carrying a cell phone is common, this is usually stored where a wallet would be stored, which is a likely place for one to keep their card key	Data is not being collected	Allow Web Clock login as a backup	Provide card holders for card keys	IT or HR	This has been discussed with client, no response strategy
R15	5	User backlash	Staff may resist using this new system because they were not asked for their input during planning	Organizational	Staff are more supportive of ideas that they had an opportunity to provide feedback for	Data is not being collected	Enforce compliance through their work contract	Survey staff	HR	PPS has decided not to survey staff
R16	6	Union backlash	The staff are part of a union; unions tend to be cautious towards change	Organizational	This new system may raise red flags for the union, since this is a policy change that may affect current/future staff employability	Data is not being collected	HR needs to have documentation of any conversations with the union readily available if any issues or concerns are brought up by the union for something that has already been approved	Include a union representative in the planning stage	HR	HR has met with union representative and confirmed this will not be an issue

## 10. Contract and Statement of Work

### 10.1 Contract

This agreement is made and entered into as of the 2<sup>nd</sup> day of September 2011, by and between GG Consulting, Inc., and Broadway Electric Company (hereinafter referred to as "Contractor").

Project: PPS Electronic Timekeeping System

WHEREAS, GG Consulting, desires to retain the professional services of the Contractor to install electronic card readers at all Pennsylvania Private Sanctuary (PPS) facilities as outlined in the attached Statement of Work.

IN CONSIDERATION of the mutual promises and subject to the terms and conditions set forth herein, the parties agree as follows:

1. **DURATION.** The term of this agreement shall be December 19-30, 2011, unless terminated sooner or extended as provided herein.
2. **SERVICES.** Subject to the general direction of GG Consulting, Contractor shall install electronic card readers at all PPS facilities.
3. **COMPENSATION.** GG Consulting agrees to pay Contractor a maximum of \$10,000.00 for this service. By signing this document, I agree to GG Consulting's policies relating to travel, payment, etc.
4. **INDEPENDENT CONTRACTOR.** Contractor shall be an independent contractor for all purposes and shall be entitled to no compensation other than the compensation provided for under paragraph 3 of this agreement.
5. **EARLY TERMINATION.** This agreement may be terminated prior to December 12, 2011, by mutual written consent of the parties or by 30 days written notice delivered by certified mail or in person from either party to the other. Termination shall not affect any right, obligation, or liability of Contractor or GG Consulting that accrued prior to such termination.
6. **INDEMNITY.** Contractor will defend, save, and hold harmless GG Consulting, its officers, agents, employees, and members from all claims, suits, or actions of whatsoever nature resulting from or arising out of the activities of Contractor, agents, or employees under this agreement.
7. **WORKERS COMPENSATION.** Contractor will, at all times during the term of this agreement, comply with Worker's Compensation laws of the State of Oregon. Contractor will also require any other subcontractors to also provide worker's compensation in accordance with the laws of the State of Oregon.
8. **MODIFICATION OF EXTENSION.** Any modification of the provisions of this agreement shall be reduced to writing and signed by the parties.

IN WITNESS WHEREOF, the parties have executed this agreement.

John Doe  
Broadway Electric Company

9/5/2011  
Date

Fannie Black  
GG Consulting, Inc.

9/2/2011  
Date

## 10.2 Statement of Work

### STATEMENT OF WORK

---

- I. **Scope of Work:** Broadway Electric Company (hereinafter referred to as “Contractor”) will install electronic card readers. Pennsylvania Private Sanctuary (hereinafter referred to as “Client”) will designate optimal locations of installation of the card reader. If necessary, Contractor will designate an alternate location if Client’s designated location cannot be integrated into the current electrical system. Contractor will install the proper wiring when necessary to keep the card readers as close to the computer station as possible.
- II. **Location of Work:** Contractor will perform the work on-site at each of the 100 Pennsylvania Private Sanctuary (PPS) facilities located throughout Portland, Oregon. Contractor will install electronic card readers as close as possible to the computer stations.
- III. **Period of Performance:** Contractor will complete the installation and testing of the electronic card readers within 80 hours. Work must be performed during the weeks of December 19-30, 2011, between the hours of 7:00 am and 6:00 pm. Contractor will perform the work on-site. The maximum number of hours that can be billed per week is 40 hours.
- IV. **Deliverables Schedule:** Contractor will provide a final report documenting successful testing of each electronic card reader at each PPS facility. Contractor will update electrical drawings for each PPS facility to include newly installed wiring for the electronic card readers. All deliverables are due no later than January 6, 2012.
- V. **Applicable Standards:** Contractor will abide by ISO standards and OSHA standards.
- VI. **Acceptance Criteria:** GG Consulting will determine that work is acceptable after the final deliverables have been accepted and verified by the Client.
- VII. **Special Requirements:** All those performing the work of the Contractor must have certification as a Journeyman Electrician or Master Electrician.



## 11. Client Acceptance/Project Completion Form

Project Name: Electronic Timekeeping System-Pennsylvania Private Sanctuary

Project Manager: Fannie Black, GG Consulting

I (We), the undersigned, acknowledge and accept delivery of the work completed for this project on behalf of our organization. My (Our) signature(s) attest to my (our) agreement that this project has been completed. No further work should be done on this project.

Name	Title	Signature	Date
Fannie Black	Project Manager	<i>Fannie Black</i>	1/31/2012
Vera Sell	Team Member	<i>Vera Sell</i>	1/31/2012
Shailabh Mazari	Team Member	<i>Shailabh Mazari</i>	1/31/2012
Baraa Abudawod	Team Member	<i>Baraa Abudawod</i>	1/31/2012
Clint Eastwood	Client/SME	<i>Clint Eastwood</i>	1/31/2012
Julia Roberts	Client/SME	<i>Julia Roberts</i>	1/31/2012

1. Was this project completed to your satisfaction?

☒ Yes

No

2. Please provide the main reasons for your satisfaction or dissatisfaction with this project.

Although we did not ask for an alternative to our project proposal, we greatly appreciated GG Consulting's alternative solution. The project manager was very effective in communicating electronically, but face-to-face meetings were highlighted as our preferred method of communication, and we would have liked to see that happen more frequently, especially towards the end of the project. There also seemed to be some miscommunication or lack of understanding about the scope of the project.

Deliverables were submitted on time, and sometimes ahead of schedule. The project was completed on time.

3. Please provide suggestions on how our organization could improve its project delivery capability in the future.

As stated previously, more face-to-face meetings, especially as the project nears completion. We would have been able to address any misunderstandings GG Consulting had with the project scope.

Thank you for your input.

## 12. Follow-up and Future Opportunities for Engagement

During the course of project implementation at PPS, we discovered several opportunities for follow-up projects and future engagement that may be beneficial to PPS.

Firstly, the electronic timekeeping system promises to greatly increase efficiencies in payroll and reduce overtime expenditures. However, the current system lacks the ability to effectively track and report projected versus actual overtime paid. This lack of automated visibility may reduce the potential benefits of the newly introduced system. We would recommend implementing an automated payroll system that compares the actual overtime paid with that of the previous month and potentially with that of the previous year in the same timeframe. A trigger email could be sent if the actual overtime is higher than expected. This will allow the central office to take immediate action and adjust the resource allocation without having to manually run reports.

Secondly, the team has noticed a perceived lack of visibility into project resource needs from a program management perspective. We believe the PPS IT department could benefit from a PMO. This team has the experience and capability to introduce PMO practices and train PPS IT staff in a six-month period. The scope for such a project would include but not be limited to:

- Define and implement documentation, guidance, and metrics for program management
- Set up resource pools in MS Project to optimize resource allocation
- Set up targets for meeting the triple constraint
- Train IT and other project management staff in project management best practices

We thank you for the opportunity you provided GG Consulting in implementing the Electronic Timekeeping System Project, and we look forward to assisting you with future project management consulting needs.

### 13. Lessons Learned Report (Confidential – For Internal Use Only)

**Prepared by:** Baraa Abudawod, GG Consulting

**Date:** 8/8/2011

**Project Name:** PPS Electronic Timekeeping System

**Project Sponsor:** Tony Danza

**Project Manager:** Clint Eastwood

**Project Dates:** 8/4/2011 – after winter break 2012

**Final Budget:** \$55,640

#### 1. Did the project meet scope, time, and cost goals?

It is plausible to say that the project met the scope, time, and cost goals. In terms of scope, the scope of the project was to develop a more efficient electronic timekeeping system for custodial staff working for the Facilities and Asset Management (FAM) Department at Pennsylvania Private Sanctuary. The new system will provide accurate reporting data to assist in shift management, oversight, and provide efficiencies in scheduling personnel. PPS is encountering annual losses of \$77,000 due to inaccurate time reporting, time theft, and unnecessary overtime. The new system will help in reducing annual losses over a five-year period (see financial analysis).

In terms of time/schedule, the project sponsor wants the project to be completed within six months, ideally after the 2012 winter break. The project is actually expected to be completed on time. Thus, it is reasonable to say that the project was successful in meeting the time/schedule goal. In terms of cost, the final budget for the project was \$55,640 (excluding the opportunity cost of \$60,000). According to PPS, the cost goal for this project is to be less expensive than the biometrics project that has been rejected due to its high cost. The biometrics budget for the hardware and equipment was approximately \$54,500. When comparing that with the new proposed system, it is apparent that the new system is much less expensive, as it costs \$55,640 including hardware and equipment, development and testing, project management, maintenance, and training costs (see financial analysis). In conclusion, the project was successful in meeting the scope, time, and cost goals.

#### 2. What was the success criteria listed in the project scope statement?

##### **Main Project Success Criteria:**

6. Implementation by winter break and training of custodial staff prior to go-live date.
7. Accurate reporting of custodial staff location and time 90% of the time within the first year after introduction to ensure proper coverage of all buildings and facilities and optimize staff allocation to schools and buildings.
8. Overtime reduction by 30% within the first year after introduction, 50% reduction after two years, and 90% reduction thereafter.

9. Reduce administrative overhead in the central office by 50% to allow focus on staff management within the first year after introduction.
10. The project should pay for itself within three years after introduction.

### **3. Reflect on whether or not you met the project success criteria.**

Overall, the project success criteria were met as the success criteria basically reflect meeting the scope, time, and cost goals. As stated earlier, the project was successful in meeting those three goals, and thus we can say the project met the project success criteria. The project is expected to be completed after winter break 2012, which is a success as it satisfies the time/schedule success criterion. The project will also improve the accuracy of reporting data which would reduce overtime and administrative overhead in the central office. In terms of the fifth success criterion (payback year), the project actually pays for itself within four years after introduction instead of three years. This is the only success criterion that the project does not satisfy, other than that the project satisfies all other criteria.

### **4. In terms of managing the project, what were the main lessons your team learned?**

Main Lessons Learned:

- Risk identification is the most important/critical step in project risk management.
- The greatest risk driver is often overlooked.
- Understanding the stakeholders' expectations is very important for meeting project goals.
- It is very important to know which dimension of the triple constraint is most important to the project stakeholders.
- Good scope definition can prevent the project from experiencing cost and time overruns.
- Support from top management is an essential factor in the project's success.

### **5. Describe one example of what went right on this project.**

Understanding the stakeholders' expectations for this project was very helpful for coming up with the best electronic timekeeping system that satisfies the project goals. The stakeholders wanted a new cost-efficient timekeeping system that can improve the accuracy of the reporting data in order to reduce the annual losses of \$77,000. Apparently, PPS pays more attention to the scope and cost dimensions of the triple constraint. This was very helpful for us when proposing the card reader system that would improve the accuracy of the reporting and reduce the annual losses. We believe this is a good example of what went right on this project.

### **6. Describe one example of what went wrong on this project.**

A good example of what went wrong on this project was the issue of the vendor quote for the card reader system, which was twice as high as expected. This eventually impacted the total cost of the project as hardware and equipment costs account for 11% of the total cost. A reasonable solution for this issue was to look for other vendors who can offer the card reader system at a lower price. A very important lesson that should be learned from this issue is that we must always have alternative vendors. The price of the card reader system was very important to the stakeholder as the biometrics system was rejected because it was too expensive. Finding an alternative vendor with a lower price was essential for this project, and it helped in meeting the stakeholders' expectations.

**7. What will you do differently on the next project based on your experience working on this project?**

When assigning resources to tasks, we encountered the problem of having a small number of resources to assign to the different tasks. In this project, we only had two resources; the project manager and PeopleSoft developer. When assigning the resources to the tasks in MS Project, resource overallocation was a major issue. We believe for a project like this we need more resources in order to ease the process. Having more resources might have an impact on cost, but it would ensure that the project meets the time and scope dimensions of the triple constraint. Thus, what we will do differently on the next project of similar size and scope is to hire a few resources and assign them to some tasks. This would solve the problem of resource overallocation and ensure the project goes smoothly and finishes on time.

## **14. Deliverables Website**

Below is the link to the company website for GG Consulting, Inc.

<http://ggconsulting.weebly.com/>