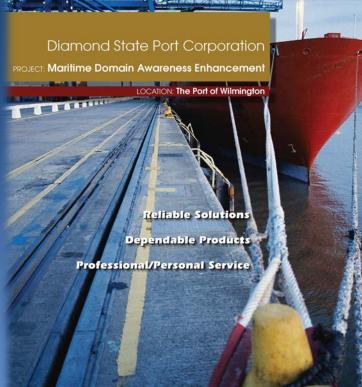
Best Practices on Project Implementation







presented by...



Creating Safe, Secure Environments

Port of Wilmington Project Overview PSG Project

- * FEMA Auditor stated that "this was the only project that met all grant requirements, and timelines"
- * \$2.6 Million
- * Developed and created custom graphical user interface for command and control interface links pacs, max pro vms, pids, and other subsystems into 1 common interface.
- * Installed over 7,000' of security fencing
- * Installed over 5,000' of perimeter fence detection (pids)
- * Installed 7 50' & 4-25' light pole on 20' concrete footers 100 yards from the Delaware River
- * Installed (4) new gate operators and provided electrical services to each
- * Installed 7 new Ethernet wireless links to further expand the existing dedicated site security network and extended existing fiber optic infrastructure
- * Installed over 200 new IP cameras
- * Installed numerous Thermal Imaging video analytics cameras
- * Install new handheld TWIC readers and enrollment devices
- * Installed new head end to include video servers, pacs server, archive server, network infrastructure, & secure VPN



* Installed new command and control center & new mobile command and control center

Command & Control Pictures



Design Approach

- * Consultant and/or Trusted Security Integrator
- * Owners Involvement is Critical stay engaged throughout the process
- * Define Objectives, Alignment with Grant Investment Justification
 - * Compliance Requirements: Coast Guard, Grant, Regulatory, Environmental
 - * Security Improvements, Operational Efficiencies, Loss Control, Safety
- * Document Existing Systems/Equipment and Site Infrastructure
- * Prepare Multiple Design Scenario's
 - * Evaluate different technologies and manufacturers
 - * Evaluate equipment migration plan keep and incorporate existing or replace all
 - * Bleeding edge technology vs. cutting edge
- * Alignment with Budget Evaluate long term cost of ownership
- * Alignment with Organizational Structure / End Users Who? Where?
- Detailed Drawings, Product Specifications, Detailed Sequence of Operation / Scope of Work



Vendor Selection

- * Selection Process
 - * Pre-Qualify Vendor Pool Statement of Qualifications & References
- * Issue Project Requirements
 - * Bid / RFP Package
 - * Include Investment Justification & Budget Narrative
- * Vendor Interviews & Presentations
 - * Require attendance by Organization's Project Manager and Technical Lead that will be assigned to the project
 - * Require attendance of key Manufacturer's Representatives
- * Check Organization's References
- Check Vendor's Manufacturer/Product Certifications & quantity of certified technicians



Installation / Deployment

- * Team Approach (Owner, Consultant/Engineer, Integrator, Fiduciary Agent)
 - * High Expectations Clearly Defined
 - * Work together to assure all stake holders objectives are met
- * Shop Drawings / Submittal Review & Acceptance
 - * Require Detailed System Drawings and Riser Diagrams
 - * Define project Phasing & Milestones Schedule of Values
 - * Pay promptly for performance
 - * Define final Audit Requirements and assure compliance throughout (wage rates, certified payroll, multi-bids, material invoices, product identification)
 - * Define structured project communication to include:
 - * Meetings frequency, attendee's, & deliverables
 - * Problem Resolution RFI response timelines



Sample Pre-Project Timeline

Design Build Process:

			Finish	Duration	Q4 32 Q1 12				Q2 12	q	3 12	T	Q4 12		01 13		Q2 13
ID	Task Name	Start			Nov Dec	Jan	Feb Mar	Apr	May Jun	Jul	Aug Sep	, ,	Oct Nov	Dec	Jan Fei	Mar	Apr
1	Finalize Fence Design	10/21/2011	10/27/2011	1w													
2	Finalize Lighting Design	10/21/2011	10/27/2011	1w													
3	Finalize Camera Fields of View / Locations	10/27/2011	12/7/2011	6w													
4	Finalize Power and Data Infrastructure	12/7/2011	12/20/2011	2w													
5	Finalize Command & Control Location and Configuration	12/20/2011	1/2/2012	2w													
6	Finalize & Layout Data Center / Head End	1/2/2012	1/13/2012	2w													
7	Fence Phase 1 (Auto Bert & 1st Point of Rest	1/13/2012	3/12/2012	8.4w													
8	1st Point of Rest Lights	3/12/2012	4/11/2012	4.6w													
9	Fence Phase 2 Admin Area	4/11/2012	5/14/2012	4.8w													
10	1st Point of Rest Security (Gates/Access/ Video)	4/11/2012	5/15/2012	5w													
11	Stage 1 & 2 Fencing	5/15/2012	5/28/2012	2w													
12	Stage 1 & 2 Gates/ Access/Video)	5/28/2012	6/15/2012	3w													
13	Head End Equipment Installation & Config	5/10/2012	5/23/2012	2w													
14	Command Center Installation	5/23/2012	6/5/2012	2w													
15	Install & Configure Video Phase 1	6/5/2012	7/2/2012	4w													
16	Install & Configure Video Phase 2	7/2/2012	7/27/2012	4w													
17	Install & Configure Video Phase 3	7/30/2012	8/24/2012	4w													
18	Install & Configure Video Phase 4	8/24/2012	9/20/2012	4w													
19	Install & Configure Video Phase 5	9/20/2012	10/17/2012	4w							1						
20	Configure & Deploy new Handhelds	9/3/2012	10/12/2012	6w													
21	Acceptance Testing – Project Closeouts	1/31/2013	4/30/2013	12.8w													

Key Design Finalizations:

- Fence Layout / Plan
- 1st Pt. of Rest Lighting
- Video Placement/Field of View
- Video Analytics
- Communications / Electrical Infrastructure
- Command & Control Location
- Head End Equipment Layout / Design
- Clearly Define Owner and Contractor Responsibilities
- Owner Sign Off



System Turn Over

- * Acceptance Tests
 - * Sign Offs all stakeholders
 - * Training & Cheat Sheets
 - * Video tape if possible keep simple
 - * Fiduciary Agent Acceptance Extremely Important
 - * Audit This is a compilation of the entire project
 - * Software & Technical Support
 - * Include number of years included in the contract
 - * Maintenance Schedule
 - * Include spare inventory if possible

