

#M.7.

<u>MEMORANDUM</u>

To: Mayor and City Council

From: Billy Grogan, Chief of Police

Thru: Warren Hutmacher, City Manager

Date: July 8, 2013

Subject: Recommendation of Public Safety Video Surveillance Project Contract

ITEM DESCRIPTION

This item is a contract to manage the installation of the Public Safety Video Surveillance Project at Brook Run Park for the City of Dunwoody.

BACKGROUND

On May 8, 2013, the City of Dunwoody issued RFP #13-02 for a Public Safety Video Surveillance Project at Brook Run Park. As part of the RFP, a mandatory Pre-Proposal meeting was held on May 29, 2013 for questions as well as a tour of Brook Run Park. A total of 16 representatives attended this meeting representing 13 companies.

A total of four proposals were received by the June 21, 2013 deadline. One of the companies, VTS Security, called and withdrew their proposal from consideration because they did not believe they could meet the specifications of the RFP. The remaining three proposals were reviewed and scored by a panel of evaluators. The average results of the scores are as follows:

Scoring Criteria	IronSky	Fleetwood Security	Systems Alert Security
Favorable References (out of 10 points)	10.0	3.00	4.00
Previous Exp/Qualifications/Ability to Perform (out of 40 points)	36.25	11.25	3.25
Proposed Approach/Methodology (out of 30 points)	25.75	9.50	0.00
Proposed Cost (out of 20 points)	13.75	6.25	3.00
Total (out of 100 points)	85.75	30.00	10.25

IronSky received an excellent rating from all raters and is an excellent choice to provide our Public Safety Video Surveillance Solution at Brook Run Park to the City of Dunwoody. The company has successfully installed public safety video surveillance solutions at multiple departments in the metro Atlanta area.



FUNDING

In the amended 2012 Budget, the City of Dunwoody budgeted \$113,000 for a Public Safety Video Surveillance solution for Brook Run Park. This amount was carried forward in the 2013 Budget. The cost of the winning proposal from IronSky, Inc. was for \$135,750. The difference in the budgeted amount and the proposal is \$22,750.

RECOMMENDED ACTION

At this time, staff recommends the City Council approve the contract with IronSky, Inc., who received the highest rating of their proposal, to install our Public Safety Video Surveillance solution at Brook Run Park at a cost of \$135,750. Staff recommends the additional funds be added for this project through a budget amendment.

	Iron Sky, Inc.					——#M.
	Proposal for:					
	City of Dunwoody - Purchasi	ing				
	Date: June 20th, 2013	•				
Prepared for:				Prepared by:		
City of Dunwoody - Purchasing		Iron Sky, Inc.				
41 Perimeter Ctr East, Ste 250	RFP 13-02 Public Safety Surveillance	1773 Westbor	ough [Drive		
Dunwoody, GA 30346	Ducio of	Katy TX 7744	9			
Purchaing Officer	Project	Bob Carter				
Tel: (678) 382-6902		Tel: (678) 283	-4829			
	Description	Units		Unit Price		Total Price
SOFIWARE & HARD	WARE	9	\$	1 000 00	\$	9 000 00
	integrated with the Iron Sky system.	5	Ŷ	1,000.00	Ψ	0,000.00
FC12T1511	COTS Server to support 10 cameras recording at 30frames per second in H.264 compression at 30% image quality compression recording for 30 days 2U Server w/ 3 X 3TB Raid5 Array Windows Server®2008, Standard x64, Incl Hyper-V [™] , Includes 5 CALs Microsoft® SQL Server [™] 2008 X64 Standard (5 CAL) Adobe Flash Media Streaming Server 3.5 Does not include Iron Sky Video Surveillance Management software licenses Includes 3 Year ProSupport for IT and Next Business Day On-site Service from Manufacturer. Includes Iron Sky services required to install and configure Iron Sky	1	\$	13,500.00	\$	13,500.00
	VMS software, operating system, SQL Server and Flash Media Server.					
FC12T19VV-CDFS1SR	CarDetector Fixed Camera LPR system server hardware (up to 8 LPR cameras). Pre- installed factory tested DSP Control Center. Includes MySQL database plus CarDetector Event Viewer Utility. Windows Server 2008 OS. 2U Rack Form.	1	\$	3,850.00	\$	3,850.00
FC12T19VVDDSP-1CDF	DSP LPR - 2 camera system -includes 2 DSP digital signal processor pancake unit with 2 wiring harnesses.	1	\$	2,700.00	\$	2,700.00
FC12T19VVR2-XXX-STD	LPR Cameras (2) - combination IR and Color LPR Cameras with RAM ball mount and standard cable connections.	1	\$	6,560.00	\$	6,560.00
FC12T1517	16-Port KVM 17" LCD 1U Rack Console	1	\$	1,608.00	\$	1,608.00
FC12T1518	UPS 2200 VA 2U Rack-Mount	1	\$	1,108.00	\$	1,108.00
FC1211337	HDTV, day/night, fixed dome with vandal-resistant, IP66-rated outdoor casing. Varifocal 2.5-6 mm DC-iris lens, remote focus and zoom. Multiple, individually configurable H.264 and Motion JPEG streams; max HDTV 720p or 1MP resolution at 30 fps. WDR. Video motion detection and active tampering alarm. Two-way audio detection and audio detection. I/O for alarm/event handling. SD/SDHC memory card slot for optional local video storage. Operation in -40°C to +55°C powered by standard Power over Ethernet. Midspan not included. Includes smoked and clear transparent covers, weather shield against sun, rain or snow, and 5m Ethernet cable with mounted gasket. Price includes staging and configuration services.		\$	1,250.00	φ	2,300.00
FC12T2281	HDTV 720p compliant outdoor-ready, PTZ camera with 18x optical zoom. HDTV 720p @ 30fps (1280x720) in H.264 and Motion JPEG, Day & Night, IP66 and NEMA 4X classification. Advanced Gatekeeper. Includes High PoE 30 W midspan, smoked and clear dome. Mounting brackets are not included.	5	\$	3,200.00	\$	16,000.00
FC12T1553	Pole mount adaptor for Pendant Dome	7	\$	58.34	\$	408.37
FC12T1560	Pole Bracket for IP PTZ camera with steel pole straps	7	\$ ¢	97.89	\$	685.24
1 0121 1090	includes staging and configuration services.	20	φ	113.15	φ	3,475.00
FC12T1600	Ubiquiti AM-5G20-90 - 5GHz AirMAX MIMO SectorAntenna with 20dB, 90 Degree.	2	\$	248.75	\$	497.50
FC12T1604	Wall-Mount Cabinet - 38" tall x 22" deep	1	\$	950.00	\$	950.00
FC12T1608	Rack-mounted shelf	1	\$	65.00	\$	65.00
FC12T1621	Connectors, Fittings and Terminations	12	\$	45.00	\$	540.00
	UPS/surge and IP addressable power relays.	10	Ф	1,750.00	φ	17,500.00
FCT12TBLPL	25' Black aluminum pole, direct burial (does not include power).	8	\$	750.00	\$	6,000.00
Software & Hardware Total					\$	86,947.11
INSTALLATION OF	RVICES					
FC12T1801	Server and Storage Device Installation: Per device fee for on-site installation of server	1	\$	2,000.00	\$	2,000.00
EC12T1806	and storage devices and configuration onto the client's network.	11	\$	2 750 00	\$	30 250 00
	device on structures other than buildings (utility poles, towers, etc). Price does not include installation of pole, electrical work, trenching, conduit or bucket truck rental.		φ	2,700.00	φ	50,230.00
FC12T1807	Roof-Mounted Equipment Installation: Per device fee for work performed to install device on structures. Price does not include electrical work, rigid conduit, firewall penetration, or core drilling.	3	\$	2,500.00	\$	7,500.00

#M.7. SU-CF-COM	Start-Up, Configure and Commissioning of CarDetector Fixed LPR System	2	\$ 450.00	\$	900.00
IFC12T1810	Regular Work Hours (8:00 A.M 5:00 P.M. Local Time)	32	\$ 125.00	\$	4.000.00
FC12T1811	Project Management Hours	40	\$ 150.00	\$	6,000.00
Installation Services Total				\$	50,650.00
					•
ANNUAL SERVICE		Months			Service Fee
FC12T1900	On-site Service- Standard Business Hours: Complete on-site support for all hardware and software provided by and installed by Iron Sky. Includes all labor required to monitor, diagnose, repair and replace defective or damaged equipment. Does not include cost of equipment that is damaged or defective outside of the manufacturer's limited warranty. Includes remote end user technical support, remote monitoring of all components connected to the Iron Sky solution, software updates and software upgrades. On-site Service period begins on the 1st day after the System has been accepted by the Client and extends for 12 months. On-site Service contract will be renewed for additional 12-month periods upon receipt of purchase order by Client. Iron Sky Software is covered by a 12-month warranty which includes remote end user technical support, remote monitoring of all components connected to the Iron Sky solution, software updates and software upgrades. Software support period begins the day after the System has been accepted by the Client and extends for 12 months. Software support does not include the performance of any onsite work by Iron Sky nor does it include management of hardware manufacturer's limited equipment warranties. Standard business hours are Monday through Friday 8am to 5pm local time.	15% of the total project price including hardware, software and services		\$	20,639.57
Annual Ormitae				^	00 000 57
				\$ ¢	20,639.57
PROJECTIVIAL				\$	158,236.68
DISCOUNT				\$	23,236.68
Shipping				\$	750.00
PROJECT TOTAL				\$	135,750.00

Note:

1) Electric power is not covered under this proposal. To be furnished by Client.

2) Server, data storage and ALPR processor to be housed within rack inside Brook Run structure. Power, Internet service and climate control provided by Client. Payment Terms:

50% of the total price will be invoiced upon issuance of purchase order

35% of the total price will be invoiced upon delivery of major equipment to client site

15% of the total price will be invoice upon completion of project

All invoices are due net 30 days.

Taxes:

Customer shall be responsible for all associated sales taxes and or duties. In the event that sales taxes are not

included with this proposal, customer shall still be responsible for the associated sales taxes and or duties. Sales tax shall be added to the final invoice.



Public Safety Video Surveillance Project RFP 13-02

Purchasing Department City Of Dunwoody 41 Perimeter Center East, Suite 250 Dunwoody, GA 30346

Prepared: June 20th, 2013

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ATTACHMENTS:

- 1) Iron Sky Itemized Sales Quotation
- 2) Axis Communications Camera Specifications for HD PTZ
- 3) Axis Communications Camera Specifications for HD Fixed
- 4) Vigilant Solutions Car Detector and LEARN
- 5) HP Server
- 6) Iron Sky Installation Photos Using Pole

EXECUTIVE SUMMARY/COVER LETTER

Iron Sky was founded in December 2008 to give cities **Better Tools to Fight Crime**. Iron Sky works exclusively with cities and law enforcement agencies to design, deploy and maintain large-scale, city-wide public safety solutions. Iron Sky has built an impressive list of clients in the Atlanta area and is actively working with:

City of College Park Police Department City of Duluth Police Department City of Lilburn Police Department City of Norcross Police Department City of Sandy Springs Police Department City of Pine Mountain Police Department City of Valdosta Police Department Valdosta Housing Authority, GA City of Conyers Police Department Conyers Housing Authority City of Decatur Police Department City of Decatur Police Department Midtown Alliance/Midtown Blue City of Brookhaven

The City of Dunwoody would like to enhance its safety and security measures, deter unlawful activities and increase police resources in the City of Dunwoody's Brook Run Park by implementing a remote-access *PUBLIC SAFETY VIDEO SURVEILLANCE* solution that will allow City Management, First Responders and Public Safety Entities to be more proactively aware of activities taking place within and around Brook Run Park, while establishing better communication and collaboration between all parties.

A key requirement of the City of Dunwoody's ideal security camera system is the ability for authorized users to view and control any camera at any location from any computer with access to the Internet. By enabling more personnel to view a location without having to physically be at the location, the surveillance system becomes a staff multiplier and allows authorized personnel to more effectively respond to incidents and be proactive in how they provide services. Being able to view live and recorded camera images from any computer will increase situational awareness and significantly decrease the time spent investigating incidents.

Another key requirement of the security camera system is the ability to expand and adapt to the needs of Dunwoody both now and in the future, using a solution that is integrated with surrounding jurisdictions. There are many video surveillance technologies on the market today and the City of Dunwoody is aware of the danger in selecting a technology that may soon be out-of-date, does not allow expansion or restricts the City of Dunwoody to only working with functionality or hardware that is available at the time of purchase. The City of Dunwoody wishes to install the most appropriate surveillance solution that will address its current needs while establishing a platform that the City of Dunwoody can build on in the future as those needs change. The solution should be nonproprietary to allow the use of commercial-off-the-shelf hardware and use a thinclient architecture to eliminate the need to install and maintain software on user workstations. The solution should also be fully integrated with the region's Multi-Jurisdictional Police Intelligence Center so that area resources are optimized, creating a higher probability of solving crimes, a strong level of cooperation and interoperability between CAD, AVL, ALPR and surveillance resources.

Based on Iron Sky's understanding of the City of Dunwoody's goals for this project, Iron Sky's video surveillance solution meets and exceeds these requirements. Iron Sky uses industry leading IP-based cameras by Axis Communications, robust wireless components by Ubiquiti Networks, non-proprietary software and commercial-off-the-shelf hardware to design cutting-edge video surveillance solutions that are customized to address each of the City of Dunwoody's unique challenges. Using the Iron Sky surveillance management software, authorized City of Dunwoody personnel will be able to view any camera installed in any location, patrol vehicle locations and incident locations from any computer on the city's LAN/WAN (or Internet) using only a standard web browser.

The Iron Sky system is the foundation of the Multi-Jurisdictional Police Intelligence Center operated at 850 Mount Vernon Highway. Iron Sky has developed this map-based interface so that it displays camera video, live police incident information and live police vehicle locations for multiple departments.

Iron Sky is pleased to provide this response to RFP 13-02, which outlines the requirements and the proposed solution for the City of Dunwoody at Brook Run. Pricing contained in this proposal is offered only to City of Dunwoody and demonstrates Iron Sky's willingness to develop a long-term partnership with the <u>City</u>. This proposal is designed to deliver the greatest return on the City of Dunwoody's investment.

Iron Sky proposes to provide a complete, turnkey public safety surveillance system consisting of IP-based HD resolution cameras from Axis Communications, a robust wireless network from Ubiquiti Networks and automated license plate recognition (ALPR) from Vigilant Video. Using Iron Sky, authorized users will be able to access live and archived video images from any PC on the network and from any PC with Internet access. The map interface will display a map or satellite image of the park with icon locations for selecting cameras. The Iron Sky video management software will reside on either a Dell or HP network server within the main structure at the park. The solution will record images from the cameras in H.264 format at 20-30 frames per second (fps) and maintain those <u>images in archive for 30 days.</u> The length of video archive is adjustable and can be supplemented with additional hard drive space. As additional projects and camera locations are identified in the future, the City of Dunwoody will be able to build on the Iron Sky platform to support an unlimited number of cameras at an unlimited number of locations.

Highlights of the proposed solution are:

- Five (5) IP-based HD resolution Pan/Tilt/Zoom cameras featuring low-light and enhanced image quality.
- Two (2) IP-based HD resolution Fixed cameras featuring low-light and enhanced image quality.
- Two (2) lanes Vigilant Video ALPR cameras covering Brook Run Park entrances.
- Database integration with GCIC, DOR, as well as custom "hot-lists" using LEARN.
- Iron Sky integration with LEARN alerts to display alert information on Iron Sky map creating a direct correlation between alert and available resources.
- Database integration with CAD (Computer Aided Dispatch) and AVL (Automatic Vehicle Location) data for incident and patrol vehicle locations.
- System integration with the City of Sandy Springs Intel / Fusion Center.
- Surveillance camera will stream live images, and will record images, in the H.264 format at HDTV 720p (1280x720) resolution. Recorded camera images will be maintained in archive for thirty (30) days before they are automatically deleted.
- Authorized users will be able to view any camera from any computer on the police department's LAN/WAN simply by logging on to a web page.
- Dunwoody Police Department will be able to instantly grant remote access to 3rd party agencies in response to incidents simply by issuing the agency the web-browser address (Ex. Ironsky.dunwoodyga.com), a user name and password.
- Users will navigate camera locations using an extremely intuitive Google Map software interface.
- This is a complete turnkey solution, other than Internet services and electric power provided by City of Dunwoody.
- No ongoing fees or subscription costs are required to operate this system, other than the annual turnkey service and support that is being proposed by Iron Sky.
- The proposed solution is an open-standard, non-proprietary solution, which takes advantage of the latest physical security technologies without locking the Dunwoody Police Department into using Iron Sky for future phases.
- As additional camera/ALPR locations are identified in the future the Department will be able to build on the Iron Sky platform to support an unlimited number of cameras at an unlimited number of locations.

Agency: City of College Park Police Department Contact: Ron Fears, Chief of Police Address: 3717 College Street City: College Park State: Georgia Telephone: (404) 761-3131 Summary of work performed: Iron Sky has been working with the College Park PD for over two years and has installed 79 cameras throughout the city. In addition to the cameras Iron Sky has deployed a large wireless system and fully integrated the City's CAD and AVL systems into the Iron Sky VMS. The City of College Park partnered with the College Park Housing Authority and the Georgia International Convention Center to expand the system adding 7 HD pan/tilt/zoom domes. Iron Sky continues to grow the system as new projects are identified and is currently installing 1 lane of automated license plate recognition system by Vigilant Solutions.

Agency: Midtown Alliance/Midtown Blue Contact: Colonel Wayne Mock, Public Safety Director Address: 999 Peachtree Street City: Atlanta State: Georgia

Telephone: (404) 817-0500

Summary of work performed: Iron Sky has been working with the Midtown Blue staff for three years and has installed over 54 HD resolution pan/tilt/zoom cameras by Axis Communications. Iron Sky designed and installed a robust wireless network throughout the Midtown Improvement District and just recently upgraded the wireless data backhaul to Gigabit speed. Midtown Blue performs a 24 hour, 7 days a week video monitoring service using off-duty City of Atlanta Police Officers and roaming Midtown Blue Public Safety vehicles. The system is used by the Atlanta Police Department.

Agency: City of Valdosta Police Department Contact: Brian Childress, Commander Address: 500 North Toombs Street City: Valdosta State: Georgia Telephone: (229) 242-2606 Summary of work performed: Iron Sky has bee

Summary of work performed: Iron Sky has been working with the Valdosta PD for over a year and has installed 64 cameras throughout the city. The Valdosta Housing Authority has partnered with the City to install Valdosta Iron Sky surveillance cameras on Housing Authority property. Iron Sky continues to grow the system as new projects are identified and is in the progress of completing a 26 HD pan/tilt/zoom camera project in a joint effort with the Valdosta Traffic Management Center.

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Agency: City of Sandy Springs Police Department Contact: Terry Sult, Director of Public Safety Address: 7840 Roswell Road City: Sandy Springs State: Georgia Telephone: (770) 551-6900 Summary of work performed: Iron Sky has been working with the City of Sandy

Springs for over a year and has created a network of 80 cameras throughout the city, built a state of the art video matrix wall command center, integrated with two mobile surveillance trailers, CAD/AVL integration, and is currently establishing four lanes of automated license plate recognition. Iron Sky continues to grow the system as new projects are identified and is currently working on a wireless network from ChatComm to the top of Concourse Parkway Bldg 5 to deploy three 1080p HD pan/tilt/zoom domes.

EXPERIENCE/QUALIFICATIONS/ABILITY TO PERFORM

Iron Sky was founded in December 2008 by executives and professionals with extensive experience designing, implementing, managing and supporting large-scale municipal projects. Iron Sky was built from the ground up solely to develop Better Tools to Fight Crime for local government clients. **City-wide public safety projects are all we do.**

<u>Experience</u>

Iron Sky provides City-Wide Public Safety solutions to local governments that:

- Reduce crime and criminal activity
- Reduce total operating costs across the city
- Increase the identification of individuals involved in incidents
- Enable the city to be more proactive in its security efforts
- Facilitate more effective, ongoing collaboration between local law enforcement, fire and emergency agencies
- Facilitate real-time communication with outside agencies in response to an incident

Iron Sky's focus on public safety has driven the company to continually develop the most effective tool for managing security efforts across the city. With Iron Sky's video surveillance solution, authorized personnel can:

- View live and recorded images and control any camera in the city using a simple web page from any computer on the network
- Receive and respond to alerts from license plate recognition systems.
- Instantly collaborate with other law enforcement personnel, as well as fire and emergency personnel, over the internet in response to an incident
- Compensate for a shortage of law enforcement staff
- Manage the safety and security efforts of all locations within the city remotely
- View other data sources, such as 911 calls and patrol vehicle locations, from a single interface enabling faster decision making

<u>Services</u>

Iron Sky offers a complete list of services necessary to successfully deliver turnkey License Plate Recognition, video surveillance and wireless systems on time and on budget with minimal impact to daily operations. These services include:

Site Audit

Iron Sky schedules a Site Audit with all client personnel that have a stake in the security project. This typically includes Police/Public Safety, Facilities and IT departments and is open to anyone the client deems necessary to attend. The

purpose of the site audit is for Iron Sky to determine the safety and security challenges that are prompting the need for the public safety system and collaborate with the client to identify a strategy for addressing those challenges with security cameras.

The site audit takes into account current safety and security systems and procedures, environmental concerns, Crime Prevention Through Environmental Design (CPTED), lighting levels, availability of electrical power for equipment, facility construction, distance to the intended subjects, current threat levels, prior incidents, client personnel levels and many other factors that need to be understood to adequately design the best solution.

System Design

Iron Sky is responsible for the design of every system offered to the client. Iron Sky personnel use the data obtained during the site walk to match the appropriate equipment and installation methods with the level of coverage necessary for each camera location. Iron Sky designs systems for schools, critical municipal infrastructure applications, cities/counties, military bases, transportation agencies, judicial centers, detention facilities, commercial buildings, wireless applications and many others.

Installation

Iron Sky provides complete installation services for all components on the system. Depending on the location of the project, Iron Sky may utilize employee installation crews or subcontract the work to qualified contractors. Subcontractors undergo an extensive qualification process and are continually evaluated to ensure compliance with Iron Sky installation standards. All installation projects are managed by full-time Iron Sky employees, not subcontractors.

Iron Sky is able to allocate resources around the country as needed to ensure project timelines are met and is able to scale up its resources for multi-site projects on short deadlines.

Project Management

Full-time Iron Sky employees are responsible for managing every phase of a client engagement and have extensive experience with large-scale projects. At no time are subcontractors used to manage projects or interact with clients.

Ongoing Service and Support

A major part of Iron Sky's partnership with the client is ongoing maintenance and support. To ensure minimal downtime and impact to the client's staff and resources, Iron Sky has designed an aggressive and proactive support plan that incorporates automated remote monitoring procedures with remote technical support representatives and onsite technicians. Iron Sky's corporate offices, located in Houston, Texas, will provide remote technical support to all end users, remote monitoring of the software and hardware to proactively determine potential issues, and remote diagnostics to ensure maximum system uptime with a minimal impact to client personnel. When an issue with a component requires an onsite visit an Iron Sky technician will be dispatched from Iron Sky's local office.

User Training

Once the Iron Sky system has been installed, Iron Sky provides onsite user training on every aspect of the system in a train-the-trainer model. All users have access to the help document and 1-800 Customer Service number.

As-Built Drawings

Upon the client's request, Iron Sky can provide as-built CAD drawings of the system identifying the location of devices, cable routing, IDF/MDF locations, legend for the drawing and other pertinent information. Drawings will be furnished after the installation is complete. There is an additional cost for providing as-builts.

Qualifications

Iron Sky's Executive Management is 100% committed to partnering with Municipal Security Solutions in the successful implementation of this project. Every Iron Sky employee is personally committed to every project Iron Sky undertakes and is available at any time to meet and discuss better ways to support its clients.

Iron Sky is an authorized dealer for all manufacturers of equipment that will be used in this project and has completed the necessary training to install and service the equipment. Letters of authorization from the manufacturers will be provided upon request.

Iron Sky personnel have designed and installed projects ranging in size from ten cameras to over 1,500 for a single client. Iron Sky' staff have considerable experience managing the logistics of large (over 1,000 cameras) projects and is confident it can deliver a successful surveillance solution that will exceed the city's expectations on time and on budget.

Organization

Iron Sky provides a broad range of services and solutions to the nation's cities and counties that center around delivering Better Tools To Fight Crime and delivers turn-key projects that are on-time and on-budget. Iron Sky works exclusively with municipal clients and is able to deliver solutions to clients nationwide through its offices in Texas, Florida, and Georgia. Iron Sky is broken into three organizations:

- Sales
- Technology
- Deliver

The Sales Organization is responsible for all aspects of identifying and acquiring clients. Iron Sky believes in developing partnerships with its clients to effectively and efficiently address real issues, not simply sell widgets, and seeks to establish long term relationships that extend well beyond the initial sale.

The Technology Organization is responsible for creating the solutions that Iron Sky offers. Iron Sky's sales and project management personnel are unique in their ability to listen to and understand a client's challenges and very often bring new functionality and solutions to the Technology team for incorporation into Iron Sky's solution. Technology then researches the possible applications. The Technology organization is comprised of solutions architects, software developers and hardware-specific experts and Iron Sky also utilizes local software development resources as needed.

The Delivery Organization is responsible for exceeding clients' expectations by delivering successful projects on-time and on-budget. Iron Sky's founders have extensive experience with large, city-wide public safety projects and are extremely vigilant in ensuring that what Iron Sky promises, Iron Sky delivers. Iron Sky is a turn-key provider and has developed an extensive delivery methodology which begins with the first sales call to ensure Iron Sky designs and proposes the right solution, continues through installation and extends through supporting the solution long after the system has been accepted by the client.

Every employee at Iron Sky, from the President to the accountant, understands their specific role in enabling Iron Sky to deliver **Better Tools To Fight Crime**.

<u> Brook Run Park - Project Team</u>

Iron Sky has completed numerous projects around the country of similar and larger scope. Below are the resumes for the team members that will be responsible for the success of the Dunwoody Brook Run project.

Jay Thompson Director of Special Projects <u>jthompson@ironsky.com</u> 813-340-9708 *Mr. Thompson will function as the overall Project Manager*

Iron Sky believes in a One-Throat-To-Choke model of project management and this project will be assigned to Jay Thompson, Iron Sky's Director of Special Projects. Mr. Thompson has significant experience managing projects containing more moving parts than this project. Mr. Thompson will manage the team that coordinates all Iron Sky and subcontractor activities to ensure the successful delivery of this project on-time and on-budget. To maintain consistency after the project has been delivered Mr. Thompson will also be the On-Site System

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Subject Matter Expert. Jay Thompson has been with Iron Sky for over 3 years and brings extensive, successful project management experience to this project. Jay managed the Midtown Blue Public Safety project, College Park and Sandy Springs. He is currently managing the installation of 27 lanes of license plate recognition in south Florida. Jay is a Registered Communications Distribution Designer (RCDD) and a Network Transport Specialist (NTS) with the Building Industry Consulting Services International (BICSI). He is a Limited Energy License holder for Florida, Georgia and Tennessee and holds all manufacturer certifications for the equipment contained in this proposal.

Mr. Thompson has managed all Iron Sky projects in Florida and has overseen the deployment of systems throughout Georgia. Mr. Thompson just completed the Town of Golden Beach system and is now working to deliver the Town of Bay Harbor Islands License Plate Recognition system.

Summary of Experience:

Mr. Thompson has been involved in all projects for Iron Sky's Southeast clients from design to deployment to subcontractor management. Mr. Thompson began his career with Electronic Data Systems in Detroit, MI. Assigned primarily to the General Motors account, Mr. Thompson spent 17 years helping maintain state of the art communication technology in General Motors plants and office environments. Advancing guickly in responsibilities and authority, Mr. Thompson held positions in engineering, project management and leadership. Noteworthy accomplishments are the design and implementation of a method to provide for a LAN room environment and cabling method on the factory floor through the use of NEMA-12 enclosures. The solution was implemented in all GM factory environments and is still in use today. Rapid advances in networking technology in the late 1990's required network upgrades at the layer 2 and 3 level in the factories at a rapid pace. Mr. Thompson was instrumental in the design and implementation of a network staging center in Madison Heights MI. At this facility the plants entire communication network was created and configured. Proof of concept and customer acceptance occurred at this facility. The equipment was then packaged as a complete solution, shipped to the factory and installed. Meanwhile the fiber optic and copper infrastructure was being installed in the plant. This unique method of implementation provided for an estimated 30% increase in implementation efficiency.

Mr. Thompson continued his career in 2000 with Custom Cable Industries in Tampa Florida. As Director of Operations Mr. Thompson was responsible for the day-to-day operation and leadership of the installation division. The division consisted of three locations in Florida and approximately 75 people. Mr. Thompson was quickly promoted to Vice President and joined the Executive Leadership Team (EMT). As a member of the five-person EMT, Mr. Thompson was responsible for the strategic direction, vision and profitability of the entire company. While still retaining responsibility for the installation division, Mr. Thompson accepted the responsibility of direct account leadership for two of the company's most valued accounts, Walt Disney World and Publix Supermarkets. A strong understanding of customer service has provided for rapid growth of both of these accounts under Mr. Thompson's leadership. Armed with his strong customer, leadership and business skills Mr. Thompson accepted the challenge from the president and CEO to lead the sales team. Mr. Thompson brought a structured sales process, methodology and accountability to the sales team. Sales results improved by 40% under Mr. Thompson's leadership.

Noteworthy accomplishments are hundreds of successful infrastructure implementation projects in and around Florida. Including the Fort Myers airport, the massive Saratoga Springs time share resort in Orlando, and the Publix headquarters in Lakeland FL. Mr. Thompson was also a significant contributor in the process to obtain ISO9001and TL9000 certification for the company.

Now with Iron Sky as Director of Special Projects, Mr. Thompson has brought his talent, experience and credentials to an already talented team to help ensure that Iron Sky's solutions are in complete alignment with customer's requirements. Mr. Thompson is a Registered Communications Distribution Designer (RCDD) and a Network Transport Specialist (NTS) with the Building Industry Consulting Services International (BICSI). He is a Limited Energy License holder for Florida, Georgia and Tennessee and is certified in Firetide. Being committed to lifelong education, Mr. Thompson returned to school and obtained his Degree in Business Administration in 2011 from Nova Southeastern University.

Relevant Past Performance for which Jay had direct responsibility:

Disney SIMBA project

This project involved 802.11 wireless surveys and AP installation at nearly every gift store on the Walt Disney World property. Approximately 500 total 802.11 access points were installed with associated active surveys at approximately 60 locations. The project was extremely fast paced and posed significant logistical challenges concerning access and "theming" of the devices.

Disney wireless Moves, Adds and Changes (MAC)

Accommodating the moves, adds and changes to the wireless infrastructure at Disney is an ongoing process. To date approximately 1,000 total 802.11 access points have been implemented at Walt Disney World under my leadership on various projects. The work always involves strong coordination between the network teams, end users, security and Disney Imagineering.

Disney 802.11 Coverage Documentation

Disney began implementing 802.11 solutions using their own personnel in their parks around 2000. Their early implementations where poorly documented and were installed without a master coverage plan. In 2004 Disney's 802.11 network had grown to over 2,000 access points. I managed a project to survey all four major parks for coverage and performance of their 802.11 network. Findings

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were documented graphically and statistically. The findings were then analyzed to formulate a coverage plan to maximize both new and future access point installations.

Disney Saratoga Springs Resort

This three-phase project consisted of 15 buildings each with 50 apartment-style guest

rooms. The low voltage aspect of this project involved all inside and outside plant cabling for each building. The systems included CATV, Voice and Data. This twoyear project remained on schedule and on budget through completion. Fort Myers Airport This project entailed the installation of all voice and data cabling for the entire airport. LAN rooms were constructed and copper and fiber optic cable was installed throughout the facility and to nearby buildings. This 18month project involved thousands of communication outlets and miles of cable.

Publix Data Centers

Publix built a new data center in Atlanta and modernized their data center in Lakeland. Under my account leadership, all copper and fiber optic cabling was designed, installed and tested. These highly critical locations support all of Publix data process needs.

Publix Headquarters

This extremely fast paced project involved the installation of all voice and data cabling at their new 600,000 square foot headquarters building. The architecture involved zone cabling with consolidation points at the cubical clusters. Occupants were moved in stages requiring strict completion deadlines every weekend for approximately three months.

Navy Federal Credit Union

Navy Federal is the world's largest credit union with 39 billion dollars US in assets and 3.2 million members. Navy Federal built a new facility in Pensacola, Florida to house customer service, collections, real estate and many other critical functions. To date three of the four buildings are complete. Each building is approximately 60,000 square feet. Under my account leadership, Custom Cable has installed all the copper and fiber optic cabling to support the entire campus. The customer happily agreed to create a public case study communicating their satisfaction with Custom Cable.

Bob Wall Director of Product Management

bwall@ironsky.com 941-704-6569 Mr. Wall will function as the Technical Lead on the project.

Mr. Wall's software design experience focuses on easy to use systems that seamlessly integrate into the network without putting a burden on the customer's

IT resources. This ensures a successful integration of the Iron Sky surveillance system without impacting the City of Tampa IT resources. Mr. Wall has been with Iron Sky for over 2 years and continues to build on Iron Sky's vision of delivering the most effective video surveillance management system available.

Summary of Experience:

Mr. Wall has 16 years development experience in the technology industry and he has managed the development and deployment of several products. Prior to joining Iron Sky, Mr. Wall served as the Software Development Manager for Janus Displays, leading a team building enterprise digital signage products. Mr. Wall has worked on development projects in the technology, communications, digital signage, video surveillance, and wireless industries. Mr. Wall directs the design and development of Iron Sky's products. Mr. Wall works closely with our customers to enhance our product to better help fight crime. Mr. Wall's clear understanding of difficulties faced by our customers helps Iron Sky build products targeted to Law Enforcement and municipalities. Mr. Wall also works to design the Iron Sky system to seamlessly integrate into the network without putting a burden on the customer's IT resources.

Relevant Past Performance for which Mr. Wall had direct responsibility: Janus Displays

Lead a team of developers to build the next generation of enterprise digital signage management products. Worked with customers to build exciting new features to help bring special value at their properties. Products installed at leading hospitality properties all over the world.

Knight Enterprises

Designed and integrated a complete VOIP solution for a new company, Reliant Digital. Built the system to support a full VOIP service company targeting businesses in the Tampa Bay area. System was designed to supported the telecommunications need of businesses and provide local phone support for high-density residential properties.

Regatta Pointe Marina

Designed and installed a surveillance system incorporating both fixed cameras and PTZ cameras to help protect the marina. The system was deployed over a wired network as well as a wireless mesh network.

City of Golden Beach Florida

Vigilant Solutions License Plate Recognition Integration in to the Iron Sky City-Wide Solution creating "pop-up" window notifications of significant LPR alerts. The alert allows each authorized system operator to acknowledge or ignore the LPR "hit". If acknowledged, then the user is directed automatically to the map area where the alert occurred where readily available Iron Sky resources can be identified and utilized to address the alert.

City of College Park

Computer Aided Dispatch and Automatic Vehicle Location data integration to display active calls for police services and patrol vehicle locations directly on to the Iron Sky interface.

City of Sandy Springs

Traffic Control System Integration to display traffic controller locations that are "off-line" or in "flash" mode. This enables the Traffic Management Center to quickly respond to traffic flow concerns with video and other available resources to manage the situation until the controller is restored.

Jason Haskins Vice President, Delivery <u>jhaskins@ironsky.com</u> 281-797-5322 *Mr. Haskins will serve as the Staging and Configuration Manager*

Mr. Haskins has led very large scale deployments for over 13 years and brings a record of successful, hands-on experience to the complex infrastructure tasks required for the successful delivery of this project. Mr. Haskins has been involved in the design and delivery of every project Iron Sky has undertaken and understands the unique challenges that this project will present. He is currently managing the deployment of 140 lanes of fixed position license plate recognition for the City of Dallas Texas.

Summary of Experience:

Jason provides considerable experience in managing large municipal infrastructure projects ranging from the installation of city-wide fiber optic cabling to the reconstruction of the Talmadge Memorial Bridge in Savannah, GA. For the last 10 years Jason has managed federal, state and local government projects in excess of 5 million dollars from the design phase through completion of the project. Jason's clear understanding of systems operations and how they contribute to a project's overall performance enables him to help clients effectively address today's demanding public works challenges. By overseeing the installation and operation of complex engineering, industrial, and construction projects he ensures that the contracts, plans, specifications and ultimately, the results, conform in every way to the client's needs and vision. Throughout the process, his guiding principle is that any problem is merely an opportunity for a solution. The result is a successful project delivered on time and on budget that exceeds the client's expectations.

Relevant Past Performance for which Jason had direct responsibility:

<u>Talmadge Memorial Bridge Repair</u> Savannah, Georgia Mr. Haskins managed the repair of the cable stay attenuating system from the development of comprehensive repair procedures, design and installation of swing stage access to the height of 425' to complete adherence to Georgia Department of Transportation project specifications. Key to the successful completion this project were the attention to details in the project specification in regards to installation tolerances, material specification and an ever present focus on safety working on a bridge 185' above one of America's International Ports.

Sawgrass Expressway and I-75 Interchange

Ft. Lauderdale, Florida

Mr. Haskins managed the repair of the interchange post tension system, using Ground

Penetrating Radar, Olympus video scope to document the condition of the post tension system and advanced Vacuum Grouting techniques to locate and remediate tendon voids. Key to the success of this project is data management of over 3,000 video files of tendon inspection, 6,000 still photos documenting bridge inspection and written reports to support each type of inspection and repair.

Hilton Crystal City

Crystal City VA

Mr. Haskins managed the complete rehabilitation of the Hilton Crystal City Hotel Parking Garage. The Project scope included the complete removal of the entrance and exit ramps and large section of the parking garage concrete parking deck, removal of the hotel entrance. As the hotel was occupied during construction, communication and coordination were vital in bringing this project to a successful completion.

Bob Carter General Manager, Sales bcarter@ironsky.com 678-283-4829 Mr. Carter will serve as the Account Manager

Mr. Carter was one of the original team members of Iron Sky starting in 2009 and has led the sales efforts of the Southeast market for 3 years securing and managing Midtown Atlanta, City of Sandy Springs, City of College Park, City of Lilburn, Town of Bay Harbor, Lauderdale-By-The-Sea, Indian Creek Village, and the Georgia Institute of Technology.

Mr. Carter combines a customer satisfaction focus as General Manager with a thorough understanding of what it takes to develop and install a surveillance systems from his years as National Accounts Manager for a systems integrator. His past experience as a patrol officer in Athens-Clarke County provides Bob a

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keen awareness of how Iron Sky's solution can be tailored to meet the challenges of modern day police services.

Relevant Past Performance for which Mr. Carter had direct responsibility: Lowes Home Improvement

Retail Store Surveillance using the travelling rail camera system – SmartTrack.

Federal Express

Developed a custom rail camera design for FedEx Smartpost using Sentry Technology's SmartTrack traveling rail camera system.

City Surveillance Systems

City-Wide Surveillance for Midtown Atlanta, Sandy Springs, Duluth, Norcross, Hapeville, College Park, Valdosta, and Pine Mountain.

RESPONSE TO CONTRATOR REQUIREMENTS

Customer Support – Normal Business Hours

Iron Sky offers a toll-free service/support number 855-IRON SKY for support during normal business hours (8 am – 5 pm, Monday – Friday). Iron Sky also encourages direct and personal interaction with your local Technical Support Representative and Account Manager.

City of Dunwoody Local Account Manager Bob Carter, <u>bcarter@ironsky.com</u>; 678-283-4829. 102 Mockingbird Lane Decatur, GA 30030

City of Dunwoody Local Technical Support and Service Terrence McCrary, <u>tmccrary@ironsky.com</u>; 404-707-7083 941 Carlisle Road Stone Mountain, GA 30083

*Please Note: Iron Sky has recently partnered with a 24 hour secured data hosting center and will soon offer 24 hour, 7 days per week, 365 days per year support.

Post Sales Support and Service

A major part of a client's partnership with Iron Sky is ongoing maintenance and support. To ensure minimal downtime and impact to your internal resources, we have designed an aggressive and proactive support plan for our clients. This plan provides an immediate response to service issues and includes:

Proactive Monitoring of the Product

Iron Sky's Remote Monitoring software monitors the surveillance system 24 hours a day, seven days a week to proactively identify the following items:

- loss of camera signal ("down camera")
- loss of network connectivity to camera
- loss of connectivity to the server,
- operating system failure
- shutdown of Iron Sky software
- hard drive failure

Remote Monitoring does not use a simple "ping" to determine the status of the surveillance system but instead provides much more detail to determine the health of the system.

Upon detection of one of above items a Iron Sky Technical Support staff member is automatically notified during normal business hours (Monday through Friday 8amEST to 5pmEST). Iron Sky will contact the designated client personnel to determine if any environmental or network issues occurred which may have affected the Iron Sky solution and then work to resolve the issue.

Timely "Pushed" Updates

The software code running on your servers is kept up-to-date by remote updates from Iron Sky's Technical Support office. This ensures the product you purchased will continue to have the most up-to-date code and patches. Software upgrades are not included.

On-Site Support

Most organizations cannot afford to allocate precious technology personnel and resources to the support of third-party equipment. By using remote access methods, Iron Sky makes every attempt to eliminate the impact to your IT and operational staff. Should an issue occur that requires a physical response to a hardware component Iron Sky will dispatch one of its local technicians **next day** to identify, diagnose and resolve the issue in as short a time as possible.

Remote Support Requirements

Iron Sky has very high standards of Client service. In order to hit these marks, we request a limited amount of access to the Client's networks via the Internet. We understand that this type of access is a very sensitive area for most organizations, and rightly so. However, we have taken every step possible to manage risk and bring it to the absolute minimal levels possible. Iron Sky will work with City of Dunwoody IT personnel to determine the best method of supporting this system based on the following requirements:

We request access to two (2) destination TCP ports and one (1) destination UDP port of your choosing through your firewall, restricted to access from the two specific IP ranges- one for Iron Sky's Technical Support Center in Houston and one for Iron Sky's Disaster Recovery Site in case of an emergency in Houston.

This level of access allows Iron Sky to provide the full array of Remote Monitoring capabilities to ensure that server, software and cameras are functioning in a normal manner. Iron Sky has the ability to monitor all components of the system every 60 seconds to proactively detect the health of each component. If an anomaly is detected, then Iron Sky Technical Support staff can proactively and quickly resolve a majority of these issues during normal business hours without the need to gain access to your physical site or staff. This remote monitoring and technical support capability allows the security camera solution to be on-line with minimal downtime.

Iron Sky follows very strict guidelines in using remote access. All remotely accessible servers are protected by strong passwords containing alphanumeric

characters and no guessable words or phrases. In addition, the connection uses SSL so that no sensitive information is transmitted in observable "plain text" across the network.

The greatest fear Iron Sky has is that one of its systems not be accessible to all necessary parties in the unfortunate event of an incident. Iron Sky's unique and extremely robust Remote Monitoring capabilities help to ensure that the system is operating at full capacity and is available to whoever needs access whenever they need access.

Complete End-User Support

The Iron Sky VMS was developed in-house to address city-wide public safety. Iron Sky provides a turnkey service from system design to installation, service and support. Each employee is fully trained on every aspect of the user interface and is fully capable of providing complete end-user support. This is all that we do.

Complete Remote Administration of the Surveillance System

The Iron Sky system 100% web-browser based allowing complete administration of the system from wherever there is network access.

Remote Downloading of Images

The Iron Sky system is 100% web-browser based allowing the downloading of images from any location that has access to the network.

Iron Sky is happy to assist customers will all aspects of the Iron Sky VMS to insure that Iron Sky customers are able to access the system whenever they need it. We recognize that public safety information is time sensitive and will do everything within our power to assist each end-user. This includes assistance in downloading video files and images, as well as remote system administration.

Technical Support

Iron Sky developed the Iron Sky VMS in-house in order to create a solution specifically for public safety. Iron Sky owns the source code. This enables our development staff to continually add new features as requests are made. Law Enforcement technology is rapidly evolving and the Iron Sky VMS is designed to evolve with it.

PROPOSED APPROACH/METHODOLOGY/SERVICES

System Requirements

1. **Enterprise-wide Platform** System shall create an enterprise-wide video surveillance platform that allows the Dunwoody Police Department to view live and recorded camera images from any camera at any location with remote and secure monitoring via intranet and VPN-secured internet by Dunwoody Police Department personnel or any other agency the department chooses to provide access.

The core of the Iron Sky solution is its map-driven Enterprise-Wide Video Surveillance Management platform. Iron Sky provides users with a powerful and easy interface to monitor and manage the entire video surveillance system. It is scalable to an unlimited number of cameras at an unlimited number of locations using a single webpage as the map-driven user interface. Authorized users are able to view and control all the video cameras on the system from a Google Map interface right from their workstation. User administration runs completely in the Internet Explorer browser, giving maximum flexibility to operate the system from any authorized workstation.

 Web-based Solution System shall be a web-based solution that will be accessed using Internet Explorer from any Windows PC. System shall provide web-based access to live video using mobile devices connecting over 3G including Apple iPad, Apple iPhones, Android Smartphone's and Tablets and RIM Blackberry devices.

The Iron Sky solution is web-browser based, using Internet Explorer. Any authorized user can access any camera from any networked PC including remote sites and mobile data terminals. For mobile devices, Iron Sky includes a live view map interface for on the go access using mobile devices.

Note Iron Sky has never been tested on a RIM Blackberry device.

3. **Single Log-in** System to have a single enterprise-wide login for all Dunwoody Police Department cameras or any non-department cameras added to the system. Users should be able to login to the system one time and access every camera at every facility they are authorized to view. Users should not be required to input separate URL addresses or user accounts to view cameras located at any facility.

The Iron Sky system is designed so that there is one login prompt to access all cameras, devices and information on the system (based upon individual account authorization). The user should never have to input separate URLs or complete separate Log-Ins to access all devices across the enterprise. The map-driven

interface enables intuitive access to all devices using a single log in and a single web-page that is map-driven.

4. **Open-Architecture Platform** System shall be non-proprietary and utilize an open-architecture platform. System shall utilize Internet Protocol cameras from leading manufacturers, commercial off the shelf servers and storage devices from any manufacturer that will conform to the Dunwoody Police Department's existing network infrastructure.

The Iron Sky solution is standards-based and non-proprietary, using an open architecture platform. It is built on commercial off the shelf network hardware that operates Windows Server, SQL server, and Adobe Streaming Media Server. Iron Sky utilizes industry leading IP-based cameras from Axis Communication that are H.264 video format and ONVIF compliant.

5. **Open-Source Media Player** System shall play recorded and downloaded images in an open source media player such as VLC and shall not require the use of proprietary media players to view recorded or downloaded images on any user workstation.

Iron Sky archives video in H.264 format (also known as MPEG-4, part 10) for download and playback in open-source media players such as VLC. There is NO requirement for a proprietary media player. Iron Sky video files are compatible with any PC user workstation.

6. *Pan/Tilt/Zoom* System shall allow local and remote users the ability to control Pan/Tilt/Zoom cameras using only a computer mouse.

The Iron Sky interface is map-driven using standard PC tools: keyboard and mouse. Each pan/tilt/zoom on the system is operated by simple mouse clicks.

7. *Images in H.264 Format* System shall record all camera images in H.264 format. If cameras do not support native H.264 streaming, the system must transcode camera images to H.264 during recording. H.264 is the only acceptable video format for recorded images.

Iron Sky archives video in H.264 format (also known as MPEG-4, part 10) for download and playback. All new cameras installed on the system will be H.264. Existing cameras that are not H.264 will be transcoded and stored as H.264 files.

8. *Full, native Resolution* System shall stream and record camera images in full, native resolution at the maximum number of frames per second with a minimum of twenty (20) frames per second.

Iron Sky designs each system to include the necessary network, server and storage specifications required to operate each camera in full, native resolution at the maximum number of frames per second (minimum 20 frames per second).

9. *Live Streaming* System shall support streaming live camera images in multiple resolutions and frame rates simultaneously.

Iron Sky pulls two video streams from each camera on the network. One stream is set to full native resolution at the maximum frame rate. This is the archive stream. The second stream is set at a lower resolution with a minimum of 20 frames per second. This is the low-bandwidth "live" stream. All archives are displayed at the full native resolution. Live viewing will be determined upon the user's network connection speed. Remote users using slower connections will receive the lower resolution live stream. Local users using higher speed connections will receive the full native resolution stream.

10. **Google Mapping Interface** System shall utilize Google Maps as the user interface to provide a rich, dynamic user interface for the display of camera locations, navigation of facility maps and facilitate the input of GPS coordinates of other assets and devices. Users must have the ability to interact with the mapping service using both street map and satellite view of the area.

Iron Sky purchased the GoogleMaps API as the foundation of the Iron Sky interface. All camera and devices locations are represented by a Google ICON that is displayed on a street map or satellite view of the City of Dunwoody.

11. *Proxy Camera Requests* System must proxy all camera requests to minimize camera bandwidth and ensure user access rules are enforced. At no time shall any user have direct network access to any camera.

The Iron Sky design utilizes a proxy server to serve video streams. At no time shall any user have direct network access to any camera. User privileges are controlled by the proxy server to enforce access controls and authorization limits.

12. *Integrate with Existing Systems* System shall have the capability to integrate with the Sandy Springs Intelligence Center at no additional cost to the City of Dunwoody other than the amount reflected in this Firm's proposal.

Iron Sky is foundation of the Sandy Springs Intelligence Center. The systems are fully compatible.

13. System shall support integration with many 3rd party data sources to provide a centralized platform for situational awareness information display. The system must quickly integrate with 3rd party Automatic

Vehicle Location systems to display police vehicle locations and current status on the map in real time alongside available video cameras. System must integrate with 3rd party Computer Aided Dispatch systems to display the current live events on the map. We currently use OSSI CAD. System must integrate with 3rd party License Plate Recognition systems to display LPR hits and alerts on the map in real time and shall allow users to access the LPR system quickly simply by clicking on the alert. We currently use Vigilant Solutions. In the future, as additional sources of situational data become available, the System shall have the ability to quickly expand and take advantage of new sources of situational information.

Iron Sky is designed to integrate with 3rd party data sources. Iron Sky has already completed the integration of OSSI CAD and AVL databases. Iron Sky has already completed the integration of the Vigilant Solutions CDFS and LEARN systems databases. The City of Dunwoody, using Iron Sky, will have active police incidents, patrol vehicle locations and LPR alerts displayed in order to provide enhanced situational awareness to each authorized user.

14. In addition, the system must have the ability to add 3rd party, private cameras to the system and integrate them on the Google map interface with the City of Dunwoody cameras.

Iron Sky is designed to become the standardized interface for all video and data throughout the City of Dunwoody. 3rd party and private cameras are tied in to the system and displayed as icons on the map or floor plan in order to provide intuitive access to this video (or data) information in response to incidents.

15. *Automated Monitoring* System shall provide 24x7 automated monitoring of every component of the surveillance solution. Upon detection of a problem with a component, System shall automatically notify the surveillance software contractor's Technical Support staff to begin resolution protocols. Upon notification, the contractor will contact the designated point person of the Dunwoody Police Department to determine if any environmental or network issues occurred which may have impacted the surveillance solution and then work to resolve the issue. Both remote and onsite resources will be utilized by the contractor in resolving the issue to ensure maximum uptime of the surveillance system.

Proactive Monitoring of the Product

Iron Sky's Remote Monitoring software monitors the surveillance system 24 hours a day, seven days a week to proactively identify the following items:

- loss of camera signal ("down camera")
- loss of network connectivity to camera
- loss of connectivity to the server,
- operating system failure

- shutdown of Iron Sky software
- hard drive failure

Remote Monitoring does not use a simple "ping" to determine the status of the surveillance system but instead provides much more detail to determine the health of the system.

Upon detection of one of above items a Iron Sky Technical Support staff member is automatically notified during normal business hours (Monday through Friday 8amEST to 5pmEST). Iron Sky will contact the designated client personnel to determine if any environmental or network issues occurred which may have affected the Iron Sky solution and then work to resolve the issue.

On-Site Support

Most organizations cannot afford to allocate precious technology personnel and resources to the support of third-party equipment. By using remote access methods, Iron Sky makes every attempt to eliminate the impact to your IT and operational staff. Should an issue occur that requires a physical response to a hardware component Iron Sky will dispatch one of its local technicians **next day** to identify, diagnose and resolve the issue in as short a time as possible.

16. *Installation and Maintenance* Contractor shall be certified/authorized by the software and equipment manufacturers for the installation and maintenance of the system components.

Iron Sky is certified to install and maintain its system. One year of service/maintenance/support is included with every system that Iron Sky installs.

BROOK RUN PARK – SCOPE OF WORK AND DESIGN

Iron Sky will install five (5) IP-based HD resolution pan/tilt/zoom cameras from Axis Communications, two (2) IP-based HD resolution fixed position cameras from Axis Communications and two (2) automated license plate recognition system cameras from Vigilant Video. The system is designed to provide images of the main entry/exit to the park, the skate park, the playground, recreation area, dog-park and community garden. The two entrance areas are also covered by Vigilant Solutions automated license plate recognition systems that scans and records the license plates of vehicles entering the park in order to compare them to hot-lists, GCIC, local participating jurisdiction hot-lists and other vehicle lookout resources (such as DOR). The design layout is intended to provide live and archive images of vehicles and persons coming and going to and from the park, and to provide pan/tilt/zoom capabilities at the main areas of activity within the park. All video will be archived for 30 days using HP server/storage hardware within an Iron Sky rack at the Skate Park Club House.

Summary:

- 5 HD resolution IP-based pan/tilt/zoom cameras from Axis Communications.
- 2 HD resolution IP-based fixed position cameras from Axis Communications (at the entrances).
- 2 lanes of automated license plate recognition using Vigilant Video ALPR at each entrance (1 lane per entrance).
- CDFS Car Detector server with integration to LEARN Law Enforcement Archival Reporting Network
- ALPR Alert integration on to the Iron Sky map and the Multi-Jurisdictional Intelligence Center.
- Ubiquiti Networks wireless network. Each location will include a NEMA enclosure with UPS/surge, IP-addressable relays, network switch and wireless access point for service.
- HP server with 9TB disk space (3X3TB RAID), installed at the Skate Park Club House.
- Server rack cabinet at the Club House with UPS/Anti-surge.
- All materials necessary to complete installation (excluding 120 VAC electric power at each camera or pole and Internet services at the Brook Run Park clubhouse).
- City of Dunwoody to maintain adequate climate control within the room where the server is located.
- Iron Sky to provide all necessary training, service and support to insure a successful project that provides value to the City of Dunwoody.

SITE LAYOUT OVERVIEW



Iron Sky made the following assumptions regarding the project:

- The City of Dunwoody is responsible for all electric power. Iron Sky will coordinate with City of Dunwoody electrician to survey the site identify available power sources and manage the installation of power. Charges for electrician to be billed directly to the City of Dunwoody.
- 2) The City of Dunwoody will supply Internet service at the Skate Park building and maintain adequate climate control at server location.
- 3) City of Dunwoody to secure facility and prevent unauthorized physical access to server area.



LOCATION 1: BROOK RUN ENTRANCE FROM N PEACHTREE

LOCATION 1 - Iron Sky to provide and install the following:

- Vigilant ALPR Fixed at Entrance Lane
- Axis HD Fixed Surveillance Camera
- Pole Installation by Iron Sky
- NEMA enclosure for network, IP power relays, UPS/surge, wireless access point for service
- Wireless network to Skate Park



LOCATION 2: BROOK RUN ENTRANCE FROM PEELER

LOCATION 2 - Iron Sky to provide and install the following:

- Vigilant ALPR Fixed at Entrance Lane
- Axis HD Fixed Surveillance Camera
- Pole furnished and installed by Iron Sky
- NEMA enclosure for network, IP power relays, UPS/surge, wireless access point for service
- Wireless network to Skate Park

LOCATION 3: PLAYGROUND STRUCTURE



LOCATION 3 - Iron Sky to provide and install the following:

- Axis HD Pan/Tilt/Zoom Surveillance Camera
- NEMA enclosure for network, IP power relays, UPS/surge, wireless access point for service
- Wireless network to Skate Park



LOCATION 4 and 5: EAST AND WEST SIDE OF SKATE PARK

LOCATION 4 – EAST SIDE Iron Sky to provide and install the following:

- Axis HD Pan/Tilt/Zoom Surveillance Camera
- NEMA enclosure for network, IP power relays, UPS/surge, wireless access point for service
- Wireless network to Skate Park building

Electric Power by Others

Installation on existing pole. If access to pole is not authorized, then a pole can be furnished and installed for \$1,250.

LOCATION 5 – WEST SIDE Iron Sky to provide and install the following:

- Axis HD Pan/Tilt/Zoom Surveillance Camera
- NEMA enclosure for network, IP power relays, UPS/surge, wireless access point for service
- Wireless network to Skate Park building

Electric Power by Others

Installation on existing pole. If access to pole is not authorized, then a pole can be furnished and installed for \$1,250.

LOCATION 6: NEW DOG PARK PARKING AREA



LOCATION 6 – Iron Sky to provide and install the following:

- Axis HD Pan/Tilt/Zoom Surveillance Camera
- NEMA enclosure for network, IP power relays, UPS/surge, wireless access point for service
- Iron Sky to furnish and install pole
- Wireless network to Skate Park and to Location 7



LOCATION 8: BACK OF COMMUNITY GARDEN

LOCATION 7 – Iron Sky to provide and install the following:

- Axis HD Pan/Tilt/Zoom Surveillance Camera
- NEMA enclosure for network, IP power relays, UPS/surge, wireless access point for service
- Wireless network to Skate Park and to Location 7

Electric Power by Others

Installation on existing pole. If access to pole is not authorized, then a pole can be furnished and installed for \$1,250.

IRON SKY SOLUTION COMPONENTS

Video Management Software

Iron Sky is a turn-key provider of open-standards video surveillance solutions designed for the unique challenges of municipal clients. We have selected Iron Sky as our software provider. This document provides a high-level overview of Iron Sky's video surveillance management software platform.

Iron Sky is well aware of the multitude of Video Management Software (VMS) applications on the market today selected Iron Sky because it chose to build its own at considerable expense because they felt there were no VMS packages that truly fit the unique needs of its municipal and public sector clients. Because other VMS manufacturers do not focus on municipal clients and have developed their applications to appeal to every client possible, their applications have grown to include features useless to local government entities. Features that are required for retail, banking, gaming and commercial applications have no relevance on local government operations and simply result in a difficult to use product that cannot be customized to the end user and contains functionality that is never used.

In contrast, Iron Sky developed its VMS to only contain features and functionality requested by local government clients. This has resulted in a product that is open architecture and non-proprietary, extremely easy to use, laser focused in purpose and completely customized to meet each client's unique needs.

Iron Sky's surveillance management software is purpose-built for the unique challenges faced by:

- Housing Authorities
- Law Enforcement Agencies
- Public Safety / Emergency Responders
- Municipal Agencies
- Healthcare facilities / Tele-Health Initiatives
- Public school districts, Colleges and Universities
- Public Utilities / Critical Infrastructure
- Transportation
- Ports and Borders
- Parks & Recreation Departments

Iron Sky developed its Video Surveillance Management software from the ground up for municipal agencies using the insights and feedback that Iron Sky's founders received while working with law enforcement agencies for the last nine years. Iron Sky's solution is designed to scale to an unlimited number of cameras, locations and users and is extremely easy to use.

We also think that the more information someone has to make a decision, the

better that decision will be. So everything Iron Sky has designed facilitates integration with other applications and information sources. Integration that allows two different systems from two different manufacturers to do something new in a way that neither manufacturer intended, but delivers significant benefits to the client.

Rather than developing proprietary solutions that lock our clients in to working with us, we look for ways to leverage cutting edge technology that radically improves the way our clients operate. We spend a lot of time with our clients trying to figure out ways to make them more effective and efficient at what they do. And since the technology exists to do just about anything, we're able to come up with some pretty creative ways to address challenges.

The Iron Sky Enterprise-Wide Video Surveillance Management platform provides the users with a powerful and easy interface to monitor and manage the entire video surveillance system. Authorized users are able to view and control all the video cameras on the system from a Google Map interface right from their workstation. Iron Sky's user client runs completely in the Internet Explorer browser, giving maximum flexibility to operate the system from any authorized workstation.



The Iron Sky platform was designed for maximum scalability and can support an unlimited number of cameras and unlimited number of users. Clients are given an unlimited user license to the Iron Sky platform. Multiple Iron Sky recording servers are setup to share the load when recording from a large number of cameras.

Satellite View with Camera Locations



Map View with Camera Locations



The Iron Sky platform licenses the Google Maps API to geographically plot out the location of surveillance cameras and assets on a recognizable satellite map of the client's environment. The interface can be customized to show the satellite or graphic map of the area. This map-based interface is a vast improvement over the traditional tree lists of camera names or numbers without any context. The user can now quickly see exactly where each camera is located as well as find all cameras located around an area of the city. For large systems users are able to manage a very large number of cameras throughout the city without being overwhelmed or frustrated. In the future additional resources and assets can be linked and tracked on your customized map, such as Computer Aided Dispatch, License Plate Recognition "hits" and GPS equipped police vehicles.

Example Using City of College Park demonstrating integration with CAD, AVL and Iron Sky:

911 call received requesting officer. Call location appears on Iron Sky map interface. Surveillance operator is immediately aware of HD pan/tilt/zoom cameras in the area that may be used to respond.

Call Location



Patrol Response





Eyes on the Scene from any Networked PC

Interior camera locations are plotted by building locations. Clicking a building location displays building floor plans with camera icons in order to maintain the same intuitive camera access and operation presented by the Google Maps interface.

Interior Spaces Satellite View of Building 400



Floor Plan View of Interior with Activated Camera



Iron Sky, in working with our law enforcement clients, recognized that *speed is of the essence* when responding to active police incidents, so we developed our

"Jump To" feature for instant map navigation to cameras, incidents, vehicles, LPR hits, interior floor plans, and virtually any data point represented on the map.



Click the Location for Instant "Jump To" Navigation Across the City Recordings Quad View Preferences Downloads TMC Help Admin



The user permission system provides multiple levels of user access to the system. Users and user permissions can also be assigned to groups, making managing the users and permissions easier. Each user or group can be granted any of these permissions rights to a camera. A user can also be given the System Administrator permission, allowing that user to manage the users on the system and view the system logs.

Permissions:

- View Live Video Defined to specific camera groups or locations.
- View Recorded Video Defined to specific camera groups or locations.
- Download Recorded Video (Export)
- Listen to Live Video Audio
- Operate PTZ Controls
- Lock PTZ Controls
- View AVL Data
- View CAD Data
- View LPR Data

Authorized users can view video and control any camera on the system which they have been granted access to, there is no limited on the number of cameras a user can manage. The user can view video both on the dedicated monitor or open the video feeds in popup windows or command a video wall for group presentation. These popup windows display video in a large window and can be moved and placed anywhere on the user's desktop. The zoom player popup window also allows the user to view video in a popup window, but also allows the user to digitally zoom into the video. This zoom player is very useful when using high-resolution capable megapixel cameras. The user can also dock camera views to the left, right, or bottom of the screen, making it easy to monitor a small subset of cameras. Using the Iron Sky Video Wall client, the user can arrange camera displays in 1, 4, 9 or 16 simultaneous views. The user can take a snap shot of any live or recorded video being watched. The user will be prompted to save the JPG snapshot file on their workstation.

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HD Pan/Tilt/Zoom Camera Snapshot



Recorded Video

Authorized users can quickly search for recorded video by location, camera, and recording date\time. When watching a live video stream the user can perform a quick replay, which will allow the user the ability to rewind a small buffer and replay a segment of video without going to the recorded video archives. If the user wants to watch recorded video, he can select the last previous recording function to open and view the latest recorded video from a camera.





The Iron Sky platform stores the recorded video in the H.264 video format. The H.264 format is part of the MPEG4 standard and was developed to support high quality streaming video using lower bandwidth streams. We have selected H.264 as our video format standard because it offers excellent video quality while minimizing the storage needed to store those recordings. This allows us to maximize the amount of video your storage array can handle. Most cameras we recommend support streaming in H.264 naively, but we also support transcoding the MPEG4 and MJPEG video streams from non-supporting cameras .We also selected the H.264 format because it is very portable. The video recordings are able to be viewed using standard media players such as Windows Media Player, Apple Quicktime, and VLC Media Player.



The video recording retention policy can be customized by the system Administrators to control how long video is kept available on the storage array before it is automatically deleted.

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All recorded video is stamped on the top or bottom with the camera name and the date / time the recording was made.



The cameras can be configured to operate with motion detection to either alert users when motion occurs or to minimize recording video without any activity. Individual motion zones and ignore zones can be setup to customize the areas motion will be detected or ignored. In the event of a motion alarm alerts can be sent to the active users. The users can decide to open an event and view the video or ignore and silence the event. Events can also be configured to trigger a live video popup window to appear on the user's workstations, bringing immediate attention to the alert.



The Iron Sky platform supports integration with 3rd party video feeds. We can support viewing and recording from any open video stream format in both unicast and multicast. Integrating with analog cameras is also supported using a digital video encoder, such as the AXIS Q7406.

User Activity Logs

All user activity on the Iron Sky platform is recorded to the database for auditing. These logs are kept indefinitely and are not automatically purged by the system. The system administrators can access and view these systems logs but cannot alter or purge the system's logs. In additional to the user logs, system logs are also kept which record system activity such as camera malfunction and recording settings. The following user actions are logged:

- Logged Actions
- User Login Success
- User Login Failure
- View Live Camera Feed
- View Recorded Video
- Download Recorded Video
- Enable\Disable Camera Recording
- PTZ Control
- PTZ Locking
- User Chat
- New\Edit\Delete User

- New\Edit\Delete Group
- New\Edit\Delete Camera
- New\Edit\Delete Location
- Delete Recordings (System Admin)
- User Logoff

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		Mon Aug 31 08:36:01 EDT 2009		Camera 9	tweldon@ironsky.com				
		Mon Aug 31 08:36:39 EDT 2009		Camera 17	tweldon@ironsky.com				
		Mon Aug 31 08:37:07 EDT 2009		Camera 11	tweldon@ironsky.com				
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The entire Iron Sky platform is constantly being proactively monitoring by the Iron Sky services. In the event of a failure of a component such as a camera going offline, an alert is generated and sent to the system administrators. This alert is customizable and be sent to an email address, mobile phone or console alert. The monitoring system checks the health and status of all the Iron Sky servers, the video storage array (SAN), hard disks, cameras, wireless nodes, and network hardware.

Cameras

Iron Sky will utilize IP-based, HD resolution cameras from Axis Communications. Iron Sky personnel have worked extensively with Axis Communications for many years and have installed thousands of their cameras. Iron Sky believes their corporate support and proven technology provide the best overall camera solution. All necessary housings and brackets will be provided to ensure the successful delivery of this project.

Pan/Tilt/Zoom Locations

The Axis Communications P5534-E PTZ Dome Network Camera is an exterior grade, IP66-rated, Pan/Tilt/Zoom camera with an industry-leading 18x optical zoom with a 12x digital zoom that delivers exceptional image quality, even in low

light situations. The P5534-E also features Auto day/night mode with extremely low light sensitivity down to 0.5 lux in color mode and 0.008 in night mode. To compensate for the elevated mounting positions on signal poles the camera is equipped with Electronic Image Stabilization. All necessary housings and brackets will be provided to ensure the successful delivery of this project.

The following are examples of the optical zoom capabilities of the Axis P5534-E Pan/Tilt/Zoom cameras. The larger image below is the camera's full field of view at 0x zoom. The medium image with a red border in the top right corner of the large image is the camera's field of view at full 18x optical zoom. The small red box on the large image identifies the area of zoom:

Image 1: Zoom on license plate at approximately 1/10th of a mile



Image 2: Zoom on Park sign



Image 3: Zoom on restaurant patron



ALPR – Automated License Plate Recognition

The Iron Sky platform is designed to integrate multiple sources of public safety technology on to one easy to use, easy to access, browser-based and mapdriven platform. Fixed position ALPR is a power resource and fits perfectly in to the Iron Sky solution. Iron Sky is integrating the Vigilant Solutions fixed position ALPR system on to the map-based platform.



All ALPR camera locations are identified on the Iron Sky map (as shown above) for easy recognition and access. Clicking the LPR icons enables access to the most recent plate scans and "hot-list" detections.

ALPR "alerts" guide authorized users to the geographic location of the event and provide immediate access to other public safety resources in the area such as live HD cameras, building floor plans, and emergency contacts.



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Hot List alerts, such as the Hit Record Detail below, can be sent out via the TAS Client, email, the LEARN web site and the Iron Sky map.

Wireless Radios

Iron Sky will install wireless radios from Ubiquiti Networks. Iron Sky has deployed these radios at several municipal projects across the country and has found their stability and throughput to be unmatched in the industry. Data sheets for the specific models to be used in this project can be found in the attachments section of this document.

Server/Storage

The camera images are archived onto non-proprietary commercial off the shelf (COTS) servers and storage devices. Iron Sky is installing an HP server.

Note: Server redundancy, failover capability and backup power have not been designed into this server/storage system. The City of Dunwoody should understand that video is being stored only on the primary storage device and failure of that device's hardware, or loss of power, will degrade the system or cause it to stop operating.

LAN/WAN Network Equipment

This is a turnkey remote access network system. The City of Dunwoody is responsible for providing network (Internet) access to the server. Iron Sky will build the network out from the server.

Installation

Iron Sky will be responsible for the supply, configuration and installation of all equipment included in the attached proposal.

Iron Sky's experience working on projects of this scope for municipal agencies has enabled it to develop a highly efficient Project Management process that ensures the project is delivered on-time and on-budget with a minimum of surprises. Our Project Management Process is built around the equipment staging and delivery requirements of large projects and has evolved into the following thorough and orderly steps:

- 1. The client issues the purchase order.
- 2. The Iron Sky Project Manager schedules a project kickoff meeting with key Iron Sky and client personnel. This meeting will serve to confirm final details and capture any changes to the original scope.
- 3. Project Manager creates a Project Workbook. The workbook will include:
 - a. Information and detail on every piece of equipment required for the project
 - b. Subcontractor information
 - c. Network information required to configure cameras/servers/storage/switches
 - d. Installation specifics and details
 - e. Maps and floor plans w/ equipment locations
 - f. Detailed project plan
 - g. Delivery schedule. A schedule based on site audit, sales meeting, client expectations and equipment availability. The schedule shall include lead-time to receive equipment, system staging, shipping and installation. The installation shall be broken down into tasks that include vehicle scheduling, camera installation, server installation, testing and final acceptance. Scheduling is critical. Project will not be started without a baseline schedule being completed.
- 4. Project Manager, Delivery Manager and client project manager to coordinate and agree on workbook approach and content.
- 5. Upon completion of the workbook, the Delivery Manager, Staging Manager & Project Manager will coordinate to ensure all parties are aware of the system components, tasks, schedule and any special conditions.
- 6. Delivery Manager will order all equipment and identify the items will be drop shipped to the subcontractor and what will be received by client for staging by the Staging Manager.
- 7. Staging Manager receives cameras/radios/servers/storage/switches and conducts the System/Application Configuration and Validation process:
 - a. Remove from packaging
 - b. Plug in to power and network
 - c. Connect all devices to each other
 - d. Configure all devices
 - e. Load software onto server

#M.7.

- f. Verify continued proper operation of all equipment through one week burn in period.
- g. Breakdown all equipment and kit up according to PM's workbook detail and installation plan (ie. Camera #3 is an Axis 233D camera w/ T95 housing, 277VAC power transformer, wireless radio, Omnidirectional antenna, pole mount, 3' coax antenna cable, NEMA enclosure). Each kit is complete and clearly labeled to enable the installation contractor to bring one box to Camera #3's location on the map and install at one time. This approach ensures all the material is present and ready for install.
- h. Ship and track all equipment according to workbook and inform subcontractor of delivery timeframe.
- 8. Subcontractor receives all equipment.
- 9. Project Manager confirms all equipment is received and schedules installation with Subcontractor and Client.
- 10. Project Manger supervises installation to completion addressing any issues that may arise.
- 11. Project Manager conducts user training.
- 12. Project Manger will submit system to client for testing and acceptance.
- 13. Upon client acceptance the system is turned over for customer operation and support.

Project Approach

Iron Sky is a firm believer in the importance of a methodical plan to successfully execute a project the size and complexity of this project. The foundation of the plan is a complete and thorough technical design. The design is first created by Iron Sky and then validated by the equipment vendors and the customer. This includes the cameras, the RF communications equipment, fiber provider and the computing and storage hardware. Once validated, the implementation plan is enacted. A key element of the implementation is the configuration and staging of the equipment before being installed. Staging further validates the design, ensures proper equipment operation and configuration and increases efficiency in the field. The staging plan closely parallels the installation plan to ensure equipment is ready for installation at the time and place most efficient to the installers. Proper coordination at this stage significantly reduces the impact to normal city operations and traffic flow. Throughout the process, the Iron Sky project manager oversees all aspects of the installation and stays in frequent communication with stake holders. As the physical installation nears completion, the critical aspect of system testing and validation begins. It is at this stage all aspects of the system are tested. The customer does not yet have control or access to the system. This stage is for Iron Sky and their vendors to completely align and tune the system before the system is relied upon for normal operation. Once validated by Iron Sky, select users are trained and given access to the system. As comfort with the system increases, additional users are trained and provided access. It is at this stage that final as-built documentation is created and delivered to the customer for on-going maintenance and support.

Project Management

Effective and accurate communication for a project the size and complexity of this project will be essential for success. Iron Sky proposes a project management hierarchy for decision making and communication for both Municipal Security Solutions, Birmingham and Iron Sky. Each organization shall designate an individual which has the authority, capacity and ability to speak for the entire organization. Primary communication concerning the project shall occur either through, or with the full knowledge of these individuals. In addition to event driven ongoing communication, weekly project status reports shall be used to communicate progress, issues and upcoming tasks. Face to face meetings shall occur as necessary to solve project challenges while still retaining efficiency.

Iron Sky's project manager will submit a Project Status Report and Project Change Control form every Friday documenting Iron Sky's progress against task assignments.

The Project Status Report provides the following information:

- Overview of tasks completed during the report period
- Overview of tasks in process
- Problems encountered and steps to resolution
- Corrective action if project is not on schedule

The Project Change Control form provides the following information for each change request:

- Reason for change request
- Impact to schedule, cost or any other aspect of project
- Signatures of the authorizing client party

PROPOSED COST

Iron Sky will furnish and deliver the solution described in the document for the sum of <u>\$159,986.68.</u>

The Iron Sky sales quotation can be found as an attachment to this document containing all software, hardware and professional services required to accomplish the tasks outlined in the Brook Run Park Scope of Work. Each component is itemized by price and quantity on the attached quotation.

Iron Sky will invoice 50% of the contract upon PO and Iron Sky will invoice 35% upon installation. The remaining balance will be invoiced upon customer acceptance of the completed project. All invoice are due 30 days after receipt.

TIMETABLE FOR IMPLEMENTATION

Iron Sky has installed City-Wide Video Surveillance solutions in all types of locations and facilities across the country and is able to successfully install systems in any environment. Our installation experience allows us to provide a quick, clean and complete installation with little to no disruption in daily activities.

Iron Sky realizes the importance of delivering this solution in a timeframe conducive to the City of Dunwoody. The Iron Sky Construction Manager and the designated City of Dunwoody Point of Contact (POC) will develop a project schedule during the pre-construction meeting, which will be scheduled fifteen (15) business days after the execution of the Purchase Order.

Iron Sky will work with the City of Dunwoody to determine the project schedule. A typical project schedule for Phase I would be:

- Day 1: Client accepts the proposal and issues a Purchase Order. Iron Sky Issues a 50% invoice.
- Week 1-3: Iron Sky schedules a pre-construction meeting with the relevant Client staff members to review scope of work, project assumptions, Client deliverables and timeline. Upon receipt payment and confirmation of project design with customer, Iron Sky orders equipment and finalizes the schedule of all subcontractors.
- Week 7: Installation is estimated to begin 3-4 weeks after the preconstruction conference and should take 2-3 weeks onsite to complete. (Note: Installation will not begin until all IT information has been provided and Client has given full remote access to Iron Sky Technical Support personnel.)
- Week 9-10: Once installation is complete, the system is turned on and tested for 1 week. Client personnel will not have access to the surveillance system during this time.
- Week 11-12: Once the system has been fully tested, it is released to the Client, training is conducted and a punch list is compiled. Users will not have access to the system until testing and final configuration has been completed. Once the punch list items have been addressed, the Client will sign off that the system is 100% to its satisfaction and the final invoice will be submitted. Upon completion of installation and acceptance by client Iron Sky will supply full system documentation to included manufacturers data sheets, operating manuals and "as built" system diagrams in .PDF or AutoCAD format.

System Training

Iron Sky will provide one (1), four-hour training session to train up to ten (10) City of Dunwoody personnel as trainers using a "train the trainer" model. The training includes system operation procedures and maintenance information for all system components. The City of Dunwoody will designate three of those users as system administrators to undergo more extensive training. Training of all users will occur on one day to be determined by the City of Dunwoody once the system has been installed.

Additional technical training will be coordinated, as needed, through the local account manager.

Iron Sky Inc.
Signed:
Name:
Title:
Date: