Attachment A

Network Infrastructure for the F1RST Cybersecurity/SAR Building

SCOPE OF WORK

The primary scope of work for the FIRST project is the successful delivery, installation, and configuration of network infrastructure for the F1RST Cybersecurity/SAR Building at the Pasco Sheriff's Office (PSO) in support of offices, classroom, conference room, and Situational Awareness Room based on specific business needs and unique functionality. All procurement of hardware delivered shall be installed and configured by the selected vendor as outlined within the RFP documents.

Building/Site Overview



1.0 F1RST CYBERSECURITY/SAR BUILDING

1.1 CYBER/SAR Building Equipment Requirements

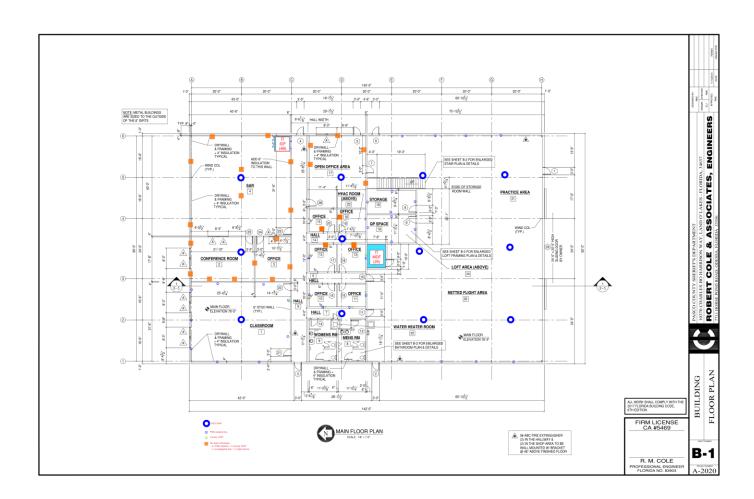
Routers	Model numbers	Qty	Notes
Model requirements:			
Router with support of	Catalyst 8300-1N1S-	2	
BGP, Multicast traffic	4T2X		
and potential need of			
encryption.			
.,			
Firewall	Model numbers	Qty	<u>Notes</u>
Palo Alto	PA-3430	2	
WAN Connections	Model numbers	Qty	<u>Notes</u>
2Gbit WAN circuits	Spectrum and or	1	PSO to provide the circuits
	Frontier		
2Gbit WAN circuits	Frontier	1	PSO to provide the circuits
<u>Switches</u>	Model numbers	Qty	<u>Notes</u>
Model requirements:			
Distribution layer	Catalyst 9300	1	
switch			
Access layer switch	C9300L-48UXG-4X-A	4	
Stacking modules:		_	Grad 12 Grand has 21th
Switch stacking kit	C9300L-STACK-KIT	4	Stack kit for each switch.
Power Management:	DIAID CE 1KIAIAC	4	Redundant power supplies for switches
Optional secondary	PWR-C5-1KWAC	4	nedanidani power supplies for switches
power supply	Catalyat 0200	4	Redundant power supplies for 9300 switch.
Secondary power	Catalyst 9300	1	370w power supply
Supply	SNT	4	Smartnet service on switches. PSO to acquire
Warranty services	SIVI	4	Sindratice service on switches. Foo to dequire
Access Points			
Model Number:			
Indoor AP	CW9164I-x	12	
SFP Modules			
(1Gbit) 1000BASE-	GLC-LH-SMD=	4	
LX/LH SFP			
(10Gbit) SFP+	Cisco SFP-10G-LR	8	
Network Rack	Model numbers		Notes
Network Cabinet	Ecostruxure Micro	2	Use the Chatsworth brand. Second rack for
	Data Center		future growth.
	(MDC42SX5KVAT)		
Network ladder	Chatsworth Quick	4	Use Chatsworth brand ladder attached to top of
	Ship Cable Runway		rack and wall.
	Kit		
Cable management	Chatsworth	4	Trays on sides of rack and straps like Velcro
Velocity®™ Standard		•	
	Tolocity Stalladia	l	

	Pack (VSP)		
Punch down panels	Cable Matters 48	12	
Tunen down panels	port, 2 RU 180012-	12	
	Cat6		
Copper patch cables	Cable Matters	150	5 ft' Cat6 copper cables
copper pateri cables	Snagless Cat6 Blue	130	
	Ethernet 5' Cable		
Cananan natah ashlas		100	7 ft' Cat6 copper cables
Copper patch cables	Cable Matters	100	7 it cato copper capies
	Snagless Cat6 Blue		
	Ethernet 7' Cable		
Fiber patch cables	C2G 28758 OS2 Fiber	4	
	Optic Cable - LC-LC		
	9/125 Duplex Single-		
	Mode PVC Fiber		
	Cable, Yellow (9.8		
	Feet, 3 Meters)		
LIU tray	Corning LANscape	2	
	Closet Connector		
	Housing, Accepts 2		
	CCH Panels CCH-01U		
LIU fiber bulk head	CCH-CP12-A8	2	
Power Management	Model numbers		<u>Notes</u>
Power strips	EMAT08-10	4	EATON MANAGED RACK PDU with standard 5- 15P. We need power strips with remote
			1
UPS			management capability.
Rail mounting kit	SRT1500XLA	4	management capability. SMART UPS SRT 1500VA 120V
	SRT1500XLA SRTRK4	4	
_	SRTRK4	4	SMART UPS SRT 1500VA 120V APC SMART-UPS SRT 19RAIL KIT FOR SRT SRT 2.2/3KVA
Management		•	SMART UPS SRT 1500VA 120V APC SMART-UPS SRT 19RAIL KIT FOR SRT SRT 2.2/3KVA UPS NETWORK MANAGEMENT CARD 2 WITH
_	SRTRK4	4	SMART UPS SRT 1500VA 120V APC SMART-UPS SRT 19RAIL KIT FOR SRT SRT 2.2/3KVA
_	SRTRK4	4	SMART UPS SRT 1500VA 120V APC SMART-UPS SRT 19RAIL KIT FOR SRT SRT 2.2/3KVA UPS NETWORK MANAGEMENT CARD 2 WITH ENVIRONMENTAL MONITORING WITH
Management	SRTRK4 AP9631	4 2	SMART UPS SRT 1500VA 120V APC SMART-UPS SRT 19RAIL KIT FOR SRT SRT 2.2/3KVA UPS NETWORK MANAGEMENT CARD 2 WITH ENVIRONMENTAL MONITORING WITH ENVIRONMENTAL MONITORING
Management Temperature sensor	SRTRK4 AP9631 AP9335TH	2	SMART UPS SRT 1500VA 120V APC SMART-UPS SRT 19RAIL KIT FOR SRT SRT 2.2/3KVA UPS NETWORK MANAGEMENT CARD 2 WITH ENVIRONMENTAL MONITORING WITH ENVIRONMENTAL MONITORING APC TEMPERATURE + HUMIDITY SENSOR UPS NETWORK MANAGEMENT CARD 2 Notes
Management Temperature sensor Network management	SRTRK4 AP9631 AP9335TH AP9630	2	SMART UPS SRT 1500VA 120V APC SMART-UPS SRT 19RAIL KIT FOR SRT SRT 2.2/3KVA UPS NETWORK MANAGEMENT CARD 2 WITH ENVIRONMENTAL MONITORING WITH ENVIRONMENTAL MONITORING APC TEMPERATURE + HUMIDITY SENSOR UPS NETWORK MANAGEMENT CARD 2
Management Temperature sensor Network management <u>Labor</u>	AP9631 AP9630 Model numbers	2	SMART UPS SRT 1500VA 120V APC SMART-UPS SRT 19RAIL KIT FOR SRT SRT 2.2/3KVA UPS NETWORK MANAGEMENT CARD 2 WITH ENVIRONMENTAL MONITORING WITH ENVIRONMENTAL MONITORING APC TEMPERATURE + HUMIDITY SENSOR UPS NETWORK MANAGEMENT CARD 2 Notes
Management Temperature sensor Network management Labor Copper Termination	AP9631 AP9630 Model numbers	2	SMART UPS SRT 1500VA 120V APC SMART-UPS SRT 19RAIL KIT FOR SRT SRT 2.2/3KVA UPS NETWORK MANAGEMENT CARD 2 WITH ENVIRONMENTAL MONITORING WITH ENVIRONMENTAL MONITORING APC TEMPERATURE + HUMIDITY SENSOR UPS NETWORK MANAGEMENT CARD 2 Notes Run copper cabling and terminate on both ends Various data wall jacks to support 2-6 keystones.
Management Temperature sensor Network management Labor Copper Termination costs	AP9631 AP9335TH AP9630 Model numbers CAT6	2 2 2	SMART UPS SRT 1500VA 120V APC SMART-UPS SRT 19RAIL KIT FOR SRT SRT 2.2/3KVA UPS NETWORK MANAGEMENT CARD 2 WITH ENVIRONMENTAL MONITORING WITH ENVIRONMENTAL MONITORING APC TEMPERATURE + HUMIDITY SENSOR UPS NETWORK MANAGEMENT CARD 2 Notes Run copper cabling and terminate on both ends Various data wall jacks to support 2-6 keystones. Tripp Lite brand is a requirement of this RFP. No
Management Temperature sensor Network management Labor Copper Termination costs 4-Port Keystone	SRTRK4 AP9631 AP9335TH AP9630 Model numbers CAT6 Tripp Lite brand	2 2 2 2 Approx.	SMART UPS SRT 1500VA 120V APC SMART-UPS SRT 19RAIL KIT FOR SRT SRT 2.2/3KVA UPS NETWORK MANAGEMENT CARD 2 WITH ENVIRONMENTAL MONITORING WITH ENVIRONMENTAL MONITORING APC TEMPERATURE + HUMIDITY SENSOR UPS NETWORK MANAGEMENT CARD 2 Notes Run copper cabling and terminate on both ends Various data wall jacks to support 2-6 keystones.
Management Temperature sensor Network management Labor Copper Termination costs 4-Port Keystone Faceplate and Cat6	AP9631 AP9335TH AP9630 Model numbers CAT6 Tripp Lite brand (N042-001-04-WH),	4 2 2 2 2 Approx. 75-100	SMART UPS SRT 1500VA 120V APC SMART-UPS SRT 19RAIL KIT FOR SRT SRT 2.2/3KVA UPS NETWORK MANAGEMENT CARD 2 WITH ENVIRONMENTAL MONITORING WITH ENVIRONMENTAL MONITORING APC TEMPERATURE + HUMIDITY SENSOR UPS NETWORK MANAGEMENT CARD 2 Notes Run copper cabling and terminate on both ends Various data wall jacks to support 2-6 keystones. Tripp Lite brand is a requirement of this RFP. No
Management Temperature sensor Network management Labor Copper Termination costs 4-Port Keystone Faceplate and Cat6	SRTRK4 AP9631 AP9335TH AP9630 Model numbers CAT6 Tripp Lite brand (N042-001-04-WH), (N080-106) and	4 2 2 2 2 Approx. 75-100	SMART UPS SRT 1500VA 120V APC SMART-UPS SRT 19RAIL KIT FOR SRT SRT 2.2/3KVA UPS NETWORK MANAGEMENT CARD 2 WITH ENVIRONMENTAL MONITORING WITH ENVIRONMENTAL MONITORING APC TEMPERATURE + HUMIDITY SENSOR UPS NETWORK MANAGEMENT CARD 2 Notes Run copper cabling and terminate on both ends Various data wall jacks to support 2-6 keystones. Tripp Lite brand is a requirement of this RFP. No

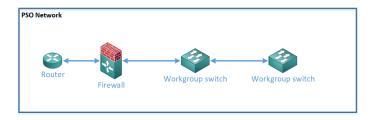
1.2 CYBER/SAR Building Network Equipment and Cabling Scope of Work

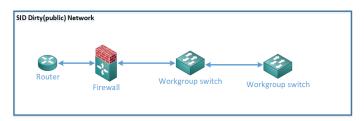
- 1.2.1 VENDOR will run the copper network cabling to the gang-boxes and access points throughout the facility to the patch panel in the network closet. VENDOR will terminate and test all copper cabling at the gang-box keystone and at the network closet on the patch panel.
- 1.2.2 VENDOR will physically label all wiring at the gang box face plate, copper patch panels and fiber LIU.
- 1.2.3 VENDOR will test and provide results on all fiber cabling throughout the CYBER/SAR building.
- 1.2.4 VENDOR will install and ground network racks, cable organizers and ladders to be used for cable management. Network racks must be oriented in a way where there is a minimum clearance of at least 30 inches on all sides of racks. This is to allow the installation of equipment and for a person to navigate around racks.

1.3 CYBER/SAR Building Network Wiring Diagram





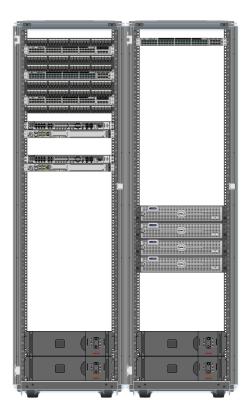




1.4 CYBER/SAR Building Network Rack Diagram

MDF:

Location	DESCRIPTION	
Cyber/SAR	Cyber/SAR MDF Cabinet	



IDF:

