FLORIDA DEPARTMENT OF TRANSPORTATION
Procurement Office
605 Suwannee Street, MS 20
Tallahassee, Florida 32399-0450
Phone: (850) 414-4568
Fax: (850) 414-4951

ADDENDUM NO. 4 DATE: January 13, 2015

BID#: ITB-DOT-14/15-9021-JP

BID TITLE: Furnish, Install and Commission Networking Equipment at Locations in Tallahassee
OPENING DATE: January 21, 2015 at 3:00p.m., Local Time

REVISED OPENING DATE: February 3, 2015 at 3:00p.m., Local Time

Notice is hereby given of the following changes to the above referenced Invitation to Bid:

Delete: Pages 37 thru 52 of Exhibit A, Scope of Services attached to Addendum No. 1 and Addendum No. 2.

Replace with: The revised Pages 37 thru 52 attached to this Addendum.

TIMELINE CHANGE:

Provided below is a list of critical dates and actions. These dates are subject to change. Notices of changes (Addenda) will be posted on the Florida Vendor Bid System at www.myflorida.com (click on "BUSINESS", click on "Doing Business with the State", under "Everything for Vendors and Customers", click on "Vendor Bid System (VBS)", click on "Search Advertisements") under this bid number. It is the responsibility of all potential bidders to monitor this site for any changing information prior to submitting your bid.

ACTION / LOCATION	DATE	LOCAL TIME
DEADLINE FOR TECHNICAL QUESTIONS - There is no deadline for administrative questions.	**December 15, 2014**	**05:00 PM**
BIDS DUE (ON OR BEFORE) - Florida Department of Transportation Procurement Office – Haydon Burns Building Attn: Joyce Plummer 605 Suwannee Street, Mail Station 20 Fourth Floor – Room 439 Tallahassee, Florida 32399-0450	**February 3, 2015**	**03:00 PM**

PUBLIC OPENING - **February 3, 2015** **03:00 PM**
Florida Department of Transportation
Procurement Office – Haydon Burns Building
Attn: Joyce Plummer
605 Suwannee Street, Mail Station 20
Fourth Floor – Conference Room 440-A
Tallahassee, Florida 32399-0450

POSTING OF INTENDED DECISION/AWARD - **February 10, 2015** **05:00 PM**
(on the Florida Vendor Bid System)

Bidders must acknowledge receipt of this Addendum by completing and returning to the Procurement Office, by no later than the time and date of the bid opening. **Failure to do so may subject the bidder to disqualification.**

Joyce Plummer, Procurement Agent

_____Bidder

_____Address

_____

_____Submitted by (Signature)

Failure to file a protest within the time prescribed in Section 120.57(3), Florida Statutes, or failure to post the bond or other security required by law within the time allowed for filing a bond shall constitute a waiver of proceedings under Chapter 120, Florida Statutes.

ADDENDUM 4

FLORIDA DEPARTMENT OF TRANSPORTATION

SCOPE OF SERVICES

FOR THE

CITY OF TALLAHASSEE FIBER RING DEPLOYMENT

TO SUPPORT

CENTER-TO-CENTER COMMUNICATIONS

December 31, 2014

Florida Department of Transportation
2740 Centerview Dr
Tallahassee, FL 32301
Voice: (850) 410-5500
Fax: (850) 410-5501

For -48 VDC power cabling, the “A” power bus cabling shell employ red-jacketed cable for the negative 48 VDC (hot) side of the power supply and black-jacketed cable shall be used for the positive (return, ground) side. The “B” power bus cabling shell employ white-jacketed cable for the negative 48 VDC (hot) side of the power supply and black-jacketed cable shall be used for the positive (return, ground) side.

Both AC and DC power cables shall be sized in accordance with NEC and manufacturers’ recommendations.

Grounding Requirements

The Contractor must assure that all equipment racks in which equipment is mounted are grounded to the existing site ground bus in a manner consistent with other grounding at each site.

Per-Site Requirements

Transportation Engineering Research Lab (TERL)

Summary

A Nortel ERS-8606 in an existing rack will be upgraded to an Avaya ERS-8806. Two appropriate GBICs shall be provided for the existing fiber network. A duplex multimode fiber-optic patch cord shall interconnect the TERL Cisco 4507 switch and the 8806 (1000BASE-SX).

The 8806 shall be managed by the existing SITSN NMS.

Equipment

The equipment required for the TERL installation is:

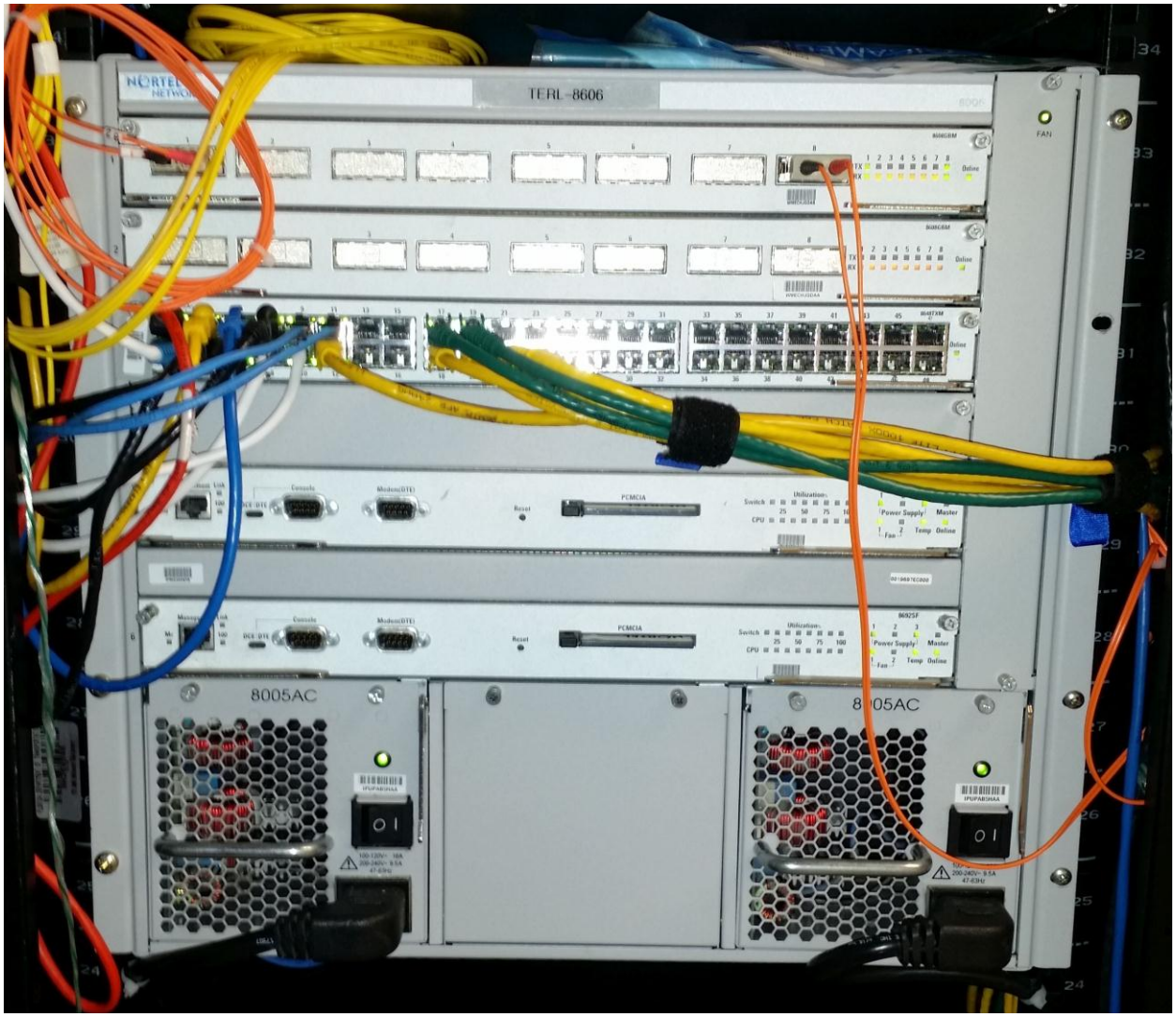
2	AA1403003-E5	1-port 10GBASE-ER/EW XFP. LAN/WAN functionality based on port configuration/compatibility. Supports single-mode fiber for interconnects up to 40km.
2	AA1419048-E6	1-port 1000BASE-SX Small Form Factor Pluggable (SFP) Gigabit Ethernet Transceiver, connector type: LC. Digital Diagnostic Monitoring Interface.
2	DS1404120-E5	Ethernet Routing Switch 8895SF Switch Fabric/CPU to enable redundant terabit core configurations. One required with R/RS Modules, 2nd for load-sharing and redundancy. Operable with R/RS modules. Includes 1GB SDRAM and 2GB Compact Flash.
1	DS1404123-E6	8834XG Routing Switch Module. Combination module with 2 port 10GBase-X XFP, 24 port SFP (inc 100FX support) and 8 port autosensing 10BASE-T/100BASE-TX/1000Base-T baseboard (XFPs and SFPs purchased separately). The 8834XG requires the 8692wMezz or 8895S
1	DS1404124-E6	8848GT Routing Switch Module. 48-port auto-sensing 10BASE-T/100BASE-TX/1000Base-T Ethernet Layer 3 switching interfaces. 8848GT requires the 8692SFwMezz or 8895SF.

1	DS1410026	Ethernet Routing Switch 8800 Premier License Kit, for 1 chassis. Enabled features: Advanced features, VRF-Lite, MP-BGP, IP-VPN MPLS RFC2547, IP-VPN-Lite (IP-in-IP) & Mcast Virtualization for VRF-Lite (IGMP, PIM-SM/SSM). Refer to release notes for list of
1	DS1411018-E6	Spare 8006CMHS fan tray for 8006 chassis. Required for use with ERS8600 RS series modules and MERS8600 RC series modules. 8006 chassis uses 1 x DS1411018-E6.
		1m Cat 6 patch cable - blue
		1m Cat 6 patch cable - white
		1m Cat 6 patch cable - black
1		1m Cat 6 patch cable - purple
		1m Cat 6 patch cable - yellow
		1m Cat 6 patch cable - red

The Contractor shall provide the most recent versions/releases of all equipment and software, which may differ from the versions listed above.

Location and Mounting

The equipment shall be mounted in the existing SITSN Rack provided by FDOT ITS Central Office, located in the TERL equipment room.



Power Connections

No additional power connections are required; the existing chassis is in place and powered up.

Network Connections

Please refer to the COT Design and Configuration Document for network connection information and diagrams.

Tallahassee FHP Site (TFHP)

Summary

TFHP is a Layer 3 network point of presence location for the Tallahassee Fiber Ring, and the FDOT Statewide Telecommunications Network.

A Nortel ERS-8606 in an existing rack will be upgraded to an Avaya ERS-8806. Two appropriate optical interfaces shall be provided for the existing fiber network. A copper Ethernet patch cord shall interconnect the TFHP SMS Connection and the 8806 (100 BASE-TX).

The 8806 shall be managed by the existing SITSN NMS.

Equipment

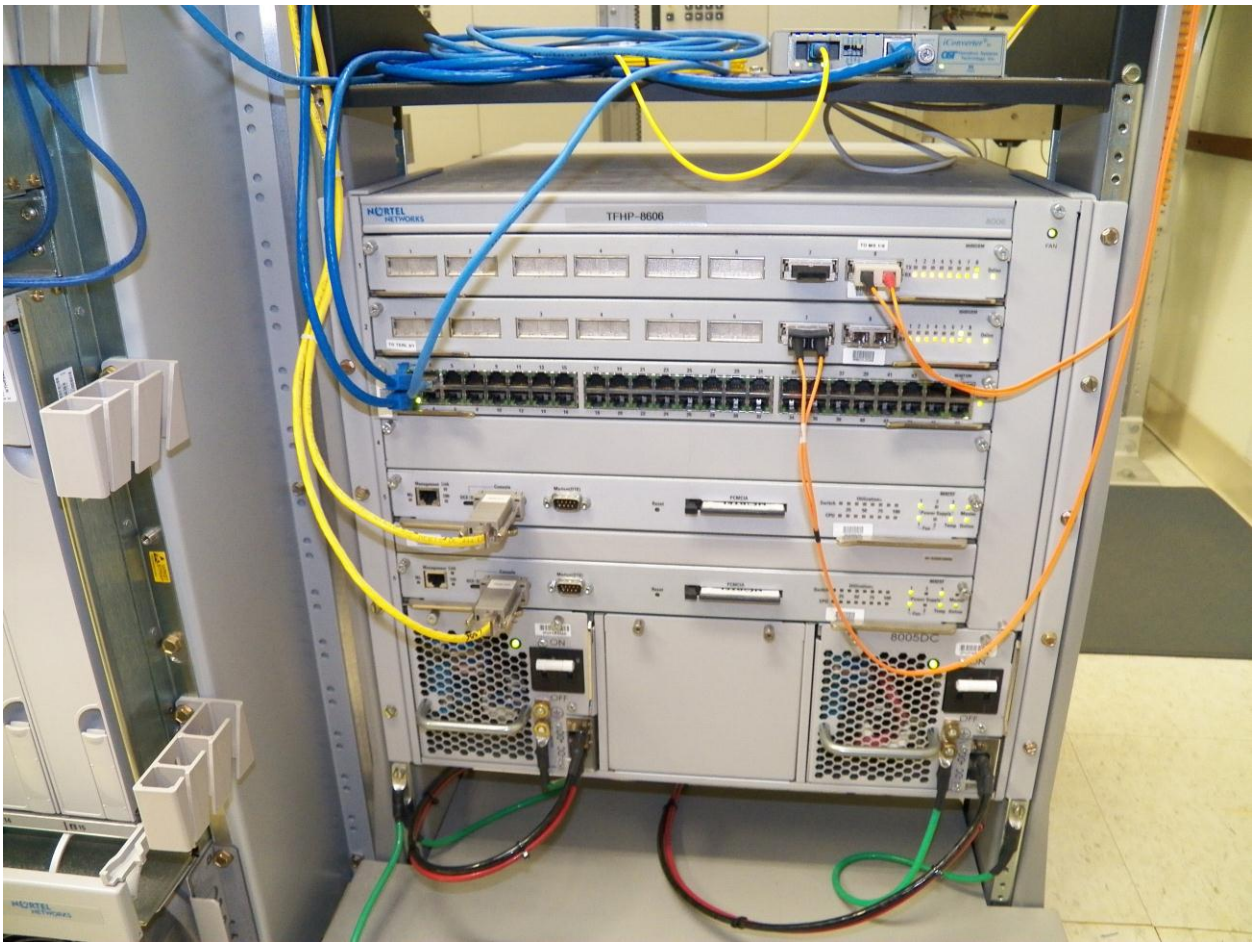
The equipment required for the TFHP installation is:

1	AA1403003-E5	1-port 10GBASE-ER/EW XFP. LAN/WAN functionality based on port configuration/compatibility. Supports single-mode fiber for interconnects up to 40km.
1	AA1403001-E5	1-port 10GBASE-LR/LW XFP. LAN/WAN functionality based on port configuration/compatibility. Supports single-mode fiber for interconnects up to 10km.
2	AA1419048-E6	1-port 1000BASE-SX Small Form Factor Pluggable (SFP) Gigabit Ethernet Transceiver, connector type: LC. Digital Diagnostic Monitoring Interface.
2	DS1404120-E5	Ethernet Routing Switch 8895SF Switch Fabric/CPU to enable redundant terabit core configurations. One required with R/RS Modules, 2nd for load-sharing and redundancy. Operable with R/RS modules. Includes 1GB SDRAM and 2GB Compact Flash.
1	DS1404123-E6	8834XG Routing Switch Module. Combination module with 2 port 10GBase-X XFP, 24 port SFP (inc 100FX support) and 8 port autosensing 10BASE-T/100BASE-TX/1000Base-T baseboard (XFPs and SFPs purchased separately). The 8834XG requires the 8692wMezz or 8895S
1	DS1404124-E6	8848GT Routing Switch Module. 48-port auto-sensing 10BASE-T/100BASE-TX/1000Base-T Ethernet Layer 3 switching interfaces. 8848GT requires the 8692SFwMezz or 8895SF.
1	DS1410026	Ethernet Routing Switch 8800 Premier License Kit, for 1 chassis. Enabled features: Advanced features, VRF-Lite, MP-BGP, IP-VPN MPLS RFC2547, IP-VPN-Lite (IP-in-IP) & Mcast Virtualization for VRF-Lite (IGMP, PIM-SM/SSM). Refer to release notes for list of
1	DS1411018-E6	Spare 8006CMHS fan tray for 8006 chassis. Required for use with ERS8600 RS series modules and MERS8600 RC series modules. 8006 chassis uses 1 x DS1411018-E6.
		1m Cat 6 patch cable - blue
		1m Cat 6 patch cable - white
		1m Cat 6 patch cable - black
1		1m Cat 6 patch cable - purple
		1m Cat 6 patch cable - yellow
		1m Cat 6 patch cable - red

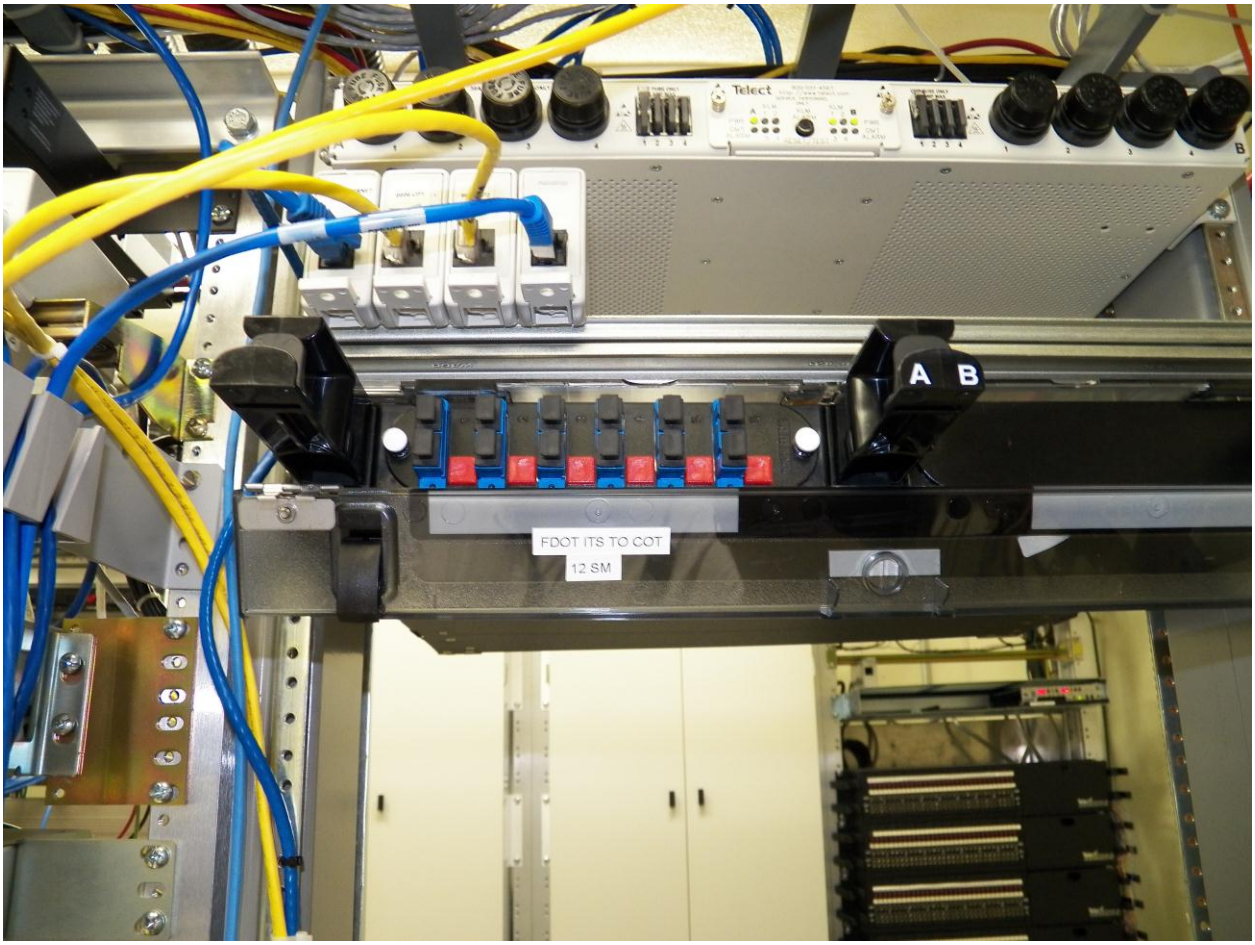
The Contractor shall provide the most recent versions/releases of all equipment and software, which may differ from the versions listed above.

Location and Mounting

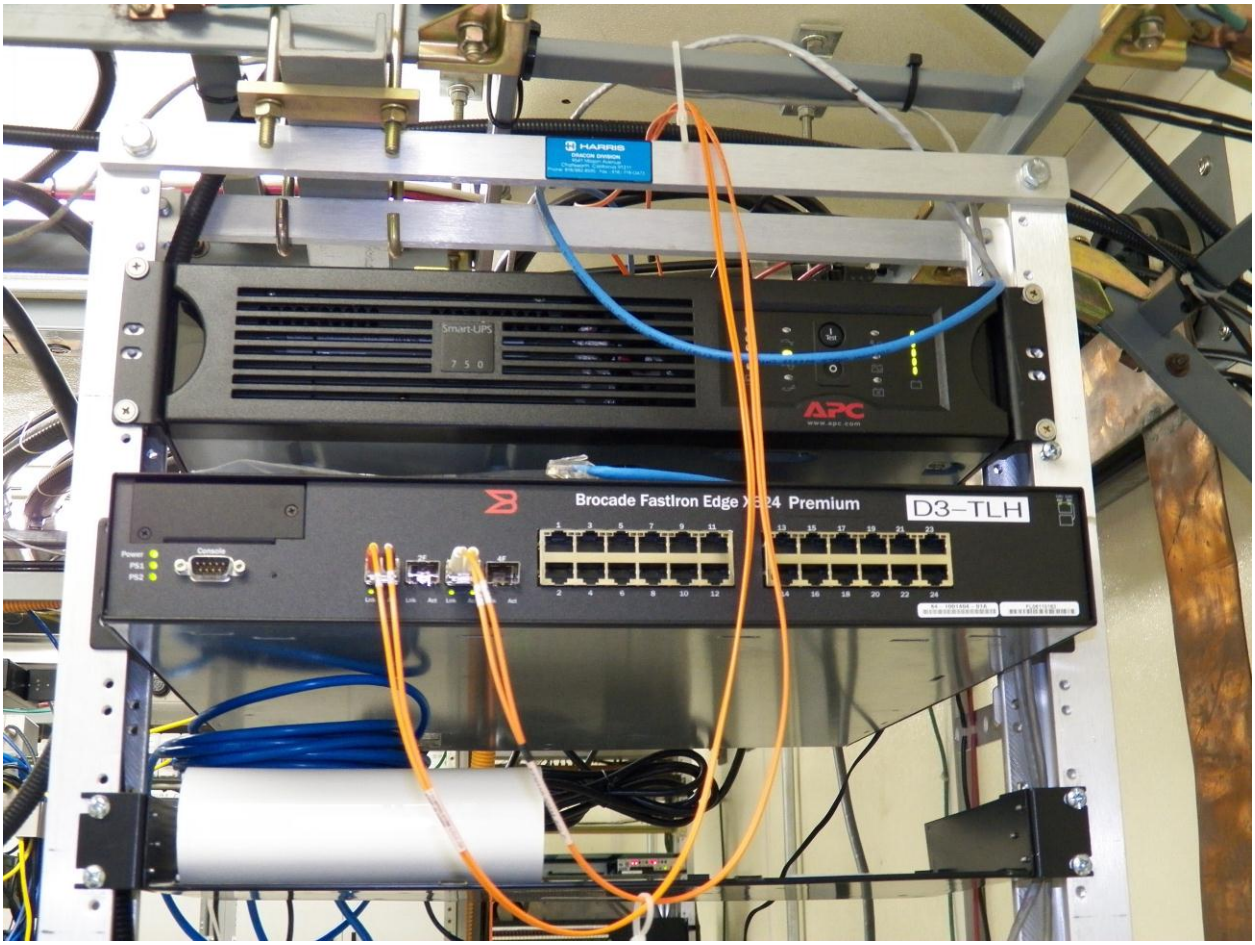
The equipment shall be mounted in the existing SITSN Rack provided by FDOT ITS Central Office, located in the TFHP equipment shelter.



Fiber connectivity to the upgraded ERS-8806 will come from the patch panel, located in the same rack, and shown in the photograph below.



The Brocade FastIron layer 3 device shown in the photograph below will be removed from this site, and relocated to the Tallahassee PSC. Please note the installation details in the Tallahassee PSC section directly below.



Power Connections

No additional power connections are required; the existing chassis is in place and powered up.

Network Connections

Please refer to the COT Design and Configuration Document for network connection information and diagrams.

Tallahassee Public Safety Complex (PSC)

Summary

PSC is a dual-purpose Layer 3 handoff and optical signal regeneration site providing OEO regeneration between TFHP to the west and the Rhyne Bldg to the east.

Equipment

The equipment required for the PSC installation is:

2	AA1403011-E5	1-port 10GBase-LR Small Form Factor Plus (SFP+). 10 Gigabit Ethernet Transceiver. Connector type LC. Supports single-mode fiber for interconnects up to 10km.
2	AA1419049-E6	1-port 1000BASE-LX Small Form Factor Pluggable (SFP) Gigabit Ethernet Transceiver, connector type: LC. Digital Diagnostic Monitoring Interface.
1	AA1419048-E6	1-port 1000BASE-SX Small Form Factor Pluggable (SFP) Gigabit Ethernet Transceiver, connector type: LC. Digital Diagnostic Monitoring Interface.
1	AL1905E21-E6	Ethernet Routing Switch 4800GTS-PWR+ 1000W AC redundant power supply. EUED RoHS 6/6 compliant]. NA Power Cord
1	EC4400E05-E6	VSP 4450GSX with 12 10/100/1000 BaseT PoE+ ports, 36 1G SFP ports and two 10G SFP+ uplink ports. Inc. Base Software License, 1 Field replaceable 1000W PSU. NA Power Cord
1	EC4810015	VSP4000 PREMIER LICENSE - 1 UNIT
		1m Cat 6 patch cable - blue
		1m Cat 6 patch cable - white
		1m Cat 6 patch cable - black
1		1m Cat 6 patch cable - purple
		1m Cat 6 patch cable - yellow
		1m Cat 6 patch cable - red

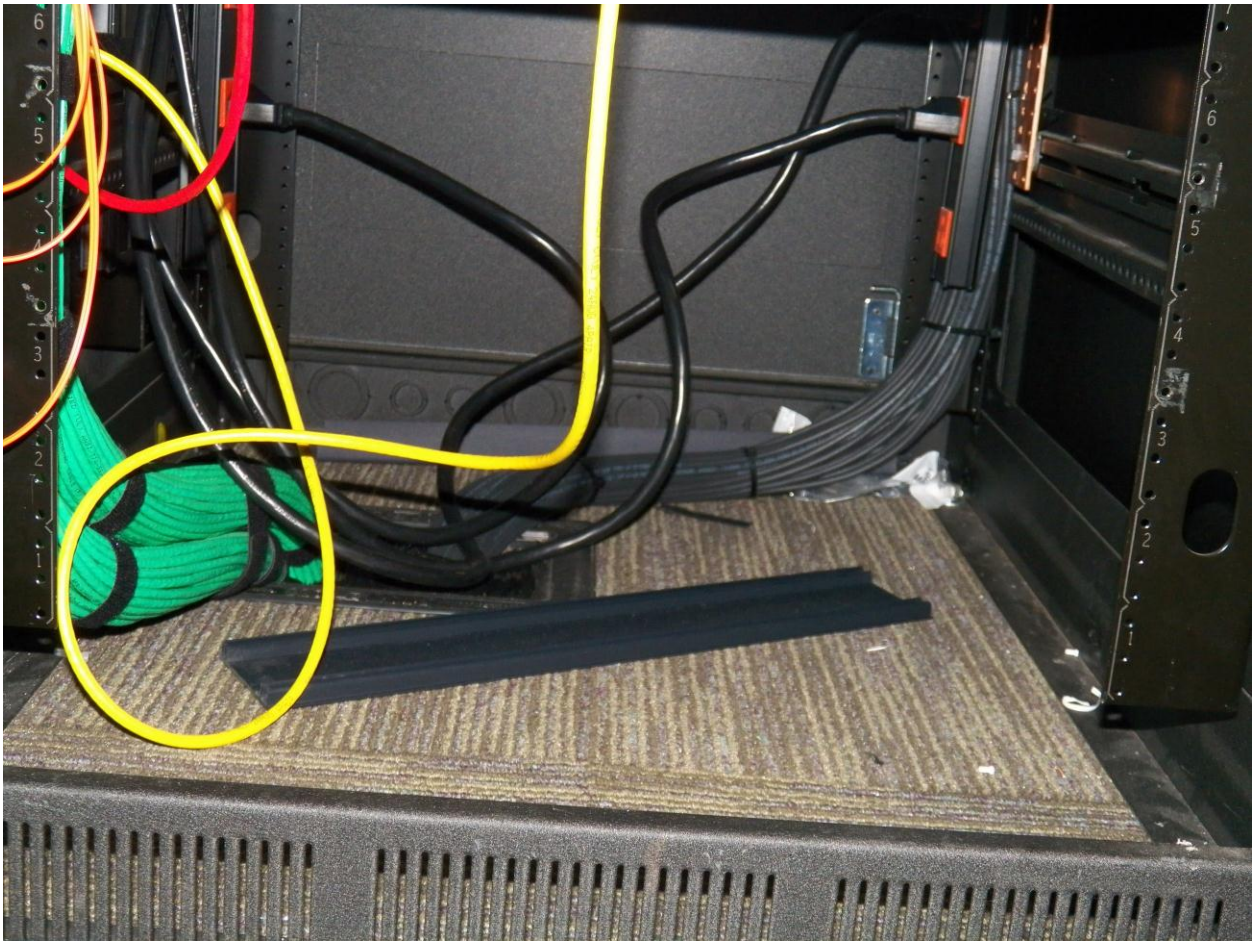
The Contractor shall provide the most recent versions/releases of all equipment and software, which may differ from the versions listed above.

Location and Mounting

The equipment shall be mounted in the existing Racks #1 & 2, provided by the City of Tallahassee, located in Room 166 of the PSC.

The FDOT fiber ring termination point at this location is a 1U Corning LANScape fiber patch panel, located in Rack #1, and shown in the photograph below. Fiber patch cords are already present with the proper connector types for both the patch panel and equipment for the COT Fiber Ring. However, any multimode patch cords distance and connector types will have to be researched and provided by the Contractor.

The Avaya VSP-4450 switch and Brocade FastIron layer 3 device referenced above will be installed in rack units 5 and 6, and 2 and 3, respectively, at the bottom of Rack #2, as shown in the photo below.



Power Connections

The equipment shall be powered from the existing AC power distribution system in the PSC.

Network Connections

Please refer to the COT Design and Configuration Document for network connection information and diagrams.

FDOT ITS Central Office –Rhyne Bldg (Rhyne)

Summary

An Avaya 4450 shall be installed in an existing wall-mounted cabinet located in the ESF-1 break-out room in the SEOC.

In addition to the COT Ring connection, there are seventeen (17) user ports that will be active at this location. All in house wiring and patch panels ports were tested and available for use.

Equipment

The equipment required for the Rhyne installation is:

2	AA1403011-E5	1-port 10GBase-LR Small Form Factor Plus (SFP+). 10 Gigabit Ethernet Transceiver. Connector type LC. Supports single-mode fiber for interconnects up to 10km.
12	AA1419043-E6	1-port 1000BASE-T Small Form Pluggable (SFP), 8-pin modular connector (RJ-45).
1	AL1905E21-E6	Ethernet Routing Switch 4800GTS-PWR+ 1000W AC redundant power supply. EUED RoHS 6/6 compliant]. NA Power Cord
1	EC4400E05-E6	VSP 4450GSX with 12 10/100/1000 BaseT PoE+ ports, 36 1G SFP ports and two 10G SFP+ uplink ports. Inc. Base Software License, 1 Field replaceable 1000W PSU. NA Power Cord
1	EC4810015	VSP4000 PREMIER LICENSE - 1 UNIT
		1m Cat 6 patch cable - blue
		1m Cat 6 patch cable - white
		1m Cat 6 patch cable - black
1		1m Cat 6 patch cable - purple
		1m Cat 6 patch cable - yellow
		1m Cat 6 patch cable - red

The Contractor shall provide the most recent versions/releases of all equipment and software, which may differ from the versions listed above.

Location and Mounting

The equipment shall be installed in the existing SITSN Rack located in the Room 291F of the Rhyne Building. This room is the server closet for the facility. The SITSN Rack is the rack on the left side of the room (as one enters), and at the rear – it is shown in the photo below.

At the top of this cabinet, there is a 48-port patch panel. The contracted installers punched down the copper LAN drops beginning at port #24, as shown below.

Below the CAT 6 patch panel is a 1U space for the Avaya VSP-4450 being installed at this site. Cat 6 patch cables will be connected to this switch as described in Appendix A. A 1U Corning fiber patch panel is located beneath the space, and single-mode fiber jumpers will connect to the VSP-4450 as described in Appendix A.

Power Connections

The equipment shall be powered from the existing AC power distribution system located in the Rhyne server equipment room.

Network Connections

Please refer to the COT Design and Configuration Document for network connection information and diagrams.

Statewide Emergency Operation Center (SEOC)

Summary

An Avaya 4450 shall be installed in an existing wall-mounted cabinet located in the ESF-1 break-out room in the SEOC. In addition to the COT Fiber Ring connections, there will be a limited number (six or fewer) user ports that will be active and turned up.

Equipment

The equipment required for the SEOC installation is:

1	AA1403011-E5	1-port 10GBase-LR Small Form Factor Plus (SFP+). 10 Gigabit Ethernet Transceiver. Connector type LC. Supports single-mode fiber for interconnects up to 10km.
1	AA1403013-E6	1-port 10GBASE-ER Small Form Factor Pluggable Plus (SFP+) 10 Gigabit Ethernet Transceiver, connector type: LC. Supports single-mode fiber for interconnects up to 40km.
1	AL1905E21-E6	Ethernet Routing Switch 4800GTS-PWR+ 1000W AC redundant power supply. EUED RoHS 6/6 compliant]. NA Power Cord
1	EC4400E05-E6	VSP 4450GSX with 12 10/100/1000 BaseT PoE+ ports, 36 1G SFP ports and two 10G SFP+ uplink ports. Inc. Base Software License, 1 Field replaceable 1000W PSU. NA Power Cord
1	EC4810015	VSP4000 PREMIER LICENSE - 1 UNIT

The Contractor shall provide the most recent versions/releases of all equipment and software, which may differ from the versions listed above.

Location and Mounting

The equipment shall be mounted in the existing SITSN cabinet provided by FDOT ITS Central Office, located in the SEOC, ESF-1 (Transportation) break-out room.

Power Connections

The equipment shall be powered from the existing AC power distribution system located in the SEOC, ESF-1 (Transportation) break-out room.

Network Connections

Please refer to the COT Design and Configuration Document for network connection information and diagrams.

Spares Inventory

The following equipment will be used as spares for immediate replacement of any equipment which suffers an in or out-of-warranty failure, so as to maintain continuity of operations. Failed equipment will be returned to the vendor for repair or replacement under warranty until such time that equipment is folded into FDOT's ongoing maintenance contract(s), which will commence on July 1, 2016.

2	AA1403011-E5	1-port 10GBase-LR Small Form Factor Plus (SFP+). 10 Gigabit Ethernet Transceiver. Connector type LC. Supports single-mode fiber for interconnects up to 10km.
1	AA1403003-E5	1-port 10GBASE-ER/EW XFP. LAN/WAN functionality based on port configuration/compatibility. Supports single-mode fiber for interconnects up to 40km.
1	AA1403001-E5	1-port 10GBASE-LR/LW XFP. LAN/WAN functionality based on port configuration/compatibility. Supports single-mode fiber for interconnects up to 10km.
1	AA1403013-E6	1-port 10GBASE-ER Small Form Factor Pluggable Plus (SFP+) 10 Gigabit Ethernet Transceiver, connector type: LC. Supports single-mode fiber for interconnects up to 40km.
1	AA1419048-E6	1-port 1000BASE-SX Small Form Factor Pluggable (SFP) Gigabit Ethernet Transceiver, connector type: LC. Digital Diagnostic Monitoring Interface.
1	AA1419049-E6	1-port 1000BASE-LX Small Form Factor Pluggable (SFP) Gigabit Ethernet Transceiver, connector type: LC. Digital Diagnostic Monitoring Interface.
1	AL1905E21-E6	Ethernet Routing Switch 4800GTS-PWR+ 1000W AC redundant power supply. EUED RoHS 6/6 compliant]. NA Power Cord
1	EC4400E05-E6	VSP 4450GSX with 12 10/100/1000 BaseT PoE+ ports, 36 1G SFP ports and two 10G SFP+ uplink ports. Inc. Base Software License, 1 Field replaceable 1000W PSU. NA Power Cord
1	EC4810015	VSP4000 PREMIER LICENSE - 1 UNIT
1	DS1404123-E6	8834XG Routing Switch Module. Combination module with 2 port 10GBase-X XFP,24 port SFP (inc 100FX support) and 8 port autosensing 10BASE-T/100BASE- TX/1000Base-T baseboard (XFPs and SFPs purchased seperately) . The 8834XG requires the 8692wMezz or 8895S
1	DS1404124-E6	8848GT Routing Switch Module.48-port Auto-sensing 10BASE-T/1000BASE=TX/1000BASE-T Ethernet Layer 3 switching interfaces 8848GT requires 8692SF W/Mezz or 8895SF
1	DS1411018-E6	8006CMHS FAN TRAY. Required for use with ERS8600 "-RS" modules in 8006 chassis.

Express Technology Support

All equipment within this Scope of Services is to be covered by Avaya Express Technology Support as noted by the Avaya part numbers below.

GL5300000/6300000	Avaya Express Technology Support – until July 1, 2016
GE5300000/6300000	Avaya Express Technology Support – Base Technology/Software Support – until July 1, 2016

Delivery of Spares Equipment

Following the successful testing and designation of spares equipment following testing, as noted below, all spares equipment will be inventoried and delivered to FDOT's maintenance contractor's warehouse in Orlando, Florida. Shipping details will be provided to the awarded vendor.

Twenty-Day Burn-In Period

Since the ERS-8600s are production systems, carrying live traffic, these devices must be upgraded in-place, and confirmed 100% fully-functional ERS-8800 upgrades, carrying the same traffic. Likewise, the remaining sites must be operational, and integrated system-wide prior to the burn-in period.

Excluding the ERS-8600s being upgraded to ERS-8800s, all equipment in this Scope of Services will be tested for a minimum of 20 business days, based upon requirements set forth in the Avaya "Quick Setup" documentation.

Additional traffic management and other applicable testing will be performed in accordance with the *COT Configuration, Design and Testing Document* developed jointly between the FDOT, its consultants, and the awarded vendor.

Testing of Spares

Spares equipment will be tested by populating a site or existing equipment following installation, configuration and turn-up by replacing the production equipment with spares equipment. All spares are to function as designed, and programmed. Spares equipment testing is also subject to a 20-day burn-in period. Following spares equipment testing, the spares equipment will become production equipment, and the equipment removed for spares testing will become spares.

System Final Acceptance Dependent Upon Successful Testing of All Equipment

All equipment, including spares, must pass the 210-day burn-in period and all functional tests in order for the system to be finally accepted by FDOT.