



City of Aurora Network and Wireless Refresh Solution Fiscal 2016

Presented By:

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Cisco Hardware and Software

	Cisco List Price	Extended Price
ACH Replacement for 6513	163,352.00	76,064.00
ACH Replacement for FWSM-1	85,504.00	42,273.00
WTP Replacement for FWSM-1	85,504.00	42,273.00
FS8 Replacement for 6509	231,223.00	109,191.00
FS8 Replacement for 6548 Line Card	29,382.00	13,728.00
ACH Replacement for 6509	271,223.00	127,213.00
WTP Replacement for 6509	271,223.00	127,213.00
Cables and SFPs for Solution	229,010.00	103,617.00
Indoor Wireless	143,100.00	68,002.00
Hardware and Software Sub-Total	1,509,521.00	709,574.00

Total Project: Based on the combined purchase of all Hardware, Software, Professional Services, and Solution Maintenance from Sentinel as detailed in the attached Bill of Materials. Unbundling or materially reducing any of these essential elements of the solution may result in modifications to the cost of the remaining elements.

	Extended Price
Cisco Hardware and Software	709,574.00
Certified Professional Services Implementation	68,140.00
Project Total	\$ 777,714.00 *

** plus applicable shipping & handling*

City of Aurora
ACH Replacement for 6513



Cisco Hardware and Software				
Part Number	Description	Qty	Unit Price	Ext Price
Cisco Catalyst 4500				
WS-C4500X-32SFP+	Catalyst 4500-X 32 Port 10G IP Base Front-to-Back No P/S	2	12,616	25,232
C4KX-PWR-750AC-R	Catalyst 4500X 750W AC front to back cooling power supply	2	902	1,804
C4KX-PWR-750AC-R/2	Catalyst 4500X 750W AC front to back cooling 2nd PWR supply	2	902	1,804
C4KX-NM-BLANK	Catalyst 4500X Network Module Blank	2	-	-
CAB-C15-CBN	Cabinet Jumper Power Cord 250 VAC 13A C14-C15 Connectors	4	-	-
S45XUK9-37E	CAT4500-X Universal Crypto Image	2	-	-
C4500X-IP-ES	IP Base to Ent. Services license for 32 Port Catalyst 4500-X	2	3,605	7,210
CAB-CON-C4K-RJ45	Console Cable 6ft with RJ-45-to-RJ-45	2	-	-
SFP-H10GB-CU3M	10GBASE-CU SFP+ Cable 3 Meter	4	46	184
USB-X45-4GB-E	Catalyst 4500 4GB USB device for Sup7-E	2	226	452
CON-SNT-C45X32SF	SMARTNET 8X5XNBD Catalyst 4500-X 32 Port 10G IP Base	2	1,385	2,770
Cisco Catalyst 2960X				
WS-C2960X-48FPD-L	Catalyst 2960-X 48 GigE PoE 740W 2 x 10G SFP+ LAN Base	8	3,603	28,824
CAB-16AWG-AC	AC Power cord 16AWG	8	-	-
PWR-CLP	Power Retainer Clip For Cisco 3560-C and 2960-C Compact Swit	8	-	-
C2960X-STACK	Catalyst 2960-X FlexStack Plus Stacking Module	8	539	4,312
CAB-STK-E-1M	Cisco FlexStack 1m stacking cable	8	46	368
CON-SNT-WSC296XL	SMARTNET 8X5XNBD Catalyst 2960-X 48 GigE PoE 740W 2 x 10	8	388	3,104
Sub-Total			76,064	

City of Aurora
ACH Replacement for FWSM-1



Cisco Hardware and Software				
Part Number	Description	Qty	Unit Price	Ext Price
	Cisco ASA 5585			
ASA5585-S20X-K9	ASA 5585-X Chas with SSP20 8GE 2SFP+ 2GE Mgt 2 AC 3DES/AES	1	31,537	31,537
ASA5585-PWR-AC	ASA 5585-X AC Power Supply	1	-	-
SF-ASA-X-9.1-K8	ASA 9.1 Software image for ASA 5500-X Series5585-X & ASA-SM	1	-	-
ASA-VPN-CLNT-K9	Cisco VPN Client Software (Windows Solaris Linux Mac)	1	-	-
CAB-C19-CBN	Cabinet Jumper Power Cord 250 VAC 16A C20-C19 Connectors	2	-	-
ASA5585-SEC-PL	ASA 5585-X Security Plus License (Enables 10G SFP+ Ports)	1	-	-
ASA5500-ENCR-K9	ASA 5500 Strong Encryption License (3DES/AES)	1	-	-
ASA-SSP-20-INC	ASA 5585-X Security Services Processor-20 with 8GE	1	-	-
ASA5585-BLANK-F	ASA 5585-X Full Width Blank Slot Cover	1	-	-
ASA5585-BLANK-HD	ASA 5585-X Hard Drive Blank Slot Cover	2	-	-
ASA5585-PWR-AC	ASA 5585-X AC Power Supply	1	-	-
ASA5500-SC-5	ASA 5500 5 Security Contexts License	1	1,690	1,690
CON-SNTP-A85S2XK9	SMARTNET 24X7X4 ASA 5585-X Chas with SSP208GE2SFP+2GE	1	9,046	9,046
Sub-Total			42,273	

City of Aurora
WTP Replacement for FWSM-1



Cisco Hardware and Software				
Part Number	Description	Qty	Unit Price	Ext Price
	Cisco ASA 5585			
ASA5585-S20X-K9	ASA 5585-X Chas with SSP20 8GE 2SFP+ 2GE Mgt 2 AC 3DES/AES	1	31,537	31,537
ASA5585-PWR-AC	ASA 5585-X AC Power Supply	1	-	-
SF-ASA-X-9.1-K8	ASA 9.1 Software image for ASA 5500-X Series5585-X & ASA-SM	1	-	-
ASA-VPN-CLNT-K9	Cisco VPN Client Software (Windows Solaris Linux Mac)	1	-	-
CAB-C19-CBN	Cabinet Jumper Power Cord 250 VAC 16A C20-C19 Connectors	2	-	-
ASA5585-SEC-PL	ASA 5585-X Security Plus License (Enables 10G SFP+ Ports)	1	-	-
ASA5500-ENCR-K9	ASA 5500 Strong Encryption License (3DES/AES)	1	-	-
ASA-SSP-20-INC	ASA 5585-X Security Services Processor-20 with 8GE	1	-	-
ASA5585-BLANK-F	ASA 5585-X Full Width Blank Slot Cover	1	-	-
ASA5585-BLANK-HD	ASA 5585-X Hard Drive Blank Slot Cover	2	-	-
ASA5585-PWR-AC	ASA 5585-X AC Power Supply	1	-	-
ASA5500-SC-5	ASA 5500 5 Security Contexts License	1	1,690	1,690
CON-SNTP-A85S2XK9	SMARTNET 24X7X4 ASA 5585-X Chas with SSP208GE2SFP+2GE	1	9,046	9,046
Sub-Total			42,273	

City of Aurora
FS8 Replacement for 6509



Cisco Hardware and Software				
Part Number	Description	Qty	Unit Price	Ext Price
Cisco Nexus 7009				
N7K-C7009-B2S2E	Nexus 7009 Bundle (Chassis, 1xSUP2E, 5xFAB2), No Power Supplies	1	32,440	32,440
DCNM-PAK	DCNM Advanced License Kit for Nexus and MDS switches	1	-	-
N7K-MODULE-BLANK	Nexus 7000 - I/O Module Blank Slot Cover	5	-	-
N7KS2K9-72	Cisco NX-OS Release 7.2 for Nexus 7000 Series	1	-	-
N7K-C7009-FAB-2	Nexus 7000 - 9 Slot Chassis - 110Gbps/Slot Fabric Module	5	-	-
CAB-C19-CBN	Cabinet Jumper Power Cord, 250 VAC 16A, C20-C19 Connectors	4	-	-
N7K-C7009-FD-MB	Nexus 7009 Front Door Kit	1	676	676
N7K-DP-CORE	N7K or N77 DC Core Deployment; For Tracking Only	1	-	-
N7K-AC-6.0KW	Nexus 7000 - 6.0KW AC Power Supply Module	2	2,704	5,408
N7K-SBUN-P1	Includes LAN, ADV, TRS, EL2, DCNM License - Promotion	1	22,528	22,528
DCNM-N7K-K9-SBUN	DCNM for LAN Enterprise License for one Nexus 7000 Chassis	1	-	-
N7K-LAN1K9-SBUN	Nexus 7000 LAN Enterprise License (L3 protocols)	1	-	-
N7K-EL21K9-SBUN	Nexus 7000 Enhanced layer 2 (includes FabricPath, RISE)	1	-	-
N7K-ADV1K9-SBUN	Nexus 7000 Advanced LAN Enterprise License (VDC, CTS ONLY)	1	-	-
N7K-TRS1K9-SBUN	Nexus 7000 Transport Services License	1	-	-
N7K-SUP2E	Nexus 7000 - Supervisor 2 Enhanced, Includes 8GB USB Flash	1	-	-
N7K-USB-8GB	Nexus 7K USB Flash Memory - 8GB (Log Flash)	1	-	-
N7K-F348XP-25	Nexus 7000 F3-Series 48 Port 10GbE (SFP+)	1	18,022	18,022
N7K-SUP2E	Nexus 7000 - Supervisor 2 Enhanced, Includes 8GB USB Flash	1	18,022	18,022
N7K-USB-8GB	Nexus 7K USB Flash Memory - 8GB (Log Flash)	1	-	-
CON-SNTP-7X9B2S2E	SNTP-24X7X4 Nexus 7009 Bundle (C)	1	11,018	11,018
CON-SAU-N7KSBUN1	SW APP SUPP + UPGR Includes LAN, ADV, T	1	-	-
CON-SAU-N7DCNMSB	SW APP SUPP + UPGR DCNM for LAN Enterpr	1	1,077	1,077
Sub-Total			109,191	

City of Aurora
FS8 Replace for 6548 Line Card



Cisco Hardware and Software				
Part Number	Description	Qty	Unit Price	Ext Price
Cisco Catalyst 2960X				
WS-C2960X-48FPD-L	Catalyst 2960-X 48 GigE PoE 740W 2 x 10G SFP+ LAN Base	3	3,603	10,809
CAB-16AWG-AC	AC Power cord 16AWG	3	-	-
PWR-CLP	Power Retainer Clip For Cisco 3560-C and 2960-C Compact Swit	3	-	-
C2960X-STACK	Catalyst 2960-X FlexStack Plus Stacking Module	3	539	1,617
CAB-STK-E-1M	Cisco FlexStack 1m stacking cable	3	46	138
CON-SNT-WSC296XL	SMARTNET 8X5XNBD Catalyst 2960-X 48 GigE PoE 740W 2 x 10	3	388	1,164
Sub-Total			13,728	

City of Aurora
ACH Replacement for 6509



Cisco Hardware and Software				
Part Number	Description	Qty	Unit Price	Ext Price
Cisco Nexus 7009				
N7K-C7009-B2S2E	Nexus 7009 Bundle (Chassis, 1xSUP2E, 5xFAB2), No Power Supplies	1	32,440	32,440
DCNM-PAK	DCNM Advanced License Kit for Nexus and MDS switches	1	-	-
N7K-MODULE-BLANK	Nexus 7000 - I/O Module Blank Slot Cover	5	-	-
N7KS2K9-72	Cisco NX-OS Release 7.2 for Nexus 7000 Series	1	-	-
N7K-C7009-FAB-2	Nexus 7000 - 9 Slot Chassis - 110Gbps/Slot Fabric Module	5	-	-
CAB-C19-CBN	Cabinet Jumper Power Cord, 250 VAC 16A, C20-C19 Connectors	4	-	-
N7K-C7009-FD-MB	Nexus 7009 Front Door Kit	1	676	676
N7K-DP-CORE	N7K or N77 DC Core Deployment; For Tracking Only	1	-	-
N7K-AC-6.0KW	Nexus 7000 - 6.0KW AC Power Supply Module	2	2,704	5,408
N7K-SBUN-P1	Includes LAN, ADV, TRS, EL2, DCNM License - Promotion	1	22,528	22,528
DCNM-N7K-K9-SBUN	DCNM for LAN Enterprise License for one Nexus 7000 Chassis	1	-	-
N7K-LAN1K9-SBUN	Nexus 7000 LAN Enterprise License (L3 protocols)	1	-	-
N7K-EL21K9-SBUN	Nexus 7000 Enhanced layer 2 (includes FabricPath, RISE)	1	-	-
N7K-ADV1K9-SBUN	Nexus 7000 Advanced LAN Enterprise License (VDC, CTS ONLY)	1	-	-
N7K-TRS1K9-SBUN	Nexus 7000 Transport Services License	1	-	-
N7K-SUP2E	Nexus 7000 - Supervisor 2 Enhanced, Includes 8GB USB Flash	1	-	-
N7K-USB-8GB	Nexus 7K USB Flash Memory - 8GB (Log Flash)	1	-	-
N7K-F348XP-25	Nexus 7000 F3-Series 48 Port 10GbE (SFP+)	2	18,022	36,044
N7K-SUP2E	Nexus 7000 - Supervisor 2 Enhanced, Includes 8GB USB Flash	1	18,022	18,022
N7K-USB-8GB	Nexus 7K USB Flash Memory - 8GB (Log Flash)	1	-	-
CON-SNTP-7X9B2S2E	SNTP-24X7X4 Nexus 7009 Bundle (C)	1	11,018	11,018
CON-SAU-N7KSBUN1	SW APP SUPP + UPGR Includes LAN, ADV, T	1	-	-
CON-SAU-N7DCNMSB	SW APP SUPP + UPGR DCNM for LAN Enterpr	1	1,077	1,077
Sub-Total			127,213	

City of Aurora
WTP Replacement for 6509



Cisco Hardware and Software				
Part Number	Description	Qty	Unit Price	Ext Price
Cisco Nexus 7009				
N7K-C7009-B2S2E	Nexus 7009 Bundle (Chassis, 1xSUP2E, 5xFAB2), No Power Supplies	1	32,440	32,440
DCNM-PAK	DCNM Advanced License Kit for Nexus and MDS switches	1	-	-
N7K-MODULE-BLANK	Nexus 7000 - I/O Module Blank Slot Cover	5	-	-
N7KS2K9-72	Cisco NX-OS Release 7.2 for Nexus 7000 Series	1	-	-
N7K-C7009-FAB-2	Nexus 7000 - 9 Slot Chassis - 110Gbps/Slot Fabric Module	5	-	-
CAB-C19-CBN	Cabinet Jumper Power Cord, 250 VAC 16A, C20-C19 Connectors	4	-	-
N7K-C7009-FD-MB	Nexus 7009 Front Door Kit	1	676	676
N7K-DP-CORE	N7K or N77 DC Core Deployment; For Tracking Only	1	-	-
N7K-AC-6.0KW	Nexus 7000 - 6.0KW AC Power Supply Module	2	2,704	5,408
N7K-SBUN-P1	Includes LAN, ADV, TRS, EL2, DCNM License - Promotion	1	22,528	22,528
DCNM-N7K-K9-SBUN	DCNM for LAN Enterprise License for one Nexus 7000 Chassis	1	-	-
N7K-LAN1K9-SBUN	Nexus 7000 LAN Enterprise License (L3 protocols)	1	-	-
N7K-EL21K9-SBUN	Nexus 7000 Enhanced layer 2 (includes FabricPath, RISE)	1	-	-
N7K-ADV1K9-SBUN	Nexus 7000 Advanced LAN Enterprise License (VDC, CTS ONLY)	1	-	-
N7K-TRS1K9-SBUN	Nexus 7000 Transport Services License	1	-	-
N7K-SUP2E	Nexus 7000 - Supervisor 2 Enhanced, Includes 8GB USB Flash	1	-	-
N7K-USB-8GB	Nexus 7K USB Flash Memory - 8GB (Log Flash)	1	-	-
N7K-F348XP-25	Nexus 7000 F3-Series 48 Port 10GbE (SFP+)	2	18,022	36,044
N7K-SUP2E	Nexus 7000 - Supervisor 2 Enhanced, Includes 8GB USB Flash	1	18,022	18,022
N7K-USB-8GB	Nexus 7K USB Flash Memory - 8GB (Log Flash)	1	-	-
CON-SNTP-7X9B2S2E	SNTP-24X7X4 Nexus 7009 Bundle (C)	1	11,018	11,018
CON-SAU-N7KSBUN1	SW APP SUPP + UPGR Includes LAN, ADV, T	1	-	-
CON-SAU-N7DCNMSB	SW APP SUPP + UPGR DCNM for LAN Enterpr	1	1,077	1,077
Sub-Total			127,213	

City of Aurora
Cables and SFPs



Cisco Hardware and Software				
Part Number	Description	Qty	Unit Price	Ext Price
Cables and SFPs				
SFP-10G-SR-S=	10GBASE-SR SFP Module, Enterprise-Class (2 extras for spares)	25	293	7,325
SFP-H10GB-CU3M=	10GBASE-CU SFP+ Cable 3 Meter	4	46	184
SFP-10G-LRM=	10GBASE-LRM SFP Module	4	449	1,796
SFP-10G-ER=	10GBASE-ER SFP Module	1	4,506	4,506
GLC-T=	1000BASE-T SFP (2 extras for spares)	10	178	1,780
CAB-STK-E-3M=	Cisco Bladeswitch 3M stack cable	2	136	272
DWDM-SFP10G-58.17=	10GBASE-DWDM 1558.17 nm SFP10G (100-GHz ITU grid)	1	9,011	9,011
DWDM-SFP10G-31.90=	10GBASE-DWDM 1531.90 nm SFP10G (100-GHz ITU grid)	2	9,011	18,022
SFP-10G-SR-S=	10GBASE-SR SFP Module, Enterprise-Class	4	293	1,172
GLC-T=	1000BASE-T SFP	4	178	712
DWDM-SFP10G-58.17=	10GBASE-DWDM 1558.17 nm SFP10G (100-GHz ITU grid)	1	9,011	9,011
DWDM-SFP10G-31.90=	10GBASE-DWDM 1531.90 nm SFP10G (100-GHz ITU grid)	2	9,011	18,022
DWDM-SFP10G-58.98=	10GBASE-DWDM 1558.98 nm SFP10G (100-GHz ITU grid)	1	9,011	9,011
SFP-10G-SR-S=	10GBASE-SR SFP Module, Enterprise-Class	4	293	1,172
GLC-T=	1000BASE-T SFP	8	178	1,424
SFP-10G-LRM=	10GBASE-LRM SFP Module	2	449	898
SFP-10G-LR-S=	10GBASE-LR SFP Module, Enterprise-Class	1	857	857
DWDM-SFP10G-58.17=	10GBASE-DWDM 1558.17 nm SFP10G (100-GHz ITU grid)	2	9,011	18,022
IM-LC/LC50MMDAQ – 03	3 meter multi-mode lc/lc	12	35	420
Sub-Total			103,617	

City of Aurora
Indoor Wireless



Cisco Hardware and Software				
Part Number	Description	Qty	Unit Price	Ext Price
Cisco Wireless Controllers				
AIR-CT5520-K9	Cisco 5520 Wireless Controller w/rack mounting kit	2	9,011	18,022
LIC-CT5520-DTLS-K9	Cisco 5520 Wireless Controller DTLS License	2	-	-
CAB-N5K6A-NA	Power Cord 200/240V 6A North America	2	-	-
AIR-CT5520-SW-8.1	Cisco 5520 Wireless Controller SW Rel. 8.1	2	-	-
AIR-PSU1-770W	770W AC Hot-Plug Power Supply for 5520 Controller	2	-	-
AIR-BZL-C220M4	Cisco 5520 Wireless Controller Security Bezel	2	-	-
AIR-CPU-E52609D	1.90 GHz E5-2609 v3/85W 6C/15MB Cache/DDR4 1600MHz	2	-	-
AIR-CT6870-NIC-K9	PCIe Network Interface 20G	2	-	-
AIR-MR-1X081RU-A	8GB DDR4-2133-MHz RDIMM/PC4-17000/single rank/x4/1.2v	8	-	-
AIR-SD-32G-S	32GB SD Card for UCS servers	2	-	-
AIR-SD240G0KS2-EV	240GB 2.5 inch Enterprise Value 6G SATA SSD	2	-	-
AIR-TPM2-001	Trusted Platform Module 1.2 for UCS (SPI-based)	2	-	-
CON-SNT-AIRT5520	SMARTNET 8X5XNBD Cisco 5520 Wireless Controller	2	2,000	4,000
Cisco ONE Licensing				
C1-AIR-K9	Cisco ONE - Wireless License Suite	1	-	-
C1FPAIRK9	Cisco ONE Foundation Perpetual - Wireless	50	158	7,900
C1-ISE-BASE-AP	Cisco ONE Identity Services Engine 25 EndPoint Base Lic	50	-	-
C1-MSE-LS-1	Cisco ONE Mobility Services Engine Base Location 1AP license	50	-	-
C1-PI-LFAS-AP-K9	Cisco ONE PI Device License for LF & AS for WLAN	50	-	-
C1-WLC-1	Cisco ONE Wireless LAN Controller AP License (any WLC)	50	-	-
C1-MSE-PAK	Cisco ONE MSE License PAK	1	-	-
C1-WLC-PAK	Cisco ONE Wireless LAN Controller AP License PAK (any WLC)	1	-	-
CON-ECMU-C1AIRK	SWSS UPGRADES Cisco ONE - Wireless	1	-	-
CON-ECMU-C1FPAIR	SWSS UPGRADES C1 Foundation Perpetual - Wireless	50	41	2,050
Wireless Access Points				
AIR-CAP3702I-AK910	802.11ac Ctrlr 10APs 4x4:3SS w/CleanAir; Int; A Reg Domain	5	6,736	33,680
SWAP3700-RCOVRY-K9	Cisco 3700 Series IOS WIRELESS LAN RECOVERY	50	-	-
AIR-AP-BRACKET-1	802.11n AP Low Profile Mounting Bracket (Default)	50	-	-
AIR-AP-T-RAIL-R	Ceiling Grid Clip for Aironet APs - Recessed Mount (Default)	50	-	-
AIR-CAP3702I-ABULK	BOM Level AP3700i Bulk PID for A reg domain	50	-	-
CON-SNT-C372IA10	SMARTNET 8X5XNBD 802.11ac Ctrlr 10APs	5	-	-
CON-SNT-C372IAB	SMARTNET 8X5XNBD BOM Level AP3700i Bu	50	47	2,350
Sub-Total			68,002	

General Proposal Assumptions

Product Lead Times

Depending on the technologies quoted, orders may be direct or through distribution. Lead times should be expected to be 8 weeks but can exceed 8 weeks. Should expedited equipment requirements arise, there could be an additional charge to source through a warehousing distribution partner.

Site Readiness and Site Survey Requirement:

Every effort has been made to ensure that proper power cords and patch cables have been included to match your environment's infrastructure. The notes section of the Bill of Materials (BOM) explicitly states the quantity and type of cords quoted.

Customer waives the opportunity to complete a site/closet checklist, has reviewed the BOM and agrees to quantity, type and length of the power and patch cables provided. Financial obligation for labor and materials for changes identified post order will be Customer's responsibility.

Fiber

It is assumed that Customer's existing fiber will support proposed transmission speeds (i.e. 1GB, 10GB, 40GB, etc.). Customer must ensure that the fiber optic cabling is within manufacturer tolerances for distance and loss in order to support the required transport speeds. In some cases specialized equipment such as attenuators and mode conditioning cables may be required to properly support these speeds. This equipment will be at the expense of Customer.

Optics (SFP, SFP+, GBIC, etc.)

Every effort was made in the pre-sales process through white board sessions, BOM reviews and diagrams to identify any and all optics required. **OPTICS AS QUOTED AND SOLD ASSUME A STAND ALONE SYSTEM UNLESS OTHERWISE NOTED.** Migration items and integration items to existing equipment, if not noted, are not included nor is time for the interconnection, planning or design of same. Should any question exist as to the total number, types and use of the optics, Sentinel can set up a design review and white board session prior to the order upon request.

It may be determined during the blueprint process that additional connections are required or recommended. These will require an additional purchase cost to Customer. Sentinel makes a best effort to avoid any foreseeable additional purchases, but in most cases the final connectivity varies slightly either for a technical reason or due to a physical requirement and this is beyond the fixed price solution design.

Power, Racks and Cooling

Like the optics, Sentinel has made a best effort to match any power requirements and answer any requests of Customer related to equipment specifications, power cables included or other physical requirements. Any adjustments to fit in racks, connect to specific power terminal types, or secure electrician services to run a new service are beyond the fixed bid project price. Sentinel will respond to any inquiry and provide product literature. Any sizing charts provided are done so as a convenience to the client and DO NOT represent a commitment by Sentinel that, as sold, the equipment is ready for Customer site. Sentinel offers Technology Area Design (TAD) consulting services should Customer prefer a more formal and accurate solution.

Patch Cables/Cable Lengths

In most cases the BOM includes any note(s) on cable lengths included. Without the design validation of a formal TAD engagement, only a best effort is made to match the site requirements. Any changes to the cord lengths, connectors or other site readiness items will be in addition to the solution once the order is placed with the manufacturer(s). Many of the vendors offer the ability to select the appropriate items prior to order, but will charge for any replacements needed after the order and this offer will be extended to Customer through the Sentinel Project Change Request (PCR) process. Unless specified, Sentinel assumes Customer will provide all patch cables needed and can provide the product literature on any devices upon request.

Labor Union Requirements

Sentinel has **NOT** included any parameters for Union workers. Any requirement would require a subcontract arrangement to be determined up front and would increase the cost of deployment.

Permits & Access

Unless otherwise agreed, all permits, variances, access to facilities, roof access, building warranty concerns or other site specific information and procedures are the responsibility of Customer. Sentinel can assist as needed, but will need to be informed of any requirements prior to the site survey to consider these within the validation process.

Remote Support

Sentinel's service estimate assumes remote access support through IP VPN or IP PPP connection. Without this access, additional services may be incurred for optimization and tuning required pre and post installation.

Project Changes Request

Sentinel assumes, unless noted here, that Customer will patch in all equipment to the cabling plant within the facility. Sentinel can perform this connection service at an additional charge with an approved PCR.

Cisco Data Center – UCS & MDS

Cisco UCS

Cisco UCS sizing has been estimated to the best of Sentinel's ability. Without a complete data center assessment of the current virtual and non-virtual servers as well as planned projections of requirements, the UCS system has been included as a best effort only and changes are subject to financial investment through the project change process.

Unified Fabric

Sentinel has made a best effort to confirm optics and cables required. Patch cables required between the FlexPod and the networks are the responsibility of Customer.

Pricing

Pricing is valid for 30 days from date of quote delivery unless otherwise noted.

Pricing assumes payment via company check or electronic funds transfer. Alternate payment methods may incur an additional charge.