



National
SPORTS CENTER

National Sports Center Foundation

&

Minnesota Amateur Sports Commission

REQUEST FOR PROPOSALS

Network Refresh

National Sports Center

Project Overview

The Minnesota Amateur Sports Commission (MASC) and the National Sports Center Foundation (NSCF) requests proposals from contractors (Firm) with experience in technology infrastructure to provide turnkey network and Wi-Fi implementation on the National Sports Center (NSC).

The NSC is a multi-sport complex located at 1750 105th Ave. NE, in Blaine, Minnesota. The campus is a 600-acre site including a soccer stadium, over 50 full-sized soccer fields, a golf course, a meeting facility, and an eight-sheet ice rink. The facility hosts over 100 unique programs, external events, and receives over 4.1 million annual visits. See Attachment A for a current map of the National Sports Center campus.

Goal

The goal of this Request for Proposals (RFP) is to evaluate companies that can purchase, install, test, and commission a turnkey Local Area Network and Wi-Fi including network core, access switches, Wi-Fi controllers, access points, and servers.

Scope of Work

- Design, architect, procure hardware, stage, test, and commission the LAN infrastructure and Wi-Fi.
- Include all required components and services for a fully functioning turnkey system.
- Install and configure all devices following manufacturer specifications.
- Provide at least 40 hours of operational training for NSCF staff.
- Appoint a Project Manager for the Converge Network build-out whose responsibilities will include:
 - Coordinate design with NSCF staff for the implementation of aesthetic considerations.
 - Coordinate with the low voltage cabling vendor and keep NSCF staff updated about Network progress.
- Perform all system testing, optimization, and commissioning per manufacturer upon completion of the physical installation.
- Recycle or dispose of replaced equipment.
- Project is expected to achieve Substantial Completion by July 1, 2024.
- NSCF requires event support activities for a minimum of four events after Substantial Completion is achieved to validate and confirm everything is designed and working as designed in the specification.

The Firm is responsible for any permits, licenses, certificates, and authorizations for installation activities.

Tasks

1. Local Area Network

- a. Architect, install, configure, test, and document core switches, access switches, and equipment associated with Server, Wireless, and Internet connectivity.
- b. Develop and implement a LAN System architecture and design based on industry standards that facilitate secure, reliable operation of all endpoints within the campus.
- c. Develop a detailed network diagram of proposed connectivity with all technology sub-systems.
- d. Components in the Data Center to include:
 - Core networking switch
 - Distribution switches as needed
 - Firewall appliances
 - Wireless controller
 - Routers as needed
 - Uninterruptible Power Supply (UPS) with a minimum of 30 minutes run time to support all hardware in the Data Center
- e. Components in IDF rooms to include:
 - Network switches
 - Category 6 / 6a cables from patch panel to switches
 - UPS with a minimum run time of 20 minutes to support hardware included in IDF room
 - Environmental monitoring to monitor temperature, humidity, and water detection in IDF rooms
- f. VLAN determination, assignment, configuration, and implementation
- g. Configure applicable software licenses and register required warranty.
- h. Spec server infrastructure to build multiple Virtual Machines and Storage to meet NSCF's requirements.

2. Wi-Fi

- a. Provide Wi-Fi connectivity to all office spaces and press boxes of the stadium.
- b. Wi-Fi 6e for internal locations and Wi-Fi 6 for outdoor locations to be used as basis of design.
- c. Typical Access Point locations to be identified for base design.
- d. Typical design assumes 125 Access Points with an equal number of indoor and outdoor rated APs.
- e. Identify Access Point placements that suit manufacturer hardware and provide optimal coverage.
- f. Wi-Fi system to have Staff SSID, which will be based on username & password with Secure SSID access for other IOT / POS / other devices to be connected based on different username & password combinations. Based on entered credentials, access to be re-directed to specific VLANs.

3. Non-Functional Requirements

- a. LAN and Wi-Fi should be designed to operate 24*7*365 days irrespective of games, events, or any activities at the campus.
- b. LAN and Wi-Fi system should be 24*7 active and operational.
- c. Wi-Fi should not interfere with
 - Wireless intercoms
 - Wireless microphones
 - Wireless telephone headsets
 - Facility Radio System
 - Bluetooth devices
 - Assisted Listening System (ALS) Devices
- d. Firm will provide a minimum of 40 hours of operational training to NSCF staff.

4. Integration with Other Technologies

- a. Be involved in discussions with each of the required scopes to ensure the LAN system can integrate seamlessly with all sub-systems.
- b. Technologies leveraging the Firm's Converge Network, including but not limited to:
 - Point of Sales
 - IPTV
 - Press
 - Ticket scanners
 - Ticket office
 - Security cameras
 - Access control system
 - Scoreboard controls
 - Production control room
 - Audio/visual systems

Contingency

The NSCF plans for up to \$300,000 in contingency costs to cover unforeseen and planned conditions. Please include the \$300K as a line item in your response.

Locational Information

The NSCF will identify one Data Center room and 14 other IDF rooms/rack spaces across the campus. Structured cabling will be covered as part of the NSCF's base scope.

Sustainability

The NSCF is committed to advancing the State of Minnesota's goal of creating a carbon-neutral, resilient, and equitable future. The willingness and ability to mitigate the environmental impact of a contractor's products and services will be considered when evaluating and selecting a Firm.

Value Engineering

The NSCF wishes to discuss with qualified Firms the opportunity of alternatives that would result in cost savings for the project. Firms who wish to submit value engineering must include the cost savings item(s) in their proposal submission as a separate line item. All items submitted may/may not be considered.

Partnership

The NSCF is a Not for Profit 501(c)(3) that partners with companies to help support healthy, active lifestyles in youth through sport. These partnerships allow the NSCF to keep participation cost low for youth and families and strive never to let the cost be the barrier for participation. We welcome your thoughts and ideas for partnerships your organization can bring as part of this proposal.

Commitment to Diversity and Inclusion

The NSCF is committed to diversity and inclusion in its procurement process. The goal is to ensure that companies providing goods and services to the NSCF are representative of the communities it serves and includes businesses owned by racial minorities, women, veterans, and those with substantial physical disabilities. The NSCF considers this community representation as a factor when evaluating and selecting contractors.

Responders who wish to be considered as representing the communities described above must declare that their business is at least 51% owned by a woman, racial minority, or person with a substantial physical disability. The business must also be operated and controlled on a day-to-day and long-term basis by the qualifying owner.

Proposal Content

Please submit the following information:

1. Cover Letter. Include details for the Firm's main point of contact. Must be signed by an authorized Firm representative.
2. Qualifications and Experience. Provide 5-10 examples of similar projects completed within the last five years. Detail any network outages or breaches within the last three years.
 - If possible, include the following details for similar projects: project name, location, timeline of contract execution to substantial completion, scope of involvement, contract value, and OEM used for LAN, Wi-Fi, and VoIP
3. Work Plan. Include a timeline, cost detail (see Attachment D for Bill of Materials), and description of how the Firm plans to accomplish items listed under Tasks, separated into the following categories:
 - A. Local Area Network
 - Include Firewall appliances planned to be used
 - Include OEMs planned to be used
 - B. Wi-Fi
 - Include OEMs planned to be used
 - Include initial draft of Access Point placements, provide "heat map"
 - Include cost to install all Access Points
 - C. Non-Functional Requirements
 - Include an initial Physical and Logical design (see Attachments B and C for samples)
 - Include outline of operational training for NSCF staff, minimum of 40 hours
 - D. Integration with Other Technologies
4. Sustainability. Indicate the Firm's plans for mitigating the environmental impact of its services.
5. Optional: Value Engineering. Indicate opportunities for alternatives that would result in cost savings.
6. Optional: Partnership. Indicate ideas for partnerships to support the NSCF's mission.
7. Optional: Community Representation. If applicable, include a letter declaring that the responder is at least 51% owned and is operated/controlled on a day-to-day and long-term basis by a woman, racial minority, or person with a substantial physical disability. The letter must be signed by the qualifying owner.

Questions

Karah Lodge of the Minnesota Amateur Sports Commission is the authorized point of contact on behalf of the NSCF. Unauthorized contact with any other parties involved in the project or any staff members of the NSCF may result in the bidder's disqualification.

Responders may request a site visit of the NSC to verify assumed existing conditions only.

Questions and visit requests shall be submitted to:

Karah Lodge

klodge@mnsports.org

Proposal Submission Instructions

Submit proposals to Karah Lodge by Tuesday, November 21, 2023, no later than 4:00 p.m.

Submittals can be made at klodge@mnsports.org or via the DropBox link below:

<https://www.dropbox.com/request/FPKNSvWsZKnZ1Ilcau9K>

Proposal Timeline

11/7/23 – RFP is published

11/21/23 – responses are due

11/21-11/28/23 – Interviews with responders

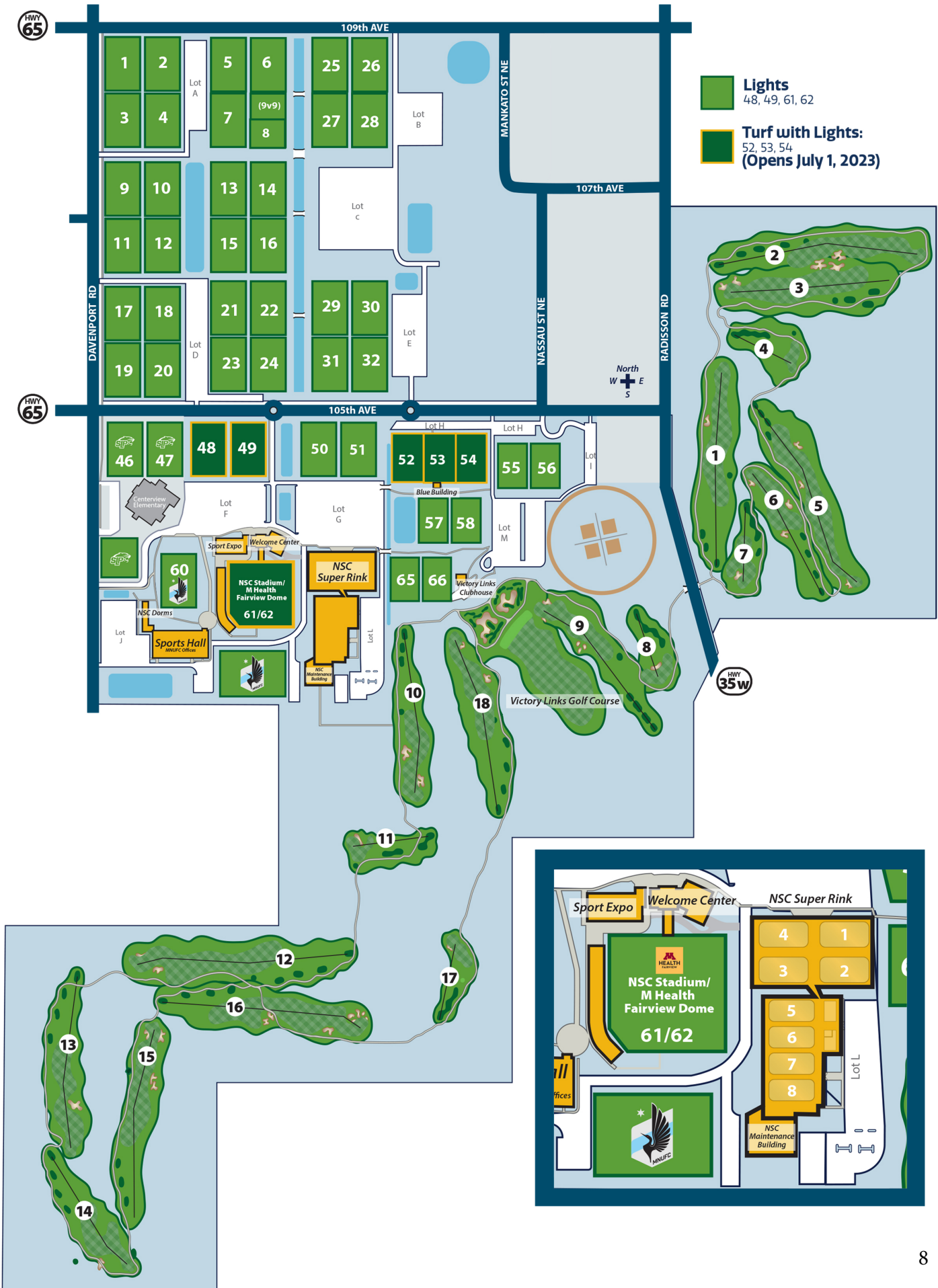
12/1/23 – Selection and verbal award of contract

12/8/23 – Agreement execution

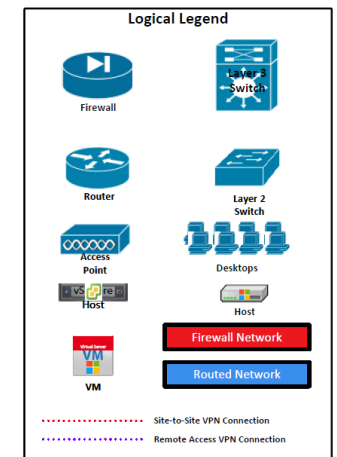
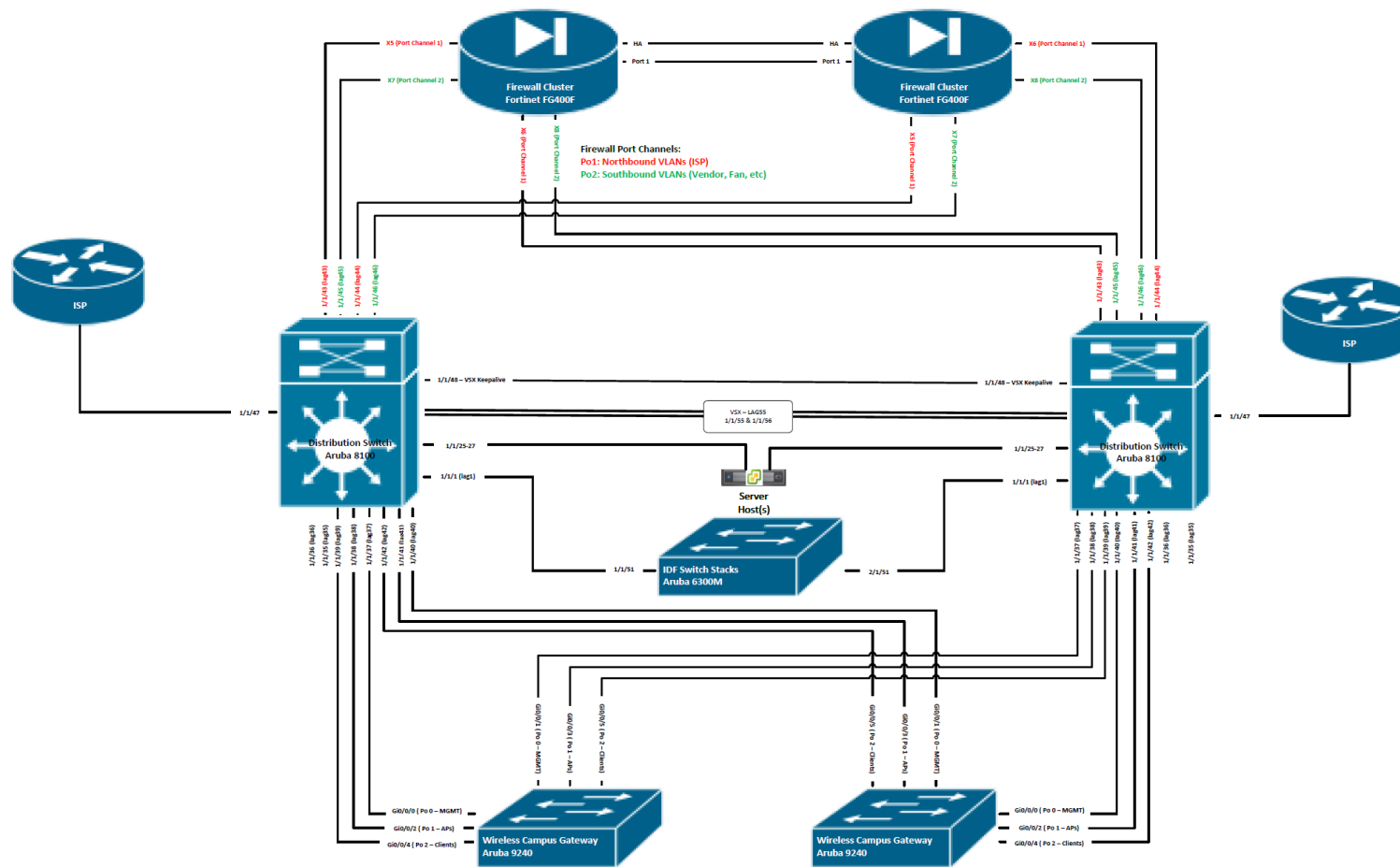
12/15/23- First Billing submitted

NSC Full Campus Map

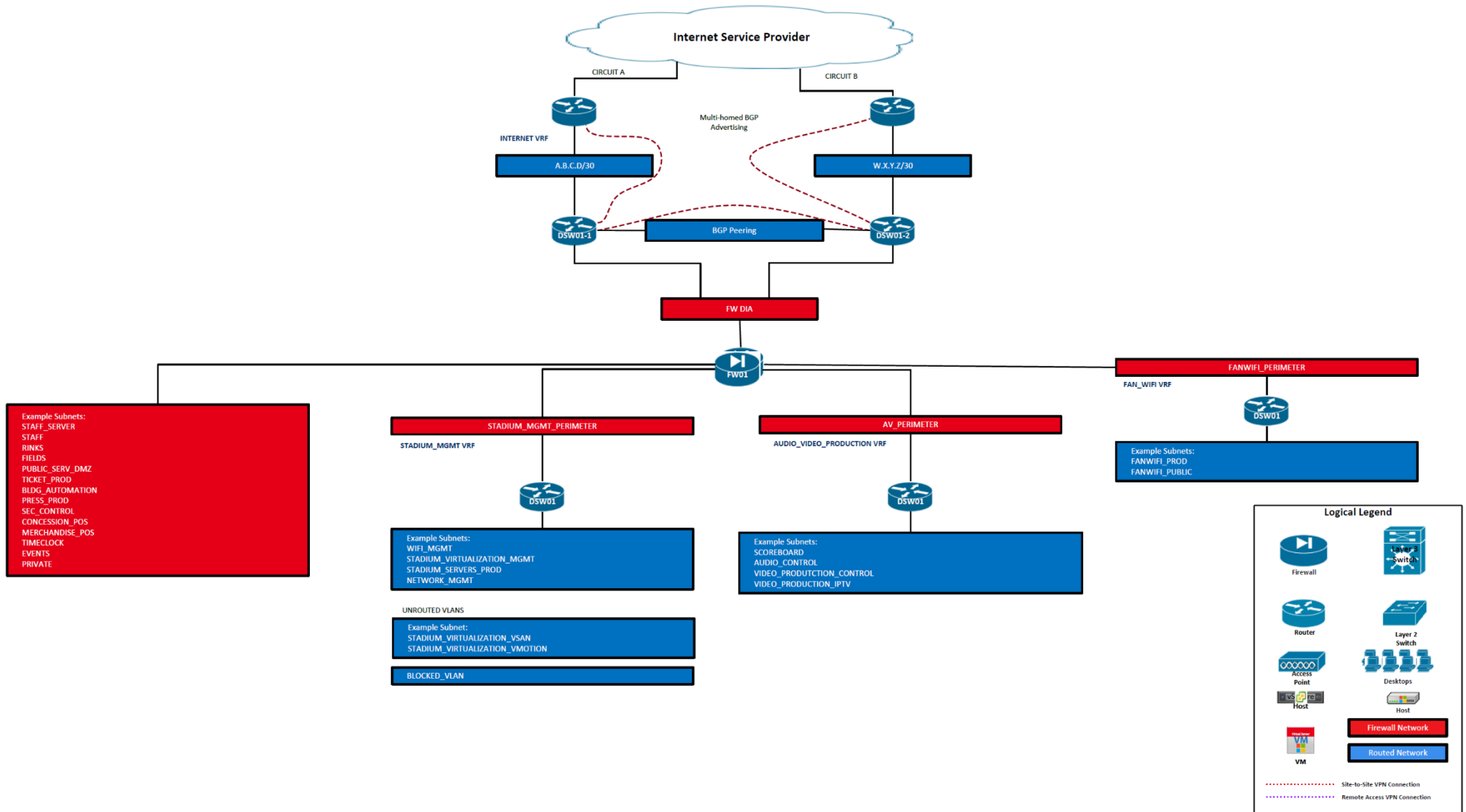
Attachment A: Campus Map



Attachment B: Sample Physical Design



Attachment C: Sample Logical Design



Attachment D: Bill of Materials (BOM)

BASED ON ARUBA HARDWARE			
#	PART#	DESCRIPTION	QTY
1	R9W86A	Aruba 8100 24SFP+ 4QSFP28 FB 3F 2AC Bundle	2
2	R9W86A- ABA	INCLUDED: Power Cord - U.S. localization	2
3	H83N7E	Aruba 1Y FC NBD 8100 24SFP+ FB SVC [for R9W86A]	2
4	JL307A	Aruba 100G QSFP28-QSFP28 3m DAC Cable	2
5	JZ399AAE	Aruba ClearPass Cx000V VM Appliance E-LTU	2
6	H9WX2E	Aruba 1Y FC SW CP Cx000V VMAppl E-L SVC [for	2
7	JZ404AAE	Aruba ClearPass NL AC 5K CE E-LTU	1
8	H9XQ6E	Aruba 1Y FC SW CP NL AC 5K CE E-L SVC [for	1
9	JY896AAE	Aruba MCR-VA-1K Mobility Conductor Virtual	2
10	H5UE9E	Aruba 1Y FC SW MM-VA-1K ELTU SVC [for JY896AAE]	2
11	R4H23A	Aruba AP-577 (US) Outdoor 11ax AP	70
12	JW053A	AP-270-MNT-V2 AP-270 Series Outdoor Pole/Wall	70
13	JW055A	AP-270-MNT-H2 AP-270 Series Access Flush Wall or	70
14	R7J39A	Aruba AP-655 (US) Campus AP	70
15	S0J40A	AP-MNT-MP10-U AP mount bracket 10-pack Universal	7
16	JW744A	Aruba 7210 (US) 4p 10GBase-X (SFP+) 2p Dual Pers	2
17	H3DR1E	Aruba 1Y FC NBD Exch 7210 Cntlr SVC [for JW744A]	2
18	JW657A	Aruba PSU-350-AC 7200 Series S3500-24T S3500-48T	2
19	JW124A	PC-AC-NA North America AC Power Cord	4
20	JW472AAE	Aruba LIC-AP Controller per AP Capacity License E-LTU	140
21	JW473AAE	Aruba LIC-PEF Controller Policy Enforcement Firewall	140
22	JL659A	Aruba 6300M 48SR5 CL6 PoE 4SFP56 Switch	11
23	JL087A	Aruba X372 54VDC 1050W AC Power Supply	22
24	JL087A- ABA	INCLUDED: Power Cord - U.S. localization	22
25	R0M47A	Aruba 50G SFP56 to SFP56 3m DAC Cable	26
26	JL660A	Aruba 6300M 24SR5 CL6 PoE 4SFP56 Switch	15
27	JL087A	Aruba X372 54VDC 1050W AC Power Supply	30
28	JL087A- ABA	INCLUDED: Power Cord - U.S. localization	30
29	JL669B	Aruba X751 FB Fan Tray	15
30	R8N89A	Aruba 6000 12G CL4 PoE 2G/2SFP 139W Switch	10
31	R8N89A- ABA	INCLUDED: Power Cord - U.S. localization	10
32	FG-400F-BDL-950-	FortiGate-400F Hardware plus 1 Year FortiCare	2
33	FN-TRAN-SX	INCLUDED: 1GE SFP SX transceiver module for systems	4
34	SMX1500RM2UCNC	APC Smart-UPS X, Line Interactive, 1500VA,	14

BOM continued through page 14

BASED ON DELL HARDWARE			
#	PART#	DESCRIPTION	QTY
1	PowerEdge R550 Server	[210-AZEG]	1
2	Chassis with up to 8x2.5"	[379-BDTF]	1
3	SAS/SATA Backplane	[379-BDSS]	1
4	Trusted Platform Module 2.0	[461-AAIG]	1
5	2.5" Chassis with up to 8 Hard	[321-BKJL]	1
6	Intel® Xeon® Silver 4314 2.4G,	[338-CBWK]	1
7	No Additional Processor	[374-BBBX]	1
8	Standard Heatsink for 1 CPU	[412-AAVU] [412-AAXL]	1
9	Performance Optimized	[370-AAIP]	1
10	3200MT/s RDIMMs	[370-AEVR]	1
11	(4) 32GB RDIMM, 3200MT/s,	[370-AGDS]	4
12	C4, RAID 5 for 3 or more HDDs	[780-BCDP]	1
13	Front PERC H755 Rear Load	[405-AAZB] [750-ACFQ]	1
14	(6) 2.4TB 10K RPM SAS ISE	[400-AVEZ]	6
15	Performance BIOS Setting	[384-BBBL]	1
16	UEFI BIOS Boot Mode with	[800-BBDM]	1
17	Standard Fan Cold Swap 2U,V2	[750-ADIN]	1
18	Dual, Hot-plug, Power Supply	[450-AIQX]	1
19	(2) NEMA 5-15P to C13 Wall	[450-AALV]	2
20	(2) C13 to C14, PDU Style, 12	[492-BBDI]	2
21	1 CPU, 1x16 LP+ 1x8(x4 link)	[330-BBWI]	1
22	PowerEdge R550	[329-BGIB]	1
23	Intel X710-T2L Dual Port	[540-BCRS]	1
24	No Bezel	[350-BBBW] [350-BCFM]	1
25	BOSS-S2 controller card + with	[403-BCMG] [470-BBJK]	1
26	VMware ESXi 8.0 Embedded	[634-BZQR]	1
27	Windows Server 2022	[634-BYJZ]	1
28	No Media Required	[605-BBFN]	1
29	iDRAC9, Enterprise 15G	[385-BBQV]	1
30	Server Secured Component	[528-COYT]	1
31	No Quick Sync	[350-BCER]	1
32	iDRAC,Factory Generated	[379-BCSF]	1
33	iDRAC Service Module (ISM),	[379-BCQX]	1
34	iDRAC Group Manager,	[379-BCQY]	1
35	ReadyRails Static Rails for 2/4-	[770-BDRR] [770-BDZN]	1
36	No Internal Optical Drive	[429-AAIQ]	1
37	No Systems Documentation,	[631-AACK]	1
38	PowerEdge R550 Shipping	[340-CVKM]	1
39	PowerEdge R550 Shipping	[343-BBRT]	1
40	PowerEdge 2U CCC Marking,	[389-DYHB] [389-DYMO]	1
41	Basic Next Business Day 36	[709-BBFL]	1

BASED ON DELL HARDWARE			
#	PART#	DESCRIPTION	QTY
42	Prosupport Plus and 4Hr	[865-BBNF]	1
43	VSAN-RN R650	[210-AZKY]	2
44	vSAN Original Storage	[634-CCSG]	2
45	Hybrid IDM, VSAN-RN R650	[350-BCBE] [350-BCFN]	2
46	10x2.5 Front Storage	[379-BEID]	2
47	SAS/SATA Backplane	[379-BDSS]	2
48	No Rear Storage	[379-BDTE]	2
49	Trusted Platform Module 2.0	[461-AAIG]	2
50	2.5" Chassis with up to 10	[321-BGKY]	2
51	Intel® Xeon® Silver 4314 2.4G,	[338-CBWK]	2
52	No Additional Processor	[374-BBBX]	2
53	Heatsink for 1 CPU	[412-AAVO]	2
54	Performance Optimized	[370-AAIP]	2
55	3200MT/s RDIMMs	[370-AEVR]	2
56	(4) 32GB RDIMM, 3200MT/s,	[370-AGDS]	8
57	C1, No RAID for HDDs/SSDs	[780-BCDI]	2
58	Front HBA355i Rear Load	[405-AAXY] [750-ACFQ]	2
59	(2) 800GB SSD SAS Mixed Use	[345-BEPV]	4
60	(8) 1.2TB Hard Drive SAS	[400-BEFU]	16
61	UEFI BIOS Boot Mode with	[800-BBDM]	2
62	3 High Performance Fans for 1	[750-ADIF]	2
63	Dual, Hot-plug, Power Supply	[450-AIQZ]	2
64	(2) NEMA 5-15P to C13 Wall	[450-AALV]	4
65	(2) C13 to C14, PDU Style, 12	[492-BBDI]	4
66	Riser Config 0, 1CPU, Half	[330-BBRQ]	2
67	PowerEdge R650	[329-BFGW]	2
68	Intel X710-T2L Dual Port	[540-BCRS]	2
69	LCD Bezel for x8 and x10	[325-BECJ] [350-BCEI]	2
70	BOSS-S2 controller card + with	[403-BCMB] [403-BCNP]	2
71	VMware ESXi 8.0 Embedded	[634-BZQR]	2
72	Windows Server 2022	[634-BYKB]	2
73	No Media Required	[605-BBFN]	2
74	(2) 50-pack of Windows	[634-BYKK]	4
75	(2) Microsoft SQL Server 2022	[634-BZVX]	4
76	iDRAC9, Enterprise 15G	[385-BBQV]	2
77	No Quick Sync	[350-BBXM]	2
78	iDRAC,Factory Generated	[379-BCSF]	2
79	iDRAC Service Module (ISM),	[379-BCQX]	2
80	iDRAC Group Manager,	[379-BCQV]	2
81	ReadyRails Sliding Rails With	[770-BDMU] [770-BECD]	2
82	No Systems Documentation,	[631-AACK]	2

BASED ON DELL HARDWARE			
#	PART#	DESCRIPTION	QTY
83	PowerEdge R650 Shipping	[340-CUQR]	2
84	R650 Ship 4x3.5, 10x2.5, 8x2.5	[340-CUQN]	2
85	PowerEdge R650 CE and BIS	[343-BBQY] [389-DYHY]	2
86	Basic Next Business Day 36	[709-BBFM]	2
87	Prosupport Plus and 4Hr	[865-BBNF]	2