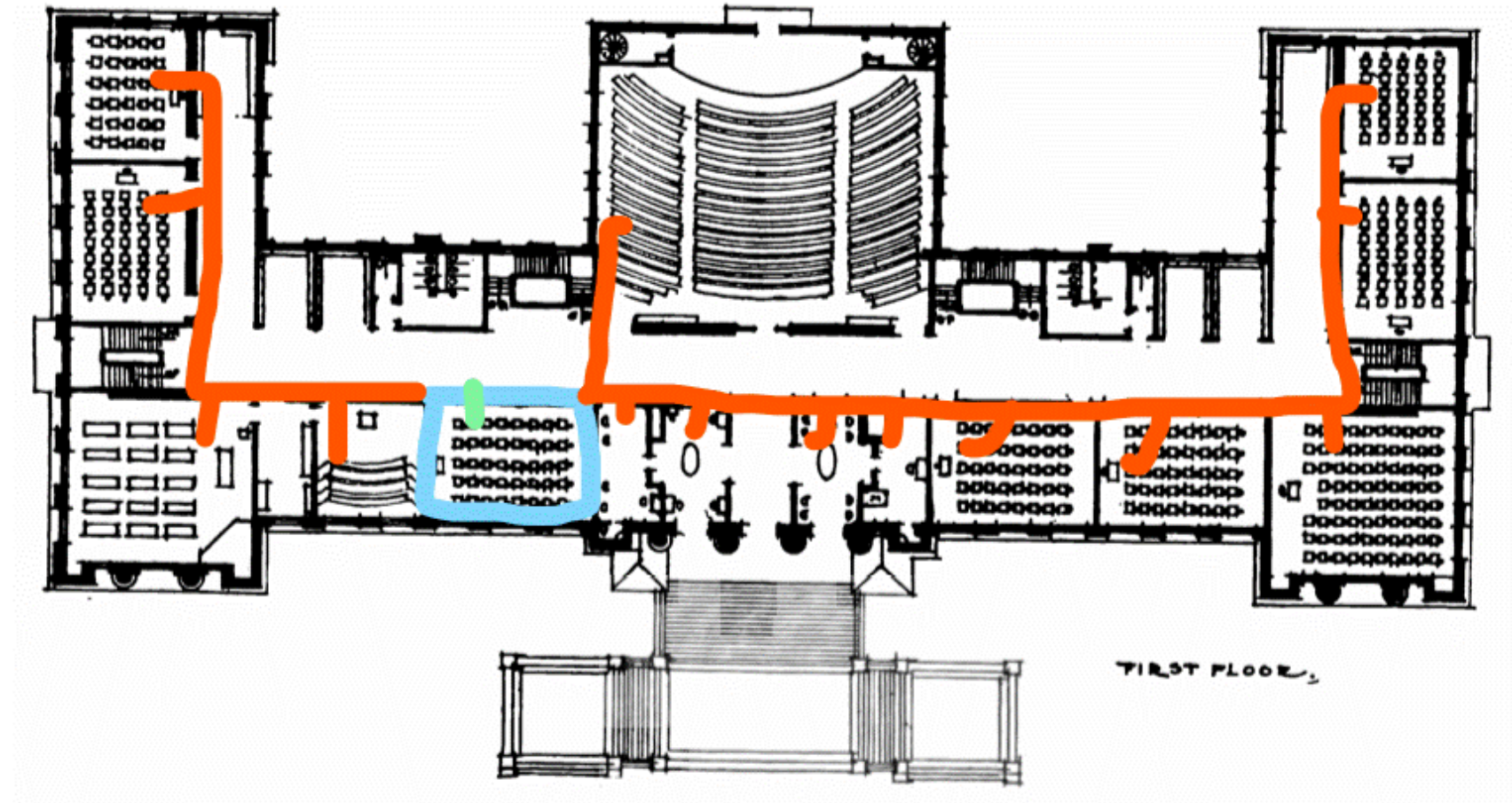


Wiring Maury High School

Casey Brown 01214177

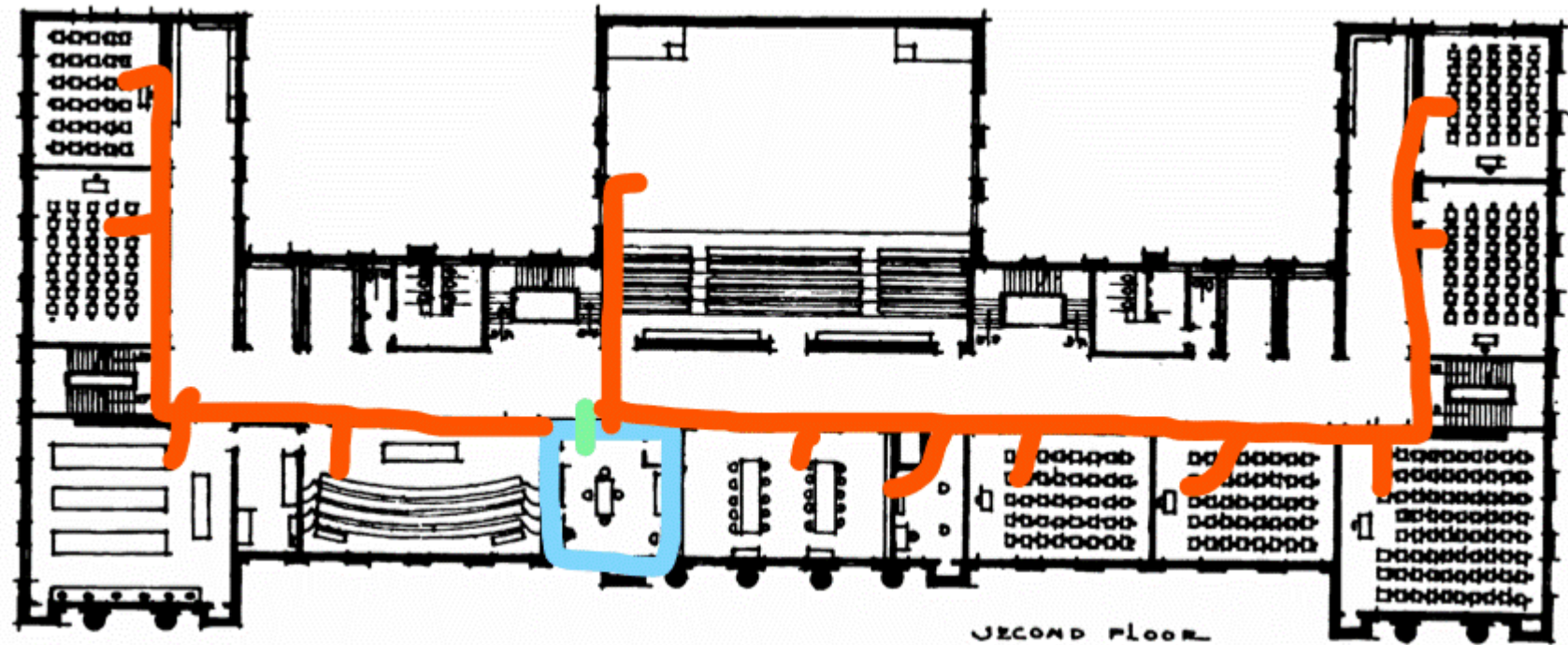
Floor 1 Cabling

-  Cable closet
-  Cabling for each room
-  Cable between floors



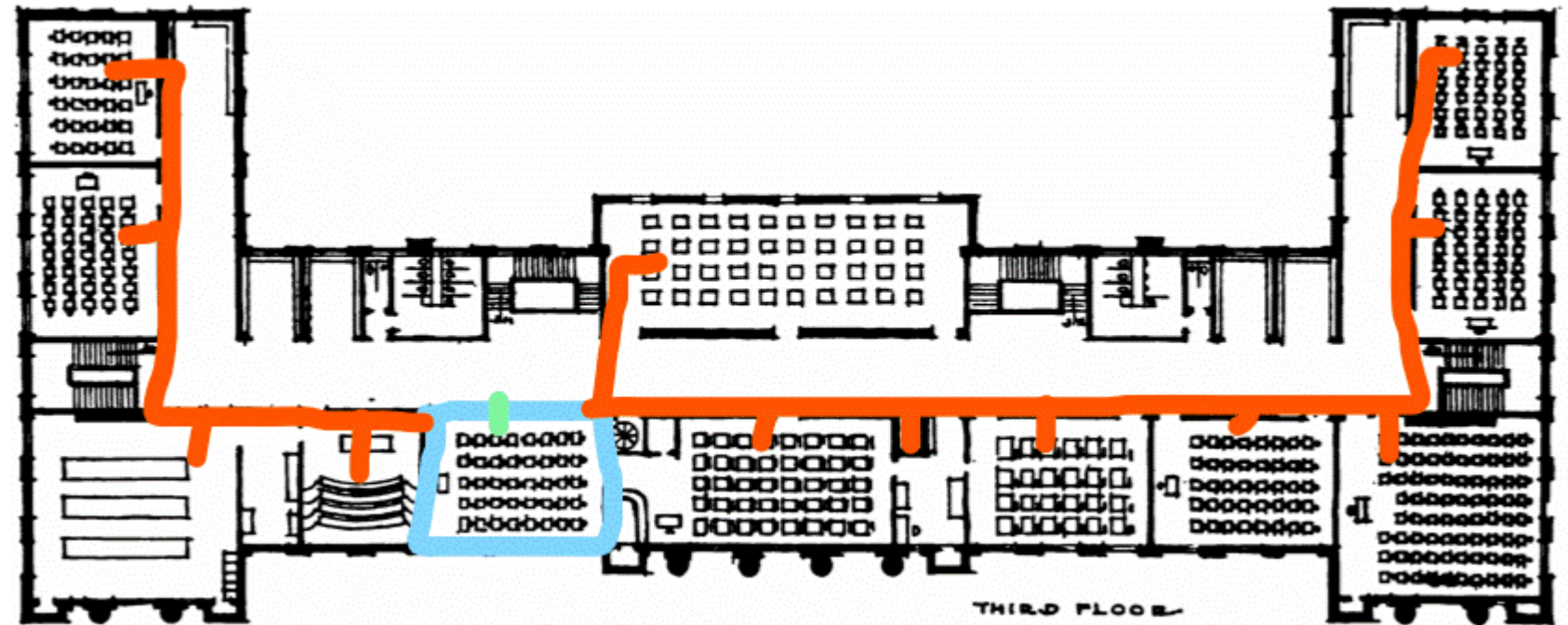
Floor 2 Cabling

-  Cable closet
-  Cabling for each room
-  Cable between floors



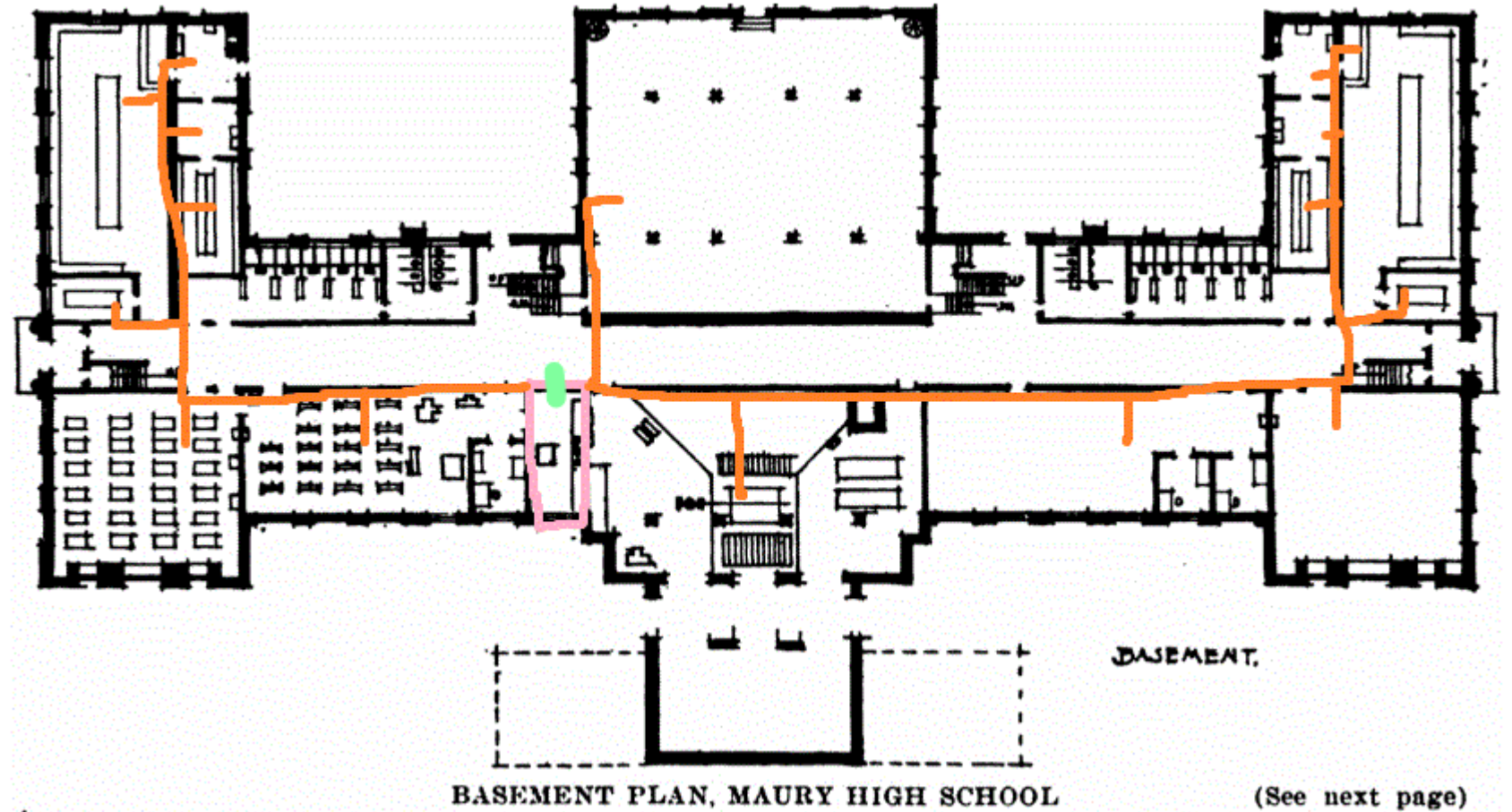
Floor 3 Cabling

-  Cable closet
-  Cabling for each room
-  Cable between floors



Basement Cabling

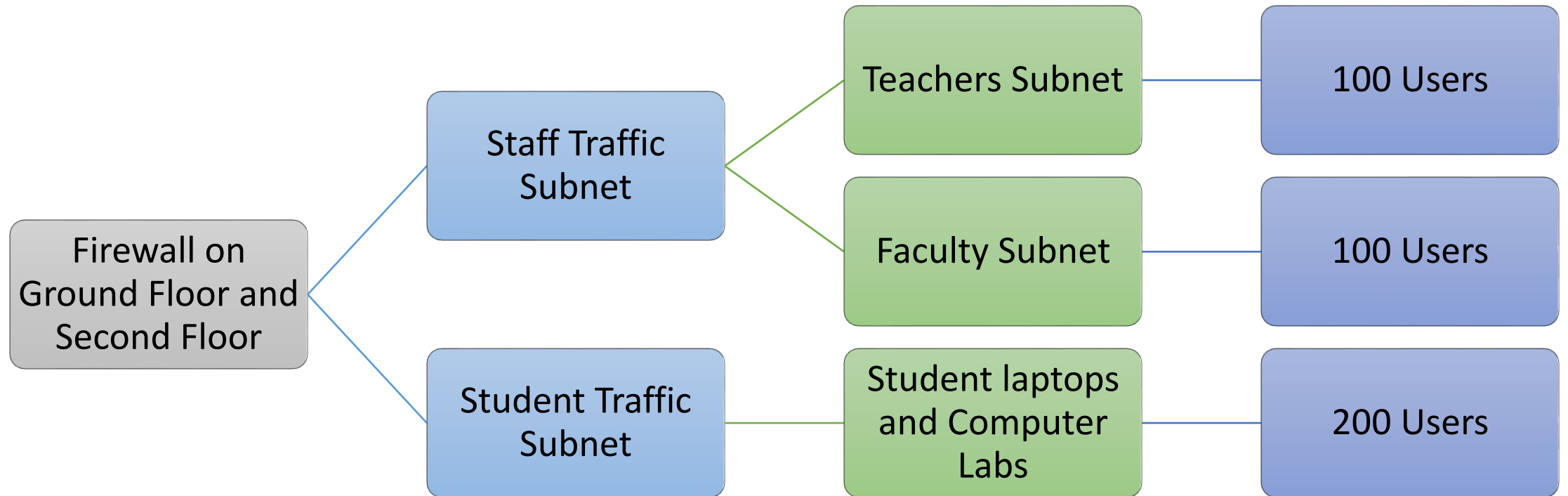
-  Telecom closet
-  Cabling for each room
-  Cable between floors



Cabling Estimate

Each floor had about 14 – 16 rooms to connect to and since the floors are about 95m wide, with the cable closets being in the middle of the building, I ranged my cables to all be 100ft cables that could each across the floors and I'll have 25ft cables going between the floors since the closets are all above and below one another.

Network Plan



My Firewall Pick for the School

For Maury High School, I decided to choose the Fortinet FortiGate 80E Network Security Appliance. It supports up to 200 Users and they will be on the first and second floors to provide access to the basement and third floors. There will be separate subnets for students and staff, while also providing separate subnets for teachers and faculty.



Budgeting Hardware

Item	Quantity	Price	Total
2 Port wall plate	20	\$7.89	\$157.80
100ft RJ45 cable	58	\$15.50	\$899.00
24 Port Switch	4	\$99.99	\$399.96
12 Port Patch Panels	8	\$23.99	\$191.92
1ft Patch Cables (5 pack)	20	\$13.49	\$269.80
25ft RJ45 Cable	4	\$8.90	\$35.60
Firewall	2	\$1,169.00	\$2,338.00
Total			\$4,292.08
Tax			\$257.46
Total w/ Tax			\$4,549.54

Equipment Used

100ft cable - https://www.amazon.com/Cat5e-100FT-Networking-Ethernet-Router/dp/B01BMZ1O8I/ref=asc_df_B01BMZ1O8I/?tag=&linkCode=df0&hvadid=309777534894&hvpos=&hvnetw=g&hvrnd=9134041146655183027&hvpone=&hvptwo=&hvqmt=&hvdev=c&hvdvcmld=&hvlocint=&hvlocphy=9008533&hvtargid=pla-574382022692&ref=&adgrpid=58425267301&th=1

25ft cable - https://www.amazon.com/Ethernet-Adoreen-Network-Internet-Ties-25ft/dp/B093K2KQW8/ref=sr_1_2_sspa?crid=Z3CE828KBIBR&keywords=cat5%2Bpatch%2Bcable%2B25ft&qid=1663889497&refinements=p_n_feature_ten_browse-bin%3A23555329011&rnid=23555276011&s=pc&sprefix=cat5%2Bpatch%2Bcable%2B25ft%2Ccomputers%2C55&sr=1-2-spons&spLa=ZW5jcnlwdGVkUXVhbGlmaWVyPUEzRkZMVVFCsJdZSjlKJmVuY3J5cHRlZElkPUeWMzU1Nzc2MU1SR0taS0hFMTJKWSZlbnNyeXB0ZWZlZElkPUeWMTEzMjY4MkUzMVRNN1BYVVpONCZ3aWRnZXROYW1lPjNwX2F0ZiZhY3Rpb249Y2xpY2tSZWRpcmVjdCZkb05vdExvZ0NsaWNrPXRydWU&th=1

Wall Plate - https://www.amazon.com/Sancable-Ethernet-Plate-Keystone-Female/dp/B07LGYFKYN/ref=asc_df_B07LGYFKYN/?tag=hyprod-20&linkCode=df0&hvadid=343238550635&hvpos=&hvnetw=g&hvrnd=362796639741936396&hvpone=&hvptwo=&hvqmt=&hvdev=c&hvdvcmld=&hvlocint=&hvlocphy=9008533&hvtargid=pla-785735881335&pssc=1&tag=&ref=&adgrpid=68750230963&hvpone=&hvptwo=&hvadid=343238550635&hvpos=&hvnetw=g&hvrnd=362796639741936396&hvqmt=&hvdev=c&hvdvcmld=&hvlocint=&hvlocphy=9008533&hvtargid=pla-785735881335

Equipment Used Pt 2

12 port patch panel - https://www.amazon.com/Cable-Matters-12-Port-Vertical-Bracket/dp/B00UVQI8B6/ref=sr_1_4?crid=2YIR36CVQVHF6&keywords=network+patch+panel+12+port&qid=1670548127&srefix=network+patch+panel+12+port%2Caps%2C67&sr=8-4#

24 port switch - https://www.amazon.com/TP-LINK-TL-SG1024DE-24-Port-Gigabit-Switch/dp/B00CUG8ESM/ref=sr_1_3?crid=2GWR8BWGWQZTH&keywords=managed+switch+24+port&qid=1670549187&srefix=Managed+Switch%2Caps%2C72&sr=8-3#

Equipment Used Pt 3

Fortinet FortiGate Firewall - <https://www.amazon.com/FORTINET-FG-80E-FortiGate-80E-Security-Firewall/dp/B06WGLQ58L>

Patch cable 5 pack - https://www.amazon.com/Ethernet-CableCreation-Gigabit-Network-Computer/dp/B01JO3FM7Y/ref=sxbs_pa_sp_search_thematic_bt_f_ssapa?content-id=amzn1.sym.97a5b67f-5f95-4e76-8917-4d9669a5d482%3Aamzn1.sym.97a5b67f-5f95-4e76-8917-4d9669a5d482&cv_ct_cx=Network%2BPatch%2BPanel&keywords=Network%2BPatch%2BPanel&pd_rd_i=B01JO3FM7Y&pd_rd_r=3b91202a-25bb-49e9-ac2e-438323242ac7&pd_rd_w=qUGlN&pd_rd_wg=5spz3&pf_rd_p=97a5b67f-5f95-4e76-8917-4d9669a5d482&pf_rd_r=1SA935V30A505D7TZAQ0&qid=1663879929&sr=1-4-97bafd84-a21b-4eac-aafb-f1e805a45134-spons&spLa=ZW5jcnlwdGVkUXVhbGlmaWVyPUEyRks0QTJQRU9KVk5YJmVuY3J5cHRlZElkPUeWOTE1MDM0M0dTNzBFRUwwNVRPWSZlbmNyeXB0ZWRBZEIkPUeWODg2NjY0MVA1MFBNOFJYVU1PVSZ3aWRnZXROYW1IPXNwX3NlYXJjaF90aGVtYXRpY19idGYmYWN0aW9uPWNsaWNrUmVkaXJlY3QmZG9Ob3RMb2dDbGljaz10cnVl&th=1