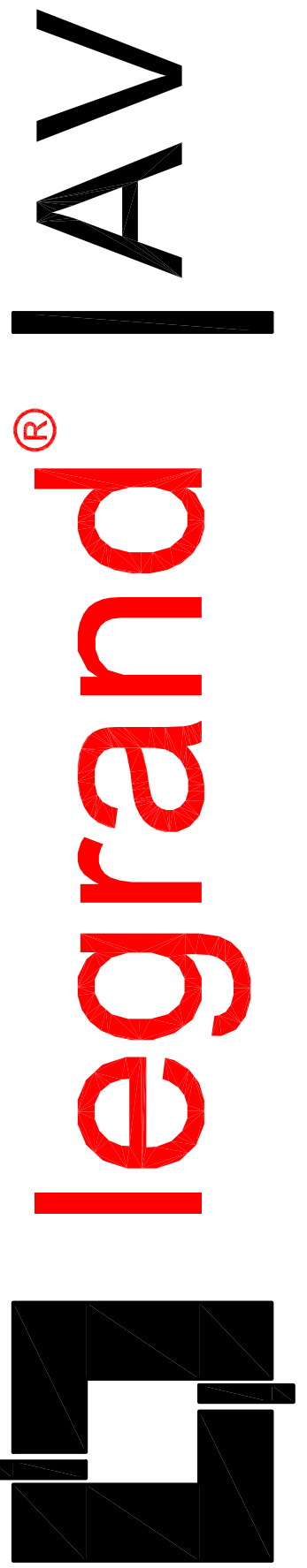


Any Residence

A.0	Cover Page
NL.1-3	Network Layout
NR.1	Network Riser
BM.1	Bill Of Materials



PROJECT

Any Residence

REVISIONS

<u>NO.</u>	<u>DESCRIPTION</u>	<u>DATE</u>
FSHv1	NETWORK DESIGN	09/12/22

CUSTOM INTEGRATOR

Your Company AV

PROJECT #

000000

TERRITORY SALES MANGER

Lauren Brodeur

DESIGNED BY

Kelly Draney

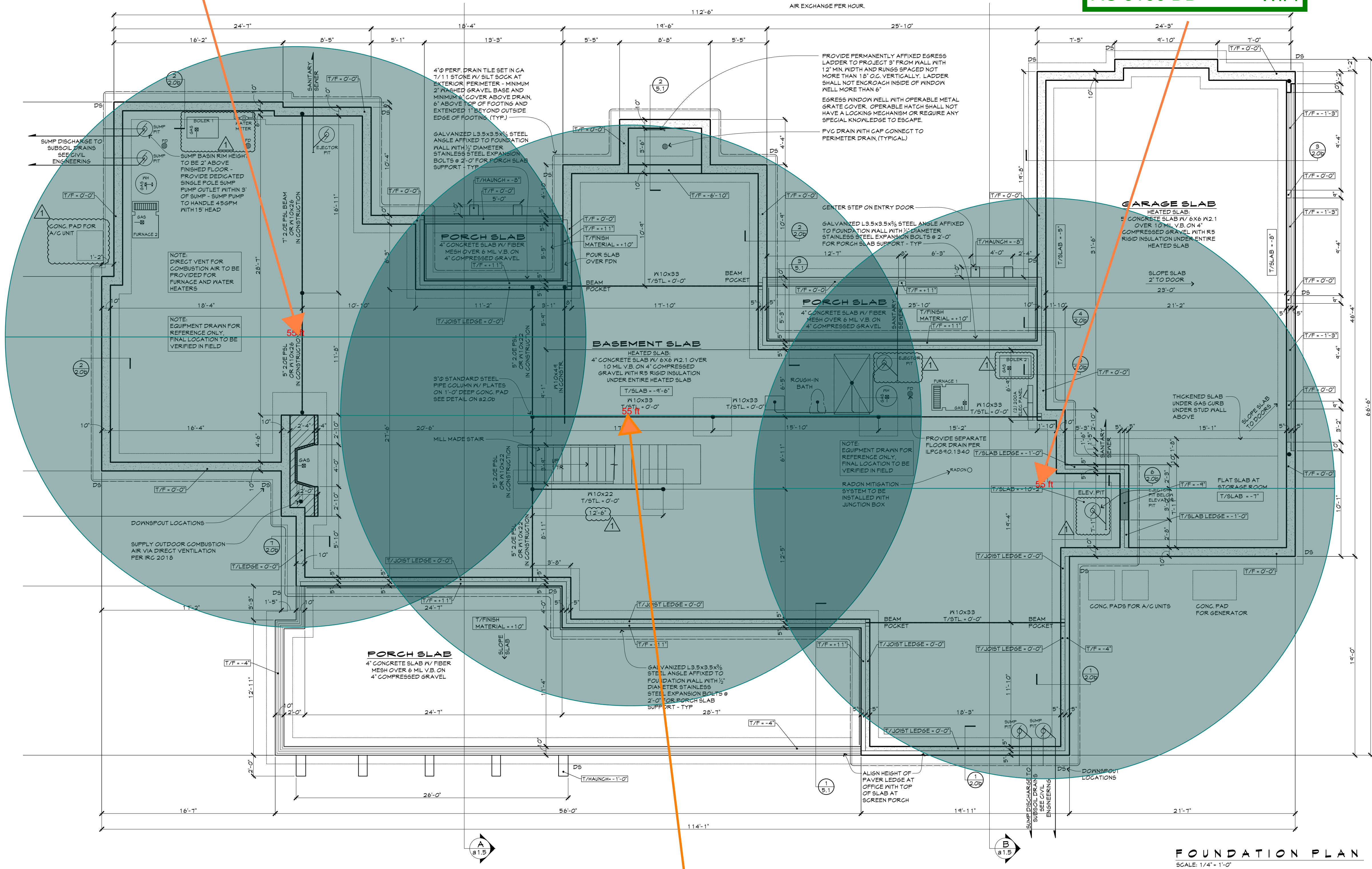
A.0



Network Layout

AP XAP-1610
AC 3100 DB WiFi

AP XAP-1610
AC 3100 DB WiFi



FOUNDATION PLAN
SCALE: 1/4" = 1'-0"

AP XAP-1610
AC 3100 DB WiFi

- = 75 Degree Angle Wi-Fi Broadcast
- = 75 Degree Directional Wi-Fi Signal Representation
- = Omni-Directional Wi-Fi Signal Representation

Note: 2.4 GHz WiFi coverage is guaranteed throughout the livable/ conditioned portions of the structure. Varying building materials and obstructions will cause significant degradation in the WiFi signal external to the structure. Thusly this map is not representative of actual external coverage to the home or structure and not covered under our WiFi guarantee.



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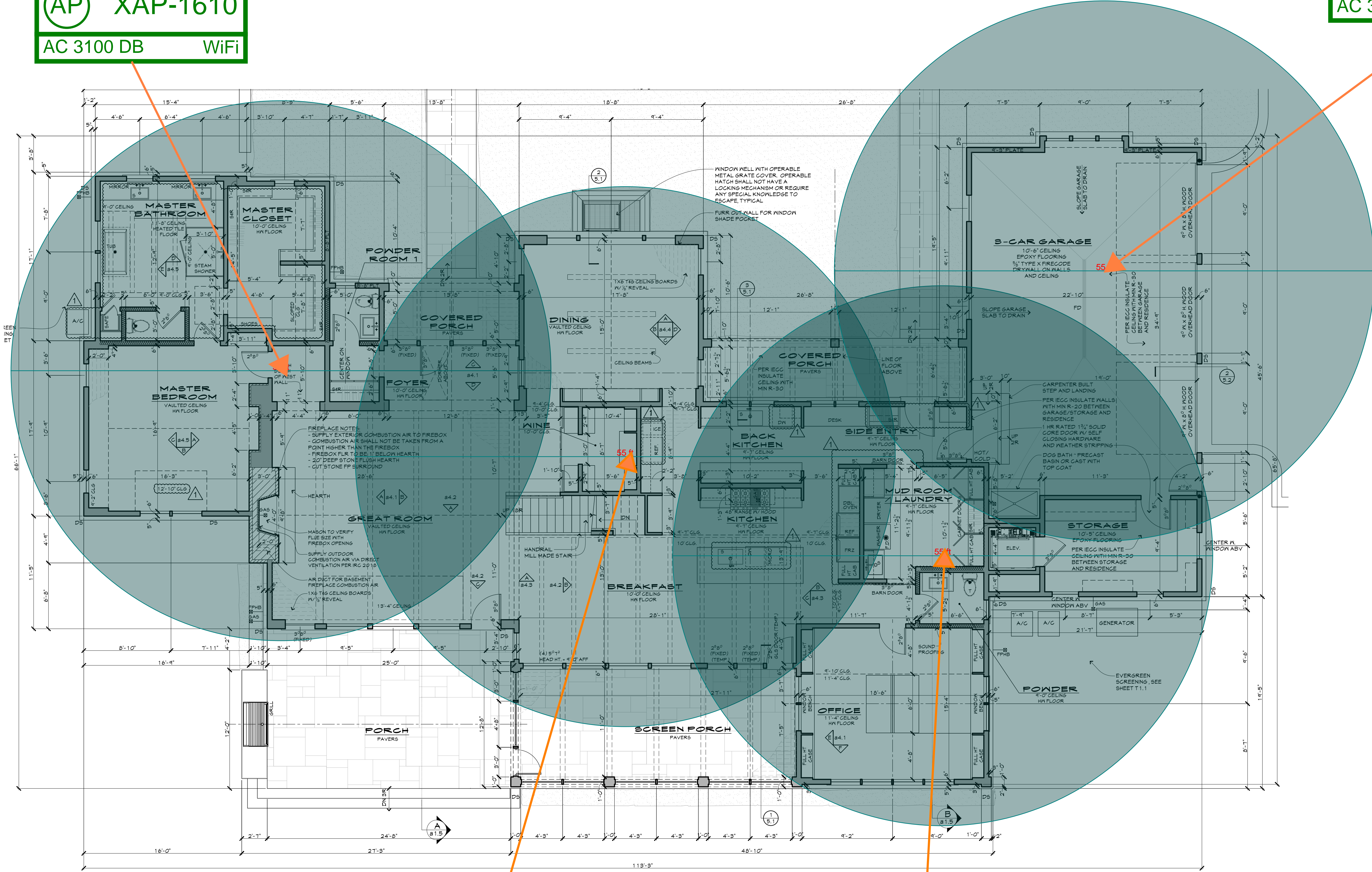
NL.1



Network Layout

(AP) XAP-1610
AC 3100 DB WiFi

(AP) XAP-1610
AC 3100 DB WiFi



(AP) XAP-1610
AC 3100 DB WiFi

(AP) XAP-1610
AC 3100 DB WiFi

75° = 75 Degree Angle Wi-Fi Broadcast
◀ = 75 Degree Directional Wi-Fi Signal Representation
3 ft = Omni-Directional Wi-Fi Signal Representation

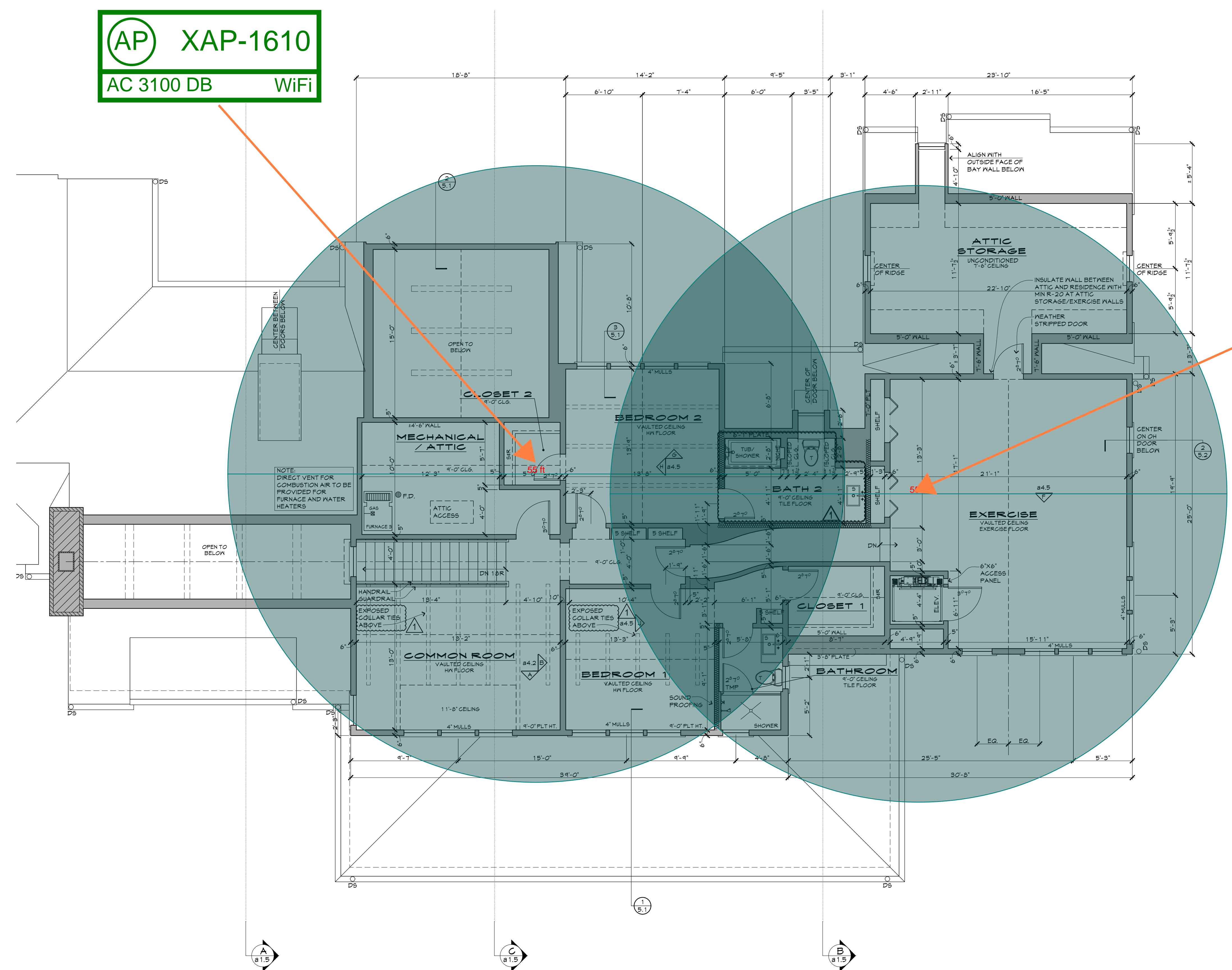
Note: 2.4 GHz WiFi coverage is guaranteed throughout the livable/ conditioned portions of the structure. Varying building materials and obstructions will cause significant degradation in the WiFi signal external to the structure. Thusly this map is not representative of actual external coverage to the home or structure and not covered under our WiFi guarantee.



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TERRITORY SALES MANGER		
Lauren Brodeur		
DESIGNED BY		
Kelly Draney		
NL.2		



Network Layout



AP XAP-1610
AC 3100 DB WiFi

AP XAP-1610
AC 3100 DB WiFi

SECOND FLOOR PLAN
SCALE: 1/4" = 1'-0"

- = 75 Degree Angle Wi-Fi Broadcast
- = 75 Degree Directional Wi-Fi Signal Representation
- = Omni-Directional Wi-Fi Signal Representation

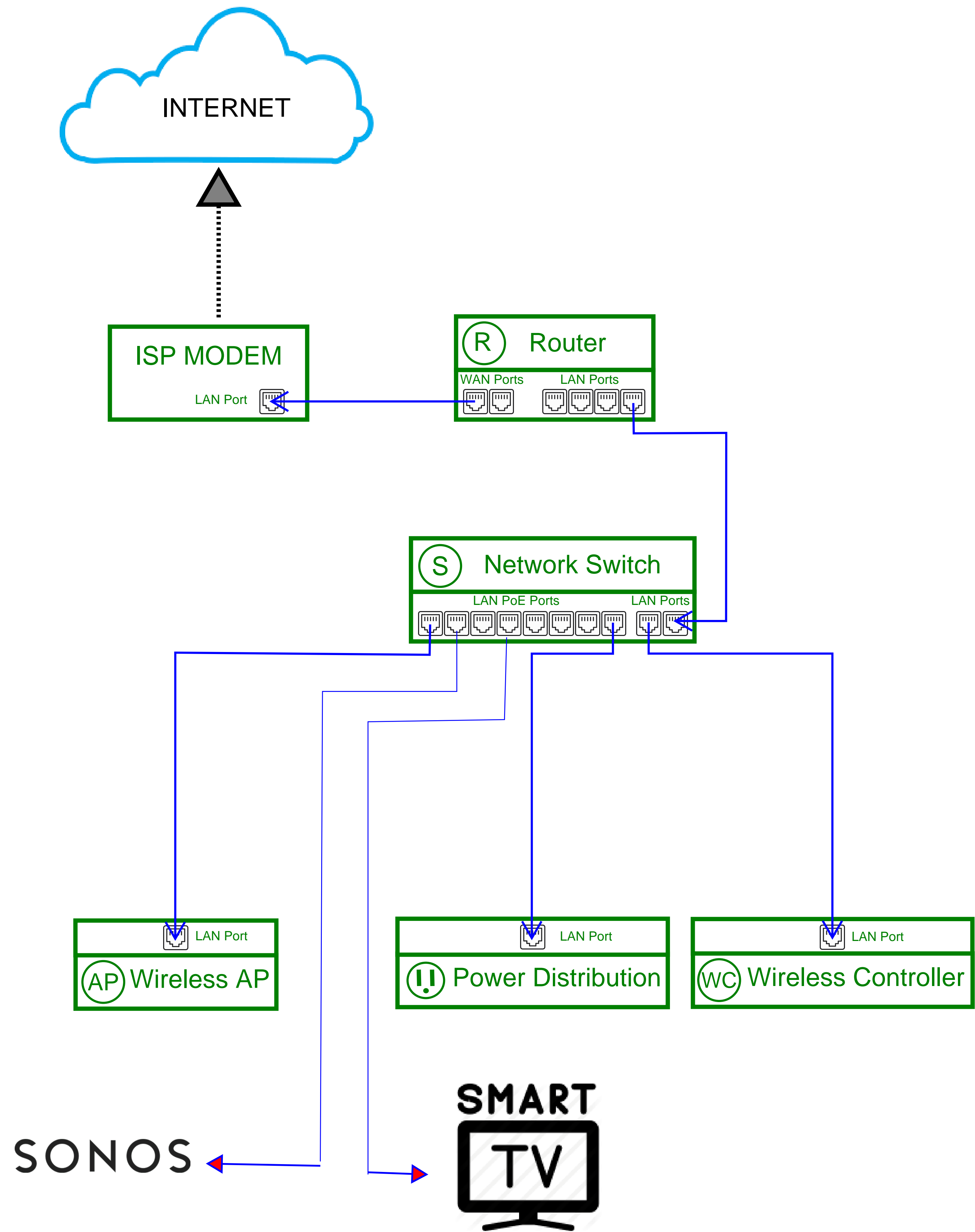
Note: 2.4 GHz WiFi coverage is guaranteed throughout the livable/ conditioned portions of the structure. Varying building materials and obstructions will cause significant degradation in the WiFi signal external to the structure. Thusly this map is not representative of actual external coverage to the home or structure and not covered under our WiFi guarantee.



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Lauren Brodeur		
DESIGNED BY		
Kelly Draney		
NL.3		



Typical Network Topology



- Ethernet / Max, Dist. 328' (100m)
 - Cat5e or better - recommended
 - Shielded cable on runs over 100' (30.5m) - recommended
 - 10/100/1000 mbps
 - Standard MHz Rating _ 100MHz

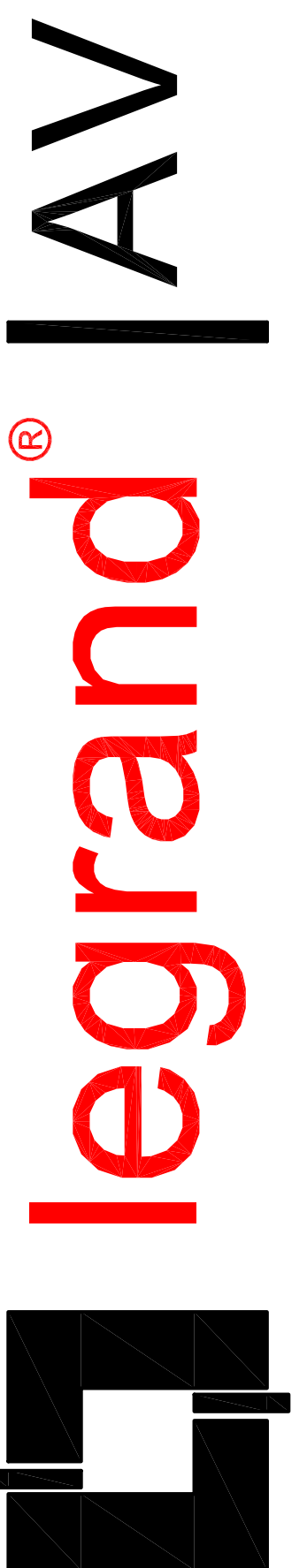
- 5GHz - up to 500 Mbps at 1/4 Mile
 - 2.4GHz - up to 90 Mbps at 1.2 Mile
 - Line of sight is required

(R) Router
 (S) Switch
 (AP) Wireless Access Point
 (WC) Wireless Controller

VLAN 1 - Management/Main
 VLAN 2 - Guest, QoS-Bulk
 VLAN 3 - PoS, QoS-Priority
 VLAN 4 - Security

— Ethernet / Max, Dist. 328' —>

— SFP / MM Fiber —>



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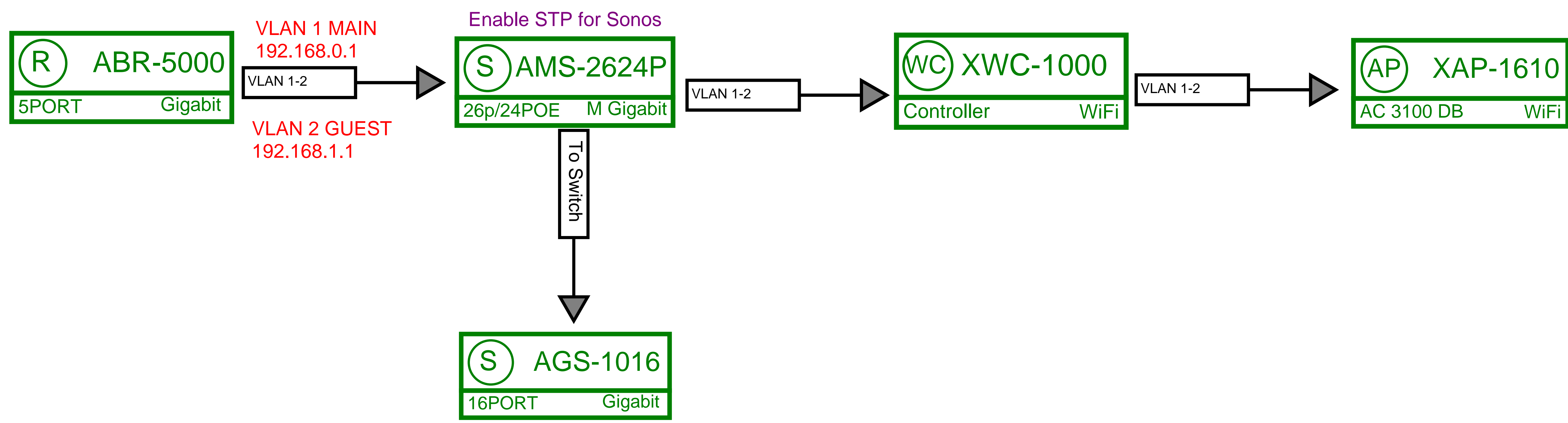
Kelly Draney

NR.1



Bill of Materials

Description	Model #	QTY	MSRP	Unit Cost	Total
Epic 5 Gigabit Router - Rear Ports	ABR-5000	1	\$635.00		\$635.00
AV Series 26 Port/24 PoE+ Gb Managed (250 W)	AMS-2624P	1	\$1,300.00		\$1,300.00
Wireless Controller, Managed up to 16 APs	XWC-1000	1	\$486.00		\$486.00
AV Series 16-Port Gb Rack Mount	AGS-1016	1	\$295.00		\$295.00
High Power Wave 2 AC3100 Dual-Band Wireless AP	XAP-1610	9	\$730.00		\$6,570.00
MSRP Grand Total					\$9,286.00



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TERRITORY SALES MANGER

Lauren Brodeur

DESIGNED BY

Kelly Draney

BM.1



Customer Assurance Program

RESIDENTIAL

Custom Network Design for

Project Name

Prepared By

The Best Choice for Your Smart Home Network

With the dramatic increase in everyday connected devices, having a powerful network that manages the flow of audio, video, and data has become critical. With that in mind, Luxul:

- Is engineered specifically to support smart home technology networks that smoothly stream video for entertainment and security; audio for pitch-perfect sound; and accurate data for thermostats, shades, and lighting control.
- Is built for professional installers who know how to configure and optimize networks.
- Provides a network that can handle the everyday demand on bandwidth and is built with the horsepower to run today's technology and beyond.
- Wireless coverage everywhere you need it, with the ability to seamlessly move your device between Access Points without dropping off the network.

Warranty

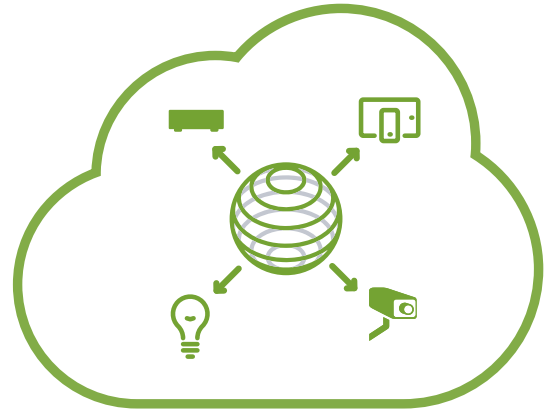
Luxul offers free software updates plus a three-year hardware warranty on all Luxul network products when the network components are purchased from and installed by an Authorized Luxul Dealer.



Remote management saves time and money



The system in your home is important to you. Your network is the foundation that all your phones, tablets, computers, cameras, automation systems, and Internet of Things rely on. It's what connects you to the Internet, streams your movies, and connects all your devices. Having network problems, including losing connection to the Internet, can dramatically affect your life, your capacity to work, or ability to truly enjoy your time at home.



A remote management system can alert your integrator within moments of when a problem occurs. It then allows him to correct that problem right away, often without having to schedule a service call, providing you peace of mind and no disruption to your daily schedule. Remarkably, this remote healing ability does not only apply to your network equipment, it can extend to other devices on your network as well. And all of this can be done through the cloud securely, without endangering the security of your network.



Protection for your children while they use the Internet

Keep your children safe

Take control of screen time, and safeguard your children against harmful content with Router Limits. Our children are becoming more and more connected to the Internet, which can pose a danger to them. Using Router Limits allows you to determine how much screen time your child has while governing what content comes into your home and what doesn't.



Manage Screen Time

Set Internet access schedules that fit the needs of each person. For example, filter social media for employees during the workday, or shut off the kids' access to the Internet completely during dinner and at bedtime.



Filter Content

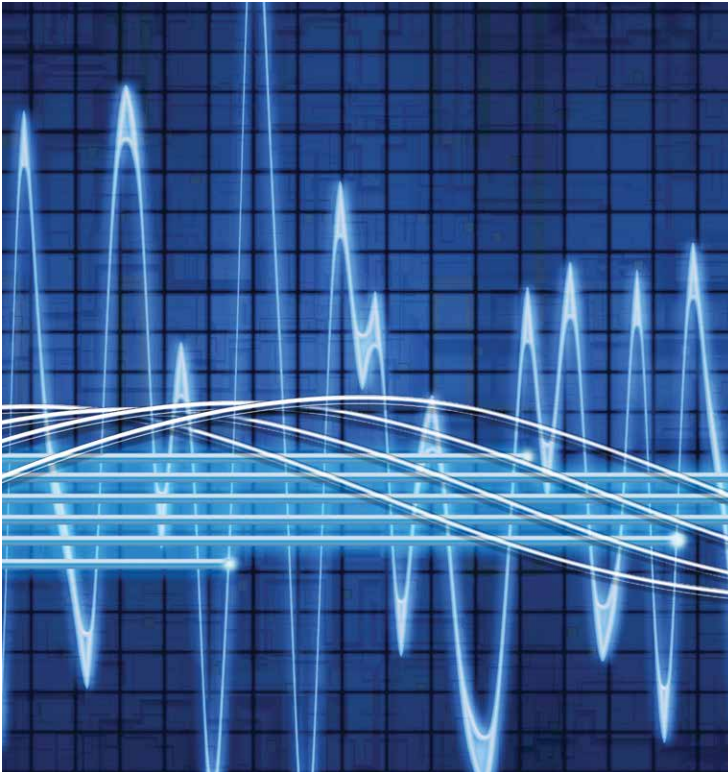
An extensive library of filters include categories like Games, Social Media, and Offensive Content, as well as popular sites and apps like Facebook, Netflix, and Snapchat. Filters can be customized to your exact needs.



Track Browsing History

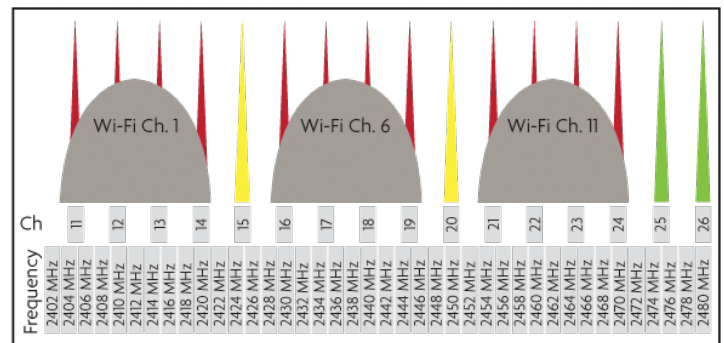
View web use and browsing history data right at your fingertips. Now you can see what's happening on your network, even when you're not there.

Interference and the Impact on your Wireless Network



Radio Frequency Interference

Although not visible, radio frequency waves are all around us. Devices such as mobile phones, FM radio, microwaves, cell phone boosters, and Zigbee all broadcast various frequencies—just like WiFi. Some of these devices broadcast on the same frequencies as WiFi. As a result, interference that affects the performance and speed of the WiFi signal can sometimes occur. Steps can be taken to help avoid or reduce these devices from interfering, allowing for greater performance of WiFi throughout the home.



Physical Interference

Various materials in the home can greatly affect the coverage area and speed of WiFi. Items such as stone, water, metal, and cement can change the performance and coverage area broadcast from a wireless access point. In order to adapt to influences of the physical environment, construction materials and where they are in the home must be taken into consideration when designing a robust wireless network.

Proper Planning and Design

Proper upfront planning is essential to create an incredible WiFi experience. A little time taken to properly design and verify network performance can greatly reduce troubleshooting time later in the project. Having a suitable design followed by thorough site survey verification will provide the information necessary to know what adjustments may need to be made to the system. Following this process will ensure the desired WiFi network result is one that satisfies your needs.

