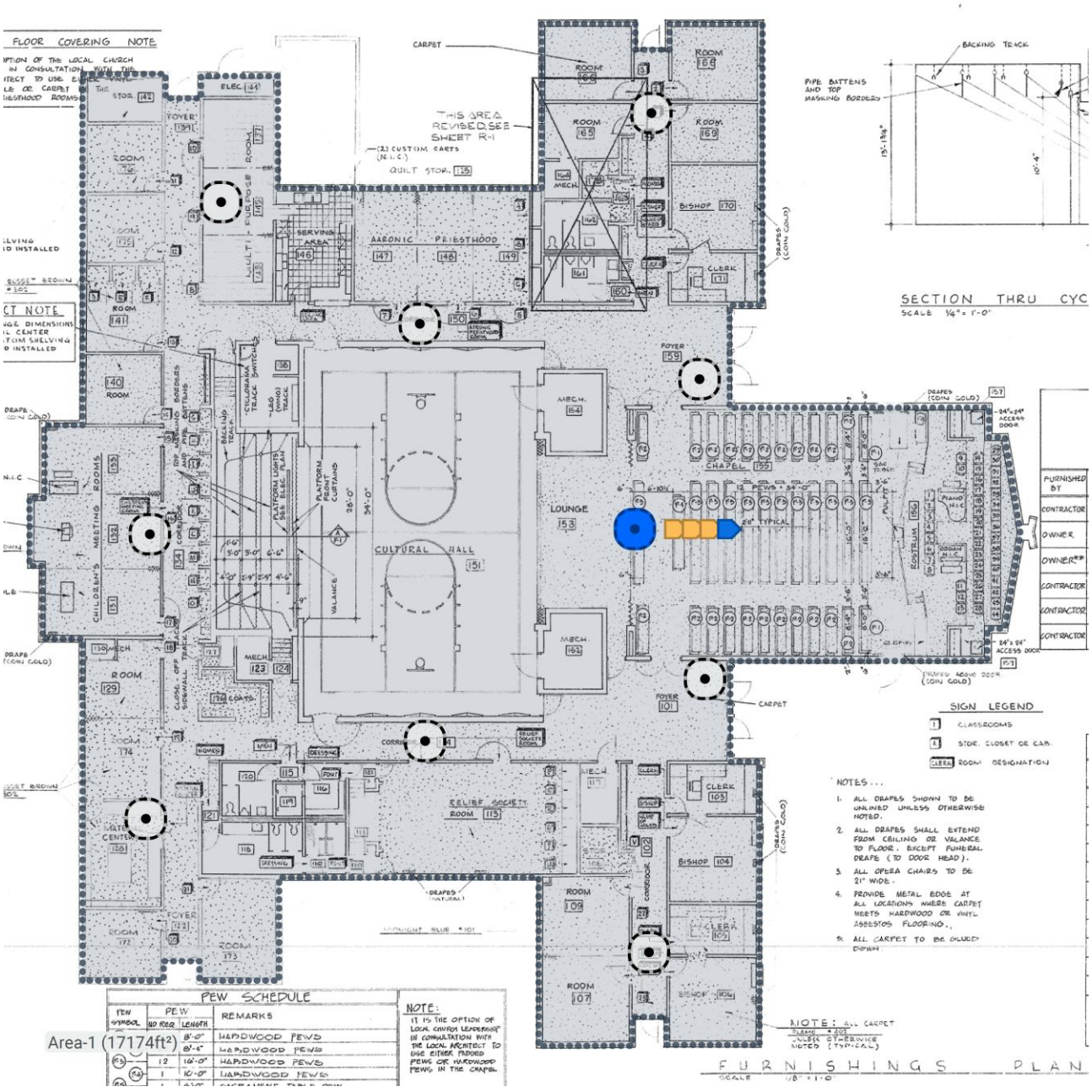
MTG-Standard Plan-Carter 1 AP Placement Report v.3

Name: **MTG-Standard Plan-Carter 1 v3**
Location:
Responsible Person:

Project description
The AP placement and signal strength predictions are based on assumptions made for signal propagation through interior wall materials. Based on those assumptions there will be a greater margin of error between the prediction and what may be experienced. Interior wall material was set as hollow block (cinderblock). Without measured attenuation and AP signal deviation measurements, the actual signal propagation will vary. The AP placement was made based on optimizing 5 GHz signals for primary signal strength. Secondary coverage was not a requirement. The C9172I access point is represented in this prediction. v.2 – Moved access points from inaccessible areas and added an access point to keep the same coverage. v.3 – Due to issues with coverage within the chapel, an access point was added. The position of the access point is mounted on the wall instead of the ceiling with the access point directed at the rostrum.

Carter 1 - Furnishings Plan a

Survey routes and Access Points for Carter 1 - Furnishings Plan a



View as / Project Offset:	Mobile Device

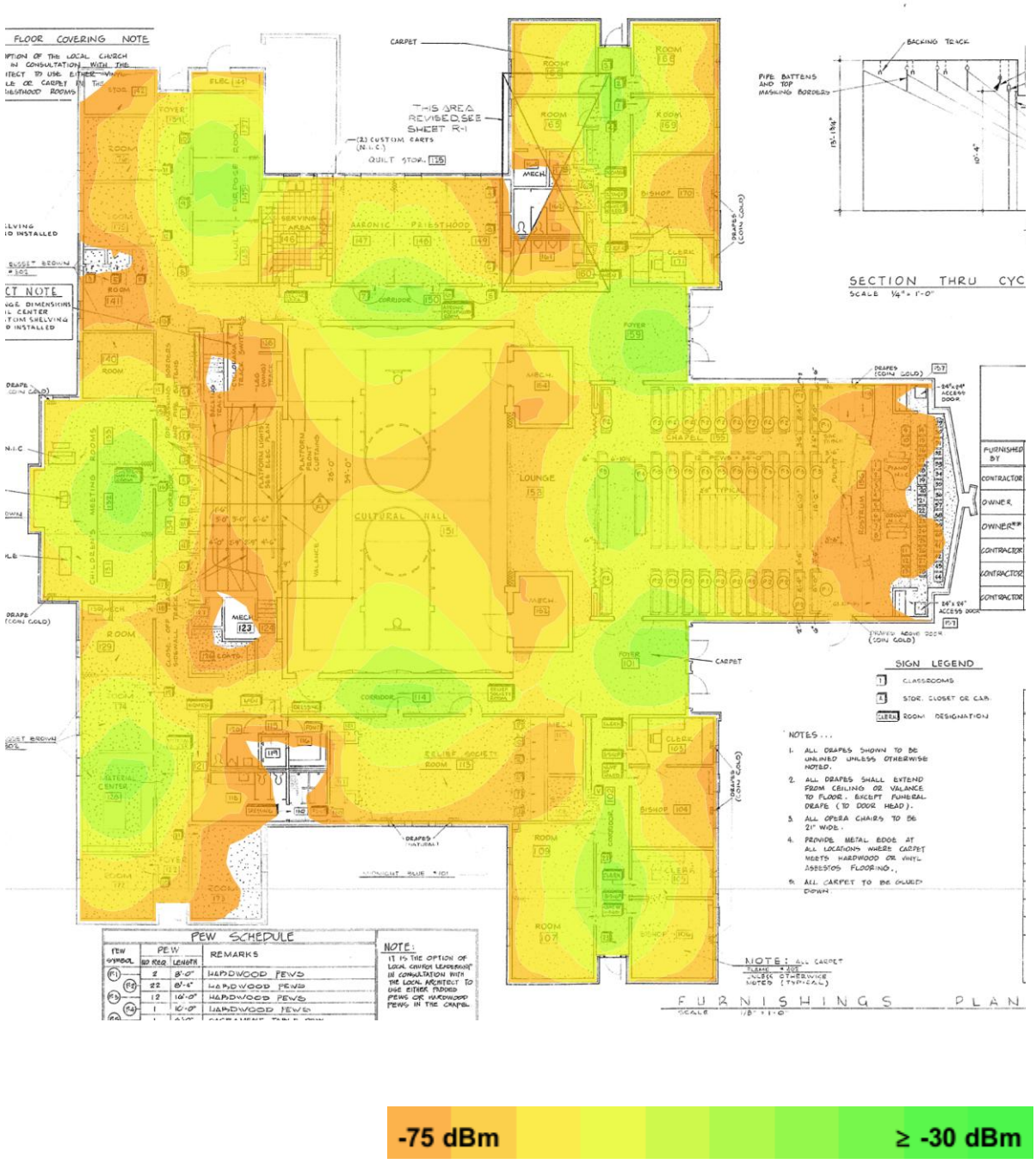
Area-1 (17,174 ft²)

Coverage Requirement: **Ekahau Best Practices**		
2.4 GHz	Signal Strength Min	**-75.0 dBm**

	Signal-to-Noise Ratio Min	**20.0 dB**
	Data Rate Min	**24 Mbps**
	Channel Interference Max	**2 at min. -85.0 dBm**
	Round Trip Time (RTT) Max	**200 ms**
	Packet Loss Max	**0.0 %**
5 GHz	Signal Strength Min	**-75.0 dBm**
	Secondary Signal Strength Min	**-67.0 dBm**
	Signal-to-Noise Ratio Min	**25.0 dB**
	Data Rate Min	**24 Mbps**
	Channel Interference Max	**1 at min. -85.0 dBm**
	Round Trip Time (RTT) Max	**200 ms**
	Packet Loss Max	**0.0 %**
6 GHz	Signal Strength Min	**-75.0 dBm**
	Secondary Signal Strength Min	**-67.0 dBm**
	Signal-to-Noise Ratio Min	**25.0 dB**
	Data Rate Min	**24 Mbps**
	Channel Interference Max	**1 at min. -85.0 dBm**
	Round Trip Time (RTT) Max	**200 ms**
	Packet Loss Max	**0.0 %**
Capacity Requirement	No capacity devices for this area	
Notes		

Signal Strength for Carter 1 - Furnishings Plan a on 2.4 GHz band

Signal Strength - sometimes called coverage - is the most basic requirement for a wireless network. As a general guideline, low signal strength means unreliable connections, and low data throughput.



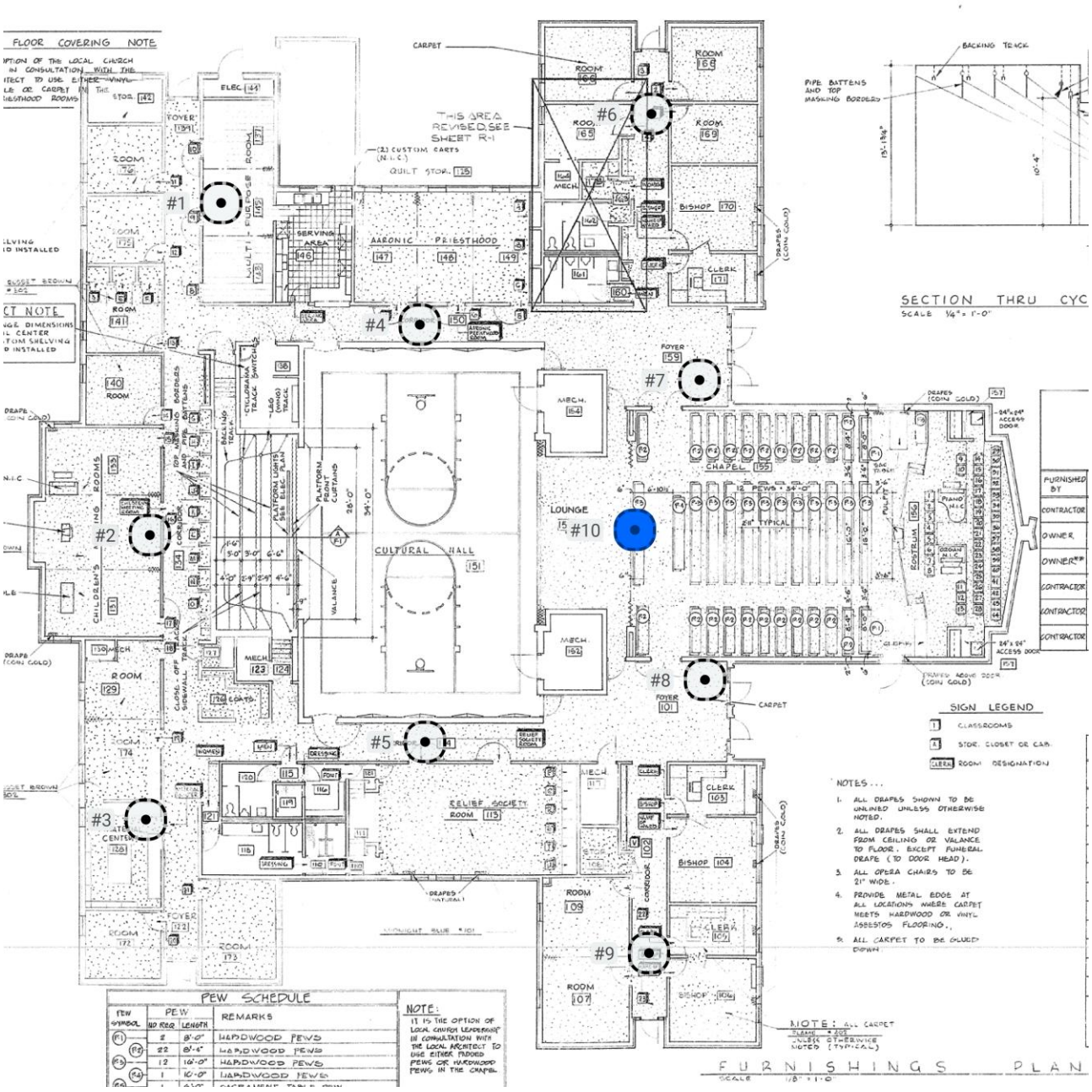
Signal Strength for Carter 1 - Furnishings Plan a on 5 GHz band

Signal Strength - sometimes called coverage - is the most basic requirement for a wireless network. As a general guideline, low signal strength means unreliable connections, and low data throughput.

Signal Strength for Carter 1 - Furnishings Plan a on 6 GHz band

Signal Strength - sometimes called coverage - is the most basic requirement for a wireless network. As a general guideline, low signal strength means unreliable connections, and low data throughput.

Access Points on Carter 1 - Furnishings Plan a



Access Points on Carter 1 - Furnishings Plan a

Simulated Access Points on Carter 1 - Furnishings Plan a

AP #	Access Point			
1	Simulated AP-001		Cisco CW9172I	
	Wi-Fi 7	11	14 mW	Cisco CW9172I 2.4GHz
	Wi-Fi 7	64	25 mW	Cisco CW9172I 5GHz
	Wi-Fi 7	149@80 (6 GHz)	25 mW	Cisco CW9172I 6GHz
	Bluetooth	-	1 mW	Cisco CW9172I BLE
2	Simulated AP-002		Cisco CW9172I	
	Wi-Fi 7	6	14 mW	Cisco CW9172I 2.4GHz
	Wi-Fi 7	149	25 mW	Cisco CW9172I 5GHz
	Wi-Fi 7	53@80 (6 GHz)	25 mW	Cisco CW9172I 6GHz
	Bluetooth	-	1 mW	Cisco CW9172I BLE
3	Simulated AP-003		Cisco CW9172I	
	Wi-Fi 7	1	14 mW	Cisco CW9172I 2.4GHz
	Wi-Fi 7	108	25 mW	Cisco CW9172I 5GHz
	Wi-Fi 7	181@80 (6 GHz)	25 mW	Cisco CW9172I 6GHz
	Bluetooth	-	1 mW	Cisco CW9172I BLE
4	Simulated AP-004		Cisco CW9172I	
	Wi-Fi 7	1	14 mW	Cisco CW9172I 2.4GHz
	Wi-Fi 7	36	25 mW	Cisco CW9172I 5GHz
	Wi-Fi 7	213@80 (6 GHz)	25 mW	Cisco CW9172I 6GHz
	Bluetooth	-	1 mW	Cisco CW9172I BLE
5	Simulated AP-005		Cisco CW9172I	
	Wi-Fi 7	11	14 mW	Cisco CW9172I 2.4GHz
	Wi-Fi 7	165	25 mW	Cisco CW9172I 5GHz
	Wi-Fi 7	101@80 (6 GHz)	25 mW	Cisco CW9172I 6GHz

	Bluetooth	-	1 mW	Cisco CW9172I BLE
6	Simulated AP-006		Cisco CW9172I	
	Wi-Fi 7	6	14 mW	Cisco CW9172I 2.4GHz
	Wi-Fi 7	48	25 mW	Cisco CW9172I 5GHz
	Wi-Fi 7	165@80 (6 GHz)	25 mW	Cisco CW9172I 6GHz
	Bluetooth	-	1 mW	Cisco CW9172I BLE
7	Simulated AP-007		Cisco CW9172I	
	Wi-Fi 7	11	14 mW	Cisco CW9172I 2.4GHz
	Wi-Fi 7	100	25 mW	Cisco CW9172I 5GHz
	Wi-Fi 7	1@80 (6 GHz)	25 mW	Cisco CW9172I 6GHz
	Bluetooth	-	1 mW	Cisco CW9172I BLE
8	Simulated AP-008		Cisco CW9172I	
	Wi-Fi 7	6	14 mW	Cisco CW9172I 2.4GHz
	Wi-Fi 7	132	25 mW	Cisco CW9172I 5GHz
	Wi-Fi 7	5@80 (6 GHz)	25 mW	Cisco CW9172I 6GHz
	Bluetooth	-	1 mW	Cisco CW9172I BLE
9	Simulated AP-009		Cisco CW9172I	
	Wi-Fi 7	1	14 mW	Cisco CW9172I 2.4GHz
	Wi-Fi 7	116	25 mW	Cisco CW9172I 5GHz
	Wi-Fi 7	117@80 (6 GHz)	25 mW	Cisco CW9172I 6GHz
	Bluetooth	-	1 mW	Cisco CW9172I BLE
10	Simulated AP-010		Cisco CW9172I	
	Wi-Fi 7	1	6 mW	Cisco CW9172I 2.4GHz
	Wi-Fi 7	36	25 mW	Cisco CW9172I 5GHz
	Wi-Fi 7	1@80 (6 GHz)	25 mW	Cisco CW9172I 6GHz
	Bluetooth	-	1 mW	Cisco CW9172I BLE