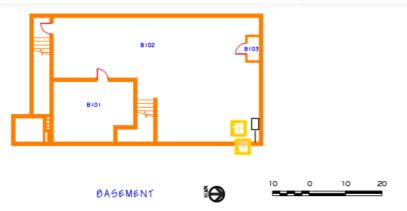


## **Design Plan**

Prepared for: MKE (Fire stations 5 & 30)

Fire Station 5 (1313 W Reservoir Ave, Milwaukee, WI 53205)



Note black line and box in the bottom right corner of the basement where cabling starts



Note black lines indicate the path of our cabling

## Figure 1



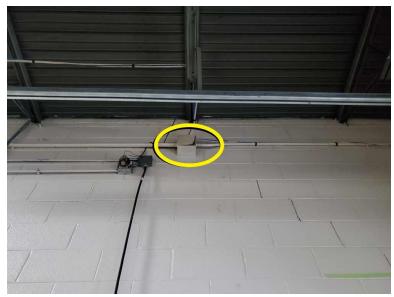
- Fiber hand-off (located in the basement of the fire station). This is where we will be tapping into the fire station's fiber and is the starting point for running our CAT6 to the rooftop enclosure.
- (1) Ubiquiti EdgeRouter 12 will be housed in this location; beginning our network.
- The yellow circle is an existing access point from the basement to the first floor and is where we will feed our cat6 through.

Figure 2



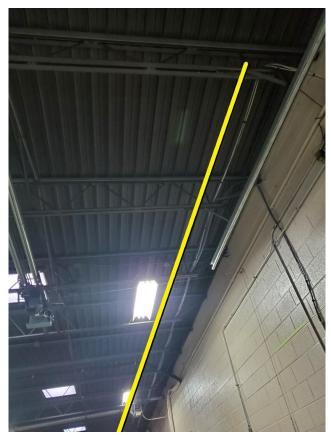
Location where cat6 will be fed through to the first floor from the basement.

Figure 3



 Cat6 fed through to middle garage area and out to through the junction box (yellow circle)

Figure 4



Cat6 ran along the rafters in the garage area, alongside existing network cables.

Figure 5



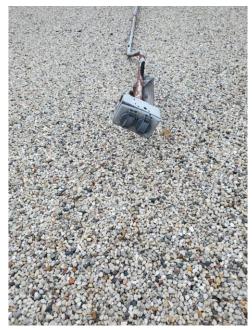
• Cat6 coming from along the rafters will be fed into this entry point that leads into the hose tower.

Figure 6



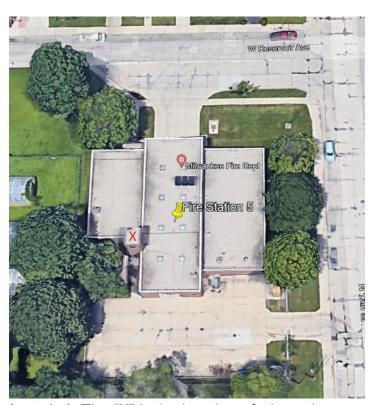
• Hose tower (interior). Cat6 will be run alongside the inside of the tower and to the rooftop access point.

## Figure 7



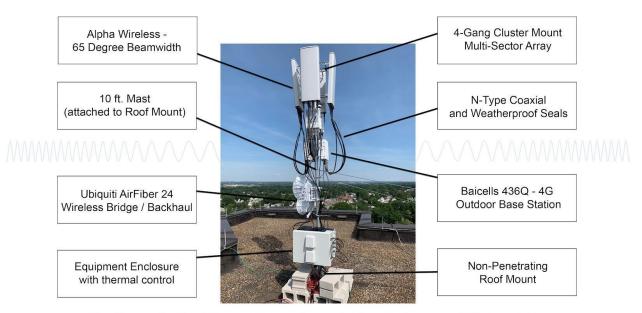
 Circuit to be used for electrical connection. The electrician will repair this outlet so that is functional for our use.

Figure 8



 Hose tower (exterior). The "X" is the location of where the non-penetrating roof will be installed.

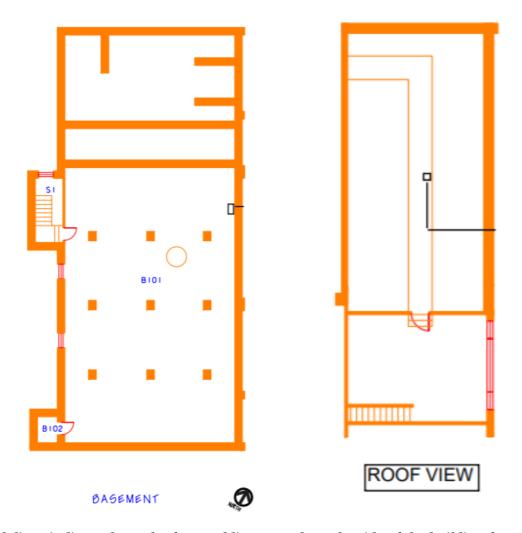
Figure 9



Non-Penetrating Roof Mount ,4-Sector Cluster, Outdoor Enclosure, and Wireless Bridge

 The finished build will resemble the tower in the picture above. 12 cinder blocks will weigh the non-penetrating roof mount and tension line ran to the edges of the building to anchor the tower.





(black lines indicate the path of our cabling, ran along the side of the building from basement to roof)

## Figure 1



- Fiber hand-off (located in the basement of the fire station). This is where we will be tapping into the fire station's fiber and is the starting point for running cat6 to the rooftop enclosure.
- (1) Ubiquiti EdgeRouter 12 will be housed in this location; beginning our network.
- The yellow circle is an existing conduit from the basement to the outside wall and is where we will feed our cat6 through.

Figure 2



• This existing conduit is connected to the basement and is ideal for our cat6 to run through. Shared with an existing coax line that is being used for cable television.

Figure 3



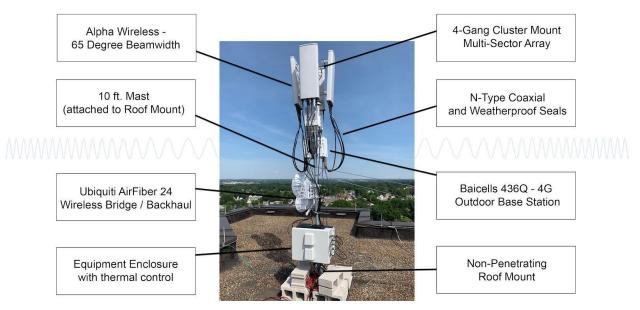
 Another image of the existing conduit. We will run cat6 out of the conduit and the remainder of the line will attach along the side of the building. Once to the roof; our backhaul will be complete.

Figure 4



• Electrical access is inside the enclosure circled in yellow. Drilling a small hole in the enclosure and applying a weatherproof harness will allow for our electrical hookup.

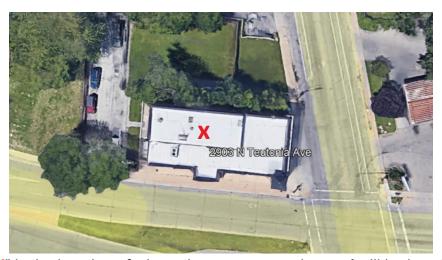
Figure 5



Non-Penetrating Roof Mount ,4-Sector Cluster, Outdoor Enclosure, and Wireless Bridge

• The finished build will resemble the tower in the picture above. 12 cinder blocks will weigh the non-penetrating roof mount and tension line ran to the edges of the building to anchor the tower.

Figure 6



The "X" is the location of where the non-penetrating roof will be installed.