# Parking Exhaust Fan Controls

Level P1: Locations of CO Sensors

GEF-4

Level P2: Locations of CO Sensors
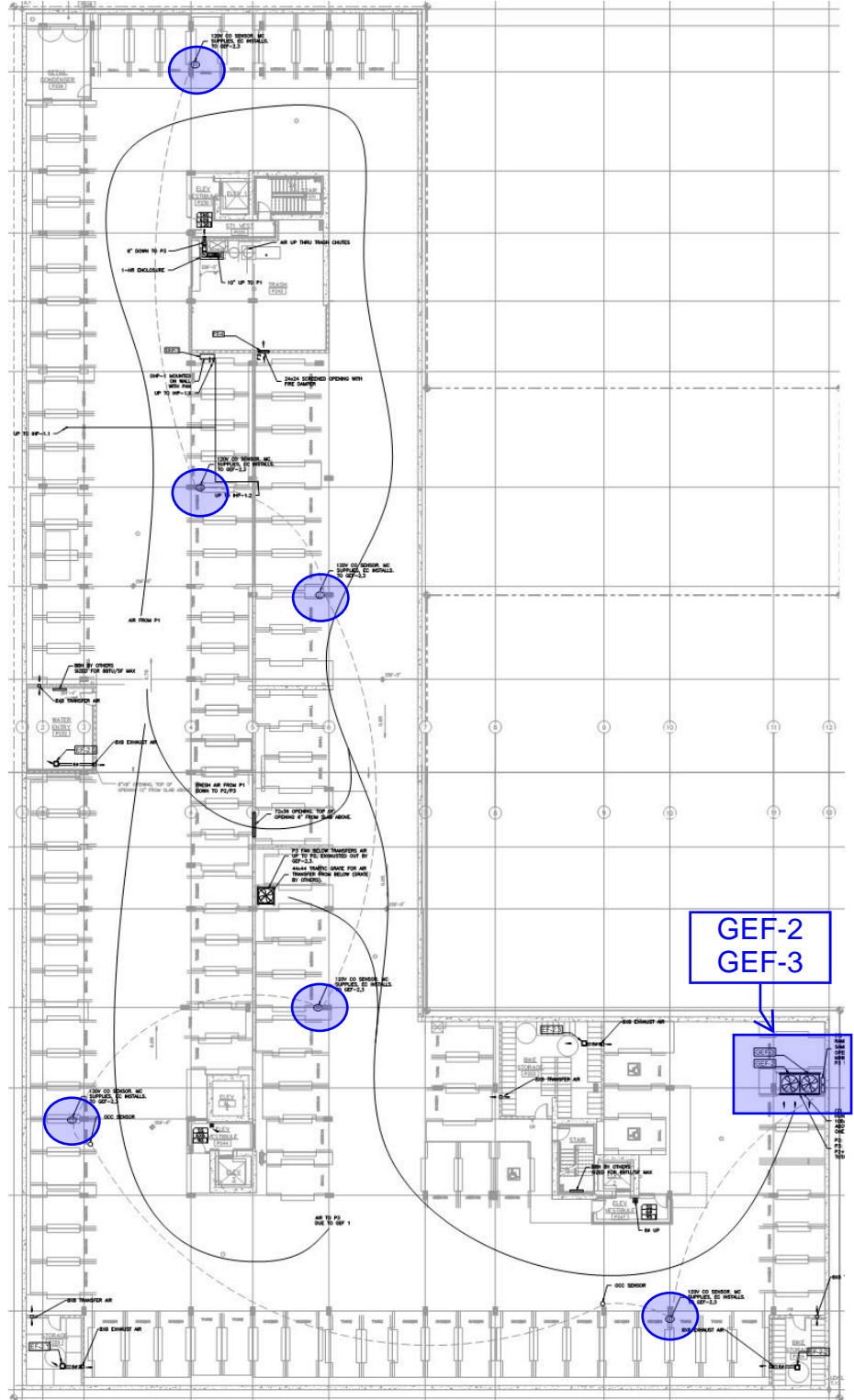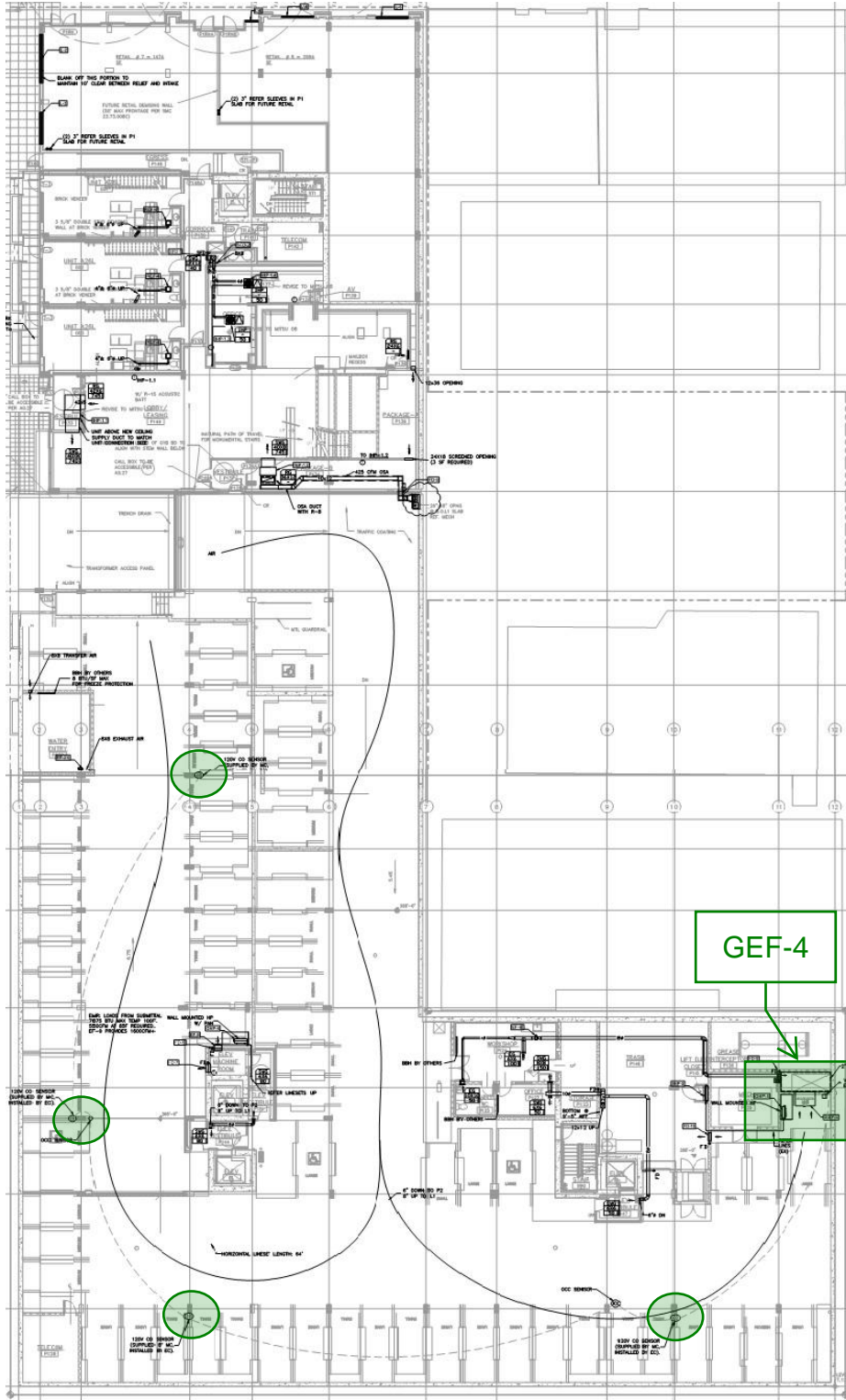
GEF-2
GEF-3

Level P3: Locations of CO Sensors
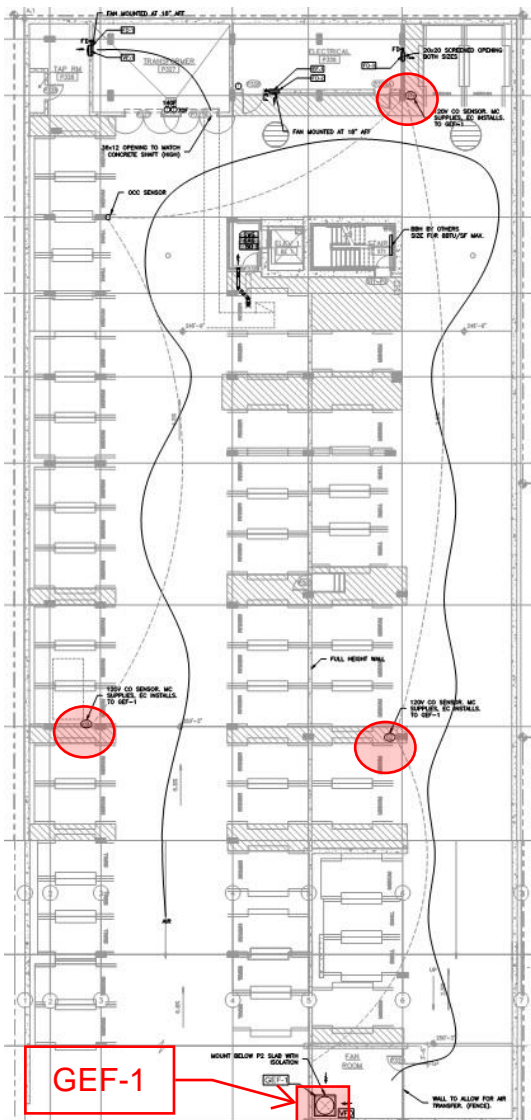
GEF-1

Sensors located in green circles control GEF-4
Sensors located in blue circles control GEF-2 and GEF-3
Sensors located in red circles control GEF-1

No occupancy sensors are used to control fans. Any fan related occupancy sensors shown on drawings are not installed.

Quick start guide to investigating VFD parameters

List of what the parameters should be:
1. To view parameters – press Set. Use black dial to go to the parameter you want, press Set again. Then the parameter value is displayed. Do not use dial or number will change. Press Set to get back to the parameter list. Note that the CFD program is touchy and may only allow 1 change at a time. If the screen "locks up" turn the VFDs off at the disconnect, let the fan slow down, and then turn it back on.
2. There are only a few parameters that are not default:
   a. Parameter 2 is min speed = 20 Hz
   b. Parameter 4 is max speed = per air balance report
      GEF-1 – 60Hz
      GEF-2/3 – 66Hz
      GEF-4 – 60Hz
   c. Parameter 7 is time to accelerate = 900 seconds (15 min)
   d. Parameter 8 is time to decelerate = 5 seconds (default)
   e. Parameter 9 is motor amps (per motor size)
3. Under power failure, system should auto recover. It will follow the acceleration time (15 minutes). Including software reboot time, it's at least 15 minutes until it's back to minimum speed (20 Hz).