

# COLLIDER EXPERIMENTAL HALL PAD DEMOLITION



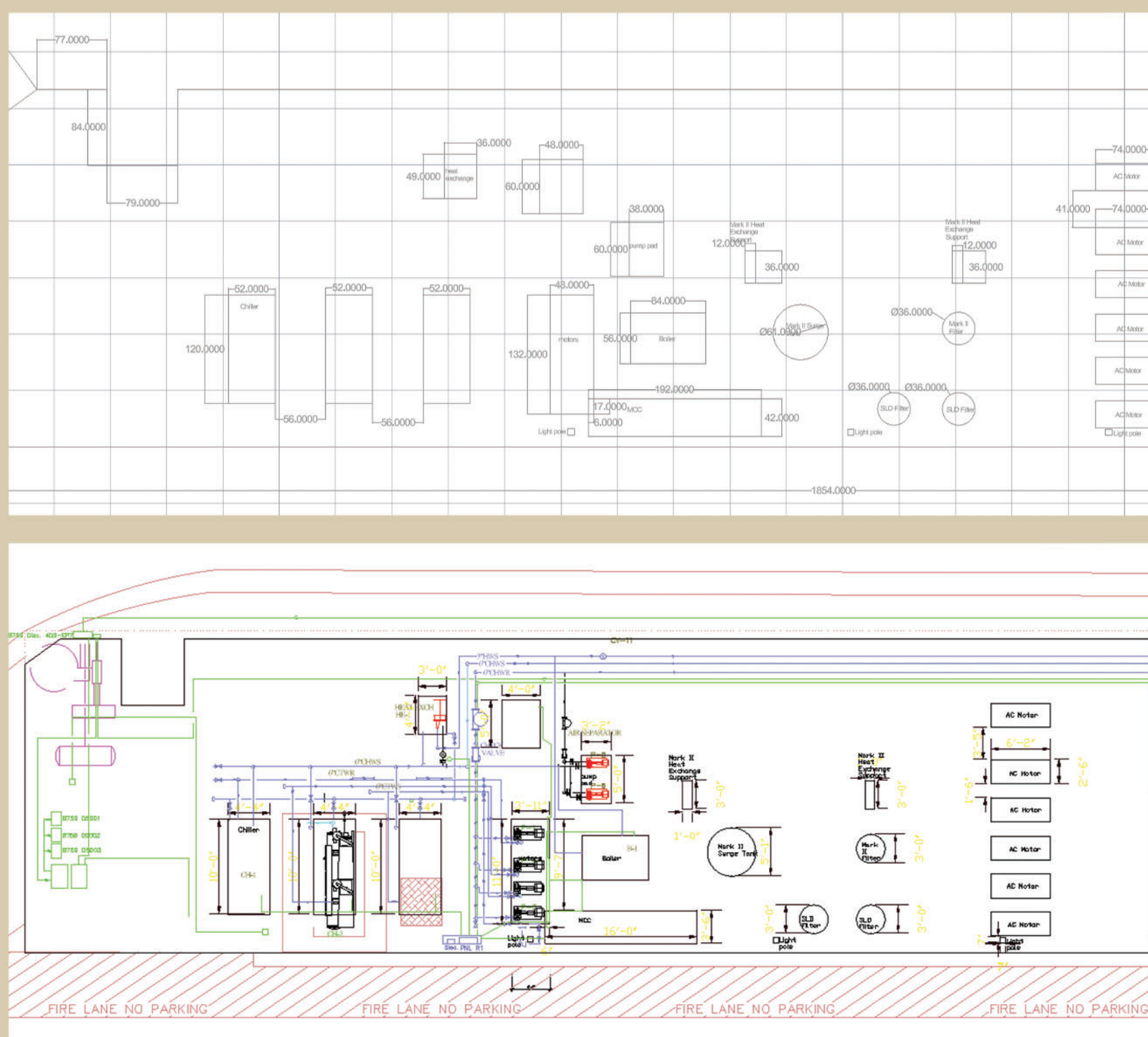
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## ABSTRACT

Every year SLAC receives funding from the DOE, which is geared towards new science and projects. However, **once the new becomes the old, projects are left unattended, taking up space as funds get allocated to newer projects.**

The CEH (Collider Experimental Hall), is a prime example of old projects taking up space, where most of its initial machinery is no longer in use. This includes systems that supply water and electricity to the CEH, located outside the building. **The goal of this project was to find a stream line method to demolish these water pipes and electrical systems in order to devise a cost efficient and safe demolition plan.** So far, we have mapped out water pipes connected to the chillers, motors, and boiler, as well as electrical conduits.

## PROCESS



To create accurate drawings, a full remeasurement of concrete padding was drawn up, building the foundation for more precise placement of water pipes and conduits in connection to their respective equipment. Initial pen to paper drawings were transferred to AutoCAD for accurate proportions.

**Once in AutoCAD, conduits and pipes associated with motors, chillers, or the boiler were color-coded, and points of disconnection were established**

## DISCONNECTION

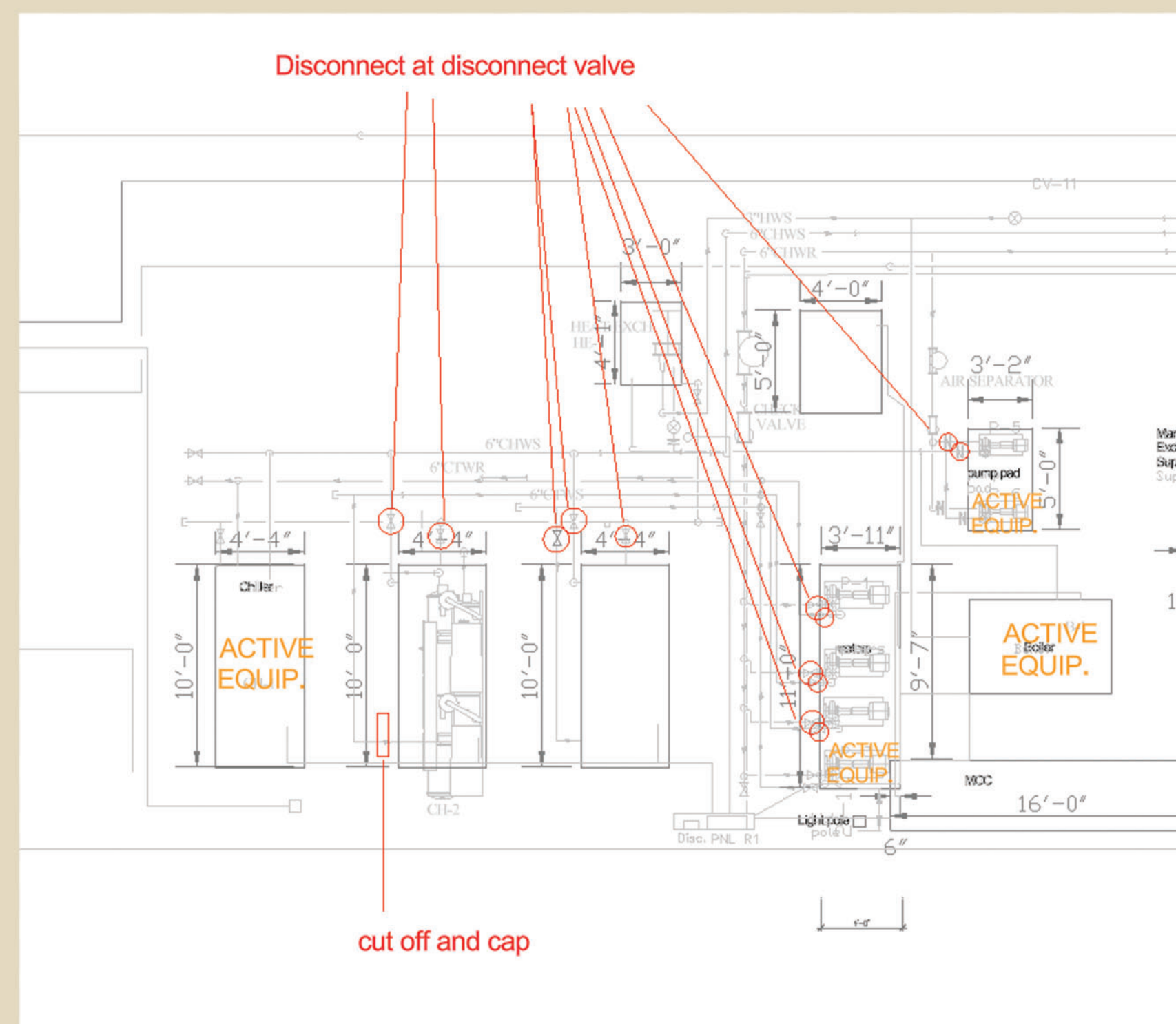


FIGURE 1: DISCONNECT EQUIPMENT

First supply and return must be cut off. For the water pipes using the disconnection valves worked best, although manual cutting was necessary for a specific spot.

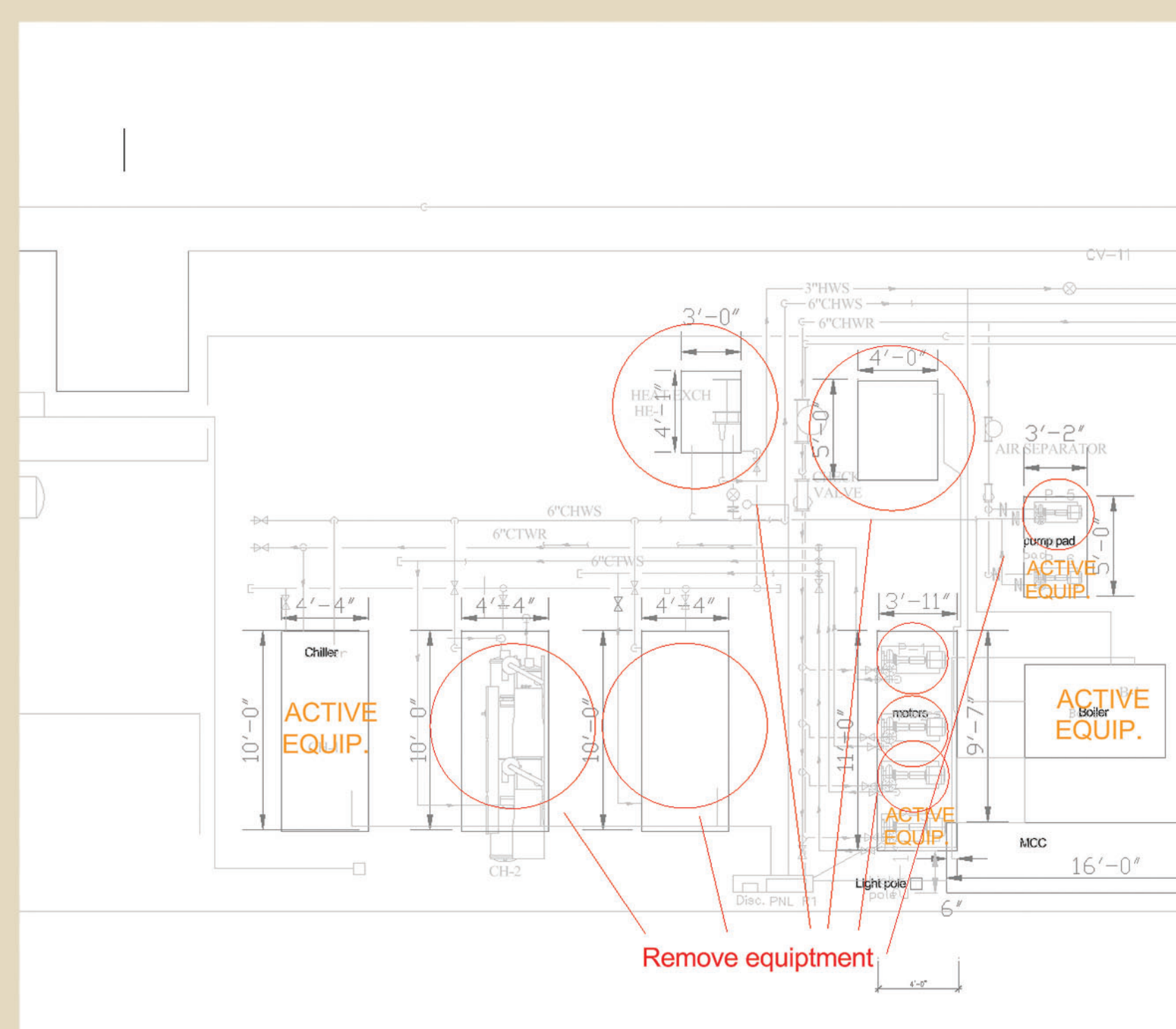


FIGURE 2: REMOVE EQUIPMENT

Once supply has been cut off, and equipment has been completely isolated, equipment can be safely removed

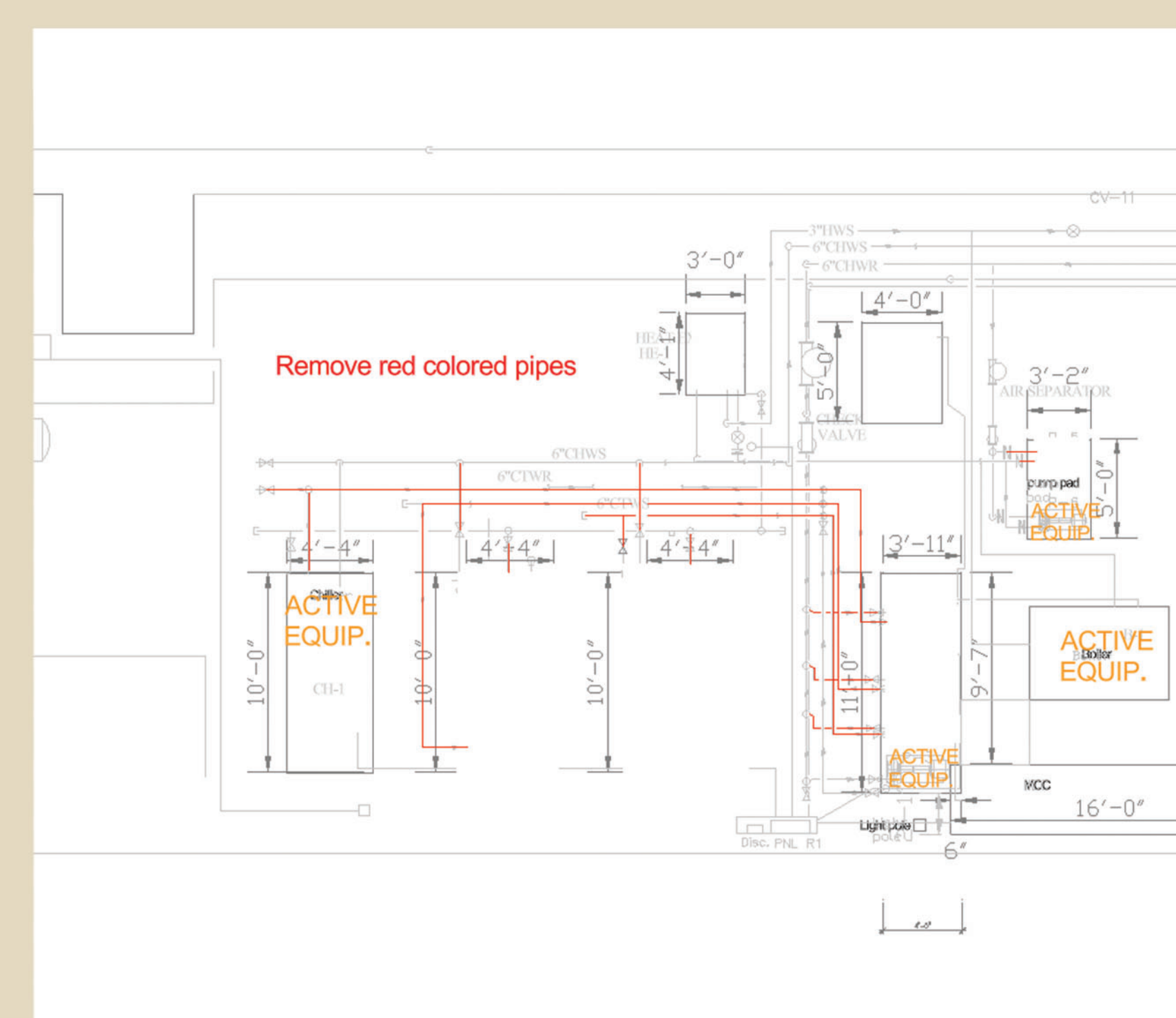


FIGURE 3: REMOVE REMAINDER PIPES

Excess pipes can now be removed, no longer having use and completely disconnected from any active systems

## NEXT STEPS

Cost estimates:

What's a realistic budget? Is there a more cost efficient solution? Whose involved?

Time Estimate:

How long will it take for the job to be completed? How long will it take in each stage of demolition?