



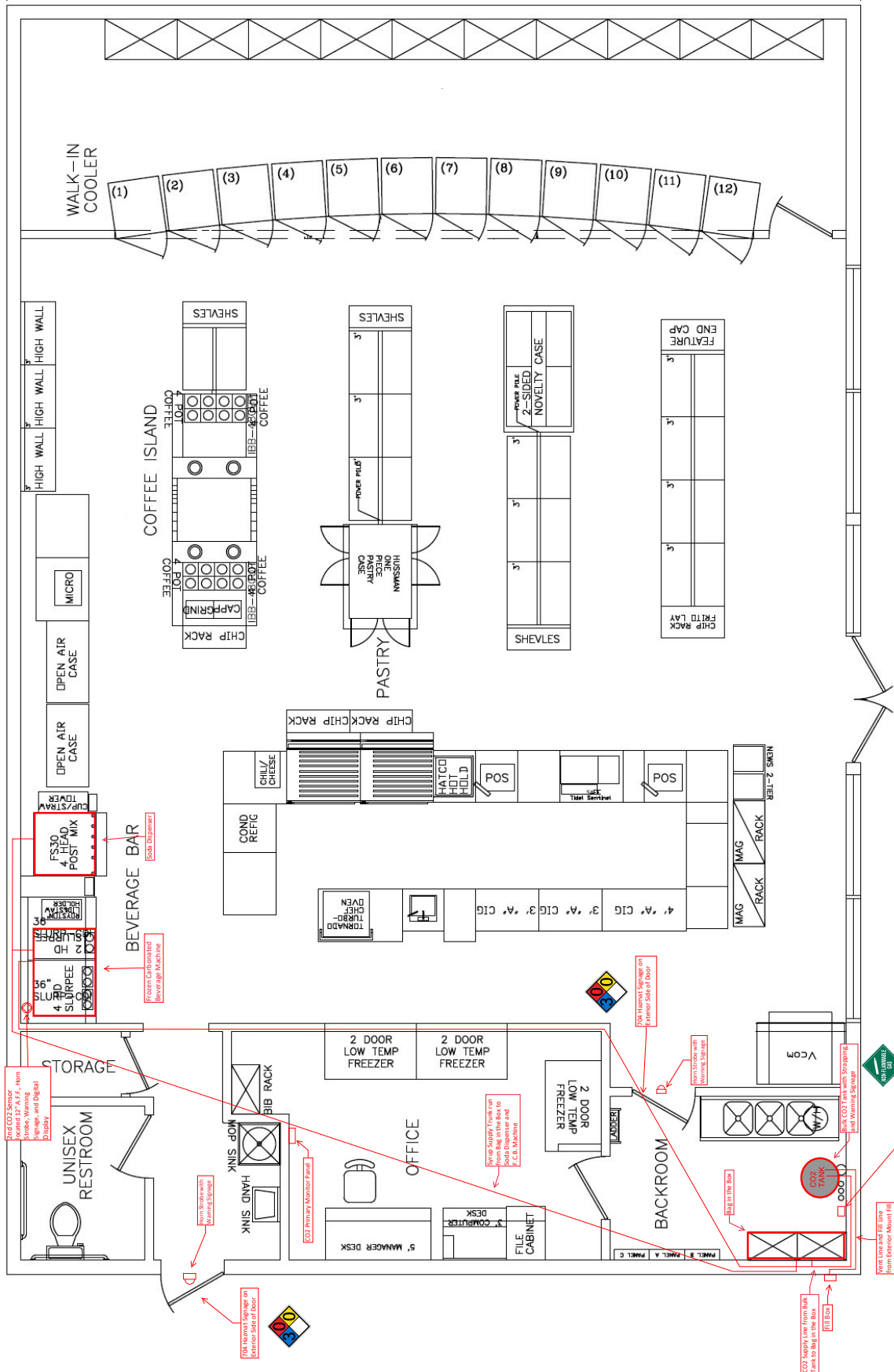
MURRAY CITY FIRE DEPARTMENT

FIRE PREVENTION BUREAU

LEAK DETECTION & NOTIFICATION FOR CO2 BEVERAGE DISPENSING APPLICATIONS

Carbon dioxide (CO2) systems with more than 100 pounds of carbon dioxide used in beverage dispensing applications shall comply with 2021 IFC 5307 & 916, 2016 NFPA 55, 2018 IMC and the following:

- Plan submittal. Provide a floor plan showing the location of the CO2 tank, piping, exterior fill location, CO2 sensors, notification devices, system control unit and required signage. Spec sheets for the tank and system components shall be included with the submittal. *See attached plan sheet example. The permit application and plan review documents must be approved prior to final inspection and building occupancy.*
- Permit. An annual “operational permit” and fire department inspection is required for CO2 detection systems. The “operational permit” fee & inspection is \$50.00.
- Leak Detection / Notification. Rooms or areas containing carbon dioxide storage tanks, cylinders, piping and fittings and other areas where a leak of carbon dioxide can collect must have an emergency alarm system installed.
 - Emergency alarm system. An emergency alarm system shall comply with all of the following:
 - Continuous gas detection shall be provided to monitor areas where carbon dioxide can accumulate.
 - Activates an audible & visual “supervisory” alarm upon detection of a CO2 concentration of 5,000ppm in a normally attended location.
 - Activates an audible & visual emergency alarm within the room or immediate area in which the system is installed upon detection of CO2 concentration of 30,000ppm.
- Acceptance Testing & Annual Certification. Inspection and testing of gas detection systems shall be conducted following the initial installation and then on an annual basis. Sensor calibration shall be confirmed at the time of installation. Future system calibration shall be performed at the frequency specified by the sensor manufacturer. CO2 emergency alarm systems are required to be certified and tagged annually.
- System Installation & Certification. Refer to list of approved vendors by Murray City Fire Department for system installation, maintenance, annual inspection and certification.



FLOOR PLAN

SCALE: NTS

