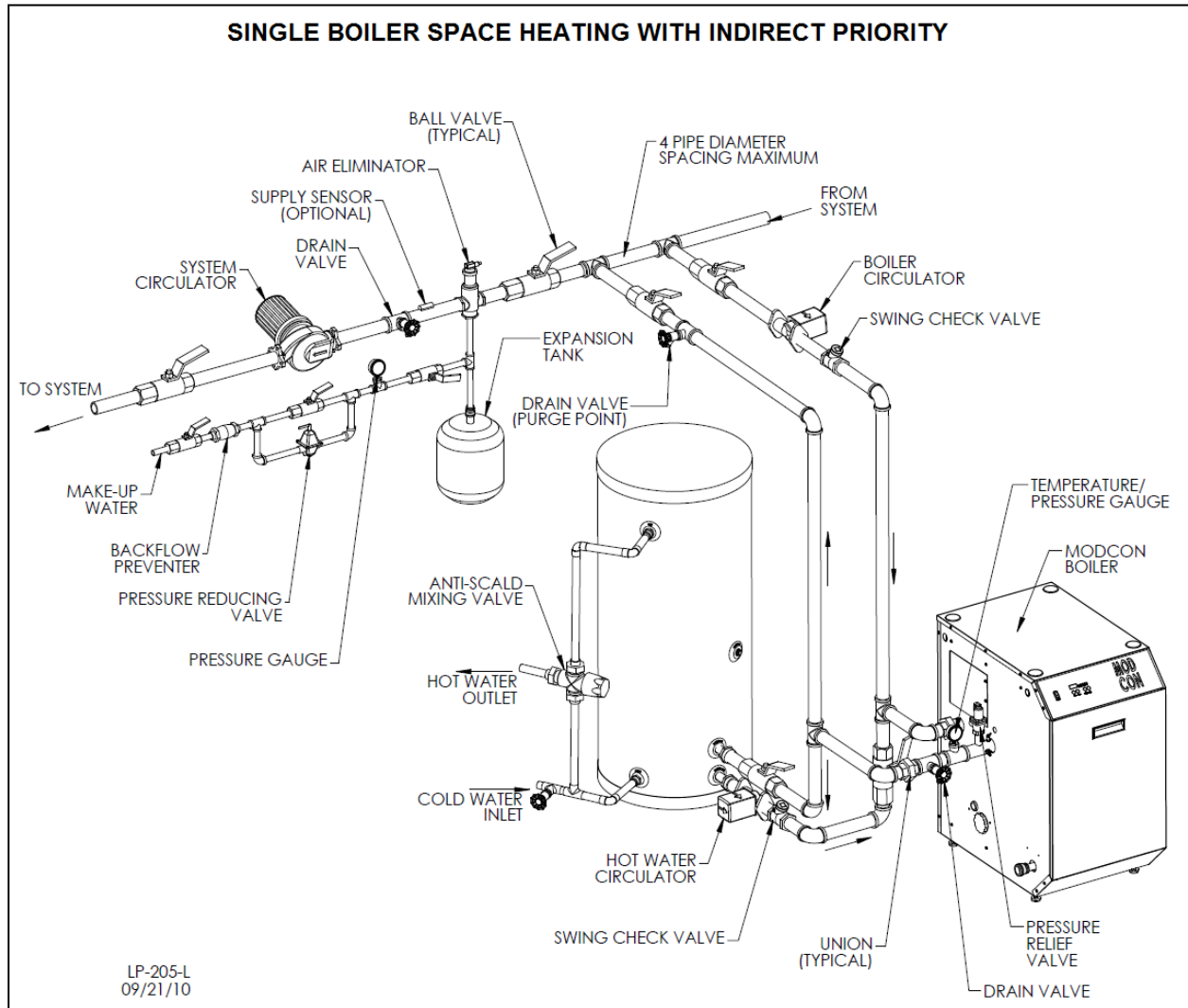


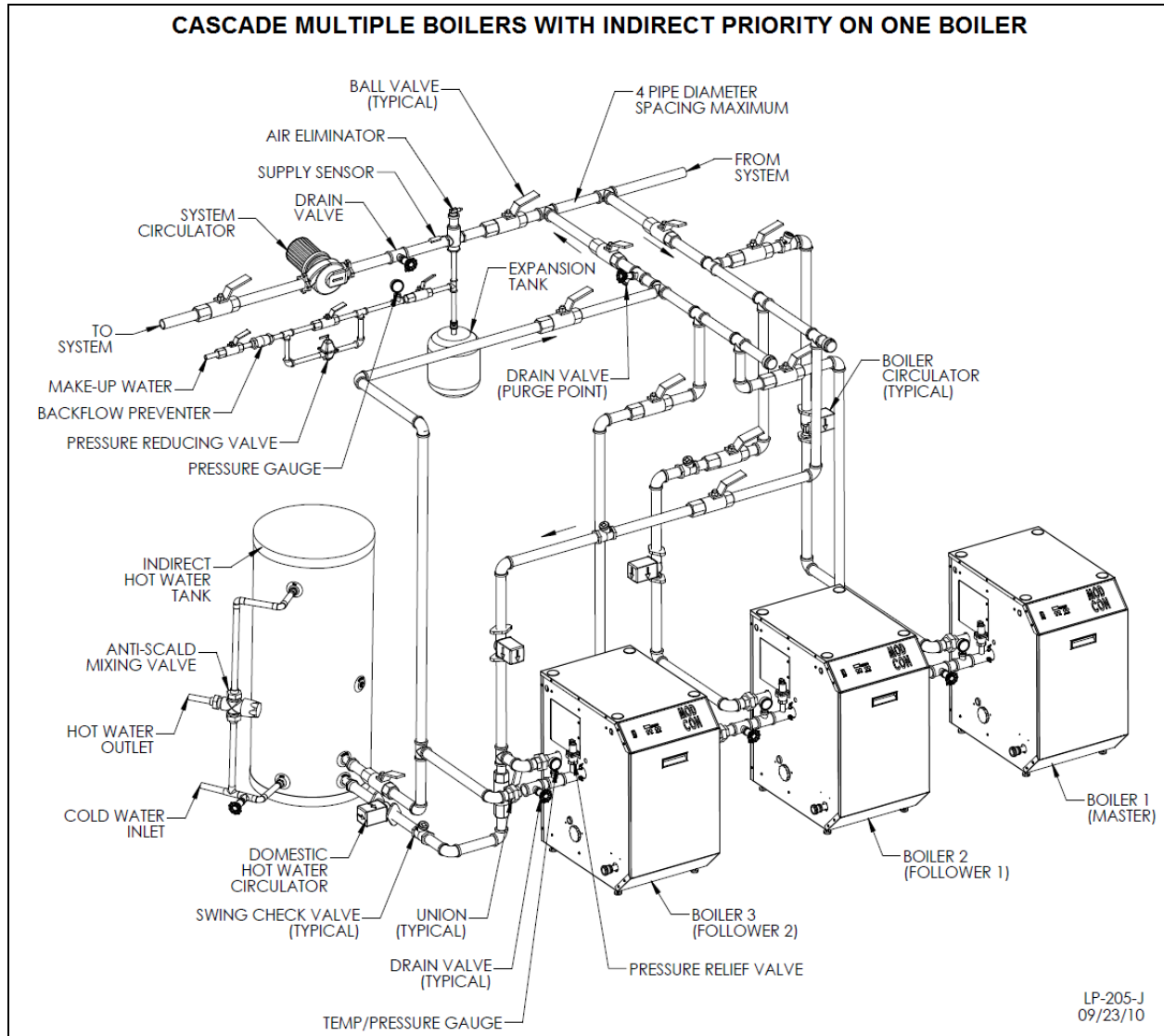
## G. BOILER PIPING DETAILS



**Figure 7 – Single Boiler Space Heating – Indirect Priority**

### **FIGURE NOTES:**

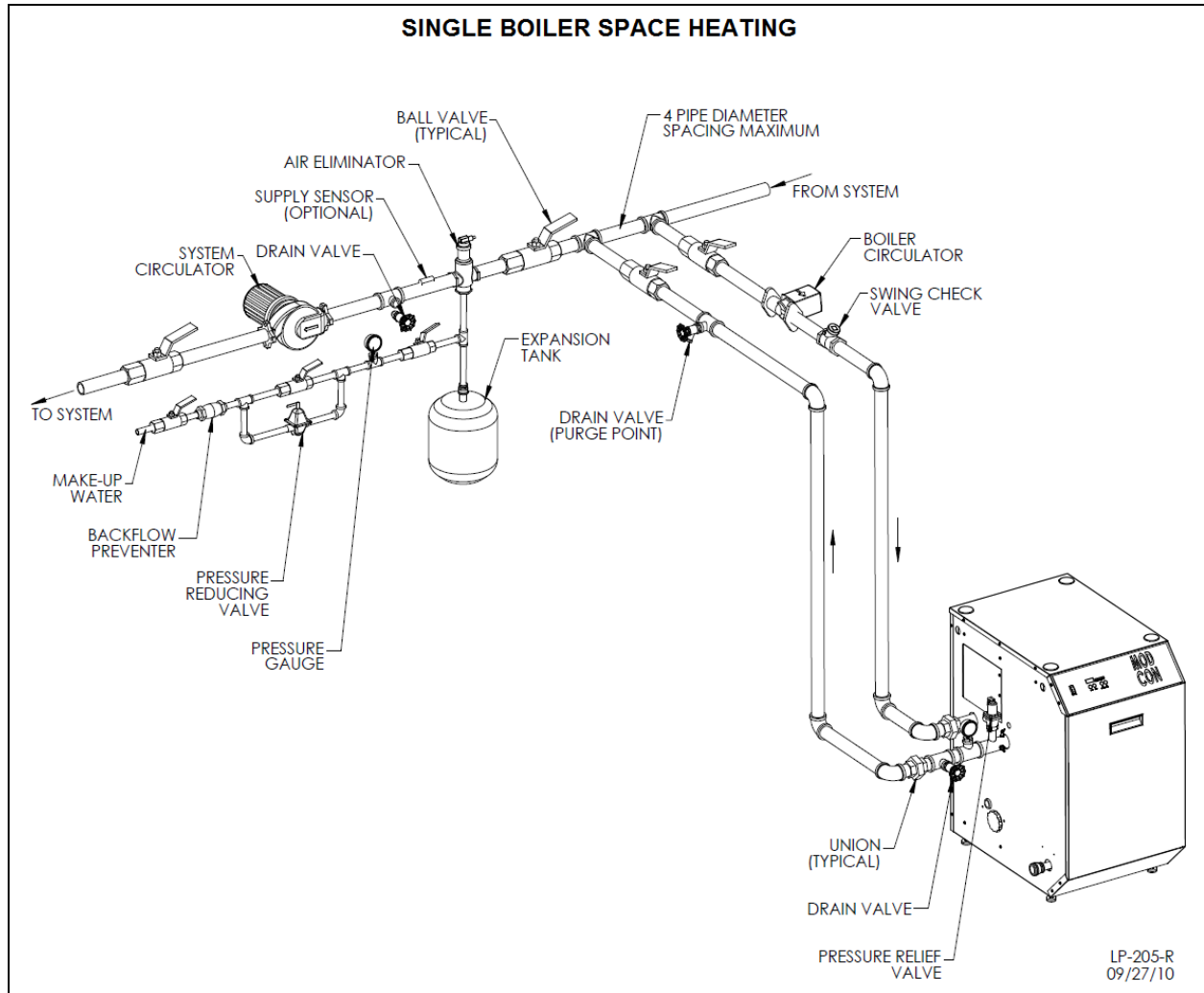
1. This drawing is meant to demonstrate system piping concept only.
2. A mixing valve is recommended if the DHW temperature is set above the factory setting of 119°F.
3. Install a minimum of 12 diameters of straight pipe upstream of all circulators.
4. Install a minimum of 6 diameters of straight pipe up and downstream of all closely spaced tees.
5. Piping shown is Primary/Secondary.
6. The minimum pipe size for connecting an HTP indirect fired water heater is 1".
7. The minimum pipe size for connecting a Mod Con boiler is 1 ½" for the 300 and 2" for the 500 and 850.
8. System flow (Secondary Loop) must be greater than the boiler's Primary Loop flow.
9. Installations must comply with all local codes.
10. In Massachusetts, a vacuum relief valve must be installed on the cold water line per 248 CMR.



**Figure 8 – Cascade Multiple Boilers – Indirect Priority on One**

**FIGURE NOTES:**

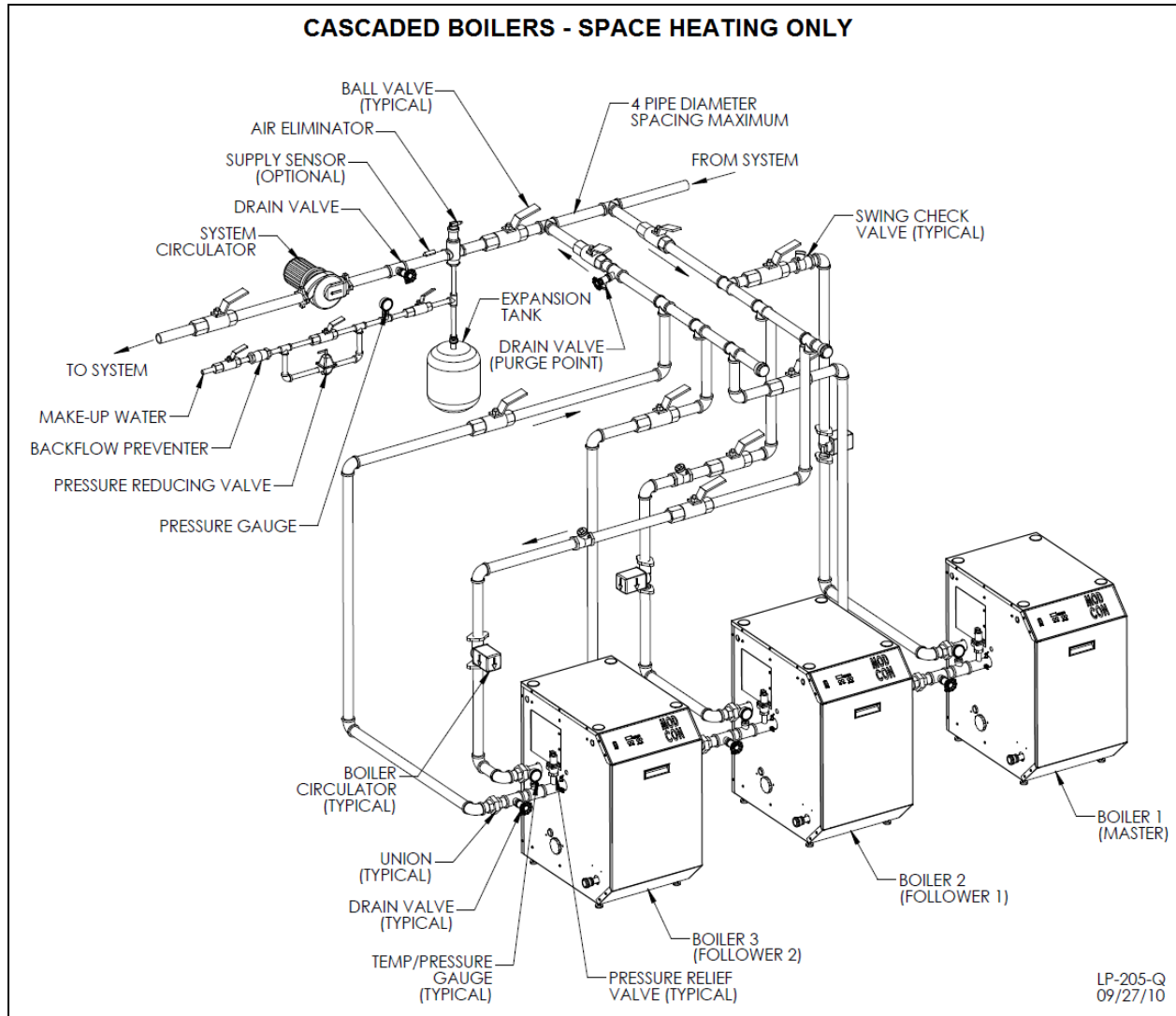
1. This drawing is meant to demonstrate system piping concept only.
2. A mixing valve is recommended if the DHW temperature is set above the factory setting of 119°F.
3. Install a minimum of 12 diameters of straight pipe upstream of all circulators.
4. Piping shown is Primary/Secondary.
5. System flow (Secondary Loop) must be greater than the boiler's Primary Loop flow.
6. Installations must comply with all local codes.
7. In Massachusetts, a vacuum relief valve must be installed on the cold water line per 248 CMR.
8. Reference Multiple Boiler Manifold Piping chart, Part 5, Section H.



**Figure 9 – Single Boiler Space Heating**

**FIGURE NOTES:**

1. This drawing is meant to demonstrate system piping concept only.
2. Installations must comply with all local codes.
3. Install a minimum of 12 diameters of straight pipe upstream of all circulators.
4. Install a minimum of 6 diameters of straight pipe up and downstream of all closely spaced tees.
5. The minimum pipe size for connecting a Mod Con boiler is 1 ½" for the 300 and 2" for the 500 and 850.
6. Piping shown is Primary/Secondary.



**Figure 10 – Cascaded Boilers – Space Heating**

**FIGURE NOTES:**

1. This drawing is meant to demonstrate system piping concept only.
2. Installations must comply with all local codes.
3. Install a minimum of 12 diameters of straight pipe upstream of all circulators.
4. Piping shown is Primary/Secondary.
5. Reference Multiple Boiler Manifold Piping chart, Part 5, Section H.

**CAUTION**

The boiler should not be operated as a potable hot water heater. The boiler should not be used as a direct hot water heating device.

Basic steps are listed below that will guide the installation of the boiler.

1. Connect the system return marked “Boiler Return”.
2. Connect the system supply marked “Boiler Supply”.