Example: (625 feet)/(2 feet/emitter) = 312.5, use 313 emitters

(313 emitters) x (1.32 gallons/hour/emitter) = 413.2 gallons/hour

(413.2 gallons/hour)/(60 minutes/hour) = 6.89 GPM, or 7 GPM

10 connections at 1.5 GPM per connection = 15 GPM

Pumping rate: 7 GPM + 15 GPM = 22 GPM

4. Determine feet of head. Multiply the system design pressure (20 psi is standard, but values can vary depending on the drip tube used) by 2.31 feet/psi to get head required to pump against.

   Example: (20 psi) x (2.31 feet/psi) = 46.2 feet of head

   Add in the frictional head loss from tubing

5. Select a pump. Determine the size of the pump based on gallons per minute (step 3 of suggested design example) and total head (step 4 of suggested design example) needed to deliver a dose to the system. The pump selected for this example must achieve a minimum of 22 GPM plus the flush volume at 46.2 feet of head.

Figure 4-2 shows an overhead view of a typical drip distribution system. Figure 4-3 shows a potential layout of a filter, valve, and meter assembly, and Figure 4-4 illustrates a cross-sectional view of the filter, valve, and meter assembly. Figure 4-5 provides a view of the continuous flush system filter and meter assembly.