

Concept only

Proposed design for use in an emergency if there is a problem with the main well. Gate valve #1 can be closed to the indexing head and turn off the sprinkler control without the need for the extras but if the main well is down for an extended period of time and you wish to both water the yard and keep water to the house, this should suffice. This design should allow the submersible pump to supply water to both the sprinklers and the house. The sprinkler system continues to operate as originally intended when the sprinkler control turns on the pump. The only addition is the solenoid valve at the wellhead that is powered by the sprinkler control. When the sprinkler control calls for water, it also supplies power to the solenoid valve to open it and allow water to flow to the mechanical index valve. Without it, the sprinklers would run continuously. Pressure switch A is connected to the breaker box in line with the 220-volt line to the submersible pump. When the pressure falls below 30 psi, the pressure switch turns the pump on regardless of whether it is the sprinklers or the house calling for water. Check valve (A) prevents backflow and maintains pressure on the house any time the sprinklers are running. The only issue I can foresee is low or no water pressure during the time the sprinklers are running. As the sprinklers are set to run only after 1:00 a.m. and go off by 5:00 a.m., it should not be an issue. In the event the pressure drops in the tank, some water should get into the tank so you should never be completely without water for toilets during the time the sprinklers are running. . If valve #2 is closed so that the house is running on the main well, the sprinkler pump won't run. It may need a bypass for that pressure switch.

