

## Field of Dreams

Gicon Packaged Systems is a division of Gicon Pumps & Equipment located in Haltom City, TX. They manufacture prepackaged constant pressure pump stations. By utilizing the Yaskawa iQpump1000 variable speed drive and a pressure transducer their pump stations provide constant water pressure for applications like rural water systems, rainwater harvesting, and turf irrigation.

**IT'S PERSONAL  
YASKAWA**



YASKAWA'S IQPUMP1000 IS YOUR TOTAL PUMPING SOLUTION FOR WHATEVER YOUR SYSTEM DEMANDS



- INTEGRATED PUMP FUNCTIONALITY MAKES SYSTEM INTEGRATION EASY
- DELIVERS CONSTANT PRESSURE WITH VARIABLE FLOW
- REDUCES WEAR ON PUMPS AND MOTORS
- KEEP PUMPS WORKING AT PEAK EFFICIENCY
- MINIMIZES WATER HAMMER
- IMPROVES ENERGY EFFICIENCY

### Challenge

Metro Irrigation Supply contacted Calvin Hale at Gicon with a unique application. They needed a pump station for irrigation at a local high school campus and football field. The pump station would need to supply various irrigation zones ranging from drip zones at 2 GPM to multiple sprinklers at over 180 GPM.

Additionally, while most irrigation zones required 50 PSI the football field would require 80 PSI for proper sprinkler coverage.

### Solution

Calvin worked with his Yaskawa Sales Engineer, Todd Thompson, to provide a simple solution for the application requirements.

A 1.5 HP pressure maintenance pump was selected for the drip irrigation zones with small flow rates. A 25 HP main pump was utilized for the larger irrigation zones. An iQpump1000 drive was used to control each pump. The two drives used their network multiplexing feature to automatically select the proper pump without the need for an additional control device.

By adding a flow meter to the standard pump station design, the iQpump1000 drive could sense the increased flow rate required by the football field irrigation zone. Once this increased flow rate was sensed, the drive was set up to switch the pressure set point to 80 PSI. When the football field irrigation is complete the set point returns to 50 PSI.

The simple addition of a flow meter to the system along with the iQpump1000 drive's network multiplexing feature allowed all of the objectives to be accomplished with minimal additional cost.

### Results

Metro Irrigation Supply successfully installed the Gicon pump station. As a result, one Texas High School has a green playing field and reduced energy consumption by utilizing Yaskawa iQpump1000 variable speed drives.