IRRIGATION DESIGN

SHERIDAN CEMETERY

Sheridan, Wyoming

Steiner Thuesen PLLC was retained as irrigation consultant to local engineering firm MSE-HKM, Inc. to assist planning for development of a raw water source for irrigation of the 57 acre city cemetery. In this capacity the firm was tapped for specialized knowledge regarding turf irrigation pumping systems. The firm was also responsible for conceptual design of the new irrigation distribution and automatic computer regulated control systems.

Located on a high bench on the city's south side, the cemetery has historically been irrigated with potable water. Due to elevation, storage capacity and growth, this particular pressure zone has suffered with poor pressures and limited flow availability. These conditions were detrimental to homeowners in the area and resulted in many maintenance difficulties at the cemetery including restricted water availability.

A plan was developed to perfect an existing city water right in Big Goose Creek by constructing an infiltration gallery in the stream bed. Water is drawn from the infiltration gallery and pumped directly into a transmission pipeline which delivers raw water to the cemetery irrigation mainlines.

The new cemetery irrigation system has been completely redesigned to take advantage of this new water resource. The piping system was replaced and a new master satellite computer irrigation control system is being used. This control system enables separate metering for each of the

several service groups associated with the cemetery. It also continually monitors flow conditions within the irrigation system and evapotranspiration conditions to continuously adjust individual station selection and run times. This keeps the pumps operating optimally while applying only the precipitation that the grass requires to maintain health and vigor. This feature compresses the pumping time to its minimum, extending the pump life and reducing energy requirements while maintaining attractive turf conditions.

The Wyoming Engineering Society awarded the Sheridan Cemetery Irrigation Project an honorable mention designation for the President's Project of the Year Award in 2000. This project has also been recognized as the 2001 Central Region Winner for Best Use of Rain Bird Water Conservancy Products.





