

Irrigation Specifications, Elcho Golf Course, Lara for City of Greater Geelong, January 2010

The City of Greater Geelong planned an irrigation system upgrade for Elcho Park Golf Course using Class C recycled water from Barwon Prison. Phillips Agribusiness undertook an investigation to determine soil suitability for irrigation, the quality of the irrigation water available and the specifications required for appropriate irrigation regimes. The tasks undertaken included:

- 1 An inspection of the soil profile across the site to determine profile permeability and therefore infiltration capacity. Soil testing was conducted at the surface and root zone level to establish nutrient and salinity status and what changes were occurring over depth.
- 2 The nutrient and salinity status of the recycled water was studied to determine its irrigation suitability when applied at recommended rates, generally between 3.0-5.0ML/ha.
- 3 A review was conducted of the irrigation regimes being planned for the golf course. It involved a consideration of course irrigation requirements, the type of turf species being irrigated and the irrigation system being used.

The investigation concluded that the soils are only fair for irrigation due to their heavy texture and subsoil sodicity. Regular applications of gypsum were recommended. Other recommendations included differential irrigation for different turf classes, irrigation scheduling through moisture deficit or Et scheduling and some upgrade of facilities.