

### Skilled Park Stadium

April 2001

The new \$160 million, 25,000-seat stadium on Australia's Gold Coast has been designed with energy efficiency and sustainability as two key factors. World leaders in sports architecture, HOK Sport considered a number of environmental aspects in the development of Skilled Park, including utilisation of natural ventilation and lighting to reduce energy costs and using recycled water for irrigation and cleaning. Comprising 100 open corporate boxes, 28 closed corporate suites, a 500 seat function hall and 16 food and beverage outlets, Skilled Park is essentially a cut down version of sister-stadium, Suncorp, located in Brisbane and another successful controlled installation.

Consultants, Sinclair Knight Merz, called for a lighting control system that not only met with the environmentally sustainable design of the stadium, but one that had a proven track record in similar applications. Project requirements include control of all stadium lighting and external lighting to four illumination levels; match play/ broadcast television, training, patron exit and safe working level. Presence detection is to be implemented in hallways, amenities and other low-traffic areas, to further reduce energy costs.

Skilled Stadium utilises the same trunk and spur network topology employed at Suncorp Stadium; a horizontal implementation of a standard network, whereby the trunk surrounds the stadium in a ring and vertical spurs run up through the electrical risers and supply local distribution boards. Each spur is optically isolated via a network Bridge, which eliminates the chance of an electrical fault on one spur corrupting the rest of the network. Control of stadium and other exterior lighting incorporates programmable relay switching to achieve the four pre-requisite light levels; robust relay controllers provide on/off control of HID lighting. Fluorescent fittings are controlled via cost-effective Ballast Controllers and in addition, Universal Sensors are installed in low traffic areas. The presence detection feature in the sensors ensures that fluorescents in these areas are only turned on when required, further saving energy. A powerful Touch Screen provides an intuitive user-interface to the system, providing simple selection of preset lighting levels or scenes. A dedicated PC running ControlSoft Advanced user software provides an alternate control location in the events room.

With a solid background in superior lighting control solutions for sports stadia and Olympic venues worldwide, it was clear that our company was the only choice. The mission critical nature of sports broadcasting means that failure or fault is not acceptable. The end result for the client is a system that meets with the energy efficient and sustainable nature of the project, providing simple, flexible and easy-to-use control.

#### Scope of Works:

- 480 x Network Relay Channels
- 36 x Network HF Ballast Channels
- 18 x Network Sensors
- 1 x Touch Screen

