

# CASE STUDY

## Lane Cove Tunnel

### PROJECT

The Lane Cove Tunnel in Sydney involved the construction of twin, 3.6km, two-lane tunnels, with 3 lanes provided in long sections to improve traffic flow. The Tunnel is a key link connecting the Gore Hill Freeway with the M2, resulting in quicker journey times between the city & Sydney's North West. Thiess John Holland was appointed the builder and the total project cost was \$1.1 billion.

United Group Infrastructure (formerly Alstom) was appointed electrical engineers for the project, responsible for the installation of all low & high voltage cables, fibre optic cables and fit out of the control centre.

Madison Technologies involvement in the project started in late 2004 after successfully winning the UGI tender. Optimal Cable Services was also successful in winning the fibre on the project.

### CHALLENGE

Due to the risk of possible accidents in the tunnel, all cable specifications in the initial tender called for Low Smoke Zero Halogen Sheath or 2 Hour Fire Rated cables. In the event of fire, the use of these cables would ensure minimal toxins would be emitted into the atmosphere within the tunnel.

### SOLUTION

Madison Technologies was able to manufacture a custom made cable, designed to match UGI's specific requirements.

The flexibility offered by Madison Technologies for this project also facilitated the manufacture of additional Low Smoke Zero Halogen cables for the Parramatta Rail Link (another UGI project).

The cables for both of these projects were used for CCTV cameras, emergency exit lighting, emergency telephones, traffic advisory speed signs & traffic warning signs.

### OUTCOME

The Lane Cove Tunnel was opened on 25th March 2007 (approximately 4 months ahead of schedule).

With tight delivery schedules nearing the end of the project, the staff at UGI and Madison Technologies had to work very closely to ensure all of the systems remaining to be cabled were covered, quantities were correct and delivery schedules were accurate to allow adequate time for installation and testing. All the stages came together precisely and allowed UGI to complete their work two months ahead of schedule.

The Lane Cove Tunnel project has led to a very successful relationship between Madison Technologies and UGI. Madison Technologies has subsequently been successful on many other major infrastructure projects that UGI have been involved with throughout Australia.



### COMPANY

United Group Infrastructure

### PROFILE

United Group Infrastructure is a leader in providing industrial maintenance, construction and engineering services to the water, power, transport, communications and defence sectors, using strong technology partnerships with world-leading organisations.

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### RESULTS

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