## Built Features

Metropolitan Coal's built features monitoring program includes monitoring of the following infrastructure items:

- Integral Energy infrastructure (e.g. transmission line, access tracks and towers).
- Nextgen infrastructure (e.g. access tracks, fibre optic cable lines and pits).
- TransGrid infrastructure (e.g. access tracks, towers and transmission lines).
- Optus infrastructure (e.g. access tracks and fibre optic cables).
- Telstra infrastructure (e.g. access tracks and transmission lines).
- Roads and Maritime Services (RMS) (previously Roads and Traffic Authority [RTA]) infrastructure (e.g. pavement, bridges, culverts and cuttings).
- RailCorp infrastructure (e.g. rail line and associated infrastructure).
- Sydney Water infrastructure (e.g. pipelines and water tanks).
- Wollongong City Council infrastructure (e.g. pavement and culverts).

Site inspections have been conducted prior to the commencement of Longwall 20 secondary extraction to establish the condition of the infrastructure items. Following re-surfacing of the F6 Southern Freeway (March 2012) in the vicinity of Helensburgh as part of routine maintenance, a further pavement condition assessment was conducted by the RMS (previously RTA) prior to Longwall 21 extraction approaching within 1,000 metres of the Longwall Finish Line.

Metropolitan Coal's monitoring of subsidence parameters (i.e. subsidence, tilt, tensile strain, and compressive strain) is described in the Subsidence section of this Environmental Monitoring Summary.

Subsidence monitoring relevant to each Built Feature Management Plan was conducted in accordance with each Plan. In relation to the Built Features Management Plan – RMS (previously RTA), a Technical Committee was established comprising representatives from the RMS (previously RTA), Metropolitan Coal, the Mine Subsidence Board, and technical specialists to monitor progress on a regular basis. A specific subsidence report on Longwall 20 movements and impacts will be prepared at the completion of Longwall 20 by Mine Subsidence Engineering Consultants and monitored bridge movements were assessed by Cardno Pty Ltd at regular intervals in accordance with the Technical Committee's requirements. At the completion of Longwall 20 the subsidence movements were generally in accordance with predicted subsidence within the accuracy of the survey and predictions methods.

No impact to any built feature was evident over the review period.

The frequency of monitoring for each infrastructure item varies as described in the Built Features Management Plan.

The results of the monitoring will be used to assess the performance of the Project against the following built features subsidence impact performance measure:

*Safe, serviceable and repairable, unless the owner and the MSB agree otherwise in writing*.

In relation to the Built Features Management Plan – RMS (previously RTA), Cardno Pty Ltd assessed the monitored bridge movements as at end July 2011. The assessment concluded that there were no differential movements of any concern, however some disturbance of ground pegs (1G and 4G for northbound and 8G for southbound) may have occurred.

The built features subsidence impact performance measure was not exceeded during the review period.