

TAHMOOR COLLIERY: Longwall 28

Subsidence Management Status Report No. 03
 Submitted every four months as required by Condition 17 of the
 Subsidence Management Plan Approval for Longwall 28

Reporting Period	1 November 2014 to 28 February 2015	
Length of extraction	2205 m	as at 26 February
Length of extraction remaining	425 m	
Distance travelled by LW since previous report	811 m	30 October to 26 February
Maximum total subsidence since start of LW22 within zone of active subsidence	711 mm	Bridge Street line as at 18 February
Maximum incremental subsidence due to LW28 within zone of active subsidence	542 mm	Optical Fibre line as at 1 December
Maximum increase in subsidence since previous report	397 mm	Redbank Creek line (25 November to 26 February)

Summary of Observations, Management Actions and Consultation since start of LW28

Summary of subsidence development
<p>Subsidence is developing above LW28 within expectations. The zone of active subsidence is currently in rural land between Redbank Creek and Bridge Street. Subsidence monitoring has focussed primarily on the Main Southern Railway, Redbank Creek and Bridge Street during this reporting period.</p> <p>Valley closure is developing across Redbank Creek at similar magnitudes to those observed during the extraction of previous Longwalls 26 and 27. Localised non-systematic subsidence movements have been observed along the Main Southern Railway between 91.700 km and 91.820 km.</p>
Natural Features
<p><i>Summary of any observed/reported impacts or incidents, exceedence of triggers</i></p> <p>Visual inspections of Redbank Creek by GeoTerra have found minor additional changes above Longwall 27 since the completion of Longwall 27. There is a reduced water holding capacity including following heavy rainfall. The majority of pools upstream of the railway crossing are dry or close to being dry. Downstream of the railway crossing, a groundwater seep in the tributary continues to provide a large flow into pools, which have high water levels. Minor cracks have been observed in the creek bed near Redbank Creek railway culvert, approximately 150 metres east of Longwall 28, with minor new sandstone delamination observed at two locations in February.</p> <p><i>Summary of Management Actions</i></p> <p>Relative 3D ground surveys and visual inspections of Redbank Creek are ongoing. The longwall face has mined directly beneath Redbank Creek and has passed it by approximately 260 metres.</p> <p><i>Summary of Consultation with Stakeholders</i></p> <p>Observations during mining of Longwall 28 reported to Tahmoor Colliery Community Consultative Committee. No issues have been raised by any members.</p>
Main Southern Railway
<p><i>Summary of any observed/reported impacts or incidents, exceedence of triggers</i></p> <p>The longwall face has completed extraction directly beneath the Main Southern Railway. There have been no impacts on the safety or serviceability of the Railway. The railway infrastructure has experienced some minor impacts along the track as a result of mine subsidence, and these have been successfully managed by Tahmoor Colliery in accordance with the LW28 Rail Management Plan. Redbank Creek Culvert has experienced damage, particularly in the central section of the culvert in the form of brickwork cracking and stepping. The culvert remains safe and serviceable and additional measures have been implemented to provide support to the culvert, with further measures planned to be implemented. No impacts have been observed to the Bridge Street Overbridge.</p> <p><i>Summary of Management Actions</i></p> <p>Monitoring and inspections are being undertaken as per the Railway Management Plan.</p> <p><i>Summary of Consultation with Stakeholders</i></p> <p>Ongoing consultation and inspections by ARTC technical and management personnel with ARTC, including weekly teleconference. Detailed subsidence monitoring reports issued weekly. Please refer to Railway Status Report for further information.</p>
Local Roads, Bridges and Culverts
<p><i>Summary of any observed/reported impacts or incidents, exceedence of triggers</i></p> <p>No impacts have been observed to the local bridges and road culverts.</p> <p><i>Summary of Management Actions</i></p> <p>Monitoring and inspections have been undertaken as per the Wollondilly Shire Council Management Plan.</p> <p><i>Summary of Consultation with Stakeholders</i></p> <p>Detailed subsidence monitoring report is issued to Wollondilly Council.</p>

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Potable Water Infrastructure
<i>Summary of any observed/reported impacts or incidents, exceedence of triggers</i> No impacts observed or reported with respect to potable water infrastructure. <i>Summary of Management Actions</i> Monitoring and inspections are being undertaken as per the Potable Water Management Plan. <i>Summary of Consultation with Stakeholders</i> Detailed subsidence monitoring report is issued to Sydney Water.
Sewer Infrastructure
<i>Summary of any observed/reported impacts or incidents, exceedence of triggers</i> No impacts observed or reported with respect to sewer infrastructure. There is a short 67 metre section of the Thirlmere Carrier pipe along Bridge Street that has been laid with a relatively low grade of 0.5 % (5 mm/m). Monitoring during the mining of Longwall 27 found that the pipes experienced a reduction in grade, as was expected. Monitoring during the mining of Longwall 28 has subsequently confirmed that pipe grades are increasing, as expected. <i>Summary of Management Actions</i> Monitoring and inspections are being undertaken as per the Sewer Management Plan, which include weekly ground surveys along Bridge Street. <i>Summary of Consultation with Stakeholders</i> Detailed subsidence monitoring reports are issued to Sydney Water. Sydney Water is ready to respond if required to ensure the sewer remains serviceable.
Gas Infrastructure
<i>Summary of any observed/reported impacts or incidents, exceedence of triggers</i> No impacts observed or reported with respect to gas pipes. No gas services are located within the active subsidence area during this reporting period. <i>Summary of Management Actions</i> Monitoring and inspections are being undertaken as per the Jemena Management Plan. <i>Summary of Consultation with Stakeholders</i> Detailed subsidence monitoring report is issued to Jemena.
Electrical Infrastructure
<i>Summary of any observed/reported impacts or incidents, exceedence of triggers</i> No impacts observed or reported with respect to electrical cables or poles. <i>Summary of Management Actions</i> Monitoring and inspections are being undertaken as per the Endeavour Management Plan. This includes monthly surveys of critical power poles. <i>Summary of Consultation with Stakeholders</i> Detailed subsidence monitoring report is issued to Endeavour Energy.
Telecommunications Infrastructure
<i>Summary of any observed/reported impacts or incidents, exceedence of triggers</i> No impacts observed or reported with respect to telecommunications cables or poles. <i>Summary of Management Actions</i> Monitoring and inspections are being undertaken as per the Telstra Management Plan. This includes weekly visual inspections within the zone of active subsidence. <i>Summary of Consultation with Stakeholders</i> Detailed subsidence monitoring report is issued to Telstra.
Items of Heritage Significance
No items of heritage significance are located within the active subsidence area during this reporting period.

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Building Structures
<p><i>Summary of any observed/reported impacts or incidents, exceedence of triggers</i></p> <p>Impacts observed to a number of houses during the mining of LW28.</p> <p><i>Summary of Management Actions</i></p> <p>Ongoing inspections of properties within the active subsidence area.</p> <p><i>Summary of Consultation with Stakeholders</i></p> <p>Ongoing, extensive consultation has been undertaken with residents in the subsided areas. This includes consultation with residents who have experienced impacts and neighbouring residents who have not reported impacts.</p>
Any additional and/or outstanding management actions
<p>None. The existing management processes are considered to be adequate and effective.</p>

Certified by Tahmoor Colliery:

Signature: _____ Date: _____