

APPENDIX 11

Consultation Materials



Austar Coal Mine

Stage 3 Modification Project Presentation



Austar Coal Mine Stage 3 Modification



COMMUNITY MEETING

Agenda

- | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| <ul style="list-style-type: none">• Welcome and Opening<ul style="list-style-type: none">• Purpose of day• Approval Process | Adrian Moodie |
| <ul style="list-style-type: none">• Current Operations & Stage 3 Overview | Adrian Moodie |
| <ul style="list-style-type: none">• Description of Proposed Modification | Adrian Moodie |
| <ul style="list-style-type: none">• Sharing the Benefit Agreement | Frank Fulham |
| <ul style="list-style-type: none">• Open Forum<ul style="list-style-type: none">• Questions | Frank Fulham |



Austar Current Operations and the Stage 3 Project

Overview



Austar Coal Mine

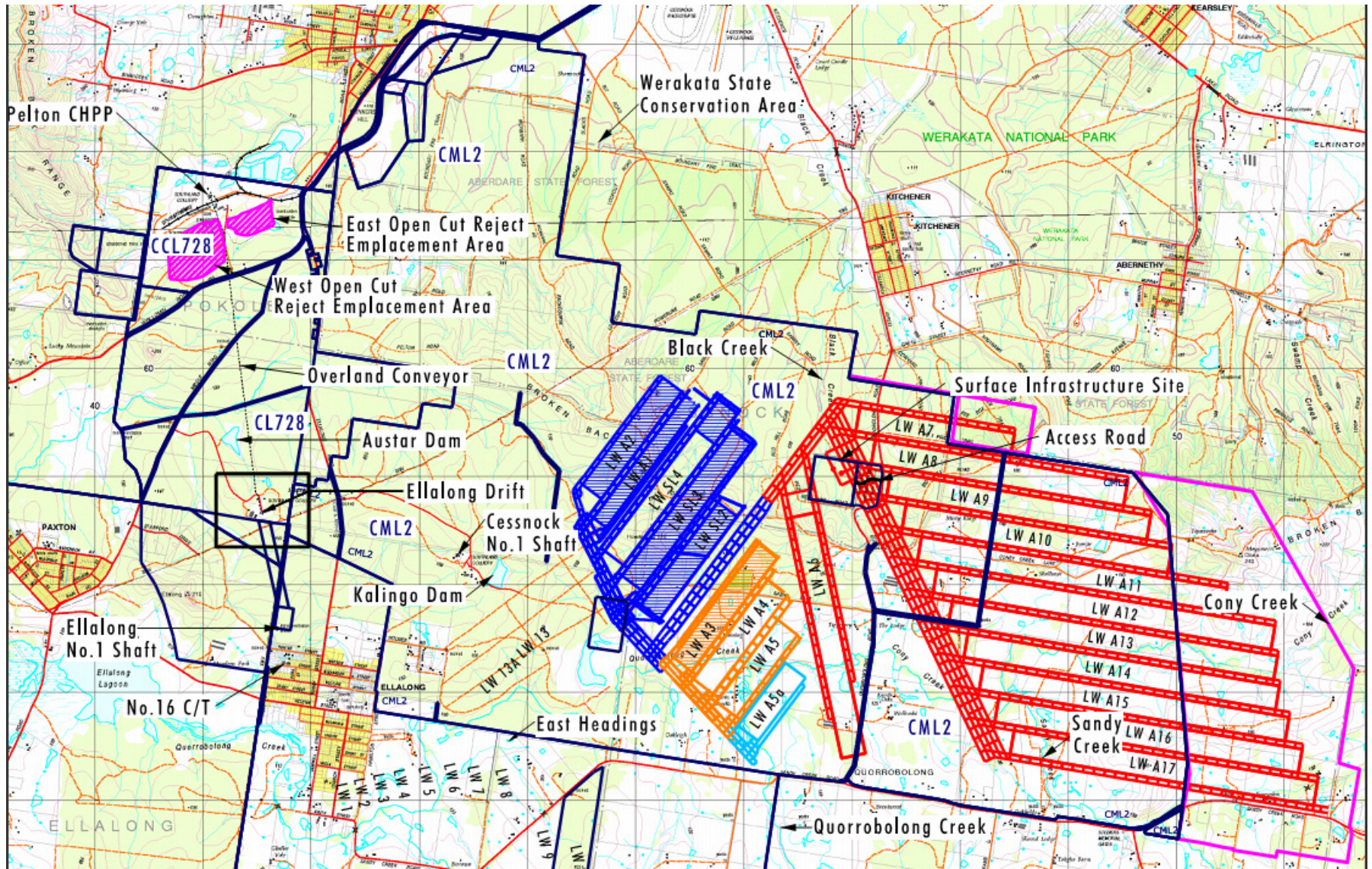
- Austar currently has approval to mine within CML2 using the following facilities:
 - Ellalong Drift and Pit Top and remote infrastructure sites
 - Pelton CHPP and associated coal handling, processing and rail infrastructure
 - Reject Emplacement areas in accordance with the Austar MOP
 - Water Management infrastructure in accordance with the Site Water Management Plan

Overview



Austar Coal Mine

- 98% of product is transported to the port via rail for export
- Remainder is transported via road to domestic customers unable to be reached via rail/shipping and to customers who require coal of specific sizes. Road transport diminishes the risk of the coal size being reduced during transport.



Legend

- ▭ Layout for Stage 1 Longwall Panels
- ▭ Layout for Stage 2 Longwall Panels
- ▭ Layout for Stage 2 Extension Longwall Panel
- ▭ Conceptual Layout for Stage 3 Longwall Panels
- ▭ Proposed Stage 3 Extension Boundary
- ▨ Reject Emplacement Areas

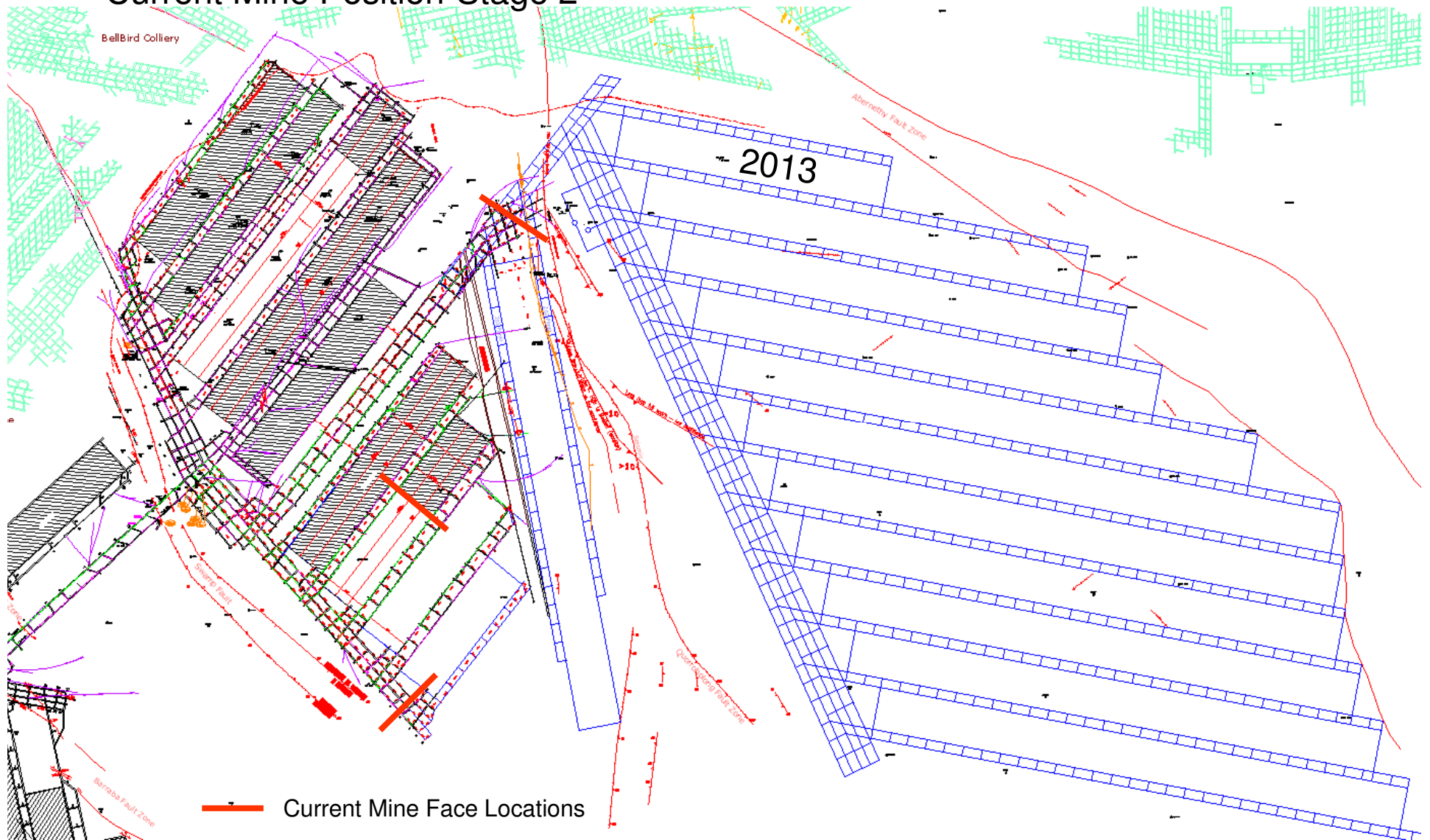
FIGURE 1

Austar Mine Complex

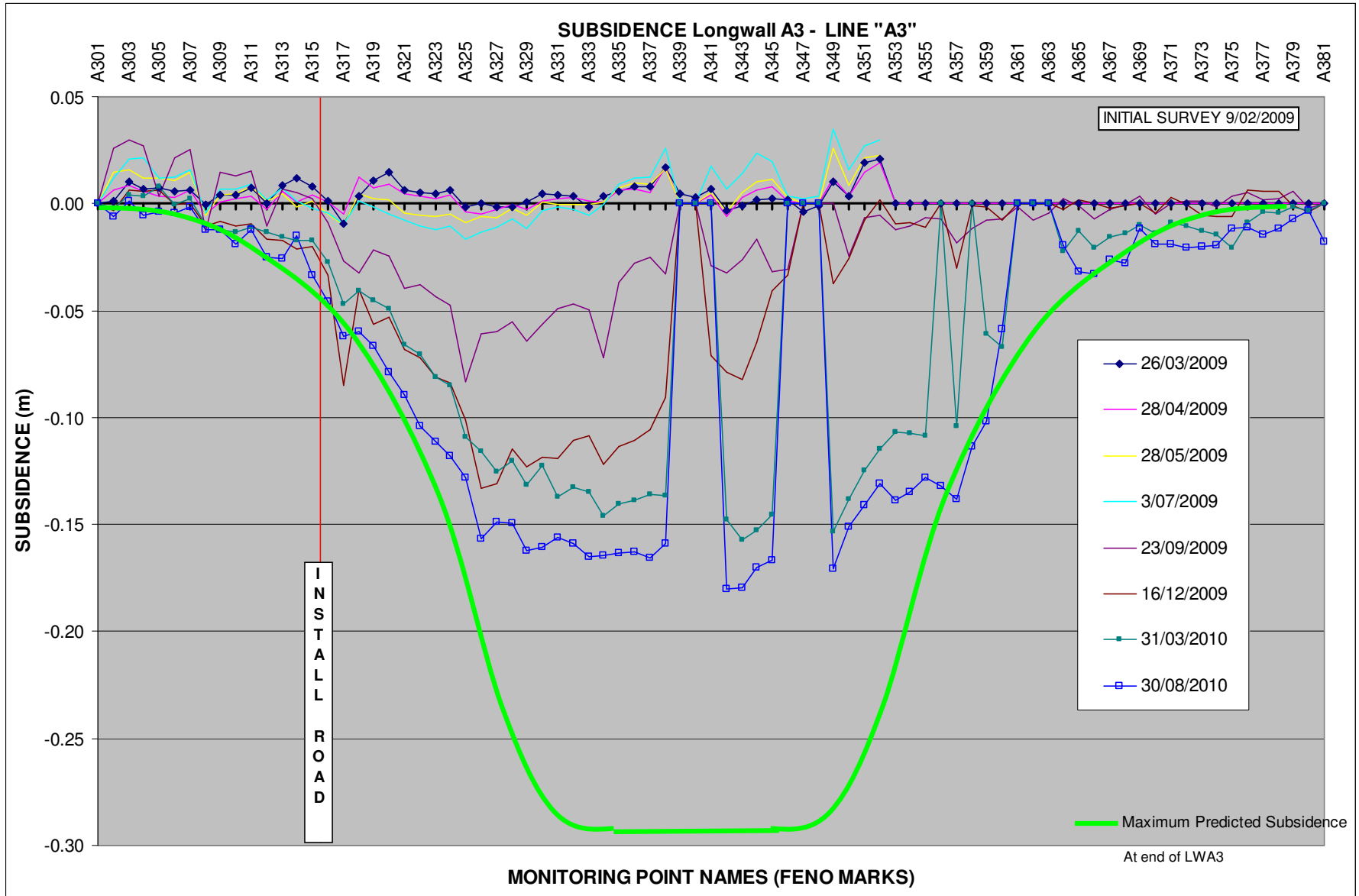
Mining Operations Progress



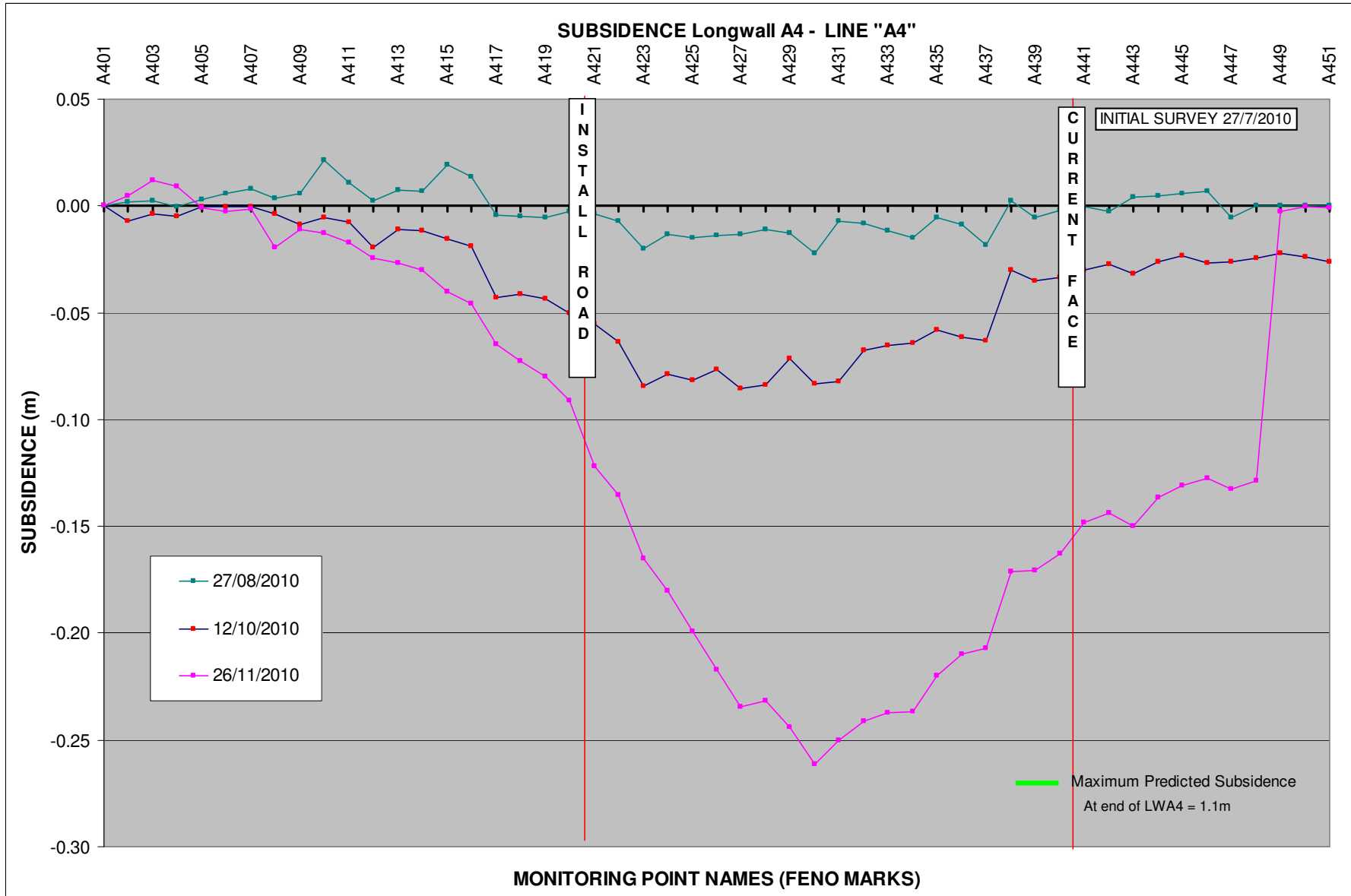
Current Mine Position-Stage 2



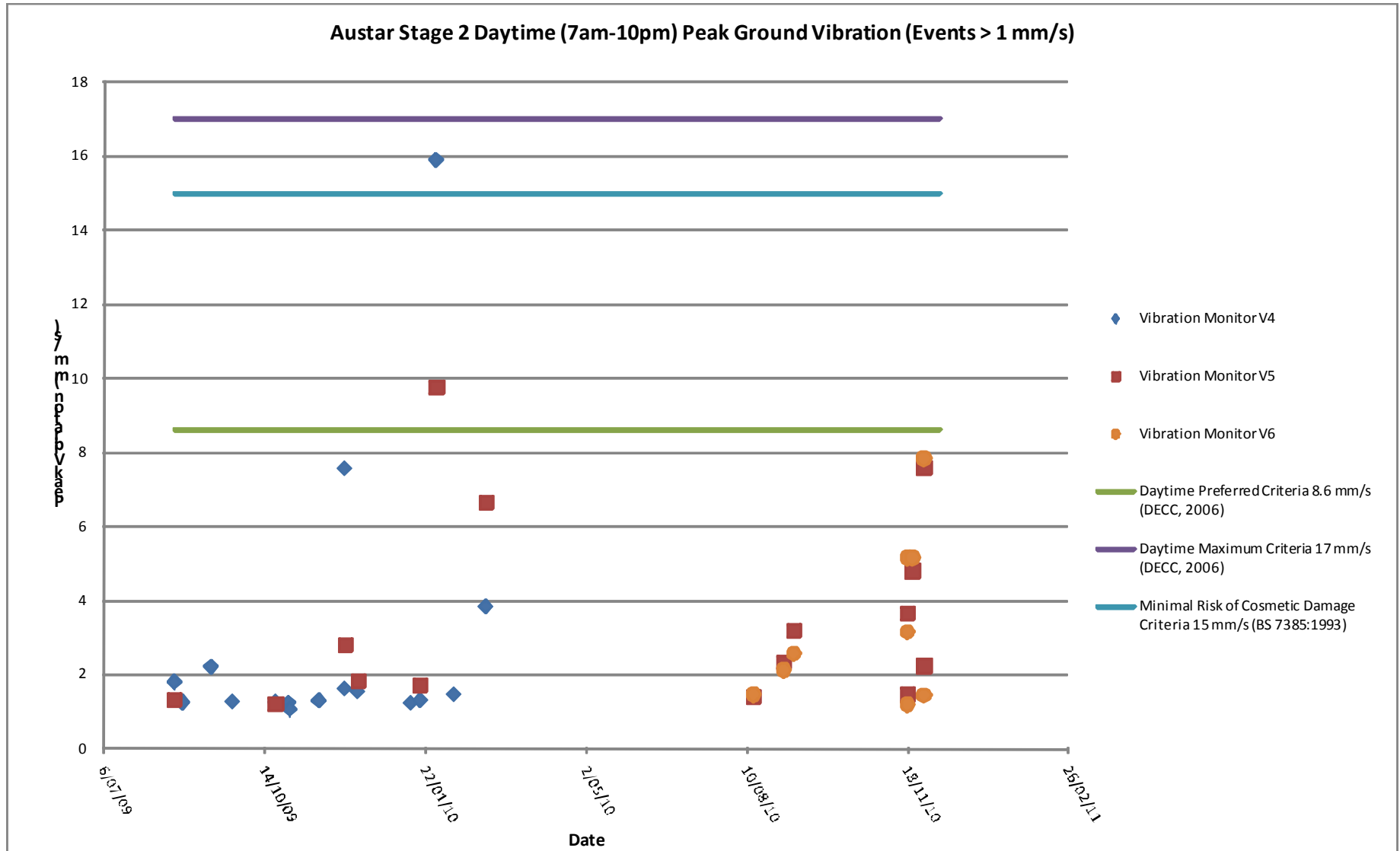
Subsidence Monitoring



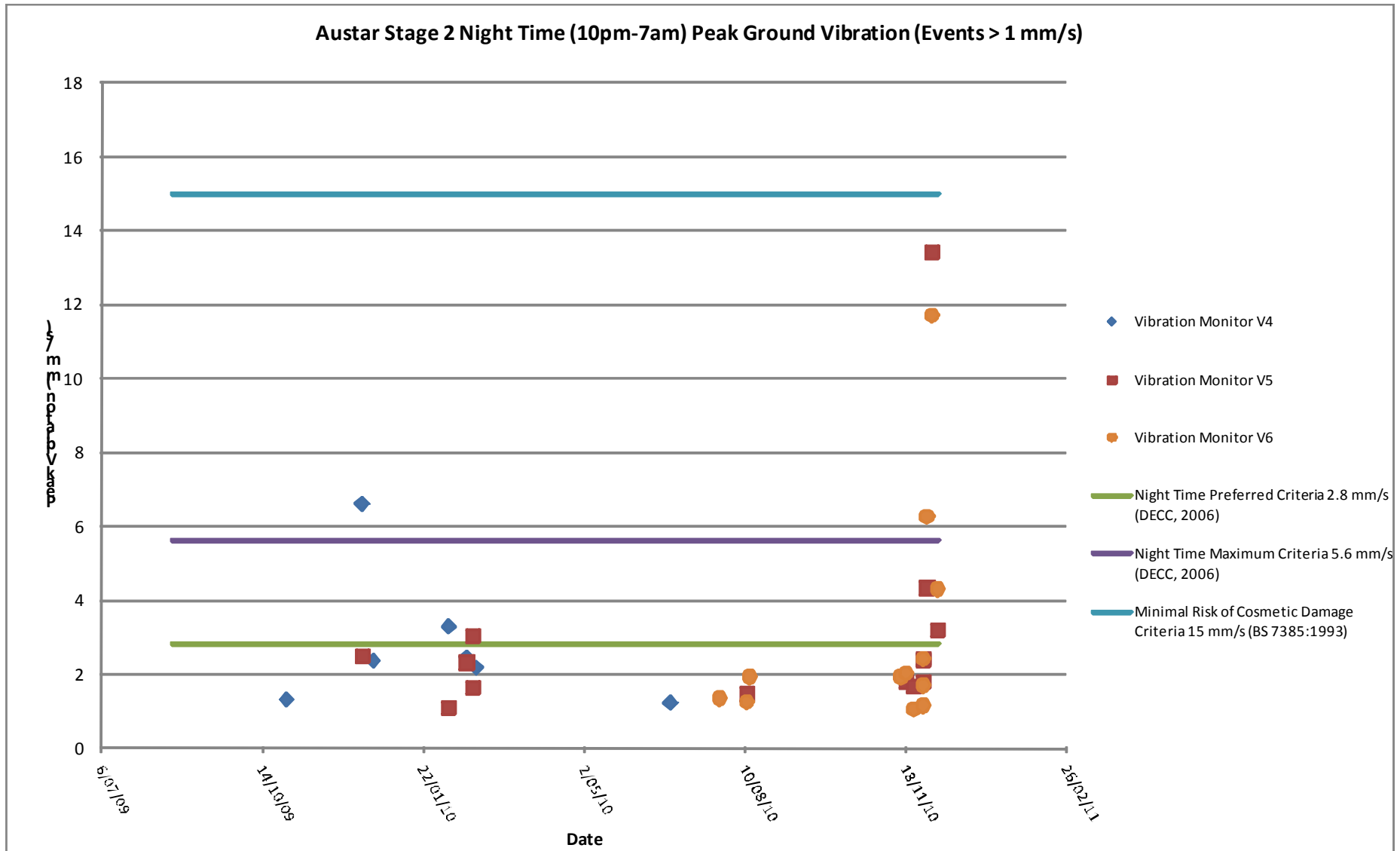
Subsidence Monitoring



Vibration Monitoring



Vibration Monitoring



Kitchener Infrastructure Site



- 4.5m diameter ventilation shaft first required piece of infrastructure at Kitchener
- Clearing works and site preparation commenced late November 2009
- Shaft construction commenced early December 2009
- Shaft currently at 200m depth (460m total depth)
- Anticipated completion in July 2011

Kitchener Infrastructure Site



Kitchener Infrastructure Site



Kitchener Infrastructure Site



- Upcoming works in 2011-2012 for the Kitchener Site:
 - 33kV Power line extension from Kitchener
 - Men and Materials Shaft construction
 - Ventilation fan build
 - Final intersection upgrades
- Construction activities are to be environmentally managed under the “Shaft Construction Environmental Management Plan” approved by the Department of Planning in accordance with Schedule 4- Condition 1 of the Stage 3 Consent.

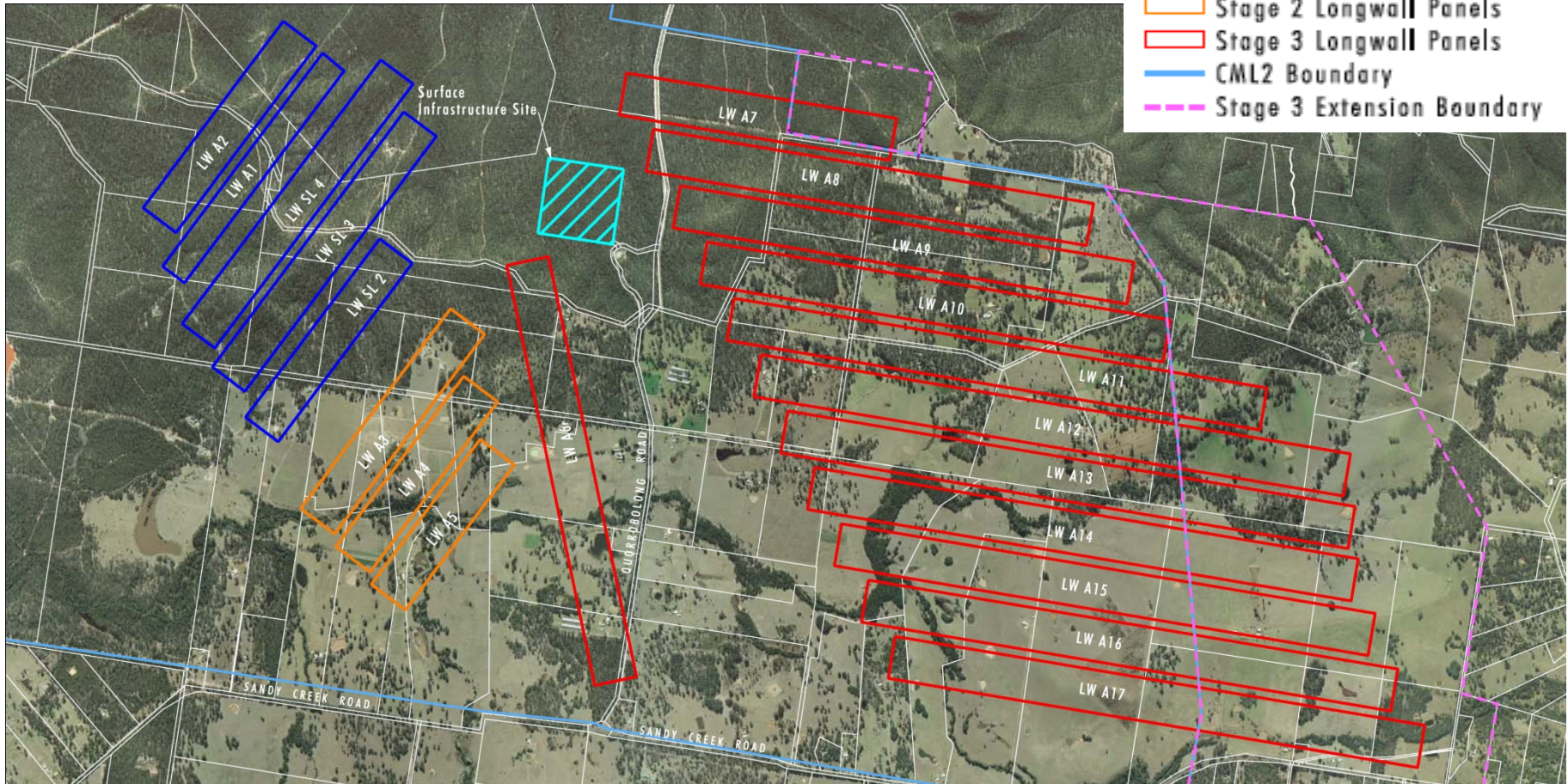
Austar Stage 3 Project



Austar Coal Mine

Legend

- Stage 1 Longwall Panels
- Stage 2 Longwall Panels
- Stage 3 Longwall Panels
- CML2 Boundary
- Stage 3 Extension Boundary



Key Approval Aspects



Austar Coal Mine

- Approval for underground mining:
 - In accordance with EA, statement of commitments and consent conditions
 - extraction of up to 3.6 MTPA ROM from Austar Mine Complex through to 31 December 2030
 - 60,000 TPA of coal and coal reject transported by road, the remainder by rail
 - Extraction of up to 7 metres of coal using Longwall Top Coal Caving technology
- Construction and operation of new Surface Infrastructure Site which will provide access to underground mining area for workers and materials

Key Approval Aspects



Austar Coal Mine

- Projects will use existing and approved infrastructure:
 - Ellalong drift
 - Pelton Coal handling Preparation Plant
 - Austar and South Maitland Railway
 - Emplacement of reject at Pelton and Aberdare open cuts

Stage 3 Approval and the Community



Austar Coal Mine

- Road intersection upgrades prior to construction of SIS buildings
 - Access intersection to SIS off Quorrobolong Rd
 - Wollombi Rd / West Ave intersection (designated right turn to West Ave)
- Use best endeavours for road/rail level crossing upgrades prior to construction of SIS buildings

Stage 3 Approval and the Community



Austar Coal Mine

- Road Maintenance Contributions
 - an appropriate annual contribution to be made to Cessnock City Council for maintenance of local roads used as haulage routes to transport coal from the Stage 3 project.
- Community Commitments
 - Provide support to Kitchener Public School through the provision of sporting equipment and contributions to school/community projects
 - Contribute to the ongoing maintenance of Poppet head Reserve, Kitchener



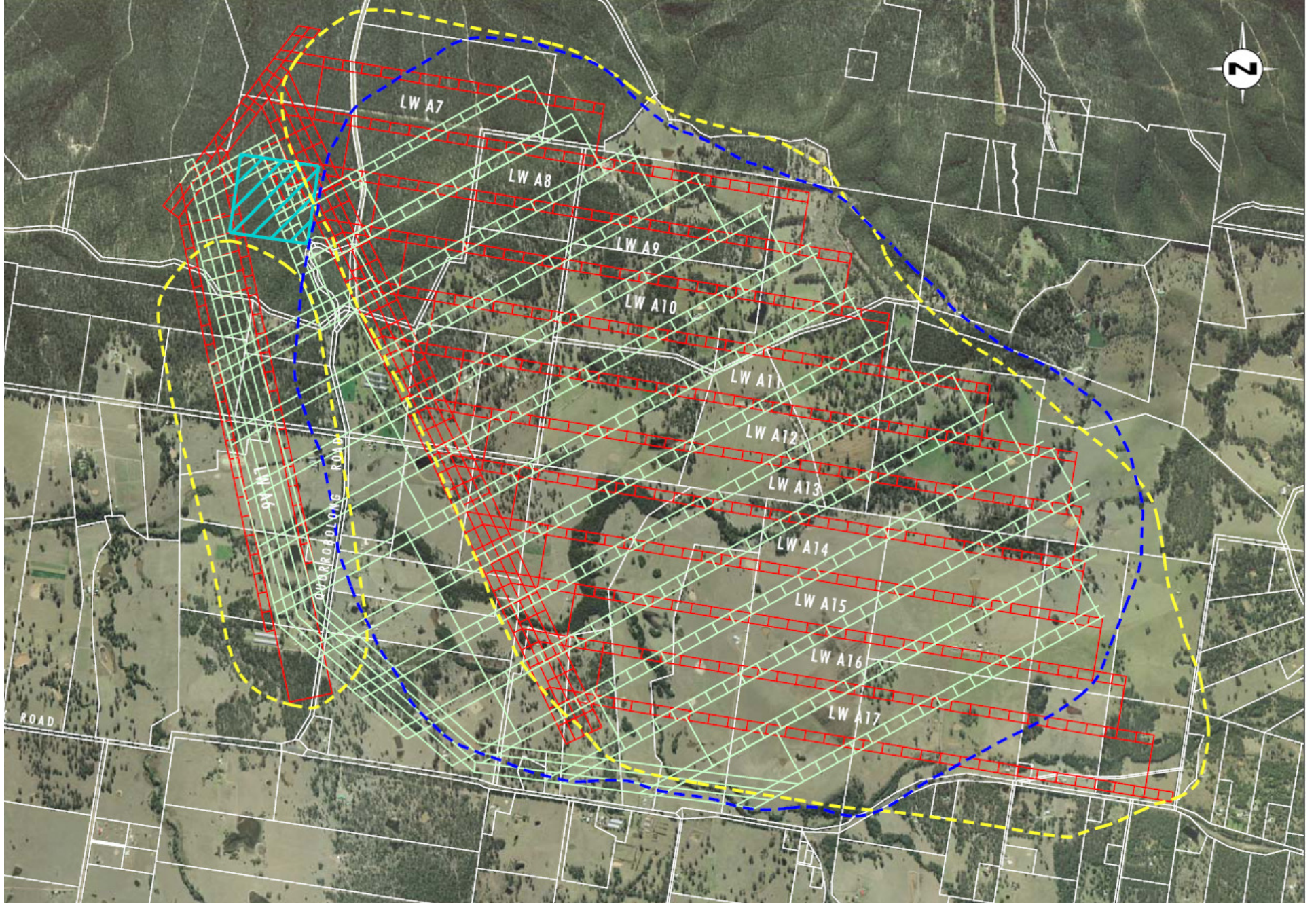
Description of Proposed Stage 3 Modification

Proposed Modification Outcomes



Austar Coal Mine

- Removal of LWA6 and reorientation of longwalls A7 to A17
- Relocation of the Stage 3 main headings and longwall finish lines to the west
- Increase in chain pillar width
- No change in the life of the operation
- No change in rate of coal extraction
- No change in method of coal extraction
- Mining to remain within Mining Lease CML2
- No change to Kitchener pit top facilities
- No change to the number of properties affected
- No change to the operation of Austar Mining Complex (existing infrastructure)



LW A7

LW A8

LW A9

LW A10

LW A11

LW A12

LW A13

LW A14

LW A15

LW A16

LW A17

LW A1

PAPOROLOLONG ROAD

ROAD

2

Reasons Behind Proposed Modification



Austar Coal Mine

- Further geological information gained
 - Stress orientation
 - Lowest risk longwall orientation is more aligned with stress direction (now better defined)
 - Impact of geological structures on east-west orientated panels and A6
 - Improved coal quality in western area of Stage 3
- Mine Planning considerations
 - Geological structures around longwall A6 pose to high a risk to production
 - Movement of mains allows earlier access to new pit bottom and shafts
 - Increase in chain pillar width reduces roadway failure risks and also subsidence impact risks

These changes are anticipated to reduce risk and provided for more consistent production with less interruption whilst having no increase in environmental impact levels

Modification Approval Pathway



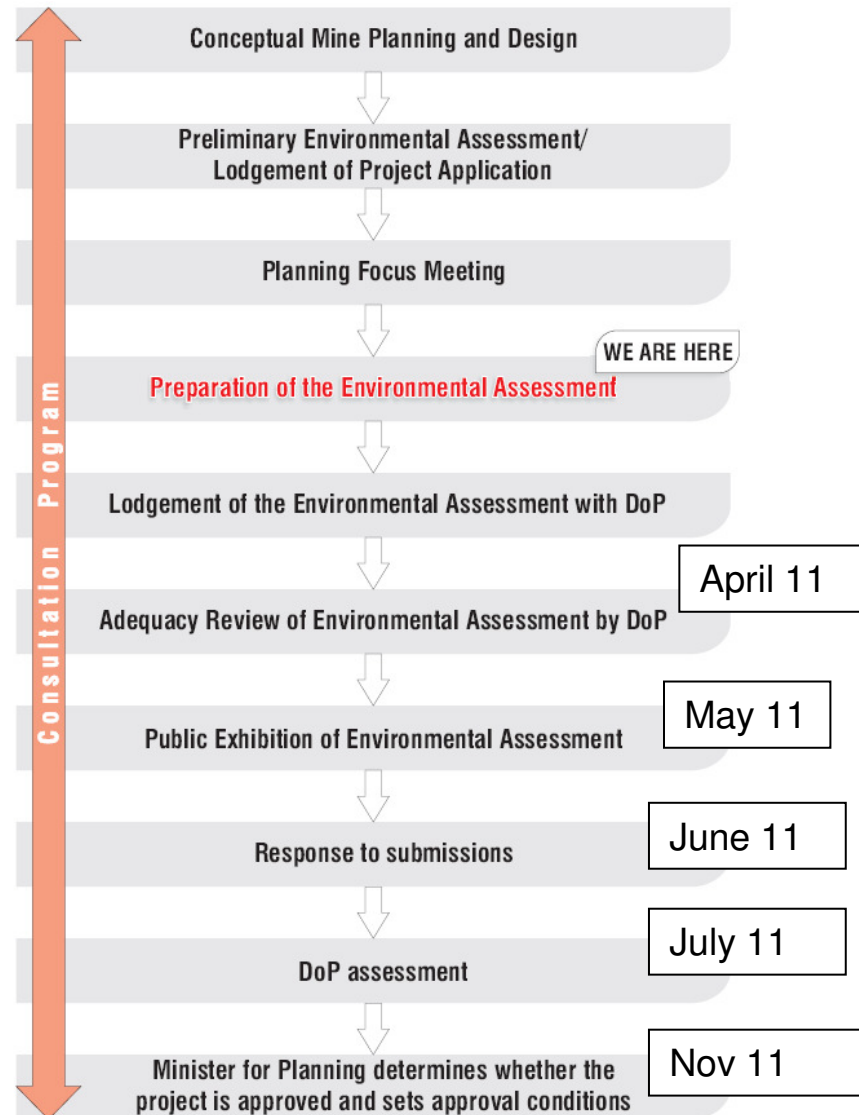
Austar Coal Mine

- Modification Application will be prepared under s75W of the Environmental Planning and Assessment Act 1979
- An Environmental Assessment (EA) will be prepared to accompany the application
- EA will assess environmental impact changes to what is already approved for the Stage 3 project
- EA will be submitted for adequacy review and then public exhibition around April 2011
- This will follow completion of the various independent environmental assessments and completion of final exploration around the Quorrobolong fault. Each of which may result in some adjustment to either mains location or longwall finish positions.

Modification Approval Pathway



Austar Coal Mine



Environmental Assessment Elements



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The following will be assessed for change in impact over what is already approved:

- Subsidence assessment
- Flooding and drainage assessment
- Ecological assessment
- Aboriginal Archaeology and Cultural Heritage
- Cumulative Impacts

Elements that will be reviewed but will not have a change in impact due to the proposed modification include:

- Groundwater (no change in extraction heights)
- Noise, air quality and visual assessment (no change in mining method or surface infrastructure)
- Greenhouse gas and energy (no change in mining rates)
- Traffic and transport (no change in surface infrastructure or mining rates)

Assessment Outcomes to Date



Austar Coal Mine

SUBSIDENCE

- As per previous assessments both Maximum Predicted and Upper Bound subsidence will be modelled and reported
- As actual data from the four (4) LTCC longwalls to date supports, Maximum Predicted Subsidence will be the focus of the assessment with Upper Bound being used for risk assessment purposes in the modification assessment
- This data has been incorporated into the updated subsidence predictions for the modified layout

Assessment Outcomes to Date



Austar Coal Mine

Comparison of the Maximum Predicted subsidence parameters based on the previous and modified layouts

Layout	Maximum Predicted Total Conventional Subsidence (mm)	Maximum Predicted Total Conventional Tilt (mm/m)	Maximum Predicted Total Conventional Hogging Curvature (1/km)	Maximum Predicted Total Conventional Sagging Curvature (1/km)
Previous Layout (Report No. MSEC309)	1925	6.7	0.06	0.12
Modified Layout (Report No. MSEC424)	1850	6.5	0.05	0.10

Maximum subsidence parameters are similar or slightly less for the modified layout as with the high depth of cover and strata characteristics the overall subsidence is controlled by the chain pillar compression and an increase in the pillars width from 45m to 55m is proposed which increases pillar strength and reduces compression.

Assessment Outcomes to Date



Austar Coal Mine

Subsidence Impact to Natural Features and Infrastructure:

- Coney Creek**- Similar to slightly less
- Sandy Creek**- Same
- Roads**- similar to slightly less
- Houses and Rural Structures**- Overall same to slightly less across the Stage 3 area but individual pieces of infrastructure will slightly increase or decrease depending on the location relative to the modified longwall layout

In summary the management strategies adopted and approved for the current Stage 3 layout will be appropriate for the new layout

Subsidence Assessment Summary



Austar Coal Mine

- Changes provide for a lower risk and less potential interruption to mining and landholders
- Overall impacts consistent with currently approved
- Current management strategies anticipated to be appropriate for modified plan
- Area of greatest change in impact is in western part of Stage 3 area but level of impact no greater than for remainder of Stage 3 area