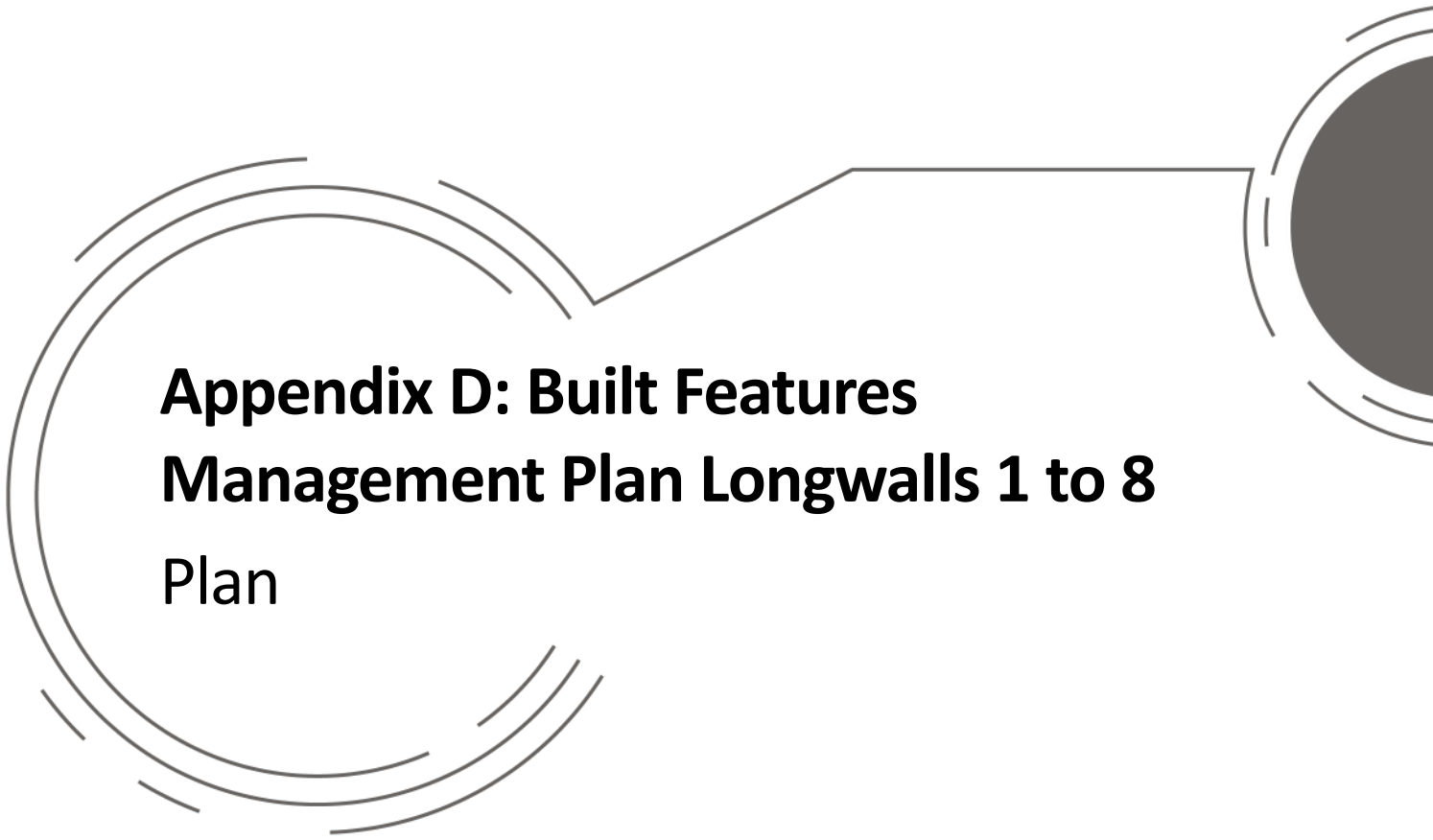


ULAN  
COAL

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GLENCORE



# Appendix D: Built Features Management Plan Longwalls 1 to 8 Plan

Number: ULNCX-111515275-2811

Owner: Environment and Community Manager

Status: Final

Version: 8

Effective: 1/10/2021

Review: 1/10/2024

*Uncontrolled unless viewed on the intranet*

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# 1. Introduction

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The *Ulan West Extraction Plan for Longwalls LW1 to LW8 (Version 5)* (the Extraction Plan), has been revised to include the next two approved longwall panels LW7 and LW8 (the Application Area) (**Figure 1**).

## 1.1 Purpose & Scope

The purpose of this Built Feature Management Plan for Longwalls 1 to 8 (BFMP LW1-8) is to outline the management strategies, controls and monitoring programs to be implemented for the management of built features (either UCMPL owned or non-UCMPL owned) regarding potential subsidence impacts and environmental consequences in the Ulan West mining area from the secondary extraction of longwalls (LW) LW1 to LW8, also referred to as the Extraction Plan Area (**Figure 2**).

Subsidence impacts, monitoring and management measures on private land regarding built features will be managed in accordance with each individual Private Property Subsidence Management Plan (PPSMP) in **Section 2.1**.

The Extraction Plan was prepared by UCMPL, with assistance from Strata Control Technology (SCT), Eco Logical Australia (ELA), Australasian Groundwater and Environmental Consultants Pty Ltd (AGE), Engeny and OzArk Environment & Heritage (OzArk). The appointment of the suitably qualified and experienced persons were endorsed by the Secretary of the DPIE on the 01 March 2021 and 10 June 2021 (Attachment C of the Extraction Plan).

Figure 1 The Application Area

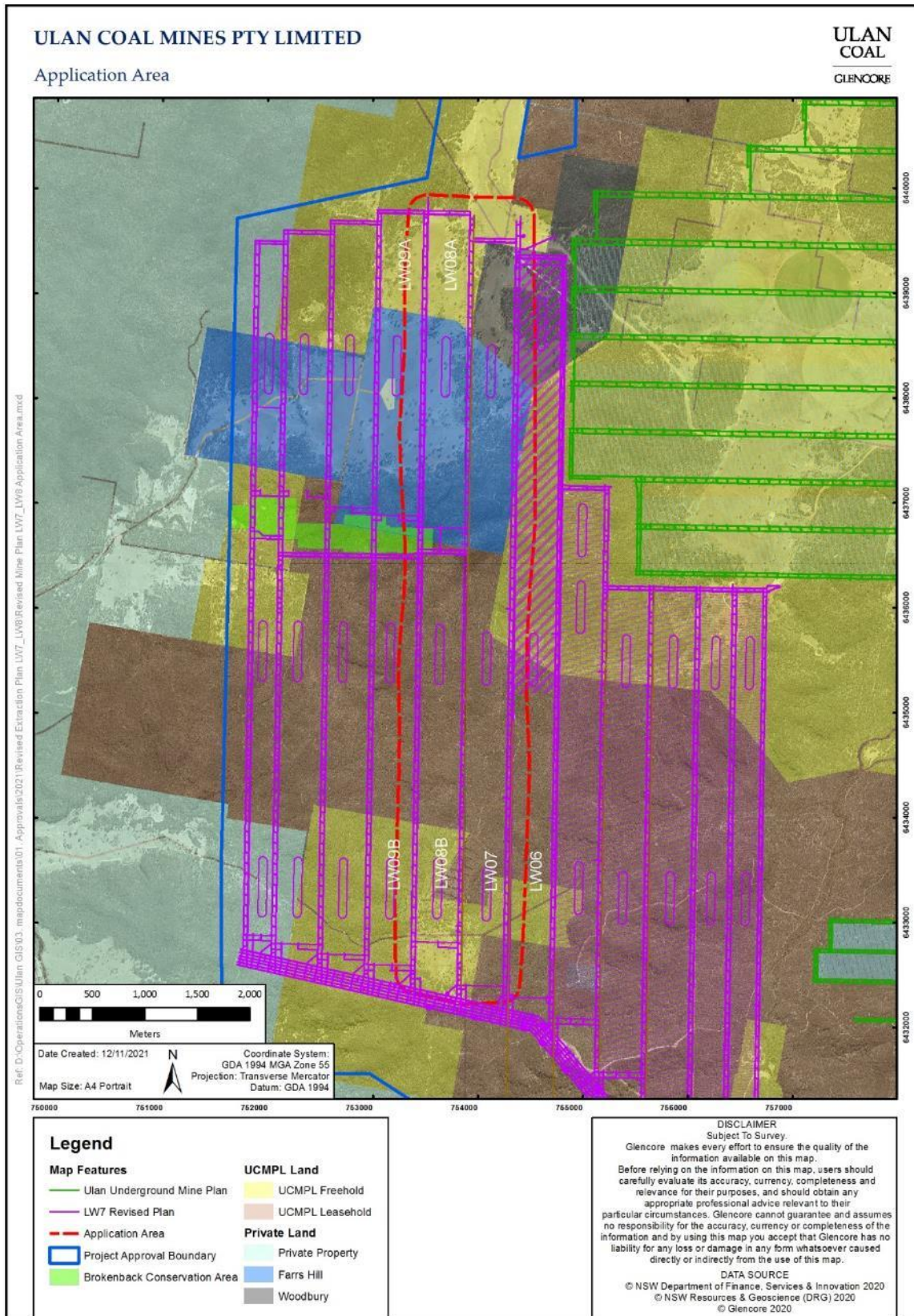
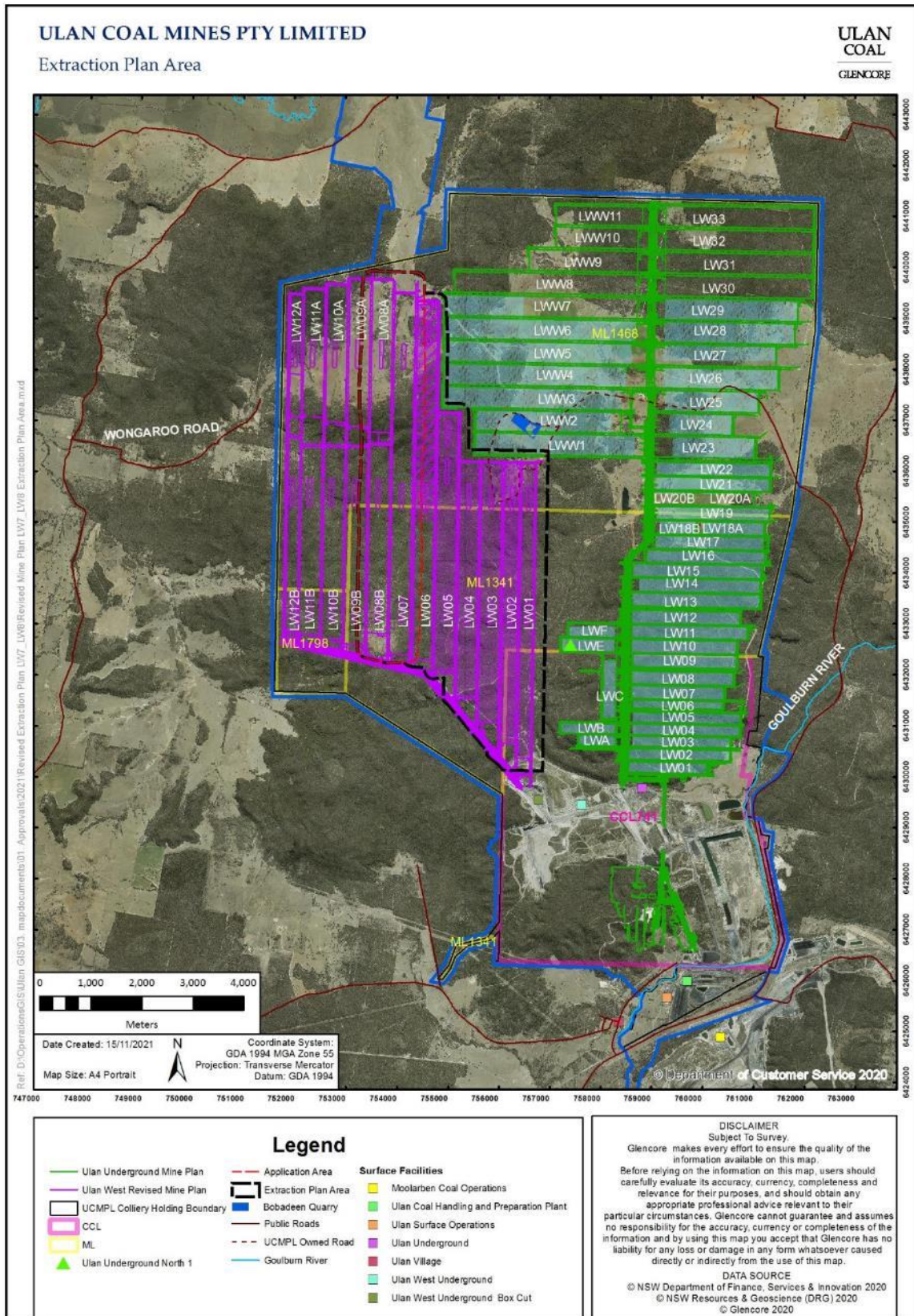


Figure 2 The Extraction Plan Area



## 2. Statutory Requirements

The Ulan Coal Mine currently operate under a number of regulatory approvals. Regulatory approvals relevant to this Extraction Plan include:

- PA08\_0184 (as modified) granted 15 November 2010, issued under the EP&A Act;
- Approval from the Commonwealth Minister for the Environment of the *Environment Protection and Biodiversity Conservation Act 1999* (approval reference No. 2009/5252);
- Mining Leases ML1468, ML1341 and CCL741 issued under the *Mining Act 1992*; and
- Environmental Protection Licence (EPL) 394 issued under the *Protection of the Environment Operations Act 1997*.

For further information regarding approvals and relevant legislation refer to Section 1.3 of the Extraction Plan.

This BFMP LW1-8 is a component of the Extraction Plan and has been prepared specifically to address Condition 26 of Schedule 3 which states:

*26. The Proponent must prepare and implement an Extraction Plan for all second workings on site to the satisfaction of the Secretary. Each Extraction Plan must:*

*(g)...include the following to the satisfaction of the DRG:*

*... A Built Features Management Plan, which has been prepared in consultation with the owner/s of any relevant features, to manage the potential subsidence impacts and/or environmental consequences of the proposed second workings on these features; and*

- *a program to collect sufficient baseline data for Future Extraction Plans<sup>1</sup>.*

The structure of this BFMP LW1-8 also follows the draft *Guidelines for the Preparation of Extraction Plans* (EP Guidelines) provided by DPIE. **Table 1** identifies where the requirements of PA 08\_0184 and the EP Guidelines are where they are addressed either in the BFMP LW1-8 of the Extraction Plan.

*Table 1 EP Guidelines and PA08\_0184 Requirements and where they are Addressed*

EP Guidelines	Condition 2, Schedule 5 of PA08-0184	BFMP LW1-8 Reference
<i>Overview of landscape features, heritage sites and environmental values to be managed under the component plan; and Description of landscape features, heritage sites and environmental values to be managed under the component plan and their significance.</i>	Condition 2(a) <i>detailed baseline data.</i>	<b>Section 3.0</b> Section 3.0 of the Extraction Plan
	Condition 2(b) <i>a description of:</i> <ul style="list-style-type: none"> <li>• <i>the relevant statutory requirements (including any relevant approval, licence or lease conditions);</i></li> </ul>	<b>Section 2</b> Section 1.3 of the Extraction Plan

*Table 1 Guidelines and PA08\_0184 Requirements and where they are Addressed (cont.)*

<sup>1</sup> UCMPL's program to collect baseline data for Future Extraction Plans is provided in Attachment D of the Extraction Plan.

EP Guidelines	Condition 2, Schedule 5 of PA08-0184	BFMP LW1 – 8 Reference
<i>Performance measures relevant to the landscape features, heritage sites and environmental values to be managed under the component plan</i>	Condition 2(b) a description of: <ul style="list-style-type: none"> <li>any relevant limits or performance measures/ criteria;</li> </ul>	<b>Section 5</b>
<i>Performance indicators to establish compliance with these performance measures</i>	Condition 2(b) a description of: <ul style="list-style-type: none"> <li>the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the project or any management measures</li> </ul>	<b>Section 5.1</b>
	Condition 2(c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria	<b>Section 6</b>
<i>Currently predicted subsidence impacts and environmental consequences relevant to the features, sites and values to be managed.</i>		<b>Section 4</b>
<i>Measures planned to remediate these impacts and/or consequences</i>		<b>Section 6</b>
<i>Existing baseline monitoring network and baseline monitoring results.</i>  <i>Proposed monitoring of subsidence impacts and environmental consequences.</i>	Condition 2(d) a program to monitor and report on the: <ul style="list-style-type: none"> <li>impacts and environmental performance of the project</li> <li>effectiveness of any management measures (see c above)</li> </ul>	<b>Section 6</b>  <b>Section 7.4</b>
<i>Proposed monitoring of the success of remediation measures following implementation</i>		<b>Section 6.2.2</b>
<i>Adaptive management proposed to avoid repetition of unpredicted subsidence impacts and/or environmental consequences.</i>  <i>Contingency plans proposed to remediate unpredicted subsidence impacts and/or environmental consequences.</i>  <i>Trigger, Action, Response Plan.</i>	Condition 2(e) a contingency plan to manage any unpredicted impacts and their consequences	<b>Section 7</b>
<i>Responsibilities for implementation of the component plan</i>		<b>Section 8</b>
	Condition 2(f) a program to investigate and implement ways to improve the environmental performance of the project over time	<b>Section 7.2</b>
	Condition 2(g) a protocol for managing and reporting any: <ul style="list-style-type: none"> <li>incidents;</li> <li>complaints;</li> <li>non-compliances with statutory requirements; and</li> <li>exceedances of the impact assessment criteria and/or performance criteria</li> </ul>	<b>Section 7</b>
	Condition 2(h) a protocol for periodic review of the plan	<b>Section 7.3</b>

## 2.1 Consultation

Consultation with the relevant government agencies and stakeholders including the owners of private land and public utility owners with the Application Area is summarised in Section 2 of the Extraction Plan.

There are two private landowners above the northern portions of LW7 and LW8, referred to as the Woodbury Property and Farris Hill Property (**Figure 2**). UCMPL are required to prepare in consultation with each landholder, individual Private Property Subsidence Management Plans (PPSMPs) for LW7 and LW8.

The PPSMP outlines impacts of mining on their property and the monitoring, management and remediation measures to be implemented by UCMPL, by written agreement with the landowner. The PPSMP's are a private document and are not for publication.

For more information refer to Section 2.1.2, Section 4.3 and Section 4.5 of the Extraction Plan and Section 2.1 of the LMP LW1-8 (**Appendix B**).

### 2.1.1 Public Utilities

Public utilities within the Application Area or in locations with potential to be affected by LW7 and LW8 include an overhead Essential Energy powerline, a Telstra telecommunications copper cable and a number of NSW State Survey control stations (**Figure 2**).

UCMPL have completed consultation with each asset owner during the development of the Built Features Management Plan with Essential Energy and Telstra (**Appendix A**).

In accordance with the written agreements with each public utility owner, UCMPL will repair the serviceability of each built feature at the full cost of UCMPL if the serviceable of the public utility is not maintained during extraction of LW7 and LW8 regarding those assets (**Appendix A**).

The two NSW State Survey control stations will be reinstated after active subsidence, in accordance with the *Surveyor-General's Direction No. 11 – Preservation of Survey Infrastructure - Version 4.0 January 2020* as confirmed by NSW Spatial Services in March 2019.

### 2.1.2 Potential Risks to Built Features

UCMPL held a risk assessment workshop for LW7 and LW8, on the 11 June 2021 (Section 2.3 of the Extraction Plan). During the risk assessment workshop several potential impacts and risks to built features, included farm dams, fences, public utilities, bores and structures resulting from subsidence within the Application Area as described in **Section 4**.

The risk assessment workshop indicated that risks associated with LW7 and LW8 were in the "Low" or "Medium" category, and it was expected that the risks could be managed with implementation of the appropriate mitigation, management and/or control measures in the Extraction Plan.

The BFMP LW1-8 has been developed to manage these potential built feature risks as described further in **Section 6**.

## 3. Overview

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### 3.1 Baseline

#### 3.1.1 Land Ownership and Land Use

The majority of the land within the Application Area is owned by UCMPL or Crown land leased and controlled by UCMPL. The remainder is private property owned by two landholders (**Figure 1**).

The total area of the Application Area is approximately 942Ha. Approximately 30.3% of the land within the total Application Area is privately owned; 6.4% or 59.9Ha on the Woodbury Property and 23.9% or 225.4Ha on the Farris Hill Property.

The northern portions of land owned and/or leased by UCMPL within the Application Area is cleared or semi cleared land suitable for grazing purposes. The southern portions of land owned and/or leased by UCMPL is largely undeveloped bushland with no significant agricultural or mining related activity (other than environmental monitoring) currently in progress.

Around 80% of the section of Woodbury Property within the Application Area is cleared or semi-clear land suitable for grazing purposes. About 60% of the section of Farris Hill Property within the Application Area has been cleared for grazing and the remaining 40% is undeveloped bushland.

#### 3.1.2 Built Features

There are two bores/wells for groundwater extraction within the Application Area. One is located on the Woodbury property and the other is located on UCMPL land (**Figure 3**).

Public utilities or public amenities identified within the Application Area are limited to an Essential Energy powerline, Telstra telecommunication cables and state survey control stations. The overhead powerline and a telecommunications cable that service the Woodbury property and a UCMPL owned property, traverse the surface south from Blue Springs Road and enter the Application Area in the north and continue over the start of LW7 and LW8 (**Figure 3**).

Two state survey marks are located above LW 8B. A total of 13 survey marks that may be affected by subsidence movements from previous mining and the planned mining of LW7 and LW8 are within 3km of the Application Area (**Figure 3**).

The two private properties within the Application Area contain a number of features likely to be sensitive to subsidence impacts. The residential dwelling and outbuildings on Woodbury are directly above the western side of Longwall 7. The residential site on the Farris Hill property is located more than 1km to the west of Longwalls 7 and 8 well outside the Application Area. The former Petzl residence (Billir) is above Longwall 8A but the property is now owned by UCMPL and the residential building (Billir) is not currently occupied.

Other agricultural infrastructure is limited to farm dams and fencing located on the Woodbury, and Farris Hill and former Petzl properties and two bores or wells: one each on Woodbury and the former Petzl property.

The major mining related infrastructure within the Application Area is a small diameter ventilation shaft located in the northeast corner of the Application Area adjacent to Longwall 7. Mine dewatering

bores, with pumping equipment and other water management installations are located to the east of this shaft and primarily outside the Application Area.

Other UCMPL owned infrastructure within and in the vicinity of the Application Area includes unseal internal roads, monitoring sites, farm dams, fences and a dwelling with associated out buildings will be inspected routinely as required by the PSMP LW1-8 (**Appendix F**).

## 4. Predicted Subsidence Impacts & Environmental Consequences

The potential environmental impacts of the existing and proposed mining activities were assessed in the *Ulan Coal - Continued Operations Environmental Assessment 2009* (Project EA). The approved subsidence impacts and environmental consequences relating to built features are described in the Project EA and subsequent modifications are provided in Section 4.3.3 of the Extraction Plan.

As required by Condition 26(e), Schedule 3 of PA08\_0184, UCMPL engaged SCT to complete a subsidence assessment for LW7 and LW8 within the Application Area). The following summary of subsidence related impacts to cliff lines and land features within the Application Area, were described by SCT which stated [extract]:

*Subsidence impacts to natural and built features on land owned or leased by UCM and private property are expected to be manageable with appropriate management plans in place following consultation and agreement with asset and landowners.*

*The power poles and cables are expected to experience the full subsidence effects for Longwalls 7 and 8A. Single power pole structures are generally tolerant of subsidence movements as maximum ground strain and tilt movements do not necessarily transfer to the poles themselves. Potential impacts to the three poles are expected to be manageable with mitigation measures such as placing conductors in roller sheaves and reducing guy wire or stay tensions for the period of active subsidence<sup>2</sup>.*

*Buried cables are likely to be impacted by the levels of strain expected near the panel edges but given the current period of no usage of these services the consequences from mining Longwalls 7 and 8 are expected to be negligible. Uncovering buried cables would reduce the likelihood of damage.*

*Two state survey marks have been identified within the Application Area. The marks are PM170463 and CP88311000 located above the southern end of Longwall 8B.*

*The planned mining of Longwalls 7 and 8 is not expected to have any greater impact to agricultural utilisation, agricultural suitability of farmland or other features, on the Woodbury Property, than those outlined in the UCCO Project EA, subsequent modifications and SMP/Eps. The planned mining of Longwalls 7 and 8 is not expected to have any greater impacts to agricultural utilisation or agricultural suitability of farm land on Farris Hill Property than those outlined in the UCCO Project EA and subsequent modifications.*

*The private bore above Longwall 7 and other sources of near-surface groundwater on the Woodbury Property within 1km or so of the planned mining of Longwalls 7 and 8 are expected to be impacted. Physical impacts to the bore are expected by fracturing and shearing of the ground. The water table is expected to be drawn down due to depressurisation of the overburden strata above each longwall panel*

*Any minor impacts to dams, fences/gates, access tracks or agricultural land are expected to be manageable using the same approaches that have been adopted successfully by UCM in the past via a PPSMP and BFMP. Minor impacts to the dams are expected with cracking and water loss during the period of active subsidence but are expected to be repairable with a small amount of remediation work.*

<sup>2</sup> As an outcome of the Fist Workings amendment to LW7, there will be a reduced impact to the overhead powerline with one less pole to be mined under and reduced impact to the Telstra cable with a shorter section of the cable mine under (SCT, Oct 2021).

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*Impacts to the Etheridge Dam<sup>3</sup> are expected to be consistent with those described in SCT (2018) for MOD4. These include potential for greater holding capacity and ponding at the upstream edges but also the potential for water loss due to surface cracking from Longwall 7. The dam wall is not expected to be impacted from the planned mining.*

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<sup>3</sup> As an outcome of the Fist Workings amendment to LW7, there will be no physical impacts to ground level at the high-water mark of the Etheridge dam (SCT, Oct 2021).

## 5. Performance Measures and Performance Indicators

In accordance with Condition 24 of Schedule 3 of the PA08\_0184, UCMPL must ensure that there is no exceedance of the subsidence impact performance measures as listed in Table 14 of PA08\_0184. The subsidence performance measures relevant to built features are:

- *all built features are safe, serviceable and repairable unless the owner agrees otherwise in writing....*

### 5.1 Subsidence Performance Indicators & Assessment

**Table 2** provides a summary of the subsidence performance indicators for built features to inform UCMPL if the subsidence performance measures for built features are likely to be exceeded during the secondary extraction within the Application Area.

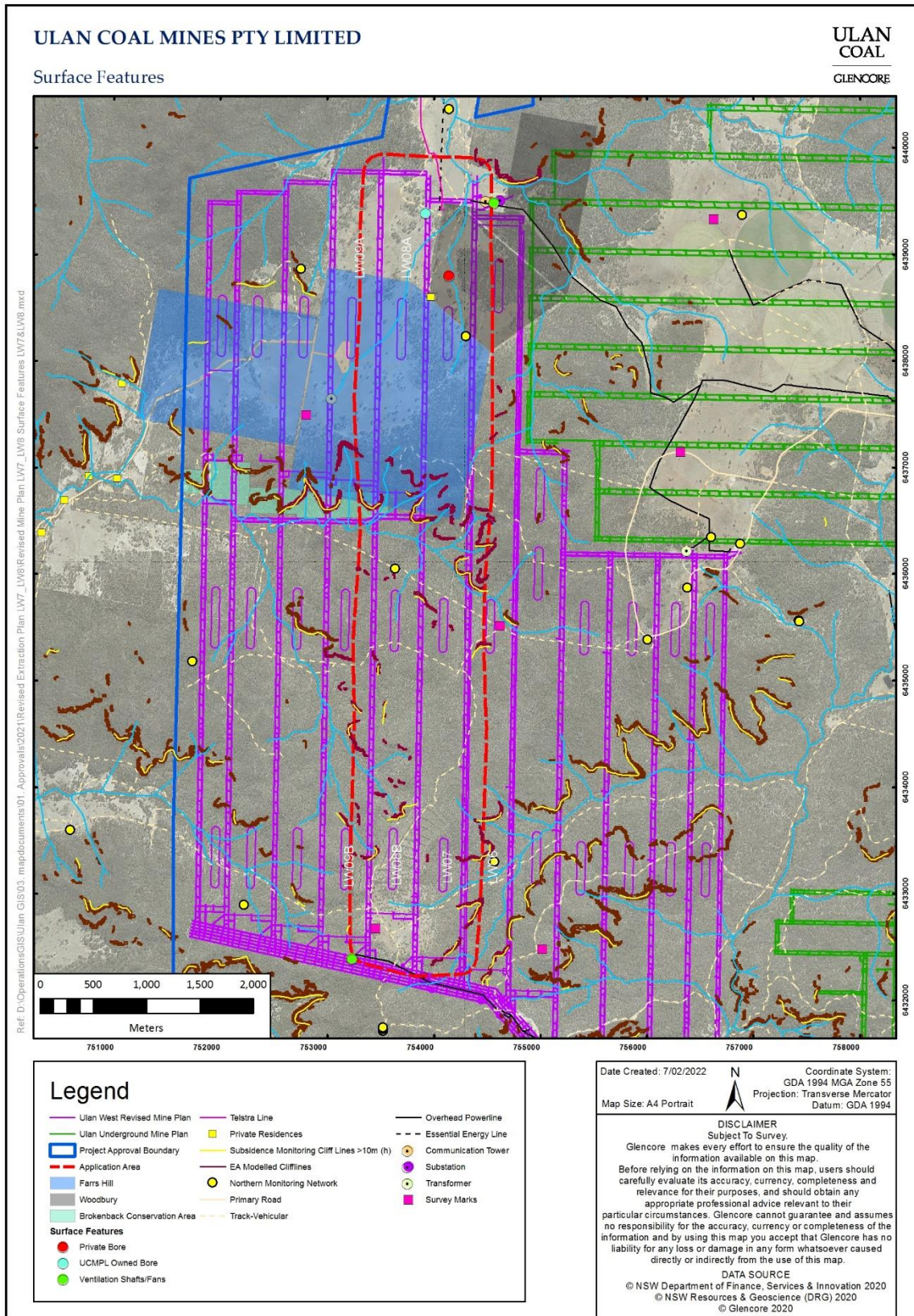
*Table 2 Built Features Subsidence Performance Indicators & Assessment*

Parameter	Site	Frequency	Subsidence Performance Indicators	Assessment of Subsidence Performance Measures
Public Utilities	Telstra Cable <sup>1</sup> Essential Energy Powerline <sup>1</sup> State Survey Marks <sup>2</sup>	Pre mining & post mining Monthly during longwall retreat	Performance indicators will be considered to have been triggered if:  The integrity and functionality of the public utilities within the Application Area has determine to have been comprised without a written agreement in place with the relevant built feature owner.	The subsidence performance measure for built features is exceeded if investigations completed by UCMPL's ECM confirm if any of the built features subsidence performance indicators on private property triggered are mining related, due to subsidence impacts within the Application Area, as outlined in <i>Table 24 Built Features TARP</i> in the Extraction Plan.
Built Features on Private Property	Private Property	In accordance with PPSMP	Performance indicators will be considered to have been triggered if:  The integrity and functionality of a privately owned built feature within the Application Area has determine to have been comprised without a written agreement in place with the built feature owner; and/or  UCMPL receive a complaint from a private property owner regarding a built feature or a subsidence related impact within the Application Area.  Analysis of subsidence monitoring data indicates an exceedance of subsidence predictions on Private Property within the Application Area.	

**Notes:** <sup>1</sup> As agreed in writing with Telstra and Essential Energy, UCMPL will reinstate the serviceability of the Telstra cable and the Essential Energy powerline if they become unserviceable during longwall mining of LW7 and LW8. <sup>2</sup> In accordance with *Surveyor-General's Direction No. 11 – Preservation of Survey Infrastructure - Version 4.0 January 2020*, UCMPL will reinstate and resurvey the survey marks after cessation of subsidence movements has been verified by subsidence engineer.

UCMPL will compare the results of the subsidence monitoring against the built features performance measures and indicators (**Table 2**). In the event the observed subsidence impacts exceed the performance measure or indicators, UCMPL will assess the consequences as outlined in *Table 24 Built Features Management TARP* in the Extraction Plan. If investigations confirm the exceedance is mining related, UCMPL will implement the Contingency Response (**Section 7**).

Figure 3 Built Features within the Application Area



## 6. Monitoring and Management Measures

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### 6.1 Telstra Line

There is a telecommunications (Telstra) cable above the start of Longwalls 7 and 8A that services the UCMPL owned 'Petzl' property dwelling located as shown in **Figure 3**, however it has been terminated at the boundary of the privately owned Woodbury property and remains insitu to the Woodbury Property dwelling at this location.

UCMPL is the final customer on this telecommunications line and as agreed by Telstra the buried cable will remain in situ during mining of LW7 and LW8. After the completion of active subsidence from LW8, the cable will be retested by Telstra for continuity.

Monthly inspections during longwall retreat will be completed by UCMPL to identify subsidence related surface impacts along or in the vicinity of the buried Telstra line.

If the Telstra cable is considered unserviceable, UCMPL in consultation with Telstra will reinstate the serviceability of the Telstra cable at the cost of UCMPL (**Appendix A**).

### 6.2 Essential Energy

There are three poles over Longwall 7, two poles on property owned by UCMPL and one pole on the privately owned Woodbury property. The powerline to the Woodbury property terminates at the single pole near the western boundary in the northwest corner of the section of property above Longwall 7 and does not connect to the residence. The Essential Energy line to the UCMPL owned Petzel property and remains active and is buried (**Figure 3**).

UCMPL is the final customer on this power line and as agreed by Essential Energy the supply to the powerline line will be isolated prior to mining of LW7 and LW8. After the completion of active subsidence from LW8, the powerline and poles will be inspected by Essential Energy for serviceability prior to re-energising the power.

Monthly inspections during longwall retreat will be completed by UCMPL to identify subsidence related impacts along or in the vicinity of the Essential Energy powerline. Photographic recording will be used to compare the baseline condition of the poles and overhead powelines.

If the Essential Energy powerline and/or poles are considered unserviceable, UCMPL in consultation with Essential Energy will reinstate the serviceability of the powerline at the cost of UCMPL (**Appendix A**).

### 6.3 State Survey Marks

Two state survey marks have been identified within the Application Area. Survey marks PM170463 and CP88311000 are located above the southern end of Longwall 8B (**Figure 3**). In accordance with Section 40 of the *Surveying Regulation 2006*, UCMPL will notify the Surveyor General when it becomes aware the survey marks have been spatially moved as a result of subsidence from mining within the Application Area.

After active subsidence has been verified by UCMPL's subsidence engineer and Subsidence Monitoring Program, the two NSW State Survey control stations will be reinstated in accordance with the *Surveyor-General's Direction No. 11 – Preservation of Survey Infrastructure - Version 4.0 January 2020* as confirmed by NSW Spatial Services in March 2019.

## 6.4 Private Property Infrastructure

Approximately 60ha of the western section of privately owned land referred to as the Woodbury Property is located at the north end of the Application Area above Longwall 7. Farm infrastructure includes the Woodbury dwelling and associated outbuildings, fencing and gates, access tracks, several dams on the drainage lines and a groundwater bore (PB8) (**Figure 3**).

Approximately 225Ha of the eastern section of private land known as the Farris Hill Property is located in the northern part of the Application Area over Longwalls 7 and 8A. Farm infrastructure is limited to access tracks, two farm dams and fences/gates. The residential site on the Farris Hill Property is located remote from the Application Area at more than 1km to the west of Longwall 8A (**Figure 3**).

Prior to longwall mining under both private properties, UCMPL in consultation with each property owner will have in place individual Private Property Subsidence Management Plans (PPSMPs)<sup>4</sup> that describes the impacts, monitoring and management measures to be implemented to maintain the relevant built features safe serviceable and repairable or as agreed to by the Property Owner.

In general, pre mining and during mining inspections with the landowner will be undertaken at regular intervals (as agreed) during longwall mining activities under each respective property. Post mining inspections will be completed to develop conditional assessment reports for each landowner.

UCMPL will ensure the residential building and associated outbuildings on the Woodbury Property will not be left unsafe at the completion of longwall mining under this private property. Prior to the commencement of LW7 a dilapidation report will be undertaken by UCMPL. All necessary rectification works after mining on the property and the outbuildings will be completed by UCMPL.

### 6.4.1 Private Bores

There is one private bore within the Application Area above LW7 referred to as PB08 (**Figure 3**). As predicted by SCT, the bore may incur physical impacts to the bore are expected by fracturing and shearing of the ground. The water table is expected to be drawn down due to depressurisation of the overburden strata above each longwall panel (SCT, 2021). Compensatory measures for this bore will be provided in the PPSMP. PB08 will be monitored for impacts by UCMPL during monthly inspections whilst the longwall is retreating under the private property.

For private bores outside of the Application Area, UCMPL undertake private bore monitoring in accordance with the GWMP. An assessment of the groundwater levels in privately owned bores will include departures from the predicted drawdown levels as described in Section 4.2.5.3 of the Extraction Plan.

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<sup>4</sup> Condition 26(h), Schedule 3 of PA08\_0184 include a Land Management Plan that has been prepared in consultation with the relevant landowners.

## 6.5 UCMPL Infrastructure

UCMPL will carry out monitoring and management measures on its own infrastructure within the Application Area (**Figure 3**) in accordance with the Public Safety Management Plan LW1-8 (PSMP LW1-8) (**Appendix F**).

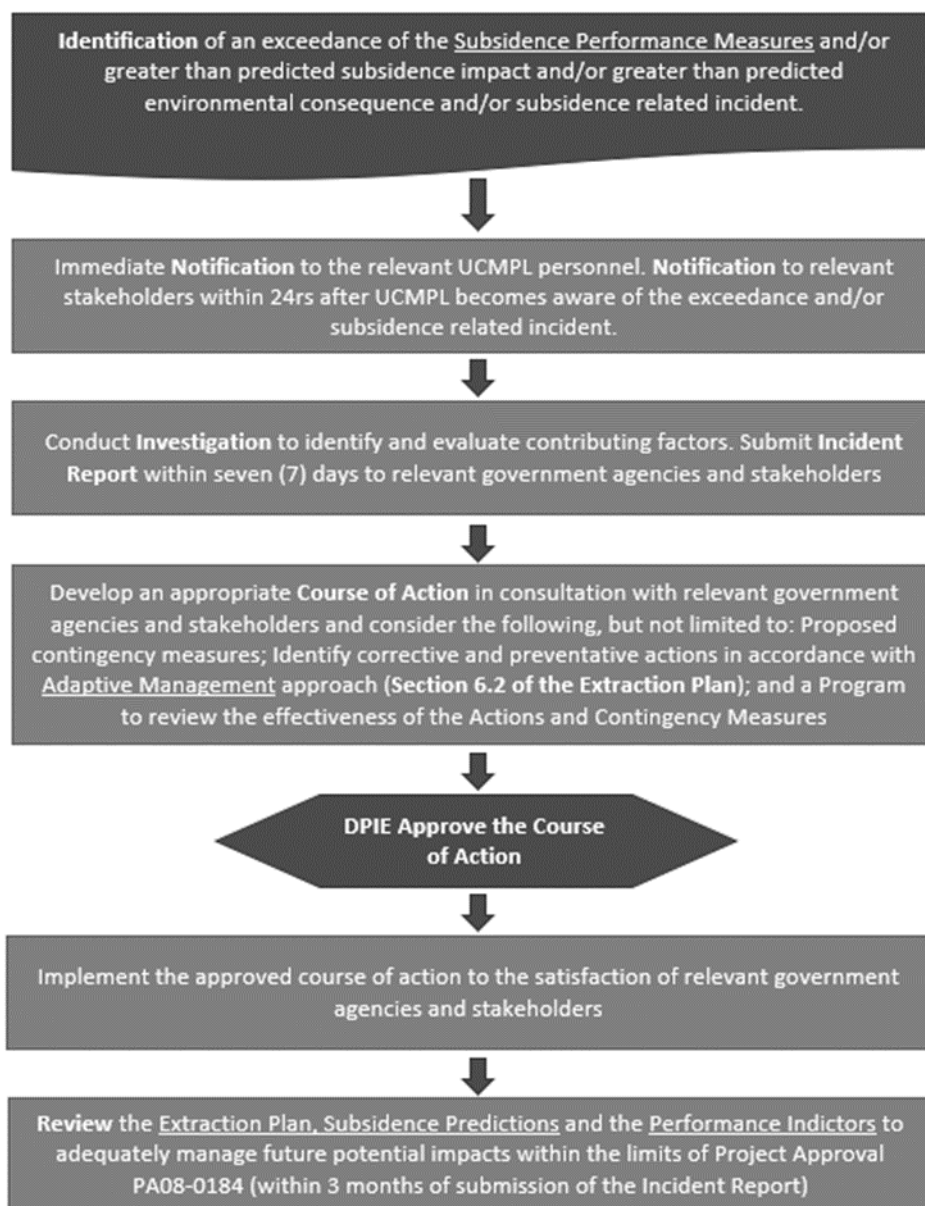
The ventilation shaft, dewatering bores and substation are adjacent to LW7 and are not expected to be greatly impacted (SCT, 2021). Other UCMPL owned infrastructure including unseal roads, monitoring sites, farm dams, fences and a dwelling with associated out buildings will be inspected routinely as required by the PSMP LW1-8 (**Appendix F**).

## 7. Contingency Response

In the event the subsidence performance measures for built features management as summarised in **Section 5** are considered to have been exceeded or are likely to be exceeded, response and management will be undertaken in accordance with protocols for incident reporting as identified in Section 6.3 of the Extraction Plan.

**Figure 4** displays the Contingency Plan to be implemented in the event UCMPL confirm the subsidence performance measures for built features have been exceeded and/or higher than predicted subsidence and/or environmental consequence has occurred or in the event of a subsidence related incident.

Figure 4 Contingency Plan



## 7.1 Trigger Action Response Plans

UCMPL have developed Trigger Action Response Plans or TARPs which detail trigger events, investigations required, notifications to be undertaken, management and contingency actions for built feature management.

*Table 24 Built Features TARP* in the Extraction Plan provides the key trigger, action, response measures for built features management that UCMPL's Environment and Community Manager (ECM) or delegate, will implement that relate to investigations required, notifications to be undertaken, management and contingency actions for potential subsidence related impacts for this Extraction Plan.

## 7.2 Adaptive Management

The regular reviewing and evaluating the effectiveness of management strategies includes analysis of subsidence monitoring data against predicted impacts, performance indicators and performance measures (Section 6.2 of the Extraction Plan). The review process also includes, but is not limited to:

- Engaging a subsidence engineering specialist to review monitoring results against predictions;
- Engaging other specialists, for example groundwater and surface water, heritage and ecological specialists, to review monitoring results and assist development of adapt management strategies as required; and
- Adapt remediation and land management measures to reduce impacts on subsequent longwalls.

The review process as outlined in Section 6.5 of the Extraction Plan (summarised in Sections 6.1-6.3) may require a revision of this Extraction Plan and its component management plans. Any revised management strategies to improve performance, particularly following an exceedance of a subsidence impact performance measure and/or an unexpected subsidence impact and/or subsidence related incident, will be undertaken in consultation with relevant government agencies.

## 7.3 Review

Ongoing monitoring and review on the performance and implementation of this BFMP LW1-8 will be undertaken in accordance with Section 6.5 of the Extraction Plan. Any changes made to this BFMP LW1-8 will be made in consultation with DPIE. A copy of the revised management plan will be supplied to the Secretary of the DPIE for approval.

## 7.4 Reporting Requirements

External reporting requirements, including incident and annual reporting, for this BFMP LW1-8 will be in accordance with Section 6.3 of the Extraction Plan.

## 7.5 Community Complaints

Community complaints are managed in accordance with Section 6.4 of the Extraction Plan, including receipt of complaints, investigation, implementation of appropriate remedial action, and feedback to the complainant, communication to site management or personnel and notification to government agencies where necessary.

## 8. Roles and Responsibilities

Key responsibilities for this the Extraction Plan including this BFMP LW1-8 are summarised in Table 35 of the Extraction Plan.

## 9. Document Information

### 9.1 Definitions

Definitions as provided in Section 7.1 of the Extraction Plan.

### 9.2 Accountabilities

Accountabilities are described in **Section 8** of this BFMP LW1-8.

### 9.3 References

References as provided in Section 7.2 of the Extraction Plan.

### 9.4 Change Information

Full details of the document history are recorded in the document control register, by version. A summary of the current change is provided in **Table 3** below.

*Table 3 Change Information*

Version	Date	Review team (Consultation)	Change Summary
1.0	18/10/2013	Robyn Stoney, Ian Flood, Stephen Bragg	Original submission LW1 and LW2
2.0	30/10/2015	Robyn Stoney, Ben Anderson, Stephen Bragg	Revised to include LW3 and LW4
3.0	15/11/2017	Robyn Stoney, Rebecca Shanks, Jessica Southgate	Revised to include LW5 and LW6
4.0	30/05/2018	Robyn Stoney, Justin Russel	Revised to incorporate comments from agencies following submission.
5.0	08/02/2022	Robyn Stoney, Lucy Stuart, Stephen Bragg, SCT, AGE, ELA, OzArk & Engeny	Revised to include LW7 and LW8 and amendment to LW7 First Workings and feedback from government agencies.

**Notes:** Any 'version' discrepancies displayed in the Footer of this Document are a function of the UCMP document control register. The actual revisions and summary of changes to this Document are provided in the table above and in Table 39 of the Extraction Plan.

## Appendix A - Correspondence



04 August 2021

Stephen Lynch  
Network Integrity – Commercial Work Specialist  
Infracore (part of Telstra)  
[Stephen.r.lynch@team.telstra.com](mailto:Stephen.r.lynch@team.telstra.com)  
Ph: 0418 618 737

Seq No: 45/21

Dear Mr Lynch,

**Re: Telstra Copper Line within Ulan West Longwall LW 7 and LW8**

As discussed recently, Ulan Coal Mines Pty Limited (UCMPL) are currently preparing an Extraction Plan (EP) for Longwalls LW7 and LW8 for the Ulan West Underground Mine, a component operation of the approved Ulan Coal Complex. UCMPL are required to prepare and submit for approval an EP to satisfy Condition 26, Schedule 3 of Project Approval 08\_0184 (PA08\_0184) before longwall mining can commence. Mining of LW7 is scheduled to commence in Quarter 2 of 2022.

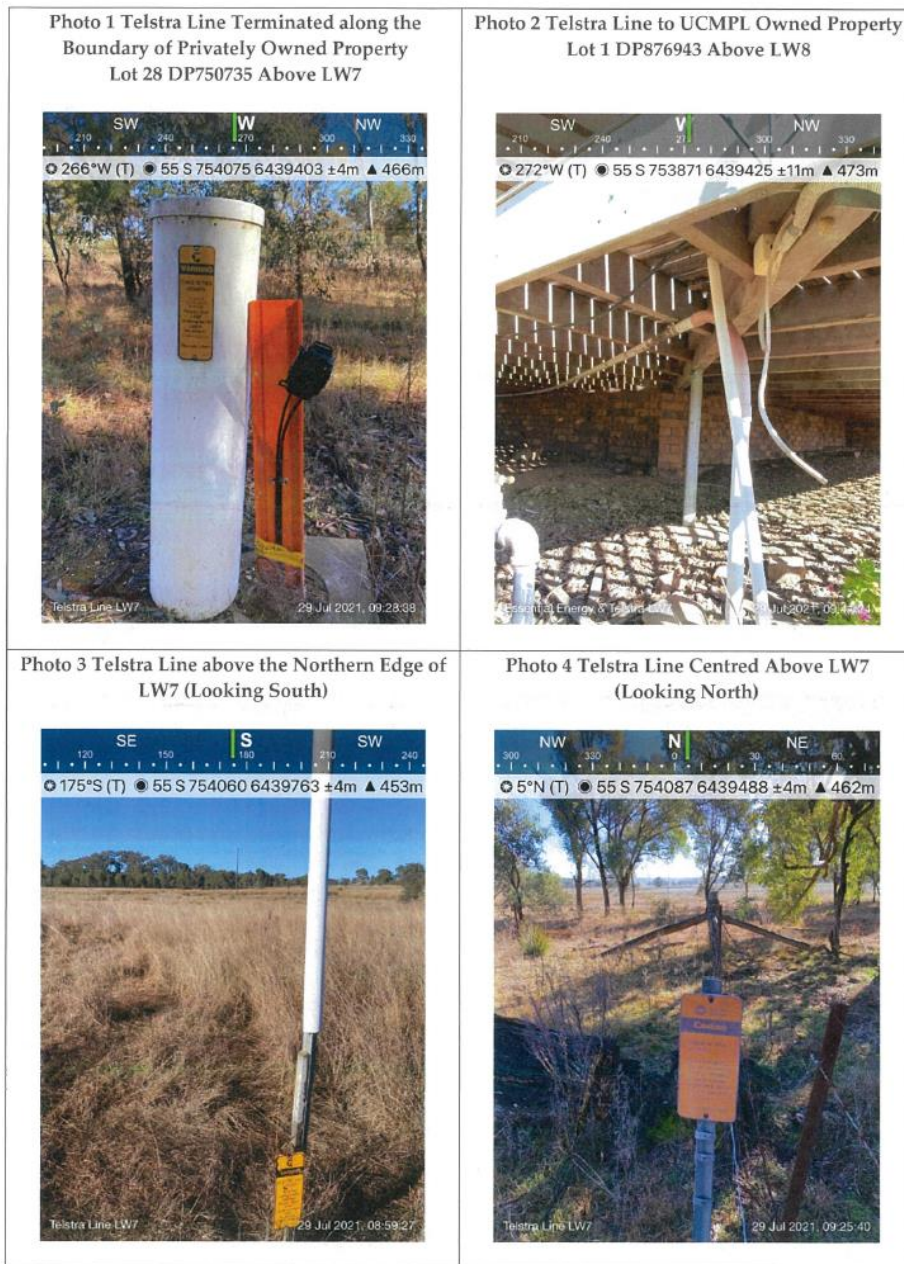
To satisfy Condition 26(g), Schedule 3 of PA08\_0184 UCMPL are required to prepare a Built Features Management Plan (BFMP) which has been developed in consultation with the owner/s of relevant features to manage the potential subsidence impacts and/or environmental consequences of the proposed second workings on these features. Within the northern portion of LW7 and LW8, a section of a buried Telstra communications line (Telstra line) services a UCMPL owned property Lot 1 DP876943 and a privately owned property Lot 28 DP750735 (Figure 1).

The buried Telstra line that has the potential to service the privately owned property, Lot 28 DP750735, has been terminated at a point along the western boundary (refer to **Photo 1** and **Figure 1**) and does not connect to the residence. The owner of Lot 28 DP750735 has informed UCMPL he has no intention of connecting to the Telstra line. Telstra, however, have confirmed that the option for future property owners to connect to the Telstra network must remain available.

The buried Telstra line that services the UCMPL owned property, Lot 1 DP876943 is active and remains connected to the residence (refer to **Photo 2** and **Figure 1**). There are no other Telstra customers that will be affected if the Telstra lines becomes unserviceable as a result of mining LW7 and LW8.

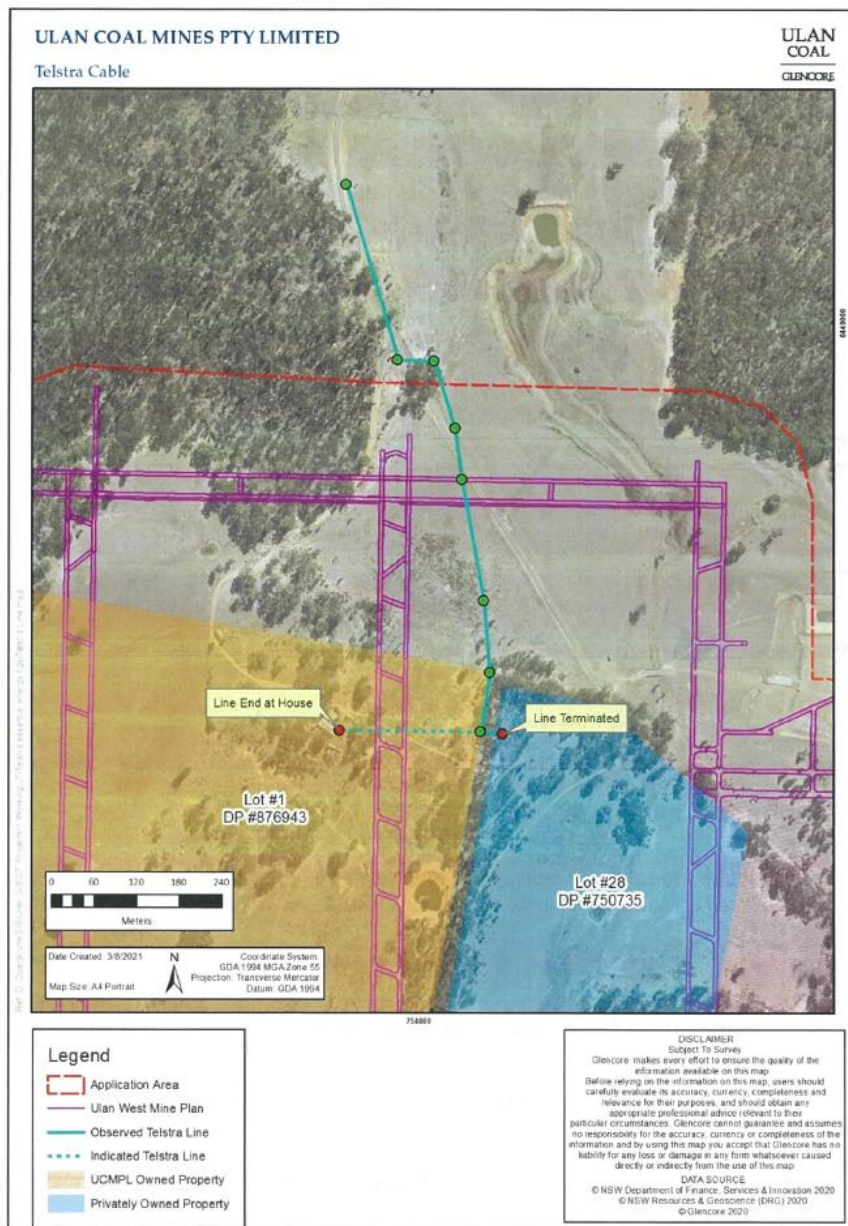
The subsidence predictions specific to the Telstra line have been prepared by SCT Operations Pty Ltd (SCT) and are described in the *Ulan West Mine: Subsidence Assessment for Longwalls 7-8 Extraction Plan* (**Attachment 1**). SCT states that the Telstra line has the potential to be damaged and unserviceable due to the expected levels of strain as a result of mine induced subsidence from LW7 and LW8. In accordance with PA08\_0184, UCMPL must ensure all built features are safe, service and repairable unless the owner agrees otherwise in writing.

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Figure 1: Extraction Plan Application Area and Telstra Line



**Notes:** The buried path of the Telstra line cable is assumed, based on field verification of Telstra identification markers recorded by GPS during a site inspection on the 29 July 2021 (refer to photos). With the exception of one private landowner, the surrounding land of LW7 and LW8 is wholly owned by UCMPL.

As discussed with Telstra, as no other Telstra customers will be impacted if the Telstra line at this location is compromised and unserviceable, during the period of mining LW7 and LW8, UCMPL propose the buried Telstra line remain in situ during mining and no specific management or mitigation, such as exposing the cable, will be necessary.

However, after the completion of active subsidence from LW8, the Telstra line will be tested for continuity by Telstra. If the Telstra line is determined unserviceable, UCMPL in consultation with Telstra will reinstate the serviceability of the Telstra line at the cost of UCMPL.

UCMPL are therefore seeking confirmation in writing from Telstra that the proposed response measure of reinstating the serviceability of the Telstra line at the cost of UCMPL is satisfactory, if the buried Telstra line becomes unserviceable due to mining related impacts from LW7 and LW8.

A copy of the Extraction Plan for LW7 and LW8 detailing the consultation, monitoring and management measures proposed for the Telstra line will be supplied for your records.

If Telstra require additional information regarding this matter, please contact Lucy Stuart on 0413 614 458 or email on [Lucy.Stuart@glencore.com.au](mailto:Lucy.Stuart@glencore.com.au)

Yours Sincerely,



Lucy Stuart  
Environment & Community Coordinator  
Ulan Coal Mines Pty Limited

Attachment 1: Ulan West Mine: Subsidence Assessment for Longwalls 7-8 Extraction Plan

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From: Lynch, Stephen <Stephen.R.Lynch@team.telstra.com>  
Sent: Thursday, 5 August 2021 7:47 AM  
To: Stuart, Lucy (Ulan No 3 - AU) <Lucy.Stuart@glencore.com.au>  
Subject: RE: UCMPL Extraction Plan

External sender

Lucy,

As the DA feed is to a disconnected service, I am happy with the proposal offered by the UCMPL extraction plan for LW 7 and 8.

Cheers

Stephen Lynch



Infraco Design & Construct

Network Integrity

45 Sheraton Rd Dubbo 2830  
FAX 02 6884 2835 | MOBILE 0418 618 737  
[\\_WEB http://www.in.telstra.com.au/ism/networkintegrity/index.asp](http://www.in.telstra.com.au/ism/networkintegrity/index.asp)

<https://www.telstra.com.au/consumer-advice/digging-construction/relocating-network->

ULAN  
COAL  
—  
GLENCORE

04 August 2021

Matthew Boyling  
Head of Design, Essential Energy  
Po Box 5730  
Port Macquarie NSW 2444  
[Matthew.Boyling@essentialenergy.com.au](mailto:Matthew.Boyling@essentialenergy.com.au)  
Ph: 0419 846 178

Seq No:45/21

Dear Mr Boyling,

**Re: Essential Energy Power Line within Ulan West Longwall (LW) 7 and LW8**

As discussed recently, Ulan Coal Mines Pty Limited (UCMPL) are currently preparing an Extraction Plan (EP) for Longwalls LW7 and LW8 for the Ulan West Underground Mine, a component operation of the approved Ulan Coal Complex. UCMPL are required to prepare and submit for approval an EP to satisfy Condition 26, Schedule 3 of Project Approval 08\_0184 (PA08\_0184) before longwall mining can commence. Longwall mining of LW7 is scheduled to commence in Quarter 2 of 2022.

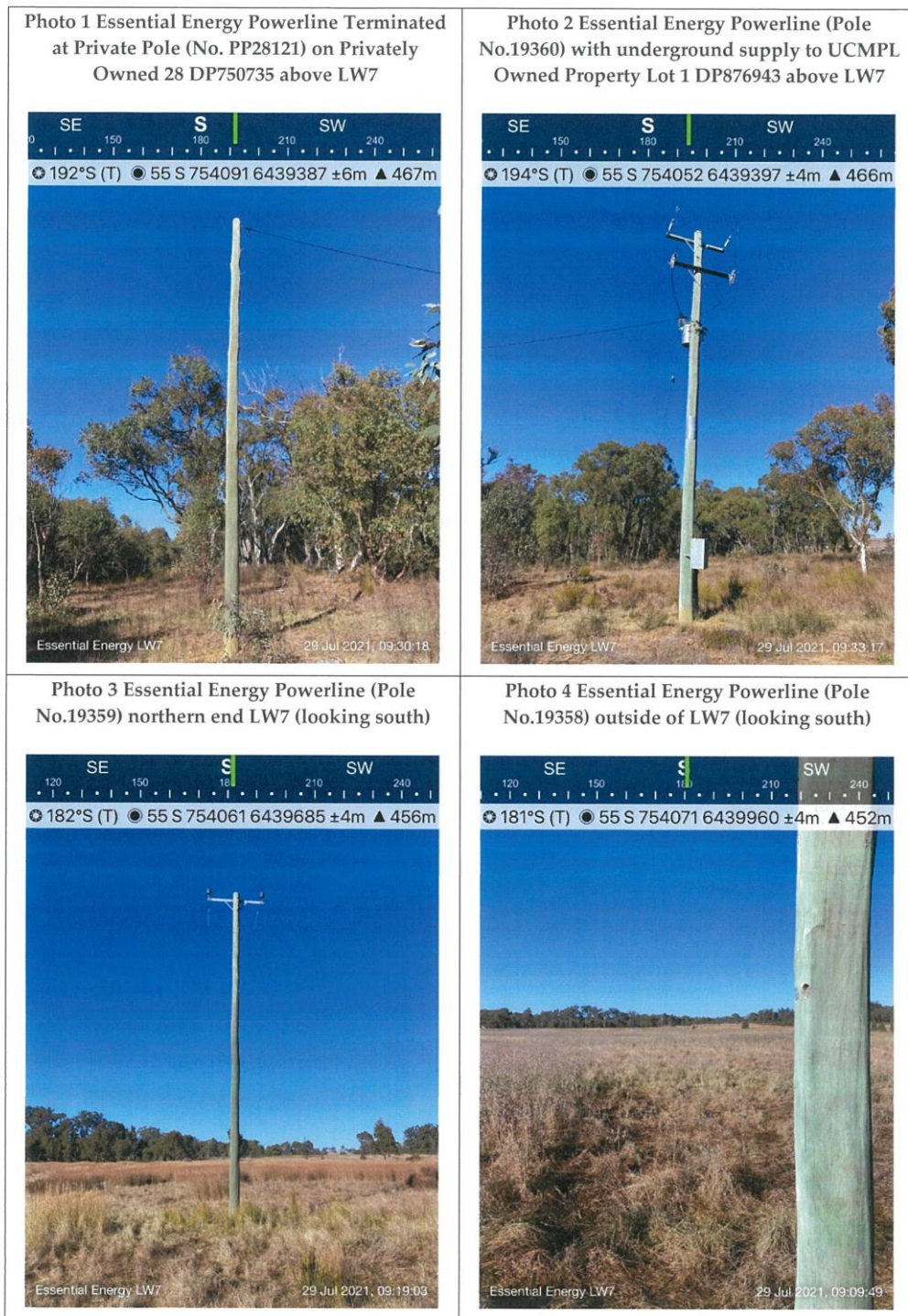
To satisfy Condition 26(g), Schedule 3 of PA08\_0184 UCMPL are required to prepare a Built Features Management Plan (BFMP) which has been developed in consultation with the owner/s of relevant features to manage the potential subsidence impacts and/or environmental consequences of the proposed second workings on these features. Within the northern portion of LW7 and LW8, are Essential Energy power poles and overhead lines (Essential Energy powerline) servicing a UCMPL owned property, Lot 1 DP876943 and a privately owned property, Lot 28 DP750735 (**Figure 1**).

The Essential Energy powerline that has the potential to service the privately owned property, Lot 28 DP750735, has been terminated at Private Pole No. PP28121 along the western boundary of this property (refer to **Photo 1** and **Figure 1**) and does not connect to the residence. The current owner of Lot 28 DP750735, has confirmed that he has no plans to connect to this service.

The Essential Energy powerline that services the UCMPL owned property Lot 1 DP876943 is active and remains connected to the residence via an underground supply (refer to **Photo 2** and **Figure 1**). There are no other Essential Energy customers that will be affected if the Essential Energy powerline becomes unserviceable as a result of mining LW7 and LW8. It should be noted that this property will be vacant during undermining.

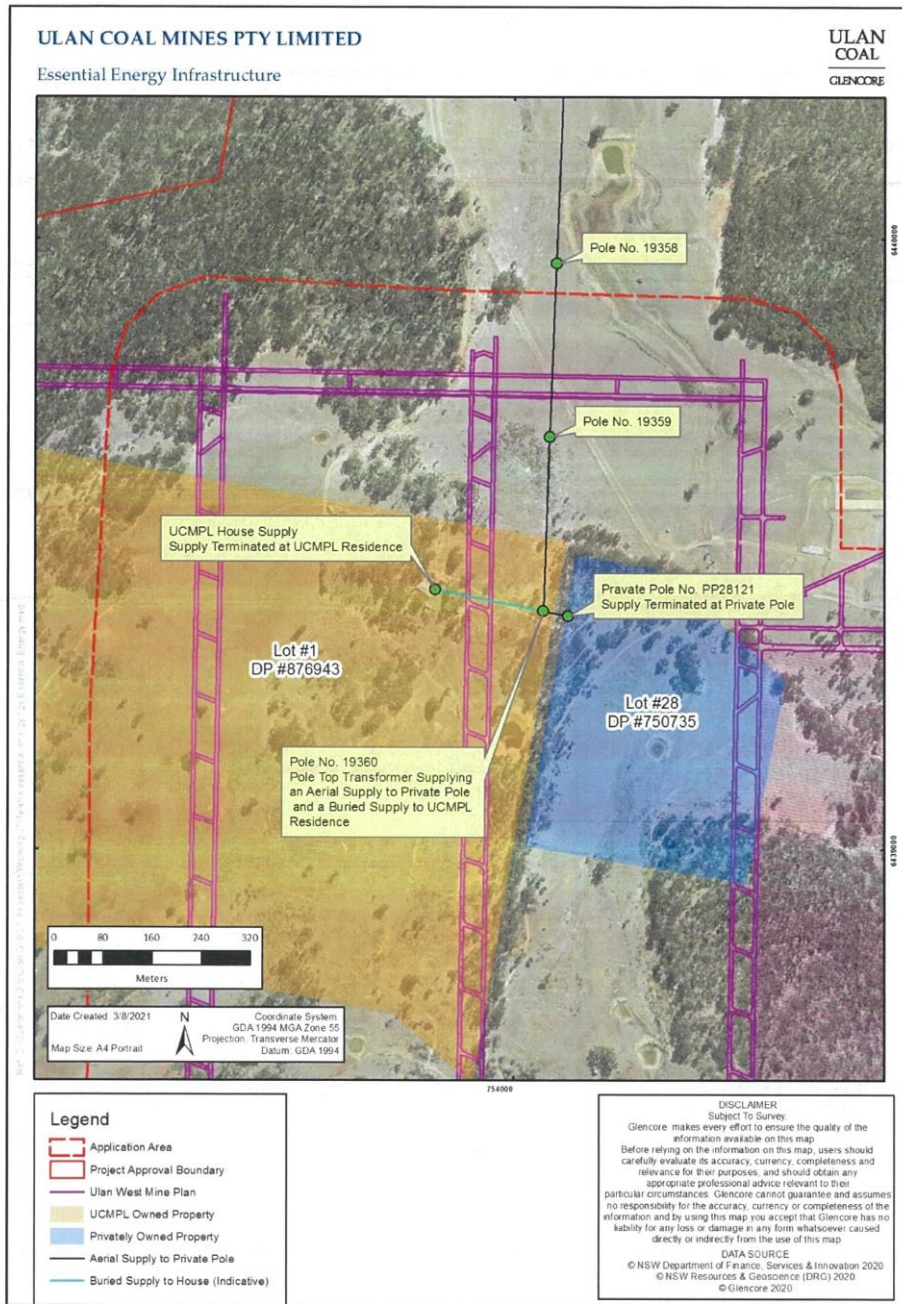
The subsidence predictions specific to the Essential Energy powerline have been prepared by SCT Operations Pty Ltd (SCT) and are described in the *Ulan West Mine: Subsidence Assessment for Longwalls 7-8 Extraction Plan (Attachment 1)*. SCT states that the Essential Energy powerline has the potential to be damaged and unserviceable due to the expected levels of strain as a result of mining induced subsidence from LW7 and LW8. In accordance with PA08\_0184, UCMPL must ensure all built features are safe, service and repairable unless the owner agrees otherwise in writing.

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Figure 1 Extraction Plan Application Area and Essential Energy Powerline



**Notes:** The buried path of the underground supply cable is assumed only, based on field verification of Essential Energy assets as recorded by GPS during a site inspection on the 29 July 2021 (refer to photos). With the exception of one private landowner, the surrounding land of LW7 and LW8 is wholly owned by UCMPL.

In consideration that no other Essential Energy customers will be impacted if the Essential Energy powerline at this location is compromised and unserviceable, as a result of subsidence from LW7 and LW8, UCMPL propose that Essential Energy isolate the powerline from the Essential Energy electrical network before and for the duration of longwall mining under the Essential Energy powerline.

However, during active subsidence from LW7 and LW8, the Essential Energy powerline will be inspected to note and record any potential subsidence induced impacts to the lines and poles, with the results of these inspections provided to Essential Energy. If the Essential Energy powerline is determined unserviceable as a result of mining LW7 and LW8, UCMPL in consultation with Essential Energy will reinstate the serviceability of the Essential Energy powerline at the cost of UCMPL at the completion of mining.

UCMPL are therefore seeking confirmation in writing from Essential Energy that the proposed measures for monitoring and mitigating impacts and reinstating the serviceability of the Essential Energy powerline at the cost of UCMPL is satisfactory, if it becomes unserviceable due to mining related impacts from LW7 and LW8. Should additional mitigations be required such as the addition of rollers and / or reducing guy wire tension please advise.

A copy of the Extraction Plan for LW7 and LW8 detailing the consultation, monitoring and management measures proposed for the Essential Energy powerline will be supplied for your records.

If Essential Energy require additional information regarding this matter, please contact Lucy Stuart on 0413 614 458 or email on [Lucy.Stuart@glencore.com.au](mailto:Lucy.Stuart@glencore.com.au)

Yours Sincerely,



Lucy Stuart  
Environment & Community Coordinator  
Ulan Coal Mines Pty Limited

Attachment 1: Ulan West Mine: Subsidence Assessment for Longwalls 7-8 Extraction Plan

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### **Bragg, Stephen (Ulan No 3 - AU)**

**From:** Matthew Boyling <matthew.boyling@essentialenergy.com.au>  
**Sent:** Monday, 17 January 2022 8:07 AM  
**To:** Bragg, Stephen (Ulan No 3 - AU)  
**Cc:** Andrew Pratt  
**Subject:** RE: UCMPL Extraction Plan

#### **External sender**

Hi Stephen,

I have discussed this with Andrew Pratt and he has summarised what we believe are the best options for Ulan Coal. Please see below-

Option 1 is close to what was proposed by Ulan. Option 3 would remove the line completely during the mining operation.

I am on leave until next week so if you have any questions can you contact Andrew Pratt on 0418 475 277?

Thanks.

#### Option 1 - Remove bridges or a span of conductor at a suitable location (OPTION 1 below).

With this, some considerations:

- The powerline will remain in situ on the mining property whilst still being Essential Energy owned assets.
- If the line is affected by the land subsiding, Essential Energy will still need to ensure the structures are preserved in a safe condition even whilst deenergised.
- If the line is affected by subsidence and becomes unsafe or unstable, Essential Energy will need to carry emergency works to rectify return the assets to a safe state. I am pretty certain this would be a cost recovery basis chargeable to Ulan Coal.
- It is possible that the line could be damaged on more than one occasion meaning multiple repairs and associated costs.

#### Option 2 - Isolation may be taken at a set of HV links, the spur line earthed, and an Operating Agreement issued to a Responsible Person at Ulan Coal (OPTION 2 below).

With this:

- The issues would be the same as per Option 1 but with the additional operating agreement requirement.

#### Option 3 – Remove some spans of the 11kV line (to the extent necessary) and reinstate the line as required once the mining operations are complete.

For this option, Ulan Coal could engage ASPs to remove the required assets and also for the work to reinstate them later. The potential benefits for Ulan Mine to consider include:

- The HV assets will be removed from site altogether, and therefore, the safety hazards associated with them will also be removed.
- No need for operating agreements, or weekly patrols.
- The costs to Ulan Coal in relation to the powerline will be controlled and predictable.

*If Ulan Coal pursue Option 3, the work can be managed through the Contestable Works process. Ulan Coal can engage a Level 3 ASP who will make a Design Information Application on their behalf. Any legal issues related to the reinstatement of the line (e.g. easements or customer deeds for neighbouring property) would be confirmed via the Design Information Package that is issued for the project.*

Matthew Boyling  
Mains Design North Manager

T: 02 6589 8895 | M: 0419 846178  
[matthew.boyling@essentialenergy.com.au](mailto:matthew.boyling@essentialenergy.com.au)

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