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Site Establishment Management Plan

Parkes to Narromine Inland Rail Project

Project # 808 – J013

Job No.:	808 - J013		
Principal:	Australian Rail Track Corporation, (ARTC)		
Authorised by:	INLink Project Director	Date:	02/01/2019
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Site Establishment Management Plan (SEMP)

Parks to Narromine Inland Rail Project # 808 – J013

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Glossary of Terms

Term	Definition
ABCs	Activity Based Conversations
ARTC	Australian Rail Track Corporation
BMD	BMD Constructions
CTMP	Construction Traffic Management Plan
CoA	Conditions of Approval
CSSI	Critical State Significant Infrastructure
DP&E	Department of Planning and Environment
EIS	Environmental Impact Statement
EPA	Environment Protection Authority
EPL	Environment Protection License
ER	Environmental Representative
JHA	Job Hazard Analysis
INLink	Contractor Joint Venture (Fulton Hogan | BMD Constructions)
INP	Industrial Noise Policy
MCAF	Major Construction Ancillary Facility
OEH	Office of Environment and Heritage
P2N	Parkes to Narromine
SEMP	Site Establishment Management Plan
WMS	Work Method Statement

1 Scope

1.1 Purpose

This Site Establishment Management Plan (SEMP) outlines the environmental management practices and procedures that will be implemented for the establishment of the INLink Major Construction Ancillary Facilities (MCAF). With BMD Constructions (BMD) undertaking the role of Principal Contractor for the Project on behalf of INLink, this plan is primarily based on the BMD Group Management Systems.

All MCAF are to be setup and managed in accordance with this SEMP along with the BMD Site Setup and Establishment Guideline and associated documents contained within the Guideline (Refer to Attachment A). The SEMP is the governing documentation regarding all Site Establishment Works.

1.2 Performance Objectives

The following performance objectives against which this SEMP will be assessed are detailed in Table 1-1.

Table 1-1 Compilation of environmental performance outcomes (Source: Table 8.4 of the Inland Rail – Parkes to Narromine Submissions Report (*February 2018*))

Key Issue (as listed in the SEARS)	SEARS desired performance outcomes	Proposal specific environmental performance outcomes	SEMP reference or comment
5. Air Quality	The project is designed, constructed and operated in a manner that minimises air quality impacts (including nuisance dust and odour) to minimise risks to human health and the environment to the greatest extent practicable.	The proposal is designed to minimise the potential for vegetation clearance and associated dust impacts. The proposal is constructed and operated in accordance with the requirements of the *Protection of the Environment Operations Act 1974* (POEO Act) and relevant EPLs. Dust generated during construction will not exceed the relevant criteria in the *National Environment Protection (Ambient Air Quality) Measure* (NEPC, 1998) and the Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales (DEC, 2005).	SEMP – Section 2.1 SEMP – Section 3.3 SEMP - Section 4.3
6. Biodiversity	The project design considers all feasible measures to avoid and minimise impacts on terrestrial and aquatic biodiversity.	The proposal is designed to minimise the surface footprint and impacts on biodiversity. Potential impacts on biodiversity are managed in accordance with relevant legislation, including the EP&A Act, TSC Act, FM Act,	SEMP – section 3.3 The proposal sites will be in a location which minimises vegetation clearing

Key Issue (as listed in the SEARS)	SEARS desired performance outcomes	Proposal specific environmental performance outcomes	SEMP reference or comment
	Offsets and/or supplementary measures are assured which are equivalent to any remaining impacts of project construction and operation.	EPBC Act, and the Noxious Weeds Act 1993. The biodiversity outcome is consistent with the Framework for Biodiversity Assessment (OEH, 2014a). Offsets are provided in accordance with the NSW Biodiversity Offsets Policy for Major Projects (OEH, 2014c).	and topsoil stripping. Covered in a separate document (Flora and Fauna Management Plan) N/A - This is not related to the SEMP. This will be completed as part of a separate approval.
7. Climate	The project is designed, constructed and operated to be resilient to the future impacts of climate change.	Climate change risks are considered throughout the design and development process. The proposal is designed to maximise climate change resilience while minimising costs, community, and environmental impacts. The climate change risk assessment is maintained in line with updated global climate models and regional projection data. The proposal is designed, constructed, and operated in accordance with relevant climate change legislation and guidelines.	N/A - This issue is not related to the SEMP.
8. Flooding	The project minimises adverse impacts on existing flooding characteristics. Construction and operation of the project avoids or minimises the risk of, and adverse impacts from, infrastructure flooding, flooding hazards, or dam failure.	Construction is undertaken in a manner that minimises the potential for adverse flooding impacts, through staging of works and the implementation of mitigation measures. Structures such as spoil mounds are designed and located such that flows are not significantly impeded. The proposal reduces the length of overtopping of the existing rail corridor. The proposal reduces or does not significantly increase the area subject to flooding.	SEMP – section 2.1
9. Health and safety	The project avoids, to the greatest extent possible, risk to public safety.	Construction targets zero safety incidents. All dangerous goods are stored, handled and transported in accordance with relevant	SEMP – Appendix A. SEMP – Section 3.3.5

Key Issue (as listed in the SEARS)	SEARS desired performance outcomes	Proposal specific environmental performance outcomes	SEMP reference or comment
		regulatory requirements and Australian Standards	
10. Heritage	The design, construction and operation of the project facilitates, to the greatest extent possible, the long-term protection, observation and management of the heritage significance of items of environmental heritage and Aboriginal objects and places. The design, construction and operation of the project avoids or minimises impacts, to the greatest extent possible, on the heritage significance of environmental heritage and Aboriginal objects and places.	The proposal is designed to minimise the surface footprint. The design is sympathetic to the historic significance of the existing rail corridor and the heritage significance of surrounding listed heritage items, and where practicable, avoids and minimises impacts to heritage. Impacts on heritage are managed in accordance with relevant legislation, including the EP&A Act, the Heritage Act 1977, and relevant guidelines. The potential impacts identified are mitigated by photographic /archival recording.	Appendix C MCAF will not have any impact on heritage items (including areas of archaeological sensitivity), as none have been identified within the footprint.
11. Noise and vibration – amenity	Construction noise and vibration (including airborne noise, ground borne noise and blasting) are effectively managed to minimise adverse impacts on acoustic amenity. Increases in noise emissions and vibration affecting nearby properties and other sensitive receivers during operation of the proposal is effectively managed to protect the amenity and well-being of the community.	The proposal minimises impacts to the local community by: - Controlling noise and vibration at the source - Controlling noise and vibration on the source to receiver transmission path - Controlling noise and vibration at the receiver - Implementing practicable and reasonable measures to minimise the noise and vibration impacts of construction activities on local sensitive receivers	SEMP – Sections 3.3.2, 4.1 and 4.2
12. Noise and vibration – structural	Construction noise and vibration (including airborne noise, ground borne noise and blasting) are effectively managed to minimise adverse impacts on the structural integrity of buildings, items including Aboriginal places and environmental heritage, and nearby road infrastructure. Increases in noise emissions and vibration affecting environmental	The proposal minimises impacts to structures by: - Controlling vibration at the source - Controlling vibration on the source to receiver transmission path - Implementing practicable and reasonable measures to minimise vibration impacts of construction activities on structures	SEMP – Sections 3.3.2, 4.1 and 4.2

Key Issue (as listed in the SEARS)	SEARS desired performance outcomes	Proposal specific environmental performance outcomes	SEMP reference or comment
	heritage as defined in the Heritage Act 1977 during operation of the proposal are effectively managed.		
13. Protected and sensitive lands	The project is designed, constructed and operated to avoid or minimise impacts on protected and sensitive lands.	The proposal does not impact on protected and sensitive lands as defined by the SEARs.	The MCAFs are not located on sensitive lands as defined by the SEARs.
14. Socio-economic, land use property, agriculture and biosecurity	The project minimises adverse social and economic impacts and capitalises on opportunities potentially available to affected communities. The project minimises impacts to property and business and achieves appropriate integration with adjoining land uses, including maintenance of appropriate access to properties and community facilities, and minimisation of displacement of existing land use activities, dwellings and infrastructure.	The proposal minimises impacts to the local community and businesses. As part of Inland Rail as a whole, the proposal provides for the development of an efficient and sustainable route for the transport of freight between Brisbane and Melbourne. The proposal provides opportunities for regional economic development, by enabling local and regional businesses to access Inland Rail via regional transport hubs. Impacts to existing land use and properties are minimised, where practicable. The proposal is appropriately integrated with adjoining land uses, and access to private properties is maintained. The proposal is appropriately integrated with local and regional land use planning strategies.	The proposed MCAFs are located on vacant land or land previously used for rail infrastructure. The MCAF at Peak Hill is expected to bring economic benefits to the town – refer SEMP section 2.2
15. Soils	The environmental values of land, including soils, subsoils and landforms, are protected. Risks arising from the disturbance and excavation of land and disposal of soil are minimised, including disturbance to acid sulfate soils and site contamination.	Site-specific soil, subsoil and landform characteristics are taken into consideration during detailed design and construction. Any contamination is managed in accordance with relevant regulatory requirements. Any soil waste is assessed, classified, managed and disposed of in accordance with the Waste Classification Guidelines (EPA, 2014).	This information is covered in a separate document (Soil and Water Management Plan SEMP – Section 3.3.4
16. Sustainability	The project reduces the NSW Government's operating costs and ensures the effective and efficient use of resources.	The design process targets an 'excellent' rating in accordance with the ISCA rating tool. Sustainability considerations are integrated throughout the design,	N/A - This issue is related to the design and overall outcomes of the project not the SEMP.

Key Issue (as listed in the SEARS)	SEARS desired performance outcomes	Proposal specific environmental performance outcomes	SEMP reference or comment
		construction, and operation phases of the proposal. The proposal contributes to one of the desired outcomes of Inland Rail – to have more than 750,000 fewer tonnes of carbon, one-third less fuel consumption, and reduced truck volumes in over 20 regional towns.	Refer to CEMP for construction sustainability considerations.
17. Traffic, transport and access	Network connectivity, safety and efficiency of the transport system in the vicinity of the project is managed to minimise impacts. The safety of transport system customers is maintained. Impacts on network capacity and the level of service are effectively managed. Works are compatible with existing infrastructure and future transport corridors.	The proposal provides for more efficient and productive freight rail operations. Impacts to traffic and transport are minimised, where practicable. Motorist, pedestrian and cyclist safety will be maintained or improved. The proposal contributes to one of the desired outcomes of Inland Rail – to have reduced truck volumes on the road network, improving road safety. Safe access to properties is maintained. The proposal is integrated with existing and future local and regional transport infrastructure and planning strategies.	N/A – This is related to the overall outcomes of the project not the SEMP. SEMP – Section 3.3.3 Covered in the Construction Traffic Management Plan (CTMP) N/A This is related to the overall outcomes of the project not the SEMP SEMP – Section 2.2.5, 2.3.5, and 2.4.5 N/A This is related to the overall outcomes of the project not the SEMP.
18. Visual amenity	The project minimises adverse impacts on the visual amenity of the built and natural environment (including public open space) and capitalises on opportunities to improve visual amenity.	Vegetation providing screening to the rail corridor is retained where practicable. The proposal is designed to have regard to the surrounding landscape and visual environment. The proposal incorporates features to minimise the potential visual impacts where visual receptors are concentrated. The proposal makes a positive contribution to the quality of the visual environment in the vicinity of the Parkes north west connection.	N/A This is related to construction of the project not the SEMP SEMP – 2.2.4, 2.3.4, 2.5.4 N/A to SEMP N/A to SEMP N/A to SEMP

Key Issue (as listed in the SEARS)	SEARS desired performance outcomes	Proposal specific environmental performance outcomes	SEMP reference or comment
		The proposal is visually integrated with its surroundings.	
19. Waste	All wastes generated during the construction and operation of the proposal is effectively stored, handled, treated, reused, recycled and/or disposed of lawfully, and in a manner that protects environmental values.	Waste is managed in accordance with the POEO Act and the Waste and Resource Recovery Act 2001. Waste is assessed, classified, managed, and disposed of in accordance with the Waste Classification Guidelines (EPA, 2014). Reusable spoil is beneficially reused in accordance with the project spoil reuse hierarchy.	SEMP – 3.3.4
20. Water - Hydrology	Long term impacts on surface water and groundwater hydrology (including drawdown, flow rates and volumes) are minimised. The environmental values of nearby, connected and affected water sources, groundwater and dependent ecological systems including estuarine and marine water (if applicable) are maintained (where values are achieved) or improved and maintained (where values are not achieved). Sustainable use of water resources.	The proposal avoids long term impacts to surface water. Opportunities to reuse water resources are considered during the design process. The use of water during construction is minimised.	The nearest waterbody from a MCAF is 121m (farm dam near North-West Link MCAF) SEMP - **Appendix D** MCAF use will be limited to construction therefore long-term impacts are not expected. N/A to SEMP SEMP – Section 4.4
21. Water - quality	The project is designed, constructed and operated to protect the NSW Water Quality Objectives where they are currently being achieved, and contribute towards achievement of the Water Quality Objectives over time where they are currently not being achieved, including downstream of the project to the extent of the project impact including estuarine and	The proposal is designed and constructed such that changes to water flows in watercourses are minimised. Water discharged does not exceed the ANZECC 2000 guidelines for protection of aquatic ecosystems or water quality trigger values.	The nearest waterbody from a MCAF is 121m (farm dam near North-West Link MCAF) MCAF use will be limited to construction therefore long-term impacts are not expected SEMP – Appendix D

Key Issue (as listed in the SEARS)	SEARS desired performance outcomes	Proposal specific environmental performance outcomes	SEMP reference or comment
	marine waters (if applicable).	Impacts to water quality during construction and operation are minimised.	SEMP – Appendix D

1.3 Approval and Consultation Process

The following SEMP has been prepared in accordance with C22 of the Conditions of Approval (CoA) dated June 2018 from The Department of Planning and Environment (DP&E). Where other CoA are considered in the SEMP a cross reference is provided. This is detailed in Table 1-2.

In accordance with the CoA the SEMP has also been developed in consultation with the relevant local councils. INLink will assist ARTC in delivering all project-related communications and meeting the objectives of the project requirements and CoA.

Communication tools will be used to publicly communicate and will include (but are not limited to) community information sessions, community forums, construction notifications, Community Reference Groups, Stakeholder engagement /meetings and door knocks. All stakeholder and community interactions will be recorded in P2N Consultation Manager database established by ARTC.

Where works are on private land, ARTC will undertake consultation with the relevant landowners through the communication tools mentioned above and interactions recorded in ARTC's P2N Consultation Manager database. ARTC will seek approval in accordance with the ARTC Communications Strategy (i.e. Land Access Agreements) from the relevant landowners prior to INLink commencing works onsite.

Table 1-2 – Conditions of Approval

Reference	Condition of approval	Where considered
A5	Where the terms of this approval require a document to be prepared or a review to be undertaken in consultation with identified parties, consultation must be carried out in accordance with the Communications Strategy required by Condition B1. Evidence of the consultation undertaken must be submitted to the Secretary with the document. The evidence must include: (a) documentation of the engagement with the party(ies) identified in the condition of approval that has occurred prior to submitting the document for approval; (b) log of the points of engagement or attempted engagement with the identified party(ies) and a summary of the issues raised by them; (c) documentation of the follow-up with the identified party(ies) where feedback has not been provided to confirm that they have none or have failed to provide feedback after repeated quests; (d) outline of the issues raised by the identified party(ies) and how they have been addressed; and	SEMP – Section 1.3 (Table 1-2) Consultation has been carried out with Council and endorsement has been received by the ER.

Reference	Condition of approval	Where considered
	(e) a description of the outstanding issues raised by the identified party(ies) and the reasons why they have not been addressed.	
A10	The CSSI may be constructed and operated in stages. Where staged construction or operation is proposed, a Staging Report (for either or both construction and operation as the case requires) must be prepared and submitted to the Secretary for information. The Staging Report must be submitted to the Secretary no later than one (1) month prior to the commencement of construction of the first of the proposed stages of construction (or if only staged operation is proposed, one (1) month prior to the commencement of operation of the first of the proposed stages of operation).	This project will not be constructed or operated in stages.
C20	Construction ancillary facilities must meet the following criteria, unless otherwise approved by the Secretary: (a) the facility is development of a type that would, if it were not for the purpose of the CSSI, otherwise be exempt or complying development; **or** (b) the facility is located as follows: (i) at least 50 metres from any waterway unless an erosion and sediment control plan is prepared and implemented so as not to affect water quality in the waterway in accordance with Managing Urban Stormwater series; (ii) on lands as identified as “indicative compound locations” in Figures 8.2a to 8.2f of the EIS; (iii) so as to prevent heavy vehicles travelling on local streets or through residential areas in order to access the facility, except as identified in the EIS and amended by the Submissions Report; (iv) so as not to require vegetation clearing beyond the extent of clearing approved under other terms of this approval except as approved by the ER as minor clearing; (v) so as to not to directly impact on threatened species or their habitat or threatened ecological communities beyond the impacts identified, assessed and approved under other terms of this approval; (vi) so as not to have any impact on heritage items (including areas of archaeological sensitivity) beyond the impacts identified, assessed and approved under other terms of this approval; (vii) so as not to unreasonably interfere with lawful uses of adjacent properties that are being carried out at the date upon which construction or establishment of the facility is to commence; (viii) to enable operation of the ancillary facility during flood events and to avoid or minimise, to the greatest extent practicable, adverse flood impacts on the surrounding environment and other properties and infrastructure; and (ix) so as to have sufficient area for the storage of raw materials to minimise, to the greatest extent practicable, the number of deliveries outside of standard work hours through areas which are within 500 metres of a residential receiver. Nothing in this condition prevents the landowner from refusing to allow the Proponent to use their land.	SEMP – Section 2.1 The mitigation measures as described have been included in the Site Selection Criteria section with Table 2-1 outlining how each condition has been met.

Reference	Condition of approval	Where considered
C22	Before establishment of any construction ancillary facility that satisfies the criteria in Condition C20, the Proponent must prepare a Site Establishment Management Plan which outlines the environmental management practices and procedures to be implemented for the establishment of the construction ancillary facility(ies). The Site Establishment Management Plan must be prepared in consultation with the relevant council(s) and submitted to the Secretary for approval one (1) month prior to installation of ancillary facilities. The Site Establishment Management Plan must detail the establishment of the construction ancillary facilities and include:	
	(a) a description of activities to be undertaken during establishment of the construction ancillary facility (including indicative scheduling and duration of works to be undertaken at the site);	SEMP – Section 2.3.6, 2.3.7, 2.4.6, 2.4.7, 2.5.6 and 2.5.7. Project description has been included in this Plan.
	(b) a program for ongoing analysis of the key environmental risks arising from the site establishment activities described in subsection (a) of this condition, including an initial risk assessment undertaken prior to the commencement of site establishment works; and	SEMP – Section 3 Environmental Risk Analysis has been undertaken and will continue to be reviewed for the duration of the works.
	(c) details of how the site establishment activities described in subsection (a) of this condition will be carried out to –	
	(i) meet the performance outcomes stated in the EIS and Submissions Report, and	SEMP – Section 1.2 The performance outcomes as outlined in the EIS have been addressed within the Plan.
	(ii) manage the risks identified in the risk analysis undertaken in subsection (b) of this condition; and	Environmental Risk Analysis has been undertaken and will continue to be reviewed for the duration of the works.
	(d) a program for monitoring the performance outcomes, including a program for noise monitoring during site establishment consistent with the requirements of Conditions C13 and C14.	A Construction Monitoring Program has been included in this plan and is consistent with C13 and C14. The Construction Monitoring Program will be undertaken for the duration of the works.
	"Nothing in this condition prevents the Proponent from preparing individual Site Establishment Management Plans for each	SEMP – Section 3 *(Note – These programs have been developed to be*

Reference	Condition of approval	Where considered
	construction ancillary facility. This condition does not apply to minor construction ancillary facilities as defined in Condition C21."	*consistent with Conditions C13 and C14)*
C23	The operation of a construction ancillary facility must not commence until the CEMP required by Condition C1, relevant CEMP Sub-plans required by Condition C4 and relevant Construction Monitoring Programs required by Condition C13 have been approved by the Secretary.	SEMP – Section 2 Consultation has been carried out with Council and endorsement has been received by the ER. The operation of the MCAF as described in this plan will not commence until approval is received from DP&E.
C24	Where possible, construction ancillary facilities must be accessed via existing public roads. Where this is not possible, the Proponent may utilise existing private access tracks on private property but only with the permission of the landowner. The Proponent must consult with each landowner whose property is required for access and agree on the terms and conditions relating to access arrangements. Nothing in this condition prevents the landowner from refusing the Proponent access to and via their land. New construction access tracks on private property must comply with the requirements of Condition C20(b)(i), (iv), (v), (vi) and (vii)	SEMP – Section 2.3.5 2.4.5 and 2.5.5 INLink will utilise existing council or state controlled local roads (bitumen sealed or unsealed) to access Major Construction Ancillary Facilities. The majority of the primary access route comprises sealed Council or State roads.
C25	The Proponent must ensure that all roads / tracks that will be utilised to access construction ancillary facilities are to the standard necessary to provide all-weather access, including a trafficable surface suitable to accommodate the type of vehicle movements that are anticipated to be associated with the construction of the CSSI.	SEMP – Section 2.3.5, 2.4.5 and 2.5.5 INLink will utilise existing council or state controlled local roads (bitumen sealed or unsealed) to access Major Construction Ancillary Facilities. The majority of the primary access route comprises sealed Council or State roads All roads to be utilised have had Dilapidation surveys undertaken and the road will be returned to the same or better condition upon completion of works. Further to this ongoing inspections (weekly) will be undertaken by the Environmental Team for the duration of works.

Reference	Condition of approval	Where considered
C26	Boundary fencing that incorporates screening must be erected around all construction ancillary facilities that are within 500 metres of sensitive land uses for the duration of the use of the construction ancillary facility unless otherwise agreed with the affected landowners and/or tenants and adjacent landowners.	SEMP – Section 2.3.4, 2.4.4 and 2.5.4 Boundary fencing will be incorporated to provide appropriate visual amenity in accordance with the condition.
C27	Boundary fencing around construction ancillary facilities and required under Condition C26 of this approval must aim to minimise visual and noise impacts on adjacent landowners, and emission of nuisance dust beyond the facility boundary.	SEMP – Section 2.3.4, 2.4.4 and 2.5.4 Boundary fencing will be incorporated to provide appropriate noise mitigation in accordance with the condition.

2 Major Construction Ancillary Facilities

Three Major Construction Ancillary Facilities (MCAF) within close proximity to the rail corridor and at key locations along the project alignment have been selected to support the Parkes to Narromine Inland Rail Project, these are:

- North-West Link MCAF (Lot 2 DP514740 and Lot 2 DP238558)
- Peak Hill MCAF (Lot 4110 DP1208582)
- Tomingley MCAF (Lot 1 DP 818792 and Lot 4113/-/DP1208588)

The location of each of the three MCAFs is shown in Figure 2-1.

North-West Link MCAF

The land for the MCAF is zoned as Primary Production land (RU1) under the Parkes Local Environmental Plan 2012. The proposed MCAF area is located off Brolgan Road consisting of Lot 2 DP514740 owned by Kenneth James Leith, Lot 2 DP238558 owned by P S Marine PTY LIMITED and Coopers Road reserve owned by Parkes Shire Council. The land is currently vacant non-operational land.

Peak Hill MCAF

The land for the MCAF is zoned as Infrastructure (SP2) under the Parkes Local Environmental Plan 2012. The proposed MCAF area at Peak Hill consists of Lot 4110 DP1208582 owned by Transport for NSW (TfNSW) and Coradgery Street road reserve owned by Parkes Shire Council. The site is located adjacent to the Peak Hill train station and is currently used as rail infrastructure facility.

Tomingley MCAF

The land for the MCAF is zoned as Infrastructure (SP2) and Primary Production land (RU1) under the Narromine Local Environmental Plan 2011.The proposed MCAF areas consists of Lot 1 DP818792 owned by NSW Grain Corporation Limited and the existing rail corridor Lot 4113 DP1208588 owned by TfNSW. The land is currently vacant non-operational land.

In accordance with C23 of the CoA, the operation of all Major Construction Ancillary Facilities (MCAF) will not occur until the CEMP (Condition C1 of CoA), the CEMP Sub-plans (Condition C4 of CoA) and the relevant Construction Monitoring Programs (Condition C13 of CoA) have been approved by the Secretary.

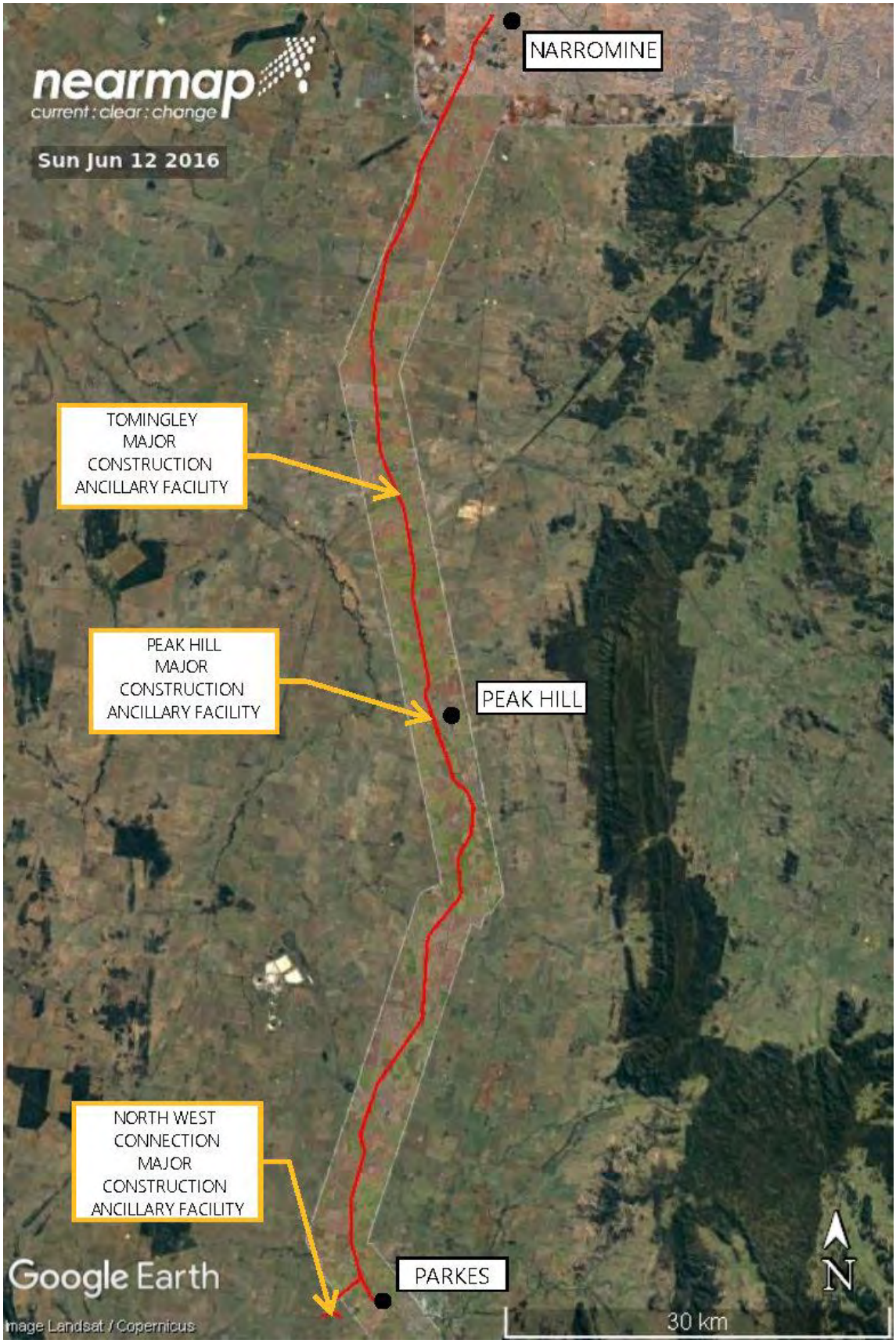


Figure 2-1 – INLink P2N Major Construction Ancillary Facilities Locations

2.1 Site Selection Criteria

In accordance with C20 of the CoA, MCAFs must meet the following criteria, unless otherwise approved by the Secretary:

a) the facility is development of a type that would, if it were not for the purpose of the CSSI, otherwise be exempt or complying development; **or**

b) the facility is located as follows:

(i) to be located at least 50 metres from any waterway unless an erosion and sediment control plan is prepared and implemented so as not to affect water quality in the waterway in accordance with *Managing Urban Stormwater* series;

(ii) on lands as identified as "indicative compound locations" in Figures 8.2a to 8.2f of the EIS;

(iii) so as to prevent heavy vehicles travelling on local streets or through residential areas in order to access the facility, except as identified in the EIS and amended by the Submissions Report;

(iv) so as not to require vegetation clearing beyond the extent of clearing approved under other terms of this approval except as approved by the ER as minor clearing;

(v) so as to not to directly impact on threatened species or their habitat or threatened ecological communities beyond the impacts identified, assessed and approved under other terms of this approval;

(vi) so as not to have any impact on heritage items (including areas of archaeological sensitivity) beyond the impacts identified, assessed and approved under other terms of this approval;

(vii) so as not to unreasonably interfere with lawful uses of adjacent properties that are being carried out at the date upon which construction or establishment of the facility is to commence;

(viii) to enable operation of the ancillary facility during flood events and to avoid or minimise, to the greatest extent practicable, adverse flood impacts on the surrounding environment and other properties and infrastructure (Also to consider requirements of Flood and Emergency Management Plan); and

(ix) so as to have sufficient area for the storage of raw materials to minimise, to the greatest extent practicable, the number of deliveries outside of standard work hours through areas which are within 500 metres of a residential receiver.

Table 2-1 – Site Selection Criteria

Selection Criteria	North-West Link MCAF	Peak Hill MCAF	Tomingley MCAF
CoA 20 (a) the facility is development of a type that would, if it were not for the purpose of the CSSI, otherwise be exempt or complying development; or	Not Compliant The MCAF would not be considered to be an exempt or complying development. The facility is not on existing ARTC land and is neither routine works, maintenance or minor works.	Compliant Site Peak Hill is identified as a rail infrastructure facility and is the only site that is development of a type that would, if it were not for the purpose of the CSSI, otherwise be exempt or complying development (C20(a)). Peak Hill is not required to meet C20 (b) however has been included below for ARTC's requirements to identify any additional impacts and associated additional mitigation measures.	Not Compliant The MCAF would not be considered to be an exempt or complying development. The facility is not on existing ARTC land and is neither routine works, maintenance or minor works.
CoA C20 (b) the facility is located as follows:			
(i) at least 50 metres from any waterway unless an erosion and sediment control plan is prepared and implemented so as not to affect water quality in the waterway in accordance with *Managing Urban Stormwater* series;	Compliant The North-West Link MCAF is approximately: 4.91km from Ridgey Creek; 6.47km from Goobang Creek; 121m from a waterbody (farm dam); and 336m from a non-perennial waterway into a waterbody (farm dam).	Compliant The Peak Hill MCAF is approximately: 1.5km from Ten Mile Creek; and 240m from a water body (farm dam).	Compliant The Tomingley MCAF is approximately: 3.3km from Gundong Creek; 176m from a waterbody (farm dam); and 195m from a non-perennial waterway into a waterbody (farm dam).
(ii) on lands as identified as "indicative compound locations" in Figures 8.2a to 8.2f of the EIS;	Not Compliant The north-east North-West Link MCAF is on lands identified as 'indicative compound locations' in Figure 8.2a of the EIS.	Not Compliant The Peak Hill MCAF is NOT on lands identified as 'indicative compound locations' in Figure 8.2c of the EIS. As such the Peak Hill MCAF is not compliant however justification for its	Not Compliant The Tomingley MCAF is NOT on lands identified as 'indicative compound locations' in Figure 8.2d of the EIS. As such the Tomingley MCAF is not compliant however justification for its

Selection Criteria		North-West Link MCAF	Peak Hill MCAF	Tomingley MCAF
		The southern North-West Link MCAF is NOT on lands identified as 'indicative compound locations' in Figure 8.2a. As such the North-West Link MCAF is not compliant however justification for its inclusion as a MCAF for the project is provided in section 2.2.	inclusion as a MCAF for the project is provided in section 2.2.	inclusion as a MCAF for the project is provided in section 2.2.
(iii)	so as to prevent heavy vehicles travelling on local streets or through residential areas in order to access the facility, except as identified in the EIS and amended by the Submissions Report;	Access and egress from both the northern and southern North-West Link MCAFs will be via Brolgan Road (refer Figure 2-3). Access via the arterial road network has been prioritised over local streets and residential areas. No private roads will be utilised for access and egress. No residential areas will be impacted as there are none identified within the surrounding area requiring access via Coopers Road (refer **Appendix C**).	Access and egress from the Peak Hill MCAF will be via Station Lane (refer Figure 2-8 and Figure 2-9. Access via the arterial road network has been prioritised over local streets and residential areas. No private roads will be utilised for access and egress. Site Peak Hill is located within a more densely populated area (refer **Appendix C**). Traffic volumes and type for the site Peak Hill will increase marginally but are not considered to make a material difference to the existing assessed levels of impact during construction.	Access and egress from the Tomingley MCAF will be via Tomingley West Road and Peak Hill Railway Road (refer 5 and Figure 2-6). Access via the arterial road network has been prioritised over local streets and residential areas. No private roads will be utilised for access and egress. Only one resident is identified north of the MCAF (approximately 350m from the MCAF). This resident will not be impacted by any heavy vehicles (refer **Appendix C**).
(iv)	so as not to require vegetation clearing beyond the extent of clearing approved under other terms of this approval except as approved by the ER as minor clearing;	Compliant Minor vegetation clearing required. The North-West Link MCAF is dominated by cropping and predominately exotic pastures assigned to Miscellaneous Ecosystem (Highly disturbed areas with no or limited native vegetation). Clearing of miscellaneous ecosystem is considered low impact and therefore the ER can approve clearing of this vegetation type at the North-West Link MCAF.	Compliant Minor vegetation clearing required. The Peak Hill MCAF is dominated by exotic perennial grasses consistent with Miscellaneous Ecosystem (Highly disturbed areas with no or limited native vegetation). Clearing of miscellaneous ecosystem is considered low impact and therefore the ER can approve clearing of this vegetation type at the Peak Hill MCAF.	Compliant Minor vegetation clearing required. The Tomingley MCAF is mostly dominated by Miscellaneous Ecosystem (Highly disturbed areas with no or limited native vegetation). Clearing of miscellaneous ecosystem is considered low impact and therefore the ER can approve clearing of this vegetation type at the Tomingley MCAF.

Selection Criteria	North-West Link MCAF	Peak Hill MCAF	Tomingley MCAF
(v) so as to not to directly impact on threatened species or their habitat or threatened ecological communities beyond the impacts identified, assessed and approved under other terms of this approval;	Compliant No impact to threatened species, habitat or ecological communities with the implementation of mitigation measures. Two plant community types (PCTs) were recorded within the site in two distinct patches being; PCT 276 Yellow Box grassy tall woodland on alluvium or parna loams and clays on flats in NSW South Western Slopes Bioregion and PCT 201 Fuzzy Box Woodland on alluvial brown loam soils mainly in the NSW South Western Slopes Bioregion. PCT 276 was recorded is poor condition as remnant trees with a predominately exotic understorey; this community is consistent with White Box Yellow Box Blakely's Red Gum Woodland, an Endangered ecological community under the BC Act and Critically Endangered under the EPBC Act. PCT 201 was recorded as remnant roadside vegetation and is consistent with Fuzzy Box Woodland, an Endangered ecological community under the BC Act. Where PCT's do occur, they will be demarcated as no go areas. PCT maps are included in **Appendix C**. The North-West MCAF is located within an unnamed watercourse that was assessed in the EIS construction impact zone.	Compliant No impact to threatened species, habitat or ecological communities as no threatened flora or fauna species were identified in the EIS as associated with the PCT Miscellaneous Ecosystem (Highly disturbed areas with no or limited vegetation).	Compliant No impact to threatened species, habitat or ecological communities with the implementation of mitigation measures. Two discrete patches of derived native grassland in the form of PCT 55 Belah woodland on alluvial plains and low rises in the central NSW wheatbelt to Pilliga and Liverpool Plains regions. This plant community type does not align to any threatened ecological community. Where PCT's do occur, they will be demarcated as no go areas. PCT maps are included in **Appendix C**.

Selection Criteria	North-West Link MCAF	Peak Hill MCAF	Tomingley MCAF
	Stockpiling of materials will not occur in the unnamed watercourse, where practicable.		
(vi) so as not to have any impact on heritage items (including areas of archaeological sensitivity) beyond the impacts identified, assessed and approved under other terms of this approval;	Compliant **Aboriginal Heritage** There are no registered AHIMS sites within the vicinity (1km) of the sites The sites are not on or near sites with known Aboriginal heritage value (consistent with EIS, Volume 1, Part B, section 8.4 commitment) or impact on heritage items (including areas of archaeological sensitivity) beyond those identified in the EIS (consistent with MCoA C20 (b) (vi)). Based on the existing information, it is unlikely that any Aboriginal values will be present at all sites. Standard unexpected finds protocol will be applied during construction. **Non-Aboriginal Heritage** There are no non-Aboriginal heritage items located within 1km of the MCAF. The North-West Link MCAF will not have any impact on heritage items (including areas of archaeological sensitivity), as none have been identified within the footprint.	Compliant **Aboriginal Heritage** There are two registered AHIMS sites within 50m and 200m of Site Peak Hill. It is unlikely that works will impact on the AHIMS sites. If required, further detail on the location and type of site can be assessed. The sites are not on or near sites with known Aboriginal heritage value (consistent with EIS, Volume 1, Part B, section 8.4 commitment) or impact on heritage items (including areas of archaeological sensitivity) beyond those identified in the EIS (consistent with MCoA C20 (b) (vi)). Based on the existing information, it is unlikely that any Aboriginal values will be present at all sites. Standard unexpected finds protocol will be applied during construction. **Non-Aboriginal Heritage** The following Non-aboriginal heritage items were identified within 1km of the MCAF: - Tomingley West silo (potential heritage item) – 40m for MCAF - Tomingley West 2 (timber components of underbridge) – 800m from MCAF - Tomingley West 3(timber components of the bridge) – 190m from the MCAF It is unlikely that non-Aboriginal heritage items will be impacted on, subject to 35m	Compliant **Aboriginal Heritage** There are no registered AHIMS sites within the vicinity (1km) of the sites. The sites are not on or near sites with known Aboriginal heritage value (consistent with EIS, Volume 1, Part B, section 8.4 commitment) or impact on heritage items (including areas of archaeological sensitivity) beyond those identified in the EIS (consistent with MCoA C20 (b) (vi)). Based on the existing information, it is unlikely that any Aboriginal values will be present at all sites. Standard unexpected finds protocol will be applied during construction. **Non-Aboriginal Heritage** The following Non-aboriginal heritage items were identified within 1km of the MCAF: - Peak Hill Railway Station – 45m from the MCAF - Peak Hill 1 (timber components of the underbridge) – 230m It is unlikely that non-Aboriginal heritage items will be impacted on, subject to 35m exclusion zone around heritage items (consistent with EIS, Volume 1, Part B, section 8.4 commitment). The Tomingley MCAF will not have any impact on heritage items (including areas of

Selection Criteria	North-West Link MCAF	Peak Hill MCAF	Tomingley MCAF
		exclusion zone around heritage items (consistent with EIS, Volume 1, Part B, section 8.4 commitment). The Peak Hill MCAF will not have any impact on heritage items (including areas of archaeological sensitivity), as none have been identified within the footprint.	archaeological sensitivity), as none have been identified within the footprint.
(vii) so as not to unreasonably interfere with lawful uses of adjacent properties that are being carried out at the date upon which construction or establishment of the facility is to commence;	Complaint Some short-term impacts such as amenity and traffic may impact adjacent properties however these will be minimised through implementation of the mitigation measures. There will not be unreasonable interference with lawful uses of adjacent properties (consistent with MCoA C20 (b) (vii)).	Complaint Site Peak Hill is partially owned by ARTC and GrainCorp or a derivative e.g. Grain Handling Authority of NSW, NSW Grain Corporation Ltd etc. or other private ownership). The land is currently used for rail infrastructure facilities and so there will be no change to the existing land use. As such the impacts to adjacent landholders should be similar and should not interfere with lawful uses of adjacent properties.	Complaint Some short-term impacts such as amenity and traffic may impact adjacent properties however these will be minimised through implementation of the mitigation measures. There will not be unreasonable interference with lawful uses of adjacent properties (consistent with MCoA C20 (b) (vii)).
(viii) to enable operation of the ancillary facility during flood events and to avoid or minimise, to the greatest extent practicable, adverse flood impacts on the surrounding environment and other properties and infrastructure; and	Complaint The North-West Link MCAF is located mostly within the Average Recurrence Interval (ARI) 20 year flood zone or 5% AEP, except for patchy areas within the eastern section. In the event that flooding prevents access to Site, then the railway corridor will be an alternative means of access to the site. Mitigation measures include avoiding storage of dispersive materials (like stockpiles), hazardous materials (including ablution facilities) and other potential	Complaint The Peak Hill MCAF is located mostly within the Average Recurrence Interval (ARI) 20 year flood zone or 5% AEP. Mitigation measures include avoiding storage of dispersive materials (like stockpiles), hazardous materials (including ablution facilities) and other potential environmental contaminating materials outside the 5% AEP.	Complaint The Tomingley MCAF is located mostly within the Average Recurrence Interval (ARI) 20 year flood zone or 5% AEP, except for the northern tip. Mitigation measures include avoiding storage of dispersive materials (like stockpiles), hazardous materials (including ablution facilities) and other potential environmental contaminating materials outside the 5% AEP.

Selection Criteria	North-West Link MCAF	Peak Hill MCAF	Tomingley MCAF
	environmental contaminating materials outside the 5% AEP. The MCAF is located within an unnamed watercourse that was assessed in the EIS CIZ. It is recommended to avoid the stockpiling of materials in this watercourse. It is recommended to avoid or minimise the impacts to this watercourse, where practicable.		
(ix) so as to have sufficient area for the storage of raw materials to minimise, to the greatest extent practicable, the number of deliveries outside of standard work hours through areas which are within 500 metres of a residential receiver	Compliant The North-West MCAF is within 500m of sensitive receivers (refer **Appendix C) however** the MCAF has been sized as fit for purpose to: • Reduce travel distance from compound sites to work areas, and from accommodation to compound sites; and • Increase the potential for bulk transportation, which will also reduce travel distance and decrease waste production.	Compliant The Peak Hill MCAF is within 500m of sensitive receivers (refer **Appendix C)** however the MCAF has been sized as fit for purpose to: • Reduce travel distance from compound sites to work areas, and from accommodation to compound sites; and • Increase the potential for bulk transportation, which will also reduce travel distance and decrease waste production.	Compliant The Tomingley MCAF is within 500m of sensitive receivers (refer **Appendix C) however** the MCAF has been sized as fit for purpose to: • Reduce travel distance from compound sites to work areas, and from accommodation to compound sites; and • Increase the potential for bulk transportation, which will also reduce travel distance and decrease waste production.

2.2 MCAF Site Selection

Table 2-1 summarises how each MCAF meets the criteria as outlined in CoA20.

As there were some instances of noncompliance with CoA20, the following is provided to outline the site selection process and demonstrate the need, environmental benefit and consistency of these over alternatives.

Peak Hill MCAF

Peak Hill meets condition C20(a) and as such is compliant with CoA20.

The Peak Hill MCAF is on land that is owned by the Australian Rail Track Corporation (ARTC) and forms part of the existing rail corridor. The installation of a MCAF would therefore not change the land use of the site and minimises the disturbance of other greenfield sites.

The location is approximately at the geographical half way point for the project resulting in efficiencies in terms of constructability and plant movements. The central location also reduces pressure on a single town as demand for accommodation can be spread more evenly between both Parkes and Dubbo. Locating the MCAF at Peak Hill will also provide economic benefits to the town from site personnel utilising the town shops and businesses for purchase of daily needs (fuel and food). The site also has access to existing services such as the NBN network.

North West Link and Tomingley do not meet condition C20(b)(ii) as they were not identified as "indicative compound locations" in Figures 8.2a to 8.2f of the EIS. However, ARTC and INLink consider they are preferred locations. Further supporting evidence and justification on the need, environmental benefit and consistency of the proposed MCAF has been provided below.

In accordance with the provisions of CoA20, INLink and ARTC request Secretarial approval of these MCAFs.

North-west Link MCAF

The North-west Link MCAF is not on land originally identified during the EIS however the original location at the Parkes end of the project was discounted due to environmental concerns.

The North-west Link MCAF was selected as it:

- The north-east portion was identified as 'indicative compound locations' in Figure 8.2a of the EIS
- Is located in close proximity to the rail corridor;
- Would be developed as part of the P2N project for construction of turn outs and the southern tie to the existing Broken Hill line
- Is already disturbed land thus minimising disturbance of greenfield sites
- Meets the remaining criteria of CoA20(b)

Tomingley MCAF

The Tomingley MCAF is not on land originally identified as a potential location during the EIS.

The Tomingley MCAF was selected as it:

- Is approximately at the geographical three-quarter point for the project resulting in efficiencies in terms of constructability and plant movements
- has access to existing services such as the NBN network
- Is located in close proximity to the rail corridor
- Is already disturbed land thus minimising disturbance of greenfield sites
- Meets the remaining criteria of CoA20(b).

2.3 North-West Link Major Construction Ancillary Facility (Lot 2 DP514740 and Lot 2 DP238558)

In accordance with C20 of the CoA the location of the following Major Construction Ancillary Facility falls under condition (b).

2.3.1 Site Amenities

All Major Construction Ancillary Facilities will include the site amenities that are outlined in the BMD Site Setup and Establishment Guideline (Refer to **Attachment A**). The Site Amenities include but are not limited to:

- Site Offices & Meeting Rooms
- Change Rooms
- Meal Rooms
- Ablution Block (both Male & Female)
- Potable Water
- Storage Facility for Tools
- Storage Facility for Chemicals and Hazardous Substances
- Site Security (i.e. perimeter fences, alarms, lighting etc.)
- First Aid Room
- Waste Receptacles

2.3.2 Duration and Capacity

At capacity, the site will facilitate up to 60 people consisting mainly of the general workforce (i.e. foreman, leading hands, labourers). The site will be active for approximately 4 months whilst delivering the North-West Link Project.

2.3.3 Approvals & Consultation Process

Prior to commencing works on site, Parkes Shire Council will be consulted by ARTC. Where works are on private land, consultation by ARTC will be undertaken with the landowner and approval provided

prior to works commencing. New construction access tracks on private property must comply with the requirements of Condition C20(b)(i), (iv), (v), (vi) and (vii). Site Establishment works will not commence onsite until approval has been provided by the Secretary.

2.3.4 Site Security and Lighting

The site will consist of a perimeter chain mesh fence and lockable gates. An alarm system will be provided if deemed necessary for additional security. As the site is within 500m of sensitive land / receivers the boundary fence will include screening to assist with noise and dust mitigation as well as minimising the impact on general land aesthetics. Site lighting will be supplied and managed in accordance with the NSW Code of Practice and consult with site plans and contractors to ensure lighting standards are met.

2.3.5 Site Layout and Access

Site access will be via existing public road, Coopers Road which is an unsealed road. No private roads will be utilised for site access. In accordance with Condition of Approval C25 INLink will ensure that all roads/tracks that will be utilised to access construction ancillary facilities are to a standard to provide all-weather access, including a trafficable surface suitable to accommodate the type of vehicles movements that are anticipated. A nominal 100mm base layer of approved gravel will be adopted at site access points (providing all weather access) as well as in carpark and laydown areas (where required). Parking for both light vehicles and plant (where required) is anticipated in these areas. The indicative site layout of the North-West Link is shown below in Figure 2-2.

The general construction traffic route for all construction traffic accessing the North-West Link Major Construction Ancillary Facility is also provided below in Figure 2-3. The primary access route (Newell Highway → Hartigan Avenue → Brolgan Road) was not identified in the EIS or the response to submission however access routes to MCAFs were determined based on the following criteria:

- Provision of a suitability wide road to achieve a single lane, two-way access
- Provision of adequate turning circles for heavy vehicles - at least a 25-metre turning radius capability
- Minimal property impacts by using access alignments within and adjacent to the rail corridor and existing agreed property access roads as far as practicable
- Provision of more than one access point where possible to allow access from either road direction

The primary heavy vehicle routes are sealed (except for a portion of Coopers Road approximately 1.5km to the North-west Link Site) making them suitable for all weather access (refer Figure 2-3). The use of unsealed roads to access the North-west Link MCAF will be limited to this 1.5km portion of Coopers Road and alternative access routes should they need to be used.

Alternative access routes would only be utilised:

- When Out of Hours access is required, and the primary route is adjacent to residential areas, but the alternative access route is not
- When a serious traffic incident has occurred on the primary route

- During an emergency response where, alternative access is required

Table 2-2 details the dust and road safety management measures which will be implemented across all access routes.

Table 2-2 Access route dust and road safety management measures

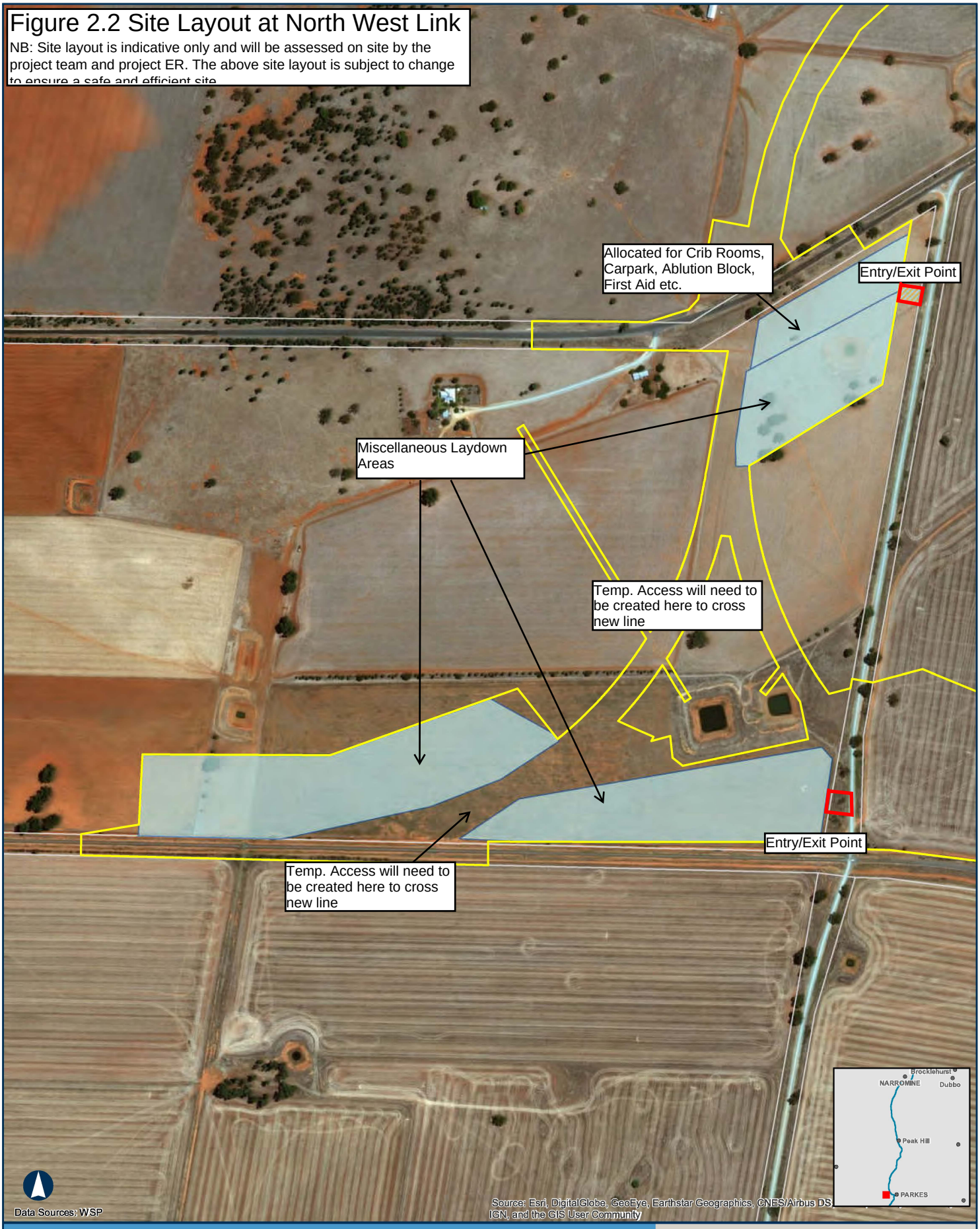
Ref ID	Mitigation measures	Responsibility	Source
AQ1	Where sensitive receivers are located within 150m of construction or visible dust is generated road watering will be implemented.	Environmental Manager	EIS C5.1
AQ2	Ensure all machinery and vehicles meet relevant emissions standards (including Australian Standards). Any vehicles plant or equipment non-compliant with standards or producing excessive (visual assessment) emissions to be disused immediately until service/maintenance can be undertaken. All plant should be operated in accordance with section 124 and maintenance undertaken in accordance with section 125 of the POEO Act 1997.	Foreman	CEMF EIS Table K.1
AQ3	Any manufacturer specified exhausts and/or baffles to stay installed and operational as per specifications.	Foreman	EIS Table K.1 Good Practice
AQ4	Equipment, plant and machinery not to be left running or idling unnecessarily.	Foreman	CEMF
AQ5	Utilise low sulphur content diesel fuel / oil where available.	Environmental Manager	Good Practice
AQ6	Water and dust suppression techniques must be used for active earthwork areas or in areas where visible dust is present for extended periods.	Environmental Manager	CEMF EIS Table 13.3
AQ11	All vehicles hauling materials will be adequately covered and not overloaded.	Foreman	Good Practice
AQ12	Wherever possible, haulage likely to generate excessive dust or odour will be scheduled during mornings. Seasonal variation in wind strength, with lighter winds during winter/spring, should also be consider when scheduling works. Additionally, prevailing wind direction should also be considered when planning works.	Environmental Manager	Good Practice
AQ13	Where sensitive receivers are located within 150m of construction and construction are stood down for a period (Christmas break) soil stabilisers or similar controls may be applied to reduce impacts of offsite nuisance dust.	Environmental Manager	Good Practice
AQ28	Dust emission levels will be assessed visually, and mitigation will be assessed as necessary whenever dust generation has been visually identified.	Environmental Manager	CEMF EIS Table K.1

Ref ID	Mitigation measures	Responsibility	Source
AQ29	In the event the investigation determines the project to be the direct result of exceedance or a complaint, the Environmental Team in consultation with Construction and Community Team will determine appropriate environmental control, potential remediation for sensitive receiver and/or change to construction methodology, if required. Monitoring will be undertaken after the investigation to ensure compliance with the air quality criteria.	Environmental Manager	Good Practice
AQ30	All site personnel to undertaken site induction outlining their role and responsibilities and identifying and managing risk of impacts to air quality during construction	Environmental Manager	Good Practice
AQ34	Vehicle movements would be limited to designated entries and exits, haulage routes, and parking areas	Environmental Manager	EIS Table K.1

Figure 2-2 illustrated on the next page defines the site layout at North-West Link.

Figure 2.2 Site Layout at North West Link

NB: Site layout is indicative only and will be assessed on site by the project team and project ER. The above site layout is subject to change to ensure a safe and efficient site



Data Sources: WSP

PARKES TO NARROMINE Major Construction Ancillary Facility Locations - North-West Link

Map 3 of 3

130m

Coordinate System: GDA 1994 MGA Zone 55

Paper: A3 Scale: 1:5,000

Date: 13/12/2018

Author: MG

LEGEND

- Construction Impact Zone (07/08/2018)
- Site Establishment Management Plan Area
- Proposed Road Access
- Cadastral Lot (Survey Adjusted Cadastral Model)

ARTC InlandRail

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation, in partnership with the private sector.

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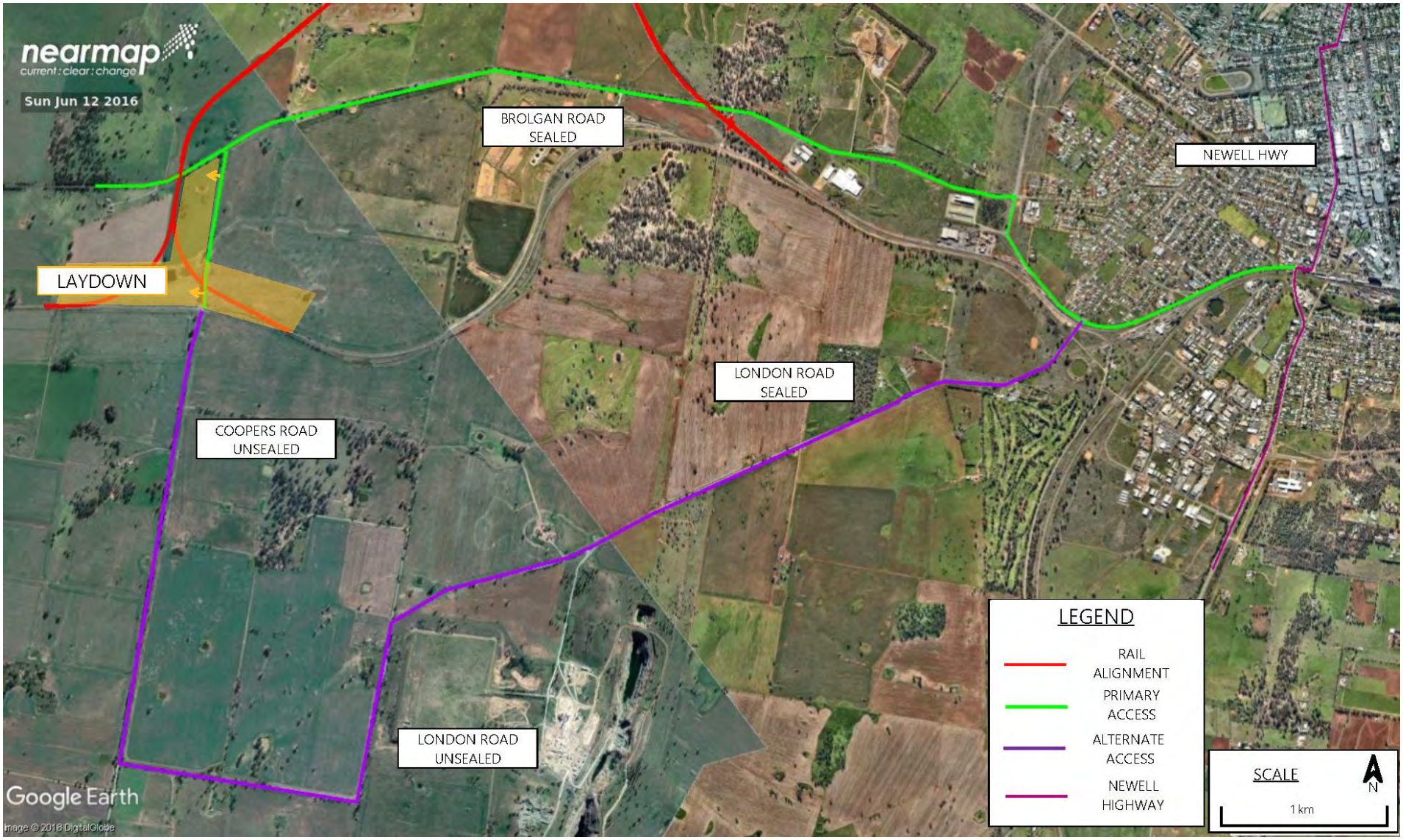

Figure 2-3 – Construction Traffic Route (North-West Link)

2.3.6 Site Establishment Activities

A description of each of the activities to be undertaken during the site establishment works of the North-West Link Major Construction Ancillary Facility are listed below:

1. Site Clearing Works

Including: i) Clearing & Grubbing and ii) Stripping of Topsoil & Vegetation

2. General Earthworks

A suitable foundation treatment will be adopted on site where required. Installation of new services, concrete hardstands etc. will be installed as required during this phase of the site establishment works.

3. General Pavement Works

A suitable approved gravel base layer will be spread where required to prepare the carpark, access roads, entry/exit points, building pads, laydown areas etc.

4. Site Facilities

This will include the mobilisation and installation of all site facilities (i.e. site offices, meal rooms, toilet blocks, tool storage, crib sheds etc.).

5. Fence Installation

A chain mesh fence will be adopted around the perimeter of the Major Construction Ancillary Facility to improve the general site security.

As the MCAF is within 500m of a sensitive receiver (refer **Appendix C**) boundary fencing will incorporate screening for the duration of the use of the construction ancillary facility unless otherwise agreed with the affected landowners and/or tenants and adjacent landowners.

2.3.7 Site Establishment Activities Program

Table 2-2 – Site Establishment Works Timeline North-West Link

NB: Indicative date of Monday 19th November 2018 provided. Commencement date TBC.

Tasks	10 Dec	10 Dec	10 Dec	11 Dec	11 Dec	11 Dec	12 Dec	12 Dec	12 Dec	13 Dec	13 Dec	13 Dec	14 Dec	14 Dec	14 Dec	15 Dec	15 Dec	15 Dec	16 Dec	17 Dec	17 Dec	17 Dec	18 Dec	18 Dec	18 Dec	19 Dec	19 Dec	19 Dec	20 Dec	20 Dec	20 Dec	21 Dec	21 Dec	21 Dec	22 Dec	22 Dec	22 Dec	23 Dec	24 Dec	24 Dec	24 Dec	25 Dec	25 Dec	25 Dec	26 Dec	26 Dec	26 Dec	27 Dec	27 Dec	27 Dec	28 Dec	28 Dec	28 Dec	29 Dec	29 Dec	29 Dec	30 Dec
	AM	MID	PM	AM	MID	PM	AM	MID	PM	AM	MID	PM	AM	MID	PM	AM	MID	PM	AM	MID	PM	AM	MID	PM	AM	MID	PM	AM	MID	PM	AM	MID	PM	AM	MID	PM	AM	AM	MID	PM	AM	MID	PM	AM	MID	PM	AM	MID	PM	AM	MID	PM	AM	MID	PM	AM
	M	M	M	T	T	T	W	W	W	TH	TH	TH	F	F	F	S	S	S	SU	M	M	M	T	T	T	W	W	W	TH	TH	TH	F	F	F	S	S	S	SU	M	M	M	T	T	T	W	M	W	TH	TH	TH	F	F	F	S	S	S	SU
Site Establishment Works - Major Ancillary Facility																																																								
Site Clearing Works																																																							
Clearing & Grubbing Works (1 day/s)																																																						
Stripping of Vegetation & Topsoil (1 day/s)																																																					
General Ground Preparation Works																																																						
Spread Gravel Base Layer (3 day/s)																																																					
includes building pads, carpark, access roads, entry/exit points etc.																																																					
Site Facilities																																																						
Mobilisation and Installation of Site Facilities (5 day/s)																																																					
includes site offices, meal rooms, ablution blocks etc.																																																					
Fence Installation																																																						
Install Boundary Fence (5 day/s)																																																					
gate sizes to be confirmed closer to indicative commencement date																																																					

2.4 Tomingley Major Construction Ancillary Facility (Lot 1 DP 818792 and Lot 4113 DP1208588)

In accordance with C20 of the CoA the location of the following Major Construction Ancillary Facility falls under condition (b).

2.4.1 Site Amenities

All Major Construction Ancillary Facilities will include the site amenities that are outlined in the BMD Site Setup and Establishment Guideline (Refer to **Attachment A**). The Site Amenities include but are not limited to:

- Site Offices & Meeting Rooms
- Change Rooms
- Meal Rooms
- Ablution Block (both Male & Female)
- Potable Water
- Storage Facility for Tools
- Storage Facility for Chemicals and Hazardous Substances
- Site Security (i.e. perimeter fences, alarms, lighting etc.)
- First Aid Room
- Waste Receptacles

2.4.2 Duration and Capacity

At capacity, the site will facilitate up to 60 people consisting mainly of the general workforce (i.e. foreman, leading hands, labourers). The site will be active for approximately 15 months whilst delivering the main line from Parkes to Narromine (P2N).

2.4.3 Approvals & Consultation Process

Prior to commencing works on site, Narromine Shire Council will be consulted by ARTC. Where works are on private land, consultation by ARTC will be undertaken with the landowner and approval provided prior to works commencing. New construction access tracks on private property must comply with the requirements of Condition C20(b)(i), (iv), (v), (vi) and (vii). Site Establishment works will not commence onsite until approval has been provided by the Secretary.

2.4.4 Site Security and Lighting

The site will consist of a perimeter chain mesh fence and lockable gates. An alarm system will be provided if deemed necessary for additional security. As the site is within 500m of sensitive land / receivers the boundary fence will include screening to assist with noise and dust mitigation as well as minimising the impact on general land aesthetics. Site lighting will be supplied and managed in accordance with the NSW Code of Practice and consult with site plans and contractors to ensure lighting standards are met.

2.4.5 Site Layout and Access

Site access will be via existing public road, Tomingley West Road, which is a sealed road. No private roads will be utilised for site access. In accordance with Condition of Approval C25 INLink will ensure that all roads/tracks that will be utilised to access construction ancillary facilities are to a standard to provide all-weather access, including a trafficable surface suitable to accommodate the type of vehicles movements that are anticipated. A nominal 100mm base layer of approved gravel will be adopted at site access points (providing all weather access) as well as in carpark and laydown areas (where required). Parking for both light vehicles and plant (where required) is anticipated in these areas. The indicative site layout of the Tomingley Satellite Office is shown below in **Error! Reference s ource not found.**.

The general construction traffic route for all construction traffic accessing the Tomingley Major Construction Ancillary Facility is also provided below in 5and Figure 2-6. The primary access route (Newell Highway → Tomingley West Road → Peak Hill Railway Road) was identified in Chapter 8 of the EIS (Table 8.3 – Potential construction access routes to work areas).

The primary heavy vehicle routes are sealed making them suitable for all weather access (refer 5 and Figure 2-6). The use of unsealed roads to access the Tomingley MCAF will be limited to alternative access routes should they need to be used.

Alternative access routes would only be utilised:

- When Out of Hours access is required, and the primary route is adjacent to residential areas, but the alternative access route is not
- When a serious traffic incident has occurred on the primary route
- During an emergency response where, alternative access is required

Table 2-2 details the dust and road safety management measures which will be implemented across all access routes.

Figure 2-4 illustrated on the next page defines the site layout at Tomingley.

Figure 2.4 Site Layout at Tomingley

NB: Site layout is indicative only and will be assessed on site by the project team and project ER. The above site layout is subject to change to ensure a safe and efficient site

PARKES TO NARROMINE Major Construction Ancillary Facility Locations - Tomingley

Map 1 of 3

25m

Coordinate System: GDA 1994 MGA Zone 55

Paper: A3 Scale: 1:1,000
Date: 13/12/2018
Author: MG

LEGEND

- Master Alignment (27/09/2018)
- Construction Impact Zone (07/08/2018)
- Site Establishment Management Plan Area
- Cadastral Lot (Survey Adjusted Cadastral Model)

ARTC InlandRail

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation, in partnership with the private sector.

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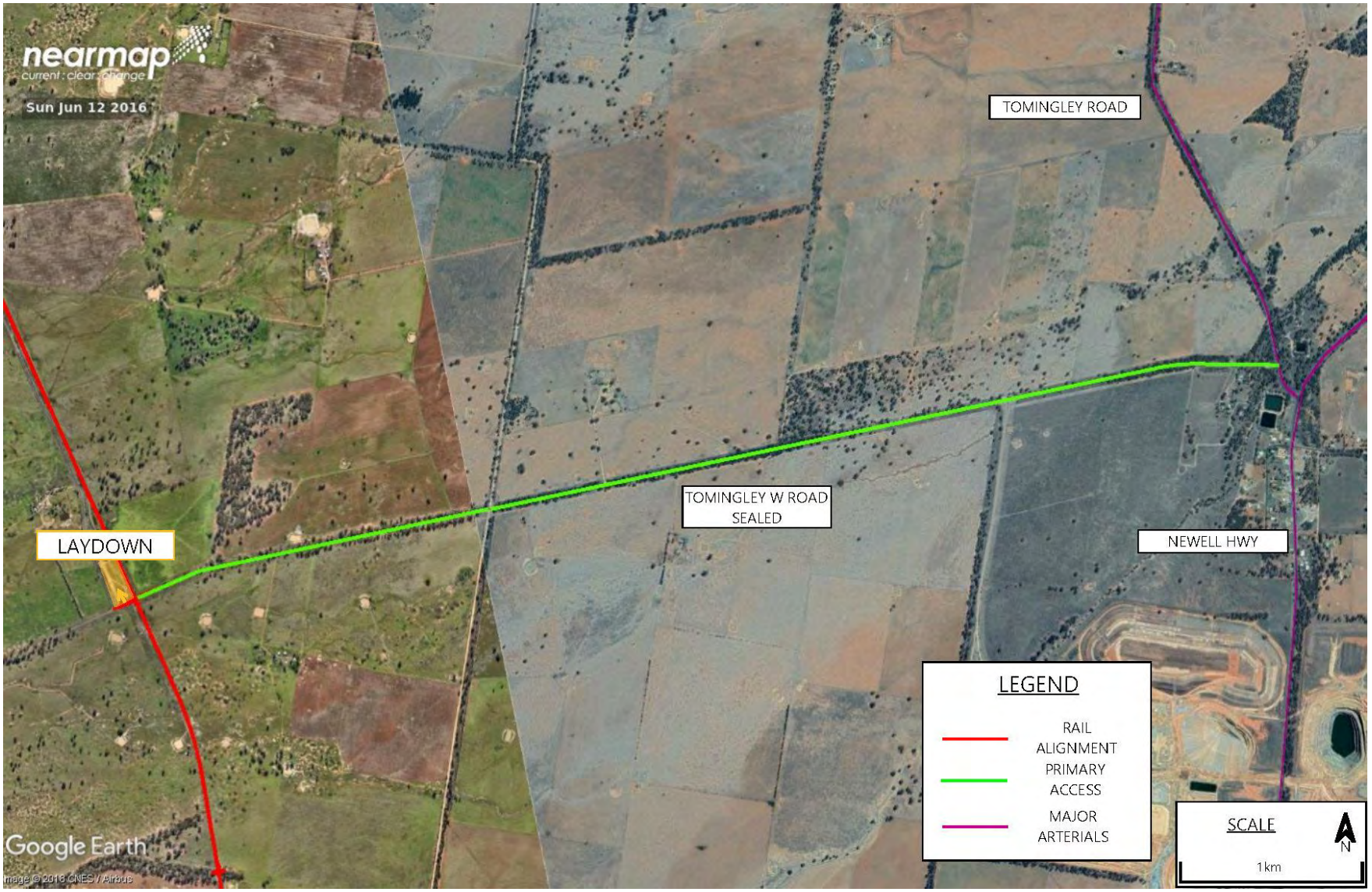

Figure 2-5 – Construction Traffic Route (Tomingley)

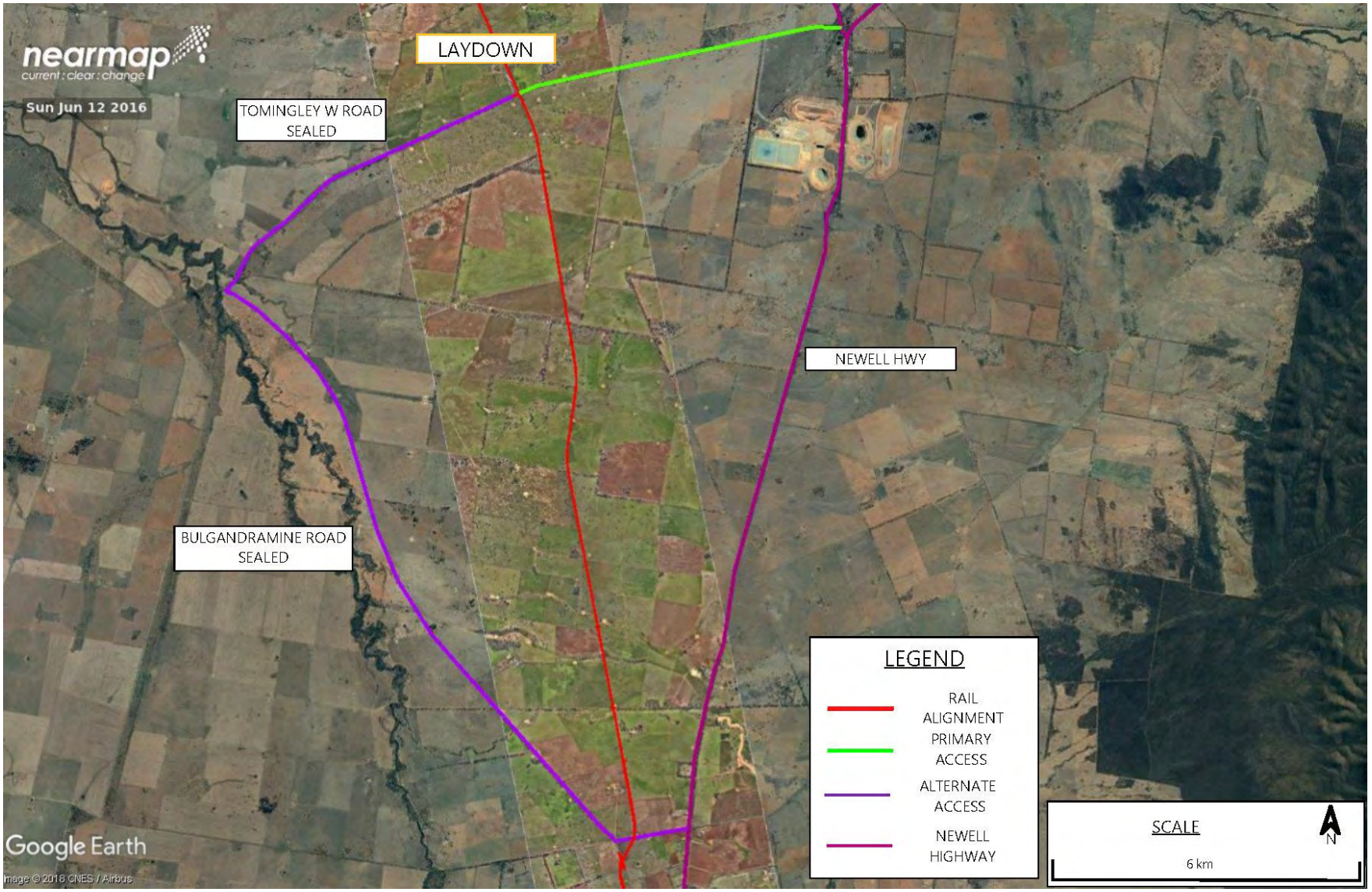

Figure 2-6 – Construction Traffic Route (Tomingley)

2.4.6 Site Establishment Activities

A description of each of the activities to be undertaken during the site establishment works of the Tomingley Construction Major Ancillary Facility are listed below:

1. Site Clearing Works

Including: i) Clearing & Grubbing and ii) Stripping of Topsoil & Vegetation

2. General Earthworks

A suitable foundation treatment will be adopted on site where required. Installation of new services, concrete hardstands etc. will be installed as required during this phase of the site establishment works.

3. General Pavement Works

A suitable approved gravel base layer will be spread where required to prepare the carpark, access roads, entry/exit points, building pads, laydown areas etc.

4. Site Facilities

This will include the mobilisation and installation of all site facilities (i.e. site offices, meal rooms, toilet blocks, tool storage, crib sheds etc.).

5. Fence Installation

A chain mesh fence will be adopted around the perimeter of the Construction Major Ancillary Facility to improve the general site security.

*As the MCAF is within 500m of a sensitive receiver (refer **Appendix C**) boundary fencing will incorporate screening for the duration of the use of the construction ancillary facility unless otherwise agreed with the affected landowners and/or tenants and adjacent landowners.*

2.4.7 Site Establishment Activities Program

Table 2-3 – Site Establishment Works Timeline Tomingley

NB: Indicative date of Monday 4th March 2019 provided. Commencement date TBC.

Tasks	4 Mar	4 Mar	4 Mar	5 Mar	5 Mar	5 Mar	6 Mar	6 Mar	6 Mar	7 Mar	7 Mar	7 Mar	8 Mar	8 Mar	8 Mar	9 Mar	9 Mar	9 Mar	10 Mar	11 Mar	11 Mar	11 Mar	12 Mar	12 Mar	12 Mar	13 Mar	13 Mar	13 Mar	14 Mar	14 Mar	14 Mar	15 Mar	15 Mar	15 Mar	16 Mar	16 Mar	16 Mar	17 Mar	18 Mar	18 Mar	18 Mar	19 Mar	19 Mar	19 Mar	20 Mar	20 Mar	20 Mar	21 Mar	21 Mar	21 Mar	22 Mar	22 Mar	22 Mar	23 Mar	23 Mar	23 Mar	24 Mar	25 Mar	25 Mar	25 Mar	26 Mar	26 Mar	26 Mar	27 Mar	27 Mar
	AM	MID	PM	AM	MID	PM	AM	MID	PM	AM	MID	PM	AM	MID	PM	AM	MID	PM	AM	AM	MID	PM	AM	MID	PM	AM	MID	PM	AM	MID	PM	AM	MID	PM	AM	MID	PM	AM	AM	MID	PM	AM	MID	PM	AM	MID	PM	AM	MID	PM	AM	MID	PM	AM	MID	PM	AM	AM	MID	PM	AM	MID	PM	AM	MID
	M	M	M	T	T	T	W	W	W	TH	TH	TH	F	F	F	S	S	S	SU	M	M	M	T	T	T	W	W	W	TH	TH	TH	F	F	F	S	S	S	SU	M	M	M	T	T	T	W	M	W	TH	TH	TH	F	F	F	S	S	S	SU	M	M	M	T	T	T	W	M
Site Establishment Works - Major Ancillary Facility																																																																	
Site Clearing Works																																																																	
Clearing & Grubbing Works (2 day/s)	🟨	🟨	🟨	🟨	🟨	🟨																																																											
Stripping of Vegetation & Topsoil (2 day/s)							🟨	🟨	🟨	🟨	🟨	🟨																																																					
General Earthworks																																																																	
Foundation Treatment (4 day/s)													🟨	🟨	🟨					🟨	🟨	🟨	🟨	🟨	🟨	🟨	🟨	🟨																																					
includes installation of new services, concrete hardstands etc. (if required)																																																																	
General Ground Preparation Works																																																																	
Spread Gravel Base Layer (3 day/s)																													🟨	🟨	🟨	🟨	🟨	🟨					🟨	🟨	🟨																								
includes building pads, carpark, access roads, entry/exit points etc.																																																																	
Site Facilities																																																																	
Mobilisation and Installation of Site Facilities (4 day/s)																																										🟨	🟨	🟨	🟨	🟨	🟨	🟨	🟨	🟨	🟨	🟨	🟨												
includes site offices, meal rooms, ablution blocks etc.																																																																	
Fence Installation																																																																	
Install Boundary Fence (4 day/s)																																										🟨	🟨	🟨	🟨	🟨	🟨	🟨	🟨	🟨	🟨	🟨	🟨												
gate sizes to be confirmed closer to indicative commencement date																																																																	

2.5 Peak Hill Major Construction Ancillary Facility (Lot 4110 DP1208582)

In accordance with C20 of the CoA the location of the following Major Construction Ancillary Facility falls under condition (a).

2.5.1 Site Amenities

All Major Construction Ancillary Facilities will include the site amenities that are outlined in the BMD Site Setup and Establishment Guideline (Refer to Attachment A). The Site Amenities include but are not limited to:

- Site Offices & Meeting Rooms
- Change Rooms
- Meal Rooms
- Ablution Block (both Male & Female)
- Potable Water
- Storage Facility for Tools
- Storage Facility for Chemicals and Hazardous Substances
- Site Security (i.e. perimeter fences, alarms, lighting etc.)
- First Aid Room
- Waste Receptacles

INLink will provide ARTC with the following accommodation:

- Office Complex (12m x 15m or suitable to accommodate at least 10 people) including the following:
    - Large meeting room
    - Three (3) private office spaces
    - Large area for desks, chairs, book shelves, reception desk etc
    - Kitchenette
- Ablution Block (both Male & Female)

2.5.2 Duration and Capacity

At capacity, the site will facilitate up to 60 people and will be active for a total of 15 months. The site will consist of a mixture Engineers, Superintendents, Foreman & Leading Hands and various Tradesman & Labourers.

2.5.3 Approvals & Consultation Process

The location of the Major Construction Ancillary Facility at Peak Hill is located on existing ARTC land. Prior to commencing works on site, Parkes Shire Council will be consulted by ARTC. Where works are on private land, consultation by ARTC will be undertaken with the landowner and approval provided

prior to works commencing. New construction access tracks on private property must comply with the requirements of Condition C20(b)(i), (iv), (v), (vi) and (vii). Site Establishment works will not commence onsite until approval has been provided by the Secretary.

2.5.4 Site Security and Lighting

The site will consist of a perimeter chain mesh fence and lockable gates. An alarm system will be provided if deemed necessary for additional security. As the site is within 500m of sensitive land / receivers the boundary fence will include screening to assist with noise and dust mitigation as well as minimising the impact on general land aesthetics. Site lighting will be supplied and managed in accordance with the NSW Code of Practice and consult with site plans and contractors to ensure lighting standards are met.

2.5.5 Site Layout and Access

Site access will be via existing public road, Station Lane. No private roads will be utilised for site access. In accordance with Condition of Approval C25 INLink will ensure that all roads/tracks that will be utilised to access construction ancillary facilities are to a standard to provide all-weather access, including a trafficable surface suitable to accommodate the type of vehicles movements that are anticipated. A nominal 100mm base layer of approved gravel will be adopted at site access points (providing all weather access) as well as in carpark and laydown areas (where required). Parking for both light vehicles and plant (where required) is anticipated in these areas. The indicative site layout of the Peak Hill Main Office is shown below in **Error! Reference source not found.**. The general c onstruction traffic route for all construction traffic accessing the Peak Hill Major Construction Ancillary Facility is also provided below in Figure 2-8 and Figure 2-9. The primary access routes for light vehicles (Newell Highway → Mingelo Street →Coradgery Road → Station Lane) and heavy vehicles (Newell Highway → Bogan Street → Warrah Street → Coradgery Road → Station Lane) were not identified in the EIS or the response to submission however access routes to MCAFs were determined based on the following criteria:

- Provision of a suitability wide road to achieve a single lane, two-way access
- Provision of adequate turning circles for heavy vehicles - at least a 25-metre turning radius capability
- Minimal property impacts by using access alignments within and adjacent to the rail corridor and existing agreed property access roads as far as practicable
- Provision of more than one access point where possible to allow access from either road direction.

The primary heavy vehicle routes are sealed making them suitable for all weather access (refer Figure 2-8 and Figure 2-9). The use of unsealed roads to access the Peak Hill MCAF will be limited to alternative access routes should they need to be used.

Alternative access routes would only be utilised:

- When Out of Hours access is required, and the primary route is adjacent to residential areas, but the alternative access route is not

- When a serious traffic incident has occurred on the primary route
- During an emergency response where, alternative access is required

Table 2-2 details the dust and road safety management measures which will be implemented across all access routes.

Figure 2-7 illustrated on the next page defines the site layout at Peak Hill.

Figure 2.7 Site Layout at Peak Hill

NB: Site layout is indicative only and will be assessed on site by the project team and project ER. The above site layout is subject to change to ensure a safe and efficient site.

PARKES TO NARROMINE Major Construction Ancillary Facility Locations - Peak Hill

Map 2 of 3

25m

Coordinate System: GDA 1994 MGA Zone 55

Paper: A3 Scale: 1:1,000
Date: 13/12/2018
Author: MG

LEGEND

- Master Alignment (27/09/2018)
- Construction Impact Zone (07/08/2018)
- Site Establishment Management Plan Area
- Cadastral Lot (Survey Adjusted Cadastral Model)

ARTC InlandRail

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation, in partnership with the private sector.

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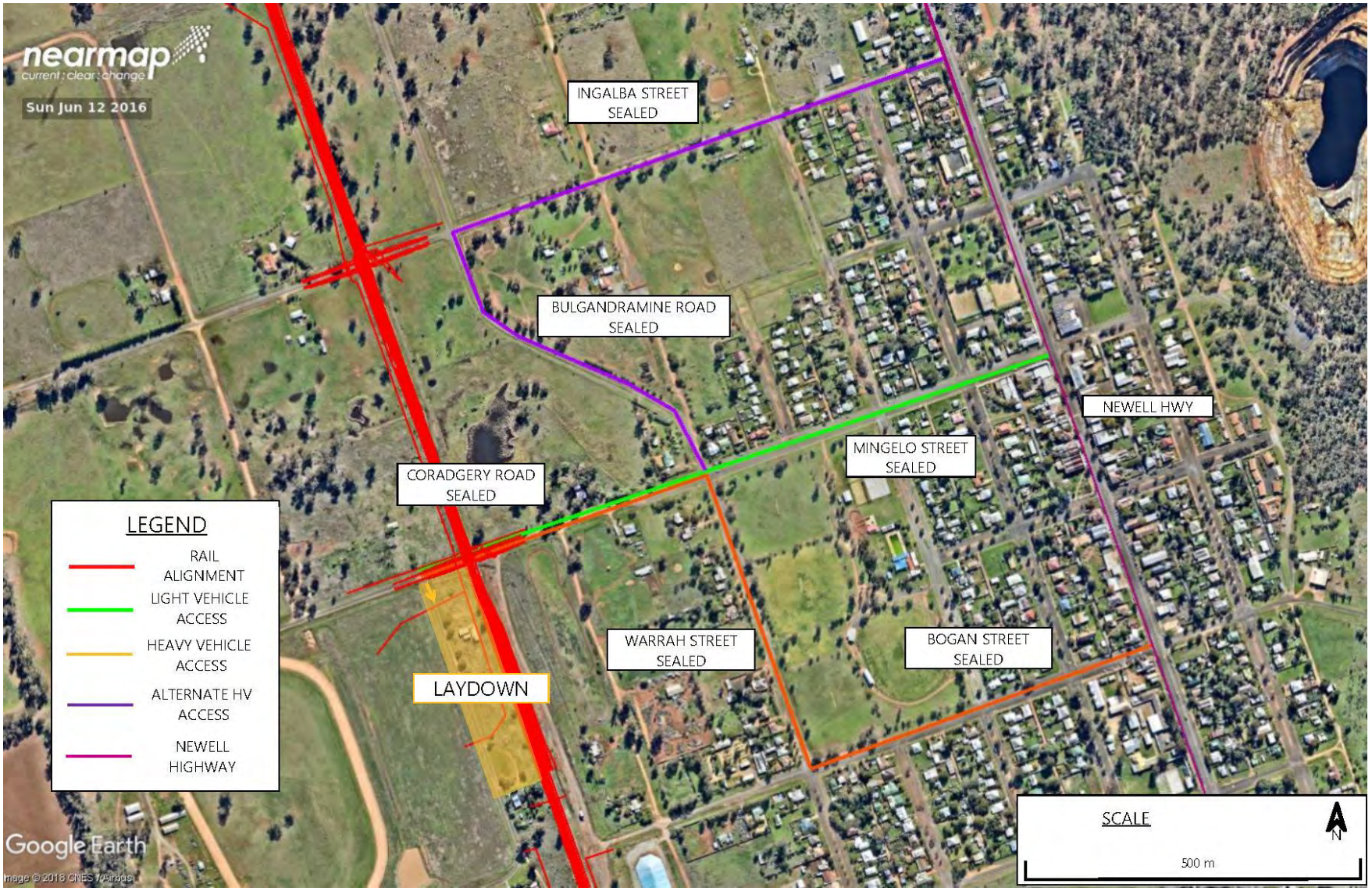


Figure 2-8 – Construction Traffic Route (Peak Hill)

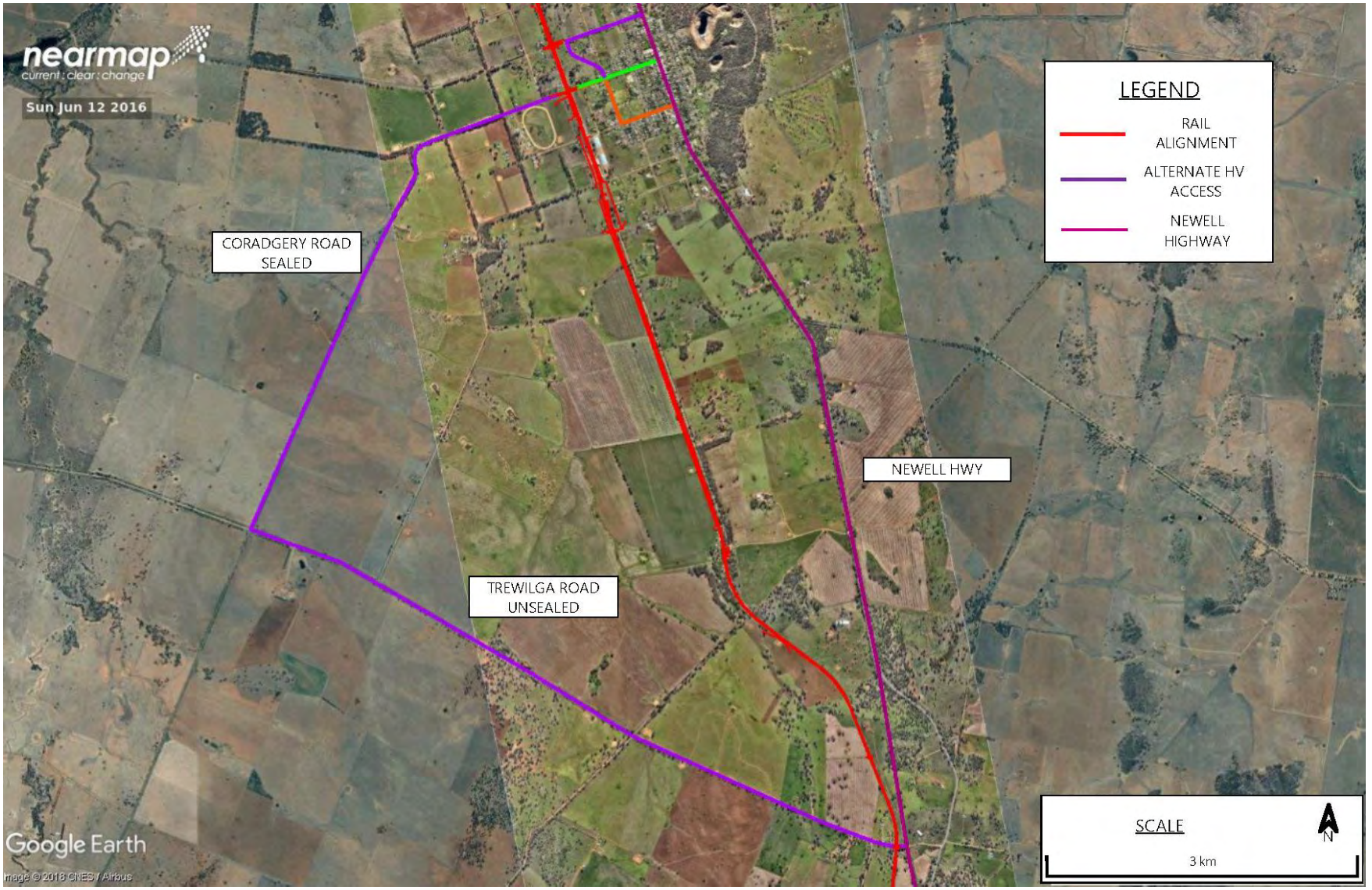


Figure 2-9 – Construction Traffic Route (Peak Hill)

2.5.6 Site Establishment Activities

A description of each of the activities to be undertaken during the site establishment works of the Peak Hill Major Construction Ancillary Facility are listed below:

1. **Demolition of ARTC's existing structures at the Peak Hill AF**

These buildings are to be removed in accordance with the INLink Safety Management Systems/Plans and Asbestos Management Procedure (Refer to Attachment B). All existing services will be identified and re-located (if required) prior to the demolition works commencing.

2. **Site Clearing Works**

Including: i) Clearing & Grubbing and ii) Stripping of Topsoil & Vegetation

3. **General Earthworks**

A suitable foundation treatment will be adopted on site where required. Installation of new services, concrete hardstands etc. will be installed as required during this phase of the site establishment works.

4. **General Pavement Works**

A suitable approved gravel base layer will be spread where required to prepare the carpark, access roads, entry/exit points, building pads, laydown areas etc.

5. **Site Facilities**

This will include the mobilisation and installation of all site facilities (i.e. site offices, meal rooms, toilet blocks, tool storage, crib sheds etc.).

6. **Fence Installation**

A chain mesh fence will be adopted around the perimeter of the Major Construction Ancillary Facility to improve the general site security.

*As the MCAF is within 500m of a sensitive receiver (refer **Appendix C**) boundary fencing will incorporate screening for the duration of the use of the construction ancillary facility unless otherwise agreed with the affected landowners and/or tenants and adjacent landowners.*

2.5.7 Site Establishment Activities Program

Table 2-4 – Site Establishment Works Timeline Peak Hill

NB: Indicative date of Monday 4th February 2019 provided. Commencement date TBC.

Tasks
Site Establishment Works - Major Ancillary Facility
Demolition Works
Demolition of ARTC's Existing Structures at Peak Hill (5 days)
includes identifying and re-locating existing services (if required)
Site Clearing Works
Clearing & Grubbing Works (2 days)
Stripping of Vegetation & Topsoil (2 days)
General Earthworks
Foundation Treatment (4 days)
includes installation of new services, concrete hardstands etc. (if required)
General Pavement Works
Spread Gravel Base Layer (3 days)
includes building pads, carpark, access roads, entry/exit points etc.
Site Facilities
Mobilisation and Installation of Site Facilities (4 days)
includes site offices, meal rooms, ablution blocks etc.
Fence Installation
Install Boundary Fence (4 days)
gate sizes to be confirmed closer to indicative commencement date

3 Environmental Risk Identification and Management

3.1 Environmental Risk Assessment and Identification

In accordance with C22 of the CoA, the following key potential environmental risks associated with establishment of Major Construction Ancillary Facilities have been identified:

1. Nuisance impact on nearby sensitive receivers e.g. dust, noise, vibration
2. Traffic and access to and from the facility and parking in and surrounding the facility;
3. Waste handling, storage and transport;
4. Storage and handling of hazardous and dangerous substances;
5. Vegetation clearing and grubbing to establish facility.

3.2 Environmental Risk Assessment

In accordance with C22 of the CoA, a program for ongoing analysis of key environmental risks associated with establishment of Major Construction Ancillary Facilities will be documented through:

- Work Method Statements (WMS);
- Job Hazard Analysis (JHA) Cards;
- Activity Based Conversations (ABCs).

All project staff are responsible for management of risk identification and assessment in consultation with the project team.

3.3 Environmental Risk Management

In accordance with C22 of the CoA, the Proponent must prepare a Site Establishment Management Plan (SEMP) which outlines the environmental management practices and procedures to be implemented for the establishment of the construction facilities. Management procedures that will be adopted to address site establishment risks identified in Section 3.1 of the SEMP are outlined below and in Appendix A. All management procedures and monitoring identified in this SEMP applies to the site establishment activities only.

3.3.1 Dust Risk Management

The proposal will be constructed and operated in accordance with the requirements of the Protection of the Environment Operations Act 1974 (POEO Act) and relevant EPLs. During site establishment works, water carts or water devices will be implemented to assist with suppression of dust that may be produced during site establishment activities. Wherever possible site establishment works will be programmed on days where excessive wind speeds have not been forecast.

Where possible, INLink will use existing bitumen sealed roads to access Major Construction Ancillary Facilities. In the case where unsealed roads are used to access Major Construction Ancillary Facilities, INLink will implement the dust mitigation techniques specified above. The majority of roads are sealed with the exception of Coopers Road (North-West Link MCAF) (refer Figure 2-3).

The effectiveness of INLink's dust mitigation techniques adopted throughout the Site Establishment Works will be continually reviewed by the Environmental Manager to ensure impacts are minimised to sensitive receivers. A program for monitoring the performance outcomes is listed below in Table 3-1.

Table 3-1 – Program for Monitoring Dust

Program	Responsibility	Frequency
A daily visual inspection of each worksite is to be conducted to assess likelihood of dust generation, evidence of excessive vehicle exhausts (not to exceed 10 second duration), wind and weather conditions, works program for dust generation potential and effectiveness of the dust mitigation measures. Comments or corrective actions will be recorded on the site diary and/or Daily Environmental Inspection Checklist.	Project Engineer Site Supervisor Environmental Manager	Daily
A visual inspection of each worksite is to be conducted weekly to monitor the effectiveness of dust mitigation measures and the results entered on the Environmental Inspection Checklist.	Environmental Manager	Weekly
Prior to being used on site, plant and vehicles will undergo a Plant Induction.	Health & Safety Manager	As required

3.3.2 Noise and Vibration Risk Management

There are several noise management aspects to be considered in the construction and operation of the MCAFs. The Inland Rail NSW Construction Noise and Vibration Management Framework (provided in Appendix H of the Inland Rail - Parkes to Narromine Environmental Impact Statement [EIS]) has been developed in accordance with the Inland Rail Noise and Vibration Strategy, to show how construction noise and vibration will be managed for Inland Rail. It provides a framework for managing construction noise and vibration impacts in accordance with the ICNG, to provide a consistent approach to management and mitigation across Inland Rail in NSW.

Construction of the MCAFs will consider the Inland Rail NSW Construction Noise and Vibration Management Framework, operation of the MCAF will consider the Noise Policy for Industry (EPA, 2017), and traffic noise will consider the NSW Road Noise Policy (NSW EPA, 2011).

During site establishment, works will only be undertaken during the following hours to:

- 7:00 am to 6:00 pm Mondays to Fridays;
- 8:00 am to 1:00 pm Saturdays; and
- at no time on Sundays or public holidays.

Throughout site establishment works, all construction vehicles and machinery will be fitted with manufacturer supplied noise suppression devices and maintained where required.

Refer to Section 4.1 for the Noise Construction Monitoring Program that will be specifically adopted for the site establishment works.

3.3.3 Traffic Risk Management

To manage traffic and access to and from the facility and parking in and surrounding the facility a Construction Traffic Management Plan (CTMP) will be developed onsite prior to commencing site establishment works. The CTMP will highlight all access points (entry/exits) as well as identifying a delineated car park for staff/workers with a separate carpark for plant. This plan will be developed with input from the following INLink personnel:

- Safety Manager;
- Environmental Manager;
- Project Manager and/or relevant Project/Site Engineers;
- Superintendent/General Foreman.

The CTMP will also be developed in consultation with relevant stakeholders (i.e. local councils, RMS) where required. Site specific signage will also be adopted onsite to clearly identify all access points and car parking facilities. A program for monitoring the performance outcomes is listed below in Table 3-2.

Table 3-2 – Program for Traffic Risk Management

Program	Responsibility	Frequency
A daily meeting will be scheduled where the current Construction Traffic Management Plan (CTMP) will be reviewed and modified to ensure that the CTMP is up to date with the current site conditions. The updated CTMP will be made available to all staff and subcontractors at the pre-start the following morning.	Project Engineer Site Supervisor Environmental Manager	Daily

3.3.4 Waste Risk Management

All waste generated during site establishment works will be classified in accordance with the EPA's Waste Classification Guidelines, with appropriate records and disposal dockets retained for audit purposes. Where required waste segregation bins will be provided to facilitate segregation and prevent cross contamination.

Cleared material will be chipped, mulched and stockpiled for reuse during finishing works where suitable. Materials with special habitat value, such as hollow bearing logs or trees, will be selectively removed for reuse, or placed in nearby bushland where suitable.

The following are key performance criteria against which the implementation of this plan will be assessed:

- No or minimal waste generated during the site establishment works requiring offsite disposal at authorised facilities;
- No waste disposed of within or adjacent the project area during site establishment works;
- No waste found to have been disposed of within or adjacent project area following completion of site establishment works.

3.3.5 Hazardous and Dangerous Substances Risk Management

All hazardous and dangerous substances that will be utilised during site establishment works will be transported, stored and used as per their Material Safety Data Sheets (MSDS). Emergency spill kits will be kept onsite at all times. Weekly inspections regarding the storage of hazardous and dangerous substances will be undertaken by the following INLink personnel:

- Safety Manager;
- Environmental Manager;
- Project/Site Engineers;
- Superintendent/General Foreman.

An Emergency Response Plan (ERP) will also be developed onsite prior to commencing establishment works to ensure all required parties are contacted in the case of a hazardous or dangerous substance spillage. A program for monitoring the performance outcomes is listed below in Table 3-3.

Table 3-3 – Program for Hazardous and Dangerous Substances

Program	Responsibility	Frequency
A visual inspection of each worksite is to be conducted weekly to ensure all Hazardous and Dangerous Substances are being stored as per their MSDS and the results entered on the Environmental Inspection Checklist.	Project Engineer Site Supervisor Environmental Manager	Weekly

3.3.6 Clearing and Grubbing Risk Management

Prior to any clearing and/or grubbing works, a pre-clearance survey will be conducted on the proposed areas for the site establishment works. The pre-clearance survey will record the following information:

- Variations to the mapped boundaries of threatened ecological communities
- Threatened flora species that occur within the area to be cleared, including:
  - Whether these are expected or unexpected finds
  - The number of plants/stems that will be impacted by the clearance activities
- The adequacy of signage and high visibility fencing along the clearance boundary to minimise the risk of unintentional or inadvertent clearing
- The presence of any hollow bearing trees
- The presence and occupation status of any nests or drays
- Details of any fauna microhabitat or in-stream features to be salvaged and relocated prior to clearing (including a suitable translocation site
- The location of any noxious weeds within the vegetation to be cleared

The above information will be recorded and stored on a pre-clearance checklist will be completed and signed-off by the Environmental Manager. A Clearing and Grubbing Inspection Test Plan (ITP) as well as a Clearing and Grubbing Construction Procedure will also be developed and submitted to ARTC for review and approval prior to onsite site establishment works commencing. Spoil and stockpiles will also be fenced with silt fencing, where required, as sediment and erosion control measures. A program for monitoring the performance outcomes is listed below in Table 3-4.

Table 3-4 – Program for Clearing and Grubbing

Program	Responsibility	Frequency
Works are not to be constructed in areas of high quality vegetation, habitat or ecological communities as determined by the Environmental Manager.	Environmental Manager	Prior to works commencing
A visual inspection of each worksite is to be conducted weekly to ensure all spoil and stockpiles that are created throughout the clearing and grubbing works are fenced off with silt fencing and/or protected with tarps. The results are to be entered on the Environmental Inspection Checklist.	Project Engineer Site Supervisor Environmental Manager	Weekly
Pre-Clearing Survey and Pre-Clearance Checklist	Environmental Manager Project Surveyor	Prior to works commencing
Any vegetation clearing will be undertaken a qualified fauna spotter/catcher. Any injured animals will be treated as required by wildlife vet.	Environmental Manager	As required
Where PCT's do occur, these will be demarcated as no go areas.	Environmental Manager	Prior to works commencing

4 Construction Monitoring Programs

The following monitoring programs will be undertaken during the site establishment phase of the Project. The monitoring programs relate to noise and vibration, air quality, and water management and will be implemented at the following Major Construction Ancillary Facilities:

- North West Link;
- Tomingley;
- Peak Hill.

4.1 Noise Monitoring Construction Program

Noise monitoring will be carried out in response to a complaint, where site establishment works may cause environmental nuisance, or as directed by ARTC or the Regulatory Authority. Below is a summary of the Noise Monitoring Construction Program. In depth methodology for monitoring is attached in **Appendix D**. Additionally sensitive receivers are identified in **Appendix C**.

Construction of the MCAFs will consider the Inland Rail NSW Construction Noise and Vibration Management Framework, operation of the MCAF will consider the Noise Policy for Industry (EPA, 2017), and traffic noise will consider the NSW Road Noise Policy (NSW EPA, 2011).

4.1.1 Baseline Data

Baseline unattended noise monitoring took place at nine residential locations and eight locations within the rail corridor between 2 September 2015 and 6 April 2016 in accordance with procedures in the Industrial Noise Policy (INP) guideline. The logger locations (refer Figure 4-1) used for the assessment were representative of the existing background and ambient noise environment in the study area. The results from this monitoring are detailed in the EIS and summarised in Figure 4-1.

Table 4-1 – Noise Monitoring Results from Baseline Data (RBL $L_{A90\ (period)}$ and $L_{Aeq\ (period)}$ noise monitoring results, dB (A)[1,2]

Location	$L_{A90\ (period)}$ RBL noise levels			L_{Aeq} ambient noise levels		
	Day	Evening	Night	Day	Evening	Night
L01P2N	27	29	25	53	49	49
L02P2N	29	27	27	48	44	43
L03P2N	26	30	20	53	49	51
L04P2N	29	30	32	51	52	45
L05P2N	20	20	19	53	47	48
L06P2N	22	19	18	56	44	53
L07P2N	26	26	21	58	45	42
L08P2N	27	24	20	49	44	42
L09P2N	28	23	20	47	48	46
L010P2N	22	22	21	56	56	54
L011P2N	24	21	18	52	51	52
L012P2N	25	27	20	57	50	51
L013P2N	25	19	18	53	49	50
L014P2N	27	18	18	48	49	46
L015P2N	23	20	20	59	54	50
L016P2N	30	31	28	53	54	55
L017P2N	25	20	20	59	56	55

[1] The NSW INP states that where the RBL is less than 30 dB(A), then it is set to 30 dB(A). The INP also states that the evening RBL should not be higher than the day time RBL, and that the night time RBL should not be higher than the evening RBL.
[2] The NSW INP defines day as the period from 7 am to 6 pm Monday to Saturday; or 8 am to 6 pm on Sundays and Public Holidays. Evening is defined as the period between 6 pm to 10 pm. Night time is defined as the remaining period.

Figure 4-1 – Noise Monitoring Locations (source: EIS, GHD 2017)

4.1.2 Site Establishment Activities

The site establishment activities and predicted sound levels for each task to be undertaken throughout the site establishment works are listed in Table 4-2.

Table 4-2 – Site Establishment Activities during Site Establishment Works

Tasks	Equipment	Adopted Sound Power Level for Task (L_W dBA)
Site Establishment Works	Hand tools, road truck, excavator, water cart, grader, dump truck	118

4.1.3 Noise Monitoring

Throughout the site establishment works the noise monitoring to be undertaken includes:

- Suitably experienced personnel (such as Environment Coordinator or acoustic consultant) will carry out noise monitoring at least fortnightly (to confirm the effectiveness of the mitigation measures and impact predictions), in response to complaints, or as directed by ARTC or Regularly Authority
- Noise monitoring will be performed at the nearest sensitive receiver to the location of the site establishment works and at complainant locations.

Any exceedances of predicted noise impacts from works that have been addressed in Table 4-2 are to be reviewed to determine where noise levels can be reduced by the addition of further feasible and reasonable mitigation measures.

4.2 Vibration Monitoring Construction Program

Vibration impacts have the potential to be generated from general site establishment activities. With the appropriate distance applied these impacts are not anticipated to cause structural damage or a risk of damage to buildings. Below is a summary of the Vibration Monitoring Construction Program. In depth methodology for monitoring is attached in **Appendix D**. Additionally Heritage items are identified in **Appendix C**.

A distance of 18 metres or greater for site establishment activities from standard residential buildings or structures has been nominated to avoid damage. While a distance of 35 metres or greater is nominated for heritage buildings and structures. These distances are highlighted below in Table 4-3.

Table 4-3 – Safe Working Distances

Activity	Structure	Distance from Sensitive Receiver (m)
Site Establishment Works	Standard residential building	18
Site Establishment Works	Heritage building	35

Any exceedances of predicted distance to works that have been addressed in Table 4-3 are to be reviewed to determine where vibration levels can be reduced by the addition of further feasible and reasonable mitigation measures.

4.2.1 Site Establishment Activities

The site establishment activities and predicted vibration levels for each task to be undertaken throughout the site establishment works are listed below in Table 4-4.

Table 4-4 – Site Establishment Activities during Site Establishment Works

Tasks	Equipment	Typical Levels of Ground Vibration
Site Establishment Works	Roller	Up to 1.5mm/s at distance of 25 m
Site Establishment Works	Truck (irregular surface)	0.01 – 0.2mm/s at distance of 20 m

4.2.2 Vibration Monitoring

Throughout the site establishment works the vibration monitoring to be undertaken includes:

- Suitably experienced personnel (such as Environment Coordinator or acoustic consultant) will carry out vibration monitoring (to confirm the effectiveness of the mitigation measures and impact predictions), in response to complaints, or as directed by ARTC or Regularly Authority.
- Vibration monitoring will be performed at the nearest sensitive receiver to the location of the site establishment works (if the distance is less than that identified in Table 7 and at complainant locations).

4.3 Air Quality Monitoring Construction Program

Dust impacts may be generated from site establishment activities such as the operation of plant and vehicles, and exhaust emissions. Below is a summary of the Air Quality Monitoring Construction Program. In depth methodology for monitoring is attached in **Appendix D**.

Air quality assessment criteria which should be met at sensitive receivers were outlined in the Environmental Impact Assessment. A summary of these criteria, which are applicable to site establishment works are provided in Table 4-5.

Table 4-5 – Air Quality Assessment Criteria

Pollutant	Averaging Period	Criteria (Air NEPM)
PM_{10}	24 hr	50 µg/m^3
	Annual	25 µg/m^3
$PM_{2.5}$	24 hr	25 µg/m^3
	Annual	8 µg/m^3
Total Suspended Particles	Annual	90 µg/m^3
Dust deposition	Annual	2 µg/m^3

4.3.1 Air Quality Monitoring

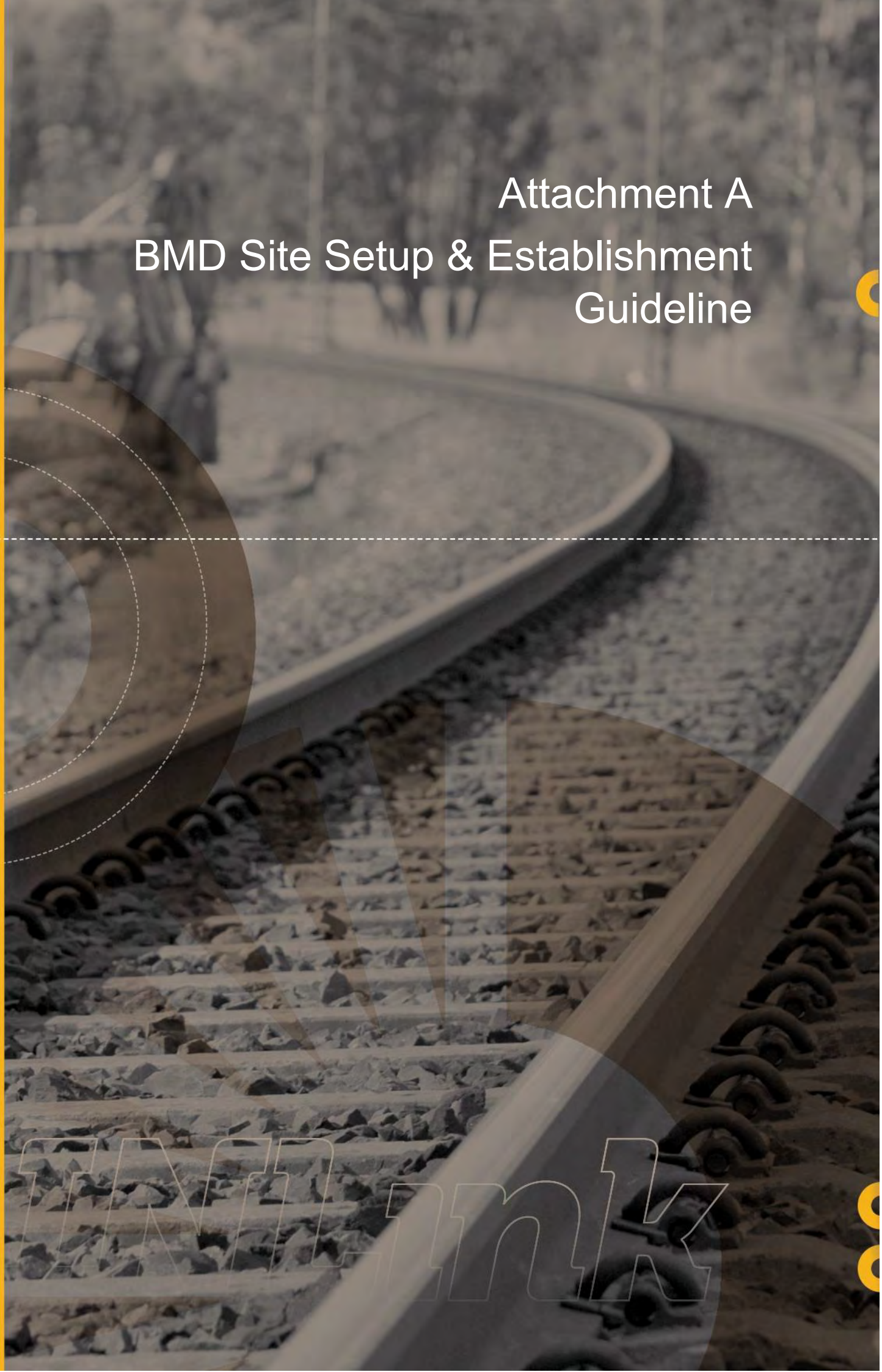
Throughout the site establishment works the air quality monitoring to be undertaken includes:

- Suitably experienced personnel (such as Environment Coordinator or acoustic consultant) will carry out real time air quality monitoring (to confirm the effectiveness of the mitigation measures and impact predictions), in response to complaints, or as directed by ARTC or Regularly Authority

4.4 Water Usage Monitoring Construction Program

All water usage will be documented by the INLink Construction Team and Environmental Team and will include the following:

- Date and time;
- Water source;
- Total amount used; and
- Conditions of use.



Attachment A

BMD Site Setup & Establishment Guideline

Site Setup & Establishment

Business Management System (BMS) Group Guideline

Document Version Control

Revision No.	Revision Date	Details of Revision	Approved By
10	08/12/2017	Changes to Operator Competency, change from VOC to Operator Skills Assessment.	Brian Olsen
9	20/04/2017	Content Updates to sections 3.3, 3.4, 3.5.1, 3.5.2, 3.5.3, 3.5.4, 3.7, 3.8, 3.13, 3.14, 3.15, 3.16, 3.17	Brian Olsen
8	25/08/2016	Updates to Sections 3.3, 3.4, 3.5.1, 3.5. Additional sections added 3.5.3, 3.7, 3.13, 3.14, 3.15, 3.16, 3.17 7 and 8.	Brian Olsen
7	16/03/2015	Update to Section 3.3 with the inclusion of the Corflute Posters to be displayed on site.	Brian Olsen
6	07/05/2015	Inclusion of Document Version Control Table and update to document permissions	Brian Olsen
5	17/03/2015	Inclusion of Freedom of Association Policy and PPE Poster	Brian Olsen
4	09/01/2015	Updating of Hyperlinks, Jobfit contact and additional posters added to section 3.3 Site Posters/Safety Information	Brian Olsen
3	30/10/2014	Inclusion of a link to the Remote or Isolated Work COP	Brian Olsen
2	30/09/2014	Content reviewed and amended	Brian Olsen
1	15/11/2013	Inclusion into the BMS	Brian Olsen

Site Setup & Establishment

Business Management System (BMS) Group Guideline

Document No.: PTM-GLE-00356

Table of Contents

1. Purpose

This document has been developed to provide guidelines on the requirements when establishing a BMD project site. This set-up list is limited to the requirements of the information detailed, however, as each site is different it may require additional content, this will be achieved by completing a site risk assessment.

2. Scope

This document encompasses all BMD Group subsidiaries including BMD Constructions, BMD Urban, JMac and Joint Ventures (JV) where no other procedures or processes are specified. For ease of reference, the term 'BMD' is used throughout this document to reference the BMD Group and its subsidiaries.

Within BMD some projects will not be of sufficient size to build a compound and hence this Guideline will not be applicable. Examples are: projects with a duration of less than 4 weeks of continuous work; projects not requiring a site office or crib room, as other arrangements are in place, such as share facilities, or only maintenance work is being carried-out.

3. Site Requirements

Where a BMD compound exists and is of sufficient size, the following items and information must be displayed as a minimum. Depending on the scope of the project, more items may be required. Supervisors are to refer to the Risk Register to identify additional items.

These items are as follows:

- Site Emergency Contact Banner;
- Site Safety Statistics Board;
- Site Posters/HSEQ Information;
- First Aid facilities;
- Fire Extinguishers;
- PPE requirements;
- General signage requirements;
- Site amenities;
- Storage of chemicals;
- Two-way radios (this is to be risk assessed and either two-way or fixed radios are to be provided).

3.1. Site Emergency Contact Banner

The Site Emergency Contact Banner of respective Business Units must be displayed at the entrance to all BMD sites and are to be attained through your Regional Purchasing Officer. Exampled below is the BMD Constructions' Site Emergency Contact Banner (Figure 1). BMD Urban, JMac or JV banners are also available to order.

Figure 1

The symbols on this banner can be modified to suit the rules and restrictions of your site. Mandatory symbols include:

- Hard Hats;
- High Visibility/Safety Vest;
- Safety Footwear Requirements;
- Eye Protection;
- All visitors must report to the Site Office;
- General Safety Induction & Proof of Identity must be produced on demand;
- Danger: Construction Site unauthorised persons keep out.

Other possible symbols, dependant on your site specifications, could include:

- No Smoking;
- Gloves.

Note: It is BMD mandatory policy that all personnel onsite, including visitors, must wear long sleeves and long pants at all times. Reference to these requirements can be found in the Personal Protective Equipment Policy.

3.2. Site Safety and Environmental Statistics Board

As part of BMD's 'Zero Harm' goal, the Site Statistic Board (Figure 2) must be displayed outside the main site office on a BMD site where a compound of sufficient size exists. The Site Statistics Board must be updated weekly and/or at the occurrence of an incident. This sign is available for download through the BMS: Safety & Environment Stats. The board can also be ordered with Urban, JMac or JV logos as required.

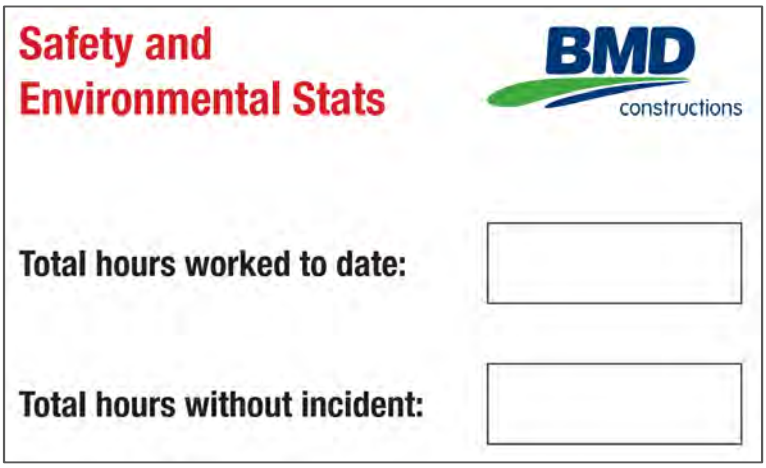


Figure 2

Note: The Total hours without incident must be reset to zero (0) after an incident. The following incident classifications require a reset:

- ***Total recordable incidents (LTI, RWI, MTI) or higher;***
- ***Environmental Incidents Class 1 and Class 2.***

Refer to the Incident and Accident Management Standard for further details.

3.3. Site Posters/HSEQ Information

The following site posters are required to be displayed on each of the corresponding site boards. If identified as 'Rotational' these posters should be displayed before and during such activities are undertaken. These should be discussed in a toolbox meeting prior to being posted to ensure personnel are familiar with the presented information.

Type	Name	Zero Harm Board	HSEQ Project Information Board	Project Emergency Board
BMD Group Policies	Safety Policy	Yes	N/A	N/A
	Environmental Policy	Yes	N/A	N/A
	Quality Policy	Yes	N/A	N/A
	Rehabilitation Policy	Yes	N/A	N/A
	Freedom of Association Policy	Yes	N/A	N/A
Mandatory Posters	HSE Issue Resolution Process & Flowchart	Yes	N/A	N/A
	PPE Poster	Yes	N/A	N/A
	Top 10 Environmental Essentials	Yes	N/A	N/A
	Employee Assistance Program Poster	Yes	N/A	N/A
	Fitness for Work	Yes	N/A	N/A
	Licences, VOC and OSA Explained	Yes	N/A	N/A
	BMD Values	Yes	N/A	N/A
	Site Rules (use page 2 of Personal Commitment)	N/A	Yes	N/A
	ABCC Right of Entry Poster	N/A	Yes	N/A
	Relevant State Rehabilitation Poster / Policy E.g. "If you get injured at work" & "Return to Work Program"	N/A	Yes	N/A
	Positive Communication (Plant Blind Spot Poster)	N/A	Yes	N/A
	Injury Assist Hotline	N/A	Yes	N/A
	Working with Small Petrol-Driven Engines poster	N/A	Yes	N/A
	Site Traffic Access Map	N/A	Yes	N/A
Reports	HSE Project Overview (generated through your Project SharePoint site)	N/A	Yes	N/A
	Quality Project Overview (generated through your Project SharePoint site)	N/A	Yes	N/A
Emergency Information	Key personnel / Site First Aiders & Firewardens / Site Emergency Contacts	N/A	N/A	Yes
	Site Medical Centre or Hospital (with site specific map)	N/A	N/A	Yes
	Site Emergency and Evacuation Plan/Map/Diagram that identifies exit and muster points (example provided within Appendix C of Emergency Response Plan)	N/A	N/A	Yes
	Injury Response Flowchart (to be made available)	N/A	N/A	Yes

Type	Name	Zero Harm Board	HSEQ Project Information Board	Project Emergency Board
	Environmental Incident Flowchart (to be made available)	N/A	N/A	Yes
	Fire Response/Evacuation Flowchart (to be made available)	N/A	N/A	Yes
	Bomb Threat or Suspicious Package Flowchart (to be made available)	N/A	N/A	Yes
	Site Emergency Response Satchel or Map and Details of where it is located	N/A	N/A	Yes
High Risk Activities	Asbestos Management	N/A	Rotational	N/A
	Confined Spaces	N/A	Rotational	N/A
	Electrical Equipment	N/A	Rotational	N/A
	Energy Use Management	N/A	Rotational	N/A
	Falsework and Formwork	N/A	Rotational	N/A
	Hazardous Chemical Management	N/A	Rotational	N/A
	Hazardous Manual Tasks	N/A	Rotational	N/A
	Isolation and Tagging Management	N/A	Rotational	N/A
	Lifting Equipment Management	N/A	Rotational	N/A
	Remote or Isolated Work Management	N/A	Rotational	N/A
	Scaffolding Management	N/A	Rotational	N/A
	Trenching and Excavation	N/A	Rotational	N/A
	Waste and Recycling Management	N/A	Rotational	N/A
	Water Quality Management	N/A	Rotational	N/A
	Working at Heights	N/A	Rotational	N/A
	Working Near or Over Water	N/A	Rotational	N/A
	Working Near Services	N/A	Rotational	N/A
	Working Around Mobile Equipment	N/A	Rotational	N/A
	Check Your Quick Hitch	N/A	Rotational	N/A
	Dehydration/Heat Stress Management	N/A	Rotational	N/A

In addition to the above, the following documents should be kept in the Site Office:

- Prestart Talk and Site Attendance Record;
- Safety Data Sheet Folder (ChemAlert). Follow the instructions detailed in the document to access this resource.

Other key messages can be found in HSEQ Tools on the right hand side of BMS Home Page.

Where practical, the site boards shown on the following pages should be used to provide a standard template for site signage and hence is the first preference for displaying the aforementioned mandatory posters and key messages/information. Where this preference is not practical nor achievable, the mandatory posters and key messages/information shall be displayed in a uniform manner within a prominent location on site.

When ordering the site boards for your project, there are two (2) options available:

- **Option 1**: For boards that are to be displayed in regular crib rooms or site offices (see Figures 3, 5 and 7 for Product Codes);
- **Option 2**: Where there are no crib rooms or site offices on the project, resulting in the boards having to be displayed in containers and therefore are required to be cut in half (see Figures 4, 6 and 8 for Product Codes).

One (1) set of site boards (Zero Harm Board, HSEQ Project Information Board and Project Emergency Board) is to be displayed in each relevant site facility on the project. If possible, the site boards are to be displayed in a prominent location within each crib room on site. For further details in determining the site board requirements for your project, please refer to the following table.

Site Facilities on Site	Required Option	Positioning Requirements
One (1) crib room	Option 1	One (1) set of site boards displayed in the crib room
Multiple, separated crib rooms located in different prestart areas	Option 1	One (1) set of site boards displayed in **each** relevant crib room
One (1) site office and no crib rooms	Option 1	One (1) set of site boards displayed in the site office
One (1) container and no crib rooms or site office	Option 2	One (1) set of site boards displayed in the container
Multiple, separated containers located in different prestart areas and no crib rooms or site office	Option 2	One (1) set of site boards displayed in **each** relevant container

Note: The site boards are available via BMD Purchasing with the supply of the products through Artcraft. When ordering, please ensure that you advise BMD Purchasing of the relevant product number(s), which have been provided within the following pages.

The preference for each of the placeholder posters is that they are laminated, which will reduce the effects of damage and weathering. Additional to this, it is important that all posters displayed on the site boards are up to date. Where a permanent (non-placeholder) poster requires updating, you should place a printout of the most recent version of the poster over the top of the current poster until the revised site board has been ordered and delivered.

Figure 3: Zero Harm Board (Option 1) - Product Number: BMD024

Figure 4: Zero Harm Board (Option 2) - Product Number: BMD025

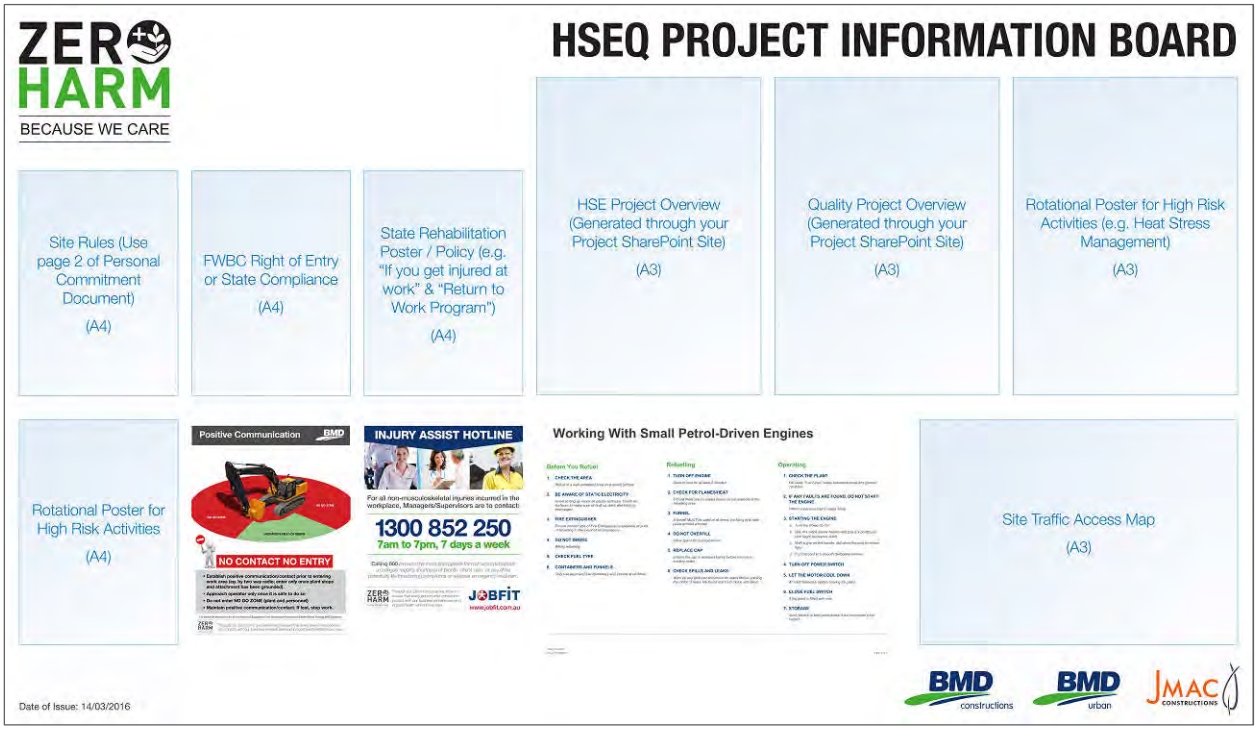


Figure 5: HSEQ Project Information Board (Option 1) - Product Number: BMD026

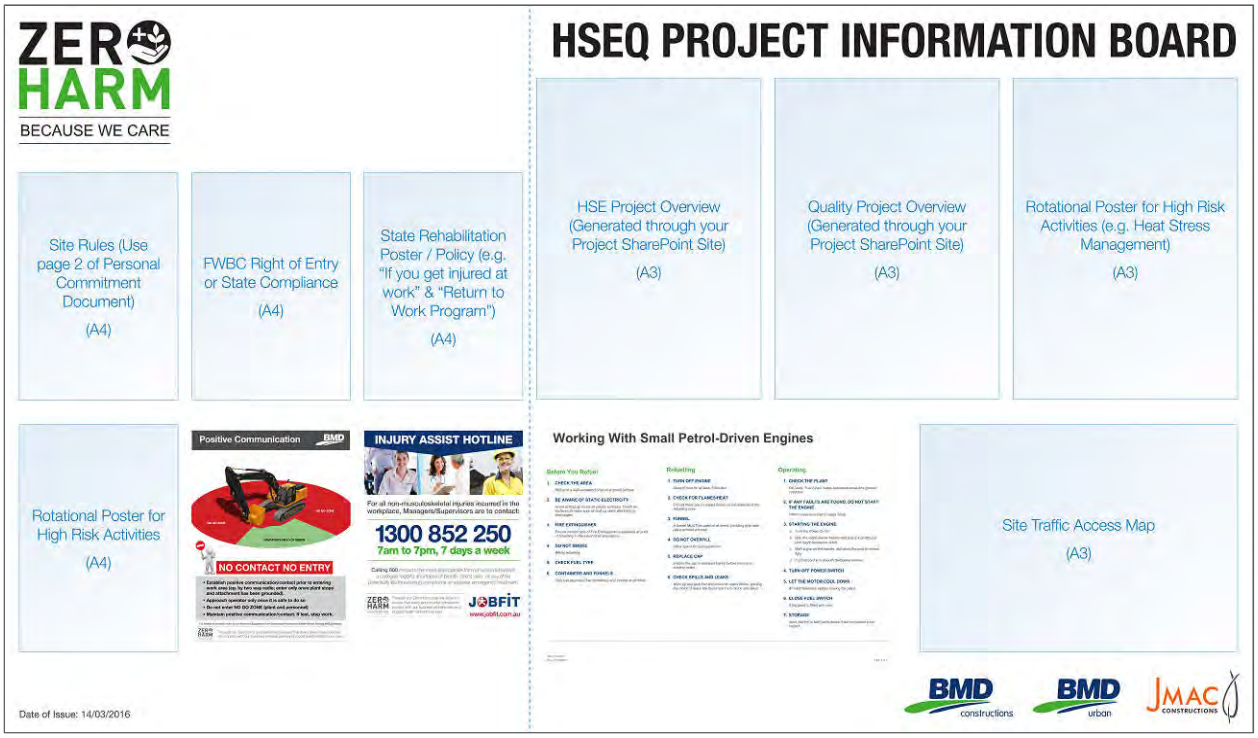


Figure 6: HSEQ Project Information Board (Option 2) - Product Number: BMD027

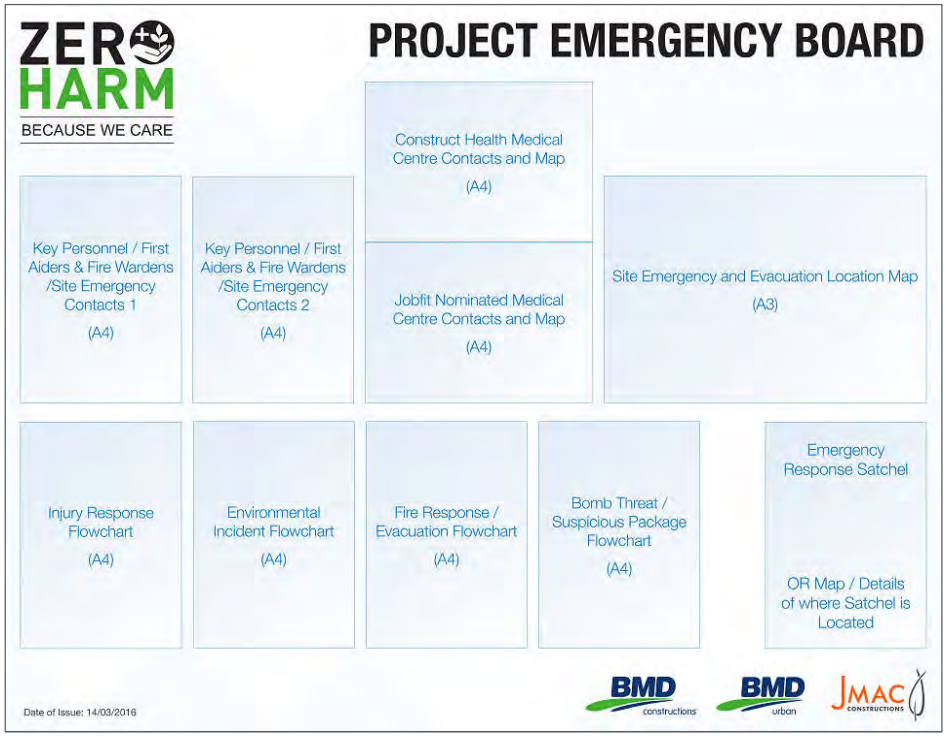


Figure 7: Project Emergency Board (Option 1) - Product Number: BMD028

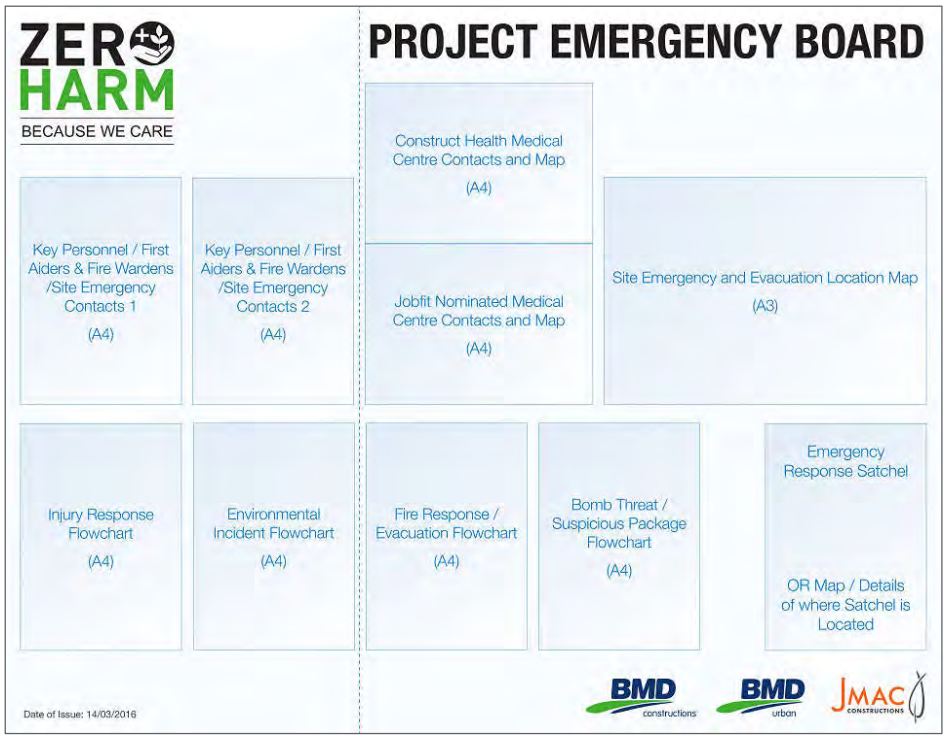


Figure 8: Project Emergency Board (Option 2) - Product Number: BMD029

3.4. First Aid Facilities[1]

As per the Emergency Response Management Standard, First Aid Facilities are to be aligned to the respective states First Aid Code of Practice and first aid kits are to be kept fully stocked and in accordance with the Code of Practice with products in date at site setup.

A First Aid Risk Assessment must be conducted by competently trained and authorised Senior 1st Aider, prior to the commencement of work on site with assessment undertaken for peak work periods.

The Site First Aider/s contacts poster is to be clearly displayed in both site offices and lunch sheds.

3.4.1. Contents

The contents of first aid kits should be based on a risk assessment (see Section 3.4). For example, there may be a higher risk of eye injuries and a need for additional eye wash bottles and eye pads in a workplace where:

- Chemical liquids or powders are handled in open containers;
- Spraying, hosing or abrasive blasting operations are carried out;
- There is any possibility of flying particles causing eye injuries;
- There is a risk of splashing or spraying of infectious materials;
- Welding, cutting or machining operations are carried out.

Additional equipment may be needed for serious burns and remote workplaces.

3.4.2. Design of Kits

First aid kits can be any size, shape or type, but each kit should:

- Be large enough to contain all the necessary items;
- Be immediately identifiable with a white cross on green background that is prominently displayed on the outside;
- Contain a list of the contents for that kit;
- Be made of material that will protect the contents from dust, moisture and contamination.

3.4.3. Location

First aid kits should be kept in a prominent, accessible location and able to be retrieved promptly as assessed by a Senior First Aider. First aid kits should be located close to areas where there is a higher risk of injury or illness. A portable first aid kit is provided in each BMD site vehicle.

[1] FSC Audit Criteria WH13.7 &13.8

3.4.4. Restocking and Maintaining Kits

A nominated first aider will be responsible for monitoring and restocking first aid kits, and should:

- Monitor access to the first aid kit and ensure any items used are replaced as soon as practicable after use;
- Undertake regular checks (after each use, or, if the kit is not used, at least once every 12 months) to ensure the kit contains a complete set of the required items (an inventory list in the kit should be signed and dated after each check);
- Ensure that items are in good working order, have not deteriorated and are within their expiry dates and that sterile products are sealed and have not been tampered with.

3.4.5. Remoteness of Project

The Remote or Isolated Work Management details the BMD processes that must be implemented when working in these high-risk environments.

3.4.6. First Aid Signs

Locations of all first aid kits must be easily identifiable. These signs are essential and must be attained through your Regional Purchasing Officer.

3.4.7. First Aid Rooms

A first aid room is recommended for high risk workplaces with 100 workers or more.

A first aid room should:

- Be located within easy access to a sink with hot and cold water (where this is not provided in the room) and toilet facilities;
- Offer privacy via screening or a door;
- Be easily accessible to emergency services (minimum door width of 1m for stretcher access);
- Be well lit and ventilated;
- Have an appropriate floor area (14m² as a guide);
- Have an entrance that is clearly marked with first aid signage.

Maintaining a first aid room should be allocated to a trained occupational first aider, except where this room is part of a health centre or hospital.

3.4.8. Trained First Aiders

The following ratios are recommended:

- Low risk workplaces – one first aider for every 50 workers;
- High risk workplaces – one first aider for every 25 workers.

The number and type of trained first aiders can be further refined by following the five-step guide below:

Step 1

- Identify the maximum number of workers at the workplace at any one time.

Step 2

- Consider the nature of the work being carried out at the workplace and determine if your workers are at a high risk of being exposed to hazards that could require immediate first aid treatment.

Step 3

- Determine if the workplace is remote, or if access to emergency services is difficult;
- High risk workplaces that do not have timely access to medical and ambulance services should have at least one first aider for every 10 workers.

Step 4

- Consider the variety of ways that your workers carry out work e.g.
  - if a worker's location varies on a regular basis and they often work without supervision;
  - if a worker sometimes works alone for relatively short periods of time.
- In these situations, it may not be practicable to have a first aider available at all times at the workplace, however, these workers must be able to access first aid assistance.

Step 5

- Before finalising the number of first aiders your workers require access to, consider if there are any other factors that indicate that your workplace needs additional first aiders, e.g.
  - the arragement of work (multiple shifts or overtime);
  - seasonal work, where there may be a sudden and significant increase or decrease in the number of workers;
  - where there are large numbers of other persons present on a regular basis e.g. schools, shopping centres;
  - workplaces that have unique hazards;
  - access during times when a first aider is absent e.g. annual leave.

3.5. Medical Providers

BMD utilises the services of both Jobfit and Construct Health to ensure the health and wellbeing of all workers, visitors and sub-contractors. The combination of these agencies ensures personnel have access to medical providers at all times, on all BMD run sites.

The agencies are responsible for the management of different injuries and tasks. Construct Health are utilised for the application of first aid for musculoskeletal disorders (MSD) only, whilst Jobfit's services are used for pre-employment medicals, medical examinations and all other injuries.

3.5.1. Injury Management

As per the Injury Rehabilitation Management Standard, BMD will appoint a Rehabilitation and Return to Work Coordinator (RRTWC) to support each Business Unit or project for the management of rehabilitation. At the project establishment stage the RRTWC is required to contact Jobfit (Ph.: 1300 616 165) to identify the closest medical treatment provider for the project. If Jobfit does not have an established medical centre in a reasonable distance from the project an optimal medical provider will be nominated by Jobfit.

The project's RRTWC must also be contacted to identify Construct Health's medical provider (Ph.: 07 4840 2122) noting two weeks is normally required to provide setup.

After the occurrence of a non-musculoskeletal injury which requires medical attention, the competent person will be required to contact Jobfit via the Injury Assist Hotline (Ph.: 1300 852 250) to notify them of the occurrence and to receive instructions pertaining to medical treatment. If the injury is considered to be a MSD then the competent person must contact the RRTWC and Construct Health's medical provider directly. For Construct Health, an individual Purchase Order is to be issued with each session and is to be costed to the project. Contact BMD Purchasing for the specific costing rates for Construct Health.

3.5.2. Pre-Medical

A standard pre-employment medical (PEM) assessment for employees may be required if stipulated in the contract, or dictated by the Construction Manager. Pre-employment medical should booked through medimanager@jobfit.com.au. BMD industry default requires no PEM assessment unless otherwise specified. Refer to the Fitness for Work Management Standard for more details.

3.5.3. Switch On Program

Each project is to establish a 'Switch On' program, which is coordinated by Construct Health. The 'Switch On' program encompasses pre-start and re-start exercises with the objective to mitigate the risk of sprains/strains and slip/trip/falls injuries to workers, as well as starting and re-starting workers mentally throughout the day. An exemption can only be applied by a relevant Construction Manager, due to a small number of personnel on site, low levels of risk involved with the work or the remoteness of location. Since the 'Switch On' program is facilitated through Construct Health, an individual Purchase Order is to be issued and costed to the project.

3.5.4. Key Jobfit and Construct Health Contact Details for BMD

3.5.4.1. Jobfit Contact Details for BMD

Injury Assist Hotline (24hrs/7days)	Phone: 1300 852 250 (for non-musculoskeletal injuries such as breaks, cuts and burns)
Pre-Employment Medical	Website: www.jobfit.com.au [MediManager]
Follow-up Appointments (8:30am - 5pm) (Monday – Friday)	**Queensland** Cairns – Call 07 4044 8700 Gladstone – Call 1300 61 61 65 and press option "2" for Workplace Injuries. Then press "1" for Queensland. Then press "1" for Gladstone All other Queensland injuries – Call 1300 61 61 65 and press option "2" for Workplace Injuries. Then press "1" for Queensland. Then press "2" for all other Queensland injuries **South Australia** Call 1300 61 61 65 and press option "2" for Workplace Injuries. Then press "2" for South Australia. **Western Australia** Call 1300 61 61 65 and press option "2" for Workplace Injuries. Then press "3" for Western Australia. **Northern Territory** Call 1300 61 61 65 and press option "2" for Workplace Injuries. Then press "4" for Northern Territory. **Victoria** Call 1300 61 61 65 and press option "2" for Workplace Injuries. Then press "5" for Victoria. **New South Wales/Australian Capital Territory** Call 1300 61 61 65 and press option "2" for Workplace Injuries. Then press "6" for NSW / ACT.

3.5.4.2 Construct Health Contact Details for BMD

Melissa Gillam	Email: mackay@construct-health.com Phone: 07 4840 2122

3.5.5. Jobfit Clinic Lead Times

Category	Lead Time
Work Fitness Assessment (FCE) with CV Fitness	24 Hours
Standard Pre-employment Medical (Includes audio / vision / spirometer)	24 Hours
QLD Coal Board Medical	24 Hours
QLD Coal Board Medical – Section 4 – NMA	24 Hours
Drug and Alcohol Screen (Lab or Instant)	24 Hours
Instant Drug Screen	24 Hours

3.5.6. Jobfit Associate Clinic Lead Times

Category	Lead Time
Work Fitness Assessment (FCE) with CV Fitness	24 – 72 Hours
Standard Pre-employment Medical (Includes audio / vision / spirometer)	24 – 72 Hours
QLD Coal Board Medical	24 – 72 Hours
QLD Coal Board Medical – Section 4 – NMA	24 – 72 Hours
Drug and Alcohol Screen (Lab or Instant)	24 – 72 Hours
Instant Drug Screen	24 – 72 Hours
Confirmatory Drug Screening (GCMS)	24 – 72 Hours

Note: Reference to specific costing rates for Jobfit can be seen in the following: Jobfit - Supply of Services Agreement (BMD Urban) and Jobfit - Supply of Service Agreement (BMD Constructions).

3.6. Employee Assistance Program (EAP)

The EAP is a service provided by BMD which is free* for yourself and your immediate family to access. The program is completely voluntary and confidential.

Through access to qualified counselors, employees and their families have the opportunity to identify issues that may be affecting their quality of life and find ways of resolving them.

BMD have contracted **Davidson Trahaire Corpsych** (DTC), an external service provider, to provide confidential counselling services. All counsellors employed by DTC are qualified and experienced psychologists or clinical social workers. The EAP website can be accessed through The BMD Way portal.

*Six (6) counselling hours are available to each employee and their immediate family members annually.

3.6.1. Contact Details

Calls will be received by the EAP Centre whose customer service team will manage the inquiry and guide you through the process in order to receive the appropriate assistance.

The appointment time will be made on the initial call unless a caller needs to be referred to a DTC Associate. DTC offers face-to-face, telephone, video or online counselling options.

DTC have their own offices in more than 36 locations across Australia as well as an extensive range of service providers in the greater metropolitan, regional and rural areas.

EAP	Making an Appointment	1300 360 364
24 Hour Support	Lifeline Australia	13 11 14
	Beyond Blue	1300 224 636

3.6.2. Manager Assist

Manager Assist provides confidential coaching and support for managers in dealing with the people issues that present on a regular basis. This can be around a broad range of issues such as performance, conflict, communication, individual or team behaviour. More information can be accessed through The BMD Way Portal.

3.7. Suicide Prevention Providers

3.7.1. Mates in Construction (Qld, NSW, NT, SA, WA)

Mates in Construction (MIC) is a charity focussed around reducing the high level of suicide among Australian construction workers. The MIC program uses training as a tool to help raise awareness that there is a problem with suicide and its contributing factors in the construction industry, and we can all be part of the solution. The support is provided through:

- Clear pathways to help;
- Case management processes that ensures that all workers in need of support are connected to appropriate help; and,
- On-site visits by field officers to support the site and its workers in an ongoing presence until the site closes.

Each site within Qld, NSW, NT, SA and WA is to set up a MIC program by completing their online form. The BMD employee filling out the form shall:

- Include their personal details within the relevant sections;
- Ensure 'BMD' is included within the 'Organisation' section;
- Tick 'Setting up new "MATES" Construction Site' within the relevant section; and,
- Include details about the number of personnel on site within the 'Your Message' section.

3.7.2. Lifeline (Vic, ACT)

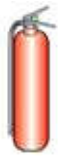
Lifeline is a national charity providing all Australians experiencing crisis with access to 24 hour crisis support and suicide prevention services. Lifeline provides crisis support 24hours a day, 7 days a week. The support is provided through:

- A confidential crisis telephone support line 24/7, 13 11 14
- Providing immediate support over the phone by Trained Crisis Supporters

- Assisting to clarify options and choices available
- A referral information to other services in the local area

3.8. Fire Extinguishers[2]

Fire extinguishers are to be mounted on secure wall brackets designed for the specific fire extinguisher on site and easily accessible. Signs are to be erected above highlighting their locations to comply with Australian Standards. BMD's general preference is the Dry Chemical Powder (DCP) fire extinguisher, however, a risk assessment should be undertaken by a competent person (Fire Safety Officer or Fire Services Company) to identify the most effective work specific and location of extinguishers. All fire extinguishers must be attained through your respective Regional Purchasing Officer.

Colour Schemes		Type	Class A	Class B	Class C	Class D	Class E	Class F	Notes
Before 1999	After 1999		Wood Paper Plastics	Flammable Liquids	Flammable Gas	Metal	Live Electrical Equipment	Cooking Oils and Fats	
		Water	✓	✗	✗	✗	✗	✗	Dangerous on live electrical equipment May spread Class B and F fires
		Foam	✓	✓	✗	✗	✗	✓	Dangerous on live electrical equipment
		ABE Dry Chemical Powder (DCP)	✓	✓	✓	✗	✓	✗	Check what type of dry chemical powder before using
		BE Dry Chemical Powder (DCP)	✗	✓	✓	✗	✓	✓	Check what type of dry chemical powder before using
		Carbon Dioxide (CO_2)	✓	✓	✓	✗	✓	✓	Wind reduces effectiveness
		Wet Chemical	✓	✗	✗	✗	✗	✓	Dangerous of line electrical equipment

[2] FSC Audit Criteria WH13.8

		Vaporising Liquid	✓	✓	✓	✗	✓	✗	
		Dry Powder				✓			Special purpose
✓	= most effective	✓	= limited effectiveness	✗	= not to be used				

3.9. Personal Protective Equipment (PPE) Requirements

The following table lists as a guide the PPE requirements for each site. To help ensure that sufficient stock is available.

Item	Unit	No. of personnel on site (average)			
		1-10	10-20	20-30	30+
Hearing protection (AS 1270)	Box	2	3	4	4
Safety glasses (AS 1337)	Box	2	3	3	3
Disposable gloves (AS)	Box	1	2	2	2
PVC gloves – wrist length (AS 2161)	Pack	1	2	2	2
Rigger gloves (AS 2161)	Pack	1	2	2	2
P1 Dust masks (AS 1716)	Box	2	3	3	3
Face shields (AS 1716)	Each	1	1	2	2
Sunscreen SPF30+	Bottle	2	3	4	4
Insect repellent	Bottle	2	3	4	4
Hard hats (AS 1801)	Each	4	6	6	6
Danger tags (Do Not Operate)	10/Pack	1	1	1	1
High Visibility Vests	Each	10	10	10	10
Controller (i.e. spotter) Vest	Each	2	2	2	2
Visitors Vest	Each	2	2	2	2

3.10. General Signage Requirements

The following signs are required onsite. These are to be attained through your respective Regional Purchasing Officer.

No Smoking

Fire Extinguisher - Must also be placed on the outside wall of the office.

First Aid

Danger Construction Site

To be placed at all entrances and along the perimeter fence line.

Reverse Parking Only

To be placed when reverse parking is required.

Emergency Assembly Point

PPE - As required for the site.

Extra items:

The following items are to be provided at all BMD sites and are available through your respective Regional Purchasing Officer.

- Sharps container – minimum of one (1) per site;
- Evacuation horn/signal – minimum of one (1) per site compound (including satellite compounds).

3.11. Site Amenities

Amenities are to be cleaned daily, which includes:

- Sweeping floors;
- Wiping tables and benches;
- Cleaning of sink and dishes;
- Removal of rubbish;
- Kitchen appliances, including microwave;
- Toilets cleaned daily (washed out weekly).

All electrical equipment is to be in good working order and within testing and tagging date (both subcontractor and BMD equipment).

All portable electrical equipment is to be tested and tagged every three (3) months by a competent person (Electrician). Non-portable Residual Current Devices (RCDs) are to be tested and documented on a monthly basis by a trained person.

The table provided below is applicable were other arrangement have not been organised and the project is of sufficient size.

Amenity	No. of personnel on site (average)				
	1-20	21-40	41-60	61-80	81-100
Change Rooms Min 0.5m² floor area per person	0.5m²-10m²	10.5m²-20m²	20.5m²-30m²	30.5m²-40m²	40.5m²-50m²
Meal Rooms Min 1m² floor area per person	1m²-20m²	21m²-40m²	41m²-60m²	61m²-80m²	81m²-100m²
Meal Rooms – Tables Approx. 6 people per table	1-4	4-7	7-10	10-14	14-17
Toilets – Male Urinals provided 1 per 20 or fraction of 20	1	2	3	4	5
Toilets – Male Urinals not provided 1 per 15 or fraction of 15	1-2	2-3	3-4	5-6	6-7
Toilets – Female With sanitary disposal units 1 per 10 or fraction of 10	1-2	3-4	5-6	7-8	9-10
Toilets – Wash Basins 1 per 10 or fraction of 10	1-2	3-4	5-6	7-8	9-10
Toilets – Showers (if required) 1 per 25 or fraction of 25	1	1-2	2-3	3-4	4-5
Drinking Water – Access Points (such as bubblers where applicable)	1+	2+	3+	4+	5+

Note: Change rooms are only required if employees are required to change in and out of other apparel. Refer to respective States Codes of Practice.

3.11.1. General Provisions for all Workplaces

- All amenities should be kept clean and sanitary.

- An adequate supply of cleaning equipment and accessories, such as soap, hand drying facility, toilet paper, cleaning agents, mops, brooms.
- Access to all amenities, and facilities within, should be kept clear at all times.
- Amenities should not be used for the storage of any building materials or equipment, with the exception of employee's personal work tools and protective equipment.
- Adequate lighting (natural or artificial) should be provided for safe access to amenities.

3.11.2. Change Rooms

- Change rooms should be provided if the type of work, location of work or the workers require clothes to be changed.
- Change rooms should be for the exclusive use of employees.
- Suitable bench seating in all change rooms at least 400mm wide and 460mm in length for each person using the room at any one time.
- Adequate numbers of secure hooks should be provided for hanging clothes and be spaced at least 460mm apart. Where appropriate to the type of work being performed, additional hooks for hanging up personal work tools should be provided.
- Clothes drying facilities should be provided where appropriate to the type of work being performed.
- Change rooms with suitable enclosures or compartments for privacy should be provided where both males and females are employed on the site.

3.11.3. Meal Rooms

- Each meal room is to be set up with:
    - Drinking water;
    - Auto boil or jug;
    - Microwave;
    - Hand washing facility;
    - A suitable space or shelves for storage of employees' provisions e.g. utensils, food;
    - Garbage bins, with removal liners and secure lids.
- Seating should be either chairs or benches 400mm wide and 560mm in length for each person;
- Meal rooms should have adequate means of cooling or heating, appropriate to the conditions such as:
    - Reverse cycle air conditioning;
    - Cooling fans;
    - Flow-through ventilation;
    - Heaters.
- A refrigerator(s) of adequate size should be provided in each meal room to store perishable foods for all persons using the meal room.
- Garbage bins should be emptied daily or more frequently if required.

3.11.4. Toilets

- Toilets should be clearly marked where separate toilets are provided for males and females.
- Toilets and urinals should be installed so as to provide adequate privacy.
- Toilets should be connected to the sewer where practicable.
- If sewer connection is not practicable, self-contained freshwater flushing or open closet portable toilets should be provided.
- Toilets that are not connected to a sewer should be serviced at least once every two weeks for a toilet used by up to five persons, or at least once every week for a toilet used by more than five persons.
- Toilets should be installed to prevent any odours reaching dining facilities.
- Portable toilets should be installed to prevent them toppling over.
- Toilets should be located as close as practicable to the workplace and/or amenities.
- Sanitary disposal units for female use should be provided, where required, and serviced regularly.

3.11.5. Washing Facilities

- Undercover washing facilities within or adjacent to each toilet or urinal should be provided. These should be in addition to any provided within portable toilets.
- Clean water and cleansing agents (and disinfecting agents where appropriate) should be provided for the purposes of washing.
- An adequate number of mirrors should be provided at convenient points.
- Garbage bins, with removable liners and secure lids, should be provided. Bins should be emptied daily or more frequently if required.

3.11.6. Showers

- Shower facilities should be provided when required by the nature of the project or the type of work being done.
- Separate shower facilities should be provided with adequate privacy for the exclusive use of males or females, where both males and females are employed.

3.11.7. Drinking Water

- An adequate supply of cool, clean drinking water should be available on work sites.
- Drinking water points should be provided near all hot and strenuous work stations. Additional points, if needed, should be provided.
- Where a connection to a water supply is not possible, supply may be provided by other means suitable for dispensing drinking water such as a flask, water bag, or cooled drink dispenser.
- Where there are a number of amenities on site, at least one chilled water bubbler at each group of amenities should be provided.

Weather Strips are to be fitted to all doors when applicable.

3.12. Storage of Chemicals & Hazardous Substances

Use and storage of all hazardous substances and/or dangerous goods must be in accordance with the all relevant regulatory bodies' prescribed requirements, and any other requirements identified in the Compatibility and Segregation Guide (Appendix 2 of Hazardous Chemicals Management) the SDSs, the risk assessment, and any Work Method Statement (WMS's) developed for the task.

Materials onsite must be stored as per the relevant Australian Standards (e.g AS1940). All hazardous chemicals not being used must be stored in bunded areas as per the Australian Standards. All containers of hazardous materials used onsite must be brought back to the storage area at the end of the shift, e.g. jerry cans of fuel. Hazardous chemicals must be stored in properly ventilated containers and the project must ensure incompatible substances are not stored together.

If a significant storage of dangerous goods is located onsite, e.g. diesel fuel tank, the project must check to ensure the volume does not contravene State or Territory regulations with respect to environmental licensing or dangerous goods facility legislation.

For further information, see the Environmental Management Plan, and more specifically, the Hazardous Chemicals Management Core Operating Procedure.

3.13. Information Technology (IT) Connection and Notification

When setting up a new project, an IT order form must be completed and sent to the BMD IT department four (4) weeks prior to establishment. The IT department will then determine the specific requirements from the information provided and organise all necessary equipment and services for the project.

3.14. Connection and Disconnection of Temporary Power Supply

As the Electrical Equipment Core Operating Procedure, the following processes for mobilising, demobilising and energising AC power supply to switchboards shall be adapted to suit your specific project:

Mobilising:

1. Nominated electrical contractor to initiate approval processes with Power Supply Company (PSC) and copies of all issued documents (to PSC) to be forwarded to BMD to assist in programming of any temporary works and compound installation.
   Note: Lead times may vary from relevant PSCs. Lead time could be up to four (4) – six (6) weeks.
2. Electrical contractor is the only authorised person to install power poles and switchboards, and is to ensure that all trenching, conducting and connections including cabinet are AS 3000 approved.
3. Electrical contractor to isolate power supply point
4. The switchboard or cabinet shall be padlocked and the sticker placed on the switchboard or cabinet indicating live power. If the switchboard or cabinet is not energised, a lockout tag shall be placed warning others of potential danger.

5. When the electrical contractor has completed connections and energised the switch board or cabinet, a padlock shall be installed to reduce access to the mains supply. Keys for the switchboard or cabinet padlocks shall only be in the position of the foreman / supervisor and the electrical contractor.
6. The Electrical Contractor will issue a regulatory body authorised “Safety Certificate” or approval document
7. A lockout system shall be in place when any maintenance, servicing or fault finding activities are in place. Refer to the Isolation and Tagging Management Core Operating Procedure.

Demobilising:

1. Demobilisation of site compounds and de-energising of power supply to site shall be conducted in the same manner. All procedures for site establishment shall operate in reverse. Electrical contractor shall be informed of proposed dates minimum 2 weeks in advance.
2. Following compound demobilisation (shed disconnection) pole / switchboard or cabinets shall be isolated and locked out indicting ‘Live Power Keep Out’ through the use of parawebb 900mm high and timber stakes with signage.
3. All works shall be in accordance with the project specific Work Method Statement (WMS).

3.15. Site Tools and Equipment

As per Plant and Equipment Core Operating Procedure, project sites that involve either of the operations mentioned in the table below, the associating tools and equipment shall be procured and stored on site. This will ensure that the appropriate tools and equipment are available when required the Cutting of Concrete Pipes and use of Star Picket Driver.

Operation	Required Tool / Equipment
Cutting of concrete pipes	Pipe cutting cradle (pipes up to 825mm) or timber beams (pipes larger than 825mm)
Star picket driving	Industrial standard star picket driver and additional attachments (lay-flat or similar material fitting)

3.16. Work Area Sign-in Point (WASP)

It is recommended that all BMD project sites utilise Work Area Sign-in Points (WASPs) throughout their sites. A WASP is a multi-purpose storage container located within a work area, comprising of basic PPE items and relevant documentation for the surrounding work area such as a WMS, JHA and permits.

3.17. Dockets

It is imperative that all dockets throughout the course of the project are submitted and stored appropriately. For projects where dockets are likely to be submitted after normal working hours, a docket drop box as displayed below should be provided in an accessible location on site. Alert signs can also be displayed to further ensure that dockets are submitted appropriately.

3.18. Site Security

Site security, such as fences, cameras, alarms or security patrols, may be required on your site. Consult your contract with the Client and determine if any are necessary. Increased security may be necessary in higher-risk situations e.g. plant being kept on site.

The Safety and Security Fencing Assessment will help you determine if you need safety and security fencing for your site. If you tick 'Yes' to any question, you may need to install fencing.

Note: Ensure temporary fencing complies with AS4687 Temporary Fencing and Hoardings. Request clarification from supplier before installing.

3.18.1. Lighting

Site lighting required on any BMD site is to be managed in accordance with the respective states Code of Practice and consult with site plans and contractors to ensure lighting standards are met.

3.19. Site Shed Awnings

Shed awnings, if required onsite, must comply with BMD specifications in accordance with the Site Shed Awnings Work Instruction. If the project is affected by severe weather or is located in a cyclonic area then the competent person must refer to the Cyclone Management Plan. When at physical risk from a cyclone Site Shed Awnings must have the cladding removed and stored in a safe area to reduce the risk of damage. Otherwise specialised site shed awnings must be designed in accordance with the relevant cyclone rating of the area.

3.20. Muster Points and Parking

Muster points and parking is to be clearly identified and as a minimum, located a safe distance from the site, with clear visibility and clear paths to entrance and egress points.

Parking should consider pedestrian movements (safe movements of pedestrians) and may require clear delineation. BMD general practice is the requirement of reverse parking. Parking lots and areas must be signed when required.

4. Environmental Management

4.1. Licences, Permits and Approvals

Ensure that all relevant licences, approvals and permits relating to project works, in particular early or pre-site works (e.g. Clearing and Grubbing), are attained prior to Site Setup and Establishment. This includes those either obtained by the Client or by BMD. These should be listed in the project's Environmental Licences and Permits Register.

4.2. Erosion and Sediment Controls

The project must ensure that an Erosion and Sediment Control plan has been developed (either by the Client or BMD) and that controls are implemented as site establishment occurs. Particular attention should be paid to stabilising site entry/exit points at the start of the project. Ensure that the necessary materials have been ordered for the ESCP – e.g sediment fence, rock, geofabric, silt socks etc.

4.3. Waste and Recycling Management

Contact should be made with local waste management companies for site bins. The project should identify waste streams and provide bins for general waste and recycling materials onsite. In some remote or regional locations recycling may not be feasible due to limited facilities. Ensure bins with lids (e.g wheelie or industrial) are provided for waste from offices and crib huts as it includes food, and separate larger skip bins are used for construction waste from the field.

4.4. Flora and Fauna

During site establishment any areas of vegetation onsite that require protection should be identified and fenced off to prevent disturbance. For the removal of vegetation in the project area the limits of disturbance shall be marked out by the surveyor.

Where required by the project, fauna habitat trees / locations shall be identified and marked out at the site establishment phase. The project shall engage a fauna spotter for the upcoming clearing activities and obtain the contact number of a local wildlife carer / vet to be used in the event of injury.

4.5. Environmental Spills

Spill Kits are required on all BMD controlled sites and must be on-site during Site Setup and Establishment to ensure the appropriate management of spills. Typically 240 litre wheelie bin hydrocarbon spill kits are utilised. Enough spill kits should be supplied to be positioned at the different work fronts around the project. On certain projects chemical or marine spill kits may also be required depending on the type of work onsite.

5. First Aid Risk Assessment

First Aid Risks Assessments should be conducted in accordance with the following document:

First Aid Risk Assessment and Requirements Checklist.

6. Checklist and Sign Off

The Site Set-up and Establishment Checklist and Sign Off should be used to ensure all aspects of the site set-up are carried out in accordance with this guideline.

7. MediManager User Guide

JOBFIT

MediManager User Guide

Please see below some brief instructions on how to use our new system MediManager, the most advanced solution for booking and managing medical assessments.

The features of MediManager include:

- Book and manage medical assessments online 24 hours a day, 7 days a week
- MediManager is tailored to include specific company medical requirements
- Check appointment availability at Jobfit centres around Australia
- Keep track of your booking from request until you have received the medical report
- MediManager retains all past medical information so you can search and retrieve previous reports
- MediManager is responsive and can be used on a PC, laptop, iPad or tablet

After you have logged in for the first time, please change the password we allocated to a new password of your choice.

Once logged in, the first page you will see is **My Bookings**.

My Bookings

This section shows your company's bookings requests and medical assessments. Here you can see the status of a medical request as outlined below:

Requested – this is a new booking request that has been sent by you.
In Progress – this means Jobfit staff are in the process of arranging the appointment.
Booked – Jobfit has now scheduled an appointment time. You will be able to view details of this appointment by clicking on the request and clicking the Appointment Details tab.
Completed – the medical determination report has now been finalised and emailed. If you have been given results access, you can review the Jobfit determination report by clicking on the booking request and clicking the Results tab.

You can also search for a particular booking request on this screen by clicking in the search field or filtering the status of the medicals.

Jobfit staff will write notes for you to view regarding your booking request. For example, if a message has been left for the candidate to contact us, or we require additional information from you such as we have been provided with an incorrect mobile number, you will see this written in the notes which appears as a speech bubble next to your booking request (see below). Please ensure you are checking these notes regularly for updates on the progress of your booking request.

You can also edit or delete a booking request if required by clicking on the medical request. This option is only available while the medical status is 'New Request'.

Please note some requests will appear in **black font** and some in blue font. The black requests have been sent through via email or phone and so notes cannot be left for you. Blue requests have been sent by you and your colleagues using MediManager.

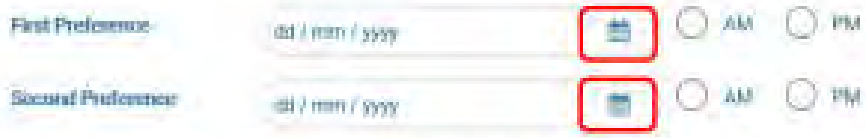
New Booking

To make a new booking request, please click on the 'New Booking' tab, as per below.

Please complete the required fields indicated with a red asterix.

If you require the booking confirmation email to be sent to another email as well as your own (for example an HR email) please include this email in the 'distribution emails' section.

Please ensure you include the location you would like us to schedule the appointment. You can see the available appointment times at any of our Jobfit centres around Australia by clicking the calendar buttons as per below. Our team will book as close to this time as possible.



Select your company specific medical preset from the list. Should you require a change to these presets or wish to add additional presets, please email medimanager@jobfit.com.au

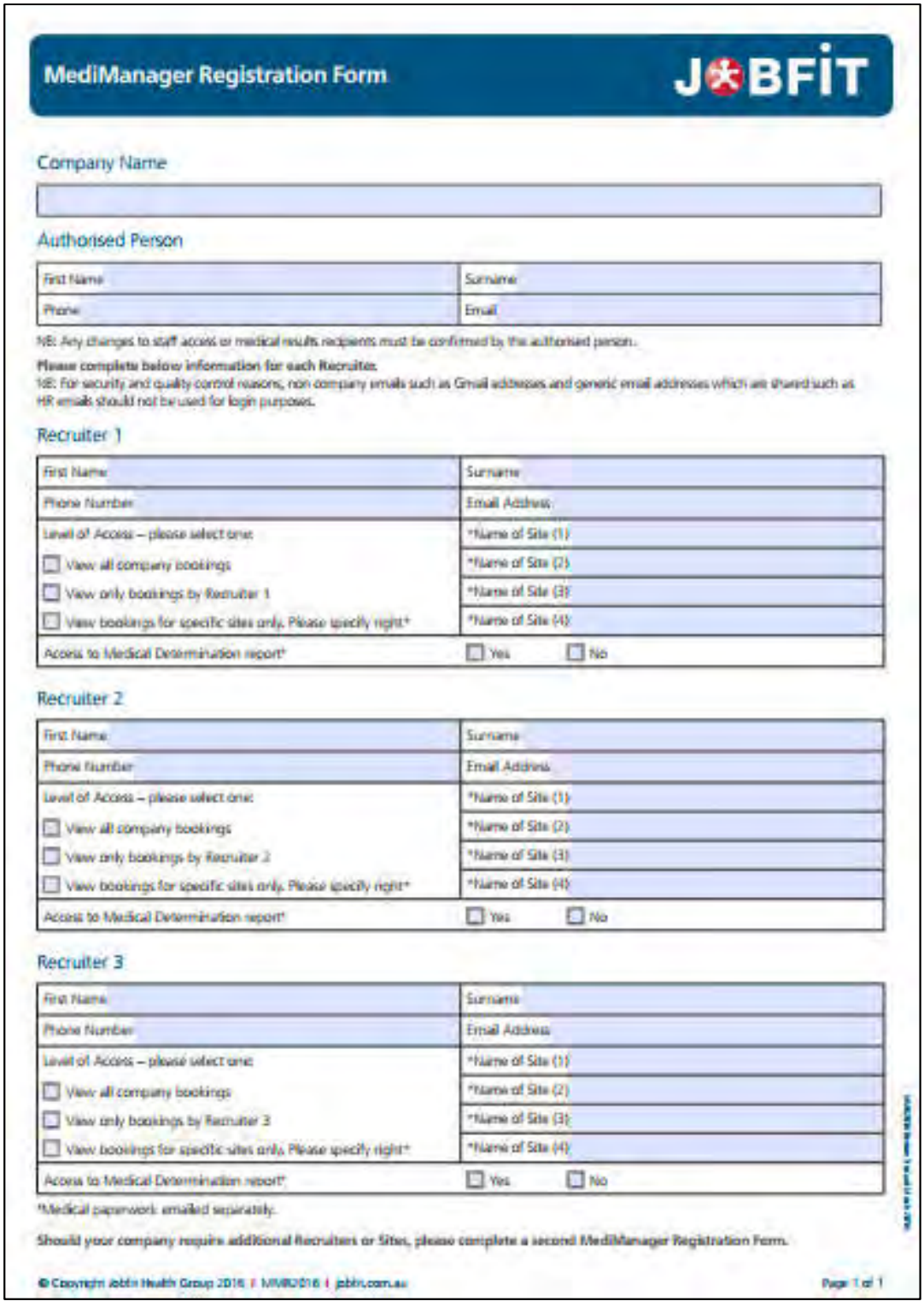
You can add other tests to the company preset you have selected by typing in the 'other' box below.

Press 'Request Booking'. Your booking request should now appear in the 'My Bookings' screen.

A booking confirmation email will be sent back to yourself once the booking has been finalised by our team. The booking details will also appear under the booking on the 'My Bookings' screen.

If you require any further assistance please phone 08 8177 8668 or email medimanager@jobfit.com.au

8. MediManager Registration Form



MediManager Registration Form JOBFIT

Company Name

Authorised Person

First Name	Surname
Phone	Email

NB: Any changes to staff access or medical results recipients must be confirmed by the authorised person.

Please complete below information for each Recruiter.
NB: For security and quality control reasons, non company emails such as Gmail addresses and generic email addresses which are shared such as HR emails should not be used for login purposes.

Recruiter 1

First Name	Surname
Phone Number	Email Address
Level of Access – please select one:	*Name of Site (1)
☐ View all company bookings	*Name of Site (2)
☐ View only bookings by Recruiter 1	*Name of Site (3)
☐ View bookings for specific sites only. Please specify right*	*Name of Site (4)
Access to Medical Determination report*	☐ Yes ☐ No

Recruiter 2

First Name	Surname
Phone Number	Email Address
Level of Access – please select one:	*Name of Site (1)
☐ View all company bookings	*Name of Site (2)
☐ View only bookings by Recruiter 2	*Name of Site (3)
☐ View bookings for specific sites only. Please specify right*	*Name of Site (4)
Access to Medical Determination report*	☐ Yes ☐ No

Recruiter 3

First Name	Surname
Phone Number	Email Address
Level of Access – please select one:	*Name of Site (1)
☐ View all company bookings	*Name of Site (2)
☐ View only bookings by Recruiter 3	*Name of Site (3)
☐ View bookings for specific sites only. Please specify right*	*Name of Site (4)
Access to Medical Determination report*	☐ Yes ☐ No

*Medical paperwork emailed separately.

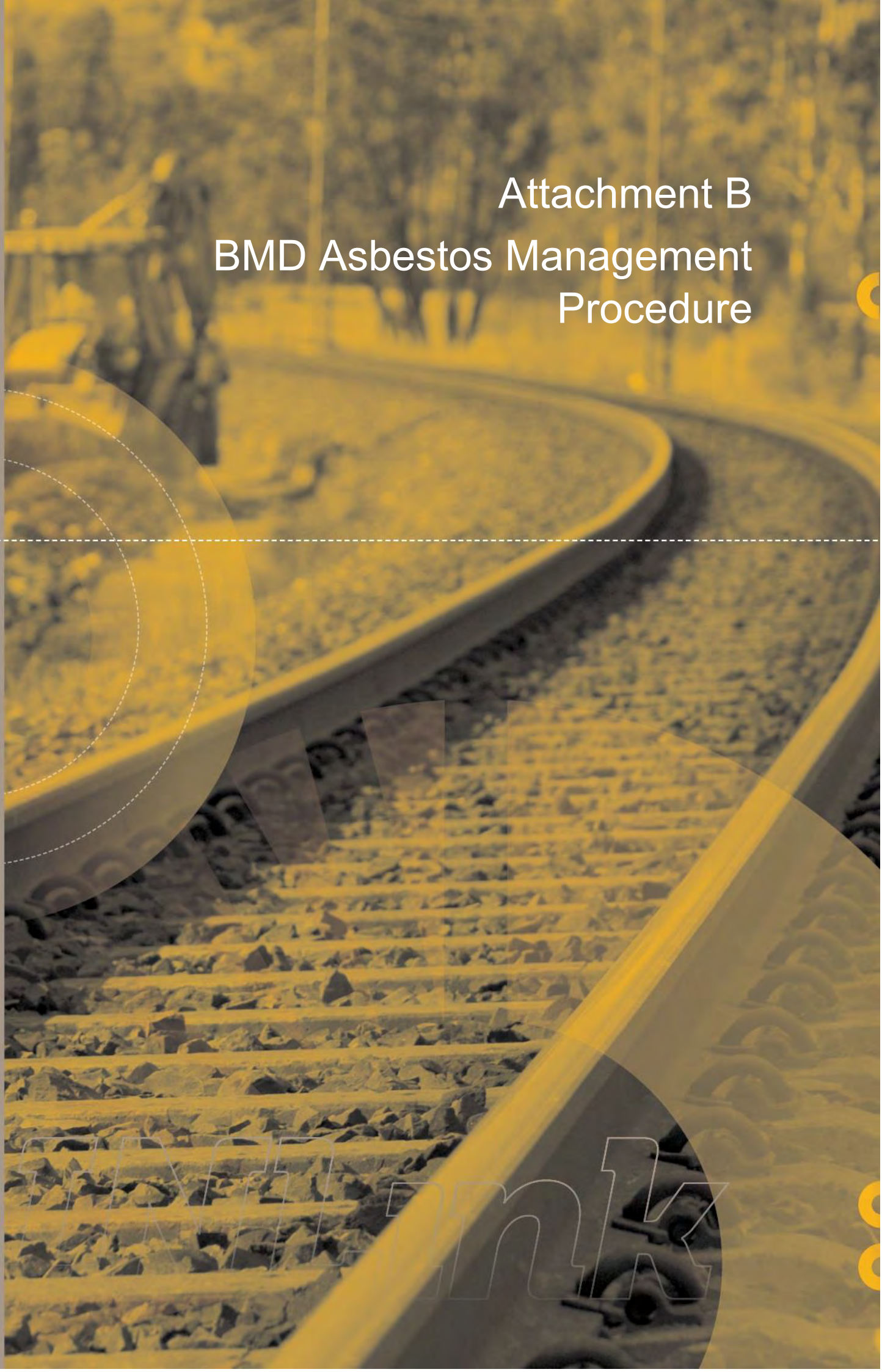
Should your company require additional Recruiters or Sites, please complete a second MediManager Registration Form.

9. References

- Australian Standards Online
- First Aid Code of Practice – NT
- First Aid Code of Practice – QLD
- First Aid Code of Practice – NSW
- First Aid Code of Practice – ACT
- First Aid Code of Practice – VIC
- First Aid Code of Practice – SA
- First Aid Code of Practice – TAS
- First Aid Code of Practice - WA
- Jobfit - Supply of Services Agreement (BMD Urban)
- Jobfit - Supply of Service Agreement (BMD Constructions)
- Managing the Work Environment and Facilities: Code of Practice - NT
- Managing the Work Environment and Facilities: Code of Practice - QLD
- Managing the Work Environment and Facilities: Code of Practice - NSW
- Managing the Work Environment and Facilities: Code of Practice - ACT
- Managing the Work Environment and Facilities: Code of Practice - VIC
- Managing the Work Environment and Facilities: Code of Practice - SA
- Managing the Work Environment and Facilities: Code of Practice - TAS
- Managing the Work Environment and Facilities: Code of Practice - WA

10. Associated Documents

- Cyclone Management Plan
- Environmental Management Plan
- First Aid Risk Assessment and Requirements Checklist
- Hazardous Chemical Management
- Remote or Isolated Work Management
- Risk Register
- Safety and Environment Stats – Constructions
- Safety and Environment Stats – Urban
- Safety and Environment Stats – JMac
- Safety and Security Fencing Assessment
- Site Set-up and Establishment Checklist and Sign-off
- Site Shed Awnings Work Instruction
- MediManager Registration Form



Attachment B

BMD Asbestos Management Procedure

Asbestos Management

Business Management Systems (BMS)
Core Operating Procedure

Document Version Control

Revision No.	Revision Date	Details of Revision	Approved By
4	13/01/2017	Updates to Sections 3.1, 3.2, 5, 6, 11,12 and 13	Brian Olsen
3	24/09/2015	Additional paragraphs added regarding Training Requirements for NSW and ACT.	Brian Olsen
2	21/04/2015	Inclusion of Document Version table and update to document permissions	Brian Olsen
1	30/07/2013	Inclusion into the BMS	Brian Olsen

Asbestos Management

Business Management System (BMS) Core Operating Procedure

Document No.: HEQ-PCE-01018

Table of Contents

1. Purpose

The purpose of this Group Core Operating Procedure (COP) is to assist in the control of asbestos and asbestos containing materials (ACM) in the workplace, in order to prevent worker's exposure to airborne asbestos fibres. BMD is committed to the health and safety of all persons at a BMD workplace and this COP ensures that the risk of asbestos exposure is minimal in order to achieve this commitment.

This Core Operating Procedure provides guidelines in asbestos management for BMD representatives to follow should asbestos be present on a BMD controlled project. BMD's ultimate objective is to have all sites free from asbestos; however this is a long term prospect. This procedure aims to outline priorities for the effective control of asbestos related risks whilst working towards this objective.

2. Scope

This document encompasses all BMD Group subsidiaries including BMD Constructions, Empower, BMD Urban, JMac Constructions, URBEX and Joint Ventures (JV) where no other procedures or processes are specified. For ease of reference, the term 'BMD' is used throughout this document to reference the BMD Group and its subsidiaries.

This procedure applies to any BMD controlled site where asbestos or asbestos containing materials (ACM) are present or assumed to be present and any activity in which a BMD employee or controlled contractor may be exposed to asbestos.

3. Introduction

3.1. Asbestos and Asbestos Containing Materials (ACM)

Asbestos is a hazardous substance that poses a risk to a person's health by inhalation of the asbestos fibres that become airborne and people are exposed to these airborne fibres. ACMs were used extensively in Australian buildings and vehicles during the 1950s to 1980s, until use in construction was prohibited from 31 December 2003.

ACMs can release asbestos fibres into the air whenever they are disturbed, particularly during the following activities:

- any direct action on ACMs, such as drilling, boring, cutting, sanding and breaking;
- excavation work that exposes illegal dumping of ACM;
- the inspection or removal of ACMs from workplaces;
- the maintenance or servicing of ACMs; and,
- the renovation or demolition of buildings containing ACMs.

3.2. Legislative Requirements

All work involving a potential exposure of persons to asbestos is to be carried out in conformity with Safe Work Australia's *Code of Practice: How to Manage and Control Asbestos in the Workplace (2011)* and *Code of Practice: How to Safely Remove Asbestos (2011).*

The licenced removal of asbestos material is managed in each State / Territory through their respective occupational health and safety authority:

State / Territory	OHS Authority	Legislation
ACT	ACT Worksafe	Work Health and Safety Act 2011 Work Health and Safety Regulation 2011
NSW	SafeWork NSW	Work Health and Safety Act 2011 Work Health and Safety Regulation 2011
NT	NT Worksafe	Work Health and Safety (National Uniform Legislation) Act 2011 Work Health and Safety (National Uniform Legislation) Regulations 2011
QLD	QLD WorkCover	Work Health and Safety Act 2011 Work Health and Safety Regulation 2011
SA	SafeWork SA	Work Health and Safety Act 2012 Work Health and Safety Regulations 2012
TAS	Worksafe Tasmania	Work Health and Safety Act 2012 Work Health and Safety Regulations 2012
VIC	Worksafe Victoria	Occupational Health and Safety Act 2004 Occupational Health and Safety Regulations 2007
WA	Worksafe WA	Occupational Safety and Health Act 1984 Occupational Safety and Health Regulation 1996

The transport and disposal of removed ACMs are controlled by the State and Territory environmental authorities:

State / Territory	OHS Authority	Legislation
ACT	ACT EPA	Environmental Protection Act 1997
NSW	NSW EPA	Protection or the Environment Operations Act 1997 Contaminated Land Act 1997
NT	NT EPA	Waste Management and Pollution Control Act 2011
QLD	Department of Environment and Heritage	Environmental Protection Act 1994 Environmental Protection Regulations 2008
SA	SA EPA	Environmental Protection Act 1993 Environmental Protection Regulation 2009
TAS	TAS EPA	Environmental Management and Pollution Control Act 1994
VIC	EPA VIC	Environmental Protection Act 1970
WA	Department of Environmental Regulation	Environmental Protection Act 1986

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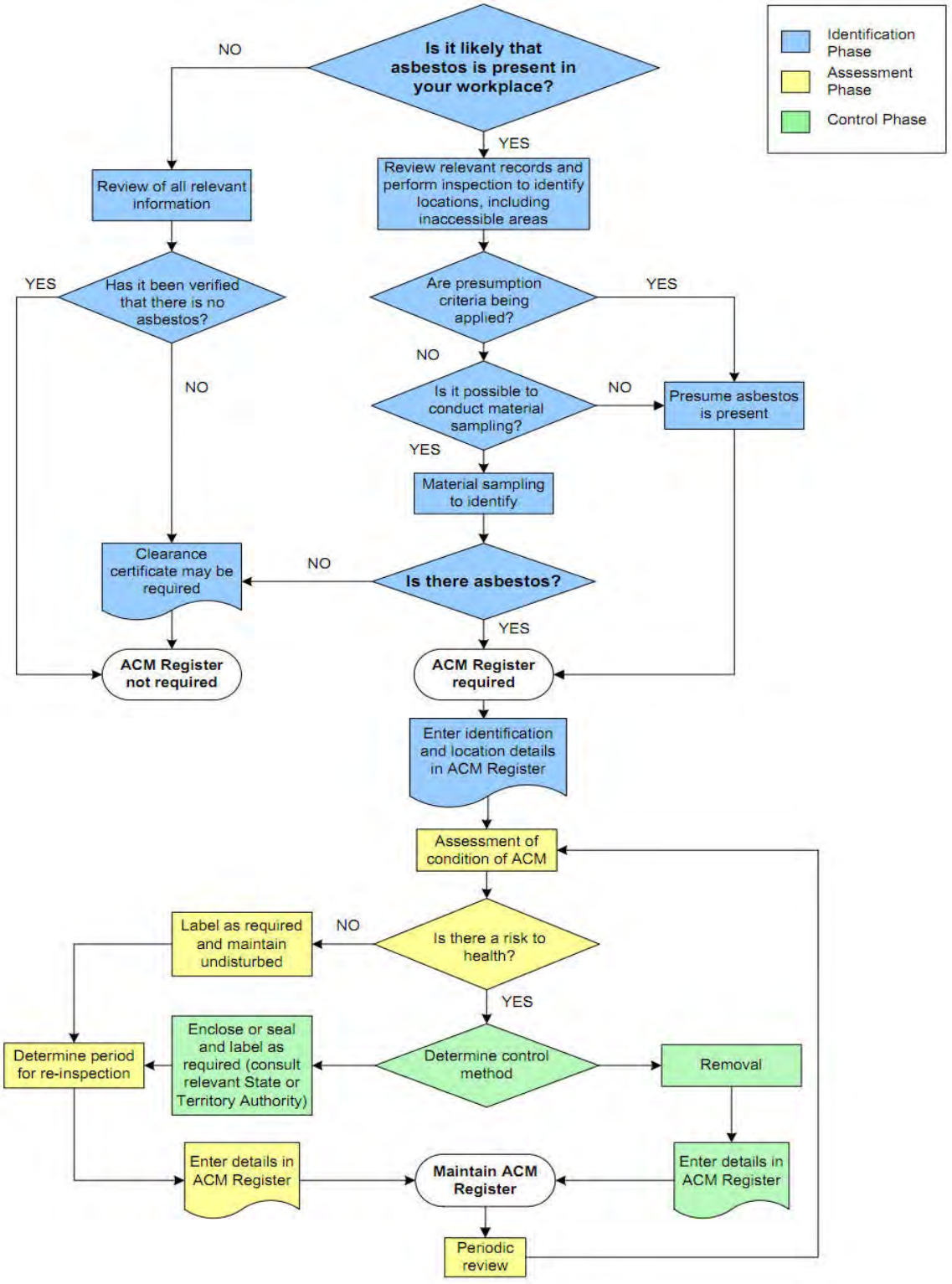
3.3. Asbestos Management General Principals

The following flowchart from the National Occupational Health and Safety Commission's *Code of Practice for the Management and Control of Asbestos in Workplaces (2005)* outlines the process involved in effective asbestos management.



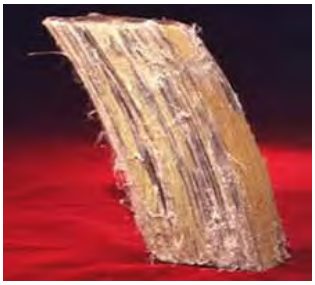
3.4. Common Health Effects

Asbestos can cause a number of health effects if the fibres are inhaled. Some common health effects of asbestos inhalation are listed below:

- *Mesothelioma* is a cancer of the outer covering of the lung or the abdominal cavity. It is usually fatal. The latency period is generally between 35 to 40 years and the disease is very difficult to detect prior to the onset of illness.
- *Lung Cancer* has been shown to be caused by a variety of types of asbestos. The average latency period ranges from 20 to 30 years.
- *Asbestosis* is a form of lung disease (fibrosis), which reduces the ability of the lungs to transfer oxygen to the blood. The latency period of asbestosis is generally between 15 to 25 years.

3.5. Common Types of Asbestos

The following table provides a summary of the most commonly encountered forms of asbestos.

Type	Description
White asbestos (chrysotile) 	Chrysotile is the most common form of asbestos and can be found in roofs, ceilings, walls and floors. It is unique in that is has a curled fibre formation compared to the straight fibres of the other asbestos types. Chrysotile is less friable, and less likely to be inhaled, making it the least dangerous form of asbestos.
Blue asbestos (crocidolite) 	Crocidolite asbestos is viewed as the most dangerous type of asbestos. It was commonly used to insulate engines and was found in some spray-on coatings, pipe insulation and cement products.
Brown asbestos (amosite) 	Originating in Africa, amosite was used industrially for various purposes such as cement sheet and pipe insulation.

4. Roles and Responsibilities

In the management and control of asbestos present on BMD controlled worksites, persons are to undertake the following associated roles and responsibilities.

HSE Representatives
• Approve AMP; and • Ensure compliance with AMP.
Project Manager / Site Managers
• Ensure resources are allocated to enable thorough application of AMP on site; • Ensure employees are made available for asbestos awareness training and asbestos removal work; • Ensure an Asbestos Removal Business Certificate is maintained for the site where applicable; and • Ensure the Asbestos Exposure Register is maintained for the site.
Site Safety Representative
• Provide primary point of contact for site related asbestos issues; • Survey, identify and sample suspected ACM; • Provide training and awareness to site employees and contractors; • Update the Asbestos Exposure Register; and • Review the Asbestos Removal Control Plan and other Work Method Statement (WMS) documents produced by the certified removalists.
BMD Employees
• Comply with the site AMP and any associated procedures; • Attend and comply with AMP training; • Ensure no asbestos is removed without prior notification to their Supervisor or Site Safety Representative; • Report asbestos related hazards to the Site Safety Representative or Supervisor immediately; and • Complete an Asbestos Exposure Questionnaire following a possible exposure to asbestos.

5. Asbestos Identification

Identifying asbestos or asbestos containing material (ACM) is the first step in managing the risk of exposure to asbestos in the workplace. The Project Manager / Site Manager are to ensure asbestos or ACM at the workplace is identified by a competent person.

5.1. Competent Identifying Person

The competent person who can identify asbestos must:

- be trained to handle and take asbestos samples, have the knowledge and experience to identify suspected asbestos and be able to determine risk and control measures;
- be familiar with building and construction practices to determine where asbestos is likely to be present; and
- be able to determine that material may be friable or non-friable asbestos and evaluate its condition.

5.2. Key Factors in Identification

The person who is carrying out the task of identifying asbestos is to have all relevant information so they can correctly identify where the asbestos is located in the workplace. A number of factors should be taken into account when identifying or assuming that asbestos is present in a workplace. These include:

When was the building constructed?	Asbestos was widely used as a construction and insulation material until its prohibited use on 31 December 2003. Asbestos may be present in buildings constructed up to this point and possibly later.
What type of material was used to construct the building?	If cement sheet is present and was installed up until 1990, it is likely to contain asbestos bonded to the cement particles. Areas of buildings that are prone to wet conditions may contain asbestos in the walls, floors and pipes due to its hardiness and waterproofing qualities.

5.3. Asbestos Sampling

Only a competent person, as defined in Section 5.1, will take the samples for analysis. Any sample taken must be sealed within a container, or a 200µm polythene bag, and labelled appropriately.

After testing positive, the Site Manager is to update the Asbestos Register to indicate that the material is asbestos.

5.4. Assuming Asbestos Presence

If there is uncertainty as to whether asbestos is present in any part of a structure, the Site Manager is to either have a sample analysed or assume asbestos is present and treat it with the appropriate caution based on the level of risk.

5.5. Indicating the Presence of Asbestos

All identified or assumed asbestos must be clearly indicated by the relevant labels or signage. Examples of signs that can be used to indicate the location or presence of asbestos or ACM are provided in Appendix A. All warning signs must comply with AS 1319: 1194 “Safety Signs for the Occupational Environment”. Where direct marking of asbestos is not possible, identifying the presence and location of asbestos to workers is to be achieved by implementing a Permit-To-Work (PTW) system.

6. Risk Assessment

Managing the risks associated with asbestos involves:

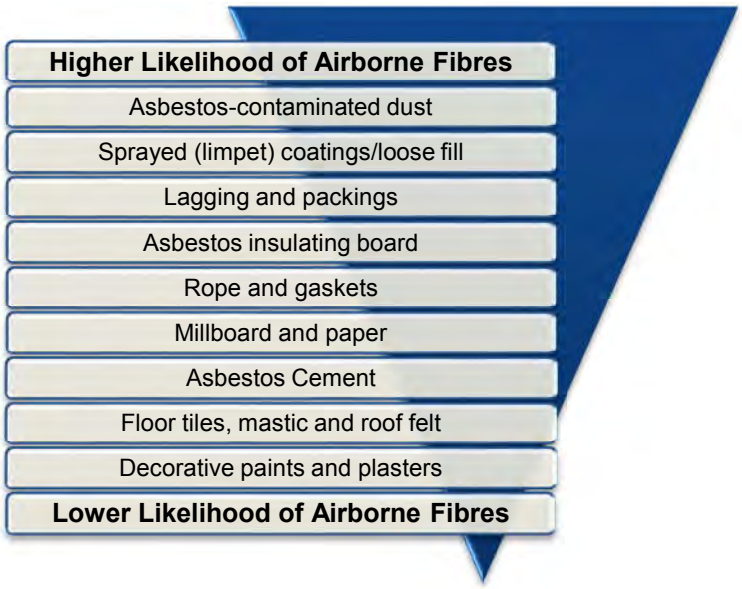
- Identifying asbestos and asbestos containing material (ACM) at the workplace and recording this in the Asbestos Register;
- Assessing the risk of exposure to airborne asbestos;
- Eliminating or minimising the risks by implementing control measures; and
- Reviewing control measures to ensure they are effective.

Note: A combination of controls may be required in order to adequately manage asbestos on the worksite.

6.1. Assessing Risk of Exposure

If asbestos or ACM is in good condition and left undisturbed, it is unlikely that asbestos fibres will be released into the air and the risk to a person’s health is extremely low. However if the asbestos has deteriorated, been disturbed, or if asbestos-contaminated dust is present, the likelihood that airborne asbestos will be released into the air is increased.

The following list ranks different types of common asbestos according to the likelihood that airborne asbestos has been released into the air if it has deteriorated or been disturbed.



6.2. Level of Risk

The presence of asbestos within a workplace is a hazard, but the level of risk associated with the hazard is related to the presence of airborne fibres. The identification of asbestos does not automatically warrant its removal, as this is dependent on the associated risk it poses.

Level of Risk	Definition
High Risk	Friable ACM that has deteriorated significantly. The material is readily accessible and prone to further disturbance, or unsealed friable ACM is located in air conditioning systems.
Moderate Risk	Minor deterioration of the ACM is evident and/or the ACM is prone to disturbance due to routine construction / maintenance activity.
Low Risk	ACM shows no or very minor signs of damage/deterioration. Regular access to the ACM is unlikely to cause significant deterioration, if the material is adequately sealed.

7. Controlling Asbestos Hazards

After identification of an asbestos hazard in the worksite, the following actions are to be taken to mitigate the risk. The typical priority of countermeasures is:

7.1. Asbestos Removalists

Removal of asbestos or asbestos containing material (ACM) is the preferred control method as it eliminates the hazard from the workplace. The following sections outline elements involved in the management of asbestos removal.

Asbestos removal work must be performed by a certified Asbestos Removalist, with the appropriate licencing according to the type of ACM being removed. Asbestos removal work will be conducted in accordance with the *Code of Practice: How to Safely Remove Asbestos (2011).*

Type of licence	What asbestos can be removed
Class A	Can remove any amount or quantity of asbestos of ACM, including: • Any amount of friable asbestos or ACM; • Any amount of non-friable asbestos or ACM; and • Any amount of asbestos contaminated dust (ACD).

Class B	Can remove: • Any amount of non-friable asbestos or ACM; and • ACD associated with the removal of non-friable asbestos or ACM.

No licence required	Can remove:
	• Up to 10m^2 of non-friable asbestos or ACM; and
	• ACD that is:
	  ○ associated with the removal of less than 10m^2 of non-friable asbestos or ACM; and
	  ○ not associated with the removal of friable or non-friable asbestos and is only a minor contamination.

A site specific Asbestos Removal Plan is to be prepared by the Asbestos Removalist prior to the commencement of asbestos removal work. The Asbestos Removalist must also prepare a Work Method Statement (WMS) / Job Hazard Analysis (JHA) specific to the proposed removal.

If it is not reasonably practicable to remove asbestos, then other control measures are to be implemented to ensure people are not exposed to asbestos.

7.2. Enclosure

In instances where it is not reasonably practicable to remove asbestos, enclosure control should be adopted. Enclosure involves the creation of a structure built around the asbestos so that it is completely covered to prevent exposure of the asbestos to air and other substances. The physical barrier of separation prevents access to the asbestos and therefore minimises the potential for exposure to airborne fibres. Enclosure control should only be used on non-friable asbestos at risk of damage from work activities.

7.3. Encapsulation

If asbestos cannot be removed or enclosed, encapsulation control is to be adopted. Encapsulation refers to the coating or sealing of the outer surface of the ACM by the application of some form of sealant compound impermeable to asbestos. It is designed to reduce the risk of exposure by preventing the release of asbestos fibres into the airborne environment.

8. Safe Work Practices

Safe work practices must be in place when carrying out asbestos work or asbestos-related work. Wherever possible, dry asbestos should not be worked on.

8.1. Personal Protective Equipment (PPE)

PPE must be used, in combination with other effective control measures, when working with asbestos. The selection and use of PPE is to be based on a risk assessment. Section 7.6 of the *Code of Practice: How to Manage and Control Asbestos (2011),* will be consulted as well as AS/NZS 1715: 2009 “Selection, use and maintenance of respiratory protective equipment” and AS/NZS 1716: 2012 “Respiratory protective devices” for specific respiratory protection requirements.

8.2. Health Monitoring

Where a worker is at risk of exposure to asbestos due to work other than licensed asbestos removal, health monitoring must also be undertaken. Workers are to be informed of any health monitoring requirements before they undertake work that may expose them to asbestos. The need for health monitoring for these workers is to be determined on the basis of:

- the potential for exposure;
- the frequency of potential exposure; and
- the duration of the work being undertaken.

Health monitoring is to be carried out under the supervision of a registered medical practitioner. The person responsible for commissioning of the health monitoring must provide the following information:

- their name and address;
- the name and date of birth of the worker;
- a description of the work that has triggered the requirement for health monitoring; and
- whether the worker has started the work, and if so, how long it has been for.

A report from the medical practitioner responsible for the monitoring must be assembled as soon as reasonably practicable.

9. Clearance Inspections

Clearance to re-occupy an asbestos work area is to be determined by a thorough clearance inspection. All barriers and warning signs are to remain in place until the clearance to re-occupy has been granted.

9.1. Visual Inspections

Visual inspections involve an examination of the asbestos work area prior to the resumption of normal work in the area by unprotected personnel. This is to confirm that the asbestos removal or maintenance work has been completed and there is no visual evidence of dust and debris.

9.2. Clearance Monitoring

Monitoring results and experience with similar maintenance work in the past will assist in determining whether clearance monitoring will be required.

Clearance monitoring is to be undertaken by a person independent of the person responsible for the asbestos work, after cleaning has been completed and the area dried.

Air samples will be taken in the asbestos work area. For jobs involving an enclosed area, this should be done following the completion of the work but prior to the removal of the enclosure, and again after the removal of the enclosure. The work should not be considered complete until an airborne fibre level of less than 0.01 fibres/mL has been achieved, as determined by the clearance monitoring.

9.3. Settled dust sampling

Settled dust sampling may be considered as part of the clearance to re-occupy an asbestos work area. Settled dust sampling can, however, only provide an indication of cleanliness following disturbance of an asbestos containing material (ACM). Settled dust sampling must not be used as an indicator of risk to health.

10. Notification of Authorities

The relevant State / Territory OHS Authority must be notified by the licenced asbestos removalist under the following circumstances:

- Licenced asbestos removal work;

- Demolition work;

- Immediate asbestos removal work;

- Notification of emergency demolition of structure or plant containing asbestos;

- Notification of asbestos fibre levels exceeding 0.02 fibres/ml.

11. Asbestos Training

New South Wales legislation (refer to Asbestos Training - WorkCover) requires an employer or business (or other PCBU) who carries out removal work (or may come into contact with asbestos), you must ensure that all workers complete asbestos awareness training. If loose fill asbestos insulation or naturally occurring asbestos is likely to be found at a workplace, you must provide training in how to identify and manage the associated risks and hazards.

WorkSafe ACT requires an employer or business to ensure that all workers involved in working with asbestos or asbestos containing material (being construction) undertake 10314NAT – Course in Asbestos Awareness (refer to GN0098 Asbestos Awareness Training)

12. Asbestos Containing Buildings

Where BMD own or occupy buildings that contain asbestos BMD is required to develop an Asbestos Management Plan and maintain an Asbestos Register as per the legislation requirements.

12.1. Asbestos Management Plan (AMP)

An Asbestos Management Plan (AMP) will be developed whenever asbestos or asbestos containing material (ACM) is identified or assumed to be present at a BMD controlled workplace. As a minimum, the AMP will:

- identify the location of the asbestos or ACM and any naturally occurring asbestos;
- include control measures adopted and Safe Work Practices implemented;
- outline the procedures for incidents and emergencies involving asbestos, including roles and responsibilities;
- be maintained with up-to-date information; and
- be reviewed at least semi-annually or when asbestos is removed, enclosed, encapsulated, disturbed or the control measures are changed.

12.2. Asbestos Register

The OHS legislation for each State / Territory requires an asbestos register for each site unless:

- The workplace is a building that was constructed after 31 December 2003;
- No asbestos has been identified at the workplace; and
- No asbestos is likely to be present from time to time.

An Asbestos Register provides a mechanism of managing and monitoring asbestos within a site. The Asbestos Register should contain:

- A record of any asbestos or asbestos containing materials (ACMs) that has been identified or is likely to be present at the workplace. This includes:
    - the date on which the asbestos or ACM was identified; and
    - the location, type and condition of the asbestos.
- a statement that no asbestos or ACM is identified at the workplace;
- details of any asbestos assumed to be in the workplace;
- results of any analysis that confirms a material at the workplace is or is not asbestos;
- dates when the identification was carried out; and
- details of inaccessible areas.

Photographs or drawings to show the location of the asbestos may also be included.

13. Project Asbestos Management

During the course of undertaking project works BMD may encounter asbestos containing materials. This may be known or previously unknown, and are commonly in the form of:

- existing buildings and structures that are to be removed or demolished for the works;

- PUP pipes that contain asbestos e.g old water mains, Telstra pits;

- materials that have been illegally dumped by the public prior to or during project works;

- soil contaminated with asbestos fragments from previous site activities.

Asbestos and the associated management shall be detailed through the project's Risk Register, Safety Management Plan and Environmental Management Plan.

13.1. Tender Stage

All known sources of asbestos on the project shall be identified at the tender stage where possible. Information from Clients such as their asbestos register shall be consulted along with information from PUP providers.

13.2. Prior to Commencement of Works

Wherever possible, known sources of asbestos onsite shall be removed at the start of the project to eliminate the risk to site workers. This shall be undertaken by an appropriately licenced subcontractor.

13.3. Asbestos Removal

All asbestos removal on BMD sites shall be undertaken by an appropriately licenced subcontractor. A copy of the subcontractor's licence shall be received by BMD prior to the subcontractor undertaking works onsite.

The only exception to this shall be where small amounts (total amount for project<10m2) of asbestos cement sheeting/pipe are found onsite and do not require to be broken to be removed. These shall be wetted down and wrapped in plastic for disposal through a licenced waste provider.

13.4. PUP Investigations

During the course of undertaking non destructive digging for PUP investigations, asbestos containing pipes may be encountered. As asbestos cement (AC) pipes have approximately 15% or less asbestos content, the risk of asbestos exposure posed to workers by water blasting is generally extremely small due to the wet nature of the works and the work being performed under vacuum. The exception to this may be where the pipe has been structurally damaged and is in poor condition. If broken pipe is observed during the works the project shall undertake a risk assessment and decide on appropriate management measures.

Additionally, the slurry from NDD investigations shall be disposed of at an appropriate waste facility however it does not necessarily mean that the load must be classified as asbestos waste under Waste Code: N220. In the majority of circumstances the potential for asbestos contamination in the load is deemed to be extremely low

and hence can be disposed of at a general waste facility. If the project has a concern that the material may pose a risk post disposal due to conditions onsite, a risk assessment shall be undertaken to ensure the material is disposed of appropriately. Where a load is transported under Waste Code N220, a licenced transporter and disposal location must be used with the appropriate waste tracking forms completed as per the State / Territory Regulations.

13.5. Unexpected Finds

Where asbestos or potentially asbestos material that had previously not been identified is found onsite, an exclusion zone shall be setup to prevent workers accessing the material. A physical barrier such as flagging or parawebbing shall be used as a minimum with signage indicating the asbestos. This shall remain in place until either the material is tested and determined not to be containing asbestos, or a licenced asbestos removalist is onsite to manage the material. The material shall be wet down to prevent dust becoming airborne.

For asbestos contaminated soil, the project shall engage a suitably qualified contaminated land expert to assist with the management of the material. The testing, permitting, transport and disposal for this material shall be conducted as per the contaminated land legislation and guidelines in the relevant State / Territory.

All previously unknown asbestos finds shall be reported through the BMD Incident and Accident Database as per the Incident and Accident Standard.

13.6. Disposal

All asbestos containing material from BMD projects shall be disposed of as per the relevant State / Territory environmental and waste disposal legislative requirements. This shall be conducted through a licenced waste transporter and taken to a licenced waste disposal facility. As asbestos is a prescribed or regulated waste (depending on State / Territory definition) the necessary waste tracking forms shall be completed with a copy of these stored on the project's SharePoint site.

14. Emergency Response

An emergency associated with the potential exposure to airborne asbestos fibres within a building or worksite may necessitate the need to evacuate. Site procedures for evacuation are to be conveyed to contractors and employees during the Site Induction.

Persons involved in asbestos removal must evacuate to the assembly point, but remain downwind to ensure any fibres remaining on clothes do not enter the breathing space of others.

Events likely to require evacuation during asbestos removal work include but are not limited to:

- Fire evacuation;
- Chemical spill and contamination; and
- Gas leak / contaminated atmosphere.

15. Documentation and Records

Under Safe Work Australia's *Code of Practice: How to Manage and Control Asbestos in the Workplace (2011),* all documentation / records relating to the identification and control of asbestos must be retained for a period of 40 years. This includes the Asbestos Register, test results, health monitoring records and certificates of approval.

16. Definitions

Asbestos	The fibrous form of mineral silicates belonging to the serpentine and amphibole groups of rock-forming minerals, including actinolite, amosite, crocidolite, chrysotile, tremolite, or any mixture containing one or more of these.
AMP	Asbestos Management Plan.
ACM	Asbestos Containing Material: Any material, object, product or debris that contains asbestos.
ACD	Asbestos Contaminated Dust: Any dust or debris that has settled within a workplace and is (or assumed to be) contaminated with asbestos.
Friable Asbestos	An ACM that is in a powder form or that can be crumbled or reduced to a powder by hand pressure when dry.
Competent Person	A person who has acquired, through training, qualification or experience, the knowledge and skills to carry out the task.
In-Situ	Fixed or installed in its original position, not having been moved.

17. References

- CS Energy, 2008 – Asbestos Management Plan: CS-OHS-43

Associated Documents

- Safe Work Australia, Code of Practice: How to Safely Remove Asbestos 2011
- Safe Work Australia, Code of Practice: How to Manage and Control Asbestos in the Workplace 2011
- NSW SafeWork – Asbestos Training
- WorkSafe ACT GN0098 Asbestos Awareness Training
- Asbestos Register Template

18. Appendix A

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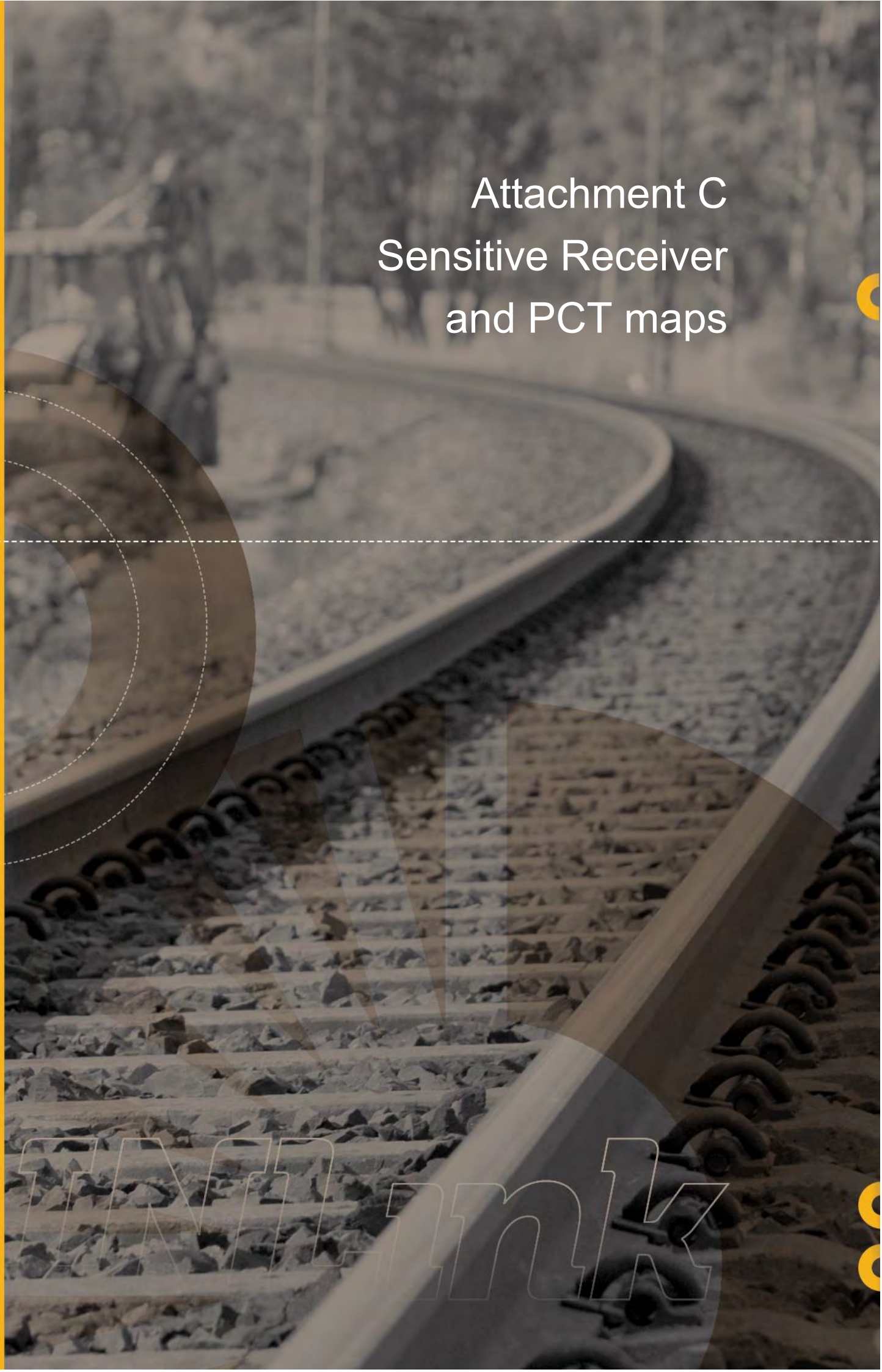
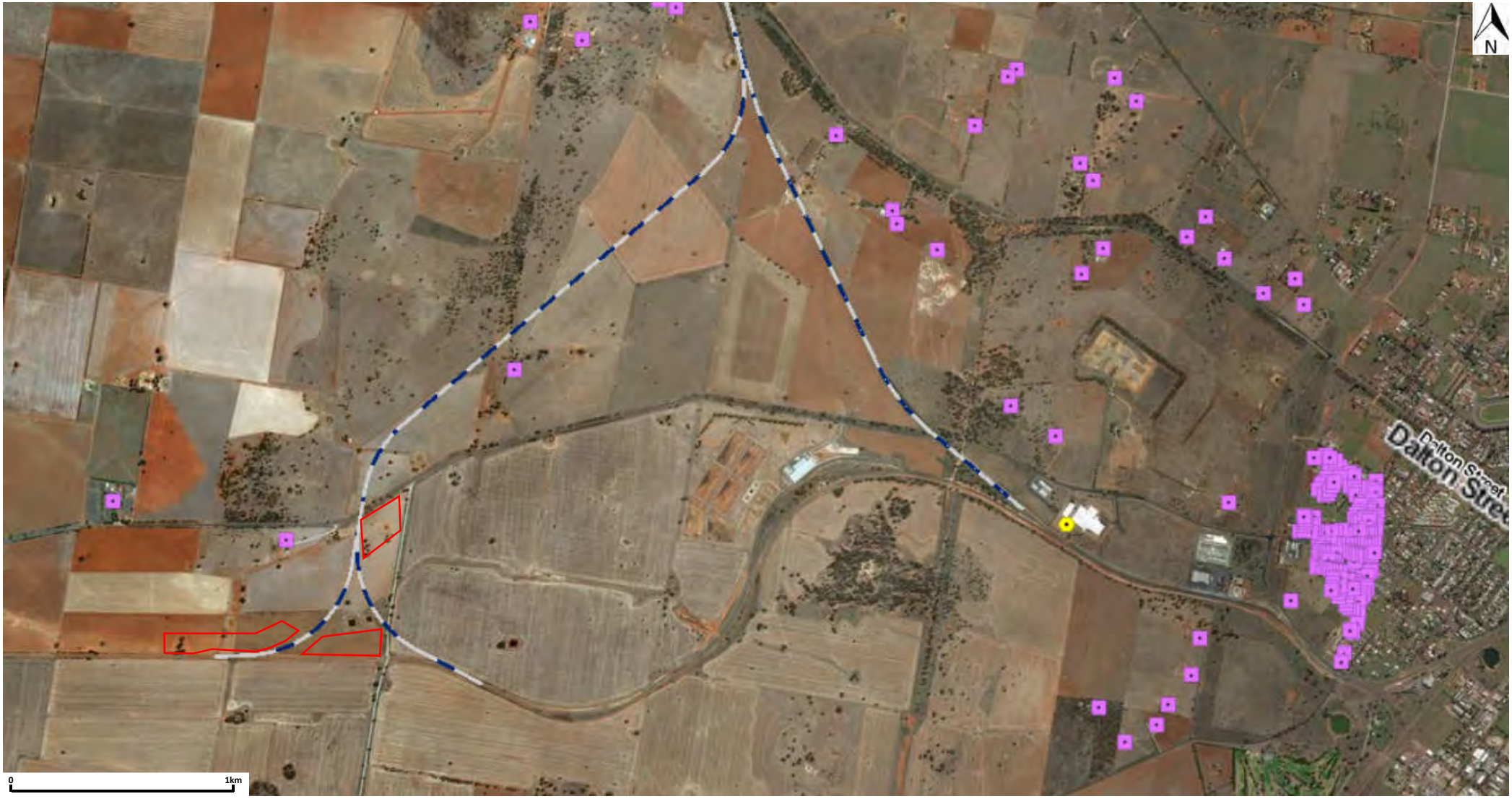
Attachment C
Sensitive Receiver and PCT maps



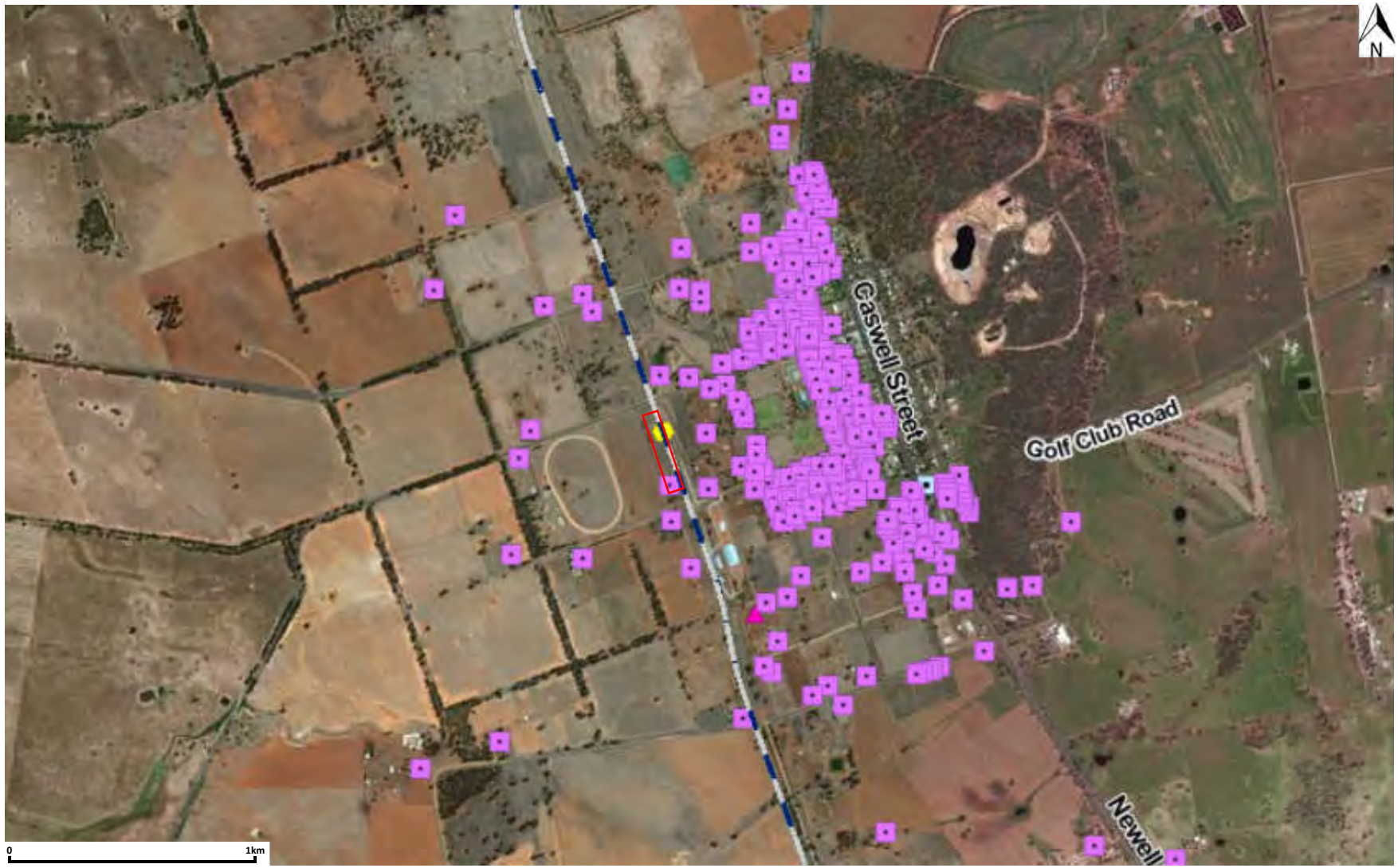
North-West Link MCAF



Legend

- Track Alignment
- Residential Receivers
- Sensitive Receivers
- Stations Heritage - Unwelt
- Archaeology Data - Umwelt
- ACH Landform Constrains - Umwelt
- MCAF

Peak Hill MCAF



Legend

- Track Alignment
- Residential Receivers
- Sensitive Receivers
- Stations Heritage - Unwelt
- Archaeology Data - Umwelt
- ACH Landform Constrains - Umwelt
- MCAF

Tomingley MCAF

Legend

- Track Alignment
- Residential Receivers
- Sensitive Receivers
- Stations Heritage - Unwelt
- Archaeology Data - Umwelt
- ACH Landform Constrains - Umwelt
- MCAF

PCT55

NARROMINE
WYANGA
PEAK HILL
PARKES

Data Sources: WSP - ENVIRONMENT_IRDJV_CompoundVegetationCommunities_20814_MGA55

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

PARKES TO NARROMINE

Major Construction Ancillary Facility Locations - Tomingley

25m

Coordinate System: GCS GDA 1994

Paper: A3 Scale: 1:1,000
Date: 21/12/2018
Author: IR GIS

LEGEND

- Master Alignment (27/09/2018)
- Construction impact zone (07/08/2018)
- Site establishment management plan area
- Surveyed lot boundary

PCT

- PCT55

ARTC InlandRail

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation, in partnership with the private sector.

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PARKES TO NARROMINE

Major Construction Ancillary Facility Locations - Peak Hill

25m

Coordinate System: GCS GDA 1994

Paper: A3 Scale: 1:1,000
Date: 21/12/2018
Author: IR GIS

LEGEND

- Master Alignment (27/09/2018)
- Construction impact zone (07/08/2018)
- Site establishment management plan area
- Surveyed lot boundary

ARTC InlandRail

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation, in partnership with the private sector.

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ARTC InlandRail

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation, in partnership with the private sector.

PARKES TO NARROMINE

Major Construction Ancillary Facility Locations

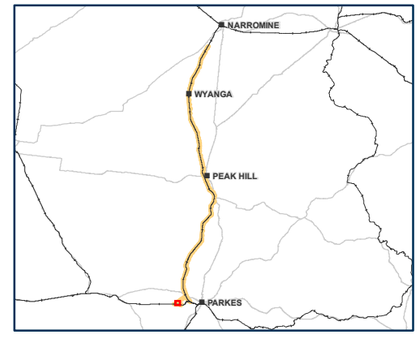
Map 1 of 3

LEGEND

- Northwest track alignment (20181008)
- Construction impact zone (07/08/2018)
- Site establishment management plan area
- Proposed road access
- Surveyed lot boundary

PCT

- PCT201
- PCT276



200 Meters

Coordinate System: GCS GDA 1994

Paper: A3
Date: 21/12/2018
Author: IR GIS

Scale: 1:5,000

Data Sources: WSP - ENVIRONMENT_IRDJV_CompoundVegetationCommunities_180814_MGA55

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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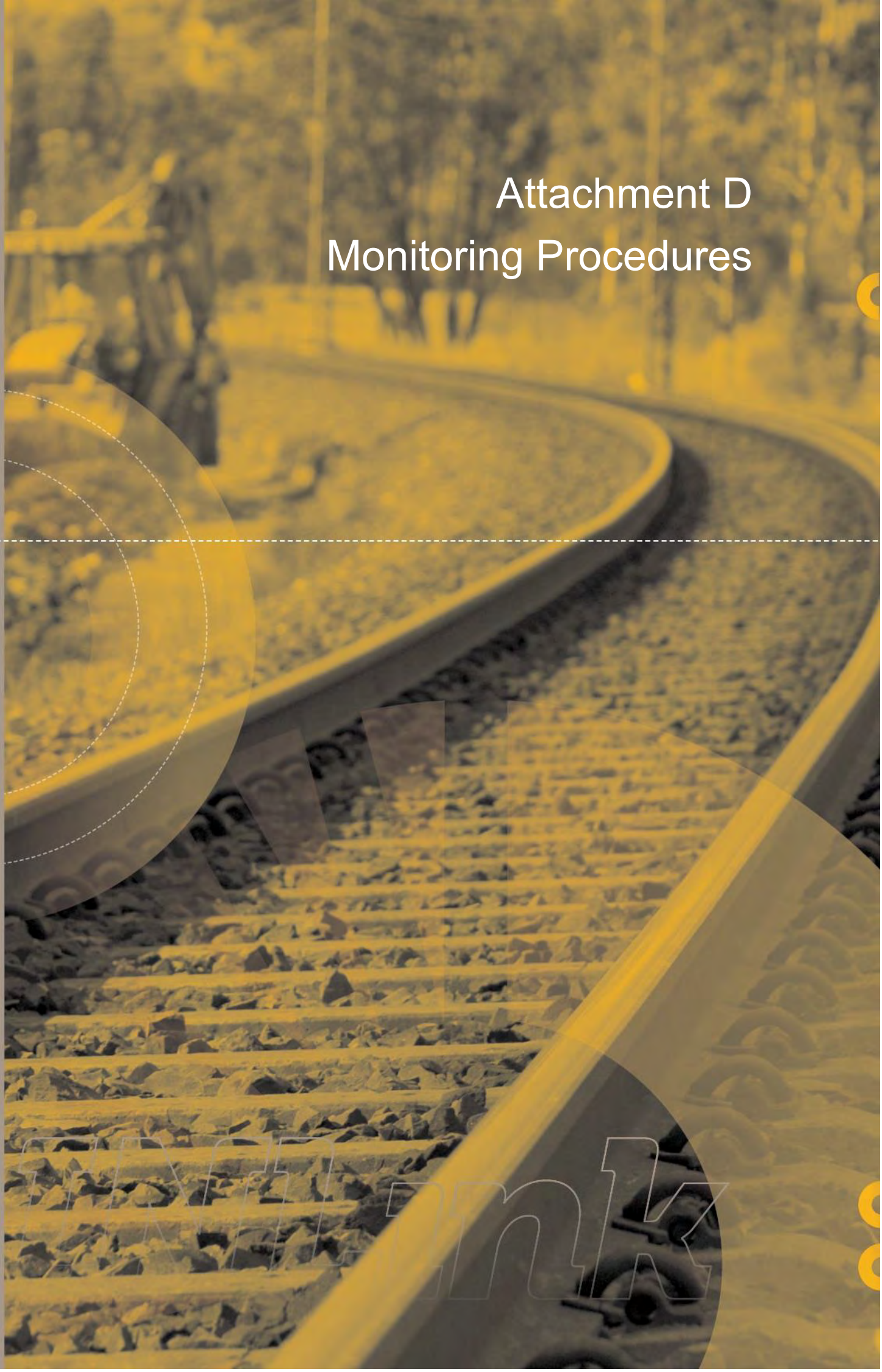


Attachment D
Monitoring Procedures

Noise Monitoring Procedures

The following procedures are to be followed by personnel suitably qualified and experienced in undertaking acoustic measurements.

All noise monitoring equipment used must be at least Type 2 instruments as described in AS IEC 61672.1 2004 'Electroacoustic – Sound Level Meters – Specifications' and calibrated to standards that are traceable to Australian Physical Standards held by the National Measurement Laboratory (CSIRO Division of Applied Physics). The calibration of the monitoring equipment shall be checked in the field before and after the noise measurement period.

All environmental noise measurements shall be taken with the following meter settings:

- Time Constant - FAST (i.e. 125 milliseconds)
- Frequency Weightings - A-weighting
- Sample Period - 15 minutes

The loggers will also be programmed to accumulate L_{A90}, L_{A10}, L_{Aeq} and L_{Amax} data, as well as the data being assessed for compliance against applicable Noise Management Levels.

Measurements of noise should be disregarded when it is raining, and/or the wind speed is greater than 5m/s (18km/HR).

Outdoor noise monitoring is to be undertaken at least 3.5m from any reflecting structure other than the ground. The preferred measurement height is 1.2-1.5m above the ground. Where the noise monitors are placed within 3.5 metres of building facades, walls or cliffs, then a reflection correction of up to -2.5cdB(A) shall be applied to remove the effect of increased noise due to sound reflections from such structures.

Measurements inside buildings should be at least 1m from the walls or other major reflecting surfaces, 1.2m to 1.5m above the floor, and about 1.5m from windows.

The following information shall be recorded within the noise monitoring record template:

- Date and time of measurements;
- Type and model number of instrumentation;
- Results of field calibration checks before and after measurements;
- Description of the time aspects of each measurement (i.e. sample times, measurement time intervals and time of day);
- Monitoring will be undertaken at the nearest sensitive receiver;
- Sketch map of area;
- Measurement location details and number of measurements at each location;
- Weather conditions during measurements;
- Operation and load conditions of the noise sources under investigation;
- Any adjustment made for presence or absence of nearby reflecting surfaces and

- Noise due to other sources (e.g. traffic, aircraft, trains, dogs barking, insects etc.).

Vibration Monitoring Procedures

Vibration monitoring to be undertaken throughout the Project in accordance with the following requirements:

- Attended vibration measurements would be undertaken at the commencement of vibration generating activities located in close proximity to sensitive receivers to confirm that vibration levels are within the acceptable range to prevent cosmetic building damage;
- Trial vibration testing would be undertaken as required, prior to undertaking any high vibration activities. Trials would be undertaken in non-sensitive areas and at a range of distances from the source. The results of the trial monitoring would be compared against predicted vibration levels and the potential for impact refined, if deemed appropriate;
- Testing for both structural damage and human comfort where either the 'safe working distances' in Section 4.2.2 of the NVMP cannot be complied with or vibration levels are predicted to be greater than the maximum values for human comfort as a result of works;
- As required by a CNVIS;
- As required by the CoA and EPL; and
- In response to complaints in accordance with the requirements of the CoA and EPL.

Vibration monitoring will be undertaken at monitoring locations consistent with the baseline monitoring locations. Data that is collected will be compared against applicable criteria and baseline data.

Vibration Testing Procedure

The following procedure is to be followed by personnel suitably qualified and experienced in undertaking vibration measurements.

All vibration monitoring equipment is to be calibrated at least once every two years to standards that are traceable to Australian Physical Standards held by the National Measurement Laboratory (CSIRO Division of Applied Physics). The monitoring system should also have a measurement frequency range down to 1Hz.

All attended short-term vibration monitoring shall be recorded over 15-minute sample intervals. The magnitude of vibration is to be recorded at a minimum rate of 10 samples per second. The following minimum range of vibration metrics should be stored in memory and reported:

- Vibration Dose Values (VDVs);
- root-mean-square (rms) – maximums and statistical levels; and
- peak-particle velocity (ppv) – maximums and statistical levels.

In addition to measuring and reporting overall vibration, statistical vibration shall also be measured and reported in third-octave band frequencies from 1Hz to 250Hz.

Vibration monitoring shall be undertaken in accordance with the vibration measurement requirements stipulated in the legislative standards and guidelines. The following notes of importance are included here:

- Vibration monitoring equipment shall be placed outside at the footings or foundations of the building of interest, closest to the vibrating plant;
- The surface should be solid and rigid in order to best represent the vibration entering the structure of the building under investigation;
- The vibration sensor or transducer shall not be mounted on loose tiles, loose gravel or other resilient surfaces;
- The vibration sensor or transducer shall be directly mounted to the vibrating surface using either bees wax or a magnetic mounting plate onto a steel washer, plate or bracket which shall be either fastened or glued to the surface of interest; and
- Where a suitable mounting surface is unavailable, then a metal stake of at least 300mm in length shall be driven into solid ground adjacent to the building of interest, and the vibration sensor or transducer shall be mounted on that.

The following information shall be recorded within the vibration monitoring record template:

- Date and time of measurements;
- Type and model number of instrumentation;
- Description of the time aspects of each measurement (i.e. sample times, measurement time intervals and time of day);
- Sketch map of area;
- Measurement location details and number of measurements at each location;
- Operation and load conditions of the vibrating plant under investigation; and
- Possible vibration influences from other sources (e.g. domestic vibrations, other mechanical plant, traffic, etc.).

Surface Water Monitoring Procedures

Due to the ephemeral nature of all watercourses within the project corridor, it is not practical to implement a routine monitoring program during construction. Instead, an opportunistic event-based sampling program will be undertaken. This includes, but is not limited to the following:

Visual Inspections

Visual inspection will be undertaken at the following intervals:

- At least once a week during normal construction activities;
- After a possible storm event (within 24 hrs if it is safe to do so); and
- Immediately prior to the closure of construction in any areas of the project corridor.
- Visual inspections to include:
- Recording indicators of adverse site conditions (e.g. flooded areas, areas of waterway bank erosion, surface erosion, sediment load dispersion);
- Inspection of all permanent and temporary erosion and sedimentation controls (i.e. to verify compliance with this SWMP and the PESCP; and
- Identification of any rectification measures that may need to be implemented.

Monitoring

The following section outlines the location, monitoring parameters and the monitoring schedule for the surface waters within the project corridor.

Location

The monitoring will be undertaken at an upstream and downstream point at a minimum in close proximity the boundaries of the project corridor.

- Macquarie River
- Lachlan River
- Burril Creek
- Ten Mile Creek
- Bradys Cowal

Monitoring Parameters

The following parameters will be monitored:

- pH
- Salinity
- Turbidity
- Dissolved oxygen
- Oil and Grease (visual)
- Potential Contaminants of Concern (if contaminants encountered and are deemed to impact on surface water for extended period include routine monitoring)

Monitoring Schedule

The monitoring schedule for surface water will be immediately after a rain event (within 24 hours) and / or when the surface waters are in flow.

Water Use for Construction Procedure

Surface Water

The following section outlines the location, monitoring parameters and the monitoring schedule for the use of surface waters for construction activities.

Location

- Private dams near chainages 730, 782, 798
- Macquarie River – at location in which water is being extracted

Monitoring Parameters

The following parameters will be monitored during the extraction of surface waters at the point of extraction:

- pH
- Salinity
- Turbidity
- Dissolved Oxygen
- Oil and Grease (visual)
- Volume used per day against source location
- Entitlement Details

Monitoring Schedule

The monitoring schedule for surface water when used for construction will be weekly during the period when the water is being extracted.

Groundwater

The following section outlines the location, monitoring parameters and the monitoring schedule for the use of groundwater for construction activities.

Location

- Private bores near chainages 708, 716, 724, 738, 748 and 778 (each bore is within five kilometres of the project)

Monitoring Parameters

The following parameters will be monitored during the extraction of surface waters at the point of extraction:

- pH
- Salinity

- Turbidity
- Depth
- Volume used per day against source location
- Entitlement Details

Monitoring Schedule

The monitoring schedule for groundwater when used for construction will be weekly for all parameters and daily for depth during the period when the water is being extracted.

Potable Water

The following section outlines the location, monitoring parameters and the monitoring schedule for the use of potable for construction activities.

Location

- Narromine Shire Council
- Parkes Shite Council

Monitoring Parameters - Documentation

The following parameters will be requested when using potable water for construction:

- Testing parameters
- Frequency of testing
- Chlorination regime
- Volume used per day against source location
- Entitlement Details

Recycled Water

The following section outlines the location, monitoring parameters and the monitoring schedule for the use of recycled water for construction activities.

Location

- Parkes North and Peak Hill mines

Monitoring Parameters

The following parameters will be monitored during the use of recycled water for construction at the point of extraction:

- pH
- Salinity
- Turbidity

- Dissolved oxygen
- Any other nutrients or metals associated with the waste water
- Volume used per day against source location
- Entitlement Details

Monitoring Schedule

The monitoring schedule for recycled water when used for construction will be weekly for physical parameters and monthly for nutrients and metals during the period when the water is being extracted.

Assessment Criteria

Surface Water

The following assessment criteria applies to surface water quality during the following situations:

- When discharging water off site
- When assessing surface water extraction impacts

Table 5 – Surface Water Quality Criteria

Indicator	Lachlan River Criteria	Macquarie-Bogan River criteria
pH (pH units)	6.5-8.5	6.5-8.5
Dissolved Oxygen (%)	85 - 100	85 - 100
Salinity (µS/cm)	125-2200	125-2200
Turbidity (NTU)	6-50	6-50
Oil and Grease	No sheen visible	No sheen visible

During water quality assessment the difference between the upstream and downstream monitoring point must be no greater than 20%. The assessment criteria relate to best practice standard as there are no assessment criteria set out in the CoA or EPL. The surface water criteria are consistent with the principles of the ANZECC guidelines.

Groundwater

The following assessment criteria applies to groundwater during the following situations:

- When using groundwater bores for construction

Table 6 – Surface Water Quality Criteria

Indicator	Groundwater Bore
Drawdown (m)	0.3

In the event of a groundwater drawdown without rebound between consecutive extraction days exceeding a value of 0.3m then further extractions from that location would be suspended until the rebound has shown a recovery of the groundwater level of not more than 0.1m.

Recycled Water

The following assessment criteria applies to surface water quality during the following situations:

- When discharging water off site
- When assessing surface water extraction impacts

Table 7 – Recycled Water Quality Criteria

Indicator	Recycled Water Quality Criteria
pH (pH units)	6.5-8.5
Dissolved Oxygen (%)	85 - 100
Salinity (µS/cm)	125-2200
Turbidity (NTU)	6-50
Other	

Further parameters and criteria to be added when the source of the recycled water is known.

Reporting Schedule

All water quality monitoring data obtained will be reported in the INLink Monthly Report. Any exceedances against assessment criteria will be reported as a Non-Compliance or an Environmental Incident and will be managed in accordance with Section 5.4 of this SWMP.

Records

The following information will be recorded at each sampling location:

- Date and Time;
- Weather Observations;
- Construction Phase or Activity;
- Any other observations (surrounding environment or at sampling location – state of water);
- Location;
- Samplers Name;
- Water Parameter and Result; and
- Laboratory Sample (if taken).

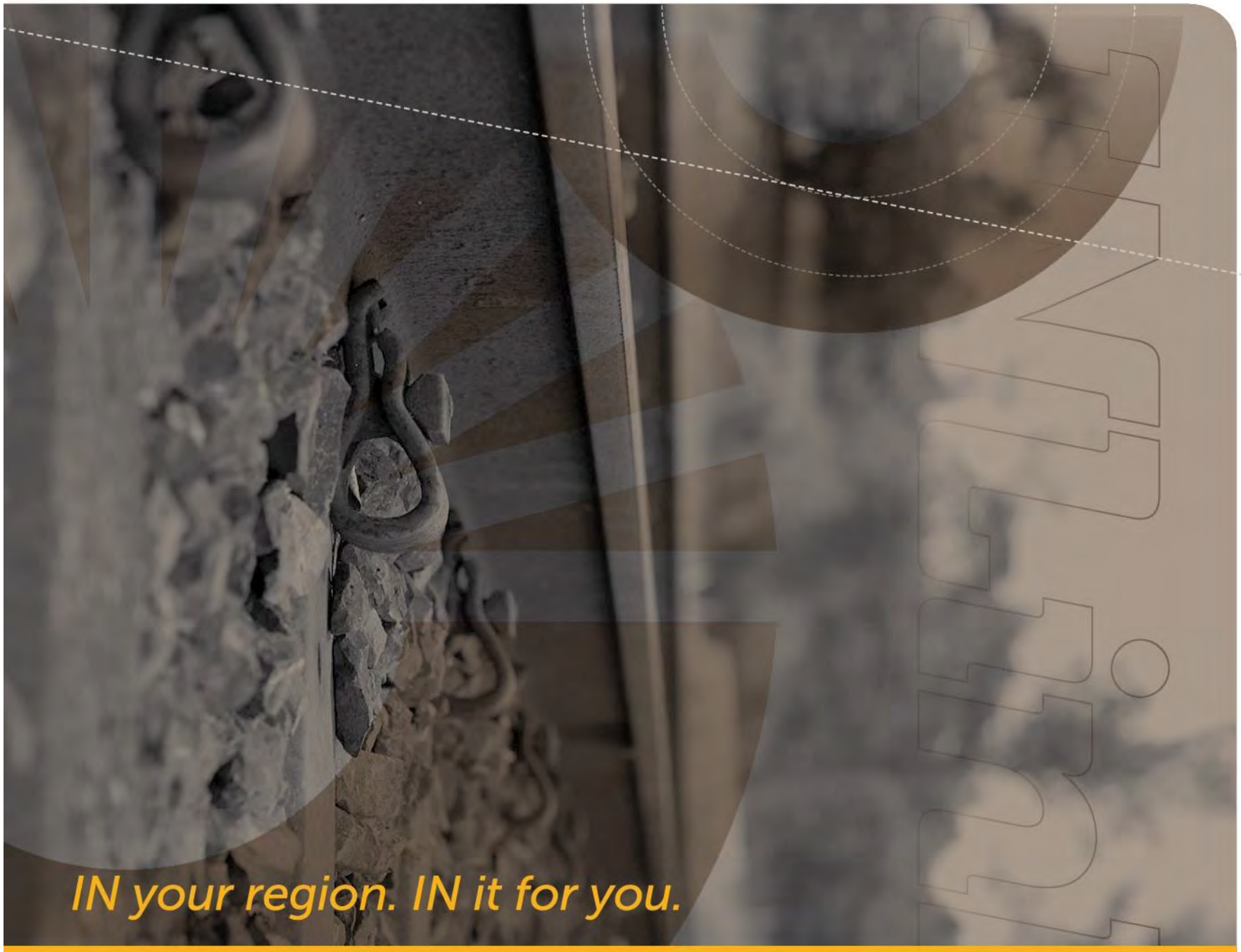
Calibration

In stream water samples are tested immediately for temperature, pH, salinity, and turbidity. Water quality parameters were recorded 3 times at 1-minute intervals to ensure that the parameters are stabilised. A Horiba water meter is used and was calibrated for pH using a 2-point calibration with a

pH 4 and 10 buffer at 25°C, which is undertaken prior to each sampling round (minimum once daily). The Horiba water meter is also checked for salinity using KCL buffer. In addition, decontamination (Decon90 and deionised water rinses) of all field equipment is performed prior to each sample round.

Quality Control

All laboratory analysis will be undertaken at an accredited facility with the National Association of Testing Authorities (NATA). NATA is an independent accreditation association for laboratory facilities in Australia. Quality control protocol should include laboratory duplicates, method blank, laboratory control spike and matrix spike. Quality control protocol used during field sampling included duplicate sampling for 1 in every 10 samples collected.



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